

WATER & SEWER MAINTENANCE BUILDING



DESIGN

CARNES ENGINEERING, INC.

12605 I.H. 10 EAST

BUILDING CODE SUMMARY

SHOP

CHAPTER 3 – OCCUPANCY CLASSIFICATION

B 1ST FLOOR OFFICE 4,000 SF

CHAPTER 5 – GENERAL HEIGHT AND AREA CALCULATIONS

B ALLOWABLE AREA = 9,000 SF ALLOWABLE HEIGHT 2 STORY/ 40 FT

CHAPTER 6 – TYPES OF CONSTRUCTION

TYPE - II B

CHAPTER 10 – MEANS OF EGRESS

DESIGN OCCUPANCY LOAD

OCCUPANCY	AREA	OCC LOAD
B 1ST FLOOR	3,000/100	30
B WAREHOUSE	5,400/500	10

TOTAL	48
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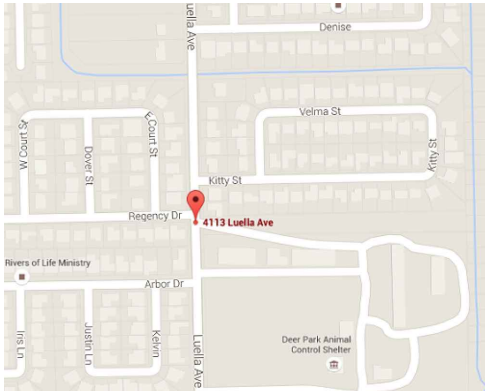
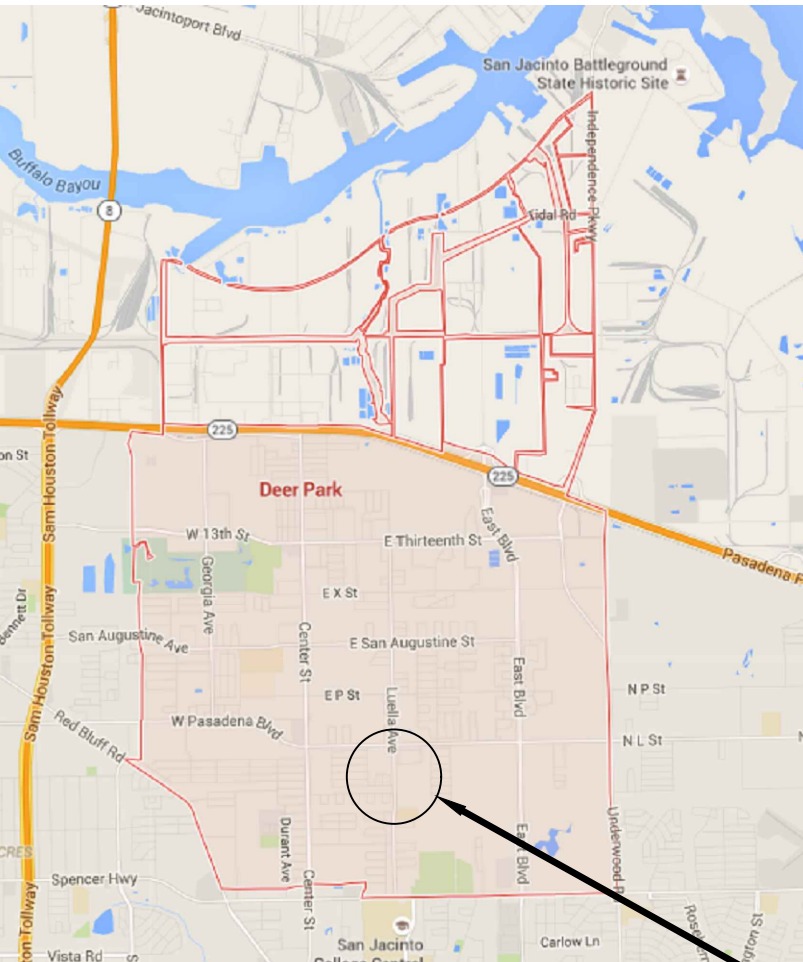
1003.2.3 EGRESS WIDTH

OCCUPANCY	USE	TOTAL	EGRESS	REQ
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B 1ST FLOOR $72 \times 0.2 \text{ IN} = 4.4 \text{ IN}$
TOTAL EGRESS PROVIDED = 2 OPENINGS $\times 3' = 72 \text{ IN}$ PROVIDED

CHAPTER 16 – STRUCTURAL DESIGN

WIND DESIGN = 2012 IBC 150 MPH LRFD



GENERAL LOCATION

INDEX

BUILDING

- C-1 SITE PLAN
- A-1 ELEVATIONS
- A-2 FLOOR PLAN
- S-1 FOUNDATION PLAN
- S-2 DETAILS
- M-1 MECHANICAL PLAN
- E-1 ELECTRICAL PLAN
- P-1 PLUMBING PLAN
- T-1 TEXAS ACCESSIBILITY STANDARDS

PROJECT & ALTERNATES DESCRIPTION

1. 60' X 140' X 16' Eave PEMB erected on site with 2' X 6' Stud wall EOC erected on interior and surrounded by offices on two sides.
2. 60' X 140' X 16' Eave PEMB erected on site with concrete block wall erected on interior and surrounded by offices on two sides.
(Alternate 1)
3. 60' X 140' X 16' Eave PEMB erected on site with Prestressed Concrete Building installed on PEMB foundation and surrounded by offices on two sides.
(Alternate 2)

CONTRACTOR NOTES:

1. CONTRACTOR MUST NOTIFY ENGINEER UPON UNCOVERING HIDDEN CONDITIONS.
2. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ARRANGE WITH THE FACILITIES MANAGEMENT FOR SITE ACCESS, SITE STORAGE, AND WORKER PARKING.
3. CODE REQUIREMENTS:
IT IS THE INTENT THAT ALL WORK SHALL CONFORM TO THE ADOPTED CODES, STANDARDS & RULES OF THE ADMINISTRATIVE AUTHORITY HAVING JURISDICTION. IN THE EVENT THAT THE ADMINISTRATIVE AUTHORITY HAVING JURISDICTION WITHHOLDS ITS APPROVAL FOR ANY CAUSE, THE CONTRACTOR SHALL IMMEDIATELY INFORM THE DESIGNER OF THE SITUATION ALONG W/ CORRECTIVE ACTION TO BE TAKEN.
4. EXISTING CONDITIONS:
THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND FIELD COORDINATE CORRECTIVE ACTION AS REQUIRED. THE GENERAL CONTRACTOR SHALL NOTIFY THE DESIGNER OF ALL CONFLICTS AND DISCREPANCIES THAT EFFECT THE WORK PRIOR TO PROCEEDING.

General Notes

1. Electrical and HVAC to be installed by City of Deer Park.
2. Contractor to co-ordinate with city when appropriate electrical and HVAC milestone are reached .
3. Steel doors and jambs with commercial grade hardware .
4. Paint to be 2 coats of Sherwin Williams latex and exterior two coats of latex enamel.
5. 75 Gal gas water heater.
6. All interior plumbing runs to be PEX.
7. All entry doors to have programmable card readers.
8. Floor and wall mounted commercial bathroom dividers.
9. All cabinets to be oak with raised panel doors and simulatede marble counter tops .

APPLICABLE CODES:

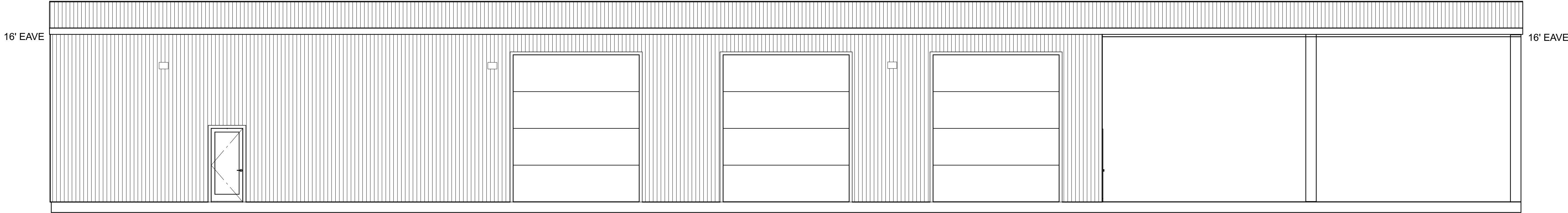
2012 INTERNATIONAL BUILDING CODE
2012 INTERNATIONAL FIRE CODE
2012 INTERNATIONAL MECHANICAL CODE
2012 INTERNATIONAL PLUMBING CODE
2011 NATIONAL ELECTRICAL CODE
2012 INTERNATIONAL ENERGY CONSERVATION CODE

