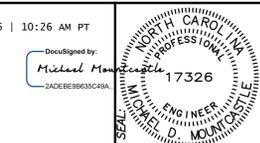


THREE-BAY SALT STORAGE SHED

HIGHWAY DIVISION 13, NCDOT
MITCHELL COUNTY, NC
SCO ID# 16-13023-01A



DESIGNED BY:
FACILITIES DESIGN ARCHITECTS & ENGINEERS
FACILITIES MANAGEMENT DIVISION, NCDOT
1 SOUTH WILMINGTON STREET
RALEIGH, NORTH CAROLINA 27601
PHONE 919/707-4640 FAX 919/776-0089



CONSULTANT:

DRAWING TITLE / DESCRIPTION:
COVER SHEET
CODE SUMMARY
ELEVATIONS
BID DOCUMENTS

PROJECT TITLE:
THREE-BAY SALT STORAGE BUILDING
HIGHWAY DIVISION 13, NCDOT
MITCHELL COUNTY, NORTH CAROLINA

STATE CONSTRUCTION ID# 16-13023-01A

ASSET NUMBER:
CO.# SITE# BLDG.#
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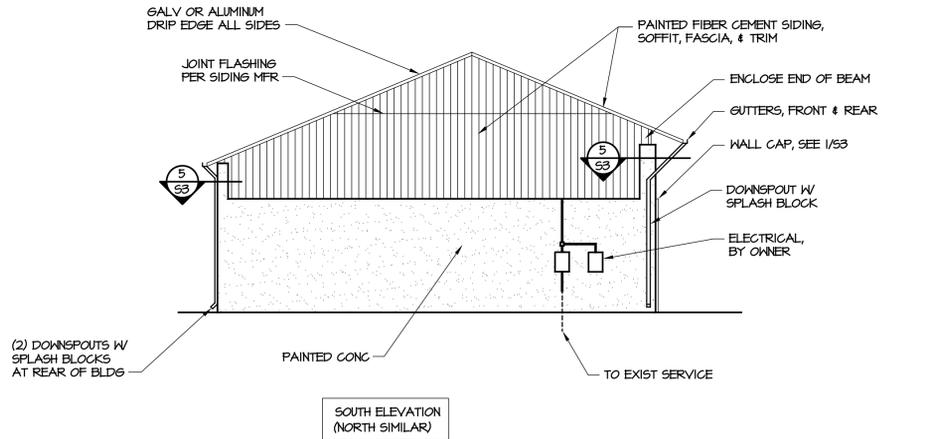
REVISIONS
NO. DATE

DATE ISSUED: 04-26-16
DRAWN BY: HDM
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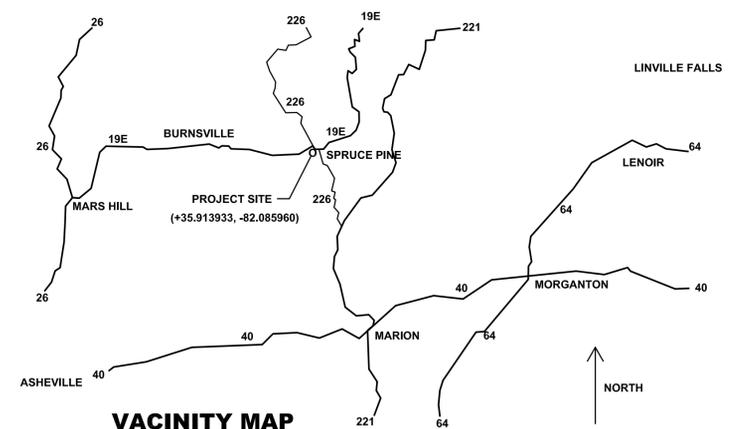
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T1
1 OF 2

