

Wythe County –Apex Barn Restrooms

BID FORM

BID RECIPIENT

1.01 This Bid is submitted to:

**WYTHE COUNTY
ATTN: STEPHEN D. BEAR, COUNTY ADMINISTRATOR
340 SOUTH SIXTH STREET
WYTHEVILLE, VA 24382**

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

BIDDER’S ACKNOWLEDGEMENTS

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

BIDDER’S REPRESENTATIONS

3.01 In submitting this Bid, Bidder represents that:

A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

Addendum No. Addendum, Date

B. Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

C. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work and including all American Iron and Steel requirements.

D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.

E. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and any Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of

- construction to be employed by Bidder; and (3) Bidder's safety precautions and programs.
- F. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
 - G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
 - H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and confirms that the written resolution thereof by Engineer is acceptable to Bidder.
 - I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.
 - J. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

BIDDER'S CERTIFICATION

4.01 Bidder certifies that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
 1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process;
 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

ARTICLE 5 – BASIS OF BID

5.01 Bidder will complete the Work in accordance with the Contract Documents for the following price(s): Plans and Specifications Provided

TOTAL BASE BID PRICE

\$ _____

(USE WORDS)

(USE NUMBERS)

Bidder acknowledges that (1) each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and (2)

estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

TIME OF COMPLETION

- 6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment within 90 calendar days of the notice to proceed.
- 6.02 Bidder accepts the provisions as to liquidated damages: If the restrooms and wash bays are not substantially complete within the 120 calendar days of the notice to proceed, the contractor shall be penalized at a rate of \$250 per day until substantial completion is achieved as decided by the engineer.

ATTACHMENTS TO THIS BID

- 7.01 The following documents are submitted with and made a condition of this Bid:
 - A. List of Proposed Subcontractors;
 - B. List of Proposed Suppliers;
 - C. List of Project References;
 - D. Contractor’s License No.: _____ [or] Evidence of Bidder’s ability to obtain a State Contractor’s License and a covenant by Bidder to obtain said license within the time for acceptance of Bids;
 - e. A Bid Bond will be required at the time of the bid.
 - f. A Performance Bond in the dollar amount of the bid will be required by the successful bidder before the project can be awarded.

BID SUBMITTAL

BIDDER:

By:_____

Signature_____

Printed name_____

(If Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest:

Signature_____

Printed name_____

Title:_____

Submittal Date:_____

Address for giving notices:_____

Telephone Number:_____

Contact Name and e-mail address:_____

Bidder's License No.: _____

ADOPTION AGREEMENT

Wythe County, for this project, the Appalachian Regional Exposition Center (APEX) Utility Barn Restrooms, located in Wythe County, has adopted the use of the Commonwealth of Virginia, General Conditions of the Construction Contract, in their entirety, unless otherwise specified in the Supplemental General Conditions. They are part of the Contract Documents. References to Agencies and State personnel may not apply and Owner personnel may fill these positions if applicable to this project.

ATTACHMENT A
General Terms and Conditions

- A. **VENDORS MANUAL:** This solicitation is subject to the provisions of the Commonwealth of Virginia *Vendors Manual* and any changes or revisions thereto, which are hereby incorporated into this contract in their entirety. The procedure for filing contractual claims is in section 7.19 of the *Vendors Manual*. A copy of the manual is normally available for review at the purchasing office and is accessible on the Internet at www.eva.virginia.gov under "Vendors Manual" on the vendors tab.
- B. **APPLICABLE LAWS AND COURTS:** This solicitation and any resulting contract shall be governed in all respects by the laws of the Commonwealth of Virginia and any litigation with respect thereto shall be brought in the courts of the Commonwealth. The agency and the contractor are encouraged to resolve any issues in controversy arising from the award of the contract or any contractual dispute using Alternative Dispute Resolution (ADR) procedures (*Code of Virginia*, § 2.2-4366). ADR procedures are described in Chapter 9 of the *Vendors Manual*. The contractor shall comply with all applicable federal, state and local laws, rules and regulations.
- C. **ANTI-DISCRIMINATION:** By submitting their proposals, offerors certify to the Commonwealth that they will conform to the provisions of the Federal Civil Rights Act of 1964, as amended, as well as the Virginia Fair Employment Contracting Act of 1975, as amended, where applicable, the Virginians With Disabilities Act, the Americans With Disabilities Act and § 2.2-4311 of the *Virginia Public Procurement Act (VPPA)*. If the award is made to a faith-based organization, the organization shall not discriminate against any recipient of goods, services, or disbursements made pursuant to the contract on the basis of the recipient's religion, religious belief, refusal to participate in a religious practice, or on the basis of race, age, color, gender or national origin and shall be subject to the same rules as other organizations that contract with public bodies to account for the use of the funds provided; however, if the faith-based organization segregates public funds into separate accounts, only the accounts and programs funded with public funds shall be subject to audit by the public body. (*Code of Virginia*, § 2.2-4343.1E).
1. During the performance of this contract, the contractor agrees as follows:
 - a. The contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by state law relating to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the contractor. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
 - b. The contractor, in all solicitations or advertisements for employees placed by or on behalf of the contractor, will state that such contractor is an equal opportunity employer.
 - c. Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting these requirements.
 2. The contractor will include the provisions of #1 in every subcontract or purchase order over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.
- D. **ETHICS IN PUBLIC CONTRACTING:** By submitting its proposal, offerors certify that their proposals are made without collusion or fraud and that they have not offered or received any kickbacks or inducements from any other offeror, supplier, manufacturer or subcontractor in connection with their (bid/proposal), and that they have not conferred on any public employee having official responsibility for this procurement transaction any payment, loan, subscription, advance, deposit of money, services or anything of more than nominal value, present or promised, unless consideration of substantially equal or greater value was exchanged.

ATTACHMENT A
General Terms and Conditions

- E. **IMMIGRATION REFORM AND CONTROL ACT OF 1986:** The successful Offeror, by submitting its proposal and entering into a written contract with the Commonwealth of Virginia, certifies that the Offeror does not, and shall not during the performance of the contract for goods and services in the Commonwealth, knowingly employ an unauthorized alien as defined in the federal Immigration Reform and Control Act of 1986.
- F. **DEBARMENT STATUS:** By submitting their proposals, offerors certify that they are not currently debarred by the Commonwealth of Virginia from submitting bids or proposals on contracts for the type of goods and/or services covered by this solicitation, nor are they an agent of any person or entity that is currently so debarred.
- G. **MANDATORY USE OF STATE FORM AND TERMS AND CONDITIONS FOR IFBs AND RFPs:** Failure to submit a proposal on the official state form provided for that purpose may be a cause for rejection of the proposal. Modification of or additions to the General Terms and Conditions of the solicitation may be cause for rejection of the proposal; however, the Commonwealth reserves the right to decide, on a case by case basis, in its sole discretion, whether to reject such a proposal.
- H. **CLARIFICATION OF TERMS:** If any prospective offeror has questions about the specifications/Statement of Work or other solicitation documents, the prospective offeror should contact the buyer whose name appears on the face of the solicitation before the due date specified on the RFP. Any revisions to the solicitation will be made only by addendum issued by the buyer.
- I. **PRECEDENCE OF TERMS:** The following General Terms and Conditions *VENDORS MANUAL, APPLICABLE LAWS AND COURTS, ANTI-DISCRIMINATION, ETHICS IN PUBLIC CONTRACTING, IMMIGRATION REFORM AND CONTROL ACT OF 1986, DEBARMENT STATUS, ANTITRUST, MANDATORY USE OF STATE FORM AND TERMS AND CONDITIONS, CLARIFICATION OF TERMS, PAYMENT* shall apply in all instances. In the event there is a conflict between any of the other General Terms and Conditions and any Special Terms and Conditions in this solicitation, the Special Terms and Conditions shall apply.
- J. **QUALIFICATIONS OF OFFERORS:** The Commonwealth may make such reasonable investigations as deemed proper and necessary to determine the ability of the offeror to perform the services/furnish the goods and the offeror shall furnish to the Commonwealth all such information and data for this purpose as may be requested. The Commonwealth reserves the right to inspect Offeror's physical facilities prior to award to satisfy questions regarding the Offeror's capabilities. The Commonwealth further reserves the right to reject any proposal if the evidence submitted by, or investigations of, such offeror fails to satisfy the Commonwealth that such offeror is properly qualified to carry out the obligations of the contract and to provide the services and/or furnish the goods contemplated therein.
- K. **TRANSPORTATION AND PACKAGING:** By submitting their proposals, all offerors certify and warrant that the price offered for FOB destination includes only the actual freight rate costs at the lowest and best rate and is based upon the actual weight of the goods to be shipped. Except as otherwise specified herein, standard commercial packaging, packing and shipping containers shall be used. All shipping containers shall be legibly marked or labeled on the outside with purchase order number, commodity description, and quantity.
- L. **INSURANCE:** By signing and submitting a bid or proposal under this solicitation, the bidder or Offeror certifies that if awarded the contract, it will have the following insurance coverage at the time the contract is awarded. For construction contracts, if any subcontractors are involved, the subcontractor will have workers' compensation insurance in accordance with §§ 2.2-4332 and 65.2-800 et seq. of the *Code of Virginia*. The bidder or Offeror further certifies that the contractor and any subcontractors will maintain these insurance coverage during the entire term of the contract and that all insurance coverage will be provided by insurance companies authorized to sell insurance in Virginia by the Virginia State Corporation Commission.