SITE PLAN

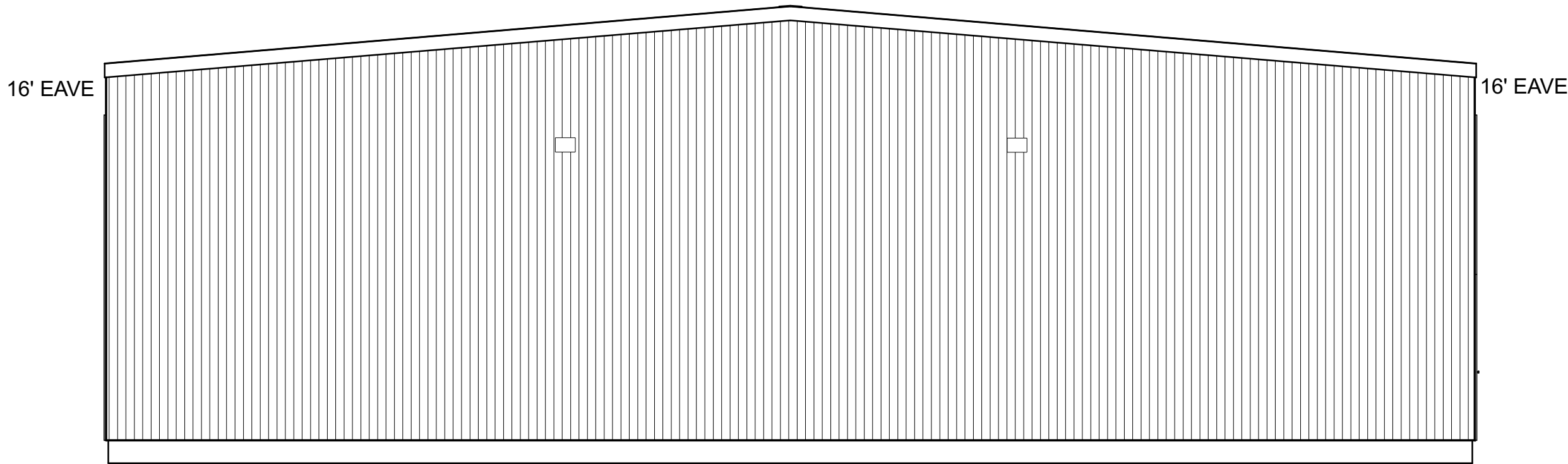
SCALE: 1:50

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	 12605 I.H. 10 EAST BAYTOWN, TEXAS 77550 (281) 385-1200 FAX (281) 385-0920 © 2015 Baytown, Texas <u>DESIGN</u> <u>ENGINEERING</u> <u>INSPECTIONS</u>																																												
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SITE PLAN - MAINTENANCE BUILDING																																													
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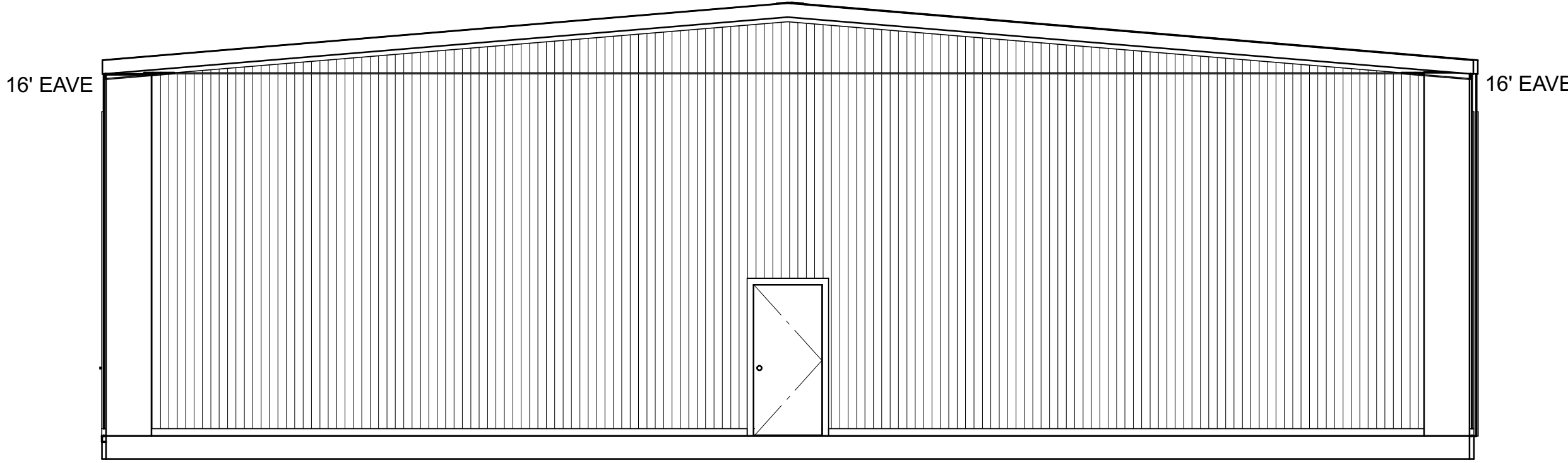
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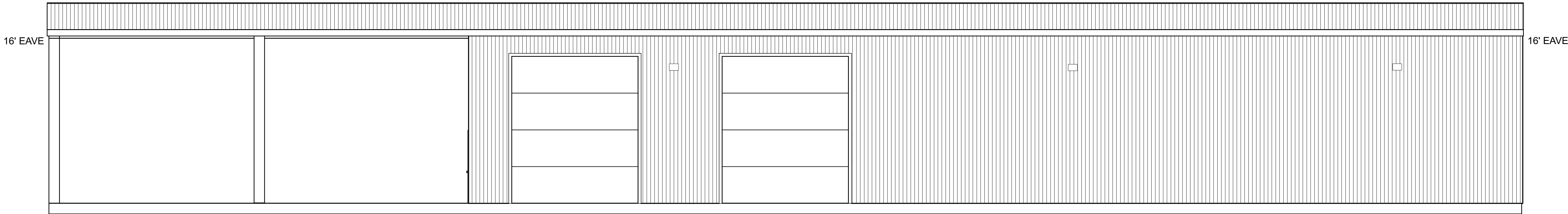
FRONT ELEVATION
SCALE 3/16" = 1'



LEFT ELEVATION
SCALE 3/16" = 1'

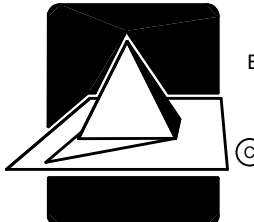


RIGHT ELEVATION
SCALE 3/16" = 1'



REAR ELEVATION
SCALE 3/16" = 1'

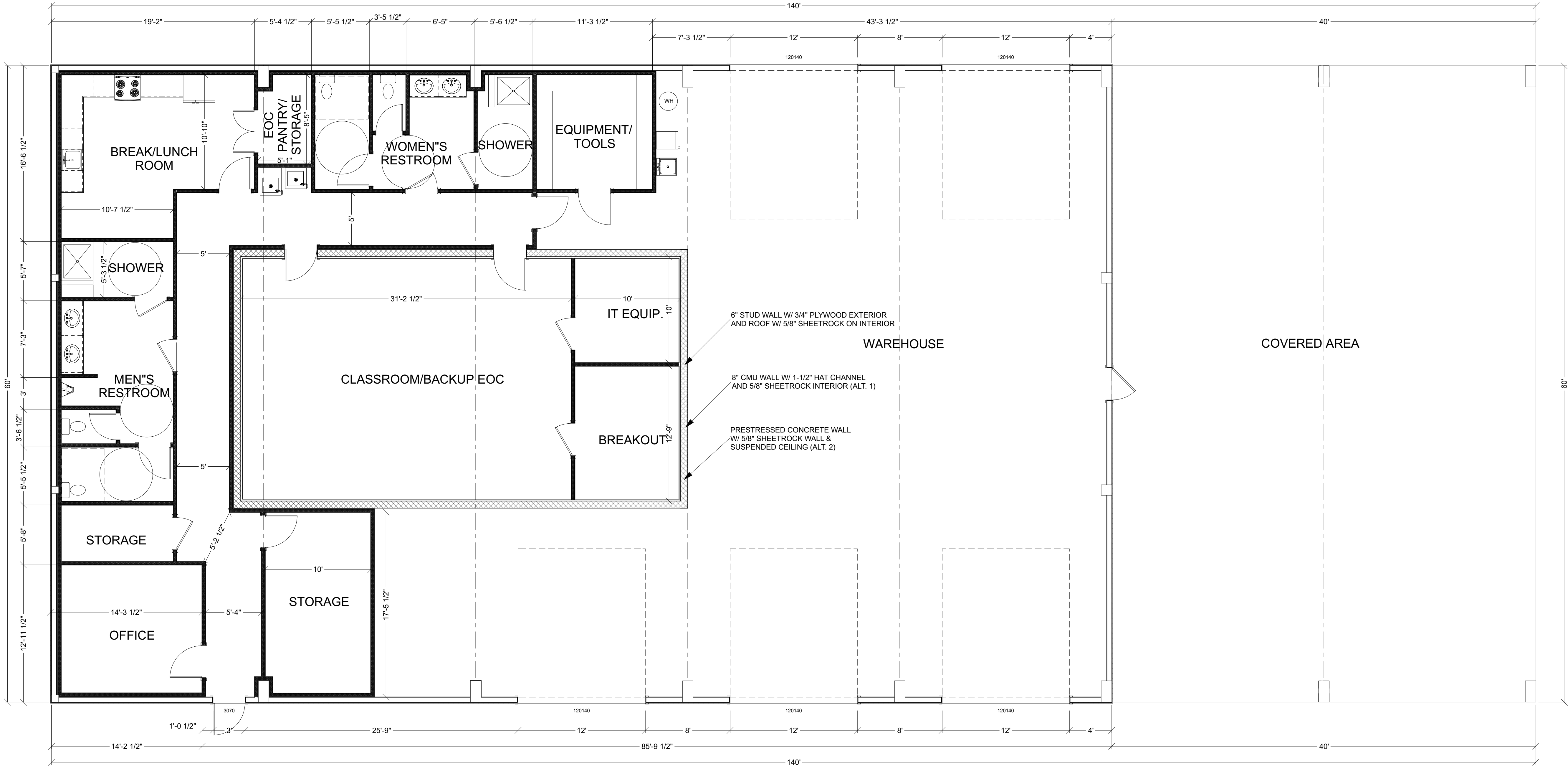
NOTE: METAL BUILDING STRUCTURE DESIGN PROVIDED BY OTHERS
FOLLOW 2012 IBC

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ENGINEER D. SPENCER CARNES, P.E.				FILE																	

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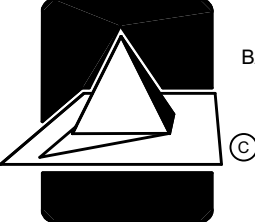
BUILDING ROOM FINISH SCHEDULE (MAINT. BUILDING)

NO.	USE	FLOOR	BASE	CHR RL	WALLS	CEILING	NOTES
100	STORAGE (1)	CONCRETE	WOOD		PAINTED GYP.BD.	GYP.SUM	9' A.F.F.
101	STORAGE (2)	CONCRETE	WOOD		PAINTED GYP.BD.	GYP.SUM	9' A.F.F.
102	MENS RESTROOM	TILE	WOOD		PAINTED GYP.BD.	GYP.SUM	9' A.F.F.
103	BREAK/LUNCH	TILE	WOOD		PAINTED GYP.BD.	GYP.SUM	9' A.F.F.
104	WOMENS RESTROOM	TILE	WOOD		PAINTED GYP.BD.	GYP.SUM	9' A.F.F.
105	EQUIP/TOOL	CONCRETE	WOOD		PAINTED GYP.BD.	GYP.SUM	9' A.F.F.
106	EOC	CONCRETE	WOOD		PAINTED GYP.BD.	SUSPENDED	9' A.F.F.
107	WAREHOUSE	CONCRETE				OPEN	9' A.F.F.

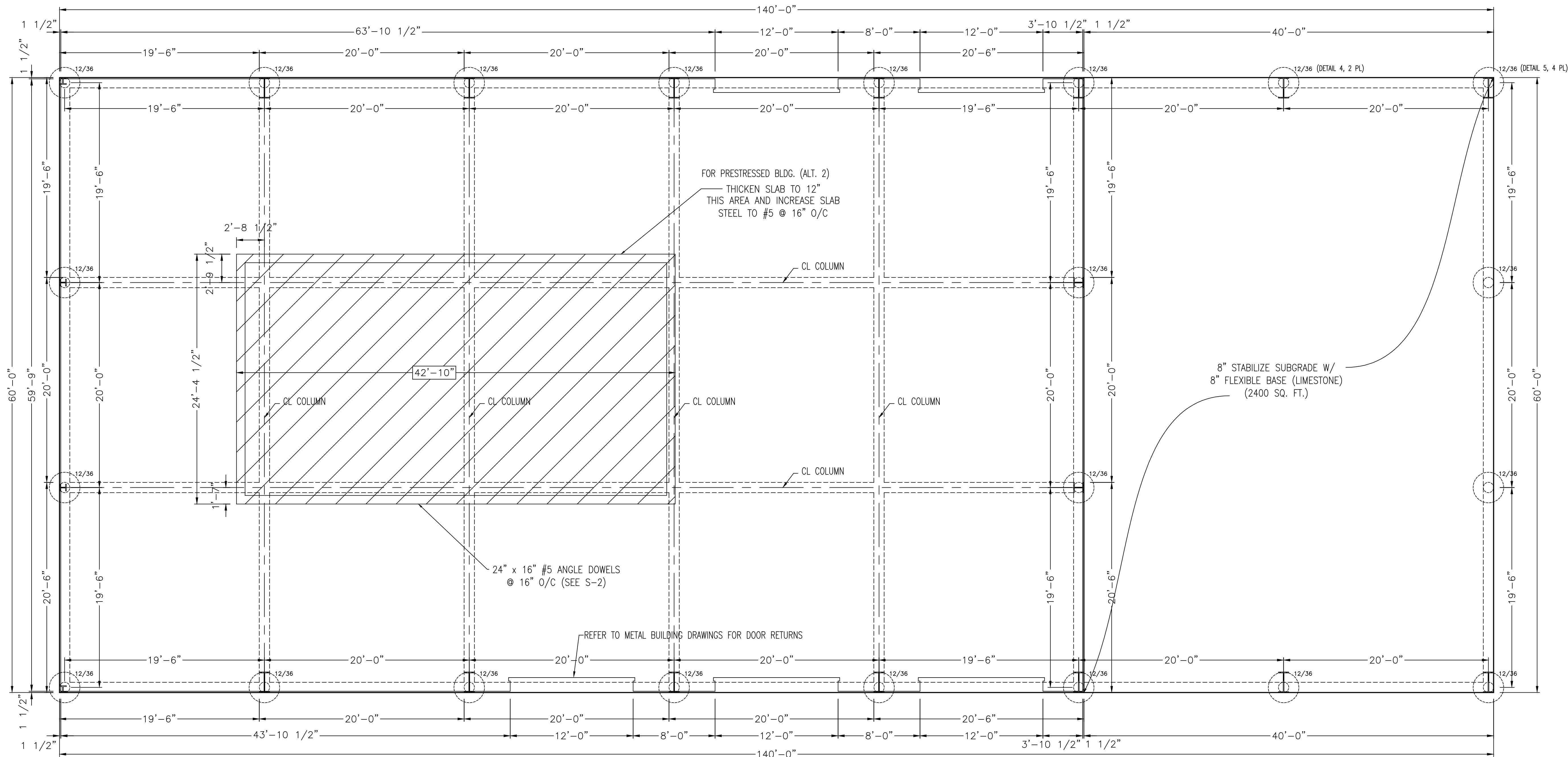


WATER & SEWER
MAINTENANCE BLDG. AREA
8400 sq ft

FLOOR PLAN
SCALE 3/16" = 1'

