

**REGAN YOUNG ENGLAND BUTERA**

**REFERENDUMS • ENGINEERING • ARCHITECTURE • DESIGN**

456 HIGH ST. • MT. HOLLY, NJ 08060 USA  
(609) 265-2652 • 21A100912100 • [www.RYEBREAD.com](http://www.RYEBREAD.com)



**A BLUEPRINT FOR BETTER**

# **PROJECT MANUAL**

## **INDUSTRIAL ARTS ALTERATION**

**GLOUCESTER CITY HIGH SCHOOL  
1300 MARKET STREET  
GLOUCESTER CITY, NEW JERSEY**

**NJDOE SP# 050-1770**



**GLOUCESTER CITY BOARD OF EDUCATION  
1300 MARKET STREET  
GLOUCESTER CITY, NEW JERSEY 08030  
(856) 456-7000**

---

**REGAN YOUNG, AIA  
NEW JERSEY REGISTRATION NO. 21A00912100**

**RYEBREAD PROJECT 5672G  
24 FEBRUARY 2023**

*Working together, we can create building envelopes/systems/interiors/contexts  
that are more safe, productive, healthy, efficient, and distinctive.*

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

SECTION 000010 - TABLE OF CONTENTS

All sections have page numbers prefixed by the section number, as page number 000000-3 for page 3 of Section 000000.

| SECTION<br>NUMBER | SECTION TITLE | # PAGES |
|-------------------|---------------|---------|
|-------------------|---------------|---------|

**DIVISION 00 – PROCUREMENT AND CONTRACTING REQUIREMENTS**

|        |                                                                                                 |    |
|--------|-------------------------------------------------------------------------------------------------|----|
| 000010 | TABLE OF CONTENTS .....                                                                         | 3  |
| 000030 | ABBREVIATIONS .....                                                                             | 4  |
| 000100 | ADVERTISEMENT.....                                                                              | 4  |
| 001000 | INSTRUCTIONS TO BIDDERS.....                                                                    | 11 |
| 002000 | FORM OF BID .....                                                                               | 6  |
| 002600 | PROCUREMENT SUBSTITUTION PROCEDURES.....                                                        | 3  |
| 002800 | CONSENT OF SURETY .....                                                                         | 1  |
| 002801 | SURETY COMPANY & AGENCY INFORMATION.....                                                        | 1  |
| 002850 | AFFIRMATIVE ACTION EVIDENCE FOR CONSTRUCTION PROJECTS .....                                     | 5  |
| 002900 | OWNERSHIP DISCLOSURE STATEMENT .....                                                            | 4  |
| 002950 | NON-COLLUSION AFFIDAVIT .....                                                                   | 1  |
| 002960 | NO MATERIAL CHANGE IN CIRCUMSTANCES .....                                                       | 1  |
| 002970 | CERTIFICATION REGARDING THE DEBARMENT, SUSPENSION<br>INELIGIBILITY AND VOLUNTARY EXCLUSION..... | 2  |
| 002971 | CERTIFICATION OF NON-DEBARMENT FOR FEDERAL<br>GOVERNMENT CONTRACTS.....                         | 5  |
| 004580 | SWORN CONTRACTOR CERTIFICATION REQUIREMENTS .....                                               | 2  |
| 004590 | POLITICAL CONTRIBUTIONS DISCLOSURE FORM .....                                                   | 1  |
| 004591 | BYRD ANTI-LOBBYING AMENDMENT CERTIFICATION .....                                                | 3  |
| 004595 | PREVAILING WAGES CERTIFICATION FORM .....                                                       | 1  |
| 004596 | LOWEST BIDDER PREVAILING WAGE CERTIFICATION.....                                                | 1  |
| 005290 | LIST OF PRIME SUBCONTRACTORS .....                                                              | 2  |
| 006000 | PROJECT FORMS.....                                                                              | 2  |
| 006001 | BIDDER REQUEST FOR INFORMATION .....                                                            | 1  |
| 007100 | NOTICE TO PROCEED.....                                                                          | 1  |

**DIVISION 01 - GENERAL REQUIREMENTS**

|          |                                                                              |    |
|----------|------------------------------------------------------------------------------|----|
| 010002   | AIA GENERAL CONDITIONS AIA A201 - 2017.....                                  | 66 |
|          | SUPPLEMENTAL CONTRACT TERMS FOR CONTRACTS SUPPORTED<br>BY FEDERAL FUNDS..... | 5  |
| 010003   | PREVAILING WAGE RATES. ....                                                  | 2  |
|          | DAVIS-BACON ACT WAGE DETERMINATIONS .....                                    | 10 |
| 011000   | SUMMARY .....                                                                | 6  |
| 012100   | ALLOWANCES.....                                                              | 2  |
| 012500   | SUBSTITUTION PROCEDURES .....                                                | 4  |
| 012501   | SUBSTITUTION REQUEST .....                                                   | 2  |
| 012600   | CONTRACT MODIFICATION PROCEDURES .....                                       | 3  |
| 012610.1 | PRIME CONTRACTOR COR SUMMARY .....                                           | 1  |

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

|    |          |                                                     |    |
|----|----------|-----------------------------------------------------|----|
| 1  | 012610.2 | PRIME CONTRACTOR COR WORKSHEET .....                | 1  |
| 2  | 012620.1 | SUBCONTRACTOR COR SUMMARY .....                     | 1  |
| 3  | 012620.2 | SUBCONTRACTOR COR WORKSHEET .....                   | 1  |
| 4  | 012900   | PAYMENT PROCEDURES.....                             | 5  |
| 5  | 012910   | PAYROLL VERIFICATION AFFIDAVIT.....                 | 1  |
| 6  | 012911   | PARTIAL RELEASE OF LIENS .....                      | 3  |
| 7  | 012920   | BILL OF SALE/CERTIFICATION FOR STORED MATERIAL..... | 3  |
| 8  | 013100   | PROJECT MANAGEMENT AND COORDINATION.....            | 11 |
| 9  | 013200   | CONSTRUCTION PROGRESS DOCUMENTATION.....            | 4  |
| 10 | 013233   | PHOTOGRAPHIC DOCUMENTATION .....                    | 2  |
| 11 | 013300   | SUBMITTAL PROCEDURES .....                          | 9  |
| 12 | 013310   | PROJECT START-UP SUBMITTALS .....                   | 2  |
| 13 | 014000   | QUALITY REQUIREMENTS .....                          | 6  |
| 14 | 014200   | REFERENCES .....                                    | 2  |
| 15 | 015000   | TEMPORARY FACILITY AND CONTROLS .....               | 7  |
| 16 | 015526   | MAINTENANCE AND PROTECTION OF TRAFFIC.....          | 7  |
| 17 | 016000   | PRODUCT REQUIREMENTS.....                           | 7  |
| 18 | 017123   | FIELD ENGINEERING.....                              | 2  |
| 19 | 017300   | EXECUTION .....                                     | 9  |
| 20 | 017413   | CLEANING AND RESTORATIONS FOR SITEWORK.....         | 4  |
| 21 | 017700   | CLOSEOUT PROCEDURES .....                           | 6  |
| 22 | 017710   | PROJECT CLOSEOUT SUBMITTALS .....                   | 2  |
| 23 | 017721   | MAINTENANCE BOND .....                              | 2  |
| 24 | 017722   | SUBCONTRACTOR GUARANTY.....                         | 2  |
| 25 | 017823   | OPERATION AND MAINTENANCE DATA .....                | 7  |
| 26 | 017839   | PROJECT RECORD DOCUMENTS .....                      | 4  |
| 27 | 017900   | DEMONSTRATION AND TRAINING.....                     | 4  |
| 28 |          |                                                     |    |
| 29 |          | <b>DIVISION 02 – EXISTING CONDITIONS</b>            |    |
| 30 |          |                                                     |    |
| 31 | 023000   | SUBSURFACE INVESTIGATION .....                      | 1  |
| 32 | 024113   | SELECTIVE SITE DEMOLITION .....                     | 4  |
| 33 | 024119   | SELECTIVE DEMOLITION.....                           | 7  |
| 34 |          |                                                     |    |
| 35 |          | <b>DIVISION 03 – CONCRETE</b>                       |    |
| 36 |          |                                                     |    |
| 37 | 031100   | CONCRETE FORMWORK FOR SITEWORK.....                 | 6  |
| 38 | 032100   | CONCRETE REINFORCEMENT FOR SITEWORK.....            | 3  |
| 39 | 033053   | CONCRETE FOR SITEWORK.....                          | 4  |
| 40 |          |                                                     |    |
| 41 |          | <b>DIVISION 05 – METALS</b>                         |    |
| 42 |          |                                                     |    |
| 43 | 050900   | MISCELLANUOUS METAL WORK AND COATINGS .....         | 4  |
| 44 | 055200   | HANDRAILS AND RAILINGS.....                         | 3  |
| 45 |          |                                                     |    |
| 46 |          | <b>DIVISION 08 - OPENINGS</b>                       |    |
| 47 |          |                                                     |    |
| 48 | 083323   | OVERHEAD COILING DOORS .....                        | 9  |
| 49 |          |                                                     |    |

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

**DIVISION 10 - SPECIALTIES**

|        |                               |   |
|--------|-------------------------------|---|
| 101100 | VISUAL DISPLAY SURFACES ..... | 6 |
| 101453 | REGULATORY SIGNS .....        | 2 |

**DIVISION 11 - EQUIPMENT**

|        |                                |   |
|--------|--------------------------------|---|
| 115700 | VOCATIONAL SHOP EQUIPMENT..... | 7 |
|--------|--------------------------------|---|

**DIVISION 31 - EARTHWORK**

|           |                                                           |    |
|-----------|-----------------------------------------------------------|----|
| 311200    | SELECTIVE SITE CLEARING .....                             | 3  |
| 312300.10 | SITE EXCAVATION, FILLING AND GRADING.....                 | 12 |
| 312316.10 | EXCAVATION (UNCLASSIFIED).....                            | 3  |
| 312500    | TEMPORARY SOIL EROSION AND SEDIMENT CONTROL MEASURES..... | 3  |

**DIVISION 32 – EXTERIOR IMPROVEMENTS**

|           |                                                       |   |
|-----------|-------------------------------------------------------|---|
| 321123    | DENSE GRADE AGGREGATE BASE COURSE .....               | 3 |
| 321216    | HOT-MIX ASPHALT (HMA-MIX).....                        | 6 |
| 321723    | TRAFFIC STRIPING AND MARKINGS.....                    | 3 |
| 323113    | GALVANIZED CHAIN LINK FENCE AND SWING GATES.....      | 5 |
| 323113.10 | GALVANIZED CHAIN LINK, CANTILEVERED SLIDE GATES ..... | 3 |

**DIVISION 50 – APPENDIX**

|        |                                                                      |    |
|--------|----------------------------------------------------------------------|----|
| 500000 | CONTRACTOR’S USE OF APPENDIX DOCUMENTS .....                         | 1  |
| 500001 | GEOPHYSICAL INVESTIGATION REPORT UTILITY LOCATING<br>& MAPPING ..... | 11 |
| 500002 | GEOTECHNICAL ENGINEERING REPORT .....                                | 29 |
| 500003 | LAGUNA TOOLS QUOTE NUMBER 93402.....                                 | 3  |
| 500004 | SJF QUOTE NUMBER 73685 .....                                         | 3  |

END OF TABLE OF CONTENTS

END OF SECTION 000010



SALEM HIGH SCHOOL STADIUM  
SALEM CITY BOE

SECTION 000030 - ABBREVIATIONS

PART 1 - GENERAL

SUMMARY

The following abbreviations and symbols are used throughout the Contract Documents.

SYMBOLS

|    |                                      |        |               |
|----|--------------------------------------|--------|---------------|
|    |                                      | A/V    | audio visual  |
|    |                                      | AUTO   | automatic     |
|    |                                      | AVE    | avenue        |
| <  | angle                                |        |               |
| ~  | approximately                        |        |               |
| [  | channel                              |        |               |
| x° | degree (s)                           | BSMT   | basement      |
| ø  | diameter                             | BRM    | bathroom      |
| #x | number                               | BM     | beam          |
| ↓  | perpendicular                        | BRG    | bearing       |
| x# | pound (s)                            | BRG PL | bearing plate |
| ●  | extra mat'ls/service agreem'ts req'd | BM     | bench mark    |

ABBREVIATIONS

|        |                            |      |                        |
|--------|----------------------------|------|------------------------|
| ABV    | above                      | BLW  | below                  |
| AFF    | above finish floor         | BET  | between                |
| ASC    | above suspended ceiling    | BIT  | bituminous             |
| ACC    | access                     | BLK  | block                  |
| ACFL   | access floor               | BLKG | blocking               |
| AP     | access panel               | BD   | board                  |
| APC    | acoustical panel ceiling   | BO   | bottom of...           |
| ATC    | acoustical tile ceiling    | BOT  | bottom                 |
| ADJ    | adjacent                   | BCB  | bottom chord bearing   |
| ADJT   | adjustable                 | BOS  | bottom of steel        |
| AFFID  | affidavit                  | BRK  | brick                  |
| AGG    | aggregate                  | BLDG | building               |
| A/C    | air conditioning           | BL   | building line          |
| ALT    | alternate                  |      |                        |
| ALUM   | aluminum                   | CAB  | cabinet                |
| ADA    | american w/ disability act | CTV  | cable television       |
| AB     | anchor bolt                | CPT  | carpet(ed), (ing)      |
| ANOD   | anodized                   | CSMT | casement               |
| APP    | application                | CI   | cast iron              |
| APPROX | approximate(ly)            | CIPC | cast-in place concrete |
| ARCHT  | architect(ural)            | CST  | cast stone             |
| A/E    | architect/engineer         | CB   | catch basin            |
| AD     | area drain                 | CLK  | caulk(ing)             |
| APM    | as per manufacturer        | CLG  | ceiling                |
| ASPH   | asphalt                    | CH   | ceiling height         |
|        |                            | CTR  | center                 |
|        |                            | CC   | center to center       |
|        |                            | CT   | ceramic tile           |

SALEM HIGH SCHOOL STADIUM  
SALEM CITY BOE

|       |                        |           |                           |
|-------|------------------------|-----------|---------------------------|
| CMT   | ceramic mosaic tile    | E         | east                      |
| CERT  | certificate            | ELEC      | electric(al)              |
| CHBD  | chalkboard             | EC        | electrical closet         |
| CLRM  | classroom              | EP        | electrical panel          |
| CO    | clean out              | EWC       | electric water cooler     |
| CLR   | clear(ance)            | EL        | elevation                 |
| CL    | closet                 | ELEV      | elevator                  |
| COL   | column(s)              | EMER      | emergency                 |
| COMP  | complete(d), (ing)     | EQ        | equal                     |
| CONC  | concrete               | EQUIP     | equipment                 |
| CMU   | concrete masonry unit  | EST       | estimate                  |
| CU    | condensing unit        | EXCAV     | excavate                  |
| CONF  | conference             | EF        | exhaust fan               |
| CONST | construction           | EX        | exist(ing)                |
| CONT  | continue(ous)          | EXIST('G) | exist(ing)                |
| CONTR | contract(or)           | EJ        | expansion joint           |
| CLL   | contract limit line    | EXP       | exposed                   |
| CJ    | control joint          | EXT       | exterior                  |
| COORD | coordinate(ation)      | EIFS      | ext insul & fin sys       |
| CORR  | corridor               |           |                           |
| CRS   | course(ing), (s)       | FAB       | fabricate(d)              |
| CFT   | cubic foot             | FB        | face brick                |
| CU YD | cubic yard             | FOC       | face of concrete          |
| CUH   | cabinet unit heater    | FOF       | face of finish            |
|       |                        | FOM       | face of masonry           |
| DP    | dampproofing           | FT        | feet, foot                |
| DL    | dead load              | FBGL      | fiberglass                |
| DEG   | degree                 | FIN       | finish                    |
| DEMO  | demolish, demolition   | FF        | finsh floor               |
| DMT   | demountable            | FE        | fire extinguisher         |
| DTL   | detail(ed), (ing), (s) | FEC       | fire extinguisher cabinet |
| DIAG  | diagonal               | FPL       | fireplace                 |
| DIA   | diameter               | FP        | fireproof                 |
| DIM   | dimension              | FLASH'G   | flashing                  |
| DRM   | dining room            | FLR       | floor(ing)                |
| DSPR  | dispenser              | FD        | floor drain               |
| DIV   | division               | FLUR      | fluorescent               |
| DR    | door                   | FJ        | flush joint               |
| DA    | doubleacting           | FTG       | footing                   |
| DH    | double hung            | FND       | foundation                |
| DN    | down                   | FBO       | furnished by others       |
| DS    | downspout              |           |                           |
| D     | drain                  |           |                           |
| DWG   | drawing(s)             | GA        | gauge                     |
| DF    | drinking fountain      | GALV      | galvanized                |
| D/W   | drywall                | GC        | general contract(or)      |
|       |                        | GL        | glass, glazing            |
| EA    | each                   | GB        | grab bar                  |
| EF    | each face              | GD        | grade(ing)                |

SALEM HIGH SCHOOL STADIUM  
SALEM CITY BOE

|        |                           |       |                         |
|--------|---------------------------|-------|-------------------------|
| GFI    | ground fault interrupt    | MFR   | manufacture(r)          |
| GR     | guard rail                | MO    | masonry opening         |
| GWB    | gypsum wall board         | MAT'L | material(s)             |
|        |                           | MAX   | maximum                 |
|        |                           | MECH  | mechanical              |
| HC     | handicap                  | MC    | medicine cabinet        |
| HR     | handrail                  | MED   | medium                  |
| HDW    | hardware                  | MTL   | metal                   |
| HDR    | header                    | MIN   | minimum                 |
| HTR    | heater                    | MIR   | mirror                  |
| HVAC   | heating/ventilating & a/c | MISC  | miscellaneous           |
| HT     | height                    | MOD   | modular                 |
| HC     | hollow core               | MT    | mount(ed), (ing)        |
| HM     | hollow metal              | MHT   | mounting height         |
| HORZ   | horizontal                |       |                         |
| HB     | hose bibb                 |       |                         |
| HWH    | hot water heater          | NOM   | nominal                 |
|        |                           | N     | north                   |
|        |                           | NIC   | not in contract         |
| IRWC   | impact resist. wall cover | NTS   | not to scale            |
| ID     | inside diameter           | NO    | number                  |
| INSUL  | insulate(d), (ion)        | NJUCC | NJ Uniform Constr. Code |
| INT    | interior                  |       |                         |
| INV    | invert                    | OFF   | office                  |
|        |                           | O/C   | on center               |
| JC     | janitor's closet          | OPN'G | opening                 |
| JST    | joist                     | OPP   | opposite                |
| JT     | joint                     | OPT   | optional                |
|        |                           | OA    | outside air             |
| KIT    | kitchen                   | OD    | outside diameter        |
|        |                           | OA    | overall                 |
|        |                           | OH    | overhead                |
| LAB    | laboratory                |       |                         |
| LBS    | pounds                    | PNT   | paint                   |
| LBL    | lable                     | PNL   | panel                   |
| LAV    | lavatory                  | PAN   | pantry                  |
| LH     | left hand                 | PAR   | parallel                |
| L      | length                    | PKG   | parking                 |
| LTG    | lighting                  | PTN   | partition               |
| LT FIX | light fixture             | PVMT  | pavement                |
| LF     | lineal foot               | PAYMT | payment                 |
| LIN    | linen closet              | PL    | plate                   |
| LTL    | lintel                    | PLYWD | plywood                 |
| LL     | live load                 | PNT   | point                   |
| LIV    | living room               | PVC   | polyvinyl chloride      |
| LVR    | louver                    | PCF   | pounds per cubic foot   |
|        |                           | PLF   | pounds per lineal foot  |
| MH     | manhole                   | PSF   | pounds per square foot  |

SALEM HIGH SCHOOL STADIUM  
SALEM CITY BOE

|        |                            |      |                           |
|--------|----------------------------|------|---------------------------|
| PSI    | pounds per square foot     | TG   | tempered glass            |
| PCL    | Precast lintel             | T&G  | tongue and grove          |
| PREFAB | prefabricate(d)            | TO   | top of...                 |
| PTL    | property line              | TOP  | top of parapet            |
| PROP   | proposed                   | TOS  | top of steel              |
|        |                            | TOW  | top of wall               |
|        |                            | TB   | towel bar                 |
| RAD    | radius                     | T    | tread                     |
| RAFT   | rafter(s)                  | TYP  | typical                   |
| RAH    | roof area hatch            |      |                           |
| RWC    | rain water conductor       |      |                           |
| REF    | reference                  | UC   | under cut                 |
| RYEB   | Regan Young England Butera | U/D  | unfinished drywall        |
| REINF  | reinforce(d), (ing)        | UL   | underwriters laboratory   |
| REQ'D  | required                   | UR   | urinal                    |
| RF     | Resinous Flooring          |      |                           |
| RH     | right hand                 |      |                           |
| ROW    | right of way               | VERT | vertical                  |
| R      | riser                      | VB   | vinyl base                |
| RF'G   | roofing                    | VCT  | vinyl composited tile     |
| RD     | roof drain                 | VT   | vinyl tile                |
| RM     | room                       |      |                           |
| RO     | rough opening              |      |                           |
| RT     | rubber tile                | WTW  | wall to wall              |
|        |                            | WC   | water closet              |
|        |                            | WG   | wire glass                |
| SAFB   | sound attn fire blanket    | WP   | waterproof(ing)           |
| SCHED  | schedule                   | WWF  | welded wire fabric        |
| SAU    | self-adhering underlayment | W    | west                      |
| SHT    | sheet(s)                   | WDW  | window                    |
| SIM    | similar                    | WG   | wire glass                |
| SKYLT  | skylight                   | W/   | with                      |
| SC     | solid core                 | W/O  | without                   |
| S      | south                      | WOM  | women                     |
| SPEC   | specification(s)           | WD   | wood                      |
| SQ FT  | square feet, foot          | WPT  | wood preservative treated |
| SRVT   | slip resistant vinyl tile  |      |                           |
| SST    | stainless steel            |      |                           |
| STD    | standard                   | YD   | yard                      |
| STL    | steel                      |      |                           |
| STO    | storage                    |      |                           |
| SD     | storm drain                |      |                           |
| STRUC  | structure(ural)            |      |                           |
| SYM    | symmetry(ical)             |      |                           |
| SYS    | system                     |      |                           |
| SV     | sheet vinyl                |      |                           |
|        |                            |      |                           |
| TELE   | telephone                  |      |                           |
| THK    | thick(ness)                |      |                           |

END OF SECTION 000030

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

SECTION 000100 - ADVERTISEMENT

NOTICE IS HEREBY GIVEN THAT SEALED BIDS FOR:

INTERIOR AND EXTERIOR ALTERATIONS FOR A INDUSTRIAL ARTS (WOODSHOP) AT THE GLOUCESTER CITY HIGH SCHOOL LOCATED AT 1300 MARKET STREET; GLOUCESTER CITY, NEW JERSEY 08030.

Will be received no later than **3:00 PM** prevailing time, on **Friday, 17 March 2023** in the Board Offices located in the Gloucester City High School; 1300 Market Street; Gloucester City, New Jersey 08030.

THIS IS **NOT** A SCHOOL DEVELOPMENT AUTHORITY (SDA) PROJECT

Stevens Amendment Statement: It is anticipated that approximately 100% of this Project will be funded by grants received under (ARP/ American Rescue Plan SRP/ESSER Elementary and Secondary School Emergency Relief) in the anticipated amount of \$1,579,404. The use of federal funds requires Prime Contractors to utilize small, minority and women owned businesses as their subcontractors whenever possible.

Prime Bidders must be pre-qualified by the New Jersey Department of the Treasury, Department of Property and Management Construction, prior to the date that bids are received. Any bids submitted under the terms of New Jersey Statutes not including a copy of a valid and active Pre-qualified/Classification Certificate and New Jersey Department of Labor Contractor Registration Certificate may be rejected as being non-responsive to bid requirements.

The following DPMC-Classified Trade(s) and License(s) may be required by the Overall Prime Bidder and/or their subcontractors:

C008 General Construction

C009 General Construction/Alterations and Additions.

C029 Structural Steel and Ornamental Iron.

C030 Plumbing.

C032 Heating, Ventilation, Air Conditioning and Refrigeration (HVACr).

C047 Electrical.

Bids must be addressed to the GLOUCESTER CITY BOARD OF EDUCATION; 1300 Market Street; Gloucester City; New Jersey 08068; Attn.: Sarah Bell, Business Administrator/Board Secretary. All bids received on time shall be opened and read publicly at the above time and date. The Bidder assumes full responsibility for appropriate delivery (via whatever means, including mail) on or before the designated time and to the designated location. The District is not responsible for any bids that fail to be delivered on or before the designated time, and to the designated location specified by this advertisement, regardless of fault. Electronic (e-mail) submissions shall not be accepted. The GLOUCESTER CITY BOARD OF EDUCATION and REGAN YOUNG ENGLAND BUTERA, PC. assume no responsibility for bids mailed or misdirected in delivery.

Bidders shall note that the Board of Education, RYEBREAD and its consultants shall not be responsible for the Bidder's procurement of the Bidding Documents from third party agencies as

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

the information and documents provided by these agencies may be incomplete and/or inaccurate. Furthermore, the Board of Education, RYEBREAD and its consultants shall not be responsible for error and omissions published by third party agencies.

**Sealed bids shall be received as a SINGLE GENERAL CONSTRUCTION contract for all work, goods and services required to complete the project.** The bid must identify the name or names of all subcontractors to whom the Prime Bidder will subcontract the furnishing of: (1) Plumbing and Gas Fitting; (2) Heating, Ventilation, Air Conditioning and Refrigeration; (3) Electrical Work, including any electrical power plant, tele-data, fire alarm, or security system; and (4) Structural Steel and Ornamental Iron Work ("Prime Subcontractors"). Each of the Prime Subcontractors shall be qualified in the same manner as the Prime Bidder, in accordance with the requirements of N.J.S.A. 18A:18A-1 et seq. If none are required, the Prime Bidder shall input "None" on the List of Subcontractors.

The project consists of, but is not limited to, the alteration of two existing rooms into an industrial arts woodshop of approximately 2,000 square feet.

The Work shall include, but not be limited to, demolition, sitework, concrete work, chain link fencing and gates, overhead door, finishes, dust collection system, woodshop equipment, HVAC and electrical.

Bid Forms, Instructions to Bidders, Specifications and other bid documents may be made available and examined by Bidders from the office of REGAN YOUNG ENGLAND BUTERA, PC; 456 High Street, Mt. Holly, New Jersey 08060 during regular business hours, (beginning on 24 February 2023). Additional information, including a list of (registered) Prime Bidders, can be obtained from the Architect's web site ([www.RYEBREAD.com](http://www.RYEBREAD.com)). Subcontractors and vendors may obtain copies from registered Prime Bidders. There is a **\$25.00 non-refundable** fee for the bidding documents, payable by check, credit card, or cash. Checks shall be made payable to Regan Young England Butera. An electronic copy of the specifications and drawings shall be made available to Prime Bidders; hard copies of the bidding documents shall not be provided. Access to the electronic documents shall be emailed to the Prime Bidder upon receipt of their payment and all of the following information:

- Business name.
- Contact person.
- Business mailing address.
- Business phone number.
- Business facsimile number.
- Email address for whom bid documents are to be sent.

Additional information, including Addenda, a list of Prime Bidders, and project budget can be obtained from the following link.

<http://www.ryebread.com/bidding/5672g-industrial-arts-alteration/>

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

Inquiries shall be directed to:

Regan Young AIA  
REGAN YOUNG ENGLAND BUTERA, PC  
456 High Street  
Mt. Holly, NJ 08060  
(609) 265-2652/0333 Fax  
[rgy@ryebread.com](mailto:rgy@ryebread.com)

A **NON-MANDATORY** PRE-BID CONFERENCE will be held at **3:00 PM** prevailing time, on **Tuesday, 28 February 2023**. We will meet in the North Parking Lot adjacent to the proposed work area at the GLOUCESTER CITY HIGH SCHOOL located at 1300 Market Street; Gloucester City; New Jersey 08030. Attendance at the Pre-Bid Conference is encouraged but not mandatory. Bid documents will not be available at the pre-bid conference.

Prime Bidder shall note that long-lead shop drawings are required to be initiated immediately after the Notice to Proceed is issued so that those items can be ordered as soon as possible. Construction shall begin on or about 03 April 2023 and shall be substantially completed on or before 25 August 2023.

Bids must be made upon the official Form of Bid and shall include Bid Security in the form of a certified check, cashier's check, or by Bid Bond drawn to the order of the Owner in the amount of ten percent (10%) of the Base Bid but in no case in excess of \$20,000.00. The bid shall also be accompanied by an executed Consent of Surety in accordance with N.J.S.A. 18A:18A-25, agreeing to furnish a Performance Bond and a Payment Bond, each in the stated principal amount of one hundred percent (100%) of the contract amount, and a two-year Maintenance Bond in the amount of ten percent (10%) of the contract amount.

Contracts for work under these bids will obligate contractors and Subcontractors to (1) pay Prevailing Wages in accordance with N.J.S.A. 34:11-56(a) et. seq., (2) comply with equal opportunity laws in accordance with N.J.S.A. 10:5-31 et. seq., (3) comply with Affirmative Action laws in accordance with N.J.A.C. 17:27 and comply with Exhibit B of the Department of the Treasury, Guidelines for Administering EEO in Public Contracts, (4) provide ownership disclosure information per N.J.S.A. 52:25-24.2, (5) comply with New Jersey Business Registration laws in accordance with N.J.S.A. 52:32-44 and (6) comply with any and all successors, amendments or additions thereto.

Prime Bidders are required to comply with the requirements of the State of New Jersey Public School Contract Law, N.J.S.A. Title 18A bidding laws. A Prime Bidder that withdraws or modifies his/her bid prior to 60 days after the actual date of opening of bids may forfeit their bid security. All bid security, except for the security of the three apparent lowest responsible Prime Bidders shall, if requested, be returned after ten days from the opening of the bids, Saturdays, Sundays and holidays excepted, and the bids of such Prime Bidders shall be considered as withdrawn.

Registered Bidders must submit substitution requests or any questions concerning the project to the Architect on Form 006001 BIDDER REQUEST FOR INFORMATION included in the Project Manual no later than **1:00 PM Friday, 03 March 2023**. The Architect will not respond to questions received by those other than Prime Bidders.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1 The GLOUCESTER CITY BOARD OF EDUCATION has the right to award the contracts within  
2 sixty (60) days of the bid opening and reserves the right to reject any or all bids and to waive any  
3 non-material defects, as may be permitted by law.  
4

5 Bidders are advised that the District reserves the right to cancel this Project at any time due to any  
6 unforeseen circumstances that arise in connection with any Public Health Emergency and funding  
7 related to same. By submitting a bid, Prime Bidders waive, on behalf of themselves and their  
8 Subcontractors, any potential claim for increased costs, loss of profits, delay damages, or other  
9 similar consequential and direct damages incurred due to the District's Termination of the Project  
10 for Convenience.  
11

12 Directions to the Pre-Bid Conference and the Bid Opening can be obtained by calling:

13  
14 (856) 456-7000  
15

16 By Order of the GLOUCESTER CITY BOARD OF EDUCATION.  
17 Sarah Bell, Business Administrator/Board Secretary.  
18  
19

20 END OF SECTION 000100



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1 SECTION 001000 - INSTRUCTIONS TO BIDDERS

2  
3  
4 PART 1 - GENERAL

5  
6 Refer to Sections of Divisions 00 and 01 for additional information that may affect the preparation  
7 of bids. These Sections contain information pertaining to:

- 8  
9 Time, date and place for receipt of bids.  
10 Time for completion.  
11 Substitution of materials.  
12 Alternate prices, allowances, unit prices.  
13 Other conditions pertaining to the Work.  
14

15 BIDDING DOCUMENTS

16  
17 Bidding Documents consist of:

18  
19 The Project Manual containing:

- 20  
21 Table of Contents.  
22 Instructions to Bidders.  
23 Contract Forms.  
24 Modified AIA General Conditions of the Contract.  
25 Specifications as listed in the TABLE OF CONTENTS.  
26

27 Drawings as listed on the drawings COVER SHEET.

28  
29 Any Addenda as may be subsequently issued to Bidders of Record.  
30

31 Bidding Documents will be available to Prime Contract Bidders as stated in the  
32 ADVERTISEMENT. Sub-Contractors and vendors may obtain copies from registered Prime  
33 Contract Bidders. All documents furnished to any person, under any condition, shall remain the  
34 property of the Architect and shall not be reproduced or used on any other project without approval  
35 of the Architect in writing.  
36

37 BID UPDATES

38  
39 Bidders should regularly visit the Architect's website at the link indicated in the Advertisement and  
40 select the applicable project for relevant project information including, but not limited to, addenda,  
41 prospective bidders, and budget.  
42

43 SINGLE OVERALL BID

44  
45 In accordance with Title 18A, Public School Contracts Law, the Contractor submitting a bid to  
46 perform the work under a single contract shall furnish in writing at the time of Bid, the names of  
47 persons or entities proposed as Prime subcontractors. Prime subcontractors shall be qualified in  
48 accordance with N.J.S.A. 18A:18A-18. In addition, submit evidence of performance security of  
49 each Prime subcontractor simultaneously with the bid.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

BID PREPARATION

Bids for Contracts as listed in the Advertisement for Bids as hereinafter described, will be received for the performance of the Project. The bids shall cover all cost of any nature, incident to and growing out of the work. In explanation but not in limitation thereof, these costs shall include the cost of all work, labor, materials, equipment, transportation and cost of all else necessary to perform and complete the Project in the manner and within the time required, all incidental expenses in connection therewith, all costs on account of loss by damage or destruction of the Project, to the extent that the cost of such loss is not recovered from insurance carried by the Owner and the Contractor, and any additional expenses for unforeseen difficulties encountered, for settlement of damages and for replacement of defective work and materials.

Prior to submitting a bid, Bidder shall examine and thoroughly familiarize himself/herself with all of the following:

The Bidding Documents.

All applicable laws, ordinances, rules and regulations which may affect the Work.

The Site and all existing Work, buildings, utilities, roads, etc.

That the bidding Contractor can secure the necessary labor and equipment and that the materials specified herein may be obtained in the quantities and in the time required by the Contract.

All other conditions that may affect the Work.

Drawings and Specifications have been prepared on the basis of surveys and inspections of the Site and are intended to present an essentially accurate indication of the physical conditions at the Site. This shall not relieve the Bidder of the necessity of fully informing himself/herself as to the existing conditions at the site. The failure or omission of any Bidder to receive or examine any form instrument or document or to visit the site and acquaint themselves with conditions there existing, shall not relieve any Bidder from obligation with respect to his bid.

If a Bidder finds discrepancies or ambiguities in, or omissions from the Documents, or if he/she is in doubt as to their meaning, he/she shall notify the Architect in writing by the time, date and method indicated in the ADVERTISEMENT. Failure to report any discrepancies, ambiguities, and/or omissions in the manner herein prescribed constitutes a waiver of any claim for additional compensation arising out of any and all additional work and/or materials necessary as a result of the Architect's decision(s) clarifying said discrepancies, ambiguities and/or omissions. If properly notified, the Architect will, if necessary, send written Addenda to all Bidders of Record. Direct inquiries to:

Regan Young, AIA  
REGAN YOUNG ENGLAND BUTERA, PC  
456 High Street  
Mt. Holly, NJ 08060  
(609) 265-2652/0333 Fax  
rgy@ryebread.com

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1 PRE-BID CONFERENCE

2  
3 A pre-bid conference will be conducted by the Architect as stated in the ADVERTISEMENT. It is  
4 the responsibility of the bidders to obtain directions to the place of the meeting and for attendance.  
5

6 VISITATION OF EXISTING SITE

7  
8 Visit to the existing site may be arranged by contacting Bob Collins, Facilities Director at:

9  
10 (856) 456-7000, Ext 1524; or  
11 rcollins@gcsd.k12.nj.us.  
12

13 REQUESTS FOR INFORMATION

14  
15 Registered Prime Bidders requesting information or clarification to bidding or construction related  
16 issues shall fax the request to the Architect at (609) 265-0333 by the date and time indicated in the  
17 ADVERTISEMENT. Bidders must submit form 006001, BIDDER REQUEST FOR  
18 INFORMATION included in this Project Manual. Only requests submitted on the BIDDERS  
19 REQUEST FOR INFORMATION form will be answered.  
20

21 Request must clearly identify the drawing number and/or specification section in question. All  
22 requests must be received in writing no later than the date & time indicated in the  
23 ADVERTISEMENT.  
24

25 ORAL EXPLANATIONS

26  
27 Oral explanations or instructions given before Award of Contract will not be binding. All  
28 authorized interpretations will be made by written Addenda.  
29

30 ADDENDA

31  
32 Written Addenda making changes or corrections to the Bidding Documents after they have been  
33 issued will be sent, if required, to Bidders of Record. Such Addenda shall take precedence over  
34 that portion of the Bidding Documents concerned and shall become a part of the Contract  
35 Documents. The failure to provide the additional notice to bidders shall not serve to void the award  
36 of the Contract(s). In accordance with N.J.S.A 18A:18A-21. Addenda shall be issued to reach  
37 registered Bidders at least 7 days prior, Saturdays, Sundays and holidays excepted, to the Date for  
38 Receipt of Bids. It is the responsibility of the Bidder to ascertain that he/she has received all issued  
39 Addenda, prior to submission of the bid.  
40

41 Receipt of all Addenda shall be acknowledged by the Bidder on the FORM OF BID in the space  
42 provided. Failure to acknowledge Addenda may be cause for rejection of the bid.  
43

44 PREQUALIFICATION/CLASSIFICATION

45  
46 Pursuant to N.J.S.A. 52:35-1 et seq. and 18A:18A-26, 27 et seq., Bidders on any Contract for State  
47 Funded and/or Department of Education work in the State of New Jersey in which the entire cost  
48 of the Contract exceeds \$20,000 must be pre-qualified by the Department of Treasury, Division of  
49 Property Management and Construction, as to the character and amount of public work on which

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1 they may submit bids. Pre-qualified Bidders must submit with their Bid a Notice of Classification  
2 setting forth the type of work and the amount of work for which he has been qualified, that there  
3 has been no material adverse change in his qualification information, the total amount of  
4 uncompleted work on contracts at the time of the bid opening. (Forms for this purpose are available  
5 from the Director of the Division of Property Management and Construction, Department of  
6 Treasury, Trenton, NJ 08625, [www.state.nj.us/treasury/dpmc/forms.shtml](http://www.state.nj.us/treasury/dpmc/forms.shtml)).

7  
8 Each bidder submitting a bid for a single overall contract must include with its bid evidence that  
9 the prime subcontractors it proposes (if any) to utilize for structural steel work; plumbing and fire  
10 protection work; heating, ventilating and air conditioning work; and electrical work (prime  
11 subcontractors) are pre-qualified by the New Jersey Department of Treasury, Division of Property  
12 Management and Construction and shall submit with his/her bid a current Notice of Classification  
13 and a No Material Change in Qualification Information Form, and a Total Amount of Uncompleted  
14 Contracts Form (DPMC Form 701) for each of the above subcontractors.

15  
16 Pursuant to N.J.S.A. 18A:7G-37, each prequalified contractor seeking to bid school facilities  
17 projects, along with any prime subcontractors required to be named shall, as a condition of bidding,  
18 submit a sworn Contractor Certification regarding their qualifications and credentials. A principal  
19 owner or officer of each company shall certify that their firm has the qualifications and credentials  
20 required by the Contractor Certification. A current, valid copy of a "Certification of Authority to  
21 perform work in New Jersey" issued by the Department of the Treasury shall be attached to each  
22 Contractor Certification form.

23  
24 BUSINESS REGISTRATION OF PUBLIC CONTRACTORS

25  
26 Pursuant to N.J.S.A.52:32-44, as set forth above, the bidder shall submit a copy of their Business  
27 Registration Certificate as well as each of their subcontractors or suppliers anticipated to be used  
28 in the fulfillment of the contract.

29  
30 For the term of the contract, the contractor and each of its affiliates and a subcontractor and each of its  
31 affiliates N.J.S.A. 52:32-44(g)(3) shall collect and remit to the Director, New Jersey Division of  
32 Taxation, the use tax due pursuant to the Sales and Use Tax Act on all sales of tangible personal  
33 property delivered into this State, regardless of whether the tangible personal property is intended for  
34 a contract with a contracting agency.

35  
36 A business organization that fails to provide a copy of a business registration as required pursuant to  
37 section 1 of P.L.2001, c.134 (C.52:32-44 et al.) or subsection e. or f. of section 92 of P.L.1977, c.110  
38 (C.5:12-92), or that provides false business registration information under the requirements of either  
39 of those sections, shall be liable for a penalty of \$25 for each day of violation, not to exceed \$50,000  
40 for each business registration copy not properly provided under a contract with a contracting agency.

41  
42 OWNER'S RIGHT TO ADDITIONAL INVESTIGATION

43  
44 The Owner may make such additional investigations as it deems necessary to determine the ability  
45 of the Bidder to perform the work, and the Bidder shall furnish to the Owner all such information  
46 and data for this purpose as the Owner may request. The Owner reserves the right to reject any bid  
47 if the evidence submitted by, or investigation of, such Bidder fails to satisfy the Owner that he is  
48 properly qualified to carry out the obligations of the Contract and to complete the work  
49 contemplated therein.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1 TIME FOR COMPLETION

2  
3 Time for completion as indicated in the ADVERTISEMENT. Bidders attention is directed to  
4 MODIFIED AIA GENERAL CONDITIONS, Paragraph 8.1.

5  
6 BIDDER'S LEGAL NAME

7  
8 The Bidders legal name, address and telephone number shall be stated in full on the FORM OF  
9 BID. The Bid shall be signed in ink by a Principal duly authorized to bind the Bidder in contracts.

10  
11 Bids by Partnerships shall indicate the full names of all partners and shall be signed in the  
12 partnership name by one of the partners or by a duly authorized representative followed by the  
13 designation of the person signing.

14  
15 Bids by Corporations shall have the name of the corporation followed by the State of Incorporation  
16 and the designation of the corporate officer authorized to bind the corporation in this matter.

17 In accordance with N.J.S.A. 52:25-24.2, no corporation, partnership, or limited liability company  
18 shall be awarded any contract nor shall any agreement be entered into for the performance of any  
19 work or the furnishing of any materials or supplies, the cost of which is to be paid with or out of  
20 any public funds, by the State, or any county, municipality or school district, or any subsidiary or  
21 agency of the State, or of any county, municipality or school district, or by any authority, board, or  
22 commission which exercises governmental functions, unless prior to the receipt of the bid or  
23 accompanying the bid, of said corporation, said partnership, or said limited liability company there  
24 is submitted a statement setting forth the names and addresses of all stockholders in the corporation  
25 who own 10 percent or more of its stock, of any class, or of all individual partners in the partnership  
26 who own a 10 percent or greater interest therein, or of all members in the limited liability company  
27 who own a 10 percent or greater interest therein, as the case may be. If one or more such stockholder  
28 or partner or member is itself a corporation or partnership or limited liability company, the  
29 stockholders holding 10 percent or more of that corporation's stock, or the individual partners  
30 owning 10 percent or greater interest in that partnership, or the members owning 10 percent or  
31 greater interest in that limited liability company, as the case may be, shall also be listed. The  
32 disclosure shall be continued until names and addresses of every noncorporate stockholder, and  
33 individual partner, and member, exceeding the 10 percent ownership criteria established in this act,  
34 has been listed.

35  
36 DOCUMENTS ACCOMPANYING BID

37  
38 Refer to Section 002000 - FORM OF BID for a list of all documents required to be submitted with  
39 the bid along with the required number of copies.

40  
41 Failure to provide all required documents and required number of copies may be cause for  
42 disqualification and rejection of bid.

43  
44 MAILED BIDS

45  
46 If a Bid is to be mailed, the bid envelope shall be enclosed in another opaque envelope stating  
47 "MAILED GLOUCESTER CITY HIGH SCHOOL INDUSTRIAL ARTS ALTERATION BID  
48 PROPOSAL" and addressed to:  
49

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1 Sarah Bell, Business Administrator/ Board Secretary  
2 GLOUCESTER CITY BOARD OF EDUCATION  
3 1300 Market Street  
4 Gloucester City, New Jersey 08030  
5

6 Electronic (e-mail) submissions shall not be accepted.  
7

8 The Bidder assumes full responsibility for appropriate delivery (via whatever means, including  
9 mail) on or before the designated time and to the designated location. The Owner is not responsible  
10 for any bids that fail to be delivered on or before the designated time, and to the designated location  
11 specified by this ADVERTISEMENT, regardless of fault.  
12

13 BID OPENING  
14

15 Bids shall be received and opened at the designated time and location as stated in the  
16 ADVERTISEMENT.  
17

18 The award of the Contract(s) or rejection of all bids must be made within sixty (60) days of the bid  
19 opening.  
20

21 The execution of the Contract(s) shall be done within ten (10) days of award of bid.  
22

23 Award made to a Bidder whom is not a resident of the State of New Jersey is conditioned upon  
24 Bidder designating a proper agent in the State on whom service can be made in the event of  
25 litigation.  
26

27 If the successful bidder is a corporation not organized under the laws of New Jersey, the award of  
28 Contract and payment of consideration thereunder shall be conditioned upon Corporation promptly  
29 filing a certificate of doing business in the State of New Jersey pursuant to the provisions of New  
30 Jersey law.  
31

32 WITHDRAW OR MODIFICATION OF BID  
33

34 No Bids may be withdrawn or modified after the time set for receipt of bids and for a period of 60  
35 calendar days thereafter without consent of the Owner.  
36

37 INFORMALITIES IN BIDS  
38

39 The Owner reserves the right to reject any or all bids, and to waive any bid requirements and/or  
40 any non-material bid defects, where such rejection or waiver is in the best interests of the Owner,  
41 and where such rejection or waiver is permitted by law.  
42

43 FORM OF AGREEMENT  
44

45 The Form of Agreement shall be the 2017 AIA Document A101 Standard Form of Agreement  
46 between Owner and Contractor (Stipulated Sum).  
47

48 CONTRACTOR PREFORMANCE REVIEW  
49

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1 In accordance with N.J.S.A. 18A:18A-15, the Board of Education, through its authorized agent,  
2 shall upon completion of the contract report to the department as to the contractor's performance,  
3 and shall also furnish such report from time to time during performance if the contractor is then in  
4 default.

5 CHALLENGES TO BID SPECIFICATIONS

6  
7 In accordance with N.J.S.A. 18A:18A-15, any prospective bidder who wishes to challenge a bid  
8 specification shall file such challenges in writing with the School Business Administrator/Board  
9 Secretary and the Architect no less than three (3) days prior to the opening of bids. Challenges  
10 filed after that date shall be considered void and having no impact on the Board of Education or the  
11 award of a contract.

12  
13 AMERICAN GOODS

14  
15 In accordance with N.J.S.A. 18A:18A-20, only manufactured products of the United States,  
16 wherever available, and where possible are to be used with this project.

17  
18 EQUIVALENT PRODUCTS: The use of manufacturers' brand names, catalogue numbers and  
19 similar proprietary identifying data in the Contract Documents are not intended to eliminate from  
20 consideration products that are equivalent in quality, appearance and function to those specified.

21  
22 BONDING

23  
24 Bid Security: Each bid shall include bid security by certified check, cashier's check or bid bond  
25 drawn to the Owner in an amount of ten percent (10%) of the base bid but in no case in  
26 excess of \$20,000.00.

27  
28 Contract Bonds: The Bidder to whom the Contract has been awarded shall, within ten (10)  
29 days of the date of the award, furnish and deliver a Performance Bond and Payment Bond,  
30 equal to one hundred percent (100%) of the Contract amount. The Bidder(s) to whom the  
31 Contract(s) has been awarded shall, prior to requesting Final Payment, furnish and deliver  
32 a TWO (2) year Maintenance Bond, equal to ten percent (10%) of the Final Contract  
33 Amount. If, at any time after execution and approval of a Contract and Performance-  
34 Payment Bond required by Contract Documents, such Bond shall cease to be adequate  
35 security for the Owner, the Contractor shall, within five days after notice to do so, furnish  
36 a new or additional Bond, in form, sum and signed by such Sureties as shall be satisfactory  
37 to the Owner. No further payment shall be deemed due nor shall any further payment be  
38 made to the Contractor unless and until such new or additional Bond shall be furnished and  
39 approved.

40  
41 Consent of Surety: All bids shall be accompanied by an executed Consent of Surety in  
42 accordance with 18A:18A-25, agreeing to furnish the required Performance, Labor and  
43 Material Payment Bond and Maintenance Bond.

44  
45 The Contractor shall obligate their Surety to make periodic inquiries of the Board at  
46 reasonable times, to determine whether its Principal has performed or was performing the  
47 Contract in accordance with all of its terms and conditions, particularly in relation to the  
48 progress payments scheduled under said Contract with the Board.  
49

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

Bidder shall provide proof of executed consent with his/her bid from an approved surety company licensed to conduct business in the State of New Jersey agreeing to furnish the required Maintenance Bond.

All Bonds and Consents of Surety must be accompanied by a valid power of attorney authorizing the signer to bind the surety company.

BOND AND PERMIT COSTS

The cost of all Bonds shall be paid for and obtained by the Contractor. Permits shall be coordinated by and obtained by the Contractor. If the municipality requires a fee for the review and release of construction permits, the Contractor shall pay all required fees and submit evidence of such to the Owner for full reimbursement of direct costs without any markup.

NON-COLLUSION AFFIDAVIT

Pursuant to N.J.S.A. 52:34-15, each bidder shall submit with his bid a Non-Collusion Affidavit in the form bound herein.

LAW AGAINST DISCRIMINATION

All contracts related to the project, whether between Owner and Contractor or Contractor and Subcontractors, shall comply with the anti-discrimination provisions of N.J.S.A. 10:2-1 *et seq.*, the New Jersey Law Against Discrimination, N.J.S.A 10:5-31 *et seq.*, N.J.A.C. 17:27, N.J.A.C. 6A:7-1.8.

Pursuant to N.J.S.A. 10:2-1:

- a. In the hiring of persons for the performance of work under this contract or any subcontract hereunder, or for the procurement, manufacture, assembling or furnishing of any such materials, equipment, supplies or services to be acquired under this contract, no contractor, nor any person acting on behalf of such contractor or subcontractor, shall, by reason of race, creed, color, national origin, ancestry, marital status, gender identity or expression, affectional or sexual orientation or sex, discriminate against any person who is qualified and available to perform the work to which the employment relates;
- b. No contractor, subcontractor, nor any person on his behalf shall, in any manner, discriminate against or intimidate any employee engaged in the performance of work under this contract or any subcontract hereunder, or engaged in the procurement, manufacture, assembling or furnishing of any such materials, equipment, supplies or services to be acquired under such contract, on account of race, creed, color, national origin, ancestry, marital status, gender identity or expression, affectional or sexual orientation or sex;
- c. There may be deducted from the amount payable to the contractor by the contracting public agency, under this contract, a penalty of \$50.00 for each person for each calendar day during which such person is discriminated against or intimidated in violation of the provisions of the contract; and



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- 1 d. This contract may be canceled or terminated by the contracting public agency, and all  
2 money due or to become due hereunder may be forfeited, for any violation of this section  
3 of the contract occurring after notice to the contractor from the contracting public agency  
4 of any prior violation of this section of the contract.  
5

6 In addition, all contracts related to the project, whether between Owner and Contractor or  
7 Contractor and Subcontractors, shall comply with Section 010003 - Supplemental Contract  
8 Terms for Contracts Supported by Federal Funds of the Project Manual.  
9

10 ANTI-BULLYING BILL OF RIGHTS—REPORTING OF HARASSMENT, INTIMIDATION  
11 AND BULLYING—CONTRACTED SERVICE  
12

13 The contracted service provider shall comply with all applicable provisions of the New Jersey Anti-  
14 Bullying Bill of Rights Act—N.J.S.A. 18A:37-13.1 et seq., all applicable code and regulations, and  
15 the Anti-Bullying Policy of the Board of Education. The district shall provide to the contracted  
16 service provider a copy of the board's Anti-Bullying Policy.  
17

18 In accordance with N.J.A.C. 6A:16-7.7 (c), a contracted service provider, who has witnessed, or  
19 has reliable information that a student has been subject to harassment, intimidation, or bullying  
20 shall immediately report the incident to any school administrator or safe schools resource officer,  
21 or the School Business Administrator/Board Secretary.  
22

23 NEW JERSEY PREVAILING WAGE RATE  
24

25 Bidders are required to comply with the State prevailing wage rate for public works, Chapter 150  
26 Laws of 1963, N.J.S.A. 34:11-56.25 et seq.  
27

28 FEDERAL PREVAILING WAGE RATE  
29

30 Bidders must also comply with federal prevailing wage rate determinations, as set forth herein.  
31 Where there is a disparity in wage rate determinations, contractor shall be required to pay the higher  
32 rate.  
33

34 PUBLIC WORKS CONTRACTOR REGISTRATION  
35

36 In accordance with the "Public Works Contractor Registration Act" (N.J.S.A. 34:11-56.51) each  
37 bidder is required to be registered pursuant to the Act at the time of the bid and in accordance with  
38 N.J.S.A. 34:11-56.55 shall submit their certificate prior to awarding of the contract.  
39

40 In accordance with N.J.S.A. 34:11-56.27, (a) bidders shall pay workers not less than the prevailing  
41 wage rate; (b) in the event it is found that any worker, employed by the contractor or any  
42 subcontractor covered by said contract, has been paid a rate of wages less than the prevailing wage  
43 required to be paid by such contract, the Owner may terminate the contractor's or subcontractor's  
44 right to proceed with the work, or such part of the work as to which there has been a failure to pay  
45 required wages and to prosecute the work to completion or otherwise.  
46

47 Pursuant to N.J.S.A. 34:11-56.51, a contractor must be registered pursuant to the Public Works  
48 Contractor Registration Act in order to bid on a contract. All listed subcontractors must also be  
49 registered at the time the bid is submitted.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

PAY TO PLAY

Bidders are advised to comply with the disclosure requirements of 6A:23A-6.3.

RESIDENT CITIZENS; PREFERRED IN EMPLOYMENT ON PUBLIC WORKS  
CONTRACTS

All bidders are to familiarize themselves with N.J.S.A. 34:9-2, which requires the contractor of any public work project to give preference in employment on the project, to citizens of the state of New Jersey. If the terms and conditions of N.J.S.A. 34:9-2 are not complied with, the contract shall be voidable.

CERTIFIED PAYROLL RECORDS

The bidder to whom the contract has been awarded agrees to submit certified payroll records to the public body for each payroll period within ten (10) days of payment of wages in accordance with current New Jersey Statutes. Copies of certified payroll forms may be obtained by calling or writing or calling the following agency:

NEW JERSEY DEPARTMENT OF LABOR  
Division of Workplace Standards  
Public Contracts Section  
CN 389  
Trenton, New Jersey 08626-0389  
(609) 292-2259

STUDENT AND FACULTY SAFETY REQUIREMENTS

During the performance of this contract, neither the Contractor nor any Subcontractor or delivery personnel, where applicable, shall knowingly allow any employee registered pursuant to N.J.S.A. 2C:7-1, et seq. "Megan's Law," as a Tier 3 offender ("sex offenders determined to pose a relatively high risk of re-offense") or a Tier 2 offender ("sex offenders determined to pose a moderate risk of re-offense"), upon the Owner's property or the Project site.

During the performance of this contract, neither the Contractor nor any Subcontractor, where applicable, shall knowingly allow any employee to enter any area of the Project where students or faculty are present, without first providing the Owner with a written list setting forth the identity of the employees. All personnel or agents of the Contractor shall observe all rules and regulations in effect at the Owner's premises. Employees or agents of the Contractor, while on the Owner's property, shall be subject to the control of the Owner, but under no circumstances shall such persons be deemed to be employees or agents of the Owner.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1 CRIMINAL HISTORY BACKGROUND CHECKS

2  
3 The contractor and all subcontractors for the project shall provide to the school district (Director of  
4 Facilities, Director of Security or School Business Administrator/Board Secretary) with evidence  
5 or proof that each worker assigned to the project has had a criminal history background check, and  
6 that said check indicates that no criminal history record information exists on file for that worker  
7 pursuant to N.J.S.A. 18A:6-7.2.

8  
9 Bidders shall fully comply with the requirements of N.J.S.A. 18A:6-7.6 to 7.13 (P.L. 2018, c.5).  
10 Failure to provide the information required within ten (10) business days of a bidder's receipt of  
11 the District's notice of intent to award the contract may be cause for rejection of the Bid.

12  
13 Additional information can be obtained from the New Jersey Department of Education Office of  
14 Student Protection at (609) 376-3999 or [nj.gov/education/crimhist](http://nj.gov/education/crimhist).

15  
16 Failure to provide a proof of criminal history background check for any contractor or subcontractor  
17 employee may be cause for breach of contract.

18  
19 If it is discovered during the course of the contract that a contractor or subcontractor employee has  
20 a disqualifying criminal history, or the employee has not had a criminal history background check,  
21 that employee is to be removed from the project immediately.

22  
23 SCHOOL DISTRICT COVID-19 MANDATES

24  
25 The contractor and all subcontractors for the project shall be required to follow the current New  
26 Jersey and/or Federal regulations, whichever is more stringent, whenever indoors on District  
27 property.

28  
29 RECORDS RETENTION

30  
31 In accordance with N.J.A.C. 17:44-2.2 Bidders shall maintain all documentation related to  
32 products, transactions or services under this contract for a period of five years from the date of final  
33 payment. Such records shall be made available to the New Jersey Office of the State Comptroller  
34 upon request.

35  
36  
37 PARTS 2 AND 3 (Not Applicable)

38  
39  
40 END OF SECTION 001000

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

SECTION 002000 - FORM OF BID

TO:  
Sarah Bell, Business Administrator/Board Secretary  
GLOUCESTER CITY BOARD OF EDUCATION  
1300 Market Street  
Gloucester City, New Jersey 08030

FROM:

\_\_\_\_\_ (NAME)

\_\_\_\_\_ (ADDRESS)

\_\_\_\_\_ (CITY, STATE, ZIP)

\_\_\_\_\_ (PHONE/FAX NUMBER)

\_\_\_\_\_ (EMAIL ADDRESS)

Operating as an individual, a partnership, corporation under the laws of the State of New Jersey

\_\_\_\_\_  
(Input words that apply)

BID FOR: RYEBREAD PROJECT NO. 5672G

INDUSTRIAL ARTS ALTERATION  
Gloucester City High School  
1300 Market Street  
Gloucester City, New Jersey 08030

This Bid is based on Specifications and Drawings dated 24 February 2023 and prepared by:

ARCHITECTURAL, CIVIL, STRUCTURAL, PLUMBING, FIRE PROTECTION,  
MECHANICAL & ELECTRICAL  
REGAN YOUNG ENGLAND BUTERA, PC  
456 High Street  
Mt. Holly, New Jersey 08060

**BASE BID:** Pursuant to and in compliance with your request for Bids for the above named project and contract, and having examined the site where the work is to be located, and having become familiar with local conditions as they may, in any way, affect the cost and/or execution of the work, and having carefully examined the specifications and drawings named above, the Undersigned Bidder hereby agrees to provide all plant, labor, materials, supplies equipment, transportation and other facilities necessary and proper for, or incidental to, or required for complete and satisfactory

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1 execution of work. For a one-time lump sum bid, which shall include the allowance(s) and unit  
2 price total(s) listed below:

3  
4 \_\_\_\_\_(\$ \_\_\_\_\_)  
5

6 **ALLOWANCES** below, which include labor, materials, taxes, insurance, overhead, profit and  
7 other costs in connection therewith, shall be included in the Base-Bid proposal for the quantities  
8 listed. Allowances listed shall include all incidental items required to render the allowance fully  
9 complete and operational whether specifically referenced or not. Any unused allowances shall be  
10 deducted from the contract value at the stated amount.

11  
12 **Contingency Allowance No. 01:** Include in the Base-Bid a contingency allowance amount of  
13 Twenty Five Thousand Dollars \$25,000 for additional work as directed by the Architect and  
14 approved by the Owner.

15  
16 **NO MATERIAL ADVERSE CHANGE IN QUALIFICATION:** The undersigned bidder hereby  
17 certifies that there has been no material adverse change in the qualification information last  
18 submitted to the New Jersey Department of the Treasury pursuant to NJSA 18A: 18A-28.

19  
20 **HOLD HARMLESS AGREEMENT:** By submitting and executing a bid the Bidder, if corporation,  
21 also responsible individual of corporation signing individually agrees to indemnify and hold  
22 harmless the Owner, Architect, and their agents and employees, from all and against all claims,  
23 damages, losses, and expenses, including reasonable attorney's fees in case it shall be necessary to  
24 file an action, arising out of bodily injury, illness or death, or for property damage, by the Contractor  
25 negligent, reckless or intentional acts or omission or that of a Subcontractor, or that of anyone  
26 employed by them or for whose acts contractor or subcontractor may be liable. This  
27 indemnification and agreement shall apply in all instances whether Owner and/or Architect is made  
28 a party to the action by third-party in-pleading or is made party to a collateral action arising, in  
29 whole or in part, from any of the issues emanating from the original cause of action or claim.

30  
31 **TIME OF COMPLETION:** The Undersigned Bidder agrees to complete the work as indicated in  
32 the Advertisement, (Bidder is referred to AIA GENERAL CONDITIONS, Par. 8.1).

33  
34 ATTACHED TO THIS BID is **ONE** original copy of all the following documents (Fill in all  
35 blank spaces, alternate bids and unit prices. Failure to comply may be cause for rejection of  
36 bid.).

37  
38 **DOCUMENTS ACCOMPANYING BID**

39  
40 Failure to provide all required documents and required number of copies may be cause for  
41 disqualification and rejection of bid.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

**Bidder shall correlate the following required documents in the order listed below & place an "X" in the box next to each item provided.**

In bid envelope:

1. ☐ Form of Bid.
2. ☐ DPMC Notice of Classification.
3. ☐ Total Amount of Uncompleted Contracts Affidavit (DPMC Form 701).
4. ☐ Business Registration of Public Contractors from the New Jersey Division of Taxation.
5. ☐ Bid Security in the form of a Bid Bond, certified check or cashier's check in the amount of 10% of the Base Bid, or \$500.00 whichever is more, but in any event not more than \$20,000.00. The Bid Security must be in a form consistent with the statutory requirements of the State of New Jersey.  
  
The Bid Security must be accompanied by a valid power of attorney authorizing the signer to bind the surety company.
6. ☐ Consent of Surety: Section 002800, or similar.  
  
Consents Security must be accompanied by a valid power of attorney authorizing the signer to bind the surety company.
7. ☐ Surety Company & Agency Information: Section 002801.
8. ☐ Affirmative Action Evidence: Section 002850.
9. ☐ Ownership Disclosure Starement: Section 002900 or similar if Bidder is a partnership or a corporation.
10. ☐ Non-Collusion Affidavit: Section 002950.
11. ☐ No Material Change of Circumstances: Section 002960.
12. ☐ Form of certification stating that bidder is not currently debarred, suspended or disqualified under N.J.A.C. section 19:32-1.8. Section 002970.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

13. ☐ Certification Of Non-Debarment for Federal Government Contracts: Section 002971.

14. ☐ Contractor's Sworn Contractor Certification. Section 004580; and

**Credentials A, B & C listed below must be stapled to this certification.**

☐ A. "Contractor Registration Certificate" from the New Jersey Department of Labor in accordance with the "Public Works Contractor Registration Act."

☐ B. "Certificate of Authority" issued by the Department of Treasury.

☐ C. Contractor or trade license. (Not applicable for General Contractor).

15. ☐ Political Contributions Disclosure Form: Section 004590.

16. ☐ Byrd Anti-Lobbying Amendment Certification: Section 004591.

17. ☐ Prevailing Wages Certification Form: Section 004595.

18. ☐ Lowest Bidder Prevailing Wage Certification: Section 004596.

19. ☐ List of Prime Subcontractors: Section 005290.

For each Prime subcontractor listed, attached a copy of:

☐ A. DPMC Notice of Classification.

☐ B. Total Amount of Uncompleted Contracts Affidavit (DPMC Form 701).

☐ C. Business Registration of Public Contractors from the New Jersey Division of Taxation.

☐ D. No Material Change of Circumstances: Section 002960.

☐ E. Contractor's Sworn Contractor Certification. Section 004580; and

**Credentials 1, 2 & 3 listed below must be stapled to this certification.**

☐ 1. "Contractor Registration Certificate" from the New Jersey Department of Labor in accordance with the "Public Works Contractor Registration Act."

☐ 2. "Certificate of Authority" issued by the Department of Treasury.

☐ 3. Contractor or trade license. (Not applicable for General Contractor or Structural Steel).

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- 1 ☐ F. Evidence of Prime Subcontractor's performance security.  
2 (Required only if Bidders Bid Bond does not cover Bidders Prime  
3 subcontractors.) (Attach to Prime Bidder's Bid Bond).

- 4 20. ☐ **ONE (1)** original copy of all required documents.

5 IF AWARDED CONTRACT, the Undersigned Bidder agrees to execute the AGREEMENT and  
6 to furnish the required Performance and Payment Bonds and evidence of required insurance as soon  
7 as practicable after Notice of Acceptance of bid or in any event not later than 10 calendar days after  
8 receipt of such notification.  
9

10 If the Undersigned Bidder fails to execute AGREEMENT and furnish required bond and evidence  
11 of insurance, the Bid Security accompanying this Bid will be forfeited to the Owner as liquidated  
12 damages for the delay and loss caused to the Owner by reason of such failure by the Undersigned  
13 Bidder.  
14

15 THE UNDERSIGNED BIDDER HAS COMPLIED with all requirements concerning licensing  
16 and with all Local, State and Federal laws. No legal requirement has been violated in making this  
17 Bid nor will be violated in the execution of the Work if this Bid is accepted.  
18

19 In addition, the undersigned hereby certifies that there has been no material adverse change in the  
20 qualification information last submitted to the New Jersey Department of Treasury pursuant to  
21 N.J.S.A. 18A:18A-28.  
22

23 IT IS UNDERSTOOD that the right is reserved by the Owner to reject any and all bids and to waive  
24 all informalities in connection therewith as may be permitted by law.  
25

26 AWARD OF CONTRACT(S)

27  
28 A Single Prime Contract shall be awarded for all of the work and materials required to complete  
29 the project, unless all bids are rejected, to the lowest responsible bidder based on the total amount  
30 of the Base Bid and Alternates (if any), accepted by the Owner.  
31

32 IT IS AGREED THAT THIS BID MAY NOT BE WITHDRAWN for a period of 60 days after the  
33 actual date of receipt of bids.  
34



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

RECEIPT OF THE FOLLOWING ADDENDA is acknowledged by the Undersigned bidder (List  
by number and date):

| <u>ADDENDUM NO.</u> | <u>DATED</u> | <u>ADDENDUM NO.</u> | <u>DATED</u> |
|---------------------|--------------|---------------------|--------------|
| _____               | _____        | _____               | _____        |
| _____               | _____        | _____               | _____        |
| _____               | _____        | _____               | _____        |
| _____               | _____        | _____               | _____        |

Respectfully submitted this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_.

\_\_\_\_\_(Name of Firm)

By: \_\_\_\_\_ L.S.  
Print

\*(SEAL IF BIDDER  
IS A CORPORATION)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Federal Employment Identification Number (FEIN)

END OF SECTION 002000

DOCUMENT 002600 - PROCUREMENT SUBSTITUTION PROCEDURES

1.1 DEFINITIONS

- A. Procurement Substitution Requests: Requests for changes in products, materials, equipment, and methods of construction from those indicated in the Procurement and Contracting Documents, submitted prior to receipt of bids.
- B. Substitution Requests: Requests for changes in products, materials, equipment, and methods of construction from those indicated in the Contract Documents, submitted following Contract award. See Section 012500 "Substitution Procedures" for conditions under which Substitution requests will be considered following Contract award.

1.2 QUALITY ASSURANCE

- A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage a qualified testing agency to perform compatibility tests recommended by manufacturers.

1.3 PROCUREMENT SUBSTITUTIONS

- A. Procurement Substitutions, General: By submitting a bid, the Bidder represents that its bid is based on materials and equipment described in the Procurement and Contracting Documents, including Addenda. Bidders are encouraged to request approval of qualifying substitute materials and equipment when the Specifications Sections list materials and equipment by product or manufacturer name.
- B. Procurement Substitution Requests will be received and considered by Owner when the following conditions are satisfied, as determined by Architect; otherwise requests will be returned without action:
  - 1. Extensive revisions to the Contract Documents are not required.
  - 2. Proposed changes are in keeping with the general intent of the Contract Documents, including the level of quality of the Work represented by the requirements therein.
  - 3. The request is fully documented and properly submitted.

1.4 SUBMITTALS

- A. Procurement Substitution Request: Submit to Architect. Procurement Substitution Request must be made in writing by prime contract Bidder only in compliance with the following requirements:
  - 1. Requests for substitution of materials and equipment will be considered if received no later than the date and time for questions indicated in the ADVERTISEMENT.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

2. Submittal Format: Submit one PDF copy of each written Procurement Substitution Request, using form 012501 Substitution Request form of the Project Manual.
3. Submittal Format: Submit Procurement Substitution Request, using format provided on Project Web site.
  - a. Identify the product or the fabrication or installation method to be replaced in each request. Include related Specifications Sections and drawing numbers.
  - b. Provide complete documentation on both the product specified and the proposed substitute, including the following information as appropriate:
    - 1) Point-by-point comparison of specified and proposed substitute product data, fabrication drawings, and installation procedures.
    - 2) Copies of current, independent third-party test data of salient product or system characteristics.
    - 3) Samples where applicable or when requested by Architect.
    - 4) Detailed comparison of significant qualities of the proposed substitute with those of the Work specified. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
    - 5) Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
    - 6) Research reports, where applicable, evidencing compliance with building code in effect for Project, from New Jersey Uniform Construction Code.
    - 7) Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors, which will become necessary to accommodate the proposed substitute.
  - c. Bidder shall provide certification by manufacturer that the substitute proposed is equal to or superior to that required by the Procurement and Contracting Documents, and that its in-place performance will be equal to or superior to the product or equipment specified in the application indicated.
  - d. Bidder, in submitting the Procurement Substitution Request, waives the right to additional payment or an extension of Contract Time due to any failure of the substitute to perform as represented in the Procurement Substitution Request.

B. Architect's Action:

1. Architect may request additional information or documentation necessary for evaluation of the Procurement Substitution Request. Architect will notify all bidders of acceptance of the proposed substitute by means of an Addendum to the Procurement and Contracting Documents.

C. Architect's approval of a substitute during bidding does not relieve Contractor of the responsibility to submit required shop drawings and to comply with all other requirements of the Contract Documents.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

END OF DOCUMENT 002600

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

SECTION 002800 - CONSENT OF SURETY

TO: GLOUCESTER CITY BOARD OF EDUCATION (Owner).

herein called the Surety hereby agrees that if the Contract

for the construction of the \_\_\_\_\_ Industrial Arts Alteration

\_\_\_\_\_ and approved Allowances, Alternates & Unit Prices (if any)

at the \_\_\_\_\_ Gloucester City High School

be awarded to \_\_\_\_\_

herein called the Bidder, the Surety will provide the Bidder

with such form and sums that are required by said Contract.

Signed, sealed and dated this \_\_\_\_\_ day of 20\_\_\_\_\_.

\_\_\_\_\_  
(Surety)

\_\_\_\_\_  
(Bond No.)

(SEAL)

Attest: \_\_\_\_\_

By: \_\_\_\_\_  
(Attorney in fact)

**CONSENT OF SURETY MUST BE SIGNED BY AN AUTHORIZED AGENT OR  
REPRESENTATIVE OF A SURETY COMPANY AND NOT BY THE INDIVIDUAL OR  
COMPANY SUBMITTING THE BID.**

END OF SECTION 002800

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

SECTION 002801 - SURETY COMPANY & AGENCY INFORMATION

PRIME BIDDER:

\_\_\_\_\_ (NAME)

\_\_\_\_\_ (ADDRESS)

\_\_\_\_\_ (CITY, STATE, ZIP)

\_\_\_\_\_ (TELEPHONE NUMBER)

\_\_\_\_\_ (E-MAIL ADDRESS)

In accordance with the bidding requirements, the bidder hereby acknowledges the following responsible surety data for this project:

SURETY COMPANY

\_\_\_\_\_ (NAME)

\_\_\_\_\_ (ADDRESS)

\_\_\_\_\_ (CITY, STATE, ZIP)

\_\_\_\_\_ (TELEPHONE NUMBER)

\_\_\_\_\_ (E-MAIL ADDRESS)

SURETY AGENCY

\_\_\_\_\_ (NAME)

\_\_\_\_\_ (ADDRESS)

\_\_\_\_\_ (CITY, STATE, ZIP)

\_\_\_\_\_ (TELEPHONE NUMBER)

\_\_\_\_\_ (E-MAIL ADDRESS)

END OF SECTION 002801

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

SECTION 002850 – AFFIRMATIVE ACTION EVIDENCE FOR CONSTRUCTION PROJECTS

Bidder shall complete this form and submit it with his/her bid proposal.

Pursuant to N.J.S.A.10:5-31 et. seq. and N.J.A.C.17:27, all successful bidders are required to submit evidence of appropriate Affirmative Action compliance to the Division of Public Contracts Equal Employment Opportunity Compliance (hereafter referred to as “Division”) and the awarding Public Agency. During a review, the Division representatives will review the Public Agency files to determine whether the Affirmative Action evidence has been submitted by the vendor/contractor. Specifically, each vendor/contractor shall submit to the Public Agency, prior to execution of Public Agency contract the following documents within seven (7) days after receipt of the notification of intent to award the contract or receipt of the contract, whichever is sooner:

The construction contractors shall complete and submit an Initial Project Workforce Report Form AA-201 upon notification of award. Proper completion and submission of this report shall constitute evidence of the contractor’s compliance with the regulations. Failure to submit this form may result in the contract being terminated. The contractor also agrees to submit a copy of the Monthly Project Workforce Report Form AA-202 once a month thereafter for the duration of the contract to the Division and to the public agency compliance officer.

After notification of award, but prior to signing a construction contract the EEO/AA evidence must be submitted.

Upon award of a construction contract, it shall be the responsibility of the Public Agency to provide the contractor with Form AA-201, Initial Project Workforce Report. The Division does not supply this form to the contractor.

Failure on the Contractor’s part to comply with their requirements of N.J.S.A. 10:5-31 et. seq. and N.J.A.C. 17:27 that result in sanctions and/or penalties against the Public Agency from the Division agree to pay all costs and expenses incurred by the Public Agency.

The undersigned contractor certifies that he/she is aware of the commitment to comply with the requirements of N.J.S.A. 10:5-31 et. seq. and N.J.A.C. 17:27 and agrees to furnish the required documentation pursuant to the Law.

Signed, sealed and dated this \_\_\_\_\_ day of 20\_\_\_\_\_.

\_\_\_\_\_ (Company)

\_\_\_\_\_ (Signature)

\_\_\_\_\_ (Title)

**EXHIBIT B**

**MANDATORY EQUAL EMPLOYMENT OPPORTUNITY LANGUAGE**

**N.J.S.A. 10:5-31 et seq. (P.L.1975, c.127)**

**N.J.A.C.17:27 - 1.1 et seq.**

**CONSTRUCTION CONTRACTS**

During the performance of this contract, the contractor agrees as follows:

The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Except with respect to affectional or sexual orientation and gender identity or expression, the contractor will ensure that equal employment opportunity is afforded to such applicants in recruitment and employment, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Such equal employment opportunity shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.

The contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex.

The contractor or subcontractor will send to each labor union, with which it has a collective bargaining agreement, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The contractor or subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer, pursuant to N.J.S.A. 10:5-31 et seq., as amended and supplemented from time to time and the Americans with Disabilities Act.

When hiring or scheduling workers in each construction trade, the contractor or subcontractor agrees to make good faith efforts to employ minority and women workers in each construction trade consistent with the targeted employment goal prescribed by N.J.A.C. 17:27-7.2; provided, however, that the Dept. of LWD, Construction EEO Monitoring Program, may, in its discretion, exempt a contractor or subcontractor from compliance with the good faith procedures prescribed by the following provisions, A, B, and C, as long as the Dept. of LWD, Construction EEO Monitoring Program is satisfied that the contractor or subcontractor is employing workers provided by a union which provides evidence, in accordance with standards prescribed by the Dept. of LWD, Construction EEO Monitoring Program, that its percentage of active "card carrying" members who



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

are minority and women workers is equal to or greater than the targeted employment goal established in accordance with N.J.A.C. 17:27-7.2. The contractor or subcontractor agrees that a good faith effort shall include compliance with the following procedures:

(A) If the contractor or subcontractor has a referral agreement or arrangement with a union for a construction trade, the contractor or subcontractor shall, within three business days of the contract award, seek assurances from the union that it will cooperate with the contractor or subcontractor as it fulfills its affirmative action obligations under this contract and in accordance with the rules promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et. seq., as supplemented and amended from time to time and the Americans with Disabilities Act. If the contractor or subcontractor is unable to obtain said assurances from the construction trade union at least five business days prior to the commencement of construction work, the contractor or subcontractor agrees to afford equal employment opportunities minority and women workers directly, consistent with this chapter. If the contractor's or subcontractor's prior experience with a construction trade union, regardless of whether the union has provided said assurances, indicates a significant possibility that the trade union will not refer sufficient minority and women workers consistent with affording equal employment opportunities as specified in this chapter, the contractor or subcontractor agrees to be prepared to provide such opportunities to minority and women workers directly, consistent with this chapter, by complying with the hiring or scheduling procedures prescribed under (B) below; and the contractor or subcontractor further agrees to take said action immediately if it determines that the union is not referring minority and women workers consistent with the equal employment opportunity goals set forth in this chapter.

(B) If good faith efforts to meet targeted employment goals have not or cannot be met for each construction trade by adhering to the procedures of (A) above, or if the contractor does not have a referral agreement or arrangement with a union for a construction trade, the contractor or subcontractor agrees to take the following actions:

- (1) To notify the public agency compliance officer, the Dept. of LWD, Construction EEO Monitoring Program, and minority and women referral organizations listed by the Division pursuant to N.J.A.C. 17:27-5.3, of its workforce needs, and request referral of minority and women workers;
- (2) To notify any minority and women workers who have been listed with it as awaiting available vacancies;
- (3) Prior to commencement of work, to request that the local construction trade union refer minority and women workers to fill job openings, provided the contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade;
- (4) To leave standing requests for additional referral to minority and women workers with the local construction trade union, provided the contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade, the State Training and Employment Service and other approved referral sources in the area;
- (5) If it is necessary to lay off some of the workers in a given trade on the construction site, layoffs shall be conducted in compliance with the equal employment opportunity and nondiscrimination standards set forth in this regulation, as well as with applicable Federal and State court decisions;
- (6) To adhere to the following procedure when minority and women workers apply or are referred to the contractor or subcontractor:

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- 1 (i) The contractor or subcontractor shall interview the referred minority or women  
2 worker.
- 3 (ii) If said individuals have never previously received any document or certification  
4 signifying a level of qualification lower than that required in order to perform the  
5 work of the construction trade, the contractor or subcontractor shall in good faith  
6 determine the qualifications of such individuals. The contractor or subcontractor  
7 shall hire or schedule those individuals who satisfy appropriate qualification  
8 standards in conformity with the equal employment opportunity and non-  
9 discrimination principles set forth in this chapter. However, a contractor or  
10 subcontractor shall determine that the individual at least possesses the requisite  
11 skills, and experience recognized by a union, apprentice program or a referral  
12 agency, provided the referral agency is acceptable to the Dept. of LWD, Construction  
13 EEO Monitoring Program. If necessary, the contractor or subcontractor shall hire or  
14 schedule minority and women workers who qualify as trainees pursuant to these  
15 rules. All of the requirements, however, are limited by the provisions of (C) below.
- 16 (iii) The name of any interested women or minority individual shall be maintained on a  
17 waiting list and shall be considered for employment as described in (i) above,  
18 whenever vacancies occur. At the request of the Dept. of LWD, Construction EEO  
19 Monitoring Program, the contractor or subcontractor shall provide evidence of its  
20 good faith efforts to employ women and minorities from the list to fill vacancies.
- 21 (iv) If, for any reason, said contractor or subcontractor determines that a minority  
22 individual or a woman is not qualified or if the individual qualifies as an advanced  
23 trainee or apprentice, the contractor or subcontractor shall inform the individual in  
24 writing of the reasons for the determination, maintain a copy of the determination in  
25 its files, and send a copy to the public agency compliance officer and to the Dept. of  
26 LWD, Construction EEO Monitoring Program.
- 27
- 28 (7) To keep a complete and accurate record of all requests made for the referral of workers in  
29 any trade covered by the contract, on forms made available by the Dept. of LWD,  
30 Construction EEO Monitoring Program and submitted promptly to the Dept. of LWD,  
31 Construction EEO Monitoring Program upon request.
- 32
- 33 (C) The contractor or subcontractor agrees that nothing contained in (B) above shall preclude the  
34 contractor or subcontractor from complying with the union hiring hall or apprenticeship  
35 policies in any applicable collective bargaining agreement or union hiring hall arrangement,  
36 and, where required by custom or agreement, it shall send journeymen and trainees to the union  
37 for referral, or to the apprenticeship program for admission, pursuant to such agreement or  
38 arrangement. However, where the practices of a union or apprenticeship program will result in  
39 the exclusion of minorities and women or the failure to refer minorities and women consistent  
40 with the targeted county employment goal, the contractor or subcontractor shall consider for  
41 employment persons referred pursuant to (B) above without regard to such agreement or  
42 arrangement; provided further, however, that the contractor or subcontractor shall not be  
43 required to employ women and minority advanced trainees and trainees in numbers which  
44 result in the employment of advanced trainees and trainees as a percentage of the total  
45 workforce for the construction trade, which percentage significantly exceeds the apprentice to  
46 journey worker ratio specified in the applicable collective bargaining agreement, or in the  
47 absence of a collective bargaining agreement, exceeds the ratio established by practice in the  
48 area for said construction trade. Also, the contractor or subcontractor agrees that, in

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1 implementing the procedures of (B) above, it shall, where applicable, employ minority and  
2 women workers residing within the geographical jurisdiction of the union.  
3

4 After notification of award, but prior to signing a construction contract, the contractor shall submit  
5 to the public agency compliance officer and the Dept. of LWD, Construction EEO Monitoring  
6 Program an initial project workforce report (Form AA-201) electronically provided to the public  
7 agency by the Dept. of LWD, Construction EEO Monitoring Program, through its website, for  
8 distribution to and completion by the contractor, in accordance with N.J.A.C. 17:27-7. The  
9 contractor also agrees to submit a copy of the Monthly Project Workforce Report once a month  
10 thereafter for the duration of this contract to the Dept. of LWD, Construction EEO Monitoring  
11 Program, and to the public agency compliance officer.  
12

13 The contractor agrees to cooperate with the public agency in the payment of budgeted funds, as is  
14 necessary, for on-the-job and/or off-the job programs for outreach and training of minorities and  
15 women.  
16

17 (D) The contractor and its subcontractors shall furnish such reports or other documents to the Dept.  
18 of LWD, Construction EEO Monitoring Program as may be requested by the Dept. of LWD,  
19 Construction EEO Monitoring Program from time to time in order to carry out the purposes of  
20 these regulations, and public agencies shall furnish such information as may be requested by  
21 the Dept. of LWD, Construction EEO Monitoring Program for conducting a compliance  
22 investigation pursuant to N.J.A.C. 17:27-1.1 et seq.  
23

24 (Revised: January 2016)  
25  
26

27 END OF SECTION 002850

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1 SECTION 002900 - OWNERSHIP DISCLOSURE STATEMENT

2 PART 1 - GENERAL

3 1.1 ORGANIZATION INFORMATION

4 A. Provide the following as per N.J.S.A. 52:25-24.2 (P.L. 1977, c.33, as amended by P.L.  
5 2016, c.43).

6 B. This statement shall be completed, certified to, and included with all bid and proposal  
7 submissions. Failure to submit the required information is cause for automatic rejection  
8 of the bid or proposal.

9 Organization Name: \_\_\_\_\_

10 Organization Address: \_\_\_\_\_

11 \_\_\_\_\_

12 C. Type of Business Organization

13 1. Check the box that represents the type of business organization:

14 ☐ Sole Proprietorship (skip PARTS 2 and 3, execute certification in PART 4)

15 ☐ Non-Profit Corporation (skip PARTS 2 and 3, execute certification in PART  
16 4)

17 ☐ For-Profit Corporation (any type) ☐ Limited Liability Company (LLC)

18 ☐ Partnership ☐ Limited Partnership ☐ Limited Liability  
19 Partnership (LLP)

20 ☐ Other (be specific): \_\_\_\_\_  
21

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1 PART 2 - STOCKHOLDER INFORMATION

2 2.1 LIST OF CORPERATION STOCKHOLDERS

3 A. Percentage Amount

4 1. Check the box that represents the corporation's stockholder percentages:

- 5 ☐ The list below contains the names and addresses of all stockholders in the  
6 corporation who own 10 percent or more of its stock, of any class, or of all  
7 individual partners in the partnership who own a 10 percent or greater interest  
8 therein, or of all members in the limited liability company who own a 10  
9 percent or greater interest therein, as the case may be. **(COMPLETE THE**  
10 **LIST BELOW IN THIS SECTION)**

11 (Please attach additional sheets if more space is needed):

| Name of Individual or Business Entity | Home Address (for Individuals) or Business Address |
|---------------------------------------|----------------------------------------------------|
|                                       |                                                    |
|                                       |                                                    |
|                                       |                                                    |
|                                       |                                                    |

- 12 ☐ No one stockholder in the corporation owns 10 percent or more of its stock,  
13 of any class, or no individual partner in the partnership owns a 10 percent or  
14 greater interest therein, or no member in the limited liability company owns  
15 a 10 percent or greater interest therein, as the case may be. **(SKIP TO PART**  
16 **4)**  
17

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1 PART 3 - STOCKHOLDER DISCLOSURE

2 3.1 DISCLOSURE OF 10% OR GREATER OWNERSHIP

3 A. Disclosure of 10% or greater ownership in the stockholders, partners or llc members listed  
4 in PART 2.

5 1. If a bidder has a direct or indirect parent entity which is publicly traded, and any  
6 person holds a 10 percent or greater beneficial interest in the publicly traded parent  
7 entity as of the last annual federal Security and Exchange Commission (SEC) or  
8 foreign equivalent filing, ownership disclosure can be met by providing links to  
9 the website(s) containing the last annual filing(s) with the federal Securities and  
10 Exchange Commission (or foreign equivalent) that contain the name and address  
11 of each person holding a 10% or greater beneficial interest in the publicly traded  
12 parent entity, along with the relevant page numbers of the filing(s) that contain the  
13 information on each such person.

14 (Please attach additional sheets if more space is needed):

| Website (URL) containing the last annual SEC (or foreign equivalent) filing | Page #'s |
|-----------------------------------------------------------------------------|----------|
|                                                                             |          |
|                                                                             |          |
|                                                                             |          |

15 2. List the names and addresses of each stockholder, partner or member owning a 10  
16 percent or greater interest in any corresponding corporation, partnership and/or  
17 limited liability company (LLC) listed in PART 2 other than for any publicly  
18 traded parent entities referenced above. The disclosure shall be continued until  
19 names and addresses of every non-corporate stockholder, and individual partner,  
20 and member exceeding the 10 percent ownership criteria established pursuant to  
21 N.J.S.A. 52:25-24.2 has been listed.

22 (Please attach additional sheets if more space is needed):

| Stockholder/Partner/Member &<br>Corresponding Entity<br>Listed In PART 2 | Home Address (for Individuals) or Business Address |
|--------------------------------------------------------------------------|----------------------------------------------------|
|                                                                          |                                                    |
|                                                                          |                                                    |
|                                                                          |                                                    |

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1 PART 4 - CERTIFICATION

2 4.1 I, being duly sworn upon my oath, hereby represent that the foregoing information and any  
3 attachments thereto to the best of my knowledge are true and complete.

4 A. I acknowledge: that I am authorized to execute this certification on behalf of the  
5 bidder/proposer; that the GLOUCESTER CITY BOE is relying on the information  
6 contained herein and that I am under a continuing obligation from the date of this  
7 certification through the completion of any contracts with the GLOUCESTER CITY BOE  
8 to notify them in writing of any changes to the information contained herein;

9 B. that I am aware that it is a criminal offense to make a false statement or misrepresentation  
10 in this certification, and if I do so, I am subject to criminal prosecution under the law and  
11 that it will constitute a material breach of my agreement(s) with the, permitting the  
12 GLOUCESTER CITY BOE to declare any contract(s) resulting from this certification void  
13 and unenforceable.

14 Full Name (Print): \_\_\_\_\_

15 Title: \_\_\_\_\_

16 Signature: \_\_\_\_\_

17 Date: \_\_\_\_\_

18

19

20

21 END OF SECTION 002900

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

SECTION 002950 - NON-COLLUSION AFFIDAVIT

STATE OF NEW JERSEY

County of Camden      Owner:      GLOUCESTER CITY BOARD OF EDUCATION

I, \_\_\_\_\_ of \_\_\_\_\_ (Municipality)

in the County of \_\_\_\_\_ and the State of \_\_\_\_\_

of full age, being duly sworn according to law on my oath depose and say that:

I am \_\_\_\_\_ of the firm of \_\_\_\_\_,  
the bidder making the Bid for the above named Project, and that I have executed the said Bid with  
full authority so to do; that said Bidder has not, directly or indirectly, entered into any agreement,  
participated in any collusion, or otherwise taken any action in restraint of free, competitive bidding  
in connection with the above named Project; and that all statements contained in said Bid and in  
this affidavit are true and correct, and made with full knowledge that the above named Owner relies  
upon the truth of the statements contained in said Bid and in the statements contained in this  
affidavit in awarding contract for the said Project.

I further warrant that no person or selling agency has been employed or retained to solicit or secure  
such contract upon an agreement or understanding for a commission, percentage, brokerage or  
contingent fee, except bona fide employees or bona fide established commercial or selling agencies  
maintained by

\_\_\_\_\_  
(Bidder)

By: \_\_\_\_\_ (Type name)

Subscribed and sworn to before me this

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

State of \_\_\_\_\_

Notary Public: \_\_\_\_\_

My commission expires \_\_\_\_\_, 20\_\_\_\_\_.

END OF SECTION 002950



PROJECT NAME  
DISTRICT  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5000

SECTION 002960 – NO MATERIAL CHANGE OF CIRCUMSTANCES

I, \_\_\_\_\_ being of full age under oath depose and say:

1. I am a(n) owner, partner, shareholder or officer of the company set forth below and am duly authorized to execute this affidavit on its behalf.
2. A statement as to the financial ability, adequacy of plant and equipment, organization and prior experience of Bidder, as required by N.J.S.A. 18A:18A-28 has been submitted to the Department of Treasury within one (1) year preceding the date of opening of bids for this contract.
3. I certify, as required by N.J.S.A. 18A:18A-32 that there has been no material adverse change in the qualification information of Bidder since such statement was submitted to the Department of Treasury except:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

NAME

SIGNATURE

TITLE

COMPANY

Subscribed and sworn to before me this

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

State of \_\_\_\_\_

Notary Public: \_\_\_\_\_

My commission expires \_\_\_\_\_, 20\_\_\_\_\_.

END OF SECTION 002960

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

SECTION 002970 - CERTIFICATION REGARDING THE DEBARMENT, SUSPENSION,  
DISQUALIFICATION, INELIGIBILITY AND VOLUNTARY EXCLUSION

I am \_\_\_\_\_ of the firm of \_\_\_\_\_  
(title) (company name)  
\_\_\_\_\_  
(company address)

CHOOSE ONE OF THE FOLLOWING

( ) A. I hereby certify on behalf of \_\_\_\_\_ that  
(company name)  
neither it nor its principals are included on any State or Federal Government's  
List of Debarred, Suspended, or Disqualified Bidders as a result of action taken  
by any State or Federal Agency.

( ) B. I hereby certify on behalf of \_\_\_\_\_ that  
(company name)  
no individual or organization that is debarred by the Federal Government from  
contracting with a federal agency owns greater than 50 percent of the Bidder  
named above or, if applicable, owns greater than 50 percent of a parent entity of  
the Bidder named above.

( ) C. I am unable to certify to any of the statements set forth in this certification. I have  
attached an explanation to this form.

\_\_\_\_\_  
(Signature) (SEAL)

\_\_\_\_\_  
(Type Name & Title)

\_\_\_\_\_  
(Date)

The Board of Education may not enter into a Contract for work with any person, company, or firm  
that is on the State Department of Labor and Workforce Development, Prevailing Wage Debarment  
List, or State of New Jersey Consolidated Debarment Report ([www.state.nj.us/treasury/debarred](http://www.state.nj.us/treasury/debarred)).  
Further, the Board of Education may not enter into a contract for work with any person, company  
or firm that is debarred at the federal level from contracting with a federal government agency  
and/or that is on the federal government's System for Award Management (SAM.gov), or with any  
person, company or firm with an affiliate that is debarred at the federal level from contracting with  
a federal government agency and/or that is on the federal government's System for Award

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

Management (SAM.gov). For purposes of this Certification, "affiliate" shall mean any entity that (1) directly, indirectly, or constructively controls another entity, (2) is directly, indirectly, or constructively controlled by another entity, or (3) is subject to the control of a common entity. An entity controls another entity if it owns, directly or individually, more than 50% of the ownership interest in that entity.

By certifying this Form, the Contractor confirms: (1) Neither it nor its principals are included on any State or Federal List of Debarred, Suspended, or Disqualified Bidders as a result of action taken by any State or Federal Agency; and that, (2) Neither it nor its principals nor any affiliate is debarred at the federal level from contracting with a federal government agency.

Subscribed and sworn to before me this

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

State of \_\_\_\_\_

Notary Public: \_\_\_\_\_

My commission expires \_\_\_\_\_, 20\_\_\_\_\_.

Dun and Bradstreet (DUNS) No: \_\_\_\_\_.

Commercial and Government Entity (CAGE) Code: \_\_\_\_\_.

