

**ADDENDUM NO. 2**  
**PHILLIP C. SHOWELL ELEMENTARY SCHOOL**  
**CLASSROOM ADDITION**  
Selbyville, Delaware 19975

May 4, 2015

NOTICE: Attach this addendum to the project manual for this project. It modifies and becomes a part of the contract documents. Work or materials not specifically mentioned herein are to be described in the main body of the specifications and as shown on the drawings. Bidders shall acknowledge receipt of this addendum on the space provided on the Bid Form. Failure to do so may subject the bidder to disqualification.

**The bid opening date and time has changed. All bids are due Friday May 8, 2015 at 2:00 PM local time at the Indian River School District Offices, 31 Hoosier Street Selbyville, Delaware 19975.**

**Bidders are advised that the only reliable source of documents for this solicitation is the EDiS ftp site. Bidders that rely on information published on any other websites do so at their own risk.**

Whenever this Addendum modifies a portion of the Project Manual added information is shown in **Bold/Italicized** and deleted information is shown as ~~striketrough~~.

The documents for the above referenced project, Project Manual, dated March 2, 2015 and Drawings, dated March 25, 2015, as well as subsequently issued addenda, are amended as follows:

**CLARIFICATION**

1. Addendum 1: First paragraph of addendum should indicate dates as follows:  
    "The documents for the above referenced project, Project Manual, dated *March 2, 2015* and Drawings, dated *March 25, 2015*, are amended as follows:"
2. Pre-engineered roof trusses shall provide adequate clearance over equipment platform for proper installation and servicing of mechanical equipment, but not less than 7'-0". Coordinate with approved equipment. Provide removable section(s) of truss bottom chord as required for installation and future removal of mechanical equipment, accessed from adjacent classroom.
3. Casement window in storefront SF-1 shall be manufacturer's standard model (basis-of-design Kawneer GLASSvent with standard hardware), and shall comply with emergency escape requirements.
4. The roof trusses below the dormer are intended to run through the dormer area and bear on the exterior wall. Truss manufacturer shall leave the area below the louvers open as required for ductwork, plenum, and louver installation, and locate a truss on either side of each of the two louvers. Metal deck shall not be installed on the area of the trusses below the dormer. Mechanical duct work shall be coordinated with the truss configuration to allow the duct work to pass through the web openings of the trusses in the area of the dormer.
5. As noted on Lighting Fixture Schedule, Remark #1, basis-of-design fixtures are listed in schedule to establish general requirements of equivalent type, performance, quality, and aesthetics.

**CHANGES TO PROJECT MANUAL**

1. Section 004100 BID FORMS

- a. REPLACE section with attached.
2. Section 12300 ALTERNATES
  - a. REPLACE section with attached.
3. Section 033000 Cast-In-Place Concrete
  - a. REPLACE paragraph 2.7.A with the following:
    - A. Sheet Vapor Retarder: ASTM E 1745, Class A. Include manufacturer's recommended adhesive or pressure-sensitive tape.
      1. Products: Subject to compliance with requirements, provide one of the following:
        - a. Fortifiber Building Systems Group; Moistop Ultra 10.
        - b. Insulation Solutions, Inc.; Viper VaporCheck II 10-mil.
        - c. Raven Industries, Inc; Vapor Block 10.
        - d. Reef Industries, Inc; Griffolyn 10 mil Green.
        - e. Stego Industries, LLC; Stego Wrap 10 mil Class A.
        - f. Tex-Trude, Inc.; Xtreme 10 Mil Underslab Vapor Barrier.
        - g. W. R. Meadows, Inc; Perminator 10 mil.
4. Section 042000 Unit Masonry
  - a. REVISE 2.4.B.1.a and subparagraphs to read as follows:
    - a. BRK-1 (Phillip C. Showell): Include the cost of \$700/m for the following selection.
      - 1) Basis-of-Design: Yankee Hill; New England, Modular.
      - 2) Showell Flashed Smooth Blend #4, Modular, as provided by Delaware Brick.
5. Section 087100 Door Hardware
  - a. REPLACE section with attached.
6. Section 088000 Glazing
  - a. REVISE paragraph 2.3.A.1 as follows: "1. PPG Industries, Inc.; Solarban 70XL w/ Optigray tint."
7. Section 093000 Tiling
  - a. REPLACE paragraph 2.2.A.1 with the following:
    1. Basis-of-Design: Subject to compliance with requirements, provide Daltile; Semi-Gloss or a comparable product by one of the following:
    - b. REMOVE paragraph 2.2.A.1.c (this manufacturer is now listed as basis-of-design).
8. Section 096723 Resinous Flooring
  - a. REVISE paragraph 2.1.A.1 to read as follows: "1. One selection for EPX-2."

9. Section 238126 Split-System Air-Conditioning Units
  - a. ADD paragraphs 2.1.A.5 and 2.1.A.6 as follows:
    5. Trane.
    6. Samsung.
  - b. ADD paragraphs 2.1.B as follows:
    - B. Contractor shall coordinate any and all different equipment requirements for the listed manufacturers, from the basis-of-design equipment; and shall be responsible for any additional cost, including electrical upgrades or added connection requirements.

### **CHANGES TO DRAWINGS**

1. C-501 Schematic Construction Stormwater Management Plan
  - a. REMOVE work associated with filter strip 2.
2. C-502 Post Construction Site Stormwater Management Plan
  - a. ADD rain garden area.
3. C-503 Construction Site Stormwater Plan Filter Strip 1
  - a. REPLACE drawing with attached.
4. C-504 Construction Site Stormwater Plan Filter Strip 1
  - a. ADD drawing issued via this addendum
5. C-505 Sediment and Stormwater Plan Notes and Details
  - a. REVISE previous sheet C-504 to sheet C-505, per attached.
6. C-506 Sediment and Stormwater Plan Notes and Details
  - a. REVISE previous sheet C-505 to sheet C-506, per attached.
7. S101 Foundation Plan
  - a. REVISE exterior stair per attached drawing. Brick sidewall occurs on plan west and plan north sides of stair.
8. S102 Roof Framing Plan
  - a. REVISE framing at dormer and notes, per attached drawing.
9. S500 Foundation Typical Details
  - a. ADD detail 8.
10. AD101 First Floor Demolition Plan
  - a. ADD note at Classroom 102 and adjacent corridor by drinking fountain as follows: "REMOVE CEILING, FLOORING AND BASE - COORD EXTENTS W/ NEW WORK".
11. A103 Finish Plan and Finish Schedule

- a. Detail 1:
    - i. REVISE teaching surfaces at Classrooms 122, 124, and 125.
    - ii. REMOVE VCT pattern at Vestibule 121 (floor finish is carpet, as scheduled).
    - iii. REVISE VCT floor pattern at Vestibule 115 and Corridor 120.
    - iv. ADD note at new EWC and chase near Classroom 102 as follows:  
 "REPLACE VCT AND BASE TO MATCH EXG."
  - b. Detail 2: REVISE from eleven (11) tiles to fourteen (14) tiles high, and raise accent band by one (1) tile.
  - c. Finish Schedule Legend
    - i. REPLACE CPT-1 and CPT-2 with "CPT, TILE WALK OFF MAT, 096816".
12. A301 Building and Wall Sections
- a. ADD detail 4, per attached drawing.
  - b. REPLACE detail 5, per attached drawing.
13. A501 Wall Types and Miscellaneous Details
- a. ADD wall type 1D, and revise wall type descriptions to note termination of CMU at truss.
  - b. Detail 4: REVISE per attached drawing.
  - c. Detail 5: REPLACE detail per attached drawing.
14. A601 Door Schedule, Door and Window Types, and Details
- a. Door Schedule: REVISE hardware set numbers.
  - b. ADD details S3 and 1.
15. E100 Electrical Plans
- a. On lighting floor plan, ADD Drawing Note #17 to indicate Type "B" fixture in VEST 121 to be provided with flange kit.
  - b. On power floor plan, ADD Drawing Note #16 to indicate added receptacle to circuit Z-30 at ERV in attic space for maintenance purposes.
  - c. On power floor plan, REVISE hall receptacles to indicate circuit no. Z-30 and not Z-7. Circuit was labeled incorrectly.
  - d. On power floor plan, ADD (1) quad receptacle, (2) teacher/smartboard 2" conduit drops, (3) 2 port data drops, and (2) 3 port data drops to each classroom. REVISE spacing/dimensions of device locations.
  - e. On power floor plan, ADD Drawing Note #15 to indicate Base Bid and Alternate No. 4 requirements for IDF Room 113.
16. E101:
- a. On fire alarm floor plan, ADD (1) smoke detector to each classroom.

## **ATTACHMENTS**

Spec. Sections 004100, 012300, 087100

C-501, C-502, C-503, C-504, C-505, C-506, S101, S102, S501, A103, A301, A501, A601, E100, E101

**END OF ADDENDUM NO. 2**



Indian River School District  
Referendum 2013  
Phillip C. Showell Elementary School Addition

**A-01: Sitework**

BID FORM

For Bids Due: \_\_\_\_\_ To: Indian River School District  
31 Hosier Street  
Selbyville, DE 19975

Name of Bidder: \_\_\_\_\_

Bidder Address: \_\_\_\_\_  
\_\_\_\_\_

Contact Name: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Delaware Business License No.: \_\_\_\_\_ Taxpayer ID No.: \_\_\_\_\_

(Other License Nos.): \_\_\_\_\_

**(A copy of Bidder's Delaware Business License must be attached to this form.)**

Phone No.: ( ) \_\_\_\_\_ - \_\_\_\_\_ Fax No.: ( ) \_\_\_\_\_ - \_\_\_\_\_

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

\$ \_\_\_\_\_ (\$ \_\_\_\_\_ )

ALTERNATES

Alternate prices conform to applicable project specification section. Refer to specifications for a complete description of the following Alternates. An "ADD" or "DEDUCT" amount is indicated by the crossed out part that does not apply.

A. Alternate No. 1: Seal coat existing front parking lot

1. Base Bid: Removal of striping in the existing front south parking lot adjacent to the front of the building according to Sheet C-101 of the contract documents. Striping of parking spaces and pavement markings as shown on sheet C-201 of the contract documents.
2. Alternate: Seal coating approximately 21,700 sqft of the existing southern parking lot as shown on sheet C-201 of the contract documents.

Add/Deduct \_\_\_\_\_ (\$ \_\_\_\_\_ )

Indian River School District  
Referendum 2013  
Phillip C. Showell Elementary School Addition

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B. Alternate No. 2: Seal coat remaining existing parking lot

1. Base Bid: Existing northern and western parking lots to remain, as shown on sheet C-201.
2. Alternate: Seal coating approximately 35,000 sqft of the existing western and northern parking lot as shown on sheet C-201 of the contract documents, with striping to match existing.

Add/Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

C. Alternate No. 3: LED Lights

1. Base Bid: Provide fluorescent light fixture for types 'A' and 'B' as indicate in Lighting Fixture Schedule on Sheet E001.
2. Alternate: In lieu of base bid, provide LED lighting fixture for types 'A' and 'B' as indicated in Lighting Fixture Schedule on Sheet E001.

Add/Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

D. *Alternate No. 4: IDF Room*

1. *Base Bid: Owner constructs IDF room and provided electrical and technology equipment.*
2. *Alternate: In lieu of base bid, demolish existing storage rooms and provide new IDF room, including technology and electrical work.*

*Add/Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)*

UNIT PRICES

Unit prices conform to applicable project specification section. Refer to the specifications for a complete description of the following Unit Prices:

A. Unit Price No. 1: Removal of unsatisfactory soil and replacement and installation of satisfactory soil material.

1. Description: Unsatisfactory soil excavation and disposal off site and replacement with satisfactory fill material or engineered fill from off site, as required, according to Section 312000 "Earth Moving."
2. Unit of Measurement: Cubic yard of soil excavated, based on survey of volume removed.

Add \_\_\_\_\_ (\$ \_\_\_\_\_)      Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

Indian River School District  
Referendum 2013  
Phillip C. Showell Elementary School Addition

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B. Unit Price No. 2: Full depth pavement patch.

1. Description: Saw cutting and removal of complete pavement section and unsuitable subsoils in the areas of pavement above and beyond the base bid as shown on the contract documents. Complete replacement and installation of pavement section in accordance with the "On-Site Pavement Section" detail provided on sheet C-902 of the contract documents.
2. Unit of Measurement: Square foot of pavement area, based on survey of area removed.

Add \_\_\_\_\_ (\$ \_\_\_\_\_)      Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

C. Unit Price No. 3: Seal Coating Pavement area.

1. Description: Additional seal coating of parking surfaces and marking in addition to the area specified by the Alternate no. 2.
2. Unit of Measurement: Square foot.

Add \_\_\_\_\_ (\$ \_\_\_\_\_)      Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

D. Unit Price No. 4: Resinous flooring primer.

1. Description: Add/deduct vapor-retarding primer to resinous flooring system, as recommending in writing by flooring system manufacturer.
2. Unit of Measurement: Per room.

Add \_\_\_\_\_ (\$ \_\_\_\_\_)      Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

NOTE: The difference in price between Add and Deduct in the above Unit Prices should not exceed fifteen percent (15%).

I/We acknowledge Addendums numbered \_\_\_\_\_ and the price(s) submitted include any cost/schedule impact they may have.

This bid shall remain valid and cannot be withdrawn for sixty (60) days from the date of opening of bids, and the undersigned shall abide by the Bid Security forfeiture provisions. Bid Security is attached to this Bid (if required).

The Owner shall have the right to reject any or all bids, and to waive any informality or irregularity in any bid received.

**Indian River School District**  
**Referendum 2013**  
**Phillip C. Showell Elementary School Addition**

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This bid is based upon work being accomplished by the Sub-Contractors named on the list attached to this bid.

The undersigned represents and warrants that he has complied and shall comply with all requirements of local, state, and national laws; that no legal requirement has been or shall be violated in making or accepting this bid, in awarding the contract to him or in the prosecution of the work required; that the bid is legal and firm; that he has not, directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken action in restraint of free competitive bidding.

Upon receipt of written notice of the acceptance of this Bid, the Bidder shall, within twenty (20) calendar days, execute the agreement in the required form and deliver the Contract Bonds, and Insurance Certificates, required by the Contract Documents.

I am / We are an Individual / a Partnership / a Corporation

By \_\_\_\_\_ Trading as \_\_\_\_\_  
(Individual's / General Partner's / Corporate Name)  
\_\_\_\_\_  
(State of Corporation)

Business Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Witness: \_\_\_\_\_ By: \_\_\_\_\_  
(SEAL) ( Authorized Signature )  
\_\_\_\_\_  
( Title )  
Date: \_\_\_\_\_

**ATTACHMENTS**

Sub-Contractor List  
Non-Collusion Statement  
Bid Bond  
Consent of Surety  
Delaware Business License  
(Others as Required by Project Manuals)

Indian River School District  
Referendum 2013  
Phillip C. Showell Elementary School Addition

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SUBCONTRACTOR LIST

In accordance with Title 29, Chapter 6962 (d)(10)b Delaware Code, the following sub-contractor listing must accompany the bid submittal. The name and address of the sub-contractor must be listed for each category where the bidder intends to use a sub-contractor to perform that category of work. In order to provide full disclosure and acceptance of the bid by the Owner, **it is required that bidders list themselves as being the sub-contractor for all categories where he/she is qualified and intends to perform such work.**

<u>Subcontractor Category</u>	<u>Subcontractor</u> <u><b>Subcontractors tax payer ID #</b></u> <u><b>or Delaware Business license #</b></u>	<u>Address (City &amp; State)</u>
1. Sitework	_____	_____

Indian River School District  
Referendum 2013  
Phillip C. Showell Elementary School Addition

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NON-COLLUSION STATEMENT

This is to certify that the undersigned bidder has neither directly nor indirectly, entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with this proposal submitted this date \_\_\_\_\_.

All the terms and conditions of A-01, Sitework have been thoroughly examined and are understood.

NAME OF BIDDER: \_\_\_\_\_

AUTHORIZED REPRESENTATIVE  
(TYPED): \_\_\_\_\_

AUTHORIZED REPRESENTATIVE  
(SIGNATURE): \_\_\_\_\_

TITLE: \_\_\_\_\_

ADDRESS OF BIDDER: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PHONE NUMBER: \_\_\_\_\_

Sworn to and Subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_.

My Commission expires \_\_\_\_\_. NOTARY PUBLIC \_\_\_\_\_.

THIS PAGE MUST BE SIGNED AND NOTARIZED FOR YOUR BID TO BE CONSIDERED.

Indian River School District  
Referendum 2013  
Phillip C. Showell Elementary School Addition

**BID BOND**

TO ACCOMPANY PROPOSAL  
(Not necessary if security is used)

KNOW ALL MEN BY THESE PRESENTS That: \_\_\_\_\_ of  
\_\_\_\_\_ in the County of \_\_\_\_\_ and State of \_\_\_\_\_ as  
Principal, and \_\_\_\_\_ of \_\_\_\_\_ in the County of \_\_\_\_\_  
\_\_\_\_\_ and State of \_\_\_\_\_ as Surety, legally authorized to do business in the State of Delaware  
("State"), are held and firmly unto the Indian River School District in the sum of \_\_\_\_\_ Dollars  
(S \_\_\_\_\_), or percent not to exceed \_\_\_\_\_  
Dollars (S \_\_\_\_\_) of amount of bid on Contract No. \_\_\_\_\_ to be paid to the Indian  
River School District for the use and benefit of the Indian River School District for which payment well and truly to be  
made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly and severally for  
and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden Principal who has submitted to the  
Indian River School District a certain proposal to enter into this contract for the furnishing of certain material and/or  
services within the State, shall be awarded this Contract, and if said Principal shall well and truly enter into and execute  
this Contract as may be required by the terms of this Contract and approved by the Indian River School District this  
Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the  
terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with \_\_\_\_\_ seal and dated this \_\_\_\_ day of \_\_\_\_\_ in the year of our Lord two thousand  
and \_\_\_\_\_ (20\_\_).

SEALED, AND DELIVERED IN THE PRESENCE OF

\_\_\_\_\_  
Name of Bidder (Organization)

Corporate  
Seal  
Attest \_\_\_\_\_

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

\_\_\_\_\_  
Title

\_\_\_\_\_  
Name of Surety

Witness \_\_\_\_\_

\_\_\_\_\_  
Title

Indian River School District  
Referendum 2013  
Phillip C. Showell Elementary School Addition

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CONSENT OF SURETY

DATE \_\_\_\_\_

To: Indian River School District  
31 Hosier Street  
Selbyville, DE 19975

Gentlemen:

We, the \_\_\_\_\_

\_\_\_\_\_  
(Surety Company's Address)

a Surety Company authorized to do business in the State of Delaware hereby agrees that if

\_\_\_\_\_  
(Contractor)

\_\_\_\_\_  
(Address)

is awarded the Contract No. \_\_\_\_\_

We will write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to Bidders.

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

By \_\_\_\_\_  
(Attorney-in-Fact)

END OF SECTION



Indian River School District  
Referendum 2013  
Phillip C. Showell Elementary School Addition

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**A-02: Masonry**

BID FORM

For Bids Due: \_\_\_\_\_ To: Indian River School District  
31 Hosier Street  
Selbyville, DE 19975

Name of Bidder: \_\_\_\_\_

Bidder Address: \_\_\_\_\_  
\_\_\_\_\_

Contact Name: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Delaware Business License No.: \_\_\_\_\_ Taxpayer ID No.: \_\_\_\_\_

(Other License Nos.): \_\_\_\_\_

**(A copy of Bidder's Delaware Business License must be attached to this form.)**

Phone No.: (        ) \_\_\_\_\_ - \_\_\_\_\_ Fax No.: (        ) \_\_\_\_\_ - \_\_\_\_\_

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

\$ \_\_\_\_\_ (\$ \_\_\_\_\_ )

ALTERNATES

Alternate prices conform to applicable project specification section. Refer to specifications for a complete description of the following Alternates. An "ADD" or "DEDUCT" amount is indicated by the crossed out part that does not apply.

A. Alternate No. 1: Seal coat existing front parking lot

1. Base Bid: Removal of striping in the existing front south parking lot adjacent to the front of the building according to Sheet C-101 of the contract documents. Striping of parking spaces and pavement markings as shown on sheet C-201 of the contract documents.
2. Alternate: Seal coating approximately 21,700 sqft of the existing southern parking lot as shown on sheet C-201 of the contract documents.

Add/Deduct \_\_\_\_\_ (\$ \_\_\_\_\_ )

Indian River School District  
Referendum 2013  
Phillip C. Showell Elementary School Addition

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B. Alternate No. 2: Seal coat remaining existing parking lot

1. Base Bid: Existing northern and western parking lots to remain, as shown on sheet C-201.
2. Alternate: Seal coating approximately 35,000 sqft of the existing western and northern parking lot as shown on sheet C-201 of the contract documents, with striping to match existing.

Add/Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

C. Alternate No. 3: LED Lights

1. Base Bid: Provide fluorescent light fixture for types 'A' and 'B' as indicate in Lighting Fixture Schedule on Sheet E001.
2. Alternate: In lieu of base bid, provide LED lighting fixture for types 'A' and 'B' as indicated in Lighting Fixture Schedule on Sheet E001.

Add/Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

D. *Alternate No. 4: IDF Room*

1. *Base Bid: Owner constructs IDF room and provided electrical and technology equipment.*
2. *Alternate: In lieu of base bid, demolish existing storage rooms and provide new IDF room, including technology and electrical work.*

Add/Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

UNIT PRICES

Unit prices conform to applicable project specification section. Refer to the specifications for a complete description of the following Unit Prices:

A. Unit Price No. 1: Removal of unsatisfactory soil and replacement and installation of satisfactory soil material.

1. Description: Unsatisfactory soil excavation and disposal off site and replacement with satisfactory fill material or engineered fill from off site, as required, according to Section 312000 "Earth Moving."
2. Unit of Measurement: **Cubic yard** of soil excavated, based on survey of volume removed.

Add \_\_\_\_\_ (\$ \_\_\_\_\_)      Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

Indian River School District  
Referendum 2013  
Phillip C. Showell Elementary School Addition

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B. Unit Price No. 2: Full depth pavement patch.

1. Description: Saw cutting and removal of complete pavement section and unsuitable subsoils in the areas of pavement above and beyond the base bid as shown on the contract documents. Complete replacement and installation of pavement section in accordance with the "On-Site Pavement Section" detail provided on sheet C-902 of the contract documents.
2. Unit of Measurement: Square foot of pavement area, based on survey of area removed.

Add \_\_\_\_\_ (\$ \_\_\_\_\_)      Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

C. Unit Price No. 3: Seal Coating Pavement area.

1. Description: Additional seal coating of parking surfaces and marking in addition to the area specified by the Alternate no. 2.
2. Unit of Measurement: Square foot.

Add \_\_\_\_\_ (\$ \_\_\_\_\_)      Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

D. Unit Price No. 4: Resinous flooring primer.

1. Description: Add/deduct vapor-retarding primer to resinous flooring system, as recommending in writing by flooring system manufacturer.
2. Unit of Measurement: Per room.

Add \_\_\_\_\_ (\$ \_\_\_\_\_)      Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

NOTE: The difference in price between Add and Deduct in the above Unit Prices should not exceed fifteen percent (15%).

I/We acknowledge Addendums numbered \_\_\_\_\_ and the price(s) submitted include any cost/schedule impact they may have.

This bid shall remain valid and cannot be withdrawn for sixty (60) days from the date of opening of bids, and the undersigned shall abide by the Bid Security forfeiture provisions. Bid Security is attached to this Bid (if required).

The Owner shall have the right to reject any or all bids, and to waive any informality or irregularity in any bid received.

**Indian River School District**  
**Referendum 2013**  
**Phillip C. Showell Elementary School Addition**

---

This bid is based upon work being accomplished by the Sub-Contractors named on the list attached to this bid.

The undersigned represents and warrants that he has complied and shall comply with all requirements of local, state, and national laws; that no legal requirement has been or shall be violated in making or accepting this bid, in awarding the contract to him or in the prosecution of the work required; that the bid is legal and firm; that he has not, directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken action in restraint of free competitive bidding.

Upon receipt of written notice of the acceptance of this Bid, the Bidder shall, within twenty (20) calendar days, execute the agreement in the required form and deliver the Contract Bonds, and Insurance Certificates, required by the Contract Documents.

I am / We are an Individual / a Partnership / a Corporation

By \_\_\_\_\_ Trading as \_\_\_\_\_  
(Individual's / General Partner's / Corporate Name)  
\_\_\_\_\_  
(State of Corporation)

Business Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Witness: \_\_\_\_\_ By: \_\_\_\_\_  
(SEAL) ( Authorized Signature )  
\_\_\_\_\_  
( Title )  
Date: \_\_\_\_\_

**ATTACHMENTS**

Sub-Contractor List  
Non-Collusion Statement  
Bid Bond  
Consent of Surety  
Delaware Business License  
(Others as Required by Project Manuals)

Indian River School District  
Referendum 2013  
Phillip C. Showell Elementary School Addition

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SUBCONTRACTOR LIST

In accordance with Title 29, Chapter 6962 (d)(10)b Delaware Code, the following sub-contractor listing must accompany the bid submittal. The name and address of the sub-contractor must be listed for each category where the bidder intends to use a sub-contractor to perform that category of work. In order to provide full disclosure and acceptance of the bid by the Owner, **it is required that bidders list themselves as being the sub-contractor for all categories where he/she is qualified and intends to perform such work.**

<u>Subcontractor Category</u>	<u>Subcontractor</u> <u><b>Subcontractors tax payer ID #</b></u> <u><b>or Delaware Business license #</b></u>	<u>Address (City &amp; State)</u>
1. Masonry	_____	_____

Indian River School District  
Referendum 2013  
Phillip C. Showell Elementary School Addition

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NON-COLLUSION STATEMENT

This is to certify that the undersigned bidder has neither directly nor indirectly, entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with this proposal submitted this date \_\_\_\_\_.

All the terms and conditions of A-02, Masonry have been thoroughly examined and are understood.

NAME OF BIDDER: \_\_\_\_\_

AUTHORIZED REPRESENTATIVE  
(TYPED): \_\_\_\_\_

AUTHORIZED REPRESENTATIVE  
(SIGNATURE): \_\_\_\_\_

TITLE: \_\_\_\_\_

ADDRESS OF BIDDER: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PHONE NUMBER: \_\_\_\_\_

Sworn to and Subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_.

My Commission expires \_\_\_\_\_. NOTARY PUBLIC \_\_\_\_\_.

THIS PAGE MUST BE SIGNED AND NOTARIZED FOR YOUR BID TO BE CONSIDERED.

Indian River School District  
Referendum 2013  
Phillip C. Showell Elementary School Addition

**BID BOND**

TO ACCOMPANY PROPOSAL  
(Not necessary if security is used)

KNOW ALL MEN BY THESE PRESENTS That: \_\_\_\_\_ of  
\_\_\_\_\_ in the County of \_\_\_\_\_ and State of \_\_\_\_\_ as  
Principal, and \_\_\_\_\_ of \_\_\_\_\_ in the County of \_\_\_\_\_  
\_\_\_\_\_ and State of \_\_\_\_\_ as Surety, legally authorized to do business in the State of Delaware  
("State"), are held and firmly unto the Indian River School District in the sum of \_\_\_\_\_ Dollars  
(S \_\_\_\_\_), or percent not to exceed \_\_\_\_\_  
Dollars (S \_\_\_\_\_) of amount of bid on Contract No. \_\_\_\_\_ to be paid to the Indian  
River School District for the use and benefit of the Indian River School District for which payment well and truly to be  
made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly and severally for  
and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden Principal who has submitted to the  
Indian River School District a certain proposal to enter into this contract for the furnishing of certain material and/or  
services within the State, shall be awarded this Contract, and if said Principal shall well and truly enter into and execute  
this Contract as may be required by the terms of this Contract and approved by the Indian River School District this  
Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the  
terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with \_\_\_\_\_ seal and dated this \_\_\_\_ day of \_\_\_\_\_ in the year of our Lord two thousand  
and \_\_\_\_\_ (20\_\_).

SEALED, AND DELIVERED IN THE PRESENCE OF

\_\_\_\_\_  
Name of Bidder (Organization)

Corporate  
Seal  
Attest \_\_\_\_\_

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

\_\_\_\_\_  
Title

\_\_\_\_\_  
Name of Surety

Witness \_\_\_\_\_

\_\_\_\_\_  
Title

Indian River School District  
Referendum 2013  
Phillip C. Showell Elementary School Addition

---

CONSENT OF SURETY

DATE \_\_\_\_\_

To: Indian River School District  
31 Hosier Street  
Selbyville, DE 19975

Gentlemen:

We, the \_\_\_\_\_

\_\_\_\_\_  
(Surety Company's Address)

a Surety Company authorized to do business in the State of Delaware hereby agrees that if

\_\_\_\_\_  
(Contractor)

\_\_\_\_\_  
(Address)

is awarded the Contract No. \_\_\_\_\_

We will write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to Bidders.

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

By \_\_\_\_\_  
(Attorney-in-Fact)

END OF SECTION



Indian River School District  
Referendum 2013  
Phillip C. Showell Elementary School Addition

A-03: Carpentry & General Work

BID FORM

For Bids Due: \_\_\_\_\_ To: Indian River School District  
31 Hosier Street  
Selbyville, DE 19975

Name of Bidder: \_\_\_\_\_

Bidder Address: \_\_\_\_\_  
\_\_\_\_\_

Contact Name: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Delaware Business License No.: \_\_\_\_\_ Taxpayer ID No.: \_\_\_\_\_

(Other License Nos.): \_\_\_\_\_

**(A copy of Bidder's Delaware Business License must be attached to this form.)**

Phone No.: ( ) \_\_\_\_\_ - \_\_\_\_\_ Fax No.: ( ) \_\_\_\_\_ - \_\_\_\_\_

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

\$ \_\_\_\_\_ (\$ \_\_\_\_\_ )

ALTERNATES

Alternate prices conform to applicable project specification section. Refer to specifications for a complete description of the following Alternates. An "ADD" or "DEDUCT" amount is indicated by the crossed out part that does not apply.

A. Alternate No. 1: Seal coat existing front parking lot

1. Base Bid: Removal of striping in the existing front south parking lot adjacent to the front of the building according to Sheet C-101 of the contract documents. Striping of parking spaces and pavement markings as shown on sheet C-201 of the contract documents.
2. Alternate: Seal coating approximately 21,700 sqft of the existing southern parking lot as shown on sheet C-201 of the contract documents.

Add/Deduct \_\_\_\_\_ (\$ \_\_\_\_\_ )

Indian River School District  
Referendum 2013  
Phillip C. Showell Elementary School Addition

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B. Alternate No. 2: Seal coat remaining existing parking lot

1. Base Bid: Existing northern and western parking lots to remain, as shown on sheet C-201.
2. Alternate: Seal coating approximately 35,000 sqft of the existing western and northern parking lot as shown on sheet C-201 of the contract documents, with striping to match existing.

Add/Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

C. Alternate No. 3: LED Lights

1. Base Bid: Provide fluorescent light fixture for types 'A' and 'B' as indicate in Lighting Fixture Schedule on Sheet E001.
2. Alternate: In lieu of base bid, provide LED lighting fixture for types 'A' and 'B' as indicated in Lighting Fixture Schedule on Sheet E001.

Add/Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

D. *Alternate No. 4: IDF Room*

1. *Base Bid: Owner constructs IDF room and provided electrical and technology equipment.*
2. *Alternate: In lieu of base bid, demolish existing storage rooms and provide new IDF room, including technology and electrical work.*

Add/Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

UNIT PRICES

Unit prices conform to applicable project specification section. Refer to the specifications for a complete description of the following Unit Prices:

A. Unit Price No. 1: Removal of unsatisfactory soil and replacement and installation of satisfactory soil material.

1. Description: Unsatisfactory soil excavation and disposal off site and replacement with satisfactory fill material or engineered fill from off site, as required, according to Section 312000 "Earth Moving."
2. Unit of Measurement: **Cubic yard** of soil excavated, based on survey of volume removed.

Add \_\_\_\_\_ (\$ \_\_\_\_\_)      Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

Indian River School District  
Referendum 2013  
Phillip C. Showell Elementary School Addition

---

B. Unit Price No. 2: Full depth pavement patch.

1. Description: Saw cutting and removal of complete pavement section and unsuitable subsoils in the areas of pavement above and beyond the base bid as shown on the contract documents. Complete replacement and installation of pavement section in accordance with the "On-Site Pavement Section" detail provided on sheet C-902 of the contract documents.
2. Unit of Measurement: Square foot of pavement area, based on survey of area removed.

Add \_\_\_\_\_ (\$ \_\_\_\_\_)      Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

C. Unit Price No. 3: Seal Coating Pavement area.

1. Description: Additional seal coating of parking surfaces and marking in addition to the area specified by the Alternate no. 2.
2. Unit of Measurement: Square foot.

Add \_\_\_\_\_ (\$ \_\_\_\_\_)      Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

D. Unit Price No. 4: Resinous flooring primer.

1. Description: Add/deduct vapor-retarding primer to resinous flooring system, as recommending in writing by flooring system manufacturer.
2. Unit of Measurement: Per room.

Add \_\_\_\_\_ (\$ \_\_\_\_\_)      Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

NOTE: The difference in price between Add and Deduct in the above Unit Prices should not exceed fifteen percent (15%).

I/We acknowledge Addendums numbered \_\_\_\_\_ and the price(s) submitted include any cost/schedule impact they may have.

This bid shall remain valid and cannot be withdrawn for sixty (60) days from the date of opening of bids, and the undersigned shall abide by the Bid Security forfeiture provisions. Bid Security is attached to this Bid (if required).

The Owner shall have the right to reject any or all bids, and to waive any informality or irregularity in any bid received.

This bid is based upon work being accomplished by the Sub-Contractors named on the list attached to this bid.

**Indian River School District**  
**Referendum 2013**  
**Phillip C. Showell Elementary School Addition**

---

The undersigned represents and warrants that he has complied and shall comply with all requirements of local, state, and national laws; that no legal requirement has been or shall be violated in making or accepting this bid, in awarding the contract to him or in the prosecution of the work required; that the bid is legal and firm; that he has not, directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken action in restraint of free competitive bidding.

Upon receipt of written notice of the acceptance of this Bid, the Bidder shall, within twenty (20) calendar days, execute the agreement in the required form and deliver the Contract Bonds, and Insurance Certificates, required by the Contract Documents.

I am / We are an Individual / a Partnership / a Corporation

By \_\_\_\_\_ Trading as \_\_\_\_\_  
(Individual's / General Partner's / Corporate Name)  
\_\_\_\_\_  
(State of Corporation)

Business Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Witness: \_\_\_\_\_ By: \_\_\_\_\_  
(SEAL) ( Authorized Signature )  
\_\_\_\_\_  
( Title )  
Date: \_\_\_\_\_

**ATTACHMENTS**

Sub-Contractor List  
Non-Collusion Statement  
Bid Bond  
Consent of Surety  
Delaware Business License  
(Others as Required by Project Manuals)

Indian River School District  
Referendum 2013  
Phillip C. Showell Elementary School Addition

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SUBCONTRACTOR LIST

In accordance with Title 29, Chapter 6962 (d)(10)b Delaware Code, the following sub-contractor listing must accompany the bid submittal. The name and address of the sub-contractor must be listed for each category where the bidder intends to use a sub-contractor to perform that category of work. In order to provide full disclosure and acceptance of the bid by the Owner, **it is required that bidders list themselves as being the sub-contractor for all categories where he/she is qualified and intends to perform such work.**

<u>Subcontractor Category</u>	<u>Subcontractor</u> <u><b>Subcontractors tax payer ID #</b></u> <u><b>or Delaware Business license #</b></u>	<u>Address (City &amp; State)</u>
1. Carpentry & General Work	_____	_____
2. Concrete	_____	_____
3. Roofing	_____	_____
4. Glass & Glazing	_____	_____
5. Drywall	_____	_____
6. Acoustical Ceilings	_____	_____
7. Flooring	_____	_____
8. Painting	_____	_____

Indian River School District  
Referendum 2013  
Phillip C. Showell Elementary School Addition

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NON-COLLUSION STATEMENT

This is to certify that the undersigned bidder has neither directly nor indirectly, entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with this proposal submitted this date \_\_\_\_\_.

All the terms and conditions of A-03, Carpentry & General Work have been thoroughly examined and are understood.

NAME OF BIDDER: \_\_\_\_\_

AUTHORIZED REPRESENTATIVE  
(TYPED): \_\_\_\_\_

AUTHORIZED REPRESENTATIVE  
(SIGNATURE): \_\_\_\_\_

TITLE: \_\_\_\_\_

ADDRESS OF BIDDER: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PHONE NUMBER: \_\_\_\_\_

Sworn to and Subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_.

My Commission expires \_\_\_\_\_. NOTARY PUBLIC \_\_\_\_\_.

THIS PAGE MUST BE SIGNED AND NOTARIZED FOR YOUR BID TO BE CONSIDERED.

Indian River School District  
Referendum 2013  
Phillip C. Showell Elementary School Addition

**BID BOND**

TO ACCOMPANY PROPOSAL  
(Not necessary if security is used)

KNOW ALL MEN BY THESE PRESENTS That: \_\_\_\_\_ of  
\_\_\_\_\_ in the County of \_\_\_\_\_ and State of \_\_\_\_\_ as  
Principal, and \_\_\_\_\_ of \_\_\_\_\_ in the County of \_\_\_\_\_  
\_\_\_\_\_ and State of \_\_\_\_\_ as Surety, legally authorized to do business in the State of Delaware  
("State"), are held and firmly unto the Indian River School District in the sum of \_\_\_\_\_ Dollars  
(S \_\_\_\_\_), or percent not to exceed \_\_\_\_\_  
Dollars (S \_\_\_\_\_) of amount of bid on Contract No. \_\_\_\_\_ to be paid to the Indian  
River School District for the use and benefit of the Indian River School District for which payment well and truly to be  
made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly and severally for  
and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden Principal who has submitted to the  
Indian River School District a certain proposal to enter into this contract for the furnishing of certain material and/or  
services within the State, shall be awarded this Contract, and if said Principal shall well and truly enter into and execute  
this Contract as may be required by the terms of this Contract and approved by the Indian River School District this  
Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the  
terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with \_\_\_\_\_ seal and dated this \_\_\_\_ day of \_\_\_\_\_ in the year of our Lord two thousand  
and \_\_\_\_\_ (20\_\_).

