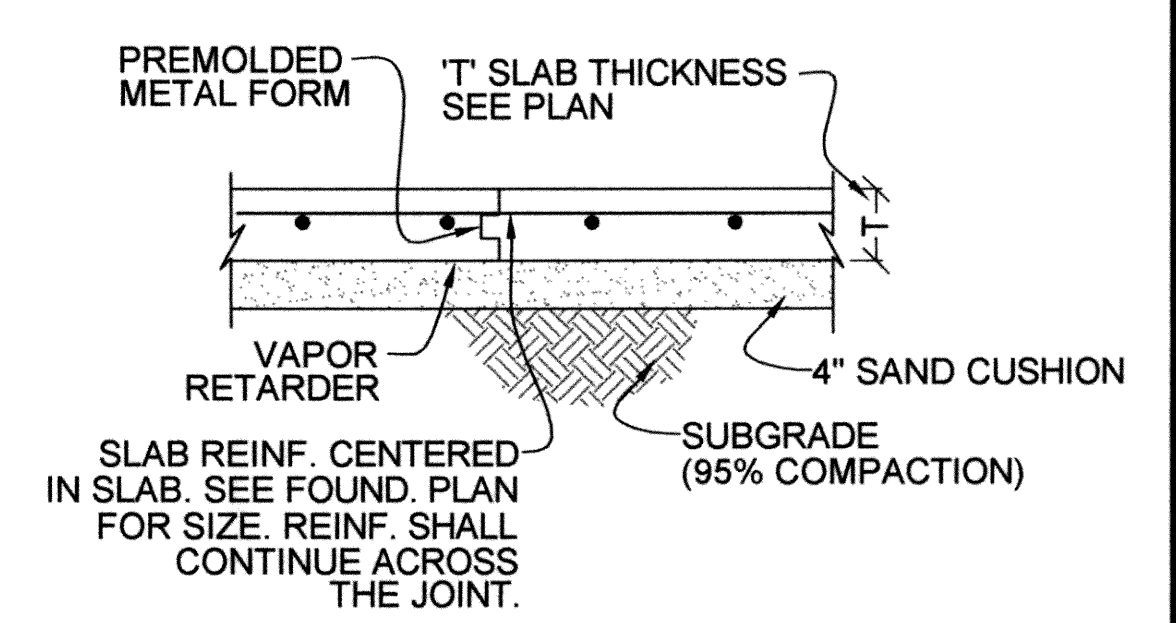
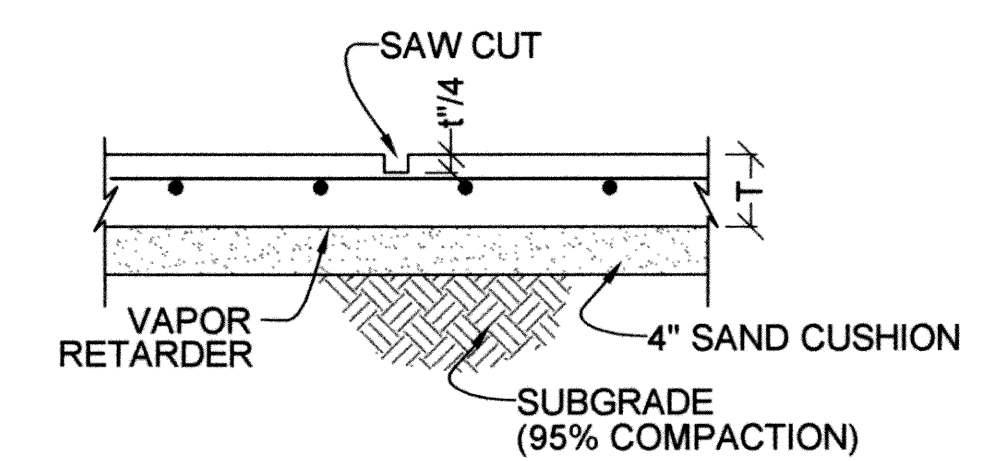


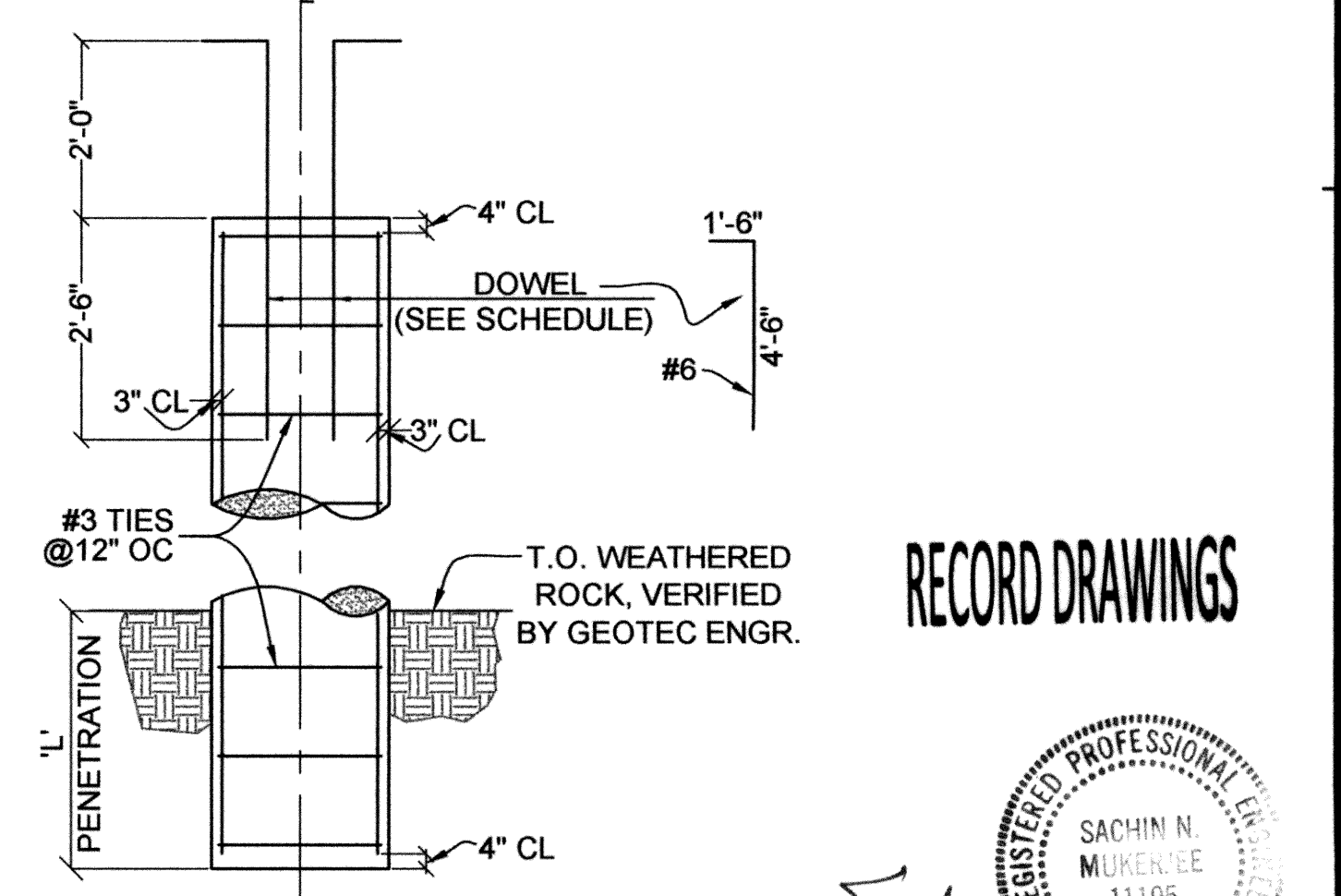
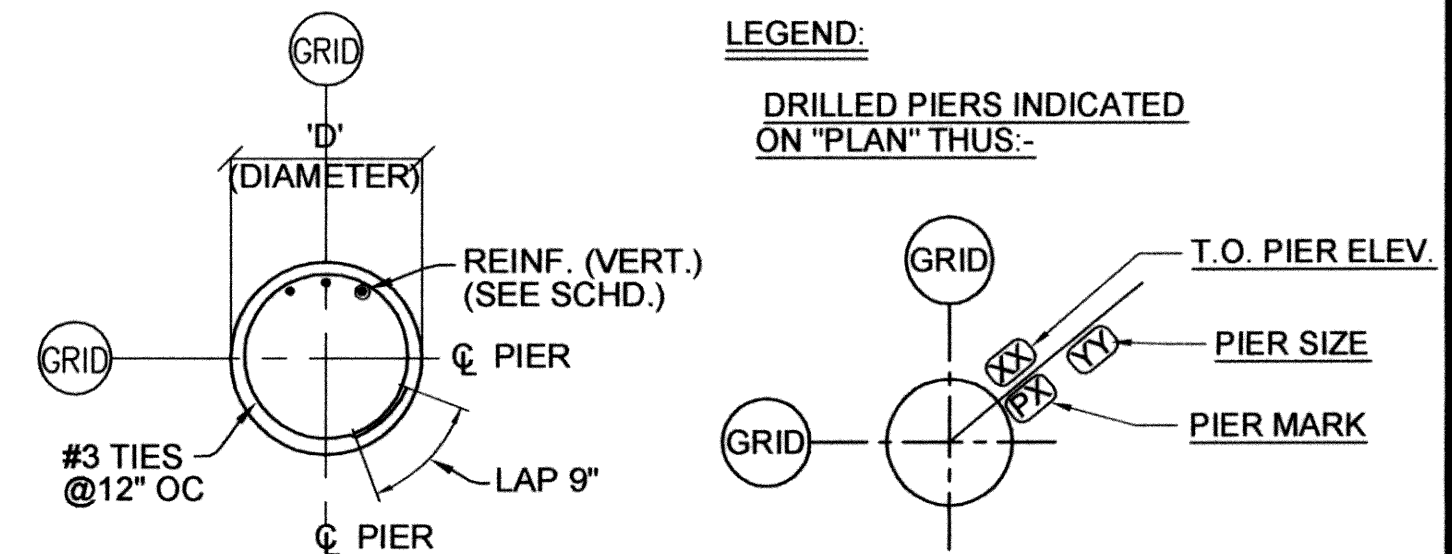
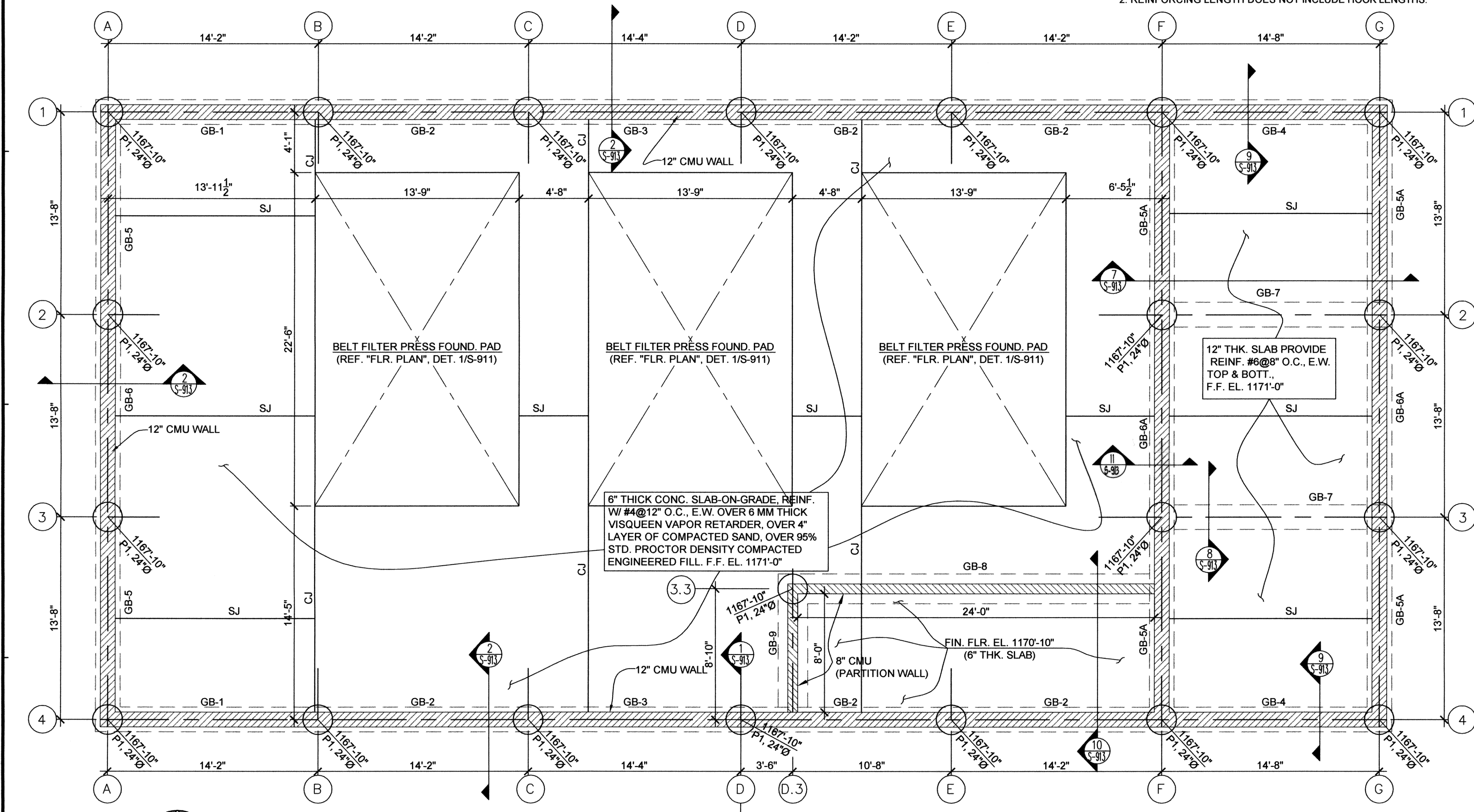
GRADE BEAM SCHEDULE												
BEAM MARK	SIZE	NO	MAIN REINFORCING				SKETCH	STIRRUPS				
			SIZE	LENGTH	BAR	NO		SIZE	TYPE	PLACING		
GB-1	20W 30D	3	#8	17'-8"	TOP	[Sketch]	11	#3	S1	@ 15" O.C.		
GB-2	20W 30D	3	#8	20'-2"	TOP	[Sketch]	11	#3	S1	@ 15" O.C.		
GB-3	20W 30D	3	#8	20'-4"	TOP	[Sketch]	11	#3	S1	@ 15" O.C.		
GB-4	20W 26D	3	#8	18'-2"	TOP	[Sketch]	11	#3	S2	@ 15" O.C.		
GB-5	20W 30D	3	#8	17'-2"	TOP	[Sketch]	11	#3	S1	@ 15" O.C.		
GB-5A	20W 26D	3	#8	17'-2"	TOP	[Sketch]	11	#3	S2	@ 15" O.C.		
GB-6	20W 30D	3	#8	19'-8"	TOP	[Sketch]	11	#3	S1	@ 15" O.C.		
GB-6A	20W 26D	3	#8	19'-8"	TOP	[Sketch]	11	#3	S2	@ 15" O.C.		
GB-7	20W 26D	3	#8	15'-8"	TOP	[Sketch]	11	#3	S2	@ 15" O.C.		
GB-8	20W 26D	3	#8	25'-10"	TOP	[Sketch]	19	#3	S2	@ 15" O.C.		
GB-9	20W 26D	3	#8	9'-10"	TOP	[Sketch]	8	#3	S2	@ 15" O.C.		



2 DETAIL - CONST. JT. (CJ)  
NO SCALE



3 DETAIL - SAWED JT. (SJ)  
NO SCALE



4 TYPICAL DRILLED PIER  
NO SCALE

DRILLED PIER SCHEDULE					
MARK	SIZE (DIA.)	PENETRATION	REINFORCEMENT		NO. REQ'D
			VERT.	DOWEL	
P-1	24"Ø	2'-0"	6-#6	4-#6	21

DESIGNED BY: S.D. CAD OPERATOR: D.O. CHECKED: S.D. APPROVED: S.D. PLOT DATE: 2/15/2010 DWG. SCALE: AS SHOWN SHEET: 71 OF 88

1 S-910

**FOUNDATION PLAN - (DRILLED PIERS & GRADE BEAMS)**  
(SCALE: 1/4" = 1'-0")

REVISIONS:	DATE:

**BELT FILTER PRESS BUILDING  
STRUCTURAL DETAILS**

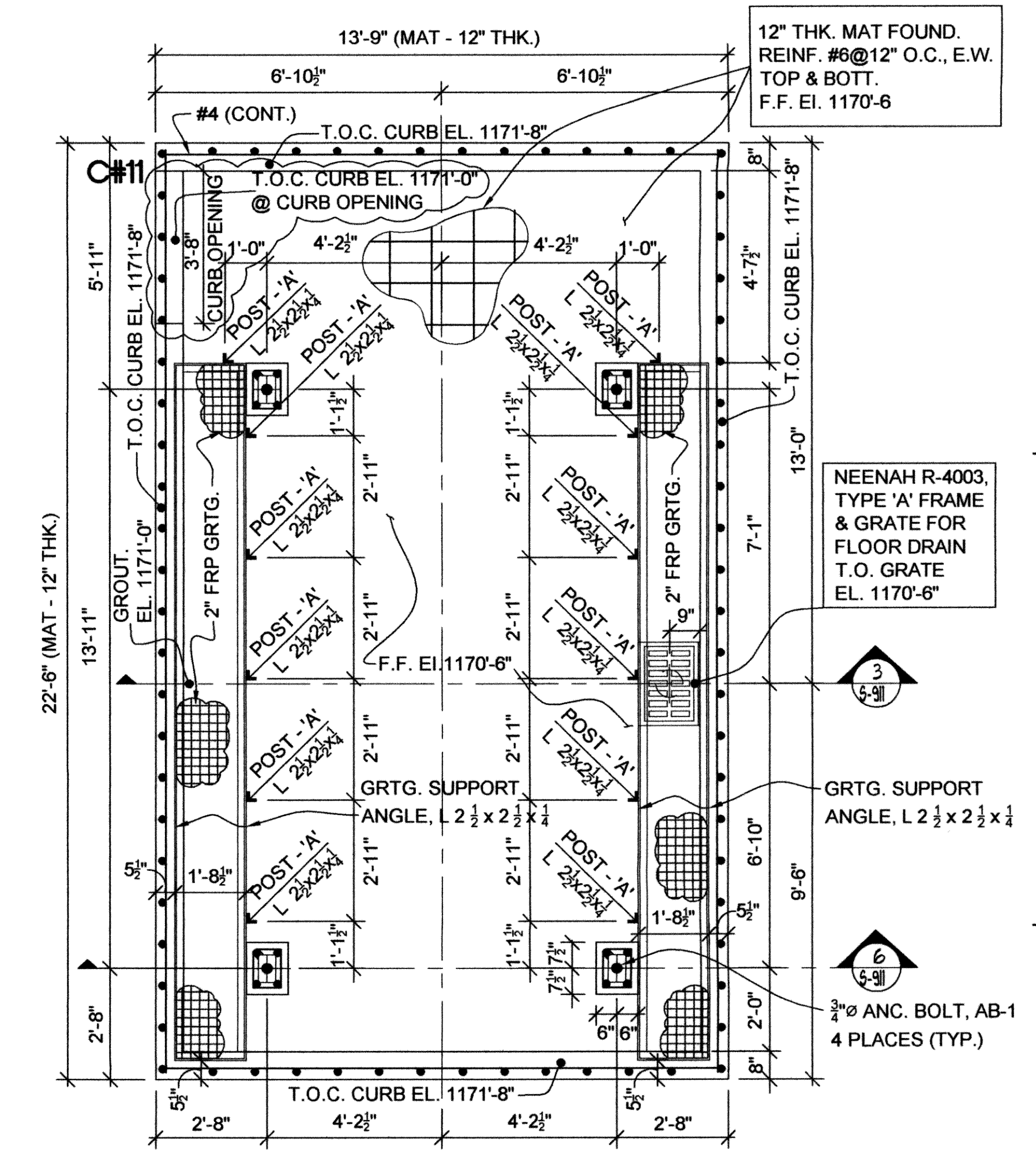
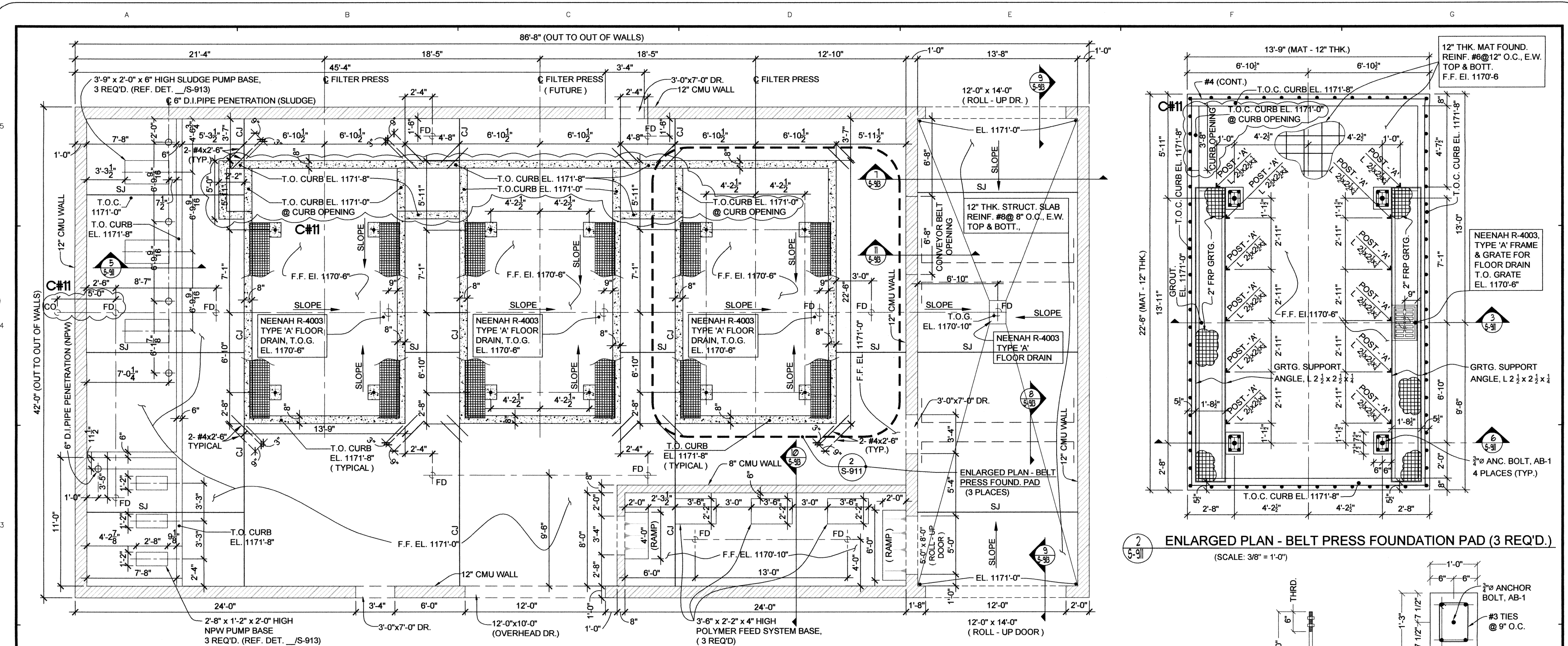
EAGLE OFFICE CENTER  
2803 SOUTH BRYANT  
EDMOND, OK. 73013  
PH. (405) 844-3900  
FAX. (405) 844-3600

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CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088

RECORD DRAWINGS

SACHIN N. MUKERJEE  
11195  
OKLAHOMA  
4/20/10

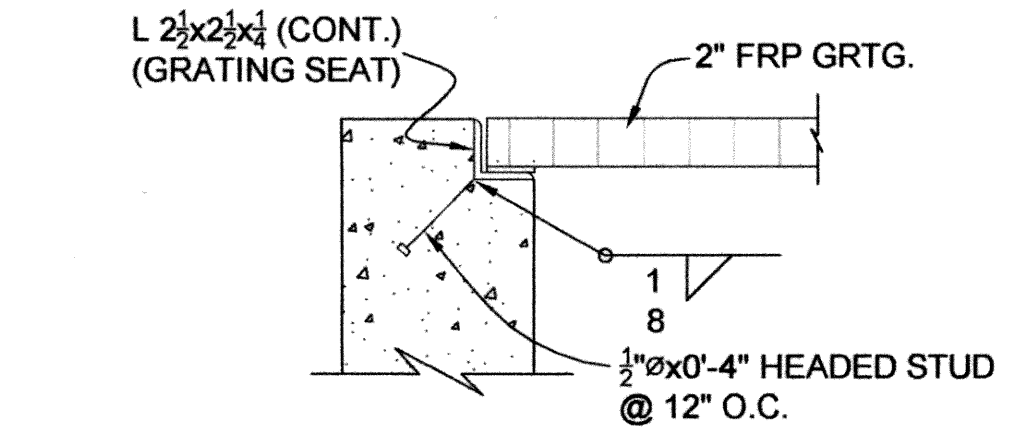
S-910



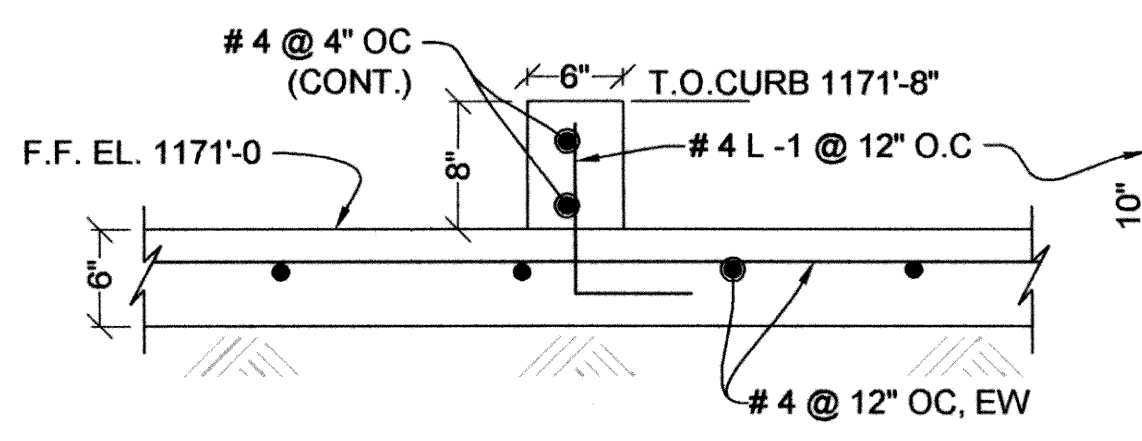
2 ENLARGED PLAN - BELT PRESS FOUNDATION PAD (3 REQ'D.)  
(SCALE: 3/8" = 1'-0")

1 FLOOR PLAN - FILTER PRESS BLDG.  
(SCALE: 1/4" = 1'-0")

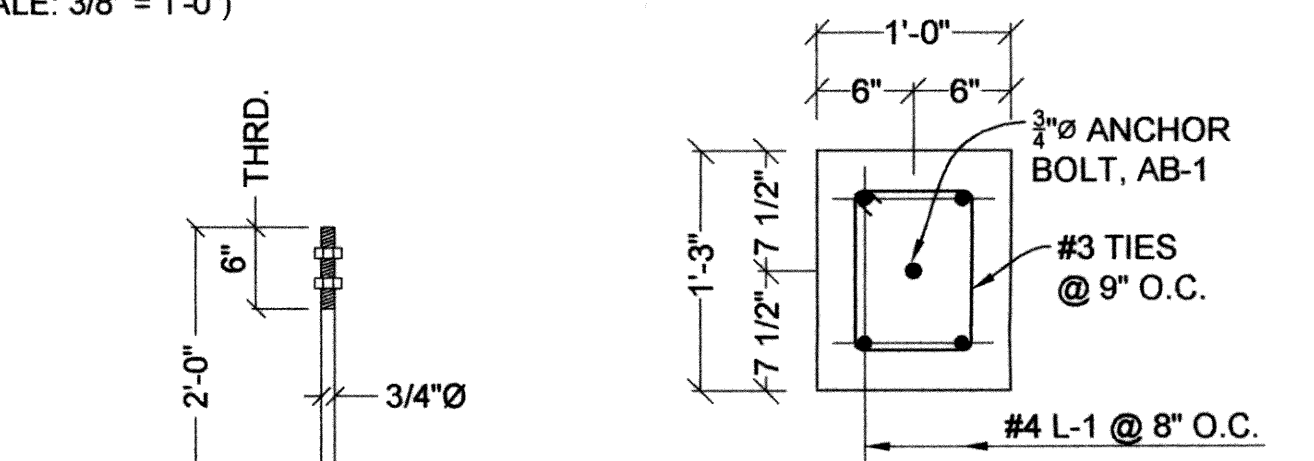
ABBREVIATIONS:  
FD - FLOOR DRAIN  
CJ - CONSTRUCTION JOINT  
SJ - SAWED JOINT



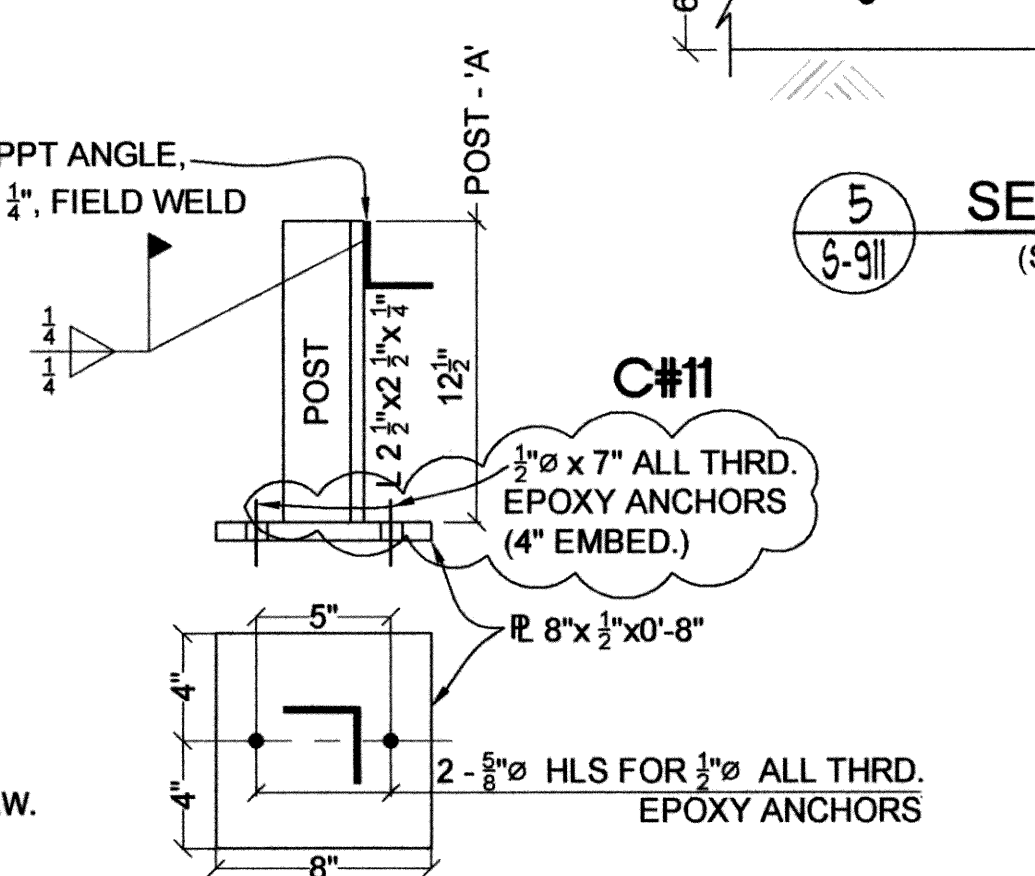
9 DETAIL - GRATING SEAT (TYP.)  
(SCALE: 1 1/2" = 1'-0")



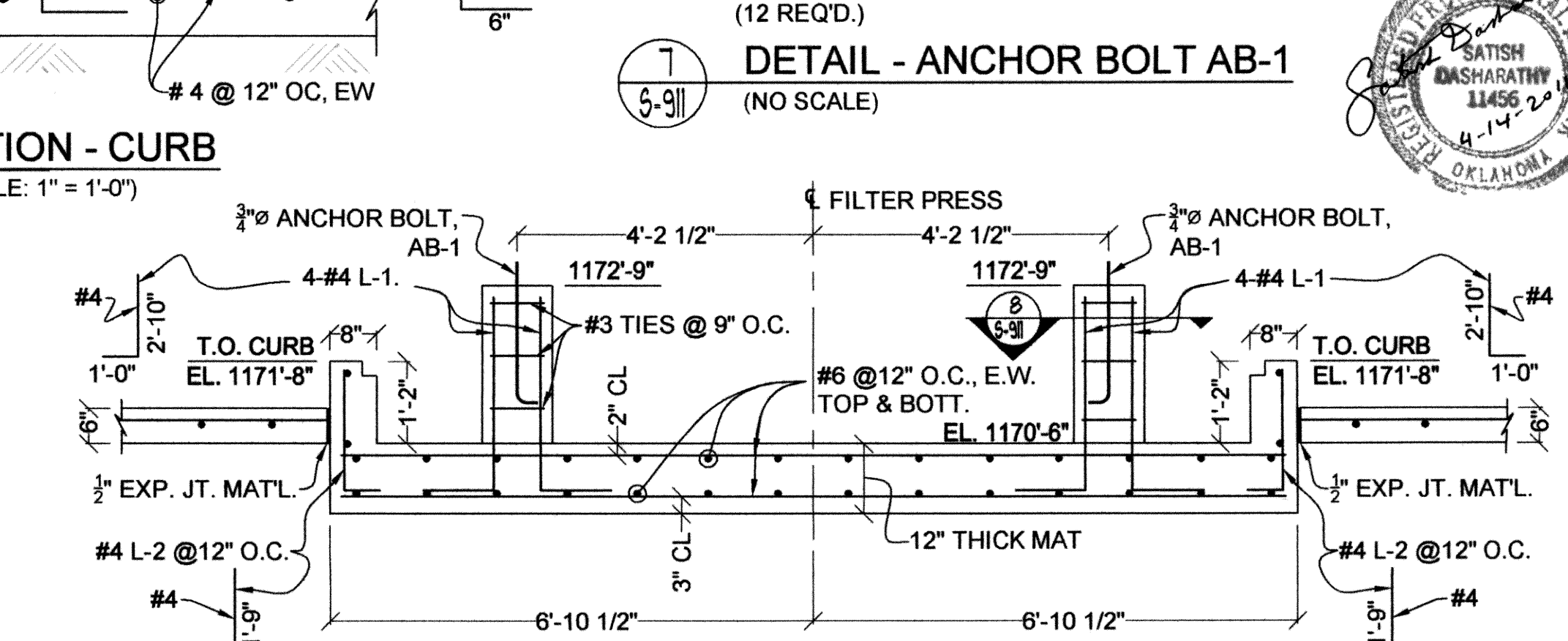
5 SECTION - CURB  
(SCALE: 1" = 1'-0")



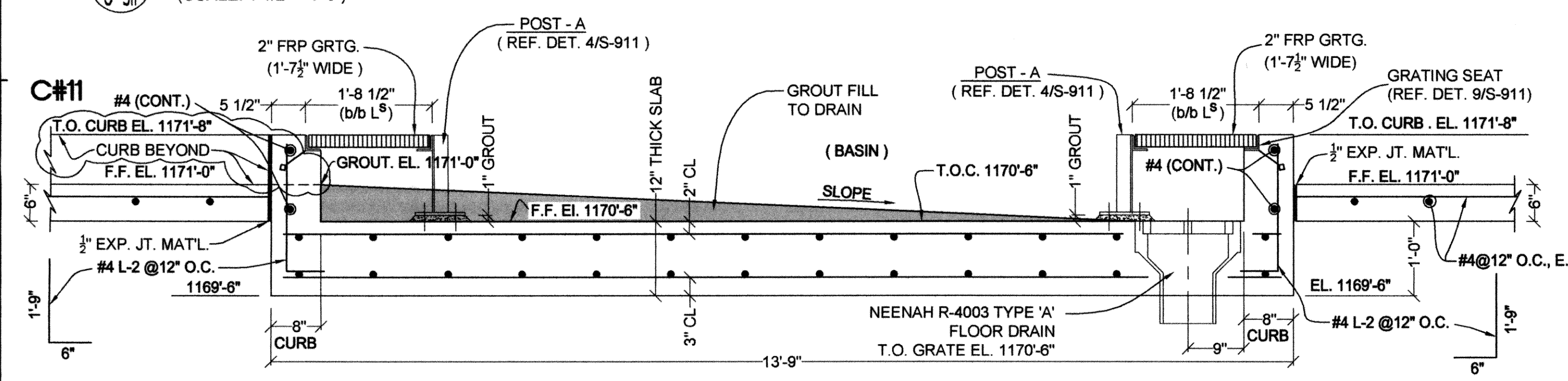
7 DETAIL - ANCHOR BOLT AB-1  
(NO SCALE)



4 DETAIL - GRG. SUPP. POST - "A"  
(NO SCALE)



6 SECTION  
(SCALE: 1/2" = 1'-0")



3 SECTION  
(SCALE: 3/4" = 1'-0")

REVISIONS:	DATE:
C#11 - CLARIFICATION NO. 11	4/14/2011

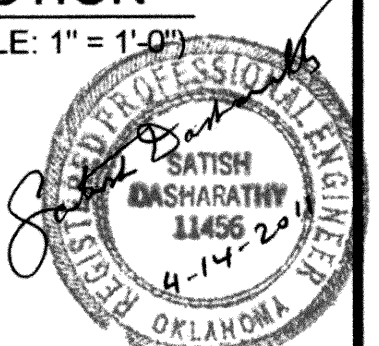
BELT FILTER PRESS BUILDING  
STRUCTURAL DETAILS

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EDMOND, OK 73013  
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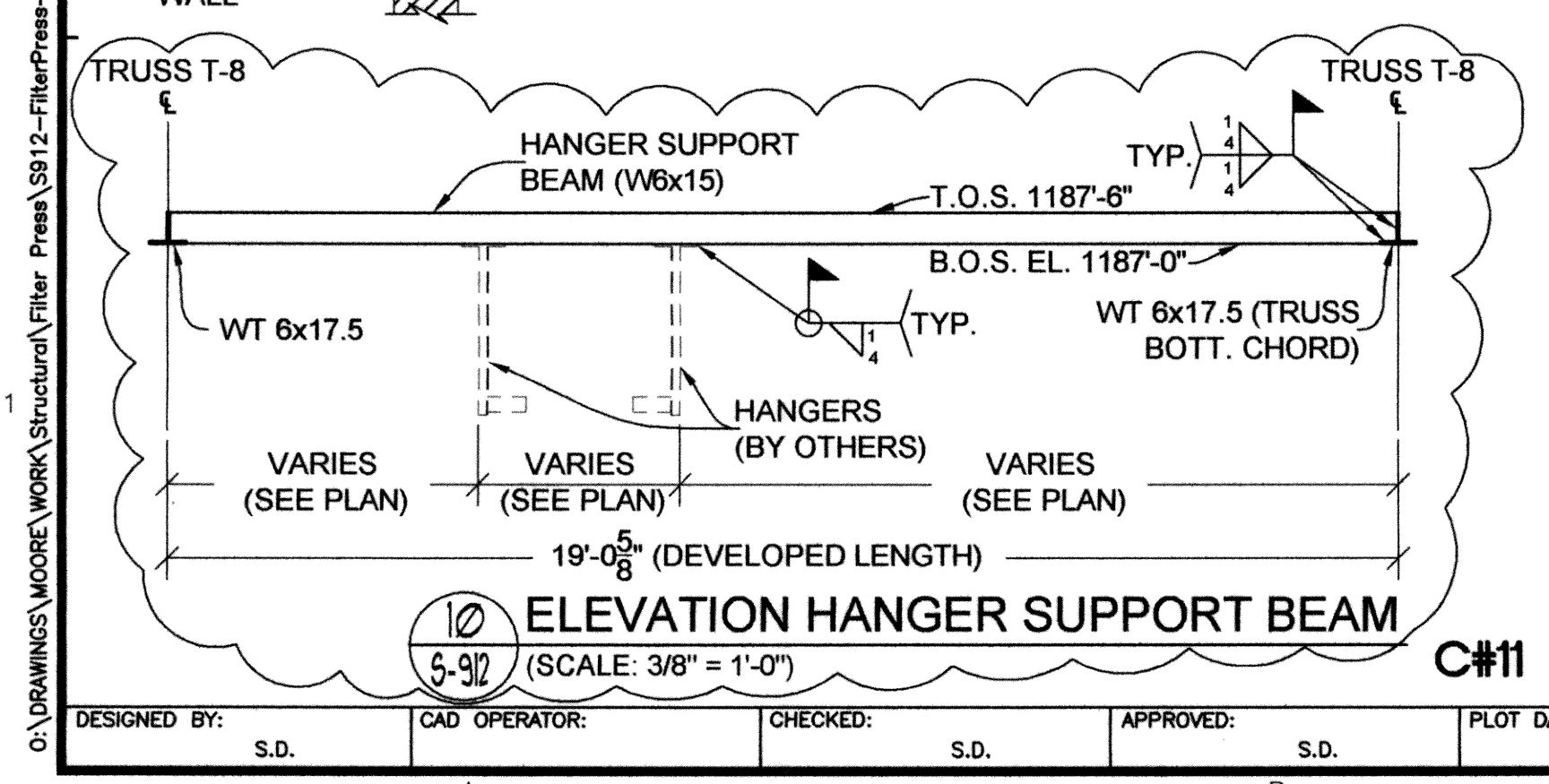
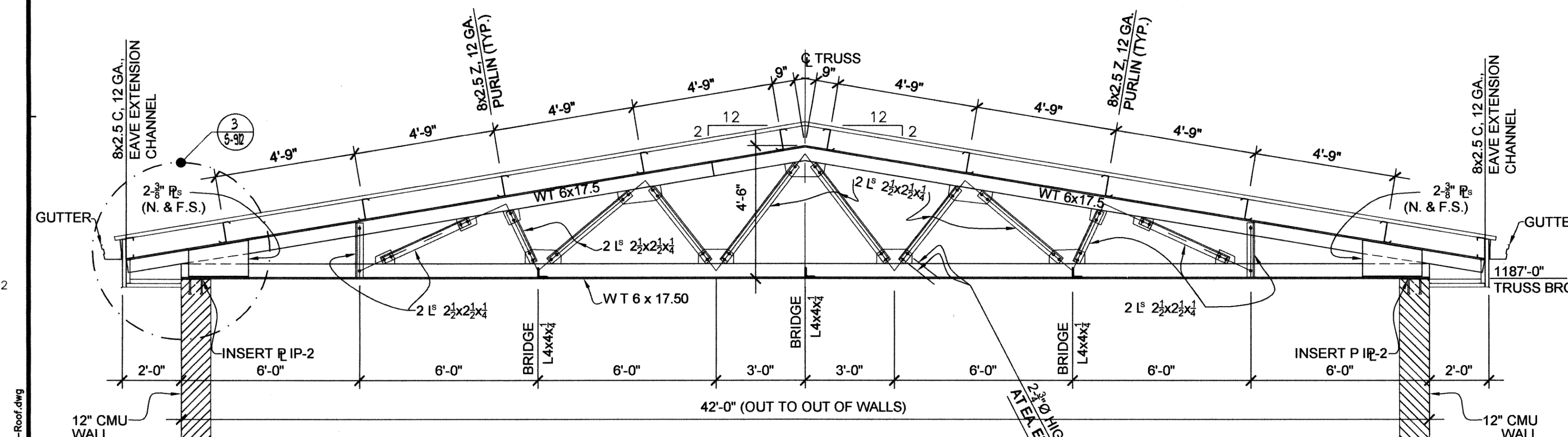
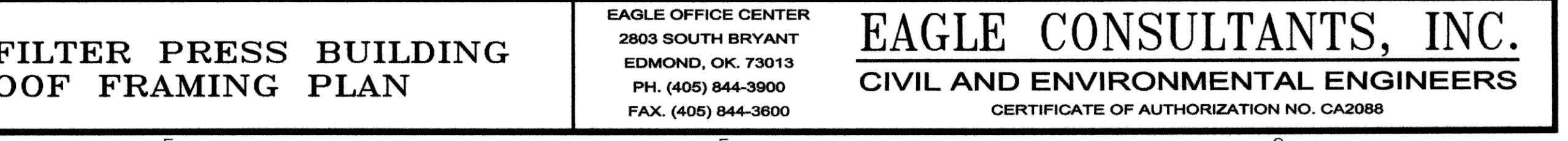
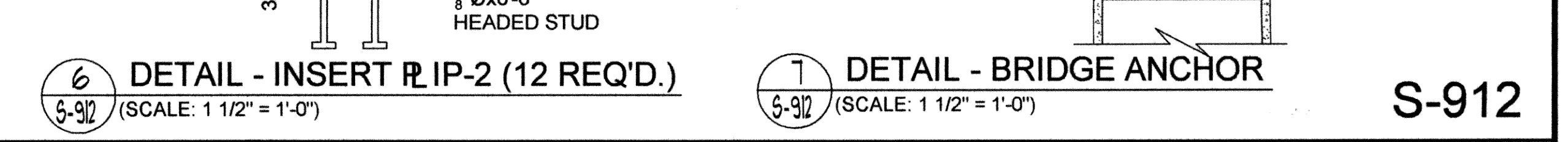
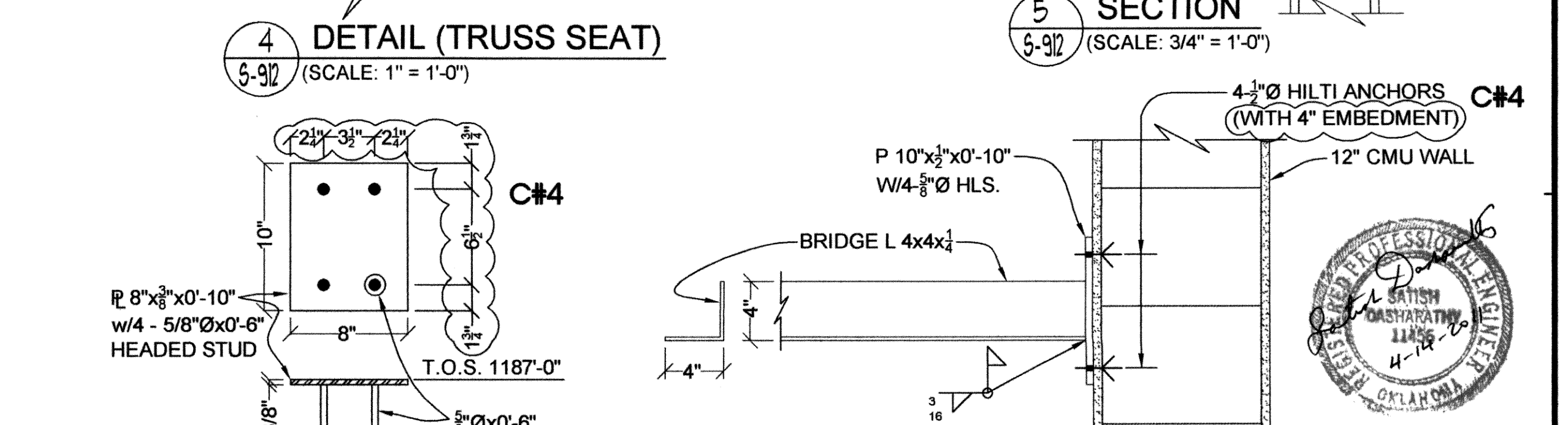
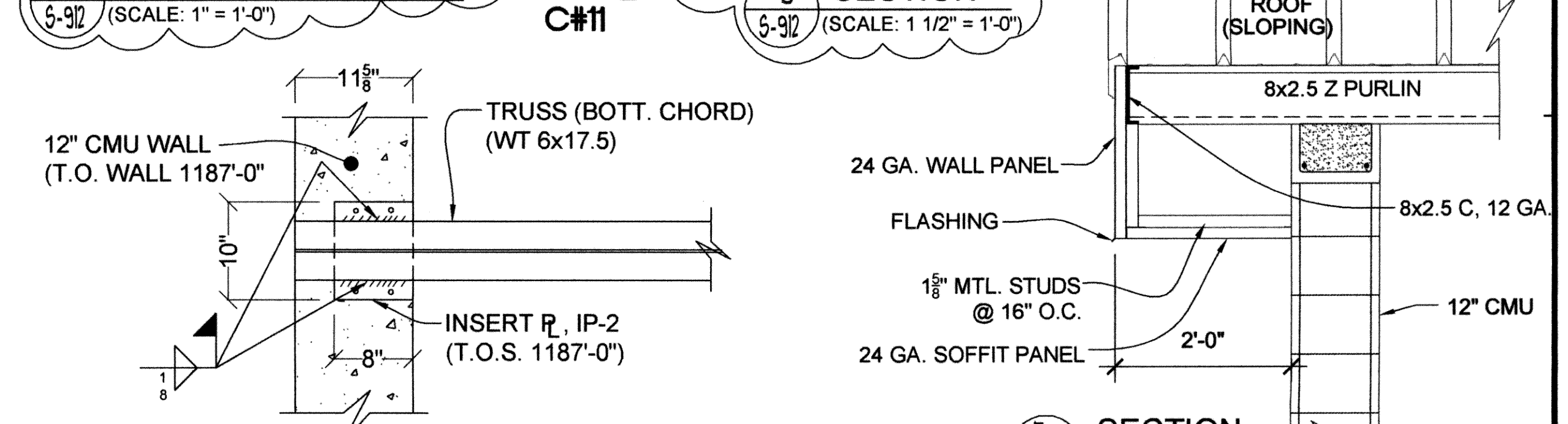
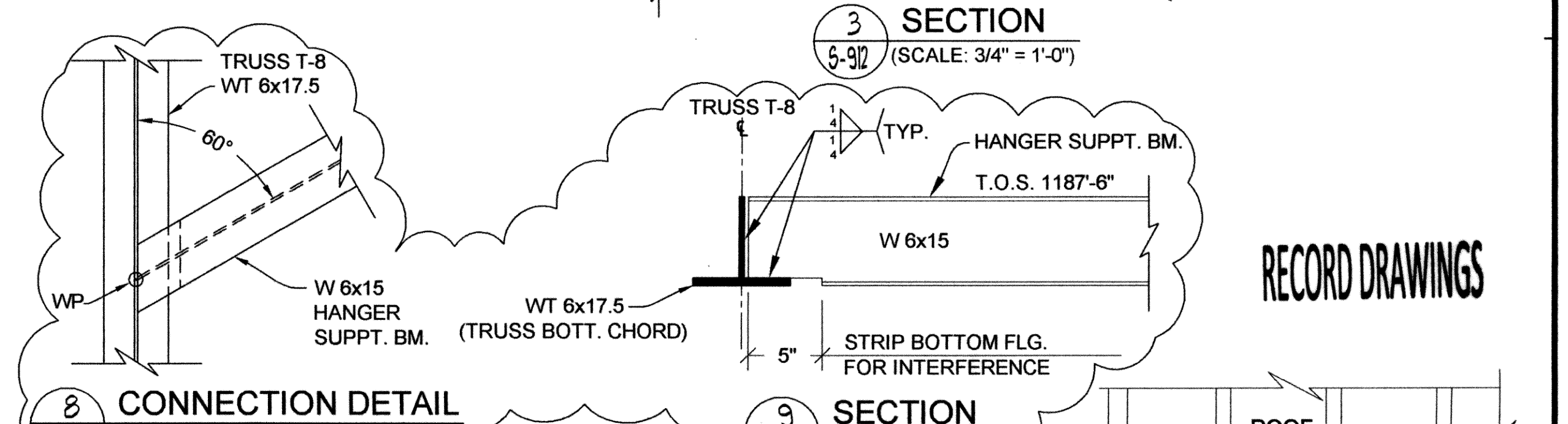
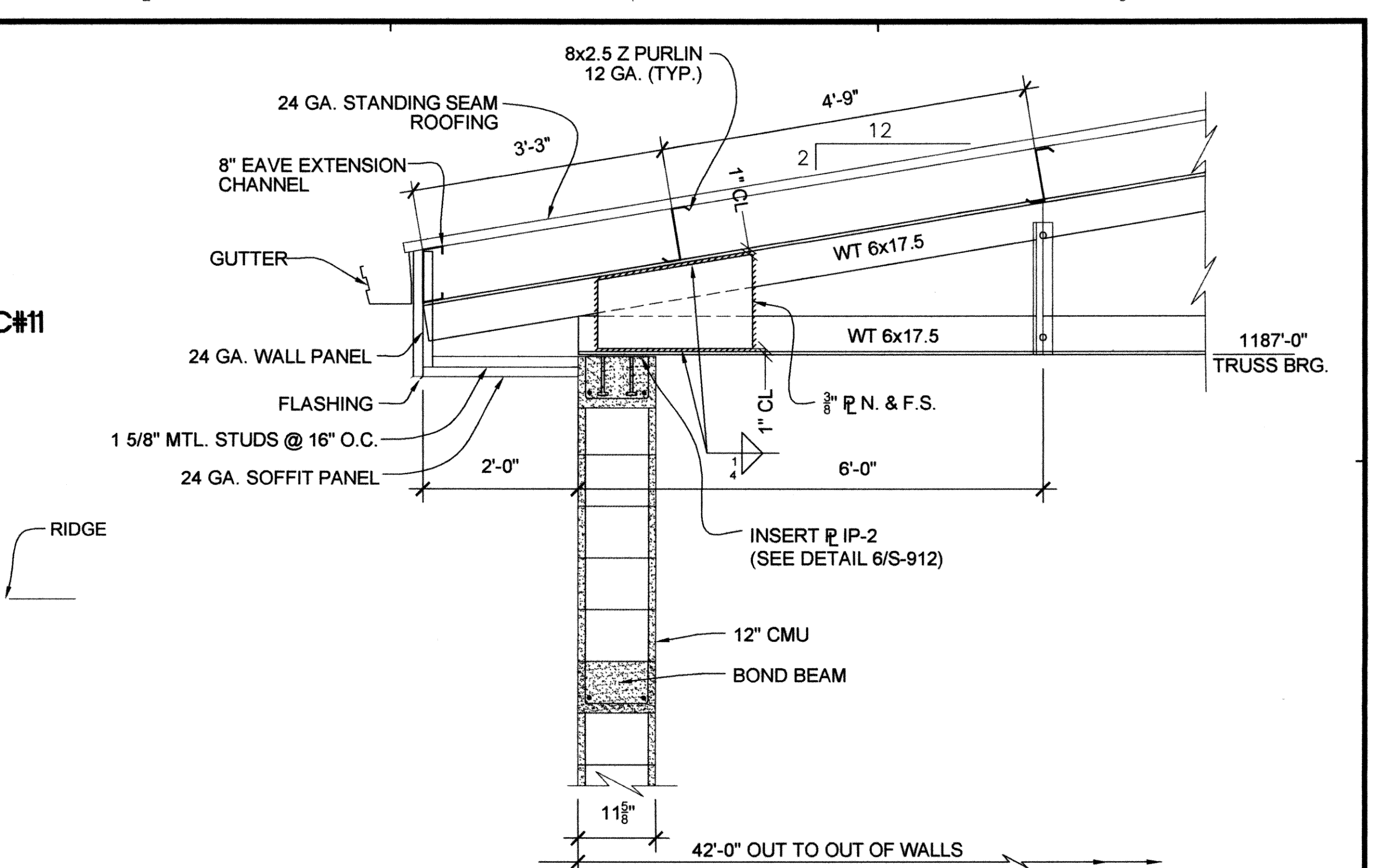
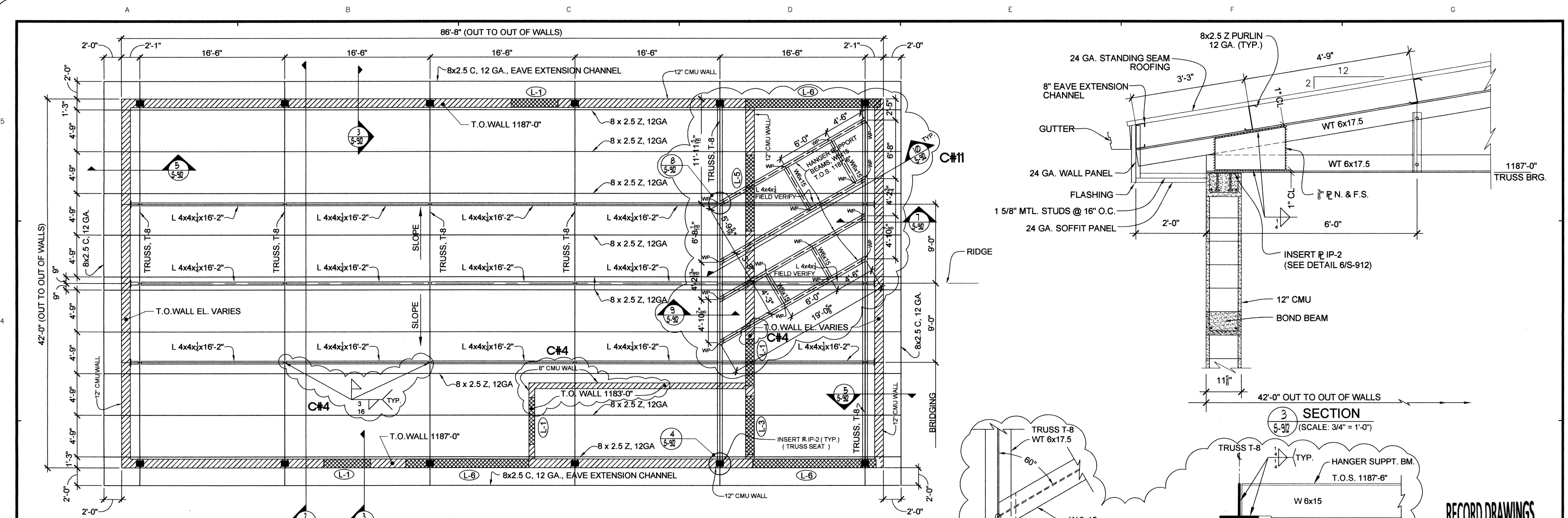
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CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088

O:\DRAWINGS\MOORE\Structural\Filter Press S911 - Filter Press - Floor Plan.dwg

DESIGNED BY:	CAD OPERATOR:	CHECKED:	APPROVED:	PLOT DATE:	DWG. SCALE:	SHEET:
S.D.	D.O.	S.D.	S.D.	4/29/2010	AS SHOWN	72 OF 89



RECORD DRAWINGS  
S-911



**LEGEND**

LINTEL DRG S-960

L - X REF. LINTEL SCHEDULE

REVISIONS:	DATE:
C#4 - CLARIFICATION NO. 4	12/8/2010
C#11 - CLARIFICATION NO. 11	4/14/2011

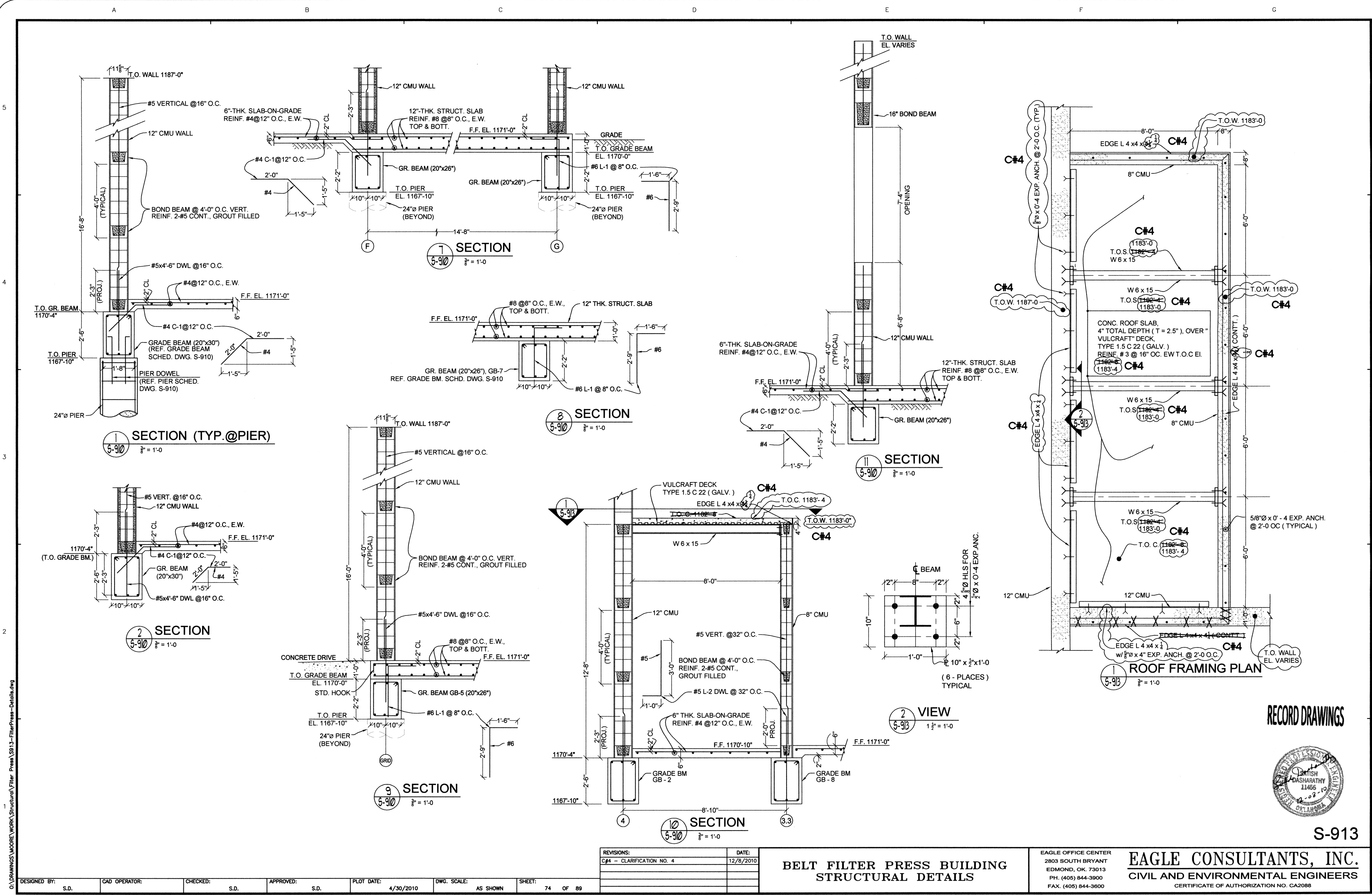
**BELT FILTER PRESS BUILDING  
ROOF FRAMING PLAN**

EAGLE OFFICE CENTER  
2803 SOUTH BRYANT  
EDMOND, OK. 73013  
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CERTIFICATE OF AUTHORIZATION NO. CA2088

DESIGNED BY: S.D. CAD OPERATOR: S.D. CHECKED: S.D. APPROVED: S.D. PLOT DATE: 4/30/2010 DWG. SCALE: AS SHOWN SHEET: 73 OF 89

**WASTEWATER TREATMENT SYSTEM IMPROVEMENTS, MOORE, OK**



C:\DRAWINGS\MOORE\WORK\Structural\Filer Press\S913-FilerPress-Details.dwg  
 DESIGNED BY: S.D. CAD OPERATOR: A APPROVED: S.D. PLOT DATE: 4/30/2010 DWG. SCALE: AS SHOWN SHEET: 74 OF 89

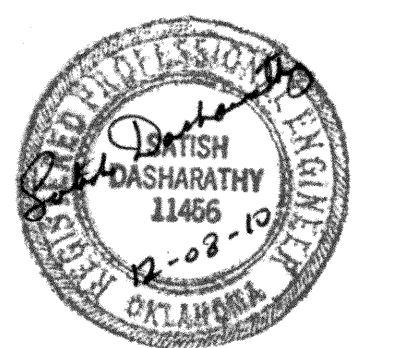
REVISIONS:	DATE:
C#4 - CLARIFICATION NO. 4	12/8/2010

**BELT FILTER PRESS BUILDING  
 STRUCTURAL DETAILS**

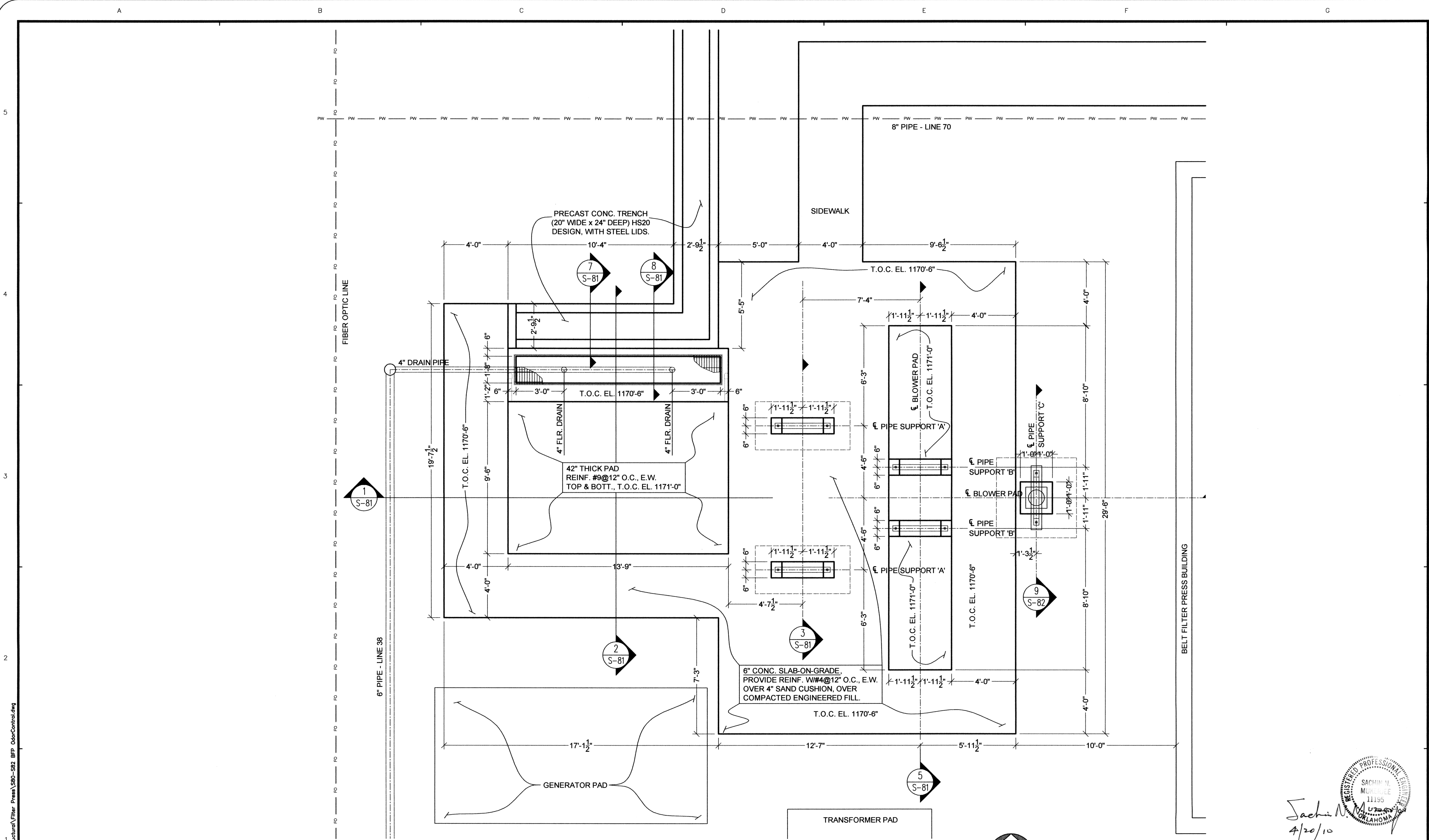
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 EDMOND, OK. 73013  
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RECORD DRAWINGS



S-913

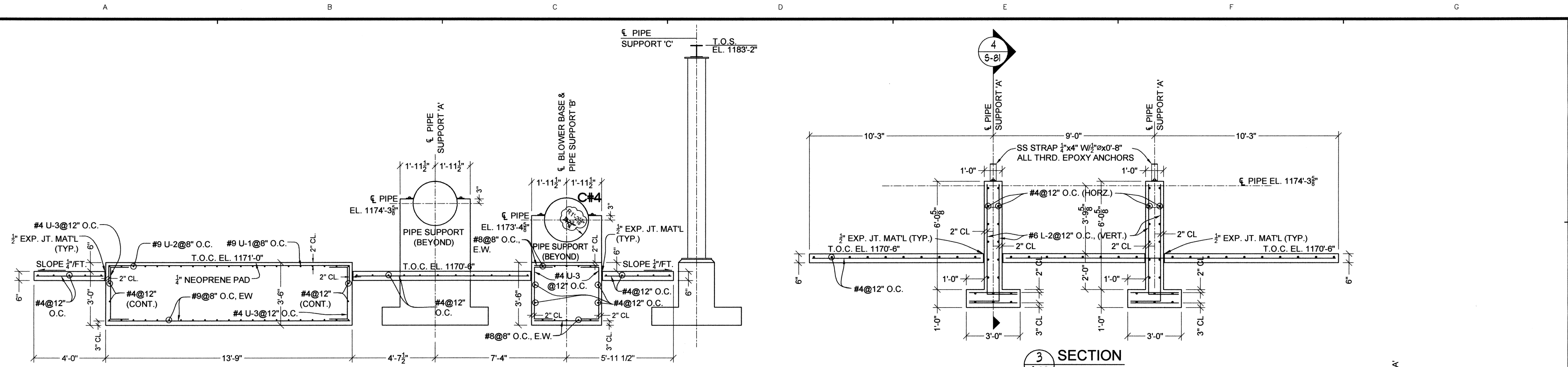


**BELT FILTER PRESS ODOR CONTROL UNIT - PLAN VIEW**  
 SCALE: 3/8" = 1'-0"

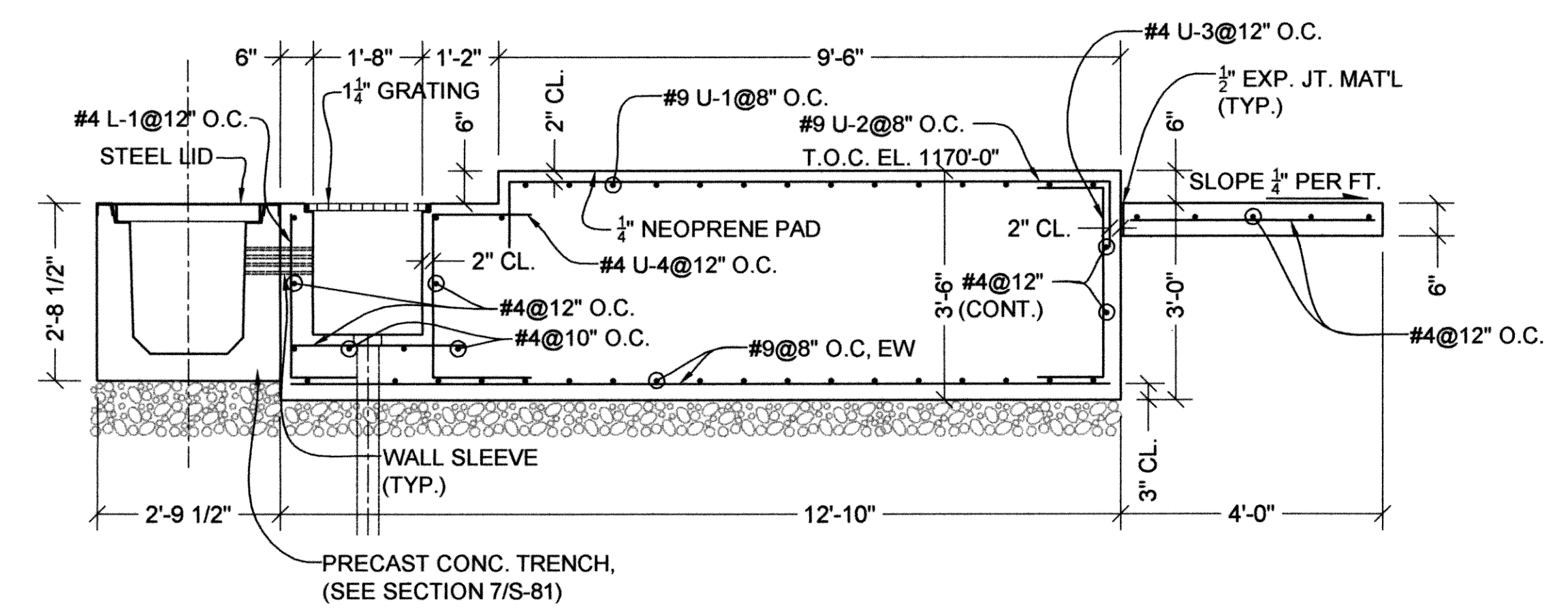
  
 Sachin N. Murejee  
 4/20/10  
**RECORD DRAWINGS**

**S-80**

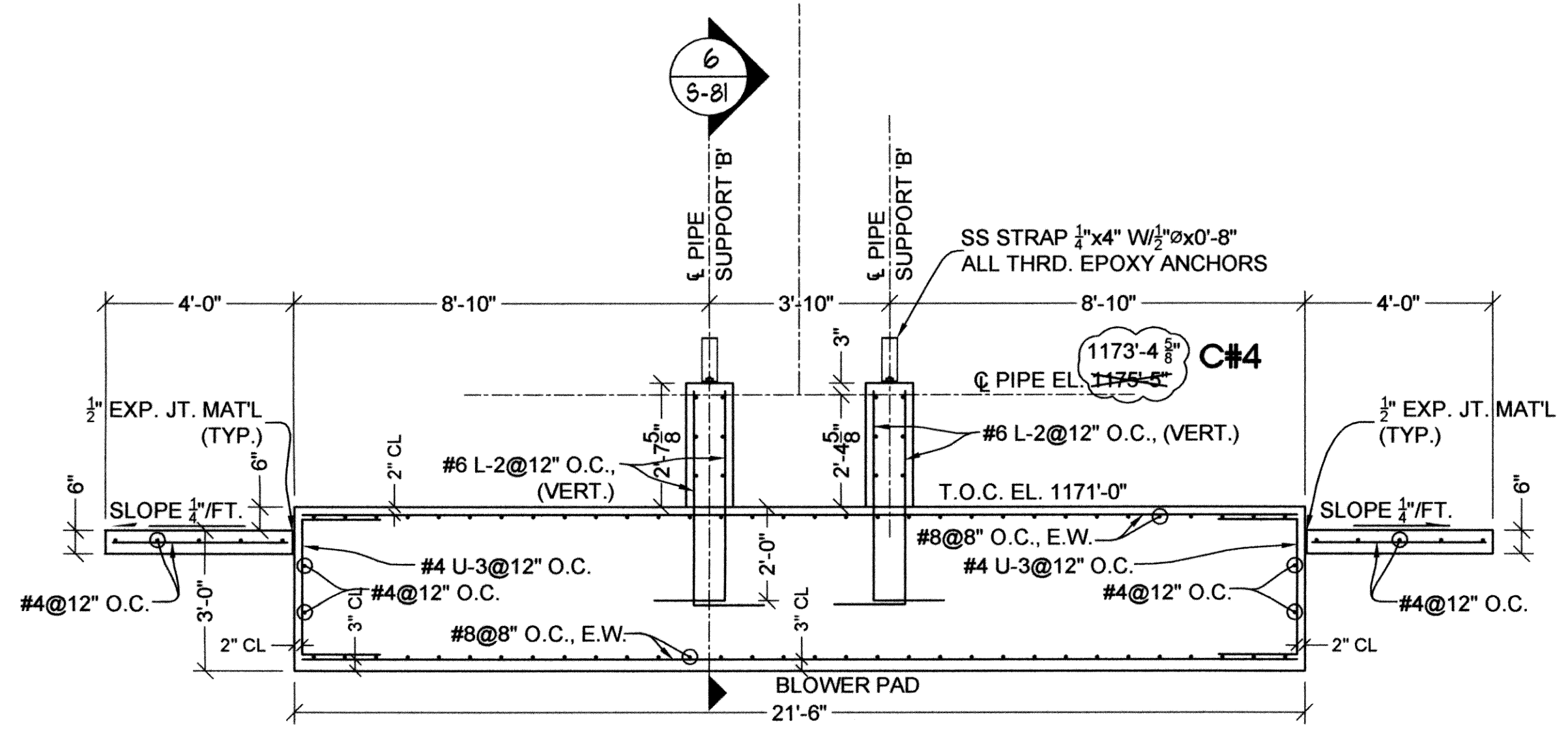
DESIGNED BY: S.D.	CAD OPERATOR: D.O.	CHECKED: S.D.	APPROVED: S.D.	PLOT DATE: 1/27/2010	DWG. SCALE: AS SHOWN	SHEET: 75 OF 89	REVISIONS: _____ _____ _____ _____ _____	DATE: _____ _____ _____ _____	<b>BELT FILTER PRESS ODOR CONTROL          STRUCTURAL DETAILS</b> 1 OF 3	EAGLE OFFICE CENTER 2803 SOUTH BRYANT EDMOND, OK. 73013 PH. (405) 844-3900 FAX. (405) 844-3600	<b>EAGLE CONSULTANTS, INC.</b> CIVIL AND ENVIRONMENTAL ENGINEERS <small>CERTIFICATE OF AUTHORIZATION NO. CA2088</small>
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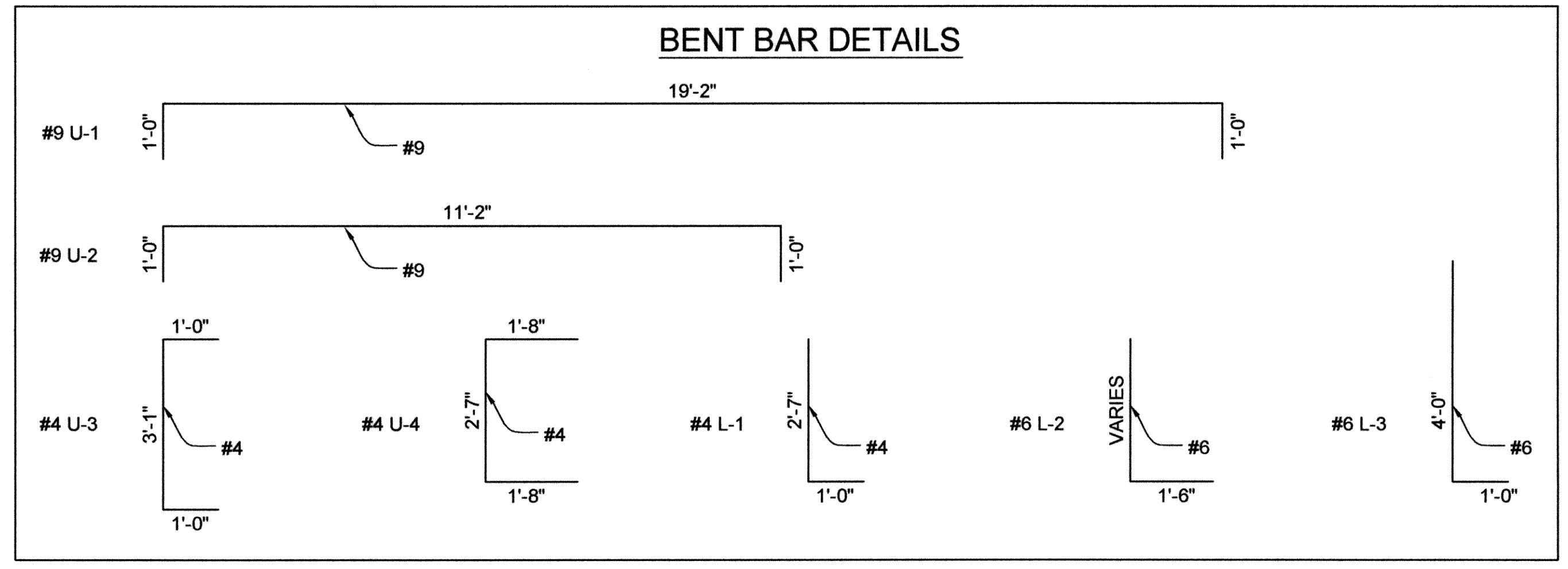
**SECTION 1**  
5-80 SCALE: 3/8" = 1'-0"



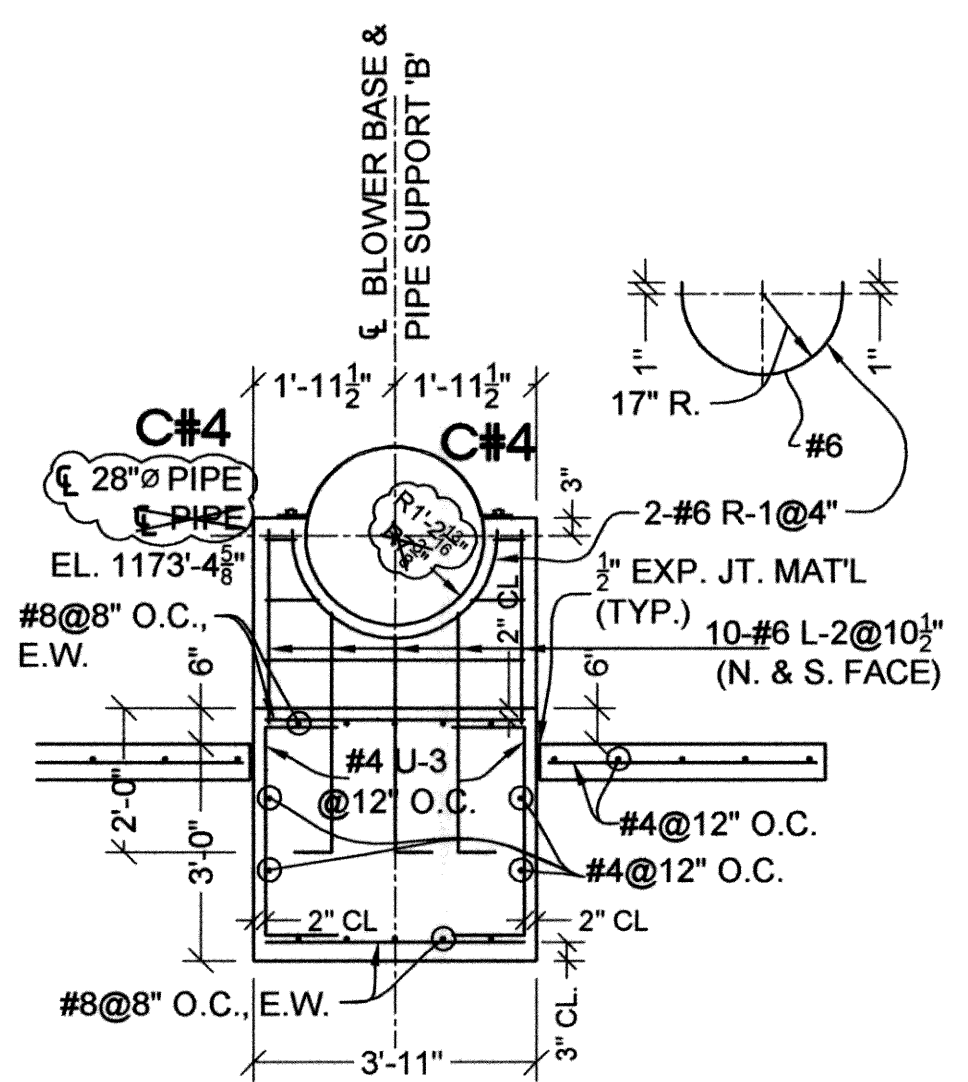
**SECTION 2**  
5-80 SCALE: 1/2" = 1'-0"



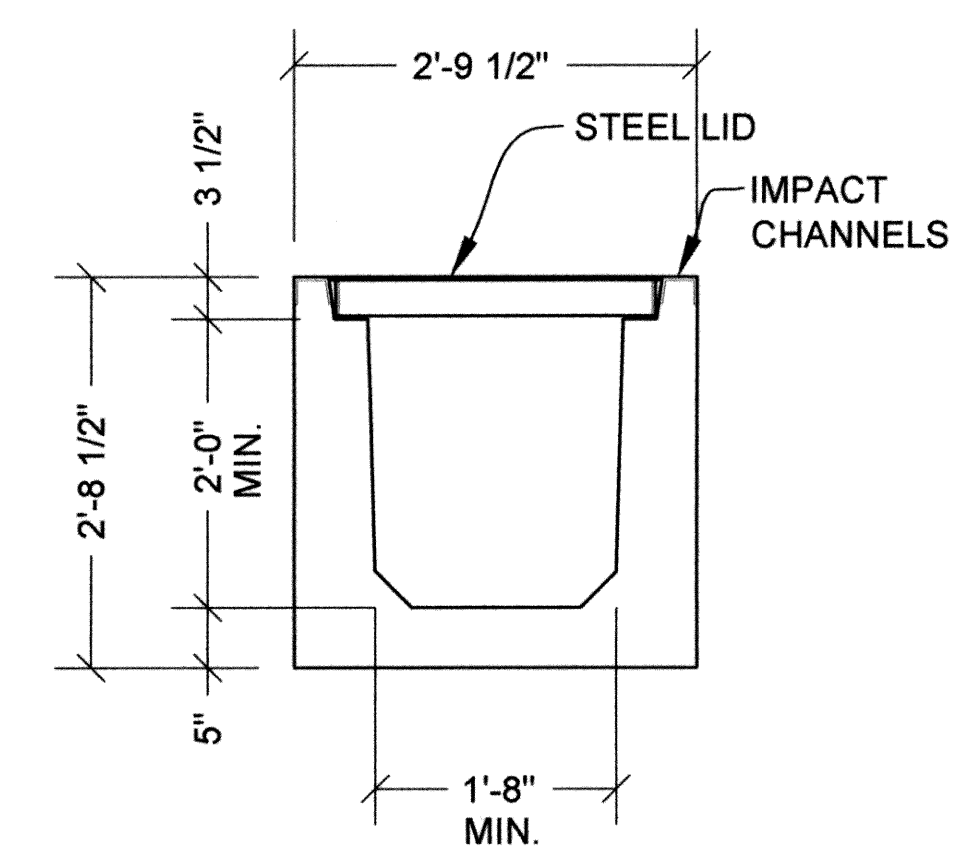
**SECTION 3**  
5-80 SCALE: 3/8" = 1'-0"



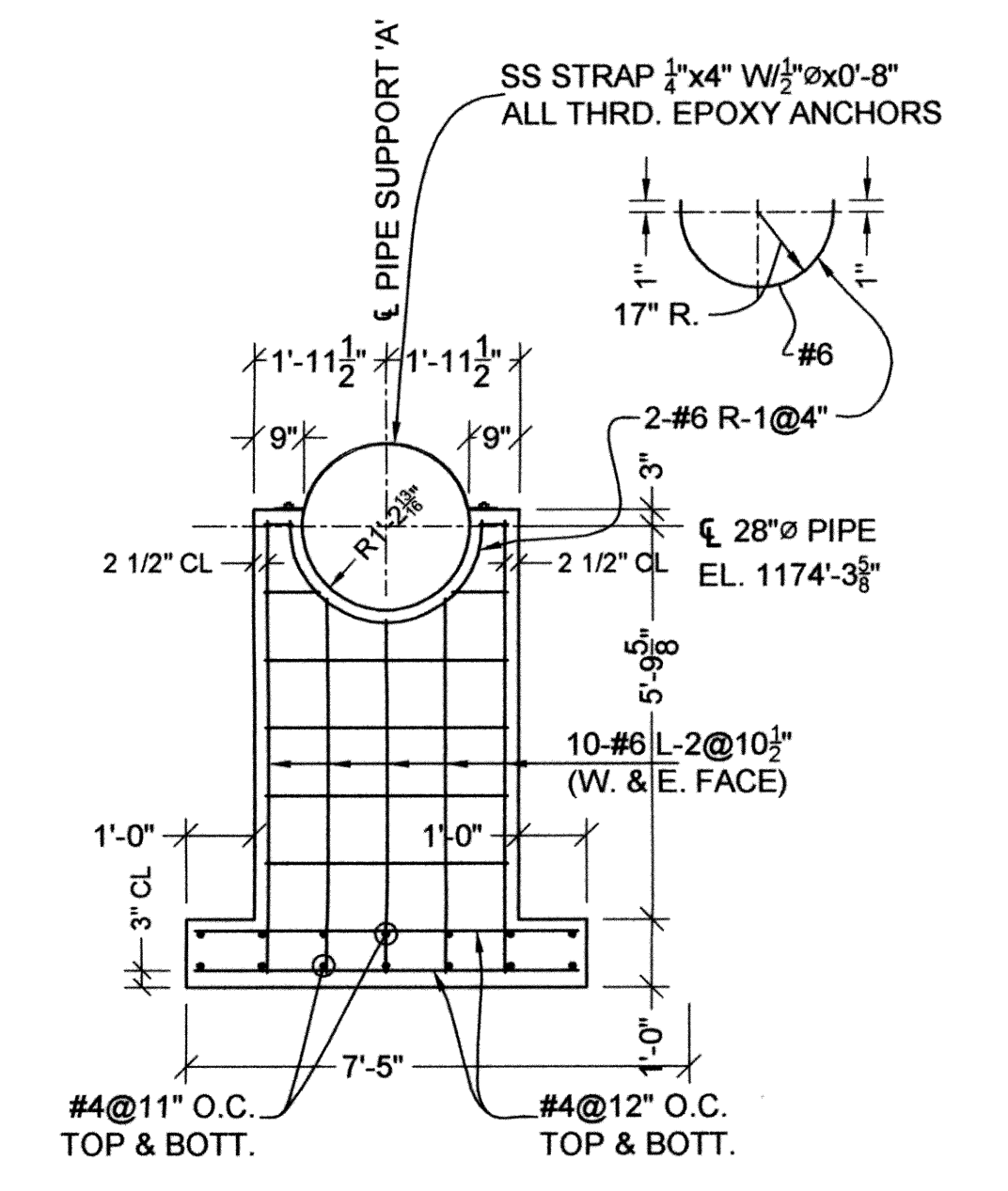
**BENT BAR DETAILS**



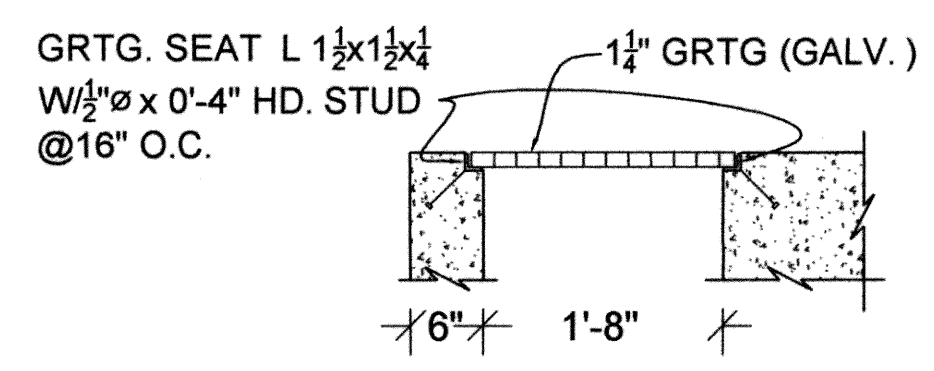
**SECTION 4**  
5-81 SCALE: 3/8" = 1'-0"



**SECTION 5**  
5-80 SCALE: 3/4" = 1'-0"



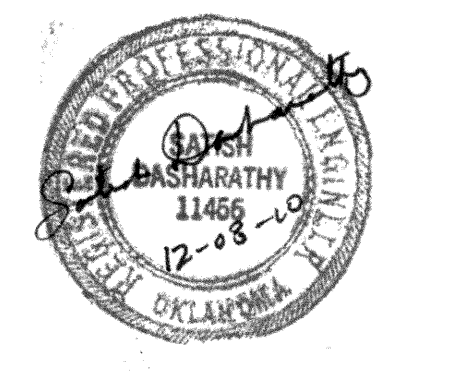
**SECTION 6**  
5-81 SCALE: 3/8" = 1'-0"



**SECTION 7**  
5-80 SCALE: 3/4" = 1'-0"

**FOUNDATION NOTE:**  
IF FOUNDATION IS NOT RESTING ON ROCK  
PROVIDE AT LEAST 6" THICK CRUSHED  
AGGREGATE ROCK SUBBASE.

**RECORD DRAWINGS**



**S-81**

REVISIONS:	DATE:
C#4 - CLARIFICATION NO. 4	12/8/2010

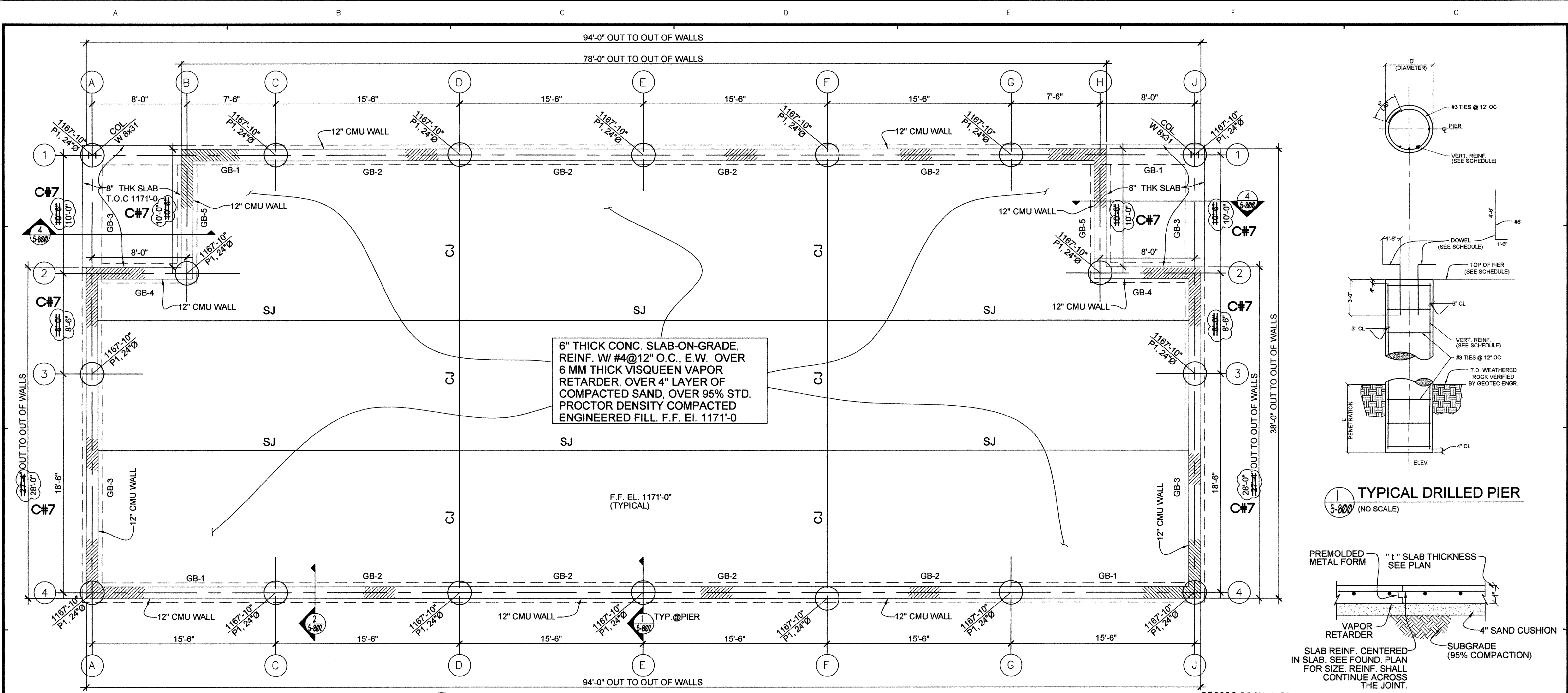
**BELT FILTER PRESS ODOR CONTROL  
STRUCTURAL DETAILS  
2 OF 3**

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**EAGLE CONSULTANTS, INC.**  
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CERTIFICATE OF AUTHORIZATION NO. CA2088

DESIGNED BY: S.D. CAD OPERATOR: D.O. CHECKED: S.D. APPROVED: S.D. PLOT DATE: 4/30/2010 DWG. SCALE: AS SHOWN SHEET: 76 OF 89





6" THICK CONC. SLAB-ON-GRADE, REINF. W/ #4@12" O.C., E.W. OVER 6 MM THICK VISQUEEN VAPOR RETARDER, OVER 4" LAYER OF COMPACTED SAND, OVER 95% STD. PROCTOR DENSITY COMPACTED ENGINEERED FILL. F.F. EI. 1171'-0

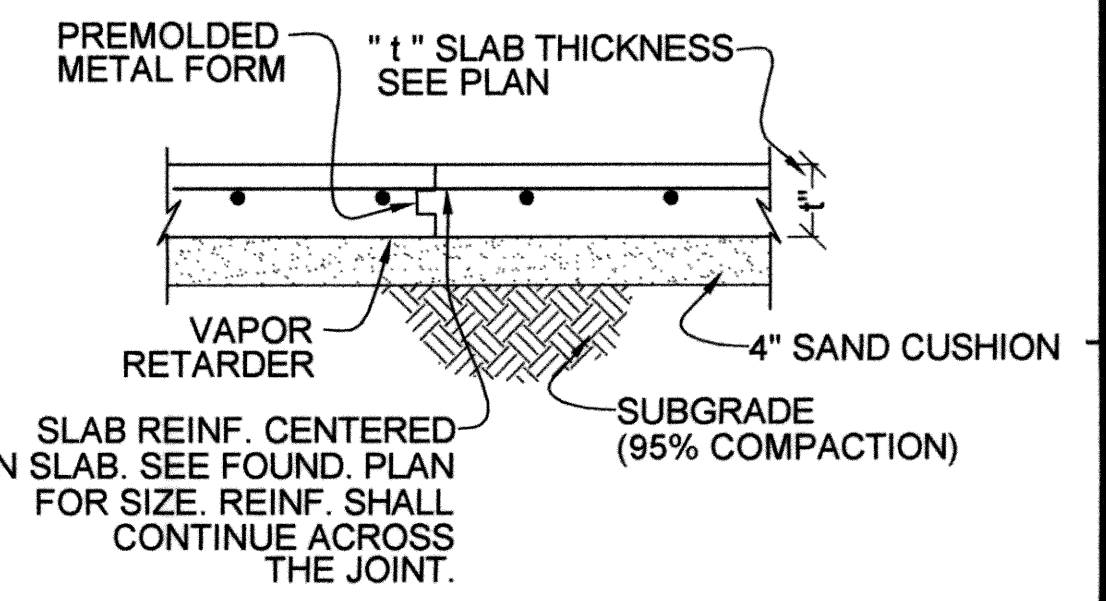
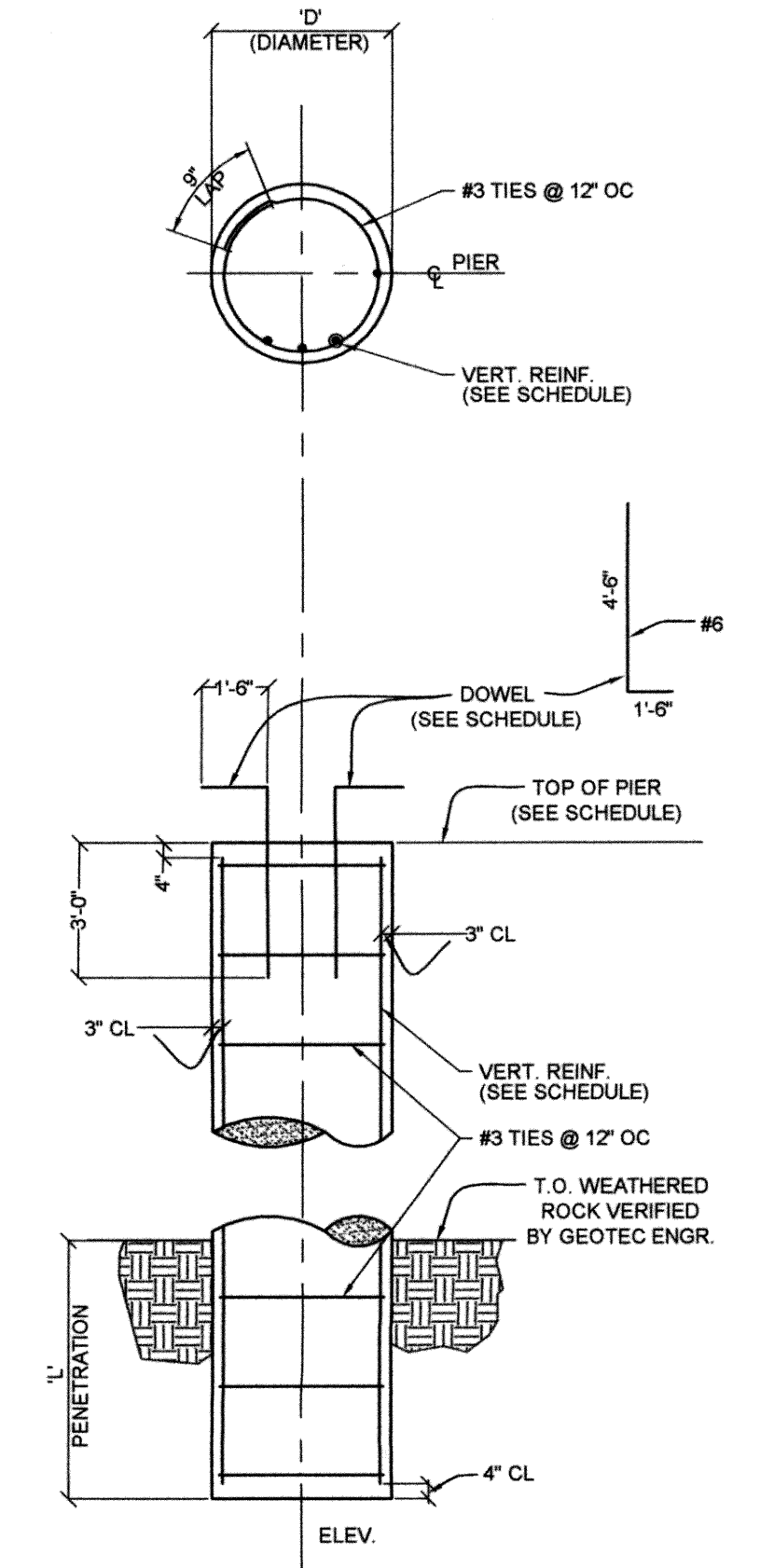
**FOUNDATION PLAN - (DRILLED PIERS & FLOOR JOINTS)**  
(SCALE: 1/4" = 1'-0")

LEGEND:  
CONST. JT. - CJ  
SAWED JT. - SJ

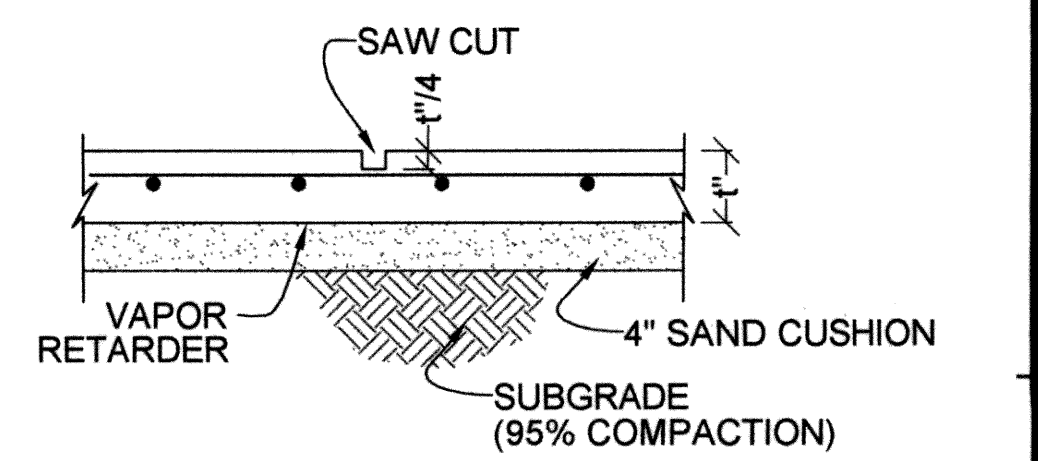
RECORD DRAWINGS



**1 TYPICAL DRILLED PIER**  
(NO SCALE)



**2 DETAIL - CONST. JT. (CJ)**  
(NO SCALE)

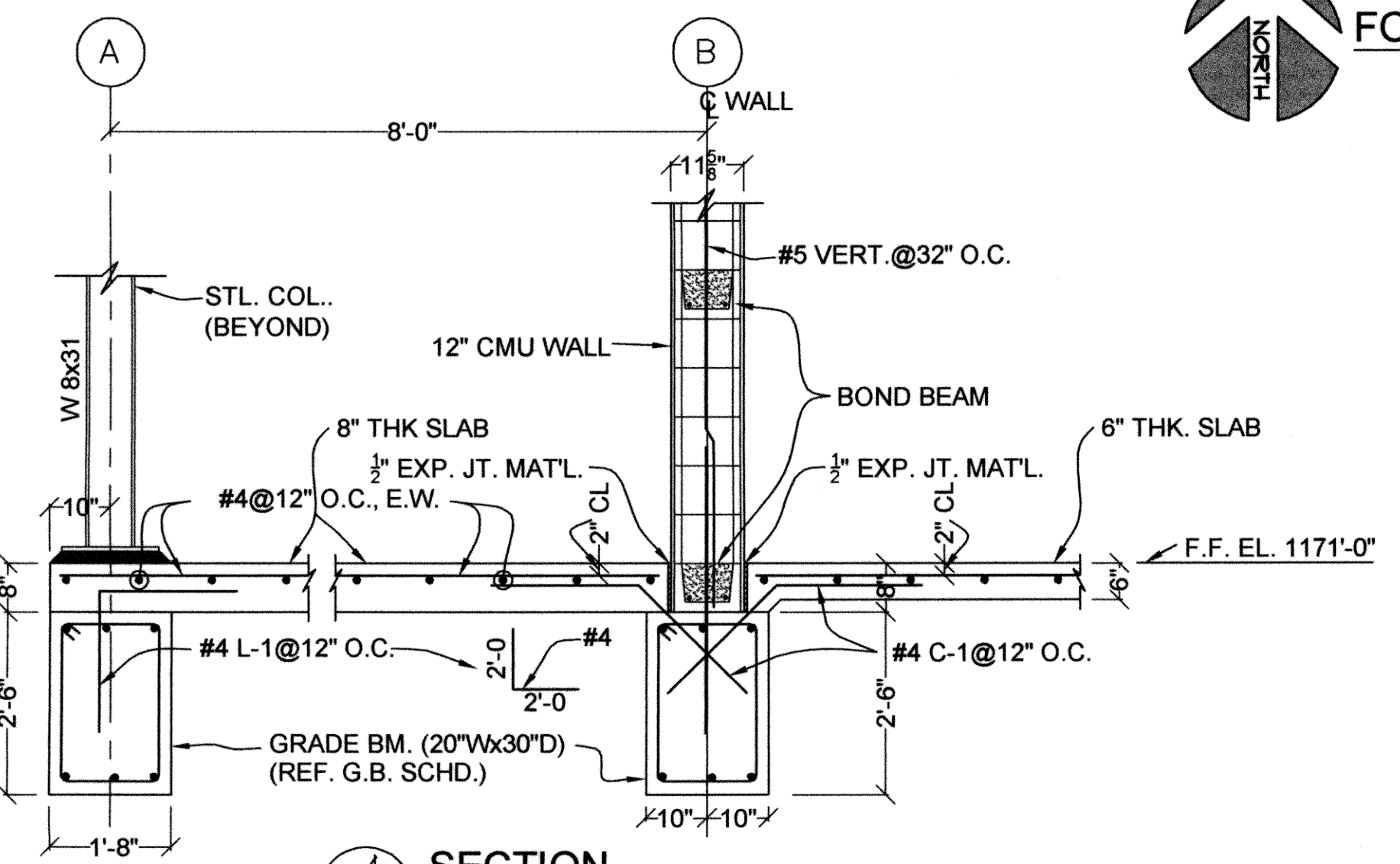


**3 DETAIL - SAWED JT. (SJ)**  
(NO SCALE)

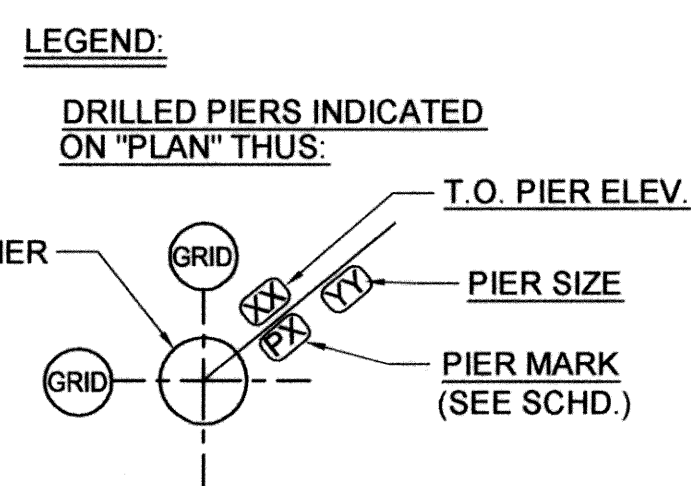
MARK	SIZE (DIA.)	PENETRATION	REINFORCEMENT		T.O. PIER	NO. REQ'D
			VERT.	DOWEL		
P-1	24"Ø	2'-0"	6-#6	4-#6	EL. 1167'-10"	18

- NOTES:
- 6" LAYER OF CRUSHED ROCK TO BE PROVIDED WHERE BOTTOM OF EXCAVATION NOT FOUNDED ON BED ROCK.
  - FLOOR SLAB, 6" THICK CONC. SLAB-ON-GRADE, TO BE POURED OVER 6 MM THICK VISQUEEN VAPOR RETARDER, OVER 4" LAYER OF COMPACTED SAND, OVER 95% STD. PROCTOR DENSITY COMPACTED ENGINEERED BACKFILL.
  - TYPICAL DRILLED PIER DETAIL, REFER DETAIL 1 DWG. S-800.

S-800



**4 SECTION**  
(SCALE: 1/2" = 1'-0")



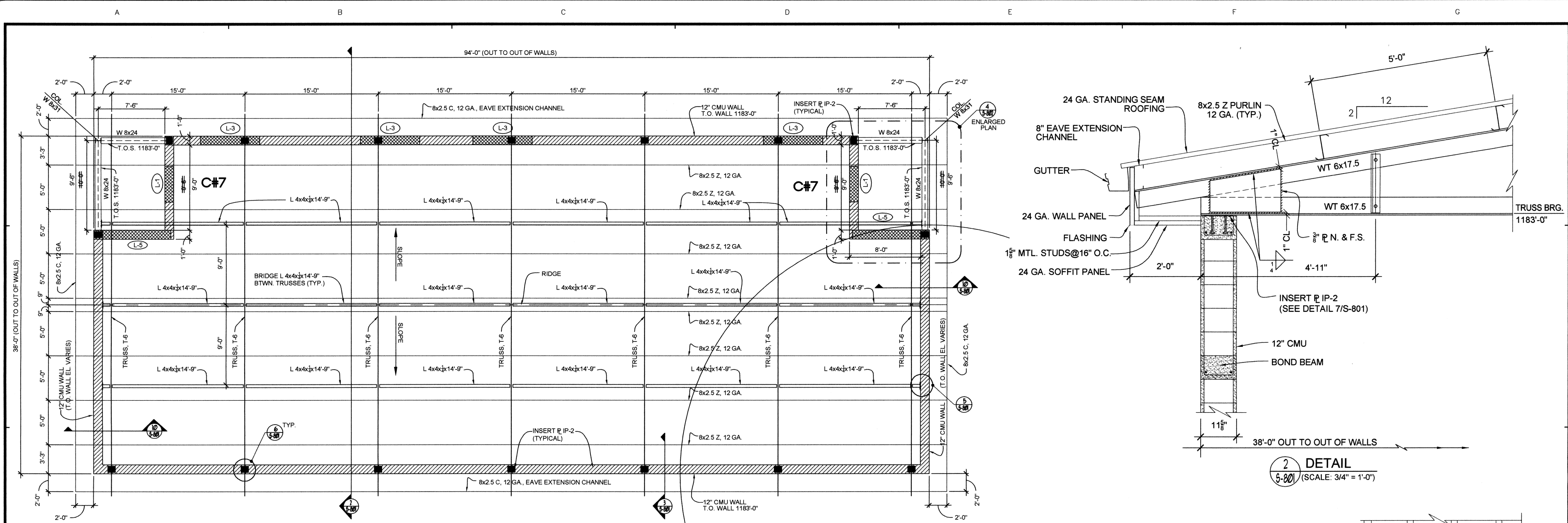
REVISIONS:	DATE:
C#7 - CLARIFICATION NO. 7	2/14/2011

**ADMINISTRATION BUILDING  
DRILLED PIERS PLAN**

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CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088

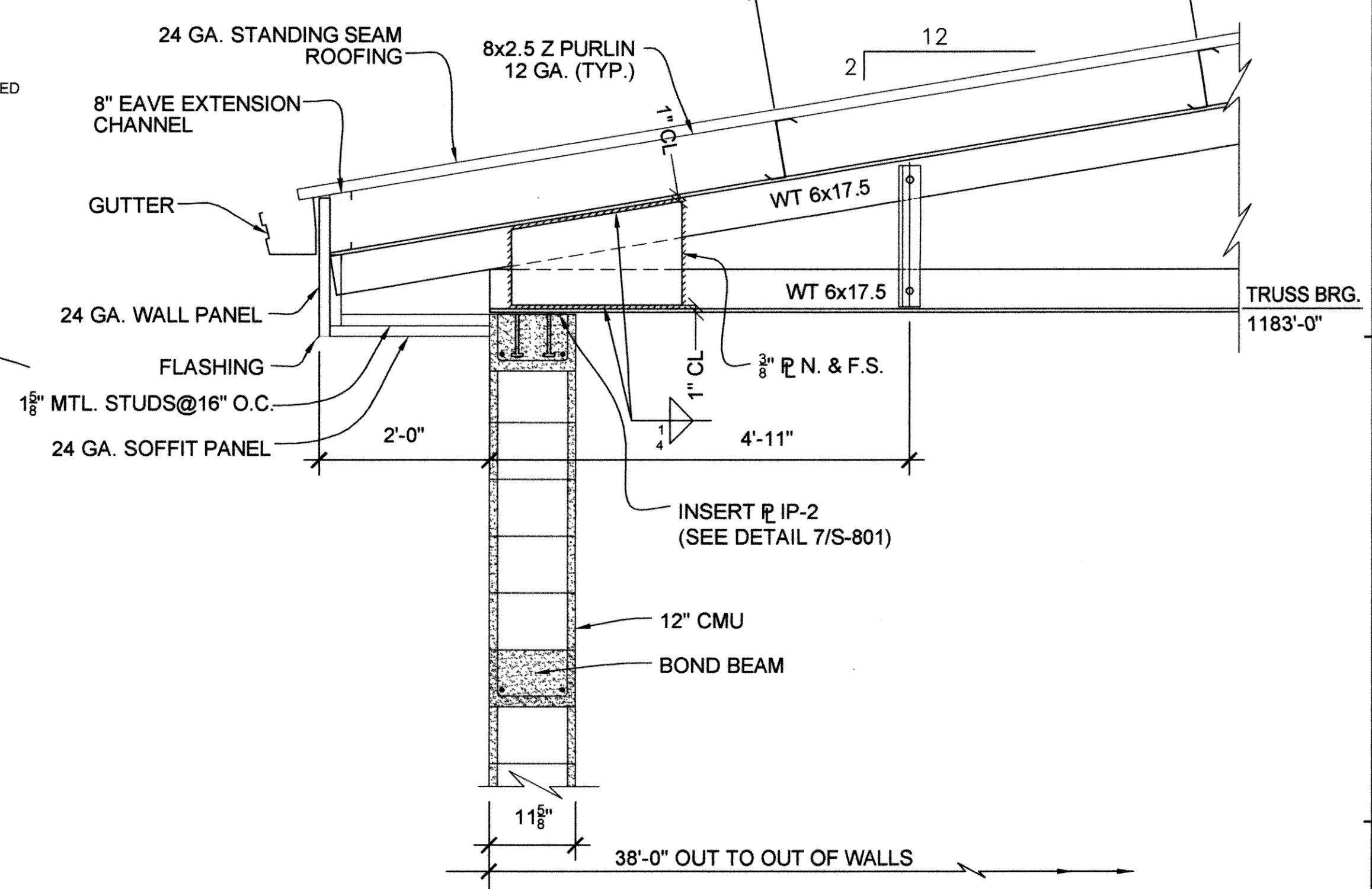
DESIGNED BY: S.D. CAD OPERATOR: S.D. CHECKED: S.D. APPROVED: S.D. PLOT DATE: 5-6-2009 DWG. SCALE: AS SHOWN SHEET: 78 OF 89



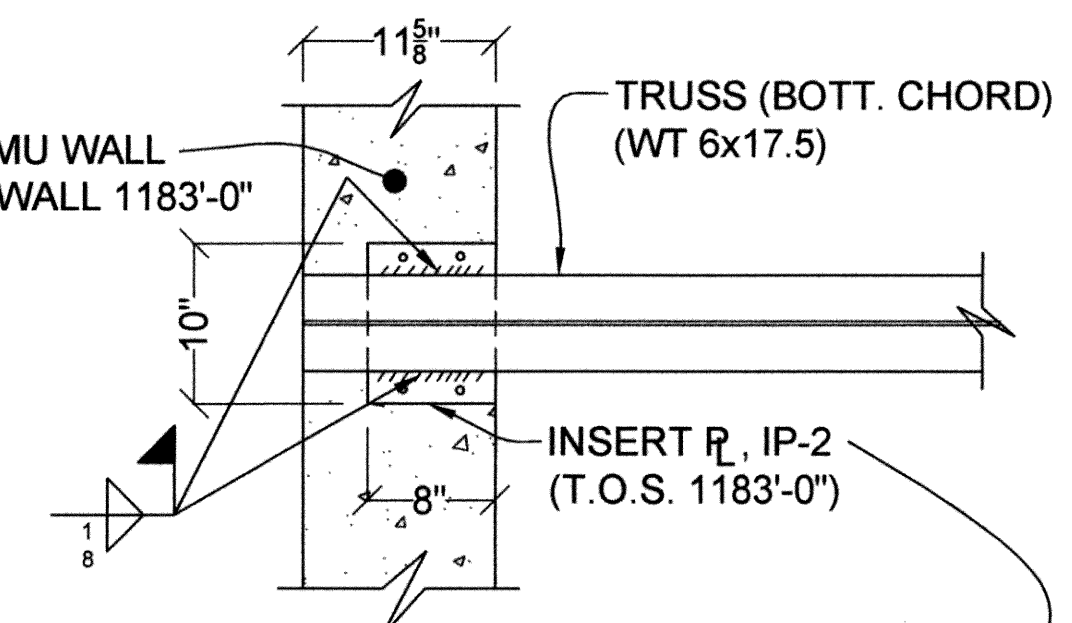
**1 ROOF FRAMING PLAN**  
 (SCALE: 3/16" = 1'-0")

**LEGEND**

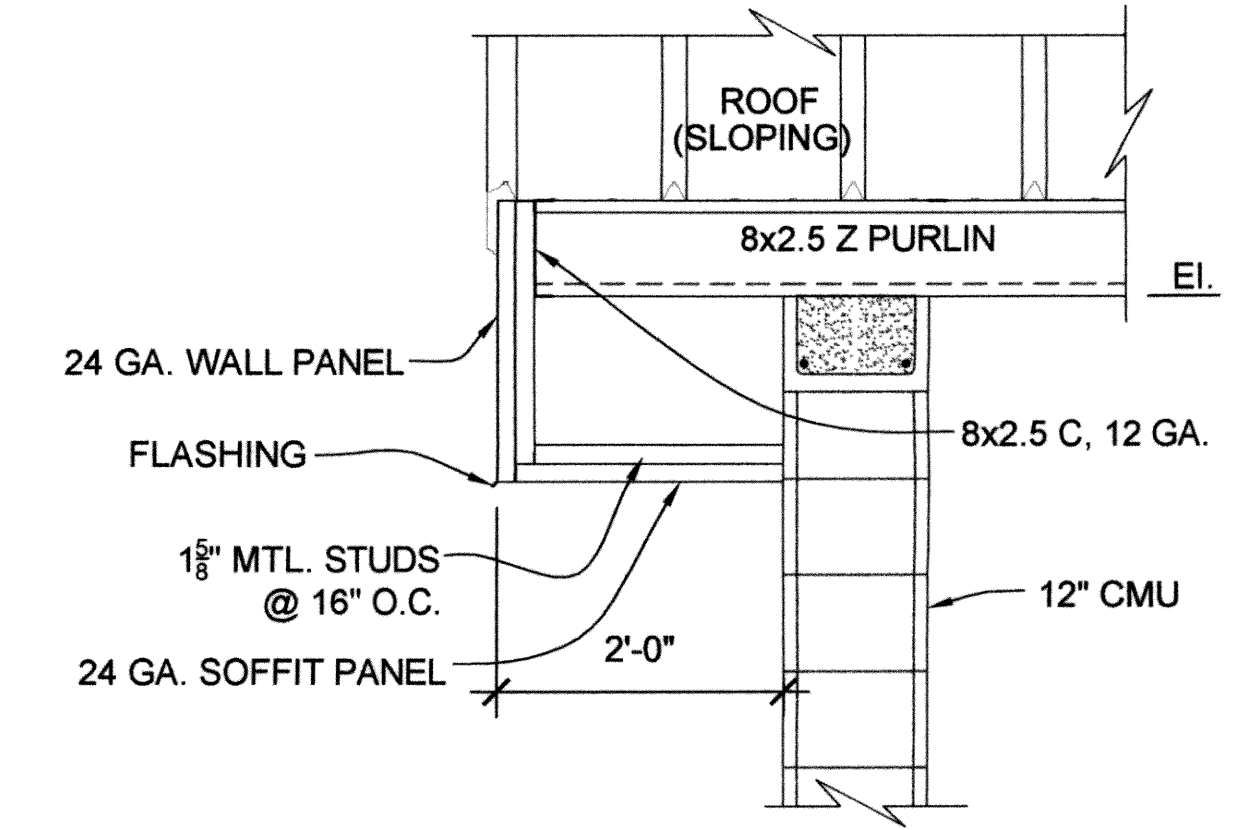
LINTEL	
L - X	REF. LINTEL SCHEDULE DRG S-960



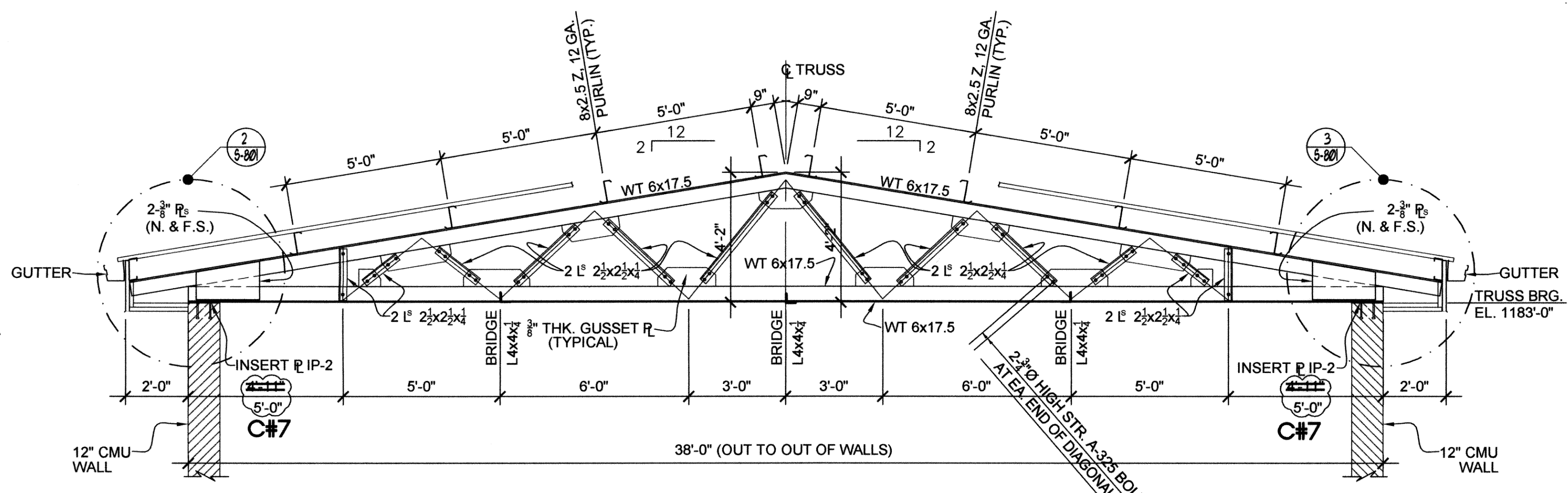
**2 DETAIL**  
 (SCALE: 3/4" = 1'-0")



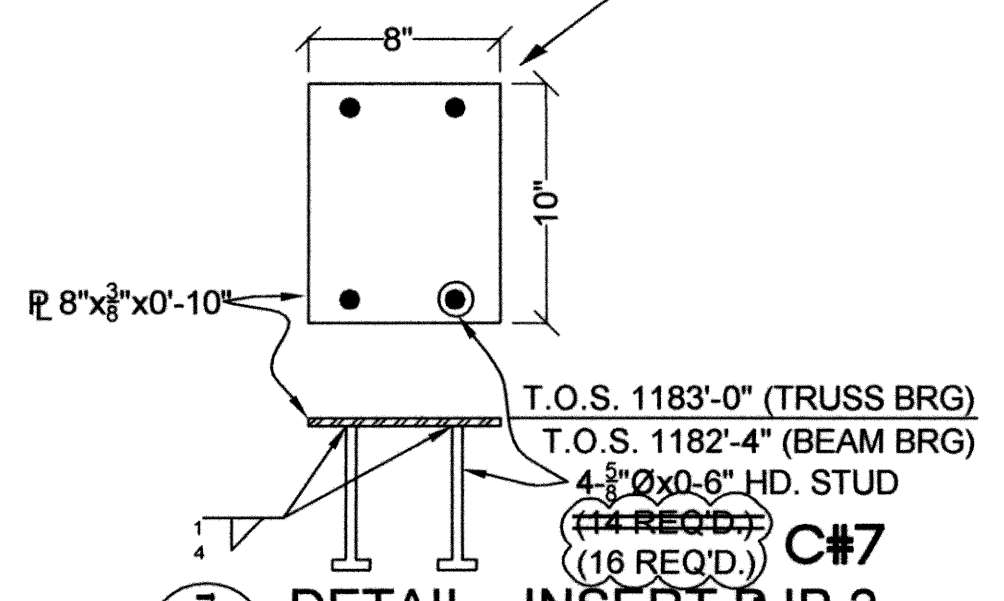
**6 DETAIL (TRUSS SEAT)**  
 (SCALE: 1" = 1'-0")



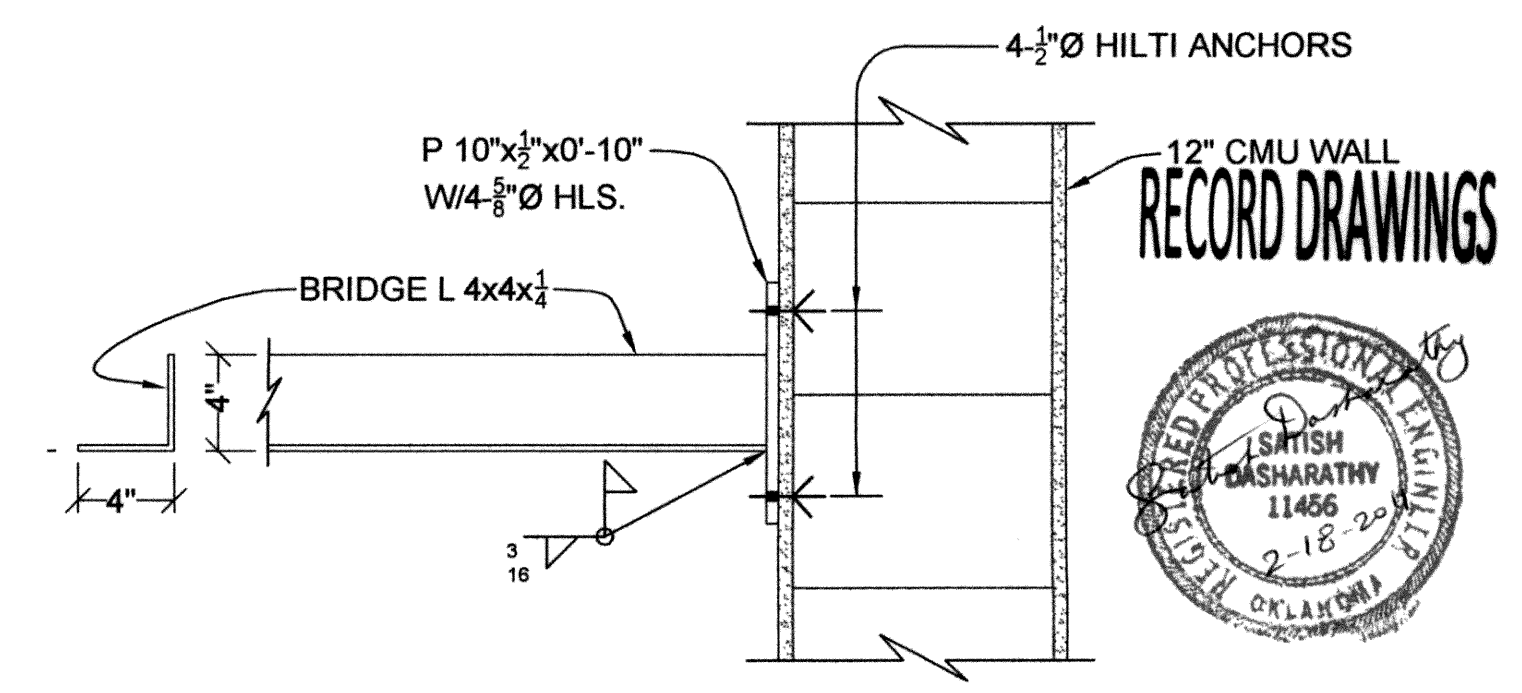
**10 SECTION**  
 (SCALE: 3/4" = 1'-0")



**2 ELEVATION TRUSS T-6 (7 REQ'D.)**  
 (SCALE: 3/8" = 1'-0")



**7 DETAIL - INSERT R IP-2**  
 (SCALE: 1 1/2" = 1'-0")



**5 DETAIL - BRIDGE ANCHOR**  
 (SCALE: 1 1/2" = 1'-0")

**RECORD DRAWINGS**



**S-801**

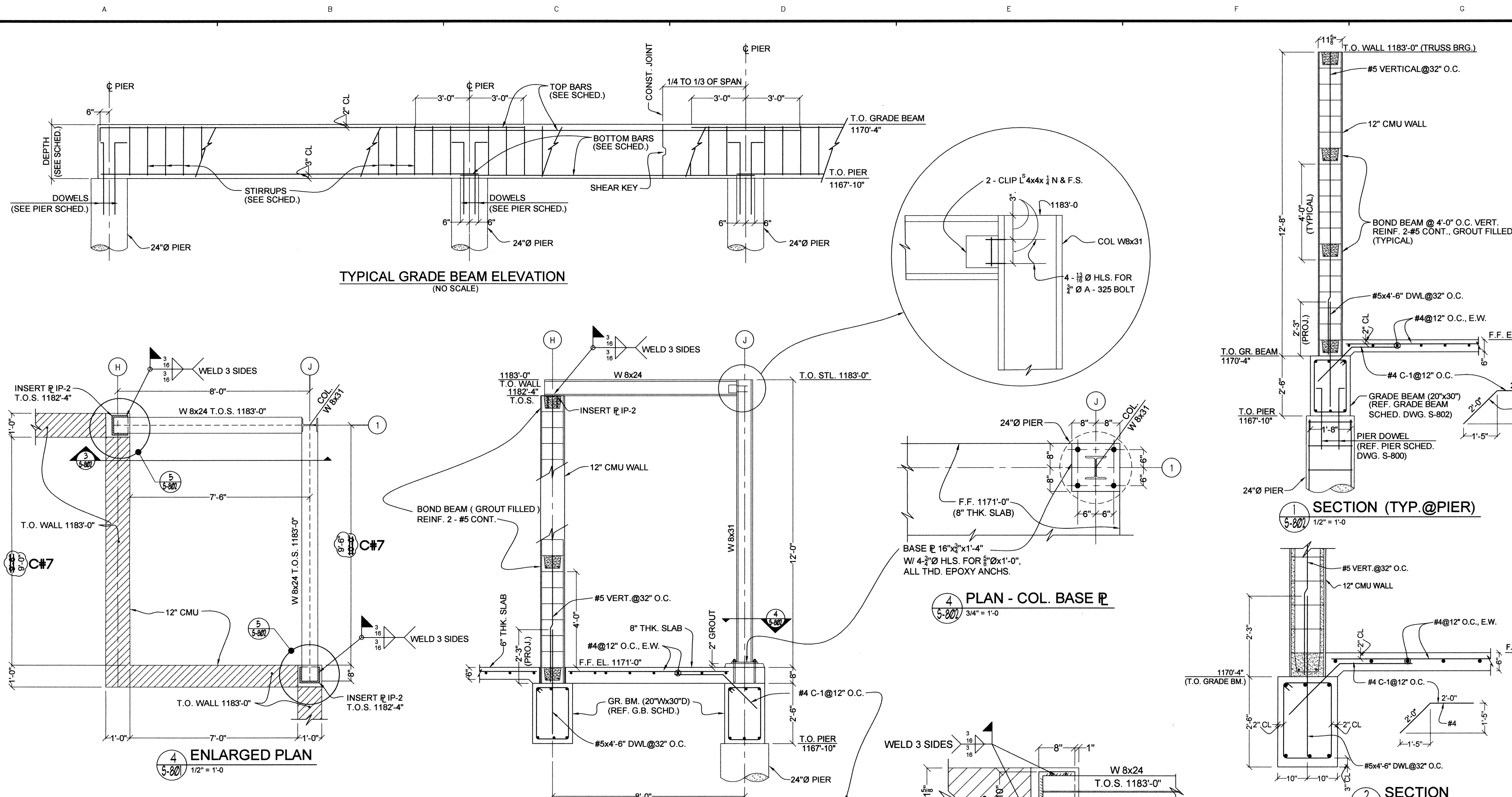
REVISIONS:	DATE:
C#7 - CLARIFICATION NO. 7	2/14/2011

**ADMINISTRATION BUILDING  
 ROOF FRAMING PLAN**

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 CIVIL AND ENVIRONMENTAL ENGINEERS  
 CERTIFICATE OF AUTHORIZATION NO. CA2088

DESIGNED BY:	CAD OPERATOR:	CHECKED:	APPROVED:	PLOT DATE:	DWG. SCALE:	SHEET:
S.D.		S.D.	S.D.	4/30/2010	AS SHOWN	79 OF 89



**TYPICAL GRADE BEAM ELEVATION**  
(NO SCALE)

**ENLARGED PLAN**  
1/2" = 1'-0"

**ELEVATION**  
1/2" = 1'-0"

**PLAN - COL. BASE**  
3/4" = 1'-0"

**SECTION (TYP. @ PIER)**  
1/2" = 1'-0"

**DETAIL - BEAM SEAT**  
1/2" = 1'-0"

GRADE BEAM SCHEDULE										
BEAM	MAIN REINFORCING						STIRRUPS			
MARK	SIZE	NO	SIZE	LENGTH	BAR	SKETCH	NO	SIZE	TYPE	PLACING
GB-1	20W 30D	3	#8	19'-0" 16'-6"	TOP BTM		20	#3	S1	@ 9" O.C.
GB-2	20W 30D	3	#8	21'-6" 16'-6"	TOP BTM		20	#3	S1	@ 9" O.C.
GB-3	20W 30D	3	#8	22'-0" 19'-6"	TOP BTM		24	#3	S1	@ 9" O.C.
GB-4	20W 30D	2	#6	9'-0" 9'-0"	TOP BTM		10	#3	S1	@ 9" O.C.
GB-5	20W 30D	2	#6	11'-0" 11'-0"	TOP BTM		14	#3	S1	@ 9" O.C.

NOTE:  
1. BEAM SIZE IS IN INCHES.  
2. REINFORCING LENGTH DOES NOT INCLUDE HOOK LENGTHS.