INDEX OF DRAWINGS

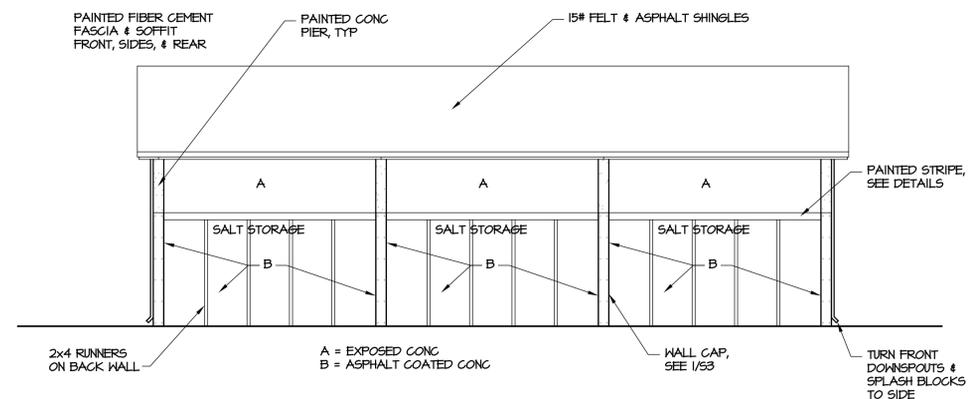
- T1 COVER SHEET / CODE SUMMARY / ELEVATIONS
- T2 SITE LAYOUT
- S1 FOUNDATION & FRAMING PLANS
- S2 WALL SECTIONS / DETAILS
- S3 DETAILS & GENERAL NOTES



SOUTH ELEVATION (NORTH SIMILAR)



VACINITY MAP



EAST ELEVATION (WEST SIMILAR)

2012 APPENDIX B BUILDING CODE SUMMARY

Name of Project: MITCHELL COUNTY THREE-BAY SALT SHED
 Address: 916 GREENWOOD ROAD, SPRUCE PINE, NC 28777
 Proposed Use: STORAGE
 Owner or Authorized Agent: HIGHWAY DIVISION 13 Phone # 828-765-2282
 Owned By: STATE OF NORTH CAROLINA
 Code Enforcement Jurisdiction: City County State

LEAD DESIGN PROFESSIONAL:
 DESIGNER: FIRM NAME LICENSE # TELEPHONE # E-MAIL
 Architectural: FACILITIES DESIGN, NCDOT
 SITE "Civil"
 Electrical
 Plumbing
 Mechanical
 Sprinkler-Standpipe
 Structural: NCDOT MIKE MOUNTCASTLE 17326 (919) 707-4547 mdmountcastle@ncdot.gov

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

BUILDING DATA

Construction Type: I-A II-A III-A IV V-A
 I-B II-B III-B V-B
 Mixed construction: No Yes Types: _____
 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: 25'-0" Number of Stories: 1
 Mezzanine: No Yes
 Gross Building Area:

| FLOOR | EXISTING (SQ FT) | NEW (SQ FT) | SUB-TOTAL |
|-----------|------------------|-------------|-----------|
| 1st Floor | 2624 | | 2624 |
| TOTAL | | 2624 | 2624 |

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-piled
 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 INCREASE | (D) AREA FOR INCREASE | (E) ALLOWABLE AREA OR UNLIMITED | (F) MAXIMUM BUILDING AREA |
|-----------|---------------------|----------------------------------|--------------------|-----------------------|-----------------------|---------------------------------|---------------------------|
| 1 | Utility & Misc. | 2624 | 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=H+20' = N/A | Feet 20'-1" | 503 |
| Building Height in Stories | Stories | 1 | Stories+1 = N/A | Stories 1 | 503 |

FIRE PROTECTION REQUIREMENTS

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

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting: No Yes
 Exit Signs: No Yes
 Fire Alarm: No Yes
 Smoke Detection Systems: No Yes
 Panic Hardware: No Yes

EXIT REQUIREMENTS N/A

STRUCTURAL DESIGN

DESIGN LOADS:
 Importance Factors: Wind (I_w) 1.0 Live Loads: Roof 20 psf
 Snow (I_s) 1.0 Mezzanine N/A psf
 Seismic (I_e) 1.0 Floor 800 psf
 Snow Load: 15 psf
 Wind Load: Basic Wind Speed 80 mph (ASCE-7-05)
 Exposure Category B
 Wind Base Shears (for MWFRS) V_x = _____ V_y = _____

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
 Spectral Response Acceleration S_s 36.0 %g S₁ 10.2 %g
 Site Classification D Field Test Presumptive
 Basic structural system (check one)
 Bearing Wall Dual w/Special Moment Frame
 Building Frame Dual w/Intermediate R/C or Special Steel
 Moment Frame Inverted Pendulum
 Seismic base shear V_s = _____ V_m = _____
 Analysis Procedure Simplified Equivalent Lateral Force Modal
 Architectural, Mechanical, Components anchored? N/A
 LATERAL DESIGN CONTROL: Earthquake _____ Wind Special Inspection Required?
 SOIL BEARING CAPACITIES: Field Test Presumptive 2000 Yes No

PLUMBING, ENERGY, ELECTRICAL, & MECHANICAL SUMMARIES - NOT APPLICABLE

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

DocuSigned by:
Michael Montague
2ADEBE9855CA9A 17326



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CONSULTANT:

DRAWING TITLE / DESCRIPTION:

THREE-BAY SALT STORAGE BUILDING
HIGHWAY DIVISION 13, NCDOT
MITCHELL COUNTY, NORTH CAROLINA

STATE CONSTRUCTION
ID# 16-13023-01A

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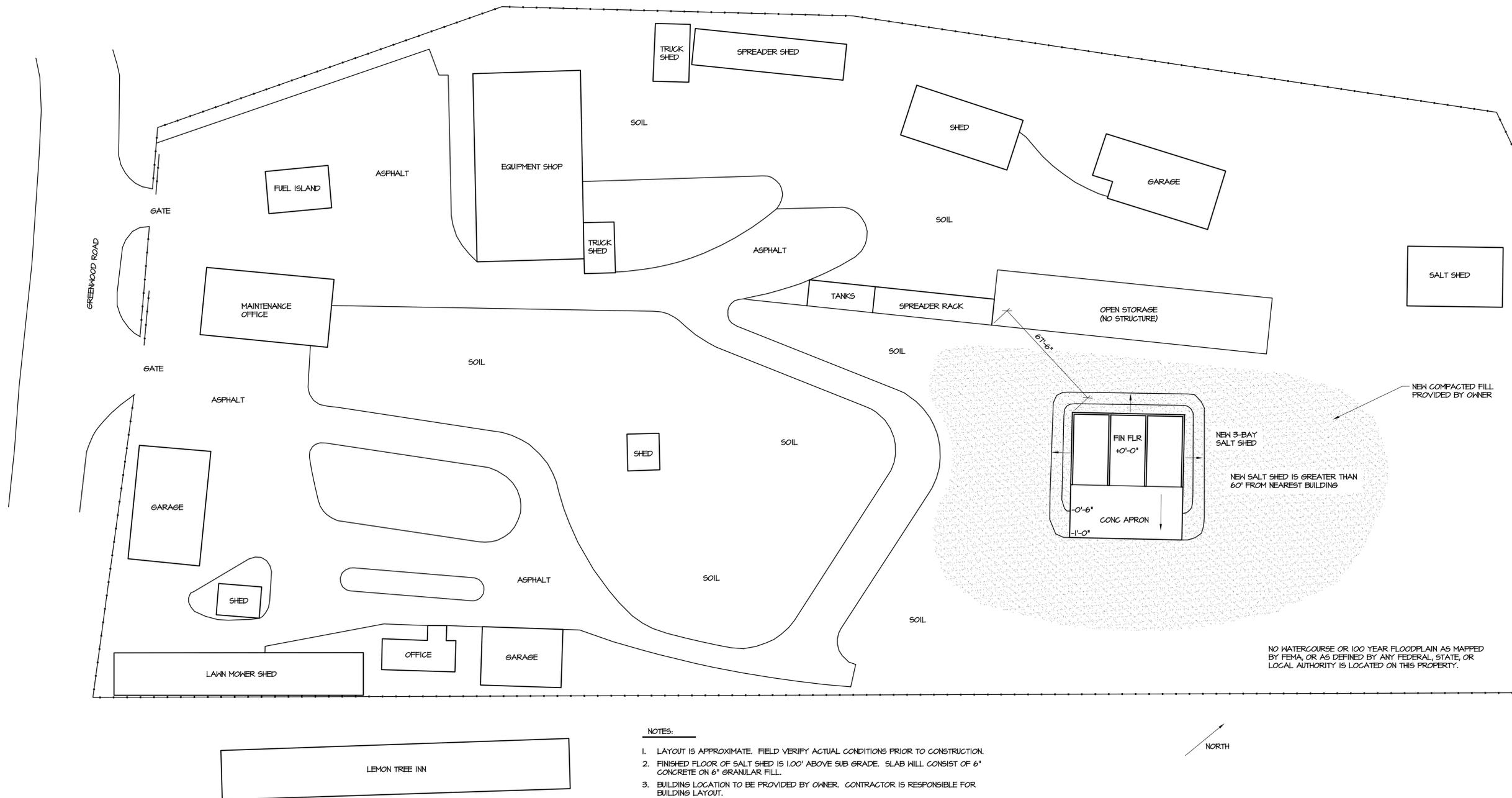
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T2

2 OF 2



NOTES:

- LAYOUT IS APPROXIMATE. FIELD VERIFY ACTUAL CONDITIONS PRIOR TO CONSTRUCTION.
- FINISHED FLOOR OF SALT SHED IS 1.00' ABOVE SUB GRADE. SLAB WILL CONSIST OF 6" CONCRETE ON 6" GRANULAR FILL.
- BUILDING LOCATION TO BE PROVIDED BY OWNER. CONTRACTOR IS RESPONSIBLE FOR BUILDING LAYOUT.
- VERIFY SALT SHED SLAB ELEVATION W/ ACCESS FOR SALT OPERATIONS. ALSO NOTE THE CONCRETE APRON IN FRONT OF SALT SHED SHOULD SLOPE APPROX 0.4" PER FOOT FOR DRAINAGE AWAY FROM BUILDING.
- ROUGH GRADING HAS BEEN PROVIDED BY NCDOT TO BUILDING SUB GRADE. EXCAVATION FOR FOOTING & APRON WILL BE THE RESPONSIBILITY OF THE BUILDING CONTRACTOR.
- SPOILS FROM FOOTING EXCAVATION MAY BE STORED ON SITE AS DIRECTED BY OWNER.
- CONTRACTOR TO PROVIDE FINAL GRADING AROUND BUILDING AS INDICATED BY THE CONTOURS ABOVE.
- PROVIDE & COORD EROSION CONTROL MEASURES DURING CONSTRUCTION W/ OWNER.
- FINAL SEEDING OR ASPHALT BEYOND BUILDING & APRON WILL BE PROVIDED BY OWNER.



1 SITE LAYOUT
T2 SCALE: 1" = 30'

DocuSigned by:
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2ADEB6955C49A...



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CONSULTANT:

DRAWING TITLE / DESCRIPTION:
FOUNDATION PLAN
FRAMING PLAN

PROJECT TITLE:
THREE-BAY SALT STORAGE BUILDING
HIGHWAY DIVISION 13, NCDOT
MITCHELL COUNTY, NORTH CAROLINA

STATE CONSTRUCTION
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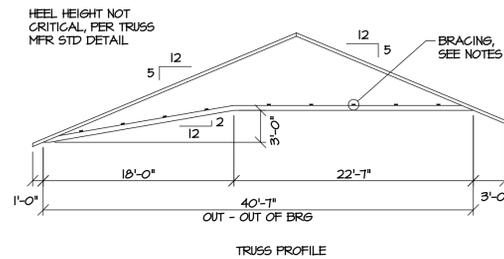
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S1
1 OF 3

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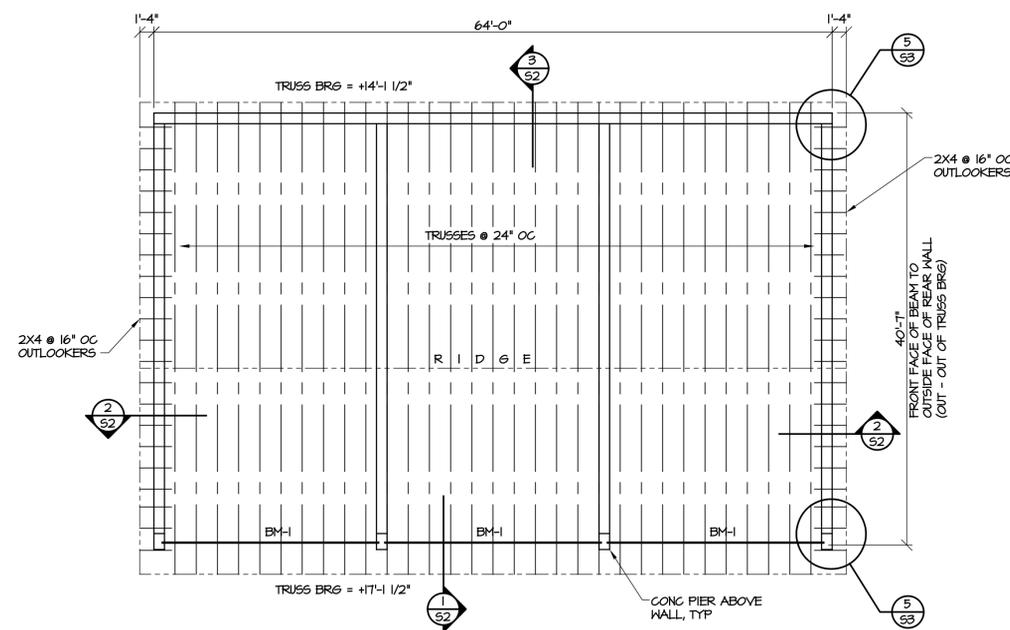
1. PROVIDE TRUSS SHOP DRAWINGS SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NC, SHOWING TRUSS LAYOUT, TRUSS DESIGNS, & REQUIRED BRACING.
2. TRUSS MFR NOTE THERE IS NO CEILING & BOTTOM CHORD BRACING MAY BE REQUIRED. GC NOTE BOTTOM CHORD BRACING IS SHOWN ON TRUSS CALCULATION SHEET # 15 IN ADDITION TO THE TEMPORARY BRACING.
3. SPLICES IN TRUSS BRACING SHALL LAP TWO (2) TRUSSES MINIMUM.
4. ROOF SHEATHING SHALL BE 5/8" (3/8" ACCEPTABLE) OSB OR PLYWOOD, ATTACHED W/ 10D NAILS @ 6" O.C. ON PANEL EDGES, & @ 8" O.C. AT INTERIOR.
5. ZIP SYSTEM BY HUBER IS AN ACCEPTABLE PRODUCT FOR ROOF SHEATHING PROVIDED IT MEETS THE PREVIOUS NOTED RATINGS. ROOF FELT IS NOT REQUIRED W/ ZIP SYSTEM.
6. SIDING, SOFFIT, & FASCIA SHALL BE PAINTED FIBER-CEMENT BOARD, COLOR SELECTION BY OWNER.
7. BM-1 = 5-1/2" X 16" GLULAM, 24F-V4, BALANCED, & PRESSURE TREATED.