SEALED, AND DELIVERED IN THE PRESENCE OF

\_\_\_\_\_  
Name of Bidder (Organization)

Corporate  
Seal  
Attest \_\_\_\_\_

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

\_\_\_\_\_  
Title

\_\_\_\_\_  
Name of Surety

Witness \_\_\_\_\_

\_\_\_\_\_  
Title

Indian River School District  
Referendum 2013  
Phillip C. Showell Elementary School Addition

---

CONSENT OF SURETY

DATE \_\_\_\_\_

To: Indian River School District  
31 Hosier Street  
Selbyville, DE 19975

Gentlemen:

We, the \_\_\_\_\_

\_\_\_\_\_  
(Surety Company's Address)

a Surety Company authorized to do business in the State of Delaware hereby agrees that if

\_\_\_\_\_  
(Contractor)

\_\_\_\_\_  
(Address)

is awarded the Contract No. \_\_\_\_\_

We will write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to Bidders.

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

By \_\_\_\_\_  
(Attorney-in-Fact)

END OF SECTION



Indian River School District  
Referendum 2013  
Phillip C. Showell Elementary School Addition

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**A-04: Mechanical**

BID FORM

For Bids Due: \_\_\_\_\_ To: Indian River School District  
31 Hosier Street  
Selbyville, DE 19975

Name of Bidder: \_\_\_\_\_

Bidder Address: \_\_\_\_\_  
\_\_\_\_\_

Contact Name: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Delaware Business License No.: \_\_\_\_\_ Taxpayer ID No.: \_\_\_\_\_

(Other License Nos.): \_\_\_\_\_

**(A copy of Bidder's Delaware Business License must be attached to this form.)**

Phone No.: (        ) \_\_\_\_\_ - \_\_\_\_\_ Fax No.: (        ) \_\_\_\_\_ - \_\_\_\_\_

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

\$ \_\_\_\_\_ (\$ \_\_\_\_\_ )

ALTERNATES

Alternate prices conform to applicable project specification section. Refer to specifications for a complete description of the following Alternates. An "ADD" or "DEDUCT" amount is indicated by the crossed out part that does not apply.

A. Alternate No. 1: Seal coat existing front parking lot

1. Base Bid: Removal of striping in the existing front south parking lot adjacent to the front of the building according to Sheet C-101 of the contract documents. Striping of parking spaces and pavement markings as shown on sheet C-201 of the contract documents.
2. Alternate: Seal coating approximately 21,700 sqft of the existing southern parking lot as shown on sheet C-201 of the contract documents.

Add/Deduct \_\_\_\_\_ (\$ \_\_\_\_\_ )

Indian River School District  
Referendum 2013  
Phillip C. Showell Elementary School Addition

---

B. Alternate No. 2: Seal coat remaining existing parking lot

1. Base Bid: Existing northern and western parking lots to remain, as shown on sheet C-201.
2. Alternate: Seal coating approximately 35,000 sqft of the existing western and northern parking lot as shown on sheet C-201 of the contract documents, with striping to match existing.

Add/Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

C. Alternate No. 3: LED Lights

1. Base Bid: Provide fluorescent light fixture for types 'A' and 'B' as indicate in Lighting Fixture Schedule on Sheet E001.
2. Alternate: In lieu of base bid, provide LED lighting fixture for types 'A' and 'B' as indicated in Lighting Fixture Schedule on Sheet E001.

Add/Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

D. *Alternate No. 4: IDF Room*

1. *Base Bid: Owner constructs IDF room and provided electrical and technology equipment.*
2. *Alternate: In lieu of base bid, demolish existing storage rooms and provide new IDF room, including technology and electrical work.*

Add/Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

UNIT PRICES

Unit prices conform to applicable project specification section. Refer to the specifications for a complete description of the following Unit Prices:

A. Unit Price No. 1: Removal of unsatisfactory soil and replacement and installation of satisfactory soil material.

1. Description: Unsatisfactory soil excavation and disposal off site and replacement with satisfactory fill material or engineered fill from off site, as required, according to Section 312000 "Earth Moving."
2. Unit of Measurement: **Cubic yard** of soil excavated, based on survey of volume removed.

Add \_\_\_\_\_ (\$ \_\_\_\_\_)      Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

Indian River School District

Referendum 2013

Phillip C. Showell Elementary School Addition

---

B. Unit Price No. 2: Full depth pavement patch.

1. Description: Saw cutting and removal of complete pavement section and unsuitable subsoils in the areas of pavement above and beyond the base bid as shown on the contract documents. Complete replacement and installation of pavement section in accordance with the "On-Site Pavement Section" detail provided on sheet C-902 of the contract documents.
2. Unit of Measurement: Square foot of pavement area, based on survey of area removed.

Add \_\_\_\_\_ (\$ \_\_\_\_\_)

Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

C. Unit Price No. 3: Seal Coating Pavement area.

1. Description: Additional seal coating of parking surfaces and marking in addition to the area specified by the Alternate no. 2.
2. Unit of Measurement: Square foot.

Add \_\_\_\_\_ (\$ \_\_\_\_\_)

Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

D. Unit Price No. 4: Resinous flooring primer.

1. Description: Add/deduct vapor-retarding primer to resinous flooring system, as recommending in writing by flooring system manufacturer.
2. Unit of Measurement: Per room.

Add \_\_\_\_\_ (\$ \_\_\_\_\_)

Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

NOTE: The difference in price between Add and Deduct in the above Unit Prices should not exceed fifteen percent (15%).

I/We acknowledge Addendums numbered \_\_\_\_\_ and the price(s) submitted include any cost/schedule impact they may have.

This bid shall remain valid and cannot be withdrawn for sixty (60) days from the date of opening of bids, and the undersigned shall abide by the Bid Security forfeiture provisions. Bid Security is attached to this Bid (if required).

The Owner shall have the right to reject any or all bids, and to waive any informality or irregularity in any bid received.

**Indian River School District**  
**Referendum 2013**  
**Phillip C. Showell Elementary School Addition**

---

This bid is based upon work being accomplished by the Sub-Contractors named on the list attached to this bid.

The undersigned represents and warrants that he has complied and shall comply with all requirements of local, state, and national laws; that no legal requirement has been or shall be violated in making or accepting this bid, in awarding the contract to him or in the prosecution of the work required; that the bid is legal and firm; that he has not, directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken action in restraint of free competitive bidding.

Upon receipt of written notice of the acceptance of this Bid, the Bidder shall, within twenty (20) calendar days, execute the agreement in the required form and deliver the Contract Bonds, and Insurance Certificates, required by the Contract Documents.

I am / We are an Individual / a Partnership / a Corporation

By \_\_\_\_\_ Trading as \_\_\_\_\_  
(Individual's / General Partner's / Corporate Name)  
\_\_\_\_\_  
(State of Corporation)

Business Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Witness: \_\_\_\_\_ By: \_\_\_\_\_  
(SEAL) ( Authorized Signature )  
\_\_\_\_\_  
( Title )  
Date: \_\_\_\_\_

**ATTACHMENTS**

Sub-Contractor List  
Non-Collusion Statement  
Bid Bond  
Consent of Surety  
Delaware Business License  
(Others as Required by Project Manuals)

Indian River School District  
Referendum 2013  
Phillip C. Showell Elementary School Addition

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SUBCONTRACTOR LIST

In accordance with Title 29, Chapter 6962 (d)(10)b Delaware Code, the following sub-contractor listing must accompany the bid submittal. The name and address of the sub-contractor must be listed for each category where the bidder intends to use a sub-contractor to perform that category of work. In order to provide full disclosure and acceptance of the bid by the Owner, **it is required that bidders list themselves as being the sub-contractor for all categories where he/she is qualified and intends to perform such work.**

<u>Subcontractor Category</u>	<u>Subcontractor</u> <u><b>Subcontractors tax payer ID #</b></u> <u><b>or Delaware Business license #</b></u>	<u>Address (City &amp; State)</u>
1. Mechanical	_____	_____

Indian River School District  
Referendum 2013  
Phillip C. Showell Elementary School Addition

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NON-COLLUSION STATEMENT

This is to certify that the undersigned bidder has neither directly nor indirectly, entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with this proposal submitted this date \_\_\_\_\_.

All the terms and conditions of A-04, Mechanical have been thoroughly examined and are understood.

NAME OF BIDDER: \_\_\_\_\_

AUTHORIZED REPRESENTATIVE  
(TYPED): \_\_\_\_\_

AUTHORIZED REPRESENTATIVE  
(SIGNATURE): \_\_\_\_\_

TITLE: \_\_\_\_\_

ADDRESS OF BIDDER: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PHONE NUMBER: \_\_\_\_\_

Sworn to and Subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_.

My Commission expires \_\_\_\_\_. NOTARY PUBLIC \_\_\_\_\_.

THIS PAGE MUST BE SIGNED AND NOTARIZED FOR YOUR BID TO BE CONSIDERED.

Indian River School District  
Referendum 2013  
Phillip C. Showell Elementary School Addition

**BID BOND**

TO ACCOMPANY PROPOSAL  
(Not necessary if security is used)

KNOW ALL MEN BY THESE PRESENTS That: \_\_\_\_\_ of  
\_\_\_\_\_ in the County of \_\_\_\_\_ and State of \_\_\_\_\_ as  
Principal, and \_\_\_\_\_ of \_\_\_\_\_ in the County of \_\_\_\_\_  
\_\_\_\_\_ and State of \_\_\_\_\_ as Surety, legally authorized to do business in the State of Delaware  
("State"), are held and firmly unto the Indian River School District in the sum of \_\_\_\_\_ Dollars  
(S \_\_\_\_\_), or percent not to exceed \_\_\_\_\_  
Dollars (S \_\_\_\_\_) of amount of bid on Contract No. \_\_\_\_\_ to be paid to the Indian  
River School District for the use and benefit of the Indian River School District for which payment well and truly to be  
made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly and severally for  
and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden Principal who has submitted to the  
Indian River School District a certain proposal to enter into this contract for the furnishing of certain material and/or  
services within the State, shall be awarded this Contract, and if said Principal shall well and truly enter into and execute  
this Contract as may be required by the terms of this Contract and approved by the Indian River School District this  
Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the  
terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with \_\_\_\_\_ seal and dated this \_\_\_\_ day of \_\_\_\_\_ in the year of our Lord two thousand  
and \_\_\_\_\_ (20\_\_).

SEALED, AND DELIVERED IN THE PRESENCE OF

\_\_\_\_\_  
Name of Bidder (Organization)

Corporate  
Seal  
Attest \_\_\_\_\_

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

\_\_\_\_\_  
Title

\_\_\_\_\_  
Name of Surety

Witness \_\_\_\_\_

\_\_\_\_\_  
Title

Indian River School District  
Referendum 2013  
Phillip C. Showell Elementary School Addition

---

CONSENT OF SURETY

DATE \_\_\_\_\_

To: Indian River School District  
31 Hosier Street  
Selbyville, DE 19975

Gentlemen:

We, the \_\_\_\_\_

\_\_\_\_\_  
(Surety Company's Address)

a Surety Company authorized to do business in the State of Delaware hereby agrees that if

\_\_\_\_\_  
(Contractor)

\_\_\_\_\_  
(Address)

is awarded the Contract No. \_\_\_\_\_

We will write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to Bidders.

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

By \_\_\_\_\_  
(Attorney-in-Fact)

END OF SECTION



Indian River School District  
Referendum 2013  
Phillip C. Showell Elementary School Addition

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A-05: Electrical

BID FORM

For Bids Due: \_\_\_\_\_

To: Indian River School District  
31 Hosier Street  
Selbyville, DE 19975

Name of Bidder: \_\_\_\_\_

Bidder Address: \_\_\_\_\_  
\_\_\_\_\_

Contact Name: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Delaware Business License No.: \_\_\_\_\_ Taxpayer ID No.: \_\_\_\_\_

(Other License Nos.): \_\_\_\_\_

**(A copy of Bidder's Delaware Business License must be attached to this form.)**

Phone No.: (        ) \_\_\_\_\_ - \_\_\_\_\_ Fax No.: (        ) \_\_\_\_\_ - \_\_\_\_\_

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

\$ \_\_\_\_\_ (\$ \_\_\_\_\_ )

ALTERNATES

Alternate prices conform to applicable project specification section. Refer to specifications for a complete description of the following Alternates. An "ADD" or "DEDUCT" amount is indicated by the crossed out part that does not apply.

A. Alternate No. 1: Seal coat existing front parking lot

1. Base Bid: Removal of striping in the existing front south parking lot adjacent to the front of the building according to Sheet C-101 of the contract documents. Striping of parking spaces and pavement markings as shown on sheet C-201 of the contract documents.
2. Alternate: Seal coating approximately 21,700 sqft of the existing southern parking lot as shown on sheet C-201 of the contract documents.

Add/Deduct \_\_\_\_\_ (\$ \_\_\_\_\_ )

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B. Alternate No. 2: Seal coat remaining existing parking lot

1. Base Bid: Existing northern and western parking lots to remain, as shown on sheet C-201.
2. Alternate: Seal coating approximately 35,000 sqft of the existing western and northern parking lot as shown on sheet C-201 of the contract documents, with striping to match existing.

Add/Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

C. Alternate No. 3: LED Lights

1. Base Bid: Provide fluorescent light fixture for types 'A' and 'B' as indicate in Lighting Fixture Schedule on Sheet E001.
2. Alternate: In lieu of base bid, provide LED lighting fixture for types 'A' and 'B' as indicated in Lighting Fixture Schedule on Sheet E001.

Add/Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

D. *Alternate No. 4: IDF Room*

1. *Base Bid: Owner constructs IDF room and provided electrical and technology equipment.*
2. *Alternate: In lieu of base bid, demolish existing storage rooms and provide new IDF room, including technology and electrical work.*

Add/Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

UNIT PRICES

Unit prices conform to applicable project specification section. Refer to the specifications for a complete description of the following Unit Prices:

A. Unit Price No. 1: Removal of unsatisfactory soil and replacement and installation of satisfactory soil material.

1. Description: Unsatisfactory soil excavation and disposal off site and replacement with satisfactory fill material or engineered fill from off site, as required, according to Section 312000 "Earth Moving."
2. Unit of Measurement: Cubic yard of soil excavated, based on survey of volume removed.

Add \_\_\_\_\_ (\$ \_\_\_\_\_)      Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

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B. Unit Price No. 2: Full depth pavement patch.

1. Description: Saw cutting and removal of complete pavement section and unsuitable subsoils in the areas of pavement above and beyond the base bid as shown on the contract documents. Complete replacement and installation of pavement section in accordance with the "On-Site Pavement Section" detail provided on sheet C-902 of the contract documents.
2. Unit of Measurement: Square foot of pavement area, based on survey of area removed.

Add \_\_\_\_\_ (\$ \_\_\_\_\_)      Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

C. Unit Price No. 3: Seal Coating Pavement area.

1. Description: Additional seal coating of parking surfaces and marking in addition to the area specified by the Alternate no. 2.
2. Unit of Measurement: Square foot.

Add \_\_\_\_\_ (\$ \_\_\_\_\_)      Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

D. Unit Price No. 4: Resinous flooring primer.

1. Description: Add/deduct vapor-retarding primer to resinous flooring system, as recommending in writing by flooring system manufacturer.
2. Unit of Measurement: Per room.

Add \_\_\_\_\_ (\$ \_\_\_\_\_)      Deduct \_\_\_\_\_ (\$ \_\_\_\_\_)

NOTE: The difference in price between Add and Deduct in the above Unit Prices should not exceed fifteen percent (15%).

I/We acknowledge Addendums numbered \_\_\_\_\_ and the price(s) submitted include any cost/schedule impact they may have.

This bid shall remain valid and cannot be withdrawn for sixty (60) days from the date of opening of bids, and the undersigned shall abide by the Bid Security forfeiture provisions. Bid Security is attached to this Bid (if required).

The Owner shall have the right to reject any or all bids, and to waive any informality or irregularity in any bid received.

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This bid is based upon work being accomplished by the Sub-Contractors named on the list attached to this bid.

The undersigned represents and warrants that he has complied and shall comply with all requirements of local, state, and national laws; that no legal requirement has been or shall be violated in making or accepting this bid, in awarding the contract to him or in the prosecution of the work required; that the bid is legal and firm; that he has not, directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken action in restraint of free competitive bidding.

Upon receipt of written notice of the acceptance of this Bid, the Bidder shall, within twenty (20) calendar days, execute the agreement in the required form and deliver the Contract Bonds, and Insurance Certificates, required by the Contract Documents.

I am / We are an Individual / a Partnership / a Corporation

By \_\_\_\_\_ Trading as \_\_\_\_\_  
(Individual's / General Partner's / Corporate Name)  
\_\_\_\_\_  
(State of Corporation)

Business Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Witness: \_\_\_\_\_ By: \_\_\_\_\_  
(SEAL) ( Authorized Signature )  
\_\_\_\_\_  
( Title )  
Date: \_\_\_\_\_

**ATTACHMENTS**

Sub-Contractor List  
Non-Collusion Statement  
Bid Bond  
Consent of Surety  
Delaware Business License  
(Others as Required by Project Manuals)

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SUBCONTRACTOR LIST

In accordance with Title 29, Chapter 6962 (d)(10)b Delaware Code, the following sub-contractor listing must accompany the bid submittal. The name and address of the sub-contractor must be listed for each category where the bidder intends to use a sub-contractor to perform that category of work. In order to provide full disclosure and acceptance of the bid by the Owner, **it is required that bidders list themselves as being the sub-contractor for all categories where he/she is qualified and intends to perform such work.**

<u>Subcontractor Category</u>	<u>Subcontractor</u> <u><b>Subcontractors tax payer ID #</b></u> <u><b>or Delaware Business license #</b></u>	<u>Address (City &amp; State)</u>
1. Electrical	_____	_____
2. Communications	_____	_____

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NON-COLLUSION STATEMENT

This is to certify that the undersigned bidder has neither directly nor indirectly, entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with this proposal submitted this date \_\_\_\_\_.

All the terms and conditions of A-05, Electrical have been thoroughly examined and are understood.

NAME OF BIDDER: \_\_\_\_\_

AUTHORIZED REPRESENTATIVE  
(TYPED): \_\_\_\_\_

AUTHORIZED REPRESENTATIVE  
(SIGNATURE): \_\_\_\_\_

TITLE: \_\_\_\_\_

ADDRESS OF BIDDER: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PHONE NUMBER: \_\_\_\_\_

Sworn to and Subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_.

My Commission expires \_\_\_\_\_. NOTARY PUBLIC \_\_\_\_\_.

THIS PAGE MUST BE SIGNED AND NOTARIZED FOR YOUR BID TO BE CONSIDERED.

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**BID BOND**

TO ACCOMPANY PROPOSAL  
(Not necessary if security is used)

KNOW ALL MEN BY THESE PRESENTS That: \_\_\_\_\_ of  
\_\_\_\_\_ in the County of \_\_\_\_\_ and State of \_\_\_\_\_ as  
Principal, and \_\_\_\_\_ of \_\_\_\_\_ in the County of \_\_\_\_\_  
\_\_\_\_\_ and State of \_\_\_\_\_ as Surety, legally authorized to do business in the State of Delaware  
("State"), are held and firmly unto the Indian River School District in the sum of \_\_\_\_\_ Dollars  
(S \_\_\_\_\_), or percent not to exceed \_\_\_\_\_  
Dollars (S \_\_\_\_\_) of amount of bid on Contract No. \_\_\_\_\_ to be paid to the Indian  
River School District for the use and benefit of the Indian River School District for which payment well and truly to be  
made, we do bind ourselves, our and each of our heirs, executors, administrators, and successors, jointly and severally for  
and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bounden Principal who has submitted to the  
Indian River School District a certain proposal to enter into this contract for the furnishing of certain material and/or  
services within the State, shall be awarded this Contract, and if said Principal shall well and truly enter into and execute  
this Contract as may be required by the terms of this Contract and approved by the Indian River School District this  
Contract to be entered into within twenty days after the date of official notice of the award thereof in accordance with the  
terms of said proposal, then this obligation shall be void or else to be and remain in full force and virtue.

Sealed with \_\_\_\_\_ seal and dated this \_\_\_\_ day of \_\_\_\_\_ in the year of our Lord two thousand  
and \_\_\_\_\_ (20\_\_).

SEALED, AND DELIVERED IN THE PRESENCE OF

\_\_\_\_\_  
Name of Bidder (Organization)

Corporate  
Seal  
Attest \_\_\_\_\_

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

\_\_\_\_\_  
Title

\_\_\_\_\_  
Name of Surety

Witness \_\_\_\_\_

\_\_\_\_\_  
Title

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CONSENT OF SURETY

DATE \_\_\_\_\_

To: Indian River School District  
31 Hosier Street  
Selbyville, DE 19975

Gentlemen:

We, the \_\_\_\_\_

\_\_\_\_\_  
(Surety Company's Address)

a Surety Company authorized to do business in the State of Delaware hereby agrees that if

\_\_\_\_\_  
(Contractor)

\_\_\_\_\_  
(Address)

is awarded the Contract No. \_\_\_\_\_

We will write the required Performance and/or Labor and Material Bond required by Paragraph 9 of the Instructions to Bidders.

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

By \_\_\_\_\_  
(Attorney-in-Fact)

END OF SECTION



**Indian River School District  
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SECTION 012300 - ALTERNATES

1. GENERAL PROVISIONS

- 1.1 The general provisions of the Contract, including the Conditions of the Contract (General, Supplementary and other conditions, if any) and Division 1 as appropriate, apply to the Work specified in this Section.
- 1.2 Refer to provisions in AIA Document A232 – 2009 Edition, GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION, CONSTRUCTION MANAGER AS ADVISOR EDITION, for requirements in addition to those specified in Division 1.
- 1.3 For work being constructed under separate prime contracts, provisions of this Section apply to each contract being bid.

2. BASE BID

- 2.1 The Base Bid shall consist of all work shown or specified in the Contract Documents, exclusive of any Additive Alternates specified herein.
- 2.2 The Base Bid shall include all work in any Subtractive Alternates specified herein.

3. ALTERNATES

- 3.1 State in the Bid Form the amount to be added to the Base Bid for each Alternate specified.
- 3.2 See Section 002113 - INSTRUCTIONS TO BIDDERS for related information.
- 3.3 The description of Alternates contained herein is in summary form. Detailed requirements for materials and execution shall be as specified in other sections and as shown on drawings.

A. Alternate No. 1: Seal coat existing front parking lot

- 1. Base Bid: Removal of striping in the existing front south parking lot adjacent to the front of the building according to Sheet C-101 of the contract documents. Striping of parking spaces and pavement markings as shown on sheet C-201 of the contract documents.
- 2. Alternate: Seal coating approximately 21,700 sqft of the existing southern parking lot as shown on sheet C-201 of the contract documents.

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B. Alternate No. 2: Seal coat remaining existing parking lot

1. Base Bid: Existing northern and western parking lots to remain, as shown on sheet C-201.
2. Alternate: Seal coating approximately 35,000 sqft of the existing western and northern parking lot as shown on sheet C-201 of the contract documents, with striping to match existing.

C. Alternate No. 3: LED Lights

1. Base Bid: Provide fluorescent light fixture for types 'A' and 'B' as indicate in Lighting Fixture Schedule on Sheet E001.
2. Alternate: In lieu of base bid, provide LED lighting fixture for types 'A' and 'B' as indicated in Lighting Fixture Schedule on Sheet E001.

D. *Alternate No. 4: IDF Room*

1. *Base Bid: Owner constructs IDF room and provided electrical and technology equipment.*
2. *Alternate: In lieu of base bid, demolish existing storage rooms and provide new IDF room, including technology and electrical work.*

END OF SECTION

## SECTION 087100 – DOOR HARDWARE

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. This Section includes commercial door hardware for the following:
  - 1. Swinging doors.
  - 2. Other doors to the extent indicated.
- B. Door hardware includes, but is not necessarily limited to, the following:
  - 1. Mechanical door hardware.
- C. Related Sections:
  - 1. Division 08 Section “Hollow Metal Doors and Frames”.
  - 2. Division 08 Section “Flush Wood Doors”.
  - 3. Division 08 Section “Aluminum-Framed Entrances and Storefronts”.
- D. Codes and References: Comply with the version year adopted by the Authority Having Jurisdiction.
  - 1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
  - 2. ICC/IBC - International Building Code.
  - 3. NFPA 70 - National Electrical Code.
  - 4. NFPA 80 - Fire Doors and Windows.
  - 5. NFPA 101 - Life Safety Code.
  - 6. NFPA 105 - Installation of Smoke Door Assemblies.
  - 7. State Building Codes, Local Amendments.
- E. Standards: All hardware specified herein shall comply with the following industry standards:
  - 1. ANSI/BHMA Certified Product Standards - A156 Series
  - 2. UL10C – Positive Pressure Fire Tests of Door Assemblies

## 1.2 SUBMITTALS

- A. Product Data: Manufacturer's product data sheets including installation details, material descriptions, dimensions of individual components and profiles, operational descriptions and finishes.
- B. Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Door

Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.

1. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule."
  2. Organization: Organize the Door Hardware Schedule into door hardware sets indicating complete designations of every item required for each door or opening. Organize door hardware sets in same order as in the Door Hardware Sets at the end of Part 3. Submittals that do not follow the same format and order as the Door Hardware Sets will be rejected and subject to resubmission.
  3. Content: Include the following information:
    - a. Type, style, function, size, label, hand, and finish of each door hardware item.
    - b. Manufacturer of each item.
    - c. Fastenings and other pertinent information.
    - d. Location of door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
    - e. Explanation of abbreviations, symbols, and codes contained in schedule.
    - f. Mounting locations for door hardware.
    - g. Door and frame sizes and materials.
  4. Submittal Sequence: Submit the final Door Hardware Schedule at earliest possible date, particularly where approval of the Door Hardware Schedule must precede fabrication of other work that is critical in the Project construction schedule. Include Product Data, Samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the Door Hardware Schedule.
- C. Keying Schedule: Prepared under the supervision of the Owner, separate schedule detailing final keying instructions for locksets and cylinders in writing. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions. Owner to approve submitted keying schedule prior to the ordering of permanent cylinders.
- D. Operating and Maintenance Manuals: Provide manufacturers operating and maintenance manuals for each item comprising the complete door hardware installation in quantity as required in Division 01, Closeout Submittals. The manual to include the name, address, and contact information of the manufacturers providing the hardware and their nearest service representatives. The final copies delivered after completion of the installation test to include "as built" modifications made during installation, checkout, and acceptance.
- E. Warranties and Maintenance: Special warranties and maintenance agreements specified in this Section.

### 1.3 QUALITY ASSURANCE

- A. Manufacturers Qualifications: Engage qualified manufacturers with a minimum 5 years of documented experience in producing hardware and equipment similar to that indicated for this Project and that have a proven record of successful in-service performance.

- B. Installer Qualifications: Installers, trained by the primary product manufacturers, with a minimum 3 years documented experience installing both standard and electrified builders hardware similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.
- C. Door Hardware Supplier Qualifications: Experienced commercial door hardware distributors with a minimum 5 years documented experience supplying both mechanical and electromechanical hardware installations comparable in material, design, and extent to that indicated for this Project. Supplier recognized as a factory direct distributor in good standing by the manufacturers of the primary materials with a warehousing facility in Project's vicinity. Supplier to have on staff a certified Architectural Hardware Consultant (AHC) available during the course of the Work to consult with Contractor, Architect, and Owner concerning both standard and electromechanical door hardware and keying.
1. Scheduling Responsibility: Preparation of door hardware and keying schedules.
- D. Source Limitations: Obtain each type and variety of Door Hardware specified in this Section from a single source, qualified supplier unless otherwise indicated.
- E. Regulatory Requirements: Comply with NFPA 70, NFPA 80, NFPA 101 and ANSI A117.1 requirements and guidelines as directed in the model building code including, but not limited to, the following:
1. NFPA 70 "National Electrical Code", including electrical components, devices, and accessories listed and labeled as defined in Article 100 by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
  2. Where indicated to comply with accessibility requirements, comply with Americans with Disabilities Act (ADA), "Accessibility Guidelines for Buildings and Facilities (ADAAG)," ANSI A117.1 as follows:
    - a. Handles, Pulls, Latches, Locks, and other Operating Devices: Shape that is easy to grasp with one hand and does not require tight grasping, tight pinching, or twisting of the wrist.
    - b. Door Closers: Comply with the following maximum opening-force requirements indicated:
      - 1) Interior Hinged Doors: 5 lbf applied perpendicular to door.
      - 2) Fire Doors: Minimum opening force allowable by authorities having jurisdiction.
    - c. Thresholds: Not more than 1/2 inch high. Bevel raised thresholds with a slope of not more than 1:2.
  3. NFPA 101: Comply with the following for means of egress doors:
    - a. Latches, Locks, and Exit Devices: Not more than 15 lbf to release the latch. Locks shall not require the use of a key, tool, or special knowledge for operation.
    - b. Thresholds: Not more than 1/2 inch high.

4. Fire-Rated Door Assemblies: Provide door hardware for assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to NFPA 252 (neutral pressure at 40" above sill) or UL-10C.
    - a. Test Pressure: Positive pressure labeling.
  - F. Each unit to bear third party permanent label demonstrating compliance with the referenced standards.
  - G. Keying Conference: Conduct conference to comply with requirements in Division 01 Section "Project Meetings." Keying conference to incorporate the following criteria into the final keying schedule document:
    1. Function of building, purpose of each area and degree of security required.
    2. Plans for existing and future key system expansion.
    3. Requirements for key control storage and software.
    4. Installation of permanent keys, cylinder cores and software.
    5. Address and requirements for delivery of keys.
  - H. Pre-Submittal Conference: Conduct coordination conference in compliance with requirements in Division 01 Section "Project Meetings" with attendance by representatives of Supplier(s), Installer(s), and Contractor(s) to review proper methods and the procedures for receiving, handling, and installing door hardware.
    1. Prior to installation of door hardware, conduct a project specific training meeting to instruct the installing contractors' personnel on the proper installation and adjustment of their respective products. Product training to be attended by installers of door hardware (including electromechanical hardware) for aluminum, hollow metal and wood doors. Training will include the use of installation manuals, hardware schedules, templates and physical product samples as required.
    2. Inspect and discuss electrical roughing-in, power supply connections, and other preparatory work performed by other trades.
    3. Review sequence of operation narratives for each unique access controlled opening.
    4. Review and finalize construction schedule and verify availability of materials.
    5. Review the required inspecting, testing, commissioning, and demonstration procedures
  - I. At completion of installation, provide written documentation that components were applied to manufacturer's instructions and recommendations and according to approved schedule.
- 1.4 DELIVERY, STORAGE, AND HANDLING
- A. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.
  - B. Tag each item or package separately with identification related to the final Door Hardware Schedule, and include basic installation instructions with each item or package.

- C. Deliver, as applicable, permanent keys, cylinders, cores, access control credentials, software and related accessories directly to Owner via registered mail or overnight package service. Instructions for delivery to the Owner shall be established at the "Keying Conference".

#### 1.5 COORDINATION

- A. Templates: Obtain and distribute to the parties involved templates for doors, frames, and other work specified to be factory prepared for installing standard and electrified hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing hardware to comply with indicated requirements.
- B. Door Hardware and Electrical Connections: Coordinate the layout and installation of scheduled electrified door hardware and related access control equipment with required connections to source power junction boxes, low voltage power supplies, detection and monitoring hardware, and fire and detection alarm systems.
- C. Door and Frame Preparation: Related Division 08 Sections (Steel, Aluminum and Wood) doors and corresponding frames are to be prepared, reinforced and pre-wired (if applicable) to receive the installation of the specified electrified, monitoring, signaling and access control system hardware without additional in-field modifications.

#### 1.6 WARRANTY

- A. General Warranty: Reference Division 01, General Requirements. Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.
- B. Warranty Period: Written warranty, executed by manufacturer(s), agreeing to repair or replace components of standard and electrified door hardware that fails in materials or workmanship within specified warranty period after final acceptance by the Owner. Failures include, but are not limited to, the following:
  - 1. Structural failures including excessive deflection, cracking, or breakage.
  - 2. Faulty operation of the hardware.
  - 3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
  - 4. Electrical component defects and failures within the systems operation.
- C. Standard Warranty Period: One year from date of Substantial Completion, unless otherwise indicated.
- D. Special Warranty Periods:
  - 1. Seven years for heavy duty cylindrical (bored) locks and latches.
  - 2. Five years for exit hardware.
  - 3. Twenty five years for manual surface door closers.
  - 4. Two years for electromechanical door hardware.

## 1.7 MAINTENANCE SERVICE

- A. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.
- B. Continuing Service: Beginning at Substantial Completion, and running concurrent with the specified warranty period, provide continuous (6) months full maintenance including repair and replacement of worn or defective components, lubrication, cleaning, and adjusting as required for proper door opening operation. Provide parts and supplies as used in the manufacture and installation of original products.

## PART 2 - PRODUCTS

### 2.1 SCHEDULED DOOR HARDWARE

- A. General: Provide door hardware for each door to comply with requirements in Door Hardware Sets and each referenced section that products are to be supplied under.
  - 1. Designations: Requirements for quantity, item, size, finish or color, grade, function, and other distinctive qualities of each type of door hardware are indicated in the Door Hardware Sets at the end of Part 3. Products are identified by using door hardware designations, as follows:
    - a. Named Manufacturer's Products: Product designation and manufacturer are listed for each door hardware type required for the purpose of establishing requirements. Manufacturers' names are abbreviated in the Door Hardware Schedule.
- B. Substitutions: Requests for substitution and product approval for inclusive mechanical and electromechanical door hardware in compliance with the specifications must be submitted in writing and in accordance with the procedures and time frames outlined in Division 01, Substitution Procedures. Approval of requests is at the discretion of the architect, owner, and their designated consultants.

### 2.2 HANGING DEVICES

- A. Hinges: ANSI/BHMA A156.1 certified butt hinges with number of hinge knuckles as specified in the Door Hardware Sets.
  - 1. Quantity: Provide the following hinge quantity, unless otherwise indicated:
    - a. Two Hinges: For doors with heights up to 60 inches.
    - b. Three Hinges: For doors with heights 61 to 90 inches.
    - c. Four Hinges: For doors with heights 91 to 120 inches.
    - d. For doors with heights more than 120 inches, provide 4 hinges, plus 1 hinge for every 30 inches of door height greater than 120 inches.



2. Hinge Size: Provide the following, unless otherwise indicated, with hinge widths sized for door thickness and clearances required:
  - a. Widths up to 3'0": 4-1/2" standard or heavy weight as specified.
  - b. Sizes from 3'1" to 4'0": 5" standard or heavy weight as specified.
3. Hinge Options: Comply with the following where indicated in the Hardware Sets or on Drawings:
  - a. Non-removable Pins: Provide set screw in hinge barrel that, when tightened into a groove in hinge pin, prevents removal of pin while door is closed; for the following applications:
    - 1) Out-swinging exterior doors.
    - 2) Out-swinging access controlled doors.
    - 3) Out-swinging lockable doors.
4. Acceptable Manufacturers:
  - a. Bommer Industries (BO).
  - b. Hager Companies (HA).
  - c. McKinney Products (MK).

- B. Continuous Geared Hinges: ANSI/BHMA A156.26 certified continuous geared hinge with minimum 0.120-inch thick extruded 6060 T6 aluminum alloy hinge leaves and a minimum overall width of 4 inches. Hinges are non-handed, reversible and fabricated to template screw locations. Provide concealed flush mount (with or without inset), full surface, or half surface, in standard and heavy duty models, as specified in the Hardware Sets. Concealed continuous hinges to be U.L. listed for use on up to and including 90 minute rated door installations and U.L. listed for windstorm components where applicable. Factory cut hinges for door size and provide with removable service power transfer panel where indicated at electrified openings.

1. Acceptable Manufacturers:
  - a. Bommer Industries (BO).
  - b. McKinney Products (MK).
  - c. Pemko Manufacturing (PE).

## 2.3 DOOR OPERATING TRIM

- A. Door Push Plates and Pulls: ANSI/BHMA A156.6 certified door pushes and pulls of type and design specified below or in the Hardware Sets. Coordinate and provide proper width and height as required where conflicting hardware dictates.
1. Push/Pull Plates: Minimum .050 inch thick, size as indicated in hardware sets, with beveled edges, secured with exposed screws unless otherwise indicated.
  2. Door Pull and Push Bar Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door unless otherwise indicated.

3. Offset Pull Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door and offset of 90 degrees unless otherwise indicated.
4. Fasteners: Provide manufacturer's designated fastener type as indicated in Hardware Sets.
  - a. Acceptable Manufacturers:
    - 1) Burns Manufacturing (BU).
    - 2) Rockwood Manufacturing (RO).
    - 3) Trimco (TC).