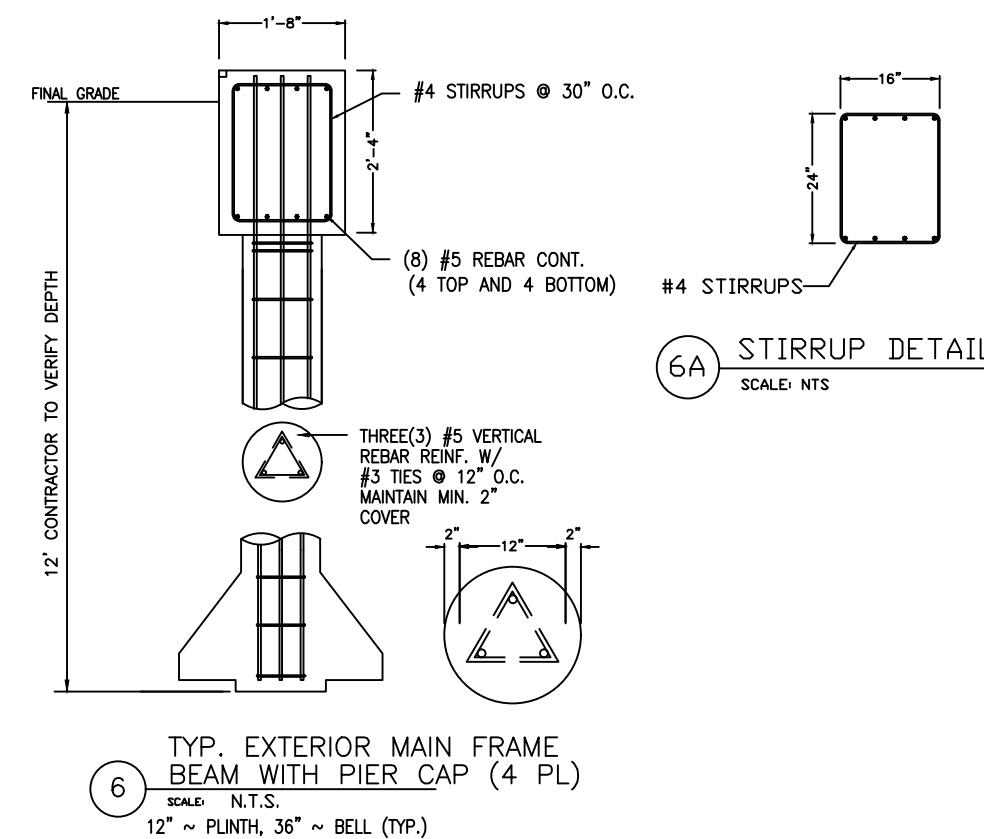
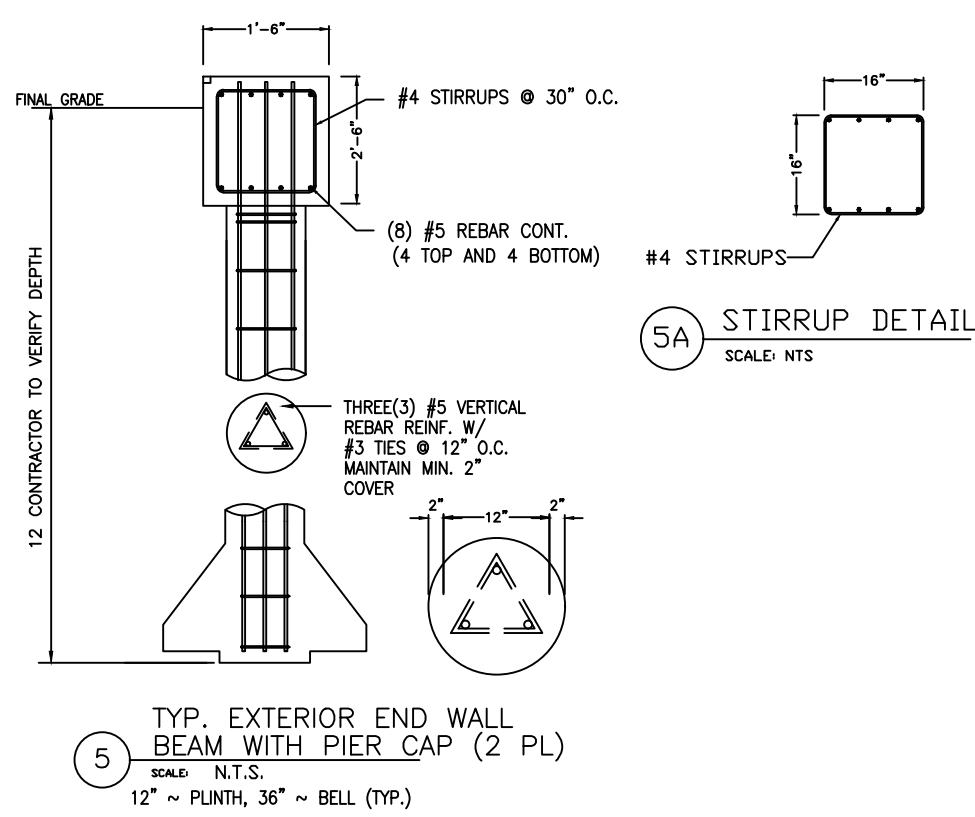
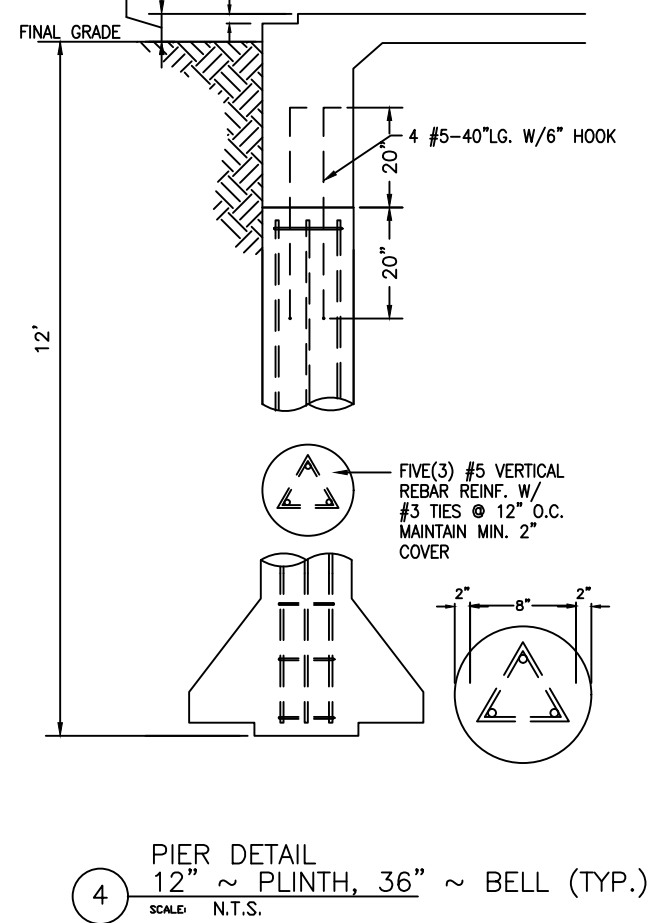
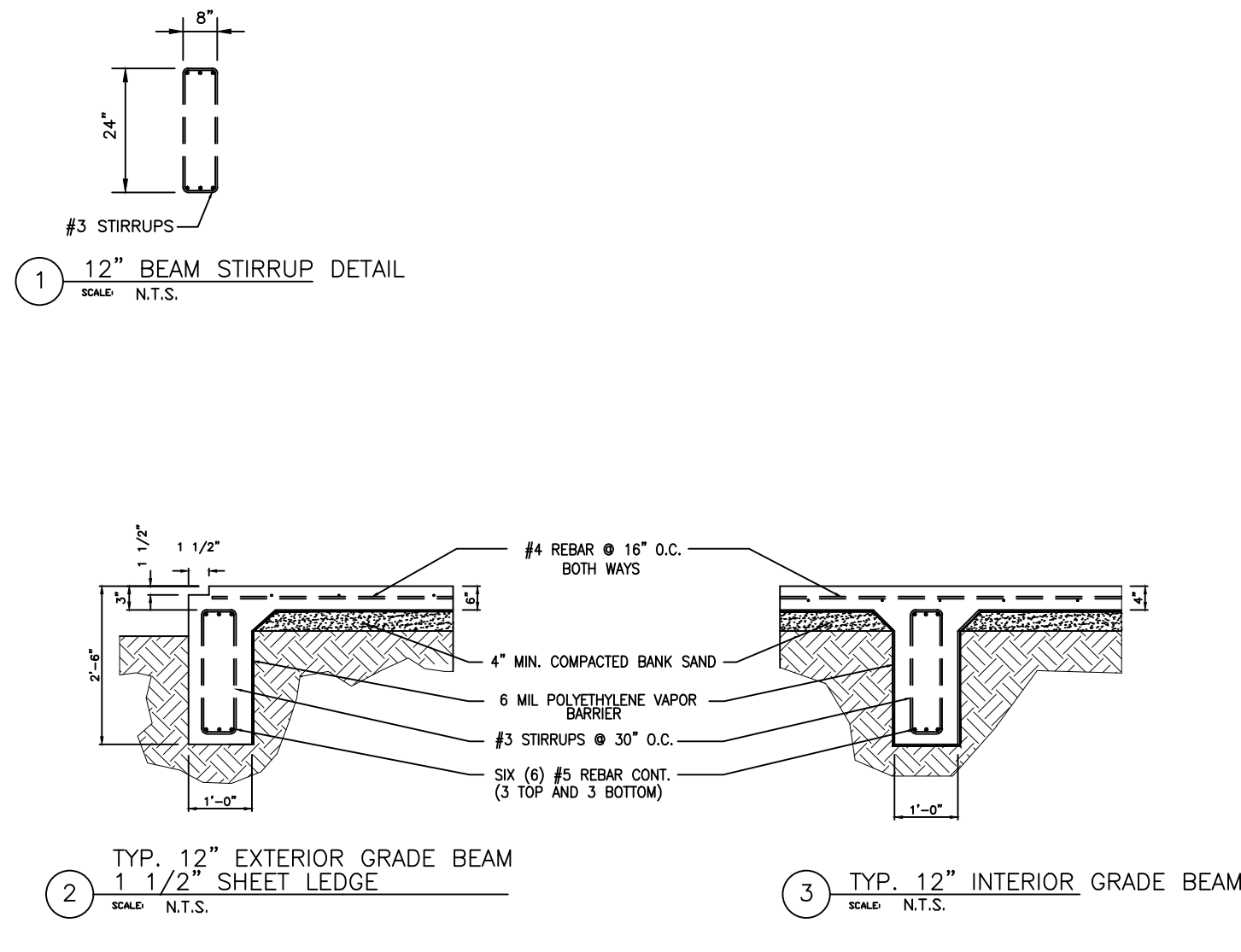
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	WATER & SEWER MAINT. BLDG. FLOOR PLAN			DESIGNED SC	SCALE AS NOTED	SHEET NO. A-2
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FOUNDATION PLAN - MAINTENANCE BUILDING

SCALE: 3/16" = 1'



NOTE:
FOUNDATION DESIGN TO BE VERIFIED WITH METAL
BUILDING DRAWINGS PRIOR TO CONSTRUCTION.

TYPICAL CONCRETE MIX	EUCALIS	HARDENING, SEALING AND OUTDOORPROOFING	COMPARISON TO EUCALIS
CONCRETE	THICK COVERAGE APPLY 1/2" ON	FINISH	FINISH
WATER	FINISH CONCRETE	FINISH	FINISH
INTER	NEWLY CURED	2000/4.8	4000/9.8
FLINE AGGREGATE	2000/4.8	2000/4.8	4000/9.8
CONCRETE	FLOORS TO BE FIELDED	2000/4.8	500/12.3
	OR TERRAZZO	2000/4.8	500/12.3

SOIL REPORT, AND A TEST RESULT

LAB. JOB NO. : #1655501

IN AREAS OF HIGH PILE, SOILS SOME FOUNDATION MOVEMENT IS POSSIBLE. SUCH MOVEMENT DOES NOT CONSTITUTE FOUNDATION FAILURE. OWNERS MUST IMPLEMENT A MAINTENANCE PROGRAM TO PRESERVE THE INTEGRITY OF THE FOUNDATION.