REVISIONS:	DATE:
C#7 - CLARIFICATION NO. 7	2/14/2011

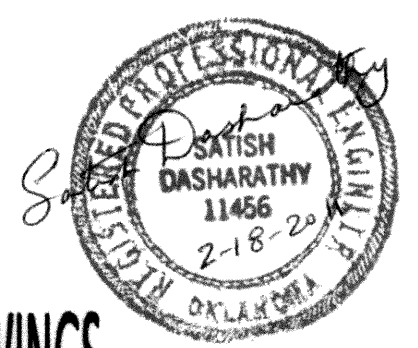
ADMINISTRATION BUILDING  
STRUCTURAL DETAILS

EAGLE OFFICE CENTER  
2803 SOUTH BRYANT  
EDMOND, OK. 73013  
PH. (405) 844-3900  
FAX. (405) 844-3600

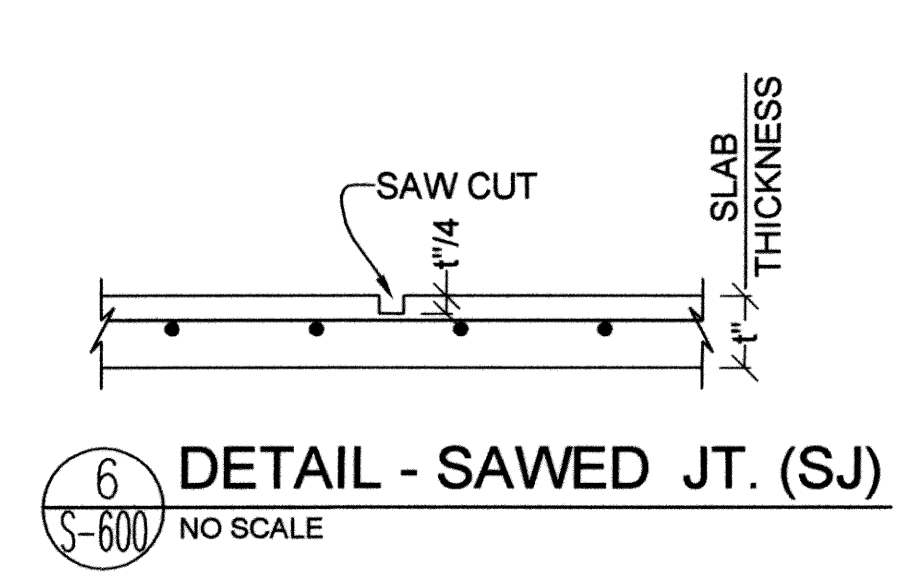
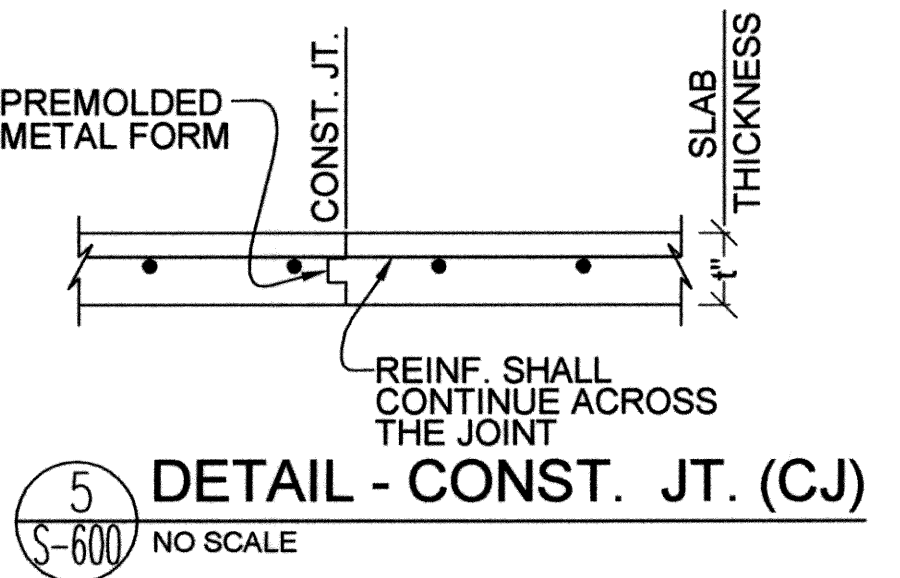
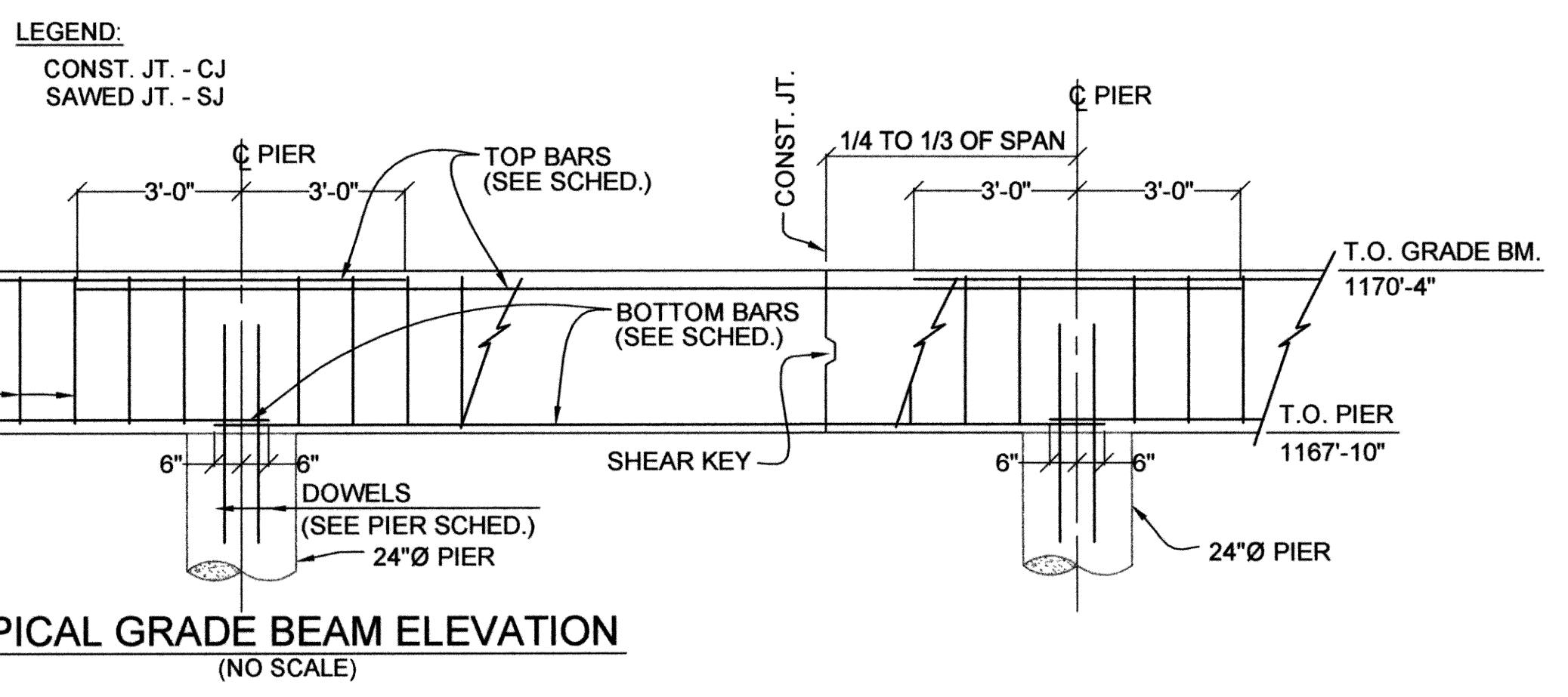
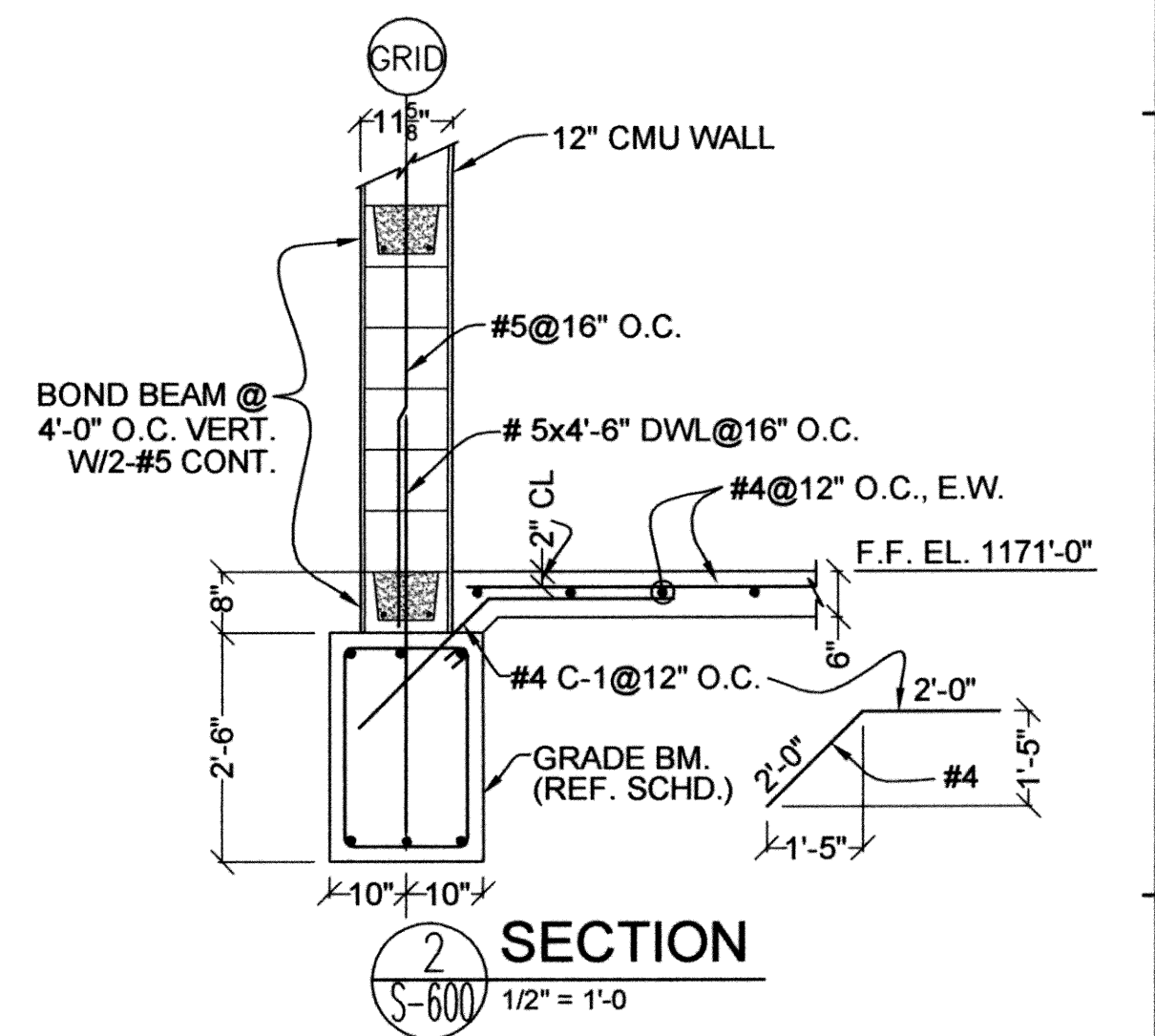
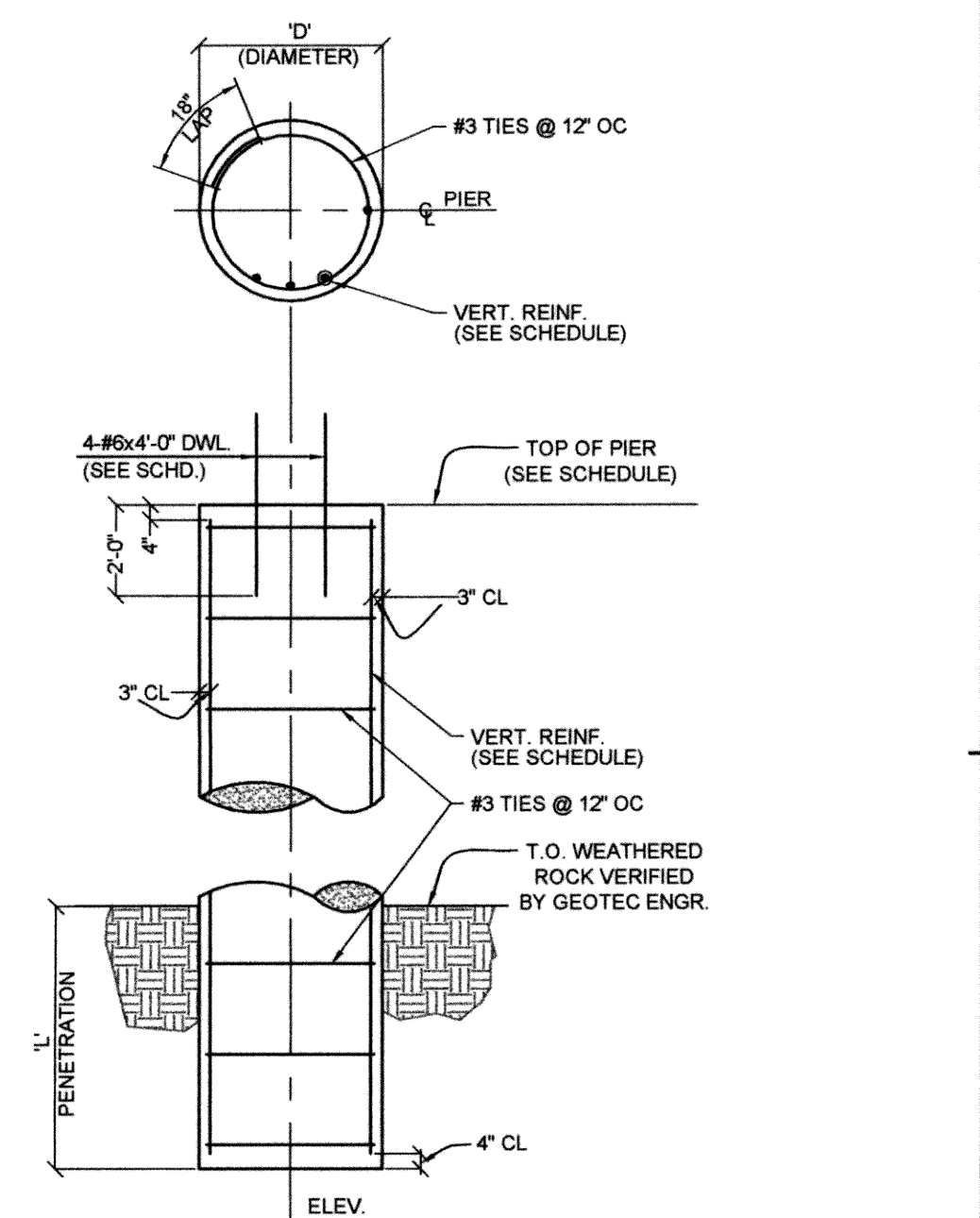
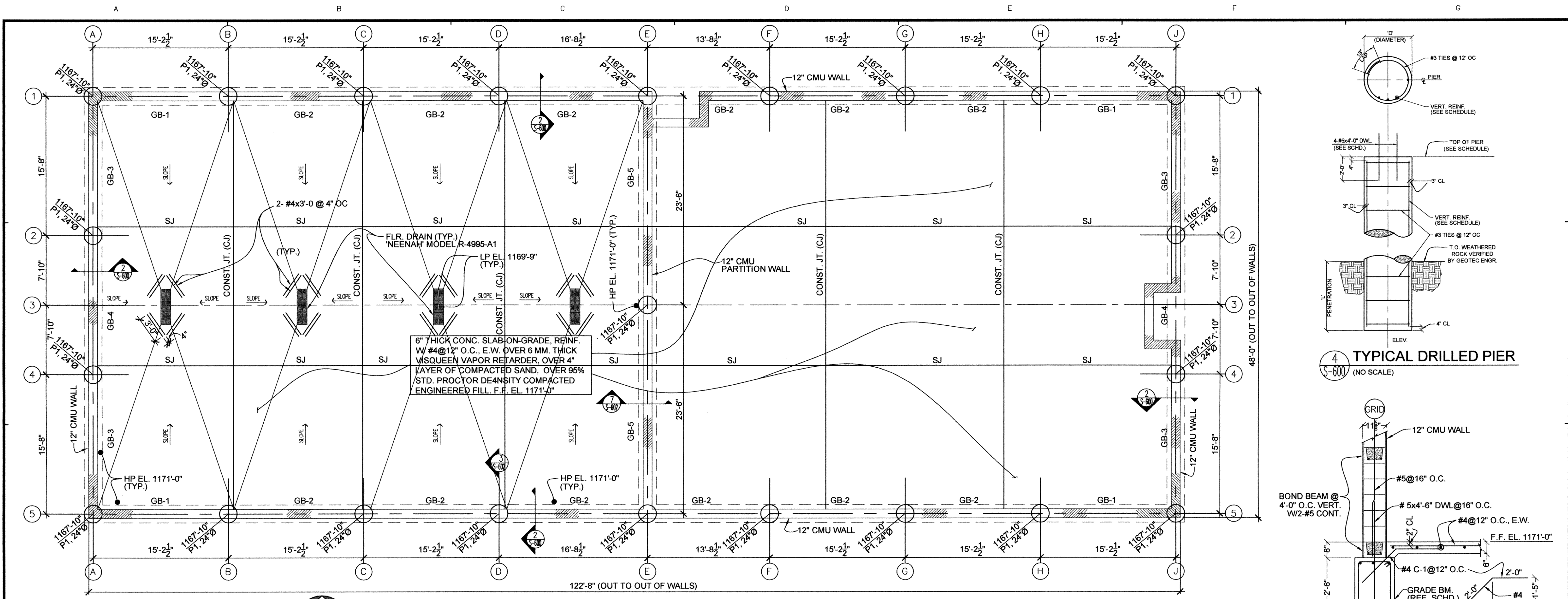
**EAGLE CONSULTANTS, INC.**  
CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088

RECORD DRAWINGS

S-802



C:\DRAWINGS\MOORE\WORK\Structural\Administration Building\S802-Admin-GB.dwg



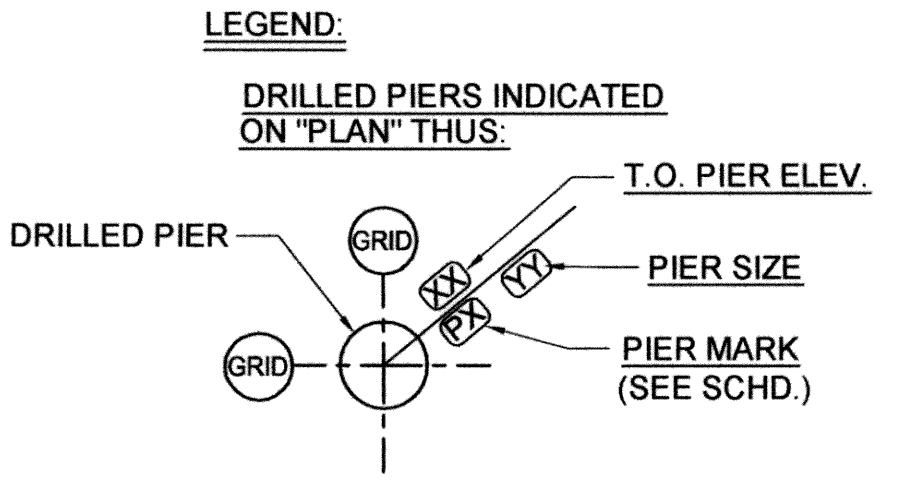
GRADE BEAM SCHEDULE

BEAM	MAIN REINFORCING					STIRRUPS					
	MARK	SIZE	NO	SIZE	LENGTH	BAR	SKETCH	NO	SIZE	TYPE	PLACING
GB-1	20W 30D	3	#8	18'-8 1/2"	TOP BTM	[Sketch]	21	#3	S1	@ 9" O.C.	
GB-2	20W 30D	3	#8	21'-2 1/2"	TOP BTM	[Sketch]	21	#3	S1	@ 9" O.C.	
GB-3	20W 30D	3	#8	19'-2"	TOP BTM	[Sketch]	21	#3	S1	@ 9" O.C.	
GB-4	20W 30D	3	#8	21'-8"	TOP BTM	[Sketch]	21	#3	S1	@ 9" O.C.	
GB-5	20W 30D	3	#8	27'-0"	TOP BTM	[Sketch]	31	#3	S1	@ 9" O.C.	

- NOTES:
1. BEAM SIZE IS IN INCHES.
  2. REINFORCING LENGTH DOES NOT INCLUDE HOOK LENGTHS.
- NOTES:
1. 6" LAYER OF CRUSHED ROCK TO BE PROVIDED WHERE BOTTOM OF EXCAVATION NOT FOUNDED ON BED ROCK.
  2. FLOOR SLAB, 6" THK. CONC. SLAB-ON-GRADE, TO BE POURED OVER 6 MM THICK VISQUEEN VAPOR RETARDER, OVER 4" LAYER OF COMPACTED SAND CUSHION, OVER 95% STD. PROCTOR DENSITY COMPACTED ENGINEERED BACKFILL.
  3. TYPICAL DRILLED PIER DETAIL, REFER DETAIL 4 /DWG. S-600.

DRILLED PIER SCHEDULE

MARK	SIZE (DIA.)	PENETRATION	REINFORCEMENT		T.O. PIER	NO. REQ'D
			VERT.	DOWEL		
P-1	24"Ø	2'-0"	6-#6	4-#6x4'-0"	EL. 1167'-10"	23



REGISTERED PROFESSIONAL ENGINEER  
SACHIN M. MURTHY  
M.U.E. 11195  
Joshi M. Murthy  
4/20/10

RECORD DRAWINGS  
EAGLE CONSULTANTS, INC.  
CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088

MAINTENANCE BUILDING  
DRILLED PIERS PLAN

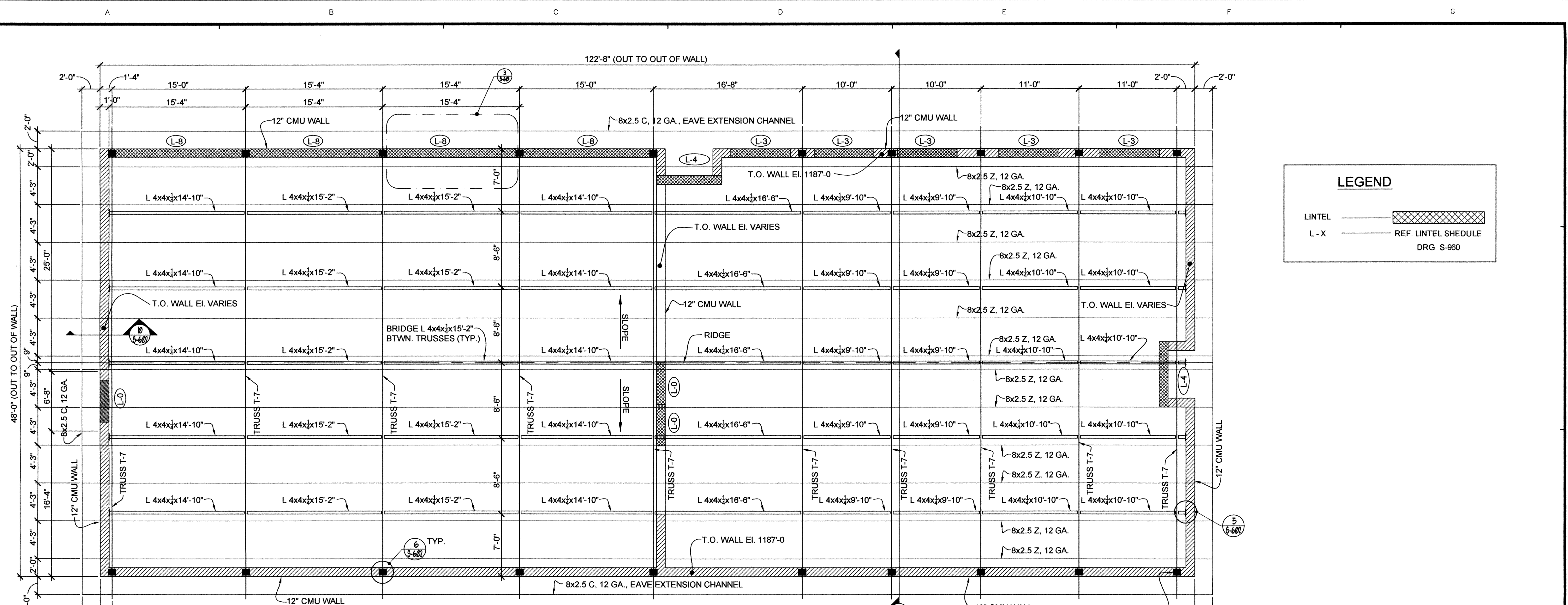
EAGLE OFFICE CENTER  
2803 SOUTH BRYANT  
EDMOND, OK. 73013  
PH. (405) 844-3900  
FAX. (405) 844-3600

WASTEWATER TREATMENT SYSTEM IMPROVEMENTS, MOORE, OK

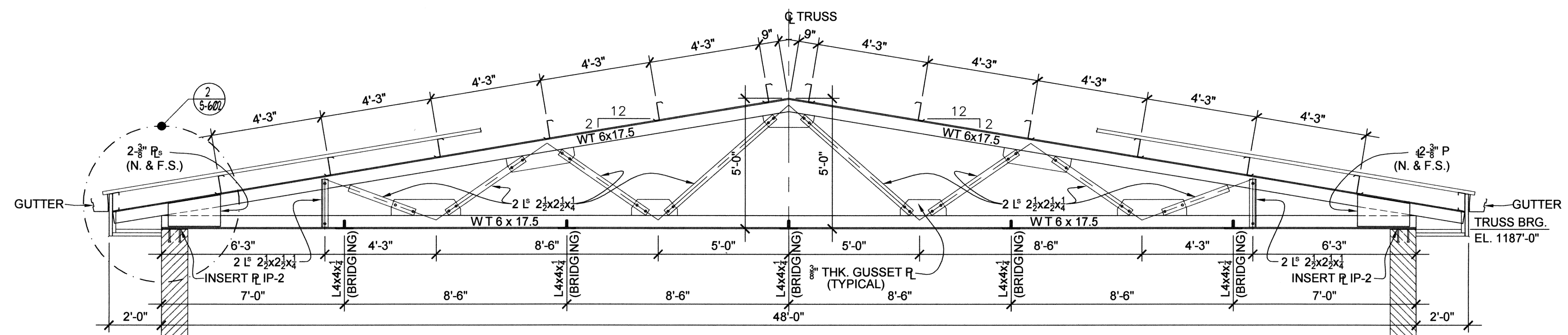
C:\DRAWINGS\WORK\WORK\Structural\Maintenance Building\S600-MaintenancePiers.dwg

DESIGNED BY: S.D. CAD OPERATOR: S.D. CHECKED: S.D. APPROVED: S.D. PLOT DATE: 2/15/2010 DWG. SCALE: AS SHOWN SHEET: 81 OF 89

REVISIONS: DATE:



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

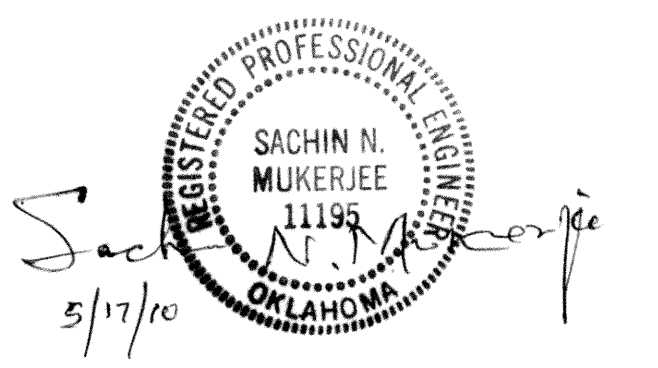


**2 ELEVATION TRUSS T-7 (10 REQ'D.)**  
(SCALE: 3/8" = 1'-0")

**LEGEND**

LINTEL REF. LINTEL SCHEDULE DRG S-960

L-X REF. LINTEL SCHEDULE DRG S-960



**RECORD DRAWINGS** **S-601**

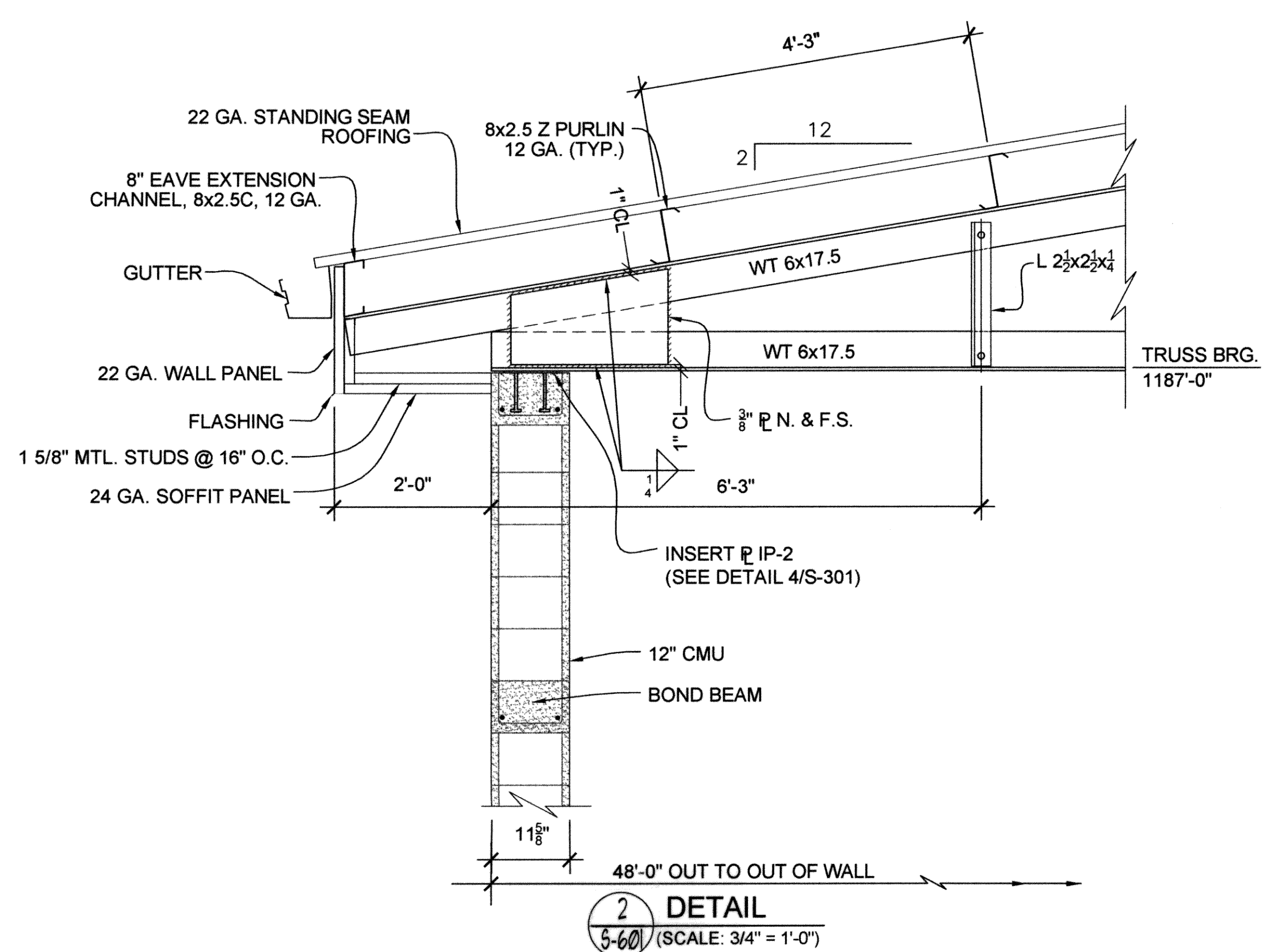
DESIGNED BY: S.D.	CAD OPERATOR:	CHECKED: S.D.	APPROVED: S.D.	PLOT DATE: 4/30/2010	DWG. SCALE: AS SHOWN	SHEET: 82 OF 89
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REVISIONS:	DATE:

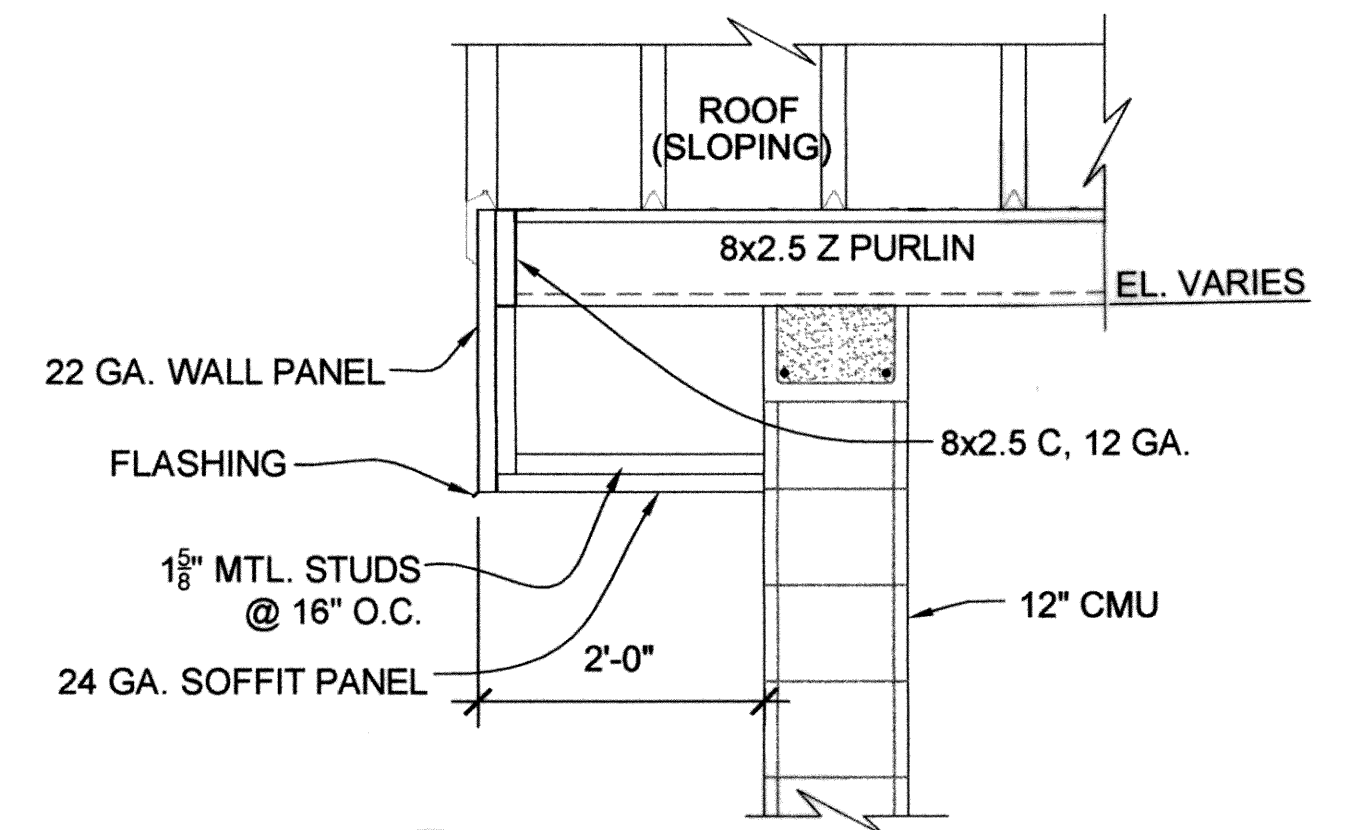
**MAINTENANCE BUILDING  
ROOF FRAMING PLAN**

EAGLE OFFICE CENTER  
2803 SOUTH BRYANT  
EDMOND, OK. 73013  
PH. (405) 844-3900  
FAX. (405) 844-3600

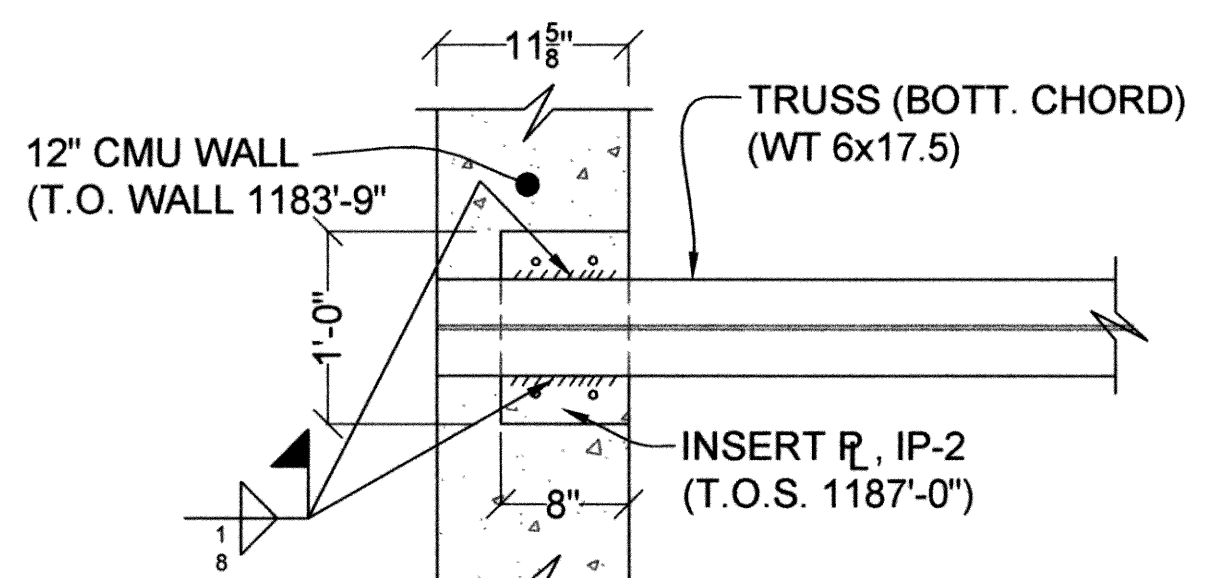
**EAGLE CONSULTANTS, INC.**  
CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088



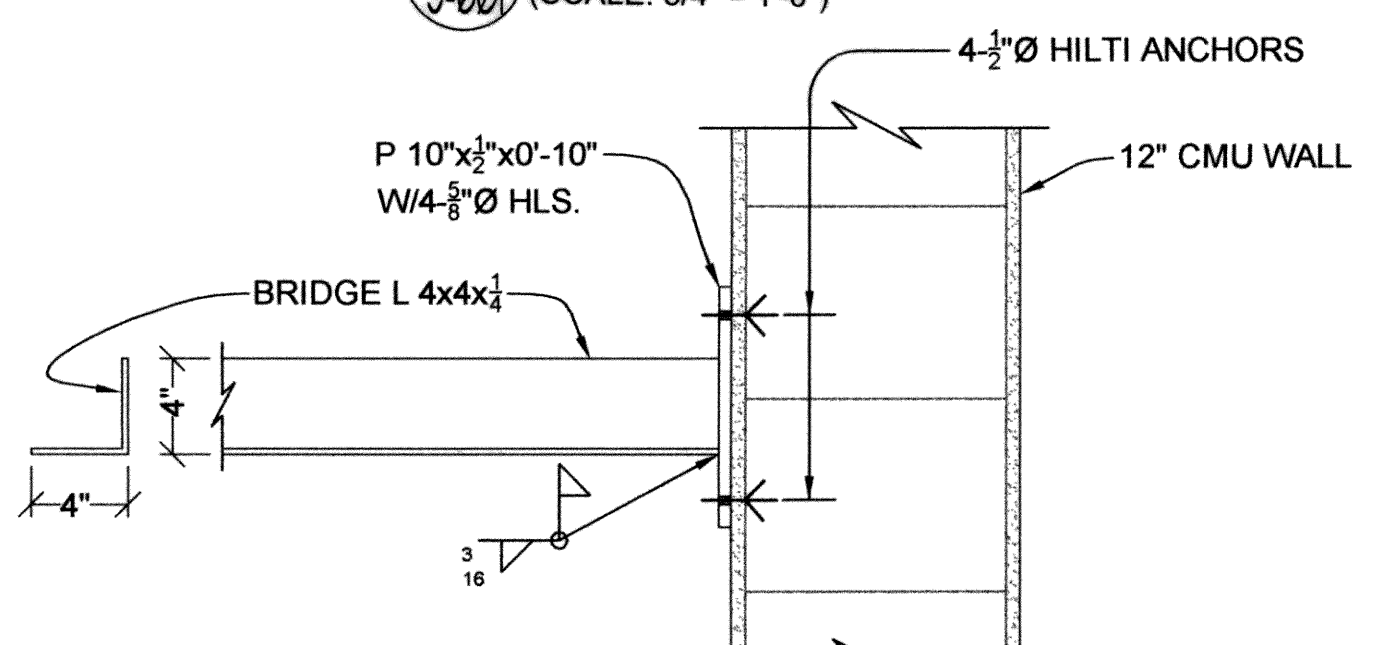
**2** DETAIL  
5-600 (SCALE: 3/4" = 1'-0")



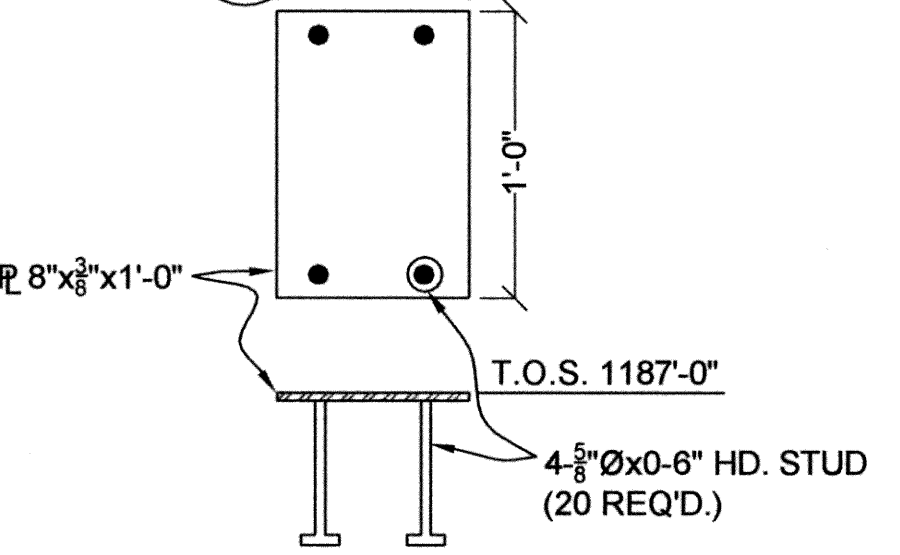
**4** SECTION  
5-600 (SCALE: 3/4" = 1'-0")



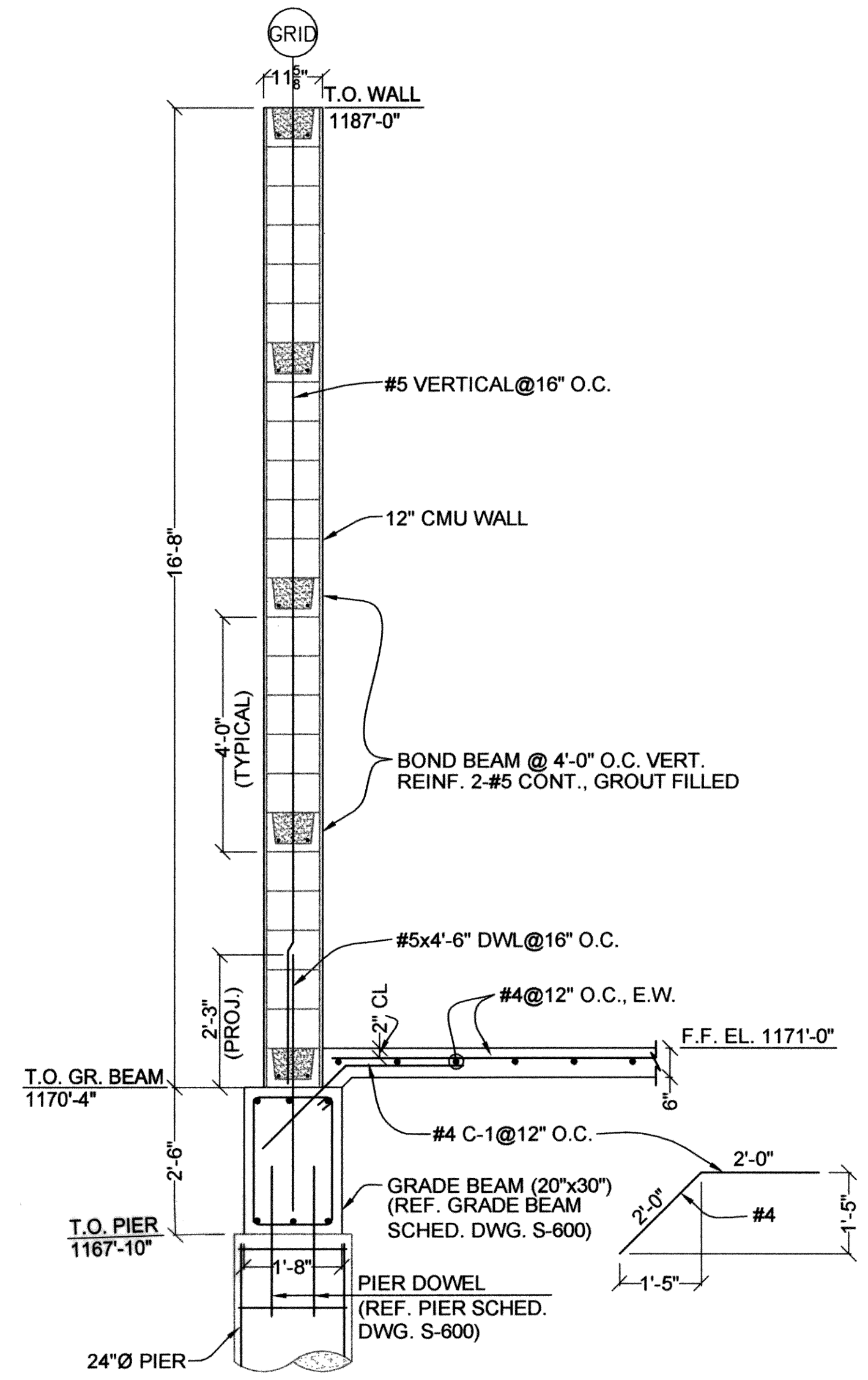
**6** DETAIL (TRUSS SEAT)  
5-600 (SCALE: 1" = 1'-0")



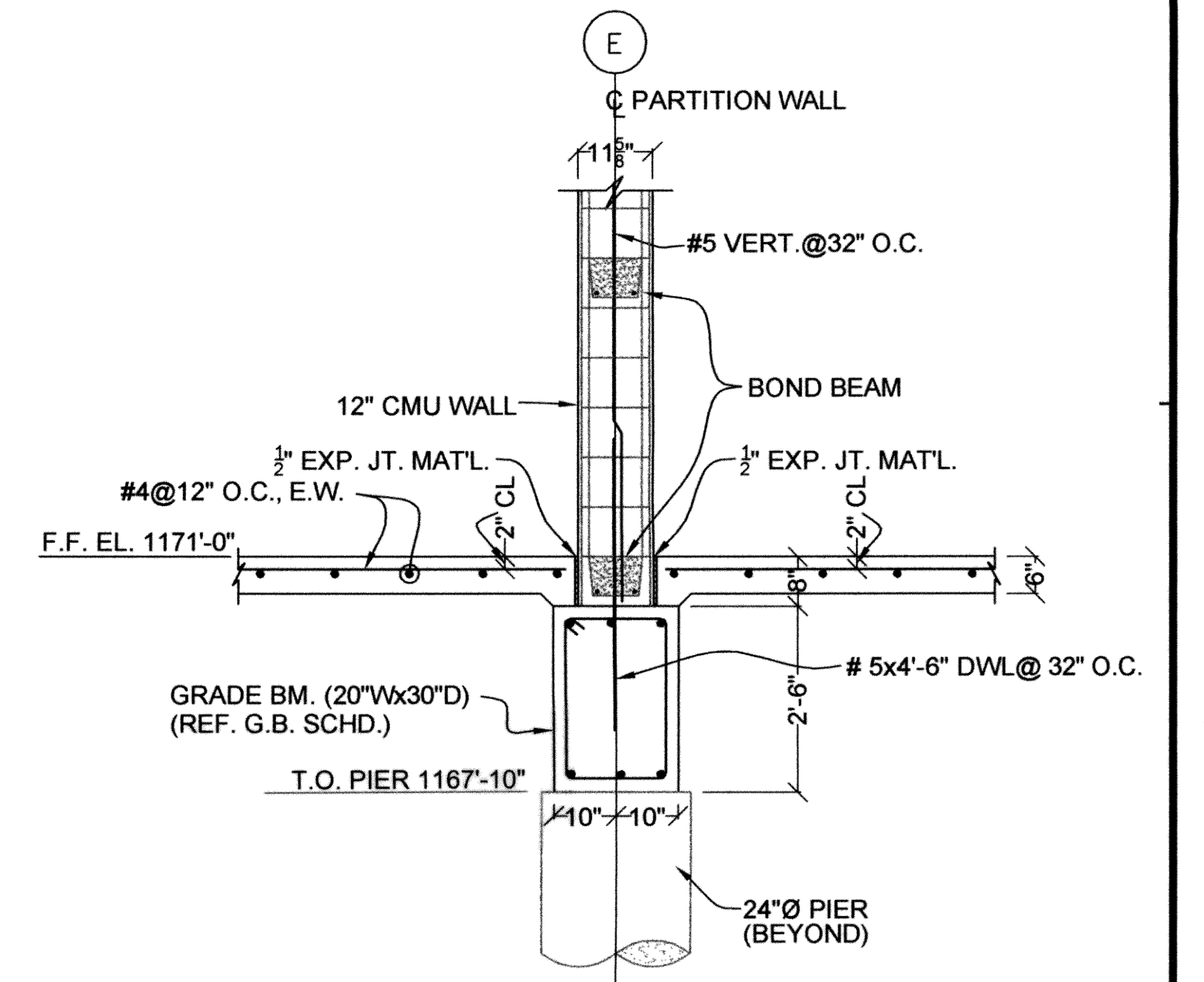
**5** DETAIL - BRIDGE ANCHOR  
5-600 (SCALE: 1 1/2" = 1'-0")



**7** DETAIL - INSERT R IP-2  
5-600 (SCALE: 1 1/2" = 1'-0")



**3** TYPICAL 12" CMU WALL  
5-600 (SCALE: 1/2" = 1'-0")



**7** SECTION (PARTITION WALL)  
5-600 (SCALE: 1/2" = 1'-0")

C:\DRAWINGS\MOORE\WORK\Structural\S602-MainRoofDetails.dwg

DESIGNED BY: S.D.	CAD OPERATOR: A	CHECKED: S.D.	APPROVED: S.D.	PLOT DATE: 5-6-2009	DWG. SCALE: AS SHOWN	SHEET: 83 OF 89
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REVISIONS:	DATE:

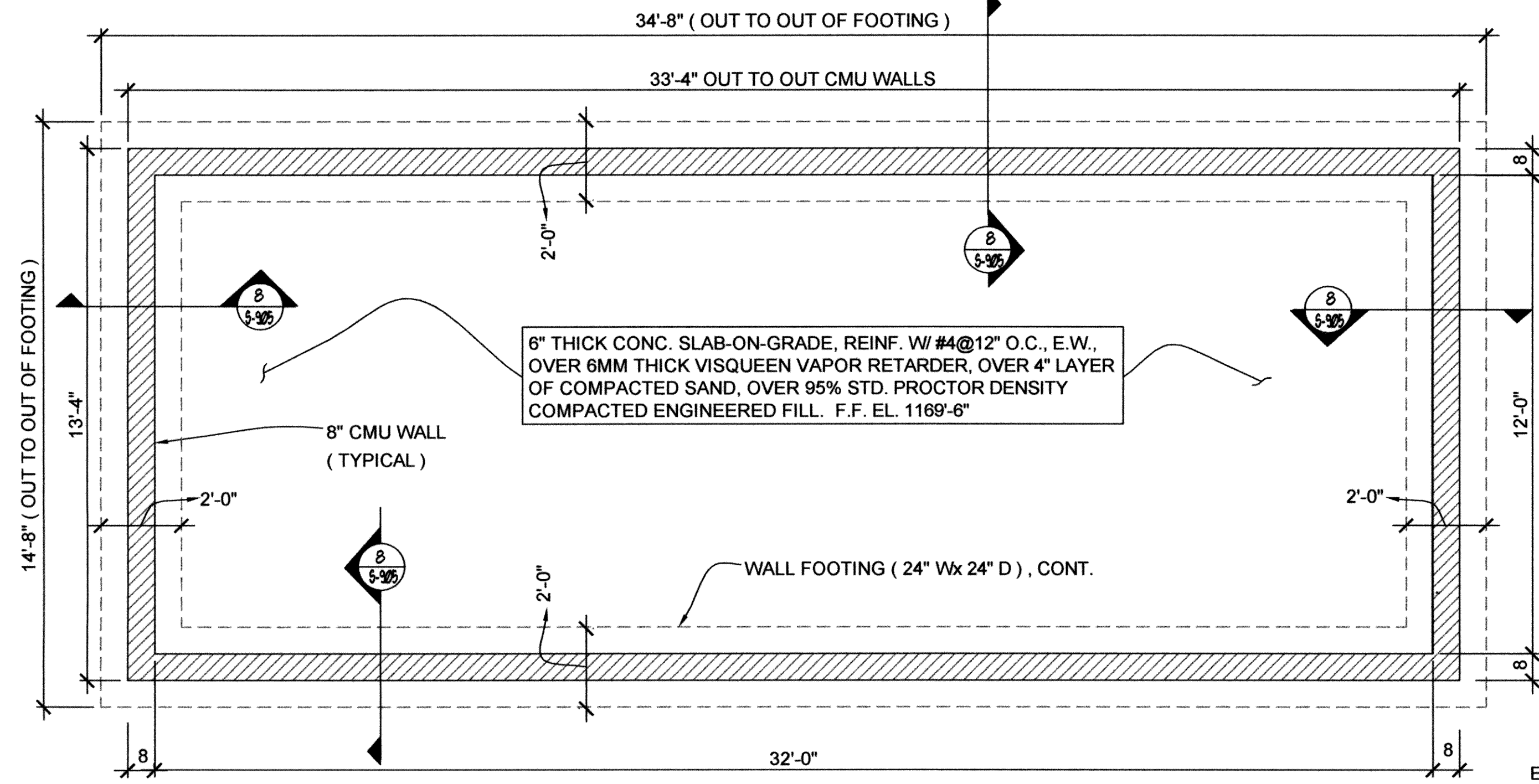
**MAINTENANCE BUILDING  
ROOF FRAMING PLAN**

EAGLE OFFICE CENTER  
2803 SOUTH BRYANT  
EDMOND, OK. 73013  
PH. (405) 844-3900  
FAX. (405) 844-3600

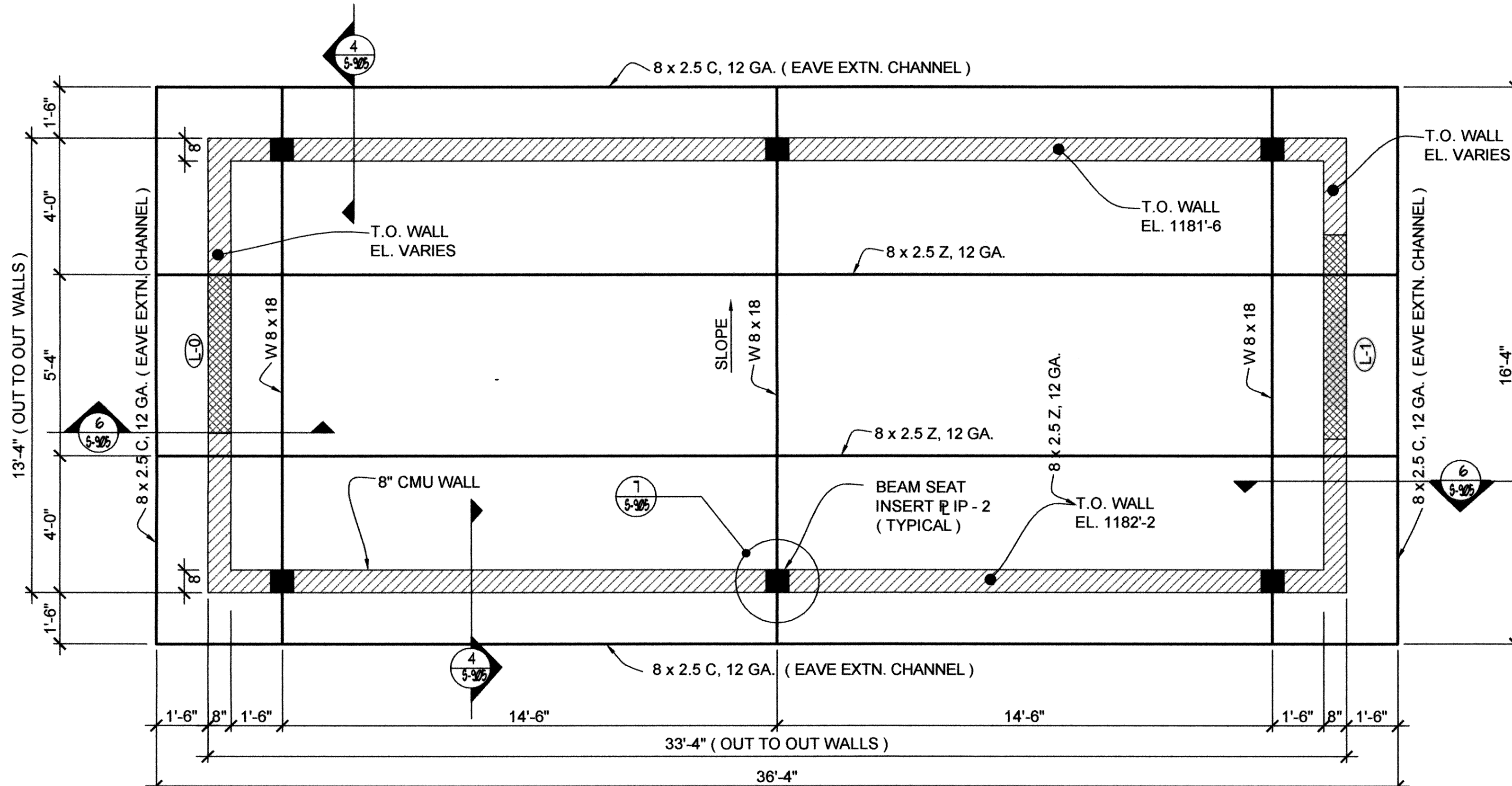
**EAGLE CONSULTANTS, INC.**  
CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088

*Sachin M. Mulani*  
4/20/10  
REGISTERED PROFESSIONAL ENGINEER  
SACHIN M. MULANI  
11195  
OKLAHOMA

RECORD DRAWINGS S-602



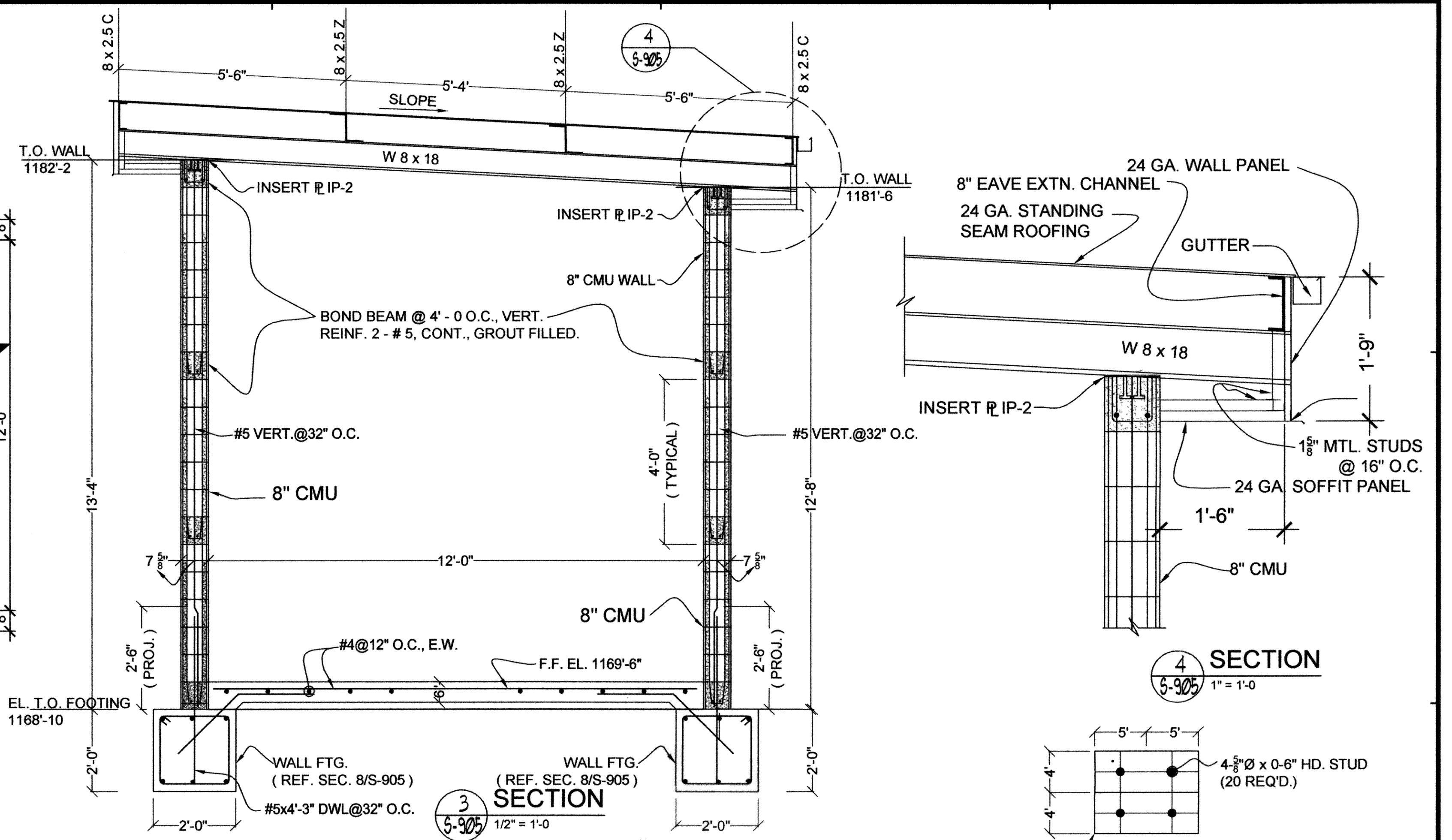
1 FOUNDATION PLAN (F.F. 1169'-6)  
3/8" = 1'-0"



2 ROOF FRAMING PLAN  
3/8" = 1'-0"

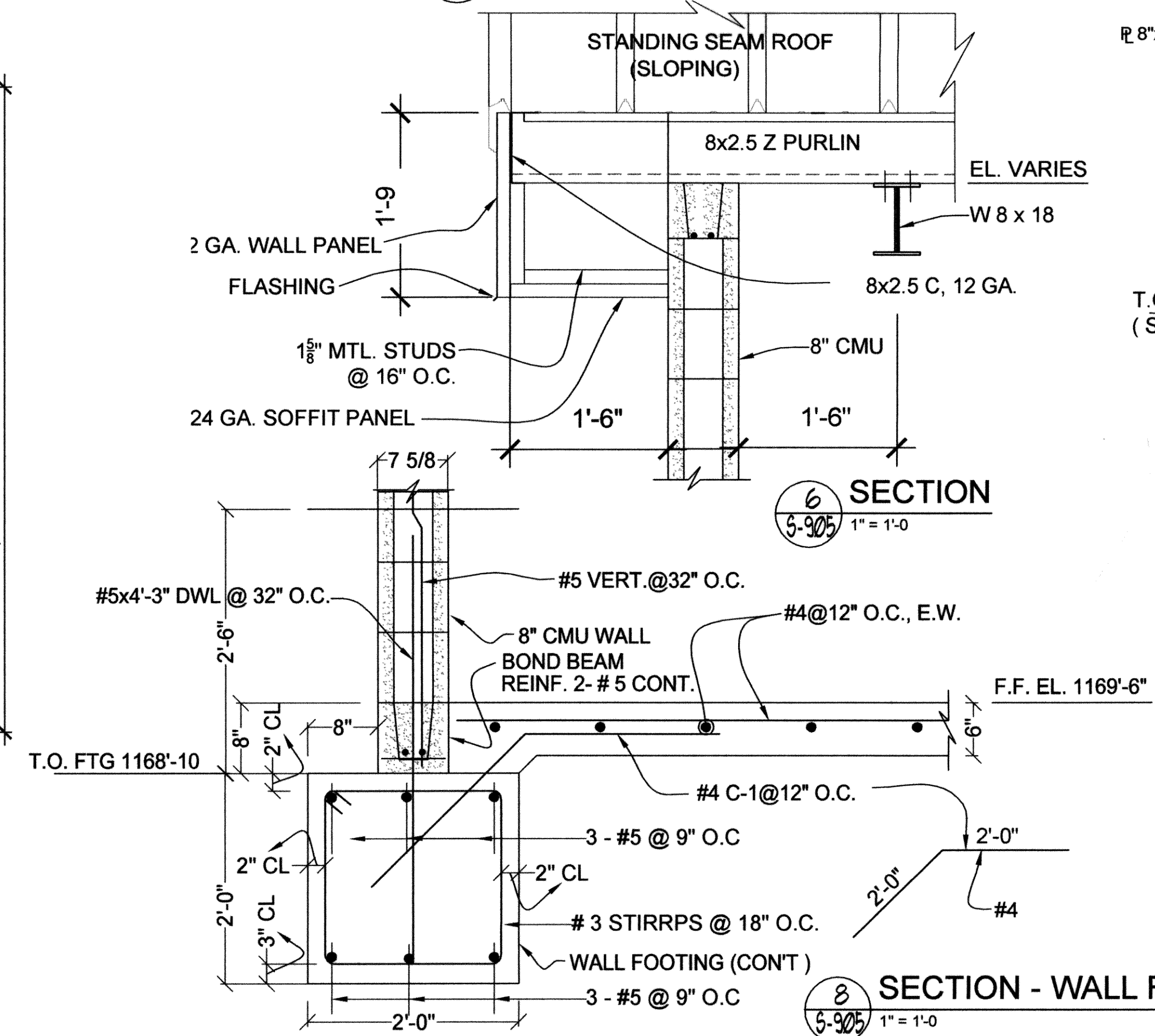
**LEGEND**

LINTEL	
L - X	REF. LINTEL SCHEDULE DRG S-960



3 SECTION  
1/2" = 1'-0"

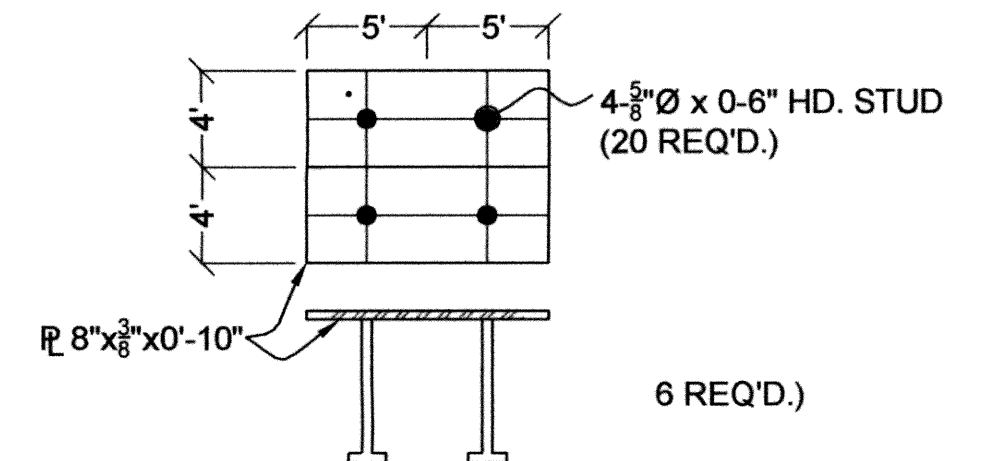
4 SECTION  
1" = 1'-0"



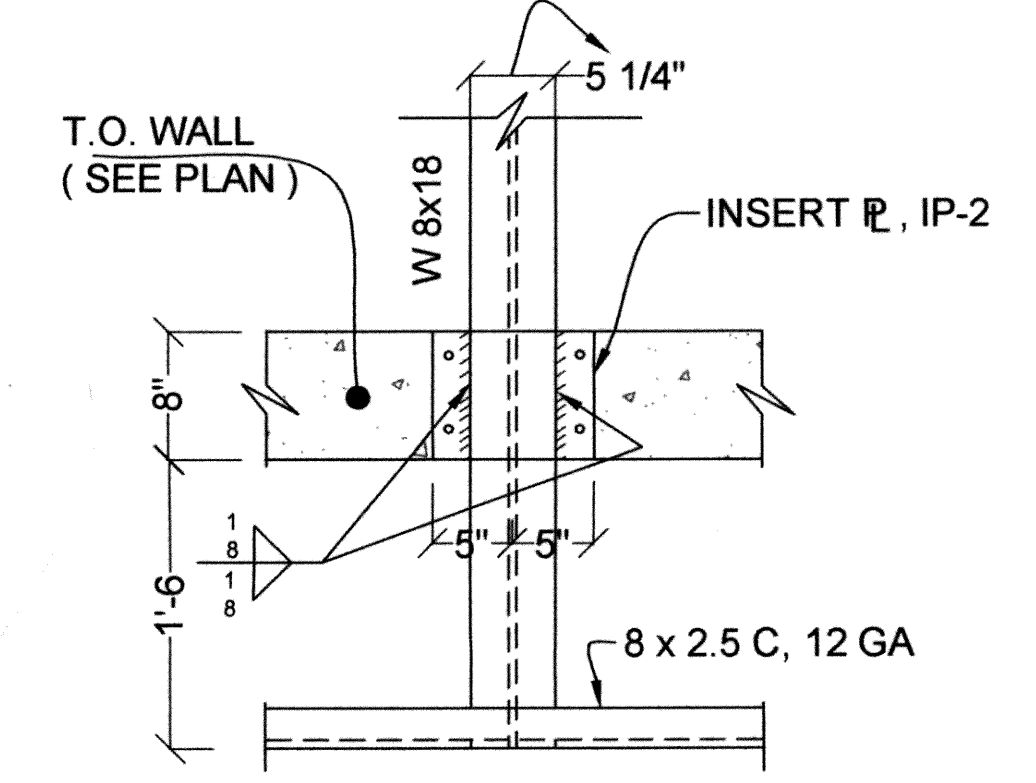
5 SECTION  
1" = 1'-0"

6 SECTION  
1" = 1'-0"

7 SECTION - WALL FOOTING  
1" = 1'-0"



5 DETAIL - INSERT IP-2  
1 1/2" = 1'-0"



7 DETAIL - (BM. SEAT)  
1" = 1'-0"

REVISIONS:	DATE:

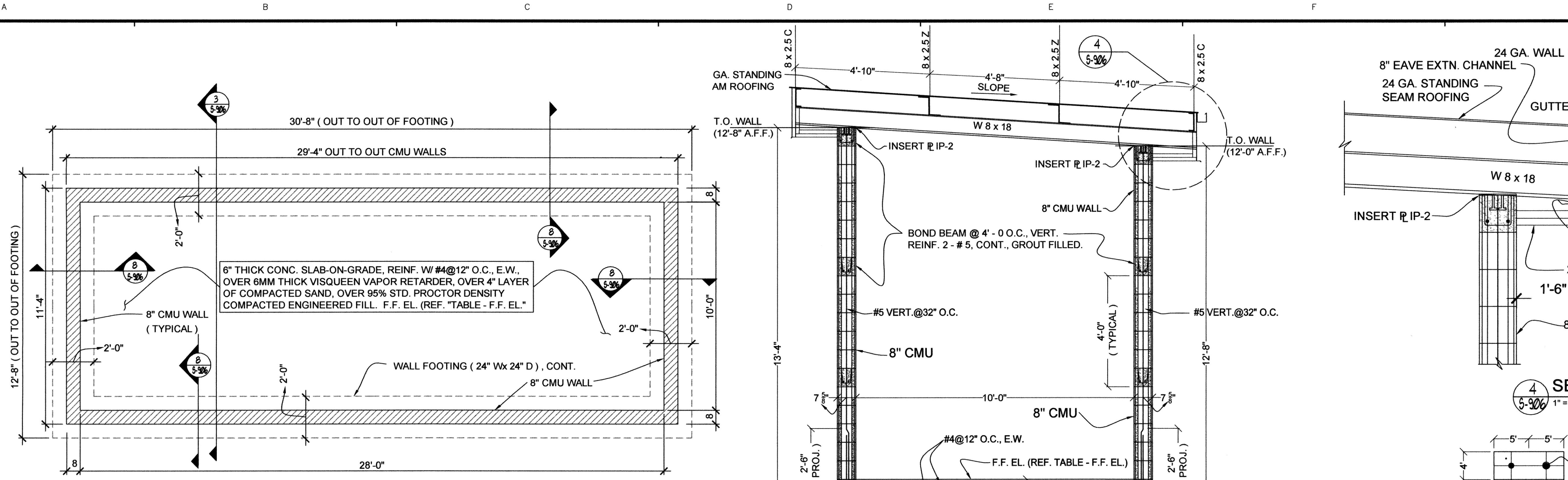
ELEC. CONTROL ROOM  
STR # 48  
STRUCTURAL DETAILS

EAGLE OFFICE CENTER  
2803 SOUTH BRYANT  
EDMOND, OK. 73013  
PH. (405) 844-3800  
FAX. (405) 844-3600

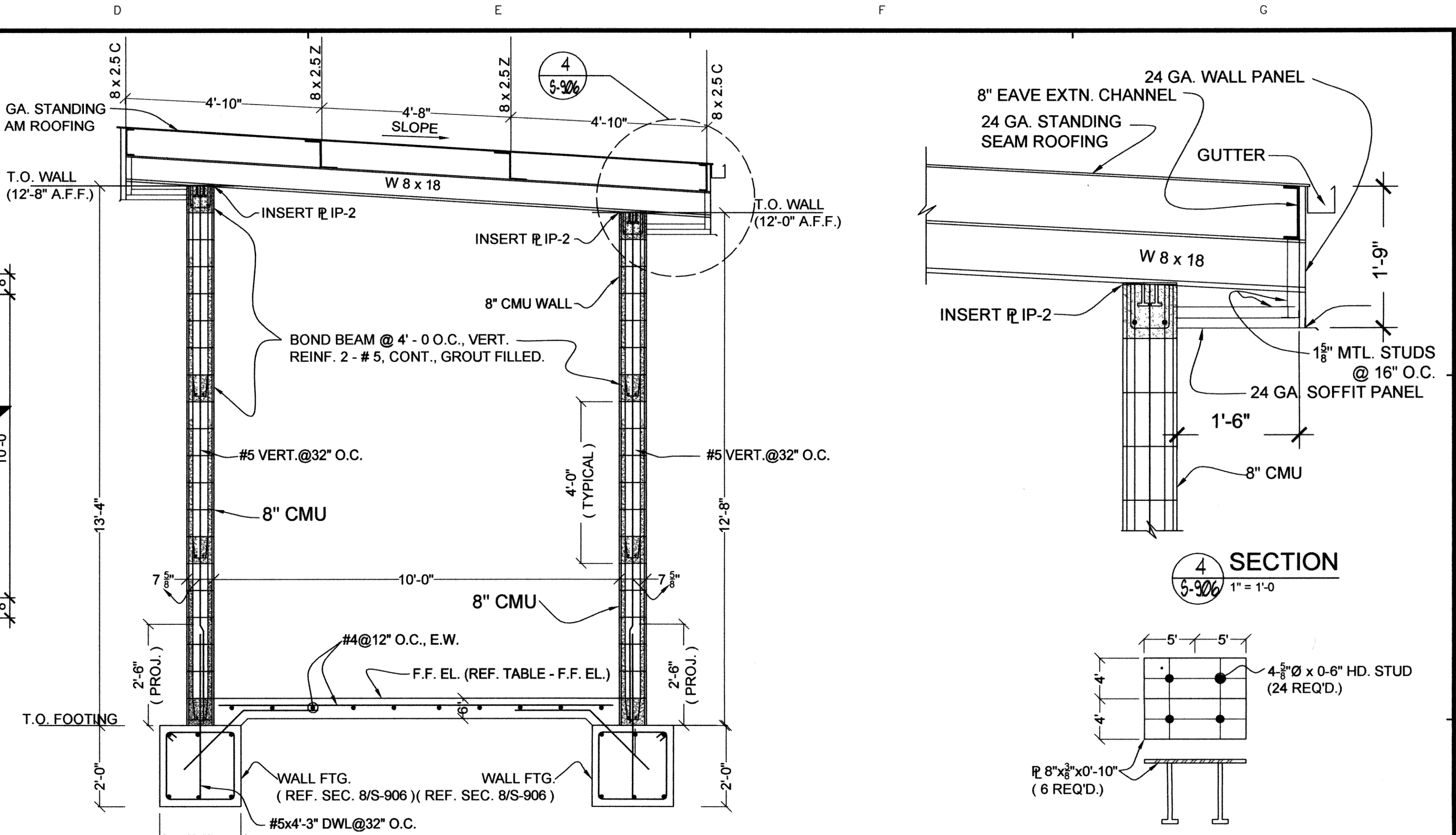
**EAGLE CONSULTANTS, INC.**  
CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088

RECORD DRAWINGS  
Sachi  
7/20/10  
REGISTERED PROFESSIONAL ENGINEER  
SAC  
M.L.  
11195  
OKLAHOMA

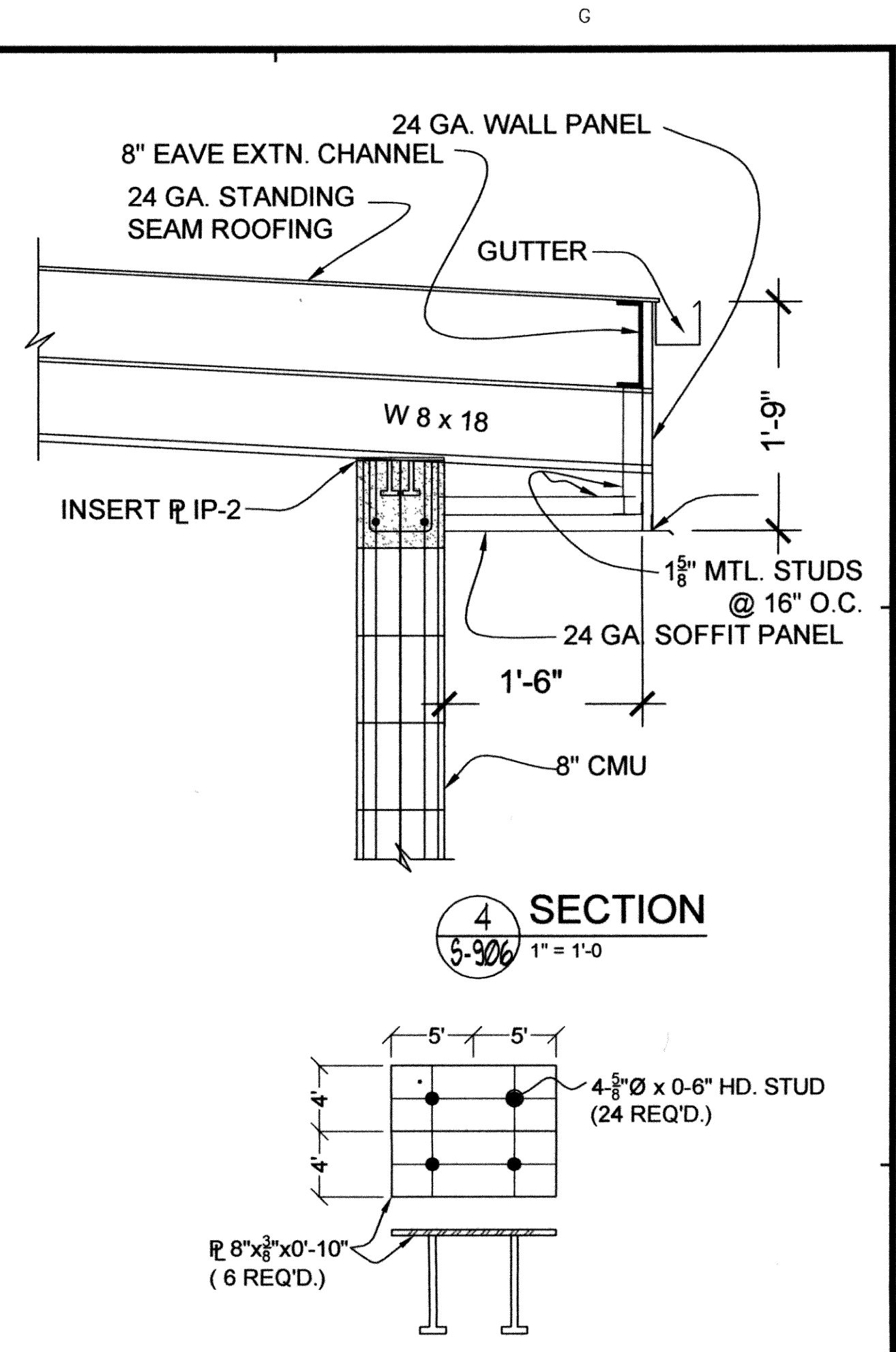
S-905



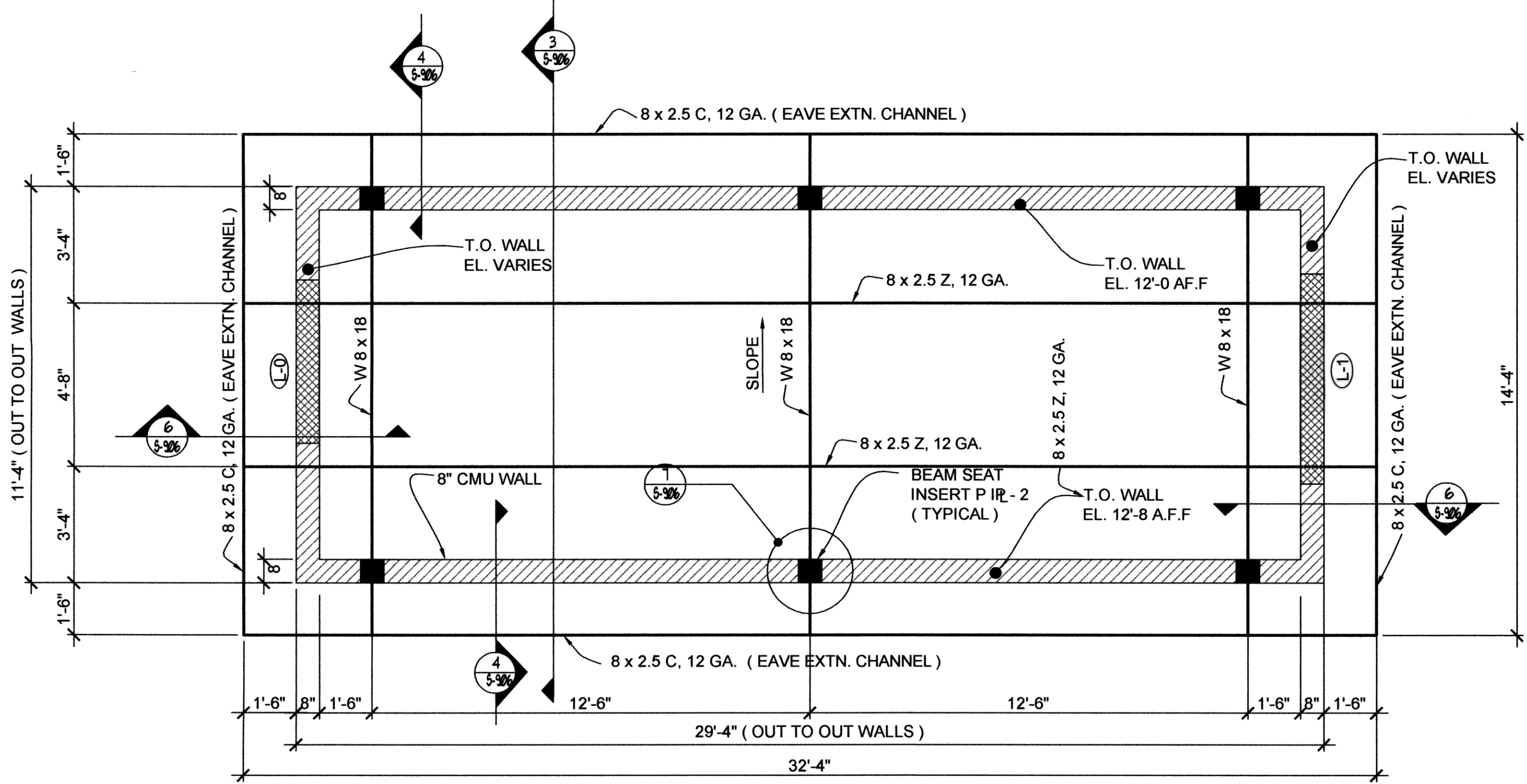
FOUNDATION PLAN ( F.F REF. "TABLE" - F.F. EL )  
 3/8" = 1'-0"



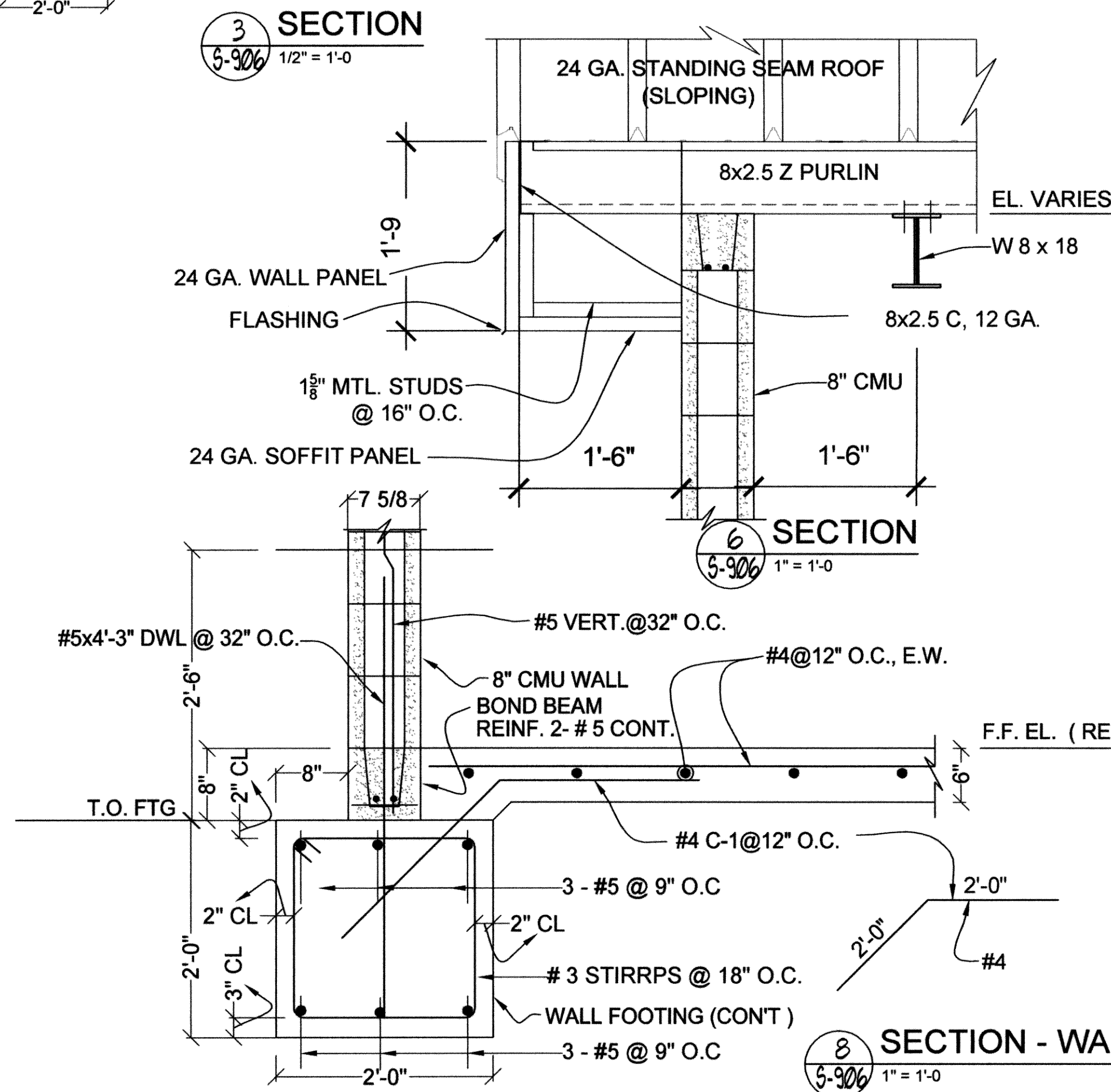
SECTION 4  
 1/2" = 1'-0"



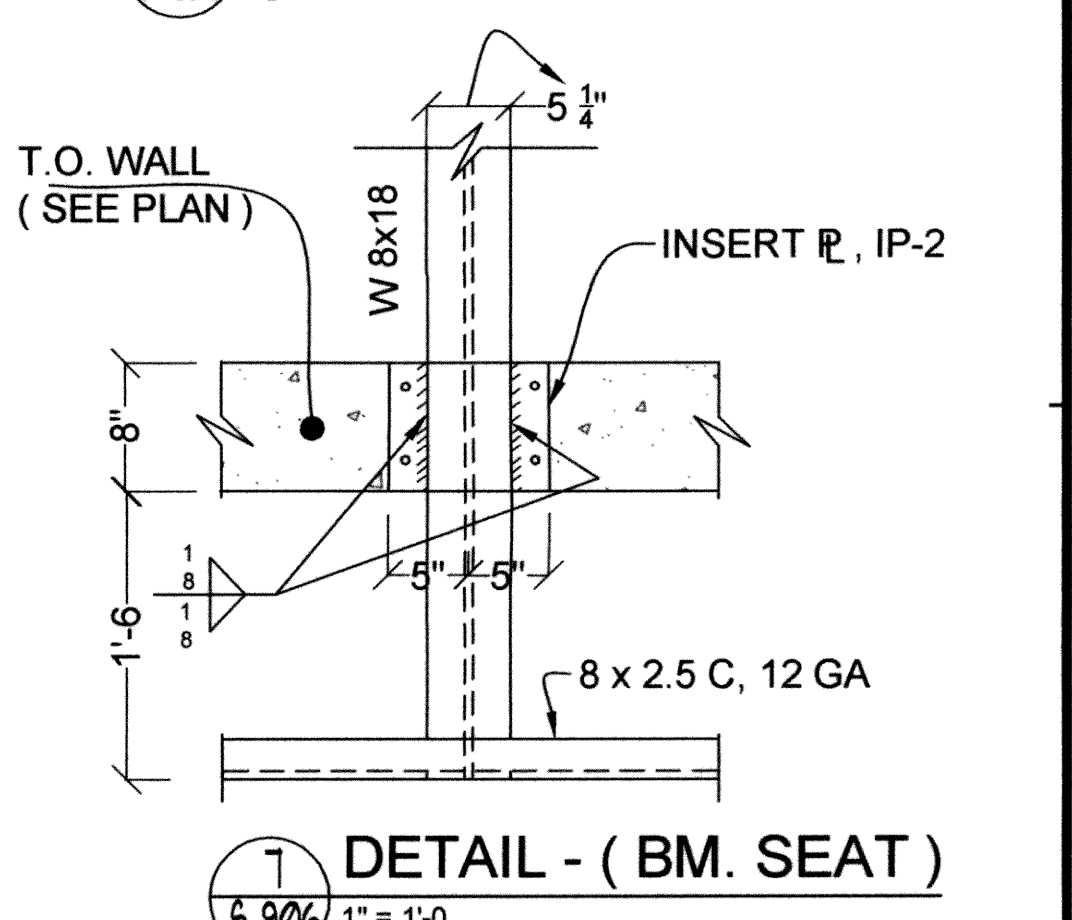
SECTION 5  
 1 1/2" = 1'-0"



ROOF FRAMING PLAN ( 4 - STRUCTURES REQ'D )  
 3/8" = 1'-0"



SECTION 6 - WALL FOOTING  
 1" = 1'-0"



DETAIL - ( BM. SEAT )  
 1" = 1'-0"

**LEGEND**

LINTEL	
L - X	REF. LINTEL SCHEDULE DRG S-960

BUILDING NAME & STR.#	F.F. ELEVATION
N. SBR ELECTRICAL ( #47 )	1169.50
N. AD ELECTRICAL ( #49 )	1171.50
S. AD ELECTRICAL ( #50 )	1171.00
N. POND ELECTRICAL ( #67 )	1169.50

RECORD DRAWINGS  
 SACHIN MUKHERJEE  
 REGISTERED PROFESSIONAL ENGINEER  
 11195  
 4-20-10  
 TABLE - F.F. EL.

C:\DRAWINGS\MOORE\WORK\Structural\Maintenance Building\S-906 Elec.Control Room\_STR# 47-49-50-67.dwg

DESIGNED BY: S.D. CAD OPERATOR: A CHECKED: S.D. APPROVED: S.D. PLOT DATE: 2/25/2010 DWG. SCALE: AS SHOWN SHEET: 85 OF 89

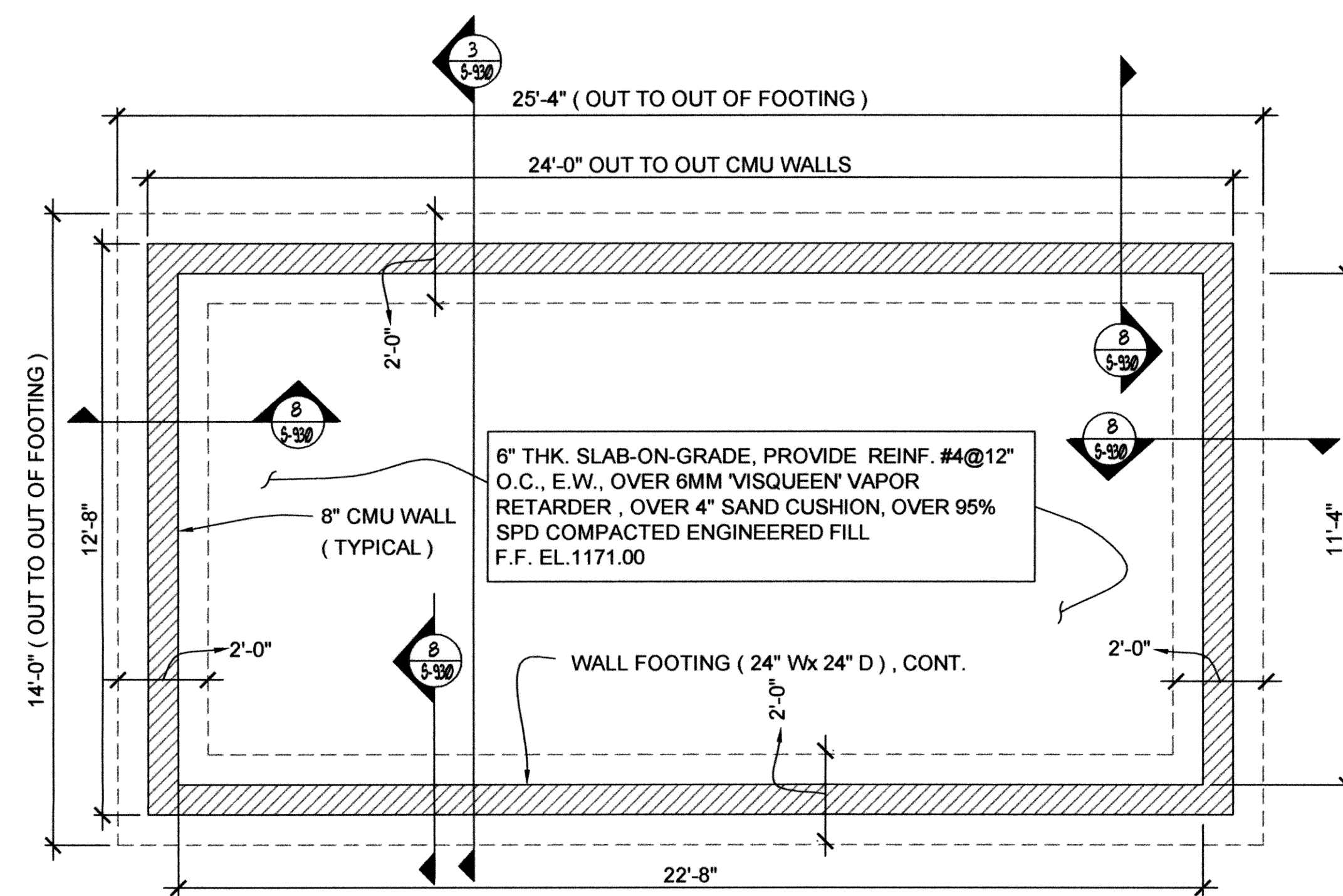
REVISIONS:	DATE:

ELEC.CONTROL ROOM  
 STR # 47, 49, 50 & 67  
 STRUCTURAL DETAILS

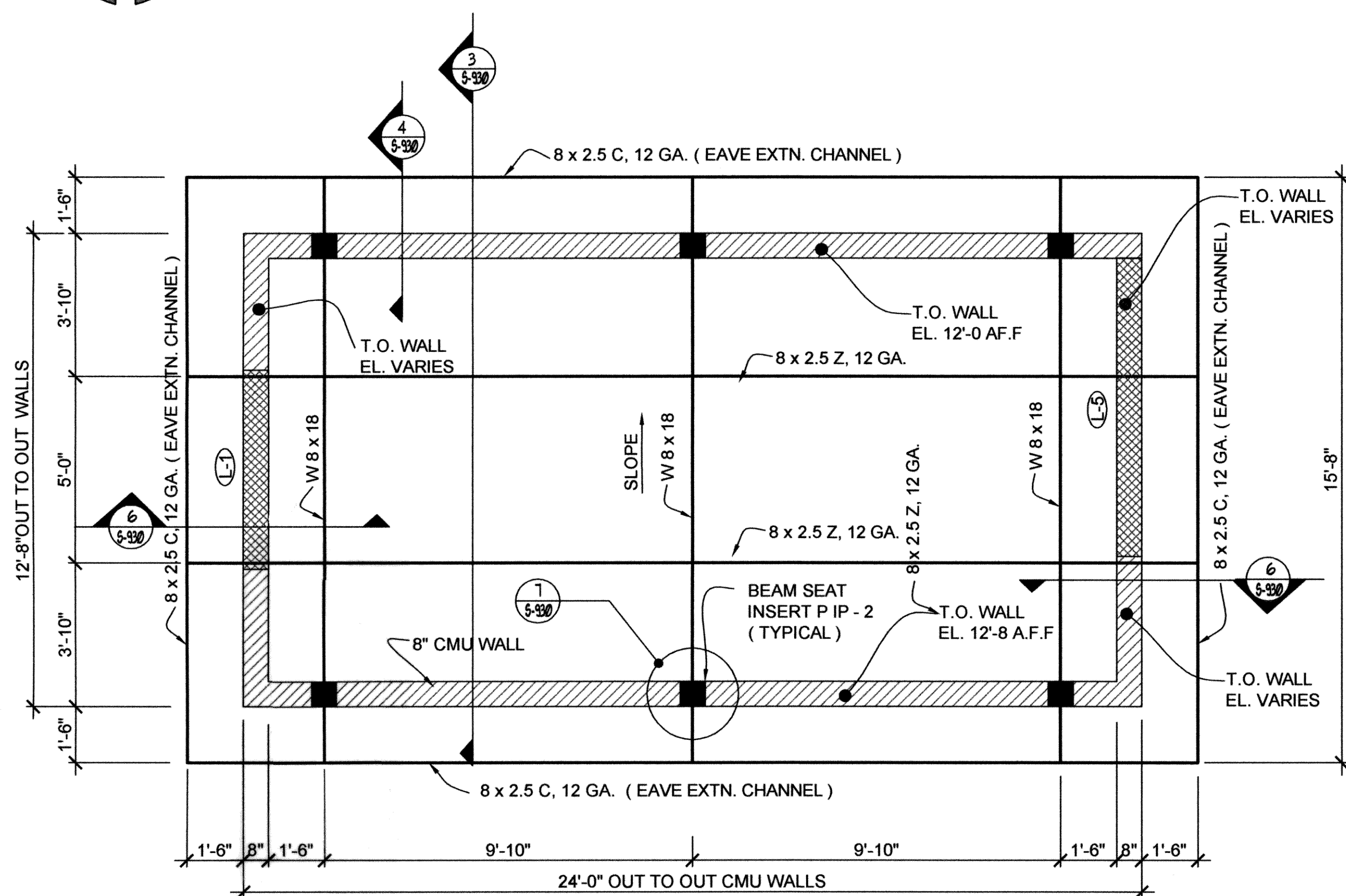
EAGLE OFFICE CENTER  
 2803 SOUTH BRYANT  
 EDMOND, OK. 73013  
 PH. (405) 844-3900  
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 CIVIL AND ENVIRONMENTAL ENGINEERS  
 CERTIFICATE OF AUTHORIZATION NO. CA2088

S-906



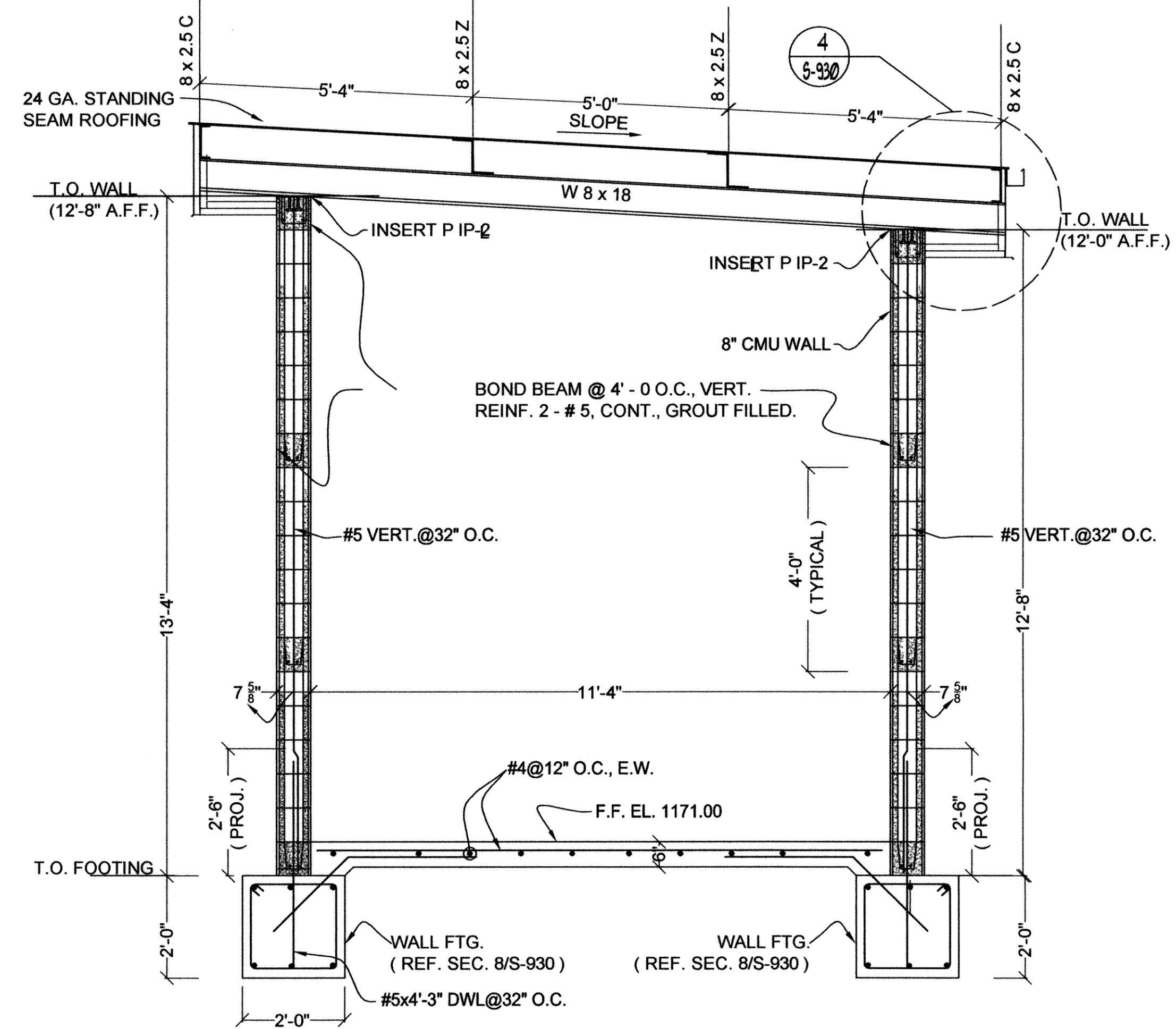
**FOUNDATION PLAN ( F.F. EL 1171.00)**  
3/8" = 1'-0"



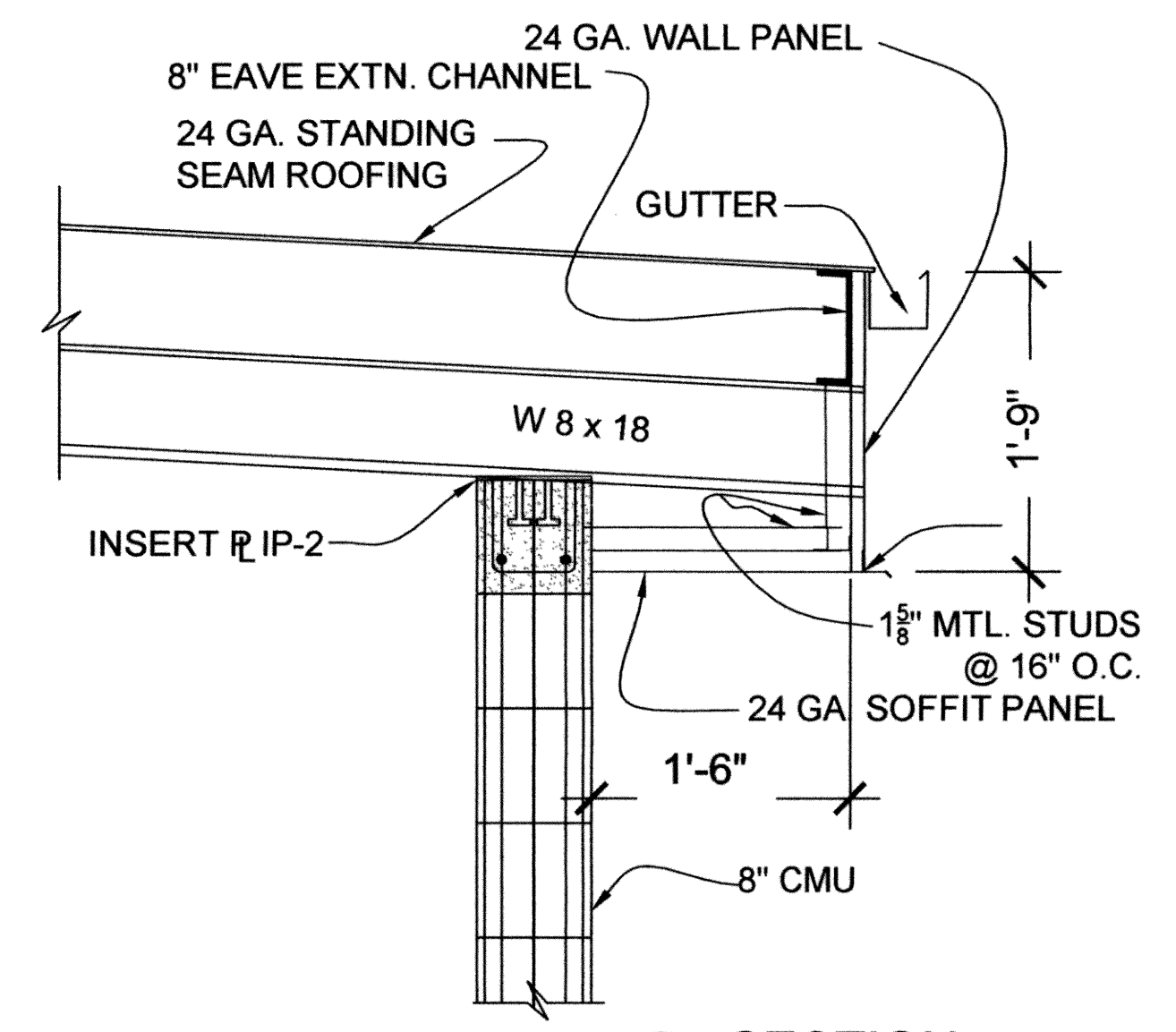
**ROOF FRAMING PLAN**  
3/8" = 1'-0"

**LEGEND**

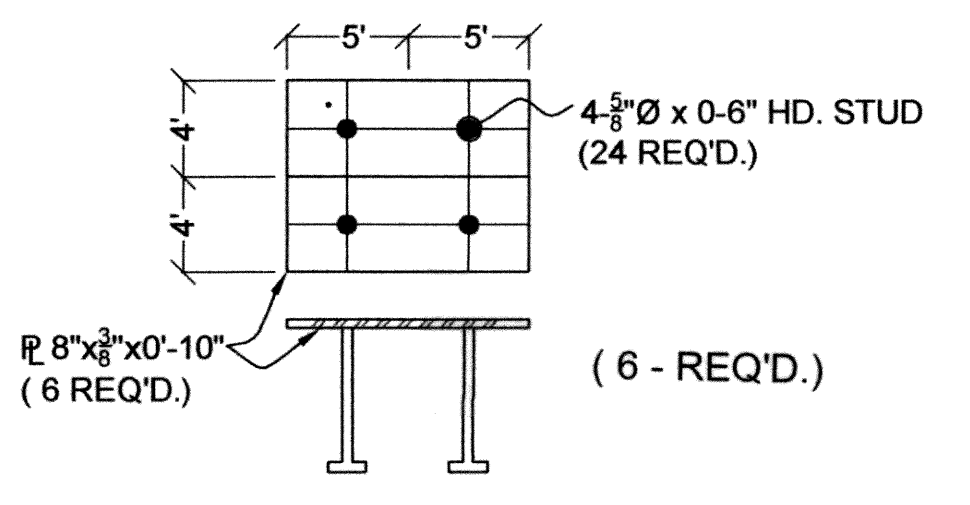
LINTEL	
L - X	REF. LINTEL SCHEDULE DRG S-960



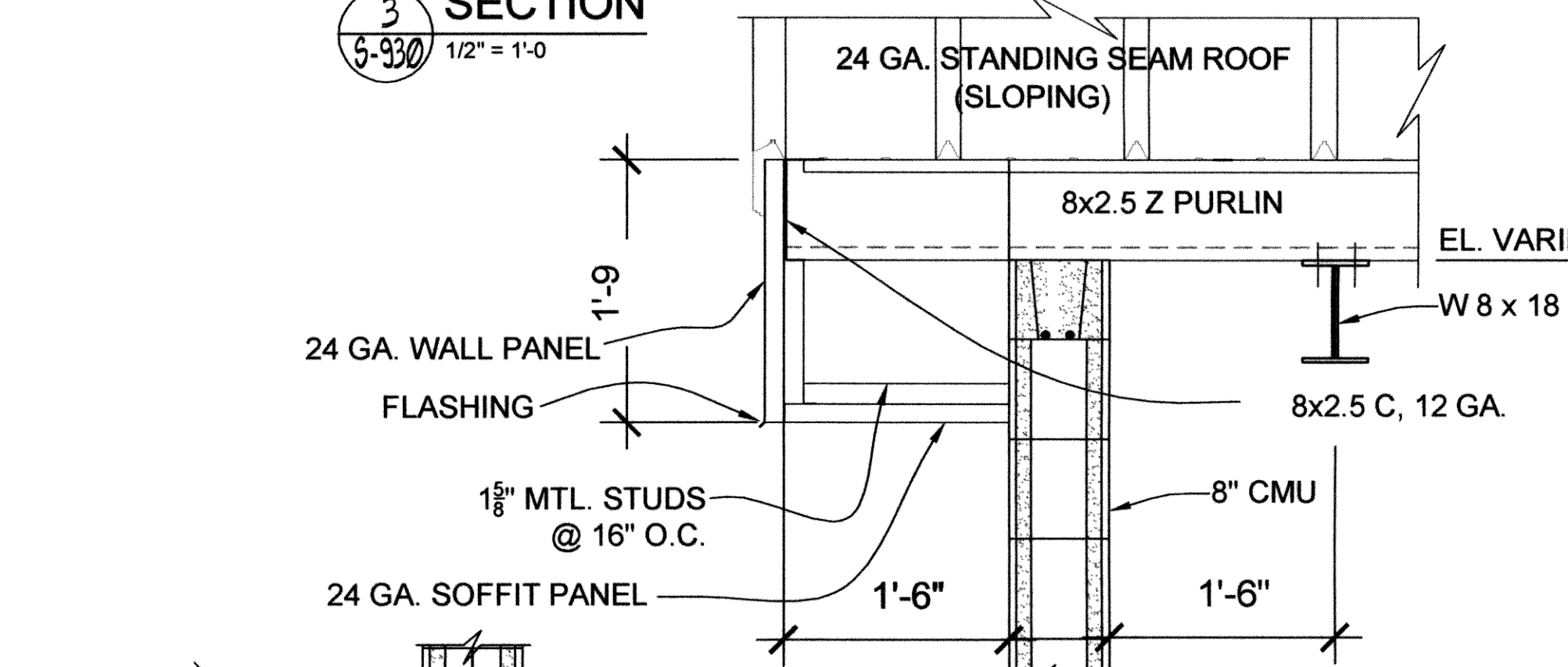
**SECTION 3**  
1/2" = 1'-0"



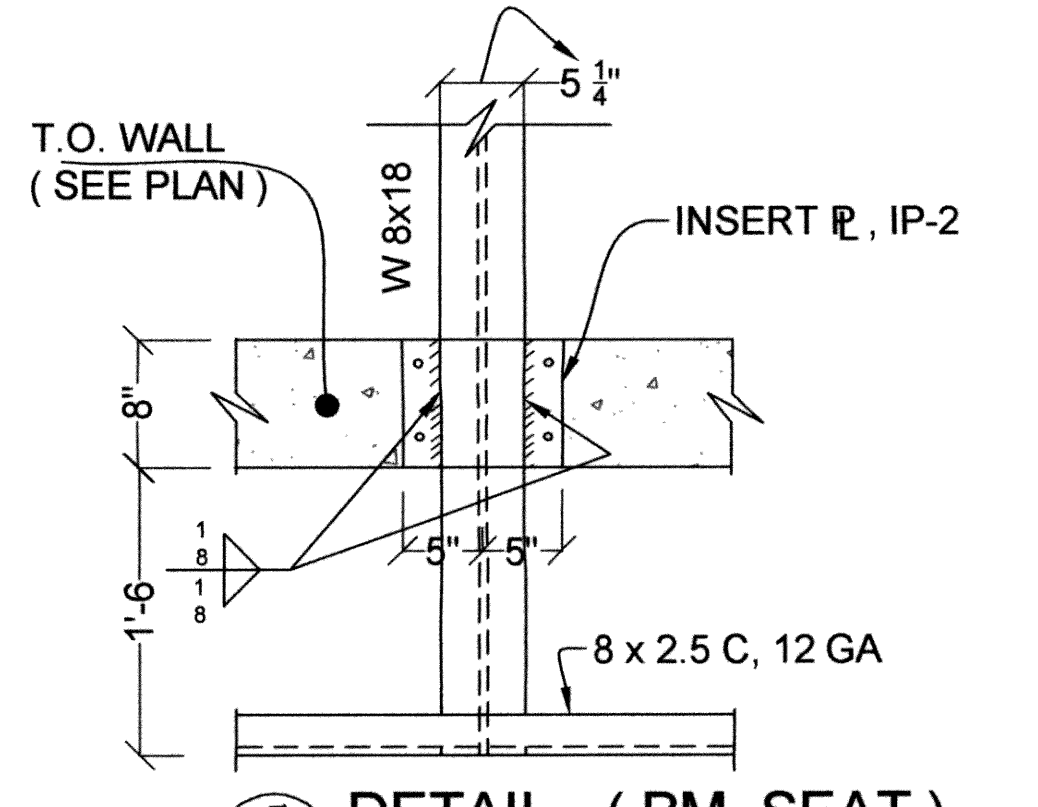
**SECTION 4**  
1" = 1'-0"



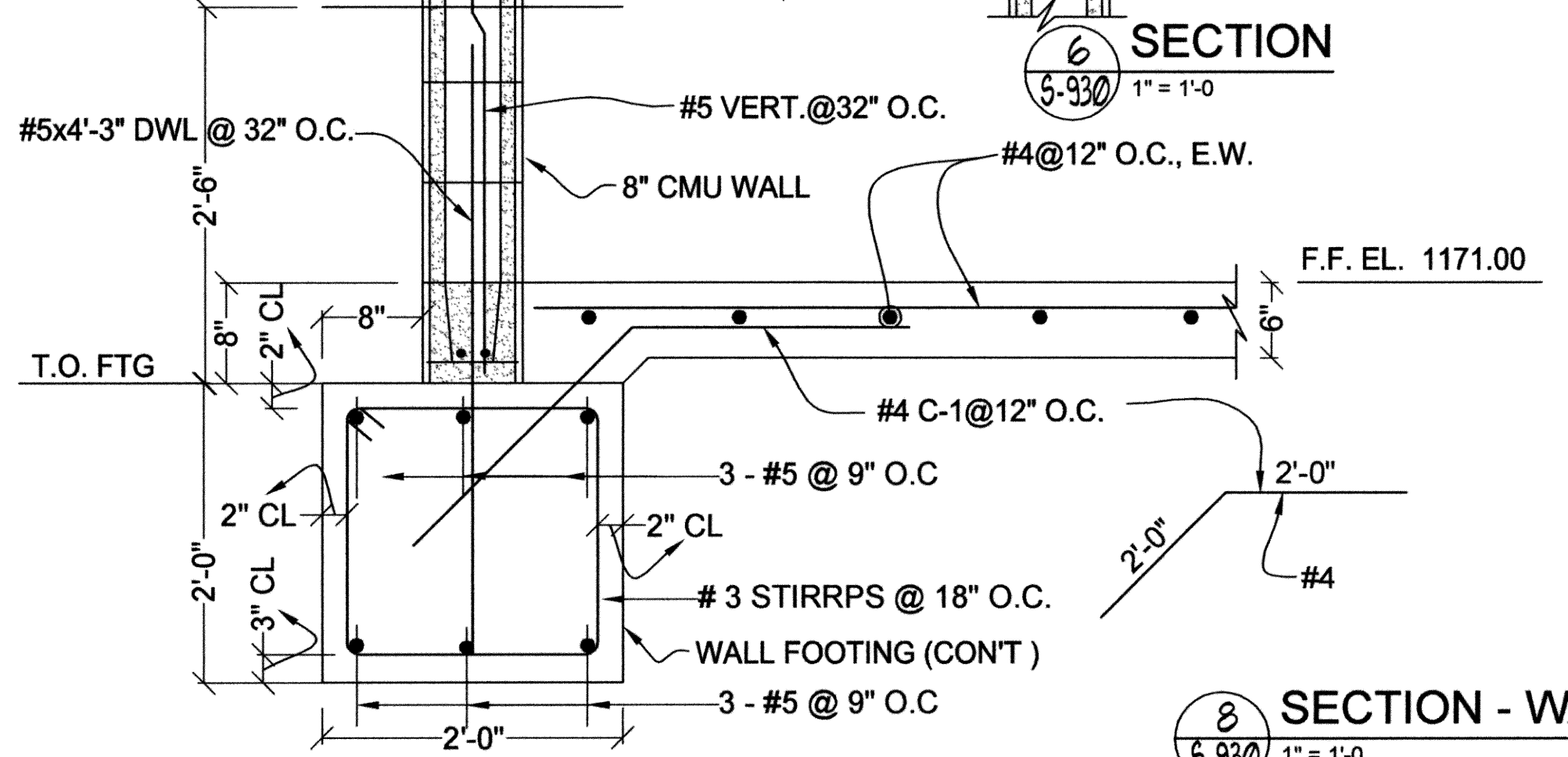
**DETAIL - INSERT P IP-2**  
1 1/2" = 1'-0"



**SECTION 6**  
1" = 1'-0"



**DETAIL - ( BM. SEAT )**  
1" = 1'-0"



**SECTION - WALL FOOTING**  
1" = 1'-0"

**RECORD DRAWINGS**

SACHIN N. MUKERJEE  
11195  
4/20/10  
REGISTERED PROFESSIONAL ENGINEER  
OKLAHOMA

**S-930**

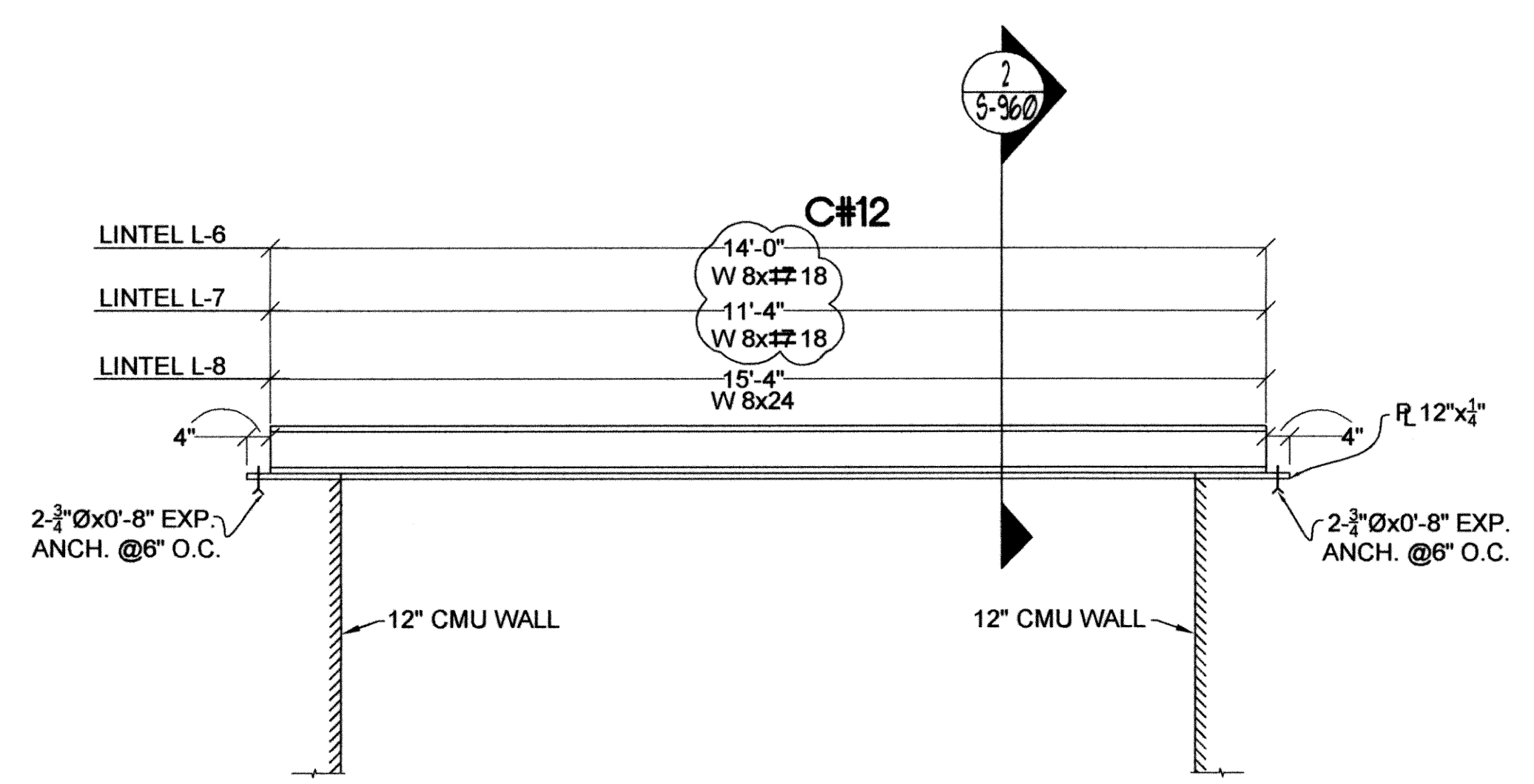
DESIGNED BY: S.D.	CAD OPERATOR:	CHECKED: S.D.	APPROVED: S.D.	PLOT DATE: 2/25/2010	DWG. SCALE: AS SHOWN	SHEET: 86 OF 89
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REVISIONS:	DATE:

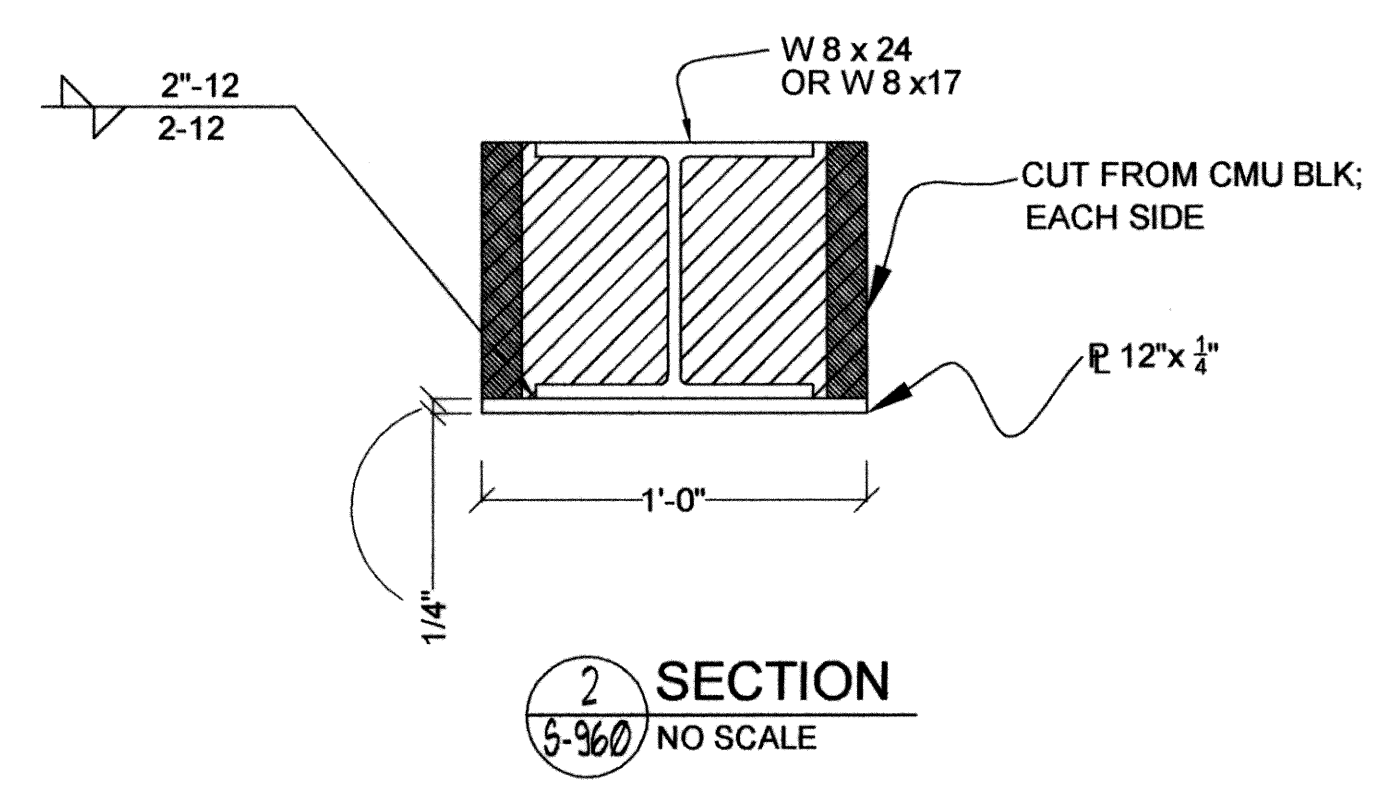
**NON POTABLE WATER BUILDING  
STRUCTURAL DETAILS**

EAGLE OFFICE CENTER  
2803 SOUTH BRYANT  
EDMOND, OK. 73013  
PH. (405) 844-3900  
FAX. (405) 844-3600

**EAGLE CONSULTANTS, INC.**  
CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088



1  
5-960  
DETAIL - STL.- LINTEL  
NO SCALE



2  
5-960  
SECTION  
NO SCALE

LINTEL SCHEDULE		
MARK	TYPE	VIEW
L-0	8" OR 12" WIDE x 8" DEEP x 4'-8" LONG CMU LINTEL w/ (2) - #5 BOTT.	
L-1	8" OR 12" WIDE x 8" DEEP x 5'-4" LONG CMU LINTEL w/ (2) - #5 BOTT.	
L-3	12" WIDE x 8" DEEP x 6'-8" LONG CMU LINTEL w/ (2) - #6 BOTT.	
L-4	12" WIDE x 8" DEEP x 7'-4" LONG CMU LINTEL w/ (2) - #6 BOTT.	
L-5	12" WIDE x 16" DEEP x 8'-8" LONG CMU / STL. LINTEL w/ (2) - #6 BOTT.	
L-6	<b>C#12</b> STL. BEAM LINTEL x 14' - 0" LONG, W8 x 18 w/ 12"x 1/4" WELDED TO BOT. FLG. PROVIDE CMU BLOCK FACING, ON EACH SIDE	 C#12
L-7	<b>C#12</b> STL. BEAM LINTEL x 11' - 4" LONG, W8 x 18 w/ 12"x 1/4" WELDED TO BOT. FLANGE. PROVIDE CMU BLOCK FACING, ON EACH SIDE	 C#12
L-8	STL. BEAM LINTEL x 15' - 4" LONG, W8 x 24 w/ 12"x 1/4" WELDED TO BOT. FLANGE. PROVIDE CMU BLOCK FACING, ON EACH SIDE	 REF. DEY. 2 / S - 960

C:\DRAWINGS\MOORE\WORK\Structure\Maintenance Building\S-960-MISC-STL-detailed.dwg

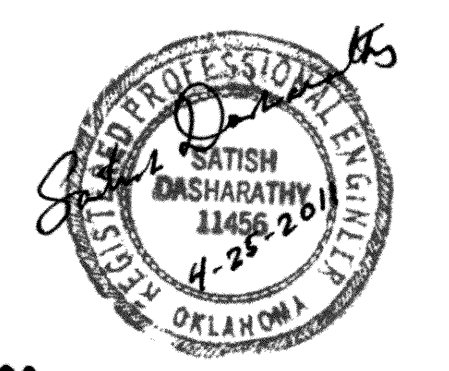
DESIGNED BY:	CAD OPERATOR:	CHECKED:	APPROVED:	PLOT DATE:	DWG. SCALE:	SHEET:
S.D.		S.D.	S.D.	4/30/2010	AS SHOWN	87 OF 89

REVISIONS:	DATE:
C#12 - CLARIFICATION NO. 12	4/22/2011

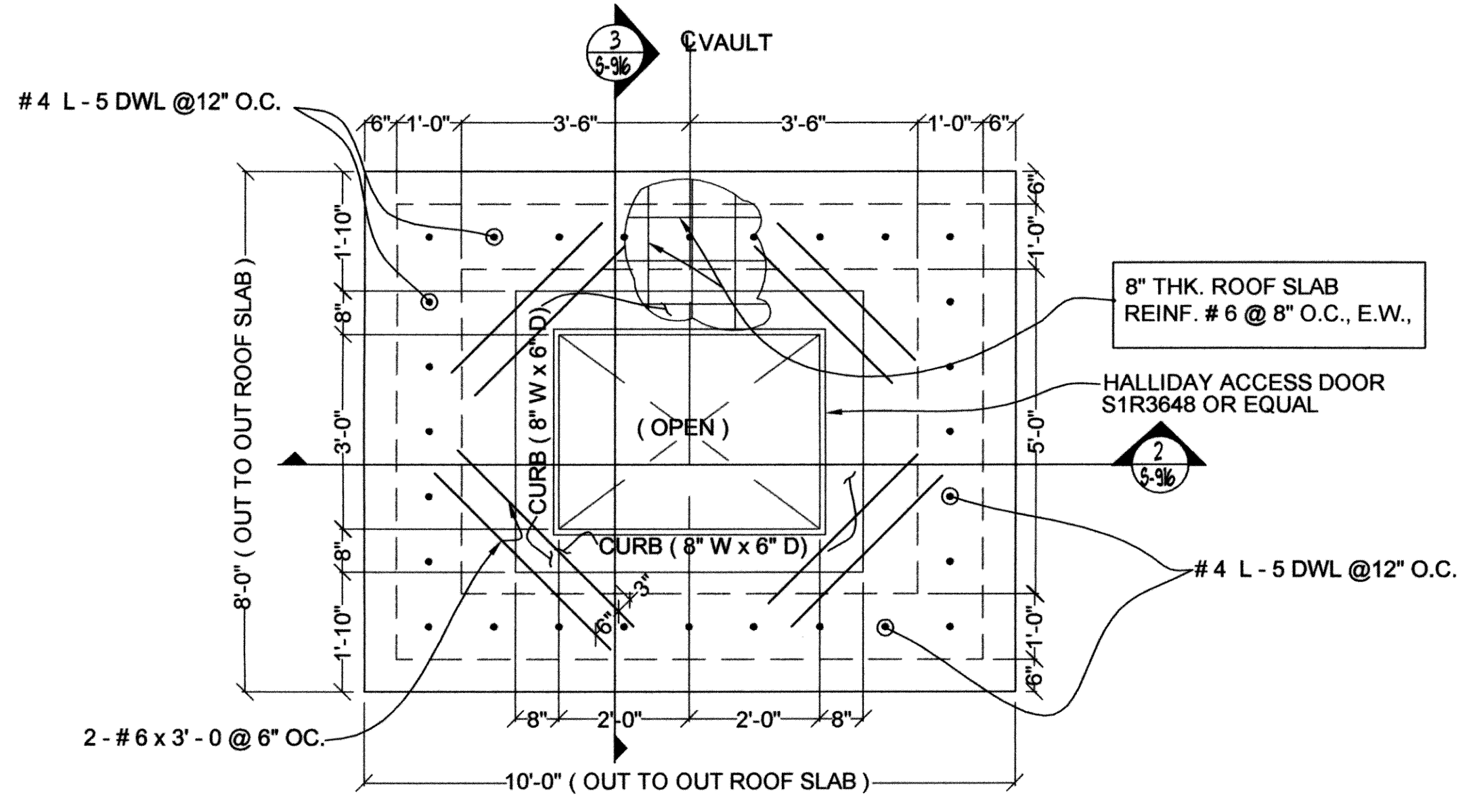
MISCELLANEOUS STRUCTURAL  
DETAILS

EAGLE OFFICE CENTER  
2803 SOUTH BRYANT  
EDMOND, OK. 73013  
PH. (405) 844-3900  
FAX. (405) 844-3600

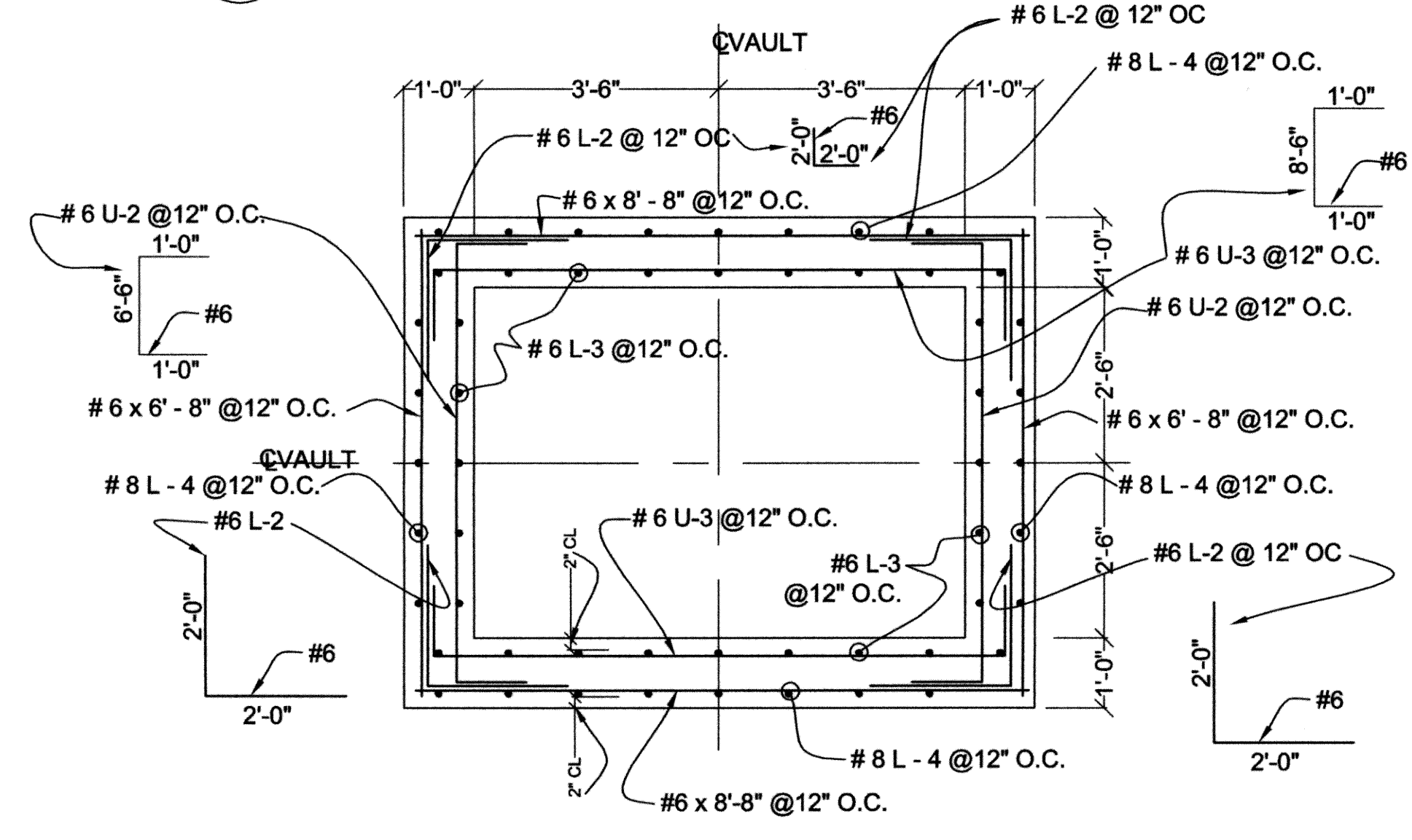
**EAGLE CONSULTANTS, INC.**  
CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088



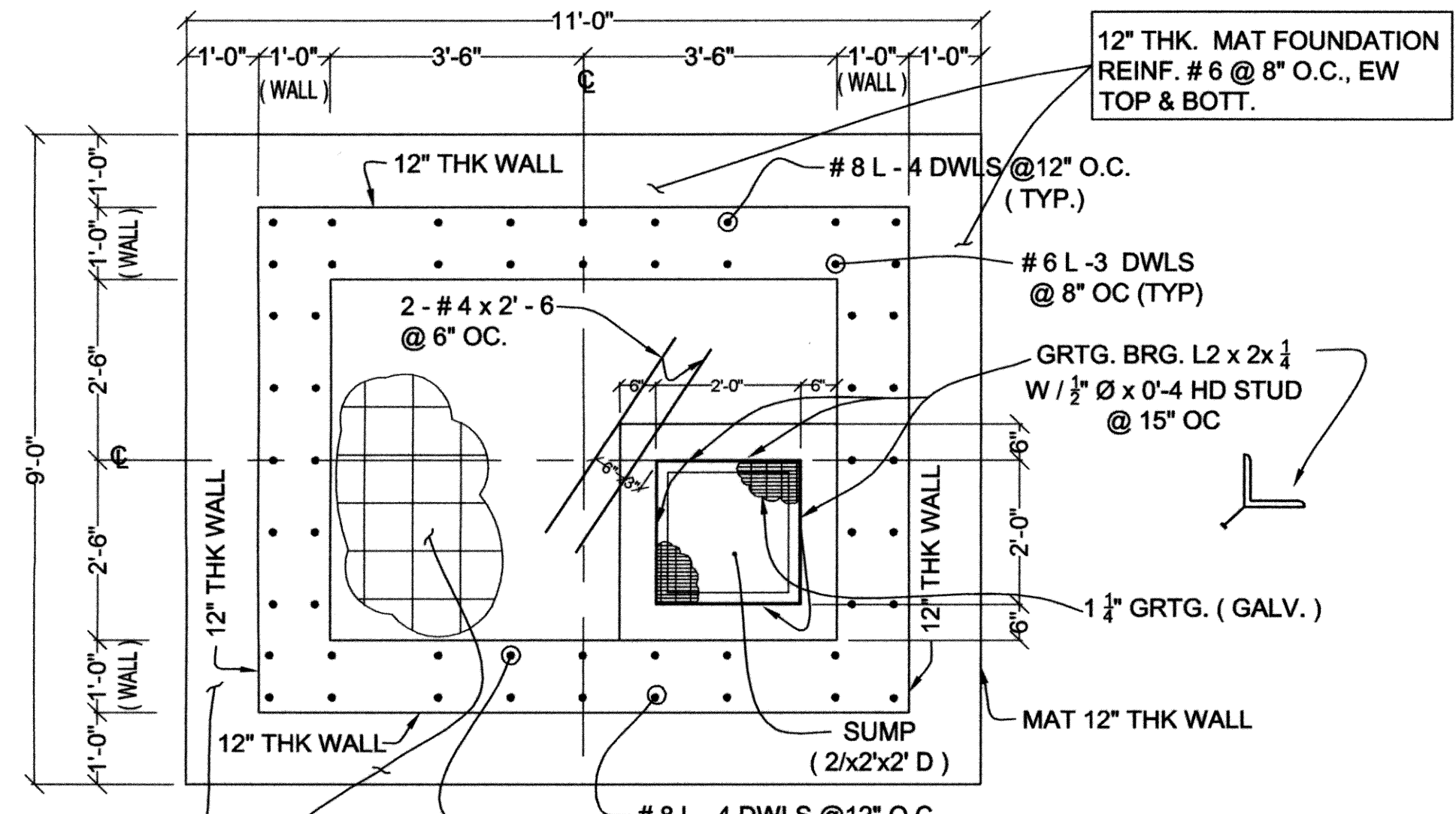
RECORD DRAWINGS S-960



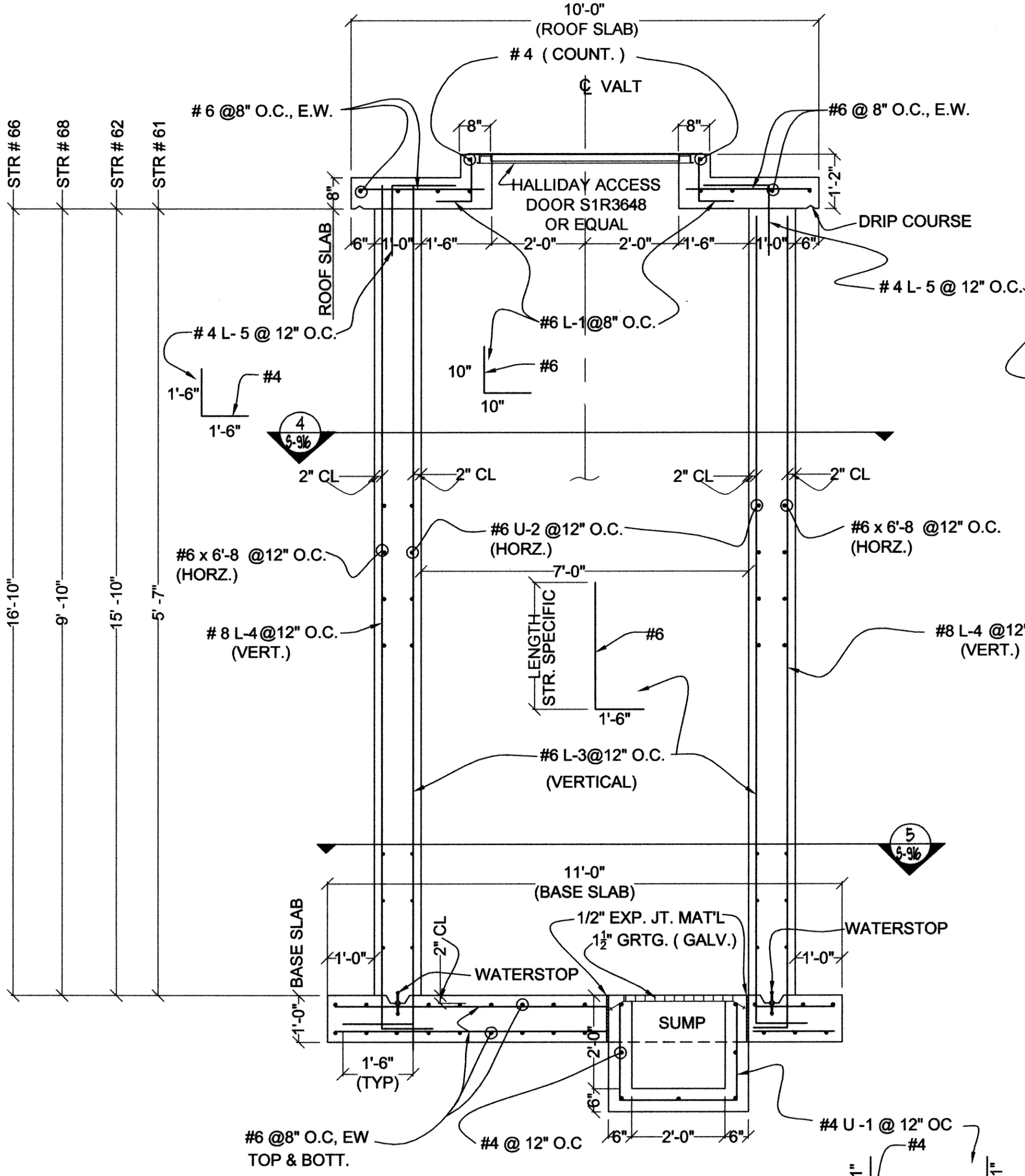
1 ROOF PLAN (8" THK. CONC. ROOF SLAB)  
SCALE: 1/2" = 1'-0"



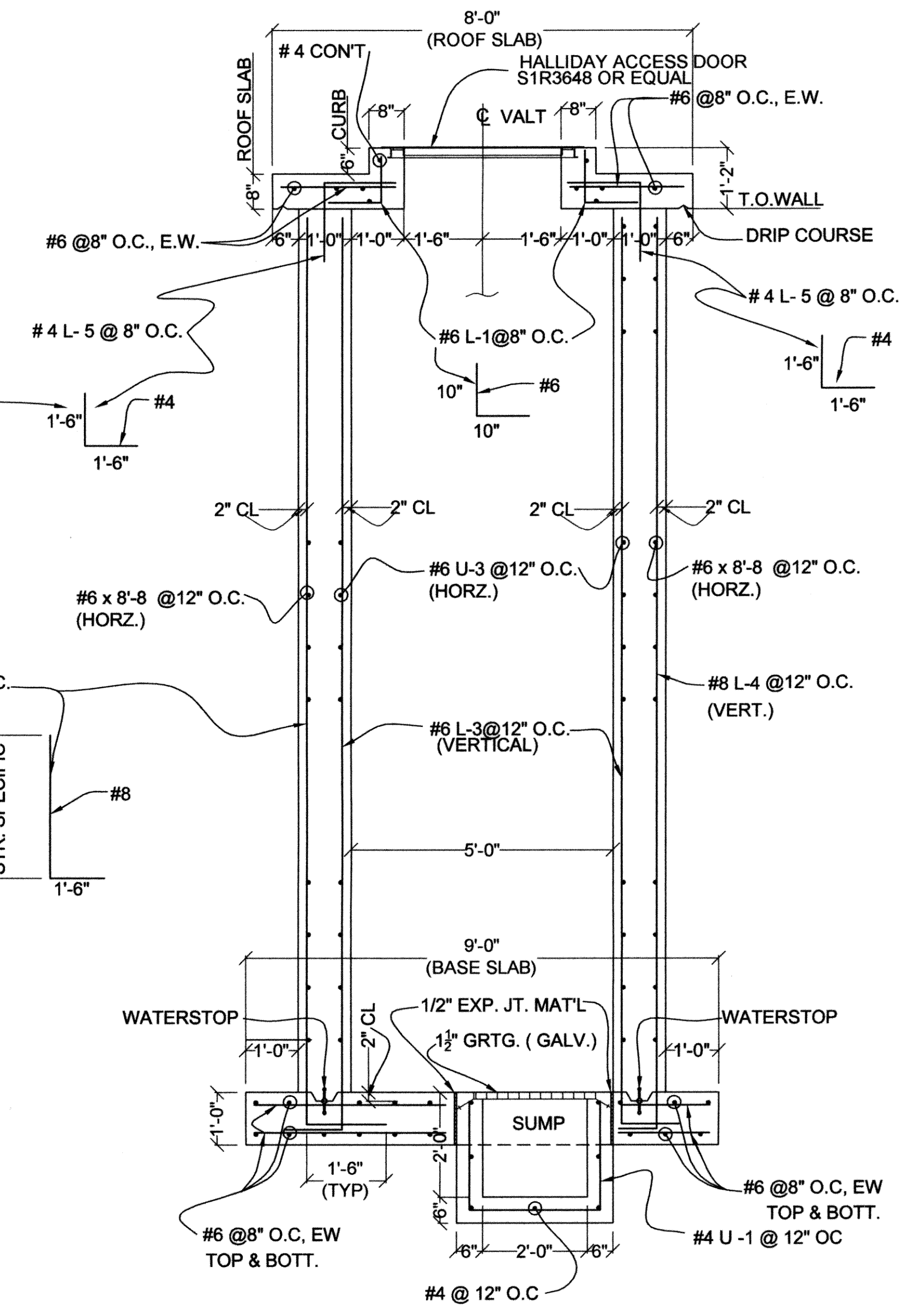
4 SECTION  
SCALE: 1/2" = 1'-0"



5 SECTION  
SCALE: 1/2" = 1'-0"



2 SECTION  
SCALE: 1/2" = 1'-0"



3 SECTION  
SCALE: 1/2" = 1'-0"

4 - STRS. REQ'D	INSIDE DIMENSIONS
A. STR. # 66	7' x 6'
B. STR. # 67	7' x 6'
C. STR. # 62	7' x 6'
D. STR. # 61	6' x 5'

Sachin N. Mukerjee  
5/17/10  
REGISTERED PROFESSIONAL ENGINEER  
SACHIN N. MUKERJEE  
OKLAHOMA

RECORD DRAWINGS

S-916

C:\DRAWINGS\WORK\Structural\SS16-Magmeter.dwg

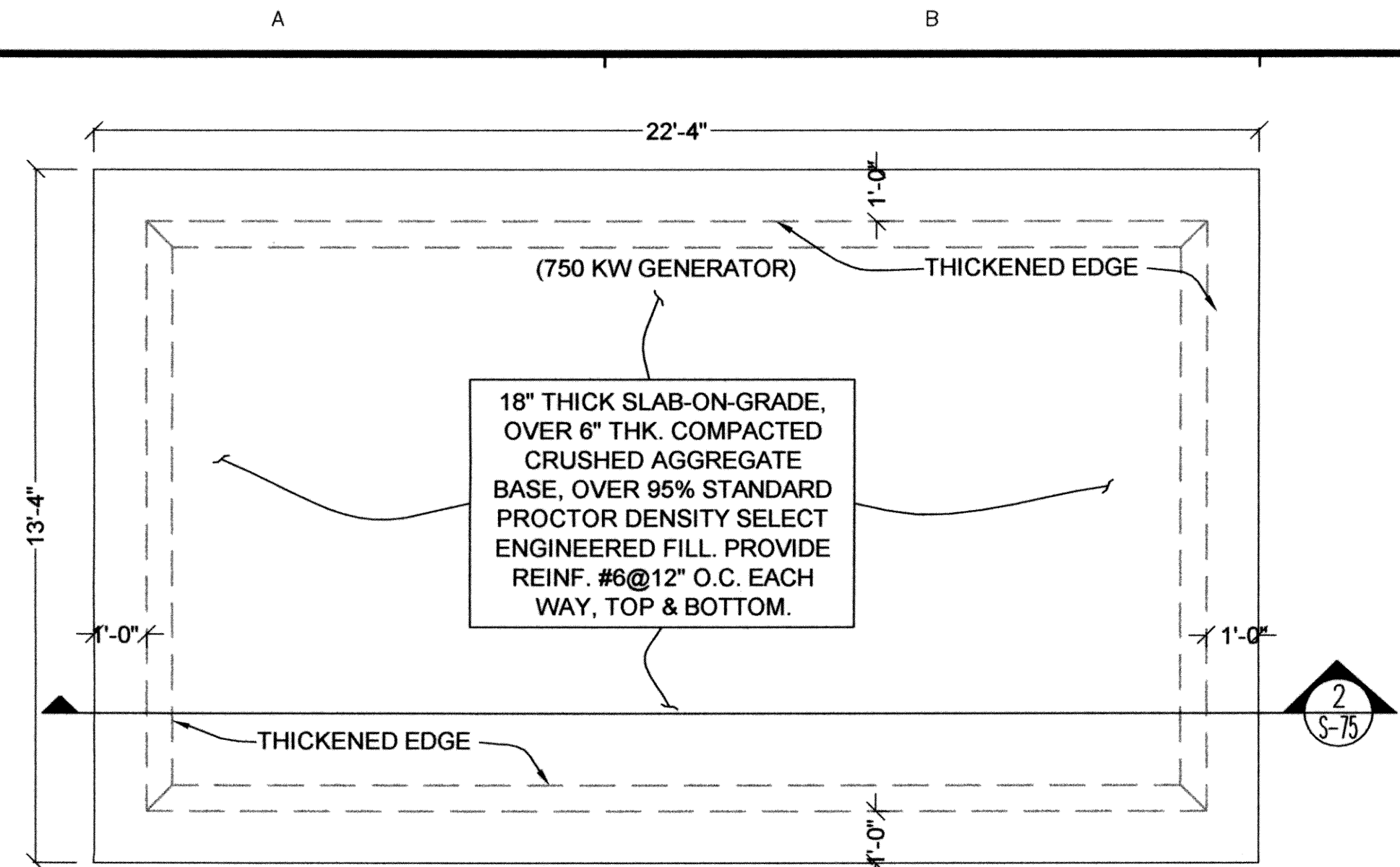
12" THK. MAT FOUNDATION REINF. # 6 @ 8" O.C., EW TOP & BOT.