## 2.4 CYLINDERS AND KEYING

- A. General: Cylinder manufacturer to have minimum (10) years experience designing secured master key systems and have on record a published security keying system policy.
- B. Source Limitations: Obtain each type of keyed cylinder and keys from the same source manufacturer as locksets and exit devices, unless otherwise indicated.
- C. Cylinders: Original manufacturer cylinders complying with the following:
  1. Mortise Type: Threaded cylinders with rings and straight- or clover-type cam.
  2. Rim Type: Cylinders with back plate, flat-type vertical or horizontal tailpiece, and raised trim ring.
  3. Bored-Lock Type: Cylinders with tailpieces to suit locks.
  4. Mortise and rim cylinder collars to be solid and recessed to allow the cylinder face to be flush and be free spinning with matching finishes.
  5. Keyway: Match Facility Standard.
- D. Permanent Cores: Manufacturer's standard; finish face to match lockset; complying with the following:
  1. Removable Cores: Core insert, removable by use of a special key, and for use with only the core manufacturer's cylinder and door hardware. Provide removable core (small or large format) as specified in Hardware Sets.
- E. High Security Cylinders: ANSI/BHMA A156.5, Grade 1, patented high security cylinders and keys able to be used together under the same facility master or grandmaster key system. Provide UL437 certified high security cylinders, employing a utility patented locking mechanism requiring the use of a patented key and pick resistance; cylinders are to be factory keyed.
  1. Acceptable Manufacturers:
    - a. Sargent Manufacturing (SA) - KESO Series (Exterior).
    - b. No Substitution – Facility Standard.
- F. Security Cylinders: ANSI/BHMA A156.5, Grade 1, patented security cylinders and keys able to be used together under the same facility master or grandmaster key system. Cylinders are to be factory keyed.

1. Acceptable Manufacturers:

- a. Corbin Russwin (RU) - Pyramid PS Series (Interior).
- b. No Substitution – Facility Standard.

G. Keying System: Each type of lock and cylinders to be factory keyed. Conduct specified "Keying Conference" to define and document keying system instructions and requirements. Furnish factory cut, nickel-silver large bow permanently inscribed with a visual key control number as directed by Owner. Incorporate decisions made in keying conference, and as follows:

1. Existing System: Master key or grand master key locks to Owner's existing system.

H. Key Quantity: Provide the following minimum number of keys:

- 1. Top Master Key: One (1)
- 2. Change Keys per Cylinder: Two (2)
- 3. Master Keys (per Master Key Group): Two (2)
- 4. Grand Master Keys (per Grand Master Key Group): Two (2)
- 5. Construction Keys (where required): Ten (10)
- 6. Construction Control Keys (where required): Two (2)
- 7. Permanent Control Keys (where required): Two (2)

I. Construction Keying: Provide construction master keyed cylinders or temporary keyed construction cores where specified. Provide construction master keys in quantity as required by project Contractor. Replace construction cores with permanent cores. Furnish permanent cores for installation as directed under specified "Keying Conference".

J. Key Registration List: Provide keying transcript list to Owner's representative in the proper format for importing into key control software.

## 2.5 MECHANICAL LOCKS AND LATCHING DEVICES

A. Cylindrical Locksets, Grade 1 (Heavy Duty): ANSI/BHMA A156.2, Series 4000, Grade 1 certified cylindrical (bored) locksets furnished in the functions as specified in the Hardware Sets. Lock chassis fabricated of heavy gauge steel, zinc dichromate plated, with through-bolted application. Furnish with solid cast levers, standard 2 3/4" backset, and 1/2" (3/4" at rated paired openings) throw brass or stainless steel latchbolt. Locks are to be non-handed and fully field reversible.

1. Acceptable Manufacturers:

- a. Corbin Russwin Hardware (RU) – CL3300 Series.
- b. No Substitution – Facility Standard.

B. Lock Trim Design: As specified in Hardware Sets.

## 2.6 LOCK AND LATCH STRIKES

- A. Strikes: Provide manufacturer's standard strike with strike box for each latch or lock bolt, with curved lip extended to protect frame, finished to match door hardware set, unless otherwise indicated, and as follows:
1. Flat-Lip Strikes: For locks with three-piece antifriction latchbolts, as recommended by manufacturer.
  2. Extra-Long-Lip Strikes: For locks used on frames with applied wood casing trim.
  3. Aluminum-Frame Strike Box: Provide manufacturer's special strike box fabricated for aluminum framing.
- B. Standards: Comply with the following:
1. Strikes for Mortise Locks and Latches: BHMA A156.13.
  2. Strikes for Bored Locks and Latches: BHMA A156.2.
  3. Strikes for Auxiliary Deadlocks: BHMA A156.5.
  4. Dustproof Strikes: BHMA A156.16.

## 2.7 CONVENTIONAL EXIT DEVICES

- A. General Requirements: All exit devices specified herein shall meet or exceed the following criteria:
1. At doors not requiring a fire rating, provide devices complying with NFPA 101 and listed and labeled for "Panic Hardware" according to UL305. Provide proper fasteners as required by manufacturer including sex nuts and bolts at openings specified in the Hardware Sets.
  2. Where exit devices are required on fire rated doors, provide devices complying with NFPA 80 and with UL labeling indicating "Fire Exit Hardware". Provide devices with the proper fasteners for installation as tested and listed by UL. Consult manufacturer's catalog and template book for specific requirements.
    - a. Fire Exit Removable Mullions: Provide keyed removable mullions for use with fire exit devices complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire and panic protection, based on testing according to UL 305 and NFPA 252. Mullions to be used only with exit devices for which they have been tested.
  3. Except on fire rated doors, provide exit devices with hex key dogging device to hold the pushbar and latch in a retracted position. Provide optional keyed cylinder dogging on devices where specified in Hardware Sets.
  4. Devices must fit flat against the door face with no gap that permits unauthorized dogging of the push bar. The addition of filler strips is not acceptable except in any case where the door light extends behind the device as in a full glass configuration.

5. Flush End Caps: Provide heavy weight impact resistant flush end caps made of architectural metal in the same finish as the devices as in the Hardware Sets. Plastic end caps will not be acceptable.
  6. Lever Operating Trim: Where exit devices require lever trim, furnish manufacturer's heavy duty trim with cold forged escutcheons, beveled edges, and four threaded studs for thru-bolts.
    - a. Lock Trim Design: As indicated in Hardware Sets, provide finishes and designs to match that of the specified locksets. Provided free-wheeling type trim where indicated.
    - b. Where function of exit device requires a cylinder, provide an interchangeable core type keyed cylinder (Rim or Mortise) as specified in Hardware Sets.
  7. Vertical Rod Exit Devices: Provide and install interior surface and concealed vertical rod exit devices as Less Bottom Rod (LBR) unless otherwise indicated.
  8. Narrow Stile Applications: At doors constructed with narrow stiles, or as specified in Hardware Sets, provide devices designed for maximum 2" wide stiles.
  9. Rail Sizing: Provide exit device rails factory sized for proper door width application.
  10. Through Bolt Installation: For exit devices and trim as indicated in Door Hardware Sets.
- B. Conventional Push Rail Exit Devices (Heavy Duty): ANSI/BHMA A156.3, Grade 1 certified panic and fire exit hardware devices furnished in the functions specified in the Hardware Sets. Mounting rails to be formed from smooth stainless steel, brass or bronze architectural materials no less than 0.072" thick, with push rails a minimum of 0.062" thickness. Painted or aluminum metal rails are not acceptable. Exit device latch to be investment cast stainless steel, pullman type, with deadlock feature.
1. Acceptable Manufacturers:
    - a. Corbin Russwin Hardware (RU) - ED4000 / ED5000 Series.
    - b. Von Duprin (VD) - 35A/98 XP Series.
    - c. Yale Locks and Hardware (YA) - 7000 Series.
- C. Tube Steel Removable Mullions: ANSI/BHMA A156.3 removable steel mullions with malleable-iron top and bottom retainers and a primed paint finish. Provide keyed removable feature, stabilizers, and mounting brackets as specified in the Hardware Sets. At openings designed for severe wind load conditions due to hurricanes or tornadoes, provide manufacturers approved mullion and accessories to meet applicable state and local windstorm codes.
1. Acceptable Manufacturers:
    - a. Corbin Russwin Hardware (RU) - 700/900 Series.
    - b. Von Duprin (VD) - 9954 Series.
    - c. Yale Locks and Hardware (YA) - M200 Series.

## 2.8 DOOR CLOSERS

- A. All door closers specified herein shall meet or exceed the following criteria:
1. General: Door closers to be from one manufacturer, matching in design and style, with the same type door preparations and templates regardless of application or spring size. Closers to be non-handed with full sized covers including installation and adjusting information on inside of cover.
  2. Standards: Closers to comply with UL-10C and UBC 7-2 for Positive Pressure Fire Test and be U.L. listed for use of fire rated doors.
  3. Size of Units: Comply with manufacturer's written recommendations for sizing of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Where closers are indicated for doors required to be accessible to the physically handicapped, provide units complying with ANSI ICC/A117.1.
  4. Closer Arms: Provide heavy duty, forged steel closer arms unless otherwise indicated in Hardware Sets.
    - a. Where closers are indicated to have mechanical dead-stop, provide heavy duty arms and brackets with an integral positive stop.
    - b. Where closers are indicated to have mechanical hold open, provide heavy duty units with an additional built-in mechanical holder assembly designed to hold open against normal wind and traffic conditions. Holder to be manually selectable to on-off position.
    - c. Where closers are indicated to have a cushion-type stop, provide heavy duty arms and brackets with spring stop mechanism to cushion door when opened to maximum degree.
    - d. Closers shall not be installed on exterior or corridor side of doors; where possible install closers on door for optimum aesthetics. Provide drop plates or other accessories as required for proper mounting.
  5. Closer Accessories: Provide door closer accessories including custom templates, special mounting brackets, spacers and drop plates, and through-bolt or security type fasteners as specified in the door Hardware Sets.
- B. Door Closers, Surface Mounted (Heavy Duty): ANSI/BHMA A156.4, Grade 1 surface mounted, heavy duty door closers with complete spring power adjustment, sizes 1 thru 6; and fully operational adjustable according to door size, frequency of use, and opening force. Closers to be rack and pinion type, one piece cast iron or aluminum alloy body construction, with adjustable backcheck and separate non-critical valves for closing sweep and latch speed control. Provide non-handed units standard.
1. Acceptable Manufacturers:
    - a. Corbin Russwin Hardware (RU) - DC8000 Series.
    - b. LCN Closers (LC) - 4040XP Series.
    - c. Norton Door Controls (NO) - 7500 Series.

## 2.9 SURFACE MOUNTED CLOSER HOLDERS

- A. Electromagnetic Door Holders: Certified ANSI A156.15 electromagnetic door holder/releases with a minimum 20 to 40 pounds holding power and single coil construction able to accommodate 12VDC, 24VAC, 24VDC and 120VAC. Coils to be independently wound, employing an integral fuse and armatures to include a positive release button.

1. Acceptable Manufacturers:

- a. LCN Door Closers (LC) - SEM7800 Series.
- b. Rixson (RF) - 980/990 Series.
- c. Sargent Manufacturing (SA) - 1560 Series.

## 2.10 ARCHITECTURAL TRIM

A. Door Protective Trim

1. General: Door protective trim units to be of type and design as specified below or in the Hardware Sets.
2. Size: Fabricate protection plates (kick, armor, or mop) not more than 2" less than door width (LDW) on stop side of single doors and 1" LDW on stop side of pairs of doors, and not more than 1" less than door width on pull side. Coordinate and provide proper width and height as required where conflicting hardware dictates. Height to be as specified in the Hardware Sets.
3. Metal Protection Plates: ANSI/BHMA A156.6 certified metal protection plates (kick, armor, or mop), beveled on four edges (B4E), fabricated from the following:
  - a. Stainless Steel: 300 series, .050-inch thick, with countersunk screw holes (CSK).
4. Fasteners: Provide manufacturer's designated fastener type as specified in the Hardware Sets.
  - a. Burns Manufacturing (BU).
  - b. Rockwood Manufacturing (RO).
  - c. Trimco (TC).

## 2.11 DOOR STOPS AND HOLDERS

- A. General: Door stops and holders to be of type and design as specified below or in the Hardware Sets.
- B. Door Stops and Bumpers: ANSI/BHMA A156.16, Grade 1 certified door stops and wall bumpers. Provide wall bumpers, either convex or concave types with anchorage as indicated, unless floor or other types of door stops are specified in Hardware Sets. Do not mount floor stops where they will impede traffic. Where floor or wall bumpers are not appropriate, provide overhead type stops and holders.

1. Acceptable Manufacturers:
  - a. Burns Manufacturing (BU).
  - b. Rockwood Manufacturing (RO).
  - c. Trimco (TC).

- C. Overhead Door Stops and Holders: ANSI/BHMA A156.6, Grade 1 certified overhead stops and holders to be surface or concealed types as indicated in Hardware Sets. Track, slide, arm and jamb bracket to be constructed of extruded bronze and shock absorber spring of heavy tempered steel. Provide non-handed design with mounting brackets as required for proper operation and function.

1. Acceptable Manufacturers:
  - a. Rixson Door Controls (RF).
  - b. Rockwood Manufacturing (RO).
  - c. Sargent Manufacturing (SA).

## 2.12 ARCHITECTURAL SEALS

- A. General: Thresholds, weatherstripping, and gasket seals to be of type and design as specified below or in the Hardware Sets. Provide continuous weatherstrip gasketing on exterior doors and provide smoke, light, or sound gasketing on interior doors where indicated. At exterior applications provide non-corrosive fasteners and elsewhere where indicated.
- B. Smoke Labeled Gasketing: Assemblies complying with NFPA 105 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for smoke control ratings indicated, based on testing according to UL 1784.
1. Provide smoke labeled perimeter gasketing at all smoke labeled openings.
- C. Fire Labeled Gasketing: Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to UL-10C.
1. Provide intumescent seals as indicated to meet UL10C Standard for Positive Pressure Fire Tests of Door Assemblies, and UBC 7-2, Fire Tests of Door Assemblies.
- D. Sound-Rated Gasketing: Assemblies that are listed and labeled by a testing and inspecting agency, for sound ratings indicated, based on testing according to ASTM E 1408.
- E. Replaceable Seal Strips: Provide only those units where resilient or flexible seal strips are easily replaceable and readily available from stocks maintained by manufacturer.
- F. Acceptable Manufacturers:
1. National Guard Products (NG).
  2. Pemko Manufacturing (PE).
  3. Reese Enterprises, Inc. (RS).



## 2.13 FABRICATION

- A. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to manufacturers recognized installation standards for application intended.

## 2.14 FINISHES

- A. Standard: Designations used in the Hardware Sets and elsewhere indicate hardware finishes complying with ANSI/BHMA A156.18, including coordination with traditional U.S. finishes indicated by certain manufacturers for their products.
- B. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware.
- C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine scheduled openings, with Installer present, for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction, and other conditions affecting performance.
- B. Notify architect of any discrepancies or conflicts between the door schedule, door types, drawings and scheduled hardware. Proceed only after such discrepancies or conflicts have been resolved in writing.

### 3.2 PREPARATION

- A. Hollow Metal Doors and Frames: Comply with ANSI/DHI A115 series.
- B. Wood Doors: Comply with ANSI/DHI A115-W series.

### 3.3 INSTALLATION

- A. Install each item of mechanical and electromechanical hardware and access control equipment to comply with manufacturer's written instructions and according to specifications.
  - 1. Installers are to be trained and certified by the manufacturer on the proper installation and adjustment of fire, life safety, and security products including: hanging devices; locking devices; closing devices; and seals.

- B. Mounting Heights: Mount door hardware units at heights indicated in following applicable publications, unless specifically indicated or required to comply with governing regulations:
  - 1. Standard Steel Doors and Frames: DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."
  - 2. Wood Doors: DHI WDHS.3, "Recommended Locations for Architectural Hardware for Wood Flush Doors."
  - 3. Where indicated to comply with accessibility requirements, comply with ANSI A117.1 "Accessibility Guidelines for Buildings and Facilities."
  - 4. Provide blocking in drywall partitions where wall stops or other wall mounted hardware is located.
- C. Retrofitting: Install door hardware to comply with manufacturer's published templates and written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work specified in Division 9 Sections. Do not install surface-mounted items until finishes have been completed on substrates involved.
- D. Thresholds: Set thresholds for exterior and acoustical doors in full bed of sealant complying with requirements specified in Division 7 Section "Joint Sealants."
- E. Storage: Provide a secure lock up for hardware delivered to the project but not yet installed. Control the handling and installation of hardware items so that the completion of the work will not be delayed by hardware losses before and after installation.

### 3.4 FIELD QUALITY CONTROL

- A. Field Inspection: Supplier will perform a final inspection of installed door hardware and state in report whether work complies with or deviates from requirements, including whether door hardware is properly installed, operating and adjusted.

### 3.5 ADJUSTING

- A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

### 3.6 CLEANING AND PROTECTION

- A. Protect all hardware stored on construction site in a covered and dry place. Protect exposed hardware installed on doors during the construction phase. Install any and all hardware at the latest possible time frame.
- B. Clean adjacent surfaces soiled by door hardware installation.

- C. Clean operating items as necessary to restore proper finish. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of owner occupancy.

### 3.7 DEMONSTRATION

- A. Instruct Owner's maintenance personnel to adjust, operate, and maintain mechanical and electromechanical door hardware.

### 3.8 DOOR HARDWARE SCHEDULE

- A. The hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application and functionality.
- B. Manufacturer's Abbreviations:

1. MK - McKinney
2. RU - Corbin Russwin
3. SA - Sargent
4. RO - Rockwood
5. RF - Rixson
6. NO - Norton
7. PE - Pemko

#### **Hardware Schedule**

##### **Set: 1.0**

Doors: 122B/1, 123B/1, 124B/1, 125B/1

3 Hinge	TA2714	US26D	MK
1 Cylindrical Lock (classroom)	CL3355 PZD CTPD	626	RU
1 Cylinder Core (Pyramid)	8027		RU
1 Surface Overhead Stop	10-X36	630	RF
3 Silencer	608 (or) 609	GRY	RO

##### **Set: 2.0**

Doors: 122A/1, 123A/1, 124A/1, 125A/1

3 Hinge	TA2714	US26D	MK
1 Cylindrical Lock (privacy)	CL3320 PZD	626	RU
1 Surface Overhead Stop	10-X36	630	RF
1 Kick Plate	K1050 8" 4BE	US32D	RO
3 Silencer	608 (or) 609	GRY	RO

**Set: 3.0**

Doors: 122/1, 123/1, 124/1, 125/1

3 Hinge (heavy weight)	T4A3786	US26D	MK
1 Cylindrical Lock (classroom intruder)	CL3352 PZD CTPD	626	RU
2 Cylinder Core (Pyramid)	8027		RU
1 Door Closer	PR7500	689	NO
1 Kick Plate	K1050 8" 4BE	US32D	RO
1 Door Stop	403 (or) 441CU	US26D	RO
1 Gasketing	S773BL		PE

**Set: 4.0**

Doors: 121/1

6 Hinge (heavy weight)	T4A3786	US26D	MK
2 Push/Pull Bar Set	BF15847 T1	US32D	RO
2 Door Closer	R7500	689	NO
2 Door Stop	403 (or) 441CU	US26D	RO
1 Threshold	166A MSES10SS		PE
1 Gasketing	S773BL		PE
2 Sweep	315CN		PE
2 Astragal	297AS		PE

**Set: 5.0**

Doors: 115/2

6 Hinge (heavy weight)	T4A3786	US26D	MK
2 Exit Device (SVR, passage)	ED5470B PR910 M55	630	RU
2 Door Closer	PR7500	689	NO
2 Kick Plate	K1050 8" 4BE	US32D	RO
2 Electromagnetic Holder	998	689	RF
1 Gasketing	S88BL		PE

2 Astragal	297AS		PE
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Notes: Connect holder to fire alarm system.

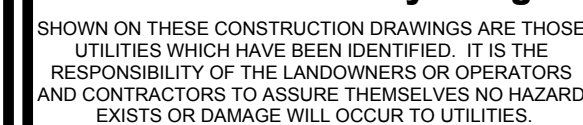
**Set: 6.0**

Doors: 115/1, 121/2

2 Continuous Hinge	MCK-12HD - DOOR HEIGHT	CL	MK
1 Removable Mullion	900BKM - DOOR HEIGHT		RU
1 Exit Device (rim, dummy trim)	ED4200 P1050 M52	630	RU
1 Exit Device (rim, nightlatch)	ED4200 P1057 M52	630	RU
3 Cylinder (KESO, mortise)	82-72	US26D	SA
1 Cylinder (KESO, rim)	82-64	US26D	SA
2 Door Closer	PR7500	689	NO
2 Door Stop - HD Floor	471	US26D	RO
1 Threshold	2005A MSES25SS		PE
2 Sweep	3452CNB		PE

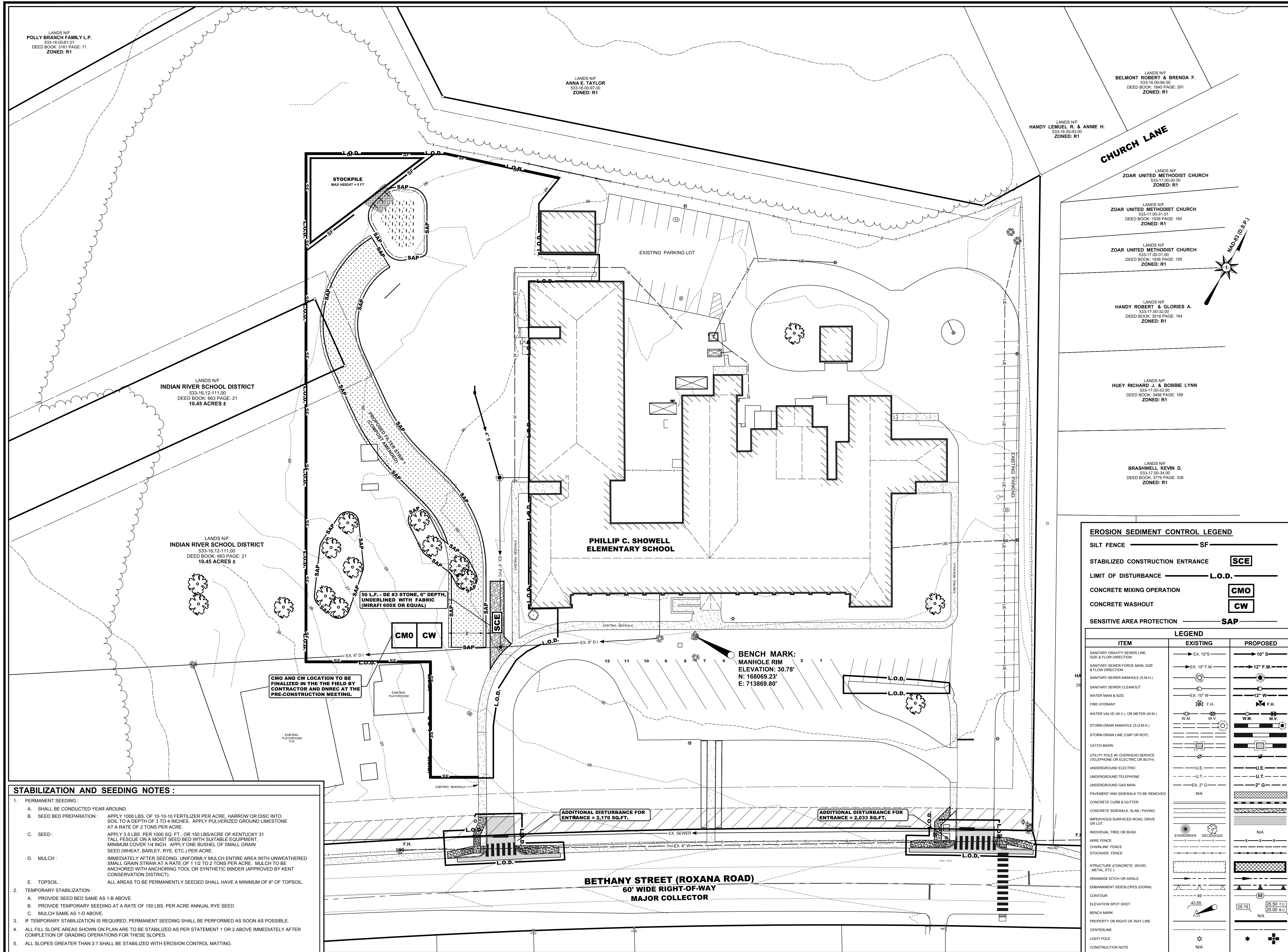
Notes: Perimeter/meeting stile seals by door/frame supplier.

END OF SECTION 087100



41 BETHANY ROAD  
TOWN OF SELBYVILLE  
SUSSEX COUNTY, DE.

# SCHEMATIC CONSTRUCTION STORMWATER MANAGEMENT PLAN





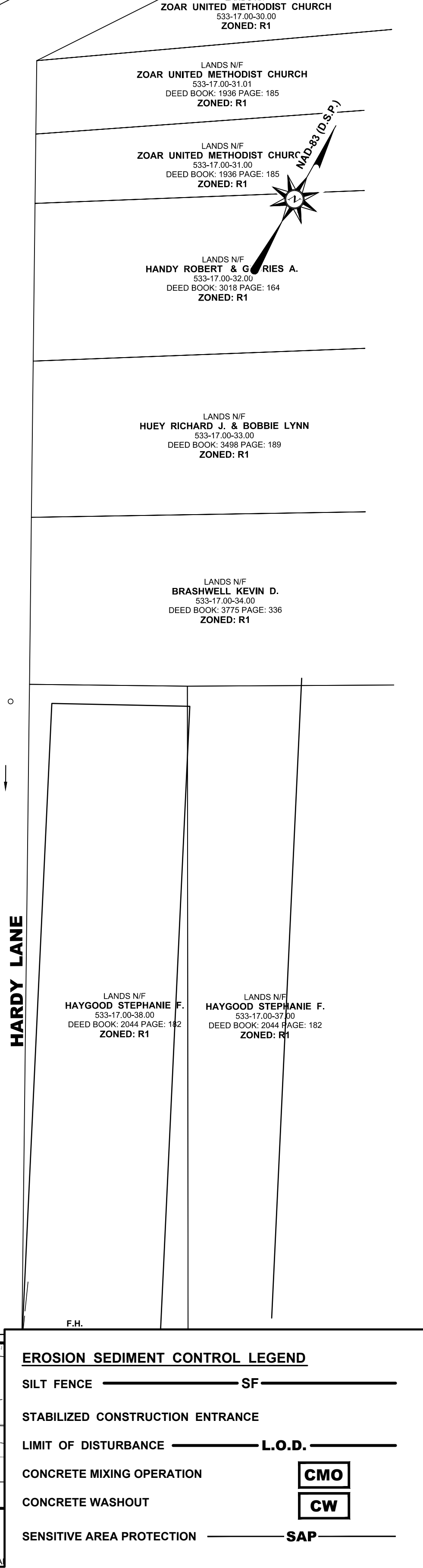
1. PERMANENT SEEDING :
  - A. SHALL BE CONDUCTED YEAR AROUND.
  - B. SEED BED PREPARATION :

APPLY 1000 LBS. OF 10-10-10 FERTILIZER PER ACRE. HARROW OR DISC INTO SOIL TO A DEPTH OF 3 TO 4 INCHES. APPLY PULVERIZED GROUND LIMESTONE AT A RATE OF 2 TONS PER ACRE.
  - C. SEED :

APPLY 3.5 LBS. PER 1000 SQ. FT. OR 150 LBS/ACRE OF KENTUCKY 31 TALL FESCUE ON A MOIST SEED BED WITH SUITABLE EQUIPMENT. MINIMUM COVER 1/4 INCH. APPLY ONE BUSHEL OF SMALL GRAIN SEED (WHEAT, BARLEY, RYE, ETC.) PER ACRE.
  - D. MULCH :

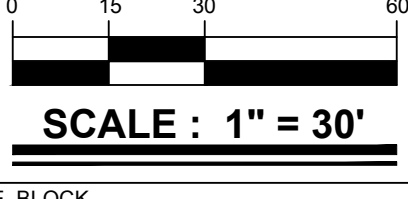
IMMEDIATELY AFTER SEEDING, UNIFORMLY MULCH ENTIRE AREA WITH UNWEATHERED SMALL GRAIN STRAW AT A RATE OF 1 1/2 TO 2 TONS PER ACRE. MULCH TO BE ANCHORED WITH ANCHORING TOOL OR SYNTHETIC BINDER (APPROVED BY KENT CONSERVATION DISTRICT).
  - E. TOPSOIL :

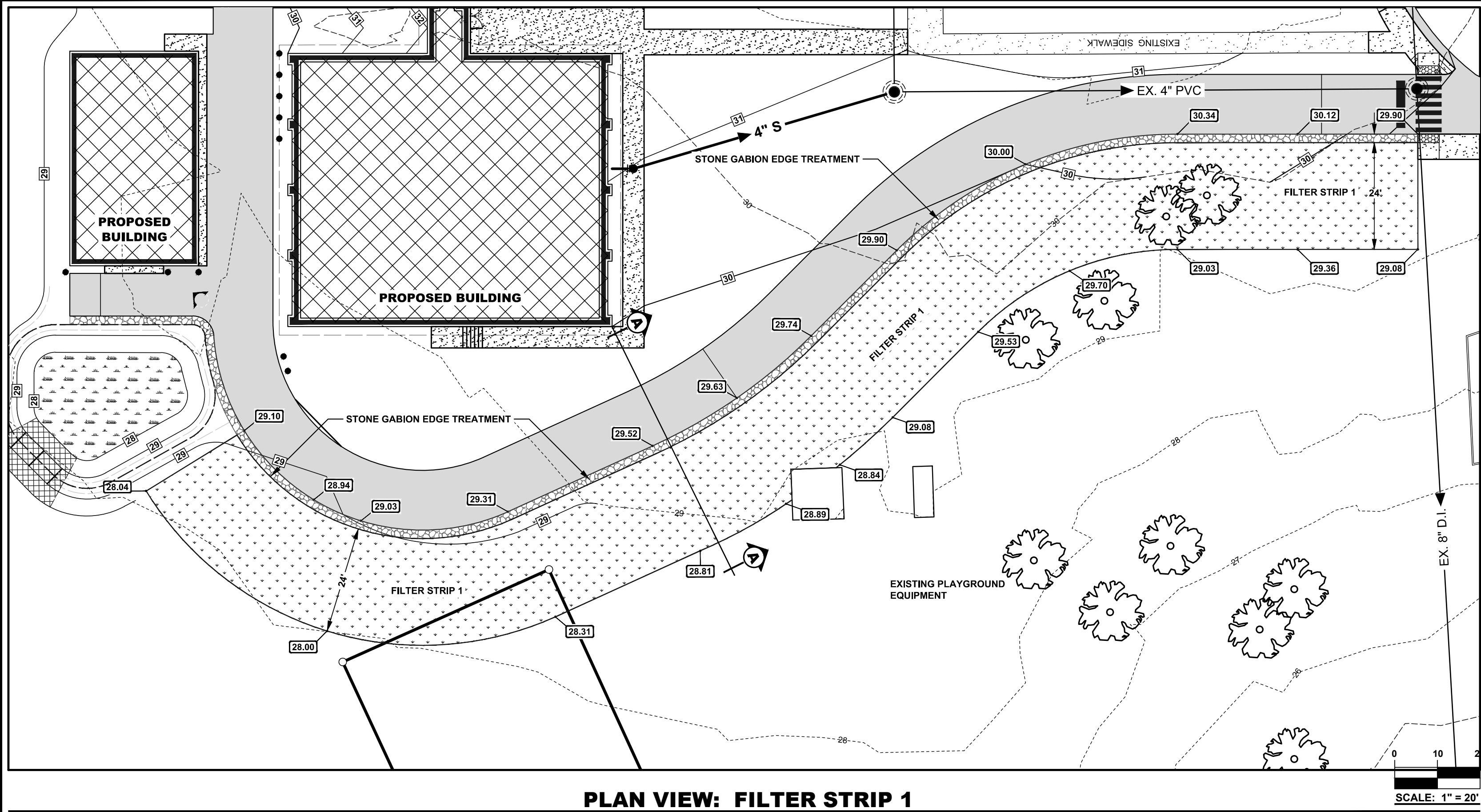
ALL AREAS TO BE PERMANENTLY SEEDED SHALL HAVE A MINIMUM OF 6" OF TOPSOIL.
2. TEMPORARY STABILIZATION :
  - A. PROVIDE SEED BED SAME AS 1-B ABOVE.
  - B. PROVIDE TEMPORARY SEEDING AT A RATE OF 150 LBS. PER ACRE ANNUAL RYE SEED.
  - C. MULCH SAME AS 1-D ABOVE.
3. IF TEMPORARY STABILIZATION IS REQUIRED, PERMANENT SEEDING SHALL BE PERFORMED AS SOON AS POSSIBLE.
4. ALL FILL SLOPE AREAS SHOWN ON PLAN ARE TO BE STABILIZED AS PER STATEMENT 1 OR 2 ABOVE IMMEDIATELY AFTER COMPLETION OF GRADING OPERATIONS FOR THESE SLOPES.
5. ALL SLOPES GREATER THAN 3:1 SHALL BE STABILIZED WITH EROSION CONTROL MATTING.



**Know what's below.  
Call before you dig.**

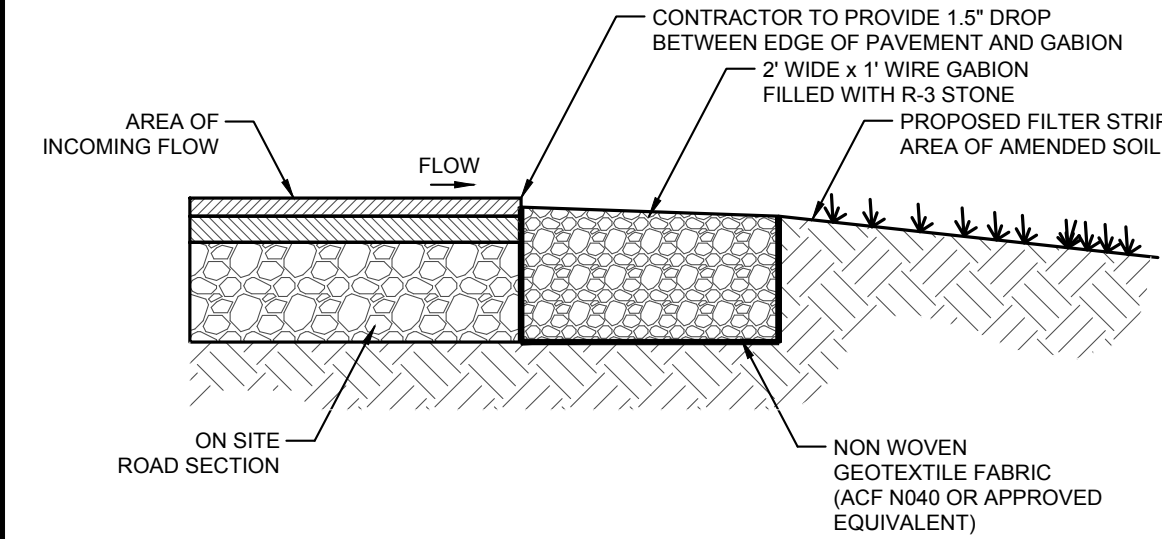
SHOWN ON THESE CONSTRUCTION DRAWINGS ARE THOSE UTILITIES WHICH HAVE BEEN IDENTIFIED. IT IS THE RESPONSIBILITY OF THE LANDOWNERS OR OPERATORS AND CONTRACTORS TO ASSURE THEMSELVES NO HAZARD EXISTS OR DAMAGE WILL OCCUR TO UTILITIES.