THIS FOUNDATION IS VALID FOR CITY OF OREGON, DEER PARK, TOWN OF DEER PARK. THIS FOUNDATION IS NOT APPLICABLE AT ANY OTHER LOCATION. DRAWING MUST BE RED OR BLUE SEAL TO BE VALID. PHOTOGRAPHY ARE NOT BE ACCEPTED.

ALTERATIONS, ADDITIONS, & ADDITIONS IN FOUNDATIONS MUST BE APPROVED BY WRITING BY THE ENGINEER OR RECORDS.

1. GENERAL NOTES

THESE NOTES ARE A PART OF ALL DRAWINGS THAT REFER TO THEM. IN CASE OF CONFLICT BETWEEN THE DRAWINGS, THESE NOTES AND THE REFERENCED CODES, THE ORDER OF AUTHORITY SHALL BE; FIRST, THE DRAWINGS: SECOND, THESE NOTES: AND THIRD, THE CODES.

2. CODES:

SITE PREPARATION, FORMING, STEEL PLACEMENT, CONCRETE PLACEMENT, AND FINISHING SHALL BE IN ACCORDANCE WITH AND CONFORM TO ACI 318-02 CODE REQUIREMENTS, LOCAL CODES AND ORDINANCES. THE TEXAS DEPARTMENT OF INSURANCE BUILDING CODE FOR WINDSTORM RESISTANT CONSTRUCTION GUIDELINES WHERE APPLICABLE.

3. MATERIALS:

4000 PSI/28 DAY CONCRETE

ANCHOR BOLTS SEE METAL BUILDING DRAWINGS.
REINFORCING BARS SHALL BE DEFORMED BARS OF
MIN. GR 40 STEEL FOR #4 AND SMALLER AND GR 60
STEEL FOR #5 AND LARGER CONFORMING TO ASTM A
615.

FLOOR JOIST TO BE #2 TREATED SYP FLOOR DECKING
TO BE MIN 1 1/8" T&G SYP OR STURDI DECK. PONY
WALLS TO BE #2 TREATED SYP CONFORMING TO
ASTM A615.

BEAM NOTES:

ALL ENGINEERED BEAMS TO BE ANTHONY POWER
BEAMS 3000 Fb - 2.1E - 290 Fv FOR PER CONNECTIONS
USE 2 BOLTS. SPACE TO ACCOMMODATE
STRUCTURAL BEAMS.

4. SITE PREPARATION

CONTRACTORS SHOULD FAMILIARIZE THEMSELVES WITH THE SOIL REPORT FOR THIS PROJECT AND IMPLEMENT RECOMMENDED SITE PREPARATION. SEE FOUNDATION PLAN FOR SOIL REPORT NO. AND DATA FOR THIS PROJECT.

STRIP AND SCARIFY THE SURFACE SOIL TO A MIN. DEPTH OF SIX INCHES AND REMOVE ALL SURFACE ORGANICS, TRASH, DEBRIS, AND OTHER DELETERIOUS MATERIALS.

TREE REMOVAL:
CONTRACTOR MUST REMOVE STUMPS, GRINDINGS
AND ALL DEBRIS. REPLACE SOIL AND COMPACT.

BACKFILL SHALL BE A MIN/ OF 6 INCHES OF
COMPACTED BANK SAND OR SAND/SILTY CLAY
WITH A MIN. LIQUID LIMIT OF 26 AND A PI BETWEEN
10 AND 20 UNDER SLAB. * COMPACT ALL FILL
TO 95% OF STANDARD PROCTER DENSITY.

FILL IS TO BE SELECT STRUCTURAL FILL (MAX PI 20)
PLACED IN 8" LIFTS. * COMPACTION IS TO BE
ACCOMPLISHED WITH PROPER EQUIPMENT. TESTING
IS RESPONSIBILITY OF CONTRACTOR/ OWNER.

5. CONCRETE DETAILS

SLAB REINFORCING TO BE #4 BAR 16" O.C. LAPPED 3 DIAMETERS, TIED AND PLACED ON 2" CHAIRS.

BEAM STEEL TO BE CONTINUOUS #5 BAR LAPPED 30 DIAMETERS AND TIED. ALL CORNERS AND DEAD END INTERSECTIONS TO HAVE TIED 2'X2' CORNER BARS IN EXTERIOR FACE STEEL TOP & BOTTOM (OR BEAM STEEL CONTINUED AROUND CORNER 2' AND TIED.)

CONCRETE COVER TO BE IN ACCORDANCE WITH AC
- 318-02 7.7.1.

ALL EXTERIOR BEAMS MUST BE A MIN. OF 12 IN.
INTO THE UNDISTURBED SOIL

CONCRETE MIX SHOULD BE VERIFIED. SLUMP TO BE 5 INCHES. WATER ADDED AT SITE SHOULD BE SUPERVISED AND RECORDED. SEE MIX CHART.

6. SLAB NOTE:

4" AND 6" CONCRETE SLAB REINFORCED W/ #4 REBARS @ 16" O.C. EA. WAY ON STANDARD SUPPORT CHAIRS WITH FLAT BOTTOM SUPPORT BASES ADEQUATE IN HEIGHT TO SUPPORT STEEL IN THE CENTER OF THE SLAB OVER 6 MIL VAPOR BARRIER ON COMPACTED BANK SAND CUSHION OVER PREPARED SUBGRADE.

7. MISCELLANEOUS

OWNER SHOULD IMPLEMENT A FOUNDATION MAINT PROGRAM TO AID IN REDUCING FOUNDATION REACTIONS TO EXPANSIVE SOILS.

CONTRACTORS OR PROVIDE POSITIVE DRAINAGE BY
SLOPING AND DIRECTING THE RUNOFF AWAY FROM
THE FOUNDATION AND ESTABLISH GRADE. MIN.
SLOPE TO BE 5% (6 INCHES IN 10 FEET.)

PLUMBING BY OTHERS.

ANCHORAGE AGAINST UPLIFT SHALL BE PROVIDED BY THE METAL BUILDING MWFRS.

DESIGN IS BASED ON LIGHT COMMERCIAL SERVICE LOADS AND STABLE SOIL MOISTURE CONDITIONS. COMPACTION & INTEGRITY OF FILL AND FINAL DRAINAGE AROUND THE PERIMETER OF THE BUILDING IS THE RESPONSIBILITY IF THE OWNER/CONTRACTOR. TESTING SHOULD BE CONDUCTED BY A CERTIFIED LABORATORY.

8. INSPECTIONS:

AT A MINIMUM, INSPECTIONS SHOULD VERIFY ALL FILL CONDITIONS HAVE BEEN SATISFIED AND PROPERLY TESTED IN ACCORDANCE WITH PLANS AND SPECIFICATIONS. PIERS ARE OBSERVED FOR PROPER PLACEMENT, DEPTH, CONCRETE, AND REINFORCING; OBSERVATION OF ALL FOUNDATION ELEMENTS IMMEDIATELY BEFORE CONCRETE PLACEMENT; STRESSING OBSERVATION AND ELONGATION COMPARISON TO THEORETICAL. INSPECTION AND TESTING IS THE RESPONSIBILITY OF THE OWNER/CONTRACTOR. A COMPLIANCE LETTER SHOULD BE ISSUED TO VERIFY SUBSTANTIAL CONFORMANCE WITH PLANS INCLUDING ALTERATIONS AND MODIFICATIONS.

