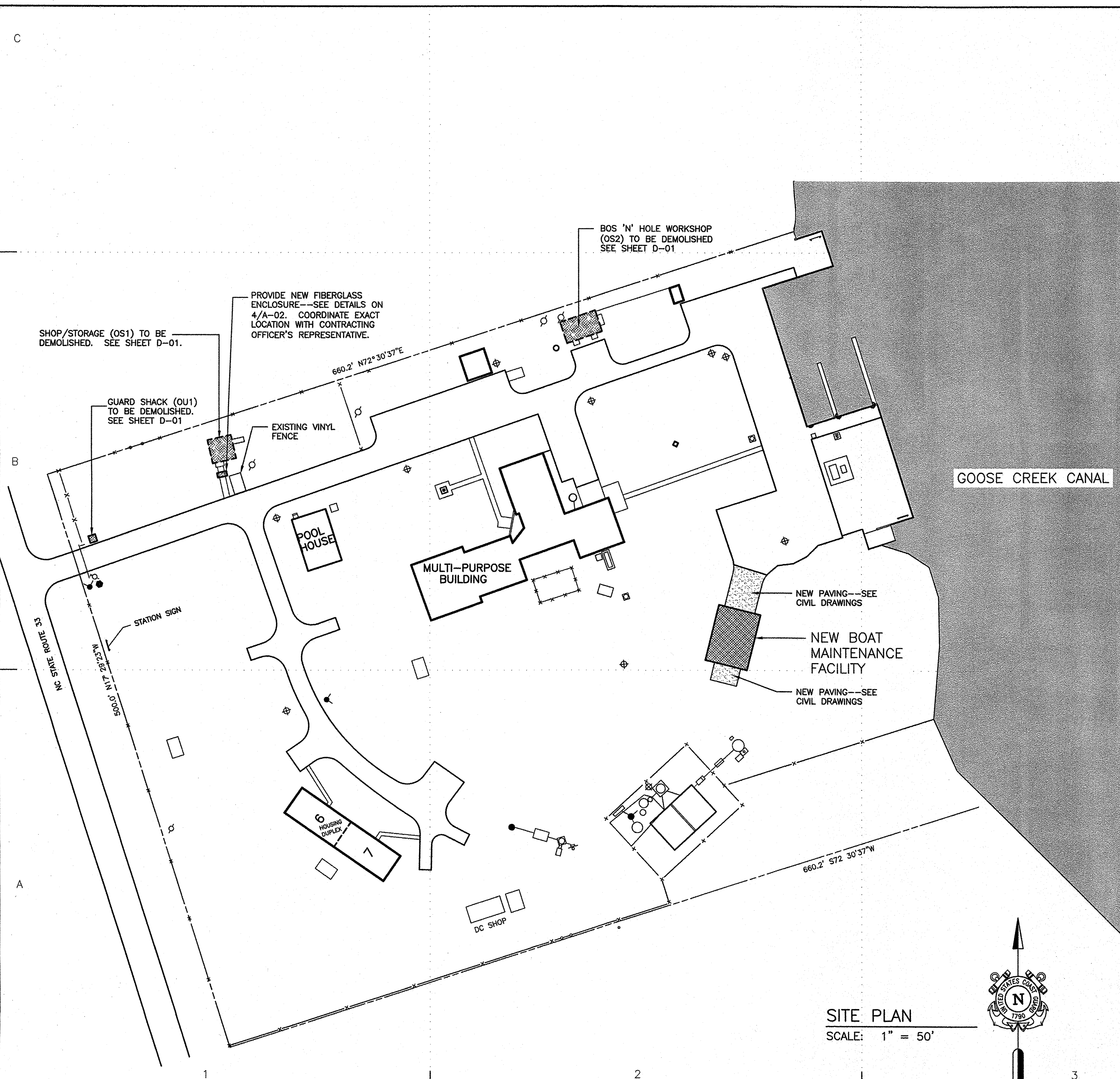


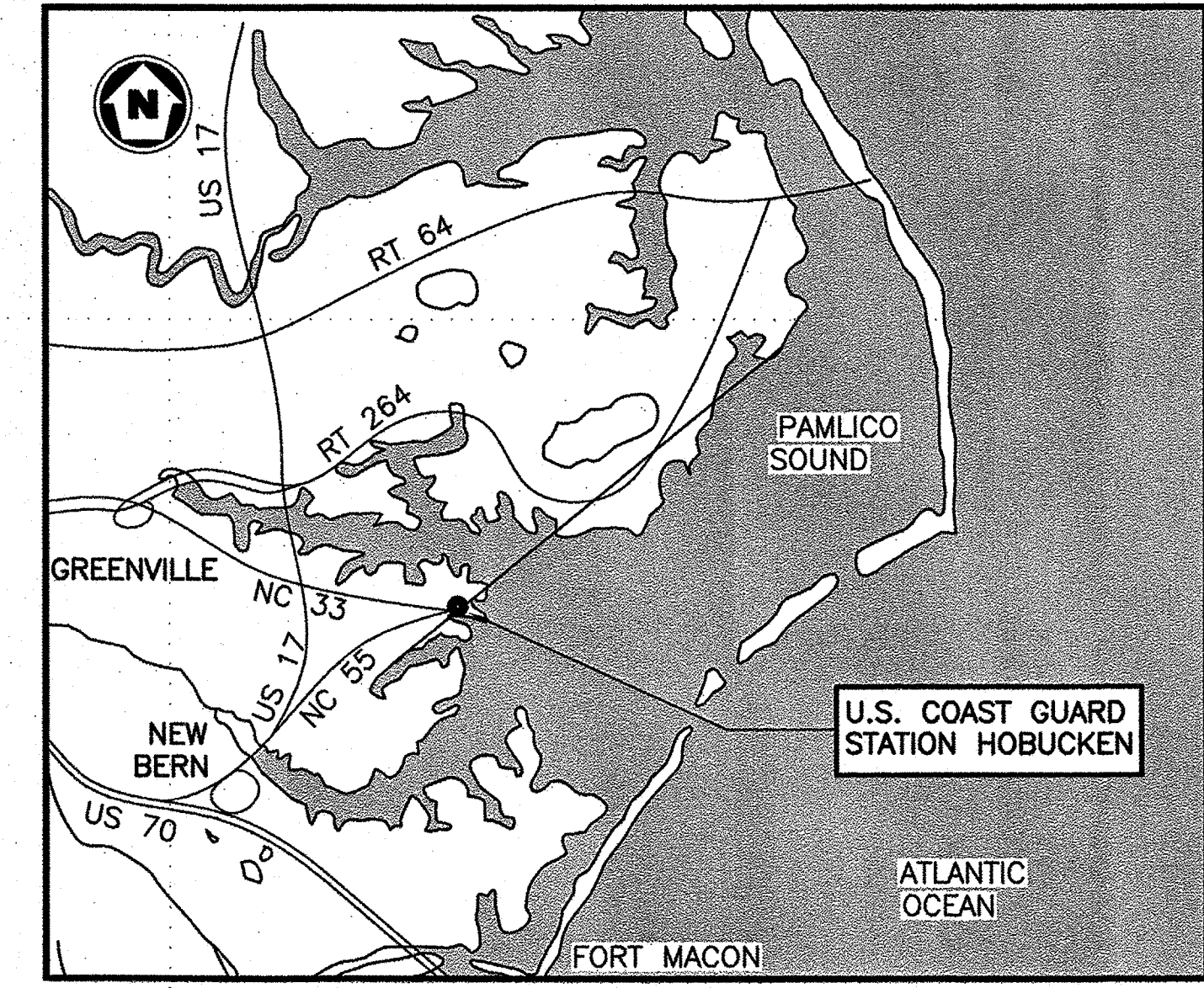
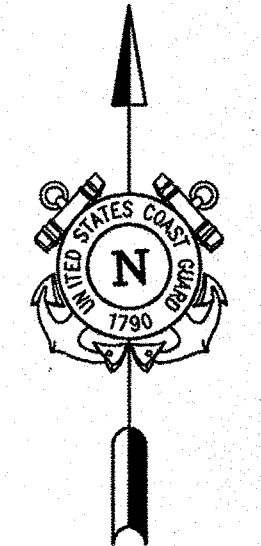
# U.S COAST GUARD STATION HOBUCKEN CONSTRUCT NEW BOAT MAINTENANCE FACILITY HOBUCKEN, NORTH CAROLINA

USCG CEU  
CLEVELAND, OHIO  
216-902-6200

CONSULTANTS  
THE JOHNSON McADAMS FIRM  
GREENWOOD, MISSISSIPPI 38930



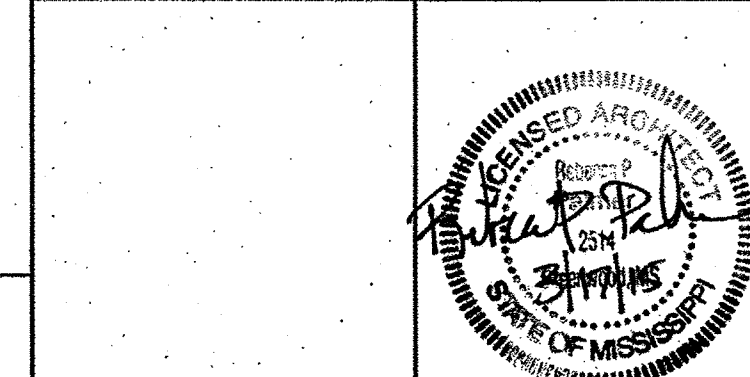
**SITE PLAN**  
SCALE: 1" = 50'



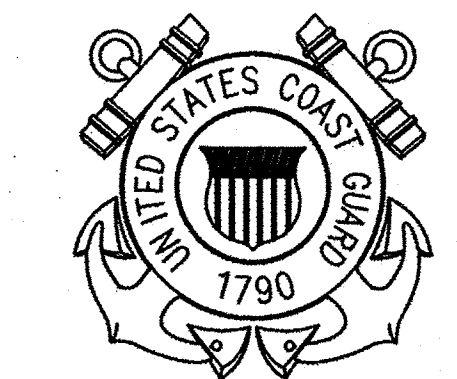
**VICINITY MAP**  
STATUTE MILES

**DRAWING INDEX**

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CIVIL		M-02	SECTION & ELEVATION
C-01	EXISTING SITE PLAN	M-03	SCHEDULES
C-02	NEW SITE PLAN	M-04	DETAILS
C-03	UTILITY DETAILS	PLUMBING	
C-04	SITE DETAILS	P-01	FLOOR PLAN - DWV
C-05	GENERAL DETAILS	P-02	FLOOR PLAN - DOM. WATER
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A-01	FLOOR PLANS	E-04	LIGHTING DETAILS
A-02	EXTERIOR ELEVATIONS	E-05	SITE PLAN
A-03	BUILDING SECTIONS	E-06	POWER FLOOR PLAN
A-04	BUILDING SECTIONS	E-07	MECH/AUX FLOOR PLAN
		E-08	LIGHTING FLOOR PLAN



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CLEVELAND



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ISSUE		
MARK	DATE	DESCRIPTION

A/E PROJECT NO: 1474-A  
CAD FILE NAME: C8244G01.dwg  
DESIGNED BY: RPP  
DRAWN BY: JSL  
EDITED BY: JSL  
CHECKED BY: DRL

SCALE: AS SHOWN PLOT SCALE: 1:1

SHEET TITLE  
**CONSTRUCT BMF  
CG STATION HOBUCKEN  
HOBUCKEN NC**  
GENERAL  
TITLE SHEET

REVIEWED BY: R. PIPAK	REVIEWED BY: B. VRANKAR	REVIEWED BY: G. S. PLACZEK
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR
P. R. CARROLL, CDR.		03/17/15
APPROVING OFFICER		DATE

PROJECT NUMBER <b>05-C02245</b>	DRAWING NUMBER <b>8244-D</b>
DISCIPLINE/SHT NO <b>G-01</b>	SHEET 1 OF 32

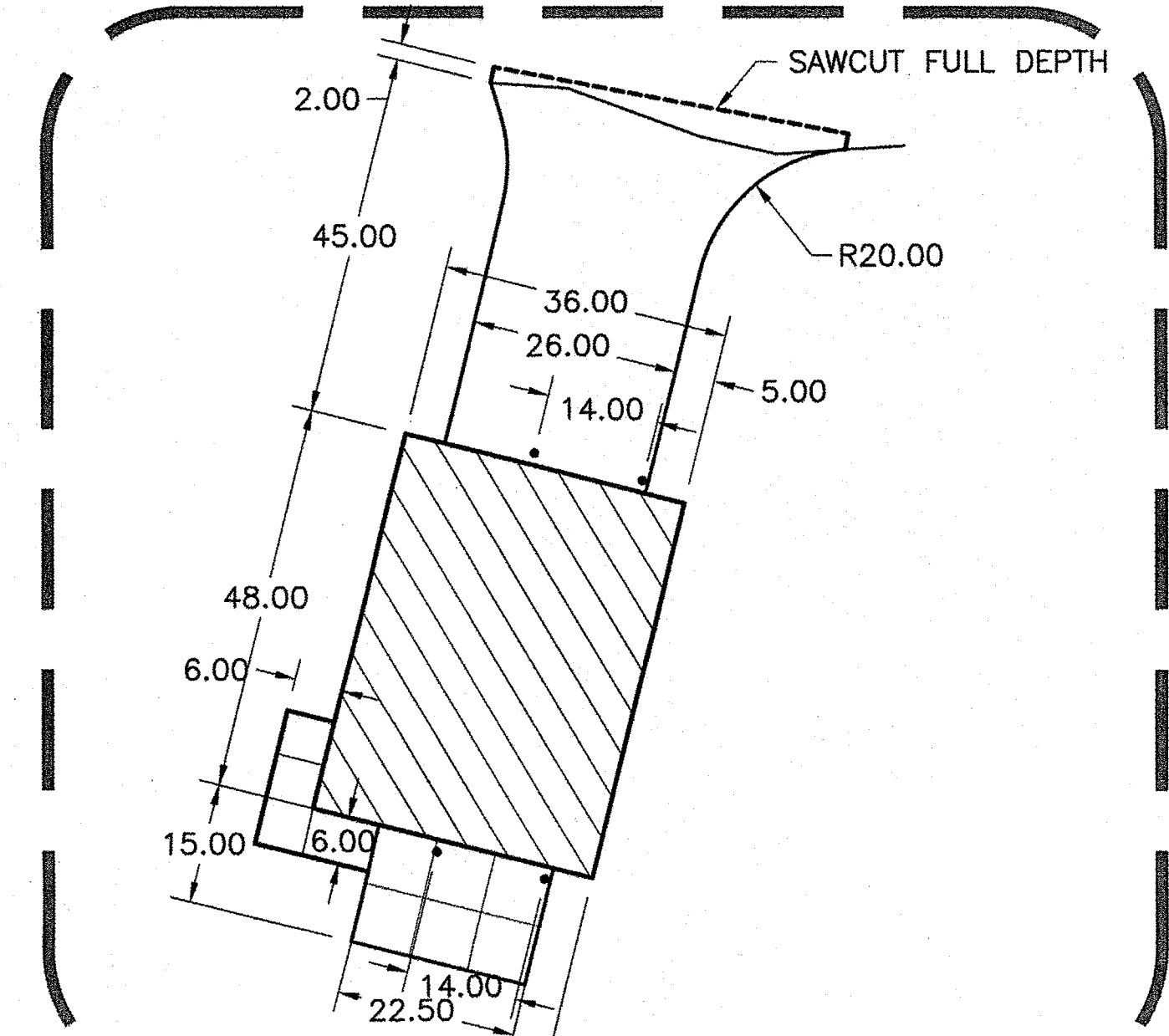




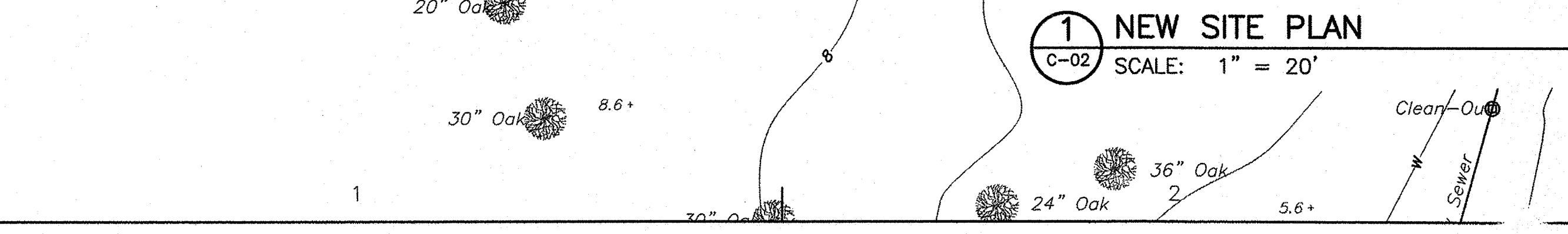


**KEYED NOTES**

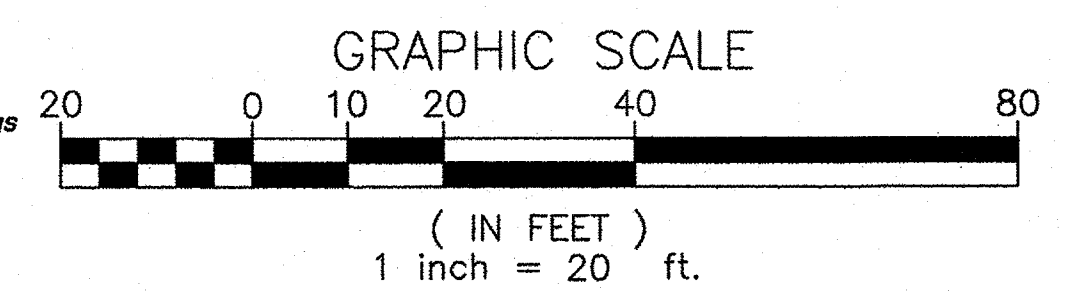
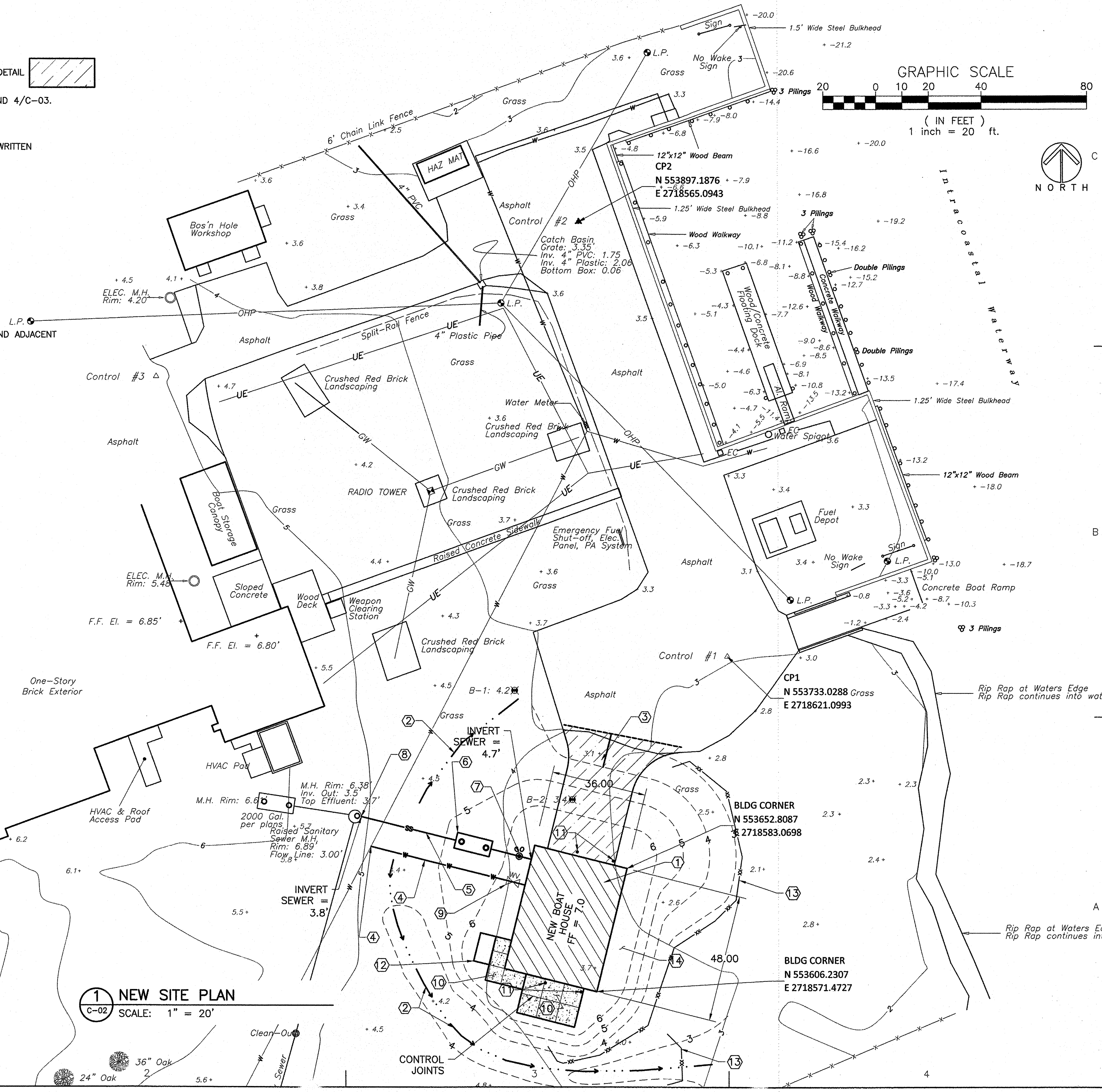
- ① PROVIDE NEW BOAT HOUSE. SEE ARCHITECTURAL PLANS
- ② PROVIDE NEW GRADED SWALE.
- ③ PROVIDE NEW ASPHALT APPROACH. SHOWN AT APPROXIMATELY 10% GRADE. SEE DETAIL 3/C-04 AND 3/C-05.
- ④ PROVIDE NEW 1/2" DOMESTIC WATERLINE. CONNECT WITH TEE. SEE DETAILS 1 AND 4/C-03.
- ⑤ PROVIDE NEW 4" SANITARY SEWER LINE. SEE DETAILS 1 AND 4/C-03.
- ⑥ PROVIDE NEW SEPTIC TANK. SEE DETAIL 6/C-03. ANCHOR PER MANUFACTURER'S WRITTEN REQUIREMENT TO PREVENT FLOATING.
- ⑦ PROVIDE NEW SANITARY CLEAN OUT. SEE DETAIL 3/C-03.
- ⑧ PROVIDE NEW SEWER CONNECTION TO EXISTING MANHOLE. SEE DETAIL 5/C-03.
- ⑨ PROVIDE NEW ISOLATION VALVE. SEE DETAIL 2/C-03.
- ⑩ PROVIDE NEW RIGID CONCRETE PAVEMENT. SEE DETAIL 2/C-04.
- ⑪ PROVIDE NEW PIPE BOLLARD. SEE DETAIL 1/C-04.
- ⑫ PROVIDE NEW GENERATOR AND CONCRETE PAD. SEE ELECTRICAL PLANS.
- ⑬ PROVIDE NEW SILT FENCE. SEE DETAIL 1/C-05.
- ⑭ PROVIDE SITE PREPARATION AND STRUCTURAL BACKFILL/FILL FOR NEW BUILDING AND ADJACENT CONSTRUCTION. SEE SHEET S-01.



**2 DIMENSIONED PLAN**  
C-02 SCALE: 1" = 20'

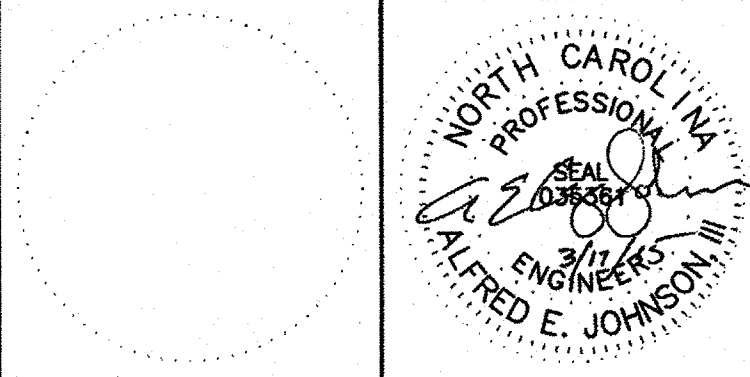


**1 NEW SITE PLAN**  
C-02 SCALE: 1" = 20'

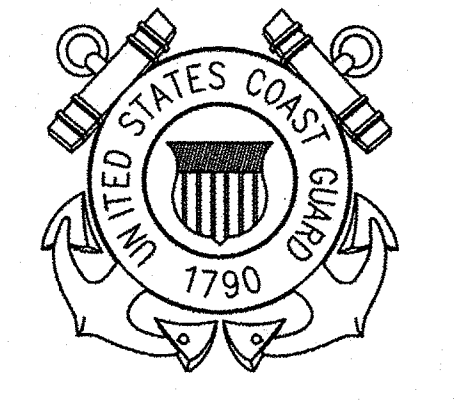


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ISSUE		
MARK	DATE	DESCRIPTION

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DESIGNED BY: AEJ  
DRAWN BY: JND  
EDITED BY: AEJ  
CHECKED BY: DRL

SCALE: AS SHOWN PLOT SCALE: 1:1

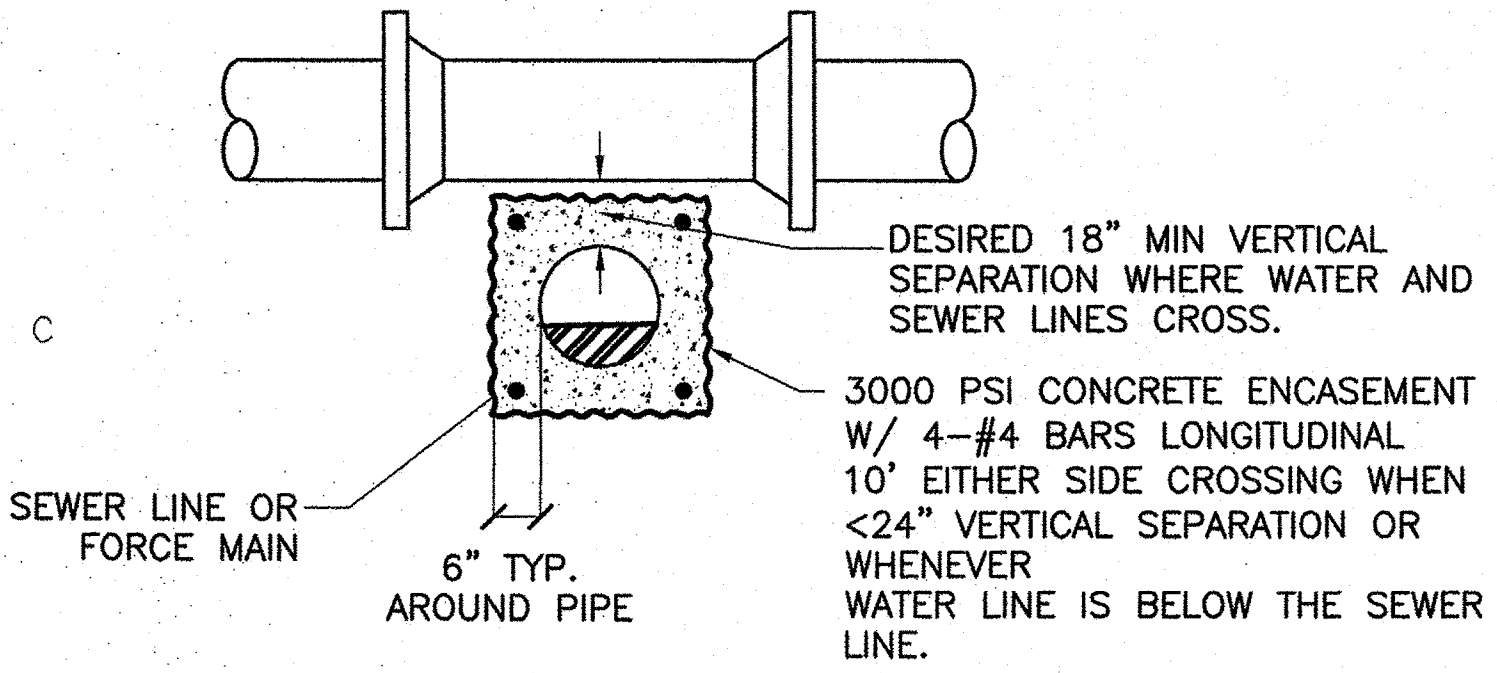
SHEET TITLE  
**CONSTRUCT BMF  
CG STATION HOBUCKEN  
HOBUCKEN NC**  
CIVIL  
**NEW SITE PLAN**

REVIEWED BY: R. PIPAK	REVIEWED BY: B. VRANKAR	REVIEWED BY: G.S. PLACZEK
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR
P. R. CARROLL, CDR		03/17/15
APPROVING OFFICER		DATE

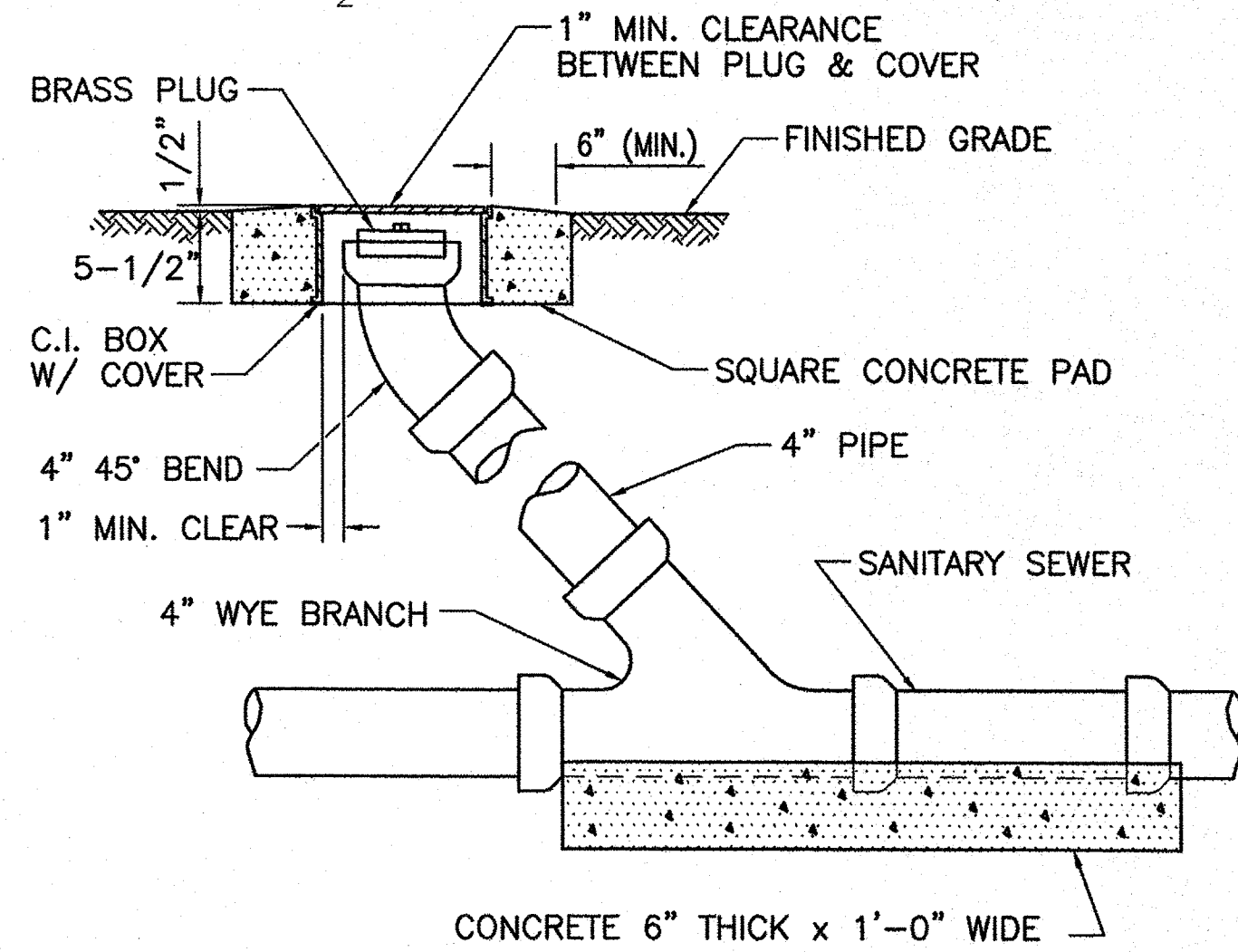
PROJECT NUMBER <b>05-C02245</b>	DRAWING NUMBER <b>8244-D</b>
DISCIPLINE/SHT NO <b>C-02</b>	SHEET <b>3</b> OF <b>32</b>



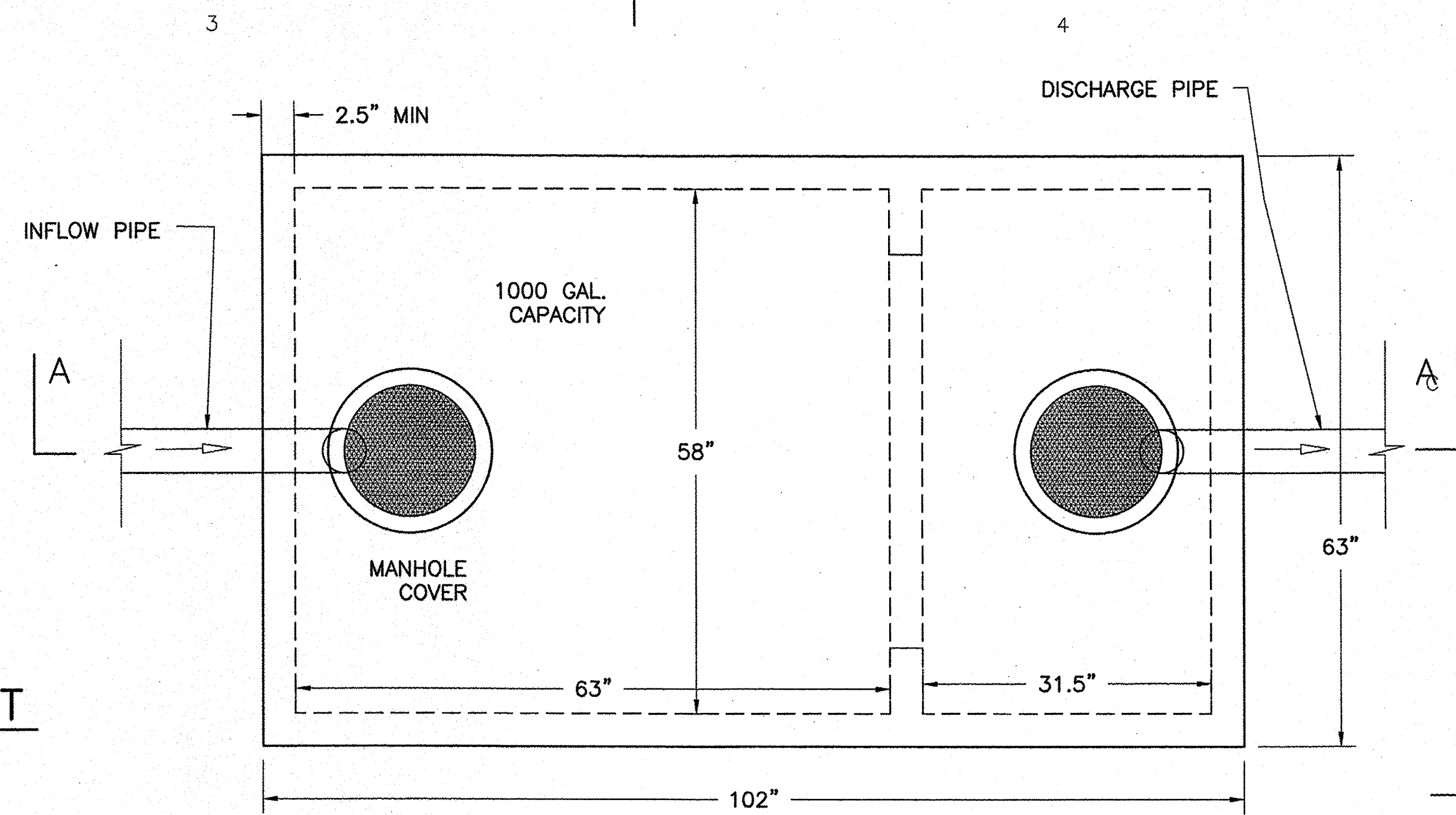
NOTE: WHEN 18" VERTICAL SEPARATION CANNOT BE MAINTAINED, JOINTS SHALL BE LOCATED SUCH THAT THEY ARE EQUAL DISTANCE BEFORE AND AFTER CROSSING.



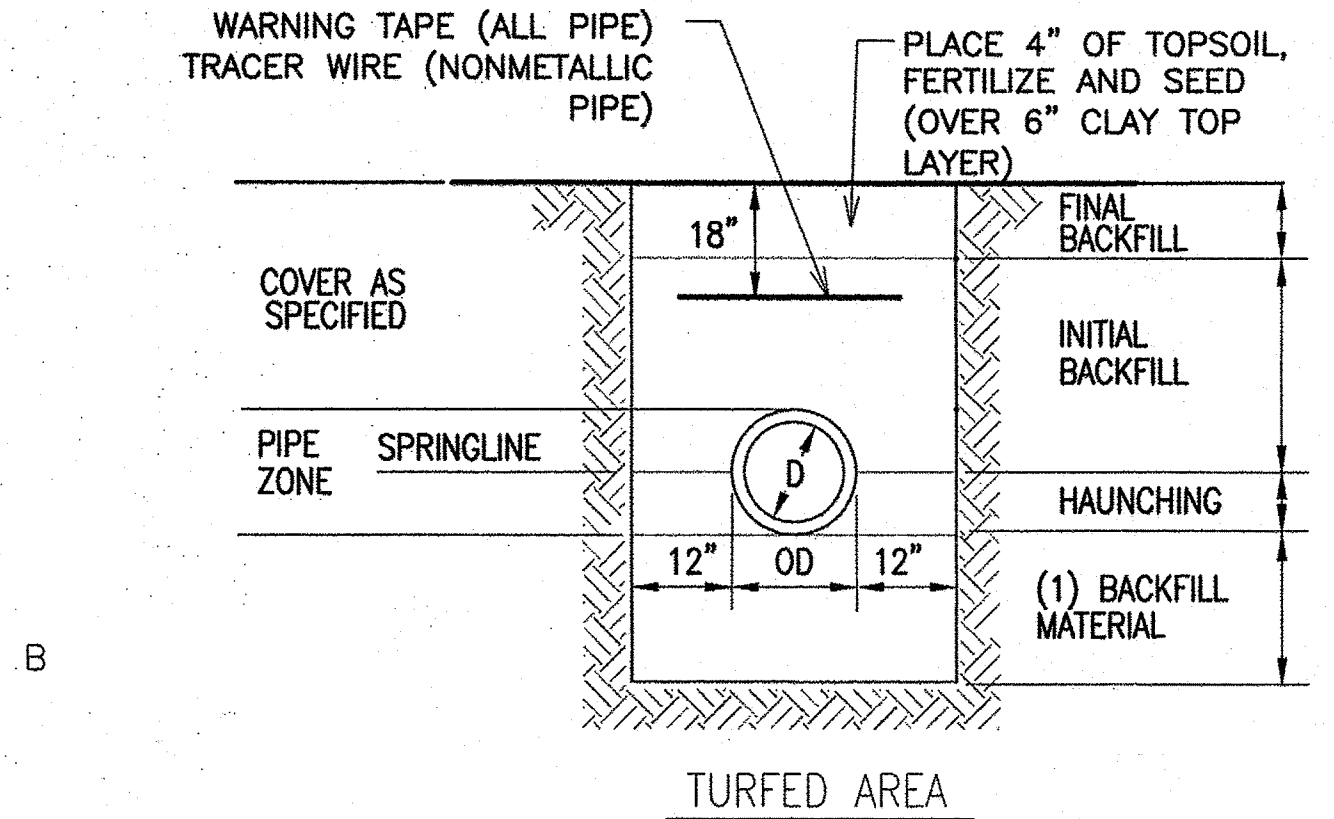
**1 SEWER & WATER CROSSING**  
C-02|C-03 SCALE: NONE



**3 SANITARY CLEAN OUT**  
C-02|C-03 SCALE: NONE



**PLAN VIEW**

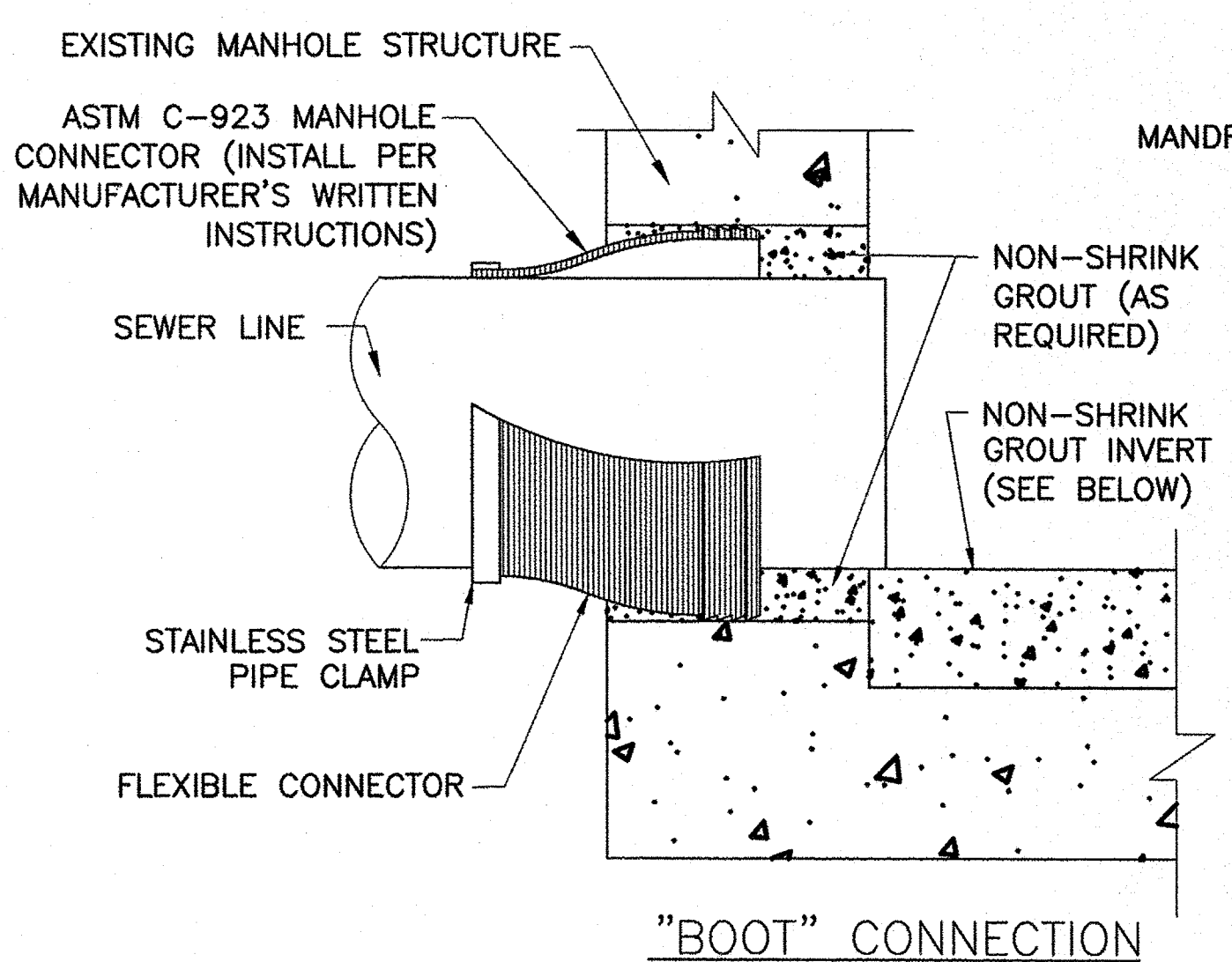


MINIMUM COVER FOR ALL UTILITIES SHALL BE 30 INCHES OR AS SPECIFIED.

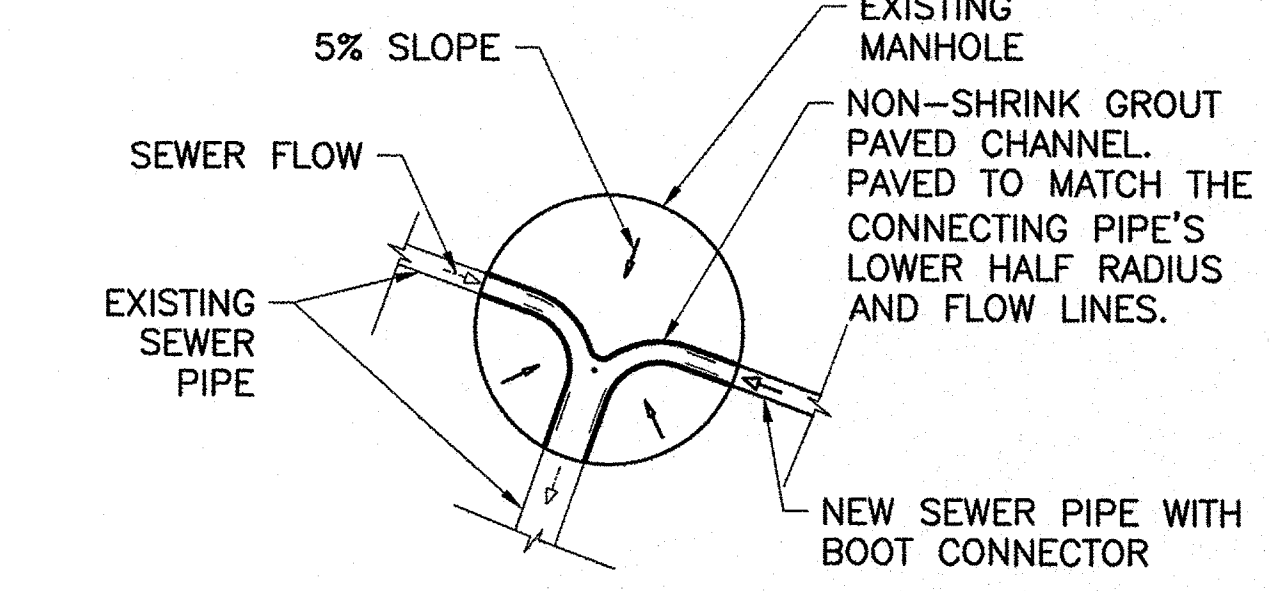
PLACE BACKFILL IN 8" LIFTS AND COMPACT TO A MINIMUM 95% ASTM D 698 DENSITY.

(1) - SEE SPECIFICATIONS FOR REQUIREMENTS.

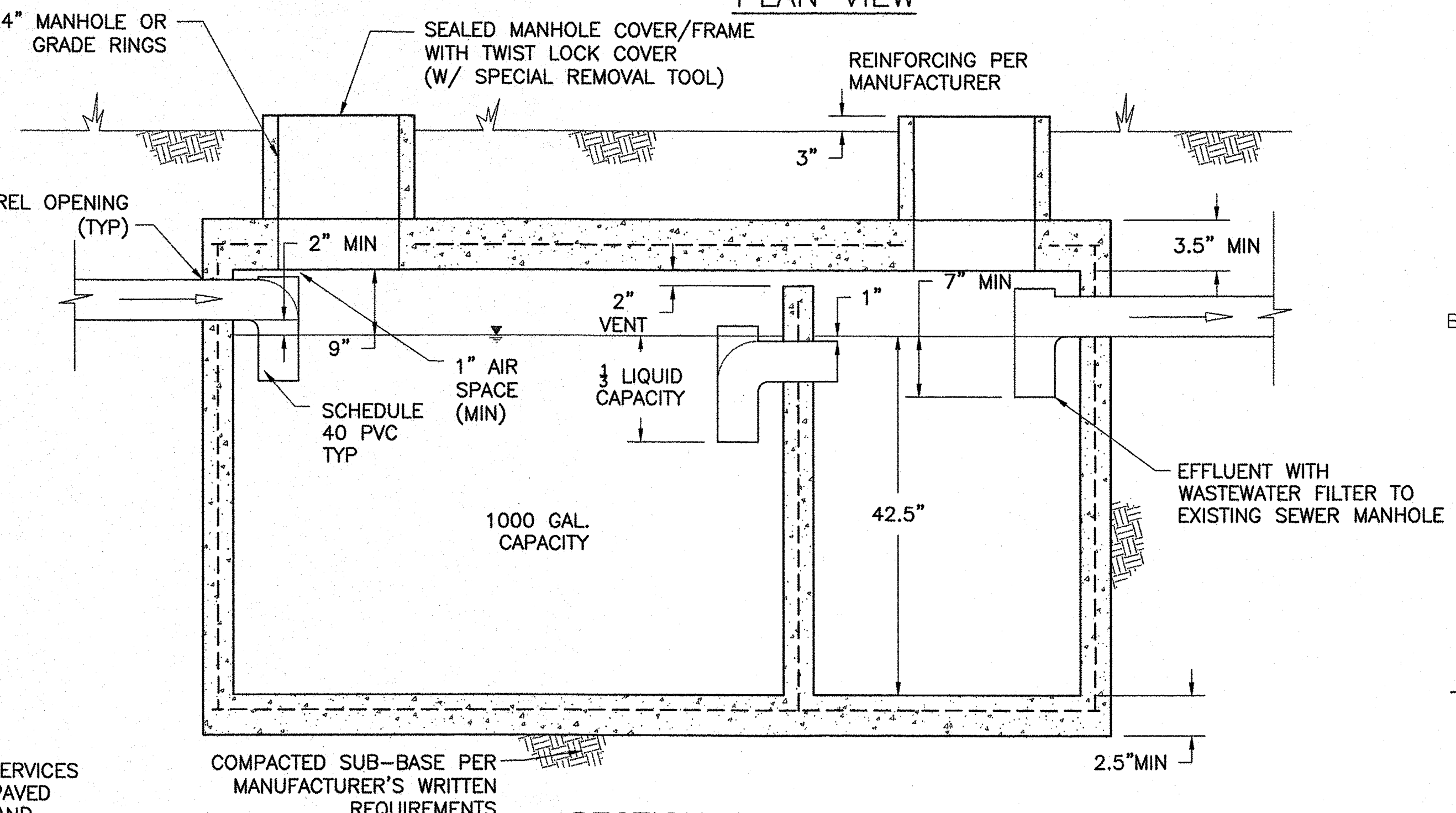
**2 ISOLATION VALVE WITH BOX**  
C-02|C-03 SCALE: NONE



THE NEW SEWER FEEDS INTO AN EXISTING MANHOLE THAT SERVICES THE STATION BUILDING. CURRENTLY THE MANHOLE HAS A PAVED INVERT. REMOVE AS NECESSARY TO FACILITATE NEW FLOWS AND PAVE INVERT TO THE CONNECTED PIPES SPRINGLINES AND MATCH THE CONNECTED PIPING FLOWLINE INVERTS.



**5 EXISTING SEWER CONNECTION**  
C-02|C-03 SCALE: NONE



**SECTION A-A**

SEPTIC TANKS SHALL MEET THE REQUIREMENTS OF THE LOCAL COUNTY HEALTH DEPARTMENT AND THE STATE OF NORTH CAROLINA.

ALL JOINTS SHALL BE WATERPROOF. COAT ALL INTERIOR CONCRETE SURFACES WITH A BITUMINOUS COATING OR OTHER ACCEPTABLE METHODS. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI.

THE TANKS SHALL BE DESIGNED AND CERTIFIED BY A NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER TO MEET ALL APPLICABLE LOADS AND ANCHORED TO PREVENT FLOATING PER MANUFACTURER'S WRITTEN RECOMMENDATIONS.

TANK DIMENSION MAY VARY TO FIT STANDARD MANUFACTURER SIZES BUT MINIMUM CAPACITIES SHALL 1000 GALLONS.

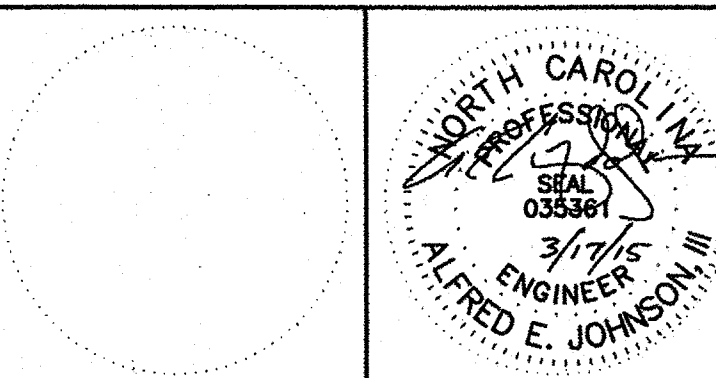
REINFORCING SHALL BE PROVIDED TO ALLOW FOR A MINIMUM OF HS20 TRAFFIC LOADING AND ADDITIONAL OVERBURDEN LOADING.

FILL TANK WITH WATER PRIOR TO COMPLETING FINAL BACKFILL.

**6 SEPTIC TANK DETAIL**  
C-02|C-03 SCALE: NONE

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MARK	DATE	DESCRIPTION

A/E PROJECT NO: 1474-A  
CAD FILE NAME: C8244C03.dwg  
DESIGNED BY: AEJ  
DRAWN BY: JND  
EDITED BY: AEJ  
CHECKED BY: DRL

SCALE: AS SHOWN PLOT SCALE: 1:1

SHEET TITLE  
**CONSTRUCT BMF  
CG STATION HOBUCKEN  
HOBUCKEN NC**  
CIVIL  
**UTILITY DETAILS**

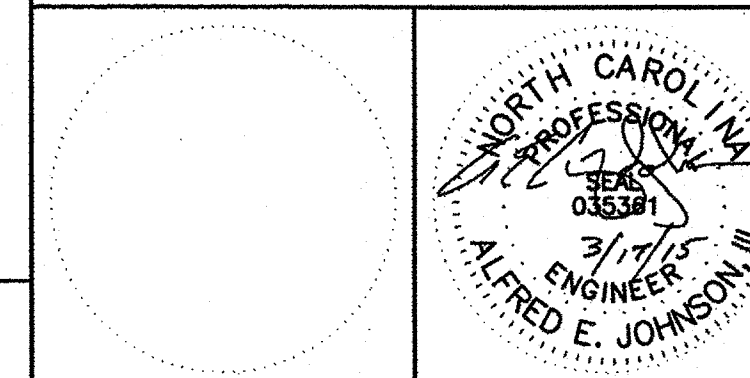
REVIEWED BY: P. PIPAK	REVIEWED BY: B. VRANKAR	REVIEWED BY: G.S. PLACZEK
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR
P. R. CARROLL, CDR APPROVING OFFICER		03/17/15 DATE

PROJECT NUMBER <b>05-C02245</b>	DRAWING NUMBER <b>8244-D</b>
DISCIPLINE/SHT NO <b>C-03</b>	SHEET <b>4</b> OF <b>32</b>

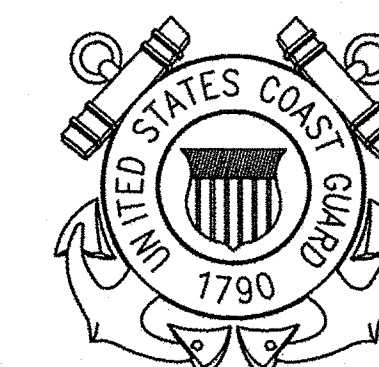


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CLEVELAND, OH 44199-2060

MARK	DATE	DESCRIPTION

A/E PROJECT NO: 1474-A  
CAD FILE NAME: C8244C04.dwg  
DESIGNED BY: AEJ  
DRAWN BY: JND  
EDITED BY: AEJ  
CHECKED BY: DRL

SCALE: AS SHOWN PLOT SCALE: 1:1

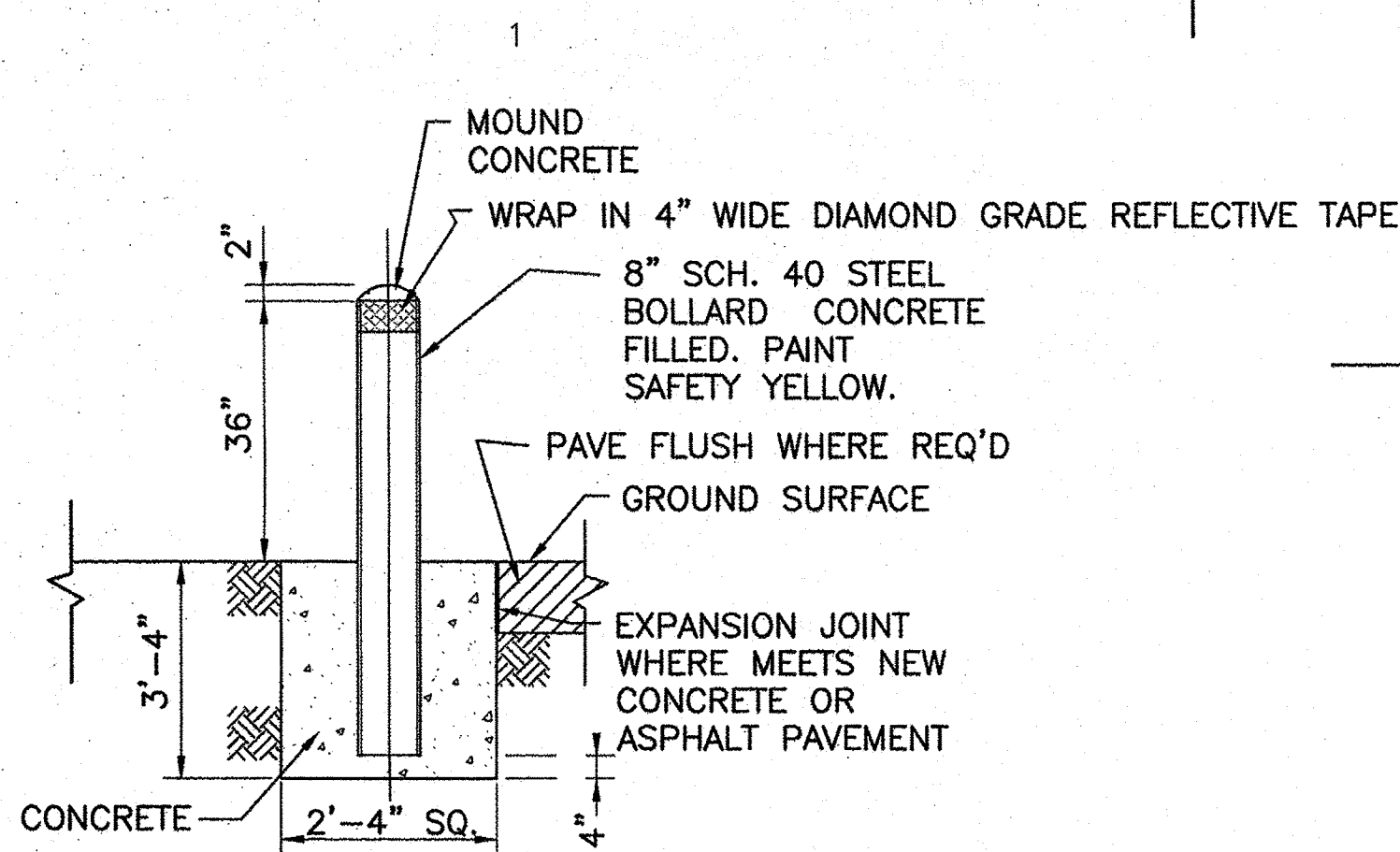
SHEET TITLE

CONSTRUCT BMF  
CG STATION HOBUCKEN  
HOBUCKEN NC

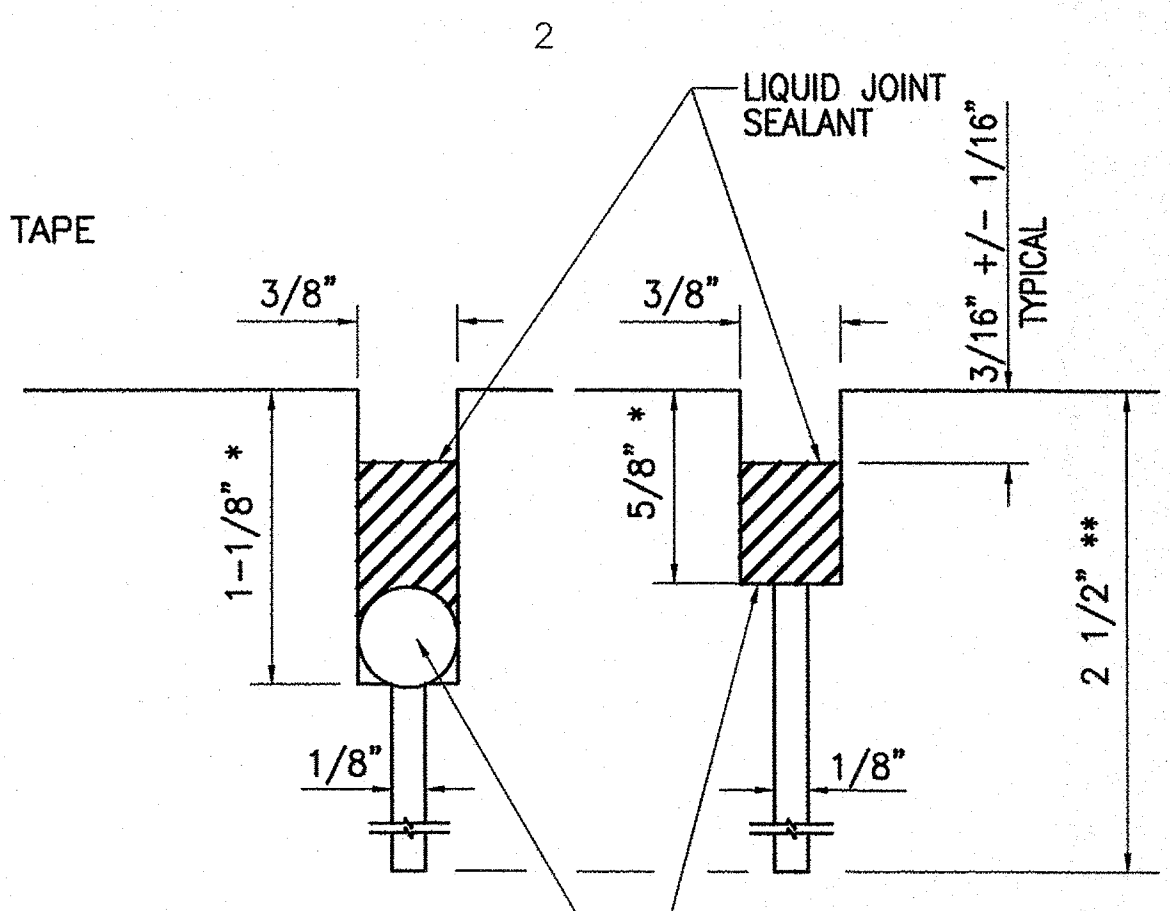
CIVIL  
SITE DETAILS

REVIEWED BY: R. PIPAK	REVIEWED BY: B. VRANKAR	REVIEWED BY: G.S. PLACZEK
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR
P. R. CARROLL, CDR APPROVING OFFICER		03/17/15 DATE

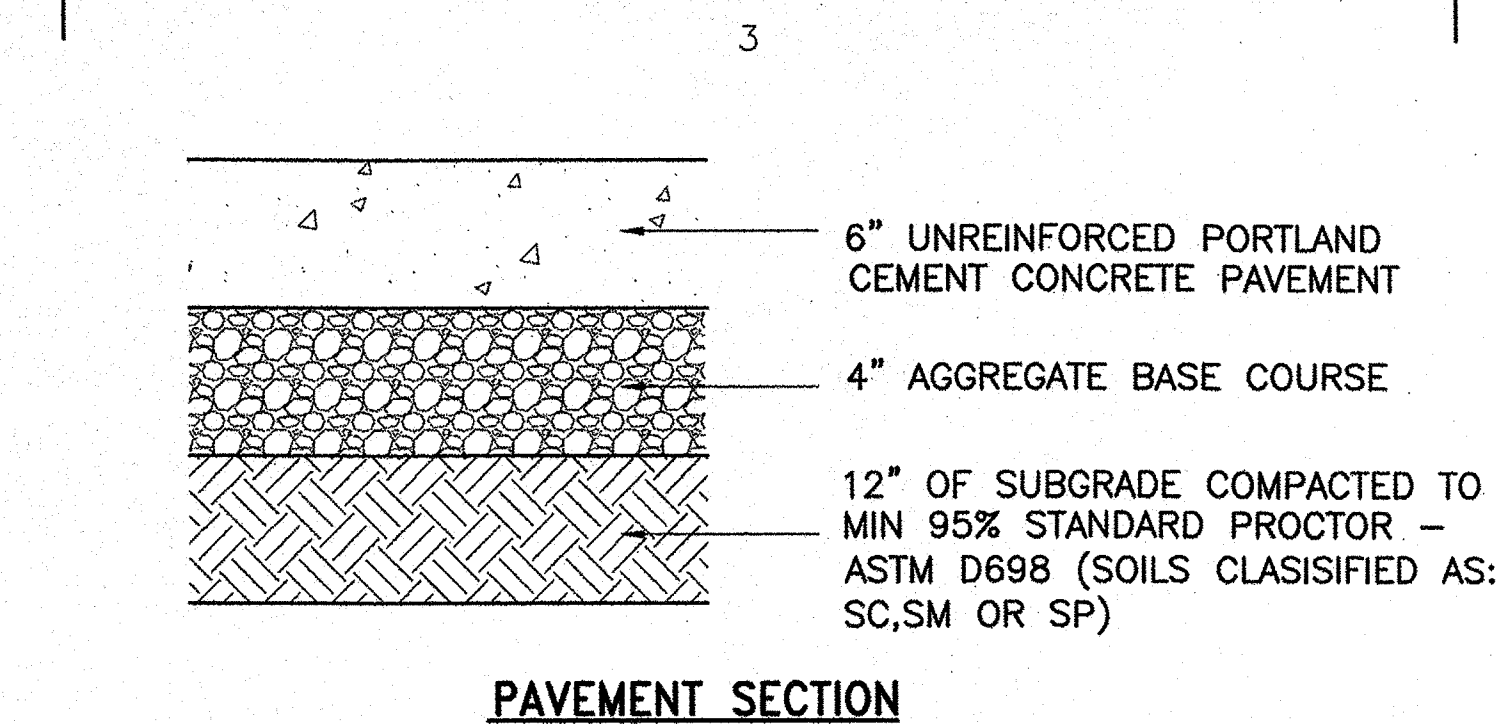
PROJECT NUMBER	DRAWING NUMBER
05-C02245	8244-D
DISCIPLINE/SHT NO	SHEET 5 OF 32
C-04	



**1 BOLLARD DETAIL**  
C-02|C-04 SCALE: NONE



**2 CONTROL (CONTRACTION) JOINTS**  
NOT TO SCALE



**PAVEMENT SECTION**

CONTROL JOINTS SHALL BE SPACED AT APPROXIMATELY 7'-6"

PORTLAND CEMENT CONCRETE PAVEMENT SHALL HAVE A MINIMUM FLEXURAL STRENGTH OF 650 PSI.