PROJECT TITLE	
<h1 style="margin: 0;">PHILLIP C. SHOWELL ELEMENTARY SCHOOL</h1> <p style="margin: 0;">41 BETHANY ROAD TOWN OF SELBYVILLE SUSSEX COUNTY, DE.</p>	
SHEET TITLE	
<h2 style="margin: 0;">POST CONSTRUCTION SITE STORMWATER MANAGEMENT PLAN</h2>	
	
ISSUE	BLOCK
7	05/01/15
ISSUED FOR ADDENDUM NO 2	
6	3/30/15
REVISED PER DNREC COMMENTS ISSUED: 03/09/15	
5	3/24/15
DOCUMENTS ISSUED FOR BID	
4	12/19/14
REVISED PER DELDOT COMMENTS ISSUED: 11/07/14	
3	11/12/14
REVISED PER INDIAN RIVER SCHOOL DISTRICT COMMENTS	
2	08/22/14
CDS ISSUED FOR OWNER REVIEW	
1	08/13/14
OFFICE OF STATE FIRE MARSHAL COMMENTS DATED: 06/24/14	
MARK	DESCRIPTION
DATE	DATE
LAYER STATE: C-502	
PROJECT NO.: 2013157.03	
DATE: 08/18/14	
SCALE: 1" = 30'	
DRAWN BY: R.J.M.	PROJ. MGR.: G.E.J.
SHEET	
C-502	
COPYRIGHT 2013	



PLAN VIEW: FILTER STRIP 1

SCALE: 1" = 20'



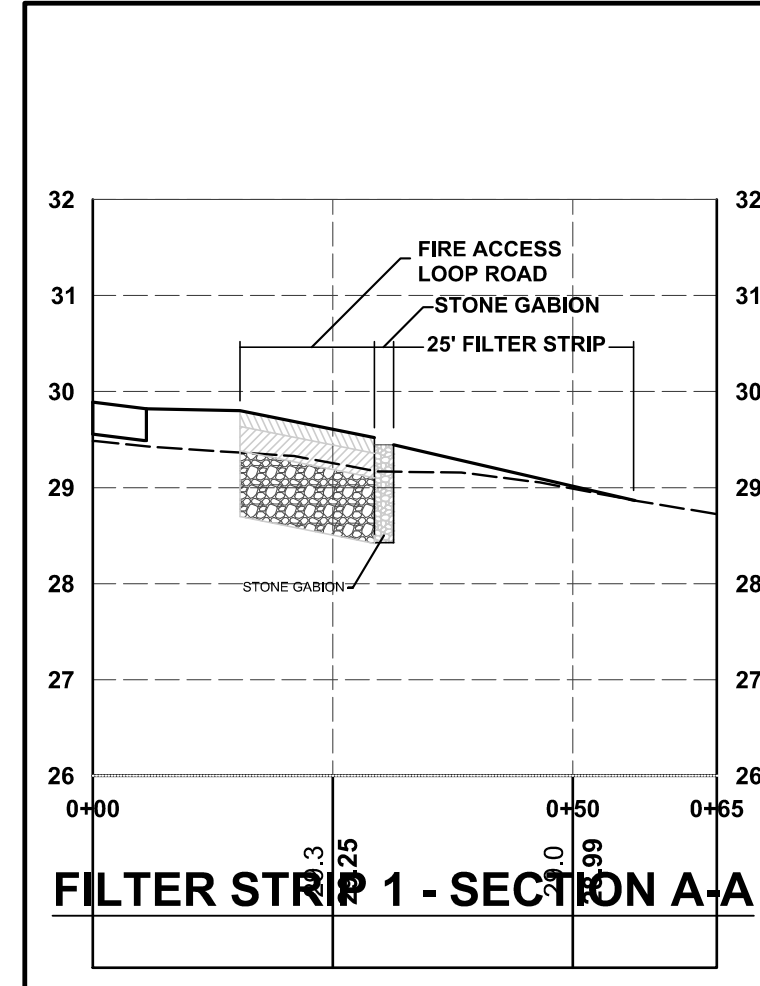
NOTES:

1. NON WOVEN FABRIC TO KEY INTO THE DOWNSTREAM SIDE OF THE GABION TRENCH.

### STONE GABION LEVEL SPREADER

NO SCALE

BMG NO. 1



FILTER STRIP 1 - SECTION A-A

SECTION VIEW: A-A

HORIZONTAL SCALE: 1" = 20'

VERTICAL SCALE: 1" = 2'

### SEQUENCE OF CONSTRUCTION: FILTER STRIP / LEVEL SPREADERS

1. NOTIFY THE PERSON RESPONSIBLE FOR STORMWATER SYSTEM CONSTRUCTION REVIEW AT LEAST THREE (3) DAYS PRIOR TO THE START OF THE STORMWATER SYSTEM CONSTRUCTION; STORMWATER FACILITIES MUST BE REVIEWED THROUGHOUT THEIR CONSTRUCTION.
2. BEFORE SITE WORK BEGINS, FILTER STRIP BOUNDARIES SHOULD BE CLEARLY MARKED.
3. ONLY VEHICULAR TRAFFIC USED FOR FILTER STRIP CONSTRUCTION SHOULD BE ALLOWED WITHIN THE FILTER STRIP BOUNDARY.
4. IF EXISTING TOPSOIL IS STRIPPED DURING INSTALLATION OF THE STONE GABIONS, SOIL SHALL BE STOCKPILED FOR LATER USE.
5. CONSTRUCTION OF THE STONE GABIONS SHALL NOT COMMENCE UNTIL THE CONTRIBUTING DRAINAGE AREAS HAVE BEEN STABILIZED AND PERIMETER EROSION AND SEDIMENT (E&S) CONTROL HAVE BEEN REMOVED AND CLEANED OUT.
6. THE CONSTRUCTION SITE OF THE STONE GABIONS AND FILTER STRIPS SHOULD BE RETURNED TO PRE-CONSTRUCTION CONDITIONS. PROVIDE ADDITIONAL SEEDING AND STABILIZATION AS NECESSARY.
7. REMOVAL OF EROSION AND SEDIMENT CONTROL DEVICES SHOULD ONLY BE REMOVED AFTER WORK IN AN AREA HAS BEEN COMPLETED AND STABILIZED WITH WRITTEN APPROVAL FROM THE AGENCY CCR.
8. POST CONSTRUCTION VERIFICATION OF DOCUMENTS, INCLUDING FINAL STABILIZATION THROUGHOUT THE SITE, ALL ELEMENT OF THE SEDIMENT AND STORMWATER MANAGEMENT PLAN IMPLEMENTED, AND ACCEPTANCE OF THE FINAL OPERATION AN MAINTENANCE PLAN WITHIN 60 DAYS OF STORMWATER MANAGEMENT COMPLETION.

### OPERATION AND MAINTENANCE PLAN: FILTER STRIP / STONE GABION

TOTAL AREA OF FILTER STRIP: 8145 SQFT (0.187 ACRES)

FREQUENCY	MAINTENANCE ITEMS
DURING ESTABLISHMENT, AS NEEDED (FIRST YEAR)	<ul style="list-style-type: none"><li>• INSPECT THE SITE AFTER EACH STORMEVENT THAT EXCEEDS 0.5 INCHES OF RAINFALL.</li><li>• STABILIZE ANY BARE OR ERODING AREAS IN THE CONTRIBUTING DRAINAGE AREA.</li><li>• VEGETATION PLANTED IN THE AREA OF FILTER STRIP AND OPEN SPACE SHOULD BE WATERED EVERY THREE DAYS FOR THE FIRST MONTH AND WEEKLY DURING THE REMAINDER OF THE FIRST GROWING SEASON (APRIL - OCTOBER), DEPENDING ON RAINFALL.</li></ul>
QUARTERLY OR AFTER MAJOR STORMS (> 1" OF RAINFALL)	<ul style="list-style-type: none"><li>• REMOVE DEBRIS AND BLOCKAGES FROM STONE GABIONS.</li><li>• REPAIR UNDERCUT, ERODED AND BARE SOILS IN AREA OF FILTER STRIP.</li></ul>
TWICE A YEAR	<ul style="list-style-type: none"><li>• CHECK CONDITION OF GABIONS. REPAIR AS NEEDED.</li></ul>
ANNUALLY	<ul style="list-style-type: none"><li>• CLEAN TOP OF STONE WITHIN THE GABIONS.</li><li>• REPAIR AREAS OF GRASS WHICH APPEAR TO BE BARE OR IN NEED OF EROSION REPAIR.</li><li>• CHECK STONE GABIONS UTILIZED FOR LEVEL SPREADER. REPLACE AS NEEDED.</li></ul>

### OPERATION AND MAINTENANCE NOTES

1. THE DNREC SEDIMENT AND STORMWATER PROGRAM AND /OR THE RELEVANT DELEGATED AGENCY RESERVES THE RIGHT TO ENTER PRIVATE PROPERTY FOR PURPOSES OF PERIODIC SITE REVIEW.
2. THE DNREC SEDIMENT AND STORMWATER PROGRAM SHALL BE NOTIFIED WITHIN 30 BUSINESS DAYS IF THE PROPERTY OWNERSHIP IS TRANSFERRED TO A NEW PERSON OR ENTITY.
3. THE DNREC SEDIMENT AND STORMWATER PROGRAM MAY SEEK ENFORCEMENT ACTION AGAINST ANY OWNER DEEMED NEGLIGENT IN FULFILLING THE OPERATION AND MAINTENANCE REQUIREMENTS OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS.
4. APPROVAL OF THE SEDIMENT AND STORMWATER PLAN SHALL NOT GRANT OR IMPLY A RIGHT TO DISCHARGE STORM WATER RUNOFF. THE CAPITAL SCHOOL DISTRICTS RESPONSIBLE FOR ACQUIRING ANY AND ALL AGREEMENTS, EASEMENTS ETC. NECESSARY TO COMPLY WITH STATE DRAINAGE AND OTHER APPLICABLE CODES.
5. REVIEW AND OR APPROVAL OF THE SEDIMENT AND STORM WATER MANAGEMENT PLAN SHALL NOT RELIEVE THE CONTRACTOR FROM HIS OR HER RESPONSIBILITIES FOR COMPLIANCE WITH THE REQUIREMENTS OF THE SEDIMENT AND STORM WATER REGULATIONS, NOR SHALL IT RELIEVE THE CONTRACTOR FROM ERRORS OR OMISSIONS IN THE APPROVED PLAN.
6. THE DNREC SEDIMENT AND STORMWATER PROGRAM SHALL BE CONTACTED IF A CONCERN ARISES REGARDING A STORMWATER MANAGEMENT FACILITY, BEFORE ANY NON-ROUTINE MAINTENANCE, OR IF MODIFICATIONS TO THE FACILITY ARE DESIRED.
7. ANY DESIGN MODIFICATIONS MADE TO THE STORMWATER SYSTEM SHALL REQUIRE THE CREATION OF A NEW POST CONSTRUCTION STORMWATER MANAGEMENT PLAN AND/OR OPERATIONS AND MAINTENANCE PLAN, WITH APPROVAL OF THE PLANS BY THE DNREC SEDIMENT AND STORMWATER PROGRAM.
8. FOR ALL STORMWATER EASEMENT AREAS AND THE MINIMUM 10-FOOT WIDE ACCESSWAYS TO ALL STORMWATER FACILITIES AND THEIR STRUCTURAL COMPONENTS, REGULAR MOWING SHALL BE PERFORMED TO KEEP THE GRASS 6" OR LESS; NO TREES OR SHRUBS SHALL BE PLANTED, AND ANY FOUND GROWING SHALL BE REMOVED, AND NO PERMANENT STRUCTURES, SUCH AS FENCES OR SHED, SHALL BE LOCATED WITHIN THE EASEMENT OR ACCESS WAY.
9. PRIOR TO ANY EARTHWORK OR EXCAVATION TAKES PLACE, THE CONTRACTOR SHALL HIRE A PRIVATE UTILITY LOCATOR AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.

### STABILIZATION AND SEEDING NOTES :

1. PERMANENT SEEDING :
  - A. SHALL BE CONDUCTED YEAR AROUND.
  - B. SEED BED PREPARATION : SHALL BE IN ACCORDANCE WITH DE-ESC-3.4.3, SHEET 4 OF 4.
  - C. SOIL AMENDMENTS : FERTILIZER AND LIME APPLICATION SHALL BE IN ACCORDANCE WITH DE-ESC-3.4.3, SHEET 4 OF 4.
  - D. SEEDING : APPLY ERNST'S #117 WARM SEASON SEED MIXTURE. APPLY SEED UNIFORMLY WITH A BROADCAST SEEDER, DRILL, CULTPACKER SEEDER OR HYDROSEEDER. ALL SEED WILL BE APPLIED AT THE RECOMMENDED RATE AND PLANTING DEPTH. REFER TO LANDSCAPE PLANS FOR ADDITIONAL SEEDING REQUIREMENTS.
  - E. MULCH : IMMEDIATELY AFTER SEEDING, UNIFORMLY MULCH ENTIRE AREA WITH STRAW AT A RATE OF 2 TONS PER ACRE MINIMUM. ALL MULCHING SHALL BE DONE IN ACCORDANCE WITH DETAIL DE-ESC-3.4.5.
  - F. TOPSOIL : ALL AREAS TO BE PERMANENTLY SEEDED SHALL HAVE A MINIMUM OF 4" OF TOPSOIL.
2. TEMPORARY STABILIZATION :
  - A. PROVIDE SEED BED SAME AS 1-B ABOVE.
  - B. APPLY MIX NO. 5 (ANNUAL RYEGRASS) IN ACCORDANCE WITH DETAIL DE-ESC-3.4.3, SHEET 1 OF 4.
  - C. MULCH SAME AS 1-E ABOVE.
3. IF TEMPORARY STABILIZATION IS REQUIRED, PERMANENT SEEDING SHALL BE PERFORMED AS SOON AS POSSIBLE.
4. ALL FILL SLOPE AREAS SHOWN ON PLAN ARE TO BE STABILIZED AS PER STATEMENT 1 OR 2 ABOVE IMMEDIATELY AFTER COMPLETION OF GRADING OPERATIONS FOR THESE SLOPES.
5. EROSION CONTROL MATTING IS REQUIRED ON ALL SLOPES OF 3:1 OR GREATER AND IN AREAS OF CONCENTRATED FLOW.



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PROJECT TITLE

**PHILLIP C.  
SHOWELL  
ELEMENTARY  
SCHOOL**

**41 BETHANY ROAD  
TOWN OF SELBYVILLE  
SUSSEX COUNTY, DE.**

SHEET TITLE

**CONSTRUCTION SITE  
STORMWATER  
PLAN  
FILTER STRIP 1**

ISSUE BLOCK

7	05/01/15	ISSUED FOR ADDENDUM NO.2
6	3/30/15	REVISED PER DNREC COMMENTS ISSUED: 03/09/15
5	3/24/15	DOCUMENTS ISSUED FOR BID
4	12/19/14	REVISED PER DELDOT COMMENTS ISSUED: 11/07/14
3	11/12/14	REVISED PER INDIAN RIVER SCHOOL DISTRICT COMMENTS
2	08/22/14	CDS ISSUED FOR OWNER REVIEW
1	08/13/14	OFFICE OF STATE FIRE MARSHAL COMMENTS DATED: 06/24/14

MARK DATE DESCRIPTION

LAYER STATE: 0.503

PROJECT NO.: 2013157.03

DATE: 08/18/14

SCALE: 1" = 50'

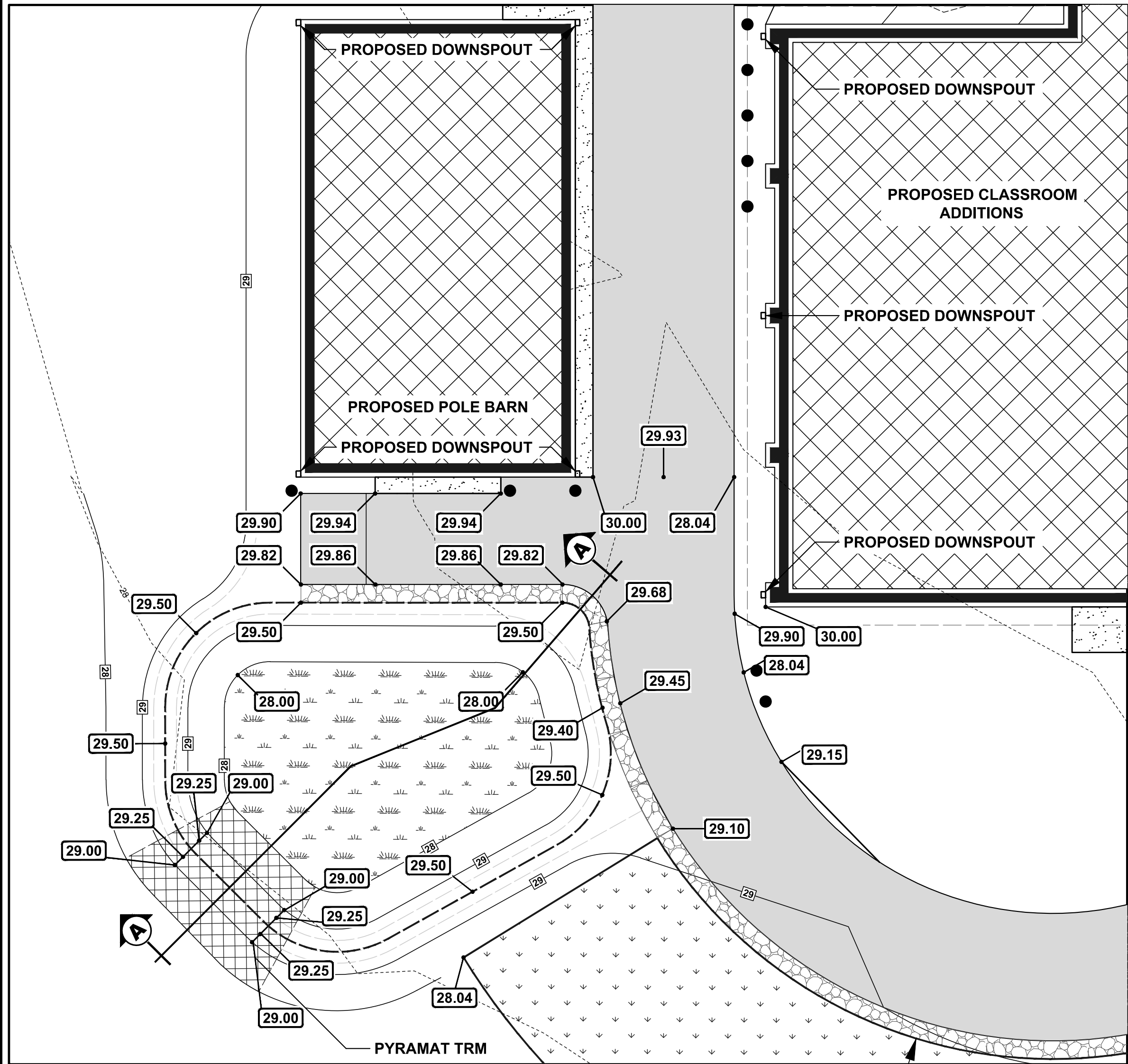
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SHEET

**C-503**

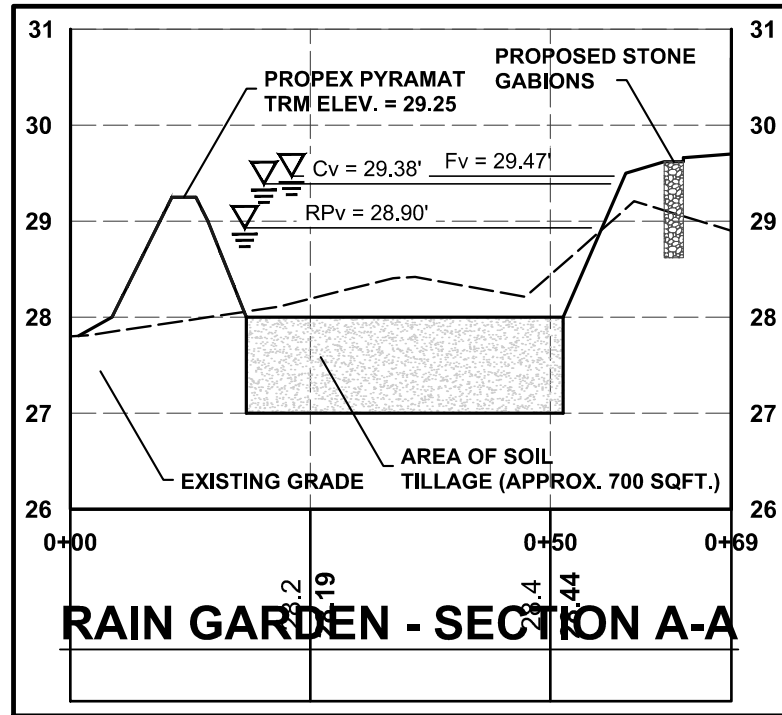
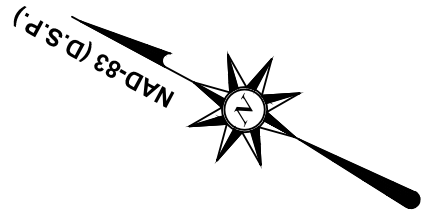
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PLAN VIEW: RAIN GARDEN

SCALE: 1" = 10'



SECTION VIEW: A-A

HORIZONTAL SCALE: 1" = 20'  
VERTICAL SCALE: 1" = 2'

SEQUENCE OF CONSTRUCTION: RAIN GARDEN

1. NOTIFY THE PERSON RESPONSIBLE FOR STORMWATER SYSTEM CONSTRUCTION REVIEW AT LEAST THREE (3) DAYS PRIOR TO THE START OF THE STORMWATER SYSTEM CONSTRUCTION; STORMWATER FACILITIES MUST BE REVIEWED THROUGHOUT THEIR CONSTRUCTION.
2. BEFORE SITE WORK BEGINS, RAIN GARDEN BOUNDARIES SHOULD BE CLEARLY MARKED.
3. VEHICULAR TRAFFIC SHOULD BE PROHIBITED FROM THE AREA OF THE RAIN GARDEN BOUNDARY.
4. IF EXISTING TOPSOIL IS STRIPPED DURING INSTALLATION OF THE STONE GABIONS, SOIL SHALL BE STOCKPILED FOR LATER USE.
5. CONSTRUCTION OF THE STONE GABIONS SHALL NOT COMMENCE UNTIL THE CONTRIBUTING DRAINAGE AREAS HAVE BEEN STABILIZED AND PERIMETER EROSION AND SEDIMENT (E&S) CONTROL HAVE BEEN REMOVED AND CLEANED OUT.
6. INSTALL STONE GABIONS AROUND THE PERIMETER OF THE RAIN GARDEN AS SHOWN. CONTRACTOR TO KEEP GABIONS AS FLAT AS POSSIBLE AND ADHERE TO THE ELEVATIONS SHOWN ON THIS PLAN AND THE EDGE OF PAVING.
7. CONTRACTOR TO GRADE RAIN GARDEN AREA AS SHOWN. IF FINAL CONSTRUCTION OF THE RAIN GARDEN IS SCHEDULED FOR THE NON GROWING SEASON AND THE AREA WILL NOT STABILIZE IN AN TIMELY MANOR, THE CONTRACTOR SHOULD MAKE PREPARATIONS TO SEED AND UTILIZE AN EROSION AND SEDIMENT CONTROL MATTING TO HELP STABILIZE THE AREA.
8. CONTRACTOR TO STABILIZE THE SIDE SLOPES OF THE RAIN GARDEN WITH EAST COAST ESC-2 TURF REINFORCEMENT MATTING (TRM) OR APPROVED EQUIVALENT. THE BOTTOM OF THE RAIN GARDEN SHOULD BE DEEP TILLED TO A DEPTH OF 12 INCHES TO AVOID UNNECESSARY COMPACTION.
9. CONTRACTOR SHOULD CONSTRUCT THE AREA OF THE OUTFALL UTILIZING PROPEX PYRAMAT TRM (OR APPROVED EQUIVALENT) IN THE AREA SHOWN.
10. THE CONSTRUCTION SITE OF THE STONE GABIONS AND RAIN GARDEN SHOULD BE RETURNED TO PRE-CONSTRUCTION CONDITIONS. PROVIDE ADDITIONAL SEEDING AND STABILIZATION AS NECESSARY.
11. REMOVAL OF EROSION AND SEDIMENT CONTROL DEVICES SHOULD ONLY BE REMOVED AFTER WORK IN AN AREA HAS BEEN COMPLETED AND STABILIZED WITH WRITTEN APPROVAL FROM THE AGENCY CCR.
12. POST CONSTRUCTION VERIFICATION OF DOCUMENTS, INCLUDING FINAL STABILIZATION THROUGHOUT THE SITE, ALL ELEMENT OF THE SEDIMENT AND STORMWATER MANAGEMENT PLAN IMPLEMENTED, AND ACCEPTANCE OF THE FINAL OPERATION AN MAINTENANCE PLAN WITHIN 60 DAYS OF STORMWATER MANAGEMENT COMPLETION.

OPERATION AND MAINTENANCE PLAN: RAIN GARDEN

TOTAL AREA OF FILTER STRIP: 1500 SQFT (0.03 ACRES)

FREQUENCY	MAINTENANCE ITEMS
DURING ESTABLISHMENT, AS NEEDED (FIRST YEAR)	<ul style="list-style-type: none"><li>• INSPECT THE SITE AFTER EACH STORMEVENT THAT EXCEEDS 0.5 INCHES OF RAINFALL.</li><li>• STABILIZE ANY BARE OR ERODING AREAS IN THE CONTRIBUTING DRAINAGE AREA.</li><li>• VEGETATION PLANTED IN THE AREA OF FILTER STRIP AND OPEN SPACE SHOULD BE WATERED EVERY THREE DAYS FOR THE FIRST MONTH AND WEEKLY DURING THE REMAINDER OF THE FIRST GROWING SEASON (APRIL - OCTOBER), DEPENDING ON RAINFALL.</li></ul>
QUARTERLY OR AFTER MAJOR STORMS (> 1" OF RAINFALL)	<ul style="list-style-type: none"><li>• REMOVE DEBRIS AND BLOCKAGES FROM STONE GABIONS.</li><li>• REPAIR UNDERCUT, ERODED AND BARE SOILS IN AREA OF RAIN GARDEN AND THE OUTFALL.</li></ul>
TWICE A YEAR	<ul style="list-style-type: none"><li>• CHECK CONDITION OF GABIONS. REPAIR AS NEEDED.</li></ul>
ANNUALLY	<ul style="list-style-type: none"><li>• CLEAN TOP OF STONE WITHIN THE GABIONS.</li><li>• REPAIR AREAS OF GRASS WHICH APPEAR TO BE BARE OR IN NEED OF EROSION REPAIR.</li><li>• CHECK STONE GABIONS UTILIZED FOR LEVEL SPREADER. REPLACE AS NEEDED.</li></ul>

OPERATION AND MAINTENANCE NOTES

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9. PRIOR TO ANY EARTHWORK OR EXCAVATION TAKES PLACE, THE CONTRACTOR SHALL HIRE A PRIVATE UTILITY LOCATOR AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.

STABILIZATION AND SEEDING NOTES :

1. PERMANENT SEEDING :
  - A. SHALL BE CONDUCTED YEAR AROUND.
  - B. SEED BED PREPARATION : SHALL BE IN ACCORDANCE WITH DE-ESC-3.4.3, SHEET 4 OF 4.
  - C. SOIL AMENDMENTS : FERTILIZER AND LIME APPLICATION SHALL BE IN ACCORDANCE WITH DE-ESC-3.4.3, SHEET 4 OF 4.
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  - F. TOPSOIL : ALL AREAS TO BE PERMANENTLY SEEDED SHALL HAVE A MINIMUM OF 4" OF TOPSOIL.
2. TEMPORARY STABILIZATION :
  - A. PROVIDE SEED BED SAME AS 1-B ABOVE.
  - B. APPLY MIX NO. 5 (ANNUAL RYEGRASS) IN ACCORDANCE WITH DETAIL DE-ESC-3.4.3, SHEET 1 OF 4.
  - C. MULCH SAME AS 1-E ABOVE.
3. IF TEMPORARY STABILIZATION IS REQUIRED, PERMANENT SEEDING SHALL BE PERFORMED AS SOON AS POSSIBLE.
4. ALL FILL SLOPE AREAS SHOWN ON PLAN ARE TO BE STABILIZED AS PER STATEMENT 1 OR 2 ABOVE IMMEDIATELY AFTER COMPLETION OF GRADING OPERATIONS FOR THESE SLOPES.
5. EROSION CONTROL MATTING IS REQUIRED ON ALL SLOPES OF 3:1 OR GREATER AND IN AREAS OF CONCENTRATED FLOW.



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PROJECT TITLE

PHILLIP C.  
SHOWELL  
ELEMENTARY  
SCHOOL

41 BETHANY ROAD  
TOWN OF SELBYVILLE  
SUSSEX COUNTY, DE.

SHEET TITLE

CONSTRUCTION SITE  
STORMWATER  
PLAN  
FILTER STRIP 1

ISSUE BLOCK

7	05/01/15	ISSUED FOR ADDENDUM NO.2
6	3/30/15	REVISED PER DNREC COMMENTS ISSUED: 03/09/15
5	3/24/15	DOCUMENTS ISSUED FOR BID
4	12/19/14	REVISED PER DELDOT COMMENTS ISSUED: 11/07/14
3	11/12/14	REVISED PER INDIAN RIVER SCHOOL DISTRICT COMMENTS
2	08/22/14	CDS ISSUED FOR OWNER REVIEW
1	08/13/14	OFFICE OF STATE FIRE MARSHAL COMMENTS DATED: 06/24/14

MARK DATE DESCRIPTION

LAYER/STATE: C-504

PROJECT NO.: 2013157.03

DATE: 08/18/14

SCALE: 1" = 50'