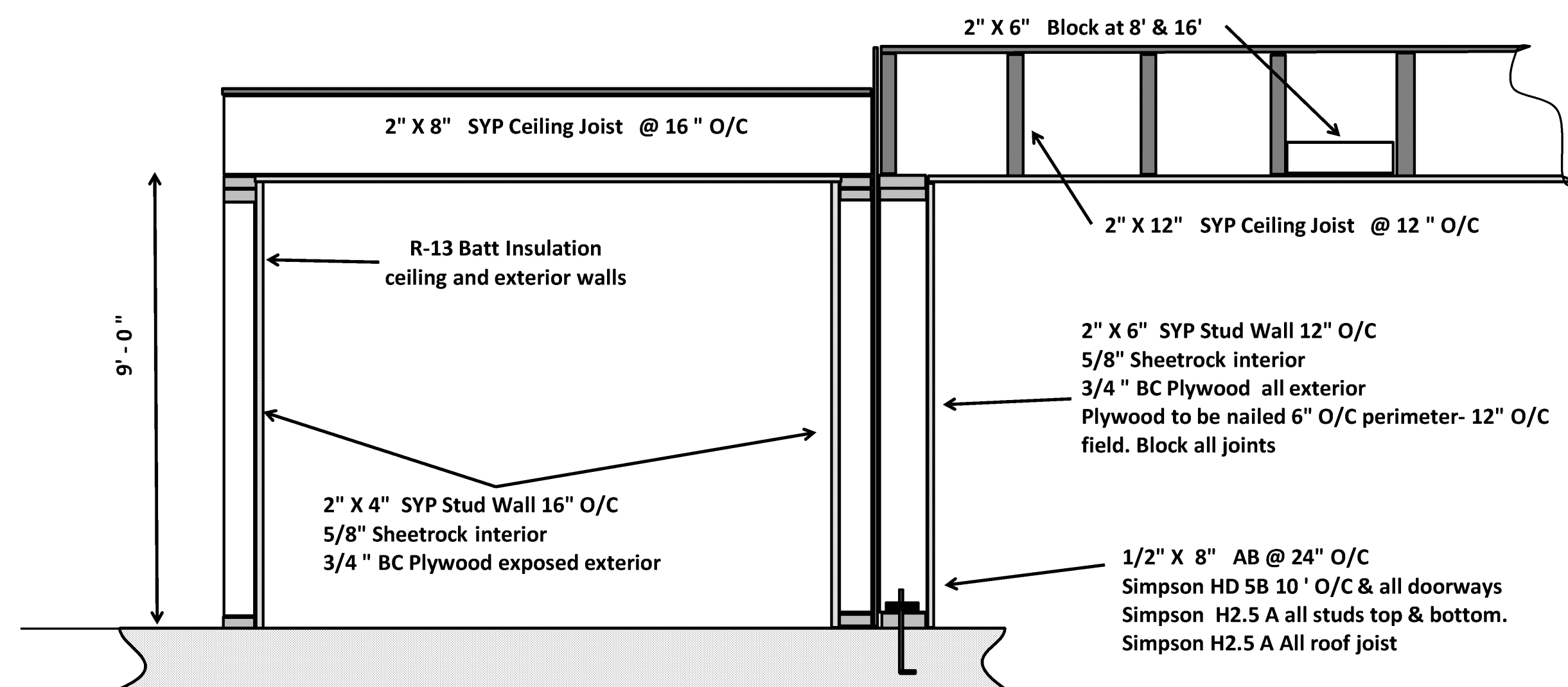
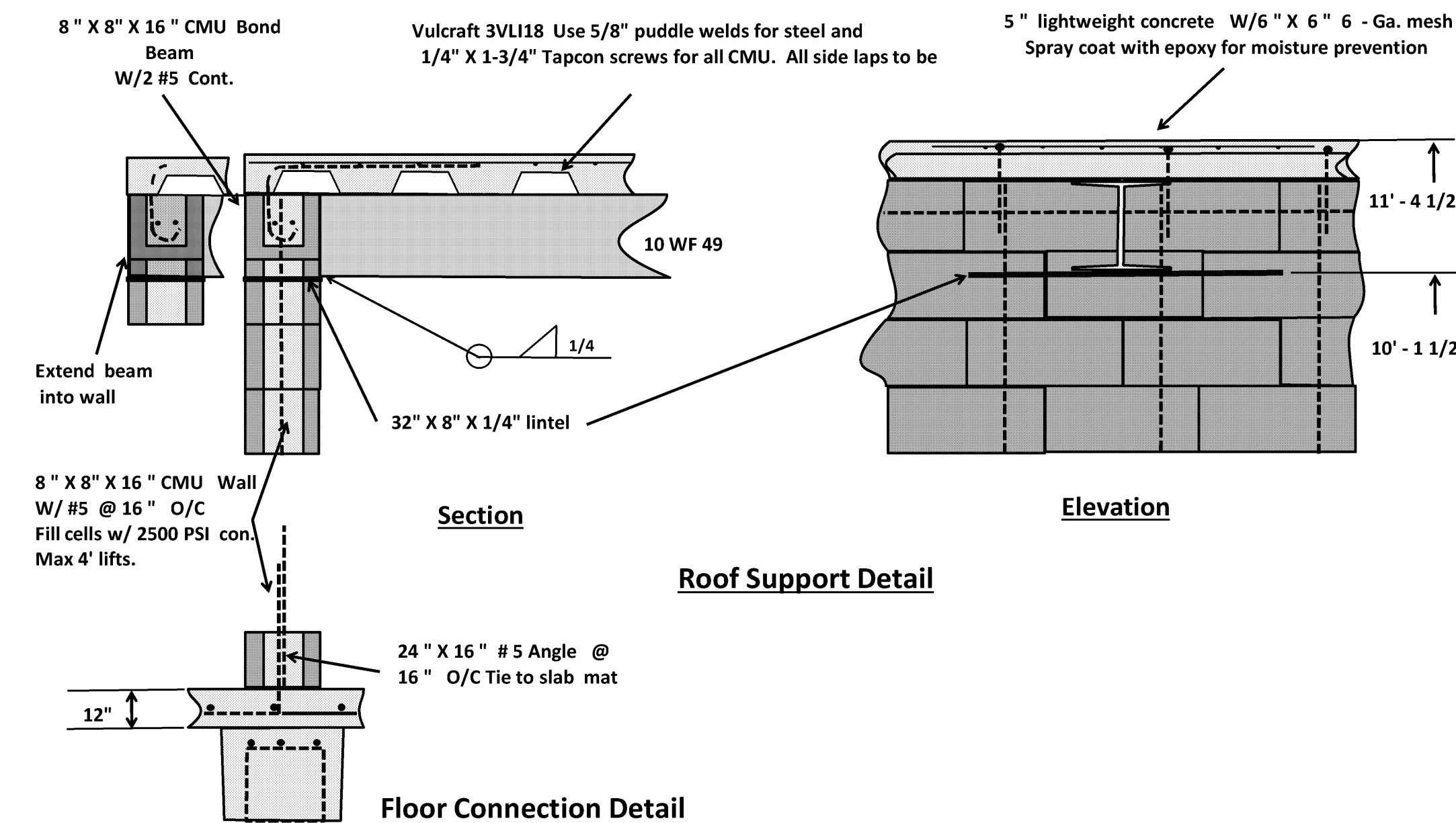
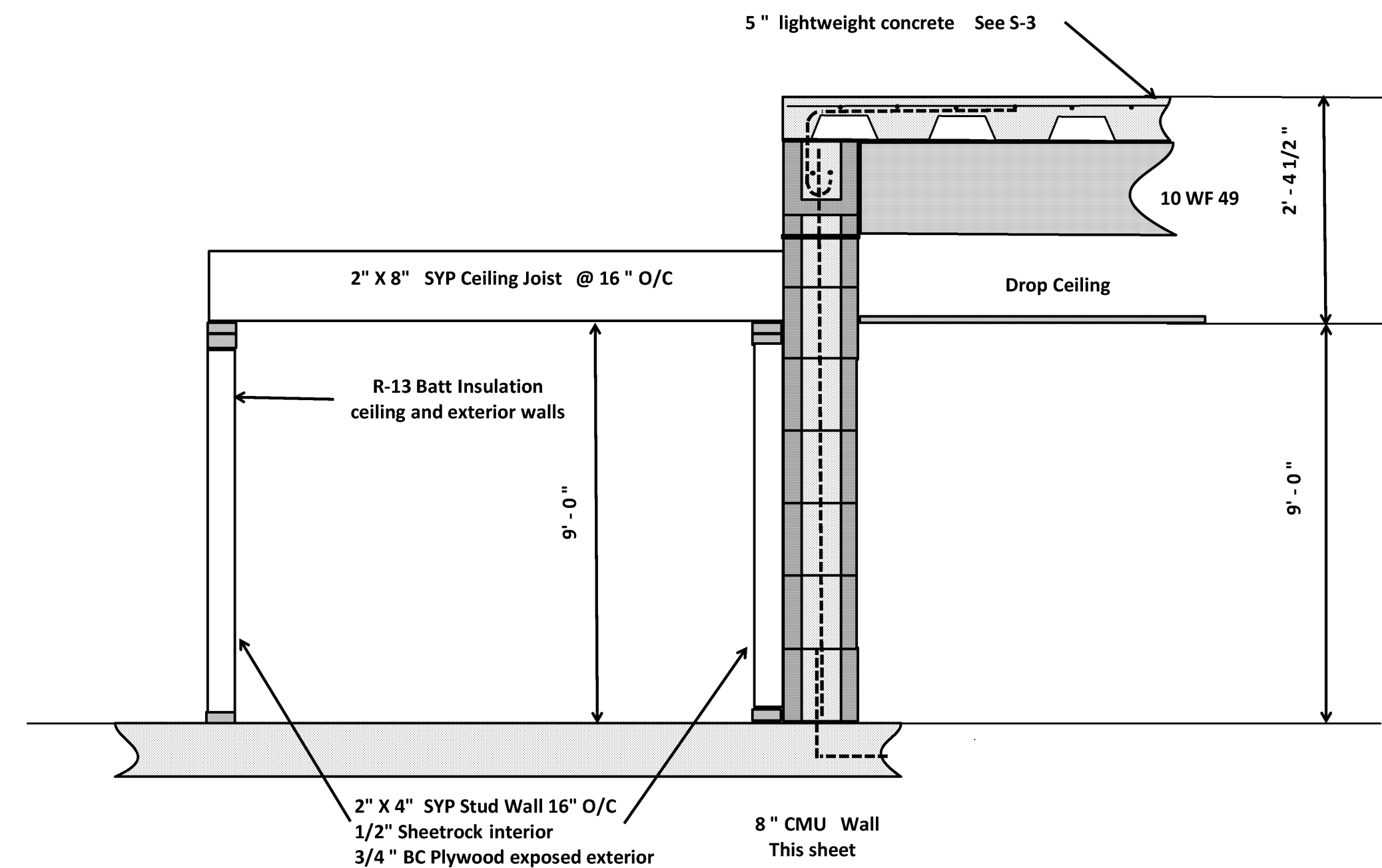
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FRAMING SPECIFICATIONS:

STRUCTURAL FRAMING SHALL BE ERECTED IN ACCORDANCE WITH IBC UNO.

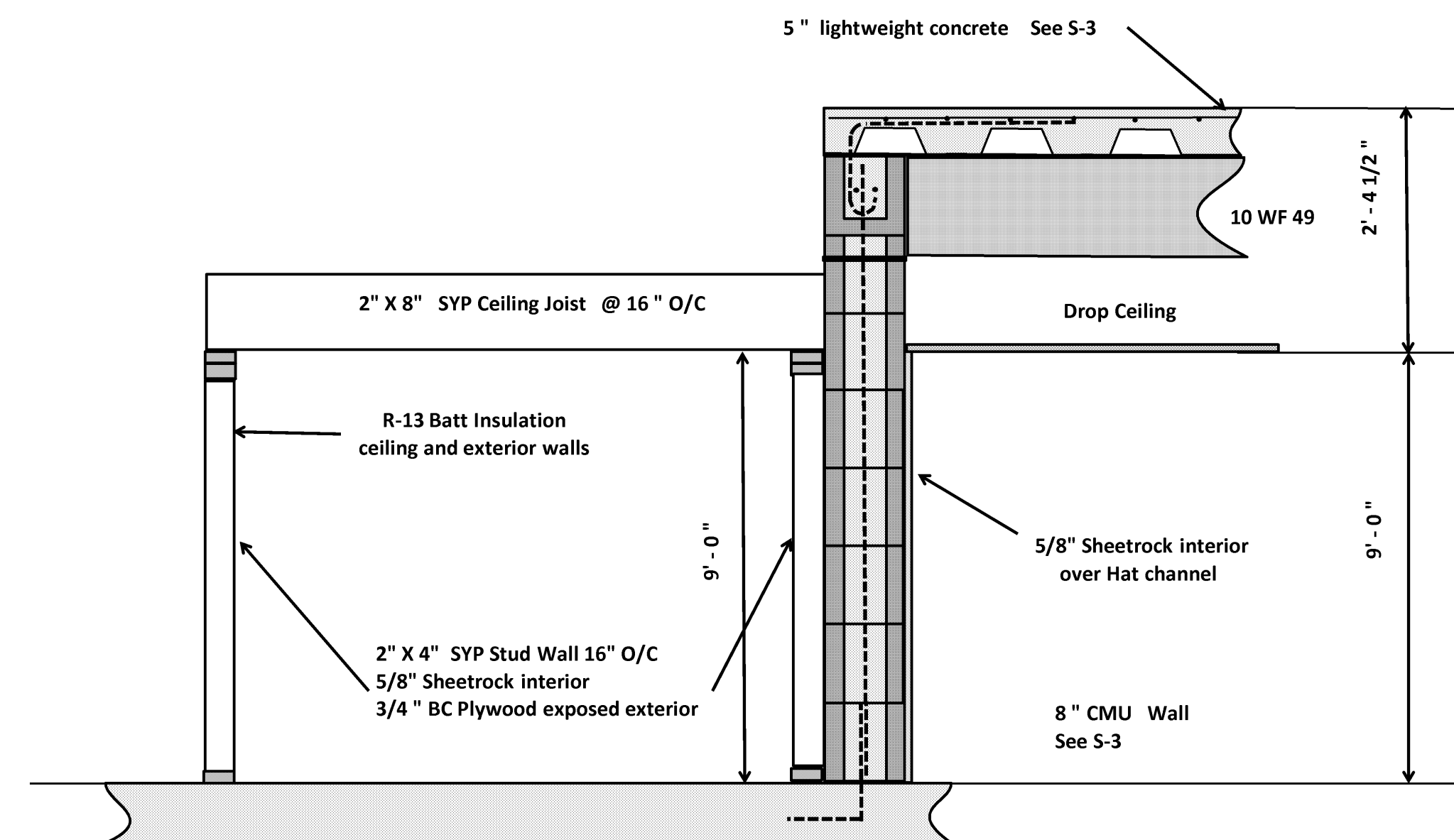
1. FRAMING MATERIAL #2 S.Y.P. K.D. U.N.O.
2. EXTERIOR STUD WALLS 2x4's @ 16" O.C. U.N.O. (2X6 AS NOTED)
3. INTERIOR STUD WALLS 2x4's @ 16" O.C. U.N.O.
4. HEADERS @ EXTERIOR OPENINGS
MAX SPAN 4'-6" (2) 2x6's
6'-0" (2) 2x8's
7'-6" (2) 2x10's
9'-0" (2) 2x12's
5. HEADERS @ INTERIOR OPENINGS (2) 2x6's
6. FLOOR JOISTS 2x @ 16" O.C. SECTION TO BE IN ACCORDANCE WITH AMERICAN
7. CEILING JOISTS 2x @ 16" O.C. FOREST PRODUCTS ASSOCIATION, 2000 INC.
8. ROOF RIBBERS 2x @ 16" O.C. & NATIONAL DESIGN SPECIFICATIONS SPAN TABLES
9. HURRICANE CLIPS & METAL STRAPPING REQUIREMENTS TO BE IN ACCORDANCE
WITH THESE DRAWINGS, NOTES, AND MFG. SPECIFICATIONS.



OFFICES

EOC

Wood Frame Detail



OFFICES

EOC

Concrete Block Detail

PROJECT & ALTERNATES DESCRIPTION

1. 60' X 140' X 16' Eave PEMB erected on site with 2' X 6' Stud wall EOC erected on interior and surrounded by offices on two sides.
2. 60' X 140' X 16' Eave PEMB erected on site with concrete block wall erected on interior and surrounded by offices on two sides.
(Alternate 1)
3. 60' X 140' X 16' Eave PEMB erected on site with Prestressed Concrete Building installed on PEMB foundation and surrounded by offices on two sides.
(Alternate 2)

FIRM No. **F-003737**

ENGINEER: **D. SPENCER CARNES, P.E.**

CARNES ENGINEERING, INC.