REVISIONS:	DATE:

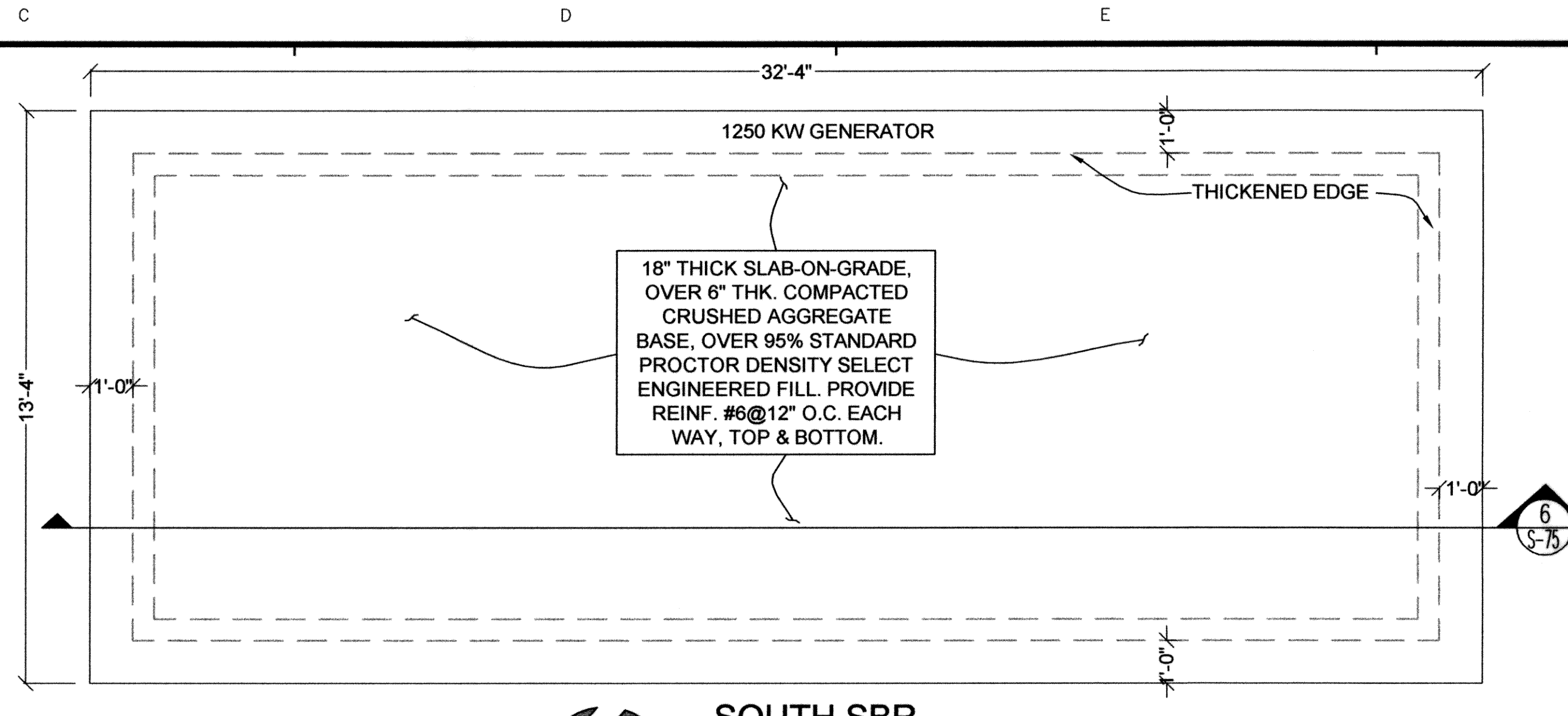
MAG METER  
STR# 61,62, 66, 68 STRUCTURAL  
DETAILS

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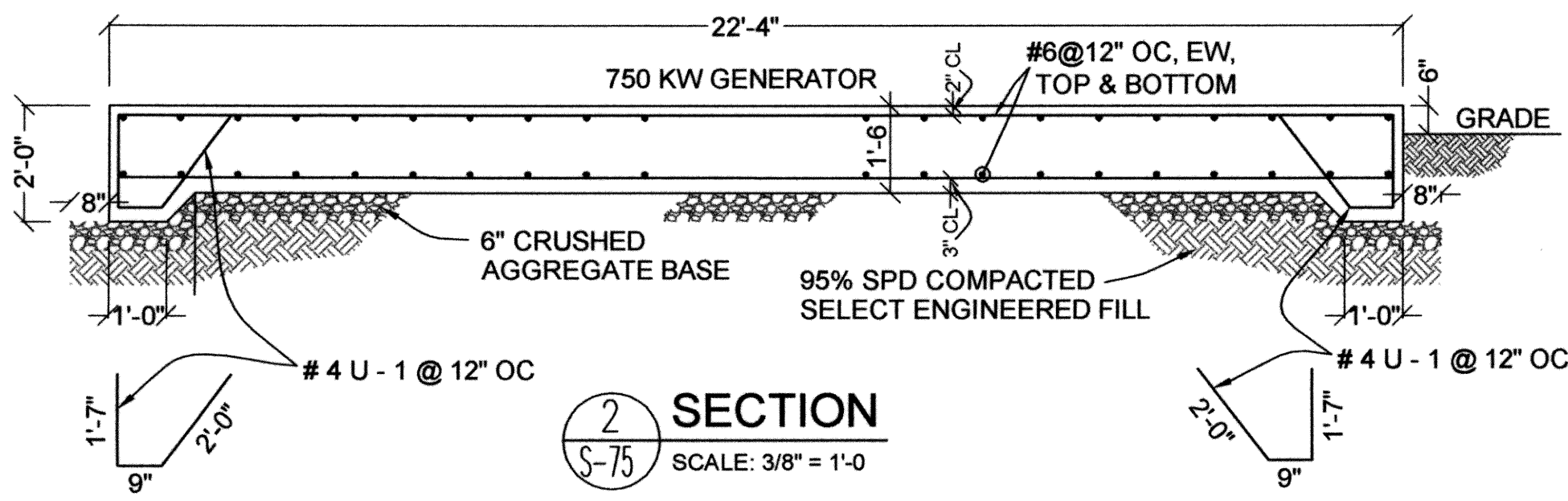
EAGLE CONSULTANTS, INC.  
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CERTIFICATE OF AUTHORIZATION NO. CA2088



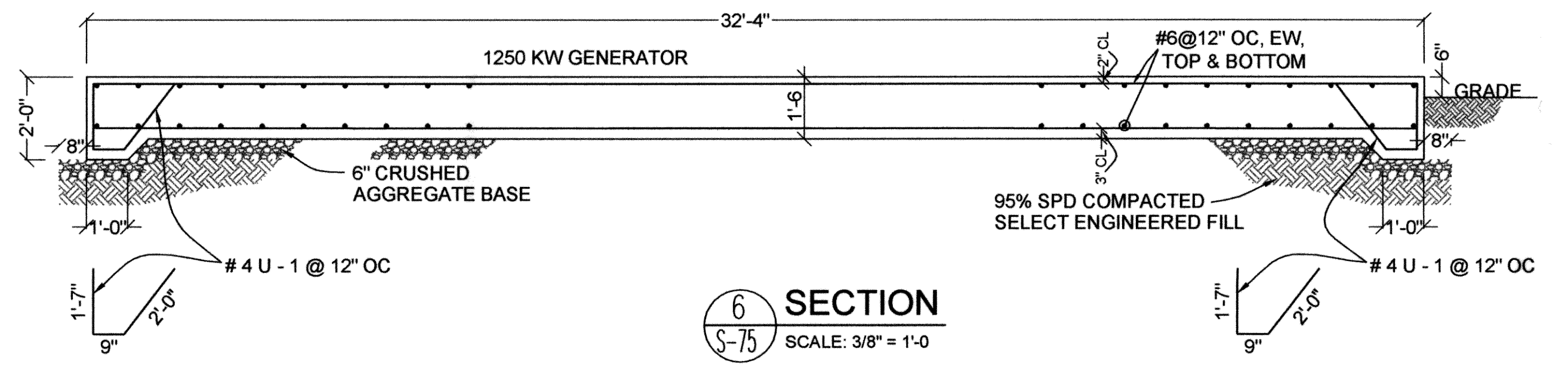
**HEADWORKS, UV BLDG. PLAN**  
 1  
 S-75 SCALE: 3/8" = 1'-0"



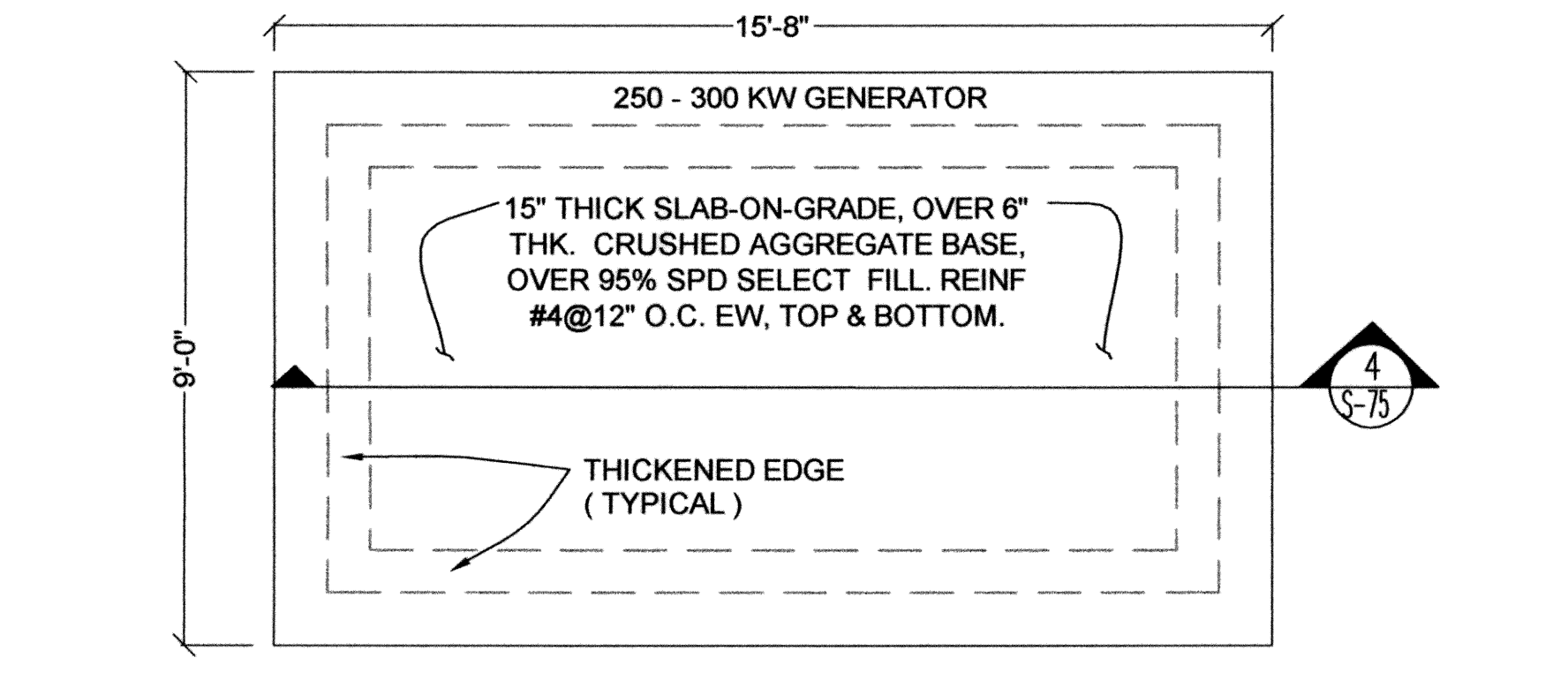
**SOUTH SBR PLAN**  
 5  
 S-75 SCALE: 3/8" = 1'-0"



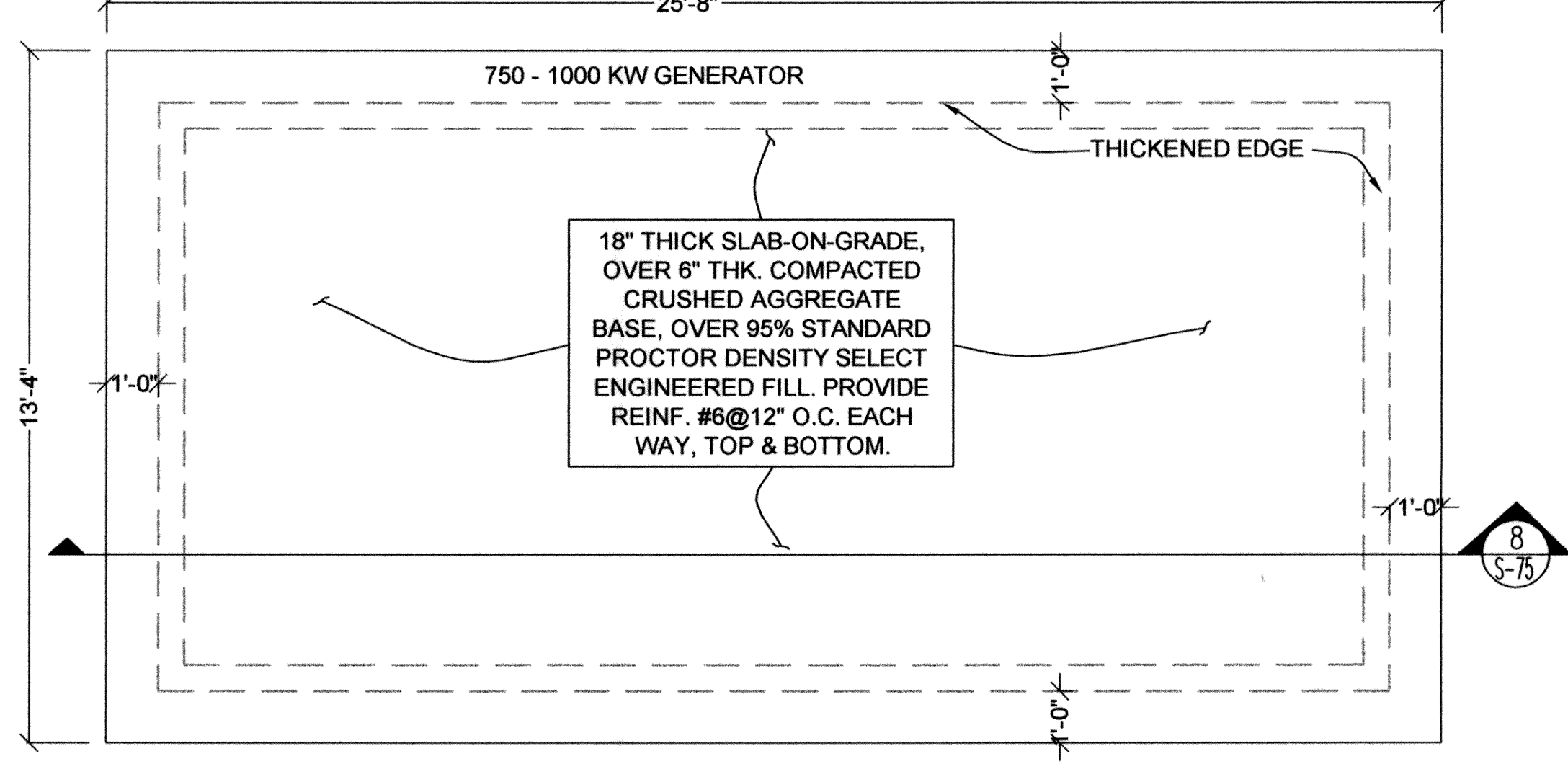
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 2  
 S-75 SCALE: 3/8" = 1'-0"



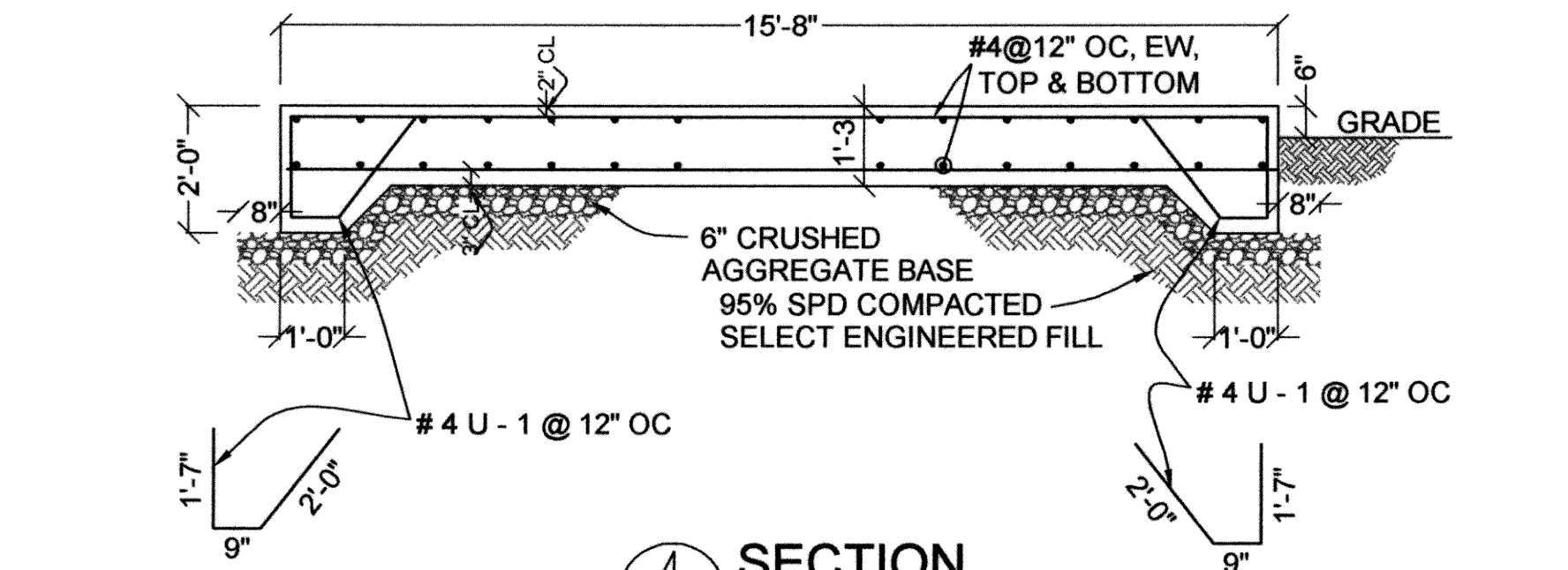
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 S-75 SCALE: 3/8" = 1'-0"



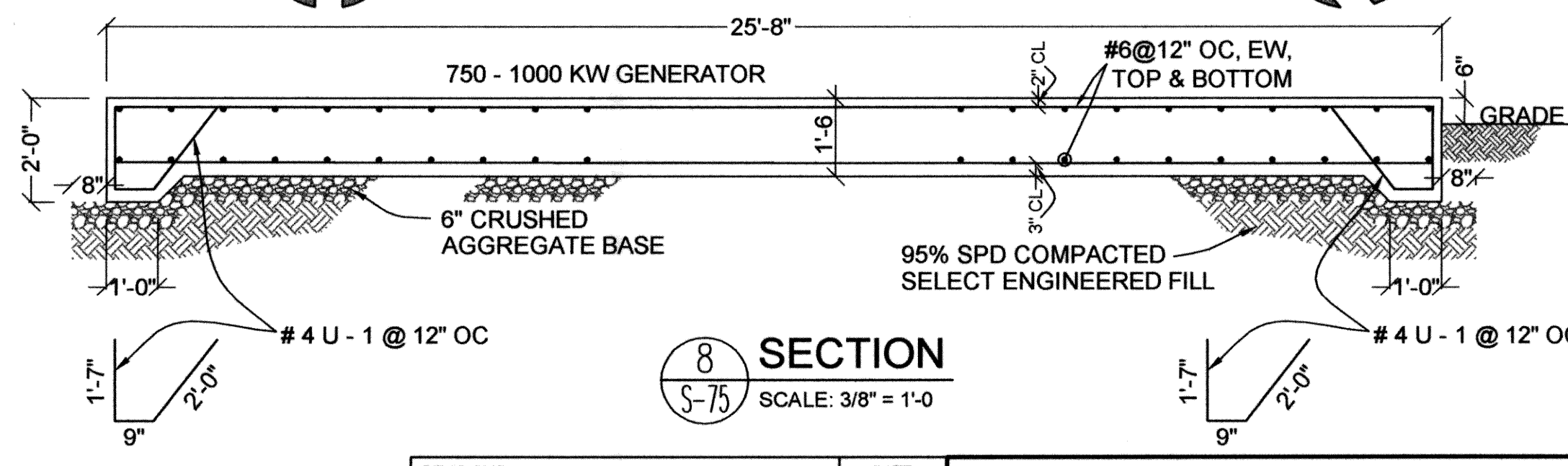
**SBR ODOR CONTROL - RETURN LIFT STATION PLAN**  
 3  
 S-75 SCALE: 3/8" = 1'-0"



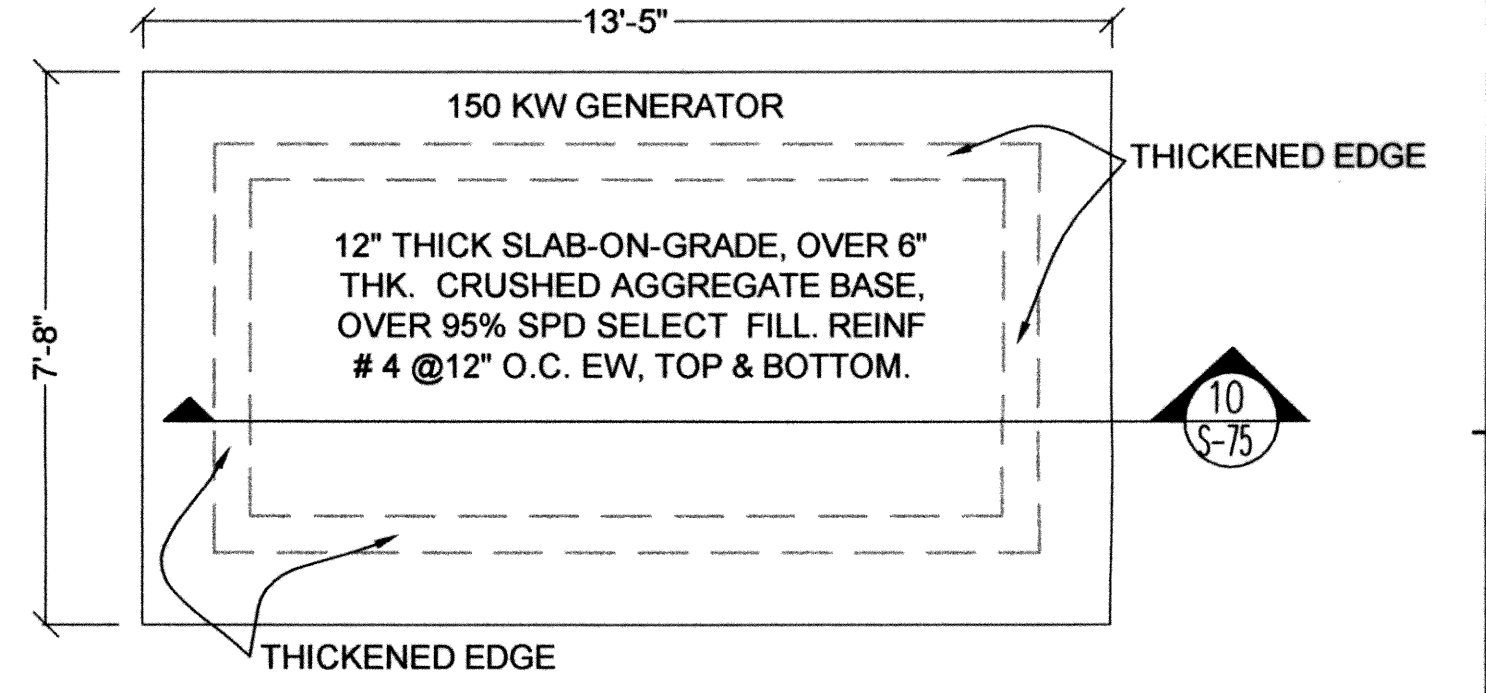
**N. DIGESTER, S. DIGESTER - NORTH SBR PLAN**  
 7  
 S-75 SCALE: 3/8" = 1'-0"



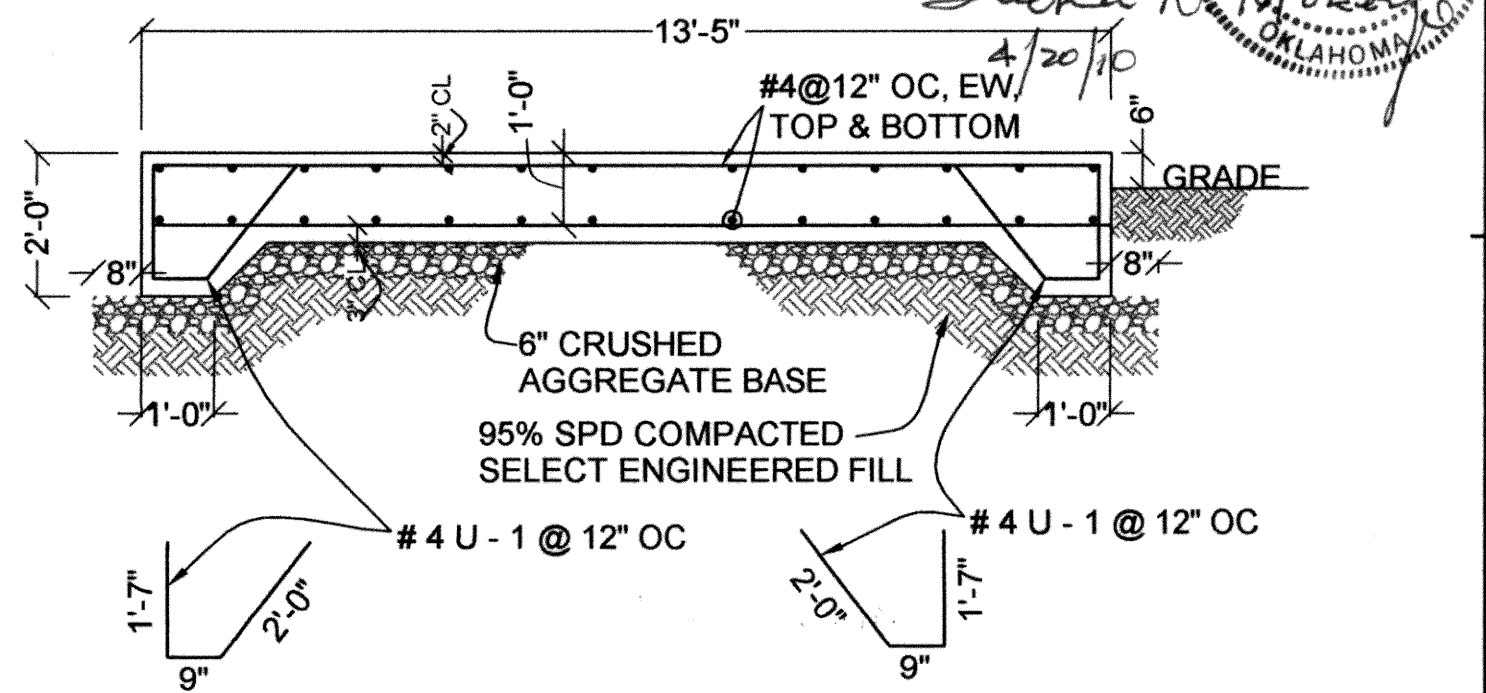
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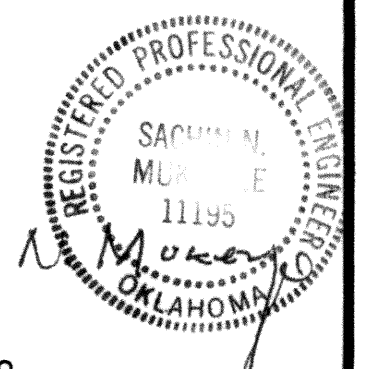
**SECTION**  
 8  
 S-75 SCALE: 3/8" = 1'-0"



**ADMINISTRATION/ MAINTENANCE PLAN**  
 9  
 S-75 SCALE: 3/8" = 1'-0"



**SECTION**  
 10  
 S-75 SCALE: 3/8" = 1'-0"



REVISIONS:	DATE:

**GENERATOR PAD STRUCTURAL DETAILS**

RECORD DRAWINGS

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S-75

# VOLUME 5 ARCHITECTURAL SHEET INDEX



SHEET NO.	TITLE	
1	ARCHITECTURAL SHEET INDEX	
2	HEADWORKS BUILDING	HEAD2.0
3	HEADWORKS BUILDING	HEAD4.0
4	HEADWORKS CHEMICAL STORAGE BUILDING	HWCF2.0
5	HEADWORKS CONTROL BUILDING, N. POND, AD NORTH & SOUTH, SBR NORTH	ELECT2.0
6	SBR BUILDING	SBRA2.0
7	SBR SECTIONS	SBRA4.0
8	SBR PIPE VAULT BUILDING	SBRPVA2.0
9	ELECTRICAL CONTROL BUILDING SOUTH SBR	SSBRELECT2.0
10	SBR CHEMICAL FEED BUILDING	SBRCF2.0
11	AD BUILDING	ADA2.0
12	BELT FILTER PRESS BUILDING	BELTA2.0
13	AD/BFP CHEMICAL FEED BUILDING	AD/BFPA2.0
14	UV BUILDING	UVA2.0
15	NON POTABLE WATER BUILDING	NONPOTA2.0
16	ADMINISTRATION BUILDING	A2.0
17	ADMINISTRATION BUILDING	A2.1
18	ADMINISTRATION BUILDING	A4.0
19	ADMINISTRATION BUILDING	A4.1
20	LAB DETAILS	A6.0
21	ADMINISTRATION BUILDING	A6.1
22	ADMINISTRATION BUILDING	A6.2
23	MAINTENANCE BUILDING	A2.2
24	MAINTENANCE BUILDING	A2.3
25	MAINTENANCE BUILDING	A4.2
26	MAINTENANCE BUILDING	A4.3
27	ARCHITECTURAL DETAILS	A3.0
28	ARCHITECTURAL DETAILS	A3.1

**RECORD DRAWINGS**

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DESIGNED BY: S.D.    CAD OPERATOR:    CHECKED: S.D.    APPROVED: S.D.    PLOT DATE: 5/5/10    DWG. SCALE: NO SCALE    SHEET: 1 OF 28

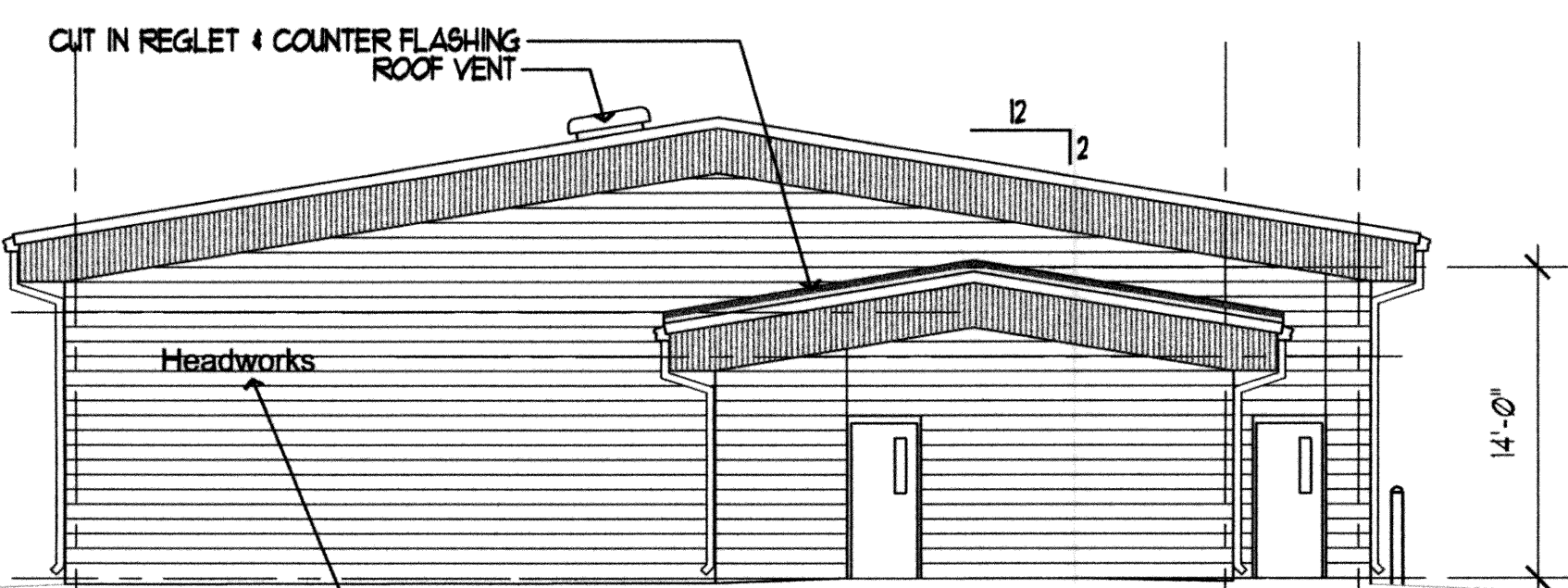
REVISIONS:	DATE:

**VOLUME 5  
ARCHITECTURAL  
SHEET INDEX**

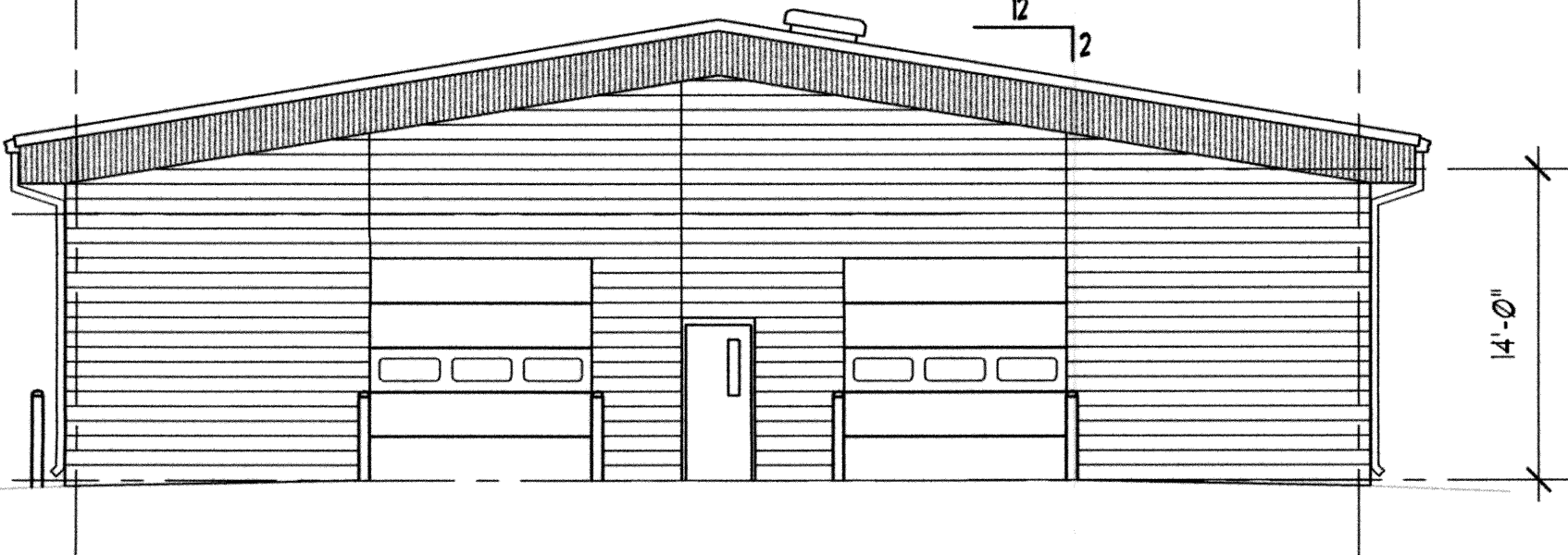
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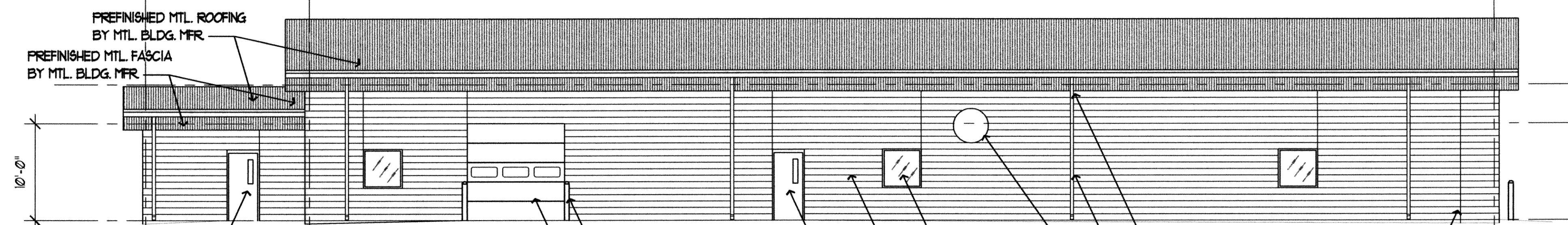
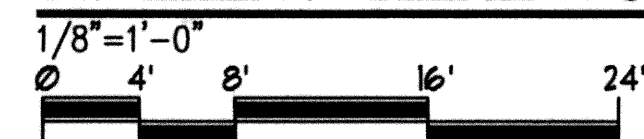
**WASTEWATER TREATMENT SYSTEM IMPROVEMENTS, MOORE, OK**



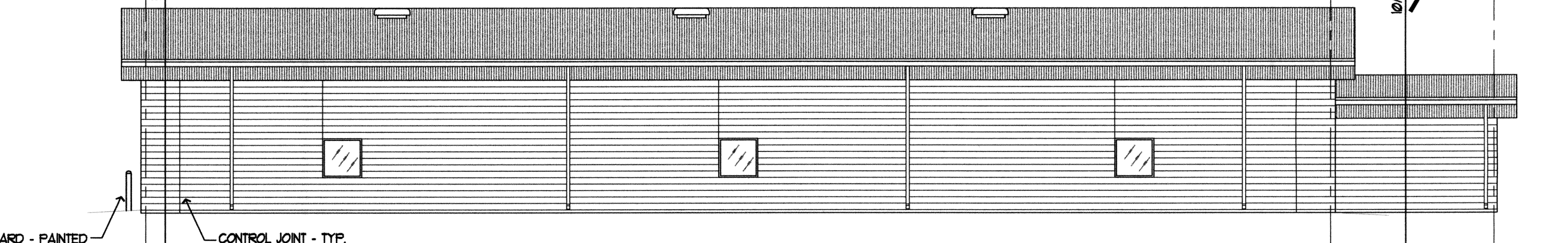
**S. ELEV.: HEADWORKS BLDG.**



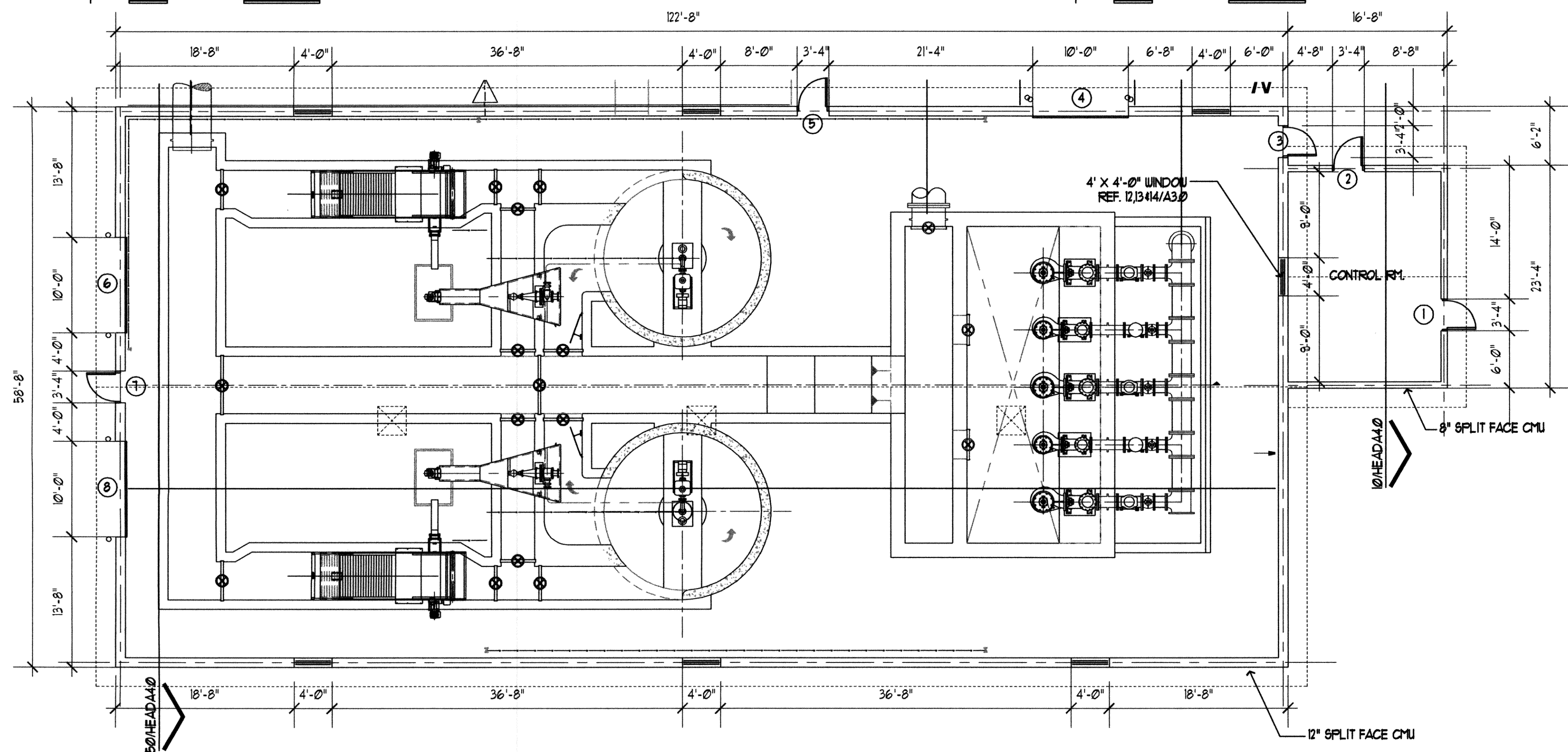
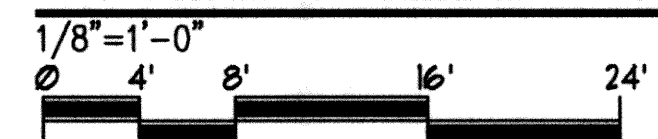
**N. ELEV.: HEADWORKS BLDG.**



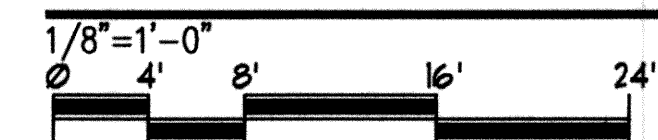
**E. ELEV.: HEADWORKS BLDG.**



**W. ELEV.: HEADWORKS BLDG.**

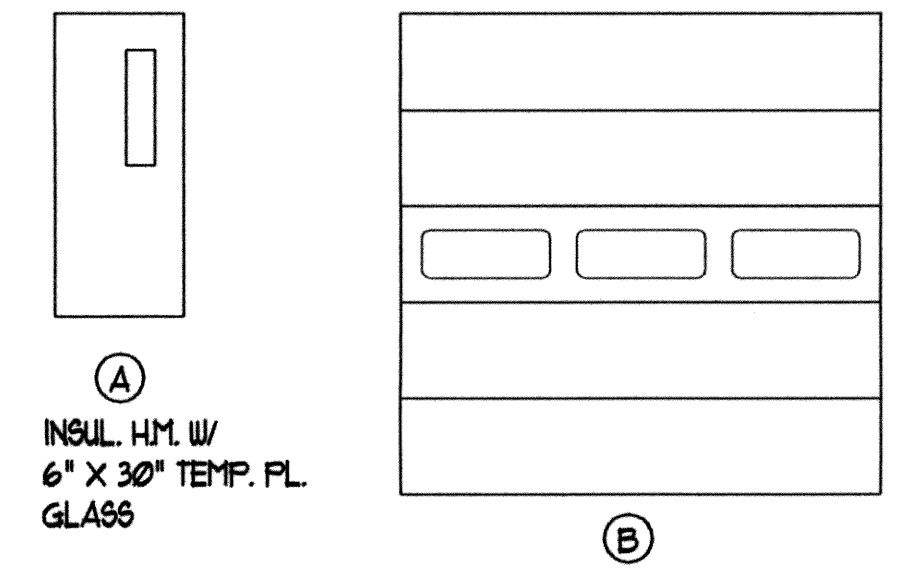


**FLOOR PLAN: HEADWORKS BUILDING**



DOOR SCHEDULE						
DR	SIZE	TYPE	HEAD	JAMB	HRDR. SET	REMARKS
1	3'-0" X 1'-0" X 1 3/4"	A	31/A3J	30/A3J	03	
2	3'-0" X 1'-0" X 1 3/4"	A	31/A3J	30/A3J	03	
3	3'-0" X 1'-0" X 1 3/4"	A	11/A30	10/A30	04	
4	10'-0" X 10'-0" X 2"	B	22/A30	21/A30	05	
5	3'-0" X 1'-0" X 1 3/4"	A	11/A30	10/A30	04	
6	10'-0" X 10'-0" X 2"	B	22/A30	21/A30	05	
7	3'-0" X 1'-0" X 1 3/4"	A	11/A30	10/A30	04	
8	10'-0" X 10'-0" X 2"	B	22/A30	21/A30	05	

**DOOR TYPES**



**GENERAL NOTES**

1. BUILDING USE F-2.



RECORD DRAWINGS

**HEADA2.0**

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CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088

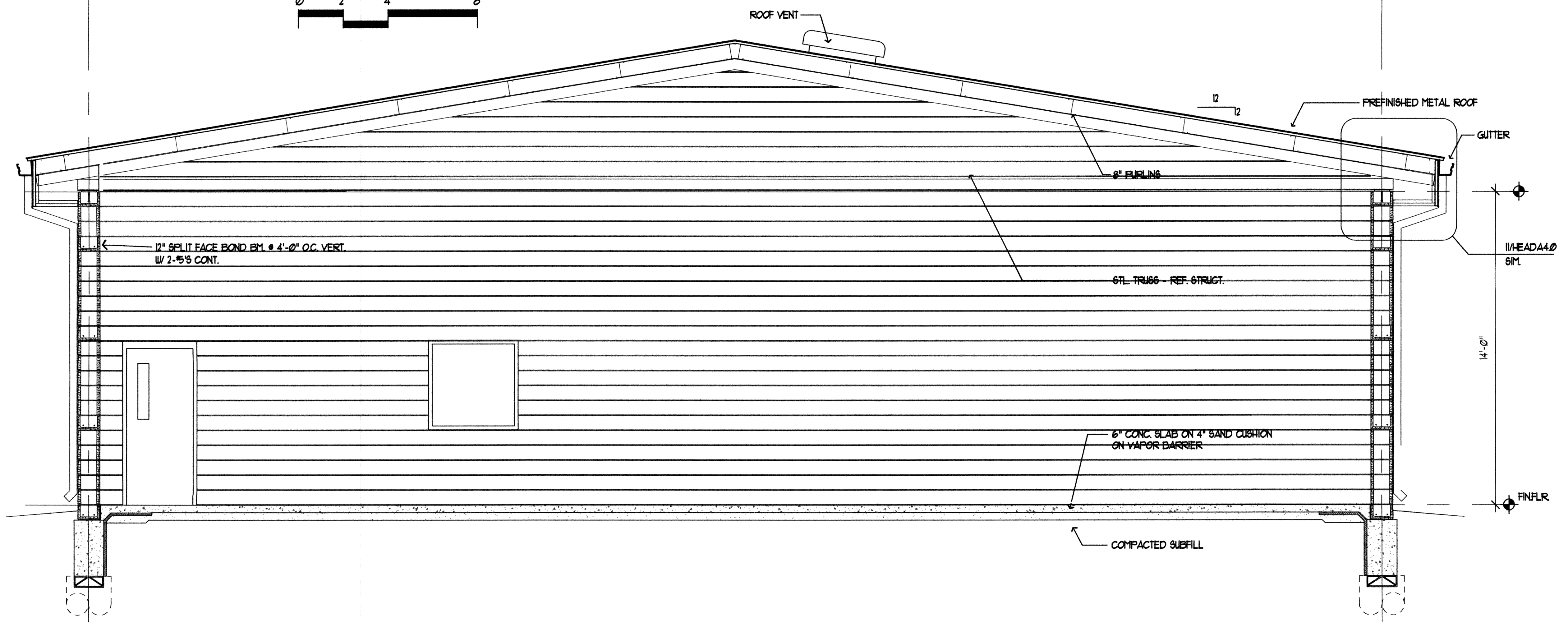
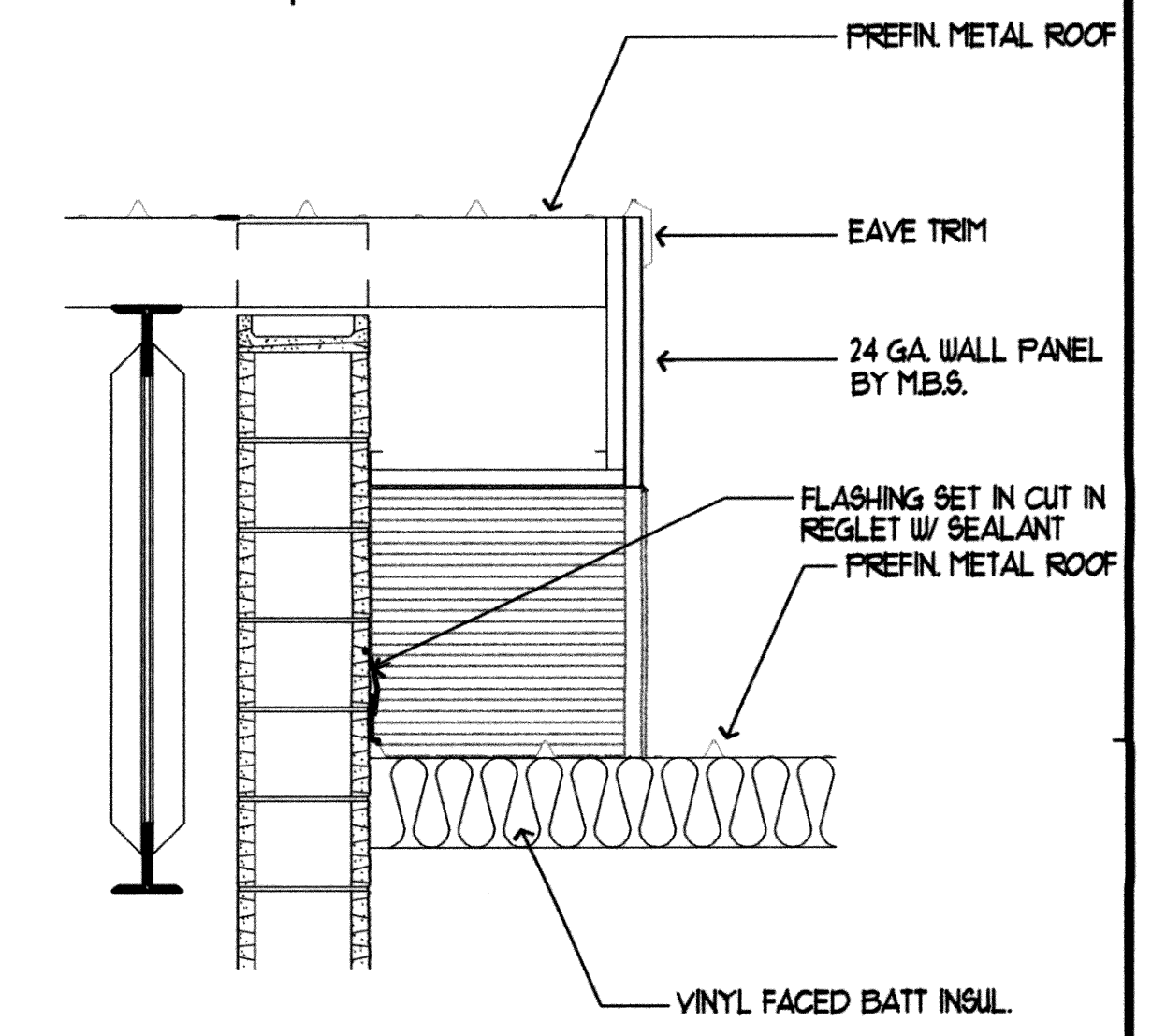
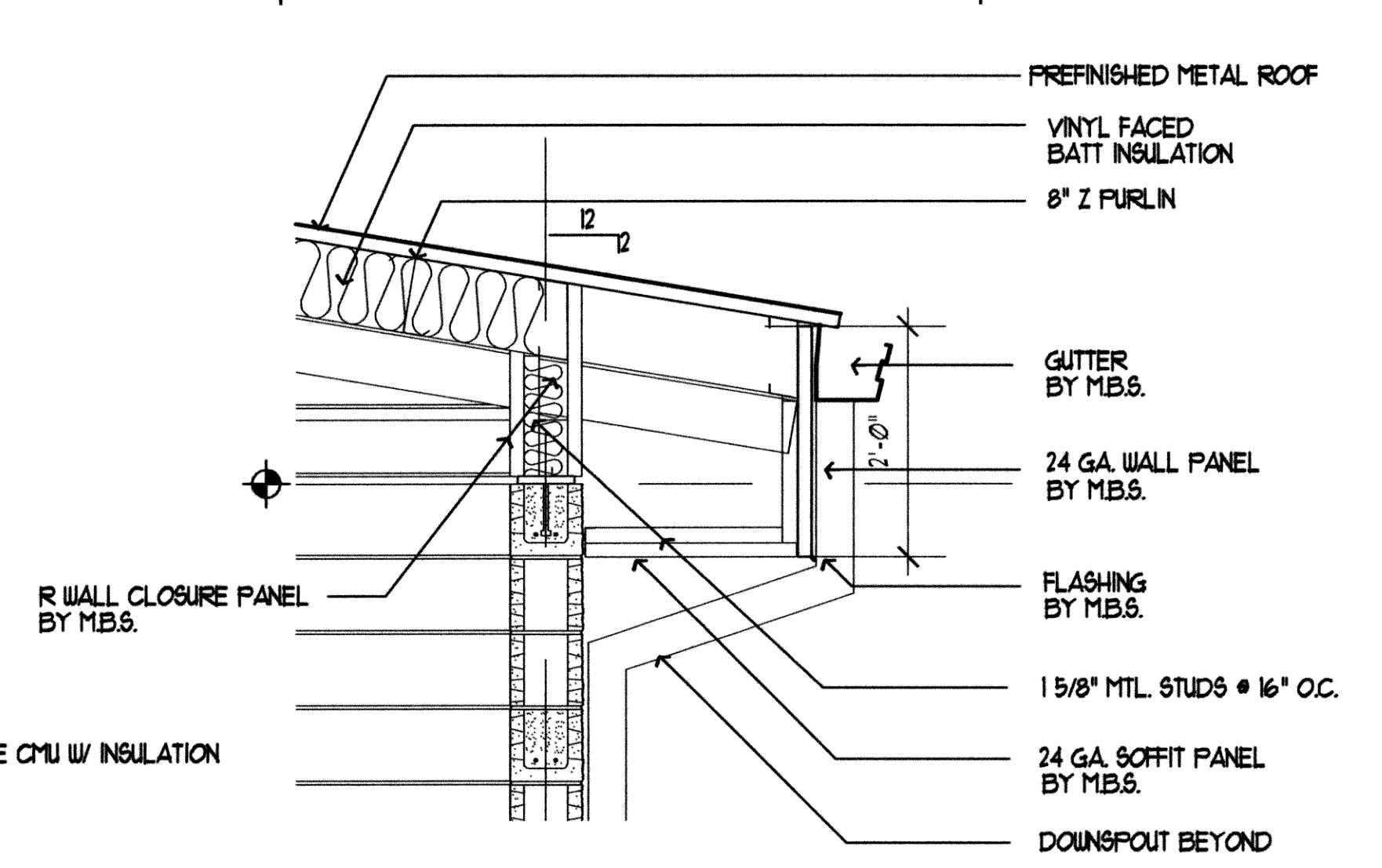
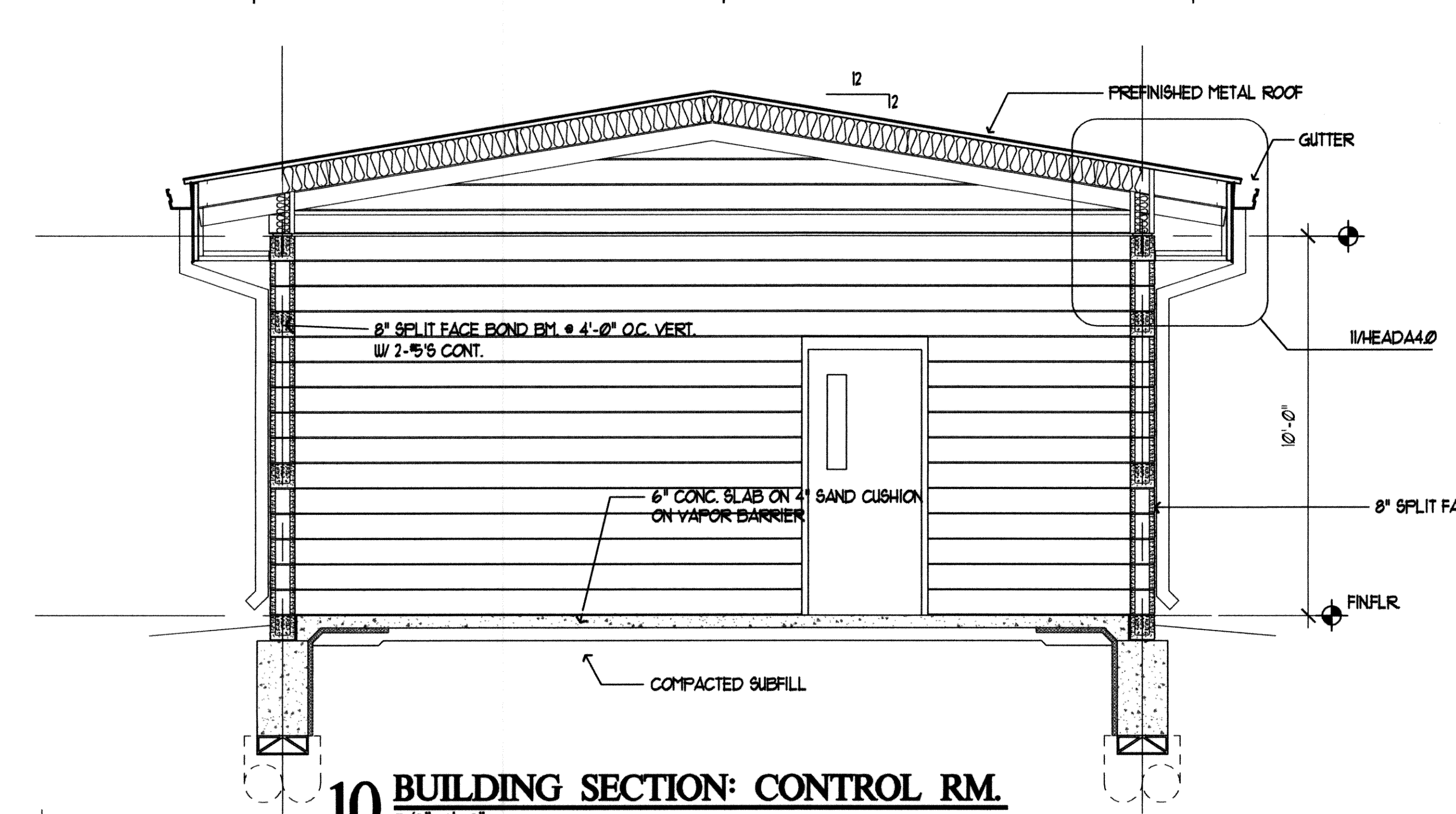
HEADWORKS BUILDING

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EDMOND, OK. 73013  
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FAX. (405) 844-3800

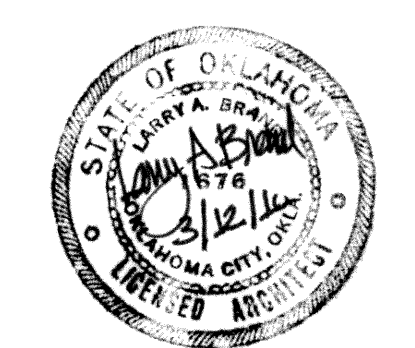
REVISIONS:	DATE:

DESIGNED BY:	CAD OPERATOR:	CHECKED: SD	APPROVED: SD	PLOT DATE: 3/11/2010	DWG. SCALE: AS SHOWN	SHEET: 2 OF 28
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A B C D E F G



RECORD DRAWINGS



**HEADA4.0**

**EAGLE CONSULTANTS, INC.**  
 CIVIL AND ENVIRONMENTAL ENGINEERS  
 CERTIFICATE OF AUTHORIZATION NO. CA2098

HEADWORKS BUILDING

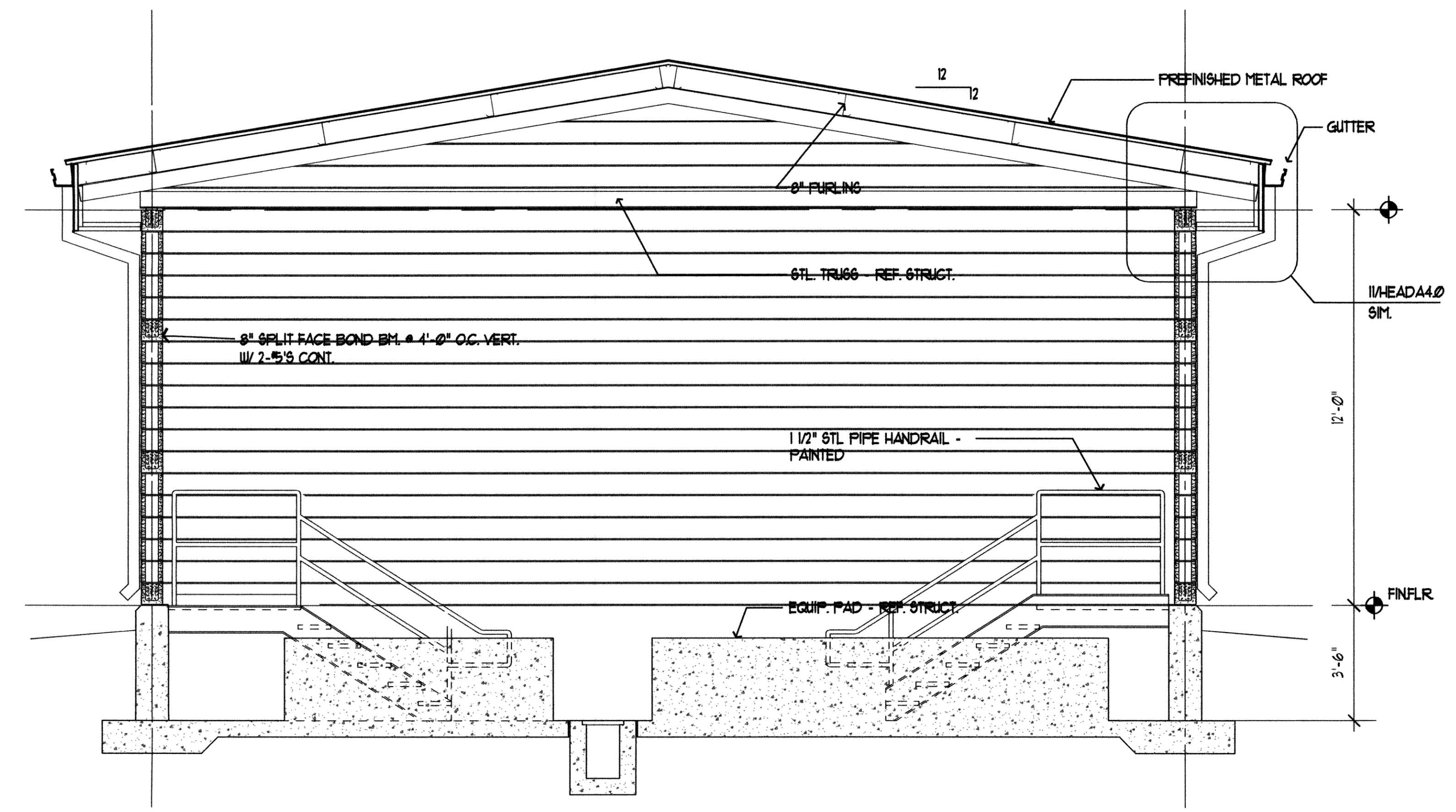
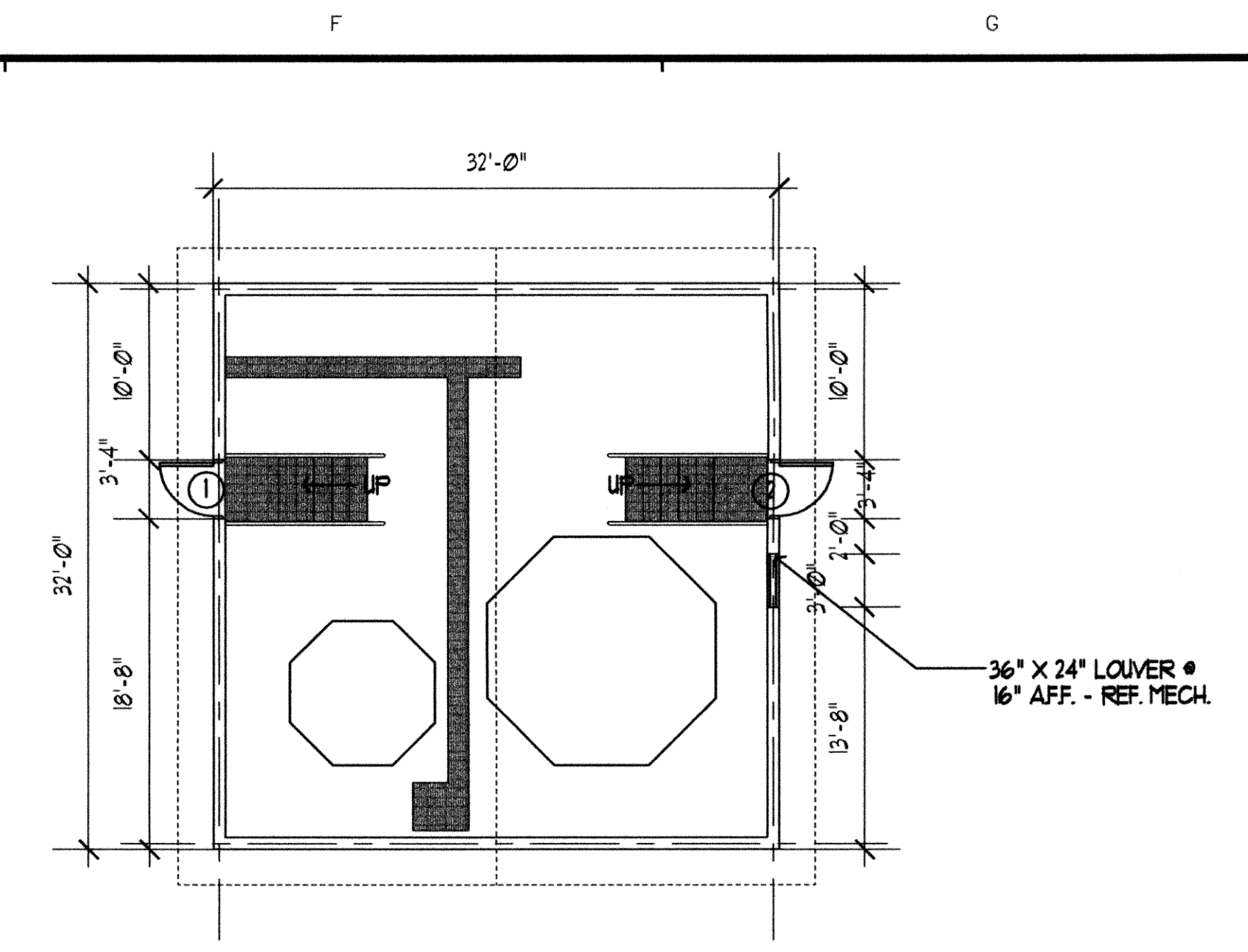
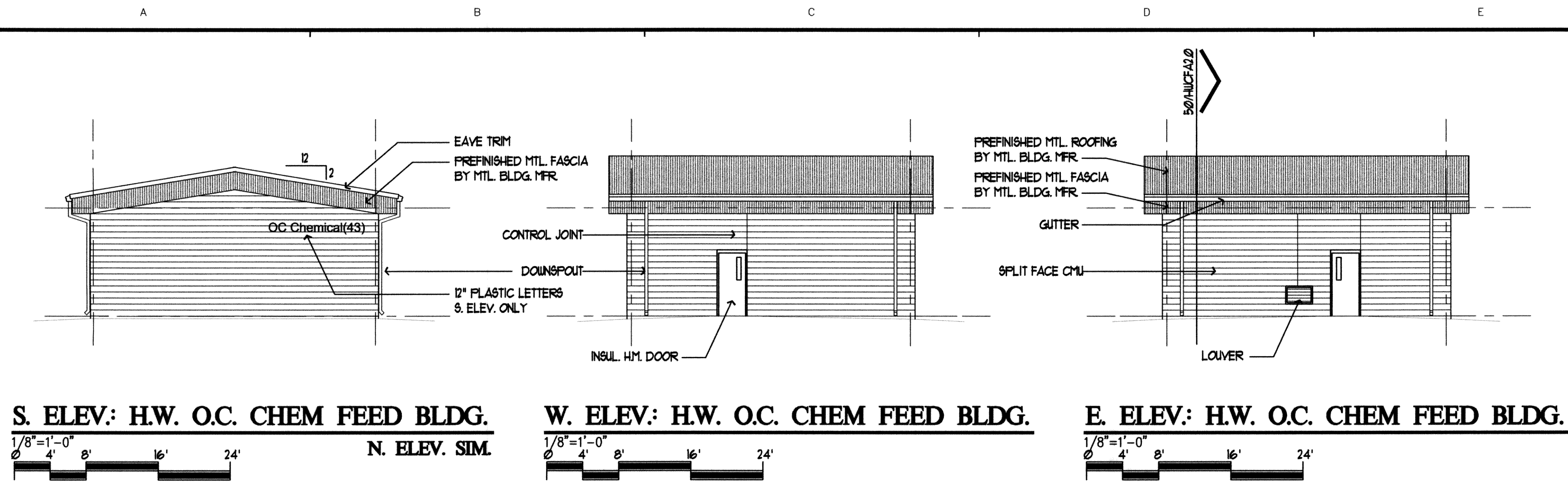
EAGLE OFFICE CENTER  
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 EDMOND, OK. 73013  
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REVISIONS:	DATE:

DESIGNED BY:	CAD OPERATOR:	CHECKED:	APPROVED:	PLOT DATE:	DWG. SCALE:	SHEET:	OF
		SD	SD	3/11/2010	AS SHOWN	3	28

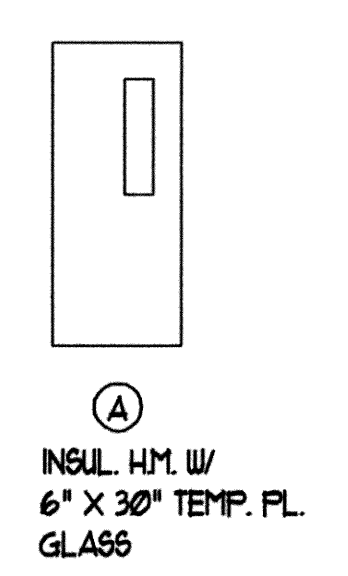
WASTEWATER TREATMENT SYSTEM IMPROVEMENTS, MOORE, OK

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DOOR SCHEDULE						
DR	SIZE	TYPE	HEAD	JAMB	HRDRW. SET	REMARKS
1	3'-0" X 7'-0" X 1/4"	A	3/A3J	30/A3J	06	
2	3'-0" X 7'-0" X 1/4"	A	3/A3J	30/A3J	06	

**DOOR TYPES**



**GENERAL NOTES**

- 1. BUILDING USE F-2.

RECORD DRAWINGS



**HWCFA2.0**

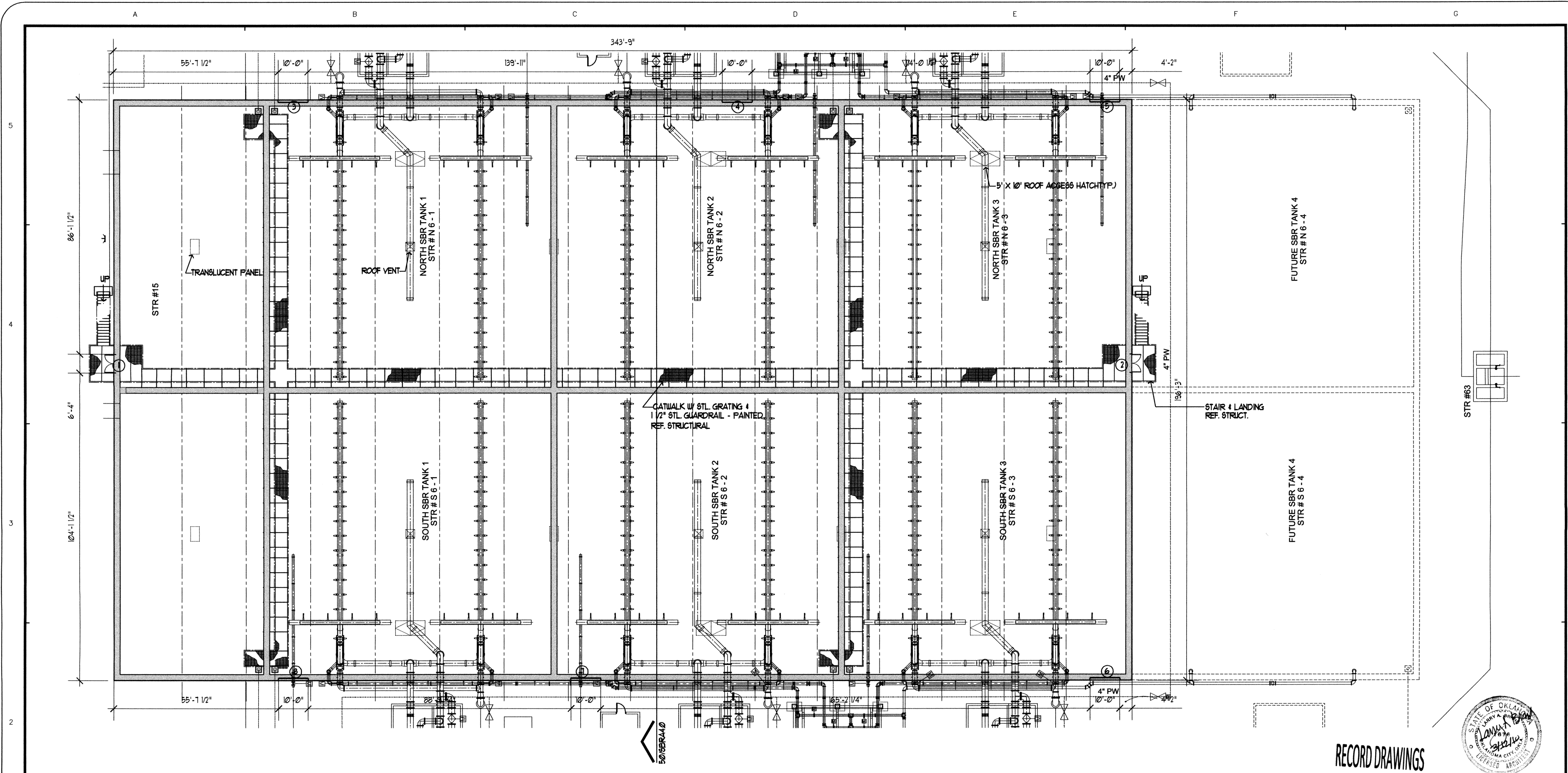
REVISIONS:	DATE:

**HEADWORKS CHEMICAL STORAGE BUILDING**

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 FAX. (405) 844-3800

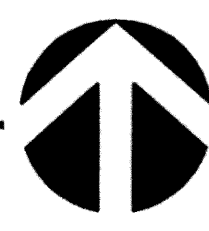
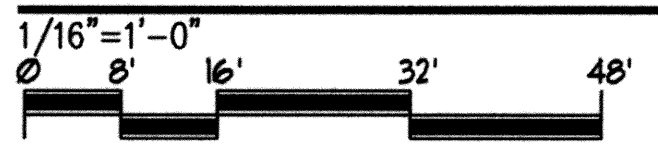
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 CERTIFICATE OF AUTHORIZATION NO. CA2088

DESIGNED BY:	CAD OPERATOR:	CHECKED:	APPROVED:	PLOT DATE:	DWG. SCALE:	SHEET:
		SD	SD	3/11/2010	AS SHOWN	4 OF 28

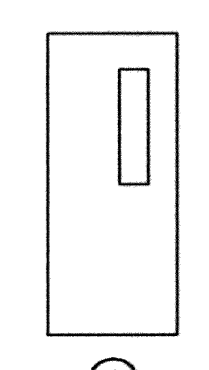


RECORD DRAWINGS

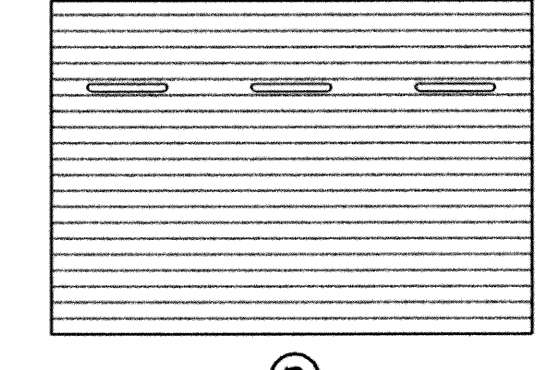
**PLAN: SBR BUILDING**



**DOOR TYPES**



(A)  
INSUL. HM. W/  
6" X 30" TEMP. FL.  
GLASS



(B)  
ROLL UP DOOR

**DOOR SCHEDULE**

DR	SIZE	TYPE	HEAD	JAMB	HDWR SET	REMARKS
1	FR 3'-0" X 7'-0" X 1 3/4"	A	41/A3J	40/A3J	07	
2	FR 3'-0" X 7'-0" X 1 3/4"	A	41/A3J	40/A3J	07	
3	10'-0" X 9'-0" X 2"	B	43/A3J	42/A3J	08	ACCESS DOORS
4	10'-0" X 9'-0" X 2"	B	43/A3J	42/A3J	08	ACCESS DOORS
5	10'-0" X 9'-0" X 2"	B	43/A3J	42/A3J	08	ACCESS DOORS
6	10'-0" X 9'-0" X 2"	B	43/A3J	42/A3J	08	ACCESS DOORS
7	10'-0" X 9'-0" X 2"	B	43/A3J	42/A3J	08	ACCESS DOORS
8	10'-0" X 9'-0" X 2"	B	43/A3J	42/A3J	08	ACCESS DOORS

**GENERAL NOTES**

1. BUILDING USE F-2.

**SBRA2.0**

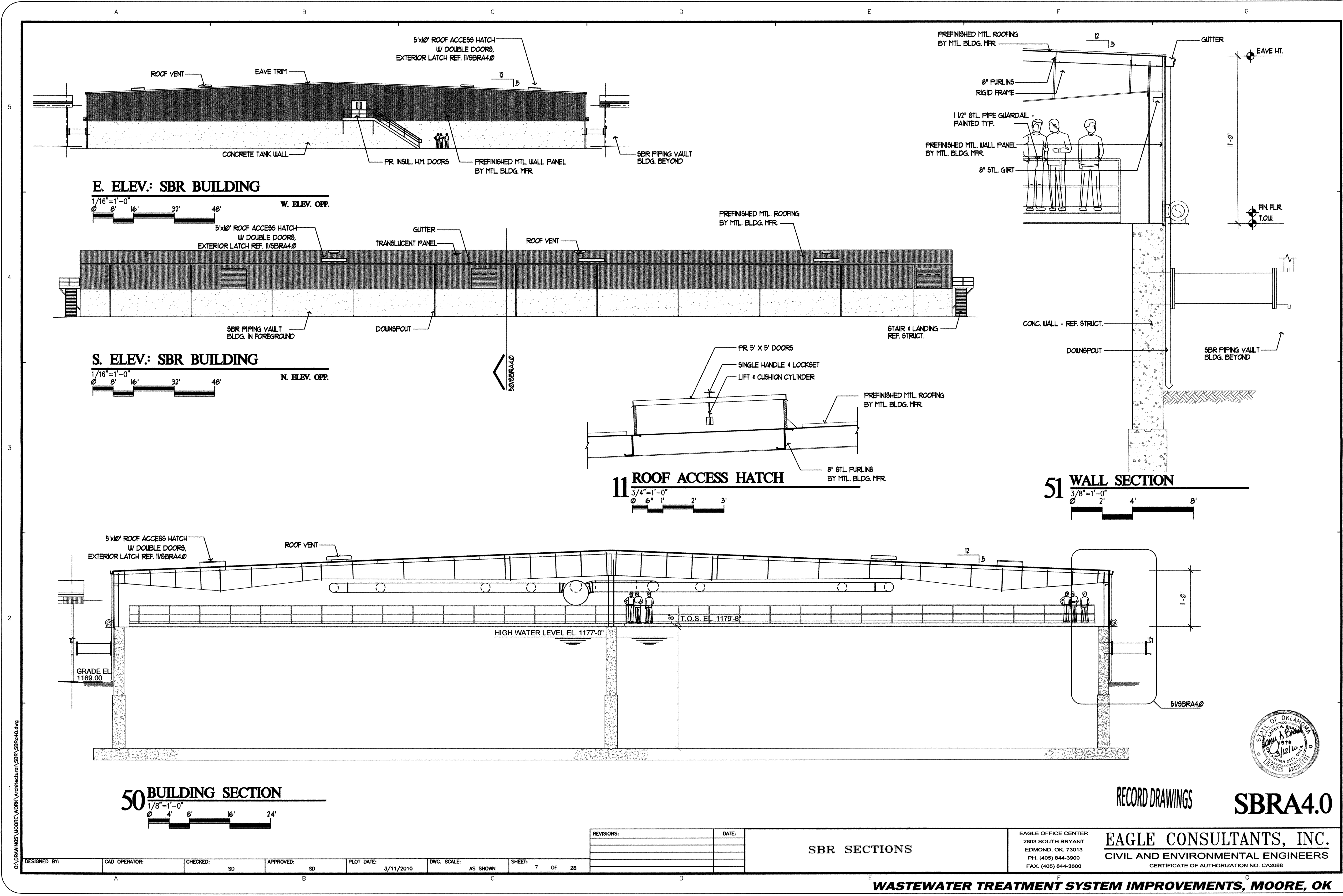
REVISIONS:	DATE:

**SBR BUILDING**

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DESIGNED BY:	CAD OPERATOR:	CHECKED:	APPROVED:	PLOT DATE:	DWG. SCALE:	SHEET:
		SD	SD	3/11/2010	AS SHOWN	6 OF 28



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**RECORD DRAWINGS** **SBRA4.0**

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 CERTIFICATE OF AUTHORIZATION NO. CA2088

REVISIONS:	DATE:

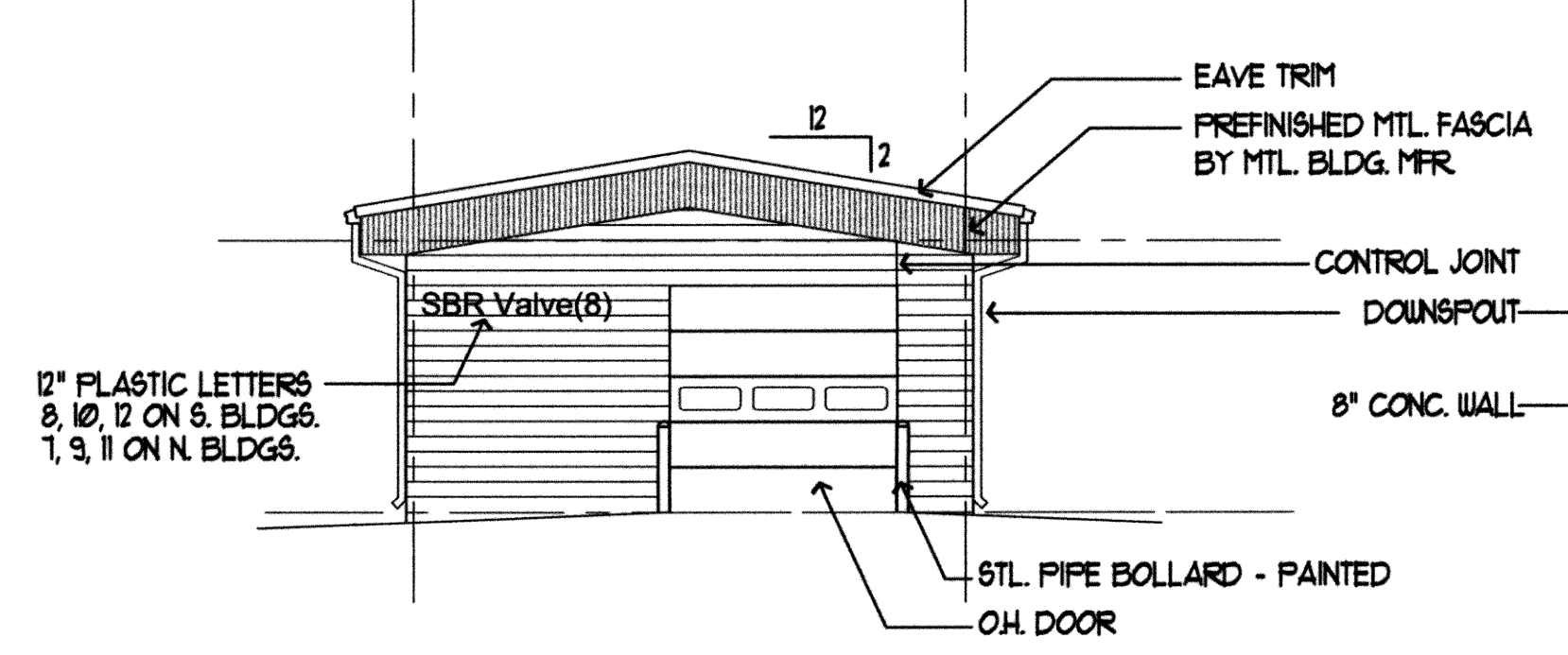
**SBR SECTIONS**

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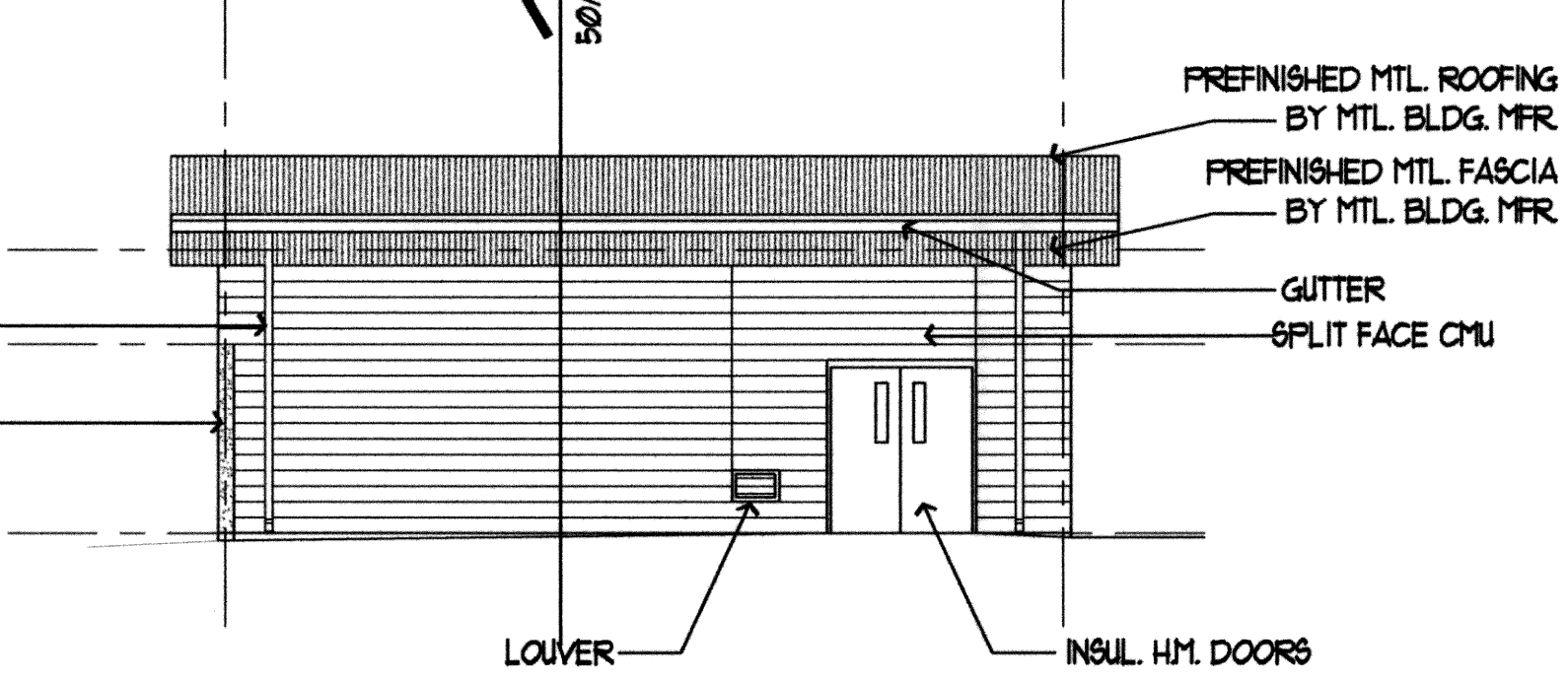
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**WASTEWATER TREATMENT SYSTEM IMPROVEMENTS, MOORE, OK**

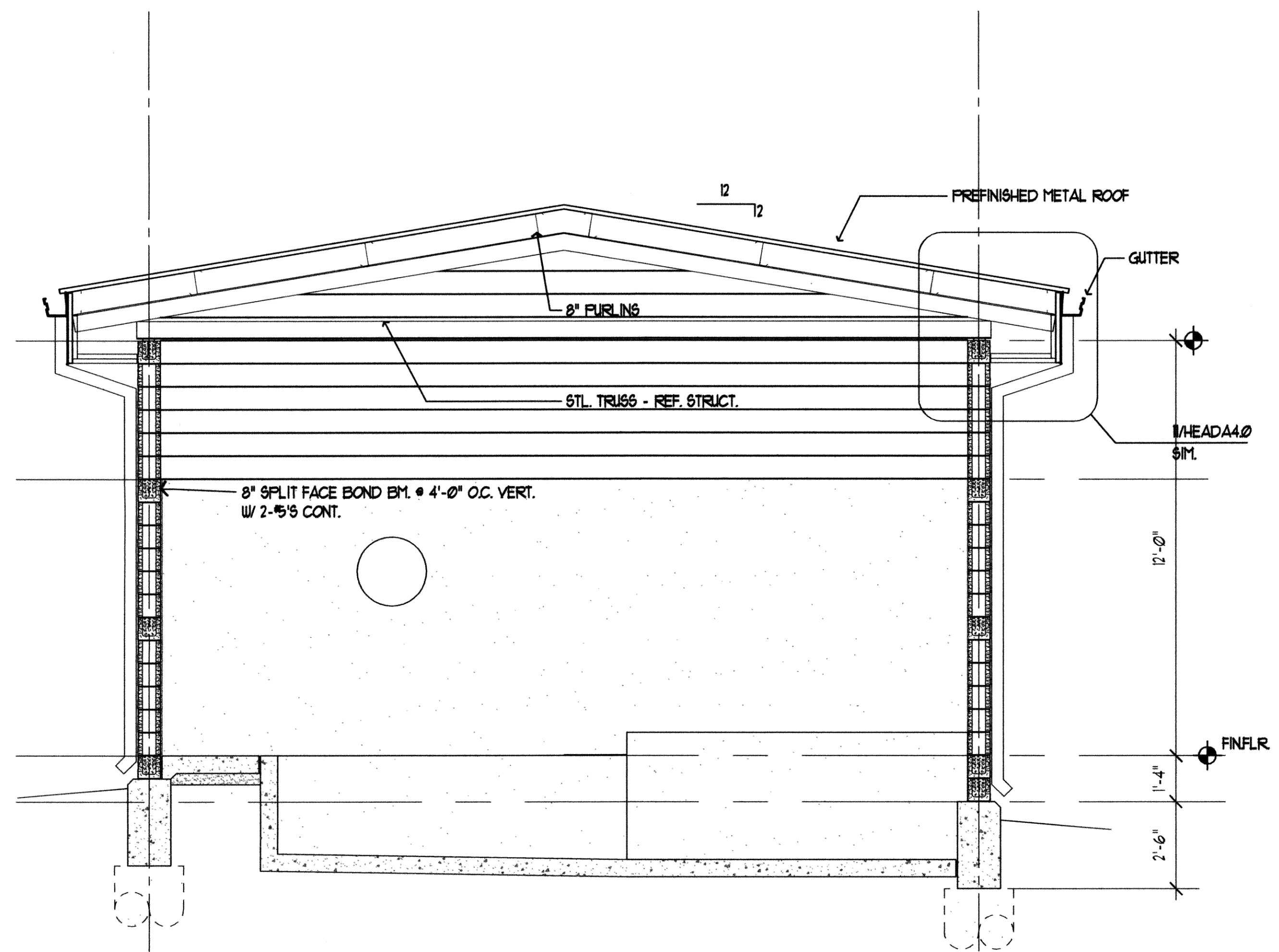
A B C D E F G



**S. ELEV: SBR PIPING VAULT BLDG.**  
 1/8"=1'-0"  
 0' 4' 8' 16' 24'  
 N ELEV. SIM. W/O DOOR.



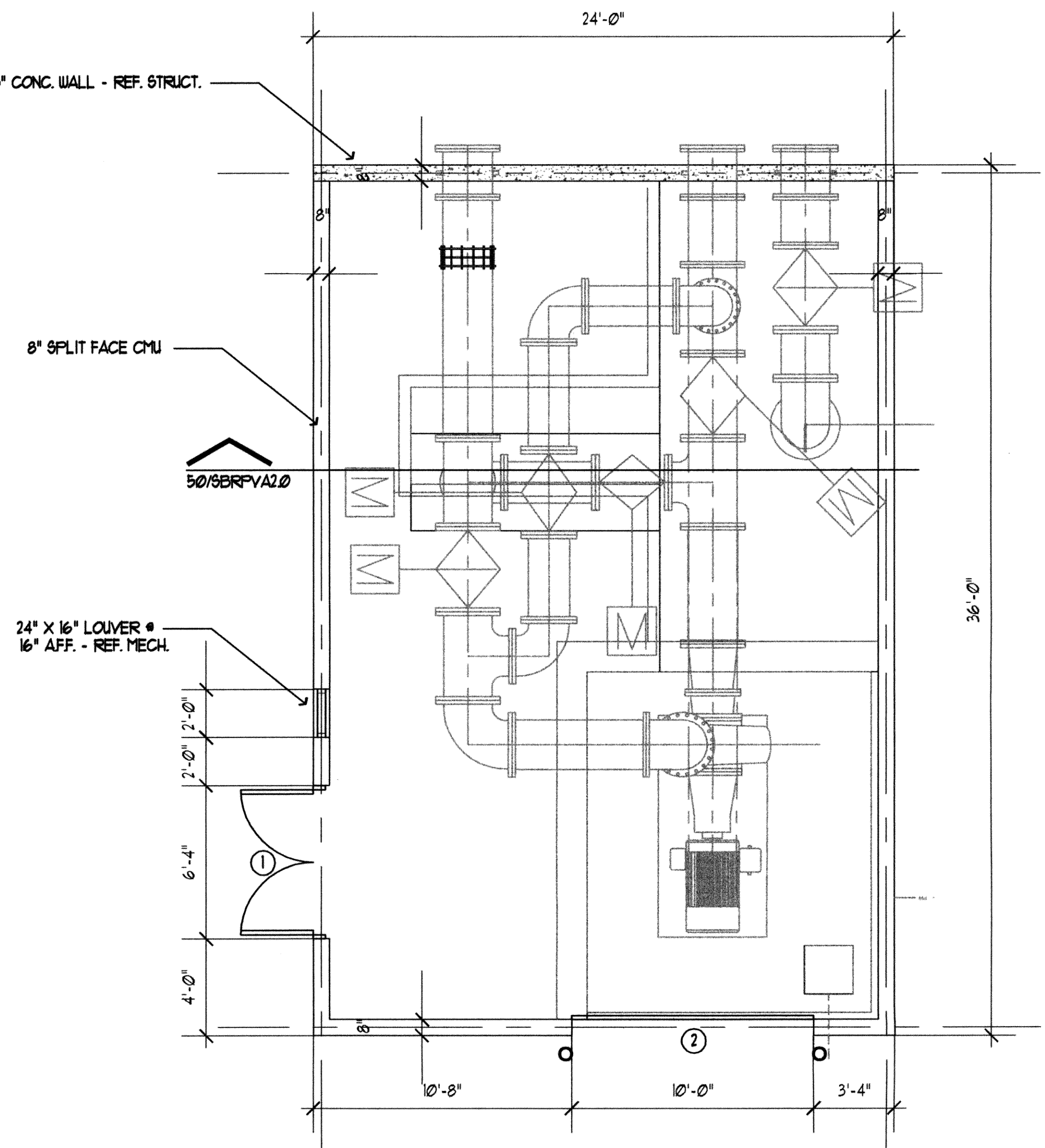
**W. ELEV: SBR PIPING VAULT BLDG.**  
 1/8"=1'-0"  
 0' 4' 8' 16' 24'  
 E. ELEV. SIM. W/O DOOR & LOUVER



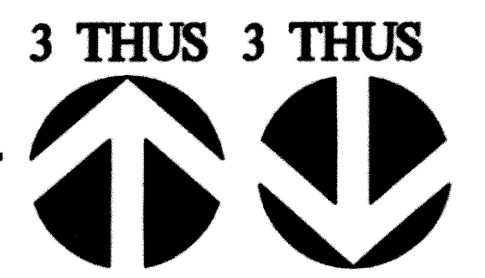
**50 BUILDING SECTION**  
 3/8"=1'-0"  
 0' 2' 4' 8'

**GENERAL NOTES**

1. BUILDING USE F-2.



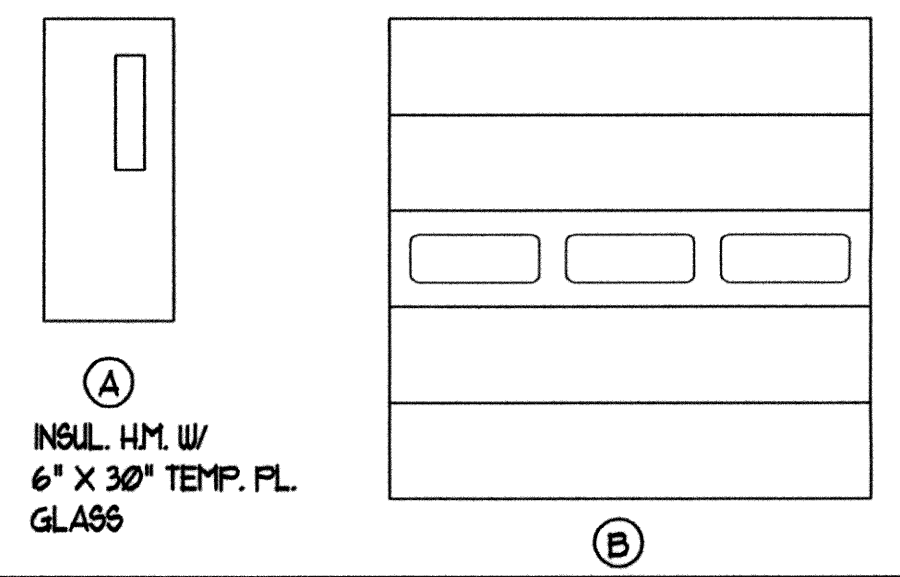
**FLOOR PLAN: SBR PIPING VAULT BUILDING**  
 1/4"=1'-0"  
 0' 2' 4' 8' 12'



**DOOR SCHEDULE**

DR	SIZE	TYPE	HEAD	JAMB	HRDR	SET	REMARKS
1	PR 3'-0" X 1'-0" X 1 3/4"	A	31/A3J	30/A3J	Ø3	Ø3	
2	10'-0" X 10'-0" X 2"	B	22/A3Ø	21/A3Ø	10	10	

**DOOR TYPES**



RECORD DRAWINGS



**6 THUS**  
**SBRPVA2.0**

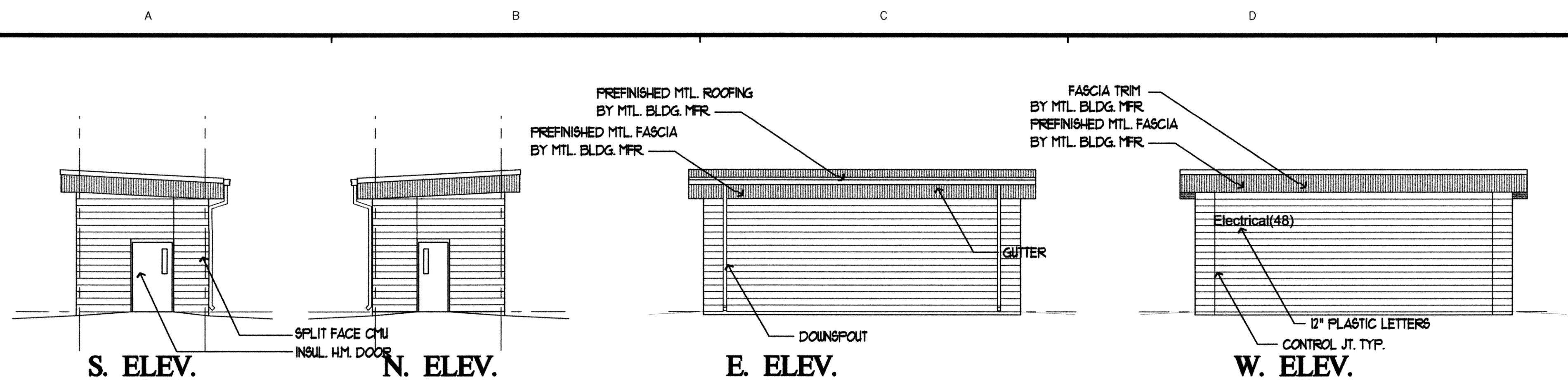
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		SD	SD	3/11/2010	AS SHOWN	8 OF 28

REVISIONS:	DATE:

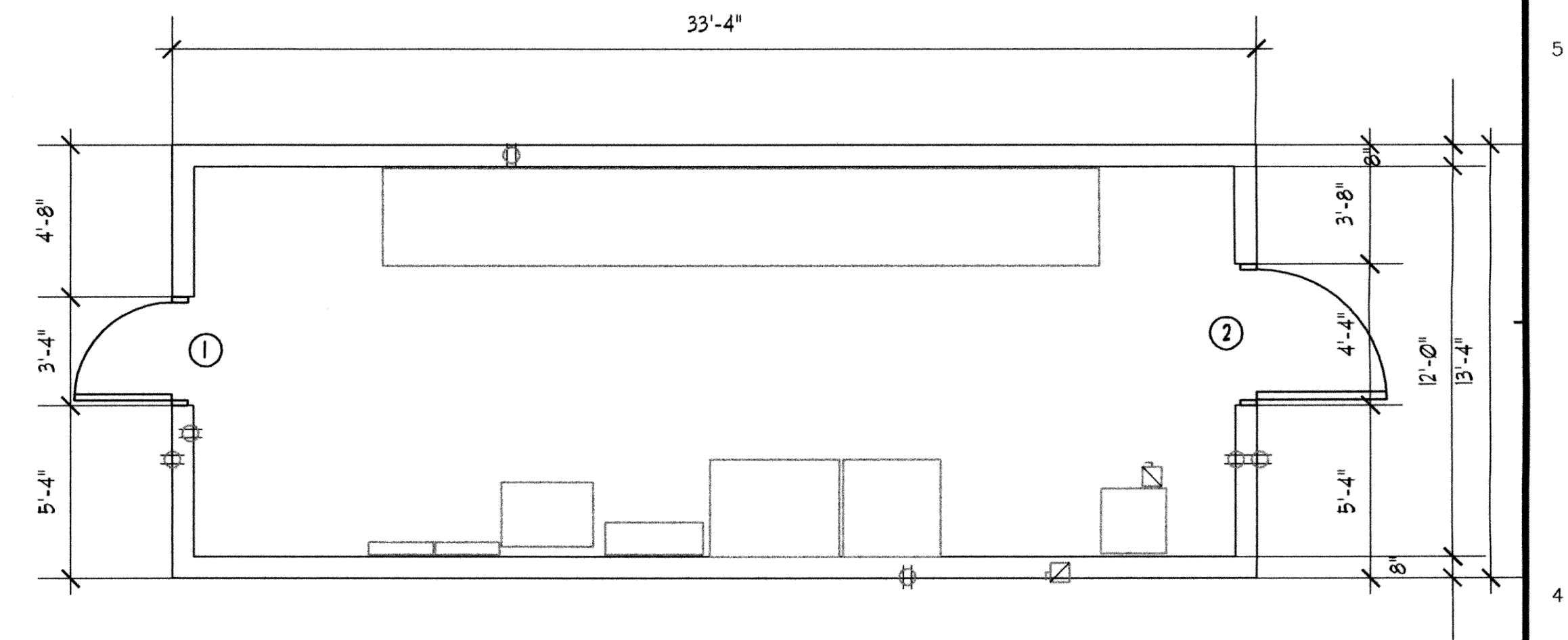
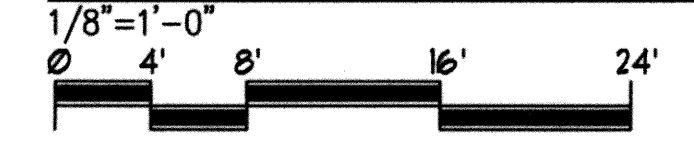
**SBR PIPE VAULT BUILDING**

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 2803 SOUTH BRYANT  
 EDMOND, OK. 73013  
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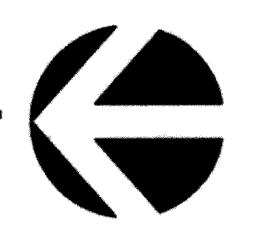
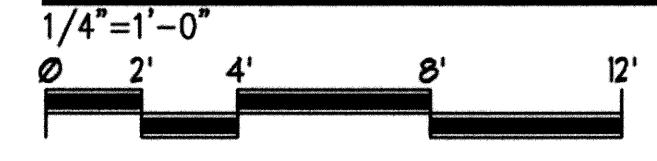
**EAGLE CONSULTANTS, INC.**  
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**ELEVATIONS: SOUTH SBR  
ELECTRICAL BUILDING**

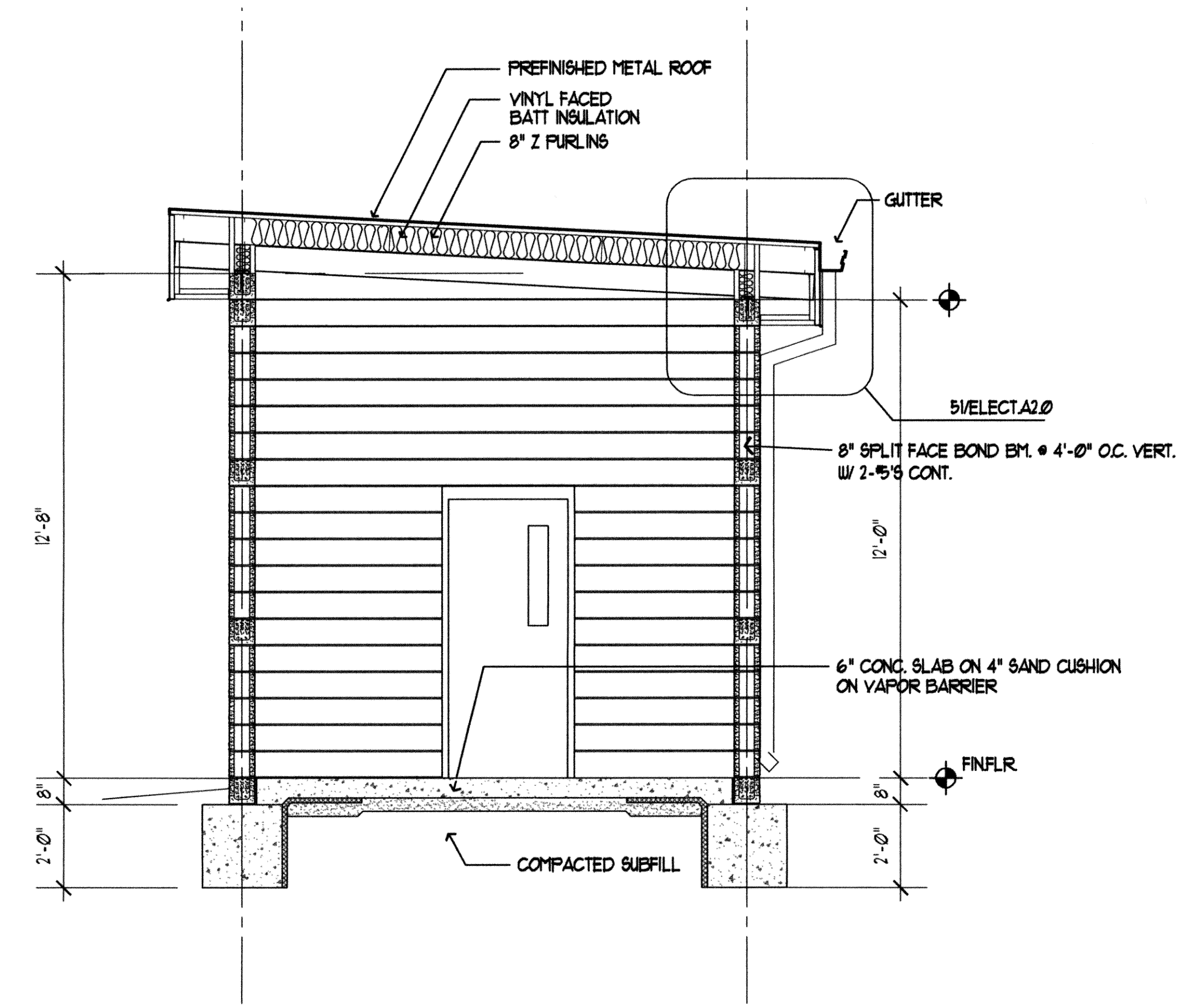


**FLOOR PLAN: SOUTH SBR  
ELECTRICAL BUILDING**

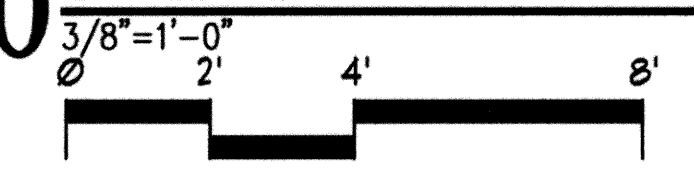


**GENERAL NOTES**

- 1. BUILDING USE U



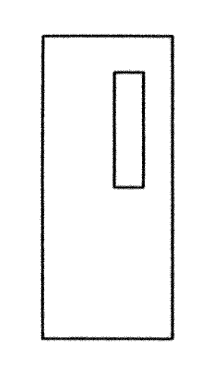
**50 BUILDING SECTION**



**DOOR SCHEDULE**

DR	SIZE	TYPE	HEAD	JAMB	HRDR SET	REMARKS
1	3'-0" X 7'-0" X 1 3/4"	A	3/A3	30/A3	Ø1	
2	4'-0" X 7'-0" X 1 3/4"	A	3/A3	30/A3	Ø2	

**DOOR TYPES**



①  
INSUL. HM. W/  
6" X 30" TEMP. FL.  
GLASS

RECORD DRAWINGS



**SSBRELECTA2.0**

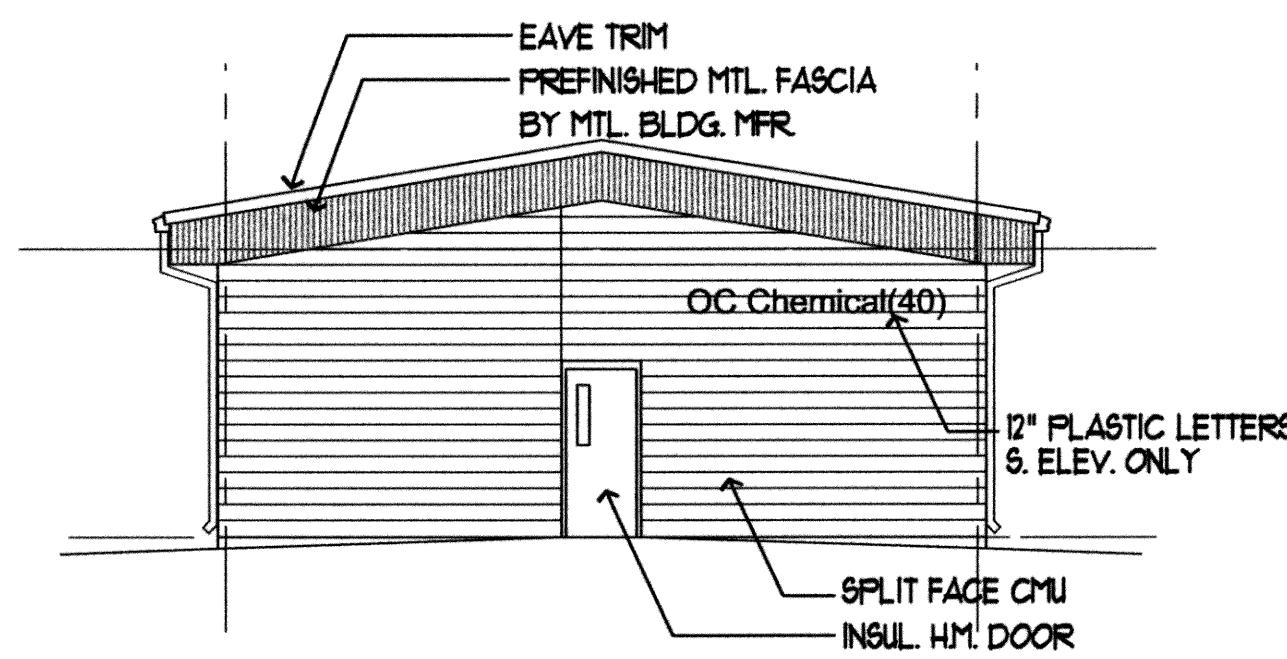
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		SD	SD	3/10/2010	AS SHOWN	9 OF 28

REVISIONS:	DATE:

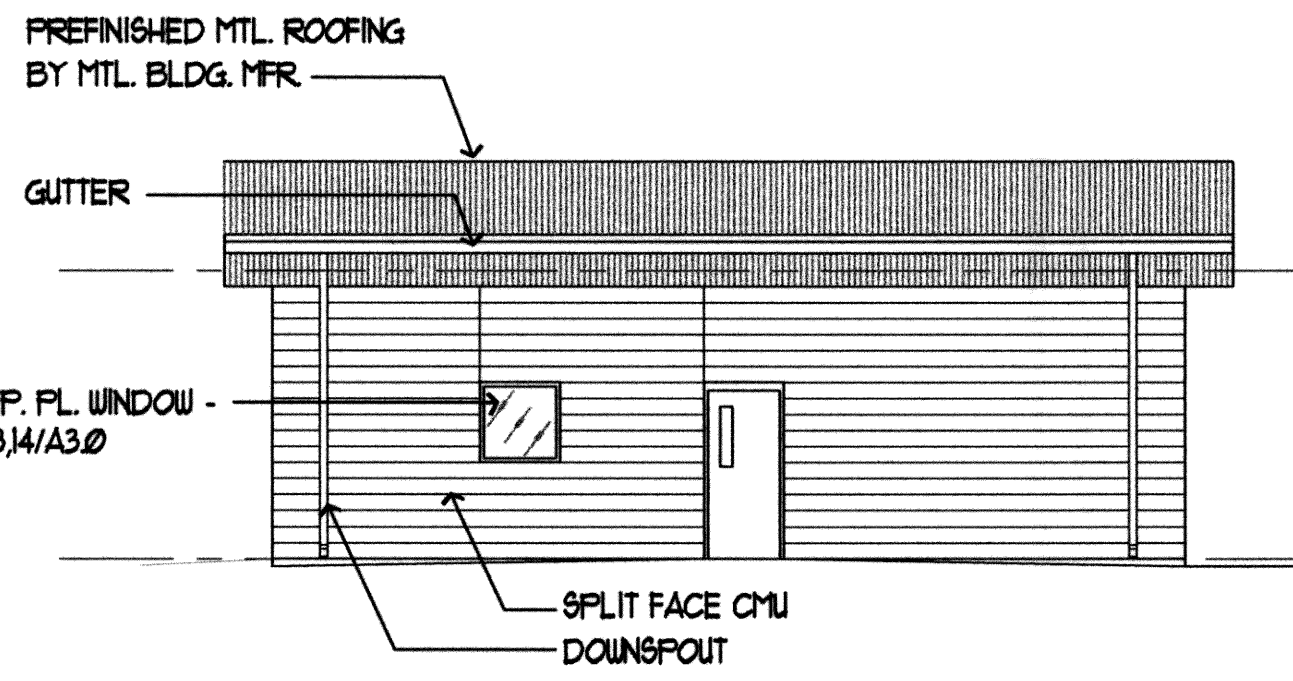
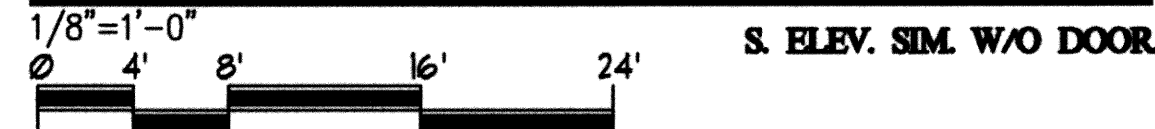
**ELECTRICAL CONTROL BUILDING  
SOUTH SBR**

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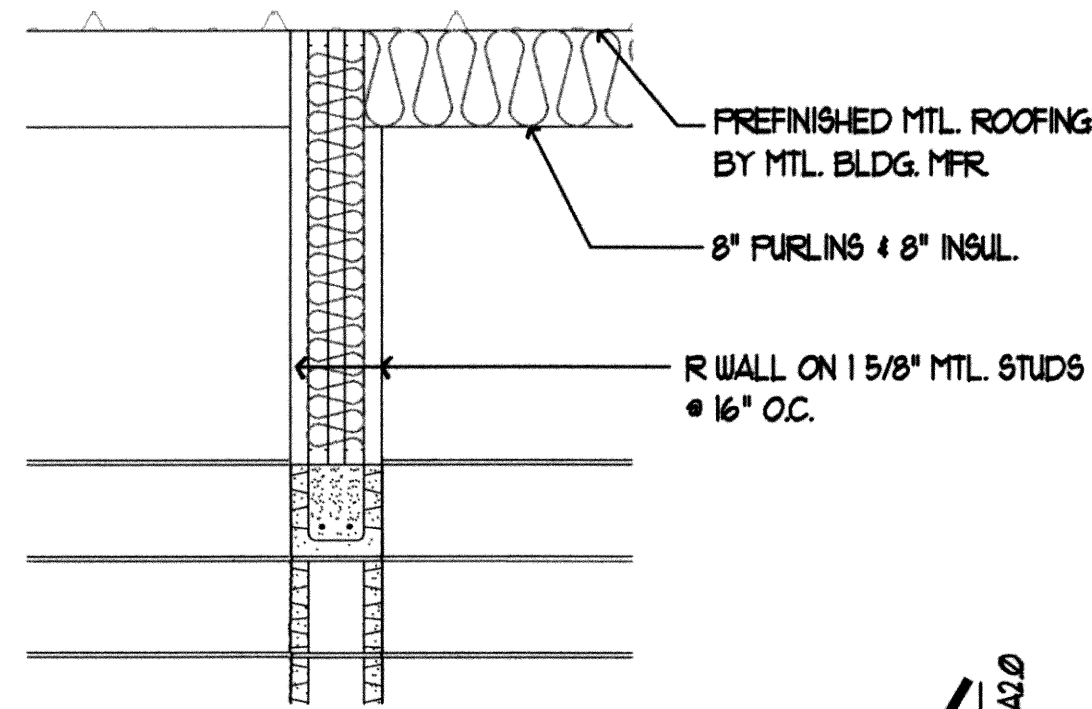
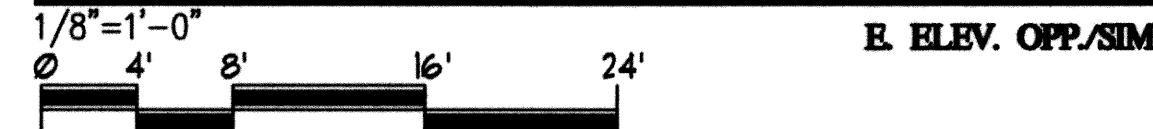
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CERTIFICATE OF AUTHORIZATION NO. CA2088



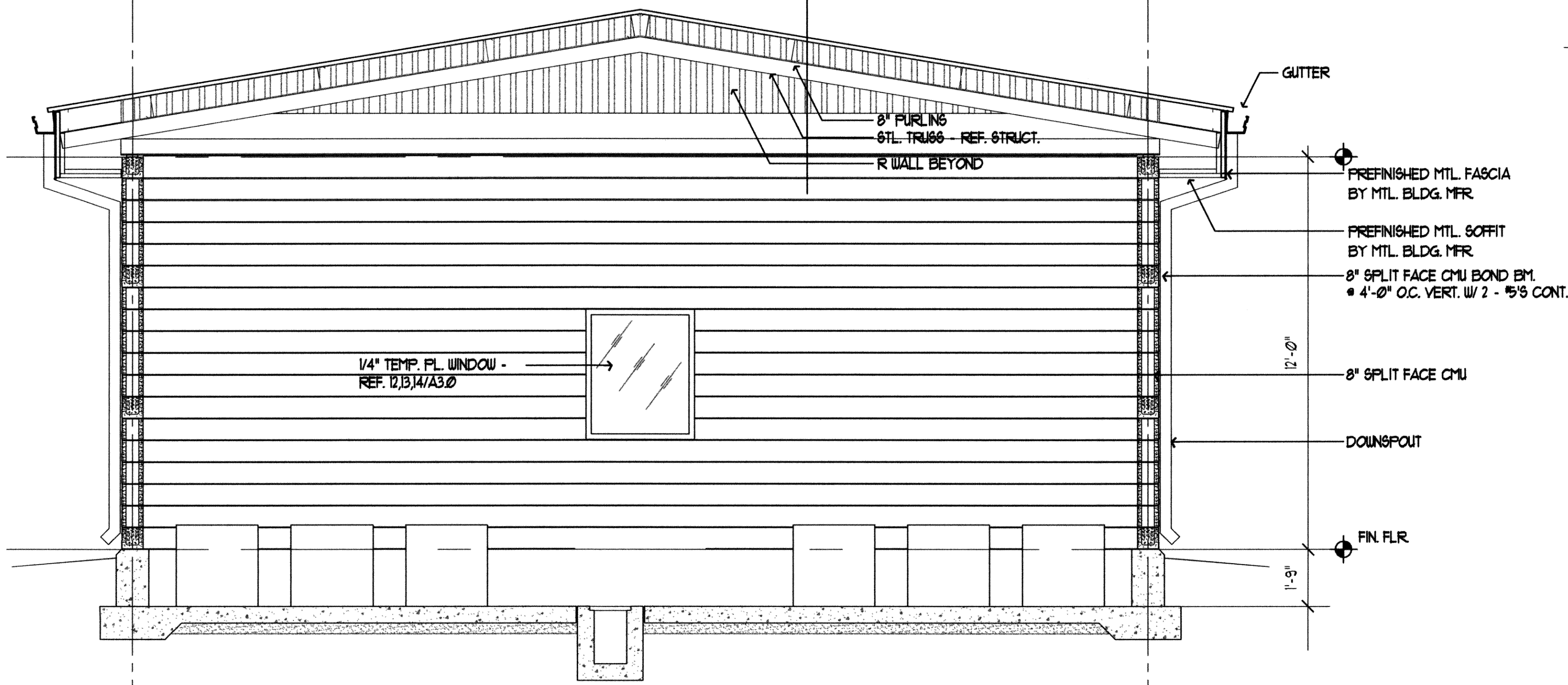
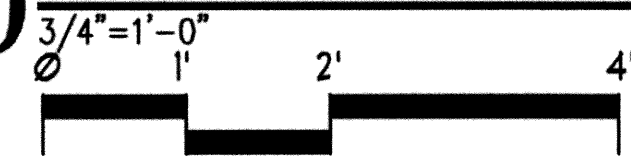
**N. ELEV: SBR CHEMICAL FEED BUILDING**



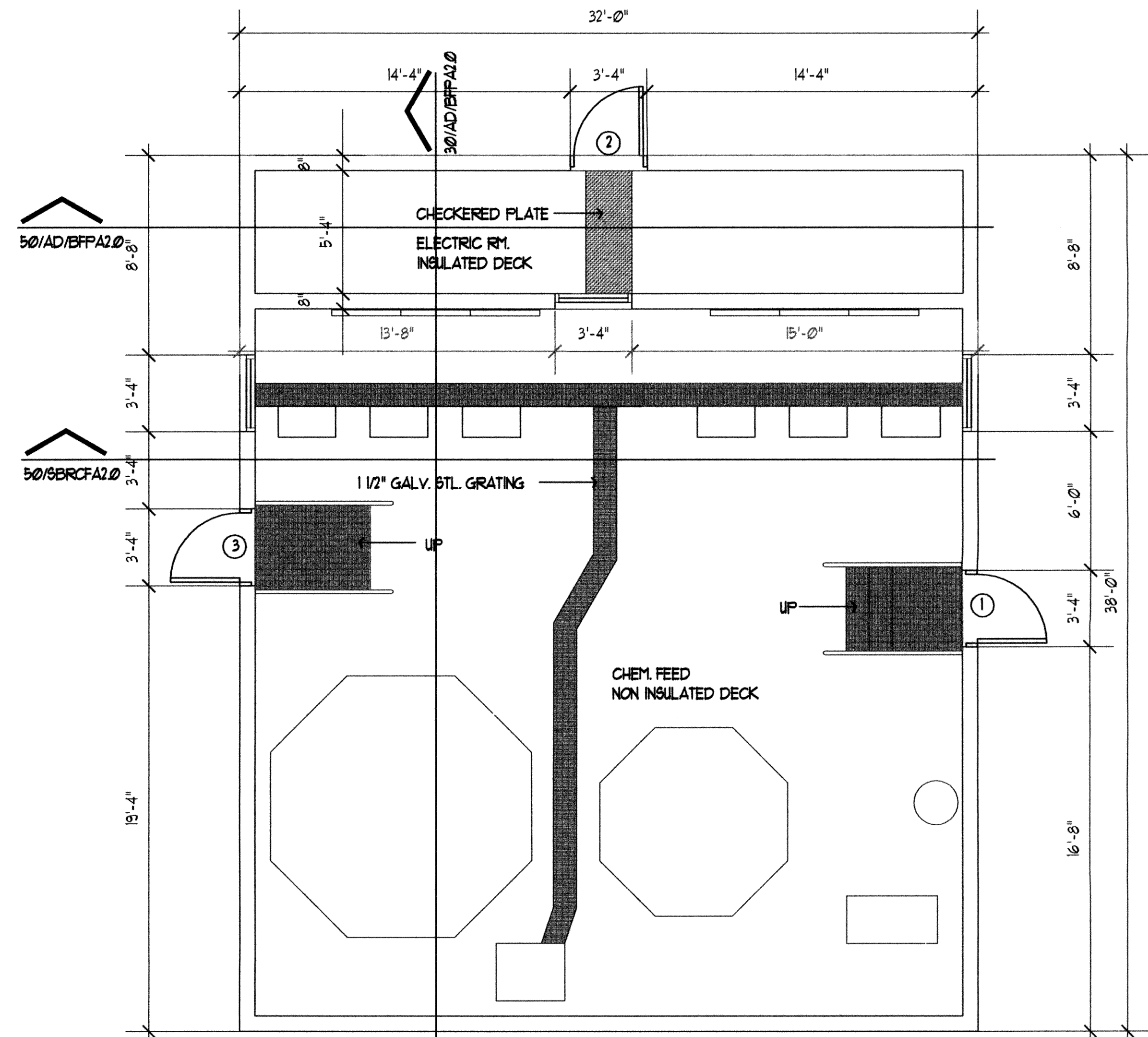
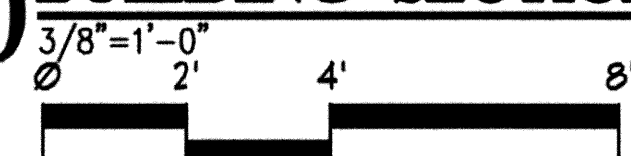
**W. ELEV: SBR CHEMICAL FEED BUILDING**



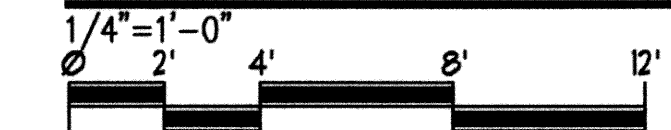
**30 DETAIL**



**50 BUILDING SECTION**



**FLOOR PLAN: SBR CHEMICAL FEED BUILDING**



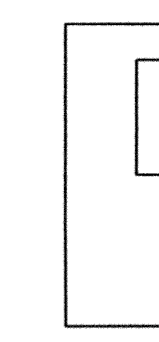
**GENERAL NOTES**

- 1. BUILDING USE F-2.