MINIMUM INSURANCE COVERAGES AND LIMITS REQUIRED FOR MOST CONTRACTS:

ATTACHMENT A
General Terms and Conditions

1. Workers' Compensation - Statutory requirements and benefits. Coverage is compulsory for employers of three or more employees, to include the employer. Contractors who fail to notify the Commonwealth of increases in the number of employees that change their workers' compensation requirements under the Code of Virginia during the course of the contract shall be in noncompliance with the contract.
2. Employer's Liability - \$100,000.
3. Commercial General Liability - \$1,000,000 per occurrence and \$2,000,000 in the aggregate. Commercial General Liability is to include bodily injury and property damage, personal injury and advertising injury, products and completed operations coverage. The Commonwealth of Virginia must be named as an additional insured and so endorsed on the policy.
4. Automobile Liability - \$1,000,000 combined single limit. (Required only if a motor vehicle not owned by the Commonwealth is to be used in the contract. Contractor must assure that the required coverage is maintained by the Contractor (or third party owner of such motor vehicle.)

<u>Profession/Service</u>	<u>Limits</u>
Accounting	\$1,000,000 per occurrence, \$3,000,000 aggregate
Architecture	\$2,000,000 per occurrence, \$6,000,000 aggregate
Asbestos Design, Inspection or Abatement Contractors	\$1,000,000 per occurrence, \$3,000,000 aggregate
Health Care Practitioner (to include Dentists, Licensed Dental Hygienists, Optometrists, Registered or Licensed Practical Nurses, Pharmacists, Physicians, Podiatrists, Chiropractors, Physical Therapists, Physical Therapist Assistants, Clinical Psychologists, Clinical Social Workers, Professional Counselors, Hospitals, or Health Maintenance Organizations.)	\$2,150,000 per occurrence, \$3,000,000 aggregate
Insurance/Risk Management	\$1,000,000 per occurrence, \$3,000,000 aggregate
Landscape/Architecture	\$1,000,000 per occurrence, \$1,000,000 aggregate
Legal	\$1,000,000 per occurrence, \$5,000,000 aggregate
Professional Engineer	\$2,000,000 per occurrence, \$6,000,000 aggregate
Surveying	\$1,000,000 per occurrence, \$1,000,000 aggregate

- M. ~~**ANNOUNCEMENT OF AWARD:** Upon the award or the announcement of the decision to award a contract as a result of this solicitation, the purchasing agency will publicly post such notice on the DGS/DPS eVA VBO (www.eva.virginia.gov) for a minimum of 10 days.~~
- N. **NONDISCRIMINATION OF CONTRACTORS:** A bidder, Offeror, or contractor shall not be discriminated against in the solicitation or award of this contract because of race, religion, color, sex, national origin, age, disability, faith-based organizational status, any other basis prohibited by state law relating to discrimination in employment or because the bidder or Offeror employs ex-offenders unless the state agency, department or institution has made a written determination that employing ex-offenders on the specific contract is not in its best interest. If the award of this contract is made to a faith-based organization and an individual, who applies for or receives goods, services, or disbursements provided pursuant to this contract objects to the religious character of the faith-based organization from which the individual receives or would receive the goods, services, or disbursements, the public body shall offer the individual, within a reasonable period of time after the date of his objection, access to equivalent goods, services, or disbursements from an alternative provider.
- O. **SET-ASIDES.** This solicitation is set-aside for VASBSD-certified small business participation only when designated "SET-ASIDE FOR SMALL BUSINESSES" in the solicitation. VASBSD-certified small businesses are

Applicable Codes

Building Code VUSBC 2015

Design Criteria

Basic Wind Speed (3 second gust): 115 mph
 Floor Live Load 100 psf
 Ground snow load 30 psf
 Seismic Importance Factor 1
 Seismic Site Class: D
 Seismic Design Category: E
 Minimum Soil Bearing Capacity: 1500 PSI

Building Data

User Group: Utility & Misc
 Construction Type 11B
 Sprinklers: NO
 Standpipes: NO
 Fire District: Wytheville
 Number of stories: 1
 Gross Building Area: 1050 SF

Number of Exits

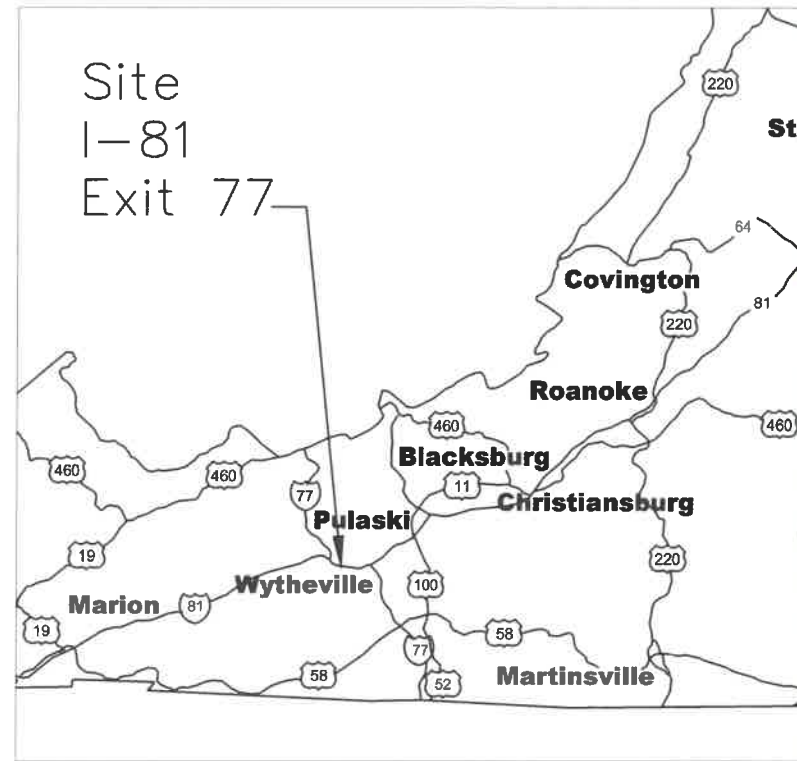
Exits Provided 2
 Travel Distance: 35 feet max.
 Exit Width: 3 feet

Life Safety System Requirements

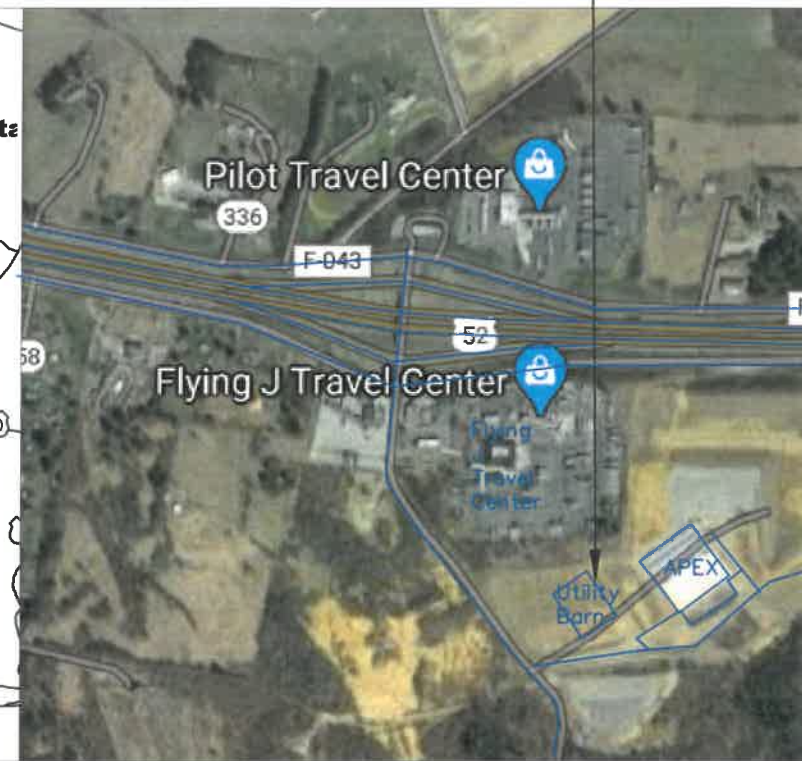
Exit Signs: Yes – Glow in the Dark
 (photoluminescent) Above Exit Doors

Two Battery Backup Exit/Emergency Light
 Combo.