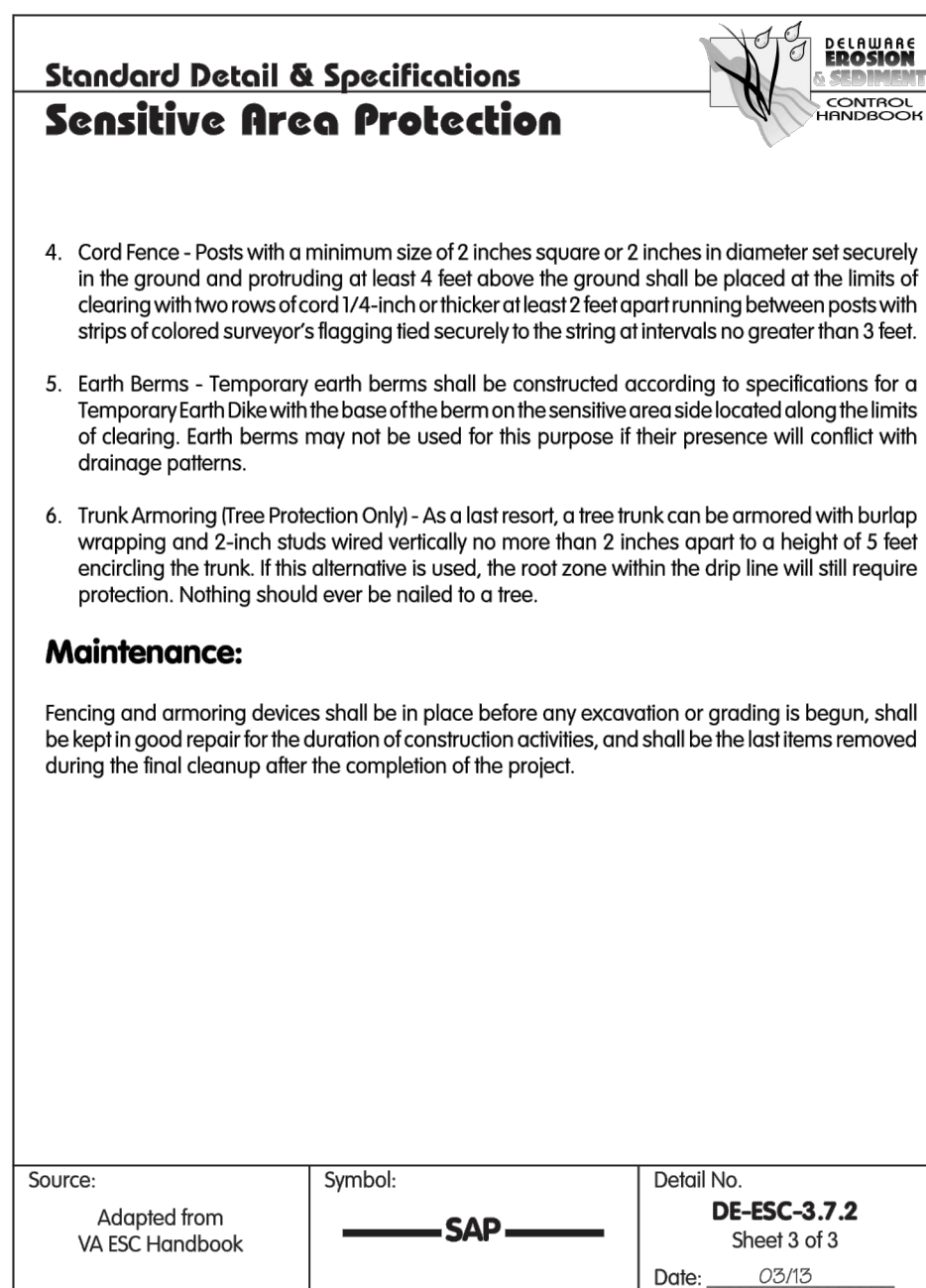
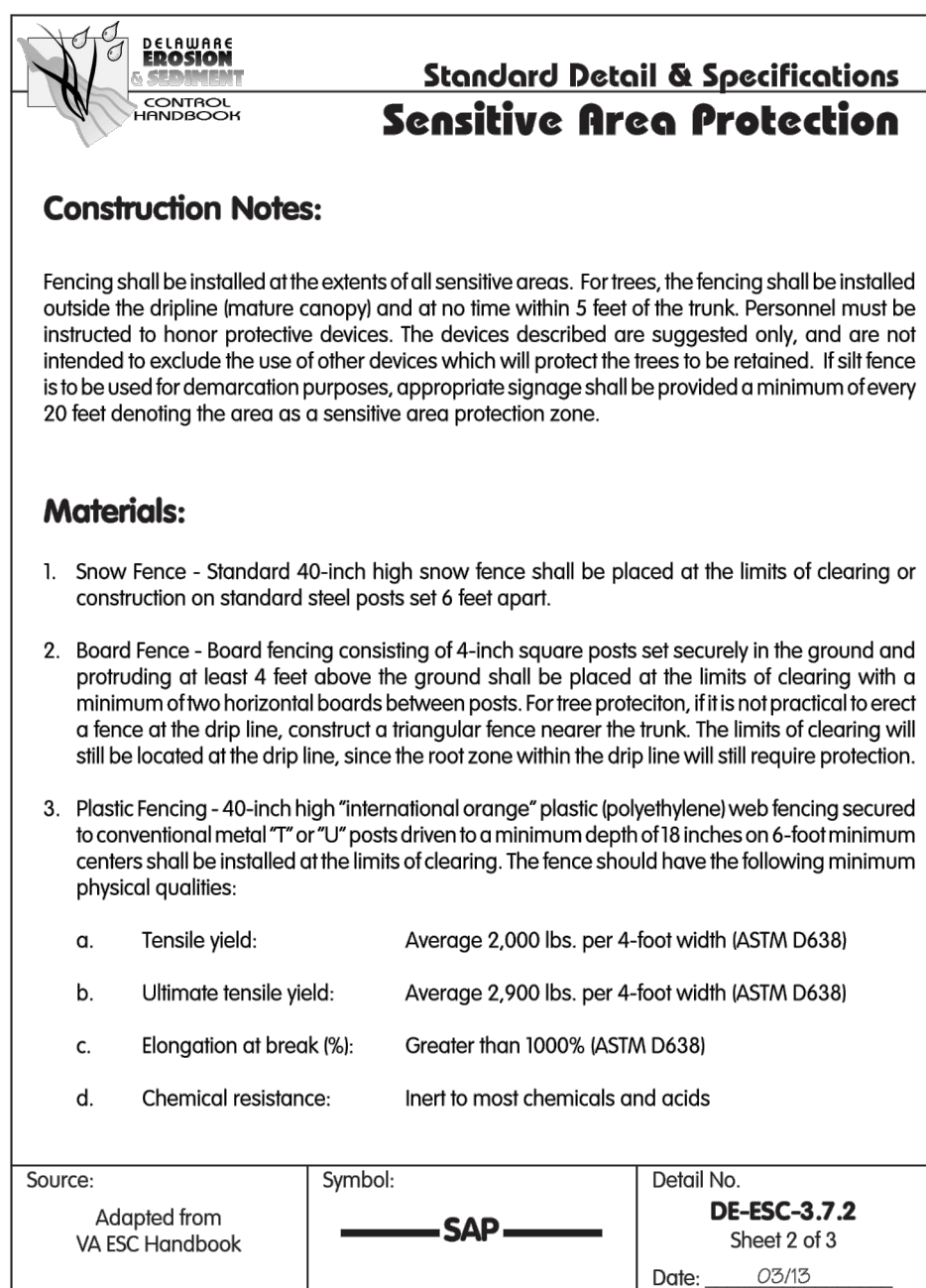
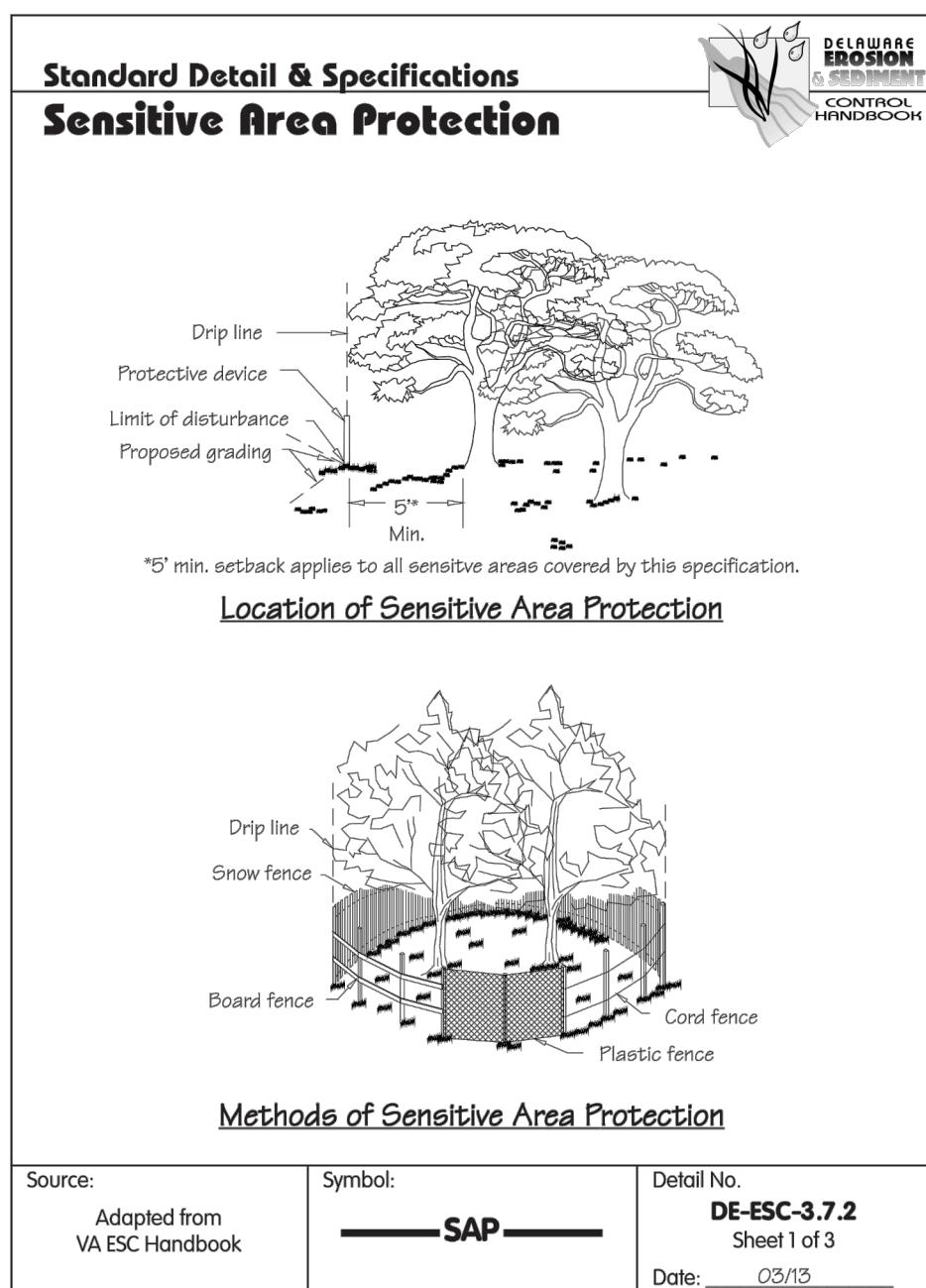
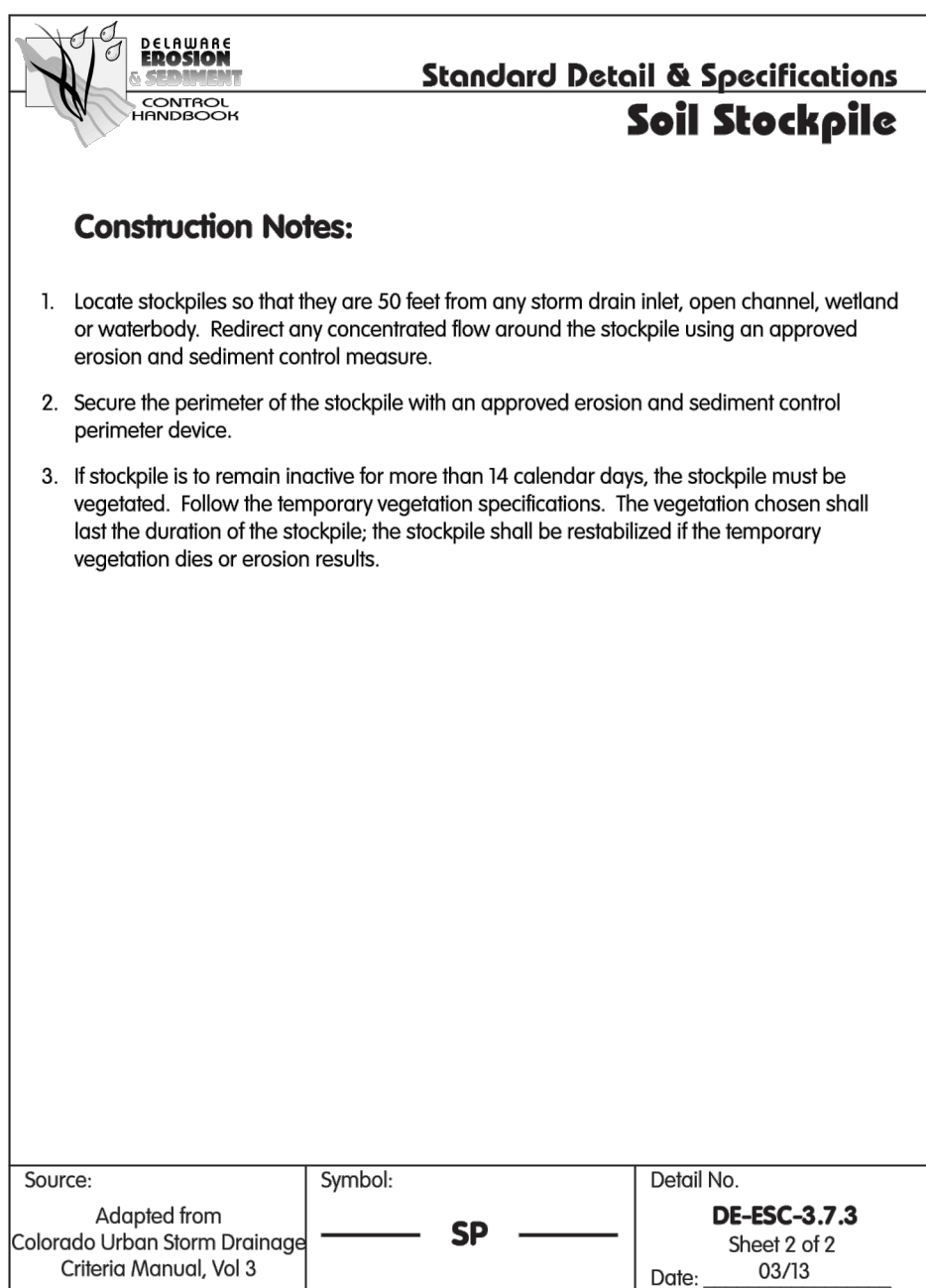
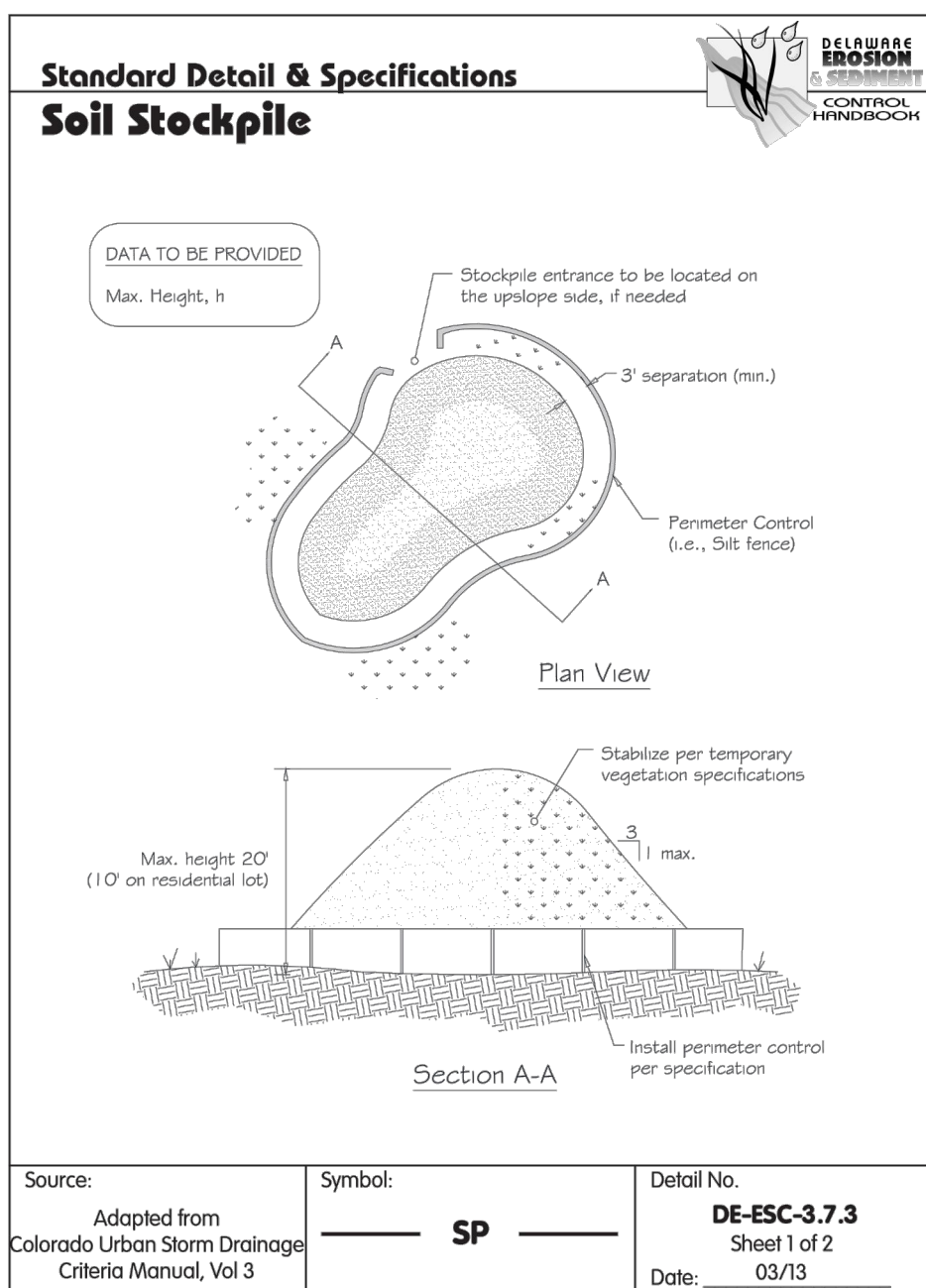
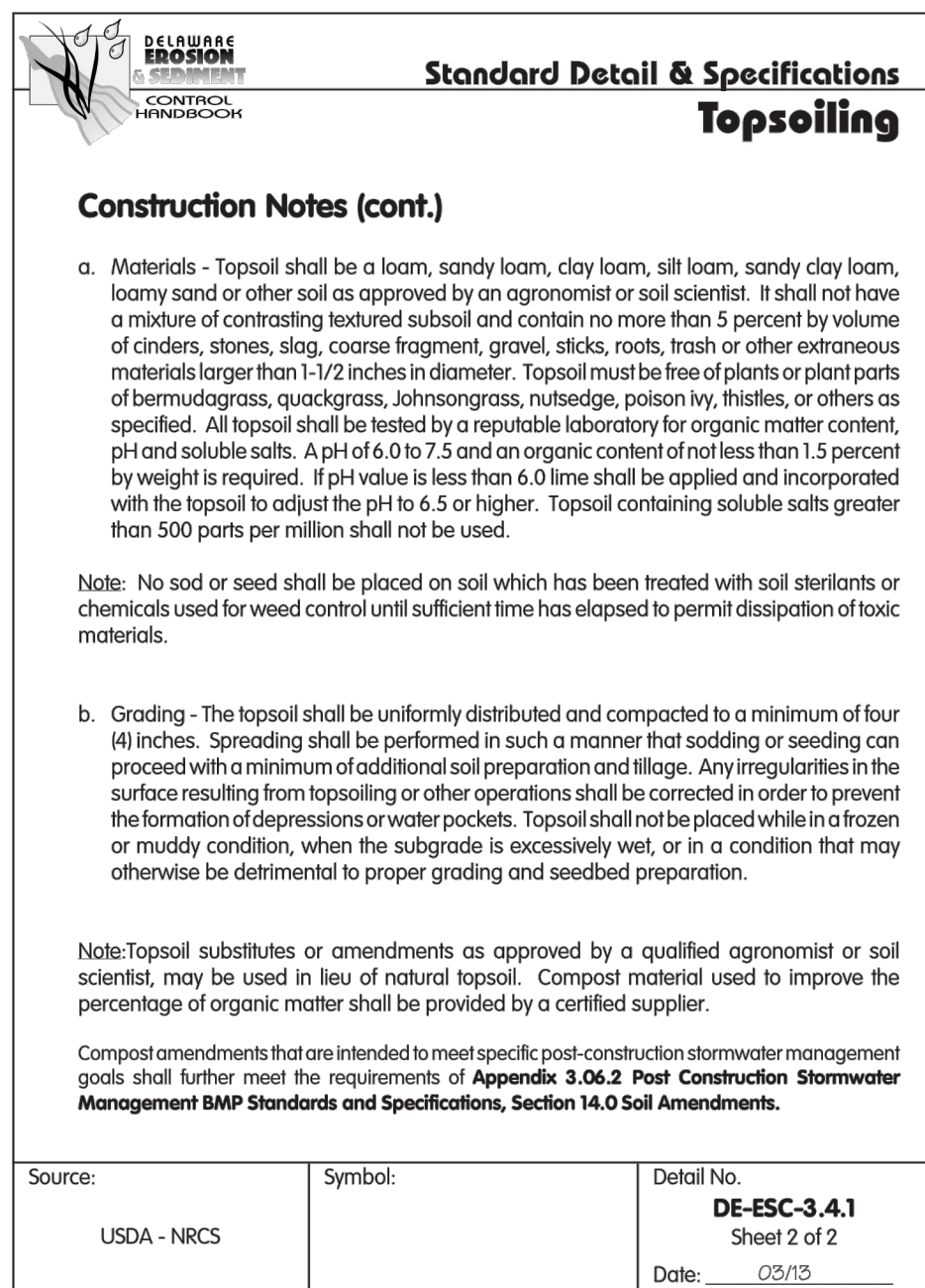
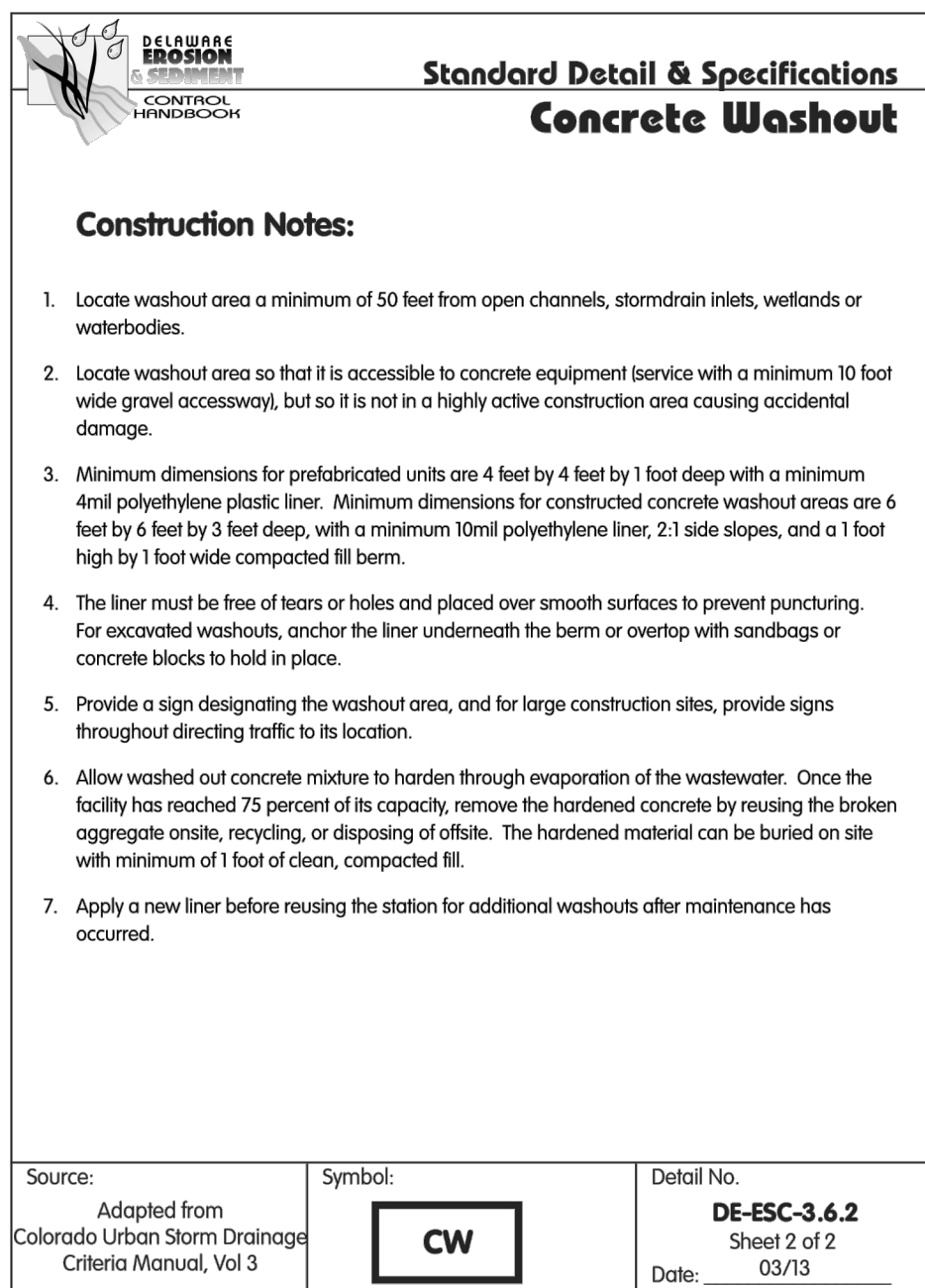
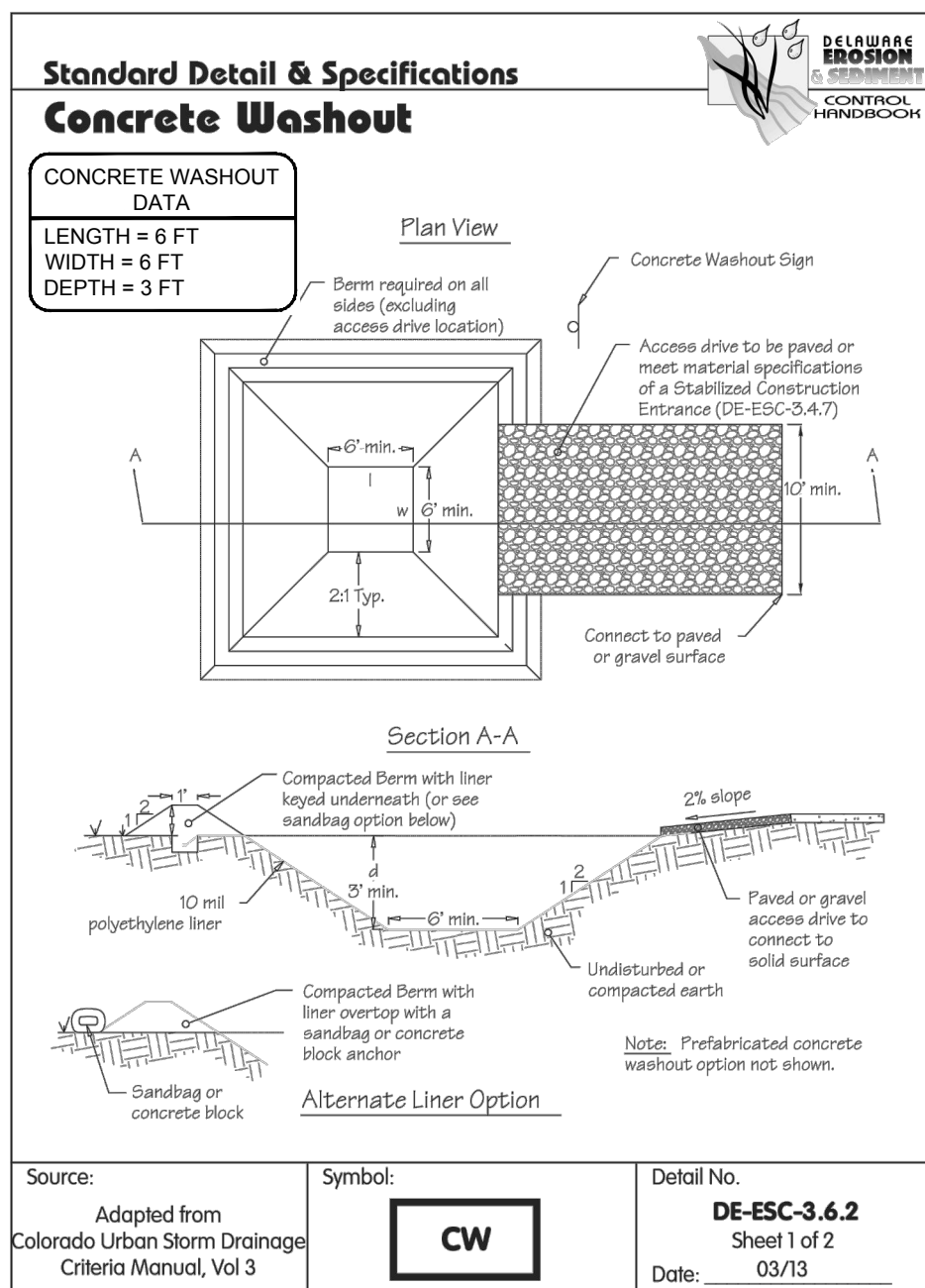
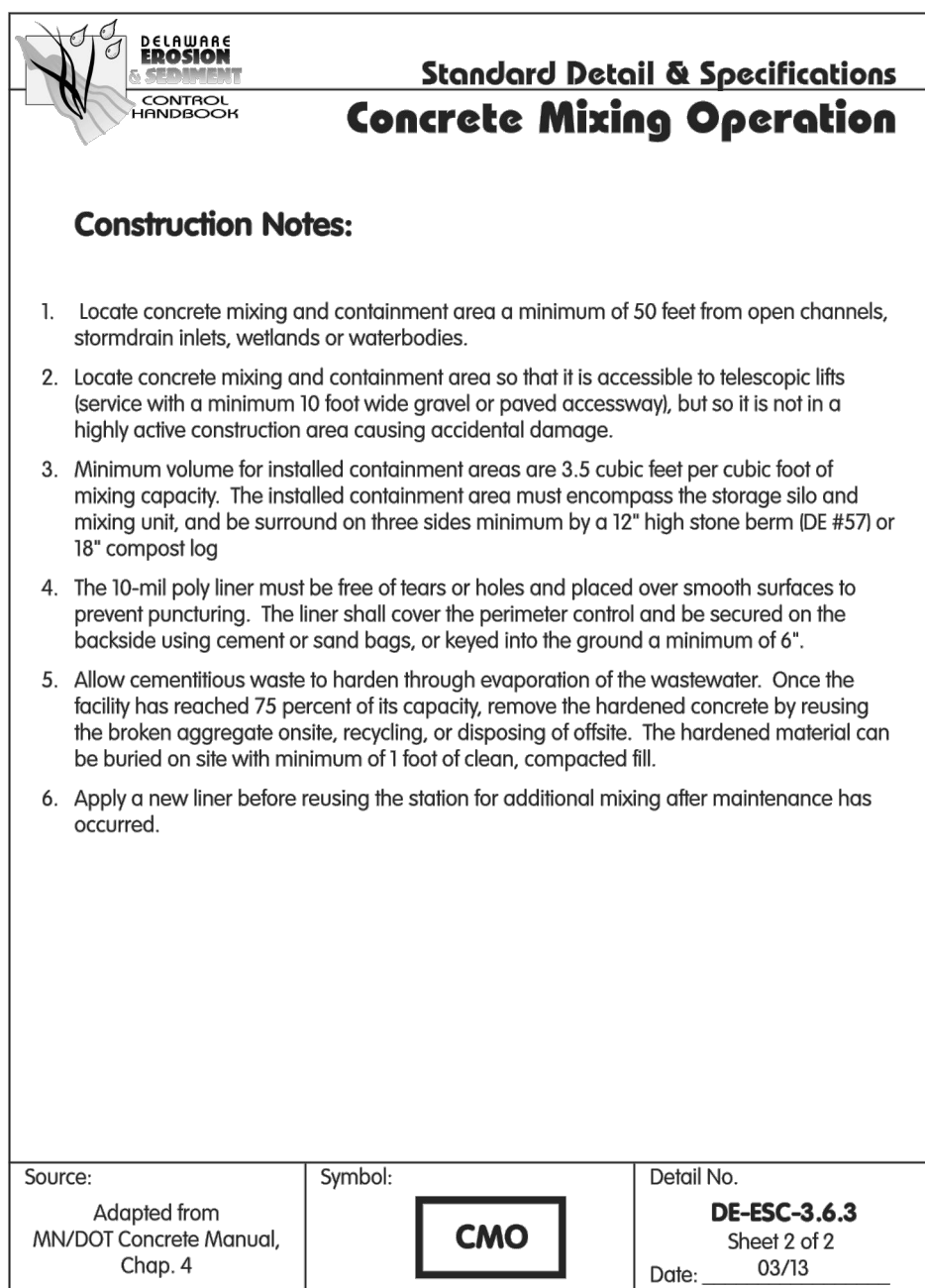
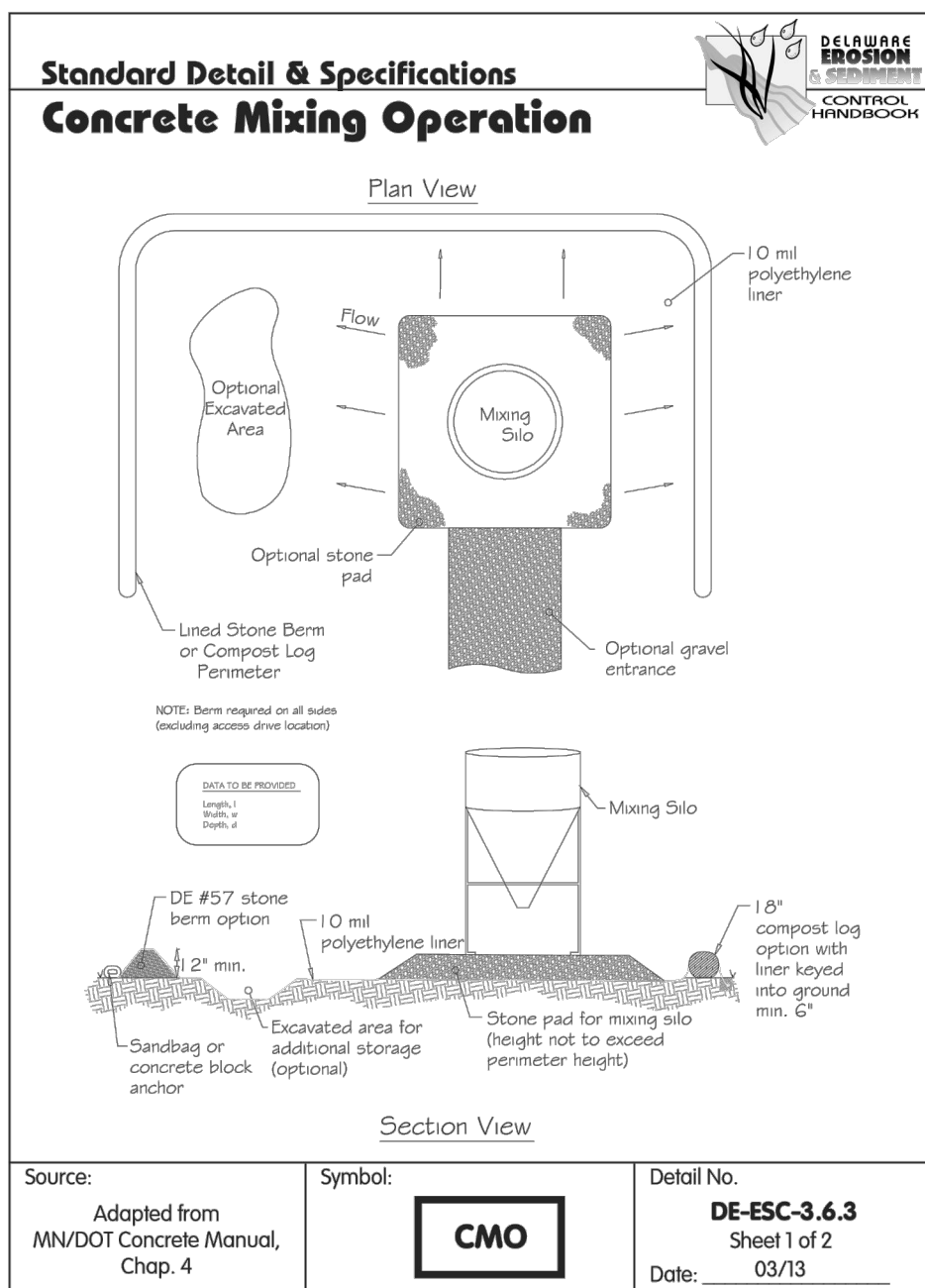
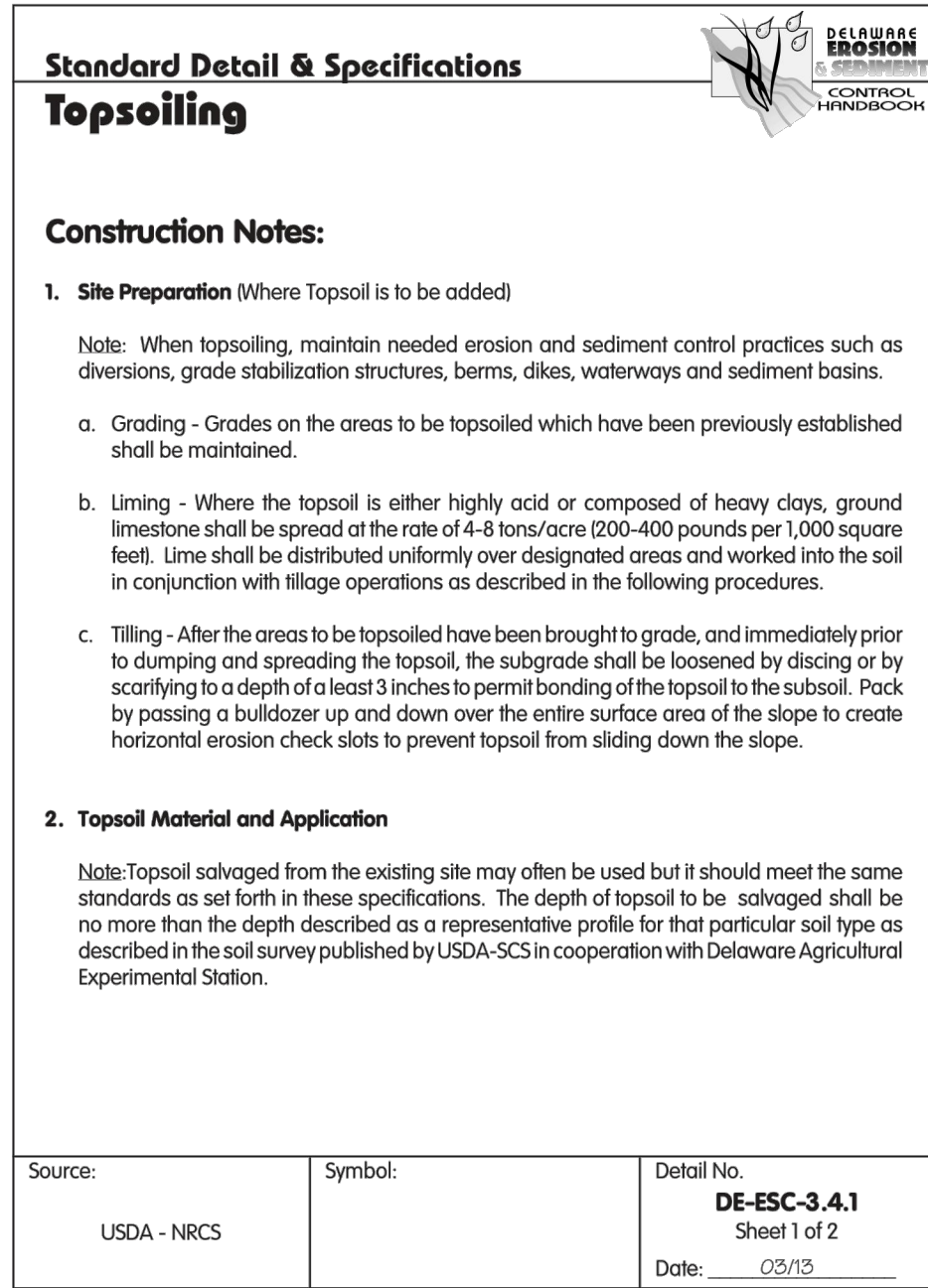
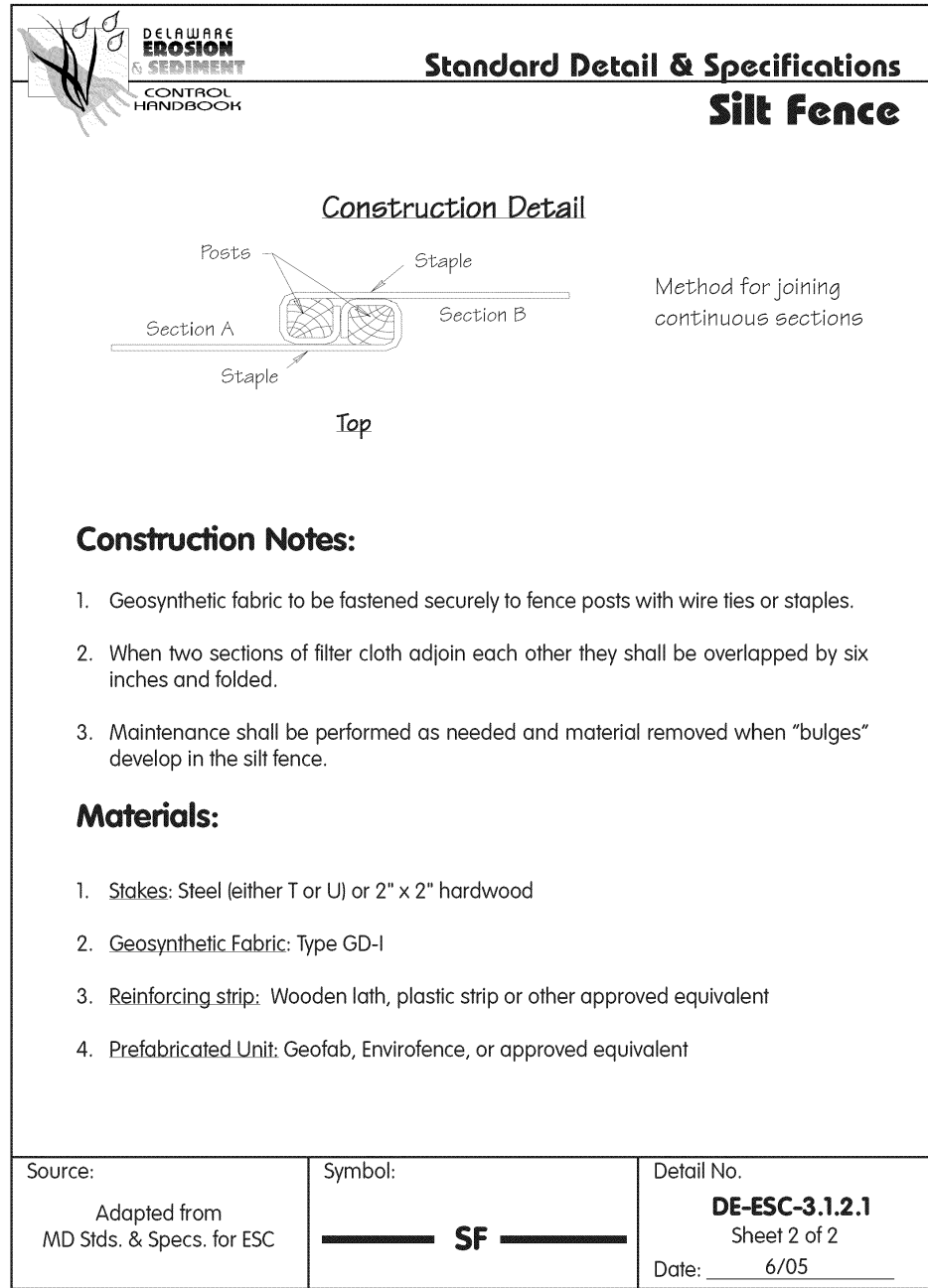
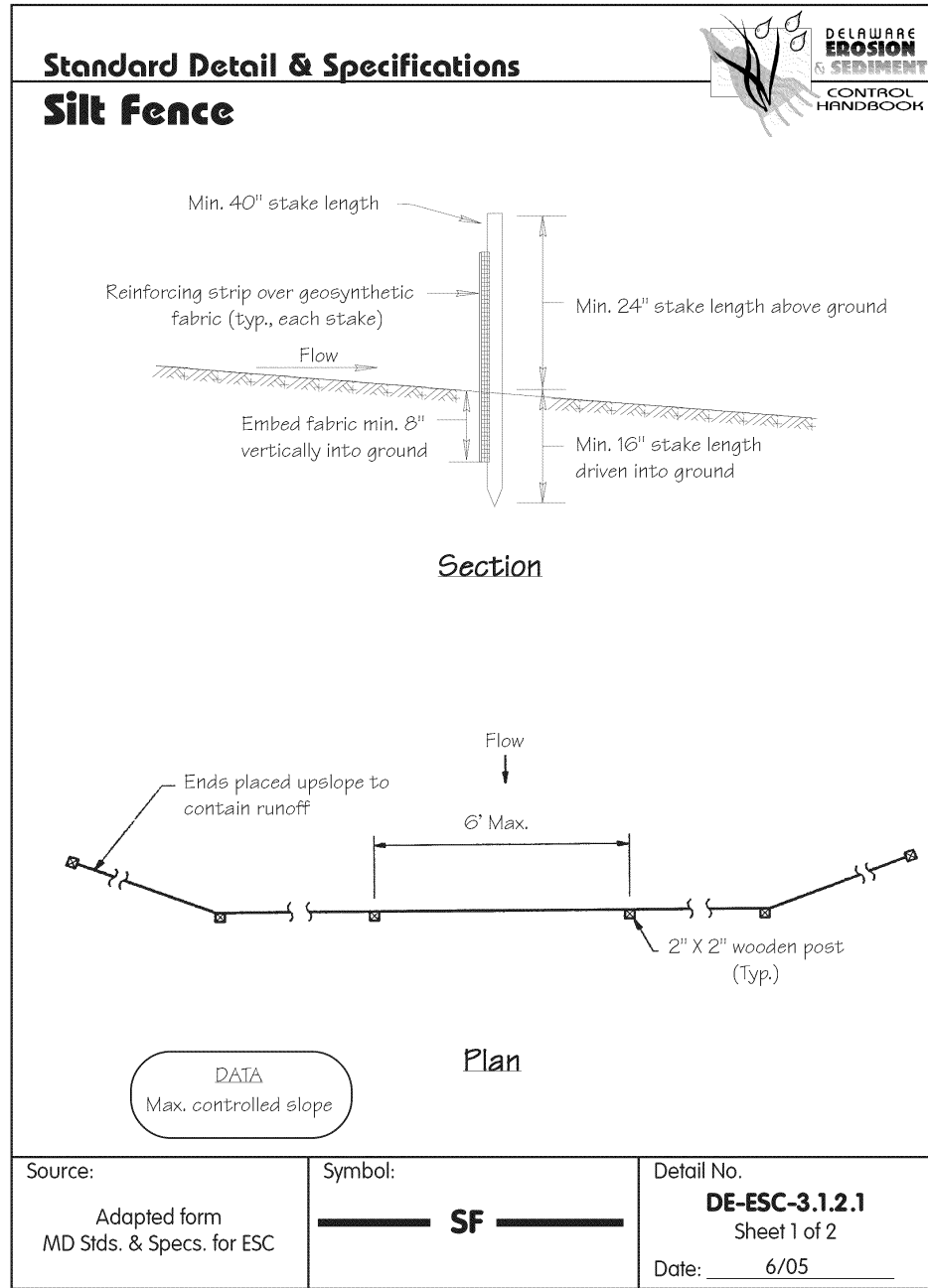
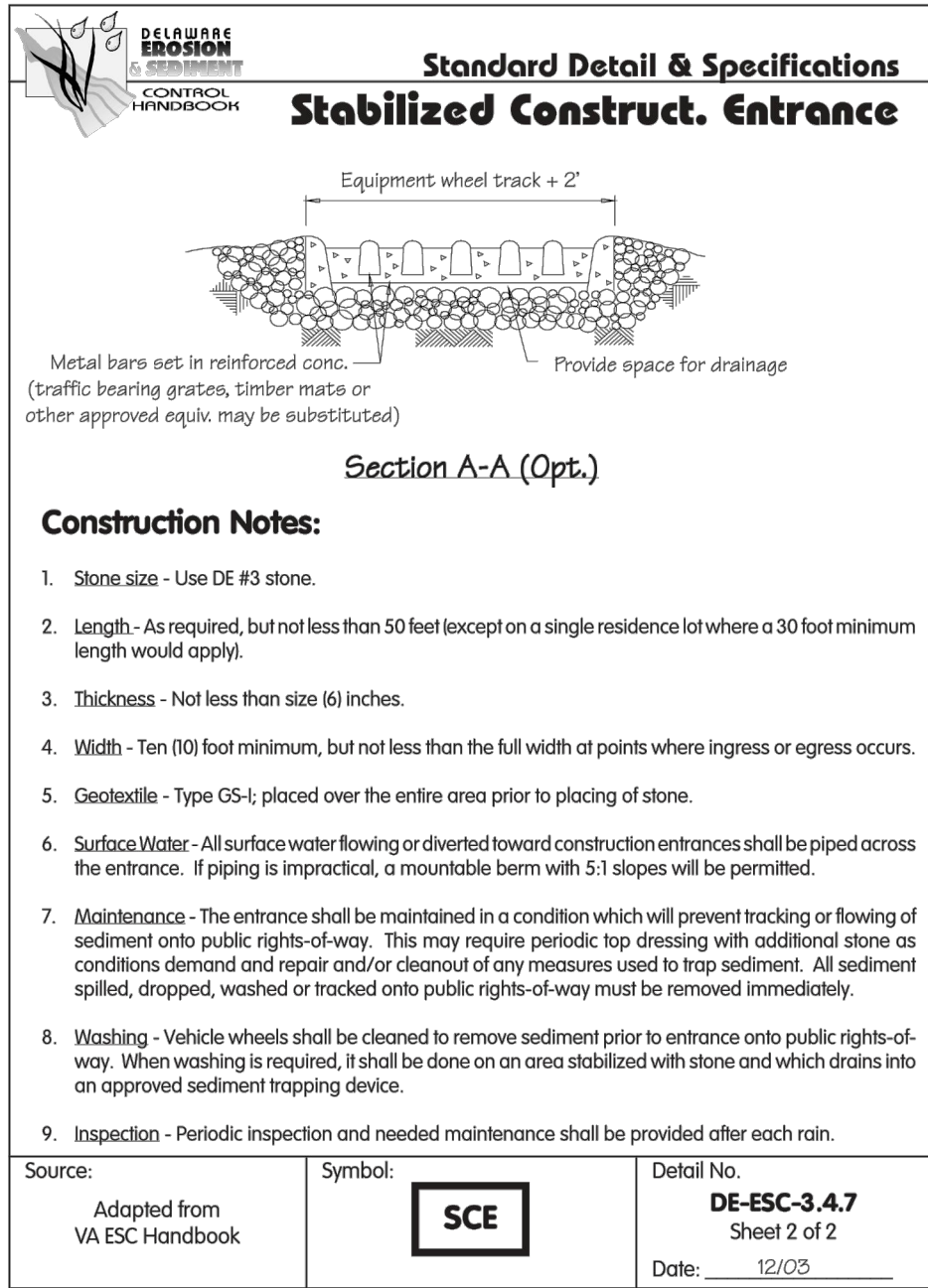
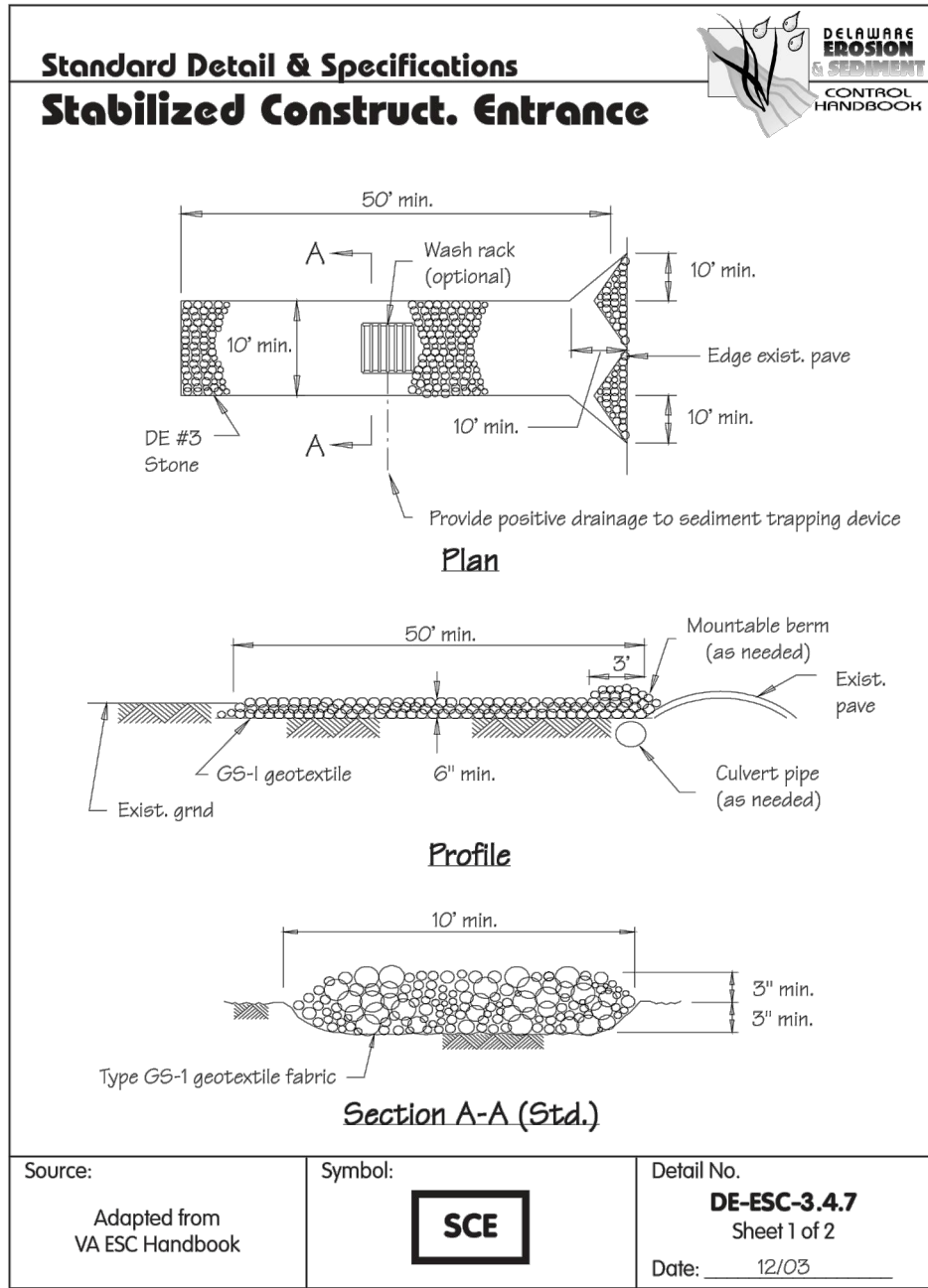
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Sheet 1 of 2  
Date: 03/13