**DOOR SCHEDULE**

DR	SIZE	TYPE	HEAD	JAMB	HRDR. SET	REMARKS
1	3'-0" X 7'-0" X 1 3/4"	A	31/A3J	30/A3J	11	
2	3'-0" X 7'-0" X 1 3/4"	A	31/A3J	30/A3J	12	
3	3'-0" X 7'-0" X 1 3/4"	A	31/A3J	30/A3J	11	

**DOOR TYPES**



(A)  
INSUL. HM. W  
6" X 30" TEMP. FL.  
GLASS

RECORD DRAWINGS



**SBR CFA2.0**

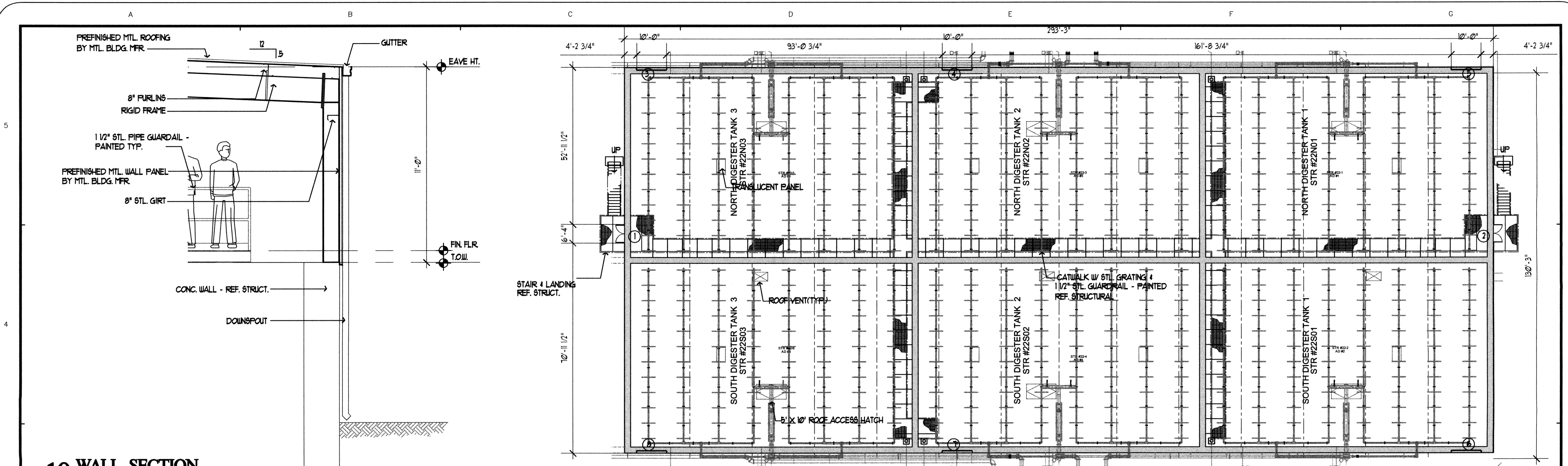
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CERTIFICATE OF AUTHORIZATION NO. CA2088

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**SBR CHEMICAL FEED BUILDING**

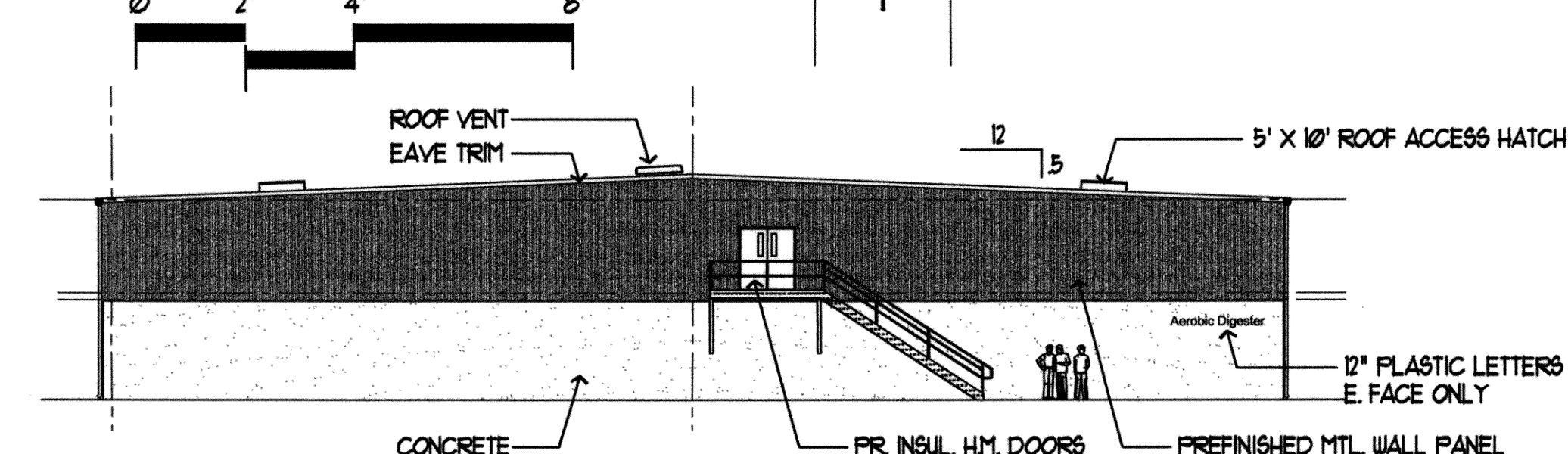
REVISIONS:	DATE:

DESIGNED BY:	CAD OPERATOR:	CHECKED:	APPROVED:	PLOT DATE:	DWG. SCALE:	SHEET:
		SD	SD	3/11/2010	AS SHOWN	10 OF 28

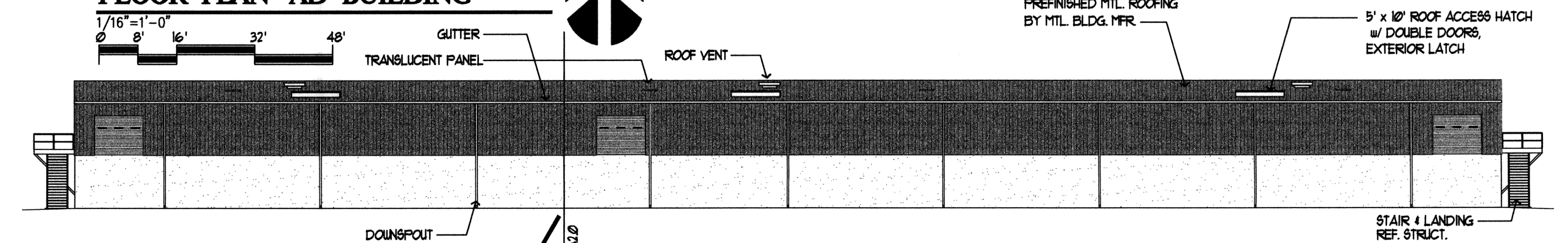


**10 WALL SECTION**

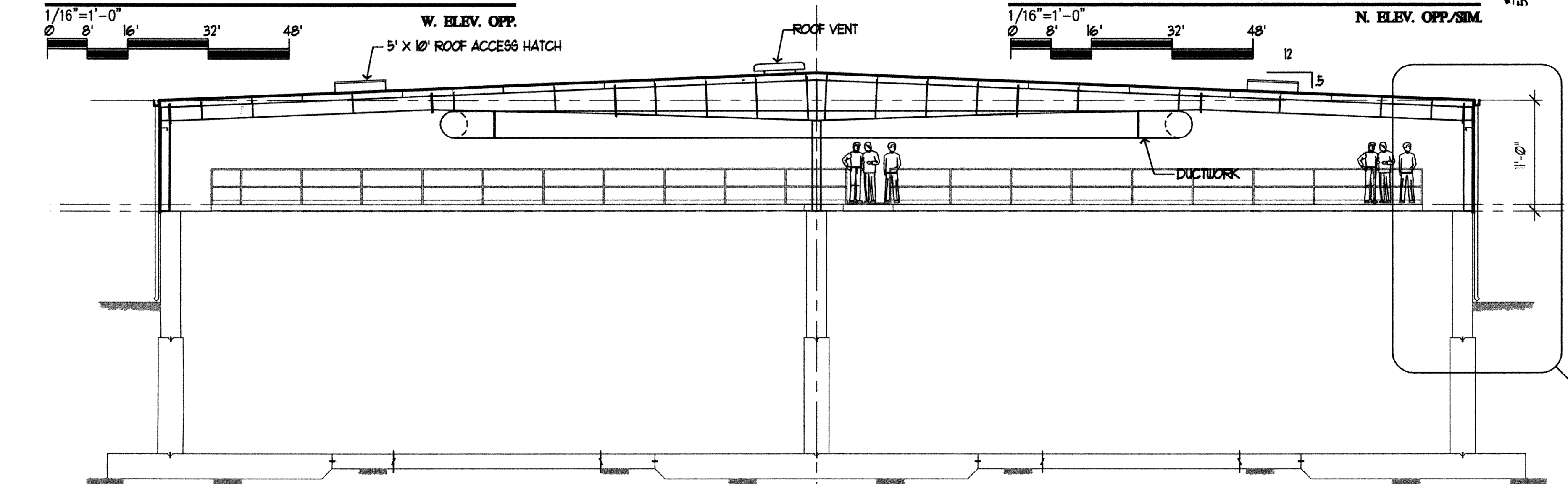
**FLOOR PLAN: AD BUILDING**



**E. ELEV: AD BUILDING**



**S. ELEV: AD BUILDING**



**50 BUILDING SECTION**

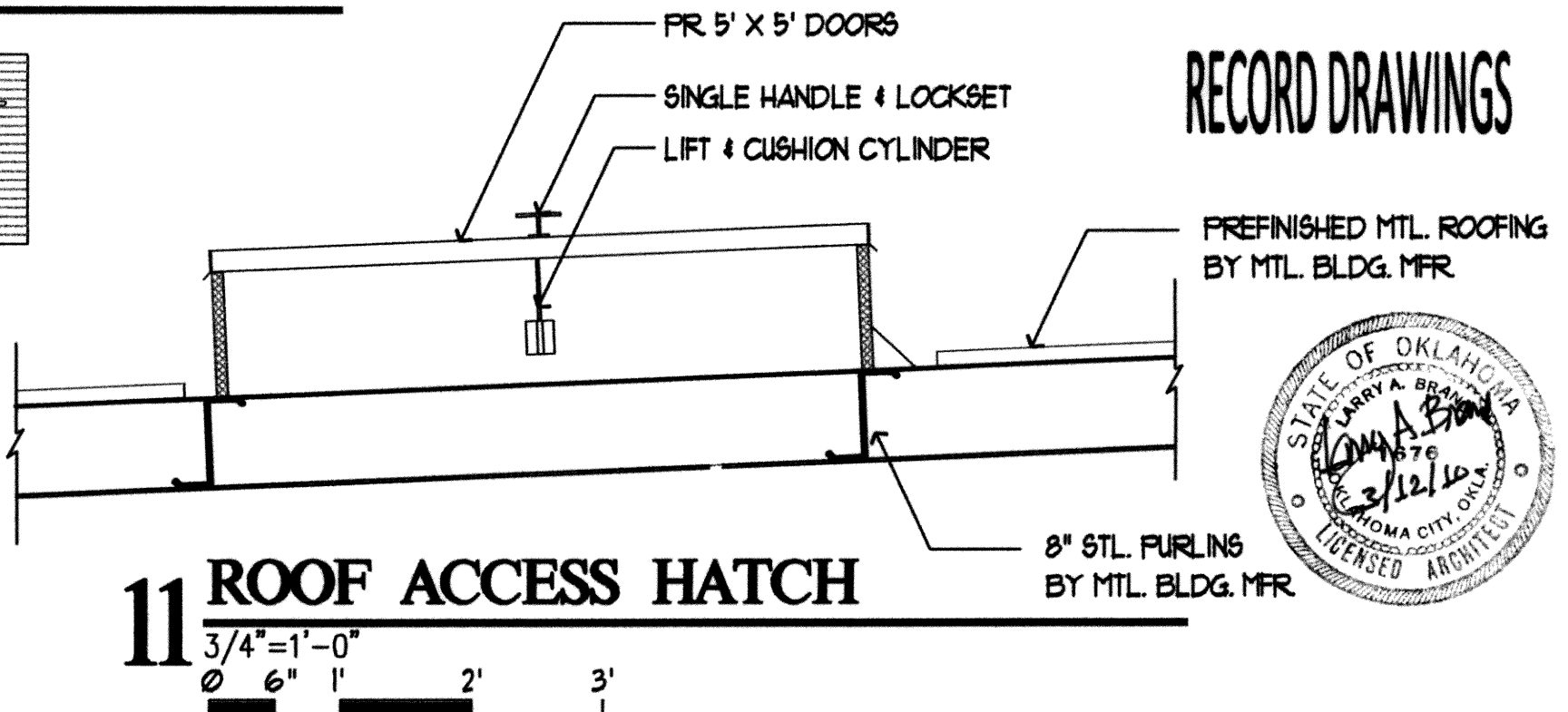
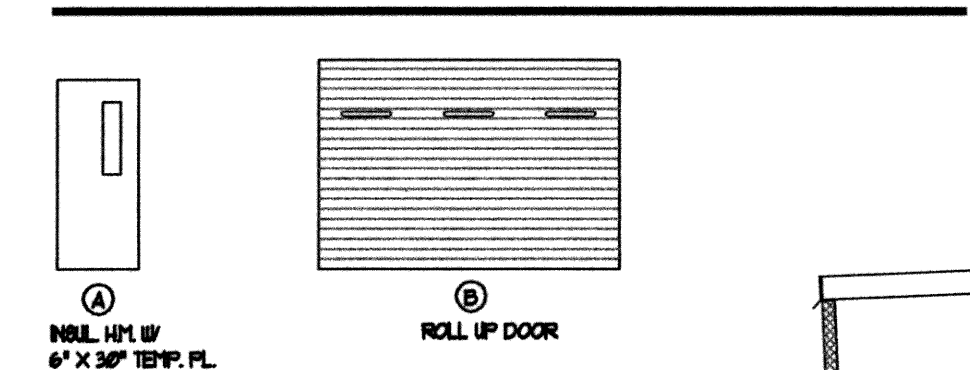
**DOOR SCHEDULE**

NO.	SIZE	TYPE	LEAD	LABS	LOCKER SET	REMARKS
1	10'-0" X 10'-0"	A	40/AS1	40/AS1	B	ACCESS DOORS
2	10'-0" X 10'-0"	B	40/AS1	40/AS1	M	ACCESS DOORS
3	10'-0" X 10'-0"	D	40/AS1	40/AS1	M	ACCESS DOORS
4	10'-0" X 10'-0"	D	40/AS1	40/AS1	M	ACCESS DOORS
5	10'-0" X 10'-0"	D	40/AS1	40/AS1	M	ACCESS DOORS
6	10'-0" X 10'-0"	D	40/AS1	40/AS1	M	ACCESS DOORS
7	10'-0" X 10'-0"	D	40/AS1	40/AS1	M	ACCESS DOORS
8	10'-0" X 10'-0"	D	40/AS1	40/AS1	M	ACCESS DOORS

**GENERAL NOTES**

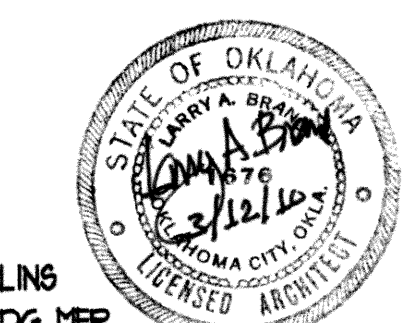
- 1. BUILDING USE F-2

**DOOR TYPES**



**11 ROOF ACCESS HATCH**

**RECORD DRAWINGS**



**ADA2.0**

DESIGNED BY: CAD OPERATOR: CHECKED: SD APPROVED: SD PLOT DATE: 3/10/2010 DWG. SCALE: AS SHOWN SHEET: 11 OF 28

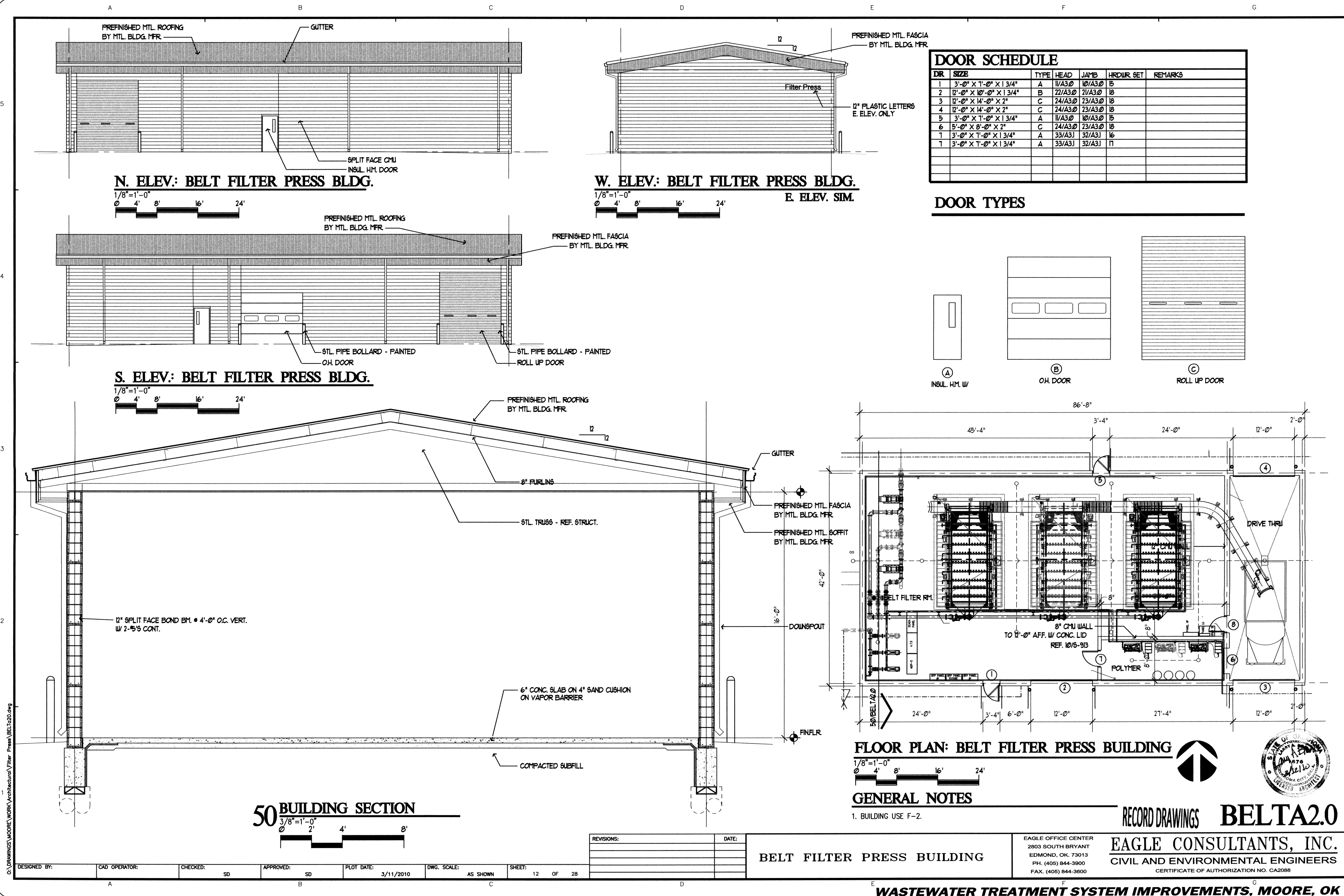
REVISIONS: DATE:


**AD BUILDING**

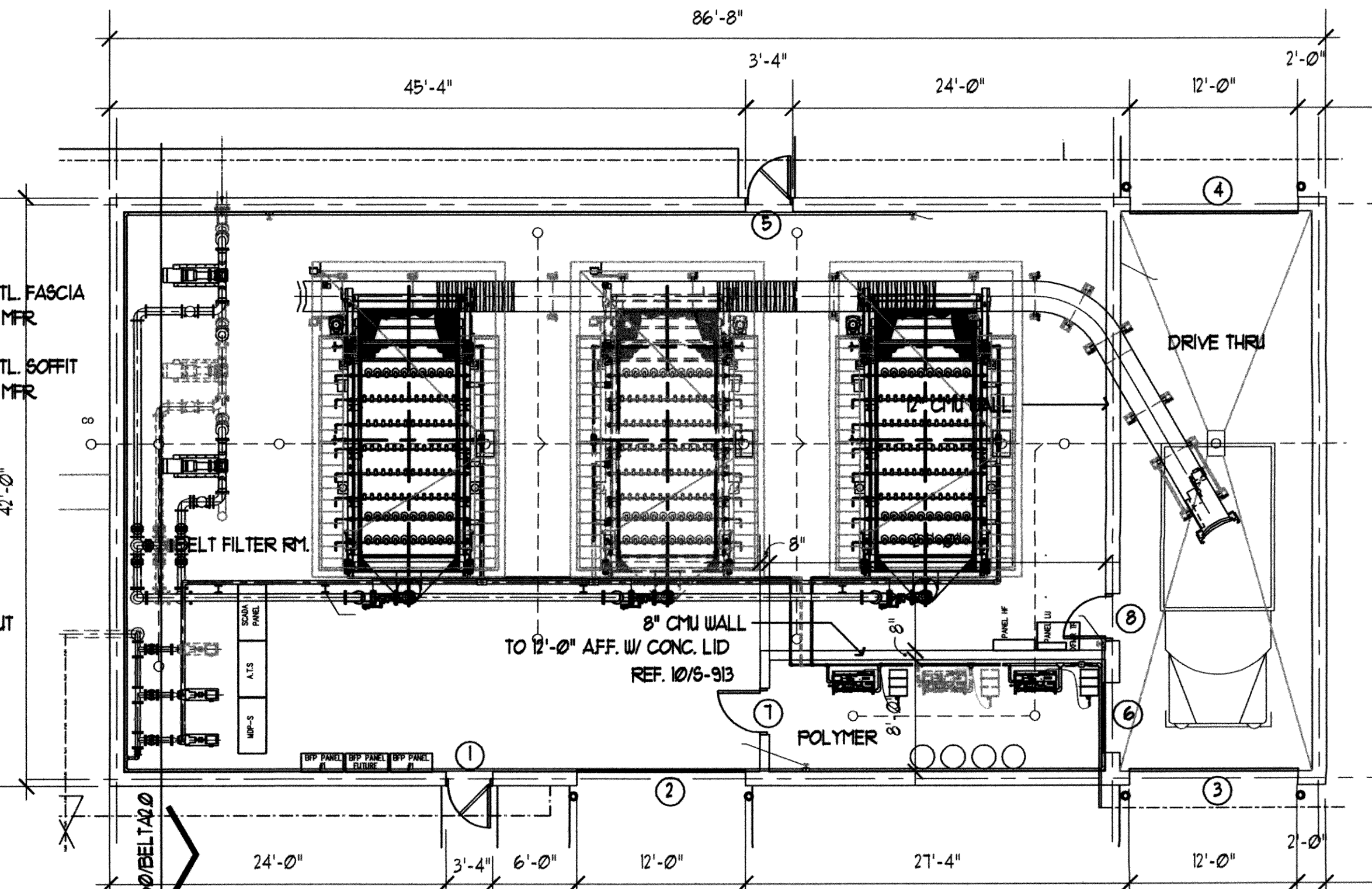
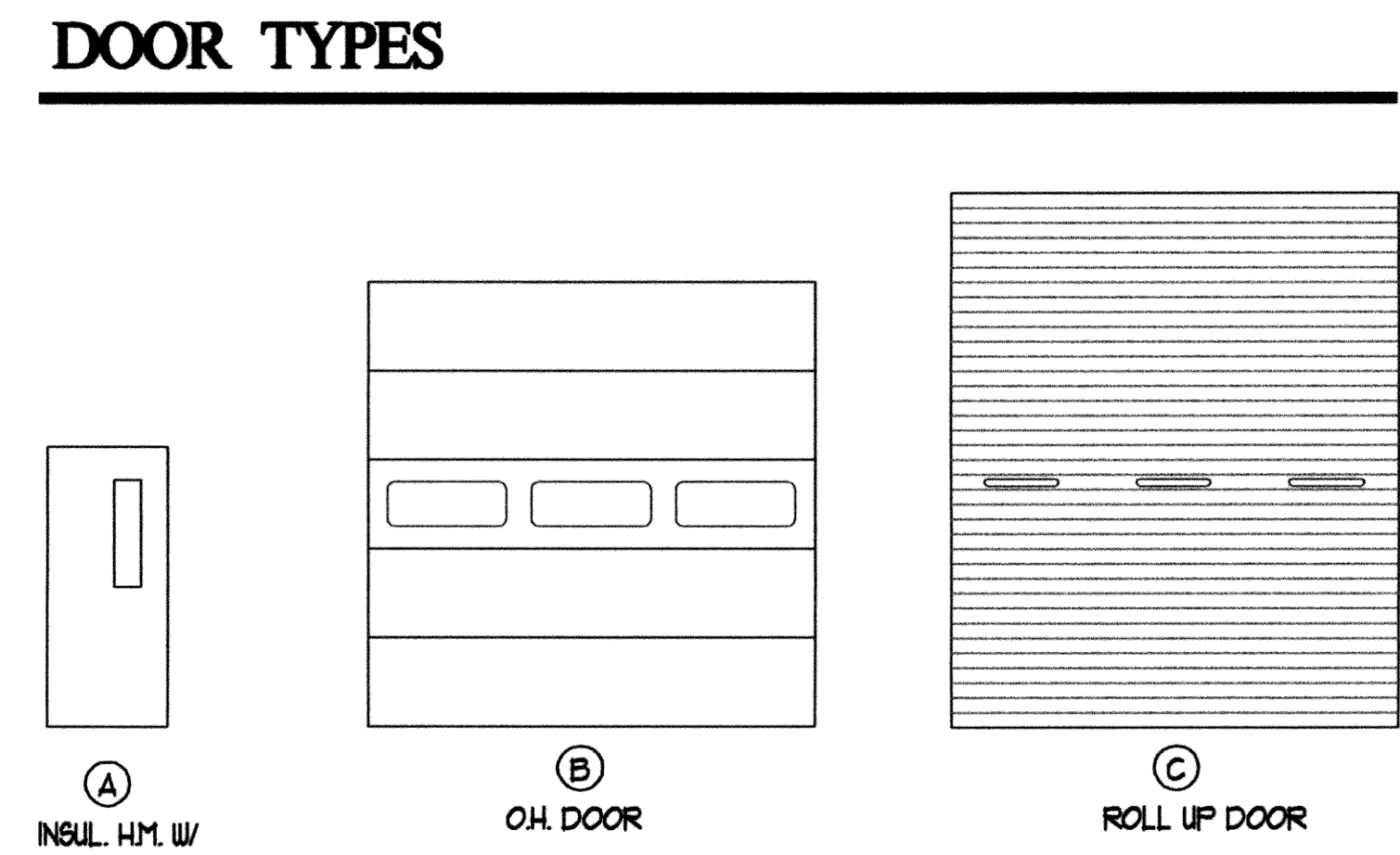
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CERTIFICATE OF AUTHORIZATION NO. CA2088

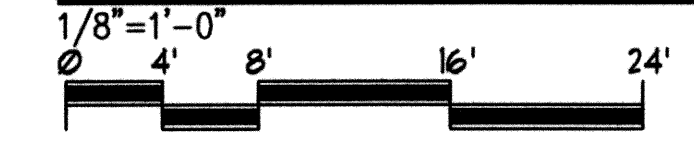
**WASTEWATER TREATMENT SYSTEM IMPROVEMENTS, MOORE, OK**



DOOR SCHEDULE						
DR	SIZE	TYPE	HEAD	JAMB	HRDR SET	REMARKS
1	3'-0" X 7'-0" X 1 3/4"	A	11/A30	10/A30	15	
2	12'-0" X 10'-0" X 1 3/4"	B	22/A30	21/A30	18	
3	12'-0" X 14'-0" X 2"	C	24/A30	23/A30	18	
4	12'-0" X 14'-0" X 2"	C	24/A30	23/A30	18	
5	3'-0" X 7'-0" X 1 3/4"	A	11/A30	10/A30	15	
6	5'-0" X 8'-0" X 2"	C	24/A30	23/A30	18	
7	3'-0" X 7'-0" X 1 3/4"	A	33/A31	32/A31	16	
7	3'-0" X 7'-0" X 1 3/4"	A	33/A31	32/A31	11	



**FLOOR PLAN: BELT FILTER PRESS BUILDING**



**GENERAL NOTES**

- 1. BUILDING USE F-2.



**RECORD DRAWINGS BELTA2.0**  
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 CIVIL AND ENVIRONMENTAL ENGINEERS  
 CERTIFICATE OF AUTHORIZATION NO. CA2088

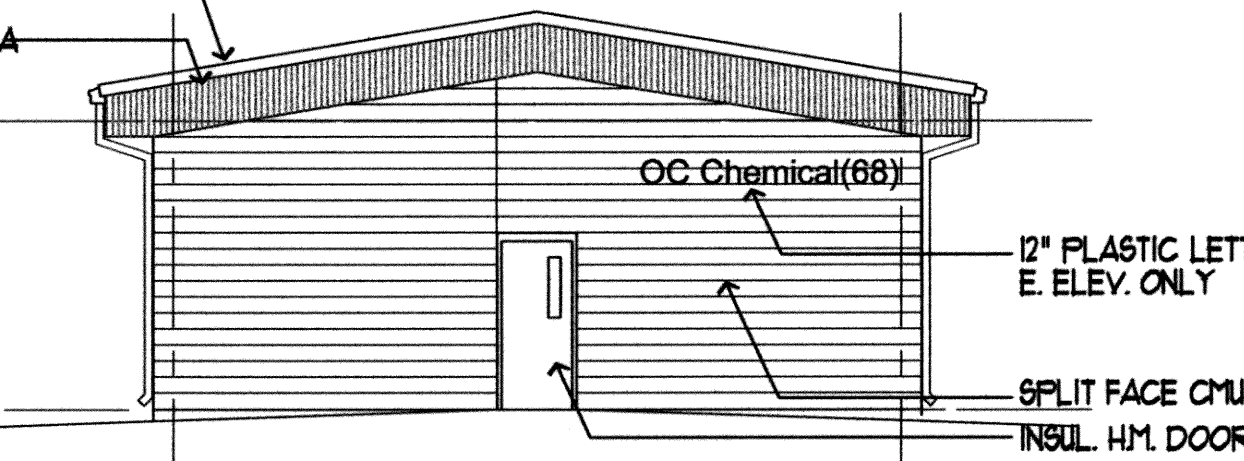
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		SD	SD	3/11/2010	AS SHOWN	12 OF 28

REVISIONS:	DATE:

**BELT FILTER PRESS BUILDING**

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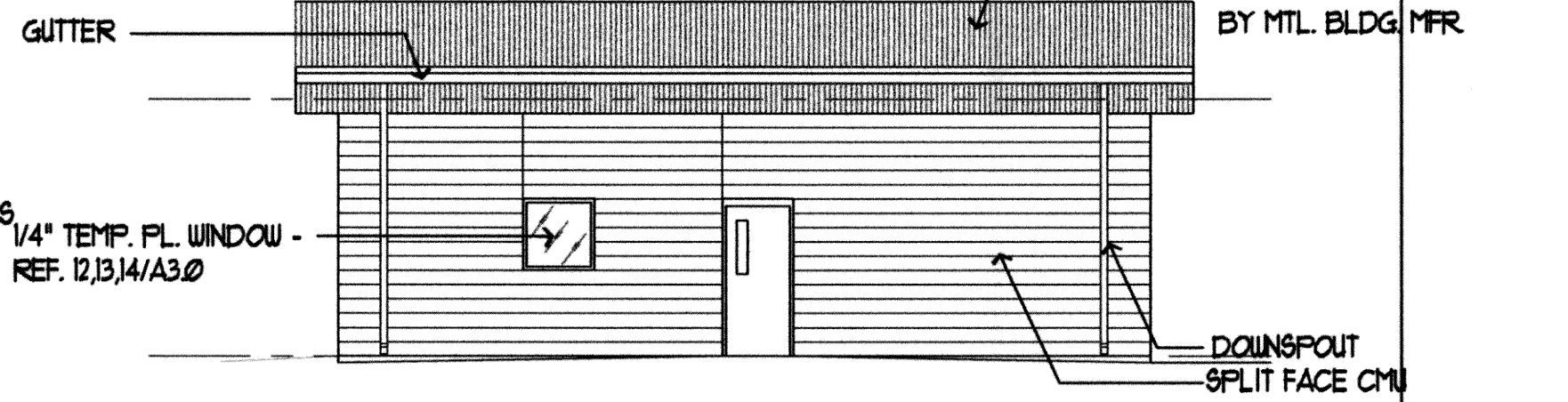
EAVE TRIM  
 PREFINISHED MTL. FASCIA  
 BY MTL. BLDG. MFR



**W. ELEV.: AD/BFP CHEMICAL FEED BUILDING**

1/8"=1'-0"  
 0' 4' 8' 16' 24'

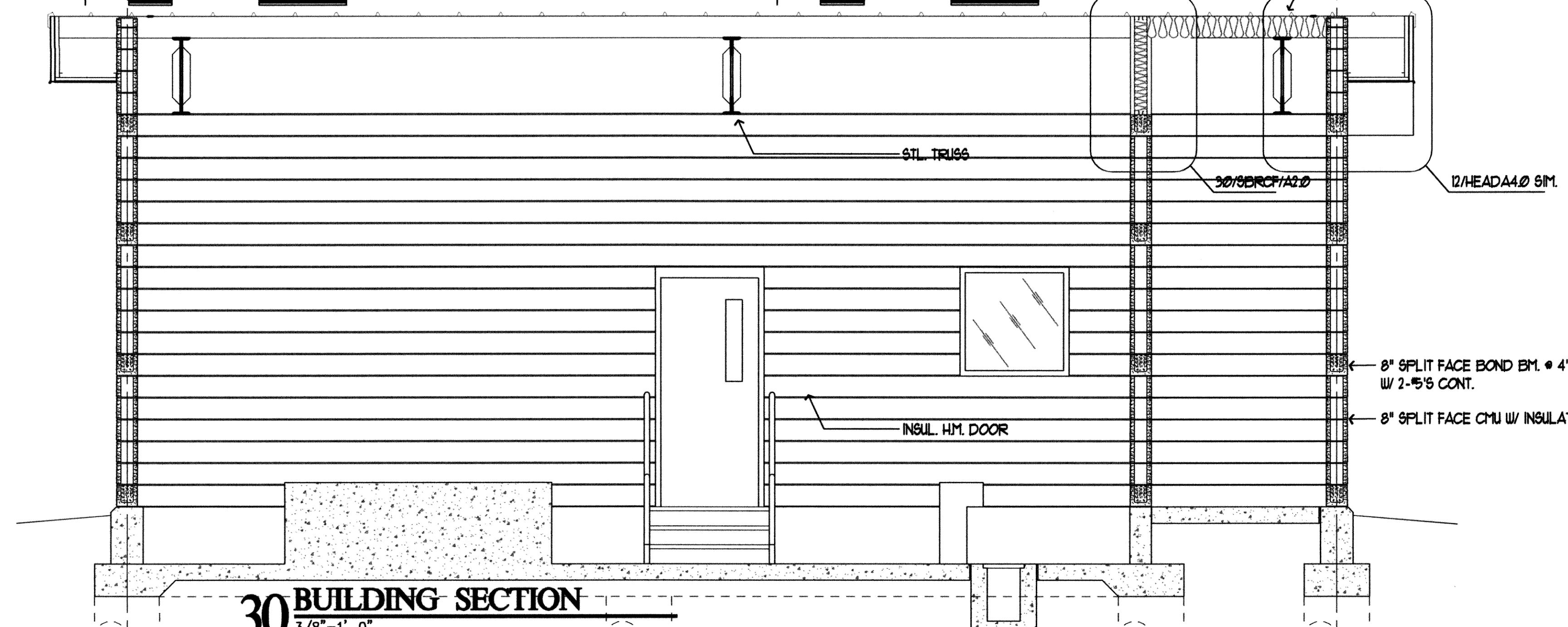
E. ELEV. SIM. W/O DOOR



**S. ELEV.: AD/BFP CHEMICAL FEED BUILDING**

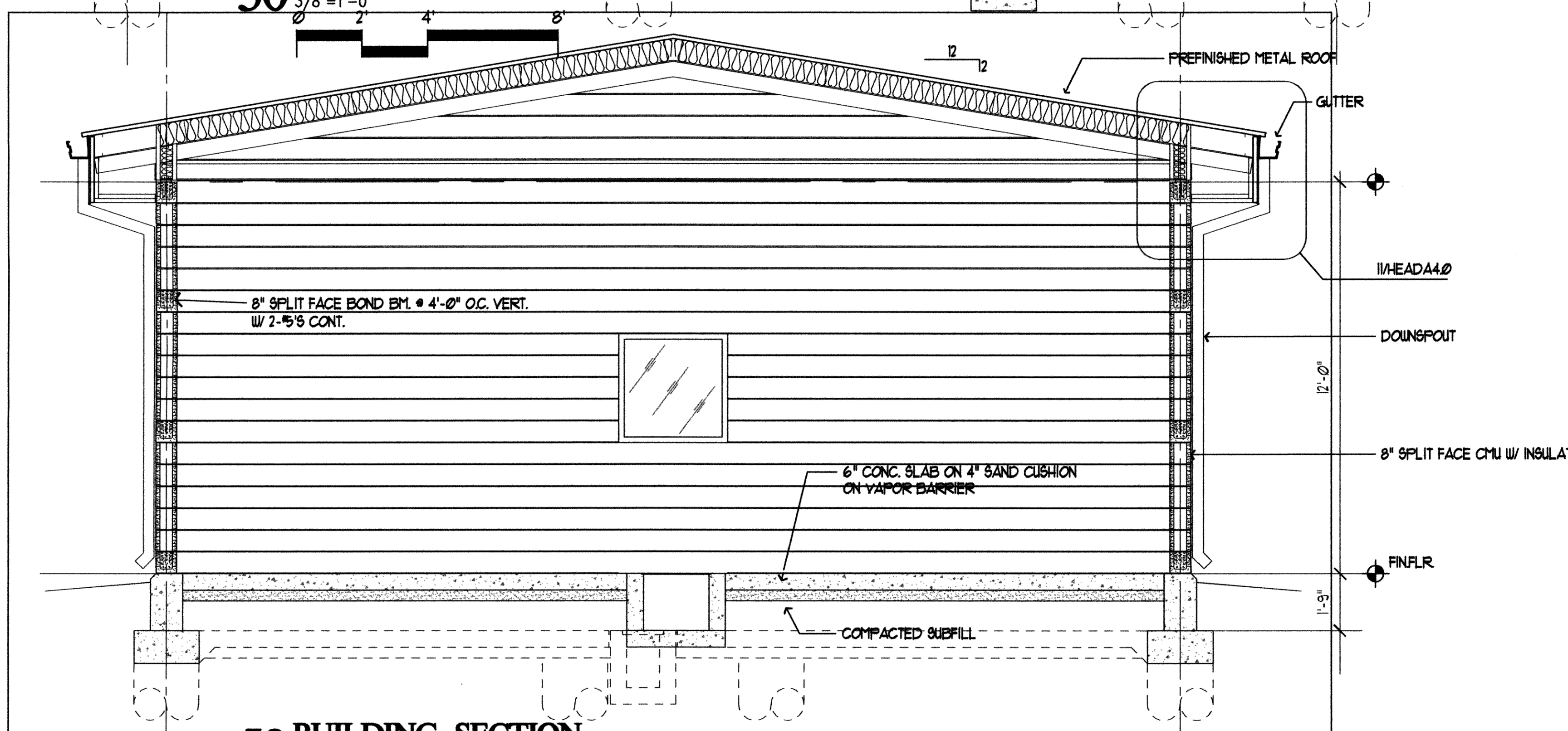
1/8"=1'-0"  
 0' 4' 8' 16' 24'

N. ELEV. OFF.



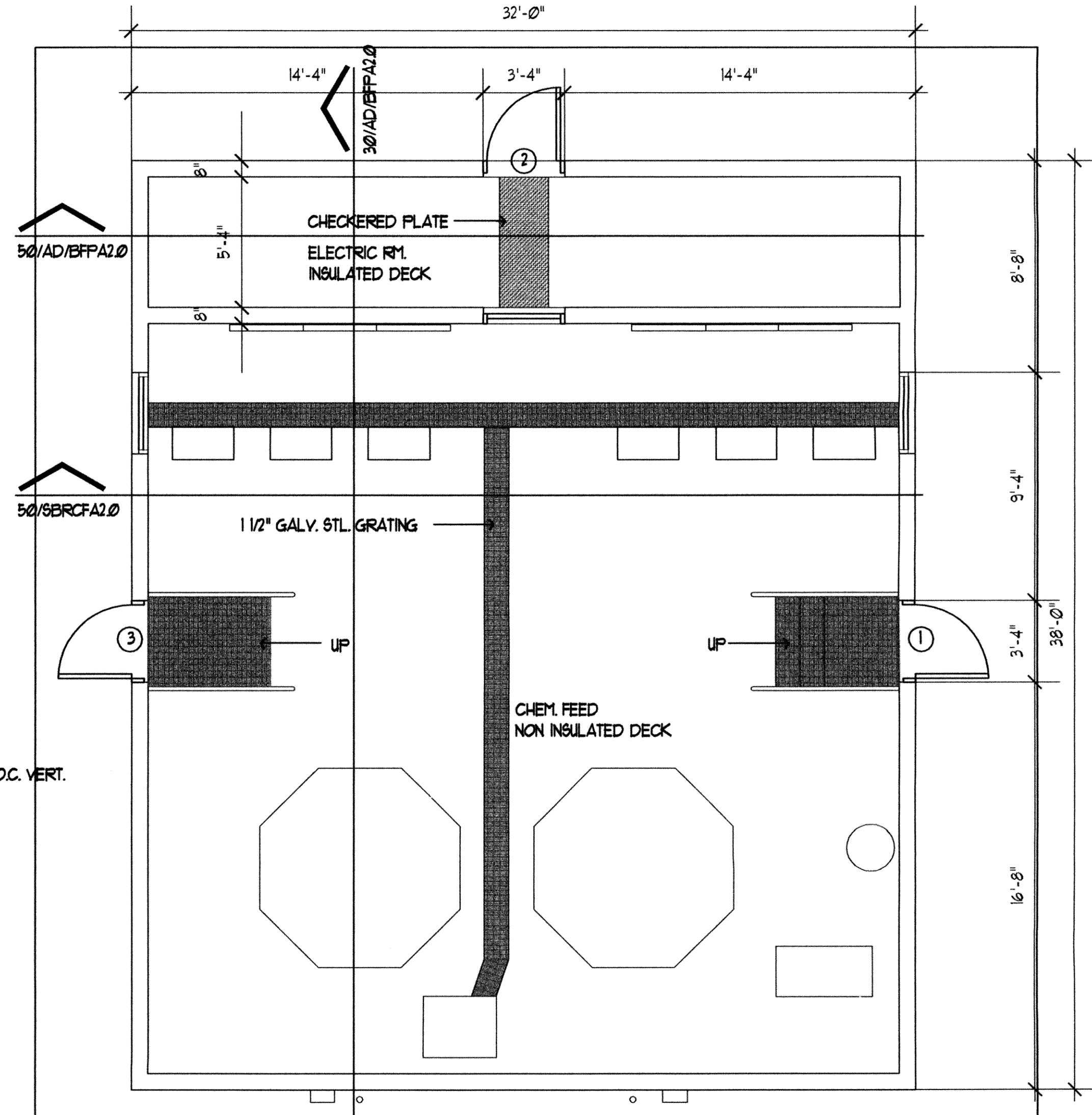
**30 BUILDING SECTION**

3/8"=1'-0"  
 0' 2' 4' 8'



**50 BUILDING SECTION**

3/8"=1'-0"  
 0' 2' 4' 8'

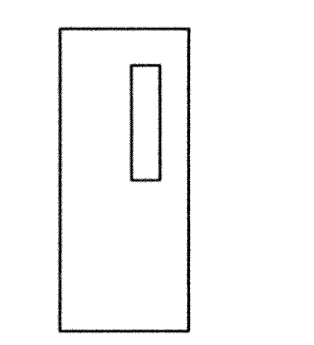


**FLOOR PLAN: AD/BFP CHEMICAL FEED BUILDING**

1/4"=1'-0"  
 0' 2' 4' 8' 12'

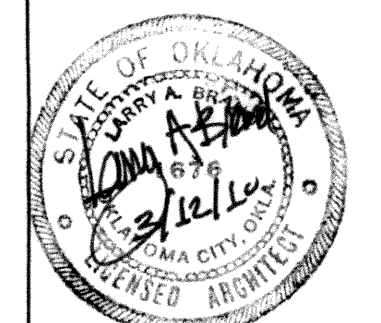
DOOR SCHEDULE						
DR	SIZE	TYPE	HEAD	JAMB	HRDR SET	REMARKS
1	3'-0" X 1'-0" X 1 3/4"	A	3/A3.1	30/A3.1	19	
2	3'-0" X 1'-0" X 1 3/4"	A	3/A3.1	30/A3.1	20	
3	3'-0" X 1'-0" X 1 3/4"	A	3/A3.1	30/A3.1	19	

**DOOR TYPES**



(A)  
 INSUL. HM. W/  
 6" X 30" TEMP. FL.  
 GLASS

RECORD DRAWINGS



**AD/BFPA2.0**

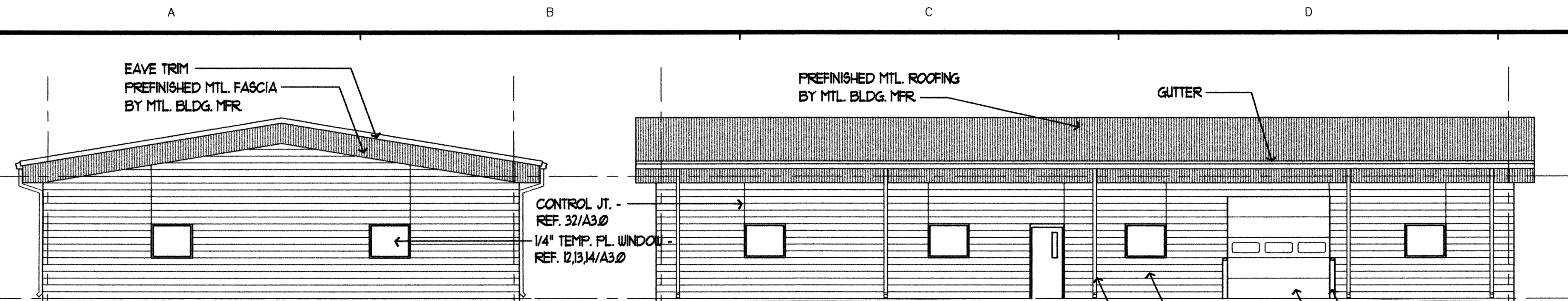
**EAGLE CONSULTANTS, INC.**  
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 CERTIFICATE OF AUTHORIZATION NO. CA2088

**AD/BFP CHEMICAL FEED BUILDING**

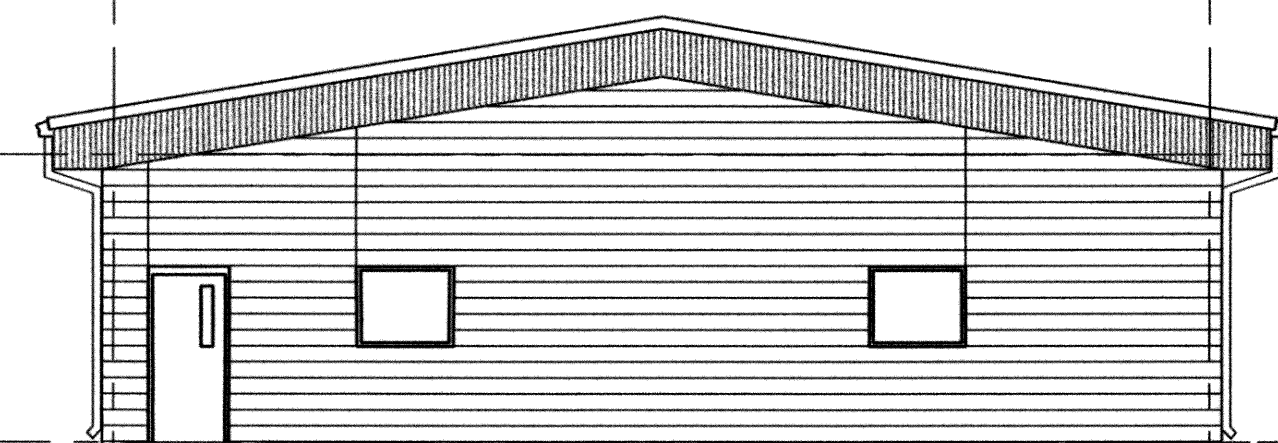
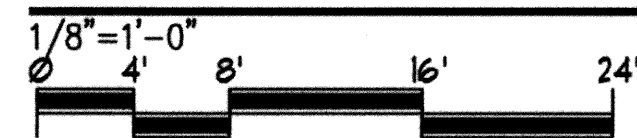
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 EDMOND, OK. 73013  
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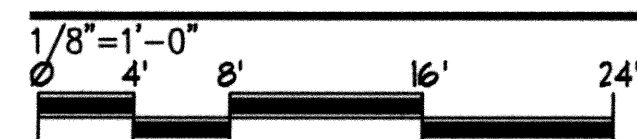
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		SD	SD	3/11/2010	AS SHOWN	13 OF 28



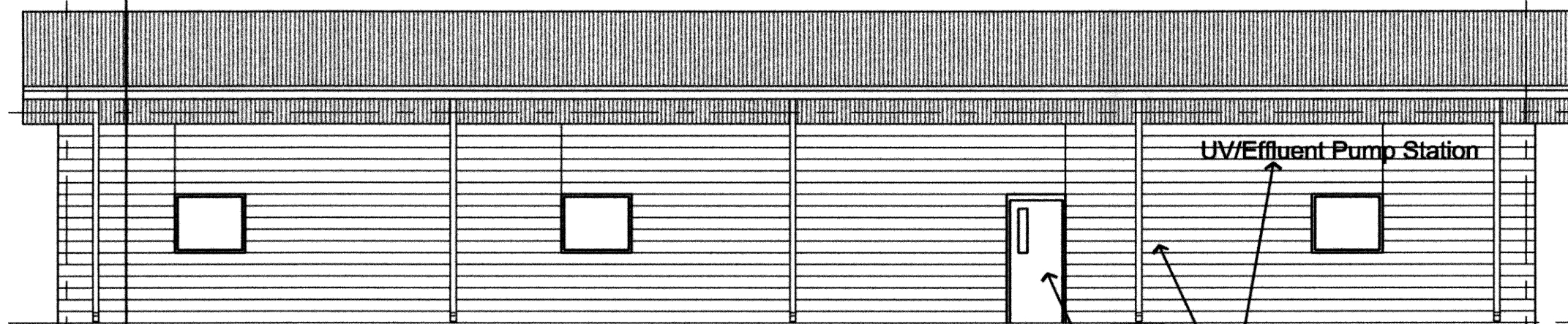
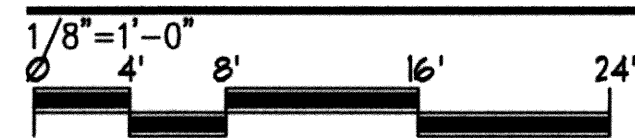
**E. ELEV.: UV BUILDING**



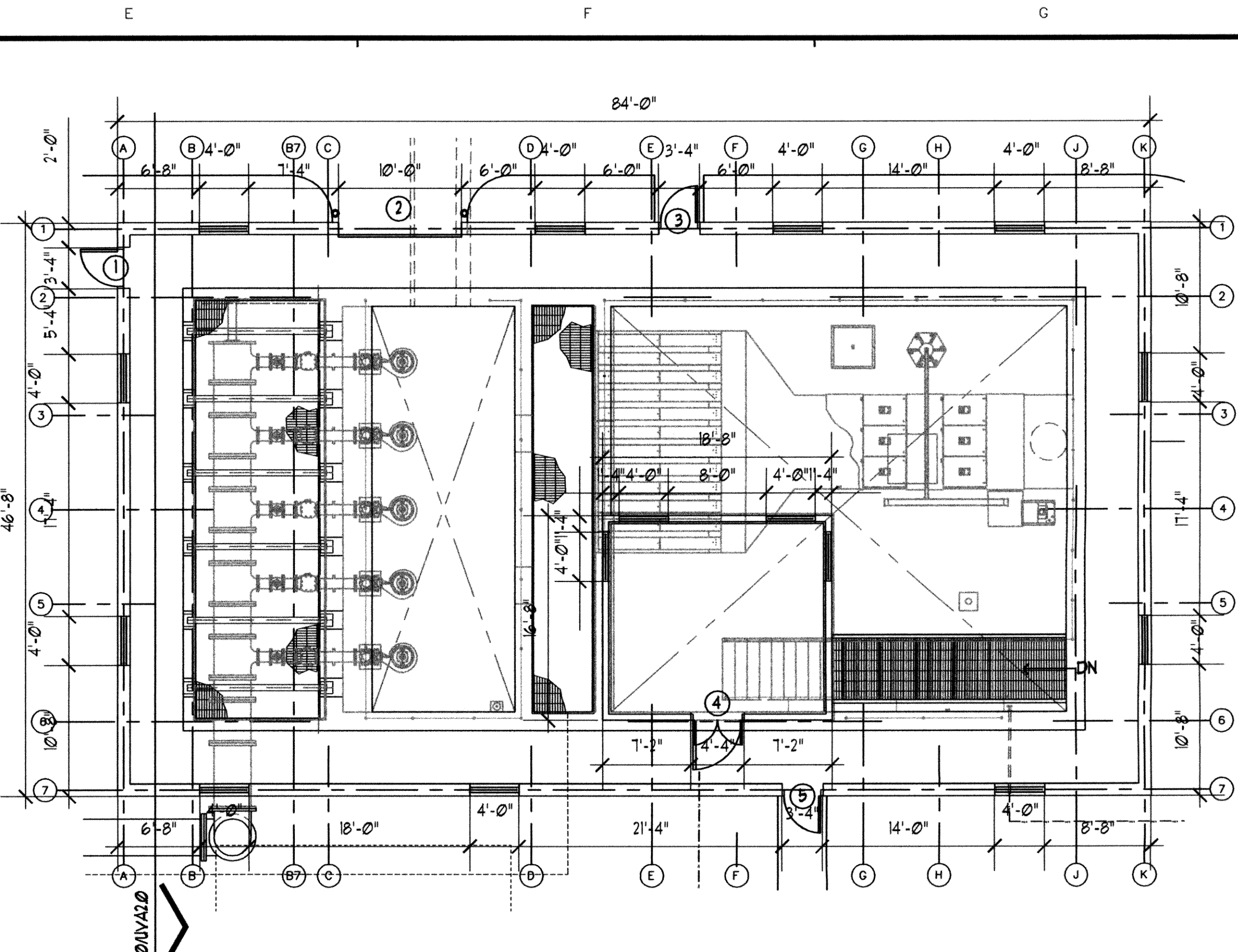
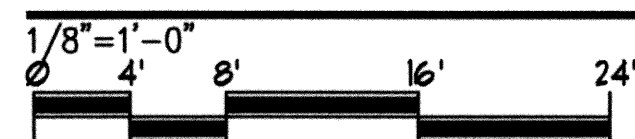
**W. ELEV.: UV BUILDING**



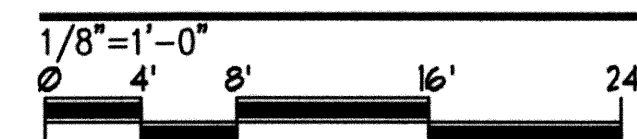
**S. ELEV.: UV BUILDING**



**N. ELEV.: UV BUILDING**



**FLOOR PLAN: UV BUILDING**



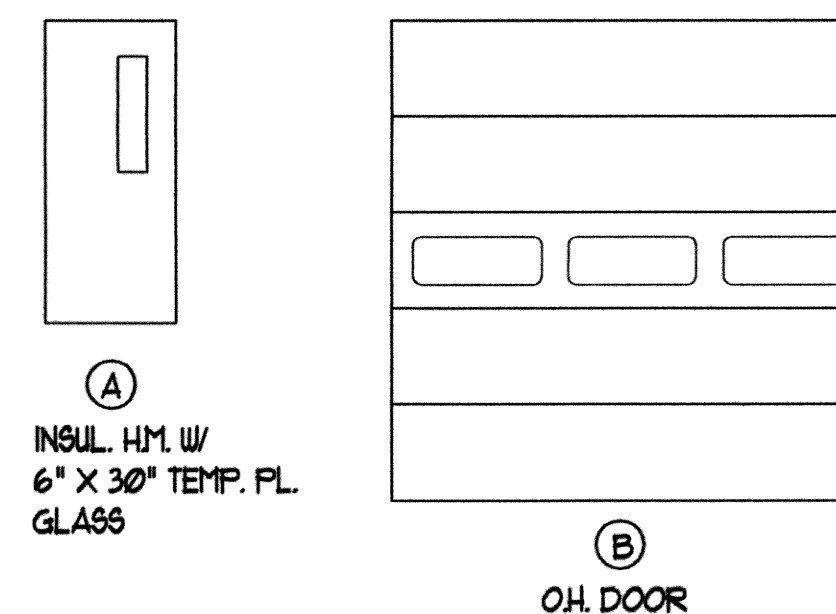
**GENERAL NOTES**

- 1. BUILDING USE F-2.

**DOOR SCHEDULE**

DR	SIZE	TYPE	HEAD	JAMB	HRDR SET	REMARKS
1	3'-0" X 7'-0" X 1 3/4"	A	41/A3.1	40/A3.1	21	
2	10'-0" X 10'-0" X 2"	B	22/A3.0	21/A3.0	23	
3	3'-0" X 7'-0" X 1 3/4"	A	41/A3.1	40/A3.1	21	
4	4'-0" X 7'-0" X 1 3/4"	A	33/A3.1	32/A3.1	22	
5	3'-0" X 7'-0" X 1 3/4"	A	41/A3.1	40/A3.1	21	

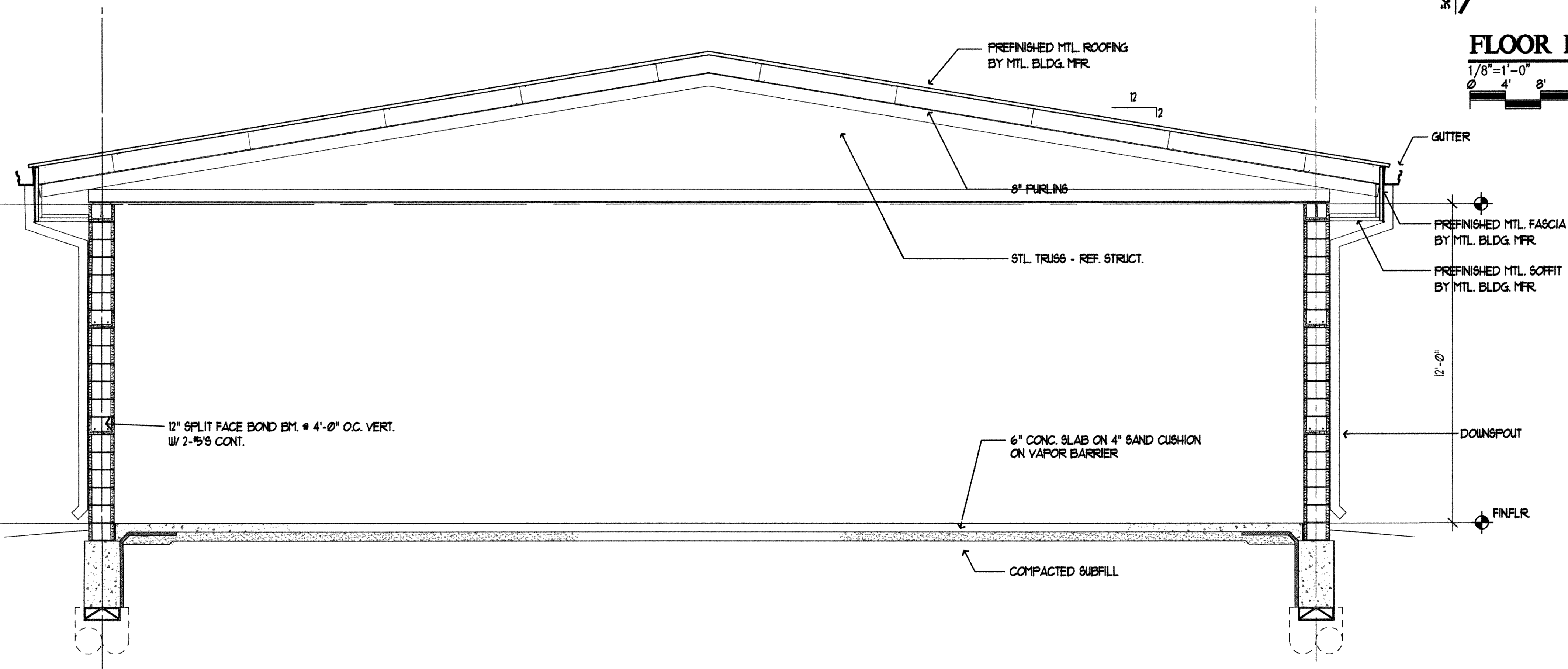
**DOOR TYPES**



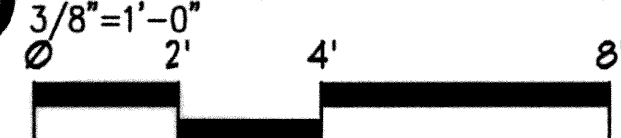
RECORD DRAWINGS



**UVA2.0**



**50 BUILDING SECTION**



REVISIONS:	DATE:

UV BUILDING

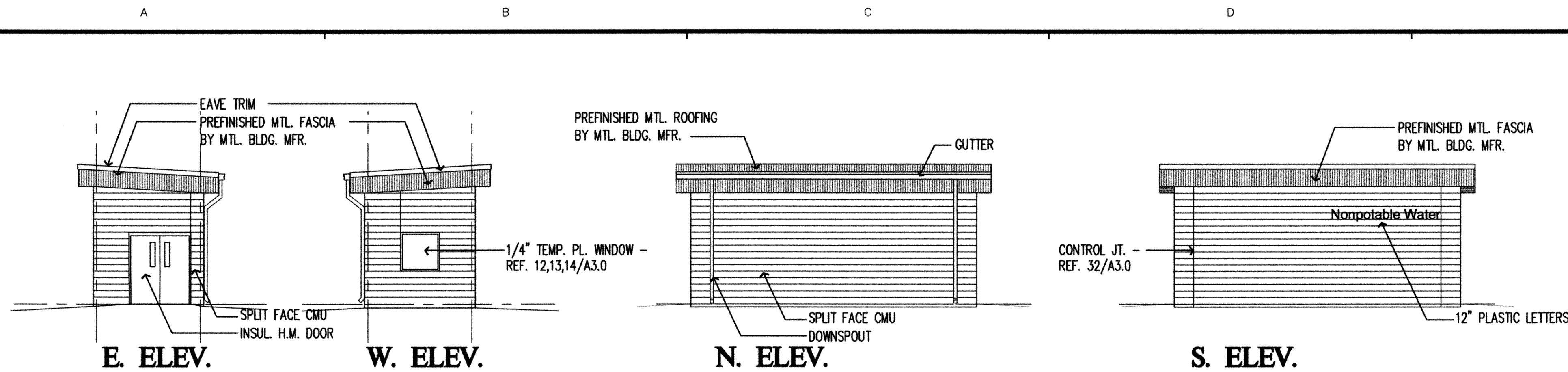
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CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088

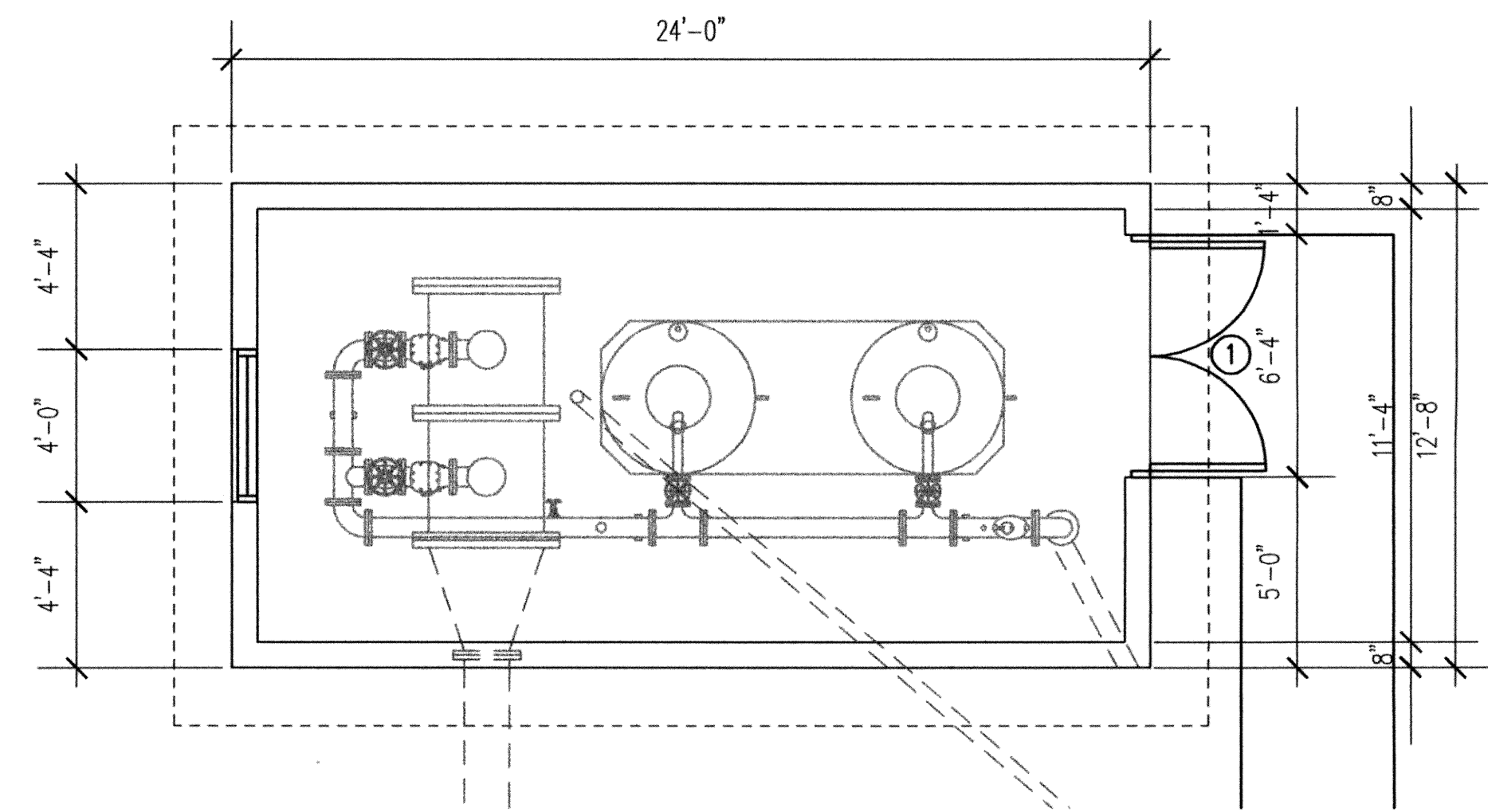
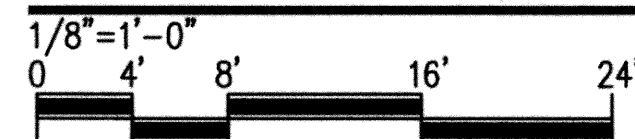
**WASTEWATER TREATMENT SYSTEM IMPROVEMENTS, MOORE, OK**

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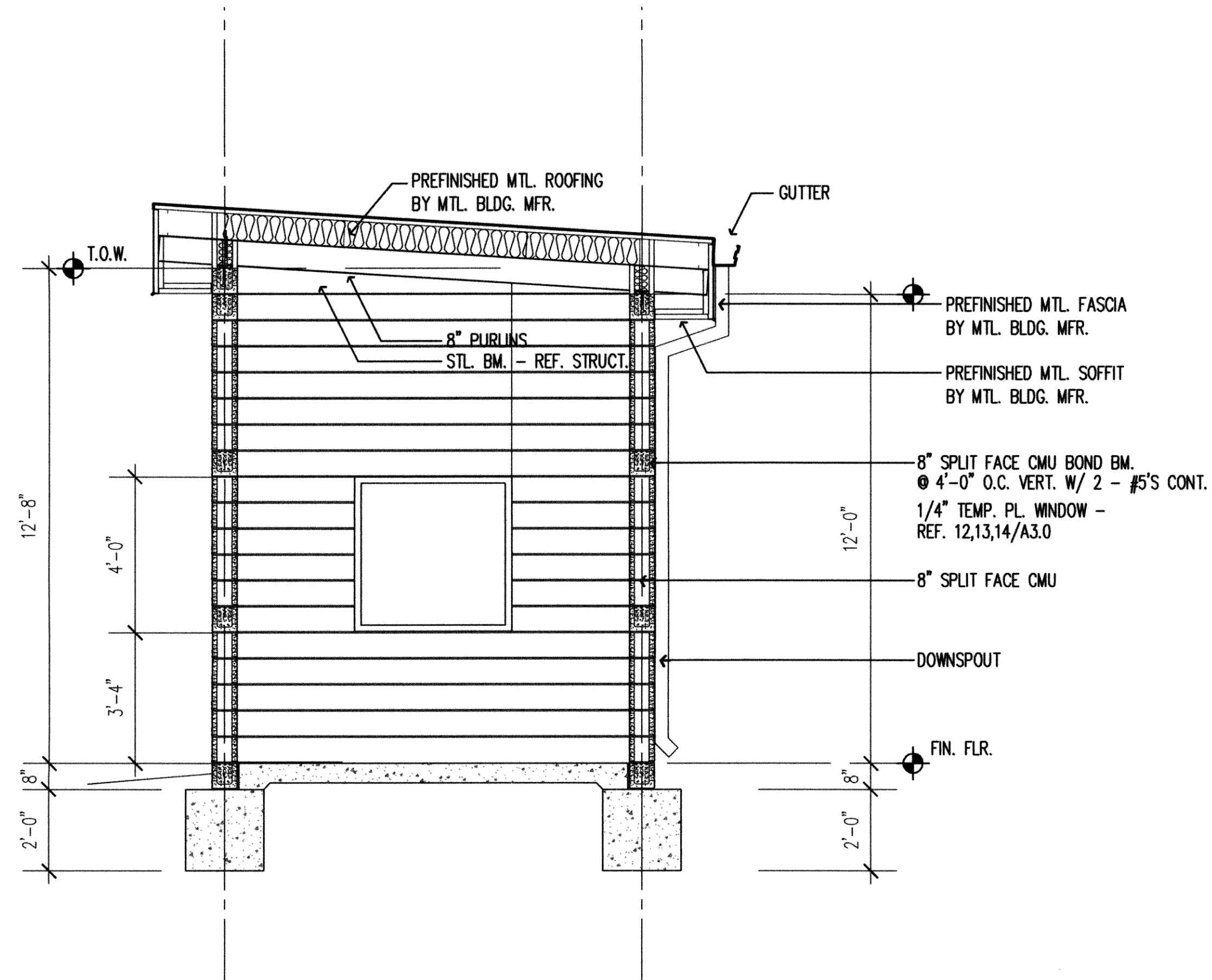
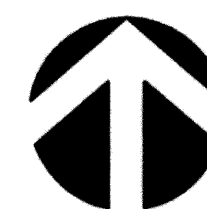
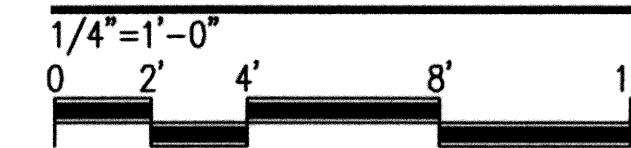
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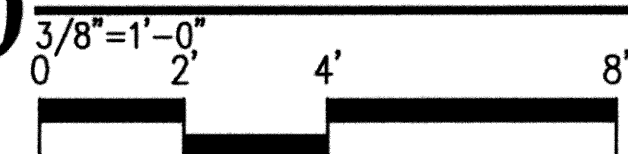
**ELEVATIONS: NON POTABLE WATER BUILDING**



**FLOOR PLAN: NON POTABLE WATER BUILDING**



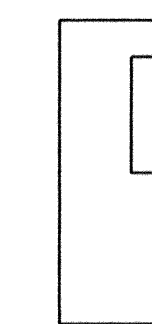
**50 BUILDING SECTION**



**DOOR SCHEDULE**

DR	SIZE	TYPE	HEAD	JAMB	HRDWR. SET	REMARKS
1	PR. 3'-0" X 7'-0" X 1 3/4"	A	31/A3.1	30/A3.1	24	

**DOOR TYPES**



(A) INSUL. H.M. W/  
6" X 30" TEMP. PL.  
GLASS

**GENERAL NOTES**

- BUILDING USE F-2

RECORD DRAWINGS



**NONPOTA2.0**

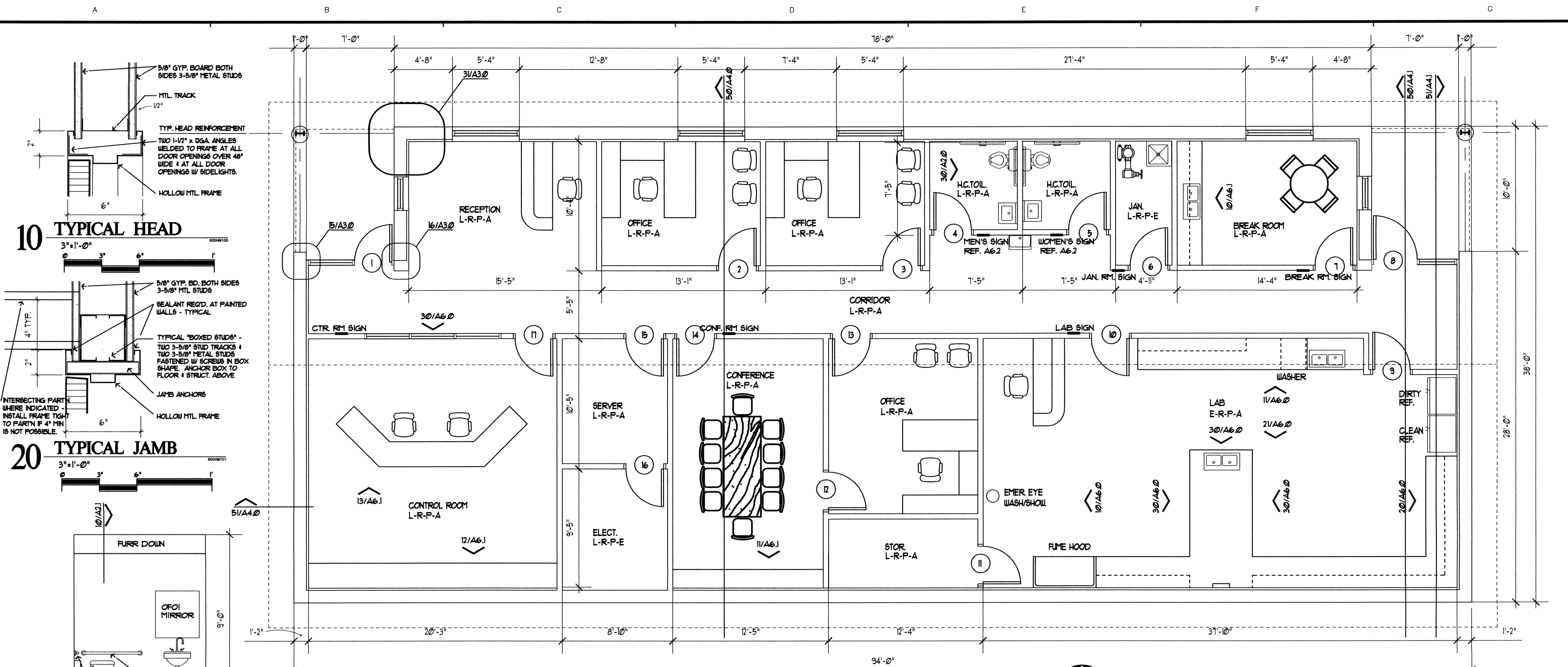
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CERTIFICATE OF AUTHORIZATION NO. CA2088

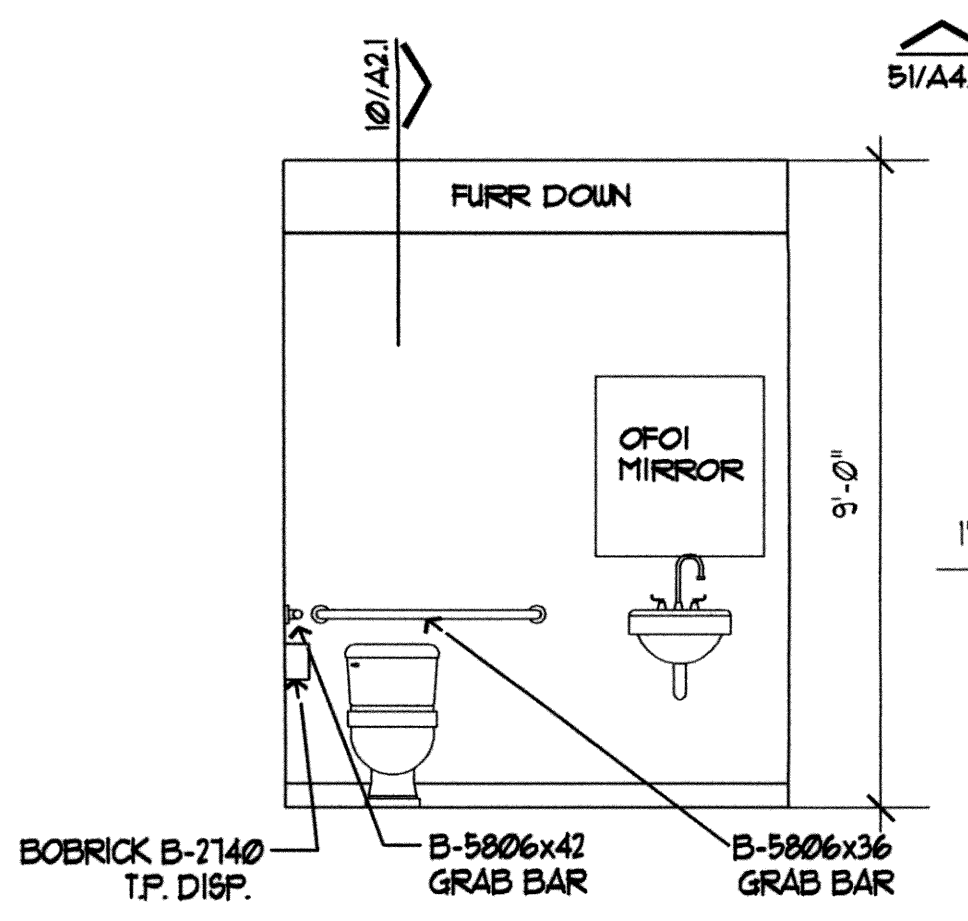
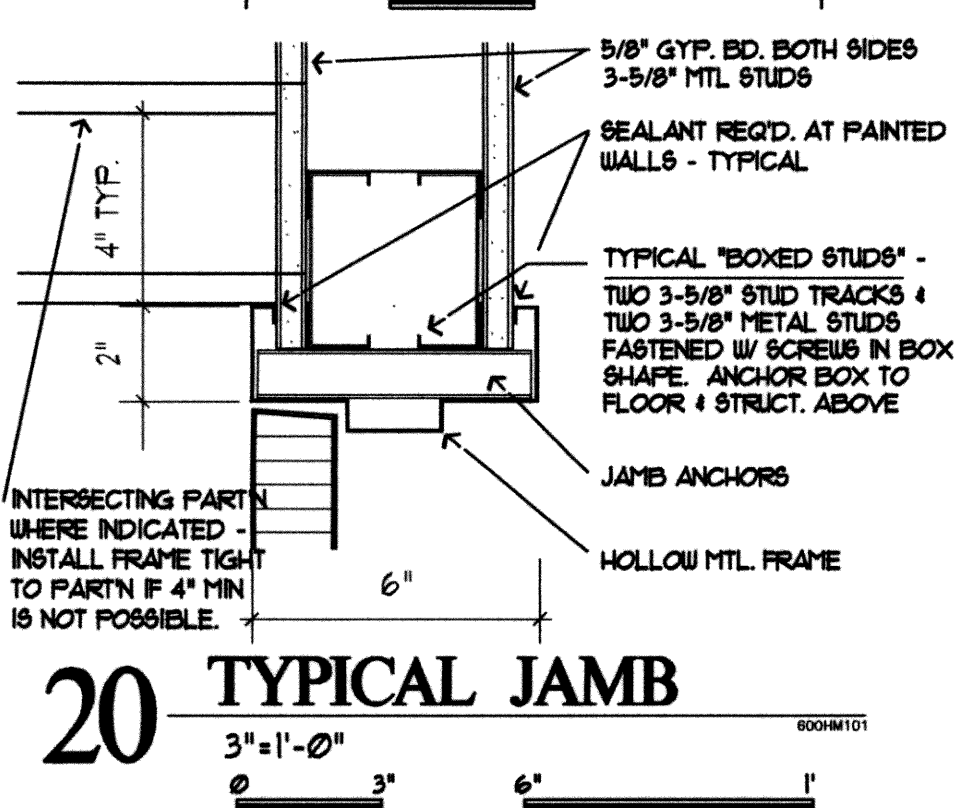
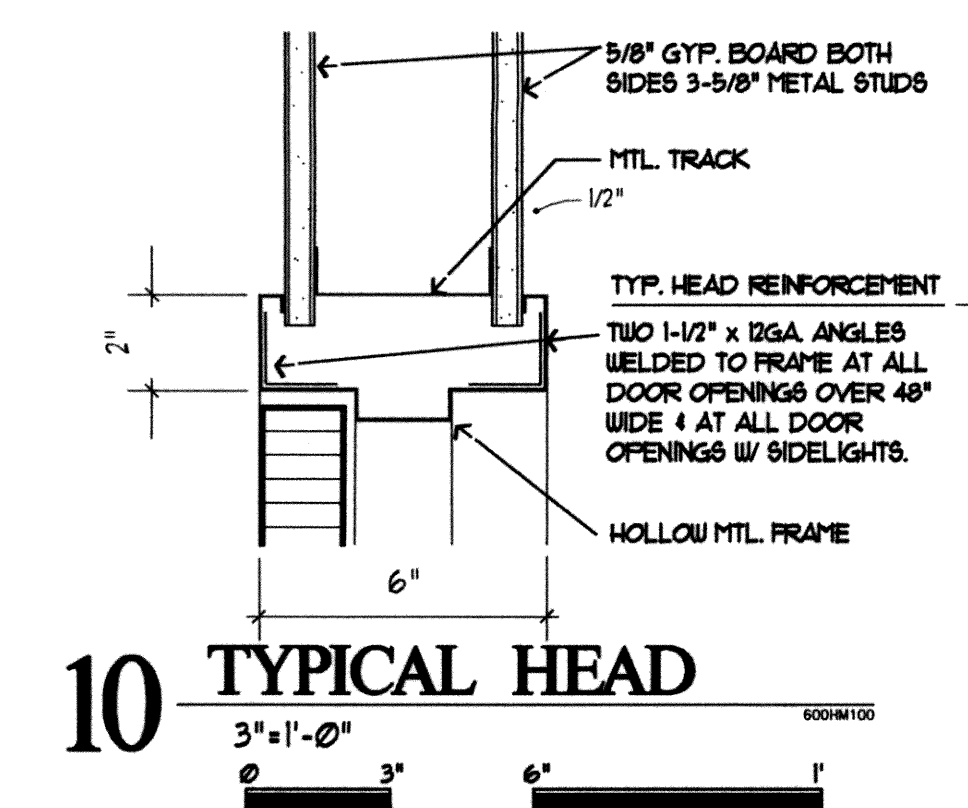
REVISIONS:	DATE:

NON POTABLE WATER BUILDING

DESIGNED BY:	CAD OPERATOR:	CHECKED:	APPROVED:	PLOT DATE:	DWG. SCALE:	SHEET:
		SD	SD	3/10/2010	AS SHOWN	15 OF 28

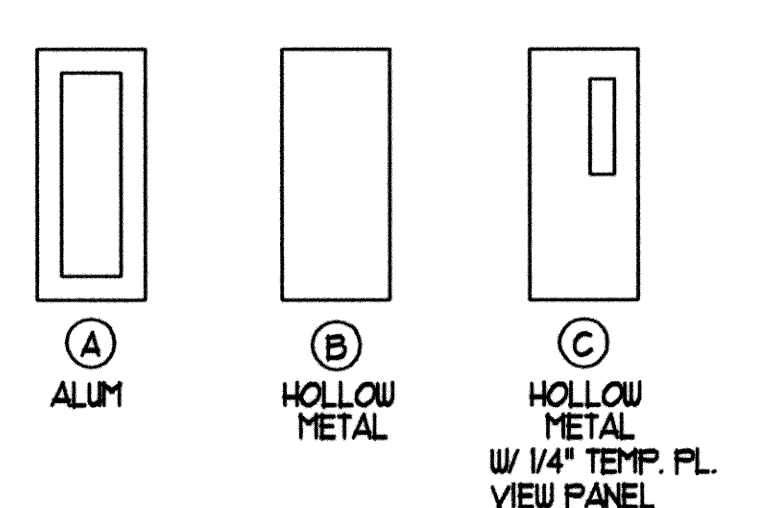


**ADMIN. BLDG. FLOOR PLAN 3,390 S.F.**  
 1/4" = 1'-0"  
 0 2' 4' 8' 12'



DR	SIZE	TYPE	HEAD	JAMB	HWDR SET	REMARKS
1	3'-0" X 1'-0" X 1 3/4"	A	16/A3.0	25		REF. 50/A4.1
2	3'-0" X 1'-0" X 1 3/4"	B	10/A2.0	28		
3	3'-0" X 1'-0" X 1 3/4"	B	10/A2.0	28		
4	3'-0" X 1'-0" X 1 3/4"	B	10/A2.0	28		
5	3'-0" X 1'-0" X 1 3/4"	B	10/A2.0	28		
6	3'-0" X 1'-0" X 1 3/4"	B	10/A2.0	30		
7	3'-0" X 1'-0" X 1 3/4"	B	10/A2.0	30		
8	3'-6" X 1'-0" X 1 3/4"	A	16/A3.0	26		REF. 50/A4.1
9	3'-0" X 1'-0" X 1 3/4"	C	10/A2.0	30		
10	3'-0" X 1'-0" X 1 3/4"	C	10/A2.0	30		
11	3'-0" X 1'-0" X 1 3/4"	B	10/A2.0	30		
12	3'-0" X 1'-0" X 1 3/4"	B	10/A2.0	28		
13	3'-0" X 1'-0" X 1 3/4"	B	10/A2.0	28		
14	3'-0" X 1'-0" X 1 3/4"	B	10/A2.0	30		
15	3'-0" X 1'-0" X 1 3/4"	B	10/A2.0	27		
16	3'-0" X 1'-0" X 1 3/4"	B	10/A2.0	30		
17	3'-0" X 1'-0" X 1 3/4"	B	10/A2.0	30		

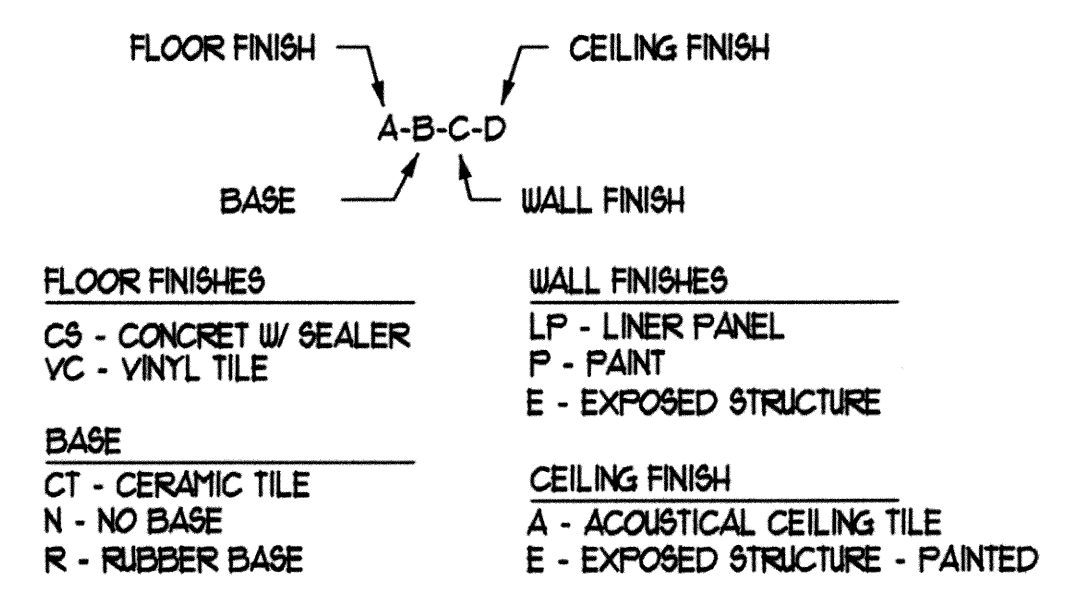
**DOOR TYPES**



**GENERAL NOTES**

1. BUILDING USE B

**ROOM FINISH SCHEDULE**



RECORD DRAWINGS



**A2.0**

REVISIONS:	DATE:

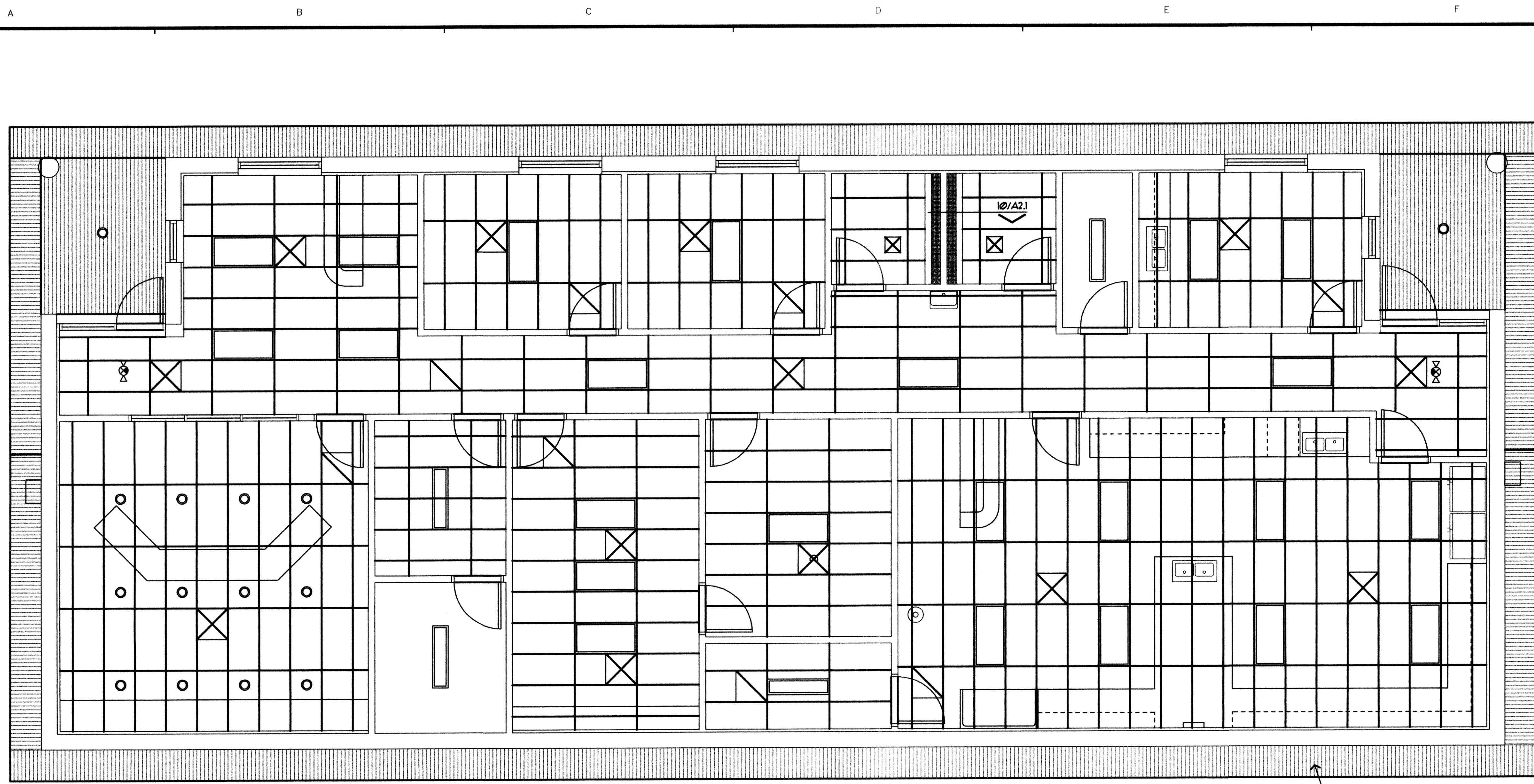
ADMINISTRATION BUILDING

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 2803 SOUTH BRYANT  
 EDMOND, OK 73013  
 PH. (405) 844-3900  
 FAX. (405) 844-3900

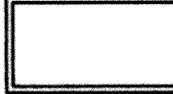





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D:\DRAWINGS\MOORE\WORK\Architectural\Administration Building\ymoreno20b.dwg

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		SD	SD	3/10/2010	AS SHOWN	16 OF 28

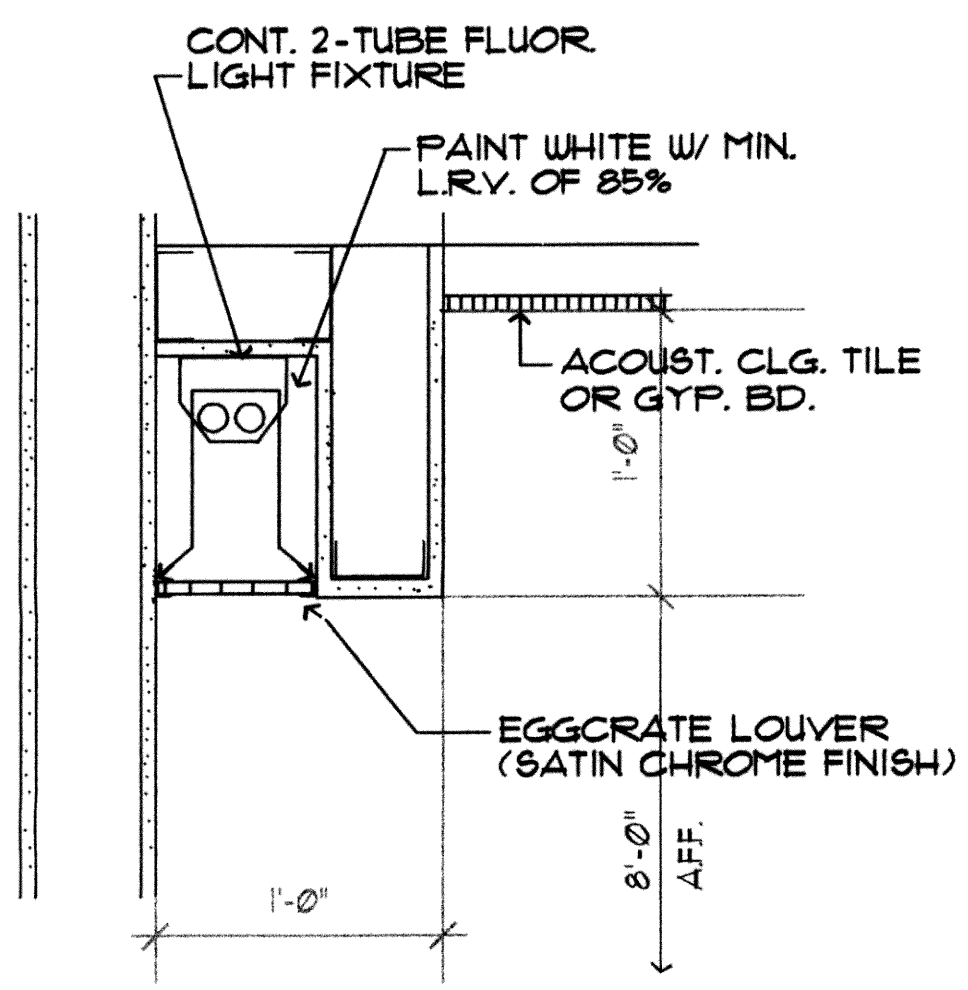


**LEGEND**

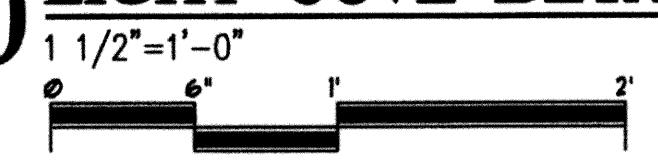
-  2 X 4 FLUORESCENT -
-  INCANDESCENT RECESSED CAN LIGHT
-  SUPPLY GRILLE
-  RETURN GRILLE
-  EXIT LIGHT
-  2' X 4' ACST. CLG.

**GENERAL NOTES**

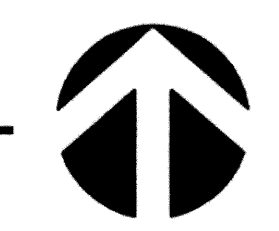
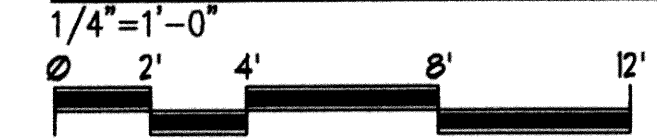
1. CEILING HT. 9'-0" UNO.
2. COORDINATE FIXTURE LOCATIONS W/MECH. & ELECT.



**10 LIGHT COVE DETAIL**



**ADMIN. BLDG. REFLECTED CEILING PLAN**



24GA SOFFIT PANEL BY M.B.S.

RECORD DRAWINGS



**A2.1**

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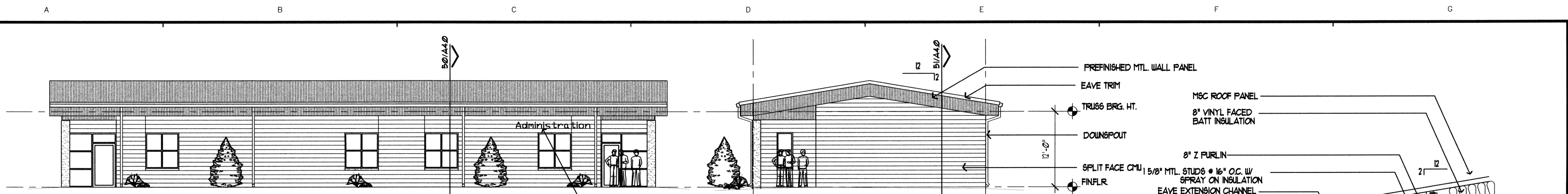
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REVISIONS:	DATE:

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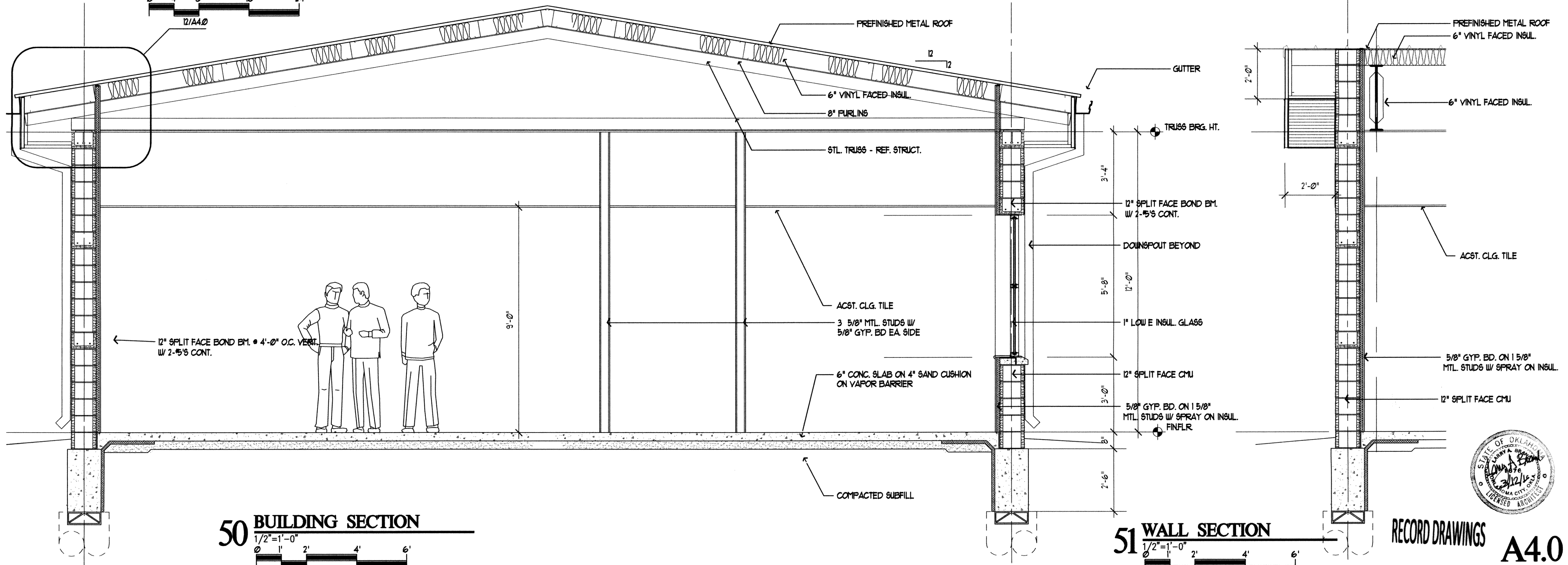


**ADMIN. BLDG. NORTH ELEVATION**

**ADMIN. BLDG. WEST ELEVATION (E. OPP.)**

**ADMIN. BLDG. SOUTH ELEVATION**

**12" FASCIA DETAIL**



**50 BUILDING SECTION**

**51 WALL SECTION**

**RECORD DRAWINGS A4.0**

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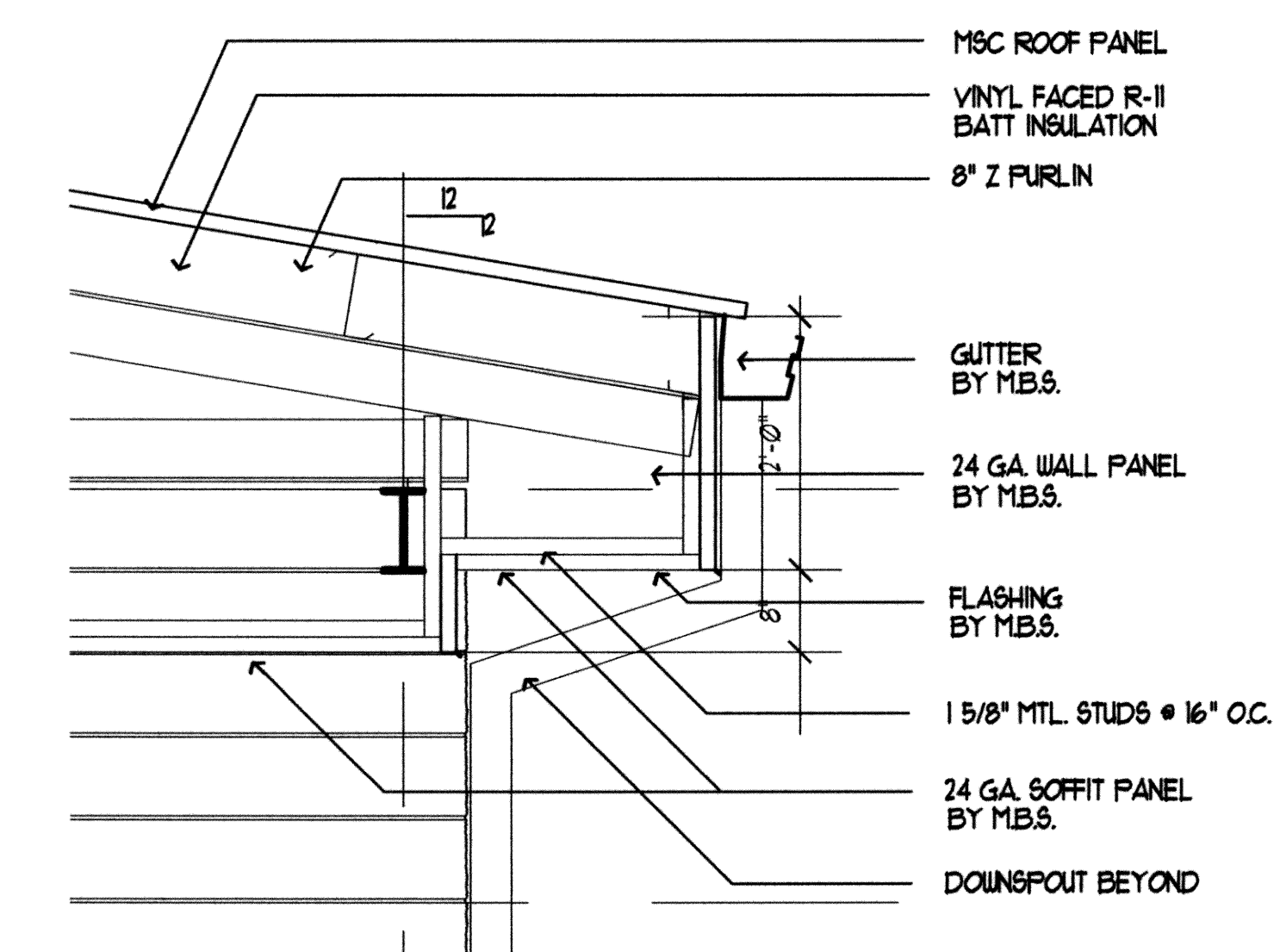
REVISIONS:	DATE:

**ADMINISTRATION BUILDING**

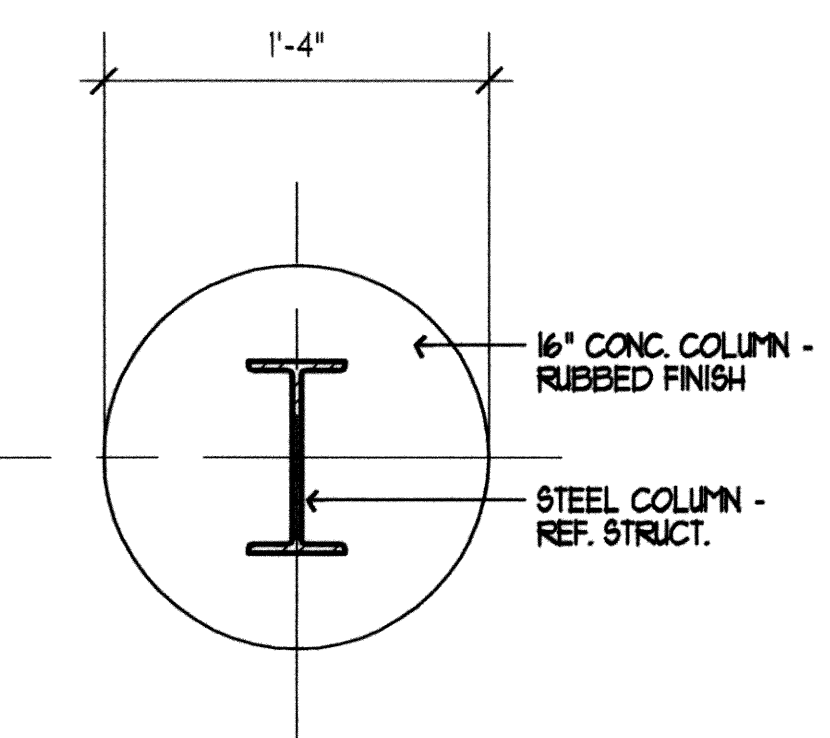
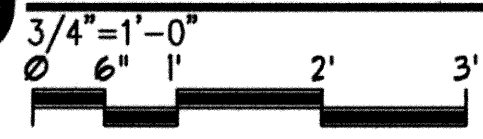
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EDMOND, OK. 73013  
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CERTIFICATE OF AUTHORIZATION NO. CA2088

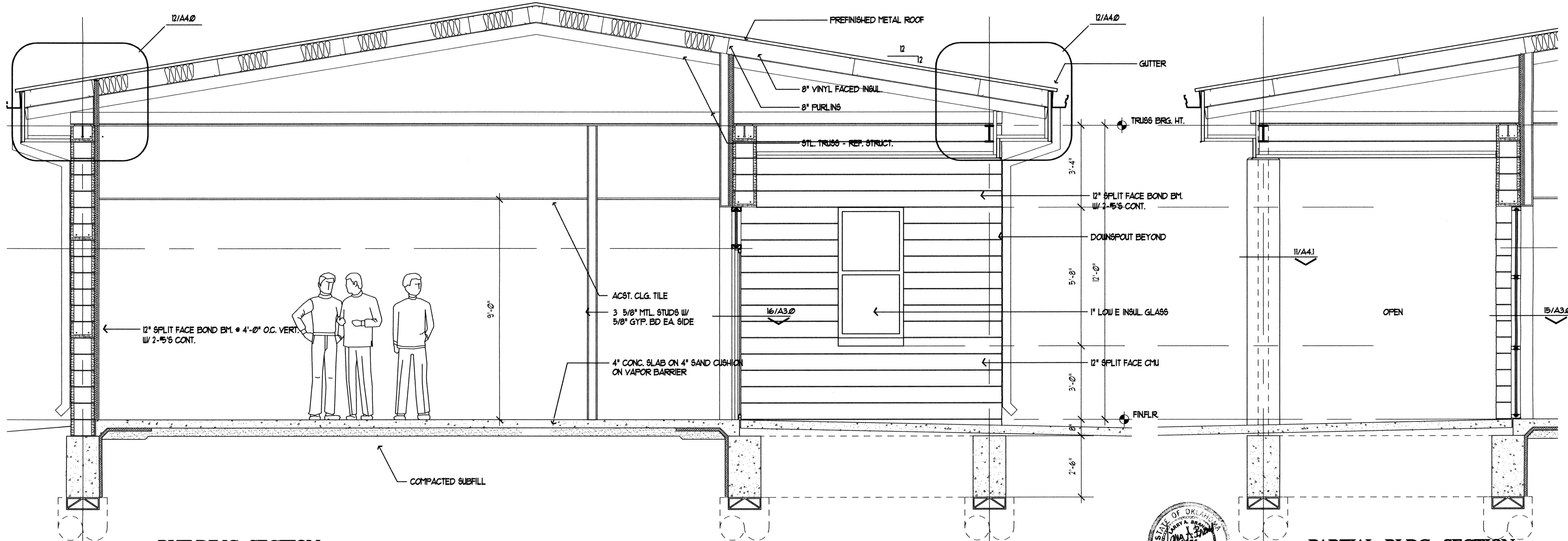
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		SD	SD	3/12/2010	AS SHOWN	18 OF 28



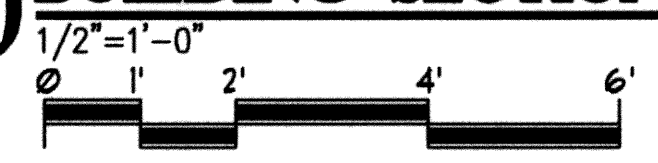
**10 FASCIA DETAIL**



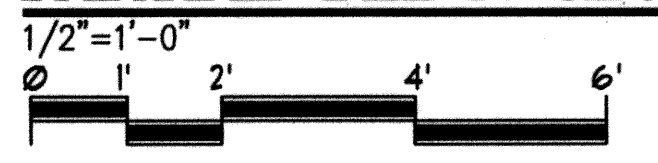
**11 COLUMN DETAIL**



**50 BUILDING SECTION**



**51 PARTIAL BLDG. SECTION**



**A4.1**

RECORD DRAWINGS



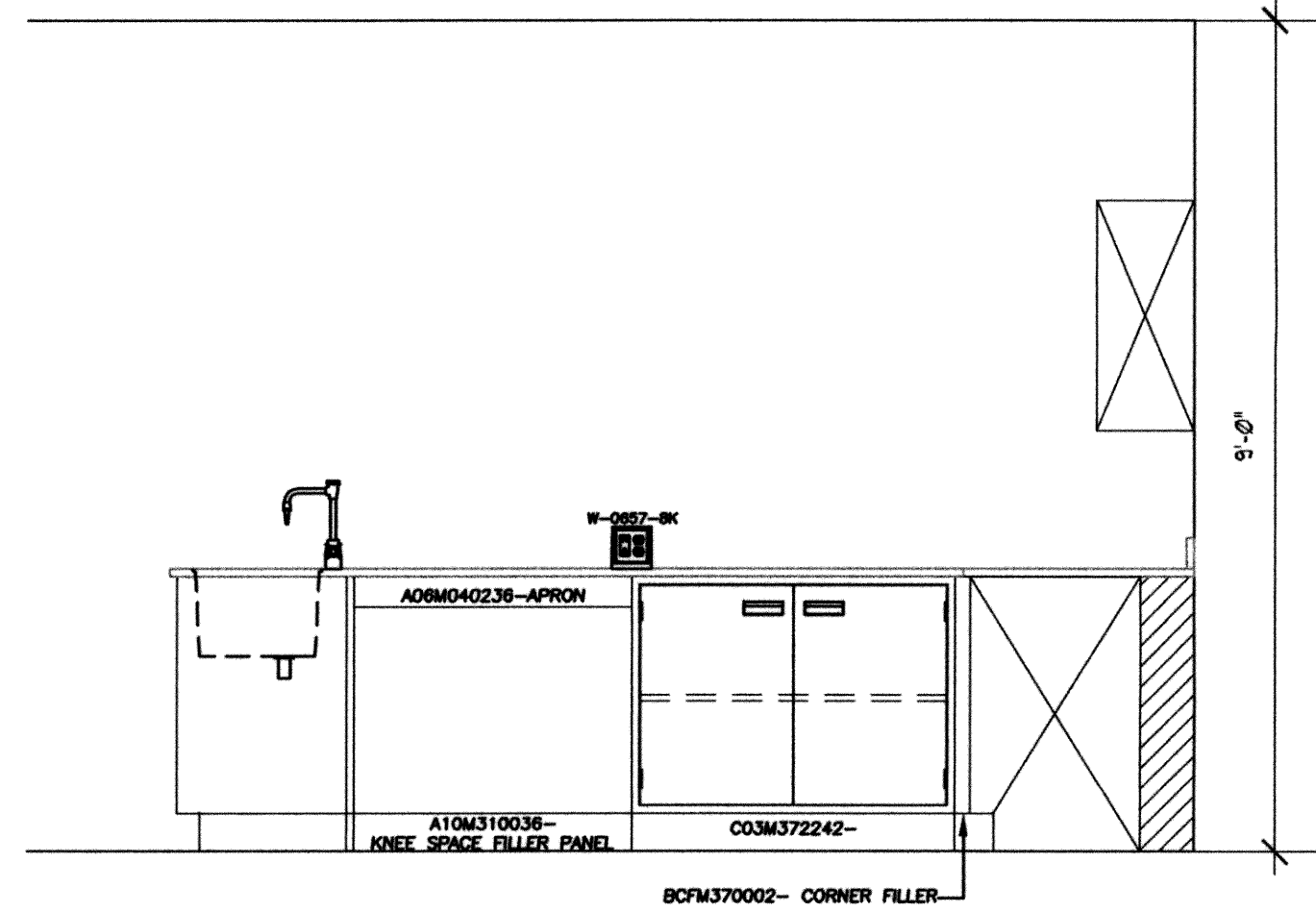
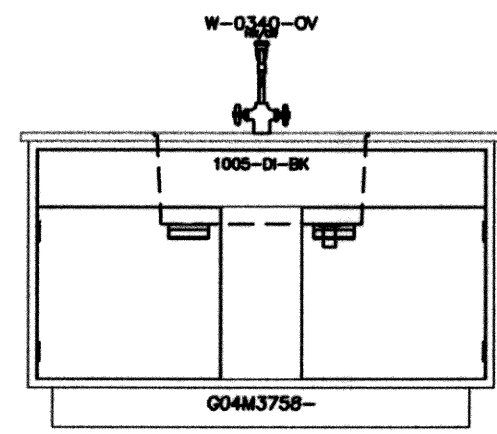
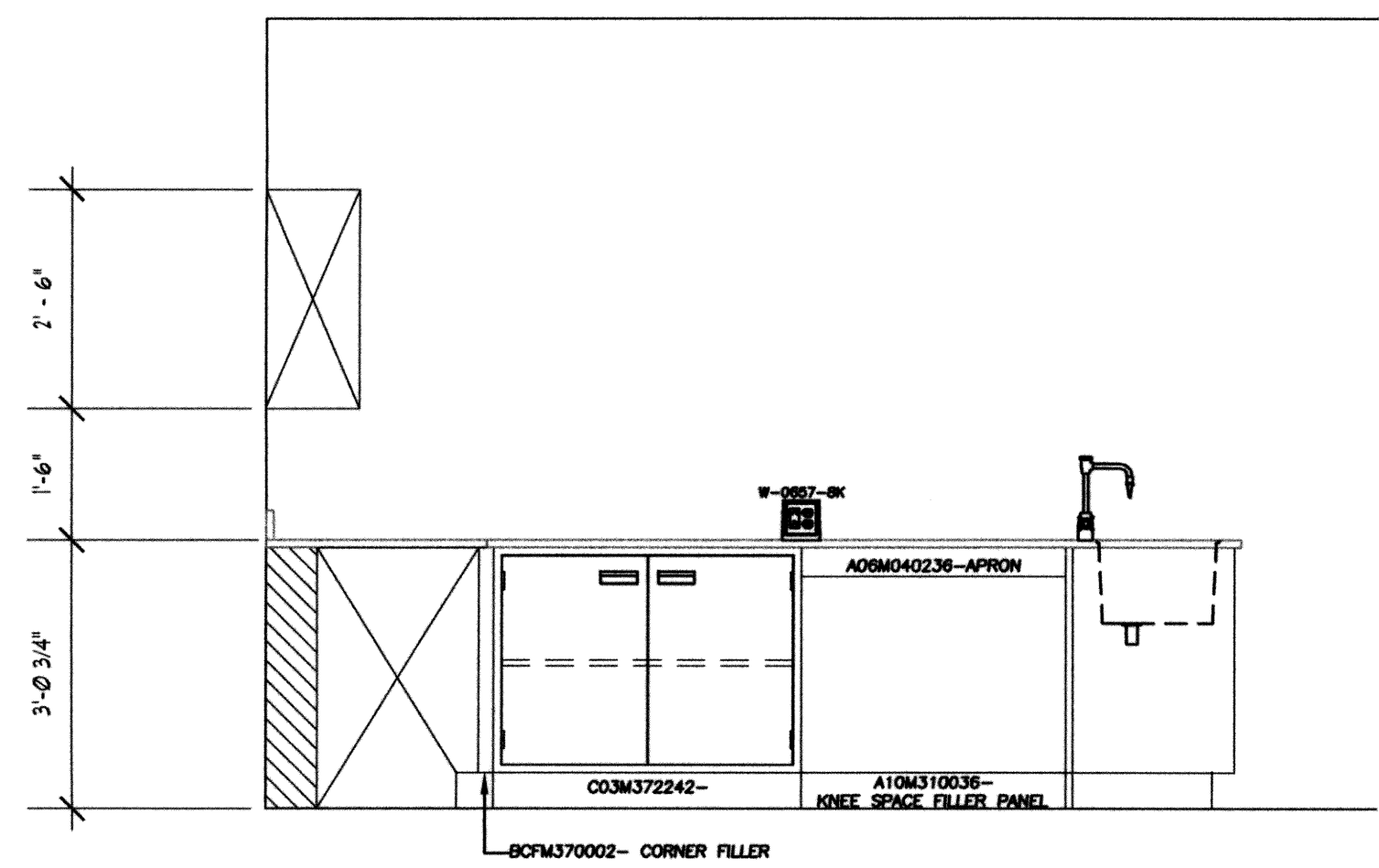
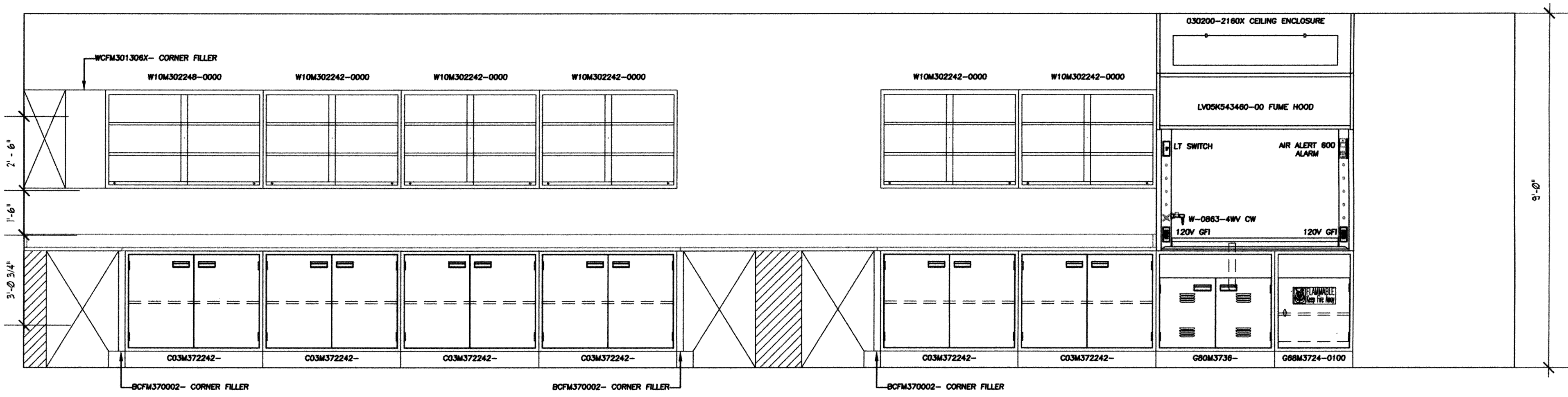
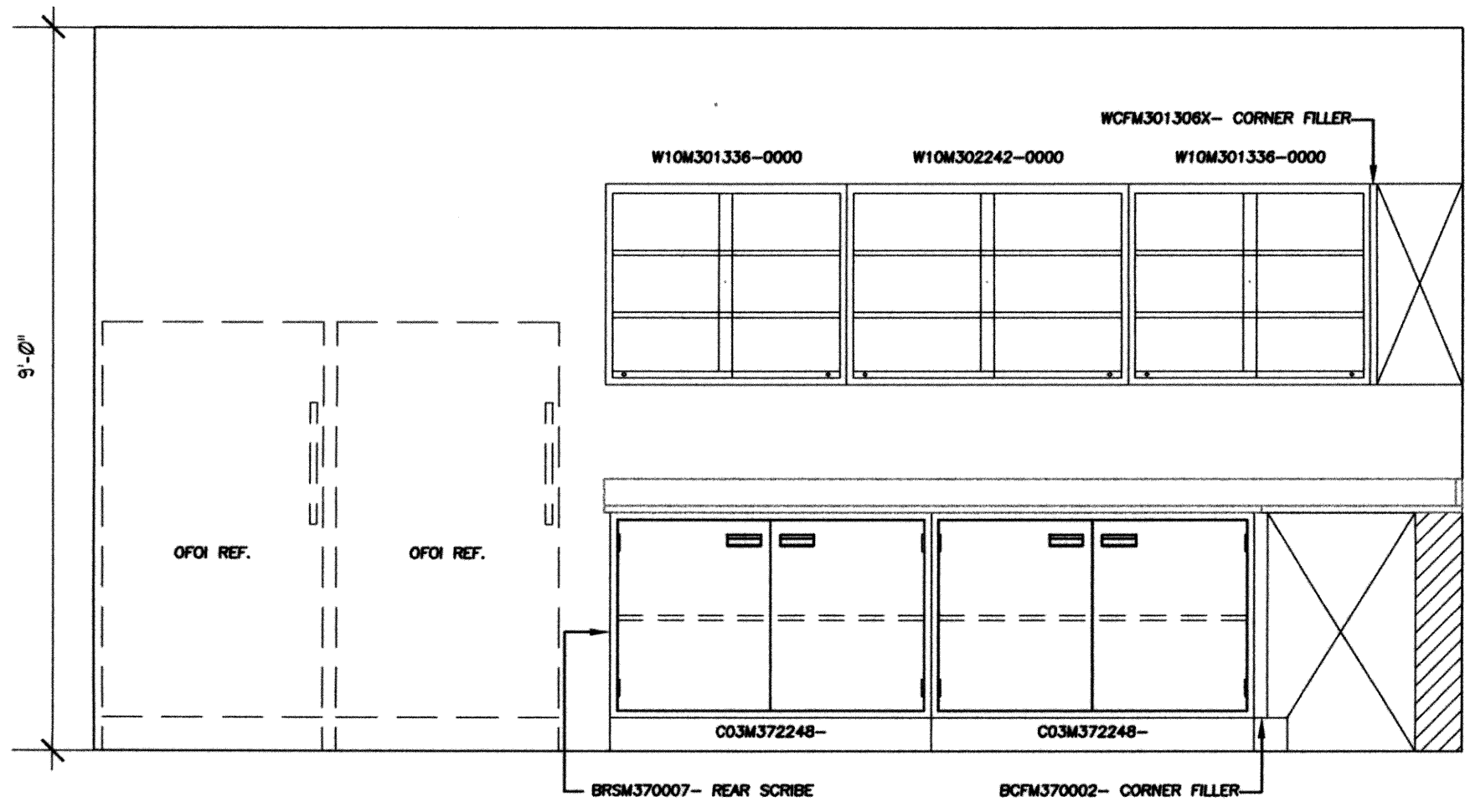
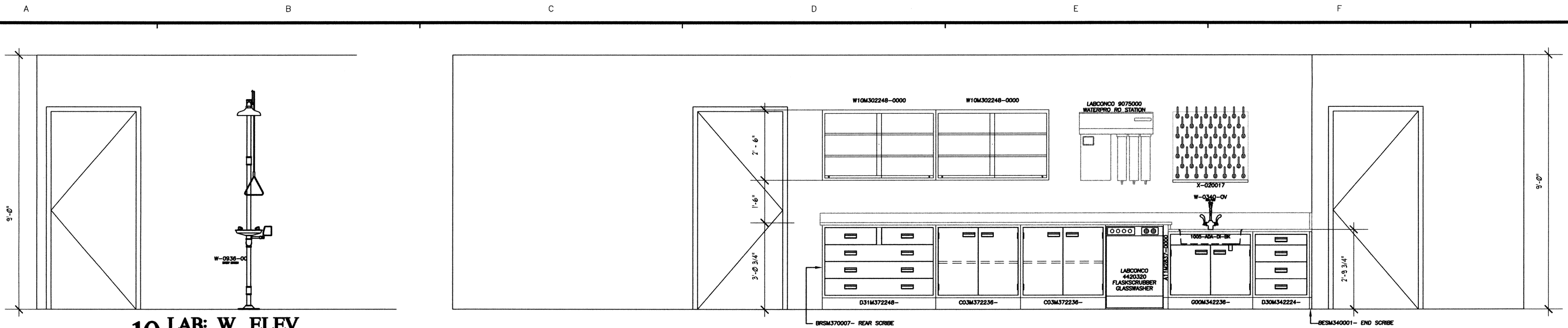
REVISIONS:	DATE:

ADMINISTRATION BUILDING

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		SD	SD	3/11/2010	AS SHOWN	19 OF 28



**GENERAL NOTES**

1. PROVIDE ACID RESISTANT COUNTER TOP
2. ALL LAB CASEWORK TO BE KEUWAINEE OR APPROVED EQUAL - REF. SPECS.

RECORD DRAWINGS



A6.0

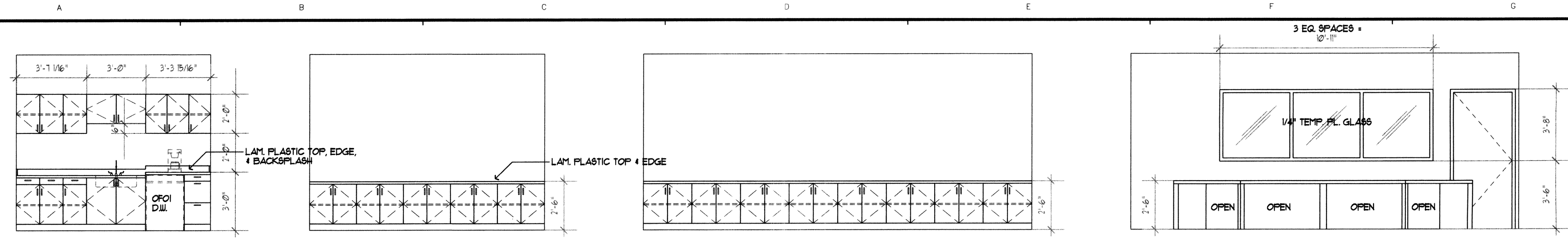
REVISIONS:	DATE:

LAB DETAILS

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DESIGNED BY:	CAD OPERATOR:	CHECKED:	APPROVED:	PLOT DATE:	DWG. SCALE:	SHEET:
A	B	SD	SD	1/29/10	AS SHOWN	20 OF 28

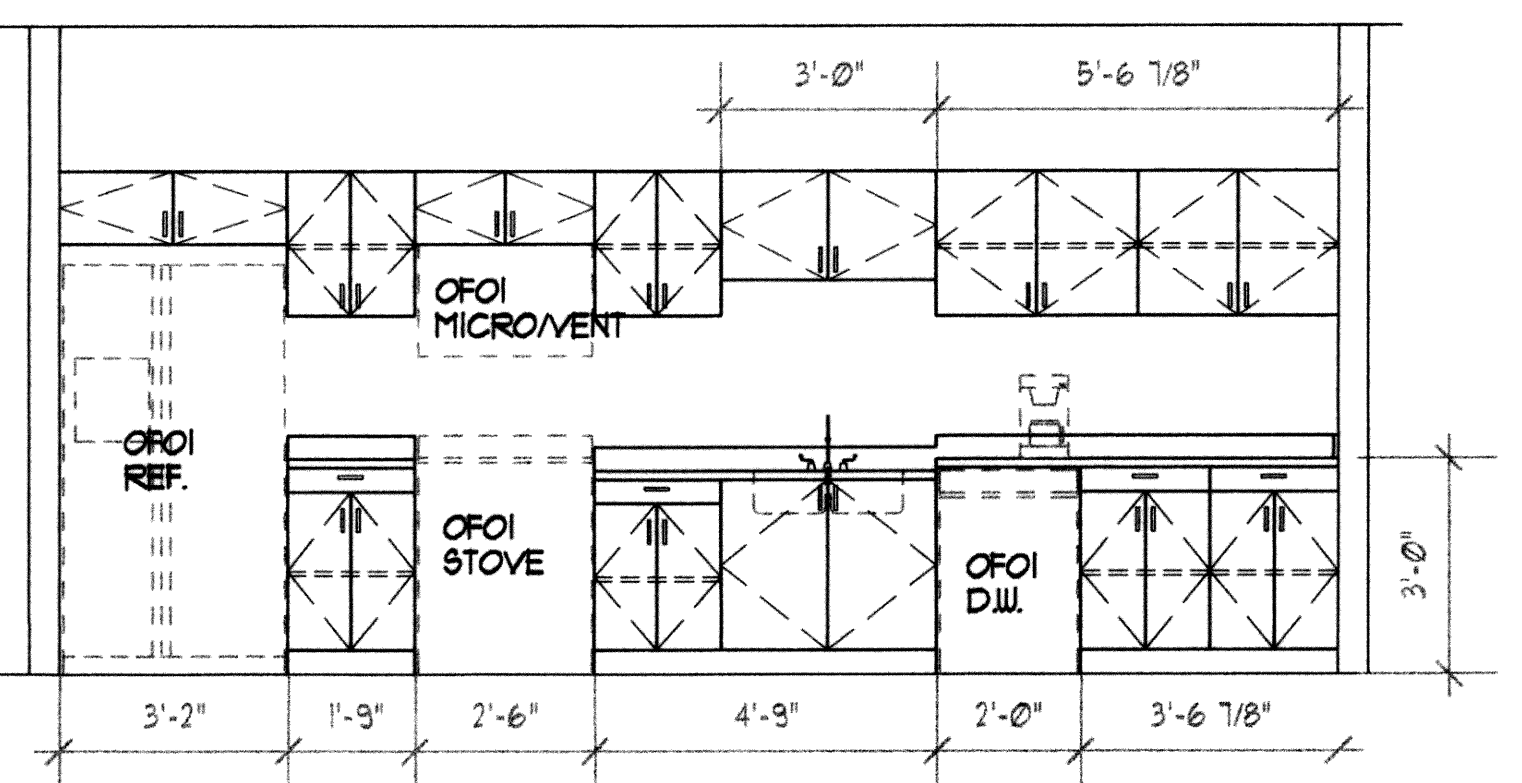


**10 W. ELEV. BREAK RM. ADMIN. BLDG.**  
SCALE: 3/8" = 1'-0"  
0 2' 4' 8'

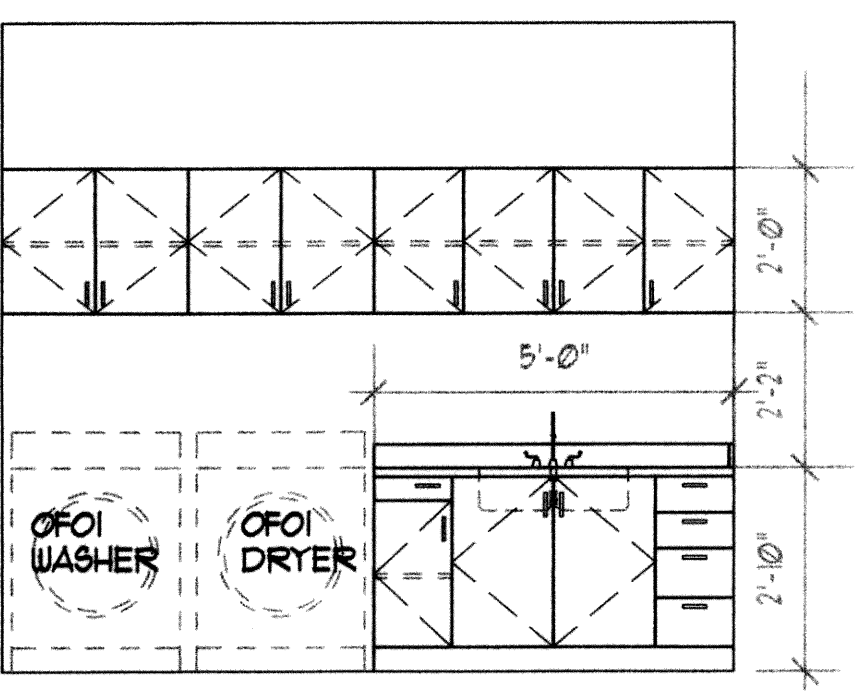
**11 S. ELEV. CONF. RM. ADMIN. BLDG.**  
SCALE: 3/8" = 1'-0"  
0 2' 4' 8'

**12 S. ELEV. CONTROL RM. ADMIN. BLDG.**  
SCALE: 3/8" = 1'-0"  
0 2' 4' 8'

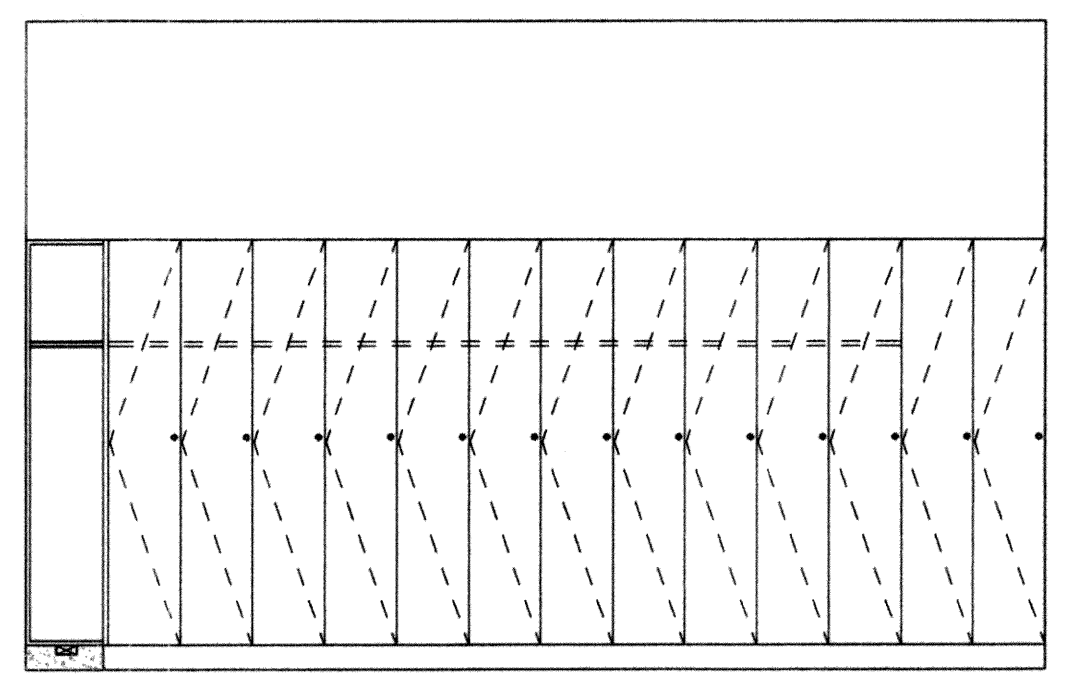
**13 N. ELEV. CONTROL RM. ADMIN. BLDG.**  
SCALE: 3/8" = 1'-0"  
0 2' 4' 8'



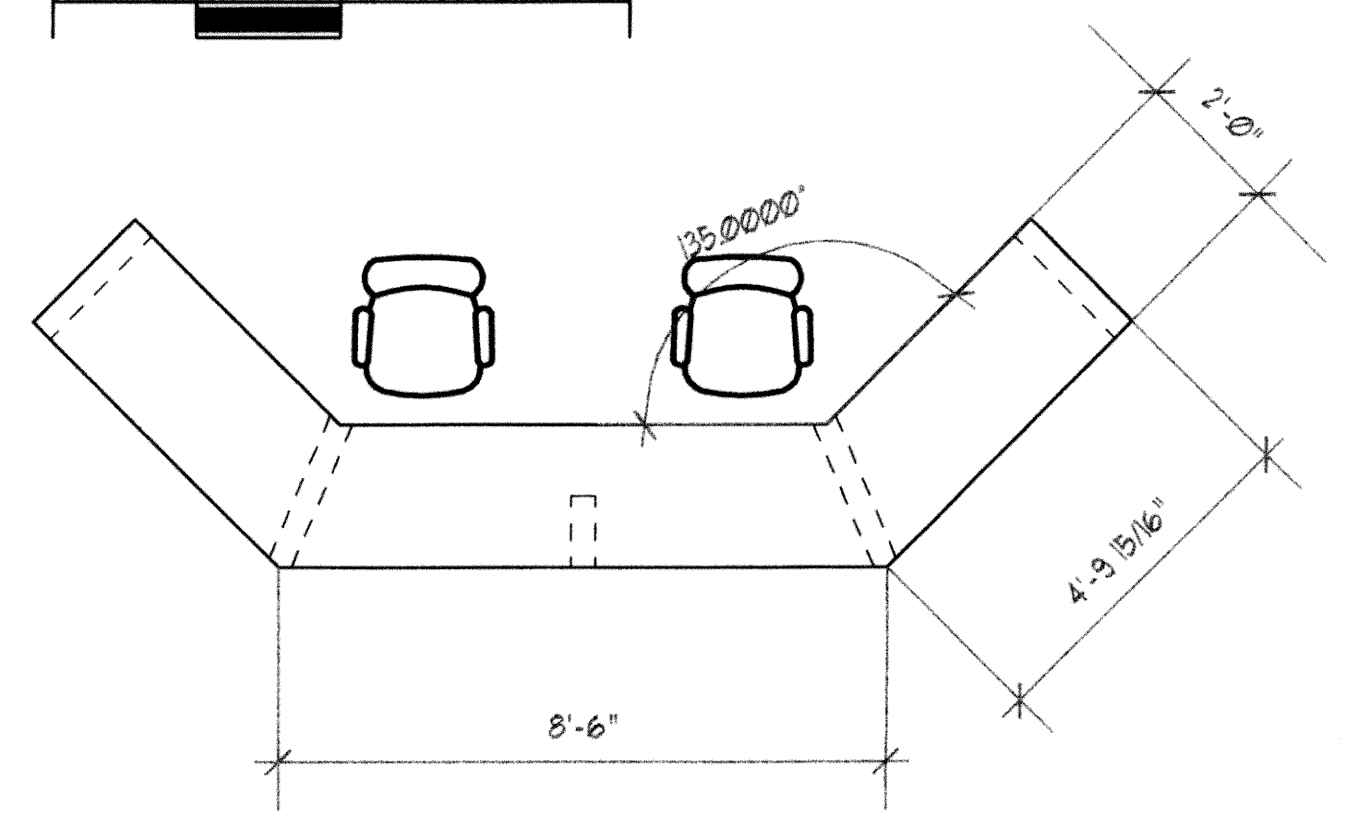
**20 S. ELEV. BREAK/TRAINING RM. MAINT. BLDG.**  
SCALE: 3/8" = 1'-0"  
0 2' 4' 8'



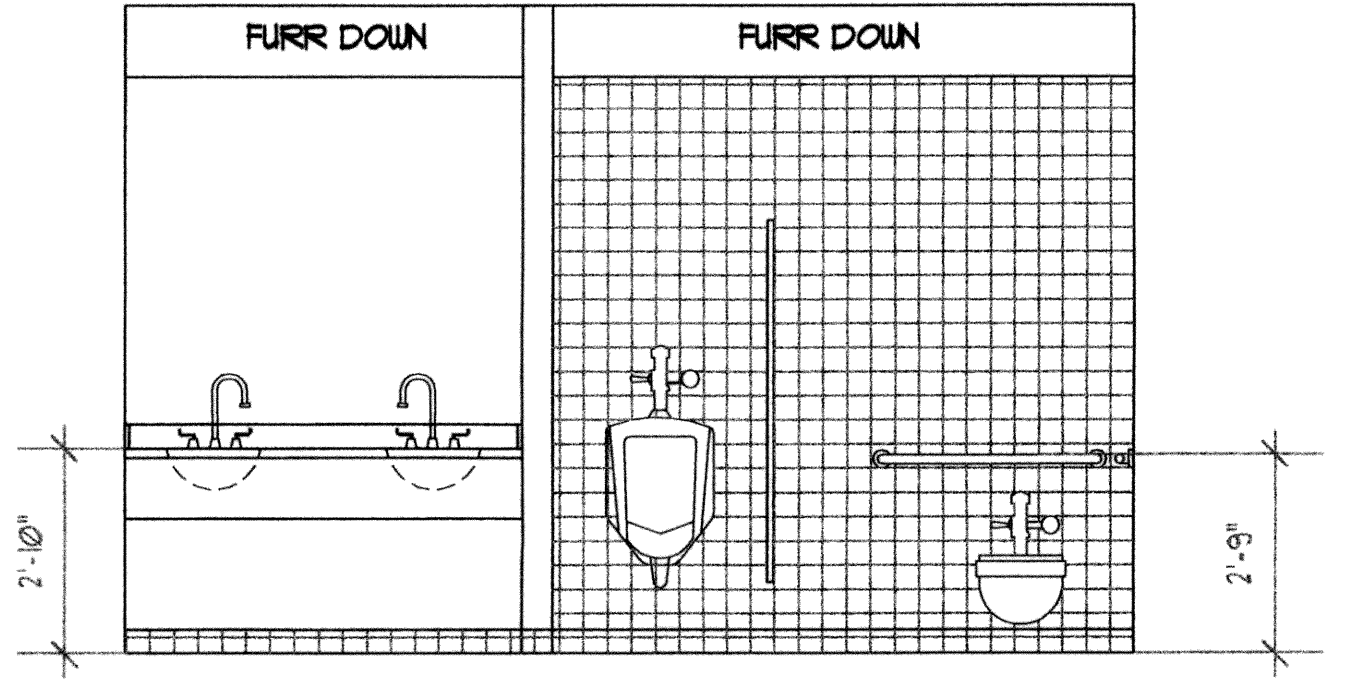
**21 E. ELEV. LAUNDRY MAINT. BLDG.**  
SCALE: 3/8" = 1'-0"  
0 2' 4' 8'



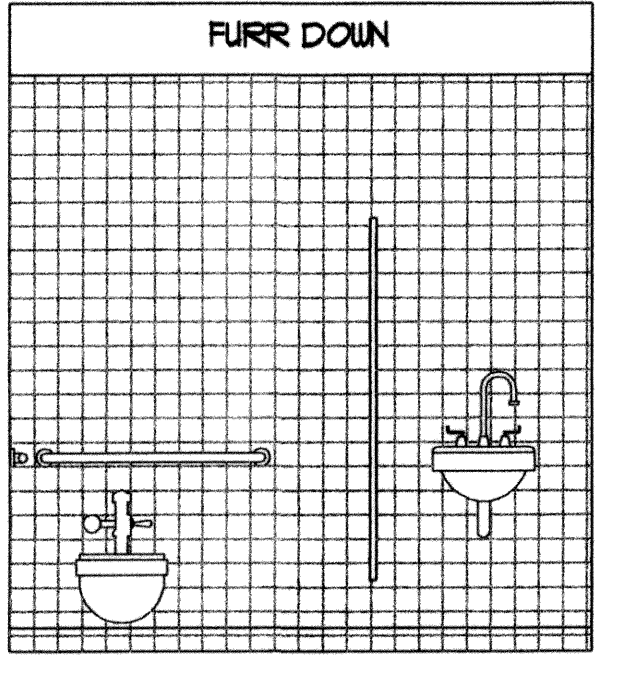
**22 W. ELEV. MENS LOCKERS MAINT. BLDG.**  
SCALE: 3/8" = 1'-0"  
0 2' 4' 8'



**23 PLAN CONTROL RM. DESK ADMIN. BLDG.**  
SCALE: 3/8" = 1'-0"  
0 2' 4' 8'



**30 E. ELEV. MENS TLT./LOCKER RM. MAINT. BLDG.**  
SCALE: 3/8" = 1'-0"  
0 2' 4' 8'



**31 W. ELEV. WOMENS TLT./LOCKER RM. MAINT. BLDG.**  
SCALE: 3/8" = 1'-0"  
0 2' 4' 8'

**GENERAL NOTES**

1. ALL EXPOSED SURFACES TO BE LAM. PLASTIC
2. ALL NON EXPOSED SURFACES SHALL BE WHITE MELAMINE
3. ARCHITECT TO PROVIDE LAM. PLASTIC COLOR SELECTION
4. ALL CABINET DOORS TO HAVE 165° GRASS CLIP -ON HINGES
5. ALL FULLS TO BE 3 1/2" BRUSHED ALUMINUM
6. ALL DRAWERS SHALL BE GRASS METAL BOX W/ MEL. BOTTOM
7. ALL BULKHEADS & BOTTOMS SHALL BE 3/4" PART. BD. W/ MELAMINE G-16
8. ALL SHELVES SHALL BR 3/4" PART. BD. W/ MELAMINE G-26

RECORD DRAWINGS



**A6.1**

C:\DRAWINGS\MOORE\_WORK\Architectural\Administration Building\moredad61.dwg

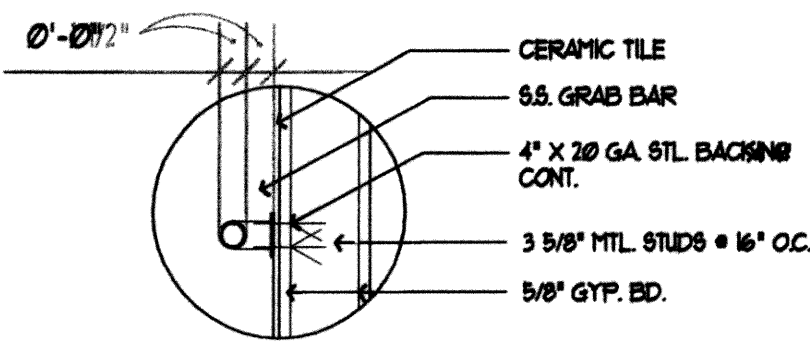
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		SD	SD	12/2/2009	AS SHOWN	21 OF 28

REVISIONS:	DATE:

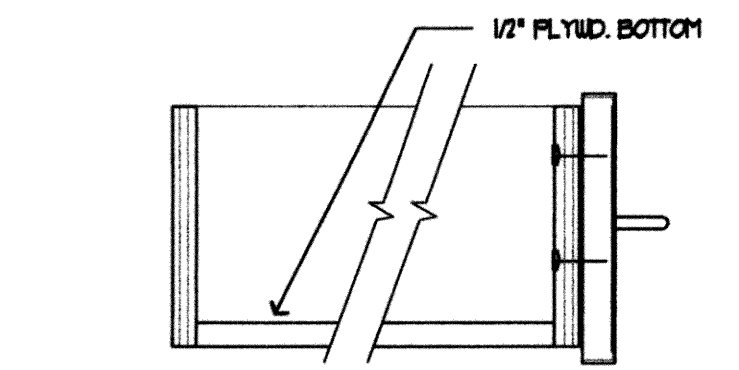
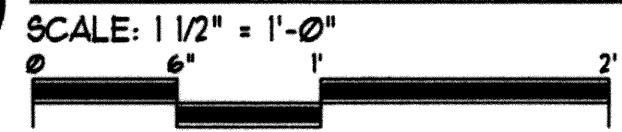
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EDMOND, OK. 73013  
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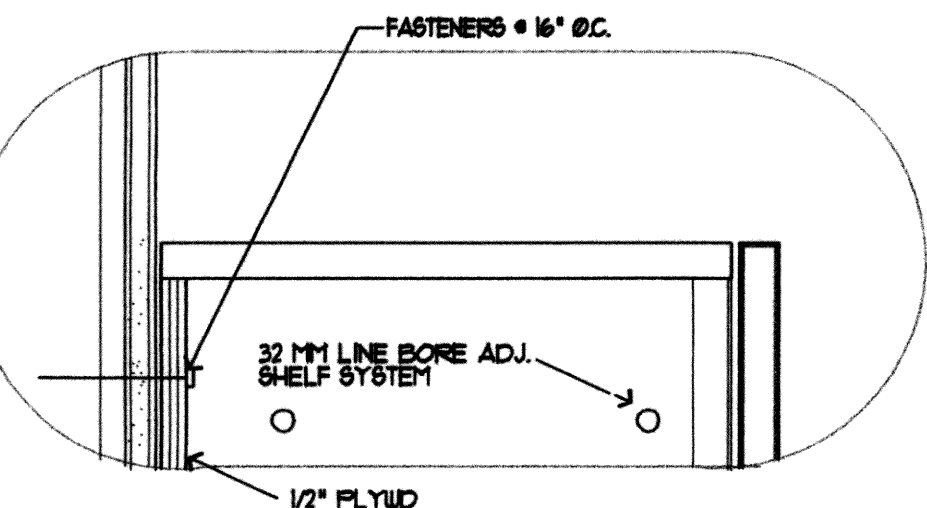
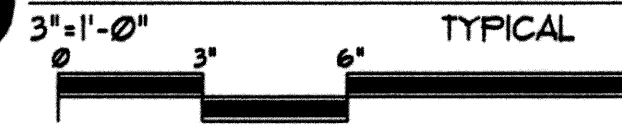
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CERTIFICATE OF AUTHORIZATION NO. CA2088



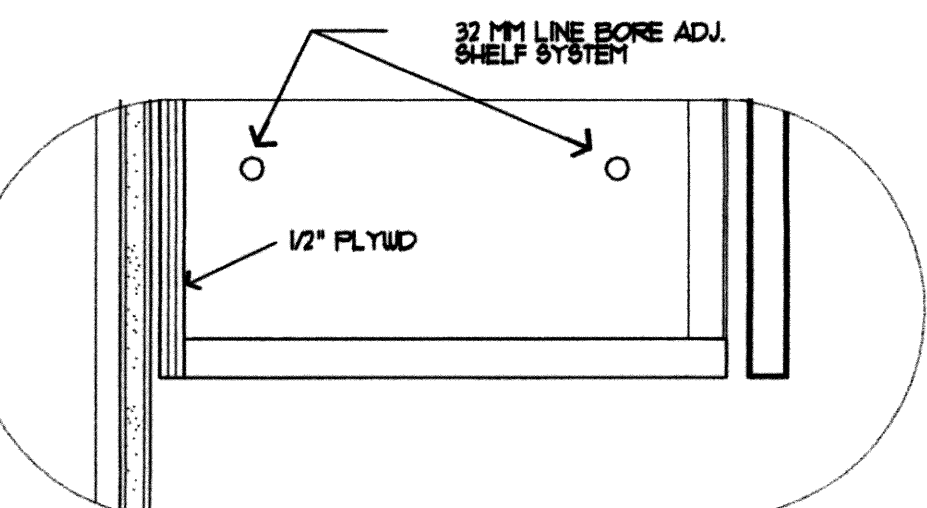
**10 BACKING DETAIL**



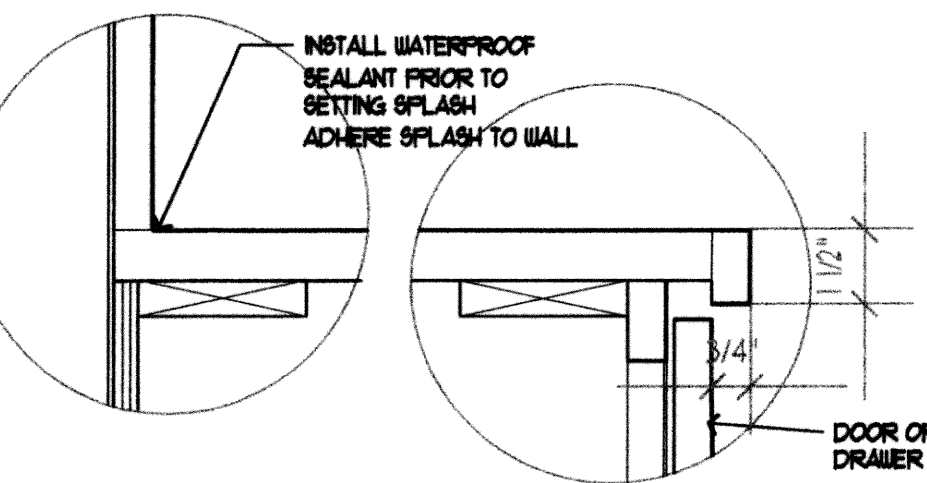
**20 DRAWER SECTION**



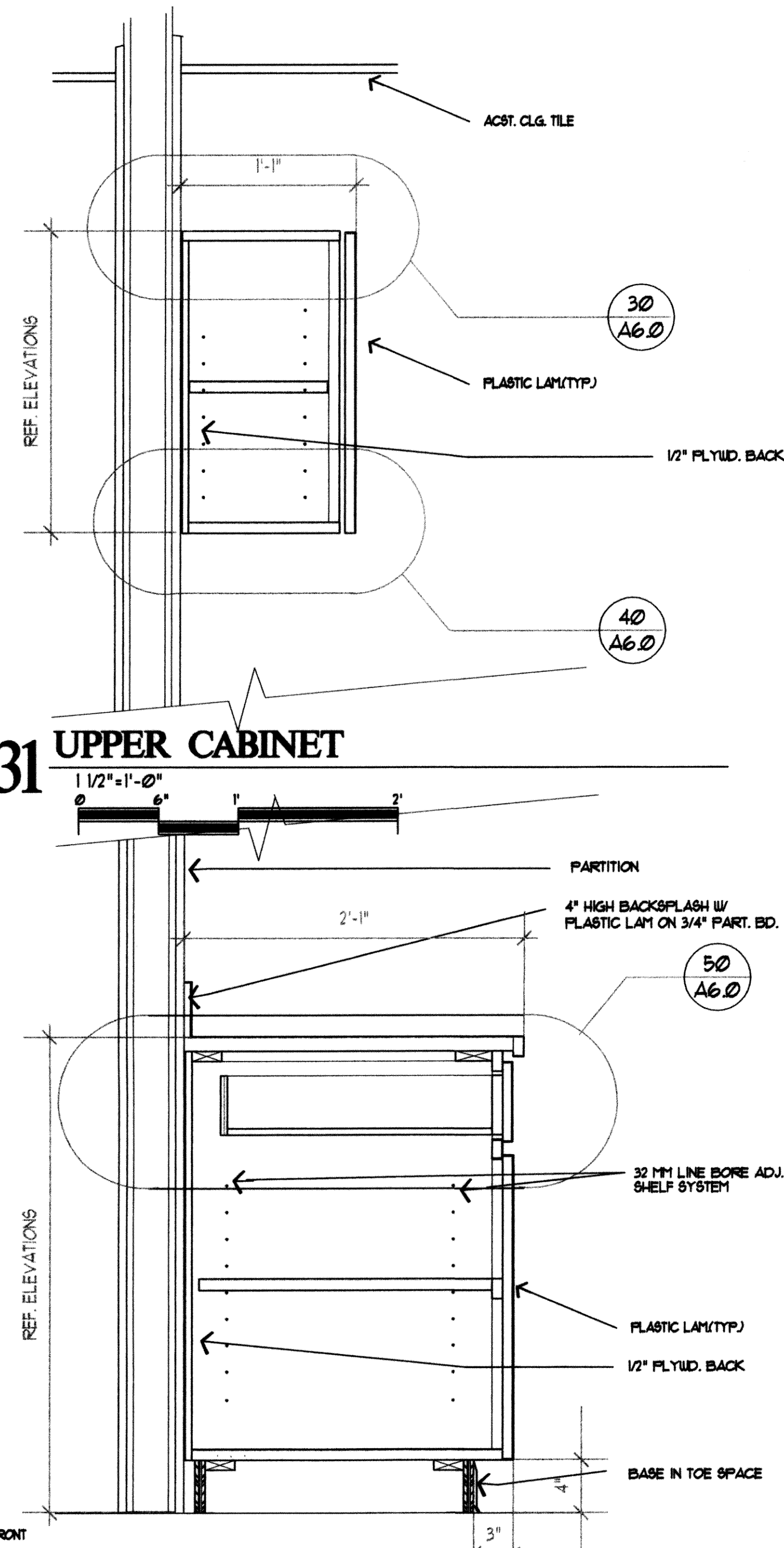
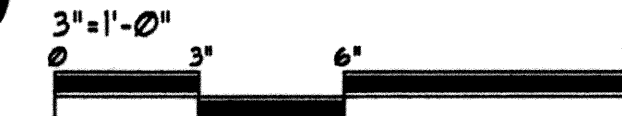
**30 UPPER CABINET**



**40 UPPER CABINET**



**50 COUNTERTOP/SPLASH**



**31 UPPER CABINET**



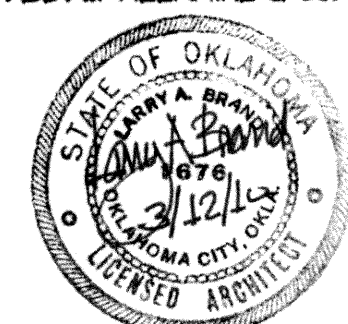
**51 TYP. BASE CABINET**



**GENERAL NOTES**

1. ALL EXPOSED SURFACES TO BE LAM. PLASTIC
2. ALL NON EXPOSED SURFACES SHALL BE WHITE MELAMINE.
3. ARCHITECT TO PROVIDE LAM. PLASTIC COLOR SELECTION.
4. ALL CABINET DOORS TO HAVE 165° GRASS CLIP-ON HINGES.
5. ALL FULLS TO BE 3 1/2" BRUSHED ALUMINUM.
6. ALL DRAWERS SHALL BE GRASS METAL BOX W/ MEL. BOTTOM.
7. ALL BULKHEADS & BOTTOMS SHALL BE 3/4" PART. BD. W/ MELAMINE G-18.
8. ALL SHELVES SHALL BR 3/4" PART. BD. W/ MELAMINE G-26.

RECORD DRAWINGS



A6.2

C:\DRAWINGS\MOORE\WORK\Architecture\Administration Building\moored02.dwg

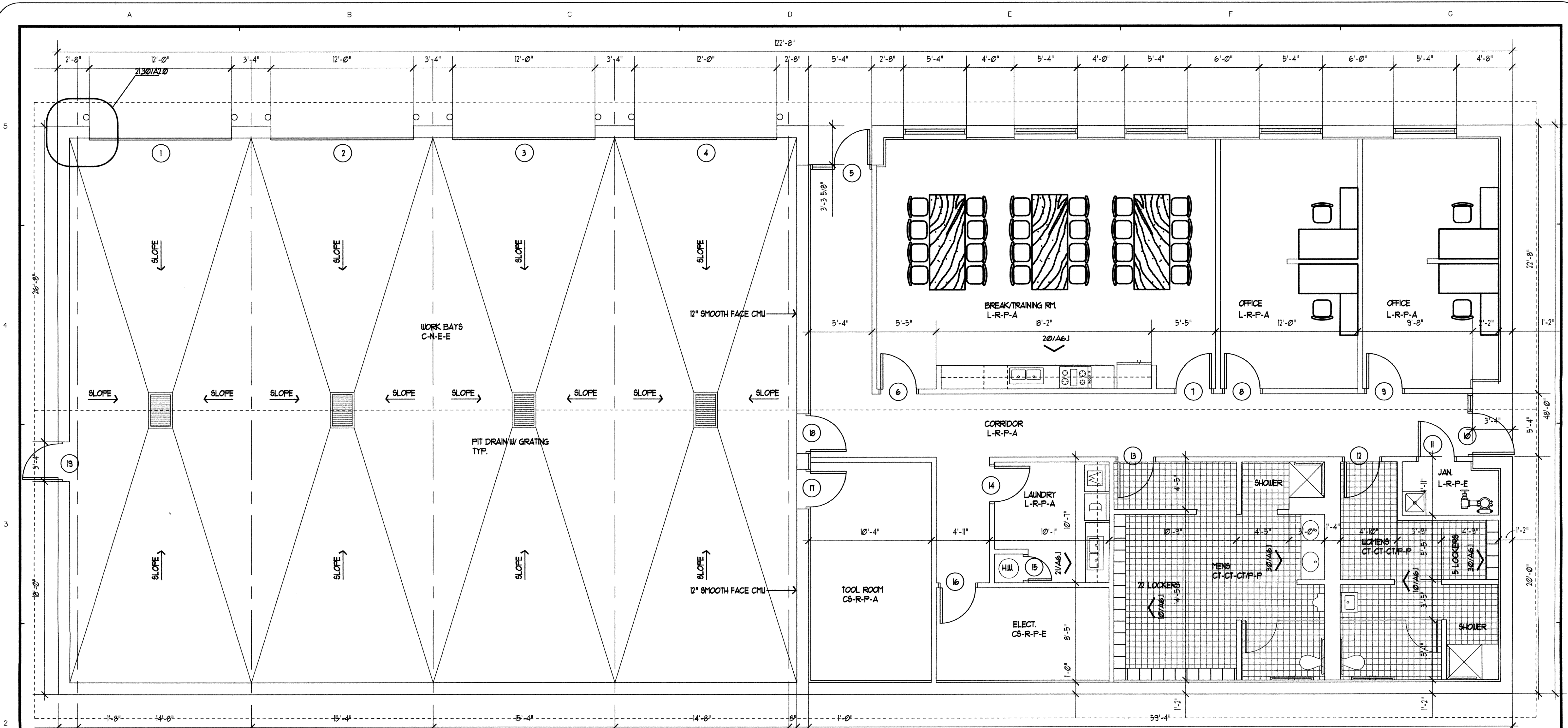
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REVISIONS:	DATE:

ADMINISTRATION BUILDING

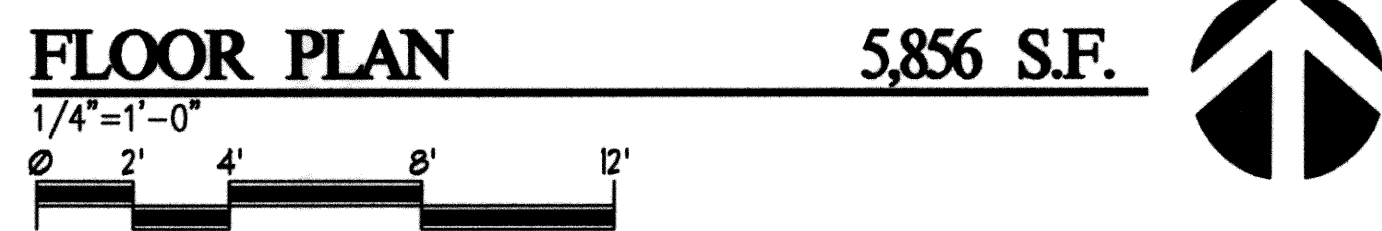
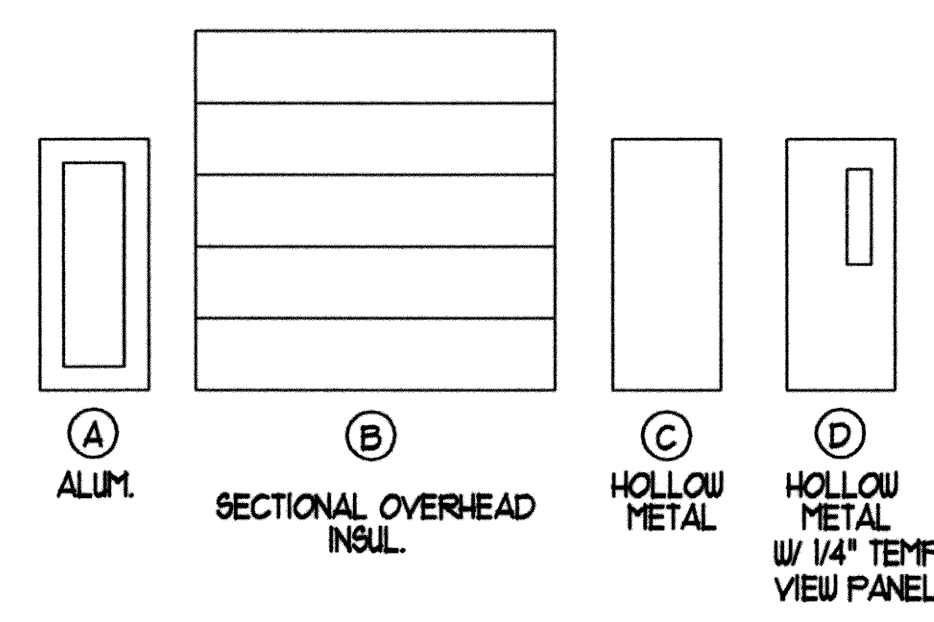
EAGLE OFFICE CENTER  
2803 SOUTH BRYANT  
EDMOND, OK. 73013  
PH. (405) 844-3900  
FAX. (405) 844-3600

**EAGLE CONSULTANTS, INC.**  
CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088

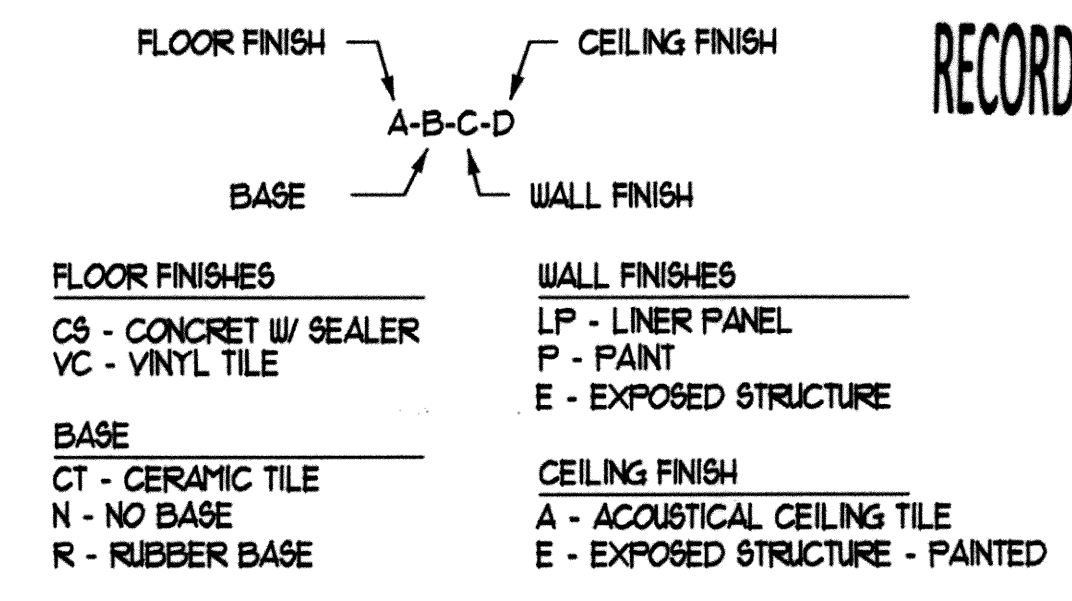


DR	SIZE	TYPE	HEAD	JAMB	HRDR. SET	REMARKS
1	12'-0" X 14'-0" X 2"	B	22/A3.0	21/A3.0	31	ELECT. OPENER
2	12'-0" X 14'-0" X 2"	B	22/A3.0	21/A3.0	31	ELECT. OPENER
3	12'-0" X 14'-0" X 2"	B	22/A3.0	21/A3.0	31	ELECT. OPENER
4	12'-0" X 14'-0" X 2"	B	22/A3.0	21/A3.0	31	ELECT. OPENER
5	3'-0" X 1'-0" X 1 3/4"	A	15/A3.0	25/A3.0	32	
6	3'-0" X 1'-0" X 1 3/4"	D	10/A2.0	20/A2.0	36	
7	3'-0" X 1'-0" X 1 3/4"	D	10/A2.0	20/A2.0	36	
8	3'-6" X 1'-0" X 1 3/4"	D	10/A2.0	20/A2.0	35	
9	3'-0" X 1'-0" X 1 3/4"	D	10/A2.0	20/A2.0	35	
10	3'-6" X 1'-0" X 1 3/4"	A	15/A3.0	25/A3.0	33	
11	3'-0" X 1'-0" X 1 3/4"	C	10/A2.0	20/A2.0	31	
12	3'-0" X 1'-0" X 1 3/4"	C	10/A2.0	20/A2.0	33	
13	3'-0" X 1'-0" X 1 3/4"	C	10/A2.0	20/A2.0	33	
14	3'-0" X 1'-0" X 1 3/4"	D	10/A2.0	20/A2.0	36	
15	2'-0" X 1'-0" X 1 3/4"	C	10/A2.0	20/A2.0	36	
16	3'-0" X 1'-0" X 1 3/4"	C	10/A2.0	20/A2.0	36	
17	3'-0" X 1'-0" X 1 3/4"	D	34/A3.0	33/A3.0	34	
18	3'-0" X 1'-0" X 1 3/4"	D	34/A3.0	33/A3.0	34	
19	3'-0" X 1'-0" X 1 3/4"	D	11/A3.0	10/A3.0	38	

**DOOR TYPES**



**ROOM FINISH SCHEDULE**



**GENERAL NOTES**

1. BUILDING USE B

RECORD DRAWINGS



**A2.2**

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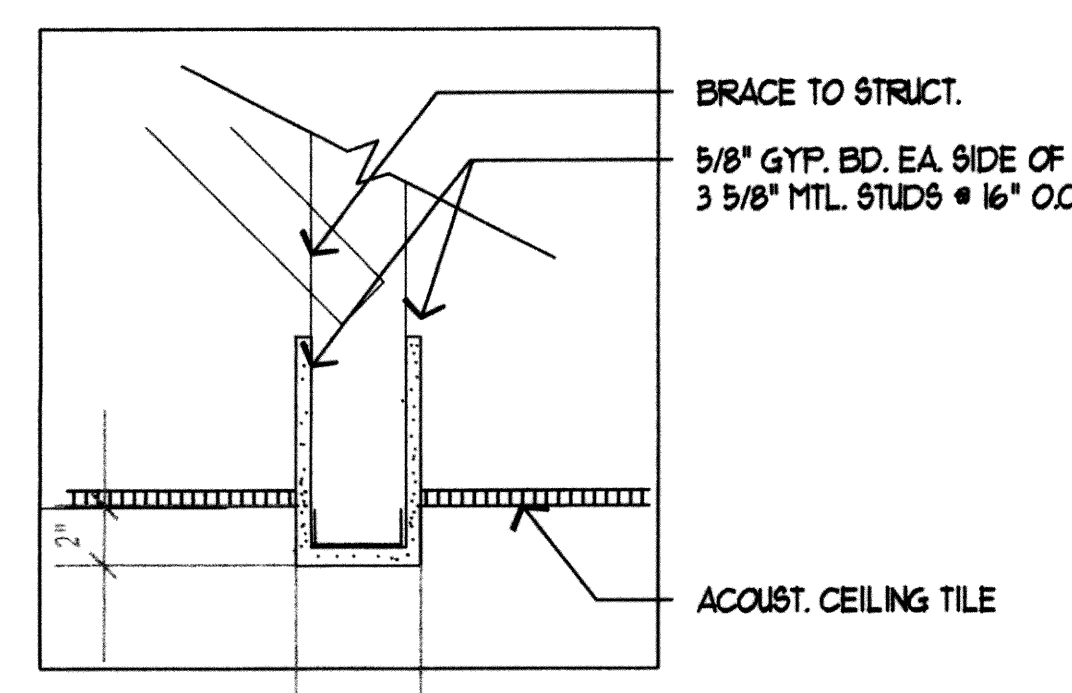
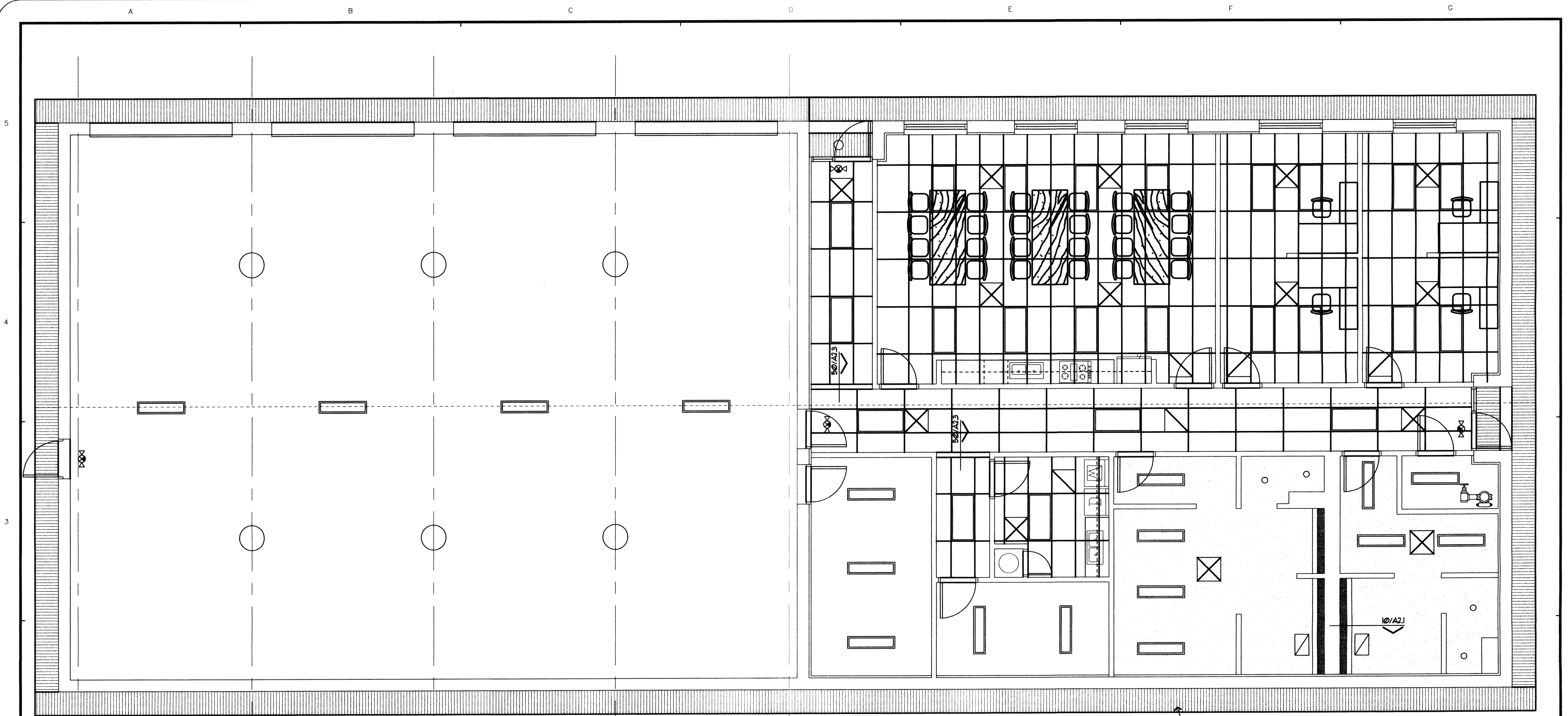
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		SD	SD	3/10/2010	AS SHOWN	23 OF 28

REVISIONS:	DATE:

**MAINTENANCE BUILDING**

EAGLE OFFICE CENTER  
 2803 SOUTH BRYANT  
 EDMOND, OK. 73013  
 PH. (405) 844-3900  
 FAX. (405) 844-3600

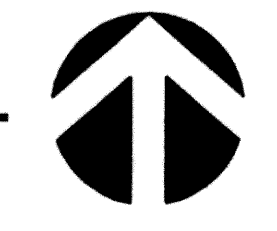
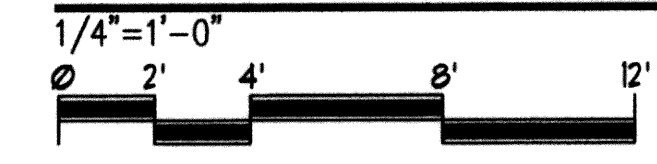
**EAGLE CONSULTANTS, INC.**  
 CIVIL AND ENVIRONMENTAL ENGINEERS  
 CERTIFICATE OF AUTHORIZATION NO. CA2088



BRACE TO STRUCT.  
 5/8" GYP. BD. EA. SIDE OF  
 3 5/8" METL. STUDS @ 16" O.C.  
 ACoust. CEILING TILE

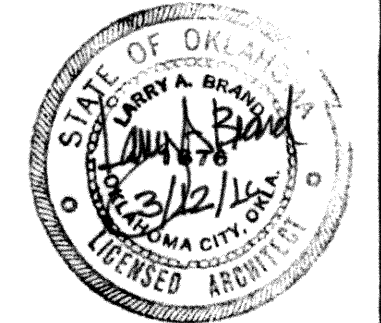
**50 BULKHEAD DETAIL**  
 1 1/2" = 1'-0"

**MAINT. BLDG. REFLECTED CEILING PLAN**



24GA. SOFFIT PANEL BY M.B.S.

RECORD DRAWINGS



**A2.3**

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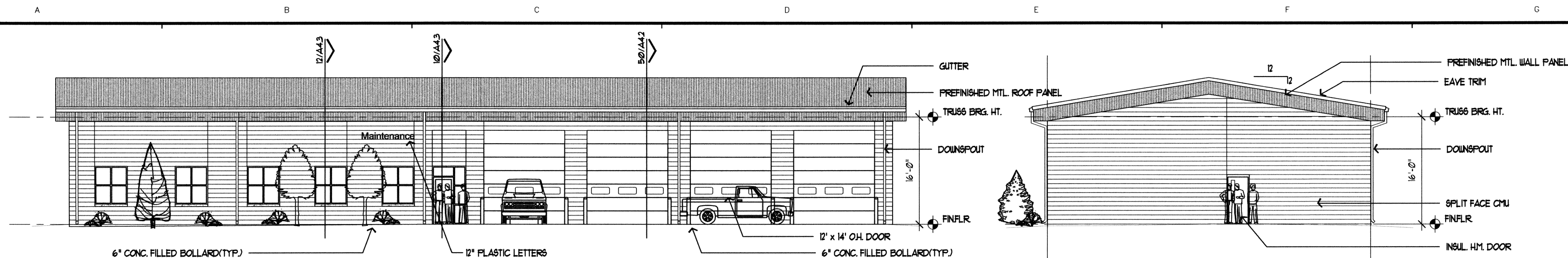
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		SD	SD	12/2/2009	AS SHOWN	24 OF 28

REVISIONS:	DATE:

MAINTENANCE BUILDING

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 EDMOND, OK. 73013  
 PH. (405) 844-3900  
 FAX. (405) 844-3600

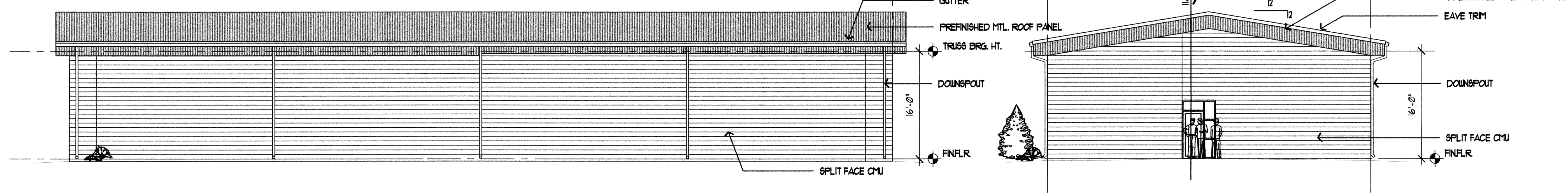
**EAGLE CONSULTANTS, INC.**  
 CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088



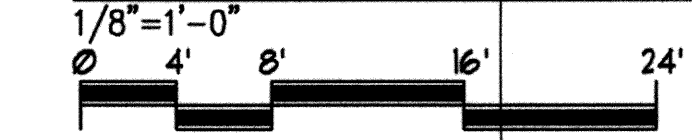
**SOUTH ELEVATION**



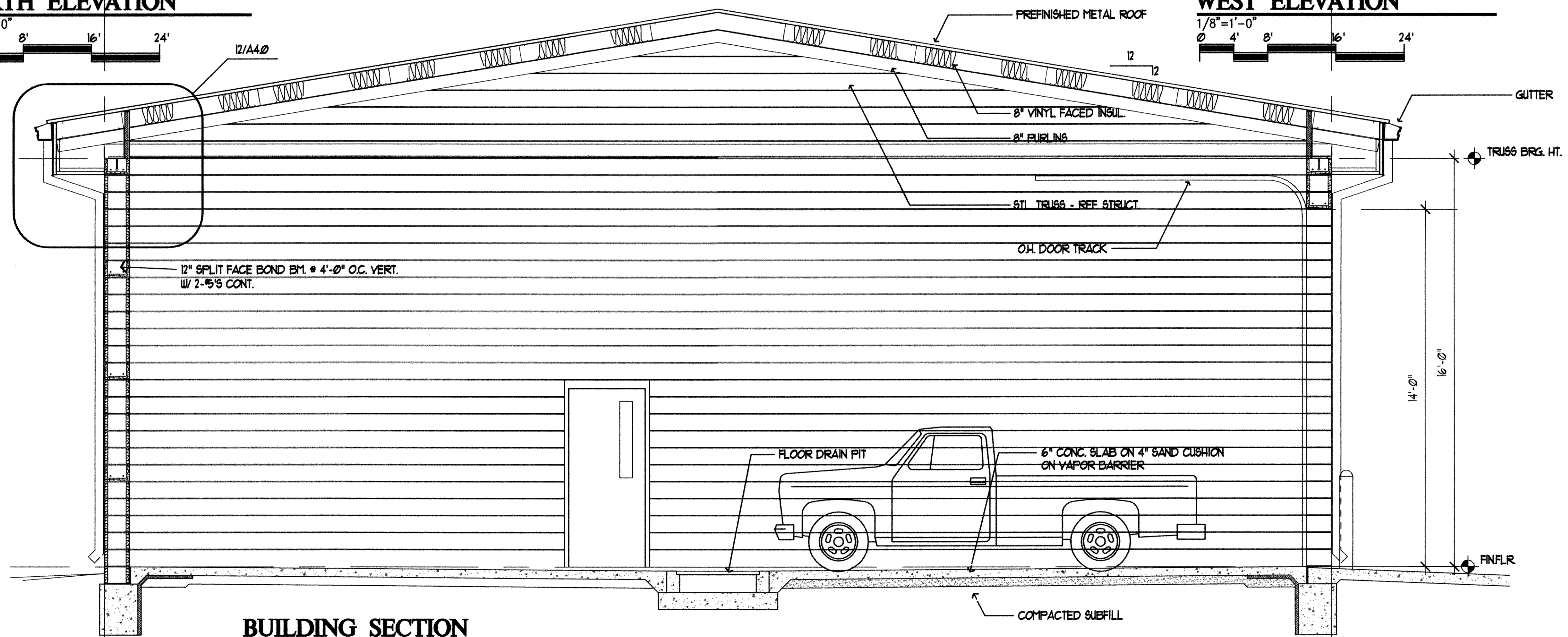
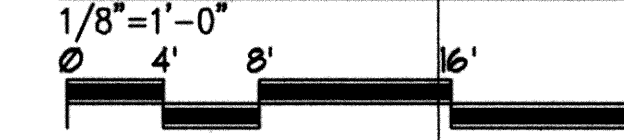
**EAST ELEVATION**



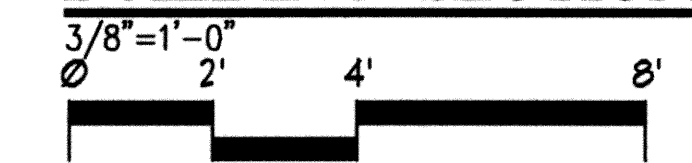
**NORTH ELEVATION**



**WEST ELEVATION**



**BUILDING SECTION**



REVISIONS:	DATE:

MAINTENANCE BUILDING

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EDMOND, OK 73013  
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FAX. (405) 844-3800

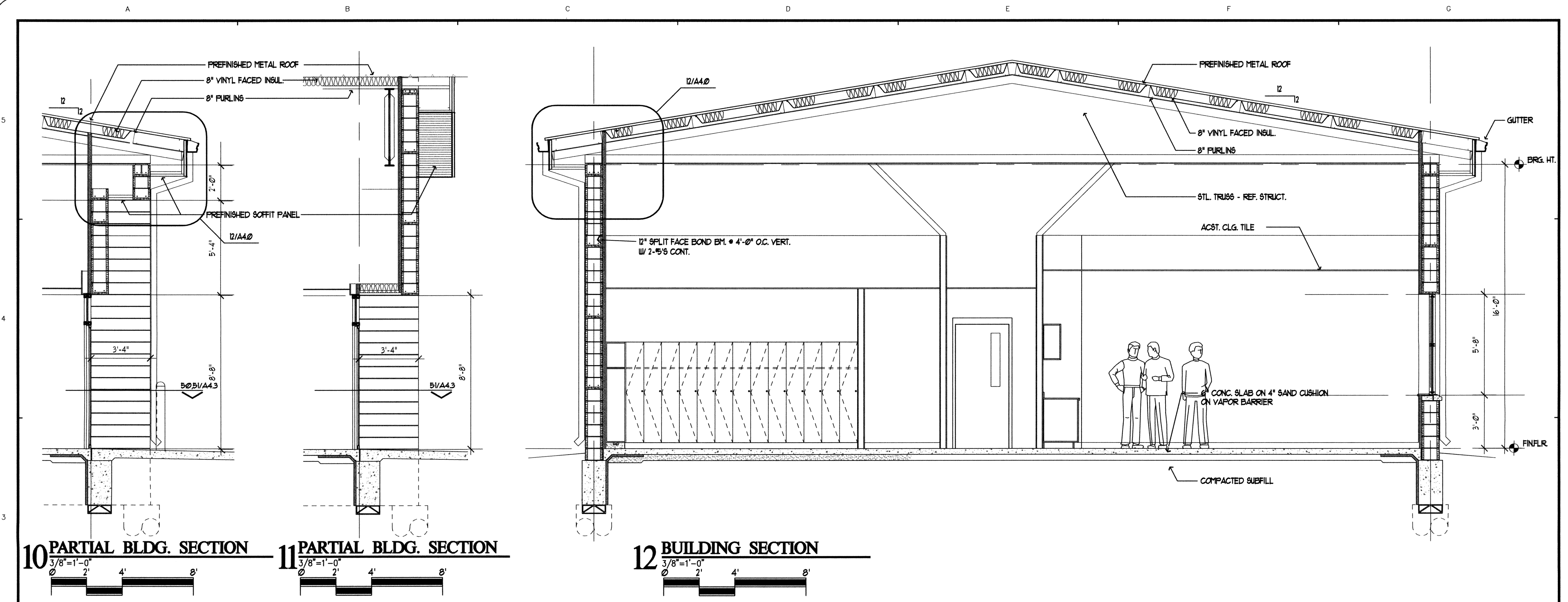
**EAGLE CONSULTANTS, INC.**  
CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088



RECORD DRAWINGS **A4.2**

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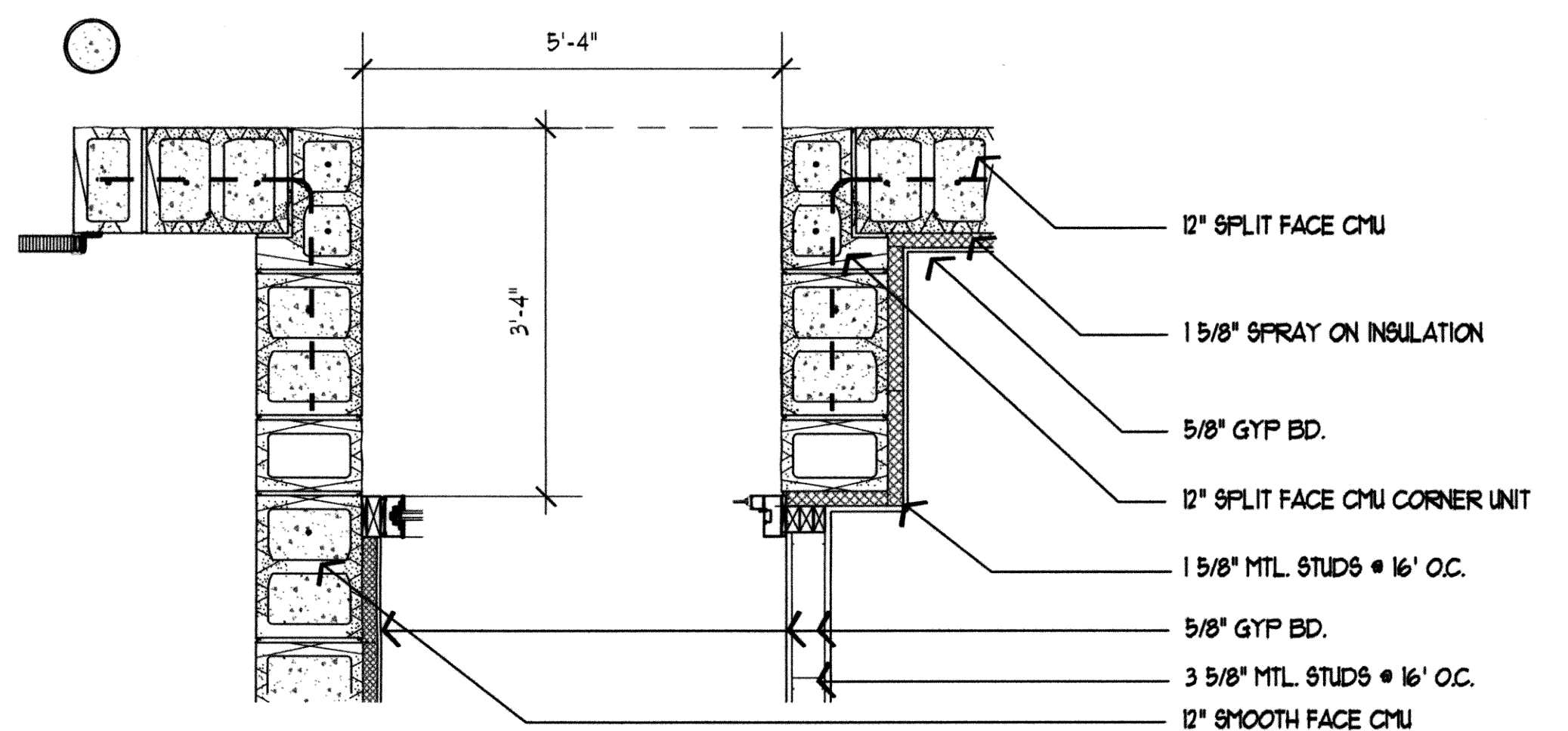
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		SD	SD	3/11/2010	AS SHOWN	25 OF 28



**10 PARTIAL BLDG. SECTION**

**11 PARTIAL BLDG. SECTION**

**12 BUILDING SECTION**



**50 PLAN DETAIL**

**51 PLAN DETAIL**

RECORD DRAWINGS



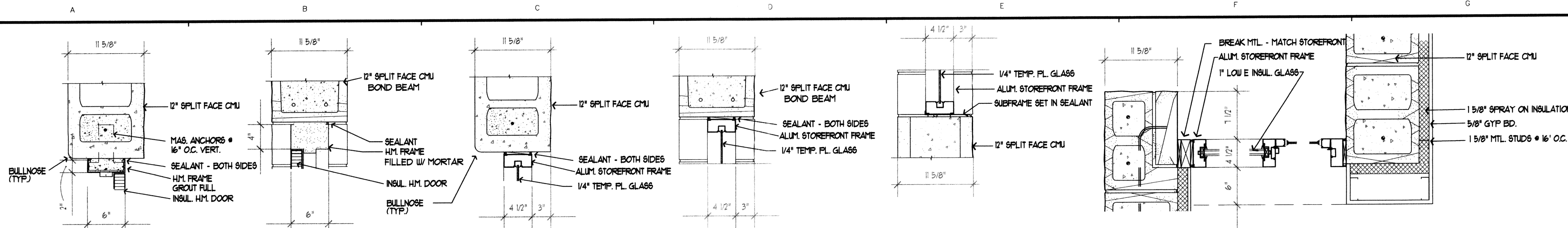
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DESIGNED BY:	CAD OPERATOR:	CHECKED: SD	APPROVED: SD	PLOT DATE: 3/11/2010	DWG. SCALE: AS SHOWN	SHEET: 26 OF 28	REVISIONS:	DATE:	EAGLE OFFICE CENTER 2803 SOUTH BRYANT EDMOND, OK. 73013 PH. (405) 844-3900 FAX. (405) 844-3900	<b>EAGLE CONSULTANTS, INC.</b> CIVIL AND ENVIRONMENTAL ENGINEERS CERTIFICATE OF AUTHORIZATION NO. CA2088
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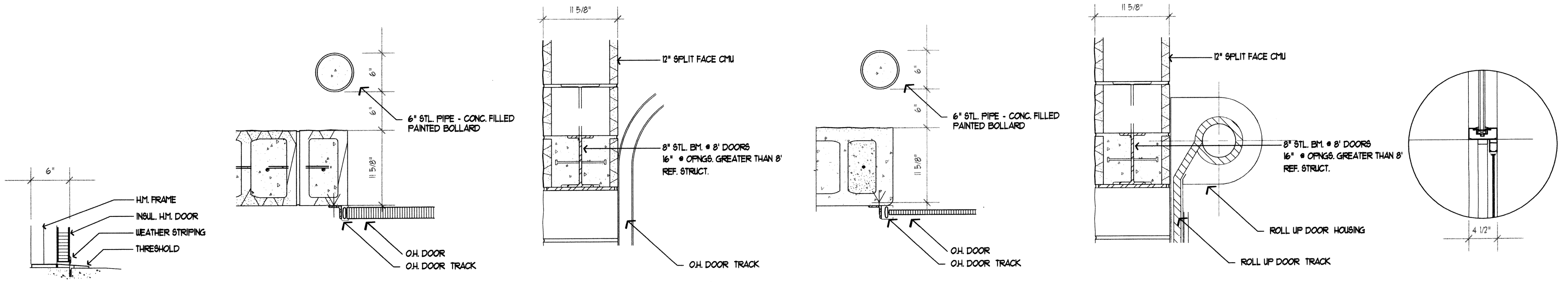
MAINTENANCE BUILDING

WASTEWATER TREATMENT SYSTEM IMPROVEMENTS, MOORE, OK

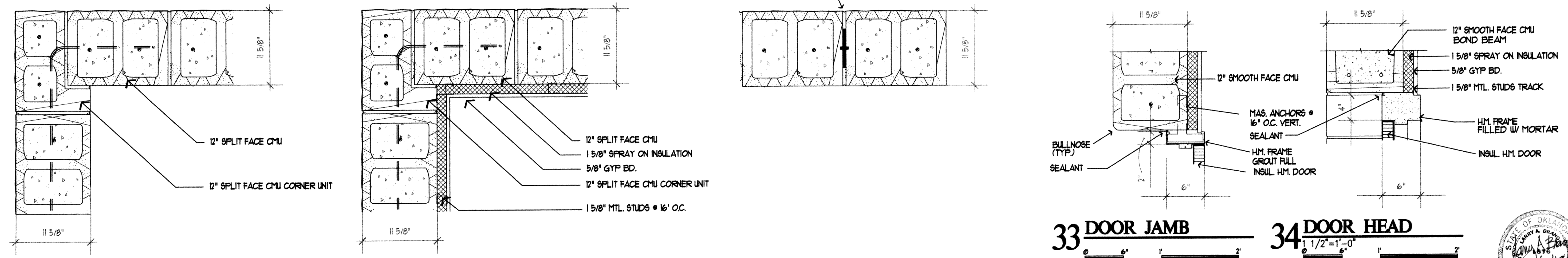
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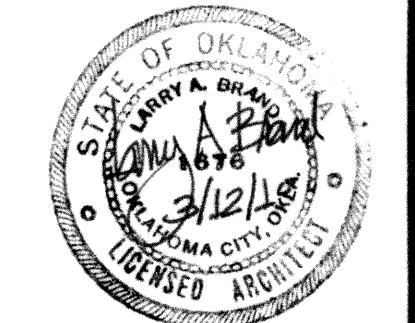
**10 DOOR JAMB**  $1\frac{1}{2}''=1'-0''$  **11 DOOR HEAD**  $1\frac{1}{2}''=1'-0''$  **12 WINDOW JAMB**  $1\frac{1}{2}''=1'-0''$  **13 WINDOW JAMB**  $1\frac{1}{2}''=1'-0''$  **14 WINDOW SILL**  $1\frac{1}{2}''=1'-0''$  **15 WINDOW JAMB**  $1\frac{1}{2}''=1'-0''$  **16 DOOR JAMB**  $1\frac{1}{2}''=1'-0''$



**20 DOOR SILL**  $1\frac{1}{2}''=1'-0''$  **21 O.H. DOOR JAMB**  $1\frac{1}{2}''=1'-0''$  **22 O.H. DOOR HEAD**  $1\frac{1}{2}''=1'-0''$  **23 ROLL UP DOOR JAMB**  $1\frac{1}{2}''=1'-0''$  **24 ROLL UP DOOR HEAD**  $1\frac{1}{2}''=1'-0''$  **25 DOOR HEAD**  $1\frac{1}{2}''=1'-0''$

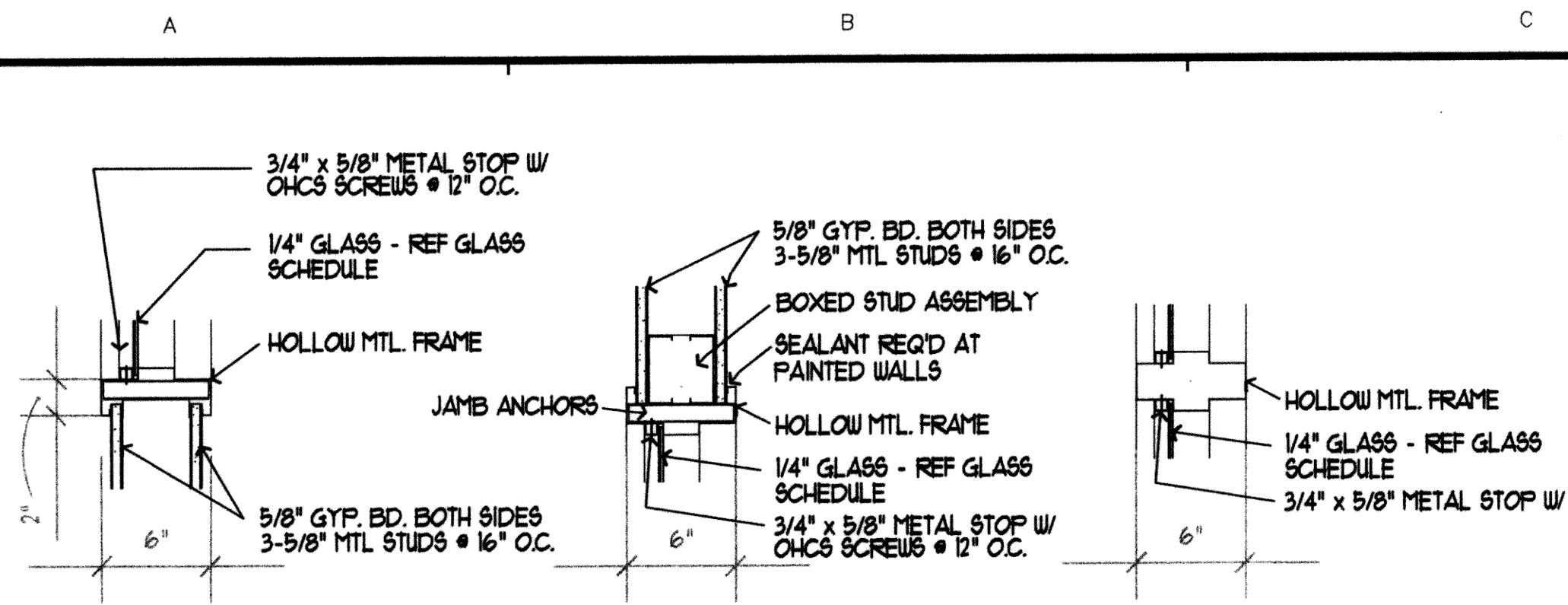


**30 PLAN DETAIL**  $1\frac{1}{2}''=1'-0''$  **31 PLAN DETAIL**  $1\frac{1}{2}''=1'-0''$  **32 CONTROL JOINT DETAIL**  $1\frac{1}{2}''=1'-0''$  **33 DOOR JAMB**  $1\frac{1}{2}''=1'-0''$  **34 DOOR HEAD**  $1\frac{1}{2}''=1'-0''$



RECORD DRAWINGS **A3.0**

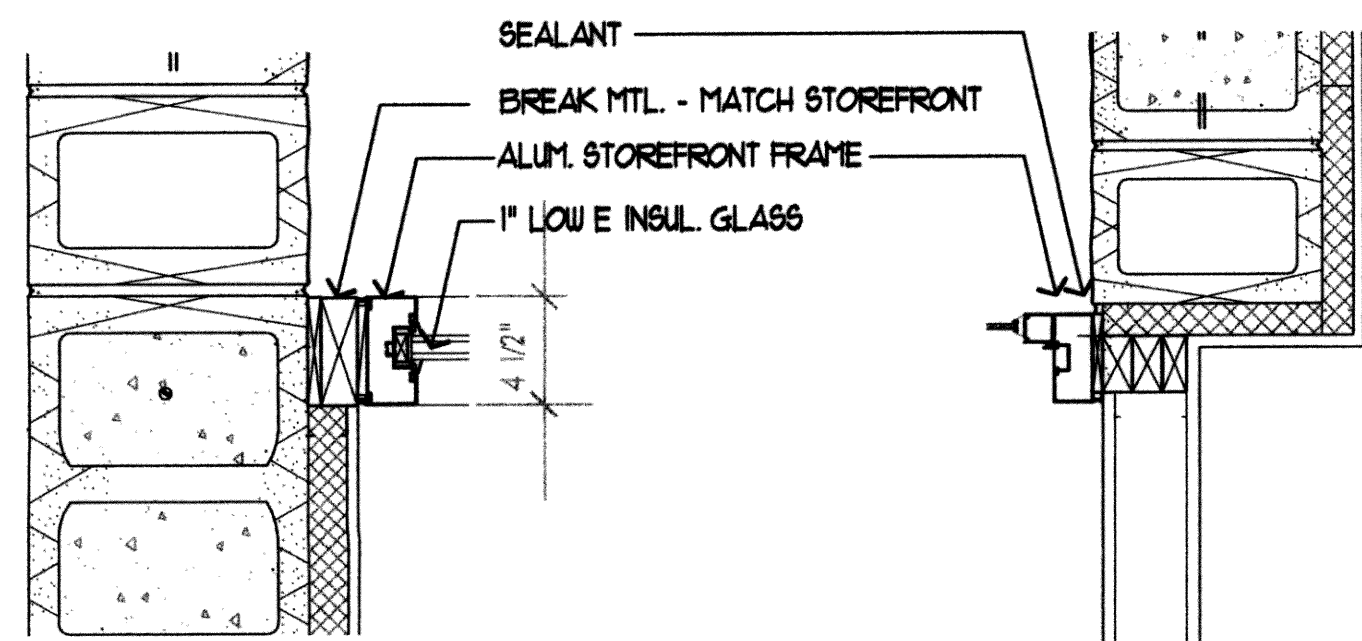
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**10 H.M. SILL**  
1 1/2" = 1'-0"

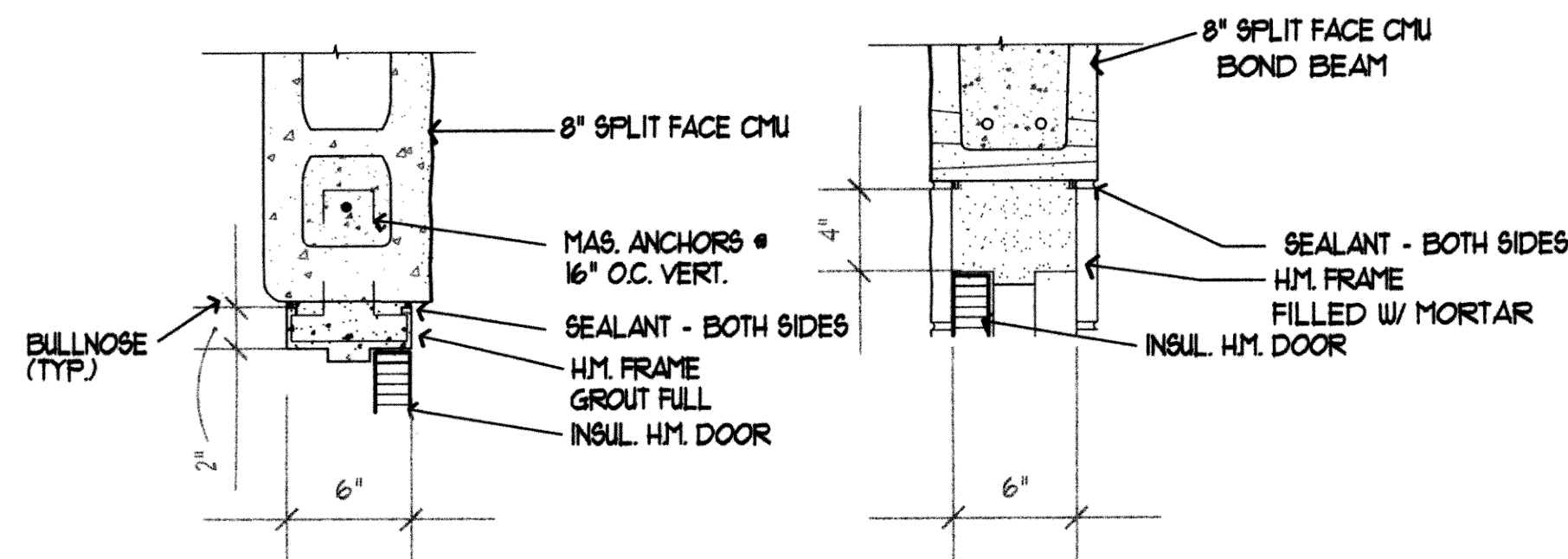
**11 H.M. HEAD**  
1 1/2" = 1'-0"

**12 H.M. MULLION**  
1 1/2" = 1'-0"



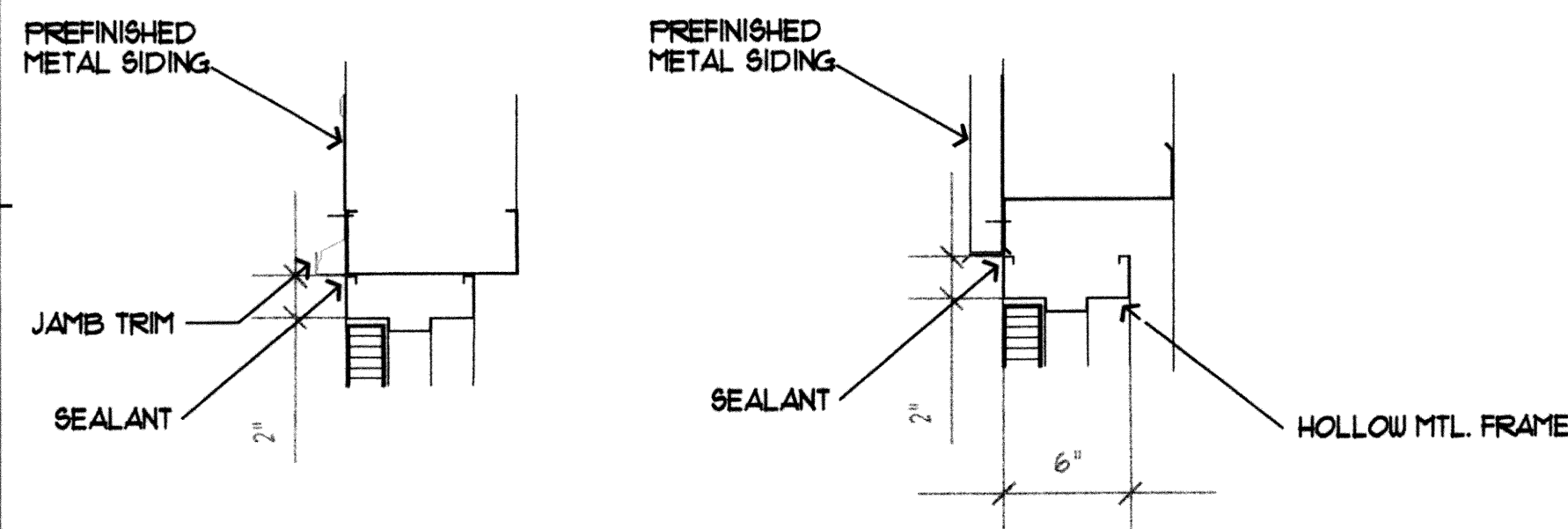
**20 WINDOW JAMB**  
1 1/2" = 1'-0"

**21 DOOR JAMB**  
1 1/2" = 1'-0"



**30 DOOR JAMB**  
1 1/2" = 1'-0"

**31 DOOR HEAD**  
1 1/2" = 1'-0"



**40 DOOR JAMB**  
1 1/2" = 1'-0"

**41 DOOR HEAD**  
1 1/2" = 1'-0"

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DESIGNED BY: CAD OPERATOR: CHECKED: SD APPROVED: SD PLOT DATE: 12/2/2009 DWG. SCALE: AS SHOWN SHEET: 28 OF 28

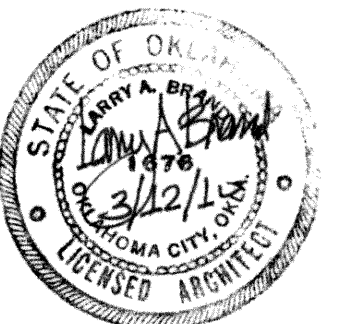
REVISIONS:	DATE:

**ARCHITECTURAL DETAILS**

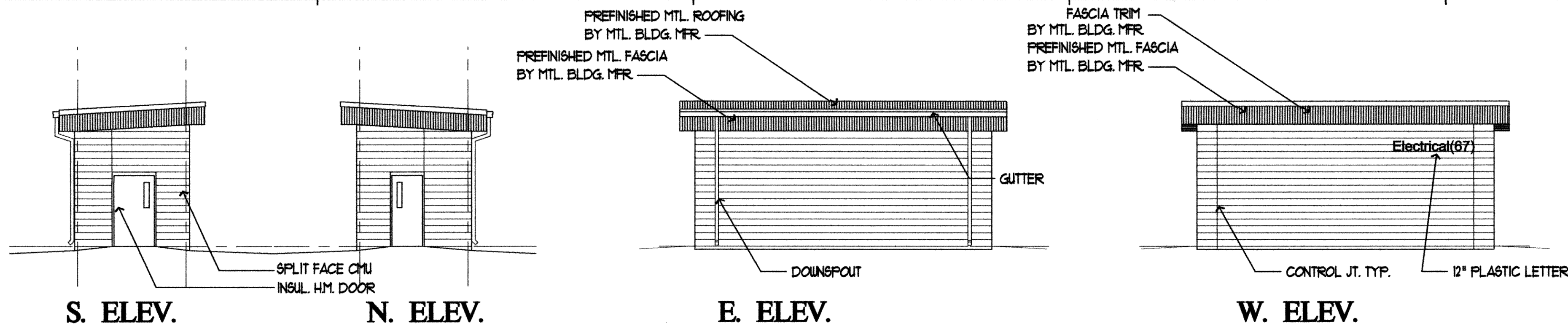
EAGLE OFFICE CENTER  
2803 SOUTH BRYANT  
EDMOND, OK. 73013  
PH. (405) 844-3900  
FAX. (405) 844-3600

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CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088

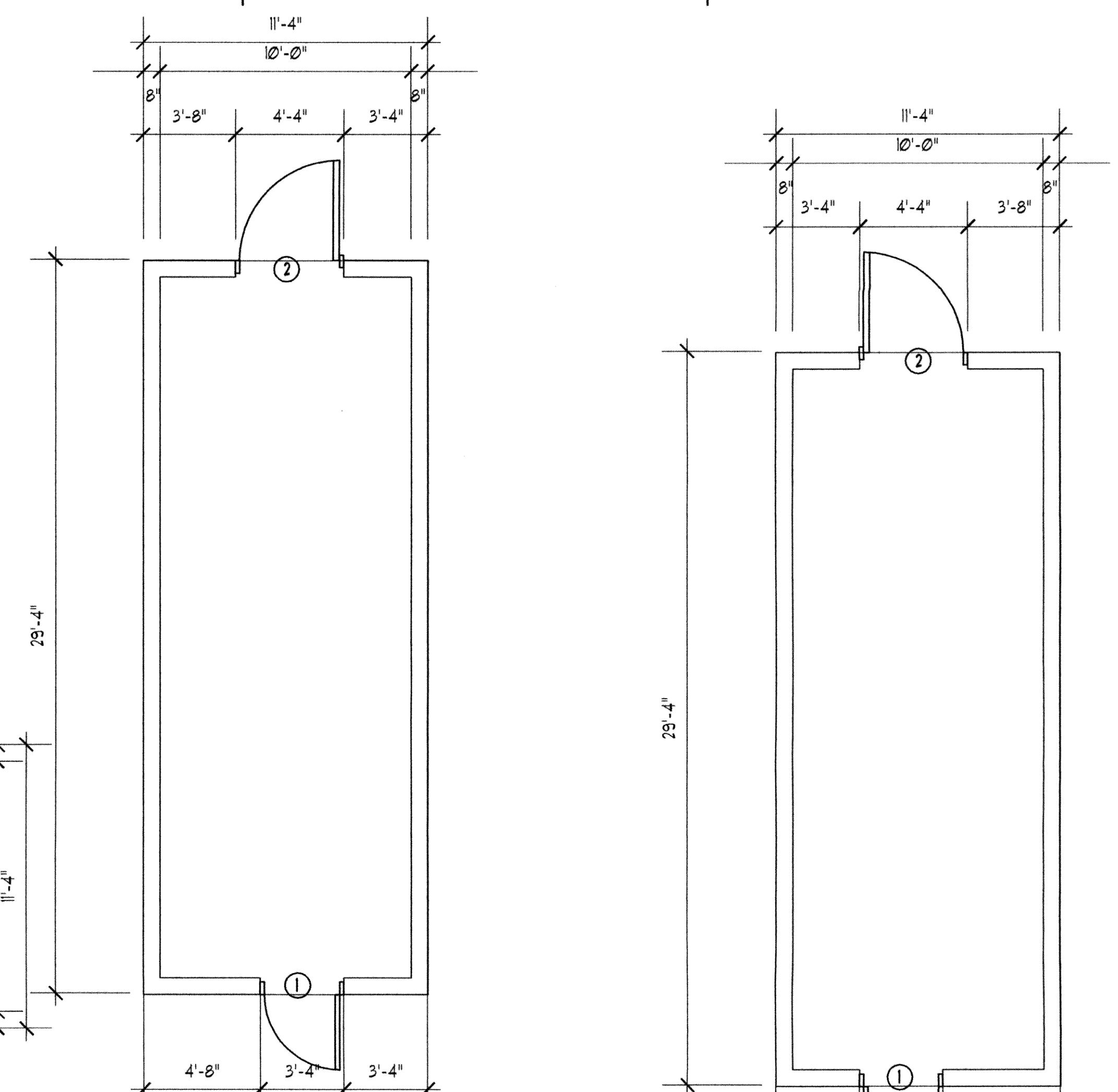
RECORD DRAWINGS



**A3.1**



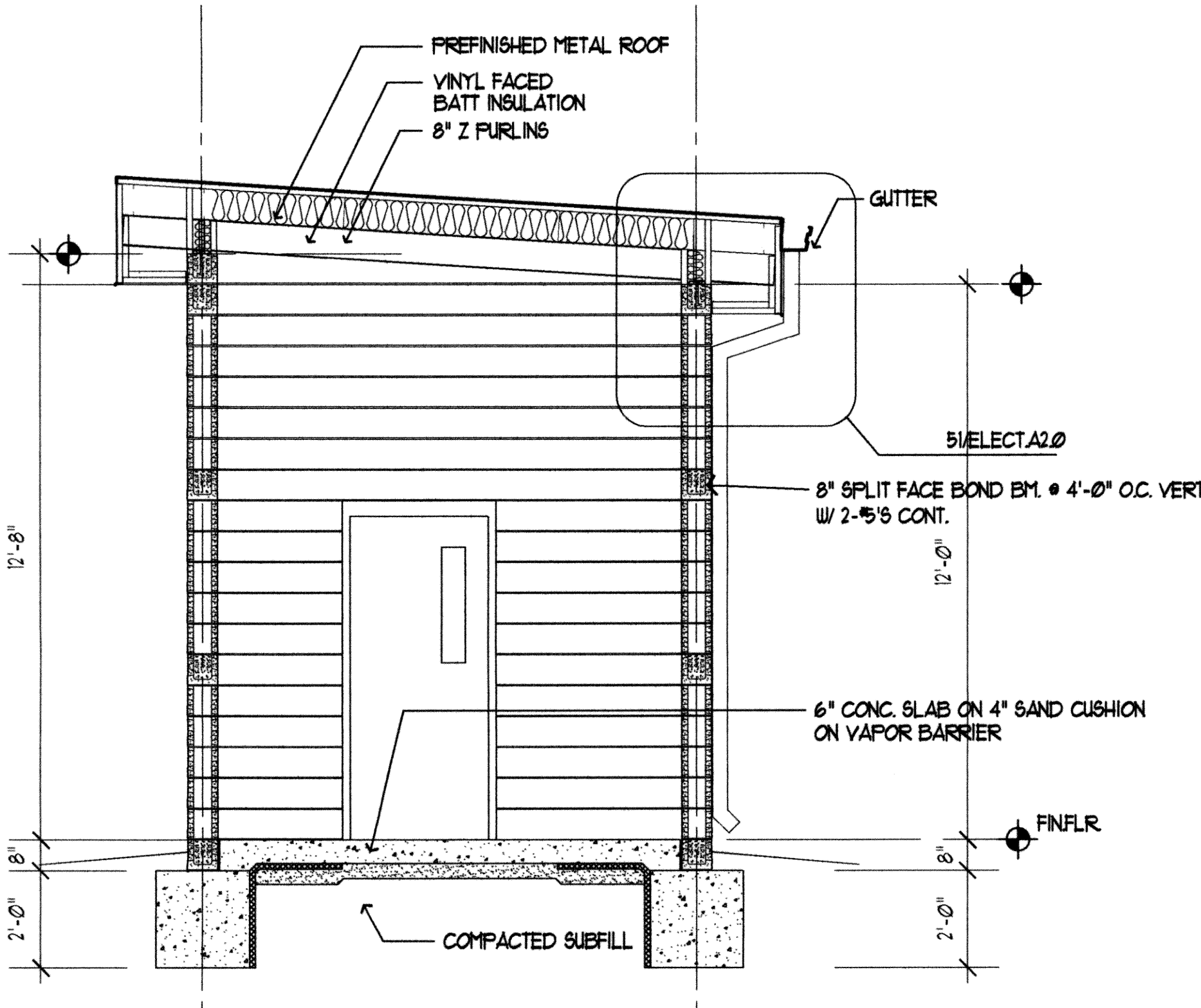
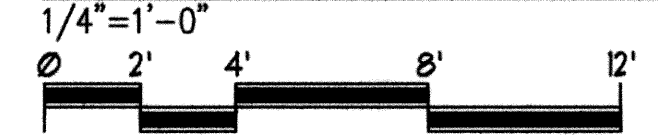
**ELEVATIONS: NORTH POND ELECTRICAL BUILDING**



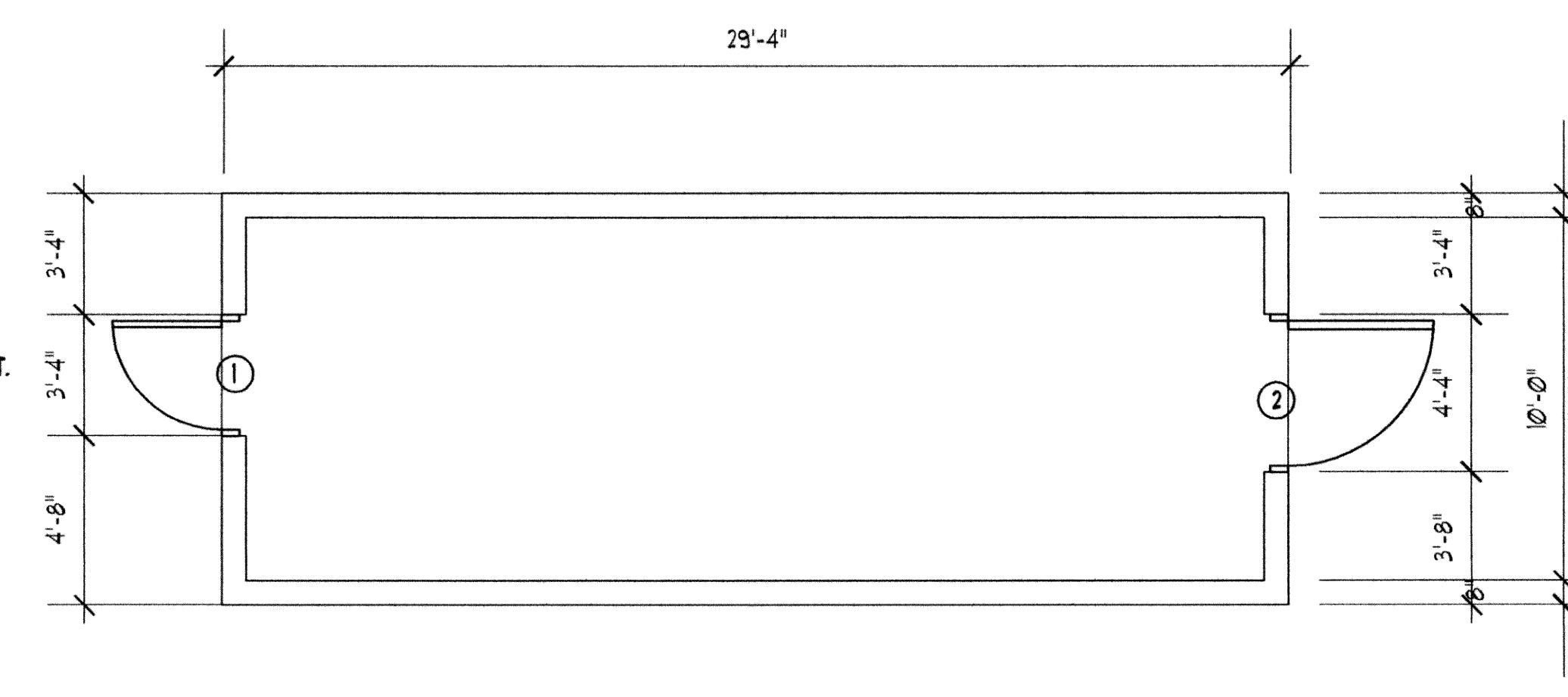
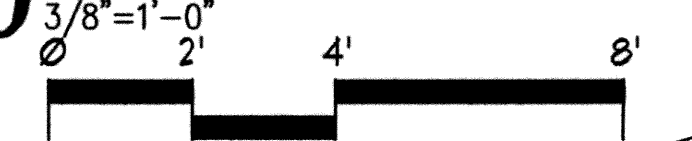
**FLOOR PLAN: NORTH POND ELECTRICAL BUILDING**



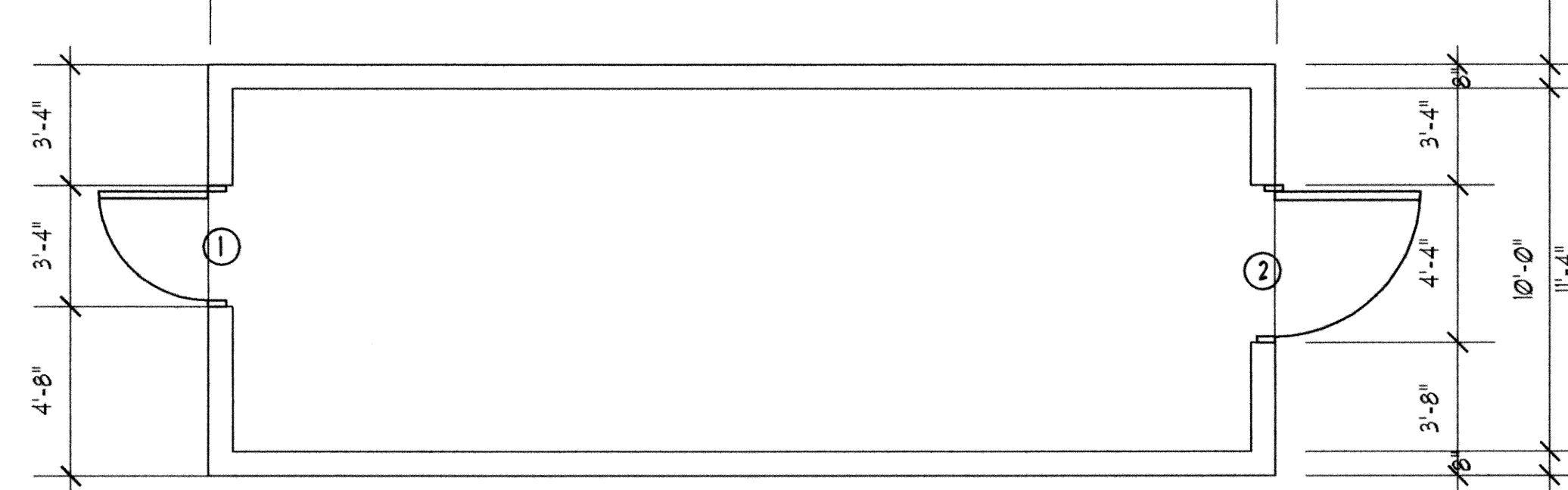
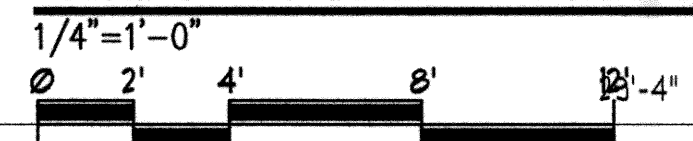
**FLOOR PLAN: NORTH SBR ELECTRICAL BUILDING**



**50 BUILDING SECTION**



**FLOOR PLAN: AD NORTH ELECTRICAL BUILDING**



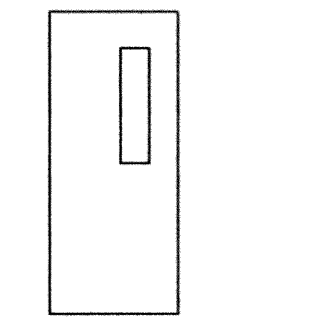
**FLOOR PLAN: AD SOUTH ELECTRICAL BUILDING**



**DOOR SCHEDULE**

DR	SIZE	TYPE	HEAD	JAMB	HRRDR SET	REMARKS
1	3'-0" X 7'-0" X 1 3/4"	A	3/A3	30/A3	01	
2	4'-0" X 7'-0" X 1 3/4"	A	3/A3	30/A3	02	

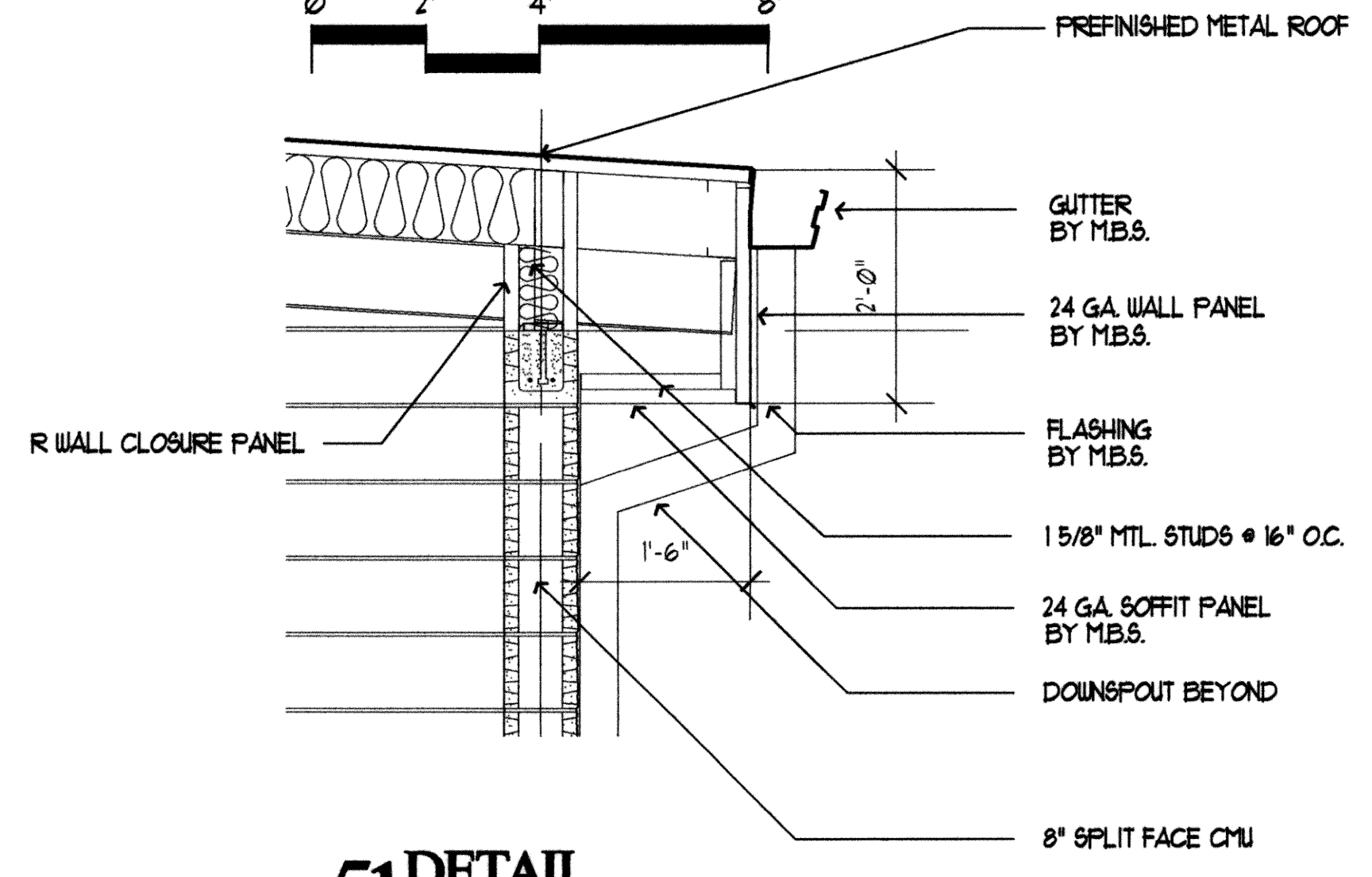
**DOOR TYPES**



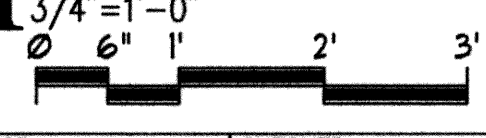
(A) INSUL. HM. W/ 6" X 30" TEMP. FL. GLASS

**GENERAL NOTES**

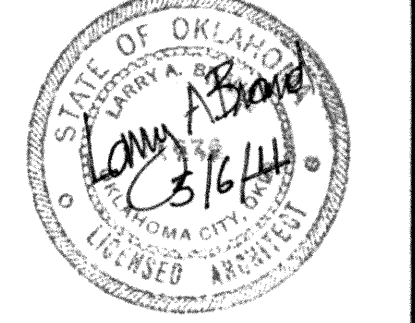
- 1. BUILDING USE U



**51 DETAIL**



RECORD DRAWINGS



**ELECTA2.0**

**EAGLE CONSULTANTS, INC.**  
CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088

**ELECTRICAL CONTROL BUILDING**  
N. POND, AD NORTH & SOUTH,  
SBR NORTH

EAGLE OFFICE CENTER  
2803 SOUTH BRYANT  
EDMOND, OK. 73013  
PH. (405) 844-3900  
FAX. (405) 844-3600

REVISIONS:	DATE:
C#13 - CLARIFICATION NO. 13	5/2/2011

DESIGNED BY:	CAD OPERATOR:	CHECKED:	APPROVED:	PLOT DATE:	DWG. SCALE:	SHEET:
		SD	SD	3/10/2010	AS SHOWN	5 OF 28

# VOLUME 6 MECHANICAL / ELECTRICAL SHEET INDEX



SHEET NO.	TITLE	
1	MECHANICAL/ELECTRICAL SHEET INDEX	
2	HEADWORKS HVAC PLANS	M-11
3	HEADWORKS HVAC DETAILS	M-12
4	SBR HVAC PLAN	M-21
5	SBR HVAC DETAILS	M-22
6	EFFLUENT L.S. HVAC DETAILS	M-31
7	DIGESTER HVAC DETAILS	M-41
8	DIGESTER HVAC DETAILS	M-42
9	BELT FILTER PRESS BUILDING HVAC DETAILS	M-51
10	ADMINISTRATION BUILDING HVAC DETAILS	M-61
11	ADMINISTRATION BUILDING PLUMBING DETAILS	M-62
12	MAINTENANCE BUILDING HVAC DETAILS	M-63
13	MAINTENANCE BUILDING PLUMBING DETAILS	M-64
14	ADMINMAINT. BUILDING PLUMBING DETAILS	M-65
15	RETURN AND EXISTING L.S. HVAC DETAILS	M-71
16	GENERAL ELECTRICAL NOTES	E-01
17	HEADWORKS LIGHTING PLAN	E-11
18	HEADWORKS POWER PLAN	E-12
19	HEADWORKS ENLARGED ELECTRICAL PLANS	E-13
20	HEADWORKS ONE LINE DIAGRAM	E-14
21	SITE LIGHTING PLAN	E-15
22	SBR LIGHTING PLAN	E-21
23	SBR POWER PLAN	E-22
24	SBR ENLARGED POWER PLANS	E-23

SHEET NO.	TITLE	
25	SBR SOUTH ONE LINE DIAGRAM	E-24
26	SBR NORTH ONE LINE DIAGRAM	E-25
27	SBR OCS ONE-LINE DIAGRAM	E-26
28	EFFLUENT / UV BUILDING LIGHTING PLAN	E-31
29	EFFLUENT UV BUILDING POWER PLAN	E-32
30	DIGESTER LIGHTING PLAN	E-41
31	DIGESTER POWER PLAN	E-42
32	DIGESTER ENLARGED ELECTRICAL PLANS	E-43
33	DIGESTER ONE-LINE DIAGRAM	E-44
34	DIGESTER OCS ONE-LINE DIAGRAM	E-45
35	DIGESTER AREA SITE PLAN	E-46
36	BELT FILTER PRESS BUILDING LIGHT PLAN	E-51
37	BELT FILTER PRESS BUILDING POWER PLAN	E-52
38	BELT FILTER PRESS BUILDING ONE-LINE DIAGRAM	E-53
39	ADMIN. / MAINT. BUILDINGS LIGHTING PLANS	E-61
40	ADMIN. / MAINT. BUILDINGS LIGHTING PLANS	E-62
41	ADMIN. / MAINT. BUILDINGS POWER PLANS	E-63
42	ADMIN. / MAINT. BUILDINGS POWER PLANS	E-64
43	ADMIN. / MAINT. BUILDINGS ELECTRICAL SCHEDULES	E-65
44	RETURN LIGHTING PLAN	E-71
45	RETURN POWER PLAN	E-72
46	RETURN ELECTRICAL DETAILS	E-73
47	EXISTING FACILITIES ELECTRICAL DETAILS	E-81
48	SECURITY PLAN DETAILS	

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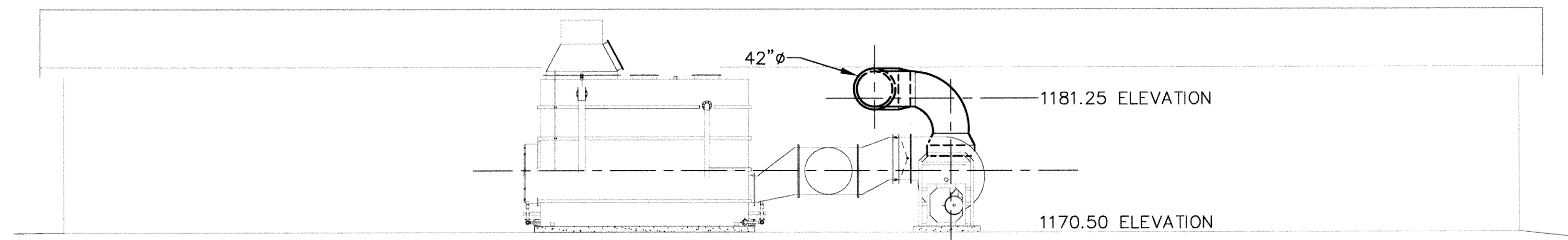
REVISIONS:	DATE:

**VOLUME 6  
MECHANICAL / ELECTRICAL  
SHEET INDEX**

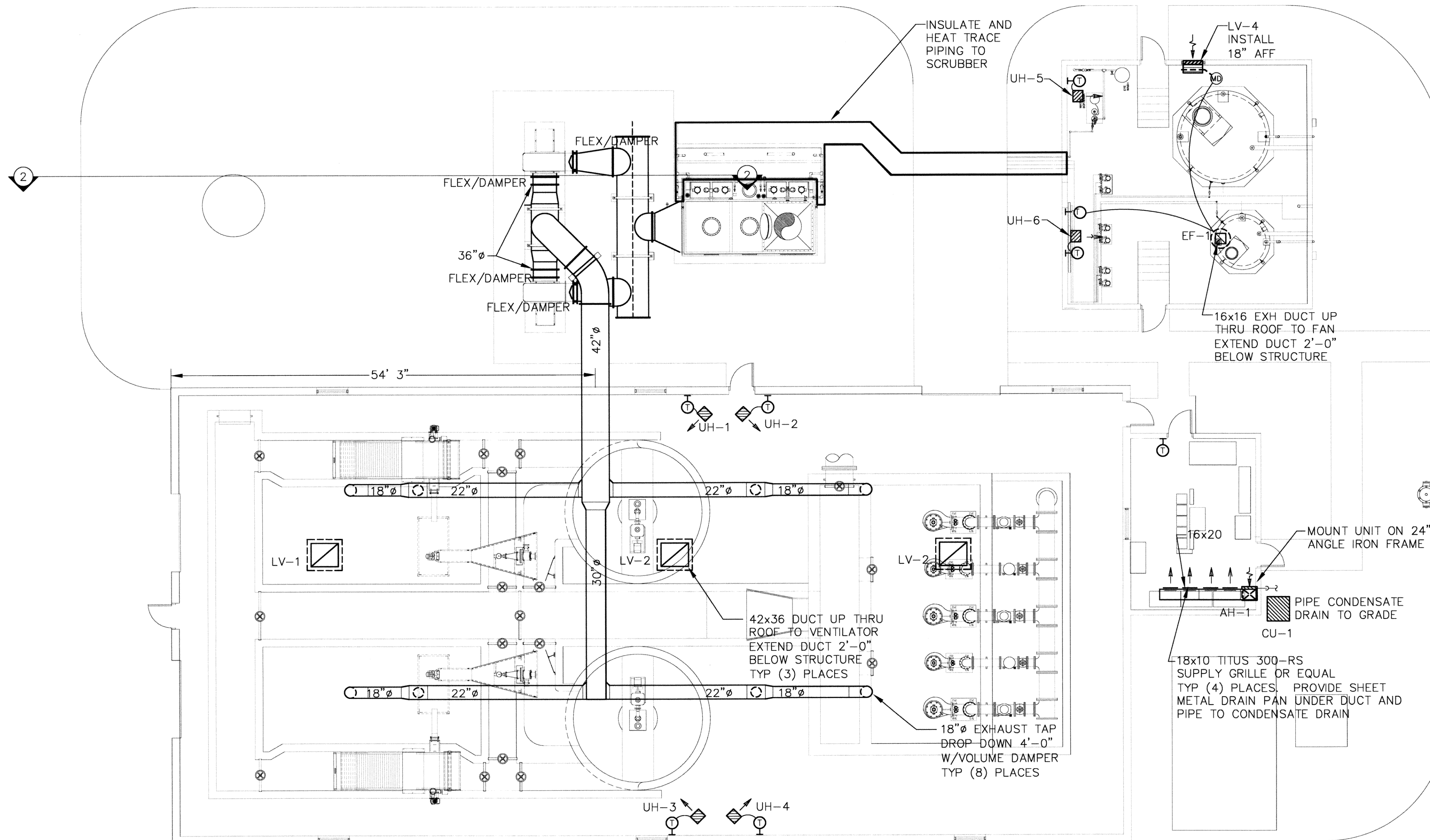
EAGLE OFFICE CENTER  
2803 SOUTH BRYANT  
EDMOND, OK. 73013  
PH. (405) 844-3900  
FAX. (405) 844-3600

**EAGLE CONSULTANTS, INC.**  
CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088

**WASTEWATER TREATMENT SYSTEM IMPROVEMENTS, MOORE, OK**



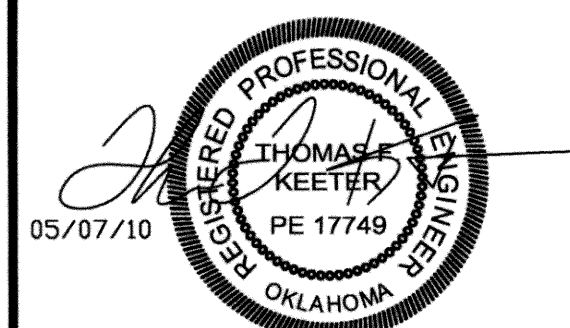
2 WEST ELEVATION  
1/16" = 1'-0"



1 HEADWORKS HVAC PLAN  
1/8" = 1'-0"

RECORD DRAWINGS

◀ N M-11



Thomas F. Keeter, PE# 17749  
TFK Engineering, Inc.  
Co/FA# 5206 exp 6/2011

REVISIONS:	DATE:

HEADWORKS HVAC PLANS

EAGLE OFFICE CENTER  
2803 SOUTH BRYANT  
EDMOND, OK. 73013  
PH. (405) 844-3900  
FAX. (405) 844-3600

**EAGLE CONSULTANTS, INC.**  
CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088

DESIGNED BY:	CAD OPERATOR:	CHECKED: SD	APPROVED: SD	PLOT DATE:	DWG. SCALE: AS SHOWN	SHEET: 2 OF 48
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**GENERAL NOTES:**

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2006 INTERNATIONAL MECHANICAL CODE, IN JUNCTION WITH LOCAL AMENDMENTS.
2. ALL THERMOSTATS SHALL BE SUPPLIED BY THE MECH CONTRACTOR. THE ELEC CONTRACTOR SHALL FURNISH AND INSTALL THE NECESSARY CONDUIT, WIRE, BOXES, ETC. FOR THE THERMOSTATS. THE MECH CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND CONNECTION OF THERMOSTATS.
3. INSTALL DUCTWORK AND SUPPORTS PER SMACNA STANDARDS AND FIBERGLASS DUCT MANUFACTURER'S RECOMMENDATIONS.
4. PROVIDE EXPANSION JOINTS WHERE RECOMMENDED BY FRP DUCT MFR.
5. DUCT SIZES NOTED ARE NET FREE AREA.

**SPLIT SYSTEM EQUIPMENT SCHEDULE**

AIR HANDLER													CONDENSING UNIT												
MARK	MANUFACTURER MODEL	NOMINAL COOLING CAPACITY (MBH)	SUPPLY (CFM)	O/A (CFM)	E.S.P. (w.c.)	HP	VOLTS	Φ HZ	CAP. (KW)	VOLTS	Φ HZ	AMPS	MCA	MOCP	OPTIONS/ACCESSORIES	MARK	MANUFACTURER MODEL	SEER	VOLTS	Φ HZ	MCA	MOCP	FAN MTR HP	FLA	OPTIONS/ACCESSORIES
AH-1	TRANE 4TEH3F48	48	1600	25	0.40"	3/4	230/1/60	4.8	240/1/60	20	33	35	4.			CU-1	TRANE 4TWA3048A3	13.0	200/230 3 60	21	35	1/4	1.3	1. 2. 3. 5. 6.	

**OPTIONS/ACCESSORIES:**  
 1. ANTI-SHORT CYCLE TIMER  
 2. REFRIGERANT LINESET, SIZED & INSTALLED PER MFR'S RECOMMENDATIONS  
 3. INDOOR FAN DELAY KIT  
 4. HEAT/COOL THERMOSTAT  
 5. EVAPORATOR DEFROST CONTROL  
 6. LOW AMBIENT KIT

**NOTE:**  
AIR HANDLER IS VERTICAL UPFLOW CONFIGURATION.

**NOTES:**  
COORDINATE EXACT LOCATION OF CONDENSING UNITS WITH OWNER. ROUTE REFRIGERANT PIPING THRU WALL TO UNIT. PROVIDE WEATHER PROOF SLEEVE AT WALL PENETRATION. PROVIDE CONCRETE EQUIPMENT BASE FOR CONDENSING UNIT.

**ELECTRIC UNIT HEATER SCHEDULE**

MARK	MANUFACTURER MODEL NO.	CFM	VOLTS	PH	AMPS	HEATING CAP. (kW)	MOUNTING HEIGHT (MINIMUM)	FAN MOTOR				
								HP	VOLTS	PH	AMPS	
UH-1 UH-2 UH-3 UH-4	QMARK JUV1000483TLS	700	480	3	12.0	10.0	7'-0"	1/4	480	1	60	0.3
UH-5 UH-6	QMARK JUV750483TLS	485	480	3	9.0	7.5	7'-0"	1/4	480	1	60	0.3

**NOTES:**  
 1. PROVIDE W/THERMOSTAT KIT AND POWER DISCONNECT SWITCH; FACTORY INSTALLED.  
 2. EPOXY COATING.

**VENTILATOR SCHEDULE**

MARK	MANUFACTURER MODEL NO.	SIZE	F/A SQ FT	CFM	S.P. IN. WC	ACCESSORIES
LV-1 LV-2 LV-3	COOK TRE-36X42X10TR	36 X 42	26.42	6667	.098"	1. 2. 3. 4.
LV-4	RUSKIN EMES20DD	36 X 24	2.28	1250	.100"	3. 4. * NOTE

\* NOTE: PROVIDE MOTORIZED DAMPER INTERLOCKED WITH EF-1, SET TO OPEN WHEN FAN IS ON.

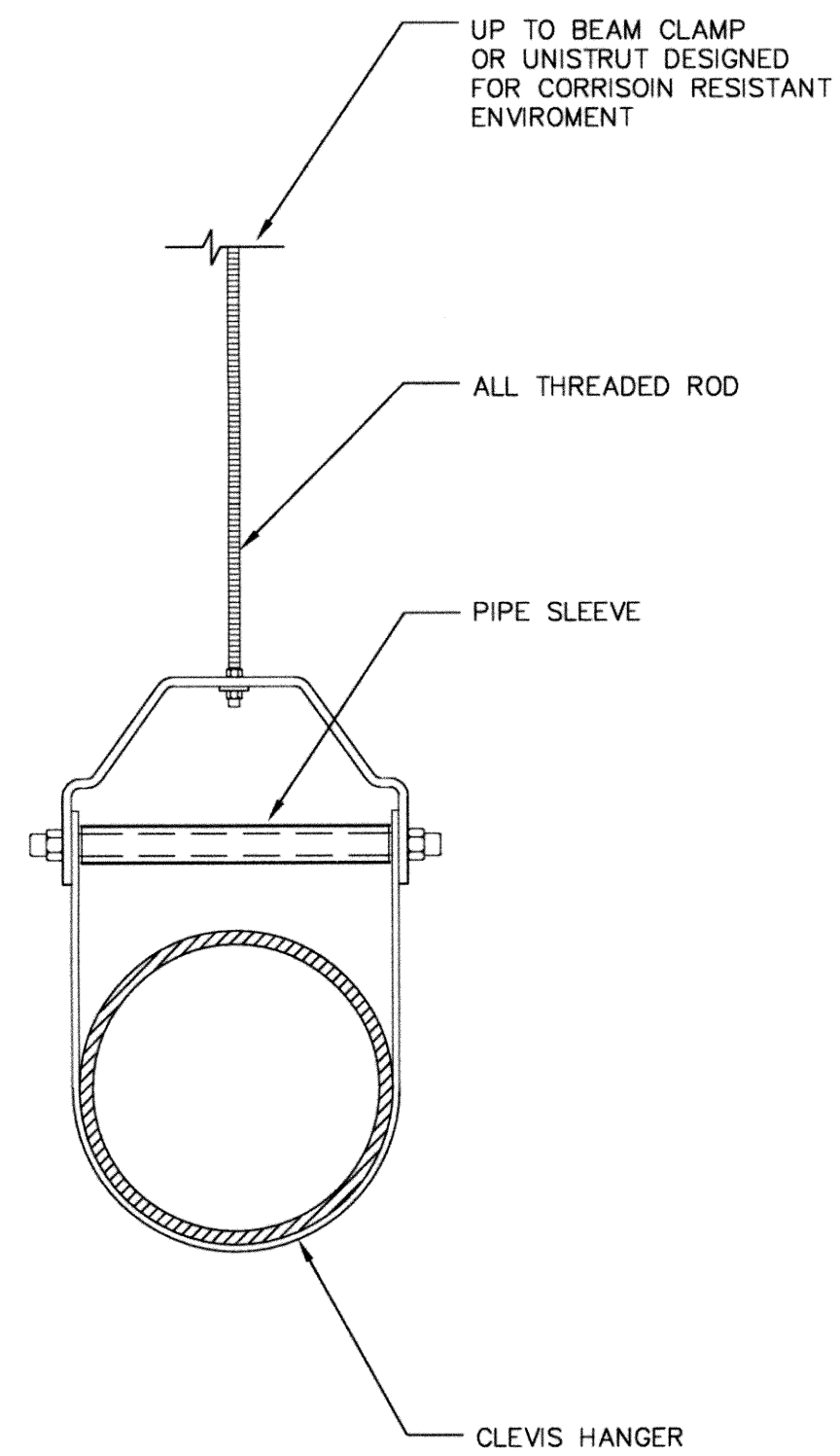
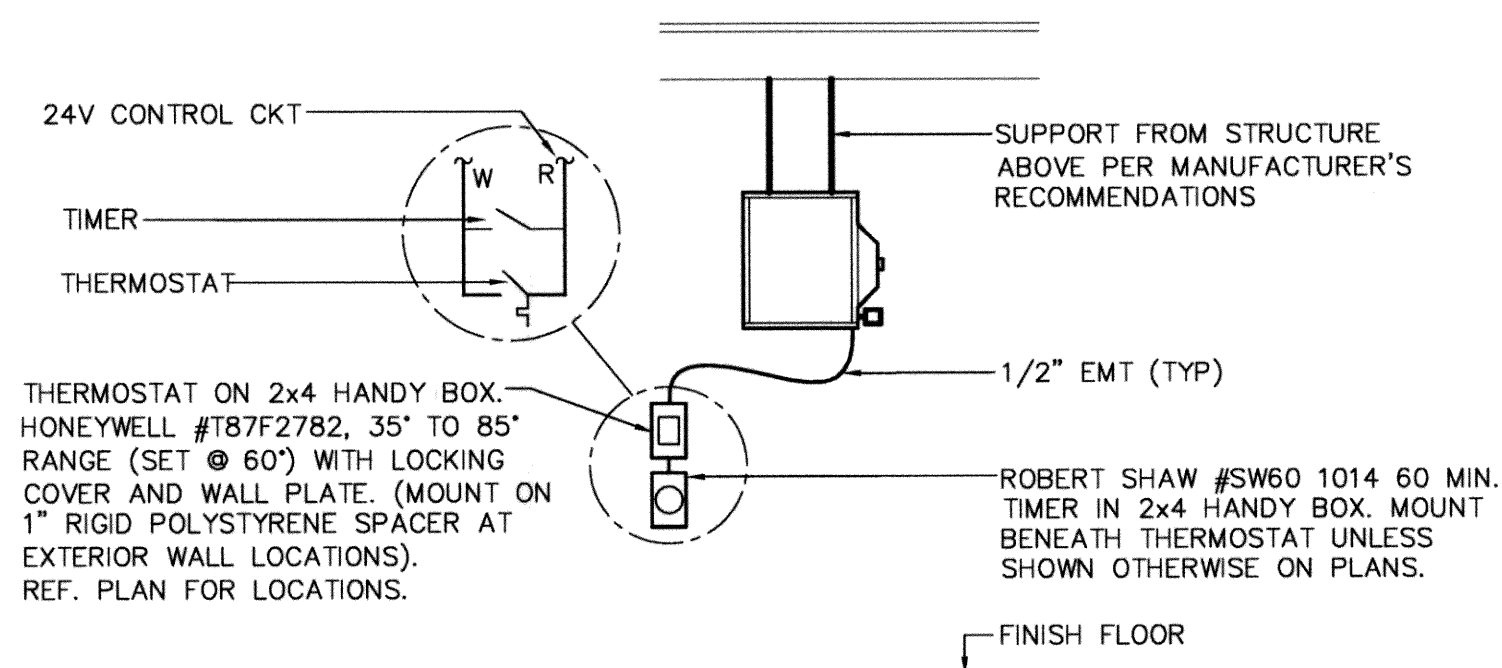
**ACCESSORIES:**  
 1. INTAKE BACKDRAFT DAMPER  
 2. ALUMINUM ROOF CURB  
 3. ALUMINUM BIRDSCREEN  
 4. EPOXY POWDER COAT

**EXHAUST FAN SCHEDULE**

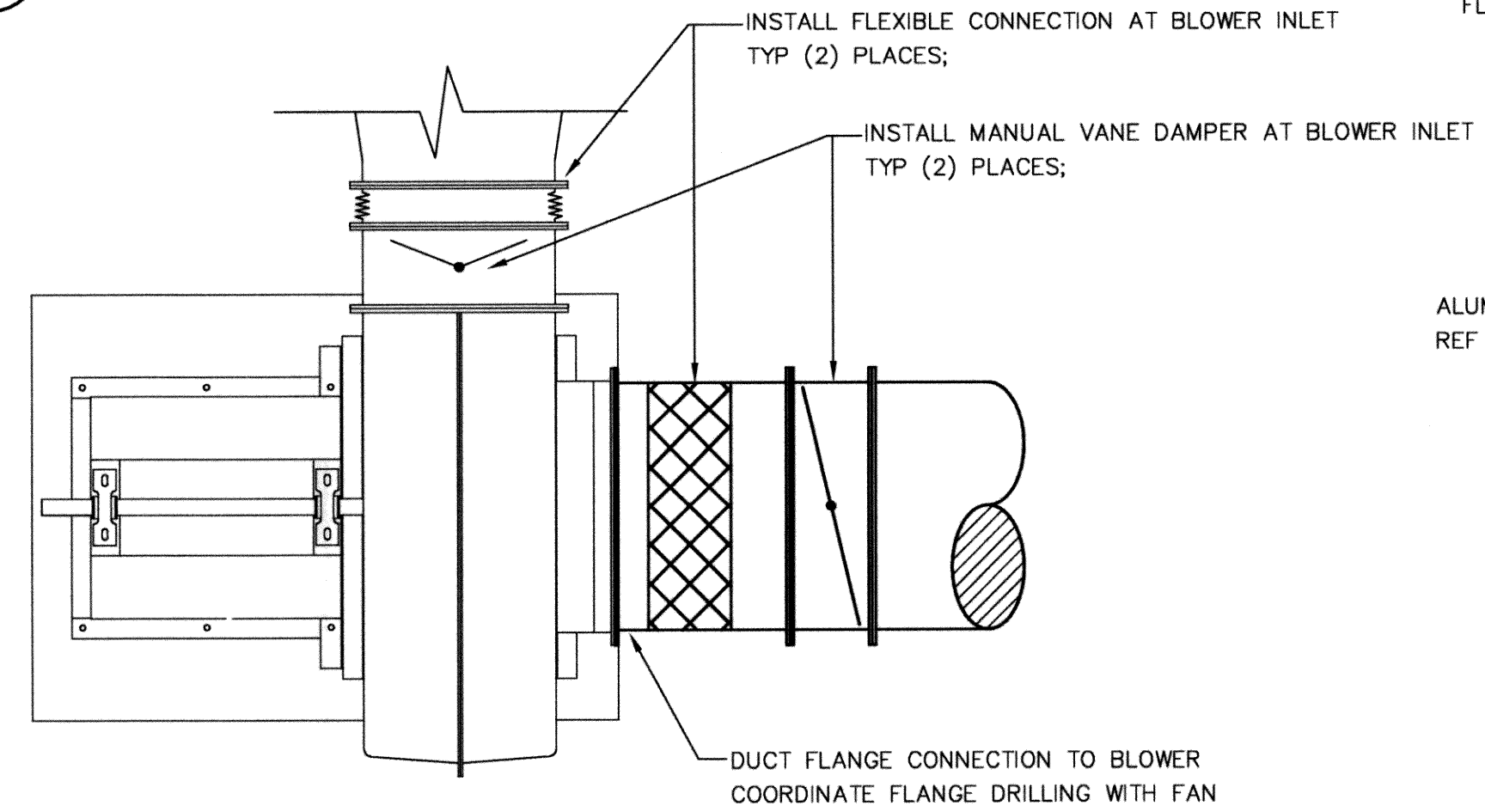
MARK	MANUFACTURER MODEL NO.	CFM	ESP	DRIVE	MOTOR		
					WATTS	HP	VOLT
EF-1	COOK 13S ACRUB	1000	.375"	BELT	--	1/6	120

**ACCESSORIES:**  
 1. GRAVITY BACKDRAFT DAMPER  
 2. ALUMINUM ROOF CURB  
 3. DAMPER TRAY  
 4. EPOXY POWDER COAT  
 5. DISCONNECT SWITCH W/NEMA 3R ENCLOSURE

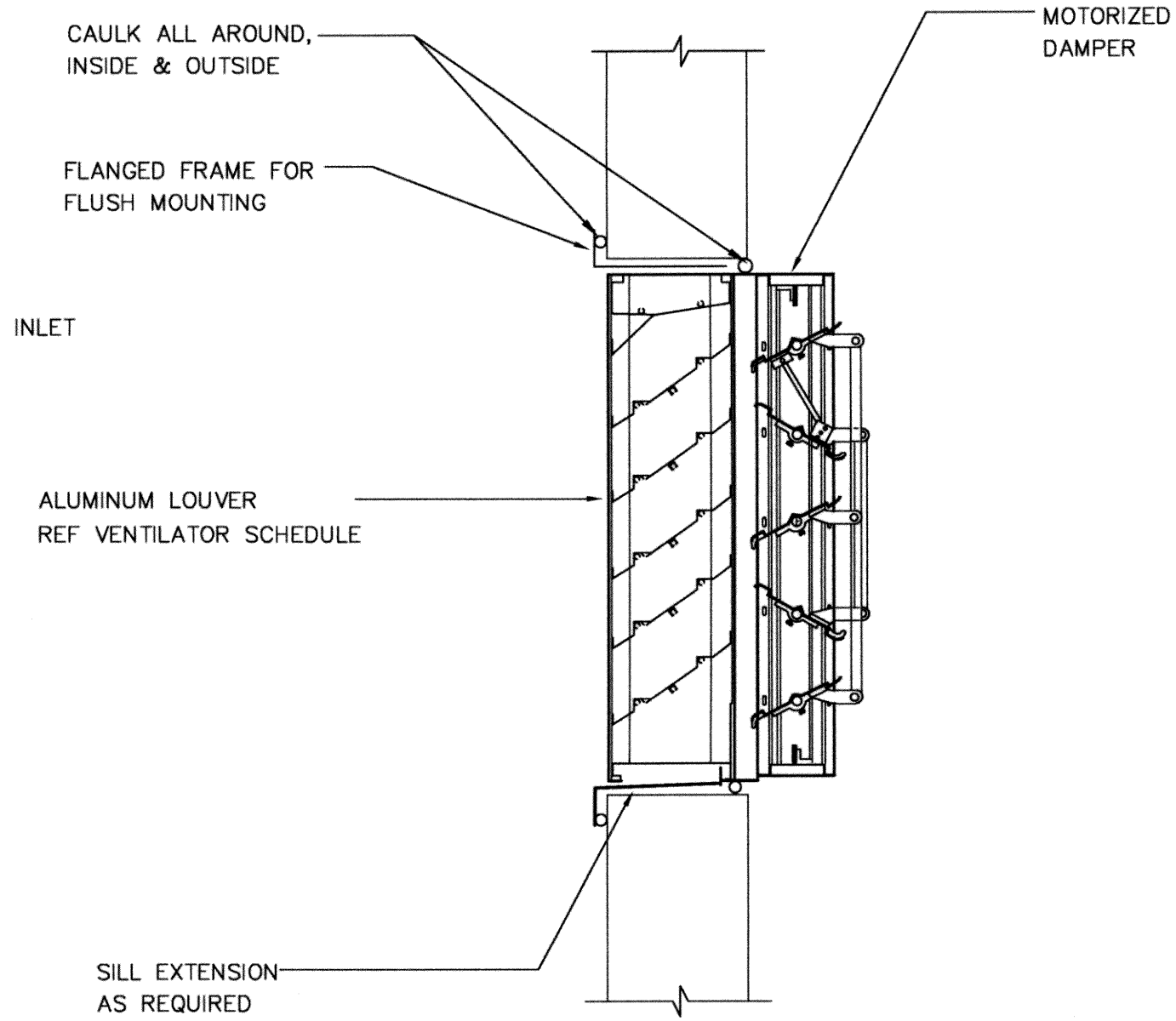
**CONTROLS:**  
 A. INTERLOCK WITH T-STAT  
 B. WALL SWITCH



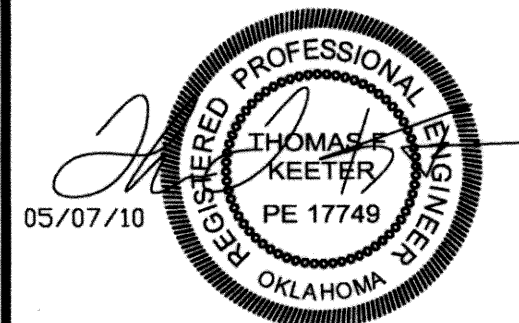
**D ELECTRIC UNIT HEATER**  
N.T.S.