Fire Alarm: YES tie into existing barn system.
 Emergency Lighting: Panic hardware: Yes



Location Map



Vicinity Map

Electrical Notes:

1. One Electrical Sub Panel Fed from Barn Panel
2. 100 amp
3. Copper Bus
4. 10 space
5. 100 Amp Main Breaker
6. Full Length Neutral bars, both sides.
7. Accepts GFI breakers
8. GE A series II
9. Bolt in breakers

Sheet List

1. Title
2. Floor Plan
3. Sections
4. Specifications
5. Sewer Plan and Profile

Existing Wythe County Erosion and Sediment Control Permit

Existing Stormwater Permit
 VAR 101522



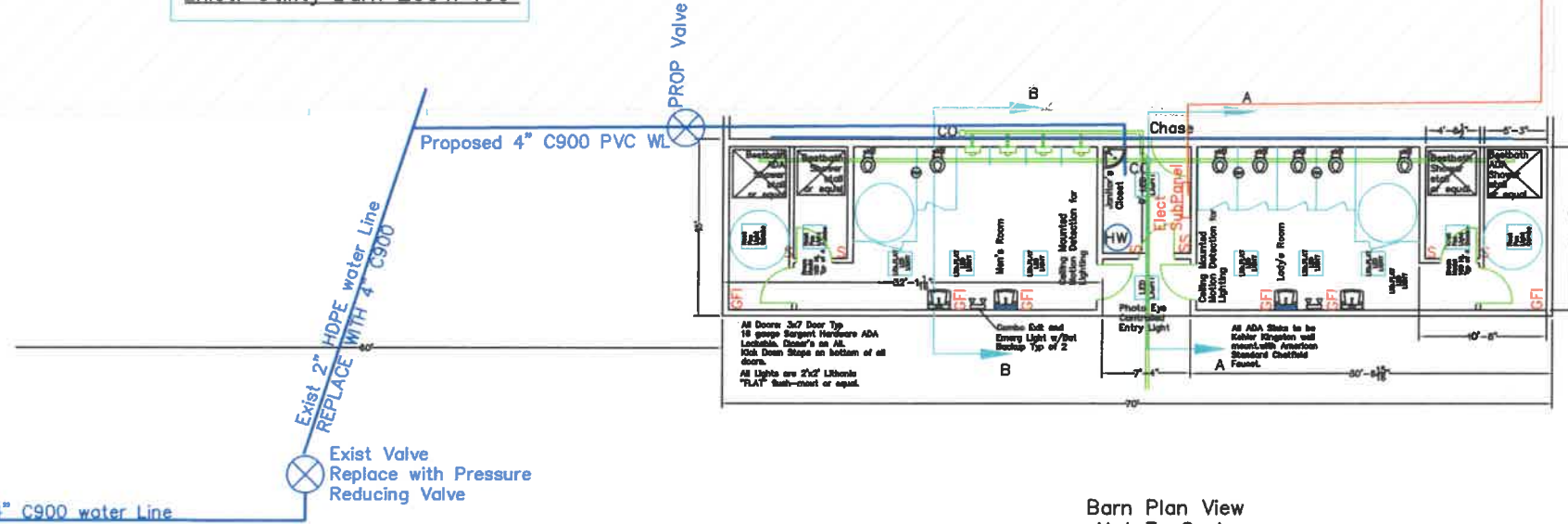
Utility Barn
 Restroom
 Title Sheet

Date 10-5-2020

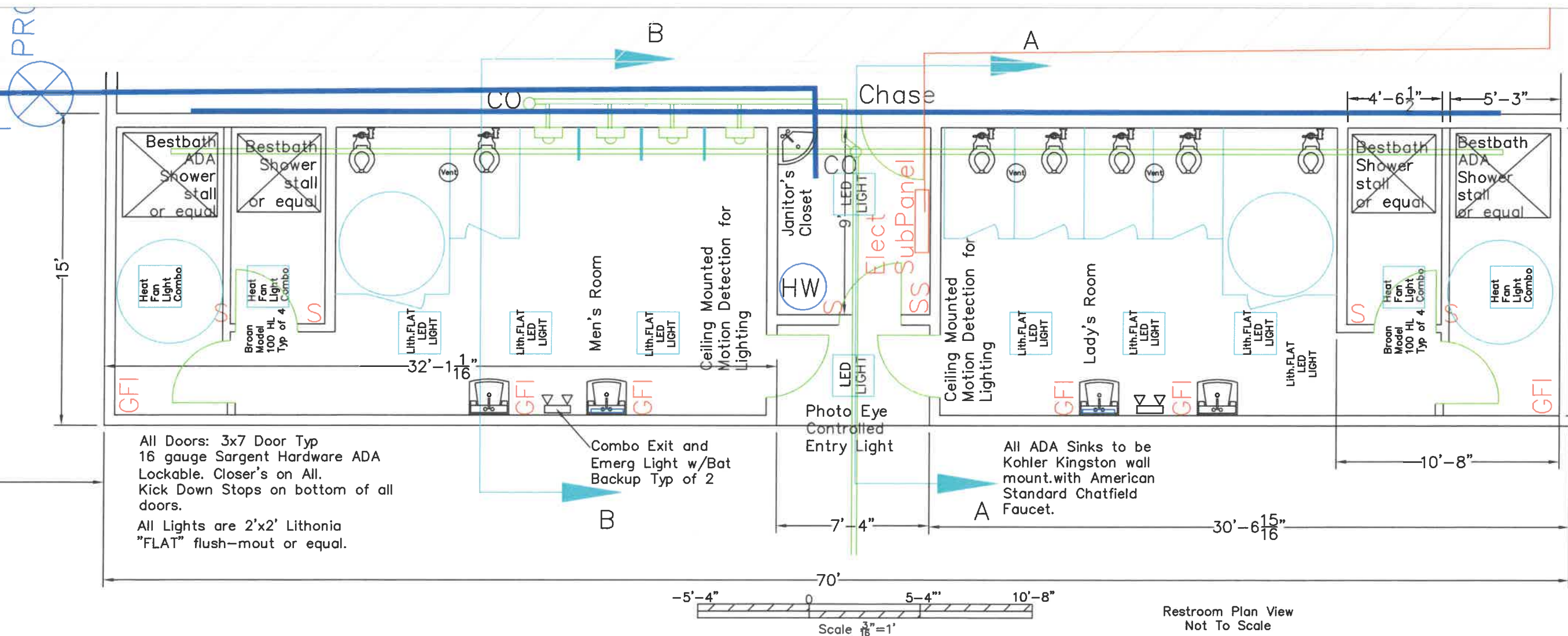
No.	Revision	Date



Exist. Utility Barn 200'x 160'