END OF SECTION 002970

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

SECTION 002971 - CERTIFICATION OF NON-DEBARMENT FOR FEDERAL GOVERNMENT  
CONTRACTS

N.J.S.A. 52:32-44.1 (P.L. 2019, c.406)

**This certification shall be completed, certified to, and submitted to the contracting unit prior to contract award, except for emergency contracts where submission is required prior to payment.**

| PART I: VENDOR INFORMATION                                              |  |
|-------------------------------------------------------------------------|--|
| Individual or Organization Name                                         |  |
| Address of Individual or Organization                                   |  |
| DUNS Code (if applicable)                                               |  |
| CAGE Code (if applicable)                                               |  |
| <b>Check the box that represents the type of business organization:</b> |  |

- ☐ Sole Proprietorship (skip Parts III and IV)   ☐ Non-Profit Corporation (skip Parts III and IV)  
☐ For-Profit Corporation (any type)   ☐ Limited Liability Company (LLC)   ☐ Partnership  
☐ Limited Partnership   ☐ Limited Liability Partnership (LLP)  
☐ Other (be specific): \_\_\_\_\_

| PART II – CERTIFICATION OF NON-DEBARMENT: Individual or Organization                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |        |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------|--|
| I hereby certify that the <b>individual or organization listed above in Part I</b> is not debarred by the federal government from contracting with a federal agency. I further acknowledge: that I am authorized to execute this certification on behalf of the above-named organization; that the <b>Board of Education</b> is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the date of contract award by the <b>Board of Education</b> to notify the <b>Board of Education</b> in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the <b>Board of Education</b> , permitting the <b>Board of Education</b> to declare any contract(s) resulting from this certification void and unenforceable. |  |        |  |
| Full Name (Print):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | Title: |  |
| Signature:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Date:  |  |

INDUSTRIAL ARTS ALTERATION  
 GLOUCESTER CITY BOE  
 REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

| <b>PART III – CERTIFICATION OF NON-DEBARMENT: Individual or Entity Owning Greater than 50 Percent of Organization</b> |                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Section A (Check the Box that applies)</b>                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <input type="checkbox"/>                                                                                              | Below is the name and address of the stockholder in the corporation who owns more than 50 percent of its voting stock, or of the partner in the partnership who owns more than 50 percent interest therein, or of the member of the limited liability company owning more than 50 percent interest therein, as the case may be.                                                                                         |
| <b>Name of Individual or Organization</b>                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Home Address (for Individual) or Business Address</b>                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>OR</b>                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <input type="checkbox"/>                                                                                              | No one stockholder in the corporation owns more than 50 percent of its voting stock, or no partner in the partnership owns more than 50 percent interest therein, or no member in the limited liability company owns more than 50 percent interest therein, as the case may be.                                                                                                                                         |
| <b>Section B (Skip if no Business entity is listed in Section A above)</b>                                            |                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <input type="checkbox"/>                                                                                              | Below is the name and address of the stockholder in the corporation who owns more than 50 percent of the voting stock of the organization's parent entity, or of the partner in the partnership who owns more than 50 percent interest in the organization's parent entity, or of the member of the limited liability company owning more than 50 percent interest in organization's parent entity, as the case may be. |
| <b>Stockholder/Partner/Member Owning Greater Than 50 Percent of Parent Entity</b>                                     |                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Home Address (for Individual) or Business Address</b>                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>OR</b>                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                         |

INDUSTRIAL ARTS ALTERATION  
 GLOUCESTER CITY BOE  
 REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                        |        |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--|
| <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | No one stockholder in the parent entity corporation owns more than 50 percent of its voting stock, no partner in the parent entity partnership owns more than 50 percent interest therein, or no member in the parent entity limited liability company owns more than 50 percent interest therein, as the case may be. |        |  |
| <b>Section C – Part III Certification</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                        |        |  |
| I hereby certify that no individual or organization that is debarred by the federal government from contracting with a federal agency owns greater than 50 percent of the <b>Organization listed above in Part I</b> or, if applicable, owns greater than 50 percent of a parent entity of the <b>Organization listed above in Part I</b> . I further acknowledge: that I am authorized to execute this certification on behalf of the above-named organization; that the <b>Board of Education</b> is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the date of contract award the <b>Board of Education</b> to notify the <b>Board of Education</b> in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the <b>Board of Education</b> , permitting the <b>Board of Education</b> to declare any contract(s) resulting from this certification void and unenforceable. |                                                                                                                                                                                                                                                                                                                        |        |  |
| Full Name (Print):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                        | Title: |  |
| Signature:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                        | Date:  |  |

INDUSTRIAL ARTS ALTERATION  
 GLOUCESTER CITY BOE  
 REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

| Part IV – CERTIFICATION OF NON-DEBARMENT: Contractor – Controlled Entities |                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Section A                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <input type="checkbox"/>                                                   | Below is the name and address of the corporation(s) in which the <b>Organization listed in Part I</b> owns more than 50 percent of voting stock, or of the partnership(s) in which the <b>Organization listed in Part I</b> owns more than 50 percent interest therein, or of the limited liability company or companies in which the <b>Organization listed above in Part I</b> owns more than 50 percent interest therein, as the case may be. |
| Name of Business Entity                                                    | Business Address                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| **Add additional sheets if necessary**                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| OR                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <input type="checkbox"/>                                                   | The <b>Organization listed above in Part I</b> does not own greater than 50 percent of the voting stock in any corporation and does not own greater than 50 percent interest in any partnership or any limited liability company.                                                                                                                                                                                                                |

| Section B (skip if no business entities are listed in Section A of Part IV) |                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/>                                                    | Below are the names and addresses of any entities in which an entity listed in Part III A owns greater than 50 percent of the voting stock (corporation) or owns greater than 50 percent interest (partnership or limited liability company). |
| Name of Business Entity Controlled by Entity Listed in Section A of Part IV | Business Address                                                                                                                                                                                                                              |
|                                                                             |                                                                                                                                                                                                                                               |
|                                                                             |                                                                                                                                                                                                                                               |
|                                                                             |                                                                                                                                                                                                                                               |
| **Add additional Sheets if necessary**                                      |                                                                                                                                                                                                                                               |
| OR                                                                          |                                                                                                                                                                                                                                               |
| <input type="checkbox"/>                                                    | No entity listed in Part III A owns greater than 50 percent of the voting stock in any corporation or owns greater than 50 percent interest in any partnership or limited liability company.                                                  |

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

| Section C – Part IV Certification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |        |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------|--|
| <p>I hereby certify that the <b>Organization listed above in Part I</b> does not own greater than 50 percent of any entity that that is debarred by the federal government from contracting with a federal agency and, if applicable, does not own greater than 50 percent of any entity that in turns owns greater than 50 percent of any entity debarred by the federal government from contracting with a federal agency. I further acknowledge: that I am authorized to execute this certification on behalf of the above-named organization; that the <b>Board of Education</b> is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the date of contract award by the <b>Board of Education</b> to notify the <b>Board of Education</b> in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the <b>Board of Education</b>, permitting the <b>Board of Education</b> to declare any contract(s) resulting from this certification void and unenforceable.</p> |  |        |  |
| Full Name (Print):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | Title: |  |
| Signature:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | Date:  |  |

END OF SECTION 002971



SECTION 004590 – POLITICAL CONTRIBUTIONS DISCLOSURE FORM

The undersigned, being authorized and knowledgeable of the circumstances, does hereby certify

that \_\_\_\_\_ (Business Entity) has made the following **reportable** political contributions to any elected official, political candidate or any political committee as defined in N.J.S.A. 19:44-20.26 during the twelve (12) months preceding this award of contract:

**Reportable Contributions**

| <b><u>Date of Contribution</u></b> | <b><u>Amount of Contribution</u></b> | <b><u>Name of Recipient Elected Official/ Committee/Candidate</u></b> | <b><u>Name of Contributor</u></b> |
|------------------------------------|--------------------------------------|-----------------------------------------------------------------------|-----------------------------------|
|                                    |                                      |                                                                       |                                   |
|                                    |                                      |                                                                       |                                   |
|                                    |                                      |                                                                       |                                   |
|                                    |                                      |                                                                       |                                   |
|                                    |                                      |                                                                       |                                   |
|                                    |                                      |                                                                       |                                   |
|                                    |                                      |                                                                       |                                   |

The Business Entity may attach additional pages if needed.

☐ **No Reportable Contributions** (Please check (✓) if applicable.)

I certify that \_\_\_\_\_ (Business Entity) made no reportable contributions to any elected official, political candidate or any political committee as defined in N.J.S.A. 19:44-20.26.

**CERTIFICATION**

I certify, that the information provided above is in full compliance with Public Law 2005—Chapter 271.

Name of Authorized Agent: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Business Entity: \_\_\_\_\_

END OF SECTION 004590

BYRD ANTI-LOBBYING AMENDMENT CERTIFICATION  
(To be submitted with each bid or offer exceeding \$100,000)

The undersigned, [Company] \_\_\_\_\_, certifies, to the best of his or her knowledge, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The Contractor, [Company] \_\_\_\_\_, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. § 3801 *et seq.*, apply to this certification and disclosure, if any.

\_\_\_\_\_  
Signature of Contractor's Authorized Official

\_\_\_\_\_  
Name and Title of Contractor's Authorized Official

\_\_\_\_\_  
Date

COMPLETE THIS FORM TO DISCLOSE LOBBYING ACTIVITIES PURSUANT TO 31 U.S.C. 1352

004591-2

## **INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES**

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of covered Federal action or a material change to previous filing pursuant to title 31 U.S.C. section 1352. The filing of a form is required for such payment or agreement to make payment to lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress an officer or employee of Congress or an employee of a Member of Congress in connection with a covered Federal action. Attach a continuation sheet for additional information if the space on the form is inadequate. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence, the outcome of a covered Federal action.
2. Identify the status of the covered Federal action.
3. Identify the appropriate classification of this report. If this is a follow-up report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last, previously submitted report by this reporting entity for this covered Federal action.
4. Enter the full name, address, city, state and zip code of the reporting entity. Include Congressional District if known. Check the appropriate classification of the reporting entity that designates if it is or expects to be a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the first tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
5. If the organization filing the report in Item 4 checks "Subawardee" then enter the full name, address, city, state and zip code of the prime Federal recipient. Include Congressional District, if known.
6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organization level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans and loan commitments.
8. Enter the most appropriate Federal identifying number available for the Federal action identification in item 1 (e.g., Request for Proposal (RFP) number, Invitation for Bid (IFB) number, grant announcement number, the contract grant, or loan award number, the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP-DE-90-001."
9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitments for the prime entity identified in item 4 or 5.
10. (a) Enter the full name, address, city, state and zip code of the lobbying entity engaged by the reporting entity identified in item 4 to influenced the covered Federal action.  
(b) Enter the full names of the individual(s) performing services and include full address if different from 10 (a). Enter Last Name, First Name and Middle Initial (MI).
11. Enter the amount of compensation paid or reasonably expected to be paid by the reporting entity (item 4) to the lobbying entity (item 10). Indicate whether the payment has been made (actual) or will be made (planned). Check all boxes that apply. If this is a material change report, enter the cumulative amount of payment made or planned to be made.
12. Check the appropriate box. Check all boxes that apply. If payment is made through an in-kind contribution, specify the nature and value of the in-kind payment.
13. Check the appropriate box. Check all boxes that apply. If other, specify nature.
14. Provide a specific and detailed description of the services that the lobbyist has performed or will be expected to perform and the date(s) of any services rendered. Include all preparatory and related activity not just time spent in actual contact with Federal officials. Identify the Federal officer(s) or employee(s) contacted or the officer(s) employee(s) or Member(s) of Congress that were contacted.
15. Check whether or not a continuation sheet(s) is attached.
16. The certifying official shall sign and date the form, print his/her name title and telephone number.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, D.C. 20503.

SF-LLL-Instructions Rev. 06-04-90«ENDIF»

SECTION 004595 – PREVAILING WAGES CERTIFICATION FORM

It is the determination of the Gloucester City Board of Education that this is a public works project that in total will exceed \$2,000.00 (two thousand dollars), therefore prevailing wages rules and regulations apply as promulgated by the New Jersey Prevailing Wage Act and in conformance with N.J.S.A. 34:11-56:25.

**CERTIFICATION**

1. I certify that our company understands that this project of the Gloucester City Board of Education requires prevailing wages to be paid in full accordance with the law.
2. I further certify that all subcontractors named in this bid understand that this project requires the subcontractor to pay prevailing wages in full accordance with the law.

**NOTIFICATION OF VIOLATIONS – New Jersey Department of Labor**

Has the bidder or any person having an “interest” with the bidder, been notified by the New Jersey Department of Labor by notice issued pursuant to N.J.S.A. 34:11-56:37 that he/she has been in violation for failure to pay prevailing wages as required by the New Jersey Prevailing Wage Act within the last five (5) years?

\* Yes ☐

No ☐

\*If yes, please attach a signed document explaining any/or all administrative proceedings with the NJDOL within the last five (5) years.

Please include any pending administrative proceedings with the NJDOL, if any.

Name of Company: \_\_\_\_\_

Authorized Agent: \_\_\_\_\_

Authorized Signature: \_\_\_\_\_

END OF SECTION 004595

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

SECTION 004596 - LOWEST BIDDER PREVAILING WAGE CERTIFICATION

54 N.J.R. 1009(a) LOWEST BIDDER PREVAILING WAGE CERTIFICATION

In the matter of an award of a ) STATE OF NEW JERSEY  
contract for public work for a ) DEPARTMENT OF LABOR AND  
WORKFORCE DEVELOPMENT  
DIVISION OF WAGE & HOUR COMPLIANCE  
project described as: ) Industrial Arts Alteration  
Gloucester City High School  
) Certification of Lowest Bidder

\_\_\_\_\_, of full age and under oath, duly provides the following sworn statement:

(1). I am the owner and/or highest-ranking official or officer of a company or firm name

\_\_\_\_\_, which holds a currently valid public

works contractor registration pursuant to the New Jersey Public Works Contractor Registration Act,

N.J.S.A. 34:11-56.48 et seq., certificate number \_\_\_\_\_.

(2). I submitted a bid for a contract award in the above identified project and the public body has informed me that I am the lowest bidder by 10 percent or more as compared to the next lowest bid submitted.

(3). The amount of my bid does include paying the prevailing wage rate to all workers who perform work on the project at rates of pay, including both base wage and fringe benefits, set forth in applicable Wage Determinations, (1) for the appropriate locality, (2) for the appropriate work classification (e.g., carpenter, electrician, mason, plumber), and (3) for the appropriate job title (e.g., Apprentice, Journeyman, Forman), published by the New Jersey Department of Labor and Workforce Development (NJDOL) pursuant to the New Jersey Prevailing Wage Act (NJPWA), N.J.S.A. 34:11-56.25 et seq., and corresponding NJDOL rules, N.J.A.C. 12:60.

I certify under penalty of perjury that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are false, I am subject to punishment. See N.J.S.A. 2C:28-1 et seq., specifically, N.J.S.A. 2C:28-3, within the New Jersey Code of Criminal Justice.

Date: \_\_\_\_\_ Signature: \_\_\_\_\_

Title: \_\_\_\_\_

NEW JERSEY REGISTER  
Copyright © 2022 by the New Jersey Office of Administrative Law

END OF SECTION 004596

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

SECTION 005290 - LIST OF PRIME SUBCONTRACTORS

BIDDER:

\_\_\_\_\_ (NAME)

\_\_\_\_\_ (ADDRESS)

\_\_\_\_\_ (CITY, STATE, ZIP)

\_\_\_\_\_ (PHONE/FAX NUMBER)

In accordance with N.J.S.A. 18A:18A-18 where the Bid requires and/or permits more than one of the specified branches of work to be under one contract, the bidder shall list below the applicable name or names of their Prime Subcontractors. If none are required, the Bidder shall input "NONE" on the list of those Subcontractors. **Subject to compliance with the Public Bidding Laws, if the Overall Bidder elects to undertake one or more of the subcontracts listed with their own forces, they MUST indicate their intentions on this form.**

LIST OF PRIME SUBCONTRACTORS

GENERAL CONSTRUCTION (C008 or C009), which shall include all other work goods and services required for the completion of the project.

\_\_\_\_\_ (NAME)

\_\_\_\_\_ (ADDRESS)

\_\_\_\_\_ (CITY, STATE, ZIP)

\_\_\_\_\_ (PHONE/FAX NUMBER)

\_\_\_\_\_ (DOLLAR VALUE)

STRUCTURAL STEEL AND ORNAMENTAL IRON WORK (C029)

\_\_\_\_\_ (NAME)

\_\_\_\_\_ (ADDRESS)

\_\_\_\_\_ (CITY, STATE, ZIP)

\_\_\_\_\_ (PHONE/FAX NUMBER)

\_\_\_\_\_ (DOLLAR VALUE)

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

|    |                                                                                                 |
|----|-------------------------------------------------------------------------------------------------|
| 1  | <u>PLUMBING (C030)</u>                                                                          |
| 2  | _____ (NAME)                                                                                    |
| 3  | _____ (ADDRESS)                                                                                 |
| 4  | _____ (CITY, STATE, ZIP)                                                                        |
| 5  | _____ (PHONE/FAX NUMBER)                                                                        |
| 6  | _____ (DOLLAR VALUE)                                                                            |
| 7  |                                                                                                 |
| 8  |                                                                                                 |
| 9  | <u>HEATING, VENTILATION, AIR CONDITIONING AND REFRIGERATION (HVACr) (C032)</u>                  |
| 10 | _____ (NAME)                                                                                    |
| 11 | _____ (ADDRESS)                                                                                 |
| 12 | _____ (CITY, STATE, ZIP)                                                                        |
| 13 | _____ (PHONE/FAX NUMBER)                                                                        |
| 14 | _____ (DOLLAR VALUE)                                                                            |
| 15 |                                                                                                 |
| 16 |                                                                                                 |
| 17 | <u>ELECTRICAL WORK (C047)</u> , including any electrical power plant, tele-data, fire alarm, or |
| 18 | security                                                                                        |
| 19 | _____ (NAME)                                                                                    |
| 20 | _____ (ADDRESS)                                                                                 |
| 21 | _____ (CITY, STATE, ZIP)                                                                        |
| 22 | _____ (PHONE/FAX NUMBER)                                                                        |
| 23 | _____ (DOLLAR VALUE)                                                                            |
| 24 |                                                                                                 |
| 25 |                                                                                                 |
| 26 | END OF SECTION 005290                                                                           |



## SECTION 006000 - PROJECT FORMS

### 1.1 FORM OF AGREEMENT AND GENERAL CONDITIONS

- A. The following form of Owner/Contractor Agreement and form of the General Conditions shall be used for Project:
  - 1. AIA Document A101-2017 "Standard Form of Agreement between Owner and Contractor Where the Basis of Payment is a Stipulated Sum."
  - 2. The General Conditions as modified by the Owner are included in the Project Manual.
  - 3. Form for Requests for Information (RFIs): Section 006001 – Bidder Request for Information is to be used during the Bidding Phase and is included in the Project Manual.
  - 4. Notice to Proceed: Section 007100 – Notice to Proceed is included in the Project Manual.

### 1.2 ADMINISTRATIVE FORMS

- A. Administrative Forms: Additional administrative forms are specified in Division 01 General Requirements.
- B. Copies of AIA standard forms may be obtained from the American Institute of Architects; [www.aiacontractdocsaiacontracts.org](http://www.aiacontractdocsaiacontracts.org); (800) 942-7732.
- C. State of New Jersey Pre-Qualification (Notice of Classification) information may be obtained from the New Jersey Department of Treasury at (609) 633-3990 or (609) 984-4708.
- D. State of New Jersey WORKFORCE REPORTS may be obtained from the New Jersey Division of Public Contracts Equal Employment Opportunity Compliance at [www.state.nj.us/treasury/contract](http://www.state.nj.us/treasury/contract) compliance.
- E. Preconstruction Forms:
  - 1. Form of Performance Bond and Labor and Material Bond: Bonding Company's standard form complying with the statutory requirements of the State of New Jersey. AIA Document A312-2010 "Performance Bond and Payment Bond."
  - 2. Form of Certificate of Insurance: Insurance Company's standard form complying with the statutory requirements of the State of New Jersey. AIA Document G715-2017 "Supplemental Attachment for ACORD Certificate of Insurance 25."
  - 3. Tracking Report: Initial Project Workforce Report - Building Construction (NJAAO Form AA-201).
- F. Information and Modification Forms:
  - 1. Form for Requests for Information (RFIs): Section 013100 – Contractor Request for Information is to be used during the Construction Phase and is included in the Project Manual. AIA Document G716-2004 "Request for Information (RFI)."

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

2. Form for Requesting Substitutions: Section 012501 – Substitution Request is included in the Project Manual.
3. Form for Submitting Submittals: Section 013300 – Submittal Transmittal Form is included in the Project Manual.
4. Change Order Form: AIA Document G701-2017 "Change Order."
5. Prime Contractor Change Order Request Forms: Sections 012610 & 012610.1 - Prime Contractor COR Summary & Worksheet.
6. Subcontractor Change Order Request Forms: Sections 012620 & 012620.1 - Subcontractor COR Summary & Worksheet.
7. Form of Architect's Memorandum for Minor Changes in the Work: AIA Document G710-2017 "Architect's Supplemental Instructions."
8. Form of Change Directive: AIA Document G714-2017 "Construction Change Directive."

G. Payment Forms:

1. Schedule of Values Form: AIA Document G703-1992 "Continuation Sheet."
2. Payment Application: AIA Document G702-1992/703-1992 "Application and Certificate for Payment and Continuation Sheet."
3. Payroll Verification: Section 012910 – Payroll Verification Affidavit is included in the Project Manual.
4. Partial Release: Section 012911 – Partial Release of Liens is included in the Project Manual.
5. Stored Materials: Section 012920 – Bill of Sale/Certification for Stored Materials is included in the Project Manual.
6. Monthly Tracking Reports: Monthly Workforce Tracking - Building Construction (Form AA-202).
7. Form of Partial Release: AIA Document G707A-1994, "Consent of Surety to Reduction in or Partial Release of Retainage."

H. Close Out Forms:

1. Substantial Completion: AIA Document G704-2017, "Certificate of Substantial Completion."
2. Payment Application: AIA Document G702-1992/703-1992 "Application and Certificate for Payment and Continuation Sheet."
3. Form of Contractor's Affidavit: AIA Document G706-1994 "Contractor's Affidavit of Payment of Debts and Claims."
4. Form of Affidavit of Release of Liens: AIA Document G706A-1994 "Contractor's Affidavit of Payment of Release of Liens."
5. Form of Consent of Surety: AIA Document G707-1994 "Consent of Surety to Final Payment."
6. Maintenance Bond: Section 017721 - Maintenance Bond is included in the Project Manual.
7. Subcontractor Guaranty: Section 017722 – Subcontractor Guaranty is included in the Project Manual.

END OF SECTION 006000

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

SECTION 006001 - BIDDER REQUEST FOR INFORMATION

FROM: \_\_\_\_\_

REQUEST DATE: \_\_\_\_\_ EMAIL \_\_\_\_\_

BIDDER'S RFI NUMBER: \_\_\_\_\_

TO:

Regan Young, AIA

REGAN YOUNG ENGLAND BUTERA, PC

Fax: (609) 265-0333

Email: rgy@ryebread.com

REFERENCES (List all applicable drawings & specifications):

PLEASE RESPOND TO THE FOLLOWING:

RESPONSE:

DATE OF RESPONSE: \_\_\_\_\_ BY: \_\_\_\_\_

DISTRIBUTION: \_\_\_\_\_

END OF SECTION 006001

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

SECTION 007100 - NOTICE TO PROCEED

TO: \_\_\_\_\_ DATE: \_\_\_\_\_  
\_\_\_\_\_  
PROJECT: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

You are hereby notified to commence WORK beginning with the submission of Start-up and material submittals in accordance with the Agreement dated \_\_\_\_\_.  
On site work shall begin on \_\_\_\_\_ and you are to complete the WORK on or before \_\_\_\_\_.

\_\_\_\_\_  
(OWNER)

By: \_\_\_\_\_

Title: \_\_\_\_\_

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE TO PROCEED  
is hereby acknowledged by:

\_\_\_\_\_,  
(CONTRACTOR)

this the \_\_\_\_\_, 20\_\_\_\_\_

\_\_\_\_\_  
By: \_\_\_\_\_

Title: \_\_\_\_\_

Employer ID #: \_\_\_\_\_

END OF SECTION 007100



# AIA® Document A201® – 2017

## General Conditions of the Contract for Construction

### for the following PROJECT:

*(Name and location or address)*

5672G GCHS Industrial Arts Alteration  
Gloucester City High School  
1300 Market Street  
Gloucester City, NJ 08030

### THE OWNER:

*(Name, legal status and address)*

GLOUCESTER CITY BOE, Other  
1300 Market Street  
Gloucester City, NJ 08030

### THE ARCHITECT:

*(Name, legal status and address)*

REGAN YOUNG ENGLAND BUTERA, PC, Professional Corporation  
456 High Street; Mount Holly, NJ 08060

### THE CONSTRUCTION MANAGER:

*(Name, legal status and address)*

GREYHAWK  
Suite 210, 1800 Midlantic Drive; Mount Laurel, NJ 08054

### ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

For guidance in modifying this document to include supplementary conditions, see AIA Document A503™, Guide for Supplementary Conditions.

### TABLE OF ARTICLES

- |    |                                                  |
|----|--------------------------------------------------|
| 1  | GENERAL PROVISIONS                               |
| 2  | OWNER                                            |
| 3  | CONTRACTOR                                       |
| 4  | ARCHITECT AND CONSTRUCTION MANAGER               |
| 5  | SUBCONTRACTORS                                   |
| 6  | CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS |
| 7  | CHANGES IN THE WORK                              |
| 8  | TIME                                             |
| 9  | PAYMENTS AND COMPLETION                          |
| 10 | PROTECTION OF PERSONS AND PROPERTY               |

- 11 INSURANCE AND BONDS
- 12 UNCOVERING AND CORRECTION OF WORK
- 13 MISCELLANEOUS PROVISIONS
- 14 TERMINATION OR SUSPENSION OF THE CONTRACT
- 15 CLAIMS AND DISPUTES
- 16 NEW JERSEY REQUIREMENTS FOR PUBLIC WORK



## INDEX

(Topics and numbers in bold are Section headings.)

### Acceptance of Nonconforming Work

9.6.6, 9.9.3, **12.3**

#### Acceptance of Work

9.6.6, 9.8.2, 9.9.3, 9.10.1, 9.10.3, **12.3**

### Access to Work

**3.16**, 6.2.1, **12.1**

#### Accident Prevention

10

#### Acts and Omissions

3.2, 3.3.2, 3.12.8, 3.18, 4.2.3, 8.3.1, 9.5.1, 10.2.5, 10.2.8, 13.3.2, 14.1, 15.1.2, 15.2

#### Addenda

1.1.1

#### Additional Costs, Claims for

3.7.4, 3.7.5, 10.3.2, 15.1.5

### Additional Inspections and Testing

9.4.2, 9.8.3, 12.2.1, **13.4**

### Additional Time, Claims for

3.2.4, 3.7.4, 3.7.5, 3.10.2, 8.3.2, **15.1.6**

### Administration of the Contract

3.1.3, **4.2**, 9.4, 9.5

#### Advertisement or Invitation to Bid

1.1.1

#### Aesthetic Effect

4.2.13

### Allowances

**3.8**

### Applications for Payment

4.2.5, 7.3.9, 9.2, **9.3**, 9.4, 9.5.1, 9.5.4, 9.6.3, 9.7, 9.10

#### Approvals

2.1.1, 2.3.1, 2.5, 3.1.3, 3.10.2, 3.12.8, 3.12.9, 3.12.10.1, 4.2.7, 9.3.2, 13.4.1

#### Arbitration

8.3.1, 15.3.2, **15.4**

## ARCHITECT AND CONSTRUCTION MANAGER

**4**

### Architect and Construction Manager, Definitions of

**4.1.1**

#### Architect and Construction Manager, Extent of Authority

2.5, 3.12.7, 4.1.2, 4.2, 5.2, 6.3, 7.1.2, 7.3.4, 7.4, 9.2, 9.3.1, 9.4, 9.5, 9.6.3, 9.8, 9.10.1, 9.10.3, 12.1, 12.2.1, 13.4.1, 13.4.2, 14.2.2, 14.2.4, 15.1.4, 15.2.1

#### Architect and Construction Manager, Limitations of Authority and Responsibility

2.1.1, 3.12.4, 3.12.8, 3.12.10, 4.1.2, 4.2.1, 4.2.2, 4.2.3, 4.2.6, 4.2.7, 4.2.10, 4.2.12, 4.2.13, 5.2.1, 7.4, 9.4.2, 9.5.4, 9.6.4, 15.1.4, 15.2

### Architect's and Construction Manager's Additional Services and Expenses

2.5, 12.2.1, 13.4.2, 13.4.3, 14.2.4

### Architect's and Construction Manager's

#### Administration of the Contract

3.1.3, 3.7.4, 15.2, 9.4.1, 9.5

#### Architect's and Construction Manager's Approvals

2.5, 3.1.3, 3.5, 3.10.2, 4.2.7

#### Architect's and Construction Manager's Authority to Reject Work

3.5, 4.2.6, 12.1.2, 12.2.1

#### Architect's Copyright

1.1.7, 1.5

#### Architect's and Construction Manager's Decisions

3.7.4, 4.2.6, 4.2.7, 4.2.11, 4.2.12, 4.2.13, 4.2.14, 6.3, 7.3.4, 7.3.9, 8.1.3, 8.3.1, 9.2, 9.4.1, 9.5, 9.8.4, 9.9.1, 13.4.2, 15.2

#### Architect's and Construction Manager's Inspections

3.7.4, 4.2.2, 4.2.9, 9.4.2, 9.8.3, 9.9.2, 9.10.1, 13.4

#### Architect's and Construction Manager's Instructions

3.2.4, 3.3.1, 4.2.6, 4.2.7, 13.4.2

#### Architect's Interpretations

4.2.11, 4.2.12

#### Architect's Project Representative

4.2.10

#### Architect's and Construction Manager's Relationship with Contractor

1.1.2, 1.5, 2.3.3, 3.1.3, 3.2.2, 3.2.3, 3.2.4, 3.3.1, 3.4.2, 3.5, 3.7.4, 3.7.5, 3.9.2, 3.9.3, 3.10, 3.11, 3.12, 3.16, 3.18, 4.1.2, 4.2, 5.2, 6.2.2, 7, 8.3.1, 9.2, 9.3, 9.4, 9.5, 9.7, 9.8, 9.9, 10.2.6, 10.3, 11.3, 12, 13.3.2, 13.4, 15.2

#### Architect's and Construction Manager's Relationship with Subcontractors

1.1.2, 4.2.3, 4.2.4, 4.2.6, 9.6.3, 9.6.4, 11.3

#### Architect's and Construction Manager's

##### Representations

9.4.2, 9.5.1, 9.10.1

#### Architect's and Construction Manager's Site Visits

3.7.4, 4.2.2, 4.2.9, 9.4.2, 9.5.1, 9.9.2, 9.10.1, 13.4

#### Asbestos

10.3.1

#### Attorneys' Fees

3.18.1, 9.6.8, 9.10.2, 10.3.3

#### Award of Separate Contracts

6.1.1, 6.1.2

### Award of Subcontracts and Other Contracts for Portions of the Work

**5.2**

### Basic Definitions

**1.1**

#### Bidding Requirements

1.1.1

#### Binding Dispute Resolution

8.3.1, 9.7, 11.5, 13.1, 15.1.2, 15.1.3, 15.2.1, 15.2.5, 15.2.6.1, 15.3.1, 15.3.2, 15.3.3, 15.4.1

Bonds, Lien  
7.3.4.4, 9.6.8, 9.10.2, 9.10.3  
**Bonds, Performance, and Payment**  
7.3.4.4, 9.6.7, 9.10.3, 11.1.2, 11.1.3, 11.5  
**Building Information Models Use and Reliance**  
1.8  
Building Permit  
3.7.1  
**Capitalization**  
1.3  
Certificate of Substantial Completion  
9.8.3, 9.8.4, 9.8.5  
**Certificates for Payment**  
4.2.1, 4.2.5, 4.2.9, 9.3.3, 9.4, 9.5, 9.6.1, 9.6.6, 9.7,  
9.10.1, 9.10.3, 14.1.1.3, 14.2.4, 15.1.4  
Certificates of Inspection, Testing or Approval  
13.4.4  
Certificates of Insurance  
9.10.2  
**Change Orders**  
1.1.1, 3.4.2, 3.7.4, 3.8.2.3, 3.11, 3.12.8, 4.2.8, 5.2.3,  
7.1.2, 7.1.3, 7.2, 7.3.2, 7.3.7, 7.3.9, 7.3.10, 8.3.1,  
9.3.1.1, 9.10.3, 10.3.2, 11.2, 11.5, 12.1.2  
**Change Orders, Definition of**  
7.2.1  
**CHANGES IN THE WORK**  
2.2.2, 3.11, 4.2.8, 7, 7.2.1, 7.3.1, 7.4, 8.3.1, 9.3.1.1,  
11.5  
**Claims, Definition of**  
15.1.1  
Claims, Notice of  
1.6.2, 15.1.3  
**CLAIMS AND DISPUTES**  
3.2.4, 6.1.1, 6.3, 7.3.9, 9.3.3, 9.10.4, 10.3.3, 15, 15.4  
Claims and Timely Assertion of Claims  
15.4.1  
**Claims for Additional Cost**  
3.2.4, 3.3.1, 3.7.4, 7.3.9, 9.5.2, 10.2.5, 10.3.2, 15.1.5  
**Claims for Additional Time**  
3.2.4, 3.3.1, 3.7.4, 6.1.1, 8.3.2, 9.5.2, 10.3.2, 15.1.6  
**Concealed or Unknown Conditions, Claims for**  
3.7.4  
Claims for Damages  
3.2.4, 3.18, 8.3.3, 9.5.1, 9.6.7, 10.2.5, 10.3.3, 11.3,  
11.3.2, 14.2.4, 15.1.7  
Claims Subject to Arbitration  
15.4.1  
**Cleaning Up**  
3.15, 6.3  
Commencement of the Work, Conditions Relating to  
2.2.1, 3.2.2, 3.4.1, 3.7.1, 3.10.1, 3.12.6, 5.2.1, 5.2.3,  
6.2.2, 8.1.2, 8.2.2, 8.3.1, 11.1, 11.2, 15.1.5  
**Commencement of the Work, Definition of**  
8.1.2  
**Communications**  
3.9.1, 4.2.4

Completion, Conditions Relating to  
3.4.1, 3.11, 3.15, 4.2.2, 4.2.9, 8.2, 9.4.2, 9.8, 9.9.1,  
9.10, 12.2, 14.1.2, 15.1.2  
**COMPLETION, PAYMENTS AND**  
9  
Completion, Substantial  
3.10.1, 4.2.9, 8.1.1, 8.1.3, 8.2.3, 9.4.2, 9.8, 9.9.1,  
9.10.3, 12.2, 15.1.2  
Compliance with Laws  
2.3.2, 3.2.3, 3.6, 3.7, 3.12.10, 3.13, 9.6.4, 10.2.2, 13.1,  
13.3, 13.4.1, 13.4.2, 13.5, 14.1.1, 14.2.1.3, 15.2.8,  
15.4.2, 15.4.3  
Concealed or Unknown Conditions  
3.7.4, 4.2.8, 8.3.1, 10.3  
Conditions of the Contract  
1.1.1, 6.1.1, 6.1.4  
Consent, Written  
3.4.2, 3.14.2, 4.1.2, 9.8.5, 9.9.1, 9.10.2, 9.10.3, 13.2,  
15.4.4.2  
**Consolidation or Joinder**  
15.4.4  
**CONSTRUCTION BY OWNER OR BY  
SEPARATE CONTRACTORS**  
1.1.4, 6  
**Construction Change Directive, Definition of**  
7.3.1  
**Construction Change Directives**  
1.1.1, 3.4.2, 3.11, 3.12.8, 4.2.8, 7.1.1, 7.1.2, 7.1.3, 7.3,  
9.3.1.1  
Construction Schedules, Contractor's  
3.10, 3.11, 3.12.1, 3.12.2, 6.1.3, 15.1.6.2  
**Contingent Assignment of Subcontracts**  
5.4, 14.2.2.2  
**Continuing Contract Performance**  
15.1.4  
**Contract, Definition of**  
1.1.2  
**CONTRACT, TERMINATION OR  
SUSPENSION OF THE**  
5.4.1.1, 5.4.2, 11.5, 14  
Contract Administration  
3.1.3, 4, 9.4, 9.5  
Contract Award and Execution, Conditions Relating  
to  
3.7.1, 3.10, 5.2, 6.1  
Contract Documents, Copies Furnished and Use of  
1.5.2, 2.3.6, 5.3  
**Contract Documents, Definition of**  
1.1.1  
**Contract Sum**  
2.2.2, 2.2.4, 3.7.4, 3.7.5, 3.8, 3.10.2, 5.2.3, 7.3, 7.4,  
9.1, 9.2, 9.4.2, 9.5.1.4, 9.6.7, 9.7, 10.3.2, 11.5, 12.1.2,  
12.3, 14.2.4, 14.3.2, 15.1.4.2, 15.1.5, 15.2.5  
**Contract Sum, Definition of**  
9.1



## Contract Time

1.1.4, 2.2.1, 2.2.2, 3.7.4, 3.7.5, 3.10.2, 5.2.3, 6.1.5, 7.2.1.3, 7.3.1, 7.3.5, 7.3.6, 7, 7, 7.3.10, 7.4, 8.1.1, 8.2.1, 8.2.3, 8.3.1, 9.5.1, 9.7, 10.3.2, 12.1.1, 12.1.2, 14.3.2, 15.1.4.2, 15.1.6.1, 15.2.5

## Contract Time, Definition of

8.1.1

## CONTRACTOR

3

## Contractor, Definition of

3.1, 6.1.2

## Contractor's Construction and Submittal Schedules

3.10, 3.12.1, 3.12.2, 4.2.3, 6.1.3, 15.1.6.2

## Contractor's Employees

2.2.4, 3.3.2, 3.4.3, 3.8.1, 3.9, 3.18.2, 4.2.3, 4.2.6, 10.2, 10.3, 11.3, 14.1, 14.2.1.1

## Contractor's Liability Insurance

11.1

## Contractor's Relationship with Separate Contractors and Owner's Forces

3.12.5, 3.14.2, 4.2.4, 6, 11.3, 12.2.4

## Contractor's Relationship with Subcontractors

1.2.2, 2.2.4, 3.3.2, 3.18.1, 3.18.2, 4.2.4, 5, 9.6.2, 9.6.7, 9.10.2, 11.2, 11.3, 11.4

## Contractor's Relationship with the Architect and Construction Manager

1.1.2, 1.5, 2.3.3, 3.1.3, 3.2.2, 3.2.3, 3.2.4, 3.3.1, 3.4.2, 3.5.1, 3.7.4, 3.10, 3.11, 3.12, 3.16, 3.18, 4.2, 5.2, 6.2.2, 7, 8.3.1, 9.2, 9.3, 9.4, 9.5, 9.7, 9.8, 9.9, 10.2.6, 10.3, 11.3, 12, 13.4, 15.1.3, 15.2.1

## Contractor's Representations

3.2.1, 3.2.2, 3.5, 3.12.6, 6.2.2, 8.2.1, 9.3.3, 9.8.2

## Contractor's Responsibility for Those Performing the Work

3.3.2, 3.18, 5.3, 6.1.3, 6.2, 9.5.1, 10.2.8

## Contractor's Review of Contract Documents

3.2

## Contractor's Right to Stop the Work

2.2.2, 9.7

## Contractor's Right to Terminate the Contract

14.1

## Contractor's Submittals

3.10, 3.11, 3.12, 4.2.7, 5.2.1, 5.2.3, 9.2, 9.3, 9.8.2, 9.8.3, 9.9.1, 9.10.2, 9.10.3

## Contractor's Superintendent

3.9, 10.2.6

## Contractor's Supervision and Construction Procedures

1.2.2, 3.3, 3.4, 3.12.10, 4.2.2, 4.2.7, 6.1.3, 6.2.4, 7.1.3, 7.3.4, 7.3.6, 8.2, 10, 12, 14, 15.1.4

## Coordination and Correlation

1.2, 3.2.1, 3.3.1, 3.10, 3.12.6, 6.1.3, 6.2.1

## Copies Furnished of Drawings and Specifications

1.5, 2.3.6, 3.11

## Copyrights

1.5, 3.17

## Correction of Work

2.5, 3.7.3, 9.4.2, 9.8.2, 9.8.3, 9.9.1, 12.1.2, 12.2, 12.3, 15.1.3.1, 15.1.3.2, 15.2.1

## Correlation and Intent of the Contract Documents

1.2

## Cost, Definition of

7.3.4

## Costs

2.5, 3.2.4, 3.7.3, 3.8.2, 3.15.2, 5.4.2, 6.1.1, 6.2.3, 7.3.3.3, 7.3.4, 7.3.8, 7.3.9, 9.10.2, 10.3.2, 10.3.6, 11.2, 12.1.2, 12.2.1, 12.2.4, 13.4, 14

## Cutting and Patching

3.14, 6.2.5

## Damage to Construction of Owner or Separate Contractors

3.14.2, 6.2.4, 10.2.1.2, 10.2.5, 10.4, 12.2.4

## Damage to the Work

3.14.2, 9.9.1, 10.2.1.2, 10.2.5, 10.4, 12.2.4

## Damages, Claims for

3.2.4, 3.18, 6.1.1, 8.3.3, 9.5.1, 9.6.7, 10.3.3, 11.3.2, 11.3, 14.2.4, 15.1.7

## Damages for Delay

6.2.3, 8.3.3, 9.5.1.6, 9.7, 10.3.2, 14.3.2

## Date of Commencement of the Work, Definition of

8.1.2

## Date of Substantial Completion, Definition of

8.1.3

## Day, Definition of

8.1.4

## Decisions of the Architect and Construction Manager

3.7.4, 4.2.6, 4.2.7, 4.2.11, 4.2.12, 4.2.13, 6.3, 7.3.4, 7.3.9, 8.1.3, 8.3.1, 9.2, 9.4, 9.5.1, 9.8.4, 9.9.1, 13.4.2, 14.2.2, 14.2.4, 15.1, 15.2

## Decisions to Withhold Certification

9.4.1, 9.5, 9.7, 14.1.1.3

## Defective or Nonconforming Work, Acceptance, Rejection and Correction of

2.5, 3.5, 4.2.6, 6.2.3, 9.5.1, 9.5.3, 9.6.6, 9.8.2, 9.9.3, 9.10.4, 12.2.1

## Definitions

1.1, 2.1.1, 3.1.1, 3.5, 3.12.1, 3.12.2, 3.12.3, 4.1.1, 5.1, 6.1.2, 7.2.1, 7.3.1, 8.1, 9.1, 9.8.1, 15.1.1

## Delays and Extensions of Time

3.2, 3.7.4, 5.2.3, 7.2.1, 7.3.1, 7.4, 8.3, 9.5.1, 9.7, 10.3.2, 10.4, 14.3.2, 15.1.6, 15.2.5

## Digital Data Use and Transmission

1.7

## Disputes

6.3, 7.3.9, 15.1, 15.2

## Documents and Samples at the Site

3.11

## Drawings, Definition of

1.1.5

## Drawings and Specifications, Use and Ownership of

3.11

## Effective Date of Insurance

8.2.2

## **Emergencies**

### **10.4, 14.1.1.2, 15.1.5**

#### **Employees, Contractor's**

3.3.2, 3.4.3, 3.8.1, 3.9, 3.18.2, 4.2.3, 4.2.6, 10.2, 10.3.3, 11.3, 14.1, 14.2.1.1

#### **Equipment, Labor, or Materials**

1.1.3, 1.1.6, 3.4, 3.5, 3.8.2, 3.8.3, 3.12, 3.13, 3.15.1, 4.2.6, 4.2.7, 5.2.1, 6.2.1, 7.3.4, 9.3.2, 9.3.3, 9.5.1.3, 9.10.2, 10.2.1, 10.2.4, 14.2.1.1, 14.2.1.2

#### **Execution and Progress of the Work**

1.1.3, 1.2.1, 1.2.2, 2.3.4, 2.3.6, 3.1, 3.3.1, 3.4.1, 3.7.1, 3.10.1, 3.12, 3.14, 4.2, 6.2.2, 7.1.3, 7.3.6, 8.2, 9.5.1, 9.9.1, 10.2, 10.3, 12.1, 12.2, 14.2, 14.3.1, 15.1.4

#### **Extensions of Time**

3.2.4, 3.7.4, 5.2.3, 7.2.1, 7.3, 7.4, 9.5.1, 9.7, 10.3.2, 10.4, 14.3, 15.1.6, **15.2.5**

#### **Failure of Payment**

9.5.1.3, **9.7**, 9.10.2, 13.5, 14.1.1.3, 14.2.1.2

#### **Faulty Work**

(See Defective or Nonconforming Work)

#### **Final Completion and Final Payment**

4.2.1, 4.2.9, 9.8.2, **9.10**, 12.3, 14.2.4, 14.4.3

#### **Financial Arrangements, Owner's**

2.2.1, 13.2.2, 14.1.1.4

## **GENERAL PROVISIONS**

### **1**

#### **Governing Law**

##### **13.1**

Guarantees (See Warranty)

#### **Hazardous Materials and Substances**

10.2.4, **10.3**

Identification of Subcontractors and Suppliers  
5.2.1

#### **Indemnification**

3.17, **3.18**, 9.6.8, 9.10.2, 10.3.3, 11.3

#### **Information and Services Required of the Owner**

2.1.2, **2.2**, 2.3, 3.2.2, 3.12.10.1, 6.1.3, 6.1.4, 6.2.5, 9.6.1, 9.9.2, 9.10.3, 10.3.3, 11.2, 13.4.1, 13.4.2, 14.1.1.4, 14.1.4, 15.1.4

#### **Initial Decision**

##### **15.2**

#### **Initial Decision Maker, Definition of**

1.1.8

#### **Initial Decision Maker, Decisions**

14.2.4, 15.1.4.2, 15.2.1, 15.2.2, 15.2.3, 15.2.4, 15.2.5

#### **Initial Decision Maker, Extent of Authority**

14.2.4, 15.1.4.2, 15.2.1, 15.2.2, 15.2.3, 15.2.4, 15.2.5

#### **Injury or Damage to Person or Property**

**10.2.8**, 10.4

#### **Inspections**

3.1.3, 3.3.3, 3.7.1, 4.2.2, 4.2.6, 4.2.9, 9.4.2, 9.8.3, 9.9.2, 9.10.1, 12.2.1, 13.4

#### **Instructions to Bidders**

1.1.1

#### **Instructions to the Contractor**

3.2.4, 3.3.1, 3.8.1, 5.2.1, 7, 8.2.2, 12, 13.4.2

## **Instruments of Service, Definition of**

### **1.1.7**

#### **Insurance**

6.1.1, 7.3.4, 8.2.2, 9.3.2, 9.8.4, 9.9.1, 9.10.2, 10.2.5, **11**

Insurance, Notice of Cancellation or Expiration

11.1.4, 11.2.3

#### **Insurance, Contractor's Liability**

##### **11.1**

Insurance, Effective Date of

8.2.2, 14.4.2

#### **Insurance, Owner's Liability**

##### **11.2**

#### **Insurance, Property**

**10.2.5**, 11.2, 11.4, 11.5

Insurance, Stored Materials

9.3.2

## **INSURANCE AND BONDS**

### **11**

Insurance Companies, Consent to Partial Occupancy

9.9.1

Insured loss, Adjustment and Settlement of

11.5

Intent of the Contract Documents

1.2.1, 4.2.7, 4.2.12, 4.2.13

#### **Interest**

##### **13.5**

#### **Interpretation**

1.1.8, 1.2.3, **1.4**, 4.1.1, 5.1, 6.1.2, 15.1.1

Interpretations, Written

4.2.11, 4.2.12

Judgment on Final Award

15.4.2

#### **Labor and Materials, Equipment**

1.1.3, 1.1.6, **3.4**, 3.5, 3.8.2, 3.8.3, 3.12, 3.13, 3.15.1, 5.2.1, 6.2.1, 7.3.4, 9.3.2, 9.3.3, 9.5.1.3, 9.10.2, 10.2.1, 10.2.4, 14.2.1.1, 14.2.1.2

#### **Labor Disputes**

8.3.1

#### **Laws and Regulations**

1.5, 2.3.2, 3.2.3, 3.2.4, 3.6, 3.7, 3.12.10, 3.13, 9.6.4, 9.9.1, 10.2.2, 13.1, 13.3.1, 13.4.2, 13.5, 14, 15.2.8,

15.4

#### **Liens**

2.1.2, 9.3.1, 9.3.3, 9.6.8, 9.10.2, 9.10.4, 15.2.8

#### **Limitations, Statutes of**

12.2.5, 15.1.2, 15.4.1.1

#### **Limitations of Liability**

3.2.2, 3.5, 3.12.10, 3.12.10.1, 3.17, 3.18.1, 4.2.6, 4.2.7, 6.2.2, 9.4.2, 9.6.4, 9.6.7, 9.6.8, 10.2.5, 10.3.3, 11.3, 12.2.5, 13.3.1

#### **Limitations of Time**

2.1.2, 2.2, 2.5, 3.2.2, 3.10, 3.11, 3.12.5, 3.15.1, 4.2.7, 5.2, 5.3, 5.4.1, 6.2.4, 7.3, 7.4, 8.2, 9.2, 9.3.1, 9.3.3, 9.4.1, 9.5, 9.6, 9.7, 9.8, 9.9, 9.10, 12.2, 13.4, 14, 15, 15.1.2, 15.1.3, 15.1.5

#### **Materials, Hazardous**

10.2.4, **10.3**



Materials, Labor, Equipment and  
1.1.3, 1.1.6, 3.4.1, 3.5, 3.8.2, 3.8.3, 3.12, 3.13, 3.15.1,  
5.2.1, 6.2.1, 7.3.4, 9.3.2, 9.3.3, 9.5.1.3, 9.10.2,  
10.2.1.2, 10.2.4, 14.2.1.1, 14.2.1.2  
Means, Methods, Techniques, Sequences and  
Procedures of Construction  
3.3.1, 3.12.10, 4.2.2, 4.2.7, 9.4.2  
Mechanic's Lien  
2.1.2, 9.3.1, 9.3.3, 9.6.8, 9.10.2, 9.10.4, 15.2.8  
**Mediation**  
8.3.1, 15.1.3.2, 15.2.1, 15.2.5, 15.2.6, **15.3**, 15.4.1,  
15.4.1.1  
**Minor Changes in the Work**  
1.1.1, 3.4.2, 3.12.8, 4.2.8, 7.1, **7.4**  
**MISCELLANEOUS PROVISIONS**  
**13**  
**Modifications, Definition of**  
**1.1.1**  
Modifications to the Contract  
1.1.1, 1.1.2, 2.5, 3.11, 4.1.2, 4.2.1, 5.2.3, 7, 8.3.1, 9.7,  
10.3.2  
**Mutual Responsibility**  
**6.2**  
**Nonconforming Work, Acceptance of**  
9.6.6, 9.9.3, **12.3**  
Nonconforming Work, Rejection and Correction of  
2.4, 2.5, 3.5, 4.2.6, 6.2.4, 9.5.1, 9.8.2, 9.9.3, 9.10.4,  
12.2  
**Notice**  
**1.6**, 1.6.1, 1.6.2, 2.1.2, 2.2.2., 2.2.3, 2.2.4, 2.5, 3.2.4,  
3.3.1, 3.7.4, 3.7.5, 3.9.2, 3.12.9, 3.12.10, 5.2.1, 7.4,  
8.2.2, 9.6.8, 9.7, 9.10.1, 10.2.8, 10.3.2, 11.5, 12.2.2.1,  
13.4.1, 13.4.2, 14.1, 14.2.2, 14.4.2, 15.1.3, 15.1.5,  
15.1.6, 15.4.1  
Notice of Cancellation or Expiration of Insurance  
11.1.4, 11.2.3  
**Notice of Claims**  
1.6.2, 2.1.2, 3.7.4, 9.6.8, 10.2.8, **15.1.3**, 15.1.5, 15.1.6,  
15.2.8, 15.3.2, 15.4.1  
Notice of Testing and Inspections  
13.4.1, 13.4.2  
Observations, Contractor's  
3.2, 3.7.4  
Occupancy  
2.3.1, 9.6.6, 9.8  
Orders, Written  
1.1.1, 2.4, 3.9.2, 7, 8.2.2, 11.5, 12.1, 12.2.2.1, 13.4.2,  
14.3.1  
**OWNER**  
**2**  
**Owner, Definition of**  
**2.1.1**  
**Owner, Evidence of Financial Arrangements**  
**2.2**, 13.2.2, 14.1.1.4

**Owner, Information and Services Required of the**  
2.1.2, **2.2**, 2.3, 3.2.2, 3.12.10, 6.1.3, 6.1.4, 6.2.5, 9.3.2,  
9.6.1, 9.6.4, 9.9.2, 9.10.3, 10.3.3, 11.2, 13.4.1, 13.4.2,  
14.1.1.4, 14.1.4, 15.1.4  
**Owner's Authority**  
1.5, 2.1.1, 2.3.32.4, 2.5, 3.4.2, 3.8.1, 3.12.10, 3.14.2,  
4.1.2, 4.2.4, 4.2.9, 5.2.1, 5.2.4, 5.4.1, 6.1, 6.3, 7.2.1,  
7.3.1, 8.2.2, 8.3.1, 9.3.2, 9.5.1, 9.6.4, 9.9.1, 9.10.2,  
10.3.2, 11.4, 11.5, 12.2.2, 12.3, 13.2.2, 14.3, 14.4,  
15.2.7  
**Owner's Insurance**  
**11.2**  
Owner's Relationship with Subcontractors  
1.1.2, 5.2, 5.3, 5.4, 9.6.4, 9.10.2, 14.2.2  
**Owner's Right to Carry Out the Work**  
2.5, 14.2.2  
**Owner's Right to Clean Up**  
**6.3**  
**Owner's Right to Perform Construction and to**  
**Award Separate Contracts**  
**6.1**  
**Owner's Right to Stop the Work**  
**2.4**  
Owner's Right to Suspend the Work  
14.3  
Owner's Right to Terminate the Contract  
14.2, 14.4  
**Ownership and Use of Drawings, Specifications**  
**and Other Instruments of Service**  
1.1.1, 1.1.6, 1.1.7, **1.5**, 2.3.6, 3.2.2, 3.11, 3.17, 4.2.12,  
5.3  
**Partial Occupancy or Use**  
9.6.6, **9.9**  
**Patching, Cutting and**  
**3.14**, 6.2.5  
Patents  
3.17  
**Payment, Applications for**  
4.2.5, 7.3.9, 9.2, **9.3**, 9.4, 9.5, 9.6.3, 9.7, 9.8.5, 9.10.1,  
14.2.3, 14.2.4, 14.4.3  
**Payment, Certificates for**  
4.2.5, 4.2.9, 9.3.3, **9.4**, 9.5, 9.6.1, 9.6.6, 9.7, 9.10.1,  
9.10.3, 14.1.1.3, 14.2.4  
**Payment, Failure of**  
9.5.1.3, **9.7**, 9.10.2, 13.5, 14.1.1.3, 14.2.1.2  
Payment, Final  
4.2.1, 4.2.9, **9.10**, 12.3, 14.2.4, 14.4.3  
**Payment Bond, Performance Bond and**  
7.3.4.4, 9.6.7, 9.10.3, **11.1.2**  
**Payments, Progress**  
9.3, **9.6**, 9.8.5, 9.10.3, 14.2.3, 15.1.4  
**PAYMENTS AND COMPLETION**  
**9**  
Payments to Subcontractors  
5.4.2, 9.5.1.3, 9.6.2, 9.6.3, 9.6.4, 9.6.7, 14.2.1.2  
PCB  
10.3.1

**Performance Bond and Payment Bond**

7.3.4.4, 9.6.7, 9.10.3, 11.1.2

**Permits, Fees, Notices and Compliance with Laws**

2.3.1, 3.7, 3.13, 7.3.4.4, 10.2.2

**PERSONS AND PROPERTY, PROTECTION OF  
10**

Polychlorinated Biphenyl

10.3.1

**Product Data, Definition of**

3.12.2

**Product Data and Samples, Shop Drawings**

3.11, 3.12, 4.2.7

**Progress and Completion**

4.2.2, 8.2, 9.8, 9.9.1, 14.1.4, 15.1.4

**Progress Payments**

9.3, 9.6, 9.8.5, 9.10.3, 14.2.3, 15.1.4

**Project, Definition of**

1.1.4

Project Representatives

4.2.10

**Property Insurance**

10.2.5, 11.2

**Proposal Requirements**

1.1.1

**PROTECTION OF PERSONS AND PROPERTY  
10**

Regulations and Laws

1.5, 2.3.2, 3.2.3, 3.6, 3.7, 3.12.10, 3.13, 9.6.4, 9.9.1,  
10.2.2, 13.1, 13.3, 13.4.1, 13.4.2, 13.5, 14, 15.2.8, 15.4

Rejection of Work

4.2.6, 12.2.1

Releases and Waivers of Liens

9.3.1, 9.10.2

Representations

3.2.1, 3.5, 3.12.6, 8.2.1, 9.3.3, 9.4.2, 9.5.1, 9.10.1

Representatives

2.1.1, 3.1.1, 3.9, 4.1.1, 4.2.10, 13.2.1

Responsibility for Those Performing the Work

3.3.2, 3.18, 4.2.2, 4.2.3, 5.3, 6.1.3, 6.2, 6.3, 9.5.1, 10

Retainage

9.3.1, 9.6.2, 9.8.5, 9.9.1, 9.10.2, 9.10.3

**Review of Contract Documents and Field**

**Conditions by Contractor**

3.2, 3.12.7, 6.1.3

Review of Contractor's Submittals by Owner,

Construction Manager and Architect

3.10.1, 3.10.2, 3.11, 3.12, 4.2, 5.2, 6.1.3, 9.2, 9.8.2

Review of Shop Drawings, Product Data and Samples  
by Contractor

3.12

**Rights and Remedies**

1.1.2, 2.4, 2.5, 3.5, 3.7.4, 3.15.2, 4.2.6, 5.3, 5.4, 6.1,  
6.3, 7.3.1, 8.3, 9.5.1, 9.7, 10.2.5, 10.3, 12.2.1, 12.2.2,  
12.2.4, 13.3, 14, 15.4

**Royalties, Patents and Copyrights**

3.17

Rules and Notices for Arbitration

15.4.1

**Safety of Persons and Property**

10.2, 10.4

**Safety Precautions and Programs**

3.3.1, 4.2.2, 4.2.7, 5.3, 10.1, 10.2, 10.4

**Samples, Definition of**

3.12.3

**Samples, Shop Drawings, Product Data and**

3.11, 3.12, 4.2.7

**Samples at the Site, Documents and**

3.11

**Schedule of Values**

9.2, 9.3.1

Schedules, Construction

3.10, 3.12.1, 3.12.2, 6.1.3, 15.1.6.2

Separate Contracts and Contractors

1.1.4, 3.12.5, 3.14.2, 4.2.4, 4.2.7, 6, 8.3.1, 12.1.2

**Separate Contractors, Definition of**

6.1.1

**Shop Drawings, Definition of**

3.12.1

**Shop Drawings, Product Data and Samples**

3.11, 3.12, 4.2.7

**Site, Use of**

3.13, 6.1.1, 6.2.1

Site Inspections

3.2.2, 3.3.3, 3.7.1, 3.7.4, 4.2, 9.9.2, 9.4.2, 9.10.1, 13.4

Site Visits, Architect's and Construction Manager's

3.7.4, 4.2.2, 4.2.9, 9.4.2, 9.5.1, 9.9.2, 9.10.1, 13.4

Special Inspections and Testing

4.2.6, 12.2.1, 13.4

**Specifications, Definition of**

1.1.6

**Specifications**

1.1.1, 1.1.6, 1.2.2, 1.5, 3.12.10, 3.17, 4.2.14

Statute of Limitations

15.1.2, 15.4.1.1

Stopping the Work

2.2.2, 2.4, 9.7, 10.3, 14.1

Stored Materials

6.2.1, 9.3.2, 10.2.1.2, 10.2.4

**Subcontractor, Definition of**

5.1.1

**SUBCONTRACTORS**

5

Subcontractors, Work by

1.2.2, 3.3.2, 3.12.1, 3.18, 4.2.3, 5.2.3, 5.3, 5.4, 9.3.1.2,  
9.6.7

**Subcontractual Relations**

5.3, 5.4, 9.3.1.2, 9.6, 9.10, 10.2.1, 14.1, 14.2.1

Submittals

3.10, 3.11, 3.12, 4.2.7, 5.2.1, 5.2.3, 7.3.4, 9.2, 9.3, 9.8,  
9.9.1, 9.10.2, 9.10.3

Submittal Schedule

3.10.2, 3.12.5, 4.2.7



**Subrogation, Waivers of**  
6.1.1, 11.3  
**Substances, Hazardous**  
10.3  
**Substantial Completion**  
4.2.9, 8.1.1, 8.1.3, 8.2.3, 9.4.2, 9.8, 9.9.1, 9.10.3, 12.2, 15.1.2  
**Substantial Completion, Definition of**  
9.8.1  
Substitution of Subcontractors  
5.2.3, 5.2.4  
Substitution of Architect and Construction Manager  
2.3.3  
Substitutions of Materials  
3.4.2, 3.5, 7.3.8  
**Sub-subcontractor, Definition of**  
5.1.2  
Subsurface Conditions  
3.7.4  
**Successors and Assigns**  
13.2  
**Superintendent**  
3.9, 10.2.6  
**Supervision and Construction Procedures**  
1.2.2, 3.3, 3.4, 3.12.10, 4.2.2, 4.2.7, 6.1.3, 6.2.4, 7.1.3, 7.3.4, 8.2, 8.3.1, 9.4.2, 10, 12, 14, 15.1.4  
Suppliers  
1.5, 3.12.1, 4.2.4, 4.2.6, 5.2.1, 9.3, 9.4.2, 9.5.4, 9.6, 9.10.5, 14.2.1  
Surety  
5.4.1.2, 9.6.8, 9.8.5, 9.10.2, 9.10.3, 11.1.2, 14.2.2, 15.2.7  
Surety, Consent of  
9.8.5, 9.10.2, 9.10.3  
Surveys  
1.1.7, 2.3.4  
**Suspension by the Owner for Convenience**  
14.3  
Suspension of the Work  
3.7.5, 5.4.2, 14.3  
Suspension or Termination of the Contract  
5.4.1.1, 14  
**Taxes**  
3.6, 3.8.2.1, 7.3.4.4  
**Termination by the Contractor**  
14.1, 15.1.7  
**Termination by the Owner for Cause**  
5.4.1.1, 14.2, 15.1.7  
**Termination by the Owner for Convenience**  
14.4  
Termination of the Architect and Construction Manager  
2.3.3  
Termination of the Contractor Employment  
14.2.2

## **TERMINATION OR SUSPENSION OF THE**

**CONTRACT**  
14  
**Tests and Inspections**  
3.1.3, 3.3.3, 3.7.1, 4.2.2, 4.2.6, 4.2.9, 9.4.2, 9.8.3, 9.9.2, 9.10.1, 10.3.2, 12.2.1, 13.4  
**TIME**  
8  
**Time, Delays and Extensions of**  
3.2.4, 3.7.4, 5.2.3, 7.2.1, 7.3.1, 7.4, 8.3, 9.5.1, 9.7, 10.3.2, 10.4, 14.3.2, 15.1.6, 15.2.5  
Time Limits  
2.1.2, 2.2, 2.5, 3.2.2, 3.10, 3.11, 3.12.5, 3.15.1, 4.2, 5.2, 5.3, 5.4, 6.2.4, 7.3, 7.4, 8.2, 9.2, 9.3.1, 9.3.3, 9.4.1, 9.5, 9.6, 9.7, 9.8, 9.9, 9.10, 12.2, 13.4, 14, 15.1.2, 15.1.3, 15.4  
**Time Limits on Claims**  
3.7.4, 10.2.8, 15.1.2, 15.1.3  
Title to Work  
9.3.2, 9.3.3  
**UNCOVERING AND CORRECTION OF WORK**  
12  
**Uncovering of Work**  
12.1  
Unforeseen Conditions, Concealed or Unknown  
3.7.4, 8.3.1, 10.3  
Unit Prices  
7.3.3.2, 9.1.2  
Use of Documents  
1.1.1, 1.5, 2.3.6, 3.12.6, 5.3  
**Use of Site**  
3.13, 6.1.1, 6.2.1  
**Values, Schedule of**  
9.2, 9.3.1  
Waiver of Claims by the Architect or Construction Manager  
13.3.2  
Waiver of Claims by the Contractor  
9.10.5, 13.3.2, 15.1.7  
Waiver of Claims by the Owner  
9.9.3, 9.10.3, 9.10.4, 12.2.2.1, 13.3.2, 14.2.4, 15.1.7  
Waiver of Consequential Damages  
14.2.4, 15.1.7  
Waiver of Liens  
9.3, 9.10.2, 9.10.4  
**Waivers of Subrogation**  
6.1.1, 11.3  
**Warranty**  
3.5, 4.2.9, 9.3.3, 9.8.4, 9.9.1, 9.10.2, 9.10.4, 12.2.2, 15.1.2  
Weather Delays  
8.3, 15.1.6.2  
**Work, Definition of**  
1.1.3  
Written Consent  
1.5.2, 3.4.2, 3.7.4, 3.12.8, 3.14.2, 4.1.2, 9.3.2, 9.10.3, 13.2, 13.3.2, 15.4.4.2

Written Interpretations  
4.2.11, 4.2.12

Written Orders  
1.1.1, 2.4, 3.9, 7, 8.2.2, 12.1, 12.2, 13.4.2, 14.3.1

Init.

AIA Document A201 – 2017. Copyright © 1911, 1915, 1918, 1925, 1937, 1951, 1958, 1961, 1963, 1966, 1970, 1976, 1987, 1997, 2007 and 2017. All rights reserved. "The American Institute of Architects," "American Institute of Architects," "AIA," the AIA Logo, and "AIA Contract Documents" are registered trademarks of The American Institute of Architects. This document was produced at 11:53:57 ET on 02/20/2023 under Order No.2114344578 which expires on 08/02/2023, is not for resale, is licensed for one-time use only, and may only be used in accordance with the AIA Contract Documents® Terms of Service. To report copyright violations, e-mail [docinfo@aiacontracts.com](mailto:docinfo@aiacontracts.com).

User Notes:

(911365684)



## **ARTICLE 1 GENERAL PROVISIONS**

### **§ 1.1 Basic Definitions**

#### **§ 1.1.1 The Contract Documents**

The Contract Documents are enumerated in the Agreement between the Owner and Contractor (hereinafter the Agreement) and consist of the Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Agreement, and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive, or (4) a written order for a minor change in the Work issued by the Architect. The Contract Documents shall also include the Bidding Requirements, including, but not limited to Advertisement or Invitation to Bid, Instructions to Bidders, the Contractor's Bid Proposal Form and other bidding forms, Addenda or portions of the Addenda relating to any Bidding Documents. The Contract Documents shall apply to all Contractors for the Project and each Contractor is responsible for the content of all.

#### **§ 1.1.2 The Contract**

The Contract Documents form the Contract for Construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Contractor and the Architect or the Architect's consultants, (2) between the Owner and a Subcontractor or a Sub-subcontractor, (3) between the Owner and the Architect or the Architect's consultants, (4) between the Owner and the Construction Manager or the Construction Manager's consultants, (5) between the Contractor and the Construction Manager or the Construction Manager's consultants, (6) between the Construction Manager and the Architect, or (7) between any persons or entities other than the Owner and the Contractor. The Construction Manager and Architect shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of the Architect's duties.

**§ 1.1.2.1** The Contractor acknowledges and warrants that it has closely examined all of the Contract Documents, that they are suitable and sufficient to enable the Contractor to complete the Work in a timely manner for the Contract Sum, and that they include all Work, whether or not shown or described, which reasonably may be inferred to be required or useful for the completion of the Work in full compliance with all applicable codes, laws, ordinances and regulations and that questions regarding the bid documents and any interpretation(s) regarding same have been asked by the Contractor, in the form and manner required in the instructions to bidders.

#### **§ 1.1.3 The Work**

The term "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment, and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project.

**§ 1.1.3.1** The Work shall include the obligation of the Contractor to visit the site of the Project before submitting a bid. Such site visit shall be for the purpose of familiarizing the Contractor with the conditions as they exist and the character of the operations to be carried on under the Contract Documents, including all existing site conditions, access to the site, physical characteristics of the site and surrounding areas.

**§ 1.1.3.2** Nothing in these General Conditions shall be interpreted as imposing on either the Owner, Construction Manager or Architect, or their respective agents, employees, officers, directors or consultants, any duty, obligation or authority with respect to any items that are not intended to be incorporated into the completed project, including but not limited to shoring, scaffolding, hoists, temporary weatherproofing, or any temporary facility or temporary activity, since these are the sole responsibility of the Contractor.

#### **§ 1.1.4 The Project**

The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by the Owner and by Separate Contractors not administered by the Construction Manager.

#### **§ 1.1.5 The Drawings**

The Drawings are the graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules, and diagrams.

Init.



§ 1.1.5.1 The Drawings are diagrammatical and show the general arrangement and extent of the Work; exact locations and arrangements of parts shall be determined as the Work progresses and shall be subject to the Architect's approval.

- .1 The right is reserved by the Architect to make any reasonable change in location of equipment, ductwork, and piping prior to roughing in without involving additional expense to the Owner.
- .2 Contractor shall coordinate his Work with the Work of others and shall be responsible for the coordination work, so that interference between mechanical, electrical and other work and architectural and structural work does not occur.
- .3 Contractor shall furnish and install supports, hangers, offsets, bends, turns, and the like in connection with this Work to avoid interference with work of other Contractors, to conceal Work where required, and to secure necessary clearance and access for operation and maintenance without involving additional expense to the Owner.

#### § 1.1.6 The Specifications

The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, systems, standards and workmanship for the Work, and performance of related services.

#### § 1.1.7 Instruments of Service

Instruments of Service are representations, in any medium of expression now known or later developed, of the tangible and intangible creative work performed by the Architect and the Architect's consultants under their respective professional services agreements. Instruments of Service may include, without limitation, studies, surveys, models, sketches, drawings, specifications, and other similar materials.

#### § 1.1.8 Initial Decision Maker

The Initial Decision Maker is the person identified in the Agreement to render initial decisions on Claims in accordance with Section 15.2. The Initial Decision Maker shall not show partiality to the Owner or Contractor and shall not be liable for results of interpretations or decisions rendered in good faith.

#### § 1.2 Correlation and Intent of the Contract Documents

§ 1.2.1 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results.

*(Paragraph deleted)*

§ 1.2.1.1 The general character of the detail work is shown on the drawings, but minor modifications may be made in large-scale details. Where the word "similar" occurs on the drawings it shall be used in its general sense and not as meaning identical, and all details shall be worked out in relation to their location and their connection to other parts of the work.

- .1 Where on any drawings a portion of the work is drawn out and the remainder is indicated in outline, the parts drawn out shall apply also to other like portions of the work.
- .2 Where detail is indicated by starting only, such detail shall be continued throughout the courses or parts in which it occurs and shall also apply to all other similar parts in the work unless otherwise indicated.
- .3 In case of differences between small and large-scale drawings, the larger scale drawings shall take precedence. Dimensions given shall take precedence over scale measurements.
- .4 Any discrepancies or questions as to the application of, and interpretations related to 1.2.1.1, shall be referred to the Architect for adjustment before any work affected thereby has been performed.

§ 1.2.1.2 During the course of the work, should any ambiguities or discrepancies be found in the Specifications or on the Drawings; or should there be found any discrepancies between the Drawings and Specifications to which the Contractor has failed to call attention before submitting his bid, then the Architect will interpret the intent of the Drawings and Specifications; and the Contractor hereby agrees to abide by the Architect's interpretation and to carry out the work in accordance with the decision of the Architect.

§ 1.2.1.3 It is expressly stipulated that neither the Drawings nor the Specifications shall take precedence over the other, and it is further stipulated that the Architect may interpret or construe the Drawings and Specifications so as to secure in all cases the result most consistent with the needs and requirements of the Owner. In the event of such ambiguity or



discrepancy subject to any Architect's interpretation, the Contractor shall comply with the more stringent requirement, and supply the better quality or greater quantity of work.

§ 1.2.1.4 The invalidity of any provision of the Contract Documents shall not invalidate the Contract or its remaining provisions. If it is determined that any provision of the Contract Documents violates any law, or is otherwise invalid or unenforceable, then that provision shall be revised to the extent necessary to make that provision legal and enforceable. In such case the Contract Documents shall be construed, to the fullest extent permitted by law, to give effect to the parties' intentions and purposes in executing the Contract.

§ 1.2.2 Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

§ 1.2.2.1 The various materials and products specified in the specifications by name or description are given to establish a standard of quality and of cost for bid purposes. It is not the intent to limit the acceptance to any one material or product specified, but rather to name or describe it as the absolute minimum standard that is desired and acceptable, all determinations as to equality of a proposed product or material shall be at the discretion of the Architect and/or the Owner.

- .1 A material or product of lesser quality will not be acceptable.
- .2 Where "Basis of Design" products or manufacturer's names are used, whether or not followed by the words "or approved equal," they shall be subject to approved equals and authorized only by the Architect and/or the Owner.

§ 1.2.2.2 Substitutions lowering performance, quality, method of assembly or installation, or in general not in keeping with details and specifications or the requirements of the Owner, will not be permitted. Refer to substitution procedure indicated elsewhere in the Contract Documents.

§ 1.2.2.3 It is understood when a bid for any product or material is submitted, the bidder is aware of specified requirements and all materials or products within his bid are equal or better than such specified items.

§ 1.2.2.4 In addition to the Specifications, it shall be understood that details on Drawings shall become part of the Specification in determining the required "standard of quality."

§ 1.2.2.5 If a conflict occurs between Drawing details and Specifications, bidder during bidding process and/or Contractor shall bring such conflicts to the attention of the Architect in accordance with applicable requirements indicated elsewhere in other sections of Contract Documents.

§ 1.2.3 Unless otherwise stated in the Contract Documents, words that have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

### § 1.3 Capitalization

Terms capitalized in these General Conditions include those that are (1) specifically defined, (2) the titles of numbered articles, or (3) the titles of other documents published by the American Institute of Architects.

### § 1.4 Interpretation

In the interest of brevity, the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

§ 1.4.1 Whenever in the Contract Documents an item of work is referred to in the singular number, such reference shall apply to as many such items as are required to complete the work.

### § 1.5 Ownership and Use of Drawings, Specifications, and Other Instruments of Service

§ 1.5.1 The Architect and the Architect's consultants shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and retain all common law, statutory, and other reserved rights in their Instruments of Service, including copyrights. The Contractor, Subcontractors, Sub-subcontractors, and suppliers shall not own or claim a copyright in the Instruments of Service. Submittal or



distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of the Architect's or Architect's consultants' reserved rights.

**§ 1.5.2** The Contractor, Subcontractors, Sub-subcontractors, and suppliers are authorized to use and reproduce the Instruments of Service provided to them, subject to any protocols established pursuant to Sections 1.7 and 1.8, solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Instruments of Service. The Contractor, Subcontractors, Sub-subcontractors, and suppliers may not use the Instruments of Service on other projects or for additions to the Project outside the scope of the Work without the specific written consent of the Owner, Architect, and the Architect's consultants.

#### **§ 1.6 Notice**

**§ 1.6.1** Except as otherwise provided in Section 1.6.2, where the Contract Documents require one party to notify or give notice to the other party, such notice shall be provided in writing to the designated representative of the party to whom the notice is addressed and shall be deemed to have been duly served if delivered in person, by mail, by courier, or by electronic transmission if a method for electronic transmission is set forth in the Agreement.

**§ 1.6.2** Notice of Claims as provided in Section 15.1.3 shall be provided in writing and shall be deemed to have been duly served only if delivered to the designated representative of the party to whom the notice is addressed by certified or registered mail, or by courier providing proof of delivery.

#### **§ 1.7 Digital Data Use and Transmission**

The parties shall agree upon protocols governing the transmission and use of Instruments of Service or any other information or documentation in digital form. The parties will use the Electronic Indemnification Form provided by the Architect to establish the protocols for the development, use, transmission, and exchange of digital data.

*(Paragraphs deleted)*

#### **§ 1.9 EXECUTION OF CONTRACT DOCUMENTS**

**§ 1.9.1** Execution of the Contract by the Contractor is a representation that said Contract Documents are full and complete, are sufficient to have enabled the Contractor to determine the cost of the Work therein to enter into the Contract and that the Contract Documents are sufficient to enable it to construct the Work outlined therein, and otherwise to fulfill all its obligations hereunder, including, but not limited to, Contractor's obligation to construct the Work for an amount not in excess of the Contract Sum on or before the date(s) of Substantial Completion established in the Agreement. The Contractor further acknowledges and declares that it has visited and examined the site, examined all physical, legal, and other conditions affecting the Work and is fully familiar with all of the conditions thereon and thereunder affecting the same. In connection therewith, Contractor specifically represents and warrants to Owner that it has, by careful examination, satisfied itself as to: (1) the nature, location and character of the Project and the site, including, without limitation, the surface and subsurface conditions of the site and all structures and obstructions thereon and thereunder, both natural and man-made, and all surface and subsurface water conditions of the site and the surrounding area; (2) the nature, location, and character of the general area in which the Project is located, including without limitation, its climatic conditions, available labor supply and labor costs, and available equipment supply and equipment costs; and (3) the quality and quantity of all materials, supplies, tools, equipment, labor, approvals, and professional services necessary to complete the Work in the manner and within the cost and time frame required by the Contract Documents. In connection with the foregoing, and having carefully examined all Contract Documents, as aforesaid, and having visited the site, the Contractor acknowledges and declares that it has no knowledge of any discrepancies, omissions, ambiguities, or conflicts in said Contract Documents and that if it becomes aware of any such discrepancies, omissions, ambiguities, or conflicts, it will promptly notify Owner, Construction Manager and Architect of such fact.

**§ 1.9.2** The Contract Documents include all items necessary for the proper execution and completion of the Work by the Contractor. The Work shall consist of all items specifically included in the Contract Documents as well as all additional items of work which are reasonable inferable from that which is specified in order to complete the Work in accordance with the Contract Documents. The Contract Documents are complementary, and what is required by any one Contract Document shall be as binding as if required by all. Any differences between the requirements of the Drawings and the Specifications or any differences noted within the Drawings themselves or within the Specifications themselves have been referred to the Owner, Construction Manager and Architect by Contractor prior to the submission of bids and have been clarified by an Addendum issued to all bidders.



§ 1.9.2.1 If any such differences or conflicts were not called to the Owner's, Construction Manager's and Architect's attention prior to submission of bids, the Architect shall decide which of the conflicting requirements will govern based upon the most stringent of the requirements, and, subject to the approval of the Owner, the Contractor shall perform the Work at no additional cost and/or time to the Owner in accordance with the Architect's decision. Work not covered in the Contract Documents will not be required unless it is consistent therewith and is reasonable inferable therefrom as being necessary to produce the intended results.

§ 1.9.2.2 The term "reasonably inferable" includes work necessary to "provide" work indicated or specified, as defined in section: Definitions and Standards; that is: furnish and install, complete, in place and ready for use.

§ 1.9.2.3 Details referenced to portions of the Work shall apply to other like portions of the Work not otherwise detailed.

§ 1.9.2.4 The Contractor shall request, from the Architect's interpretation of apparent discrepancies, conflicts, or omissions in the Specifications and Drawings. Subcontractors shall forward such requests through the Contractor. Such requests, and the Architect's interpretation, shall be in written form; other forms of communications shall be used to expedite resolution of concerns, but will not be binding.

§ 1.9.3 Explanatory notes shall take precedence over conflicting drawn note indications. Large-scale drawings shall take precedence over small-scale drawings. Figured dimensions shall take precedence over scaled measurements. Should contradictions be found, the Architect shall determine which indication is correct.

§ 1.9.4 Where it is required in the specifications that materials, products, processes, equipment, or the like be installed or applied in accordance with manufacturers' instructions, directions, or specifications, or words to this effect, it shall be construed to mean that said application or installation shall be in strict accordance with printed material concerned for use under conditions similar to those at the job site.

§ 1.9.5 Any material specified by reference to the number, symbol, or title of a Commercial Standard, Federal Specification, ASTM Specification, trade association standard, or other similar standards, shall comply with the requirements in the latest revision thereof and any amendments or supplements thereto in effect one month prior to the date on which bids are opened and read, except as limited to type, class, or grade, or modified in such reference. The standards referred to, except as modified in the specifications, shall have full force and effect as though printed in the specifications.

## ARTICLE 2 OWNER

### § 2.1 General

§ 2.1.1 The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all matters requiring the Owner's approval or authorization. Except as otherwise provided in Section 4.2.1, the Construction Manager and the Architect do not have such authority. The term "Owner" means the Owner or the Owner's authorized representative.

*(Paragraphs deleted)*

### § 2.3 Information and Services Required of the Owner

§ 2.3.1 Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including those required under Section 3.7.1, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities. Unless otherwise provided under the Contract Documents, the Owner, through the Construction Manager, shall secure and pay for the building permit.

§ 2.3.2 The Owner shall retain an architect lawfully licensed to practice architecture, or an entity lawfully practicing architecture, in the jurisdiction where the Project is located. That person or entity is identified as the Architect in the Agreement and is referred to throughout the Contract Documents as if singular in number. The term "Architect" means the Architect or the Architect's authorized representative.



§ 2.3.2.1 The Owner shall retain a construction manager lawfully licensed to practice construction management or an entity lawfully practicing construction management in the jurisdiction where the Project is located. That person or entity is identified as the Construction Manager in the Agreement and is referred to throughout the Contract Documents as if singular in number.

§ 2.3.3 If the employment of the Architect or Construction Manager terminates, the Owner shall employ a successor to whom the Contractor has no reasonable objection and whose status under the Contract Documents shall be that of the Architect or Construction Manager.

§ 2.3.4 The Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site. The Contractor shall be entitled to rely on the accuracy of information furnished by the Owner but shall exercise proper precautions relating to the safe performance of the Work. The furnishing of these surveys and the legal description of the site shall not relieve the Contractor from its duties under the Contract Documents. Neither Owner, Construction Manager nor the Architect shall be required to furnish Contractor with any information concerning subsurface characteristics or conditions of the areas where the Work is to be performed. When the Owner, Construction Manager or Architect has made investigations of subsurface characteristics or conditions of the areas where the Work is to be performed, such investigations, if any, were made solely for the purposes of Owner's study and Architect's design. Neither such investigations nor the records thereof are a part of the Contract between Owner and Contractor. To the extent such investigations or the records thereof are made available to the Contractor by the Owner, Construction Manager or Architect, such information is furnished solely for the convenience of Contractor. Neither Owner, Construction Manager nor Architect assumes any responsibility whatsoever in respect of the sufficiency or accuracy of the investigations thus made, the records thereof, or of the interpretations set forth therein or made by the Owner, Construction Manager or Architect in its use thereof, and there is no warranty or guaranty, either express or implied, that the conditions indicated by such investigations or records thereof are representative of those existing throughout the areas where the Work is to be performed, or any part thereof, or that unforeseen developments may not occur, or that materials other than or in proportions different from those indicated may not be encountered. The Contractor shall undertake such further investigations and studies as may be necessary or useful to determine subsurface characteristics and conditions. In connection with the foregoing, Contractor shall be solely responsible for locating (and shall locate prior to performing any Work) all utility lines, telephone company lines and cables, sewer lines, water pipes, gas lines, electrical lines, including, without limitation, all buried pipelines and buried telephone cables and shall perform the Work in such a manner so as to avoid damaging any such lines, cables, pipes, and pipelines.

§ 2.3.4.1 After award of Contract and for construction purposes, designated Contractors will be furnished with printed signed and sealed Drawings and Specifications free of charge for filing with public bodies.

- .1 Additional copies of Drawings and Specifications will be furnished upon receipt of the amount indicated in the Advertisement. Subcontractors and vendors shall obtain copies of the Drawings and Specifications through the Contractor from his/her allotment.

§ 2.3.5 The Owner shall endeavor to forward all communications to the Contractor through the Construction Manager and shall contemporaneously provide the same communications to the Architect about matters arising out of or relating to the Contract Documents.

*(Paragraph deleted)*

#### § 2.4 Owner's Right to Stop the Work

If the Contractor fails to correct Work that is not in accordance with the requirements of the Contract Documents as required by Section 12.2 or repeatedly fails to carry out Work in accordance with the Contract Documents, or fails or refuses to provide a sufficient amount of properly supervised and coordinated labor, materials, or equipment so as to be able to complete the Work within the Contract Time or fails to remove and discharge (within ten days) any lien filed upon Owner's property by anyone claiming by, through or under Contractor, or disregards the instructions of Construction Manager, Architect or Owner when based on the requirements of the Contract Documents, the Owner through the Construction Manager may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity.



## **§ 2.5 Owner's Right to Carry Out the Work**

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a ten-day period after receipt of notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, correct such default or neglect. Such action by the Owner and amounts charged to the Contractor are both subject to prior approval of the Architect, after consultation with the Construction Manager. The Construction Manager and the Architect may, pursuant to Section 9.5.1, withhold or nullify a Certificate for Payment in whole or in part, to the extent reasonably necessary to reimburse the Owner for the reasonable cost of correcting such deficiencies, including Owner's expenses and compensation for the Construction Manager's and the Architect's additional services made necessary by such default, neglect, or failure. If current and future payments are not sufficient to cover such amounts, the Contractor and/or their Surety shall pay the difference to the Owner. If the Contractor disagrees with the actions of the Owner, Construction Manager or the Architect, or the amounts claimed as costs to the Owner, the Contractor may file a Claim pursuant to Article 15.

## **ARTICLE 3 CONTRACTOR**

### **§ 3.1 General**

**§ 3.1.1** The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Contractor shall be lawfully licensed, if required in the jurisdiction where the Project is located. The term "Contractor" shall mean the respective Prime Contract person or entity identified as such in the Owner Contractor Agreement, for each respective Prime Construction Contract, as responsible for the supervisory control over allocation, coordination of all Subcontractors or trades, performance and completion of all portions of the Work, including cooperation with those doing portions of the Work under Separate Contract with the Owner.

**§ 3.1.1.2** The term "Contractor" shall mean and apply with equal force to each respective Prime Contractor and all other Contractors having a direct Contract with the Owner that are administered by the Construction Manager, or with each respective Contractor or other Prime Contractor for other branches of the Work, or his authorized representative.

**§ 3.1.2** The Contractor shall perform the Work in accordance with the Contract Documents.

**§ 3.1.3** The Contractor shall not be relieved of its obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Construction Manager or Architect in the Architect's administration of the Contract, or by tests, inspections or approvals required or performed by persons or entities other than the Contractor.

**§ 3.1.4** Regularly scheduled job meetings shall be held at a location and time convenient to the Contractor, Owner's representatives Construction Manager and the Architect. The Contractor shall attend such meetings or be represented by a person with knowledge of the Project and with the authority to speak for and make decisions for the Contractor.

### **§ 3.2 Review of Contract Documents and Field Conditions by Contractor**

**§ 3.2.1** Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become generally familiar with local conditions under which the Work is to be performed, and correlated personal observations with requirements of the Contract Documents.

- .1 If the Contractor requires clarification of the intent of the Contract Documents after award, the Contractor shall be responsible to issue a typewritten Request for Information (RFI) to the Construction Manager and the Architect utilizing the Architect's sample form via acceptable methods set forth in Article 4.2.

**§ 3.2.2** In addition to and not in derogation of Contractor's duties under Paragraph 1.5.2, the Contractor shall carefully study and compare the Contract Documents with each other and shall at once report to the Architect errors, inconsistencies or omissions discovered. If the Contractor performs any construction activity involving an error, inconsistency or omission in the Contract Documents that the Contractor recognized or reasonably should have recognized without such notice to the Construction Manager and the Architect, the Contractor shall assume complete responsibility for such performance and shall bear the full amount of the attributable costs for correction. It is recognized that the Contractor's review is made in the Contractor's capacity as a contractor and not as a licensed design professional, unless otherwise specifically provided in the Contract Documents. However, any design errors or



omissions noted by the Contractor during this review shall be reported promptly to the Construction Manager and the Architect.

**§ 3.2.2.1 Conditions Precedent – Notice**

- .1 Notice of any alleged Conflict that have been reasonably identified prior to submitting a Bid shall be provided to the Construction Manager and the Architect immediately in order that the Architect in its discretion, may issue an Addendum.
- .2 A Bidder's failure to do so constitutes an absolute waiver of any Conflict that may thereafter be asserted with respect thereto and shall bar any recovery regarding such Conflict.
- .3 If any errors, inconsistencies or omissions appear in the drawings, specifications or other Contract Documents, which should reasonably have been discovered and concerning which interpretation had not been obtained from the Architect during the Bidding Period, the Contractor shall within ten (10) days after receiving written "Notice of Award" notify the Construction Manager and the Architect in writing of such error, inconsistency or omission. In the event the Contractor fails to give such notice, Contractor and its Surety may be required to indemnify Owner for the costs of any such errors, inconsistencies or omissions and the cost of rectifying same including attorney's fees. Interpretation of this procedure after the ten-day period will be made by the Architect and his decision will be final. By Submission of a bid, the Contractor acknowledges that the Contract Documents are full and complete, are sufficient to have enabled it to determine the cost of the Work and that the Drawings, the Specifications and all addenda are sufficient to enable the Contractor to construct the Work outlined therein in accordance with applicable laws, statutes, ordinances, building codes and regulations, and otherwise to fulfill all of its obligations under the Contract Documents.
  - .a The Contract Documents are sufficiently complete and detailed for the Contractor to perform the Work and comply with all requirements of the Contract Documents;
  - .b The Work required by the Contract Documents, including, without limitation, all construction details, construction means, methods, procedures, and techniques necessary to perform the Work, use of materials, selection of equipment, and requirements of products by manufacturers are consistent with;
    - .i Good and sound practices within the construction industry;
    - .ii Generally prevailing and accepted industry standards applicable to Work;
    - .iii Requirements of any warranties applicable to the Work; and
    - .iv All laws, ordinances, regulations, rules, and orders which bear upon the Contractor's performance of the Work.
  - .c The Contractor has read, understands and accepts the Contract Documents and its bid was made in accordance with them;
  - .d The Contract Sum is based upon the products, materials, systems and equipment required by the Contract Documents without exception. Where the Contract Documents list one or more manufacturer or brand name products, materials, systems and equipment as acceptable, the Contract sum is, in each instance, based upon one of the listed manufacturers or brand name products, materials, systems, and equipment, or, if the contract Sum is based upon the substitution of an "or equal" manufacturer or product, material, system or equipment, the Contractor has in each such instance sought and received the Architect's approval for the substitution either:
    - .i Prior to the Bid in accordance Architect's Addenda; and
    - .ii After commencement of the Work, under in conformance with substitution procedure elsewhere in the Contract Documents.
  - .e The Contract Sum is firm and all inclusive, and no escalation is contemplated for any reason whatsoever.
    - .i The Contract Sum includes any and all costs associated with completion by those dates and times, including any and all costs associated with out-of-sequence work, come-back work, stand-by work, stacking of trades, coordination with the schedules and work of separate Contractors, allowing sufficient time, work and storage areas, and site access for separate Contractors to timely progress and complete their work, overtime, expediting and acceleration that may be required to complete the work by those dates and times.



- .ii The Contractor has reviewed the completion dates and times, and milestone dates set forth in the Contract Documents, agrees that such dates and times are reasonable and commits to achieve them.
- .f The Contractor shall satisfy itself as to the accuracy of all dimensions and locations. In all cases of interconnection of its work with existing or other work, it shall verify at the site, all dimensions relating to such existing or other work. Any errors due to the Contractor's failure to verify all such locations or dimensions shall be promptly rectified by the Contractor without any additional cost to the Owner.

**§ 3.2.2.2** Deviations from the construction documents must be noted by the Contractor at the time of shop drawing submission. Failure to do so will result in the implication of Section 3.2 of the General Conditions and Paragraph 3.2.1 and 3.2.1.1 above.

**§ 3.2.3** The Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, but the Contractor shall promptly report to the Construction Manager and the Architect any nonconformity discovered by or made known to the Contractor as a request for information submitted to Construction Manager in such form as the Construction Manager and Architect may require.

**§ 3.2.4** If the Contractor believes that additional cost or time is involved because of clarifications or instructions the Architect issues in response to the Contractor's notices or requests for information pursuant to Sections 3.2.2 or 3.2.3, the Contractor shall submit Claims as provided in Article 15. If the Contractor fails to perform the obligations of Sections 3.2.2 or 3.2.3, the Contractor and/or their Surety shall pay such costs and damages to the Owner as would have been avoided if the Contractor had performed such obligations. If the Contractor performs those obligations, the Contractor shall not be liable to the Owner, Construction Manager or Architect for damages resulting from errors, inconsistencies or omissions in the Contract Documents, for differences between field measurements or conditions and the Contract Documents, or for nonconformities of the Contract Documents to applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities; unless the Contractor recognized such error, inconsistency, omission or difference and knowingly failed to report it to the Construction Manager and the Architect.

### **§ 3.3 Supervision and Construction Procedures**

**§ 3.3.1** The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences, and procedures, and for coordinating all portions of the Work under the Contract. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences, or procedures, the Contractor shall evaluate the jobsite safety thereof and shall be solely responsible for the jobsite safety of such means, methods, techniques, sequences, or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely notice to the Owner, the Construction Manager and Architect, and shall propose alternative means, methods, techniques, sequences, or procedures through the Construction Manager. The Architect shall evaluate the proposed alternative solely for conformance with the design intent for the completed construction. Unless the Architect objects to the Contractor's proposed alternative, the Contractor shall perform the Work using its alternative means, methods, techniques, sequences, or procedures.

**§ 3.3.2** The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for, or on behalf of, the Contractor or any of its Subcontractors.

**§ 3.3.3** The Contractor shall be responsible for inspection of portions of Work already performed to determine that such portions are in proper condition to receive subsequent Work.

**§ 3.3.4** The Contractor, when requested by the Construction Manager or the Architect, shall meet with representative of the Construction Manager and the Architect at all times and furnish all information requested; he shall allow the Construction Manager, Architect and Construction Code Officials to inspect the work at all times. Neither the Owner, Construction Manager, nor the Architect shall be liable to the Contractor for extra compensation or damages for interference or delays on account of any such meetings, information, or inspections so requested or other acts of the Construction Manager or Architect done in good faith and within the scope of their employment by the Owner.

