

GENERAL NOTES:

- A. GENERAL**
- See specifications for further information. In case of conflict between specifications & drawings, contact architect for resolution.
  - Contractor is responsible for coordination & distribution of all changes in contract documents to all subcontractors.
  - Contractor shall verify all field conditions, elevations, & dimensions prior to construction. Do not scale from plans.
  - Means & methods of construction, including temporary bracing, shoring, & jobsite safety, are the responsibility of the contractor.
  - Structural frame shall be braced until erection is complete & permanent connections & bracing are installed.
  - Provide silt fence or other erosion & sediment control measures as required.
  - If demolition is included in project, sawcut all edges of existing slab and asphalt to remain adjacent to new construction.
- B. FOUNDATION**
- Footing excavations shall be reviewed by a geotechnical engineer or construction testing agency approved by the architect or engineer.
  - Footing depths shown are based on geotechnical investigation or presumptive soil properties. Soft or unsuitable soils shall be removed & replaced with suitable fill as specified.
  - Under slabs & footings, remove all topsoil, trash, & organic material, & replace with select fill compacted to 95% maximum density as measured by the Standard Proctor Method (ASTM 698) in 12 inch maximum lifts. The top 12" shall be compacted to 98% maximum density.
  - Contractor is responsible for shoring while excavating near existing structures.
  - Remove existing construction, including foundations, as indicated on architectural plans and replace w/ compacted fill for new construction.

- C. CONCRETE**
- Compressive strength of concrete shall be 3000 psi for footings & 4000 psi for walls and slabs, unless otherwise noted.
  - Coordinate floor slopes and depressions with arch and plumbing plans. Maintain specified slab thickness below depressed or sloped areas.
  - If not specified on plans, provide sawed slab control joints in slabs on grade spaced at not more than 48 times the slab thickness.
  - Reinforcing steel shall meet ASTM A 615, Grade 60.
  - Welded wire reinforcement shall conform to ASTM A 185 & A 82.
  - Grout under all columns & beam bearing plates with non-shrink, non-metallic grout which meets ASTM C 1107.
  - Clear distance from face of concrete to main reinforcing:
    - Suspended slabs and joists: 1"
    - Grade beams, pedestals, columns, walls: 2"
    - Footings & walls cast against earth: 3"
  - Provide (2) #4 x 48" diagonal corner bars at center of slab at all corners of floor slab openings.
  - Lap all reinforcement splices 48 bar diameters, UON.
  - Detailing, fabrication, & installation of reinforcing steel shall conform to ACI "Manual of Standard Practice for Detailing Reinforced Concrete Structures" (ACI 315).
  - Workmanship, tolerances, & concrete placement shall conform to "Standard Specifications for Structural Concrete" (ACI 301).
  - Chamfer exposed edges of concrete 3/4", UON.
  - Anchor bolts shall conform to ASTM F 1554, Grade 36.
  - Provide smooth troweled finish on floor slab. Coordinate slab curing & sealing compounds with flooring materials.

- D. STRUCTURAL STEEL**
- Structural steel shall conform to ASTM A 572 except: round pipe shall be A 53, Grade B; square and rectangular tube shall be A 500, Grade B.
  - Steel construction shall conform to "Manual of Steel Construction, Allowable Stress Design," Ninth Edition.
  - Connection bolts shall be 3/4" ASTM A 325, UON. If connection loads not specified, design for loads shown in AISC beam span tables. Assume bearing type connections with threads included in the shear plane.
  - Cutting of structural members shall have all re-entrant corners shaped & notch free to a minimum 1/2" radius.
  - Unless otherwise designed by fabricator, weld material shall be E70XX.
  - Provide cap plate top of all tube & pipe columns, UON.
  - All field welds shall be cleaned & painted with a rust inhibiting paint compatible with the shop coat.