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PROJECT TITLE

**PHILLIP C. SHOWELL ELEMENTARY SCHOOL**

41 BETHANY STREET  
TOWN OF SELBYVILLE  
SUSSEX COUNTY, DE.

SHEET TITLE

**SEDIMENT AND STORMWATER PLAN NOTES AND DETAILS**

ISSUE BLOCK

7	5/1/15	DOCUMENTS ISSUED FOR ADD. NO. 2
6	3/30/15	REVISED PER DNRC COMMENTS ISSUED. 3/9/15
5	3/24/15	DOCUMENTS ISSUED FOR BID
4	12/19/14	REVISED PER DELDOT COMMENTS ISSUED. 11/07/14
3	11/12/14	REVISED PER INDIAN RIVER SCHOOL DISTRICT COMMENTS
2	08/22/14	CDS ISSUED FOR OWNER REVIEW
1	08/13/14	OFFICE OF STATE SITE MARSHAL COMMENTS DATED 06/24/14

MARK DATE DESCRIPTION

LAYER STATE: 0-885

**PROJECT NO.:** 2013157.03

**DATE:** 03/31/14

**SCALE:** N.T.S.

**DRAWN BY:** J.N.S. **PROJ. MGR.:** G.E.J.

SHEET

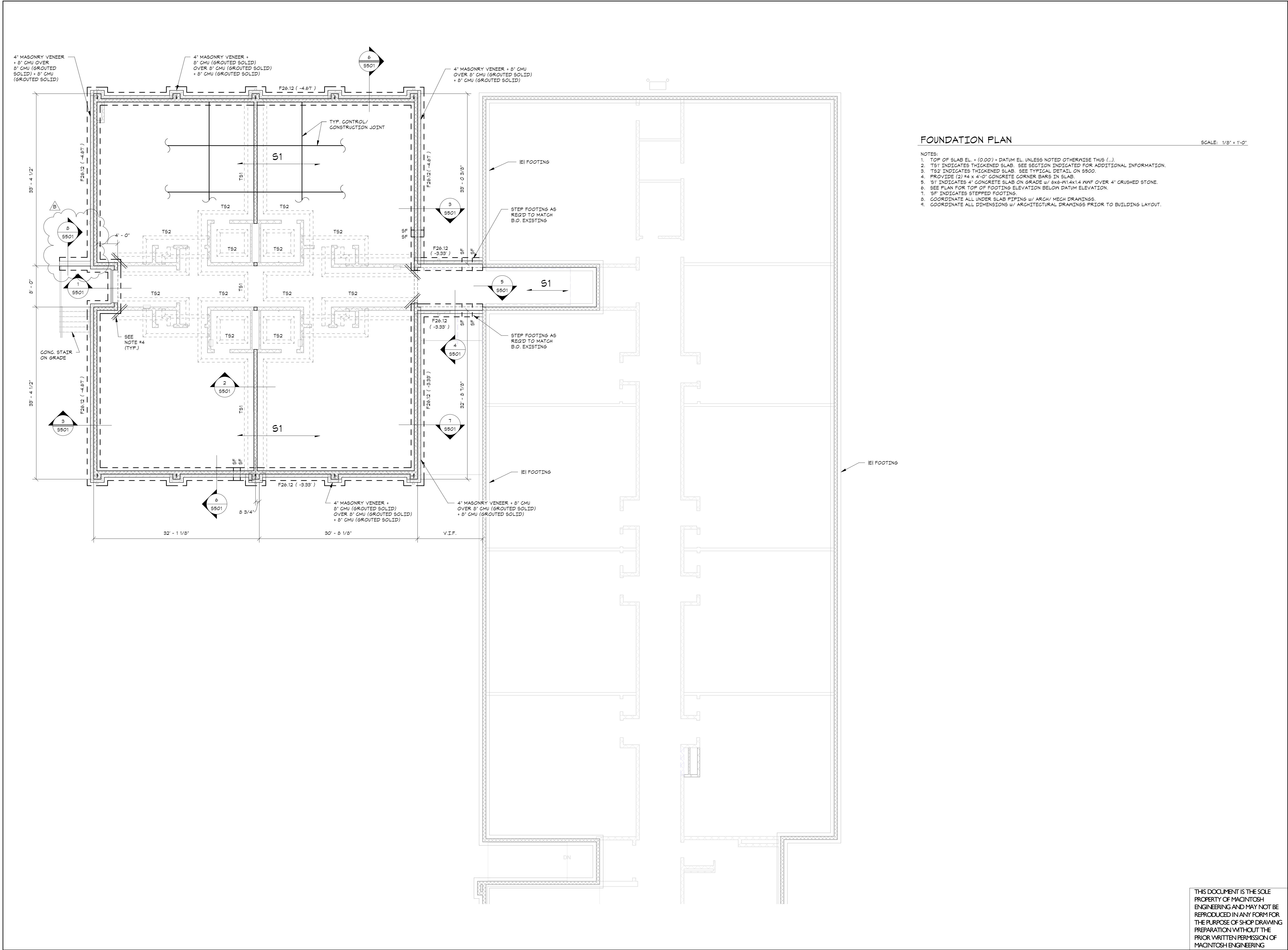
**C-505**

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FOUNDATION PLAN

SCALE: 1/8" = 1'-0"

- NOTES:
1. TOP OF SLAB EL. = (0.000) = DATUM EL. UNLESS NOTED OTHERWISE THIS (...).
  2. TS1 INDICATES THICKENED SLAB. SEE SECTION INDICATED FOR ADDITIONAL INFORMATION.
  3. TS2 INDICATES THICKENED SLAB. SEE TYPICAL DETAIL ON S500.
  4. PROVIDE (2) #4 x 4'-0" CONCRETE CORNER BARS IN SLAB.
  5. S1 INDICATES 4" CONCRETE SLAB ON GRADE W/ 6x6-W14X1.4 WWF OVER 4" CRUSHED STONE.
  6. SEE PLAN FOR TOP OF FOOTING ELEVATION BELOW DATUM ELEVATION.
  7. SF INDICATES STEPPED FOOTING.
  8. COORDINATE ALL UNDER SLAB PIPING W/ ARCH/ MECH DRAWINGS.
  9. COORDINATE ALL DIMENSIONS W/ ARCHITECTURAL DRAWINGS PRIOR TO BUILDING LAYOUT.

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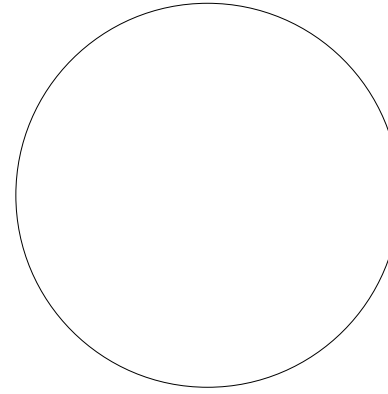
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ASSUMED BY THE ARCHITECT FOR THE  
BENEFIT OF ANY OTHER PERSON INVOLVED  
IN THE PROJECT.

PROJECT TITLE

ADDITION TO  
**PHILLIP C.  
SHOWELL  
ELEMENTARY**  
41 BETHANY RD  
SELBYVILLE, DE 19975

SHEET TITLE

FOUNDATION PLAN

ISSUE BLOCK

Mark	Date	Description
B	5/1/15	ADDENDUM 2

PROJECT NO: 2013157.03

DATE: MARCH 24, 2015

SCALE: 1/8" = 1'-0"

DRAWN BY: BLC PROJ MGR: JRB

S101

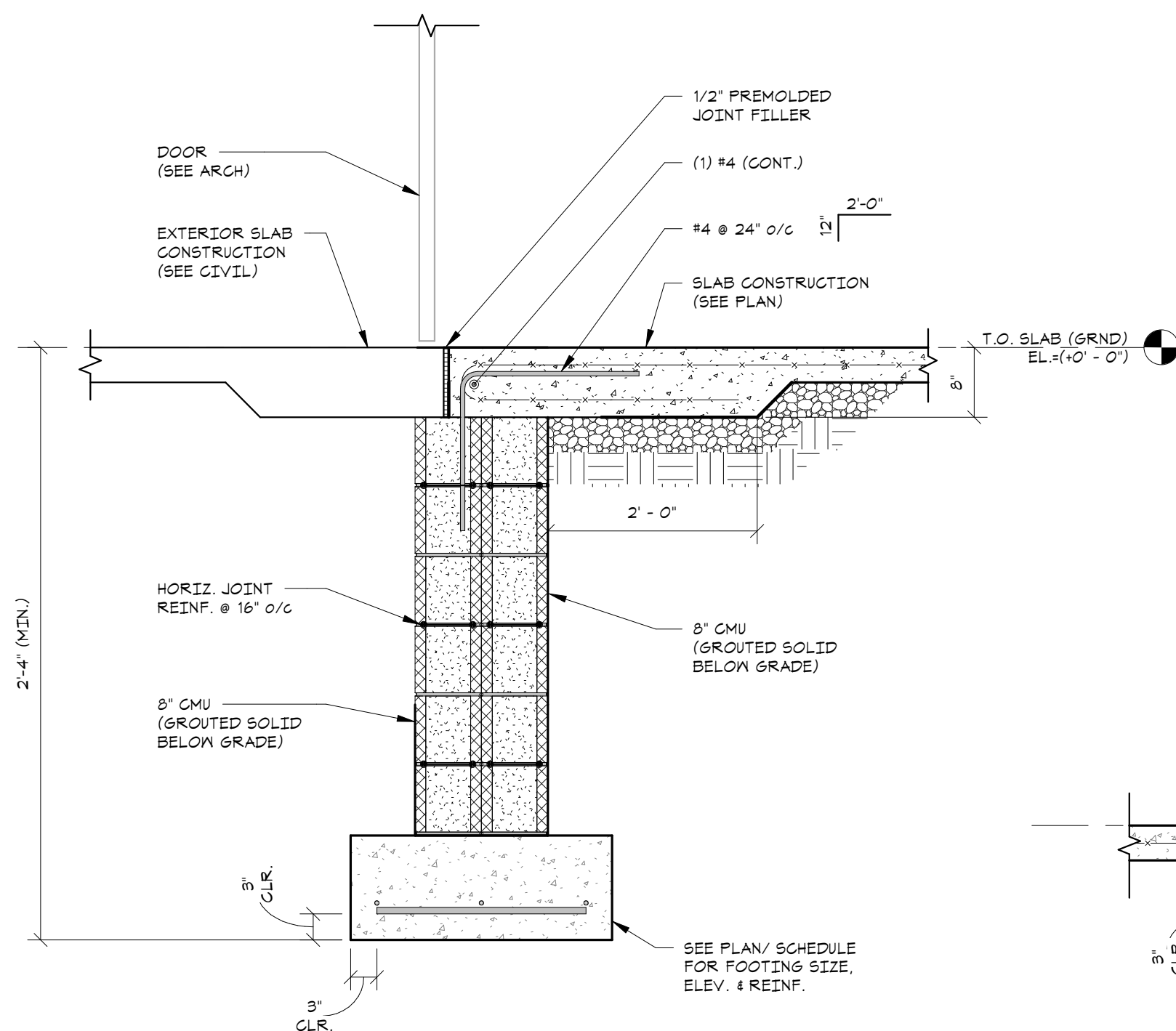
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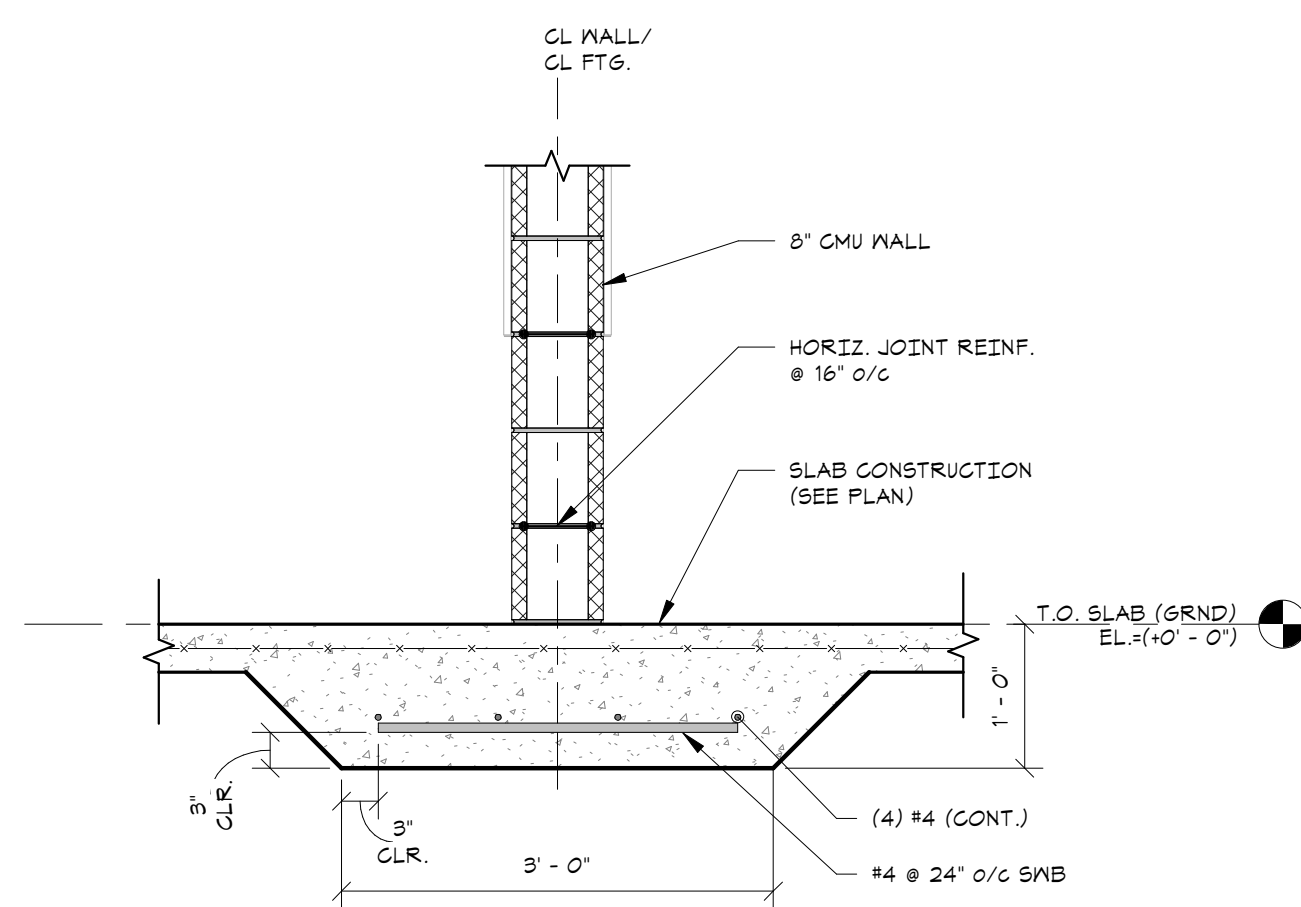
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- NOTES:
1. TRUSS BEARINGS EL. +/- (10.00') ABOVE DATUM EL. (U.N.O.).
  2. 'D' INDICATES 1-1/2" METAL ROOF DECK TYPE 'B' PROVIDE 5/8" T&S FIRE TREATED PLYWOOD + 7/8" H&T TRACK OVER METAL DECK FOR RIVET ATTACHMENT (SEE ARCH).
  3. LIGHT GAGE ROOF TRUSSES TO ACCOMMODATE MEZANINE/ MECHANICAL LOADING AT BOTTOM CHORD.
  4. 'L' INDICATES LINTEL. SEE SCHEDULE ON DRAWING 5601 FOR ADDITIONAL INFORMATION.
  5. 'BP' INDICATES BEARING PLATE. SEE SCHEDULE ON DRAWING 5601.
  6. ALL EXTERIOR STEEL LINTELS TO BE GALVANIZED.
  7. ALL STEEL FOR W/ MEMBERS SHALL BE ASTM A492.
  8. TOOTH NEW 4 EXISTING CUM TOGETHER.
  9. [ ] INDICATES LIGHT GAGE ROOF TRUSS OVERFRAMING.
  10. 'NB' INDICATES NON-BEARING LINTEL. SEE SCHEDULE ON DRAWING 5601 FOR ADDITIONAL INFORMATION.
  11. 'G.T.' INDICATES GIRDER TRUSS.
  12. 'D2' INDICATES 3/4" FIRE TREATED PLYWOOD DECK BEARING ON BOTTOM CHORD OF TRUSS.
  13. DORMER CONSTRUCTION TO BE BY TRUSS MANUFACTURER. COORDINATE LOCATION OF DORMER 4 LOUVERS W/ ARCHITECTURAL 4 VIEW.
  14. TRUSS MANUFACTURER TO DESIGN BOTTOM CHORD OF TRUSSES ABOVE TOLLET ROOMS 124A & 125A FOR MECHANICAL EQUIPMENT PLATFORM. COORDINATE MECHANICAL EQUIPMENT SIZE, HEIGHT & LOCATION W/ MECHANICAL DRAWINGS.