**B CONNECTION AT BLOWER**  
N.T.S.



**A WALL LOUVER W/DAMPER**  
N.T.S.



**C HANGER DETAIL**  
N.T.S.

RECORD DRAWINGS

M-12

DESIGNED BY:	CAD OPERATOR:	CHECKED: SD	APPROVED: SD	PLOT DATE:	DWG. SCALE: AS SHOWN	SHEET: 3 OF 48	REVISIONS:	DATE:	HEADWORKS HVAC DETAILS	EAGLE OFFICE CENTER 2803 SOUTH BRYANT EDMOND, OK. 73013 PH. (405) 844-3900 FAX. (405) 844-3600	EAGLE CONSULTANTS, INC. CIVIL AND ENVIRONMENTAL ENGINEERS CERTIFICATE OF AUTHORIZATION NO. CA2088
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NOTE: MAINTAIN 6'-8" CLEARANCE ABOVE CATWALK

2 WEST ELEVATION  
1/16" = 1'-0"

INSTALL DUCTWORK HEADER, FITTINGS, AND BLOWERS FOR COLLECTION PROVIDED BY ODOR CONTROL EQUIPMENT SUPPLIER. COORDINATE WITH EQUIPMENT SUPPLIER AND PROVIDE PER VENDOR REQUIREMENTS.

INSULATE AND HEAT TRACE PIPING IN THIS AREA, REFER TO ODOR CONTROL SYSTEM PIPING

PROVIDE MANUAL VANE DAMPER & FLEXIBLE CONNECTION AT BOTH SIDES OF BLOWER; TYP (6) PLCS; REF BLOWER CONN. DETAIL

REF "CHEMICAL ROOM HVAC" ENLARGED PLAN CU-7 AH-7

12x12 EXH DUCT UP THRU ROOF TO FAN EXTEND DUCT 2'-0" BELOW STRUCTURE

16x16 TITUS 300-RS SUPPLY GRILLE OR EQUAL

12x10 TITUS 300-RS SUPPLY GRILLE OR EQUAL

COND UNIT

PIPE CONDENSATE DRAIN TO GRADE MOUNT UNIT ON 24"H ANGLE IRON FRAME

REF "CHEMICAL ROOM HVAC" ENLARGED PLAN (SIMILAR)

3 CHEMICAL ROOM HVAC  
N.T.S.

1 SBR HVAC PLAN  
1/16" = 1'-0"



Thomas F. Keeter, PE# 17749  
TFK Engineering, Inc.  
Co/FA# 5206 exp 6/2011

REVISIONS:	DATE:

SBR HVAC PLAN

EAGLE OFFICE CENTER  
2803 SOUTH BRYANT  
EDMOND, OK. 73013  
PH. (405) 844-3900  
FAX. (405) 844-3600

RECORD DRAWINGS M-21  
**EAGLE CONSULTANTS, INC.**  
CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088

DESIGNED BY:	CAD OPERATOR:	CHECKED:	APPROVED:	PLOT DATE:	DWG. SCALE:	SHEET:
		SD	SD		AS SHOWN	4 OF 48

**GENERAL NOTES:**

- ALL WORK SHALL BE IN ACCORDANCE WITH THE 2006 INTERNATIONAL MECHANICAL CODE, IN JUNCTION WITH LOCAL AMENDMENTS.
- ALL THERMOSTATS SHALL BE SUPPLIED BY THE MECH CONTRACTOR. THE ELEC CONTRACTOR SHALL FURNISH AND INSTALL THE NECESSARY CONDUIT, WIRE, BOXES, ETC. FOR THE THERMOSTATS. THE MECH CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND CONNECTION OF THERMOSTATS.
- INSTALL DUCTWORK AND SUPPORTS PER SMACNA STANDARDS AND FIBERGLASS DUCT MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE EXPANSION JOINTS WHERE RECOMMENDED BY FRP DUCT MFR.
- DUCT SIZES NOTED ARE NET FREE AREA.

**SPLIT SYSTEM EQUIPMENT SCHEDULE**

AIR HANDLER														CONDENSING UNIT												
MARK	MANUFACTURER MODEL	NOMINAL COOLING CAPACITY (MBH)	SUPPLY (CFM)	O/A (CFM)	E.S.P. (w.c.)	BLOWER MOTOR		ELECTRIC HEATER				OPTIONS/ACCESSORIES	MARK	MANUFACTURER MODEL	SEER	VOLTS	MCA	MOCP	FAN MTR	OPTIONS/ACCESSORIES						
						HP	VOLTS	φ	HZ	CAP. (KW)	VOLTS	φ	HZ	AMPS	MCA	MOCP	HP	FLA	1.	2.	3.	5.	6.			
AH-5 AH-6 AH-7	TRANE 4TEH3F30	30	1000	25	0.40"	1/3	230/1/60	4.8	240/1/60	20	29	30	4.	CU-5 CU-6 CU-7	TRANE 2TWA3048A4	13.0	460 3 60	9	15	1/5	0.7	1.	2.	3.	5.	6.
<b>OPTIONS/ACCESSORIES:</b> 1. ANTI-SHORT CYCLE TIMER 2. REFRIGERANT LINESET, SIZED & INSTALLED PER MFR'S RECOMMENDATIONS 3. INDOOR FAN DELAY KIT 4. HEAT/COOL THERMOSTAT 5. EVAPORATOR DEFROST CONTROL 6. LOW AMBIENT KIT														<b>NOTE:</b> AIR HANDLER IS HORIZONTAL RIGHT CONFIGURATION.						<b>NOTES:</b> COORDINATE EXACT LOCATION OF CONDENSING UNITS WITH OWNER. ROUTE REFRIGERANT PIPING THRU WALL TO UNIT. PROVIDE WEATHER PROOF SLEEVE AT WALL PENETRATION. PROVIDE CONCRETE EQUIPMENT BASE FOR CONDENSING UNIT.						

**ELECTRIC UNIT HEATER SCHEDULE**

MARK	MANUFACTURER MODEL NO.	CFM	VOLTS	PH	AMPS	HEATING CAP. (KW)	MOUNTING HEIGHT (MINIMUM)	FAN MOTOR				
								HP	VOLTS	PH	HZ	AMPS
UH-9 UH-10	QMARK JW750483TLS	485	480	3	9.0	7.5	7'-0"	1/4	480	3	60	0.3
UH-11 (QTY=6)	QMARK JW750483TLS	485	480	3	9.0	7.5	7'-0"	1/4	480	3	60	0.3

**NOTES:**  
 1. PROVIDE W/THERMOSTAT KIT AND POWER DISCONNECT SWITCH; FACTORY INSTALLED.  
 2. EPOXY COATING.

**VENTILATOR SCHEDULE**

MARK	MANUFACTURER MODEL NO.	SIZE	F/A SQ FT	CFM	S.P. IN. WC	ACCESSORIES
LV-9 LV-10 LV-11 LV-12 LV-13 LV-14	COOK TRE-36X48X12TR	36 X 48	33.68	7850	.098"	1. 2. 3. 4.
LV-15 (QTY=6)	RUSKIN EMES20DD	24 X 18	1.00	550	0.10"	3. 4. * NOTE
LV-16	RUSKIN EMES20DD	30 X 18	1.29	825	0.10"	3. 4. * NOTE

\* NOTE: PROVIDE MOTORIZED DAMPER INTERLOCKED WITH EXH FAN, SET TO OPEN WHEN FAN IS ON.

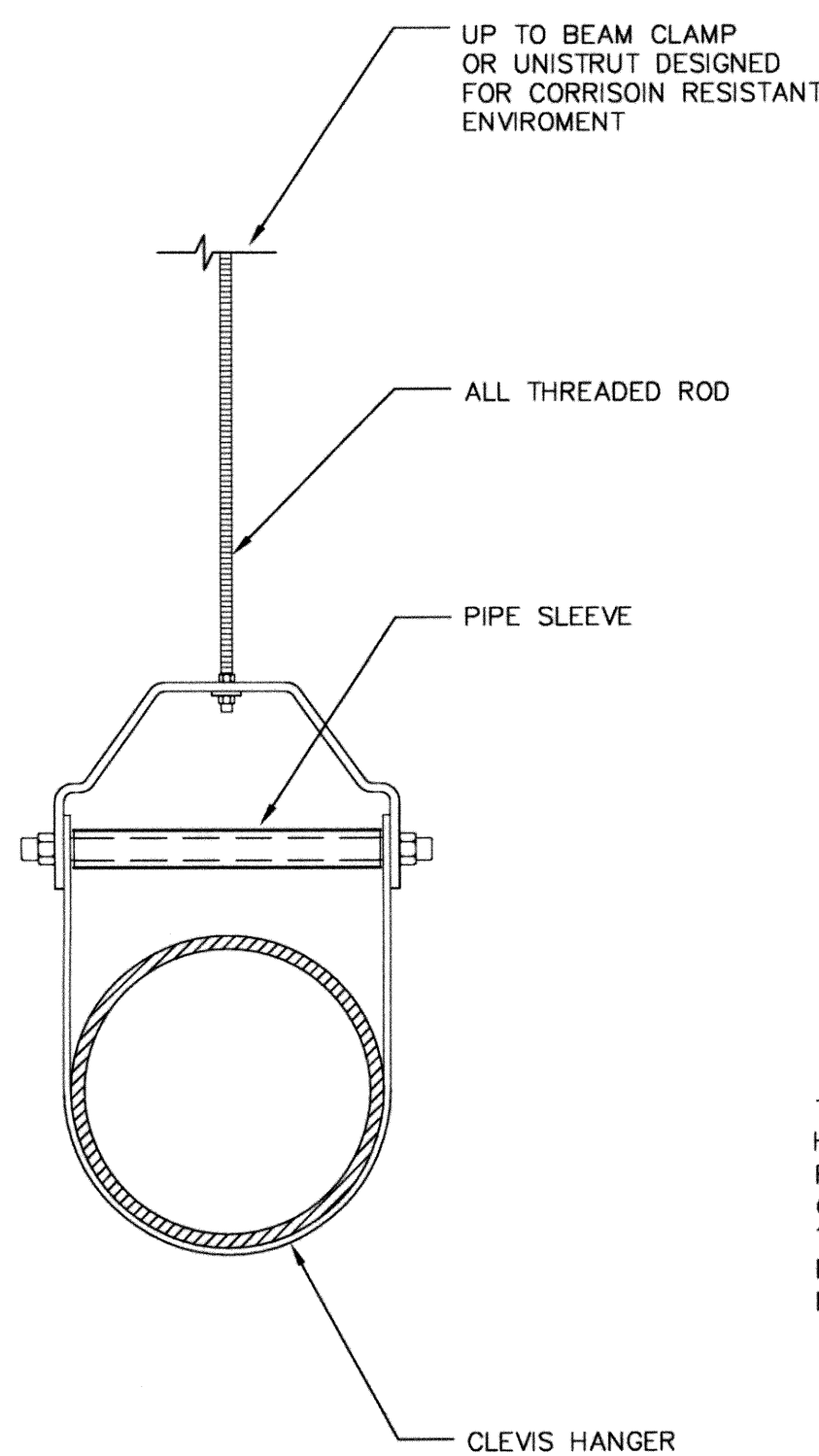
**ACCESSORIES:**  
 1. INTAKE BACKDRAFT DAMPER  
 2. ALUMINUM ROOF CURB  
 3. ALUMINUM BIRDSCREEN  
 4. EPOXY POWDER COAT

**EXHAUST FAN SCHEDULE**

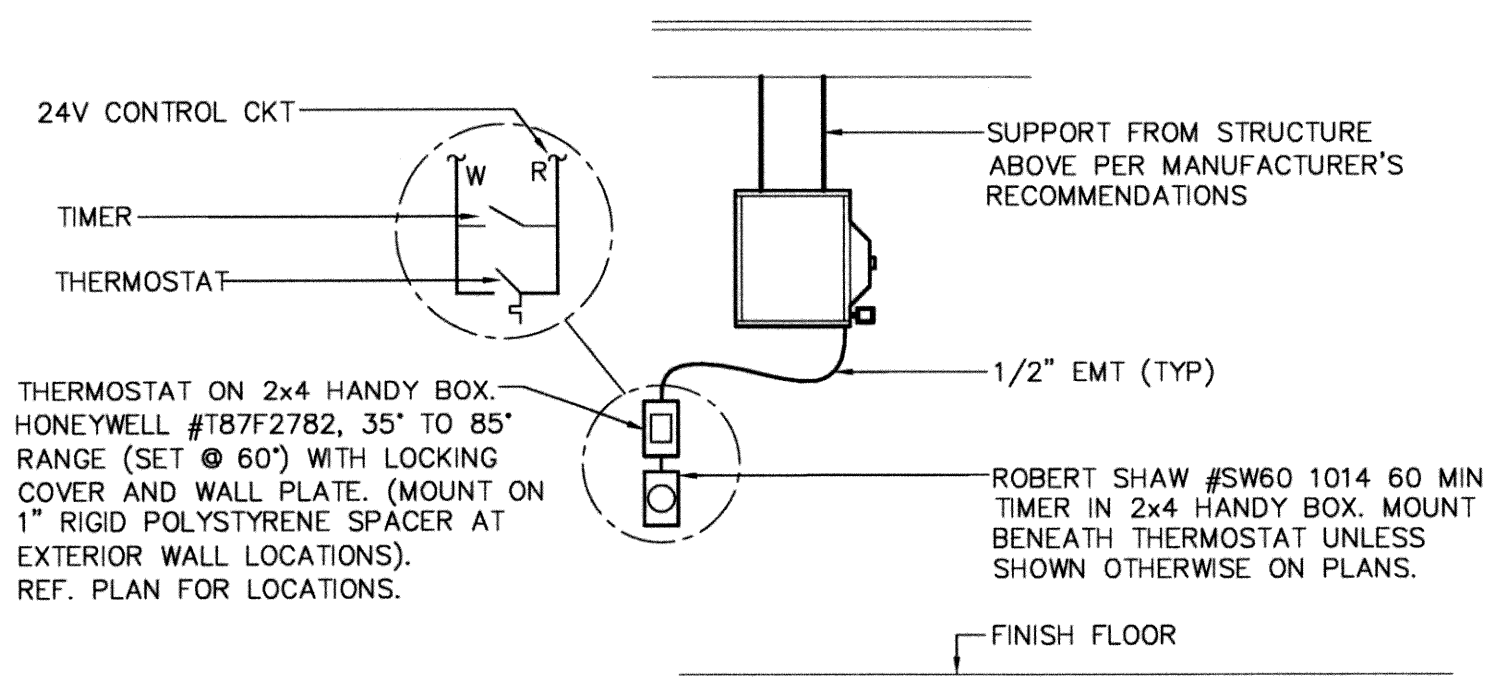
MARK	MANUFACTURER MODEL NO.	CFM	ESP	DRIVE	MOTOR			
					WATTS	HP	VOLT	PH
EF-3 (QTY=6)	COOK 100 ACRUB	550	.375"	BELT	--	1/6	120	1
EF-4	COOK 120 ACRUB	825	.375"	BELT	--	1/6	120	1

**ACCESSORIES:**  
 1. GRAVITY BACKDRAFT DAMPER  
 2. ALUMINUM ROOF CURB  
 3. DAMPER TRAY  
 4. EPOXY POWDER COAT

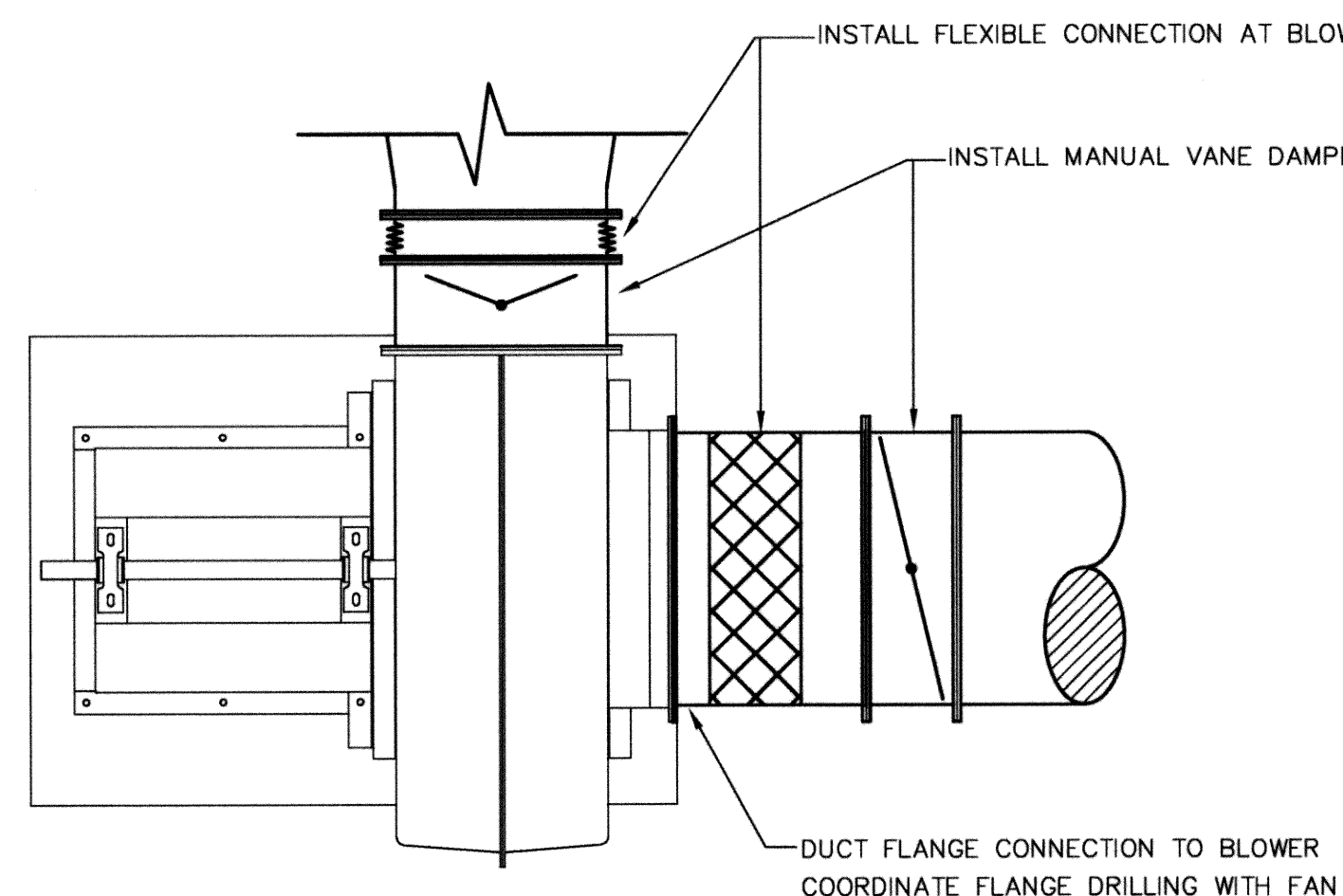
**CONTROLS:**  
 A. INTERLOCK WITH T-STAT  
 B. WALL SWITCH



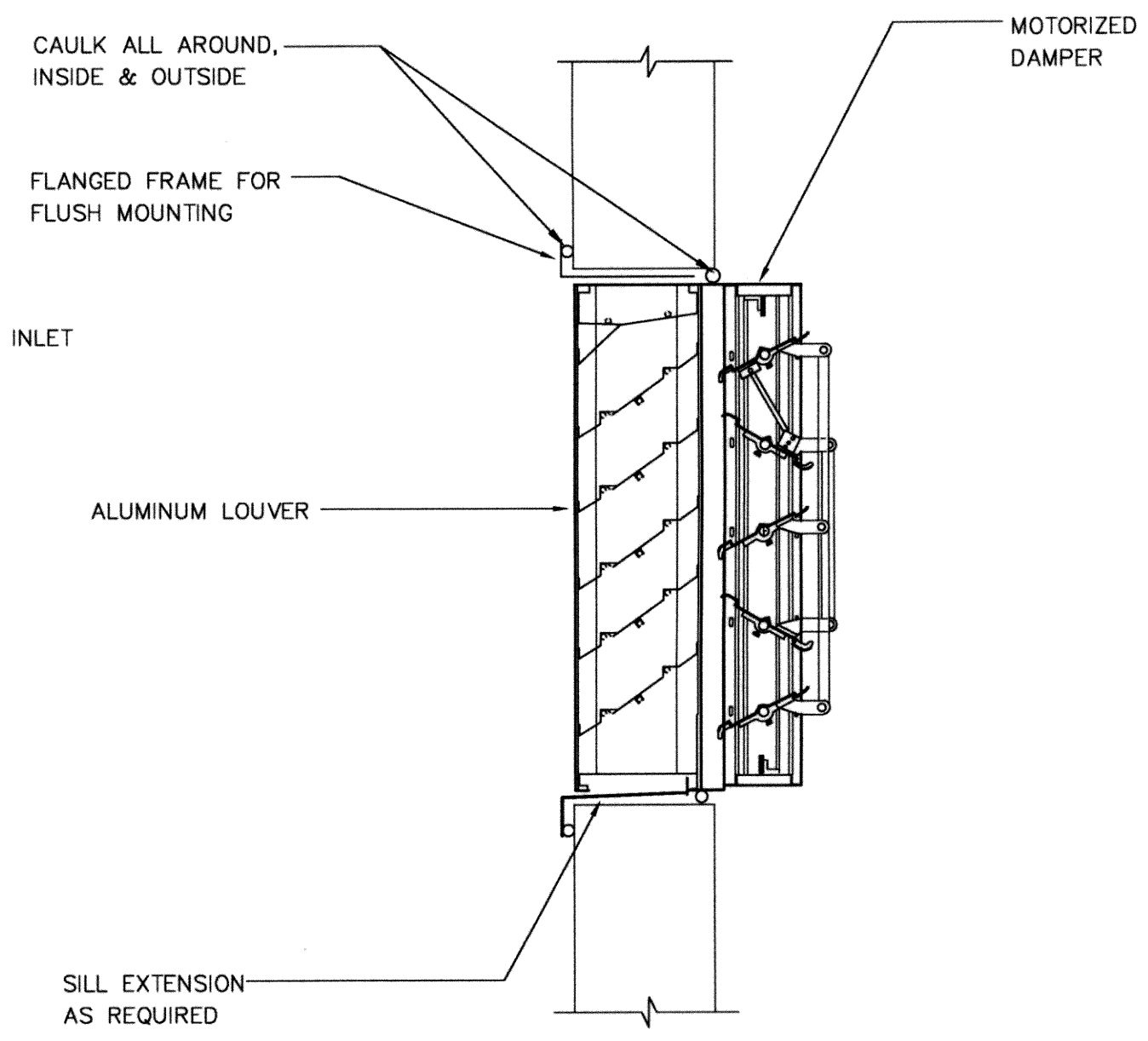
**D HANGER DETAIL**  
N.T.S.



**C ELECTRIC UNIT HEATER**  
N.T.S.



**B CONNECTION AT BLOWER**  
N.T.S.



**A WALL LOUVER W/DAMPER**  
N.T.S.



DESIGNED BY:	CAD OPERATOR:	CHECKED:	APPROVED:	PLOT DATE:	DWG. SCALE:	SHEET:
		SD	SD		AS SHOWN	5 OF 48

Thomas F. Keeter, PE# 17749 TFK Engineering, Inc. Co/A# 5206 exp 6/2011	REVISIONS:	DATE:

SBR HVAC DETAILS

EAGLE OFFICE CENTER  
2803 SOUTH BRYANT  
EDMOND, OK. 73013  
PH. (405) 844-3900  
FAX. (405) 844-3600

**EAGLE CONSULTANTS, INC.**  
CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088

RECORD DRAWINGS

M-22

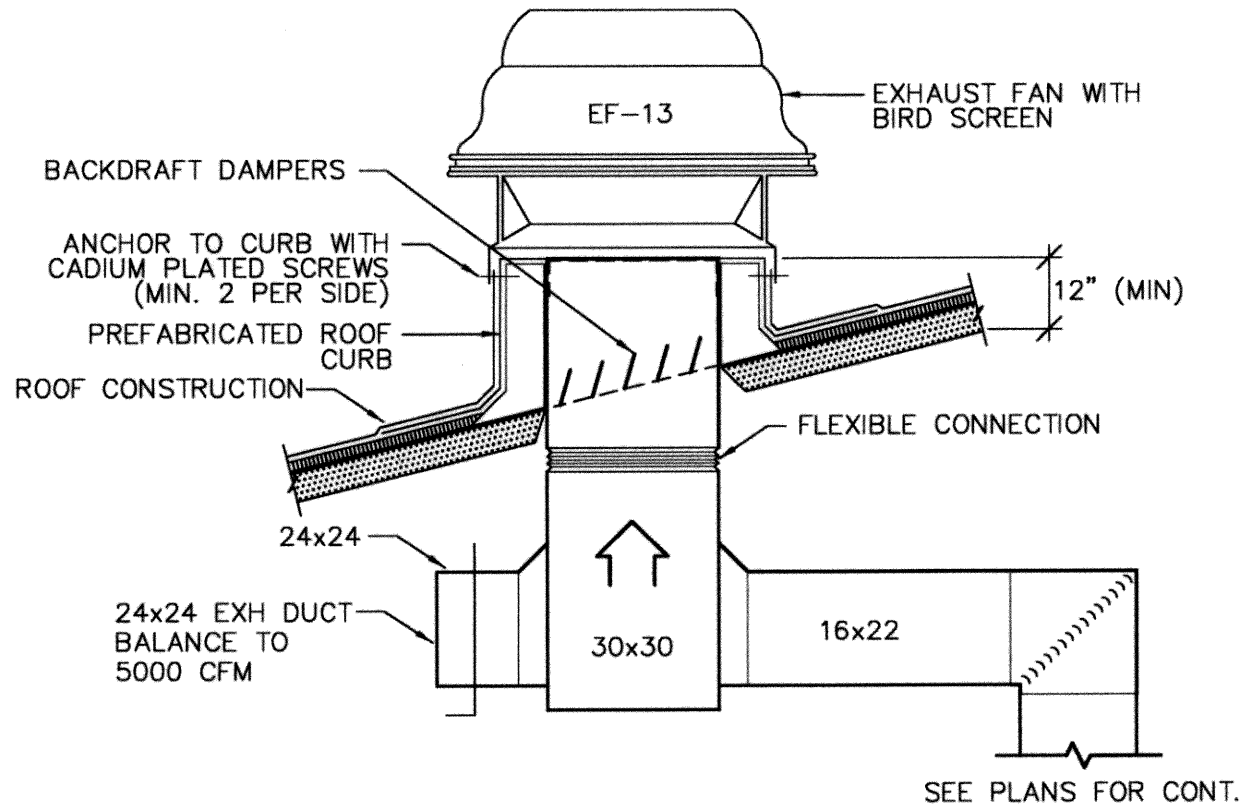
### SPLIT SYSTEM EQUIPMENT SCHEDULE

AIR HANDLER														CONDENSING UNIT									
MARK	MANUFACTURER MODEL	NOMINAL COOLING CAPACITY (MBH)	SUPPLY (CFM)	O/A (CFM)	E.S.P. (w.c.)	BLOWER MOTOR			ELECTRIC HEATER				OPTIONS/ACCESSORIES	MARK	MANUFACTURER MODEL	SEER	VOLTS	MCA	MOCP	FAN MTR	OPTIONS/ACCESSORIES		
						HP	VOLTS	Ø HZ	CAP. (KW)	VOLTS	Ø HZ	AMPS	MCA/MOCP				Ø HZ			HP	FLA	1. 2. 3. 5. 6.	
AH-8	TRANE 4TEH3F30	30	1000	25	0.40"	1/3	230	1/60	4.8	240	1/60	20	29 30	4.	CU-8	TRANE 2TWA3048A4	13.0	460	9	15	1/5	0.7	1. 2. 3. 5. 6.

**OPTIONS/ACCESSORIES:**  
 1. ANTI-SHORT CYCLE TIMER  
 2. REFRIGERANT LINESET, SIZED & INSTALLED PER MFR'S RECOMMENDATIONS  
 3. INDOOR FAN DELAY KIT  
 4. HEAT/COOL THERMOSTAT  
 5. EVAPORATOR DEFROST CONTROL  
 6. LOW AMBIENT KIT

**NOTE:**  
 AIR HANDLER IS HORIZONTAL RIGHT CONFIGURATION.

**NOTES:**  
 COORDINATE EXACT LOCATION OF CONDENSING UNITS WITH OWNER. ROUTE REFRIGERANT PIPING THRU WALL TO UNIT. PROVIDE WEATHER PROOF SLEEVE AT WALL PENETRATION. PROVIDE CONCRETE EQUIPMENT BASE FOR CONDENSING UNIT.



3 EXHAUST FAN DETAIL  
N.T.S.

### ELECTRIC UNIT HEATER SCHEDULE

MARK	MANUFACTURER MODEL NO.	CFM	VOLTS	PH	AMPS	HEATING CAP. (kW)	MOUNTING HEIGHT (MINIMUM)	FAN MOTOR				
								HP	VOLTS	PH	HZ	AMPS
UH-18	QMARK JUW3000483TLS	1800	480	3	36.1	30	7'-0"	1/3	480	3	60	0.8
UH-20	QMARK JUW20081TLS	405	208	1	9.6	2	7'-0"	1/4	208	1	60	0.5

**NOTES:**  
 1. PROVIDE W/THERMOSTAT KIT AND POWER DISCONNECT SWITCH; FACTORY INSTALLED.  
 2. EPOXY COATING.

### VENTILATOR SCHEDULE

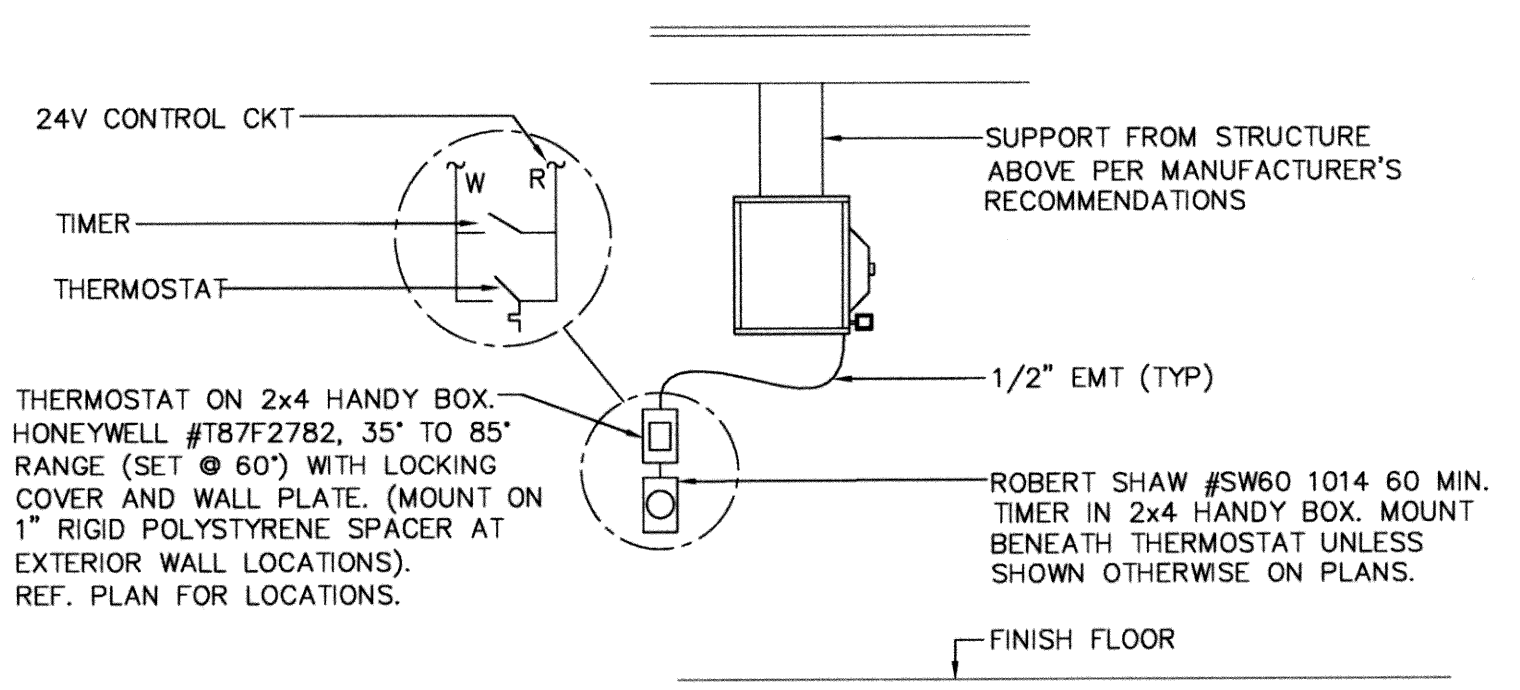
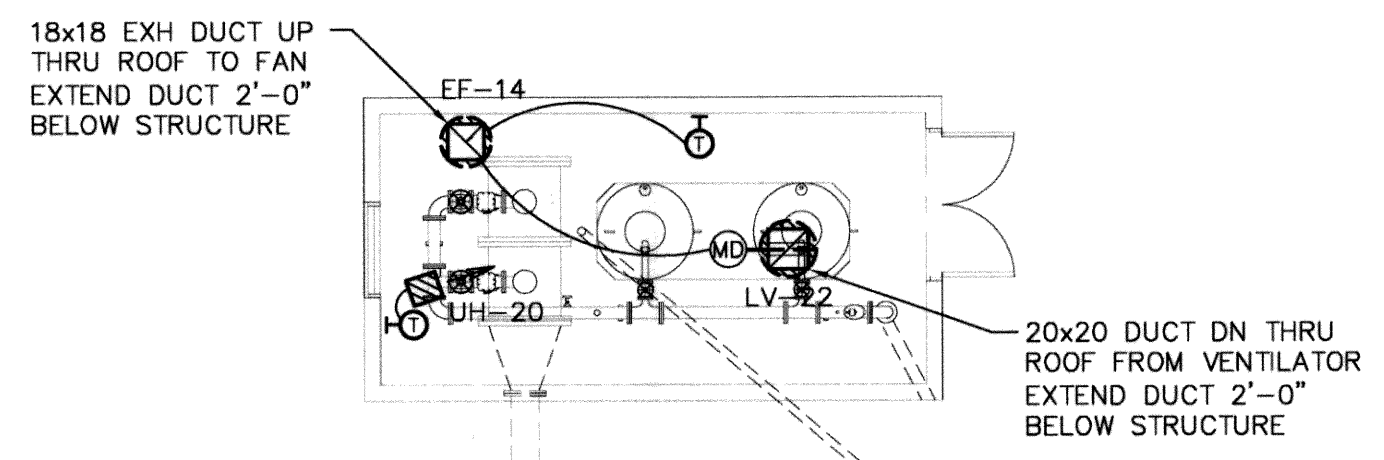
MARK	MANUFACTURER MODEL NO.	SIZE	F/A SQ FT	CFM	S.P. IN. WC	ACCESSORIES:
LV-21	COOK TRE-36X36X13	36 X 36	32.18	6850	.122"	1. 2. 3. 4. INTERLOCK W/EF-13
LV-22	COOK PR-12	20 X 20	--	450	.119"	1. 2. 3. 4. INTERLOCK W/EF-14

**ACCESSORIES:**  
 1. MOTORIZED BACKDRAFT DAMPER  
 2. ALUMINUM ROOF CURB  
 3. ALUMINUM BIRDSCREEN  
 4. EPOXY POWDER COAT  
 5. INSECT SCREEN

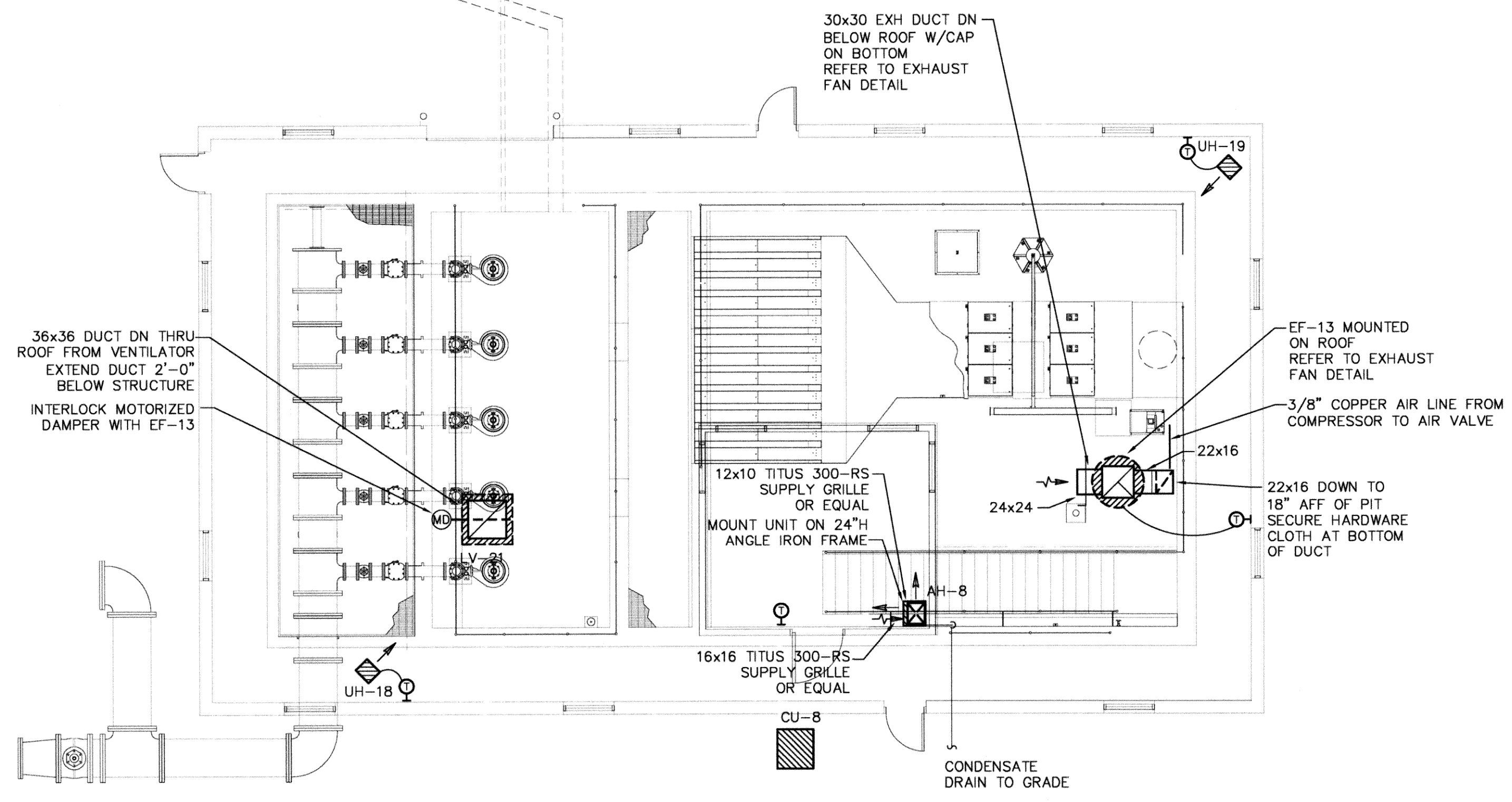
### EXHAUST FAN SCHEDULE

MARK	MANUFACTURER MODEL NO.	CFM	ESP	DRIVE	MOTOR				CONTROLS:
					HP	VOLT	PH	HZ	
EF-13	COOK ACRUB-300R8B	6850	.300"	BELT	1.5	208	3	60	T-STAT & WALL SWITCH INTERLOCK W/MOTORIZED DAMPER
EF-14	COOK ACRUB-100R2B	400	.250"	BELT	.167	115	1	60	T-STAT & WALL SWITCH INTERLOCK W/MOTORIZED DAMPER

**ACCESSORIES:**  
 1. GRAVITY BACKDRAFT DAMPER  
 2. ALUMINUM ROOF CURB  
 3. DAMPER TRAY  
 4. EPOXY POWDER COAT  
 5. DISCONNECT SWITCH W/NEMA 3R ENCLOSURE



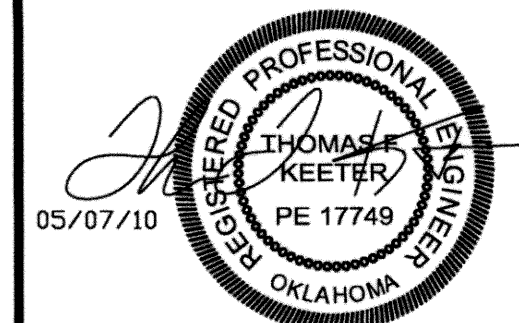
2 ELECTRIC UNIT HEATER  
N.T.S.



1 EFFLUENT LIFT STATION HVAC PLAN  
1/8" = 1'-0"

RECORD DRAWINGS

M-31



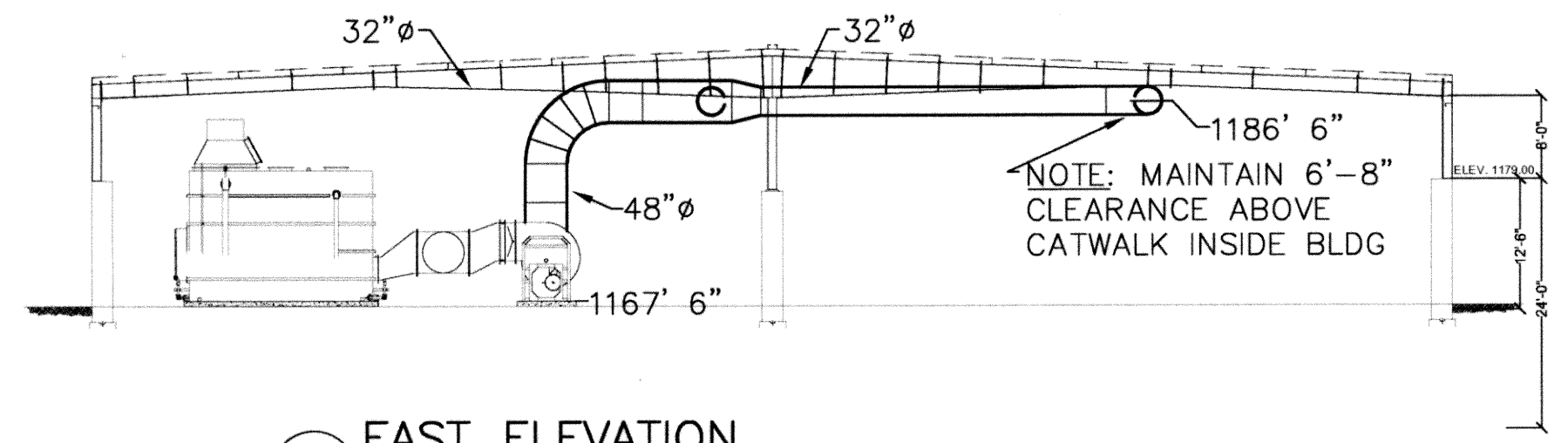
DESIGNED BY:	CAD OPERATOR:	CHECKED: SD	APPROVED: SD	PLOT DATE:	DWG. SCALE: AS SHOWN	SHEET: 6 OF 48
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THOMAS F. KEETER, PE# 17749 TFK Engineering, Inc. Co/FA# 5206 exp 6/2011	REVISIONS:	DATE:
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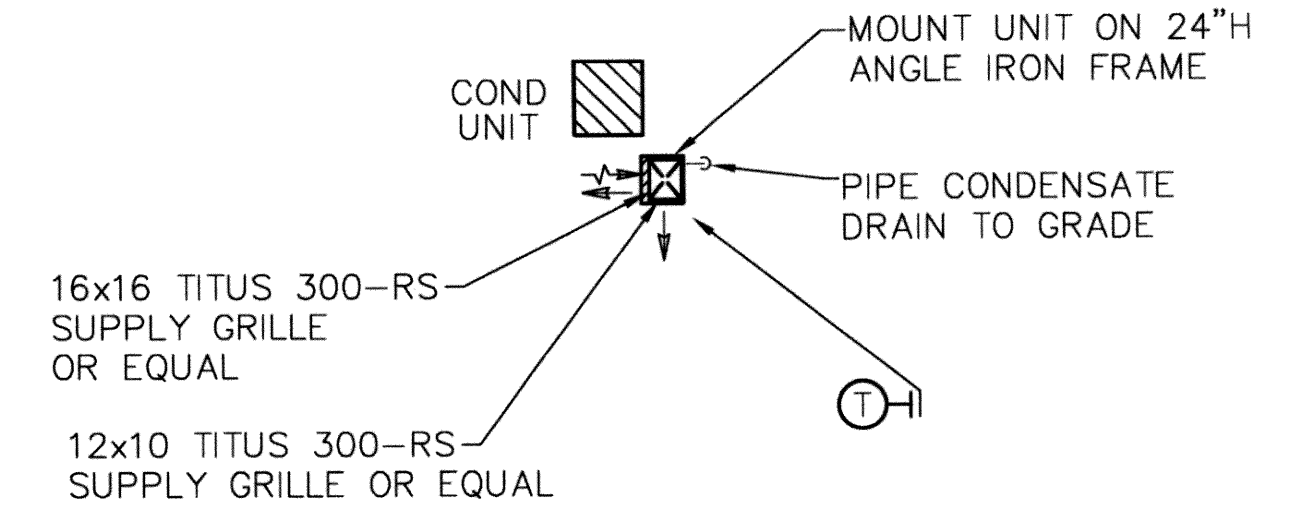
EFFLUENT L.S. HVAC DETAILS

EAGLE OFFICE CENTER  
2803 SOUTH BRYANT  
EDMOND, OK. 73013  
PH. (405) 844-3900  
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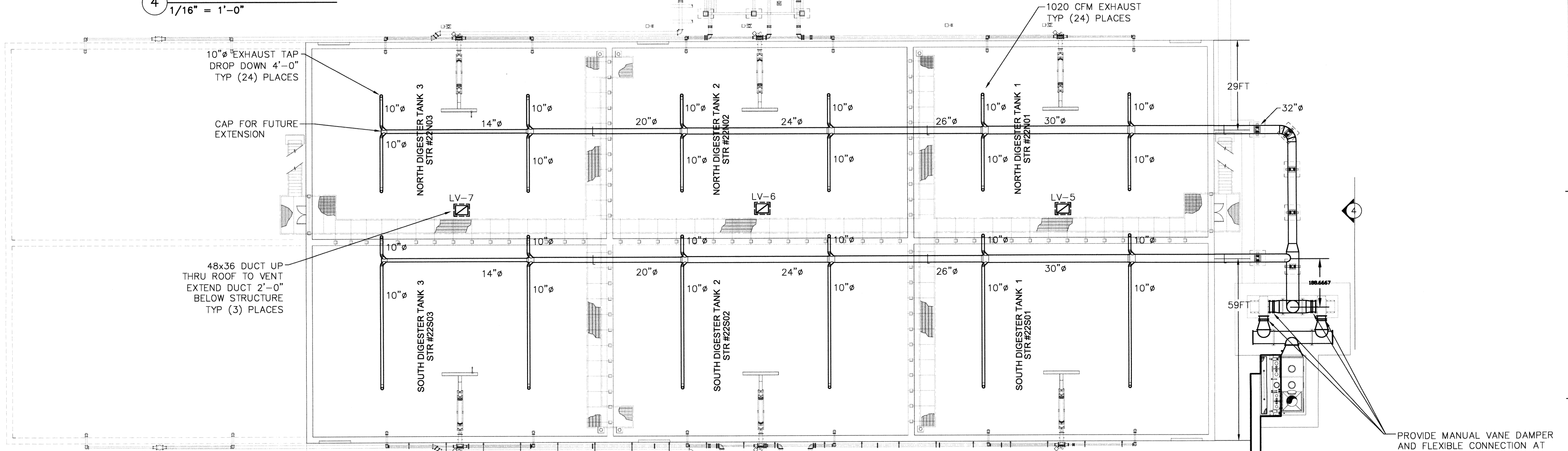
**EAGLE CONSULTANTS, INC.**  
CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088



4 EAST ELEVATION  
1/16" = 1'-0"



3 CONTROL ROOM HVAC  
N.T.S.

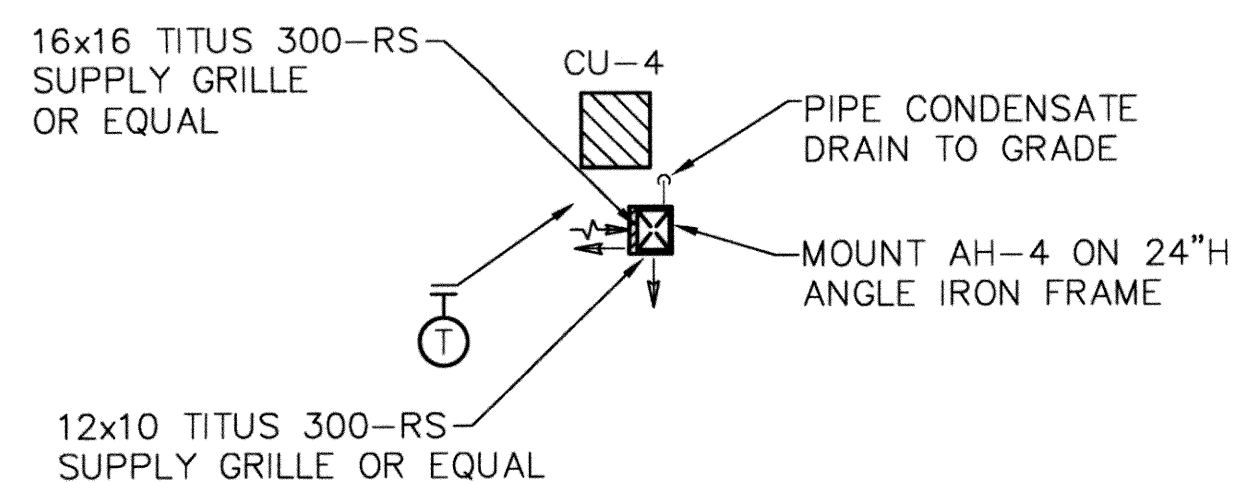


10"Ø EXHAUST TAP  
DROP DOWN 4'-0"  
TYP (24) PLACES

CAP FOR FUTURE  
EXTENSION

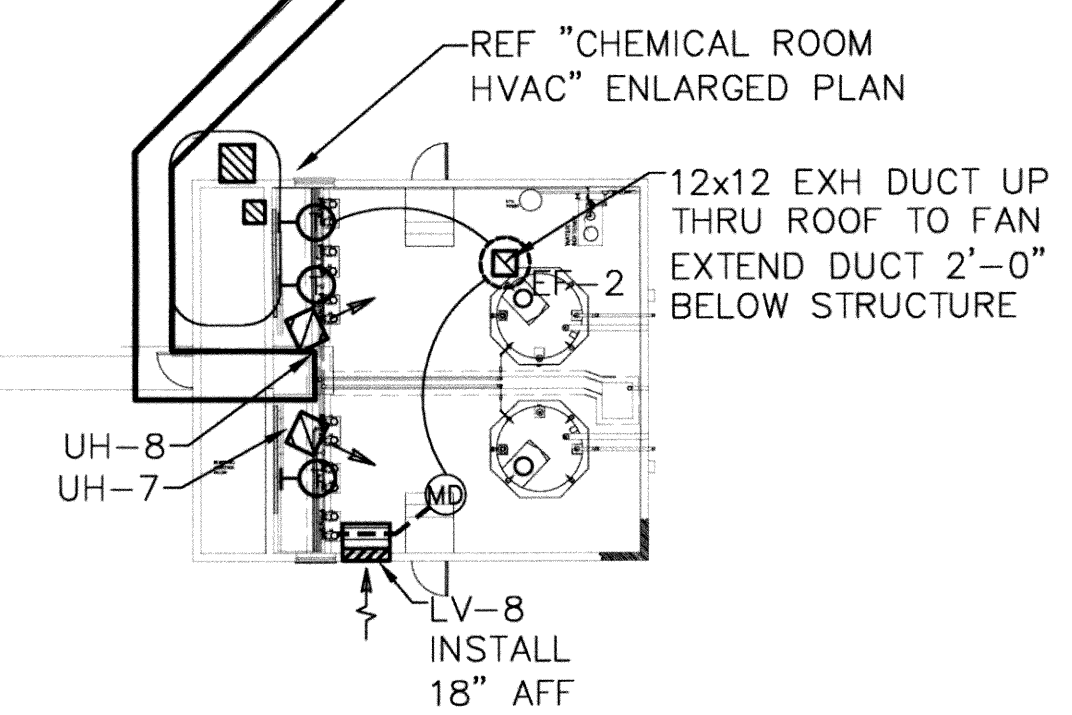
48x36 DUCT UP  
THRU ROOF TO VENT  
EXTEND DUCT 2'-0"  
BELOW STRUCTURE  
TYP (3) PLACES

PROVIDE MANUAL VANE DAMPER  
AND FLEXIBLE CONNECTION AT  
BLOWER INLET TYP (2) PLCS  
AND BLOWER DISCHARGE (2)  
PLCS REF. BLOWER CONN. DETAIL



2 CHEMICAL ROOM HVAC  
N.T.S.

PROVIDE INSULATION AND HEAT  
TRACING ON ODOR CONTROL  
PIPING IN THIS AREA, REFER TO  
ODOR CONTROL SYSTEM  
REQUIREMENTS.



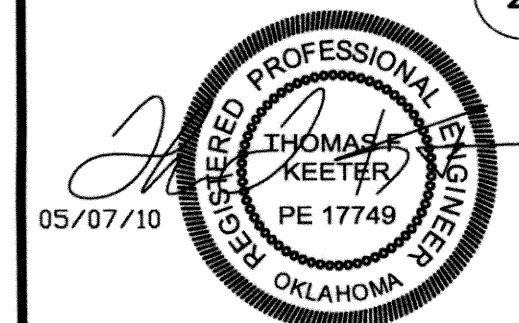
12x12 EXH DUCT UP  
THRU ROOF TO FAN  
EXTEND DUCT 2'-0"  
BELOW STRUCTURE

LV-8  
INSTALL  
18" AFF

1 DIGESTERS HVAC PLAN  
1/16" = 1'-0"

RECORD DRAWINGS

M-41



Thomas F. Keeter, PE# 17749  
TFK Engineering, Inc.  
CofA# 5206 exp 8/2011

REVISIONS:	DATE:

DIGESTER HVAC DETAILS

EAGLE OFFICE CENTER  
2803 SOUTH BRYANT  
EDMOND, OK. 73013  
PH. (405) 844-3900  
FAX. (405) 844-3600

EAGLE CONSULTANTS, INC.  
CIVIL AND ENVIRONMENTAL ENGINEERS  
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DESIGNED BY:	CAD OPERATOR:	CHECKED:	APPROVED:	PLOT DATE:	DWG. SCALE:	SHEET:	OF
		SD	SD		AS SHOWN	7	48

**GENERAL NOTES:**

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2006 INTERNATIONAL MECHANICAL CODE, IN JUNCTION WITH LOCAL AMENDMENTS.
2. ALL THERMOSTATS SHALL BE SUPPLIED BY THE MECH CONTRACTOR. THE ELEC CONTRACTOR SHALL FURNISH AND INSTALL THE NECESSARY CONDUIT, WIRE, BOXES, ETC. FOR THE THERMOSTATS. THE MECH CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND CONNECTION OF THERMOSTATS.
3. INSTALL DUCTWORK AND SUPPORTS PER SMACNA STANDARDS AND FIBERGLASS DUCT MANUFACTURER'S RECOMMENDATIONS.
4. PROVIDE EXPANSION JOINTS WHERE RECOMMENDED BY FRP DUCT MFR.
5. DUCT SIZES NOTED ARE NET FREE AREA.

**SPLIT SYSTEM EQUIPMENT SCHEDULE**

AIR HANDLER													CONDENSING UNIT													
MARK	MANUFACTURER MODEL	NOMINAL COOLING CAPACITY (MBH)	SUPPLY (CFM)	O/A (CFM)	E.S.P. (w.c.)	BLOWER MOTOR HP	VOLTS	Φ HZ	CAP. (KW)	VOLTS	Φ HZ	AMPS	MCA	MOCP	OPTIONS/ACCESSORIES	MARK	MANUFACTURER MODEL	SEER	VOLTS	Φ HZ	MCA	MOCP	FAN MTR HP	FLA	OPTIONS/ACCESSORIES	
AH-2	TRANE	30	1000	25	0.40"	1/3	230	1/60	4.8	240	1/60	20	29	30	4.	CU-2	TRANE	13.0	460	3	60	9	15	1/5	0.7	1. 2. 3. 5. 6.
AH-3	4TEH3F30															CU-3	2TWA3048A4									
AH-4																CU-4										

**OPTIONS/ACCESSORIES:**  
 1. ANTI-SHORT CYCLE TIMER  
 2. REFRIGERANT LINESET, SIZED & INSTALLED PER MFR'S RECOMMENDATIONS  
 3. INDOOR FAN DELAY KIT  
 4. HEAT/COOL THERMOSTAT  
 5. EVAPORATOR DEFROST CONTROL  
 6. LOW AMBIENT KIT

**NOTE:** AIR HANDLER IS HORIZONTAL RIGHT CONFIGURATION.

**NOTES:**  
 COORDINATE EXACT LOCATION OF CONDENSING UNITS WITH OWNER. ROUTE REFRIGERANT PIPING THRU WALL TO UNIT. PROVIDE WEATHER PROOF SLEEVE AT WALL PENETRATION. PROVIDE CONCRETE EQUIPMENT BASE FOR CONDENSING UNIT.

**ELECTRIC UNIT HEATER SCHEDULE**

MARK	MANUFACTURER MODEL NO.	CFM	VOLTS	PH	AMPS	HEATING CAP. (kW)	MOUNTING HEIGHT (MINIMUM)	FAN MOTOR				
								HP	VOLTS	PH	AMPS	
UH-7	QMARK	485	480	3	9.0	7.5	7'-0"	1/4	480	3	60	0.3
UH-8	JUW750483TLS											

**NOTES:**  
 1. PROVIDE W/THERMOSTAT KIT AND POWER DISCONNECT SWITCH; FACTORY INSTALLED.  
 2. EPOXY COATING.

**VENTILATOR SCHEDULE**

MARK	MANUFACTURER MODEL NO.	SIZE	F/A SQ FT	CFM	S.P. IN. WC	ACCESSORIES
LV-5	COOK	36 X 48	42.11	8170	.098"	1. 2. 3. 4.
LV-6	TRE-36X48X15TR					
LV-7						
LV-8	RUSKIN EMES20DD	24 X 18	1.00	550	0.10"	3. 4. * NOTE

\* NOTE: PROVIDE MOTORIZED DAMPER INTERLOCKED WITH EF-2, SET TO OPEN WHEN FAN IS ON.

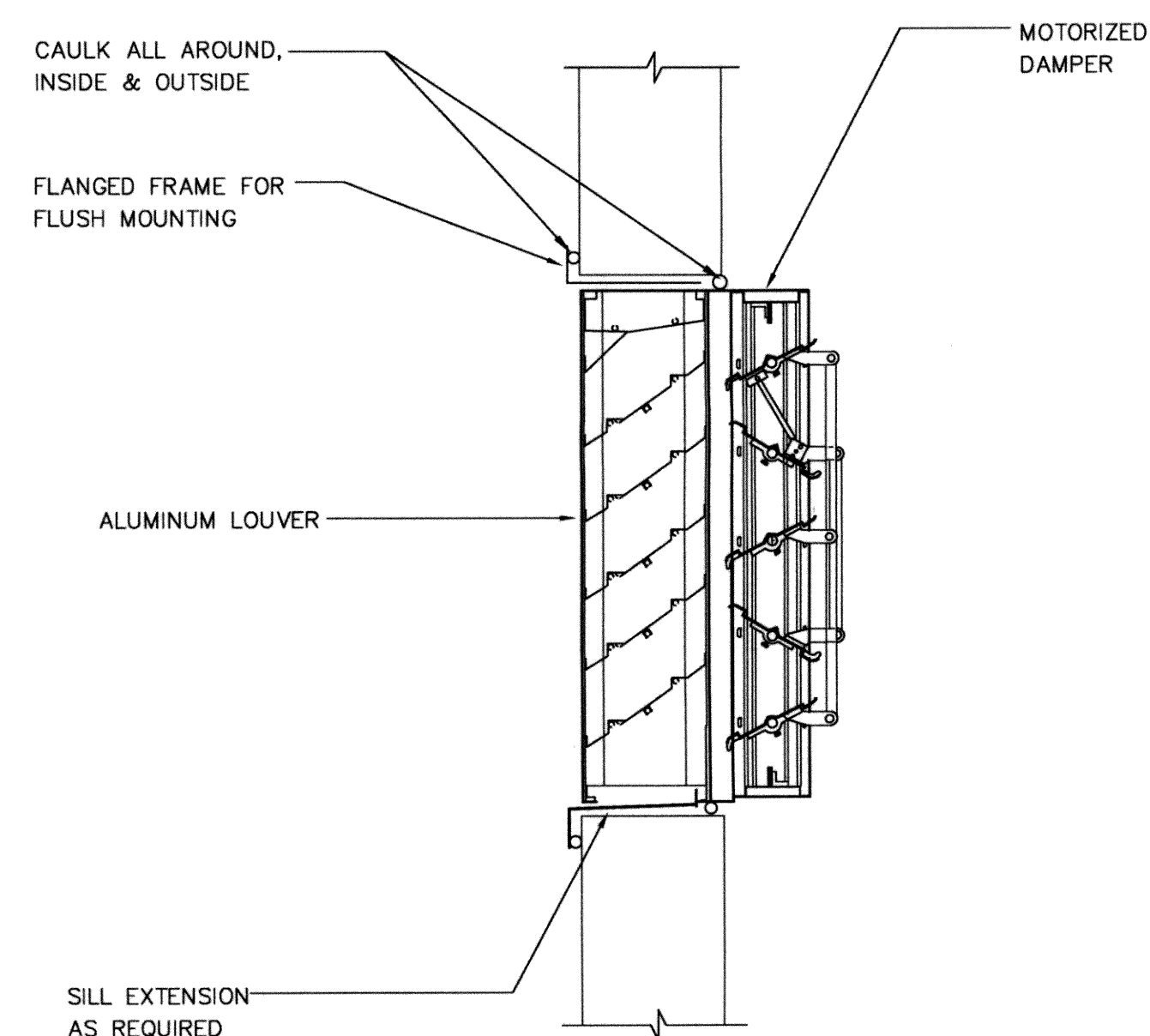
**ACCESSORIES:**  
 1. INTAKE BACKDRAFT DAMPER  
 2. ALUMINUM ROOF CURB  
 3. ALUMINUM BIRDSCREEN  
 4. EPOXY POWDER COAT

**EXHAUST FAN SCHEDULE**

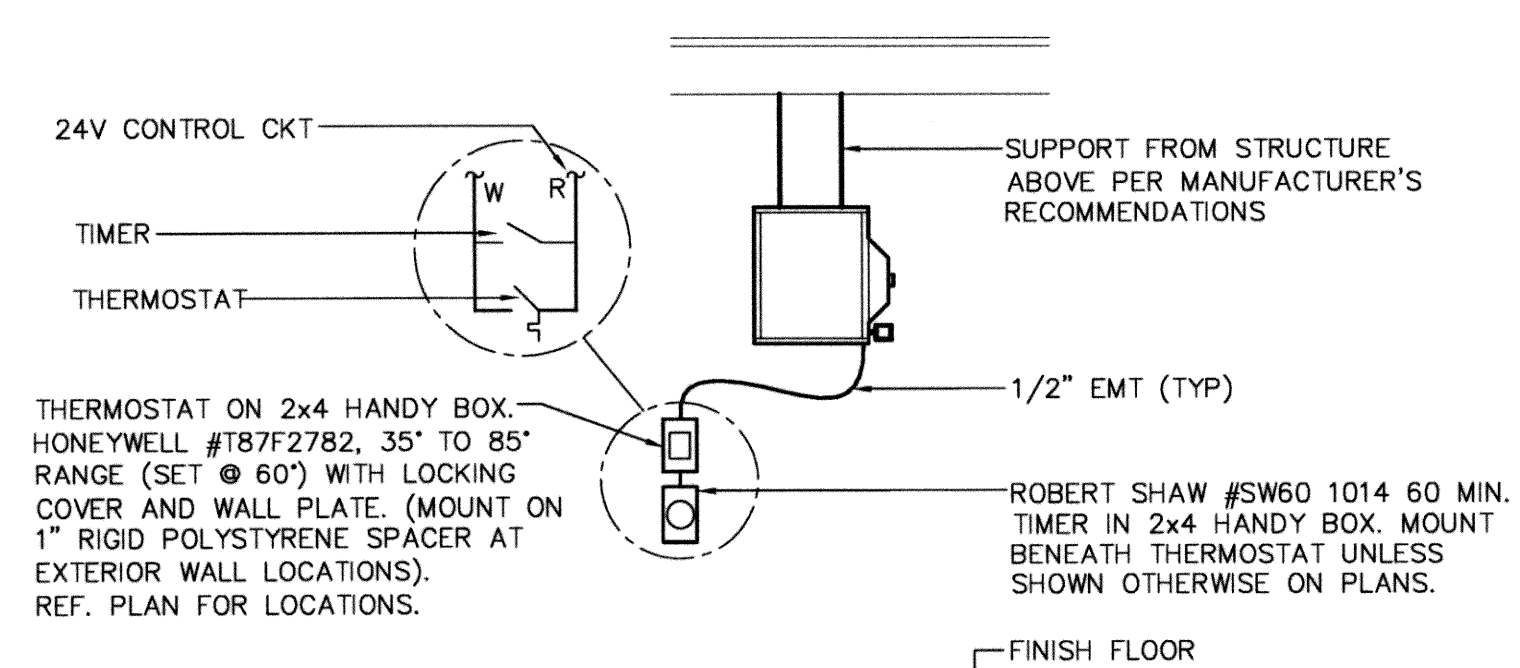
MARK	MANUFACTURER MODEL NO.	CFM	ESP	DRIVE	MOTOR			
					WATTS	HP	VOLT	PH
EF-2	COOK 135 ACRUB	1000	.375"	BELT	--	1/6	120	1

**ACCESSORIES:**  
 1. GRAVITY BACKDRAFT DAMPER  
 2. ALUMINUM ROOF CURB  
 3. DAMPER TRAY  
 4. EPOXY POWDER COAT

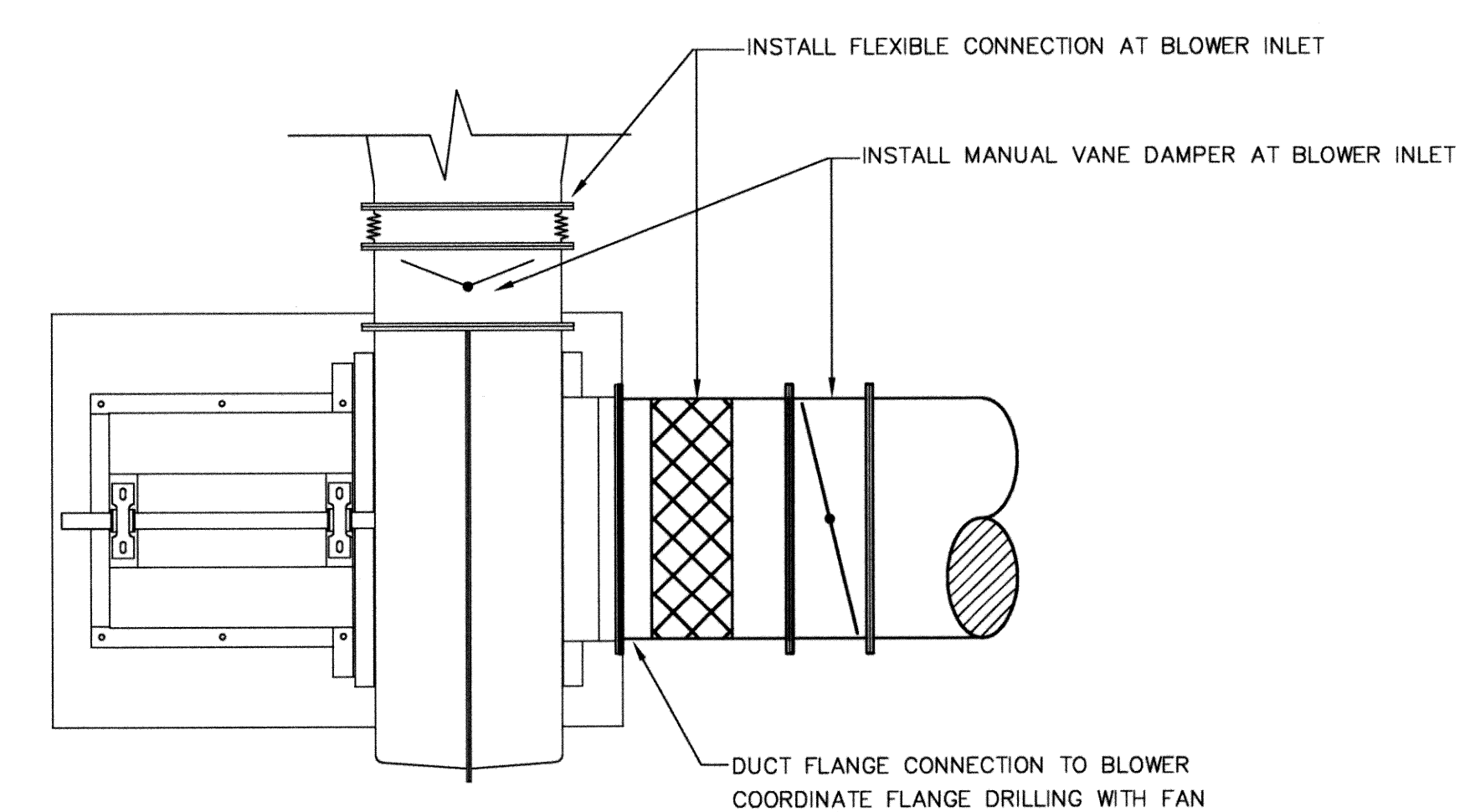
**CONTROLS:**  
 A. INTERLOCK WITH T-STAT  
 B. WALL SWITCH



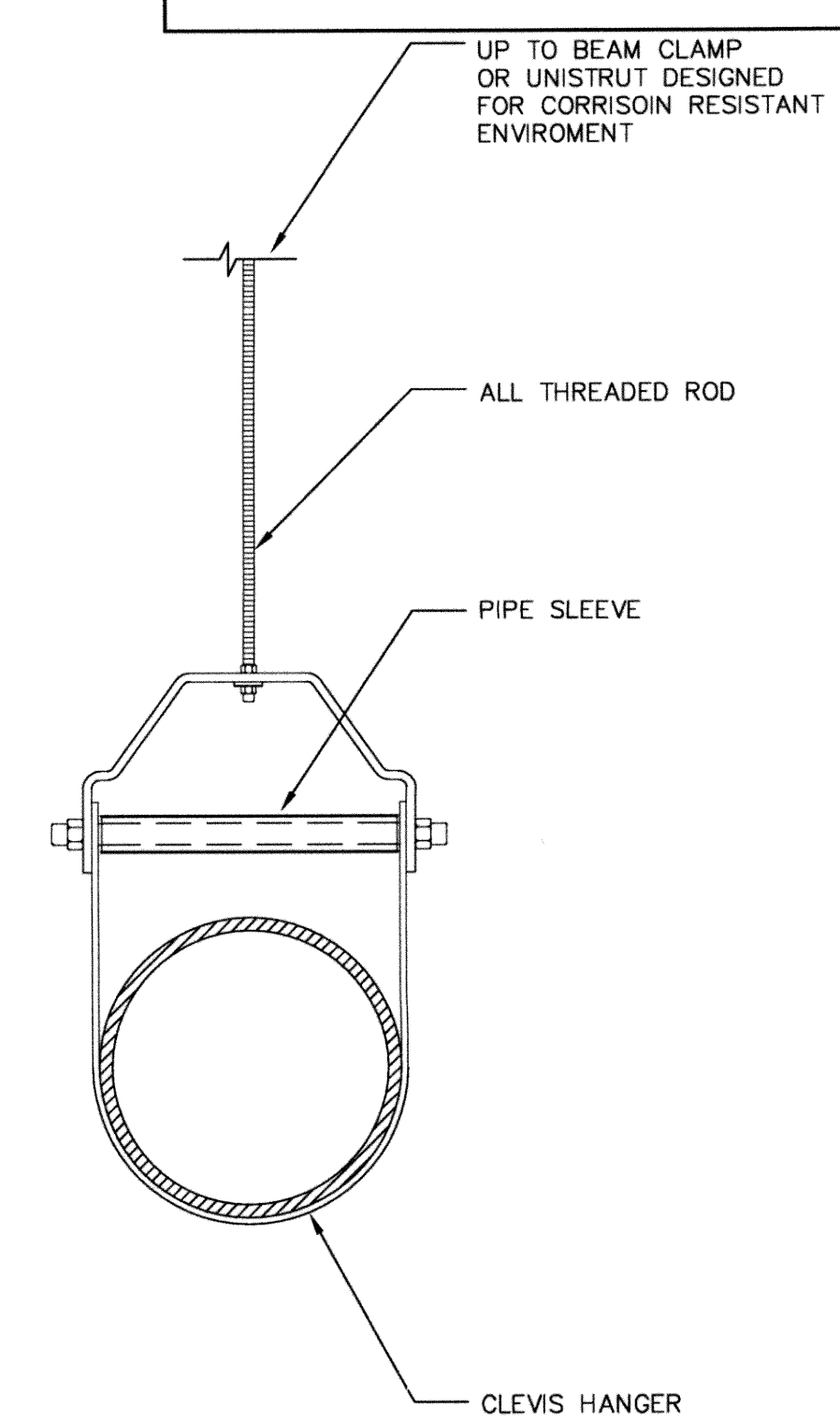
**A WALL LOUVER W/DAMPER**  
N.T.S.



**C ELECTRIC UNIT HEATER**  
N.T.S.



**B CONNECTION AT BLOWER**  
N.T.S.



**D HANGER DETAIL**  
N.T.S.



DESIGNED BY:	CAD OPERATOR:	CHECKED:	APPROVED:	PLOT DATE:	DWG. SCALE:	SHEET:	REVISIONS:	DATE:
A	B	SD	SD		AS SHOWN	8 OF 48		

**DIGESTER HVAC DETAILS**

EAGLE OFFICE CENTER  
 2803 SOUTH BRYANT  
 EDMOND, OK. 73013  
 PH. (405) 844-3900  
 FAX. (405) 844-3600

**EAGLE CONSULTANTS, INC.**  
 CIVIL AND ENVIRONMENTAL ENGINEERS  
 CERTIFICATE OF AUTHORIZATION NO. CA2088

A B C D E F G

**ELECTRIC UNIT HEATER SCHEDULE**

MARK	MANUFACTURER MODEL NO.	CFM	VOLTS	PH	AMPS	HEATING CAP. (kW)	MOUNTING HEIGHT (MINIMUM)	FAN MOTOR				
								HP	VOLTS	PH	HZ	
UH-15	QMARK JUW1000483TLS	700	480	3	12.0	10	7'-0"	1/14	480	1	60	0.3
UH-17	QMARK JUW20081TLS	405	208	1	9.6	2	7'-0"	1/14	208	1	60	0.5

NOTES:  
 1. PROVIDE W/THERMOSTAT KIT AND POWER DISCONNECT SWITCH; FACTORY INSTALLED.  
 2. EPOXY COATING.

**VENTILATOR SCHEDULE**

MARK	MANUFACTURER MODEL NO.	SIZE	F/A SQ FT	CFM	S.P. IN. WC	ACCESSORIES
LV-17	COOK TRE-24X36X10	24 X 36	21.44	4550	.122"	2. 3. 4.
LV-18	COOK TRE-16X18X10	16 X 18	14.24	1560	.119"	2. 3. 4.
LV-20	COOK TRE-12X12X10	12 X 12	11.48	600	.122"	1. 2. 3. 4. INTERLOCK W/EF-12

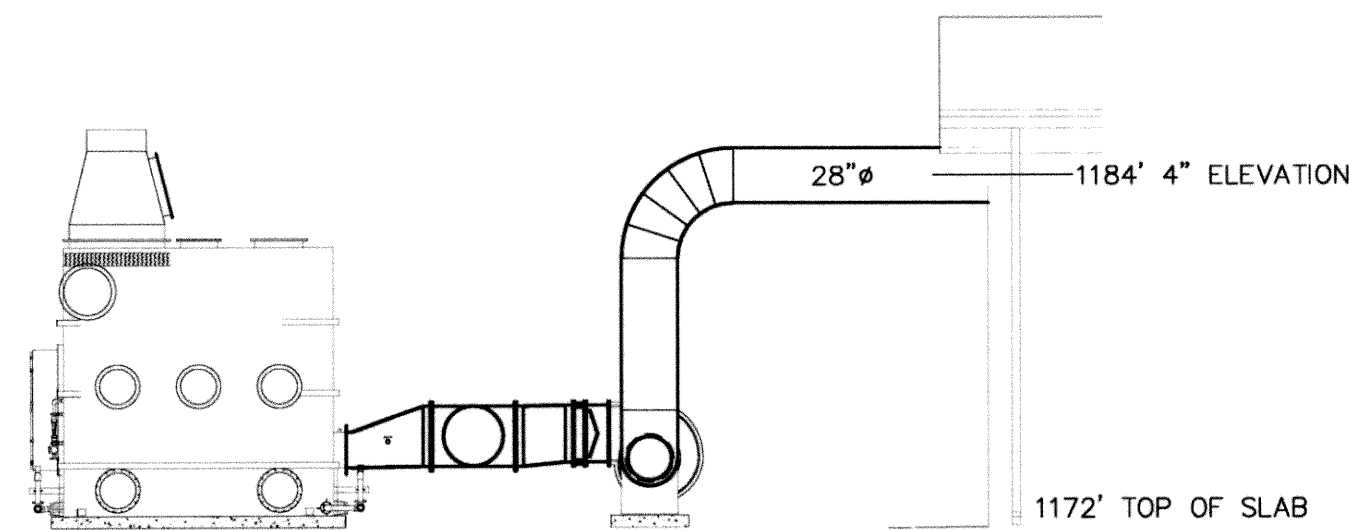
ACCESSORIES:  
 1. MOTORIZED BACKDRAFT DAMPER  
 2. ALUMINUM ROOF CURB  
 3. ALUMINUM BIRDSCREEN  
 4. EPOXY POWDER COAT

**EXHAUST FAN SCHEDULE**

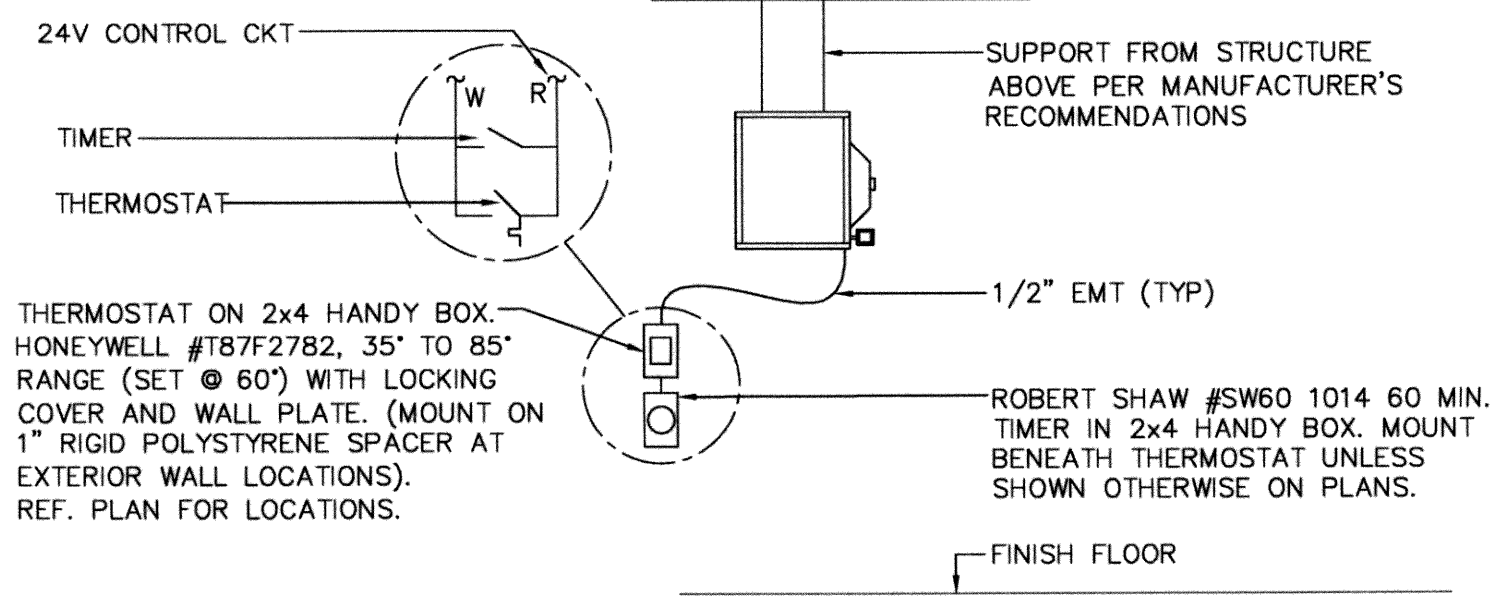
MARK	MANUFACTURER MODEL NO.	CFM	ESP	DRIVE	MOTOR			
					HP	VOLT	PH	HZ
EF-12	COOK AWD-12A17D	600	.250"	DIR	1/6	120	1	60

ACCESSORIES:  
 1. GRAVITY ALUMINUM SHUTTER  
 2. MOTOR SIDE WIRE GUARD  
 3. WALL COLLAR  
 4. EPOXY POWDER COAT  
 5. DISCONNECT SWITCH

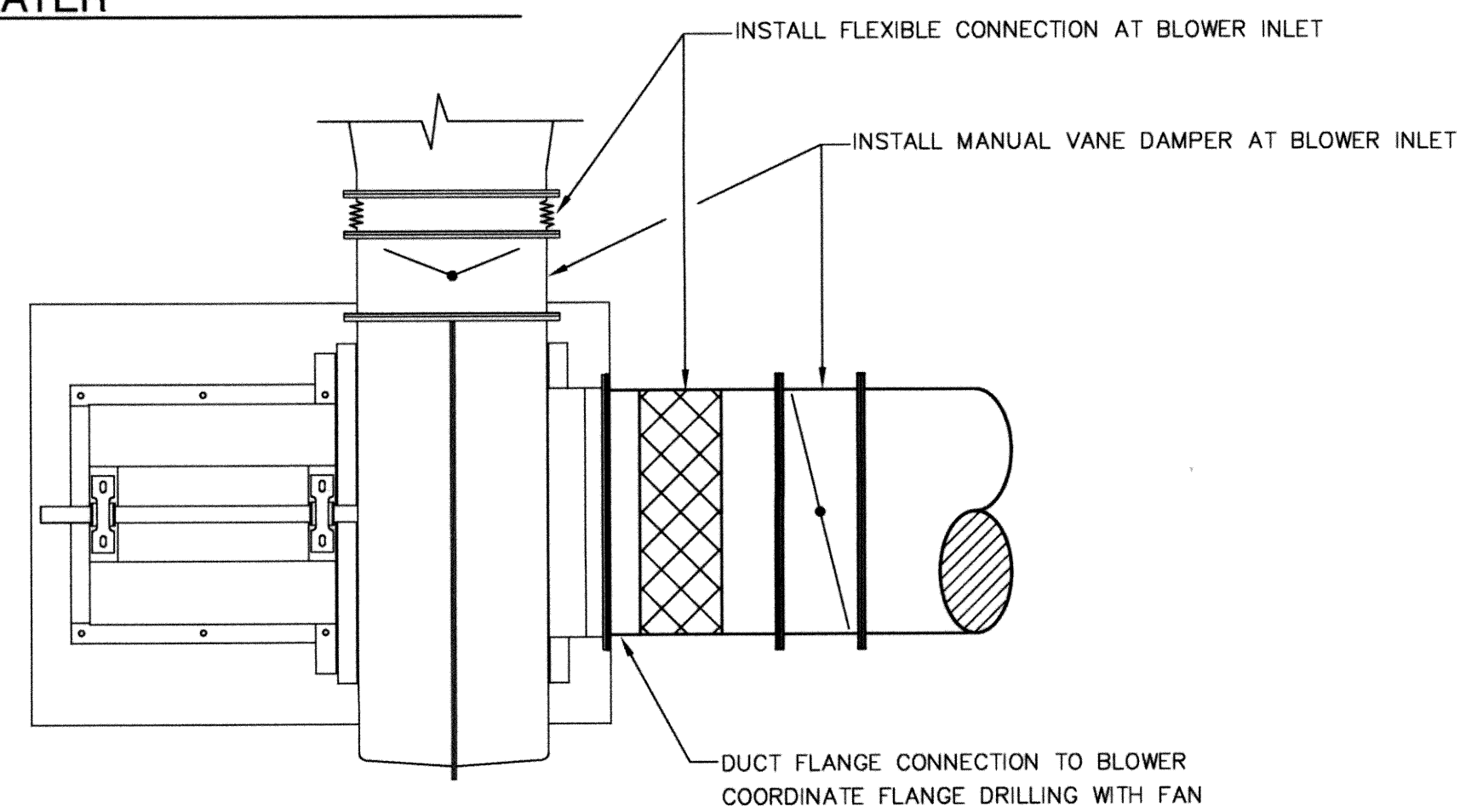
CONTROLS:  
 T-STAT & WALL SWITCH  
 INTERLOCK W/MOTORIZED DAMPER



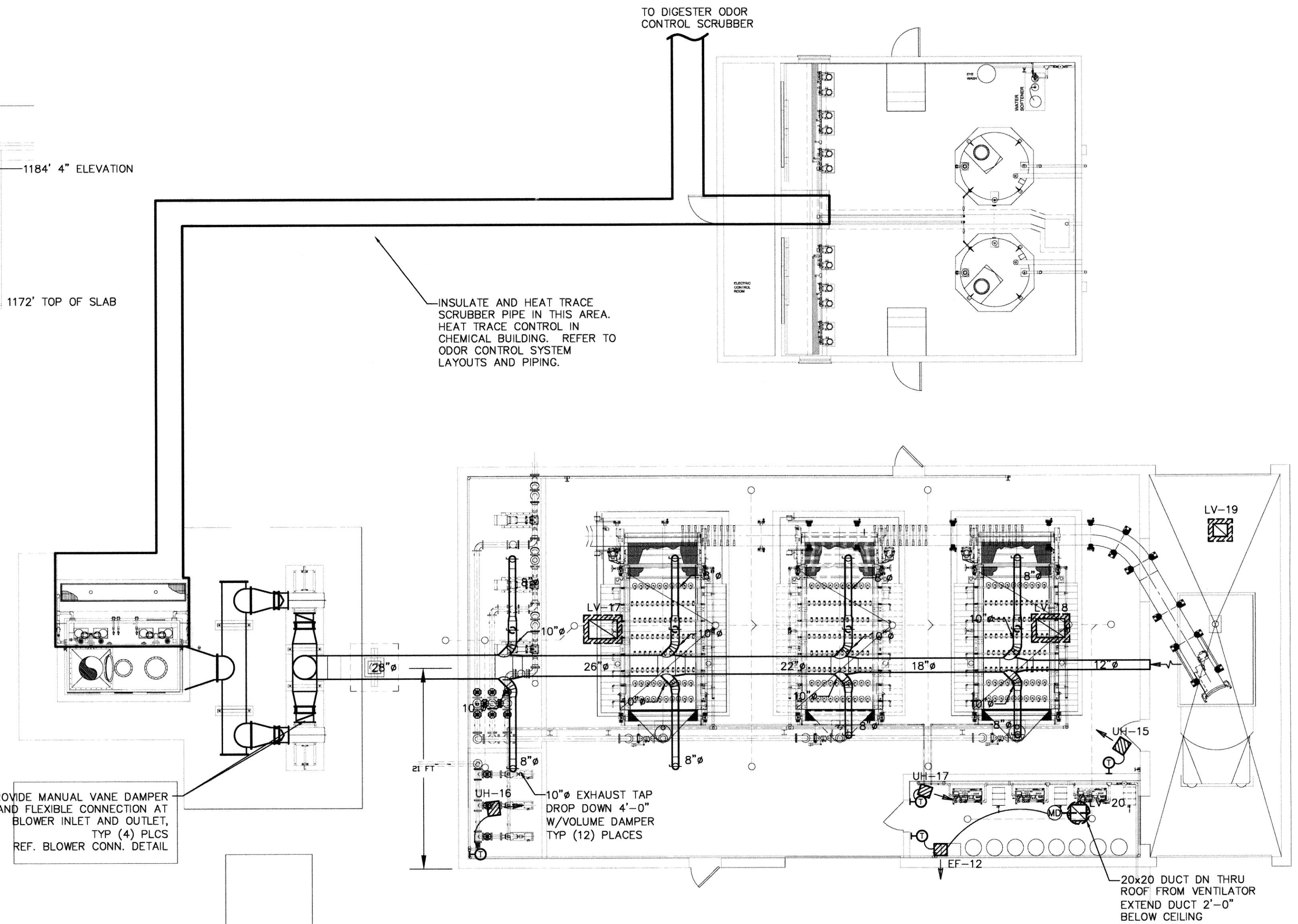
2 SOUTH ELEVATION  
 1/8" = 1'-0"



**ELECTRIC UNIT HEATER**  
 N.T.S.



**CONNECTION AT BLOWER**  
 N.T.S.



1 BELT FILTER PRESS BLDG HVAC PLAN  
 1/8" = 1'-0"



DESIGNED BY: CAD OPERATOR: CHECKED: SD APPROVED: SD PLOT DATE: DWG. SCALE: AS SHOWN SHEET: 9 OF 48

Thomas F. Keeter, PE# 17749  
 TFK Engineering, Inc.  
 Col#A# 5206 exp 8/2011

REVISIONS:	DATE:

**BELT FILTER PRESS BUILDING  
 HVAC DETAILS**

EAGLE OFFICE CENTER  
 2803 SOUTH BRYANT  
 EDMOND, OK. 73013  
 PH. (405) 844-3900  
 FAX. (405) 844-3600

**EAGLE CONSULTANTS, INC.**  
 CIVIL AND ENVIRONMENTAL ENGINEERS  
 CERTIFICATE OF AUTHORIZATION NO. CA2088

RECORD DRAWINGS  
 M-51

A B C D E F G

GRILLE & DIFFUSER SCHEDULE						
MARK	SERVICE	MANUFACTURER MODEL	STYLE	BORDER TYPE	FACE SIZE	NOTES
CD1	SUPPLY AIR	TITUS TMS	ROUND NECK CEILING DIFFUSER	LAY-IN	24" X 24"	A, B
CD2	SUPPLY AIR	TITUS TMS	ROUND NECK CEILING DIFFUSER	SURFACE	24" X 24"	A, B
CD3	SUPPLY AIR	TITUS TMS	ROUND NECK CEILING DIFFUSER	SURFACE	12" X 12"	A, B
RG1	RETURN AIR	TITUS 50F	EGGRATE CEILING GRILLE	LAY-IN	24" X 24"	A, B, C
RG2	RETURN AIR	TITUS 50F	EGGRATE CEILING GRILLE	SURFACE	24" X 24"	A, B, C
RG3	RETURN AIR	TITUS 50F	EGGRATE CEILING GRILLE	SURFACE	12" X 12"	A, B, C

NOTES:  
 A. STANDARD FINISH.  
 B. PROVIDE NECK FOR DUCT CONNECTION; SIZE AS INDICATED ON PLANS.  
 C. 1/2" STANDARD CORE.

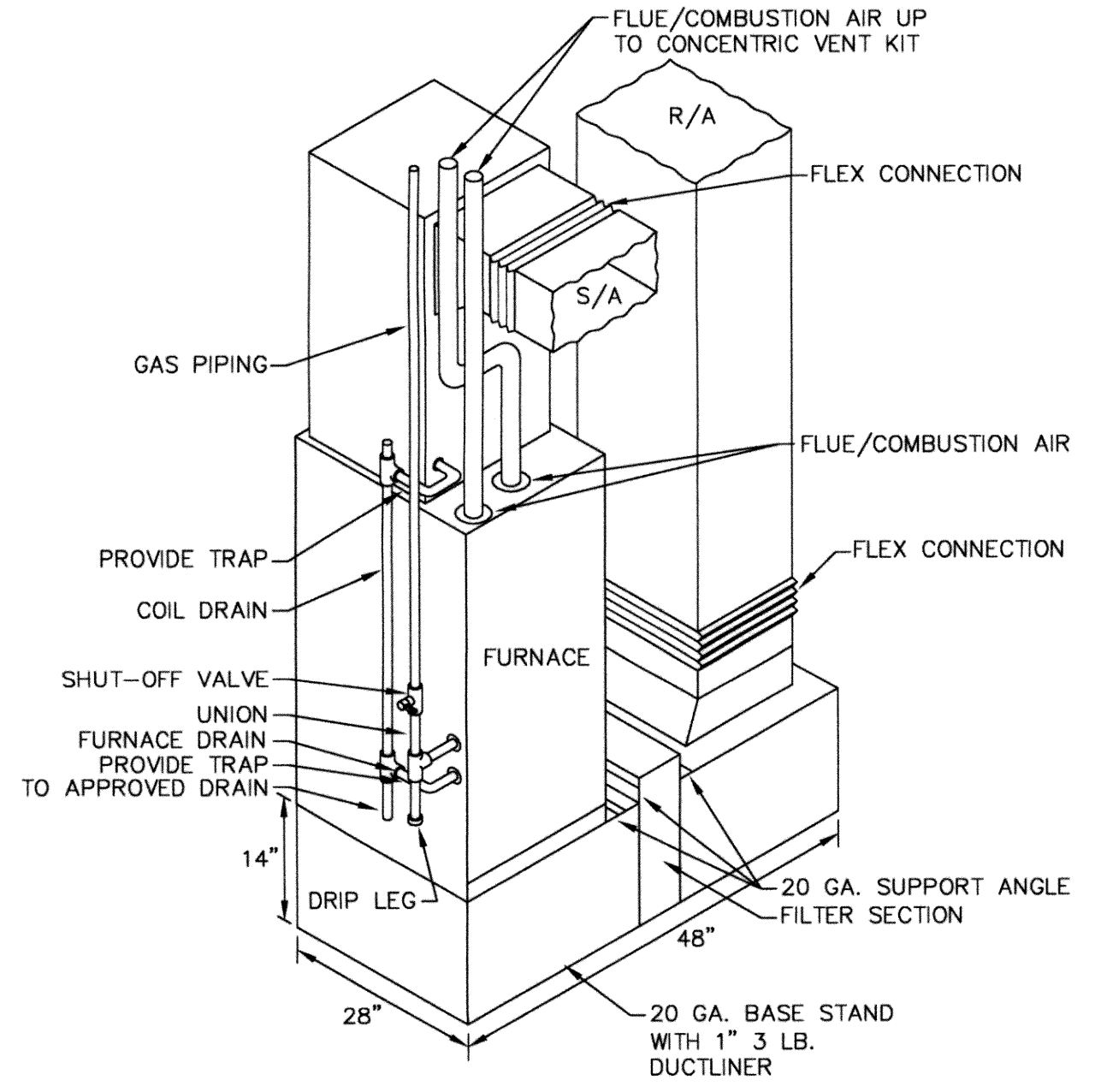
DUCTLESS SPLIT SYSTEM EQUIPMENT SCHEDULE											
AIR HANDLER						CONDENSING UNIT					
MARK	MANUFACTURER MODEL	AIRFLOW (CFM)	NOMINAL COOLING CAP (MBH)	SEER	VOLTS Φ HZ	FAN HP	MARK	MANUFACTURER MODEL	VOLTS Φ HZ	FAN HP	ACCESSORIES
DS-1	CARRIER 40MVC024-3	750	24	13	208 1 60	.112	DC-1	CARRIER 38MVC024-3	208 1 60	.218	A, B, C.

NOTES:  
 1. PROVIDE WEATHERPROOF SLEEVE FOR REFRIGERANT PIPING WALL PENETRATIONS.

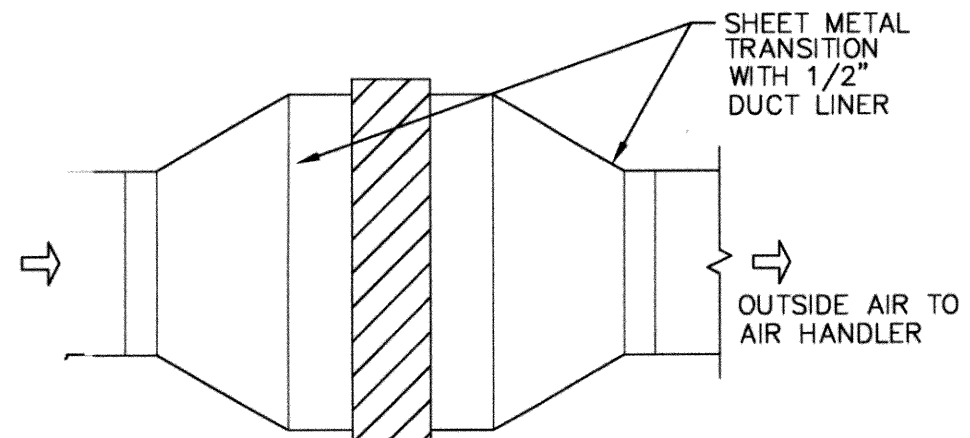
ACCESSORIES:  
 A. LOW AMBIENT CAPABILITY  
 B. CRANKCASE HEATER  
 C. FIELD FABRICATED WIND BAFFLE

GAS UNIT HEATER SCHEDULE											
MARK	MANUFACTURER MODEL NO.	CFM	VOLTS	PH	FLA	GAS HEAT INPUT (BTUH)	GAS HEAT OUTPUT (BTUH)	FAN MOTOR			
								HP	VOLTS	PH HZ	AMPS
UH-13	REZNOR UDAS-75	961	115	1	3.3	75,000	62,250	1/4	115	1 60	0.3

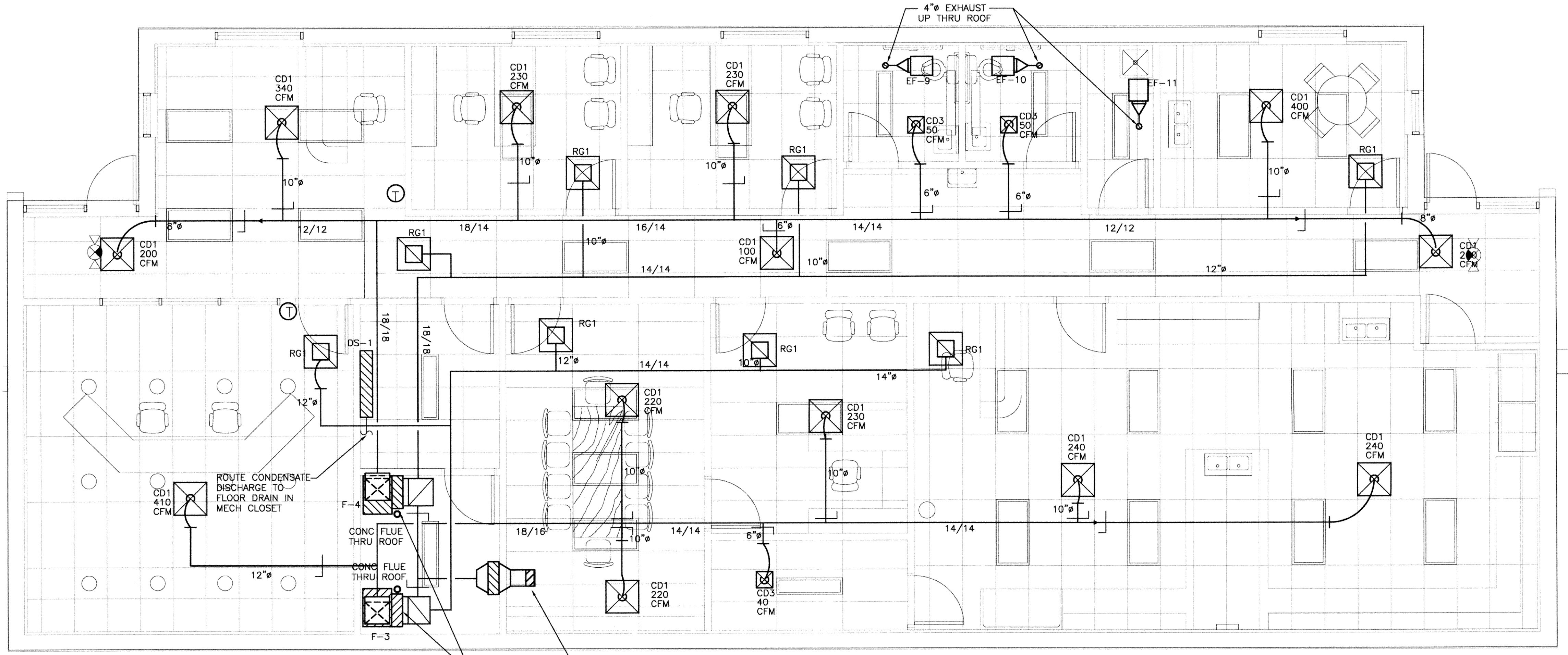
NOTES:  
 1. PROVIDE W/THERMOSTAT AND COMBUSTION AIR/VENT KIT; FIELD INSTALL.  
 2. PROVIDE W/VERTICAL LOUVERS FOR DOUBLE DEFLECTION.



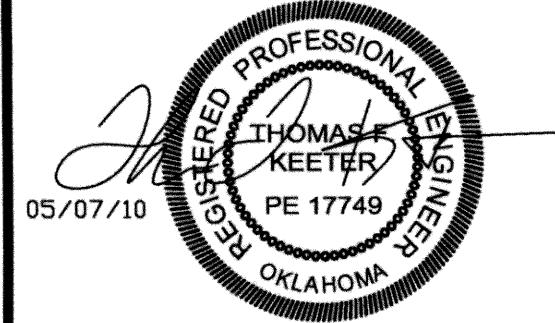
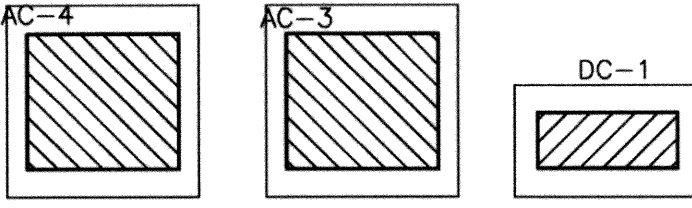
**GAS FURNACE DETAIL**  
NO SCALE



**OUTSIDE AIR FILTER DETAIL (TYPICAL)**  
NO SCALE



**ADMIN. HVAC PLAN**  
1/4" = 1'-0"



DESIGNED BY: CAD OPERATOR: CHECKED: SD APPROVED: SD PLOT DATE: DWG. SCALE: AS SHOWN SHEET: 10 OF 48

Thomas F. Keeter, PE# 17749  
 TFK Engineering, Inc.  
 Col# 5206 exp 6/2011

REVISIONS: DATE:

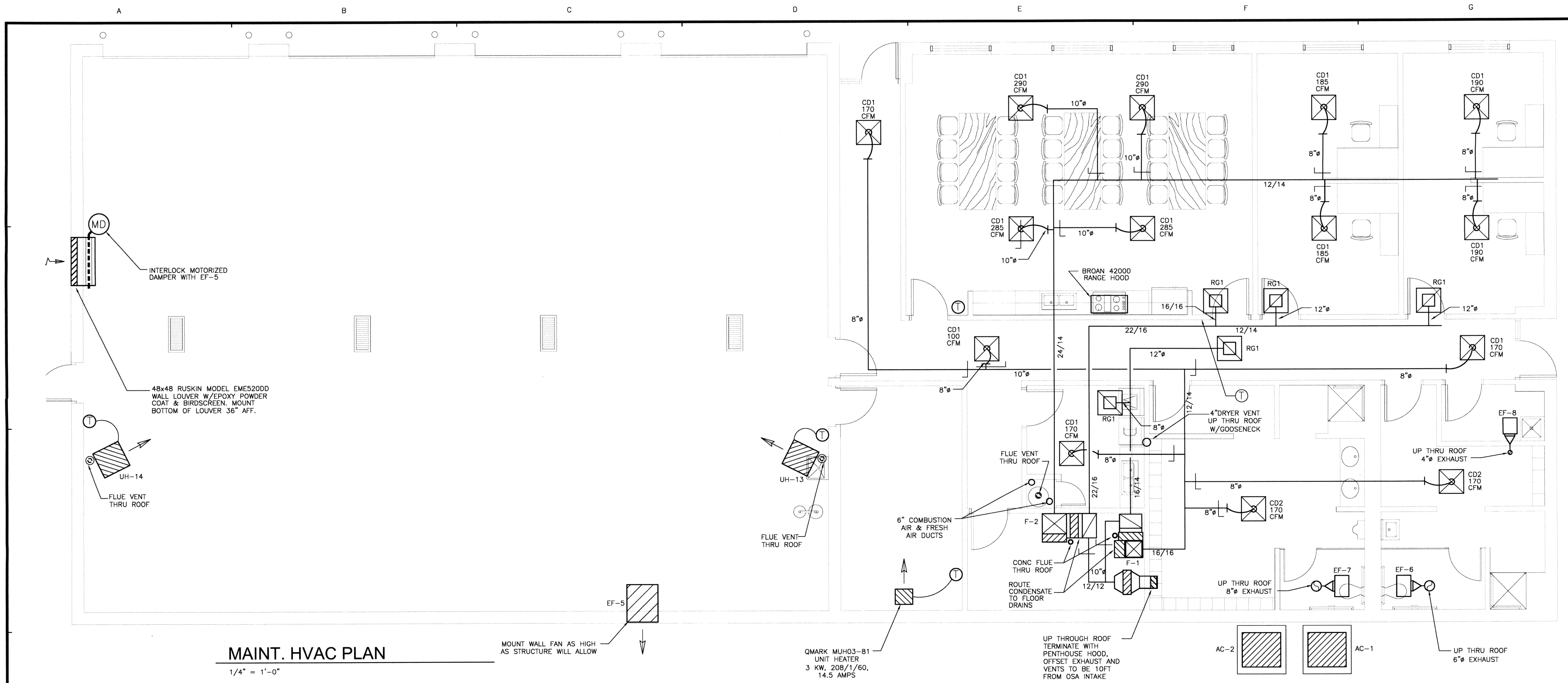
**ADMINISTRATION BUILDING  
 HVAC DETAILS**

EAGLE OFFICE CENTER  
 2803 SOUTH BRYANT  
 EDMOND, OK. 73013  
 PH. (405) 844-3900  
 FAX. (405) 844-3600

**EAGLE CONSULTANTS, INC.**  
 CIVIL AND ENVIRONMENTAL ENGINEERS  
 CERTIFICATE OF AUTHORIZATION NO. CA2088

RECORD DRAWINGS  
 M-61





**MAINT. HVAC PLAN**

1/4" = 1'-0"

**GENERAL NOTES:**

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2006 INTERNATIONAL MECHANICAL CODE, IN JUNCTION WITH LOCAL AMENDMENTS.
2. ALL THERMOSTATS SHALL BE SUPPLIED BY THE MECH CONTRACTOR. THE ELEC CONTRACTOR SHALL FURNISH AND INSTALL THE NECESSARY CONDUIT, WIRE, BOXES, ETC. FOR THE THERMOSTATS. THE MECH CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND CONNECTION OF THERMOSTATS.
3. INSTALL DUCTWORK AND SUPPORTS PER SMACNA STANDARDS AND FIBERGLASS DUCT MANUFACTURER'S RECOMMENDATIONS.
4. DUCT SIZES NOTED ARE NET FREE AREA.

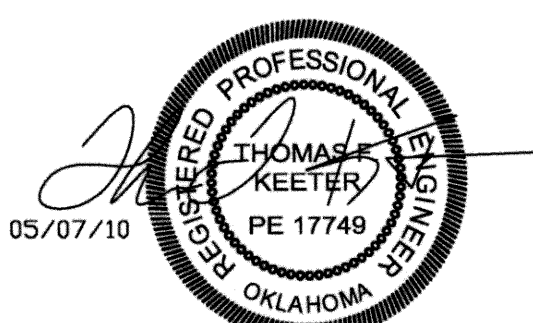
MARK	MANUFACTURER MODEL NO.	SERVICE	CFM	ESP	DRIVE	MOTOR				ACCESSORIES CONTROLS
						WATTS	HP	VOLT	PH	
EF-5	COOK WALL PAC 24XMP	WORK BAYS	4150	.125"	BELT	--	1/3	115	1	B
EF-6	COOK GEMINI GC-160	WOMENS ROOM (MAINT. BLDG)	110	.250"	DIR	62.5	--	115	1	1, 2, 3, 4 A
EF-7	COOK GEMINI GC-180	MENS ROOM (MAINT. BLDG)	225	.250"	DIR	159	--	115	1	1, 2, 3, 4 A
EF-8	COOK GEMINI GC-120	JANITOR (MAINT. BLDG)	50	.250"	DIR	25.8	--	115	1	1, 2 A
EF-9	COOK GEMINI GC-140	WOMENS ROOM (ADMIN. BLDG)	75	.250"	DIR	41.1	--	115	1	1, 2, 3, 4 A
EF-10	COOK GEMINI GC-140	MENS ROOM (ADMIN. BLDG)	75	.250"	DIR	41.1	--	115	1	1, 2, 3, 4 A
EF-11	COOK GEMINI GC-120	JANITOR (ADMIN. BLDG)	50	.250"	DIR	25.8	--	115	1	1, 2 A
EF-H	COOK 100SQN12D	HOOD (ADMIN. BLDG)	717	.250"	BELT	149	1/6	115	1	2, 3 C

- ACCESSORIES:**
1. GRAVITY BACKDRAFT DAMPER
  2. ROOF JACK W/BIRDSCREEN
  3. SOLID STATE VARIABLE SPEED CONTROL
  4. ALUMINUM GRILLE W/WHITE PAINTED FINISH
- CONTROLS:**
- A. INTERLOCK WITH LIGHT SWITCH
  - B. WALL SWITCH
  - C. CONTROL FROM HOOD SWITCH

**SPLIT SYSTEM EQUIPMENT SCHEDULE**

FURNACE										CONDENSING UNIT							
MARK	MANUFACTURER MODEL	SUPPLY (CFM)	O/A (CFM)	HEATING INPUT/OUTPUT (MBH)	E.S.P.	MTR HP	V φ	MCA	MOCF	OPTIONS/ACCESSORIES	MARK	MANUFACTURER MODEL	SEER	V φ	MOCF	MCA	OPTIONS/ACCESSORIES
F-1	TRANE TUX1B060A9241A	800	100	40/38	0.60"	1/5	115 1	4.8	15	4	AC-1	TRANE 2TTB3024A1	13	230 1	20	12	1,2,3,5,7,8
F-2	TRANE TUX1C080A9601A	1900	210	80/74	0.60"	3/4	115 1	13.5	20	4	AC-2	TRANE 2TTB3060A1	13	230 1	50	33	1,2,3,5,7,8
F-3	TRANE TUX1C080A9601A	1400	185	80/74	0.60"	3/4	115 1	13.5	20	4	AC-3	TRANE 2TTB3048A1	13	230 1	40	25	1,2,3,5,7,8
F-4	TRANE TUX1C080A9601A	1600	120	80/74	0.60"	3/4	115 1	13.5	20	4	AC-4	TRANE 2TTB3048A1	13	230 1	40	25	1,2,3,5,7,8

- GENERAL NOTES (ALL UNITS):**
- A. PROVIDE ALL CONTROLS AND ASSOCIATED TRANSFORMERS.
  - B. PROVIDE 7-DAY PROGRAMMABLE HEAT/COOL THERMOSTATS W/AUTOMATIC CHANGE-OVER.
- OPTIONS/ACCESSORIES:**
1. PROVIDE CRANKCASE HEATER.
  2. PROVIDE THERMOSTATIC EXPANSION VALVE.
  3. PROVIDE QUICK START KIT.
  4. PROVIDE CONCENTRIC VENT TERMINATION KIT. FIELD INSTALL CLAMP AND SHEET METAL STRAP TO SUPPORT THE WEIGHT OF THE TERMINATION KIT.
  5. PROVIDE MFR'S PRECHARGED REFRIGERANT LINE KIT OR TYPE AR COPPER, SIZED & INSTALLED PER MANUFACTURERS RECOMMENDATIONS.
  6. PROVIDE HAIL GUARD.
  7. PROVIDE LOW AMBIENT TEMPERATURE FAN SPEED CONTROL.
  8. PROVIDE SUPPORT FEET.



Thomas F. Keeter, PE# 17749  
TFK Engineering, Inc.  
CofA# 5206 exp 6/2011

REVISIONS:	DATE:

**MAINTENANCE BUILDING  
HVAC DETAILS**

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PH. (405) 844-3900  
FAX. (405) 844-3600

**EAGLE CONSULTANTS, INC.**  
CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088

DESIGNED BY:	CAD OPERATOR:	CHECKED:	APPROVED:	PLOT DATE:	DWG. SCALE:	SHEET:	OF
		SD	SD		AS SHOWN	12	48

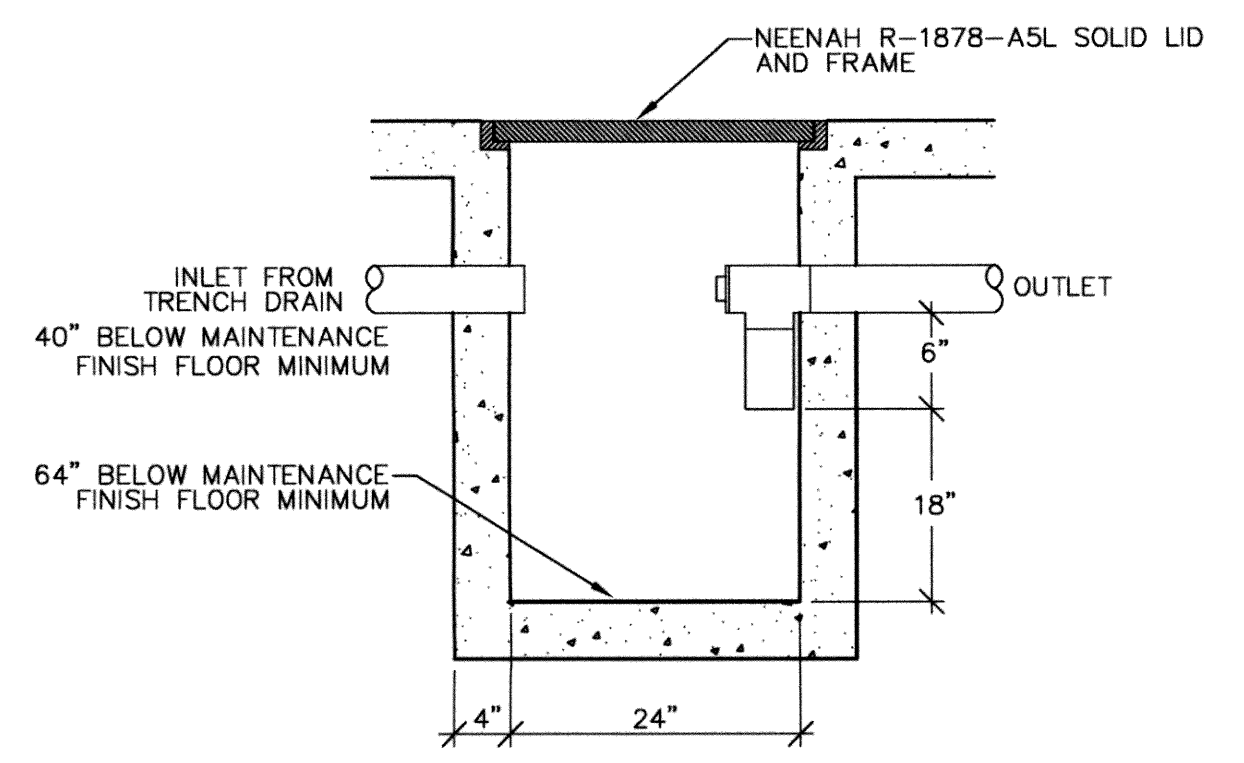


GAS-FIRED WATER HEATER SCHEDULE						
MARK	MANUFACTURER MODEL NO.	TYPE FUEL	CAP. (GAL)	INPUT (BTU)	RECOVERY 90° RISE (GPH)	NOTES:
WH-1	A.O. SMITH CONSERVATIONIST BT-65	TANK GAS-FIRED	65	65,000	67	1. SET OUTLET TEMP AT 140°F 2. PROVIDE MFR'S RECOMMENDED EXPANSION TANK 3. INSTALL ON 4" THK CONCRETE HOUSEKEEPING PAD

ELECTRIC WATER HEATER SCHEDULE								
MARK	MANUFACTURER MODEL NO.	TANK CAPACITY (GAL)	MAXIMUM INPUT (KW)	RECOVERY 80° RISE (GPH)	ELECTRICAL			NOTES:
					VOLTS	PH/HZ	FLA	
WH-2	A.O. SMITH DEL-40	50	4.0	20	208	1/60	19.2	1. SET OUTLET TEMP AT 140°F 2. PROVIDE MFR'S RECOMMENDED EXPANSION TANK 3. 2 NON-SIMULTANEOUS ELEMENTS

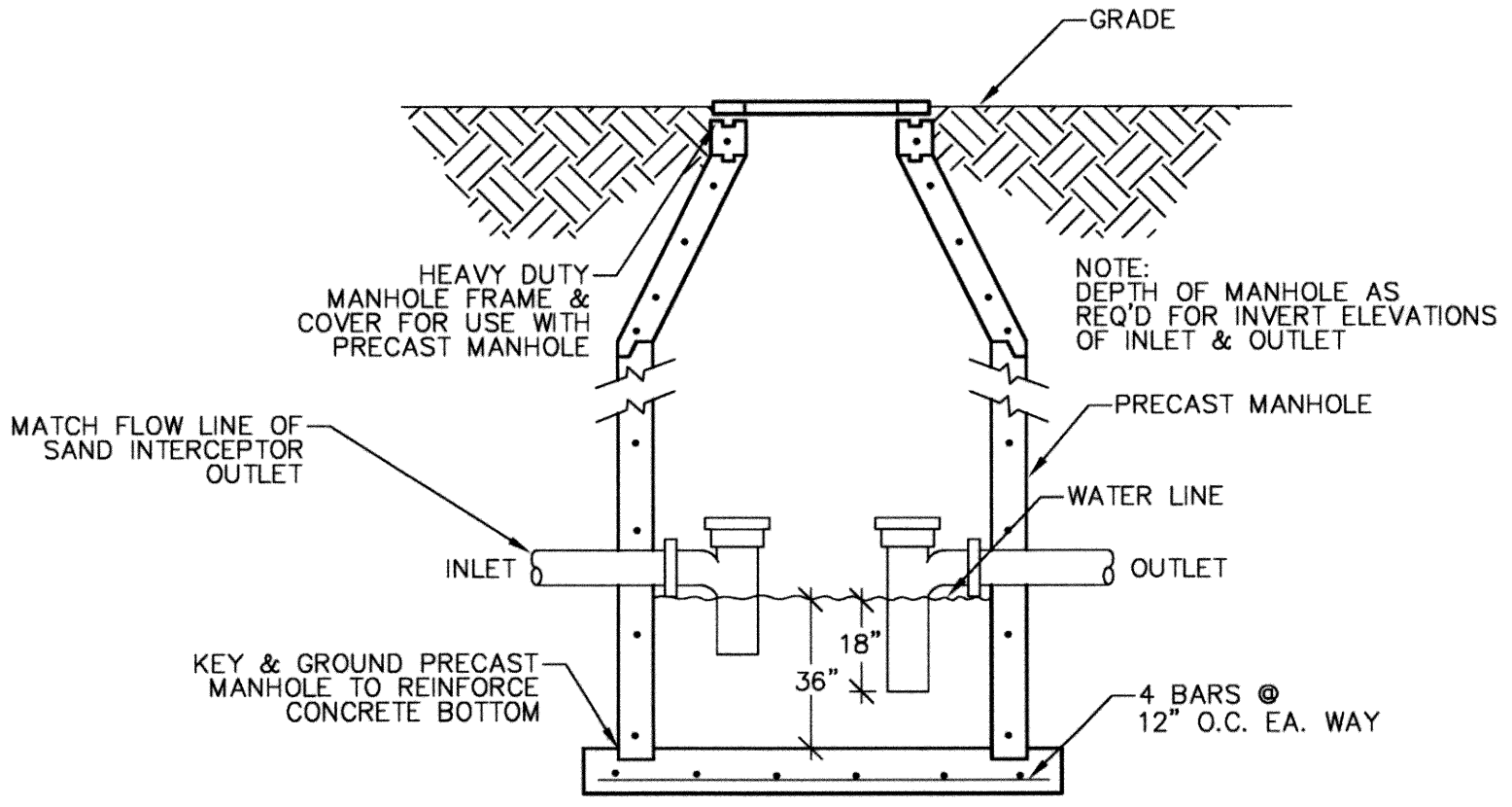
PLUMBING FIXTURE SCHEDULE									
MARK	FIXTURE	TYPE	SIZE	MANUFACTURER MODEL NO.	BRANCH SIZES (MIN)				OPTIONS/ACCESSORIES
					CW	HW	WASTE	VENT	
WC1	WATER CLOSET (HANDICAPPED)	FLUSH VALVE	ELONGATED 17" HIGH	AMERICAN STANDARD MADERA 3043.102	1 1/4"	--	4"	2"	SLOAN ROYAL MODEL 111 FLUSH VALVE, 1.6 GPF AMERICAN STANDARD 5901.100 SEAT
WC2	WATER CLOSET (HANDICAPPED)	TANK	ELONGATED 17" HIGH	AMERICAN STANDARD CADET 2377.100	3/4"	--	4"	2"	PROVIDE CHURCH 9500C ELONGATED OPEN FRONT SEAT
UR1	URINAL	WALL MOUNTED	17 1/2" X 14"	AMERICAN STANDARD TRIMBROOK 6561.017	1"	--	2"	1 1/4"	SLOAN ROYAL MODEL 186-1.0 GPF FLUSH VALVE PLUMBING CONTRACTOR TO PROVIDE CARRIER; SEE NOTE BELOW
LV1	LAVATORY	WALL MOUNTED	19" ROUND	AMERICAN STANDARD COMRADE 0124.024	1/2"	1/2"	2"	1 1/4"	PROVIDE W/AMERICAN STANDARD RELIANT FAUCET MODEL 2385.400
LV2	LAVATORY	SELF RIMMING	21" X 17 5/8" OVAL	AMERICAN STANDARD CADET 0419.444	1/2"	1/2"	2"	1 1/4"	PROVIDE W/AMERICAN STANDARD RELIANT FAUCET MODEL 2385.400
SK1	SINK 2-COMP S.S.	SELF RIMMING	33" X 22" 8" DEEP	ELKAY LUSTERTONE LR33224	1/2"	1/2"	2"	1 1/4"	PROVIDE W/DELTA 400 FAUCET AND SPRAY NOZZLE
SK2	SINK 2-COMP S.S.	SELF RIMMING	29" X 18" 10" DEEP	ELKAY LUSTERTONE DLR291810	1/2"	1/2"	2"	1 1/4"	PROVIDE W/DELTA 400 FAUCET
SK3	SERVICE SINK	WALL MOUNTED	22" X 18" 10 1/2" DEEP	AMERICAN STANDARD LAKEWELL 7692.008	1/2"	1/2"	3"	1 1/2"	PROVIDE W/8340.243 EXPOSED YOKE WALL MOUNT UTILITY FAUCET AND TRAP STANDARD 7798.030
MB1	MOP BASIN	FLOOR MOUNTED	24" X 24" 10" DEEP	FIAT MSB-2424	1/2"	1/2"	3"	1 1/2"	PROVIDE W/830-AA SERVICE FAUCET, 1453-BB GRID STRAINER, AND B32-AA HOSE & BRACKET
SD1	SHOWER DRAIN	LIGHT DUTY	2"	SIoux CHIEF 821-2PNR	--	--	2"	1 1/2"	POLISHED NICKEL BRONZE ROUND RING AND STRAINER INSTALL DRAIN IN TILE FLOOR OF SHOWER
SV1	SHOWER HEAD MIXING VALVE	WALL MOUNTED	--	DELTA 621 SERIES	1/2"	1/2"	--	--	
ES1	EMERGENCY EW/SHOWER	FLOOR MOUNTED	--	HAWS 8200	3/4"	3/4"	2"	--	PROVIDE W/MODEL 9202 TMV & MODEL 8127FC SHOWER HEAD PROVIDE 1 1/4" SUPPLY LINE FROM TMV TO SHOWER HEAD
EWC	ELECTRIC WATER COOLER	WALL MOUNTED	18 3/8" X 19"	ELKAY LZ08	1/2"	--	1 1/4"	1 1/4"	
HB1	HOSE BIBB	HEAVY DUTY	1/2" INLET	PRIER C-138NP.50	1/2"	--	--	--	NICKEL CHROME PLATED
FPWH	FREEZE PROOF WALL HYDRANT	CONCEALED BOX	3/4" INLET	WOODFORD B65 W/P" INLET	3/4"	--	--	--	FOR INSTALLATION IN 12" THICK CMU WALL
FD1	FLOOR DRAIN	LIGHT DUTY	2"	JOSAM 30002	--	--	2"	1 1/4"	SATIN FINISH BRONZE TOP; 1/2" PRIMER TAP PROVIDE W/TRAP PRIMER VALVE

NOTES:  
1. URINAL IS ADA COMPLIANT WHEN MOUNTED AT RIM HEIGHT OF 17" AFF.  
2. UNDER-SLAB WASTE PIPE SHALL BE 2" MIN.



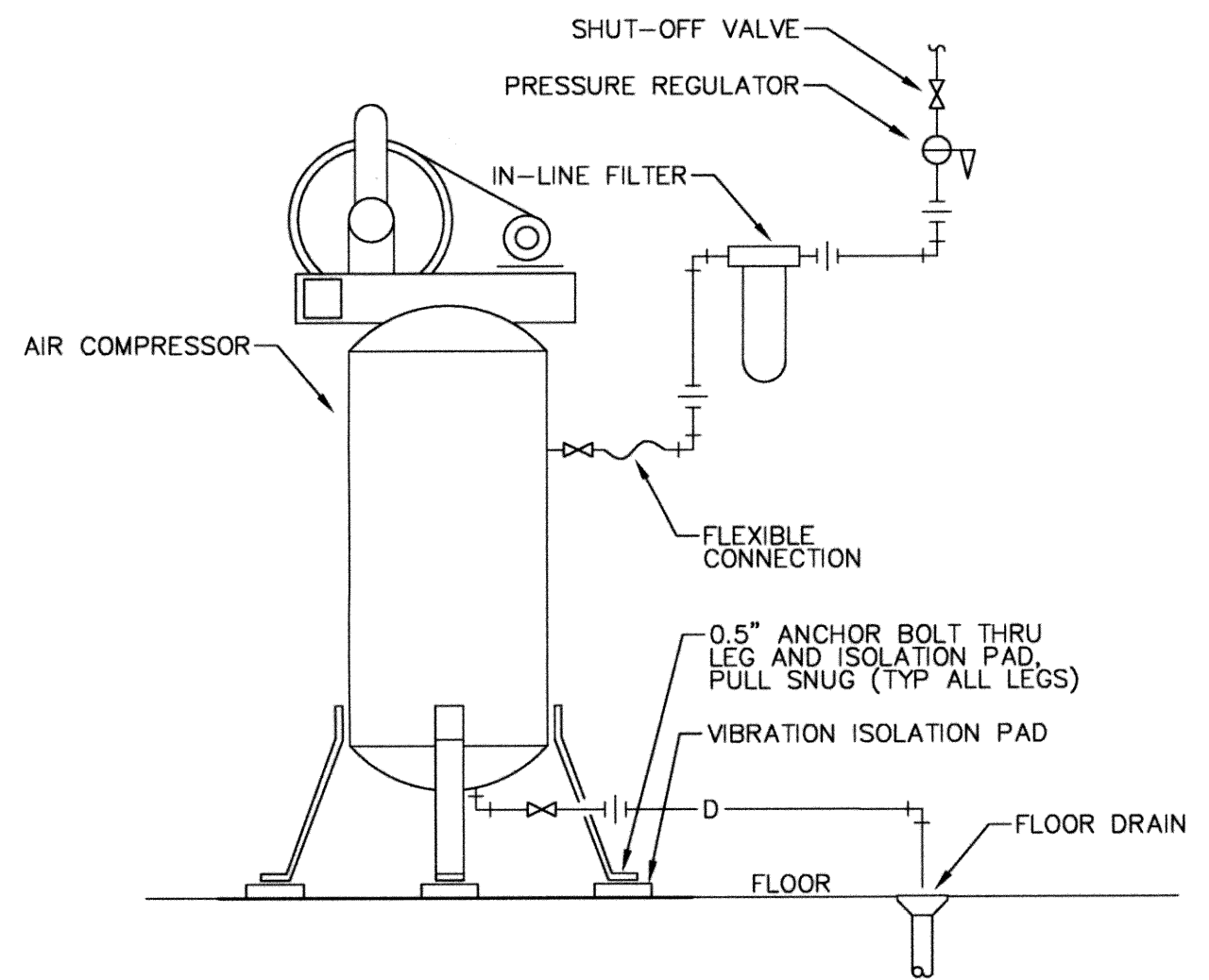
**SAND INTERCEPTOR DETAIL**

NOTE: CONTRACTOR OPTION TO USE PRECAST INTERCEPTOR PER DETAIL OR ZURN MODEL Z1187-SI PREFABRICATED SAND INTERCEPTOR



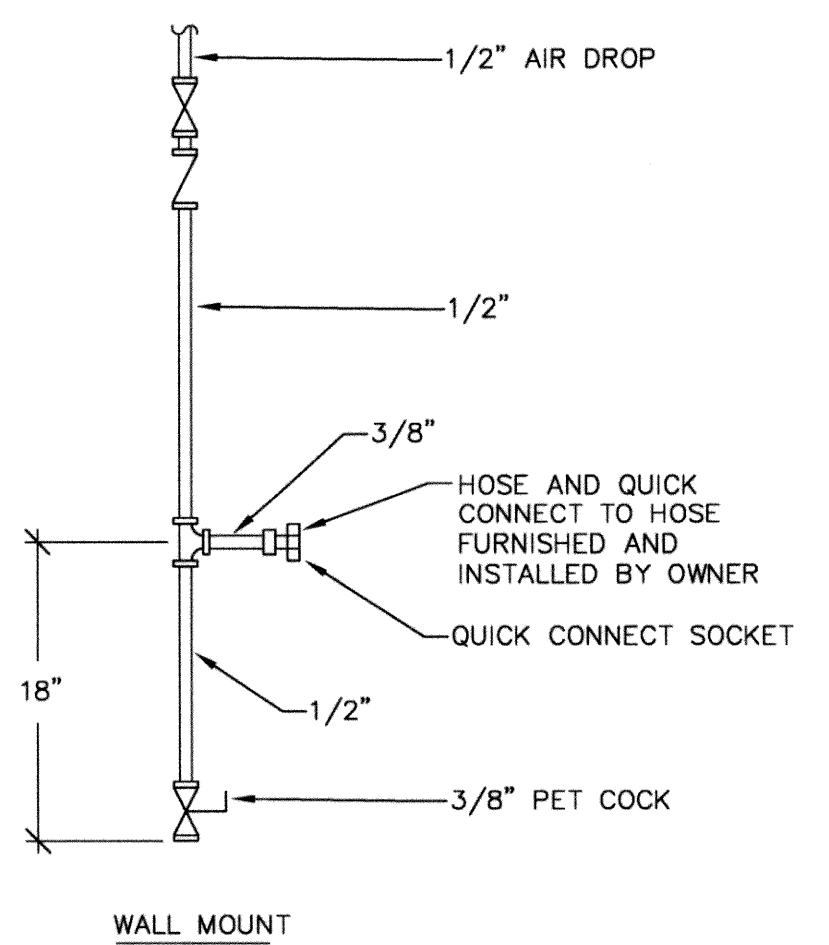
**OIL INTERCEPTOR DETAIL**

NOTE: CONTRACTOR OPTION TO USE PRECAST INTERCEPTOR PER DETAIL OR ZURN MODEL Z1198 PREFABRICATED OIL INTERCEPTOR W/OIL LEVEL SENSOR



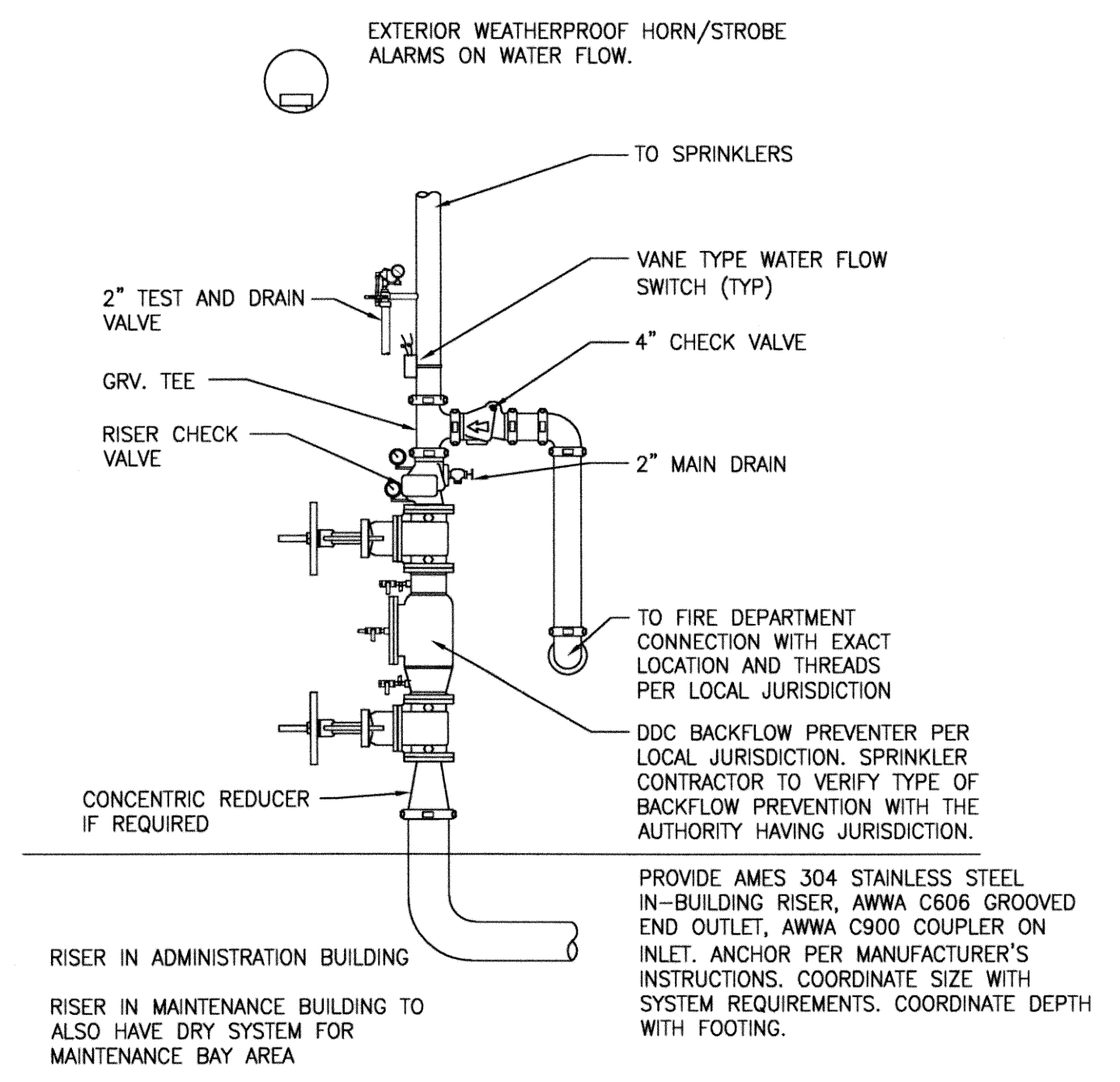
**AIR COMPRESSOR DETAIL**

NO SCALE



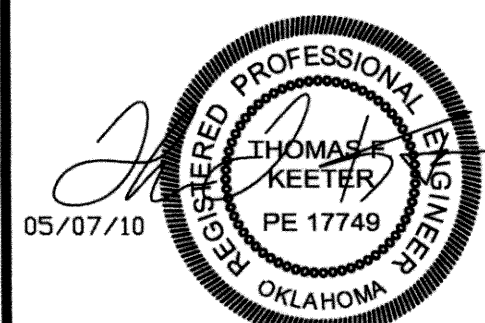
**AIR DROP PIPING SCHEMATIC**

NO SCALE



**FIRE PROTECTION RISER DETAIL**

NO SCALE



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		SD	SD		AS SHOWN	14 OF 48		

ADMIN./MAINT. BUILDING  
PLUMBING DETAILS

EAGLE OFFICE CENTER  
2803 SOUTH BRYANT  
EDMOND, OK 73013  
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**EAGLE CONSULTANTS, INC.**  
CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088

RECORD DRAWINGS

M-65

WASTEWATER TREATMENT SYSTEM IMPROVEMENTS, MOORE, OK

SPLIT SYSTEM EQUIPMENT SCHEDULE																						
AIR HANDLER													CONDENSING UNIT									
MARK	MANUFACTURER MODEL	NOMINAL COOLING CAPACITY (MBH)	SUPPLY (CFM)	O/A (CFM)	E.S.P. (w.c.)	BLOWER MOTOR			ELECTRIC HEATER			OPTIONS/ACCESSORIES	MARK	MANUFACTURER MODEL	SEER	VOLTS		MCA	MOCP	FAN MTR		OPTIONS/ACCESSORIES
						HP	VOLTS	φ HZ	CAP. (KW)	VOLTS	φ HZ					AMPS	MCA			MOCP	HP	
AH-9	TRANE 4TEH3F30	30	1000	25	0.40"	1/3	230	1/60	4.8	240	1/60	20 29 30	4.	CU-9	TRANE 2TWA3048A4	13.0	460 3 60	9	15	1/5	0.7	1. 2. 3. 5. 6.