# NEW TRAFFIC SERVICES SHED

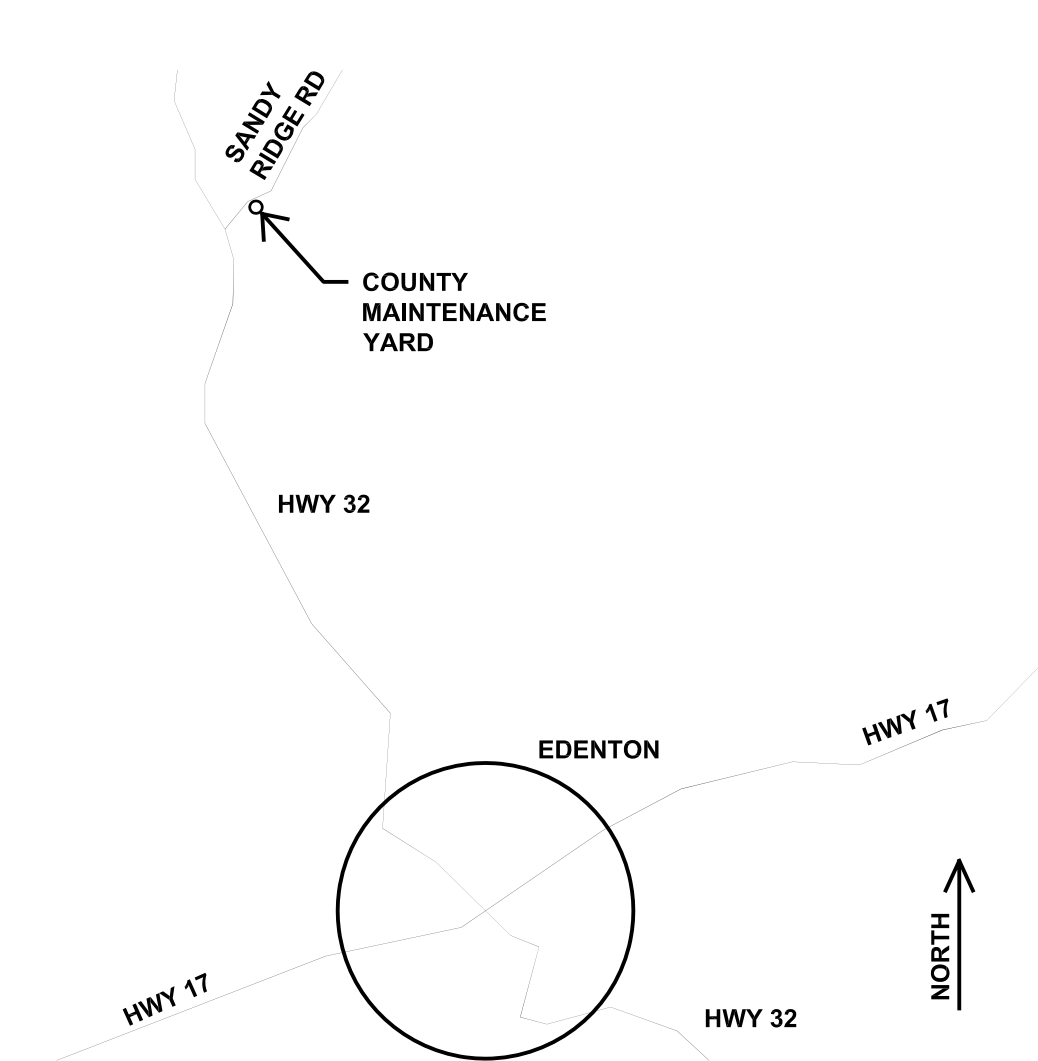
## SITE LAYOUT



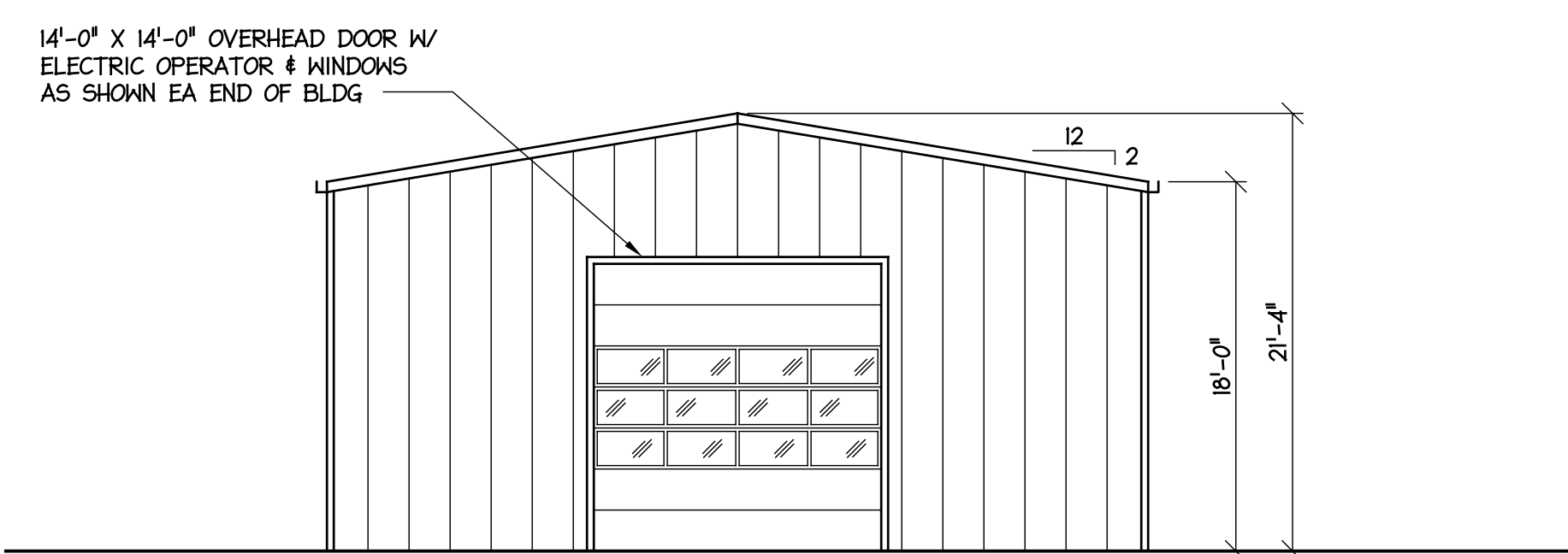
## HIGHWAY DIVISION 1, NCDOT CHOWAN COUNTY, NC SCO ID# 14-11404-01A

### INDEX OF DRAWINGS

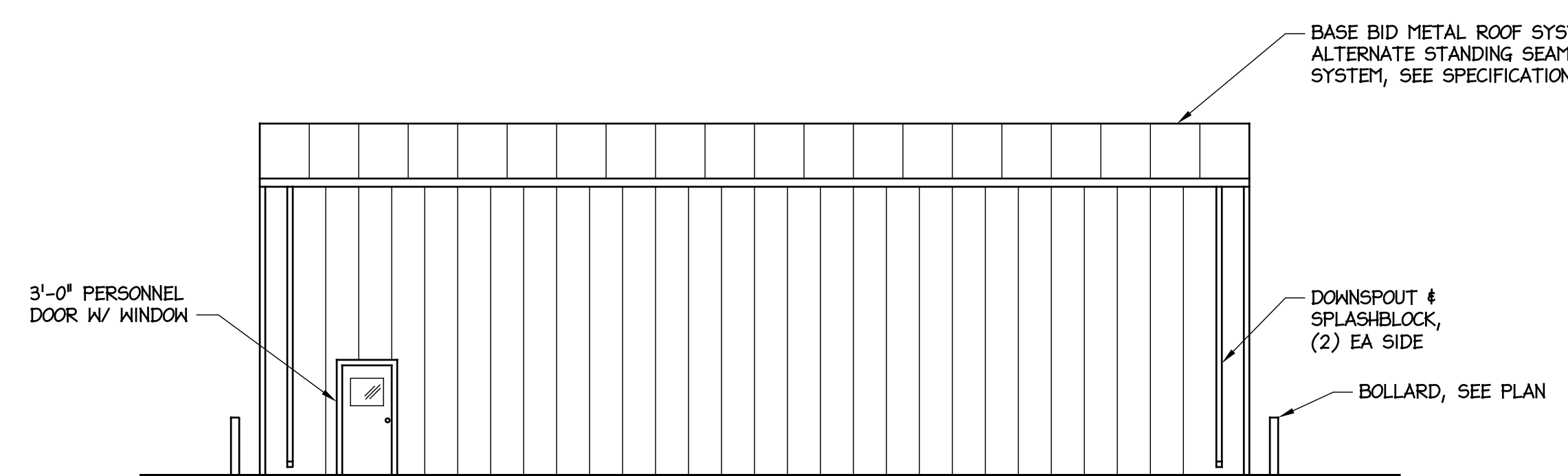
T1 TITLE SHEET & CODE SUMMARY  
S1 FOUNDATION & FRAMING PLANS



NO WATERCOURSE OR 100 YEAR FLOODPLAIN AS MAPPED BY FEMA OR AS DEFINED BY ANY FEDERAL, STATE, OR LOCAL AUTHORITY IS LOCATED ON THIS PROPERTY.



