

ALUM CREEK PUMP STATION & CENTRAL MAINTENANCE FACILITY

DELAWARE COUNTY, OHIO

CONTRACT "S99-1"



COUNTY STAFF

DAVID CANNON COUNTY ADMINISTRATOR
 SCOTT A. PIKE DIRECTOR OF ENVIRONMENTAL SERVICES
 JACK R. SMELKER SANITARY ENGINEER
 RICK L. VARNER PLANT SUPERINTENDENT
 PAUL D. SANDSTROM ASST. PLANT SUPERINTENDENT

BOARD OF COUNTY COMMISSIONERS

DEBORAH B. MARTIN _____ DATE _____
 JAMES D. WARD _____ DATE _____
 DONALD E. WUERTZ _____ DATE _____

NOTE: RECORD DRAWINGS

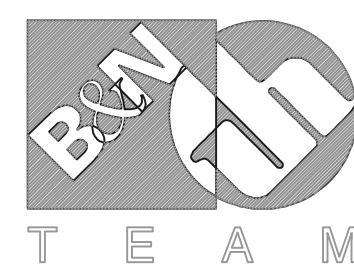
PLEASE BE ADVISED, THE RECORD UPDATED VERSION OF THE CONTRACT DRAWINGS MAY NOT BE COMPLETELY AUTHORITATIVE WITH RESPECT TO THE LEVEL OF DETAIL PROVIDED FOR A PARTICULAR PRODUCT OR INSTALLATION. ADDITIONAL INFORMATION MAY BE AVAILABLE FROM THE PLANT MANAGER OR FROM PROJECT CONSTRUCTION RECORD DOCUMENTS SUCH AS: DIVISION 15 AND DIVISION 16 CONTRACTOR RECORD DRAWINGS, OR OTHER APPLICABLE SUBMITTAL RECORDS, SHOP DRAWINGS, MANUFACTURERS' OPERATION & MAINTENANCE INSTRUCTION MANUALS ETC.

APPROVED THIS _____ DAY OF MAY, 1999

JACK R. SMELKER, DELAWARE COUNTY SANITARY ENGINEER

TOL-471460V1-001
 08/12/02 06-V02
 P:\PR24025\PMPS\REC\DWG\1.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	BEF
DRAWN BY:	DRR
CHECKED BY:	SLW
APPROVED BY:	SLW
DATE:	1999

