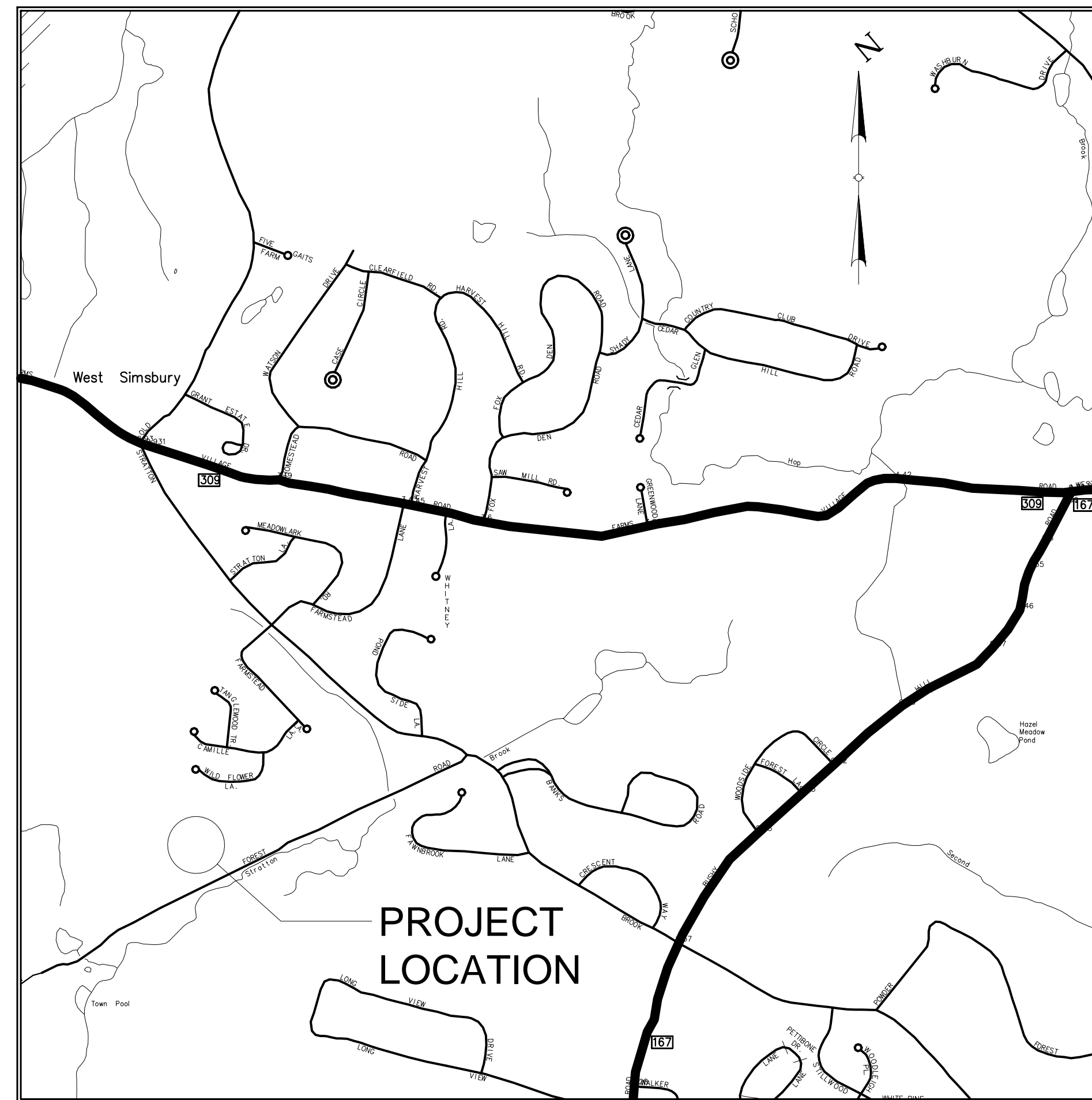


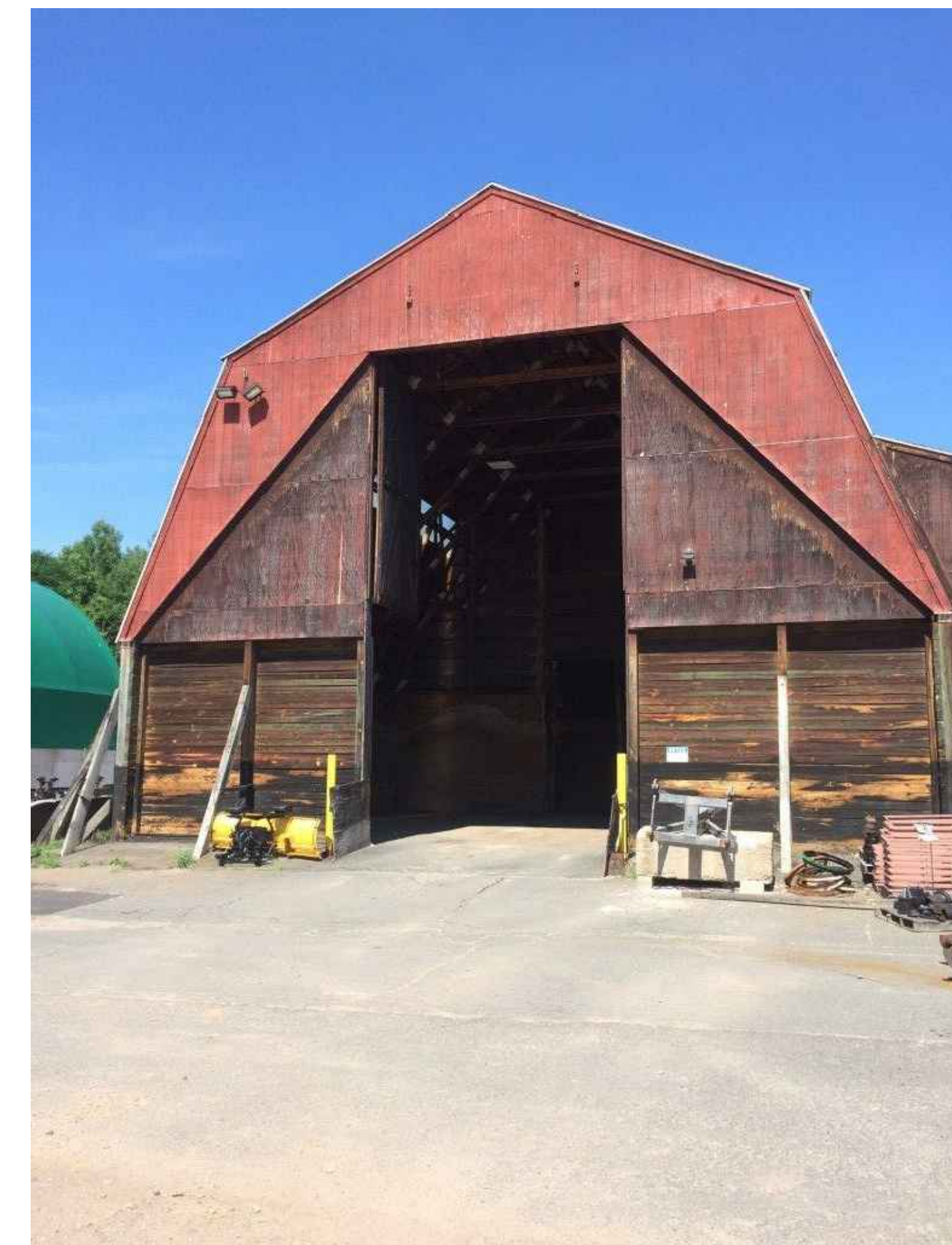
# TOWN OF SIMSBURY, CONNECTICUT

## TRUCK WASH BAY DEPARTMENT OF PUBLIC WORKS 66 TOWN FOREST RD SIMSBURY, CONNETICUT



LOCATION PLAN

Prepared By:  
 **SILVA ENGINEERING, LLC** Consulting Engineers  
90 Quarry Street, Lower Level, Willimantic, CT 06226  
Phone: (860) 423-4506 Fax: (860) 423-1875



**LIST OF STRUCTURAL DRAWINGS**

- S-1 GENERAL NOTES & FOUNDATION PLAN
- S-2 FOUNDATION SECTIONS & DETAILS
- S-3 FRAMING PLAN, SECTIONS
- S-4 BRACING DETAILS

**BUILDING CODE**

2003 INTERNATIONAL BUILDING CODE PORTION OF THE 2005 STATE BUILDING CODE - STATE OF CONNECTICUT WITH 2013 AMENDMENTS

**DESIGN CRITERIA AND LOADS**

STORAGE LIVE LOAD: 10 PSF  
SEISMIC DESIGN: CATEGORY B

**DESIGN NOTES**

**CONCRETE**

WALLS AND FOOTINGS:  
28 DAY COMPRESSIVE STRENGTH, F'C = 3,000 PSI  
SLAB:  
28 DAY COMPRESSIVE STRENGTH, F'C = 4,000 PSI

**REINFORCING STEEL**

DEFORMED STEEL BARS: ASTM A615, GRADE 60, F<sub>y</sub> = 60 KSI  
WELDED WIRE FABRIC: ASTM A 185

ALL REINFORCEMENT SHALL BE INSPECTED AND APPROVED BY THE ENGINEER OR HIS DESIGNATE BEFORE CONCRETE IS PLACED.