EAST ELEVATION SHOWN  
WEST ELEVATION SIMILAR



SOUTH ELEVATION SHOWN  
NORTH ELEVATION SIMILAR  
EXCEPT NO PERSONNEL DOOR

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

### 2012 APPENDIX B BUILDING CODE SUMMARY

Name of Project: TRAFFIC SERVICES SHED  
Address: 134 SANDY RIDGE ROAD, TYNER, NC 27880  
Proposed Use: UTILITY  
Owner or Authorized Agent: HIGHWAY DIVISION 1 Phone # 252-452-1871  
Owned By: STATE OF NORTH CAROLINA  
Code Enforcement Jurisdiction: City County

LEAD DESIGN PROFESSIONAL:

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	FACILITIES DESIGN, NCDOT				

2012 EDITION OF NC CODE FOR:  New Construction  Addition  Upfit  
 Reconstruction  Alteration  Repair  
CONSTRUCTED ORIGINAL USE RENOVATED CURRENT USE

**BUILDING DATA**

Construction Type:  I-A  I-B  II-A  II-B  III-A  III-B  IV  V-A  V-B  
Mixed construction:  No  Yes  
Sprinklers:  No  Partial  Yes  NFPA 13  NFPA 13R  NFPA 13D  
Standpipes:  No  Yes Class  I  II  III  Wet  Dry  
Fire District:  No  Yes Flood Hazard Area:  No  Yes  
Building Height: Feet 21'-3" Number of Stories: 1  
Mezzanine:  No  Yes  
Gross Building Area:  
FLOOR EXISTING (SQ FT) NEW (SQ FT) SUB-TOTAL  
1st Floor 2400 2400 2400  
TOTAL 2400 2400 2400

**ALLOWABLE AREA**

Primary Occupancy:  Assembly  A-1  A-2  A-3  A-4  A-5  
 Business  Educational  Factory  F-1 Moderate  F-2 Low  
Hazardous  H-1 Detonate  H-2 Deflagrate  H-3 Combust  H-4 Health  H-5 HPM  
Institutional  I-1  I-2  I-3  I-4  
I-3 Condition  1  2  3  4  5  
 Mercantile  Residential  R-1  R-2  R-3  R-4  
Storage  S-1 Moderate  S-2 Low  High-stilled  
 Utility and Miscellaneous  Parking Garage  Open  Enclosed  Repair Garage  
Secondary Occupancy: N/A  
Mixed Occupancy:  No  Yes Separation: \_\_\_\_\_ Hr. Exception: \_\_\_\_\_

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 503 AREA	(C) AREA FOR OPEN SPACE INCREASE	(D) AREA FOR SPRINKLER INCREASE	(E) ALLOWABLE AREA OR UNLIMITED	(F) MAXIMUM BUILDING AREA
1	Utility & Misc.	2400	5500	NOT USED	NOT USED	5500	5500

**ALLOWABLE HEIGHT**

TYPE	V-B	ALLOWABLE (TABLE 503)	INCREASE FOR SPRINKLERS	SHOWN ON PLANS	CODE REFERENCE
Building height in feet	Feet	40	Feet=40+20'= N/A	Feet 21'-3"	503
Building height in stories	Stories	1	Stories=1+ N/A	Stories 1	503

**FIRE PROTECTION REQUIREMENTS**

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING		DETAIL & SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR WELDED PENETRATION	DESIGN # FOR RATED JOINTS
		REQ'D	PROVIDED W/ REDUCT				
Structural frame, including columns, girders, & trusses	>10	0	0				
Exterior walls	0	0	0				
Exterior walls and partitions	0	0	0				
Roof construction	>10	0	0				

**LIFE SAFETY SYSTEM REQUIREMENTS**

Emergency Lighting:	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
Exit Signs:	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
Fire Alarm:	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
Smoke Detection Systems:	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
Panic Hardware:	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes

**EXIT REQUIREMENTS** N/A

**STRUCTURAL DESIGN**

DESIGN LOADS:

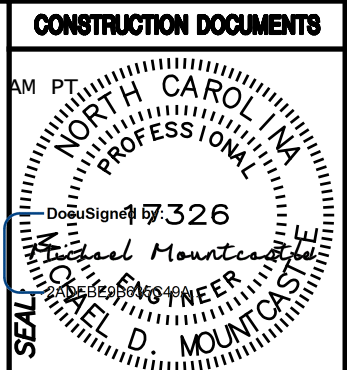
Importance Factors:	Wind (I <sub>w</sub> ) 1.0	Live Loads:	Roof 20 psf
Snow (I <sub>s</sub> ) 1.0		Mezzanine	N/A psf
Seismic (I <sub>e</sub> ) 1.0		Floor	250 psf
Snow Load:	10 psf		
Wind Load:	Basic Wind Speed 110 mph (ASCE-7-05)		
	Exposure Category B		
	Wind Base Shears (for MWFRS) V <sub>x</sub> = _____ V <sub>y</sub> = _____		

**SEISMIC DESIGN:**

Compliance with Section 1616.4 only?  YES  NO  
SEISMIC DESIGN CATEGORY  A  B  C  D  
Provide the following Seismic Design Parameters:  
Occupancy Category:  I  II  III  IV S<sub>s</sub> 5.3 %g  
Spectral Response Acceleration S<sub>s</sub> 12.8 %g  
Site Classification:  1  2  3  4  5  
Basic structural system (check one)  Field Test  Presumptive  
Bearing Wall  Dual w/Special Moment Frame  
Building Frame  Dual w/Intermediate R/C or Special Steel  
X-Moment Frame  Inverted Pendulum  
Seismic base shear V<sub>s</sub> = \_\_\_\_\_ V<sub>w</sub> = \_\_\_\_\_  
Analysis Procedure  Simplified  Equivalent Lateral Force  Modal  
Architectural, Mechanical, Components anchored?  N/A