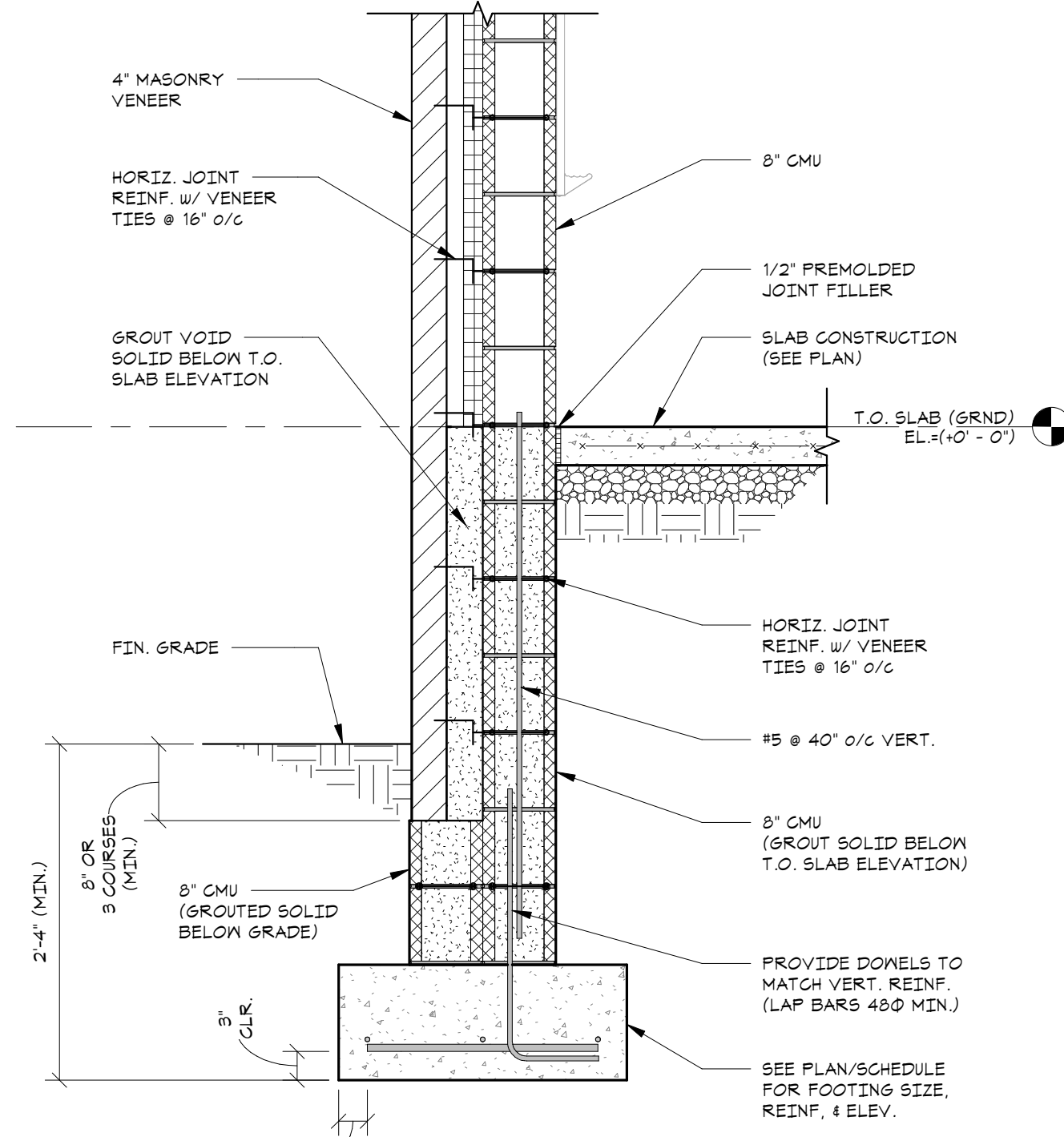




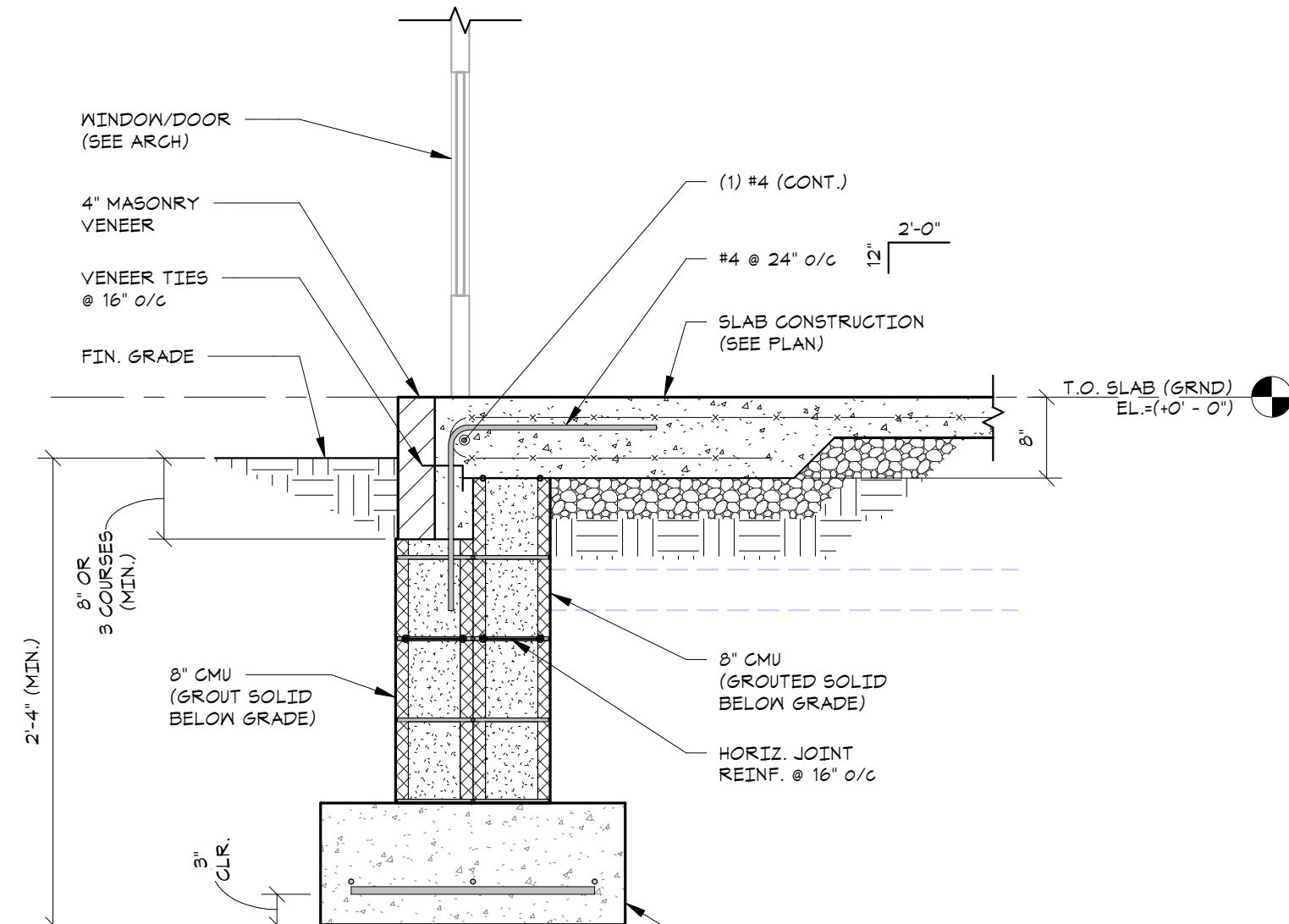
Section 1  
S501



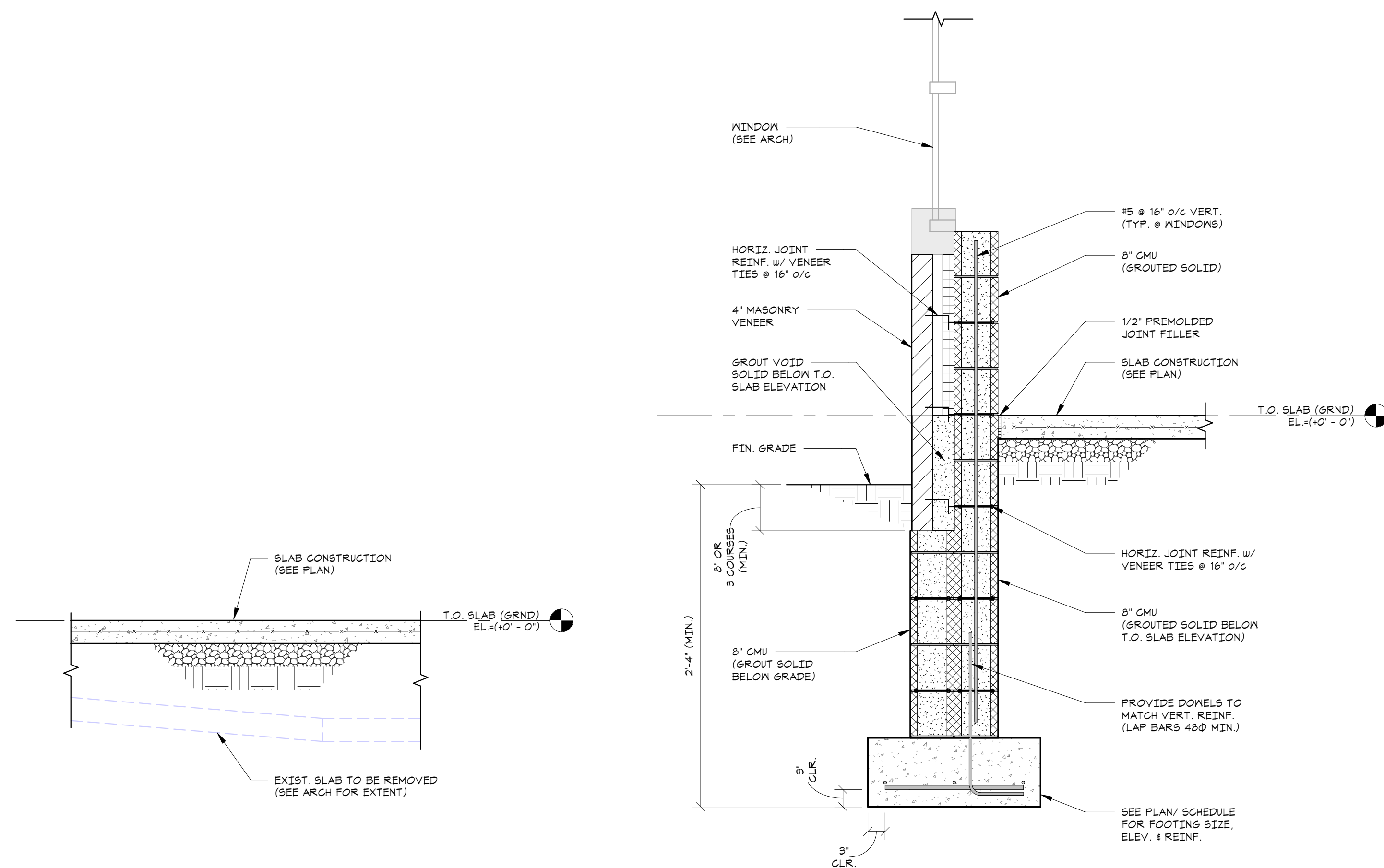
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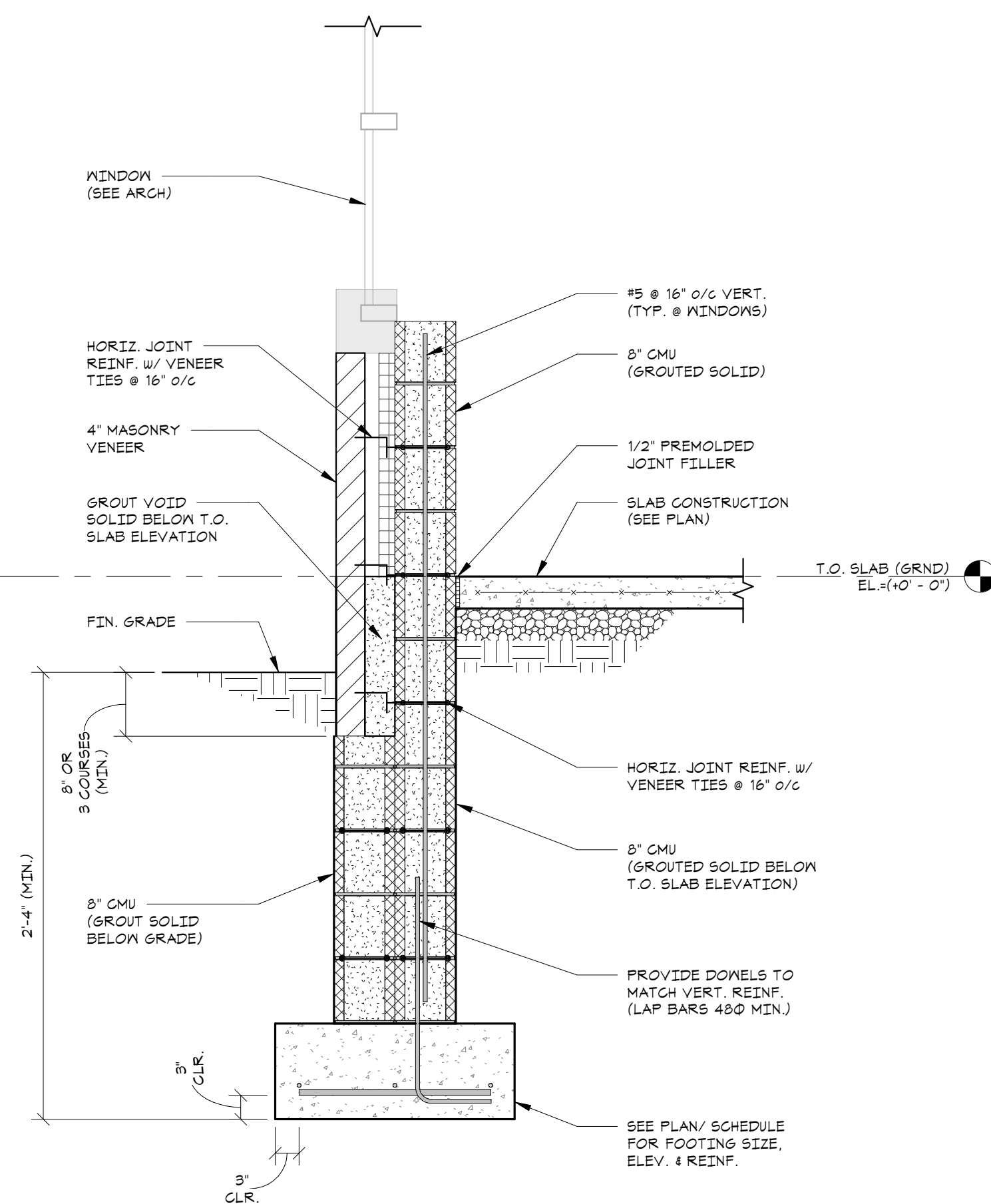
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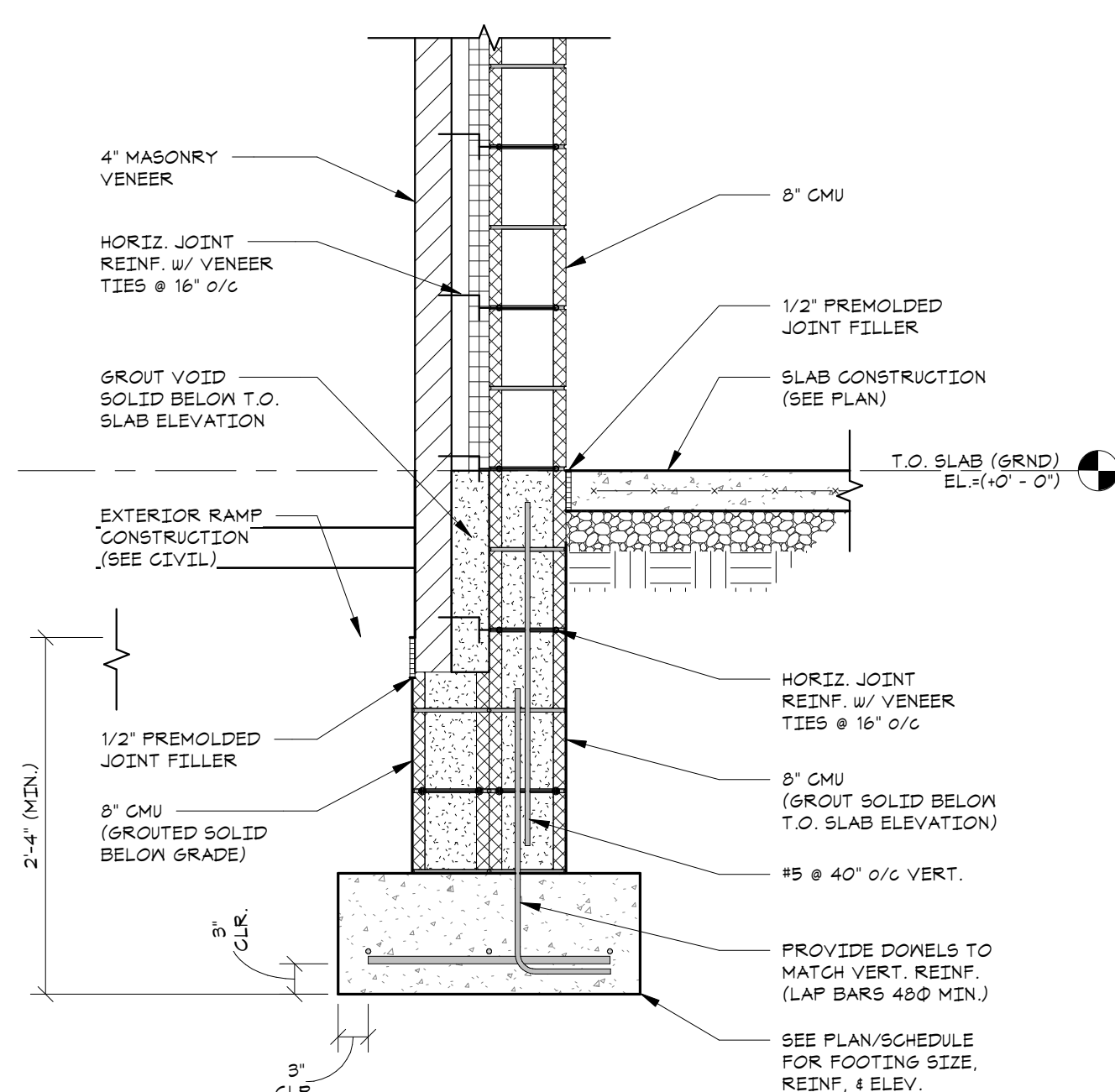
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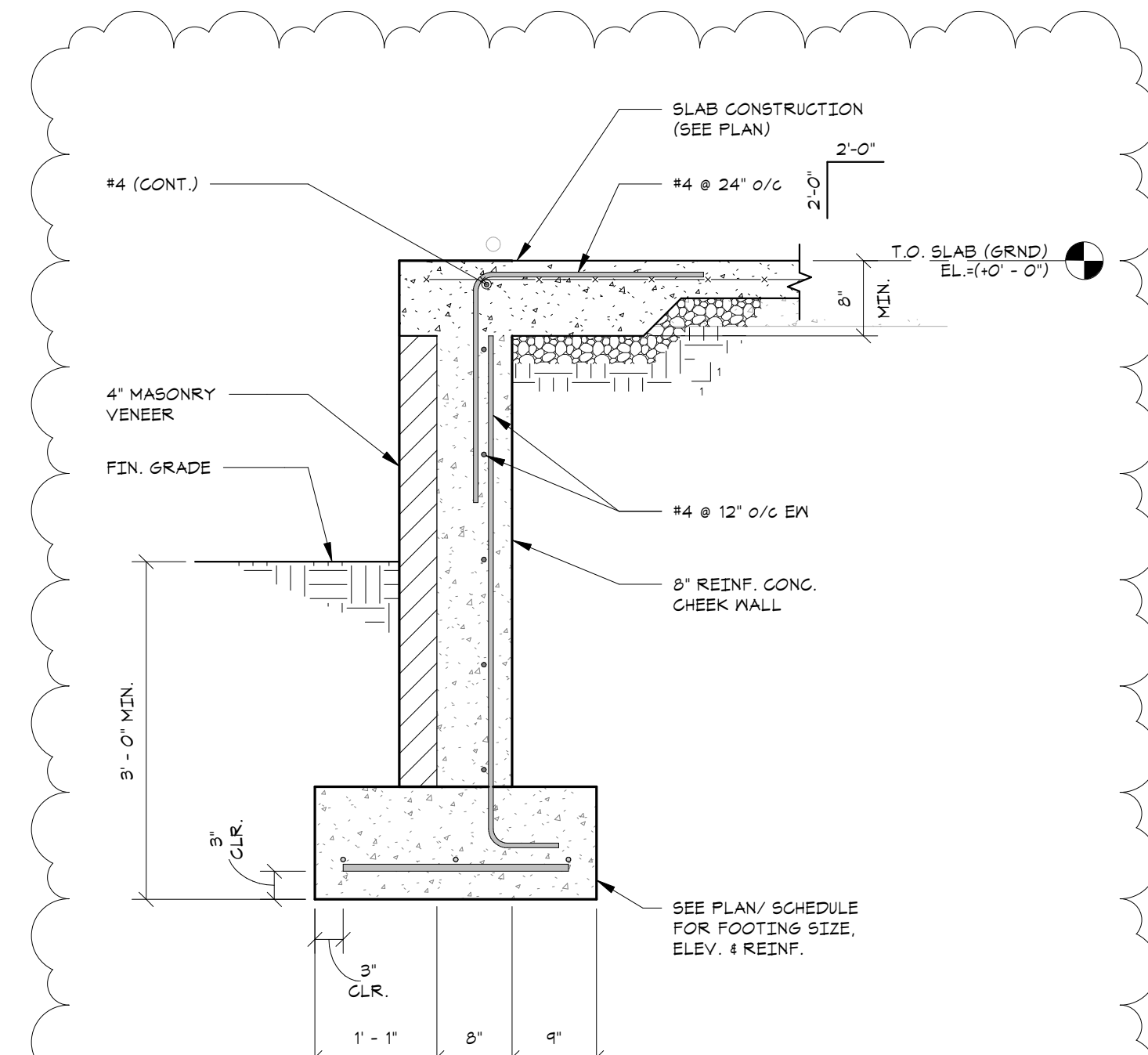
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Section 6  
S501

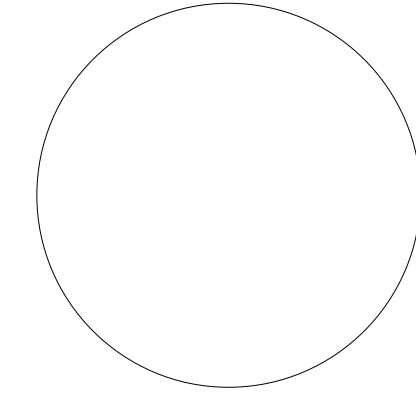


Section 7  
S501



Section 8  
S501

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PROJECT TITLE

ADDITION TO  
PHILLIP C. SHOWELL  
ELEMENTARY  
41 BETHANY RD  
SELBYVILLE, DE 19975

SHEET TITLE

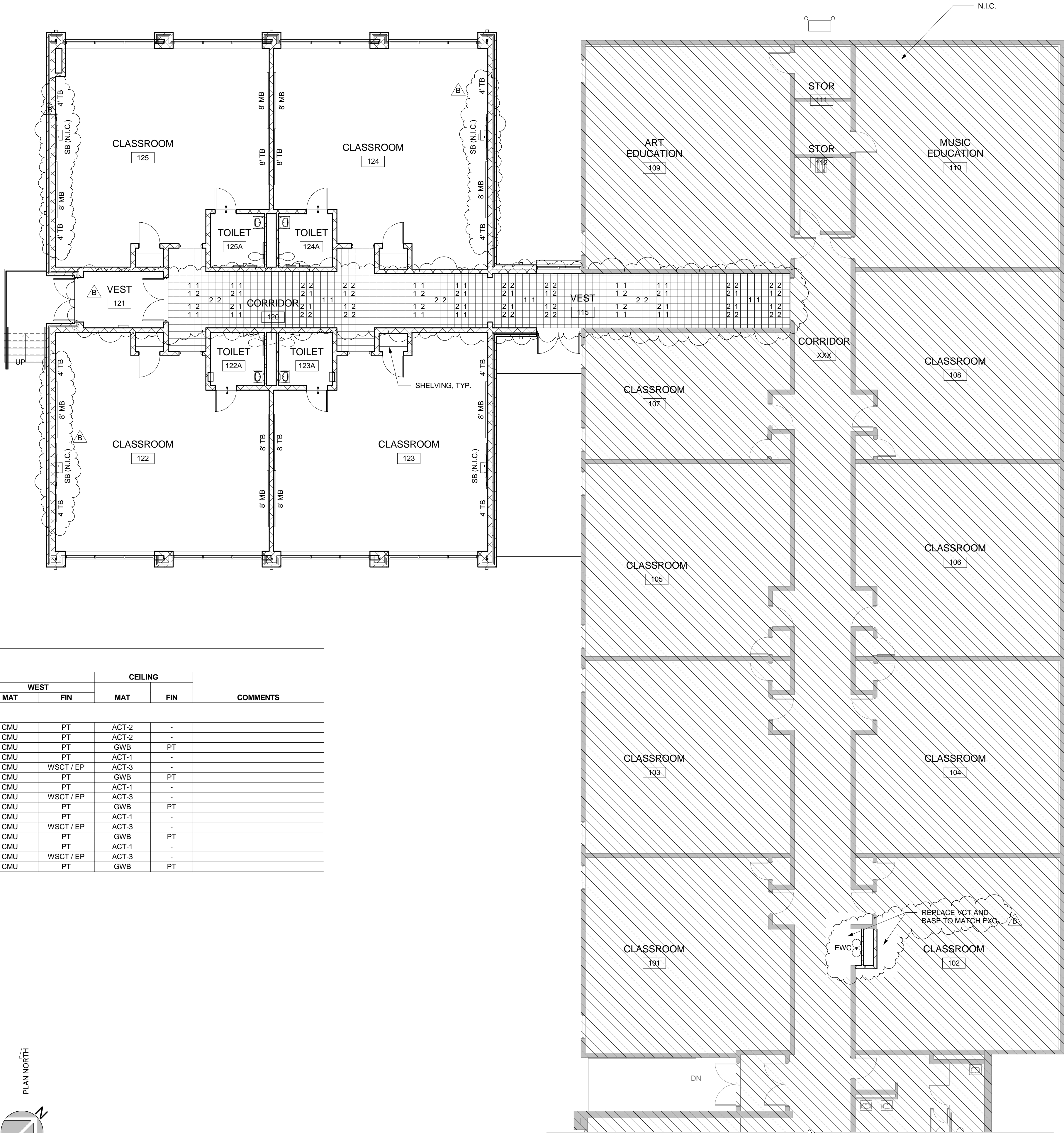
FOUNDATION  
SECTIONS AND  
DETAILS

ISSUE BLOCK

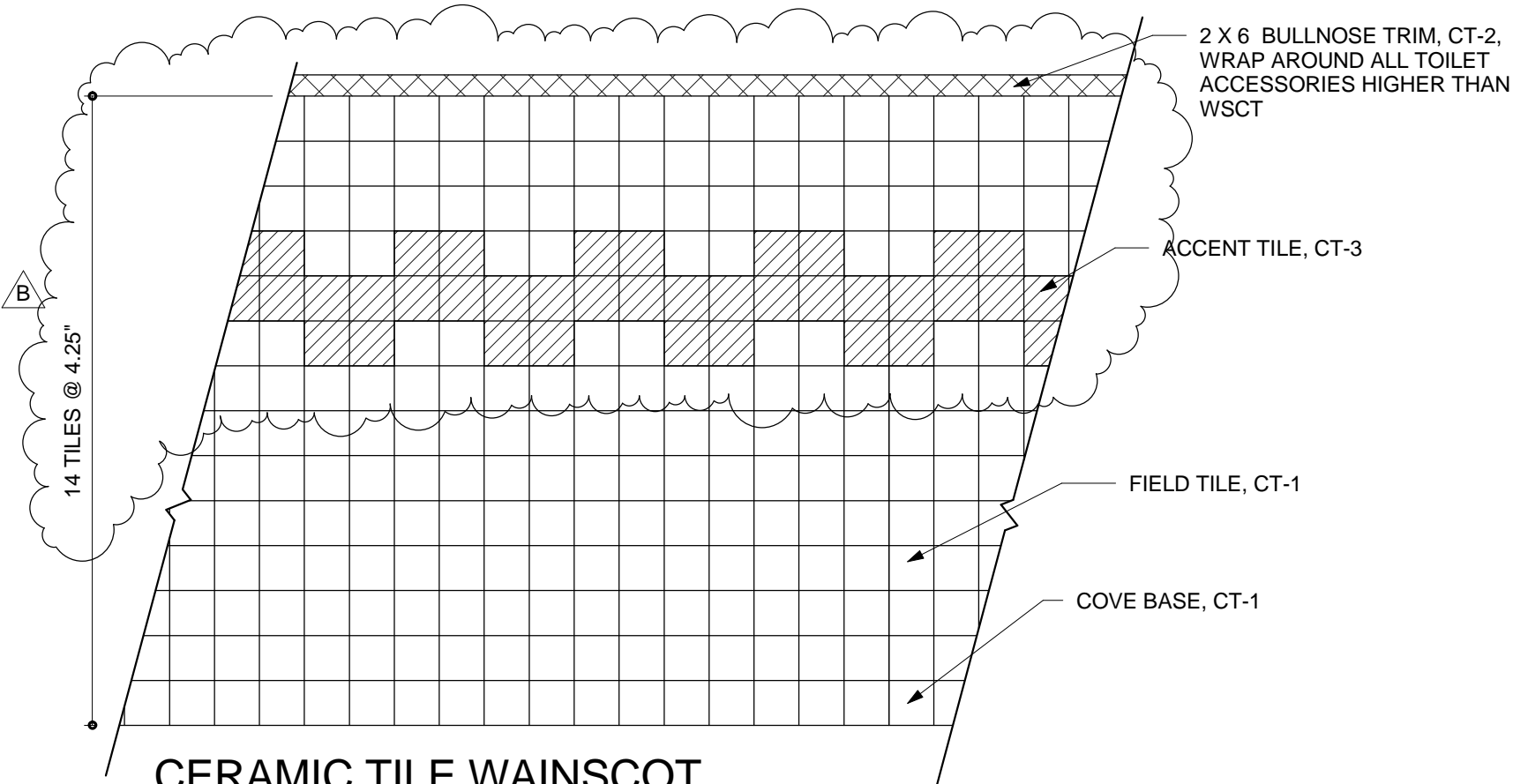
Mark	Date	Description
B	5/1/15	ADDENDUM 2

PROJECT NO: 2013157.03  
DATE: MARCH 24, 2015  
SCALE: 3/4" = 1'-0"  
DRAWN BY: BLC PROJ MGR: JRB

FINISH SCHEDULE LEGEND		
KEY NAME	DESCRIPTION	SPEC. REF
FLOOR		
BRK	BRICK	042000
CPT	TILE WALK-OFF MAT	096816
EPX	RESINOUS FLOORING	096623
EXG	EXG. CONDITION TO REMAIN	
VCT	VINYL COMPOSITION TILE	096519
BASE		
CT	CERAMIC TILE BASE	093000
R	RESILIENT WALL BASE	096513
WALL		
-	NOT APPLICABLE	
CMU	CONCRETE MASONRY UNIT	042000
EP	EPOXY PAINT	099123
EXG	EXG. CONDITION TO REMAIN	
GWB	GYPSTUM WALL BOARD	092900
PT	PAINT	099123
WSCT	CERAMIC TILE WAINSCOT TO 5'-0" AFF W/ CMU ABOVE	093000/042000
CEILING		
-	NOT APPLICABLE	
ACT1	2X4 ACCOUSTICAL CEILING TILE	095123
ACT2	2X2 ACCOUSTICAL CEILING TILE	095123
ACT3	2X2 SCRUBBABLE	095123
GWB	GYPSTUM BOARD CEILING	092900
PT	PAINT	099123
ORIENTATION		
ON PLANS NORTH WALL IS DOWN, EAST IS LEFT, SOUTH IS UP, WEST IS RIGHT		
FLOOR		
-	NOT APPLICABLE	
GENERAL NOTES		
1	WALLS AND CEILINGS MAY CONTAIN MORE THAN ONE MATERIAL OR FINISH AS INDICATED. COORDINATE WITH CONSTRUCTION TYPE AND FINISH SIMILAR TO ADJACENT MATERIALS	
2	SEE A104 AND A105 REFLECTED CEILING PLANS & CEILING NOTES FOR CEILING HEIGHTS, MATERIAL EXTENTS, LOCATIONS AND HEIGHTS OF BULKHEADS, SOFFITS, ETC.	
3	PLAN WALL TYPES TAKE PRECEDENCE OVER SCHEDULED WALL FINISH. PROVIDE APPROPRIATE WALL FINISH TO CORRESPOND TO WALL TYPES.	
4	MOLD AND MOISTURE RESISTANT GYPSUM BOARD SHALL BE USED AT ALL KITCHEN AREAS, TOILET ROOMS AND CUSTODIAN SERVICE CLOSETS SCHEDULED TO HAVE GYPSUM BOARD FINISHES	
5	WALL AND CEILING FINISHES SHALL INCLUDE ALL PROJECTIONS, BEAM ENCLOSURES, RECESSES, BULKHEADS, MATERIAL CHANGES, OR OTHER ENCLOSURES. REFER TO REFLECTED CEILING PLANS	
6	PROVIDE SEALANT/CAULK AT INTERSECTIONS OF DISSIMILAR MATERIALS AND AS RECOMMENDED BY MANUFACTURERS' GUIDELINES.	
7	ALL NEW PARTITIONS AND WALLS SHALL BE PAINTED. PROVIDE PRICING TO REPAINT EXISTING WALLS	

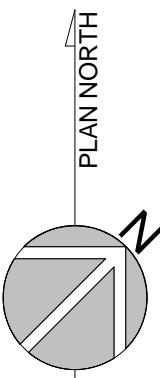


FINISH SCHEDULE														
#	ROOM NAME	FLOOR	BASE MAT	WALL								CEILING		COMMENTS
		NORTH		EAST		SOUTH		WEST		MAT	FIN			
		MAT		MAT	FIN	MAT	FIN	MAT	FIN	MAT	FIN	MAT	FIN	
FIRST FLOOR PLAN														
115	VEST	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ACT-2	-	
120	CORRIDOR	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ACT-2	-	
121	VEST	CPT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	GWB	PT	
122	CLASSROOM	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ACT-1	-	
122A	TOILET	EPX	CT	CMU	WSCT / EP	CMU	WSCT / EP	CMU	WSCT / EP	CMU	WSCT / EP	ACT-3	-	
122B	CLO	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	GWB	PT	
123	CLASSROOM	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ACT-1	-	
123A	TOILET	EPX	CT	CMU	WSCT / EP	CMU	WSCT / EP	CMU	WSCT / EP	CMU	WSCT / EP	ACT-3	-	
123B	CLO	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	GWB	PT	
124	CLASSROOM	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ACT-1	-	
124A	TOILET	EPX	CT	CMU	WSCT / EP	CMU	WSCT / EP	CMU	WSCT / EP	CMU	WSCT / EP	ACT-3	-	
124B	CLO	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	GWB	PT	
125	CLASSROOM	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	ACT-1	-	
125A	TOILET	EPX	CT	CMU	WSCT / EP	CMU	WSCT / EP	CMU	WSCT / EP	CMU	WSCT / EP	ACT-3	-	
125B	CLO	VCT	R	CMU	PT	CMU	PT	CMU	PT	CMU	PT	GWB	PT	



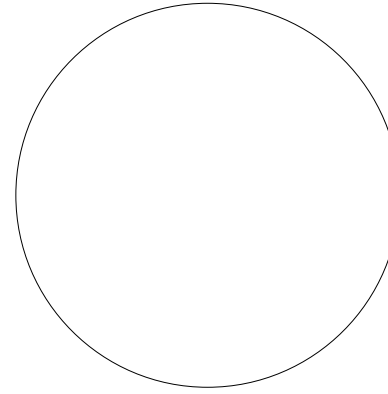
2 CERAMIC TILE WAINSCOT DETAIL

SCALE: 3/4" = 1'-0"



1 FINISH PATTERN PLAN

SCALE: 1/8" = 1'-0"



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PROJECT TITLE

ADDITION TO

PHILLIP C.  
SHOWELL  
ELEMENTARY

41 BETHANY RD  
SELBYVILLE, DE 19975

SHEET TITLE

FINISH PLAN AND  
FINISH SCHEDULE

ISSUE BLOCK

Mark	Date	Description
B	05/01/15	ADDENDUM 2

PROJECT NO: 2013157.03

DATE: MARCH 25, 2015

SCALE: As indicated

DRAWN BY: GMS PROJ MGR: JML

A103

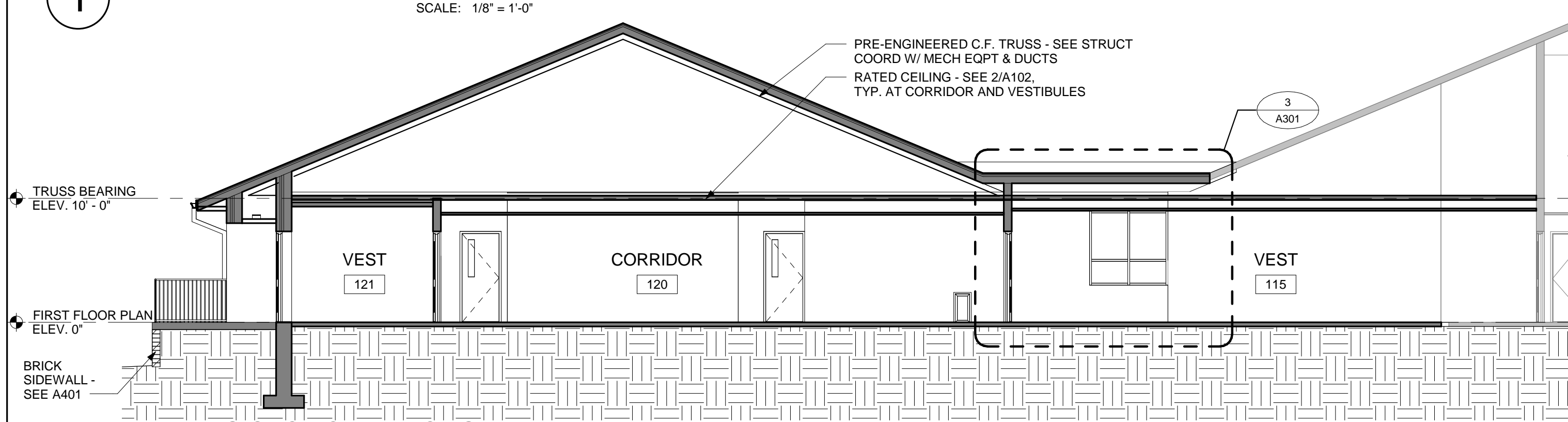
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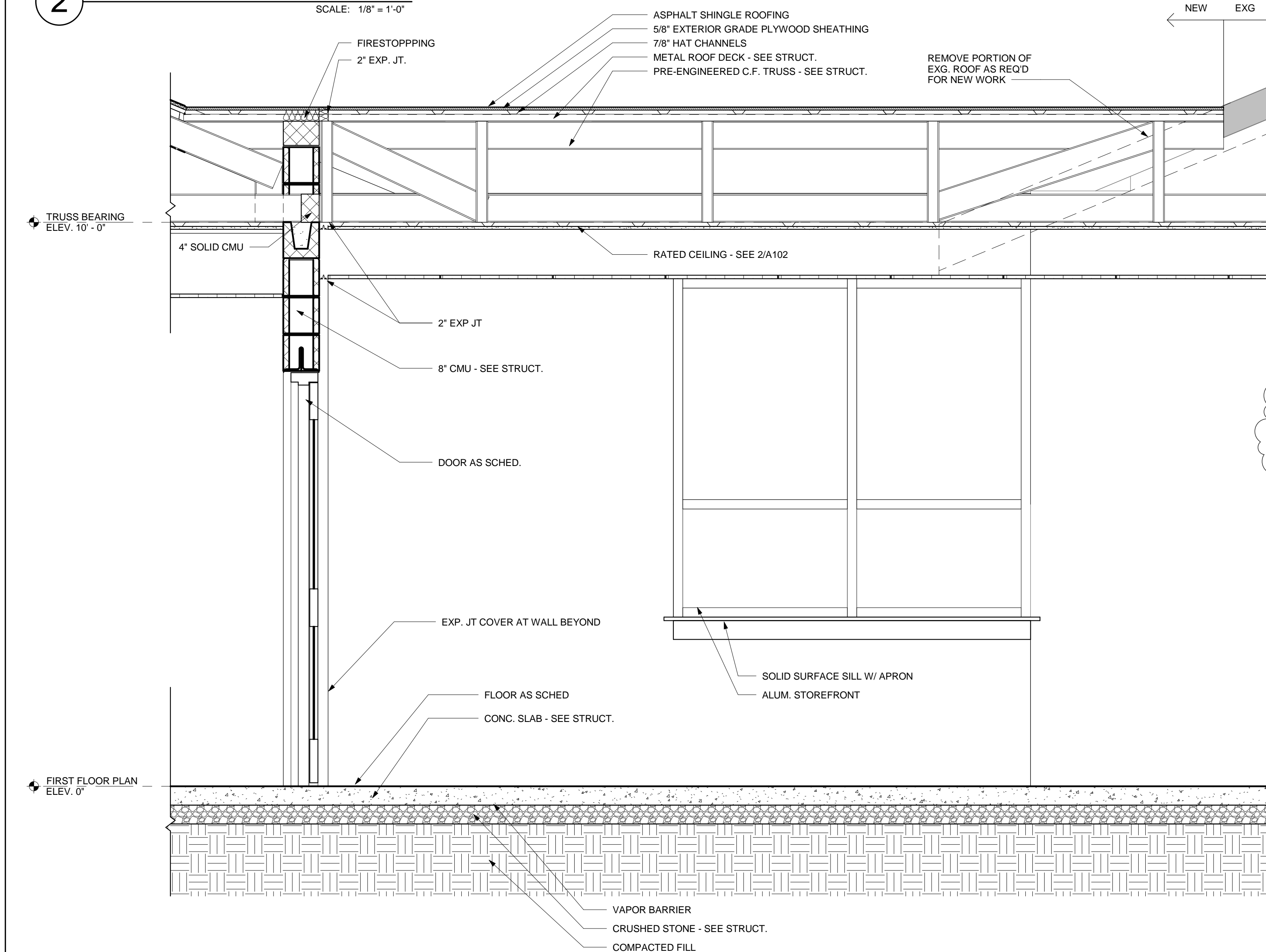
1 BUILDING SECTION

SCALE: 1/8" = 1'-0"



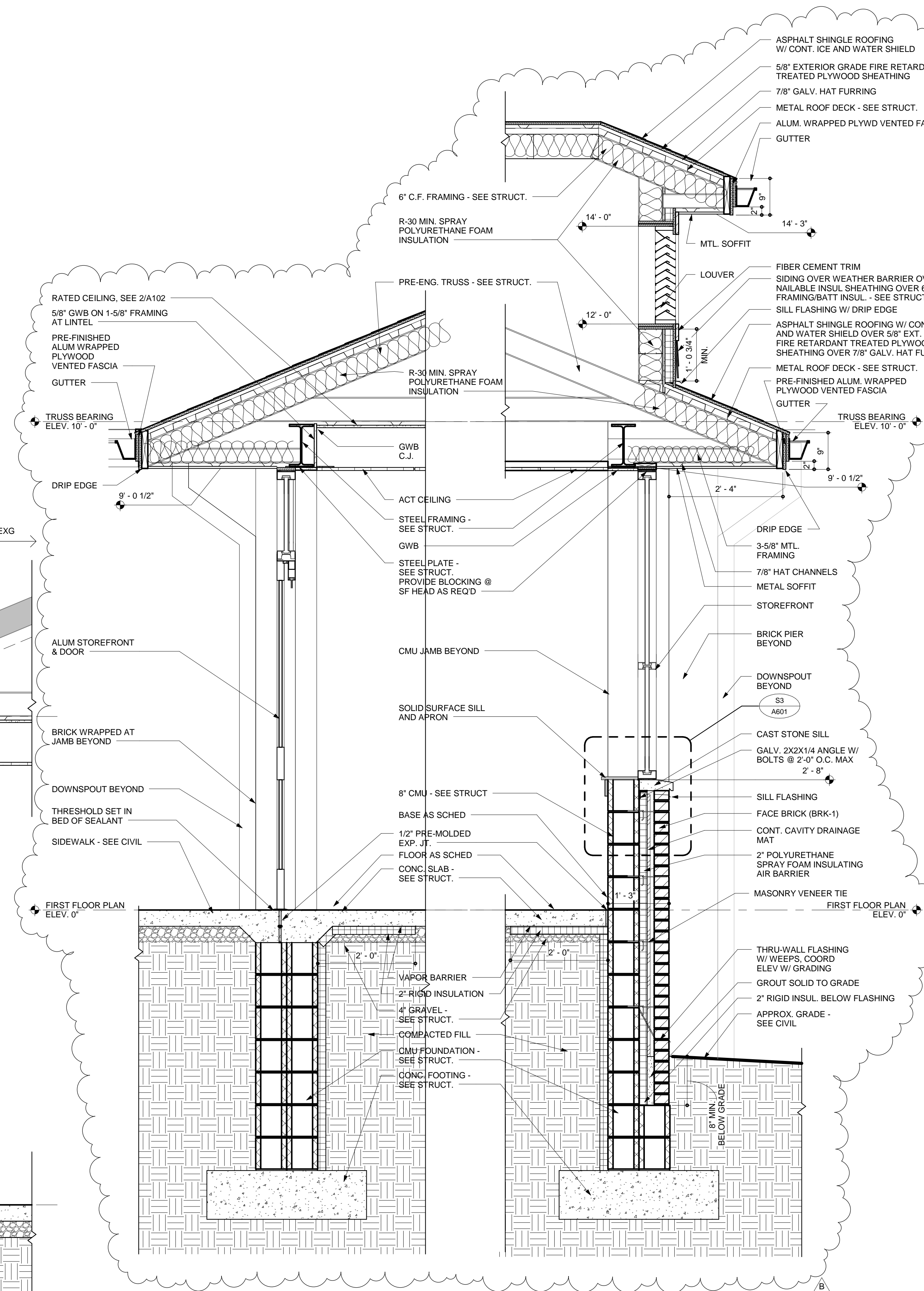
2 BUILDING SECTION THROUGH CORRIDOR

SCALE: 1/8" = 1'-0"



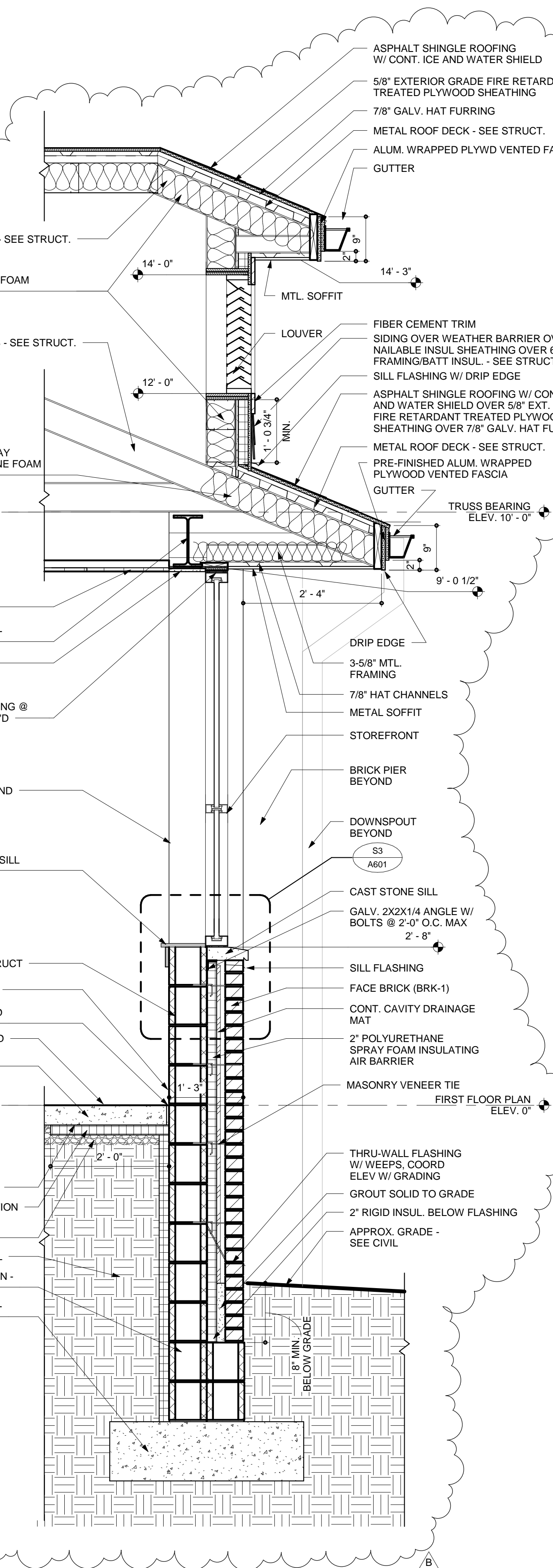
3 WALL SECTION AT VESTIBULE

SCALE: 3/4" = 1'-0"



4 WALL SECTION AT SF-2

SCALE: 3/4" = 1'-0"