MINIMUM CLEARANCE OF REINFORCING FROM ADJACENT SURFACES AS FOLLOWS BUT NO LESS THAN REINFORCING BAR DIAMETER

UNFORMED SURFACE IN CONTACT 3 INCHES WITH GROUND OR EXPOSED TO WEATHER, AND BOTTOM SURFACES OF SLABS ON GRADE

FORMED SURFACES IN CONTACT WITH GROUND OR EXPOSED TO WEATHER  
#5 BARS AND SMALLER 2 INCHES  
#6 BARS AND LARGER 2-1/2 INCHES

FORMED SURFACES NOT IN CONTACT WITH GROUND OR EXPOSED TO WEATHER  
#11 BARS OR SMALLER 3/4 INCH  
#12 BARS OR LARGER 1-1/2 INCHES

MAXIMUM DEVIATION FROM THESE REQUIREMENTS  
SECTIONS 10 INCHES THICK OR LESS 1/4 INCH  
SECTIONS OVER 10 INCHES THICK 1/2 INCH

**MINIMUM REINFORCING SUPPORT REQUIREMENTS**

HIGHCHAIRS 3'-6" O.C.  
SLAB BOLSTERS 3'-6" O.C.  
SUPPORT BARS FOR HIGH CHAIR NO. 5

**MINIMUM REINFORCING AT OPENINGS**

PROVIDE REINFORCING AT ALL FOUR SIDES OF OPENINGS  
1 #5 TOP AND BOTTOM IN SLABS  
1 #5 EACH FACE IN WALL; EXTEND 2 FEET BEYOND OPENING.

**CONTINUOUS REINFORCING BARS**

RUN CONTINUOUSLY AROUND CORNERS AND LAP AT NECESSARY SPLICES, OR HOOK AT DISCONTINUOUS ENDS.  
LAP LENGTH: 30 BAR DIAMETERS (UNO.)  
BAR LAPS MAY BE OFFSET TO AVOID CONTROL OR CONSTRUCTION JOINTS.

**CAST-IN-PLACE CONCRETE ANCHORS**

ANCHOR RODS: ASTM F-1554 (GRADE 36)  
NUTS (FOR ASTM F-1554 ANCHOR ROD): ASTM A563D  
WASHERS (FOR ASTM F-1554 ANCHOR ROD): ASTM F436

**STRUCTURAL STEEL:**

PLATES & ANGLES: ASTM A36, F<sub>y</sub> = 36 KSI

**DIMENSIONAL LUMBER**

DOUGLAS FIR LARCH NO.2 MEETING THE FOLLOWING MINIMUM REQUIREMENTS:  
A: 1,600 KSI  
F<sub>b</sub>: 900 PSI F<sub>t</sub>: 575 PSI  
F<sub>c</sub>: 1350 PSI F<sub>c</sub> (PERPENDICULAR): 625 PSI  
F<sub>v</sub>: 180 PSI

USE PRESERVATIVE TREATED DIMENSIONAL LUMBER FOR EXTERIOR APPLICATIONS AND LOCATIONS IN DIRECT CONTACT WITH CONCRETE.

**STRUCTURAL SHEATHING:**

APA RATED SHEATHING

**ROUGH CARPENTRY NOTES**

FRAMING WITH DIMENSION LUMBER, WOOD BLOCKING, CANTS, AND NAILERS.

**SUBMITTALS**

PRODUCT DATA:  
FOR EACH TYPE OF PROCESS AND FACTORY-FABRICATED PRODUCT.

WOOD-PRESERVATIVE TREATMENT FROM CHEMICAL TREATMENT MANUFACTURER AND CERTIFICATION BY TREATING PLANT THAT TREATED MATERIALS COMPLY WITH REQUIREMENTS.

MATERIAL CERTIFICATES: FOR DIMENSION LUMBER SPECIFIED TO COMPLY WITH MINIMUM ALLOWABLE UNIT STRESSES. INDICATE SPECIES AND GRADE SELECTED FOR EACH USE AND DESIGN VALUES APPROVED BY THE ALSOC BOARD OF REVIEW.

EVALUATION REPORTS: FOR THE FOLLOWING, FROM ICC-ES:  
WOOD-PRESERVATIVE-TREATED WOOD.

**PRODUCTS**

LUMBER: DOC PS 20 AND APPLICABLE RULES OF GRADING AGENCY CERTIFIED BY THE ALSOC BOARD OF REVIEW. FACTORY MARK EACH PIECE OF LUMBER WITH GRADE STAMP OF GRADING AGENCY. PROVIDE DRESSED LUMBER, S4S, UNLESS OTHERWISE INDICATED.

MAXIMUM MOISTURE CONTENT OF LUMBER: 19 PERCENT UNLESS OTHERWISE INDICATED.

**WOOD-PRESERVATIVE-TREATED LUMBER:**

PRESERVATIVE TREATMENT BY PRESSURE PROCESS: AWPA U1; USE CATEGORY UC2.

KILN-DRY LUMBER AFTER TREATMENT TO A MAXIMUM MOISTURE CONTENT OF 19 PERCENT. DO NOT USE MATERIAL THAT IS WARPED OR THAT DOES NOT COMPLY WITH REQUIREMENTS FOR UNTREATED MATERIAL.

MARK LUMBER WITH TREATMENT QUALITY MARK OF AN INSPECTION AGENCY APPROVED BY THE ALSOC BOARD OF REVIEW.

**TREAT THE FOLLOWING APPLICATIONS:**

WOOD CANTS, NAILERS, CURBS, EQUIPMENT SUPPORT BASES, BLOCKING, STRIPPING, AND SIMILAR MEMBERS IN CONNECTION WITH ROOFING, FLASHING, VAPOR BARRIERS, AND WATERPROOFING.

WOOD SILLS, SLEEPERS, BLOCKING, AND SIMILAR CONCEALED MEMBERS IN CONTACT WITH MASONRY OR CONCRETE.

**DIMENSION LUMBER FRAMING: DOUGLAS FIR-LARCH**

APPLICATION: ALL DIMENSIONAL LUMBER FRAMING.

**MISCELLANEOUS LUMBER:**

PROVIDE MISCELLANEOUS LUMBER INDICATED AND LUMBER FOR SUPPORT OR ATTACHMENT OF OTHER CONSTRUCTION, INCLUDING THE FOLLOWING:  
BLOCKING.  
NAILERS.  
CANTS.

FOR ITEMS OF DIMENSION LUMBER SIZE, PROVIDE CONSTRUCTION OR NO. 2 GRADE.

**FASTENERS**

GENERAL: PROVIDE FASTENERS OF SIZE AND TYPE INDICATED.

WHERE ROUGH CARPENTRY IS EXPOSED TO WEATHER, IN GROUND CONTACT, PRESSURE-PRESERVATIVE TREATED, OR IN AREA OF HIGH RELATIVE HUMIDITY, PROVIDE FASTENERS OF TYPE 304 STAINLESS STEEL.

POWER-DRIVEN FASTENERS: NES NER-272.

**MISCELLANEOUS MATERIALS**

SILL-SEALER GASKETS:  
GLASS-FIBER-RESILIENT INSULATION, FABRICATED IN STRIP FORM, FOR USE AS A SILL SEALER; 1-INCH NOMINAL THICKNESS, COMPRESSIBLE TO 1/32 INCH; SELECTED FROM MFR'S STANDARD WIDTHS TO SUIT WIDTH OF SILL MEMBERS INDICATED.