LATERAL DESIGN CONTROL: Earthquake \_\_\_\_\_ Wind X \_\_\_\_\_ Special Inspection Required?  Yes  No  
SOIL BEARING CAPACITIES:  Field Test  Presumptive 1500 psi

PLUMBING, ENERGY, & MECHANICAL SUMMARIES - NOT APPLICABLE



DESIGNED BY:  
**FACILITIES DESIGN ARCHITECTS & ENGINEERS**  
FACILITIES MANAGEMENT DIVISION, NCDOT  
1 SOUTH WILMINGTON STREET  
Raleigh, NC 27601  
PHONE 919.707.4547 FAX 919.707.6098



CONSULTANT:

DRAWING TITLE / DESCRIPTION:

TITLE SHEET  
CODE SUMMARY  
SITE LAYOUT  
GENERAL NOTES

**TRAFFIC SERVICES SHED**  
HIGHWAY DIVISION 1, NCDOT  
CHOWAN COUNTY, NORTH CAROLINA

STATE CONSTRUCTION ID# 14-11404-01A

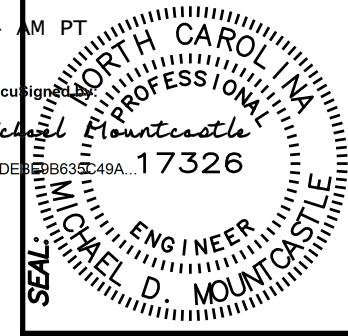
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21 - 03 - 00

REVISIONS

NO.	DATE

DATE ISSUED: 06-03-15  
DRAWN BY: TDM  
CHECKED BY: TDM

SHEET NO. **T1**



DESIGNED BY:  
**FACILITIES DESIGN**  
 ARCHITECTS & ENGINEERS  
 FACILITIES MANAGEMENT DIVISION, INC.  
 1 SOUTH WILMINGTON STREET  
 WILMINGTON, NC 28403  
 PHONE 910.770.7400 FAX 910.770.9898



CONSULTANT:

DRAWING TITLE / DESCRIPTION:  
 FOUNDATION PLAN  
 FRAMING PLAN  
 DETAILS

PROJECT TITLE:  
**TRAFFIC SERVICES SHED**  
 HIGHWAY DIVISION 1, NCDOT  
 CHOWAN COUNTY, NORTH CAROLINA

STATE CONSTRUCTION  
 ID.# 14-11404-01A

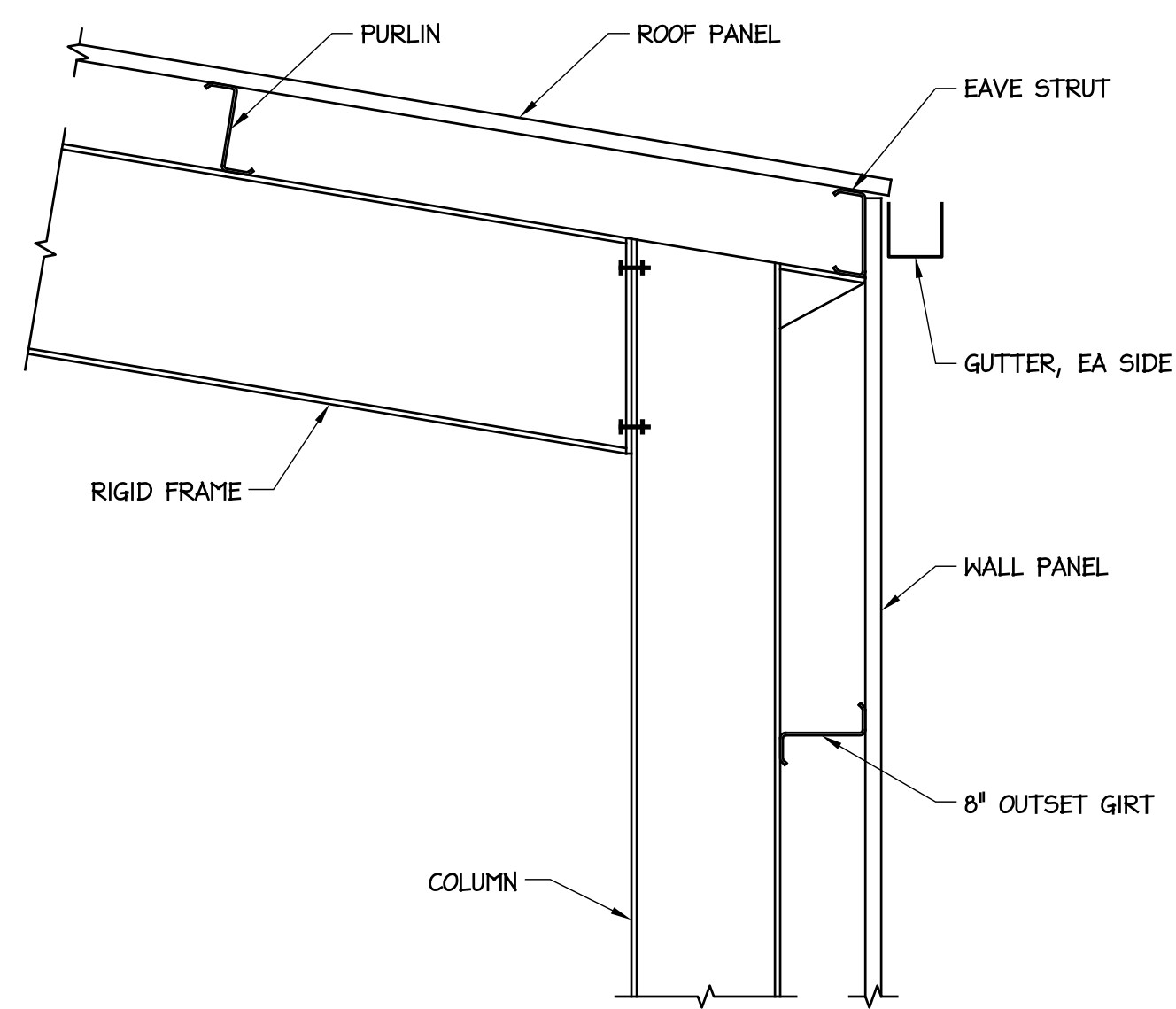
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REVISIONS  
 NO. DATE