TITLE SHEET

SCALE:	
1" = 1500'	
SHEET NO.	OF
1	100

ABBREVIATIONS

AB ANCHOR BOLT	FT FEET OR FOOT	R RADIUS OR RISER
ACP ASBESTOS CEMENT PIPE	FTG FOOTING	RAD RADIUS
ADJ ADJUSTABLE		RA RETURN AIR
AFF ABOVE FINISHED FLOOR	GA GAUGE OR GAGE	RB ROOF BEAM
ALT ALTERNATE	GAL GALLON	RCP REINFORCED CONCRETE PIPE
ALUM ALUMINUM	GALV GALVANIZED	RD ROOF DRAIN
@ AT	GEN GENERAL	REINF REINFORCING
AVG AVERAGE	GRD GROUND OR GRADE	REQ'D REQUIRED
AUTO AUTOMATIC	GSP GALVANIZED STEEL PIPE	RPBP REDUCED PRESSURE BACKFLOW PREVENTER
	GYP GALVANIZED YOLOY PIPE	RT RIGHT
B BEAM OR BOTTOM		R/W RIGHT-OF-WAY
BB BUMPER BLOCK	HM HOLLOW METAL	
BD BALANCING DAMPER	HORIZ HORIZONTAL	S SLAB
} BASE LINE	HP HORSEPOWER	SA SUPPLY AIR
BLDG BUILDING	HS HIGH SERVICE	SAN SANITARY
BM BENCH MARK	HU HEATING UNIT	SAS SANITARY SEWER
BOT BOTTOM	HWL HIGH WATER LEVEL	SCH SCHEDULE
BRG BEARING		SECT SECTION
	ID INSIDE DIAMETER	SF SQUARE FEET
C COLUMN	IF INSIDE FACE	SHT SHEET
CB CATCH BASIN	IJ ISOLATION JOINT	SJ SAW JOINT
CDF CONTROLLED DENSITY FILL	INFL INFLUENT	SP SEWER PIPE
CF CUBIC FEET	INT INTERIOR	SPC SPACES
CFM CUBIC FEET PER MINUTE	INV INVERT	SPG SPACING
CI CAST IRON	IP IRON PIN	SQ SQUARE
CIP CAST IRON PIPE		ST STRAIGHT
' CENTERLINE	LAV LAVATORY	STA STATION
C/C CENTERLINE TO CENTERLINE	LB POUND	STD STANDARD
CL CLEAR OR CLASS	LG LENGTH	STIR STIRRUPS
CLG CEILING	LL LIVE LOAD	ST.STL.,SS STAINLESS STEEL
CMP CORRUGATED METAL PIPE	LLV LONG LEG VERTICAL	STL STEEL
COL COLUMN	LS LOW SERVICE	STR STRUCTURAL
CONC CONCRETE	LTG LIGHTING	STS STORM SEWER
COP COPPER OR COPPER PIPE	LWL LOW WATER LEVEL	SY SQUARE YARD
CJ CONSTRUCTION JOINT	LT LEFT	SYM SYMMETRICAL
CONTR JT CONTRACTION JOINT		T TOP OR TREAD
CONST CONSTRUCTION	MAX MAXIMUM	T&B TOP AND BOTTOM
CONT CONTINUOUS	MCC MOTOR CONTROL CENTER	TC TOP OF COVER
CY CUBIC YARD	MGD MILLION GALLONS PER DAY	T&G TONGUE AND GROOVE
	MH MANHOLE	THD THREADED
DIA DIAMETER	MIN MINIMUM, MINUTE	TP TURNING POINT OR TANGENT POINT
DIM DIMENSION	MJ MECHANICAL JOINT	TS STRUCTURAL TUBE
DIP DUCTILE IRON PIPE	MK MARK	TYP TYPICAL
DL DEAD LOAD	MO MASONRY OPENING OR MOTOR OPERATED	
DO DOOR OPENING	MRP METAL REINFORCED PLASTIC PIPE	UNO UNLESS NOTED OTHERWISE
DS DOWN SPOUT		URN URINAL
DWG DRAWING	NC NORMALLY CLOSED	V VACUUM
	NF NEAR FACE	VAR VARIES
EA EACH	NO NORMALLY OPEN	VCP VALVE CONTROL PANEL
ED EQUIPMENT DRAIN	NO. NUMBER	VERT VERTICAL
EF EACH FACE	NS NEAR SIDE	W/ WITH
EFFL EFFLUENT	NWL NORMAL WATER LEVEL	W/O WITHOUT
EL.,ELEV ELEVATION		WC WATER CLOSET
EW EACH WAY	OC ON CENTER	WH WATER HEATER OR WALL HYDRANT
EWC ELECTRIC WATER COOLER	OD OUTSIDE DIAMETER	WL WATER LEVEL OR WATER LINE
EXF EXHAUST FAN	OF OUTSIDE FACE	WWF WELDED WIRE FABRIC
EXIST EXISTING	OPG OPENING	
EXL EXHAUST LOUVER	OPP OPPOSITE	
EXP JT EXPANSION JOINT	OZ OUNCE	
EXT EXTERIOR		
	PB PULL BOX	YH YARD HYDRANT
FA FRESH AIR	PCF POUNDS PER CUBIC FOOT	YP YOLOY PIPE
FAF FRESH AIR FAN	PCP PUMP CONTROL PANEL	
FAL FIXED AIR LOUVER	PE POLYETHYLENE OR PLAIN END	
FB FLOOR BOX OR FOUNDATION BEAM	PEJM PREMOLDED EXP. JT. MATERIAL	
FD FLOOR DRAIN	~ PLATE OR PROPERTY LINE	
FDN FOUNDATION	PNL PANEL	
FEC FIRE EQUIPMENT CABINET	POL POLISHED	
FF FAR FACE	PP POLYPROPYLENE	
FIN FINISHED	PRCP PRESTRESSED REINFORCED CONCRETE PIPE	
FH FIRE HYDRANT	PSF POUNDS PER SQUARE FOOT	
FLG FLANGE	PSI POUNDS PER SQUARE INCH	
FLR FLOOR	PVC POLYVINYL CHLORIDE	
FOB FLAT ON BOTTOM		
FOC FACE OF COLUMN	QUAN QUANTITY	
FOT FLAT ON TOP		
FRP FIBERGLASS REINFORCED PLASTIC PIPE		