\* SECOND SAWCUT

\*\* FIRST SAWCUT—SHALL BE MADE AS SOON AS CONCRETE HAS HARDENED SUFFICIENTLY TO PREVENT RAVELING OR SPALLING AND PRIOR TO ANY RANDOM CRACKING

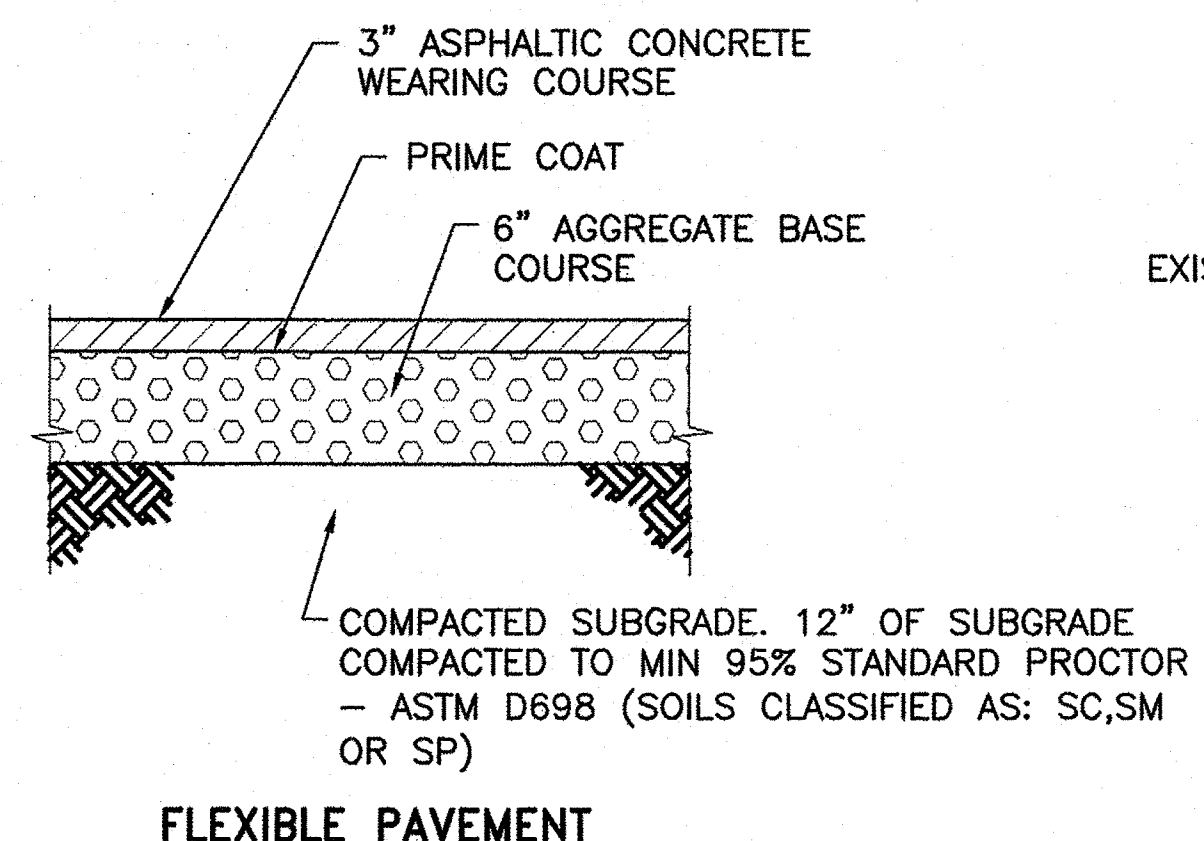
ALL NEW CONCRETE PAVEMENT WORK AND MATERIAL SHALL BE EXECUTED AND SUPPLIED PER THE FOLLOWING REQUIREMENTS OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES (2012)":

ITEM 520 (1005 & 1010) FOR AGGREGATE BASE COURSE (TYPE ABC).  
ITEM 710 PORTLAND CEMENT CONCRETE PAVEMENT  
ITEM 235 EMBANKMENT.

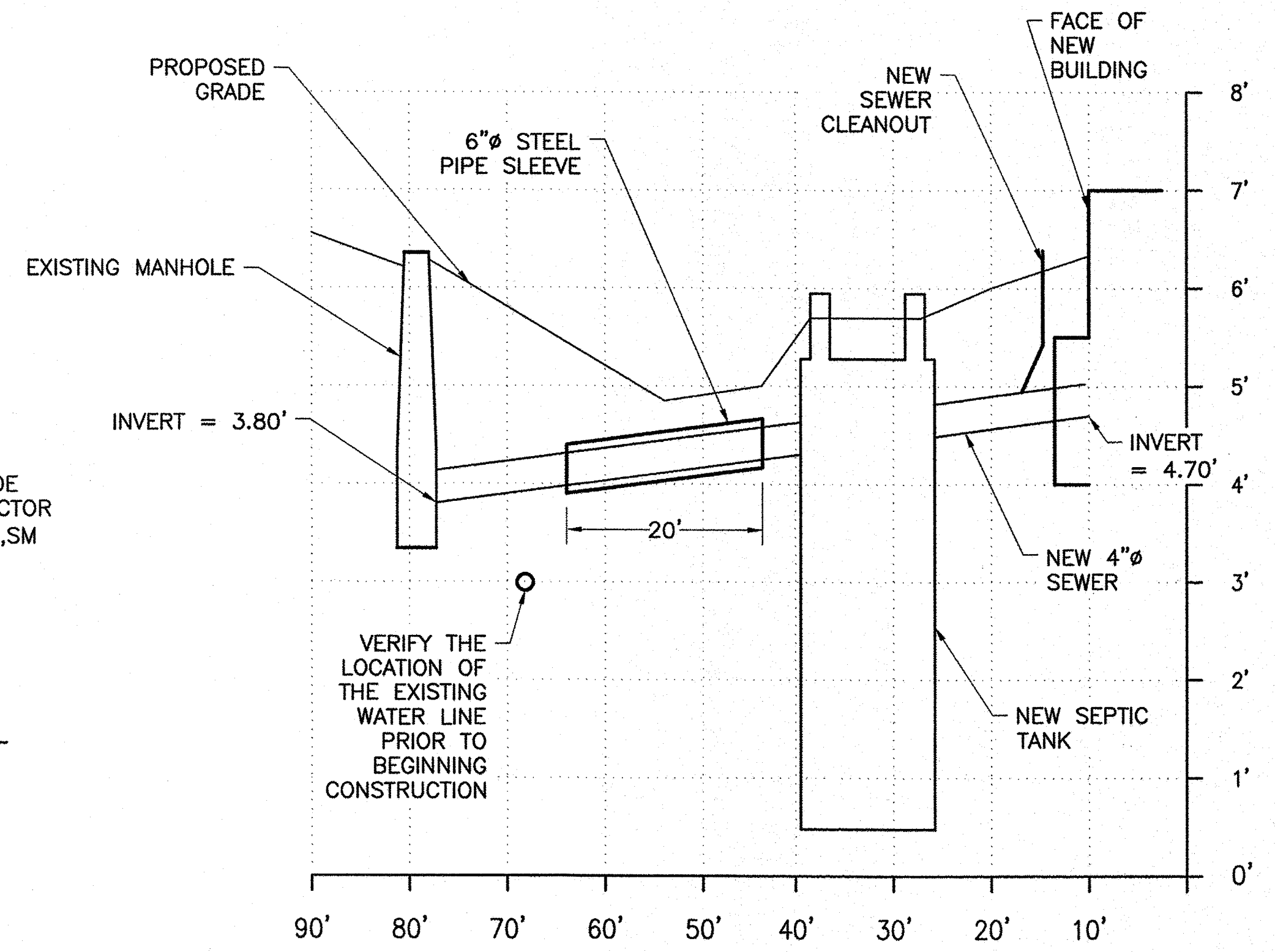
ALL NEW ASPHALT PAVEMENT WORK AND MATERIAL SHALL BE EXECUTED AND SUPPLIED PER THE FOLLOWING REQUIREMENTS OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES (2012)":

ITEM 520 (1005 & 1010) FOR AGGREGATE BASE COURSE (TYPE ABC).  
ITEM 600 FOR PRIME COAT.  
ITEM 605 (1020) FOR TACK COAT.  
ITEM 610 (1012 & 1020-2) MIX DESIGNATION 'SF9.5A' FOR WEARING COURSE AND '119.0B' FOR INTERMEDIATE COURSE.  
ITEM 235 EMBANKMENT.

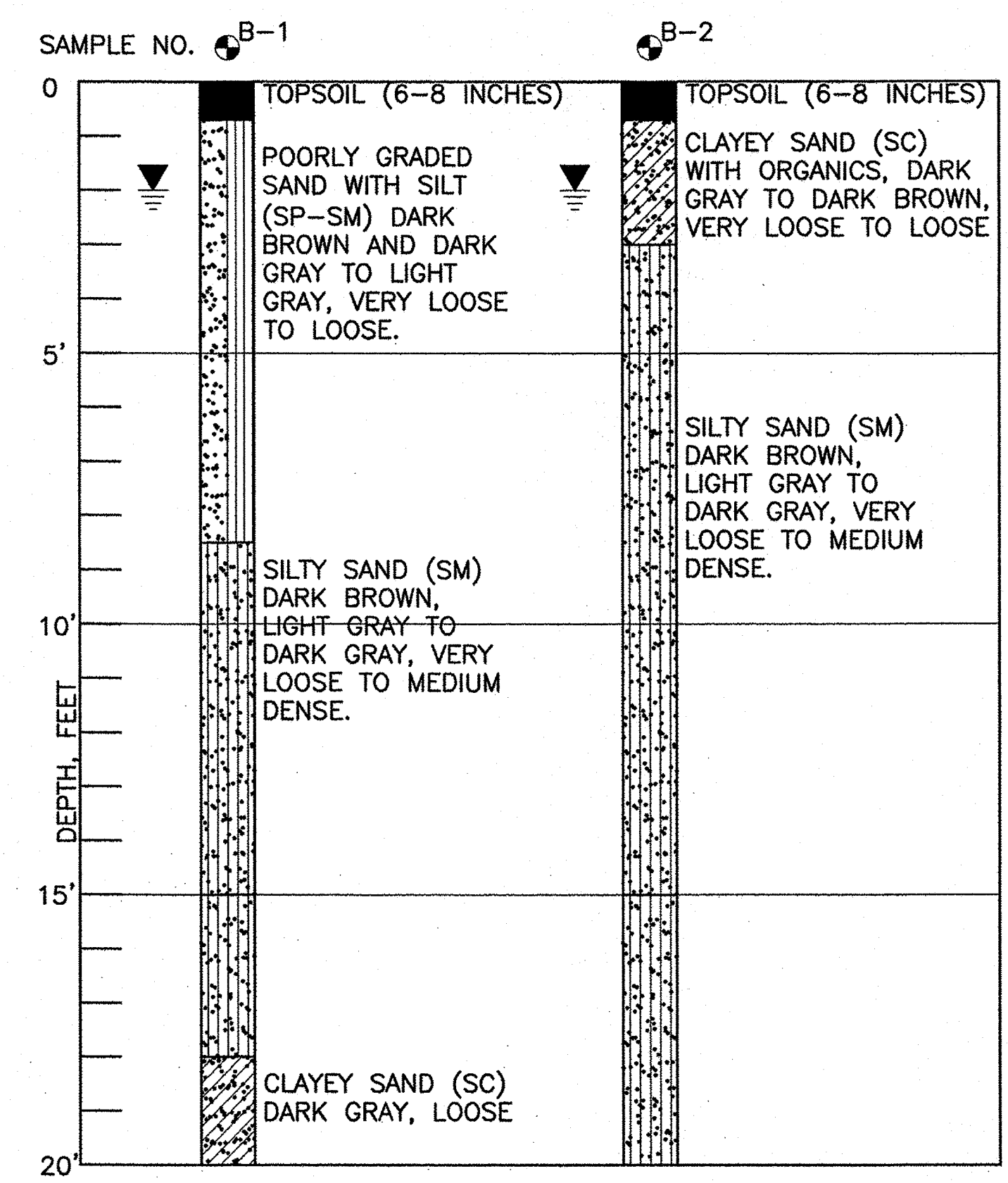
**2 CONCRETE PAVEMENT DETAIL**  
C-02|C-04 SCALE: NONE



**3 ASPHALT PAVEMENT DETAIL**  
C-02|C-04 SCALE: NONE



**4 NEW SEWER LINE PROFILE**  
C-02|C-04 SCALE: NONE



GROUNDWATER LEVEL WAS OBSERVED AT A DEPTH OF 2' BELOW GRADE WHILE DRILLING. GROUND WATER LEVELS CAN RISE DUE TO SEASONAL VARIATIONS IN THE AMOUNT OF RAINWATER, RUNOFF AND OTHER FACTORS.

SOIL BORING DATA BASED ON TERRACON'S GEOTECHNICAL INVESTIGATION REPORT 'PROPOSED HOBUCKEN USCG STATION BOAT MAINTENANCE BUILDING' DATED NOVEMBER 21, 2014.

**5 SOILS BORINGS**  
C-01|C-04 SCALE: NONE



**NOTE:**

GEOTEXTILE FABRIC SHALL BE PRE-APPROVED AS SPECIFIED BY THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION

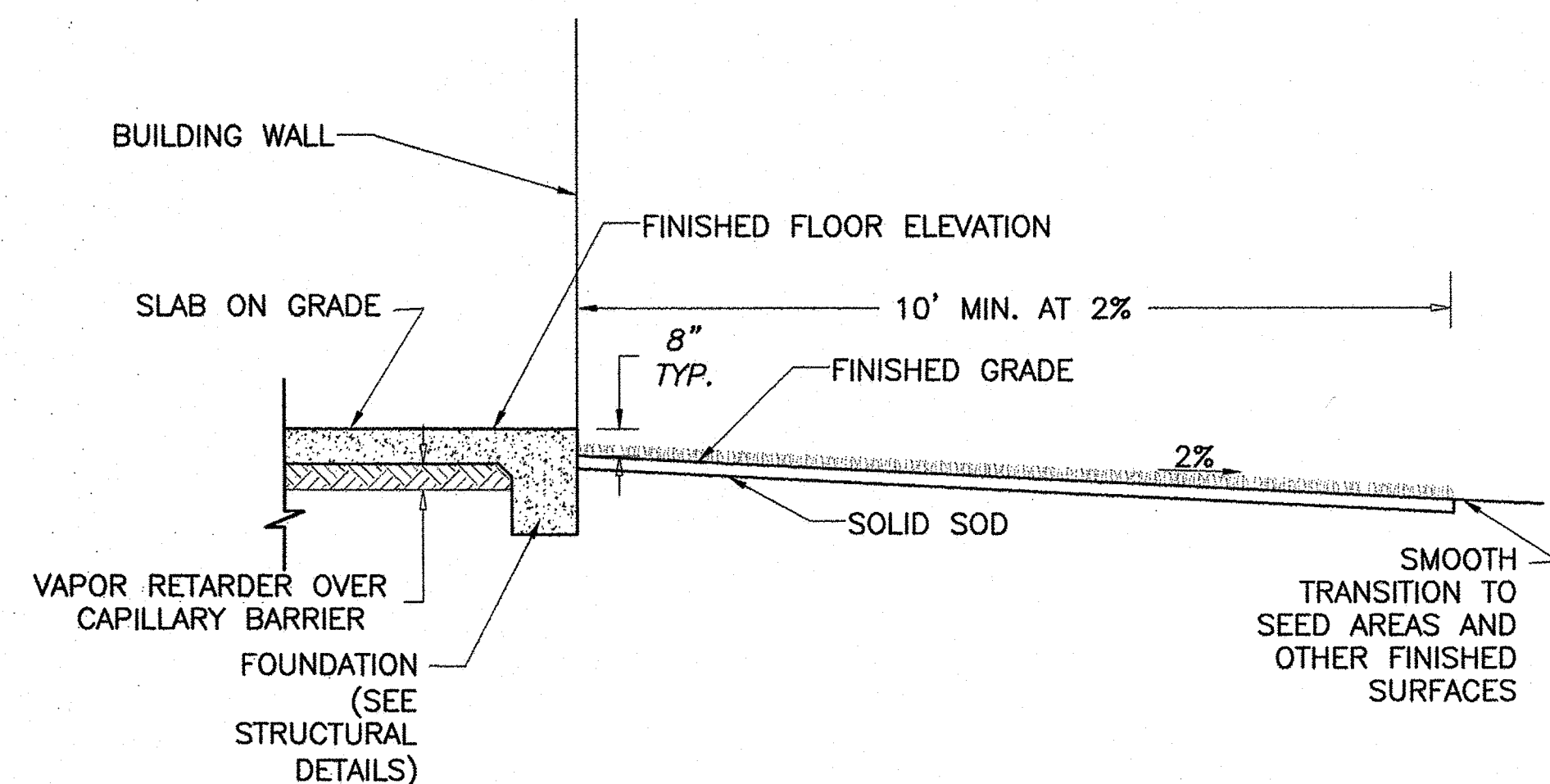
**SEQUENCE OF WATER POLLUTION PREVENTION CONTROLS**

- 1.) INSTALL SILT FENCE .
- 2.) STRIP AND STORE TOP SOIL.
- 3.) ESTABLISH DRAINAGE.
- 4.) BRING SITE TO GRADE.
- 5.) SEED ALL EXPOSED EARTH WORK THAT WILL NOT BE PAVED WITH COMMON BERMUDA MIXTURE (10 lbs./ACRE AND 600 lbs./ACRE 13-13-13 FERTILIZER).
- 6.) MAINTAIN BERMUDA TURF AND MAINTAIN SILT FENCE AND STRAW BALES TO RESTRICT RUN OFF OF AREAS NOT TURFED, THROUGHOUT THE LENGTH OF THE CONSTRUCTION PERIOD.
- 7.) WHEN CONSTRUCTION IS NEAR COMPLETION, RESPREAD TOPSOIL, FINE GRADE, RE-SEED WITH COMMON BERMUDA AND MULCH.

**MAINTENANCE PLAN**

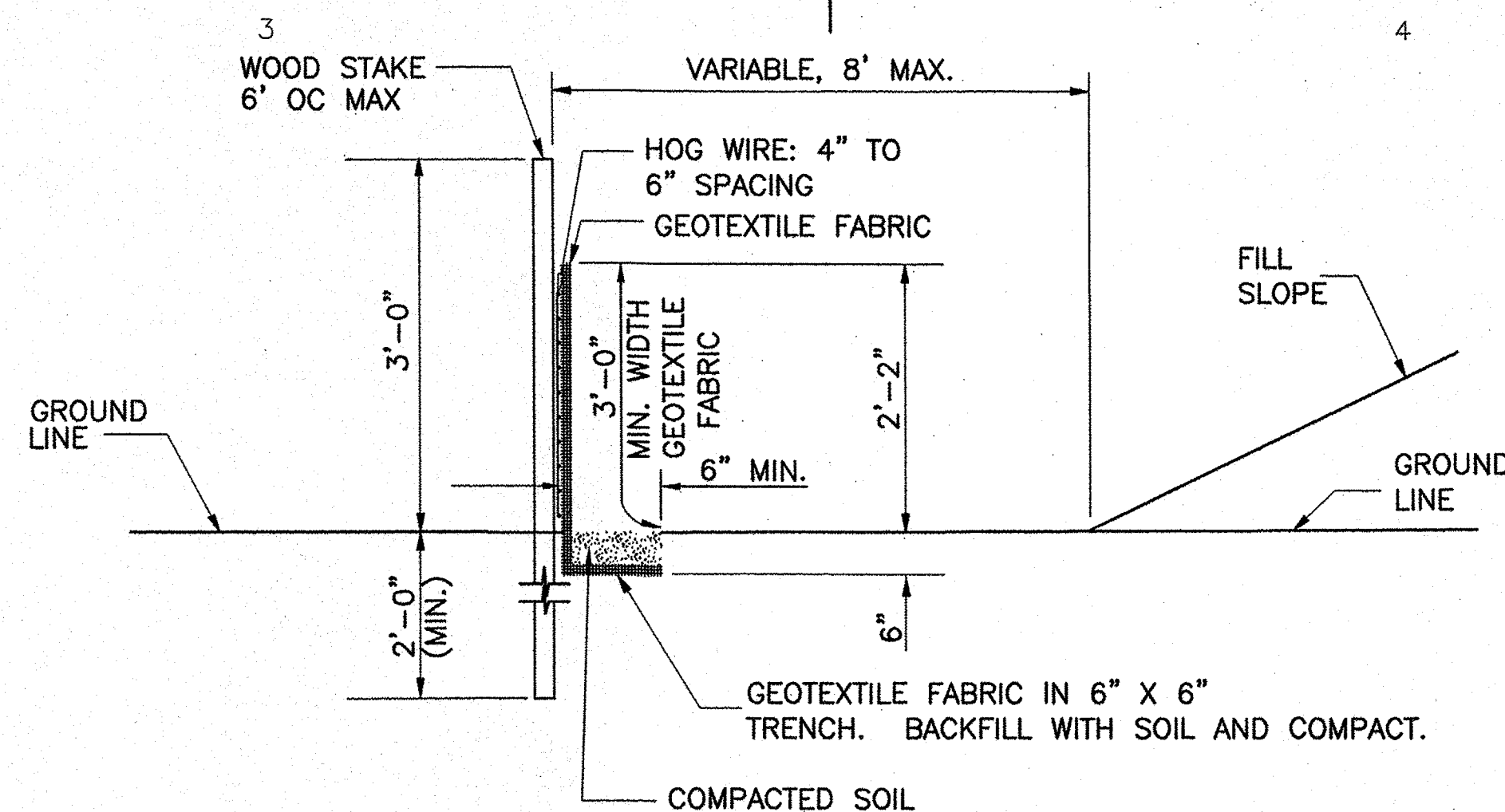
CHECK ALL DISTURBED AREAS, EROSION AND SEDIMENT CONTROLS AFTER EACH SIGNIFICANT RAINFALL BUT NOT LESS THAN ONCE PER WEEK. MAKE NEEDED REPAIRS WITHIN 24 HOURS. REMOVE SEDIMENT FROM THE BASIN, INLET PROTECTION DEVICES AND SILT FENCES WHEN ACCUMULATED SEDIMENT HAS REACHED 50 PERCENT CAPACITY. REPLACE NONFUNCTIONAL SILT FENCE. MAINTAIN ALL VEGETATED AREAS TO PROVIDE PROPER GROUND COVER. RESEED, FERTILIZE AND MULCH AS NEEDED.

EROSION MEASURES SHOWN ON THE PLAN WILL REQUIRE ADJUSTMENTS TO ACCOMMODATE CONTRACTOR PHASING. THE CONTRACTOR SHALL MAKE ALL ADJUSTMENTS AND REPAIRS REQUIRED TO CONTROL SEDIMENT RUN-OFF AT NO ADDITIONAL COST TO THE GOVERNMENT.



**2 FOUNDATION GRADING DETAIL (TYPICAL)**

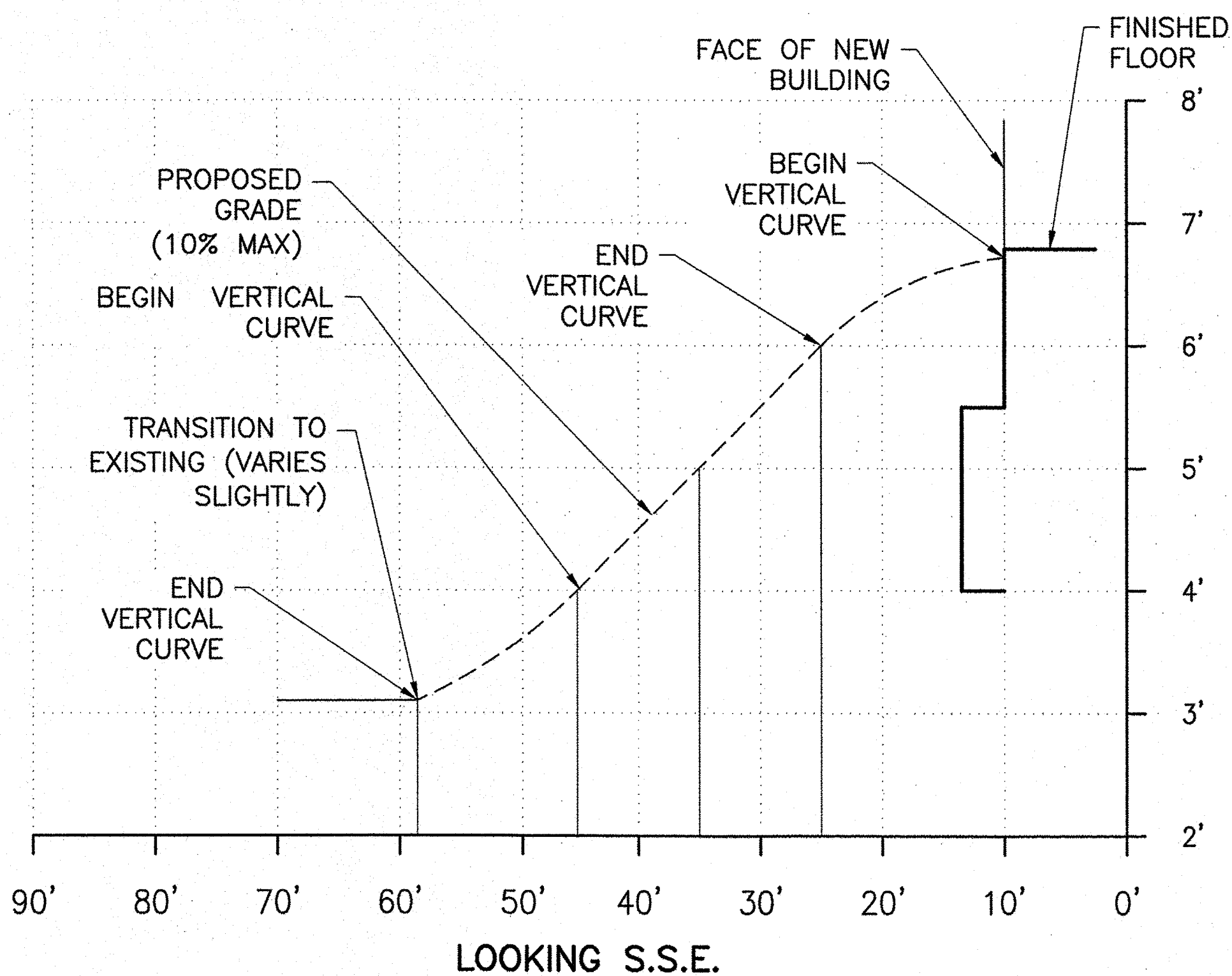
C-02|C-05 SCALE: NONE



**SIDE ELEVATION**

**1 TEMPORARY SILT FENCE DETAIL**

C-02|C-05 SCALE: NONE



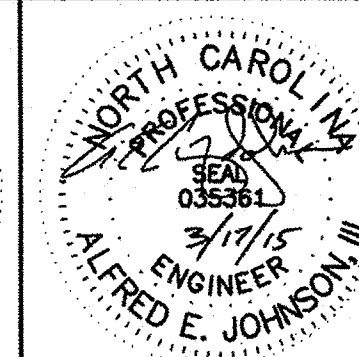
**3 NEW ACCESS PAVEMENT PROFILE**

C-02|C-05 SCALE: NONE

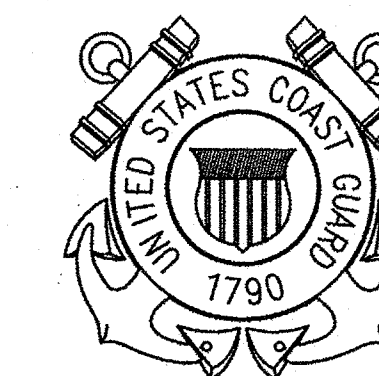
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1240 EAST 9TH STREET  
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ISSUE		
MARK	DATE	DESCRIPTION

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CAD FILE NAME: C8244C05.dwg
DESIGNED BY: AEJ
DRAWN BY: JND
EDITED BY: AEJ
CHECKED BY: DRL

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SHEET TITLE  
**CONSTRUCT BMF  
CG STATION HOBUCKEN  
HOBUCKEN NC**  
**CIVIL  
GENERAL DETAILS**

REVIEWED BY: R. PIPAK	REVIEWED BY: B. VRANKAR	REVIEWED BY: G.S. PLACZEK
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR
P. R. CARROLL, CDR APPROVING OFFICER		03/17/15 DATE

PROJECT NUMBER	DRAWING NUMBER
05-C02245	8244-D
DISCIPLINE/SHT NO	SHEET 6 OF 32
C-05	



**PRE-ENGINEERED METAL BUILDING AND STRUCTURAL NOTES:**

- THE BUILDING SHALL BE PRE-ENGINEERED BUILDING AS SPECIFIED IN SPECIFICATION SECTION 13 34 19, "METAL BUILDING SYSTEMS". THE BUILDING SHALL BE A MANUFACTURER'S STANDARD PREFABRICATED METAL STRUCTURE OF THE INSIDE AREA SHOWN. OVERALL DIMENSIONS AND CONSTRUCTION DETAILS MAY VARY TO SUIT MANUFACTURER'S STANDARD DESIGN.
- THE BUILDING SHALL BE DESIGNED AND FABRICATED ACCORDING TO AISC (AMERICAN INSTITUTE OF STEEL CONSTRUCTION) AND AISI (AMERICAN IRON AND STEEL INSTITUTE) LATEST SPECIFICATIONS. THE DIMENSIONAL TOLERANCES OUTLINED IN THE AWS (AMERICAN WELDING SOCIETY) CODE UNDER WORKMANSHIP AND THE TOLERANCES APPLICABLE TO ROLL FORM STEEL UNDER THE AISC "STANDARD MILL PRACTICE" SECTION SHALL BE REQUIRED IN THE FABRICATION OF THE STEEL BUILDING FRAMES.
- A COMPLETE DESIGN ANALYSIS SHOWING ALL CALCULATIONS FOR THE RIGID FRAMES, GIRTS, AND PURLINS, AND A LAYOUT OF ANCHOR BOLTS AND OTHER EMBEDDED ITEMS SHALL BE SUBMITTED FOR APPROVAL WITH THE SHOP DRAWINGS. SHOP DRAWINGS SHALL INCLUDE DETAILS OF ALL MAIN MEMBERS, TYPICAL CONNECTIONS (SHOWING BOLT HOLES AND WELDS), AND ERECTION DRAWINGS.
- THE BUILDING SHALL BE DESIGNED TO SUPPORT ALL FLOORS, DOORS, EQUIPMENT AND ALL OTHER DEVICES. ADDITIONAL STRUCTURAL STEEL, GIRTS OR PURLINS SHALL BE PLACED IN CONVENIENT LOCATIONS FOR ATTACHMENT OF ALL EQUIPMENT AND DEVICES.
- CROSS BRACING SHALL NOT BE POSITIONED WHERE POTENTIAL CONFLICTS WITH DOORS, WINDOWS, OR BUILDING APPURTENANCES COULD ARISE.
- THE FOUNDATIONS SHOWN ARE ESTIMATES FOR THE BUILDING TYPE SHOWN ON THE DRAWINGS AND ARE TO BE USED AS A GUIDE FOR THE BUILDING SUPPLIED. THESE FOUNDATIONS ARE SIZED FOR THE VALUES SHOWN IN THE "FOUNDATION REACTION DIAGRAM". THE CONTRACTOR SHALL DESIGN THE FOUNDATIONS FOR THE SPECIFIC LOADS FOR THE BUILDING SUPPLIED.
- THE CONTRACTOR SHALL USE IN HIS DESIGN THE BASIC CRITERIA SHOWN BY THIS DRAWING, SUCH AS SLAB THICKNESS, CONTROL JOINTS, DESIGN LOADS AND MINIMUM DEPTH OF FOOTING.
- FOUNDINGS SHALL BE SIZED FOR AN ALLOWABLE SOIL BEARING PRESSURE OF 1500 PSF. THE ALLOWABLE SOIL PRESSURE IS BASED UPON A GEOTECHNICAL REPORT PREPARED BY TERRACON CONSULTANTS, INC. DATED NOVEMBER 21, 2014.
- DESIGN THE BUILDING SYSTEM FOR THE LIVE LOADS OR SNOW LOADS (WHICHEVER IS GREATER) INDICATED AND A COLLATERAL LOAD OF 5 PSF IN ADDITION TO THE BUILDING DEAD LOADS, WIND LOADS AND SEISMIC LOADS. PARAMETERS FOR THE DEVELOPMENT OF THE SNOW, WIND AND SEISMIC LOADS ARE LISTED IN THE DESIGN LOADS ON THIS SHEET. ROOF PURLINS SHALL BE DESIGNED FOR AN ADDITIONAL CONCENTRATED LIVE LOAD OF 300 POUNDS LOCATED ANYWHERE ALONG THE LENGTH OF THE PURLIN.

**DESIGN LOADS**

USE ASCE 7-05 FOR ALL BUT SEISMIC.  
USE TI 809-04 FOR SEISMIC

DEAD LOAD	AS REQ'D BY MANUFACTURER
COLLATERAL LOADS	5.0 PSF (TOTAL)
ROOF LIVE LOAD	20 TO 12.0 PSF (VARIES BY TRIBUTARY AREA)
GROUND SNOW LOAD	10.0 PSF
SNOW EXPOSURE FACTOR	0.9
THERMAL FACTOR	1.1
IMPORTANCE FACTOR, SNOW	1.0
ROOF SNOW LOAD	7.0 PSF
WIND SPEED	134 MPH (ULTIMATE)
WIND EXPOSURE	C
ENCLOSURE CLASSIFICATION	PARTIALLY OPEN
IMPORTANCE FACTOR, WIND	1.0
SEISMIC HAZARD USE GROUP	II
SEISMIC DESIGN CATEGORY	B
SEISMIC PERFORMANCE LEVEL	LIFE SAFETY
SEISMIC SITE CLASSIFICATION	E

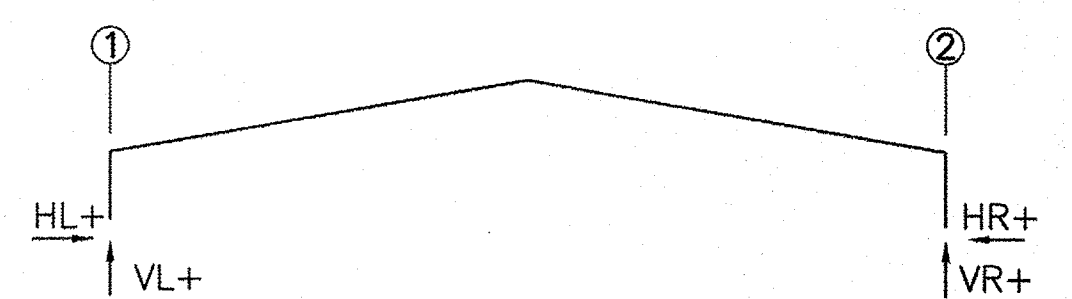
- ALL CONCRETE SHALL CONFORM TO ACI (AMERICAN CONCRETE INSTITUTE) 301 AND SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH (f'c) OF 3500 PSI @ 28 DAYS.
- CONCRETE COVER ON REINFORCEMENT SHALL BE AS FOLLOWS:  
CONCRETE CAST AGAINST EARTH 3 INCHES  
CONCRETE EXPOSED TO EARTH OR WEATHER 2 INCHES  
CONCRETE SLABS 2 INCHES
- REINFORCING STEEL SHALL BE ASTM A 615, GRADE 60 FOR BARS OR ASTM A 185 FOR WELDED WIRE FABRIC. REINFORCING STEEL SHALL BE LAPPED AS SPECIFIED IN ACI 318-02.
- GROUT SHALL BE NON-SHRINK WITH COMPRESSIVE STRENGTH (f'c) OF 4500 PSI @ 28 DAYS.
- PROVIDE VAPOR BARRIER (ASTM E1745) OVER A 4 INCH CAPILLARY (WASHED STONE (NCDOT NO. 57) BARRIER UNDER SLABS.
- PROVIDE A BY-PASS OR OUTSET MOUNTED GIRT SYSTEM TO FACILITATE ARCHITECTURAL FEATURES.
- THE MEZZANINE LIVE LOAD FOR STORAGE IS 80 PSF.

**ABBREVIATIONS**

A <sub>g</sub>	EFFECTIVE PEAK VELOCITY		
A <sub>v</sub>	EFFECTIVE PEAK VELOCITY RELATED ACCELERATION		
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS		
D	DEAD LOAD		
E	SERVICE LOAD	L <sub>R</sub>	LIVE ROOF LOAD
H	HORIZONTAL	V	VERTICAL
HL	HORIZONTAL LEFT	VL	VERTICAL LEFT
HR	HORIZONTAL RIGHT	VR	VERTICAL RIGHT
KIP	1000 POUNDS	W	WIND LOAD

FOOTING SCHEDULE				
MARK	LENGTH	WIDTH	THICKNESS	REINFORCEMENT
F1	7'-0"	7'-0"	1'-6"	(8) #6, E.W.

NOTE: UNLESS OTHERWISE NOTED, THE TOPS OF ALL FOOTINGS TO BE 1'-8" BELOW FINISHED FLOOR ELEVATION.



MAXIMUM ESTIMATED REACTIONS				
HL	VL	HR	VR	
-13.0	48.8	-17.5	11.5	34.0
				-17.5

(1) ALL VALUES ARE IN KIPS (1000 LBS).  
(2) VALUES WITH (-) SIGN ACT IN OPPOSITE DIRECTION OF ARROWS IN DIAGRAMS  
(3) NO MOMENTS SHALL BE TRANSFERRED FROM THE METAL BUILDING TO THE FOUNDATION

**FOUNDATION REACTION DIAGRAM (MAX. VALUES)**  
NOT TO SCALE

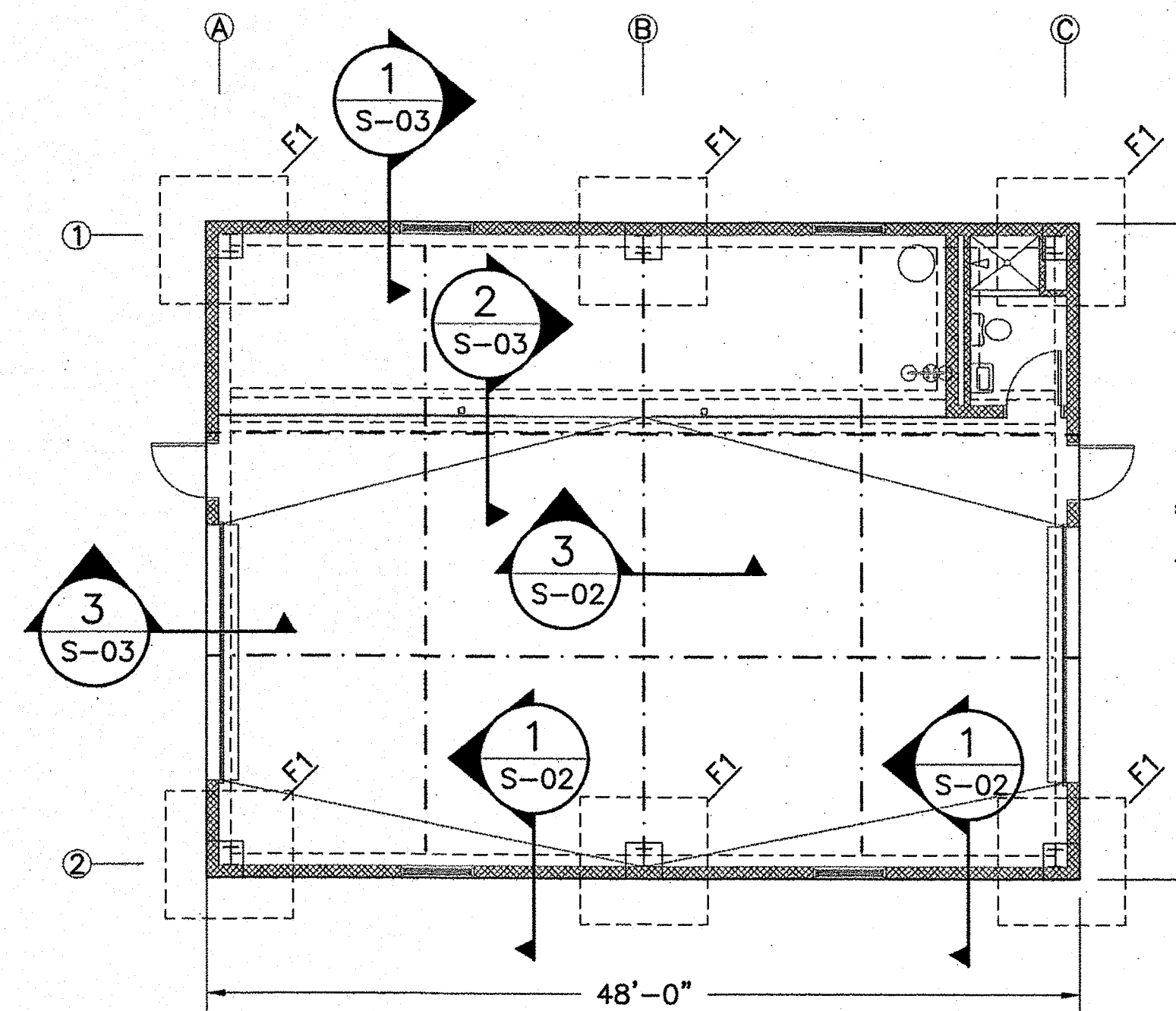
**GEOTECHNICAL ENGINEERING (SOIL BORING) REPORT:**

FOR SOIL BORING INFORMATION SEE GEOTECHNICAL ENGINEERING REPORT 'PROPOSED HOBUCKEN USCG STATION BOAT MAINTENANCE BUILDING' PREPARED BY TERRACON CONSULTANTS, INC. DATED NOVEMBER 21, 2014 INCLUDED WITH SOLICITATION REFERENCE DOCUMENTS. SEE SHEET C-01 FOR BORING LOCATIONS AND C-04 FOR SOIL BORING PROFILES.

**SUMMARY OF GEOTECHNICAL REPORT FINDINGS AND PROJECT REQUIREMENTS:**

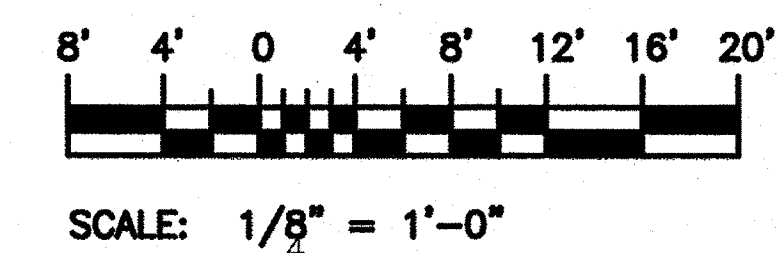
- STRUCTURAL BACKFILL/FILL
  - UNIFORMLY COMPACTED TO A MINIMUM OF 95% ASTM D 698.
  - 9 INCH MAXIMUM LOOSE LIFTS (MACHINE COMPACTED) AND 4" TO 6" MAXIMUM LOOSE LIFTS (HAND COMPACTED).
  - BACKFILL/FILL SOIL SHALL BE CLASSIFIED AS SC, SM OR SP AS DEFINED BY THE UNIFIED SOIL CLASSIFICATION SYSTEM.
  - SLOPES SHALL BE FLATTER OR EQUAL TO 3H:1V.
- SUBGRADE
  - STRIP A MINIMUM OF 8" OF TOPSOIL BELOW ALL FILL AND COMPACT WITH A HEAVY VIBRATORY ROLLER IN DRY.
  - COMPACT WITH MEDIUM WEIGHT VIBRATORY ROLLER (6 PASSES FOLLOWED BY 3 PASSES IN A PERPENDICULAR DIRECTION) IN DRY CONDITIONS.
  - PROOF ROLL WITH LOADED TANDEM-AXEL DUMP TRUCK.

DESCRIPTION	APPROXIMATE DEPTH TO BOTTOM OF STRATUM (FEET)	MATERIAL ENCOUNTERED	CONSISTENCY/DENSITY
SURFACE	0.7	TOPSOIL	N/A
STRATUM 1	6.0 TO 8.0	POORLY GRADED SAND WITH SILT (SP-SM), CLAYEY SAND (SC), AND AND SILTY SAND (SM)	VERY LOOSE TO LOOSE
STRATUM 2	18.0	POORLY GRADED SAND WITH SILT (SP-SM) AND SILTY SAND (SM)	LOOSE TO MEDIUM DENSE
STRATUM 3	20.0	CLAYEY SAND (SC) AND SILTY SAND (SM)	VERY LOOSE TO LOOSE



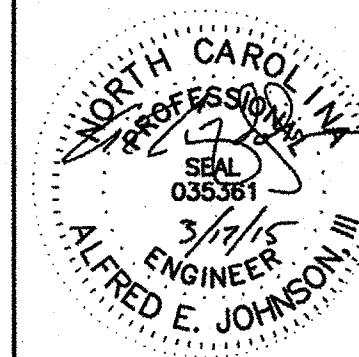
**FOUNDATION PLAN**  
SCALE: 1/8" = 1'-0"

JOINT LEGEND	
---	CONTROL JOINT

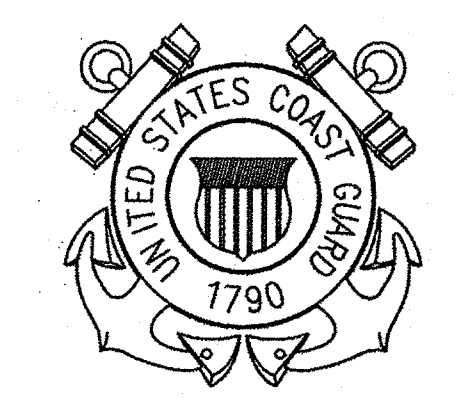


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THE JOHNSON McADAMS FIRM  
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CLEVELAND



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CLEVELAND, OH 44199-2060

ISSUE		
MARK	DATE	DESCRIPTION

A/E PROJECT NO: 1474-A  
CAD FILE NAME: C8244S01.dwg  
DESIGNED BY: AEJ  
DRAWN BY: JND  
EDITED BY: AEJ  
CHECKED BY: DRL

SCALE: AS SHOWN PLOT SCALE: 1:1

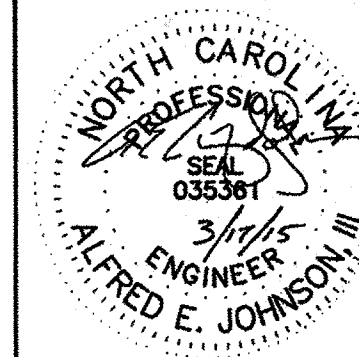
SHEET TITLE  
**CONSTRUCT BMF  
CG STATION HOBUCKEN  
HOBUCKEN NC**  
STRUCTURAL  
GENERAL NOTES

REVIEWED BY: R. PIPAK	REVIEWED BY: B. VRANKAR	REVIEWED BY: G.S. PLACZEK
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR
P. R. CARROLL, CDR APPROVING OFFICER		03/17/15 DATE

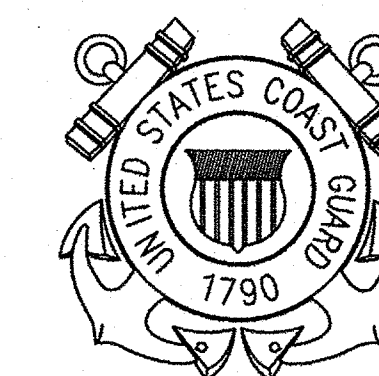
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DISCIPLINE/SHT NO <b>S-01</b>	SHEET <b>7</b> OF <b>32</b>



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MARK	DATE	DESCRIPTION

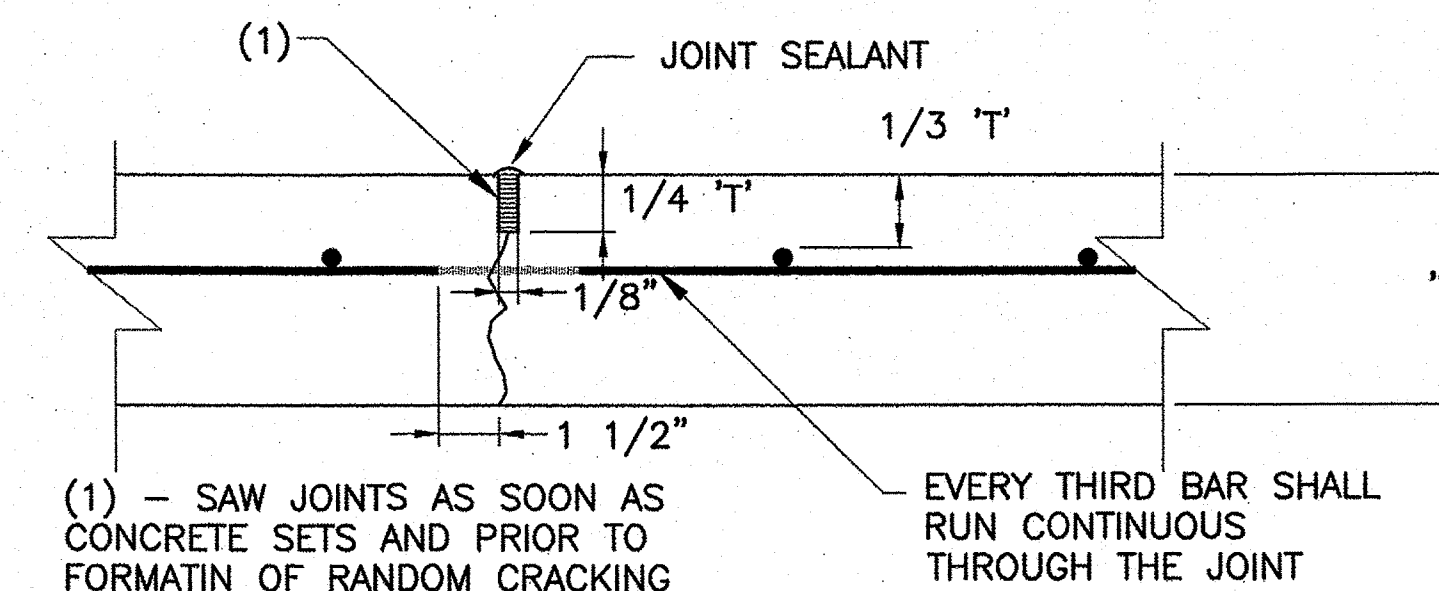
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CAD FILE NAME: C8244S02.dwg  
DESIGNED BY: AEJ  
DRAWN BY: JND  
EDITED BY: AEJ  
CHECKED BY: DRL

SCALE: AS SHOWN PLOT SCALE: 1:1  
SHEET TITLE

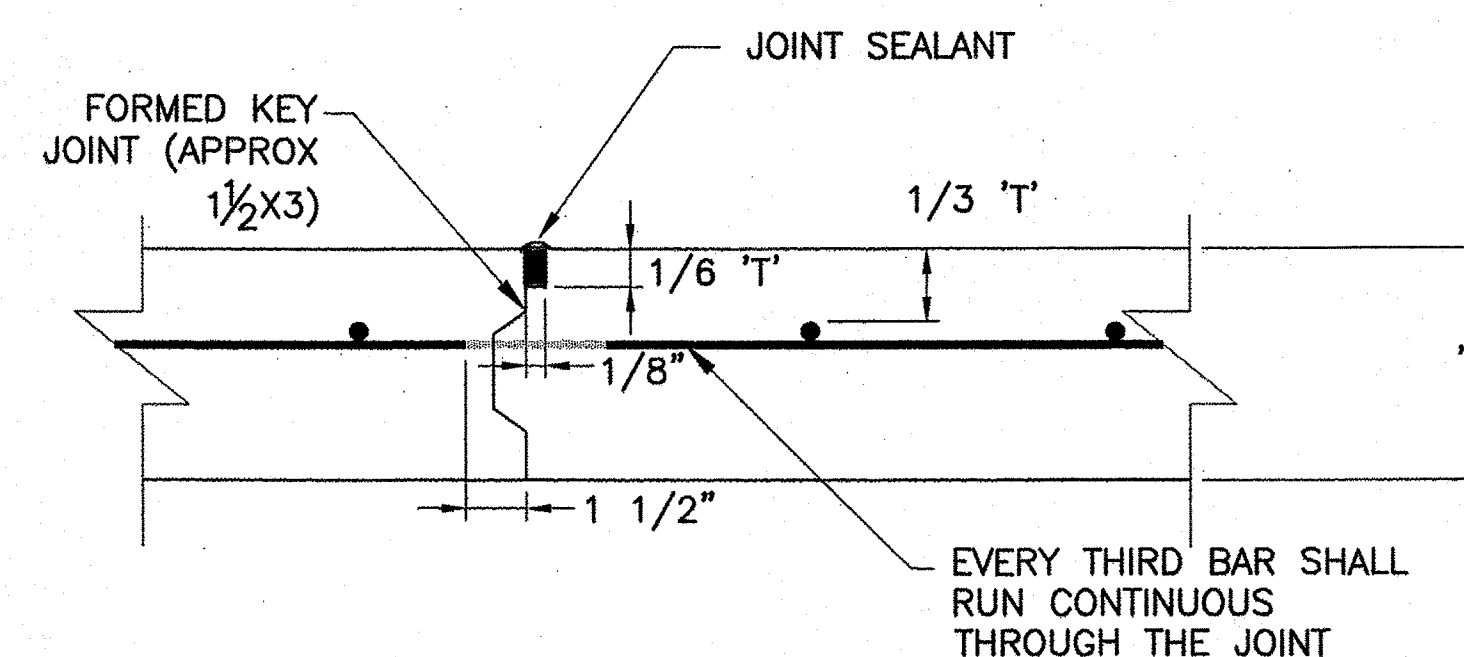
CONSTRUCT BMF  
CG STATION HOBUCKEN  
HOBUCKEN NC  
STRUCTURAL  
FOUNDATION DETAILS

REVIEWED BY: R. PIPAK	REVIEWED BY: B. VRANKAR	REVIEWED BY: G.S. PLACZEK
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR
P. R. CARROLL, CDR APPROVING OFFICER		03/17/15 DATE