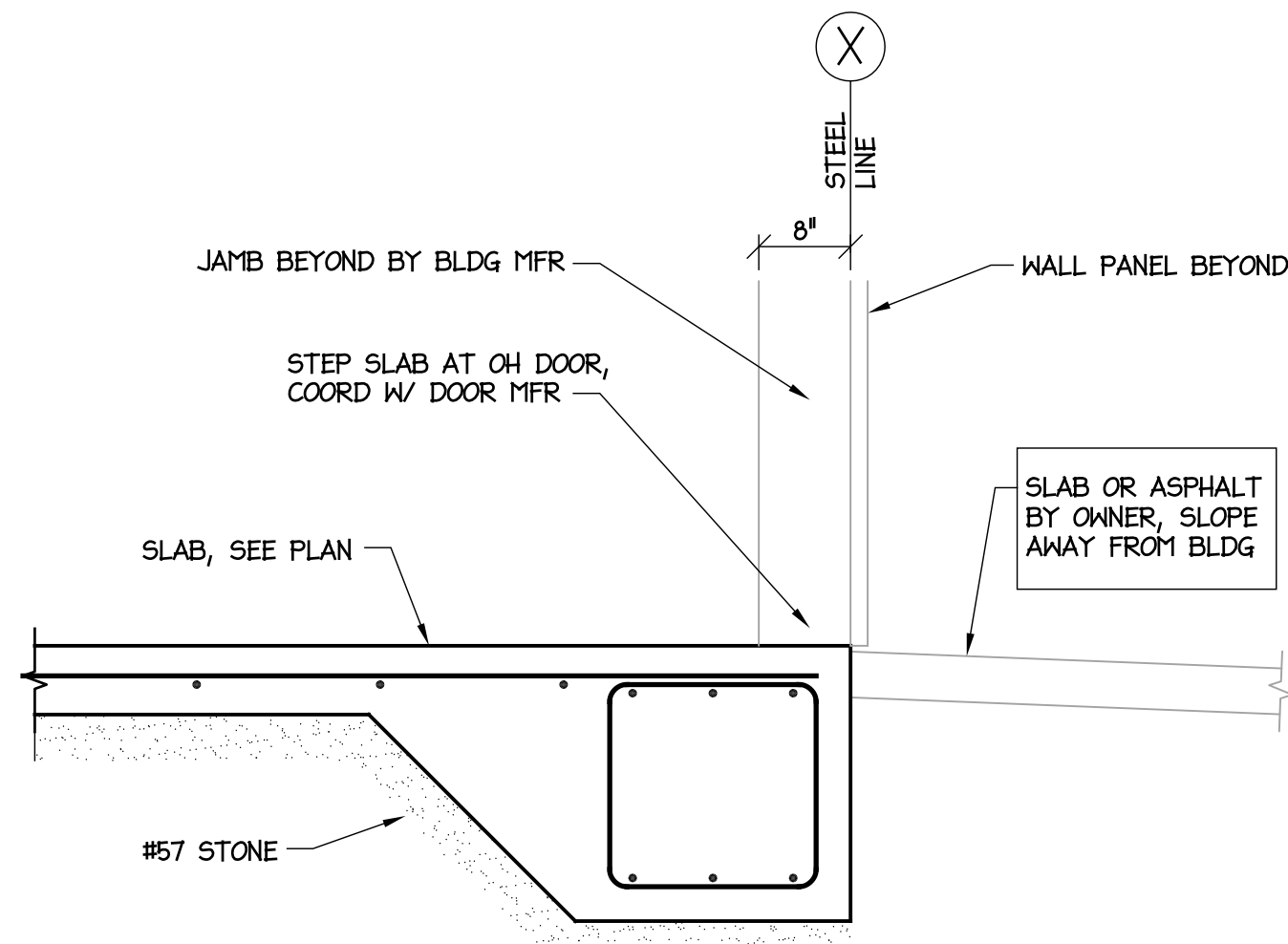
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 CHECKED BY: MDM