Barn Plan View
Not To Scale

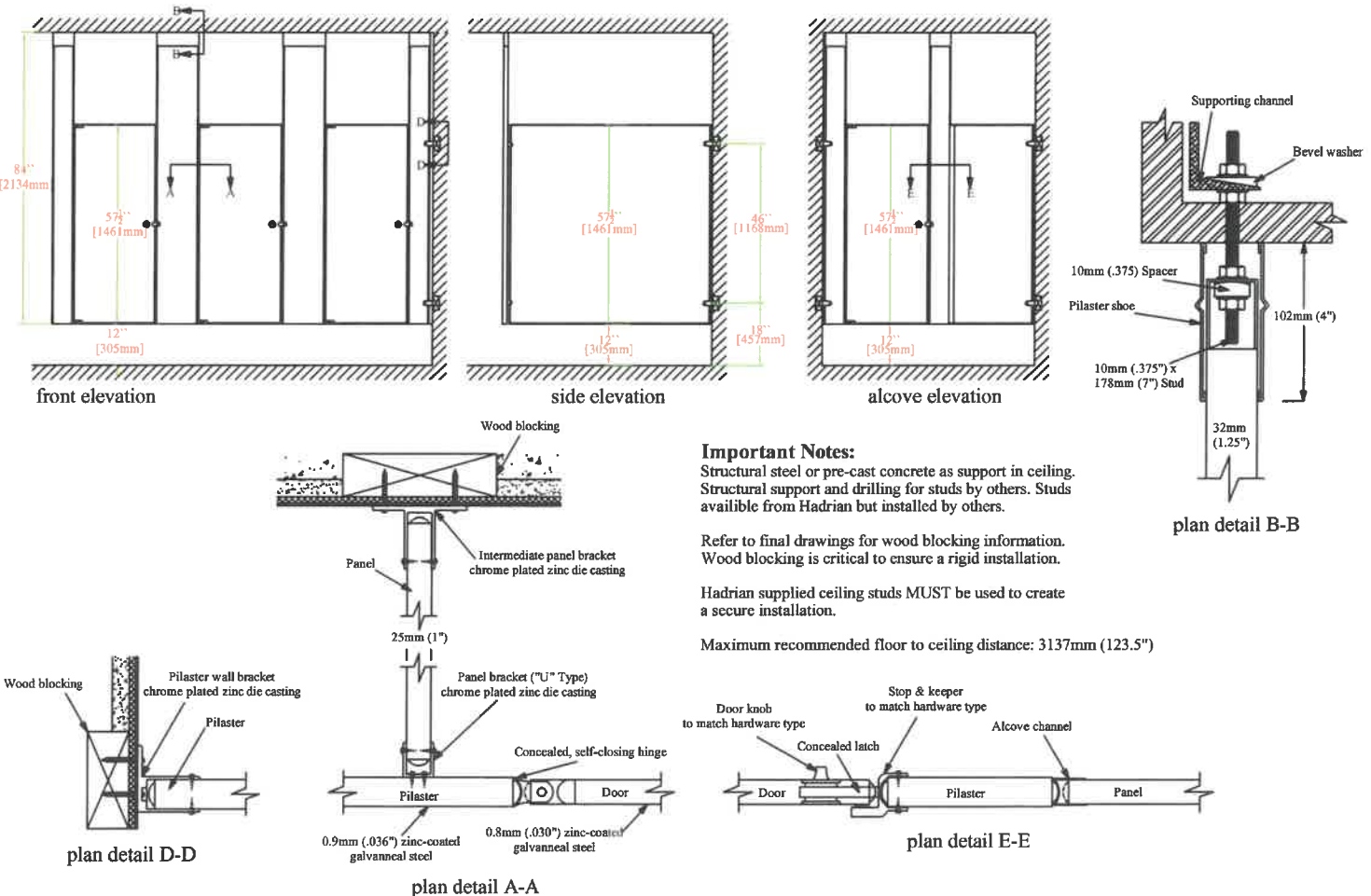
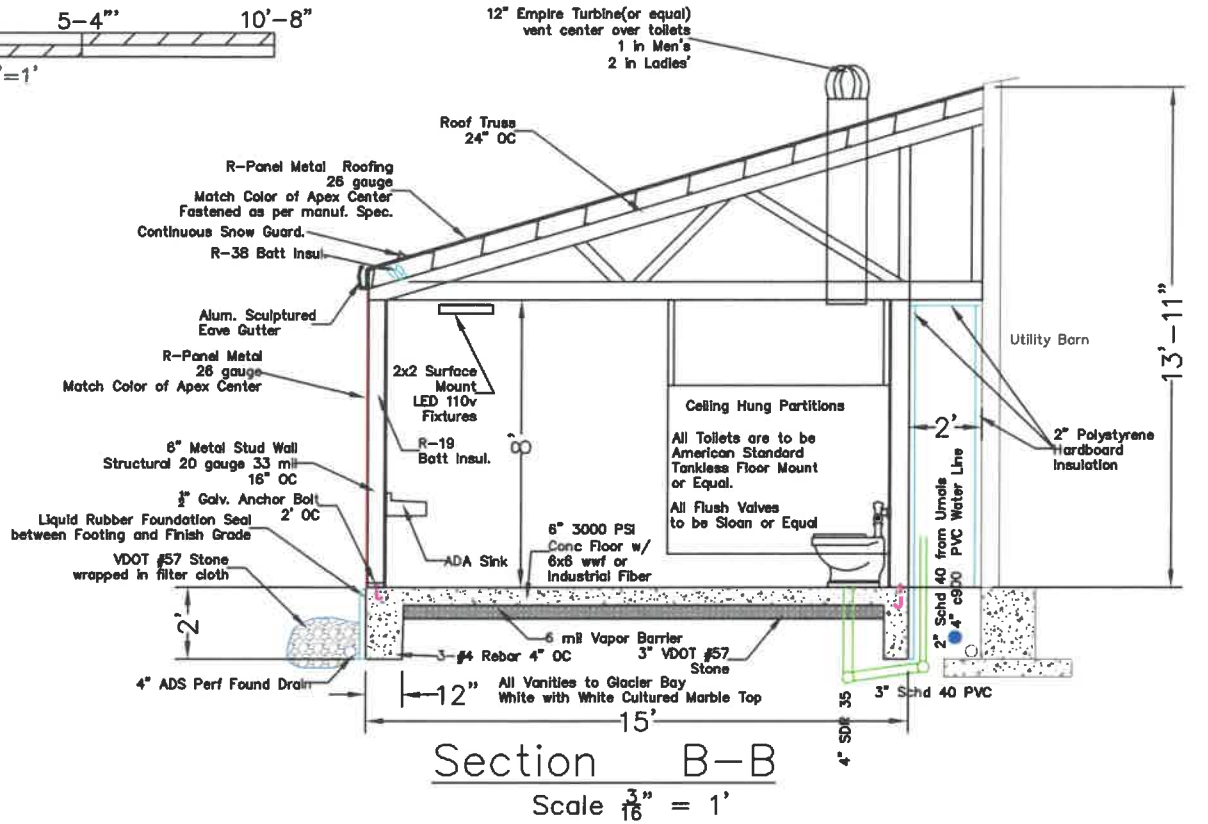
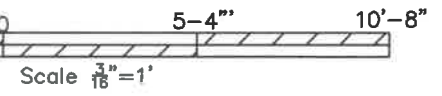
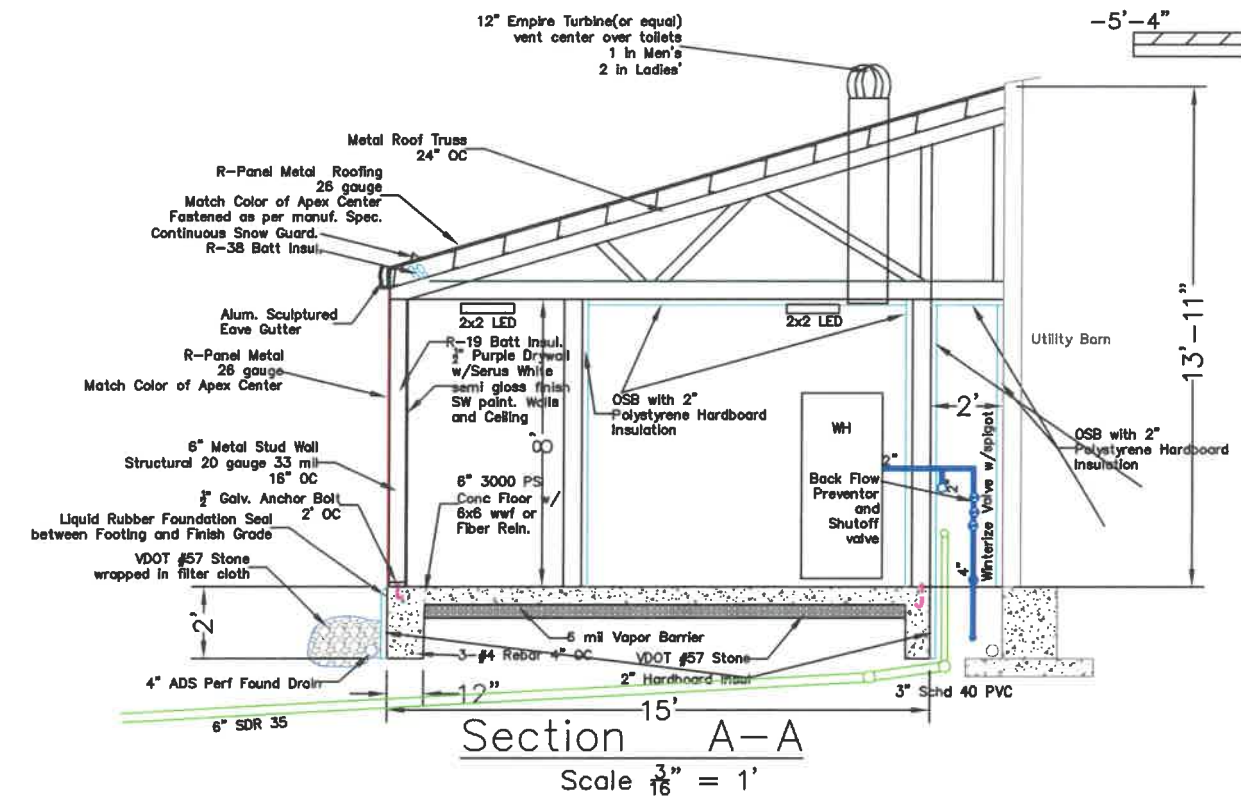


Restroom Plan View
Not To Scale

Utility Barn
Restroom
Floorplan

Date 10-5-2020

No.	Revision	Date



Utility Barn Restroom Sections

Date 10-5-2020

No.	Revision	Date

Hadrian Manufacturing Inc.
Hadrian Inc.,
www.hadrian-inc.com

965 Syscon Road, Burlington, ON, Canada, L7L 5S3 · Tel: (905) 333-0300 · Fax (905) 333-1841
7420 Clover Avenue, Mentor, OH, U.S.A., 44060 · Tel: (440) 942-9118 · Fax (440) 942-9618

Note:
Hadrian Partitions or Equal
Submit Shop Drawings and
Cut Sheets for approvals.