**INSTALLATION**

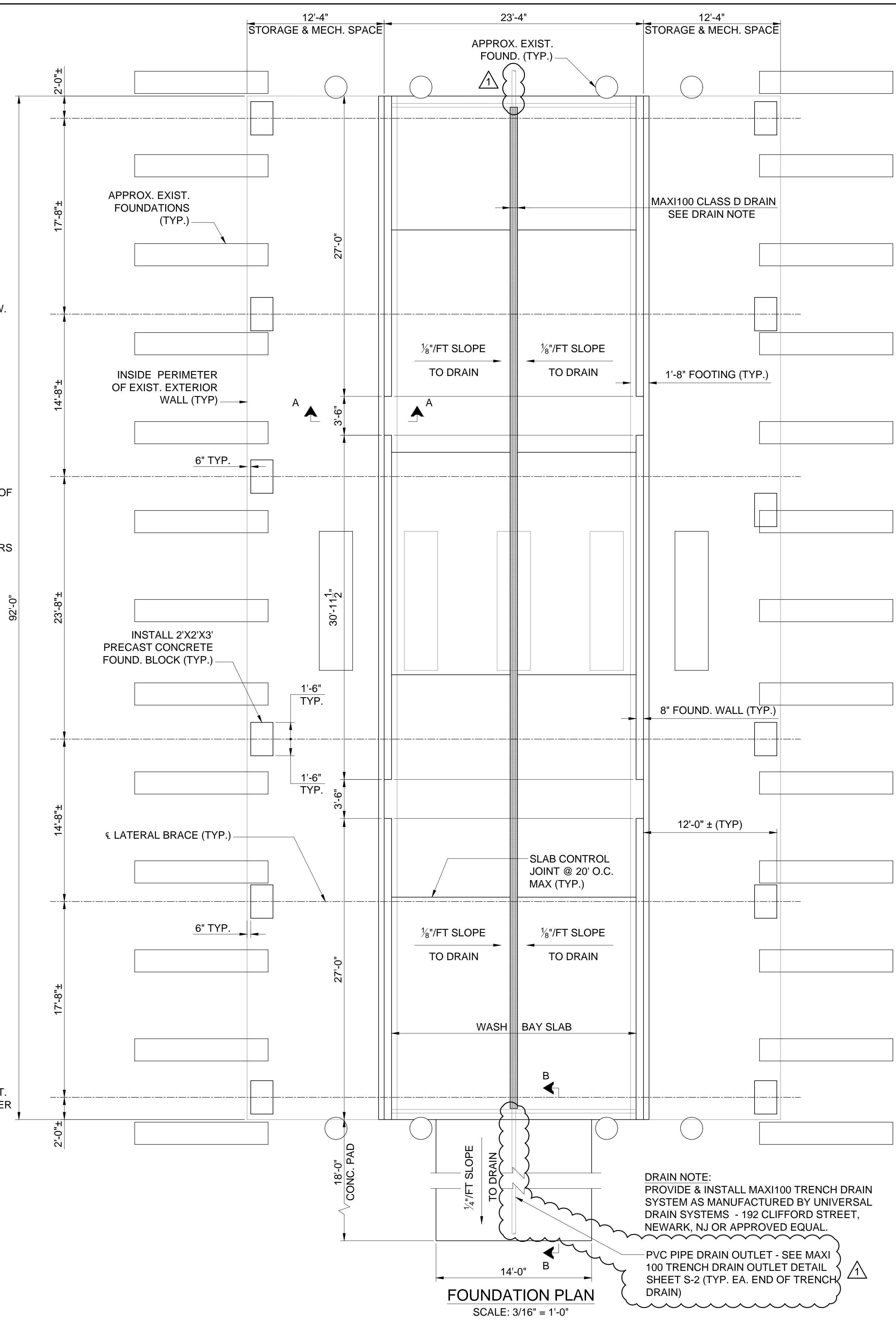
SET ROUGH CARPENTRY TO REQUIRED LEVELS AND LINES, WITH MEMBERS PLUMB, TRUE TO LINE, CUT, AND FITTED. FIT ROUGH CARPENTRY TO OTHER CONSTRUCTION; SCRIBE AND COPE AS NEEDED FOR ACCURATE FIT. LOCATE NAILERS, BLOCKING, AND SIMILAR SUPPORTS TO COMPLY WITH REQUIREMENTS FOR ATTACHING OTHER CONSTRUCTION.

COMPLY WITH AF&PA'S WCD 1, "DETAILS FOR CONVENTIONAL WOOD FRAME CONSTRUCTION," UNLESS OTHERWISE INDICATED.

COMPLY WITH AWPA M4 FOR APPLYING FIELD TREATMENT TO CUT SURFACES OF PRESERVATIVE-TREATED LUMBER.

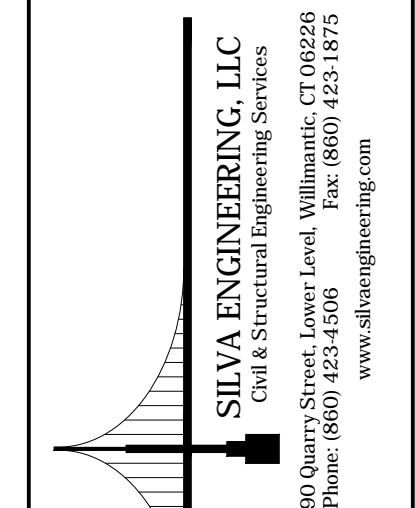
SECURELY ATTACH ROUGH CARPENTRY WORK TO SUBSTRATE BY ANCHORING AND FASTENING AS INDICATED, COMPLYING WITH THE FOLLOWING:

1. NES NER-272 FOR POWER-DRIVEN FASTENERS.
2. TABLE 2304.9.1, "FASTENING SCHEDULE," IN ICC'S INTERNATIONAL BUILDING CODE.



**DRAIN NOTE:**  
PROVIDE & INSTALL MAXI100 TRENCH DRAIN SYSTEM AS MANUFACTURED BY UNIVERSAL DRAIN SYSTEMS - 192 CLIFFORD STREET, NEWARK, NJ OR APPROVED EQUAL.

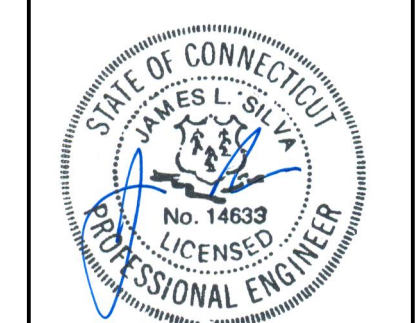
PVC PIPE DRAIN OUTLET - SEE MAXI 100 TRENCH DRAIN OUTLET DETAIL SHEET S-2 (TYP. EA. END OF TRENCH DRAIN)



**TRUCK WASH BAY GENERAL NOTES & FOUNDATION PLAN**  
 PREPARED FOR  
**SIMSBURY DEPARTMENT OF PUBLIC WORKS**  
 66 TOWN FOREST RD., SIMSBURY, CT

REVISIONS:

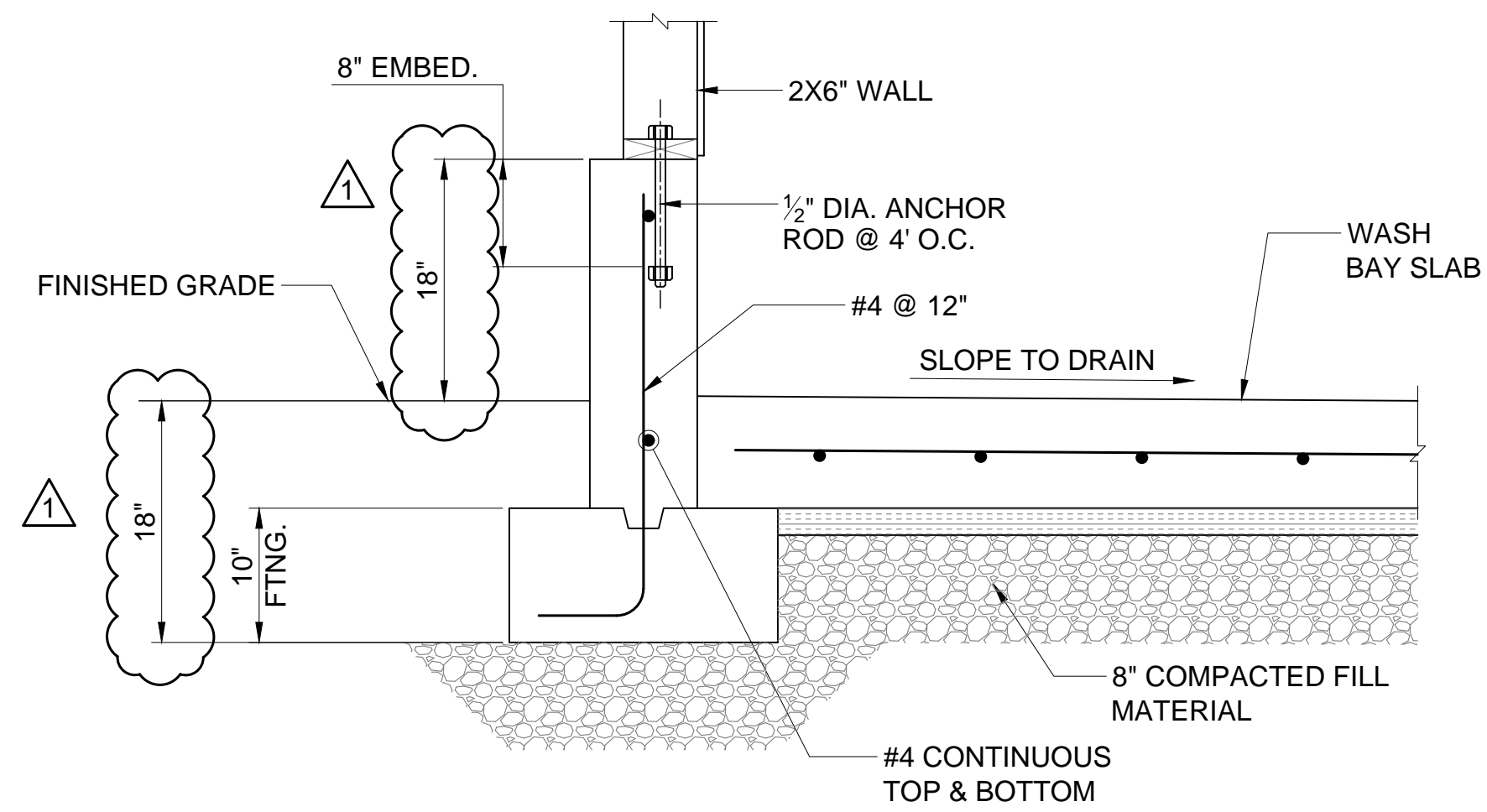
1. 8/18/16  
ADDED PVC PIPE DRAIN OUTLET FOR TRENCH