PROJECT NUMBER 05-C02245	DRAWING NUMBER 8244-D
DISCIPLINE/SHT NO S-02	SHEET 8 OF 32

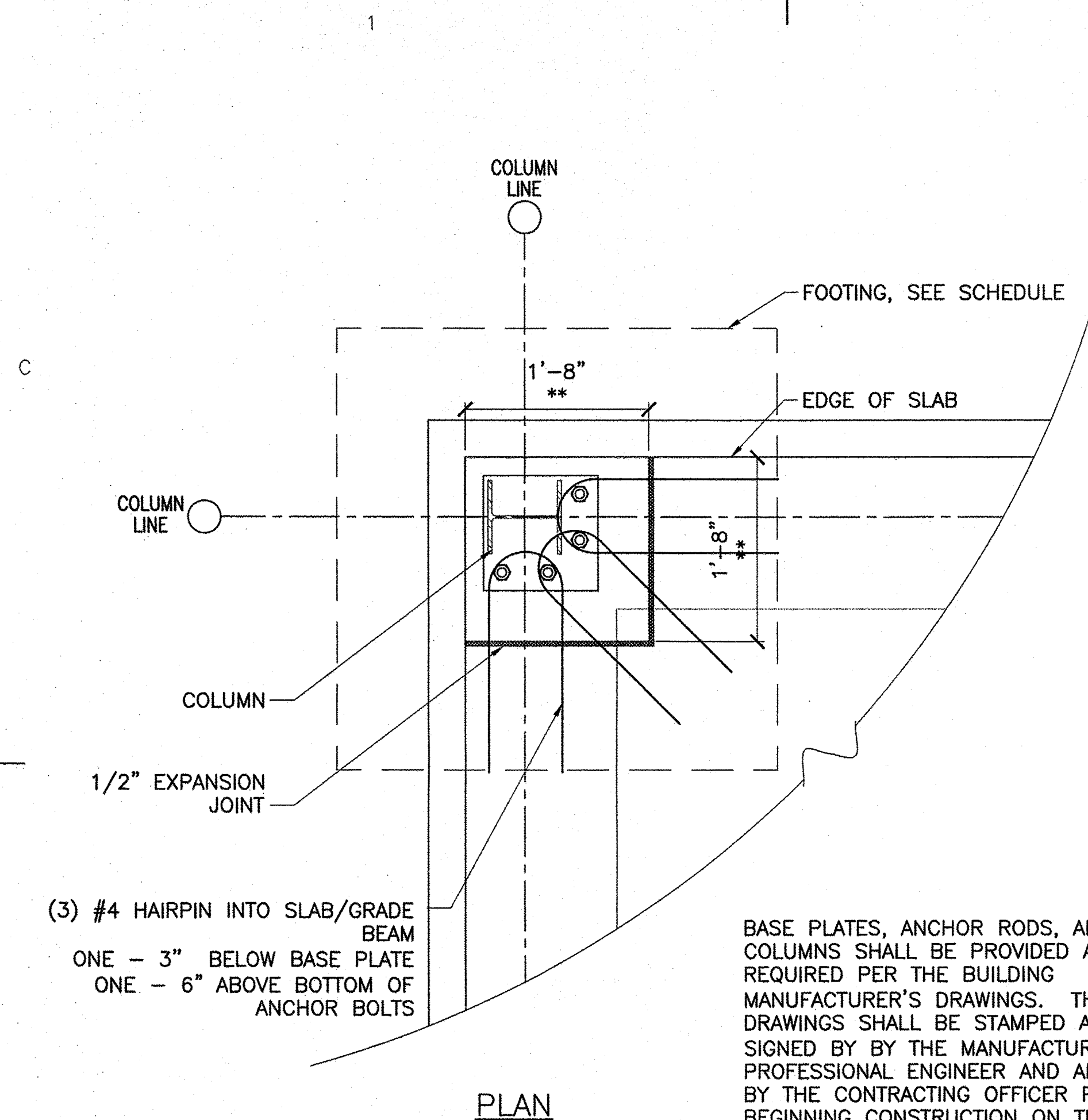


CONTROL JOINT DETAIL

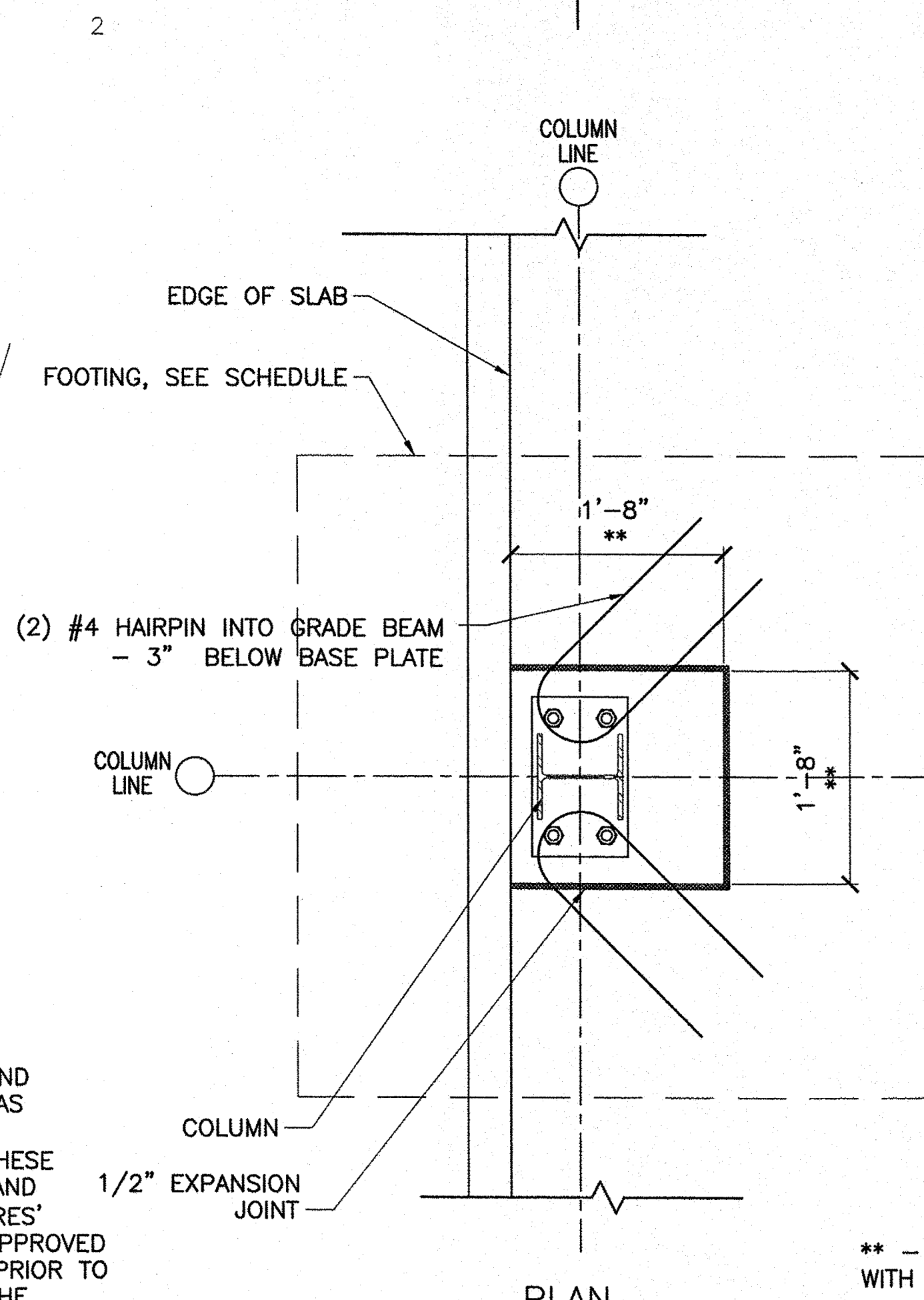


CONSTRUCTION JOINT DETAIL

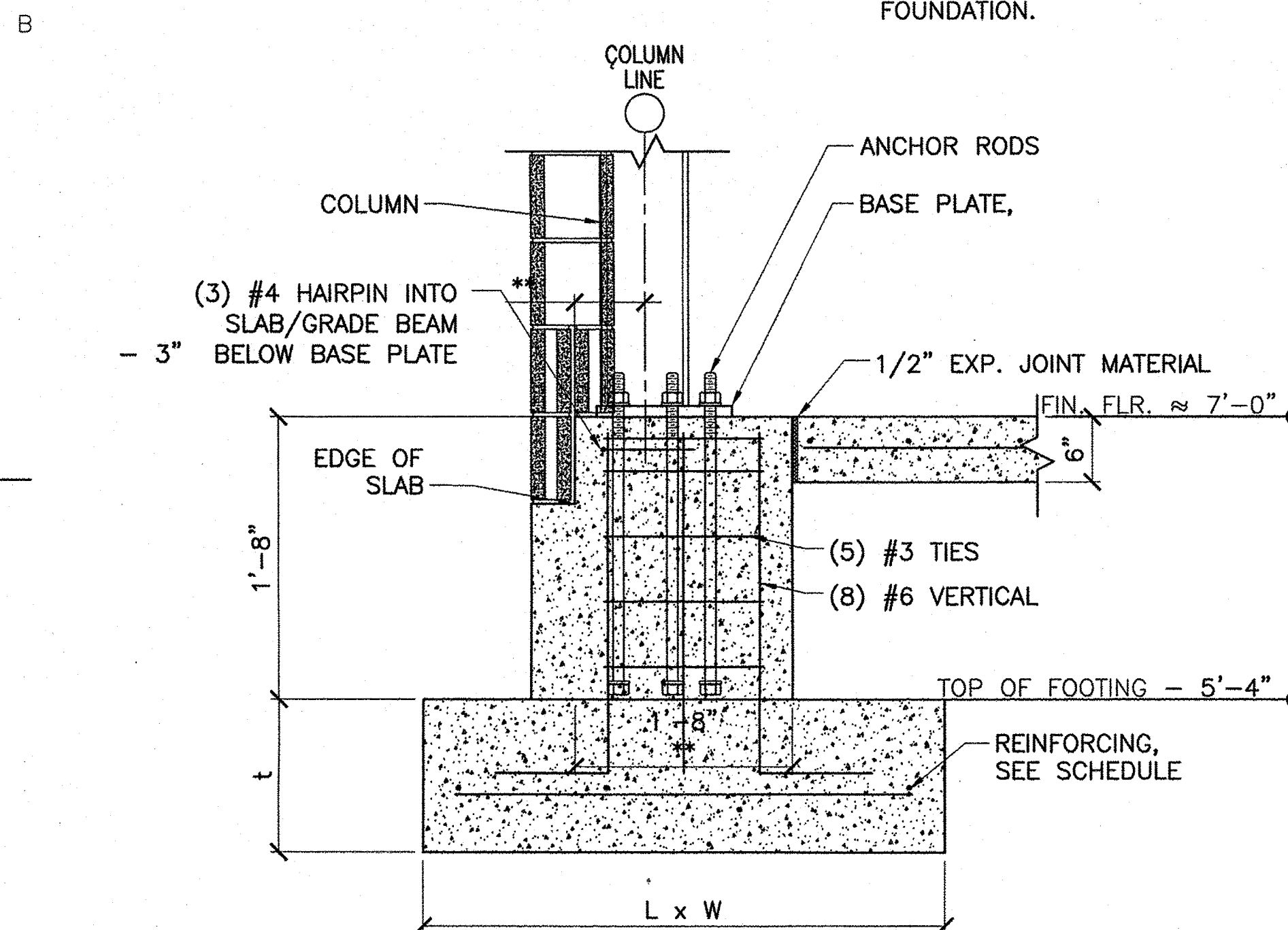
3 TYPICAL JOINT DETAILS  
S-01S-02 SCALE: NONE



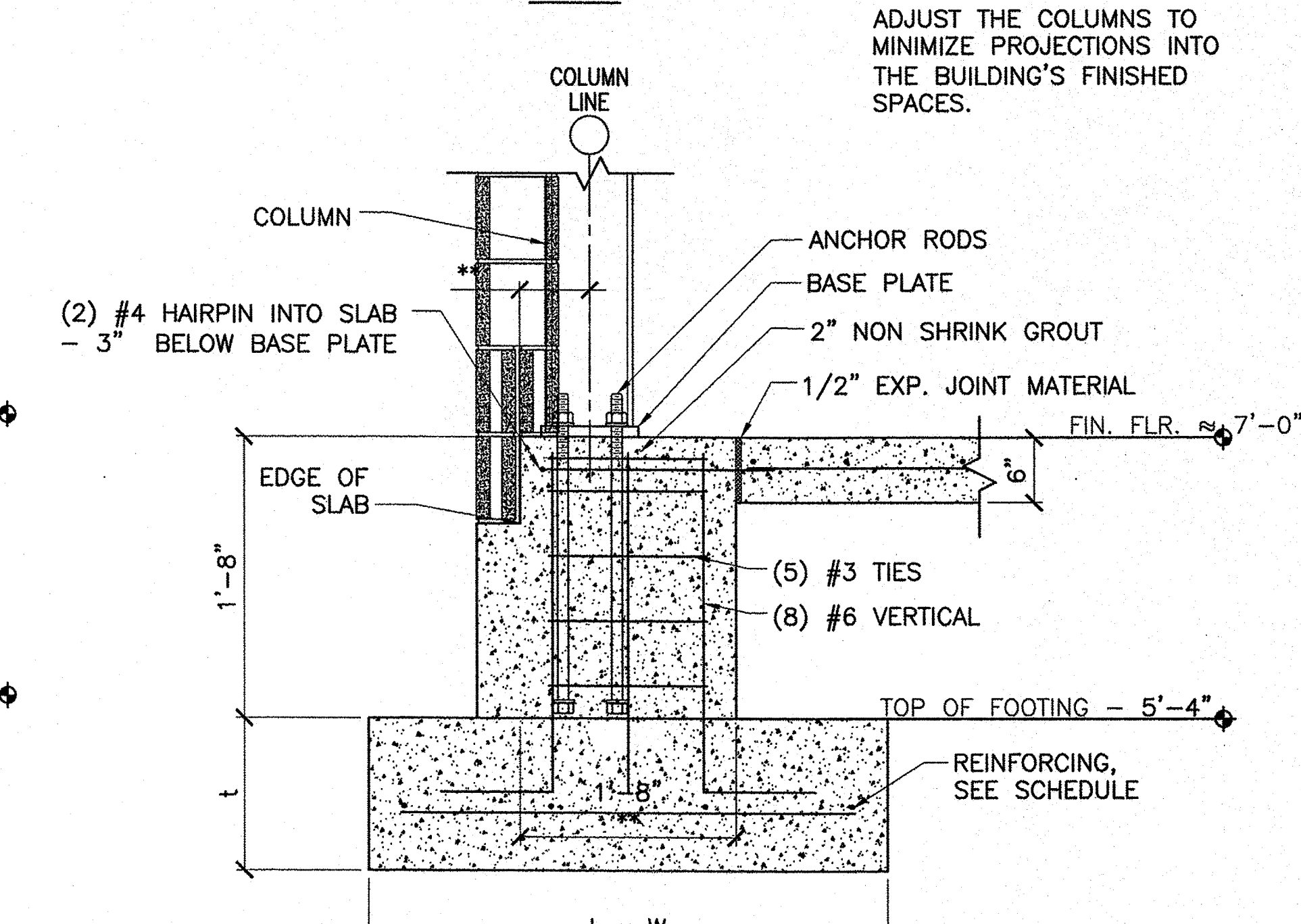
PLAN



PLAN



SECTION

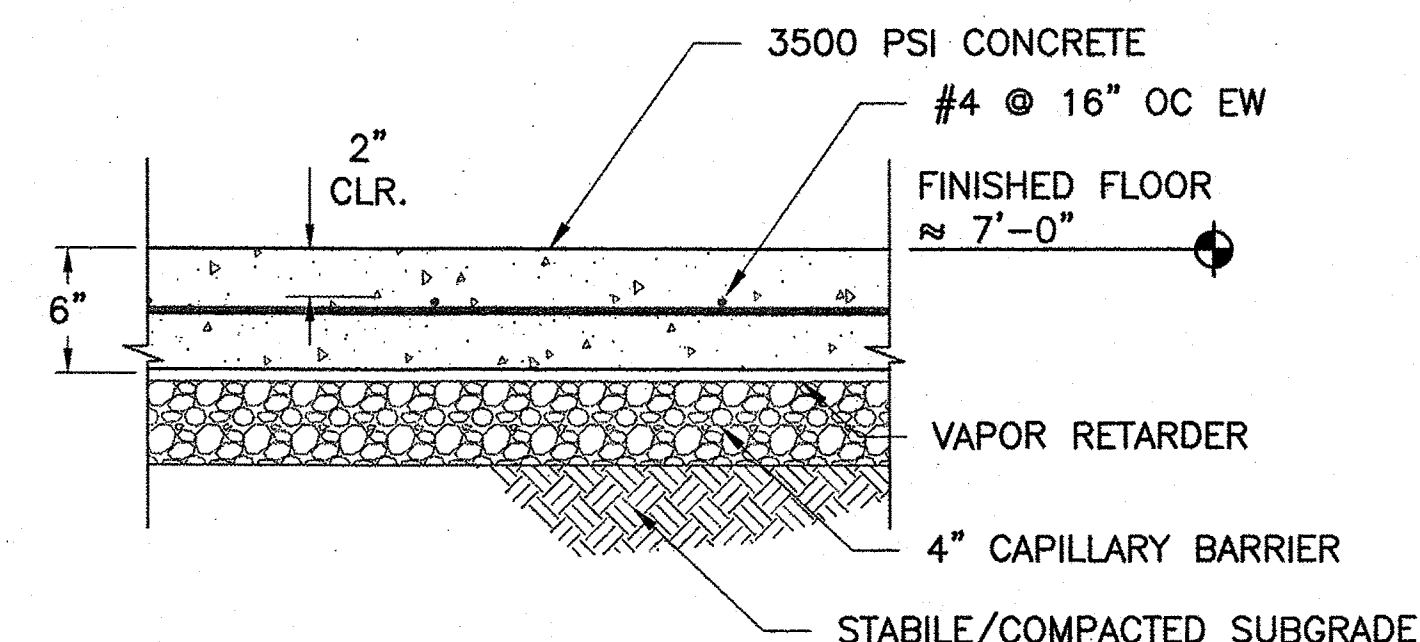


SECTION

FOR CLARITY, CAPILLARY BARRIER IS NOT SHOWN.  
\*\* COORDINATE FINAL DIMENSIONS WITH METAL BUILDING MANUFACTURER.

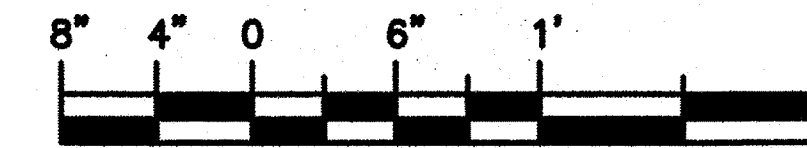
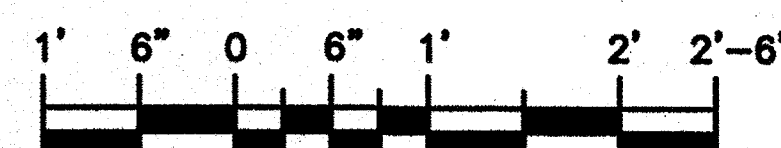
1 FOOTING PLANS  
S-01S-02 SCALE: 1" = 1'-0"

- CAPILLARY BARRIER SHALL BE A COARSE AGGREGATE WITH #57 GRADATION OR APPROVED EQUAL.
- VAPOR RETARDERS SHALL MEET THE REQUIREMENTS OF ASTM E1745. ALL LAPS SHALL BE SEALED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS AND ACI 360.
- CONCRETE SHALL OBTAIN A MINIMUM 3500 PSI STRENGTH AT 28 DAYS. CONCRETE SLUMP SHALL NOT EXCEED 5" WITHOUT THE WRITTEN APPROVAL OF THE CONTRACTING OFFICER.



2 SLAB ON GRADE DETAIL

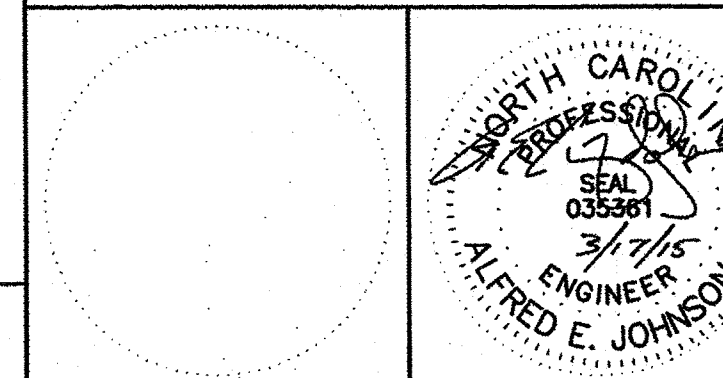
S-01S-02 SCALE: 1 1/2" = 1'-0"



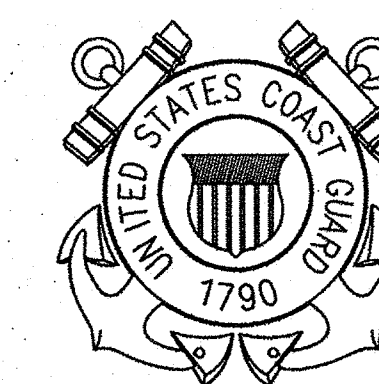


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CLEVELAND



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1240 EAST 9TH STREET  
CLEVELAND, OH 44199-2060

MARK	DATE	DESCRIPTION

A/E PROJECT NO: 1474-A
CAD FILE NAME: C8244S03.dwg
DESIGNED BY: AEJ
DRAWN BY: JND
EDITED BY: AEJ
CHECKED BY: DRL

SCALE: AS SHOWN PLOT SCALE: 1:1

SHEET TITLE

CONSTRUCT BMF  
CG STATION HOBUCKEN  
HOBUCKEN NC

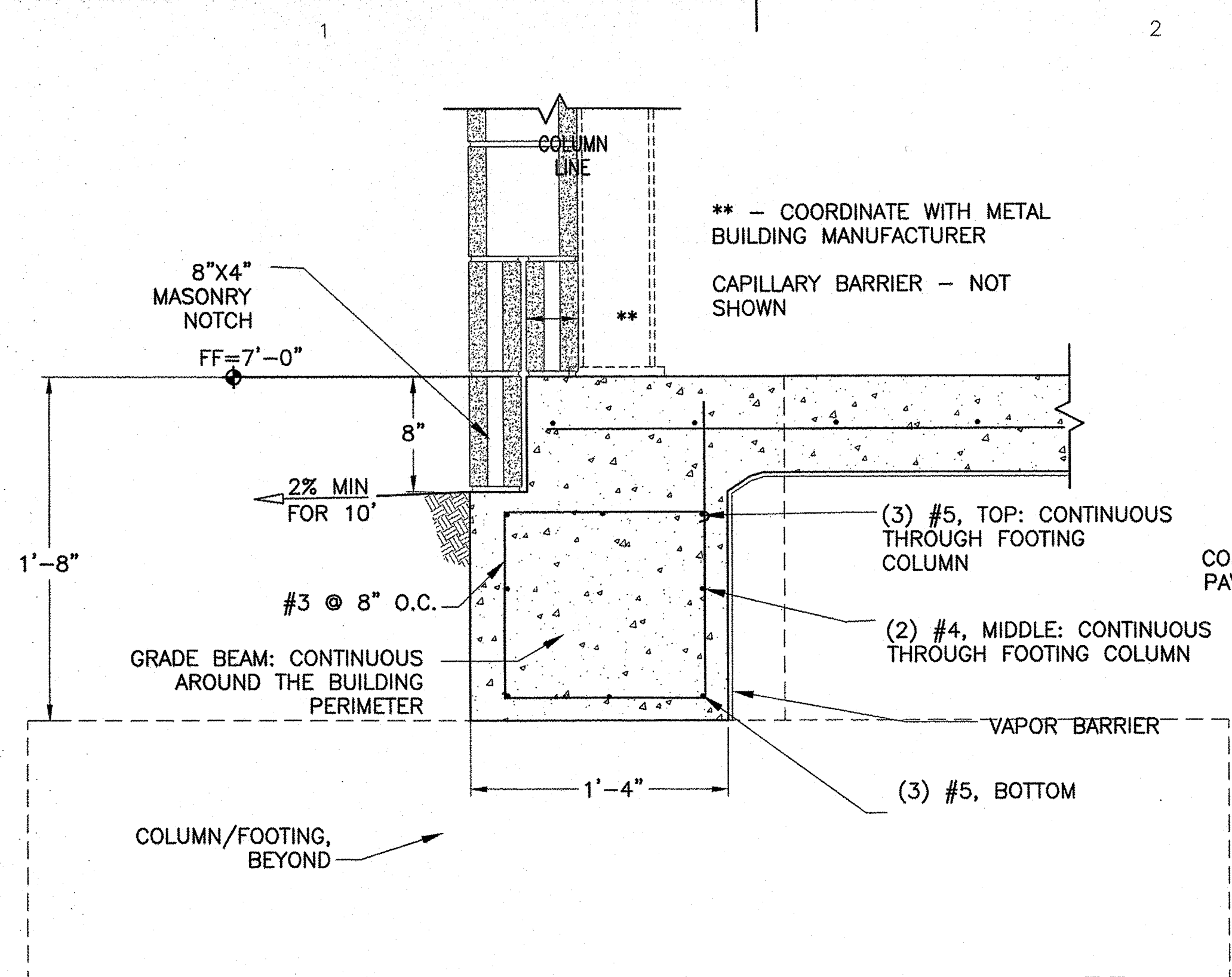
STRUCTURAL  
ADDITIONAL SLAB DETAILS

REVIEWED BY: R. PIPAK	REVIEWED BY: B. VRANKAR	REVIEWED BY: G.S. PLACZEK
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR
P. R. CARROLL, CDR APPROVING OFFICER		03/17/15 DATE

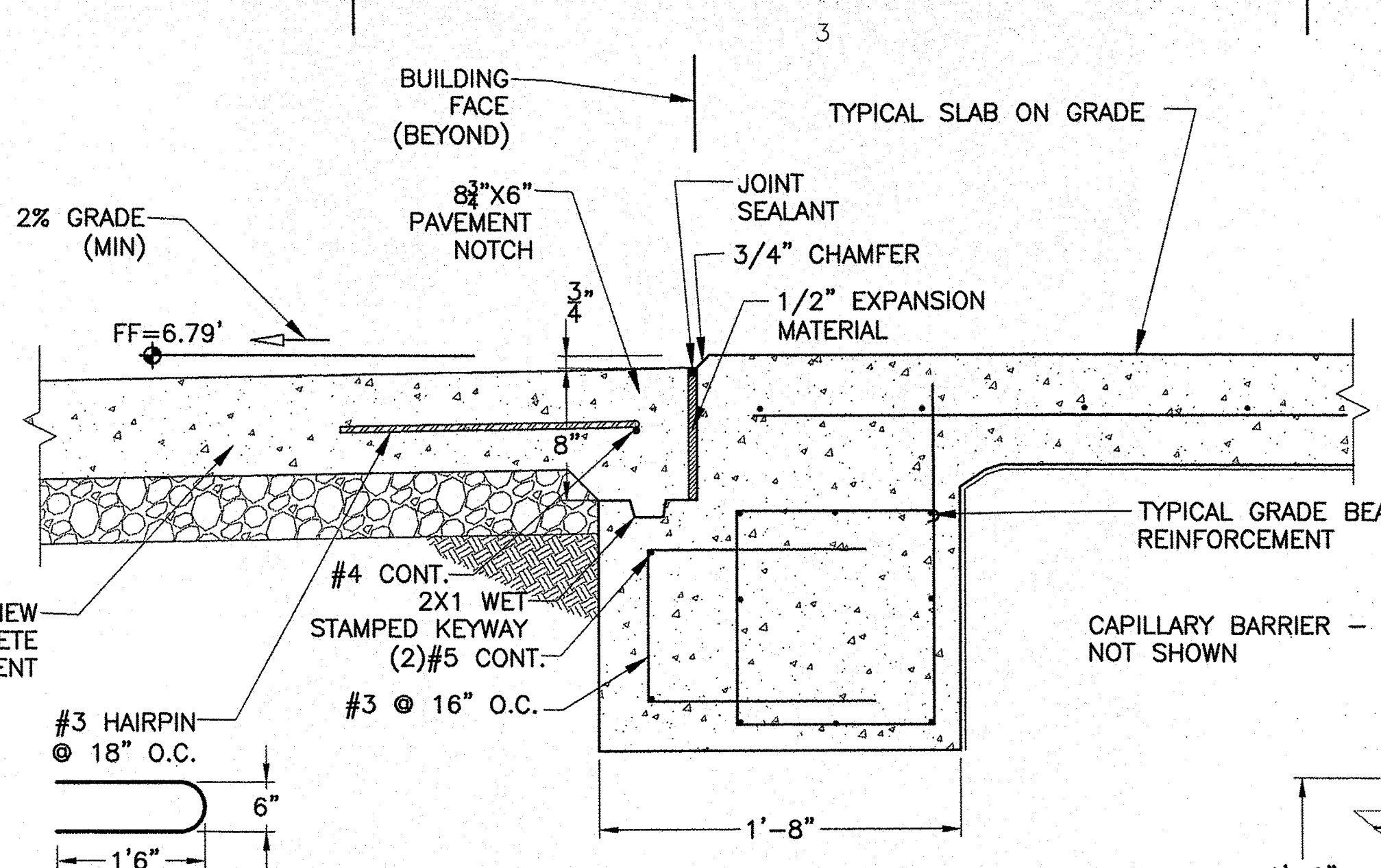
PROJECT NUMBER DRAWING NUMBER

05-C02245 8244-D

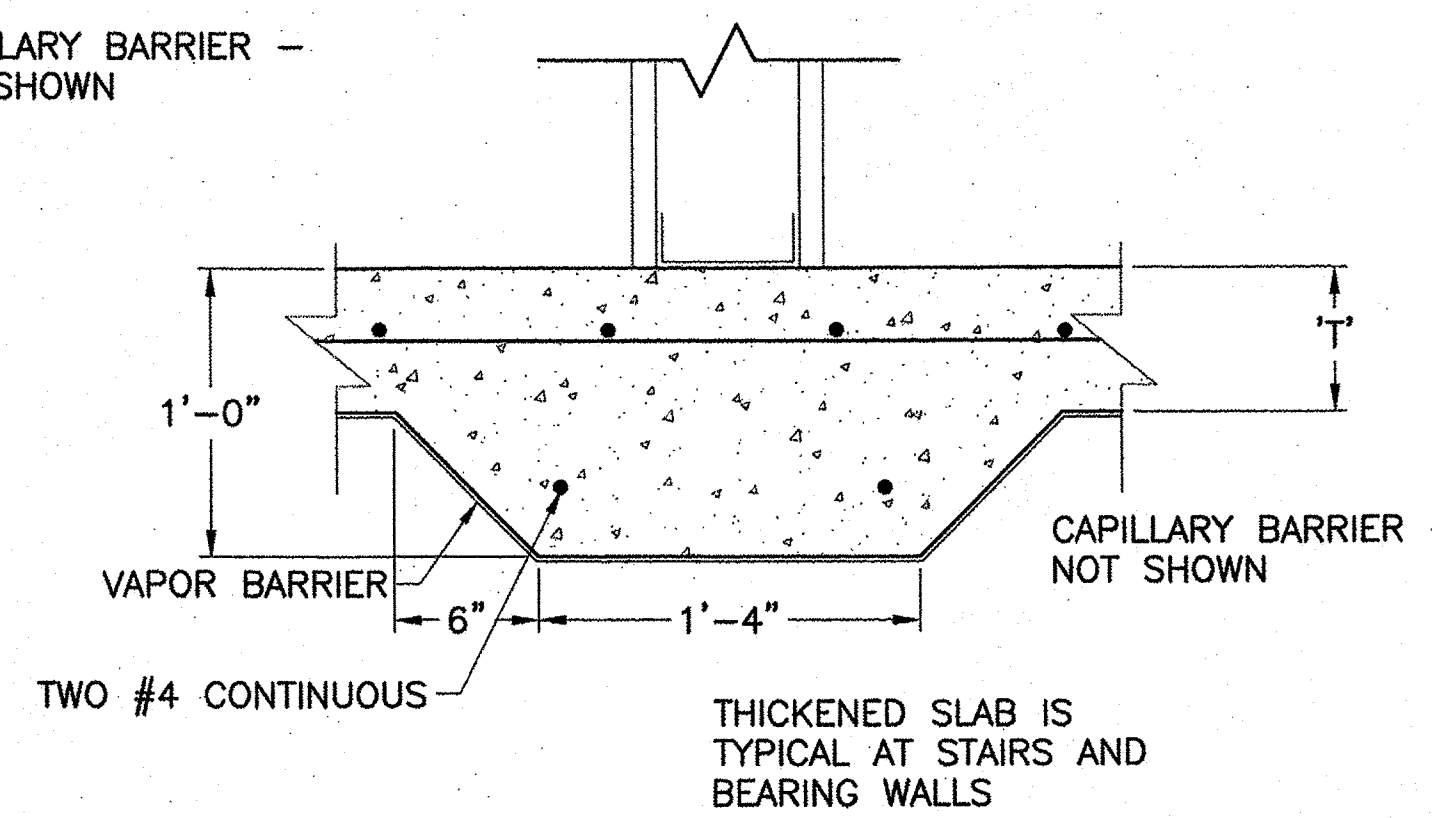
DISCIPLINE/SHT NO SHEET 9 OF 32



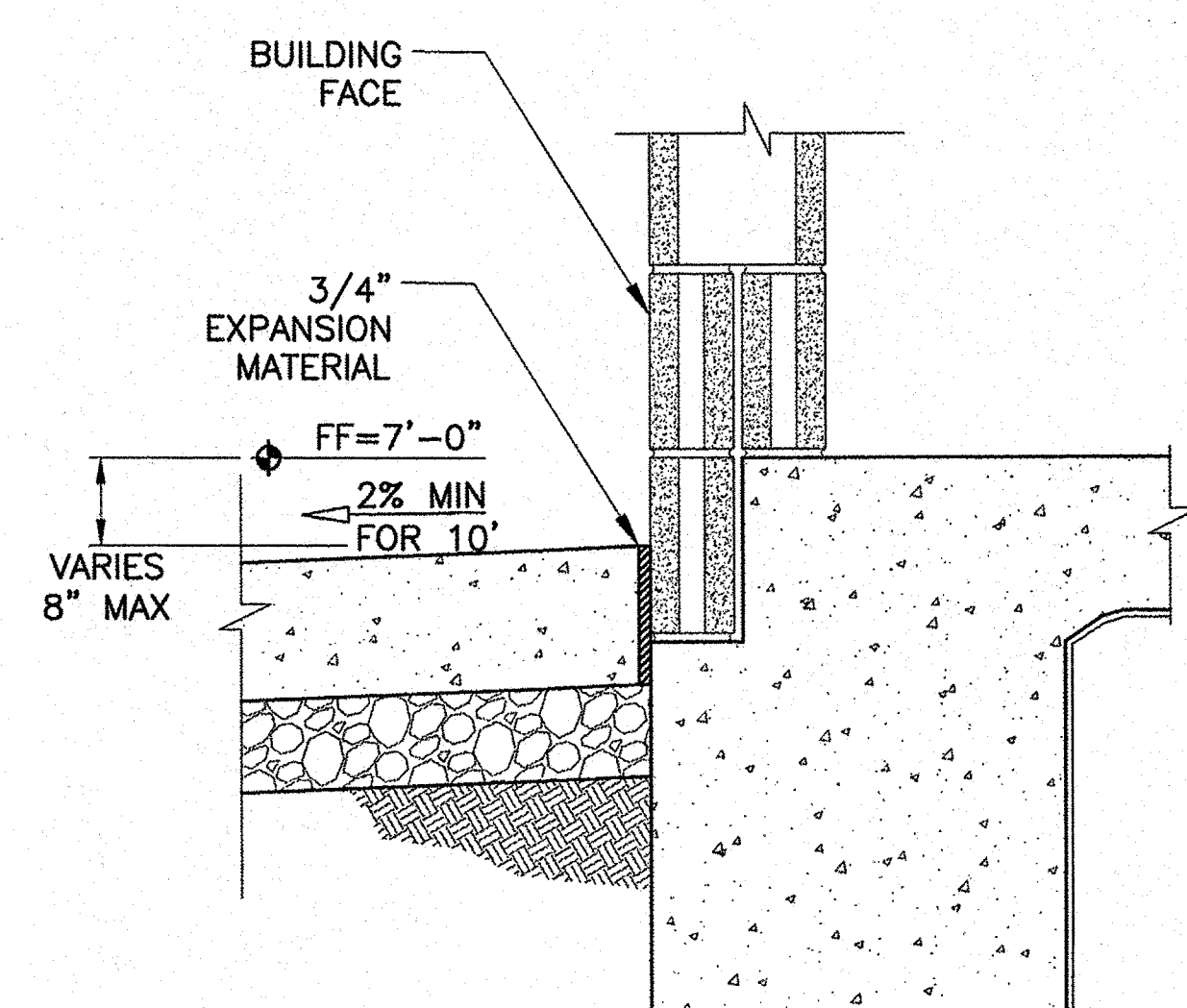
1 TYPICAL GRADE BEAM  
S-01S-03 SCALE: NONE



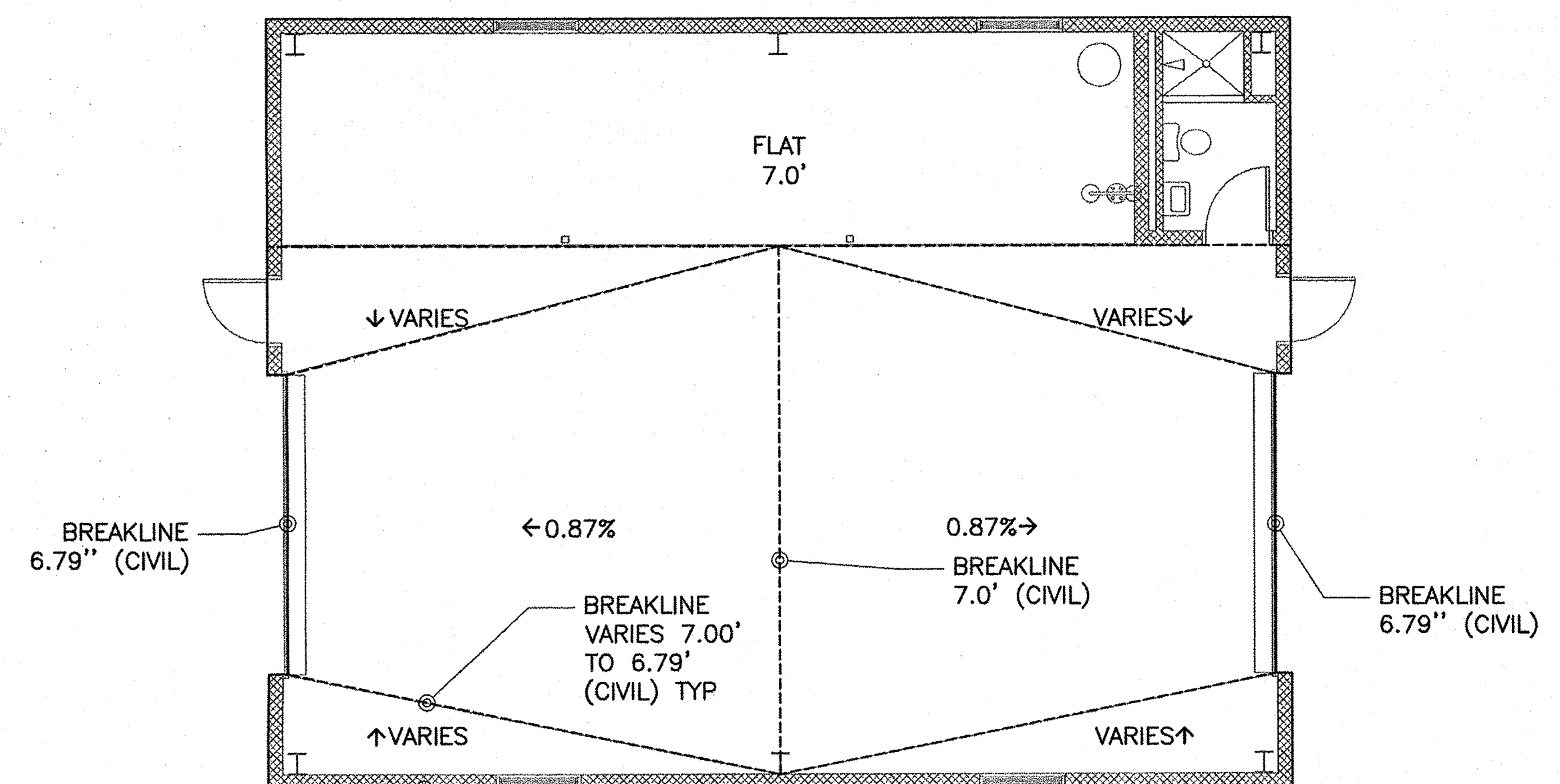
3 PAVEMENT NOTCH AT OPENINGS  
S-01S-03 SCALE: NONE



2 THICKENED SLAB DETAILS  
S-01S-03 SCALE: NONE

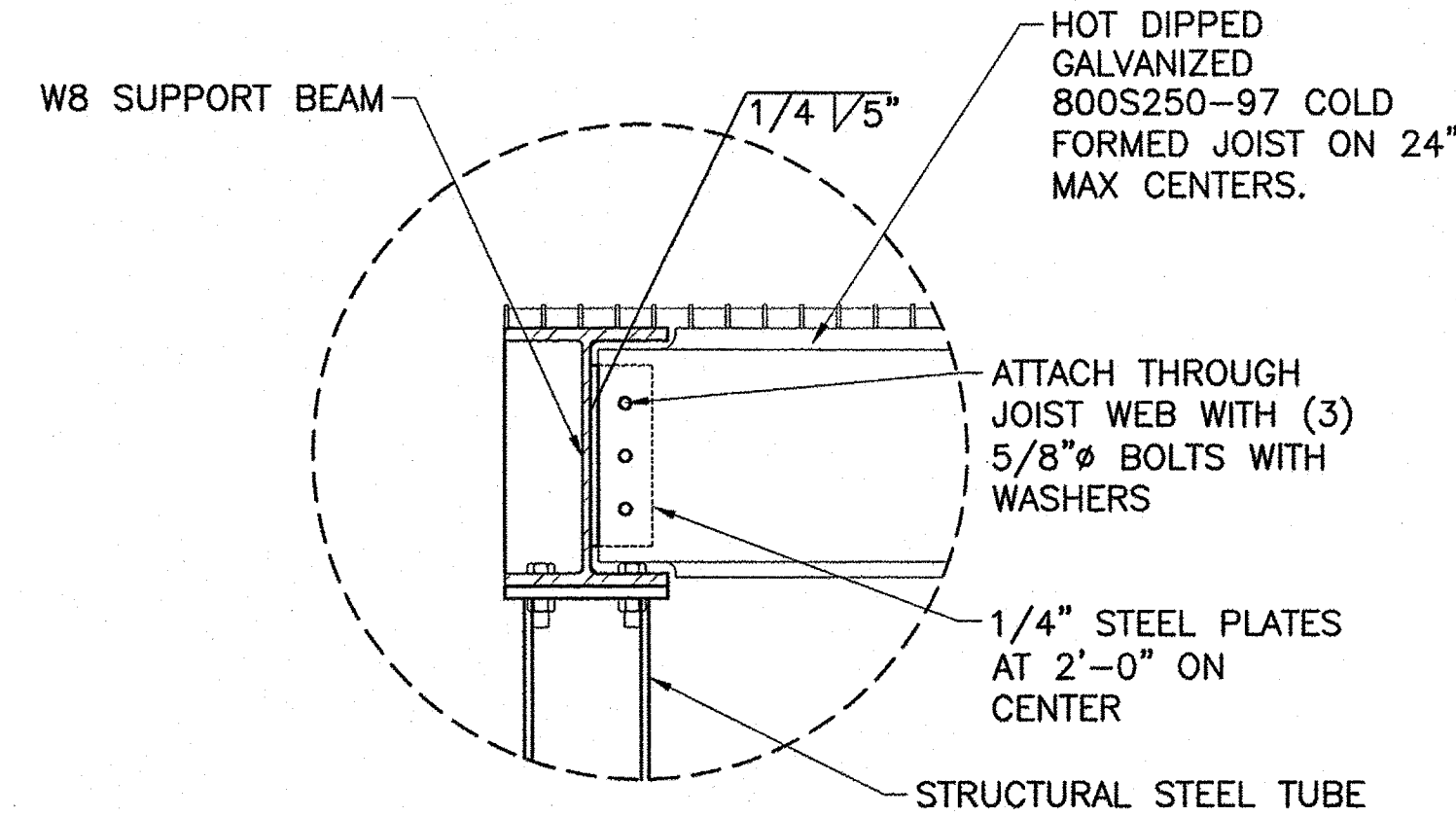
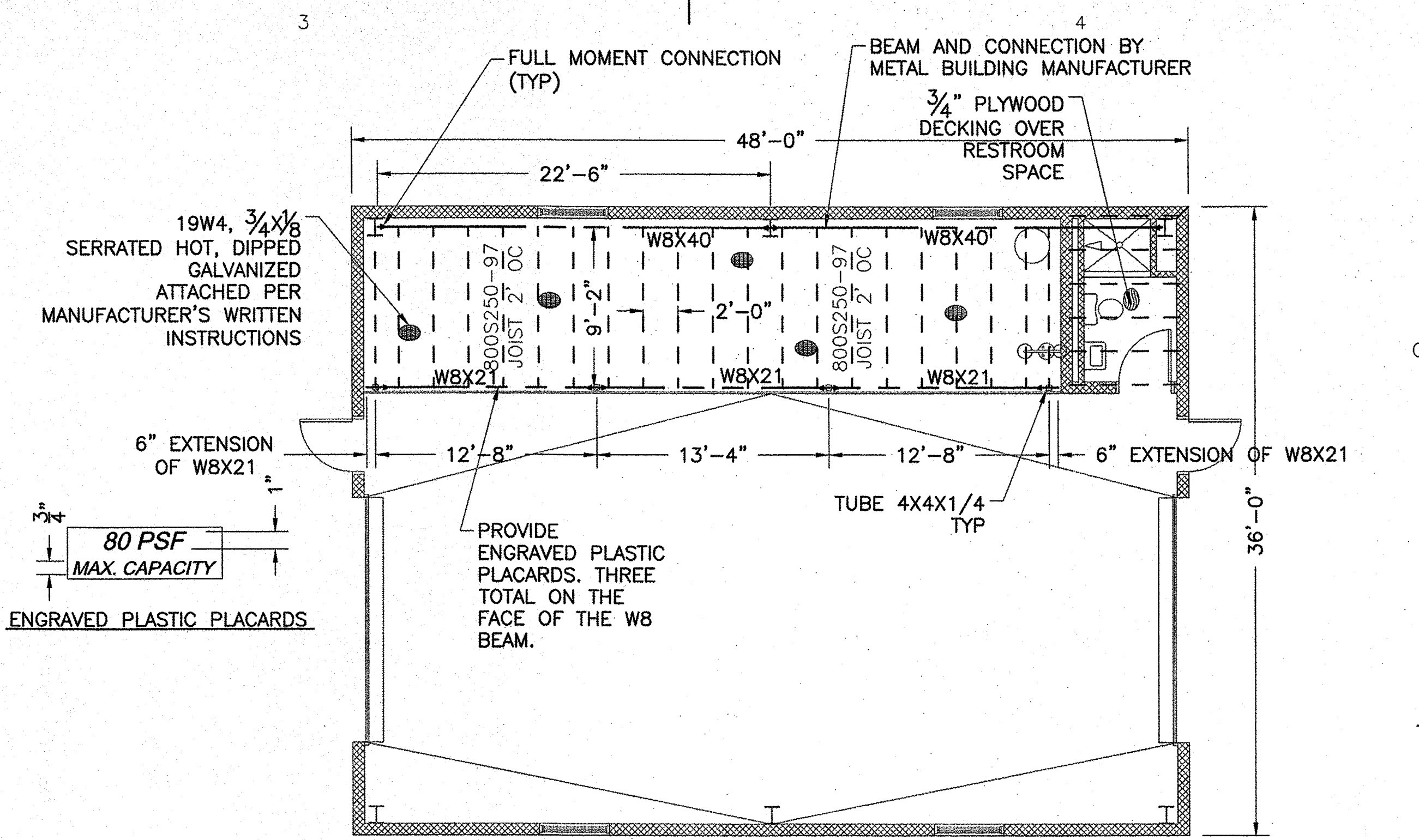
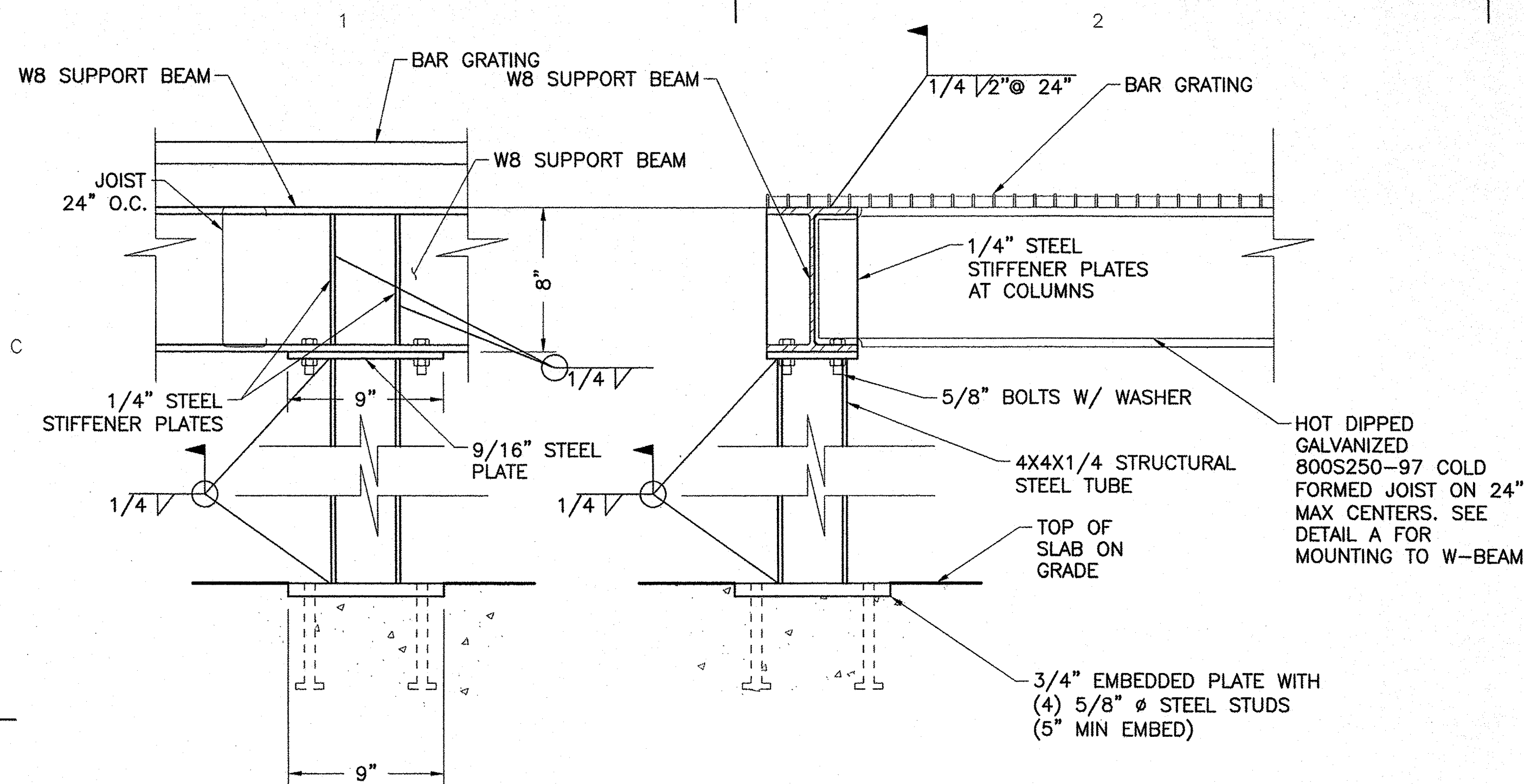


5 PAVEMENT DETAIL WHERE ABUTS BLDG.  
S-01S-03 SCALE: NONE



4 SLAB GRADING  
S-01S-03 SCALE: NONE





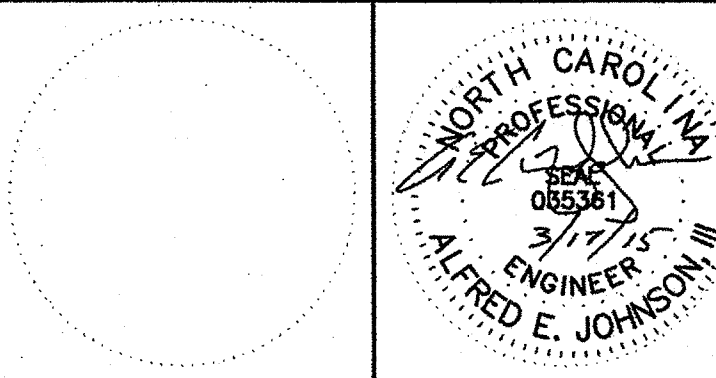
DETAIL A

MEZZANINE DETAILS  
UNIT BID ITEM 1  
S-01S-04 SCALE: NONE

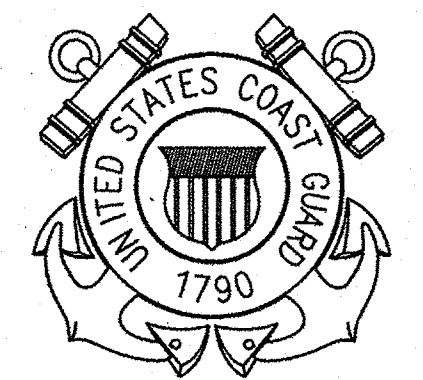
MEZZANINE STRUCTURAL PLAN  
UNIT BID ITEM 1  
S-01S-04 SCALE: NONE

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1240 EAST 9TH STREET  
CLEVELAND, OH 44199-2060

MARK	DATE	DESCRIPTION

A/E PROJECT NO: 1474-A
CAD FILE NAME: C8244S04.dwg
DESIGNED BY: AEJ
DRAWN BY: JND
EDITED BY: AEJ
CHECKED BY: DRL

SCALE: AS SHOWN PLOT SCALE: 1:1  
SHEET TITLE

CONSTRUCT BMF  
CG STATION HOBUCKEN NC  
STRUCTURAL  
MEZZANINE

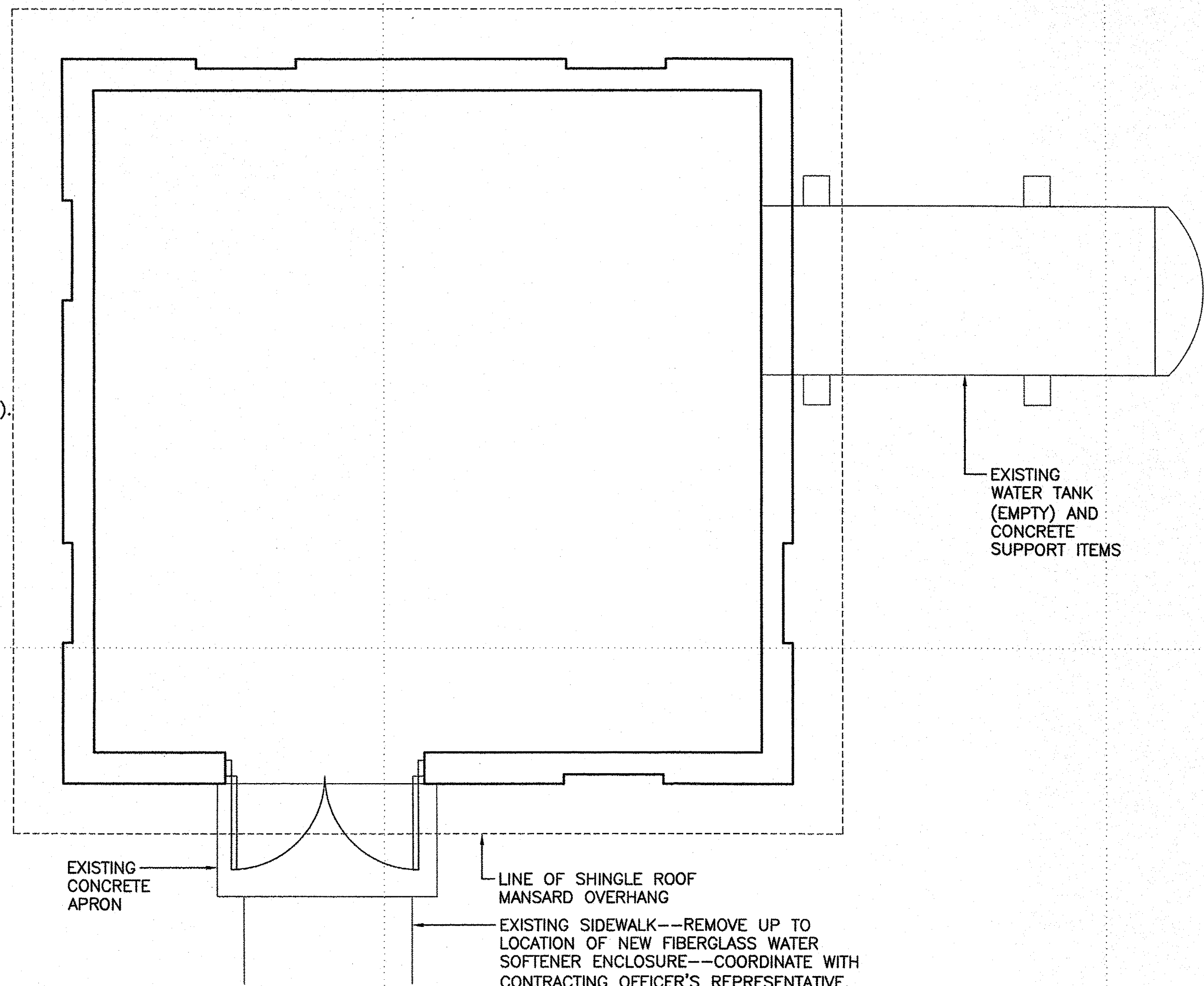
REVIEWED BY: R. PIPAK	REVIEWED BY: B. VRANKAR	REVIEWED BY: G.S. PLACZEK
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR
P. R. CARROLL, CDR APPROVING OFFICER		03/17/15 DATE

PROJECT NUMBER	DRAWING NUMBER
05-C02245	8244-D
DISCIPLINE/SHT NO	SHEET 10 OF 32
S-04	



**GENERAL DESCRIPTION:** THE SHOP/STORAGE BUILDING (OS1) IS ONE STORY MASONRY SLAB ON GRADE BUILDING WITH A FIBERGLASS SHINGLE MANSARD AND LOW SLOPE ROLL ROOF. THE ROOF STRUCTURE CONSISTS OF A STEEL DECK OVER STEEL JOISTS. THE BUILDING IS APPROXIMATELY 400 SQUARE FEET.

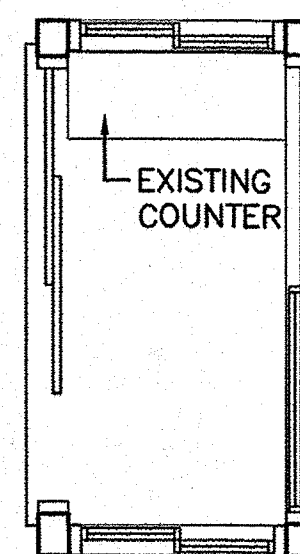
**DEMOLITION:** REMOVE AND DISPOSE OF THE SHOP/STORAGE BUILDING (OS1). REMOVE THE FOUNDATION AND SLAB, WATER TANK AND SUPPORT ITEMS, ADJACENT WALKWAYS (UP TO NEW FIBERGLASS ENCLOSURE), SERVICE UTILITIES AND APPURTENANCES. REMOVE ELECTRICAL SERVICE TO THE POINT OF CONNECTION. FILL/BACKFILL TO MATCH ADJACENT GROUND SURFACE AND GRADE TO DRAIN.



**DEMOLITION PLAN - SHOP/STORAGE BUILDING (OS1)**  
SCALE: 3/8" = 1'-0"

**GENERAL DESCRIPTION:** THE GUARD SHACK (OU1) IS A PRE-MANUFACTURED ONE STORY SLAB ON GRADE BUILDING WITH SLIDING WINDOWS AND RESILIENT TILE FLOORING. IT IS APPROXIMATELY 21 SQUARE FEET.

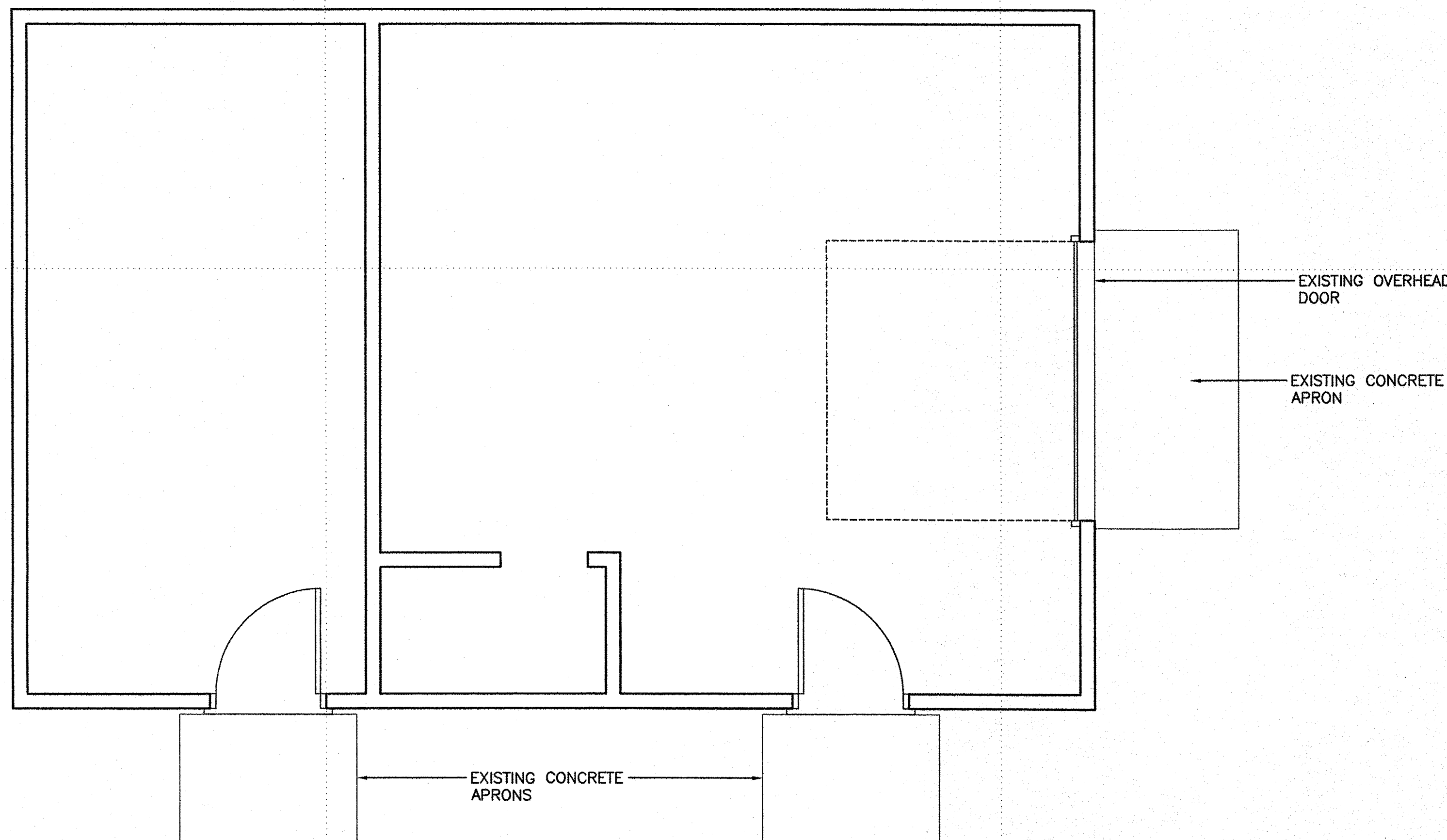
**DEMOLITION:** REMOVE AND DISPOSE OF THE GUARD SHACK (OU1). REMOVE THE FOUNDATION AND SLAB, SERVICE UTILITIES AND APPURTENANCES. REMOVE ELECTRICAL SERVICE TO THE POINT OF CONNECTION. FILL/BACKFILL TO MATCH ADJACENT GROUND SURFACE AND GRADE TO DRAIN.