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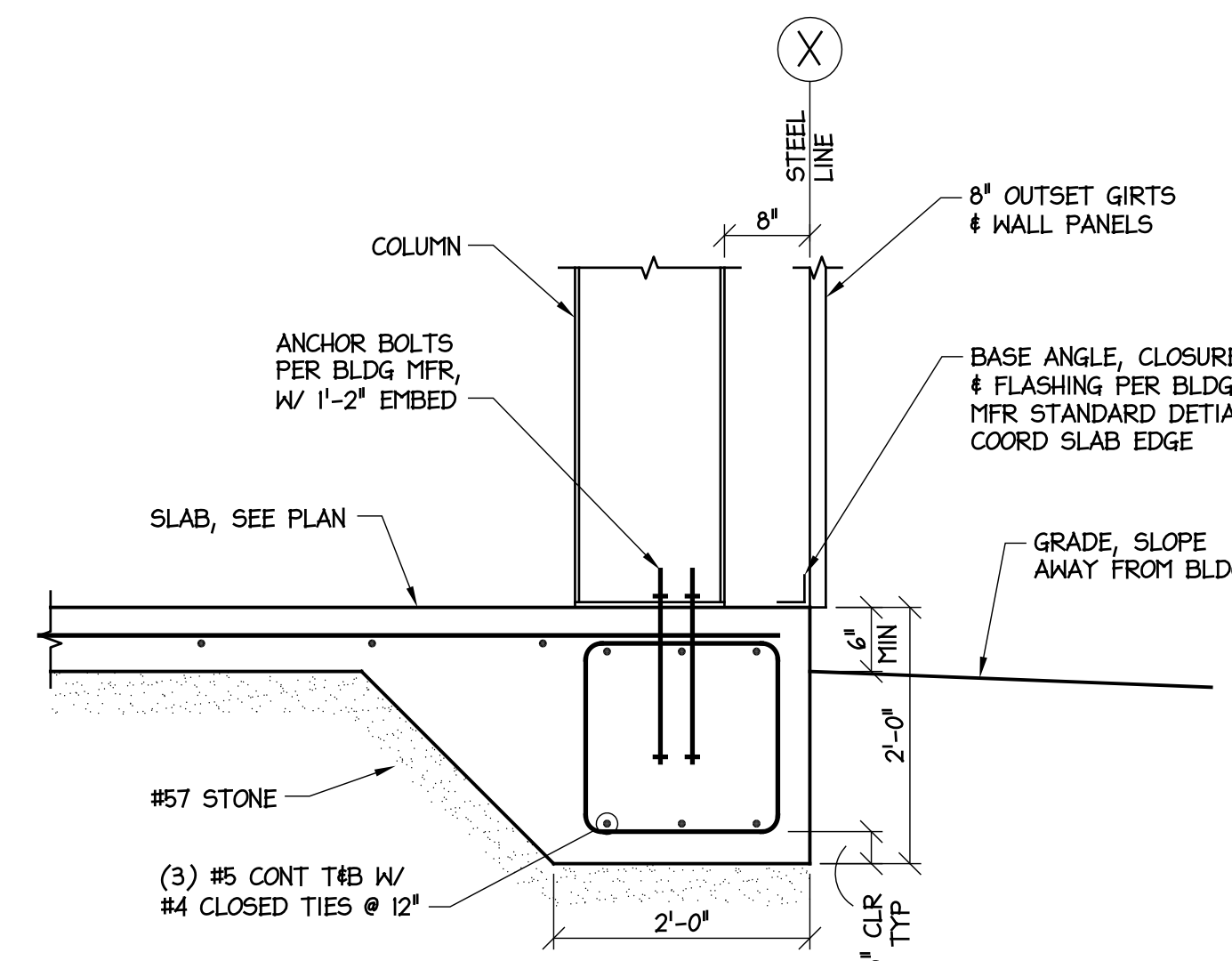
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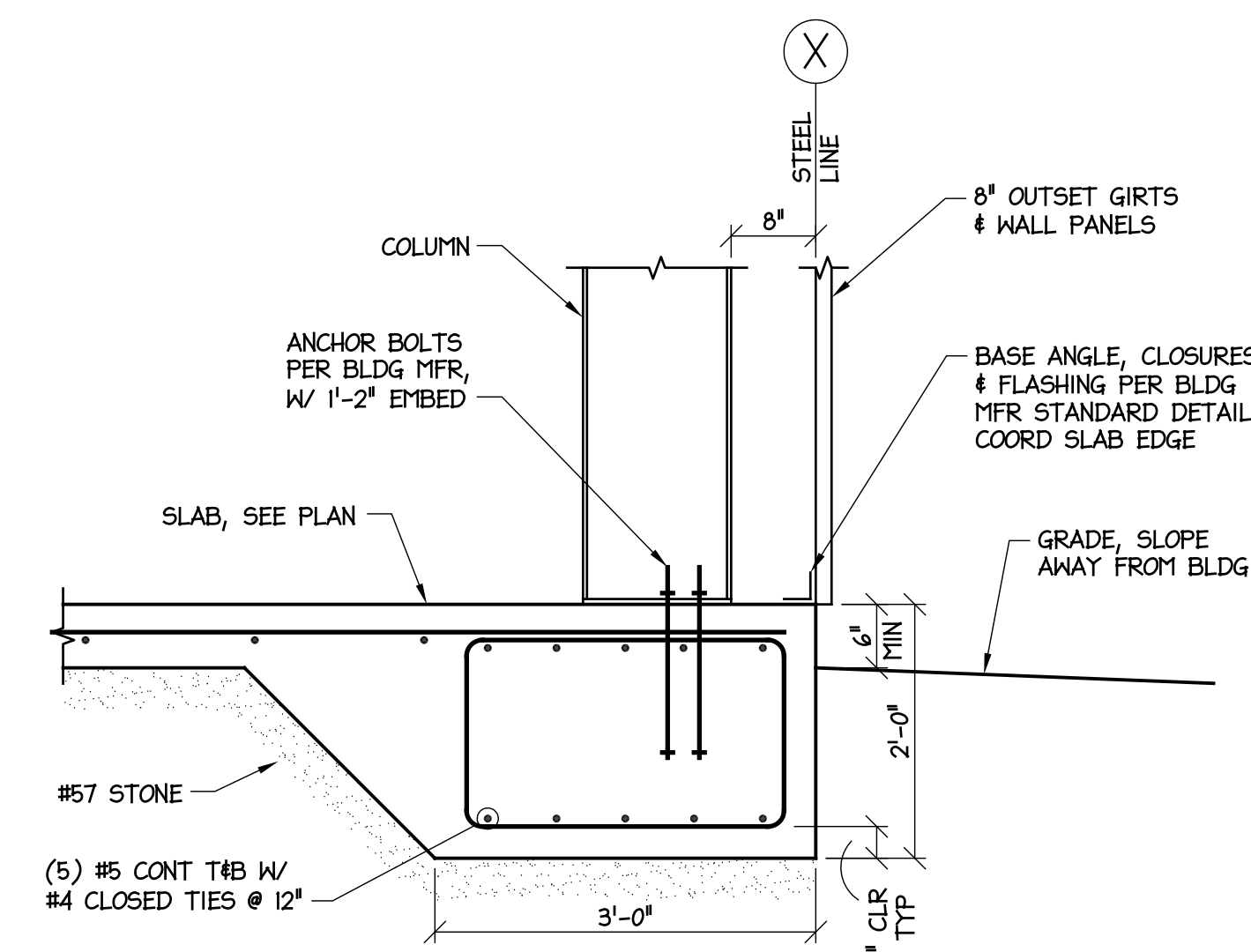
**6** WALL/ROOF SECTION  
 S1 SCALE: 3/4" = 1'-0"