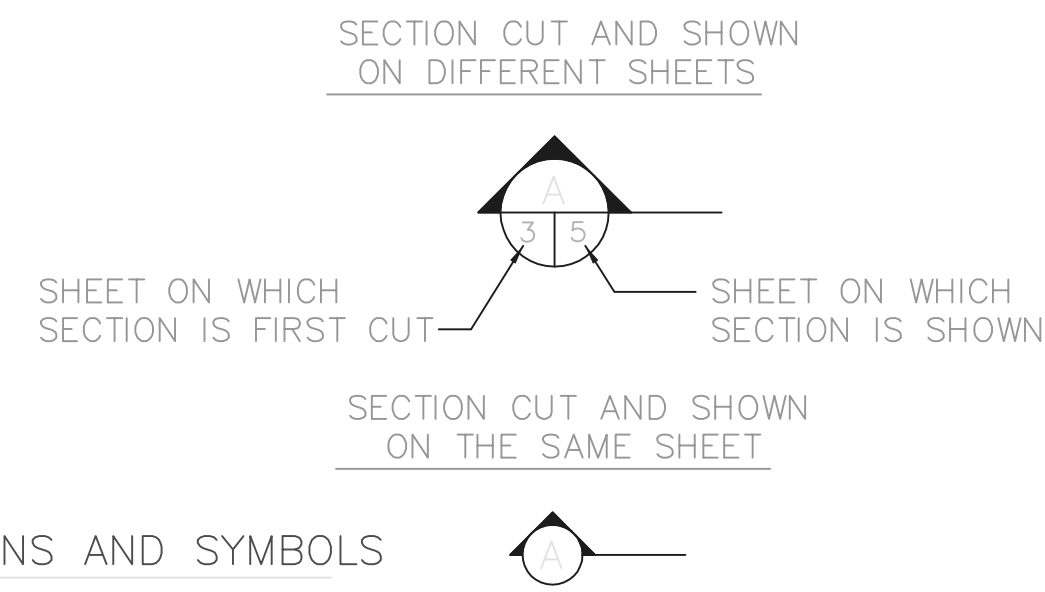
SECTION SYMBOLS

	CONCRETE
	MASONRY
	METAL
	WOOD
	EXISTING GRADE
	FINISHED GRADE
	UNDISTURBED SUBGRADE
	ROCK
	POROUS BACKFILL
	COMPACTED GRANULAR BACKFILL
	SAND
	CONTROLLED DENSITY FILL
	GROUT

RECORD DRAWING
NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM Jones & Henry Engineers, Ltd. DATE 06/07/02 MO. / DAY / YR.