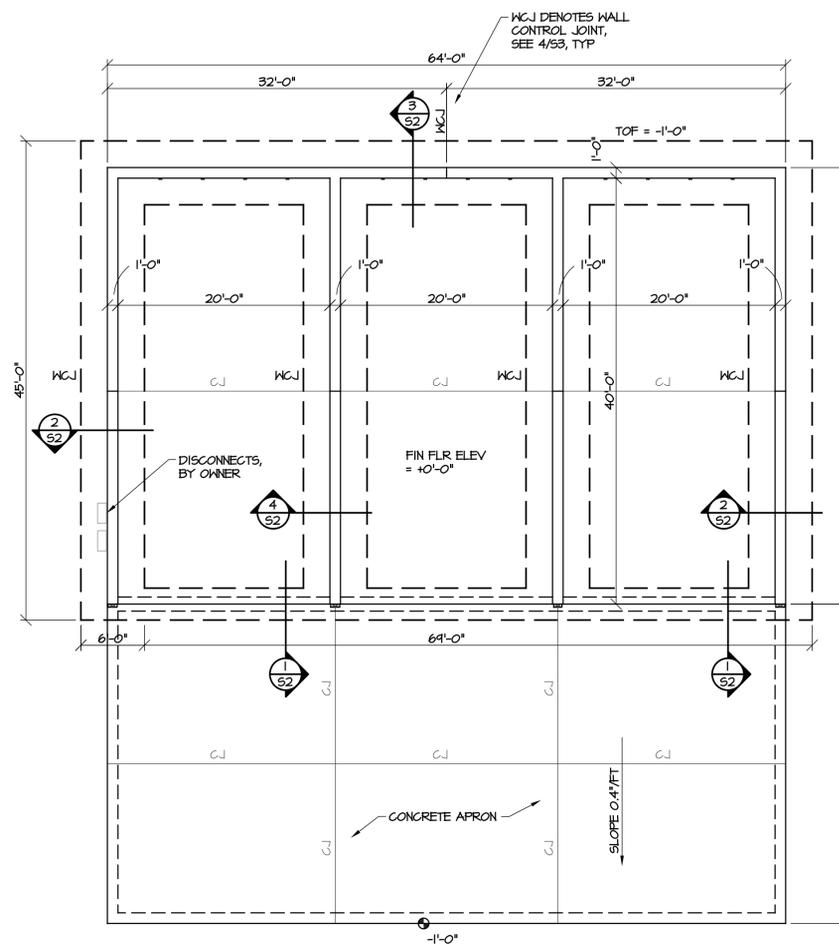
NOTES:

1. COMPRESSIVE STRENGTH OF CONCRETE FOR FOOTINGS = 4000 PSI.
2. CONCRETE FOR WALLS & SLABS SHALL HAVE 0.45 MAXIMUM W/C RATIO, & MINIMUM 4500 PSI COMPRESSIVE STRENGTH.
3. CONCRETE FOR SLABS SHALL INCLUDE 5% ENTRAINED AIR.
4. ALL REINF STEEL SHALL BE ASTM A 615, GR 60. LAP ALL SPLICES 48 X BAR DIAMETER.
5. ELEVATIONS SHOWN ARE ABOVE REFERENCE FLOOR ELEVATION = +0'-0".
6. WOOD STUD WALL SHEATHING SHALL BE 1/2" APA RATED SHEATHING, 32/16 SPAN RATINGS, EXPOSURE 1, ATTACHED W/ 8D NAILS @ 6" OC ON PANEL EDGES & 8" OC ALONG INTERMEDIATE SUPPORTS, UON. PROVIDE BLOCKING AT ALL PANEL EDGES ON EXTERIOR WALLS.
7. PT DENOTES PRESSURE TREATED IN ACCORDANCE W/ ANPA STANDARDS.
8. ELECTRICAL WORK IS BY OWNER. CONTRACTOR TO COORDINATE LOCATION OF CONDUIT W/ OWNER PRIOR TO PLACEMENT OF CONCRETE FOR FOOTINGS & SLABS.
9. PROVIDE ELECTRICAL GROUND TO FOOTING REINF, SEE 6/53.
10. FLOOR SLAB SHALL BE 6" THICK CONC. REINF'D W/ EPOXY COATED #4 @ 16" OC, EM, ON 6" THICK #5T STONE BASE.

PREPARE CONCRETE WALL SURFACES AS FOLLOWS:
INTERIOR - PATCH TIE HOLES & DEFECTS, REMOVE FINS FLUSH W/ SURFACE.
EXTERIOR - PATCH TIE HOLES, BUG HOLES, & OTHER DEFECTS. REMOVE FINS FLUSH WITH SURFACE. PATCH HOLES THAT CANNOT BE SEALED W/ BLOCK FILLER & PAINT. NOTE, RUBBING MAY BE REQ'D DEPENDING ON CONDITION OF CONCRETE SURFACE AFTER REMOVAL OF FORMS.



2 FRAMING PLAN
SCALE: 1/8" = 1'-0"



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



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CONSULTANT:

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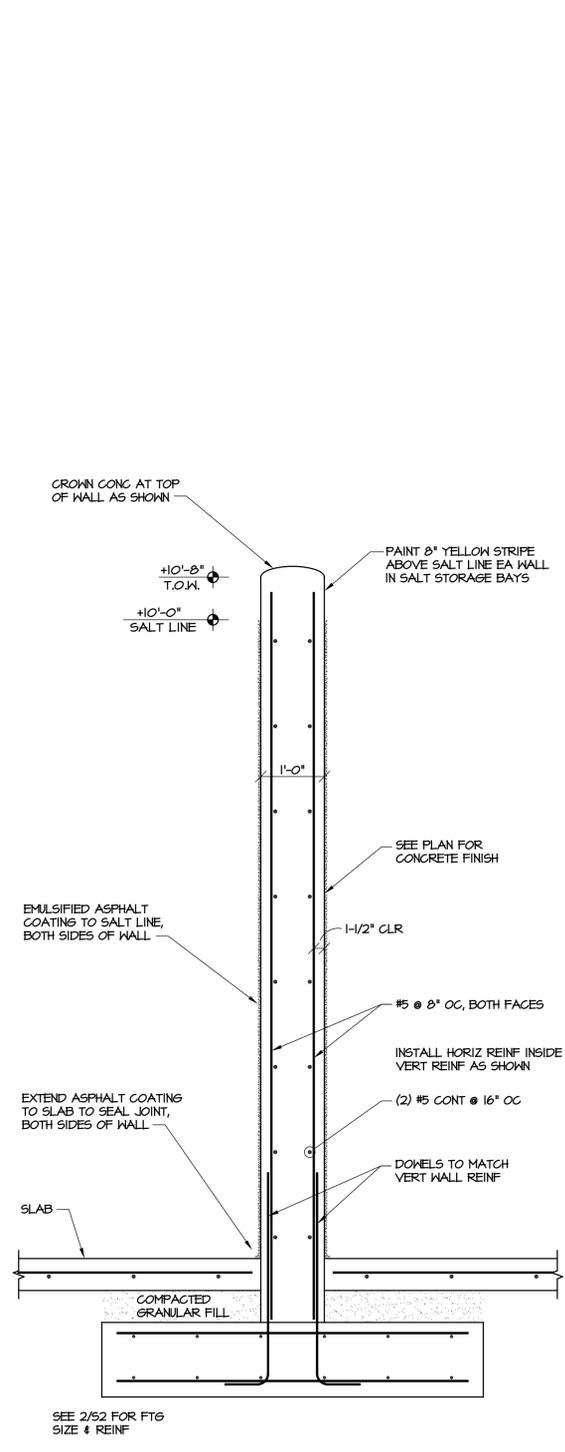
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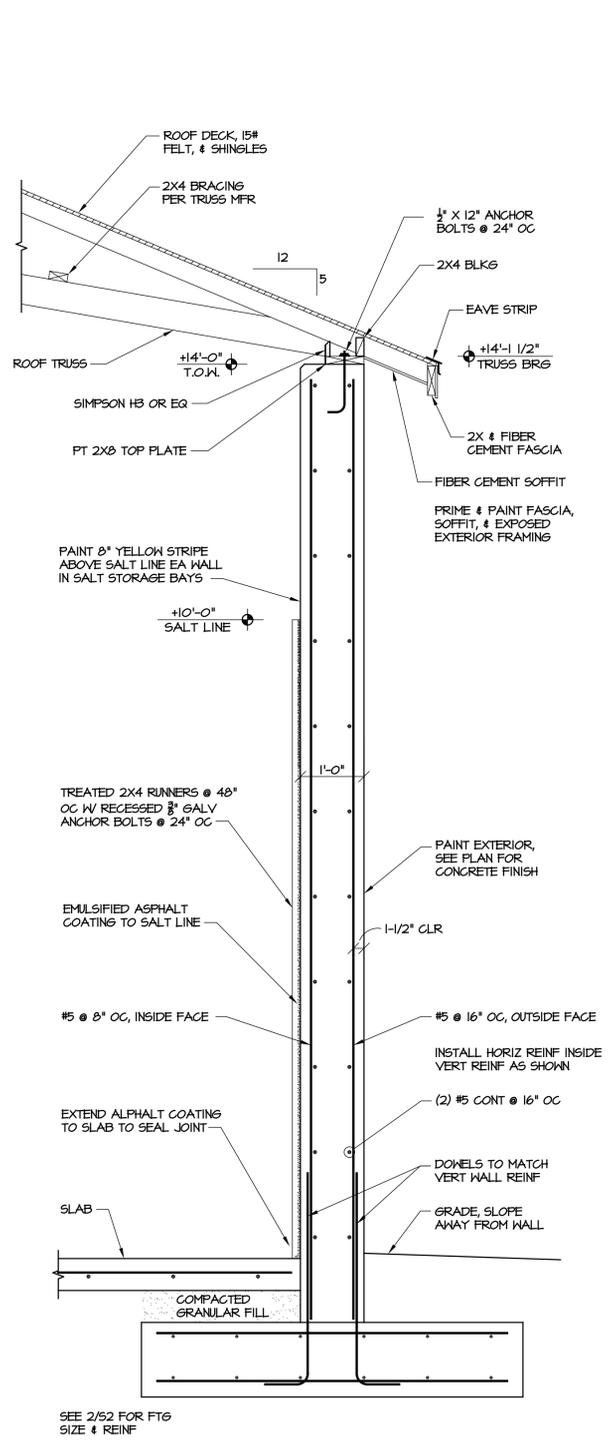
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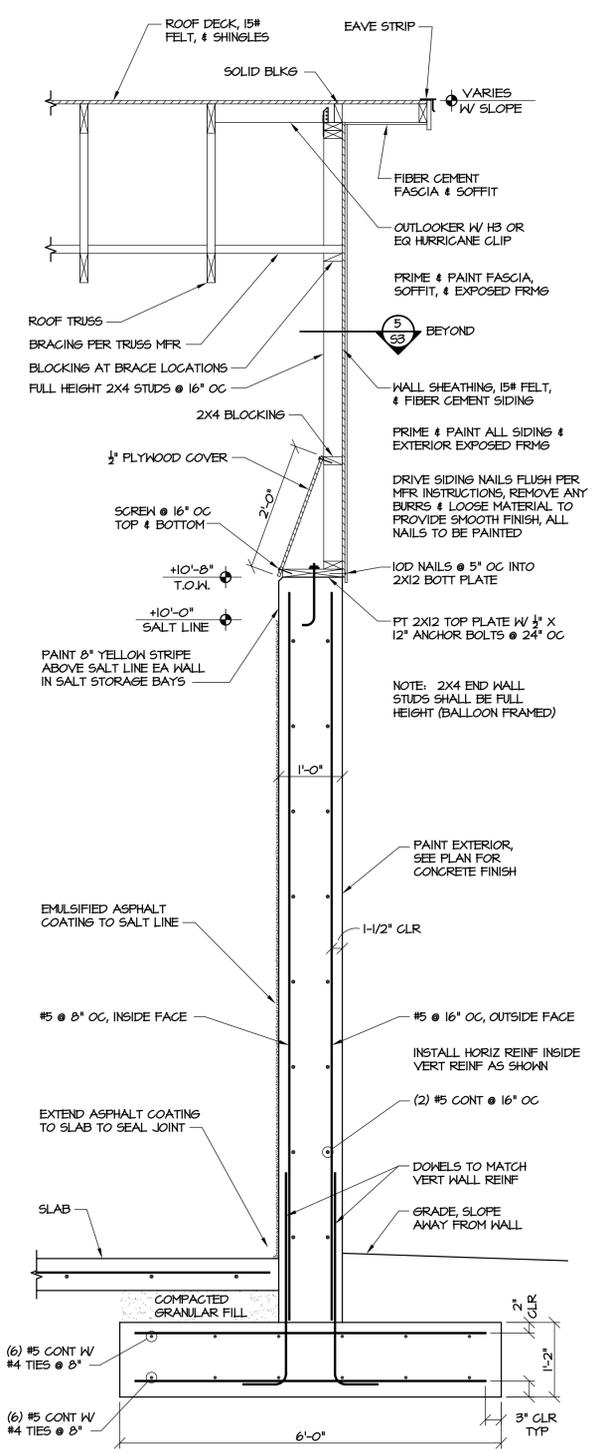