Init.



- .1 In addition the Contractor is entrusted with the oversight, management control, and general direction of this project to ensure that all contract completion dates are met. In the event that there are any delays caused to any subcontractor on this project, liability shall lie with the Contractor and not with the Owner.

**§ 3.3.5** The Contractor has the responsibility to ensure that all material suppliers and Subcontractors, their agents, and employees adhere to the Contract Documents, and that they order materials on time, taking into account the current market and delivery conditions and that they provide materials on time. The Contractor shall coordinate its Work with that of all others on the Project including deliveries, storage, installations, and construction utilities. The Contractor shall be responsible for the space requirements, locations, and routing of its materials and equipment. In areas and locations where the proper and most effective space requirements, locations and routing cannot be made as indicated, the Contractor shall meet with all others involved, before installation, to plan the most effective and efficient method of overall installation.

**§ 3.3.6** The Contractor shall establish and maintain bench marks and all other grades, lines, and levels necessary for the Work, report errors or inconsistencies to the Construction Manager and the Architect before commencing Work and review the placement of the building(s) and permanent facilities on the site with the Owner, Construction Manager and Architect after all lines are staked out and before foundation Work is started. Contractor shall provide access to the Work for the Owner, the Construction Manager, the Architect, other persons designated by Owner, and governmental inspectors. Any encroachments made by Contractor or its Subcontractor (of any tier) on adjacent properties due to construction as revealed by an improvement survey, except for encroachments arising from errors or omissions not reasonably discoverable by Contractor in the Contract Documents, shall be the sole responsibility of the Contractor, and Contractor shall correct such encroachments within thirty (30) days of the improvement survey (or as soon thereafter as reasonably possible), at Contractor's sole cost and expense, either by the removal of the encroachment (and subsequent reconstruction on the Project site) or agreement with the adjacent property owner(s) (in form and substance satisfactory to Owner in its sole discretion) allowing the encroachments to remain.

**§ 3.3.7 Coordination:**

- .1 In the case of a single prime Contract (single prime), the General Contractor becomes the sole responsible party for the coordination of the entire project, and all other contractors shall mean subcontractors. In the case of a multiple Prime Contract (separate prime), the General Contractor shall also be responsible to coordinate the relationships among the Prime Contractors.
- .2 The General Contractor shall be responsible to coordinate and expedite the total construction process and all of its parts. The Owner relies upon the organization, management, skill, cooperation and efficiency of the General Contractor to supervise, direct, control and manage the work and to coordinate and expedite the efforts of the other prime contractors and subcontractors so as to deliver the work conforming to the contract within the scheduled time. The General Contractor is responsible for proper sequence and coordination. It shall determine the location of work and resolve conflicts amongst Contractors.
- .3 The General Contractor shall provide a qualified full-time staff member or members to manage the project on site. This Construction Superintendent shall coordinate, organize and manage the project from the Contractor's on-site field office and oversee their own work and the work of their sub-contractors. Should the Prime Contractor be responsible for multiple projects at different sites, or multiple locations on one large site, then the Contractor shall provide a separate qualified superintendent for each of the projects or locations. This determination shall be made by and subject to the approval of the Owner, Construction Manager and Architect who at all times may require additional manpower. The Superintendent shall be responsible for on-site safety, quality assurance, conformance with the Contract Documents and perform coordination with all on-site construction personnel and/or subcontractors. The Construction Superintendent shall be subject to the approval of the Owner, Construction Manager and Architect who at all times have the right to require the contractor to replace this Construction Superintendent if they fail to perform.
- .4 The other prime contractors (separate prime) or subcontractor's (single prime) shall also have a designated Superintendent and/or Foreman who will at all times be subject to the approval of the Owner, Construction Manager and Architect. The Owner, Construction Manager and Architect reserve the right to require the Contractor to replace the Superintendent and/or Foreman if, in the opinion of the Owner, Construction Manager or Architect, the Superintendent and/or Foreman is not performing satisfactorily.



- .5 Each prime contractor shall coordinate his activities with the activities of other contractors.
- .6 All questions pertaining to the work are to be made to the Architect through the Construction Manager sufficiently in advance (via an RFI Form) of construction to permit comparisons investigation or references to drawings and shop drawings as necessary.
- .7 The General Contractor is required to submit through the Construction Manager to the Owner a site logistics plan coordinating all Owner functions with the access and safety of the job site.
- .8 The Contractor is required to coordinate all the inspection and material testing to meet the contract documents specifications.
- .9 The Contractor has full and sole responsibility for construction methods and implementation of a "quality control system" to insure coordination.
- .10 The Contractor is responsible for field verification of all dimensions/measurements for the coordination of materials and trades. Check field dimensions, clearances, relationships to available space, and anchors.
- .11 The Contractor shall make all necessary arrangements to conduct work so that all parts shall be carried on harmoniously and simultaneously or sequentially, so as components or increments of the same shall not interfere or retard the progress of others.
- .12 Minor changes in locations of equipment, parts, etc. due to field conditions shall be made, if so directed, at no additional cost.
- .13 The Contractor shall coordinate the delivery, unloading, movement, relocation, storage and protection of all materials.
- .14 The Contractor shall examine the drawings and dimensions and is responsible for satisfactory joining and fitting of all parts of the work.
- .15 Accurate dimensions, sleeved and opening drawings are to be submitted prior to placement in the field.
- .16 Prepare coordination drawings for all above ceiling areas throughout the entire project. Drawings showing all piping, duct, cable trays, electrical ductbanks, and similar items, but not electrical conduit less than 4 inches in diameter. Complete architectural, mechanical and electrical reflected ceiling layouts, (including ductwork, conduits, piping, lighting, etc.).
- .17 The Contractor is responsible for any omissions of the subcontractors and is required to provide a complete operating facility.
- .18 The General Contractor shall be responsible for preserving the integrity of ceiling heights and room sizes and shall:
  - .a Check compatibility with equipment, other work, electrical characteristics, and operational control requirements. Check motor voltages and control characteristics. Coordinate controls, interlocks, wiring of pneumatic switches, and relays. Coordinate wiring and control wiring diagrams. Review the effect of changes on other work. Obtain and distribute installation data on each item of equipment requiring mechanical or electrical connections;
  - .b Coordinate and observe start-up and demonstration of equipment and systems. Observe and maintain record of tests and inspections. Coordinate maintenance of record documents;
  - .c Assist the Construction Manager and Architect with final inspections;
  - .d Coordinate all mechanical, plumbing, electrical, food service and equipment/furnishings work, and coordinate that work with all other work; and
  - .e Inform the Owner via the Construction Manager when coordination of his work is required.
- .19 Where space is limited, coordinate arrangement of mechanical, electrical, and other work to fit, show plan and cross-section dimensions of space available, including structural obstructions and ceilings as applicable.
- .20 Coordinate cutting and patching activities and sequencing.
- .21 The Construction Manager and Owner shall assist in resolution of any coordination items.

### § 3.4 Labor and Materials

§ 3.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

§ 3.4.2 Except in the case of minor changes in the Work approved by the Architect in accordance with Section 3.12.8 or ordered by the Architect in accordance with Section 7.4, the Contractor may make substitutions only with the



consent of the Owner, after evaluation by the Architect, in consultation with the Construction Manager, and in accordance with a Change Order or Construction Change Directive.

**§ 3.4.2.1** Not later than ten (10) days from the Notice to Proceed, the Contractor shall provide a list showing the names of the manufacturers proposed to be used for each of the products identified in the Specifications and the installing Subcontractor's name(s).

**§ 3.4.2.2 STANDARD OF QUALITY:** The various materials and products specified in the specifications by name or description are given to establish a standard of quality and of cost for bid purposes.

- .1 It is not the intent to limit the Contractor to any one material or product specified but rather to described as the minimum standard.
- .2 When proprietary names are used as the "Basis of Design", for specified products or equipment, they shall be followed by the words "or approved equal in quality necessary to meet the specifications," unless otherwise indicated elsewhere in the Contract Documents.

**§ 3.4.2.3** The Architect will evaluate alternatives and substitutions and shall be the sole judge of whether the alternatives, (substitutions), are acceptable or not.

- .1 The burden of proving the alternatives, (substitutions), are equal, or better, to the specified product is that of the Contractor.
- .2 Contractor shall submit request for substitution in accordance with substitution procedures indicated elsewhere in the Contract Documents.
- .3 Any alternative names or products which do not meet the specifications will not be accepted.

**§ 3.4.3** The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of unfit persons or persons not properly skilled in tasks assigned to them.

**§ 3.4.4** The Contractor will be held to be thoroughly familiar with all conditions affecting labor in the locale of the Project, including, but not limited to, trade jurisdictions and agreements, incentive and premium time, pay, procurement, living and commuting conditions. Contractor shall assume responsibility for costs resulting from his failure to verify conditions affecting his labor.

**§ 3.4.5** Contractor shall be responsible for labor peace on the Project and shall at all times make its best efforts and judgment as an experienced contractor to adopt and implement policies and practices designed to avoid work stoppages, slowdowns, disputes, or strikes where reasonably possible and practical under the circumstances and shall at all times maintain Project-wide labor harmony. Except as specifically provided in Subparagraph 8.3.1, Contractor shall be liable to Owner for all damages suffered by Owner occurring as a result of work stoppages, slowdowns, disputes, or strikes.

### **§ 3.5 Warranty**

**§ 3.5.1** The Contractor warrants to the Owner, Construction Manager and Architect that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Construction Manager or Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

**§ 3.5.2** The Contractor represents that all manufacturer and supplier warranties shall run directly to or be specifically assignable to the Owner. The Contractor warrants that all portions of the work that will be covered by a manufacturer's or supplier's warranty shall be performed in such a manner so as to preserve all rights under such warranties. The Contractor hereby assigns to the Owner effective upon the termination of this contract all manufacturer's and supplier's warranties relating to the Work, and the Contractor shall upon request of the Owner through the Construction Manager, execute any document reasonably requested by Owner to effectuate such assignment. If the Owner attempts to enforce a claim based upon a manufacturer's or suppliers warranty and such manufacturer or



supplier refuses to honor such warranty based in whole or in part on a claim of defective installation by the Contractor, the Contractor shall be responsible for any resulting loss or damages incurred by the Owner as a result of the manufacturer's or supplier's refusal to honor such warranty. The Contractor's obligations under this Subparagraph 3.5.1.1 shall survive the expiration or earlier termination of the Contract. The warranty period for all work of each Contractor shall not be less than two (2) years from the date of Substantial Completion and acceptance by the Owner unless otherwise specified.

**§ 3.5.3** The Contractor represents and warrants the following to the Owner (in addition to the other representations and warranties contained in the Contract Documents), as an inducement to the Owner to execute the Owner-Contractor Agreement, which representations and warranties shall survive the execution and delivery of the Owner-Contractor Agreement and the final completion of the Work:

- .1 That he/she is authorized to do business in the State, County, and/or City where construction will take place at the Project and is properly licensed by all necessary governmental and public authorities having jurisdiction over him/her and over the Work and the site of the Project;
- .2 That he/she is familiar with all Federal, State, Municipal and Department laws, ordinances and regulations, which may in any way affect the work of those employed herein, including but not limited to any special acts relating to the work or to the project of which it is a part;
- .3 That such temporary and permanent work required by the Contract Documents as is to be done by him/her, can be satisfactorily constructed and used for the purposes for which it is intended;
- .4 That he/she is familiar with local trade jurisdictional practices at the site of the project;
- .5 That he/she has carefully examined the plans; the specifications and the site of the work, and that from his own investigations, he/she has satisfied himself/herself as to the nature and location of the work, the character, quality and quantity of the surface and subsurface materials likely to be encountered, the character of equipment and other facilities needed for the performance of the work, and the general local conditions, and all other materials which may in any way affect the work or his/her performance; and
- .6 That he/she has determined what local ordinances, if any, will affect his work. That he/she has checked for any County, City, Borough, or Township rules or regulations applicable to the area in which the Project is being constructed and in addition, for any rules or regulations of other organizations having jurisdiction, such as planning commission, industries, or utility companies who have jurisdiction over property on which the Work will be performed. Any costs of compliance with local controls are included in the prices bid, even if documents of such local controlling agencies are not listed specifically in the Contract Documents.

### **§ 3.6 Taxes**

The Contractor shall pay sales, consumer, use and similar taxes for the Work provided by the Contractor that are legally enacted when bids are received, or negotiations concluded, whether or not yet effective or merely scheduled to go into effect.

**§ 3.6.1** The Owner is exempt from all taxes including Federal Excise Tax, fuel tax, transportation taxes and State Sales or Use Tax.

**§ 3.6.2** The Contractor shall pay all social security taxes, unemployment insurance, contributions, or other taxes measured by wages of employees, attributable to, or performing the Work.

### **§ 3.7 Permits, Fees, Notices and Compliance with Laws**

**§ 3.7.1** The Contractor shall be required to secure permits or government approvals necessary for the proper execution and completion of the work. The Contractor shall obtain business licenses required by the State, County and/or City and shall give all notices and comply with all laws, ordinances, rules, regulations and orders of any public authority bearing on the performance of the work.

- .1 It shall be the obligation of the Contractor to review the Contract Documents and to determine and to notify the Owner, Construction Manager and Architect of any discrepancy between building codes and regulations of which the Contractor has knowledge or should be reasonably able to determine.
- .2 The Contractor shall not violate any zoning, setback or other requirements of applicable laws, codes and ordinances, building codes, rules or regulations, the Contractor promptly shall notify the Architect, in writing, and necessary changes shall be accomplished by appropriate modification.



- .3 The required Building Permit or Permits shall be secured by the Contractor for his trade; or by the Prime Contractor in charge of the Work when the Contract combines more than one trade under a Single Contract. Fees shall be paid for by the Owner or reimbursed after submission of receipt to the Construction Manager for Owner's payment without additional mark-up.

§ 3.7.2 The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work.

§ 3.7.2.1 Subject to the other terms and conditions of these General Conditions, it is not the Contractor's responsibility to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, building codes, and rules and regulations. However, if the Contractor observes that portions of the Contract Documents are at variance therewith, the Contractor shall promptly notify the Construction Manager, Architect and Owner in writing, and necessary changes shall be accomplished by appropriate modification.

§ 3.7.3 If the Contractor performs Work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to the correction thereof or related thereto, including all fines and penalties.

#### § 3.7.4 Concealed or Unknown Conditions

Claims for Concealed or Unknown Conditions: Subject to the Contractor's obligations under Articles 3.2, if conditions are encountered at the site which are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, then notice by the observing party shall be given to the other party promptly before conditions are disturbed and in no event later than five (5) days after first observance of the conditions. The Architect and the Construction Manager will promptly investigate such conditions and, if the Architect, in consultation with the Construction Manager, determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend that an equitable adjustment be made in the Contract Sum or Contract Time, or both. If the Architect, in consultation with the Construction Manager, determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Architect shall promptly notify the Owner, Construction Manager and Contractor, stating the reasons. Claims by either party in opposition to such determination must be made within 21 days after the Architect has given notice of the decision. If the conditions encountered are materially different, the Contract Sum and Contract Time shall be equitably adjusted, but if the Owner and Contractor cannot agree on an adjustment in the Contract Sum or Contract Time, the adjustment shall be referred to the Architect for initial determination, subject to further proceedings pursuant to Section 15.2.5.1.

§ 3.7.5 If, in the course of the Work, the Contractor encounters human remains or recognizes the existence of burial markers, archaeological sites or wetlands not indicated in the Contract Documents, the Contractor shall immediately suspend any operations that would affect them and shall notify the Owner, Construction Manager and Architect. The Contractor shall continue to suspend such operations until otherwise instructed by the Owner through the Construction Manager but shall continue with all other operations that do not affect those remains or features. Requests for adjustments in the Contract Sum and Contract Time arising from the existence of such remains or features may be made as provided in Article 15.

#### § 3.8 Allowances

§ 3.8.1 The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner through the Construction Manager may direct, but the Contractor shall not be required to employ persons or entities to whom the Contractor has reasonable objection.

§ 3.8.2 Unless otherwise provided in the Contract Documents,

- .1 allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts; and
- .2 whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect the difference between actual costs and the allowances under in the Contract Documents.



§ 3.8.3 Materials and equipment under an allowance shall be selected by the Owner through the Construction Manager with reasonable promptness.

### § 3.9 Superintendent

§ 3.9.1 The Contractor shall employ a competent full-time superintendent and necessary assistants, acceptable to the Owner, Construction Manager and Architect who shall be in attendance at the Project site during performance of the Work and until final completion of all work including all corrective and punch list items. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor. If, in the Construction Manager's or Architect's opinion, the quality or progress of the work is adversely affected by the lack of adequate supervision, the Contractor shall increase the number of supervisory personnel at no increase in the Contract Sum. Each contractor must have supervisory personnel on site at all times during the execution of any work under their respective contract.

§ 3.9.2 The Contractor, as soon as practicable after award of the Contract, shall notify the Owner and Architect through the Construction Manager, the name and qualifications of a proposed superintendent. Within 14 days of receipt of the information, the Construction Manager may notify the Contractor, stating whether the Owner, the Construction Manager or the Architect (1) has reasonable objection to the proposed superintendent or (2) requires additional time for review. Failure of the Construction Manager to provide notice within the 14-day period shall constitute notice of no reasonable objection.

§ 3.9.3 The Contractor shall not employ a proposed superintendent to whom the Owner, Construction Manager or Architect has made reasonable and timely objection. The Contractor shall not change the superintendent without the Owner's consent, which shall not unreasonably be withheld or delayed.

§ 3.9.4 A Superintendent for the contractor shall be required for the overall project and a Foreman shall be required at each project site. The number of necessary Assistants to the superintendent shall be determined by the areas where work is in progress so that the work areas are adequately supervised by the Contractor's superintendent or one of his assistants. If in the Construction Manager's or Architect's opinion, the quality or progress of the work are adversely affected by lack of adequate supervision, the Contractor shall be required to increase the number of supervisory personnel at no increase in the Contract sum.

§ 3.9.5 The Contractor shall provide a qualified full-time staff member or members to provide mechanical and electrical coordination and perform coordination with all their subcontractors.

### § 3.10 Contractor's Construction and Submittal Schedules

§ 3.10.1 The Contractor, promptly after being awarded the Contract, shall submit for the Owner's and Architect's information and the Construction Manager's approval a Contractor's construction schedule for the Work. The schedule shall contain detail appropriate for the Project, including (1) the date of commencement of the Work, interim schedule milestone dates, and the date of Substantial Completion; (2) an apportionment of the Work by construction activity; and (3) the time required for completion of each portion of the Work. The schedule shall provide for the orderly progression of the Work to completion and shall not exceed time limits current under the Contract Documents. The schedule shall be revised at appropriate intervals as required by the conditions of the Work and Project. The schedule which is prepared by the General Contractor shall indicate the proposed starting and completion date for the various subdivisions of the Work as well as the totality of the Work. The schedule shall be updated every thirty (30) days and must be submitted to the Construction Manager and the Architect with Contractor's Applications for Payment. If the schedule is not submitted with the payment application, no payment will be processed. Each schedule shall contain a comparison of actual progress with the estimated progress for such point in time started in the original schedule. If any schedule submitted sets forth a date for Substantial Completion for the Work or any phase of the Work beyond the date(s) of Substantial Completion established in the Contract (as the same may be extended as provided in the Contract Documents), then Contractor shall submit to the Construction Manager, Architect and Owner for their review and approval a description of the means and methods which Contractor intends to employ to expedite the progress of the Work to ensure timely completion of the various phases of the Work as well as the totality of the Work. To ensure such timely completion, Contractor shall take all necessary action including, without limitation, increasing the number of personnel and labor on the Project and implementing overtime and double shifts. In that event, Contractor shall not be entitled to an adjustment in the Contract Sum or the schedule.



§ 3.10.2 The Contractor, promptly after being awarded the Contract and thereafter as necessary to maintain a current submittal schedule, shall submit a submittal schedule for the Construction Manager's and Architect's approval. The Architect's and Construction Manager's approval shall not be unreasonably delayed or withheld. The submittal schedule shall (1) be coordinated with the Contractor's construction schedule, and (2) allow the Construction Manager and Architect reasonable time to review submittals. If the Contractor fails to submit a submittal schedule, or fails to provide submittals in accordance with the approved submittal schedule, the Contractor shall not be entitled to any increase in Contract Sum or extension of Contract Time based on the time required for review of submittals.

§ 3.10.3 The Contractor shall perform the Work in general accordance with the most recent schedules submitted to the Owner, Construction Manager and Architect.

### § 3.11 Documents and Samples at the Site

The Contractor shall make available, at the Project site, the Contract Documents, including Change Orders, Construction Change Directives, and other Modifications, in good order and marked currently to indicate field changes and selections made during construction, and the approved Shop Drawings, Product Data, Samples, and similar required submittals. These shall be in electronic form or paper copy, available to the Architect and Owner, and delivered to the Construction Manager for submittal to the Owner upon completion of the Work as a record of the Work as constructed.

### § 3.12 Shop Drawings, Product Data and Samples

§ 3.12.1 Shop Drawings are drawings, diagrams, schedules, and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier, or distributor to illustrate some portion of the Work.

§ 3.12.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

§ 3.12.3 Samples are physical examples that illustrate materials, equipment, or workmanship, and establish standards by which the Work will be judged.

§ 3.12.4 Shop Drawings, Product Data, Samples, and similar submittals are not Contract Documents. Their purpose is to demonstrate how the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents for those portions of the Work for which the Contract Documents require submittals. Review by the Architect and Construction Manager is subject to the limitations of Section 4.2.7. Informational submittals upon which the Construction Manager and Architect is not expected to take responsive action may be so identified in the Contract Documents. Submittals that are not required by the Contract Documents may be returned by the Construction Manager or Architect without action.

§ 3.12.5 The Contractor shall review for compliance with the Contract Documents, approve, and submit to the Architect through the Construction Manager, Shop Drawings, Product Data, Samples, and similar submittals required by the Contract Documents, in accordance with the submittal schedule approved by the Construction Manager and Architect or, in the absence of an approved submittal schedule, with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of Separate Contractors. Submittals which are not marked as reviewed for compliance with the Contract Documents and approved by the Contractor shall be returned by the Architect through the Construction Manager without action.

§ 3.12.6 By submitting Shop Drawings, Product Data, Samples, and similar submittals, the Contractor represents to the Owner, Construction Manager and Architect that the Contractor has (1) reviewed and approved them, (2) determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and (3) checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

§ 3.12.7 The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples, or similar submittals, until the respective submittal has been approved by the Architect.



§ 3.12.8 The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from the requirements of the Contract Documents by the Architect's approval of Shop Drawings, Product Data, Samples, or similar submittals, unless the Contractor has specifically notified the Architect through the Construction Manager of such deviation at the time of submittal and (1) the Architect has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples, or similar submittals, by the Architect's approval thereof.

§ 3.12.9 The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples, or similar submittals, to revisions other than those requested by the Construction Manager and Architect on previous submittals. In the absence of such notice, the Architect's approval of a resubmission shall not apply to such revisions.

§ 3.12.10 The Contractor shall not be required to provide professional services that constitute the practice of architecture or engineering unless such services are specifically required by the Contract Documents for a portion of the Work or unless the Contractor needs to provide such services in order to carry out the Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures. The Contractor shall not be required to provide professional services in violation of applicable law.

§ 3.12.10.1 If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of the Contractor by the Contract Documents, the Owner and the Architect, in consultation with the Construction Manager will specify all performance and design criteria that such services must satisfy. The Contractor shall be entitled to rely upon the adequacy and accuracy of the performance and design criteria provided in the Contract Documents. The Contractor shall cause such services or certifications to be provided by an appropriately licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings, and other submittals prepared by such professional. Shop Drawings, and other submittals related to the Work, designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to the Architect through the Construction Manager. The Owner, Construction Manager and the Architect shall be entitled to rely upon the adequacy and accuracy of the services, certifications, and approvals performed or provided by such design professionals, provided the Owner and Architect have specified to the Contractor through the Construction Manager, the performance and design criteria that such services must satisfy. Pursuant to this Section 3.12.10, the Architect will review and approve or take other appropriate action on submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents.

§ 3.12.10.2 If the Contract Documents require the Contractor's design professional to certify that the Work has been performed in accordance with the design criteria, the Contractor shall furnish such certifications to the Architect through the Construction Manager at the time and in the form specified by the Architect.

§ 3.12.11 After the Contract has been executed, the Owner and the Architect in consultation with the Construction Manager will consider a formal request for the substitution of products in place of those specified only under the conditions set forth in "SUBSTITUTION PROCEDURES" and "PRODUCT REQUIREMENTS" in Division 01 of the Project Manual.

§ 3.12.12 All substitutions or deviations from the plans and specifications must be clearly noted as such on all Shop Drawings, Product Data, Samples or similar submittals. Contractor shall identify, coordinate and pay for any additional requirements as a result of substitutions, deviations, etc., including necessary change orders and additional work of other trades as a result of the substitution.

§ 3.12.13 All Shop Drawings, Product Data, Samples or similar submittals are to be submitted within the time frame indicated in the Contract Documents. Shop Drawings, Product Data, Samples or similar submittals logs shall be updated and submitted at each job meeting along with job meeting report form.

§ 3.12.14 All shop drawings are to include manufacturer's data. All shop drawings and samples are to be submitted by the Contractor to the Architect through the Construction Manager for review. Each sheet of the shop drawings shall identify the project, contractor, subcontractor, and fabricator or manufacturer and the date of the drawings. All shop drawings shall be numbered in consecutive sequence and each sheet shall indicate the total number of sheets in the set.



### **§ 3.13 Use of Site**

**§ 3.13.1** The Contractor shall confine operations at the site to areas permitted by applicable laws, statutes, ordinances, codes, rules and regulations, lawful orders of public authorities, and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.

**§ 3.13.2** The Contractor shall not place or maintain, or allow to be placed or maintained, any advertising matter, sign, bill, poster, etc., on or about the Site, except those required by law or by the Contract Documents, unless approved by the Construction Manager.

**§ 3.13.3** Contractor shall store materials on site only in areas as directed by the Owner through the Construction Manager and shall confine operations only to areas of new construction. The Contractor shall provide adequate protection around the designated storage areas. Workers will not be permitted in areas other than construction areas. When by exception, the Owner allows any room to be used as a shop, storeroom, etc., during the progress of the work, the Contractor making use of the space will be responsible for any repairs, patching, or cleaning arising from such use. Prior approval of Owner for use of such areas is mandatory and Contractor shall be required to provide full access to other trades for work activities. Contractors shall not be permitted to use partially completed spaces for storage areas or offices.

**§ 3.13.4** If the Work is to be executed in areas occupied by the Owner, the Contractor shall inform the Owner and Construction Manager in advance of the areas scheduled to be worked on so that the Owner's personnel may make proper preparations to protect equipment and records.

**§ 3.13.5** All storage of materials at the site shall be subject to the approval or rejection of the Owner and such storage, even when approved, will be done as to minimize any impact upon the Owner's ongoing operations at the site.

**§ 3.13.6** All materials delivered to the premises which are to form a part of the work are to be considered the property of the Owner and must not be removed without the Owner's consent; but the Contractor shall remove all surplus materials upon completion of each phase of the work and as directed by the Construction Manager.

**§ 3.13.7** The existing facilities may be in use during the progress of the work as indicated in the specifications. The Contractor shall schedule his work in conjunction with the use of the facility to permit operation by the Owner and cause the least disruption to the Owner's normal schedule.

**§ 3.13.8** If the Contractor is required to work in areas that will also be occupied, he/she shall maintain adequate barricades, fences, etc. to protect the occupants and the work. Any work that is not possible to be completed while occupants are present shall be completed on weekends or evenings only with approval of the Owner through the Construction Manager. No work shall occur while the building is occupied without consent of the Owner.

**§ 3.13.9** Construction shall be limited to the hours indicated in "SUMMARY" in Division 01 of the Project Manual.

### **§ 3.14 Cutting and Patching**

**§ 3.14.1** The Contractor shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly. All areas requiring cutting, fitting, or patching shall be restored to the condition existing prior to the cutting, fitting, or patching, unless otherwise required by the Contract Documents.

**§ 3.14.2** The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner or Separate Contractors by cutting, patching, or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter construction by the Owner or a Separate Contractor except with written consent of the Construction Manager, Owner and of the Separate Contractor. Consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold, from the Owner or a Separate Contractor, its consent to cutting or otherwise altering the Work.

### **§ 3.15 Cleaning Up**

**§ 3.15.1** The Contractor shall keep the premises and surrounding area free from accumulation of waste materials and rubbish caused by operations under the Contract. At completion of the Work, the Contractor shall remove waste



materials, rubbish, the Contractor's tools, construction equipment, machinery, and surplus materials from and about the Project.

**§ 3.15.2** If the Contractor fails to clean up as provided in the Contract Documents, the Owner or Construction Manager with the Owner's approval, may do so and the Owner shall be entitled to reimbursement from the Contractor.

**§ 3.15.3** Each Prime Contractor shall perform a daily clean up and removal of debris from the site including that of his subcontractors. Each Prime Contractor shall maintain an adequate supply of laborers to accomplish daily clean up and removal of debris from the site and work areas. No debris will be allowed to accumulate in or around the building including masonry debris. The building site must be maintained free of all litter, dirt, dust and debris on a daily basis. The Owner's team may stop all work and require all personnel on site to clean up. Prior to installation of finishes, the floors shall be swept or vacuumed and kept free of dust and dirt until turned over to the Owner.

**§ 3.15.4** Cleaning and debris removal may be considered a safety concern by judgment of the Construction Manager, Owner or their agents, and as such the work may be stopped to provide time and labor for immediate clean up by the Contractor(s).

**§ 3.15.5** Final Clean-Up: The Contractor has the responsibility for the final clean-up and policing of the entire site after other contractors have removed their own waste materials, rubbish, equipment, tools and plant. In addition, thereto, the General Construction Contractor shall have a professional cleaning company perform the following immediately prior to the Architect's and Construction Manager's inspection for Substantial Completion:

- .1 Removal of all manufacturer's temporary labels from materials, equipment and fixtures;
- .2 Removal of all stains from glass and mirrors; wash, polish, inside and outside;
- .3 Removal of marks, stains, finger prints, other soil, dust, dirt, from painted, decorated, or stained woodwork, plaster or gypsum wall board, metal, acoustic tile, and equipment surfaces;
- .4 Remove spots, paint, soil, from resilient flooring and carpeting;
- .5 Remove temporary floor protections; clean, strip and provide three (3) coats of wax on new VCT floors or otherwise treat as directed by the material manufacturers recommendation, all finished floors. Final vacuum all carpet;
- .6 Clean all interior finished surfaces, including doors and window frames, and hardware required to have a polished finish, of oil, stains, dust, dirt, paint, and the like; leave without finger prints, blemishes; and
- .7 Final site cleanup shall extend beyond the Contract Limit Lines as reasonably required to insure the complete removal of all construction debris from the entire site, including staging areas.

**§ 3.15.6** No accumulation of flammable material shall be permitted.

### **§ 3.16 Access to Work**

The Contractor shall provide the Owner, Construction Manager and Architect with access to the Work in preparation and progress wherever located.

**§ 3.16.1** Contractor shall keep only necessary equipment on site and shall cooperate with the Owner and Construction Manager regarding the location of stored material. Contractor shall not be allowed to unreasonably encumber the Project site (or building) with equipment and stored material and shall afford other contractors reasonable opportunity for introduction and storage of their materials and for execution of other work.

**§ 3.16.2** General Contractor shall be responsible to maintain access/egress to building and site.

### **§ 3.17 Royalties, Patents and Copyrights**

The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner, Construction Manager and Architect harmless from loss on account thereof, but shall not be responsible for defense or loss when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Contract Documents, or where the copyright violations are contained in Drawings, Specifications, or other documents prepared by the Owner, Construction Manager or Architect. However, if an infringement of a copyright or patent is discovered by, or made known to, the Contractor, the Contractor shall be responsible for the loss unless the information is promptly furnished to the Architect through the Construction Manager.



### § 3.18 Indemnification

§ 3.18.1 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, Owner's consultant's and agents, Architect, Architect's consultants, and agents, the Construction Manager, and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), but only to the extent caused by the negligent, reckless or intentional acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity that would otherwise exist as to a party or person described in this Section 3.18.

- .1 Contractor, for itself, its successors and assigns, agrees to indemnify and save Owner, the individual members (past, present and future), its successors, assigns, employees, agent, Construction Managers, Architects, Engineers harmless from, and against any and all claims, demands, damages, actions or causes of action by any party, together with any and all losses, costs or expenses in connection therewith or related thereto, including, but not limited to, attorney fees and costs of suit, for bodily injuries, death or property damage arising in or in any manner growing out of the work performed, or to be performed under this Contract. Contractor and its successors and assigns agree to indemnify the Owner, its individual members (past, present and future), its successors, assigns, employees, agents, Construction Managers, Architects, Engineers against all fines, penalties or losses incurred for, including, but not limited to, attorney fees and costs of suit, or by reason of the violation by Contractor in the performance of this Contract, or any ordinance, regulation, rule of law of any political subdivision or duly constituted public authority. Without limiting the foregoing, the Contractor, at the request of Owner, its individual members (past and present), its successors, assigns, employees, agents, Construction Managers, Architects, Engineers agrees to defend at the Contractor's expense any suit or proceeding brought against Owner, its individual members (past, present and future), its successors, assigns, employees, agents, Construction Managers, Architect, Engineers due to, or arising out of the work performed by the Contractor.
- .2 The Contractor assumes the entire risk, responsibility, and liability for any and all damage or injury of every kind and nature whatsoever (including death resulting therefrom) to all persons, whether employees of the Contractor or otherwise, and to all property (including the Work itself) caused by, resulting from, arising out of or occurring in connection with the execution of the Work, or in preparation for the Work, or any extension, modification, or amendment to the Work by the Change Order or otherwise. To the fullest extent permitted by law, the Contractor and its Surety shall indemnify and save harmless the Owner, the Construction Manager, the Architect, the Architect's consultants, and the respective agents and employees of any of them (herein collectively called the Indemnitees) from and against any and all liability, loss, damages, interest, judgments, and liens growing out of, and any and all costs and expenses (including, but not limited to, counsel fees and disbursements) arising out of, relating to or incurred in connection with the Work including, any and all claims, demands, suits, actions, or proceedings which may be made or brought against any of the Indemnitees for or in relation to any breach of the Contract for Construction or any violation of the laws, statutes, ordinances, rules, regulations, or executive orders relating to or in any way affecting the performance or breach of the Contract for Construction, whether or not such injuries to persons or damages to property are due or claimed to be due, in whole or in part, to any negligence, reckless or intentional acts of the Contractor or its employees, agents, subcontractors, or materialmen, excepting only such injuries and/or damages as are the result of the sole gross negligence of the Owner, Construction Manager, Architect, or Engineer.

§ 3.18.2 In claims against any person or entity indemnified under this Section 3.18 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, the indemnification obligation under Section 3.18.1 shall not be limited by a limitation on amount or type of damages, compensation, or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts, or other employee benefit acts.

### § 3.19 Re-Design

§ 3.19.1 If the Contractor makes or causes to be made, due to approval of substitute equipment or otherwise, any substantial change in the form, type, system and details of construction from those shown on the drawings, he/she shall pay for all costs arising from such changes. The Contractor shall reimburse the Owner for all Architectural and



engineering fees required to check the adequacy of and/or document such changes. Any changes or departures from the construction and details shown shall be made only after written approval from the Architect through the Construction Manager.

#### **ARTICLE 4 ARCHITECT AND CONSTRUCTION MANAGER**

##### **§ 4.1 General**

**§ 4.1.1** The Architect is the person or entity retained by the Owner pursuant to Section 2.3.2 and the Construction Manager is the person or entity retained by the Owner pursuant to Section 2.3.2.1 and identified as such in the Agreement.

**§ 4.1.1.1** The Architect is REGAN YOUNG ENGLAND BUTERA, PC, a professional corporation under the laws of the State of New Jersey, with principal offices at 456 High Street, Mount Holly, New Jersey 08060, and is identified as "the Architect" in the Owner-Contractor Agreement and is referred to throughout the Contract Documents as "the Architect" as though singular in number. The term "the Architect" means REGAN YOUNG ENGLAND BUTERA, PC or its authorized representative. Engineering Services for Civil, Structure, Mechanical, Plumbing, Electrical and Fire Protection are provided under the Architect's contract.

**§ 4.1.1.2** The Construction Manager is GREYHAWK, a professional corporation under the laws of the State of New Jersey, with principal offices at 1800 Midlantic Drive; Mount Laurel, NJ 08054, and is identified as "the Construction Manager" in the Owner-Contractor Agreement and is referred to throughout the Contract Documents as "the Construction Manager" as though singular in number. The term "the Construction Manager" means GREYHAWK or its authorized representative.

**§ 4.1.2** Duties, responsibilities, and limitations of authority of the Construction Manager and Architect as set forth in the Contract Documents shall not be restricted, modified, or extended without written consent of the Owner, Contractor, Construction Manager and Architect. Consent shall not be unreasonably withheld.

##### **§ 4.2 Administration of the Contract**

**§ 4.2.1** The Construction Manager and Architect will provide administration of the Contract as described in the Contract Documents and will be an Owner's representative during construction until the date the Architect issues the final Certificate for Payment and with the Owner's and Construction Manager's concurrence, from time to time during the two-year period for correction of Work described in Section 12.2. The Construction Manager and Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents unless otherwise modified in writing in accordance with other provisions of the Contract.

*(Paragraphs deleted)*

**§ 4.2.1.1** The Architect will visit the site at intervals appropriate to the stage of construction, or as otherwise agreed with the Owner, to become generally familiar with the progress and quality of the portion of the Work completed, and to determine in general if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. However, the Architect will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work.

**§ 4.2.1.2** On the basis of the site visits, the Architect will keep the Owner and Construction Manager reasonably informed about the progress and quality of the portion of the Work completed, and promptly report to the Owner and Construction Manager (1) known deviations from the Contract Documents, (2) known deviations from the most recent construction schedule submitted by the Contractor, and (3) defects and deficiencies observed in the Work. The Architect will not be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. The Construction manager and the Architect will not have control over or charge of, and will not be responsible for acts or omissions of, the Contractor, Subcontractors, or their agents or employees, or any other persons or entities performing portions of the Work.

**§ 4.2.1.3** The Construction Manager shall provide a staffing plan to include one or more representatives who shall be in attendance at the Project site whenever the Work is being performed. The Construction Manager will determine in general if the Work observed is being performed in accordance with the Contract Documents, will keep the Owner reasonably informed of the progress of the Work, and will report to the Owner and Architect (1) known deviations from the Contract Documents and the most recent Project schedule, and (2) defects and deficiencies observed in the Work.



§ 4.2.1.4 The Construction Manager will schedule and coordinate the activities of the Contractor and other Separate Contractors in accordance with the latest approved Project schedule.

§ 4.2.1.6 The Construction Manager, except to the extent required by Section 4.2.1.4, and Architect will not have control over, or charge of, construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents.

#### § 4.2.4 Communications

The Owner and Contractor shall include the Construction Manager and the Architect in all communications that relate to or affect the Construction Manager's and Architect's services or professional responsibilities. The Owner shall promptly notify the Construction Manager and Architect of the substance of any direct communications between the Owner and the Contractor otherwise relating to the Project. Communications by and with the Architect's consultants shall be with the Architect through the Construction Manager. Communications by and with Subcontractors and suppliers shall be with the Contractor through the Construction Manager. Communications by and with Separate Contractors shall be through the Construction Manager. The Contract Documents may specify other communication protocols.

§ 4.2.5 Based on the Construction Manager's and Architect's evaluations of the Contractor's Applications for Payment, the Construction Manager and Architect will review and certify the amounts due the Contractor and will issue Certificates for Payment in such amounts.

§ 4.2.6 The Architect and Construction Manager have authority to reject Work that does not conform to the Contract Documents. The Construction Manager shall determine in general whether the Work of the Contractor is being performed in accordance with the requirements of the Contract Documents and notify the Owner, Contractor and Architect of defects and deficiencies in the Work. Whenever the Construction Manager or the Architect considers it necessary or advisable, the Construction Manager and Architect will have authority to require inspection or testing of the Work in accordance with Sections 13.4.2 and 13.4.3, whether or not the Work is fabricated, installed or completed. However, neither this authority of the Construction Manager or Architect nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect or the Construction Manager to the Contractor, Subcontractors, suppliers, their agents or employees, or other persons or entities performing portions of the Work.

§ 4.2.7 The Architect and Construction Manager will review and approve, or take other appropriate action upon, the Contractor's submittals such as Shop Drawings, Product Data, and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Architect's action will be taken in accordance with the submittal schedule approved by the Construction Manager or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time in the Construction Manager's professional judgment to permit adequate review. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Construction Manager's and Architect's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Sections 3.3, 3.5, and 3.12. The Construction Manager's and Architect's review shall not constitute approval of safety precautions or of any construction means, methods, techniques, sequences, or procedures. The Construction Manager's and Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

§ 4.2.8 The Architect will prepare Change Orders and Construction Change Directives, and may order minor changes in the Work as provided in Section 7.4. The Architect and Construction Manager will investigate and make determinations and recommendations regarding concealed and unknown conditions as provided in Section 3.7.4 and by regulations regarding "Change Orders" promulgated under the Public School Contracts law, N.J.S.A. 18A:18A-1 et seq., and N.J.A.C. 6:20-8.3.

§ 4.2.9 The Construction Manager will assist the Architect in conducting inspections to determine the date or dates of Substantial Completion and the date of final completion; issue Certificates of Substantial Completion pursuant to Section 9.8; receive and forward to the Owner, for the Owner's review and records, written warranties and related documents required by the Contract and assembled by the Contractor pursuant to Section 9.10; and issue a final



Certificate for Payment pursuant to Section 9.10. The Construction Manager will forward to the Architect a final Application and Certificate for Payment or final Project Application and Project Certificate for Payment upon the Contractor's compliance with the requirements of the Contract Documents.

§ 4.2.10 If the Owner and Architect agree, the Architect will provide one or more Project representatives to assist in carrying out the Architect's responsibilities at the site. The Owner shall notify the Contractor through the Construction Manager of any change in the duties, responsibilities and limitations of authority of the Project representatives.

§ 4.2.11 The Architect will interpret and decide matters concerning performance under, and requirements of, the Contract Documents on written request of either the Construction Manager, Owner or Contractor through the Construction Manager. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness.

§ 4.2.12 Interpretations and decisions of the Architect will be consistent with the language and intent of, and reasonably inferable from, the Contract Documents and will be in writing or in the form of drawings. When making such interpretations and decisions, the Architect will endeavor to secure faithful performance by both Owner and Contractor, will not show partiality to either, and will not be liable for results of interpretations or decisions rendered in good faith.

§ 4.2.13 The Architect's decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Contract Documents.

§ 4.2.14 The Construction Manager will receive and review requests for information from the Contractor, and forward each request for information to the Architect, with the Construction Manager's recommendation. The Architect will review and respond in writing to the Construction Manager to requests for information about the Contract Documents. The Construction Manager's recommendation and the Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness. If appropriate, the Architect will prepare and issue supplemental Drawings and Specifications in response to the requests for information.

§ 4.2.15 Reference in the technical provisions of the specifications to standard specifications and test methods, including those of the American Society for Testing and Materials, the American Iron and Steel Institute, the American National Standards Institute, the American Society of Mechanical Engineers, the American Society of Heating, Refrigeration and Air Conditioning Engineers, the Factory Mutual System, the National Fire Protection Association, Federal Specifications, and other similar nationally recognized technical societies and agencies shall refer to the editions and revisions current with the date of the codes referenced in the Contract Documents.

§ 4.2.16 The Architect's decision with respect to proposed substitutions of material or equipment specified by trade name shall be final. The Architect reserves the right to waive specifications and to accept a proposed substitution, which in his opinion is superior to the material or product specified, or to limit the specification to the product specified.

§ 4.2.17 Approval of substitutions shall not relieve the Contractor of responsibility for adequate fulfillment of all the various parts of the work, nor from specified guarantees and maintenance. Modification of adjacent or connecting work required due to any substitution approval shall be provided as part of the substitution.

§ 4.2.18 Insofar as practicable, except as otherwise specified or shown, the material or product of one manufacturer shall be used throughout the work for each specified purpose.

§ 4.2.19 Manufactured articles, materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in strict accordance with the manufacturer's directions. Should such directions conflict with the Specifications, the Contractor shall request clarification from the Architect through the Construction Manager before proceeding.

§ 4.2.20 Utilizing the documents provided by the Contractor, the Construction Manager will maintain at the site for the Owner one copy of all Contract Documents, approved Shop Drawings, Product Data, Samples and similar required submittals, in good order and marked currently to record all changes and selections made during construction. These



will be available to the Architect and the Contractor and will be delivered to the Owner upon completion of the Project.

## **ARTICLE 5 SUBCONTRACTORS**

### **§ 5.1 Definitions**

**§ 5.1.1** A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include a Separate Contractor or the subcontractors of a Separate Contractor.

**§ 5.1.2** A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the site. The term "Sub-subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.

### **§ 5.2 Award of Subcontracts and Other Contracts for Portions of the Work**

**§ 5.2.1** Unless otherwise stated in the Contract Documents, the Contractor, as soon as practicable after award of the Contract, shall notify the Owner, Construction Manager and Architect of the persons or entities proposed for each principal portion of the Work, including those who are to furnish materials or equipment fabricated to a special design. Within 14 days of receipt of the information, the Construction Manager may notify the Contractor whether the Owner, Construction Manager or the Architect (1) has reasonable objection to any such proposed person or entity or (2) requires additional time for review. Failure of the Construction Manager to provide notice within the 14-day period shall constitute notice of no reasonable objection.

**§ 5.2.1.1** In accordance with Title 18A, Public School Contracts Law, the Contractor submitting a bid to perform the work under a single contract shall furnish in writing at the time of Bid, the names of persons or entities proposed as Prime subcontractors. Prime subcontractors shall be qualified in accordance with N.J.S.A. 18A:18A-18. In addition, submit evidence of performance security of each Prime subcontractor simultaneously with the bid.

**§ 5.2.1.2** In accordance with Chapter 150, Laws of 1963: Prime subcontractors appearing on the Commissioner of Labor and Industry's current list of subcontractors who have failed to pay prevailing wages, will be automatically rejected.

**§ 5.2.2** The Contractor shall not contract with a proposed person or entity to whom the Owner, Construction Manager or Architect has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.

**§ 5.2.2.1** Failure of the Owner, Construction Manager or Architect to voice objection to a Subcontractor or material supplier shall not relieve the Contractor of responsibility for compliance with the Contract Documents.

**§ 5.2.3** If the Owner, Construction Manager or Architect has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner, Construction Manager or Architect has no reasonable objection. If the proposed but rejected Subcontractor was reasonably capable of performing the Work, the Contract Sum and Contract Time shall be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute Subcontractor's Work. However, no increase in the Contract Sum or Contract Time shall be allowed for such change unless the Contractor has acted promptly and responsively in submitting names as required.

**§ 5.2.3.1** Prime Subcontractors or Subcontractors proposed by the Contractor will not be acceptable to either the Owner, Construction Manager or Architect where evidence exists that such proposed Subcontractors (1) are unable or unwilling to comply with the requirements of the Contract Documents; (2) have experience, judged by the Owner, Construction Manager or Architect, to be inconsistent with requirements for the Work; (3) or appear on the Department of Labor and Workforce Development Prevailing Wage Debarment List. In these instances, the Contractor will not be entitled to a change in the Contract Sum as provided in Subparagraph 5.2.3 and shall propose substitute Subcontractors for those not accepted for causes stated herein.

**§ 5.2.4** The Contractor shall not substitute a Subcontractor, person, or entity for one previously selected if the Owner, Construction Manager or Architect makes reasonable objection to such substitution.



§ 5.2.5 No work shall take place on site by a subcontractor unless a qualified Contractor, responsible for the subcontractor's work, is on site to manage the work of their subcontractor.

### § 5.3 Subcontractual Relations

*(Paragraphs deleted)*

§ 5.3.1 By appropriate written agreement, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor's Work that the Contractor, by these Contract Documents, assumes toward the Owner, Construction Manager and Architect. Each subcontract agreement shall preserve and protect the rights of the Owner, Construction Manager and Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies, and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

§ 5.3.1.1 Where the Contractor sublets portions of the Work, the entire responsibility for the subdividing of Work rests with the Contractor. The Owner, Construction Manager and Architect are not responsible for the manner of the subdivision of the Work and neither will enter into nor settle disagreements or disputes between Contractor and Subcontractors.

§ 5.3.2 The Contractor shall obligate each Subcontractor specifically to comply with the New Jersey Plan of Affirmative Action to avoid discriminatory practice in employment.

§ 5.3.3 The Contractor shall obligate each Subcontractor to comply with the applicable prevailing wage schedule of the Department of Labor of the State of New Jersey per 16.2.1 and 16.2.2.

§ 5.3.4 The Contractor shall obligate each Subcontractor to comply with the Public Works (the Public Works Contractor Registration Act of the State of New Jersey).

## ARTICLE 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

### § 6.1 Owner's Right to Perform Construction and to Award Separate Contracts

§ 6.1.1 The term "Separate Contractor(s)" shall mean other contractors retained by the Owner under separate agreements. The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces which include persons or entities under separate contracts not administered by the Construction Manager, and with Separate Contractors retained under Conditions of the Contract substantially similar to those of this Contract, including those provisions of the Conditions of the Contract related to insurance and waiver of subrogation.

§ 6.1.2 When separate contracts are awarded for different portions of the Project or other construction or operations on the site, the term "Contractor" in the Contract Documents in each case shall mean the Contractor who executes each separate Owner-Contractor Agreement.

§ 6.1.3 The Contractor shall be responsible to coordinate all Work. All trades have a mutual obligation to coordinate their work with the other trades and cooperate as necessary with the Contractor and the Construction Schedule to complete the work as required by the Owner. The Contractor is required to have their Superintendent or Foreman on site at all times when their work or that of their Subcontractors is in progress.

§ 6.1.4 Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner's own forces or with Separate Contractors, the Owner or its Separate Contractors shall have the same obligations and rights that the Contractor has under the Conditions of the Contract, including, without excluding others, those stated in Article 3, this Article 6, and Articles 10, 11, and 12.



§ 6.1.5 When the Owner performs construction or operations with the Owner's own forces including persons or entities under separate contracts not administered by the Construction Manager, the Owner shall provide for coordination of such forces with the Work of the Contractor, who shall cooperate with them.

## § 6.2 Mutual Responsibility

§ 6.2.1 The Contractor shall afford the Owner, Construction Manager and Separate Contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities and shall connect and coordinate the Contractor's construction and operations with theirs as required by the Contract Documents.

§ 6.2.2 If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner or a Separate Contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly notify the Construction Manager and Architect of apparent discrepancies or defects in the construction or operations by the Owner or Separate Contractor that would render it unsuitable for proper execution and results of the Contractor's Work. Failure of the Contractor to notify the Construction Manager and Architect of apparent discrepancies or defects prior to proceeding with the Work shall constitute an acknowledgment that the Owner's or Separate Contractor's completed or partially completed construction is fit and proper to receive the Contractor's Work. The Contractor shall not be responsible for discrepancies or defects in the construction or operations by the Owner or Separate Contractor that are not apparent. Should the Contractor be damaged by any other separate Contractor on the work by reason of such other Contractor's failure to perform properly his Contract with the Owner, no action will lie against the Owner, Construction Manager or Architect, and the Owner, the Construction Manager and the Architect shall have no liability therefore, but the Contractor may assert his claim for damage against such separate Contractor as a third-party beneficiary under the Contract between such other Contractor and the Owner.

§ 6.2.3 The Contractor shall reimburse the Owner for costs the Owner incurs that are payable to a Separate Contractor because of the Contractor's delays, improperly timed activities or defective construction. The Owner shall be responsible to the Contractor for costs the Contractor incurs because of a Separate Contractor's delays, improperly timed activities, damage to the Work or defective construction.

§ 6.2.4 The Contractor shall promptly remedy damage that the Contractor wrongfully causes to completed or partially completed construction or to property of the Owner or Separate Contractor as provided in Section 10.2.5 or to other completed or partially completed construction or property on the site or to property of any adjoining Owner or other party.

§ 6.2.4.1 Should the Contractor cause damage to the work or property of any separate Contractor on the Project, the Contractor shall, upon due notice, settle with such other Contractor by agreement or Court of Law if he will so settle. If such separate Contractor sues the Owner, Construction Manager or Architect, or initiates a Court of Law proceeding on account of any damage alleged to have been so sustained, the Contractor agrees that he will hold the Owner, Construction Manager and Architect harmless against any such suit, and that he will reimburse to the Owner, Construction Manager and Architect, as the case may be, the cost of defending such suit, including reasonable attorney's fee and if judgment against Owner, Construction Manager and Architect arises therefrom, the Contractor shall pay all judgment cost incurred by the Owner, Construction Manager and Architect.

§ 6.2.5 The Owner and each Separate Contractor shall have the same responsibilities for cutting and patching as are described for the Contractor in Section 3.14.

## § 6.3 Owner's Right to Clean Up

If a dispute arises among the Contractor, Separate Contractors, and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and the Construction Manager, with notice to the Architect, will allocate the cost among those responsible as the Owner determines to be just, based on the recommendation of the Construction Manager and Architect.



## ARTICLE 7 CHANGES IN THE WORK

### § 7.1 General

§ 7.1.1 Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, by Change Order, Construction Change Directive or order for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents.

§ 7.1.1.1 A field directive or field order shall not be recognized as having any impact upon the Contract Sum or the Contract Time and the Contractor shall have no claim therefore unless it shall, prior to complying with same and in no event no later than 10 working days from the date such direction or order was given, submit to the Owner and Architect through the Construction Manager for the Owner's approval its change proposal.

§ 7.1.1.2 When submitting its Change Order request, the Contractor shall include and set forth in clear and precise detail breakdowns of labor and materials for all trades involved and the estimated impact on the Construction Schedule. The Contractor shall use the Prime Contractor Change Order Request forms, 012610 and the Subcontractor Change Order Request forms, 012620 of the Project Manual.

§ 7.1.2 A Change Order shall be based upon agreement among the Owner, Construction Manager, Contractor, and Architect. A Construction Change Directive requires agreement by the Owner, Construction Manager and Architect and may or may not be agreed to by the Contractor. An order for a minor change in the Work may be issued by the Architect alone in accordance with Section 7.4.

§ 7.1.3 Changes in the Work shall be performed under applicable provisions of the Contract Documents. The Contractor shall proceed promptly with changes in the Work, unless otherwise provided in the Change Order, Construction Change Directive, or order for a minor change in the Work.

§ 7.1.4 Notwithstanding anything to the contrary contained in this article, all Change Orders shall be subject to the requirements of N.J.A.C. 6A:26-4.9 (2006).

§ 7.1.5 A directive or order from the Owner, Construction Manager or Architect, other than a Change Order, a Construction Change Directive or any order for a minor change pursuant to this article 7, shall not be recognized as having any impact on the contract sum or the contract time and the Contractor shall have no claim therefore. If the Contractor believes that a directive or order would require it to perform work not required by the contract documents, the Contractor shall so inform the Owner and Architect through the Construction Manager in writing prior to complying with the same and in no event any later than five (5) working days from the day such direction or order was given and shall submit to the Owner and Architect through the Construction Manager for the Owner's, Construction Manager's and Architect's approval its change proposal.

### § 7.2 Change Orders

§ 7.2.1 A Change Order is a written instrument prepared by the Architect and signed by the Owner, Construction Manager, Contractor, and Architect stating their agreement upon all of the following:

- .1 The change in the Work;
- .2 The amount of the adjustment, if any, in the Contract Sum; and
- .3 The extent of the adjustment, if any, in the Contract Time.

§ 7.2.2 Change Orders shall include all costs, including cost of preparation of the Change Order, all impact and ripple costs associated with modifications or delays to the work an assessment of the amount and impact of any perceived potential delays, and all costs associated with modifications to other work.

- .1 The Prime Contractor shall furnish all necessary documentation to support the additional cost, including but not limited to the following:
  - .a Copy of subcontractor's proposal;
  - .b Complete breakdown for all costs for labor and material;
  - .c Complete breakdown of related costs; and
  - .d Other information as may be requested by the Architect or Construction Manager.

§ 7.2.3 The overall cost of the Change Order shall be inclusive, and once accepted by the Owner it shall be considered full and final.



**§ 7.2.4** When a Change Order involves both additions and deletions in material, the net quantity is to be determined and the appropriate overhead and profit is to be applied to the net quantity.

**§ 7.2.5** When any change in the Work, regardless of the reason therefore, requires or is alleged to require an adjustment in Contract Time, such request for time adjustment shall be submitted by the Contractor as part of the change proposal. Any Change Order approved by the Owner and for which payment is accepted by the Contractor, in which no adjustment in Contract Time is stipulated, shall be understood to mean that no such adjustment is required by reason of the change, and any and all rights of the Contractor or any subsequent request for adjustment of Contract Time by reason of the change is waived.

**§ 7.2.6** Request by the Contractor for adjustment of the Contract Amount regardless of the reason therefore, shall be submitted to the Owner and Architect through the Construction Manager with itemized labor and material quantities and unit prices to permit proper evaluation of the request. A submission by the Contractor containing unsubstantiated lump sum requests for adjustment of the Contract Amount will not be considered by the Owner, Construction Manager and Architect. The Owner, Construction Manager and Architect will not be liable for any delay incurred by reason of the Contractor's failure to submit satisfactory justification and back-up with any request for adjustment to the Contract Amount.

**§ 7.2.7** Agreement on any Change Order shall constitute a final settlement of all matters relating to the change in the initial Work which is the subject to the Change Order, including, but not limited to, all direct, indirect and impact costs associated with such change and any and all adjustment to the Contract Sum and the Construction Schedule. The Contractor will not be entitled to any compensation for additional work, impact costs or delays in the Construction Schedule not included in the Change Order.

### **§ 7.3 Construction Change Directives**

**§ 7.3.1** A Construction Change Directive is a written order prepared by the Architect and signed by the Owner, Construction Manager and Architect, directing a change in the Work prior to agreement on adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions, the Contract Sum and Contract Time being adjusted accordingly.

**§ 7.3.2** A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order.

**§ 7.3.3** If the Construction Change Directive provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:

- .1 Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
- .2 Unit prices stated in the Contract Documents or subsequently agreed upon;
- .3 Cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or
- .4 As provided in Section 7.3.4.

**§ 7.3.4** If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the Construction Manager shall determine the adjustment on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, an amount for overhead and profit as set forth in the Agreement, or if no such amount is set forth in the Agreement, a reasonable amount. In such case, and also under Section 7.3.3.3, the Contractor shall keep and present, in such form as the Construction Manager may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Section 7.3.4 shall be limited to the following:

- .1 Costs of labor, including applicable payroll taxes, fringe benefits required by agreement or custom, workers' compensation insurance shall be in accordance with the Prevailing Wage Rates at the time the Contract is signed with no additional "labor burden", future increases or any other considerations;
- .2 Rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others; and



.3 The allowance for overhead and profit combined, included in the total cost to the Owner, shall be based upon the following schedule, may only include a Contractor, his Subcontractor and shall be limited to a total of 15% of the cost:

.a In order to facilitate checking of quotations for extras or credits, all proposals, except those so minor that their propriety can be seen by inspection, shall be accompanied by a complete itemization of costs, including labor, materials and subcontracts. Labor and materials shall be itemized in the manner prescribed above. Where major cost items are subcontractors, they shall be itemized.

§ 7.3.5 If the Contractor disagrees with the adjustment in the Contract Time, the Contractor may make a Claim in accordance with applicable provisions of Article 15.

§ 7.3.6 Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Construction Manager and Architect of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time.

§ 7.3.7 A Construction Change Directive signed by the Contractor indicates the Contractor's agreement therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.

§ 7.3.8 The amount of credit to be allowed by the Contractor to the Owner for a deletion or change that results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Construction Manager and Architect. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.

§ 7.3.9 Pending final determination of the total cost of a Construction Change Directive to the Owner, the Contractor may request payment for Work completed under the Construction Change Directive in Applications for Payment. The Construction Manager and Architect will make an interim determination for purposes of monthly certification for payment for those costs and certify for payment the amount that the Construction Manager and Architect determine, in the Construction Manager's and Architect's professional judgment, to be reasonably justified. The Construction Manager's and Architect's interim determination of cost shall adjust the Contract Sum on the same basis as a Change Order, subject to the right of either party to disagree and assert a Claim in accordance with Article 15.

§ 7.3.10 When the Owner and Contractor agree with a determination made by the Construction Manager and Architect concerning the adjustments in the Contract Sum and Contract Time, or otherwise reach agreement upon the adjustments, such agreement shall be effective immediately and the Architect will prepare a Change Order. Change Orders may be issued for all or any part of a Construction Change Directive.

#### § 7.4 Minor Changes in the Work

The Architect may order minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time. The Architect's order for minor changes shall be in writing. If the Contractor believes that the proposed minor change in the Work will affect the Contract Sum or Contract Time, the Contractor shall notify the Architect through the Construction Manager and shall not proceed to implement the change in the Work. If the Contractor performs the Work set forth in the Architect's order for a minor change without prior notice to the Construction Manager and Architect that such change will affect the Contract Sum or Contract Time, the Contractor waives any adjustment to the Contract Sum or extension of the Contract Time.

### ARTICLE 8 TIME

#### § 8.1 Definitions

§ 8.1.1 Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.

§ 8.1.2 The date of commencement of the Work is the date established in the Agreement.

§ 8.1.3 The date of Substantial Completion is the date certified by the Architect in accordance with Section 9.8.



§ 8.1.4 The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

## § 8.2 Progress and Completion

§ 8.2.1 Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement, the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

§ 8.2.2 The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, commence the Work prior to the effective date of insurance required to be furnished by the Contractor and Owner.

§ 8.2.3 The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

§ 8.2.3.1 Contract Time shall start and end on the dates indicated in the Agreement plus any authorized extension(s) of time as approved by written Change Order.

§ 8.2.4 The Contractor shall have sole responsibility for any and all costs, charges, fees or expenses of any and all kinds from the failure to complete the work within the preceding time period, and such sums shall be deducted from the Contract Sum.

§ 8.2.5 Owner and Construction Manager, in coordination with the Contractor, shall set work hours. Contractor may be required to work nights, weekends or holidays as necessary to complete the work in accordance with the Schedule or in coordination with the Owner's activities. Under no circumstances shall the Contractor begin or continue with work that is adversely impacting the Owner's activity or operations. All utility shutdowns, interruptions, work in or adjacent to existing buildings will be coordinated through the Owner, or the Construction Manager, and may have to be performed during hours when the building is not in operation. All cutting, hammering or other activity that is noisy, produces smoke or fumes or is otherwise disruptive to the building occupants may have to be done during hours when the building is not in operation. Work required to be performed during non-operating hours, as determined by the Owner and Construction Manager, will be performed at no additional cost to the Owner. Contractor agrees to increase manpower, increase work hours, and to increase equipment necessary to maintain the Project Construction Schedule, and when also requested by the Construction Manager, Architect and the Owner, and shall be without additional cost or charge to the Owner.

§ 8.2.6 Work shall commence in accordance with the Notice to Proceed and shall proceed uninterrupted to Final Completion. The Contractor acknowledges and recognizes that the Owner is entitled to full and beneficial occupancy and use of all or part of the completed Work in accordance with the milestone dates set forth in other sections of the Contract Documents, as per approved Schedule, and that the Owner has made arrangements to discharge its public obligations based upon the Contractor's achieving Substantial Completion of all of the Work within the Contract Time. The Contractor further acknowledges and agrees that if the Contractor fails to complete substantially or cause the Substantial Completion of any portion of the Work as required by the Project Construction Schedule and/or within the Contract Time, the Owner will sustain extensive damages and serious loss as a result of such failure. The exact amount of such damages will be extremely difficult to ascertain. Therefore, the Owner and the Contractor agrees as set forth below:

- .1 If the Contractor fails to achieve partial completion within the requirements of the milestone dates or the approved Schedule or to achieve Substantial Completion of all or part of the Work when and as required by the Project Construction Schedule and/or within the Contract Time, the Owner shall be entitled to retain or recover from the Contractor and its Surety, as liquidated damages and not as a penalty, the amounts indicated in other sections of the Contract Documents and commencing upon the first day following expiration of the Project Construction Schedule and/or the Contract Time, as the case may be, and continuing until the actual Date of Substantial Completion.
- .2 Adherence to Schedule:
  - a Monthly progress payments will only be released after the Contractor reaches the status of completion for that month contemplated by the construction schedule.



### **§ 8.3 Delays and Extensions of Time**

**§ 8.3.1** If the Contractor is delayed at any time in the commencement or progress of the Work by an act or neglect of the Owner, Construction Manager or Architect, or of an employee of either, or of a separate contractor employed by the Owner; or by changes ordered in the Work; or by occurrences beyond the control and without the fault or negligence of the Contractor and which by the exercise of reasonable diligence the Contractor is unable to prevent or provide against, including labor disputes (other than disputes limited to the work force of, or provided by, the Contractor or its Subcontractors), fire, unusual delay in deliveries not reasonably anticipatable, unavoidable casualties, or by other occurrences which the Architect, based on the recommendation of the Construction Manager, subject to the Owner's approval, determines may justify delay, then, provided that the Contractor is in compliance with Subparagraph 8.3.3 hereof, the Contract Time shall be extended by Change Order or Construction Change Directive for the length of time actually and directly caused by such occurrence as determined by the Architect and Construction Manager, and approved by the Contractor and Owner (such approval not to be unreasonably withheld, delayed, or conditioned); provided, however, that such extension of Contract Time shall be net of any delays caused by or due to the fault or negligence of the Contractor or which are otherwise the responsibility of the Contractor and shall also be net of any contingency or "float" time allowance included in the Contractor's construction schedule. The Contractor shall, in the event of any occurrence likely to cause a delay, cooperate in good faith with the Architect, Construction Manager and Owner to minimize and mitigate the impact of any such occurrence and do all things reasonable under the circumstances to achieve this goal.

**§ 8.3.2** Claims relating to time shall be made as follows:

- .1 Any claim for extension of time should be made in writing to the Construction Manager and Architect not more than five (5) days after the commencement of the delay, otherwise, it shall be waived. The Contractor shall provide an estimate of the probable effect of such delay on the progress of the work. No claim made beyond the five (5) days shall be considered valid; and
- 2 The Contractor agrees that if any delay in the Contractor's works unnecessarily delays the work of any other Contractor or Contractors, the Contractor shall in that case pay all costs and expenses incurred by such parties due to such delays and hereby authorizes the Owner to deduct the amount of such costs and expenses from any moneys due or to become due the Contractor under this Contract. The Architect and Construction Manager shall be responsible for ascertaining whether the Contractor is responsible for delaying any of the work of any other Contractor. The Architect's decision shall be final.

**§ 8.3.3** Notwithstanding anything to the contrary in the Contract Documents, any extension of the Contract Time, to the extent permitted under Paragraph 8.3.1, shall be the sole remedy of the Contractor for any (1) delay in the commencement, prosecution or completion of the Work, (2) hindrance or obstruction in the performance of the Work, (3) loss of productivity or (4) other similar claims (collectively referred to in this Paragraph 8.3.3 as "delays"), whether or not such delays are foreseeable, unless a delay is caused by acts of the Owner constituting active interference with the Contractor's performance of the Work and only to the extent such acts continue after the Contractor furnishes the Owner, Construction Manager and Architect with written notice of such interference. In no event shall the Contractor be entitled to any compensation or recovery of any damages in connection with any delay including without limitation consequential damages, lost opportunity cost, impact damages or other similar remuneration. The Owner's exercise of any of its rights or remedies under the Contract Documents (including without limitation ordering changes in the Work or directing suspension, rescheduling or correction of the Work) regardless of the extent or frequency of the Owner's exercise of such rights or remedies shall not be construed as an act of interference with the Contractor's performance of the Work.

**§ 8.3.4** The Contractor agrees that the Owner can deduct from the Contract Sum, any wages paid by the Owner to any Inspector, Construction Manager, Architect, or other professional necessarily employed by the Owner for any number of days in excess of the number of days allowed in the specifications for completion of work.

**§ 8.3.5** Where the cause of delay is due to weather conditions, an extension of time shall be granted only for unusually severe weather, as determined by reference to historical data. The term "historical data" as used in the previous sentence shall be construed according to this formula: Average rainfall (or snow or low temperature) for the past five years.



## ARTICLE 9 PAYMENTS AND COMPLETION

### § 9.1 Contract Sum

§ 9.1.1 The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

§ 9.1.2 If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed so that application of such unit prices to the actual quantities causes substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted.

### § 9.2 Schedule of Values

§ 9.2.1 Where the Contract is based on a stipulated sum or Guaranteed Maximum Price, the Contractor shall submit a schedule of values to the Construction Manager and Architect before the first Application for Payment, allocating the entire Contract Sum to the various portions of the Work which in the aggregate equals the total Contract Sum, divided so as to facilitate payments to Subcontractors, supported by such evidence of correctness as the Construction Manager and Architect may direct or as required by the Owner. It will be necessary for all Contractors to divide their contract into a separate schedule for the work performed at the project. These schedules, when approved by the Construction Manager, Architect and Owner, shall be used to monitor the progress of the Work and as a basis for Certificates for Payment. All items with entered values will be transferred by the Contractor to the "Applications and Certificate for Payment," and shall include the latest approved Change Orders and Construction Change Directives. Change Order values and Construction Change Directive values shall be broken down to show the various subcontracts. The Application for Payment shall be on AIA Document G732 and G703. The approved Voucher is obtainable from the Owner. Each item shall show its total scheduled value, value of previous applications, value of the application, percentage completed, value completed and value yet to be completed. All blanks and columns must be filled in, including every percentage complete figure.

§ 9.2.2 Each Prime Contractor shall include the following separate items in their schedule of values:

- .1 Punch List Work - Minimum of 1% of contract value.
- .2 Value for testing.
- .3 Value for Record Drawings and manuals.
- .4 Value for final clean-up and monthly value for daily clean up by General Contractor.
- .5 Value for equipment start-up and commissioning.
- .6 Value for shop drawings.
- .7 Safety protections.
- .8 Project Schedule and monthly updates.
- .9 Allowances.
- .10 TAB coordination shiv, belts and modifications as required.
- .11 Value for Owner's attic stock.
- .12 Winter Protection.

### § 9.3 Applications for Payment

§ 9.3.1 At least ten days before the date established for each progress payment, the Contractor shall submit to the Construction Manager and Architect an itemized Application for Payment prepared in accordance with the schedule of values for their Contract on AIA Document G732 and G703 and the Contract Documents.

*(Paragraphs deleted)*

§ 9.3.2 Applications for Payment shall not include requests for payment for portions of the Work for which the Contractor does not intend to pay a Subcontractor or supplier, unless such Work has been performed by others whom the Contractor intends to pay.

*(Paragraph deleted)*

§ 9.3.3 Until substantial completion, the Owner will pay 98% of the amount due the Contractor on account of progress payments until a balance of \$500,000 is due the Contractor. The retainage will then be increased to Five Percent (5%) of the \$500,000.00 balance of the contract until final completion. The retainage will be held until final acceptance of the project by the Architect, the Construction Manager and the Owner. The Contractor shall submit a separate voucher for the full amount of the retainage along with the Consent of Surety, A.I.A. Form G707A and the Contractor shall be required to furnish a Maintenance Bond for 10% of the Project Cost for a period of two (2) years from the Date of Substantial Completion.



**§ 9.3.4** Upon acceptance of the work performed pursuant to this Contract for which the Contractor has agreed to the withholding of payments pursuant to Article 9 of this Contract, all amounts being withheld by the Owner shall be paid in accordance with Paragraph 9.3.3 without further withholding of any amounts for any purposes whatsoever, provided that the Contract has been satisfactorily completed.

**§ 9.3.5** Each application for payment shall be accompanied by the following, all in form and substance satisfactory to the Owner, Construction Manager and Architect:

- .1 A current contractor's lien waiver and duly executed and acknowledged sworn statement by an officer of the Contractor showing all subcontractors and material supplier with whom the Contractor has entered into subcontracts, the amount of each such subcontract, the amount requested for any subcontractor and material supplier in the requested progress payment and the amount to be paid to the Contractor from such progress payment together with similar sworn statements from all such subcontractors and material supplier.
- .2 Duly executed waivers of mechanics and material supplier's liens from all subcontractors and when appropriate, from material supplier and lower tier subcontractors establishing payment or satisfaction of payment of all amounts requested by the Contractor on behalf of such entities or persons in any previous application for payment.
- .3 A Purchase Order or Voucher if required by the Owner.
- .4 Payroll Verification Affidavit.
- .5 Bill of Sale/Certification for Stored Materials.
- .6 Monthly Project Workforce Report (AA-202).

**§ 9.3.6** At the Owner's option, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner through the Construction Manager, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with Paragraphs 9.3.1, 9.3.2, 9.3.3, 9.3.4 and 9.3.5 satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest, and shall include the costs of applicable insurance, storage, and transportation to the site, for such materials and equipment stored off the site.

**§ 9.3.6.1** With each Application for Payment the Contractor shall submit to the Architect and Owner through the Construction Manager Section 012920 Bill of Sale/Certification for Stored Materials as found in the Project Manual identifying each location where materials are stored off the Project site and the value of materials at each location. The Contractor shall procure insurance satisfactory to the Owner for materials stored off the Project site in an amount not less than the total value thereof. The Contractor shall also provide picture(s) of the stored material(s).

**§ 9.3.6.2** The consent of any surety shall be obtained to the extent required prior to the payment for any materials stored off the Project site.

**§ 9.3.6.3** Representatives of the Owner shall have the right to make inspections of the off-site storage areas at any time.

**§ 9.3.6.4** Materials stored off site shall be protected from diversion, destruction, theft and damage to the satisfaction of the Owner, shall specifically be marked for use on the Project and shall be segregated from other materials at the storage facility.

**§ 9.3.7** The Contractor warrants and agrees that title to all Work will pass to the Owner either by incorporation in the construction or upon receipt of payment therefor by the Contractor; whichever occurs first, free and clear of all liens, claims, security interests, or encumbrances whatsoever, that the vesting of such title shall not impose any obligation on Owner or relieve Contractor of any of its obligations under the Contract, that the Contractor shall remain responsible for damages to or loss of the Work, whether completed or under construction, until responsibility for the Work has been accepted by Owner in the manner set forth in the Contract Documents, and that no Work covered by an Application for Payment will have been acquired by the Contractor, or by any other person performing Work at the site or furnishing materials and equipment for the Project, subject to an agreement under which an interest therein or an encumbrance thereon is retained by the seller or otherwise imposed by the Contractor or such other person.



#### § 9.4 Certificates for Payment

§ 9.4.1 The Architect, in consultation with the Construction Manager, will, after receipt of the Contractor's Application for Payment, and as indicated in the Form of Agreement Between Owner and Contractor either (1) issue to the Owner a Certificate for Payment in the full amount of the Application for Payment, with a copy to the Contractor; or (2) issue to the Owner a Certificate for Payment for such amount as the Architect and Construction Manager determines is properly due, and notify the Contractor and Owner of the Architect's and Construction Manager's reasons for withholding certification in part as provided in Section 9.5.1 The Contractor warrants and agrees that title to all Work will pass to the Owner either by incorporation in the construction or upon receipt of payment therefor by the Contractor, whichever occurs first, free and clear of all liens, claims, security interests, or encumbrances whatsoever, that the vesting of such title shall not impose any obligation on Owner or relieve Contractor of any of its obligations under the Contract, that the Contractor shall remain responsible for damages to or loss of the Work, whether completed or under construction, until responsibility for the Work has been accepted by Owner in the manner set forth in the Contract Documents, and that no Work covered by an Application for Payment will have been acquired by the Contractor, or by any other person performing Work at the site or furnishing materials and equipment for the Project, subject to an agreement under which an interest therein or an encumbrance thereon is retained by the seller or otherwise imposed by the Contractor or such other person.

§ 9.4.2 The issuance of a Certificate for Payment will constitute a representation by the Construction Manager and Architect to the Owner, based on the Construction Manager's and Architect's evaluation of the Work and the data in the Application for Payment, that, to the best of the Construction Manager's and Architect's knowledge, information, and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and that the Contractor is entitled to payment in the amount certified. The foregoing representations are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to correction of minor deviations from the Contract Documents prior to completion, and to specific qualifications expressed by the Construction Manager and Architect. However, the issuance of a Certificate for Payment will not be a representation that the Construction Manager or Architect has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work; (2) reviewed construction means, methods, techniques, sequences, or procedures; (3) reviewed copies of requisitions received from Subcontractors and suppliers and other data requested by the Owner to substantiate the Contractor's right to payment; or (4) made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

#### § 9.5 Decisions to Withhold Certification

§ 9.5.1 The Construction Manager or Architect may withhold a Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Construction Manager's or Architect's opinion the representations to the Owner required by Section 9.4.2 cannot be made. If the Construction Manager or Architect is unable to certify payment in the amount of the Application, the Construction Manager will notify the Contractor and Owner as provided in Section 9.4.1. If the Contractor, Construction Manager and Architect cannot agree on a revised amount, the Architect will promptly issue a Certificate for Payment for the amount for which the Construction Manager or Architect is able to make such representations to the Owner. The Construction Manager or Architect may also withhold a Certificate for Payment or, because of subsequently discovered evidence, may nullify the whole or a part of a Certificate for Payment previously issued, to such extent as may be necessary in the Construction Manager's or Architect's opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from acts and omissions described in Section 3.3.2, because of

- .1 defective Work not remedied;
- .2 third party claims filed or reasonable evidence indicating probable filing of such claims, unless security acceptable to the Owner is provided by the Contractor;
- .3 failure of the Contractor to make payments properly to Subcontractors or suppliers for labor, materials or equipment;
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- .5 damage to the Owner or a Separate Contractor;
- .6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay;
- .7 repeated failure to carry out the Work in accordance with the Contract Documents.
- .8 avoidable delay in the progress of the work;
- .9 failure to cooperate with the Construction Manager or Architect relative to the construction schedule, material storage, coordination with the Owner and/or other contractors, clean up and site safety;



- .10 failure to submit shop drawings as required by the Contract Documents;
- .11 failure of any Contractors to comply with mandatory requirements for maintaining record drawings. The Contractor shall be required to check record drawings each month. Written confirmation that the record drawings are up-to-date shall be required by the Construction Manager before approval of the Contractor's monthly payment requisition will be considered;
- .12 safety violations; or
- .13 insurance lapses.

§ 9.5.2 When either party disputes the Construction Manager's or Architect's decision regarding a Certificate for Payment under Section 9.5.1, in whole or in part, that party may submit a Claim in accordance with Article 15.

§ 9.5.3 When the reasons for withholding certification are removed, certification will be made for amounts previously withheld.

§ 9.5.4 If the Architect or Construction Manager withholds certification for payment under Section 9.5.1.3, the Owner may, at its sole option, issue joint checks to the Contractor and to any Subcontractor or supplier to whom the Contractor failed to make payment for Work properly performed or material or equipment suitably delivered. If the Owner makes payments by joint check, the Owner shall notify the Construction Manager, Architect and the Contractor shall reflect such payment on its next Application for Payment.

- .1 If the Contractor disputes any determination by the Construction Manager or Architect with regard to any Certificate of Payment, the Contractor nevertheless expeditiously shall continue to prosecute the Work.
- .2 The failure of the Owner to retain any percentage payable to the Contractor or any change in or variation of the time, method or condition of payments to the Contractor shall not release or discharge to any extent whatsoever the Surety upon any bond given by Contractor hereunder. The Owner shall have the right, but not the duty, to disregard any schedule of items and costs that the Contractor may have furnished and defer or withhold in whole or in part any payment if it appears to the Owner, in its sole discretion, that the balance available in the Contract Sum as adjusted and less retained percentages, may be insufficient to complete the Work.
- .3 Notwithstanding any provision of any law to the contrary, the Contractor agrees that the time and conditions for payment under the Contract for Construction shall be as stated in the Contract for Construction and in the Contract Documents. The Contractor specifically agrees that Owner's failure to give, or timely give, notice of:
  - .a Any error in an invoice or application for payment submitted by the Contractor for payment; or;
  - .b any deficiency or non-compliance with the Contract Documents with respect to any Work for which payment is requested, shall not waive or limit any of the Owner's rights or defenses under the Contract for Construction and the Contract Documents, or require the Owner to make a payment in advance of the time, or in an amount greater than, as provided by the Contract for Construction.

## § 9.6 Progress Payments

§ 9.6.1 After the Architect has issued a Certificate for Payment, the Owner shall make payment in the manner and within the time provided in the Contract Documents and shall so notify the Construction Manager and Architect. Notwithstanding Certification by the Construction Manager, Architect, the Owner may refuse to make payment based on any default by the Contractor including, but not limited to those defaults set forth in Subparagraphs 9.5.1 through 9.5.1.13. The Owner shall not be deemed in default by reason of withholding payment while any of such defaults by the Contractor remain uncured.

§ 9.6.2 The Contractor shall pay each Subcontractor, no later than fourteen (14) days after receipt of payment from the Owner, the amount to which the Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of the Subcontractor's portion of the Work. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors and suppliers (of any tier) within the same time.

§ 9.6.3 The Construction Manager will, on request, furnish to a Subcontractor, if practicable, information regarding percentages of completion or amounts applied for by the Contractor and action taken thereon by the Construction Manager, Architect and Owner on account of portions of the Work done by such Subcontractor.

Init.



§ 9.6.4 The Owner has the right to request written evidence from the Contractor that the Contractor has properly paid Subcontractors and suppliers amounts paid by the Owner to the Contractor for subcontracted Work. If the Contractor fails to furnish such evidence within seven days, the Owner shall have the right to contact Subcontractors and suppliers to ascertain whether they have been properly paid. Neither the Owner, Construction Manager, nor Architect shall have an obligation to pay, or to see to the payment of money to, a Subcontractor or supplier, except as may otherwise be required by law.

§ 9.6.5 The Contractor's payments to suppliers shall be treated in a manner similar to that provided in Sections 9.6.2, 9.6.3 and 9.6.4.

§ 9.6.6 A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.

§ 9.6.7 Unless the Contractor provides the Owner with a payment bond in the full penal sum of the Contract Sum, payments received by the Contractor for Work properly performed by Subcontractors or provided by suppliers shall be held by the Contractor for those Subcontractors or suppliers who performed Work or furnished materials, or both, under contract with the Contractor for which payment was made by the Owner. Nothing contained herein shall require money to be placed in a separate account and not commingled with money of the Contractor, create any fiduciary liability or tort liability on the part of the Contractor for breach of trust, or entitle any person or entity to an award of punitive damages against the Contractor for breach of the requirements of this provision.

§ 9.6.8 Provided the Owner has fulfilled its payment obligations under the Contract Documents, the Contractor shall defend and indemnify the Owner from all loss, liability, damage or expense, including reasonable attorney's fees and litigation expenses, arising out of any lien claim or other claim for payment by any Subcontractor or supplier of any tier. Upon receipt of notice of a lien claim or other claim for payment, the Owner, through the Construction Manager shall notify the Contractor. If approved by the applicable court, when required, the Contractor may substitute a surety bond for the property against which the lien or other claim for payment has been asserted.

§ 9.6.9 The Owner will issue timely payments to the Contractor in accordance with the requirements of "The Prompt Payment Act", N.J.S.A. 2A:30A-1, et seq. The Contractor is hereby notified that the Owner, as a public entity, requires all payments to be approved at scheduled public meetings. The vote on authorization for payments will be made at the first public meeting of the Owner, following the Owner's receipt of the Construction Manager's and Architect's authorization for payment, and paid during the subsequent payment cycle.

#### § 9.7 Failure of Payment

If the Construction Manager and Architect do not issue a Certificate for Payment, through no fault of the Contractor, within fourteen days after receipt of the Contractor's Application for Payment, or if the Owner does not, for reasons other than a default of the Contract, including but not limited to those defaults set forth in Subparagraphs 9.5.1.1 through 9.5.1.12, pay the Contractor within seven days after the date established in the Contract Documents, the amount certified by the Construction Manager and Architect or awarded by binding dispute resolution, then the Contractor may, upon seven additional days' notice to the Owner, Construction Manager, and Architect, stop the Work until payment of the amount owing has been received. The Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shutdown, delay and start-up, plus interest as provided for in the Contract Documents.

#### § 9.8 Substantial Completion

§ 9.8.1 Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof which the Owner agrees to accept separately is sufficiently complete in accordance with this definition and the Contract Documents so that the Owner can occupy or utilize the Work for its intended use. The Work will not be considered substantially complete until all project systems included in the Work are operational as designed and scheduled, all designated or required inspections, certifications, permits, approvals, licenses and other documents from any governmental authority having jurisdiction thereof necessary for the beneficial use and occupancy of the Project are received, designated instruction of Owner's personnel has been completed, and all final finishes within the Contract are in place. In general, the only remaining Work shall be minor in nature, so that the Owner can occupy the building on that date and the completion of the Work by the Contractor would not materially interfere or hamper the Owner's (or those claiming by, through or under the Owner) normal operations. Contractor recognizes that normal



operations requires the use and occupancy of the Work by building's intended occupants without interruption and that any punch list or corrective work shall be done at times when the Work is not so occupied. As a further condition of substantial completion acceptance, the Contractor shall certify that all remaining Work will be completed within thirty (30) consecutive calendar days or as agreed upon following the date of substantial completion. In addition to any other definitions of Substantial Completion as defined by the contract documents, the following is required before the project is considered "Substantially Complete":

1. All required final inspections have been completed by the authority having jurisdiction resulting in a Temporary Certificate of Occupancy, Certificate of Occupancy or a Certificate of Approval.
2. Air Balancing Reports can be hand written field notes but must be reviewed and approved via the shop drawing process by the Mechanical Engineer. Final Air and Water Balancing Reports certified by the licensed balancer are required for "Final Acceptance" and the start of the warranty period. (These reports must be submitted in accordance with the shop drawing process to the Construction Manager and Architect so that they can be tracked and approved and distributed to all applicable parties).
3. Equipment Start Up Reports can be hand written field notes but must be submitted in accordance with the shop drawing process to the Construction Manager and Architect so that they can be tracked and approved and distributed to all applicable parties.
4. Owner On-Site ATC Training: Refer to the ATC specifications for training requirements on-site and off-site. The Owner does not have beneficial use of the mechanical system until they can operate it following this training.

**§ 9.8.2** Before the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall notify the Construction Manager, and the Contractor and Construction Manager shall jointly prepare and submit to the Architect a comprehensive list (Punch List) of items to be completed or corrected prior to final payment. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

**§ 9.8.2.1** The Contractor shall perform a Quality Control/Quality Assurance QC/QA Punch List of all work prior to requesting Substantial Completion and a Punch List from the Architect. The Architect shall take the lead and conduct an onsite review with the Contractor's superintendent and representation from every major sub prime contractor. Notification of this onsite walk-thru shall be provided from the Construction Manager and Owner who may or may not choose to attend. The Architect shall record and distribute this Punch List to the Construction Manager and Contractor for their use and who shall document the completion of the work and the date. After successful completion of the Punch List and all work, the Contractor shall request the Architect to perform a Punch List review walk thru. Substantial Completion shall be requested in accordance with paragraph 9.8.1.

**§ 9.8.3** Upon receipt of the Contractor's list, the Construction Manager and Architect will make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Construction Manager's and Architect's inspection discloses any item, whether or not included on the Contractor's list, which is not sufficiently complete in accordance with the Contract Documents and the requirements above so that the Owner can occupy or utilize the Work or designated portion thereof for its intended use, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Architect. In such case, the Contractor shall then submit a request for another inspection by the Construction Manager and Architect to determine Substantial Completion.

**§ 9.8.4** When the Architect, assisted by the Construction Manager, determines that the Work or designated portion thereof is substantially complete, the Architect will prepare a Certificate of Substantial Completion that shall establish the date of Substantial Completion; establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance; and fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

**§ 9.8.5** The Certificate of Substantial Completion shall be submitted to the Owner, Construction Manager and Contractor for their written acceptance of responsibilities assigned to them in the Certificate.

**§ 9.8.5.1** The Architect's Certificate of Substantial Completion shall be subject to the Construction Manager's and Owner's final approval.



#### **§ 9.9 Partial Occupancy or Use**

**§ 9.9.1** The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, who shall obtain all necessary modifications to its insurance coverage to permit such occupancy or use. In addition, Contractor shall obtain consent of those public authorities having jurisdiction over the Work. Such partial occupancy or use may commence whether or not the portion is substantially complete pursuant to the terms of that Agreement.

**§ 9.9.2** Immediately prior to such partial occupancy or use, the Owner, Construction Manager, Contractor, and Architect shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

**§ 9.9.3** Partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of any Work not complying with the requirements of the Contract Documents; and

- .1 except as hereinafter stated, nor does it waive the Owner's right to Liquidated Damages. Final Acceptance of the Work shall be for the whole Work only and not part.

**§ 9.9.4** As portions of the Project are completed, and occupied, Contractor shall ensure the continuing construction activity will not unreasonably interfere with the use, occupancy and quiet enjoyment of the completed portions thereof.

- .1 The Contractor agrees to coordinate the Work with the Construction Manager, the Architect and the Owner in order to minimize disturbance to occupied portions of the structure.
- .2 In the event performances or scheduled events by the Owner are conducted in close proximity to the Work in progress, the Contractor agrees to cease all work which may disturb the Owner's occupants at the site.

#### **§ 9.10 Final Completion and Final Payment**

**§ 9.10.1** Upon receipt by the Construction Manager of the Contractor's notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Construction Manager and Architect will promptly make such inspection. When the Construction Manager and Architect finds the Work acceptable under the Contract Documents and the Contract fully performed, the Architect will promptly issue a final Certificate for Payment stating that to the best of the Architect's and Construction Manager's knowledge, information and belief, and on the basis of the Architect's and Construction Manager's on-site visits and inspections, the Work has been completed in accordance with the Contract Documents and that the entire balance found to be due the Contractor and noted in the final Certificate is due and payable. The Architect's and Construction Manager's final Certificate for Payment will constitute a further representation that conditions listed in Section 9.10.2 as precedent to the Contractor's being entitled to final payment have been fulfilled. All required close out documentation pursuant to the Contract Documents, shall be assembled and delivered by the Contractor to the Architect as part of the final Application for Payment. The Architect will not issue the final Application for Payment to the Owner until all required close out documentation has been received and approved by the Construction Manager and the Architect and accepted by the Owner.

**§ 9.10.2** Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Architect through the Construction Manager (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect, (3) a written statement that the Contractor knows of no reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment, (5) documentation of any special warranties, such as manufacturers' warranties or specific Subcontractor warranties, and (6) if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts and releases and waivers of liens, claims, security interests, or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner, and (7) evidence of compliance with all requirements of the Contract Documents: notices, certificates, affidavits, other requirements to complete obligations under the Contract Documents, including but not limited to (a) instruction of Owner's representatives in the operation of mechanical, electrical, plumbing and other systems, (b) delivery of keys to Owner through the Construction Manager with keying schedule, master, sub-master and special keys, (c) delivery to Architect through the Construction Manager of Contractor's General Warranty as



described in section 3.5 and each written warranty and assignment thereof prepared in duplicate, certificates of inspections, and bonds for Architect's review and delivery to Owner through the Construction Manager, (d) printed or typewritten operating, servicing, maintenance and cleaning instructions for all Work; parts lists and special tools for mechanical and electrical Work, in approval form, (e) specified Project record documents, (f) all required "Attic Stock" and spare parts, and (g) a Final Waiver of Liens (AIA Document G-706 or other form satisfactory to Owner), covering all Work including that of all Subcontractors, vendors, labor, materials and services, executed by an authorized officer and duly notarized. In addition to the foregoing, all other submissions required by other articles and paragraphs of the Project Manual shall be submitted to the Architect through the Construction Manager before approval of final payment. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien. If a lien remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging the lien, including all costs and reasonable attorneys' fees.

**§ 9.10.3** If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, and the Construction Manager and Architect so confirms, the Owner shall, upon application by the Contractor and certification by the Construction Manager and Architect, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed, corrected, and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of the surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Construction Manager and Architect prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

**§ 9.10.4** The making of final payment shall constitute a waiver of Claims by the Owner except those arising from

- .1 liens, Claims, security interests, or encumbrances arising out of the Contract and unsettled;
- .2 failure of the Work to comply with the requirements of the Contract Documents;
- .3 terms of special warranties required by the Contract Documents; or
- .4 audits performed by the Owner, if permitted by the Contract Documents, after final payment.

**§ 9.10.5** Acceptance of final payment by the Contractor, a Subcontractor, or a supplier, shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.

## **9.11 Liquidated Damages**

**§ 9.11.1** The Contractor understands and agrees that all work must be performed in an orderly and closely coordinated sequence so that the date for substantial completion is met.

**§ 9.11.2** If the Contractor fails to complete his/her work or fails to complete a portion of his/her work, he/she shall pay the Owner, as liquidated damages and not as a penalty, the sum as specified in sub-paragraphs 9.11.5. Such amount is agreed upon as a reasonable and proper measure which the Owner will sustain each calendar day by failure of the Contractor to complete work within the stipulated time. Liquidated damages shall also apply to all Phased construction milestone dates as established by the Phasing Schedule.

**§ 9.11.3** Substantial completion will be determined by the Construction Manager and Architect as defined in paragraph 9.8.1.

**§ 9.11.4** For damage occurring at the time of delay, the Owner may retain the amount due to him/her under this clause from any payments due to the Contractor.

**§ 9.11.5** The Owner will suffer financial loss if the project is not substantially complete on the date set forth in the Contract Documents. The Contractor and the Contractor's Surety shall be liable for and pay to the Owner the sums hereinafter stipulated and fixed, agreed as liquidated damages for each calendar day of delay as follows:

- .1 TWO HUNDRED AND FIFTY DOLLARS (\$250.00) per calendar day of delay beyond the date of Substantial Completion.



## ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY

### § 10.1 Safety Precautions and Programs

The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Contract and the following:

- .1 The Contractor must fully comply with the job safety requirements in addition to all Federal, State and Local safety guidelines. All cost associated with complying with all safety requirements shall be included in each contractor's bid.
- .2 The Contractor will serve as the overall Project Safety Coordinator and shall be responsible for all issues of safety and protection. The Contractor shall designate a safety person at the job site while the contractor is working on the project site. The designated safety person shall be responsible for the safety of their work and for their workers and to make continuous inspections for all safety issues relating to his work. Each Contractor must comply with job Safety Requirements in addition to the Federal Occupational Safety and Health Act (OSHA) and local agency requirements. Failure to comply with safety issues will be grounds for withholding of payments.
- .3 Contractor will comply with all reasonable requests of the Owner with respect to additional security and protections required for work interfacing with Facility Operations. Safety is of utmost importance on this project and all issues relative to safety and protection of the Facility, Staff and Occupants will be treated as emergency needs and will not be subject to the seven-day notice requirements of Article 14.
- .4 Contractor shall provide, relocate and /or maintain barricades, signage, provide flagmen etc. as necessary to ensure public safety and safe egress. Contractor to provide, maintain, relocate and remove in coordination with the Owner and Construction Manager, the perimeter security fence.
- .5 The proper execution of the required safety provisions is directly related to the general condition safety line item on the Schedule of Values. The failure to provide a competent person on site to properly identify and take immediate corrective action may result in deductions to the general condition safety line item of the Schedule of Values.
- .6 The Contractor shall be responsible for the immediate investigation and resolution of all safety and environmental complaints/issues generated by Contractor employees, Owners, Owner's representatives or members of the public.
- .7 The Contractor shall be responsible for providing and maintaining all temporary emergency egress routes. The Contractor shall obtain the approval of the Building and Fire Departments for all temporary emergency egress routes. General Contractor to provide for fire separation walls between occupied areas as required by local officials.
- .8 Contractor shall maintain all egress routes throughout building. Contractor shall post exit signs as coordinated with the Owner and Construction Manager. Contractor shall provide wall hung fire extinguishers throughout building as deemed necessary by the fire officials.
- .9 The Contractor shall supply to the Construction Manager evidence of (2) two OSHA approved means of access/egress to each floor and roof for the course of the entire project for use by all applicable parties. The Contractor shall erect and maintain OSHA approved pedestrian walking bridges, for emergency access/egress and as necessary to protect personnel from overhead work.
- .10 Contractor shall provide OSHA approved pedestrian walking bridges as required to protect against overhead hazards.
- .11 Contractor's safety representative shall perform a daily safety inspection walk through to ensure that all requirements of the OSHA Standards, Fire Protection Standards and Safe Work Practices are being complied with and/or corrected. The responsibility of the Contractor is to provide a safe and healthy work environment for construction personnel, Owner's personnel and representative, and the public.
- .12 Upon written receipt of safety concerns and/or issues, the Contractor shall respond in writing addressing how the safety concerns or issues were resolved. The Owner and Construction Manager shall be copied on all safety-related correspondence.
- .13 The Contractor's response and compliance with correction of deficiencies noted in the safety concerns notice issued by the Authority having jurisdiction is mandatory. Failure to comply will be grounds for withholding of progress payments until the conditions are acceptable to OSHA or Authority having local jurisdiction.
- .14 The Contractor shall provide, when requested by the Construction Manager or Architect a copy of all licenses (welding, asbestos, etc.) as required by applicable agencies.
- .15 The Contractor shall provide, when requested by the Construction Manager or Architect a copy of all testing and inspection reports.
- .16 Contractor shall have all required personal protective equipment and materials available for use by each



- employee as required by Federal, State and Local guidelines.
- .17 Contractor shall supply proper equipment and crew sizes as necessary to safely complete the work.
  - .18 Notify Owner and Construction Manager immediately upon arrival of OSHA to the site.
  - .19 Contractor shall submit to the Owner and Construction Manager all Material Safety Data Sheets and shall cooperate in the posting of all required notifications relative to the use of hazardous substances on the property. Contractor shall comply with New Jersey Law regarding the use or storage of hazardous substances in Schools.
  - .20 For the safety of occupants, staff, and the public, the steel erection must be scheduled and coordinated with the Owner, Construction Manager, and Architect. Swinging of steel and crane boom over occupied space will not be allowed. Steel contractor shall provide additional barricades and fencing around his crane and steel at all times.
  - .21 The speed limit within the project property is 5 MPH. Contractor employees operating vehicles in excess of the speed limit or in any otherwise unsafe manner will be directed to leave the site and will not be permitted to return.
  - .22 Contractor shall submit an acceptable OSHA compliant site-specific written safety plan to the Owner and Construction Manager for the project files within fourteen (14) days from the Notice to Proceed or prior to mobilizing on site, whichever comes first. The Construction Manager's responsibilities for review and coordination of safety programs shall not extend to direct control over or charge of the acts or omissions of the Contractors, Subcontractors, agents or employees of the Contractors or Subcontractors, or any other persons performing portions of the Work and not directly employed by the Construction Manager.

## **§ 10.2 Safety of Persons and Property**

**§ 10.2.1** The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury, or loss to

- .1 employees on the Work and other persons who may be affected thereby;
- .2 the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody, or control of the Contractor, a Subcontractor, or a Sub-subcontractor; and
- .3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction as well as any other real or personal property of the Owner; and
- .4 The Contractor shall provide a third-party Insurance Safety Site Inspection Report monthly and remedy all issues promptly.

**§ 10.2.2** The Contractor shall comply with, and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities, bearing on safety of persons or property or their protection from damage, injury, or loss and further, the Contractor shall give immediate notice to the Owner, Construction Manager, and Architect of the onset of any hazardous conditions at the site which could require the implementation of safety programs or measures by personnel on site.

**§ 10.2.2.1** Contractor shall comply with all regulations required by the Federal Occupational Safety and Health Act (OSHA).

**§ 10.2.2.2** The Contractor shall conform to all applicable New Jersey Department of Environmental Protection regulations.

**§ 10.2.2.3** Contractor shall comply with Construction and Environmental Standards contained in Federal and State Regulations and other applicable laws.

**§ 10.2.3** The Contractor shall implement, erect, and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards; promulgating safety regulations; and notifying the owners and users of adjacent sites and utilities consistent with applicable laws, statutes, ordinances, codes, rules and regulations and lawful orders of public authorities, and prevailing industry practice.



§ 10.2.4 When use or storage of explosives or other hazardous materials or equipment, or unusual methods not prohibited by the Contract Documents are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.

§ 10.2.5 The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in Sections 10.2.1.2 and 10.2.1.3 caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Sections 10.2.1.2 and 10.2.1.3. The Contractor may make a Claim for the cost to remedy the damage or loss to the extent such damage or loss is attributable to acts or omissions of the Owner, Construction Manager, Architect or anyone directly or indirectly employed by either of them, or by anyone for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Section 3.18.

§ 10.2.6 The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner, Construction Manager and Architect.

§ 10.2.7 The Contractor shall not permit any part of the construction or site to be loaded so as to cause damage or create an unsafe condition.

**§ 10.2.8 Injury or Damage to Person or Property**

If either party suffers injury or damage to person or property because of an act or omission of the other party, or of others for whose acts such party is legally responsible, notice of the injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding 21 days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter.

§ 10.2.9 The Contractor shall provide and maintain in good operating condition suitable and adequate fire protection equipment and shall comply with all reasonable recommendations regarding fire protection made by the representatives of the fire insurance company carrying insurance on the Work or by the local fire chief or fire marshal. The area within the site limits under the Contractor's control shall be kept orderly and clean, and all combustible rubbish shall be promptly removed from the site. Contractor will comply with all reasonable requests of the Owner with respect to additional security and protections required for work interfacing with Owner's operations. Safety is of utmost importance on this project and all issues relative to safety and protection of the building and its occupants will be treated as emergency needs and will not be subject to the seven-day notice requirements of Article 14.

§ 10.2.10 The Contractor shall remove snow and/or ice, which may accumulate on the site within areas under his/her control which might result in damage or delay.

§ 10.2.11 The Contractor shall take all precautions necessary to prevent loss and/or damage caused by vandalism, theft, burglary, pilferage, or unexplained disappearance of property of the Owner and Contractor, whether or not forming part of the Work, located within those areas of the Project to which the Contractor has access. Whenever unattended, including nights and weekends, mobile equipment and operable machinery shall be kept locked and made inoperable and immovable.

§ 10.2.12 Neither the Owner, Construction Manager or Architect shall be responsible for providing a safe working place for the Contractor, the Subcontractors or their employees, or any individual responsible to them for the work.

§ 10.2.13 The Contractor shall conform to requirements of OSHA, the Construction Safety Code of the State Department of Labor, those of the AGC Manual, and any other governing body having jurisdiction. The requirements of the New Jersey and Local Building Construction Codes shall apply where they are equal to or more restrictive than the requirements of the Federal Act.

§ 10.2.14 When all or a portion of the Work is suspended for any reason, the Contractor shall securely fasten down all coverings and protect the Work as necessary from damage or any cause.

§ 10.2.15 The Contractor shall promptly report in writing to the Owner, Construction Manager and Architect all



accidents arising out of or in connection with the Work which caused death, personal injury or property damage giving full details and statements of any witnesses. In addition, if death, serious personal injury or serious property damage is caused, the accident shall be reported immediately by telephone or messenger to the Owner, Construction Manager and Architect.

**§ 10.2.16** Contractor is required to follow and enforce the work rules set forth below. Failure to comply with or enforce any of these rules will be grounds for suspension and/or termination of their Contract:

- .1 No use of alcoholic beverages prior to or during working hours. Anyone found impaired will be removed from the Project site.
- .2 No use of illegal drugs or prescription medications which could induce drowsiness or otherwise impair perception or performance. Use of illegal drugs may result in prosecution to the fullest extent of the law. Any warning associated with use of prescription drugs must be complied with, particularly warning against operation of machinery and equipment.
- .3 Horseplay or rough-housing will not be allowed.
- .4 Sexual, racial, or ethnic harassment, or similar conduct will not be tolerated.
- .5 All employees shall use proper sanitation habits including use of toilet and trash facilities.
- .6 All employees shall dress in clothing that identifies their company and is appropriate for the work they are to perform. All personnel are to wear hardhats, safety shoes, glasses, gloves, masks or respirators, noise protection devices, and other protective clothing and equipment as required by OSHA standards.
- .7 All equipment is to be properly stored and/or secured at the end of the workday or if it is to remain idle for greater than one hour.
- .8 All personnel are to be made aware of the availability of Material Safety Data Sheets for materials used at the Project site. This information is available from the Contractor using the product. The Contractor shall maintain a copy of all MSDS at the construction site for all personnel to review.
- .9 Enforce a full time no smoking or alcohol use policy for all employees during the entire course of the project. Any worker found violating these restrictions, or being belligerent, will be subject to removal from the site. (Contractors shall post required signs).

### **§ 10.3 Hazardous Materials and Substances**

**§ 10.3.1** The Contractor is responsible for compliance with any requirements included in the Contract Documents regarding hazardous materials or substances. If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and notify the Owner, Construction Manager and Architect of the condition.

**§ 10.3.2** Upon receipt of the Contractor's notice, the Owner shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to cause it to be rendered harmless. Unless otherwise required by the Contract Documents, the Owner shall furnish in writing to the Contractor, Construction Manager and Architect the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of the material or substance or who are to perform the task of removal or safe containment of the material or substance. The Contractor, the Construction Manager and the Architect will promptly reply to the Owner in writing stating whether or not either has reasonable objection to the persons or entities proposed by the Owner. If either the Contractor, Construction Manager or Architect has an objection to a person or entity proposed by the Owner, the Owner shall propose another to whom the Contractor, Construction Manager and the Architect have no reasonable objection. When the material or substance has been rendered harmless, Work in the affected area shall resume upon written agreement of the Owner and Contractor. By Change Order, the Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable additional costs of shutdown, delay, and start-up.

**§ 10.3.3** To the fullest extent permitted by law, the Owner shall indemnify and hold harmless the Contractor, Subcontractors, Construction Manager, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work in the affected area if in fact the material or substance presents the risk of bodily injury or death as described in Section 10.3.1 and has not been rendered harmless, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of



tangible property (other than the Work itself), except to the extent that such damage, loss, or expense is due to the fault or negligence of the party seeking indemnity.

§ 10.3.4 The Owner shall not be responsible under this Section 10.3 for hazardous materials or substances the Contractor brings to the site unless such materials or substances are required by the Contract Documents. The Owner shall be responsible for hazardous materials or substances required by the Contract Documents, except to the extent of the Contractor's fault or negligence in the use and handling of such materials or substances.

§ 10.3.5 The Contractor shall reimburse the Owner for the cost and expense the Owner incurs (1) for remediation of hazardous materials or substances the Contractor brings to the site and negligently handles, or (2) where the Contractor fails to perform its obligations under Section 10.3.1, except to the extent that the cost and expense are due to the Owner's fault or negligence.

*(Paragraph deleted)*

#### § 10.4 Emergencies

*(Paragraph deleted)*

§ 10.4.1 In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury, or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 15 and Article 7.

#### § 10.4.2 – Emergency/Safety Plan

- .1 All parties involved in the construction process should be aware of emergency services that may be required during the construction process.
- .2 Contractor shall establish the site-specific Emergency Action Plan and, after approval by the local authorities, shall display at site trailers and various locations at the site.
- .3 In case of an accident, emergency, or injury on the job site, the Contractor shall immediately follow the Site-Specific Emergency Action Plan. Following the incident, the Contractor shall submit to the Owner and Construction Manager a complete written accident report detailing the circumstances which caused the accident, extent of injuries, damage to the building, time of accident, corrective action required, etc.

### ARTICLE 11 INSURANCE AND BONDS

#### § 11.1 Contractor's Insurance and Bonds

§ 11.1.1 All insurance provisions shall be confirmed with Owner's Insurance Agent. Contractor shall, without in any way altering Contractor's liability under the Contract or applicable law, obtain, pay for and maintain insurance for the coverages and amounts of coverage not less than those set forth below in the Schedule of Insurance Coverages and shall provide to Owner and Construction Manager certificates issued by insurance companies satisfactory to Owner to evidence such coverage no later than seven days of the date of the execution of this Contract and prior to any personnel or equipment being brought onto and/or before any work commences at the job site. The coverage afforded under any insurance obtained pursuant to this paragraph shall be primary and non-contributory to any valid and collectible insurance carried separately by any of the indemnities. Such certificates shall provide that there shall be no cancellation, non-renewal or material change of such coverage without thirty (30) days prior written notice to Owner and Construction Manager. In the event of any failure by Contractor to comply with the provisions of this Paragraph 11.1, Owner may, at its option, on notice to Contractor, suspend the Contract for cause until there is full compliance with this Paragraph 11.1 and/or terminate the Contract for cause. Alternatively, Owner may purchase such insurance at Contractor's expense, provided that Owner shall have no obligation to do so, and if Owner shall do so, Contractor shall not be relieved of or excused from the obligation to obtain and maintain such insurance amounts and coverages. Contractor shall provide the Owner, Construction Manager and Architect a copy of any and all applicable insurance policies.

- .1 To the fullest extent permitted by law the Contractor shall indemnify and hold harmless all parties or persons described in Section 3.18.

§ 11.1.2 The Contractor shall require all Subcontractors to carry similar insurance coverages and limits of liability as required under this Article 11, adjusted to the nature of Subcontractors' operations and submit same through Contractor to Owner, Construction Manager and Architect for approval, before any personnel or equipment is brought onto the site and/or before any work commences.



§ 11.1.3 In the event Contractor fails to obtain the required certificates of insurance from the Subcontractor and a claim is made or suffered, the Contractor shall indemnify, defend and hold harmless all parties or persons described in Section 3.18 from any and all claims for which the required insurance would have provided coverage. This indemnity obligation is in addition to any other indemnity obligation provided in the Contract.

§ 11.1.4 The Contractor shall cause the commercial liability coverage required by the Contract Documents to include (1) all parties or persons described in Section 3.18 as additional insureds for claims caused in whole or in part by the Contractor's negligent acts or omissions during the Contractor's operations; and (2) the Owner, Construction Manager and Architect as an additional insured for claims caused in whole or in part by the Contractor's negligent acts or omissions during the Contractor's completed operations.

## § 11.2 Schedule of Insurance Coverages

### § 11.2.1

- .1 **Commercial General Liability** of not less than \$5,000,000, naming all parties or persons described in Section 3.18 as additional insureds on a primary and non-contributory basis.
- .2 **Worker's Compensation** in the Statutory amount together with Employer's Liability Insurance of \$500,000 for each accident.
- .3 **Comprehensive Automobile Liability Insurance** of \$1,000,000, naming all parties or persons described in Section 3.18 as additional insureds on a primary and non-contributory basis.
- .4 **Sexual Harassment** of not less than \$1,000,000, naming all parties or persons described in Section 3.18 as additional insureds on a primary and non-contributory basis.

§ 11.2.2 **Contractors Pollution Liability Insurance** including limits of \$1,000,000 each Incident/\$2,000,000 aggregate and including full coverage for mold, legionella, asbestos, and lead. All parties or persons described in Section 3.18 are to be included as additional insureds on a primary and non-contributory basis.

§ 11.2.3 **Builder's Risk Insurance** Contractor shall provide for all risk of physical loss or damage to the property described hereunder in an amount equal to the Total Project Value and furnished under Construction Contracts for the School Facilities Project; excepting excavations, foundations and other structures customarily excluded by such insurance. The Policy shall name all parties or persons described in Section 3.18 as loss payee as their interests may appear on a primary and non-contributory basis. The Builders Risk Policy is to include coverage for the perils of Earthquake, Flood, Full Windstorm, Equipment Breakdown and Theft (excluding employee theft), contain an endorsement allowing permission to occupy and include coverage for both transit and offsite storage. The policy is also to include all Contractors, Subcontractors and Sub-subcontractors as well as all parties or persons described in Section 3.18 as additional insureds on a primary and non-contributory basis. The contractor and all subcontractors are responsible for all policy deductibles and uninsured or underinsured losses.

## § 11.3 Bonds, Performance and Payment

§ 11.3.1 Contractor shall furnish a performance bond and labor and material payment bond meeting all statutory requirements of the State of New Jersey in form and substance satisfactory to the Owner and without limitation complying with the following specific requirements:

- .1 Except as otherwise required by statute, the form and substance of such bonds shall be satisfactory to the Owner in the Owner's sole judgment;
- .2 The bonds shall be executed by a responsible surety licensed in the State of New Jersey Best's rating of no less than A-/X and shall remain in effect for a period of not less than two years following the date of final acceptance or the time required to resolve any items of incomplete or inadequate work and the payment of any disputed amounts, whichever time period is longer;
- .3 The performance bond and the labor and material payment bond shall each be in an amount equal to the Contract Sum;
- .4 The Contractor shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of his power of attorney indicating the monetary limit of such power;
- .5 Any bond under this Paragraph 11.3.1 must display the surety's bond number. A rider including the following provisions shall be attached to each bond:
  - .a Surety hereby agrees that it consents to and waives notice of any addition, alteration, omission, change or other modification of the Contract Documents which singularly or in the aggregate equals or is less than 20% of the Contract Sum. Except as to increases in the Contract Sum in



excess of the percentage set forth in this clause 11.3.1.5.a. Any other alterations, change, extension of time or other modification of the Contract Documents or a forbearance on the part of either the Owner or the Contractor to the other shall not release the surety of its obligations hereunder and notice to surety of such matter is hereby waived.

- .b Surety further agrees that in the event of any default by the Owner in the performance of the Owner's obligations to the Contractor under the Contract, the Contractor or surety shall cause written notice of such default (specifying said default in writing) to be given to the Owner and Construction Manager, and the Owner shall have 30 days after receipt of such notice within which to cure such default of such additional reasonable time as may be required if the nature of such default is such that it cannot be cured within 30 days. Such notice of default shall be sent by certified or registered U.S. mail, return receipt requested, first class postage prepaid to the Owner.

#### **§ 11.4 Maintenance of Insurance**

**§ 11.4.1** If any of the foregoing insurance coverages are required to remain in force after final payment, including, but not limited to coverage for completed operations, an additional certificate evidencing continuation of such coverage shall be submitted to the Construction Manager and Architect with the Final Application for Payment.

**§ 11.4.2** In no event shall any failure of the Owner to receive certificates of policies required under paragraph 11.1 or to demand receipt of such certificates prior to the Contractor commencing Work be construed as a waiver of the Owner, the Construction Manager or the Architect of the Contractor's obligations to obtain insurance pursuant to this Article 11. The obligation to procure and maintain any insurance required by this Article 11 is a separate responsibility of the Contractor and independent of the duty to furnish a certificate of such insurance policies.

**§ 11.4.3** If the Contractor fails to purchase and maintain or require to be purchased and maintained any insurance required under this Article 11, the Owner may, but shall not be obligated to, upon five days written notice to the Contractor, purchase such insurance on behalf of the Contractor and shall be entitled to deduct said cost from the Contractor's Contract Sum.

*(Paragraphs deleted)*

**§ 11.4.4** When any required insurance due to the attainment of a normal expiration date or renewal date shall expire the Contractor shall supply the Owner and Construction Manager with certificates of insurance and amendatory riders or endorsements that clearly evidence the continuation of all coverage in the same manner, limits of protection and scope as was provided by the previous policy. In the event any renewal or replacement policy for whatever reason obtained or required is written by a carrier other than that with whom the coverage was previously placed, or the subsequent policy differs in any way from the previous policy, the Contractor shall also furnish replacement policy unless the Owner provides the Contractor with prior written consent to submit only a certificate of insurance for any such policy. All renewal and or replacement policies shall be in form and substance satisfactory to the Owner and written by carriers acceptable to the Owner.

**§ 11.4.5** The Contractor shall cause each subcontractor to (1) procure insurance in the amounts set for in Paragraph 11.2 and (2) name the indemnities under Paragraph 3.18 as additional insureds under the subcontractor's comprehensive general liability policy. The additional insured endorsement included on the subcontractor's comprehensive general liability policy shall state that coverage is afforded the additional insureds with respect to claims arising out of operations performed by or on behalf of the Contractor. If the additional insureds have other insurance, which is applicable to the claims, such other insurance shall be on an excess or contingent basis. The amount of the insurance liability under this insurance policy shall not be reduced by the existence of such other insurance.

**§ 11.4.6** Property insurance provided by the Owner shall not cover any tools, apparatus, machinery, scaffolding, hoists, forms, staging, shoring, or other similar items commonly referred to as construction equipment which may be on the site and the capital value of which is not included in the work. The Contractor shall make its own arrangements for any insurance it might require on such construction requirement. Any such policy obtained by the Contractor under this Paragraph 11.4.6 shall include a waiver of subrogation.

**§ 11.4.7** The Contractor may carry whatever additional insurance he/she deems necessary to protect him/herself against hazards not covered for theft, collapse, water damage, materials and equipment stored on the site, and for



materials and equipment stored off site, and against loss of owned or rented capital equipment and tools owned by mechanics or any tools, equipment, scaffolding, staging, towers and forms owned or rented by the Contractor, the capital value of which is not included in the cost of the Work.

**§ 11.4.8** All insurance coverage procured by the Contractor shall be provided by insurance companies having policy holder ratings no lower than "A-" and financial rating no lower than, "X" in the Best's Insurance guide, latest edition in effect as the date of the Contract and subsequently in effect at the time of the renewal of the policies required by the Contract Documents which coverage shall be maintained for no less than two (2) years following Substantial Completion.

**§ 11.4.9** If the Owner or the Contractor is damaged by the failure of the other party to purchase or maintain insurance required under Article 11, then the party who failed to purchase or maintain the insurance shall bear all reasonable costs (including attorney's fees and court and settlement costs) properly attributable thereto.

**§ 11.4.10** The Contractors must remove all "X, C & U" exclusions from their policies.

## **ARTICLE 12 UNCOVERING AND CORRECTION OF WORK**

### **§ 12.1 Uncovering of Work**

**§ 12.1.1** If a portion of the Work is covered contrary to the Construction Manager's or Architect's request or to requirements specifically expressed in the Contract Documents, it must, if requested in writing by the Architect, be uncovered for the Architect's examination and be replaced at the Contractor's expense without change in the Contract Time.

**§ 12.1.2** If a portion of the Work has been covered that the Construction Manager or Architect has not specifically requested to examine prior to its being covered, the Construction Manager or Architect may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, the Contractor shall be entitled to an equitable adjustment to the Contract Sum and Contract Time as may be appropriate. If such Work is not in accordance with the Contract Documents, the costs of uncovering the Work, and the cost of correction, shall be at the Contractor's expense.

### **§ 12.2 Correction of Work**

#### **§ 12.2.1 Before Substantial Completion**

The Contractor shall promptly correct Work rejected by the Construction Manager or Architect or failing to conform to the requirements of the Contract Documents, discovered before Substantial Completion and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and replacement, and compensation for the Construction Manager's and Architect's services and expenses made necessary thereby, shall be at the Contractor's expense. If prior to the date of Substantial Completion, the Contractor, a subcontractor or anyone for whom either is responsible, uses or damages any portion of the Work or existing conditions, including without limitation, mechanical, electrical, plumbing and other building systems, machinery, equipment or other mechanical device, the Contractor shall cause each such item to be restored to "like new condition" at no expense to the Owner.

#### **§ 12.2.2 After Substantial Completion**

**§ 12.2.2.1** In addition to the Contractor's obligations under Section 3.5, if, within two (2) years after the date of Substantial Completion of the Work or designated portion thereof or after the date for commencement of warranties established under Section 9.9.1, or by terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of notice from the Owner through the Construction Manager to do so, unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. During the two-year period for correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor and to make a claim for breach of warranty. If the Contractor fails to correct nonconforming Work within a reasonable time during that period after receipt of notice from the Owner, Construction Manager or Architect, the Owner may correct it in accordance with Section 2.5.

- .1 The obligations under Paragraph 12.2 shall cover any repairs and replacement to any part of the Work or other property caused by the defective Work.



- .2 Upon completion of any work under or pursuant to this Paragraph 12.2., the two-year correction period in connection with the work requiring correction shall be renewed and recommenced.

§ 12.2.2.2 The two-year period for correction of Work shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual completion of that portion of the Work.

§ 12.2.2.3 The two-year period for correction of Work shall not be extended by corrective Work performed by the Contractor pursuant to this Section 12.2.

§ 12.2.3 The Contractor shall remove from the site portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.

§ 12.2.4 The Contractor shall bear the cost of correcting destroyed or damaged construction of the Owner or Separate Contractors, whether completed or partially completed, caused by the Contractor's correction or removal of Work that is not in accordance with the requirements of the Contract Documents.

§ 12.2.5 Nothing contained in this Section 12.2 shall be construed to establish a period of limitation with respect to other obligations the Contractor has under the Contract Documents. Establishment of the two-year period for correction of Work as described in Section 12.2.2 relates only to the specific obligation of the Contractor to correct the Work and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

### § 12.3 Acceptance of Nonconforming Work

§ 12.3.1 If the Owner prefers to accept Work that is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Sum will be reduced as appropriate and equitable. Such adjustment shall be affected whether or not final payment has been made. This Subparagraph relates exclusively to the knowing acceptance of nonconforming work by the Owner. It has no applicability to work accepted by the Owner, Construction Manager or Architect without the knowledge that such work fails to conform to the requirements of the Contract Documents.

§ 12.3.2 The Contractor and its Surety guaranty to make good, repair and/or correct, at no cost or expense to the Owner, any and all latent defects hereafter discovered, provided only that notice in writing, shall be given by the Owner to the Contractor within two years of the discovery of such defects.

- .1 This obligation shall survive the termination of any or all other obligation or obligations under the contract Documents and it is agreed by the Contractor and its Surety that in the event the Owner is required to bring suit under this provision against the Contractor or its Surety to enforce this obligation, the contractor and its Surety hereby waive any defense of the status of limitations.

## ARTICLE 13 MISCELLANEOUS PROVISIONS

### § 13.1 Governing Law

The Contract shall be governed by the law of New Jersey.

### § 13.2 Successors and Assigns

§ 13.2.1 The Owner and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to covenants, agreements, and obligations contained in the Contract Documents. Except as provided in Section 13.2.2, neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

§ 13.2.2 The Owner may, without consent of the Contractor, assign the Contract to a lender providing construction financing for the Project, if the lender assumes the Owner's rights and obligations under the Contract Documents. The Contractor shall execute all consents reasonably required to facilitate the assignment.



### **§ 13.3 Rights and Remedies**

**§ 13.3.1** Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law.

**§ 13.3.2** No action or failure to act by the Owner, Construction Manager, Architect, or Contractor shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval or acquiescence in a breach thereunder, except as may be specifically agreed upon in writing.

### **§ 13.4 Tests and Inspections**

**§ 13.4.1** Tests, inspections, and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules, and regulations or lawful orders of public authorities. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections, and approvals. The Contractor shall give the Construction Manager and Architect timely notice of when and where tests and inspections are to be made so that the Construction Manager and Architect may be present for such procedures. The Owner shall bear costs of tests, inspections, or approvals that do not become requirements until after bids are received or negotiations concluded. The Owner shall directly arrange and pay for tests, inspections, or approvals where building codes or applicable laws or regulations so require.

**§ 13.4.2** If the Construction Manager, Architect, Owner, or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection, or approval not included under Section 13.4.1, the Construction Manager and Architect will, upon written authorization from the Owner, instruct the Contractor to make arrangements for such additional testing, inspection, or approval, by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Construction Manager and Architect of when and where tests and inspections are to be made so that the Architect may be present for such procedures. Such costs, except as provided in Section 13.4.3, shall be at the Owner's expense.

**§ 13.4.3** If procedures for testing, inspection, or approval under Sections 13.4.1 and 13.4.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure, including those of repeated procedures and compensation for the Construction Manager's and Architect's services and expenses, shall be at the Contractor's expense. The Contractor also agrees that the cost of testing services required for the convenience of the Contractor in his/her scheduling and performance of the Work and the cost of testing services related to remedial operations performed to correct deficiencies in the Work shall be borne by the Contractor.

**§ 13.4.4** Required certificates of testing, inspection, or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Architect through the Construction Manager.

**§ 13.4.5** If the Construction Manager or Architect is to observe tests, inspections, or approvals required by the Contract Documents, the Construction Manager or Architect will do so promptly and, where practicable, at the normal place of testing.

**§ 13.4.6** Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

### **§ 13.5 Interest**

**§ 13.5.1** The Contractor shall not be entitled to any payment of interest for any reason, action or inaction by the Construction Manager, the Architect or the Owner.

**§ 13.5.2** Any payments withheld for time delays, faulty materials, or workmanship, shall not bear interest for period of delay or non-acceptance.



## ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT

### § 14.1 Termination by the Contractor

§ 14.1.1 The Contractor may terminate the Contract in the manner provided in Subparagraph 14.1.2 if repeated suspensions, delays or interruptions by the Owner as described in Paragraph 14.3 constitute in the aggregate more than 100% of the total number of days scheduled for completion or 120 days in any 365-day period, whichever is less, or if all the Work is entirely stopped for a continuous period of 45 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, for any of the following reasons:

- .1 Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be stopped;
- .2 An act of government, such as a declaration of national emergency, that requires all Work to be stopped;
- .3 Because the Construction Manager has not certified, or the Architect has not issued a Certificate for Payment and has not notified the Contractor of the reason for withholding certification as provided in Section 9.4.1, or because the Owner has not made payment on a Certificate for Payment within the time stated in the Contract Documents.

§ 14.1.2 If one of the above reasons exist, the Contractor may, upon fourteen (14) days written notice to the Owner, Construction Manager and Architect, terminate the Contract, unless this reason is cured prior to the expiration of the notice, and recover from the Owner payment of work properly executed in accordance with the Contract Documents (the basis for such payment shall be as provided in the Contract) and for payment for cost directly related to work thereafter performed by Contractor in terminating such work including reasonable demobilization and cancellation charges provided said work is authorized in advance by Construction Manager, Architect and Owner.

§ 14.1.3 The Owner shall not be responsible for damages for loss of anticipated profits on work not performed on account of any termination described in Subparagraph 14.1.1 and 14.1.2.

§ 14.1.4 If the Work is stopped for a period of 45 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, or their agents or employees or any other persons or entities performing portions of the Work because the Owner has repeatedly failed to fulfill the Owner's obligations under the Contract Documents with respect to matters important to the progress of the Work, the Contractor may, upon seven additional days' notice to the Owner, Construction Manager and the Architect, terminate the Contract and recover from the Owner as provided in Section 14.1.3.

### § 14.2 Termination by the Owner for Cause

§ 14.2.1 The Owner may terminate the Contract if the Contractor

- .1 repeatedly refuses or fails to supply enough properly skilled workers or proper materials and/or equipment;
- .2 fails to make prompt payment to Subcontractors or suppliers in accordance with the respective agreements between the Contractor and the Subcontractors or suppliers;
- .3 repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority;
- .4 disregards the instructions of Construction Manager, Architect or Owner (when such instructions are based on the requirements of the Contract Documents);
- .5 is adjudged bankrupt or insolvent, or makes a general assignment for the benefit of Contractor's creditors, or a trustee or a receiver is appointed for Contractor or for any of its property, or files a petition to take advantage of any debtor's act, or to recognize under bankruptcy or similar laws;
- .6 breaches any warranty made by the Contractor under or pursuant to the Contract Documents;
- .7 fails to furnish the Owner with assurances satisfactory to the Owner evidencing the Contractor's ability to complete the Work in compliance with the requirements of the Contract Documents;
- .8 fails after the commencement of the Work to proceed continuously with the construction and completion of the work for more than 10 days except as permitted under the Contract Documents; or
- .9 otherwise does not fully comply with the Contract Documents.

§ 14.2.2 When  
(Paragraphs deleted)



the Owner terminates the Contract for one of the reasons stated in Section 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished.

**§ 14.2.3** If the costs of finishing the Work, including compensation for the Construction Manager's and Architect's and any other Consultant's services and expenses made necessary thereby, and other costs and expenses identified hereinafter, exceed the unpaid balance of the Contract Sum, the Contractor and its Surety shall pay the difference to the Owner upon demand. The costs of finishing the Work include, without limitation, all reasonable attorney's fees, additional title costs, insurance, additional interest because of any delay in completing the Work, and all other direct and indirect consequential costs, including, without limitation, Liquidated Damages for untimely completion as specified in the Contract Documents, incurred by the Owner by reason of, or arising from, or relating to the termination of the Contractor as stated herein.

*(Paragraph deleted)*

**§ 14.3 Suspension by the Owner for Convenience**

**§ 14.3.1** The Owner may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work, in whole or in part for such period of time as the Owner may determine.

**§ 14.3.2** The Contract Sum and Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay, or interruption under Section 14.3.1. Adjustment of the Contract Sum shall include profit. No adjustment shall be made to the extent

- .1 that performance is, was, or would have been, so suspended, delayed, or interrupted, by another cause for which the Contractor is responsible; or
- .2 that an equitable adjustment is made or denied under another provision of the Contract.

**§ 14.4 Termination by the Owner for Convenience**

**§ 14.4.1** The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause and request demobilization upon 20 days notice to Contractor. The Contractor will not be entitled to seek, any claim for increased costs, loss of profits, delay damages, or other similar consequential and direct damages incurred due to the District's Termination of the Project for Convenience.

**§ 14.4.2** Upon receipt of notice from the Owner of such termination for the Owner's convenience, the Contractor shall

- .1 cease operations as directed by the Owner in the notice;
- .2 take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and
- .3 except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.

**§ 14.4.3** In case of such termination for the Owner's convenience, the Owner shall pay the Contractor shall be entitled to Owner payment for Work performed as of the date of termination in accordance with the contract Documents. The Contractor shall, as a condition of receiving the payments referred to herein, execute and deliver all such papers, turn over all plans, documents and files of whatsoever nature required by the Owner, and take all such steps, including the legal assignment of its contractual rights, as the Owner may require for the purpose of fully vesting in the Owner the rights and benefits of the Contractor. The Contractor warrants that it will enter into no subcontracts or other agreements that would adversely impact the Owner's rights or increase the Owner's obligations under this paragraph. In no event shall the Owner be liable to the Contractor for lost or anticipated profits or consequential damages, or for any amount in excess of the compensation due to the Contractor in accord with the Contract Documents for the Work performed as of the date of termination. The warranty and indemnity obligations of the Contractor and Surety shall survive and continue, notwithstanding any termination pursuant to this paragraph, with respect to the Work performed as of the date of termination.

**§ 14.4.4** If Owner terminates the Contract for cause pursuant to Paragraph 14.2 and it is subsequently determined that the Owner was not authorized to terminate the Contract as provided in Paragraph 14.2, the Owner's termination shall be treated as a termination for convenience under this Paragraph 14.4 and the rights and obligations of the parties shall be the same as if the Owner has issued a notice of termination to the Contractor as provided in this Paragraph 14.4.



## **ARTICLE 15 CLAIMS AND DISPUTES**

### **§ 15.1 Claims**

#### **§ 15.1.1 Definition**

A Claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money, a change in the Contract Time, or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. The responsibility to substantiate Claims shall rest with the party making the Claim. This Section 15.1.1 does not require the Owner to file a Claim in order to impose liquidated damages in accordance with the Contract Documents.

#### **§ 15.1.2 Time Limits on Claims**

**§ 15.1.2.1** Issues involving the applicable statute of limitations shall be governed by New Jersey Law.

**§ 15.1.2.2** No act or omission by the Owner, Construction Manager or Architect, or by anyone acting on behalf of either shall be deemed or construed as a waiver or limitation of any right or remedy under the Contract Documents, or as an admission, acceptance, or approval with respect to any breach in the Contract for Construction or failure to comply with the Contract Documents by the Contractor, unless the Owner expressly agrees in writing.

**§ 15.1.2.3** The Owner's exercise or failure to exercise any rights, claims or remedies it may have arising out of or relating to the Contract Documents shall not release, prejudice, or discharge the Owner's other rights and remedies, nor shall it give rise to any right, claim, remedy or defense by any other person, including the Contractor, its Surety, any Subcontractor, or any other person or entity.

**§ 15.1.2.4** Whenever possible, each provision of the Contract Documents shall be interpreted in a manner as to be effective and valid under applicable law. If, however, any provision of the Contract Documents or portion thereof is prohibited or found invalid by law, only such invalid provision or portion thereof shall be ineffective and shall not invalidate or affect the remaining provision of the Contract Documents or valid portions of such provision, which shall be deemed severable. Further, if any provision of this Contract is deemed inconsistent with applicable law, applicable law shall control.

**§ 15.1.2.5** Contractor shall promptly pay to Owner all costs and reasonable attorney's fees incurred in connection with any action or proceeding in which Owner prevails, based on a breach of the Contract or other dispute arising out of or in connection with the Contract.

**§ 15.1.2.6** In the event of the appointment of a trustee and/or receiver or any similar occurrence affecting the management of the account of the Contractor pertaining to the Work, it shall be the obligation of the Contractor, its representatives, receivers, sureties, or successors in interest to continue the progress of the Work without delay and specifically to make timely payment to Subcontractors and Suppliers of all amounts that are lawfully due them and to provide the Owner and all Subcontractors and Suppliers whose work may be affected with timely notice of the status of receivership, bankruptcy, etc., and the status of their individual accounts.

#### **§ 15.1.3 Notice of Claims**

**§ 15.1.3.1** Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered prior to expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party and to the Initial Decision Maker with a copy sent to the Construction Manager and Architect, if the Construction Manager and/or Architect is not serving as the Initial Decision Maker. Claims by either party under this Section 15.1.3.1 shall be initiated within 21 days after occurrence of the event giving rise to such Claim or within five days after the claimant first recognizes the condition giving rise to the Claim, whichever is later.

**§ 15.1.3.2** Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party. In such event, no decision by the Initial Decision Maker is required.

**§ 15.1.3.3** Injury or Damage to Person or Property. If either party to the Contract suffers injury or damage to person or property because of an act or omission of the other party, or of others for whose acts such party is legally responsible, written notice of such injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding five days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter.



**§ 15.1.4 Continuing Contract Performance**

**§ 15.1.4.1** Pending final resolution of a Claim, except as otherwise agreed in writing or as provided in Section 9.7 and Article 14, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.

**§ 15.1.4.2** The Contract Sum and Contract Time shall be adjusted in accordance with the Initial Decision Maker's decision, subject to the right of either party to proceed in accordance with this Article 15. The Architect will issue Certificates for Payment in accordance with the decision of the Initial Decision Maker.

**§ 15.1.5 Claims for Additional Cost**

If the Contractor wishes to make a Claim for an increase in the Contract Sum, written notice as provided herein shall be given to the Owner, Construction Manager and Architect before proceeding to execute the Work and within five days after the occurrence of the event giving rise to such Claim for increase in the Contract Sum. The foregoing written notice shall contain a written statement from the Contractor setting forth in detail the nature and cause of the Claim and an itemized statement of the increase requested. No such written notice shall form the basis of an increase to the Contract Sum unless and until such increase has been authorized by a written Change Order executed and issued according to the terms and conditions set forth herein. The Contractor hereby acknowledges that the Contractor shall not have any right to, and the Owner will not consider any requests for an increase in the Contract Sum that is not submitted in compliance with the foregoing requirements. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.4.

**§ 15.1.6 Claims for Additional Time**

**§ 15.1.6.1** If the Contractor wishes to make a Claim for an increase in the Contract Time, notice as provided herein shall be given. Said notice shall itemize all claims and shall contain sufficient detail and substantiating data to permit evaluation of same by the Owner, Construction Manager and Architect. No such claim shall be valid unless so made. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay, only one Claim is necessary. Any change in the Contract Sum resulting from such claim shall be authorized only by Change Order or Construction Change Directive, as the case may be. All required notices for additional costs shall be made in writing.

**§ 15.1.6.2** If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time, could not have been reasonably anticipated, and had an adverse effect on the scheduled construction.

*(Paragraphs deleted)*

**§ 15.2 Initial Decision**

**§ 15.2.1** Claims, excluding those where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2 or arising under Sections 10.3, 10.4, and 11.5, shall be referred to the Initial Decision Maker for initial decision. The Architect will serve as the Initial Decision Maker, unless otherwise indicated in the Agreement. Except for those Claims excluded by this Section 15.2.1, an initial decision shall be required as a condition precedent to mediation of any Claim. If an initial decision has not been rendered within 30 days after the Claim has been referred to the Initial Decision Maker, the party asserting the Claim may demand mediation and binding dispute resolution without a decision having been rendered. Unless the Initial Decision Maker and all affected parties agree, the Initial Decision Maker will not decide disputes between the Contractor and persons or entities other than the Owner.

**§ 15.2.2** The Initial Decision Maker will review Claims and within ten days of the receipt of a Claim take one or more of the following actions: (1) request additional supporting data from the claimant or a response with supporting data from the other party, (2) reject the Claim in whole or in part, (3) approve the Claim, (4) suggest a compromise, or (5) advise the parties that the Initial Decision Maker is unable to resolve the Claim if the Initial Decision Maker lacks sufficient information to evaluate the merits of the Claim or if the Initial Decision Maker concludes that, in the Initial Decision Maker's sole discretion, it would be inappropriate for the Initial Decision Maker to resolve the Claim.

**§ 15.2.3** In evaluating Claims, the Initial Decision Maker may, but shall not be obligated to, consult with or seek information from either party or from persons with special knowledge or expertise who may assist the Initial Decision



Maker in rendering a decision. The Initial Decision Maker may request the Owner to authorize retention of such persons at the Owner's expense.

§ 15.2.4 If the Initial Decision Maker requests a party to provide a response to a Claim or to furnish additional supporting data, such party shall respond, within ten days after receipt of the request, and shall either (1) provide a response on the requested supporting data, (2) advise the Initial Decision Maker when the response or supporting data will be furnished, or (3) advise the Initial Decision Maker that no supporting data will be furnished. Upon receipt of the response or supporting data, if any, the Initial Decision Maker will either reject or approve the Claim in whole or in part.

§ 15.2.5 The Initial Decision Maker will render an initial decision approving or rejecting the Claim, or indicating that the Initial Decision Maker is unable to resolve the Claim. This initial decision shall (1) be in writing; (2) state the reasons therefor; and (3) notify the parties and the Architect and Construction Manager, if the Architect or the Construction Manager is not serving as the Initial Decision Maker, of any change in the Contract Sum or Contract Time or both. The initial decision shall be final and binding on the parties but subject to mediation and, if the parties fail to resolve their dispute through mediation, to binding dispute resolution.

§ 15.2.5.1 All claims and disputes and other matters in question between the Contractor and the Owner arising out of or relating to the Contract Documents or a breach thereof with regard to the Initial Decision Maker's decision, shall be decided through suit in New Jersey Superior Court and Contractor consents to the jurisdiction of the New Jersey Superior Court. The Contractor shall carry on all work and maintain its progress during such suit and the Owner shall continue to make payments not related to the dispute of the Contractor in accordance with Contract Documents.

§ 15.2.6 In the event of a Claim against the Contractor, the Owner may, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim. If the Claim relates to a possibility of a Contractor's default, the Owner may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

*(Paragraph deleted)*

§ 15.2.7 If a Claim relates to or is the subject of a mechanic's lien, the party asserting such Claim may proceed in accordance with applicable law to comply with the lien notice or filing deadlines.

*(Paragraphs deleted)*

## **ARTICLE 16 NEW JERSEY REQUIREMENTS FOR PUBLIC WORK**

*(Paragraph deleted)*

### **§ 16.1 Overtime**

The Contractor or any subcontractor shall not employ any mechanic, worker or laborer engaged in the performance of the Work more than 8 hours in any one day in accordance with and subject to the exceptions named in Revised Statutes of New Jersey, Title 34, Chapter 10 and any and all revised statutes thereof.

*(Paragraph deleted)*

### **§ 16.2 Prevailing Wage**

§ 16.2.1 Pursuant to Revised Statutes of New Jersey, Title 34, Chapter 11, Article 28 as amended, wages for all laborers, workers and mechanics employed by the Contractor or any Subcontractor for the Work shall not be less than the prevailing wages for work of a similar nature in the vicinity of the Project Site as fixed by the Commissioner of Labor and Industry and made a part of Division 01 - Conditions of the Contract. Contractors are referred to Section 010001-PREVAILING WAGE RATES for wage determination.

*(Paragraph deleted)*

§ 16.2.2 The Contractor and Subcontractors shall do the following:

- .1 Pay to all workers engaged in the performance of services directly upon the Work, the prevailing rate of wages specified in the Contract.
- .2 Keep an accurate record showing the name, craft or trade and actual hourly rate of wages paid to each worker employed by him in connection with the Work. Records shall be preserved two years from the date of payment.
- .3 Post the prevailing wage rates for each craft and classification involved, as determined by the Commissioner of Labor and Industry, including the effective date of any changes thereof, in prominent and easily accessible places at the site of the Work and at such place or places as are used by the



- employer to pay workers their wages.
- .4 Before final payment, file written statements certifying to the amounts then due and owing to any and all workers for wages due on account of the Work. The statements shall set forth the names of the persons whose wages are unpaid and the amount due to each. The statement shall be verified by the oath of the Contractor or Subcontractor, as the case may be.

*(Paragraph deleted)*

### **§ 16.3 Business Registration of Public Contractors**

*(Paragraphs deleted)*

**§ 16.3.1** Pursuant to P.L. 2004, c.57, bidders shall include proof of its own business registration and proofs of business registration of those subcontractors required to be listed in the bidder's submission (i.e., "named subcontractors.") The proof of business registration shall be provided at the time the bid or proposal is officially received and opened by the contracting agency. If there are no subcontractors on a job, the Contractor must certify to that effect.

*(Paragraph deleted)*

**§ 16.3.2** After award of the contract, the Contractor shall obtain proof of business registration of subcontractors and suppliers through all tiers of a contract, when the value of the goods or services to be provided by the subcontractor or supplier exceeds 15% of the contracting agency's bid threshold.

*(Paragraph deleted)*

**§ 16.3.3** The Contractor shall provide written notice to its subcontractors and suppliers of the responsibility to submit proof of business registration to the Contractor. The requirement of proof of business registration extends down through all levels (tiers) of the project.

**§ 16.3.4** Before final payment on the Contract is made by the contracting agency, the Contractor shall submit an accurate list and the proof of business registration of each subcontractor or supplier used in the fulfillment of the Contract or shall attest that no subcontractors were used.

**§ 16.3.5** A contractor or a contractor with a subcontractor that has entered into a contract with a contracting agency, and each of their affiliates, shall collect and remit to the Director of the Division of Taxation in the Department of the Treasury the use tax due pursuant to the "Sales and Use Tax Act," P.L.1966, c.30 (C.54:32B-1 et seq.) on all their sales of tangible personal property delivered into this State.

**§ 16.3.6** A business organization that fails to provide a copy of a business registration as required pursuant to Section 1 of P.L.2001, c.134 (C.52:32-44 et al.) or subsection e. or f. of Section 92 of P.L.1977, c.110 (C.5:12-92), or that provides false business registration information under the requirements of either of those sections, shall be liable for a penalty of \$25 for each day of violation, not to exceed \$50,000 for each business registration copy not properly provided under a contract with a contracting agency."

### **§ 16.4 Workers and Community Right to Know Act**

**§ 16.4.1** Contractors shall be required to submit copies of all Material Safety Data Sheets to the Owner and shall cooperate in the posting of all required notifications relative to the use of hazardous substances on Owner's property. Contractor shall comply with New Jersey Law regarding the use or storage of hazardous substances in Schools and as follows:

#### **§ 16.4.2 New Jersey Administrative Code 8:59 - 6.5**

##### **.1 Subcontractors:**

- .a When a public or private subcontractor produces, uses or stores hazardous substances at a public employer's facility in such a way that the employees of the public employer are or may be exposed to the hazardous substances, the public employer shall find out the identity of the hazardous substances and provide health hazard and protective procedure information about the substances to exposed and potentially exposed employees during the annual education and training program or upon request of an employee or employee representative, whichever occurs sooner.
- .b If not part of the annual training program, such information may be provided to exposed and potentially exposed employees in writing. The public employer shall provide exposed and potentially exposed employees with appropriate hazardous substance fact sheets or Material

- Safety Data Sheets, if requested.
- .c Contractor shall retain a copy of the Material Safety Data Sheet and Hazardous Substance Fact Sheets on the job site.

#### **§ 16.5 Meghan's Law**

During the performance of this contract, neither the Contractor nor any Subcontractor, where applicable, shall knowingly allow any employee registered pursuant to N.J.S.A. 2C:7-1, et seq. "Meghan's Law", as a Tier 3 offender (sex offenders determined to pose a relatively high risk of re-offense") or a Tier 2 offender (sex offenders determined to pose a moderate risk of re-offense), upon the Owner's property or the Project site.



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

SECTION 010002 - SUPPLEMENTAL CONTRACT TERMS FOR CONTRACTS  
SUPPORTED BY FEDERAL FUNDS

In accordance with 2 C.F.R. Pt. 200, App. II, the following provisions shall be incorporated into the contract between the Gloucester City Board of Education and the successful bidder:

Equal Employment Opportunity: Pursuant to 41 C.F.R. § 60–1.4, the applicant hereby agrees that it will incorporate or cause to be incorporated into any contract for construction work, or modification thereof, as defined in the regulations of the Secretary of Labor at 41 CFR Chapter 60, which is paid for in whole or in part with funds obtained from the Federal Government or borrowed on the credit of the Federal Government pursuant to a grant, contract, loan, insurance, or guarantee, or undertaken pursuant to any Federal program involving such grant, contract, loan, insurance, or guarantee, the following equal opportunity clause:

During the performance of this contract, the contractor agrees as follows:

(1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:

Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

(2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

(3) The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.

(4) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section,

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(5) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(6) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(7) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(8) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:

Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: Provided, That if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

Contract Work Hours and Safety Standards Act (40 U.S.C. 3701–3708): Where applicable, all contracts awarded by the non-Federal entity in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

Clean Air Act (42 U.S.C. 7401–7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251–1387), as amended: Contracts and subgrants of amounts in excess of \$150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401–7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251–1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

Rights to Inventions Made Under a Contract or Agreement: If the Federal award meets the definition of “funding agreement” under 37 CFR § 401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that “funding agreement,” the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,” and any implementing regulations issued by the awarding agency.

Stevens Amendment: The Board of Education recognizes its obligation as it pertains to the Stevens Amendment, Section 8136 of the Department of Defense Appropriations Act (P.L. 104-134, Sec.507) which requires the board of education to state clearly that 100% of the total cost of this project will be financed through funds provided under the American Rescue Plan Elementary and Secondary School Emergency Relief Fund (ARP ESSER), totaling approximately \$1,579,404.00.



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

Copeland “Anti-Kickback” Act: In the performance of their obligations under this Agreement, the contractor will observe and comply with the provisions relating to the federal anti-kickback statute, set forth at 40 U.S.C. § 3145 and its implementing regulations, which make it unlawful to induce, by force, intimidation, threat of procuring dismissal from employment, or otherwise, any person employed in the construction or repair of public buildings or public works, financed in whole or in part by the United States, to give up any part of the compensation to which that person is entitled.

Davis-Bacon Act: In accordance with the Act, contractors are required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. The decision to award a contract or subcontract is be conditioned upon the contractor’s acceptance of the wage determination. The applicable prevailing wage rate is included with this solicitation.

Procurement of recovered materials, 2 C.F.R. § 200.323: Contractors must comply with this section, which requires a non-Federal entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

Domestic Preferences, 2 C.F.R. § 200.322: In addition to the contractor’s obligations under N.J.S.A. 18A:18A-21, contractor shall make every effort to purchase, or use goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products) and shall require its subcontractors to comply with this section.

Byrd Anti-Lobbying Amendment (31 U.S.C. 1352): Contractors that apply or bid for an award exceeding \$100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.

Debarment and Suspension (Executive Orders 12549 and 2689): A contract award will not be made to parties listed on the governmentwide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235), Debarment and Suspension.” SAM Exclusions contains the names of parties debarred, suspended, or otherwise

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

END OF SECTION -010002

SECTION 010003 - PREVAILING WAGE RATES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements State & Federal wage rates.

1.2 WAGE RATES, GENERAL

- A. It is the responsibility of the Contractor and each Subcontractor to use the current Prevailing Wage Rates when bidding this Project and, if awarded the Contract, to pay their employees the minimum amounts mandated by such Prevailing Wage Rate Determination and to submit all certified payroll records to the Owner in accordance with the regulations.
- B. In the event it is found that any worker employed by the contractor, or any subcontractor covered by said contract, has been paid a rate of wages less than the prevailing wages required to be paid by such contract, the public body, the lessee to whom the public body is leasing a property or premises or the lessor from whom the public body is leasing or will be leasing a property or premises may terminate the contractor's or subcontractor's right to proceed with the work, or such part of the work as to which there has been a failure to pay required wages and to prosecute the work to completion or otherwise.

1.3 NEW JERSEY DEPARTMENT OF LABOR & WORKFORCE DEVELOPMENT  
PREVAILING WAGE RATES

- A. The Prevailing Wage Rate Determination by the New Jersey Department of Labor and Workforce Development pursuant to Chapter 150 of the New Jersey Laws of 1963.
  - 1. Website: [https://www.nj.gov/labor/wagehour/wagehour\\_index.html](https://www.nj.gov/labor/wagehour/wagehour_index.html)
  - 2. Wage & Hour - General Information
    - a. Tel. (609) 292-2305
    - b. Tel. (609) 292-2337
    - c. Fax (609) 695-1174
- B. Public Contracts – For information about prevailing wage rates on public works projects:
  - a. Tel. (609) 292-2259
  - b. Fax (609) 695-1174



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- C. Contractor Registration – For information about registering with the Department of Labor and Workforce Development in-order to bid on or engage in the performance of any public works project:
  - a. Tel. (609) 292-9464
  - b. Fax (609) 633-8591
- D. The Prevailing Wage Rates in the locality is for each craft or trade or classification of all workers needed to perform the contract during the anticipated term thereof are hereby made a part of each Contract to be performed under this Project Manual.

1.4 FEDERAL PREVAILING WAGE RATE DETERMINATION:

- A. Bidders must also comply with federal prevailing wage rate determinations, as set forth herein. Where there is a disparity in wage rate determinations, contractor shall be required to pay the higher rate.
  - 1. Website: <https://sam.gov/content/wage-determinations>

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 010003

"General Decision Number: NJ20230028 01/13/2023

Superseded General Decision Number: NJ20220028

State: New Jersey

Construction Type: Building

County: Camden County in New Jersey.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

|                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022: | <ul style="list-style-type: none"><li>. Executive Order 14026 generally applies to the contract.</li><li>. The contractor must pay all covered workers at least \$16.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2023.</li></ul>  |
| If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:         | <ul style="list-style-type: none"><li>. Executive Order 13658 generally applies to the contract.</li><li>. The contractor must pay all covered workers at least \$12.15 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2023.</li></ul> |

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <http://www.dol.gov/whd/govcontracts>.

| Modification Number | Publication Date |
|---------------------|------------------|
| 0                   | 01/06/2023       |
| 1                   | 01/13/2023       |

ASBE0014-004 05/01/2022

|                                                                                                                                                                                                                                                                                                                                                                              | Rates    | Fringes |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------|
| ASBESTOS WORKER/HEAT & FROST<br>INSULATOR (Includes the<br>application of all insulating<br>materials, protective<br>coverings, coatings and<br>finishings to all types of<br>mechanical systems; also, the<br>application of firestopping<br>material to openings and<br>penetrations in walls,<br>floors, ceilings and curtain<br>walls; also, all lead<br>abatement)..... | \$ 56.65 | 40.65   |

-----  
BRNJ0002-013 05/01/2021

|                 | Rates    | Fringes |
|-----------------|----------|---------|
| Bricklayer..... | \$ 45.20 | 33.26   |

Work on high stacks: 22% per hour additional.

-----  
BRNJ0007-012 07/04/2022

|                    | Rates    | Fringes |
|--------------------|----------|---------|
| Marble setter..... | \$ 62.40 | 38.82   |

-----  
BRNJ0007-014 07/01/2022

|                             | Rates    | Fringes |
|-----------------------------|----------|---------|
| TERRAZZO WORKER/SETTER..... | \$ 59.75 | 38.60   |

-----  
BRNJ0007-017 06/06/2022

|                    | Rates    | Fringes |
|--------------------|----------|---------|
| Tile finisher..... | \$ 42.80 | 28.57   |
| Tile setter.....   | \$ 50.14 | 34.05   |

Tile finisher:  
Work grouting all epoxy: \$10.00 additional per day.

-----  
CARP0006-009 05/01/2022

|                                   | Rates    | Fringes |
|-----------------------------------|----------|---------|
| CARPENTER (Scaffold Builder)..... | \$ 53.30 | 58%     |

The first sixty feet at the regular rate, 10% per hour  
additional for each additional fifty feet thereafter.

-----  
CARP0006-010 05/01/2022

|           | Rates | Fringes |
|-----------|-------|---------|
| CARPENTER |       |         |



Including Acoustical  
Ceiling Installation,  
Drywall Hanging, Formwork,  
Batt and Blown Insulation...\$ 53.30 58%

---

CARP0029-006 05/01/2022

|                       | Rates    | Fringes |
|-----------------------|----------|---------|
| Soft floor layer..... | \$ 53.30 | 58%     |

---

CARP0454-009 11/01/2022

|                    | Rates    | Fringes |
|--------------------|----------|---------|
| PILEDRIVERMAN..... | \$ 45.73 | 39.44   |

PAID HOLIDAYS:

New Year's Day, Washington's Birthday, Memorial Day,  
Independence Day, Labor Day, Thanksgiving Day and Christmas  
Day; provided that the worker works any of the three days  
in the five-day work week preceding the holiday and the  
first work day after the holiday.

---

CARP0715-007 05/01/2020

|                 | Rates    | Fringes  |
|-----------------|----------|----------|
| Millwright..... | \$ 51.58 | 58%+0.25 |

Work of erection and dismantling of elevators and towers,  
such as concrete conveyors and temporary material  
elevators, scaffolding or other structures to be used as  
scaffolding inside or outside of buildings: the first sixty  
feet at the regular rate, 10% per hour additional for each  
additional fifty feet thereafter.

---

ELEC0351-007 10/03/2022

|                                                 | Rates    | Fringes      |
|-------------------------------------------------|----------|--------------|
| Electricians: (Including Low<br>Voltage Wiring) |          |              |
| Cable splicer on lead cable.                    | \$ 46.51 | 72.54% + .65 |
| Electrician and cable<br>splicer.....           | \$ 51.75 | 77.71%+.55   |

---

ELEC0351-009 01/01/2022

|                                                         | Rates    | Fringes      |
|---------------------------------------------------------|----------|--------------|
| ELECTRICIAN (Teledata<br>Technicians)                   |          |              |
| 15 Voice Data Lines or Less.                            | \$ 39.01 | 29.75%+19.23 |
| 16 Voice or Data Lines or<br>more and Fiber Optics..... | \$ 50.19 | 77.04%+5.95  |

---

\* ELEV0005-004 01/01/2023

|                        | Rates    | Fringes    |
|------------------------|----------|------------|
| Elevator mechanic..... | \$ 66.21 | 37.335+a+b |

A. PAID VACATION: Employer contributes 8% of basic hourly rate for 5 years or more of service or 6% for 6 months to 5 years of service.

B. Eight Paid Holidays (provided employee has worked 5 consecutive days before and the working day after the holiday): New Years's Day; Memorial Day; Independence Day; Labor Day; Veteran's Day; Thanksgiving Day and the Friday after Thanksgiving Day, and Christmas Day.

-----  
ENGI0825-020 07/01/2021

|                            | Rates    | Fringes |
|----------------------------|----------|---------|
| Power equipment operators: |          |         |
| GROUP 1.....               | \$ 56.02 | 31.80   |
| GROUP 2.....               | \$ 54.43 | 31.80   |
| GROUP 3.....               | \$ 52.52 | 31.80   |
| GROUP 4.....               | \$ 50.89 | 31.80   |
| GROUP 5.....               | \$ 49.18 | 31.80   |

Hazardous waste removal work:

Work on a state or federally designated hazardous waste site, where the worker is in direct contact with hazardous material, and when personal protective equipment is required for respiratory, skin and eye protection: 20% per hour additional.

PAID HOLIDAYS:

New Year's Day, Washington's Birthday observed, Memorial Day, Independence Day, Labor Day, Presidential Election Day, Veteran's Day, Thanksgiving Day and Christmas Day; provided 1) that the worker works three of the preceding five work days before the holiday; or, the work day before the holiday and the work day after the holiday; and, 2) that the worker works the work day before and the work day after the holiday.

DEFINITION OF GROUPS:

GROUP 1:

Backhoe, Including Backhoe Track; Boom; Concrete Paving Machine; Crane (all types, including overhead and straddle traveling type); Drill (down-the-hole drill, rotary drill, self-propelled hydraulic drill, self-powered drill); Elevating Grader; Excavator; Front End Loader (5 cu. yd. and over); Piledriver (length of boom, including length of leads, shall determine premium rate applicable); Trencher

GROUP 2:

Backhoe Loader Combo; Concrete Pumper; Grader/Blade (Finish); Hoist; Hydraulic Crane, 10 Tons and under; Front End Loader (2 cu. yd. but less than 5 cu. yd.); Scraper; Side Boom

GROUP 3:

Asphalt Spreader; Bulldozer; Compressor (2 or 3) (in Battery) (within 100 ft.); Forklift; Front End Loader (1 cu. yd. and over but less than 2 cu. yd.); Lull; Mechanic; Paver, Asphalt; Roller, Blacktop; Tractor;

GROUP 4:

Bobcat/Skid Loader; Compressor (Single); Farm Tractor; Front  
End Loader (under 1 cu. yd.); Hydroseeder; Roller, Grade;  
Pump, Hydraulic

GROUP 5:  
Oiler

-----  
IRON0399-007 07/01/2018

|                                                             | Rates    | Fringes |
|-------------------------------------------------------------|----------|---------|
| IRONWORKER (Structural,<br>Reinforcing and Ornamental)..... | \$ 49.43 | 29.70   |

-----

LABO0008-001 05/01/2011

|                               | Rates    | Fringes |
|-------------------------------|----------|---------|
| Asbestos Removal Laborer..... | \$ 28.37 | 21.62   |

The removal, abatement, enclosure and decontamination of  
personal protective equipment, chemical protective clothing  
and machinery relating to asbestos and/or toxic and  
hazardous waste or materials which shall include but not  
necessarily be limited to: the erection, moving, servicing  
and dismantling of all enclosures, scaffolding and  
barricades; the operation of all tools and equipment  
normally used in the removal or abatement of asbestos and  
toxic or hazardous waste or materials; the labeling,  
bagging, cartoning, crating, or other packaging of  
materials for disposal; the clean-up of the worksite; and  
all other work incidental to the removal, abatement,  
encapsulation, enclosure, and decontamination of asbestos  
and toxic or hazardous waste or materials; and, in  
addition, all work tasks involved in the maintenance and  
operation of energy resource recovery plants (co-generation  
plants)

-----  
LABO0077-002 05/01/2022

|                                                        | Rates    | Fringes |
|--------------------------------------------------------|----------|---------|
| LABORER<br>MASON TENDER:<br>Brick/Cement/Concrete..... | \$ 36.50 | 30.22   |

-----

LABO0077-005 05/01/2022

|                                                                                                                                                                 | Rates    | Fringes |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------|
| Laborers:<br>Asphalt Shoveler, Asphalt<br>Spreader, Common or<br>General Laborer, Landscape<br>Laborer, Pipelayer, Power<br>Tool Operator and<br>Screedman..... | \$ 35.75 | 30.22   |

-----

PAIN0711-018 06/05/2022

|                             | Rates    | Fringes |
|-----------------------------|----------|---------|
| DRYWALL FINISHER/TAPER..... | \$ 42.16 | 27.06   |



-----  
PAIN0711-019 05/01/2017

|                               | Rates    | Fringes |
|-------------------------------|----------|---------|
| PAINTER (Brush & Roller)..... | \$ 39.25 | 22.66   |
| PAINTER (Spray).....          | \$ 40.28 | 19.98   |

-----

PLAS0592-035 05/01/2022

|                                   | Rates    | Fringes |
|-----------------------------------|----------|---------|
| CEMENT MASON/CONCRETE FINISHER... | \$ 43.07 | 37.86   |

-----

PLUM0322-009 05/01/2022

|                                                       | Rates    | Fringes |
|-------------------------------------------------------|----------|---------|
| PIPEFITTER (Including HVAC<br>Pipe Installation)..... | \$ 47.56 | 50.10   |
| PLUMBER (Excluding HVAC Pipe<br>Installation).....    | \$ 47.56 | 50.10   |

-----

ROOF0030-027 05/01/2022

|                     | Rates    | Fringes |
|---------------------|----------|---------|
| Roofer              |          |         |
| SHINGLES.....       | \$ 31.25 | 21.75   |
| SLATE AND TILE..... | \$ 34.25 | 21.75   |
| ALL OTHER WORK..... | \$ 41.48 | 33.37   |

Mopper, and operator of felt-laying machine: \$.50 per hour additional.

Work applying roofing material, on any new construction job, on those days on which a felt-laying machine or slag dispensing machine is used: \$.50 per hour additional.

PAID HOLIDAY:

The last working day before Christmas, to be paid at the rate of four hours pay.

-----  
SFNJ0692-003 05/01/2021

|                                            | Rates    | Fringes |
|--------------------------------------------|----------|---------|
| Sprinkler fitter (Fire<br>Sprinklers)..... | \$ 60.83 | 30.34   |

-----

SHEE0019-018 07/17/2021

|                                                               | Rates    | Fringes |
|---------------------------------------------------------------|----------|---------|
| Sheet metal worker (Including<br>HVAC Duct Installation)..... | \$ 53.84 | 44.44   |
| SHEET METAL WORKER (Sign<br>Makers & Hangers).....            | \$ 29.49 | 23.90   |

Paid Holiday:  
Election Day.

-----  
TEAM0676-003 05/01/2022

|  | Rates | Fringes |
|--|-------|---------|
|--|-------|---------|

Truck drivers:

|                         |          |       |
|-------------------------|----------|-------|
| Dump Truck Drivers..... | \$ 40.00 | 30.16 |
| Off the Road Truck..... | \$ 40.35 | 30.16 |

Hazardous waste removal work:

Work on a state or federally designated hazardous waste site, where the worker is in direct contact with hazardous materials, and when personal protective equipment is required for respiratory, skin and eye protection: \$3.00 per hour additional.

Work on a state or federally designated hazardous waste site, where personal protection A, B, C or D is NOT required: \$1.00 per hour additional.

SHIFT WORK:

An owner mandated irregular shift staring any time other than between 6:00 am and 8:00 am to receive \$1.00 per hour, for each hour worked, in addition to the regular rate of pay.

PAID HOLIDAYS:

New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Presidential Election Day, Veteran's Day (or the day after Thanksgiving, at the option of the contractor), Thanksgiving Day, the afternoon of the day before Christmas (Dec. 24) provided that the worker works in the morning, and Christmas Day, provided that the worker works or is available for work on at least two days in the week in which the holiday occurs.

BEREAVEMENT PAY:

In case of a death in the worker's immediate famiy (mother, father, wife, husband, children, brother, sister, current mother-in-law, current father-in-law, grandparents), the worker shall be allowed leave not to exceed three (3) days straight-time pay, provided that he or she shall receive no pay unless the day of death and the burial day falls on a regular work day, and not on days off, holidays, vacation, Saturdays or Sundays.

-----  
SUNJ2004-004 01/02/2009

|  | Rates | Fringes |
|--|-------|---------|
|--|-------|---------|

|                |          |       |
|----------------|----------|-------|
| GLAZIER.....   | \$ 30.82 | 15.60 |
| PLASTERER..... | \$ 42.33 | 0.00  |

-----

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

=====

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours

they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

-----

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the



wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

---

#### WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====

END OF GENERAL DECISIO"

## SECTION 011000 - SUMMARY

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section Includes:

- 1. Work performed by Owner.
- 2. Owner-furnished/Contractor-installed (OFICI) products.
- 3. Owner-furnished/Owner-installed (OFOI) products.
- 4. Contractor's use of site and premises.
- 5. Coordination with occupants.
- 6. Work restrictions.
- 7. Specification and Drawing conventions.
- 8. Warranty
- 9. Miscellaneous provisions.

- B. Related Requirements:

- 1. Section 000100 "Advertisement" for project information and work covered by the contract documents.
- 2. Section 015000 "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.
- 3. Section 017300 "Execution" for coordination of Owner-installed products.

- C. All specification divisions and drawings listed are part of the Contract Documents. It is ultimately the responsibility of the Contractor and their subcontractors to review all the Contract Documents and all field conditions to determine the full extent of work for this project.

- D. The Contractor shall provide all labor, materials, equipment and services for the complete and proper installation and operation of the work as indicated, required or implied by the Contract Documents.

- E. The submission of a proposal by the Contractor will be considered an indication that a thorough review of the conditions, materials, and the Contract Documents have been made by the Contractor and their subcontractors, and the results of such investigations have been included in their proposal and accepted.



1.3 WORK PERFORMED BY OWNER

- A. Cooperate fully with Owner, so work may be carried out smoothly, without interfering with or delaying Work under this Contract or work by Owner. Coordinate the Work of this Contract with work performed by Owner.
- B. Preceding Work: Owner will perform the following construction operations at Project site. Those operations are scheduled to be substantially complete before Work under this Contract begins.
  - 1. Movable furnishings, computers, smart boards, etc.

1.4 OWNER-FURNISHED/CONTRACTOR-INSTALLED (OFCI) PRODUCTS

- A. Owner's Responsibilities: Owner will furnish products indicated and perform the following, as applicable:
  - 1. Provide to Contractor Owner-reviewed Product Data, Shop Drawings, and Samples.
  - 2. Provide for delivery of Owner-furnished products to Project site.
  - 3. Received, unloaded, handled and store the rooftop unit.
  - 4. Upon delivery, inspect, with Contractor present, delivered items.
    - a. If Owner-furnished products are damaged, defective, or missing, arrange for replacement.
  - 5. Obtain manufacturer's inspections, service, and warranties.
  - 6. Inform Contractor of earliest available delivery date for Owner-furnished products.
- B. Contractor's Responsibilities: The Work includes the following, as applicable:
  - 1. Designate delivery dates of Owner-furnished products in Contractor's construction schedule, utilizing Owner-furnished earliest available delivery dates.
  - 2. Review Owner-reviewed Product Data, Shop Drawings, and Samples, noting discrepancies and other issues in providing for Owner-furnished products in the Work.
  - 3. Receive, unload, handle, store, protect, assemble and install Owner-furnished products.
  - 4. Make building services connections for Owner-furnished products.
  - 5. Protect Owner-furnished products from damage during storage, handling, and installation and prior to Substantial Completion.
  - 6. Repair or replace Owner-furnished products damaged following receipt.
  - 7. Act as Owner's agent in trouble shooting and processing of warranty issues.
- C. Owner-Furnished/Contractor-Installed (OFCI) Products:
  - 1. All furniture and equipment as indicated in the "Furniture & Equipment List" on Sheet ES-100.
  - 2. Rooftop equipment including, but not limited to the following:
    - a. Rooftop unit.
    - b. Curb.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- c. Controls.
- d. Start-up.
- e. Warranty.

1.5 OWNER-FURNISHED/OWNER-INSTALLED (OFOI) PRODUCTS

A. Owner-Furnished/Owner-Installed (OFOI) Products:

- 1. Provide all furniture and equipment as indicated in the "Furniture & Equipment List" on Sheet ES-100.

1.6 CONTRACTOR'S USE OF SITE AND PREMISES

A. Restricted Use of Site: Contractor shall have limited use of Project site for construction operations as indicated by requirements of this Section.

B. Limits on Use of Site: Limit use of Project site to Work in areas indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.

- 1. Limits on Use of Site: Confine construction operations to areas immediately adjacent to the areas where work is permitted and site areas designated by the Owner.
- 2. Driveways, Walkways and Entrances: Keep driveways, parking, loading areas, and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or for storage of materials.
  - a. Schedule deliveries to minimize use of driveways and entrances by construction operations.
  - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.

C. Condition of Existing Building: Maintain portions of existing building affected by construction operations in a weathertight condition throughout construction period. Repair damage caused by construction operations.

D. Condition of Existing Grounds: Maintain portions of existing grounds, landscaping, and hardscaping affected by construction operations throughout construction period. Repair damage caused by construction operations.

1.7 COORDINATION WITH OCCUPANTS

A. Full Owner Occupancy: Owner will occupy Project site and existing building(s) during entire construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's day-to-day operations. Maintain existing exits unless otherwise indicated.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and approval of authorities having jurisdiction.
  2. Notify Owner not less than 72 hours in advance of activities that will affect Owner's operations.
- B. Partial Owner Occupancy: Owner will occupy the premises during entire construction period, with the exception of areas under construction. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's operations. Maintain existing exits unless otherwise indicated.
1. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and authorities having jurisdiction.
  2. Provide not less than 72 hours' notice to Owner of activities that will affect Owner's operations.

1.8 WORK RESTRICTIONS

- A. Comply with restrictions on construction operations.
1. Comply with limitations on use of public streets, work on public streets, rights of way, and other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: Limit work to between 7:00 a.m. to 3:30 p.m., Monday through Friday, unless otherwise indicated. Work hours may be modified to meet Project requirements if approved by Owner and authorities having jurisdiction.
1. Weekend Hours: 72 hours notice and Owner approval.
  2. Early Morning Hours: As require by Municipal authorities having jurisdiction for restrictions on noisy work.
  3. Hours for Utility Shutdowns: After normal school hours, weekends, or holidays and as approved by Owner.
  4. Hours for Core Drilling: After normal school hours, weekends, or holidays and as approved by Owner.
  5. Contractors shall clean the work areas on a daily basis and properly secure all work areas in a safe and professional manner to protect the health, safety and welfare of the general public and the building occupants.
    - a. Under no condition shall an open sitework trench be left overnight. All excavations shall be opened and backfilled (in proper lifts and compacted) the same day.
- C. On-Site Work Day Restrictions: Do not perform work resulting in utility shutdowns or resulting in noisy activity on-site during work black-out days as indicated below:
1. 25 April through 12 May 23.
  2. 29 May 2023.



- D. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging for temporary utility services according to requirements indicated:
  - 1. Notify Architect not less than seven days in advance of proposed utility interruptions.
  - 2. Obtain Owner's written permission before proceeding with utility interruptions.
- E. Noise, Vibration, Dust, and Odors: Coordinate operations that may result in high levels of noise and vibration, dust, odors, or other disruption to Owner occupancy with Owner.
  - 1. Notify Architect and Owner not less than two days in advance of proposed disruptive operations.
  - 2. Obtain Owner's written permission before proceeding with disruptive operations.
- F. Smoking and Controlled Substance Restrictions: Use of tobacco products, alcoholic beverages, and other controlled substances on Project site is not permitted.
- G. Employee Screening: Comply with Owner's requirements for background screening as per Section 001000 "Instructions to Bidders" of Contractor personnel working on Project site and the following.
  - 1. Employee Identification: Owner will provide photographic identification tags for Contractor personnel working on Project site. Photographic identification shall be clearly displayed at all times and shall indicate the employee's name, current photograph and company of employment. Anyone on site without proper credentials visibly displayed at all times shall be asked to leave the project site.
  - 2. Contractor employees shall also be required to have company shirts or jackets. Anyone on site without proper credentials visibly displayed at all times shall be asked to leave the project site.
  - 3. Maintain list of approved screened personnel with Owner's representative.
- H. Safety Protocols: Contractor and Subcontractors for the Project shall be required to follow all applicable Federal, New Jersey Executive Orders, requirements set forth by public health agencies and the District.

## 1.9 SPECIFICATION AND DRAWING CONVENTIONS

- A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
  - 1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
  - 2. Text Color: Text used in the Specifications, including units of measure, manufacturer and product names, and other text may appear in multiple colors or underlined as part of a hyperlink; no emphasis is implied by text with these characteristics.

3. Hypertext: Text used in the Specifications may contain hyperlinks. Hyperlinks may allow for access to linked information that is not residing in the Specifications. Unless otherwise indicated, linked information is not part of the Contract Documents.
  4. Specification requirements are to be performed by Contractor unless specifically stated otherwise.
- B. Division 00 Contracting Requirements: General provisions of the Contract, including General and Supplementary Conditions, apply to all Sections of the Specifications.
- C. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.
- D. Drawing Coordination: Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:
1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
  2. Abbreviations: Materials and products are identified by abbreviations and scheduled in Section 000030 - Abbreviations of the Project Manual.

#### 1.10 WARRANTY

- A. Equipment and material warranties, as described in the various sections of the specifications, will only take effect on the date indicated in the Certificate of Substantial Completion issued by the Architect. The ordering, delivery, installation or start-up of equipment and materials, or a manufacturer's self-imposed warranty start date, shall not determine the beginning of a warranty period.
- B. All equipment and materials provided shall be warrantied for a minimum of two-years from the date of Substantial Completion or as indicated in individual sections of the specifications, whichever is greater, on all parts and labor.

#### 1.11 MISCELLANEOUS PROVISIONS

- A. The Contractor shall not perform any work or provide any services materials or supplies until an executed Notice to Proceed and an approved Purchase Order has been received from the Owner.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011000

## SECTION 012100 - ALLOWANCES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements governing allowances.
- B. Types of allowances include the following:
  - 1. Contingency allowances.
- C. Related Requirements:
  - 1. Section 012600 "Contract Modification Procedures" for procedures for submitting and handling Change Orders.

#### 1.3 DEFINITIONS

- A. Allowance: A quantity of work or dollar amount included in the Contract, established in lieu of additional requirements, used to defer selection of actual materials and equipment to a later date when direction will be provided to Contractor. If necessary, additional requirements will be issued by Change Order.

#### 1.4 ACTION SUBMITTALS

- A. Submit proposals for purchase of products or systems included in allowances on forms in Section 012610 "Prime Contractor Change Order Request Summary" and Section 012620 "Subcontractor Request Summary."

#### 1.5 INFORMATIONAL SUBMITTALS

- A. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.
- B. Submit time sheets and other documentation to show labor time and cost for installation of allowance items that include installation as part of the allowance.



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- C. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

1.6 CONTINGENCY ALLOWANCES

- A. Use the contingency allowance only as directed by Architect for Owner's purposes and only by Change Orders that indicate amounts to be charged to the allowance.
- B. Contractor's overhead, profit, and related costs for products and equipment ordered by Owner under the contingency allowance are included in the allowance and are not part of the Contract Sum. These costs include delivery, installation, insurance, equipment rental, and similar costs.
- C. Change Orders authorizing use of funds from the contingency allowance will include Contractor's related costs and reasonable overhead and profit.
- D. At Project closeout, credit unused amounts remaining in the contingency allowance to Owner by Change Order.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

3.2 PREPARATION

- A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.3 SCHEDULE OF ALLOWANCES

- A. Refer to Section 002000 – Form of Bid, for Schedule of Allowances.

END OF SECTION 012100

## SECTION 012500 - SUBSTITUTION PROCEDURES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for substitutions.
- B. Related Requirements:
  - 1. Document 002600 "Procurement Substitution Procedures" for requirements for substitution requests prior to award of Contract.
  - 2. Section 012100 "Allowances" for products selected under an allowance.
  - 3. Section 016000 "Product Requirements" for requirements for submitting comparable product submittals for products by listed manufacturers.

#### 1.3 DEFINITIONS

- A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents.
  - 1. Substitutions for Cause: Changes proposed by Contractor that are required due to changed Project conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.
  - 2. Substitutions for Convenience: Changes proposed by Contractor or Owner that are not required to meet other Project requirements but may offer advantage to Contractor or Owner.

#### 1.4 ACTION SUBMITTALS

- A. Substitution Requests: Submit pdf documentation identifying product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
  - 1. Substitution Request Form: Use Section 012501 – Substitution Request provided in Project Manual.
  - 2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- a. Statement indicating why specified product or fabrication or installation method cannot be provided, if applicable.
  - b. Coordination of information, including a list of changes or revisions needed to other parts of the Work and to construction performed by Owner and separate contractors that will be necessary to accommodate proposed substitution.
  - c. Detailed comparison of significant qualities of proposed substitutions with those of the Work specified. Include annotated copy of applicable Specification Section. Significant qualities may include attributes, such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
  - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
  - e. Samples, where applicable or requested.
  - f. Certificates and qualification data, where applicable or requested.
  - g. List of similar installations for completed projects, with project names and addresses as well as names and addresses of architects and owners.
  - h. Material test reports from a qualified testing agency, indicating and interpreting test results for compliance with requirements indicated.
  - i. Research reports evidencing compliance with building code in effect for Project, from current edition of the New Jersey Uniform Construction Code.
  - j. Detailed comparison of Contractor's construction schedule using proposed substitutions with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.
  - k. Cost information, including a proposal of change, if any, in the Contract Sum.
  - l. Contractor's certification that proposed substitution complies with requirements in the Contract Documents, except as indicated in substitution request, is compatible with related materials and is appropriate for applications indicated.
  - m. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
3. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within seven days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.
- a. Forms of Acceptance: Change Order, Construction Change Directive, or Architect's Supplemental Instructions for minor changes in the Work.
  - b. Use product specified if Architect does not issue a decision on use of a proposed substitution within time allocated.



1.5 QUALITY ASSURANCE

- A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage a qualified testing agency to perform compatibility tests recommended by manufacturers.

1.6 PROCEDURES

- A. Coordination: Revise or adjust affected work as necessary to integrate work of the approved substitutions.

1.7 SUBSTITUTIONS

- A. Substitutions for Cause: Submit requests for substitution immediately on discovery of need for change, but not later than 15 days prior to time required for preparation and review of related submittals.

- 1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:

- a. Requested substitution is consistent with the Contract Documents and will produce indicated results.
    - b. Substitution request is fully documented and properly submitted.
    - c. Requested substitution will not adversely affect Contractor's construction schedule.
    - d. Requested substitution has received necessary approvals of authorities having jurisdiction.
    - e. Requested substitution is compatible with other portions of the Work.
    - f. Requested substitution has been coordinated with other portions of the Work.
    - g. Requested substitution provides specified warranty.
    - h. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

- B. Substitutions for Convenience: Architect will consider requests for substitution if received within 60 days after the Notice to Proceed. Requests received after that time may be considered or rejected at discretion of Architect.

- 1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:

- a. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- to Architect for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
- b. Requested substitution does not require extensive revisions to the Contract Documents.
  - c. Requested substitution is consistent with the Contract Documents and will produce indicated results.
  - d. Substitution request is fully documented and properly submitted.
  - e. Requested substitution will not adversely affect Contractor's construction schedule.
  - f. Requested substitution has received necessary approvals of authorities having jurisdiction.
  - g. Requested substitution is compatible with other portions of the Work.
  - h. Requested substitution has been coordinated with other portions of the Work.
  - i. Requested substitution provides specified warranty.
  - j. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012500

SECTION 012501 – SUBSTITUTION REQUEST

---

Project: \_\_\_\_\_ Substitution Request Number: \_\_\_\_\_  
\_\_\_\_\_  
To: \_\_\_\_\_ From: \_\_\_\_\_  
\_\_\_\_\_  
Re: \_\_\_\_\_ Date: \_\_\_\_\_  
\_\_\_\_\_  
A/E Project Number: \_\_\_\_\_  
Contract For: \_\_\_\_\_

---

Specification Title: \_\_\_\_\_ Description: \_\_\_\_\_  
Section: \_\_\_\_\_ Page: \_\_\_\_\_ Article/Paragraph: \_\_\_\_\_

---

Proposed Substitution: \_\_\_\_\_  
Manufacturer: \_\_\_\_\_ Address: \_\_\_\_\_ Phone: \_\_\_\_\_  
Trade Name: \_\_\_\_\_ Model No.: \_\_\_\_\_  
Installer: \_\_\_\_\_ Address: \_\_\_\_\_ Phone: \_\_\_\_\_  
History: ☐ New product ☐ 2-5 years old ☐ 5-10 yrs old ☐ More than 10 years old  
Differences between proposed substitution and specified product: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

☐ Point-by-point comparative data attached - REQUIRED BY A/E

---

Reason for not providing specified item: \_\_\_\_\_  
\_\_\_\_\_

Similar Installation:

Project: \_\_\_\_\_ Architect: \_\_\_\_\_  
Address: \_\_\_\_\_ Owner: \_\_\_\_\_  
\_\_\_\_\_ Date Installed: \_\_\_\_\_

Proposed substitution affects other parts of Work: ☐ No ☐ Yes; explain \_\_\_\_\_  
\_\_\_\_\_

---

Savings to Owner for accepting substitution: \_\_\_\_\_ (\$ \_\_\_\_\_).

Proposed substitution changes Contract Time: ☐ No ☐ Yes [Add] [Deduct] \_\_\_\_\_ days.

---

Supporting Data Attached: ☐ Drawings ☐ Product Data ☐ Samples ☐ Tests ☐ Reports ☐ \_\_\_\_\_

---



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution is compliant with the building code in effect for Project.
- Cost data as stated above is complete. Claims for additional costs related to accepted substitution which may subsequently become apparent are to be waived.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.
- Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.

Submitted by: \_\_\_\_\_

Signed by: \_\_\_\_\_

Firm: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Telephone: \_\_\_\_\_

Attachments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

A/E's REVIEW AND ACTION

- ☐ Substitution approved - Make submittals in accordance with Specification Section 013300.
- ☐ Substitution approved as noted - Make submittals in accordance with Specification Section 013300.
- ☐ Substitution rejected - Use specified materials.
- ☐ Substitution Request received too late - Use specified materials.

Signed by: \_\_\_\_\_ Date: \_\_\_\_\_

Additional Comments: ☐ Contractor ☐ Subcontractor ☐ Supplier ☐ Manufacturer ☐ A/E ☐ \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## SECTION 012600 - CONTRACT MODIFICATION PROCEDURES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for handling and processing Contract modifications.
- B. Related Requirements:
  - 1. Section 012500 "Substitution Procedures" for administrative procedures for handling requests for substitutions made after the Contract award.

#### 1.3 MINOR CHANGES IN THE WORK

- A. Architect will issue supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on AIA Document G710.

#### 1.4 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
  - 1. Work Change Proposal Requests issued by Architect are not instructions either to stop work in progress or to execute the proposed change.
  - 2. Within time specified in Proposal Request or 10 days, when not otherwise specified, after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
    - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
    - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
    - c. Include costs of labor and supervision directly attributable to the change.
    - d. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish

- times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
  - e. Quotation Form: Use Section 012610 "Prime Contractor Change Order Request Summary" and Section 012620 "Subcontractor Change Order Request Summary." These documents will be provided by the Architect, in digital format to the Contractor.
- B. Contractor-Initiated Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Architect.
- 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
  - 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
  - 3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
  - 4. Include costs of labor and supervision directly attributable to the change.
  - 5. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
  - 6. Comply with requirements in Section 012500 "Substitution Procedures" if the proposed change requires substitution of one product or system for product or system specified.
  - 7. Proposal Request Form: Use Section 012610 "Prime Contractor Change Order Request Summary" and Section 012620 "Subcontractor Change Order Request Summary." These documents will be provided by the Architect, in digital format to the Contractor.

## 1.5 ADMINISTRATIVE CHANGE ORDERS

- A. Allowance Adjustment: See Section 012100 "Allowances" for administrative procedures for preparation of Change Order Proposal for adjusting the Contract Sum to reflect actual costs of allowances.
- B. Unit-Price Adjustment: See Section 012200 "Unit Prices" for administrative procedures for preparation of Change Order Proposal for adjusting the Contract Sum to reflect measured scope of unit-price work.

## 1.6 CHANGE ORDER PROCEDURES

- A. On Owner's approval of a Work Change Proposal Request, Architect will issue a Change Order for signatures of Owner and Contractor on AIA Document G701.



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1.7 CONSTRUCTION CHANGE DIRECTIVE

- A. Construction Change Directive: Architect may issue a Construction Change Directive on AIA Document G714. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
  - 1. Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
  - 1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012600

SECTION 012610 - PRIME CONTRACTOR CHANGE ORDER REQUEST SUMMARY

PRIME CONTRACTOR: \_\_\_\_\_ C.O.R. NO.: \_\_\_\_\_

NUMBER OF DAYS REQUESTED FOR CONTRACT EXTENTION: \_\_\_\_\_ DATE: \_\_\_\_\_

DESCRIPTION OF CHANGE: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**PRIME CONTRACTOR DIRECT COSTS**

**ADDITIONS**

|   |                           |             |                   |
|---|---------------------------|-------------|-------------------|
| A | Material & Equipment      | <div></div> |                   |
| B | Labor                     | <div></div> |                   |
| C | Subtotal of Additive Cost |             | <div>\$0.00</div> |

**DEDUCTIONS** (use minus sign for all deduct figures)

|   |                            |             |                   |
|---|----------------------------|-------------|-------------------|
| D | Material & Equipment       | <div></div> |                   |
| E | Labor                      | <div></div> |                   |
| F | Subtotal of Deductive Cost |             | <div>\$0.00</div> |

|   |                                      |  |                   |
|---|--------------------------------------|--|-------------------|
| G | Contractor's Total Direct Cost (C+F) |  | <div>\$0.00</div> |
|---|--------------------------------------|--|-------------------|

|   |                            |  |                   |
|---|----------------------------|--|-------------------|
| H | Prime Contractor's Mark-up |  | <div>\$0.00</div> |
|---|----------------------------|--|-------------------|

Line "H" mark-up is calculated in accordance with Article 7 of the General Conditions of the Contract for Construction. Mark-up percentages applied to the line "G" subtotal are as follows: Not to exceed 15% on first \$50,000, 10% on balance beyond \$50,000, 6% for credits.

|   |                                                                   |  |                   |
|---|-------------------------------------------------------------------|--|-------------------|
| I | <b>Total Prime Contractor Direct Costs + Mark-up</b> (Line G + H) |  | <div>\$0.00</div> |
|---|-------------------------------------------------------------------|--|-------------------|

|   |                                  |  |             |
|---|----------------------------------|--|-------------|
| J | Total Subcontractor Direct Costs |  | <div></div> |
|---|----------------------------------|--|-------------|

(Note: If there are two or more subcontractors for this change item, then use a separate form for each subcontractor.)

Sum of Lines "J" and "L" from Subcontractor Change Order Request Summary 012620

|   |                       |  |             |
|---|-----------------------|--|-------------|
| K | Subcontractor Mark-up |  | <div></div> |
|---|-----------------------|--|-------------|

Sum of Lines "J", "M", "N" and "O" from Subcontractor Change Order Request Summary 012620

|   |                                                            |  |                   |
|---|------------------------------------------------------------|--|-------------------|
| L | General Contractor's Mark-up on Subcontractor Direct Costs |  | <div>\$0.00</div> |
|---|------------------------------------------------------------|--|-------------------|

Line "L" mark-up is calculated in accordance with Article 7 of the General Conditions of the Contract for Construction. Mark-up percentages applied to the line "J" subtotal are as follows: Not to exceed 5% on first \$50,000, 3% on balance beyond \$50,000, 4% for credits.

|   |                                                                   |  |                   |
|---|-------------------------------------------------------------------|--|-------------------|
| M | <b>Total Prime Contractor Change Request</b> (Line I + J + K + L) |  | <div>\$0.00</div> |
|---|-------------------------------------------------------------------|--|-------------------|

Note: Include detailed breakdown of material, labor and equipment cost for each trade using Sections 012611 and 012621. Refer to AIA Document A201 General Conditions of the Contract for Construction, Article 7.

To the best of my knowledge and belief, I certify that all costs listed above are correct.

Contractor Name

Date

Contractor Signature

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

SECTION 012610.1 - PRIME CONTRACTOR CHANGE ORDER REQUEST WORKSHEET

PRIME CONTRACTOR: \_\_\_\_\_

C.O.R. NO.: \_\_\_\_\_

DATE: \_\_\_\_\_

Complete and attached this Worksheet to Section 012610 - Prime Contractor Change Order Request Summary.