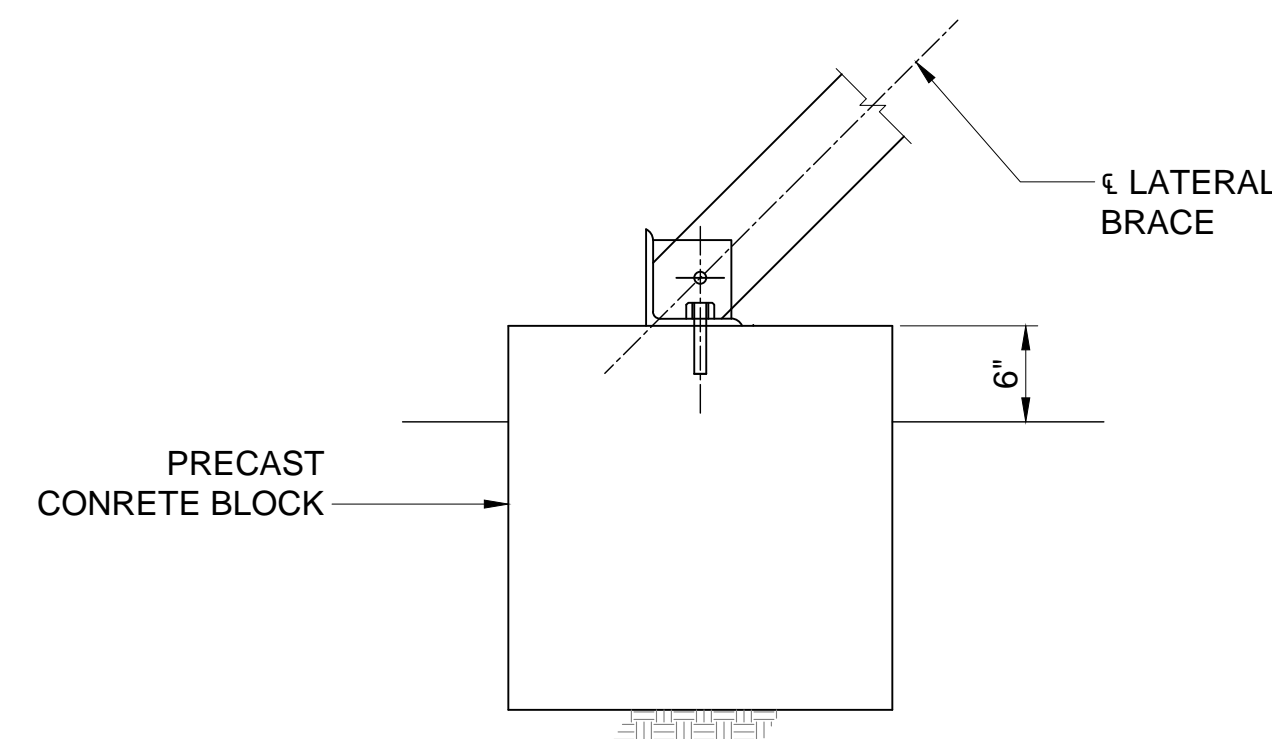
NOT AUTHORIZED FOR CONSTRUCTION WITHOUT PROFESSIONAL ENGINEER'S STAMP & SIGNATURE

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JOB NO: 15-137	SHEET NO: S-1

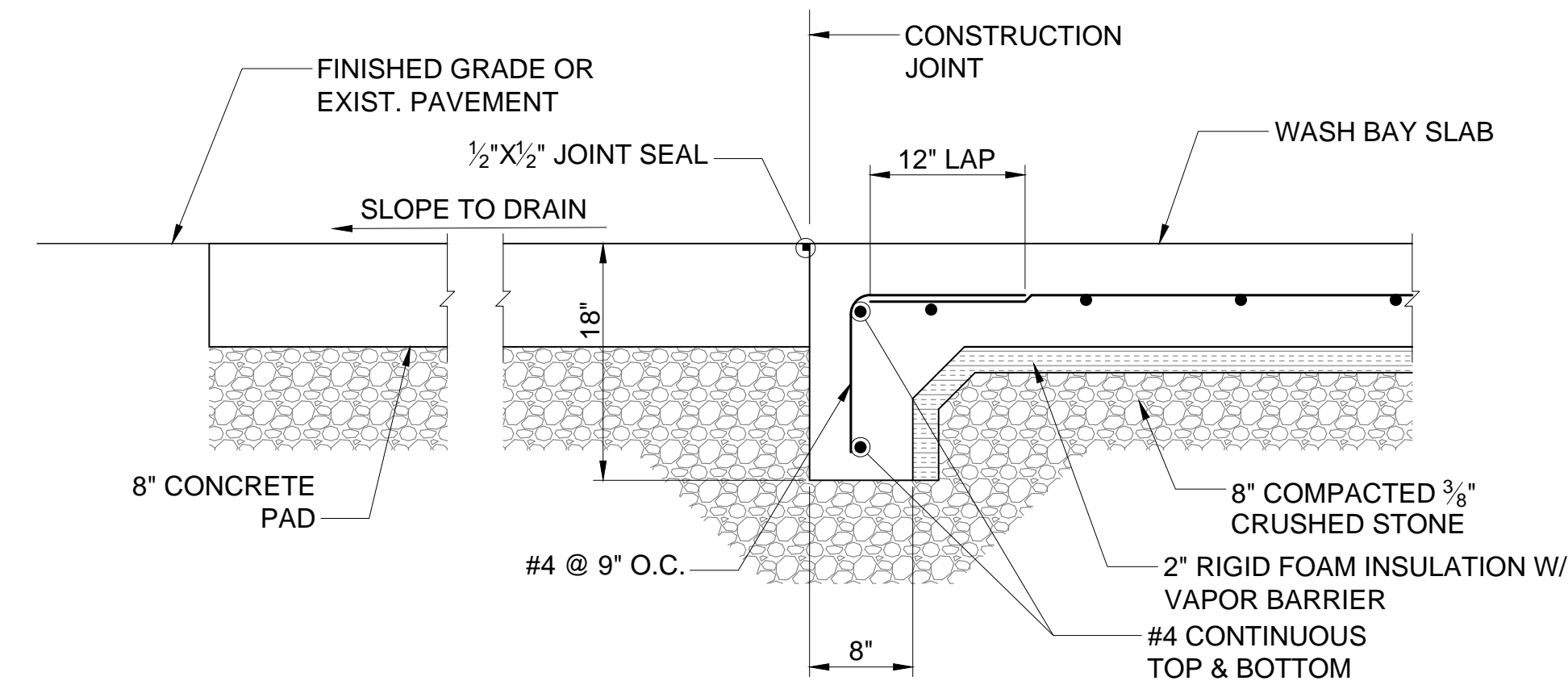
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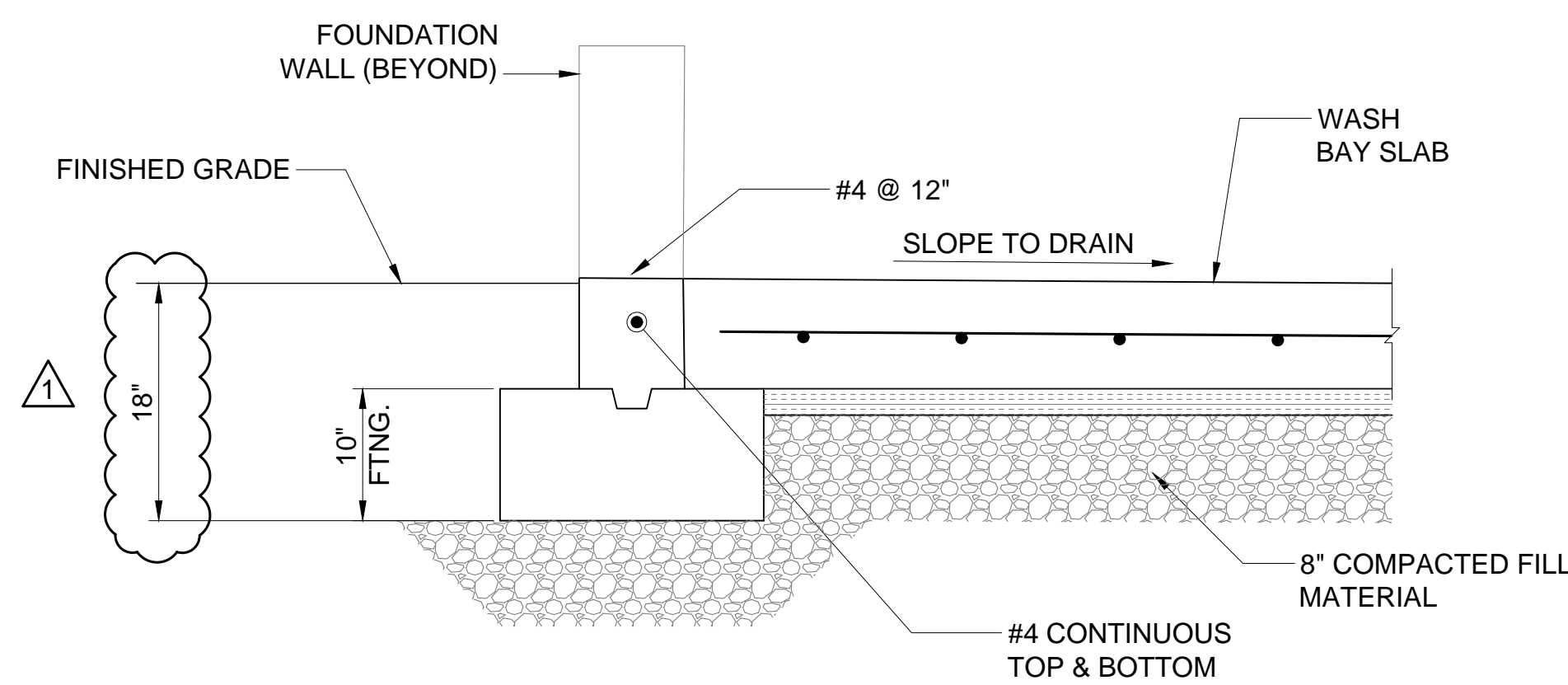
**TYPICAL FOUNDATION WALL SECTION**  
SCALE: 1" = 1'-0"