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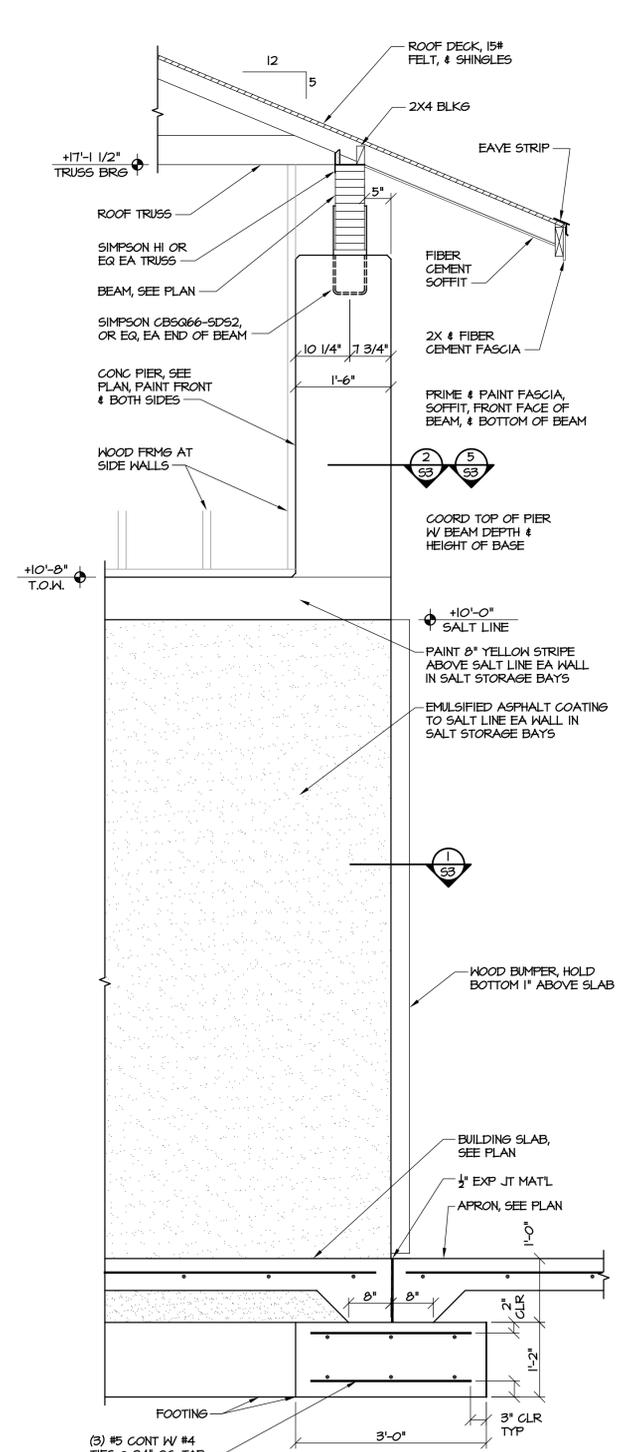
4 SECTION AT INTERIOR WALL
SCALE: 3/4" = 1'-0"



3 SECTION AT REAR WALL
SCALE: 3/4" = 1'-0"



2 SECTION AT SIDE WALL
SCALE: 3/4" = 1'-0"



1 SECTION AT FRONT OF BUILDING
SCALE: 3/4" = 1'-0"