**PRIME CONTRACTOR DIRECT COSTS  
ADDITIONS**

|    | DESCRIPTION     | MATERIAL & EQUIPMENT |      |          | LABOR |         |          | TOTAL  |
|----|-----------------|----------------------|------|----------|-------|---------|----------|--------|
|    |                 | QTY                  | COST | SUBTOTAL | HRS   | RATE/HR | SUBTOTAL |        |
| 1  |                 |                      |      | \$0.00   |       |         | \$0.00   | \$0.00 |
| 2  |                 |                      |      | \$0.00   |       |         | \$0.00   | \$0.00 |
| 3  |                 |                      |      | \$0.00   |       |         | \$0.00   | \$0.00 |
| 4  |                 |                      |      | \$0.00   |       |         | \$0.00   | \$0.00 |
| 5  |                 |                      |      | \$0.00   |       |         | \$0.00   | \$0.00 |
| 6  |                 |                      |      | \$0.00   |       |         | \$0.00   | \$0.00 |
| 7  |                 |                      |      | \$0.00   |       |         | \$0.00   | \$0.00 |
| 8  |                 |                      |      | \$0.00   |       |         | \$0.00   | \$0.00 |
| 9  |                 |                      |      | \$0.00   |       |         | \$0.00   | \$0.00 |
| 10 |                 |                      |      | \$0.00   |       |         | \$0.00   | \$0.00 |
|    | ADDITIONS TOTAL |                      |      | \$0.00   |       |         | \$0.00   | \$0.00 |

**DEDUCTIONS**

|    | DESCRIPTION (Use minus sign for all deduct dollar figures) | MATERIAL & EQUIPMENT |          |          | LABOR |             |          | TOTAL  |
|----|------------------------------------------------------------|----------------------|----------|----------|-------|-------------|----------|--------|
|    |                                                            | QTY                  | COST (-) | SUBTOTAL | HRS   | RATE/HR (-) | SUBTOTAL |        |
| 1  |                                                            |                      |          | \$0.00   |       |             | \$0.00   | \$0.00 |
| 2  |                                                            |                      |          | \$0.00   |       |             | \$0.00   | \$0.00 |
| 3  |                                                            |                      |          | \$0.00   |       |             | \$0.00   | \$0.00 |
| 4  |                                                            |                      |          | \$0.00   |       |             | \$0.00   | \$0.00 |
| 5  |                                                            |                      |          | \$0.00   |       |             | \$0.00   | \$0.00 |
| 6  |                                                            |                      |          | \$0.00   |       |             | \$0.00   | \$0.00 |
| 7  |                                                            |                      |          | \$0.00   |       |             | \$0.00   | \$0.00 |
| 8  |                                                            |                      |          | \$0.00   |       |             | \$0.00   | \$0.00 |
| 9  |                                                            |                      |          | \$0.00   |       |             | \$0.00   | \$0.00 |
| 10 |                                                            |                      |          | \$0.00   |       |             | \$0.00   | \$0.00 |
|    | DEDUCTIONS TOTAL                                           |                      |          | \$0.00   |       |             | \$0.00   | \$0.00 |

|                                                 |               |
|-------------------------------------------------|---------------|
| <b>GRAND TOTAL (Additions &amp; Deductions)</b> | <b>\$0.00</b> |
|-------------------------------------------------|---------------|



SECTION 012620 - SUBCONTRACTOR CHANGE ORDER REQUEST SUMMARY

|                                                        |                   |
|--------------------------------------------------------|-------------------|
| SUBCONTRACTOR: _____                                   | C.O.R. NO.: _____ |
| NUMBER OF DAYS REQUESTED FOR CONTRACT EXTENTION: _____ | DATE: _____       |
| DESCRIPTION OF CHANGE: _____                           |                   |
| _____                                                  |                   |
| _____                                                  |                   |

**SUBCONTRACTOR DIRECT COSTS**

**ADDITIONS**

|                             |  |        |
|-----------------------------|--|--------|
| A Material & Equipment      |  |        |
| B Labor                     |  |        |
| C Subtotal of Additive Cost |  | \$0.00 |

**DEDUCTIONS** (use minus sign for all deduct figures)

|                                           |  |        |
|-------------------------------------------|--|--------|
| D Material & Equipment                    |  |        |
| E Labor                                   |  |        |
| F Subtotal of Deductive Cost              |  | \$0.00 |
| G Subcontractor's Total Direct Cost (C+F) |  | \$0.00 |
| H Subcontractor's Mark-up                 |  | \$0.00 |

*Line "H" mark-up is calculated in accordance with Article 7 of the General Conditions of the Contract for Construction. Mark-up percentages applied to the line "G" subtotal are as follows: Not to exceed 15% on first \$50,000, 10% on balance beyond \$50,000, 6% for credits.*

|                                                                  |               |
|------------------------------------------------------------------|---------------|
| I <b>Total Subcontractor Direct Costs + Mark-up</b> (Line G + H) | <b>\$0.00</b> |
|------------------------------------------------------------------|---------------|

|                                               |  |
|-----------------------------------------------|--|
| J Total of all Sub-subcontractor Direct Costs |  |
|-----------------------------------------------|--|

|                             |        |
|-----------------------------|--------|
| K Sub-subcontractor Mark-up | \$0.00 |
|-----------------------------|--------|

*Line "K" mark-up is calculated in accordance with Article 7 of the General Conditions of the Contract for Construction. Mark-up percentages applied to the line "J" subtotal are as follows: Not to exceed 15% on first \$50,000, 10% on balance beyond \$50,000, 6% for credits.*

|                                                             |        |
|-------------------------------------------------------------|--------|
| L Subcontractor's Mark-up on Sub-subcontractor Direct Costs | \$0.00 |
|-------------------------------------------------------------|--------|

*Line "L" mark-up is calculated in accordance with Article 7 of the General Conditions of the Contract for Construction. Mark-up percentages applied to the line "J" subtotal are as follows: Not to exceed 5% on first \$50,000, 3% on balance beyond \$50,000, 4% for credits.*

|                                                                  |               |
|------------------------------------------------------------------|---------------|
| M <b>Total Subcontractor Change Request</b> (Line I + J + K + L) | <b>\$0.00</b> |
|------------------------------------------------------------------|---------------|

*Note: Include detailed breakdown of material, labor and equipment cost for each trade using Section 012621. Refer to AIA Document A201 General Conditions of the Contract for Construction, Article 7.*

|                                                                                                   |            |
|---------------------------------------------------------------------------------------------------|------------|
| <i>To the best of my knowledge and belief, I certify that all costs listed above are correct.</i> |            |
| Contractor Name _____                                                                             | Date _____ |
| Contractor Signature _____                                                                        |            |

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

SECTION 012620.1 - SUBCONTRACTOR CHANGE ORDER REQUEST WORKSHEET

SUBCONTRACTOR: \_\_\_\_\_

C.O.R. NO.: \_\_\_\_\_

DATE: \_\_\_\_\_

Complete and attached this Worksheet to Section 012620 - Subcontractor Change Order Request Summary.

**SUBCONTRACTOR DIRECT COSTS  
ADDITIONS**

|    | DESCRIPTION     | MATERIAL & EQUIPMENT |      |          | LABOR |         |          | TOTAL  |
|----|-----------------|----------------------|------|----------|-------|---------|----------|--------|
|    |                 | QTY                  | COST | SUBTOTAL | HRS   | RATE/HR | SUBTOTAL |        |
| 1  |                 |                      |      | \$0.00   |       |         | \$0.00   | \$0.00 |
| 2  |                 |                      |      | \$0.00   |       |         | \$0.00   | \$0.00 |
| 3  |                 |                      |      | \$0.00   |       |         | \$0.00   | \$0.00 |
| 4  |                 |                      |      | \$0.00   |       |         | \$0.00   | \$0.00 |
| 5  |                 |                      |      | \$0.00   |       |         | \$0.00   | \$0.00 |
| 6  |                 |                      |      | \$0.00   |       |         | \$0.00   | \$0.00 |
| 7  |                 |                      |      | \$0.00   |       |         | \$0.00   | \$0.00 |
| 8  |                 |                      |      | \$0.00   |       |         | \$0.00   | \$0.00 |
| 9  |                 |                      |      | \$0.00   |       |         | \$0.00   | \$0.00 |
| 10 |                 |                      |      | \$0.00   |       |         | \$0.00   | \$0.00 |
|    | ADDITIONS TOTAL |                      |      | \$0.00   |       |         | \$0.00   | \$0.00 |

**DEDUCTIONS**

|    | DESCRIPTION (Use minus sign for all deduct dollar figures) | MATERIAL & EQUIPMENT |          |          | LABOR |             |          | TOTAL  |
|----|------------------------------------------------------------|----------------------|----------|----------|-------|-------------|----------|--------|
|    |                                                            | QTY                  | COST (-) | SUBTOTAL | HRS   | RATE/HR (-) | SUBTOTAL |        |
| 1  |                                                            |                      |          | \$0.00   |       |             | \$0.00   | \$0.00 |
| 2  |                                                            |                      |          | \$0.00   |       |             | \$0.00   | \$0.00 |
| 3  |                                                            |                      |          | \$0.00   |       |             | \$0.00   | \$0.00 |
| 4  |                                                            |                      |          | \$0.00   |       |             | \$0.00   | \$0.00 |
| 5  |                                                            |                      |          | \$0.00   |       |             | \$0.00   | \$0.00 |
| 6  |                                                            |                      |          | \$0.00   |       |             | \$0.00   | \$0.00 |
| 7  |                                                            |                      |          | \$0.00   |       |             | \$0.00   | \$0.00 |
| 8  |                                                            |                      |          | \$0.00   |       |             | \$0.00   | \$0.00 |
| 9  |                                                            |                      |          | \$0.00   |       |             | \$0.00   | \$0.00 |
| 10 |                                                            |                      |          | \$0.00   |       |             | \$0.00   | \$0.00 |
|    | DEDUCTIONS TOTAL                                           |                      |          | \$0.00   |       |             | \$0.00   | \$0.00 |

|                                                 |               |
|-------------------------------------------------|---------------|
| <b>GRAND TOTAL (Additions &amp; Deductions)</b> | <b>\$0.00</b> |
|-------------------------------------------------|---------------|

## SECTION 012900 - PAYMENT PROCEDURES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements necessary to prepare and process Applications for Payment.
- B. Related Requirements:
  - 1. Section 012100 "Allowances" for procedural requirements governing the handling and processing of allowances.
  - 2. Section 012600 "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.
  - 3. Section 012910 "Payroll Verification Affidavit" to be completed and attached to each application for payment.
  - 4. Section 012911 "Partial Release of Liens" to be completed and attached to each application for payment.
  - 5. Section 013200 "Construction Progress Documentation" for administrative requirements governing the preparation and submittal of the Contractor's construction schedule.

#### 1.3 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's construction schedule.
  - 1. Coordinate line items in the schedule of values with items required to be indicated as separate activities in Contractor's construction schedule.
  - 2. Submit the schedule of values to Architect at earliest possible date, but no later than seven days before the date scheduled for submittal of initial Applications for Payment.
- B. Format and Content: Use Project Manual table of contents as a guide to establish line items for the schedule of values. Provide at least one line item for each Specification Section.
  - 1. Identification: Include the following Project identification on the schedule of values:
    - a. Project name and location.
    - b. Owner's name.



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- c. Name of Architect.
  - d. Architect's Project number.
  - e. Contractor's name and address.
  - f. Date of submittal.
2. Arrange schedule of values consistent with format of AIA Document G703.
3. Arrange the schedule of values in tabular form, with separate columns to indicate the following for each item listed:
  - a. Related Specification Section or division.
  - b. Description of the Work.
  - c. Name of subcontractor.
  - d. Name of manufacturer or fabricator.
  - e. Name of supplier.
  - f. Change Orders (numbers) that affect value.
  - g. Allowances.
  - h. Dollar value of the following, as a percentage of the Contract Sum to nearest one-hundredth percent, adjusted to total 100 percent. Round dollar amounts to whole dollars, with total equal to Contract Sum.
    - 1) Labor.
    - 2) Materials.
4. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Provide multiple line items for principal subcontract amounts in excess of percent of the Contract Sum.
5. Provide a separate line item in the schedule of values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
  - a. Differentiate between items stored on-site and items stored off-site.
6. Allowances: Provide a separate line item in the schedule of values for each allowance.
7. Overhead Costs, Proportional Distribution: Include total cost and proportionate share of general overhead and profit for each line item.
8. Closeout Costs. Include separate line items under Contractor and principal subcontracts for Project closeout requirements in an amount totaling five percent of the Contract Sum and subcontract amount.
9. Schedule of Values Revisions: Revise the schedule of values when Change Orders or Construction Change Directives result in a change in the Contract Sum. Include at least one separate line item for each Change Order and Construction Change Directive.

#### 1.4 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment following the initial Application for Payment shall be consistent with previous applications and payments, as certified by Architect and paid for by Owner.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- B. Payment Application Times: The date for each progress payment is indicated in the Owner/Contractor Agreement. The period of construction work covered by each Application for Payment is the period indicated in the Agreement.
  - 1. Submit draft copy of Application for Payment seven days prior to due date for review by Architect.
- C. Application for Payment Forms: Use AIA Document G702 and AIA Document G703 as form for Applications for Payment.
- D. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Architect will return incomplete applications without action.
  - 1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
  - 2. Include amounts for work completed following previous Application for Payment, whether or not payment has been received. Include only amounts for work completed at time of Application for Payment.
  - 3. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
  - 4. Indicate separate amounts for work being carried out under Owner-requested project acceleration.
- E. Stored Materials: Include in Application for Payment amounts applied for materials or equipment purchased or fabricated and stored, but not yet installed. Differentiate between items stored on-site and items stored off-site.
  - 1. Provide certificate of insurance, evidence of transfer of title to Owner, and consent of surety to payment for stored materials.
  - 2. Provide supporting documentation that verifies amount requested, such as paid invoices. Match amount requested with amounts indicated on documentation; do not include overhead and profit on stored materials.
  - 3. Provide summary documentation for stored materials indicating the following:
    - a. Value of materials previously stored and remaining stored as of date of previous Applications for Payment.
    - b. Value of previously stored materials put in place after date of previous Application for Payment and on or before date of current Application for Payment.
    - c. Value of materials stored since date of previous Application for Payment and remaining stored as of date of current Application for Payment.
- F. Transmittal: Submit one signed and notarized PDF copy of each Application for Payment to Architect by a method ensuring receipt within 24 hours. Include waivers of lien and similar attachments.
  - 1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- G. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from entities lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment.
1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
  2. When an application shows completion of an item, submit conditional final or full waivers.
  3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
  4. Waiver Forms: Use Section 012911 – “Partial Release of Liens” of the Project Manual.
- H. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
1. List of subcontractors.
  2. Schedule of values.
  3. Contractor's construction schedule (preliminary if not final).
  4. Submittal schedule (preliminary if not final).
  5. Copies of building permits.
  6. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
  7. Certificates of insurance and insurance policies.
  8. Performance and payment bonds.
  9. Data needed to acquire Owner's insurance.
  10. Copies of Initial Project Workforce Report.
  11. Copies of Monthly Workforce Tracking.
- I. Application for Payment at Substantial Completion: After Architect issues the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.
1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
    - a. Complete administrative actions, submittals, and Work preceding this application, as described in Section 017700 "Closeout Procedures."
  2. This application shall reflect Certificate(s) of Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- J. Final Payment Application: After completing Project closeout requirements, submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
1. Evidence of completion of Project closeout requirements.
  2. Certification of completion of final punch list items.
  3. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
  4. Updated final statement, accounting for final changes to the Contract Sum.



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

5. AIA Document G706.
6. AIA Document G706A.
7. AIA Document G707.
8. Evidence that claims have been settled.
9. Final liquidated damages settlement statement.
10. Waivers and releases.
11. Letter on Contractor's letterhead stating that all Workforce Tracking forms and Weekly Certified Payroll Records have been submitted to the proper recipients.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012900

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

SECTION 012910 - PAYROLL VERIFICATION AFFIDAVIT

State of New Jersey

County of \_\_\_\_\_

\_\_\_\_\_ being duly sworn, on its oath deposes and says:

I swear that the payroll on the Project indicated below,

under contract with \_\_\_\_\_ (Owner) and  
for the payroll period indicated, was fully paid and that nothing is due and owing to any worker  
thereunder, and that the wages paid were, in no case, less than the applicable wage rates contained  
in the wage determination decision of the Secretary of Labor of New Jersey, and that the job  
classification for each worker conformed to the actual work he/she performed.

In addition, I have submitted to the Owner for their files one copy of all weekly-certified payroll  
records for this pay period.

The above statement applies in full to all of the sub-contractors under this contract.

Project Name & Location: \_\_\_\_\_  
\_\_\_\_\_

Pay Period: \_\_\_\_\_

Contract No. \_\_\_\_\_ - \_\_\_\_\_ (Name)

Contractor \_\_\_\_\_

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

Subscribed and sworn to before me this

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

State of \_\_\_\_\_

Notary Public: \_\_\_\_\_

My commission expires \_\_\_\_\_, 20\_\_\_\_\_.

END OF SECTION 012910

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

SECTION 012911 - PARTIAL RELEASE OF LIENS

STATE OF NEW JERSEY

I, \_\_\_\_\_ of \_\_\_\_\_ (Municipality)  
in the County of \_\_\_\_\_ and the State of \_\_\_\_\_  
\_\_\_\_\_ of full age, being duly sworn according to law on  
my oath depose and say:

I am \_\_\_\_\_ (Title)  
of the firm of \_\_\_\_\_

(strike two of the three options below, which do not apply)

- 1.(Prime Contractor \_\_\_\_\_)
- 2.(Subcontractor to \_\_\_\_\_)
- 3.(Material supplier to \_\_\_\_\_)

in connection with construction of the \_\_\_\_\_

\_\_\_\_\_  
(Project name and location)

To be completed by Prime Contractor

To the date hereof, all labor and/or material(s) installed, including all applicable sales or use taxes furnished for this project has been fully paid for, and there are no sums due or to become due therefore, except as follows:

All labor directly employed by us for this project has been fully paid as of the date of our last payroll period

\_\_\_\_\_  
(Date), except as follows:



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

To be completed by Prime Contractor

To the date hereof, all labor and/or material(s) installed, including all applicable sales or use taxes furnished for this project has been fully paid for, and there are no sums due or to become due therefore, except as follows:

To be completed by Subcontractor and/or Material Supplier

All labor directly employed by us for this project has been fully paid as of the date of our last payroll period

\_\_\_\_\_ (Date), except as follows:

All withholding, Social Security, or Unemployment Taxes, all Union benefits and Welfare Funds, all Workman's Compensation, Public Liability, and accumulations of Withholding taxes are separately deposited in trust funds.

This affidavit is made with the full knowledge that \_\_\_\_\_

\_\_\_\_\_ (Owner)

relies hereon in making partial (final) payment \$ \_\_\_\_\_  
(Amount of payment) to us for labor and or material furnished and installed for the project named herein.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

By: \_\_\_\_\_ L.S.

\*(SEAL IF BIDDER  
IS A CORPORATION)

\_\_\_\_\_

Subscribed and sworn to before me this

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

State of \_\_\_\_\_

Notary Public: \_\_\_\_\_

My commission expires \_\_\_\_\_, 20\_\_\_\_\_.

END OF SECTION 012911

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

SECTION 012920-BILL OF SALE/CERTIFICATION FOR STORED MATERIAL

OWNER: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_

IN ACCORDANCE WITH THE CONTRACT DOCUMENTS on the above Project, the Owner has allowed the Contractor to purchase materials and/or equipment in advance of the time required for the installation of said materials and/or equipment and to requisition the Owner for payment of such material and/or equipment properly stored. The following is mutually agreed:

1. The Contractor certifies that he/she is the legal owner of the materials and/or equipment listed below and provides the Owner with a certificate of insurance naming the Owner as loss beneficiary for the full dollar amount representing the materials stored.
2. The Contractor agrees to transfer to the Owner the materials and/or equipment listed below and to transfer all rights, title and interest therein to the Owner.
3. The materials and/or equipment listed below has been properly stored where listed below and has been designated by a tag or other appropriate notice affixed thereto stating:
4. Nothing in these provisions shall be construed as relieving the Contractor from the sole responsibility for the care, custody and protection of such materials and/or equipment or as a waiver of the right of the Owner to require fulfillment of all terms and conditions of the Contract Documents.
5. When materials and/or equipment are stored off the Project Site, the Contractor certifies that such materials and/or equipment, listed below, are fully insured against the perils of fire, theft, extended coverage, vandalism and malicious mischief.
6. The Owner, Construction Manager and Architect reserve the right to inspect materials and/or equipment, wherever stored, at their convenience during normal working hours.
7. The cost and expense, if any, involved in the storage and/or delivery to the Project Site will be borne by the Contractor.



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

LIST OF MATERIALS AND/OR EQUIPMENT STORED:

| <u>ITEM</u> | <u>DESCRIPTION</u> | <u>QUANTITY</u> | <u>TOTAL VALUE</u> |
|-------------|--------------------|-----------------|--------------------|
| 1.          |                    |                 |                    |
| 2.          |                    |                 |                    |
| 3.          |                    |                 |                    |
| 4.          |                    |                 |                    |
| 5.          |                    |                 |                    |

PLACE AND METHOD OF STORAGE:

| <u>LOCATION</u>     | <u>STORED BY</u> | <u>PROTECTED BY</u> |
|---------------------|------------------|---------------------|
| ( ) Warehouse       | ( ) Contractor   | ( ) Building Cover  |
| ( ) Storage Yard    | ( ) Distributor  | ( ) Plastic Cover   |
| ( ) On Project Site | ( ) Manufacturer | ( ) Not Required    |

NAME AND ADDRESS OF PARTY STORING MATERIALS AND/OR EQUIPMENT

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY, STATE, ZIP: \_\_\_\_\_

BILL OF SALE:

In consideration of the sum or sums listed above in lawful money of the United States to be paid as provided in the Contract Documents, The Contractor does grant and convey unto the Owner title of ownership of all materials and/or equipment listed above to have and to hold the same unto the Owner forever.

The Contractor does, for himself/herself, his/her successors and assigns covenant and agree to warrant and defend the sale of the above listed materials and/or equipment hereby sold unto the Owner, against all claims or any claims or any person or persons whomsoever.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1 SWORN TO AND SUBSCRIBED \_\_\_\_\_  
2 Contractor

3 BEFORE ME THIS \_\_\_\_\_ DAY  
4 OF \_\_\_\_\_, 20\_\_\_\_\_. By: \_\_\_\_\_  
5 Name

6 \_\_\_\_\_  
7 Notary Public of the State of  
8 New Jersey. \_\_\_\_\_  
9 Title

10  
11 My Commission Expires: \_\_\_\_\_  
12  
13 \_\_\_\_\_  
14 Date

15

16

17

18

19 Accepted for Project Owner:

20

21 \_\_\_\_\_  
22 Signature Title Date

23

24

25

26 END OF SECTION 012920

## SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes administrative provisions for coordinating construction operations on Project, including, but not limited to, the following:
  - 1. General coordination procedures.
  - 2. RFIs.
  - 3. Digital project management procedures.
  - 4. Project meetings.
- B. Related Requirements:
  - 1. Section 013200 "Construction Progress Documentation" for preparing and submitting Contractor's construction schedule.
  - 2. Section 017700 "Closeout Procedures" for coordinating closeout of the Contract.

#### 1.3 DEFINITIONS

- A. RFI: Request for Information. Request from Owner, Architect, or Contractor seeking information required by or clarifications of the Contract Documents.

#### 1.4 INFORMATIONAL SUBMITTALS

- A. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
  - 1. Name, address, telephone number, and email address of entity performing subcontract or supplying products.
  - 2. Number and title of related Specification Section(s) covered by subcontract.
  - 3. Drawing number and detail references, as appropriate, covered by subcontract.



## 1.5 GENERAL COORDINATION PROCEDURES

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations included in different Sections that depend on each other for proper installation, connection, and operation.
  - 1. Schedule construction operations in sequence required to obtain the best results, where installation of one part of the Work depends on installation of other components, before or after its own installation.
  - 2. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.
  - 3. Make adequate provisions to accommodate items scheduled for later installation.
- B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
  - 1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.

## 1.6 REQUEST FOR INFORMATION (RFI)

- A. General: Immediately on discovery of the need for additional information, clarification, or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified.
  - 1. Each Request for Information shall be limited to a single subject of inquiry.
  - 2. Architect will return without response those RFIs submitted to Architect by other entities controlled by Contractor.
  - 3. Coordinate and submit RFIs in a prompt manner to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Clearly and concisely set forth the issue for which clarification or interpretation is sought and why a response is needed and when it is needed. Contractor shall provide their own interpretation or understanding of the requirement along with their reasons for how they reached such an understanding. Include a detailed, legible description of item needing information or interpretation and the following:
  - 1. Project name.
  - 2. Owner name.
  - 3. Name of Architect.
  - 4. Architect's Project number.
  - 5. Date.
  - 6. Name of Contractor.
  - 7. RFI number, numbered sequentially.
  - 8. RFI subject.
  - 9. Specification Section number and title and related paragraphs, as appropriate.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

10. Drawing number and detail references, as appropriate.
  11. Field dimensions and conditions, as appropriate.
  12. Contractor's suggested resolution. If Contractor's suggested resolution impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
  13. Contractor's signature.
  14. Potential cost impact & potential estimate.
  15. Potential time impact & potential delay.
  16. Change order required.
  17. Date response needed.
  18. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.
    - a. Include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments on attached sketches.
- C. RFI Forms: Use Contractor's Request for Information included at end of Part 3.
1. Attachments shall be electronic files in PDF format.
- D. Architect's Action: Architect will review each RFI, determine action required, and respond. Allow seven days for Architect's response for each RFI. RFIs received by Architect after 1:00 p.m. will be considered as received the following working day.
1. The following Contractor-generated RFIs will be returned without action and shall not be entered into the RFI Log:
    - a. Requests for approval of submittals.
    - b. Requests for approval of substitutions.
    - c. Requests for approval of Contractor's means and methods.
    - d. Requests for coordination information already indicated in the Contract Documents.
    - e. Requests for adjustments in the Contract Time or the Contract Sum.
    - f. Requests for interpretation of Architect's actions on submittals.
    - g. Incomplete RFIs or inaccurately prepared RFIs.
  2. Architect's action may include a request for additional information, in which case Architect's time for response will date from time of receipt by Architect of additional information.
  3. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Section 012600 "Contract Modification Procedures."
    - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect in writing within five days of receipt of the RFI response. Failure to provide such written notice shall waive the Contractor's right to seek additional time or cost.

## 1.7 DIGITAL PROJECT MANAGEMENT PROCEDURES

- A. Use of Architect's Digital Data Files: Digital data files of Architect's CAD drawings will be provided by Architect for Contractor's use during construction.
  - 1. Digital data files may be used by Contractor in preparing coordination drawings, Shop Drawings, and Project Record Drawings.
  - 2. Architect makes no representations as to the accuracy or completeness of digital data files as they relate to Contract Drawings.
  - 3. Contractor shall execute a data licensing agreement in the form of an Electronic Files Indemnification form provided by the Architect.
    - a. Subcontractors and other parties granted access by Contractor to Architect's digital data files shall execute a data licensing agreement in the form of an Electronic Files Indemnification form provided by the Architect.
- B. PDF Document Preparation: Where PDFs are required to be submitted to Architect, prepare as follows:
  - 1. Assemble complete submittal package into a single indexed file, incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item.
  - 2. Name file with submittal number or other unique identifier, including revision identifier.
  - 3. Certifications: Where digitally submitted certificates and certifications are required, provide a digital signature with digital certificate on where indicated.

## 1.8 PROJECT MEETINGS

- A. General: Architect will schedule and conduct meetings and conferences at Project site unless otherwise indicated.
  - 1. Minutes: Entity responsible for conducting meeting will record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner, Contractor(s) and Architect, within three days of the meeting.
  - 2. Contractor Progress Status Report: Prime Contractors shall distribute their progress report at each meeting to all invited attendees. Copy of form is included at end of Part 3.
- B. Preconstruction Conference: Architect will schedule and conduct a preconstruction conference before starting construction, at a time convenient to Owner and Architect, but no later than 15 days after execution of the Agreement.
  - 1. Attendees: Authorized representatives of Owner, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. Participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
  - 2. Agenda: Discuss items of significance that could affect progress, including the following:
    - a. Responsibilities and personnel assignments.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- b. Tentative construction schedule.
  - c. Permits.
  - d. Critical work sequencing and long lead items.
  - e. Designation of key personnel and their duties.
  - f. Lines of communications.
  - g. Procedures for processing field decisions and Change Orders.
  - h. Procedures for RFIs.
  - i. Procedures for testing and inspecting.
  - j. Procedures for processing Applications for Payment.
  - k. Distribution of the Contract Documents.
  - l. Submittal procedures.
  - m. Preparation of Record Documents.
  - n. Use of the premises and existing building.
  - o. Work restrictions.
  - p. Working hours.
  - q. Owner's occupancy requirements.
  - r. Responsibility for temporary facilities and controls.
  - s. Procedures for moisture and mold control.
  - t. Procedures for disruptions and shutdowns.
  - u. Construction waste management and recycling.
  - v. Parking availability.
  - w. Office, work, and storage areas.
  - x. Equipment deliveries and priorities.
  - y. First aid.
  - z. Security.
  - aa. Progress cleaning.
3. Minutes: Entity responsible for conducting meeting will record and distribute meeting minutes.
- C. Progress Meetings: Architect will conduct progress meetings at biweekly intervals or as deemed necessary by the Architect.
- 1. Attendees: In addition to representatives of Owner and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
  - 2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
    - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's construction schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- 1) Review schedule for next period.
- b. Review present and future needs of each entity present, including the following:
  - 1) Interface requirements.
  - 2) Sequence of operations.
  - 3) Status of submittals.
  - 4) Deliveries.
  - 5) Off-site fabrication.
  - 6) Access.
  - 7) Site use.
  - 8) Temporary facilities and controls.
  - 9) Progress cleaning.
  - 10) Quality and work standards.
  - 11) Status of correction of deficient items.
  - 12) Field observations.
  - 13) Status of RFIs.
  - 14) Status of Proposal Requests.
  - 15) Pending changes.
  - 16) Status of Change Orders.
  - 17) Pending claims and disputes.
  - 18) Documentation of information for payment requests.
3. Minutes: Entity responsible for conducting the meeting will record and distribute the meeting minutes to each party present and to parties requiring information.
  - a. Schedule Updating: Revise Contractor's construction schedule after each progress meeting, where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.
- D. Coordination Meetings: Conduct Project coordination meetings at as needed. Project coordination meetings are in addition to specific meetings held for other purposes, such as progress meetings and preinstallation conferences.
  1. Attendees: Each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meetings shall be familiar with Project and authorized to conclude matters relating to the Work.
  2. Agenda: Review and correct or approve minutes of the previous coordination meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
    - a. Combined Contractor's Construction Schedule: Review progress since the last coordination meeting. Determine whether each contract is on time, ahead of schedule, or behind schedule, in relation to combined Contractor's construction schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- b. Schedule Updating: Revise combined Contractor's construction schedule after each coordination meeting, where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with report of each meeting.
  - c. Review present and future needs of each contractor present, including the following:
    - 1) Interface requirements.
    - 2) Sequence of operations.
    - 3) Status of submittals.
    - 4) Deliveries.
    - 5) Off-site fabrication.
    - 6) Access.
    - 7) Site use.
    - 8) Temporary facilities and controls.
    - 9) Work hours.
    - 10) Hazards and risks.
    - 11) Progress cleaning.
    - 12) Quality and work standards.
    - 13) Status of RFIs.
    - 14) Proposal Requests.
    - 15) Change Orders.
    - 16) Pending changes.
3. Reporting: Record meeting results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

3.1 PROJECT MANAGEMENT FORMS

- A. The Architect shall furnish the Contractor with digital forms of the following documents.
  - 1. 012501 - Substitution Request.
  - 2. 012610 - Contractor Change Order Summary.
  - 3. 012620 - Subcontractor Change Order Request Summary.
  - 4. 012910 - Payroll Verification Affidavit.
  - 5. 012911 - Partial Release Liens.
  - 6. 012920 - Bill Sale-Stored Material.
  - 7. 013100 - Contractor's Project Status Report.
  - 8. 013100 - Contractor Request for Information Form.
  - 9. 013300 - Submittal Transmittal.
  - 10. 017721 - Maintenance Bond.
  - 11. 017722 - Subcontractor Guaranty.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

END OF SECTION 013100

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

CONTRACTOR REQUEST FOR INFORMATION

FROM: \_\_\_\_\_

REQUEST DATE: \_\_\_\_\_ EMAIL \_\_\_\_\_

CONTRACTOR'S RFI NUMBER: \_\_\_\_\_

TO:

Regan Young AIA

REGAN YOUNG ENGLAND BUTERA, PC

Fax: (609) 265-0333

Email: rgy@ryebread.com

REFERENCES (List all applicable drawings & specifications):

PLEASE RESPOND TO THE FOLLOWING:

POTENTIAL COST IMPACT & POTENTIAL ESTIMATE: \_\_\_\_\_

POTENTIAL TIME IMPACT & POTENTIAL DELAY: \_\_\_\_\_

CHANGE ORDER REQUIRED: ☐ Yes ☐ No

DATE RESPONSE NEEDED: \_\_\_\_\_



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

DESIGN PROFESSIONAL'S RESPONSE:

This document is not an RFI within the definition of the Contract Documents, and therefore is being returned to you without a response. It is a [**change order request**] [**submittal**] [**has not been submitted through the proper channels**]. This document has not been entered into the project's RFI Log. Please resubmit the document on the proper form for timely processing.

---

DATE OF RESPONSE: \_\_\_\_\_ BY: \_\_\_\_\_

DISTRIBUTION: \_\_\_\_\_

**Note:** This reply is not an authorization to proceed with work involving additional cost, time or both. If any reply requires a change to the Contract Documents, a Change Order, Construction Change Directive, or a Minor Change in the work must be executed in accordance with the Contract Documents.

## CONTRACTOR PROJECT STATUS REPORT

(To be submitted at each Job Meeting)

CONTRACTOR: \_\_\_\_\_ DATE \_\_\_\_\_

EST. % OF COMPLETION: \_\_\_\_\_ CONFORMANCE W/ SCHED(+,=,-): \_\_\_\_\_

WORK IN PROGRESS: (List main work items and % completion for each item)

- A. \_\_\_\_\_
- B. \_\_\_\_\_
- C. \_\_\_\_\_
- D. \_\_\_\_\_
- E. \_\_\_\_\_
- F. \_\_\_\_\_
- G. \_\_\_\_\_
- H. \_\_\_\_\_

PROJECTED WORK: (List only what you expect to perform in the next two weeks & include % of completion for each item)

- A. \_\_\_\_\_
- B. \_\_\_\_\_
- C. \_\_\_\_\_
- D. \_\_\_\_\_
- E. \_\_\_\_\_
- F. \_\_\_\_\_
- G. \_\_\_\_\_

POINTS OF RECORD: (be brief)

- A. \_\_\_\_\_
- B. \_\_\_\_\_
- C. \_\_\_\_\_
- D. \_\_\_\_\_

## SECTION 013200 - CONSTRUCTION PROGRESS DOCUMENTATION

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
  - 1. Informational submittals.
  - 2. Coordination.
  - 3. Contractor's Construction Schedule.
  - 4. Gantt-chart schedule requirements.
  - 5. Reports.
  - 6. Site condition reports.
  - 7. Unusual event reports.

#### 1.3 INFORMATIONAL SUBMITTALS

- A. Format for Submittals: Submit required submittals in the following format:
  - 1. PDF file.
- B. Contractor's Construction Schedule: Initial schedule, of size required to display entire schedule for entire construction period.
  - 1. Maximum sheet size 11 x 17. Multiple sheets are acceptable.
- C. Site Condition Reports: Submit at time of discovery of differing conditions.
- D. Unusual Event Reports: Submit at time of unusual event.

#### 1.4 COORDINATION

- A. Coordinate Contractor's Construction Schedule with the schedule of values, submittal schedule, progress reports, payment requests, and other required schedules and reports.
  - 1. Secure time commitments for performing critical elements of the Work from entities involved.

2. Coordinate each construction activity in the network with other activities, and schedule them in proper sequence.

#### 1.5 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Computer Scheduling Software: Prepare schedules using current version of a program that has been developed specifically to manage construction schedules.
- B. Time Frame: Extend schedule from date established for the Notice to Proceed to date of Final Completion.
  1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
- C. Activities: Comply with the following:
  1. Temporary Facilities: Indicate start and completion dates for the following as applicable:
    - a. Securing of approvals and permits required for performance of the Work.
    - b. Temporary facilities.
    - c. Owner interfaces and furnishing of items.
    - d. Regulatory agency approvals.
    - e. Punch list.
  2. Procurement Activities: Include procurement process activities for the following long lead-time items and major items, requiring a cycle of more than 60 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
    - a. HVAC equipment.
    - b. Lighting.
  3. Submittal Review Time: Include review and resubmittal times indicated in Section 013300 "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's Construction Schedule with submittal schedule.
  4. Startup and Testing Time: Include no fewer than seven days for startup and testing.
  5. Substantial Completion: Indicate completion in advance of date established for Substantial Completion and allow time for Architect's administrative procedures necessary for certification of Substantial Completion.
  6. Punch List and Final Completion: Include not more than 30 days for completion of punch list items and Final Completion.
  7. Owner-Provided Products: Include a separate activity for each product. Include delivery date indicated in Section 011000 "Summary." Delivery dates indicated stipulate the earliest possible delivery date.
  8. Work Restrictions: Show the effect of the following items on the schedule:
    - a. Coordination with existing construction.
    - b. Limitations of continued occupancies.



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- c. Uninterruptible services.
  - d. Use-of-premises restrictions.
  - e. Seasonal variations.
  - f. Environmental control.
- 9. Work Stages: Indicate important stages of construction for each major portion of the Work, including, but not limited to, the following:
  - a. Subcontract awards.
  - b. Submittals.
  - c. Purchases.
  - d. Fabrication.
  - e. Sample testing.
  - f. Deliveries.
  - g. Installation.
  - h. Tests and inspections.
  - i. Adjusting.
  - j. Curing.
  - k. Startup and placement into final use and operation.
- D. Upcoming Work Summary: Prepare summary report indicating activities scheduled to occur or commence prior to submittal of next schedule update. Summarize the following issues:
  - 1. Unresolved issues.
  - 2. Unanswered Requests for Information.
  - 3. Rejected or unreturned submittals.
  - 4. Notations on returned submittals.
  - 5. Pending modifications affecting the Work and the Contract Time.
- E. Contractor's Construction Schedule Updating: When requested by the Architect, update schedule to reflect actual construction progress and activities. Issue schedule one week before each regularly scheduled progress meeting.
  - 1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
  - 2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
  - 3. As the Work progresses, indicate Final Completion percentage for each activity.
- F. Recovery Schedule: When periodic update indicates the Work is 14 or more calendar days behind the current approved schedule, submit a separate recovery schedule indicating means by which Contractor intends to regain compliance with the schedule. Indicate changes to working hours, working days, crew sizes, equipment required to achieve compliance, and date by which recovery will be accomplished.
- G. Distribution: Distribute copies of approved schedule to Architect, Owner, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1. When revisions are made, distribute updated schedules to the same parties. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

1.6 GANTT-CHART SCHEDULE REQUIREMENTS

- A. Gantt-Chart Schedule: Submit a comprehensive, fully developed, horizontal, Gantt-chart-type, Contractor's Construction Schedule within 15 days of date established for the Notice to Proceed.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.

1.7 REPORTS

- A. Site Condition Reports: Immediately on discovery of a difference between site conditions and the Contract Documents, prepare and submit a detailed report. Submit with a Request for Information. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.
- B. Unusual Event Reports: When an event of an unusual and significant nature occurs at Project site, whether or not related directly to the Work, prepare and submit a special report. List chain of events, persons participating, responses by Contractor's personnel, evaluation of results or effects, and similar pertinent information. Advise Owner in advance when these events are known or predictable.
  1. Submit unusual event reports directly to Owner and Architect within one day(s) of an occurrence. Distribute copies of report to parties affected by the occurrence.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 013200

## SECTION 013233 - PHOTOGRAPHIC DOCUMENTATION

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for the following:
  - 1. Preconstruction photographs and/or videos.
- B. Related Requirements:
  - 1. Section 024119 "Selective Demolition" for photographic documentation before selective demolition operations commence.

#### 1.3 INFORMATIONAL SUBMITTALS

- A. Key Plan: Submit key plan of Project site and building with notation of vantage points marked for location and direction of each photograph. Indicate elevation or story of construction. Include same information as corresponding photographic documentation.
- B. Digital Photographs: Submit image files within three days of taking photographs.
  - 1. Submit photos thumb-drive. Include copy of key plan indicating each photograph's location and direction.
  - 2. Identification: Provide the following information:
    - a. Name of Project.
    - b. Name of Architect.
    - c. Name of Contractor.
    - d. Date photograph was taken.
    - e. Description of location, vantage point, and direction.
    - f. Unique sequential identifier keyed to accompanying key plan.

#### 1.4 FORMATS AND MEDIA

- A. Digital Photographs: Provide color images in JPG format, produced by a digital camera with minimum sensor size of 12 megapixels, and at an image resolution of not less than 3200 by 2400

pixels, and with vibration-reduction technology. Use flash in low light levels or backlit conditions.

- B. Digital Images: Submit digital media as originally recorded in the digital camera, without alteration, manipulation, editing, or modifications using image-editing software.
- C. File Names: Name media files with date and sequential numbering suffix.

#### 1.5 CONSTRUCTION PHOTOGRAPHS

- A. Photographer: Engage a qualified photographer to take construction photographs.
- B. General: Take photographs with maximum depth of field and in focus.
  - 1. Maintain key plan with each set of construction photographs that identifies each photographic location.
- C. Preconstruction Photographs: Before commencement of the Work, take photographs of existing conditions from different vantage points.
  - 1. Take 20 photographs of existing building to accurately record physical conditions at start of construction.
  - 2. Take additional photographs as required to record settlement or cracking of adjacent structures, pavements, and improvements.
  - 3. Show existing conditions of all rooms, corridors, stair towers, elevators, restrooms and other spaces effected by the Work.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 013233



## SECTION 013300 - SUBMITTAL PROCEDURES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section Includes:

- 1. Administrative and procedural requirements for submittals.

- B. Related Requirements:

- 1. Section 012900 "Payment Procedures" for submitting Applications for Payment and the schedule of values.
  - 2. Section 013200 "Construction Progress Documentation" for submitting schedules and reports, including Contractor's construction schedule.
  - 3. Section 013233 "Photographic Documentation" for submitting preconstruction photographs.
  - 4. Section 014000 "Quality Requirements" for submitting test and inspection reports.
  - 5. Section 017700 "Closeout Procedures" for submitting closeout submittals and maintenance material submittals.
  - 6. Section 017823 "Operation and Maintenance Data" for submitting operation and maintenance manuals.
  - 7. Section 017839 "Project Record Documents" for submitting record Drawings, record Specifications, and record Product Data.
  - 8. Section 017900 "Demonstration and Training" for submitting video recordings of demonstration of equipment and training of Owner's personnel.

#### 1.3 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Architect's responsive action. Action submittals are those submittals indicated in individual Specification Sections as "action submittals."
- B. Informational Submittals: Written and graphic information and physical samples that do not require Architect's responsive action. Submittals may be rejected for not complying with requirements. Informational submittals are those submittals indicated in individual Specification Sections as "informational submittals."

#### 1.4 SUBMITTAL FORMATS

A. Submittal Information: Include the following information in each submittal:

1. Project name.
2. Date.
3. Name of Architect.
4. Name of Contractor.
5. Name of firm or entity that prepared submittal.
6. Names of subcontractor, manufacturer, and supplier.
7. Unique submittal number, including revision identifier. Include Specification Section number with sequential alphanumeric identifier and alphanumeric suffix for resubmittals.
8. Category and type of submittal.
9. Submittal purpose and description.
10. Number and title of Specification Section, with paragraph number and generic name for each of multiple items.
11. Drawing number and detail references, as appropriate.
12. Indication of full or partial submittal.
13. Location(s) where product is to be installed, as appropriate.
14. Other necessary identification.
15. Remarks.
16. Signature of transmitter.

B. Options: Identify options requiring selection by Architect.

C. Deviations and Additional Information: On each submittal, clearly indicate deviations from requirements in the Contract Documents, including minor variations and limitations; include relevant additional information and revisions, other than those requested by Architect on previous submittals. Indicate by highlighting on each submittal or noting on attached separate sheet.

D. Paper Submittals (*Only for submittals that require an original signature and/or raised seal*):

1. Place a permanent label or title block on each submittal item for identification; include name of firm or entity that prepared submittal.
2. Provide a space approximately 4 by 6 inches on label or beside title block to record Contractor's review and approval markings and action taken by Architect.
3. Action Submittals: Submit four paper copies of each submittal unless otherwise indicated. Architect will return one copy.
4. Additional Copies: Unless additional copies are required for final submittal, and unless Architect observes noncompliance with provisions in the Contract Documents, initial submittal may serve as final submittal.
5. Transmittal for Submittals: Assemble each submittal individually and appropriately for transmittal and handling. Transmit each submittal using Submittal Transmittal Form found at the end of Part 3.

E. Electronic Submittals: Prepare submittals as PDF package, incorporating complete information into each PDF file. Name PDF file with submittal number.

1. Transmittal Form for Electronic Submittals: Use Submittal Transmittal Form found at the end of Part 3.

#### 1.5 SUBMITTAL PROCEDURES

- A. Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.
  1. Email: Prepare submittals as PDF package and transmit to Architect by sending via email. Include an executed PDF of the Submittal Transmittal Form. Include information in email subject line as requested by Architect.
    - a. Architect will return annotated file. Annotate and retain one copy of file as a digital Project Record Document file.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
  1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
  2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
  3. Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.
  4. Coordinate transmittal of submittals for related parts of the Work specified in different Sections, so processing will not be delayed because of need to review submittals concurrently for coordination.
    - a. Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- C. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
  1. Initial Review: Allow seven days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
  2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
  3. Resubmittal Review: Allow seven days for review of each resubmittal.
  4. Sequential Review: Where sequential review of submittals by Architect's consultants, Owner, or other parties is indicated, allow 15 days for initial review of each submittal.
- D. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
  1. Note date and content of previous submittal.

2. Note date and content of revision in label or title block, and clearly indicate extent of revision.
  3. Resubmit submittals until they are marked with approval notation from Architect's action stamp.
- E. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- F. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Architect's action stamp.

#### 1.6 SUBMITTAL REQUIREMENTS

- A. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
1. If information must be specially prepared for submittal because standard published data are unsuitable for use, submit as Shop Drawings, not as Product Data.
  2. Mark each copy of each submittal to show which products and options are applicable.
  3. Include the following information, as applicable:
    - a. Manufacturer's catalog cuts.
    - b. Manufacturer's product specifications.
    - c. Standard color charts.
    - d. Statement of compliance with specified referenced standards.
    - e. Testing by recognized testing agency.
    - f. Application of testing agency labels and seals.
    - g. Notation of coordination requirements.
    - h. Availability and delivery time information.
  4. For equipment, include the following in addition to the above, as applicable:
    - a. Wiring diagrams that show factory-installed wiring.
    - b. Printed performance curves.
    - c. Operational range diagrams.
    - d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
  5. Submit Product Data before Shop Drawings, and before or concurrently with Samples.
- B. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data unless submittal based on Architect's digital data drawing files is otherwise permitted.
1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- a. Identification of products.
    - b. Schedules.
    - c. Compliance with specified standards.
    - d. Notation of coordination requirements.
    - e. Notation of dimensions established by field measurement.
    - f. Relationship and attachment to adjoining construction clearly indicated.
    - g. Seal and signature of professional engineer if specified.
  2. Paper Sheet Size: Except for templates, patterns, and similar full-size Drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches, but no larger than 30 by 42 inches.
    - a. Four opaque copies of each submittal where submittals require an original signature and/or raised seal. One copy will be returned.
    - b. One PDF submittal. Architect will return one PDF copy with appropriate action taken.
- C. Samples: Submit Samples for review of type, color, pattern, and texture for a check of these characteristics with other materials.
1. Transmit Samples that contain multiple, related components, such as accessories together in one submittal package.
  2. Identification: Permanently attach label on unexposed side of Samples that includes the following:
    - a. Project name and submittal number.
    - b. Generic description of Sample.
    - c. Product name and name of manufacturer.
    - d. Sample source.
    - e. Number and title of applicable Specification Section.
    - f. Specification paragraph number and generic name of each item.
  3. Email Transmittal: Provide PDF transmittal. Include digital image file illustrating Sample characteristics and identification information for record.
  4. Paper Transmittal: Include paper transmittal, including complete submittal information indicated.
  5. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
    - a. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
  6. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units, showing the full range of colors, textures, and patterns available.
    - a. Number of Samples: Submit one full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect will return submittal with options selected.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- D. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of architects and owners, and other information specified.
- E. Design Data: Prepare and submit written and graphic information indicating compliance with indicated performance and design criteria in individual Specification Sections. Include list of assumptions and summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Number each page of submittal.
- F. Certificates:
  - 1. Certificates and Certifications Submittals: Submit a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity. Provide a notarized signature where indicated.
  - 2. Installer Certificates: Submit written statements on manufacturer's letterhead, certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
  - 3. Manufacturer Certificates: Submit written statements on manufacturer's letterhead, certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
  - 4. Material Certificates: Submit written statements on manufacturer's letterhead, certifying that material complies with requirements in the Contract Documents.
  - 5. Product Certificates: Submit written statements on manufacturer's letterhead, certifying that product complies with requirements in the Contract Documents.
  - 6. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of AWS B2.1/B2.1M on AWS forms. Include names of firms and personnel certified.
- G. Test and Research Reports:
  - 1. Compatibility Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for substrate preparation and primers required.
  - 2. Field Test Reports: Submit written reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
  - 3. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
  - 4. Preconstruction Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.
  - 5. Product Test Reports: Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

6. Research Reports: Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:
  - a. Name of evaluation organization.
  - b. Date of evaluation.
  - c. Time period when report is in effect.
  - d. Product and manufacturers' names.
  - e. Description of product.
  - f. Test procedures and results.
  - g. Limitations of use.

1.7 DELEGATED-DESIGN SERVICES

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
  1. If criteria indicated are insufficient to perform services or certification required, submit a written request for additional information to Architect.
- B. Delegated-Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit digitally signed PDF file and four paper copies of certificate, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.
  1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

1.8 CONTRACTOR'S REVIEW

- A. Action Submittals and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.
- B. Contractor's Approval: Indicate Contractor's approval for each submittal by signing each Submittal Transmittal Form. Include name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.
  1. Architect will not review submittals received from Contractor that do not have Contractor's review and approval.

## 1.9 ARCHITECT'S REVIEW

- A. Action Submittals: Architect will review each submittal, indicate corrections or revisions required, and return.
  - 1. PDF Submittals: Architect will indicate, via markup on each submittal, the appropriate action.
  - 2. Paper Submittals: Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action.
- B. Informational Submittals: Architect will review each submittal and will not return it, or will return it if it does not comply with requirements. Architect will forward each submittal to appropriate party.
- C. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from Architect.
- D. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.
- E. Architect will return without review submittals received from sources other than Contractor.
- F. Submittals not required by the Contract Documents will be returned by Architect without action.

## PART 2 - PRODUCTS (Not Used)

## PART 3 - EXECUTION

### 3.1 SUBMITTAL FORMS

- A. The Architect shall furnish the Contractor with digital forms of the following documents.
  - 1. The following Submittal Transmittal Form.

END OF SECTION 013300



## SUBMITTAL TRANSMITTAL FORM

PRIME CONTRACTOR'S  
SUBMITTAL NO.

---

DATE:

PRIME CONTRACTOR:

SUBCONTRACTOR:

SUPPLIER:

MANUFACTURER:

ITEM: (Be Specific)

SPEC SECTION:

DRAWING NO.:

NO. OF COPIES:

---

As, the above named PRIME CONTRACTOR we affirm that we have checked this submission for conformance with the design concept of the Project and with the Contract Documents; that the Contract Document requirements have been met and that we have verified all dimensions, conditions, and quantities as shown and/or corrected on this submittal; that the Contractor can obtain the materials to meet the project schedule; that the submittal will not cause conflict with or increase cost to other Prime Contractors or the Owner; and that all previous applicable changes made in the Project by Change Orders or other directives have been properly shown on each submittal affected.

Architect/Engineer Action Stamp

By: \_\_\_\_\_

Title: \_\_\_\_\_

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

SECTION 013310 - PROJECT START-UP SUBMITTALS

Submit copies of the following to the Architect immediately after the issuance of the Contract. This form is an internal form used by REGAN YOUNG ENGLAND BUTERA and shall be used only as a guide for submissions by the Contractor. Additional items not included on this list may be required at the discretion of the Architect or as referenced in their individual sections.

CONTRACTOR: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

TELEPHONE NUMBER: \_\_\_\_\_

| <u>ITEM</u>                                                                             | <u>DATE RECEIVED</u> |
|-----------------------------------------------------------------------------------------|----------------------|
| 1. <b>O</b> Contract.....                                                               | _____                |
| 2. <b>O</b> Performance Bond & Payment Bond.....                                        | _____                |
| 3. <b>P</b> Insurance Certificate.....                                                  | _____                |
| 4. <b>O</b> Notice to Proceed.....                                                      | _____                |
| 5. <b>P</b> Contractor's Certification of<br>Subcontractor(s) Insurance Coverages ..... | _____                |
| 6. <b>P</b> Copies of Permits .....                                                     | _____                |
| 7. <b>P</b> Schedule of Values .....                                                    | _____                |
| 8. <b>P</b> Criminal History Background Checks (Section 001000) .....                   | _____                |
| 9. <b>P</b> Initial Workforce Report (Affirmative Action).....                          | _____                |
| 10. <b>P</b> Required Cuts (see indiv. spec sections) .....                             | _____                |
| 11. <b>P</b> Construction Schedule.....                                                 | _____                |
| 12. <b>P</b> List of Subcontractors.....                                                | _____                |
| 13. <b>P</b> Pre-Demolition TAB .....                                                   | _____                |
| 14. <b>O</b> Welding Certificate (Section 013300) .....                                 | _____                |

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

15. Digital copy of preconstruction photographs and/or videos on thumb drive (Section 013233)..... 

---

**O** – One Original copies required.  
**P** – PDF copy required.

END OF SECTION 013310

## SECTION 014000 - QUALITY REQUIREMENTS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspection services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
  - 1. Specific quality-assurance and quality-control requirements for individual work results are specified in their respective Specification Sections. Requirements in individual Sections may also cover production of standard products.
  - 2. Specified tests, inspections, and related actions do not limit Contractor's other quality-assurance and quality-control procedures that facilitate compliance with the Contract Document requirements.
  - 3. Requirements for Contractor to provide quality-assurance and quality-control services required by Architect, Owner or authorities having jurisdiction are not limited by provisions of this Section.

#### 1.3 DEFINITIONS

- A. Field Quality-Control Tests and Inspections: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- B. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, subcontractor, or sub-subcontractor, to perform a particular construction operation, including installation, erection, application, assembly, and similar operations.
  - 1. Use of trade-specific terminology in referring to a Work result does not require that certain construction activities specified apply exclusively to specific trade(s).
- C. Product Tests: Tests and inspections that are performed by a nationally recognized testing laboratory (NRTL) according to 29 CFR 1910.7, by a testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program (NVLAP), or by a testing agency



qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with specified requirements.

- D. Source Quality-Control Tests and Inspections: Tests and inspections that are performed at the source (e.g., plant, mill, factory, or shop).
- E. Testing Agency: An entity engaged to perform specific tests, inspections, or both. The term "testing laboratory" has the same meaning as the term "testing agency."
- F. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work, to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- G. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work, to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Contractor's quality-control services do not include contract administration activities performed by Architect.

#### 1.4 CONFLICTING REQUIREMENTS

- A. Conflicting Standards and Other Requirements: If compliance with two or more standards or requirements is specified and the standards or requirements establish different or conflicting requirements for minimum quantities or quality levels, inform the Architect regarding the conflict and obtain clarification prior to proceeding with the Work. Refer conflicting requirements that are different, but apparently equal, to Architect for clarification before proceeding.
- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified is the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.

#### 1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Contractor's quality-control personnel.
- B. Contractor's Statement of Responsibility: When required by authorities having jurisdiction, submit copy of written statement of responsibility submitted to authorities having jurisdiction before starting work on the following systems:
  - 1. Seismic-force-resisting system, designated seismic system, or component listed in the Statement of Special Inspections.
  - 2. Primary wind-force-resisting system or a wind-resisting component listed in the Statement of Special Inspections.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- C. Testing Agency Qualifications: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.
- D. Reports: Prepare and submit certified written reports and documents as specified.
- E. Permits, Licenses, and Certificates: For Owner's record, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents established for compliance with standards and regulations bearing on performance of the Work.

1.6 REPORTS AND DOCUMENTS

- A. Test and Inspection Reports: Prepare and submit certified written reports specified in other Sections. Include the following:
  - 1. Date of issue.
  - 2. Project title and number.
  - 3. Name, address, telephone number, and email address of testing agency.
  - 4. Dates and locations of samples and tests or inspections.
  - 5. Names of individuals making tests and inspections.
  - 6. Description of the Work and test and inspection method.
  - 7. Identification of product and Specification Section.
  - 8. Complete test or inspection data.
  - 9. Test and inspection results and an interpretation of test results.
  - 10. Record of temperature and weather conditions at time of sample-taking and testing and inspection.
  - 11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
  - 12. Name and signature of laboratory inspector.
  - 13. Recommendations on retesting and reinspecting.
- B. Manufacturer's Technical Representative's Field Reports: Prepare written information documenting manufacturer's technical representative's tests and inspections specified in other Sections. Include the following:
  - 1. Name, address, telephone number, and email address of technical representative making report.
  - 2. Statement on condition of substrates and their acceptability for installation of product.
  - 3. Statement that products at Project site comply with requirements.
  - 4. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
  - 5. Results of operational and other tests and a statement of whether observed performance complies with requirements.
  - 6. Statement of whether conditions, products, and installation will affect warranty.
  - 7. Other required items indicated in individual Specification Sections.

- C. Factory-Authorized Service Representative's Reports: Prepare written information documenting manufacturer's factory-authorized service representative's tests and inspections specified in other Sections. Include the following:
  - 1. Name, address, telephone number, and email address of factory-authorized service representative making report.
  - 2. Statement that equipment complies with requirements.
  - 3. Results of operational and other tests and a statement of whether observed performance complies with requirements.
  - 4. Statement of whether conditions, products, and installation will affect warranty.
  - 5. Other required items indicated in individual Specification Sections.

#### 1.7 QUALITY ASSURANCE

- A. Qualifications paragraphs in this article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units. As applicable, procure products from manufacturers able to meet qualification requirements, warranty requirements, and technical or factory-authorized service representative requirements.
- C. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Installer Qualifications: A firm or individual experienced in installing, erecting, applying, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- E. Testing and Inspecting Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspection indicated, as documented in accordance with ASTM E329, and with additional qualifications specified in individual Sections; and, where required by authorities having jurisdiction, that is acceptable to authorities.
- F. Manufacturer's Technical Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to observe and inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- G. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect, demonstrate, repair, and perform service on installations of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.

## 1.8 QUALITY CONTROL

- A. Contractor Responsibilities: Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Perform additional quality-control activities, whether specified or not, to verify and document that the Work complies with requirements.
  - 1. Unless otherwise indicated, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, whether specified or not.
  - 2. Engage a qualified testing agency to perform quality-control services.
  - 3. Notify testing agencies at least 24 hours in advance of time when Work that requires testing or inspection will be performed.
  - 4. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
  - 5. Testing and inspection requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
  - 6. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- B. Retesting/Reinspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.
- C. Testing Agency Responsibilities: Cooperate with Architect and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
  - 1. Notify Architect and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
  - 2. Determine the locations from which test samples will be taken and in which in-situ tests are conducted.
  - 3. Conduct and interpret tests and inspections, and state in each report whether tested and inspected Work complies with or deviates from requirements.
  - 4. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.
  - 5. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
  - 6. Do not perform duties of Contractor.
- D. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Section 013300 "Submittal Procedures."
- E. Manufacturer's Technical Services: Where indicated, engage a manufacturer's technical representative to observe and inspect the Work. Manufacturer's technical representative's services include participation in preinstallation conferences, examination of substrates and conditions, verification of materials, observation of Installer activities, inspection of completed portions of the Work, and submittal of written reports.



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- F. Contractor's Associated Requirements and Services: Cooperate with agencies and representatives performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
1. Access to the Work.
  2. Incidental labor and facilities necessary to facilitate tests and inspections.
  3. Adequate quantities of representative samples of materials that require testing and inspection. Assist agency in obtaining samples.
  4. Facilities for storage and field curing of test samples.
  5. Delivery of samples to testing agencies.
  6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
  7. Security and protection for samples and for testing and inspection equipment at Project site.
- G. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and quality-control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspection.
1. Schedule times for tests, inspections, obtaining samples, and similar activities.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 REPAIR AND PROTECTION

- A. General: On completion of testing, inspection, sample-taking, and similar services, repair damaged construction and restore substrates and finishes.
1. Provide materials and comply with installation requirements specified in other Specification Sections or matching existing substrates and finishes. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible. Comply with the Contract Document requirements for cutting and patching in Section 017300 "Execution."
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 014000

## SECTION 014200 - REFERENCES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 DEFINITIONS

- A. General: Basic Contract definitions are included in the Conditions of the Contract.
- B. "Approved": When used to convey Architect's action on Contractor's submittals, applications, and requests, "approved" is limited to Architect's duties and responsibilities as stated in the Conditions of the Contract.
- C. "Directed": A command or instruction by Architect. Other terms including "requested," "authorized," "selected," "required," and "permitted" have the same meaning as "directed."
- D. "Indicated": Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including "shown," "noted," "scheduled," and "specified" have the same meaning as "indicated."
- E. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.
- F. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- G. "Install": Unload, temporarily store, unpack, assemble, erect, place, anchor, apply, work to dimension, finish, cure, protect, clean, and similar operations at Project site.
- H. "Provide": Furnish and install, complete and ready for the intended use.
- I. "Project Site": Space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.

#### 1.3 INDUSTRY STANDARDS

- A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.

- B. Publication Dates: Comply with standards in effect as of date of the Contract Documents unless otherwise indicated.
  - 1. For standards referenced by applicable building codes, comply with dates of standards as listed in building codes.
- C. Copies of Standards: Each entity engaged in construction on Project should be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.
  - 1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source.

1.4 ABBREVIATIONS AND ACRONYMS

- A. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities indicated in Gale's "Encyclopedia of Associations: National Organizations of the U.S." or in Columbia Books' "National Trade & Professional Associations of the United States."

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 014200

SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes requirements for temporary utilities, support facilities, and security and protection facilities.
- B. Related Requirements:
  - 1. Section 011000 "Summary" for work restrictions and limitations on utility interruptions.

1.3 USE CHARGES

- A. Installation, removal, and use charges for temporary facilities shall be included in the Contract Sum unless otherwise indicated. Allow other entities engaged in the Project to use temporary services and facilities without cost, including, but not limited to, Owner's construction forces, Architect, testing agencies, and authorities having jurisdiction.
- B. Sanitary Facilities: Pay for sanitary facilities by all entities for construction operations.
- C. Water Service: Owner will pay water-service use charges for water used by all entities for construction operations.
- D. Electric Power Service: Owner will pay electric-power-service use charges for electricity used by all entities for construction operations.
- E. Water Service from Existing System: Water from Owner's existing water system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.
- F. Electric Power Service from Existing System: Electric power from Owner's existing system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.



#### 1.4 INFORMATIONAL SUBMITTALS

- A. Fire-Safety Program: Show compliance with requirements of NFPA 241 and authorities having jurisdiction. Indicate Contractor personnel responsible for management of fire-prevention program.

#### 1.5 QUALITY ASSURANCE

- A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
- B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.
- C. Accessible Temporary Egress: Comply with applicable provisions in the United States Access Board's ADA-ABA Accessibility Guidelines and ICC/ANSI A117.1.

#### 1.6 PROJECT CONDITIONS

- A. Temporary Use of Permanent Facilities: Engage Installer of each permanent service to assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.

### PART 2 - PRODUCTS

#### 2.1 MATERIALS

- A. Portable Chain-Link Fencing: Minimum 2-inch (50-mm), 0.148-inch- (3.8-mm-) thick, galvanized-steel, chain-link fabric fencing; minimum 6 feet (1.8 m) high with galvanized-steel pipe posts; minimum 2-3/8-inch- (60-mm-) OD line posts and 2-7/8-inch- (73-mm-) OD corner and pull posts, with 1-5/8-inch- (42-mm-) OD top and bottom rails. Provide galvanized-steel bases for supporting posts.
- B. Signage: Provide signage attached at 50 feet intervals advising "Construction Area – Keep Out".
- C. Orange Safety Fencing: Provide around the entire area of any and all earthwork, excavations, etc. and shall be maintained until the work is complete.
- D. Floor Protection: Protect flooring during the construction period with hardboard panels or other suitable material approved by the Architect. Do not use paper or plastic sheeting. Do not move heavy and sharp objects directly over exist'g or proposed flooring.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- E. Polyethylene Sheet: Reinforced, fire-resistive sheet, 10-mil (0.25-mm) minimum thickness, with flame-spread rating of 15 or less in accordance with ASTM E84 and passing NFPA 701 Test Method 2.
- F. Dust-Control Adhesive-Surface Walk-Off Mats: Provide mats, minimum 36 by 60 inches (914 by 1524 mm).

## 2.2 TEMPORARY FACILITIES

- A. Field Offices: Prefabricated or mobile units with serviceable finishes, temperature controls, and foundations adequate for normal loading.
- B. Storage and Fabrication Sheds: Provide sheds sized, furnished, and equipped to accommodate materials and equipment for construction operations.
  - 1. Store combustible materials apart from building.

## 2.3 EQUIPMENT

- A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.
- B. HVAC Equipment: Unless Owner authorizes use of permanent HVAC system, provide vented, self-contained, liquid-propane-gas or fuel-oil heaters with individual space thermostatic control.
  - 1. Use of gasoline-burning space heaters, open-flame heaters, or salamander-type heating units is prohibited.
  - 2. Heating, Cooling, and Dehumidifying Units: Listed and labeled for type of fuel being consumed, by a qualified testing agency acceptable to authorities having jurisdiction and marked for intended location and application.
  - 3. Permanent HVAC System: If Owner authorizes use of permanent HVAC system for temporary use during construction, provide filter with MERV of 13 at each return-air grille in system and remove at end of construction and clean HVAC system as required in Section 017700 "Closeout Procedures."

## PART 3 - EXECUTION

### 3.1 TEMPORARY FACILITIES, GENERAL

- A. Conservation: Coordinate construction and use of temporary facilities with consideration given to conservation of energy, water, and materials. Coordinate use of temporary utilities to minimize waste.

1. Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work. See other Sections for disposition of salvaged materials that are designated as Owner's property.

### 3.2 INSTALLATION, GENERAL

- A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.
  1. Locate facilities to limit site disturbance as specified in Section 011000 "Summary."
- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.
- C. Isolation of Work Areas in Occupied Facilities: Prevent dust, fumes, and odors from entering occupied areas.
  1. Prior to commencing work, isolate the HVAC system in area where work is to be performed according to coordination drawings.
    - a. Disconnect supply and return ductwork in work area from HVAC systems servicing occupied areas.
    - b. Maintain negative air pressure within work area, using HEPA-equipped air-filtration units, starting with commencement of temporary partition construction, and continuing until removal of temporary partitions is complete.
  2. Maintain dust partitions during the Work. Use vacuum collection attachments on dust-producing equipment. Isolate limited work within occupied areas using portable dust-containment devices.
  3. Perform daily construction cleanup and final cleanup using approved, HEPA-filter-equipped vacuum equipment.

### 3.3 TEMPORARY UTILITY INSTALLATION

- A. General: Install temporary service or connect to existing service.
  1. Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
- B. Sewers and Drainage: Provide temporary utilities to remove effluent lawfully.
- C. Water Service: Connect to Owner's existing water service facilities. Clean and maintain water service facilities in a condition acceptable to Owner. At Substantial Completion, restore these facilities to condition existing before initial use.
- D. Sanitary Facilities: Provide temporary toilets, wash facilities, safety shower and eyewash facilities, and drinking water for use of construction personnel. Comply with requirements of

authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.

- E. Temporary Heating and Cooling: Provide temporary heating and cooling required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of low temperatures or high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed.
  - 1. Provide temporary dehumidification systems when required to reduce ambient and substrate moisture levels to level required to allow installation or application of finishes and their proper curing or drying.
- F. Electric Power Service: Connect to Owner's existing electric power service. Maintain equipment in a condition acceptable to Owner.
- G. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.
  - 1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.
- H. Telephone Service: Provide Job Forman with cell phone.

### 3.4 SUPPORT FACILITIES INSTALLATION

- A. Comply with the following:
  - 1. Temporary storage shall not be located within 30 feet (9 m) of building lines.
  - 2. Maintain support facilities until Architect schedules Substantial Completion inspection. Remove before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.
- B. Parking: Use designated areas of Owner's existing parking areas for construction personnel.
- C. Storage and Staging: Use designated areas of Project site for storage and staging needs.
- D. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Comply with progress cleaning requirements in Section 017300 "Execution."
- E. Lifts and Hoists: Provide facilities necessary for hoisting materials and personnel.
  - 1. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.



### 3.5 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.
- B. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
  - 1. Comply with work restrictions specified in Section 011000 "Summary."
- C. Site Enclosure Fence: Before construction operations begin, furnish and install site enclosure fence in a manner that will prevent people from easily entering site except by entrance gates.
  - 1. Extent of Fence: As required to enclose entire Project site or portion determined sufficient to accommodate construction operations.
  - 2. Maintain security by limiting number of keys and restricting distribution to authorized personnel.
- D. Security Enclosure and Lockup: Install temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security. Lock entrances at end of each workday. Contractor shall be responsible for opening and securing the site each day.
- E. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- F. Temporary Egress: Provide temporary egress from existing occupied facilities as indicated and as required by authorities having jurisdiction. Provide signage directing occupants to temporary egress.
- G. Temporary Partitions: Provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by Owner from fumes and noise.
  - 1. Construct dustproof partitions with two layers of 6-mil (0.14-mm) polyethylene sheet on each side. Cover floor with two layers of 6-mil (0.14-mm) polyethylene sheet, extending sheets 18 inches (460 mm) up the sidewalls. Overlap and tape full length of joints. Cover floor with fire-retardant-treated plywood.
  - 2. Where fire-resistance-rated temporary partitions are indicated or are required by authorities having jurisdiction, construct partitions according to the rated assemblies.
  - 3. Seal joints and perimeter. Equip partitions with gasketed dustproof doors and security locks where openings are required.
  - 4. Protect air-handling equipment.
  - 5. Provide walk-off mats at each entrance through temporary partition.
- H. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241; manage fire-prevention program.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1. Prohibit smoking in construction areas. Comply with additional limits on smoking specified in other Sections.
2. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition in accordance with requirements of authorities having jurisdiction.
3. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Post warnings and information.

3.6 OPERATION, TERMINATION, AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. Maintenance: Maintain facilities in good operating condition until removal.
  1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
- C. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
  1. Materials and facilities that constitute temporary facilities are property of Contractor.
  2. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period. Comply with final cleaning requirements specified in Section 017700 "Closeout Procedures."

END OF SECTION 015000

SECTION 015526 - MAINTENANCE AND PROTECTION OF TRAFFIC

PART 1 GENERAL

1.1 RELATED WORK

- A. Section 017413: Cleaning and Restoration for Sitework.
- B. Section 312300.10: Site Excavation Filling and Grading

1.2 DESCRIPTION

- A. Provide for maintenance and protection of traffic as specified herein and in the Standard Specifications, latest revisions.
- B. Before beginning work on any phase of the project, furnish and install all construction signs, barricades, traffic guides, lights and other devices necessary to protect the public during construction.
- C. Do not occupy with equipment, materials or personnel any roadway or sidewalk areas within or adjacent to the project that is open to traffic except as necessary during actual working hours.
- D. Repair any damage to newly constructed or existing pavements as directed by ARCHITECT, at CONTRACTOR's expense, or repair will be made by others and cost of such repairs will be charged against CONTRACTOR.

1.3 REFERENCE STANDARDS

- A. U.S. Department of Transportation, Federal Highway Administration, Manual on Uniform Control Devices for Streets and Highways, current edition. (MUTCD)

1.4 SUBMITTALS

- A. All submittals shall be submitted through the Architect.
- B. Traffic Control Plan:
  - 1. Within ten (10) days after Notice to proceed and before work on the project begins, submit a Traffic Control Plan for the maintenance and protection of traffic.
  - 2. Show type and location of barricades, lights, cones, barrels, signs and other devices.
- C. Copies of all notices as specified herein.
- D. Name, address, phone number and contact person supplying traffic control devices.

## 1.5 PROJECT CONDITIONS

- A. Except as necessary during actual working hours, and then only with the specified authorization of the ARCHITECT or jurisdictional authority, the CONTRACTOR shall not occupy with his equipment, materials or personnel any roadway or sidewalk area within or adjacent to the project that is open to traffic.
- B. No equipment or machinery having caterpillar or other heavy treads that mar or damage pavements shall be permitted to move over or operate from newly constructed or existing pavements unless such equipment or machinery is moved on suitable pontoons or trailers or operated on heavy planking or other suitable platforms.
- C. The CONTRACTOR shall provide for prompt removal from the existing roadways of all dirt and other materials that have been spilled, washed, tracked or otherwise deposited thereon by his hauling and other operations whenever the accumulation is sufficient to cause the formation of mud, interfere with drainage, damage pavements, create a traffic hazard or dust condition.
- D. The CONTRACTOR shall cease work in existing roads when snow is imminent. The CONTRACTOR is responsible for snow removal within the limits of the construction fencing. The CONTRACTOR shall make suitable provisions to mark the location of equipment and all other obstructions in the event of deep snow.
- E. The requirements of the agency having jurisdiction over the roadways in which the CONTRACTOR is working shall govern.
- F. The CONTRACTOR may be required to provide, in addition to flagmen, uniformed traffic officers to fulfill the expressed needs of the owner, municipality, or any governmental agency having jurisdiction and shall contact the same to determine their requirements.
- G. During any suspension of the work, the CONTRACTOR shall make passable and shall open to traffic such portions of the project and temporary roadways or portions thereof as may be agreed upon between the CONTRACTOR and the ARCHITECT and the jurisdictional authority for the temporary accommodation of necessary traffic during the anticipated period of suspension. When work is resumed, the CONTRACTOR shall replace or renew all work or materials lost or damaged because of such temporary use of the project in every respect as though its prosecution had been continuous and without interference.

## PART 2 PRODUCTS

### 2.1 GENERAL

- A. Materials may be new or used but must be suitable for the intended purpose and must not violate requirements of applicable codes and standards.

### 2.2 CONES



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- A. Cones shall conform to Part 6, Section 6F.59 of the MUTCD.
- B. Cones shall be a minimum of 18" high and be reflectorized.
- C. Cones shall be kept clean and bright for maximum target value. Cones shall be orange in color. Rubber cones shall be painted at the place of manufacture. Plastic cones shall be polyvinyl chloride with the color molded into the plastic.

2.3 DRUMS

- A. Drums shall conform to Part 6, Section 6F.62 of the MUTCD.
- B. Drums shall be 36" high 18" diameter with horizontal, circumferential, orange and white reflectorized stripes, 4" to 8" wide.

2.4 BARRICADES

- A. Barricades shall be Type I, Type II and Type III conforming to Part 6, Section C-8 with characteristics as follows:

| BARRICADE CHARACTERISTICS          |                        |                        |                                                             |
|------------------------------------|------------------------|------------------------|-------------------------------------------------------------|
| TYPE*                              |                        |                        |                                                             |
|                                    | I                      | II                     | III                                                         |
| Width of rail                      | 8" min-12" max         | 8" min-12" max         | 8" min-12" max                                              |
| Length of rail                     | 2 ft. minimum          | 2 ft. minimum          | 4 ft. minimum                                               |
| Width of stripes**                 | 6 inches               | 6 inches               | 6 inches                                                    |
| Height                             | 3 ft. minimum          | 3 ft. minimum          | 5 ft. minimum                                               |
| Number of Reflectorized Rail Faces | 2 (one each direction) | 4 (two each direction) | 3 if facing in one direction; 6 if facing in two directions |

\* For wooden barricades nominal lumber dimensions will be satisfactory

\*\* For rails less than 3 feet long, 4 inch wide stripes shall be used

2.5 LIGHTING DEVICES

- A. Lighting devices shall conform to Part 6, Section 6F.75 of the MUTCD and be as specified herein.

- B. Batteries: Storage batteries or other bulk power sources, not part of a monolithic flasher unit shall be located as far as practicable from the traveled way and at ground level. Single flasher and steady burning units with self-contained batteries shall weigh not more than seven (7) pounds and when located on traffic control devices shall be securely fastened with the bottom tangent of the lens at 36 inches above the existing ground level. Battery powered dual alternate flashers located on advance warning signs shall have the battery power source located as far as practicable from the traveled way and at ground level.

C. Flashing Warning Lights

1. Low intensity flashing warning lights shall be installed on traffic control devices where specified elsewhere herein. Low intensity lights shall be battery operated yellow flashing lights with a one piece lens not less than seven inches in diameter. They shall flash at a rate of 55-75 flashes per minute and the flash duration shall be ten percent of each flash cycle. Light intensity shall not drop below ten candelas during the first 336 hours of continuous flashing as specified in ITE Standards Requirement 5.0, Paragraph 5.10, Section 1 of the ITE Standards for Flashing and Steady Burn Barricade Warning Lights. The lens shall be externally illuminated by reflex-reflection of the light from the headlights of the oncoming automotive traffic. Intensity when acting as a reflex-reflector shall be as in ITE Standard Requirement 5, Paragraph 5.30. If designed with a reflex reflector ring, the ring shall not be less than 1/2-inch in width around the periphery of the lens. Manufacturing design requirements shall conform to the ITE Standard as specified in the following requirements:

|                                   |      |
|-----------------------------------|------|
| Lens requirements.....            | 6.00 |
| Head and Housing.....             | 7.00 |
| Photoelectric Controls.....       | 8.00 |
| Testing, Quality and Marking..... | 9.00 |

2. Low intensity flashing warning lights when used where specified shall be kept lighted as specified for steady burning lights.

D. Steady Burning Warning Lights

1. Steady burning lights shall be installed on traffic control devices where specified elsewhere herein. Steady burning lights shall have low wattage yellow electric lamps having a minimum of ten beam candle power. They may be self-contained units with batteries or may be operated with a portable electric generator or from available utility lines. When a circuit in excess of fifty volts is used and such circuits including the light units are within reach of a person who can make contact with the ground, they shall be equipped with an UL approved ground-fault circuit interrupter. Steady burning lights when used where specified shall be kept lighted from one hour before sunset until one hour after sunrise, and through all hours of fog, smog, and other adverse atmospheric conditions affording insufficient visibility for the safe operation of traffic.

2.6 PAVEMENT MARKINGS

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- A. Temporary pavement markings shall be reflectorized plastic tape specifically designed for this purpose or traffic paint and glass beads conforming to the Standard Specifications. Color shall be yellow.
- B. Painted temporary pavement markings shall be completely dry before opening roadway to traffic.

2.7 TEMPORARY CONSTRUCTION SIGNS

- A. Temporary construction signs shall conform to Part 6, Section F of the MUTCD and be Regulatory, Warning or guide signs as appropriate as specified herein.

2.8 UNIFORMED TRAFFIC DIRECTORS

- A. Uniformed traffic directors shall be trained and of average intelligence, good physical condition, including sight and hearing, having a mental alertness, a courteous but firm manner, neat appearance and sense of responsibility for the safety of the public. Traffic directors shall wear an orange vest. This garment shall be reflectorized for nighttime operations.

PART 3 EXECUTION

3.1 GENERAL

- A. Keep the portion of the project being used by public traffic, whether it be through or local traffic, in such condition that pedestrian and vehicular traffic will be adequately and safely accommodated, both temporarily and permanently.
- B. Erect, and/or maintain in substantial manner and good condition striping, barricades, signs, lights, traffic signals, cones, and other warning and danger signals and devices, including flagmen and uniformed traffic directors, appropriate and adequate for the specific needs.
- C. Traffic control devices are to be provided at work site, closed roads, intersections, open excavations, locations of material storage, standing equipment and other obstructions, at points where usable traffic width of road is reduced, at points where traffic is diverted from its normal course or lanes, and other places of danger to vehicular or pedestrian traffic or to completed work.
- D. Establish, repair, replace and relocate signs, lights, warning and protective services as required.
- E. Do not permit equipment or machinery having Caterpillar or other heavy treads that mar or damage pavements to move over or to operate from newly constructed or existing pavement unless such equipment or machinery is moved on suitable pontoons or trailers.

3.2 EMERGENCY ACCESS

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- A. All streets and building access points shall be maintained such that Emergency Vehicles and Personnel shall have complete 24 hour access.

3.3 PRIVATE DRIVEWAYS

- A. Notify owners of adjoining properties at least twenty-four (24) hours prior to beginning any work which will interfere with their passage.
- B. Provide means of access for pedestrian and vehicular traffic at all private driveways and occupied buildings affected by the work of this contract.
- C. During construction in the vicinity of driveways, access width at driveway entrance shall be plainly marked by lights and other devices as necessary.

3.4 DIVERSION OF TRAFFIC

- A. Any restriction or diversion of traffic at any time shall be subject to approval of the Local Police Department.
- B. Notify Municipal Police and Fire Departments at least twenty-four (24) hours prior to the closing of any roadway to traffic.
- C. In accordance with the laws of 1983, c.84, the CONTRACTOR shall give seventy-two (72) hours notice (by the erection and maintenance of signs near the affected area) whenever a township road must be closed to vehicular traffic for a period of forty-eight (48) hours or more.
- D. In case of an emergency, "every effort shall be made to notify the public as soon as possible of the closing."

3.5 APPLICATION

- A. Barricades
  - 1. Type I and Type II Barricades:
    - a. Type I and Type II barricades shall be used when traffic is maintained through the area being constructed and/or reconstructed.
    - b. Type II barricades shall be used singly or in groups to mark a specific hazard or they may be used in a series for channelizing traffic.
  - 2. Type III Barricades
    - a. Type III barricades shall be erected at points of closure when a road section is closed to traffic.
    - b. Type III barricades may extend completely across a roadway and its shoulder or from curb to curb.



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- c. Type III barricades shall not be used on public thoroughfares without the written permission of the ARCHITECT and the authorities having jurisdiction.
- B. Cones
  - 1. Traffic cones shall be installed to channelize traffic during daylight hours only.
- C. Drums
  - 1. Drums shall be used to delineate the edge of a traveled way, lane changes, lane closures and other similar conditions such as to channelize traffic.
  - 2. Drums may also be used to mark specific hazards.
  - 3. Drums shall not be weighted with sand, water or other materials to the extent that would make them hazardous to motorists.
- D. Lighting Devices
  - 1. During hours of darkness a flashing warning light shall be placed on drums or barricades used singly.
  - 2. Steady burn warning lights shall be used on drums or barricades used in a series for Traffic Channelization.

3.6 UNIFORMED TRAFFIC DIRECTORS

- A. Uniformed traffic directors shall be provided when and where called for by the jurisdictional authority.
- B. The CONTRACTOR may, with the permission of the respective police department, secure the services of uniformed police officers to direct traffic in those parts of the project under the jurisdiction of the respective municipality.
- C. These directors shall be responsible and trained in their duties to direct pedestrian and vehicular traffic, shall act in conformance with the police department and while serving as traffic directors on this project, shall not be required to perform any other duties.
- D. Flagmen who are normally hired to do other work on the project during the same work period shall not be considered as uniformed traffic directors.
- E. When controlling traffic, uniformed traffic directors shall follow the procedures stipulated for flagmen in the MUTCD.

END OF SECTION

## SECTION 016000 - PRODUCT REQUIREMENTS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; and comparable products.
- B. Related Requirements:
  - 1. Section 011000 "Summary" for Contractor requirements related to Owner-furnished products.
  - 2. Section 012100 "Allowances" for products selected under an allowance.
  - 3. Section 012500 "Substitution Procedures" for requests for substitutions.
  - 4. Section 014200 "References" for applicable industry standards for products specified.
  - 5. Section 01770 "Closeout Procedures" for submitting warranties.

#### 1.3 DEFINITIONS

- A. Products: Items obtained for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
  - 1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature that is current as of date of the Contract Documents.
  - 2. New Products: Items that have not previously been incorporated into another project or facility. Salvaged items or items reused from other projects are not considered new products. Items that are manufactured or fabricated to include recycled content materials are considered new products, unless indicated otherwise.
  - 3. Comparable Product: Product by named manufacturer that is demonstrated and approved through the comparable product submittal process described in Part 2 "Comparable Products" Article, to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.

- B. Basis-of-Design Product Specification: A specification in which a single manufacturer's product is named and accompanied by the words "basis-of-design product," including make or model number or other designation. Published attributes and characteristics of basis-of-design product establish salient characteristics of products.
  - 1. Evaluation of Comparable Products: In addition to the basis-of-design product description, product attributes and characteristics may be listed to establish the significant qualities related to type, function, in-service performance and physical properties, weight, dimension, durability, visual characteristics, and other special features and requirements for purposes of evaluating comparable products of additional manufacturers named in the specification. Manufacturer's published attributes and characteristics of basis-of-design product also establish salient characteristics of products for purposes of evaluating comparable products.
- C. Subject to Compliance with Requirements: Where the phrase "Subject to compliance with requirements" introduces a product selection procedure in an individual Specification Section, provide products qualified under the specified product procedure. In the event that a named product or product by a named manufacturer does not meet the other requirements of the specifications, select another named product or product from another named manufacturer that does meet the requirements of the specifications; submit a comparable product request or substitution request, if applicable.
- D. Comparable Product Request Submittal: An action submittal requesting consideration of a comparable product, including the following information:
  - 1. Identification of basis-of-design product or fabrication or installation method to be replaced, including Specification Section number and title and Drawing numbers and titles.
  - 2. Data indicating compliance with the requirements specified in Part 2 "Comparable Products" Article.
- E. Basis-of-Design Product Specification Submittal: An action submittal complying with requirements in Section 013300 "Submittal Procedures."
- F. Substitution: Refer to Section 012500 "Substitution Procedures" for definition and limitations on substitutions.

#### 1.4 QUALITY ASSURANCE

- A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, select product compatible with products previously selected, even if previously selected products were also options.
- B. Identification of Products: Except for required labels and operating data, do not attach or imprint manufacturer or product names or trademarks on exposed surfaces of products or equipment that will be exposed to view in occupied spaces or on the exterior.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1. Labels: Locate required product labels and stamps on a concealed surface, or, where required for observation following installation, on a visually accessible surface that is not conspicuous.
2. Equipment Nameplates: Provide a permanent nameplate on each item of service- or power-operated equipment. Locate on a visually accessible but inconspicuous surface. Include information essential for operation, including the following:
  - a. Name of product and manufacturer.
  - b. Model and serial number.
  - c. Capacity.
  - d. Speed.
  - e. Ratings.

1.5 COORDINATION

- A. Modify or adjust affected work as necessary to integrate work of approved comparable products and approved substitutions.

1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products, using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions.
- B. Delivery and Handling:
  1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
  2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
  3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
  4. Inspect products on delivery to determine compliance with the Contract Documents and that products are undamaged and properly protected.
- C. Storage:
  1. Provide a secure location and enclosure at Project site for storage of materials and equipment.
  2. Store products to allow for inspection and measurement of quantity or counting of units.
  3. Store materials in a manner that will not endanger Project structure.
  4. Store products that are subject to damage by the elements under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation and with adequate protection from wind.



5. Protect foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
6. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
7. Protect stored products from damage and liquids from freezing.
8. Provide a secure location and enclosure at Project site for storage of materials and equipment by Owner's construction forces. Coordinate location with Owner.

## 1.7 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
  1. Manufacturer's Warranty: Written standard warranty form furnished by individual manufacturer for a particular product and issued in the name of the Owner or endorsed by manufacturer to Owner for not less than two years after Substantial Completion.
  2. Special Warranty: Written warranty required by the Contract Documents to provide specific rights for Owner and issued in the name of the Owner or endorsed by manufacturer to Owner.
- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution.
  1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
  2. Specified Form: When specified forms are included in the Project Manual, prepare a written document, using indicated form properly executed.
  3. See other Sections for specific content requirements and particular requirements for submitting special warranties.
- C. Submittal Time: Comply with requirements in Section 017700 "Closeout Procedures."

## PART 2 - PRODUCTS

### 2.1 PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents, are undamaged and, unless otherwise indicated, are new at time of installation.
  1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
  2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

3. Owner reserves the right to limit selection to products with warranties meeting requirements of the Contract Documents.
4. Where products are accompanied by the term "as selected," Architect will make selection.
5. Descriptive, performance, and reference standard requirements in the Specifications establish salient characteristics of products.
6. Or Equal: For products specified by name and accompanied by the term "or equal," "or approved equal," or "or approved," comply with requirements in "Comparable Products" Article to obtain approval for use of an unnamed product.
  - a. Submit additional documentation required by Architect in order to establish equivalency of proposed products. Unless otherwise indicated, evaluation of "or equal" product status is by the Architect, whose determination is final.

B. Product Selection Procedures:

1. Sole Product: Where Specifications name a single manufacturer and product, provide the named product that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
  - a. Sole product may be indicated by the phrase "Subject to compliance with requirements, provide the following."
2. Sole Manufacturer/Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
  - a. Sole manufacturer/source may be indicated by the phrase "Subject to compliance with requirements, provide products by the following."
3. Non-Limited List of Products: Where Specifications include a list of names of both available manufacturers and products, provide one of the products listed or an unnamed product that complies with requirements.
  - a. Non-limited list of products is indicated by the phrase "Subject to compliance with requirements, available products that may be incorporated in the Work include, but are not limited to, the following."
  - b. Provision of an unnamed product is not considered a substitution, if the product complies with requirements.
4. Non-Limited List of Manufacturers: Where Specifications include a list of available manufacturers, provide a product by one of the manufacturers listed or a product by an unnamed manufacturer that complies with requirements.
  - a. Non-limited list of manufacturers is indicated by the phrase "Subject to compliance with requirements, available manufacturers whose products may be incorporated in the Work include, but are not limited to, the following."
  - b. Provision of products of an unnamed manufacturer is not considered a substitution, if the product complies with requirements.

5. Basis-of-Design Product: Where Specifications name a product, or refer to a product indicated on Drawings, and include a list of manufacturers, provide the specified or indicated product or a comparable product by one of the other named manufacturers. Drawings and Specifications may additionally indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product by one of the other named manufacturers.
  - a. For approval of products by unnamed manufacturers, comply with requirements in Section 012500 "Substitution Procedures" for substitutions for convenience.
- C. Visual Matching Specification: Where Specifications require the phrase "match existing or Architect's sample," provide a product that complies with requirements and matches existing conditions or Architect's sample. Architect's decision will be final on whether a proposed product matches.
  1. If no product available within specified category matches and complies with other specified requirements, comply with requirements in Section 012500 "Substitution Procedures" for proposal of product.
- D. Visual Selection Specification: Where Specifications include the phrase "as selected by Architect from manufacturer's full range" or a similar phrase, select a product that complies with requirements. Architect will select color, gloss, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

## 2.2 COMPARABLE PRODUCTS

- A. Conditions for Consideration of Comparable Products: Architect will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Architect may return requests without action, except to record noncompliance with the following requirements:
  1. Evidence that proposed product does not require revisions to the Contract Documents, is consistent with the Contract Documents, will produce the indicated results, and is compatible with other portions of the Work.
  2. Detailed comparison of significant qualities of proposed product with those of the named basis-of-design product. Significant product qualities include attributes, such as type, function, in-service performance and physical properties, weight, dimension, durability, visual characteristics, and other specific features and requirements.
  3. Evidence that proposed product provides specified warranty.
  4. List of similar installations for completed projects, with project names and addresses and names and addresses of architects and owners, if requested.
  5. Samples, if requested.
- B. Architect's Action on Comparable Products Submittal: If necessary, Architect will request additional information or documentation for evaluation, as specified in Section 013300 "Submittal Procedures."

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1. Form of Approval of Submittal: As specified in Section 013300 "Submittal Procedures."
  2. Use product specified if Architect does not issue a decision on use of a comparable product request within time allocated.
- C. Submittal Requirements, Two-Step Process: Approval by the Architect of Contractor's request for use of comparable product is not intended to satisfy other submittal requirements. Comply with specified submittal requirements.

PART 3 - EXECUTION (Not Used)

END OF SECTION 016000



SECTION 017123 - FIELD ENGINEERING

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Survey and field engineering.
- B. Quality control.
- C. Submittals.
- D. Project record documents.

1.2 RELATED SECTIONS

- A. General Conditions: Basic site engineering requirements.
- B. Refer to Section 01 "Execution" for additional Field Engineering and Survey Requirements.

1.3 QUALITY ASSURANCE

- A. Employ a Land Surveyor registered in the State of New Jersey and acceptable to Architect, to perform survey work of this section.
- B. Submit evidence of Surveyor's Errors and Omissions insurance coverage in the form of an Insurance Certificate prior to commencement of survey.

1.4 SUBMITTALS FOR REVIEW

- A. Submit name, address, and telephone number of Surveyor to ARCHITECT five (5) days prior to starting survey work.
- B. On request, submit documentation verifying accuracy of survey work.
- C. After completion of work, submit a certificate signed by the Land Surveyor to ARCHITECT, stating that the elevations and locations of the Work are in conformance with Contract Documents.

1.5 PROJECT RECORD DOCUMENTS

- A. Maintain a complete and accurate log of control and survey work as it progresses.
- B. On completion of major site improvements, prepare a certified survey illustrating dimensions, locations, angles, and elevations of construction and site work.
- C. Submit Record Documents under provisions of Division 1.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

3.1 EXAMINATION

- A. Verify locations of survey control points prior to starting work.
- B. Promptly notify ARCHITECT of any discrepancies discovered.

3.2 SURVEY REFERENCE POINTS

- A. Owner will locate and protect survey control and reference points.
- B. Control datum for survey is that indicated on Drawings.
- C. Protect survey control points prior to starting site work; preserve permanent reference points during construction.
- D. Promptly report to ARCHITECT the loss or destruction of any reference point or relocation required because of changes in grades or other reasons.
- E. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to ARCHITECT.

3.3 SURVEY REQUIREMENTS

- A. Provide field engineering services. Utilize recognized engineering survey practices.
- B. Establish elevations, lines and levels. Locate and lay out by instrumentation and similar appropriate means.
- C. Site improvements including pavements; stakes for grading, fill and topsoil placement; utility locations, slopes, and invert elevations.
- D. Grid or axis for structures.
- E. Periodically verify layouts by same means.