**PRECAST CONCRETE FOUNDATION BLOCK**  
SCALE: 1" = 1'-0"



**SECTION B-B**  
SCALE: 1" = 1'-0"  
NOTE: SECTION OF SLAB AT ENTRY TO WASH BAY SIMILAR. OMIT CONCRETE PAD



**SECTION A-A (FOUND. AT DOORWAY) TYP.**  
SCALE: 1" = 1'-0"

**NOTE:**  
COMPACTED FILL MATERIAL SHALL CONSIST OF 8" OF 3/8" CRUSHED WITHIN 5 FEET OF EACH END OF THE TRUCK WASH AND BELOW THE EXTERIOR CONCRETE PAD. FOR REMAINING INTERIOR PORTIONS OF THE FOUNDATION AND SLAB THE COMPACTED FILL SHALL CONSIST OF RECYCLED AGGREGATE SUPPLIED BY THE TOWN AND INSTALLED BY THE CONTRACTOR.

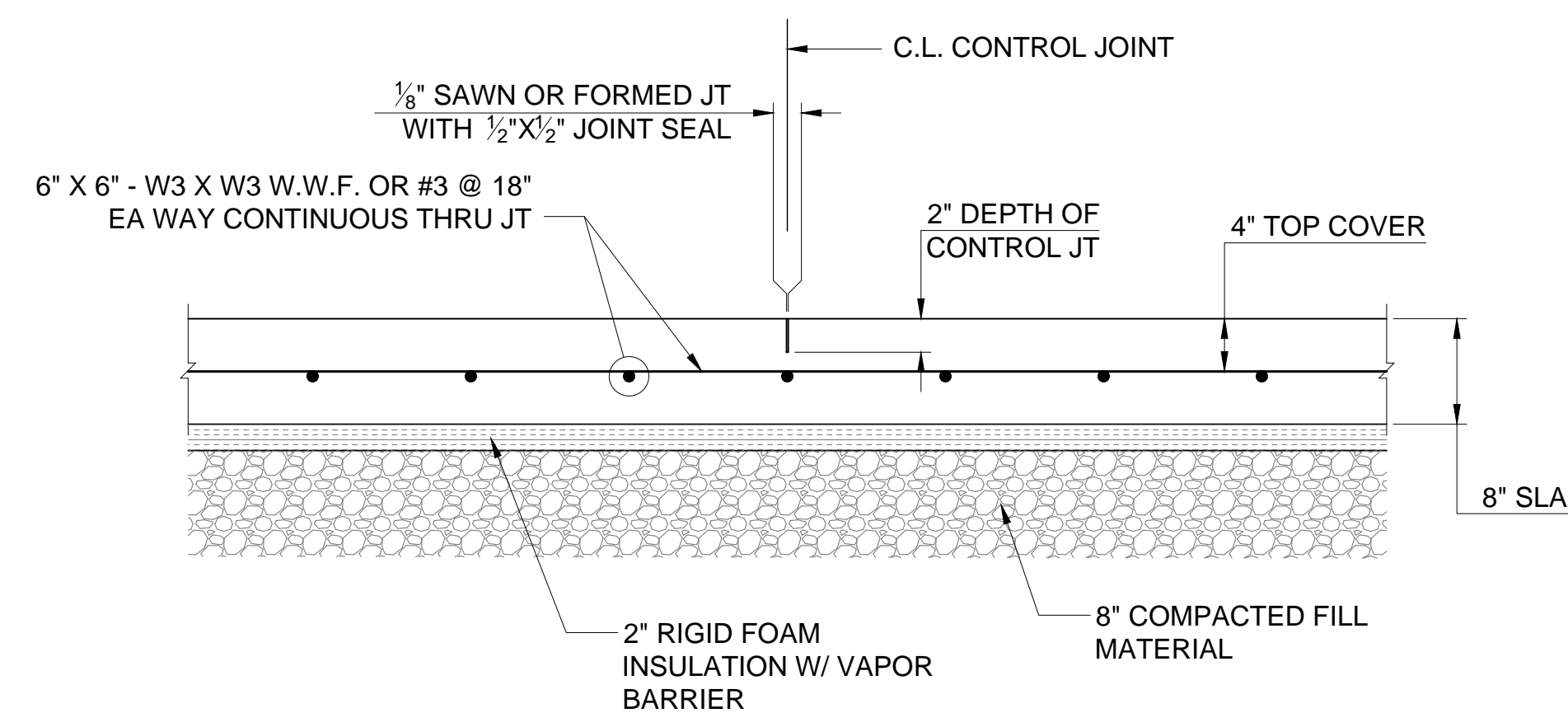
**COMPACTION OF SOIL BACKFILLS**

PLACE BACKFILL MATERIALS IN LAYERS NOT MORE THAN 8 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN 4 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS.

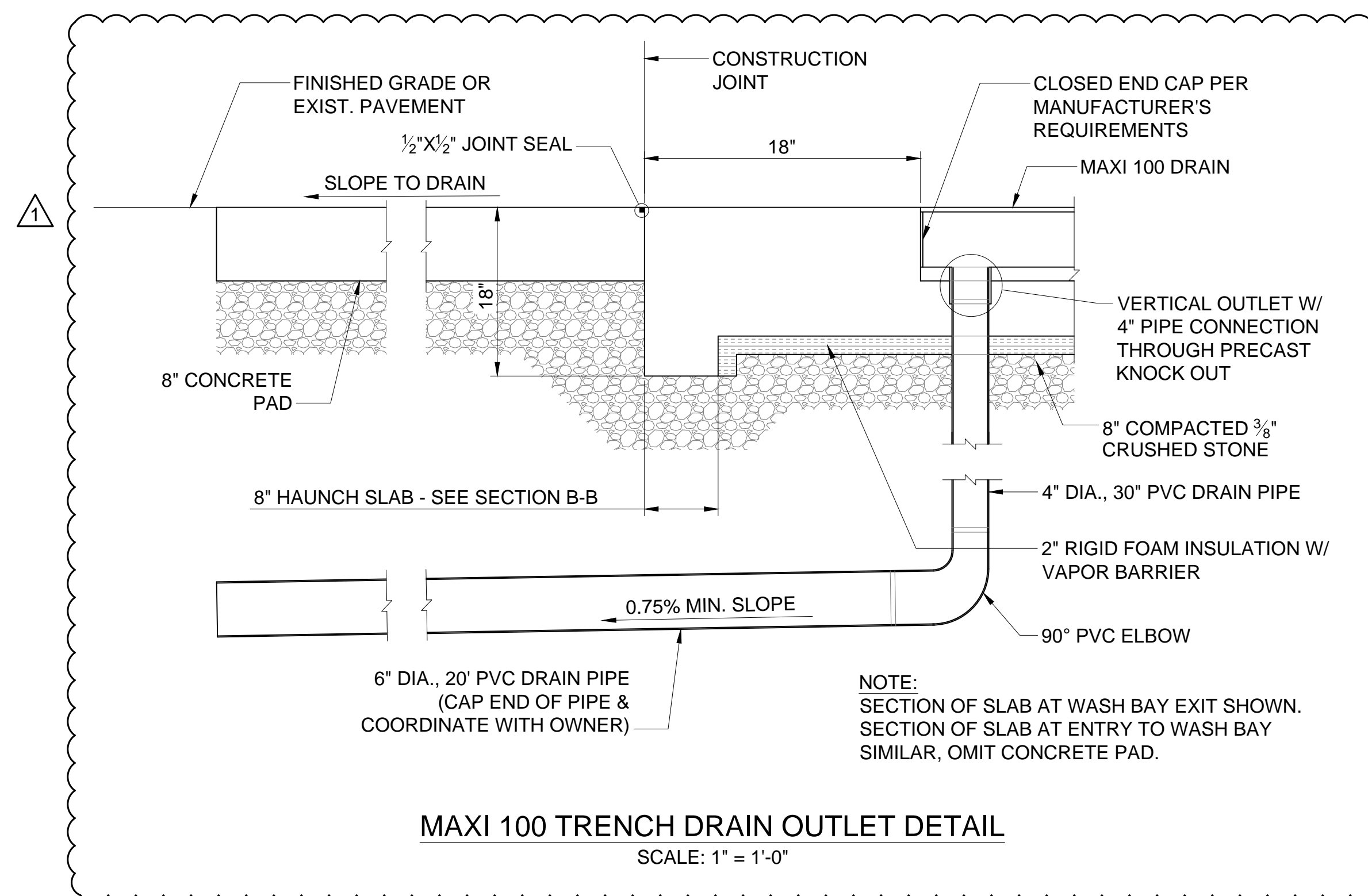
PLACE BACKFILL EVENLY ON ALL SIDES OF STRUCTURES TO REQUIRED ELEVATIONS, AND UNIFORMLY ALONG THE FULL LENGTH OF EACH STRUCTURE.