BNW0201

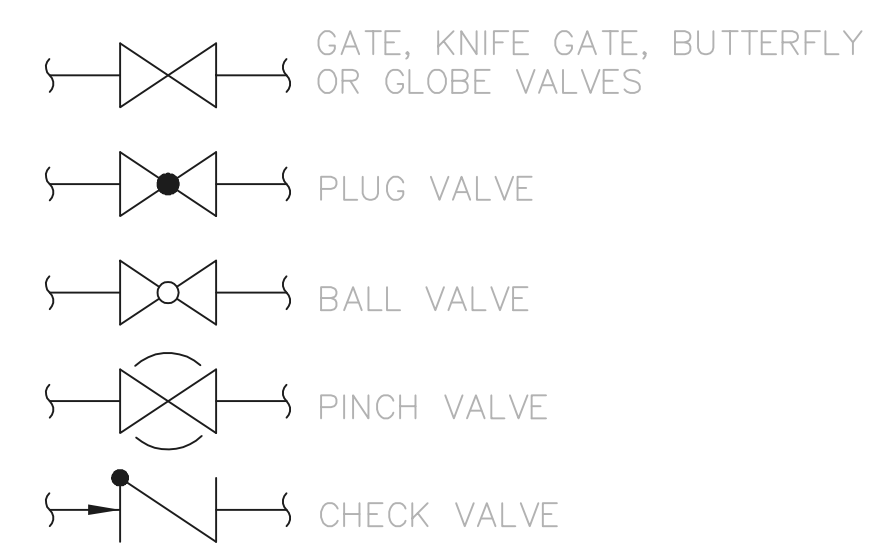
SECTION DESIGNATIONS



01A1 INDEX, ABBREVIATIONS AND SYMBOLS

INDEX OF DRAWINGS CENTRAL MAINTENANCE FACILITY	
DESCRIPTION	SHEET NO.
SITE PLAN	66
PLANTING PLAN	66A
ROADWAY AND GRADING PLAN	67
YARD PIPING	68
ARCHITECTURAL - EXTERIOR ELEVATIONS	69
ARCHITECTURAL - PLAN	70
ARCHITECTURAL - DETAILS	71
ARCHITECTURAL - DOOR DETAILS	72
ARCHITECTURAL - SECTIONS & DETAILS	73
ARCHITECTURAL - REFLECTED CEILING PLAN	74
ARCHITECTURAL - DOOR & FRAME TYPES - WINDOW TYPES	75
STRUCTURAL - GENERAL NOTES & DESIGN LOADS	76
STRUCTURAL - FOUNDATION PLAN	77
STRUCTURAL - FOUNDATION SCHEDULE & DETAILS	78
STRUCTURAL - MISCELLANEOUS SECTIONS & DETAILS	79
STRUCTURAL - MISCELLANEOUS SECTIONS & DETAILS	80
STRUCTURAL - MISCELLANEOUS SECTIONS & DETAILS	81
STRUCTURAL - FLOOR SLAB PLAN	82
STRUCTURAL - ROOF FRAMING PLAN	83
SANITARY PUMP STATION - PLAN, SECTION & DETAILS	84
HVAC - PLAN	85
HVAC - SECTIONS	86
PLUMBING - POTABLE & NON-POTABLE WATER PLAN	87
PLUMBING - WATER SUPPLY PIPING ISOMETRICS	88
PLUMBING - SANITARY PIPING PLAN	89
PLUMBING - SANITARY ISOMETRIC	90
ELECTRICAL - LEGEND	91
ELECTRICAL - SITE PLAN	92
ELECTRICAL - TYPICAL SITE LIGHTING - CONTROL SCHEMATICS	93
ELECTRICAL - SINGLE LINE DIAGRAM MCC-CM FRONT ELEVATION MCC-CM	94
ELECTRICAL - PLAN	95
ELECTRICAL - POWER & LIGHTING PLAN (WEST)	96
ELECTRICAL - POWER & LIGHTING PLAN (EAST)	97
ELECTRICAL - LIGHTING SCHEDULE & PANELBOARD SCHEDULES	98
ELECTRICAL - TYPICAL EQUIPMENT CONTROL PANELS	99
ELECTRICAL - MISCELLANEOUS DETAILS	100

VALVE SYMBOL LEGEND



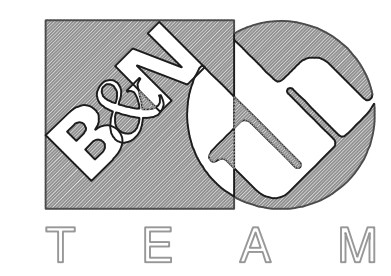
NOTE: FOR SYMBOLS USED FOR PIPING ISOMETRIC DIAGRAMS, SEE SHEET NO.