**DEMOLITION PLAN - GUARD SHACK (OU1)**  
SCALE: 3/8" = 1'-0"

**GENERAL DESCRIPTION:** THE BOS 'N' HOLE WORKSHOP (OS2) IS A SINGLE STORY SLAB ON GRADE, LOAD BEARING METAL STUD BUILDING, WITH GYPSUM BOARD/PLYWOOD INTERIOR WALL FINISH AND VINYL SIDING AT THE EXTERIOR. THE ROOF STRUCTURE IS WOOD FRAMING WITH A SHINGLE ROOF. THE BUILDING IS APPROXIMATELY 620 SQUARE FEET.

**DEMOLITION:** REMOVE AND DISPOSE OF THE BOS 'N' HOLE WORKSHOP (OS2). REMOVE THE FOUNDATION & SLAB, ADJOINING PAVEMENT, SERVICE UTILITIES AND APPURTENANCES. CAP WATER LINE AND REMOVE ELECTRICAL SERVICE BACK TO THE POINTS OF CONNECTION. FILL/BACKFILL TO MATCH ADJACENT SURFACE AND GRADE TO DRAIN.



**DEMOLITION PLAN - BOS 'N' HOLE WORKSHOP (OS2)**  
SCALE: 3/8" = 1'-0"

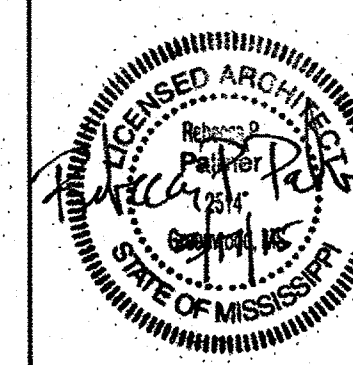
**GENERAL SHEET NOTES**

- FOR STRUCTURES THAT ARE SHOWN TO BE REMOVED AND DISPOSED OF, LIMITS OF DISTURBANCE SHALL BE APPROXIMATELY 10' BEYOND ACTUAL STRUCTURE. STRIP AND STOCKPILE TOPSOIL. FILL AS REQUIRED TO BRING AREAS OF REMOVED STRUCTURE TO GRADE OF ADJACENT SITE--GRADE TO DRAIN. RESPREAD TOPSOIL 4" ON ALL DISTURBED AREAS, SEED AS REQUIRED TO ESTABLISH VEGETATION AT THE COMPLETION OF THE PROJECT.
- AN ASBESTOS AND LEAD SURVEY WAS COMPLETED ON EACH BUILDING (SEE THE REPORT INCLUDED WITH THE SOLICITATION REFERENCE DOCUMENTS). NO ASBESTOS CONTAINING MATERIALS WERE LOCATED IN ANY OF THE STRUCTURES. ALL EXISTING PAINT COATINGS CONTAIN SOME LEVEL OF LEAD CONTENT. OSHA WORKER PROTECTION SHALL BE PROVIDED FOR DISTURBANCES OF ANY PAINTED SURFACES. PAINTED COATING ON EXISTING BUILDING MATERIALS TO BE REMOVED CAN BE DISPOSED OF AS NORMAL CONSTRUCTION WASTE PROVIDED THEY REMAIN INTACT ON THE BUILDING MATERIAL BEING REMOVED. CONTRACTOR TO FOLLOW HUD GUIDELINES.

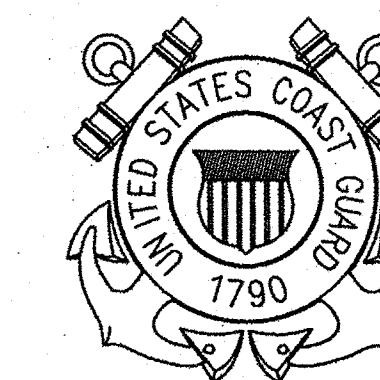
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**CONSULTANTS**

THE JOHNSON McADAMS FIRM  
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CLEVELAND, OH 44199-2060

ISSUE		
MARK	DATE	DESCRIPTION

A/E PROJECT NO: 1474-A  
CAD FILE NAME: C8244D01.dwg  
DESIGNED BY: RPP  
DRAWN BY: AEW  
EDITED BY: AEW  
CHECKED BY: DRL

SCALE: AS SHOWN PLOT SCALE: 1:1

**SHEET TITLE**

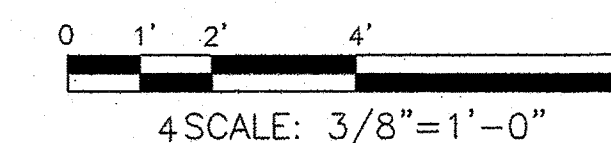
CONSTRUCT BMF  
CG STATION HOBUCKEN  
HOBUCKEN NC

**ARCHITECTURAL  
DEMOLITION PLANS**

REVIEWED BY: R. PIPAK	REVIEWED BY: B. VRANKAR	REVIEWED BY: G. S. PLACZEK
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR

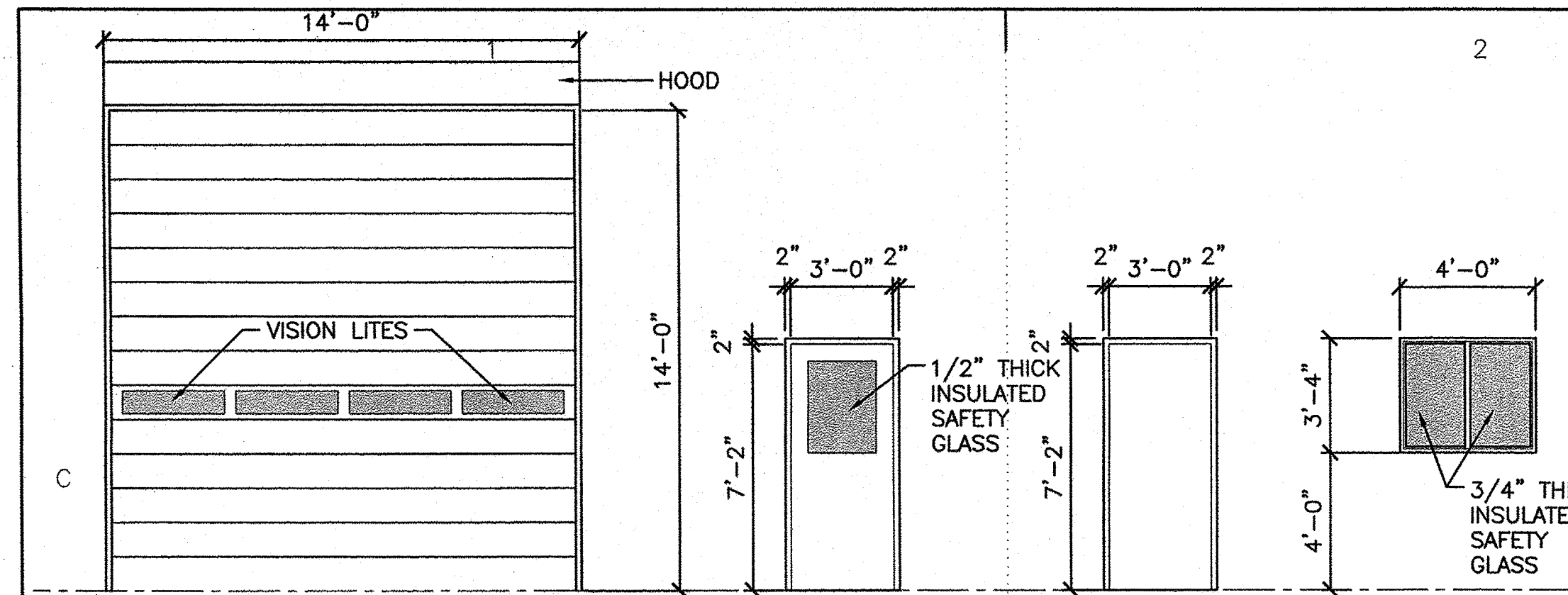
P. R. CARROLL, CDR APPROVING OFFICER	03/17/15 DATE
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**GRAPHIC SCALE**



PROJECT NUMBER	DRAWING NUMBER
05-C02245	8244-D
DISCIPLINE/SHT NO	SHEET 11 OF 32
D-01	





**DOOR & WINDOW SCHEDULE**  
SCALE: 1/4" = 1'-0"

01 INSULATED ALUMINUM COILING OVERHEAD DOOR--POWER OPERATION  
02 1-3/4" THICK INSULATING CORE HALF GLASS FRP DOOR & FRP FRAME--HW-1  
03 1-3/4" THICK FLUSH FRP DOOR & FRP FRAME--HW-2  
04 PLASTIC SLIDING WINDOW W/ INSULATING GLASS & INSECT SCREEN  
05 3/4" THICK INSULATED SAFETY GLASS

ROOM NO	ROOM NAME	FLOOR	BASE	WALLS								CEILING		NOTES
				EAST WALL		WEST WALL		NORTH WALL		SOUTH WALL		MAT'L	HEIGHT	
				MAT'L	FINISH	MAT'L	FINISH	MAT'L	FINISH	MAT'L	FINISH			
101	MAINTENANCE BAY	SC	--	MLP/CMU	PF/PT	MLP/CMU	PF/PT	MLP/CMU	PF/PT	MLP/CMU	PF/PT	VFI	VARIES	PAINT EXPOSED STRUCTURE
102	HEAD	SC	--	CMU	EPT	CMU	EPT	CMU	EPT	CMU	EPT	GWB-PT	8'-0"	--
201	MEZZANINE	FG/PWD	--	--	--	MLP	PF	MLP	PF	MLP	PF	VFI	VARIES	UNIT BID ITEM-1

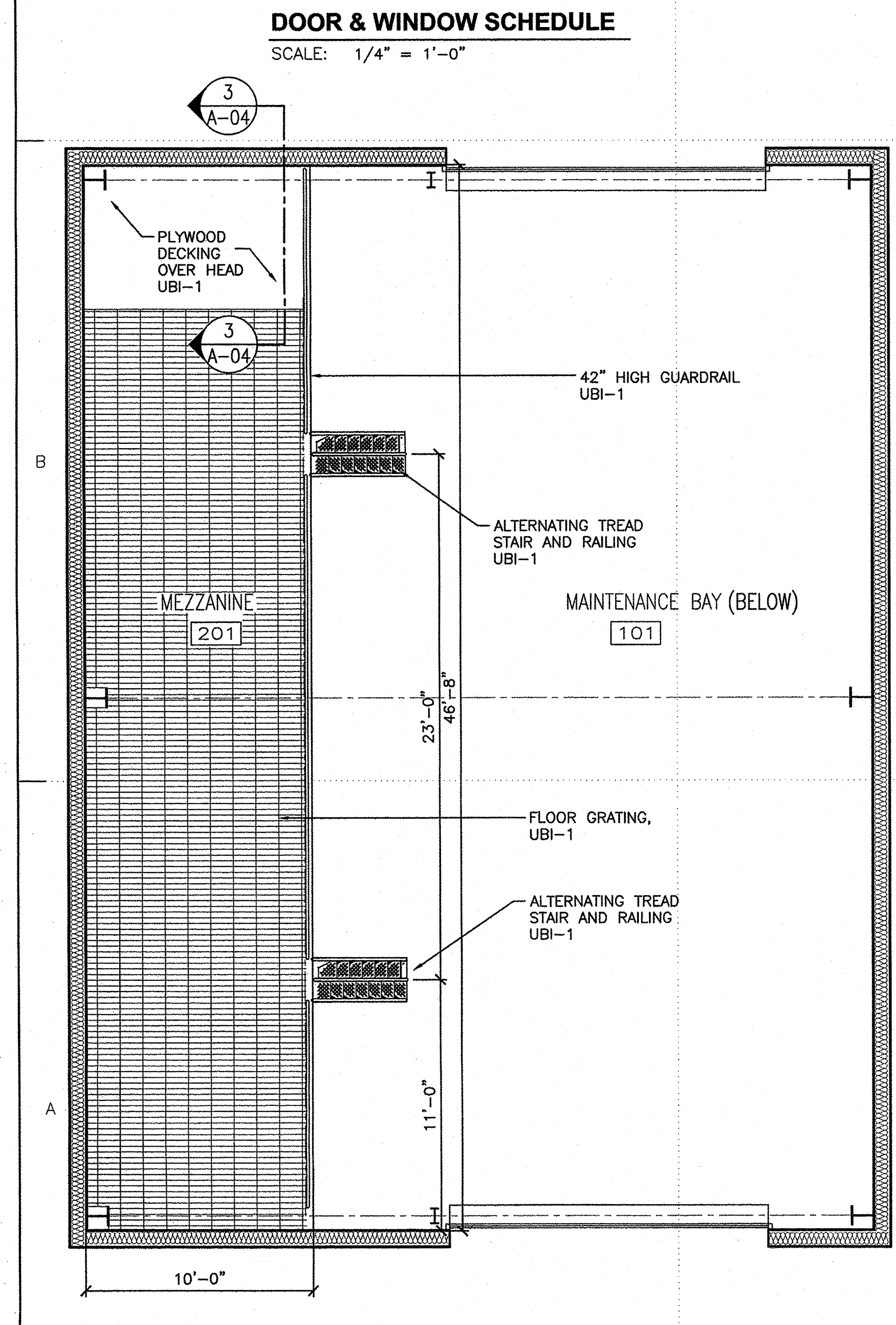
**ABBREVIATIONS:**  
 CMU CONCRETE MASONRY UNIT  
 EPT EPOXY PAINT  
 FG FLOOR GRATE  
 GWB GYPSUM WALL BOARD--PAINTED  
 MLP METAL LINER PANEL  
 PF PREFINISHED  
 PT PAINT  
 PWD 3/4" THICK TREATED PLYWOOD  
 SC SEALED CONCRETE  
 VFI VINYL FACED METAL BUILDING INSULATION

**GENERAL SHEET NOTES**

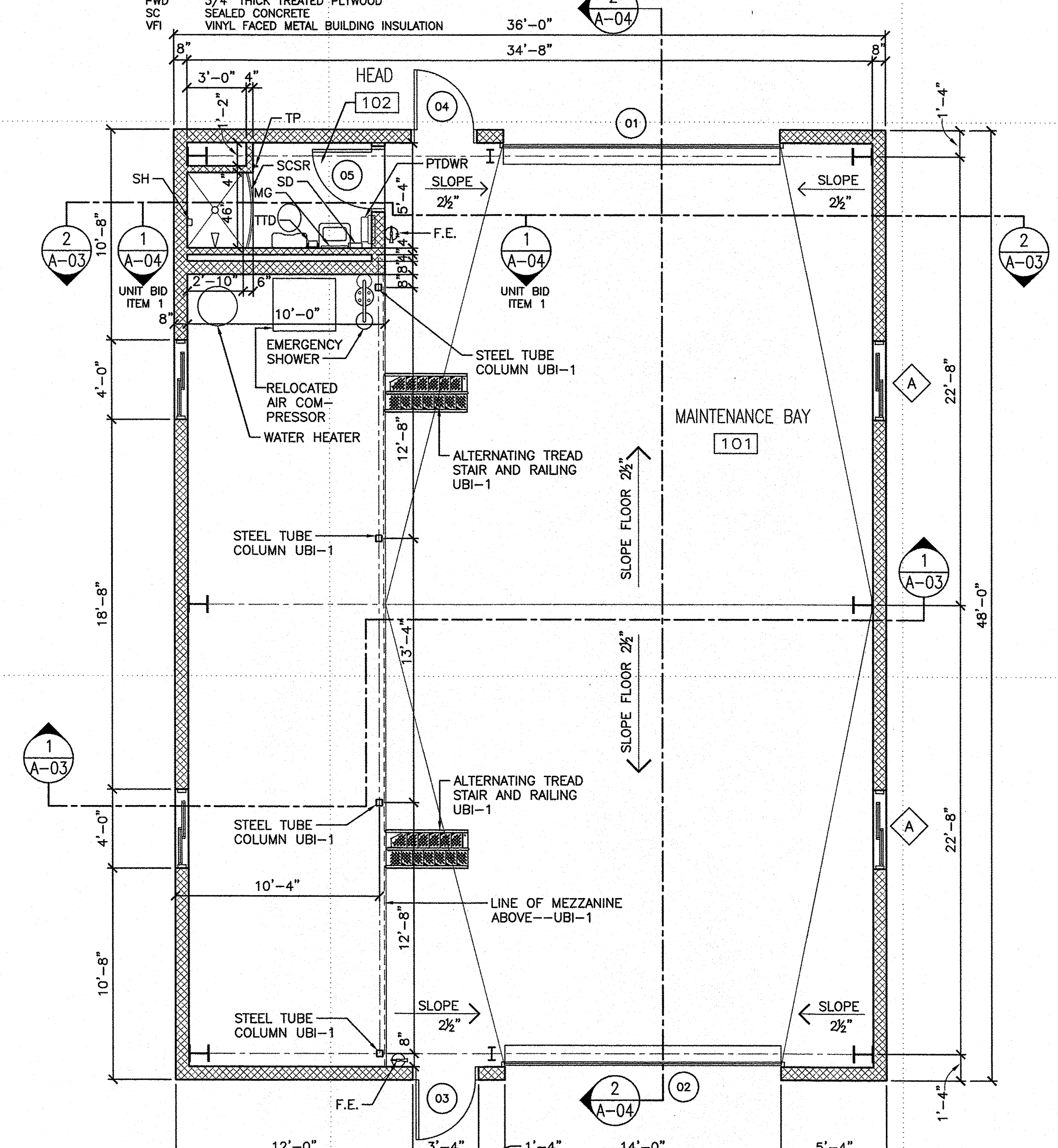
- UNDER UNIT BID ITEM-1, PROVIDE MEZZANINE STEEL FRAMING, FLOOR DECKING, RAILING & ALTERNATING TREAD STAIRS AS INDICATED ON THE PLANS.
- CONCRETE MASONRY UNITS AT BUILDING WAINSCOT SHALL BE GROUND FACE UNITS ON EXTERIOR SIDE ONLY. INTERIOR FACE SHALL BE NORMAL FINISH WITH EXPOSED SURFACES TO RECEIVE PAINT.

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**UPPER FLOOR PLAN (UNIT BID ITEM 1)**  
SCALE: 1/4" = 1'-0"



**FLOOR PLAN**  
SCALE: 1/4" = 1'-0"

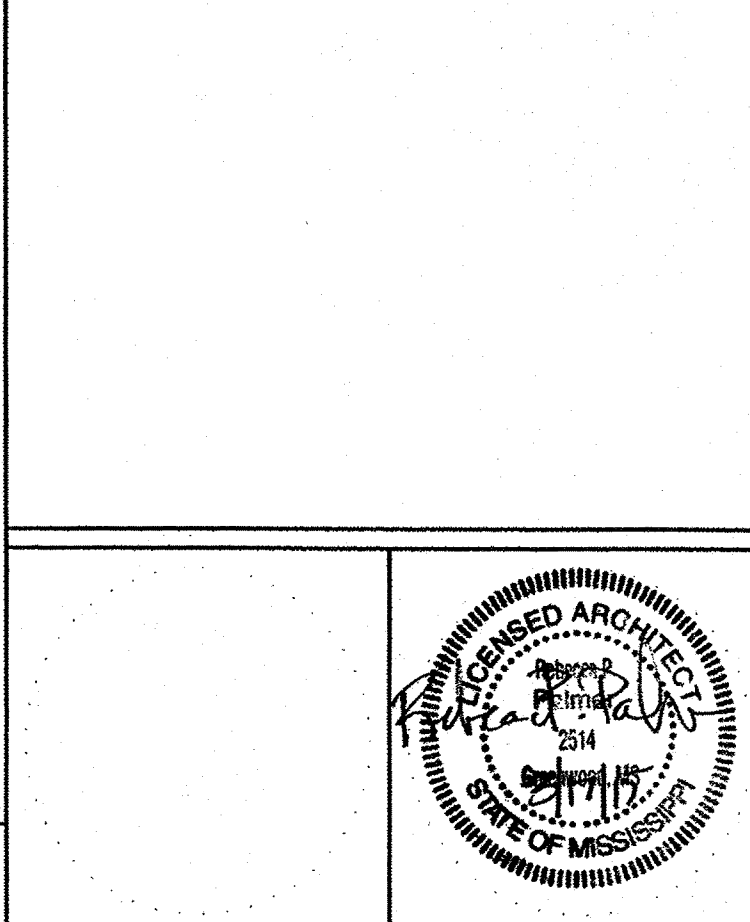
**LEGEND**

FE FIRE EXTINGUISHER & BRACKET  
 HW-# HARDWARE SET NUMBER--SEE SPECS  
 MG MIRROR, GLASS  
 PTDWR COMBO. PAPER TOWEL DISPENSER AND WASTE RECEPTACLE  
 SCSR SHOWER CURTAIN AND ROD  
 SD SOAP DISPENSER  
 SH SOAP HOLDER  
 TP TOWEL PIN  
 TTD TOILET TISSUE DISPENSER  
 UBI-1 UNIT BID ITEM 1

**GRAPHIC SCALE**

0 2' 4' 8' 12'

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



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1240 EAST 9TH STREET  
CLEVELAND, OH 44199-2060

MARK	DATE	DESCRIPTION

A/E PROJECT NO: 1474-A  
 CAD FILE NAME: C8244A01.dwg  
 DESIGNED BY: RPP  
 DRAWN BY: AEW  
 EDITED BY: AEW  
 CHECKED BY: DRL

SCALE: AS SHOWN PLOT SCALE: 1:1

CONSTRUCT BMF  
CG STATION HOBUCKEN  
HOBUCKEN NC

ARCHITECTURAL  
FLOOR PLANS

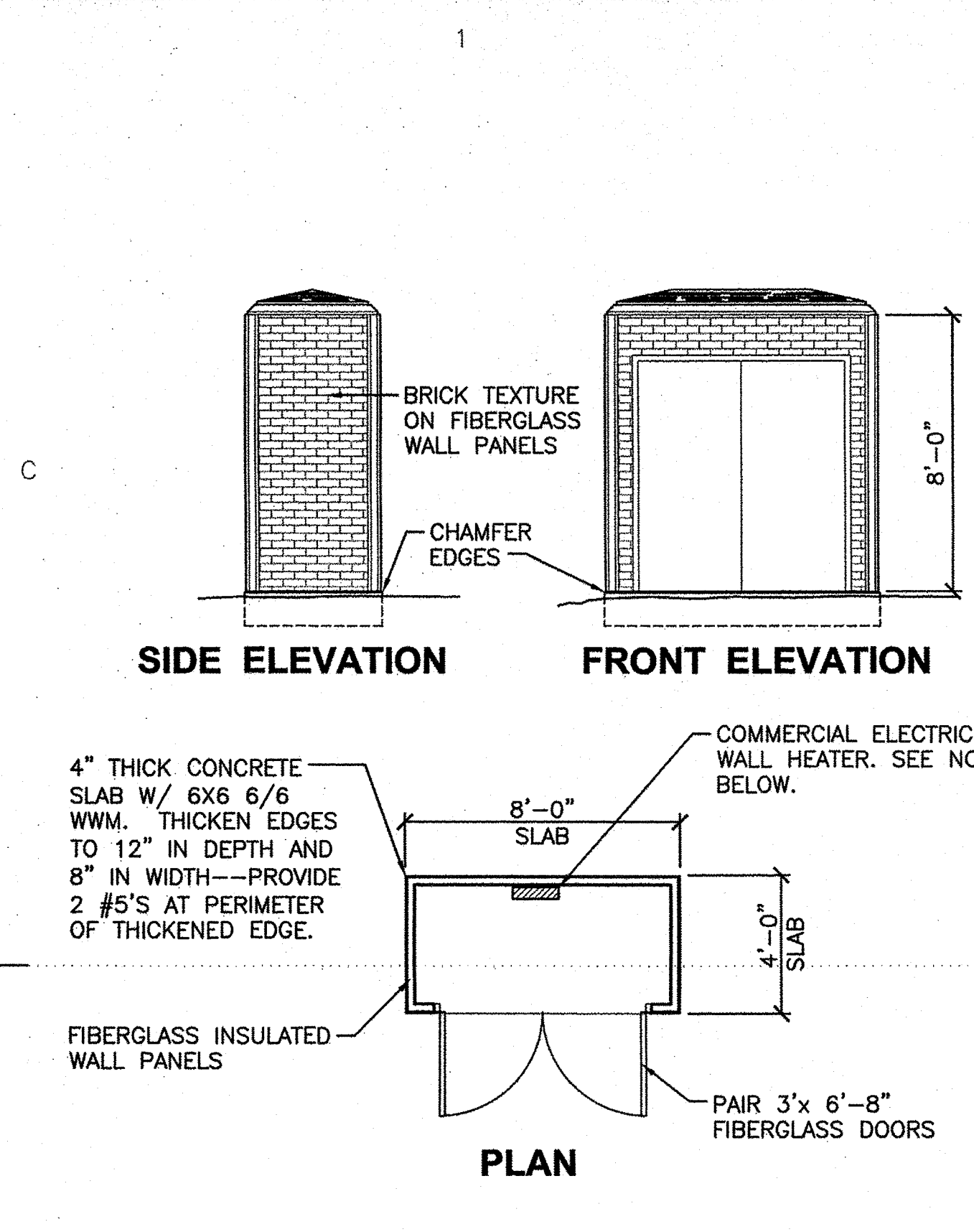
REVIEWED BY: R. PIPAK  
 REVIEWED BY: B. VRANKAR  
 REVIEWED BY: G. S. PLACZEK

PROJECT ENG. BRANCH CHIEF  
 P. R. CARROLL, CDR  
 APPROVING OFFICER

03/17/15  
DATE

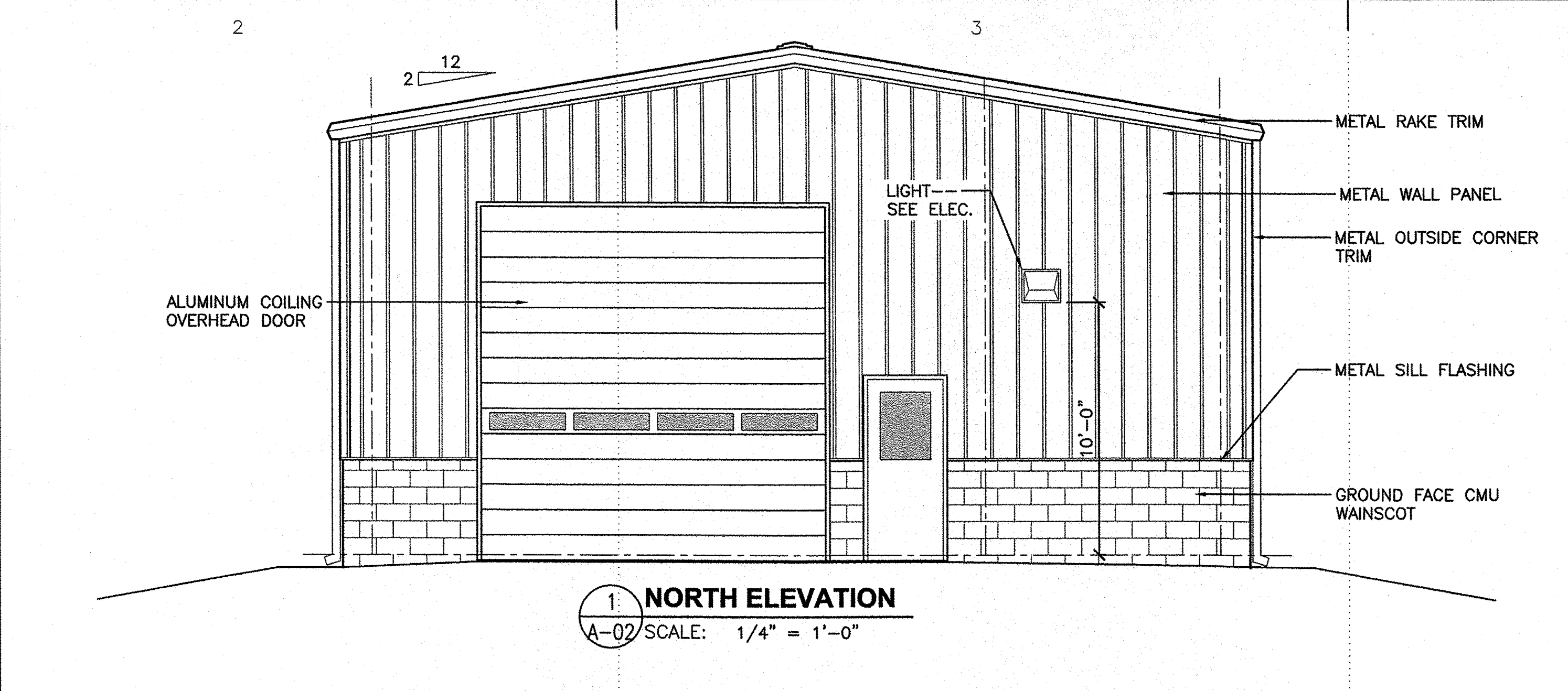
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 DRAWING NUMBER: 8244-D  
 DISCIPLINE/SHT NO: A-01  
 SHEET 12 OF 32



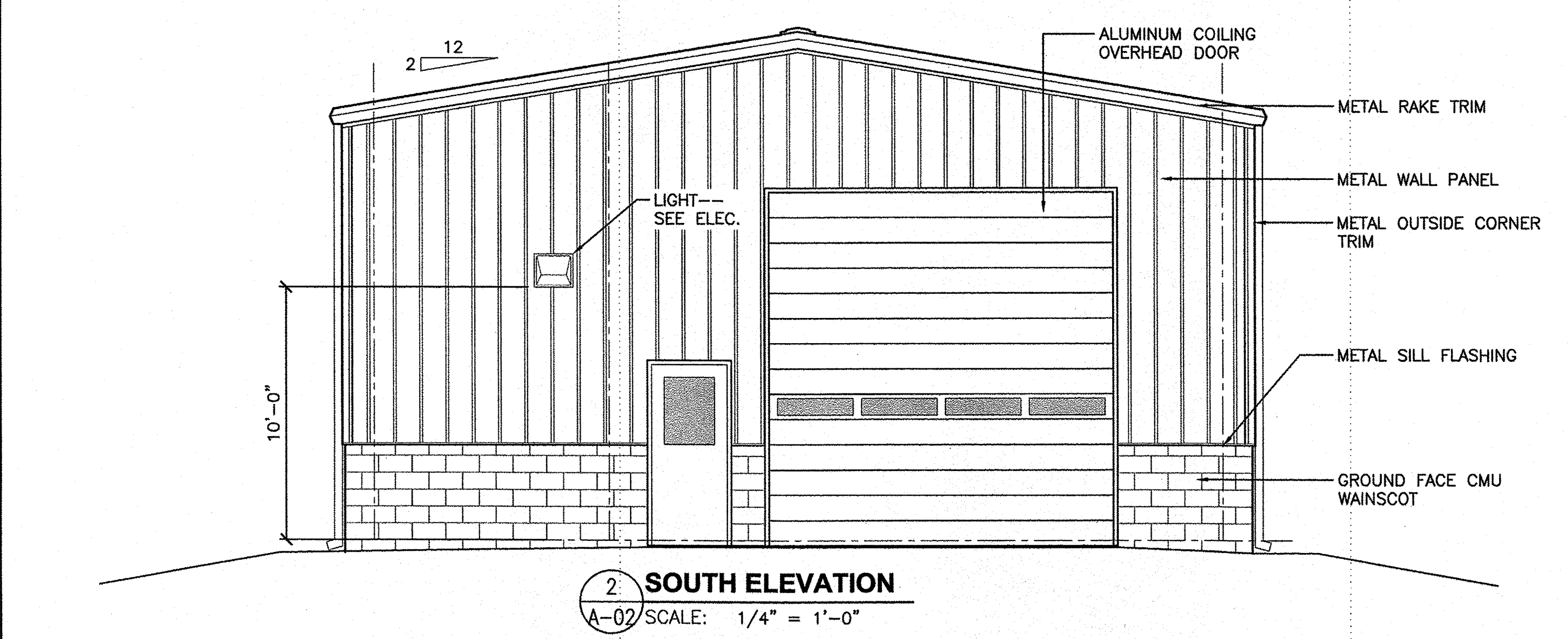


**4 WATER SOFTENER ENCLOSURE**  
A-02 SCALE: 1/4" = 1'-0"

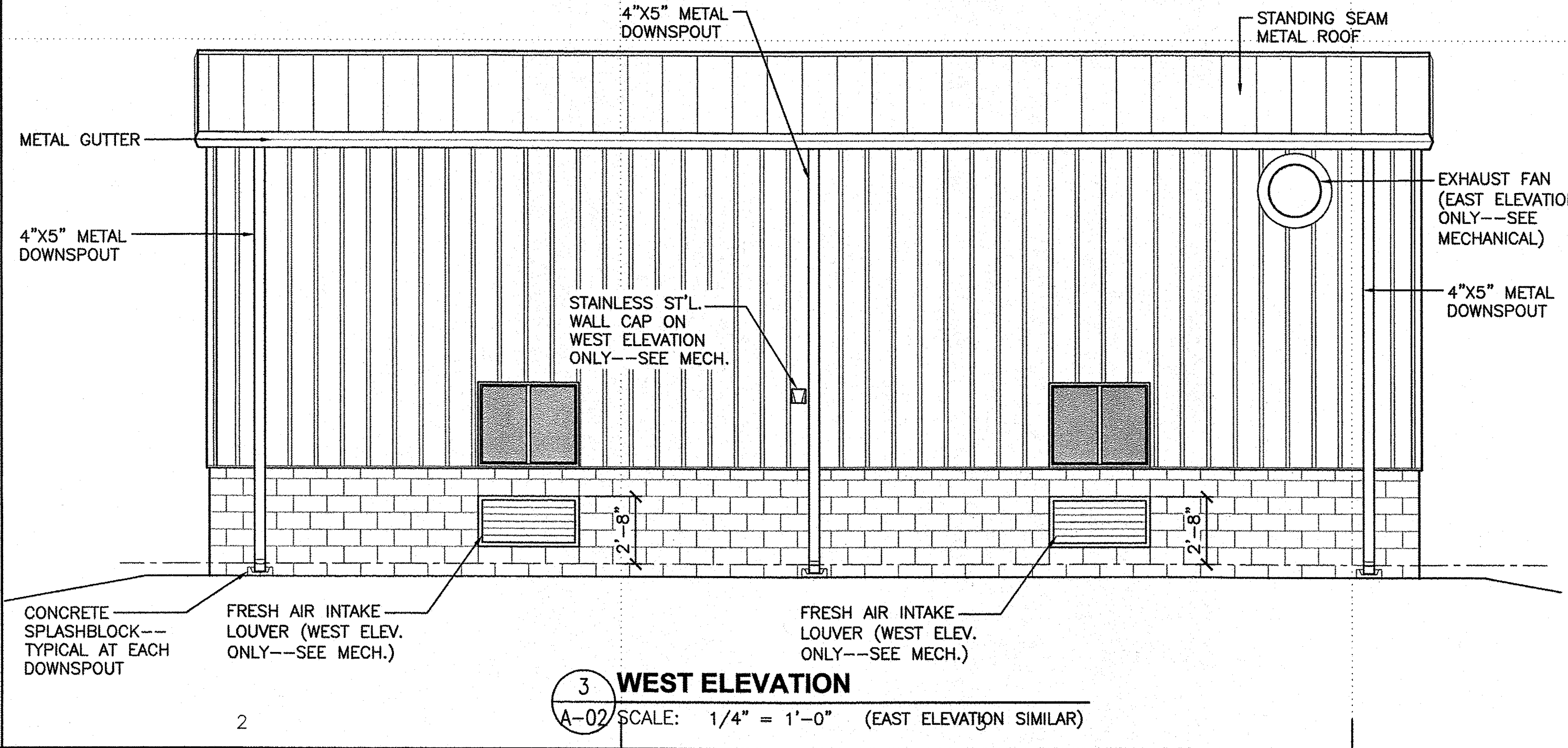
- GENERAL NOTES:**
- EXACT LOCATION OF WATER SOFTENER ENCLOSURE SHALL BE COORDINATED WITH THE CONTRACTING OFFICER'S REPRESENTATIVE.
  - INSTALL SURFACE MOUNTED 1,000 WATT COMMERCIAL WALL HEATER (120VAC) AS INDICATED ON THE PLAN.
  - DISCONNECT AND RECONNECT PIPING OF THE EXISTING NON-ELECTRIC WATER SOFTENER SYSTEMS (KINETICO MODEL CP216S) AS REQUIRED FOR INSTALLATION OF THE SYSTEM IN THE NEW ENCLOSURE. PROVIDE NEW PVC PIPING PENETRATION SEALS FOR ALL PIPING PENETRATING THE NEW ENCLOSURE.



**1 NORTH ELEVATION**  
A-02 SCALE: 1/4" = 1'-0"



**2 SOUTH ELEVATION**  
A-02 SCALE: 1/4" = 1'-0"



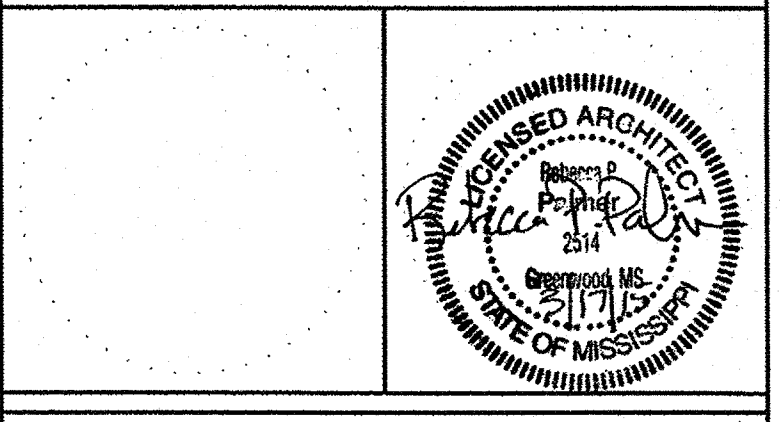
**3 WEST ELEVATION**  
A-02 SCALE: 1/4" = 1'-0" (EAST ELEVATION SIMILAR)

**GENERAL SHEET NOTES**

- CONCRETE MASONRY UNITS AT BUILDING WAINSCOT SHALL BE GROUND FACE UNITS ON EXTERIOR SIDE ONLY. INTERIOR FACE SHALL BE NORMAL FINISH WITH EXPOSED SURFACES TO RECEIVE PAINT.

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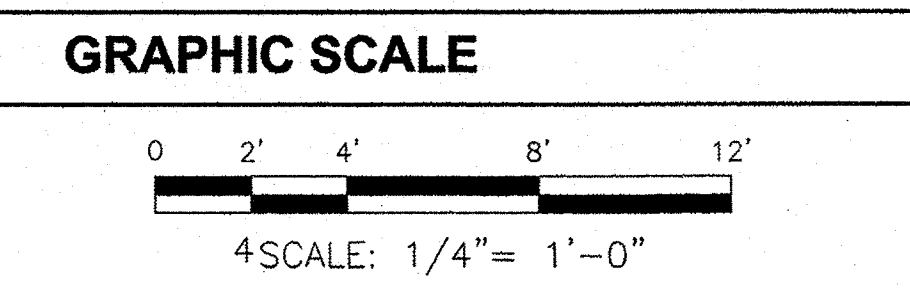
MARK	DATE	DESCRIPTION

A/E PROJECT NO: 1474-A
CAD FILE NAME: C8244A02.dwg
DESIGNED BY: RPP
DRAWN BY: AEW
EDITED BY: AEW
CHECKED BY: DRL

SCALE: AS SHOWN PLOT SCALE: 1:1  
SHEET TITLE

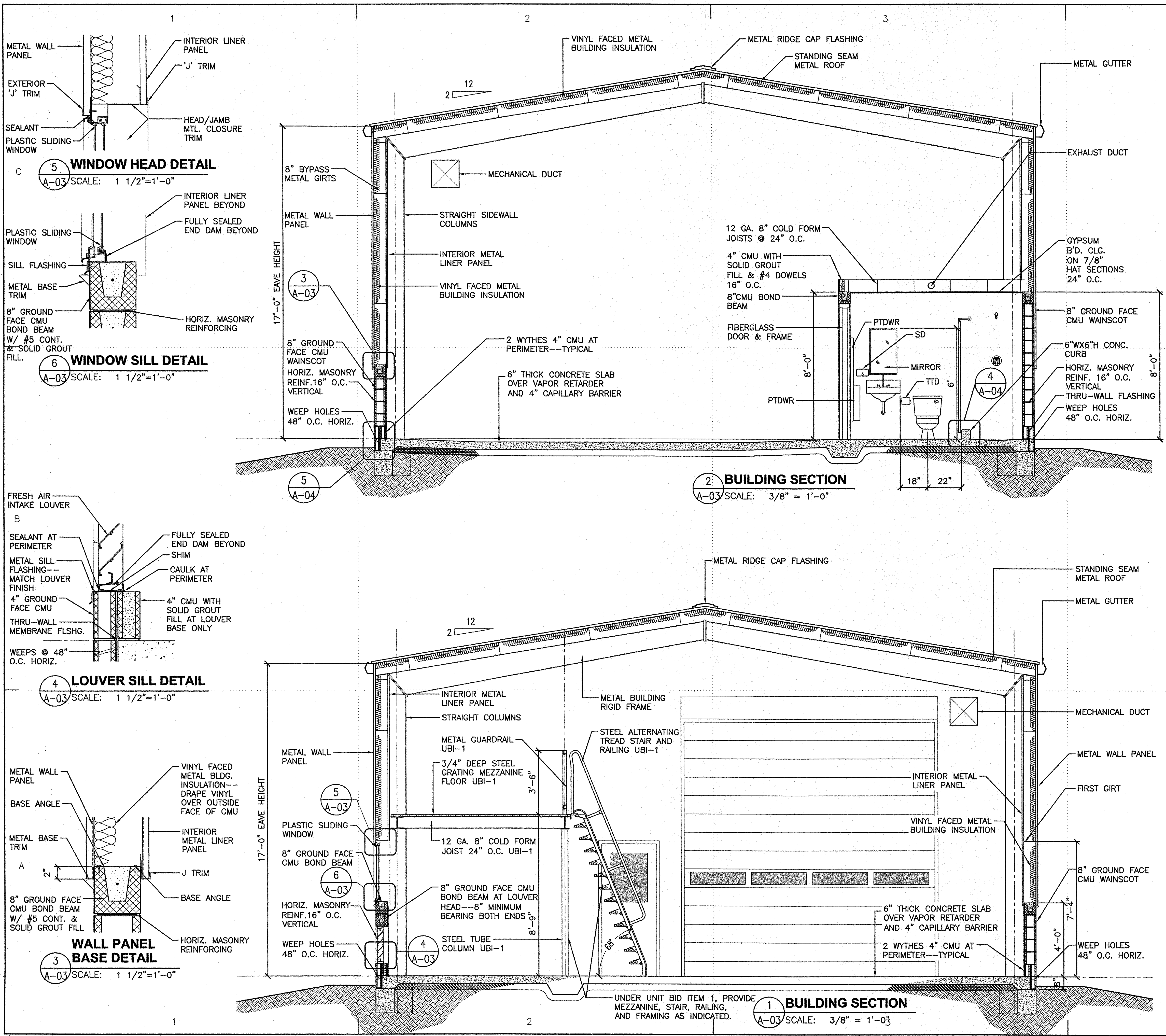
CONSTRUCT BMF  
CG STATION HOBUCKEN  
HOBUCKEN NC  
ARCHITECTURAL  
EXTERIOR ELEVATIONS

REVIEWED BY: R. PIPAK	REVIEWED BY: B. VRANKAR	REVIEWED BY: G. S. PLACZEK
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR
P. R. CARROLL, CDR APPROVING OFFICER		03/17/15 DATE



PROJECT NUMBER	DRAWING NUMBER
05-C02245	8244-D
DISCIPLINE/SHT NO	SHEET 13 OF 32
A-02	





**GENERAL SHEET NOTES**

1. PROVIDE THERMAL BREAK ISOLATION PADS AT ATTACHMENT POINTS OF METAL WALL PANELS AND ROOF PANELS TO METAL WALL GIRTS AND ROOF PURLINS.
2. CONCRETE MASONRY UNITS AT BUILDING WAJNSCOT SHALL BE GROUND FACE UNITS ON EXTERIOR SIDE ONLY. INTERIOR FACE SHALL BE NORMAL FINISH WITH EXPOSED SURFACES TO RECEIVE PAINT.

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CLEVELAND, OH 44199-2060

ISSUE		
MARK	DATE	DESCRIPTION

A/E PROJECT NO: 1474-A  
CAD FILE NAME: C8244A03.dwg  
DESIGNED BY: RPP  
DRAWN BY: AEW  
EDITED BY: AEW  
CHECKED BY: DRL

SCALE: AS SHOWN PLOT SCALE: 1:1

SHEET TITLE  
CONSTRUCT BMF  
CG STATION HOBUCKEN  
HOBUCKEN NC

ARCHITECTURAL  
BUILDING SECTIONS

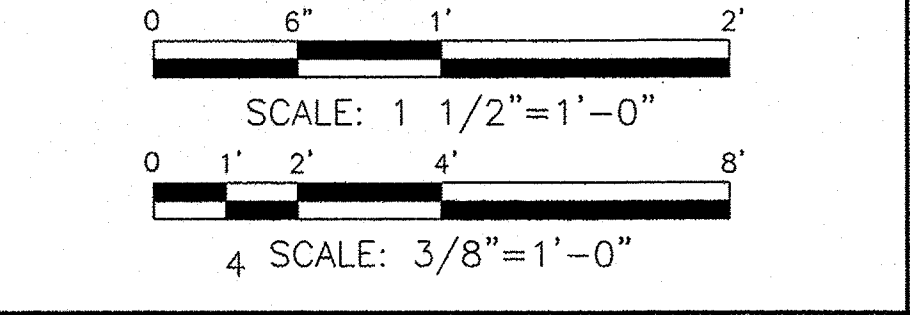
REVIEWED BY: R. PIPAK	REVIEWED BY: B. VRANKAR	REVIEWED BY: G. PLACZEK
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR
P. R. CARROLL, CDR APPROVING OFFICER		03/17/15 DATE

PROJECT NUMBER 05-C02245	DRAWING NUMBER 8244-D
DISCIPLINE/SHT NO A-03	SHEET 14 OF 32

**LEGEND**

- PTDWR PAPER TOWEL DISPENSER & WASTE RECEPTACLE  
SD SOAP DISPENSER  
TP TOWEL PIN  
TTD TOILET TISSUE DISPENSER  
UBI-1 UNIT BID ITEM 1

**GRAPHIC SCALE**





STANDING SEAM  
METAL ROOF OVER  
VINYL FACED METAL  
BUILDING INSULATION

METAL RAKE TRIM

METAL WALL PANEL

INTERIOR METAL  
LINER PANEL

POWER OPERATED  
ALUMINUM COILING  
OVERHEAD DOOR

STEEL ALTERNATING  
TREAD STAIR AND  
RAILING UBI-1

6" THICK CONCRETE SLAB  
OVER VAPOR RETARDER  
AND 4" CAPILLARY BARRIER

SLOPE FLOOR 2 1/2"

SLOPE FLOOR 2 1/2"

RIGID FRAME BEAM  
SECTION

WOVEN WIRE MESH  
PANEL UBI-1

POWER OPERATED  
ALUMINUM COILING  
OVERHEAD DOOR

STEEL ALTERNATING  
TREAD STAIR AND  
RAILING UBI-1

**2 BUILDING SECTION**

A-04 SCALE: 3/8" = 1'-0"

**GENERAL SHEET NOTES**

1. PROVIDE THERMAL BREAK ISOLATION PADS AT ATTACHMENT POINTS OF METAL WALL PANELS AND ROOF PANELS TO METAL WALL GIRTS AND ROOF PURLINS.

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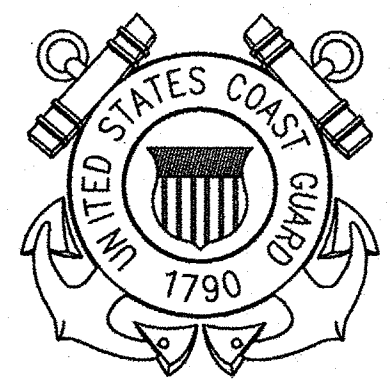
CONSULTANTS

THE JOHNSON McADAMS FIRM

GREENWOOD, MISSISSIPPI 38930



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CIVIL ENGINEERING UNIT  
CLEVELAND



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ISSUE		
MARK	DATE	DESCRIPTION

A/E PROJECT NO: 1474-A  
CAD FILE NAME: CB244A04.dwg  
DESIGNED BY: RPP  
DRAWN BY: AEW  
EDITED BY: AEW  
CHECKED BY: DRL

SCALE: AS SHOWN PLOT SCALE: 1:1

SHEET TITLE

CONSTRUCT BMF  
CG STATION HOBUCKEN NC

ARCHITECTURAL  
BUILDING SECTIONS

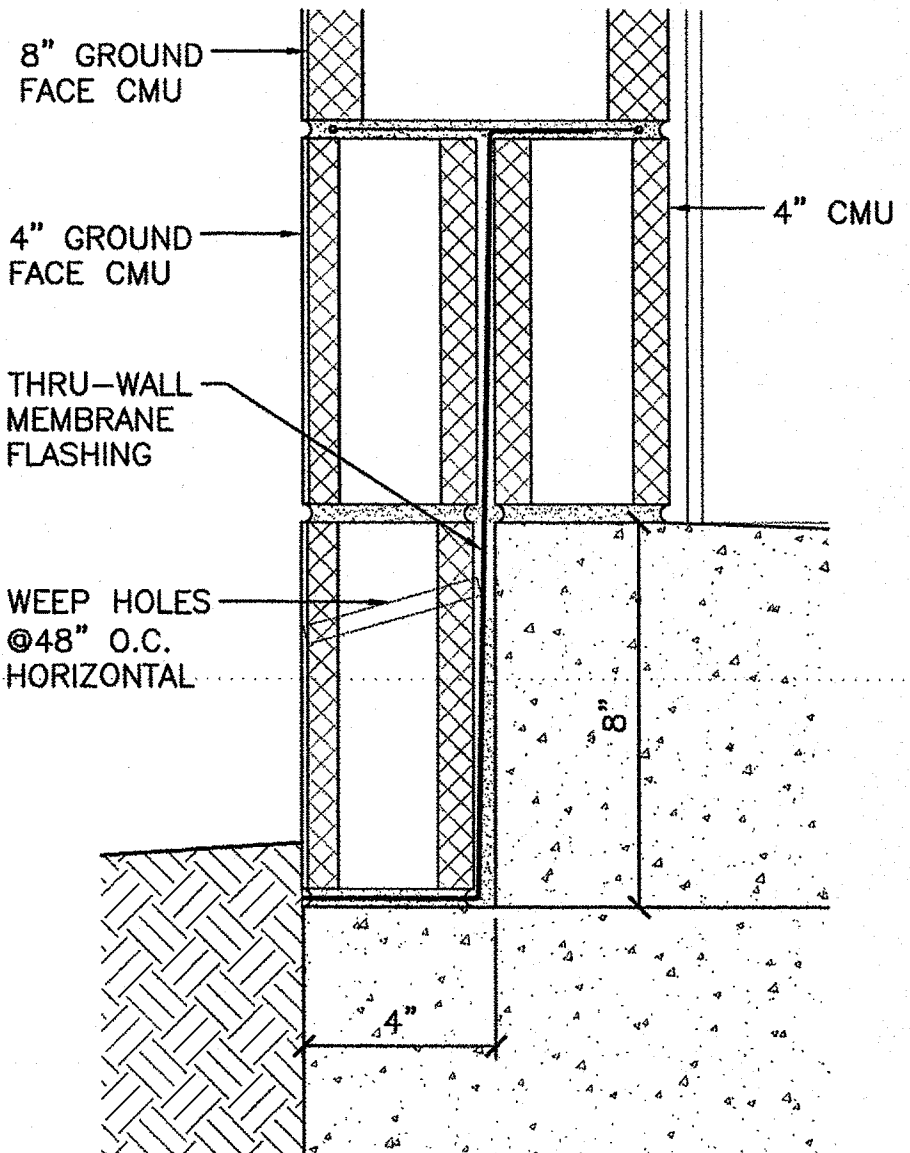
REVIEWED BY: R. PIPAK	REVIEWED BY: B. VRANKAR	REVIEWED BY: G. S. PLACZEK
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR

<i>P. R. Carroll</i> P. R. CARROLL, CDR APPROVING OFFICER	03/17/15 DATE
---	------------------

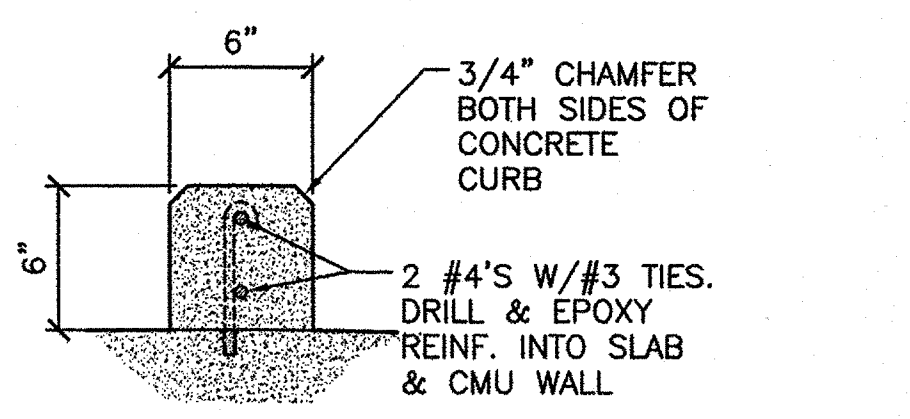
PROJECT NUMBER	DRAWING NUMBER
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05-C02245	8244-D
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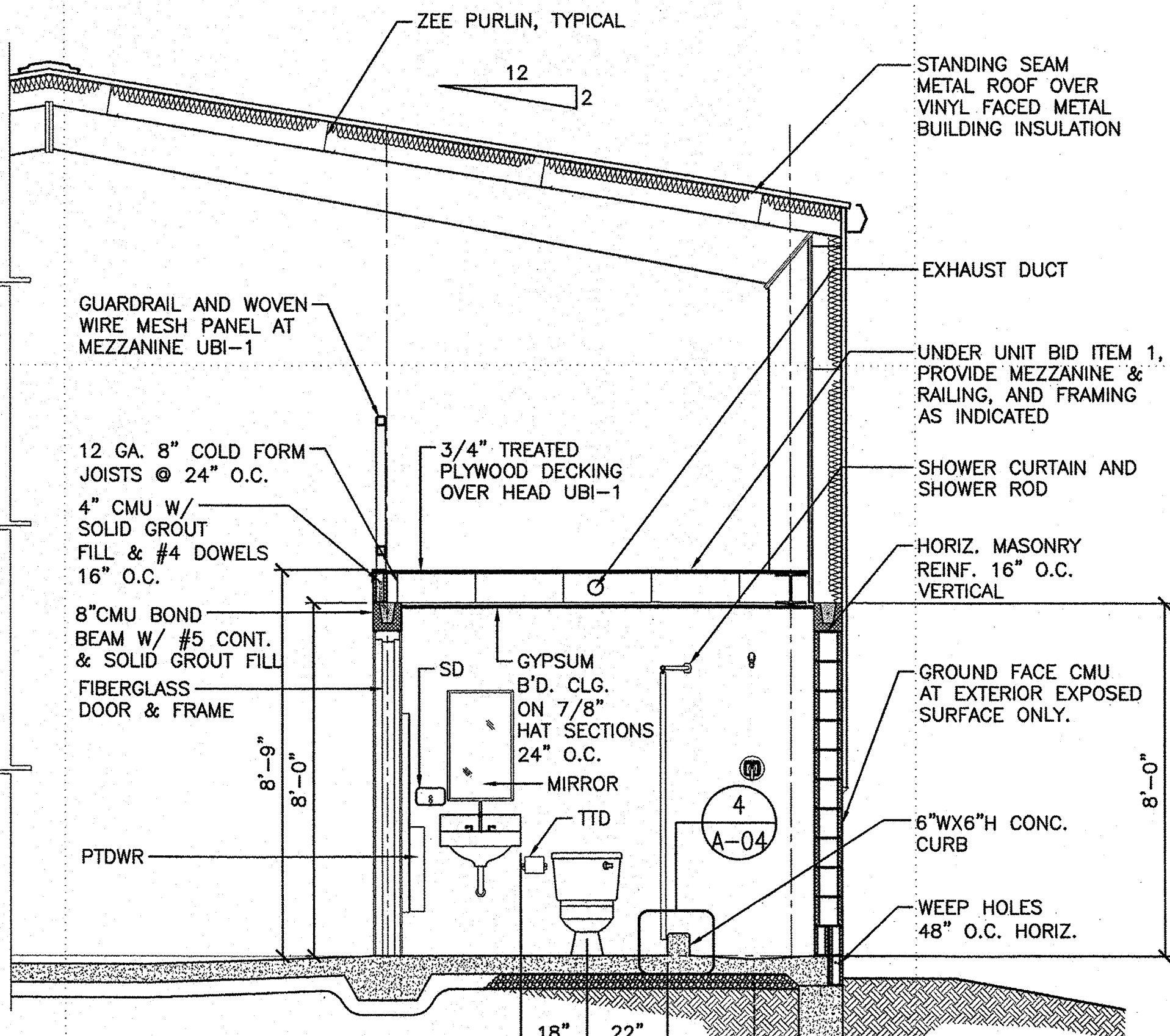
DISCIPLINE/SHT NO A-04	SHEET 15 OF 32
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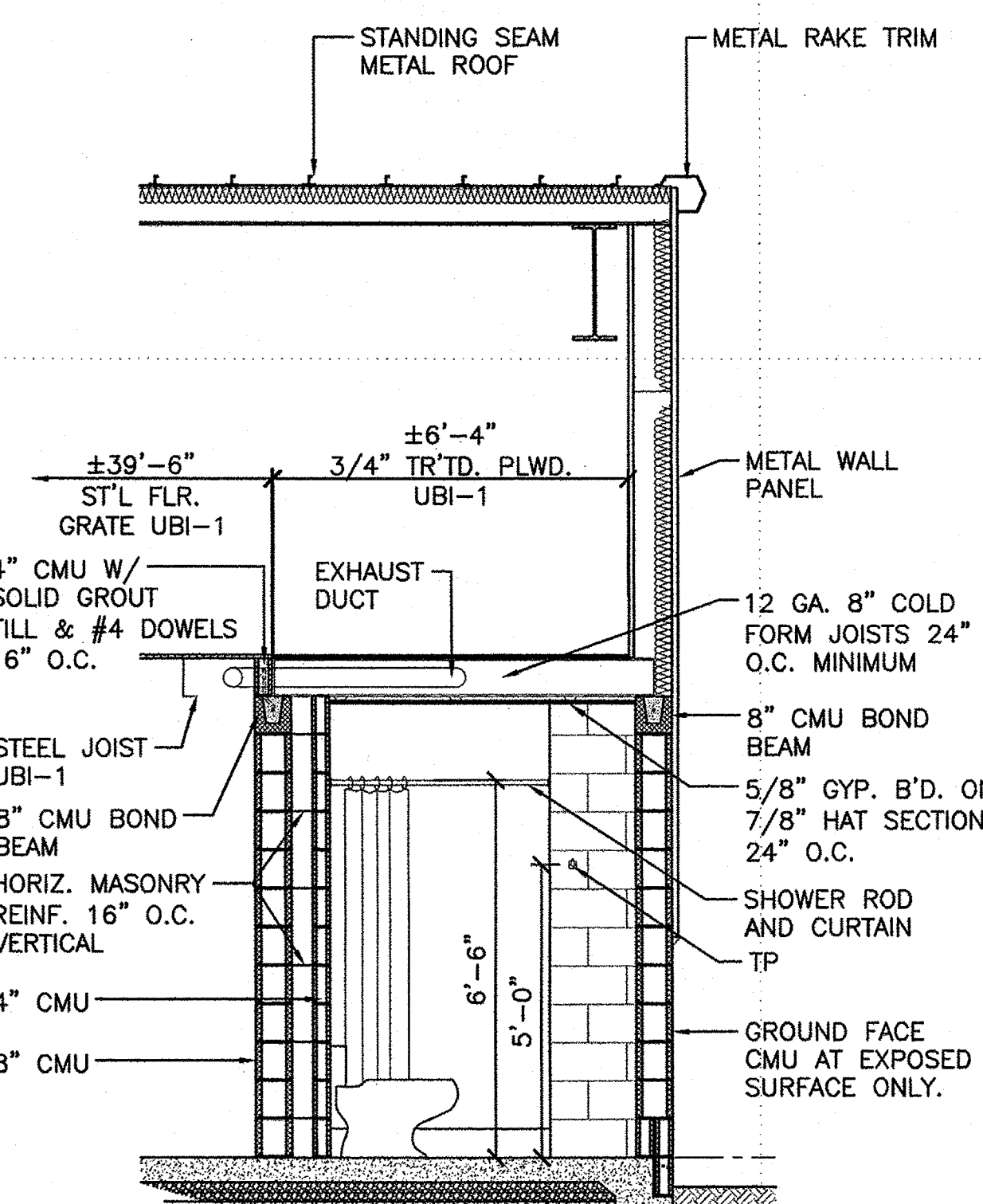
**5 BASE FLASHING DETAIL**  
A-04 SCALE: 3" = 1'-0"



**4 CURB DETAIL**  
A-04 SCALE: 1 1/2" = 1'-0"



**1 PARTIAL BUILDING SECTION**  
A-04 SCALE: 3/8" = 1'-0"

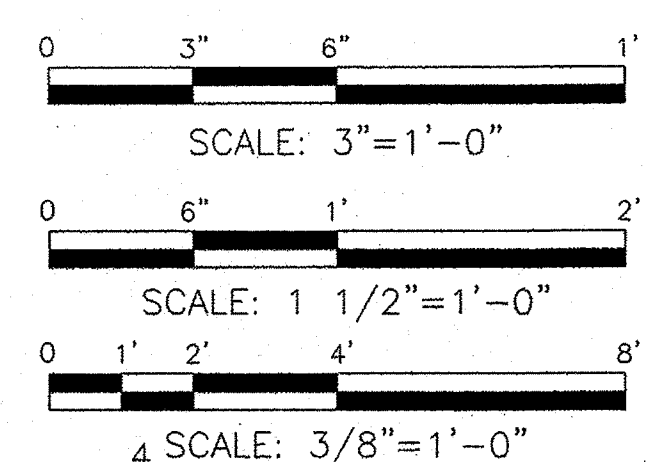


**3 PARTIAL SECTION**  
A-04 SCALE: 3/8" = 1'-0"

**LEGEND**

- PTDWR PAPER TOWEL DISPENSER & WASTE RECEPTACLE
- SD SOAP DISPENSER
- TP TOWEL PIN
- TTD TOILET TISSUE DISPENSER
- UBI-1 UNIT BID ITEM 1

**GRAPHIC SCALE**

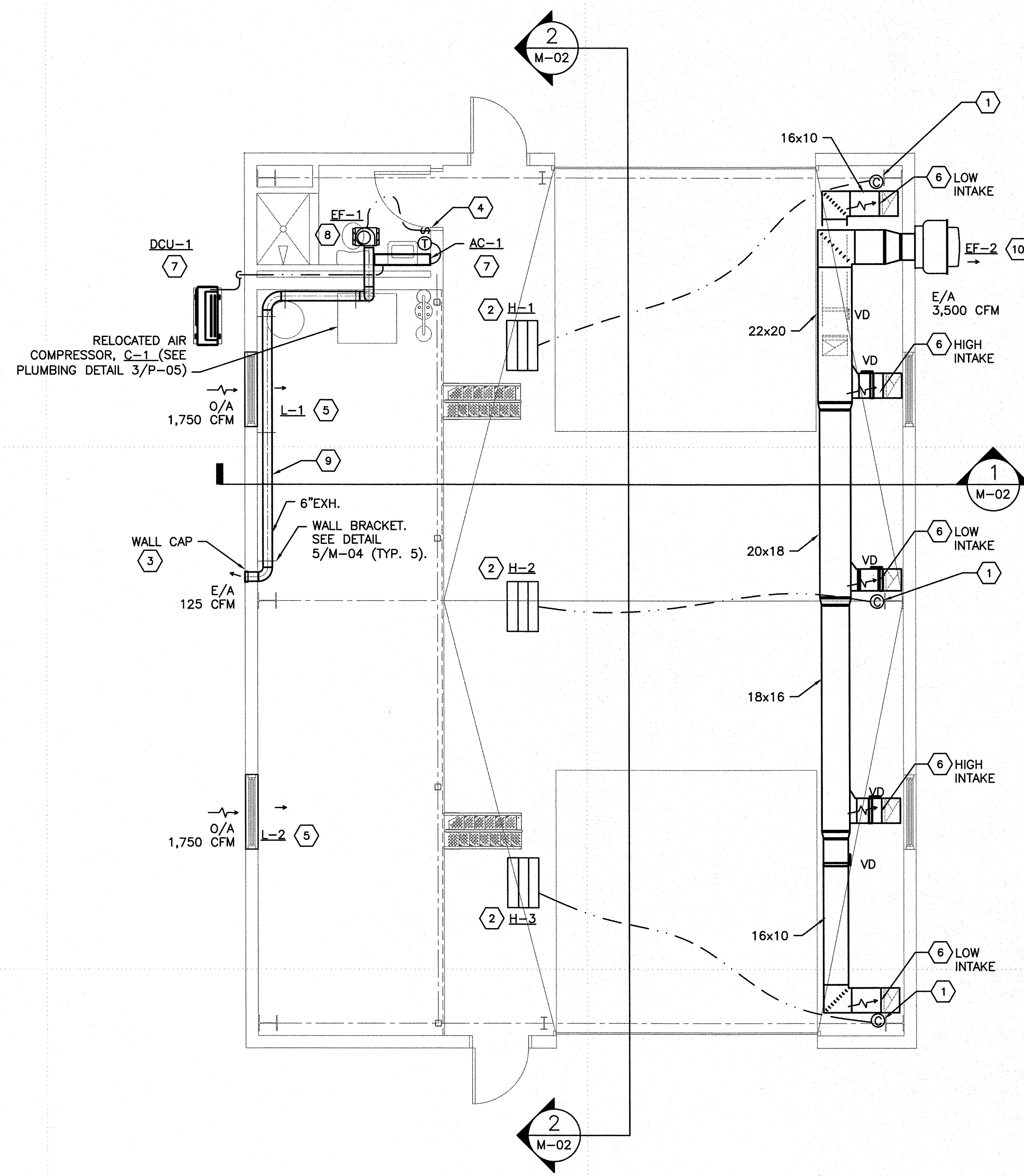




1

2

3



**FLOOR PLAN HVAC**

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



**GENERAL SHEET NOTES**

1. ALL WORK SHALL CONFORM TO THE LATEST EDITION OF MECHANICAL, GAS, PLUMBING, AND ELECTRICAL CODES FOR THE AUTHORITIES HAVING JURISDICTION.
2. ENGINEERING DRAWINGS ARE DIAGRAMMATIC, AND WHILE THE ENGINEER HAS MADE A CONCERTED EFFORT TO ARRANGE AND LAYOUT EQUIPMENT DUCTWORK & PIPING IN A NON CONFLICTIVE MANNER, THE FINAL RESPONSIBILITY OF COORDINATION OF VARIOUS TRADES IS THE CONTRACTOR'S.
3. COORDINATE WITH ELECTRICAL CONTRACTOR ALL VOLTAGES, ELECTRICAL LOADS, ETC. OF ALL ELECTRICALLY OPERATED EQUIPMENT PRIOR TO ORDERING EQUIP.
4. COORDINATE WITH ARCH, STRUCTURAL, ELECTRICAL, AND ALL OTHER TRADES FOR PIPE ROUTING AND EQUIPMENT PLACEMENT, AVOID INTERFERENCE.
5. ALL EQUIPMENT SHALL BE INSTALLED COMPLETE, TESTED, ADJUSTED, AND CLEANED FOR PROPER OPERATION.