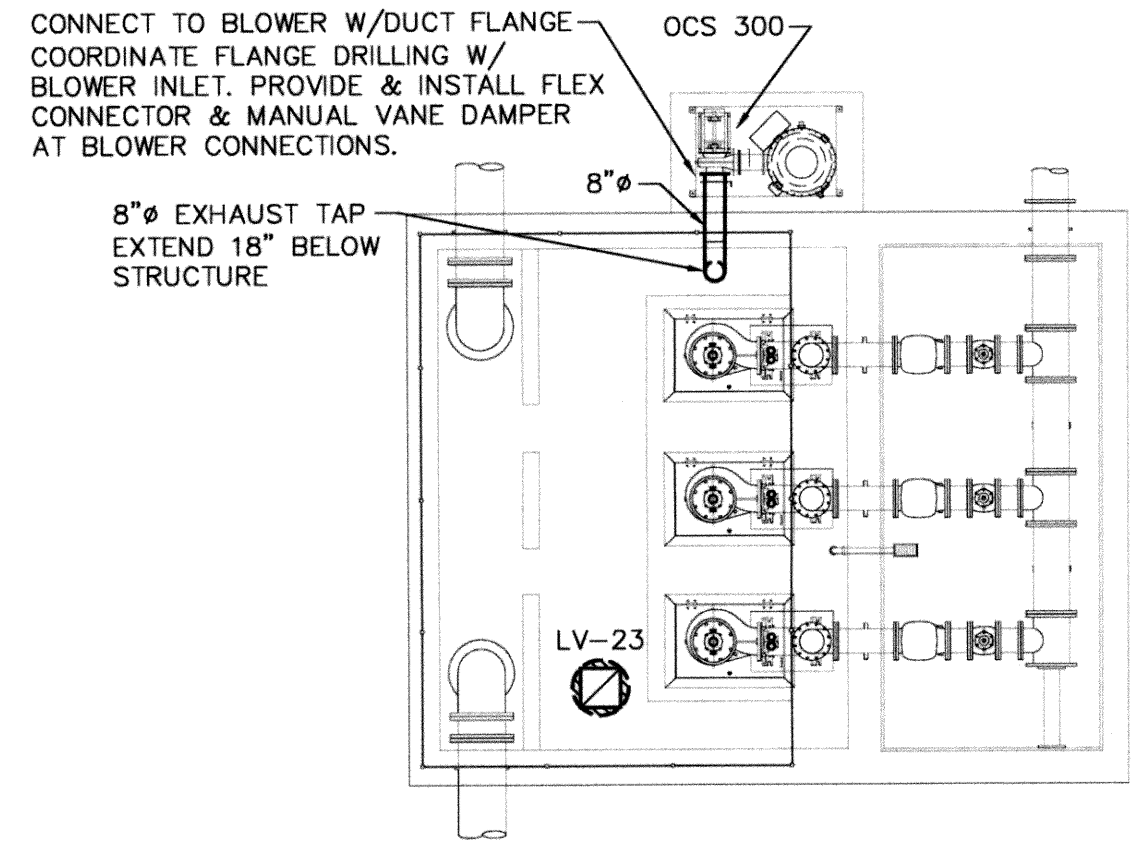
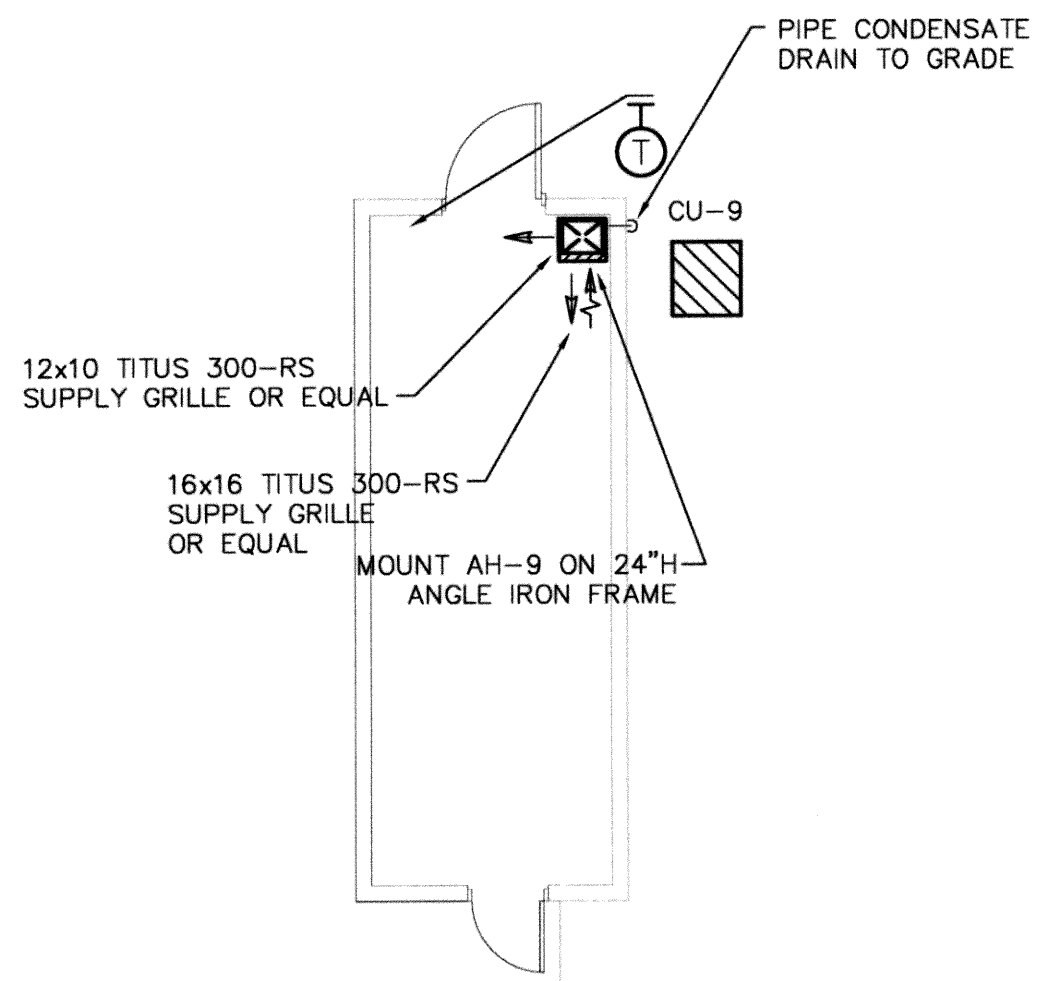
**OPTIONS/ACCESSORIES:**  
 1. ANTI-SHORT CYCLE TIMER  
 2. REFRIGERANT LINESET, SIZED & INSTALLED PER MFR'S RECOMMENDATIONS  
 3. INDOOR FAN DELAY KIT  
 4. HEAT/COOL THERMOSTAT  
 5. EVAPORATOR DEFROST CONTROL  
 6. LOW AMBIENT KIT

**NOTE:**  
 AIR HANDLER IS HORIZONTAL RIGHT CONFIGURATION.

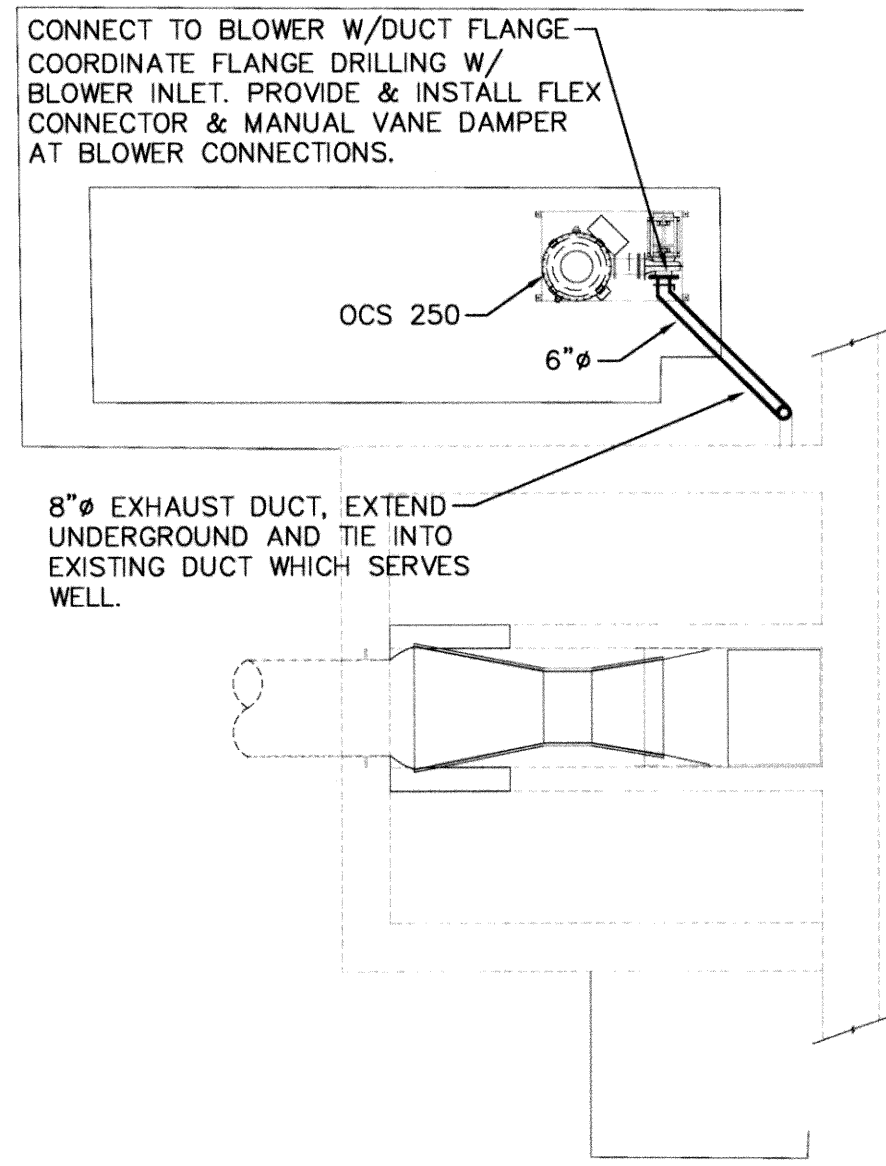
**NOTES:**  
 COORDINATE EXACT LOCATION OF CONDENSING UNITS WITH OWNER.  
 ROUTE REFRIGERANT PIPING THRU WALL TO UNIT.  
 PROVIDE WEATHER PROOF SLEEVE AT WALL PENETRATION.  
 PROVIDE CONCRETE EQUIPMENT BASE FOR CONDENSING UNIT.

VENTILATOR SCHEDULE						
MARK	MANUFACTURER MODEL NO.	SIZE	F/A SQ FT	CFM	S.P. IN. WC	ACCESSORIES:
LV-23	COOK PR-12	20 X 20	--	450	.119"	4. 5.

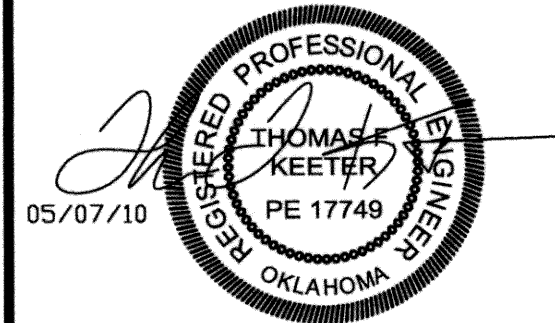
**ACCESSORIES:**  
 1. MOTORIZED BACKDRAFT DAMPER  
 2. ALUMINUM ROOF CURB  
 3. ALUMINUM BIRDSCREEN  
 4. EPOXY POWDER COAT  
 5. INSECT SCREEN



1 RETURN LIFT STATION HVAC PLAN  
1/8" = 1'-0"



2 EXISTING LIFT STATION HVAC PLAN  
1/8" = 1'-0"



Thomas F. Keeter, PE# 17749  
TFK Engineering, Inc.  
CofA# 5206 exp 8/2011

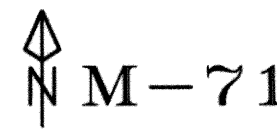
REVISIONS:	DATE:

RETURN AND EXISTING L.S. HVAC DETAILS

EAGLE OFFICE CENTER  
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RECORD DRAWINGS

EAGLE CONSULTANTS, INC.  
CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088



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**ELECTRICAL GENERAL NOTES**

- PRIOR TO BID AND CONSTRUCTION SURVEY THE SITE TO DETERMINE ALL EXISTING CONDITIONS RELATED TO THE WORK. THIS INCLUDES ALL EXISTING UTILITIES.
- ELECTRICAL CONTRACTOR TO COORDINATE THE MOUNTING HEIGHTS OF ALL DEVICES WITH EQUIPMENT AND FIXTURES.
- ALL CIRCUITS SHALL HAVE AN EQUIPMENT GROUND WIRE ROUTED IN THE CONDUIT.
- ALL 120V BRANCH CIRCUITS GREATER THAN 100' SHALL BE #10 THHN, MINIMUM.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING BREAKER SIZE AND DISCONNECT SIZE FOR EQUIPMENT WITH EQUIPMENT SUBMITTALS PRIOR TO INSTALLATION.
- THE DRAWINGS ARE INTENDED TO COVER THE LAYOUT AND DESIGN OF THE WORK AND ARE NOT TO BE SCALED FOR MEASUREMENTS.
- ANY CONNECTION TO OR RELOCATION OF EXISTING UTILITIES REQUIRING DISCONNECTION OF NORMAL UTILITY SERVICES SHALL BE SCHEDULED AND COORDINATED WITH THE OWNER OR HIS REPRESENTATIVE. PREMIUM TIME SHALL BE INCLUDED.
- IN NO CASE SHALL THE UTILITIES BE LEFT DISCONNECTED AT THE END OF A WORKDAY WITHOUT PRIOR AUTHORIZATION FROM THE OWNER.
- PROVIDE ALL EXCAVATION NECESSARY FOR INSTALLATION OF THE WORK INCLUDED. COMPLY WITH ALL APPLICABLE AND GOVERNING SAFETY REGULATIONS INCLUDING OSHA.
- CONTRACTOR SHALL REPAIR ANY EXISTING FACILITIES DAMAGED DUE TO THE OPERATIONS OF THE CONTRACTOR.
- WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE REQUIREMENTS OF ALL GOVERNING CODES, RULES AND REGULATIONS, INCLUDING THE FOLLOWING MINIMUM STANDARDS, WHETHER STATUTORY OR NOT:
  - NATIONAL ELECTRICAL CODE (NEC).
  - NATIONAL FIRE PROTECTION ASSOCIATION (NFPA).
  - INTERNATIONAL BUILDING CODE (IBC).
  - AMERICANS WITH DISABILITIES ACT (ADA).
- CONTRACTOR SHALL PROCURE AND PAY FOR ALL REQUIRED PERMITS AND LICENSES.
- GUARANTEE EACH NEW SYSTEM AND EACH ELEMENT THEREOF AGAINST ANY DEFECT DUE TO FAULTY WORKMANSHIP, DESIGN OR MATERIAL FOR A PERIOD OF ONE YEAR.
- INSTALL ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS.
- THE CONTRACTOR SHALL SHOW, ON BLUE-LINE PRINTS, ANY CHANGES FROM THE ORIGINAL DRAWINGS MADE DURING INSTALLATION DELIVER TO THE ARCHITECT WHEN THE WORK IS COMPLETED.
- PROVIDE THREE (3) COPIES OF OPERATING AND SERVICE MANUALS, INCLUDING OPERATING INSTRUCTION, SERVICE INSTRUCTIONS, AND SUBMITTAL LITERATURE TO THE OWNER.
- DEMONSTRATE TO AND INSTRUCT THE OWNER IN THE PROPER OPERATION AND MAINTENANCE OF ALL SYSTEMS.
- WHERE EQUIPMENT IS FURNISHED BY THE OWNER OR OTHER CONTRACTOR, PROVIDE ROUGH-IN AND MAKE FINAL CONNECTIONS PER SHOP DRAWINGS AND MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- STORE EQUIPMENT AND MATERIAL TO PREVENT DAMAGE. DAMAGED EQUIPMENT SHALL BE REPLACED OR RESTORED TO A CONDITION ACCEPTABLE TO THE OWNER.
- TEST ALL DEVICES, PERFORM EQUIPMENT START-UP, AND MAKE ANY ADJUSTMENTS REQUIRED TO MAKE THE EQUIPMENT FULLY OPERATIONS PER THE MANUFACTURER'S INSTRUCTIONS.
- PROVIDE FIRESTOPPING FOR PIPES, DUCTWORK, ETC. PASSING THROUGH FIRE OR SMOKE PARTITIONS.
- COORDINATE WITH OTHER TRADES WHEN LOCATING EQUIPMENT, LIGHTS, PIPING, DUCTWORK, ETC.
- PROVIDE PULL STRING IN ALL EMPTY CONDUITS.
- ALL THREE PHASE CIRCUITS AND CIRCUITS LARGER THAN 30A SHALL BE RUN IN SEPARATE CONDUITS. OTHER CIRCUITS MAY BE COMBINED IN CONDUITS SUCH COMBINED CIRCUITS SHALL BE DERATED PER NEC.
- CONNECT EXIT/EMERGENCY LIGHTS AHEAD OF SWITCH TO LOCAL LIGHTING CIRCUIT. OBTAIN APPROVAL FROM FIRE MARSHALL FOR EMERGENCY LIGHT LOCATIONS.
- THE "ELECTRICAL" DOCUMENTS ARE NOT STAND ALONE DOCUMENTS BUT ARE A PORTION OF A LARGER SET OF CONSTRUCTION DOCUMENTS. REFER TO ALL DOCUMENTS FOR WORK.

**INSTRUMENT GENERAL NOTES**

- FOR MOVs PROVIDE 120V CIRCUIT TO EACH MOV. MAXIMUM FOUR PER CIRCUIT. ROUTE THROUGH CONTROL PANEL. ALL MOVs REQUIRE SEVEN CONDUCTORS, 3 POWER, 2 INDICATION, 2 SIGNAL.
- ALL CONTROL CABLES SHALL BE IN CONDUIT. CONTROL CABLES MAY BE GANGED INTO COMMON CONDUITS WHERE PRACTICAL.
- ROUTE POWER FOR SOLENOID VALVE THROUGH CONTROLLER FOR ASSOCIATED EQUIPMENT.
- WHERE EMERGENCY STOPS ARE REQUIRED CONNECT TO EQUIPMENT CONTROLLER AS NEEDED. EMERGENCY STOP SHALL BE RED MUSH-HEAD, NEMA 4X. COORDINATE LOCATION WITH EQUIPMENT AND OWNER.
- COORDINATE CONNECTION, MOUNTING, INSTALLATION, AND WIRING REQUIREMENTS WITH INSTRUMENT/EQUIPMENT SPECIFICATIONS. WHERE INSTRUMENTS REQUIRE 120V, INSTRUMENTS IN COMMON AREA TO BE ON COMMON CIRCUIT.
- PROVIDE 3/4" WITH CONTROL CABLING FROM EACH VFD AND STARTER/CONTROLLER TO SCADA PANEL. COORDINATE WITH SCADA SYSTEM.

**ELECTRICAL LEGEND**

- DOWNLIGHT
- FLUORESCENT FIXTURE
- FLUORESCENT FIXTURE UPPER CASE LETTER INDICATES FIXTURE TYPE
- SITE LIGHTING, HEADS PER PLAN
- EXIT FIXTURE, TYPE X CEILING OR WALL MOUNTED. PROVIDE DIRECTIONAL ARROW WHERE APPLICABLE.
- EMERGENCY FIXTURE +12" BELOW CEILING
- EXIT/EMERGENCY COMBINATION FIXTURE
- THERMOSTAT ROUGH-IN, LOCATE PER MECHANICAL
- PUSHBUTTON, +48" AFF. CONFIRM LOCATION WITH OWNER
- BUZZER, CONFIRM LOCATION WITH OWNER
- VOICE OUTLET, +16" AFF U.O.N. PROVIDE PLATE/JACK AND CAT 6 CABLE TO TELECOM RACK.
- DATA OUTLET, +16" AFF U.O.N. PROVIDE PLATE/JACK AND CAT 6 CABLE TO TELECOM RACK.
- TOGGLE SWITCH +48" AFF U.O.N.
- SWITCH, 3-WAY +48" AFF U.O.N.
- TIMER SWITCH, +48" AFF U.O.N.
- SWITCH, KEYED +48" AFF U.O.N.
- SWITCH, DIMMER +48" AFF U.O.N.
- SWITCH, OCCUPANCY SENSOR
- SWITCH, MANUAL MOTOR STARTER
- RECEPTACLE, SIMPLEX CONVENIENCE OUTLET, +16" U.O.N.
- RECEPTACLE, DUPLEX CONVENIENCE OUTLET, +16" U.O.N.
- RECEPTACLE, SPECIAL, COORDINATE WITH EQUIPMENT
- RECEPTACLE, DOUBLE DUPLEX OUTLET
- WELDING RECEPTACLE, 48" U.O.N.
- JUNCTION BOX
- RECEPTACLE, DUPLEX CONVENIENCE OUTLET ABOVE/IN CEILING
- ACCESS CONTROL ROUGH-IN, 48" AFF WITH 3/4" C TO INTERIOR.
- CAMERA, ROUGH-IN HIGH ON BUILDING, 3/4" C TO NEAREST ELECTRICAL CONTROL ROOM.
- NON-FUSED DISCONNECT
- FUSED DISCONNECT
- COMBINATION STARTER/DISCONNECT
- MAGNETIC CONTACTOR
- TRANSFORMER
- ELECTRONIC SOFT STARTER
- PANELBOARD
- HOMERUN, CONTINUOUS RUN TO PANEL OR EQUIPMENT
- ELECTRIC MOTOR
- ABOVE COUNTER, COORDINATE ROUGH-IN WITH MILLWORK.
- WEATHERPROOF
- GFI
- IG
- F/R
- OHD
- WH
- UH
- ATS

**INSTRUMENT LEGEND**

- INSTRUMENT - FLOATS, 6-#14
- INSTRUMENT - LEVEL TRANSDUCER, 1-STP
- INSTRUMENT - TEMPERATURE, 1-STP AND 120V
- INSTRUMENT - DISSOLVED OXYGEN, 1-STP AND 120V
- INSTRUMENT - TOTAL SOLIDS, 1-STP AND 120V
- INSTRUMENT - ACIDITY, 1-STP AND 120V
- INSTRUMENT - AIR FLOW, 1-STP
- INSTRUMENT - DIFFERENTIAL PRESSURE, 1-STP AND 120V
- INSTRUMENT - TURBIDIMETER, 1-STP AND 120V
- INSTRUMENT - TOC ANALYZER, 1-STP AND 120V
- INSTRUMENT - CHLORINE, 1-STP AND 120V
- INSTRUMENT - ULTRASONIC FLOW METER, 1-STP AND 120V
- INSTRUMENT - MAG FLOW METER, 1-STP AND 120V
- CHEMICAL FEED SYSTEM, PER VENDOR
- MOTOR OPERATED VALVE
- MOTOR OPERATED VALVE - AIRLINE
- EMERGENCY STOP, 2-#12
- SOLENOID VALVE, 2-#12

**FEEDER SCHEDULE FOR 3 WIRE FEEDERS**

MARK	AMPACITY	SETS	HOT	GROUND	CONDUIT
A1	20	1	12	12	3/4
A2	30	1	10	10	3/4
A3	40	1	8	10	3/4
A4	50	1	8	10	1
A5	60	1	4	10	1 1/4
A6	70	1	4	8	1 1/4
A7	100	1	3	8	1 1/4
A8	125	1	1	6	1 1/2
A9	150	1	1/0	6	2
A10	175	1	2/0	6	2
A11	200	1	3/0	6	2
A12	225	1	4/0	4	2 1/2
A13	250	1	250	4	3
A14	300	1	350	4	3
A15	400	1	500	3	4
A16	600	2	350	1	4
A17	800	2	600	1/0	4
A18	1000	3	400	2/0	4
A19	1200	3	600	3/0	4

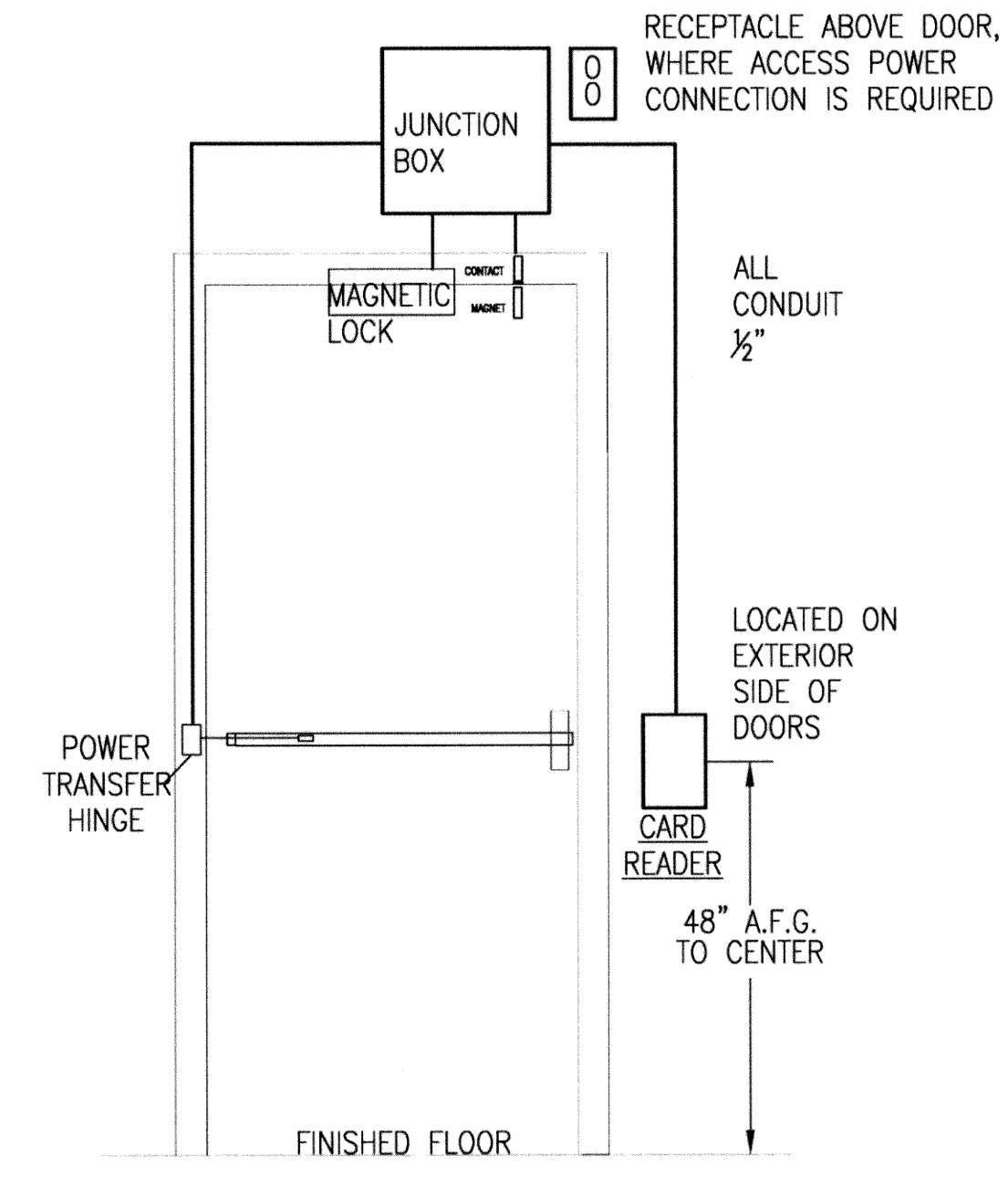
**FEEDER SCHEDULE FOR 4 WIRE FEEDERS**

MARK	AMPACITY	SETS	HOT/NEUTRAL	GROUND	CONDUIT
B1	20	1	12	12	3/4
B2	30	1	10	10	3/4
B3	40	1	8	10	3/4
B4	50	1	8	10	1
B5	60	1	4	10	1 1/4
B6	70	1	4	8	1 1/4
B7	100	1	3	8	1 1/4
B8	125	1	1	6	1 1/2
B9	150	1	1/0	6	2
B10	175	1	2/0	6	2
B11	200	1	3/0	6	2
B12	225	1	4/0	4	2 1/2
B13	250	1	250	4	3
B14	300	1	350	4	3
B15	400	1	500	3	4
B16	600	2	350	1	4
B17	800	2	600	1/0	4
B18	1000	3	400	2/0	4
B19	1200	3	600	3/0	4
B20	1600	4	600	3/0	4

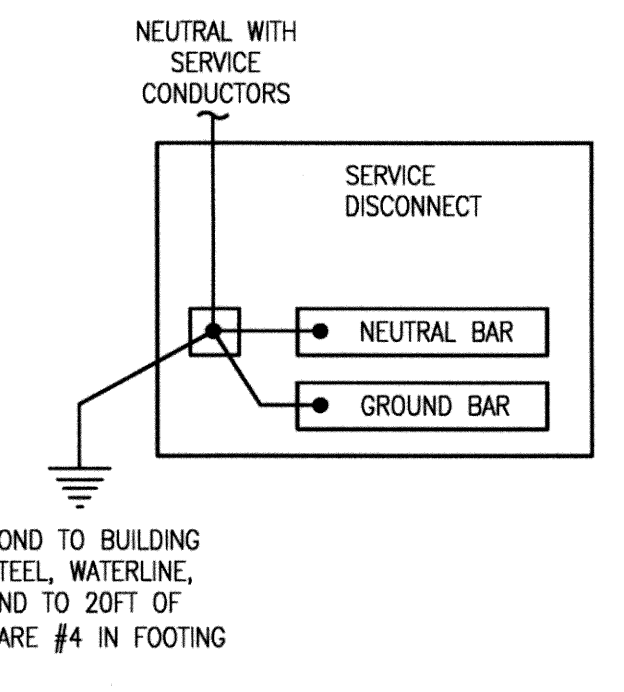
**LIGHT FIXTURE SCHEDULE**

MARK	MANF. CAT. #	LAMP	VOLTAGE	MOUNTING	DESCRIPTION
A	HLOPHANE P31-250MP-525-PD-WG	250W-MH	277	SUSPENDED	ENCLOSED NEMA 4X PENDANT MOUNT, HEAVY DUTY HOUSING
B	CROUSE-HINDS F2MVMY175-FA	175W MH	277	SURFACE	NEMA 4X FLOOD LIGHT MOUNT TO STRUCTURE
C1	LITHONIA TW1R1-150M	150W-MH	480	SURFACE	WALL MOUNT, AREA LIGHT, RECTANGLE DARK BRONZE, POLYCARBONATE LENS
C2	LITHONIA TWAC-100M	100W-MH	120	SURFACE	WALL MOUNT, AREA LIGHT, RECTANGLE DARK BRONZE, POLYCARBONATE LENS
C3	HLOPHANE WH-10DMH-48-S-G	100W-MH	480	SURFACE	WALL MOUNT, AREA LIGHT, RECTANGLE WET LOCATION, CLASS 1 DIV 2
D	LITHONIA C-2-32	2 32W-T8	120	SURFACE	4 BARE STRIP, 2 LAMP, ELECTRONIC BALAST.
D2	LITHONIA 2AW-2-32	2 32W-T8	120	SURFACE	1 X 4 SURFACE WRAP LENS POLYCARBONATE LENS
D3	LITHONIA TDMW-2-32	4 32W-T8	120	SURFACE	8FT. 4 LAMP, ENCLOSED FIBERGLASS BODY LINEAR FLUORESCENT
E	LITHONIA LPS-SHOWER LENS	75W INC.	120	RECESSED	8" RECESSED INCANDESCENT CAN DROP SHOWER LENS
F1	LITHONIA 2PM3N-G-B-3-32-18	3 32W-T8	120	LAY-IN	3" PARABOLIC 18 CELL ELECTRONIC BALAST.
F3	LITHONIA 2GTS-3-32-A12	3 32W-T8	120	LAY-IN	2X4 TROFFER LENS, 3 LAMP ELECTRONIC BALAST.
K	LITHONIA LPB8-50M-802AZ	50W-MH	120	RECESSED	8" HID CAN, CLEAR SPEC TRIM
K2	LITHONIA LPB8-809AZ	100W INC	120	RECESSED	8" INCANDESCENT CAN, IN CONTROL ROOM CLEAR SPEC TRIM, ON WALL DIMMER
G	HLOPHANE P3S-15DMH-48-445-PD-WG	150W-MH	277	SUSPENDED	ENCLOSED, NEMA 4X PENDANT MOUNT, HEAVY DUTY HOUSING
M	LITHONIA TX-250M-PA22C	250W MH	208	PENDANT	ENCLOSED ACRYLIC, LOW BAY CONICAL LENS
P	LITHONIA KSF2-400M-R4W-SP09	400W MH	480	POLE	AREA SHOE BOX LIGHT, BRONZE ON 25FT STEEL SQUARE POLE, ON CONCRETE BASE
X	LITHONIA LV-S-W-1-RELN-4X	LED	277	SURFACE	WHITE, RED LETTER, NEMA 4X NICAD BATTERY.
X2	LITHONIA BWV	LED	120	SURFACE	WHITE BODY, RED LETTER, COMBINATION EXT/EMRG NICAD BATTERY.
Y1	LITHONIA INDXB18	-	277	SURFACE	NEMA 4X TWIN HEAD 90 MINUTE BATTERY
Y2	LITHONIA IND618	-	277	SURFACE	EXTERIOR, TWIN HEAD 90 MINUTE BATTERY
Y3	LITHONIA LEU2	-	120	SURFACE	WHITE BODY, TWIN HEAD 90 MINUTE BATTERY

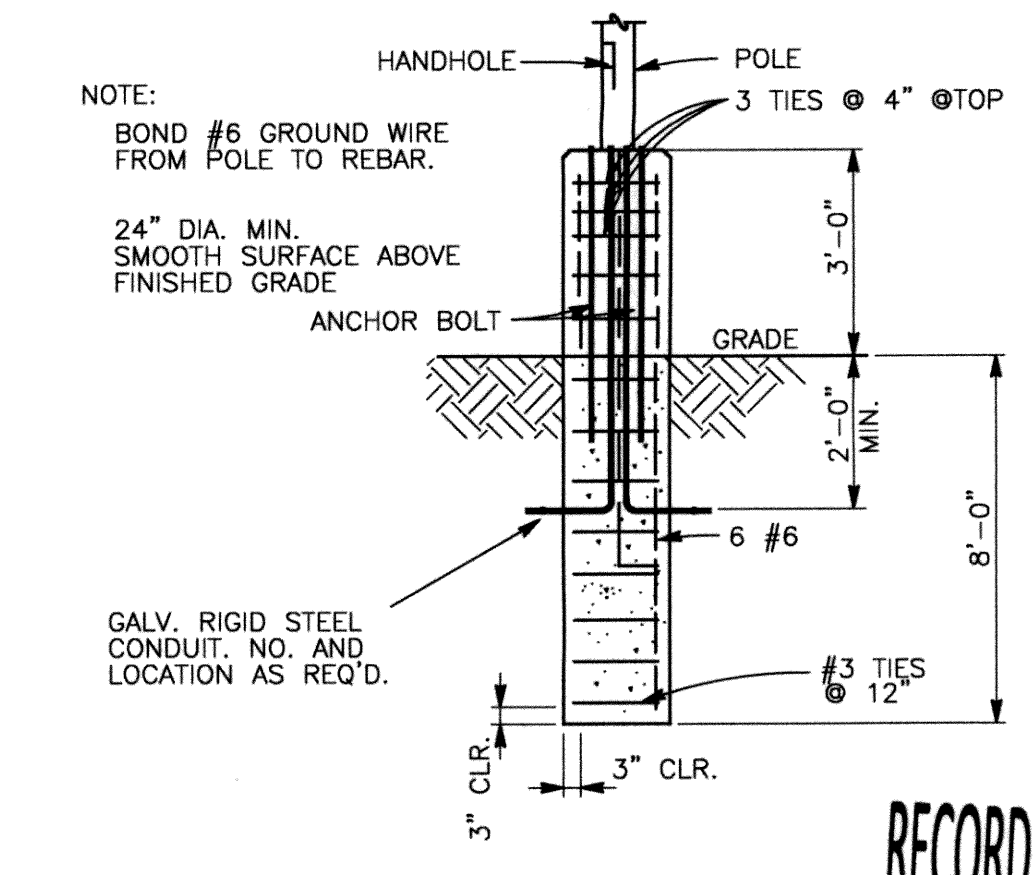
1. ALL BALASTS SHALL BE ELECTRONIC WITH THD LESS THAN 10%.  
 2. ALL FLUORESCENT LAMPS SHALL BE CRI-80, 4100 K.  
 3. CONFIRM MOUNTING HEIGHT PRIOR TO ROUGH IN.  
 4. MOUNT TYPE X ABOVE DOORS. MOUNT TYPE Y1 LEVEL WITH DOOR HEADER.  
 5. MOUNT TYPE D TO BOTTOM OF STRUCTURE/CEILING



**ACCESS CONTROL POWER/ROUGH-IN**  
NOT TO SCALE



**SERVICE GROUND DETAIL**  
NOT TO SCALE



**SITE LIGHT POLE BASE DETAIL**  
NOT TO SCALE

**RECORD DRAWINGS**



Thomas F. Keator, PE# 17749  
TFK Engineering, Inc.  
CofA# 5206 exp 6/2011

REVISIONS:	DATE:

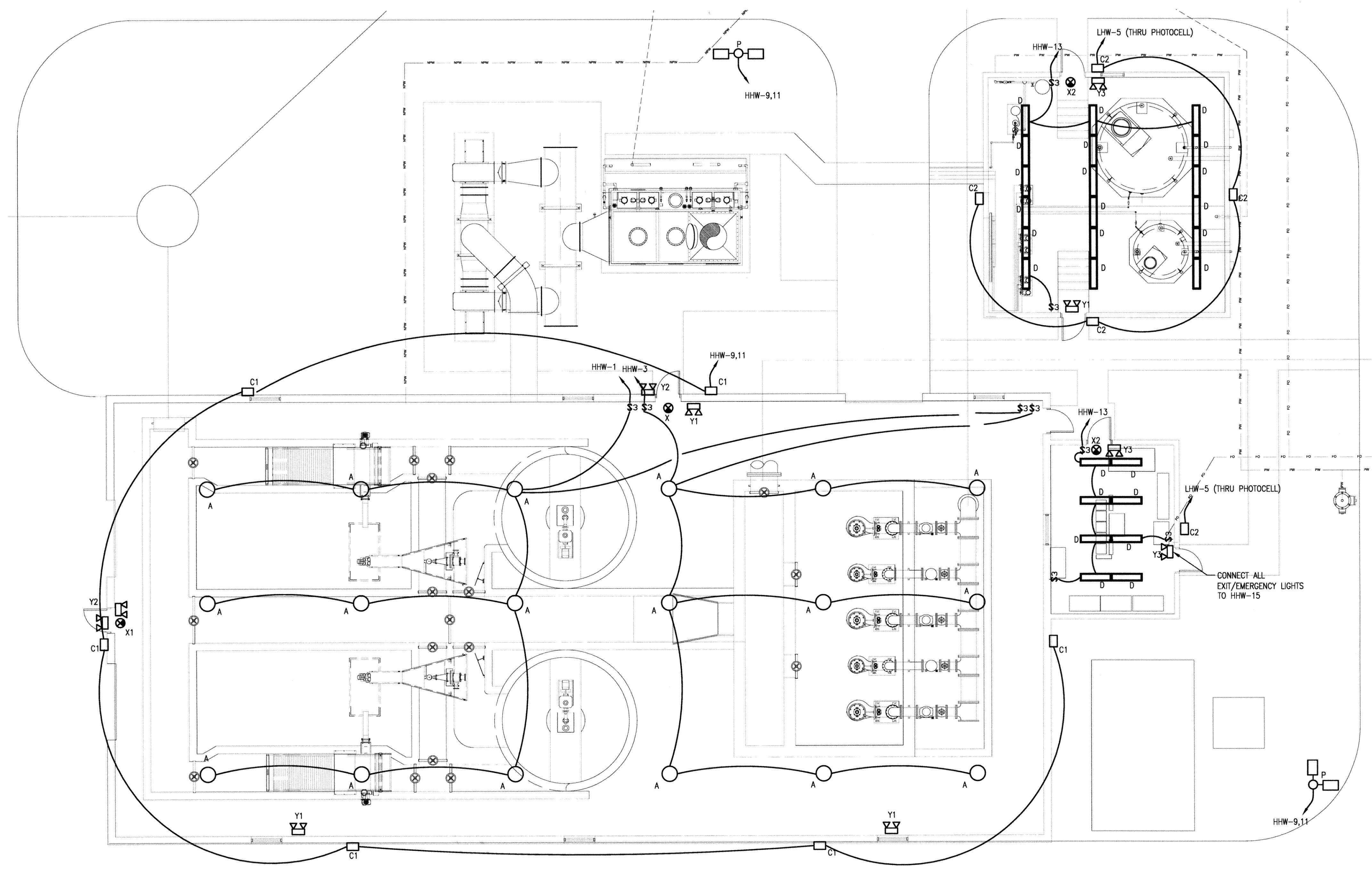
**GENERAL ELECTRICAL NOTES**

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**EAGLE CONSULTANTS, INC.**  
CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088

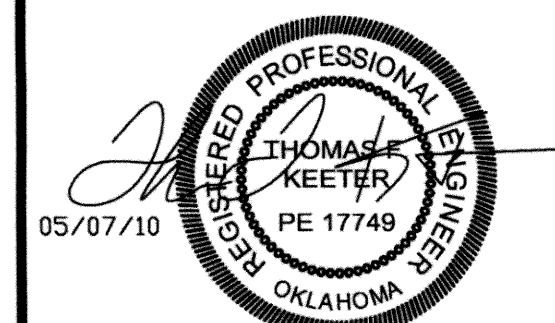
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		SD	SD					

**GENERAL NOTES**  
 1. ALL WORK IN HEADWORKS MAIN ROOM SHALL BE NEMA 4X.



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

RECORD DRAWINGS ← N E → 11



Thomas F. Keeter, PE# 17749  
 TFK Engineering, Inc.  
 CofA# 5206 exp 6/2011

REVISIONS:	DATE:

**HEADWORKS LIGHTING PLAN**

EAGLE OFFICE CENTER  
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 EDMOND, OK 73013  
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**EAGLE CONSULTANTS, INC.**  
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		SD	SD		AS SHOWN	17 OF 48

A B C D E F G

5

4

3

2

1

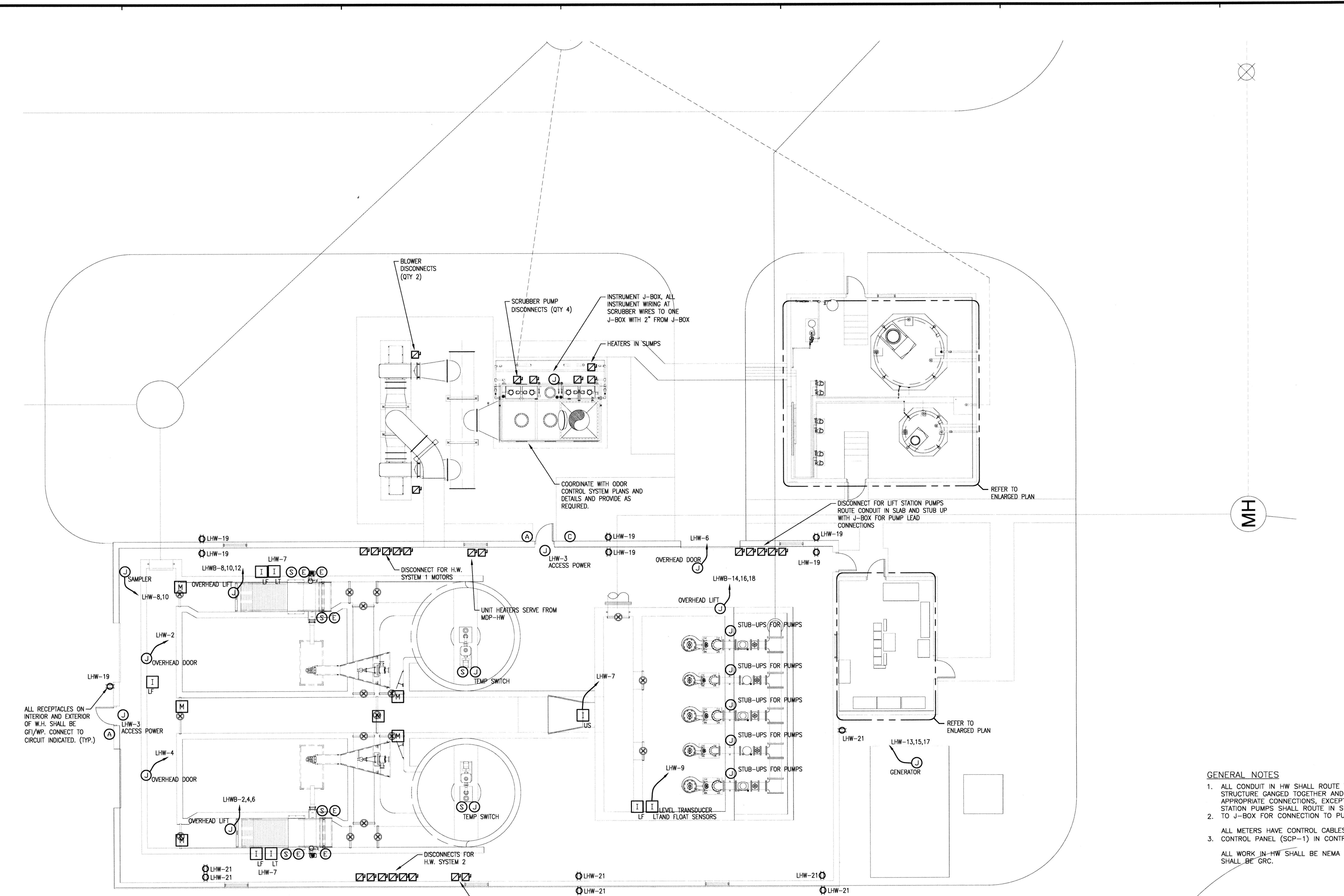
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4

3

2

1



MH

ALL RECEPTACLES ON INTERIOR AND EXTERIOR OF W.H. SHALL BE GF/WP. CONNECT TO CIRCUIT INDICATED. (TYP.)

- GENERAL NOTES**
1. ALL CONDUIT IN HW SHALL ROUTE THROUGH STRUCTURE GANGED TOGETHER AND DROP TO APPROPRIATE CONNECTIONS, EXCEPT FEEDERS TO LIFT STATION PUMPS SHALL ROUTE IN SLAB AND STUB-UP TO J-BOX FOR CONNECTION TO PUMP LEAD.
  2. ALL METERS HAVE CONTROL CABLES TO SCADA
  3. CONTROL PANEL (SCP-1) IN CONTROL ROOM.
- ALL WORK IN HW SHALL BE NEMA 4X. ALL CONDUIT SHALL BE GRC.

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

RECORD DRAWINGS ← N E → 12



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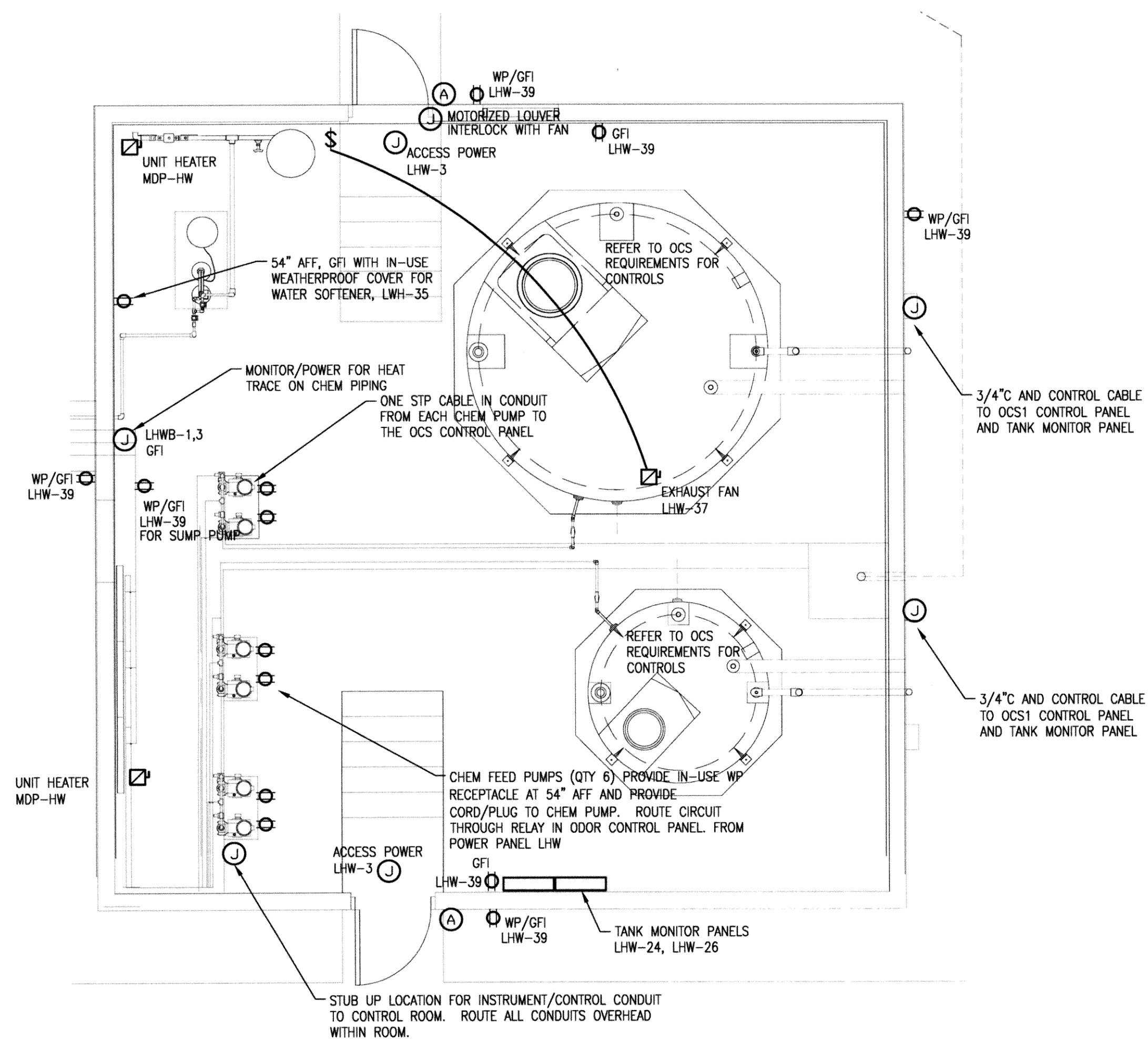
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**HEADWORK POWER PLAN**

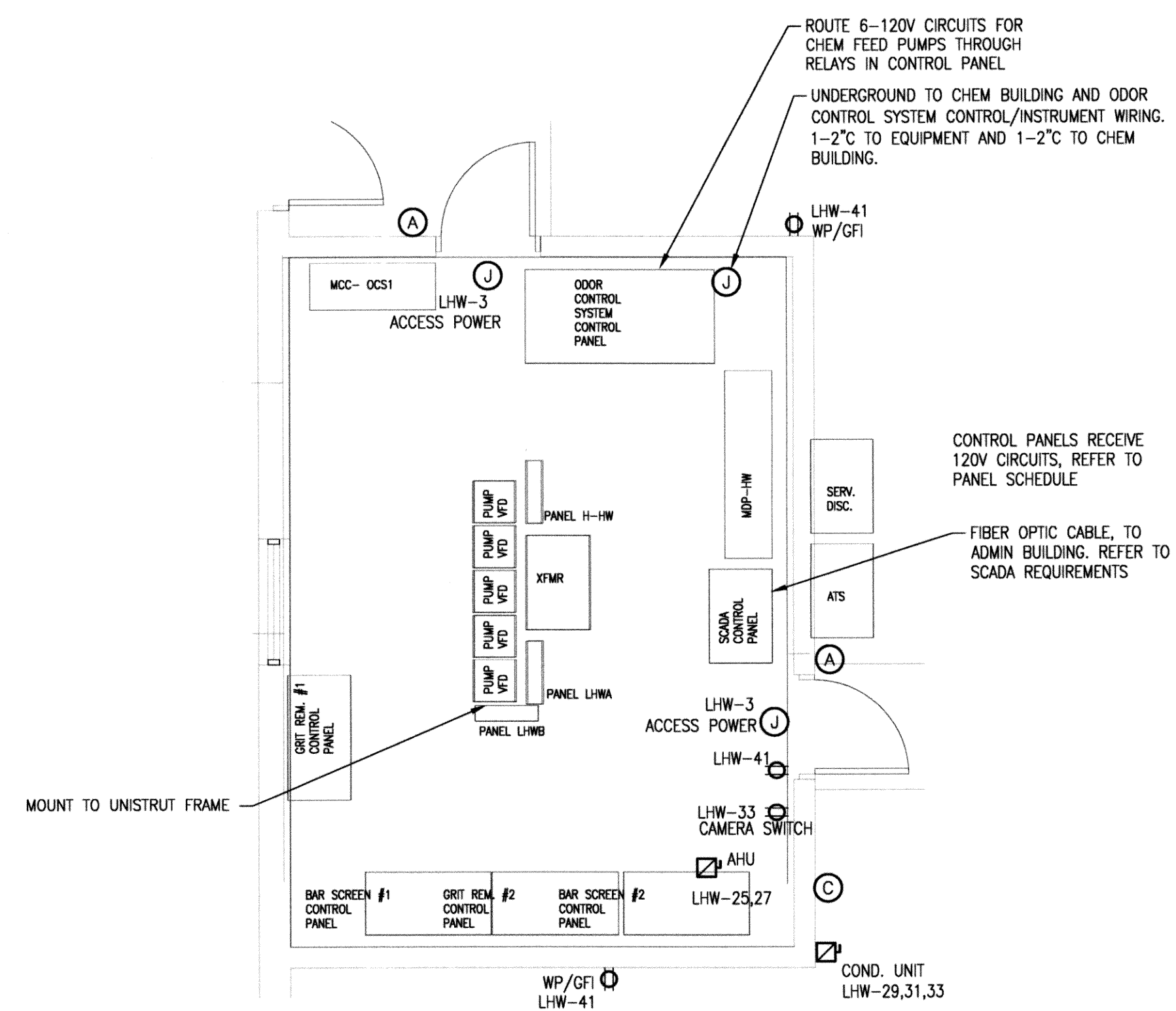
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CERTIFICATE OF AUTHORIZATION NO. GA2088

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		SD	SD		AS SHOWN	18 OF 48



**2 HEADWORKS CHEM BLDG POWER PLAN**  
SCALE: 1/4" = 1'-0"



**1 HEADWORKS CONTROL ROOM POWER PLAN**  
SCALE: 1/4" = 1'-0"



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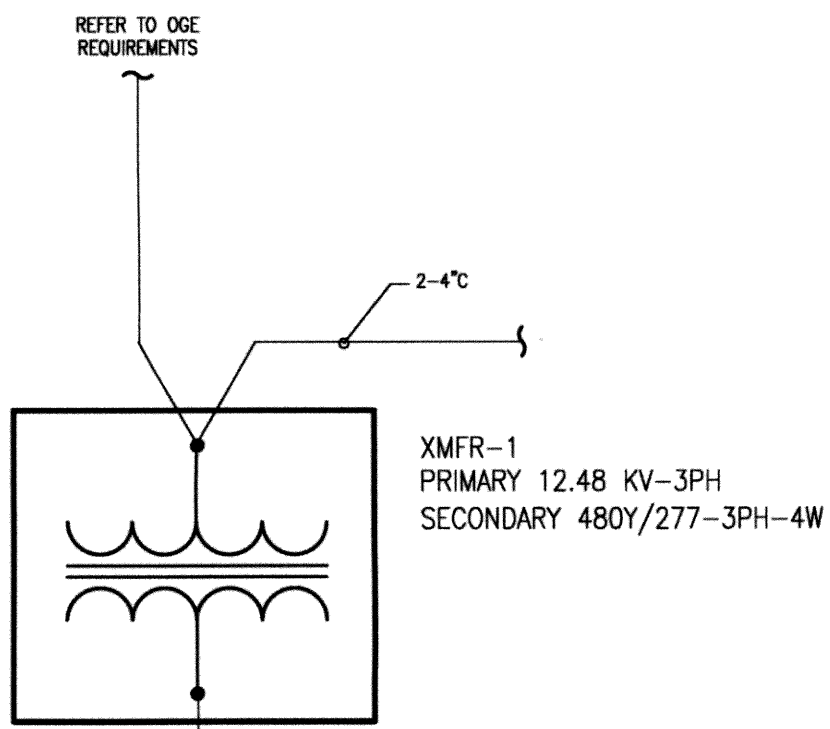
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**HEADWORKS ENLARGED  
ELECTRICAL PLANS**

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CERTIFICATE OF AUTHORIZATION NO. CA2088

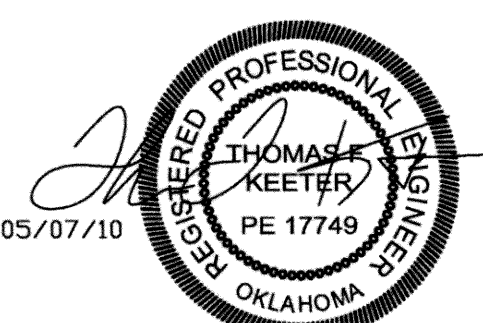
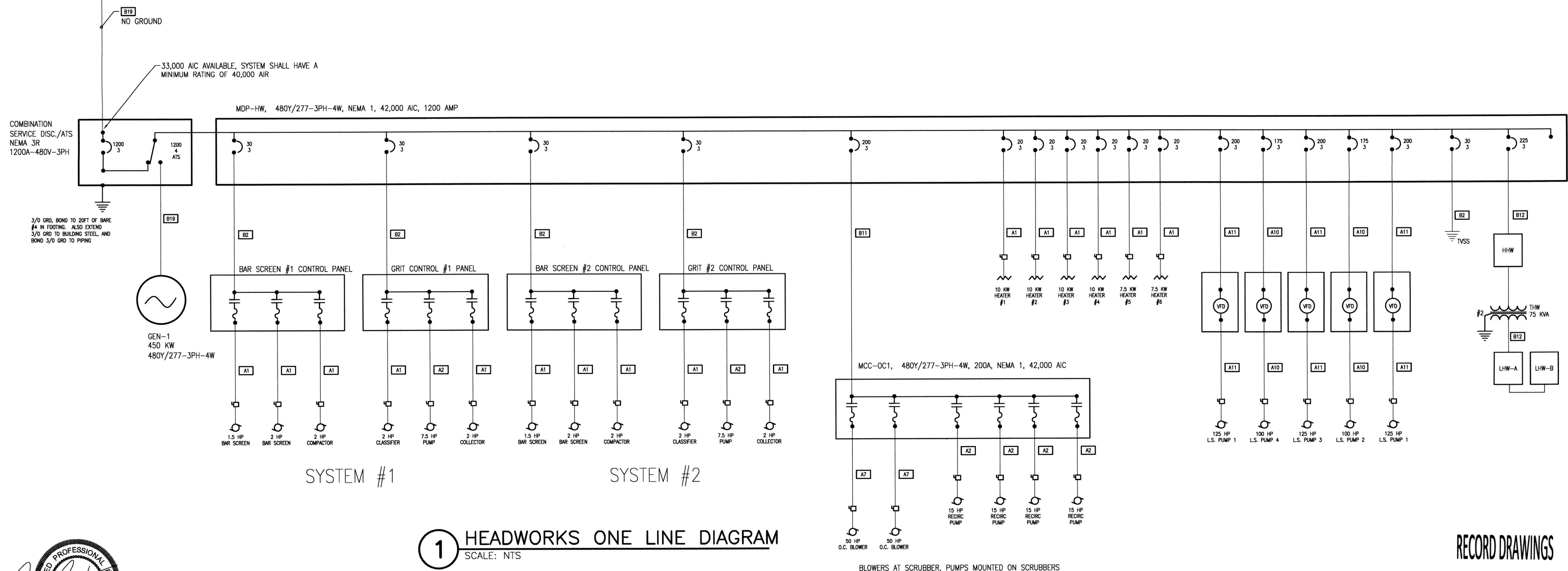
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HHW PANELBOARD 480Y/277 - 3 PH - 4 W 225A - MLO					
DESCRIPTION	CB	kVA	Ph	kVA	DESCRIPTION
1 BAY LIGHTS	20/2	3.00	A	15.00	100/3 XFMR/PANEL LHW
3 BAY LIGHTS	-	3.00	B	15.00	-
5	20/2	0.00	C	15.00	-
7	-	0.00	A	0.00	20/1
9 EXTERIOR LIGHTS	20/2	1.60	B	0.00	20/1
11	-	1.60	C	0.00	20/1
13 STRIP LIGHTS	20/1	1.60	A	0.00	20/1
15 EMERG/EXIT LIGHTS	20/1	0.50	B	0.00	20/1
17	20/1	0.00	C	0.00	20/1
19	20/1	0.00	A	0.00	20/1
21	20/1	0.00	B	0.00	20/1
23	20/1	0.00	C	0.00	20/1
25	20/1	0.00	A	0.00	20/1
27	20/1	0.00	B	0.00	20/1
29	20/1	0.00	C	0.00	20/1
31	20/1	0.00	A	0.00	20/1
33	20/1	0.00	B	0.00	20/1
35	20/1	0.00	C	0.00	20/1
37	20/1	0.00	A	0.00	20/1
39	20/1	0.00	B	0.00	20/1
41	20/1	0.00	C	0.00	20/1
41	20/1	0.00	C	0.00	20/1
CONTINUOUS		11.3	X	1.25	= 14
NON-CONTINUOUS		45	X	1.00	= 45
RECEPTACLE <10 KVA		0	X	1.00	= 0
RECEPTACLE >10 KVA		0	X	0.50	= 0
LARGEST MOTOR		0	X	0.25	= 0
TOTAL KVA					59
TOTAL AMPS					71

LHW-A PANELBOARD 208Y/120 - 3 PH - 4 W 225A - MCB SUB LUGS FOR SECOND SECTION					
DESCRIPTION	CB	kVA	Ph	kVA	DESCRIPTION
1 SUMP PUMP/METER	20/1	1.50	A	1.50	20/1 OVERHEAD DOOR
3 ACCESS POWER	20/1	0.40	B	1.50	20/1 OVERHEAD DOOR
5 WALLPACKS	20/1	0.60	C	1.50	20/1 OVERHEAD DOOR
7 US FLOWMETER	20/1	0.50	A	2.00	30/2 SAMPLER
9 LEVEL TRANSDUCER	20/1	0.50	B	2.00	-
11 GENERATOR HEATER	30/2	1.50	C	0.50	20/1 LIFT
13	-	1.50	A	0.50	20/1 SCADA CONTROL PNL
15 GENERATOR CHARGER	20/1	1.50	B	0.50	20/1 SCADA CONTROL PNL
17 RECEPTACLES	20/1	0.72	C	0.50	20/1 SCADA CONTROL PNL
19 RECEPTACLES	20/1	0.72	A	1.50	20/2 OCS HEATER
21 RECEPTACLES	20/1	0.72	B	1.50	-
23 AHU	40/2	2.50	C	0.20	20/1 TANK ALARM PANEL
25	-	2.50	A	0.20	20/1 TANK ALARM PANEL
27 COND UNIT	40/3	2.50	B	0.50	20/1 OCS CONTROL PANEL
29	-	2.50	C	0.50	20/1 OCS CONTROL PANEL
31	-	2.50	A	0.50	20/1 CHEM FEED PUMP
33 CAMERA SWITCH	20/1	0.00	B	0.50	20/1 CHEM FEED PUMP
35 WATER SOFTNER	20/1	0.30	C	0.50	20/1 CHEM FEED PUMP
37 EXHAUST FAN	20/1	0.90	A	0.50	20/1 CHEM FEED PUMP
39 RECEPTACLES	20/1	0.72	B	0.50	20/1 CHEM FEED PUMP
41 RECEPTACLES	20/1	0.72	C	0.50	20/1 CHEM FEED PUMP
CONTINUOUS		4.3	X	1.25	= 5
NON-CONTINUOUS		36.023	X	1.00	= 36
RECEPTACLE <10 KVA		2.88	X	1.00	= 3
RECEPTACLE >10 KVA		0	X	0.50	= 0
LARGEST MOTOR		0	X	0.25	= 0
TOTAL KVA					44
TOTAL AMPS					123

LHW-B PANELBOARD 208Y/120 - 3 PH - 4 W 225A - MLO FEED FROM FIRST SECTION LUGS					
DESCRIPTION	CB	kVA	Ph	kVA	DESCRIPTION
1 HEAT TRACE	20/1	1.00	A	1.50	30/3 LIFT
3 HEAT TRACE	20/1	1.00	B	1.50	-
5 MOV	20/1	0.00	C	1.50	-
7 MOV	20/1	0.00	A	1.50	30/3 LIFT
9	20/1	0.00	B	1.50	-
11	20/1	0.00	C	1.50	-
13	20/1	0.00	A	1.50	30/3
15	20/1	0.00	B	1.50	-
17	20/1	0.00	C	1.50	-
19	20/1	0.00	A	0.00	20/1
21	20/1	0.00	B	0.00	20/1
23	20/1	0.00	C	0.00	20/1
25	20/1	0.00	A	0.00	20/1
27	20/1	0.00	B	0.00	20/1
29	20/1	0.00	C	0.00	20/1
31	20/1	0.00	A	0.00	20/1
33	20/1	0.00	B	0.00	20/1
35	20/1	0.00	C	0.00	20/1
37	20/1	0.00	A	0.00	20/1
39	20/1	0.00	B	0.00	20/1
41	20/1	0.00	C	0.00	20/1
CONTINUOUS		0	X	1.25	= 0
NON-CONTINUOUS		15.5	X	1.00	= 16
RECEPTACLE <10 KVA		0	X	1.00	= 0
RECEPTACLE >10 KVA		0	X	0.50	= 0
LARGEST MOTOR		0	X	0.25	= 0
TOTAL KVA					16
TOTAL AMPS					43



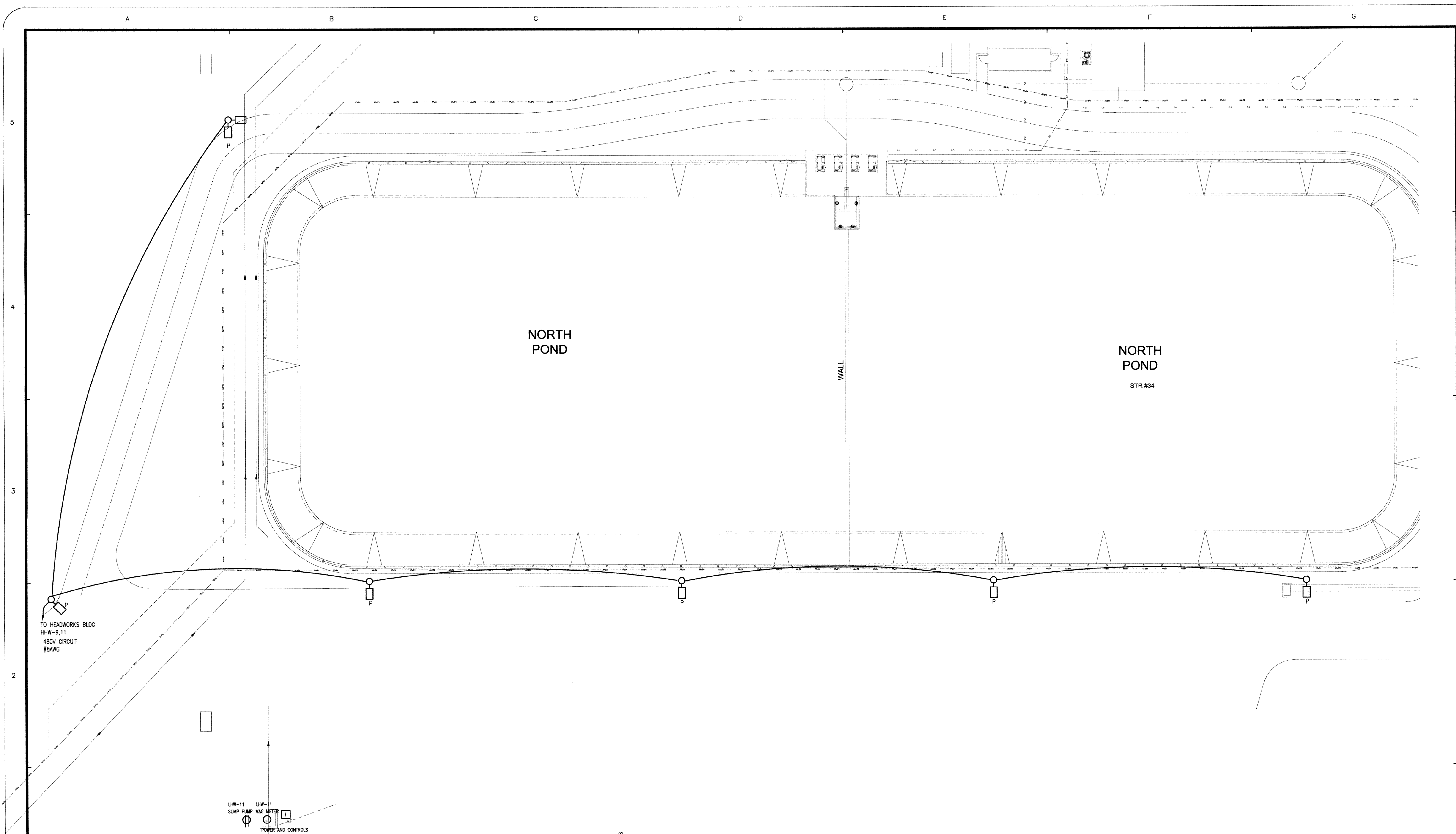
Thomas F. Keeter, PE# 17749  
TFK Engineering, Inc.  
CofA# 5206 exp 6/2011

HEADWORKS ONE LINE DIAGRAM

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EAGLE CONSULTANTS, INC.  
CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088

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		SD	SD		AS SHOWN	20 OF 48		



TO HEADWORKS BLDG  
 HHW-9,11  
 480V CIRCUIT  
 #8AWG

LHW-11  
 SUMP PUMP MAG METER  
 POWER AND CONTROLS  
 TO HEADWORKS

NORTH POND

WALL

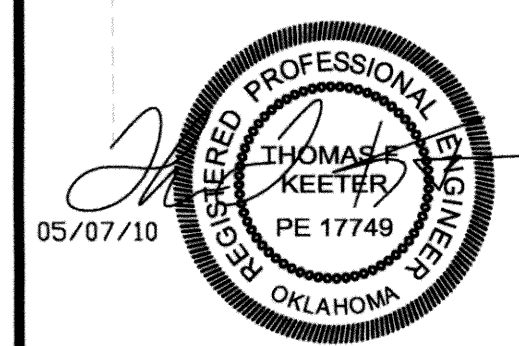
NORTH POND  
 STR #34

STR #46

**1 SITE LIGHTING PLAN - NORTH DRIVE**  
 SCALE: 1" = 20'-0"

RECORD DRAWINGS

◀N-E-15



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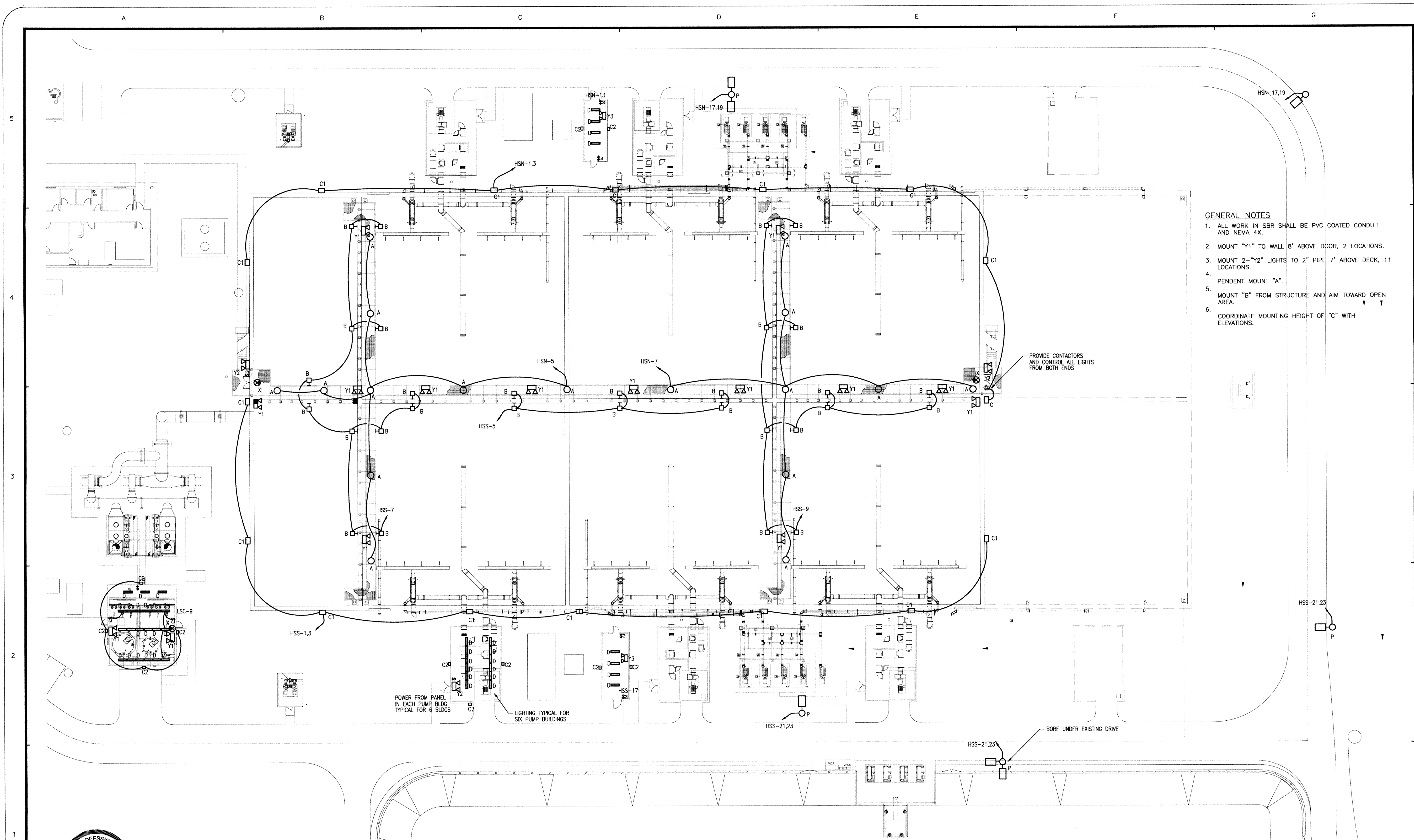
REVISIONS:	DATE:

**SITE LIGHTING PLAN**

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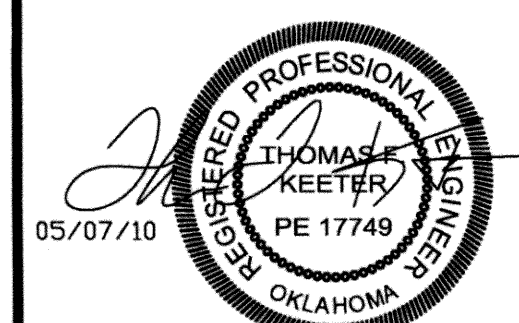
DESIGNED BY:	CAD OPERATOR:	CHECKED:	APPROVED:	PLOT DATE:	DWG. SCALE:	SHEET:
		SD	SD		AS SHOWN	21 OF 48



- GENERAL NOTES**
1. ALL WORK IN SBR SHALL BE PVC COATED CONDUIT AND NEMA 4X.
  2. MOUNT "Y1" TO WALL 8' ABOVE DOOR, 2 LOCATIONS.
  3. MOUNT 2-"Y2" LIGHTS TO 2" PIPE 7' ABOVE DECK, 11 LOCATIONS.
  4. PENDENT MOUNT "A".
  5. MOUNT "B" FROM STRUCTURE AND AIM TOWARD OPEN AREA.
  6. COORDINATE MOUNTING HEIGHT OF "C" WITH ELEVATIONS.

**1 SBR LIGHTING PLAN**  
SCALE: 1" = 20'-0"

**RECORD DRAWINGS** E-21



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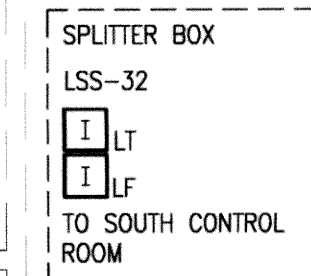
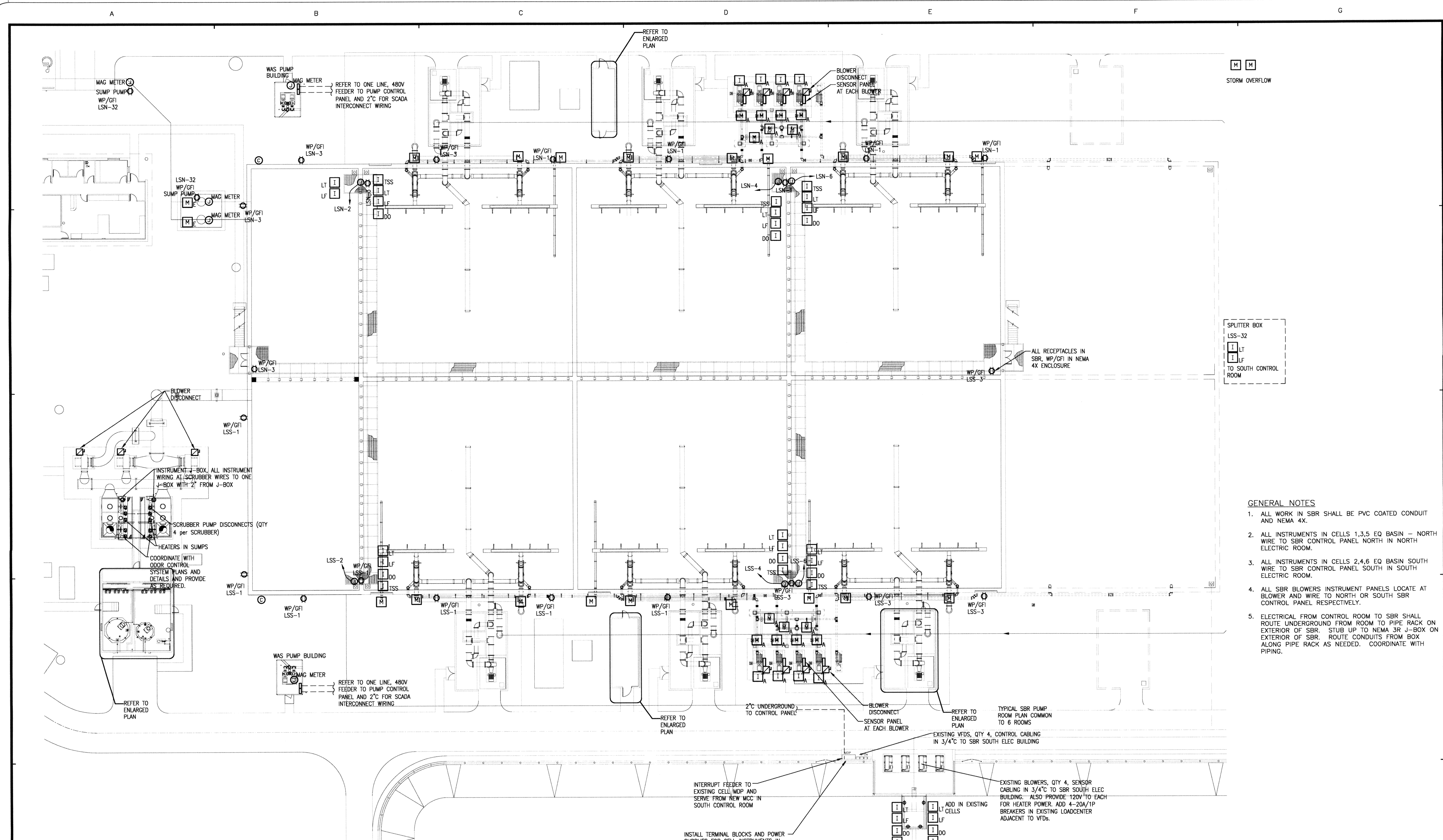
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**SBR LIGHTING PLAN**

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		SD	SD		AS SHOWN	22	48



- GENERAL NOTES**
1. ALL WORK IN SBR SHALL BE PVC COATED CONDUIT AND NEMA 4X.
  2. ALL INSTRUMENTS IN CELLS 1,3,5 EQ BASIN - NORTH WIRE TO SBR CONTROL PANEL NORTH IN NORTH ELECTRIC ROOM.
  3. ALL INSTRUMENTS IN CELLS 2,4,6 EQ BASIN SOUTH WIRE TO SBR CONTROL PANEL SOUTH IN SOUTH ELECTRIC ROOM.
  4. ALL SBR BLOWERS INSTRUMENT PANELS LOCATE AT BLOWER AND WIRE TO NORTH OR SOUTH SBR CONTROL PANEL RESPECTIVELY.
  5. ELECTRICAL FROM CONTROL ROOM TO SBR SHALL ROUTE UNDERGROUND FROM ROOM TO PIPE RACK ON EXTERIOR OF SBR. STUB UP TO NEMA 3R J-BOX ON EXTERIOR OF SBR. ROUTE CONDUITS FROM BOX ALONG PIPE RACK AS NEEDED. COORDINATE WITH PIPING.

**1 SBR POWER PLAN**  
 SCALE: 1" = 20'-0"



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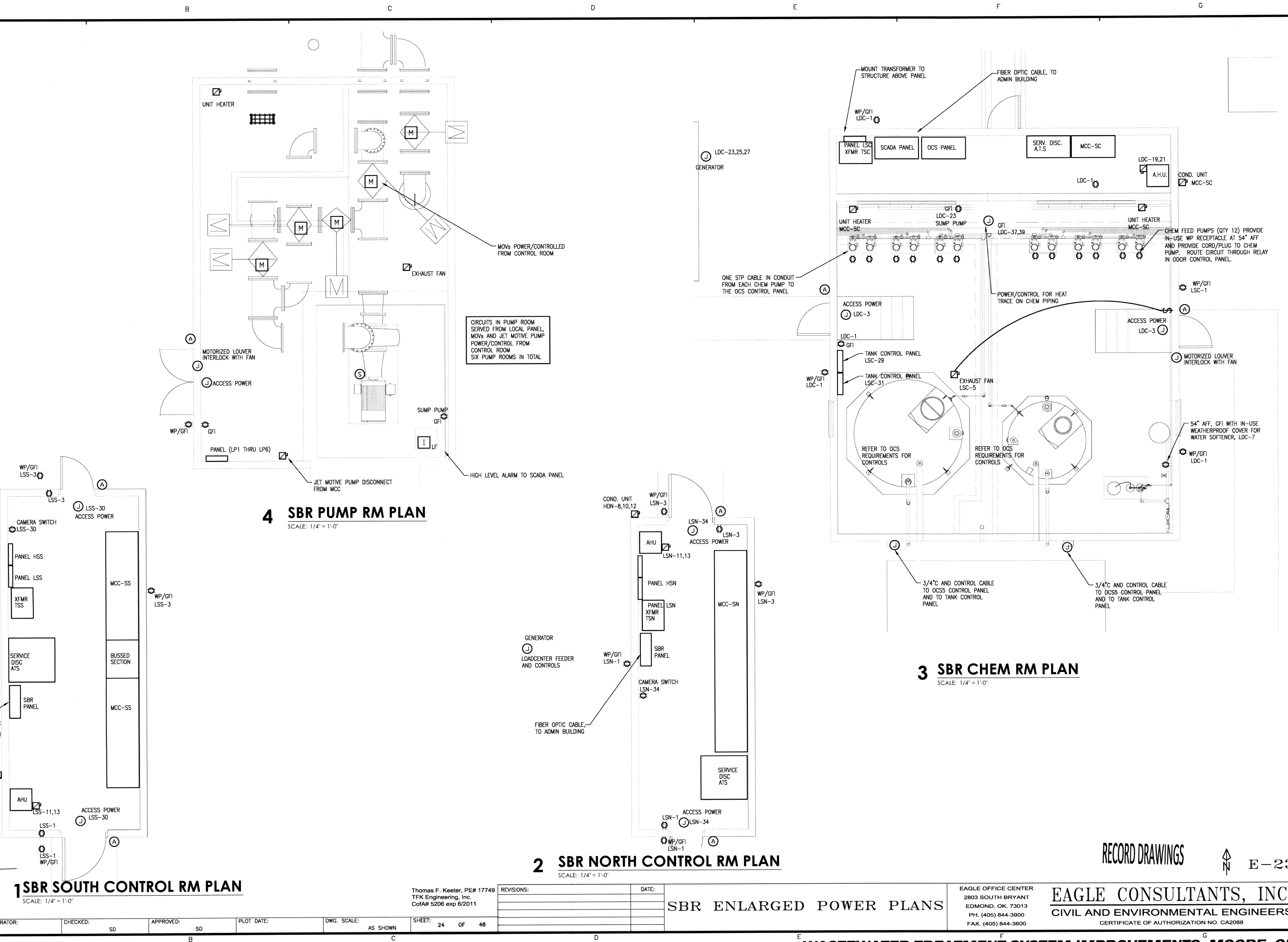
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**SBR POWER PLAN**

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RECORD DRAWINGS  
 E-22

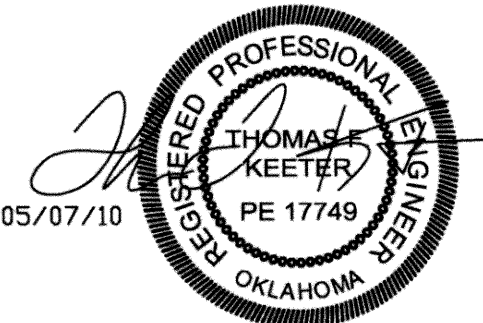


**4 SBR PUMP RM PLAN**  
SCALE: 1/4" = 1'-0"

**3 SBR CHEM RM PLAN**  
SCALE: 1/4" = 1'-0"

**2 SBR NORTH CONTROL RM PLAN**  
SCALE: 1/4" = 1'-0"

**1 SBR SOUTH CONTROL RM PLAN**  
SCALE: 1/4" = 1'-0"



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**SBR ENLARGED POWER PLANS**

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		SD	SD		AS SHOWN	24	OF	48

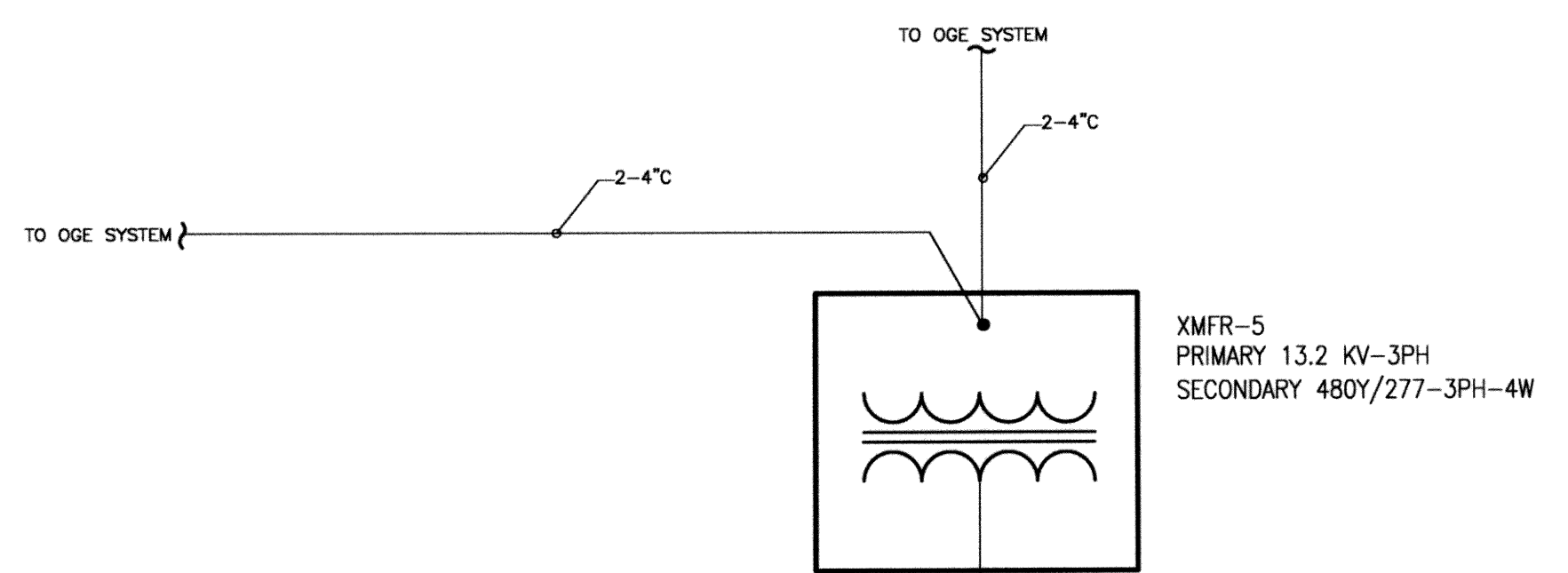
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4

3

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1

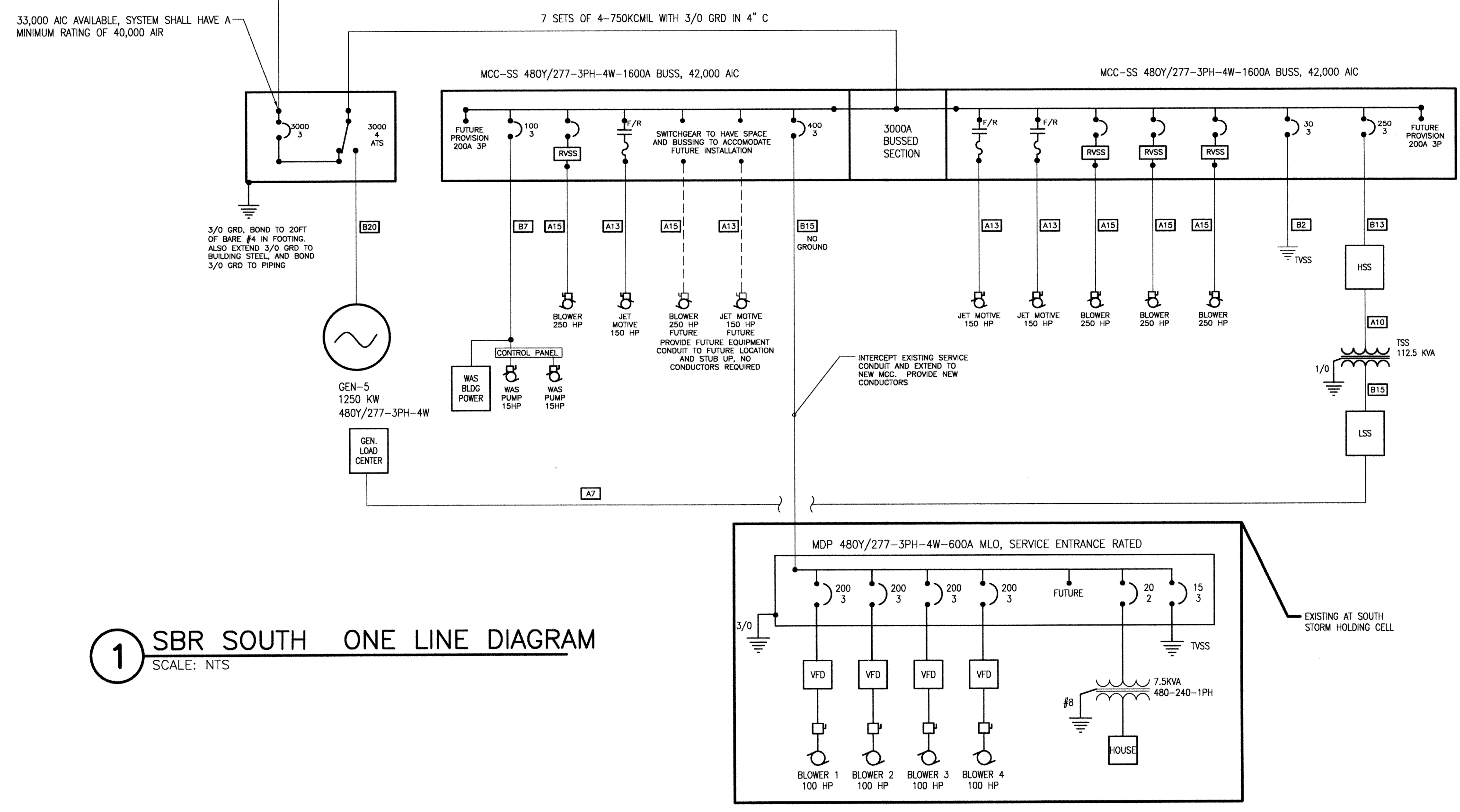


HSS PANELBOARD						
480Y/277 - 3 PH - 4 W						
100A - MLO						
DESCRIPTION	CB	kVA	Ph	kVA	CB	DESCRIPTION
1 EXTERIOR LIGHTS	20/2	1.40	A	30.00	175/3	XFMR/PANEL LHW
3	-	1.40	B	30.00	-	-
5 BAY LIGHTS	20/1	2.80	C	30.00	-	-
7 BAY LIGHTS	20/1	2.80	A	2.50	20/3	COND UNIT
9 BAY LIGHTS	20/1	2.80	B	2.50	-	-
11	20/1	0.00	C	2.50	-	-
13	20/1	0.00	A	0.00	20/1	-
15	20/1	0.00	B	0.00	20/1	-
17 STRIP LIGHTS	20/1	1.60	C	0.00	20/1	-
19 EMERG/EXT LIGHTS	20/1	0.50	A	0.00	20/1	-
21 POLE LIGHTS	20/1	0.90	B	0.00	20/1	-
23	-	0.90	C	0.00	20/1	-
25	20/1	0.00	A	0.00	20/1	-
27	20/1	0.00	B	0.00	20/1	-
29	20/1	0.00	C	0.00	20/1	-
31	20/1	0.00	A	0.00	20/1	-
33	20/1	0.00	B	0.00	20/1	-
35	20/1	0.00	C	0.00	20/1	-
37	20/1	0.00	A	0.00	20/1	-
39	20/1	0.00	B	0.00	20/1	-
41	20/1	0.00	C	0.00	20/1	-
CONTINUOUS	15.1	X	1.25	=		19
NON-CONTINUOUS	97.5	X	1.00	=		98
RECEPTACLE <10 kVA	0	X	1.00	=		0
RECEPTACLE >10 kVA	0	X	0.50	=		0
LARGEST MOTOR	0	X	0.25	=		0
TOTAL kVA						116
TOTAL AMPS						140

LSS PANELBOARD						
208Y/120 - 3 PH - 4 W						
400A - MCB						
DESCRIPTION	CB	kVA	Ph	kVA	CB	DESCRIPTION
1 RECEPTACLES	20/1	0.90	A	1.50	20/1	CELL INSTRUMENTS
3 RECEPTACLES	20/1	0.90	B	1.50	20/1	CELL INSTRUMENTS
5	20/1	0.00	C	1.50	20/1	CELL INSTRUMENTS
7	20/1	0.00	A	0.50	20/1	AIR VALVES
9	20/1	0.00	B	0.50	20/1	AIR VALVES
11 AHU	40/2	3.40	C	0.50	20/1	CELL VALVES (EXT)
13	-	3.40	A	0.50	20/1	CELL VALVES (EXT)
15	20/1	0.00	B	0.50	20/1	CELL VALVES (EXT)
17	20/1	0.00	C	0.50	20/1	CELL VALVES
19 PUMP RM PANEL	60/3	5.00	A	0.50	20/1	CELL VALVES
21	-	5.00	B	0.50	20/1	CELL VALVES
23	-	5.00	C	0.50	20/1	CELL VALVES
25 PUMP RM PANEL	60/3	5.00	A	0.50	20/1	CELL VALVES
27	-	5.00	B	0.50	20/1	CELL VALVES
29	-	5.00	C	0.50	20/1	CELL VALVES
31 PUMP RM PANEL	60/3	5.00	A	0.00	20/1	-
33	-	5.00	B	0.00	20/1	-
35	-	5.00	C	0.00	20/1	-
37 PUMP RM PANEL	60/3	5.00	A	0.00	20/1	-
39 FUTURE	-	5.00	B	3.00	100/2	GENERATOR
41	-	5.00	C	3.00	-	LOADCENTER
CONTINUOUS	1.5	X	1.25	=		2
NON-CONTINUOUS	83.6	X	1.00	=		84
RECEPTACLE <10 kVA	0	X	1.00	=		0
RECEPTACLE >10 kVA	0	X	0.50	=		0
LARGEST MOTOR	0	X	0.25	=		0
TOTAL kVA						85
TOTAL AMPS						237

LPS1 THRU 6 PANELBOARD						
208Y/120 - 3 PH - 4 W						
60A - MLO						
DESCRIPTION	CB	kVA	Ph	kVA	CB	DESCRIPTION
1 RECEPTACLES	20/1	0.72	A	0.00	20/1	-
3 EXHAUST FANS	20/1	1.00	B	0.00	20/1	-
5 HEATER	30/2	2.50	C	0.00	20/1	-
7	-	2.50	A	0.00	20/1	-
9	-	2.50	B	0.00	20/1	-
11 EXTERIOR LIGHTS	20/1	0.40	C	0.00	20/1	-
13 SUMP PUMP	20/1	0.50	A	0.00	20/1	-
15 LIGHTS	20/1	1.10	B	0.00	20/1	-
17 ACCESS POWER	20/1	0.20	C	0.00	20/1	-
19	20/1	0.00	A	0.00	20/1	-
21	20/1	0.00	B	0.00	20/1	-
23	20/1	0.00	C	0.00	20/1	-
CONTINUOUS	11.22	X	1.25	=		14
NON-CONTINUOUS	0.2	X	1.00	=		0
RECEPTACLE <10 kVA	0	X	1.00	=		0
RECEPTACLE >10 kVA	0	X	0.50	=		0
LARGEST MOTOR	0	X	0.25	=		0
TOTAL kVA						14
TOTAL AMPS						39

33,000 AIC AVAILABLE, SYSTEM SHALL HAVE A MINIMUM RATING OF 40,000 AIR



1 SBR SOUTH ONE LINE DIAGRAM  
SCALE: NTS



DESIGNED BY: CAD OPERATOR: CHECKED: SD APPROVED: SD PLOT DATE: DWG. SCALE: AS SHOWN SHEET: 25 OF 48

REVISIONS:	DATE:

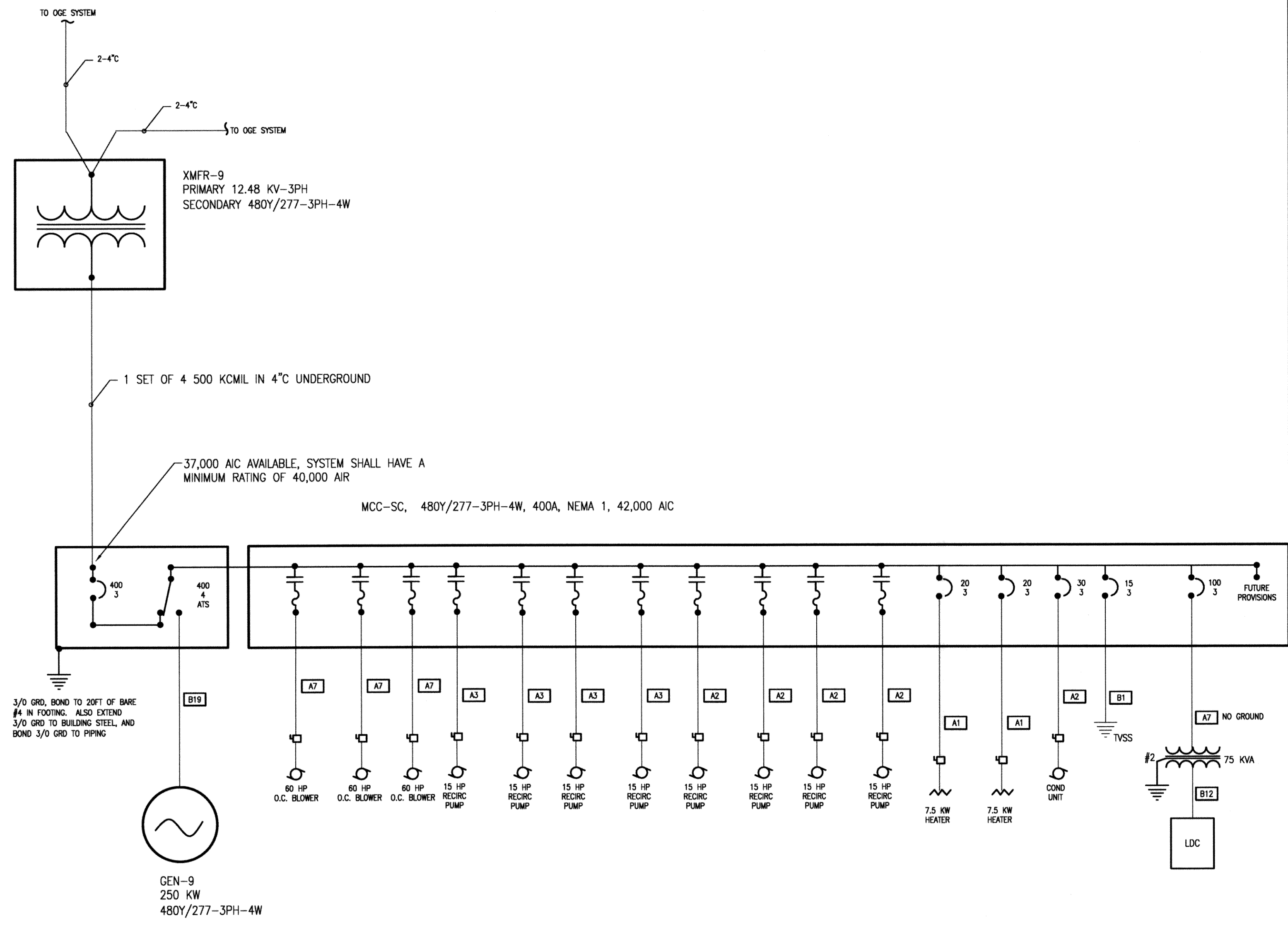
SBR SOUTH ONE LINE DIAGRAM

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EAGLE CONSULTANTS, INC.  
CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088



A B C D E F G



LSC		PANELBOARD		208Y/120 - 3 PH - 4 W		225A - MCB	
DESCRIPTION	CB	kVA	Ph	kVA	CB	DESCRIPTION	
1 RECEPTACLES	20/1	0.90	A	1.00	20/1	CHEM FEED PUMP	2
3 ACCESS POWER	20/1	0.30	B	1.00	20/1	CHEM FEED PUMP	4
5 EXHAUST FAN	20/1	1.00	C	1.00	20/1	CHEM FEED PUMP	6
7 WATER SOFTENER	20/1	0.50	A	1.00	20/1	CHEM FEED PUMP	8
9 INTERIOR LIGHTS	20/1	0.80	B	1.00	20/1	CHEM FEED PUMP	10
11 EXTERIOR LIGHTS	20/1	1.50	C	1.00	20/1	CHEM FEED PUMP	12
13 OCS CONTROL PANEL	20/1	1.00	A	1.00	20/1	CHEM FEED PUMP	14
15 OCS CONTROL PANEL	20/1	1.00	B	1.00	20/1	CHEM FEED PUMP	16
17 OCS CONTROL PANEL	20/1	1.00	C	1.00	20/1	CHEM FEED PUMP	18
19 AIR HANDLER	40/2	3.00	A	1.00	20/1	CHEM FEED PUMP	20
21 -	-	3.00	B	1.00	20/1	CHEM FEED PUMP	22
23 GENERATOR HEATER	30/2	2.50	C	1.00	20/1	CHEM FEED PUMP	24
25 -	-	2.50	A	1.00	20/1	CHEM FEED PUMP	26
27 GENERATOR CHARGER	20/1	1.00	B	0.00	20/1		28
29 OCS HEATER	20/2	1.50	C	0.00	20/1		30
31 OCS HEATER	-	1.50	A	0.00	20/1		32
33 OCS HEATER	20/2	1.50	B	0.00	20/1		34
35 OCS HEATER	-	1.50	C	0.00	20/1		36
37 HEAT TRACE	20/1	1.00	A	0.00	20/1		38
39 HEAT TRACE	20/1	1.00	B	0.00	20/1		40
41	20/1	0.00	C	0.00	20/1		42
CONTINUOUS	1	X	1.25	=			1
NON-CONTINUOUS	39	X	1.00	=			39
RECEPTACLE <10 KVA	1	X	1.00	=			1
RECEPTACLE >10 KVA	0	X	0.50	=			0
LARGEST MOTOR	0	X	0.25	=			0
TOTAL kVA							41
TOTAL AMPS							115

1 SBR OCS ONE LINE DIAGRAM  
SCALE: NTS



DESIGNED BY: CAD OPERATOR: CHECKED: SD APPROVED: SD PLOT DATE: DWG. SCALE: AS SHOWN SHEET: 27 OF 48

Thomas F. Keeter, PE# 17749  
TFK Engineering, Inc.  
CofA# 5206 exp 6/2011

REVISIONS: DATE: SBR OCS ONE-LINE DIAGRAM

EAGLE OFFICE CENTER  
2803 SOUTH BRYANT  
EDMOND, OK. 73013  
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FAX. (405) 844-3600

EAGLE CONSULTANTS, INC.  
CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088

RECORD DRAWINGS E-26

A

B

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E

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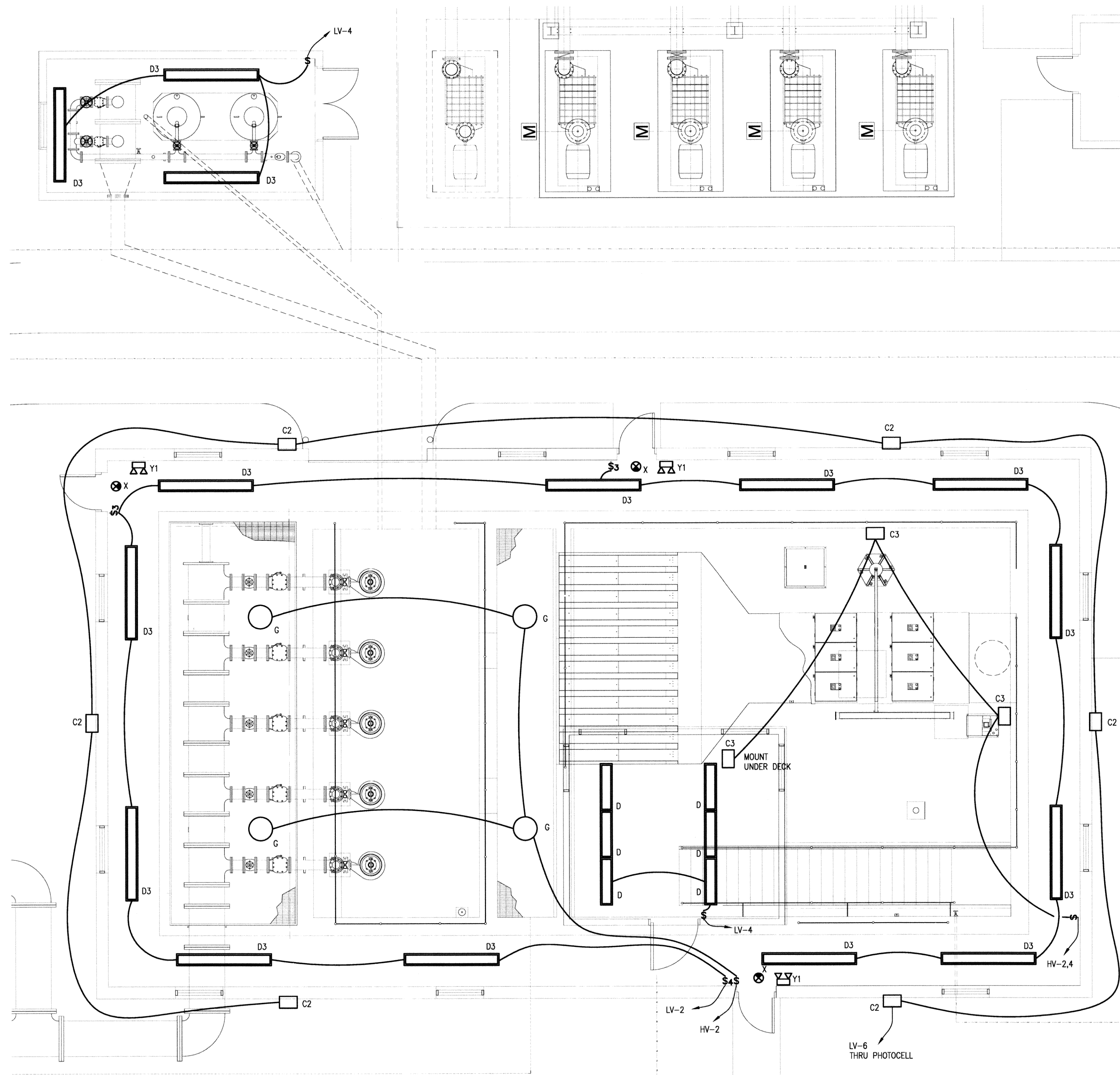
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1



1 EFFLUENT/UV BUILDING LIGHTING PLAN  
 SCALE: 3/16" = 1'-0"



DESIGNED BY: CAD OPERATOR: CHECKED: SD APPROVED: SD PLOT DATE: DWG. SCALE: AS SHOWN SHEET: 28 OF 48

Thomas F. Keeter, PE# 17749  
 TFK Engineering, Inc.  
 Co.# 5206 exp 8/2011

REVISIONS:	DATE:

**EFFLUENT/UV BUILDING LIGHTING PLAN**

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**EAGLE CONSULTANTS, INC.**  
 CIVIL AND ENVIRONMENTAL ENGINEERS  
 CERTIFICATE OF AUTHORIZATION NO. CA2088

RECORD DRAWINGS E-31

5

4

3

2

1

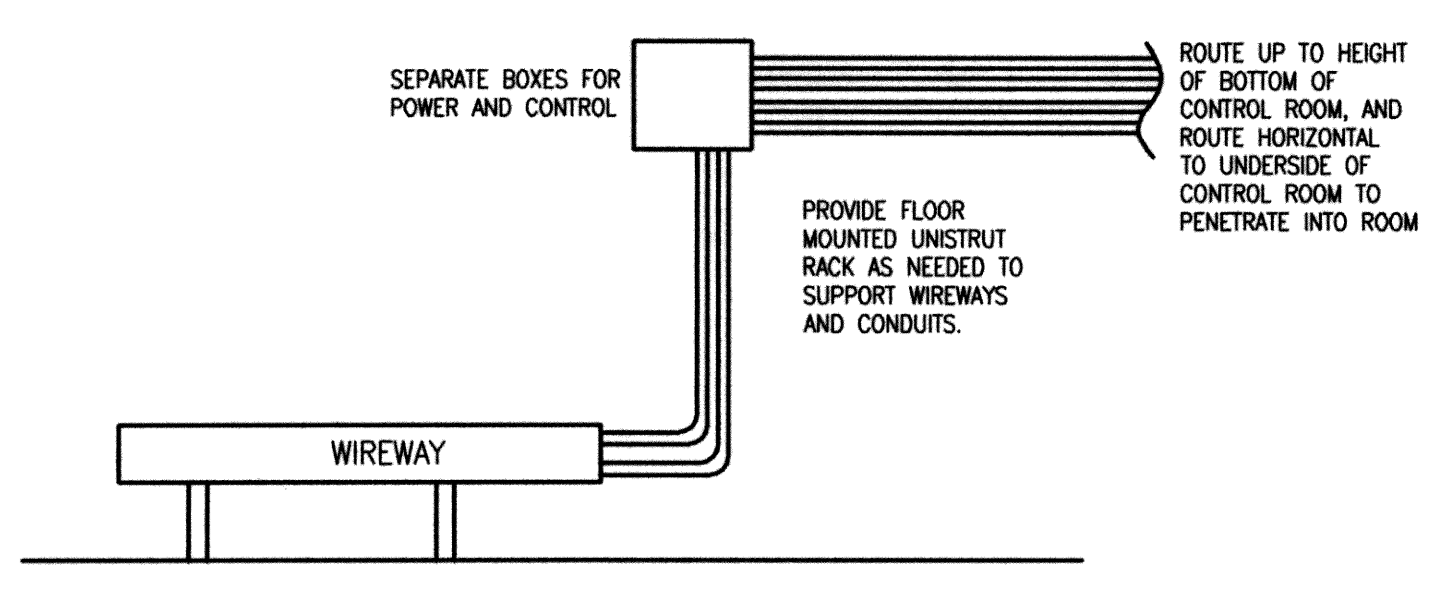
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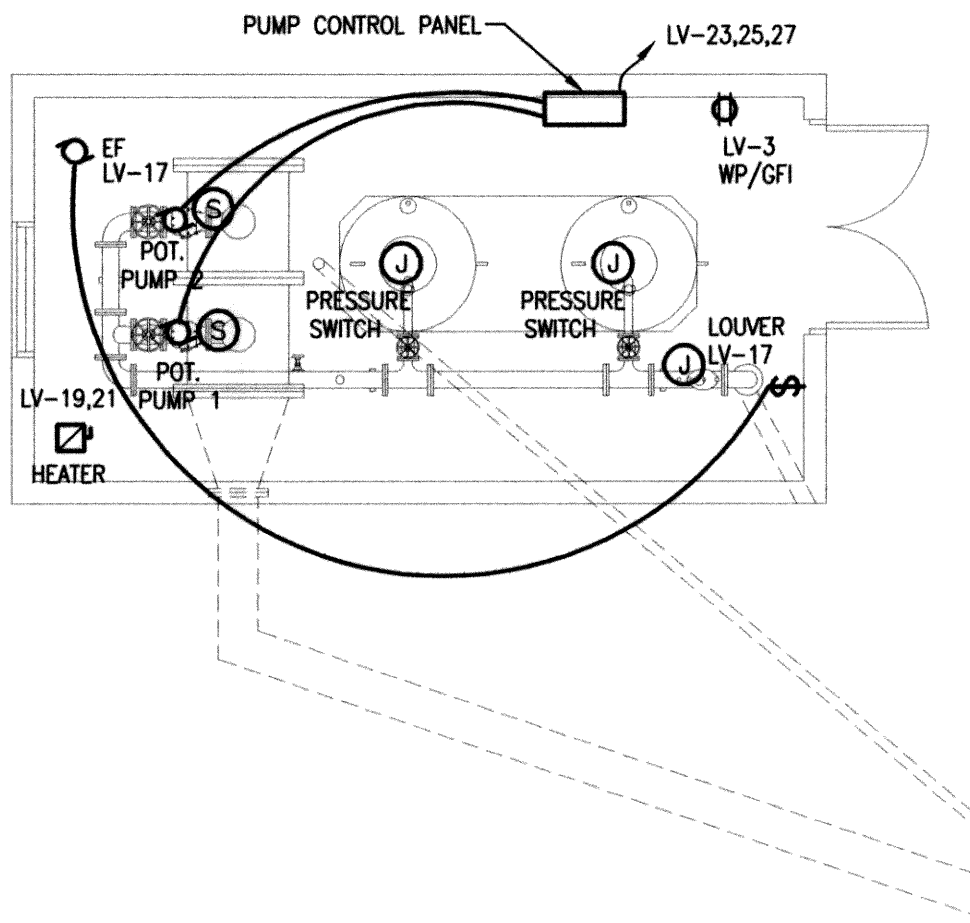
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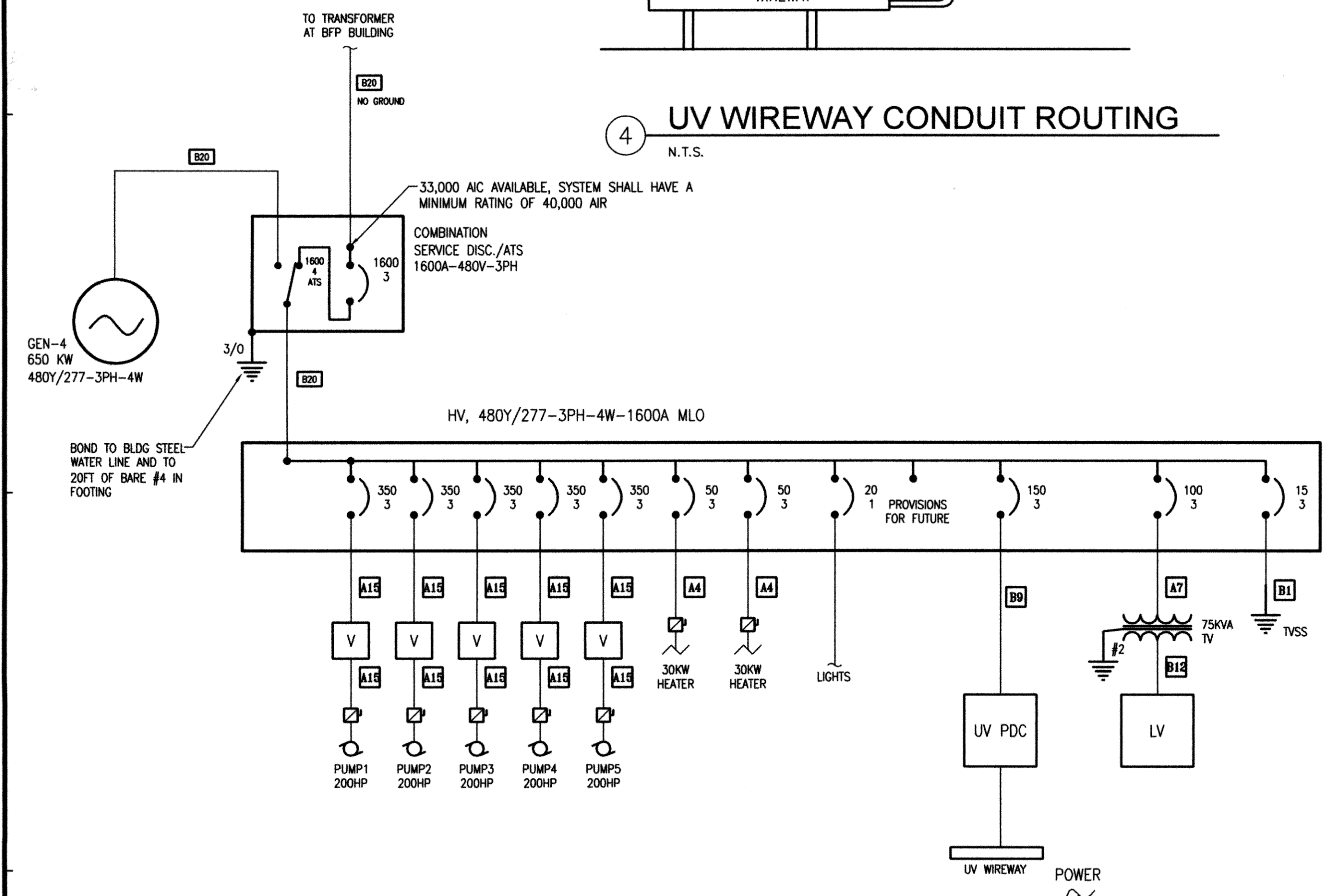
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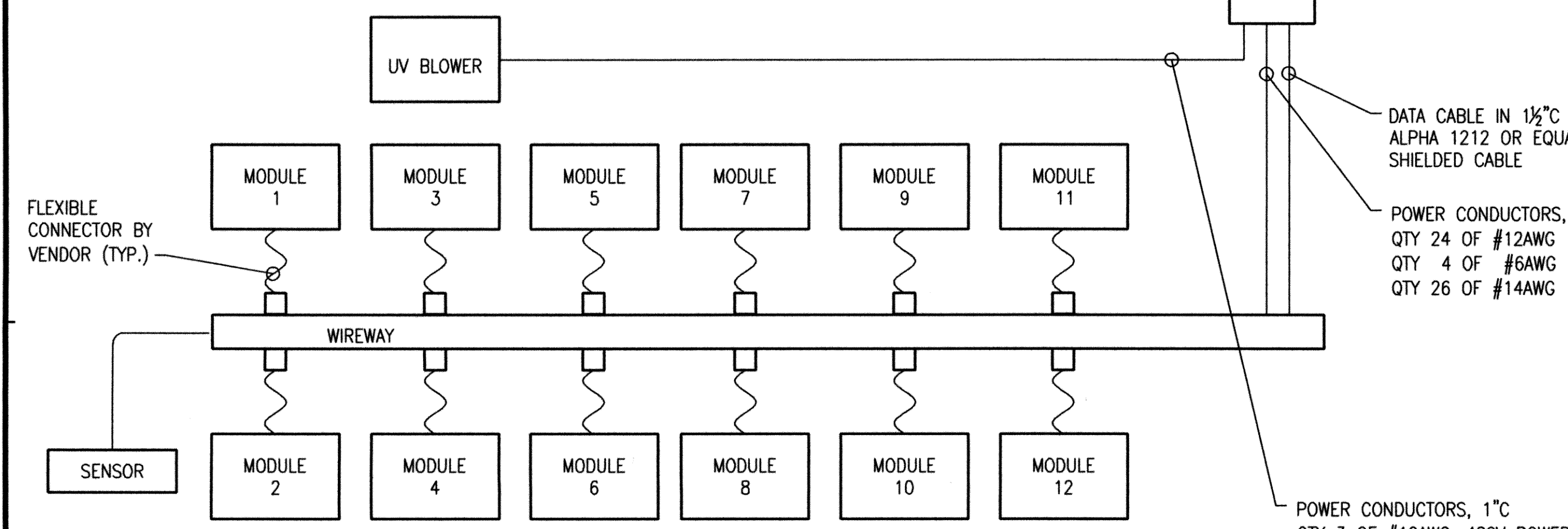
4 UV WIREWAY CONDUIT ROUTING  
N.T.S.



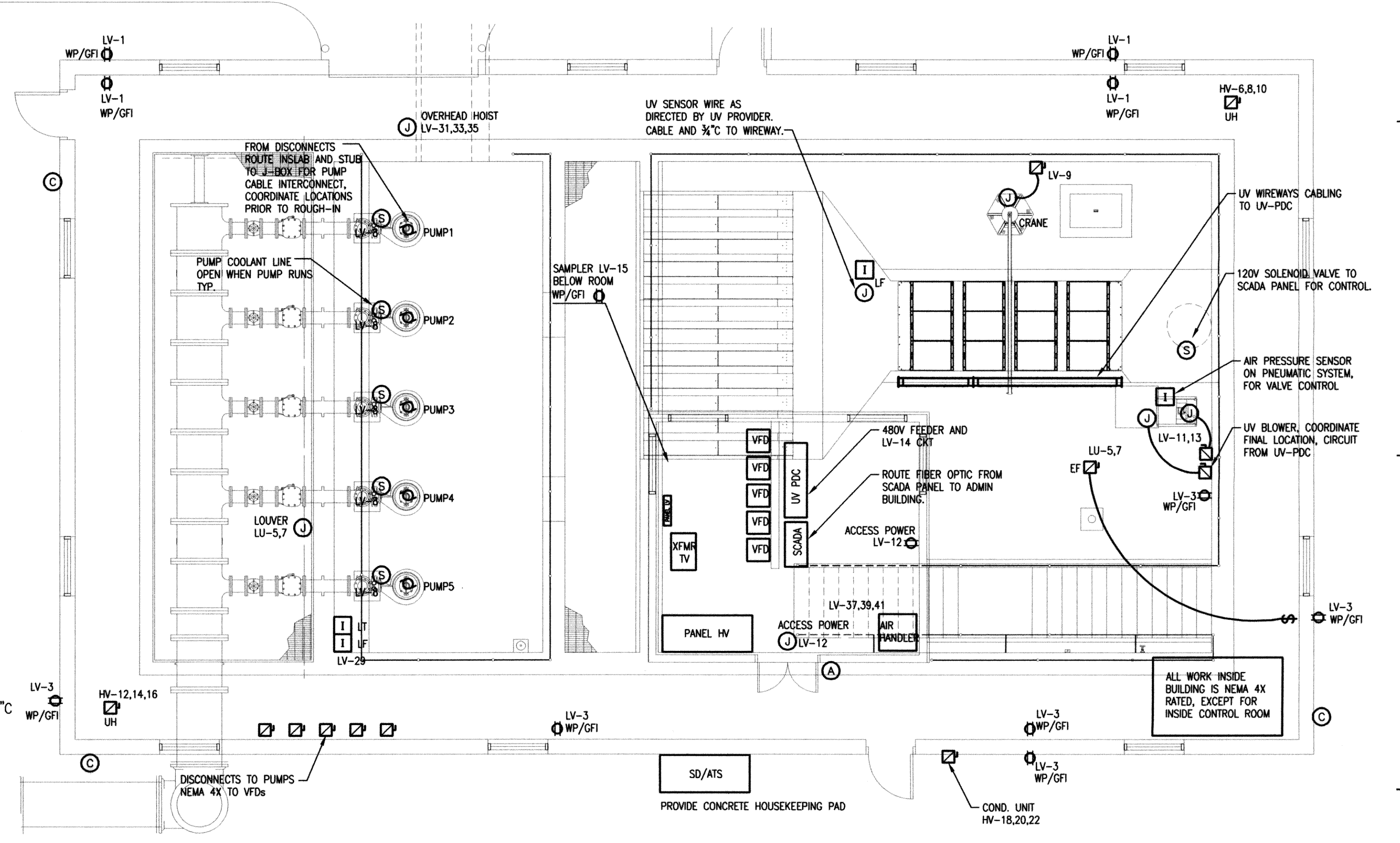
LV PANELBOARD		208Y/120 - 3 PH - 4 W		225A - MCB		
DESCRIPTION	CB	kVA	Ph	kVA	DESCRIPTION	
1 RECEPTACLES	20/1	0.72	A	1.54	20/1 LIGHTS	2
3 RECEPTACLES	20/1	0.72	B	0.77	20/1 LIGHTS	4
5 AIR HANDLER	40/2	3.00	C	1.20	20/1 EXTERIOR LIGHTS	6
7	—	3.00	A	0.30	20/1 SOLENOID VALVES	8
9 JIB CRANE	20/1	1.00	B	1.50	20/1 SUMP PUMP / MAG MET	10
11 AIR COMPRESSOR	30/2	2.00	C	0.20	20/1 ACCESS POWER	12
13	—	2.00	A	1.00	20/1 UV PDC POWER	14
15 SAMPLER	20/1	1.50	B	0.00	—	16
17 EXH FAN	20/1	1.00	C	0.00	20/1	18
19 HEATER	30/2	2.00	A	0.00	20/1	20
21	—	2.00	B	0.00	20/1	22
23 NON POT PUMPS	60/3	4.00	C	0.00	20/1	24
25	—	4.00	A	0.00	20/1	26
27	—	4.00	B	0.00	20/1	28
29 WET WELL SENSOR	20/1	0.20	C	0.00	20/1	30
31 OVERHEAD LIFT	30/3	2.00	A	0.00	20/1	32
33	—	2.00	B	0.00	20/1	34
35	—	2.00	C	0.00	20/1	36
37 SCADA	20/1	0.50	A	0.00	20/1	38
39 SCADA	20/1	0.50	B	0.00	20/1	40
41 SCADA	20/1	0.50	C	0.00	20/1	42
CONTINUOUS	8.51	X	1.25	=	8	
NON-CONTINUOUS	38.64	X	1.00	=	39	
RECEPTACLE <10 kVA	0	X	1.00	=	0	
RECEPTACLE >10 kVA	0	X	0.50	=	0	
LARGEST MOTOR	0	X	0.25	=	0	
TOTAL KVA					47	
TOTAL AMPS					130	



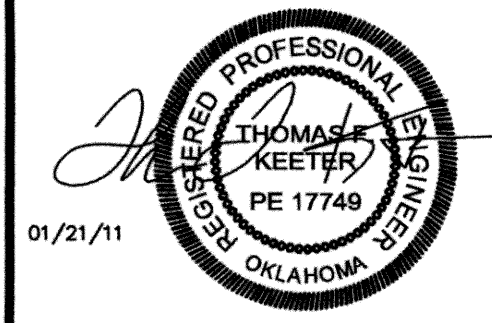
3 EFFLUENT/UV BUILDING ONE-LINE DIAGRAM  
N.T.S.



2 UV DIAGRAM  
N.T.S.



1 EFFLUENT/UV BUILDING POWER PLAN  
SCALE: 3/16" = 1'-0"



DESIGNED BY: CAD OPERATOR: CHECKED: SD APPROVED: SD PLOT DATE: DWG. SCALE: AS SHOWN SHEET: 29 of 48

REVISIONS:	DATE:
C#6 - ULTRATECH CLARIFICATION	1/28/2011

EFFLUENT/UV BUILDING POWER PLAN

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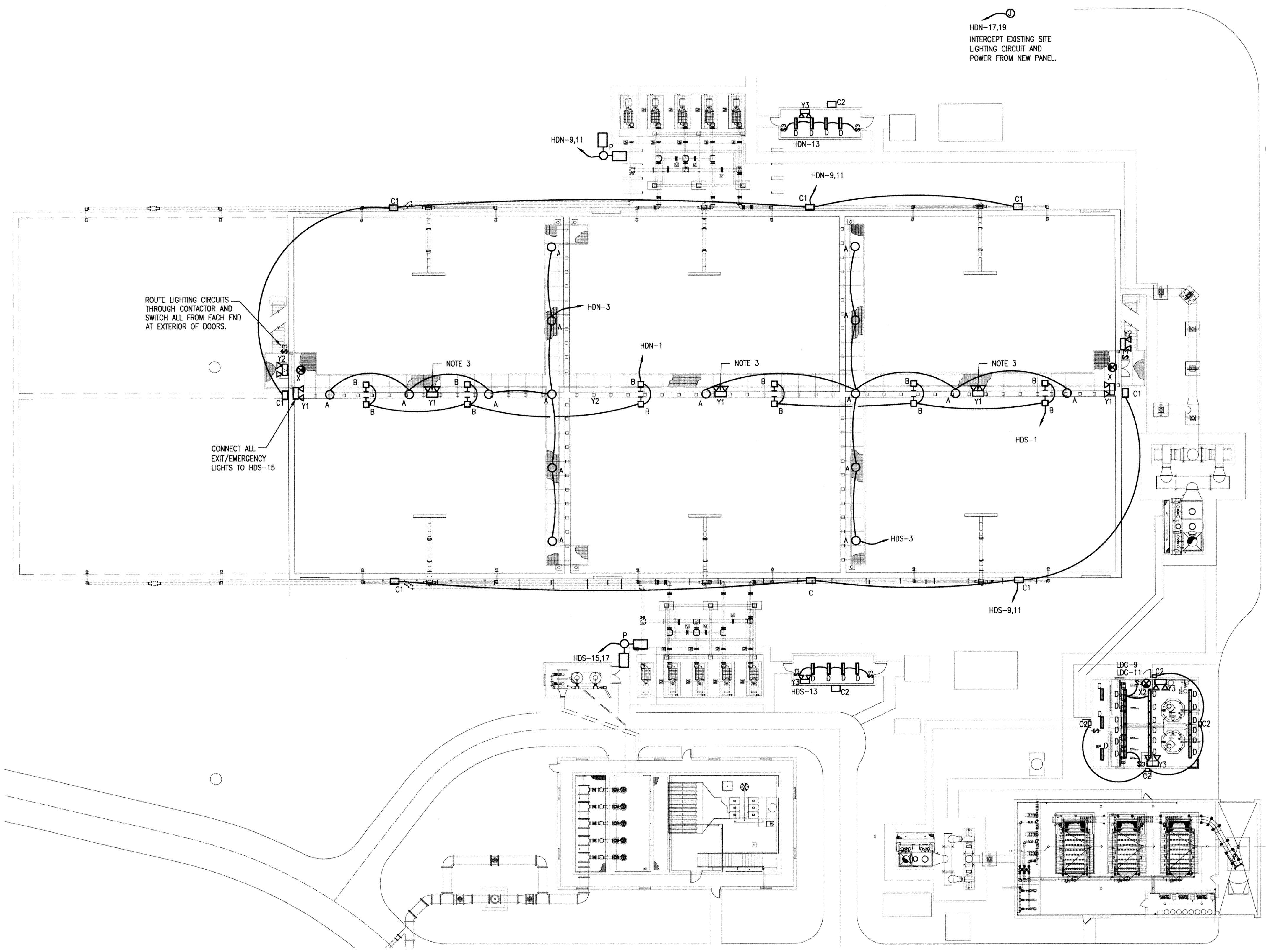
EAGLE CONSULTANTS, INC.  
CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088

RECORD DRAWINGS

E-32

A B C D E F G

- GENERAL NOTES**
1. ALL WORK IN AD SHALL BE PVC COATED CONDUIT AND NEMA 4X.
  2. MOUNT "Y1" TO WALL 8' ABOVE DECK.
  3. MOUNT ON 2" PIPE 7' ABOVE DECK.
  4. PENDENT MOUNT "A".
  5. MOUNT "B" FROM STRUCTURE AND AIM TOWARD OPEN AREA.
  6. COORDINATE MOUNTING HEIGHT OF "C" WITH ELEVATIONS.