COMPACT SOIL MATERIALS TO NOT LESS THAN THE FOLLOWING PERCENTAGES OF MAXIMUM DRY UNIT WEIGHT ACCORDING TO ASTM D1557:

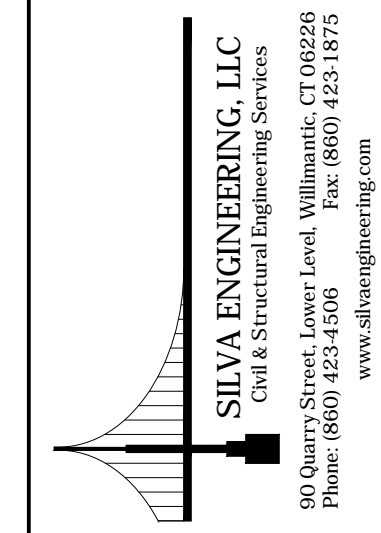
UNDER STRUCTURES AND BUILDING SLABS: SCARIFY AND RECOMPACT TOP 12 INCHES OF EXISTING SUBGRADE AND EACH LAYER OF BACKFILL AT 95 PERCENT



**TYPICAL WASH BAY SLAB SECTION**  
SCALE: 1" = 1'-0"

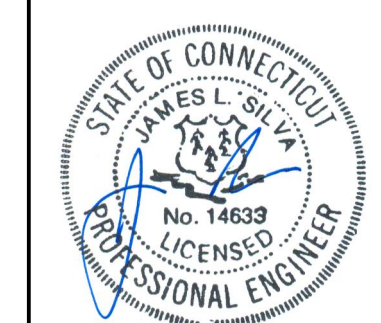


**MAXI 100 TRENCH DRAIN OUTLET DETAIL**  
SCALE: 1" = 1'-0"



**FOUNDATION SECTIONS & DETAILS**  
**TRUCK WASH BAY**  
PREPARED FOR  
**SIMSBURY DEPARTMENT OF PUBLIC WORKS**  
66 TOWN FOREST RD., SIMSBURY, CT

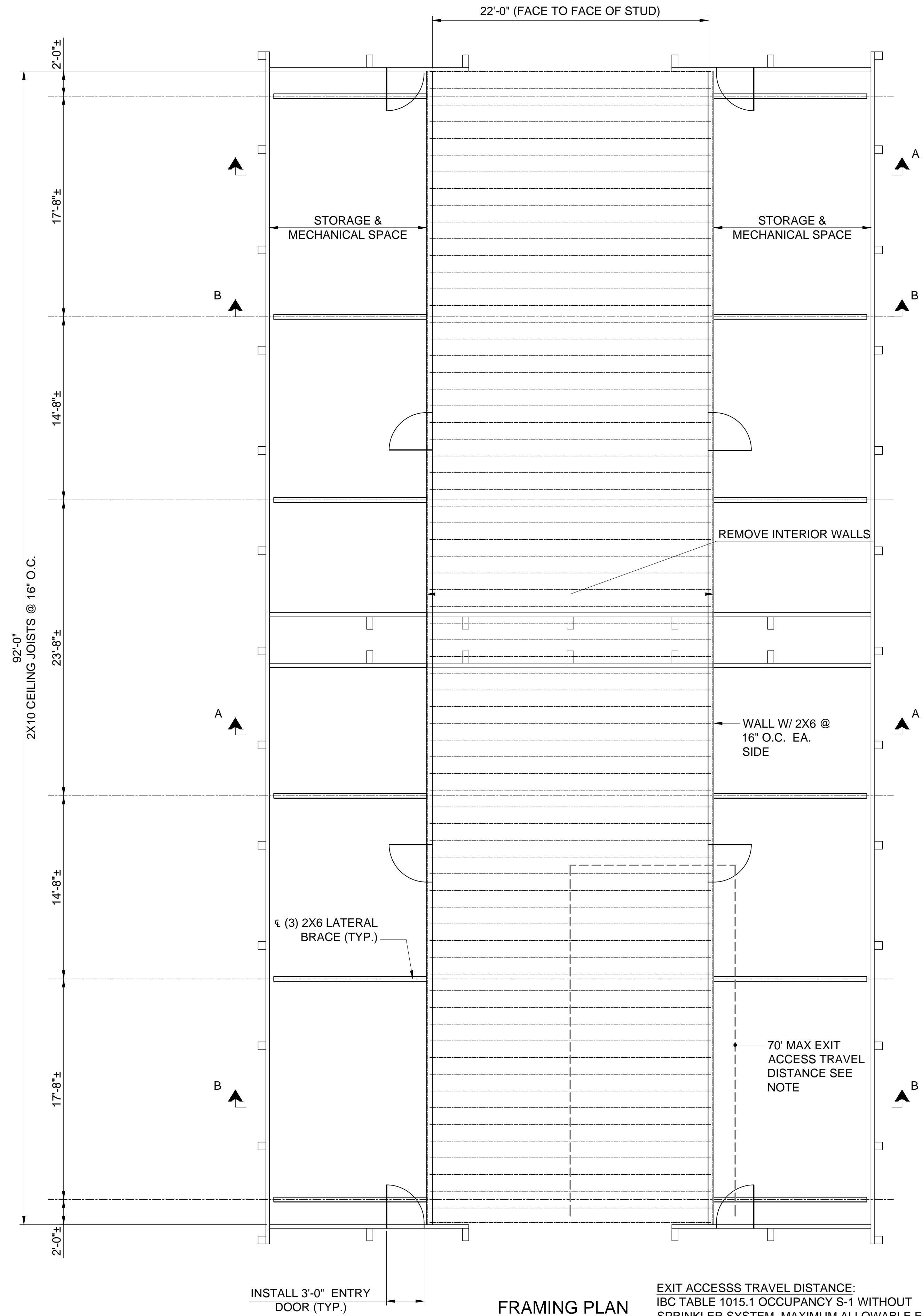
**REVISIONS:**  
#1874 ADDED MAXI 100 TRENCH DRAIN OUTLET DETAIL AND FTNG. DEPTH DIMENSIONS (ADDENDUM NO. 1)