INDEX OF DRAWINGS
PUMP STATION

DESCRIPTION	SHEET NO.
COVER SHEET	1
INDEX SYMBOLS & ABBREVIATIONS	2
SITE PLAN & YARD PIPING	3
PLANTING PLAN	3A
ARCHITECTURAL - EXTERIOR ELEVATIONS	4
ARCHITECTURAL - DETAILS	5
ARCHITECTURAL - EXTERIOR ELEVATIONS	6
ARCHITECTURAL - DOOR SCHEDULE, DOOR & FRAME TYPES WINDOW TYPES	7
STRUCTURAL - PLAN AT EL. 879.67 & EL.785.92 STAIR & GRATING PLAN AND SUMP DETAIL	8
STRUCTURAL - PLAN OF CONC. AT EL.779.67 & EL.781.67	9
STRUCTURAL - PLAN AT EL. 796.00 & 791.25	10
STRUCTURAL - PLAN AT EL. 801.58	11
STRUCTURAL - PLAN AT EL. 805.67	12
STRUCTURAL - PLAN AT EL. 818.00 - SECTIONS & DETAILS	13
STRUCTURAL - PLAN OF CONCRETE AT EL. 822.58	14
STRUCTURAL - PLAN AT EL.822.00	15
STRUCTURAL - MONORAIL & ROOF COLUMN SUPPORT FRAMING PLAN AT EL. 822.00	16
STRUCTURAL - MONORAIL FRAMING DETAILS	17
STRUCTURAL - ROOF PLAN	18
STRUCTURAL - ROOF FRAMING DETAILS	19
STRUCTURAL - EQUIPMENT PAD - PLAN AT EL. 822.50	20
STRUCTURAL - SECTIONS & DETAILS	21
STRUCTURAL - SECTIONS & DETAILS	22
STRUCTURAL - SECTIONS & DETAILS	23
STRUCTURAL - SECTIONS & DETAILS	24
PIPING & EQUIPMENT - PLAN AT EL. 779.67	25
PIPING & EQUIPMENT - PLAN AT EL. 801.58	26
PIPING & EQUIPMENT - PLAN AT EL. 805.67	27
PIPING & EQUIPMENT - PLAN AT EL. 818.00	28
PIPING & EQUIPMENT - PLAN AT EL. 822.00	29
PIPING & EQUIPMENT - SECTIONS & DETAILS	30
PIPING & EQUIPMENT - SECTIONS & DETAILS	31
PIPING & EQUIPMENT - SECTIONS & DETAILS	32
PIPING & EQUIPMENT - SECTIONS & DETAILS	33
MISCELLANEOUS DETAILS - STRUCTURAL TYPICAL REINFORCING DETAILS	34
MISCELLANEOUS DETAILS - STRUCTURAL BEAM DETAILS & SCHEDULE	35
MISCELLANEOUS DETAILS - STRUCTURAL STAIL DETAILS & SCHEDULE	36
MISCELLANEOUS DETAILS - STRUCTURAL MISCELLANEOUS DETAILS - STRUCTURAL	37
MISCELLANEOUS DETAILS - STRUCTURAL MISCELLANEOUS DETAILS - STRUCTURAL	38
MISCELLANEOUS DETAILS - STRUCTURAL MISCELLANEOUS DETAILS - STRUCTURAL	39
MISCELLANEOUS DETAILS - STRUCTURAL PIPE RAILING DETAILS	40
MISCELLANEOUS DETAILS - STRUCTURAL GRATING & STOP PLATE DETAILS & SCHEDULES	41
MISCELLANEOUS DETAILS - STRUCTURAL MANHOLE & TRENCH DETAILS	42
MISCELLANEOUS DETAILS - PIPING FLOOR & WALL SLEEVES	43
MISCELLANEOUS DETAILS - STRUCTURAL PIPE SUPPORT DETAILS, GENERAL NOTES	43A
PLUMBING - PLAN AT EL.822.00	44
PLUMBING - POTABLE & NON-POTABLE WATER ISOMETRICS	45
PLUMBING - DETAILS	46
HVAC - PLAN AT EL.822.00	47
HVAC - PLANS AT EL.779.67, 801.58 & EL.805.67	48
HVAC - MISCELLANEOUS DETAILS	49
ELECTRICAL - LEGEND	50
ELECTRICAL - SITE PLAN	51
ELECTRICAL - SINGLE LINE DIAGRAMS	52
ELECTRICAL - PLAN AT EL.822.00	53
ELECTRICAL - EMERGENCY GENERATOR SILENCER DETAILS PLAN AT EL.822.58 & SECTIONS	53A
ELECTRICAL - PLANS AT EL.779.67, 801.68, 805.67 & 818.00	54
ELECTRICAL - FOR PUMPS AND EQUIPMENT	55
ELECTRICAL - FOR PUMPS, VFD'S AND EQUIPMENT	56
ELECTRICAL - PUMP STATION, ELECTRICAL RECEPTACLES & LIGHTING PLAN, LEVELS 822.00 & 801/805.5	57
ELECTRICAL - PUMP STATION, ELECTRICAL RECEPTACLES & LIGHTING PLAN, LEVELS 785/779 & SECTIONS	58
ELECTRICAL - LIGHTING LUMINAIRE SCHEDULE AND PANELBOARD SCHEDULES	59
ELECTRICAL - SCHEMATIC DIAGRAMS	60
ELECTRICAL - MISCELLANEOUS DETAILS	61
ELECTRICAL - PRIMARY LOOP FEED PAD AND MISCELLANEOUS DETAILS	62
INSTRUMENTATION AND CONTROL - SYMBOLS & ABBREVIATIONS	63
INSTRUMENTATION AND CONTROL - RAW WASTEWATER PUMPS PROCESS DIAGRAM	64
INSTRUMENTATION AND CONTROL - PROCESS DIAGRAM	65
INSTRUMENTATION AND CONTROL - NITRATE CONTROL DIAGRAM	65A
PANEL, SUMP PUMPS 1 & 2 AND SCHEMATIC	
INSTRUMENTATION AND CONTROL - SLUICE GATES 1-3	65B
INSTRUMENTATION AND CONTROL - LIFT PUMP SCHEMATIC	65C

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

Jones & Henry Engineers, Ltd.