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DESIGN
ENGINEERING
INSPECTIONS

INFO@CARNESENG.NET
 WWW.CARNESENGINEERING.COM

CITY OF DEER PARK

DEER PARK, TEXAS
HARRIS COUNTY

REV	DATE	BY	DESCRIPTION

DESIGNED	SC	SCALE	AS NOTED
DRAWN	SR	DATE	04/11/2016
CHECKED			
FILE			

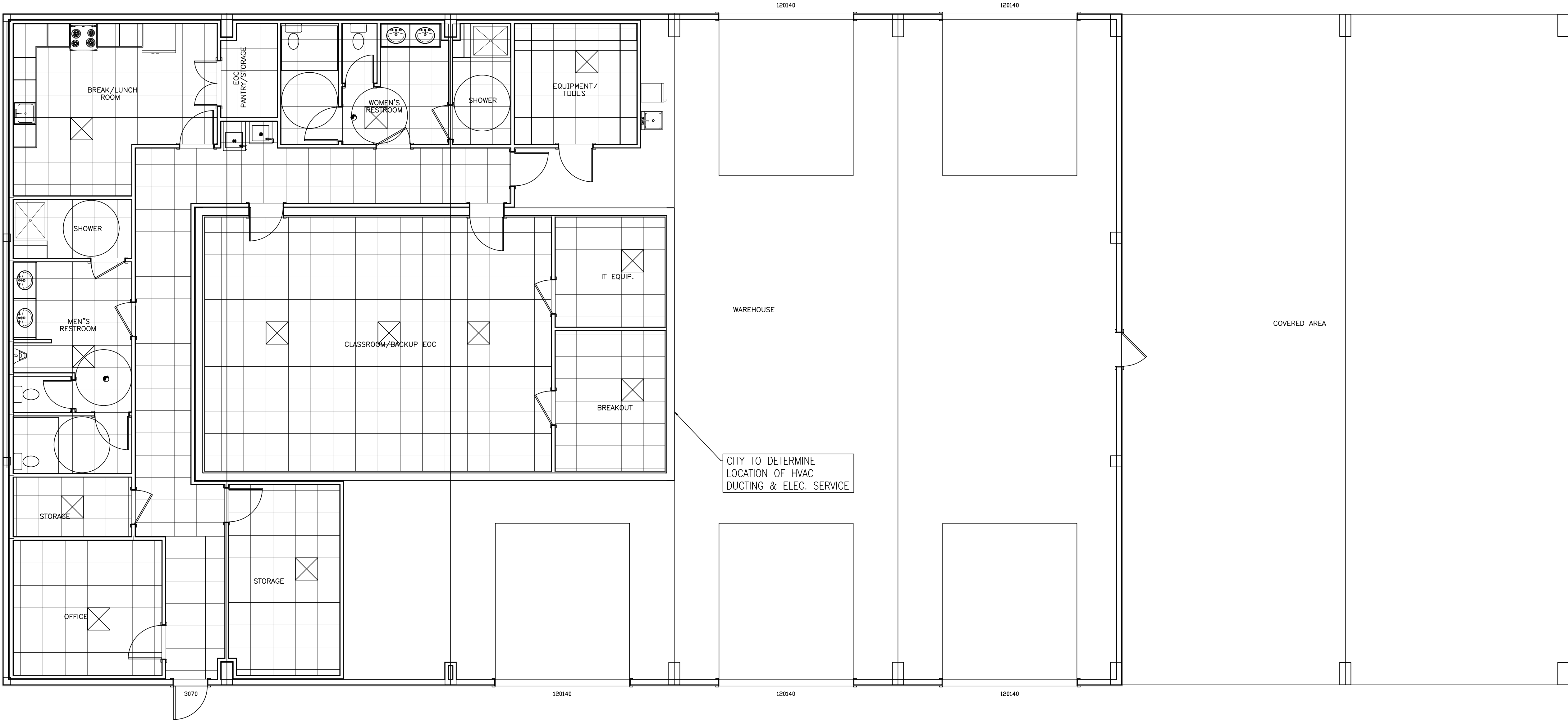
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S-2

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EQUIPMENT SCHEDULE													
MARK	MANUFACTURER	MODEL	VOLTAGE	MOCP	RATED AIR FLOW	NOMINAL COOLING CAPACITY	AHRI RATING COOLING CAPACITY	HEAT	REFRIGERANT	HEAT CAPACITY	EER	OUTSIDE AIR CFM EACH UNIT	NOTE
AHU 1,2,3	CARRIER OR EQUAL		208/60/3	40	2000	5 TONS	60,000	ELECTRIC	410-A	12.5KW			
CU 1,2,3	CARRIER OR EQUAL		208/60/3	30				ELECTRIC	410-A				

- HVAC NOTES
- MECHANICAL CODE: 2009 INTERNATIONAL MECHANICAL CODE.
 - ENERGY CODE: 2009 INTERNATIONAL ENERGY CONSERVATION CODE.
 - LICENSED HVAC CONTRACTOR SHOULD COMPLETE, INSPECT, AND/OR SUPERVISE ALL MECHANICAL WORK IN ACCORDANCE WITH ALL APPLICABLE CODES AND REQUIREMENTS.
 - ENGINEERS SEAL VERIFIES THAT MECHANICAL CODE REQUIREMENTS MUST BE FOLLOWED AND DOES NOT INDICATE DESIGN.
 - PROVIDE VOLUME DAMPERS AT ALL BRANCH DUCTS.
 - THERMOSTATS TO BE 7 DAY PROGRAMMABLE TYPE WITH MULTISTAGE COOLING AND HEATING CAPACITY MUST BE CAPABLE OF RETAINING PROGRAMMING DURING POWER OUTAGES.
 - MAIN CONDENSATE DRAIN LINES TO BE INSULATED AND ROUTED TO LAVATORY IN MEN'S AND WOMEN'S RESTROOMS. AIR HANDLERS TO HAVE 2" DEEP SHEET METAL EMERGENCY DRAIN PANS UNDERNEATH WITH FLOAT SAFETY DEVICES.
 - METAL OUTSIDE, DUCT BOARD INSIDE. ALL DIAMETERS SHOWN ARE INTERNAL PIPE SIZES.
 - INSULATION: R-8 ENVELOPE, R-8 EXTERIOR.
 - UNIT LOCATION ON DRAWING IS FOR REFERENCE ONLY. REFER TO STRUCTURAL DRAWINGS.
 - EXHAUST FANS TO BE 110 CFM EACH AND VENTED OUTSIDE PER PLANS.



LEGEND

2X2 LAY-IN SUPPLY GRILLE

2X2 LAY-IN RETURN GRILLE

EXHAUST FAN - 140 CFM U.N.O.

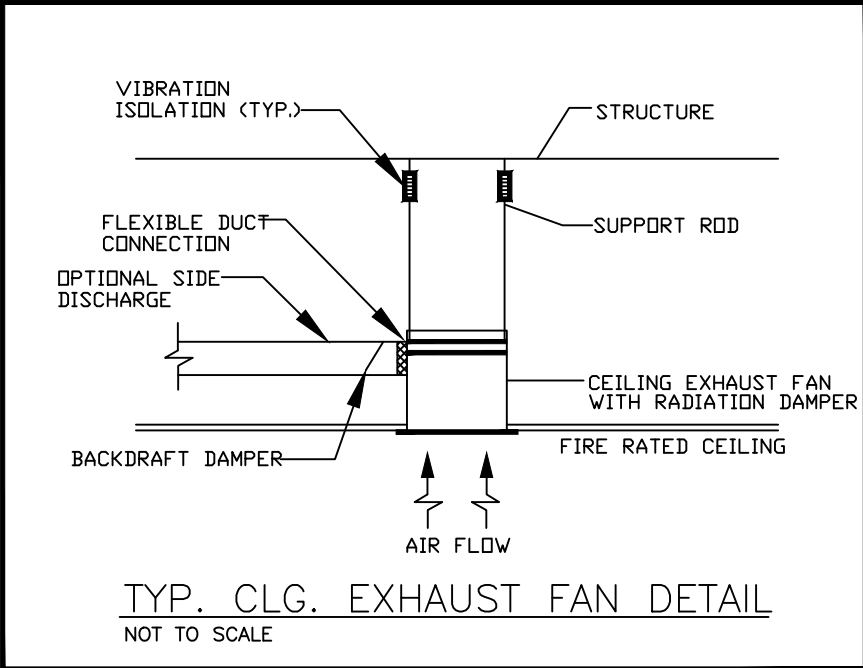
MOTORIZED FRESH AIR DAMPER

THERMOSTAT

RETURN AIR SMOKE DETECTOR

INFRARED HEATER

LINE VOLTAGE THERMOSTAT WITH DISCONNECT SWITCH



*HVAC BY CITY

MECHANICAL PLAN - MAINTENANCE
BUILDING
SCALE: 3/16" = 1'

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ENGINEER:

D. SPENCER CARNES, P.E.

CITY OF DEER PARK
DEER PARK, TEXAS
HARRIS COUNTY

MECHANICAL PLAN - MAINTENANCE
BUILDING

DESIGNED

SC

SCALE

AS NOTED

DRAWN

SR

DATE

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CHECKED

FILE

SHEET NO.

M-1

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ELECTRICAL:

FOLLOW 2011 NATIONAL ELECTRIC CODE (NEC) FOR ALL WIRING, CONNECTIONS AND SWITCH GEAR. MASTER ELECTRICIAN SHOULD COMPLETE, INSPECT, AND/OR SUPERVISE ALL ELECTRICAL WORK.

GENERAL ELECTRICAL NOTES:

- ALL ELECTRICAL WORK SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE (LATEST EDITION) AND ALL APPLICABLE STATE AND LOCAL CODES.
- COORDINATE ELECTRICAL PLANS WITH SITE, BUILDING, STRUCTURAL, MECHANICAL, PLUMBING AND ALL APPLICABLE PLANS & SUPPLEMENTS TO THIS PROJECT.
- ELECTRICAL CONTRACTOR SHALL FURNISH ALL ELECTRICAL WIRING, CONDUIT, SWITCHES, PANELS, RECEPTACLES, FIXTURES, ETC. AND LEAVE READY FOR OPERATION.
- ALL ELECTRICAL MATERIAL MUST BE "UL" LISTED AND LABELED. MINIMUM WIRE SIZE SHALL BE #12 AWG UNLESS OTHERWISE STATED. MINIMUM CONDUIT SIZE: $\phi\frac{1}{2}$ " EMT CONDUIT WITH GROUNDING CONDUCTOR.
- ALL ELECTRICAL FIXTURES & EQUIPMENT SHALL BE GROUNDED PER NEC.
- ALL WALL SWITCHES SHALL BE MOUNTED 42" ABOVE FINISH FLOOR AND ALL RECEPTACLES SHALL BE MOUNTED 15" ABOVE FINISH FLOOR, UNLESS NOTED OTHERWISE.
- MAXIMUM LOAD FOR ALL CIRCUITS SHALL BE 80%.
- THE USE OF "BX" WHERE PERMITTED BY LOCAL CODES, WILL BE ALLOWED FOR FINAL CONNECTION FROM THE LAST J.B. TO THE LIGHTING FIXTURE, "ROMEX" IS NOT ACCEPTABLE.
- CONDUCTOR INSULATION SHALL BE "THHN" TYPE, MOISTURE AND HEAT RESISTANT THERMO-PLASTIC, 75°C. TEMPERATURE RATED, EXCEPT WHERE NOTED. (CONDUCTORS SHALL BE COPPER UNLESS NOTED)
- BRANCH BREAKERS OF 2P AND 3P CONFIGURATION SHALL HAVE A COMMON TRIP.
- ALL EMERGENCY LIGHTING SHALL BE CONNECTED TO A SINGLE CIRCUIT BREAKER WITH A LOCK-ON DEVICE.
- ENGINEERS SEAL VERIFIES THAT ELECTRICAL AND MECHANICAL CODE REQUIREMENTS MUST BE FOLLOWED AND DOES NOT INDICATE DESIGN.