3.4 SURVEYS FOR MEASUREMENT AND PAYMENT

- A. Perform control surveys to establish measurement reference lines. Notify ARCHITECT prior to starting work.
- B. CONTRACTOR's Responsibilities: Sign surveyor's field notes or keep duplicate field notes, and calculate and certify quantities for payment purposes.

END OF SECTION

## SECTION 017300 - EXECUTION

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes general administrative and procedural requirements governing execution of the Work, including, but not limited to, the following:
  - 1. Installation of the Work.
  - 2. Cutting and patching.
  - 3. Coordination of Owner's portion of the Work.
  - 4. Coordination of Owner-installed products.
  - 5. Progress cleaning.
  - 6. Starting and adjusting.
  - 7. Protection of installed construction.
- B. Related Requirements:
  - 1. Section 011000 "Summary" for coordination of Owner-provided products and Owner-performed work, and limits on use of Project site.
  - 2. Section 013300 "Submittal Procedures" for submitting surveys.
  - 3. Section 024119 "Selective Demolition" for demolition and removal of selected portions of the building.

#### 1.3 DEFINITIONS

- A. Cutting: Removal of in-place construction necessary to permit installation or performance of subsequent work.
- B. Patching: Fitting and repair work required to restore construction to original conditions after installation of subsequent work.

#### 1.4 QUALITY ASSURANCE

- A. Professional Engineer Qualifications: Refer to Section 014000 "Quality Requirements."
- B. Cutting and Patching: Comply with requirements for and limitations on cutting and patching of construction elements.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1. Structural Elements: When cutting and patching structural elements, or when encountering the need for cutting and patching of elements whose structural function is not known, notify Architect of locations and details of cutting and await directions from Architect before proceeding. Shore, brace, and support structural elements during cutting and patching. Do not cut and patch structural elements in a manner that could change their load-carrying capacity or increase deflection.
  2. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety. Operational elements include the following:
    - a. Primary operational systems and equipment.
    - b. Fire separation assemblies.
    - c. Air or smoke barriers.
    - d. Fire-suppression systems.
    - e. Plumbing piping systems.
    - f. Mechanical systems piping and ducts.
    - g. Control systems.
    - h. Communication systems.
    - i. Fire-detection and -alarm systems.
    - j. Conveying systems.
    - k. Electrical wiring systems.
    - l. Operating systems of special construction.
    - m. Access control and CCTV systems.
  3. Other Construction Elements: Do not cut and patch other construction elements or components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety. Other construction elements include but are not limited to the following:
    - a. Water, moisture, or vapor barriers.
    - b. Membranes and flashings.
    - c. Fire barriers, partitions and walls.
    - d. Sprayed fire-resistive material.
    - e. Equipment supports.
    - f. Piping, ductwork, vessels, and equipment.
    - g. Noise- and vibration-control elements and systems.
  4. Visual Elements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch exposed construction in a manner that would, in Architect's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.
- C. Manufacturer's Installation Instructions: Obtain and maintain on-site manufacturer's written recommendations and instructions for installation of specified products and equipment.



## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Comply with requirements specified in other Sections.
- B. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
  - 1. If identical materials are unavailable or cannot be used, use materials that, when installed, will provide a match acceptable to Architect for the visual and functional performance of in-place materials. Use materials that are not considered hazardous.
- C. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.
  - 1. Use cleaning products that comply with Green Seal's GS-37, or if GS-37 is not applicable, use products that comply with the California Code of Regulations maximum allowable VOC levels.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Existing Conditions: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities, mechanical and electrical systems, and other construction affecting the Work.
  - 1. Before construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, gas service piping, and water-service piping; underground electrical services; and other utilities.
  - 2. Furnish location data for work related to Project that must be performed by public utilities serving Project site.
- B. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
  - 1. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
  - 2. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.

3. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
- C. Written Report: Where a written report listing conditions detrimental to performance of the Work is required by other Sections, include the following:
  1. Description of the Work, including Specification Section number and paragraph, and Drawing sheet number and detail, where applicable.
  2. List of detrimental conditions, including substrates.
  3. List of unacceptable installation tolerances.
  4. Recommended corrections.
- D. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

### 3.2 PREPARATION

- A. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- B. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- C. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents, submit a request for information to Architect in accordance with requirements in Section 013100 "Project Management and Coordination."

### 3.3 INSTALLATION

- A. Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
  1. Make vertical work plumb and make horizontal work level.
  2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
  3. Conceal pipes, ducts, and wiring in finished areas unless otherwise indicated.
  4. Maintain minimum headroom clearance of 96 inches in occupied spaces and 90 inches in unoccupied spaces, unless otherwise indicated on Drawings.
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions that will ensure satisfactory results as judged by Architect. Maintain conditions required for product performance until Substantial Completion.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- D. Conduct construction operations, so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy of type expected for Project.
- E. Sequence the Work and allow adequate clearances to accommodate movement of construction items on-site and placement in permanent locations.
- F. Tools and Equipment: Select tools or equipment that minimize production of excessive noise levels.
- G. Templates: Obtain and distribute to the parties involved templates for Work specified to be factory prepared and field installed. Check Shop Drawings of other portions of the Work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.
- H. Attachment: Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions with manufacturer.
  - 1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect.
  - 2. Allow for building movement, including thermal expansion and contraction.
  - 3. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.
- I. Joints: Make joints of uniform width. Where joint locations in exposed Work are not indicated, arrange joints for the best visual effect, as judged by Architect. Fit exposed connections together to form hairline joints.
- J. Repair or remove and replace damaged, defective, or nonconforming Work.
  - 1. Comply with Section 017700 "Closeout Procedures" for repairing or removing and replacing defective Work.

3.4 CUTTING AND PATCHING

- A. General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.
  - 1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- B. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties.
  - 1. Refer to Section 024119 for a list of existing warranties.
- C. Temporary Support: Provide temporary support of Work to be cut.
- D. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- E. Adjacent Occupied Areas: Where interference with use of adjoining areas or interruption of free passage to adjoining areas is unavoidable, coordinate cutting and patching in accordance with requirements in Section 011000 "Summary."
- F. Existing Utility Services and Mechanical/Electrical Systems: Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to minimize interruption to occupied areas.
- G. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
  - 1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots neatly to minimum size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
  - 2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
  - 3. Concrete and Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
  - 4. Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
  - 5. Proceed with patching after construction operations requiring cutting are complete.
- H. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other Work. Patch with durable seams that are as invisible as practicable, as judged by Architect. Provide materials and comply with installation requirements specified in other Sections, where applicable.
  - 1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate physical integrity of installation.
  - 2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.
    - a. Clean piping, conduit, and similar features before applying paint or other finishing materials.

- b. Restore damaged pipe covering to its original condition.
- 3. Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance. Remove in-place floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.
  - a. Where patching occurs in a painted surface, prepare substrate and apply primer and intermediate paint coats appropriate for substrate over the patch, and apply final paint coat over entire unbroken surface containing the patch, corner to corner of wall and edge to edge of ceiling. Provide additional coats until patch blends with adjacent surfaces.
- 4. Ceilings: Patch, repair, or rehang in-place ceilings as necessary to provide an even-plane surface of uniform appearance.
- 5. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition and ensures thermal and moisture integrity of building enclosure.
- I. Cleaning: Clean areas and spaces where cutting and patching are performed. Remove paint, mortar, oils, putty, and similar materials from adjacent finished surfaces.

### 3.5 COORDINATION OF OWNER'S PORTION OF THE WORK

- A. Site Access: Provide access to Project site for Owner's construction personnel.
  - 1. Refer to Section 011000 "Summary" for other requirements for Owner-furnished, Owner-installed products
- B. Coordination: Coordinate construction and operations of the Work with work performed by Owner's construction personnel.
  - 1. Construction Schedule: Inform Owner of Contractor's preferred construction schedule for Owner's portion of the Work. Adjust construction schedule based on a mutually agreeable timetable. Notify Owner if changes to schedule are required due to differences in actual construction progress.
  - 2. Preinstallation Conferences: Include Owner's construction personnel at preinstallation conferences covering portions of the Work that are to receive Owner's work. Attend preinstallation conferences conducted by Owner's construction personnel if portions of the Work depend on Owner's construction.

### 3.6 PROGRESS CLEANING

- A. Clean Project site and work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.
  - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

2. Do not hold waste materials more than seven days during normal weather or three days if the temperature is expected to rise above 80 deg F (27 deg C).
  3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
    - a. Use containers intended for holding waste materials of type to be stored.
  4. Coordinate progress cleaning for joint-use areas where Contractor and other contractors are working concurrently.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where Work is in progress to the level of cleanliness necessary for proper execution of the Work.
1. Remove liquid spills promptly.
  2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
- D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
- E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.
- F. Exposed Surfaces: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- G. Waste Disposal: Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways. Comply with waste disposal requirements in Section 015000 "Temporary Facilities and Controls."
- H. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- I. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- J. Limiting Exposures: Supervise construction operations to ensure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.7 STARTING AND ADJUSTING

- A. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.
- B. Adjust equipment for proper operation. Adjust operating components for proper operation without binding.
- C. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- D. Manufacturer's Field Service: Comply with qualification requirements in Section 014000 "Quality Requirements."

3.8 PROTECTION AND REPAIR OF INSTALLED CONSTRUCTION

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
- B. Repair Work previously completed and subsequently damaged during construction period. Repair to like-new condition.
- C. Protection of Existing Items: Provide protection and ensure that existing items to remain undisturbed by construction are maintained in condition that existed at commencement of the Work.
- D. Comply with manufacturer's written instructions for temperature and relative humidity.

END OF SECTION 017300

SECTION 017413 - CLEANING AND RESTORATIONS FOR SITEWORK

PART 1 GENERAL

1.1 DESCRIPTION

- A. Related work specified elsewhere:
  - 1. General requirements for cleaning and restorations: See the General Conditions.
  - 2. Cleaning for specific products or work: Specification Section for that work.
- B. Maintain premises and public properties free from accumulations of waste, debris and rubbish caused by work operations.
- C. At completion of work, remove waste materials, rubbish, tools, equipment, machinery and surplus materials; clean all sight exposed surfaces; leave project clean and ready for occupancy.
- D. At completion of work, restore or replace, when and as directed by the ARCHITECT, any public or private property disturbed or damaged by CONTRACTOR's work operations to a condition at least equal to that existing prior to beginning work, or as otherwise specified. Materials, equipment and methods shall be approved by the ARCHITECT.

PART 2 PRODUCTS

2.1 MATERIALS

- A. For temporary and permanent vegetative restoration, use the following materials. All materials shall conform to the applicable Sections of the New Jersey Soil Conservation Service (NJSCS) Standards for Soil Erosion and Sediment Control, and the applicable Sections of the Standard Specifications.
- B. Grass restorations: All grass restoration materials shall conform to the specification sections entitled, "Topsoiling," "Fertilizing and Seeding," and "Mulching."
- C. Pavement restorations: All paving materials shall conform to the Standard Specifications.
- D. Restoration of curbs and other concrete structures:
  - 1. Concrete:
    - a. Shall conform to Section 903.03 of the Standard Specifications.
    - b. Compressive Strength shall conform to specification Section entitled "Concrete for Sitework".

2. Joint fillers: Section 914.01, bituminous cellular type.
  3. Curing compound: Section 903.10, white-pigmented liquid.
- E. All other materials: As approved by the ARCHITECT or authorities having jurisdiction.

## PART 3 EXECUTION

### 3.1 METHODS OF CONDUCTING WORK - CLEANING

- A. Requirements of regulatory agencies: Dispose of all solid waste materials (including concrete, blacktop, trees, stumps, unacceptable backfill material including heavy clay soils, organic materials, silts, rock) in permanently established licensed OSWA (Office of Solid Waste Administration, New Jersey Department of Environmental Protection) landfills, or in temporary landfill sites approved by OWSA.
- B. Safety requirements:
1. Hazards control:
    - a. Store volatile wastes in covered metal containers, and remove from premises daily.
    - b. Prevent accumulation of waste which create a hazardous condition.
    - c. Provide adequate ventilation during use of volatile or noxious substances.
  2. Conduct cleaning and disposal operation to comply with local ordinances and anti-pollution laws:
    - a. Do not burn or bury rubbish and waste materials on project site.
    - b. Do not dispose of volatile wastes such as mineral spirits, oil or paint thinner in storm or sanitary drains.
    - c. Do not dispose of wastes into streams or waterways.
- C. Cleaning during construction:
1. Execute periodic cleaning to keep the work, the site, and adjacent properties free from accumulations of waste materials, rubbish and windblown debris resulting from construction operations.
  2. Provide on-site containers for the collection of waste materials, debris and rubbish.
  3. Remove waste materials, debris and rubbish from site periodically and legally dispose at location provided by CONTRACTOR.

D. Dust control:

1. Wet down dry materials and rubbish to lay dust and prevent blowing dust.
2. The CONTRACTOR shall employ construction methods and means that will keep flying dust to the minimum. He shall provide for the laying of water on the Project, and on roads, streets and other areas immediately adjacent to the Project limits, wherever traffic, or buildings that are occupied or in use, are affected by such dust caused by his hauling or other operations. The CONTRACTOR, shall control dust using calcium chloride, water or other materials approved by the ARCHITECT. If calcium chloride is used, the rate of application shall be approximately 1.5 pounds per square yard. The cost of carrying out the foregoing provisions shall be included in the prices bid for the various items in the Contracts.

The CONTRACTOR shall provide for prompt removal from existing roadways of all dirt and other materials that have been spilled, washed, tracked or otherwise deposited thereon by his hauling and other operations whenever the accumulation is sufficient to cause the formation of mud, interfere with drainage, damage pavements or create a traffic hazard.

E. Final cleaning:

1. Employ skilled workmen for final cleaning.
2. Remove grease, mastic, adhesives, dust, dirt, stains, fingerprints, labels, and other foreign materials from sight-exposed interior and exterior surfaces.
3. Broom clean exterior paved surfaces; rake clean other surfaces of the grounds.
4. Remove all temporary buildings and structures built by CONTRACTOR, all temporary works; tools, machinery or other construction equipment furnished by him.
5. Clean insides of manholes, valve boxes, inlets or other structures constructed, reconstructed or reset during CONTRACTOR's operations to remove debris, excess mortar of foreign materials.
6. Prior to final acceptance, CONTRACTOR shall conduct an inspection of all work areas to verify that the entire work is clean.

3.2 METHODS OF CONDUCTING WORK - RESTORATIONS

- A. General: All existing structures, unpaved areas and paved areas disturbed or damaged during the work under this Contract shall be restored or replaced to a condition at least equal to that existing prior to beginning work, or as otherwise specified. The methods of the following Sections of the Standard Specifications.



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- B. Grass restoration: All grass restorations shall comply with the specification sections entitled "Topsoiling," "Fertilizing and Seeding," and "Mulching."
- C. For pavement and concrete restorations, use the following methods. All methods shall conform to the applicable Sections of the Standard Specifications.
  - 1. Bituminous pavement restoration: All methods shall conform to the Standard Specifications.
  - 2. Concrete curb restoration: All methods shall conform to Specification Section entitled "Concrete for Sitework".
- D. For temporary and permanent vegetative restoration, use the following methods. All methods shall conform to the applicable Sections of the New Jersey Soil Conservation Service (NJSCS) Standards for Soil Erosion and Sediment Control, and the applicable Sections of the Standard Specifications.
  - 1. Soil Erosion and Sediment Control Measures: All materials shall conform to Specification Section entitled "Temporary Soil Erosion and Sediment Control."
  - 2. Topsoiling: All materials shall conform to Specification Sections entitled "Topsoiling."
  - 3. Fertilizing and Seeding: All materials shall conform to Specification Section entitled "Fertilizing and Seeding."
  - 4. Mulching: All materials shall conform to Specification Section entitled "Mulching."
- E. Restorations of curbs and other concrete structures:
  - 1. Curbs: Section 607 of the Standard Specifications.
  - 2. Other concrete structures: Restore in accordance with applicable Articles of the Standard Specifications.
- F. All other restorations: Restore in accordance with applicable Articles of the Standard Specifications, or as approved by the ARCHITECT or authorities having jurisdiction.

END OF SECTION

## SECTION 017700 - CLOSEOUT PROCEDURES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for Contract closeout, including, but not limited to, the following:
  - 1. Submittals.
  - 2. Substantial Completion procedures.
  - 3. Final completion procedures.
  - 4. Punch lists.
  - 5. Warranties.
  - 6. Final cleaning.
  - 7. Repair of the Work.
- B. Related Requirements:
  - 1. Section 012900 "Payment Procedures" for requirements for Applications for Payment for Substantial Completion and Final Completion.
  - 2. Section 017823 "Operation and Maintenance Data" for additional operation and maintenance manual requirements.
  - 3. Section 017839 "Project Record Documents" for submitting Record Drawings, and Record Product Data.
  - 4. Section 017900 "Demonstration and Training" for requirements to train the Owner's maintenance personnel to adjust, operate, and maintain products, equipment, and systems.

#### 1.3 DEFINITIONS

- A. List of Incomplete Items: Contractor-prepared list of items to be completed or corrected, prepared for the Architect's use prior to Architect's inspection, to determine if the Work is substantially complete.

#### 1.4 ACTION SUBMITTALS

- A. Product Data: For each type of cleaning agent.
- B. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.

- C. Certified List of Incomplete Items: Final submittal at Final Completion.

#### 1.5 CLOSEOUT SUBMITTALS

- A. Certificates of Release: From authorities having jurisdiction.

#### 1.6 MAINTENANCE MATERIAL SUBMITTALS

- A. Schedule of Maintenance Material Items: For maintenance material submittal items required by other Sections.

#### 1.7 SUBSTANTIAL COMPLETION PROCEDURES

- A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's "punch list"), indicating the value of each item on the list and reasons why the Work is incomplete.
- B. Submittals Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
  - 1. Certificates of Release: Obtain and submit releases from authorities having jurisdiction, permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
  - 2. Submit closeout submittals specified in other Division 01 Sections, including Project Record Documents, operation and maintenance manuals, damage or settlement surveys, property surveys, and similar final record information.
  - 3. Submit closeout submittals specified in individual Sections, including specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
  - 4. Submit maintenance material submittals specified in individual Sections, including tools, spare parts, extra materials, and similar items, and deliver to location designated by Architect. Label with manufacturer's name and model number.
  - 5. Submit testing, adjusting, and balancing records.
- C. Procedures Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
  - 1. Advise Owner of pending insurance changeover requirements.
  - 2. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
  - 3. Complete startup and testing of systems and equipment.
  - 4. Perform preventive maintenance on equipment used prior to Substantial Completion.
  - 5. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

6. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
  7. Complete final cleaning requirements.
  8. Touch up paint and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- D. Inspection: Submit a written request for inspection to determine Substantial Completion a minimum of 10 days prior to date the Work will be completed and ready for final inspection and tests. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.
1. Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
  2. Results of completed inspection will form the basis of requirements for Final Completion.
  3. The Architect and their Consultants have in their Basic Scope of Services one punch list visit and one Final Completion inspection. If all outstanding work is not completed at the time of the Final Completion inspection, the Owner has the right to back charge the Contractor for their Professionals additional time.

#### 1.8 FINAL COMPLETION PROCEDURES

- A. Submittals Prior to Final Completion: Before requesting final inspection for determining Final Completion, complete the following:
1. Submit a final Application for Payment in accordance with Section 012900 "Payment Procedures."
  2. Certified List of Incomplete Items: Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. Certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
- B. Inspection: Submit a written request for final inspection to determine acceptance a minimum of 10 days prior to date the Work will be completed and ready for final inspection and tests. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
1. Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

#### 1.9 LIST OF INCOMPLETE ITEMS

- A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1. Organize list of spaces in sequential order, starting with exterior areas first and proceeding to interior, listed by room or space number.
2. Organize items applying to each space by major element, including categories for ceilings, individual walls, floors, equipment, and building systems.
3. Include the following information at the top of each page:
  - a. Project name.
  - b. Date.
  - c. Name of Architect.
  - d. Name of Contractor.
  - e. Page number.
4. Submit list of incomplete items in the following format:
  - a. PDF Electronic File: Architect will return annotated file.

1.10 SUBMITTAL OF PROJECT WARRANTIES

- A. Time of Submittal: Submit written warranties on request of Architect for designated portions of the Work where warranties are indicated to commence on dates other than date of Substantial Completion, or when delay in submittal of warranties might limit Owner's rights under warranty.
- B. Partial Occupancy: Submit properly executed warranties within 15 days of completion of designated portions of the Work that are completed and occupied or used by Owner during construction period by separate agreement with Contractor.
- C. Organize warranty documents into an orderly sequence based on the table of contents of Project Manual.
- D. Warranty Electronic File: Provide warranties and bonds in PDF format. Assemble complete warranty and bond submittal package into a single electronic PDF file with bookmarks enabling navigation to each item. Provide bookmarked table of contents at beginning of document.
- E. Warranties in Paper Form:
  1. Bind warranties and bonds in heavy-duty, three-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch (215-by-280-mm) paper.
  2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
  3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.
- F. Provide additional copies of each warranty to include in operation and maintenance manuals.



## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.
  - 1. Use cleaning products that comply with Green Seal's GS-37, or if GS-37 is not applicable, use products that comply with the California Code of Regulations maximum allowable VOC levels.

## PART 3 - EXECUTION

### 3.1 FINAL CLEANING

- A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
  - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project:
    - a. Clean Project site of rubbish, waste material, litter, and other foreign substances.
    - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
    - c. Rake grounds that are not planted, mulched, or paved to a smooth, even-textured surface.
    - d. Remove tools, construction equipment, machinery, and surplus material from Project site.
    - e. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
    - f. Remove debris and surface dust from limited-access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
    - g. Clean flooring, removing debris, dirt, and staining; clean according to manufacturer's recommendations.
    - h. Vacuum and mop concrete.
    - i. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Polish mirrors and glass, taking care not to scratch surfaces.
    - j. Remove labels that are not permanent.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- k. Wipe surfaces of mechanical and electrical equipment and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
  - l. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
  - m. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
  - n. Clean ducts, blowers, and coils.
  - o. Clean luminaires, lamps, globes, and reflectors to function with full efficiency.
  - p. Leave Project clean and ready for occupancy.
- C. Construction Waste Disposal: Comply with waste-disposal requirements in Section 015000 "Temporary Facilities and Controls."

3.2 REPAIR OF THE WORK

- A. Complete repair and restoration operations required by Section 017300 "Execution" before requesting inspection for determination of Substantial Completion.

END OF SECTION 017700

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

SECTION 017710 - PROJECT CLOSEOUT SUBMITTALS

Submit **one copy** of the following to the Architect prior to Project closeout. This form is an internal form used by REGAN YOUNG ENGLAND BUTERA and shall be used only as a guide for submissions by the Contractor. Additional items not included on this list may be required at the discretion of the Architect or as referenced in their individual sections.

CONTRACTOR: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

TELEPHONE NUMBER: \_\_\_\_\_

| <u>ITEM</u>                                                                                                                                                                                                                                                                                                                                         | <u>DATE RECEIVED</u> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| 1. <b>O/P</b> Cert. of Substantial Completion (G704).....                                                                                                                                                                                                                                                                                           | _____                |
| 2. <b>O/P</b> Final App. For Payments (G702 & G703) .....                                                                                                                                                                                                                                                                                           | _____                |
| 3. <b>O/P</b> Affid. of Paymts. of Debts & Claims (G706).....                                                                                                                                                                                                                                                                                       | _____                |
| 4. <b>O/P</b> Affid. of Release of Liens (G706A).....                                                                                                                                                                                                                                                                                               | _____                |
| 5. <b>O/P</b> Consent of Surety to Final Payment (G707) .....                                                                                                                                                                                                                                                                                       | _____                |
| 6. <b>O/P</b> Maintenance Bond (Section 017721).....                                                                                                                                                                                                                                                                                                | _____                |
| 7. <b>O/P</b> Subcontractor Guaranty (Section 017722). One for every sub-<br>Contractor used on the Project.....                                                                                                                                                                                                                                    | _____                |
| 8. <b>O/P</b> Statement of Refrigerant Recovery (Section 024119) .....                                                                                                                                                                                                                                                                              | _____                |
| 9. <b>O/P</b> Statement on Business letterhead that all Monthly Workforce<br>Tracking Reports and Weekly-Certified Payroll Records have been<br>submitted to the Owner and the proper agencies .....                                                                                                                                                | _____                |
| 10. <b>O/P</b> Certificate of Compliance on Business letterhead stating that<br>materials and products meet specified standards or that work was<br>done in compliance with approved construction documents .....                                                                                                                                   | _____                |
| 11. <b>P</b> Operation & Maintenance Manuals. Manuals for each Trade, i.e.<br>GC, Plumbing, HVAC, etc. shall have its own folder. Within that<br>folder each Manual shall be titled w/ the "Item Name" and Manu-<br>facturer's Name. Also provide an O&M Index, listing the Trade<br>folder and its contents by spec Division No. & item name ..... | _____                |

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

12. **P** Copies of All Manufacturer Warranties (Refer to spec sections).  
Warranties for each Trade, i.e. GC, Plumbing, HVAC, etc. shall have its own folder. Within that folder each Warranty shall be titled w/ the "Item Name" & Manufacturer's Name. Also provide an O&M Index, listing the Trade folder and its contents by spec Division No. and item name ..... \_\_\_\_\_
13. **P** Testing and Balancing Report (Division 23)..... \_\_\_\_\_
14. **P** Extra "Attic Stock" Provide copy of transmittal to Owner (see Project Manual Sections with ● adjacent to page #..... \_\_\_\_\_
15. **P** Certificate of Occupancy/Certificate of Approval..... \_\_\_\_\_
16. **P** Resolution of Punch List Items ..... \_\_\_\_\_

**O** – Original paper copy required.

**P** – PDF copy required: **Submit one pdf copy of all closeout documentation as per the Section 017700 of the Project Manual on a thumb drive.** Each item listed above shall be a separate pdf using the titles above.

Provide separate folders for each of the following on the thumb drive:

- a. Close Out documents: 01 through 09 of the attached Section 017710;
- b. Architectural O&Ms, warranties & record documents;
- c. HVAC O&Ms, warranties & record documents;
- d. Plumbing O&Ms, warranties & record documents; and
- e. Electrical O&Ms, warranties & record documents.

Items 02 through 10 above shall be submitted together after all other required closeout submittals have been received and approved by the Architect.

Final payment will not be made until all required closeout submittals have been received.

END OF SECTION 017710

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

SECTION 017721 - MAINTENANCE BOND

KNOW ALL MEN BY THESE PRESENTS, That we, the undersigned

\_\_\_\_\_  
as principal, and a \_\_\_\_\_

Corporation organized and existing under the laws of the

State of \_\_\_\_\_ and  
duly authorized to do business in the State of New Jersey, as Surety, are held and firmly bound  
unto the

\_\_\_\_\_  
as Owner, in the penal sum of \_\_\_\_\_

\_\_\_\_\_  
(10%) of the Final Contract Amount)

for payment of which, well and truly to be made, we hereby, jointly, and severally, bind ourselves,  
our heirs, executors, administrators, successors and assigns.

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH, That whereas

the above named principal did on the \_\_\_\_\_ day of, \_\_\_\_\_

20\_\_\_\_\_, enter into a Contract with the Owner for

\_\_\_\_\_  
(Project Name)

which said Contract is made a part of this bond the same as though set forth herein.

NOW, if the said principal shall remedy without cost to the Owner any defects which may develop  
during the TWO (2) year(s) guarantee period of the work performed under the said Contract starting  
from \_\_\_\_\_ (date indicated in the Certificate of Substantial  
Completion), provided such defects, in the judgment of the Owner are caused by defective or  
inferior materials or workmanship, then this obligation shall be void, otherwise it shall be and  
remain in full force and effect.

IT IS FURTHER AGREED that any alterations which may be made in the terms of the Contract or  
in the work to be done or materials to be furnished or labor to be supplied or performed under it, or  
the giving by the Owner of any extension of time for the performance of the Contract, or any other  
forbearance on the part of either the Owner or the Principal to the other, shall not in any way release



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

the Principal and the Surety or Sureties, or either or any of them, their heirs, executors, administrators, successors or assigns, from their liability hereunder, notice to the Surety or Sureties of any such alterations, extension or forbearance being hereby waived.

IN WITNESS WHEREOF, the said Principal and Surety have duly executed this bond under seal the day and year written below.

BOND NUMBER:\_\_\_\_\_

Signed and sealed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
(Principal) (Seal)

\_\_\_\_\_  
(Witness)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Surety) (Seal)

\_\_\_\_\_  
(Witness)

\_\_\_\_\_  
(Title)

END OF SECTION 017721

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

SECTION 017722 – SUBCONTRACTOR GUARANTY

WHEREAS:

The Contractor, \_\_\_\_\_

has entered into a Contract with the Owner, \_\_\_\_\_

\_\_\_\_\_ for the construction of \_\_\_\_\_

\_\_\_\_\_ at \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

the Work.

AND WHEREAS:

The Subcontractor, \_\_\_\_\_

has entered into an agreement with the Contractor for the performance of a portion of said work.

NOW THEREFORE:

Pursuant to the terms of the Contract, the Contractor and the Subcontractor, for their heirs, executors, administrators, successors and assigns, jointly and severally guaranty

\_\_\_\_\_, the Item, as

described in the Specifications, Page(s) \_\_\_\_\_ through \_\_\_\_\_ for TWO (2) year(s), the

period, starting from \_\_\_\_\_ (date indicated in the Certificate of Substantial Completion).

FURTHERMORE:

In addition to the requirements of the Conditions of the Contract requiring correction of the work within a period of TWO (2) year(s) from Date of Substantial Completion, the Contractor and the Subcontractor do hereby guaranty and warrant that they will make good and replace, at their own cost and expense, all defects appearing in the Item during the Period and be responsible for all damage caused to the Owner by such defects or by the work required to remedy such defects. All corrections to defective work shall be made at the convenience of the Owner and shall be performed in a good workmanlike manner.

IT IS UNDERSTOOD THAT:

This Guaranty shall in no way be construed to affect, in any manner, any of the provisions of the Contract or to modify or limit any of the obligations, liabilities or duties of the Contractor or Subcontractor.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

IT IS FURTHER UNDERSTOOD THAT:

This Guaranty shall remain binding and irrevocable during the Period and that the Contractor and the Subcontractor shall not contest the validity of, or in any way attempt to revoke or withdraw from this Guaranty for any cause whatsoever, whether arising before or after the execution of the Contract or this Guaranty.

IN WITNESS WHEREOF:

The undersigned Contractor and Subcontractor have caused this

Instrument to be signed and executed this \_\_\_\_\_ day

Of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
Subcontractor

WITNESS:

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

\_\_\_\_\_  
Contractor

WITNESS:

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

END OF SECTION 017722

## SECTION 017823 - OPERATION AND MAINTENANCE DATA

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
  - 1. Operation and maintenance documentation directory manuals.
  - 2. Systems and equipment operation manuals.
  - 3. Systems and equipment maintenance manuals.
  - 4. Product maintenance manuals.
- B. Related Requirements:
  - 1. Section 013300 "Submittal Procedures" for submitting copies of submittals for operation and maintenance manuals.

#### 1.3 DEFINITIONS

- A. System: An organized collection of parts, equipment, or subsystems united by regular interaction.
- B. Subsystem: A portion of a system with characteristics similar to a system.

#### 1.4 CLOSEOUT SUBMITTALS

- A. Submit operation and maintenance manuals indicated. Provide content for each manual as specified in individual Specification Sections, and as reviewed and approved at the time of Section submittals. Submit reviewed manual content formatted and organized as required by this Section.
  - 1. Architect will comment on whether content of operation and maintenance submittals is acceptable.
  - 2. Where applicable, clarify and update reviewed manual content to correspond to revisions and field conditions.
- B. Format: Submit operation and maintenance manuals in the following format:

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1. Submit on digital media acceptable to Architect by email to Architect. Enable reviewer comments on draft submittals.
  2. Submit Two paper copies..
- C. Initial Manual Submittal: Submit draft copy of each manual at least 30 days before commencing demonstration and training. Architect will comment on whether general scope and content of manual are acceptable.
- D. Final Manual Submittal: Submit each manual in final form prior to requesting inspection for Substantial Completion and at least 15 days before commencing demonstration and training. Architect will return copy with comments.
1. Correct or revise each manual to comply with Architect's comments. Submit copies of each corrected manual within 15 days of receipt of Architect's comments and prior to commencing demonstration and training.
- E. Comply with Section 017700 "Closeout Procedures" for schedule for submitting operation and maintenance documentation.

1.5 FORMAT OF OPERATION AND MAINTENANCE MANUALS

- A. Manuals, Electronic Files: Submit manuals in the form of a multiple file composite electronic PDF file for each manual type required.
1. Electronic Files: Use electronic files prepared by manufacturer where available. Where scanning of paper documents is required, configure scanned file for minimum readable file size.
  2. File Names and Bookmarks: Bookmark individual documents based on file names. Name document files to correspond to system, subsystem, and equipment names used in manual directory and table of contents. Group documents for each system and subsystem into individual composite bookmarked files, then create composite manual, so that resulting bookmarks reflect the system, subsystem, and equipment names in a readily navigated file tree. Configure electronic manual to display bookmark panel on opening file.
- B. Manuals, Paper Copy: Submit manuals in the form of hard-copy, bound and labeled volumes.
1. Binders: Heavy-duty, three-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch (215-by-280-mm) paper; with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.
    - a. If two or more binders are necessary to accommodate data of a system, organize data in each binder into groupings by subsystem and related components. Cross-reference other binders if necessary to provide essential information for proper operation or maintenance of equipment or system.
    - b. Identify each binder on front and spine, with printed title "OPERATION AND MAINTENANCE MANUAL," Project title or name.



2. Dividers: Heavy-paper dividers with plastic-covered tabs for each section of the manual. Mark each tab to indicate contents. Include typed list of products and major components of equipment included in the section on each divider, cross-referenced to Specification Section number and title of Project Manual.
3. Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software storage media for computerized electronic equipment. Enclose title pages and directories in clear plastic sleeves.
4. Supplementary Text: Prepared on 8-1/2-by-11-inch (215-by-280-mm) white bond paper.
5. Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.
  - a. If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
  - b. If drawings are too large to be used as foldouts, fold and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents, and drawing locations.

#### 1.6 OPERATION AND MAINTENANCE DOCUMENTATION DIRECTORY MANUAL

- A. Operation and Maintenance Documentation Directory: Prepare a separate manual that provides an organized reference to emergency, operation, and maintenance manuals. List items and their location to facilitate ready access to desired information. Include the following:
  1. List of Systems and Subsystems: List systems alphabetically. Include references to operation and maintenance manuals that contain information about each system.
  2. List of Equipment: List equipment for each system, organized alphabetically by system. For pieces of equipment not part of system, list alphabetically in separate list.
  3. Tables of Contents: Include a table of contents for each emergency, operation, and maintenance manual.

#### 1.7 SYSTEMS AND EQUIPMENT OPERATION MANUALS

- A. Systems and Equipment Operation Manual: Assemble a complete set of data indicating operation of each system, subsystem, and piece of equipment not part of a system. Include information required for daily operation and management, operating standards, and routine and special operating procedures.
  1. Engage a factory-authorized service representative to assemble and prepare information for each system, subsystem, and piece of equipment not part of a system.
  2. Prepare a separate manual for each system and subsystem, in the form of an instructional manual for use by Owner's operating personnel.
- B. Content: In addition to requirements in this Section, include operation data required in individual Specification Sections and the following information:
  1. System, subsystem, and equipment descriptions. Use designations for systems and equipment indicated on Contract Documents.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

2. Performance and design criteria if Contractor has delegated design responsibility.
3. Operating standards.
4. Operating procedures.
5. Operating logs.
6. Wiring diagrams.
7. Control diagrams.
8. Piped system diagrams.
9. Precautions against improper use.
10. License requirements including inspection and renewal dates.

C. Descriptions: Include the following:

1. Product name and model number. Use designations for products indicated on Contract Documents.
2. Manufacturer's name.
3. Equipment identification with serial number of each component.
4. Equipment function.
5. Operating characteristics.
6. Limiting conditions.
7. Performance curves.
8. Engineering data and tests.
9. Complete nomenclature and number of replacement parts.

D. Operating Procedures: Include the following, as applicable:

1. Startup procedures.
2. Equipment or system break-in procedures.
3. Routine and normal operating instructions.
4. Regulation and control procedures.
5. Instructions on stopping.
6. Normal shutdown instructions.
7. Seasonal and weekend operating instructions.
8. Required sequences for electric or electronic systems.
9. Special operating instructions and procedures.

E. Systems and Equipment Controls: Describe the sequence of operation, and diagram controls as installed.

F. Piped Systems: Diagram piping as installed and identify color coding where required for identification.

1.8 SYSTEMS AND EQUIPMENT MAINTENANCE MANUALS

- A. Systems and Equipment Maintenance Manuals: Assemble a complete set of data indicating maintenance of each system, subsystem, and piece of equipment not part of a system. Include manufacturers' maintenance documentation, preventive maintenance procedures and frequency, repair procedures, wiring and systems diagrams, lists of spare parts, and warranty information.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1. Engage a factory-authorized service representative to assemble and prepare information for each system, subsystem, and piece of equipment not part of a system.
  2. Prepare a separate manual for each system and subsystem, in the form of an instructional manual for use by Owner's operating personnel.
- B. Content: For each system, subsystem, and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranties and bonds as described below.
- C. Source Information: List each system, subsystem, and piece of equipment included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual and drawing or schedule designation or identifier where applicable.
- D. Manufacturers' Maintenance Documentation: Include the following information for each component part or piece of equipment:
1. Standard maintenance instructions and bulletins; include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.
    - a. Prepare supplementary text if manufacturers' standard printed data are not available and where the information is necessary for proper operation and maintenance of equipment or systems.
  2. Drawings, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly.
  3. Identification and nomenclature of parts and components.
  4. List of items recommended to be stocked as spare parts.
- E. Maintenance Procedures: Include the following information and items that detail essential maintenance procedures:
1. Test and inspection instructions.
  2. Troubleshooting guide.
  3. Precautions against improper maintenance.
  4. Disassembly; component removal, repair, and replacement; and reassembly instructions.
  5. Aligning, adjusting, and checking instructions.
  6. Demonstration and training video recording, if available.
- F. Maintenance and Service Schedules: Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1. Scheduled Maintenance and Service: Tabulate actions for daily, weekly, monthly, quarterly, semiannual, and annual frequencies.
  2. Maintenance and Service Record: Include manufacturers' forms for recording maintenance.
- G. Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.
- H. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
1. Include procedures to follow and required notifications for warranty claims.
- I. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in record Drawings to ensure correct illustration of completed installation.
1. Do not use original project record documents as part of maintenance manuals.

1.9 PRODUCT MAINTENANCE MANUALS

- A. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.
- B. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.
- C. Source Information: List each product included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual and drawing or schedule designation or identifier where applicable.
- D. Product Information: Include the following, as applicable:
1. Product name and model number.
  2. Manufacturer's name.
  3. Color, pattern, and texture.
  4. Material and chemical composition.
  5. Reordering information for specially manufactured products.
- E. Maintenance Procedures: Include manufacturer's written recommendations and the following:
1. Inspection procedures.
  2. Types of cleaning agents to be used and methods of cleaning.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

3. List of cleaning agents and methods of cleaning detrimental to product.
  4. Schedule for routine cleaning and maintenance.
  5. Repair instructions.
- F. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.
- G. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
1. Include procedures to follow and required notifications for warranty claims.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 017823



## SECTION 017839 - PROJECT RECORD DOCUMENTS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for Project Record Documents, including the following:
  - 1. Record Drawings.
  - 2. Record Product Data.
  - 3. Miscellaneous record submittals.
- B. Related Requirements:
  - 1. Section 017700 "Closeout Procedures" for general closeout procedures.
  - 2. Section 017823 "Operation and Maintenance Data" for operation and maintenance manual requirements.

#### 1.3 CLOSEOUT SUBMITTALS

- A. Record Drawings: Comply with the following:
  - 1. Number of Copies: Submit copies of Record Drawings as follows:
    - a. Initial Submittal:
      - 1) Submit PDF electronic files of scanned record prints.
      - 2) Architect will indicate whether general scope of changes, additional information recorded, and quality of drafting are acceptable.
    - b. Final Submittal:
      - 1) Submit PDF electronic files of scanned Record Prints and two set(s) of file prints.
      - 2) Print each drawing, whether or not changes and additional information were recorded.
- B. Record Product Data: Submit annotated PDF electronic files and directories and two paper copies of each submittal.

1. Where record Product Data are required as part of operation and maintenance manuals, submit duplicate marked-up Product Data as a component of manual.
- C. Miscellaneous Record Submittals: See other Specification Sections for miscellaneous record-keeping requirements and submittals in connection with various construction activities. Submit annotated PDF electronic files and directories two paper copies of each submittal.

#### 1.4 RECORD DRAWINGS

- A. Record Prints: Maintain one set of marked-up paper copies of the Contract Drawings and Shop Drawings, incorporating new and revised drawings as modifications are issued.
  1. Preparation: Mark record prints to show the actual installation, where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to provide information for preparation of corresponding marked-up record prints.
    - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
    - b. Accurately record information in an acceptable drawing technique.
    - c. Record data as soon as possible after obtaining it.
    - d. Record and check the markup before enclosing concealed installations.
    - e. Cross-reference record prints to corresponding photographic documentation.
  2. Content: Types of items requiring marking include, but are not limited to, the following:
    - a. Dimensional changes to Drawings.
    - b. Revisions to details shown on Drawings.
    - c. Depths of foundations.
    - d. Locations and depths of underground utilities.
    - e. Revisions to routing of piping and conduits.
    - f. Revisions to electrical circuitry.
    - g. Actual equipment locations.
    - h. Duct size and routing.
    - i. Locations of concealed internal utilities.
    - j. Changes made by Change Order or Construction Change Directive.
    - k. Changes made following Architect's written orders.
    - l. Details not on the original Contract Drawings.
    - m. Field records for variable and concealed conditions.
    - n. Record information on the Work that is shown only schematically.
  3. Mark the Contract Drawings and Shop Drawings completely and accurately. Use personnel proficient at recording graphic information in production of marked-up record prints.
  4. Mark record prints with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
  5. Mark important additional information that was either shown schematically or omitted from original Drawings.

6. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.
- B. Format: Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
  1. Record Prints: Organize record prints into manageable sets. Bind each set with durable paper cover sheets. Include identification on cover sheets.
  2. Format: Annotated PDF electronic file with comment function enabled.
  3. Record Digital Data Files: Organize digital data information into separate electronic files that correspond to each sheet of the Contract Drawings. Name each file with the sheet identification. Include identification in each digital data file.
  4. Identification: As follows:
    - a. Project name.
    - b. Date.
    - c. Designation "PROJECT RECORD DRAWINGS."
    - d. Name of Architect.
    - e. Name of Contractor.

#### 1.5 RECORD PRODUCT DATA

- A. Recording: Maintain one copy of each submittal during the construction period for Project Record Document purposes. Post changes and revisions to Project Record Documents as they occur; do not wait until end of Project.
- B. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.
  1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
  2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
  3. Note related Change Orders and Record Drawings where applicable.
- C. Format: Submit Record Product Data as scanned PDF electronic file(s) of marked-up paper copy of Product Data.
  1. Include Record Product Data directory organized by Specification Section number and title, electronically linked to each item of Record Product Data.

#### 1.6 MISCELLANEOUS RECORD SUBMITTALS

- A. Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- B. Format: Submit miscellaneous record submittals as scanned PDF electronic file(s) of marked-up miscellaneous record submittals.
  - 1. Include miscellaneous record submittals directory organized by Specification Section number and title, electronically linked to each item of miscellaneous record submittals.

1.7 MAINTENANCE OF RECORD DOCUMENTS

- A. Maintenance of Record Documents: Store Record Documents in the field office apart from the Contract Documents used for construction. Do not use Project Record Documents for construction purposes. Maintain Record Documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to Project Record Documents for Architect's reference during normal working hours.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 017839

## SECTION 017900 - DEMONSTRATION AND TRAINING

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for instructing Owner's personnel, including the following:
  - 1. Instruction in operation and maintenance of systems, subsystems, and equipment.

#### 1.3 INFORMATIONAL SUBMITTALS

- A. Instruction Program: Submit outline of instructional program for demonstration and training, including a list of training modules and a schedule of proposed dates, times, length of instruction time, and instructors' names for each training module. Include learning objective and outline for each training module.

#### 1.4 QUALITY ASSURANCE

- A. Facilitator Qualifications: A firm or individual experienced in training or educating maintenance personnel in a training program similar in content and extent to that indicated for this Project, and whose work has resulted in training or education with a record of successful learning performance.
- B. Instructor Qualifications: A factory-authorized service representative, complying with requirements in Section 014000 "Quality Requirements," experienced in operation and maintenance procedures and training.

#### 1.5 COORDINATION

- A. Coordinate instruction schedule with Owner's operations. Adjust schedule as required to minimize disrupting Owner's operations and to ensure availability of Owner's personnel.
- B. Coordinate instructors, including providing notification of dates, times, length of instruction time, and course content.



- C. Coordinate content of training modules with content of approved emergency, operation, and maintenance manuals. Do not submit instruction program until operation and maintenance data have been reviewed and approved by Architect.

#### 1.6 INSTRUCTION PROGRAM

- A. Program Structure: Develop an instruction program that includes individual training modules for each system and for equipment not part of a system, as required by individual Specification Sections.
- B. Training Modules: Develop a learning objective and teaching outline for each module. Include a description of specific skills and knowledge that participant is expected to master. For each module, include instruction for the following as applicable to the system, equipment, or component:
  - 1. Basis of System Design, Operational Requirements, and Criteria: Include the following:
    - a. System, subsystem, and equipment descriptions.
    - b. Performance and design criteria if Contractor is delegated design responsibility.
    - c. Operating standards.
    - d. Regulatory requirements.
    - e. Equipment function.
    - f. Operating characteristics.
    - g. Limiting conditions.
    - h. Performance curves.
  - 2. Documentation: Review the following items in detail:
    - a. Emergency manuals.
    - b. Systems and equipment operation manuals.
    - c. Systems and equipment maintenance manuals.
    - d. Product maintenance manuals.
    - e. Project Record Documents.
    - f. Identification systems.
    - g. Warranties and bonds.
    - h. Maintenance service agreements and similar continuing commitments.
  - 3. Emergencies: Include the following, as applicable:
    - a. Instructions on meaning of warnings, trouble indications, and error messages.
    - b. Instructions on stopping.
    - c. Shutdown instructions for each type of emergency.
    - d. Operating instructions for conditions outside of normal operating limits.
    - e. Sequences for electric or electronic systems.
    - f. Special operating instructions and procedures.

4. Operations: Include the following, as applicable:
  - a. Startup procedures.
  - b. Equipment or system break-in procedures.
  - c. Routine and normal operating instructions.
  - d. Regulation and control procedures.
  - e. Control sequences.
  - f. Safety procedures.
  - g. Instructions on stopping.
  - h. Normal shutdown instructions.
  - i. Operating procedures for emergencies.
  - j. Operating procedures for system, subsystem, or equipment failure.
  - k. Seasonal and weekend operating instructions.
  - l. Required sequences for electric or electronic systems.
  - m. Special operating instructions and procedures.
5. Adjustments: Include the following:
  - a. Alignments.
  - b. Checking adjustments.
  - c. Noise and vibration adjustments.
  - d. Economy and efficiency adjustments.
6. Troubleshooting: Include the following:
  - a. Diagnostic instructions.
  - b. Test and inspection procedures.
7. Maintenance: Include the following:
  - a. Inspection procedures.
  - b. Types of cleaning agents to be used and methods of cleaning.
  - c. List of cleaning agents and methods of cleaning detrimental to product.
  - d. Procedures for routine cleaning.
  - e. Procedures for preventive maintenance.
  - f. Procedures for routine maintenance.
  - g. Instruction on use of special tools.
8. Repairs: Include the following:
  - a. Diagnosis instructions.
  - b. Repair instructions.
  - c. Disassembly; component removal, repair, and replacement; and reassembly instructions.
  - d. Instructions for identifying parts and components.
  - e. Review of spare parts needed for operation and maintenance.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1.7 PREPARATION

- A. Assemble educational materials necessary for instruction, including documentation and training module. Assemble training modules into a training manual organized in coordination with requirements in Section 017823 "Operation and Maintenance Data."
- B. Set up instructional equipment at instruction location.

1.8 INSTRUCTION

- A. Facilitator: Engage a qualified facilitator to prepare instruction program and training modules, to coordinate instructors, and to coordinate between Contractor and Owner for number of participants, instruction times, and location.
- B. Engage qualified instructors to instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.
  - 1. Owner will furnish Contractor with names and positions of participants.
- C. Scheduling: Provide instruction at mutually agreed-on times. For equipment that requires seasonal operation, provide similar instruction at start of each season.
  - 1. Schedule training with Owner with at least seven days' advance notice.
- D. Training Location and Reference Material: Conduct training on-site in the completed and fully operational facility using the actual equipment in-place. Conduct training using final operation and maintenance data submittals.
- E. Cleanup: Collect used and leftover educational materials and give to Owner. Remove instructional equipment. Restore systems and equipment to condition existing before initial training use.

PART 2 - sPRODUCTS

PART 3 - EXECUTION

END OF SECTION 017900

## SECTION 023000 - SUBSURFACE INVESTIGATION

### PART 1 GENERAL

#### 1.1 DESCRIPTION

- A. Subsurface investigation includes the excavation of test pits to ascertain the location of buried utilities or surface conditions.
- B. Before laying pipes or constructing any structure, the CONTRACTOR shall ascertain the location and grade of utility pipes and other subsurface structures which may interfere with such construction. Test pits shall be excavated wherever necessary to obtain the required information, subject to the approval of the ARCHITECT.

### PART 2 PRODUCTS

No products are involved.

### PART 3 EXECUTION

#### 3.1 METHODS OF WORK

- A. The approximate location of known utility structures and facilities that may be encountered within and adjacent to the limits of the work are shown on the plans. The accuracy and completeness of this information is not guaranteed by the ARCHITECT, and the bidder is advised to ascertain for himself all the facts concerning the location of these utilities.
- B. The CONTRACTOR shall adhere to Section 105.07, Cooperation with Utilities, of the Standard Specifications regarding location of and construction around public utilities.
- C. All tests pits shall be backfilled with the material excavated. All backfill shall be thoroughly compacted in accordance with Specification Section entitled Site Excavation, Filling and Grading.
- D. The CONTRACTOR shall permit the owners of the utilities of their agents, access to the site of the work at all times, in order to relocate or protect their facilities, and he shall cooperate with them in performing this work.
- E. The CONTRACTOR shall cooperate with the utility owners concerned and shall notify them not less than ten (10) days in advance of the time he proposes to perform any work that will endanger or affect their facilities.
- F. The CONTRACTOR shall call 1-800-272-1000 for a utility mark-out prior to any excavation activities.

END OF SECTION

## SECTION 024113 - SELECTIVE SITE DEMOLITION

### PART 1 GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specifications, apply to this section.
- B. Refer to Division 02 section "Selective Site Demolition" for demolition and removal of selected site improvements.
- C. Refer to Division 31 section "Selective Site Clearing" for site clearing and removal of above and below grade improvements.

#### 1.2 DESCRIPTION

- A. The work of this section includes:
  - 1. Demolition, removal and/or disposal of selected site elements as shown on the Plans including, but not limited to, buildings, bituminous and concrete pavement, concrete curb, structures and all other obstructions .
  - 2. Patching and repairs.

#### 1.3 DEFINITIONS

- A. Remove: Remove and legally dispose of items except those indicated to be reinstalled, salvaged, or to remain the OWNER's property.
- B. Remove and Salvage: Items indicated to be removed and salvaged remain the OWNER's property. Remove, clean, and pack or create items to protect against damage. Identify contents of containers and deliver to OWNER's designated storage area.
- C. Remove and Reinstall: Remove items indicated; clean, service, and otherwise prepare them for reuse; store and protect against damage. Reinstall items in the same locations or in locations indicated.
- D. Existing to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by the ARCHITECT, items may be removed to a suitable, protected storage location during selective demolition and then cleaned and reinstalled in the original and/or new locations.

#### 1.4 MATERIALS OWNERSHIP

- A. Except for items or materials indicated to be reused, salvaged, reinstalled, or otherwise indicated to remain the OWNER's property, demolished materials shall become the CONTRACTOR's property and shall be removed from the site with further disposition at the CONTRACTOR's option.



- B. Historical items indicated remain the OWNER's property. Carefully remove and salvage each item in a manner to prevent damage and deliver promptly to the OWNER.
- C. Historical items, relics, and similar objects including, but not limited to, cornerstones, and their contents, commemorative plaques and tablets, antiques, and other items of interest or value to the OWNER, which may be encountered during selective demolition, remain the OWNER's property. Carefully remove and salvage each item or object in a manner to prevent damage and deliver promptly to the OWNER.

#### 1.5 QUALITY ASSURANCE

- A. Engage an experienced firm that has successfully completed selective demolition work similar to that indicated for this project.
- B. Comply with governing NJDEP notification regulations before starting selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.

#### 1.6 PROJECT CONDITIONS

- A. The OWNER and the ARCHITECT assumed no responsibility for actual condition of site elements to be selectively demolished.
- B. Storage or sale of removed items or materials on-site will not be permitted.

#### 1.7 SCHEDULING

- A. Arrange demolition schedule so as not to interfere with OWNER's on-site operations. Coordinate with schedule and phasing indicated elsewhere.

### PART 2 PRODUCTS

#### 2.1 REPAIR MATERIALS

- A. Use repair materials identical to existing materials.
  - 1. Where identical materials are unavailable or cannot be used for exposed surfaces, use materials that visually match existing adjacent surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible.
  - 2. Use materials whose installed performance equals or surpasses that of existing materials.

### PART 3 EXECUTION

#### 3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- C. Inventory and record the condition of items to be removed and reinstalled and items to be removed and salvaged.

3.2 UTILITY SERVICES

- A. Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
- B. Do not interrupt existing utilities serving occupied or operating facilities, except when authorized in writing by OWNER and authorities having jurisdiction. Provide temporary services during interruptions to existing utilities, as acceptable to OWNER and to governing authorities. Provide not less than 48 hours' notice to OWNER if shutdown of service is required during changeover.
- C. Locate, identify, disconnect, and seal or cap off indicated utility services to be selectively demolished.
  - 1. Arrange to shut off indicated utilities with utility companies.
  - 2. Where utility services are required to be removed, relocated, or abandoned, provide bypass connections to maintain continuity of service to other parts of the building before proceeding with selective demolition.

3.3 PREPARATION

- A. Conduct demolition operations to prevent injury to people and damage to adjacent buildings and facilities to remain. Ensure safe passage of people around selective demolition area.
  - 1. Erect temporary protection, such as walks, fences, railing, canopies, and covered passageways, where required by authorities having jurisdiction.
  - 2. Protect existing site improvement, appurtenances, and landscaping to remain.
  - 3. Erect a plainly visible fence around drip line of individual trees of around perimeter drip line of groups of trees to remain.

3.4 POLLUTION CONTROLS

- A. Use water mist, temporary enclosures, and other suitable methods to limit the spread of dust and dirt. Comply with governing environmental protection regulations.
- B. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

- C. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before start of selective demolition.

### 3.5 SELECTIVE DEMOLITION

- A. Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete work within limitation of governing regulation and as follows:
  - 1. Proceed with selective demolition systematically.
  - 2. Dispose of demolished items and materials promptly. On-site storage or sale of removed items is prohibited.
  - 3. Return elements of construction and surfaces to remain to condition existing before start of selective demolition operations.
- B. Demolish concrete and masonry in smaller sections. Cut concrete and masonry at juncture with construction to remain, using power-driven saw or hand tools; do not use power-driven impact tools.
- C. Break up and remove concrete slabs on grade, unless otherwise shown to remain.
- D. Saw cut asphalt paving at juncture with construction to remain, using power driven asphalt saw.

### 3.6 PATCHING AND REPAIRS

- A. Promptly patch and repair holes and damaged surfaces caused to adjacent construction by selective demolition operations.
- B. Where repairs to existing surface are required, patch to produce surfaces suitable for new materials.

### 3.7 DISPOSAL OF DEMOLISHED MATERIALS

- A. Promptly dispose of demolished materials. Do not allow demolished materials to accumulate on-site.
- B. Do not burn demolished materials.
- C. Transport demolished materials off OWNER's property and legally dispose of them.

END OF SECTION

## SECTION 024119 - SELECTIVE DEMOLITION

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section Includes:

- 1. Demolition and removal of selected portions of building or structure.
  - 2. Demolition and removal of selected site elements.
  - 3. Salvage of existing items to be reused or recycled.

- B. Related Requirements:

- 1. Section 011000 "Summary" for restrictions on use of the premises, Owner-occupancy requirements, and phasing requirements.
  - 2. Section 017300 "Execution" for cutting and patching procedures.

#### 1.3 DEFINITIONS

- A. Remove: Detach items from existing construction and dispose of them off-site unless indicated to be salvaged or reinstalled.
- B. Remove and Salvage: Detach items from existing construction, in a manner to prevent damage, and deliver to Owner ready for reuse.
- C. Remove and Reinstall: Detach items from existing construction, in a manner to prevent damage, prepare for reuse, and reinstall where indicated.
- D. Existing to Remain: Leave existing items that are not to be removed and that are not otherwise indicated to be salvaged or reinstalled.
- E. Dismantle: To remove by disassembling or detaching an item from a surface, using gentle methods and equipment to prevent damage to the item and surfaces; disposing of items unless indicated to be salvaged or reinstalled.

#### 1.4 MATERIALS OWNERSHIP

- A. Unless otherwise indicated, demolition waste becomes property of Contractor.

1.5 PREINSTALLATION MEETINGS

- A. Predemolition Conference: Conduct conference at Project site.
  - 1. Inspect and discuss condition of construction to be selectively demolished.
  - 2. Review structural load limitations of existing structure.
  - 3. Review and finalize selective demolition schedule and verify availability of materials, demolition personnel, equipment, and facilities needed to make progress and avoid delays.
  - 4. Review requirements of work performed by other trades that rely on substrates exposed by selective demolition operations.
  - 5. Review areas where existing construction is to remain and requires protection.

1.6 INFORMATIONAL SUBMITTALS

- A. Predemolition Photographs or Video: Show existing conditions of adjoining construction, including finish surfaces, that might be misconstrued as damage caused by demolition operations. Comply with Section 013233 "Photographic Documentation." Submit before Work begins.
- B. Statement of Refrigerant Recovery: Signed by refrigerant recovery technician responsible for recovering refrigerant, stating that all refrigerant that was present was recovered and that recovery was performed according to EPA regulations. Include name and address of technician and date refrigerant was recovered.

1.7 QUALITY ASSURANCE

- A. Refrigerant Recovery Technician Qualifications: Certified by an EPA-approved certification program.

1.8 FIELD CONDITIONS

- A. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.
- B. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
  - 1. Before selective demolition, Owner will remove the following items:
    - a. Refer to Section 011000 - Summary for work by Owner.
- C. Notify Architect of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- D. Hazardous Materials: It is not expected that hazardous materials will be encountered in the Work.



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1. If suspected hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Hazardous materials will be removed by Owner under a separate contract.
  - E. OSHA Respirable Crystalline Silica Standard for Construction: Contractor shall fully comply with OSHA Standard 29 CFR 1926.1153, which requires employer to limit worker exposure to respirable crystalline silica and to take other steps to protect workers.
  - F. Storage or sale of removed items or materials on-site is not permitted.
  - G. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
    1. Maintain fire-protection facilities in service during selective demolition operations.
- 1.9 COORDINATION
- A. Arrange selective demolition schedule so as not to interfere with Owner's operations.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ASSE A10.6 and NFPA 241.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped before starting selective demolition operations.
- B. Survey of Existing Conditions: Record existing conditions by use of preconstruction photographs or video.
  1. Comply with requirements specified in Section 013233 "Photographic Documentation."
  2. Inventory and record the condition of items to be removed and salvaged. Provide photographs or video of conditions that might be misconstrued as damage caused by salvage operations.

### 3.2 PREPARATION

- A. Refrigerant: Before starting demolition, remove refrigerant from mechanical equipment according to 40 CFR 82 and regulations of authorities having jurisdiction.

### 3.3 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

- A. Existing Services/Systems to Remain: Maintain services/systems indicated to remain and protect them against damage.
- B. Existing Services/Systems to Be Removed, Relocated, or Abandoned: Locate, identify, disconnect, and seal or cap off utility services and mechanical/electrical systems serving areas to be selectively demolished.
  - 1. Owner will arrange to shut off indicated services/systems when requested by Contractor.
  - 2. If services/systems are required to be removed, relocated, or abandoned, provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.
  - 3. Disconnect, demolish, and remove fire-suppression systems, plumbing, and HVAC systems, equipment, and components indicated on Drawings to be removed.
    - a. Piping to Be Removed: Remove portion of piping indicated to be removed and cap or plug remaining piping with same or compatible piping material.
    - b. Piping to Be Abandoned in Place: Drain piping and cap or plug piping with same or compatible piping material and leave in place.
    - c. Equipment to Be Removed: Disconnect and cap services and remove equipment.
    - d. Equipment to Be Removed and Reinstalled: Disconnect and cap services and remove, clean, and store equipment; when appropriate, reinstall, reconnect, and make equipment operational.
    - e. Equipment to Be Removed and Salvaged: Disconnect and cap services and remove equipment and deliver to Owner.
    - f. Ducts to Be Removed: Remove portion of ducts indicated to be removed and plug remaining ducts with same or compatible ductwork material.
    - g. Ducts to Be Abandoned in Place: Cap or plug ducts with same or compatible ductwork material and leave in place.

### 3.4 PROTECTION

- A. Temporary Protection: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
  - 1. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building.
  - 2. Provide temporary weather protection, during interval between selective demolition of existing construction on exterior surfaces and new construction, to prevent water leakage and damage to structure and interior areas.

3. Protect walls, ceilings, floors, and other existing finish work that are to remain or that are exposed during selective demolition operations.
  4. Cover and protect equipment that has not been removed.
  5. Comply with requirements for temporary enclosures, dust control, heating, and cooling specified in Section 015000 "Temporary Facilities and Controls."
- B. Temporary Shoring: Design, provide, and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.
1. Strengthen or add new supports when required during progress of selective demolition.
- C. Remove temporary barricades and protections where hazards no longer exist.

### 3.5 SELECTIVE DEMOLITION, GENERAL

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
1. Proceed with selective demolition systematically, from higher to lower level. Complete selective demolition operations above each floor or tier before disturbing supporting members on the next lower level.
  2. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping. Temporarily cover openings to remain.
  3. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
  4. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain portable fire-suppression devices during flame-cutting operations.
  5. Maintain fire watch during and for at least eight (8) hours after flame-cutting operations and in accordance with requirements of the authority having jurisdiction; whichever is more stringent.
  6. Maintain adequate ventilation when using cutting torches.
  7. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
  8. Remove structural framing members and lower to ground by method suitable to avoid free fall and to prevent ground impact or dust generation.
  9. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
  10. Dispose of demolished items and materials promptly.

- B. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
- C. Removed and Salvaged Items:
  - 1. Clean salvaged items.
  - 2. Store items in a secure area until delivery to Owner.
  - 3. Transport items to Owner's storage area on-site.
  - 4. Protect items from damage during transport and storage.
- D. Removed and Reinstalled Items:
  - 1. Clean and repair items to functional condition adequate for intended reuse.
  - 2. Pack or crate items after cleaning and repairing. Identify contents of containers.
  - 3. Protect items from damage during transport and storage.
  - 4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.
- E. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Architect, items may be removed to a suitable, protected storage location during selective demolition and cleaned and reinstalled in their original locations after selective demolition operations are complete.

### 3.6 SELECTIVE DEMOLITION PROCEDURES FOR SPECIFIC MATERIALS

- A. Concrete: Demolish in small sections. Using power-driven saw, cut concrete to a depth of at least 3/4 inch (19 mm) at junctures with construction to remain. Dislodge concrete from reinforcement at perimeter of areas being demolished, cut reinforcement, and then remove remainder of concrete. Neatly trim openings to dimensions indicated.
- B. Concrete: Demolish in sections. Cut concrete full depth at junctures with construction to remain and at regular intervals using power-driven saw, and then remove concrete between saw cuts.
- C. Masonry: Demolish in small sections. Cut masonry at junctures with construction to remain, using power-driven saw, and then remove masonry between saw cuts.
- D. Concrete Slabs-on-Grade: Saw-cut perimeter of area to be demolished, and then break up and remove.
- E. Roofing: Remove no more existing roofing than what can be covered in one day by new roofing and so that building interior remains watertight and weathertight. New roofing system shall match existing.

### 3.7 DISPOSAL OF DEMOLISHED MATERIALS

- A. Remove demolition waste materials from Project site and dispose of them in an EPA-approved construction and demolition waste landfill acceptable to authorities having jurisdiction.
  - 1. Do not allow demolished materials to accumulate on-site.
  - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
  - 3. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
- B. Hazardous Waste: Remove, package, transport and dispose of all mercury thermostats, fluorescent light fixture ballasts containing polychlorinated biphenyls (PCBs), fluorescent light bulbs and all items containing lead cadmium batteries (such as exit signs and emergency lighting fixtures) and any other items classified as universal waste in accordance with the provisions of the regulations promulgated by the United States Environmental Protection Agency (40 CFR 273) and the New Jersey Department of Environmental Protection (N. J. A. C. 7:26A-7).
- C. Burning: Do not burn demolished materials.

### 3.8 CLEANING

- A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

### 3.9 SELECTIVE DEMOLITION SCHEDULE

- A. Prior to the commencement of the Work, the Contractor shall review with the Owner all materials & equipment to be removed. Should the Owner opt to keep any items, the Contractor shall salvage & deliver the items to the Owner on the site where so directed & properly dispose of all other demolition & construction materials.

END OF SECTION 024119



## SECTION 031100 - CONCRETE FORMWORK FOR SITEWORK

### PART 1 GENERAL

#### 1.1 SUMMARY

- A. Provide formwork in accordance with provisions of this section for cast-in -place concrete shown on the Drawings or required by other sections of these Specifications.

#### 1.2 SUBMITTALS

- A. Product Data: Within 15 calendar days after the CONTRACTOR has received the OWNER'S Notice to Proceed, submit manufacturer's data and installation instructions for proprietary materials including form coatings, ties, and accessories, and manufactured form systems if used.

#### 1.3 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this section.
- B. Design of formwork is the CONTRACTOR's responsibility.
- C. Standards: In addition to complying with pertinent regulations of governmental agencies having jurisdiction, comply with pertinent provisions of ACI 347.

### PART 2 PRODUCTS

#### 2.1 FORM MATERIALS

- A. Except for metal forms, use new materials. Materials may be reused during progress of the work, provided they are completely cleaned and reconditioned, recoated for each use, and capable of producing formwork of the required quality.
- B. For footings and foundations, use Douglas Fir boards or planks secured to wood or steel stakes, substantially constructed to shapes indicated and to support the required loads.
- C. For studs, wales, and supports, use standard grade or better Douglas Fir, dimensions as required to support the loads but not less than 2" x 4".
- D. Wall forms:
  - 1. Exposed concrete surfaces:
    - a. Use 3/4" minimum thickness Douglas Fir plywood, Grade B/B, Class I or II, exterior, sanded both sides, complying with PS-1.

- b. Seal edges and coat both faces with colorless coating which will not affect application of applied finishes.
- 2. Unexposed concrete surfaces:
  - a. Use 1" x 6" shiplap Douglas Fir boards, surfaced one side and two edges, or 3/4" minimum thickness Douglas Fir plywood, Grade B/B plyform Class I or II, sanded both sides, mill-oiled.
- E. Column forms, if required:
  - 1. For square or rectangular columns, use 2" thick Douglas Fir planks or joists, surfaced one side and two edges, or use metal forms.
  - 2. For round columns, use metal forms or patented paper tube forms approved by the ARCHITECT.
  - 3. Construct column forms with tight joints and securely clamped together with steel clamps.

## 2.2 FORM TIES

- A. Hold inner and outer forms of vertical concrete together with combination steel ties and spreaders approved by the ARCHITECT.
  - 1. Space ties symmetrically in tiers and rows, each tier plumb from top to bottom and each row level.
  - 2. At horizontal pour lines, locate ties not more than 6" below the pour lines. Tighten after concrete has set and before the next pour is made.
  - 3. For exposed concrete surfaces, provide form ties of removable type with she-bolts equipped with permanent plugs and a system approved by the ARCHITECT for fixing the plugs in place.

## 2.3 DESIGN OF FORMWORK

- A. General:
  - 1. Design, erect, support, brace, and maintain formwork so it will safely support vertical and lateral loads that might be applied, until such loads can be supported by the concrete structure.
  - 2. Carry vertical and lateral loads to ground by formwork system and in-place construction that has attained adequate strength for that purpose.
  - 3. Construct formwork so concrete members and structures are of correct size, shape, alignment elevation, and position.

4. Design forms and falsework to include assumed values of live load, dead load, weight of moving equipment operated on the framework, concrete mix height of concrete drop, vibrator frequency, ambient temperature, foundation pressures, stresses, lateral stability, and other factors pertinent to safety of the structure during construction.
5. Provide shores and struts with positive means of adjustment capable of taking up formwork settlement during concrete placing operations, using wedges or jacks or a combination thereof.
6. Provide trussed supports when adequate foundations for shores and struts cannot be secured.
7. Support form materials by structural members spaced sufficiently close to prevent objectionable deflection.
8. Fit forms of continuous surfaces to provide accurate alignment, free from irregularities, and within the allowable tolerances.
9. Provide formwork sufficiently tight to prevent leakage of cement paste during concrete placement. Solidly butt joints, and provide backup material at joints as required to prevent leakage and prevent fins.
10. Provide camber in formwork as required for anticipated deflections due to weight and pressures of fresh concrete and construction loads.

#### 2.4 EARTH FORMS

- A. Side forms for footing may be omitted, and concrete may be placed directly against excavation, only when requested by the CONTRACTOR and approved by the ARCHITECT.
- B. When omission of forms is accepted, provide additional concrete 1" on each side of the minimum design profiles and dimensions shown on the Drawings.

### PART 3 EXECUTION

#### 3.1 SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of this sections will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.

#### 3.2 FORM CONSTRUCTION

- A. General:

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1. Construct forms complying with ACI 347 to the exact sizes, shapes, lines, and dimensions shown, and as required to obtain accurate alignment, location, grades, and level and plumb work in the finished structure.
  2. Provide for openings, offsets, keyways, recesses, moldings, reglets, chamfers, blocking, screeds, bulkheads, anchorages, inserts, and other features as required.
  3. Tolerances shall be in accordance with the Section 3.3.1 of ACI 347.
- B. Fabrication:
1. Fabricate forms for easy removal without hammering or prying against concrete surfaces.
  2. Provide crush plates or wrecking plates where stripping may damage cast concrete surfaces.
  3. Kerf wood inserts for forming keyways, reglets, recesses, and the like, to prevent swelling and assure ease of removal.
  4. Provide top forms for inclined surfaces where so directed by the ARCHITECT.
- C. Forms for exposed concrete:
1. Drill forms to suit ties being used, and to prevent leakage of cement paste around tie holes. Do not splinter forms by driving ties through improperly prepared holes.
  2. Provide sharp, clean corners at intersecting planes, without visible edges or offsets. Back the joints with extra studs or girts to maintain true, square intersections.
  3. Use extra studs, wales, and bracing to prevent objectionable bowing of forms between studs, and to avoid bowed appearance in concrete. Do not use narrow strips of form material which will produce bow.
- D. Corner treatment:
1. Unless shown otherwise, form chamfers with 1" x 1" strips, accurately formed and surfaced to produce uniformly straight lines and tight edges.
  2. Extend terminal edges to required limit, and miter the chamfer strips at changes in direction.
- E. Locate control joints as indicated on the Drawings and, where required but not shown on the Drawings, as approved by the ARCHITECT.
- F. Provisions for other trades:

1. Provide openings in concrete formwork to accommodate work of other trades.
2. Verify size and location of openings, recesses, and chases with the trade requiring such items.
3. Accurately place and securely support items to be built into the concrete.

### 3.3 FORM COATINGS

- A. Coat form contact surfaces with form coating compound before reinforcement is placed.
  1. Do not allow excess form coating material to accumulate in the forms or to come in contact with surfaces which will bond to fresh concrete.
  2. Apply the form coating material in strict accordance with its manufacturer's recommendations.

### 3.4 REMOVAL OF FORMS

- A. General:
  1. Do not disturb or remove forms until the concrete has hardened sufficiently to permit form removal with complete safety.
  2. Do not remove shoring until the member has acquired sufficient strength to support its own weight, the load upon it, and the added load of construction.
  3. Do not strip floor slabs in less than two days.
  4. Do not strip wall concrete in less than 24 hours. Do not backfill until concrete has cured seven days.
  5. When stripping time is less than specified curing time, measures shall be taken to provide adequate curing and thermal protection of the stripped concrete.
- B. Finished surfaces:
  1. Exercise care in removing forms from finished concrete surfaces so that surfaces are not marred or gouged, and that corners are true, sharp, and unbroken.
  2. Release sleeve nuts or clamps, and pull the form ties neatly.
  3. Do not permit steel spreaders, form ties, or other metal to project from, or be visible on, any concrete surface except where so shown on the Drawings.
  4. Solidly pack form tie holes, rod holes, and similar holes in the concrete. For packing, use the cement grout specified in Specification Section entitled "Concrete for Sitework". The holes shall be flushed with water before packing, screeding off flush, and grinding to match adjacent surfaces.



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

END OF SECTION

SECTION 032100 - CONCRETE REINFORCEMENT FOR SITEWORK

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Reinforcing steel bars, wire fabric and accessories for cast-in-place concrete.

1.2 RELATED SECTIONS

- A. Section 031100 - Concrete Formwork for Sitework.
- B. Section 033053 - Concrete for Sitework.

1.3 REFERENCES

- A. ACI 301 - Structural Concrete for Buildings.
- B. ACI 318 - Building Code Requirements For Reinforced Concrete.
- C. ACI SP-66 - American Concrete Institute - Detailing Manual.
- D. ASTM A82 - Cold Drawn Steel Wire for Concrete Reinforcement.
- E. ASTM A184 - Fabricated Deformed Steel Bar Mats for Concrete Reinforcement.
- F. ASTM A185 - Welded Steel Wire Fabric for Concrete Reinforcement.
- G. ASTM A496 - Deformed Steel Wire Fabric for Concrete Reinforcement.
- H. ASTM A497 - Welded Deformed Steel Wire Fabric for Concrete Reinforcement.
- I. ASTM A615 - Deformed and Plain Billet Steel Bars for Concrete Reinforcement.
- J. ASTM A616 - Rail Steel Deformed and Plain Bars for Concrete Reinforcement.
- K. ASTM A617 - Axle Steel Deformed and Plain Bars for Concrete Reinforcement.
- L. ASTM A704 - Welded Steel Plain Bar or Rod Mats for Concrete Reinforcement.
- M. ASTM A706 - Low-Alloy Steel Deformed Bars for Concrete Reinforcement.
- N. ASTM A767 - Zinc-Coated (Galvanized) Bars for Concrete Reinforcement.
- O. ASTM A775 - Epoxy-Coated Reinforcing Steel Bars.
- P. ASTM D3963 - Epoxy-Coated Reinforcing Steel.
- Q. AWS D1.4 - Structural Welding Code for Reinforcing Steel.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- R. AWS D12.1 - Welding Reinforcement Steel, Metal Inserts and Connections in Reinforced Concrete Construction.
- S. CRSI - Concrete Reinforcing Steel Institute - Manual of Practice.
- T. CRSI 63 - Recommended Practice For Placing Reinforcing Bars.
- U. CRSI 65 - Recommended Practice For Placing Bar Supports, Specifications and Nomenclature.

1.4 SUBMITTALS FOR REVIEW

- A. Shop Drawings: Indicate bar sizes, spacing, locations, and quantities of reinforcing steel and wire fabric, bending and cutting schedules, and supporting and spacing devices.

1.5 SUBMITTALS FOR INFORMATION

- A. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- B. Submit certified copies of mill test report of reinforcement materials analysis.

1.6 QUALITY ASSURANCE

- A. Perform Work in accordance with ASTM A184.
- B. Provide ARCHITECT with access to fabrication plant to facilitate inspection of reinforcement. Provide notification of commencement and duration of shop fabrication in sufficient time to allow inspection.

PART 2 PRODUCTS

2.1 REINFORCEMENT

- A. Reinforcing Steel: ASTM A615, 60 ksi yield grade; deformed billet steel bars, unfinished.
- B. Reinforcing Steel Mat: ASTM A615, 40 ksi yield grade; steel bars or rods, unfinished.
- C. Stirrup Steel: ASTM A82, unfinished.
- D. Welded Steel Wire Fabric: ASTM A185 Plain Type; in coiled rolls; unfinished.

2.2 ACCESSORIES

- A. Tie Wire: Minimum 16 gage annealed type, epoxy coated. Patented system, manufactured by an approved source.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- B. Chairs, Bolsters, Bar Supports, Spacers: Sized and shaped for strength and support of reinforcement during concrete placement conditions including load bearing pad on bottom to prevent vapor barrier puncture.
- C. Special Chairs, Bolsters, Bar Supports, Spacers Adjacent to Weather Exposed Concrete Surfaces: Plastic coated steel type; size and shape as required.

PART 3 EXECUTION

3.1 PLACEMENT

- A. Place, support and secure reinforcement against displacement. Do not deviate from required position.
- B. Do not displace or damage vapor barrier.
- C. Accommodate placement of formed openings.
- D. Conform to applicable code for concrete cover over reinforcement.

3.2 FIELD QUALITY CONTROL

- A. Inspect for acceptability.

END OF SECTION

SECTION 033053 - CONCRETE FOR SITEWORK

PART 1 GENERAL

1.1 DESCRIPTION

- A. Provide all non-reinforced and reinforced cast-in-place concrete, complete in place as indicated on the Plans and Specifications.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Cement used shall conform to the following requirements of the ASTM as amended and revised to date.
- B. Standard Portland Cement ASTM Designation C-150, Type 3.
- C. High Early Strength Portland Cement ASTM Designation C-150, Type 3.
- D. Air Entraining Portland Cement ASTM Designation C-150, Type 1A.
- E. Air Entraining Admixtures ASTM Designation C-260.
- F. Water Reducing Admixtures ASTM Designation C-494, Type A, shall be proportioned in accordance with A.G.I. 211.1-77 in order to obtain the requirements of ASTM Designation C-494. Use shall be in accordance with A.C.I. recommendations for water reducing agents, and shall be as manufactured by Masterbuilders, Euclid, Sika or approved equal.
- G. Curing Compounds ASTM Designation C-390 for Liquid Membrane-forming Compounds.
- H. Joint Material ASTM Designation D-994 for Bituminous Type material or ASTM Designation D-1751 for Non-extruding and Resilient Bituminous Type material.
- I. Aggregates, both fine and coarse, shall conform to the requirements therefore of ASTM Designation C-33. Standard size number of the coarse aggregate shall be in conformance with Article 4.1.2 of Addenda A, and aggregate gradation requirements therefore shall conform to ASTM Designation C-33. The maximum coarse aggregate shall be not more than one-fourth the smallest clearance between forms, reinforcement or any exposed surfaces, in any combination thereon.
- J. Water shall be clean, fresh and free of oils, acids, salts, organic matter or other injurious substances.



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- K. Unless otherwise provided, all concrete shall be air entrained having 6% of entrained air with a tolerance of  $\pm 1\frac{1}{2}\%$ , and shall be produced by using Standard Portland Cement with additive or Air Entraining Portland Cement with or without additional additive as may be required.
- L. Except where otherwise specifically provided or indicated on Plans, concrete shall be Class 4000 PSI for all surface structures, and Class 3000 PSI for all subsurface structures, and have a three inch (3") slump with a tolerance of  $\pm 1$ ".
  - 1. Concrete curb at driveways shall attain a strength of not less than 3000 PSI in 3 days.
- M. Cement, aggregates, water and air entrainment methods and materials shall also conform to Section 903 of the Standard Specifications.

PART 3 EXECUTION

3.1 METHODS OF CONSTRUCTION

- A. Reference standards included in this section:
  - 1. Section 405 of the Standard Specifications: Concrete Surface Course
  - 2. Section 607 of the Standard Specifications: Curbs
  - 3. Section 903.10 of the Standard Specifications: Curing Materials for Concrete
  - 4. Section 914 of the Standard Specifications: Joint Filler, Preformed
- B. Submittals:

Certificates: All deliveries of concrete shall be accomplished by delivery slips, copies of which shall be provided to ARCHITECT by the CONTRACTOR.
- C. Environmental requirements:
  - 1. Allowable concrete temperatures:
    - a. Cold weather: 60 degrees F Fahrenheit (60°F) when discharged from the mixer.
    - b. Hot weather: Maximum concrete temperature is 80 degrees Fahrenheit (80°F).
  - 2. Do not place concrete during rain, when atmospheric temperature is at or below 40 degrees Fahrenheit (40°F), or when conditions are otherwise unfavorable as determined by the ARCHITECT.
- D. Protection:

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1. When directed by ARCHITECT, protect new concrete curb from traffic for a minimum of seven (7) days.
  2. Method of protection shall be approved by ARCHITECT prior to beginning work.
- E. Only enough water shall be added to make concrete workable for its intended use. The ARCHITECT will determine the slump ranges within which the CONTRACTOR must work. Ready mix or transit mix concrete may be used if obtained from sources approved by the ARCHITECT. Equipment used to proportion and mix concrete on the job shall be subject to the approval of the ARCHITECT.
- F. Forms shall conform to the shapes, lines, dimensions, and grades shown on the Plans. They shall be firmly braced, tight and sufficiently substantial to prevent movement, bulging, or mortar leakage. Wherever concrete will be exposed to view the form therefore shall be smooth and clean. Forms for footings may be omitted wherever soil conditions and workmanship permit accurate excavation to size. All forms shall be completely removed.
- G. Reinforcement shall be accurately cut, bent and placed in accordance with the Plans. It shall be free of excessive scale or any foreign material that would tend to reduce bond. It shall be securely supported, tied and fastened to prevent movement while concrete is being placed.
- H. Subgrades, excavations and soil bases for all concrete work shall be properly finished to the prescribed lines, grades and dimensions, and shall be approved by the ARCHITECT before concrete is placed. All areas to receive concrete shall be free of frost, foreign matter and excessive water, provided however, that forms and soil surfaces shall be uniformly damp when the concrete is placed.
- I. Concrete shall be handled and placed so as to avoid any segregation. Concrete which has begun to set or which has been contaminated with foreign materials or to which too much water has been added shall not be used. Pouring of concrete shall generally be a continuous operation until the placing of individual section has been completed. Concrete shall be thoroughly compacted with vibrators or by other suitable means. Ready mixed concrete hauled in truck mixers or truck agitators shall be placed within ninety (90) minutes from the time water was added.
- J. Concrete shall not be poured when the atmospheric temperature is below forty degrees (40°F) or when there is any precipitation, unless precautions satisfactory to the ARCHITECT have been taken to prevent any damage to the work; however, this shall not, in any way, relax the performance and appearance requirements of the work.
1. When the ambient temperature is expected to fall below 40 degrees Fahrenheit (40°F), the concrete shall be cured and protected in accordance with Subsection 504.03.02, Subpart (b), of the Standard Specifications.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- K. All concrete shall be finished, and the CONTRACTOR shall provide a curing environment as directed by the ARCHITECT. Curing shall be by keeping the concrete surfaces wetted for a period not less than three (3) days. When directed to do so by the ARCHITECT, the CONTRACTOR shall apply a curing compound. No additional compensation shall be made when a curing compound is required.
- L. Expansion joints, dummy joints, construction joints and other appurtenances shall be provided as shown on the Plans or otherwise specified. Expansion joints shall be joint filler of the thickness indicated which shall conform to the requirements of these Specifications.
- M. After removal of forms all permanently exposed surfaces shall be cleaned of stains and dirt, and all surface defects which do not impair structural strength shall be repaired by cutting and patching in a manner satisfactory to the ARCHITECT.

END OF SECTION

SECTION 050900 - MISCELLANEOUS METAL WORK & COATINGS

PART 1 GENERAL

1.1 GENERAL

- A. The CONTRACTOR shall furnish, erect, and set all miscellaneous steel and iron work necessary for the completion of this contract as indicated on the drawings and as herein specified. All such work shall be fabricated as detailed or approved and installed, complete with all necessary anchors, bolts, and other accessories.
- B. No red lead paint shall be used for painting miscellaneous steel and iron work. All shop painting shall be as hereinafter specified.

1.2 RESPONSIBILITY FOR DIMENSIONS

- A. The general details and dimension of the miscellaneous steel and iron work are indicated on the drawings, but the CONTRACTOR shall be responsible for the correctness of the details and dimensions and shall carefully check the same in order to avoid possible errors.

1.3 WORKMANSHIP

- A. Steel shall be well formed to shape and size with sharp lines and angles. Shearing and punching shall leave clean, true lines and surfaces. Permanent connections shall be welded or riveted, unless bolting is indicated on the drawings or specified. The design, details and workmanship shall conform to the current AISC Specifications for the Design, Fabrication and Erection of Structural Steel for Buildings insofar as applicable.
- B. Where welding is required or permitted, it shall conform to the current requirements of the American Welding Society for the type of work in question.

1.4 QUALITY ASSURANCE

- A. Qualifications of installer: Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this section.
- B. Qualifications of manufacturer: Products used in the work of this section shall be produced by manufacturers regularly engaged in manufacture of similar items and with a history of successful production acceptable to the ARCHITECT.
- C. Requirements of regulatory agencies: All installations shall be in compliance with International Building Code – NJ Edition (IBC-NJ), Local Ordinances, (OSHA) and the Occupational Safety and Health Administration Code of Federal Regulations (CFR 29).
- D. Basis of acceptance: The manufacturer's recommended installation procedures, when approved by the ARCHITECT will become the basis for inspecting and accepting or

rejecting actual installation procedures used on this work.

## PART 2 PRODUCTS

### 2.1 MATERIALS

- A. Steel plates and structural shapes shall conform to the ASTM Standard Specifications for Structural Steel, Designation A36-70a.
- B. Steel pipe shall conform to ASTM Standard Specifications for Seamless and Welded Steel Pipe, Designation A53-69a, Grade B.
- C. Cast steel shall be Grade N2 conforming to the ASTM Tentative Specifications for Mild-to-Medium Strength Carbon-Steel Castings for General Applications, Designation A27-46T.
- D. Iron castings shall be of good quality, strong, tough, even-graded iron, free from scale, lumps, blisters, sand holes and defects of every nature which would render them unfit for the service for which they are intended. Castings shall conform at least to the ASTM Standard Specifications for Gray Iron Castings, Designation A48-48 for Class 25 castings. All castings shall be thoroughly cleaned and subjected to a careful hammer inspection.
- E. Abrasive cast iron shall be "Feralun" made by the American Abrasive Metals Company, or approved equal. Stainless steel shall be Type 316, unless otherwise specified.

### 2.2 DOOR FRAMES

- A. Door frames fabricated from plates and shapes shall be as indicated on the drawings. Exposed joints shall be welded and shall be ground smooth after fabrication.

### 2.3 FRAMES FOR PLATE COVERS AND GRATINGS

- A. Frames for plate covers and grating shall be neatly made and fitted. Corners shall be mitered and welded and weld beads which are exposed or in place or grating seats shall be ground smooth. Suitable anchors shall be provided. Frames shall be galvanized after fabrication.

### 2.4 SMALL SLEEVES

- A. Unless otherwise indicated, openings for passage of pipes through walls and floors shall be formed by sleeves of standard-weight steel pipe of ample diameter to pass the pipe and its insulation, if any, and allow clearance for the pipe to move. Sleeves shall be of sufficient length to be flush at beams, walls, and bottom of slabs and project 1" above finished floors. Where so indicated, sleeves shall have a fin welded about mid-length. All sleeves shall be accurately set before concrete is placed or masonry is built.

### 2.5 CONCRETE INSERTS



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- A. Concrete inserts shall be designed to support safely the maximum load that can be imposed by the rods they support. They shall be designed to permit lateral adjustment of the rod and to lock the rod nut or head, and shall have a loop through which reinforcing rods can be placed. Inserts shall be galvanized.

2.6 MISCELLANEOUS PIECES

- A. Miscellaneous pieces shall be of the shape, size, materials and details indicated on the drawings or suitable for the purpose, as approved.

2.7 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver materials to the job site in good condition and properly protected against damage to finished surfaces.
- B. Storage on-site:
  - 1. Store all materials in clean, dry location, away from uncured concrete and masonry.
  - 2. Cover with waterproof paper, tarpaulin or polyethylene sheeting.
- C. Handling: Keep on-site handling to a minimum.
- D. Protection: Maintain protective covering on pipe until installation is complete.

PART 3 EXECUTION

3.1 ERECTION

- A. All miscellaneous steel and iron work shall be accurately set and properly secured in place.
- B. Where bolted connections are permitted, the bolted parts shall be drawn closely together and the nuts shall be drawn uptight.
- C. All anchors and anchor bolts shall be properly located and built into the connecting work in advance, except in the case of expansion bolts indicated on the drawings to be inserted in drilled holes.

3.2 GALVANIZING AND PAINTING (SHOP)

- A. Galvanizing: Where galvanizing is called for on the drawings or required by these Specifications, it shall be done by the hot-dip process in conformity with the ASTM Standard Specifications for Zinc (Hot-Galvanized) Coatings on Structural Steel Shapes, Plates, and Bars, and their Products, Designation A123-47.
- B. Painting: Before exposure to the weather and after thorough cleaning to remove rust, dirt, grease, and other foreign matter, miscellaneous steel and iron work shall be painted

in the shop as specified below:

1. In general, machine cast iron and steel surfaces obviously not to be painted shall be given one (1) shop coat of grease or other suitable rust-resistant coating.
2. Where joints are to be welded in the field, no shop coat shall be applied within three inches of the edge to be welded.
3. All miscellaneous steel and iron work surface to be painted shall be prepared to receive the paint as required by the manufacturer of the paint.

### 3.3 CLEANING

- A. As installation is completed, wash thoroughly, using clean water and soap; rinse with clean water.
- B. Do not use acid solution, steel wool or other harsh abrasives.
- C. If stain remains after washing, remove finish and restore in accordance with fabricator's recommendations.

### 3.4 REPAIR OF DEFECTIVE WORK

- A. Remove stained or otherwise defective work and replace with material that meets Specification requirements.

END OF SECTION

SECTION 055200 - HANDRAILS AND RAILINGS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Non-penetrating railing system for roof edge fall protection.

1.2 SUBMITTALS

- A. Submit under provisions of Section 013300 "Submittal Procedures."
- B. Manufacturer's data sheets on each product to be used, including:
  - 1. Preparation instructions and recommendations.
  - 2. Storage and handling requirements and recommendations.
  - 3. Installation methods.
- C. Shop Drawings: Drawings showing plans, elevations, sections and details of components.
- D. Selection Samples: For each finish product specified, one complete sets of color chips representing manufacturer's full range of standard colors and patterns.
- E. Delegated-Design Submittal: For railings, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

1.3 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to the job site in good condition and adequately protected against damage as handrails are a finished product.
- B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- C. Store products in manufacturer's unopened packaging until ready for installation.

1.4 WARRANTY

- A. Warranty: Provide manufacture's two (2) year warranty.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
  - 1. SafetyRail 2000 – Roof Fall Protection Guardrail as manufactured by Bluewater Mfg., Inc.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

2. RailGuard 200 Safety Rail as manufactured by Garlock Safety Systems.
3. Mobile Safety Rail as manufactured by SafetyRail Company.
4. Architect's approved equal.

## 2.2 SYSTEMS

- A. Roof Edge Protection: Provide non-penetrating guardrail system.
1. Standards: System shall have top and mid rail in accordance with OSHA Standards - 29 CFR 1910.23 (a)(2).
  2. Structural Load: 200 lb (90.7 kg), minimum, in any direction to all components in accordance with OSHA Regulation 29 CFR 1926.502.
  3. Height: 42 inches (1067 mm), minimum.
  4. Railings: 1-5/8 inch (41 mm) O.D. hot rolled pickled electric weld tubing, free of sharp edges and snag points.
  5. Mounting Bases: Class 30 gray iron material cast with four receiver posts. Provide rubber pads on bottom of bases.
  6. Receiver Posts: Shall have a positive locking system into slots that allow rails to be mounted in any direction. Friction locking systems are not allowed. Receiver posts shall have drain holes.
  7. Hardware: Securing pins shall be 1010 carbon steel, zinc plated and yellow chromate dipped. Pins shall consist of collared pin and lanyard that connects to lynch pin.

## 2.3 FINISHES

- A. Finish: Factory finished powder coat paint.
- B. Color: As selected by Architect from manufacturer's full range of standard colors.

## 2.4 FABRICATION

- A. General: Fabricate railings to comply with requirements indicated for design, dimensions, member sizes and spacing, details, finish, and anchorage, but not less than that required to support structural loads.
- B. Shop assemble railings to greatest extent possible to minimize field splicing and assembly. Disassemble units only as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordinated installation. Use connections that maintain structural value of joined pieces.
- C. Cut, drill, and punch metals cleanly and accurately. Remove burrs and ease edges to a radius of approximately 1/32 inch unless otherwise indicated. Remove sharp or rough areas on exposed surfaces.
- D. Form work true to line and level with accurate angles and surfaces.
- E. Fabricate connections that are exposed to weather in a manner that excludes water. Provide weep holes where water may accumulate.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. Notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.

3.4 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION 055200



## SECTION 083323 - OVERHEAD COILING DOORS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section Includes:
  - 1. Insulated service doors with steel slats.
- B. Related Requirements:
  - 1. See drawing for miscellaneous steel supports and door-opening framing.

#### 1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site with Owner and their access control vender.
  - 1. Inspect and discuss electrical roughing-in, equipment bases, and other preparatory work specified elsewhere.
  - 2. Verify that equipment operation is consistent with system description.
  - 3. Review sequence of operation for each type of overhead door.
  - 4. Review required testing, inspecting, and certifying procedures.