SPECIFICATIONS

1. PROVIDE TO MEET THE DESIGN/PERFORMANCE REQUIREMENTS OF 115 MPH (3 SECOND GUST).
2. ALL FRAMING MEMBERS SHALL BE CLEANED TO REMOVE LOOSE RUST AND MILL SCALE AND GIVEN ONE SHOP COAT OF PRIMER OR BE GALVANIZED. THE PRIMER COAT THICKNESS SHALL BE AN AVERAGE OF ONE MILL.
3. ALL HOT ROLLED SHEET, PLATE AND STRIP STEEL USED IN WEBS FROM 0.125 TO 0.175 THICK SHALL CONFORM TO THE PROVISIONS OF ASTM-1011 SS GRADE 55 (55,000 PSI MINIMUM YIELD STRENGTH). ALL THICKNESSES GREATER THAN 0.175 (TO 0.3 INCLUSIVE SHALL CONFORM TO ASTM A572 GRADE 55 (55,000 KSI MINIMUM YIELD).
4. AT THE CORNERS OF THE RESTROOMS, DRIVEN GROUND RODS ARE TO BE INSTALLED AND TIED TO THE FRAME MEMBERS. THE ELECTRICAL PANEL SHALL BE GROUNDED SEPARATE FROM THE BUILDING WITH A ROD NEAR THE PANEL.
5. WIND BRACING SHALL CONSIST OF DIAGONAL CABLE ROD OR ANGLE BRACING. ADJUSTMENT TO CABLE BRACES SHALL BE MADE BY AN EYEBOLT ASSEMBLY. ADJUSTMENT TO ROD BRACING MAY BE BY THREADED ASSEMBLY. ANGLE BRACING IS NOT ADJUSTABLE AND MAY REQUIRE FINAL FIELD WELDING.
6. ROOF PANELS ARE TO BE GALVALUME STEEL SHEETING SHALL BE ALUMINUM-ZINC ALLOY COATED STEEL IN ACCORDANCE WITH ASTM A-792 HAVING A COATING THICKNESS OF 55 OZ PER SQUARE FOOT MINIMUM.
7. INSULATION FOR THE ROOF AND WALLS ARE SHOWN ON FLOOR PLAN AND SECTION VIEW.
8. THE WALL PANELS ARE TO BE GALVALUME STEEL SHEETING SHALL BE ALUMINUM-ZINC ALLOY COATED STEEL SHEET IN ACCORDANCE WITH ASTM A-792 HAVING A COATING THICKNESS OF 55 OZ PER SQUARE FOOT MINIMUM WITH A MODIFIED SILICONIZED POLYESTER PAINT SYSTEM OR KYNAR 500 COLOR TO BE SELECTED FROM MANUFACTURER'S STANDARD COLOR WITH MANUFACTURE'S 20 YEAR COLOR WARRANTY.
9. INCLUDE DOWNSPOUTS WITH KYNAR FINISH AND SPLASH BLOCKS.
10. PANEL FASTENERS SHALL BE PROVIDED WITH PVC OR EPDM SEALING WASHERS.
11. THE CONTRACTOR SHALL PROVIDED A TWO (2) YEAR WORKMANSHIP GUARANTEE AGAINST FAILURES CAUSED BY FAULTY ERECTION.
12. THE PAINT WARRANTY ON ALL WALL PANELS SHALL BE PROVIDED BY THE MANUFACTURER FOR A PERIOD OF TWENTY (20) YEARS.

~~ICE/SNOW GUARDS ARE TO BE INSTALLED MEETING THE REQUIREMENTS OF PUBLISHED MANUFACTURER'S INSTRUCTIONS. ICE/SNOW GUARDS INSTALLATION SHALL BE DESIGNED BY THE ICE/SNOW MANUFACTURER FOR THE LOCATION, SLOPE AND TYPE OF ROOF SYSTEM AND BE SUBMITTED TO THE AVE FOR APPROVAL. THE ICE/SNOW GUARDS SHALL BE INSTALLED ACCORDING TO THOSE DESIGNED REQUIREMENTS. ATTACHMENT SHALL NOT BE WITH ADHESIVE.~~

***HOLLOW METAL DOORS:**

1. PROVIDE HOLLOW METAL DOORS, GRADE II, MODEL 2, HEAVY-DUTY, FULL FLUSH OF SIZES INDICATED, COMPLYING WITH SDI 100 MINIMUM MATERIALS AND CONSTRUCTION REQUIREMENTS.
2. ALL DOORS SHALL HAVE CLOSED FLUSH TOPS AND BOTTOMS. SEAL ALL JOINTS WATER TIGHT.
3. FLUSH DOORS SHALL BE OF FULLY WELDED CONSTRUCTION WITH NO VISIBLE SEAMS OR JOINTS ON THEIR FACES.
4. DOOR SIZES SHOWN ARE NOMINAL. SIZES SHALL INCLUDE STANDARD CLEARANCES AS FOLLOWS: 3/32 INCHES AT JAMBS AND HEAD; 3/16-INCH AT FLOOR WHERE OPENING HAS THRESHOLD, AND HEAD, 3/16- INCH AT FLOOR WHERE OPENING WITHOUT THRESHOLD. WHERE RESILIENT FLOOR COVERING IS SHOWN THE THICKNESS IS INCLUDED IN THE 1/16-INCH CLEARANCE.
5. INTERNAL CONSTRUCTION OF THE DOOR SHALL CONFORM TO ONE OF THE FOLLOWING METHODS.
6. VERTICAL METAL STIFFENERS AND BOTTOM WEEP HOLES ON EXTERIOR DOORS AND VERTICAL OR HORIZONTAL STEEL STIFFENERS, OR BOTH, ON INTERIOR DOORS, RIGIDLY FORMED MEMBERS WELDED TO THE FACE PANELS. PANELS WITH METAL REINFORCING SHALL HAVE SOUND DEADENING APPLIED TO THE INSIDE TO ELIMINATE METALLIC SOUND INCIDENT TO NORMAL DOOR OPERATION.
7. POLYURETHANE, POLYSTYRENE, OR SOLID STRUCTURAL MINERAL CORE BONDED TO THE INSIDE OF BOTH FACES.
8. OTHER METHODS OF REINFORCING MAY BE USED, PROVIDED THEY ACHIEVE THE SAME DEGREE OF FLATNESS, RIGIDITY, AND STRENGTH AS THOSE METHODS LISTED ABOVE.
9. EXTERIOR DOORS SHALL BE FABRICATED TO PROVIDE AN INSULATING "R" VALUE FOR THERMAL RESISTANCE OF NOT LESS THAN "R" EQUALS 4.0, MEASURED IN ACCORDANCE WITH ASTM C 236, AND SHALL HAVE GALVANIZED EXPOSED FACES. PROVIDE EXTERIOR DOOR BETWEEN OFFICE AND STORAGE BAY.
10. ALL EXTERIOR DOORS SHALL BE PROVIDED WITH INDICATED THRESHOLDS AND WEATHER STRIPPING.
11. ALL EXTERIOR DOORS SHALL BE GALVANIZED AND BONDERIZED AS INDICATED FOR FRAMES BELOW, BEFORE RECEIVING INDICATED FINISH.