**1 DIGESTER LIGHTING PLAN**  
SCALE: 1" = 20'-0"

RECORD DRAWINGS  E-41



Thomas F. Keeter, PE# 17749  
TFK Engineering, Inc.  
CofA# 5206 exp 6/2011

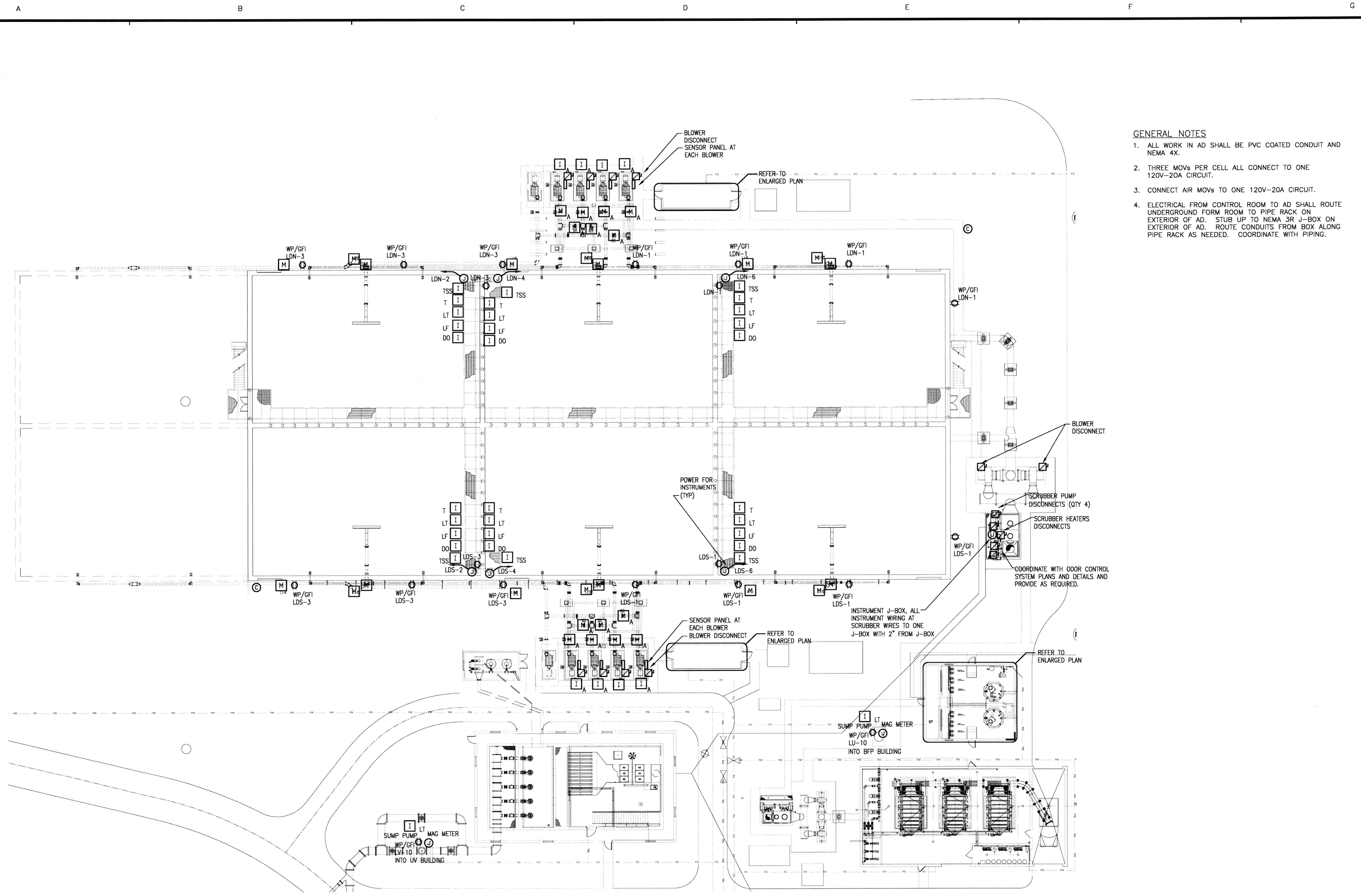
DESIGNED BY:	CAD OPERATOR:	CHECKED: SD	APPROVED: SD	PLOT DATE:	DWG. SCALE: AS SHOWN	SHEET: 30 OF 48
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REVISIONS:	DATE:

DIGESTER LIGHTING PLAN

EAGLE OFFICE CENTER  
2803 SOUTH BRYANT  
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**EAGLE CONSULTANTS, INC.**  
CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088



**GENERAL NOTES**

1. ALL WORK IN AD SHALL BE PVC COATED CONDUIT AND NEMA 4X.
2. THREE MOVs PER CELL ALL CONNECT TO ONE 120V-20A CIRCUIT.
3. CONNECT AIR MOVs TO ONE 120V-20A CIRCUIT.
4. ELECTRICAL FROM CONTROL ROOM TO AD SHALL ROUTE UNDERGROUND FORM ROOM TO PIPE RACK ON EXTERIOR OF AD. STUB UP TO NEMA 3R J-BOX ON EXTERIOR OF AD. ROUTE CONDUITS FROM BOX ALONG PIPE RACK AS NEEDED. COORDINATE WITH PIPING.

**1 DIGESTER POWER PLAN**  
SCALE: 1" = 20'-0"

RECORD DRAWINGS

E-42



Thomas F. Keeter, PE# 17749  
TFK Engineering, Inc.  
CoFA# 5206 exp 6/2011

REVISIONS:	DATE:

**DIGESTER POWER PLAN**

EAGLE OFFICE CENTER  
2803 SOUTH BRYANT  
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**EAGLE CONSULTANTS, INC.**  
CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088

DESIGNED BY:	CAD OPERATOR:	CHECKED:	APPROVED:	PLOT DATE:	DWG. SCALE:	SHEET:
		SD	SD		AS SHOWN	31 OF 48

A B C D E F G

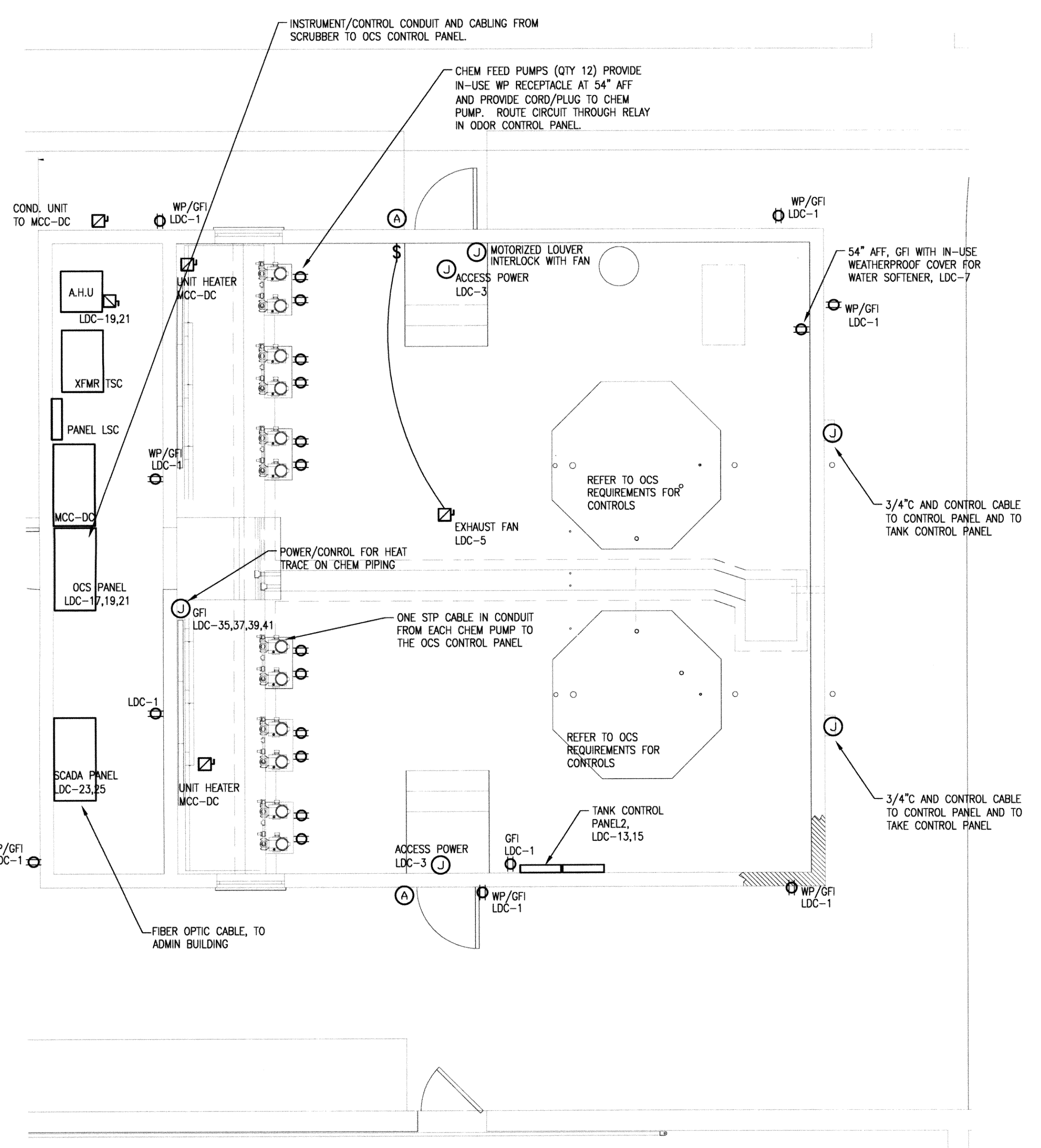
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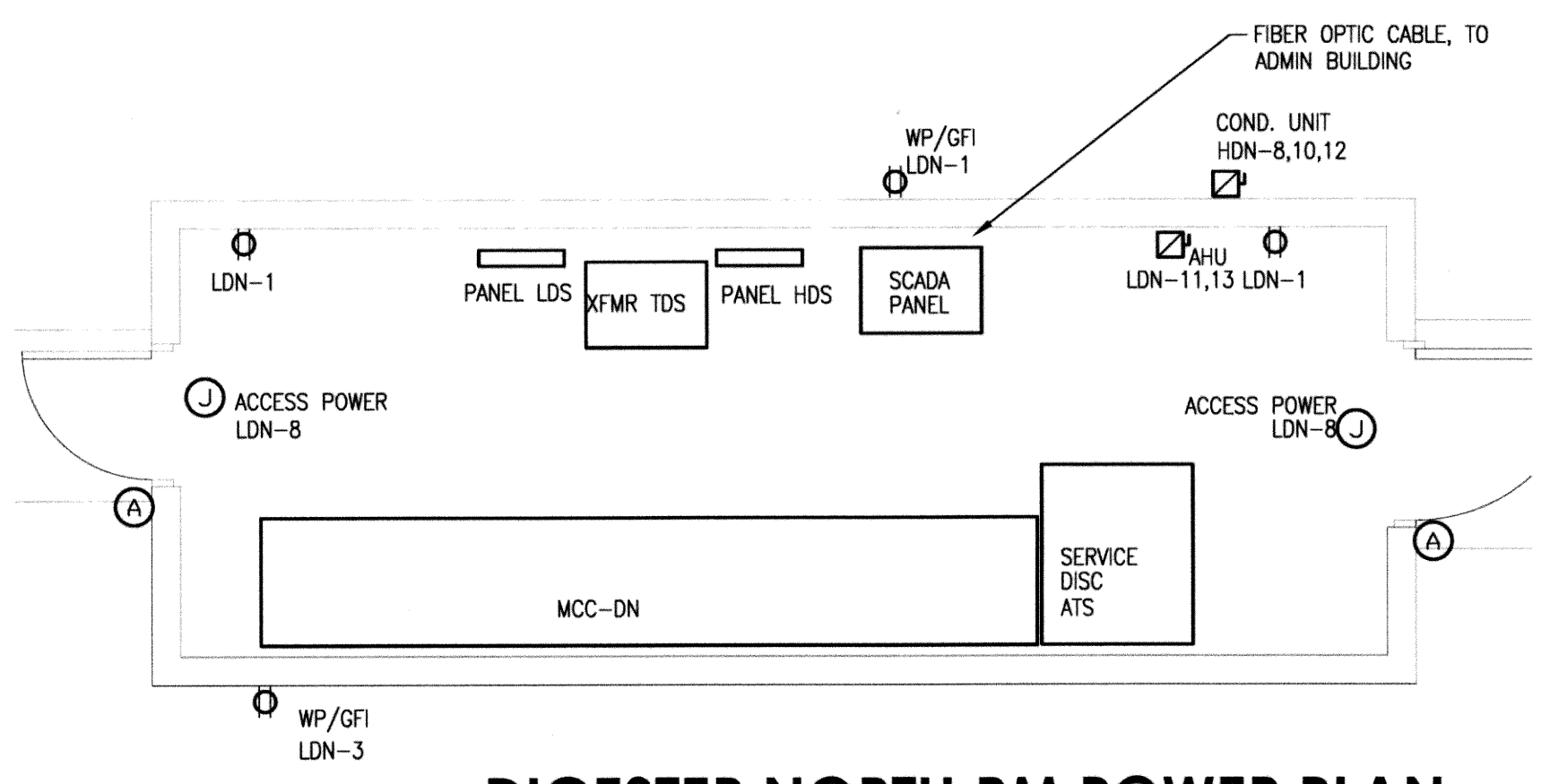
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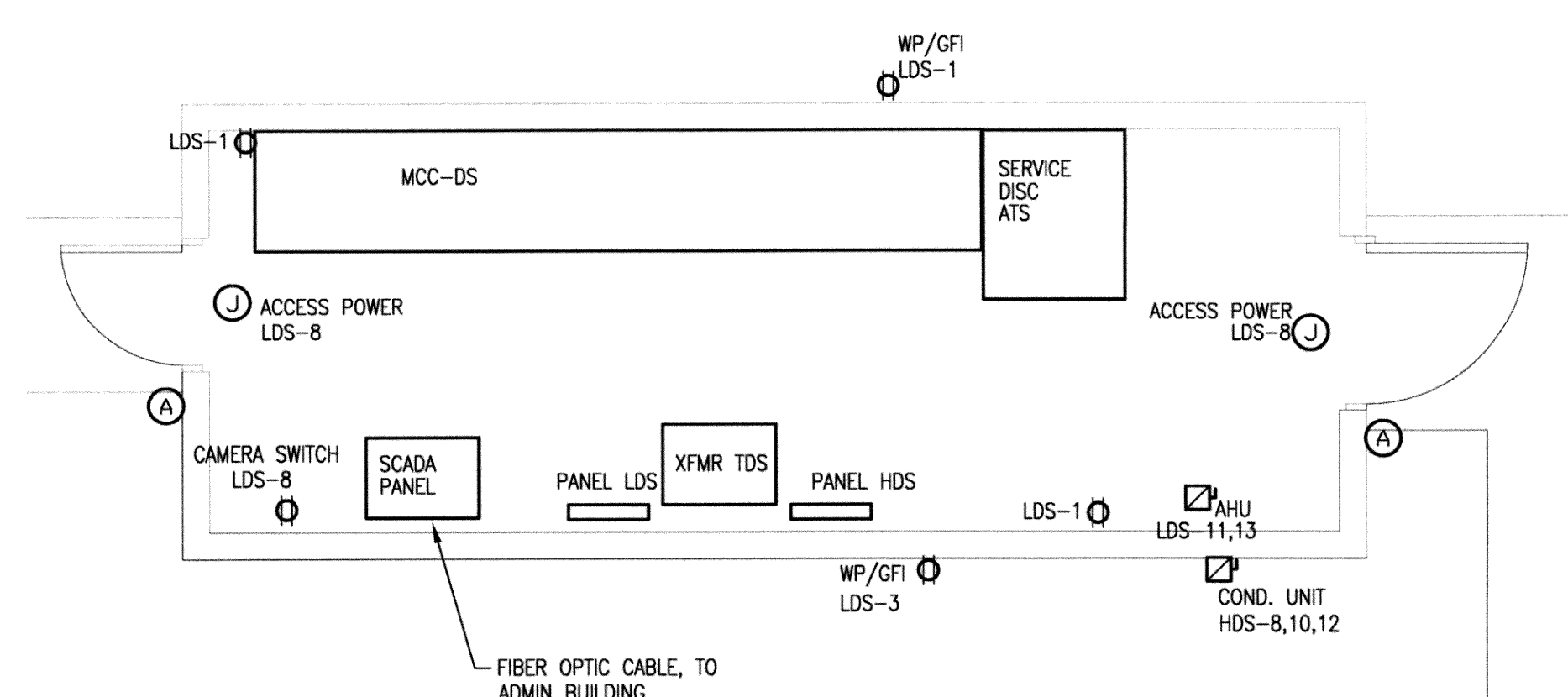
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**3 DIGESTER OCS CHEM RM POWER PLAN**  
SCALE: 1/4" = 1'-0"



**2 DIGESTER NORTH RM POWER PLAN**  
SCALE: 1/4" = 1'-0"



**1 DIGESTER SOUTH RM POWER PLAN**  
SCALE: 1/4" = 1'-0"



DESIGNED BY:	CAD OPERATOR:	CHECKED: SD	APPROVED: SD	PLOT DATE:	DWG. SCALE: AS SHOWN	SHEET: 32 OF 48
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Thomas F. Keeter, PE# 17749  
TFK Engineering, Inc.  
CofA# 5206 exp 8/2011

REVISIONS:	DATE:

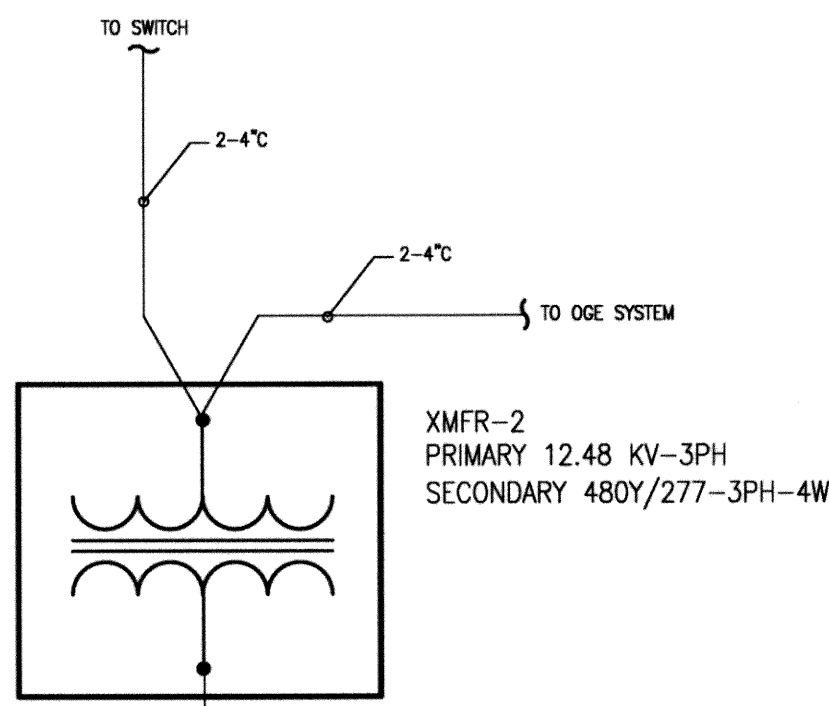
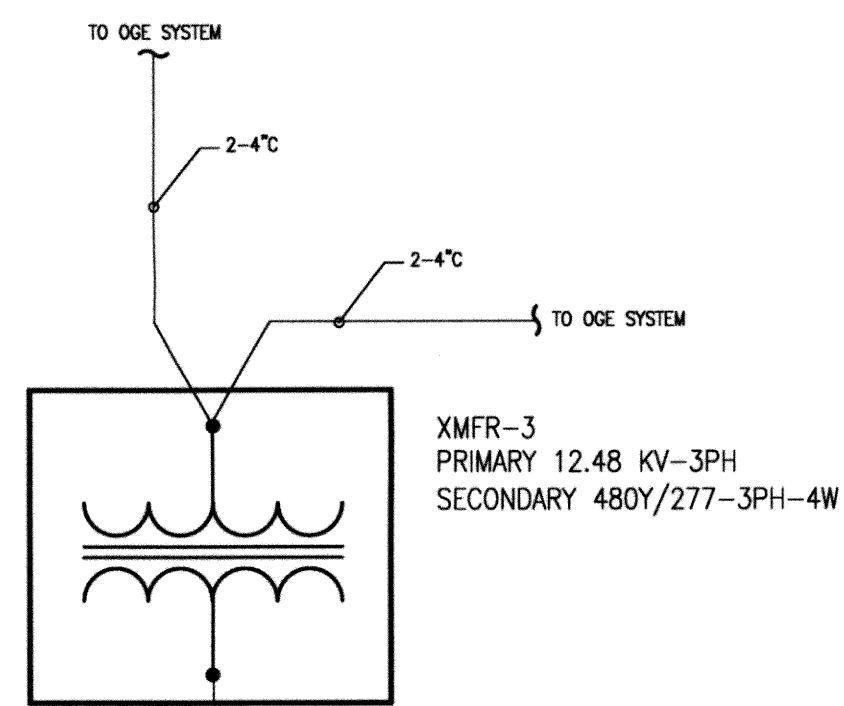
**DIGESTER ENLARGED ELECTRICAL PLANS**

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**EAGLE CONSULTANTS, INC.**  
CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088

RECORD DRAWINGS

E-43



HDN PANELBOARD		480Y/277 - 3 PH - 4 W		100A - MLO	
DESCRIPTION	CB	kVA	Ph	kVA	DESCRIPTION
1 DIGESTOR LIGHTS	20/1	2.50	B	8.00	XFMR/PANEL LDS
3 DIGESTOR LIGHTS	20/1	0.00	C	8.00	---
5	20/1	0.00	C	8.00	---
7	20/1	0.00	A	2.50	COND UNIT
9 EXTERIOR LIGHTS	20/2	1.00	B	2.50	---
11	---	1.00	C	2.50	---
13 STRIP LIGHTS	20/1	1.60	A	0.00	20/1
15 EMERG/EXIT LIGHTS	20/1	0.50	B	0.00	20/1
17 EXISTING SITE LIGHTS	20/2	1.00	C	0.00	20/1
19	---	1.00	A	0.00	20/1
21	20/1	0.00	B	0.00	20/1
23	20/1	0.00	C	0.00	20/1
25	20/1	0.00	A	0.00	20/1
27	20/1	0.00	B	0.00	20/1
29	20/1	0.00	C	0.00	20/1
31	20/1	0.00	A	0.00	20/1
33	20/1	0.00	B	0.00	20/1
35	20/1	0.00	C	0.00	20/1
37	20/1	0.00	A	0.00	20/1
39	20/1	0.00	B	0.00	20/1
41	20/1	0.00	C	0.00	20/1
42	---	---	---	---	---
CONTINUOUS	11.1	X	1.25	=	14
NON-CONTINUOUS	31.5	X	1.00	=	32
RECEPTACLE <10 kVA	0	X	1.00	=	0
RECEPTACLE >10 kVA	0	X	0.50	=	0
LARGEST MOTOR	0	X	0.25	=	0
TOTAL kVA					45
TOTAL AMPS					55

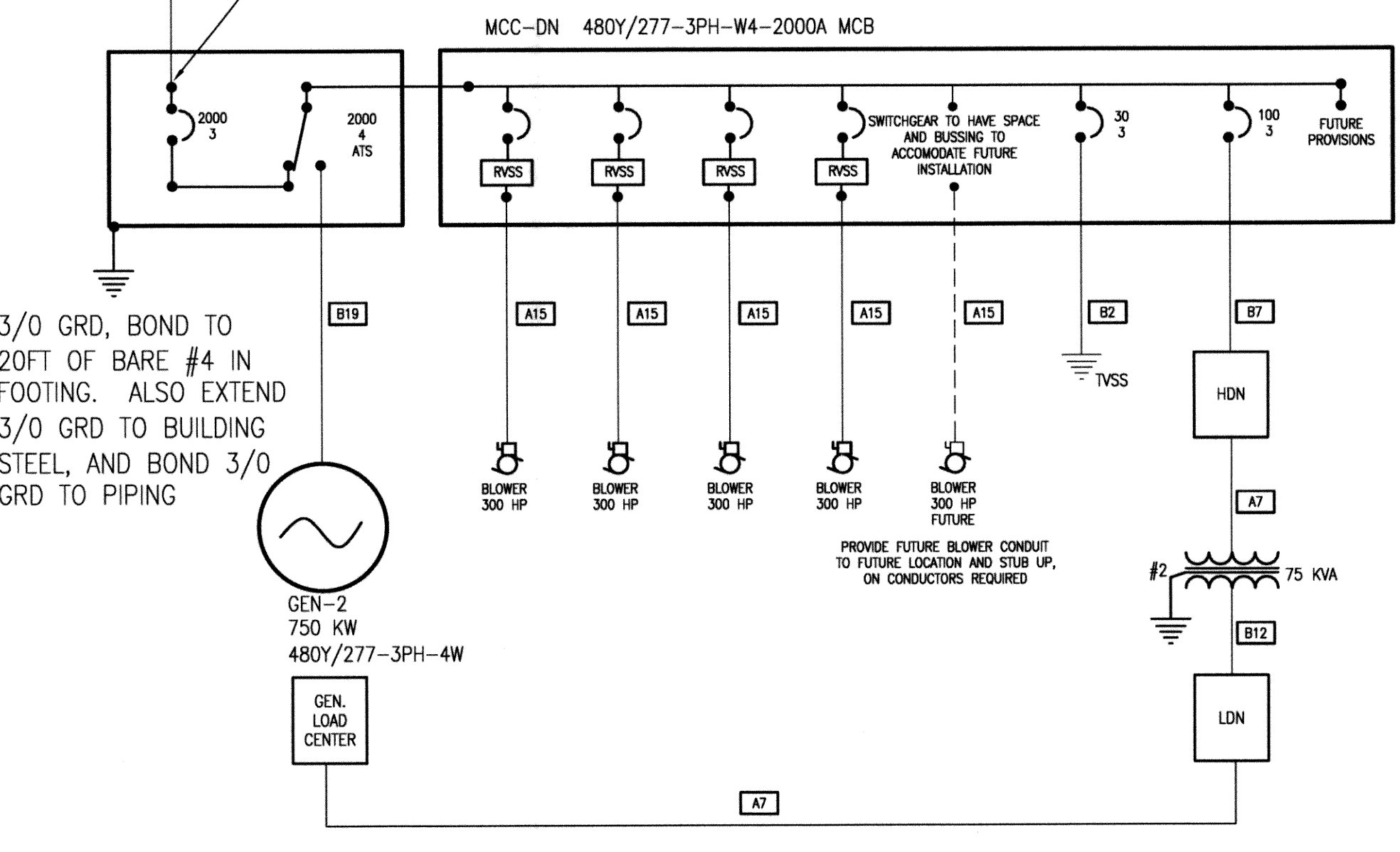
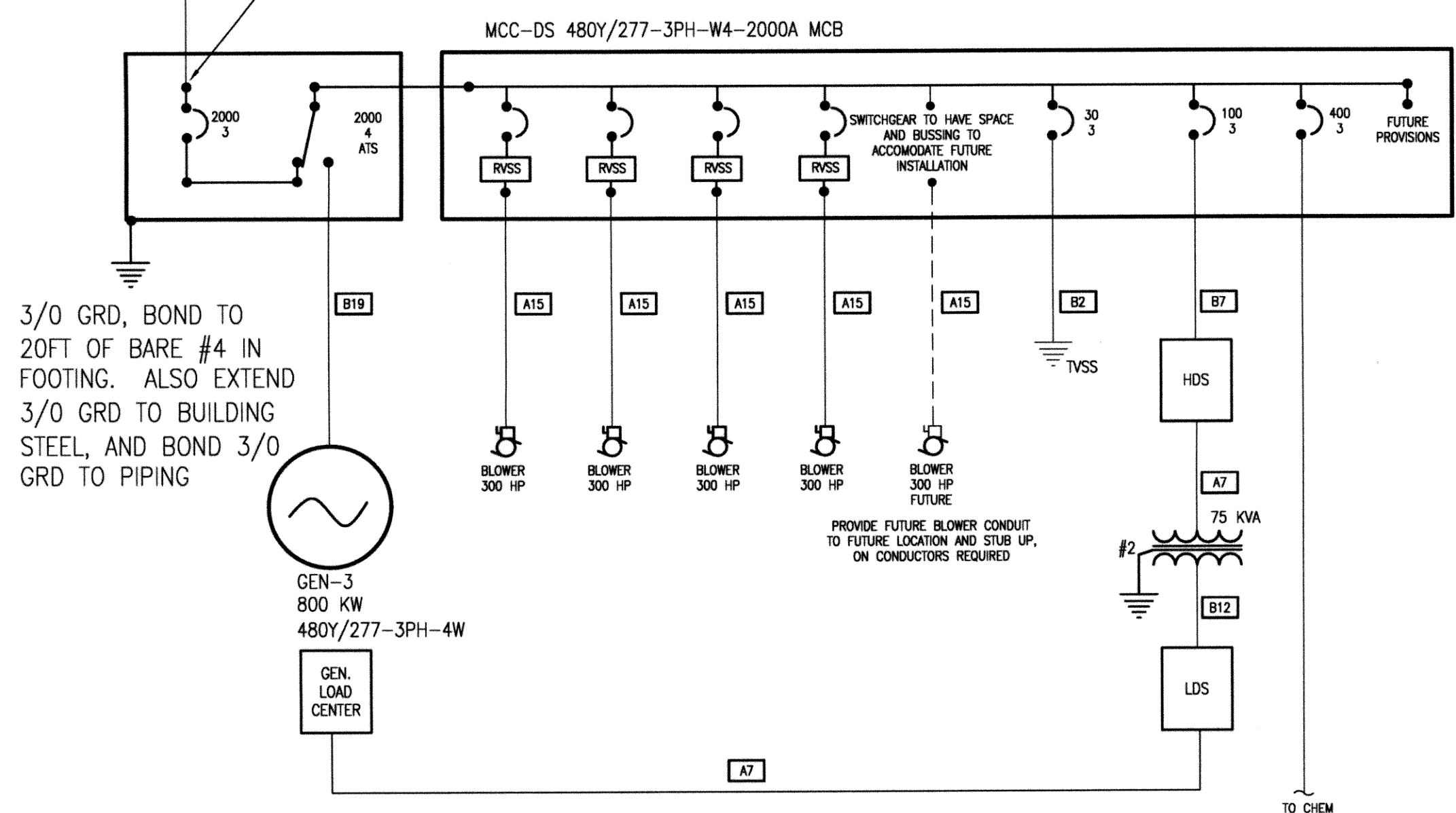
HDS PANELBOARD		480Y/277 - 3 PH - 4 W		100A - MLO	
DESCRIPTION	CB	kVA	Ph	kVA	DESCRIPTION
1 DIGESTOR LIGHTS	20/1	2.90	A	8.00	XFMR/PANEL LDS
3 DIGESTOR LIGHTS	20/1	0.00	B	8.00	---
5	20/1	0.00	C	8.00	---
7	20/1	0.00	A	2.50	COND UNIT
9 EXTERIOR LIGHTS	20/2	1.00	B	2.50	---
11	---	1.00	C	2.50	---
13 STRIP LIGHTS	20/1	1.60	A	0.00	20/1
15 EMERG/EXIT LIGHTS	20/1	0.50	B	0.00	20/1
17	20/1	0.00	C	0.00	20/1
19	20/1	0.00	A	0.00	20/1
21	20/1	0.00	B	0.00	20/1
23	20/1	0.00	C	0.00	20/1
25	20/1	0.00	A	0.00	20/1
27	20/1	0.00	B	0.00	20/1
29	20/1	0.00	C	0.00	20/1
31	20/1	0.00	A	0.00	20/1
33	20/1	0.00	B	0.00	20/1
35	20/1	0.00	C	0.00	20/1
37	20/1	0.00	A	0.00	20/1
39	20/1	0.00	B	0.00	20/1
41	20/1	0.00	C	0.00	20/1
42	---	---	---	---	---
CONTINUOUS	9.9	X	1.25	=	12
NON-CONTINUOUS	31.5	X	1.00	=	32
RECEPTACLE <10 kVA	0	X	1.00	=	0
RECEPTACLE >10 kVA	0	X	0.50	=	0
LARGEST MOTOR	0	X	0.25	=	0
TOTAL kVA					44
TOTAL AMPS					53

5 SETS OF 600 KCMIL IN 4°C UNDERGROUND

33,000 AIC AVAILABLE, SYSTEM SHALL HAVE A MINIMUM RATING OF 40,000 AIR

5 SETS OF 600 KCMIL IN 4°C UNDERGROUND

33,000 AIC AVAILABLE, SYSTEM SHALL HAVE A MINIMUM RATING OF 40,000 AIR



LDN PANELBOARD		208Y/120 - 3 PH - 4 W		225A - MCB	
DESCRIPTION	CB	kVA	Ph	kVA	DESCRIPTION
1 RECEPTACLES	20/1	0.90	A	1.50	20/1 CELL INSTRUMENTS
3 RECEPTACLES	20/1	0.90	B	1.50	20/1 CELL INSTRUMENTS
5	20/1	0.00	C	1.50	20/1 CELL INSTRUMENTS
7	20/1	0.00	A	0.20	20/1 ACCESS SYSTEM
9	20/1	0.00	B	1.00	20/2 GATE POWER
11 AHU	40/2	3.40	C	1.00	---
13	---	3.40	A	1.00	20/2 GATE POWER
15 SCADA CONTROL PNL	20/1	1.00	B	1.00	---
17 SCADA CONTROL PNL	20/1	1.00	C	0.00	20/1
19 SCADA CONTROL PNL	20/1	1.00	A	0.00	20/1
21 MTR OPER VALVE	20/1	0.50	B	0.00	20/1
23 MTR OPER VALVE	20/1	0.50	C	0.00	20/1
25 MTR OPER VALVE	20/1	0.50	A	0.00	20/1
27 MTR OPER VALVE	20/1	0.50	B	0.00	20/1
29	20/1	0.00	C	0.00	20/1
31	20/1	0.00	A	0.00	20/1
33	20/1	0.00	B	0.00	20/1
35	20/1	0.00	C	0.00	20/1
37	20/1	0.00	A	0.00	20/1
39 GENERATOR	100/2	3.00	B	0.00	20/1
41 LOADCENTER	---	3.00	C	0.00	20/1
42	---	---	---	---	---
CONTINUOUS	0	X	1.25	=	0
NON-CONTINUOUS	28.3	X	1.00	=	28
RECEPTACLE <10 kVA	0	X	1.00	=	0
RECEPTACLE >10 kVA	0	X	0.50	=	0
LARGEST MOTOR	0	X	0.25	=	0
TOTAL kVA					28
TOTAL AMPS					79

LDS PANELBOARD		208Y/120 - 3 PH - 4 W		225A - MCB	
DESCRIPTION	CB	kVA	Ph	kVA	DESCRIPTION
1 RECEPTACLES	20/1	0.90	A	1.50	20/1 CELL INSTRUMENTS
3 RECEPTACLES	20/1	0.90	B	1.50	20/1 CELL INSTRUMENTS
5	20/1	0.00	C	1.50	20/1 CELL INSTRUMENTS
7	20/1	0.00	A	0.50	20/1 ACCESS SYSTEM
9	20/1	0.00	B	0.00	20/1
11 AHU	40/2	3.40	C	0.00	20/1
13	---	3.40	A	0.00	20/1
15 SCADA CONTROL PNL	20/1	1.00	B	0.00	20/1
17 SCADA CONTROL PNL	20/1	1.00	C	0.00	20/1
19 SCADA CONTROL PNL	20/1	1.00	A	0.00	20/1
21 MTR OPER VALVE	20/1	0.50	B	0.00	20/1
23 MTR OPER VALVE	20/1	0.50	C	0.00	20/1
25 MTR OPER VALVE	20/1	0.50	A	0.00	20/1
27 MTR OPER VALVE	20/1	0.50	B	0.00	20/1
29	20/1	0.00	C	0.00	20/1
31	20/1	0.00	A	0.00	20/1
33	20/1	0.00	B	0.00	20/1
35	20/1	0.00	C	0.00	20/1
37	20/1	0.00	A	0.00	20/1
39 GENERATOR	100/2	3.00	B	0.00	20/1
41 LOADCENTER	---	3.00	C	0.00	20/1
42	---	---	---	---	---
CONTINUOUS	0	X	1.25	=	0
NON-CONTINUOUS	24.6	X	1.00	=	25
RECEPTACLE <10 kVA	0	X	1.00	=	0
RECEPTACLE >10 kVA	0	X	0.50	=	0
LARGEST MOTOR	0	X	0.25	=	0
TOTAL kVA					25
TOTAL AMPS					68

1 DIGESTER ONE LINE DIAGRAM  
SCALE: NTS



DESIGNED BY: CAD OPERATOR: CHECKED: SD APPROVED: SD PLOT DATE: DWG. SCALE: AS SHOWN SHEET: 33 OF 48

REVISIONS:	DATE:

DIGESTER ONE-LINE DIAGRAM

RECORD DRAWINGS

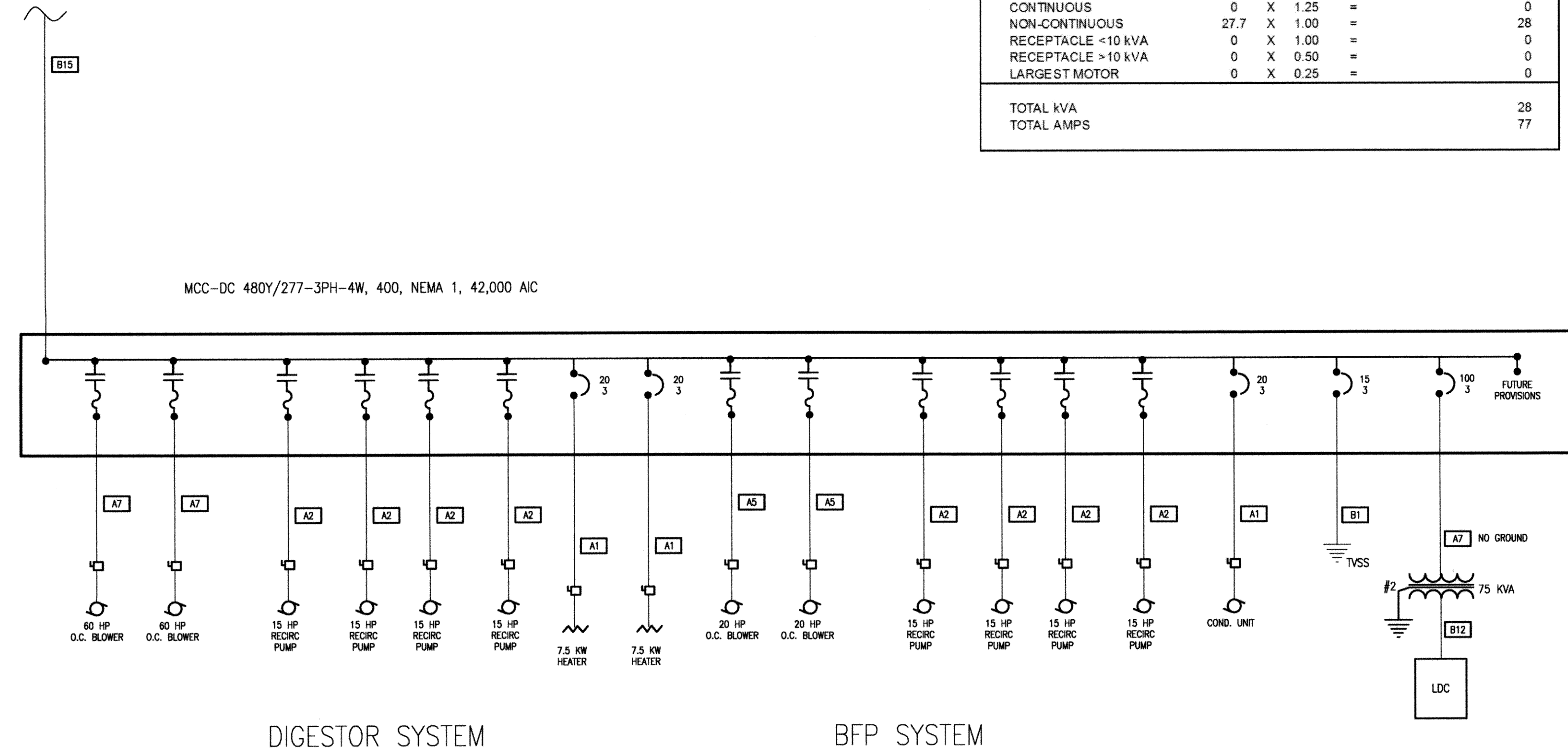
EAGLE OFFICE CENTER  
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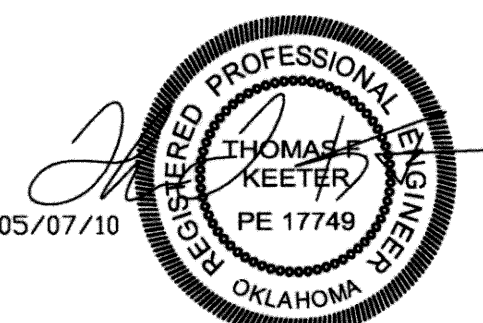
A B C D E F G

LDC PANELBOARD					
SUB LUGS FOR FUTURE SECTION			208Y/120 - 3 PH - 4 W 225A - MCB		
DESCRIPTION	CB	kVA	Ph	kVA	DESCRIPTION
1 RECEPTACLES	20/1	0.90	A	1.00	20/1 CHEM FEED PUMP
3 HEAT TRACE	20/1	1.50	B	1.00	20/1 CHEM FEED PUMP
5 EXHAUST FAN	20/1	1.00	C	1.00	20/1 CHEM FEED PUMP
7 WATER SOFTENER	20/1	0.50	A	1.00	20/1 CHEM FEED PUMP
9 INTERIOR LIGHTS	20/1	0.80	B	1.00	20/1 CHEM FEED PUMP
11 EXTERIOR LIGHTS	20/1	1.50	C	1.00	20/1 CHEM FEED PUMP
13 TANK CONTROL PNL	20/1	0.50	A	1.00	20/1 CHEM FEED PUMP
15 TANK CONTROL PNL	20/1	0.50	B	1.00	20/1 CHEM FEED PUMP
17 OCS CONTROL PANEL	20/1	0.50	C	1.00	20/1 CHEM FEED PUMP
19 OCS CONTROL PANEL	20/1	0.50	A	1.00	20/1 CHEM FEED PUMP
21 OCS CONTROL PANEL	20/1	0.50	B	1.00	20/1 CHEM FEED PUMP
23 SCADA PANEL	20/1	0.50	C	1.00	20/1 CHEM FEED PUMP
25 SCADA PANEL	20/1	0.50	A	0.00	20/1
27 OCS HEATER	20/2	1.50	B	0.00	20/1
29 OCS HEATER	-	1.50	C	0.00	20/1
31 OCS HEATER	20/2	1.50	A	0.00	20/1
33 OCS HEATER	-	1.50	B	0.00	20/1
35	20/1	0.00	C	0.00	20/1
37	20/1	0.00	A	0.00	20/1
39	20/1	0.00	B	0.00	20/1
41	20/1	0.00	C	0.00	20/1
42					
CONTINUOUS	0	X	1.25	=	0
NON-CONTINUOUS	27.7	X	1.00	=	28
RECEPTACLE <10 kVA	0	X	1.00	=	0
RECEPTACLE >10 kVA	0	X	0.50	=	0
LARGEST MOTOR	0	X	0.25	=	0
TOTAL KVA					28
TOTAL AMPS					77

UNDERGROUND TO SOUTH DIGESTOR ELECTRICAL BUILDING MCC-DS



**1** DIGESTER OCS ONE LINE DIAGRAM  
SCALE: NTS



DESIGNED BY: CAD OPERATOR: CHECKED: SD APPROVED: SD PLOT DATE: DWG. SCALE: AS SHOWN SHEET: 34 OF 48

Thomas F. Keeter, PE# 17749  
TFK Engineering, Inc.  
CofA# 5206 exp 6/2011

REVISIONS:	DATE:

**DIGESTER OCS ONE-LINE DIAGRAM**

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2803 SOUTH BRYANT  
EDMOND, OK. 73013  
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**EAGLE CONSULTANTS, INC.**  
CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088

RECORD DRAWINGS E-45

A B C D E F G

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① POWER TO GATE COORDINATE WITH GATE INSTALLER, LDN-10,12 #8AWG  
 ② 2" TO ADMINISTRATION BUILDING FOR ACCESS CONTROL AND INTERCOM, COORDINATE LOCATION, AND 1" FOR POWER LDN-8 #8AWG  
 ③ 2" TO DIGESTOR NORTH ELECTRICAL/CONTROL ROOM FOR CAMERA. PROVIDE 12FT STEEL POLE ON CONCRETE BASE SIMILAR TO POLE LIGHTS FOR CAMERA.  
 ④ POWER TO GATE COORDINATE WITH GATE INSTALLER, LDN-14,16 #8AWG  
 ⑤ 2" TO ADMINISTRATION BUILDING FOR ACCESS CONTROL AND INTERCOM, COORDINATE LOCATION, AND 1" FOR POWER LDN-8 #8AWG  
 ⑥ 2" TO DIGESTOR NORTH ELECTRICAL/CONTROL ROOM FOR CAMERA. PROVIDE 12FT STEEL POLE ON CONCRETE BASE SIMILAR TO POLE LIGHTS FOR CAMERA.

HDS-13,17  
480V CIRCUIT  
#8AWG

TO PANEL HF IN BFP BLDG  
480V CIRCUIT

LMAB-6,8  
208V CIRCUIT

**1 DIGESTER AREA SITE PLAN**  
SCALE: 1" = 20'-0"

RECORD DRAWINGS

E-46



Thomas F. Keeter, PE# 17749  
TFK Engineering, Inc.  
ColA# 5206 exp 6/2011

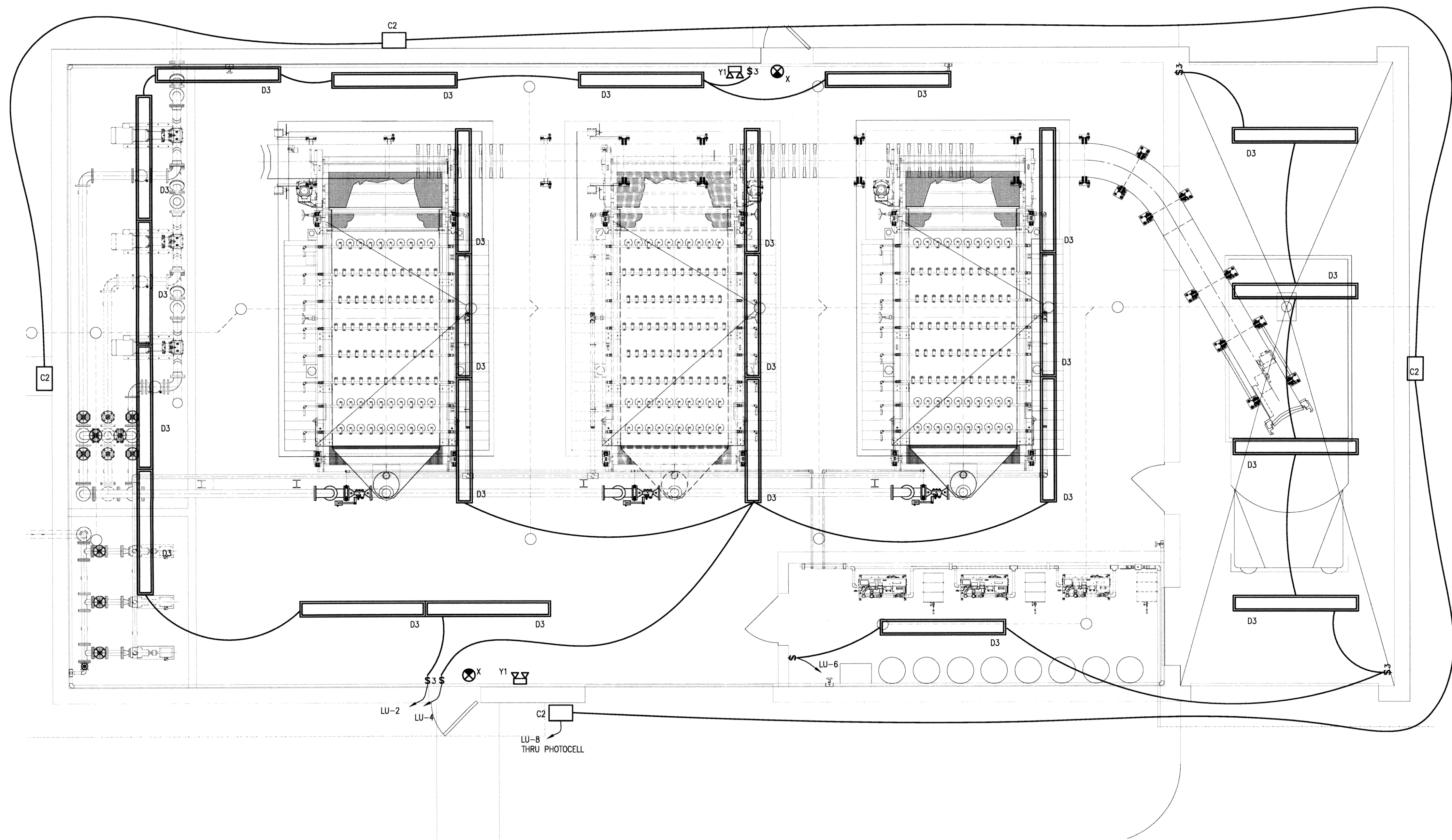
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**DIGESTER AREA SITE PLAN**

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		SD	SD		AS SHOWN	35 OF 48



1 BELT FILTER PRESS BUILDING LIGHTING PLAN  
 SCALE: 1/4" = 1'-0"



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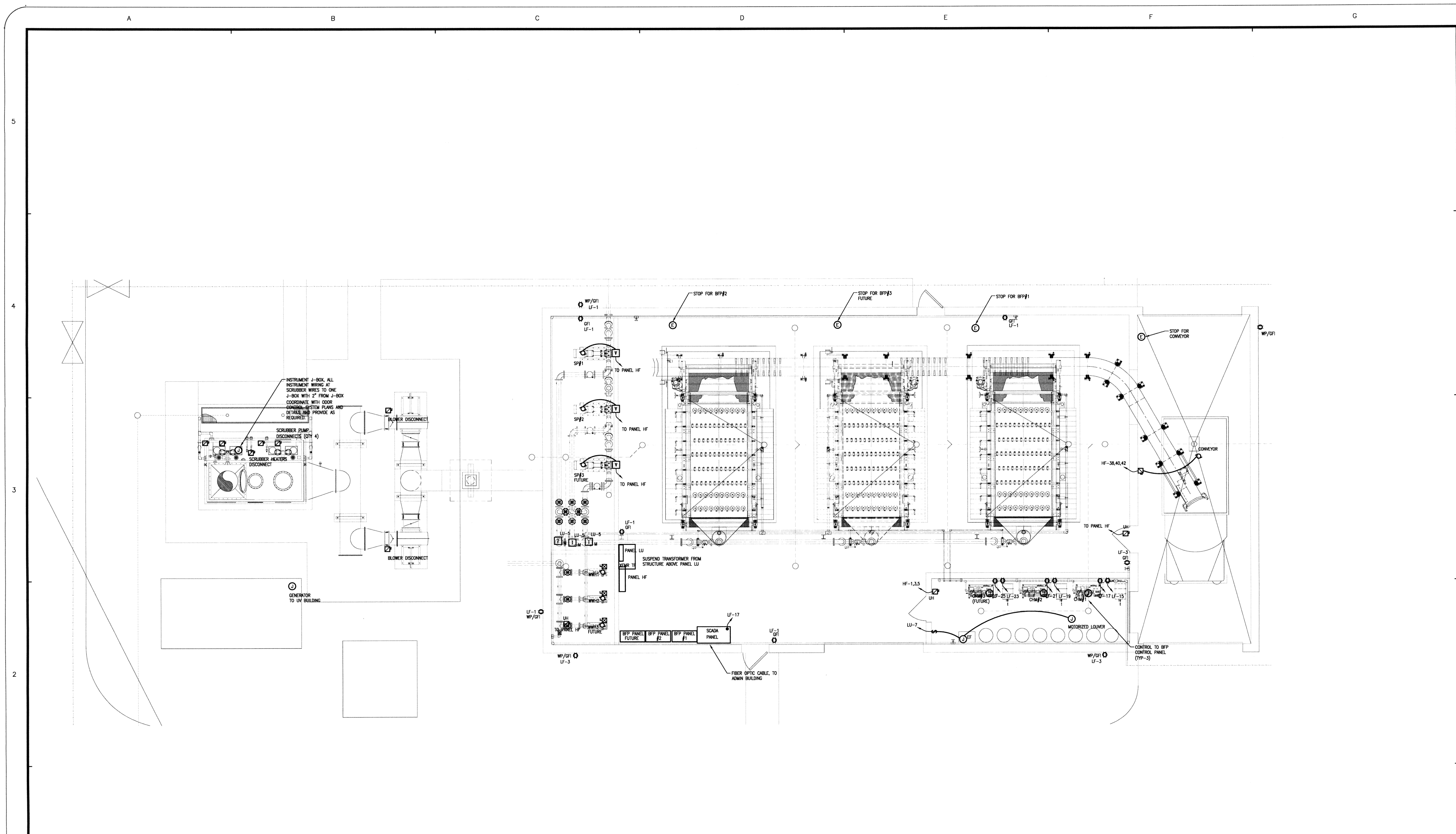
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BELT FILTER PRESS BUILDING  
 LIGHT PLAN

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RECORD DRAWINGS  
 E-51



1 BELT FILTER PRESS BUILDING POWER PLAN  
 SCALE: 3/16" = 1'-0"



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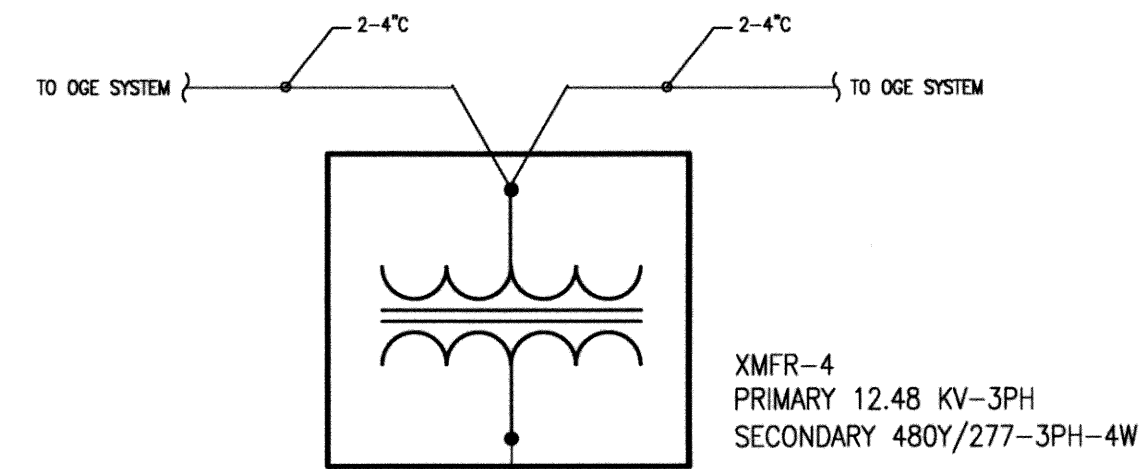
REVISIONS:	DATE:

BELT FILTER PRESS BUILDING  
 POWER PLAN

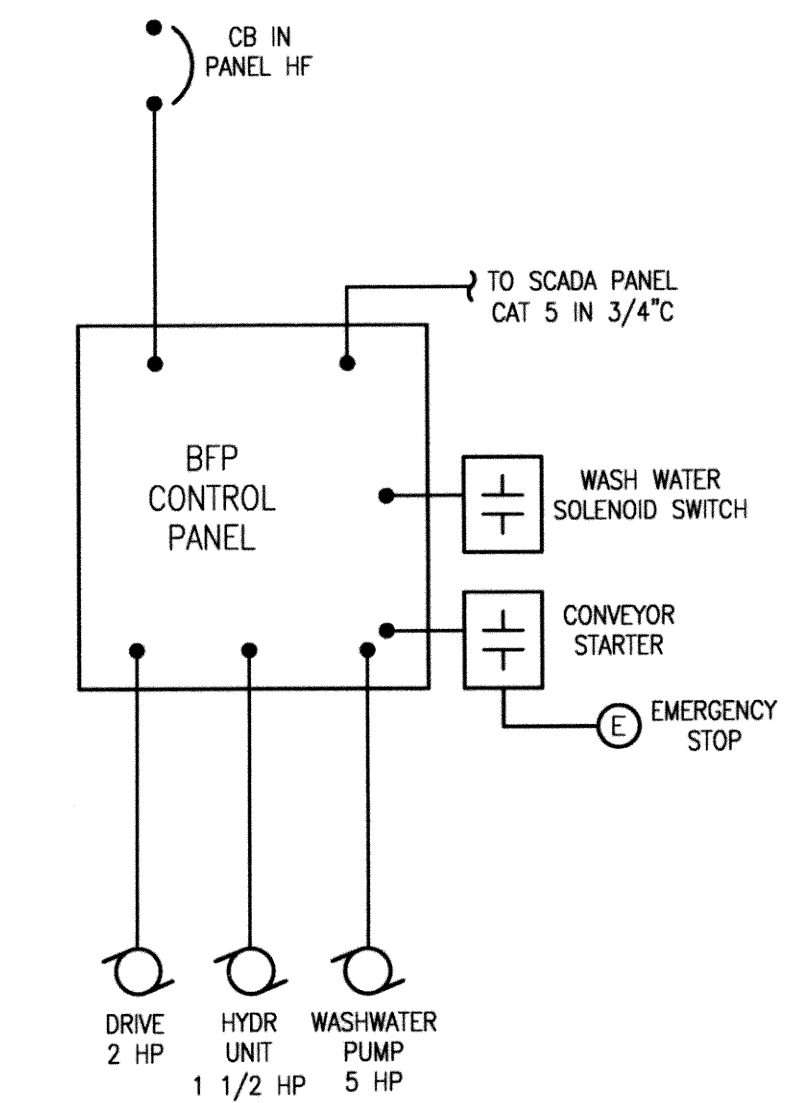
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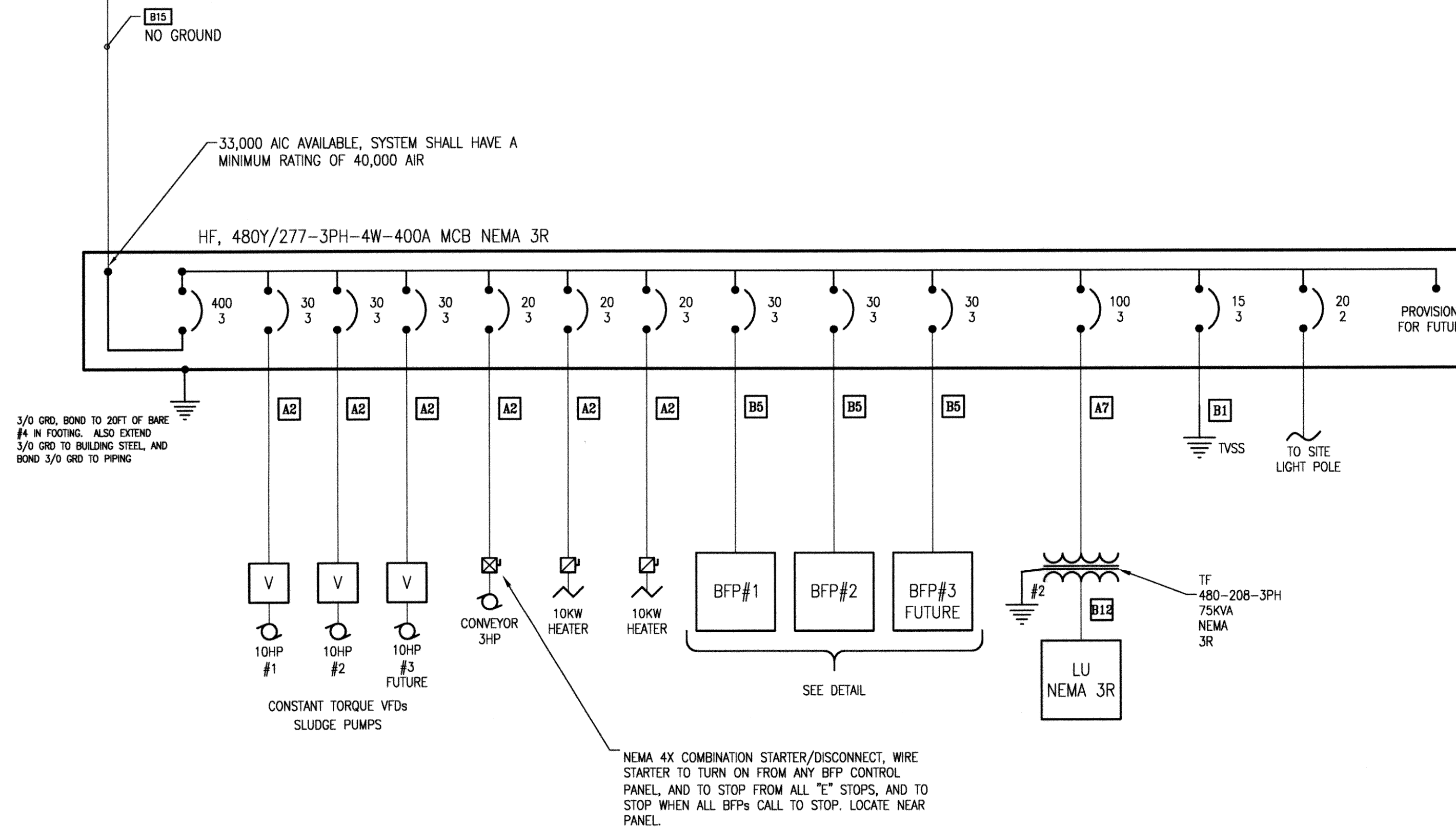
RECORD DRAWINGS  
 NE-52



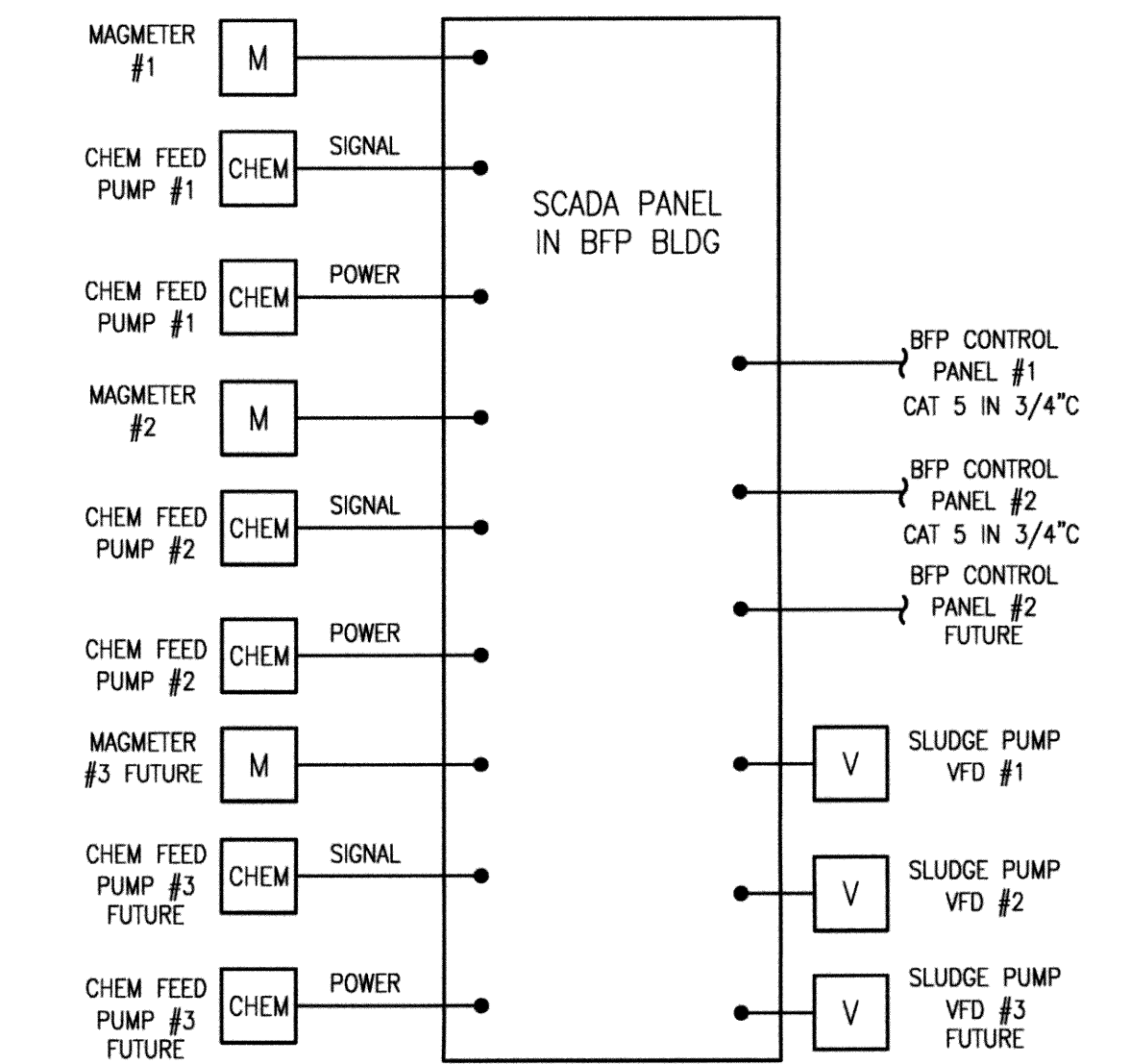
LU PANELBOARD		208Y/120 - 3 PH - 4 W		225A - MCB	
DESCRIPTION	CB	kVA	Ph	kVA	DESCRIPTION
1 RECEPTACLES	20/1	0.90	A	1.54	20/1 LIGHTS
3 RECEPTACLES	20/1	0.90	B	1.80	20/1 LIGHTS
5 MAG METERS	20/1	0.90	C	1.20	20/1 LIGHTS
7 EXHAUST FAN	20/1	1.20	A	0.50	20/1 EXTERIOR LIGHTS
9 HEATER	20/2	1.50	B	1.50	20/1 SUMP PUMP / MAG MET
11		1.50	C	0.00	20/1
13 SCADA PANEL	20/1	1.00	A	0.00	20/1
15 CHEM PUMP #1	20/1	0.50	B	0.00	20/1
17 CHEM FEED #1	20/1	0.50	C	0.00	20/1
19 CHEM PUMP #2	20/1	0.50	A	0.00	20/1
21 CHEM FEED #2	20/1	0.50	B	0.00	20/1
23 CHEM FEED #3	20/1	0.50	C	0.00	20/1
25 CHEM FEED #3	20/1	0.50	A	0.00	20/1
27 GEN CHARGER	20/1	1.00	B	0.00	20/1
29 GEN HEATER	30/2	2.00	C	0.00	20/1
31		2.00	A	0.00	20/1
33	20/1	0.00	B	0.00	20/1
35	20/1	0.00	C	0.00	20/1
37	20/1	0.00	A	0.00	20/1
39	20/1	0.00	B	0.00	20/1
41	20/1	0.00	C	0.00	20/1
CONTINUOUS		10.94	X	1.25	= 14
NON-CONTINUOUS		11.5	X	1.00	= 12
RECEPTACLE <10 kVA		0	X	1.00	= 0
RECEPTACLE >10 kVA		0	X	0.50	= 0
LARGEST MOTOR		0	X	0.25	= 0
TOTAL KVA					25
TOTAL AMPS					70



**BELT FILTER PRESS DIAGRAM**  
N.T.S. (TYPICAL THREE UNITS)



**1 BELT FILTER PRESS BUILDING ONE-LINE DIAGRAM**  
N.T.S.



**2 BFP BLDG SCADA PANEL**  
N.T.S. ONLY BPF INTERFACE ONLY



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CofA# 5206 exp 8/2011

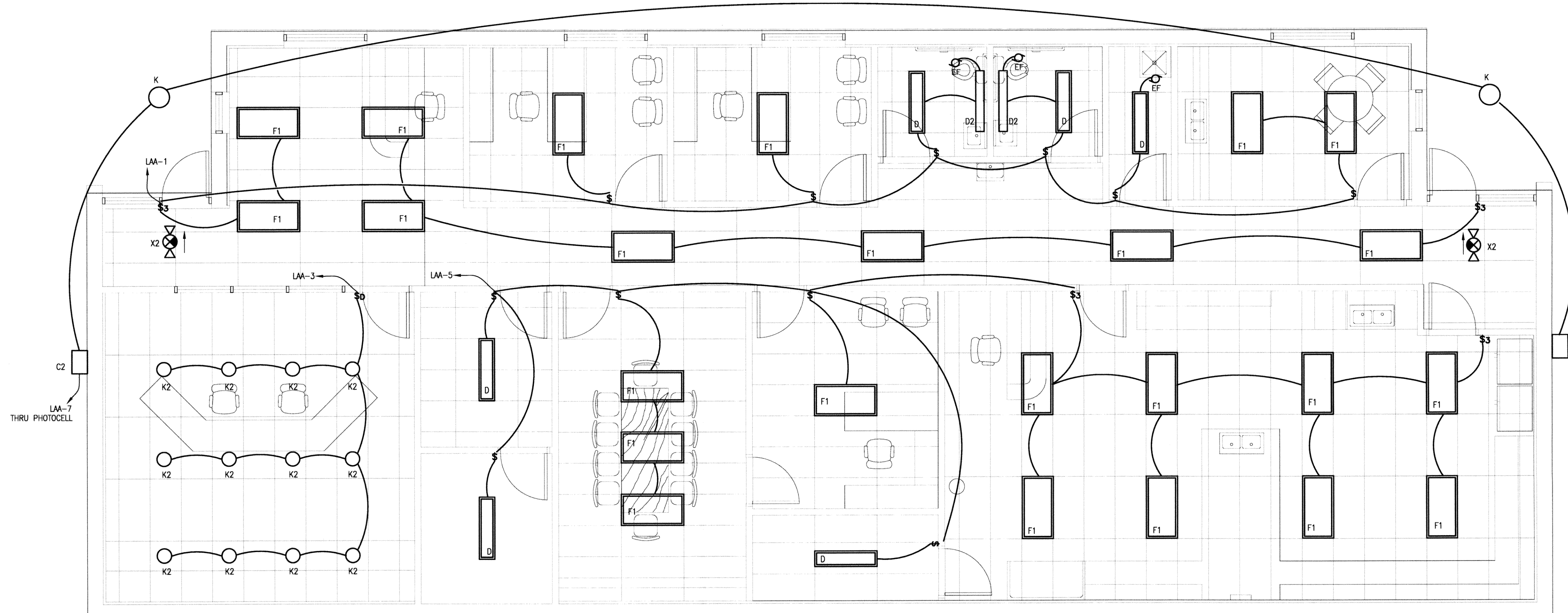
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**BELT FILTER PRESS BUILDING ONE-LINE DIAGRAM**

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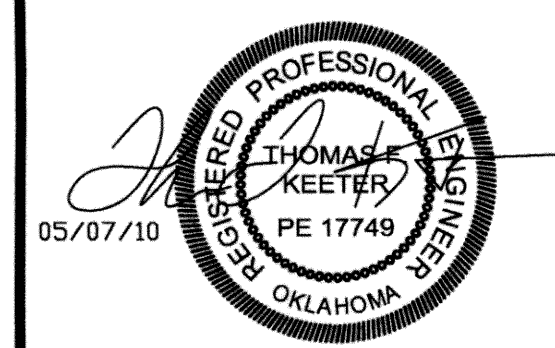
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RECORD DRAWINGS



**ADMINISTRATION BUILDING LIGHTING PLAN**

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



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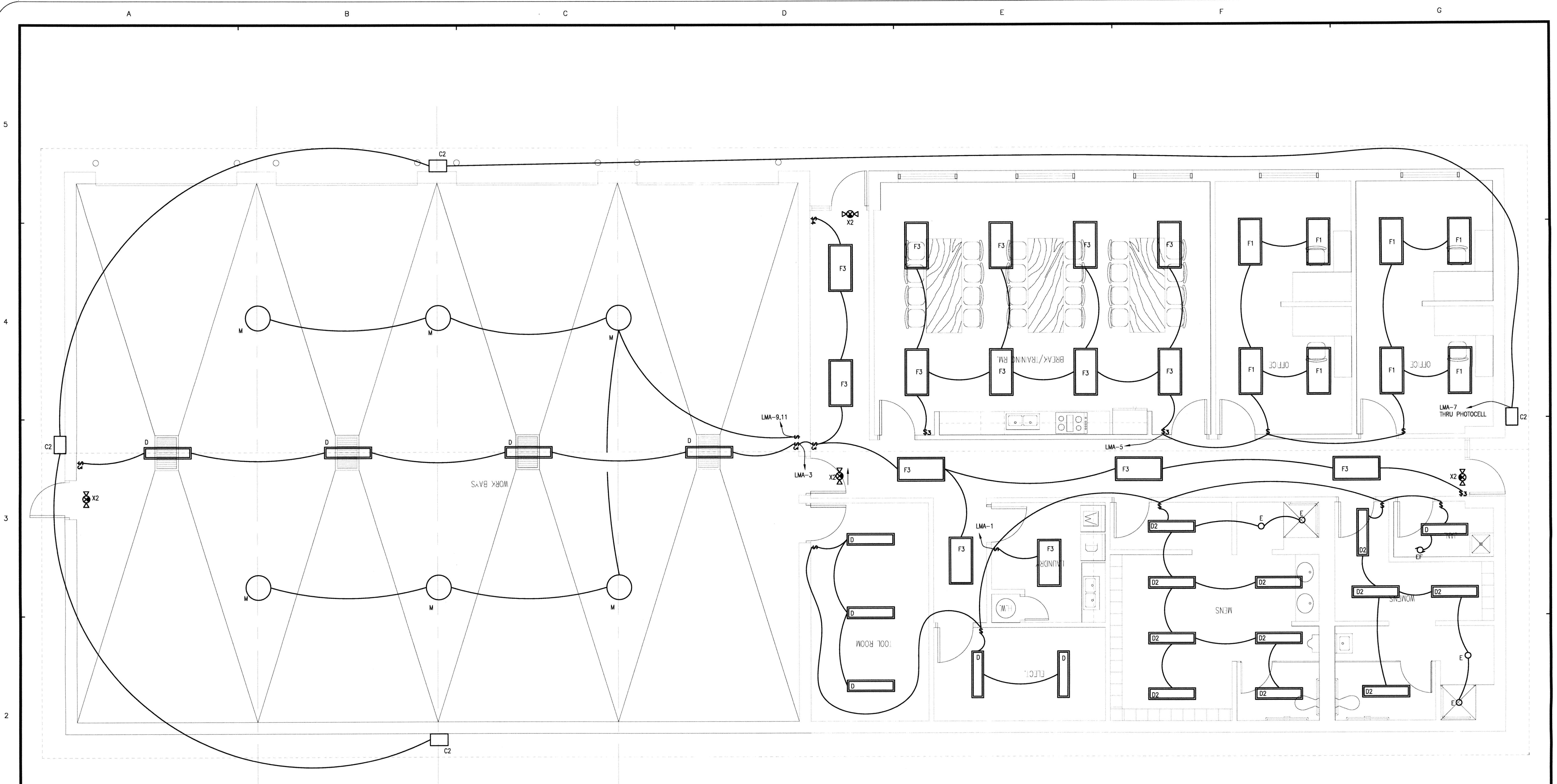
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**ADMIN./MAINT. BUILDINGS  
LIGHTING PLANS**

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RECORD DRAWINGS E-61



**MAINTENANCE BUILDING LIGHTING PLAN**  
 SCALE: 1/4" = 1' - 0"



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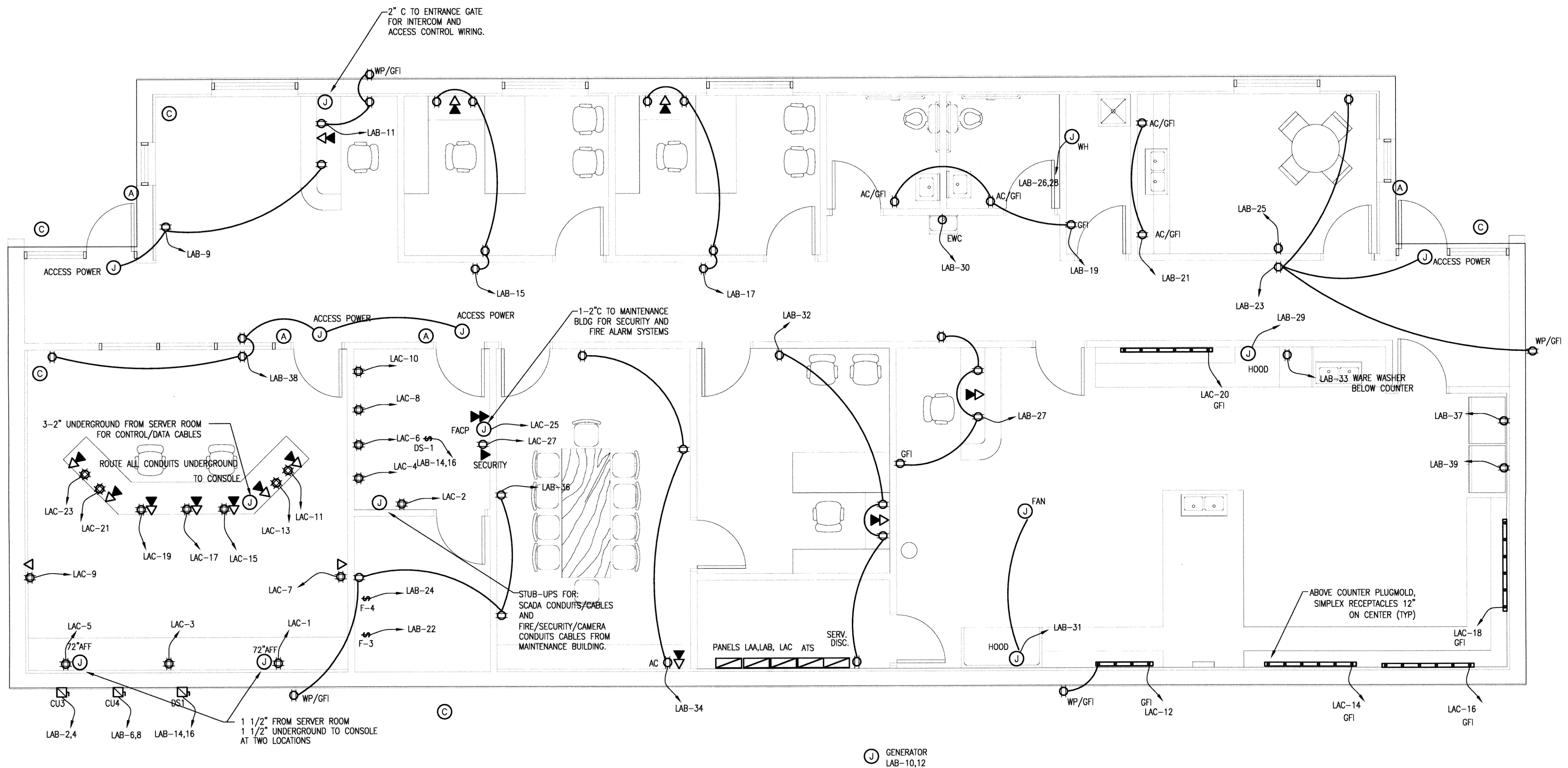
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**ADMIN./MAINT. BUILDINGS  
 LIGHTING PLANS**

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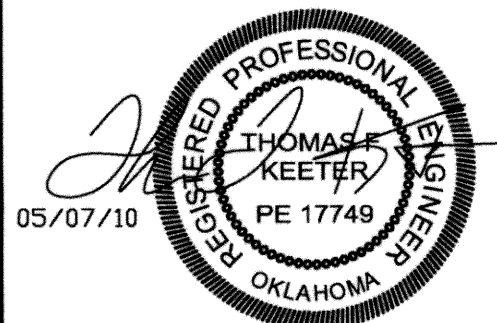
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 CERTIFICATE OF AUTHORIZATION NO. CA2088

RECORD DRAWINGS E-62



**ADMINISTRATION BUILDING POWER PLAN**

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



DESIGNED BY: CAD OPERATOR: CHECKED: SD APPROVED: SD PLOT DATE: DWG. SCALE: AS SHOWN SHEET: 41 OF 48

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CofA# 5206 exp 6/2011

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**ADMIN./MAINT. BUILDINGS  
POWER PLANS**

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CERTIFICATE OF AUTHORIZATION NO. CA2088

RECORD DRAWINGS

E-63

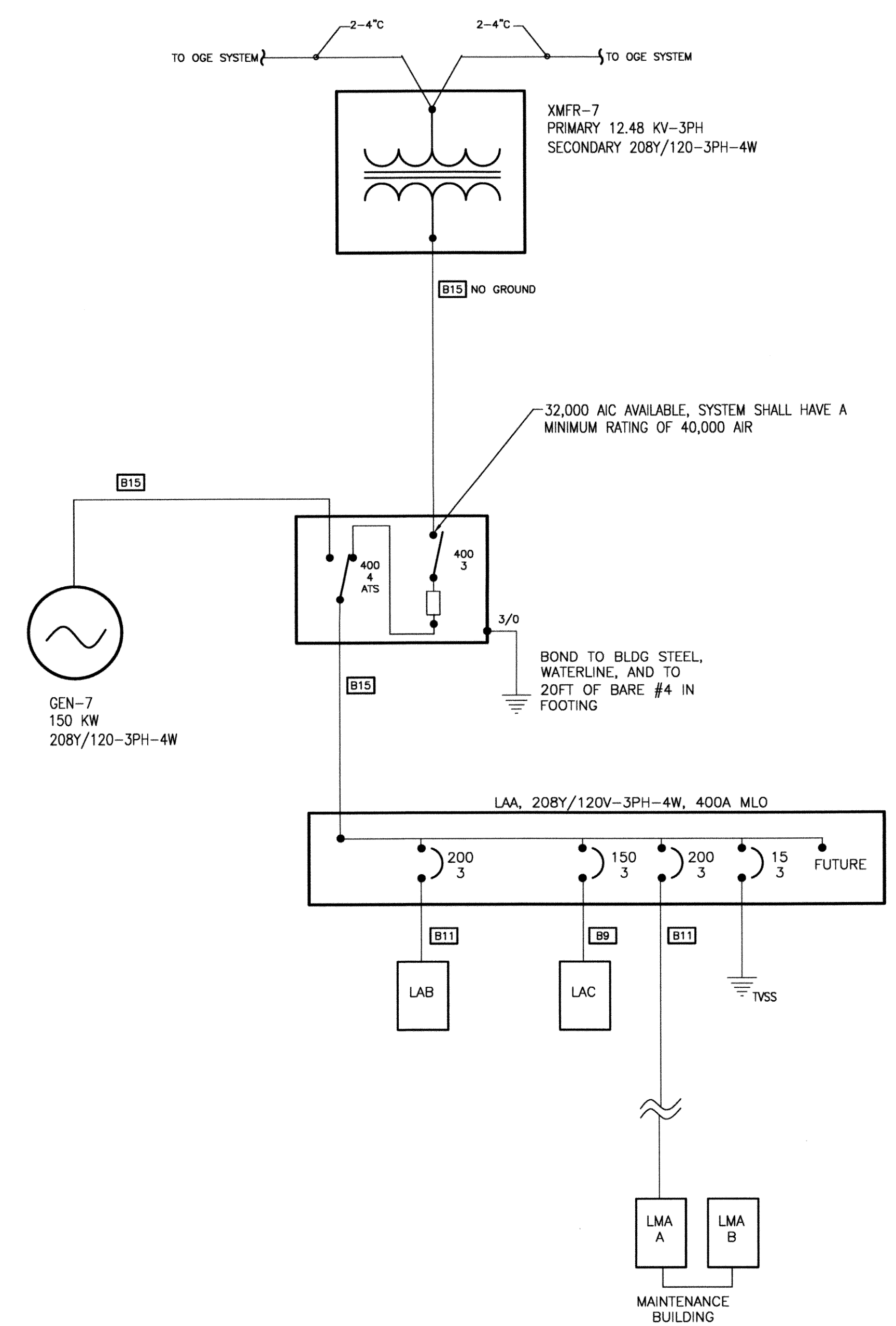


LAB PANELBOARD						
LUGS FOR FUTURE SECOND SECTION						
208Y/120 - 3 PH - 4 W						
200A - MLO						
DESCRIPTION	CB	kVA	Ph	kVA	CB	DESCRIPTION
1 LIGHTS	20/1	1.20	A	2.00	40/3	COND UNIT
3 LIGHTS	20/1	0.80	B	2.00	---	---
5 LIGHTS	20/1	1.50	C	2.00	40/3	COND UNIT
7 EXTERIOR LIGHTS	20/1	0.40	A	2.00	---	---
9 RECEPTACLES	20/1	0.00	B	1.00	20/1	GEN HEATER
11 RECEPTACLES	20/1	0.00	C	1.00	20/1	GEN CHARGER
13 RECEPTACLES	20/1	0.00	A	1.50	20/2	COND UNIT
15 RECEPTACLES	20/1	0.00	B	1.50	---	---
17 RECEPTACLES	20/1	0.00	C	2.00	30/2	WATER HEATER
19 RECEPTACLES	20/1	0.00	A	2.00	---	---
21 RECEPTACLES	20/1	0.00	B	1.50	20/1	FURNACE
23 RECEPTACLES	20/1	0.00	C	1.50	20/1	FURNACE
25 LAB DESK RECEPT	20/1	0.00	A	0.00	20/1	---
27 LAB RECEPT	20/1	0.00	B	0.00	20/1	---
29 HOOD / FAN	20/1	0.00	C	1.00	20/1	EW/C
31 LAB RECEPT	20/1	0.00	A	0.00	20/1	RECEPTACLES
33 LAB RECEPT	20/1	0.00	B	0.00	20/1	RECEPTACLES
35 LAB RECEPT	20/1	0.00	C	0.00	20/1	RECEPTACLES
37 LAB RECEPT	20/1	0.00	A	0.00	20/1	RECEPTACLES
39 LAB RECEPT	20/1	0.00	B	0.00	20/1	---
41 VALVES/METERS	20/1	0.00	C	0.00	20/1	---
CONTINUOUS		3.9	X	1.25	=	5
NON-CONTINUOUS		21	X	1.00	=	21
RECEPTACLE <10 kVA		0	X	1.00	=	0
RECEPTACLE >10 kVA		0	X	0.50	=	0
LARGEST MOTOR		6	X	0.25	=	2
TOTAL kVA						27
TOTAL AMPS						76

LAC PANELBOARD						
CONTROL ROOM AND SERVER POWER ONLY						
208Y/120 - 3 PH - 4 W						
150A - MLO						
DESCRIPTION	CB	kVA	Ph	kVA	CB	DESCRIPTION
1 CONTROL RM RECEPT	20/1	1.50	A	1.50	20/1	SERVER QUAD
3 CONTROL RM RECEPT	20/1	1.50	B	1.50	20/1	SERVER QUAD
5 CONTROL RM RECEPT	20/1	1.50	C	1.50	20/1	SERVER QUAD
7 CONTROL RM RECEPT	20/1	1.50	A	1.50	20/1	SERVER QUAD
9 CONTROL RM RECEPT	20/1	1.50	B	1.50	20/1	SERVER QUAD
11 CONSOLE QUAD	20/1	1.50	C	0.00	20/1	---
13 CONSOLE QUAD	20/1	1.50	A	0.00	20/1	---
15 CONSOLE QUAD	20/1	1.50	B	0.00	20/1	---
17 CONSOLE QUAD	20/1	1.50	C	0.00	20/1	---
19 CONSOLE QUAD	20/1	1.50	A	0.00	20/1	---
21 CONSOLE QUAD	20/1	1.50	B	0.00	20/1	---
23 CONSOLE QUAD	20/1	1.50	C	0.00	20/1	---
25	20/1	0.00	A	0.00	20/1	---
27	20/1	0.00	B	0.00	20/1	---
29	20/1	0.00	C	0.00	20/1	---
CONTINUOUS		25.5	X	1.25	=	32
NON-CONTINUOUS		0	X	1.00	=	0
RECEPTACLE <10 kVA		0	X	1.00	=	0
RECEPTACLE >10 kVA		0	X	0.50	=	0
LARGEST MOTOR		0	X	0.25	=	0
TOTAL kVA						32
TOTAL AMPS						88

LMA-A PANELBOARD						
LUGS TO FEED SECOND SECTION						
208Y/120 - 3 PH - 4 W						
200A - MLO						
DESCRIPTION	CB	kVA	Ph	kVA	CB	DESCRIPTION
1 LIGHTS	20/1	1.70	A	2.00	40/2	COND UNIT
3 LIGHTS	20/1	0.70	B	2.00	---	---
5 LIGHTS	20/1	1.60	C	2.00	40/2	COND UNIT
7 LIGHTS	20/1	0.50	A	2.00	---	---
9 HIGH BAY LIGHTS	20/2	0.90	B	1.50	20/1	FURNACE
11	---	0.90	C	1.50	20/1	FURNACE
13 EXH FANS / W.H.	20/1	0.90	A	0.90	20/1	FA/SEC. POWER
15 RECEPTACLES	20/1	0.90	B	0.90	20/1	CAMERAS
17 RECEPTACLES	20/1	0.90	C	1.50	20/1	UNIT HEATERS
19 RECEPTACLES	20/1	0.90	A	1.50	20/2	HEATER
21 RECEPTACLES	20/1	0.90	B	1.50	---	---
23 RECEPTACLES	20/1	0.90	C	0.00	20/1	---
25 REFRIGERATOR	20/1	1.20	A	1.00	20/1	EXH FAN
27 DISPOSER	20/1	1.20	B	1.50	30/2	AIR COMPRESSOR
29 DISH WASHER	20/1	1.20	C	1.50	---	---
31 COUNTER RECEPT	20/1	1.20	A	1.20	20/1	WASHER
33 RANGE	40/2	3.00	B	2.50	30/2	DRYER
35	---	3.00	C	2.50	---	---
37 RECEPTACLES	20/1	0.72	A	0.90	20/1	BAY RECEPTACLES
39	20/1	0.00	B	0.90	20/1	BAY RECEPTACLES
41	20/1	0.00	C	0.90	20/1	BAY RECEPTACLES
CONTINUOUS		6.3	X	1.25	=	8
NON-CONTINUOUS		38.4	X	1.00	=	38
RECEPTACLE <10 kVA		7.92	X	1.00	=	8
RECEPTACLE >10 kVA		0	X	0.50	=	0
LARGEST MOTOR		6	X	0.25	=	2
TOTAL kVA						58
TOTAL AMPS						155

LMA-B PANELBOARD						
SERVE FROM PANEL LM FIRST SECTION LUGS						
208Y/120 - 3 PH - 4 W						
200A - MLO						
DESCRIPTION	CB	kVA	Ph	kVA	CB	DESCRIPTION
1 OVERHEAD DOOR	20/1	0.00	A	1.00	30/3	F.P. AIR COMPRESSOR
3 OVERHEAD DOOR	20/1	0.00	B	1.00	---	---
5 OVERHEAD DOOR	20/1	0.00	C	1.00	---	---
7 OVERHEAD DOOR	20/1	0.00	A	1.00	20/2	EXTERIOR LIGHTS
9	20/1	0.00	B	1.00	---	---
11	20/1	0.00	C	0.00	20/1	---
13	20/1	0.00	A	0.00	20/1	---
15	20/1	0.00	B	0.00	20/1	---
17	20/1	0.00	C	0.00	20/1	---
19	20/1	0.00	A	0.00	20/1	---
21	20/1	0.00	B	0.00	20/1	---
23	20/1	0.00	C	0.00	20/1	---
25	20/1	0.00	A	0.00	20/1	---
27	20/1	0.00	B	0.00	20/1	---
29	20/1	0.00	C	0.00	20/1	---
31	20/1	0.00	A	0.00	20/1	---
33	20/1	0.00	B	0.00	20/1	---
35	20/1	0.00	C	0.00	20/1	---
37	20/1	0.00	A	0.00	20/1	---
39	20/1	0.00	B	0.00	20/1	---
41	20/1	0.00	C	0.00	20/1	---
CONTINUOUS		5	X	1.25	=	6
NON-CONTINUOUS		0	X	1.00	=	0
RECEPTACLE <10 kVA		0	X	1.00	=	0
RECEPTACLE >10 kVA		0	X	0.50	=	0
LARGEST MOTOR		0	X	0.25	=	0
TOTAL kVA						6
TOTAL AMPS						17



ADMINISTRATION/MAINT. BUILDING ONE LINE  
NOT TO SCALE



DESIGNED BY:	CAD OPERATOR:	CHECKED:	APPROVED:	PLOT DATE:	DWG. SCALE:	SHEET:
		SD	SD		AS SHOWN	43 OF 48

Thomas F. Keeter, PE# 17749  
TFK Engineering, Inc.  
Co.# 5206 exp 6/2011

REVISIONS:	DATE:

ADMIN./MAINT. BUILDINGS  
ELECTRICAL SCHEDULES

EAGLE OFFICE CENTER  
2803 SOUTH BRYANT  
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PH. (405) 844-3900  
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EAGLE CONSULTANTS, INC.  
CIVIL AND ENVIRONMENTAL ENGINEERS  
CERTIFICATE OF AUTHORIZATION NO. CA2088

A B C D E F G

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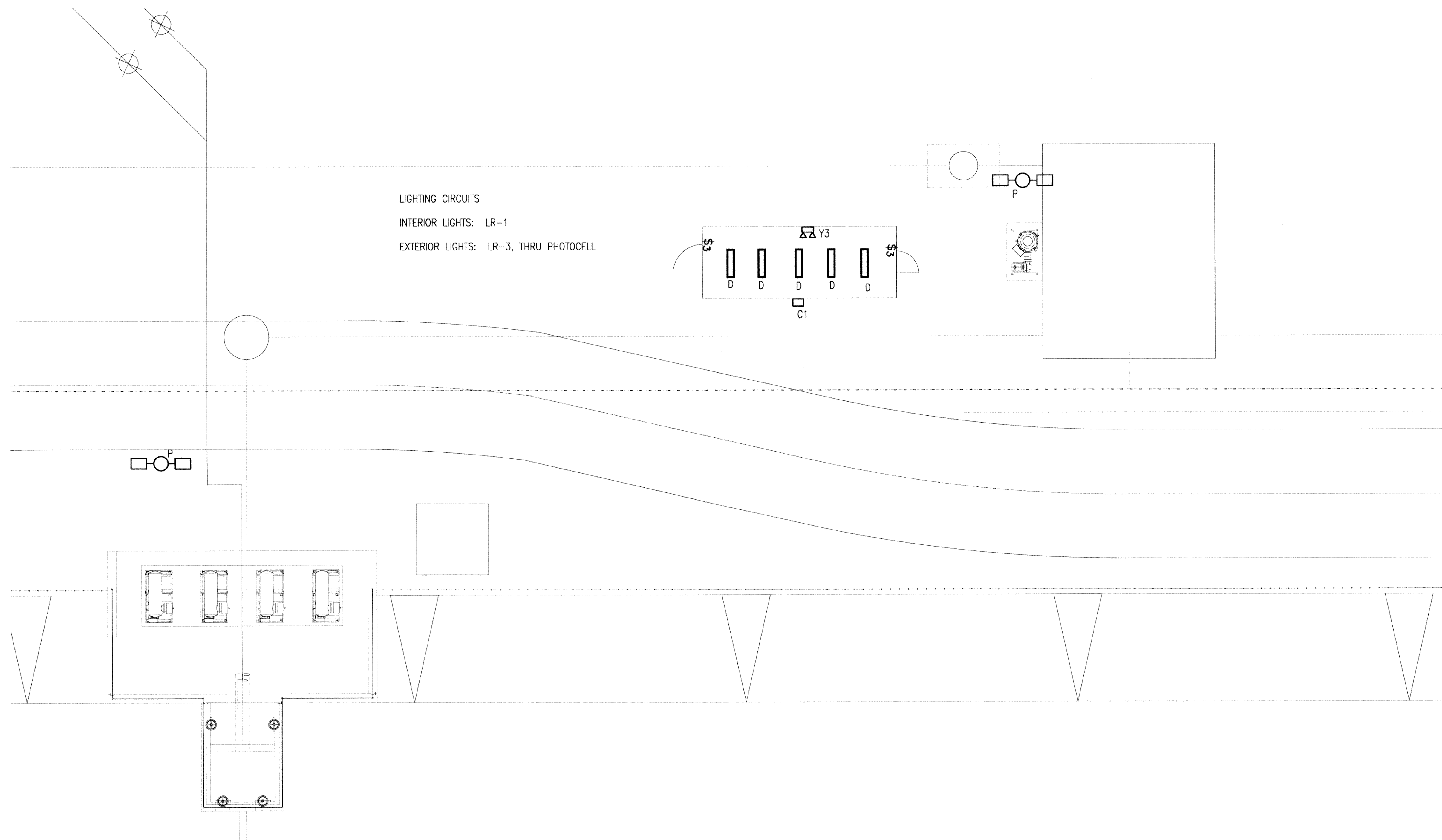
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① RETURN LIFT STATION LIGHTING PLAN  
 SCALE: 1/8" = 1'-0"



DESIGNED BY: CAD OPERATOR: CHECKED: SD APPROVED: SD PLOT DATE: DWG. SCALE: AS SHOWN SHEET: 44 OF 48

Thomas F. Keeter, PE# 17749  
 TFK Engineering, Inc.  
 Co/A# 5206 exp 6/2011

REVISIONS:	DATE:

RETURN LIGHTING PLAN

EAGLE OFFICE CENTER  
 2803 SOUTH BRYANT  
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 FAX. (405) 844-3600

**EAGLE CONSULTANTS, INC.**  
 CIVIL AND ENVIRONMENTAL ENGINEERS  
 CERTIFICATE OF AUTHORIZATION NO. CA2088

RECORD DRAWINGS

◀ N E-71

A B C D E F G

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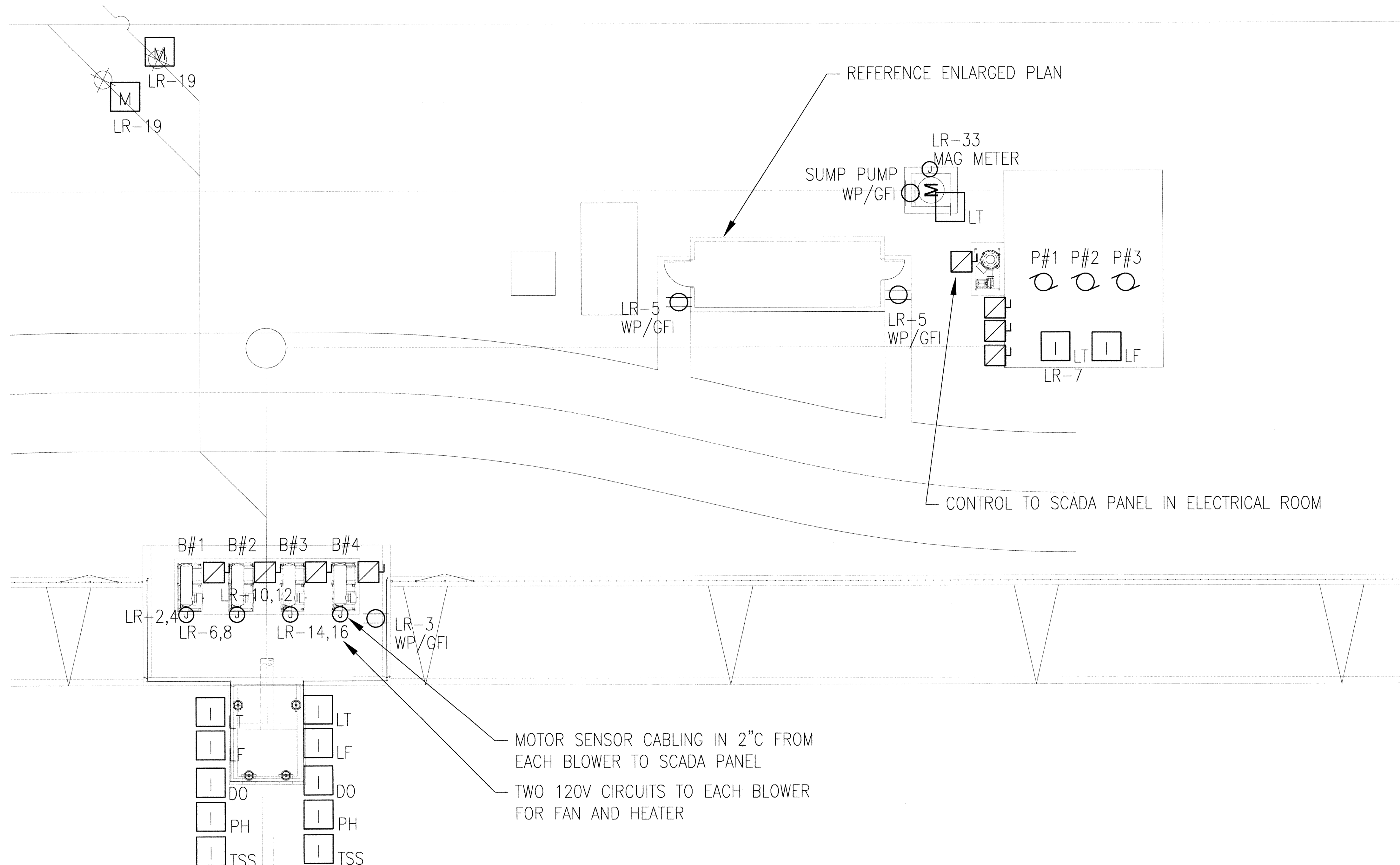
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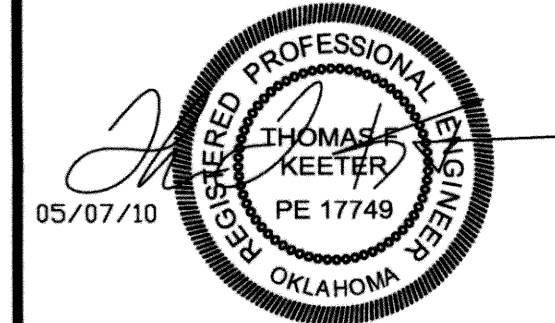


MOTOR SENSOR CABLING IN 2" C FROM EACH BLOWER TO SCADA PANEL

TWO 120V CIRCUITS TO EACH BLOWER FOR FAN AND HEATER

1 RETURN LIFT STATION POWER PLAN  
SCALE: 1/8" = 1'-0"

RECORD DRAWINGS  $\leftarrow$  N E-72



Thomas F. Keeter, PE# 17749  
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Co/PA# 5206 exp 8/2011

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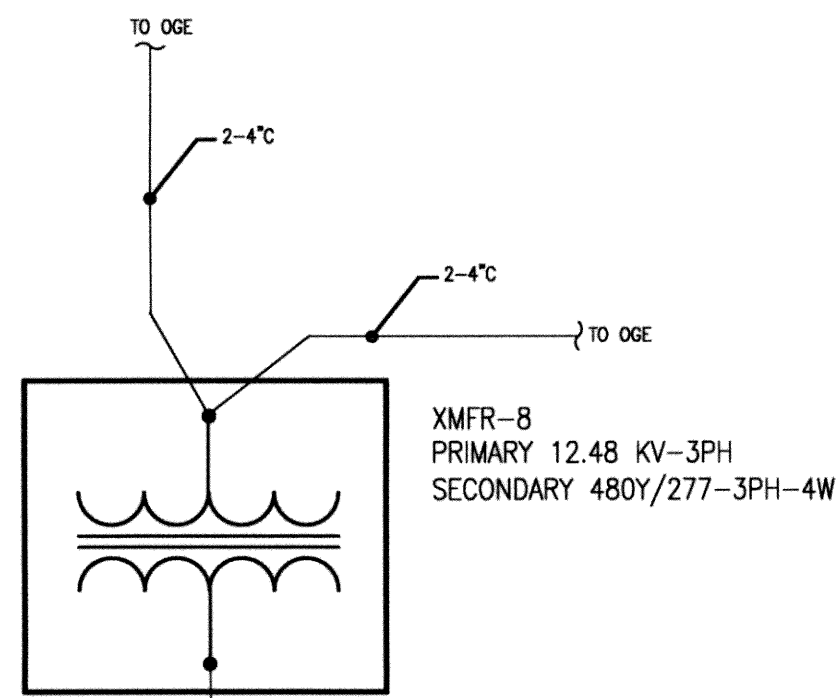
REVISIONS:	DATE:

RETURN POWER PLAN

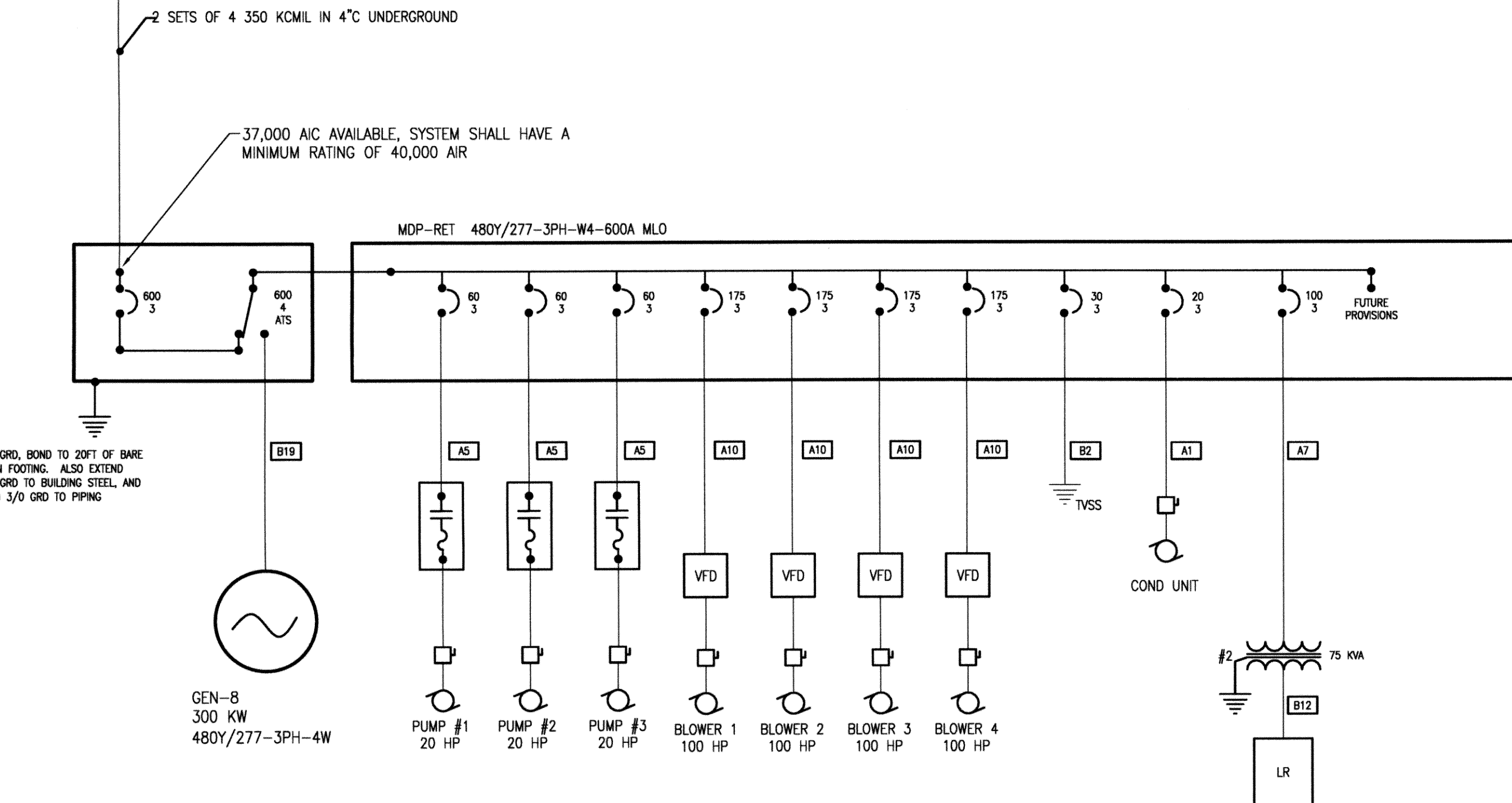
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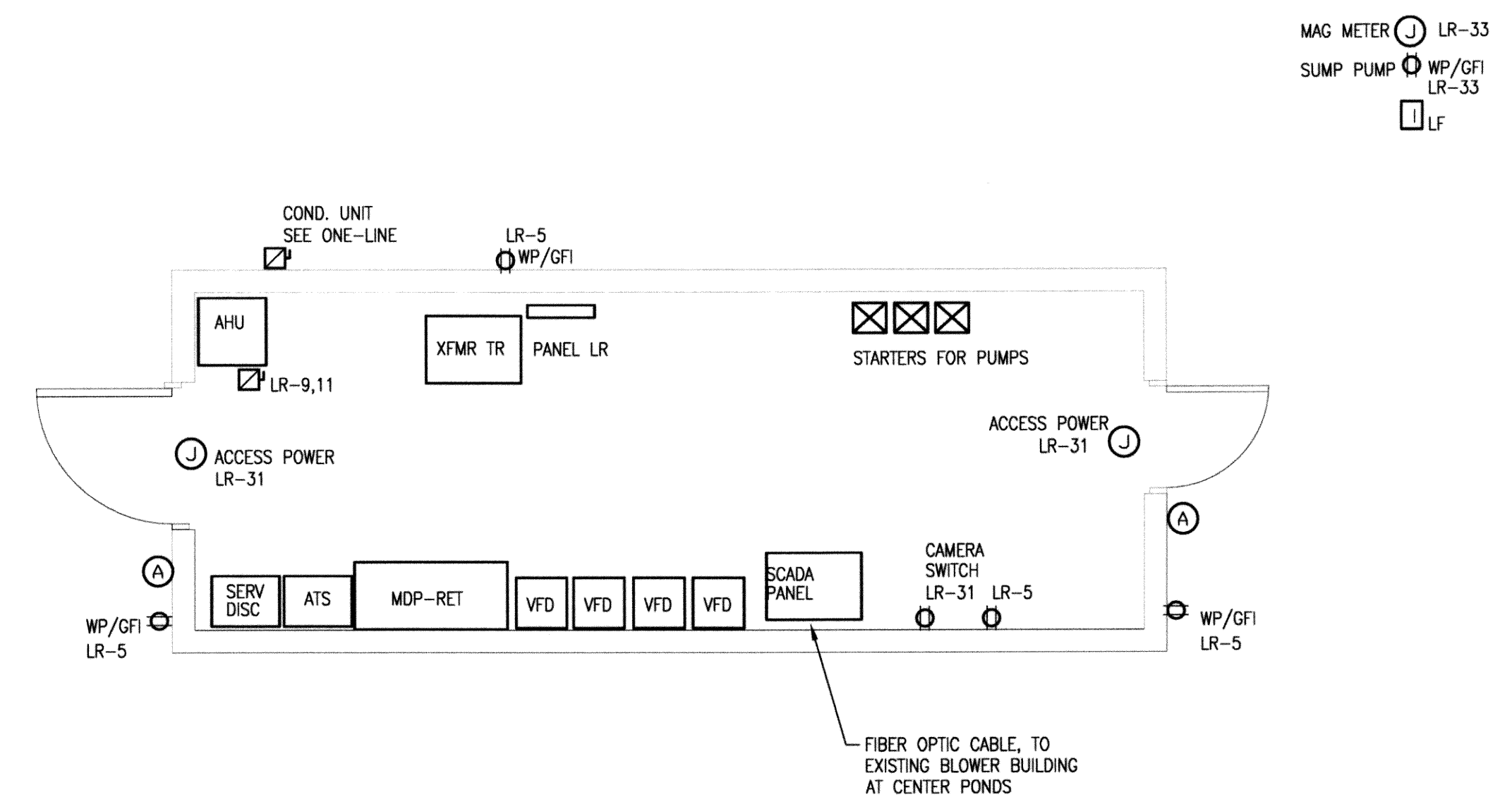


LR PANELBOARD					
208Y/120 - 3 PH - 4 W					
225A - MCB					
DESCRIPTION	CB	kVA	Ph	kVA	DESCRIPTION
1 LIGHTS	20/1	0.40	A	0.50	20/1 BLOWER EXH FAN.
3 EXTERIOR LIGHTS	20/1	1.20	B	0.50	20/1 BLOWER HEATER
5 RECEPTACLES	20/1	0.90	C	0.50	20/1 BLOWER EXH FAN.
7 METERS	20/1	0.90	A	0.50	20/1 BLOWER HEATER
9 AHU	40/2	2.50	B	0.50	20/1 BLOWER EXH FAN.
11		2.50	C	0.50	20/1 BLOWER HEATER
13 GEN CHARGER	20/1	1.00	A	0.50	20/1 BLOWER EXH FAN.
15 GEN HEATER	30/2	2.50	B	0.50	20/1 BLOWER HEATER
17		2.50	C	0.00	20/1
19 MOVs	20/1	0.20	A	0.00	20/1
21 INSTRUMENTS AT POND	20/1	0.00	B	0.00	20/1
23	20/1	0.00	C	0.00	20/1
25 SCADA PANEL	20/1	1.00	A	0.00	20/1
27 SCADA PANEL	20/1	1.00	B	0.00	20/1
29 SCADA PANEL	20/1	1.00	C	0.00	20/1
31 CAMERA SWITCH	20/1	0.50	A	0.00	20/1
33 SUMP PUMP	20/1	0.00	B	0.00	20/1
35 SUMP PUMP	20/1	0.00	C	0.00	20/1
37 SCRUBBER	30/3	2.11	A	0.00	20/1
39		2.11	B	0.00	20/1
41		2.11	C	0.00	20/1
CONTINUOUS		24.43	X	1.25	31
NON-CONTINUOUS		4	X	1.00	4
RECEPTACLE <10 kVA		0	X	1.00	0
RECEPTACLE >10 kVA		0	X	0.50	0
LARGEST MOTOR		0	X	0.25	0
TOTAL kVA					35
TOTAL AMPS					96



1 RETURN LIFT STATION ONE LINE DIAGRAM  
SCALE: NOT TO SCALE

GENERATOR  
LR-13,15,17



2 RETURN LIFT STATION CONTROL ROOM ELECTRICAL PLAN  
SCALE: 1/4" = 1' - 0"



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RETURN ELECTRICAL DETAILS

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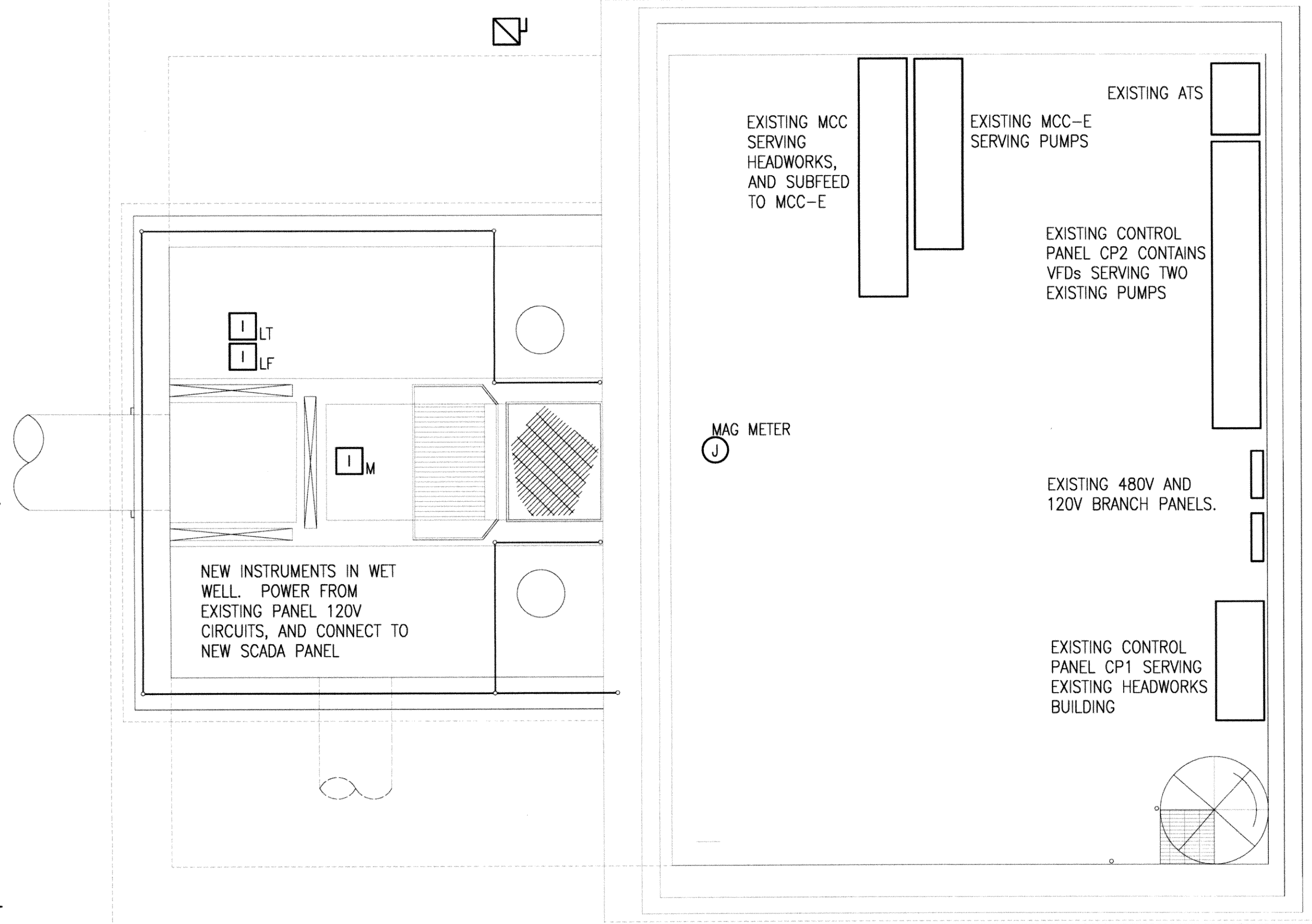
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RECORD DRAWINGS  
N E - 73

WORK IN EXISTING LIFT STATION BUILDING

1. DEMO EXISTING CONTROL PANELS CP1 AND CP2.
2. REMOUNT EXISTING VFDS AND RECONNECT AFTER CP1 IS REMOVED.
3. WITH DEMOLITION OF EXISTING HEADWORKS, REMOVE ALL ELECTRICAL THAT FORMERLY SERVED DEMOD AREA BACK TO EXISTING ELECTRICAL GEAR. TURN OFF BREAKERS/SWITCHES AND REMOVE LABELS.
4. PROVIDE NEW SCADA PANEL IN LOCATION OF EXISTING CP1. NEW SCADA SHALL CONNECT FOUR EXISTING LIFT STATION PUMPS, INCLUDING TWO PUMPS ON VFDS. ALSO, ALL NEW INSTRUMENTS REPORT TO NEW SCADA PANEL.
5. INTERCONNECT NEW SCADA PANEL WITH FIBER OPTIC CABLING TO NEW SYSTEM.

NEW SCRUBBER (QTY 1), POWER FROM UNUSED CIRCUIT IN MCC. REPLACE STARTER WITH BREAKER AS NEEDED, 30A-3PH-208V FEEDERS. CONNECT CONTROL TO NEW SCADA PANEL.

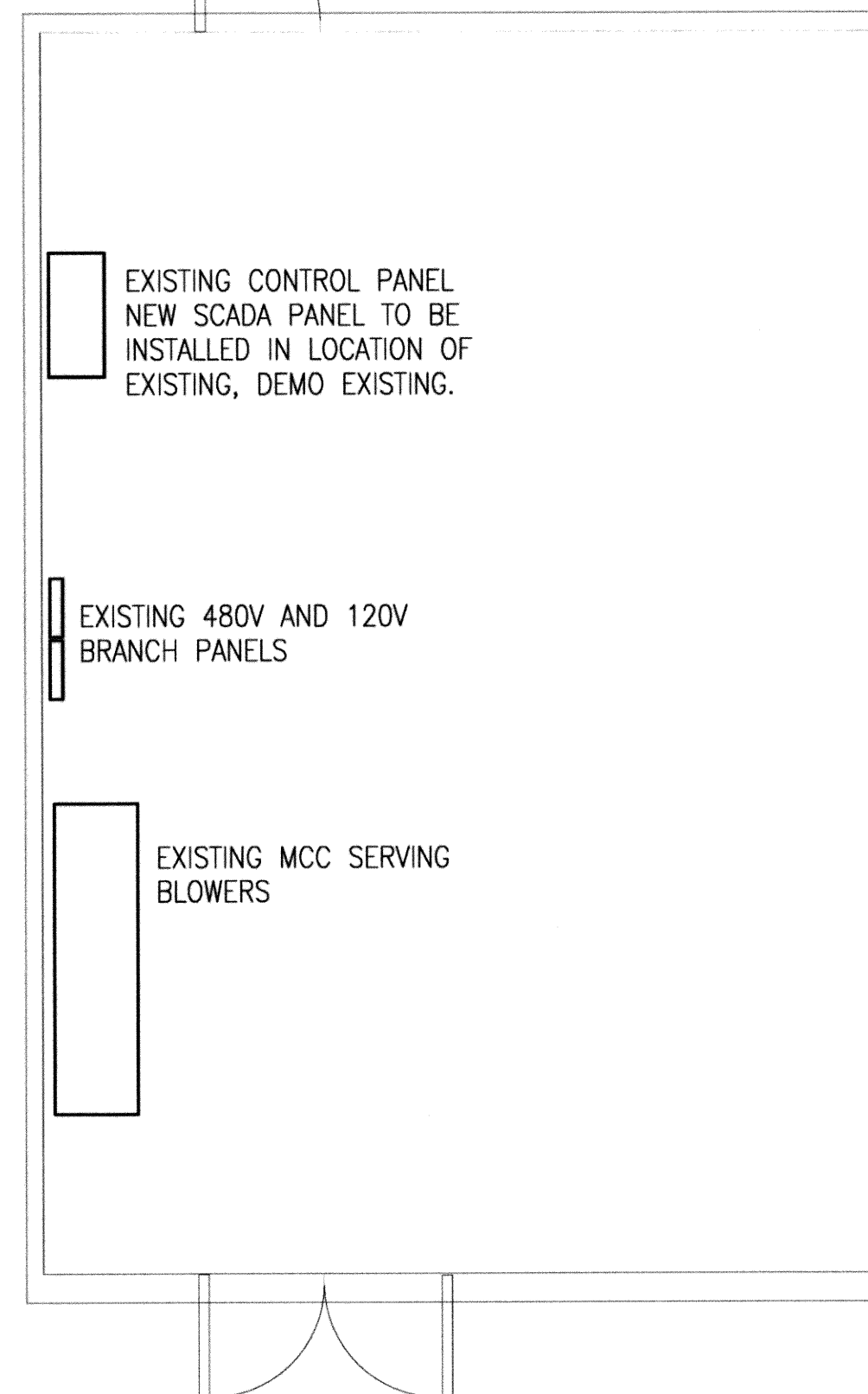


EXISTING LIFT STATION ELECTRICAL PLAN

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

WORK IN EXISTING BLOWER BUILDING

1. DEMO EXISTING CONTROL PANEL AND CONDUITS AND WIRING BACK TO SOURCE.
2. PROVIDE NEW SCADA CONTROL PANEL IN LOCATION OF EXISTING. PROVIDE 120V POWER FROM EXISTING PANEL.
3. PROVIDE NEW INSTRUMENTS IN EXISTING CELLS AND CONNECT TO NEW SCADA PANEL.
4. NEW SCADA PANEL TO ALSO CONTROL EXISTING BLOWERS SERVED FROM EXISTING MCC. REVISE STARTER CONTROL AS NEEDED TO CONTROL FROM NEW SCADA PANEL. PROVIDE HOA SWITCHES IN NEW PANEL FACE FOR CONTROL OF THE FOUR EXISTING BLOWERS.
5. EXISTING CONTROL PANEL SERVED PUMPS WHICH HAVE BEEN REMOVED, NEW SCADA PANEL IS NOT REQUIRED TO ACCOMMODATE OLD PUMP CONTROLS.
6. INTERCONNECT NEW SCADA PANEL WITH FIBER OPTIC CABLING TO NEW SYSTEM.
7. TRANSFORMER SERVING EXISTING MCC TO BE REPLACED BY OGE. REMOVE EXISTING CONDUCTORS, EXTEND EXISTING CONDUITS FROM CURRENT TRANSFORMER LOCATION TO NEW LOCATION. PROVIDE NEW SERVICE CONDUCTORS, 4 SETS OF 4-500 KCM. REFER TO SITE PLAN FOR TRANSFORMER LOCATION.

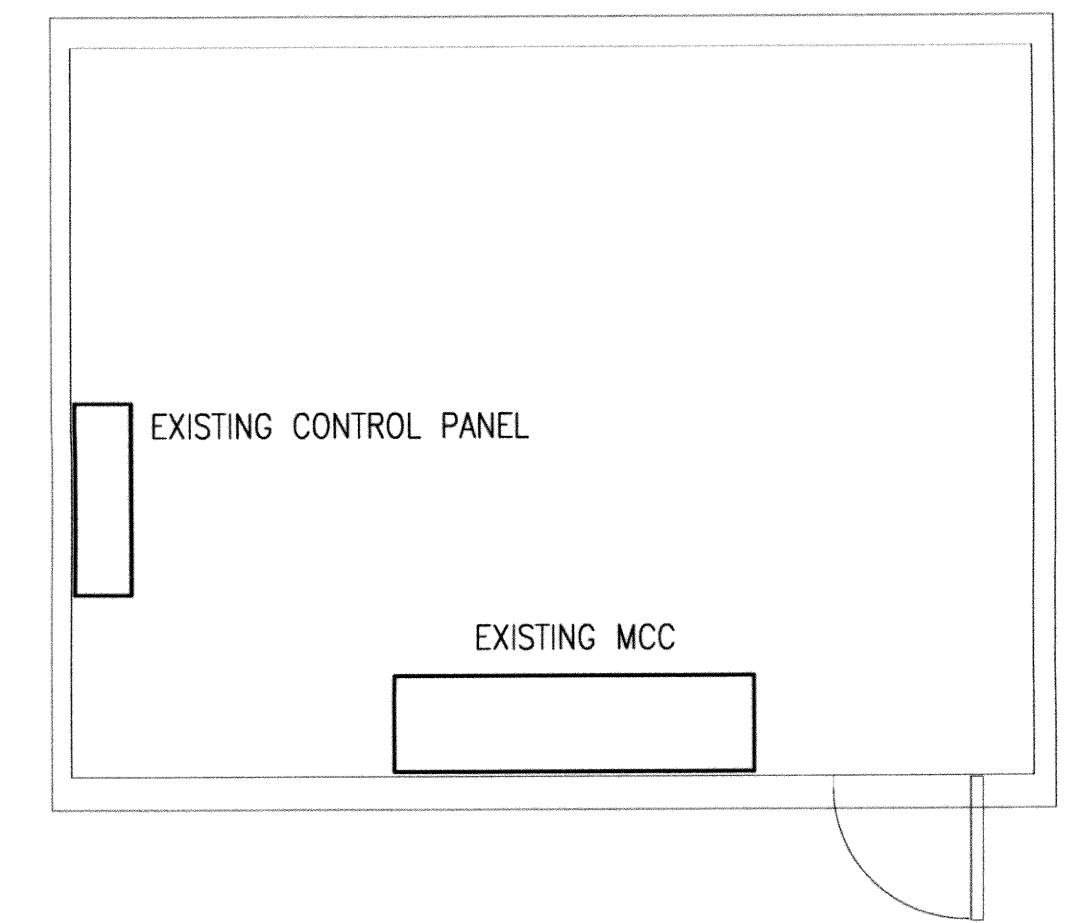


EXISTING BLOWER BUILDING ELECTRICAL PLAN

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

WORK IN EXISTING FILTER BUILDING

1. DEMO EXISTING CONTROL PANEL.
2. EXISTING CONTROL PANEL IS USFILTER ZIMPRO PRODUCTS, HYDROCLEAR RAPID SAND FILTER CONTROL PANEL, PROJECT # H00067, MODEL # (4)5512X30, DATE BUILD SEPTEMBER 2002
3. EXISTING CONTROL PANEL SHALL BE REPLACED WITH A NEW CONTROL PANEL THAT IS PART OF THE NEW SCADA SYSTEM. THE NEW PANEL SHALL DUPLICATE THE EXISTING CONTROL PANELS CONTROLS AND OPERATIONS AS WELL AS INTERCONNECT TO THE NEW SCADA SYSTEM.
4. PROVIDE HOA SWITCH IN NEW PANEL EQUAL TO THE EXISTING PANEL: HOAs FOR BACKWASH #1, BACKWASH #2, BLOWER #1, BLOWER #2, AIR COMPRESSOR #1, AIR COMPRESSOR #2, CHEMICAL FEED #1 AND CHEMICAL FEED #2.
5. INTERCONNECT NEW SCADA PANEL WITH FIBER OPTIC CABLING TO NEW SYSTEM.

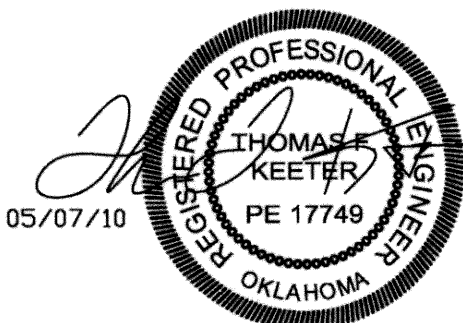


EXISTING FILTER BUILDING ELECTRICAL PLAN

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

I	LT	I	LT
I	LF	I	LF
I	DO	I	DO
I	PH	I	PH
I	TSS	I	TSS

 ADD IN EXISTING CELLS, PROVIDE 120V POWER FROM EXISTING PANEL. PROVIDE CABLING BACK TO NEW SCADA PANEL



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		SD	SD		AS SHOWN	47 OF 48

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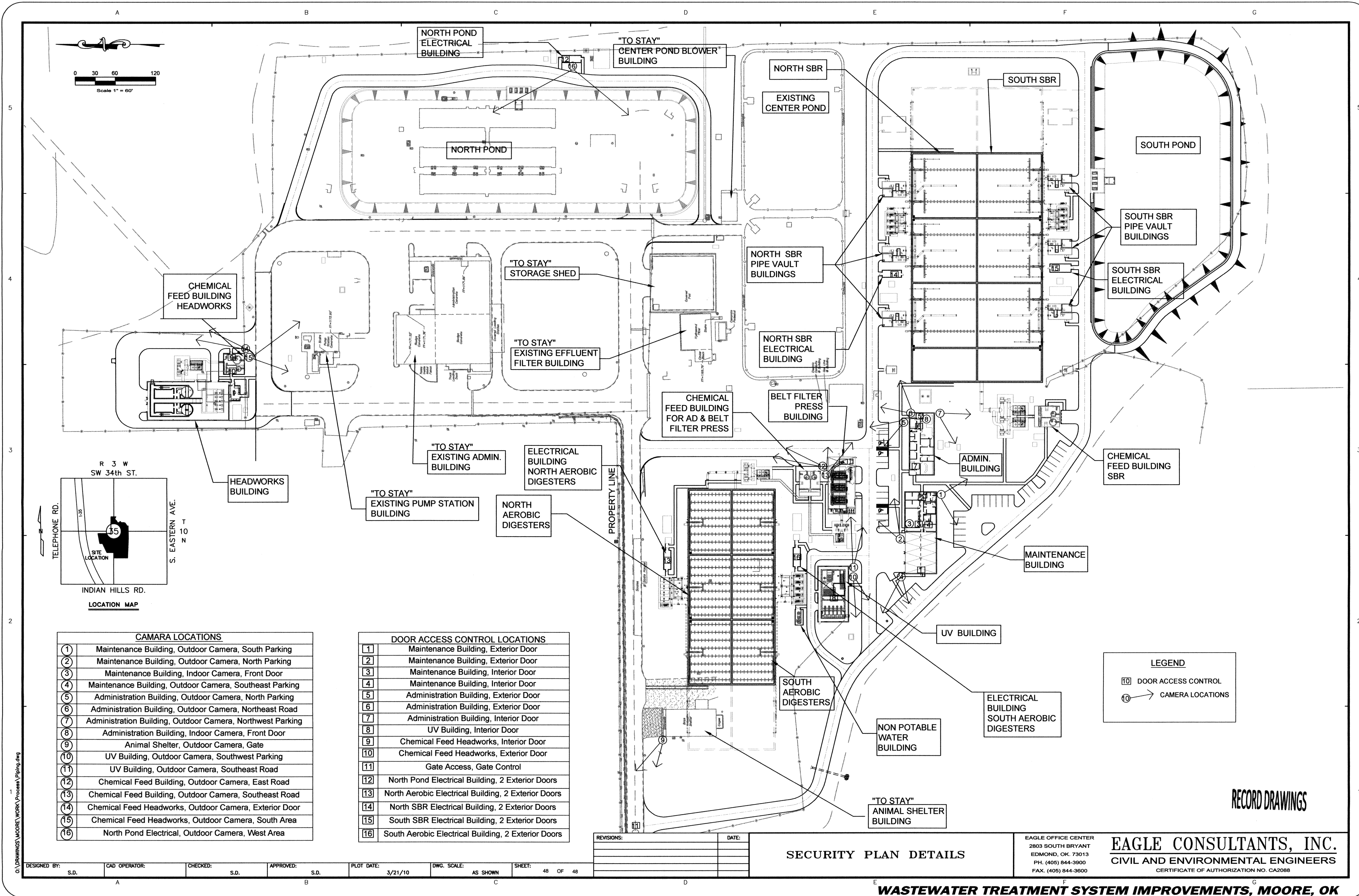
EXISTING FACILITIES ELECTRICAL DETAILS

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RECORD DRAWINGS

← N E - 81



CAMARA LOCATIONS	
1	Maintenance Building, Outdoor Camera, South Parking
2	Maintenance Building, Outdoor Camera, North Parking
3	Maintenance Building, Indoor Camera, Front Door
4	Maintenance Building, Outdoor Camera, Southeast Parking
5	Administration Building, Outdoor Camera, North Parking
6	Administration Building, Outdoor Camera, Northeast Road
7	Administration Building, Outdoor Camera, Northwest Parking
8	Administration Building, Indoor Camera, Front Door
9	Animal Shelter, Outdoor Camera, Gate
10	UV Building, Outdoor Camera, Southwest Parking
11	UV Building, Outdoor Camera, Southeast Road
12	Chemical Feed Building, Outdoor Camera, East Road
13	Chemical Feed Building, Outdoor Camera, Southeast Road
14	Chemical Feed Headworks, Outdoor Camera, Exterior Door
15	Chemical Feed Headworks, Outdoor Camera, South Area
16	North Pond Electrical, Outdoor Camera, West Area

DOOR ACCESS CONTROL LOCATIONS	
1	Maintenance Building, Exterior Door
2	Maintenance Building, Exterior Door
3	Maintenance Building, Interior Door
4	Maintenance Building, Interior Door
5	Administration Building, Exterior Door
6	Administration Building, Exterior Door
7	Administration Building, Interior Door
8	UV Building, Interior Door
9	Chemical Feed Headworks, Interior Door
10	Chemical Feed Headworks, Exterior Door
11	Gate Access, Gate Control
12	North Pond Electrical Building, 2 Exterior Doors
13	North Aerobic Electrical Building, 2 Exterior Doors
14	North SBR Electrical Building, 2 Exterior Doors
15	South SBR Electrical Building, 2 Exterior Doors
16	South Aerobic Electrical Building, 2 Exterior Doors

REVISIONS:	DATE:

**SECURITY PLAN DETAILS**

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**RECORD DRAWINGS**

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