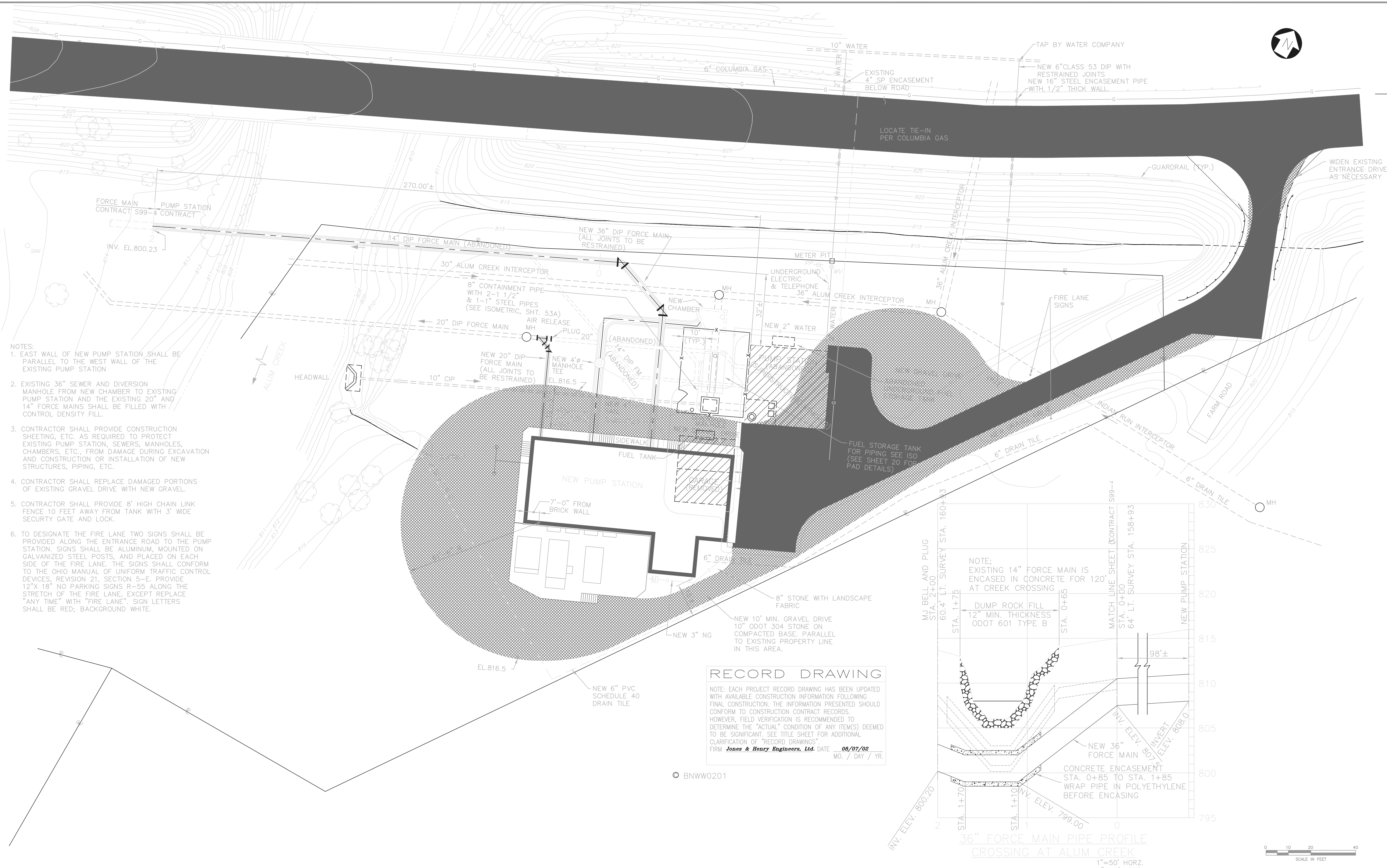
DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	SLW
APPROVED BY:	SLW
DATE:	1999