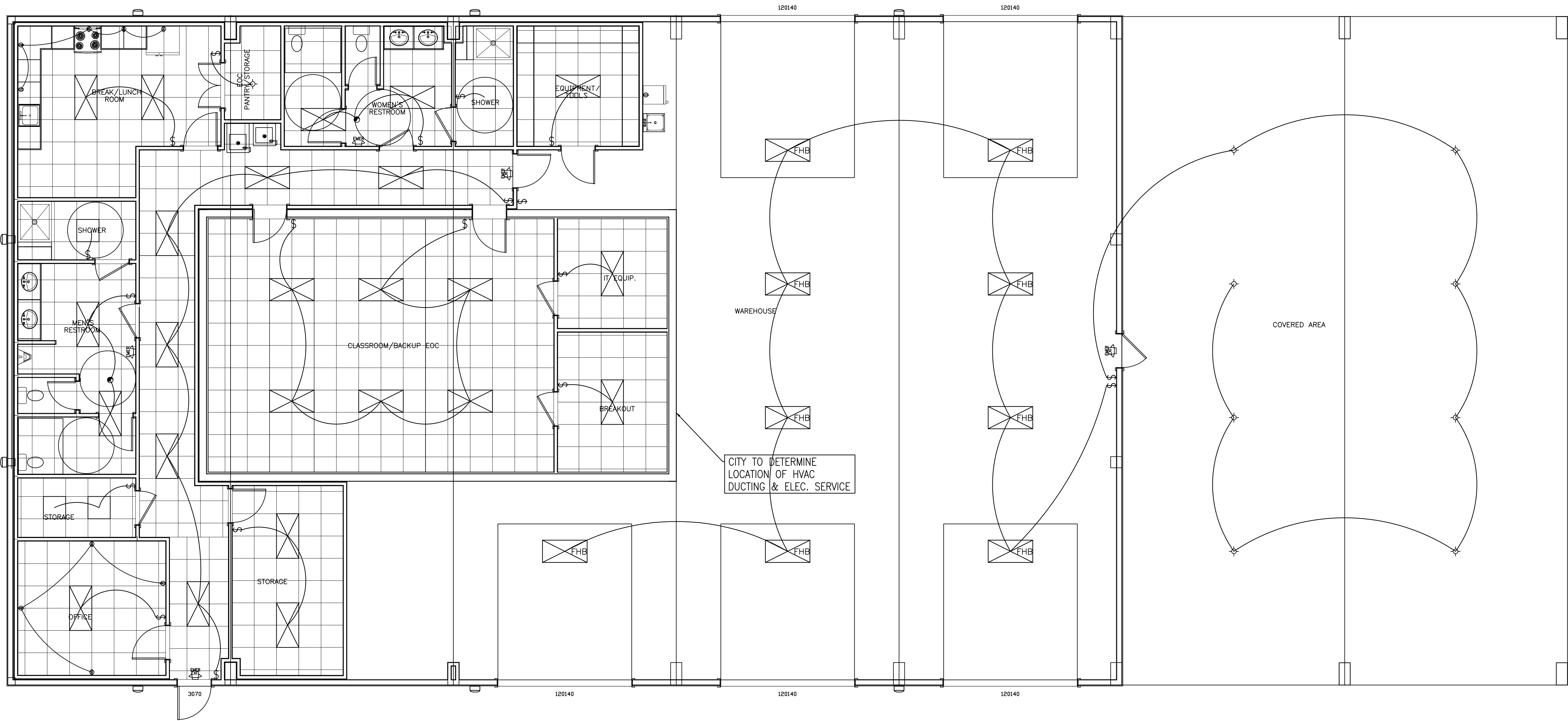
ELECTRICAL SERVICE REQUIREMENTS TO BE DETERMINED BY THE CONTRACTOR.

NOTE:
ALL ELECTRICAL OUTLETS AND FIXTURE
PLACEMENT TO BE VERIFIED WITH OWNER

ELECTRICAL LEGEND

- 208V 250W HIGH BAY
- 208V 15W 8' T-8 2 LIGHT FLUORESCENT LIGHT FIXTURES
- 2'x4' FLUORESCENT HIGH BAY FIXTURE WITH 6-34WATT BULBS 208V
- 2'x4' SURFACE FLUORESCENT FIXTURE WITH 6-34WATT BULBS 208V
- 208 13W RECESSED CAN
- 208V 170W WALL PACK WITH PHOTOCELL
13' A.F.F. U.A.O.
- DISCONNECT SAFETY SWITCH
- RECEPTACLE OUTLETS, 120V.
- FOURPLEX RECEPTACLE OUTLETS, 120V.
- RECEPTACLE OUTLETS, 240V.
- FLUORESCENT MOUNTED RECEPT. OUTLETS, 120V.
- "SURE-LITES" EXIT LIGHT W/ GREEN EMERGENCY LIGHT W/ POWER PACK
- "SURE-LITES" EMERGENCY LIGHT PLB SERIES W/ POWER PACK
- TELEPHONE/DATA LINES AND JACKS
VERIFY LOCATION WITH OWNER.
- 110 CFM EXHAUST FANS, DUCTED OUTSIDE

NOTE:
1. POWER SUPPLY FOR EXIT SIGNS AND EMERGENCY LIGHTS SHALL BE PROVIDED BY THE PREMISES WIRING SYSTEM. IN THE EVENT OF NORMAL POWER FAILURE ILLUMINATION SHALL BE AUTOMATICALLY PROVIDED FROM AN EMERGENCY POWER-BATTERY BACK UP OR FROM AN ON SITE EMERGENCY GENERATION SET.



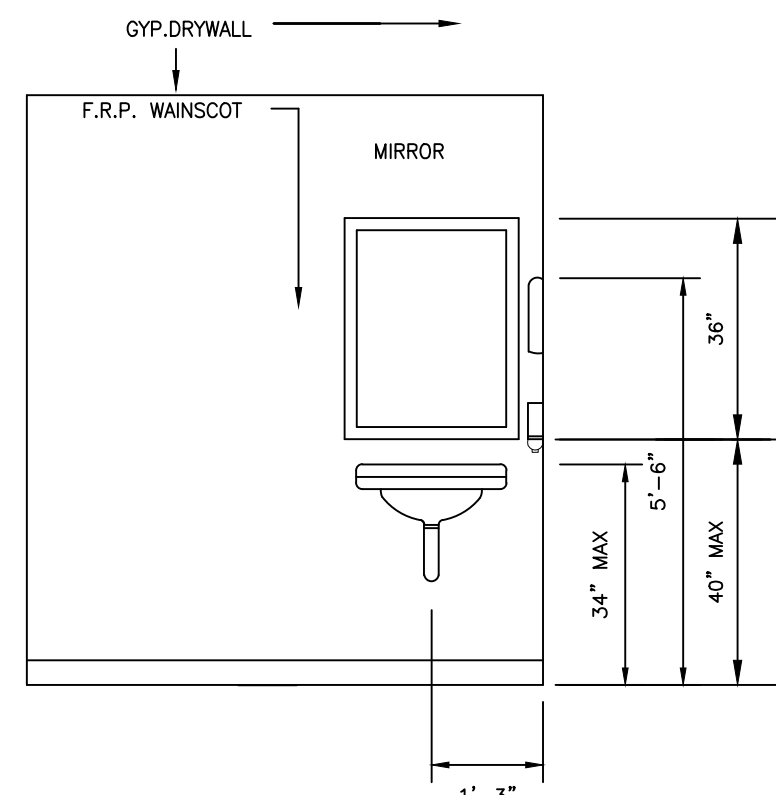
*HVAC BY CITY

*SEE CIVIL DWG FOR ELEC. UNDERGROUND

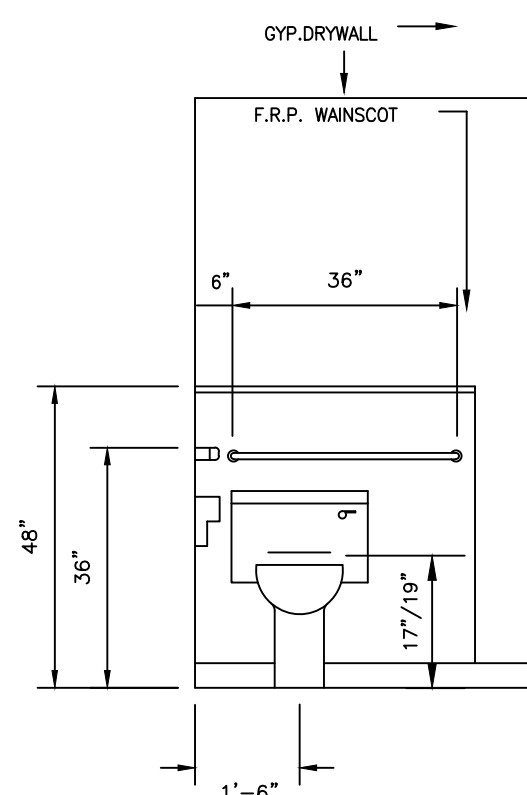
ELECTRICAL PLAN -
MAINTENANCE BUILDING

SCALE: 3/16" = 1'

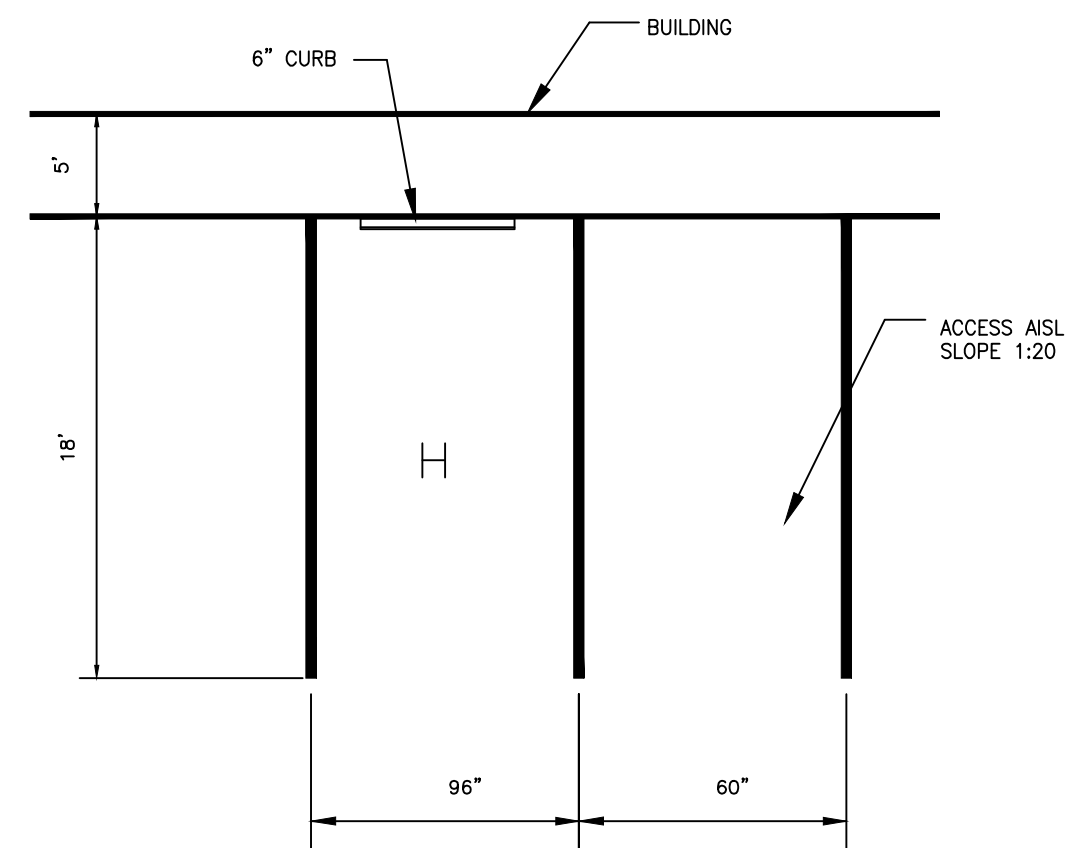
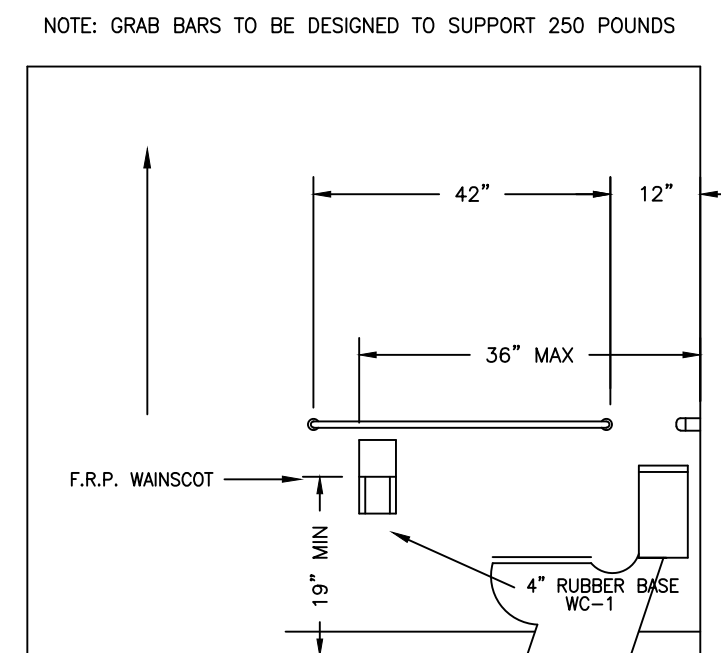
FIRM No. F-003737 ENGINEER: D. SPENCER CARNES, P.E.	CARNES ENGINEERING, INC. 12605 I.H. 10 EAST BAYTOWN, TEXAS 77520 (281) 385-1200 FAX (281) 385-0920 © 2014 Baytown, Texas www.carnesengineering.com			CITY OF DEER PARK DEER PARK, TEXAS HARRIS COUNTY	
	DESIGN ENGINEERING INSPECTIONS			ELECTRICAL PLAN - MAINTENANCE BUILDING	
	REV DATE BY DESCRIPTION			DESIGNED SC DRAWN SR CHECKED FILE	SCALE AS NOTED DATE 04/11/2016 SHEET NO. E-1