#### 1.4 ACTION SUBMITTALS

- A. Product Data: For each type and size of overhead coiling door and accessory.
  - 1. Include construction details, material descriptions, dimensions of individual components, profiles for slats, and finishes.
  - 2. Include rated capacities, operating characteristics, electrical characteristics, and furnished accessories.
  - 3. Include description of automatic-closing device and testing and resetting instructions.
- B. Shop Drawings: For each installation and for special components not dimensioned or detailed in manufacturer's product data.
  - 1. Include plans, elevations, sections, and mounting details.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

2. Include details of equipment assemblies, and indicate dimensions, required clearances, method of field assembly, components, and location and size of each field connection.
  3. Include points of attachment and their corresponding static and dynamic loads imposed on structure.
  4. For exterior components, include details of provisions for assembly expansion and contraction.
  5. Include diagrams for power, signal, and control wiring.
- C. Samples for Initial Selection: Manufacturer's finish charts showing full range of colors and textures available for units with factory-applied finishes.
1. Include similar Samples of accessories involving color selection.
- D. Samples for Verification: For each type of exposed finish on the following components, in manufacturer's standard sizes:
1. Curtain slats.
  2. Bottom bar with sensor edge.
  3. Guides.
  4. Brackets.
  5. Hood.
  6. Include similar Samples of accessories involving color selection.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Sample Warranty: For special warranty.

1.6 CLOSEOUT SUBMITTALS

- A. Special warranty.
- B. Maintenance Data: For overhead coiling doors to include in maintenance manuals.

1.7 QUALITY ASSURANCE

- A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer for both installation and maintenance of units required for this Project.
  1. Maintenance Proximity: Not more than two hours' normal travel time from Installer's place of business to Project site.

## 1.8 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace components of doors that fail in materials or workmanship within specified warranty period.
  - 1. Warranty Period: Four years from date of Substantial Completion.
  - 2. Spring Wire: Two years from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Source Limitations: Obtain overhead coiling doors from single source from single manufacturer.
  - 1. Obtain operators and controls from overhead coiling-door manufacturer.

### 2.2 PERFORMANCE REQUIREMENTS

- A. Accessibility Standard: Comply with applicable provisions in the USDOJ's "2010 ADA Standards for Accessible Design" and ICC A117.1.
- B. Structural Performance, Exterior Doors: Capable of withstanding the following design wind loads:
  - 1. Design Wind Load: Uniform pressure (velocity pressure) of 31.5 lbf/sq. ft., acting inward and outward.
  - 2. Deflection Limits: Design overhead coiling doors to withstand design wind load without evidencing permanent deformation or disengagement of door components.
- C. Seismic Performance: Overhead coiling doors shall withstand the effects of earthquake motions determined according to ASCE/SEI 7-16.

### 2.3 DOOR ASSEMBLY

- A. Service Door: Insulated overhead coiling door formed with curtain of interlocking metal slats.
  - 1. Basis-of-Design Product: Subject to compliance with requirements, provide C.H.I. Overhead Doors, Inc., Model 6222 RS, 10-feet wide by 9-feet high or comparable product by one of the following:
    - a. Alpine Rolling Door.
    - b. Overhead Door Corporation.
    - c. Architect's approved equal.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- B. Operation Cycles: Door components and operators capable of operating for not less than 20,000. One operation cycle is complete when a door is opened from the closed position to the fully open position and returned to the closed position.
- C. Door Curtain Slats: Insulated flat profile slats of 2- 3/4-inch center-to-center height.
- D. Bottom Bar: Two angles, each not less than 2-inch by 2-inch by 1/8 inch thick; fabricated from galvanized steel and finished to match door with electric safety sensor.
- E. Curtain Jamb Guides: Hot dipped galvanized steel with exposed finish matching curtain slats.
- F. Hood: Match curtain material and finish.
  - 1. Shape: Octagonal or round.
  - 2. Mounting: Face of wall.
- G. Electric Door Operator:
  - 1. Usage Classification: Light duty, up to 10 cycles per hour.
  - 2. Operator Location: Wall.
  - 3. Safety: Listed according to UL 325 by a qualified testing agency for commercial or industrial use; moving parts of operator enclosed or guarded if exposed.
  - 4. Motor Exposure: Exterior, wet, and humid.
  - 5. Motor Electrical Characteristics:
    - a. Horsepower: 1/2 hp.
    - b. Voltage: 115/230V 1 PH.
  - 6. Emergency Manual Operation: Manufacturer's standard removable crank or chain operator.
    - a. If chain operated, provide manufacturer's standard removable chain or provide a method for hanging chain so that it is out of reach without the use of a ladder.
  - 7. Obstruction-Detection Device: Automatic sensor edge on bottom bar; self-monitoring type.
    - a. Sensor Edge Bulb Color: Black.
  - 8. Control Station(s): Card readers where indicated on Drawings.
- H. Door Finish:
  - 1. Baked-Enamel or Powder-Coated Finish: Color as selected by Architect from manufacturer's full range of standard colors.

## 2.4 MATERIALS, GENERAL

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

## 2.5 DOOR CURTAIN MATERIALS AND CONSTRUCTION

- A. Door Curtains: Fabricate overhead coiling-door curtain of insulated interlocking metal slats, designed to withstand wind loading indicated, in a continuous length for width of door without splices. Unless otherwise indicated, provide slats of thickness and mechanical properties recommended by door manufacturer for performance, size, and type of door indicated, and as follows:
  - 1. Steel Door Curtain Slats: 22-gauge cold-rolled steel sheet, hot-dipped galvanized per ASTM A653 A.
  - 2. Insulation: Foamed in-place urethane insulation providing a minimum R-value of 7.2 and a minimum STC rating of 23.

## 2.6 HOODS

- A. General: Form sheet metal hood to entirely enclose coiled curtain and operating mechanism at opening head. Contour to fit end brackets to which hood is attached. Roll and reinforce top and bottom edges for stiffness. Form closed ends for surface-mounted hoods and fascia for any portion of between-jamb mounting that projects beyond wall face. Equip hood with intermediate support brackets as required to prevent sagging.
  - 1. 24-gauge cold-rolled steel sheet, hot-dipped galvanized per ASTM A653 A.
- B. Removable Metal Soffit: Formed or extruded from same metal and with same finish as curtain if hood is mounted above ceiling unless otherwise indicated.

## 2.7 LOCKING DEVICES

- A. Locking Device Assembly: Manufacturer's standard locking devices.
  - 1. Locks shall be located on the interior of the building.
- B. Safety Interlock Switch: Equip power-operated doors with safety interlock switch to disengage power supply when door is locked.

## 2.8 CURTAIN ACCESSORIES

- A. Weatherseals for Exterior Doors: Equip each exterior door with weather-stripping gaskets fitted to entire exterior perimeter of door for a weather-resistant installation unless otherwise indicated.

1. At door head, use 1/8-inch- (3-mm-) thick, replaceable, continuous-sheet baffle secured to inside of hood or field-installed on the header.
2. At door jambs, use replaceable, adjustable, continuous, flexible, 1/8-inch- thick seals of flexible vinyl, rubber, or neoprene.

## 2.9 COUNTERBALANCE MECHANISM

- A. General: Counterbalance doors by means of manufacturer's standard mechanism with an adjustable-tension, steel helical torsion spring mounted around a steel shaft and contained in a spring barrel connected to top of curtain with barrel rings. Use grease-sealed bearings or self-lubricating graphite bearings for rotating members.
- B. Counterbalance Barrel: Fabricate spring barrel of manufacturer's standard hot-formed, structural-quality, seamless carbon-steel pipe, of sufficient diameter and wall thickness to support rolled-up curtain without distortion of slats and to limit barrel deflection to not more than 0.03 in./ft. (2.5 mm/m) of span under full load.
- C. Counterbalance Spring: One or more oil-tempered, heat-treated steel helical torsion springs. Size springs to counterbalance weight of curtain, with uniform adjustment accessible from outside barrel. Secure ends of springs to barrel and shaft with cast-steel barrel plugs.
- D. Torsion Rod for Counterbalance Shaft: Fabricate of manufacturer's standard cold-rolled steel, sized to hold fixed spring ends and carry torsional load.
- E. Brackets: Manufacturer's standard mounting brackets of either cast iron or cold-rolled steel plate.

## 2.10 ELECTRIC DOOR OPERATORS

- A. General: Electric door operator assembly of size and capacity recommended and provided by door manufacturer for door and operation-cycles requirement specified, with electric motor and factory-prewired motor controls, starter, gear-reduction unit, solenoid-operated brake, clutch, control stations, control devices, integral gearing for locking door, and accessories required for proper operation.
  1. Comply with NFPA 70.
  2. Control equipment complying with NEMA ICS 1, NEMA ICS 2, and NEMA ICS 6, with NFPA 70 Class 2 control circuit, maximum 24-V ac or dc.
- B. Usage Classification: Electric operator and components capable of operating for not less than number of cycles per hour indicated for each door.
- C. Door Operator Location(s): Operator location indicated for each door.
  1. Top-of-Hood or Wall Mounted: Operator is mounted to the right or left side of door and connected to door drive shaft with drive chain and sprockets. Confirm required clearances for these types of mounting.



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- D. Motors: Reversible-type motor with controller (disconnect switch) for motor exposure indicated for each door assembly.
  - 1. Electrical Characteristics: Minimum as indicated for each door assembly. If not indicated, large enough to start, accelerate, and operate door in either direction from any position, at a speed not less than 8 in./sec. (203 mm/s) and not more than 12 in./sec. (305 mm/s), without exceeding nameplate ratings or service factor.
  - 2. Operating Controls, Controllers, Disconnect Switches, Wiring Devices, and Wiring: Manufacturer's standard unless otherwise indicated.
  - 3. Coordinate wiring requirements and electrical characteristics of motors and other electrical devices with building electrical system and each location where installed.
- E. Limit Switches: Equip each motorized door with adjustable switches interlocked with motor controls and set to automatically stop door at fully opened and fully closed positions.
- F. Obstruction-Detection Devices: External entrapment protection consisting of indicated automatic safety sensor capable of protecting full width of door opening. For non-fire-rated doors, activation of device immediately stops and reverses downward door travel.
  - 1. Provide both of the following devices.
    - a. Photoelectric Sensor: Manufacturer's standard non-monitoring system designed to detect an obstruction in door opening without contact between door and obstruction.
    - b. Electric Sensor Edge: Automatic safety sensor edge, located within astragal or weather stripping mounted to bottom bar. Contact with sensor activates device. Connect to control circuit using manufacturer's standard take-up reel or self-coiling cable.
      - 1. Self-Monitoring Type: Four-wire-configured device designed to interface with door operator control circuit to detect damage to or disconnection of sensor edge.
- G. Control Station: Keyed control station in fixed location with momentary-contact key switch labeled "Open" and "Stop" and sustained- or constant-pressure key control labeled "Close."
  - 1. Interior-Mounted Units: Full-guarded, surface-mounted, heavy-duty type, with general-purpose NEMA ICS 6, Type 1 enclosure.
  - 2. Location: Same side of jamb as motor, on the interior side of the door. Control station shall be mounted at 48-inches above finish floor.
- H. Emergency Manual Operation: Equip each electrically powered door with capability for emergency manual operation. Design manual mechanism so required force for door operation does not exceed 25 lbf.
- I. Emergency Operation Disconnect Device: Equip operator with hand-operated disconnect mechanism for automatically engaging manual operator and releasing brake for emergency manual operation while disconnecting motor without affecting timing of limit switch. Mount

mechanism so it is accessible from floor level. Include interlock device to automatically prevent motor from operating when emergency operator is engaged.

- J. Motor Removal: Design operator so motor may be removed without disturbing limit-switch adjustment and without affecting emergency manual operation.
- K. Audible and Visual Signals: Audible alarm and visual indicator lights in compliance with the accessibility standard.

## 2.11 GENERAL FINISH REQUIREMENTS

- A. Comply with NAAMM/NOMMA 500 for recommendations for applying and designating finishes.
- B. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

## 2.12 STEEL AND GALVANIZED-STEEL FINISHES

- A. Baked-Enamel or Powder-Coat Finish: Manufacturer's standard baked-on finish consisting of prime coat and thermosetting topcoat. Comply with coating manufacturer's written instructions for cleaning, pretreatment, application, and minimum dry film thickness.

# PART 3 - EXECUTION

## 3.1 EXAMINATION

- A. Examine substrates areas and conditions, with Installer present, for compliance with requirements for substrate construction and other conditions affecting performance of the Work.
- B. Examine locations of electrical connections.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

## 3.2 INSTALLATION

- A. Install overhead coiling doors and operating equipment complete with necessary hardware, anchors, inserts, hangers, and equipment supports; according to manufacturer's written instructions and as specified.
- B. Install overhead coiling doors, hoods, controls, and operators at the mounting locations indicated for each door.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- C. Accessibility: Install overhead coiling doors, switches, and controls along accessible routes in compliance with the accessibility standard.
- D. Power-Operated Doors: Install automatic garage doors openers according to UL 325.

3.3 STARTUP SERVICE

- A. Engage a factory-authorized service representative to perform startup service.
  - 1. Complete installation and startup checks according to manufacturer's written instructions.
  - 2. After electrical circuitry has been energized, operate doors to confirm proper motor rotation and door performance.
  - 3. Test and adjust controls and safety devices. Replace damaged and malfunctioning controls and equipment.

3.4 ADJUSTING

- A. Adjust hardware and moving parts to function smoothly so that doors operate easily, free of warp, twist, or distortion.
- B. Lubricate bearings and sliding parts as recommended by manufacturer.

3.5 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain overhead coiling doors.

END OF SECTION 083323

## SECTION 101100 - VISUAL DISPLAY UNITS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section Includes:
  - 1. Visual display board assemblies.

#### 1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site with Owner for mounting locations and heights of visual display boards.

#### 1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
  - 1. Include construction details, material descriptions, dimensions of individual components and profiles, finishes, and accessories for visual display units.
  - 2. Include electrical characteristics for motorized units.
- B. Shop Drawings: For visual display units.
  - 1. Include plans, elevations, sections, details, and attachment to other work.
  - 2. Show locations of panel joints. Show locations of field-assembled joints for factory-fabricated units too large to ship in one piece.
  - 3. Include sections of typical trim members.
- C. Samples for Initial Selection: For each type of visual display unit indicated, for units with factory-applied color finishes, and as follows:
  - 1. Samples of facings for each visual display panel type, indicating color and texture.
  - 2. Fabric swatches of fabric facings for tackboards.
  - 3. Actual factory-finish color samples, applied to aluminum substrate.
  - 4. Include accessory Samples to verify color selected.

- D. Samples for Verification: For each type of visual display unit indicated.
  - 1. Visual Display Panel: Not less than 8-1/2 by 11 inches (215 by 280 mm), with facing, core, and backing indicated for final Work. Include one panel for each type, color, and texture required.
  - 2. Trim: 6-inch- (150-mm-) long sections of each trim profile.
  - 3. Accessories: Full-size Sample of each type of accessory.
- E. Product Schedule: For visual display units. Use same designations indicated on Drawings.

#### 1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Product Test Reports: For each visual display unit, for tests performed by manufacturer and witnessed by a qualified testing agency.
- C. Sample Warranties: For manufacturer's special warranties.

#### 1.6 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For visual display units to include in maintenance manuals.

#### 1.7 QUALITY ASSURANCE

- A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer.

#### 1.8 DELIVERY, STORAGE, AND HANDLING

- A. Deliver factory-fabricated visual display units completely assembled in one piece. If dimensions exceed maximum manufactured unit size, or if unit size is impracticable to ship in one piece, provide two or more pieces with joints in locations indicated on approved Shop Drawings.

#### 1.9 WARRANTY

- A. Special Warranty for Porcelain-Enamel Face Sheets: Manufacturer agrees to repair or replace porcelain-enamel face sheets that fail in materials or workmanship within specified warranty period.
  - 1. Failures include, but are not limited to, the following:
    - a. Surfaces lose original writing and erasing qualities.
    - b. Surfaces exhibit crazing, cracking, or flaking.

2. Warranty Period: Lifetime.

## PART 2 - PRODUCTS

### 2.1 PERFORMANCE REQUIREMENTS

- A. Surface-Burning Characteristics: Comply with ASTM E 84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
  1. Flame-Spread Index: 25 or less.
  2. Smoke-Developed Index: 50 or less.

### 2.2 VISUAL DISPLAY BOARD ASSEMBLY

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
  1. Architect's approved equal.
  2. Claridge Products and Equipment, Inc.
- B. Visual Display Board Assembly: Factory fabricated.
  1. Assembly: Markerboard.
  2. Corners: Square.
  3. Width: 12 feet.
  4. Height: 4 feet.
  5. Mounting Method: Direct to wall.
- C. Markerboard Panel: Porcelain-enamel-faced markerboard panel on core indicated.
  1. Color: White.
- D. Aluminum Frames and Trim: Fabricated from not less than 0.062-inch- (1.57-mm-) thick, extruded aluminum; standard size and shape.
  1. Aluminum Finish: Clear anodic finish.
- E. Joints: Make joints only where total length exceeds maximum manufactured length. Fabricate with minimum number of joints, as indicated on approved Shop Drawings.
- F. Combination Assemblies: Provide manufacturer's standard exposed trim between abutting sections of visual display panels.
- G. Chalktray: Manufacturer's standard; continuous.
  1. Solid Type: Extruded aluminum with ribbed section and smoothly curved exposed ends.



- H. Display Rail: Manufacturer's standard, extruded-aluminum display rail with plastic-impregnated-cork insert, end stops, designed to hold accessories.
1. Size: 2 inch high by full length of visual display unit.
  2. Map Hooks: Two map hooks per visual display board.
  3. Flag Holder: One for each room.
  4. Tackboard Insert Color: Match tackboard.
  5. Aluminum Color: Match finish of visual display assembly trim.

## 2.3 MARKERBOARD PANELS

- A. Porcelain-Enamel Markerboard Panels: Balanced, high-pressure, factory-laminated markerboard assembly of three-ply construction, consisting of moisture-barrier backing, core material, and porcelain-enamel face sheet with low-gloss finish. Laminate panels under heat and pressure with manufacturer's standard, flexible waterproof adhesive.
1. Face Sheet Thickness: 0.021 inch uncoated base metal thickness.
  2. MDF Core: 7/16 inch (11 mm) thick; with manufacturer's standard moisture-barrier backing.
  3. Laminating Adhesive: Manufacturer's standard moisture-resistant thermoplastic type.

## 2.4 MATERIALS

- A. Porcelain-Enamel Face Sheet: PEI-1002, with face sheet manufacturer's standard two- or three-coat process.
- B. Plastic-Impregnated-Cork Sheet: Seamless, homogeneous, self-sealing sheet consisting of granulated cork, linseed oil, resin binders, and dry pigments that are mixed and calendared onto fabric backing; with washable vinyl finish and integral color throughout; with surface-burning characteristics indicated.
- C. Hardboard: ANSI A135.4, tempered.
- D. MDF: ANSI A208.2, Grade 130.
- E. Extruded Aluminum: ASTM B 221 (ASTM B 221M), Alloy 6063.
- F. Adhesives for Field Application: Mildew-resistant, nonstaining adhesive for use with specific type of panels, sheets, or assemblies; and for substrate application; as recommended in writing by visual display unit manufacturer.
1. Adhesives shall comply with the testing and product requirements of the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers."

## 2.5 GENERAL FINISH REQUIREMENTS

- A. Comply with NAAMM/NOMMA 500 for recommendations for applying and designating finishes.
- B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- C. Appearance of Finished Work: Noticeable variations in same piece are unacceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

## 2.6 ALUMINUM FINISHES

- A. Clear Anodic Finish: AAMA 611, AA-M12C22A31, Class II, 0.010 mm or thicker.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates and conditions, with Installer present, for compliance with requirements for installation tolerances, surface conditions of wall, and other conditions affecting performance of the Work.
- B. Examine walls and partitions for proper preparation and backing for visual display units.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Comply with manufacturer's written instructions for surface preparation.
- B. Clean substrates of substances, such as dirt, mold, and mildew, that could impair the performance of and affect the smooth, finished surfaces of visual display boards.
- C. Prepare surfaces to achieve a smooth, dry, clean surface free of flaking, unsound coatings, cracks, defects, projections, depressions, and substances that will impair bond between visual display units and wall surfaces.
- D. Prime wall surfaces indicated to receive visual display units and as recommended in writing by primer/sealer manufacturer and visual display unit manufacturer.

### 3.3 INSTALLATION

- A. General: Install visual display surfaces in locations and at mounting heights indicated on Drawings, or if not indicated, at heights indicated below. Keep perimeter lines straight, level, and plumb. Provide grounds, clips, backing materials, adhesives, brackets, anchors, trim, and accessories necessary for complete installation.
- B. Field-Assembled Visual Display Board Assemblies: Coordinate field-assembled units with grounds, trim, and accessories indicated. Join parts with a neat, precision fit.
  - 1. Make joints only where total length exceeds maximum manufactured length. Fabricate with minimum number of joints, as indicated on approved Shop Drawings.
- C. Factory-Fabricated Visual Display Board Assemblies: Adhere to wall surfaces with egg-size adhesive gobs at 16 inches (400 mm) o.c., horizontally and vertically.
- D. Visual Display Board Assembly Mounting Heights: Install visual display units at mounting heights indicated on Drawings, or if not indicated, at heights indicated below.
  - 1. Mounting Height As directed by Owner above finished floor to top of chalk tray.
  - 2. Join adjacent panels with exposed, H-shaped aluminum trim.

### 3.4 CLEANING AND PROTECTION

- A. Clean visual display units in accordance with manufacturer's written instructions. Attach one removable cleaning instructions label to visual display unit in each room.
- B. Touch up factory-applied finishes to restore damaged or soiled areas.
- C. Cover and protect visual display units after installation and cleaning.

END OF SECTION 101100

## SECTION 101453 - REGULATORY SIGNS

### PART 1 GENERAL

#### 1.1 SUMMARY

- A. Provide and install regulatory signs, including handicap parking signs, as specified herein and shown on the Drawings.

#### 1.2 REFERENCES

- A. Standard Specifications:
  - 1. Signs: Section 612
  - 2. Sign Materials: Section 911
  - 3. Breakaway Sign Supports: Subsection 911.02.02
- B. New Jersey Administrative Code.
  - 1. N.J.A.C. 5:23-7.86 Signs.

#### 1.3 SUBMITTALS

- A. Submit six (6) copies of product data describing signs and posts.

#### 1.4 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this section.

### PART 2 PRODUCTS

#### 2.1 MATERIALS

- A. Signs and posts: Materials shall conform to Section 911 of the Standard Specifications or as modified herein.
- B. Posts: Steel or aluminum conforming to subsection 911.02.03-1 of the Standard Specifications.

### PART 3 EXECUTION

#### 3.1 EXISTING CONDITIONS

- A. Inspection:

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1. Prior to all work of this section, carefully inspect the installed work of all other trades and verify that all such work is complete to the point where this installation may properly commence.
2. Verify that the work of this section may be installed in accordance with all pertinent codes and regulations, the original design, and the referenced standards.

3.2 INSTALLATION

- A. General: Install the work of this section in strict accordance with the manufacturer's recommendations as approved by the ARCHITECT.
- B. Install signs in accordance with Section 612 of the Standard Specifications.

3.3 CLEANING

- A. Before final inspection, all sign faces and support surfaces shall be cleaned of all foreign matter. Necessary measures shall be taken to ensure that all signs, sign supports, and signs will be in good condition and appearance.

END OF SECTION

## SECTION 115700 – VOCATIONAL SHOP EQUIPMENT

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes vocational shop equipment as follows:
  - 1. Freestanding equipment.
- B. Related Requirements:
  - 1. Plumbing drawings for sinks, faucets, and eyewash stations.

#### 1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

#### 1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For each type of equipment.
  - 1. Include plans, elevations, sections, and attachment details.
  - 2. Include electrical and dust collector connections.

#### 1.5 INFORMATIONAL SUBMITTALS

- A. Product Certificates: For each type of equipment.
- B. Material Certificates: For the following items:
  - 1. Shop finishes.
- C. Sample Warranty: For manufacturer's special warranties.



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1.6 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For equipment and finishes to include in maintenance manuals.

1.7 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace components of equipment that fail in materials or workmanship within specified warranty period.
  - 1. Failures include, but are not limited to, the following:
    - a. Structural failures.
    - b. Deterioration of controls, motors, bearings, metals, metal finishes, and other materials beyond normal weathering and use.
  - 2. Warranty Period: Two years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 VOCATIONAL SHOP EQUIPMENT

- A. Basis-of-Design Product: Subject to compliance with requirements, provide the following products listed or a comparable product.
- B. Bold numbers that follow equipment listed below correspond to the Furniture and Equipment List found on sheet ES-100.
- C. Air Compressor - **01**: Electric air compressor, 5 HP, 2 stage vertical, 80-gallon, 13.7 cfm, splash lubricated, Model 35WC83 as manufactured by Speedaire or Architect's approved equal.
  - 1. Quantity: One.
- D. Band Saw - **02**: 24", 7 1/2 HP, 3-phase band saw, Model G0569 as manufactured by Grizzly Industrial or Architect's approved equal.
  - 1. Quantity: One.
- E. CNC Router - **03**: SmartShop 2-2 CNC router as manufactured by Laguna Tools or Architect's approved equal.
  - 1. Quantity: One.
  - 2. Accessories: Use SJF Quote Number 93402 found at the end of Part 3 of this Section for Item and Description only.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- F. Flammables Safety Cabinet - **06**: 30-gallon, 43" x 18" x 44" dual walled safety cabinet, Model BM30YP as manufactured by JAMCO or Architect's approved equal.
- G. Quantity: One.
  - 1. Color: Yellow.
  - 2. Doors: two, hinged with recessed pull hands and keyed lock.
  - 3. Shelf: One.
- H. Bench Grinder - **07**: Heavy duty 3/4 HP bench grinder, Model 2LKR9 as manufactured by Dayton or Architect's approved equal.
  - 1. Quantity: One.
  - 2. Wheel Size: 8" diameter by 1" thick.
  - 3. Speed: Single.
- I. Planer/Jointer - **08**: 9,000 RPM planer/jointer combination with fence, Model 707410 as manufactured by Jet or Architect's approved equal.
  - 1. Quantity: One.
  - 2. Table Size: 10 3/4" by 36".
  - 3. Provide metal base.
- J. Miter Saw - **09**: 3,800 RPM sliding miter saw, Model DWS780 as manufactured by Dewalt or Architect's approved equal.
  - 1. Quantity: Two.
  - 2. Blade Size: 12".
  - 3. Arbor Size: 5/8".
- K. Heavy Duty Workbench – **10A**: 96" x 25" x 37" workbench, Model T1250 as manufactured by Grizzly Industrial or Architect's approved equal.
  - 1. Quantity: One.
  - 2. Top: 1 3/4" laminated solid beechwood.
  - 3. Frame: Steel with eight steel bars for shelving or stock storage and adjustable feet.
  - 4. Capacity: 2500 pounds.
- L. Heavy Duty Workbench – **10B**: 48" x 25" x 37" workbench, Model T1248 as manufactured by Grizzly Industrial or Architect's approved equal.
  - 1. Quantity: Three.
  - 2. Top: 1 3/4" laminated solid beechwood.
  - 3. Frame: Steel with eight steel bars for shelving or stock storage and adjustable feet.
  - 4. Capacity: 2500 pounds.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- M. Oscillating Spindle Sander - **11**: 1 HP spindle sander, Model JOSS-S as manufactured by Jet or Architect's approved equal.
- N. Quantity: One.
1. Belt Size: 4".
  2. Platen Size: 4".
  3. Spindle Assemblies: 1/4", 3/8", 1/2", 5/8", 3/4", 1", 1 1/2", 2" 3" and 4".
- O. Rolling Tool Cabinet - **12**: Painted steel top chest & rolling base cabinet as manufactured by Proto or Architect's approved equal.
1. Rolling Base Cabinet:
    - a. Model: J553441-6BL.
    - b. Quantity: One.
    - c. Size: 34" x 25 1/4" x 41".
    - d. Castors: 6" diameter by 2" thick glass filled nylon. Two fixed with lock and two swivel.
    - e. Number of Drawers: six with keyed locks.
    - f. Drawer Slides: Fully extendable, ball bearing.
    - g. Drawer Handles: Pull type, recessed.
  2. Top Chest:
    - a. Model: J553427-5BL.
    - b. Quantity: One.
    - c. Size: 34" x 25 1/4" x 27".
    - d. Number of Drawers: five with keyed locks.
    - e. Drawer Slides: Fully extendable, ball bearing.
    - f. Drawer Handles: Pull type, recessed.
- P. Heavy Duty Workbench - **14**: 28" x 28" workbench base, Model D3304 as manufactured by Shop Fox or Architect's approved equal.
1. Quantity: Two.
  2. Frame: Four steel legs with adjustable feet and steel shelf.
  3. Capacity: 1000 pounds.
  4. Top: Provide 30" x 30" x 1 1/2" solid laminated beechwood or oak top w/ clear satin 3-coat polyurethane finish.
- Q. Storage Cabinet - **15**: 48" x 24" x 78" painted steel storage cabinet, Model 2505-4S-95 as manufactured by Durham Manufacturing or Architect's approved equal.
1. Quantity: Six
  2. Doors: Two flush full length with three locking points and piano hinges.
  3. Door Opening: 180 degrees.
  4. Door Handle and Lock: Single lever. All cabinets to be keyed alike.
  5. Shelves: four adjustable.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- R. Portable Planer - **16**: 2 HP planer, Model DW735X as manufactured by Dewalt or Architect's approved equal.
- S. Quantity: One.
  - 1. Blades: Three, 13" wide, straight.
  - 2. Speed: 10,000 RPM.
- T. Table Saw - **17**: 5 HP, 85 1'4" x 30" x 34" table saw with automatic blade safety retraction, Model ICS53230-52 as manufactured by Sawstop or Architect's approved equal.
  - 1. Quantity: One.
  - 2. Blade Size: 10".
  - 3. Arbor Size: 5/8".
  - 4. Blade Speed: 4,000 RPM.
  - 5. Folding outfeed Table:
    - a. Model: TSA-FOT.
    - b. Quantity: One.
    - c. Size: 31 3/4" x 32".
- U. Belt/Disk Sander - **19**: 1 HP sander, Model 414550K as manufactured by Jet or Architect's approved equal.
  - 1. Quantity: One.
  - 2. Belt Size: 6" x 48".
  - 3. Disk Size: 10".
- V. Lockers - **20**: 12-locker, four tier, three unit wide, 36" x 12" x 54" painted steel lockers, Model DD53523SU as manufactured by Lyon or Architect's approved equal.
  - 1. Quantity: Two.
  - 2. Doors: Louvered.
  - 3. Handle: Pull.
  - 4. Lock: Padlock hasp.
- W. Horizontal Sheet Storage Rack - **21**: 5-bay, 54" x 102" x 48" painted steel storage rack, Item 1BBY4, Model STEEL-R-57 as provided by Grainger or Architect's approved equal.
  - 1. Quantity: One.
  - 2. Capacity: 2000/shelf, 10,000 total unit.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- X. Cabinetmaker's Workbench - **22**: 72" x 25" x 37" workbench, Model T1251 as manufactured by Grizzly Industrial or Architect's approved equal.
- Y. Quantity: One.
1. Top: 1 3/4" laminated solid beechwood with 36 predrilled 5/8" dog holes and 3 1/2" solid beech aprons and two 15" vises with four mounting locations around the aprons.
  2. Hex-Head Bench Dogs: Eight.
  3. Frame: Steel with eight steel bars for shelving or stock storage and adjustable feet.
  4. Capacity: 2500 pounds.
- Z. Laser Cutter - **23**: CO2 laser cutter, Model MX LASER 100W as manufactured by Laguna Tools or Architect's approved equal.
1. Quantity: One.
  2. Accessories: Use Laguna Tools Quote Number 93402 found in Section 500003 for Item and Description only.
- AA. Heavy Duty Oak Workbench - **24**: 60" x 30" workbench, Model T10157 as manufactured by Grizzly Industrial or Architect's approved equal.
1. Quantity: 10.
  2. Top: 1 1/2" laminated solid oak with 2" thick edge apron and predrilled dog holes.
  3. Storage Drawers: Two with ball bearing slides.
  4. Vises: One front and one side.
  5. Legs: Square tube adjustable painted steel.
  6. Steel Shelf: One.
  7. Accessories:
    - a. Workbench Caster Set: Four caster set, Model T32334 as manufactured by Grizzly Industrial or Architect's approved equal.
      - i. Quantity: 10 sets.
      - ii. Castors: 3", 360-degree swivel polyurethane wheels.
      - iii. Quick release toe flip lifting levers.
      - iv. Capacity: 1800 pounds.
- BB. Round Stool – **24**: Painted steel 31" H adjustable stool, Model 6218H as manufactured by National Public Seating or Architect's approved equal.
1. Quantity: 25.
  2. Seat: Masonite.
- CC. Cantilever Storage Rack - **27**: 10-bay painted steel single sided storage rack, as manufactured SJF Material Handling Equipment or Architect's approved equal.
1. Quantity: 11, 10' H uprights.
  2. Accessories: Use SJF Quote Number 73685 found in Section 500004 for parts description only.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- DD. Bear Crawl All Swivel HD Mobile Base: Four caster base, Model T31566 as manufactured by Grizzly Industrial or Architect's approved equal.
- EE. Quantity: Four.
1. Minimum Inside Dimensions: 19" x 21".
  2. Maximum Outside Dimensions: 29 1/2" x 29 1/2".
  3. Capacity: 1200 pounds.
- FF. Bear Crawl Mobile Base Set: Four caster set, Model T31563 as manufactured by Grizzly Industrial or Architect's approved equal.
1. Quantity: Four sets.
  2. Castors: 2 fixed and 2 swivel heavy duty rubber/steel casters with sealed bearings.
  3. Adjustable positive stop/rubber leveling feet with toe flip lifting levers.
  4. Capacity: 600 pounds.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer and Construction Manager present.
1. Do not begin installation until all furniture and equipment locations have been reviewed and approved by the Owner.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Comply with manufacturer's written installation instructions for each equipment type unless more stringent requirements are indicated. Anchor equipment securely, positioned at locations indicated.

3.3 FIELD QUALITY CONTROL

- A. Perform the following tests and inspections with the assistance of a factory-authorized service representative.
- B. Notify Construction Manager 48 hours in advance of date(s) and time(s) of testing and inspection.

END OF SECTION 115700



## SECTION 311200 – SELECTIVE SITE CLEARING

### PART 1 GENERAL

#### 1.1 DESCRIPTION

- A. Site clearing consists of clearing of the site within the limits of construction to include the following:
  - 1. Removal and legal disposal of trees, brush, weeds, roots and similar materials within areas where work is to be performed.
  - 2. Removal and disposal of structures and all other obstructions which are designated for removal by the ARCHITECT during construction.

### PART 2 PRODUCTS

#### 2.1 MATERIALS

- A. Tree paint: Applicable section of the Standard Specifications.
- B. Other materials: At Contractor's option, subject to the approval of the ARCHITECT.

### PART 3 EXECUTION

#### 3.1 METHODS OF CONSTRUCTION

- A. Referenced sections in the Standard Specifications.
  - 1. Section 201: Clearing Site.
  - 2. Section 801: Miscellaneous Landscaping Materials.
- B. Protection: Roads, structures, pavement areas, grass or landscaping to remain shall be protected by Contractor in a manner approved by the ARCHITECT.
- C. General: Site Clearing shall conform to Section 201 of the Standard Specifications, and as designated on Plans or as directed by the ARCHITECT.
  - 1. Clear the project site within the limits shown on the Plans, or as directed by the ARCHITECT.
  - 2. Repair all injuries to bark, trunk, limbs, and roots of remaining plants by properly dressing, cutting, bracing, and painting using approved tree surgery methods, tools and equipment.
  - 3. Clear designated area of brush, weeds, trees, roots, debris, and other unsuitable material.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

4. Trim tree branches overhanging proposed structures and pavements, and along proposed trails. Trim tree branches overhanging roadways, driveways, or other paved areas to height of sixteen feet.
5. Remove existing structures required for construction of roadways, driveways or other paved areas. Notify property owners forty-eight hours prior to removal of privately owned structures.
  - a. Coordinate removal of privately owned structures with individual property owners.
  - b. Remove privately owned structures desired to be retained by property owner in a manner which will minimize damage. If desired, property owner shall be given opportunity to remove said structures himself, provided this work is completed within time limit which will not conflict with Contractor's operations.
  - c. Upon removal, property owner shall be given opportunity to remove privately owned structures from the project site.
  - d. Coordinate this work with ARCHITECT.
  - e. This work shall be subject to approval of ARCHITECT.
6. Legally dispose of accumulated waste materials.
7. Grade all grubbed and cleared areas as specified in applicable sections.

END OF SECTION

SECTION 312300.10 - SITE EXCAVATION, FILLING AND GRADING

PART 1 GENERAL

1.1 DESCRIPTION

- A. Description of work:
- B. Excavation, filing and grading includes but is not limited to:
  - 1. Excavating for pavement and foundations.
  - 2. Filling and backfilling to attain indicated grades.
  - 3. Trenching and trench backfilling, if and where directed by the ARCHITECT.
  - 4. Rough and finish grading of site; furnishing and installing broken stone subbase for slabs, foundations and structures.
  - 5. Furnishing and installing quarry blend stone subbase material for pavements and other structures.
  - 6. Any additional work as may be specified in the Statement of Work.
- C. Definitions:
  - 1. Excavation: Removal and disposal of all material encountered when establishing required grade elevations, including pavements and other obstructions visible on the ground surface, and underground structures and utilities indicated to be demolished and removed.
  - 2. Unauthorized excavation: Removal of material beyond specified subgrade elevations without approval of ARCHITECT.

PART 2 PRODUCTS

2.1 MATERIALS

- A. General: All fill and backfill materials shall be subject to the approval of the ARCHITECT.
- B. Notifications: For approval of borrow materials, notify the ARCHITECT at least five (5) working days in advance of intention to import material, designate the proposed borrow area, and perform sampling and testing at CONTRACTOR'S expense, if directed by the ARCHITECT, to prove the quality and suitability of the material.
- C. On-Site Fill:

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1. All on-site materials used for fill shall be subject to the approval of the ARCHITECT, and to the following requirements:
  - a. Free from deleterious substances, stumps, brush, weeds, roots, sod, rubbish, garbage and matter that may decay.
  - b. Free of large rocks or lumps that, in the opinion of the ARCHITECT, may create voids or prevent proper compaction.

D. Borrow fill materials:

Free from deleterious substances, stumps, brush, weeds, roots, sod, rubbish, garbage and matter that may decay, and shall conform to the Standard Specifications, except as modified by the supplemental requirements below:

1. Containing no rocks or lumps over one inch (1") in greatest dimension.
2. Composed of soil aggregate, or soil aggregate and rock. The portion passing the four inch sieve shall contain not more than fifteen percent (15%) by weight of material passing the number 200 sieve. When composed of soil aggregate and rock, the proportion of soil aggregate shall not be less than that required to fill all the rock voids.

E. Trench and structural backfill material:

1. Shall conform to the requirements specified for on-site fill material except as modified by the supplemental requirements below:
2. Backfill to a height of two feet above the top of pipes, culverts and other structures and immediately adjacent to structures with material free from stones or rock fragments larger than two inches in greatest dimension.
3. Select backfill material shall be soil aggregate I-13. Soil aggregate select backfill materials, when designated, shall conform to Section 901.11 of the Standard Specifications.

F. Broken stone material:

1. Broken stone subbase material under slabs, foundations and structures shall conform to Section 901.03.01 of the Standard Specifications, and meeting the gradations specified in Table 901-1.03.01-1. Size shall be 3/8".
2. Trench stabilization material for bedding shall conform to the above requirements. Size shall be as shown on the Plans.

G. Subbase Material: Quarry blend stone subbase for bituminous and concrete pavements and other structures shall be Type I-5 conforming to the requirements for Dense Graded Aggregate Base Course in Section 302 of the Standard Specifications.

- H. Other materials: All other materials, not specifically described for a complete and proper installation, shall be as selected by the CONTRACTOR and approved by the ARCHITECT.

## PART 3 EXECUTION

### 3.1 METHODS OF CONSTRUCTION

- A. Requirements of regulatory agencies:
1. All excavations shall be in compliance with Federal Occupational Safety and Health Act and Rules and Regulations of State of New Jersey Department of Labor and Industry, Bureau of ARCHITECTing and Safety, N.J.A.C. 12:180.
  2. Excavation work shall be in compliance with applicable requirements of other governing authorities having jurisdiction.
- B. Reference standards included in this Specification section:
1. Standard Specifications:
    - a. Section 202: Excavation
    - b. Section 301: Subbase
    - c. Subsection 302: Aggregate Base Coarse
    - d. Subsection 901: Aggregates
  2. American Society for Testing and Materials (ASTM):
    - a. D-1556-64 (Reapproved 1974): Density of Soil in Place by the Sand-Cone Method
    - b. D-1557-78: Moisture Density Relations of Soils and Soil Aggregate Mixtures Using 10 lb. Rammer and 18-Inch Drop
    - c. D-2049-69: Relative Density of Cohesionless Soils
    - d. D-2166-66 (Reapproved 1979): Unconfined Compressive Strength of Cohesive Soil
    - e. D-2922-78: Density of Soil and Soil Aggregate in Place by Nuclear Methods (Shallow Depth).
- C. Existing utilities:



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1. Should uncharted, or incorrectly charted, piping or other utilities be encountered during excavation, consult the Utility Owner immediately for directions. Cooperate with owner and utility companies in keeping respective services and facilities in operation. Repair damaged utilities to satisfaction of Utility Owner.
  2. Do not interrupt existing utilities serving facilities occupied and used by OWNER or others, except when permitted in writing by ARCHITECT and then only after acceptable temporary utility services have been provided.
  3. Demolish and completely remove from site existing underground utilities indicated to be removed. Coordinate with utility companies for shut-off of services if lines are active.
- D. Use of explosives: The use of explosives is not permitted unless approved by the ARCHITECT.
- E. Protection of persons and property:
1. Barricade open excavations occurring as part of this work and post with warning lights as required to protect persons on the site. Operate warning lights as recommended by authorities having jurisdiction.
  2. Protect trees, shrubs, lawns, and other features remaining as part of final landscaping.
  3. Protect structures, utilities, sidewalks, pavements and other facilities from damage caused by settlement, lateral movement, undermining, washout and other hazards created by earthwork operations.
  4. Refer to paragraphs of General Conditions regarding protection of vegetation and structures.
  5. In the event of damage, immediately make all repairs and replacements to the approval of the ARCHITECT at no cost to the OWNER.
- F. Dust control:
1. Use all means necessary to control dust on and near the work if such dust is caused by the CONTRACTOR'S operations during performance of the work or if resulting from the conditions in which the CONTRACTOR leaves the site.
  2. Thoroughly moisten all surfaces as required to prevent dust being a nuisance to the public, neighbors and concurrent performance of other work on the site.
- G. Weather conditions: Do not place, spread, roll or fill material during freezing, raining, or otherwise unfavorable weather conditions. Do not resume work until conditions are favorable as determined by the ARCHITECT.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- H. Inspection by Contractor: Examine the areas and conditions under which excavating, filling and grading are to be performed and notify the ARCHITECT, in writing of conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected in an acceptable manner.
- I. Preparation:
  - 1. Prior to commencement of work, establish location and extent of all utilities in the work areas. Maintain, protect as required existing utilities which pass through the work area.
  - 2. Prior to excavation in pavement areas, cut existing pavement vertically with sharp tool on a straight line to the limits of excavation shown on Plans or as directed by the ARCHITECT. Maintain cut straight and neat, or recut and dress as directed by the ARCHITECT.
- J. Excavation:
  - 1. Unauthorized excavation: Unauthorized excavation, including remedial work directed by the ARCHITECT, shall be at the CONTRACTOR'S expense. Lean concrete fill may be used to bring subgrade elevations to proper positions when acceptable to the ARCHITECT.
  - 2. Additional excavation:
    - a. When excavation has reached required subgrade elevations, notify the ARCHITECT who will make an inspection of conditions.
    - b. If unsuitable bearing materials are encountered at the required subgrade elevations, carry excavations deeper and replace the excavated material as directed by the ARCHITECT.
    - c. Removal of unsuitable material and its replacement as directed will be paid on the basis of contract conditions relative to changes in work if payment has not been provided for in the Proposal.
  - 3. Dewatering:
    - a. Prevent surface water and subsurface or groundwater from flowing into excavations and from flooding project site and surrounding area.
    - b. Do not allow water to accumulate in excavations. Remove water to prevent softening of foundation bottoms, undercutting footings, and soil changes detrimental to stability of subgrades and foundations. Provide and maintain pumps, well points, sumps, suction and discharge lines, and other dewatering system components necessary to convey water away from excavations.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- c. Convey water removed from excavations and rain water to collecting or run-off areas. Establish and maintain temporary drainage ditches and other diversions outside excavation limits for each structure. Do not use trench excavations as temporary drainage ditches.
- 4. Material storage:
  - a. Stockpile satisfactory excavated materials where directed until required for use as backfill or fill. Place, grade and shape stockpiles for proper drainage.
  - b. Locate and retain soil materials away from edge of excavations.
  - c. Dispose of excess soil material and waste materials as herein specified. Excavated material unsuitable for backfilling shall be kept separate from other materials excavated, and disposed of. Materials suitable for backfilling shall not be disposed of until completion of filling or backfilling operations.
- 5. Excavation for pavements: Cut surface under pavements to comply with cross-sections, elevations and grades as shown.
- 6. Excavation for trenches, if and where directed by the ARCHITECT:
  - a. Dig trenches to the uniform width required for the particular item to be installed, sufficiently wide to provide ample working room.
    - (1). Maximum trench width to a point of two feet (2') above the outside top of pipe shall be the pipe outer diameter plus twenty-four inches (24").
    - (2). Maximum trench width at ground surface shall be as shown on Plans.
  - b. Excavate trenches to the depth indicated or required. Carry the depth of trenches for piping to establish the indicated flow lines and invert elevations. Beyond the building perimeter, keep bottoms of trenches for which elevations are not given sufficiently below finish grade to avoid freeze-ups.
  - c. Trenches for pipes shall not be operated more than the numbers of linear feet of pipe that can be placed and backfilled in one (1) day.
  - d. Place the various types of materials in the areas as designated on the Plans, or as directed by the ARCHITECT.
  - e. Pipe bedding shall be as shown on Plans.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

7. Cold weather protection: Protect excavation bottoms against freezing when atmospheric temperature is less than thirty-five (35) degrees.
- K. Backfill, fill and compaction:
1. General:
    - a. Place acceptable material in layers to required subgrade elevations.
    - b. Fills: Use material obtained from on-site excavation, except use borrow material when specified and/or shown on the Plans.
    - c. Backfilling: Use material obtained from on-site excavation, except use select backfill where indicated on Plans or as directed by the ARCHITECT. Backfill to a height of two feet (2') above top of pipe with earth free from stones, rock fragments, dirt clods or frozen material greater than one inch (1") in largest dimension.
    - d. Do not provide borrow material until all acceptable excavated materials on the site have been utilized in the work.
    - e. Place the various types of materials in the areas as designated on the Plans, or as directed by the ARCHITECT.
  2. Backfill excavation as promptly as work permits, but not until completion of the following:
    - a. Removal of concrete formwork.
    - b. Removal of trash and debris.
    - c. Inspection, testing, approval and recording locations of underground utilities.
  3. Backfilling prior to approvals:
    - a. Should any of the work be so enclosed or covered up before it has been approved, uncover all such work at no additional cost to the OWNER.
    - b. After the work has been completely tested, inspected and approved, make all repairs and replacements necessary to restore the work to the condition in which it was found at the time of uncovering, all at no additional cost to the OWNER.
  4. Ground surface preparation prior to filling:

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- a. Remove vegetation, debris, unsatisfactory soil materials, obstructions and deleterious materials from existing ground surface to a depth of not less than four inches (4") and not more than six inches (6") prior to placement of fills. Plow, strip or break-up sloped surfaces steeper than one (1) vertical to four (4) horizontal to a depth of not less than six inches (6") so that fill material will bond with existing surface.
  - b. When existing ground surface has a density less than that specified under "Compaction," for the particular area classification, break up the ground surface, pulverize, moisture- condition to the optimum moisture content, and compact to required depth and percentage of maximum density.
5. Placement and compaction:
- a. Place backfill materials in layers not more than six inches (6") in loose depth.
  - b. Control soil compaction during construction providing minimum percentage of density specified for each area classification listed below.
  - c. Pavement areas defined, for the purpose of this Paragraph, as extending a minimum of five feet (5') beyond the pavement.
  - d. Compact soil to not less than the following percentages of maximum dry density for soils which exhibit a well-defined moisture density relationship determined in accordance with ASTM D-1557; and not less than the following percentages of relative density determined in accordance with ASTM D-2049, for soils which will not exhibit a well defined moisture-density relationship.
    - (1) Structures: Compact top twelve inches (12") of subgrade and each layer of backfill of fill material at ninety-five percent (95%) maximum dry density or ninety percent (90%) relative dry density.
    - (2) Lawn or Unpaved Areas: Compact top six inches (6") of subgrade and each layer of backfiller or fill material at 90 percent (90%) maximum dry density.
    - (3) Walkways: Compact top six inches (6") of subgrade and each layer of backfill or fill material at 95 percent (95%) maximum dry density or 90 percent (90%) relative dry density.
    - (4) Pavement Areas: Compact top twelve inches (12") of subgrade and each layer of backfill or fill material at 95 percent (95%) maximum dry density or 90 percent (90%) relative dry density.
    - (5) Subbase Materials: Compact each layer of subbase material to 95 percent (95%) of maximum dry density.

- (6) Trench stabilization materials: Compact each layer of material to ninety-five percent (95%) of maximum dry density.
  - e. Moisture control:
    - (1) Where subgrade or layer of soil material must be moisture conditioned before compaction, uniformly apply water to surface of subgrade, or layer of soil material, to prevent free water appearing on surface during or subsequent to compaction operations.
    - (2) Remove and replace, or scarify and air dry, soil material that is too wet to permit compaction to specified density.
    - (3) Soil material that has been removed because it is too wet to permit compaction may be stockpiled or spread and allowed to dry. Assist drying by dicing, harrowing or pulverizing until moisture content is reduced to a satisfactory value.
  - f. Puddling or jetting will not be permitted.
  - g. Do not place backfill or fill material on surfaces that are muddy, frozen, or contain frost or ice, or other unsuitable materials.
  - h. Place backfill and fill materials evenly adjacent to structures, to required elevations. Take care to prevent wedging action of backfill against structures by carrying the material uniformly around structure to approximately same elevation in each lift.
- L. Grading:
- 1. General: Uniformly grade areas within limits of grading under this section, including adjacent transition areas. Smooth finish surface within specified tolerances, compact with uniform levels or slopes between points where elevations are shown, or between such points and existing grades.
  - 2. Grading:
    - a. Lawn or unpaved areas: Finish area to receive topsoil to within not more than 0.10 feet above or below the required subgrade elevations.
    - b. Walks: Shape surface of areas under walks to line, grade and cross-section, with finish surface not more than 1/2 inch above or below the required subgrade elevation.
    - c. Pavement: Shape surface of areas under pavement line, grade and cross-section, with finish surface not more than 1/2 inch above or below the required subgrade elevation.



INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

3.     Compaction: After grading, compact subgrade surface to the depth and percentage of maximum density for each area classification.
  4.     Treatment after grading:
    - a.     After grading is completed and the ARCHITECT has finished his inspection, permit no further excavating, filling or grading except with the approval of and inspection of the ARCHITECT.
    - b.     Use all means necessary to prevent erosion of freshly graded areas during construction and until such time as permanent drainage and erosion control measures have been installed.
  5.     Subgrade preparation: All subgrade preparation shall be performed in accordance with the applicable Articles of the New Jersey State Highway Department Standard Specifications except as may be modified by this Specification Section.
- M.     Subbase course:
1.     General:
    - a.     Subbase Course consists of placing quarry blend stone subbase materials in layers of specified thickness over subgrade, as shown on Plans.
    - b.     Provide Subbase Course in accordance with Section 301 of the Standard Specifications, except as otherwise modified by this Specification Section.
  2.     Grade control: During construction, maintain lines and grades including crown and cross-slope of subbase course.
  3.     Placing:
    - a.     Prior to placing subbase course under bituminous concrete or other non-portland cement concrete surfaces, apply an herbicide to the subgrade material. The type of herbicide and the method of application shall be approved by the ARCHITECT prior to beginning this work.
    - b.     Place subbase course material on prepared subgrade in layers of uniform thickness, conforming to indicated cross-section and thickness. Maintain optimum moisture content for compacting subbase material during placement operations.
    - c.     When a compacted subbase course is shown to be eight inches (8") or less, place material in equal layers, except no single layer shall be more than eight inches (8") in thickness when compacted.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- d. Spread, shape and compact all subbase course material deposited on the subgrade during the same day.
- N. Broken (crushed ) stone subbase course:
  - 1. General: Broken Stone Subbase Course consists of placing material in layers of specified thickness, over subgrade to support structures as shown on the Plans.
  - 2. Placing: Place Broken Stone Subbase Course as specified for Quarry Blend Stone Subbase Course.
- O. Field quality control:
  - 1. Quality control testing during construction: Allow testing service to inspect and approve subgrades and fill layers before further construction work is performed.
    - a. Subgrade. The subgrade shall be in a proper finished condition conforming to the proper line and grade and free of any soft spots or other deficiencies. The subgrade shall be tested by running a roller of a weight at least equal to that used in the paving operation over the entire subgrade. If the deformation of the subgrade is excessive, in the opinion of the ARCHITECT, the subgrade must be stabilized in a manner satisfactory to the ARCHITECT.
    - b. Subbase course. If the subgrade has a CBR value of twenty (20) or greater, as determined by the American Society for testing and Materials Method for Bearing ratio of Laboratory Compacted Soils (ASTM Designation D 1883), no subbase course is required. Subgrade soils of Type A-1, A-2-4 and A-2-5 of the American Association of State Highway Officials Classification System for Soils (AASHTO Designation M 145) will not normally require a subbase course. Subgrade soils of other types will normally require a subbase course of Soil Aggregate Type 2, Class A or B, with a minimum thickness of four (4) inches, to provide the required CBR value.
    - c. Take all tests at locations as directed by the ARCHITECT.
  - 2. If in the opinion of ARCHITECT based on testing service reports, subgrade or fill which have been placed are below specified density, provide additional compaction and testing as directed by the ARCHITECT, at no expense to the OWNER. This shall include compaction and testing at areas initially tested and at other locations as directed.
- P. Maintenance:
  - 1. Protection of graded area:

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- a. Protect newly graded areas from traffic and erosion. Keep free of trash and debris.
    - b. Repair and re-establish grades in settled, eroded and rutted areas to specified tolerances.
  - 2. Reconditioning compacted areas: Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, scarify surface, reshape and compact to required density prior to further construction.
- Q. Disposal of excess and waste materials:
- 1. Removal and disposal of excess material shall be the responsibility of the CONTRACTOR.

END OF SECTION

SECTION 312316.10 - EXCAVATION (UNCLASSIFIED)

PART 1 GENERAL

1.1 DESCRIPTION

- A. The excavation and removal of all earth, rock, brick, stone, concrete, small structures, existing pavements, and all other materials of whatever character encountered, required for the construction of roadways and their appurtenances; the transportation of the excavated materials; the construction of embankment with the materials excavated; all grading, fertilizing, seeding, and mulching; the disposal of unsuitable and surplus materials; and all other work as specified in this section.

PART 2 PRODUCTS

2.1 MATERIALS

- A. No materials are involved.

PART 3 EXECUTION

3.1 METHODS OF CONSTRUCTION

- A. Reference Standards used in this Specification section.
  - 1. Standard Specifications:
    - a. Section 202: Excavation
    - b. Section 203: Embankment
- B. Protection:
  - 1. Protect trees, shrubs, lawns and other features remaining as part of final landscaping.
  - 2. Protect curbs, inlets, manholes, utility poles, and all other existing structures to remain.
  - 3. Refer to paragraphs of General Conditions regarding protection of vegetation and structures.
  - 4. Protect newly graded areas from traffic and erosion. Keep free of trash and debris.
  - 5. Repair and reestablish grades in settled, eroded, and rutted areas to specified tolerance.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

6. Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, scarify surface, reshape and compact to required density prior to further construction.

C. Preparation:

1. Field measurements:
  - a. Layout work limits. Coordinate this work with the ENGINEER.
  - b. Set grade stakes.
2. Prior to commencement of work, establish location and extent of all utilities in the work areas. Maintain, protect as required existing utilities which pass through the work area.
3. Prior to excavating, cut existing pavement vertically with sharp tool on a straight line at a distance of six (6") inches beyond limits of excavation shown on plans. Maintain cut straight and neat, or recut and dress as directed by the ENGINEER.

D. Grading:

1. Grade project site to required levels, profiles, contours, and elevation, ready for finish grading and paving.
2. Methods of construction for excavation and grading shall conform to Section 203 of the Standard Specifications.
3. Grades shall be uniform levels or slopes between points where elevations are given or between such points and existing finished grades. Abrupt change in slopes shall be rounded.
4. Use all means necessary to prevent dust being a nuisance to the public.
5. Soil shall not be worked, or fill placed, during freezing weather, when frozen, or unstable due to excessive moisture.
6. Unstable or unsuitable material encountered at the prescribed bottom limits of roadway excavation shall be removed within limits as directed by the ENGINEER. Backfill the excavated areas with suitable material obtained from project excavation as directed by the ENGINEER.
7. Compaction: Compact any embankment for this project as specified in Section 203.03.02, Placing and Compacting Methods, of the Standard Specifications. Embankment material shall be free of stumps, brush, weeds, roots, and other material that may decay.
8. Compact subgrade in all paved areas as specified in Section 203.03 of the Standard Specifications.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

9. Dispose of surplus or unsuitable excavated materials.

END OF SECTION



## SECTION 312500 - TEMPORARY SOIL EROSION AND SEDIMENT CONTROL MEASURES

### PART 1 GENERAL

#### 1.1 DESCRIPTION

- A. This work shall consist of temporary control measures ordered by the ARCHITECT during the life of the contract and as shown on Plans, to control erosion and sediment through use of berms, dikes, dams, sediment basins, fiber mats, netting, gravel, mulches, grasses, and other erosion control devices or methods.
- B. The primary objective of this specification is to control soil erosion to the maximum extent possible with reasonable and economical construction practices.
- C. The temporary control provisions contained herein shall be coordinated with the permanent erosion control features (grass, pavement and other restorations) specified elsewhere in the contract to the extent practical to assure economical, effective and continuous erosion control throughout the construction and post-construction period.
- D. The erosion control measures described herein shall be continued until the construction is complete and final restorations installed.
- E. Wherever construction exposes work which is subject to erosion, the extent of such exposure in advance of the subsequent construction shall be subject to the approval of the ARCHITECT. Erosion control features or other work to be completed within such areas shall follow as soon after exposure as practical.
- F. All materials and methods of construction shall be in accordance with the New Jersey State Standards for Soil Erosion and Sediment Control.

### PART 2 PRODUCTS

#### 2.1 MATERIALS

- A. Mulches may be hay, straw, fiber mats, netting, wood cellulose, corn or tobacco stalks, bark, corn cobs, wood chips, or other suitable material acceptable to the ARCHITECT and shall be reasonable clean and free of noxious weeds deleterious materials.
- B. Grass shall be a quick growing species (such rye grass, Italian rye grass, or cereal grasses) suitable to the area providing a temporary cover.
- C. Fertilizer and soil conditioners shall be a standard commercial grade acceptable to the ARCHITECT.
- D. Others as specified by the ARCHITECT.

### PART 3 EXECUTION

#### 3.1 METHODS OF CONSTRUCTION

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- A. Preconstruction conference: At the preconstruction conference or prior to the start of the applicable construction, the CONTRACTOR shall submit for acceptance his schedules for accomplishment of temporary and permanent erosion control work, as are applicable for excavation work, and any other elements of the project which may contribute to ground erosion or siltation. No schedules and methods of operations have been accepted by the ARCHITECT.
- B. Construction requirements:
  - 1. The ARCHITECT has the authority to limit the surface area of erodible earth material exposed by excavation and grading operations, and to direct the CONTRACTOR to provide immediate permanent or temporary pollution control measures to prevent contamination of adjacent streams, water sources, or bodies of water. Such work may involve the construction of temporary berms, dikes, dams, sediment basins, slopes drains, and use of temporary mulches, mats, seeding or other control devices or methods as necessary to control erosion. Cut slopes shall be temporarily seeded and mulched as the excavation proceeds to the extent considered desirable and practical.
  - 2. The CONTRACTOR will be required to incorporate all permanent erosion control features to include the required pavement and grass restorations into the project at the earliest practical time as out-lined in his accepted schedule. Temporary control measures will be used to correct conditions that develop during construction that were not foreseen during the design stages that are needed prior to installation or permanent control features; or that are needed temporarily to control erosion that develops during normal construction practices, but are not associated with permanent control features on the project.
  - 3. Where erosion is likely to be a problem, excavation and grading operation shall be so scheduled and performed that permanent erosion control features can follow immediately; otherwise temporary erosion control measures may be required between successive construction stages.
  - 4. The ARCHITECT will limit the area of excavation and grading operations in progress commensurate with the CONTRACTOR's capability and progress in keeping the finish permanent pollution control measures current in accordance with the accepted schedule. Should seasonal limitations make such coordination unrealistic, temporary erosion control measures shall be taken immediately to the extent feasible and justified.
  - 5. The ARCHITECT may increase or decrease the amount of surface area of erodible earth material to be exposed at one time by excavation and grading operations as determined by his analysis of project conditions.
  - 6. Project soil conditions and the demonstrated ability and performance of the CONTRACTOR in controlling erosion will be the prime factors used by the ARCHITECT in the determination of reasonable areas.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

7. In the event of conflict between these requirements and pollution control laws, rules, or regulations of other federal or state or location agencies, the more restrictive laws, rules, or regulations shall apply.
8. The CONTRACTOR will be responsible for maintaining all soil erosion and sediment control measures in an acceptable manner. All temporary measures shall be removed by the CONTRACTOR if and as directed by the ARCHITECT.

END OF SECTION

SECTION 321123 - DENSE GRADED AGGREGATE BASE COURSE

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Dense Grade Aggregate (D.G.A.) base course.

1.2 REFERENCES

- A. AASHTO T180 - Moisture-Density Relations of Soils Using a 10-lb (4.54 kg) Rammer and an 18-in. (457 mm) Drop.
- B. ASTM D698 - Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures, Using 5.5 lb (2.49 Kg) Rammer and 12 inch (304.8 mm) Drop.
- C. ASTM D1557 - Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 10 lb (4.54 Kg) Rammer and 18 inch (457 mm) Drop.
- D. ASTM D2167 - Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method.
- E. ASTM D2922 - Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
- F. ASTM D3017 - Test Methods for Moisture Content of Soil and Soil-Aggregate Mixtures.

1.3 SUBMITTALS FOR REVIEW

- A. Submit one (1) sample and gradation from a certified material laboratory which shall include the name of source location of material.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Dense Graded Aggregate: As specified in Section 901.10.01 and Table 901.10.01-1 Gradation Requirements for D.G.A. of the Standard Specifications shall be met.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify subbase has been excavated and compacted, gradients and elevations are correct, and is dry.

3.2 PREPARATION

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- A. Correct irregularities in subbase gradient and elevation by scarifying, reshaping, and re-compacting.
- B. Do not place D.G.A. on soft, muddy, or frozen surfaces.

3.3 AGGREGATE PLACEMENT

- A. Spread aggregate over prepared subbase to a total compacted thickness as specified on the Plans.
- B. Place aggregate in maximum 8" inch layers, and compact to specified density.
- C. Level and contour surfaces to elevations and gradients indicated.
- D. Add small quantities of fine aggregate to coarse aggregate as appropriate to assist compaction.
- E. Add water to assist compaction. If excess water is apparent, remove aggregate and aerate to reduce moisture content.
- F. Use mechanical tamping equipment in areas inaccessible to compaction equipment.

3.4 TOLERANCES

- A. Flatness: Maximum variation of 1/2" inch measured with 10 foot (3 m) straight edge.
- B. Scheduled Compacted Thickness: Within 1/2" inch.
- C. Variation From Design Elevation: Within 1/2" inch.

3.5 FIELD QUALITY CONTROL

- A. Compaction testing will be performed in accordance with referenced standards.
- B. If tests indicate Work does not meet specified requirements, remove Work, replace and retest.
- C. Frequency of Tests: One (1) test per 1000 sy, if and where directed by ARCHITECT.

3.6 SCHEDULES

- A. Under Asphalt Pavement:
  - 1. Compact placed dense graded aggregate materials to achieve dry density compaction of 95% percent.
- B. Under Concrete Pavement:

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

1. Compact placed dense graded aggregate materials to achieve dry density compaction of 95% percent.
- C. Surface Course
1. Compact placed dense graded aggregate materials to achieve dry density compaction of 95% percent.

END OF SECTION



## SECTION 321216 - HOT-MIXED ASPHALT (HMA-MIX)

### PART 1 GENERAL

#### 1.1 DESCRIPTION

- A. General: The quality of materials and performance of work specified in this Specification section shall be in accordance with the Standard Specifications.
- B. The work of this section includes construction and overlay of the bituminous pavement areas as specified and/or shown on the Plans or as directed by the ARCHITECT with hot-mixed bituminous concrete materials.

#### 1.2 RELATED SECTIONS

- A. Section 312300.10: Site Excavation, Filling, and Grading.

#### 1.3 REFERENCE STANDARDS

- A. Standard Specifications.

#### 1.4 DEFINITIONS

- A. Subgrade: Surface upon which pavement structure will be constructed.
- B. Subbase: That portion of the pavement cross section consisting of quarry processed stone and/or soil aggregate.

### PART 2 PRODUCTS

#### 2.1 MATERIAL

- A. Paving materials and mixtures - Materials and mixtures shall comply with the following sections of the Standard Specification:
  - 1. Hot Mix Asphalt surface course and level course:
    - a. Materials: Section 902.02 of the Standard Specifications.
    - b. Mixture: HMA 9.5M64 Surface Course, Section 902.02.
  - 2. Hot Mix Asphalt base course:
    - a. Material: Section 902.02
    - b. Mixture: HMA 19M64 Base Course, Section 902.02.
  - 3. Tack coat: Grade RC-70 or RC-T cutback asphalt or Grade SS-1 emulsified asphalt, Section 401.03.02 of the Standard Specifications.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

4. Prime coat: Grade MC-30 or MC-70 cutback asphalt: Section 401.03.02 of the Standard Specifications.
- B. Job mix formula requirements:
  1. Provide job mix formulas for each required bituminous aggregate mixture as specified in Section 902.02.03-1 of the Standard Specifications, and as specified by the testing laboratory.
  2. Submit for the ARCHITECT's approval prior to beginning paving operations.
- C. Mix design and control requirements: The design and control requirements for all paving mixtures shall conform to Section 902.02.03 of the Standard Specifications.
- D. Sampling and testing for conformance to job mix formula and mix design requirements:
  1. Methods and rates of sampling bituminous mixtures shall conform to Section 902.02.04 of the Standard Specifications:
    - a. Sampling shall be performed by the CONTRACTOR under the supervision of the ARCHITECT unless otherwise directed by the ARCHITECT.
    - b. For small scale projects where it is not possible to attain the minimum lot size specified, a total of five (5) samples shall be taken at random for each type of mix specified.
  2. Testing of bituminous concrete mixtures to determine the quantity of bitumen, gradation of the aggregate, and conformance to mix design requirements shall be performed by the CONTRACTOR'S quality control technician, as approved by the ARCHITECT as specified in Section 902.02.04 of the Standard Specifications.
  3. Submit results of tests on forms acceptable to the ARCHITECT. Forms shall be signed by producer's quality control technician and forwarded to the ARCHITECT as directed.
- E. Preparation of mixtures: The preparation of all bituminous mixtures shall conform to Section 902 of the Standard Specifications.

## PART 3 EXECUTION

### 3.1 METHODS OF CONSTRUCTION

- A. Qualifications of bituminous concrete producer: Use only materials which are furnished by a bulk bituminous concrete producer regularly engaged in the production of hot-mix, hot-laid bituminous concrete.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- B. Paving methods - Methods shall comply with the following sections of the Standard Specification:
  - 1. Section 401: Hot Mix Asphalt Courses
  - 2. Section 301.03.01: Subbase.
- C. The method of construction to include bituminous concrete plant and equipment, bituminous concrete paver, vehicles for transporting bituminous mixtures, rollers, and all construction methods shall conform to Section 401 of the Standard Specifications for hot mix asphalt courses, except as modified by the Supplemental Requirements below:
  - 1. Equipment shall be as specified in Section 401.02.02 of the Standard Specifications.
  - 2. Excavation for base pavement:
    - a. Prior to excavating, cut existing pavements vertically with a sharp tool on a straight line along designated excavation limits, as directed by the ARCHITECT.
    - b. Remove existing pavement, subgrade material, earth, rock, stone and all other materials encountered to required depth.
    - c. Promptly dispose of excess excavated materials.
    - d. Prepare subgrade for base repairs and paving as specified in Specification Section entitled "Site Excavation, Filling and Grading".
  - 3. Proof roll:
    - a. Proof roll subgrade surfaces using a vehicle equal to, or greater than the weight of the vehicles used to construct the paving, approved by the ARCHITECT.
      - (1) Check for unstable areas.
      - (2) Check for areas requiring additional compaction.
    - b. Notify ARCHITECT of unsatisfactory conditions.
    - c. Do not begin paving work until such conditions have been corrected and are ready to receive paving.
  - 4. Surface preparation:
    - a. Earth and subbase surfaces:

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- (1) Remove loose and foreign material from compacted subgrade surface immediately before application of paving.
- (2) Use power broom or blowers and hand brooming as required.
- (3) Do not displace subgrade material.
- b. Existing pavement surfaces:
  - (1) Remove loose and foreign material from existing pavement surfaces immediately before application of paving.
  - (2) Use self-propelled mechanical sweepers. Supplement with hand brooming as required.
  - (3) Pay particular attention to cleaning of gutterlines and outer edges of pavement areas.
  - (4) Remove all weeds, grass or other vegetative matter growing in pavement areas, particularly along curbs.
- c. Minor patching:

Existing pavement surfaces: Fill in depressions, and patch pavement in overlay areas that are not marked out for base repairs. Patch as directed by ARCHITECT in the field.

- 5. Tack coat:
  - a. Apply to cleaned surfaces of all pavements to be overlaid and at adjoining curb lines.
  - b. Apply to cleaned surfaces of newly constructed base pavement if coated with dust, dirt, foreign materials in sufficient amount to prevent bond with surface course paving as determined by ARCHITECT.
  - c. Apply to edges of paving where base repairs are to be made.
  - d. Apply tack coat material at temperatures, and observe safety precautions, specified in Section 401.03.02 of the Standard Specifications.
  - e. Apply at rate of 0.02 to 0.08 gallon per square yard for cut back asphalt or 0.04 to 0.15 gallons per square yard for diluted emulsified asphalt as directed by ARCHITECT, immediately prior to placing pavement.
  - f. Apply track coat by brush to contact surfaces of pavement cold joints, curbs, gutters, manholes, and other structures projecting into or abutting asphalt concrete pavement.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

- g. Allow surface to dry until material is in a condition of tackiness to receive pavement.
  - h. Take precautions to insure tack coat is not applied to exposed surfaces or curbs or other exposed surfaces. Tack coat so applied shall be removed by CONTRACTOR at no additional cost to OWNER.
- 6. Prime coat (subbase surfaces): If and Where Directed
  - a. Uniformly apply at rate of 0.15 to 0.35 gallon per square yard over compacted and cleaned subbase surface.
  - b. Apply enough material to penetrate and seal, but not flood the surface.
  - c. Allow to cure and dry as long as required to attain penetration and evaporation of volatile components, and in no case less than twelve (12) hours unless otherwise acceptable to the ARCHITECT.
  - d. Apply prime coat material at temperatures, and observe safety precautions, specified in Section 401.03.02 of the Standard Specifications.
- 7. Perform work as additionally described in the Statement of Work.
- 8. For pavement replacement, install compacted thickness indicated on Plans of bituminous stabilized base course over excavated area and dense graded aggregate subbase.
- 9. For pavement replacement install compacted thickness indicated on Plans of hot mix asphalt surface course over base course.
- 10. For new pavements, install hot mix asphalt base course in layers of not more than two and one-half (2 1/2") inches compacted thickness, except in those areas where stone mix is prescribed and the total combined thickness of the surface course, binder course, if any, and base course is seven (7") inches or greater, the CONTRACTOR may construct layers of not more than four (4") inches compacted thickness.
- 11. The requirements for string line or ski type reference systems for bituminous concrete pavers is deleted.
- 12. General surface requirements:
  - a. Test finish surface of each concrete course for smoothness using a ten (10) foot straightedge.
  - b. The straightedges shall have projections on the bottom at each end, either built-in or firmly attached, so that it is supported six (6") inches above the pavement surface at the ends. It shall be free from warp and

deflection, subject to approval by the ARCHITECT, and furnished by the CONTRACTOR without additional compensation.

- c. Check surfaced areas at intervals and in directions specified by ARCHITECT.
- d. Check surfaces for pavement smoothness immediately after initial compaction, and correct variations by removing or adding material as may be necessary. Then rolling shall be continued as specified.
- e. Immediately after final rolling and while the pavement is still hot, the smoothness of the course shall be checked again and all projections or depressions exceeding the specified tolerances shall be corrected by removing defective work and replacing it with new surface course as specified. Portions of the surface otherwise unsatisfactory shall be replaced to the satisfaction of the ARCHITECT.
- f. Finished surfaces shall be free of all roller marks, ridges and voids.

13. Surface requirements:

- a. Base courses will not be acceptable if exceeding 1/4 inch in ten feet (10') when tested in any direction.
- b. Intermediate courses and surface courses will not be acceptable if exceeding 1/4 inch in ten feet (10') when tested in any direction.

D. Field quality control:

- 1. Pavement cores and testing for the determination of conformance to control air voids and pavement thickness shall be provided by the CONTRACTOR as required by the ARCHITECT in accordance with Section 401.03.05 of the Standard Specifications.
- 2. Areas of pavement removed for field quality control testing shall be replaced by the CONTRACTOR as follows:
  - a. Clean debris from core area. Cut all exposed pavement edges vertical.
  - b. Apply tack coat to exposed surfaces before installing replacement pavement.
  - c. Fill core area with surface course mixture for the full depth of the core.
  - d. Compact and grade mixture; seal repaired area with tack coat; apply a thin layer of sand over tack coat in a manner satisfactory to the ARCHITECT.

END OF SECTION



## SECTION 321723 - TRAFFIC STRIPING AND MARKINGS

### PART 1 GENERAL

#### 1.1 DESCRIPTION

- A. The work of this section includes providing striping, pavement markings and symbols as specified herein and/or shown on the Plans.

#### 1.2 REFERENCE STANDARDS

- A. Reference standards included in this section shall be the Standard Specifications:
  - 1. Section 610: Traffic Stripes
  - 2. Section 912: Traffic Paint
  - 3. Section 912: Glass Beads

### PART 2 PRODUCTS

#### 2.1 MATERIALS

- A. Latex traffic paint - Striping shall conform to Section 912.03.01 of the Standard Specifications.
- B. Thermoplastic traffic paint - Striping shall conform to Section 912.03.02 of the Standard Specifications.
- B. Glass beads: Shall conform to Section 912 of the Standard Specifications.

### PART 3 EXECUTION

#### 3.1 METHODS OF CONSTRUCTION

- A. Methods of construction shall conform to Section 610.03 of the Standard Specifications except as modified herein.
  - 1. Latex striping.
    - a. Apply latex stripes or markings when the ambient and surface temperatures are above forty-five degrees Fahrenheit (45 °F) and rising. Apply the latex traffic paint in a wet film thickness of  $6 \pm 1$  mil where traffic stripes are required for 14 days or less when used for interim applications prior to the placement of long life material. Apply the traffic paint in a wet film thickness of  $15 \pm 1$  mil where stripes or markings are to be visible to traffic 15 days and beyond, or when stripes or markings are to be placed in intermediate pavement layers to be opened to traffic due to stage construction.

- b. Apply glass beads, according to the gradation specified for latex traffic paint, to the wet paint in a uniform pattern and at the rate of 12 pounds per gallon of paint.
  - c. When traffic stripes or traffic markings are intended to remain visible beyond 14 days, apply prior to acceptance and when directed, additional applications of latex traffic paint and glass beads. Apply these applications at least 15 days after the initial application and after any sawing or sealing of joints in bituminous concrete overlay.
- 2. Thermoplastic striping.
  - a. Place preformed thermoplastic or hot extruded thermoplastic traffic markings on thoroughly dry surfaces and during dry weather conditions. Apply using equipment and procedures that produce markings of the specified color, width, and thickness with well-defined edges, uniform retroreflectivity, and proper bonding to the pavement. Apply the thermoplastic material as follows:
    - (1) Extruded Thermoplastic. Uniformly heat the thermoplastic material. When the ambient and surface temperatures are at least 50° F, apply the melted material at a temperature of between 400 and 425°F. Extrude the thermoplastic traffic markings on the HMA or concrete pavement ensuring a thickness of  $90 \pm 1$  mils.
    - (2) Immediately after, or in conjunction with, the thermoplastic extrusion, uniformly apply glass beads to the wet material at a minimum rate of 10 pounds per 100 square feet of markings. Apply glass beads by mechanical means only.
    - (3) Preformed Thermoplastic. Melt the preformed thermoplastic tape to bond the traffic markings permanently in position according to the manufacturer's recommendations.
    - (4) Meet the minimum initial retroreflectance value, as specified in 610.03.01.D for thermoplastic tape, by applying additional glass beads to the hot-wet material in a uniform pattern as necessary.
- 3. Immediately before marking the pavement surface, clean the surface of dirt, oil, grease, and foreign material, including curing compound on new concrete. Clean the surface 2 inches beyond the perimeter of the marking to be placed.
- 4. Replace, at no cost to the owner, all types of long life traffic stripes or traffic markings determined to be in nonconformance with the specifications, or not placed at the locations or in the dimensions specified on the plans. Remove the defective stripes or markings according to subsection 610.03.08.
- 5. Traffic stripes shall be completed before opening to traffic.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

END OF SECTION

## SECTION 323113 – GALVANIZED CHAIN LINK FENCE AND SWING GATES

### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

- A. Supply and install galvanized chain link fence, swing gates and accessories.

#### 1.2 SUBMITTALS

- A. Shop drawings: Layout of fences and gates with dimensions, details, and finishes of components, accessories, and post foundations.
- B. Product data: Manufacturer's catalog cuts indicating material compliance and specified options.

### PART 2 PRODUCTS

#### 2.1 MANUFACTURER

- A. Products from qualified manufacturers having a minimum of five years of experience manufacturing thermally fused chain link fencing will be acceptable if they meet the following specifications for design, size gauge of metal parts and fabrication.
- B. Approved Manufacturers: Anchor Fence, Inc., Baltimore, MD  
Ameristar, Tulsa, OK  
Or Approved Equal

#### 2.2 CHAIN LINK FENCE FABRIC

- A. Hot-dipped galvanized with minimum average 1.8 oz/ft<sup>2</sup> of coated surface area. Core wire tensile strength 75,000 psi.
- B. Size: Helically wound and woven to height as indicated on drawings with 2" diamond mesh, with a core wire diameter of 0.148" and a breakload of 1290 lbf.
- C. Selvage of fabric knuckled at top and knuckled at bottom.

#### 2.3 STEEL FENCE FRAMING

- A. Steel pipe - Type I: ASTM F 1083, standard weight schedule 40; minimum yield strength of 25,000 psi; sizes as indicated. Hot-dipped galvanized with minimum average 1.8 oz/ft<sup>2</sup> of coated surface area.
- B. Steel pipe - Type II: Cold formed and welded steel pipe complying with ASTM F 1043, Group IC, with minimum yield strength of 50,000 psi, sizes as indicated. Protective coating per ASTM F 1043, external coating Type B, zinc with organic overcoat, 0.9 oz/ft<sup>2</sup> minimum zinc coating with chromate conversion coating and verifiable polymer film.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

Internal coating Type B, minimum 0.9 oz/ft<sup>2</sup> zinc or Type D, zinc pigmented, 81% nominal coating, minimum 3 mils thick.

- C. Formed steel ("C") sections: Roll formed steel shapes complying with ASTM F 1043, Group II, produced from 45,000 psi yield strength steel; sizes as indicated. External coating per ASTM F 1043, Type A, minimum average 2.0 oz/ft<sup>2</sup> of zinc per ASTM A 123, or 4.0 oz/ft<sup>2</sup> per ASTM A 525. "C" section post may have ASTM F 1043, Type C external and internal coating consisting of 0.9 oz/ft<sup>2</sup> zinc 5% aluminum-mischmetal alloy, per ASTM A 875.
- D. Steel square sections: ASTM A 500, Grade B Steel having minimum yield strength of 40,000 psi; sizes as indicated. Hot-dipped galvanized with minimum 1.8 oz/ft<sup>2</sup> of coated surface area.
- E.

|                          |        |           |             |
|--------------------------|--------|-----------|-------------|
| End and Corner Post      | 3"     | 2.873 od, |             |
| Line (intermediate) Post | 2 1/2" | 2.375 od, |             |
| Rails and Braces         | 1 5/8" | 1.660 od, | 2.27 lbs/ft |

#### 2.4 GATES

- A. Gate frames: Fabricate chain link swing gates in accordance with ASTM F 900 using galvanized steel tubular members, 2" square, weighing 2.60 lb/ft. Fusion or stainless steel welded connections forming rigid one-piece unit.
- B. For gates over 8' high or 15' wide, provide minimum 1-1/2" square additional horizontal and vertical interior members to ensure proper strength.
- C. Chain link fence fabric: Hot-dipped galvanized with minimum average 1.8 oz/ft<sup>2</sup> of coated surface area. Core wire tensile strength 75,000 psi. Install fabric with hook bolts and tension bars at all 4 sides. Attach to gate frame at not more than 15" on center.
- D. Hardware materials: Hot dipped galvanized steel or malleable iron shapes to suit gate size.
- E. Hinges: Structurally capable of supporting gate leaf and allow opening and closing without binding. Non-lift-off type hinge design shall permit gate to swing 180 inward.
- F. Latch: Forked type capable of retaining gate in closed position and have provision for padlock. Latch shall permit operation from either side of gate.
- G. Keeper: Provide keeper for each gate leaf over 5' wide. Gate keeper shall consist of mechanical device for securing free end of gate when in full open position.
- H. Double gates: Provide drop rod to hold inactive leaf. Provide gate stop pipe to engage center drop rod. Provide locking device and padlock eyes as an integral part of latch, requiring one padlock for locking both gate leaves.
- I. Gate posts: Steel pipe ASTM F 1083 standard weight schedule 40; minimum yield strength of 25,000 psi or Steel square sections (ASTM A 500, Grade B) having minimum

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

yield strength of 40,000 psi size as indicated. Hot-dipped galvanized with minimum 1.8 oz/ft<sup>2</sup> of zinc or respective material finished in accordance with ASTM F 1043.

| <u>Gate Leaf Single Width</u> | <u>Post Size (Round)</u> | <u>Weight</u> |
|-------------------------------|--------------------------|---------------|
| 6 ft or less                  | 2.875 in                 | 5.79 lb/ft    |
| 6 ft<br>to 12 ft              | 4.00 in                  | 9.11 lb/ft    |
| 12 ft<br>to 19 ft             | 6.625 in                 | 18.97 lb/ft   |
| 19 ft<br>to 23 ft             | 8.625 in                 | 28.55 lb/ft   |

## 2.5 ACCESSORIES

- A. Chain link fence accessories: ASTM F 626 Provide items required to complete fence system. Galvanize each ferrous metal item and finish to match framing.
- B. Post caps: Formed steel, cast malleable iron, or aluminum alloy weathertight closure cap for tubular posts. Provide one cap for each post. Where top rail is used, provide tops to permit passage of top rail.
- C. Top rail and brace rail ends: Formed steel, malleable or cast iron, for connection of rail and brace to terminal posts.
- D. Top rail sleeves: 6" sleeve allowing for expansion and contraction of top rail.
- E. Wire ties: 9 gauge 0.148" galvanized steel wire for attachment of fabric to line posts. Single wrap 13 gauge 0.092" with double twist for rails and braces. Hog ring ties of 12-1/2 gauge 0.0985" for attachment of fabric to tension wire.
- F. Brace and tension (stretcher bar) bands: Pressed steel. At square post provide tension bar clips.
- G. Tension (stretcher) bars: One piece lengths equal to 2 inches less than full height of fabric with a minimum cross-section of 3/16" x 3/4" or equivalent fiber glass rod. Provide tension (stretcher) bars where chain link fabric meets terminal posts.
- H. Tension wire: Galvanized steel wire, 7 gauge, 0.177" diameter core wire with tensile strength of 75,000 psi.
- I. Truss rods: Steel rods with minimum diameter of 3/8".
- J. Nuts and bolts shall be galvanized.

## 2.6 SETTING MATERIALS



- A. Concrete: Minimum 28 day compressive strength of 3,000 psi.

### PART 3 EXECUTION

#### 3.1 EXAMINATION

- A. Verify areas to receive fencing are completed to final grades and elevations.
- B. Ensure property lines and legal boundaries of work are clearly established.

#### 3.2 CHAIN LINK FENCE FRAMING INSTALLATION

- A. Install chain link fence in accordance with ASTM F 567 and manufacturer's instructions.
- B. Locate terminal post at each fence termination and change in horizontal or vertical direction of 30° or more.
- C. Space line posts uniformly at 10'0" on center (maximum).
- D. Concrete set terminal and gate posts: Drill holes in firm, undisturbed or compacted soil. Holes shall have diameter 4 times greater than outside dimension of post, and depths approximately 6" deeper than post bottom. Excavate deeper as required for adequate support in soft and loose soils, and for posts with heavy lateral loads. Set post bottom 36" below surface when in firm, undisturbed soil. Place concrete around posts in a continuous pour. Trowel finish around post. Slope to direct water away from posts. (See plans for additional installation details.)
- E. Drive Anchor posts: With protective cap, drive post 36" into ground. Slightly below ground level install drive anchor shoe fitting. Install 2 diagonal drive anchors and tighten in the shoe.
- F. Check each post for vertical and top alignment, and maintain in position during placement and finishing operations.
- G. Bracing: Install horizontal pipe brace at mid-height for fences 6' and over, on each side of terminal posts. Firmly attach with fittings. Install diagonal truss rods at these points. Adjust truss rod, ensuring posts remain plumb.
- H. Tension wire: Provide tension wire at bottom of fabric and at top, if rail is not specified. Install tension wire before stretching fabric and attach to each post with ties. Secure tension wire to fabric with 12-1/2 gauge 0.0985" hog rings 24" oc.
- I. Top rail: Install bottom rails between posts with fittings and accessories. Connect joints with sleeves for rigid connections for expansion/contraction.
- J. Center Rails for fabric height 12' and over. Install mid rails between posts with fittings and accessories.

- K. Bottom Rails: Install bottom rails between posts with fittings and accessories. Connect joints with sleeves for rigid connections for expansion/contraction.

### 3.3 CHAIN LINK FABRIC INSTALLATION

- A. Fabric: Install fabric on security side and attach so that fabric remains in tension after pulling force is released. Leave approximately 2" between finish grade and bottom selvage. Attach fabric with wire ties to line posts at 15" on center and to rails, braces, and tension wire at 24" on center.
- B. Tension (stretcher) bars: Pull fabric taut; thread tension bar through fabric and attach to terminal posts with bands or clips spaced maximum of 15" on center.

### 3.4 ACCESSORIES

- A. Tie wires: Bend ends of wire to minimize hazard to persons and clothing.
- B. Fasteners: Install nuts on side of fence opposite fabric side for added security.

### 3.5 CLEANING

- A. Clean up debris and unused material, and remove from the site.

END OF SECTION

## SECTION 323113.10 - GALVANIZED CHAIN LINK CANTILEVER SLIDE GATES

### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

- A. Supply and install galvanized chain link cantilever slide gates.

#### 1.2 SUBMITTALS

- A. Shop drawings: Layout of gates with dimensions, details, and finishes of components, accessories, and post foundations.
- B. Product data: Manufacturer's catalog cuts indicating material compliance and specified options.

#### 1.3 RELATED SECTIONS

- A. Section 323113 - Galvanized Chain Link Fence and Swing Gates

### PART 2 PRODUCTS

#### 2.1 CHAIN LINK FENCE FABRIC

- A. Hot-dipped galvanized with minimum average 1.8 oz/ft<sup>2</sup> of coated surface area. Core wire tensile strength 75,000 psi.
- B. Size: Helically wound and woven to height as indicated on drawings with 2" diamond mesh, with a core wire diameter of 0.148" and a breakload of 1290 lbf.
- C. Selvage of fabric knuckled at top and knuckled at bottom.

#### 2.2 GATES

- A. Gate frames: Fabricate chain link cantilever slide gates in accordance with ASTM F 1184, Type II, Class 2, using 2 inch square aluminum members, ASTM B 221, alloy and temper 6063-T6, weighing 0.94 lb/ft. Weld members together forming rigid one-piece frame integral with top track. Provide 2 truck assemblies for each gate leaf, except as indicated for gates larger than 30'. Gates over 27' in single opening shall be shipped in 2 parts and field spliced with special attachments provided by the manufacturer.

- 1. Internal uprights: 2" x 2" aluminum members welded in gate frames, at 8' on center, subdividing frame into panels.

| <u>Gate Leaf Sizes</u> | <u>Cantilever Support (overhang)</u> |
|------------------------|--------------------------------------|
| 6 ft to 10 ft          | 6'-6"                                |
| 11 ft to 14 ft         | 7'-6"                                |
| 15 ft to 22 ft         | 10'-0"                               |

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

2. For gate leaf size 23' to 30', weld an additional 2" square lateral support rail adjacent to top horizontal rail. Bottom rail shall consist of 2"x4" aluminum member weighing 1.71 lb/ft.

Gate Leaf Sizes  
23 ft to 30 ft

Cantilever Support (overhang)  
12'-0"

3. For gate leaf sizes 30' to 40', weld 2 top track/rails together forming a dual enclosed track. Provide 2 truck assemblies for each track for each gate leaf, total 4 truck assemblies. Bottom rail shall consist of 2"x4" aluminum member weighing 1.71 lb/ft.

Gate Leaf Sizes  
31 ft to 35 ft  
36 ft to 40 ft

Cantilever Support (overhang)  
13'-6"  
16'-0"

4. For gate leaf sized 41' to 50', fabricate 24" wide rigid box frame truss. Truss shall consist of dual side frames, constructed similar to standard single leaf gates, separated by square cross members and diagonal truss rod bridging. Dual side frames shall each contain top track/rail to provide support for truss from sides. Provide 4 trucks for each track, total 8 for each gate leaf. Weld steel plate between top of support posts to maintain truck assemblies in alignment with tracks.

Gate Leaf Sizes  
41 ft to 50 ft

Cantilever Support (overhang)  
Custom engineered by manufacturer.

- B. Gate Frame and Filler Finish: Hot-dipped galvanized with minimum average 1.8 oz/ft<sup>2</sup> of coated surface area. Install fabric with hook bolts and tension bars at all 4 sides. Attach to gate frame at not more than 15 inches on center.
- C. Bracing: Provide diagonal adjustable length truss rods of 3/8" galvanized steel, in each panel of gate frames.
- D. Top track/rail: Enclosed combination one-piece track and rail, aluminum extrusion with weight of 3.72 lb/ft. Track to withstand reaction load of 2,000 lb.
- E. Truck assembly: Swivel type, zinc die cast, with 4 sealed lubricant ball-bearing rollers, 2 inches in diameter by 9/16" in width, and 2 side rolling wheels to ensure truck alignment in track. Mount trucks on post brackets using 7/8" diameter ball bolts with 1/2" shank. Truck assembly to withstand same reaction load as track, 2,000 lb.
- F. Gate hangers, latches, brackets, guide assemblies, and stops: Malleable iron or steel, galvanized after fabrication. Provide positive latch with provisions for padlocking.
- G. Bottom guide wheel assemblies: Each assembly shall consist of two, 4" diameter rubber wheels, straddling bottom horizontal gate rail, allowing adjustment to maintain gate frame plumb and in proper alignment. Attach one assembly to each guide post.

INDUSTRIAL ARTS ALTERATION  
GLOUCESTER CITY BOE  
REGAN YOUNG ENGLAND BUTERA, PC PROJECT #5672G

H. Gate posts:

1. For gates under 31'-0": galvanized steel 4" (101.6 mm) OD schedule 40 pipe, ASTM F 1083, weighing 9.1 lb/ft. Provide 1 latch post and 2 support posts for single slide gates and 4 support posts for double slide gates.
2. For gates 31'-0" or larger; 2 pairs of support posts for each leaf (dual) 4" OD schedule 40 pipe, ASTM F 1083, weighing 9.1 lb/ft each. Posts connected by welding 6 inch x 3/8 inch plate between posts as shown on drawings. Also one 4" latch post.
3. Finish to match fence.

2.3 SETTING MATERIALS

- A. Concrete: Minimum 28 day compressive strength of 3,000 psi.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify areas to receive fencing are completed to final grades and elevations.
- B. Verify areas to ensure sufficient space to receive gate in open position.

3.2 INSTALLATION

- A. Install gate posts in accordance with the manufacturer's instructions.
- B. Concrete set terminal and gate posts: Drill holes in firm, undisturbed or compacted soil. Holes shall have diameter 4 times greater than outside dimension of post, and depths approximately 6" deeper than post bottom. Excavate deeper as required for adequate support in soft and loose soils, and for posts with heavy lateral loads. Set post bottom 36" below surface when in firm, undisturbed soil. Place concrete around posts in a continuous pour. Trowel finish around post. Slope to direct water away from posts. Check each post for vertical and top alignment, and maintain in position during placement and finishing operations.
- C. Install gates plumb, level and secure for full opening without interference.
- D. Attach hardware by means which will prevent unauthorized removal.
- E. Adjust hardware for smooth operation.