***FURNISH HARDWARE AS SCHEDULED**

1. HINGES, ANSIBHMA 626 FINISH, 4-1/2 X 4-1/2, STAINLESS STEEL BASE METAL. FULL-MORTISED, FIVE KNUCKLE, TEMPLATE, FLUSH, BALL BEARING DESIGN WHERE CLOSERS ARE INDICATED AND TEMPLATE PLAIN BEARINGS ELSEWHERE. PROVIDE HINGES WITH FLAT BUTTON TIPS AND NON-REMOVABLE PINS. PROVIDE HINGES BY STANLEY, HAGER, MCKINNEY OR EQUAL
2. LOCKSETS: LOCKSETS AND LATCHSETS: HEAVY-DUTY CYLINDRICAL TYPE, EQUAL TO SCHLAGE D SERIES, OF FUNCTION INDICATED. LOCKSETS AND LATCHSETS SHALL HAVE LEVER HANDLES COMPLYING WITH ANSIA A 117.1 WITH ESCUTCHEONS, ROSES AND OTHER TRIM TO BE COMPATIBLE. WORKING PARTS FOR LOCKSETS AND EXIT DEVICES SHALL BE FORGED AND/OR MACHINED STEEL, STAINLESS STEEL, BRASS OR BRONZE, DIE CAST WORKING PARTS ARE UNACCEPTABLE. FURNISH BOX STRIKES WITH CURVED LIPS OF SUFFICIENT LENGTH TO PROTECT TRIM. KEYING SCHEDULE: SUBMIT DETAILED KEYING SCHEDULE INDICATING CLEARLY HOW THE OWNERS FINAL INSTRUCTIONS ON KEYING OF LOCKS HAS BEEN FULFILLED.
3. DOOR CLOSERS: CAST-IRON CASE WITH 10-YEAR WARRANTY, COMPLYING WITH ANSA A 117.1.
4. PROVIDE CLOSERS OF THE FULL RACK AND PINION TYPE WITH CAST-IRON OR ALUMINUM ALLOY SHELL. PROVIDE CLOSERS SURFACE MOUNTED AND PROJECTING MAXIMUM OF 2 INCHES FROM SURFACE TO DOOR.
5. PROVIDE CLOSERS CAPABLE OF 50 PERCENT ADJUSTMENT IN CLOSING POWER AND DESIGNED SO THAT AN ALLEN HEAD WRENCH WILL OPERATE REGULATING VALVES FOR INDIVIDUAL CONTROL OF SWEEP AND LATCH SPEED, BACK CHECK POSITION, AND BACK CHECK RESISTANCE.
6. PROVIDE CLOSERS WITH A BACK CHECK SELECTOR VALVE TO PERMIT ENGAGEMENT OF CHECKING ACTION PRIOR TO 90 DEGREE OPENING.
7. PROVIDE ALUMINUM CLOSER COVERS TO COMPLETELY CONCEAL OPERATING MECHANISM, WITH EXCEPTION OF THE ARM. PROVIDE PARALLEL ARM CLOSERS MOUNTED IN CONJUNCTION WITH OVER-HEAD STOPS.
8. OVERHEAD MOUNTED STOPS, TRACK TYPE ANSIBHMA 626 FINISH CORBIN 1550 SERIES. ACCEPTABLE SUBSTITUTES ARE SIMILAR PRODUCTS BY RUSSWIN, 294F44 SERIES SARGENT 1700 SERIES.
9. DOOR SILENCERS, MANUFACTURE'S STANDARD RUBBER.
10. KICK PLATES: STAINLESS STEEL, ANSIBHMA 650 FINISH, 0.050 INCH THICK BY 10 INCHES HIGH. PROVIDE PLATE FULL WIDTH OF DOOR.
11. WEATHER STRIPPING.
12. HEADS AND JAMBS, PROVIDE CLOSED CELL SPONGE NEOPRENE WEATHER-STRIPPING MOUNTED TO HEADS AND JAMBS WITH A CONTINUOUS ALUMINUM BRACKET.
13. DOOR BOTTOMS: PROVIDE FLEXIBLE NEOPRENE BUBBLE MOUNTED TO UNDERSIDE OF DOOR PROVIDE MOUNTING HARDWARE OF ALUMINUM.
14. DOOR SILENCERS: MANUFACTURER'S STANDARD RUBBER. PROVIDE 2 FOR PAIRS OF DOORS.
15. THRESHOLDS: PROVIDE CAST ALUMINUM THRESHOLDS WITH EXPOSED PLAIN SURFACES CONTAINING CAST IN ABRASIVE GRITS. ACCEPTABLE MANUFACTURERS ARE THE GRANITE STATE CASTING COMPANY. THE AMERICAN SAFETY TREAD COMPANY AND THE SAFE T METAL COMPANY, INC.

*HOLLOW METAL FRAMES, PROVIDE HOLLOW METAL FRAMES FOR DOORS OF SIZES AND PROFILES INDICATED.

1. FRAMES SHALL BE FACTORY WELDED UNIT TYPE. METALLIC FILLER TO CONCEAL MANUFACTURING DEFECTS IS NOT ACCEPTABLE.
2. FORM EXTERIOR FRAMES OF HOT-DIP GALVANIZED STEEL SHEETS WITH A STRETCHER LEVEL DEGREE OF FLATNESS AND COMPLYING WITH ASTM A 525 OR ASTM A 528, WITH G60 ZINC COATING, MILL PHOSPHATIZED.
3. DRILL STOPS IN DOOR FRAMES TO RECEIVE DOOR SILENCERS. PROVIDE THREE SILENCERS ON STRIKE JAMBS OF SINGLE-LEAF FRAMES AND TWO SILENCERS ON HEAD OF DOUBLE-LEAF FRAMES. INSTALL PLASTIC PLUGS TO KEEP HOLES CLEAR DURING CONSTRUCTION.
4. PROVIDE 26-GAGE STEEL PLASTER GUARDS OR MORTAR BOXES, WELDED TO FRAME AT BACK OF ALL FINISH HARDWARE CUTOUPS.

FIBER REINFORCED CONCRETE - FOR ALL CONCRETE USED FOR THIS PROJECT

CONCRETE MATERIALS:

- PORTLAND CEMENT OF AMERICAN MANUFACTURER: ASTM C 130, TYPE I OR II.
- FINE AGGREGATES: ASTM 033, EXCEPT AS SPECIFIED HEREIN; WASHED NATURAL SILICA SAND OR MANUFACTURED SAND COMBINATION THEREOF; 100% OF FINE AGGREGATE MUST PASS A #4 SIEVE.
- COARSE AGGREGATE: ASTM C33, EXCEPT AS SPECIFIED HEREIN; CRUSHED STONE OR GRAVEL, FREE FROM THIN ELONGATED OR LAMINATED PIECES, SOLUBLE SALTS, ORGANIC AND OTHER DELETERIOUS MATTER, MAXIMUM SIZE NOT TO EXCEED 1/3 OF THE NARROWEST DIMENSION BETWEEN FORMS OR LARGER THEN 3/4 OF THE MINIMUM CLEAR SPACING BETWEEN REINFORCING BARS, MAXIMUM SIZE NOT TO EXCEED 1" ANY DIMENSION WITHOUT SPECIAL PERMISSION OF THE AVE.
- WATER: CLEAN, FREE FROM INJURIOUS AMOUNTS OF OIL, ACID, ALKALI, SALT, ORGANIC OR OTHER DELETERIOUS MATTER.

ADMIXTURES:

- AIR-ENTRAINING ADMIXTURE: ASTM C 260. "MICRO-AIR" BY MASTER BUILDERS "DARAVAIR: BY W.R. GRACE. "SIKA AER" BY SIKA OR APPROVED EQUAL.
- WATER-REDUCING ADMIXTURE, ASTM C 494, TYPE A (FOR NORMAL SET AT TEMPERATURES 50 DEGREES F TO 80 DEGREES F), "EUCON WR-75" EUGLID CHEMICAL CO; (POZZOLITH 133N" MASTER BUILDERS; "PLASTOCRETE 181" SIKA CHEMICAL CORP; "WRDA WITH HYCOL" W.R. GRACE.
- WATER-REDUCING, RETARDING ADMIXTURE: ASTM C 494, TYPE D (FOR USE AT TEMPERATURES ABOVE 80 DEGREES F), "POZZOLITH 122-R"; MASTER BUILDERS. "EUCON RETARDER 75" EUCLID CHEMICAL "DARATARD" W.R. GRACE.
- WATER-REDUCING, ACCELERATING ADMIXTURE: ASTM C 494, TYPE C OR E (FOR USE AT TEMPERATURES BELOW 50 DEGREES F) "ACCEL GUARD 80" BY EUCLID CHEMICAL CO; "POZZUTEC 20" BY MASTER BUILDERS. "DARASET" BY W. R. GRACE OR APPROVED EUQAL.
- HIGH RANGE WATER REDUCING ADMIXTURES (SUPERPLASTICIZER) MAY BE USED AND MUST BE USED IN ALL PUMP MIXES. HIGH RANGE WATER REDUCING ADMIXTURES SHALL CONFORM TO ASTM C-494 AS A TYPE F HIGH RANGE WATER REDUCING ADMIXTURE OR AS A TYPE G SET RETARDING HIGH RANGE WATER REDUCING ADMIXTURE. THE ADMIXTURE SHALL BE A SECOND OR THIRD GENERATION TYPE WITHOUT INTENTIONALLY ADDED CHLORIDES AND ALKALIS. THE TREATED CONCRETE MUST BE CAPABLE OF MAINTAINING ITS RHEOLOGIC STATE IN EXCESS OF TWO HOURS, IF SO DESIRED. ACCEPTABLE PRODUCTS INCLUDE: "WRDA-19" BY W.R. GRACE "POZZOLITH 440-N" OR "REBUILD 716" BY MASTER BUILDERS OR APPROVED EQUAL.
- FLY ASH: MATERIALS MUST EXCEED THE REQUIREMENTS OF ASTM C618, "SPECIFICATIONS FOR FLY ASH AND RAW OR CALCINED NATURAL POZZOLANS FOR USE IN PORTLAND CEMENT CONCRETE" EXCEPT THAT THE MAXIMUM LOSS ON IGNITION (LOI) SHALL BE 3%.