**5** FOOTING AT OH DOORS  
 S1 SCALE: 3/4" = 1'-0"



**3** EXTERIOR WALL FTG  
 S1 SCALE: 3/4" = 1'-0"



**2** EXTERIOR WALL FTG  
 S1 SCALE: 3/4" = 1'-0"

**NOTES:**

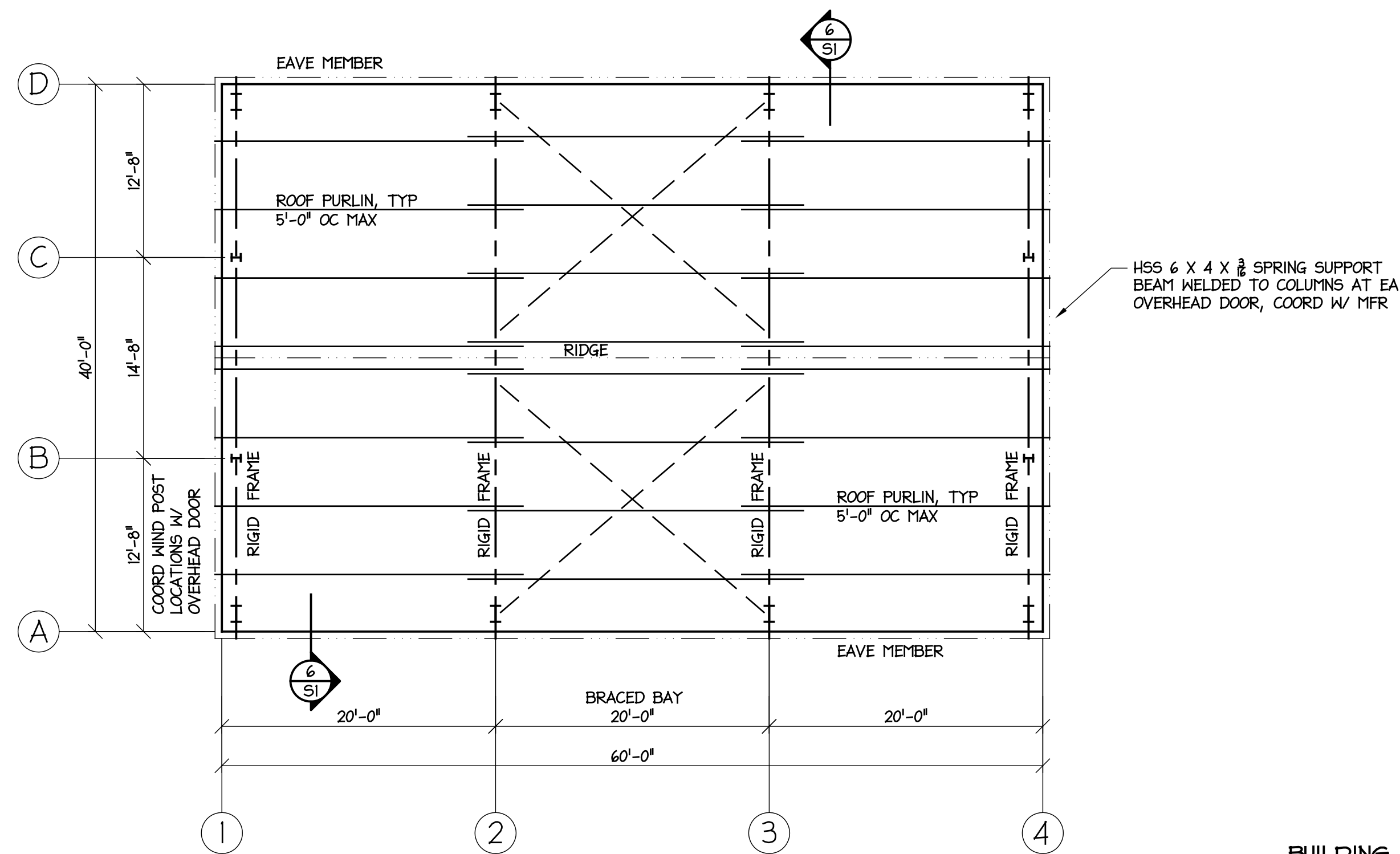
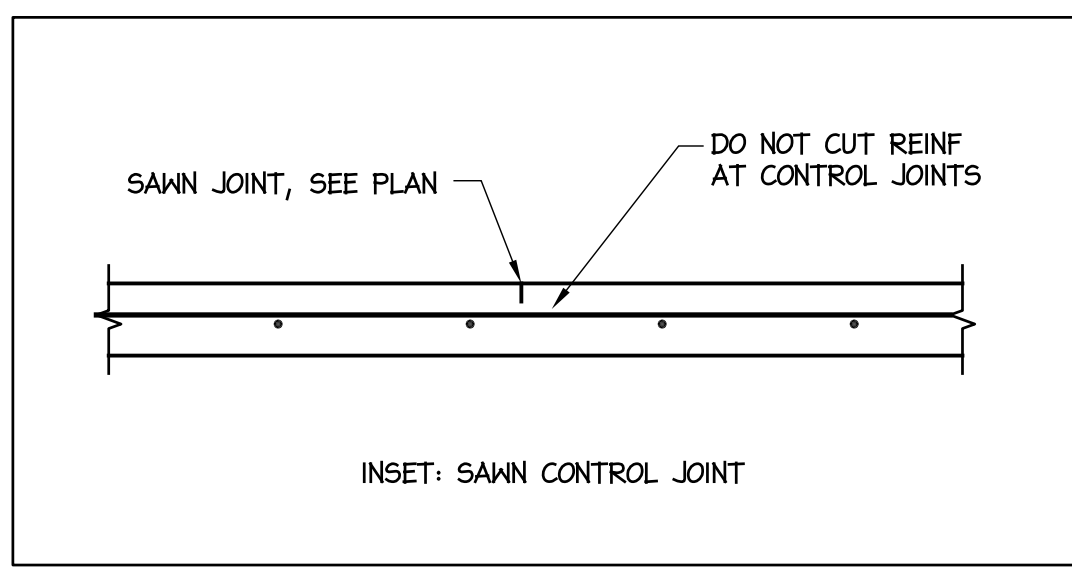
- ALL FRAMING ABOVE SLAB, INCLUDING DOOR FRAMING, SHALL BE PROVIDED BY THE METAL BUILDING MANUFACTURER.
- DESIGN METAL BLDG FOR 5 PSF COLLATERAL LOAD. THERE ARE NO MECHANICAL & PLUMBING SYSTEMS ON THIS PROJECT.
- SEE SHEET T1 FOR DESIGN CRITERIA FOR PRE-ENGINEERED COMPONENTS & SYSTEMS.
- END WALLS ARE NOT EXPANDABLE.
- DIAGONAL BRACING IN WALL IS ACCEPTABLE AT BRACED BAY.
- EAVE HEIGHT = +18'-0" AFF.