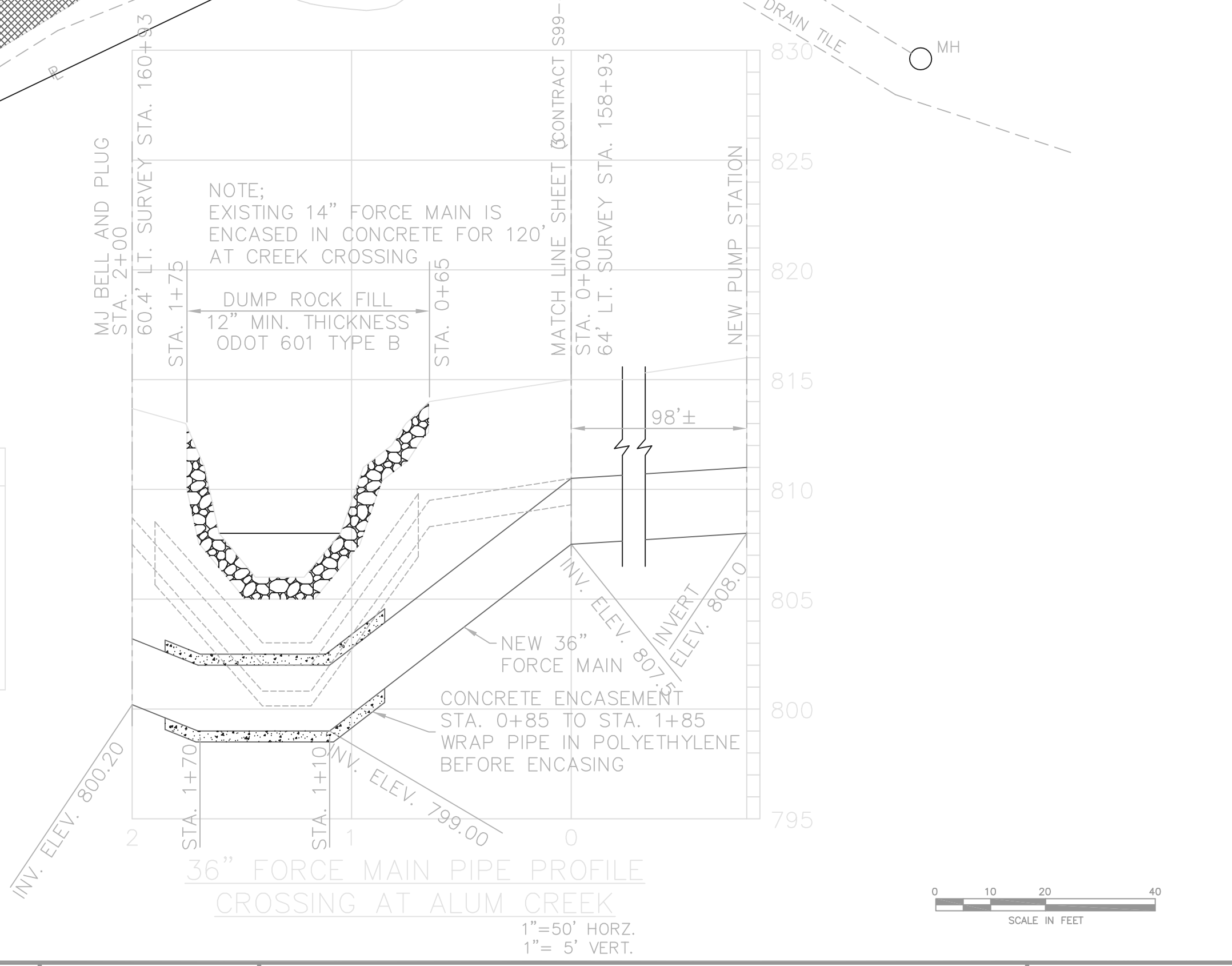
PUMP STATION
INDEX, SYMBOLS, AND ABBREVIATIONS

SCALE:	NONE
SHEET NO.	2
OF	100

TOL-4714INDX
02/27/02 04-002
P:\PR24025\NMPSTARECDWG\2.DWG



- NOTES:
1. EAST WALL OF NEW PUMP STATION SHALL BE PARALLEL TO THE WEST WALL OF THE EXISTING PUMP STATION
 2. EXISTING 36" SEWER AND DIVERSION MANHOLE FROM NEW CHAMBER TO EXISTING PUMP STATION AND THE EXISTING 20" AND 14" FORCE MAINS SHALL BE FILLED WITH CONTROL DENSITY FILL.
 3. CONTRACTOR SHALL PROVIDE CONSTRUCTION SHEETING, ETC. AS REQUIRED TO PROTECT EXISTING PUMP STATION, SEWERS, MANHOLES, CHAMBERS, ETC., FROM DAMAGE DURING EXCAVATION AND CONSTRUCTION OR INSTALLATION OF NEW STRUCTURES, PIPING, ETC.
 4. CONTRACTOR SHALL REPLACE DAMAGED PORTIONS OF EXISTING GRAVEL DRIVE WITH NEW GRAVEL.
 5. CONTRACTOR SHALL PROVIDE 8' HIGH CHAIN LINK FENCE 10 FEET AWAY FROM TANK WITH 3' WIDE SECURITY GATE AND LOCK.
 6. TO DESIGNATE THE FIRE LANE TWO SIGNS SHALL BE PROVIDED ALONG THE ENTRANCE ROAD TO THE PUMP STATION. SIGNS SHALL BE ALUMINUM, MOUNTED ON GALVANIZED STEEL POSTS, AND PLACED ON EACH SIDE OF THE FIRE LANE. THE SIGNS SHALL CONFORM TO THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, REVISION 21, SECTION 5-E. PROVIDE 12"X 18" NO PARKING SIGNS R-55 ALONG THE STRETCH OF THE FIRE LANE, EXCEPT REPLACE "ANY TIME" WITH "FIRE LANE". SIGN LETTERS SHALL BE RED; BACKGROUND WHITE.