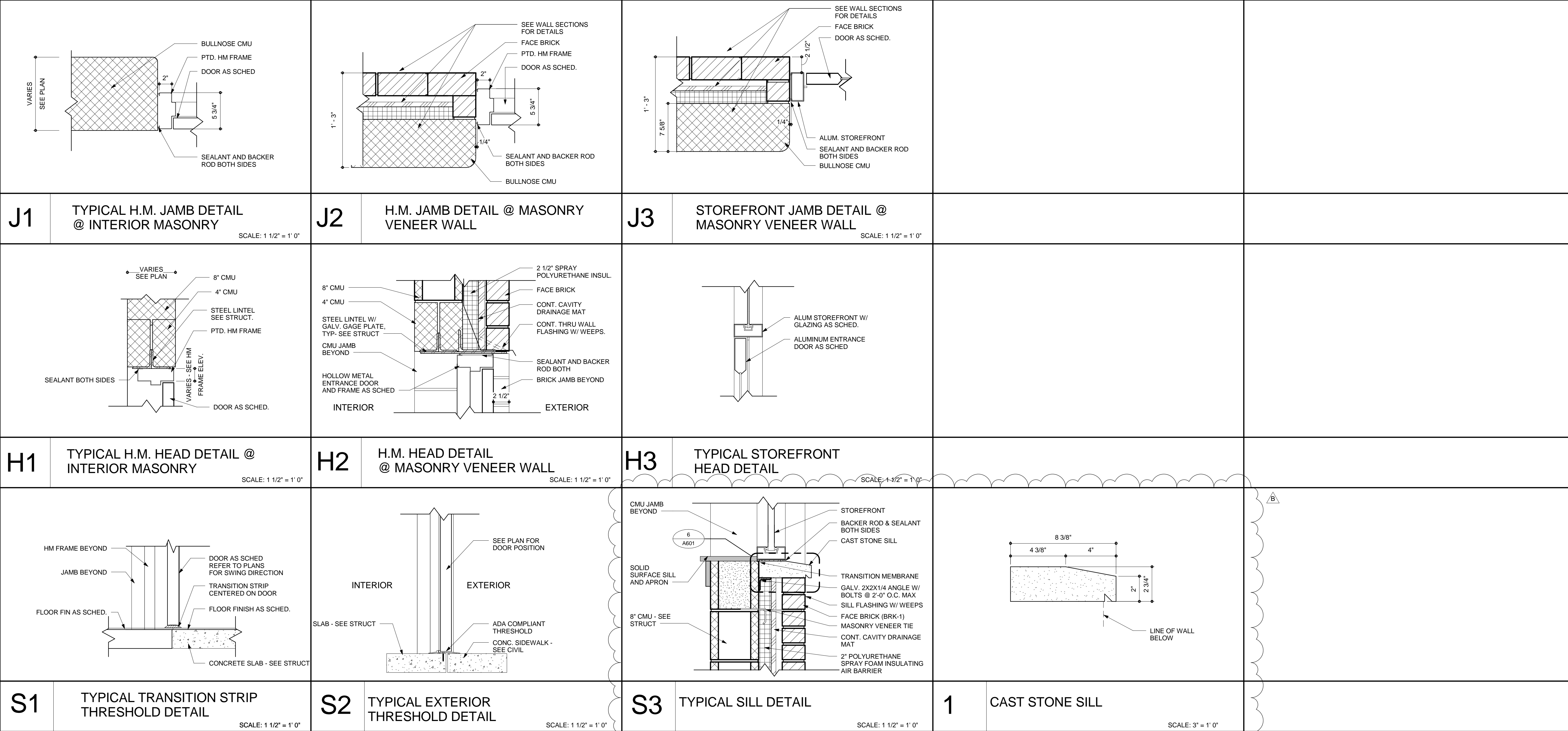


5 WALL SECTION AT EXTERIOR CLASSROOM WALL

SCALE: 3/4" = 1'-0"







DOOR SCHEDULE														
MARK	SIZE			DOOR				FRAME				DETAIL		
	WIDTH	HT	THICK	MATL	TYPE	FIN	GLAZ	UNDER CUT	MATL	TYPE	FIN	HEAD	JAMB	SILL
FIRE RATING														
HDWE SET														
COMMENTS														
FIRST FLOOR PLAN														
115/1	6' - 0"	7' - 2"	1 3/4"	ALUM	D	-	IG	0"	ALUM	SF-2	-	H3	J3	S2
115/2	6' - 0"	7' - 2"	1 3/4"	HM	D	PT	FG	0"	HM	HM-1	PT	H1	J1	S1
121/1	6' - 0"	7' - 2"	1 3/4"	HM	D	PT	TEMP	0"	HM	HM-1	PT	H1	J1	S1
121/2	6' - 0"	7' - 2"	1 3/4"	ALUM	D	PT	IG	0"	ALUM	SF-4	PT	H2	J2	S2
122/1	3' - 0"	7' - 2"	1 3/4"	HM	B	PT	FG	0"	HM	HM-1	PT	H1	J1	S1
122A/1	3' - 0"	7' - 2"	1 3/4"	SCWD	A	PT	-	0"	HM	HM-1	PT	H1	J1	S1
122B/1	3' - 0"	7' - 2"	1 3/4"	SCWD	A	PT	-	0"	HM	HM-1	PT	H1	J1	S1
123/1	3' - 0"	7' - 2"	1 3/4"	HM	B	PT	FG	0"	HM	HM-1	PT	H1	J1	S1
123A/1	3' - 0"	7' - 2"	1 3/4"	SCWD	A	PT	-	0"	HM	HM-1	PT	H1	J1	S1
123B/1	3' - 0"	7' - 2"	1 3/4"	SCWD	A	PT	-	0"	HM	HM-1	PT	H1	J1	S1
124/1	3' - 0"	7' - 2"	1 3/4"	HM	B	PT	FG	0"	HM	HM-1	PT	H1	J1	S1
124A/1	3' - 0"	7' - 2"	1 3/4"	SCWD	A	PT	-	0"	HM	HM-1	PT	H1	J1	S1
124B/1	3' - 0"	7' - 2"	1 3/4"	SCWD	A	PT	-	0"	HM	HM-1	PT	H1	J1	S1
125/1	3' - 0"	7' - 2"	1 3/4"	HM	B	PT	FG	0"	HM	HM-1	PT	H1	J1	S1
125A/1	3' - 0"	7' - 2"	1 3/4"	SCWD	A	PT	-	0"	HM	HM-1	PT	H1	J1	S1
125B/1	3' - 0"	7' - 2"	1 3/4"	SCWD	A	PT	-	0"	HM	HM-1	PT	H1	J1	S1

NOTE: GLAZING SHALL BE TEMPERED IN DOORS, SIDELIGHTS, AND AS REQUIRED BY CODE

NOTE: OPERABLE WINDOW SHALL COMPLY W/ EGRESS REQ

**BECKER MORGAN GROUP**

ARCHITECTURE ENGINEERING

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WILMINGTON, DE 19801

(800) 995-3347

PROJECT TITLE

ADDITION TO

**PHILLIP C. SHOWELL ELEMENTARY**

41 BETHANY RD  
SELBYVILLE, DE 19975

SHEET TITLE

**DOOR SCHEDULE, DOOR AND WINDOW TYPES, AND DETAILS**

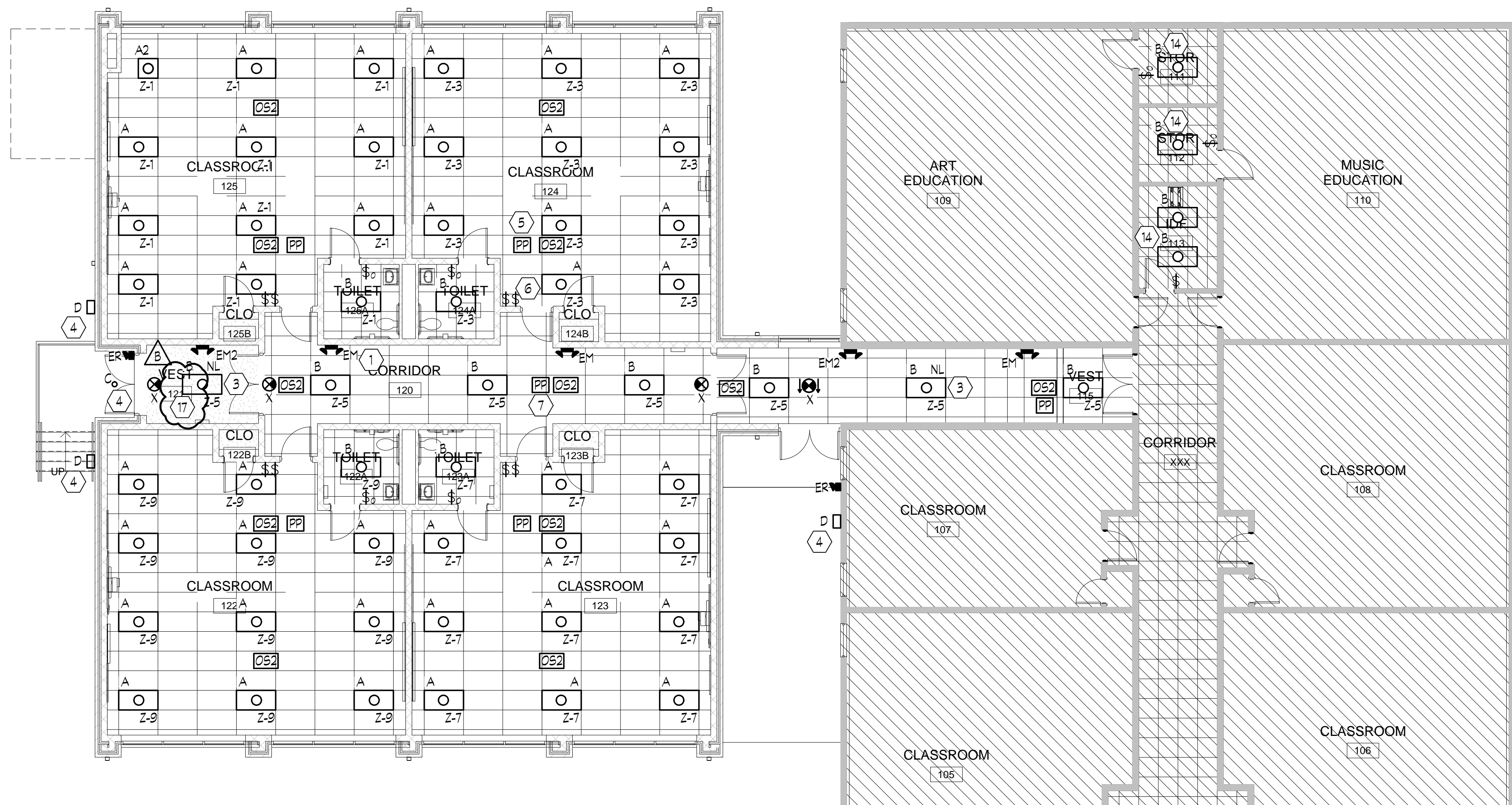
B	05/01/15	ADDENDUM 2
Mark	Date	Description
PROJECT NO: 2013157.03		
DATE: MARCH 25, 2015		
SCALE: As indicated		
DRAWN BY: GMS PROJ MGR: JML		

**A601**

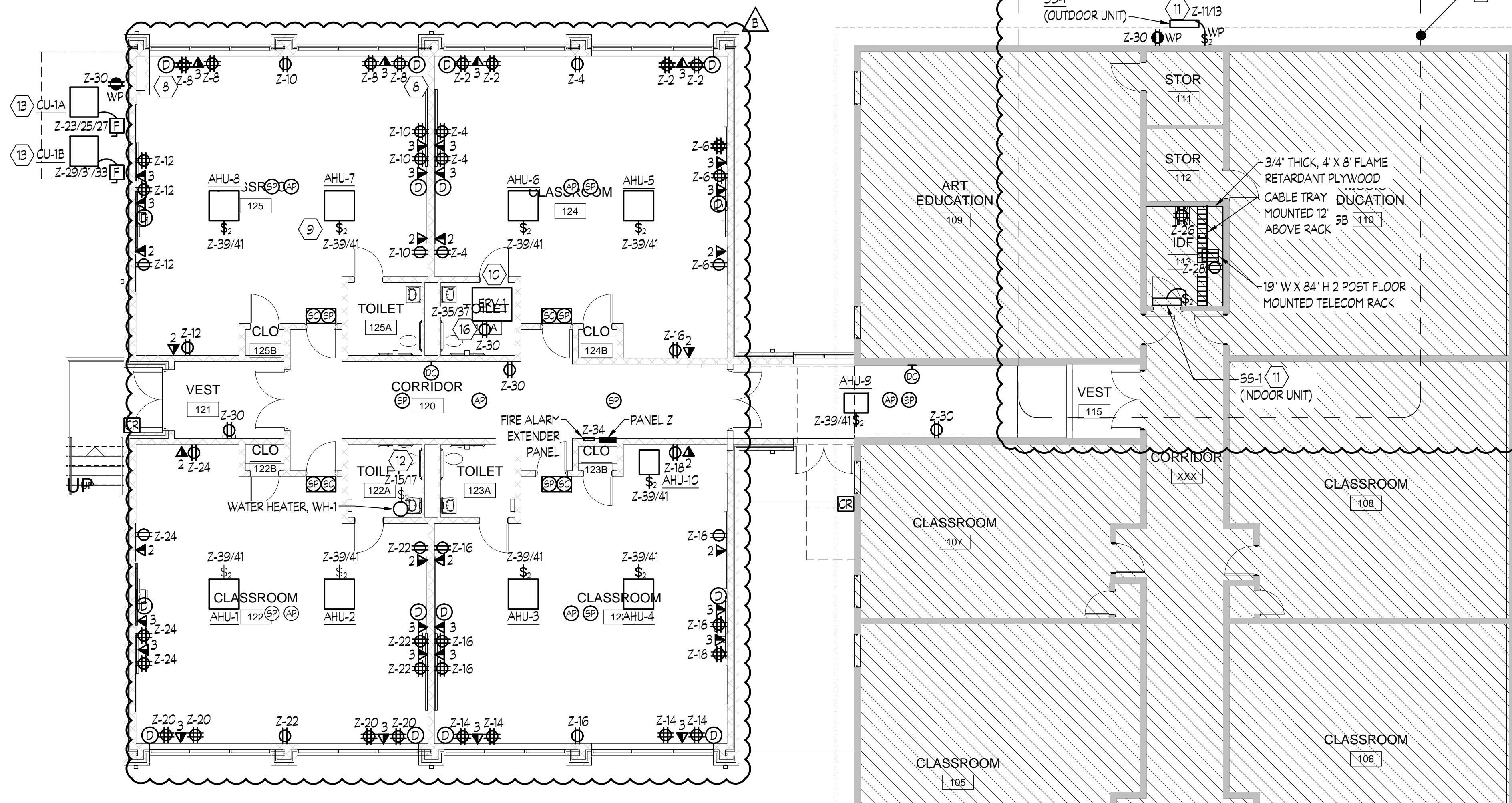
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LIGHTING FLOOR PLAN  
SCALE: 1/8" = 1' - 0"



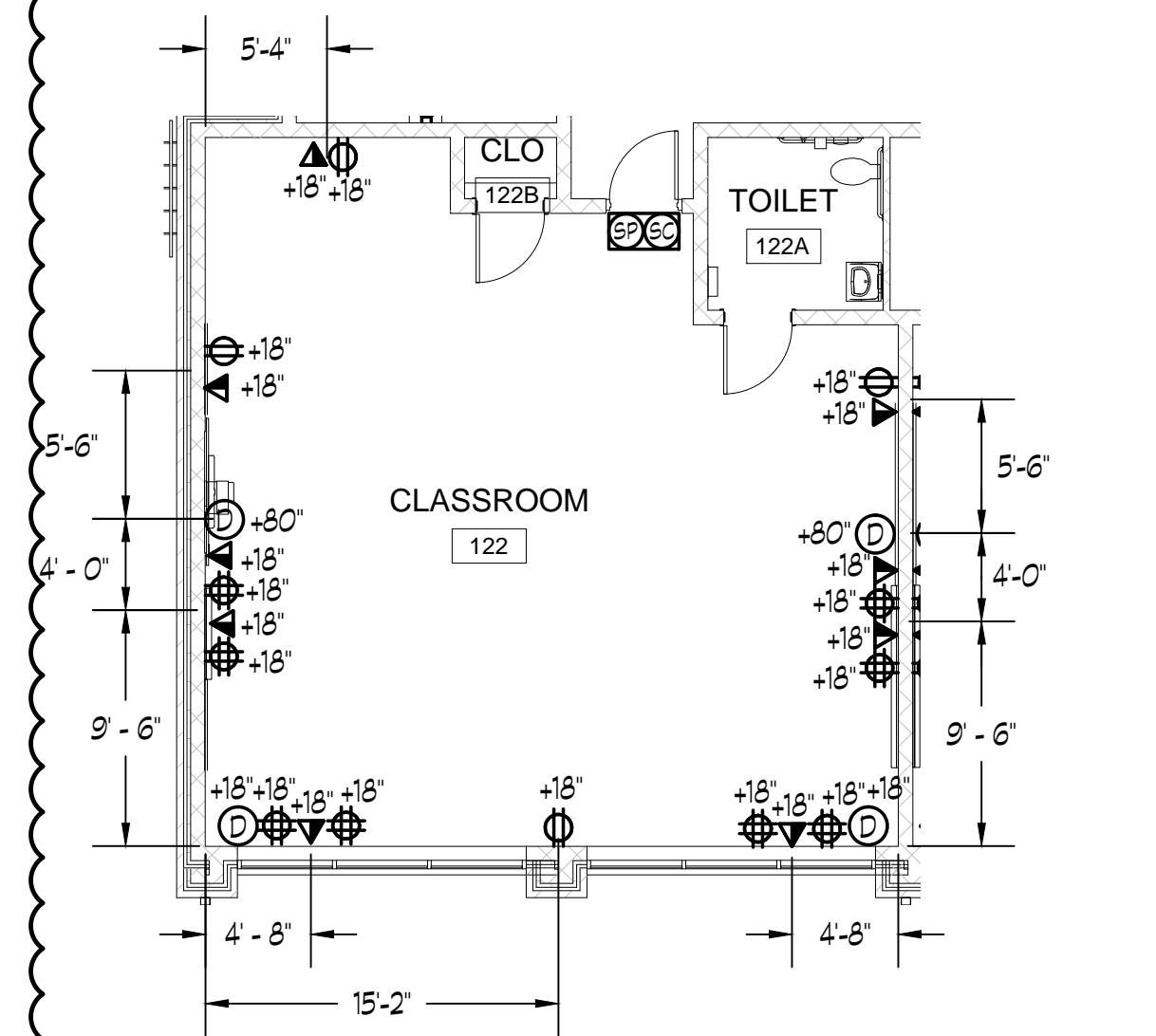
POWER FLOOR PLAN  
SCALE: 1/8" = 1' - 0"

#### GENERAL NOTES:

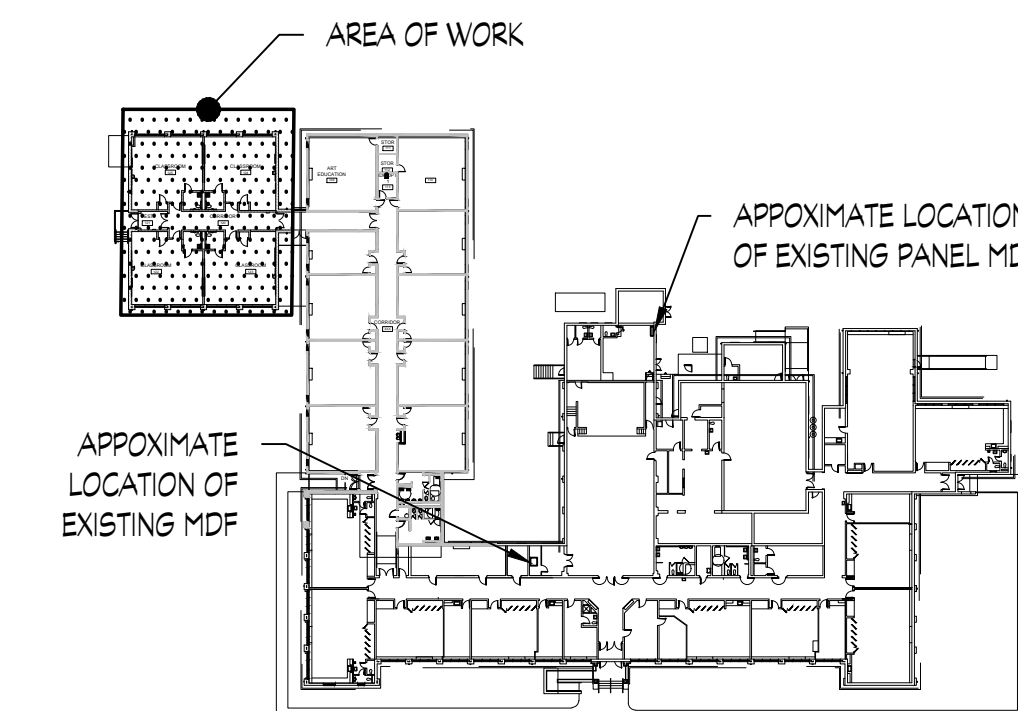
1. ELECTRICAL CONTRACTOR SHALL REFER TO DIVISION 27 SPECIFICATION SECTIONS FOR DELAWARE TECHNOLOGY'S IT PERSONS CONTACT INFORMATION, WHICH THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR CONTACTING AND COORDINATING ALL EQUIPMENT, MATERIAL, LABOR AND INSTALLATION OF THE SAME, THAT WILL BE PROVIDED BY THE ELECTRICAL CONTRACTOR UNDER THIS PROJECT SCOPE OF WORK. TECHNOLOGY QUANTITIES AND LOCATIONS NEED TO BE CONFIRMED WITH THE DELAWARE IT CONTACT PERSON PRIOR TO INSTALLATION OF THE SAME.
2. CONTRACTOR TO REFER TO ELECTRICAL OVERALL BUILDING PLAN DWG. E003 FOR LOCATION OF EXISTING PANEL MDP AND TELECOM MDF.

#### # DRAWING NOTES:

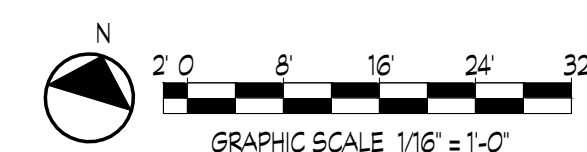
1. TYPICAL EMERGENCY LIGHT WIRED FROM UNSWITCHED SIDE OF LOCAL LIGHTING CIRCUIT.
2. TYPICAL "ER" FIXTURE. PROVIDE 3/4" CONDUIT WITH 3#12 FROM NEAREST "EM2" FIXTURE.
3. TYPICAL NIGHT LIGHT WIRED FROM UNSWITCHED SIDE OF LIGHTING CIRCUIT.
4. ELECTRICAL CONTRACTOR TO CONNECT EXISTING EXTERIOR LIGHTING CIRCUIT WITH 2 #10 + #10G, 3/4" C TO NEW TYPE "C" AND TYPE "D" EXTERIOR FIXTURES. CONTRACTOR TO FIELD VERIFY THAT EXISTING EXTERIOR LIGHTING CIRCUIT HAS SUFFICIENT CAPACITY TO SUPPORT ADDED FIXTURES PRIOR TO ROUGH-IN. CONTRACTOR SHALL NOTIFY ENGINEER IF EXTERIOR LIGHTING CIRCUIT CAPACITY IS AT ITS MAXIMUM.
5. TYPICAL POWER PACK AND OCCUPANCY SENSORS TO PROVIDE AUTOMATIC ON/OFF CONTROL OF LIGHTS IN CLASSROOMS. SWITCHES TO BE WIRED TO LOAD SIDE OF POWER PACK TO PROVIDE MANUAL LIGHT LEVEL CHANGES.
6. TYPICAL SWITCHES FOR INBOARD/OUTBOARD SWITCHING OF LIGHTS IN CLASSROOMS. CONTRACTOR TO WIRE SWITCH CLOSEST TO LOCKSIDE OF DOOR TO OUTBOARD BALLAST AND WIRE REMAINING SWITCH TO INBOARD BALLAST.
7. TYPICAL POWER PACK AND OCCUPANCY SENSORS TO PROVIDE AUTOMATIC ON/OFF CONTROL OF LIGHTS IN RESPECTIVE CORRIDORS.
8. TYPICAL DATA JUNCTION BOX FOR SMARTBOARD CABLES PROVIDE 2" EMT CONDUIT TO ABOVE CEILING. COORDINATE EXACT LOCATION OF BOXES WITH OWNER'S EQUIPMENT PRIOR TO INSTALLATION.
9. TYPICAL VRF AIR HANDLING UNIT WIRED TO CIRCUIT Z-XX. PROVIDE 2 #10 + #10G IN 3/4" C TO UNIT. SOLENOID VALVE RELAY KIT WIRED THRU AIR HANDLING UNIT. PROVIDE 2 #12 + #12G IN 3/4" WHIP FROM AIR HANDLER TO SOLENOID VALVE.
10. ERV-1 FACTORY FURNISHED WITH FUSED DISCONNECT. PROVIDE 2 #10 + #10G IN 3/4" C.
11. SS-1 INDOOR UNIT FED FROM SS-1 OUTDOOR UNIT. PROVIDE 2 #12 + #12G IN 3/4" C FROM OUTDOOR UNIT TO INDOOR UNIT.
12. PROVIDE 2 #10 + #10G IN 3/4" C.
13. PROVIDE 3 #6 + #6G IN 1" C.
14. CONNECT LIGHTS TO EXISTING CIRCUIT(S) SERVING ADJACENT CLASSROOMS.
15. SEE ALTERNATE NO. 4. PROVIDE LINE ITEM TO PROVIDE ALL ELECTRICAL AND TELECOM WORK REQUIRED FOR NEW IDF ROOM 113, INCLUDING TIE IN TO EXISTING MDF. UNDER BASE BID SCHOOL DISTRICT WOULD FURNISH AND INSTALL ALL ELECTRICAL AND TELECOM REQUIREMENTS.
16. MAINTENANCE RECEPTACLE MOUNTED ADJACENT TO ERV IN ACCESSIBLE CEILING SPACE.
17. PROVIDE TYPE "B" FIXTURE AT THIS LOCATION WITH FLANGE KIT.



TYPICAL CLASSROOM WIRING DEVICE DIMENSIONAL PLAN  
SCALE: 1/8" = 1' - 0"



KEYPLAN  
SCALE: NTS



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PROJECT TITLE

ADDITION TO

**PHILLIP C.**

**SHOWELL**

**ELEMENTARY**

41 BETHANY RD

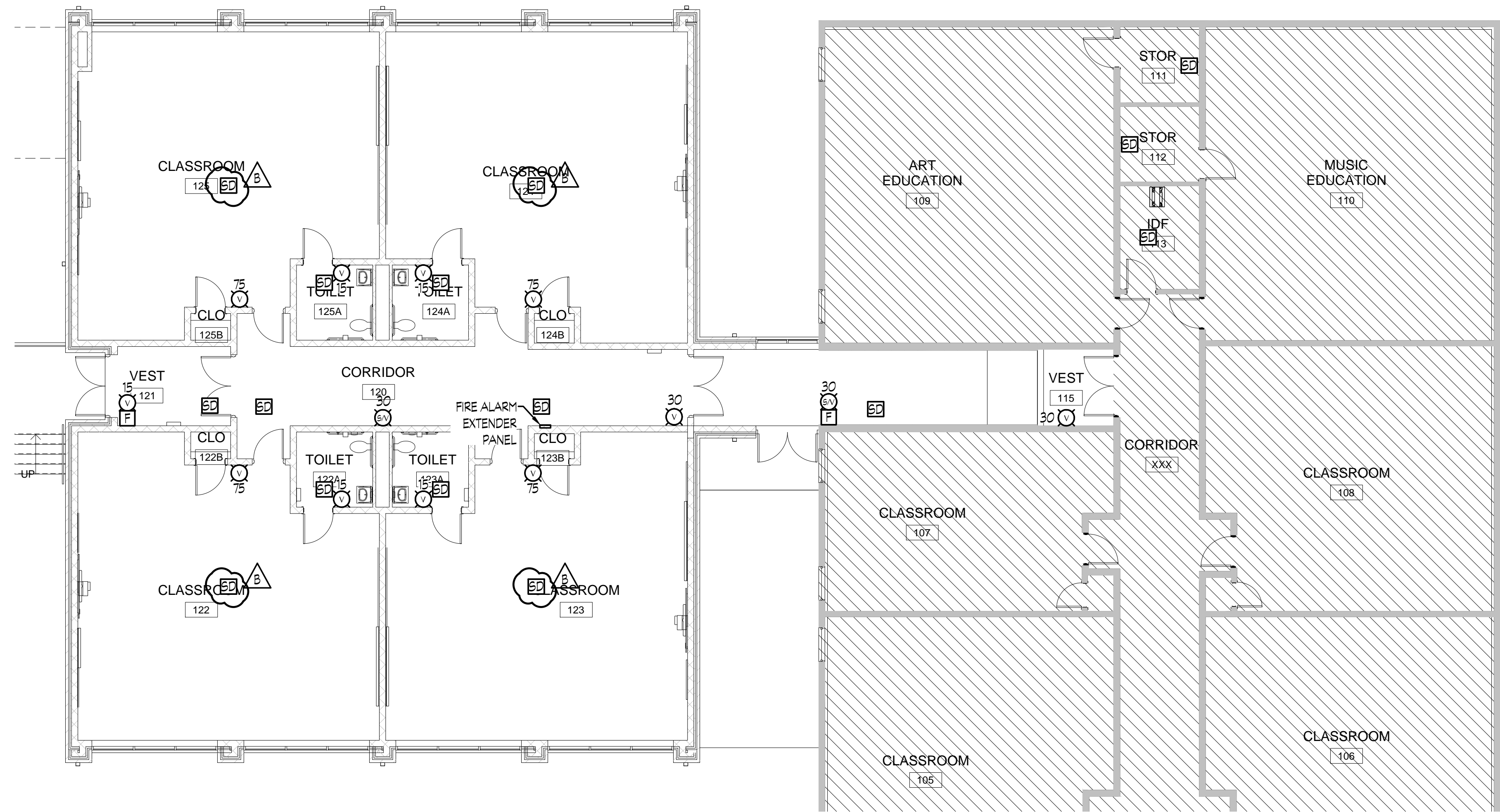
SELBYVILLE, DE 19975

SHEET TITLE

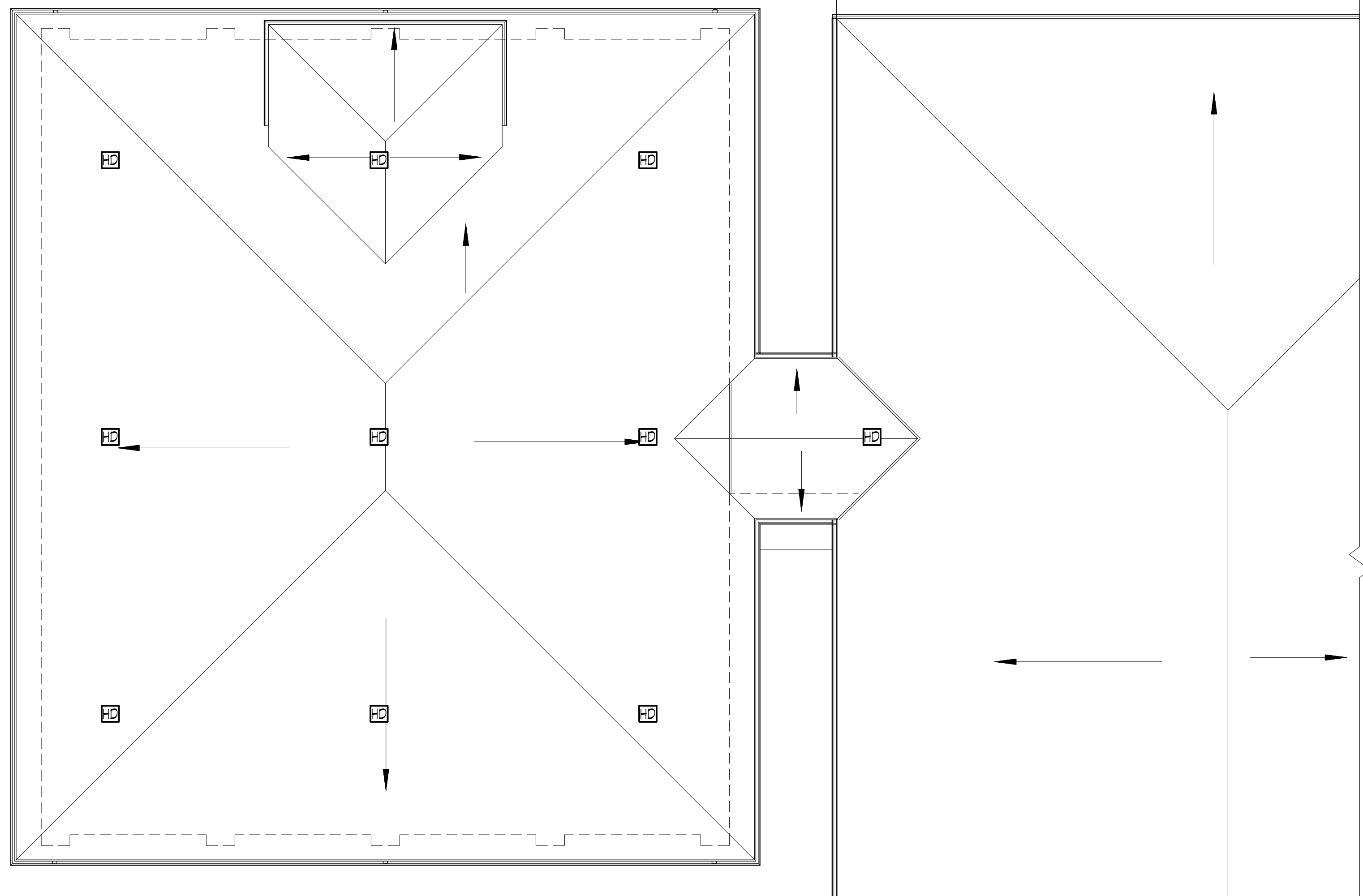
**ELECTRICAL**

**PLANS**

ISSUE BLOCK



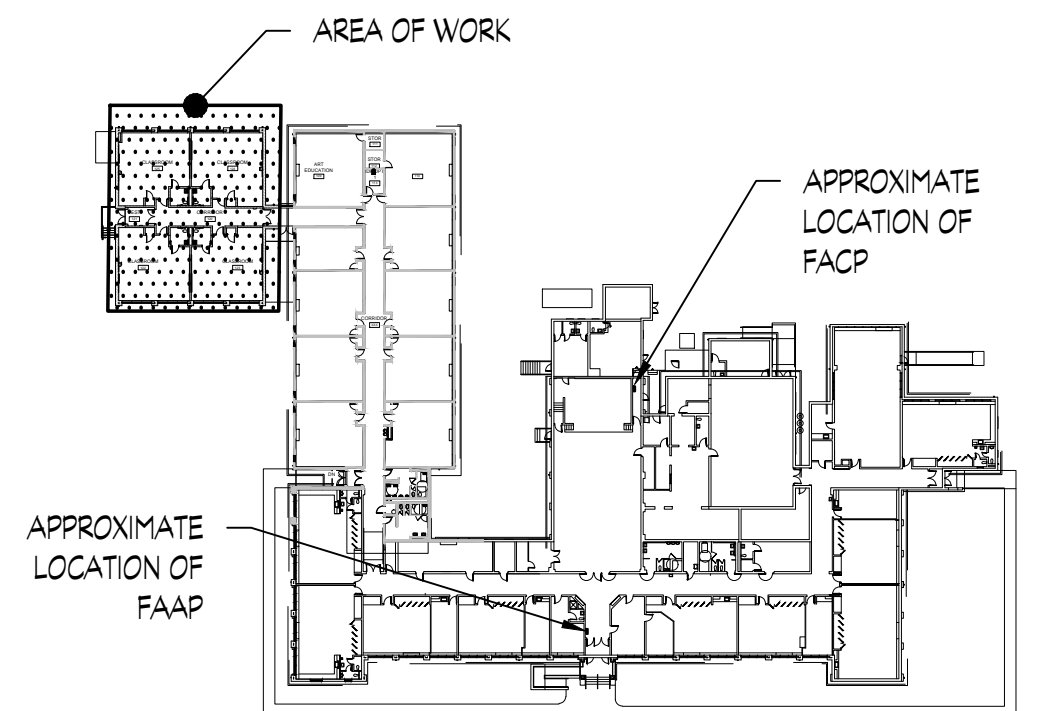
FIRE ALARM FLOOR PLAN  
SCALE: 1/8" = 1' - 0"



FIRE ALARM ATTIC PLAN  
SCALE: 1/8" = 1' - 0"

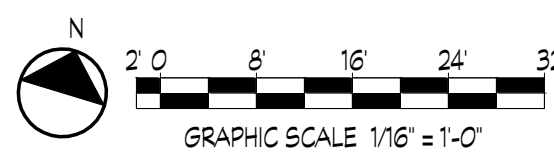
#### GENERAL NOTES:

1. HEAT DETECTOR SPACING IN ATTIC BASED ON DETECTOR WITH SMOOTH CEILING RECOMMEND SPACING OF 50 FEET. CONTRACTOR TO ADJUST QUANTITIES AND LOCATIONS BASED ON MANUFACTURER'S RECOMMENDED HEAT DETECTOR SPACING AND AS REQUIRED TO BE COMPLIANT WITH NFPA 72 FOR HEAT DETECTORS THEY PROPOSE TO USE.
2. CONTRACTOR TO REFER TO ELECTRICAL OVERALL BUILDING PLAN DWG. E003 FOR LOCATION OF EXISTING FIRE ALARM CONTROL PANEL AND ANNUNCIATOR PANEL.



KEYPLAN

SCALE: NTS



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#### PROJECT TITLE

ADDITION TO  
**PHILLIP C.  
SHOWELL  
ELEMENTARY**  
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#### SHEET TITLE

**FIRE ALARM  
PLANS**

#### ISSUE BLOCK

MARK	DATE	REVISION	DESCRIPTION
B	05/01/2015	ADDENDUM #2	

PROJECT NO: 2013157.03

DATE: MARCH 25, 2015

SCALE: 1/8" = 1' - 0"

DRAWN BY: SM PROJ MGR: DH

**E101**

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