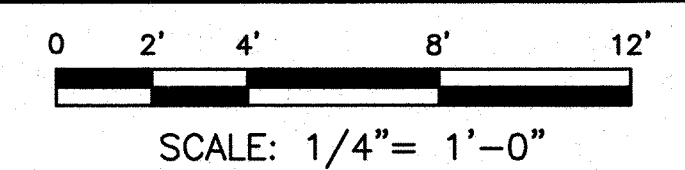
**KEYED NOTES**

1. VARIABLE HEAT CONTROLLER FOR INFRARED ELECTRIC HEATER.
2. INSTALL ELECTRIC INFRARED HEATER ON CHAIN SUPPORTS FROM ROOF STRUCTURE. APPROXIMATE MOUNTING HEIGHT IS 14'-0"; FIELD COORDINATE EXACT MOUNTING HEIGHT IN FIELD.
3. STAINLESS STEEL WALL CAP FOR TOILET EXHAUST. SEE DETAIL 6/M-04.
4. TOILET EXHAUST FAN TO BE CONTROLLED BY WALL SWITCH.
5. 48"W x 24"H LOUVER INTAKE AT LOW LEVEL - SEE ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT.
6. 16x10 EXHAUST DUCT DOWN TO INTAKE. SEE EXHAUST SYSTEM INTAKE DETAIL 2/M-04. BALANCE EACH OF THE 5 INTAKES AT 700 CFM FOR A TOTAL OF 3,500 CFM. B INSTALL BALANCING DAMPER IN TAKEOFF AT MAIN TRUNK OF EACH INTAKE DUCT. LOW INTAKES TO BE LOCATED WITHIN 1" OF THE FLOOR AND HIGH INTAKES TO BE LOCATED ABOVE WINDOW. PROVIDE PAINTED STEEL 14"x14" (MINIMUM SIZE) EXHAUST GRILLE WITH FIXED BLADES AT 35° DEFLECTION FOR EACH INTAKE.
7. INSTALL CONDENSING UNIT ON CONCRETE PAD AS RECOMMENDED BY MANUFACTURER. ROUTE REFRIGERANT LINE SET IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. INSTALL LINESSET COVER- SEE DETAIL 1/M-04. INSTALL WALL-MOUNTED UNIT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. ROUTE CONDENSATE AS SHOWN ON DETAIL 3/M-04 AND MANUFACTURER'S INSTRUCTIONS. PROVIDE PIPE SLEEVES AS SHOWN ON DETAIL 4/M-04.
8. MOUNT EXHAUST FAN ABOVE CEILING.
9. ROUTE DUCTWORK TIGHT TO WALL AND SECURE WITH WALL BRACKETS. SEE DETAIL 5/M-04.
10. EXHAUST FAN TO OPERATE CONTINUOUSLY.

**LEGEND**

A/C	AIR CONDITIONER
CD	CEILING DIFFUSER
DCU	DUCTLESS CONDENSING UNIT
E/A	EXHAUST AIR
EF	EXHAUST FAN
EXIST.	EXISTING
H	HEATER
L	LOUVER
O/A	OUTSIDE AIR
TYP.	TYPICAL
VD	VOLUME DAMPER

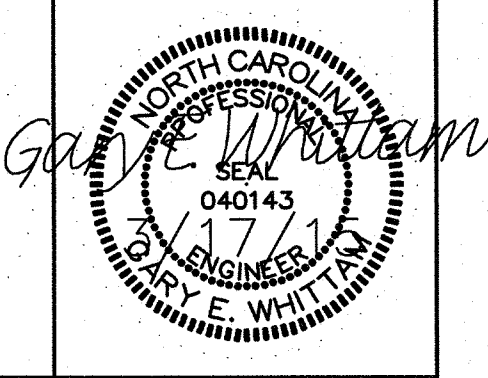
**GRAPHIC SCALE**



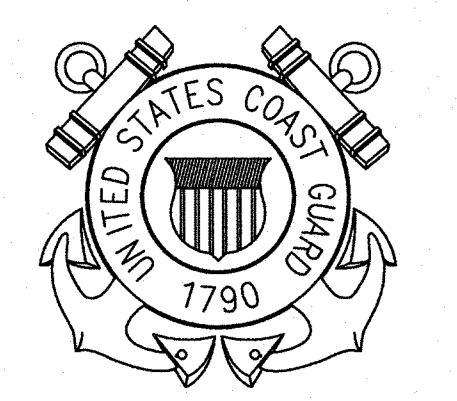
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**CONSULTANTS**

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GREENWOOD, MISSISSIPPI 38930



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CLEVELAND



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1240 EAST 9TH STREET  
CLEVELAND, OH 44199-2060

ISSUE		
MARK	DATE	DESCRIPTION

A/E PROJECT NO: 1474-A	
CAD FILE NAME: C8244M01.dwg	
DESIGNED BY:	GEW
DRAWN BY:	JD
EDITED BY:	GW
CHECKED BY:	DRL

SCALE: AS SHOWN      PLOT SCALE: 1:1

SHEET TITLE  
**CONSTRUCT BMF  
CG STATION HOBUCKEN  
HOBUCKEN NC**

**MECHANICAL  
FLOOR PLAN HVAC**

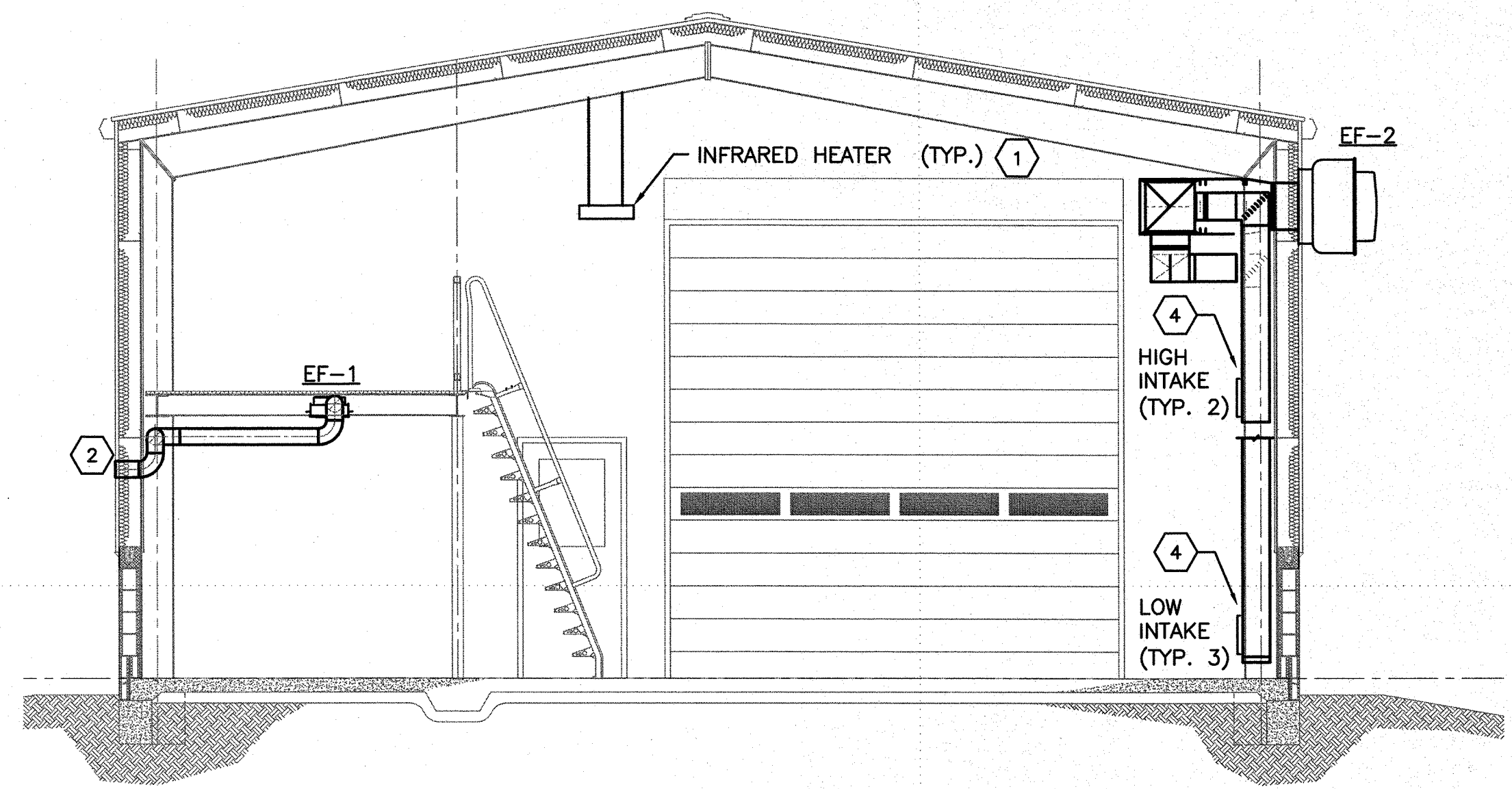
REVIEWED BY: R. PIPAK	REVIEWED BY: B. VRANKAR	REVIEWED BY: G.S. PLACZEK
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR

P. R. CARROLL, CDR  
APPROVING OFFICER      03/17/15  
DATE

PROJECT NUMBER <b>05-C02245</b>	DRAWING NUMBER <b>8244-D</b>
DISCIPLINE/SHT NO <b>M-01</b>	SHEET 16 OF 32

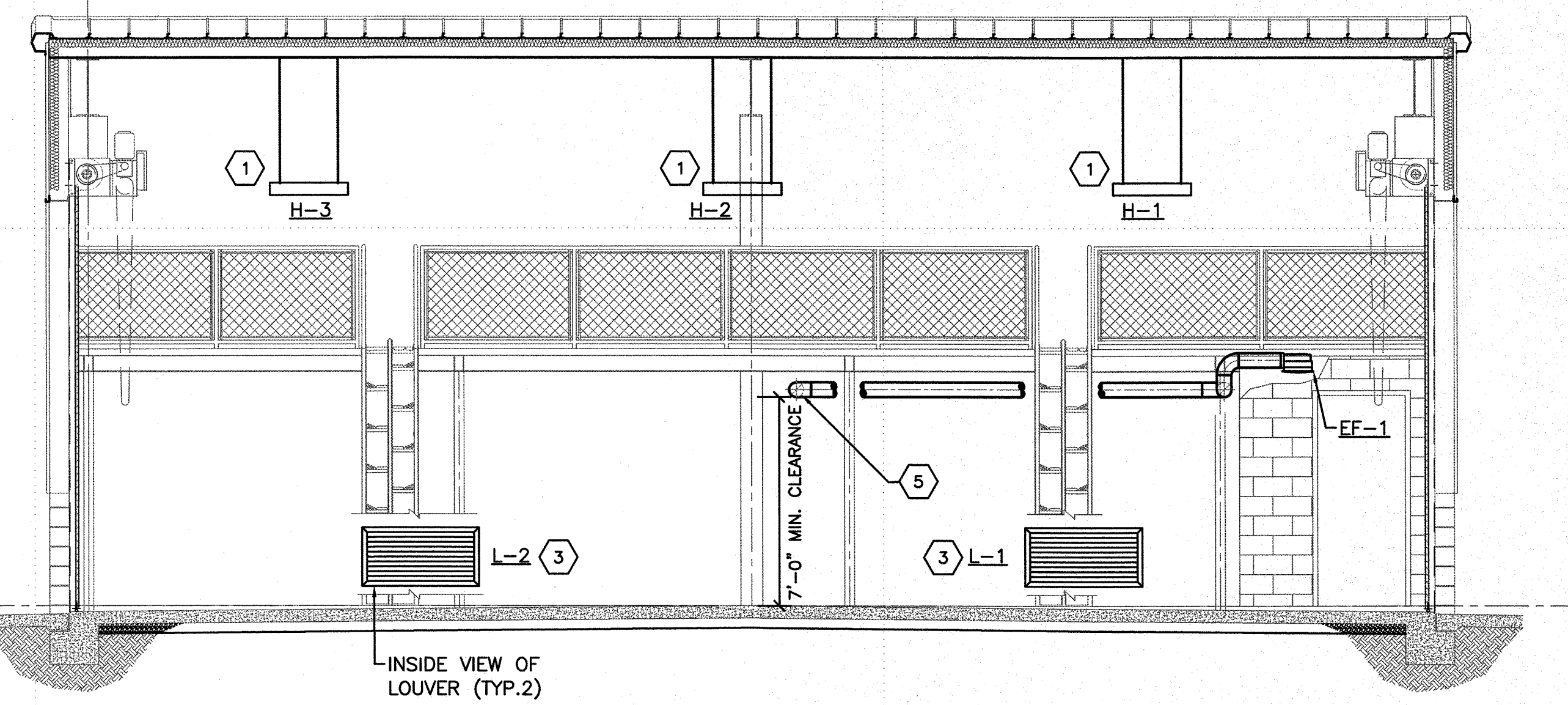


C



1 SECTION  
M-02 SCALE: NOT TO SCALE

B



INSIDE VIEW OF LOUVER (TYP.2)

2 ELEVATION  
M-02 SCALE: NOT TO SCALE

A

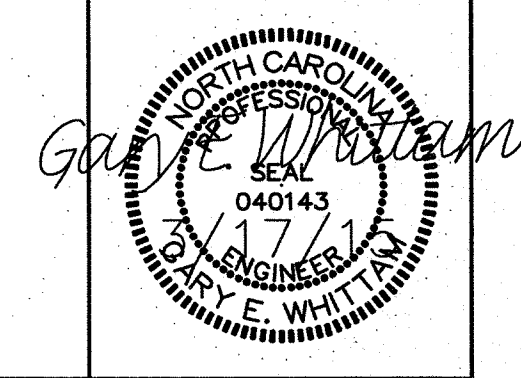
**GENERAL SHEET NOTES**

1. ALL WORK SHALL CONFORM TO THE LATEST EDITION OF MECHANICAL, GAS, PLUMBING, AND ELECTRICAL CODES FOR THE AUTHORITIES HAVING JURISDICTION.
2. ENGINEERING DRAWINGS ARE DIAGRAMMATIC, AND WHILE THE ENGINEER HAS MADE A CONCERTED EFFORT TO ARRANGE AND LAYOUT EQUIPMENT DUCTWORK & PIPING IN A NON CONFLICTIVE MANNER, THE FINAL RESPONSIBILITY OF COORDINATION OF VARIOUS TRADES IS THE CONTRACTOR'S.
3. COORDINATE WITH ELECTRICAL CONTRACTOR ALL VOLTAGES, ELECTRICAL LOADS, ETC. OF ALL ELECTRICALLY OPERATED EQUIPMENT PRIOR TO ORDERING EQUIP.
4. COORDINATE WITH ARCH, STRUCTURAL, ELECTRICAL, AND ALL OTHER TRADES FOR PIPE ROUTING AND EQUIPMENT PLACEMENT, AVOID INTERFERENCE.
5. ALL EQUIPMENT SHALL BE INSTALLED COMPLETE, TESTED, ADJUSTED, AND CLEANED FOR PROPER OPERATION.

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216-902-6233

CONSULTANTS

THE JOHNSON McADAMS FIRM  
GREENWOOD, MISSISSIPPI 38930



**KEYED NOTES**

1. INSTALL ELECTRIC INFRARED HEATER ON CHAIN SUPPORTS FROM ROOF STRUCTURE. APPROXIMATE MOUNTING HEIGHT IS 14'-0"; FIELD COORDINATE EXACT MOUNTING HEIGHT IN FIELD.
2. STAINLESS STEEL WALL CAP FOR TOILET EXHAUST.
3. 48"W x 24"H LOUVER INTAKE AT LOW LEVEL - SEE ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT.
4. SEE EXHAUST SYSTEM INTAKE DETAIL 2/M-04. BALANCE EACH OF THE 5 INTAKES EQUALLY TO A TOTAL OF 3,500 CFM.
5. 6" EXHAUST DUCT TO WALL CAP.

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**LEGEND**

CD CEILING DIFFUSER  
E/A EXHAUST AIR  
EF EXHAUST FAN  
EXIST. EXISTING  
H HEATER  
L LOUVER  
O/A OUTSIDE AIR  
TYP. TYPICAL

MARK	DATE	DESCRIPTION

**GRAPHIC SCALE**

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

**KEY PLAN**

ISSUE


A/E PROJECT NO: 1474-A  
CAD FILE NAME: C8244M02.dwg  
DESIGNED BY: GEW  
DRAWN BY: JD  
EDITED BY: GW  
CHECKED BY: DRL

SCALE: AS SHOWN PLOT SCALE: 1:1

SHEET TITLE

CONSTRUCT BMF  
CG STATION HOBUCKEN  
HOBUCKEN NC

MECHANICAL  
SECTION & ELEVATION

REVIEWED BY: R. PIPAK	REVIEWED BY: B. VRANKAR	REVIEWED BY: G.S. PLACZEK
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR
P. R. CARROLL, CDR APPROVING OFFICER		03/17/15 DATE

**KEY PLAN**  
SCALE: 4 NOT TO SCALE

PROJECT NUMBER 05-C02245	DRAWING NUMBER 8244-D
DISCIPLINE/SHT NO M-02	SHEET 17 OF 32

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3



**DUCTLESS SPLIT SYSTEM OUTDOOR UNIT SCHEDULE**

MARK	SYSTEM TYPE	COOLING OUTDOOR AMBIENT TEMPERATURE (F)	COMPRESSOR	RATED CAPACITY (BTUH)	REFRIGERANT TYPE	SEER	ELECTRICAL			REMARKS
							VOLTS/PHASE	MCA	MOCP	
DCU-1	DUCTLESS SPLIT SYSTEM	95°F	INVERTER DRIVEN (HEAT PUMP)	18,700	410A	19.2	208/1	1	15	SEE NOTES

- NOTES:**
1. PROVIDE AND INSTALL REFRIGERANT SUPPLY AND RETURN LINES PER MANUFACTURER'S RECOMMENDATIONS AND REQUIREMENTS.
  2. ALL CAPACITIES ARE NET VALUES.
  3. PROVIDE LOW AMBIENT CONTROLLER.
  4. PROVIDE HOUSEKEEPING PAD.
  5. PROVIDE WALL MOUNTED THERMOSTAT.

**DUCTLESS SPLIT SYSTEM INDOOR UNIT SCHEDULE**

MARK	TYPE	CFM	COOLING EAT (F DB/WB)	COOLING TOTAL CAPACITY (BTU/H)	COOLING SENSIBLE CAPACITY (BTU/H)	HEATING CAPACITY AT 13°F (BTUH)	CD SIZE (IN)	FILTER	NC DB HIGH/LOW	ELECTRICAL VOLTS/PH.	ELEC. MCA	WEIGHT (LB)	REMARKS
AC-1	WALL-MOUNTED	420	80/67	18,700	13,277	13,000	5/8	FACTORY	49/28	208/1	SEE NOTES	22	SEE NOTES

- NOTES:**
1. PROVIDE AND INSTALL REFRIGERANT SUPPLY AND RETURN LINES PER MANUFACTURER'S RECOMMENDATIONS AND REQUIREMENTS.
  2. ALL CAPACITIES ARE NET VALUES.
  3. PROVIDE LOW AMBIENT CONTROLLER.
  4. POWER SUPPLY TO INDOOR UNIT FROM ASSOCIATED OUTDOOR UNIT.
  5. PROVIDE WALL MOUNTED THERMOSTAT.
  6. PROVIDE BALL VALVES FOR ISOLATION OF EACH PIECE OF EQUIPMENT/COMPONENT FROM SYSTEM.

**FAN SCHEDULE**

MARK	TYPE	VOLUME (CFM)	ESP (IN WG)	FAN (RPM)	HP	V/PH/CY	FLA	MAX SONES	WEIGHT (LBS)	REMARKS
EF-1	CEILING EXHAUST FAN	125	0.5	1100	155W	120/1/60	-	-	10	SEE NOTES 1 & 3
EF-2	SIDEWALL BELT DRIVE EXHAUST FAN	3,500	0.75	1750	1	208/4/60	4.6	16	120	SEE NOTES 2 & 3

- NOTES:**
1. PROVIDE PLUG TYPE DISCONNECT AND MOTOR-MOUNTED POTENTIOMETER DIAL FOR BALANCING.
  2. PROVIDE ALUMINUM HOUSING AND SPARK-RESISTANT BLOWER WITH CLASS 1, DIV. 2 MOTOR. PROVIDE WITH NEMA 3R DISCONNECT AND REMOTE WALL-MOUNTED THERMOSTAT.
  3. ALL EQUIPMENT FURNISHED FOR THIS PROJECT MUST COMPLY WITH THE "BUY AMERICAN ACT".

**ELECTRIC INFRARED HEATER SCHEDULE**

MARK	TYPE	VOLTAGE V/PH	HEATER KW	HEATER BTUH	REFLECTOR PATTERN	WEIGHT LBS	REMARKS
H-1	INDOOR-RATED ELECTRIC INFRARED	208/3	6	20,478	60° SYMMETRICAL	30	SEE NOTES.
H-2	INDOOR-RATED ELECTRIC INFRARED	208/3	6	20,478	60° SYMMETRICAL	30	SEE NOTES.
H-3	INDOOR-RATED ELECTRIC INFRARED	208/3	6	20,478	60° SYMMETRICAL	30	SEE NOTES.

- NOTES:**
1. PROVIDE WITH "L" BRACKETS AND CHAIN SUPPORTS. APPROXIMATE MOUNTING HEIGHT IS 14'-0" AFF. COORDINATE EXACT MOUNTING HEIGHT IN FIELD.
  2. PROVIDE WITH VARIABLE HEAT CONTROL & PROVIDE 3 ELEMENTS PER HEATER.
  3. PROVIDE HEATERS WITH GROUND FAULT SENSING SWITCH.
  4. ALL EQUIPMENT FURNISHED FOR THIS PROJECT MUST COMPLY WITH THE "BUY AMERICAN ACT".

**LOUVER SCHEDULE**

MARK	TYPE	WIDTH (IN.)	HEIGHT (IN.)	FREE AREA (SF.)	VOLUME (CFM)	PRESSURE DROP (IN WG)	FREE AREA VELOCITY (FPM)	REMARKS
L-1 & L-2	INTAKE LOUVER	48	24	6.7	3,500	0.037	496	SEE NOTES.

- NOTES:**
1. PROVIDE LOUVER WITH INTEGRAL GALVANIZED BIRD SCREEN
  2. COLOR TO BE SELECTED BY THE GOVERNMENT FROM MANUFACTURER'S STANDARD COLOR CHART (NO LESS THAN 24 COLORS).
  3. PROVIDE LOUVER WITH EXTENDED SILL.
  4. ALL EQUIPMENT FURNISHED FOR THIS PROJECT MUST COMPLY WITH THE "BUY AMERICAN ACT".

**GENERAL SHEET NOTES**

1. ALL WORK SHALL CONFORM TO THE LATEST EDITION OF MECHANICAL, GAS, PLUMBING, AND ELECTRICAL CODES FOR THE AUTHORITIES HAVING JURISDICTION.
2. ENGINEERING DRAWINGS ARE DIAGRAMMATIC, AND WHILE THE ENGINEER HAS MADE A CONCERTED EFFORT TO ARRANGE AND LAYOUT EQUIPMENT DUCTWORK & PIPING IN A NON CONFLICTIVE MANNER, THE FINAL RESPONSIBILITY OF COORDINATION OF VARIOUS TRADES IS THE CONTRACTOR'S.
3. COORDINATE WITH ELECTRICAL CONTRACTOR ALL VOLTAGES, ELECTRICAL LOADS, ETC. OF ALL ELECTRICALLY OPERATED EQUIPMENT PRIOR TO ORDERING EQUIP.
4. COORDINATE WITH ARCH, STRUCTURAL, ELECTRICAL, AND ALL OTHER TRADES FOR PIPE ROUTING AND EQUIPMENT PLACEMENT, AVOID INTERFERENCE.
5. ALL EQUIPMENT SHALL BE INSTALLED COMPLETE, TESTED, ADJUSTED, AND CLEANED FOR PROPER OPERATION.

**ABBREVIATIONS**

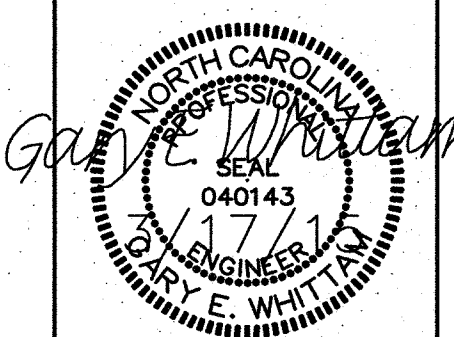
- AC AIR CONDITIONER
- AFF ABOVE FINISHED FLOOR
- AUX AUXILIARY
- BTUH BRITISH THERMAL UNITS PER HOUR
- CFM CUBIC FEET PER MINUTE
- CMAC CEILING MOUNTED AIR CONDITIONER
- CRAC COMPUTER ROOM AIR CONDITIONER
- CY CYCLES
- DX DIRECT EXPANSION
- ENT ENTERING
- ESP EXTERNAL STATIC PRESSURE
- FPM FEET PER MINUTE
- FT/MIN FEET PER MINUTE
- HP HORSE POWER
- HTR HEATER
- IN INCHES
- IN WG INCHES WATER GAUGE
- KW KILOWATT
- LVG LEAVING
- LBS POUNDS
- MCA MINIMUM CIRCUITED AMPS
- MOCP MINIMUM OVERLOAD CURRENT PROTECTION
- PD PRESSURE DROP
- PH PHASE
- RPM REVOLUTIONS PER MINUTE
- RTU ROOFTOP UNIT
- TEF TOILET EXHAUST FAN
- V VOLTS
- VD VOLUME DAMPER
- Ø DIAMETER

**LEGEND**

- MANUAL VOLUME DAMPER
- ⊕ THERMOSTAT
- ⊗ SUPPLY DIFFUSER
- ⊘ RETURN AIR OR EXHAUST AIR GRILLE
- EXISTING TO BE REMOVED
- EXISTING TO REMAIN
- NEW TO BE INSTALLED

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CIVIL ENGINEERING UNIT  
CLEVELAND



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1240 EAST 9TH STREET  
CLEVELAND, OH 44199-2060

MARK	DATE	DESCRIPTION

A/E PROJECT NO: 1474-A
CAD FILE NAME: C8244M03.dwg
DESIGNED BY: GEW
DRAWN BY: JD
EDITED BY: GW
CHECKED BY: DRL

SCALE: AS SHOWN PLOT SCALE: 1:1  
SHEET TITLE

CONSTRUCT BMF  
CG STATION HOBUCKEN NC  
MECHANICAL  
SCHEDULES

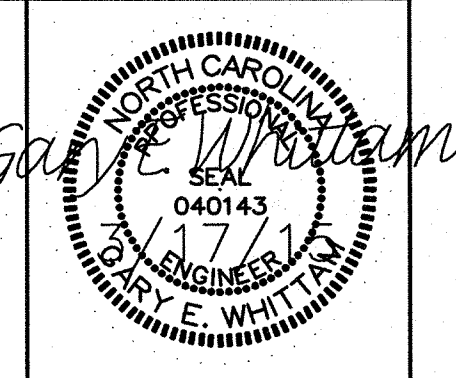
REVIEWED BY: R. PIPAK	REVIEWED BY: B. VRANKAR	REVIEWED BY: G.S. PLACZEK
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR
P. R. CARROLL, CDR APPROVING OFFICER		03/17/15 DATE

PROJECT NUMBER	DRAWING NUMBER
05-C02245	8244-D
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M-03	



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DRAWN BY: JD  
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CHECKED BY: DRL

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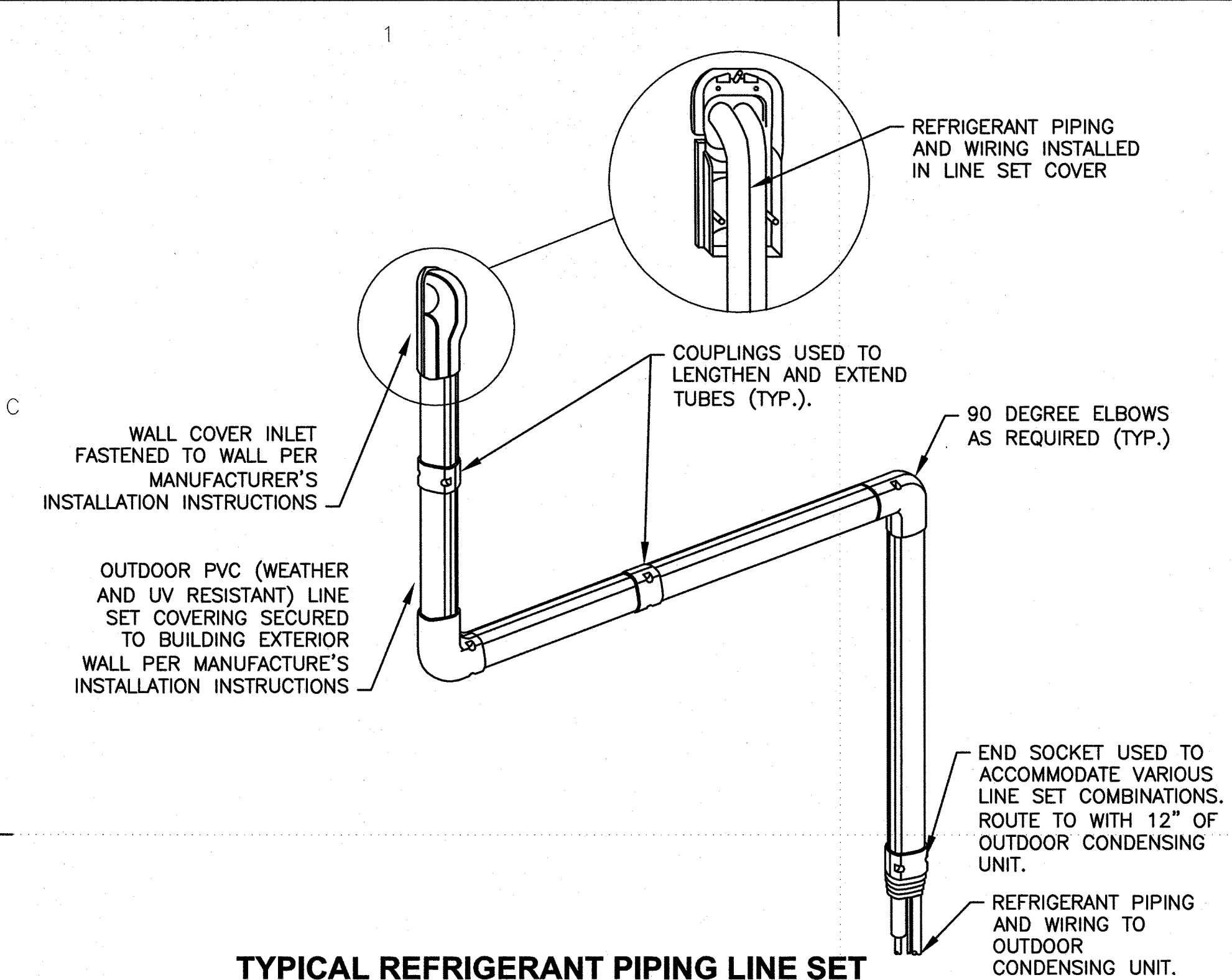
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CG STATION HOBUCKEN NC

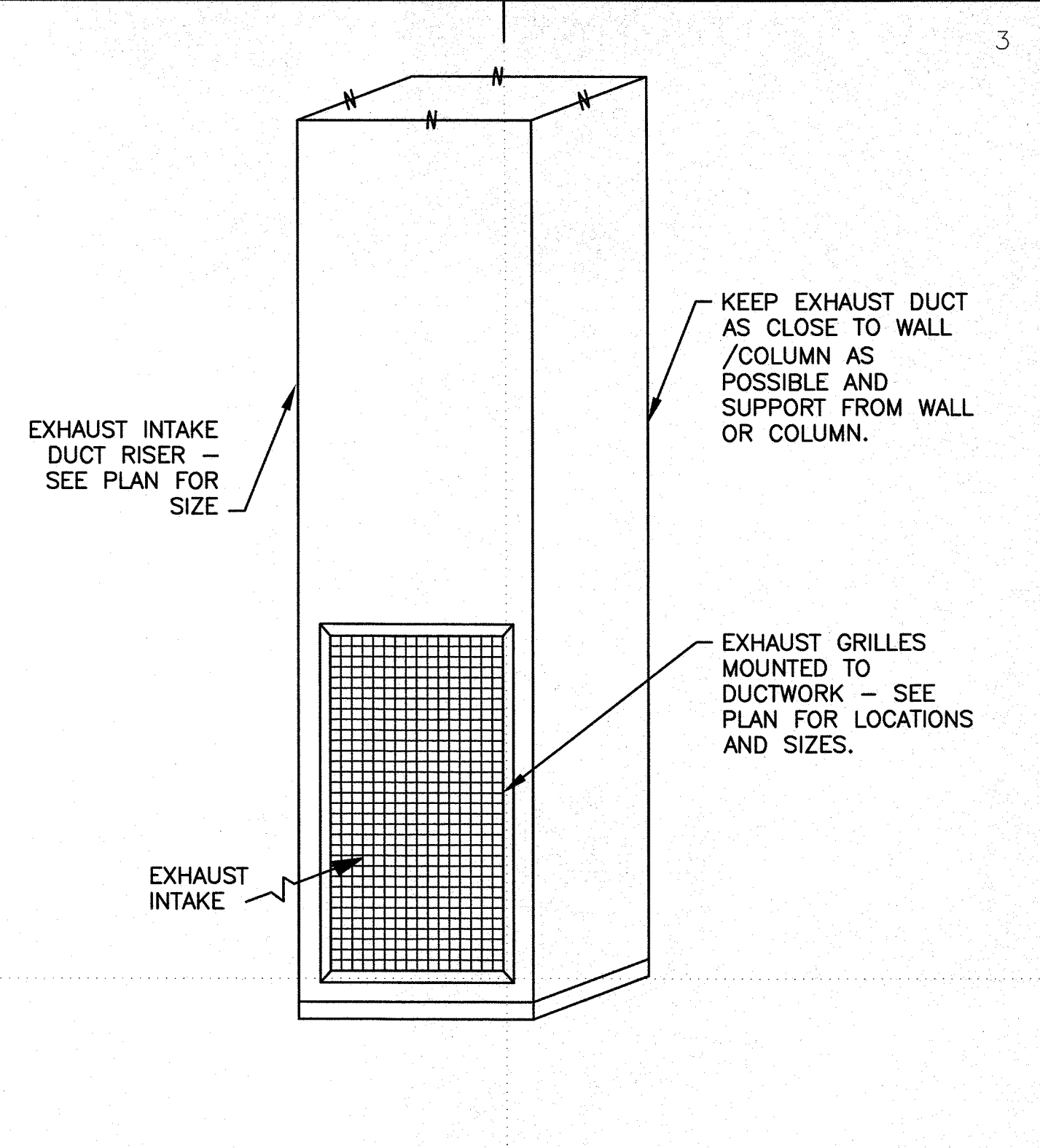
MECHANICAL  
DETAILS

REVIEWED BY: R. PIPAK	REVIEWED BY: B. VRANKAR	REVIEWED BY: G.S. PLACZEK
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR
P. R. CARROLL, CDR APPROVING OFFICER		03/17/15 DATE

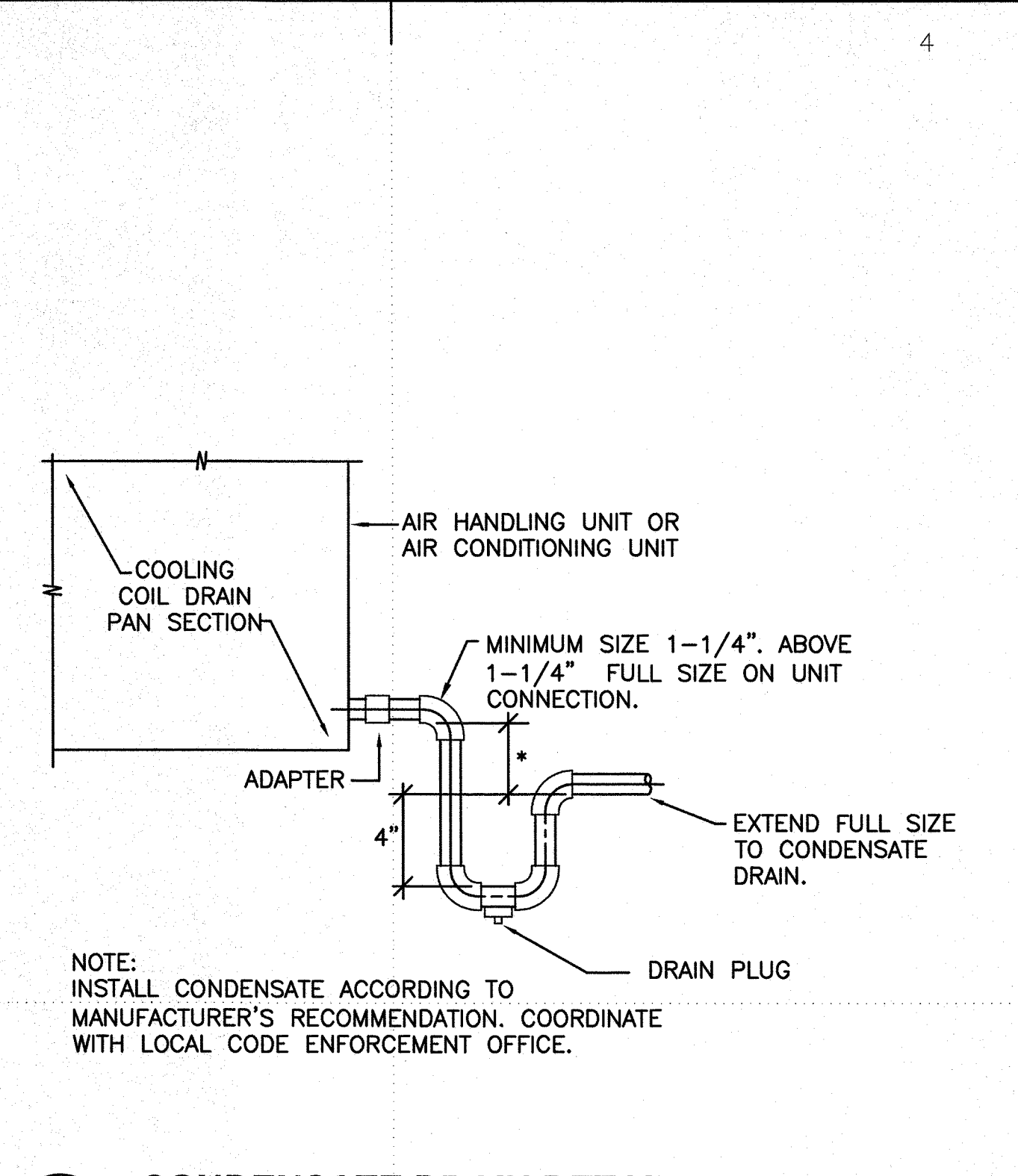
PROJECT NUMBER	DRAWING NUMBER
05-C02245	8244-D
DISCIPLINE/SHT NO	SHEET 19 OF 32
M-04	



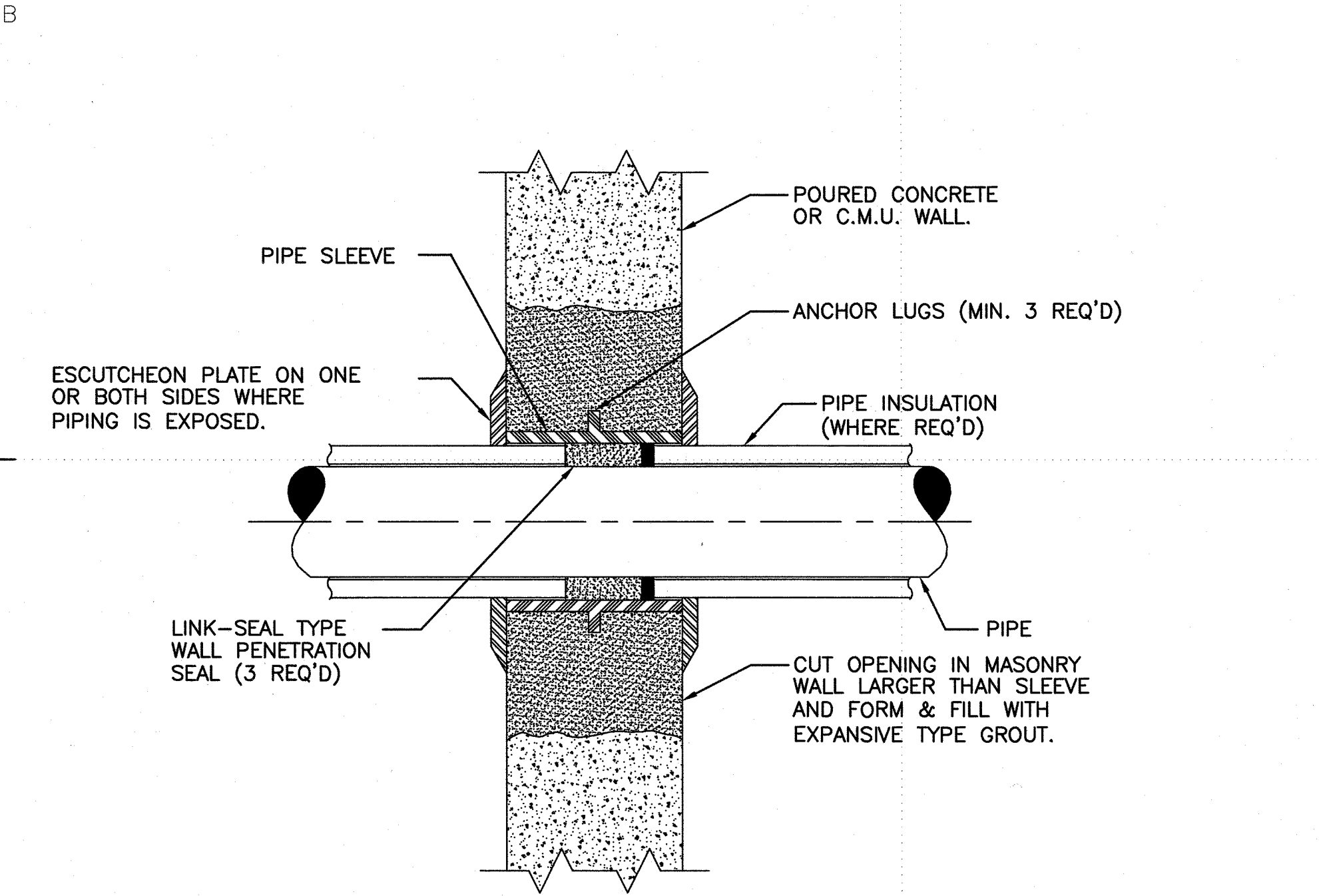
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M-04 **TYPICAL REFRIGERANT PIPING LINE SET OUTSIDE INSTALLATION DETAIL**  
SCALE: NOT TO SCALE



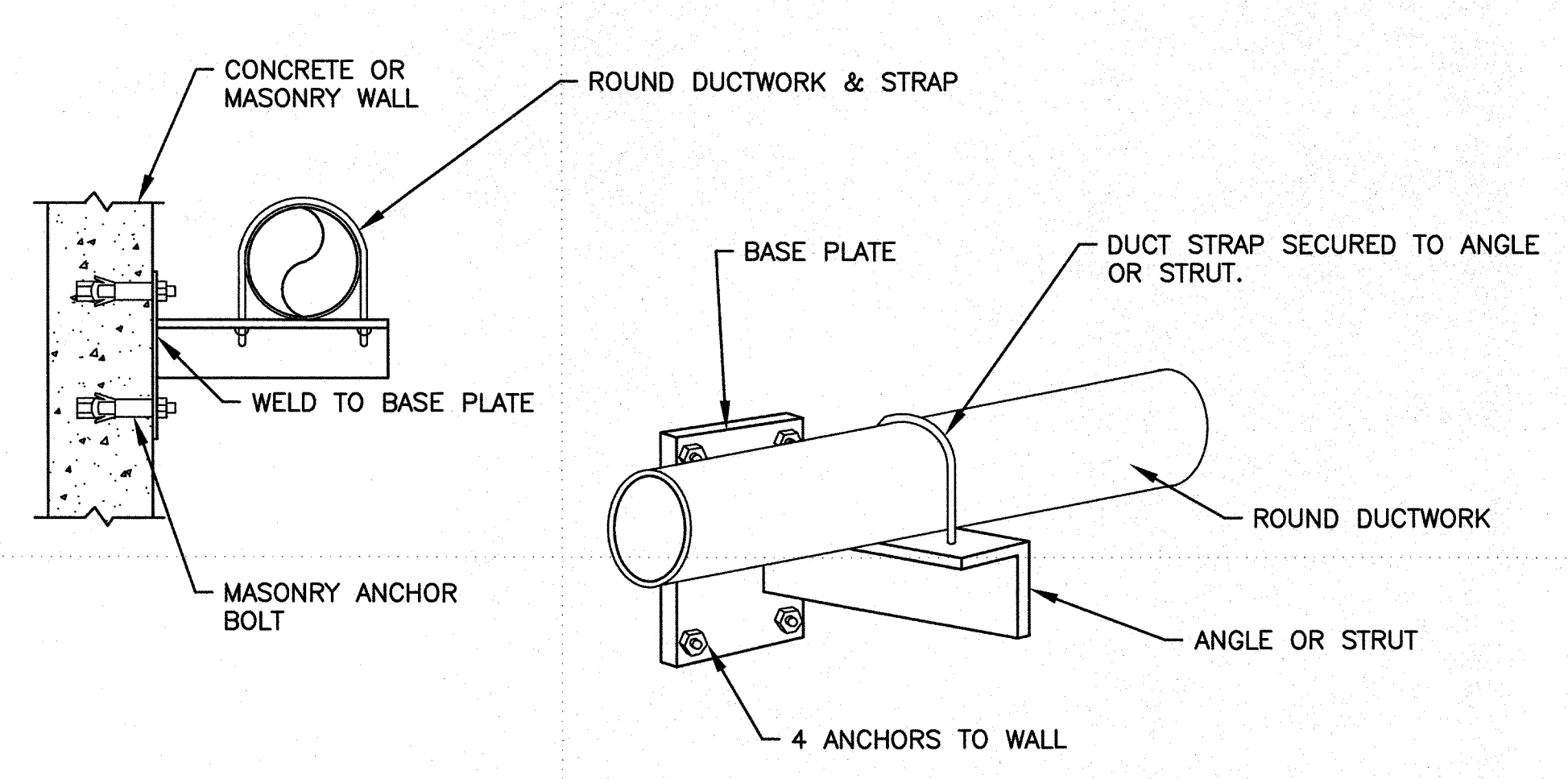
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M-04 **EXHAUST SYSTEM INTAKE DETAIL**  
SCALE: NOT TO SCALE



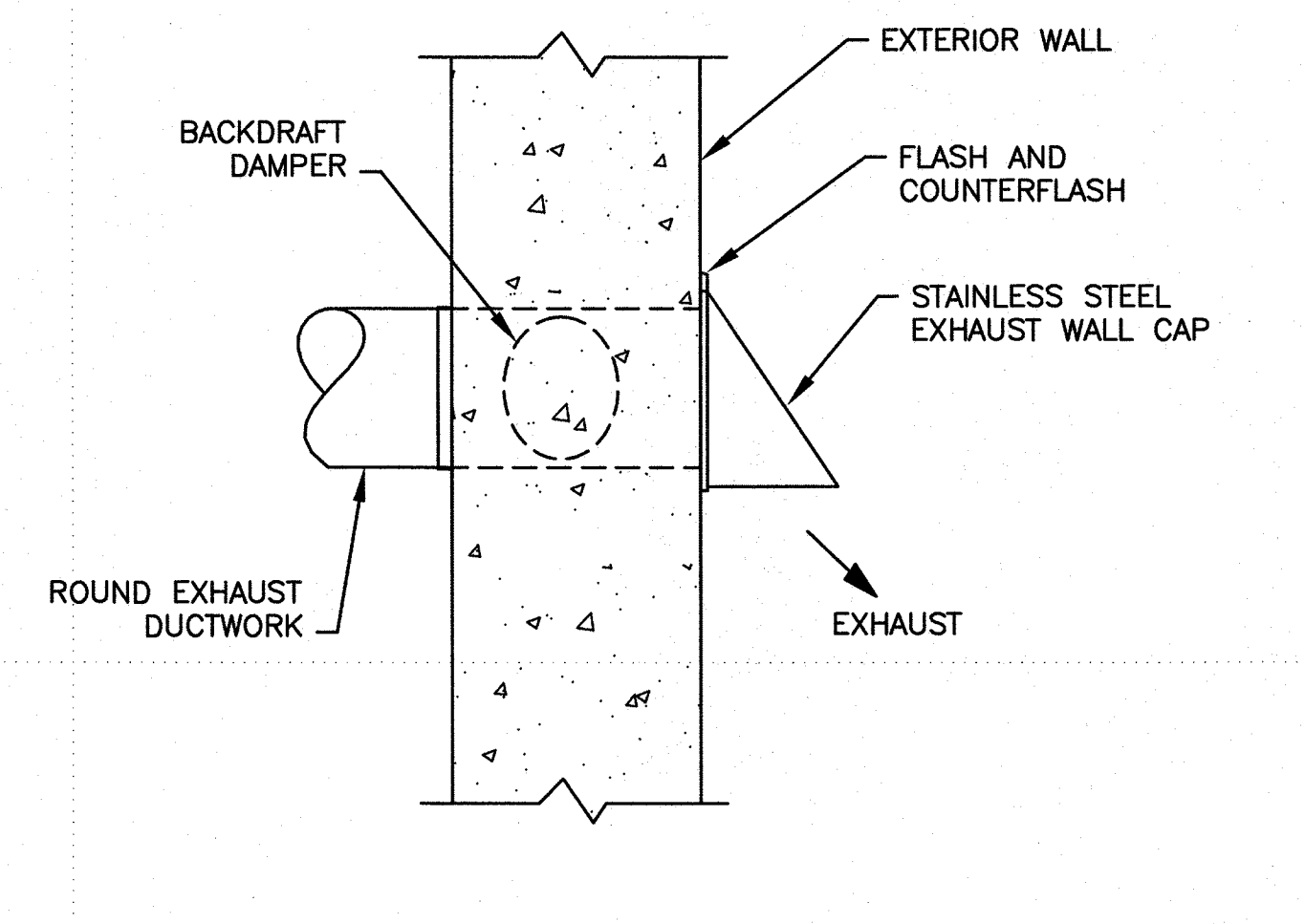
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M-04 **CONDENSATE DRAIN DETAIL**  
SCALE: NOT TO SCALE



4  
M-04 **PIPE PENETRATION THROUGH NON FIRE-RATED WALL**  
SCALE: NOT TO SCALE



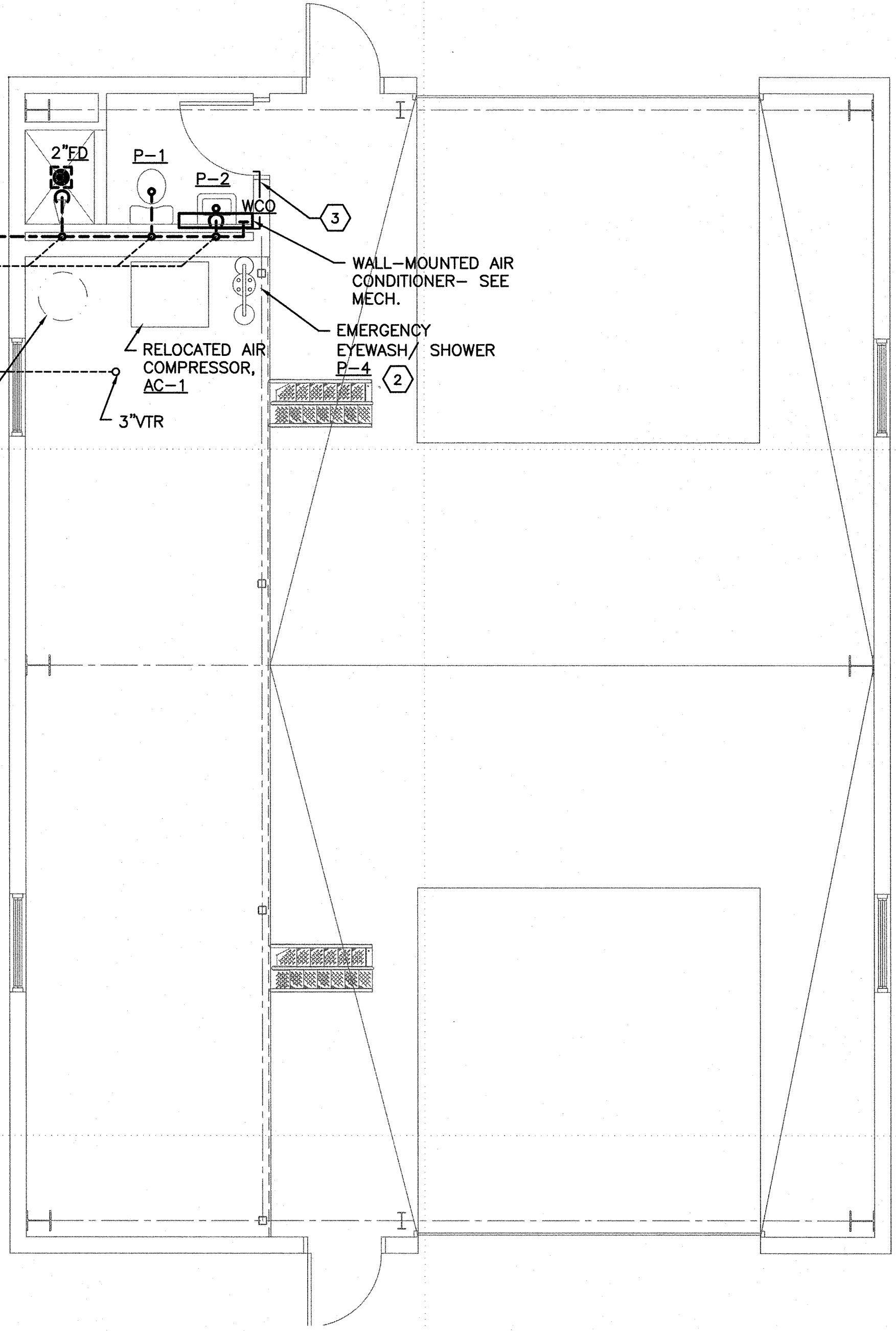
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M-04 **DUCTWORK WALL SUPPORT DETAIL**  
SCALE: NOT TO SCALE



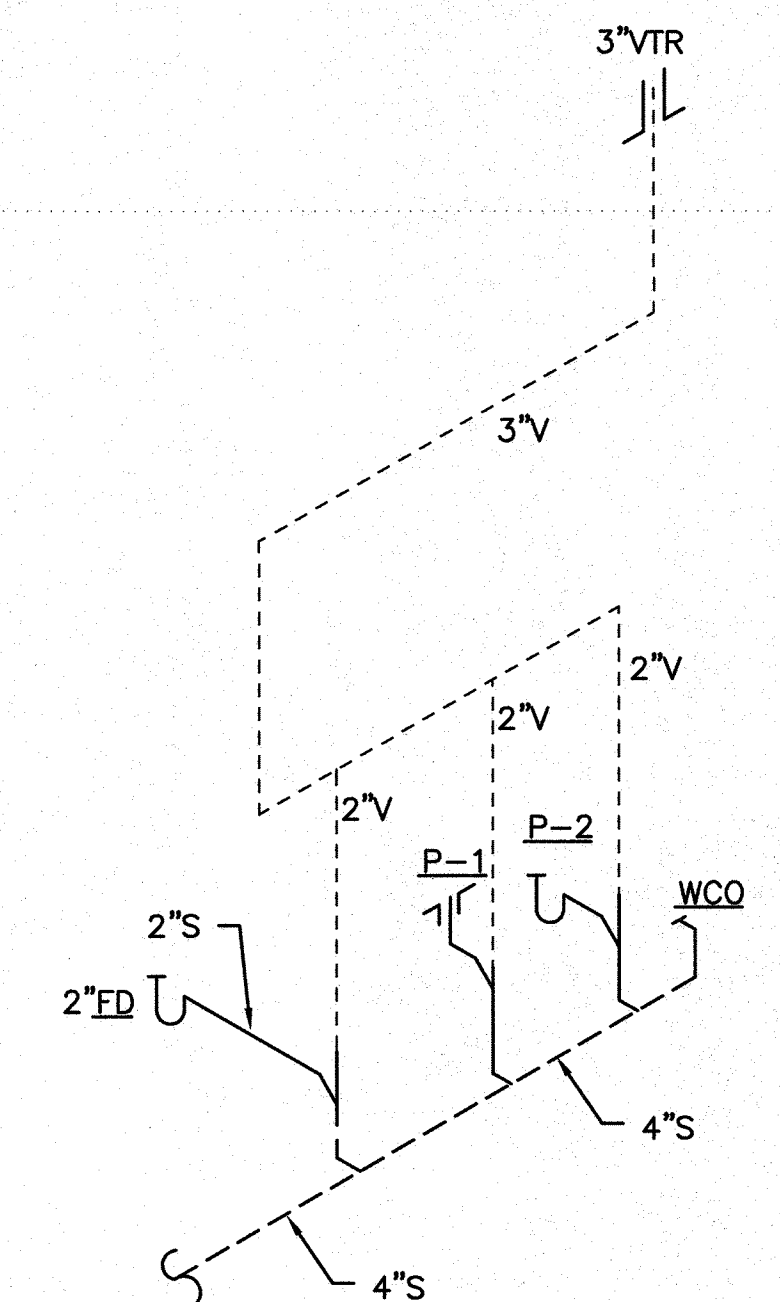
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M-04 **EXHAUST WALL CAP DETAIL**  
SCALE: NOT TO SCALE



1 2 3



**FLOOR PLAN - DWV**  
SCALE: 1/4" = 1'-0"



**1 RISER DIAGRAM**  
SCALE: NOT TO SCALE

**GENERAL SHEET NOTES**

- SEE PLUMBING RISER ON SHEET P-03.
- COMPLY WITH THE LATEST EDITION OF THE INTERNATIONAL PLUMBING CODE. ANY DEVIATIONS FROM CODE SHALL BE SUBMITTED IN WRITING FOR APPROVAL BY USCG CONTRACTING OFFICER.
- ENGINEERING DRAWINGS ARE DIAGRAMMATIC, NOT ALL OFFSETS ARE SHOWN. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF WORK WITH ALL TRADES. CONTRACTOR SHALL NOT FABRICATE ANY MATERIAL OR INSTALL ANY EQUIPMENT PRIOR TO VERIFICATION OF CLEARANCES. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.