REINFORCING MATERIALS:

- REINFORCING STEEL SHALL BE DEFORMED, BILLET, ASTM A 615 GRADE 60, UNLESS OTHERWISE INDICATED. STEEL SHALL BE USED WHERE INDICATED ON THE DRAWINGS.
- PROVIDE METAL ACCESSORIES, INCLUDING DEVICES NECESSARY FOR PROPERLY PLACING, SPACING, SUPPORTING AND FASTENING REINFORCEMENTS IN PLACE. WOOD, BRICK AND OTHER SIMILAR DEVICES ARE NOT ACCEPTABLE. FOR SLABS-ON-GRADE, USE SUPPORTS WITH SAND PLATES OR HORIZONTAL RUNNERS WHERE WETTED BASED MATERIAL WILL NOT SUPPORT CHAIR LEGS.
- FIBROUS REINFORCING SHALL BE USED IN ALL CONCRETE.
- USE ONLY 100 PERCENT VIRGIN POLYPROPYLENE, FIBRILLATED FIBERS CONTAINING NO REPROCESSED OLEFIN MATERIALS AND SPECIFICALLY MANUFACTURED FOR USE AS CONCRETE SECONDARY REINFORCEMENTS. VOLUME PER CUBIC YARD SHALL EQUAL A MINIMUM OF 0.1 % (1.5 POUNDS PER CUBIC YARD) OR AS REQUIRED TO MEET MINIMUM TOUGHNESS STANDARD AS SPECIFIED ABOVE.
- FIBER MANUFACTURER MUST DOCUMENT EVIDENCE OF 5 YEAR SATISFACTORY PERFORMANCE HISTORY, COMPLIANCE WITH APPLICABLE BUILDING CODES AND ASTM C_1116 TYPE 111 4.13 AND ASTM C_1118) PERFORMANCE LEVEL 1_5 OUTLINED IN SECTION 21 NOTE 17. FIBROUS CONCRETE REINFORCEMENT SHALL BE MANUFACTURED BY FIBERMESH COMPANY OF CHATTANOOGA, TENNESSEE, AND SHALL BE "FIBERMESH MD" OR AN APPROVED EQUAL.
- ALL POLYPROPYLENE FIBERS SHALL HAVE A SPECIFIC GRAVITY OF 0.91, TENSILE STRENGTH FROM 80-110 KSI AND A FIBER LENGTH GRADED PER MANUFACTURER.
- FIBROUS CONCRETE REINFORCEMENT MATERIALS PROVIDED IN THIS SECTION SHALL PRODUCE CONCRETE CONFORMING TO THE REQUIREMENTS FOR EACH TYPE AND CLASS OF CONCRETE REQUIRED, AS INDICATED ON THE DRAWINGS AND SPECIFIED IN SECTION 03300 WHERE THE CONCRETE IS TESTED IN ACCORDANCE WITH ASTM C_94 AND ASTM C_1116 TYPE III 4.13 AND ASTM C_1118(REF: ASTM C_1018) PERFORMANCE LEVEL 1_5 OUTLINED IN SECTION 21 NOTE 17.

CURING MEMBRANES & COMPOUNDS:

- POLYETHYLENE MEMBRANE SHALL BE 6-MIL POLYETHYLENE FILM COMPLYING WITH ASTM C171. MEMBRANE IS TO MEET OR EXCEED TEST FOR WATER RETENTION, ASTM C156.
- BURLAP SHALL BE FREE OR SIZING OF ANY SUBSTANCES THAT ARE INJURIOUS TO CEMENT OR CAN CAUSE DISCOLORATION. BURLAP SHALL BE RINSED IN WATER PRIOR TO USE. BURLAP SHALL BE OF SUFFICIENT THICKNESS TO RETAIN WATER WITHOUT FREQUENT WETTING.
- CURING COMPOUND PER ASTM C309, TYPE I: SURE-CURE FLOOR TREATMENT MADE BY KAUFMAN PRODUCTS, INC., BALTIMORE, MARYLAND; "KURE-N-SEAL" BY SONNERBORN CHEMICAL PRODUCTS, OR EUCOCURE" BY EUCLID.
- CONTROL OR CONSTRUCTION JOINT FILLER (SEALANT): SHALL BE SEMI-RIGID EPOXY JOINT FILLER HAVING A CURED SHORE A HARDNESS OF APPROXIMATELY 80 (ASTM D2240), TENSILE STRENGTH OF 400-500 PSI, ADHESION TO CONCRETE OF APPROXIMATELY 180-230 PSI. MATERIAL SHALL BE 100 PERCENT SOLIDS EPOXY AND BE A TWO COMPONENT POUR GRADE. ACCEPTABLE PRODUCTS INCLUDE METZGER/MCGUIRE MM-80 OR PECORA, TWO-PART NR-200 WITH PRIMER P-200.
- SEALER/DUSTPROOFER FINISH: CLEAR STYRENE ACRYLATE TYPE EQUAL TO "SUPER REZ SEAL" BY EUCLID, "MASTERSEAL 86" BY MASTER BUILDERS OR "KURE-N- SEAL" BY SONNEBORN. PIGMENTED SEALER SHALL BE APPROVED EQUAL TO " GARD-SIX" PIGMENTED SEALER BY OLD NORTH MFG. CO., LENIOR, NC 28645. COLOR TO BE GRAY TO MATCH CONCRETE

PROPORTIONING AND MIXING:

- PROPORTION CONCRETE MIX IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE (ACI) FOR STRENGTH INDICATED AND SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. PREPARE DESIGN MIXES FOR EACH TYPE AND STRENGTH OF CONCRETE BY EITHER LABORATORY TRAIL BATCH OR FIELD EXPERIENCE METHODS AS SPECIFIED IN ACI 301. IF TRIAL BATCH METHOD IS USED, USE AN INDEPENDENT TESTING FACILITY, ACT CONTRACTOR EXPENSE, ACCEPTABLE TO OWNER FOR PREPARING AND REPORTING PROPOSED MIX DESIGNED. THE TESTING FACILITY SHALL NOT BE THE SAME AS USED FOR FIELD QUALITY CONTROL TESTING UNLESS OTHERWISE ACCEPTABLE TO OWNER.
- SUBMIT WRITTEN REPORTS TO AVE OF EACH PROPOSED MIX FOR EACH CLASS OF CONCRETE AT LEAST 15 DAYS PRIOR TO START OF WORK. DO NOT BEGIN CONCRETE PRODUCTION UNTIL MIXES HAVE BEEN REVIEWED BY AVE.

ALL CONCRETE SHALL BE READY-MIX CONCRETE IN ACCORDANCE WITH ASTM C 94.

- CONCRETE SHALL BE MIXED ONLY IN QUANTITIES FOR IMMEDIATE USE. CONCRETE THAT HAS SET SHALL BE DISCARDED AND SHALL NOT BE RETEMPERED.
- WHEN A TRUCK MIXER IS USED, NO WATER FROM THE TRUCK WATER SYSTEM OR ELSEWHERE SHALL BE ADDED TO THE CONCRETE AFTER THE INITIAL INTRODUCTION OF THE MIXING WATER AT THE BATCH PLANT. EXCEPT WHEN ON ARRIVAL AT THE JOB SITE IF THE SLUMP IS LESS THAN SPECIFIED BY THE APPROVED MIXED DESIGN. SUCH ADDITION OF WATER TO BRING THE SLUMP WITHIN SPECIFIED LIMITS SHALL BE DONE SO IN ACCORDANCE WITH ASTM C94 AND ONLY AFTER FIRST BEING APPROVED BY THE CONCRETE TECHNICIAN REPRESENTING THE AUTHORIZED TESTING AGENCY FOR THE PROJECT. THE WATER ADDED SHALL BE INCORPORATED BY ADDITIONAL MIXING EQUAL TO AT LEAST HALF OF THE TOTAL MIXING REQUIRED.
- TRUCKS DELIVERING CONCRETE TO THE SITE WITH TOO HIGH A SLUMP OR EXCESSIVELY DRY MIXES ARE NOT ACCEPTABLE AND ARE TO BE SENT BACK TO THE BATCH PLANT.
- ALL CONCRETE, UNLESS OTHERWISE NOTED OTHERWISE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3,500 PSI AND A SLUMP OF 4" (+1") IF A SUPERPLASTICIZER IS USED, CONCRETE SHALL HAVE A SLUMP OF 4" (+1") BEFORE THE ADDITION OF SUPERPLASTICIZER AND A MINIMUM SLUMP OF 7" AND MAXIMUM SLUMP OF 10" AFTER THE ADDITION OF SUPERPLASTICIZER.
- THE MAXIMUM WATER-SOLUBLE CHLORIDE ION PRESENT AT AGE 28 DAYS IN THE CONCRETE BY WEIGHT OF CEMENT, SHALL NOT EXCEED 0.30%.
- ALL CONCRETE THAT HAS THE POTENTIAL OF BEING EXPOSED TO CYCLES OF FREEZING AND THAWING OR THE APPLICATION OF DEICER CHEMICALS SHALL HAVE A TOTAL AIR CONTENT OF 6% (+1")

SAMPLING FRESH CONCRETE: SECURE SAMPLES IN ACCORDANCE WITH ASTM C 172.