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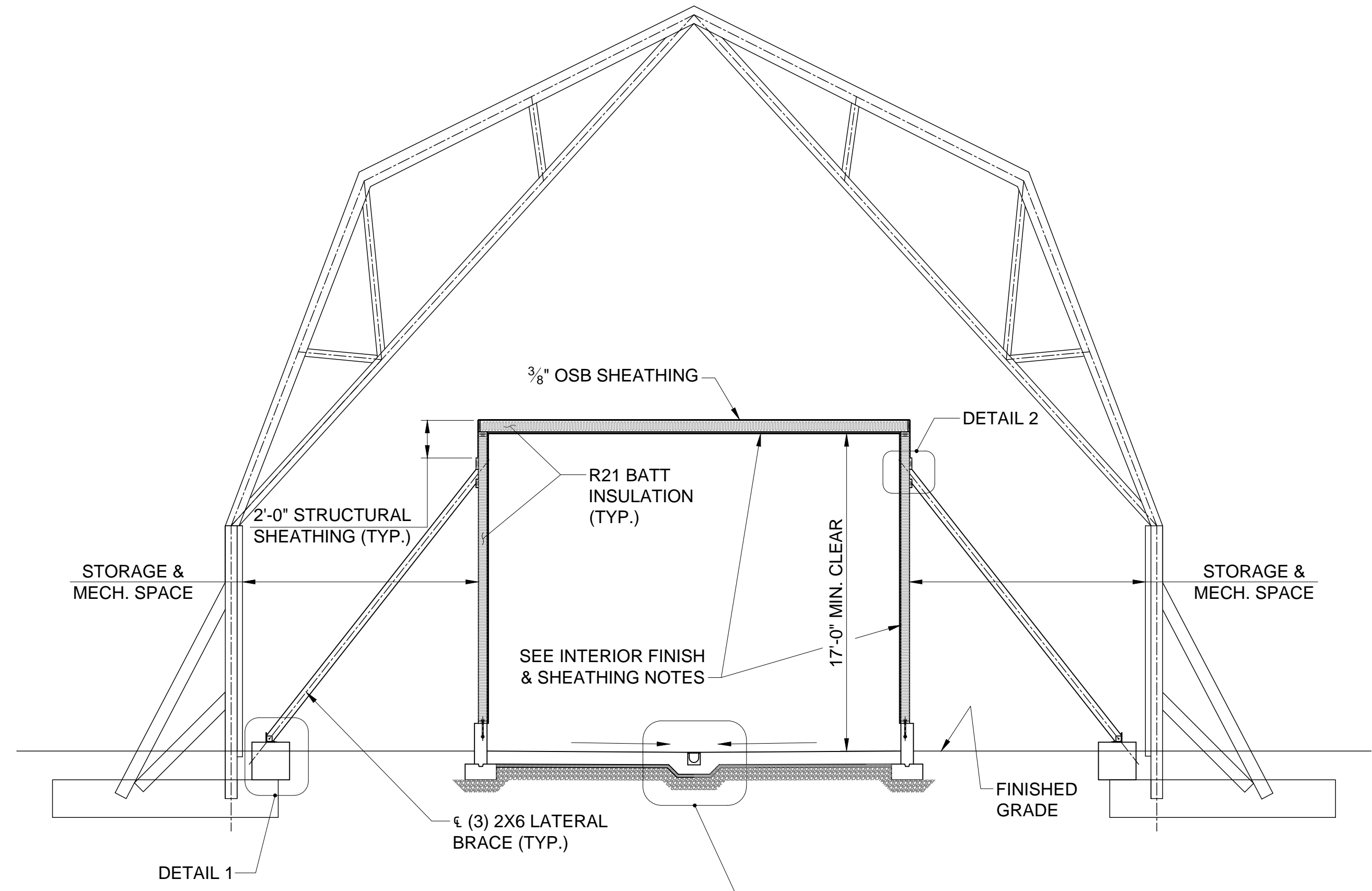
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**FRAMING PLAN**  
SCALE: 3/16" = 1'-0"

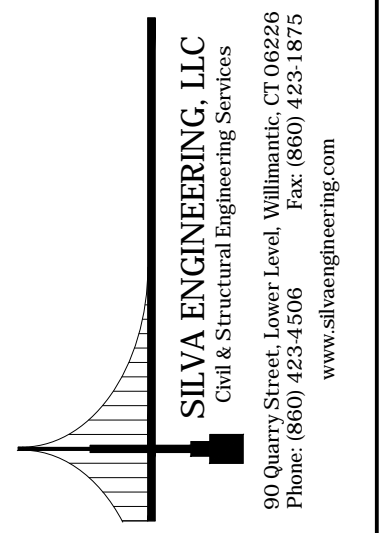
EXIT ACCESS TRAVEL DISTANCE:  
IBC TABLE 1015.1 OCCUPANCY S-1 WITHOUT  
SPRINKLER SYSTEM. MAXIMUM ALLOWABLE EXIT  
TRAVEL DISTANCE 200 FEET.



**TYPICAL SECTION**  
SCALE: 3/16" = 1'-0"

- INTERIOR FINISH & SHEATHING NOTES:
1. INSTALL 3/8" ADVANTECH ZIP SYSTEM WALL SHEATHING OVER INTERIOR FACE OF WALL STUDS AND CEILING JOISTS. APPLY ADVANTECH TAPE TO ALL INTERIOR SHEATHING JOINTS.
  2. APPLY NUFORM RELINE PANEL SYSTEM TO INTERIOR FACE OF CEILINGS AND WALLS IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS.
  3. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

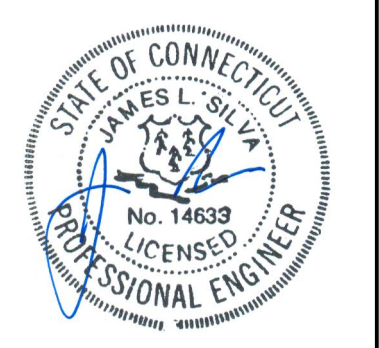
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**FRAMING PLAN & SECTION**  
**TRUCK WASH BAY**  
 PREPARED FOR  
**SIMSBURY DEPARTMENT OF PUBLIC WORKS**  
 66 TOWN FOREST RD, SIMSBURY, CT

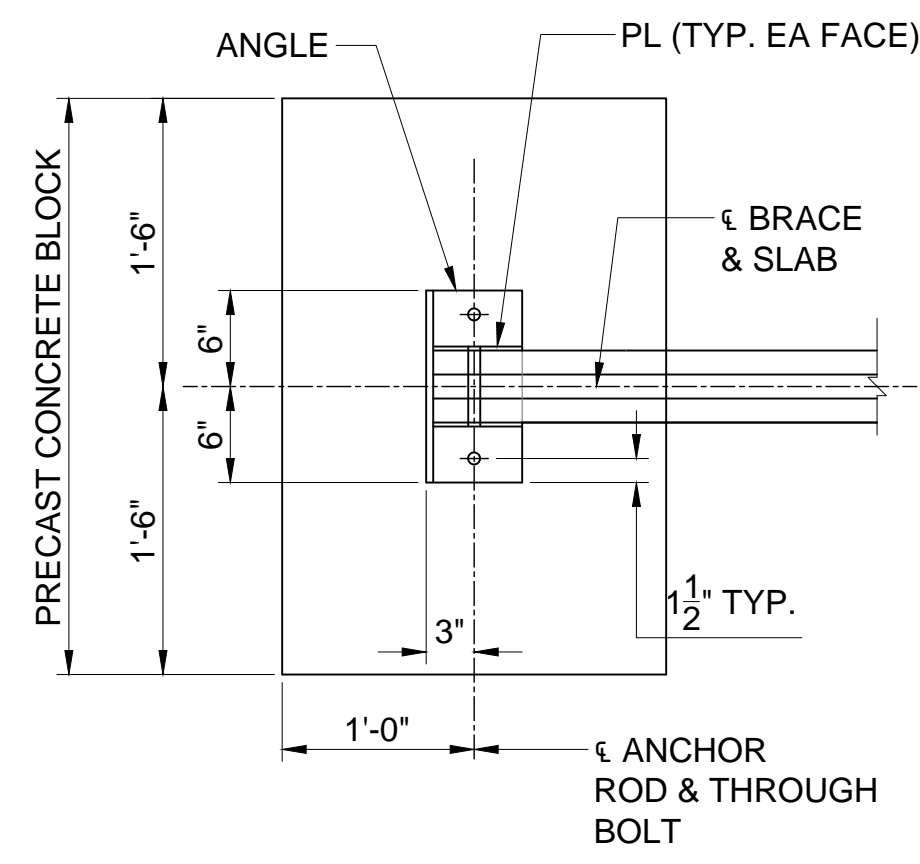
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REVISIONS:

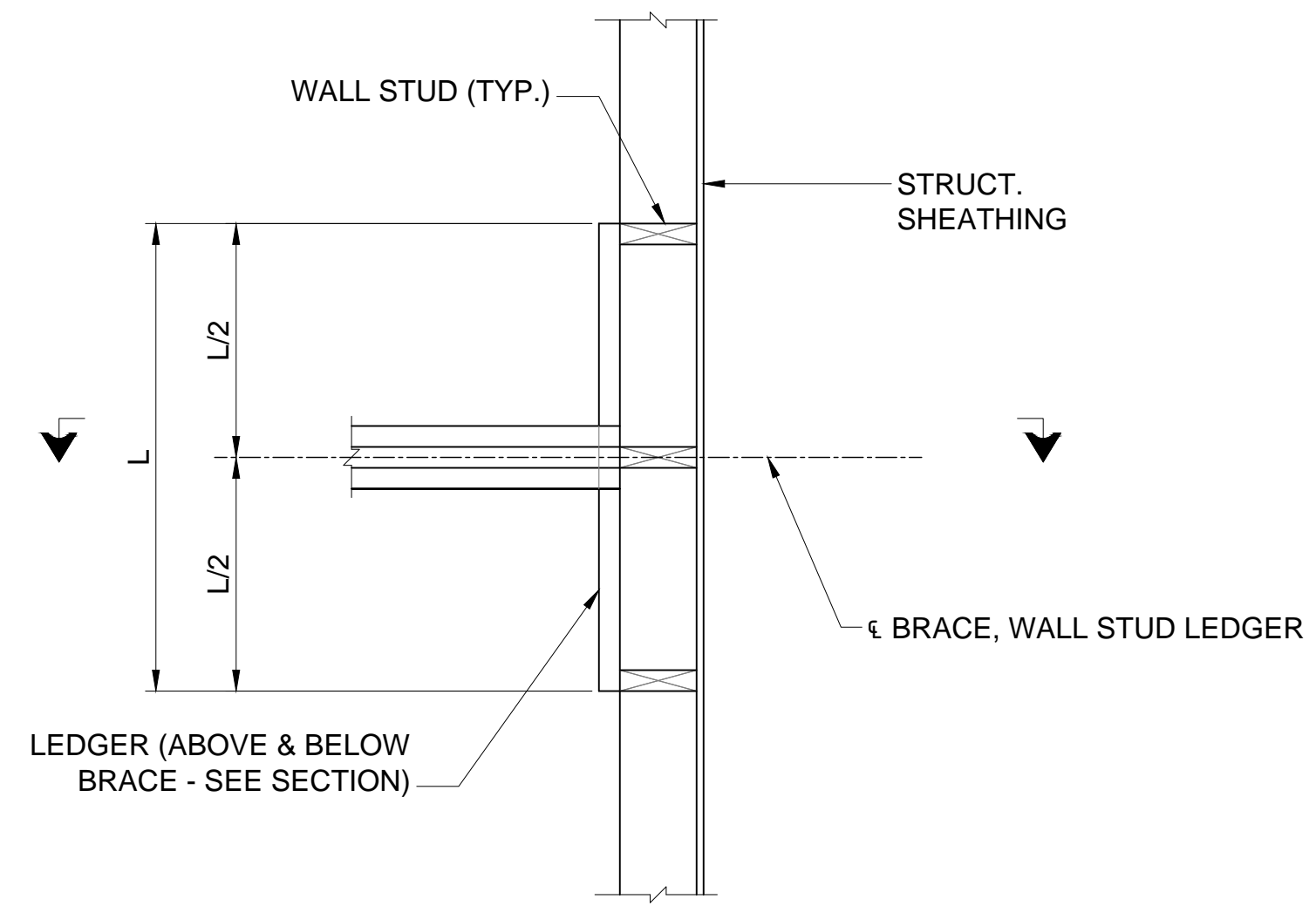


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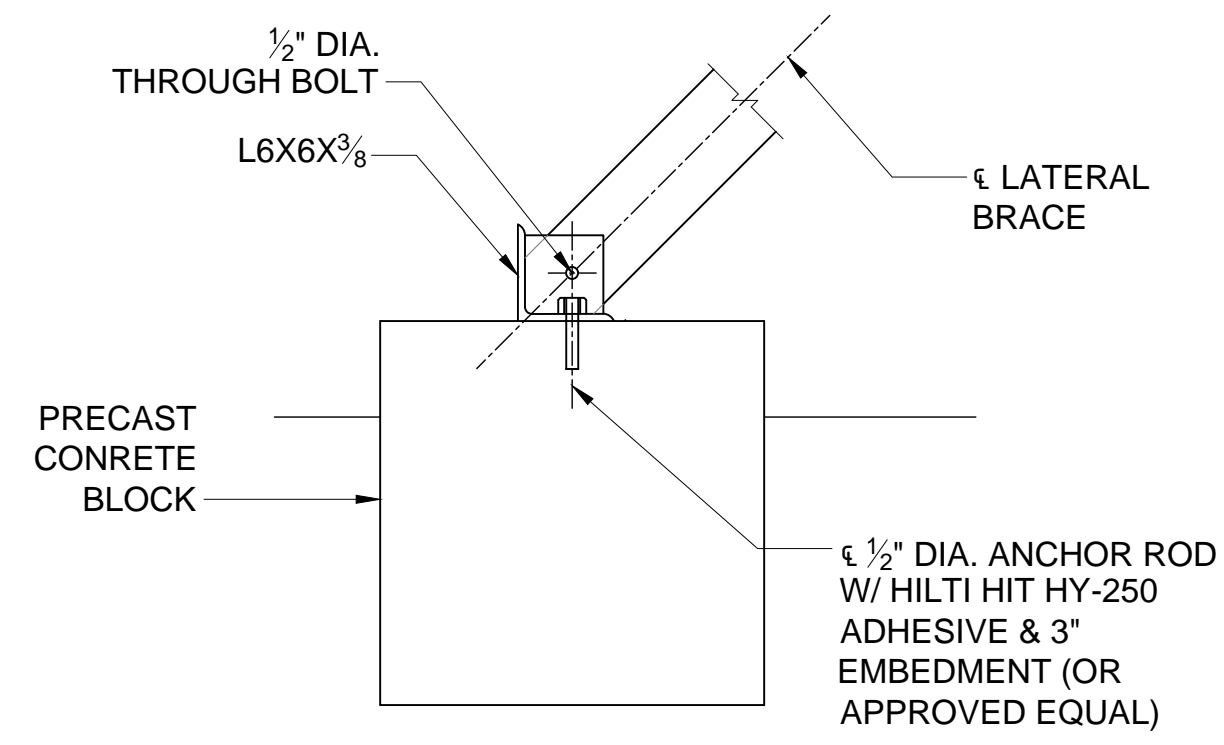
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JOB NO: 15-137	SHEET NO: S-3



PLAN

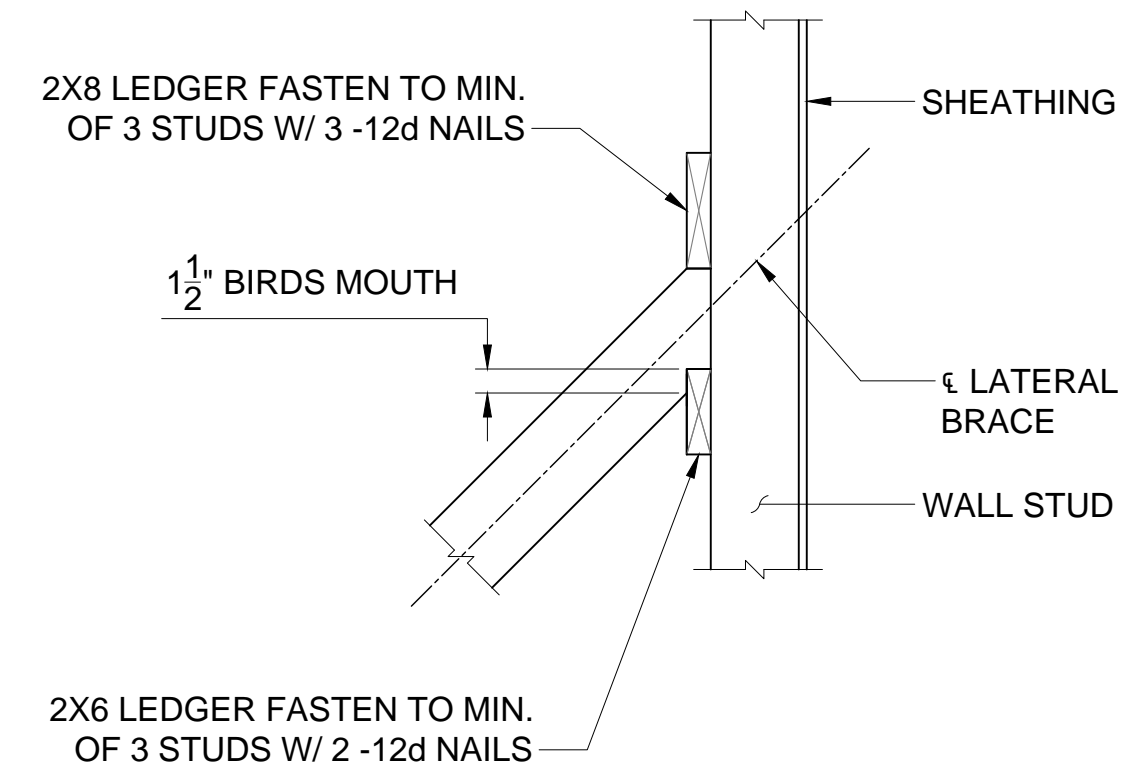


PLAN



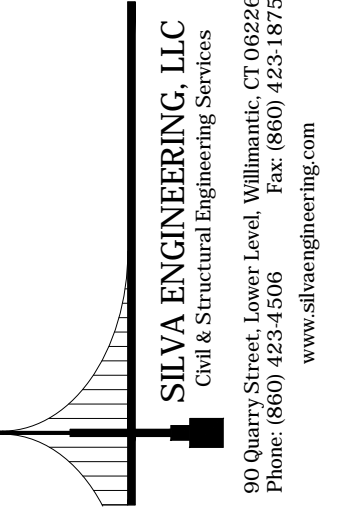
SECTION

DETAIL 1  
SCALE: 3/16" = 1'-0"



SECTION

DETAIL 2  
SCALE: 3/16" = 1'-0"



BRACING DETAILS  
TRUCK WASH BAY  
PREPARED FOR  
SIMSBURY DEPARTMENT OF PUBLIC WORKS  
66 TOWN FOREST RD., SIMSBURY, CT

TITLE:

NAME:

REVISIONS:



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JOB NO:	SHEET NO:
15-137	S-4