END OF SECTION

SECTION 500000 - CONTRACTOR'S USE OF APPENDIX DOCUMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. It shall be expressly understood that the documents and other information provided as part of the Appendix are to be considered helpful information, are not fact and have not been verified by the Owner and the Design Consultant(s) and the Construction Manager.
- B. It is expressly understood and agreed that the Owner, and the Design Consultant(s), and the Construction Manager assume no responsibility whatsoever in respect to the sufficiency or accuracy of the information, the records thereof or of the interpretations set forth therein or made by the Owner, or the Design Consultant(s), or the Construction Manager, in its use thereof other than to establish a record of the visible conditions noted at the time the documents were produced.
- C. There is no warranty or guaranty either expressed or implied, that the conditions indicated are representative of those existing throughout such areas, or any part thereof, or that unlooked-for developments may not occur, or that conditions other than or in proportions different from those indicated may be encountered.
- D. Contractors may utilize these documents at their own risk and shall be fully responsible for the results obtained from the use of these documents.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

3.1 SCHEDULE OF APPENDIX

- A. 500001 Geophysical Investigation Report Utility Locating & Mapping.
- B. 500002 Geotechnical Engineering Report.
- C. 500003 Laguna Tools Quote Number 93402.
- D. 500004 SJF Quote Number 73685.

END OF SECTION 500000



# **GEO-GRAF**

*GROUND PENETRATING RADAR SPECIALISTS*

January 17, 2023

Mr. Robert Dinan  
Greyhawk  
2000 Midlantic Drive, Suite 210  
Mount Laurel, NJ 08054

**Re: Nonintrusive Geophysical Subsurface Investigation: Utility Locating and Mapping Ahead of Construction – Gloucester City High School, 1300 Market Street, Gloucester City, NJ**

Dear Mr. Dinan:

Enclosed is an electronic copy (PDF) of the Geo-Graf, Inc. Geophysical Investigation Report for the above referenced Project. In a separate attachment are the associated electronic mapping files (PDF and CAD).

Please contact me if you have any questions regarding this project or the deliverables. I appreciate the opportunity to be of service.

Sincerely,



Jay Graf

*Ground Penetrating Radar Specialist*

Call/Text (Cell): 610-316-2184  
Email: [jaygraf@geo-graf.com](mailto:jaygraf@geo-graf.com)

# ***GEO-GRAF***

***GROUND PENETRATING RADAR SPECIALISTS***

**GEOPHYSICAL INVESTIGATION REPORT  
UTILITY LOCATING & MAPPING  
GLOUCESTER CITY HIGH SCHOOL  
1300 MARKET STREET  
GLOUCESTER CITY, NEW JERSEY  
17 JANUARY 2023**

Prepared for:

Greyhawk  
2000 Midlantic Drive, Suite 210  
Mount Laurel, NJ 08054

Project Manager:  
Robert J. Dinan

Prepared by:

Geo-Graf, Inc.  
1138 Pottstown Pike  
West Chester, PA 19380-4138

Project Manager:  
Jamieson Graf

Project Number: 011123

**GEO-GRAF, INC. DISCLAIMER**

Services, data interpretation, and investigation findings provided by Geo-Graf, Inc., shall be performed with our best professional effort. The detectability and location accuracy of underground features; as well as, the geophysical instruments' signal penetration depths are dependent upon the electrical properties and site-specific characteristics of the ground, soils, and/or materials scanned. Thus, the resulting data interpretations and investigation findings provided by Geo-Graf, Inc. are opinions based on inference from the acquired geophysical data and should be considered for "Informational Purposes Only" unless said data is properly verified via ground-truthing or other intrusive efforts, and is reviewed and sealed by a licensed professional engineer (PE). Geo-Graf, Inc. cannot and does not guarantee the desired signal penetration depth or accuracy/correctness of our interpretations and investigation findings. The lack of detected subsurface features or targets-of-concern within an investigated area does not preclude the possibility that these features exist and have gone undetected. Geo-Graf, Inc. will not accept liability or responsibility for any losses, damages or expenses that may be incurred or sustained by any services, data interpretations or investigation findings provided by Geo-Graf, Inc.

**Project Summary:**

This report contains the findings of a nonintrusive geophysical subsurface investigation performed by Geo-Graf, Inc. (GGI) on January 11, 2023, at the Gloucester City High School, 1300 Market Street in the city of Gloucester City, Camden County, New Jersey. The Investigation was conducted in accordance with the GGI Nonintrusive Geophysical Subsurface Investigation Proposal Number 4774, dated December 15, 2022.

The accessible sections of the specified search area were investigated by GGI in an attempt to locate and map near-surface utilities and anomalies that could impact the proposed construction.

Detected utilities that could be identified (water, sewer, gas, etc.) were field-marked in standard classifying colors. Unidentified utilities and subsurface anomalies were also detected and field-marked within the accessible search area.

The identities of the detected utilities were based on inferences from surface features, the provided archival mapping, and/or knowledge of local personnel. If a detected possible utility signature could not be identified in this manner it was categorized as an “unknown utility” and field-marked in white paint. In addition, the approximate depth ranges of the detected utilities and subsurface anomalies are provided on the accompanying mapping. These depth range approximations are estimates based on the collected geophysical data. Precise utility depth elevations can only be obtained via intrusive excavations.

### **Scope of Work**

Perform a nonintrusive geophysical subsurface investigation within the accessible sections of the specified search areas in an attempt to detect and map metallic and nonmetallic subsurface utilities and underground anomalies that could impact the proposed construction.

The nonintrusive geophysical delineation techniques utilized for this investigation included the collection and the interpretation of data from Ground Penetrating Radar (GPR), Electromagnetic (EM), Radio Frequency (RF) and Magnetic (MAG) instrumentation. The geophysical data was analyzed, correlated, and is presented on a color plan-view GGI Subsurface Utility Map (**SUM**).

### **Specified Search Area**

The specified search area totaled approximately 4,700 ft<sup>2</sup> and included the accessible exterior sections of a loading dock and storage area along the north side of the building complex.

### **Geophysical Investigation**

On January 11, 2023, GGI performed a nonintrusive geophysical subsurface investigation as directed by Robert J. Dinan, Project Executive – Greyhawk.

### **Investigative Procedure**

To facilitate GPR data collection and documentation of site findings, GGI created a reference grid over the accessible sections of the specified search area. The zero/zero reference datum point was located as indicated on the **SUM**.

GGI initially investigated the accessible sections of the specified search area using EM and MAG in an attempt to locate subsurface metallic utilities and underground anomalies. Findings were field-marked in white paint and subsequently documented by GGI.

RF pipe tracing techniques were also utilized in both direct pipe contact and induction modes in an attempt to locate and field-mark metallic underground utilities. Identified utilities were field-marked in standard identifying colors. Unidentified, or unknown, utilities were field-marked in white paint. The locations of the detected utilities were documented by GGI.

GPR profiles were completed in both the north-south and east-west grid directions in an attempt to delineate subsurface metallic and nonmetallic utilities and underground anomalies. The GPR data was collected utilizing a 400 MHz antenna system. Possible utility and anomaly locations observed from the field data were marked and their locations documented by GGI.

### **Geophysical Instrumentation**

The following is a list and brief description of the geophysical instrumentation utilized for this investigation.

#### **GPR**

GPR is a subsurface imaging system consisting of a control unit with interchangeable antenna systems. When a GPR antenna is moved along a surface a corresponding data image is generated and shown on the control unit's monitor. Understanding the resulting data image can seem difficult

and counter-intuitive. Thus, the knowledge and experience of the GPR operator is critical in order to procure an accurate data interpretation.

#### *Antenna Systems*

GPR antennas operate with a center band frequency measured in megahertz (MHZ) or gigahertz (GHZ). A basic rule-of-thumb is the lower the antenna frequency the deeper the signal penetration but at the cost of image resolution. Conversely, the higher the frequency the greater the resolution but at the cost of signal penetration. As a result, the antenna frequency utilized for a particular project is contingent upon the project's scope-of-work and/or the targets-of-concern.

#### *Data Interpretation*

GPR data is obtained and viewed in real time. The data is first evaluated for its quality and usefulness for detection of the project's targets-of-concern. GPR settings are adjusted as needed by the operator. For some projects, the data can be interpreted onsite by the operator. For other projects, the data is recorded for subsequent analysis and post-processing. Off-site data post-processing is utilized by GGI to improve image resolution and assist in the interpretation of the data. During this process each recorded GPR profile is individually viewed, subjected to various algorithms or modelling techniques, and then analyzed. The GPR data are then correlated with the data collected from the other geophysical instruments that were utilized in the investigation.

#### *Applications and Limitations*

GPR can be used as part of a nonintrusive geophysical investigation or structural scanning project and can delineate both metallic and nonmetallic subsurface features. The composition and moisture level of the soil will substantially impact and limit the maximum achievable GPR signal penetration depth. Also, small diameter nonmetallic piping are undetectable under most circumstances.

For this project, a Geophysical Survey Systems, Inc. (GSSI) Subsurface Interface Radar System 3000 (SIR-300) unit was used. A GPR profile(s) best representing the delineation of the project's target-of-concern was selected, post-processed, and annotated by GGI for inclusion in this report.

#### **RF**

RF instruments are used to locate underground metallic utilities. An RF instrument can consist of a separate signal transmitting unit and a signal receiving unit. The transmitting unit is placed near or physically connected to the utility to be traced. The hand-held receiver will then pick the signal as it is conducted along the utility. The indicated location of the metallic utility is then marked onsite by the RF operator using spray paint, flags, etc. When the signal transmitting unit is directly connected to the utility to be traced, accurate depth-of-cover data can be obtained.

A Vivax-Metrotech model VM-810, and/or a Radiodetection model CAT-4 instrument were used for this investigation.

#### *Applications and Limitations*

RF techniques can be used as part of a nonintrusive geophysical investigation and are capable of electrically tracing buried metallic pipes and cables. The RF signal will follow the path of least

electrical resistance; thus, the signal can jump from one utility to another, making identification and tracking of a particular utility difficult in complex underground scenarios.

## **EM**

EM is utilized to delineate the location and size of large subsurface metallic objects, areas of conductive subsoil, and/or metallic subsurface utility features. EM works by the generation of an electromagnetic field between the transmitting and receiving units of the instrument. As the instrument is moved over the ground subsurface features will interact with the electromagnetic field providing interpretable data. The EM instrument used by GGI is a small, hand-held device designed for use in urban scenarios. The data obtained from GGI's EM device is interpreted by the operator in real time and the findings are marked onsite with spray paint, flags, etc.

A Vivax-Metrotech VM-480B was used for this investigation.

### *Applications and Limitations*

EM techniques can be used as part of a nonintrusive geophysical investigation and can detect large metallic masses such as USTs, drum piles, reinforced concrete; areas of conductive subsoil; and subsurface metallic utility features. Limitations include the inability to positively identify the detected feature; no anomaly-depth data; and signal interference when in proximity to metallic surface features.

## **MAG**

The MAG instrument used by GGI is technically a vertical field gradiometer. This small hand-held device passively measures changes in magnetic fields. Buried ferromagnetic objects (anything that contains iron or energized cables, for example) naturally emit a magnetic field. The MAG instrument can detect and measure this magnetic field. The data obtained from GGI's MAG device is interpreted by the operator in real time and the findings are marked onsite with spray paint, flags, etc.

For this investigation, A Dunham and Morrow model MAG PRO II Magnetic Gradiometer was used.

### *Applications and Limitations*

MAG techniques are used to detect buried valve and manhole covers, individual drums or drum piles and assist in the detection of utilities, USTs, and other ferromagnetic features. Limitations include the inability to positively identify the detected feature; no anomaly-depth data; and signal interference when in close proximity to ferromagnetic surface features.

## **Findings**

Refer to the color plan-view **SUM** for the plotted findings.

### *Subsurface Utilities*

Subsurface utilities were detected and field-marked within the investigated areas. Utilities that could be identified were marked with standard identifying colors. Unidentified or unknown utilities were marked with white paint. All GGI-detected utilities are plotted on the **SUM**.



### **Utility Depths**

Utility depths are estimates from top of pipe below grade (b.g.) and are based on GPR data approximation. No nonintrusive delineation techniques can provide precise utility depth elevations.

The estimated maximum GPR signal penetration achieved at this site is approximately 8' below grade. Thus, features existing at or below this depth will go undetected.

### **Subsurface Anomalies**

Subsurface anomalies were detected within the accessible search area and are described below.

### **Excavated Area – “Tank Grave”**

An approximately 15' x 40' subsoil anomaly was delineated in the grass area by GPR. The anomalous GPR data signatures exhibited were indicative of an excavation and use of fill. GGI suspects this area represents a “tank grave”, the former location of an underground storage tank (UST) that has been excavated and removed.

In addition, cut-off piping was detected in the SW corner of the investigated area extending from the building to the tank grave. This piping is likely abandoned fuel oil supply/return lines that serviced the UST. Unknown piping was also detected extending from the curb line toward the tank grave. GGI suspects this could be an abandoned remote fill pipe associated with the tank.

### **Subsoil Anomaly**

An approximately 5' x 15' subsoil anomaly was detected by GPR within the paved area. The exhibited GPR data signatures were indicative of disturbed subsoil and could represent a previously excavated area.

### **GPR Anomalies**

Typically, subsurface targets delineated by GPR could be associated with utilities, isolated debris, foundational remnants, buried concrete, or certain identifiable features such as USTs, septic tanks, drums, buried reinforced concrete, etc.

### **EM Anomalies**

Typically, EM-detected subsurface anomalies can represent buried metallic features such as tanks, drums, foundations (containing rebar), utilities, and/or metallic debris. EM anomalies can represent areas containing conductive subsoil.

### **MAG Anomalies**

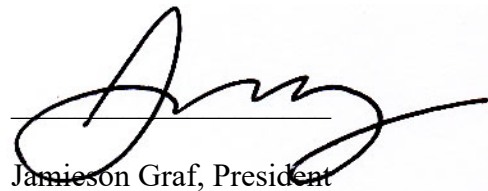
Typically, MAG-detected subsurface anomalies are representative of buried ferromagnetic features such as tanks, drums, foundations (containing rebar), metallic debris, certain utilities, buried valve, manhole, and/or well covers, etc.

**Limitations and Recommendations**

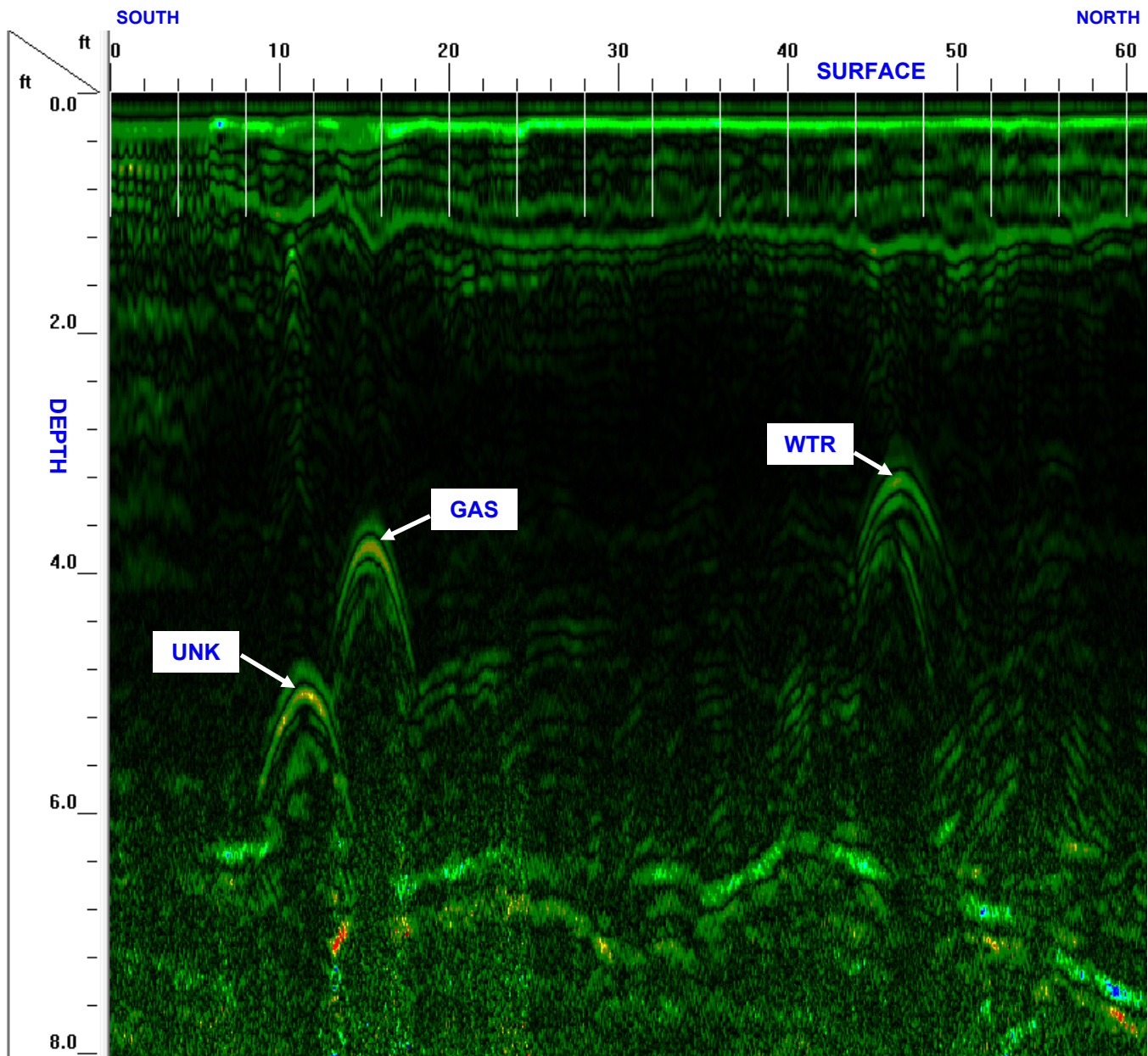
A nonintrusive geophysical investigation has inherent limitations. It should be understood that just because utilities or anomalies were not detected by the geophysical techniques used for this investigation it does not preclude the possibility that these features exist and went undetected. The utility markout provided by GGI should be considered one part of a larger process that includes a Public Utility markout (“one-call”); exhaustive search of site utility records, blue-prints, and/or as-builts; and ground-truthing via hand-digging or *Soft-Dig* (vacuum/air lance) test excavations. Completion of this multi-step utility locating process is strongly recommended by GGI.

All services provided by GGI are performed under the disclaimer found on the cover page of this report.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Jamieson Graf', is written over a horizontal line. The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Jamieson Graf, President



**Figure 1-GPR Data Profile**

Representative GPR data profile excerpt. The profile extends from south to north within the loading dock area (refer to the *SAM*). Shown in this profile are the utility-like GPR data signatures indicating the locations of a deeper unknown utility, gas, and water pipe. 400 MHz GPR antenna system, edited from 50 ns.





Figure 2 – Site Photograph



Figure 3 – Site Photograph





**GEOTECHNICAL  
ENGINEERING REPORT**

**PROPOSED INDUSTRIAL ARTS ALTERATION  
OUTDOOR WORK AREA  
GLOUCESTER CITY HIGH SCHOOL  
1300 MARKET STREET  
GLOUCESTER CITY, NEW JERSEY**

**FOR**

**GLOUCESTER CITY BOARD OF EDUCATION**

**January 25, 2023**

**UNDERWOOD ENGINEERING COMPANY**

U.E. Reference No.:5070-20209-1

W.O. #: 23-0442



# UNDERWOOD ENGINEERING COMPANY

## SOIL & FOUNDATION ENGINEERING

1 Keystone Avenue, Suite 300, Cherry Hill, NJ 08003

William R. Underwood, PE - President

Phone (856) 933-1818 Fax (856) 933-3123

---

1/25/2023

### Gloucester City Board of Education

520 Cumberland and Joy Streets  
Gloucester City, NJ 08030

RE : Geotechnical Engineering Report  
Proposed Industrial Arts Alteration  
Outdoor Work Area  
Gloucester City High School  
1300 Market Street  
Gloucester City, NJ

U.E. Reference No. :5070-20209-1

W.O. #: 23-0442

Sir/Madame:

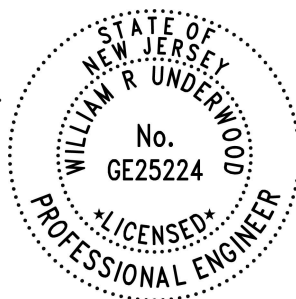
Underwood Engineering Company has been retained by Gloucester City Board of Education to perform a soil investigation, analysis and to make recommendations for the most suitable foundation system for the above referenced project. Presented herewith is the required information.

We appreciate the opportunity of working with you on this project. If we may be of further assistance, please do not hesitate to contact our office.

Respectfully submitted,  
Underwood Engineering Company



William R. Underwood, P.E.



## Table of Contents

|     |                                                                   |   |
|-----|-------------------------------------------------------------------|---|
| I   | SITE DESCRIPTION .....                                            | 1 |
| A.  | <u>Location</u> .....                                             | 1 |
| B.  | <u>Surface Conditions</u> .....                                   | 1 |
| C.  | <u>Site Plan</u> .....                                            | 1 |
| II  | PROJECT DESCRIPTION.....                                          | 1 |
| A.  | <u>Types of Structures</u> .....                                  | 1 |
| B.  | <u>Loads &amp; Spacings</u> .....                                 | 1 |
| III | FIELD INVESTIGATION & SUBSURFACE CONDITIONS .....                 | 2 |
| A.  | <u>Field Investigation</u> .....                                  | 2 |
| 1)  | <u>Borings</u> .....                                              | 2 |
| 2)  | <u>Water Table</u> .....                                          | 2 |
| IV  | RECOMMENDATIONS.....                                              | 3 |
| A.  | <u>Earthwork</u> .....                                            | 3 |
| 1)  | <u>Existing Topsoil &amp; Deleterious Materials</u> .....         | 3 |
| 2)  | <u>Proofrolling &amp; Densification</u> .....                     | 3 |
| 3)  | <u>Structural Fill Placement</u> .....                            | 3 |
| 4)  | <u>On Site Soils</u> .....                                        | 4 |
| 5)  | <u>Backfilling &amp; Densification of Load-Bearing Fill</u> ..... | 4 |
| 6)  | <u>Compaction</u> .....                                           | 4 |
| B.  | <u>Element Support</u> .....                                      | 5 |
| 1)  | <u>Type</u> .....                                                 | 5 |
| 2)  | <u>Allowable Bearing Values</u> .....                             | 5 |
| 3)  | <u>Settlements</u> .....                                          | 5 |
| C.  | <u>Lateral Earth Pressures</u> .....                              | 5 |
| D.  | <u>Paved Areas</u> .....                                          | 6 |
| 1)  | <u>Subgrade Preparation</u> .....                                 | 6 |
| 2)  | <u>Design Criteria</u> .....                                      | 6 |
| 3)  | <u>Stone Base Course</u> .....                                    | 6 |
| V   | INSPECTION .....                                                  | 6 |
| VI  | QUALIFICATIONS .....                                              | 6 |

Appendix A - Boring Location Plan

Appendix B - Boring Logs

Appendix C – Mechanical Sieve (Gradation) Analysis Results

Appendix D – General Soil Terms

Appendix E – Important Information about Your Geotechnical Engineering Report – ASFE

## **I SITE DESCRIPTION**

### **A. Location**

The building site is located at the north end of the existing Gloucester City High School facility at 1300 Market Street in Gloucester City, New Jersey.

### **B. Surface Conditions**

The proposed building area is primarily paved and generally flat.

### **C. Site Plan**

A site plan showing the locations of the proposed outdoor work area improvements was prepared by RYEBREAD Architects dated 4/5/2022, entitled “ED Spec and Egress Plan – Industrial Arts Alteration, Gloucester City High School, Block 222/Lot 6, 1300 Market Street, Gloucester City, NJ 08030”.

## **II PROJECT DESCRIPTION**

### **A. Types of Structures**

The project is to consist of the proposed installation of steel racking systems for lumber storage and a new ground-mounted dust collector and related appurtenances. It is assumed the new racking and collector base will be mounted in direct contact with asphalt paving.

### **B. Loads & Spacings**

Loads and spacings are anticipated to be typical for this type of construction, i.e., no extraordinary loads are anticipated.

### **III FIELD INVESTIGATION & SUBSURFACE CONDITIONS**

#### **A. Field Investigation**

##### **1) Borings**

The field investigation consisted of six (6) soil borings advanced to a depth of six (6) feet with standard penetration resistance per ASTM D-1586. The findings and locations are shown in Appendices A and B to include the Boring Location Plan and Soil Boring Logs.

The site soils encountered consisted generally of the following profile beneath five (5) to six (6) inches of asphalt:

##### **Zone 1 - SAND**

Loose to medium dense fine sands with trace to some silt. All of the test borings completed were terminated in granular Zone 1 soils at a depth of six (6) feet below the existing ground surface.

See attached Soil Boring Logs (Appendix B) for more detailed soil descriptions and profiles.

##### **2) Water Table**

The ground water table was encountered at a depth of six (6) feet below the surface as evidenced by direct observation and saturation of the soil samples.

It should be noted that the ground water data presented on the individual boring logs may not be representative of daily or seasonal variations in the ground water level.

#### IV RECOMMENDATIONS

##### A. Earthwork

##### 1) Existing Topsoil & Deleterious Materials

All existing topsoil / organic material, vegetation and all deleterious materials are to be removed from any new paved areas.

##### 2) Proofrolling & Densification

All exposed soil subgrade areas as well as any areas requiring structural fills are to be proofrolled with a vibratory compactor in the presence of the soil engineer to detect and repair unsuitable soil conditions and to attain a uniform firm subgrade throughout. Any loose soils encountered are to be densified by proofrolling and further compaction by additional passes if necessary. This is extremely important due to the presence of loose soils encountered.

##### 3) Structural Fill Placement

Bring existing grade up to the desired elevation with a granular type soil that complies with the following specifications or soils which are reviewed and approved by the soil engineer and compact it to within the specifications listed under **Compaction**, unless approved by the Soils Engineer.

| <u>SIEVE SIZE</u> | <u>Percent by Weight Passing Square Mesh Sieve</u> |
|-------------------|----------------------------------------------------|
| 2"                | 100                                                |
| 3/4"              | 70-100                                             |
| #4                | 30-80                                              |
| #50               | 10-35                                              |
| #200              | 5-12                                               |

It is strongly recommended that bulk samples of material to be used as load bearing structural fill be taken and tested prior to the commencement of work so that moisture / density relationships (compaction) can be determined.

4) On Site Soils

On site granular soils (Zone 1), as approved by the Soil Engineer, are suitable for use as structural load-bearing fill but will require strict moisture control due to the presence of fine grain materials. If on site soils are used as structural fill, they must be placed under favorable weather conditions and may require conditioning (i.e. aerated, moisture reducing applications) such that they are dried to within optimum moisture content ranges. This is extremely important in order to properly compact the soils as specified herein. If inclement weather is a factor, the onsite soils may be unsuitable, and provisions should be taken to import suitable structural fill materials.

5) Backfilling & Densification of Load-Bearing Fill

Soil subgrades may be brought up to desired elevation with approved structural fill in lifts no greater than ten (10) inches loose thickness and compacted to 95 % of the material's dry density per ASTM D-698 as illustrated below. Materials compacted by hand operated equipment shall be placed in lifts no greater than four (4) inches loose thickness.

6) Compaction

All backfill and fill materials should be compacted to the degree noted in the following table in accordance with ASTM D-698 latest standard.



| <u>Installation Areas</u> | <u>% Maximum Dry Density (ASTM D-698)</u> |
|---------------------------|-------------------------------------------|
| Pavements                 | 95%                                       |
| Site (Non-Load Bearing)   | 90%                                       |

B. Element Support

1) Type

Based on the information provided, racking systems and new dust collector system are to be mounted in direct contact with asphalt paving.

2) Allowable Bearing Values

Support elements for racking and dust collector systems may be designed for a maximum allowable bearing capacity of 2,000 Pounds per Square Foot provided that the requirements under **Earthwork** are adhered to strictly.

3) Settlements

Using the allowable bearing value and following the recommendations under **Earthwork** will keep total and differential settlements negligible.

C. Lateral Earth Pressures

The following values may be used for calculating lateral earth pressures. The below values assume level embankments.

**Zone 1 – SAND/Silt Mixtures**

Active Earth Pressure Coefficient,  $K_A = 0.333$

At Rest Earth Pressure Coefficient,  $K_R = 0.50$

Passive Earth Pressure Coefficient,  $K_P = 3.00$

Angle of internal friction ( $\phi$ ) = 30.0°

Unit Weight of Soil,  $\gamma = 120 \text{ lbs. / ft}^3$

Modulus of Subgrade Reaction (**k**) = 150 lbs./ft./ft.

**D. Paved Areas**

**1) Subgrade Preparation**

After the procedures as outlined under Proofrolling are completed, the subgrade should be compacted to 95% of the material's Maximum Dry Density (ASTM D-698). Prior to the installation of the bituminous base course the subgrade is to be proofrolled with a loaded ten-wheel dump truck in the presence of the soils engineer. This is extremely important and will be the primary criteria for subgrade acceptance. Any localized weak areas are to be repaired as required.

**2) Design Criteria**

In the design of pavements, a maximum CBR value of ten (10) should be used.

**3) Stone Base Course**

All new pavement areas are to be provided with at least a four (4) inch thick crushed stone or coarse gravel base course.

**V INSPECTION**

It is recommended that all earthwork operations be inspected full time by a qualified representative of the Soil Engineer, especially the proofrolling operations and exposed subgrades immediately prior to placement of new asphalt paving.

**VI QUALIFICATIONS**

Our recommendations are based on the subsurface conditions as revealed by the test borings, and on the assumptions outlined in the Project Description and Site Description sections of this report.

Our recommendations are also based on the assumption that the provisions for strict field inspection will be followed as outlined.

This report does not reflect any variations which may be encountered during construction.

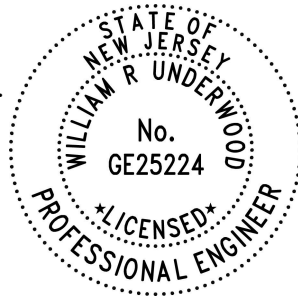
We should be informed immediately of such conditions so that we may modify our conclusions and recommendations, if necessary.

Underwood Engineering Company will not be responsible for variations in subsurface soils encountered in areas other than those tested.

Respectfully submitted,  
**Underwood Engineering Company**

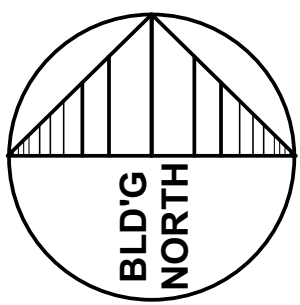


William R. Underwood, P.E.  
President



**Appendix A**  
**Boring Location Plan**







## **Appendix B**

### **Boring Logs**



CLIENT: Gloucester City Board of Education  
PROJECT: Gloucester City High School  
1300 Market Street  
Gloucester City, NJ

DATE: 1/16/2023

BORING No.: TB-1

# UNDERWOOD ENGINEERING COMPANY

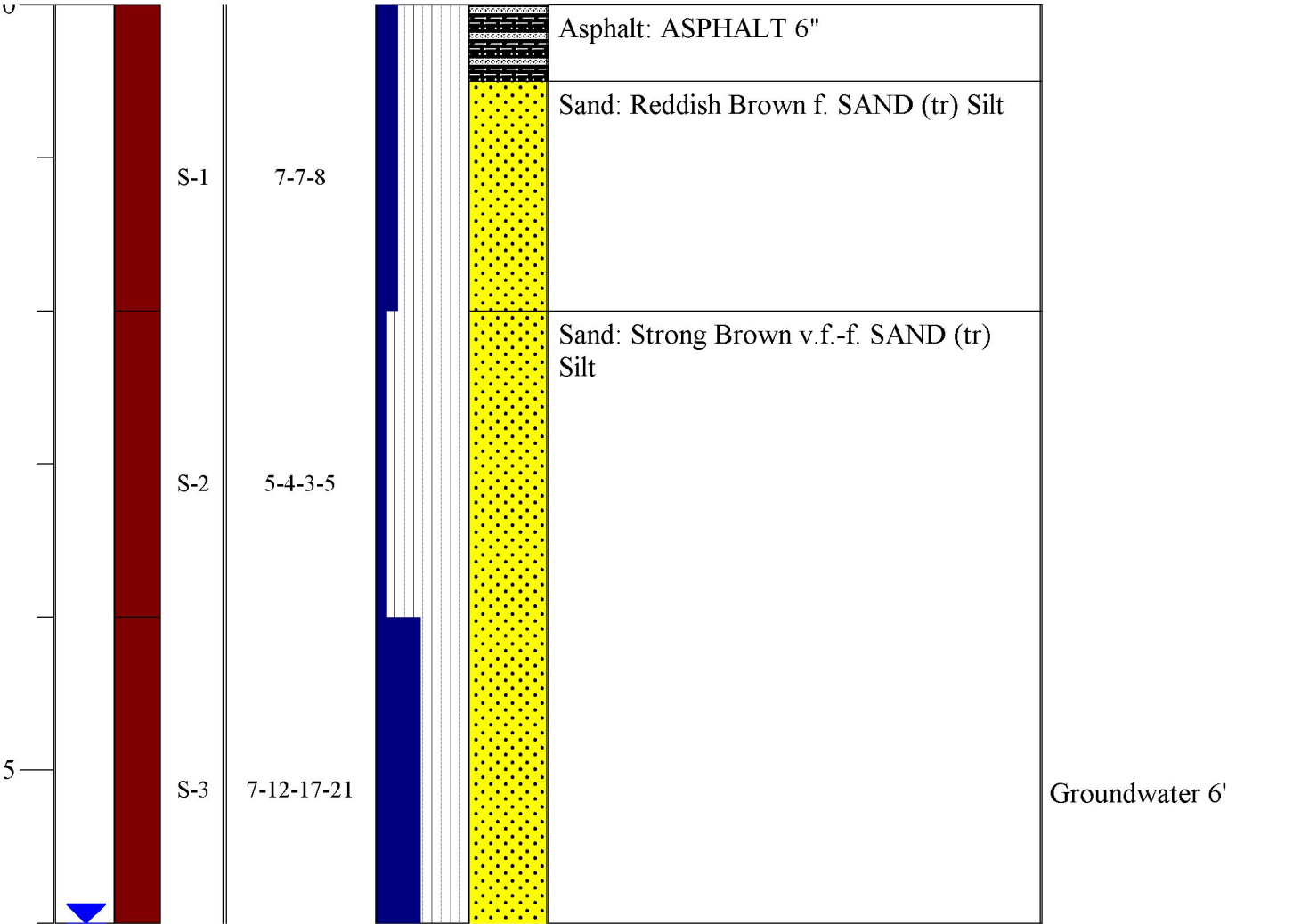
1 Keystone Avenue, Suite 300, Cherry Hill, NJ 08003  
Ph.# 856.933.1818 Fx.# 856.933.3121  
William R. Underwood, P.E., President

GROUND SURFACE ELEVATION: NA

| GROUNDWATER DATA |                             |
|------------------|-----------------------------|
| DEPTH            | Hours After Completion      |
| 6 ft             | Sample Saturated with Water |

| METHOD OF ADVANCING BORING    | DEPTH (FT.) |
|-------------------------------|-------------|
| CONTINUOUS SPLIT SPOON SAMPLE | 0 to 6 ft   |
| AUGERS                        | NA          |
| 2" O.D. SPLIT SPOON           | NA          |

| Depth (ft) | Groundwater | Sampling Interval | Sample # | Blows | N-Values | Lithology | Soil Description* | Notes: |
|------------|-------------|-------------------|----------|-------|----------|-----------|-------------------|--------|
|------------|-------------|-------------------|----------|-------|----------|-----------|-------------------|--------|



\*FIELD CLASSIFICATION ONLY. SOIL CLASSIFICATION FOR PARTICULAR USES SHOULD BE ASCERTAINED BY LABORATORY TESTS.

CLIENT: Gloucester City Board of Education  
PROJECT: Gloucester City High School  
1300 Market Street  
Gloucester City, NJ

DATE: 1/16/2023

BORING No.: TB-2

# UNDERWOOD ENGINEERING COMPANY

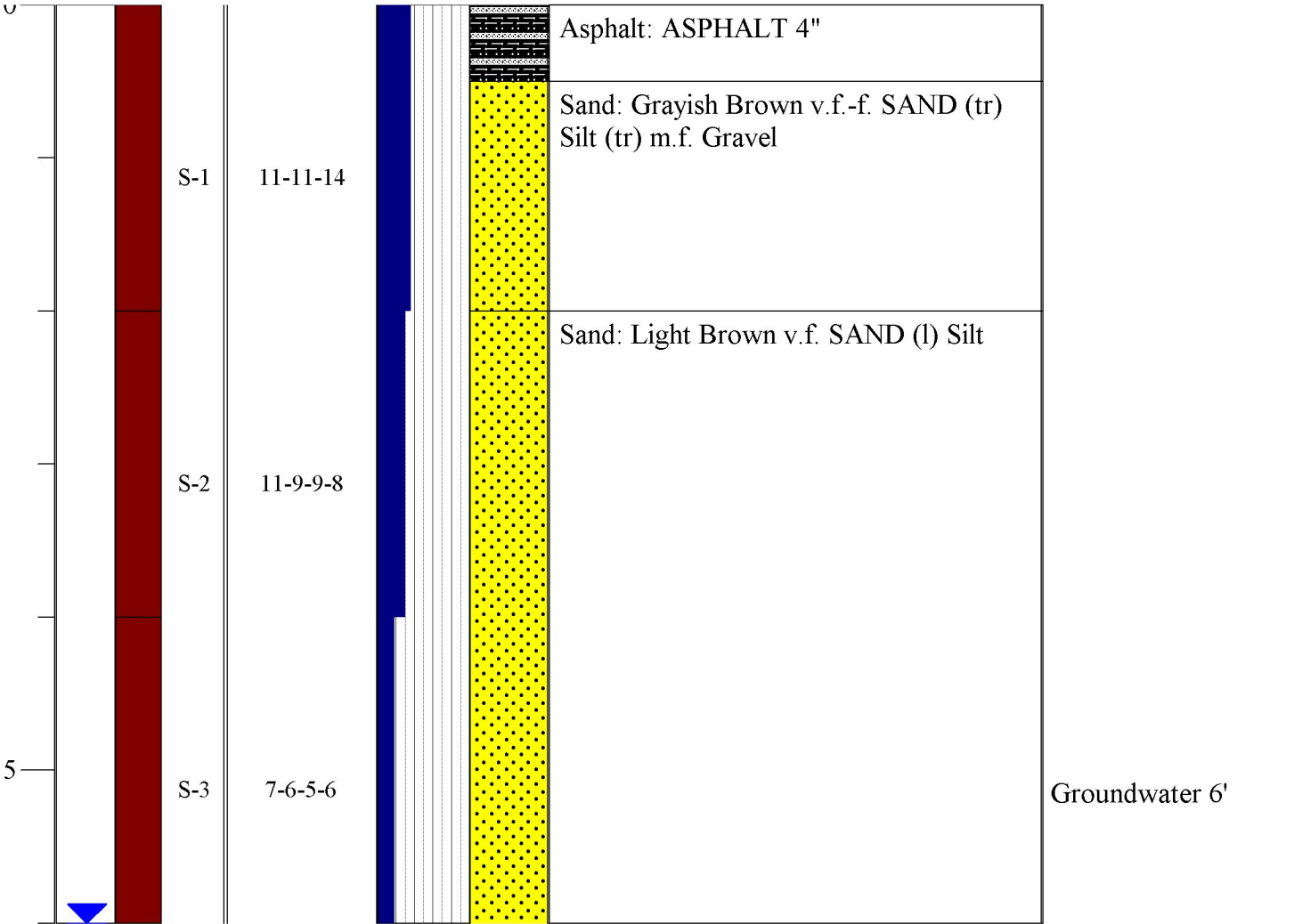
1 Keystone Avenue, Suite 300, Cherry Hill, NJ 08003  
Ph.# 856.933.1818 Fx.# 856.933.3121  
William R. Underwood, P.E., President

GROUND SURFACE ELEVATION: NA

| GROUNDWATER DATA |                                                                                                               |
|------------------|---------------------------------------------------------------------------------------------------------------|
| DEPTH            | Hours After Completion                                                                                        |
| 6 ft             |  Sample Saturated with Water |

| METHOD OF ADVANCING BORING    | DEPTH (FT.) |
|-------------------------------|-------------|
| CONTINUOUS SPLIT SPOON SAMPLE | 0 to 6 ft   |
| AUGERS                        | NA          |
| 2" O.D. SPLIT SPOON           | NA          |

| Depth (ft) | Groundwater | Sampling Interval | Sample # | Blows | N-Values | Lithology | Soil Description* | Notes: |
|------------|-------------|-------------------|----------|-------|----------|-----------|-------------------|--------|
|------------|-------------|-------------------|----------|-------|----------|-----------|-------------------|--------|



\*FIELD CLASSIFICATION ONLY. SOIL CLASSIFICATION FOR PARTICULAR USES SHOULD BE ASCERTAINED BY LABORATORY TESTS.

CLIENT: Gloucester City Board of Education  
PROJECT: Gloucester City High School  
1300 Market Street  
Gloucester City, NJ

DATE: 1/16/2023

BORING No.: TB-3

# UNDERWOOD ENGINEERING COMPANY

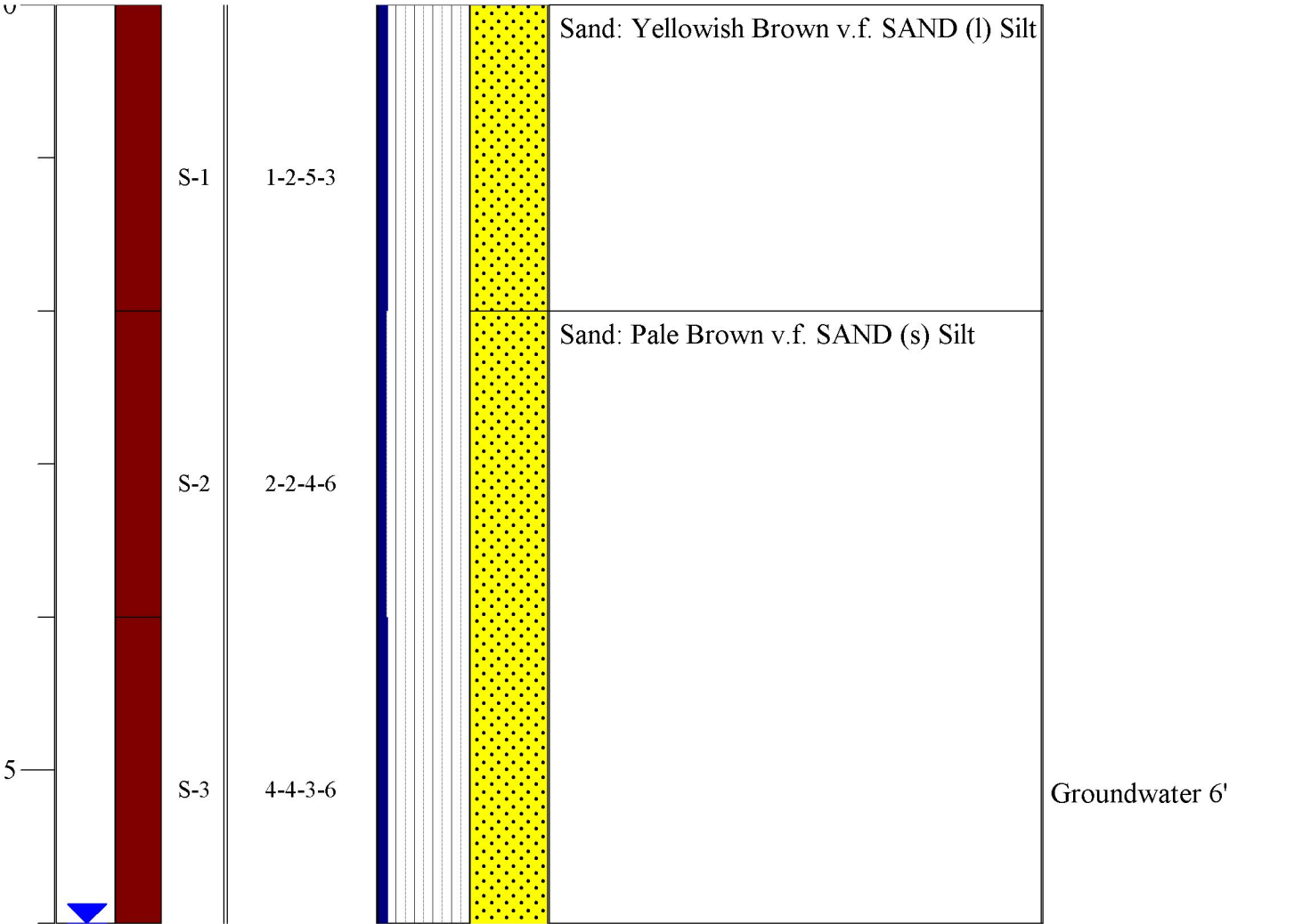
1 Keystone Avenue, Suite 300, Cherry Hill, NJ 08003  
Ph.# 856.933.1818 Fx.# 856.933.3121  
William R. Underwood, P.E., President

GROUND SURFACE ELEVATION: NA

| GROUNDWATER DATA |                             |
|------------------|-----------------------------|
| DEPTH            | Hours After Completion      |
| 6 ft             | Sample Saturated with Water |

| METHOD OF ADVANCING BORING    | DEPTH (FT.) |
|-------------------------------|-------------|
| CONTINUOUS SPLIT SPOON SAMPLE | 0 to 6 ft   |
| AUGERS                        | NA          |
| 2" O.D. SPLIT SPOON           | NA          |

| Depth (ft) | Groundwater | Sampling Interval | Sample # | Blows | N-Values | Lithology | Soil Description* | Notes: |
|------------|-------------|-------------------|----------|-------|----------|-----------|-------------------|--------|
|------------|-------------|-------------------|----------|-------|----------|-----------|-------------------|--------|



\*FIELD CLASSIFICATION ONLY. SOIL CLASSIFICATION FOR PARTICULAR USES SHOULD BE ASCERTAINED BY LABORATORY TESTS.

CLIENT: Gloucester City Board of Education  
PROJECT: Gloucester City High School  
1300 Market Street  
Gloucester City, NJ

DATE: 1/16/2023

BORING No.: TB-4

# UNDERWOOD ENGINEERING COMPANY

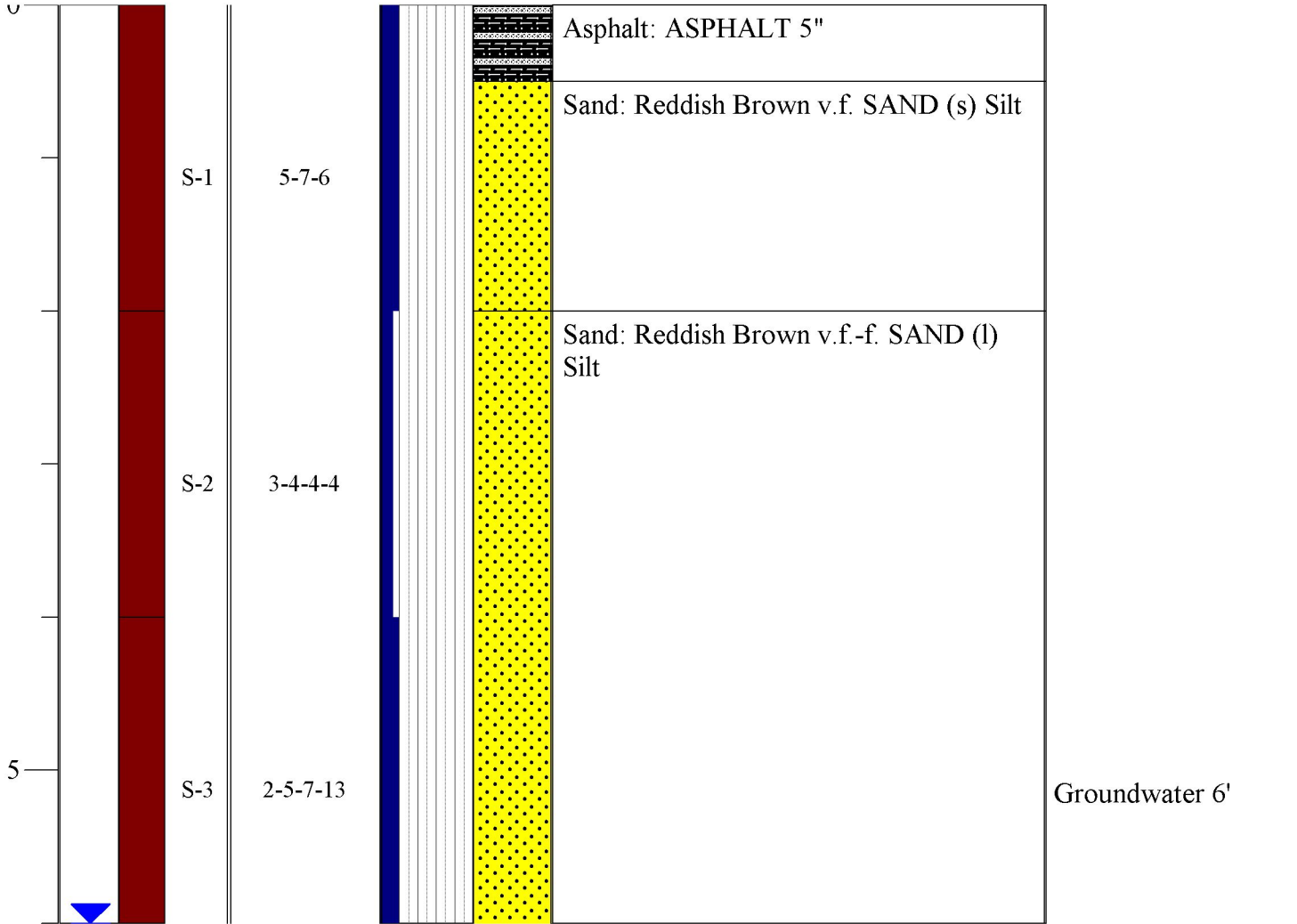
1 Keystone Avenue, Suite 300, Cherry Hill, NJ 08003  
Ph.# 856.933.1818 Fx.# 856.933.3121  
William R. Underwood, P.E., President

GROUND SURFACE ELEVATION: NA

| GROUNDWATER DATA |                                                                                                               |
|------------------|---------------------------------------------------------------------------------------------------------------|
| DEPTH            | Hours After Completion                                                                                        |
| 6 ft             |  Sample Saturated with Water |

| METHOD OF ADVANCING BORING    | DEPTH (FT.) |
|-------------------------------|-------------|
| CONTINUOUS SPLIT SPOON SAMPLE | 0 to 6 ft   |
| AUGERS                        | NA          |
| 2" O.D. SPLIT SPOON           | NA          |

| Depth (ft) | Groundwater | Sampling Interval | Sample # | Blows | N-Values | Lithology | Soil Description* | Notes: |
|------------|-------------|-------------------|----------|-------|----------|-----------|-------------------|--------|
|------------|-------------|-------------------|----------|-------|----------|-----------|-------------------|--------|



\*FIELD CLASSIFICATION ONLY. SOIL CLASSIFICATION FOR PARTICULAR USES SHOULD BE ASCERTAINED BY LABORATORY TESTS.

CLIENT: Gloucester City Board of Education  
PROJECT: Gloucester City High School  
1300 Market Street  
Gloucester City, NJ

DATE: 1/16/2023

BORING No.: TB-5

# UNDERWOOD ENGINEERING COMPANY

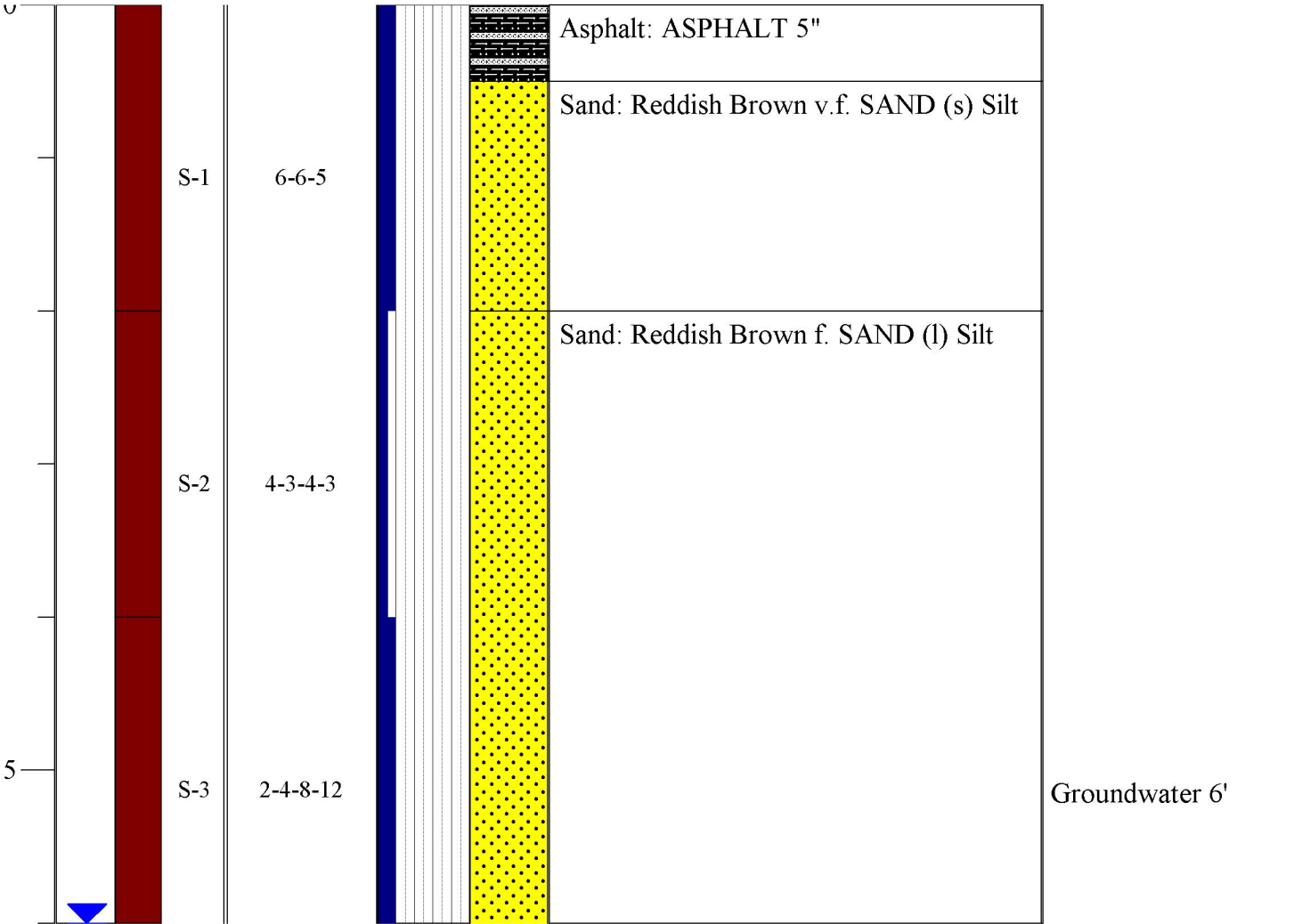
1 Keystone Avenue, Suite 300, Cherry Hill, NJ 08003  
Ph.# 856.933.1818 Fx.# 856.933.3121  
William R. Underwood, P.E., President

GROUND SURFACE ELEVATION: NA

| GROUNDWATER DATA |                                                                                                               |
|------------------|---------------------------------------------------------------------------------------------------------------|
| DEPTH            | Hours After Completion                                                                                        |
| 6 ft             |  Sample Saturated with Water |

| METHOD OF ADVANCING BORING    | DEPTH (FT.) |
|-------------------------------|-------------|
| CONTINUOUS SPLIT SPOON SAMPLE | 0 to 6 ft   |
| AUGERS                        | NA          |
| 2" O.D. SPLIT SPOON           | NA          |

| Depth (ft) | Groundwater | Sampling Interval | Sample # | Blows | N-Values | Lithology | Soil Description* | Notes: |
|------------|-------------|-------------------|----------|-------|----------|-----------|-------------------|--------|
|------------|-------------|-------------------|----------|-------|----------|-----------|-------------------|--------|



\*FIELD CLASSIFICATION ONLY. SOIL CLASSIFICATION FOR PARTICULAR USES SHOULD BE ASCERTAINED BY LABORATORY TESTS.

CLIENT: Gloucester City Board of Education  
PROJECT: Gloucester City High School  
1300 Market Street  
Gloucester City, NJ

DATE: 1/16/2023

BORING No.: TB-6

# UNDERWOOD ENGINEERING COMPANY

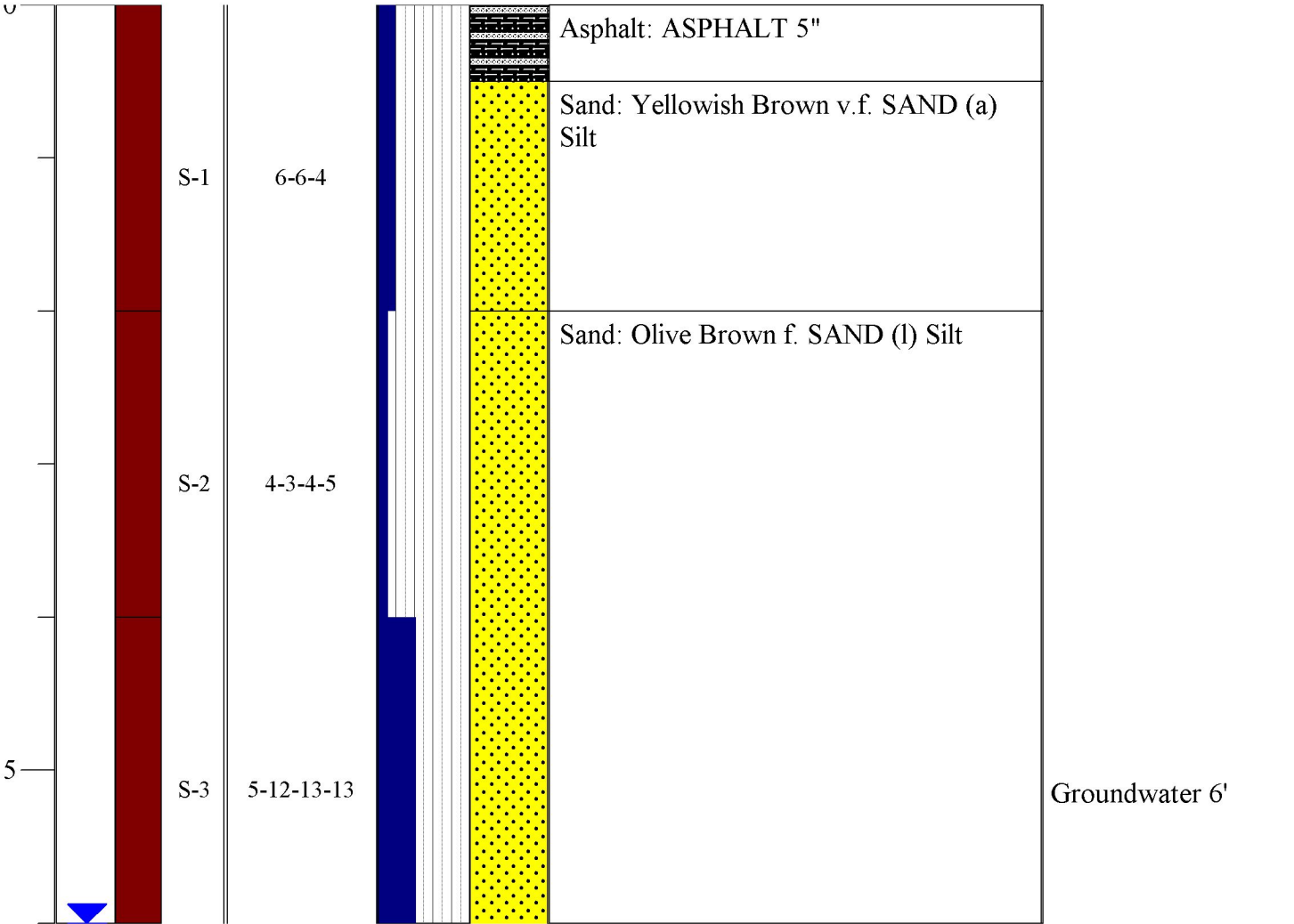
1 Keystone Avenue, Suite 300, Cherry Hill, NJ 08003  
Ph.# 856.933.1818 Fx.# 856.933.3121  
William R. Underwood, P.E., President

GROUND SURFACE ELEVATION: NA

| GROUNDWATER DATA |                                                                                                               |
|------------------|---------------------------------------------------------------------------------------------------------------|
| DEPTH            | Hours After Completion                                                                                        |
| 6 ft             |  Sample Saturated with Water |

| METHOD OF ADVANCING BORING    | DEPTH (FT.) |
|-------------------------------|-------------|
| CONTINUOUS SPLIT SPOON SAMPLE | 0 to 6 ft   |
| AUGERS                        | NA          |
| 2" O.D. SPLIT SPOON           | NA          |

| Depth (ft) | Groundwater | Sampling Interval | Sample # | Blows | N-Values | Lithology | Soil Description* | Notes: |
|------------|-------------|-------------------|----------|-------|----------|-----------|-------------------|--------|
|------------|-------------|-------------------|----------|-------|----------|-----------|-------------------|--------|



\*FIELD CLASSIFICATION ONLY. SOIL CLASSIFICATION FOR PARTICULAR USES SHOULD BE ASCERTAINED BY LABORATORY TESTS.

**Appendix C**  
**Mechanical Sieve (Gradation) Analysis Results**





Underwood Engineering, Inc.  
1 Keystone Ave, Suite 300  
Cherry Hill, New Jersey 08003  
(856) 933-1818

Mailing: PO Box 3520, Cherry Hill, NJ 08034

# Material Test Report

Report No: MAT:23-0529-S01

Issue No: 1

Client: Gloucester City BOE

CC:

Project: Gloucester City HS  
1300 Market Street, Gloucester City, NJ

This report is based on the visual and physical inspection described below. The inspections, laboratory tests and subsequent results are based on a representative sample of the overall project. Inspection by Underwood Engineering, Inc. in no way releases the contractor or sub-contractor of full responsibility of meeting contract documents, plans, specifications, shop drawings and standard in the industry. No other warranty is expressed or implied. No conclusions should be drawn from this report other than those specifically stated.



Submitted By:  
Date of Issue:

William R. Underwood, P.E.  
1/30/2023

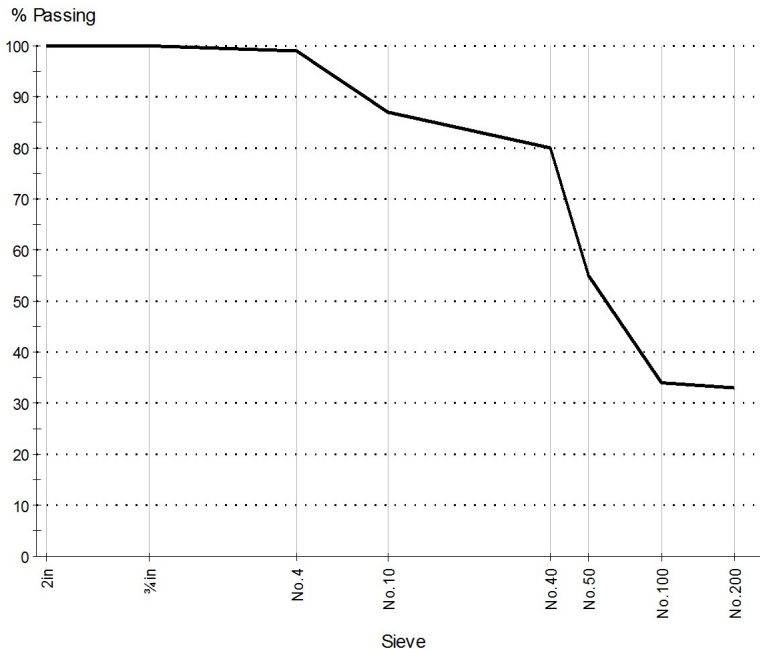
## Sample Details

Sample ID 23-0529-S01  
Date Sampled 1/16/2023  
Source Soil Boring  
Material c.f. SAND, (a) Silt and Clay, (l) f. Gravel  
Specification I-5 plus No. 100 Sieve  
Location TB-3 At 4-6'

## Other Test Results

| Description       | Method      | Result          | Limits |
|-------------------|-------------|-----------------|--------|
| Water Content (%) | ASTM D 2216 | 22.2            |        |
| Method            |             | B               |        |
| Tested By         |             | Caitlynn Brevik |        |
| Date Tested       |             | 1/30/2023       |        |

## Particle Size Distribution



Method: AASHTO T 27, AASHTO T 11

Date Tested: 1/30/2023

Tested By: Caitlynn Brevik

| Sieve Size | % Passing | Limits |
|------------|-----------|--------|
| 2in        | 100       |        |
| 3/4in      | 100       |        |
| No. 4      | 99        |        |
| No. 10     | 87        |        |
| No. 40     | 80        |        |
| No. 50     | 55        |        |
| No. 100    | 34        |        |
| No. 200    | 33        |        |

## Comments

c.f. SAND, (a) Silt and Clay, (l) f. Gravel



Underwood Engineering, Inc.  
1 Keystone Ave, Suite 300  
Cherry Hill, New Jersey 08003  
(856) 933-1818

Mailing: PO Box 3520, Cherry Hill, NJ 08034

# Material Test Report

Report No: MAT:23-0529-S02

Issue No: 1

Client: Gloucester City BOE

CC:

Project: Gloucester City HS  
1300 Market Street, Gloucester City, NJ

This report is based on the visual and physical inspection described below. The inspections, laboratory tests and subsequent results are based on a representative sample of the overall project. Inspection by Underwood Engineering, Inc. in no way releases the contractor or sub-contractor of full responsibility of meeting contract documents, plans, specifications, shop drawings and standard in the industry. No other warranty is expressed or implied. No conclusions should be drawn from this report other than those specifically stated.



Submitted By:  
Date of Issue:

William R. Underwood, P.E.  
1/30/2023

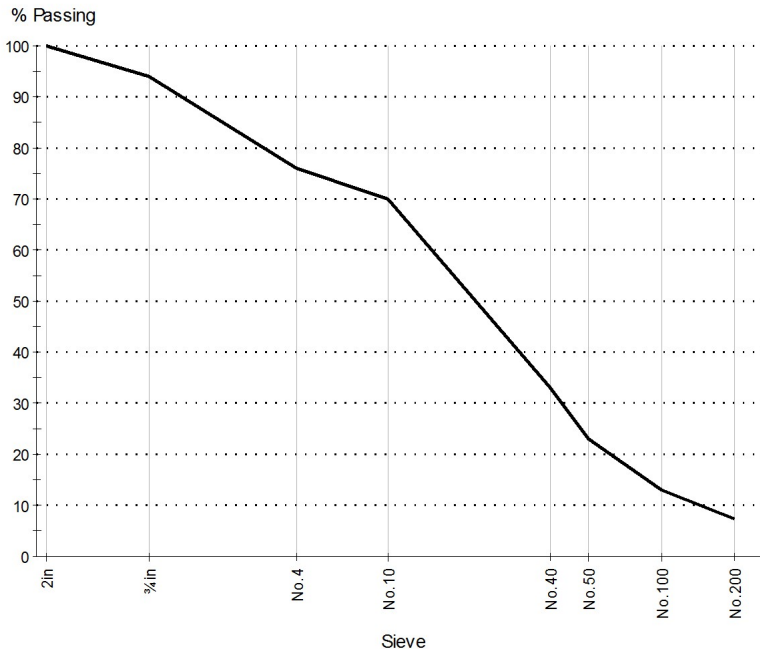
## Sample Details

Sample ID 23-0529-S02  
Date Sampled 1/16/2023  
Source Soil Boring  
Material c.f. SAND, (s) m.f. Gravel, (tr) Silt & Clay  
Specification I-5 plus No. 100 Sieve  
Location TB-4 At 4-6'

## Other Test Results

| Description       | Method      | Result          | Limits |
|-------------------|-------------|-----------------|--------|
| Water Content (%) | ASTM D 2216 | 11.6            |        |
| Method            |             | B               |        |
| Tested By         |             | Caitlynn Brevik |        |
| Date Tested       |             | 1/30/2023       |        |

## Particle Size Distribution



Method: AASHTO T 27, AASHTO T 11

Date Tested: 1/30/2023

Tested By: Caitlynn Brevik

| Sieve Size | % Passing | Limits |
|------------|-----------|--------|
| 2in        | 100       |        |
| 3/4in      | 94        |        |
| No. 4      | 76        |        |
| No. 10     | 70        |        |
| No. 40     | 33        |        |
| No. 50     | 23        |        |
| No. 100    | 13        |        |
| No. 200    | 7.5       |        |

## Comments

c.f. SAND, (s) m.f. Gravel, (tr) Silt & Clay



Underwood Engineering, Inc.  
1 Keystone Ave, Suite 300  
Cherry Hill, New Jersey 08003  
(856) 933-1818

Mailing: PO Box 3520, Cherry Hill, NJ 08034

# Material Test Report

Report No: MAT:23-0529-S03

Issue No: 1

Client: Gloucester City BOE

CC:

Project: Gloucester City HS  
1300 Market Street, Gloucester City, NJ

This report is based on the visual and physical inspection described below. The inspections, laboratory tests and subsequent results are based on a representative sample of the overall project. Inspection by Underwood Engineering, Inc. in no way releases the contractor or sub-contractor of full responsibility of meeting contract documents, plans, specifications, shop drawings and standard in the industry. No other warranty is expressed or implied. No conclusions should be drawn from this report other than those specifically stated.



Submitted By:  
Date of Issue:

William R. Underwood, P.E.  
1/30/2023

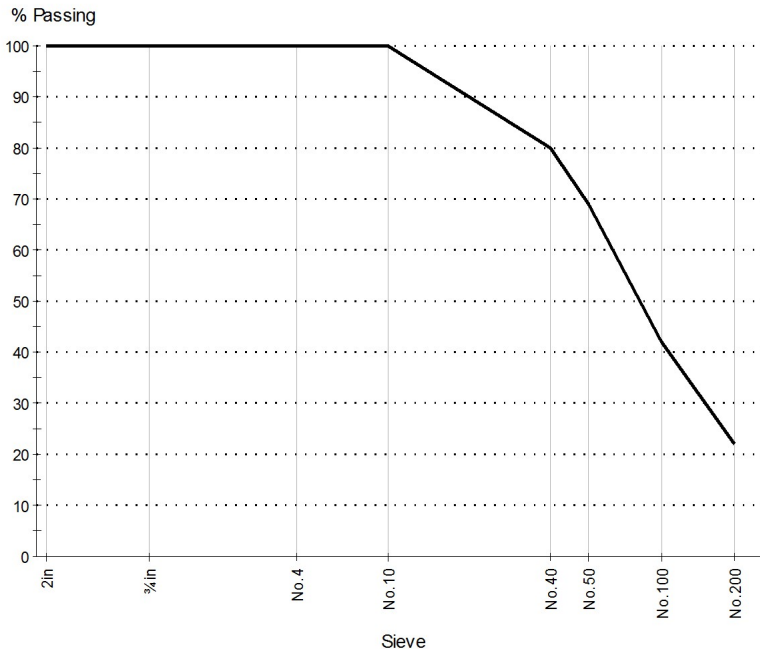
## Sample Details

Sample ID 23-0529-S03  
Date Sampled 1/16/2023  
Source Soil Boring  
Material m.f. SAND, (I) Silt and Clay  
Specification I-5 plus No. 100 Sieve  
Location TB-6 At 2-4'

## Other Test Results

| Description       | Method          | Result | Limits |
|-------------------|-----------------|--------|--------|
| Water Content (%) | ASTM D 2216     | 16.4   |        |
| Method            |                 | B      |        |
| Tested By         | Caitlynn Brevik |        |        |
| Date Tested       | 1/30/2023       |        |        |

## Particle Size Distribution



Method: AASHTO T 27, AASHTO T 11

Date Tested: 1/30/2023

Tested By: Caitlynn Brevik

| Sieve Size | % Passing | Limits |
|------------|-----------|--------|
| 2in        | 100       |        |
| 3/4in      | 100       |        |
| No. 4      | 100       |        |
| No. 10     | 100       |        |
| No. 40     | 80        |        |
| No. 50     | 69        |        |
| No. 100    | 42        |        |
| No. 200    | 22        |        |

## Comments

m.f. SAND, (I) Silt and Clay

**Appendix D**  
**General Soil Terms**

#### General Soil Terms

| Particle Sizes |                                                     | Classifications                                                                                                                                                          |
|----------------|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Boulders       | Greater than 2 inches (305mm)                       | The major soil constituent is the principal noun, i.e. clay, silt, sand, gravel. The second major soil constituent and other minor constituents are reported as follows: |
| Cobbles        | 3 inches (76.233) to 12 inches (305mm)              |                                                                                                                                                                          |
| Gravel-coarse  | 3/4 inches (19.05mm) to 3 inches (76.2mm)           |                                                                                                                                                                          |
| Gravel-fine    | No. 4- 3/16 inches (4 75mm) to 3/4 inches (19.05mm) |                                                                                                                                                                          |
| Sand-coarse    | No. 10 (2.00mm) to No. 4 (4 75mm)                   | Second Major Constituent-Minor Constituents<br>(Percentage by weight)                                                                                                    |
| Sand-medium    | No. 40 (0.425mm) to No. 10 (2.00.)                  |                                                                                                                                                                          |
| Sand-fine      | No. 200 (0.075mm) to No. 40 (0.425mm)               |                                                                                                                                                                          |
| Silt           | 0.005mm to 0.074mm                                  |                                                                                                                                                                          |
| Clay           | Less than 0.005mm                                   | Trace – 1 to 12%      Trace – 1 to 12%<br>Adjective – 12 to 35%      Little – 12 to 23<br>(clayey, silty, etc.)<br><br>Some – 23 to 33%<br>And – Over 35%                |

#### Cohesive Soils

If clay content is sufficient so that clay dominates soil properties, clay becomes the principal noun with other major soil constituent as modifier: i.e. silty clay. Other minor soil constituents may be included in accordance with the classification breakdown for cohesionless soils: i.e. silty clay, trace of sand, little gravel

#### Unconfined Compressive Strength (psf)

| Consistency | Approximate Range of (N) |         |
|-------------|--------------------------|---------|
| Very Soft   | Below 500                | 0-2     |
| Soft        | 500-1000                 | 3-4     |
| Medium      | 1000-2000                | 5-8     |
| Stiff       | 2000-4000                | 9-15    |
| Very Stiff  | 4000-8000                | 16-30   |
| Hard        | 8000-16000               | 31-50   |
| Very Hard   | Over 16000               | Over 50 |

Consistency of cohesive soils is based upon an evaluation of the observed resistance to deformation under load and not upon Standard Penetration Resistance (N)

#### Cohesionless Soils

| Density Classification | Relative Density | Approximate Range of (N) |
|------------------------|------------------|--------------------------|
| Very Loose             | 0-15             | 0-4                      |
| Loose                  | 16-35            | 5-10                     |
| Medium Compact         | 36-65            | 11-30                    |
| Compact                | 66-85            | 31-50                    |
| Very Compact           | 86-100           | Over 50                  |

Relative Density of Cohesionless Soils is based upon the evaluation of the Standard Penetration Resistance (N), modified as required for depth effects, sampling effects, etc.

Standard Penetration Test (ASTM D 1586) – A 2.0" outside-diameter split barrel sampler is driven into undisturbed soil by means of a 140-pound weight falling freely through a vertical distance of 30 inches. The sampler is normally driven three successive 6-inch increments. The total number of blows required for the final 12 inches of penetration is the Standard Penetration Resistance (N).

**Appendix E**  
**Important Information about Your Geotechnical Engineering Report-ASFE**

## **GEOTECHNICAL SERVICES ARE PERFORMED FOR SPECIFIC PURPOSES, PERSONS, AND PROJECTS**

#

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared solely to the client. No one except you should rely on your geotechnical engineering report without first conferring with the GEOTECHNICAL engineer who prepared it. And no one—not even you should apply the report for any purpose or project except the one originally contemplated.

## **A GEOTECHNICAL ENGINEERING REPORT IS BASES ON A UNIQUE SET OF PROJECT-SPECIFIC FACTORS**

Geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and the other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on geotechnical engineering report that was:

- \*not prepared for you,
- \*not prepared for your project,
- \*not prepared for the specific site explored, or
- \*completed before important project changes were made

Typical changes that can erode the reliability of an existing geotechnical engineering report include those that affect:

- \*the function of the proposed structure, as when its changed from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse
- \*elevation, configuration, location, orientation, or weight off the proposed structure,
- \*composition of the design team, or
- \*project ownership

As general rule, always inform your geotechnical engineer of project changes—even minor ones—and request an assessment of their impact. Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.

## **SUBSURFACE CONDITIONS CAN CHANGE**

A geotechnical engineering report is bases on conditions that existed at the time the study was performed. Do not rely on a geotechnical engineering report whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods earthquakes, or groundwater fluctuations. Always contact the geotechnical engineer before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.



## **MOST GEOTECHNICAL FINDINGS ARE PROFESSIONAL OPINIONS**

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ—sometimes significantly—from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide construction observation is the most effective method of managing the risks associated with unanticipated conditions.

## **A REPORT'S RECOMMENDATIONS ARE NOT FINAL**

Do not over rely on the construction recommendations included in your report. Those recommendations are not final, because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations only by observing actual conditions revealed during construction. The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's recommendations if that engineer does not perform construction observation.

## **A GEOTECHNICAL ENGINEERING REPORT IS SUBJECT TO MISINTERPRETATION**

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Lower that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer review pertinent elements of the design team's plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing construction observation.

## **DO NOT REDRAW THE ENGINEER'S LOGS**

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should never be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, but recognize that separating logs from the report can elevate risk.

## **GIVE CONTRACTORS A COMPLETE REPORT AND GUIDANCE**

#

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, but preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer.

A prebid conference can also be valuable. Be sure contractors have sufficient time to perform additional studies. Only then might you be in a position to give contractors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

#

#### **READ RESPONSIBILITY PROVISIONS CLOSELY**

#

Some clients, design professionals, and contractors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that have led to disappointments, claims, and disputes. To help reduce such risks, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled “limitations”, many of these provisions indicate where geotechnical engineers’ responsibilities begin and end, to help others recognize their own responsibilities and risks. Read these provisions closely. Ask questions. Your geotechnical engineer should respond fully and frankly.

#### **GEOENVIRONMENTAL CONCERNS ARE NOT COVERED**

The equipment, techniques and personnel used to perform a geoenvironmental study differ significantly from those used to perform a geotechnical study. For that reason, a geotechnical engineering report does not usually relate any geoenvironmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. Unanticipated environmental problems have led to numerous project failures. If you have not yet obtained your own geoenvironmental information, ask your geotechnical consultant for risk management guidance. Do not rely on an environmental report prepared for someone else.

Laguna Texas  
744 Refuge Way  
Suite 200  
Grand Prairie TX 75050  
US  
Phone: 949-474-1200 or 800-234-1976  
www.lagunatools.com  
Tax ID #93-1083116

## Customer Details:

Gerald Roch III  
Gloucester City High School-NJ  
1300 Market Street  
Gloucester City NJ 08030

## Ship To

Gerald Roch III  
Gloucester City High School-NJ  
1300 Market Street  
Gloucester City NJ 08030

# Quote

Page 1 of 3

**Date:** 9/9/2022

**Quote #** 93402

**Expires:** 10/24/2022

**Sales Rep:** Gerald Goodman

**Terms:** Net 30

**Ship Via:** Best Method

**Promise Date:**

**Quote Ship to:** Gerald Roch III  
Gloucester City High School-NJ  
1300 Market Street  
Gloucester City NJ 08030

| Quantity | Item                                                                | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Rate | Amount |
|----------|---------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------|
|          | TAX will be added at point of sale                                  | TAX WILL BE ADDED AT POINT OF SALE based on your city, county and state.<br>PLEASE PROVIDE TAX EXEMPT FORM IF APPLICABLE<br>Some jurisdictions may offer manufacturing tax exemptions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |      |        |
| 1        | 15HP DELTA MS300 VFD, INVERTER High Frequency (0-1500Hz)            | 15HP DELTA VFD,INVERTER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |        |
| 1        | MCNC SS2-2 4X8 SYNTEC SS2-2 4X8 SmartShop II with Syntec controller | WIRE FOR SINGLE PHASE 220<br>LAGUNA HSD SMARTSHOP 4 X 8 CNC ROUTER (MCNC SS 48X96 ATC, SYNTEC )<br>4' X 8' CUTTING AREA<br>12 HP HSD ISO-30 ATC ELECTROSPINDLE (CERAMIC BEARINGS), 208-230V, 3 PHASE (24,000RPM)<br>EIGHT (8) POSITION AUTOMATIC TOOL CHANGER (4 TOOL HOLDERS INCLUDED)<br>TOOL CONE HOLDER - FOR EASY BIT CHANGING<br>4' X 8' (PHENOLIC) - UNIVERSAL GRID-TYPE<br>VACUUM TABLE WITH T-SLOT FEATURE<br>SIX (6) INDEPENDENTLY CONTROLLED VACUUM ZONES<br><br>LAGUNA SMARTSHOP DRIVE SYSTEM (PLUG-AND-PLAY MOTOR REPLACEMENT):<br>- X AXIS - HELICAL RACK-AND-PINION<br>- Y AXIS - DUAL HELICAL RACK-AND-PINION (DRIVES ON EACH END OF GANTRY)<br>- Z AXIS - PRECISION GROUND BALL SCREW<br>PROGRAMMABLE DUST HOOD WITH M-CODE<br>DRIVEN RETRACTION<br>E-STOP<br>LIMIT SWITCHES ON ALL AXES WITH SOFT LIMITS<br>RIGID, ALL-WELDED, STRUCTURAL STEEL FRAME (MACHINE WEIGHT 3500 LBS.)<br>SYNTEC FC SERIES CONTROLLER<br><br>ONE-YEAR WARRANTY - PARTS |      |        |
| 1        | CNC Support Kit - SS2-2 SYNTEC HSD 12HP ATC                         | CNC Support Kit - SS2-2 SYNTEC HSD 12HP ATC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |      |        |
| 1        | VCarve Pro VCarve Pro                                               | VCarve Pro<br>(ALL SOFTWARE SALES ARE FINAL)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |      |        |

Laguna Texas  
744 Refuge Way  
Suite 200  
Grand Prairie TX 75050  
US  
Phone: 949-474-1200 or 800-234-1976  
www.lagunatools.com  
Tax ID #93-1083116

## Quote

Page 2 of 3

**Date:** 9/9/2022

**Quote #** 93402

| Quantity | Item                                                                                                                 | Description                                                                                                                                                                                                                                                                                                                                                                                                                                             | Rate | Amount |
|----------|----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------|
| 1        | Tooling Kit - SmartShop II, SUV, III<br>Tooling Kit - SmartShop II, SUV, III                                         | Tooling Kit - SmartShop II, SUV, III<br><br>1 - 1-1/2" straight bit<br>2 - 1/4" down shear spiral<br>2 - 3/8" down shear spiral<br>1 - 90 degree v-bit<br>2 - 1/4" compression bits<br>2 - 3/8" compression bits<br>2 - 1/4" ER32 collets<br>2 - 3/8" ER32 collets<br>1 - 10mm ER32 collet<br>3 - 1/2" ER32 collet<br>2 - 5mm drill bits                                                                                                                |      |        |
| 1        | 10HP VACUUM Pump 10HP<br>Vacuum Pump SS25-6" - 285 cfm                                                               | 10HP STOCK Regenerative Blower Vacuum Pump<br>220 VAC, 3 PHASE 5-6" - 285 cfm<br>Includes filter housing, filter fitting                                                                                                                                                                                                                                                                                                                                |      |        |
| 1        | CNC Installation - 2 days For new<br>machine sales CNC<br>Installation-2days                                         | CNC Installation/Training - 2days, For new machine<br>sales.                                                                                                                                                                                                                                                                                                                                                                                            |      |        |
|          | CSA Inspection note                                                                                                  | CSA Prep, Inspection and Certification Available at<br>\$1795<br>Certain regions require CSA Certification.<br>It is the buyer's responsibility to determine whether<br>CSA is required in their area or for their installation.                                                                                                                                                                                                                        |      |        |
|          | CNC Shipping Note                                                                                                    | Important Message - CNC, Plasma, Laser and other<br>large industrial machinery ships via flatbed air-ride<br>trailers. The receiver (customer) is required to have a<br>forklift with 72 inch forks or schedule a rigging<br>company to offload their machine upon arrival.                                                                                                                                                                             |      |        |
| 1        | MCNC LTL CO2 MX 2436 100W<br>MCNC LTL CO2 MX 2436 100W                                                               | Laguna MX 24x36 100W CO2 Laser<br><br>Reci Laser Tube 100W<br>Table Dimensions 36 x 24<br>Dimensions: 55L x 53.5W x 42"<br>Lift Table: Up to 7<br>Honeycomb Table Included<br>Knife Table Included<br>Water Chiller Included<br>WiFi Enabled<br>Weight 760 lbs<br>Front & Rear Pass-through<br>HiWin Linear Guide Rails<br>Auto Focusing Laser Head<br>American Photonics Optics<br>Japanese Electronic Components<br>Auxiliary Exhaust Fan & Dust Port |      |        |
| 1        | LightBurn Software LightBurn<br>Software                                                                             | LightBurn Software                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |        |
| 1        | LagunaRotoBoss Rotary                                                                                                | RotoBoss Rotary for EX & MX                                                                                                                                                                                                                                                                                                                                                                                                                             |      |        |
| 1        | Laser Training - PC to PC -<br>Software and Installation Laser<br>Training - PC to PC - Software and<br>Installation | OPTIONAL:<br>Laser Training - PC to PC - Software and Installation -<br>Comprehensive Set Up - Preventative Maintenance                                                                                                                                                                                                                                                                                                                                 |      |        |

Laguna Texas  
 744 Refuge Way  
 Suite 200  
 Grand Prairie TX 75050  
 US  
 Phone: 949-474-1200 or 800-234-1976  
 www.lagunatools.com  
 Tax ID #93-1083116

## Quote

Page 3 of 3

**Date:** 9/9/2022

**Quote #** 93402

| Quantity | Item                                                     | Description                                                                                                                                                                                                                                                     | Rate | Amount |
|----------|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------|
| 1        | ACNC Fume Extractor-800-2 L <br>Flux 800i Fume Extractor | Voltage: 120v<br>Wattage: 2.4kw<br>Frequency: 50Hz/60Hz<br>Sound Level: 60dBa<br>Airflow: 800m3/h<br><br>Includes: Filters                                                                                                                                      |      |        |
|          | CSA Inspection note                                      | CSA Prep, Inspection and Certification Available at \$1795<br>Certain regions require CSA Certification.<br>It is the buyer's responsibility to determine whether CSA is required in their area or for their installation.                                      |      |        |
|          | CNC Shipping Note                                        | Important Message - CNC, Plasma, Laser and other large industrial machinery ships via flatbed air-ride trailers. The receiver (customer) is required to have a forklift with 72 inch forks or schedule a rigging company to offload their machine upon arrival. |      |        |
|          | 15% Off Discount* 15% Off Discount                       |                                                                                                                                                                                                                                                                 |      |        |
| 1        | Best Method Best Method                                  | Best method of Shipping                                                                                                                                                                                                                                         |      |        |

**Discount Total:**

**Shipping Cost:**

**Total:**

This Sale Agreement is a legal contract between the Customer and Laguna Tools Inc., The Customer accepts this Sale Agreement by making a purchase and/or by placing an order. This Agreement will be governed by and construed in accordance with the substantive laws of California, notwithstanding any conflict of law principles. Defective merchandise must be returned with an authorized RMA (Return Merchandise Authorization) number from Laguna Tools. In the event the Customer returns any item for an exchange of a different item, there will be a 25% re-stocking fee. Freight quotes valid 30 days due to fuel surcharge \_\_\_\_\_ on \_\_\_\_\_ 2020. It is the customers responsibility to provide clean usable power with a proper earth ground for the machine. Any transformers or power conditioners will be the customers responsibility as deemed necessary during start-up by a lagunatools technician or by a customer service technician. Any costs to make the machine run on inferior power will be the customers responsibility. Any costs to repair the machine due to improper power source or due to dirty air source will be the customers responsibility.



Quote Number: 73685

Revision:

**Bill To:** RYE2652

RYEBREAD ARCHITECTS  
456 HIGH STREET  
MOUNT HOLLEY NJ 08060

Contact: Angelo Butera

Phone 609-265-2652 Ext:

Fax:

Email: apb@ryebread.com

**Ship To:**

RYEBREAD ARCHITECTS  
456 HIGH ST  
MOUNT HOLLY NJ 08060-1456

*Fob: Factory/17540. LEAD TIME: 1-2 weeks, TERMS: cash or terms (OAC) FREIGHT: ppd/add*

*NOTE: Due to the volatility in the steel & fuel markets, as well as availability, this quote is subject to change until execution.*

*This is an ESTIMATE ONLY & based on delivering to a place of business with a loading dock. We can NOT guarantee the carrier's charge (you are welcome to use your own carrier)*

*Please ensure this material is inspected upon arrival for damage. If the shipment is damaged, it must be noted on the bill of lading. (All claims must be filed within 5 business days)*

Date: 12/15/2022 Ship Via: SJF Arranged  
Expires 12/22/2022  
Terms CASH IN ADVANCE

Sales Person: Vance Haugen  
Email: vhaugen@sjf.com  
Phone: 320-485-4965

| Part Description                                                                                                                                                                                                                                                                                                     | Order Qty | Unit Price | Subtotal |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|----------|
| KAKISSN4840F0M26407050EKP<br>RA-022-216<br>Cantilever, Arm, RI, I-Beam, Standard, Straight, End Stop No, Length 48", Height 4.000", Connector Type Flat Plate, Hole Size 0.813", 2.750"x4.000", Connector 7.000"x5.000", Gauge 0.500, RI, PA STOCK                                                                   | 22        |            |          |
| KBSKS048480008100B60M2620KP<br>RA-022-214<br>Cantilever, Base, Single Sided, RI, Structural, Overall Base Length 48", Nominal Length 48"x0", Height 8.125", Inside Width 0.000", Connector Type Bolted, # of Holes 6, Hole Size 0.813", 2.750"x2.000", RI, PA STOCK                                                  | 11        |            |          |
| KDKF65J63J0IHF1402KP<br>RA-021-329<br>Cantilever, Diagonal Brace, RI, Fixed Length, Length 65.625", Hole Centers 63.625", 0.563" Hole, Flat, Height 1.500", Depth 0.250", RI, PA STOCK                                                                                                                               | 20        |            |          |
| KHKS4364160IA202000KP<br>RA-021-32<br>Cantilever, Horizontal Brace, RI, Single Hole, Width 43.750", Hole Centers 41.750", Hole Size 0.563", Construction Angle, 2.000"x2.000", Hole Offset 0.000", RI, PA STOCK                                                                                                      | 20        |            |          |
| KUDKS12008152F0M2640B00060M026<br>20KP<br>RA-022-355 AC818-120-48 Cantilever, Upright, Double Sided, RI, Structural, Column Height 120", Column Depth 8.125", Column Width 5.250", Flat Plate, Connector Hole Size 0.813", 2.750"x4.000", Base Connector Type Bolted, 0.000", # of Holes 6, Hole Size 0.813", 2.750" | 11        |            |          |
| ZHB00HBI0120016CZ5NP<br>Misc, Hardware, Bolt, Hex Bolt, Imperial (Inch), 1/2"x1.750", Course Thread, Grade 5, New, PA                                                                                                                                                                                                | 40        |            |          |



Quote Number: 73685

Revision:

|                                                                                               |     |
|-----------------------------------------------------------------------------------------------|-----|
| ZHB00HBI0340020CZ5NP                                                                          | 154 |
| Misc, Hardware, Bolt, Hex Bolt, Imperial (Inch), 3/4"x2.000", Course Thread, Grade 5, New, PA |     |
| ZHN00HNI0120000CZ5NP                                                                          | 40  |
| Misc, Hardware, Nut, Hex Nut, Imperial (Inch), 1/2"x0.000", Course Thread, Grade 5, New, PA   |     |
| ZHN00HNI0340000CZ5NP                                                                          | 154 |
| Misc, Hardware, Nut, Hex Nut, Imperial (Inch), 3/4"x0.000", Course Thread, Grade 5, New, PA   |     |
| KDKEP12K                                                                                      | 33  |
| Cantilever, Accessory, RI, 12" End Stop Pipe With Chain, RI                                   |     |
| KDKES02K                                                                                      | 22  |
| Cantilever, Accessory, RI, End Stop Socket For 4" & 5" Arms, RI                               |     |
| FREIGHT                                                                                       | 1   |

ESTIMATED FREIGHT CHARGE - NON-RESIDENTIAL

Freight: SJF provides freight estimates as a courtesy to our customers. These prices do not include any fuel or other surcharges. The quantity of trucks is an estimate and can vary depending on shipping sequence and schedule. Due to the volatility in freight rates, rates are subject to change based on current market conditions. Prior to shipment SJF will notify you if there is a change in your estimated freight rate at which time you may decide to accept or arrange your own freight. Note that additional packaging fees may apply if shipping by Van or LTL vs flatbed.

Delayed shipments are subject to a holding fee.

Freight Estimated based on following carrier type:

LTL (requires additional packaging material.)

VAN (requires additional packaging material.)

FLATBED - Non-tarped - Note: SJF will not be responsible for road grime (dirt, salt, rain, etc....) from shipping utilizing non-tarped loads.

FLATBED - TARPED Note: SJF will not be responsible for road grime (dirt, salt, rain, etc....) that could occur from leakage.

---

---

|             |      |
|-------------|------|
| SubTotal    |      |
| Sales tax   |      |
| Misc charge | 0.00 |
| Total       |      |





Quote Number: 73685

Revision:

**Purchaser agrees and acknowledges that all sales under this purchase order are subject to the Terms & Conditions located at [www.sjf.com/terms\\_and\\_conditions.html](http://www.sjf.com/terms_and_conditions.html) and acknowledges to be bound by those Terms & Conditions**

You may sign & fax\email back as confirmation of your order.

Your Purchase Order Number: \_\_\_\_\_

Accepted By: \_\_\_\_\_ Date: \_\_\_\_\_

By Accepting this you have verified that the below email address is the correct address for invoice to be emailed to:

**apb@ryebread.com**

If paying by credit card, there will be a 2.5% credit card processing fee.

Credit Card Number: \_\_\_\_\_

Exp: \_\_\_\_/\_\_\_\_ CID: \_\_\_\_\_