**ELECTRICAL NOTES:**

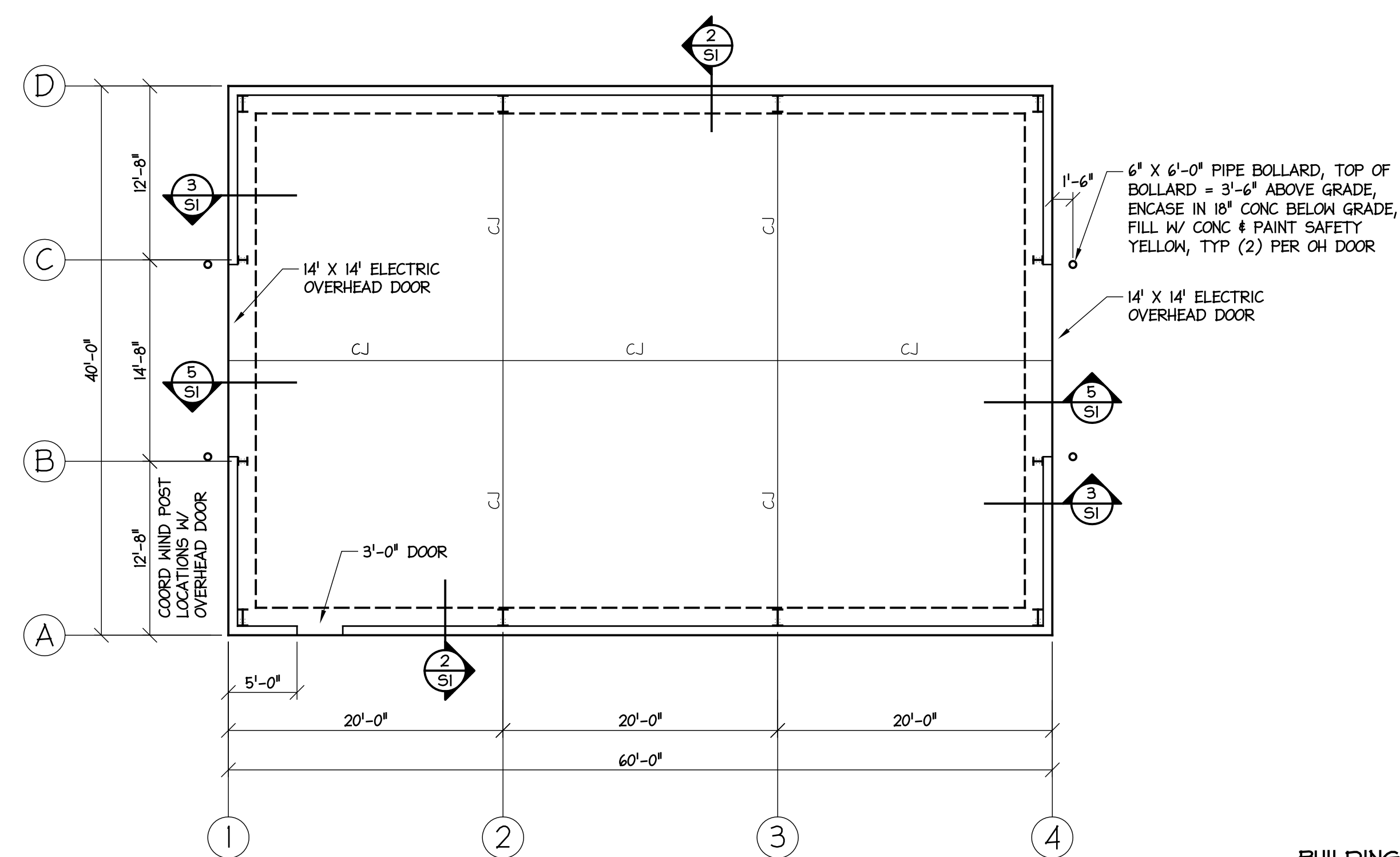
- ELECTRICAL MATERIALS & WORK WILL BE PROVIDED BY OWNER, UNLESS OTHERWISE NOTED ON PLANS.
- GENERAL CONTRACTOR SHALL PROVIDE & INSTALL OVERHEAD DOORS WITH ELECTRIC OPERATORS COMPLETE & READY FOR ELECTRICAL SERVICE BY OWNER.
- ELECTRICAL WORK SHALL BE REVIEWED BY THE STATE ELECTRICAL INSPECTOR. CALL MIKE WARD, 919-605-9001, TO SCHEDULE INSPECTIONS.
- GC TO COORDINATE WORK SCHEDULE W/ OWNER TO ALLOW INSTALLATION OF OWNER SUPPLIED WORK, IF REQUIRED.

**NOTES:**

- COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 4000 PSI.
- FOOTING SIZES SHOWN ARE BASED ON ESTIMATED COLUMN REACTIONS. SIZES ARE TO BE VERIFIED BY ENGINEER AFTER RECEIPT OF REACTION REPORT BY BLDG MFR.
- ELEVATIONS SHOWN ARE RELATIVE TO THE FIN FLOOR ELEVATION = +0'-0". COORD ACTUAL FINISHED FLOOR ELEVATION W/ OWNER'S REPRESENTATIVE ON SITE. SLAB SHALL BE MIN 6" ABOVE EXTERIOR GRADE. SLOPE GRADE AWAY FROM BUILDING.
- ASSUME APPROX 12" CUT & FILL AT SLAB OR UP TO 100 CY REMOVAL & REPLACEMENT FOR BASE BID. PROVIDE UNIT PRICE FOR ADDITIONAL CY OF SOIL REPLACEMENT, SEE SUPPLEMENTARY GENERAL CONDITIONS.
- FLOOR SLAB SHALL BE 6" CONC W/ #4 @ 16" EN ON 4" MIN #57 STONE BASE. CONTINUE SLAB REINF THRU CONTROL JOINT LOCATIONS.
- CJ DENOTES SLAB CONTROL JOINTS, SAW CONTROL JOINTS 1-1/2" DEEP, SEE INSET.



**4** ROOF FRAMING PLAN  
 S1 SCALE: 1/8" = 1'-0"



**1** FOUNDATION PLAN  
 S1 SCALE: 1/8" = 1'-0"