- COMPRESSION TEST SPECIMENS: ASTM C 31. MOLD AND CURE ONE SET OF THREE (3) STANDARD CYLINDERS FOR EACH COMPRESSIVE STRENGTH TEST. UNLESS OTHERWISE DIRECTED. MOLD AND STORE CYLINDERS FOR LABORATORY-CURED TEST SPECIMENS, EXCEPT WHEN FILED-CURED.
- COMPRESSIVE STRENGTH TESTS: ASTM C39 - ONE SET FOR EACH 100 CUBIC YARDS OR FRACTION THEREOF, OF EACH CONCRETE CLASS PLACED IN ANY ONE DAY OR EACH 5000 SQUARE FEET OF SURFACE AREA PLACED, ONE SPECIMEN TESTED AT 7 DAYS, ONE SPECIMENS TESTED @ 28 DAYS, AND ONE SPECIMEN RETAINED IN RESERVE FOR LATER TESTING @ 56 DAYS, IF REQUIRED.
- SLUMP: DETERMINE FOR EACH SAMPLE IN ACCORDANCE WITH ASTM C 143.
- AIR CONTENT: DETERMINE FOR EACH SAMPLE IN ACCORDANCE WITH ASTM C 231.
- CONCRETE TEMPERATURE: DETERMINE FOR SAMPLE.
- UNIT WEIGHT: DETERMINE FOR EACH SAMPLE IN ACCORDANCE WITH ASTM C138.

• ANY DEVIATION FROM THESE DOCUMENTS REQUIRE WRITTEN SUBMISSION AND APPROVALS.

• THESE DOCUMENTS ARE NOT PERMIT DOCUMENTS. PERMIT DOCUMENTS WILL NEED TO BE SUBMITTED WITH FINAL CHANGES INCLUDING FOOTERS DETAILS. COORDINATED WITH ACTUAL BUILDING LOADS AS SUBMITTED BY BUILDING MANUFACTURER.

OWNER'S SPECIAL INSPECTIONS:

- BEARING AT BOTTOM OF FOOTING EXCAVATIONS
- CONCRETE MIX DESIGN TESTS AND CERTIFICATES
- PLACEMENT OF REINFORCING STEEL & ANCHORS
- TEST CYLINDERS & STRENGTH TEST
- SLUMP, AIR & TEMPERATURE TEST
- MIX PROPORTIONS & MIX ON DELIVERY TICKETS
- INSTALLATION OF HIGH-STRENGTH BOLTS
- STEEL FRAMING AND CONNECTIONS

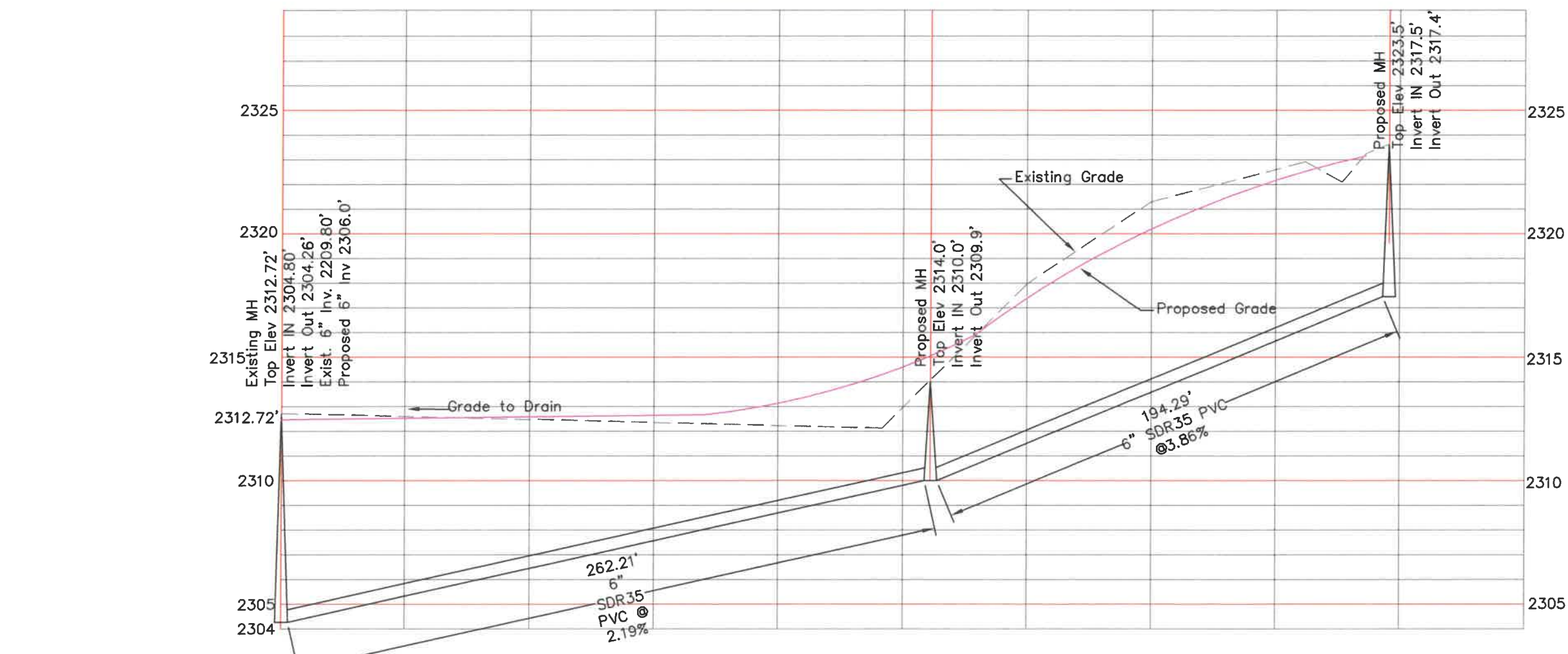
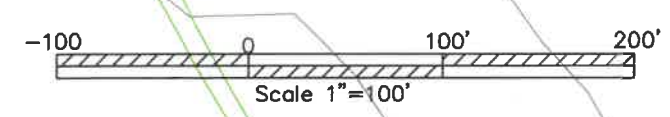
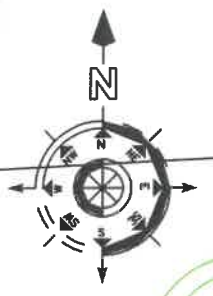


Utility Barn Restroom Specifications

Date 10-5-2020

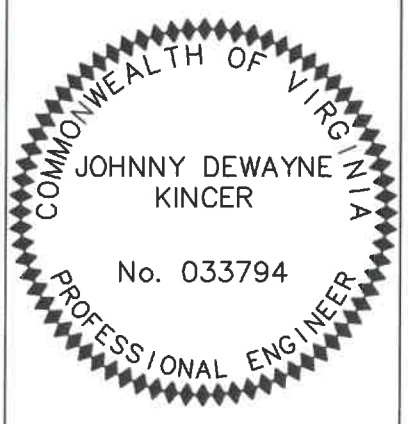
No.	Revision	Date

Legend
 Existing Contour ———
 Proposed Contour ———
 Existing Culvert/Pipe ———



Note:
 All Pipe Bedding and
 backfill to be select
 mater or material
 approved by the
 engineer.

Scale
 1"=50' Horiz.
 1"=5' Vert.



Utility Barn Sewer Plan
 Proposed Sewer Profile

Date 10-5-20

As Shown

No.	Revision	Date