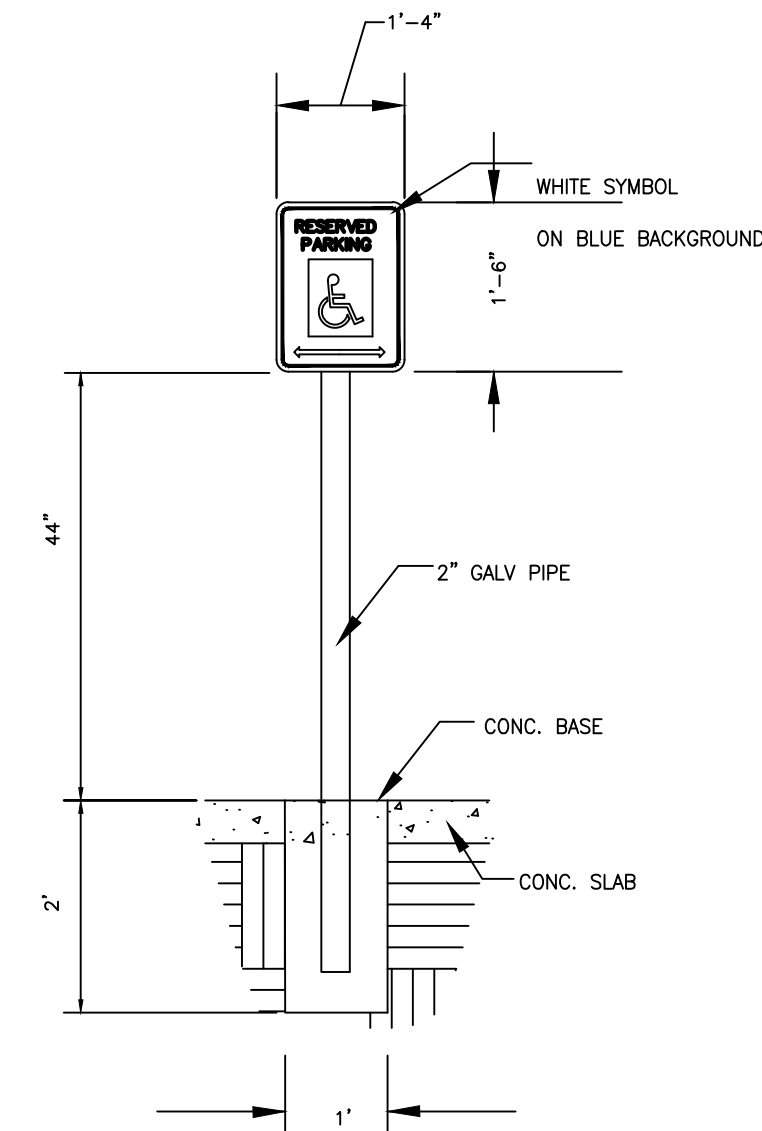
4 RESTROOMS SINK AND MIRROR
SCALE: N.T.S.



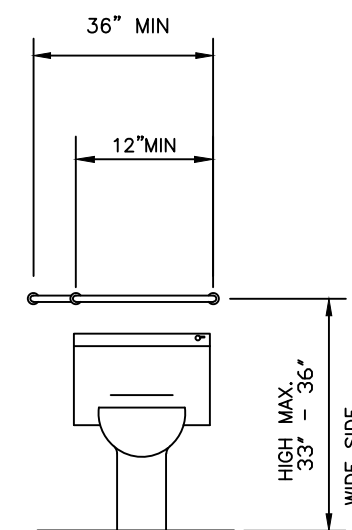
5 RESTROOMS TOILET GENERAL
SCALE: N.T.S.



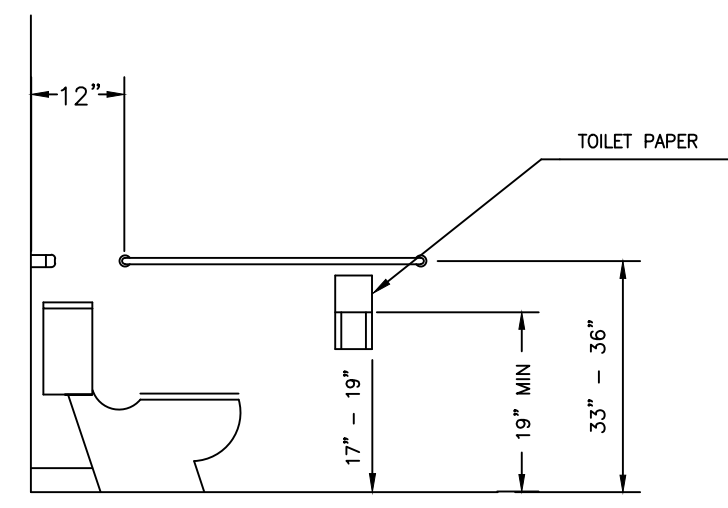
12 HANDICAP PARKING
DETAIL
SCALE: N.T.S.



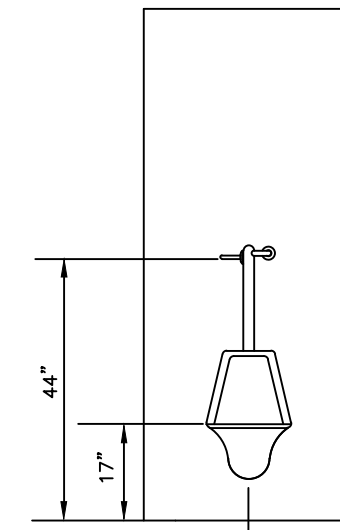
13 HANDICAP PARKING
SIGNAGE DETAIL
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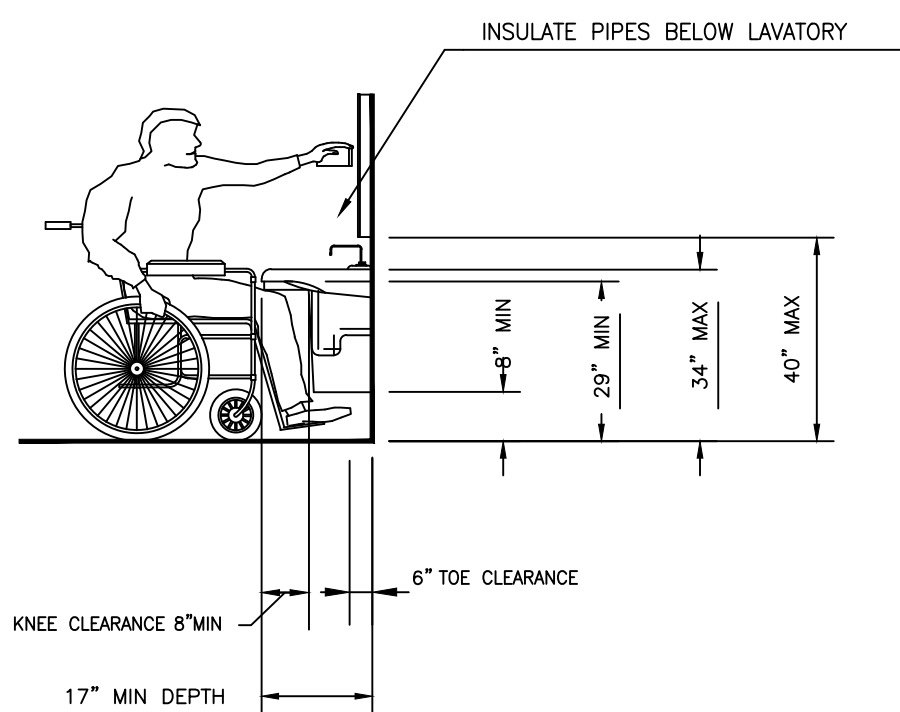
6 RESTROOMS TOILET REAR WALL
SCALE: N.T.S.



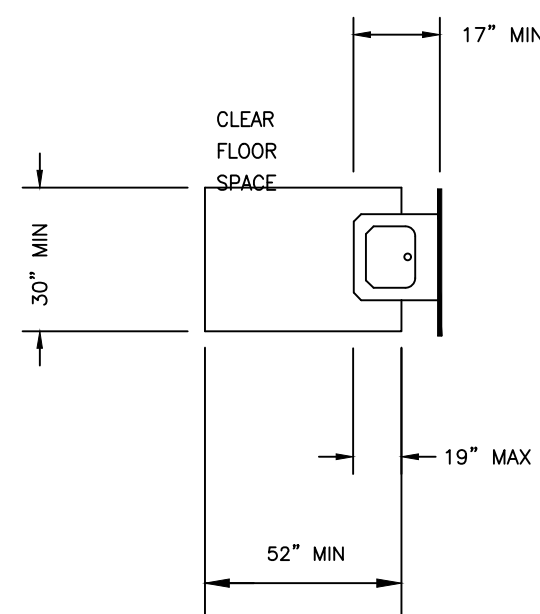
7 RESTROOMS TOILET SIDE WALL
SCALE: N.T.S.



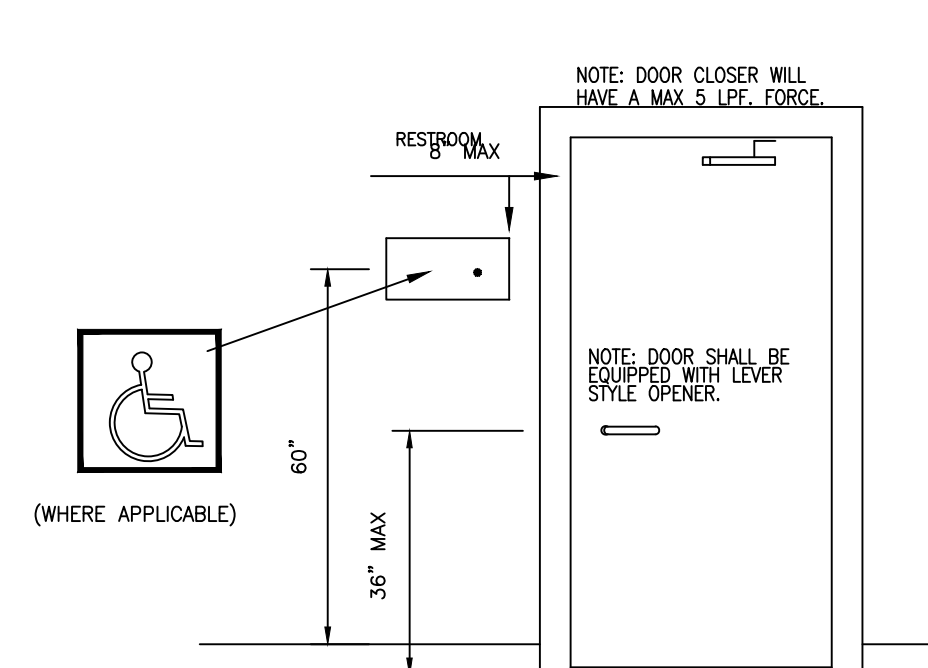
8 RESTROOMS URINAL
SCALE: N.T.S.



9 LAVATORY AND SINK CLEARANCES
SCALE: N.T.S.

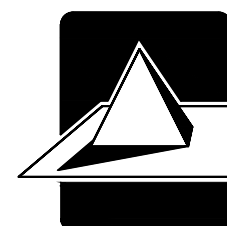


10 CLEAR FLOOR SPACE
AT LAVATORY AND SINK
SCALE: N.T.S.



11 TOILET ROOM DOOR
SIGNAGE DETAIL
SCALE: N.T.S.

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REV DATE BY DESCRIPTION

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CITY OF DEER PARK
DEER PARK, TEXAS
HARRIS COUNTY

TEXAS ACCESSIBILITY STANDARDS

DESIGNED	SC	SCALE	AS NOTED	SHEET NO.
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