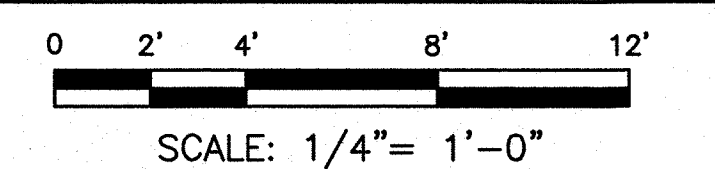
**(X) KEYED NOTES**

- 4"S. SEE CIVIL FOR CONTINUATION.
- SEE DETAIL 2/P-05.
- ROUTE 1-1/4" CONDENSATE DOWN IN WALL TO INLET SIDE OF P-TRAP OF LAVATORY.

**LEGEND**

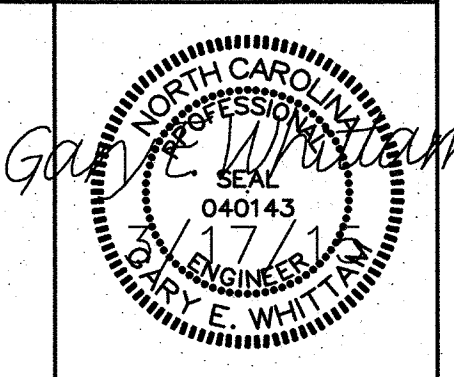
AFF	- ABOVE FINISHED FLOOR
CIP	- CAST IRON PIPING
COMP	- COMPARTMENT
CONC	- CONCRETE
CW	- COLD WATER LINE
D	- CONDENSATE DRAIN
DSN	- DOWNSPOUT NOZZLE
DWV	- DRAIN, WASTE, & VENT
EWI	- ELECTRIC WATER HEATER
EXIST	- EXISTING
FD	- FLOOR DRAIN
HB	- HOSE BIBB
HW	- HOT WATER LINE
LAV	- LAVATORY
ORD	- OVERFLOW ROOF DRAIN
ORL	- OVERFLOW RAIN LEADER
RD	- ROOF DRAIN
RL	- RAIN LEADER
S	- SANITARY SEWER
SD	- STORM DRAIN
UG	- UNDERGROUND
V	- VENT
VTR	- VENT THRU ROOF
WC	- WATER CLOSET
WCO	- WALL CLEANOUT

**GRAPHIC SCALE**

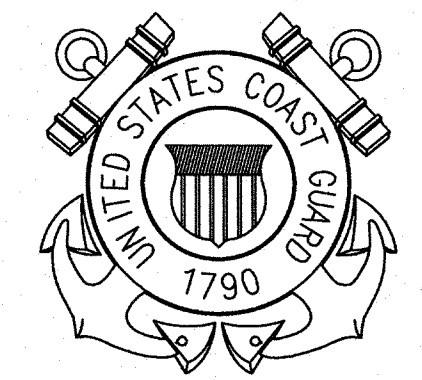


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1240 EAST 9TH STREET  
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ISSUE		
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CAD FILE NAME: C8244P01.dwg		
DESIGNED BY:	GEW	
DRAWN BY:	JD	
EDITED BY:	GW	
CHECKED BY:	DRL	

SCALE: AS SHOWN PLOT SCALE: 1:1

SHEET TITLE  
**CONSTRUCT BMF  
CG STATION HOBUCKEN  
HOBUCKEN NC**  
**PLUMBING  
FLOOR PLAN - DWV**

REVIEWED BY:	REVIEWED BY:	REVIEWED BY:
R. PIPAK	B. VRANKAR	G.S. PLACZEK
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR
P. R. CARROLL, CDR		03/17/15
APPROVING OFFICER		DATE

PROJECT NUMBER	DRAWING NUMBER
05-C02245	8244-D
DISCIPLINE/SHT NO	SHEET 20 OF 32
P-01	



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3

GENERAL SHEET NOTES

1. COMPLY WITH THE LATEST EDITION OF THE INTERNATIONAL PLUMBING CODE. ANY DEVIATIONS FROM CODE SHALL BE SUBMITTED IN WRITING FOR APPROVAL BY USCG CONTRACTING OFFICER.
2. ENGINEERING DRAWINGS ARE DIAGRAMMATIC, NOT ALL OFFSETS ARE SHOWN. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF WORK WITH ALL TRADES. CONTRACTOR SHALL NOT FABRICATE ANY MATERIAL OR INSTALL ANY EQUIPMENT PRIOR TO VERIFICATION OF CLEARANCES. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
3. ALL COMPRESSED AIR OUTLETS AND DRAINS TO BE INSTALLED PARALLEL/FLUSH TO WALL.

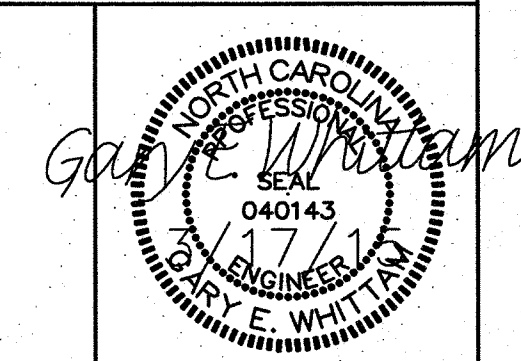
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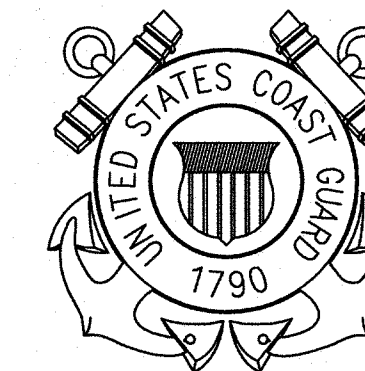
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KEYED NOTES

1. 3/4" CW AND HW TO WALL-MOUNTED TEMPERING VALVE SET TO 85°F. 1" TEPID WATER TO EMERGENCY SHOWER. SEE DETAIL 2/P-05.
2. 1-1/2" POTABLE WATER. SEE CIVIL FOR CONTINUATION.
3. 1-1/2" REDUCED PRESSURE BACKFLOW PREVENTER WITH FULL LINE SIZE MANIFOLD. SEE DETAIL 1/P-05.
4. EXIST. 10HP, 2-STAGE RECIPROCATING, 60 GAL VERTICAL AIR COMPRESSOR (INGERSOL-RAND M/N 2540K10) TO BE RELOCATED FROM LAWN GARAGE BUILDING TO LOCATION SHOWN BY THE CONTRACTOR. INSTALL AIR COMPRESSOR ON VIBRATION ISOLATION PAD WITH 1/2" CONCRETE ANCHOR OR EXPANSION BOLT AT EACH SUPPORT. PROVIDE BALL VALVE AT OUTLET OF AIR COMPRESSOR AND PRESSURE GAUGE FOR TANK. PLUG AND SEAL ALL UNUSED OPENINGS WITH SQUARE HEAD STEEL PLUGS. USE A NON-HARDENING COMPOUND. CONTRACTOR SHALL SUPPLY ALL MATERIALS NEEDED TO RELOCATE AIR COMPRESSOR AND CONNECT TO NEW COMPRESSED AIR PIPING. PROVIDE METAL PLACARD TO STATE "EQUIPMENT STARTS AUTOMATICALLY" ON WALL NEAR THE AIR COMPRESSOR.
5. COMPRESSED AIR OUTLET DROP. SEE DETAIL 3/P-05.
6. COMPRESSED AIR DRAIN. SEE DETAIL 4/P-05.
7. SEE DETAIL 2/P-05. PROVIDE METAL PLACARD ON THE WALL NEAR THE EMERGENCY EYEWASH/SHOWER TO MEET 29 CFR 1910.151(C) TO IDENTIFY EQUIPMENT.
8. 1-1/2" CW AND 1-1/4" HW HEADER. PROVIDE WATER HAMMER ARRESTOR - SEE DETAIL 4/P-04.
9. 1" CW DOWN TO WATER CLOSET.
10. 1/2" CW AND HW TO FIXTURES.
11. 1/2" CW TO WALL HYDRANT/ HOSE BIBB.



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MARK	DATE	DESCRIPTION

LEGEND

- AC AIR COMPRESSOR
- CA COMPRESSED AIR
- CW DOMESTIC COLD WATER
- HW DOMESTIC HOT WATER
- NFWH NON-FREEZE WALL HYDRANT
- P PLUMBING FIXTURE
- WH WATER HEATER
- WHA WATER HAMMER ARRESTOR

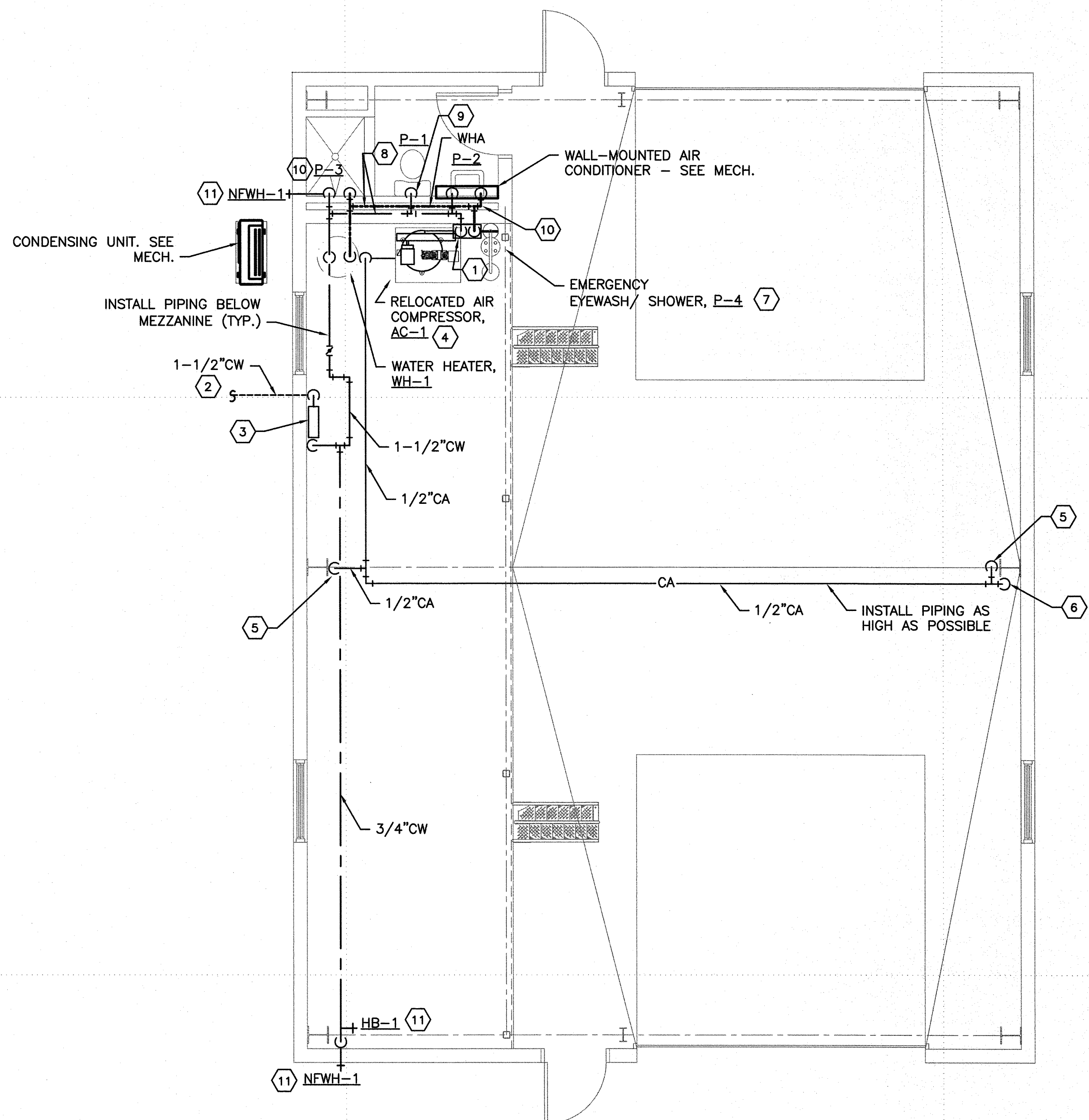
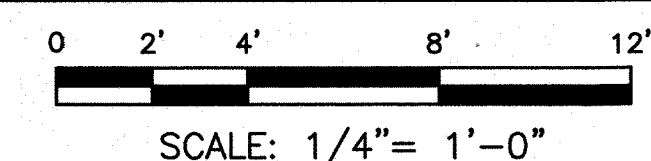
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CONSTRUCT BMF  
CG STATION HOBUCKEN  
HOBUCKEN NC

PLUMBING  
FLOOR PLAN-DOM. WATER

REVIEWED BY: R. PIPAK	REVIEWED BY: B. VRANKAR	REVIEWED BY: G.S. PLACZEK
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR
P. R. CARROLL, CDR APPROVING OFFICER		03/17/15 DATE

GRAPHIC SCALE



FLOOR PLAN - DOMESTIC WATER  
SCALE: 1/4" = 1'-0"



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PROJECT NUMBER	DRAWING NUMBER
05-C02245	8244-D
DISCIPLINE/SHT NO	SHEET
P-02	21 OF 32



PLUMBING FIXTURE SCHEDULE								
MARK	DESCRIPTION	CW	HW	TEPID WATER	WASTE	INDIRECT WASTE	VENT	REMARKS
P-1	FLOOR-MOUNTED WATER CLOSET	1/2"		-	4"	-	2"	FLUSH TANK
P-2	WALL-MOUNTED LAVATORY	1/2"	1/2"	-	2"	-	2"	-
P-3	SHOWER	1/2"	1/2"	-	2"	-	2"	1.5 GPM. PROVIDE TRIM WITH LEVER HANDLE, PRESSURE BALANCING MIXING VALVE, INTEGRAL STOPS, INTEGRAL VOLUME CONTROL, ADJUSTABLE STOP SCREWS AND SUPER SHOWER HEAD. SET SHOWER VALVE TEMPERATURE LIMIT STOP TO DELIVER MAXIMUM 115°F HOT WATER.
P-4	EMERGENCY EYEWASH/ SHOWER	-	-	1"	-	-	-	STAINLESS STEEL SHOWER AND EYEWASH, 20 GPM SHOWER AND 3 GPM EYEWASH.
FD	FLOOR DRAIN	-	-	-	2"	-	2"	SQUARE ADJUSTABLE STRAINER WITH SATIN NICKEL BRONZE FINISH. PROVIDE WITH VANDAL PROOF SECURED TOP.
WCO	WALL CLEANOUT	-	-	-	-	-	-	CLEANOUT TEE WITH BRASS PLUG & ROUND STAINLESS STEEL SECURED ACCESS COVER.
NFWH-1	NON-FREEZE WALL HYDRANT	1/2"	-	-	-	-	-	ANTI-SIPHON, AUTOMATIC DRAINING, ENCASED IN WALL AND ALL BRONZE PARTS.
HB-1	HOSE BIBB	1/2"	-	-	-	-	-	BRASS, 1/2"MIP x 3/4" HOSE CONNECTION

ELECTRICAL WATER HEATER SCHEDULE												
MARK	STORAGE (GAL.)	RECOVERY		ELECTRICAL			CIRCULATOR			ELECTRICAL		REMARKS
		TEMP. RISE	RATE	KW	V/PH/CY	F.L.A.	MARK	GPM	HEAD	HP	V/PH/CY	
WH-1	119	100°F	50 GPH	12	208/3/60	33.3A	CP-1	5	10	1/25	120/1/60	SEE NOTES.

NOTES:  
1. PROVIDE WITH ASME TEMPERATURE AND PRESSURE RELIEF VALVE  
2. LEAVING WATER TEMPERATURE SHALL BE SET FOR 140°F. PROVIDE ADJUSTABLE THERMOSTAT.  
3. THREE ELEMENTS, SIMULTANEOUS ELEMENT OPERATION.  
4. MAXIMUM WATER HEATER DIAMETER= 30"ø

**GENERAL SHEET NOTES**

- SANITARY/INDIRECT DRAIN PIPING, BURIED WITHIN 5 FEET OF BUILDING SHALL BE CAST IRON WITH ASTM A74, HUB & SPIGOT, SERVICE WEIGHT PIPE, ASTM A74 FITTINGS, AND ASTM C564, COMPRESSION GASKETS JOINTS OR PIPE SIZE 4" AND SMALLER: ASTM D1785 PVC PIPING, PIPE SIZE 6" AND LARGER: ASTM D2665 PVC PIPING WITH ASTM D2665 FITTINGS, AND ASTM D2855 WITH ASTM D2564 SOLVENT CEMENT JOINTS.
- SANITARY/INDIRECT DRAIN PIPING, ABOVE GRADE SHALL BE CAST IRON WITH ASTM A74, HUB & SPIGOT, SERVICE WEIGHT PIPE, ASTM A74 FITTINGS, AND ASTM C564, COMPRESSION GASKETS JOINTS OR CISPI 301, HUBLESS, SERVICE WEIGHT PIPE WITH CISPI 301 FITTINGS AND ASTM C564, COMPRESSION GASKETS WITH ASTM C1277 SHIELDED HUBLESS COUPLINGS JOINTS. PVC IS NOT ALLOWED IN RETURN AIR PLENUMS.
- CONDENSATE PIPING SHALL BE COPPER TUBE: ASTM B306, DWV WITH FITTINGS: ASME B16.23, CAST BRONZE, OR ASME B16.29, WROUGHT COPPER, AND JOINTS: ASTM B32, SOLDER, GRADE 50B OR INSULATED PVC PIPE: ASTM D1785 WITH FITTINGS: ASTM D2665 AND JOINTS: ASTM D2855 WITH ASTM D2564 SOLVENT CEMENT.
- WATER PIPING SHALL BE COPPER TUBING: ASTM B88, TYPE L, HARD DRAWN WITH FITTINGS: ASME B16.18, CAST BRONZE, OR ASME B16.22 WROUGHT COPPER AND BRONZE AND JOINTS: ASTM B32, SOLDER, GRADE 95TA.
- COMPRESSED AIR PIPING SHALL BE COPPER TUBING: ASTM B88, TYPE K, HARD DRAWN WITH FITTINGS: ASME B16.18, CAST BRONZE, OR ASME B16.22 WROUGHT COPPER AND BRONZE AND JOINTS: ASTM B32, SOLDER, GRADE 95TA.
- INSULATE ALL DOMESTIC HOT WATER PIPING WITH 1" THICK GLASS FIBER INSULATION; ANSI/ASTM C547; 'K' VALUE OF 0.24 AT 75 DEGREES F; NONCOMBUSTIBLE WITH ALL SERVICE JACKET.
- INSULATE ALL DOMESTIC FILTERED & COLD WATER PIPING WITH 1" THICK GLASS FIBER INSULATION; ANSI/ASTM C547; 'K' VALUE OF 0.24 AT 75 DEGREES F; NONCOMBUSTIBLE WITH ALL SERVICE JACKET.
- INSULATE ALL COLD CONDENSATE LINES WITH 1/2" THICK TUBULAR CLOSED CELL INSULATION; 'K' VALUE OF 0.255 AT 75° F, IN COMPLIANCE WITH THE FLAME SPREAD/FUEL CONTRIBUTED/SMOKE DEVELOPED RATING OF 25/30/50 IN ACCORDANCE WITH ASTM E84. JOINT SEALANT SHALL BE CLOSED CELL ELASTOMERIC TAPE, 1/8" X 2" WIDE.

**LEGEND**

- PLUMBING FIXTURES, P-X
- EXISTING PIPING TO REMAIN (SERVICE AS INDICATED).
- NEW PIPING (SERVICE AS INDICATED)
- PIPE RISING UP
- PIPE DROPPING DOWN
- DOMESTIC COLD WATER
- DOMESTIC COLD WATER (BELOW GRADE)
- DOMESTIC HOT WATER
- CONDENSATE DRAIN
- STORM DRAIN (BELOW GRADE)
- ROOF LEADER
- OVERFLOW ROOF LEADER
- SANITARY PIPING
- 4 CONNECT NEW TO EXISTING

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1240 EAST 9TH STREET  
CLEVELAND, OH 44199-2060

ISSUE

MARK	DATE	DESCRIPTION

A/E PROJECT NO: 1474-A  
CAD FILE NAME: C8244P03.dwg  
DESIGNED BY: GEW  
DRAWN BY: JD  
EDITED BY: GW  
CHECKED BY: DRL

SCALE: AS SHOWN PLOT SCALE: 1:1

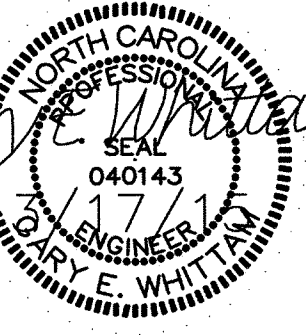
SHEET TITLE  
CONSTRUCT BMF  
CG STATION HOBUCKEN NC  
HOBUCKEN NC  
PLUMBING  
SCHEDULES

REVIEWED BY: R. PIPAK	REVIEWED BY: B. VRANKAR	REVIEWED BY: G.S. PLACZEK
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR
P. R. CARROLL, CDR APPROVING OFFICER		03/17/15 DATE

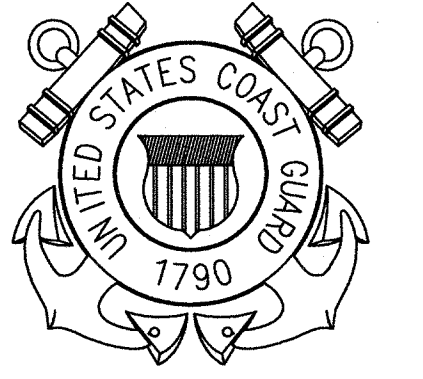
PROJECT NUMBER 05-C02245	DRAWING NUMBER 8244-D
DISCIPLINE/SHT NO P-03	SHEET 22 OF 32



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ISSUE		
MARK	DATE	DESCRIPTION

A/E PROJECT NO: 1474-A  
CAD FILE NAME: CB244P04.dwg  
DESIGNED BY: GEW  
DRAWN BY: JD  
EDITED BY: GW  
CHECKED BY: DRL

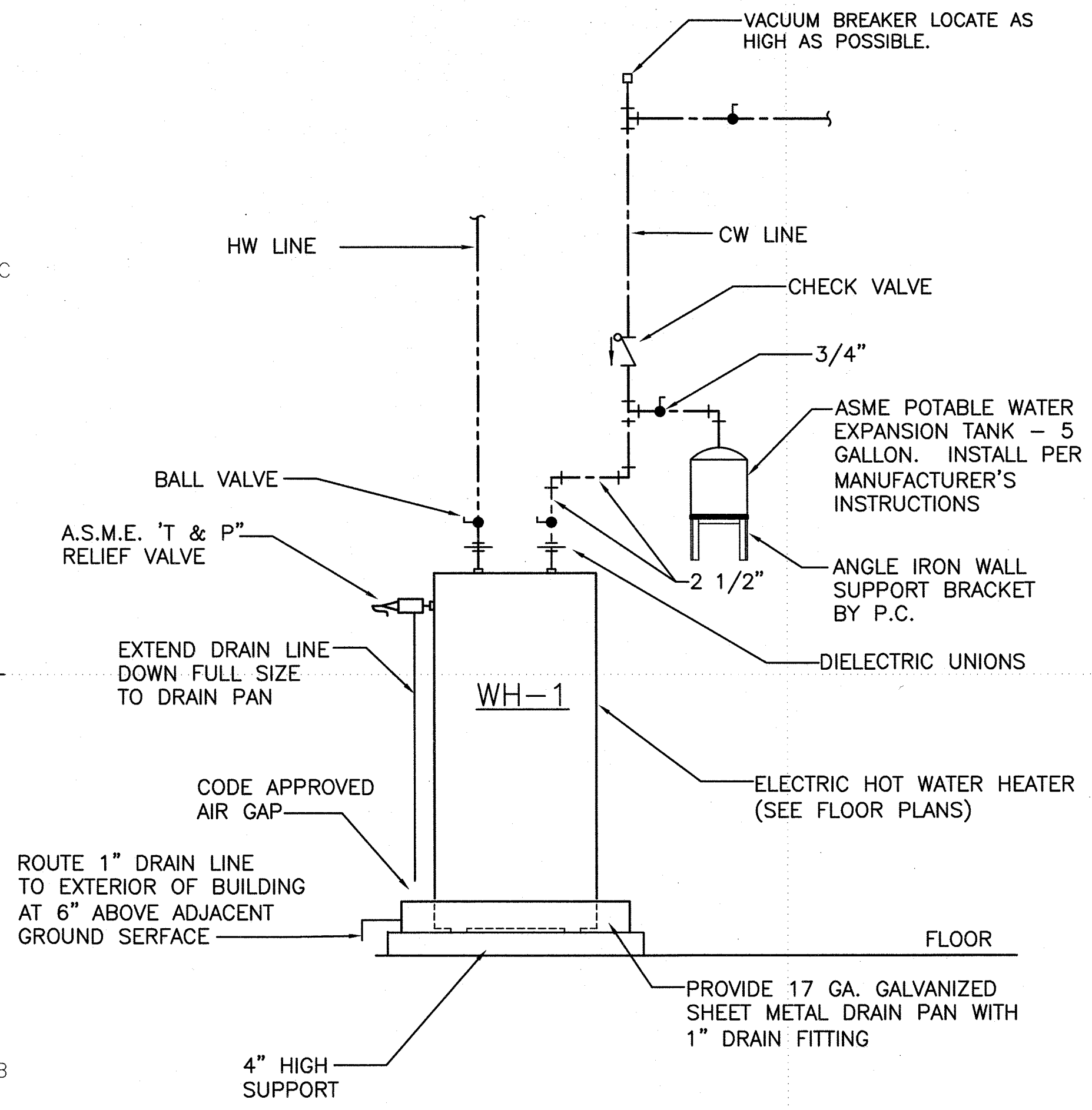
SCALE: AS SHOWN PLOT SCALE: 1:1

SHEET TITLE  
CONSTRUCT BMF  
CG STATION HOBUCKEN  
HOBUCKEN NC

PLUMBING  
DETAILS

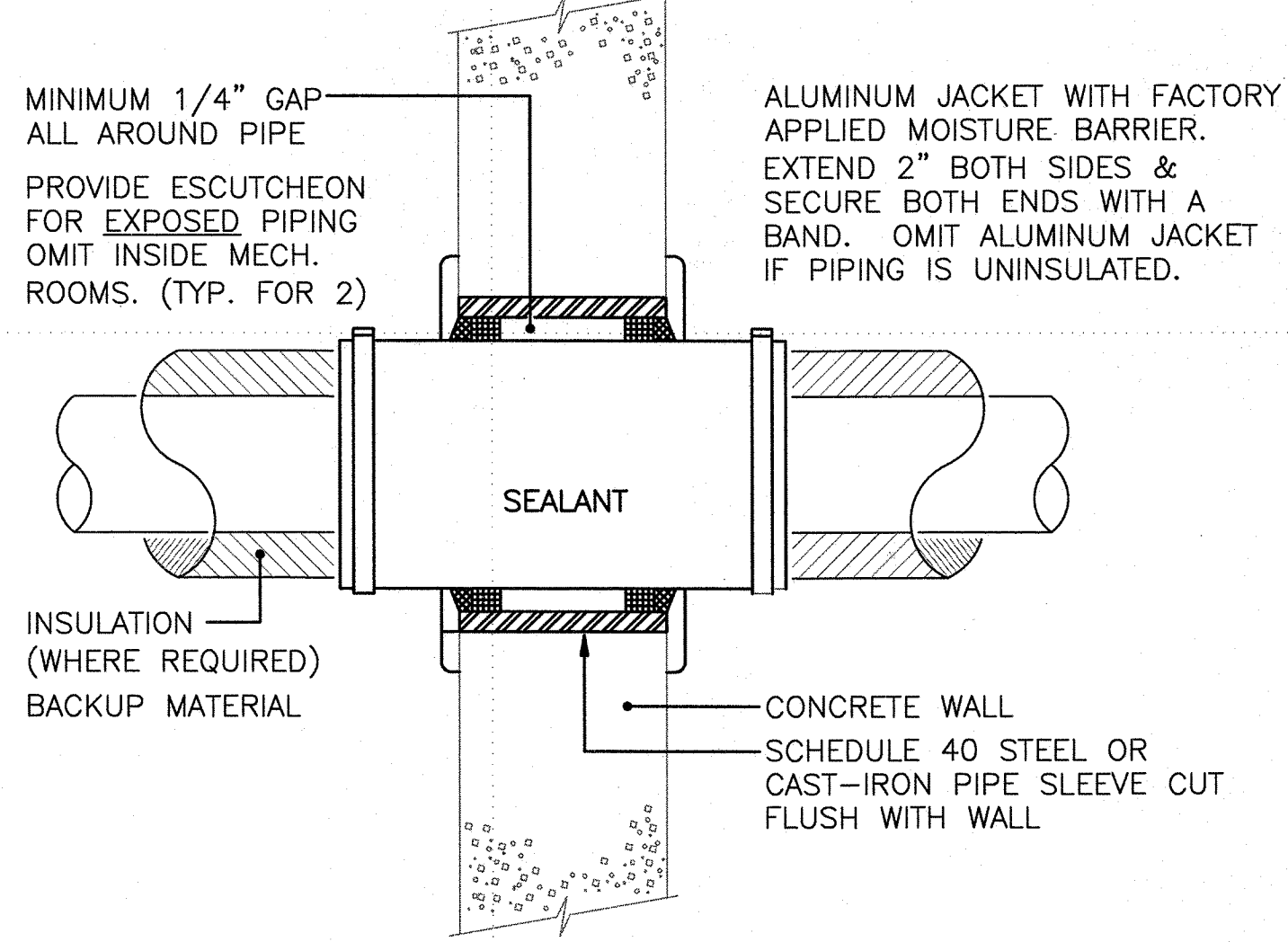
REVIEWED BY: R. PIPAK	REVIEWED BY: B. VRANKAR	REVIEWED BY: G.S. PLACZEK
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR
P. R. CARROLL, CDR APPROVING OFFICER		03/17/15 DATE

PROJECT NUMBER	DRAWING NUMBER
05-C02245	8244-D
DISCIPLINE/SHT NO	SHEET
P-04	23 OF 32

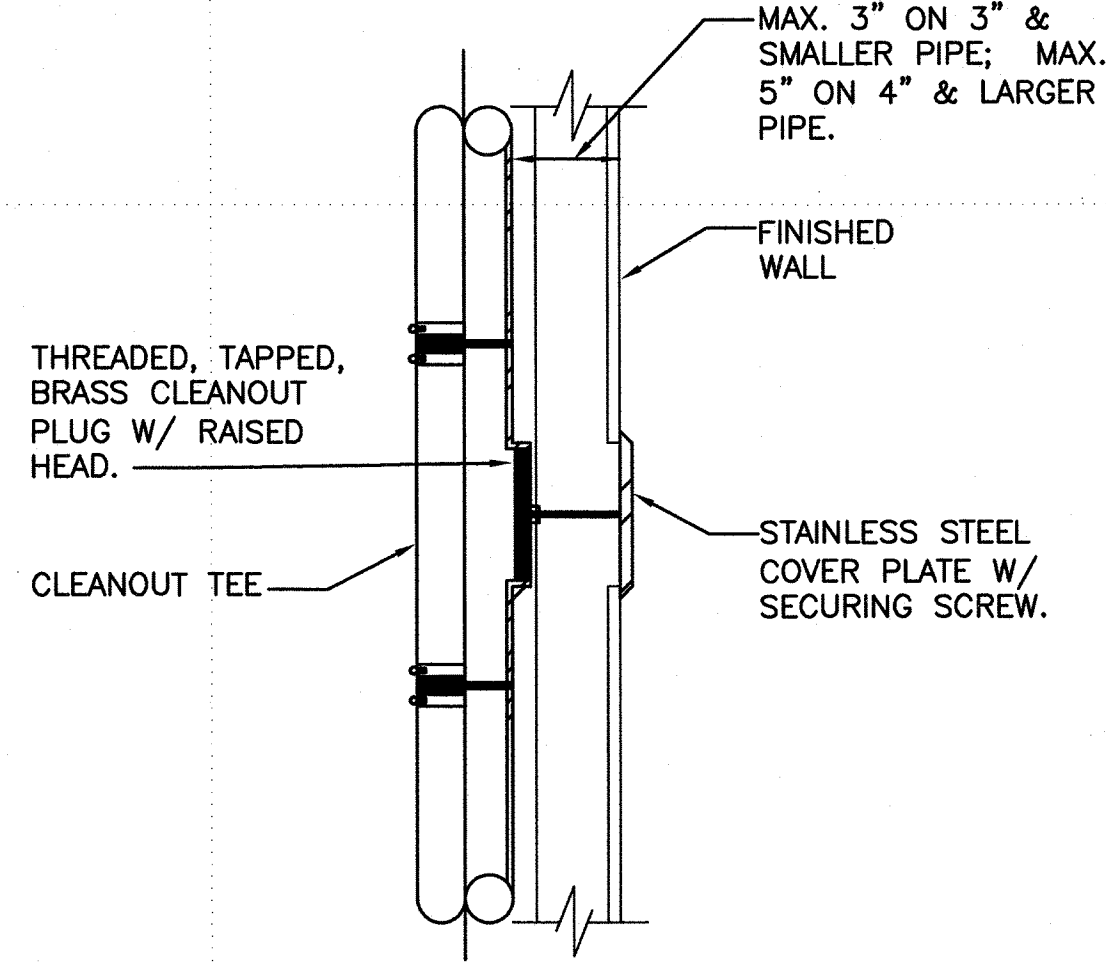


1 WH-1 PIPING SCHEMATIC  
SCALE: NOT TO SCALE

NOTE:  
CORE DRILL WALL AND  
SLEEVE TO FIT SIZE

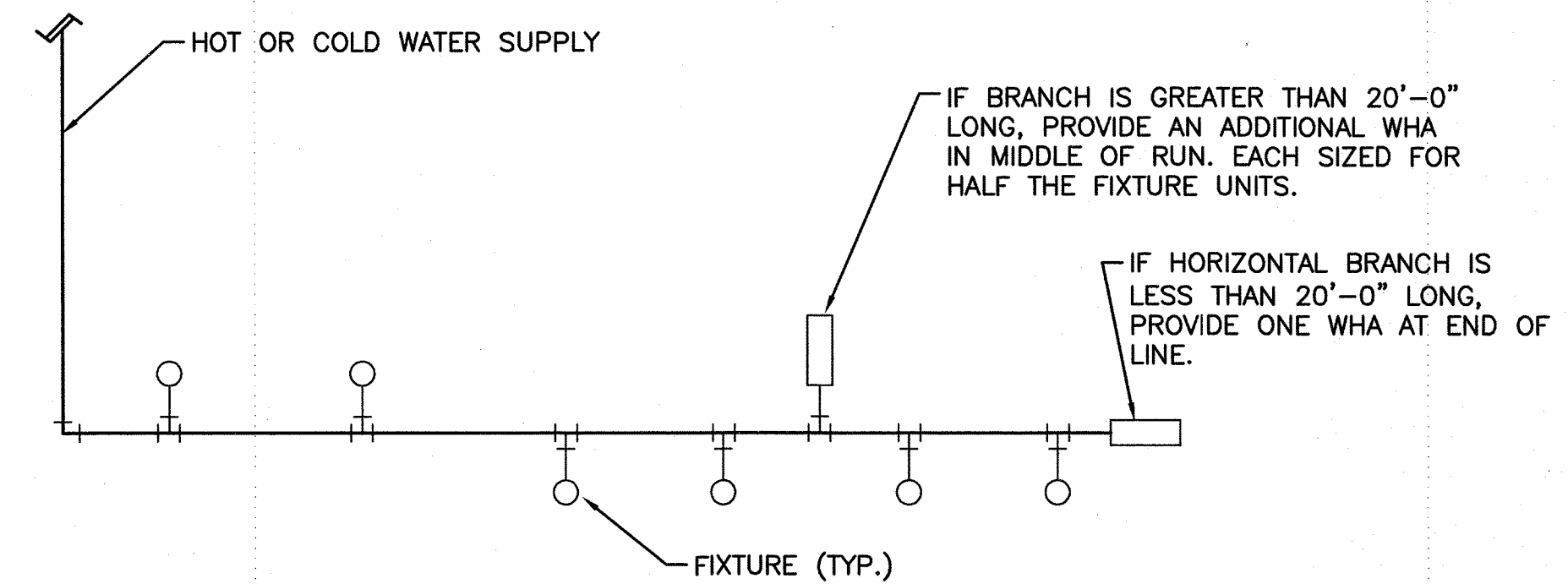


2 WALL PIPE PENETRATION DETAIL  
SCALE: NOT TO SCALE



3 WALL CLEANOUT (WCO)  
SCALE: NOT TO SCALE

SINGLE/DOUBLE FIXTURE		
WHA SIZE	PIPE SIZE	FIXTURE UNIT LOAD
A	1/2"	1-11
B	3/4"	12-32
C	1"	33-60
D	1-1/4"	61-113
E	1-1/2"	114-154
F	2"	154-330



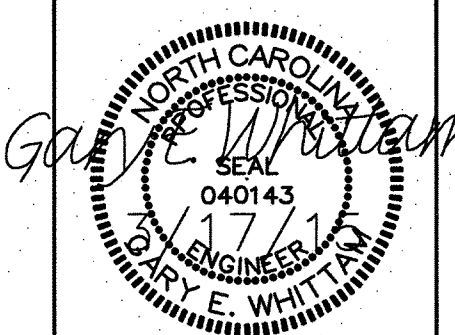
NOTE: INSTALL PER MANUFACTURER'S INSTRUCTIONS. PROVIDE A WATER HAMMER ARRESTOR AT ALL QUICK-CLOSING VALVES.

4 WATER HAMMER ARRESTOR SCHEMATIC  
SCALE: NOT TO SCALE

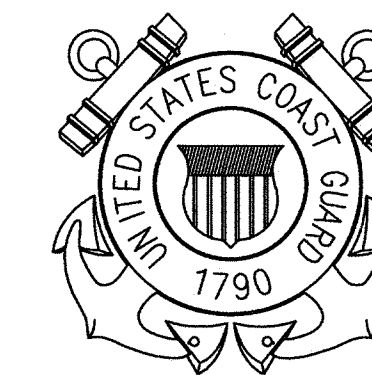


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CLEVELAND, OH 44199-2060

ISSUE		
MARK	DATE	DESCRIPTION

A/E PROJECT NO: 1474-A
CAD FILE NAME: C8244P05.dwg
DESIGNED BY: GEW
DRAWN BY: JD
EDITED BY: GW
CHECKED BY: DRL

SCALE: AS SHOWN PLOT SCALE: 1:1

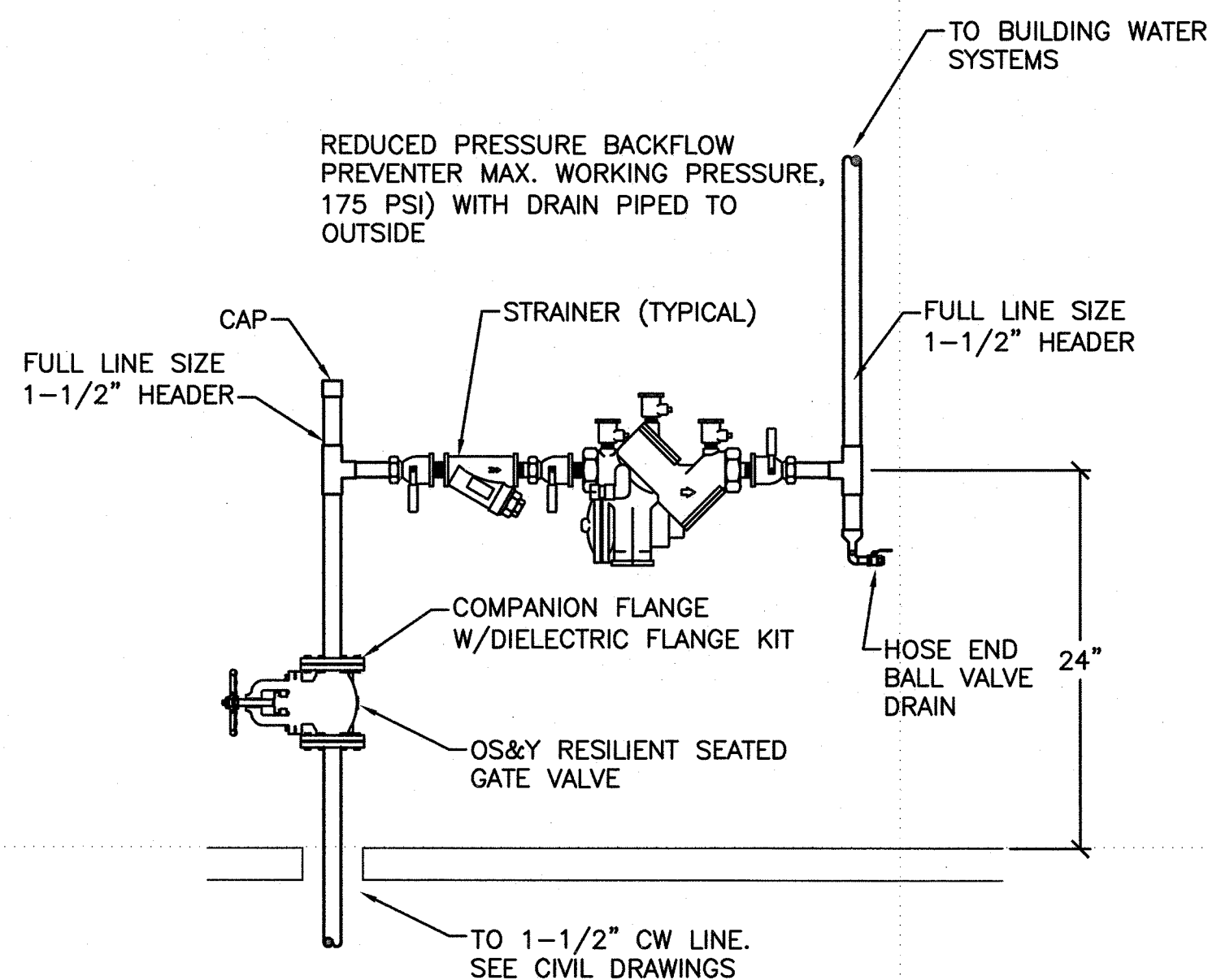
SHEET TITLE

CONSTRUCT BMF  
CG STATION HOBUCKEN  
HOBUCKEN NC

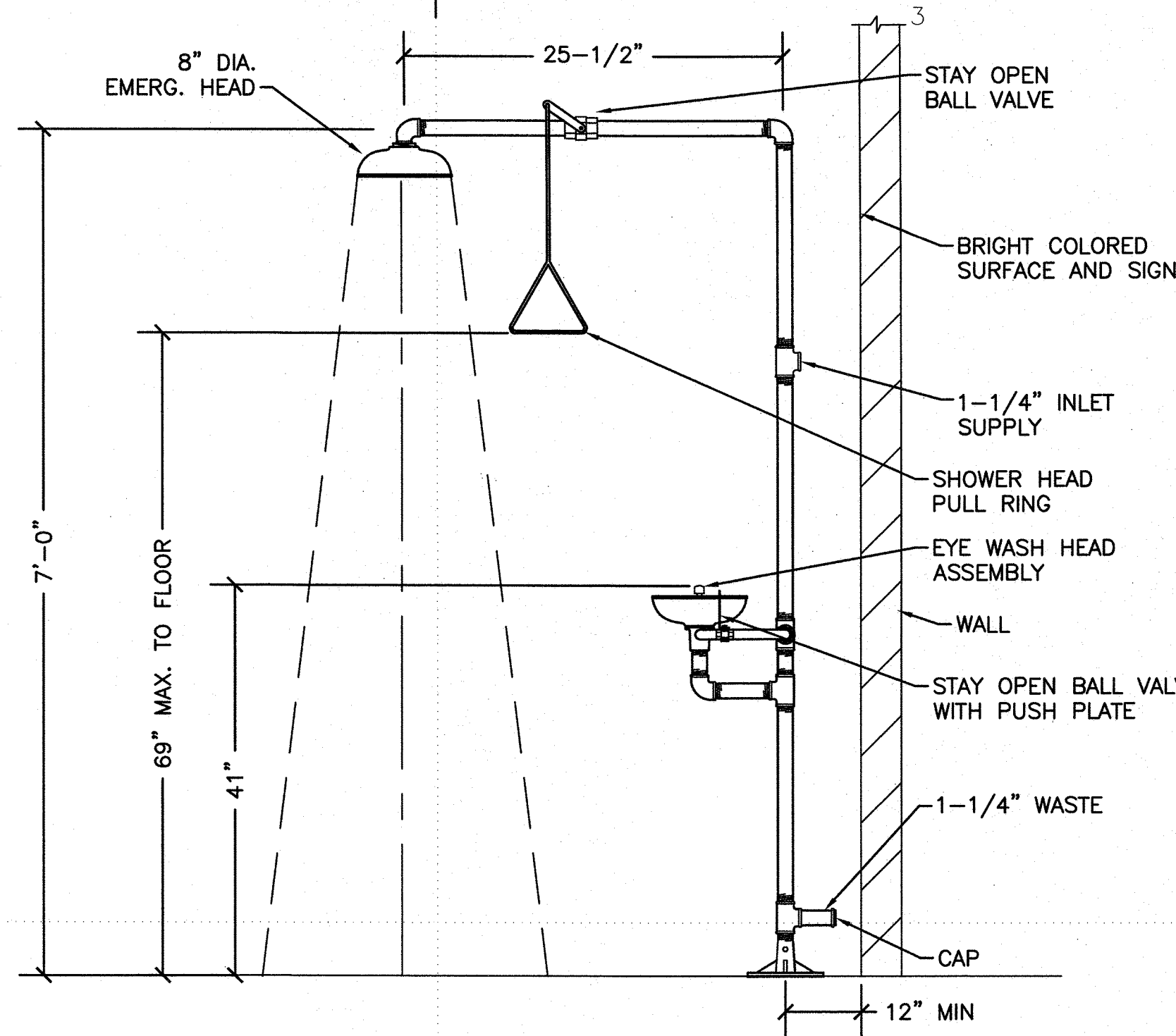
PLUMBING  
DETAILS

REVIEWED BY: R. PIPAK	REVIEWED BY: B. VRANKAR	REVIEWED BY: G.S. PLACZEK
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR
P. R. CARROLL, CDR APPROVING OFFICER		03/17/15 DATE

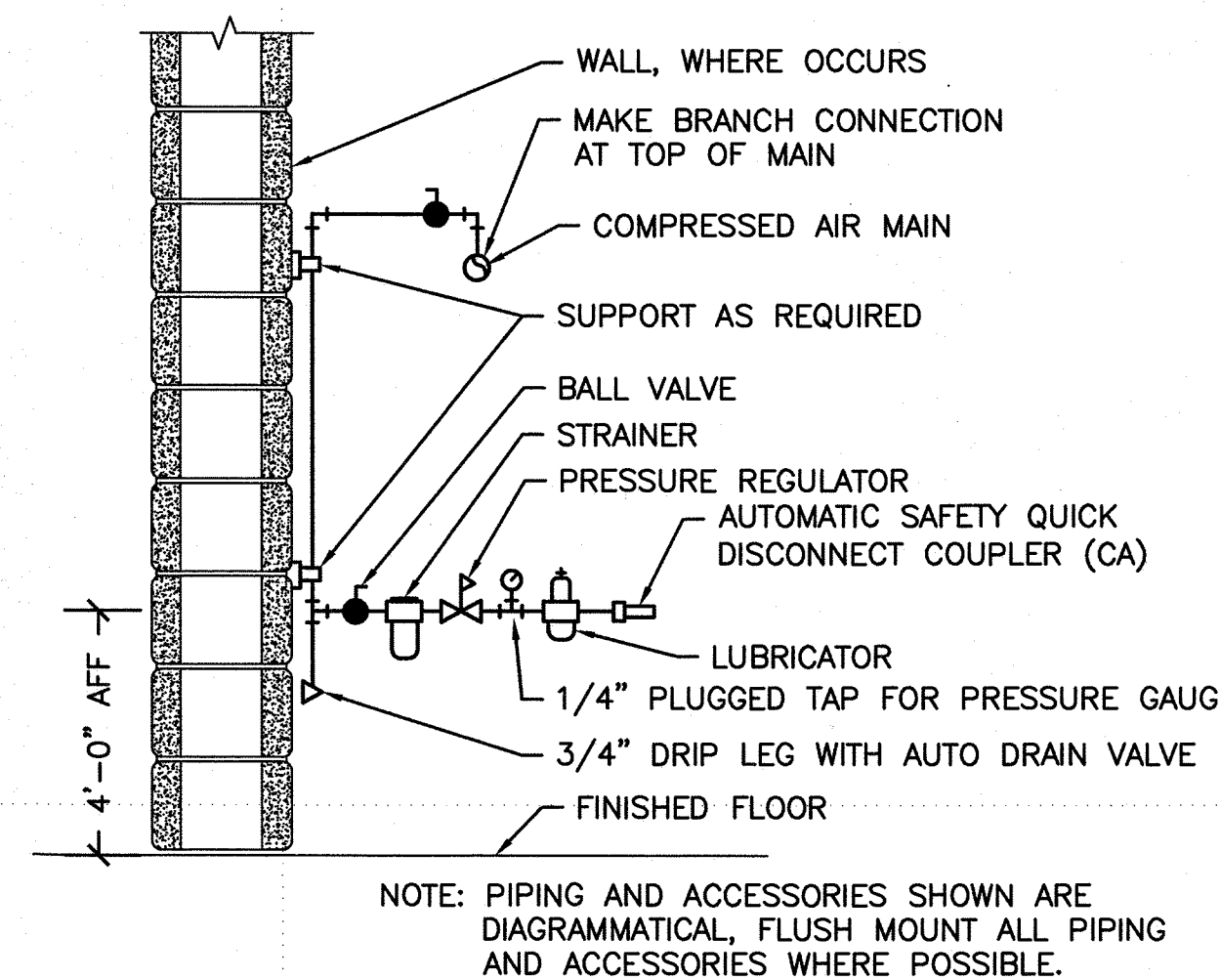
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05-C02245	8244-D
DISCIPLINE/SHT NO	SHEET 24 OF 32
P-05	



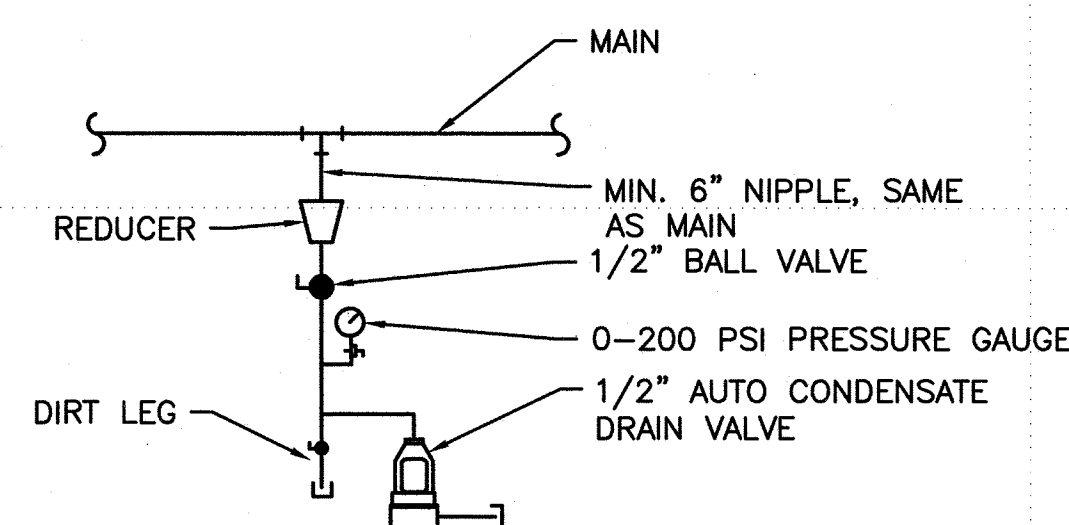
1 REDUCED PRESSURE BACKFLOW PREVENTER DETAIL  
P-05 SCALE: NOT TO SCALE



2 EMERGENCY SHOWER/EYE-WASH DETAIL  
P-05 SCALE: NOT TO SCALE



3 COMPRESSED AIR OUTLET DROP - TYPICAL  
P-05 SCALE: NOT TO SCALE



4 COMPRESSED AIR OUTLET DRAIN - TYPICAL  
P-05 SCALE: NOT TO SCALE



CONDUIT AND WIRING

CONDUCTORS IN CONDUIT CONCEALED WITHIN WALL OR CEILING. TIC MARKS INDICATE NUMBER OF CONDUCTORS. THE EQUIPMENT GROUNDING CONDUCTOR IS NOT SHOWN, BUT SHALL BE PROVIDED. SIZE THE EQUIPMENT GROUNDING CONDUCTOR AND THE CONDUIT PER THE NEC. THE ABSENCE OF TIC MARKS SIGNIFIES THAT TWO CONDUCTORS PLUS AN EQUIPMENT GROUNDING CONDUCTOR SHOULD BE PROVIDED. FOR EXAMPLE, THE MARKINGS TO THE LEFT SIGNIFY THAT THREE CONDUCTORS PLUS AN EQUIPMENT GROUNDING CONDUCTOR SHOULD BE PROVIDED.

THE TEXT INSIDE THE ARC INDICATES THE AWG SIZE OF THE CONDUCTORS THAT SHALL BE RUN IN THE CONDUIT. THE ABSENCE OF TEXT SIGNIFIES THAT THE CONDUCTORS SHOULD BE #12 AWG.

CIRCUITRY RUN IN STRAIGHT LINE SEGMENTS SIGNIFIES EXPOSED SURFACE-MOUNTED RACEWAY (SEE SPECIFICATIONS).

CONDUCTORS IN CONDUIT CONCEALED BELOW GRADE OR FLOOR. TIC MARKS INDICATE NUMBER OF CONDUCTORS. THE EQUIPMENT GROUNDING CONDUCTOR IS NOT SHOWN, BUT SHALL BE PROVIDED. SIZE THE EQUIPMENT GROUNDING CONDUCTOR AND THE CONDUIT PER THE NEC. THE ABSENCE OF TIC MARKS SIGNIFIES THAT TWO CONDUCTORS PLUS AN EQUIPMENT GROUNDING CONDUCTOR SHOULD BE PROVIDED. THE MARKINGS TO THE LEFT SIGNIFY THAT THREE CONDUCTORS PLUS AN EQUIPMENT GROUNDING CONDUCTOR SHOULD BE PROVIDED.

HOMERUN TO PANELBOARD. ARC DENOTES CONCEALED CIRCUITRY. TEXT DENOTES PANELBOARD NAME WITH CIRCUIT NUMBER. DEVICES HAVING CIRCUIT NUMBERS LOCATED BESIDE THEM MAY NOT SHOW THE CIRCUIT NUMBERS AT THE HOMERUN ARROWS.

PARTIAL HOMERUN TO PANELBOARD. COMBINE ALL PARTIAL HOMERUNS THAT ARE ON THE SAME CIRCUIT IN A JUNCTION BOX PRIOR TO ENTERING THE PANELBOARD.

RECEPTACLES

DUPLEX RECEPTACLE, NEMA 5-20R, MOUNTED 18" A.F.F. TO CENTERLINE OF BOX UNLESS NOTED OTHERWISE.

DUPLEX RECEPTACLE, NEMA 5-20R, MOUNTED WITH BOTTOM OF BOX 2" ABOVE COUNTER WITH BACKSPLASH AND 6" ABOVE COUNTER WITHOUT BACKSPLASH. WHERE RECEPTACLE IS SHOWN IN AN AREA WITH NO COUNTER, MOUNT 45"A.F.F. TO CENTERLINE OF BOX.

WELDING RECEPTACLE, NEMA L6-30R, MOUNTED 36" A.F.F. TO CENTERLINE OF BOX UNLESS NOTED OTHERWISE. PROVIDE 12' CORD AND MATCHING PLUG.

GEAR

FUSED DISCONNECT SWITCH. TEXT INDICATES AMPACITY/NUMBER OF POLES/ENCLOSURE TYPE; F-(RATING OF FUSES).

NON-FUSED DISCONNECT SWITCH. TEXT INDICATES AMPACITY/NUMBER OF POLES/ENCLOSURE TYPE.

PANELBOARD

DISCONNECT SWITCH PROVIDED WITH EQUIPMENT.

MISCELLANEOUS

MOTOR

CEILING MOUNTED JUNCTION BOX.

WALL MOUNTED JUNCTION BOX.

FLEXIBLE CONNECTION TO EQUIPMENT.

HANDHOLE. SEE DETAIL 3/E-03.

GENERAL NOTES

1. ALL EQUIPMENT AND DEVICES ARE TO BE FLUSH MOUNTED UNLESS OTHERWISE NOTED.

2. DEVICES NOTED AS "GFI" SHALL BE GROUND FAULT INTERRUPTING DEVICES.

3. DEVICES NOTED AS "WP" SHALL BE WEATHERPROOF WHILE-IN-USE.

4. LIGHT COLORS IN THE DRAWINGS INDICATE EXISTING DEVICES TO REMAIN. DARK COLORS IN THE DRAWINGS INDICATE NEW DEVICES TO BE PROVIDED UNDER THIS CONTRACT.

5. DEVICES WITH AN "X" ON THE SYMBOL IN THE DEMOLITION DRAWINGS SHALL BE DEMOLISHED.

LUMINAIRES (See Light Fixture Schedule)

NOTE: THE NUMBER INSIDE THE CIRCLE IS THE CIRCUIT NUMBER. THE LETTER BESIDE THE SYMBOL IS THE FIXTURE TYPE DESCRIBED IN THE LIGHT FIXTURE SCHEDULE.

SURFACE MOUNTED OR SUSPENDED FLUORESCENT FIXTURE.

SURFACE MOUNTED OR SUSPENDED EMERGENCY FLUORESCENT FIXTURE.

WALL MOUNTED EXIT SIGN. PROVIDE CHEVRONS AS INDICATED BY ARROWS.

EMERGENCY WALL MOUNTED FIXTURE.

SWITCHES

SINGLE-POLE, SINGLE-THROW SWITCH. MOUNT CENTERLINE OF BOX AT 45"A.F.F. UNLESS NOTED OTHERWISE.

THREE-WAY SWITCH. MOUNT CENTERLINE OF BOX AT 45"A.F.F. UNLESS NOTED OTHERWISE.

DUAL TECHNOLOGY, DUAL RELAY AUTOMATIC WALL SWITCH. MOUNT CENTERLINE OF BOX AT 45" A.F.F. UNLESS NOTED OTHERWISE.

DOUBLE POLE, SINGLE THROW, 30 AMP RATED SWITCH. MOUNT CENTERLINE OF BOX AT 45" A.F.F. UNLESS NOTED OTHERWISE.

HORSEPOWER RATED SWITCH WITH THERMAL OVERLOADS (MANUAL MOTOR STARTER).

MOTORIZED DOOR OPERATOR CONTROL STATION. SEE SPECIFICATIONS FOR CONTROL STATION REQUIREMENTS. MOUNT CENTERLINE OF BOX AT 45"A.F.F. UNLESS NOTED OTHERWISE.

FIRE ALARM SYSTEM

MANUAL PULL STATION. MOUNT 48"A.F.F. TO CENTERLINE OF BOX.

STROBE. MOUNT 80"A.F.F. TO BOTTOM OF BOX. STROBES SHALL BE 75Cd NOMINAL UNLESS TEXT IS SHOWN BESIDE THEM INDICATING HIGHER CANDELA RATING.

HORN/STROBE. MOUNT 80"A.F.F. TO BOTTOM OF BOX. STROBES SHALL BE 75Cd NOMINAL UNLESS TEXT IS SHOWN BESIDE THEM INDICATING HIGHER CANDELA RATING.

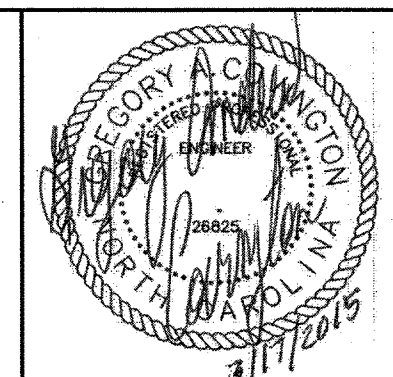
THERMAL DETECTOR.

SMOKE DETECTOR.

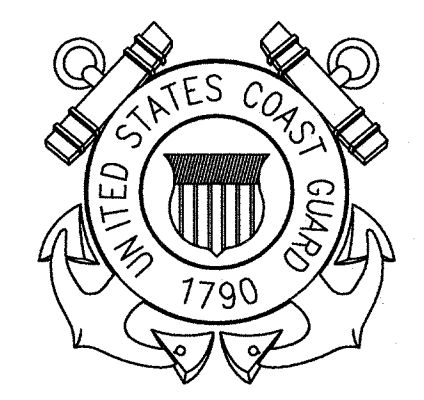
FIRE ALARM CONTROL PANEL.

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CLEVELAND, OH 44199-2060

ISSUE		
MARK	DATE	DESCRIPTION

A/E PROJECT NO: 1474-A  
CAD FILE NAME: C8244E01.dwg  
DESIGNED BY: JCS  
DRAWN BY: JCS  
EDITED BY: JCS  
CHECKED BY: GAC

SCALE: AS SHOWN PLOT SCALE: 1:1

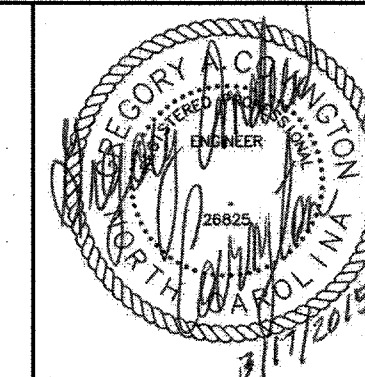
SHEET TITLE  
CONSTRUCT BMF  
CG STATION HOBUCKEN  
HOBUCKEN NC  
ELECTRICAL  
LEGEND SHEET

REVIEWED BY: R. PIPAK	REVIEWED BY: B. VRANKAR	REVIEWED BY: G. S. PLACZEK
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR
P. R. CARROLL, CDR APPROVING OFFICER		03/17/15 DATE

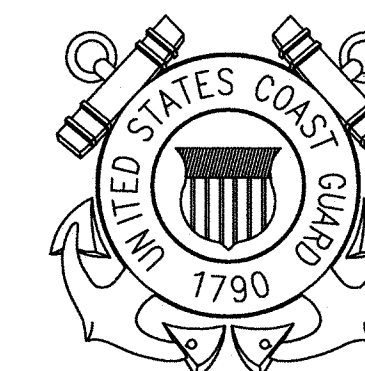
PROJECT NUMBER 05-C02245	DRAWING NUMBER 8244-D
DISCIPLINE/SHT NO E-01	SHEET 25 OF 32



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1240 EAST 9TH STREET  
CLEVELAND, OH 44199-2060

ISSUE		
MARK	DATE	DESCRIPTION

A/E PROJECT NO: 1474-A  
CAD FILE NAME: C8244E02.dwg  
DESIGNED BY: JCS  
DRAWN BY: JCS  
EDITED BY: JCS  
CHECKED BY: GAC

SCALE: AS SHOWN PLOT SCALE: 1:1

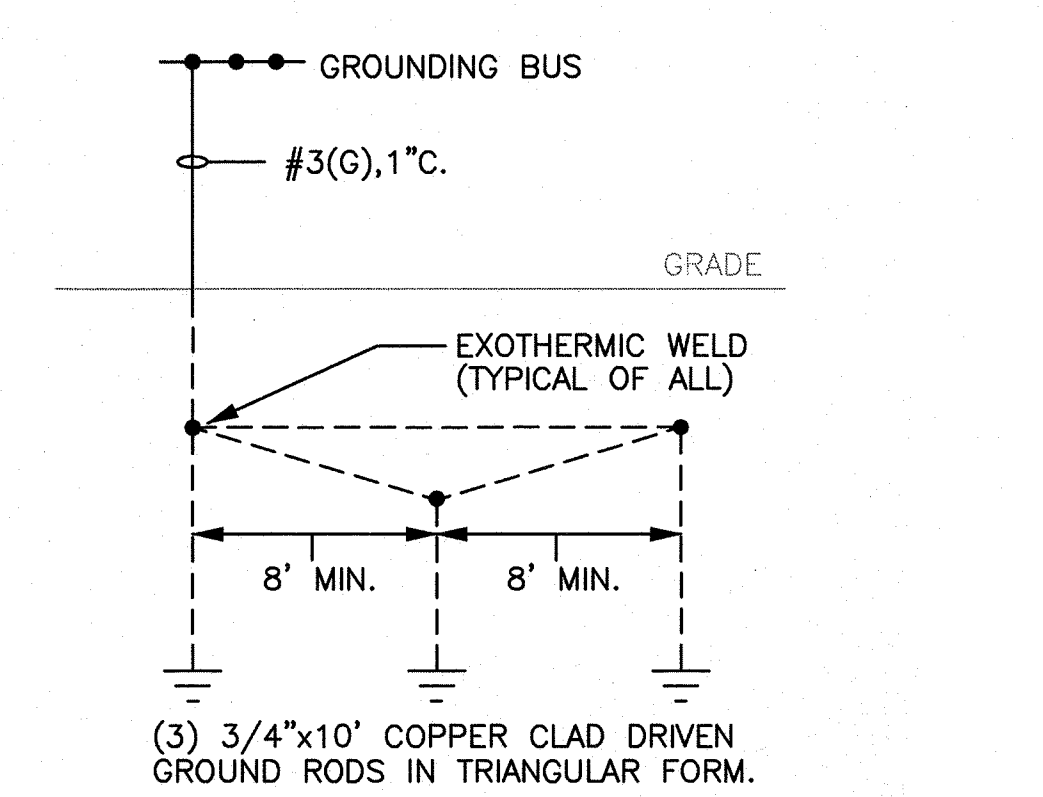
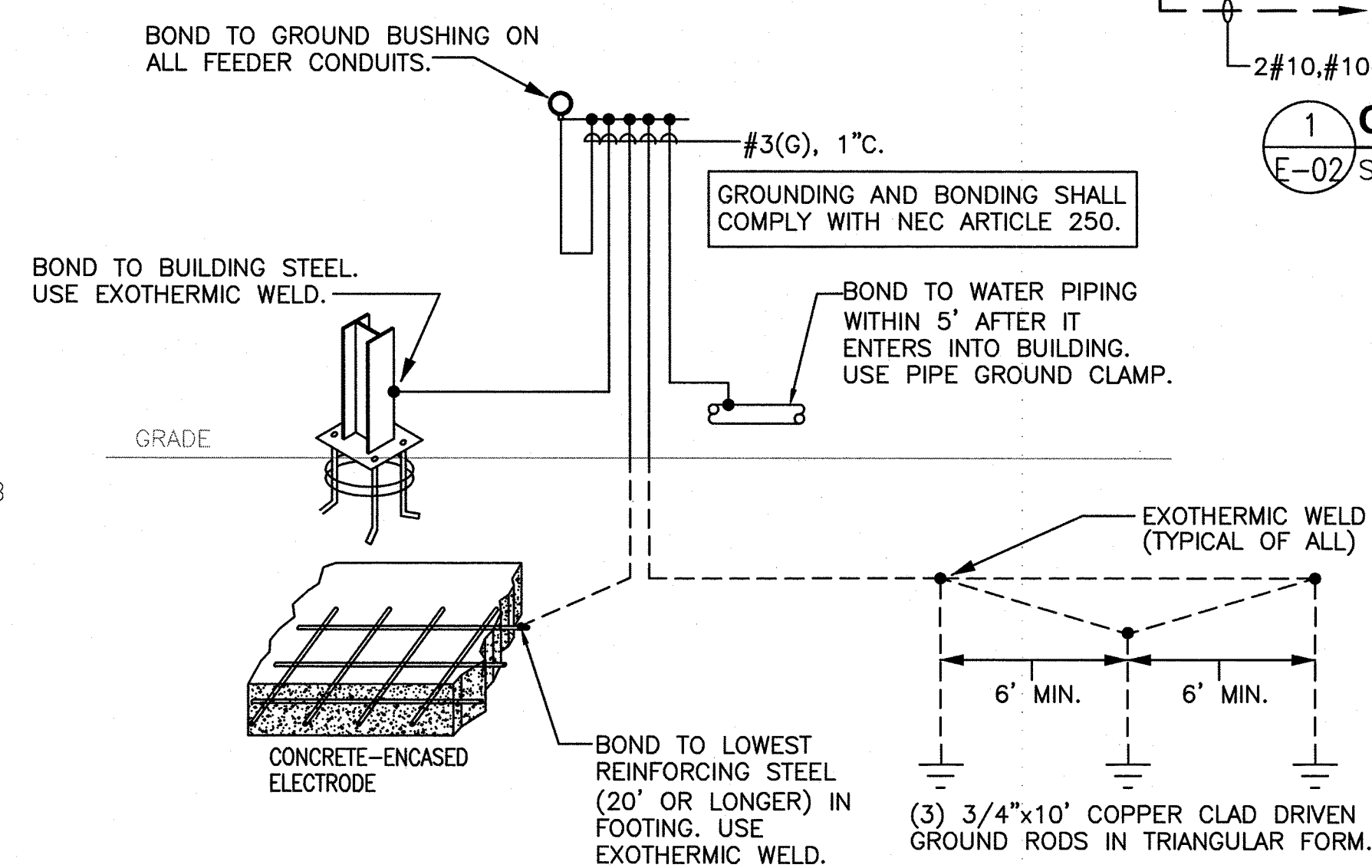
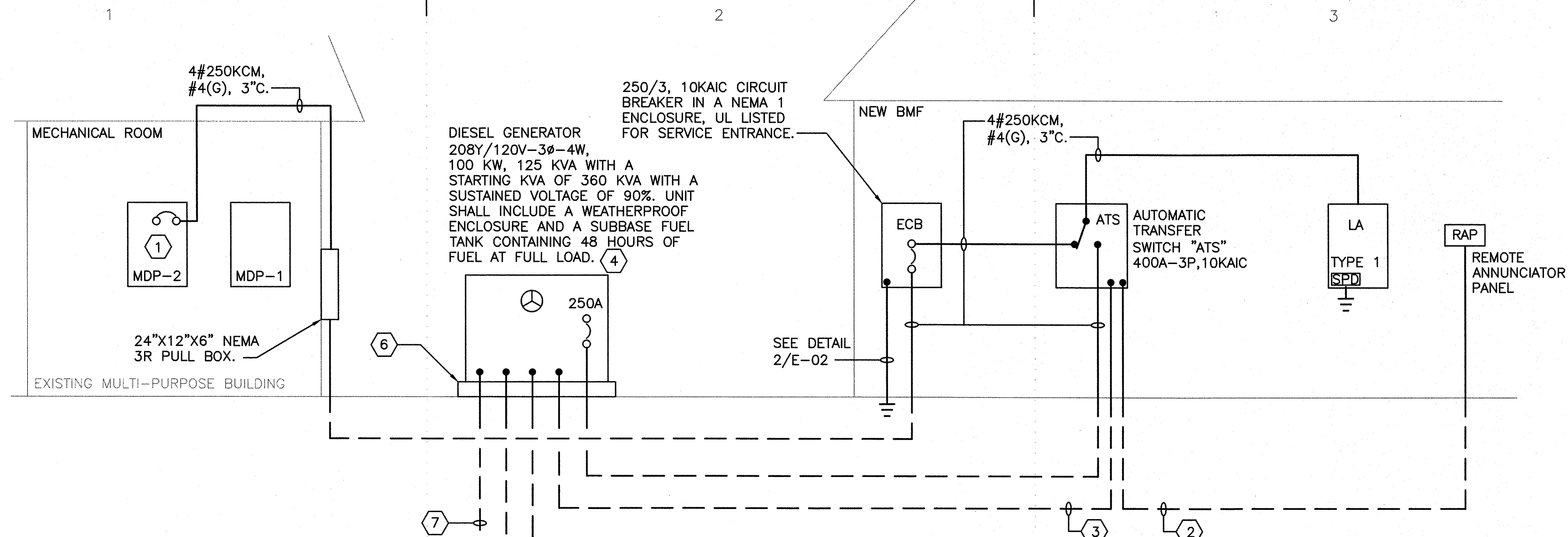
SHEET TITLE  
**CONSTRUCT BMF  
CG STATION HOBUCKEN  
HOBUCKEN NC**  
**ELECTRICAL  
ONE-LINE DIAGRAMS**

REVIEWED BY: R. PIPAK	REVIEWED BY: B. VRANKAR	REVIEWED BY: G. S. PLACZEK
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR
P. R. CARROLL, CDR APPROVING OFFICER		03/17/15 DATE

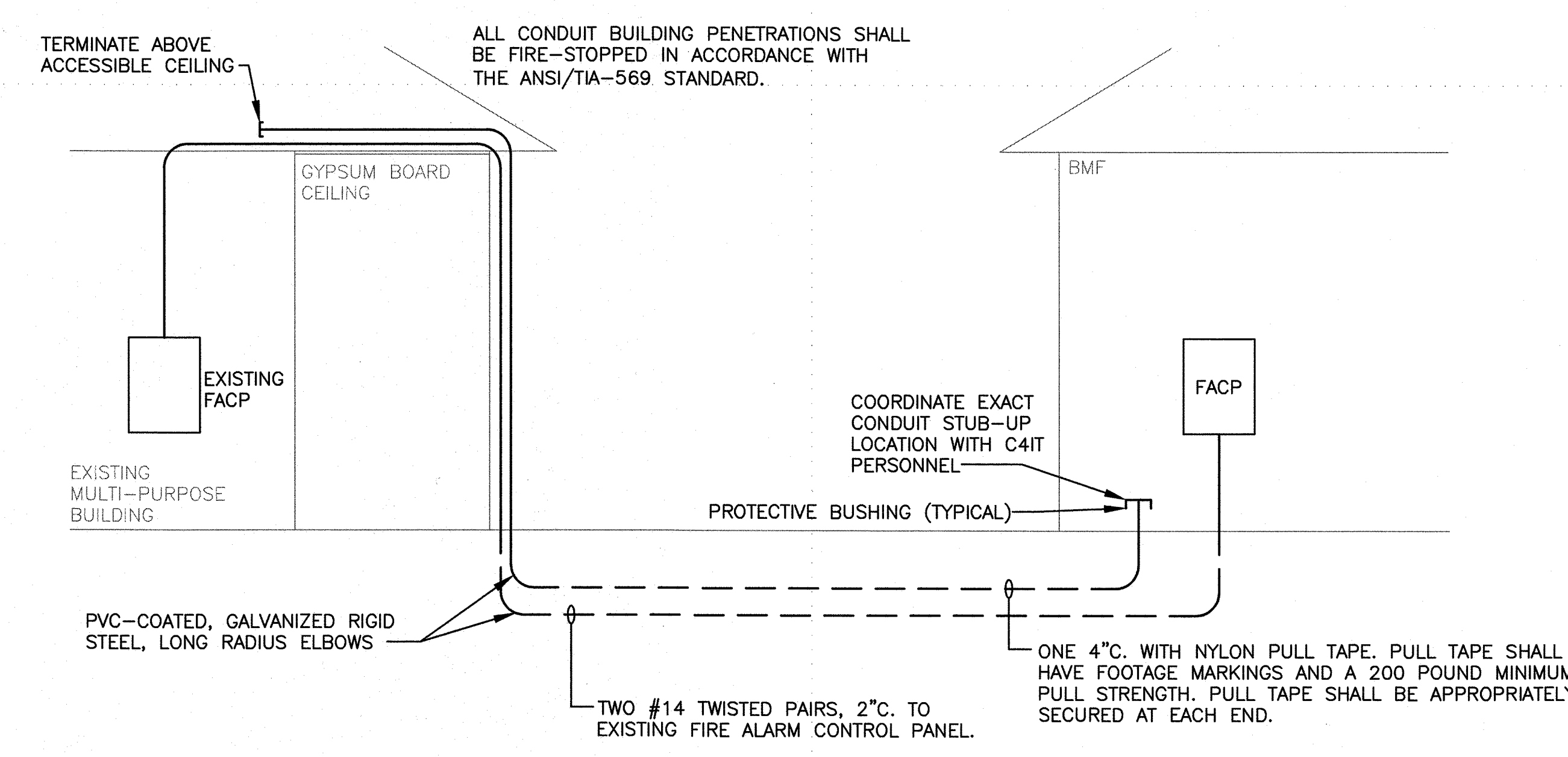
PROJECT NUMBER <b>05-C02245</b>	DRAWING NUMBER <b>8244-D</b>
DISCIPLINE/SHT NO <b>E-02</b>	SHEET 26 OF 32

**KEYED NOTES**

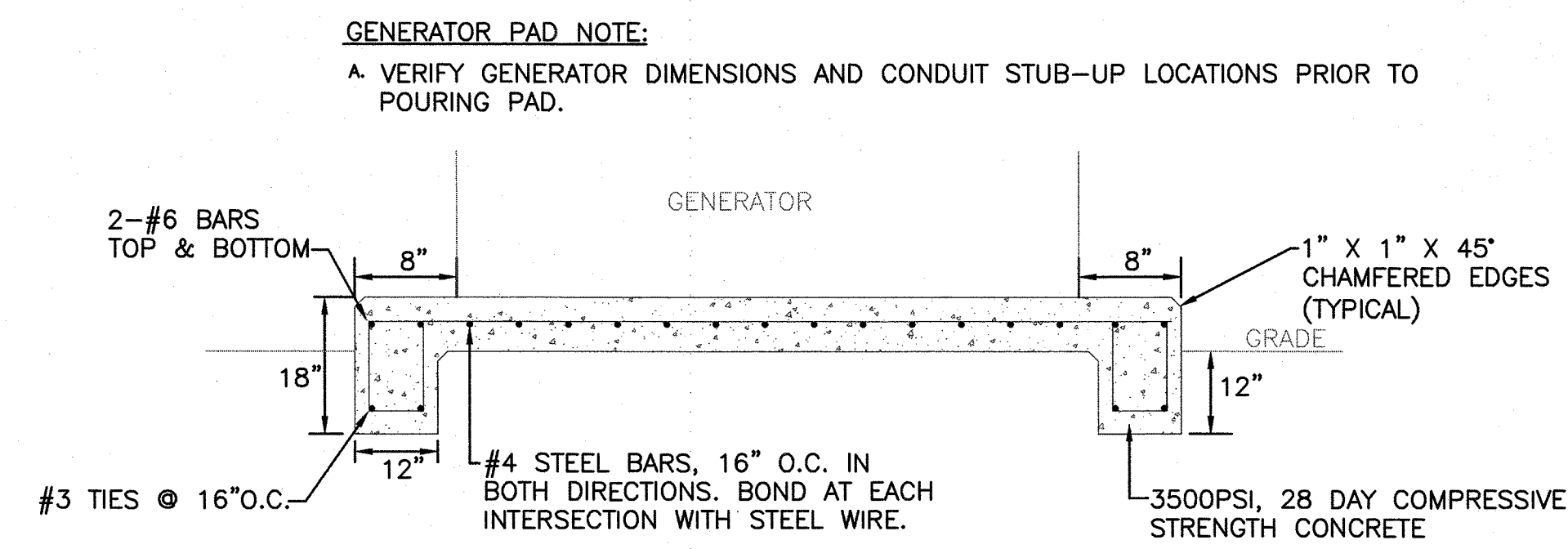
- PROVIDE A NEW 250/3, 10KAIC CIRCUIT BREAKER IN EXISTING PANEL MDP-2. EXISTING PANEL IS A SQUARE D CAT. NO. HCN32744.
- 3/4" C. CONTAINING ONE BELDEN #9841 TWISTED, SHIELDED PAIR CABLE FOR REMOTE ANNUNCIATOR. VERIFY EXACT CABLING REQUIREMENTS WITH EQUIPMENT VENDOR PRIOR TO BID.
- 1-1/4" C. CONTAINING 6 #12, #12(G) FOR GENERATOR START. VERIFY EXACT CABLING REQUIREMENTS WITH EQUIPMENT VENDOR PRIOR TO BID.
- PROVIDE A LEAK DETECTION MONITOR BETWEEN THE DOUBLE WALLS OF THE SUB-BASE FUEL TANK AND PROVIDE BOTH A LOCAL AND REMOTE ALARM UPON DETECTION OF A LEAK.
- DESIGN IS BASED ON ONE 4,000W BLOCK HEATER. VERIFY ELECTRICAL REQUIREMENTS FOR BLOCK HEATERS WITH EQUIPMENT VENDOR PRIOR TO BID.
- SEE GENERATOR PAD DETAIL 1/E-03.
- SEE GENERATOR GROUNDING DETAIL 3/E-02.



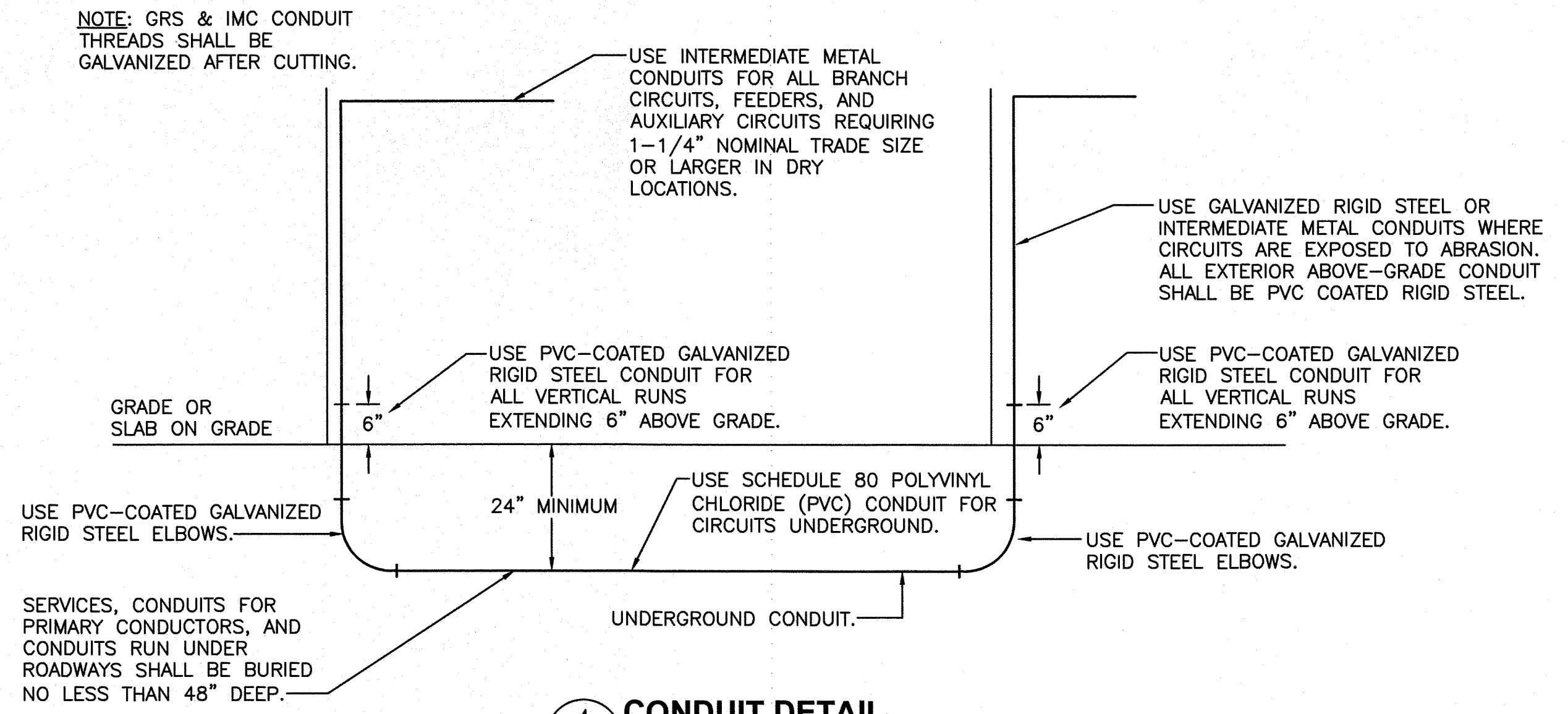
CIRCUIT NO.	BREAKER AMPS POLES	DESCRIPTION	LUG LOCATION: TOP FEED			UL LISTED FOR SERVICE ENTRANCE						
			MAIN BUS: 250A MAIN BREAKER			PANELBOARD AIC RATING (A): 10,000						
			A	B	C	DESCRIPTION	AMPS	POLES	CIRCUIT NO.			
1	25	3	H-1	2.0	4.0		WH-1	45	3	2		
3	-	-	-			2.0	4.0	-	-	4		
5	-	-	-					-	-	6		
7	25	3	H-2	2.0	0.1		CP-1	15	1	8		
9	-	-	-			2.0	0.1	DCU-1/AC-1	15	2	10	
11	-	-	-					-	-	12		
13	25	3	H-3	2.0	0.0		SPARE	20	1	14		
15	-	-	-				GEN. BATTERY CHARGER	20	1	16		
17	-	-	-				GEN. BLOCK HEATER	30	2	18		
19	60	3	AC-1	3.9	1.5		-	-	-	20		
21	-	-	-			3.9	2.1	WELDING OUTLET	30	2	22	
23	-	-	-					-	-	24		
25	20	1	LIGHTING	1.0	2.1		WELDING OUTLET	30	2	26		
27	20	1	LIGHTING			1.3	2.1	-	-	28		
29	20	1	RECEPTACLES				0.5	0.4	DOOR OPERATORS	15	3	30
31	20	1	RECEPTACLES	0.7	0.4		-	-	-	-	32	
33	20	1	RECEPTACLES			0.5	0.4	-	-	-	34	
35	20	1	RECEPTACLES				0.5	0.4	DOOR OPERATORS	15	3	36
37	20	1	RECEPTACLES (MEZZANINE)	0.9	0.4		-	-	-	-	38	
39	20	1	FACP			0.5	0.4	-	-	-	40	
41	20	1	SPARE				0.0	0.6	EF-2	15	3	42
43	60	3	SPARE	0.0	0.6		-	-	-	-	44	
45	-	-	-				0.0	0.6	-	-	46	
47	-	-	-				0.0	0.0	SPARE	20	1	48
49	20	1	SPARE	0.0	0.0		-	-	SPD	30	3	50
51	20	1	SPARE			0.0	0.0	-	-	-	52	
53	20	1	SPARE				0.0	0.0	-	-	54	
<b>TOTAL</b>				<b>21.6</b>	<b>22.5</b>		<b>20.1</b>					



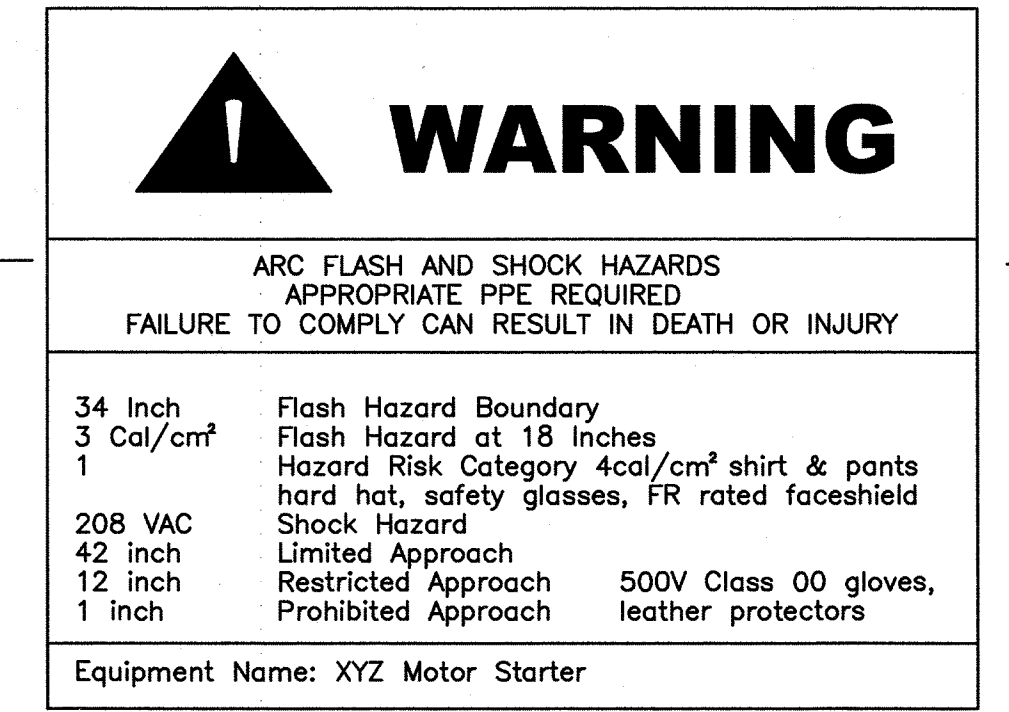
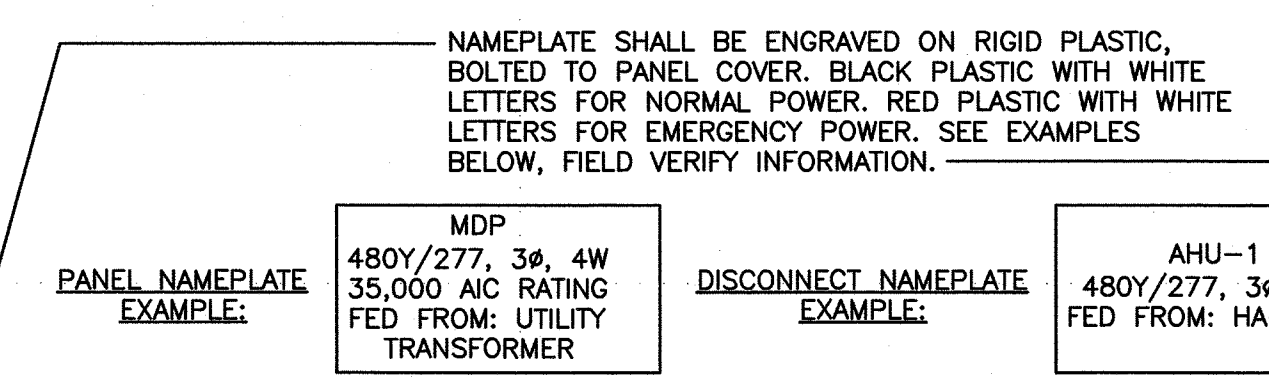




**1 GENERATOR PAD DETAIL**  
E-03 SCALE: NONE

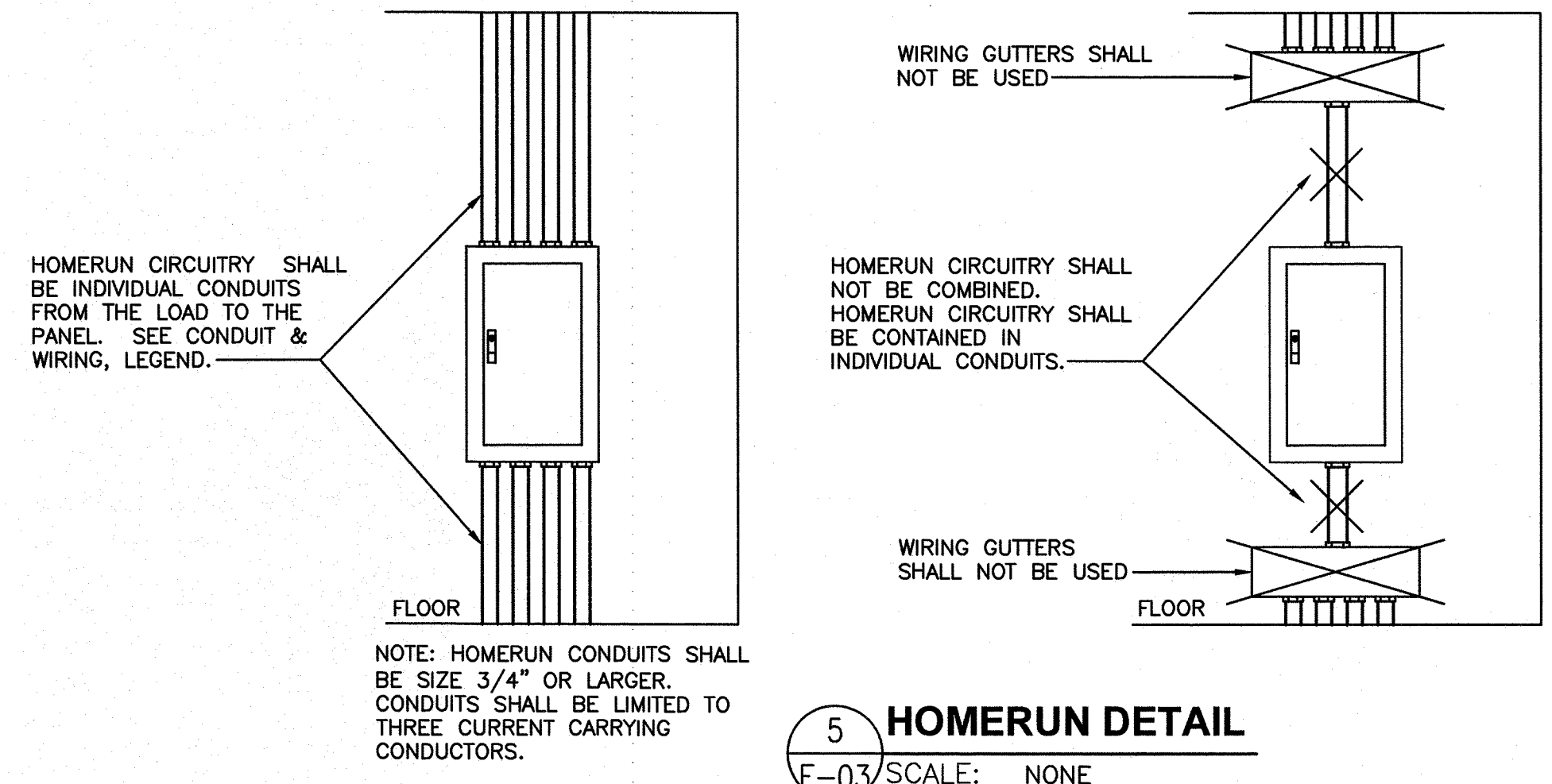


**4 CONDUIT DETAIL**  
E-03 SCALE: NONE

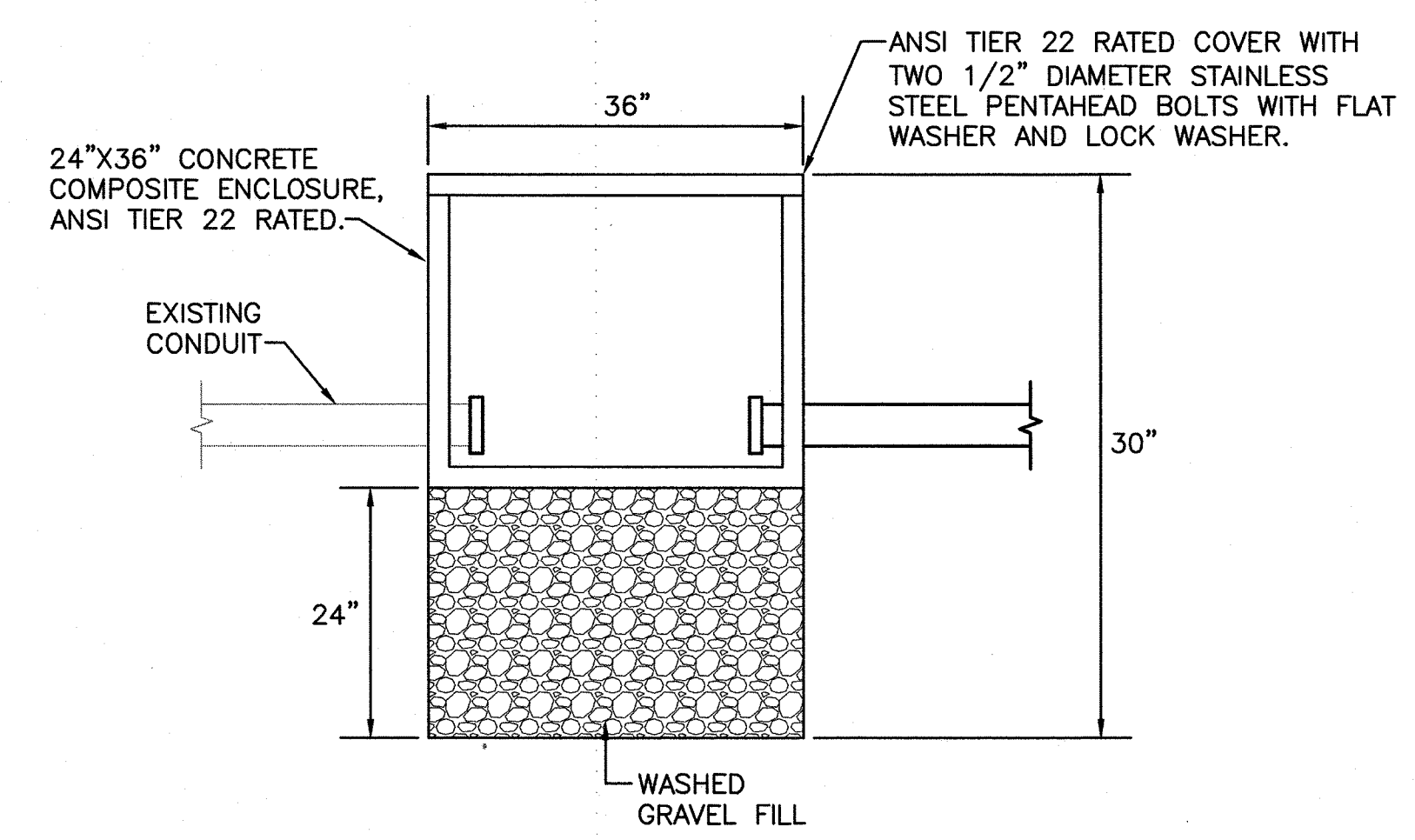


**2 WARNING LABEL DETAIL**  
E-03 SCALE: NONE

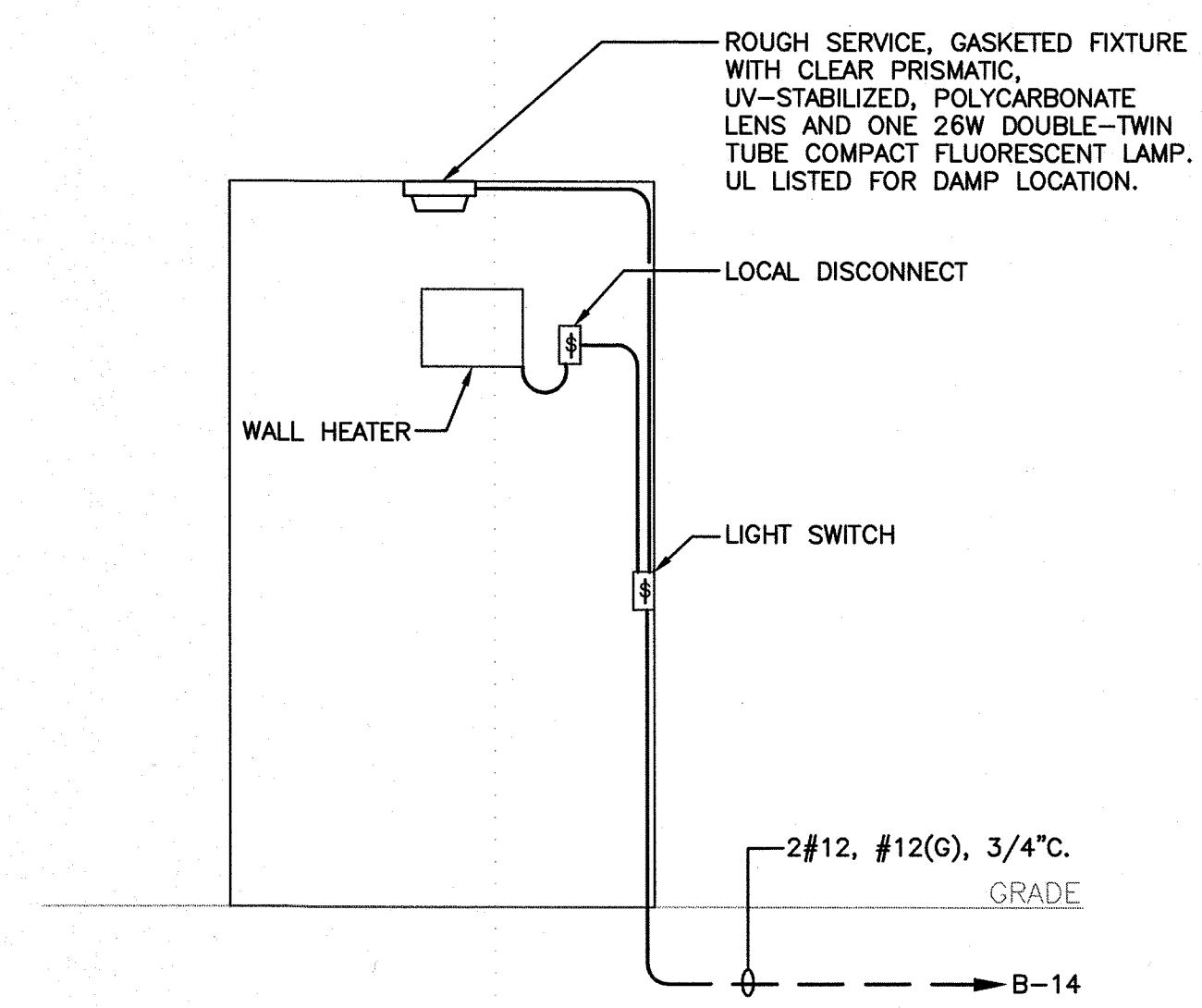
- NOTES:**
- HOMERUN CONDUITS SHALL BE SIZE 3/4" OR LARGER.
  - CONDUITS SHALL BE LIMITED TO THREE CURRENT CARRYING CONDUCTORS.
  - PROVIDE TYPEWRITTEN CIRCUIT DIRECTORIES INSIDE DOOR OF EACH PANELBOARD. EACH CIRCUIT SHALL BE DISTINGUISHED FROM ALL OTHERS.
  - PROVIDE A LABEL FOR ALL SWITCHGEAR, SWITCHBOARDS, MOTOR CONTROL CENTERS, PANELBOARDS, AND OTHER SERVICE EQUIPMENT THAT LEGIBLY DISPLAYS THE MAXIMUM AVAILABLE FAULT CURRENT. THE MAXIMUM FAULT CURRENT INFORMATION SHALL BE TAKEN FROM THE ARC FLASH/PROTECTIVE DEVICE COORDINATION STUDY PERFORMED BY THE GEAR MANUFACTURER. THE LABEL SHALL INCLUDE THE DATE THAT THE FAULT CURRENT CALCULATION WAS PERFORMED AND BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT OF THE EQUIPMENT.



**5 HOMERUN DETAIL**  
E-03 SCALE: NONE

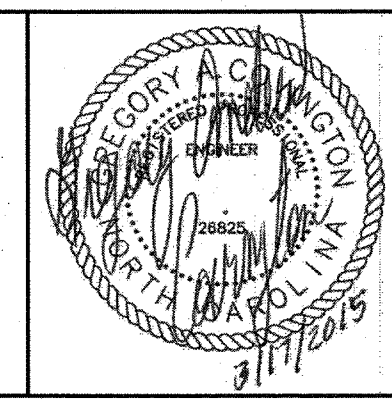


**3 HANDHOLE DETAIL**  
E-03 SCALE: NONE

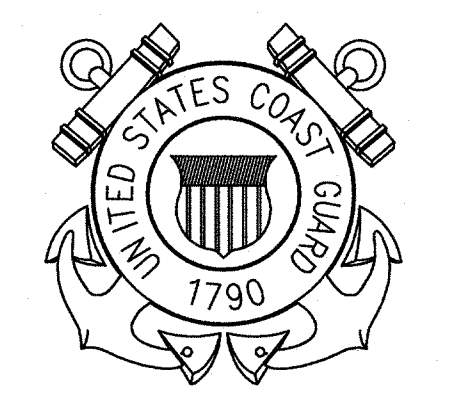


**6 WATER SOFTENER ENCLOSURE DETAIL**  
E-03 SCALE: NONE

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1240 EAST 9TH STREET  
CLEVELAND, OH 44199-2060

ISSUE		
MARK	DATE	DESCRIPTION

A/E PROJECT NO: 1474-A  
CAD FILE NAME: C8244E03.dwg  
DESIGNED BY: JCS  
DRAWN BY: JCS  
EDITED BY: JCS  
CHECKED BY: GAC

SCALE: AS SHOWN PLOT SCALE: 1:1

SHEET TITLE  
**CONSTRUCT BMF  
CG STATION HOBUCKEN  
HOBUCKEN NC**  
**ELECTRICAL  
ELECTRICAL DETAILS**

REVIEWED BY: R. PIPAK	REVIEWED BY: B. FRANKAR	REVIEWED BY: G. S. PLACZEK
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR
P. R. CARROLL, CDR APPROVING OFFICER		03/17/15 DATE

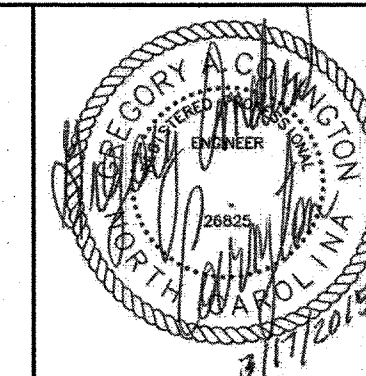
PROJECT NUMBER 05-C02245	DRAWING NUMBER 8244-D
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DISCIPLINE/SHT NO E-03	SHEET 27 OF 32
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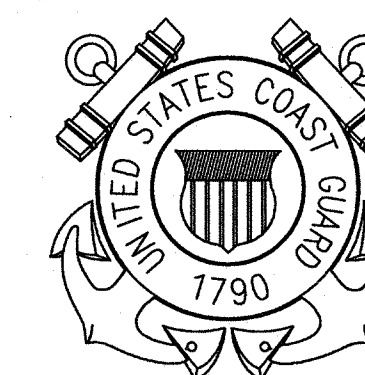


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CLEVELAND, OH 44199-2060

ISSUE		
MARK	DATE	DESCRIPTION

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CAD FILE NAME: C8244E04.dwg		
DESIGNED BY:	JCS	
DRAWN BY:	JCS	
EDITED BY:	JCS	
CHECKED BY:	GAC	

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SHEET TITLE

CONSTRUCT BMF  
CG STATION HOBUCKEN  
HOBUCKEN NC

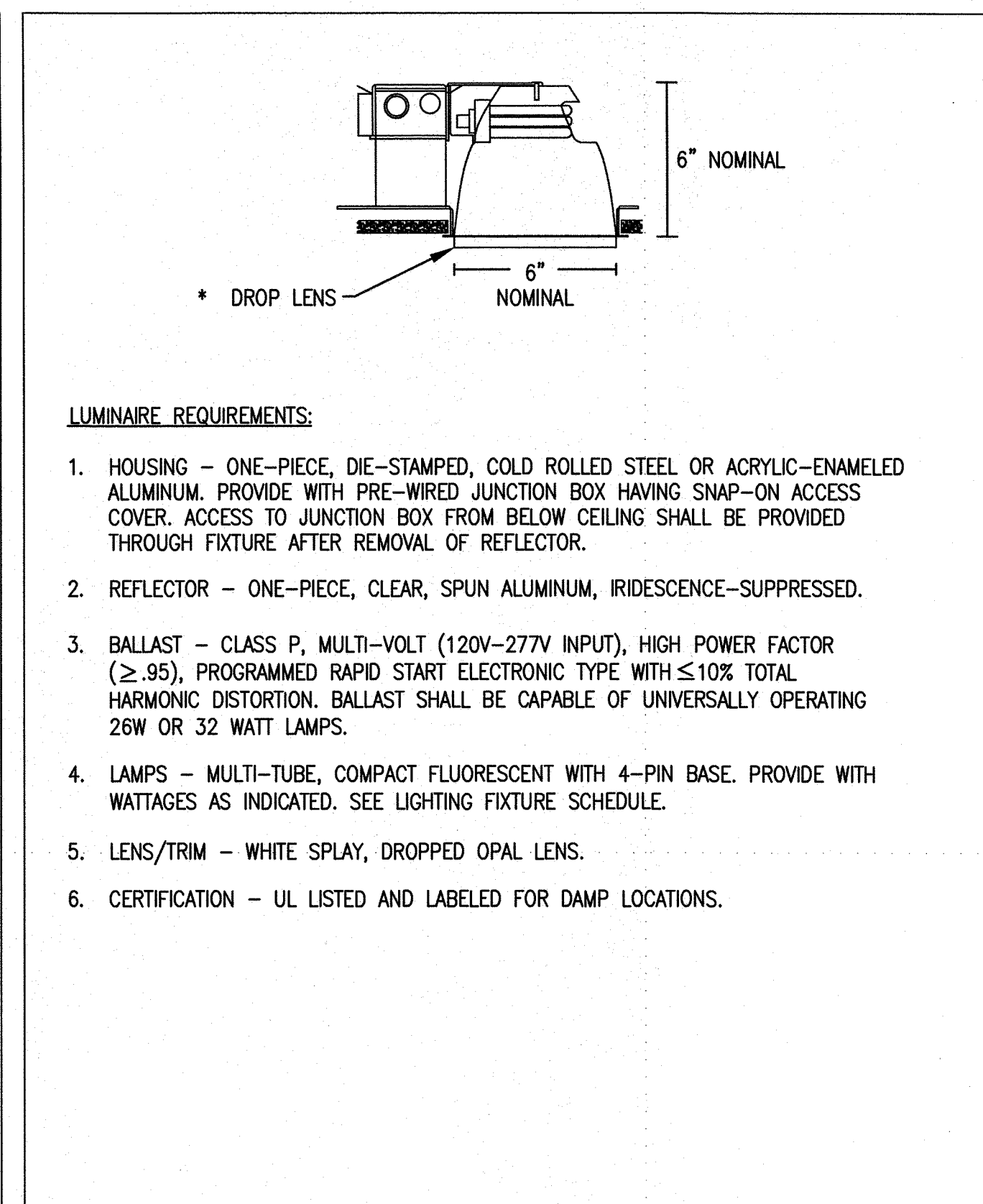
ELECTRICAL  
LIGHTING DETAILS

REVIEWED BY: <i>R. PIPAK</i> R. PIPAK	REVIEWED BY: <i>B. VRANKAR</i> B. VRANKAR	REVIEWED BY: <i>G. S. PLACZEK</i> G. S. PLACZEK
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR
P. R. CARROLL APPROVING OFFICER		03/17/15 DATE

PROJECT NUMBER	DRAWING NUMBER
05-C02245	8244-D
DISCIPLINE/SHT NO	SHEET 28 OF 32
E-04	

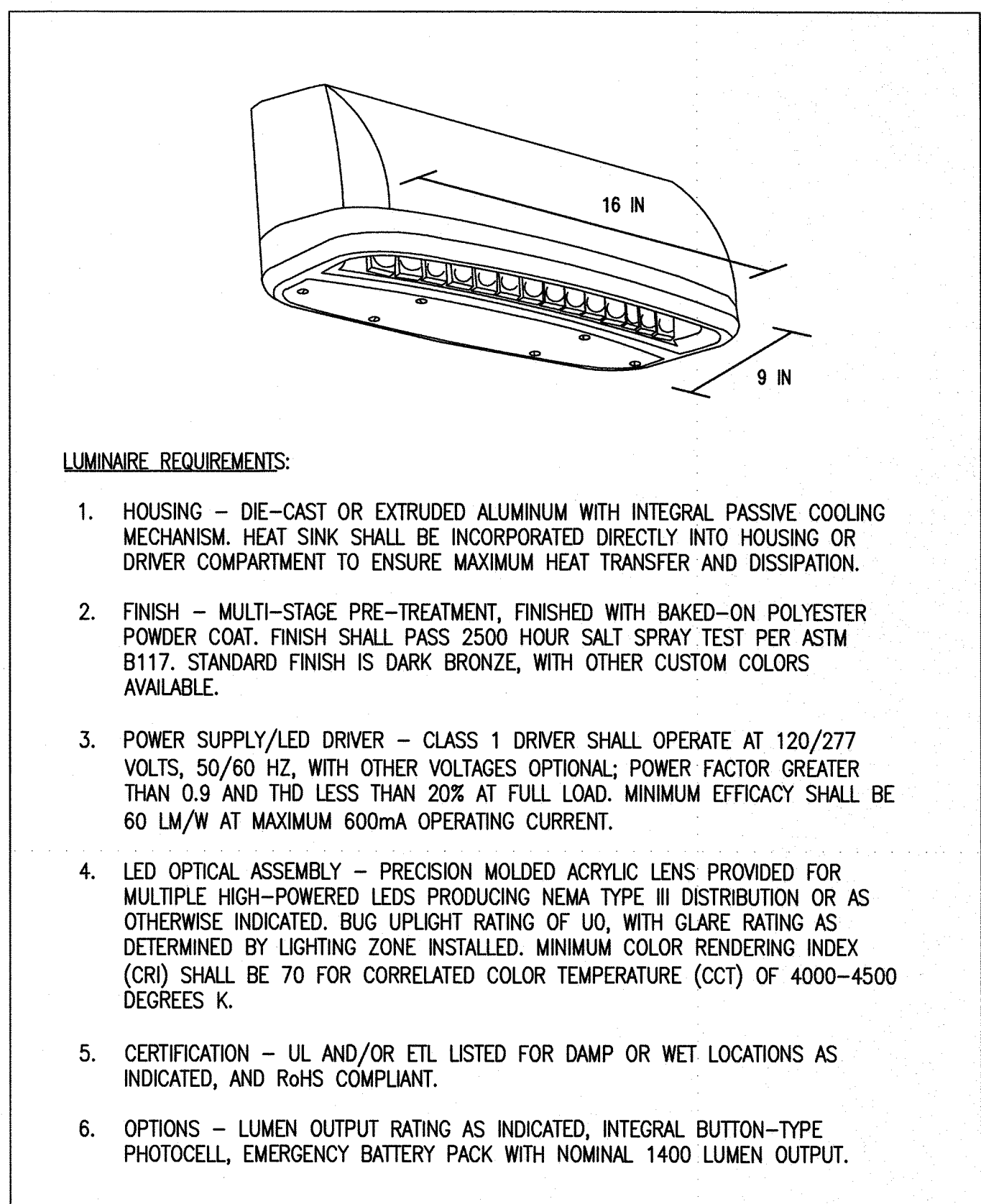
GENERAL SHEET NOTES

- THE LIGHTING FIXTURES SHOWN IN THE SCHEDULE ARE PROVIDED TO DEFINE THE FIXTURE STYLE AND TO ESTABLISH A STANDARD OF QUALITY, NOT TO LIMIT COMPETITION. ALL FIXTURES FURNISHED MUST COMPLY WITH THE BUY AMERICAN ACT. EQUIVALENT FIXTURES OF OTHER MANUFACTURERS SHALL BE EQUALLY ACCEPTABLE.
- VERIFY CEILING TYPE ON ARCHITECTURAL DRAWINGS PRIOR TO SUBMITTING BID AND PROVIDE FLANGE TRIM ON FIXTURES MOUNTED IN GYP BOARD CEILINGS.



- LUMINAIRE REQUIREMENTS:**
- HOUSING - ONE-PIECE, DIE-STAMPED, COLD ROLLED STEEL OR ACRYLIC-ENAMELED ALUMINUM. PROVIDE WITH PRE-WIRED JUNCTION BOX HAVING SNAP-ON ACCESS COVER. ACCESS TO JUNCTION BOX FROM BELOW CEILING SHALL BE PROVIDED THROUGH FIXTURE AFTER REMOVAL OF REFLECTOR.
  - REFLECTOR - ONE-PIECE, CLEAR, SPUN ALUMINUM, IRIDESCENCE-SUPPRESSED.
  - BALLAST - CLASS P, MULTI-VOLT (120V-277V INPUT), HIGH POWER FACTOR ( $\geq .95$ ), PROGRAMMED RAPID START ELECTRONIC TYPE WITH  $\leq 10\%$  TOTAL HARMONIC DISTORTION. BALLAST SHALL BE CAPABLE OF UNIVERSALLY OPERATING 26W OR 32 WATT LAMPS.
  - LAMPS - MULTI-TUBE, COMPACT FLUORESCENT WITH 4-PIN BASE. PROVIDE WITH WATTAGES AS INDICATED. SEE LIGHTING FIXTURE SCHEDULE.
  - LENS/TRIM - WHITE SPLAY, DROPPED OPAL LENS.
  - CERTIFICATION - UL LISTED AND LABELED FOR DAMP LOCATIONS.

RECESSED COMPACT FLUORESCENT SHOWER LIGHT  
REVISED: AUGUST 2004 LIGHTING PLATE: NL-38



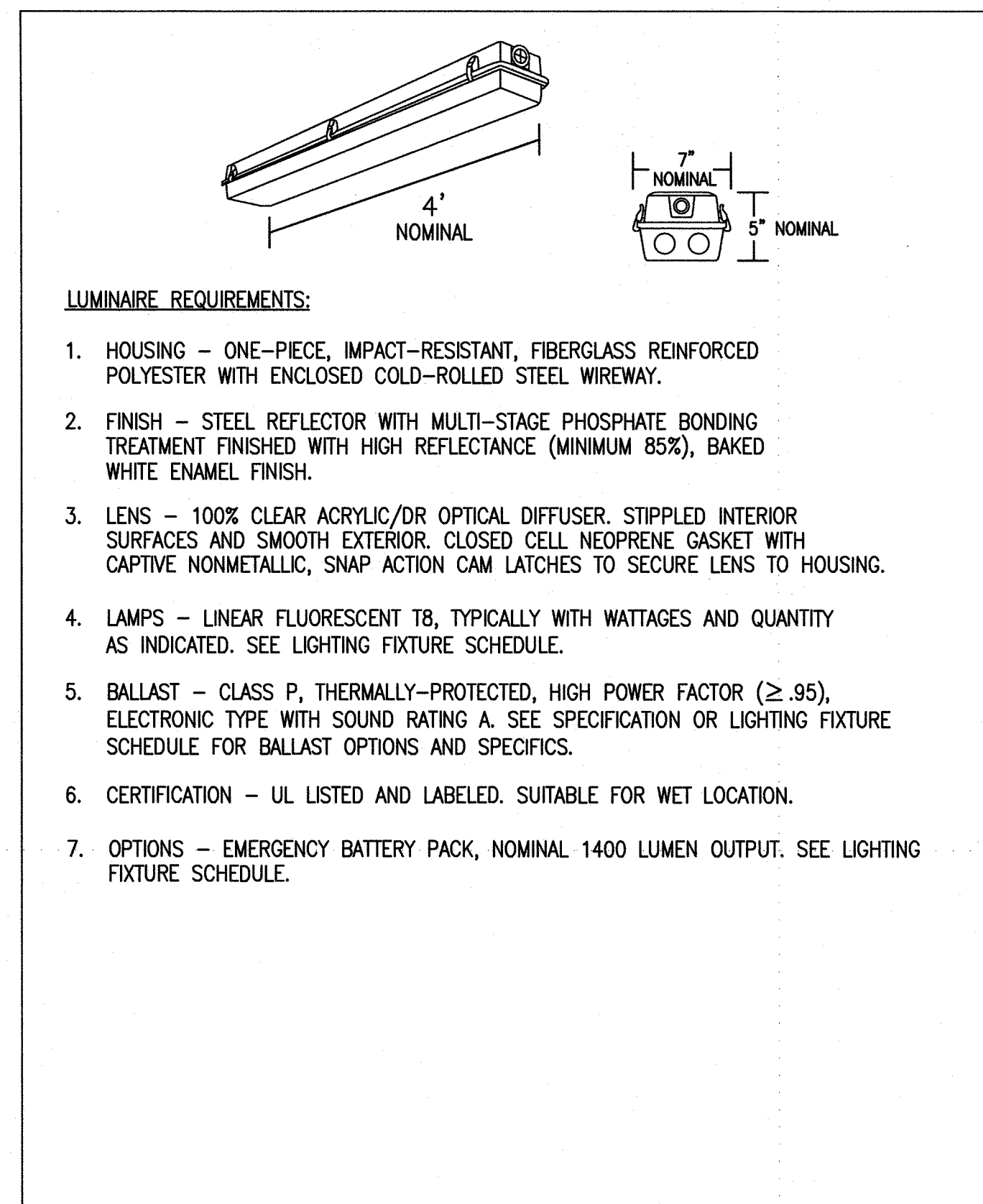
- LUMINAIRE REQUIREMENTS:**
- HOUSING - DIE-CAST OR EXTRUDED ALUMINUM WITH INTEGRAL PASSIVE COOLING MECHANISM. HEAT SINK SHALL BE INCORPORATED DIRECTLY INTO HOUSING OR DRIVER COMPARTMENT TO ENSURE MAXIMUM HEAT TRANSFER AND DISSIPATION.
  - FINISH - MULTI-STAGE PRE-TREATMENT, FINISHED WITH BAKED-ON POLYESTER POWDER COAT. FINISH SHALL PASS 2500 HOUR SALT SPRAY TEST PER ASTM B117. STANDARD FINISH IS DARK BRONZE, WITH OTHER CUSTOM COLORS AVAILABLE.
  - POWER SUPPLY/LED DRIVER - CLASS 1 DRIVER SHALL OPERATE AT 120/277 VOLTS, 50/60 HZ, WITH OTHER VOLTAGES OPTIONAL; POWER FACTOR GREATER THAN 0.9 AND THD LESS THAN 20% AT FULL LOAD. MINIMUM EFFICACY SHALL BE 60 LM/W AT MAXIMUM 600mA OPERATING CURRENT.
  - LED OPTICAL ASSEMBLY - PRECISION MOLDED ACRYLIC LENS PROVIDED FOR MULTIPLE HIGH-POWERED LEDS PRODUCING NEMA TYPE III DISTRIBUTION OR AS OTHERWISE INDICATED. BUG UPLIGHT RATING OF U0, WITH GLARE RATING AS DETERMINED BY LIGHTING ZONE INSTALLED. MINIMUM COLOR RENDERING INDEX (CRI) SHALL BE 70 FOR CORRELATED COLOR TEMPERATURE (CCT) OF 4000-4500 DEGREES K.
  - CERTIFICATION - UL AND/OR ETL LISTED FOR DAMP OR WET LOCATIONS AS INDICATED, AND RoHS COMPLIANT.
  - OPTIONS - LUMEN OUTPUT RATING AS INDICATED, INTEGRAL BUTTON-TYPE PHOTOCCELL, EMERGENCY BATTERY PACK WITH NOMINAL 1400 LUMEN OUTPUT.

LED WALL PACK  
LUMINAIRE PLATE: XL-17

LIGHTING FIXTURE SCHEDULE					
FIXTURE SYMBOL	STYLE NO. & TYPE	NUMBER AND TYPE OF LAMPS	VOLTAGE	MOUNTING	NOTES
A	NL-19	3/32W/T8	120	SUSPENDED	
AE	NL-19	3/32W/T8	120	SUSPENDED	①
B	NL-19	2/32W/T8	120	SURFACE	
BE	NL-19	2/32W/T8	120	SURFACE	①
CE	XL-17	1277L/17W/LED	120	WALL MTD. 10'-0" A.F.F.	①
DE	NL-11	1/32W/T8	120	SURFACE	①
F	NL-38	2/26W/DTT	120	RECESSED	
X	NL-63	LED	120	UNIVERSAL	①

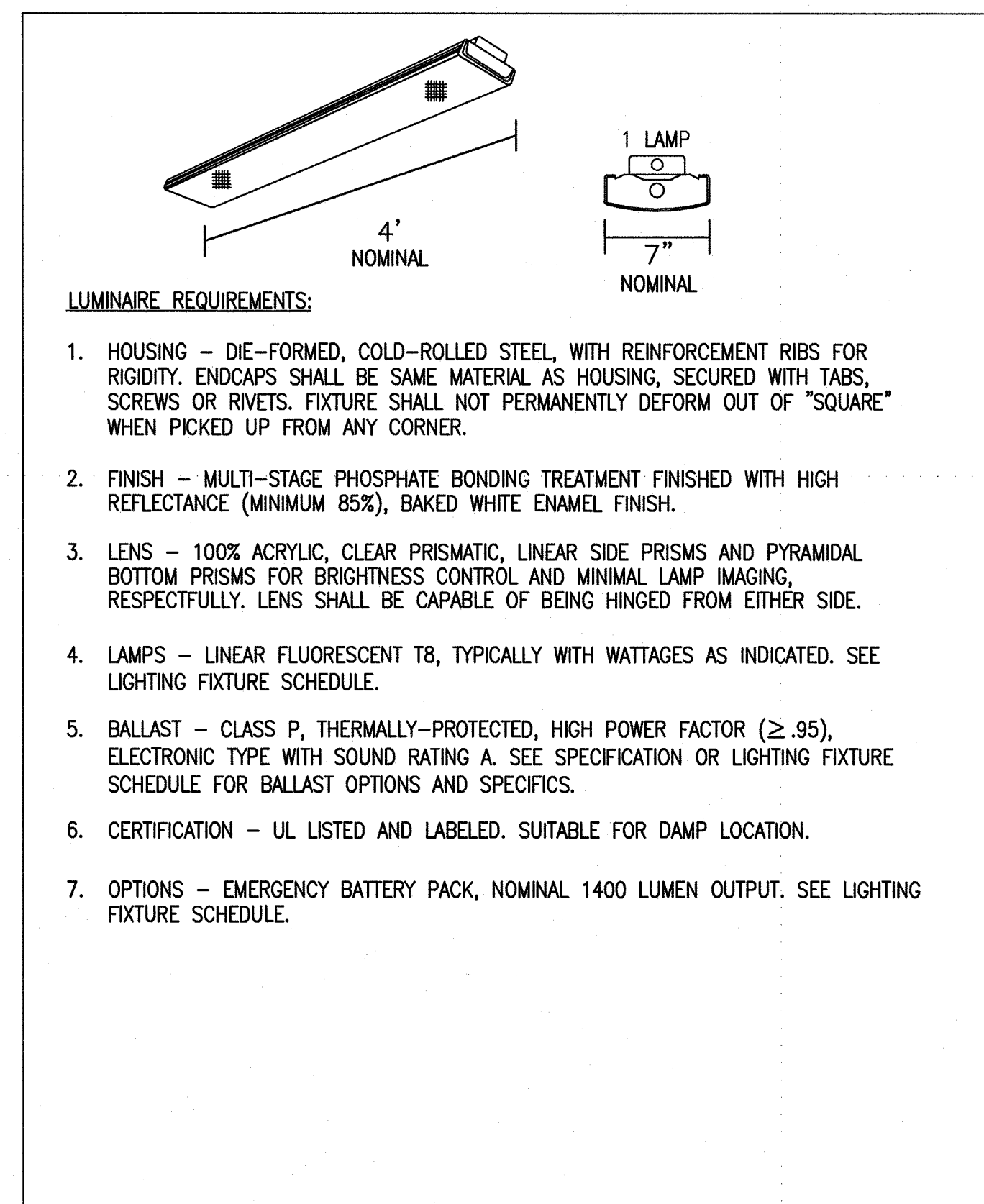
① PROVIDE EMERGENCY BATTERY PACK. PROVIDE UNSWITCHED POWER TO THE BATTERY PACK.

AUGUST 2004 LIGHTING PLATE: NL-38	
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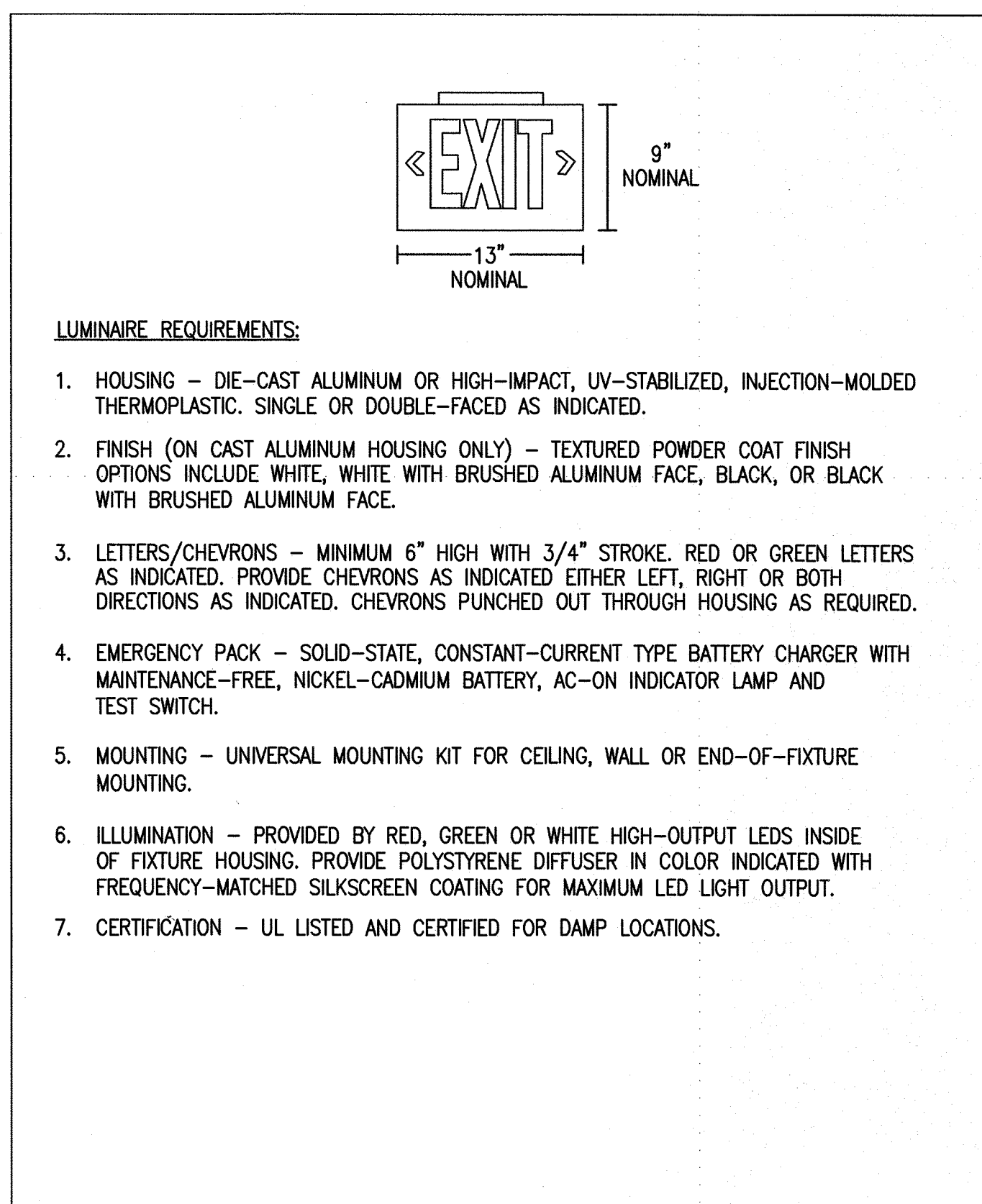
- LUMINAIRE REQUIREMENTS:**
- HOUSING - ONE-PIECE, IMPACT-RESISTANT, FIBERGLASS REINFORCED POLYESTER WITH ENCLOSED COLD-ROLLED STEEL WIREWAY.
  - FINISH - STEEL REFLECTOR WITH MULTI-STAGE PHOSPHATE BONDING TREATMENT FINISHED WITH HIGH REFLECTANCE (MINIMUM 85%), BAKED WHITE ENAMEL FINISH.
  - LENS - 100% CLEAR ACRYLIC/DR OPTICAL DIFFUSER. STIPPLED INTERIOR SURFACES AND SMOOTH EXTERIOR. CLOSED CELL NEOPRENE GASKET WITH CAPTIVE NONMETALLIC, SNAP ACTION CAM LATCHES TO SECURE LENS TO HOUSING.
  - LAMPS - LINEAR FLUORESCENT T8, TYPICALLY WITH WATTAGES AND QUANTITY AS INDICATED. SEE LIGHTING FIXTURE SCHEDULE.
  - BALLAST - CLASS P, THERMALLY-PROTECTED, HIGH POWER FACTOR ( $\geq .95$ ), ELECTRONIC TYPE WITH SOUND RATING A. SEE SPECIFICATION OR LIGHTING FIXTURE SCHEDULE FOR BALLAST OPTIONS AND SPECIFICS.
  - CERTIFICATION - UL LISTED AND LABELED. SUITABLE FOR WET LOCATION.
  - OPTIONS - EMERGENCY BATTERY PACK, NOMINAL 1400 LUMEN OUTPUT. SEE LIGHTING FIXTURE SCHEDULE.

FIBERGLASS HOUSING DAMP/WET LOCATION FLUORESCENT  
REVISED: AUGUST 2004 LIGHTING PLATE: NL-19



- LUMINAIRE REQUIREMENTS:**
- HOUSING - DIE-FORMED, COLD-ROLLED STEEL, WITH REINFORCEMENT RIBS FOR RIGIDITY. ENDCAPS SHALL BE SAME MATERIAL AS HOUSING, SECURED WITH TABS, SCREWS OR RIVETS. FIXTURE SHALL NOT PERMANENTLY DEFORM OUT OF "SQUARE" WHEN PICKED UP FROM ANY CORNER.
  - FINISH - MULTI-STAGE PHOSPHATE BONDING TREATMENT FINISHED WITH HIGH REFLECTANCE (MINIMUM 85%), BAKED WHITE ENAMEL FINISH.
  - LENS - 100% ACRYLIC, CLEAR PRISMATIC, LINEAR SIDE PRISMS AND PYRAMIDAL BOTTOM PRISMS FOR BRIGHTNESS CONTROL AND MINIMAL LAMP IMAGING, RESPECTFULLY. LENS SHALL BE CAPABLE OF BEING HINGED FROM EITHER SIDE.
  - LAMPS - LINEAR FLUORESCENT T8, TYPICALLY WITH WATTAGES AS INDICATED. SEE LIGHTING FIXTURE SCHEDULE.
  - BALLAST - CLASS P, THERMALLY-PROTECTED, HIGH POWER FACTOR ( $\geq .95$ ), ELECTRONIC TYPE WITH SOUND RATING A. SEE SPECIFICATION OR LIGHTING FIXTURE SCHEDULE FOR BALLAST OPTIONS AND SPECIFICS.
  - CERTIFICATION - UL LISTED AND LABELED. SUITABLE FOR DAMP LOCATION.
  - OPTIONS - EMERGENCY BATTERY PACK, NOMINAL 1400 LUMEN OUTPUT. SEE LIGHTING FIXTURE SCHEDULE.

FLUORESCENT WRAPAROUND  
REVISED: AUGUST 2004 LIGHTING PLATE: NL-11



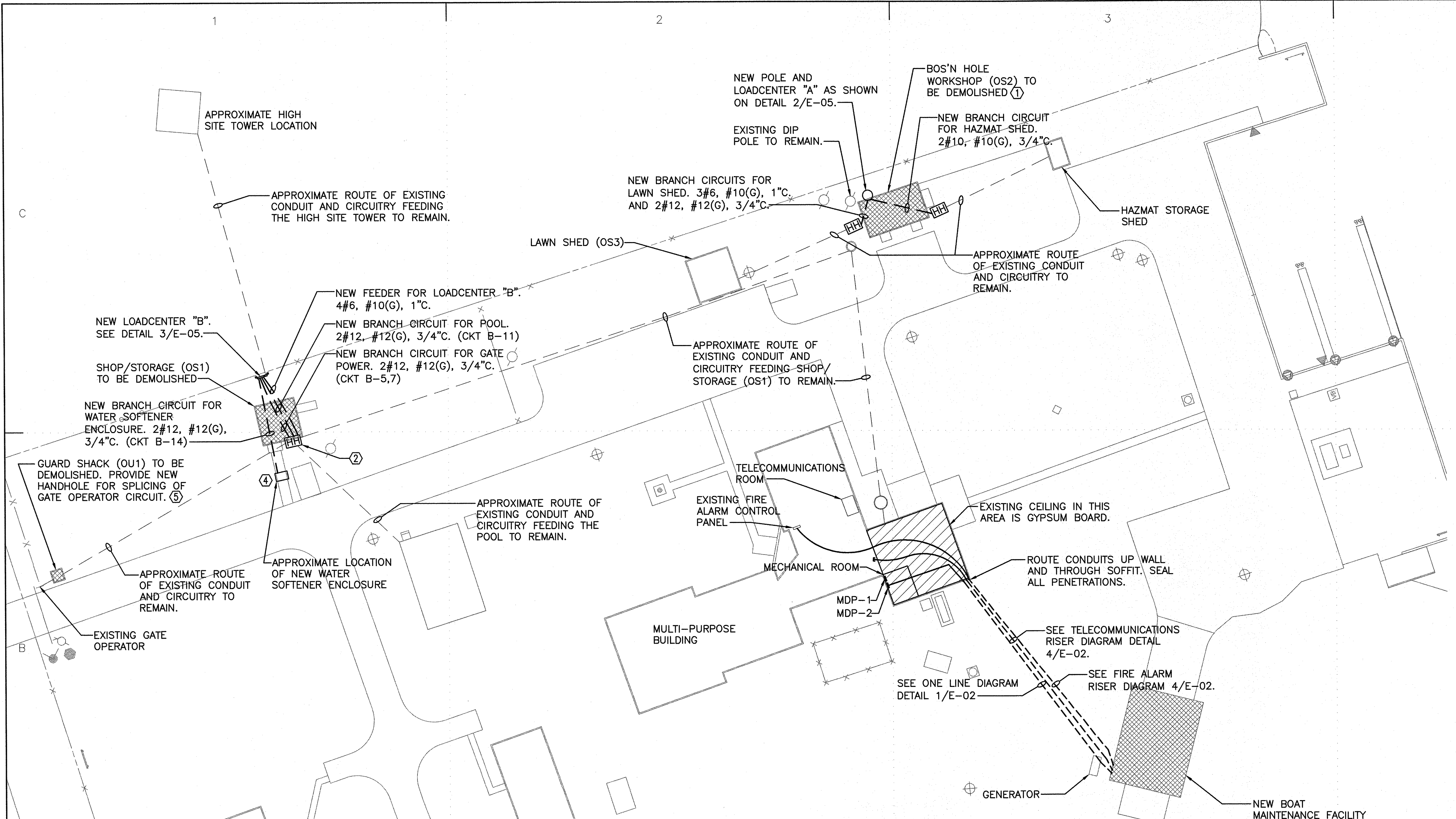
- LUMINAIRE REQUIREMENTS:**
- HOUSING - DIE-CAST ALUMINUM OR HIGH-IMPACT, UV-STABILIZED, INJECTION-MOLDED THERMOPLASTIC. SINGLE OR DOUBLE-FACED AS INDICATED.
  - FINISH (ON CAST ALUMINUM HOUSING ONLY) - TEXTURED POWDER COAT FINISH OPTIONS INCLUDE WHITE, WHITE WITH BRUSHED ALUMINUM FACE, BLACK, OR BLACK WITH BRUSHED ALUMINUM FACE.
  - LETTERS/CHEVRONS - MINIMUM 6" HIGH WITH 3/4" STROKE. RED OR GREEN LETTERS AS INDICATED. PROVIDE CHEVRONS AS INDICATED EITHER LEFT, RIGHT OR BOTH DIRECTIONS AS INDICATED. CHEVRONS PUNCHED OUT THROUGH HOUSING AS REQUIRED.
  - EMERGENCY PACK - SOLID-STATE, CONSTANT-CURRENT TYPE BATTERY CHARGER WITH MAINTENANCE-FREE, NICKEL-CADMIUM BATTERY, AC-ON INDICATOR LAMP AND TEST SWITCH.
  - MOUNTING - UNIVERSAL MOUNTING KIT FOR CEILING, WALL OR END-OF-FIXTURE MOUNTING.
  - ILLUMINATION - PROVIDED BY RED, GREEN OR WHITE HIGH-OUTPUT LEDS INSIDE OF FIXTURE HOUSING. PROVIDE POLYSTYRENE DIFFUSER IN COLOR INDICATED WITH FREQUENCY-MATCHED SILKSCREEN COATING FOR MAXIMUM LED LIGHT OUTPUT.
  - CERTIFICATION - UL LISTED AND CERTIFIED FOR DAMP LOCATIONS.

LED EXIT SIGN  
REVISED: AUGUST 2004 LIGHTING PLATE: NL-63

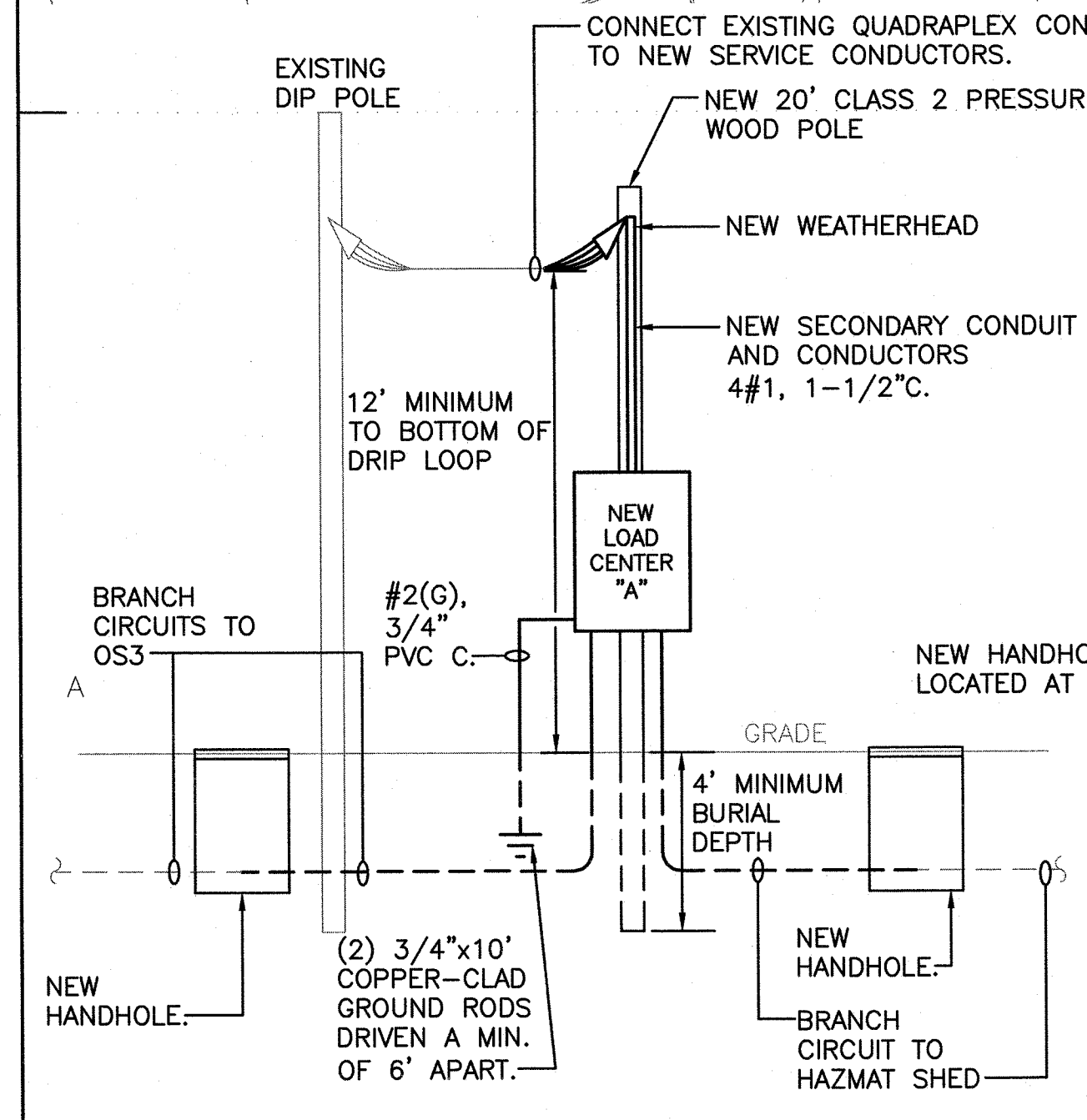
AUGUST 2004 LIGHTING PLATE: NL-11	
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AUGUST 2004 LIGHTING PLATE: NL-63	
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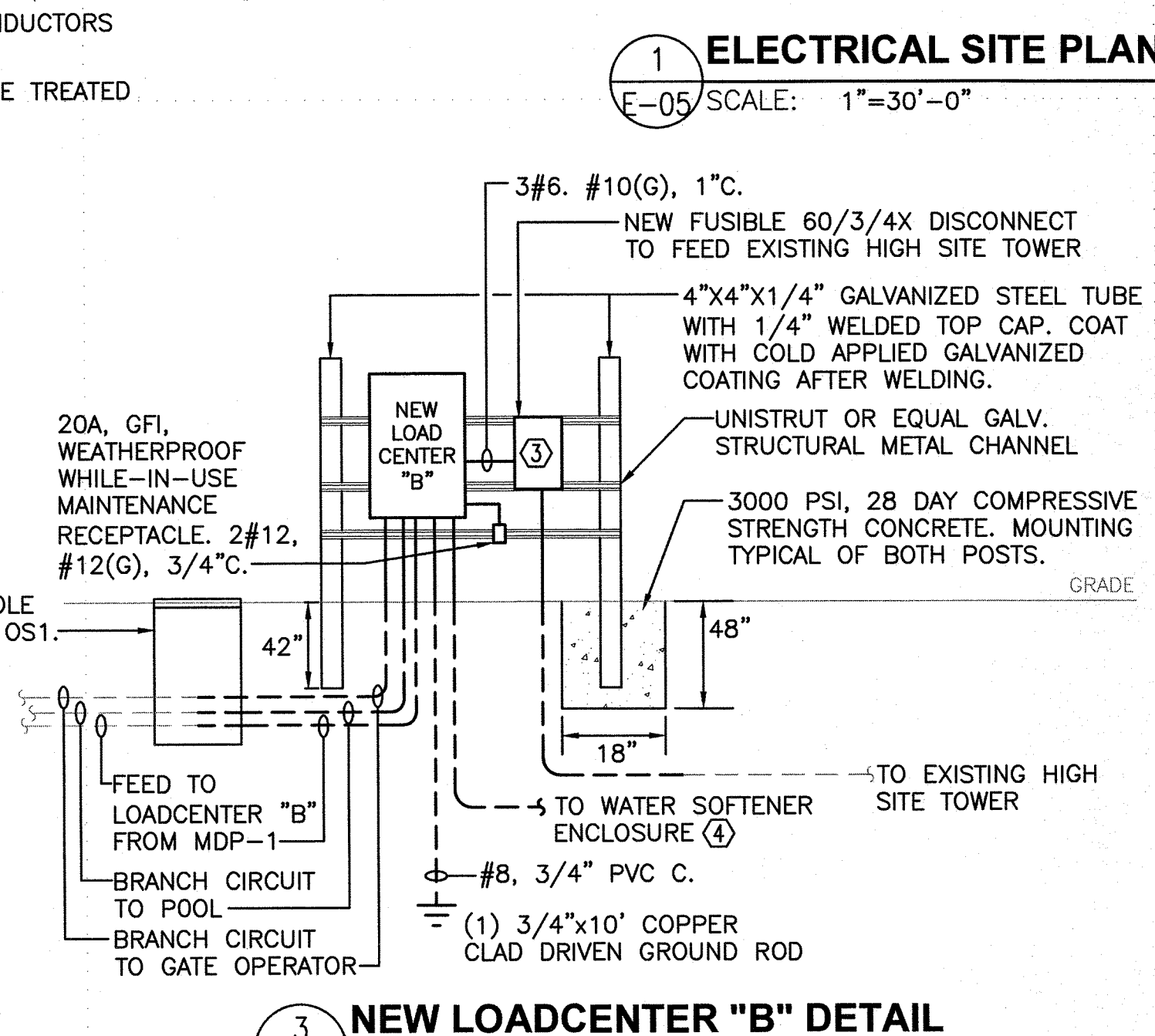




**1 ELECTRICAL SITE PLAN**  
 E-05 SCALE: 1"=30'-0"



**2 NEW LOADCENTER 'A' DETAIL**  
 E-05 SCALE: NONE



**3 NEW LOADCENTER 'B' DETAIL**  
 E-05 SCALE: NONE

LOADCENTER	LOCATION: BOS'N HOLE	LUG LOCATION: TOP FEED	UL LISTED FOR SERVICE ENTRANCE				
A	VOLT: 208Y/120V, 3Ø, 4W BUS: 100A	MAIN BUS: 100A MAIN BREAKER MOUNTING: SURFACE	NEMA 4X ENCLOSURE PANELBOARD AIC RATING (A): 42,000				
CIRCUIT NO.	BREAKER AMPS	POLES	DESCRIPTION	DESCRIPTION	BREAKER AMPS	POLES	CIRCUIT NO.
1	50	3	LAWN SHED	LAWN SHED	15	2	2
3	-	-	-	-	-	-	4
5	-	-	-	SPARE	50	3	6
7	30	2	HAZMAT STORAGE SHED	-	-	-	8
9	-	-	-	-	-	-	10
11	-	-	SPACE	SPARE	20	1	12
13	-	-	SPACE	SPARE	20	1	14
15	-	-	SPACE	SPARE	20	1	16
<b>TOTAL</b>							

LOADCENTER	LOCATION: OS1	LUG LOCATION: BOTTOM FEED	NEMA 4X ENCLOSURE				
B	VOLT: 208Y/120V, 3Ø, 4W BUS: 60A	MAIN BUS: 60A MAIN BREAKER MOUNTING: SURFACE	PANELBOARD AIC RATING (A): 10,000				
CIRCUIT NO.	BREAKER AMPS	POLES	DESCRIPTION	DESCRIPTION	BREAKER AMPS	POLES	CIRCUIT NO.
1	50	2	HIGH SITE TOWER - EXISTING	SPARE	30	2	2
3	-	-	-	-	-	-	4
5	20	2	GATE POWER - EXISTING	SPARE	20	2	6
7	-	-	-	-	-	-	8
9	20	1	POOL - EXISTING	SPARE	20	1	10
11	20	1	SPARE	SPARE	20	1	12
13	20	1	SPARE	WATER SOFTENER ENCL. - NEW	20	1	14
15	20	1	SPARE	REC. AT LOADCENTER - NEW	20	1	16
<b>TOTAL</b>							

**GENERAL SHEET NOTES**

- ALL OUTSIDE PLANT TELECOMMUNICATIONS PATHWAYS SHALL CONFORM TO THE REQUIREMENTS OF THE ANSI/TIA-758-A STANDARD, THE NATIONAL ELECTRICAL CODE (NEC), & THE NATIONAL ELECTRICAL SAFETY (NESC).
- ALL OSP TELECOMMUNICATIONS CONDUITS SHALL HAVE A MINIMUM DIAMETER OF FOUR INCHES. WHERE VEHICULAR TRAFFIC IS ABOVE THE PATHWAY ALL CONDUITS SHALL BE ENCASED IN CONCRETE WITH A MINIMUM 2500 LB/SQ.IN. COMPRESSIVE STRENGTH & STEEL REINFORCEMENT.
- PROVIDE TELECOMMUNICATIONS CONDUIT, HAND HOLES, & PULL BOXES IN ACCORDANCE WITH THE ANSI/TIA-758 STANDARD.
- INTERCEPT EXISTING CONDUITS & REROUTE THEM TO NEW EQUIPMENT. CONDUITS SHALL BE STUBBED UP DIRECTLY UNDER NEW EQUIPMENT ENCLOSURES & EXTENDED UP TO THOSE ENCLOSURES. IT SHALL NOT BE PERMISSIBLE TO OFFSET CONDUITS MORE THAN FOUR INCHES.
- ALL ASPECTS OF DEMOLITION INCLUDING SCHEDULING, OUTAGES, & COORDINATION WITH EXISTING SYSTEMS SHALL BE COORDINATED WITH THE CONTRACTING OFFICER'S REPRESENTATIVE.
- ALL EXTERIOR ABOVE-GRADE CONDUIT SHALL BE PVC COATED RIGID STEEL. ALL EXTERIOR BELOW-GRADE CONDUIT SHALL BE SCHEDULE 80 PVC. ALL EXTERIOR ENCLOSURES SHALL BE NEMA 4X.

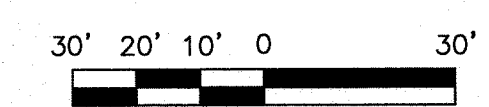
**KEYED NOTES**

- THE EXISTING PANELBOARD TO BE DEMOLISHED IN THE BOS'N HOLE (OS2) FEEDS THE LAWN SHED (OS3) & THE HAZMAT STORAGE SHED. THE EXISTING OVERHEAD FEED TO THE BOS'N HOLE SHALL BE MODIFIED AS SHOWN ON 2/E-05. PROVIDE NEW CONDUIT & CIRCUITRY TO EXTEND THE CIRCUITS TO THE NEW LOADCENTER.
- THE ELECTRICAL GEAR IN THE SHOP/STORAGE BUILDING (OS1) SHALL BE DEMOLISHED. PROVIDE AND INSTALL A NEW HANDHOLE AT THE FORMER LOCATION OF THE OS1 PANELBOARD. SEE DETAIL 3/E-05. PROVIDE NEW CONDUIT & CIRCUITRY TO EXTEND THE CIRCUITS TO THE NEW LOADCENTER.
- PROVIDE A NEW FUSIBLE 60/3/4X DISCONNECT TO FEED THE EXISTING HIGH SITE TOWER. FUSE PER EQUIPMENT REQUIREMENTS. REROUTE EXISTING CONDUIT & CIRCUITRY THAT FEEDS THE TOWER TO THE SECONDARY OF THE DISCONNECT PROVIDING NEW CONDUIT AS REQUIRED. COORDINATE EXACT HIGH SITE ELECTRICAL REQUIREMENTS WITH CONTRACTING OFFICER'S REPRESENTATIVE.
- SEE DETAIL 6/E-03 FOR WATER SOFTENER ENCLOSURE DETAILS.
- THE ELECTRICAL GEAR IN THE GUARD SHACK (OU1) AND ITS FEED SHALL BE DEMOLISHED. THE CIRCUITRY TO THE GATE OPERATOR FEEDS INTO A JUNCTION BOX IN THE GUARD SHACK FROM OS1 AND BACK OUT TO THE GATE OPERATOR. DEMOLISH THE JUNCTION BOX AND SPLICE THE EXISTING CIRCUITRY IN A HANDHOLE AFTER DEMOLITION OF THE GUARD SHACK.

**LEGEND**

HH NEW HANDHOLE. SEE DETAIL 3/E-03.

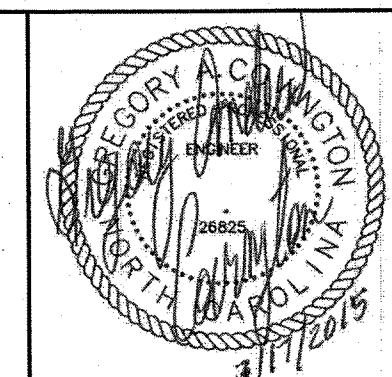
**GRAPHIC SCALE**



SCALE: 1"= 30'-0"

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ISSUE	MARK	DATE	DESCRIPTION

A/E PROJECT NO: 1474-A  
 CAD FILE NAME: C8244E05.dwg  
 DESIGNED BY: JCS  
 DRAWN BY: JCS  
 EDITED BY: JCS  
 CHECKED BY: GAC

SCALE: AS SHOWN PLOT SCALE: 1:1

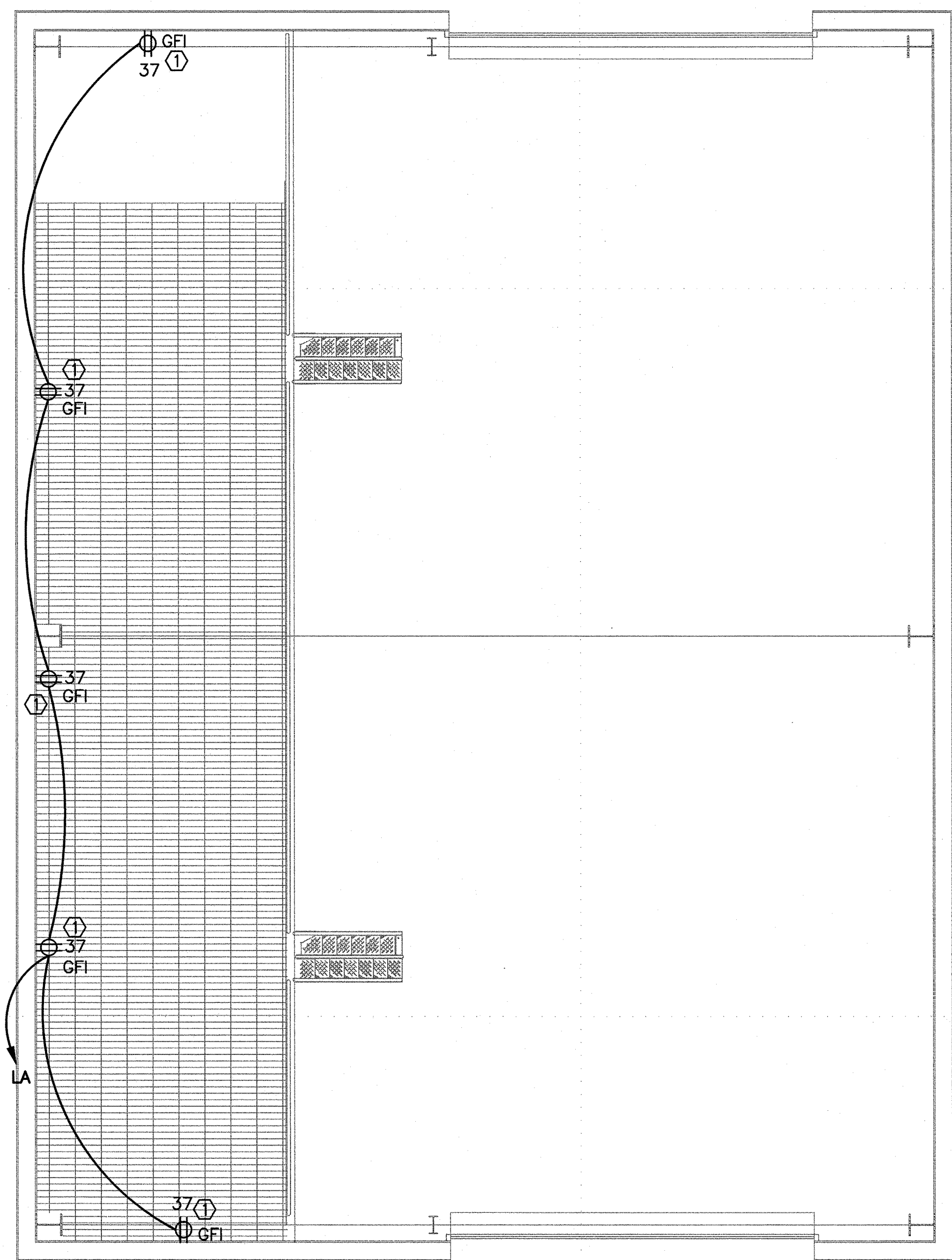
**CONSTRUCT BMF  
 CG STATION HOBUCKEN** NC

**ELECTRICAL  
 SITE PLAN**

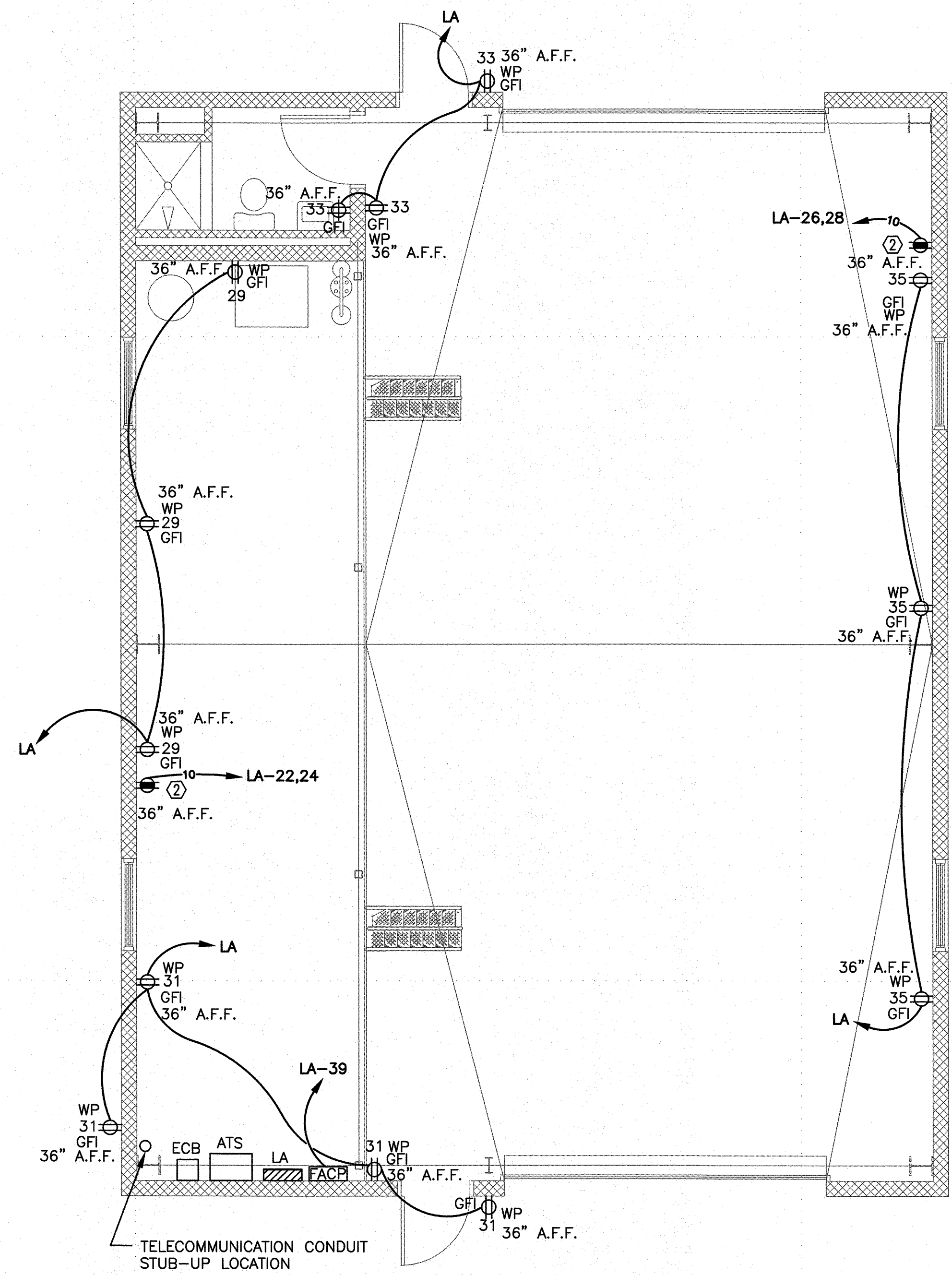
REVIEWED BY: R. PIPAK  
 PROJECT ENG.  
 REVIEWED BY: B. VRANKAR  
 BRANCH CHIEF  
 REVIEWED BY: G. S. PLACZEK  
 TECH. DIRECTOR  
 APPROVING OFFICER: P. R. CARROLL, CDR  
 DATE: 03/17/15

PROJECT NUMBER: 05-C02245  
 DRAWING NUMBER: 8244-D  
 DISCIPLINE/SHT NO: E-05  
 SHEET 29 OF 32





**1 POWER UPPER FLOOR PLAN**  
 E-06 SCALE: 1/4"=1'-0"



**2 POWER PLAN**  
 E-06 SCALE: 1/4"=1'-0"

**GENERAL NOTES**

1. ALL RECEPTACLES ON THE MAIN FLOOR SHALL BE MOUNTED 36" A.F.F. UNLESS NOTED OTHERWISE.

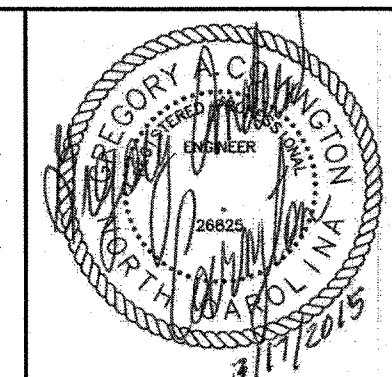
**KEYED NOTES**

1. DEVICES, CIRCUITRY, AND CONDUIT SHALL BE PROVIDED AND INSTALLED UNDER UNIT BID ITEM #1.
2. COORDINATE EXACT WELDER OUTLET LOCATION WITH CONTRACTING OFFICER'S REPRESENTATIVE.

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ISSUE		
MARK	DATE	DESCRIPTION

A/E PROJECT NO: 1474-A
CAD FILE NAME: C8244E06.dwg
DESIGNED BY: JCS
DRAWN BY: JCS
EDITED BY: JCS
CHECKED BY: GAC

SCALE: AS SHOWN PLOT SCALE: 1:1

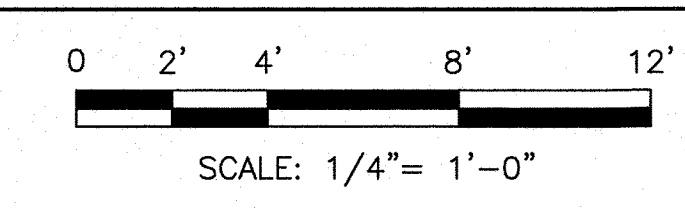
**CONSTRUCT BMF  
 CG STATION HOBUCKEN  
 HOBUCKEN NC**

**ELECTRICAL  
 POWER FLOOR PLAN**

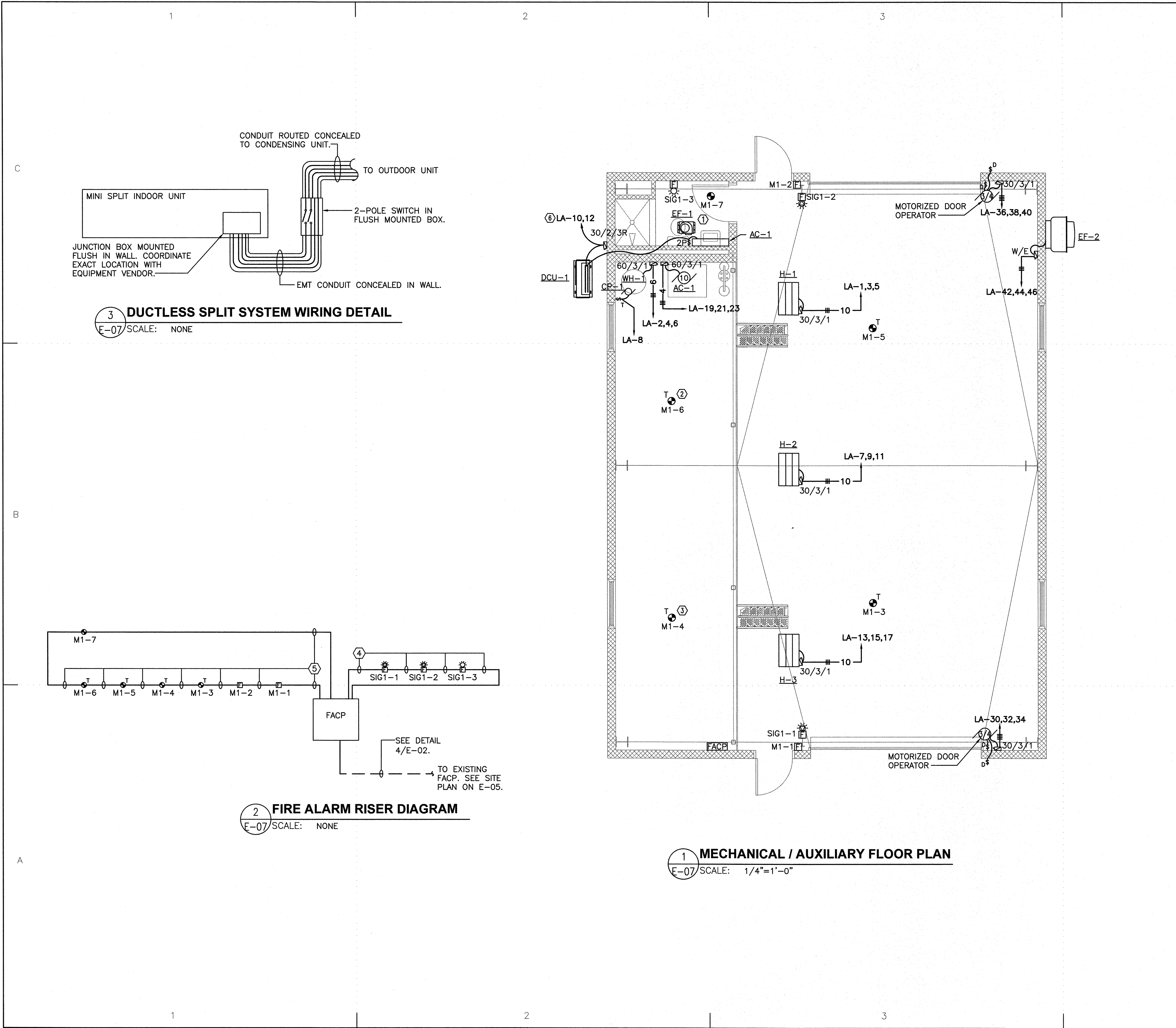
REVIEWED BY: R. PIPAK	REVIEWED BY: B. VRANKAR	REVIEWED BY: G. S. PLACZEK
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR
P. R. CARROLL, CDR APPROVING OFFICER		03/17/15 DATE

PROJECT NUMBER <b>05-C02245</b>	DRAWING NUMBER <b>8244-D</b>
DISCIPLINE/SHT NO <b>E-06</b>	SHEET <b>30</b> OF <b>32</b>

**GRAPHIC SCALE**



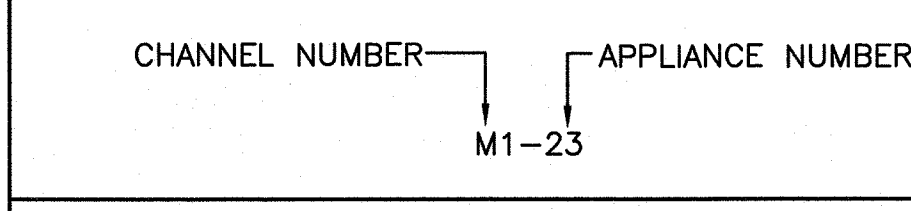




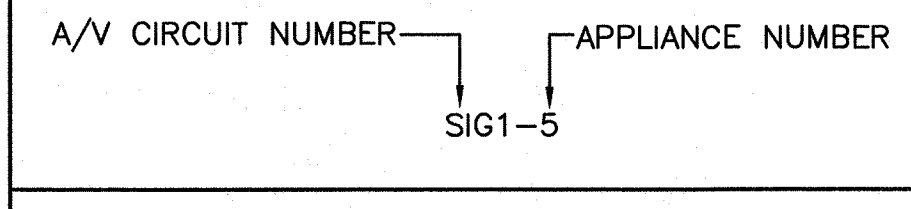
**KEYED NOTES**

- SEE LIGHTING PLAN E-08 FOR EXHAUST FAN CONNECTION.
- MOUNT DEVICE BENEATH MEZZANINE. DEVICE SHALL BE PROVIDED AND INSTALLED UNDER UNIT BID ITEM #1.
- MOUNT DEVICE BENEATH MEZZANINE UNDER UNIT BID ITEM #1. WALL MOUNT DEVICE IF BID ITEM #1 IS NOT TAKEN.
- VISUAL/SIGNAL CIRCUIT 3/4"C. WITH (2) #12 AWG NON-PLENUM RATED: FPLR CONDUIT ONLY: THHN PLENUM RATED: FPLP
- SIGNALING LINE CIRCUIT 3/4"C. WITH 1 PAIR #14 AWG TWISTED OVERALL SHIELD NON-PLENUM RATED: FPL NON-PLENUM RATED: FPLR PLENUM RATED: FPLP
- SEE DETAIL 3/E-07.

**ADDRESSABLE DEVICE NUMBERING FROM FACP**



**A/V CIRCUIT NUMBERING FROM FACP**



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216-902-6200

CONSULTANTS  
THE JOHNSON McADAMS FIRM  
GREENWOOD, MISSISSIPPI 38930

U. S. COAST GUARD  
CIVIL ENGINEERING UNIT  
CLEVELAND

USCG. CEU CLEVELAND  
1240 EAST 9TH STREET  
CLEVELAND, OH 44199-2060

MARK	DATE	DESCRIPTION

A/E PROJECT NO: 1474-A
CAD FILE NAME: CB244E07.dwg
DESIGNED BY: JCS
DRAWN BY: JCS
EDITED BY: JCS
CHECKED BY: GAC

SCALE: AS SHOWN PLOT SCALE: 1:1

SHEET TITLE  
CONSTRUCT BMF  
CG STATION HOBUCKEN NC  
ELECTRICAL  
MECH/AUX FLOOR PLAN

REVIEWED BY: R. PIPAK	REVIEWED BY: B. VRANKAR	REVIEWED BY: G. S. PLACZEK
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR

P. R. CARROLL, CDR  
APPROVING OFFICER

03/17/15  
DATE

PROJECT NUMBER 05-C02245	DRAWING NUMBER 8244-D
DISCIPLINE/SHT NO E-07	SHEET 31 OF 32

**GRAPHIC SCALE**

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

**3 DUCTLESS SPLIT SYSTEM WIRING DETAIL**  
E-07 SCALE: NONE

**2 FIRE ALARM RISER DIAGRAM**  
E-07 SCALE: NONE

**1 MECHANICAL / AUXILIARY FLOOR PLAN**  
E-07 SCALE: 1/4"=1'-0"

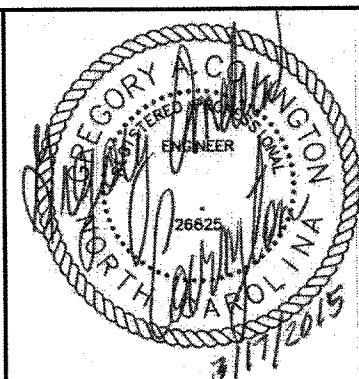


**KEYED NOTES**

1. MOUNT LIGHTS BELOW MEZZANINE. LIGHTS, DEVICES, AND CIRCUITRY SHALL BE PROVIDED AND INSTALLED UNDER UNIT BID ITEM #1. IF BID ITEM #1 IS NOT TAKEN, HOMERUN FIXTURE DE TO PANELBOARD LA.

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CIVIL ENGINEERING UNIT  
CLEVELAND



USCG. CEU CLEVELAND  
1240 EAST 9TH STREET  
CLEVELAND, OH 44199-2060

ISSUE		
MARK	DATE	DESCRIPTION

A/E PROJECT NO: 1474-A  
CAD FILE NAME: C8244E08.dwg  
DESIGNED BY: JCS  
DRAWN BY: JCS  
EDITED BY: JCS  
CHECKED BY: GAC

SCALE: AS SHOWN PLOT SCALE: 1:1

SHEET TITLE  
**CONSTRUCT BMF  
CG STATION HOBUCKEN  
HOBUCKEN NC**

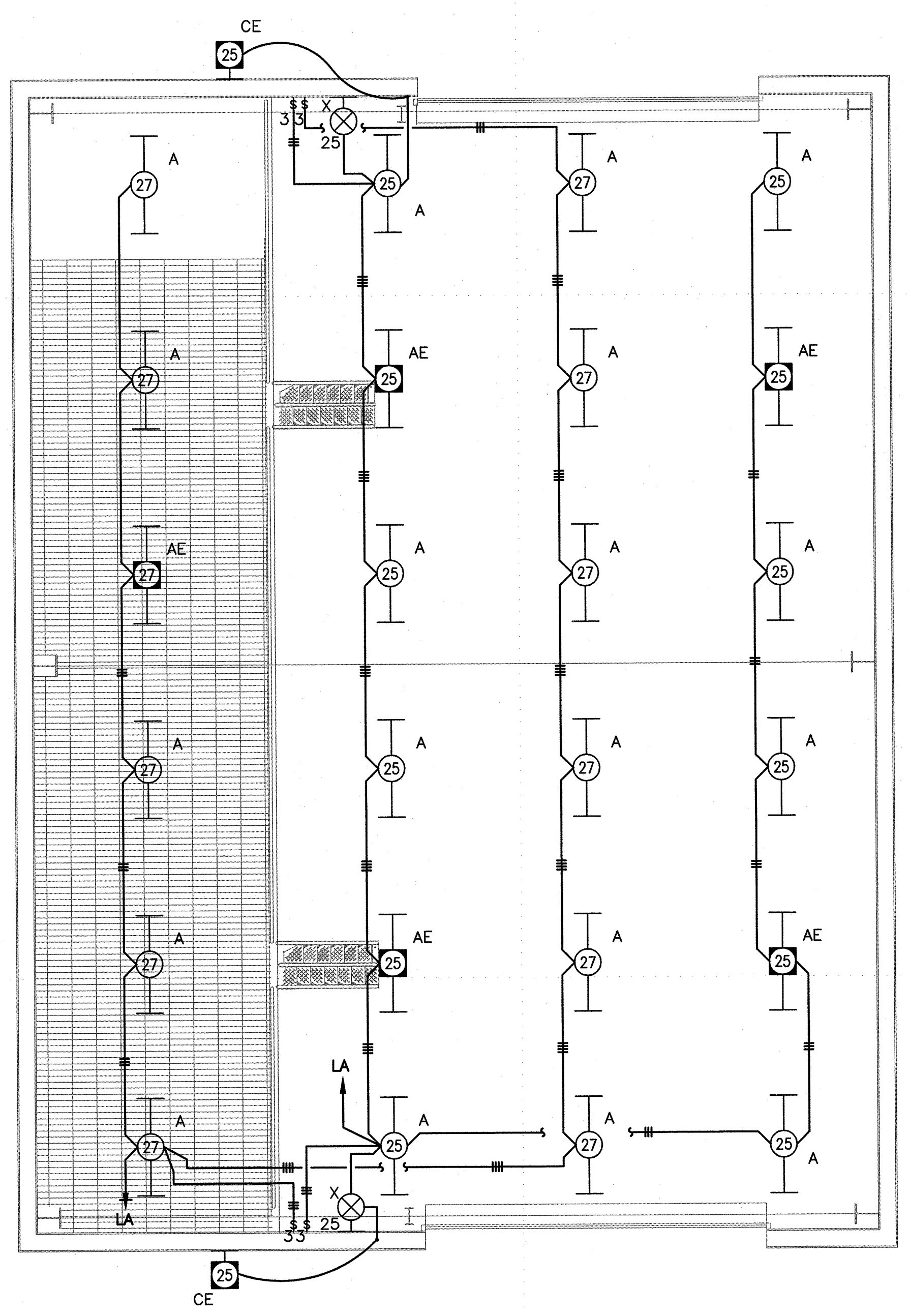
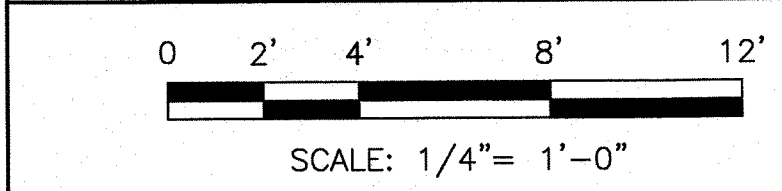
**ELECTRICAL  
LIGHTING FLOOR PLAN**

REVIEWED BY: R. PIPAK  
REVIEWED BY: B. VRANKAR  
REVIEWED BY: G. S. PLACZEK  
PROJECT ENG. BRANCH CHIEF TECH. DIRECTOR

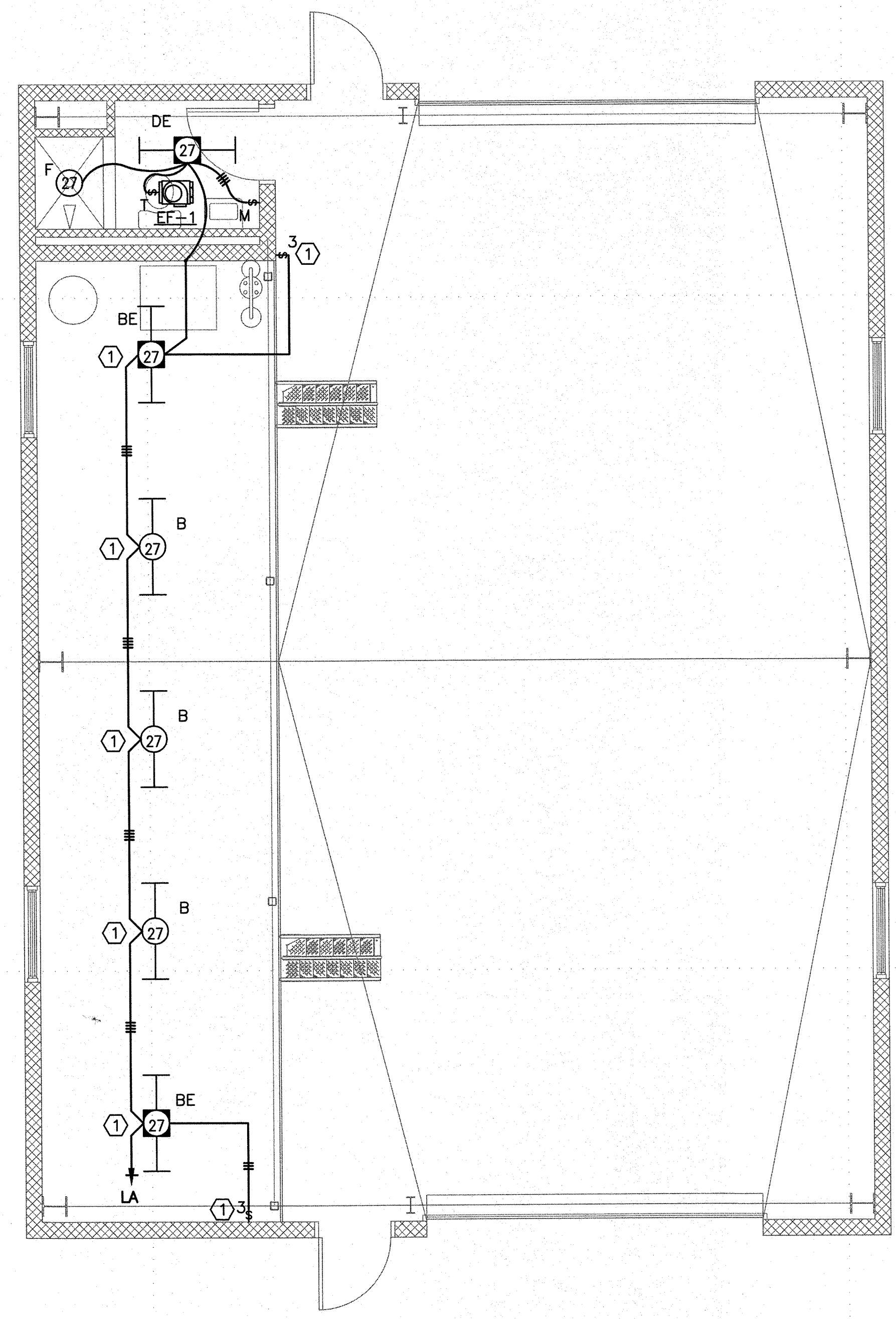
P. R. CARROLL, CDR  
APPROVING OFFICER  
03/17/15  
DATE

PROJECT NUMBER	DRAWING NUMBER
05-C02245	8244-D
DISCIPLINE/SHT NO	SHEET 32 OF 32
E-08	

**GRAPHIC SCALE**



**1 LIGHTING UPPER FLOOR PLAN**  
E-08 SCALE: 1/4"=1'-0"



**2 LIGHTING LOWER FLOOR PLAN**  
E-08 SCALE: 1/4"=1'-0"