RECORD DRAWING

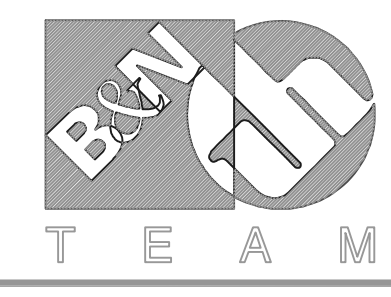
NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".

FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
MO. / DAY / YR.

© BNW0201

TOL-4714SITE-001
 08/06/02 06-V02
 P:\PR24025\PMFSTARECDWG\3.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

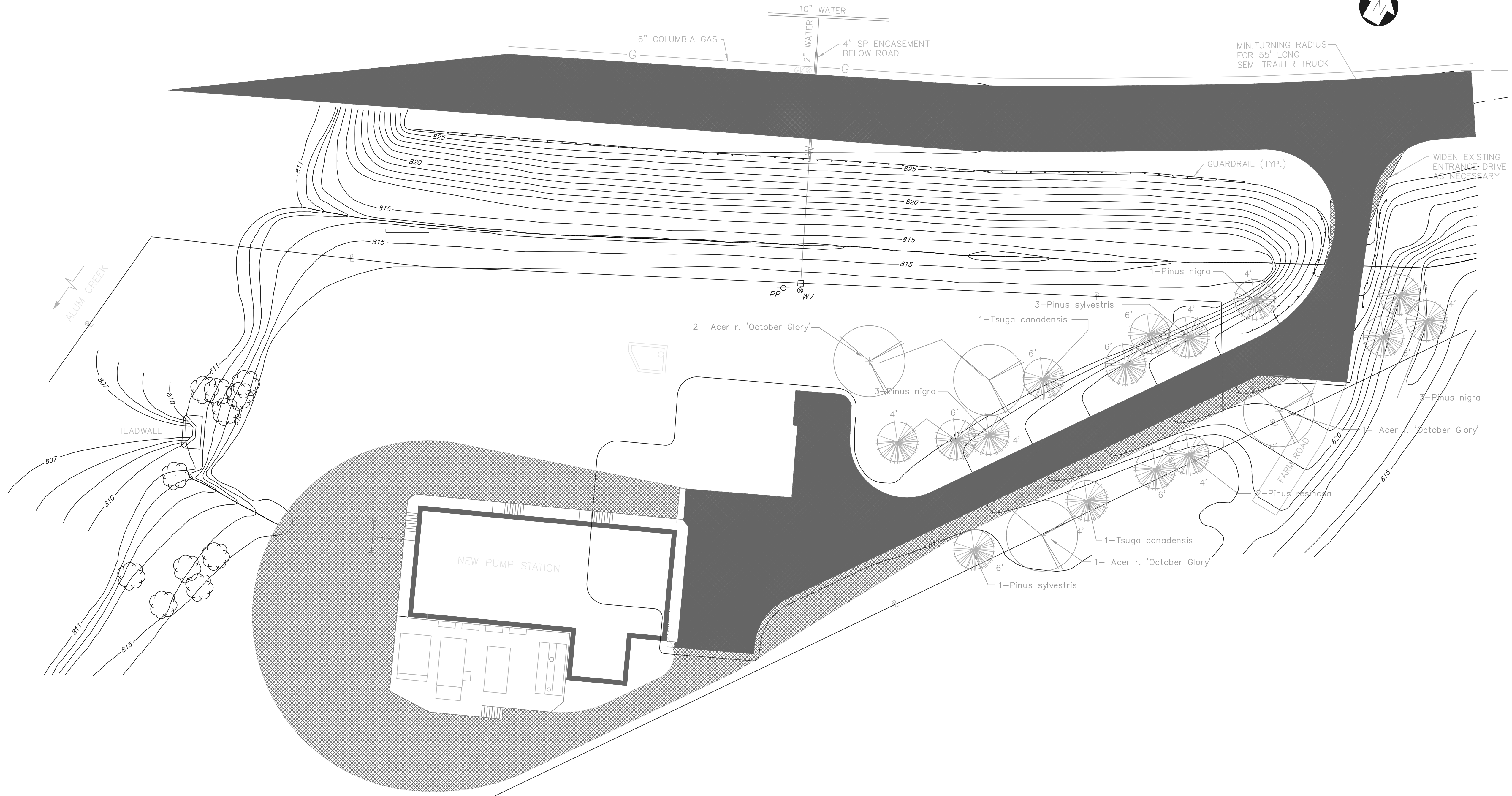
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	
APPROVED BY:	
DATE:	1999

PUMP STATION
 SITE PLAN & YARD PIPING

SCALE:	AS SHOWN
SHEET NO.	OF
3	100



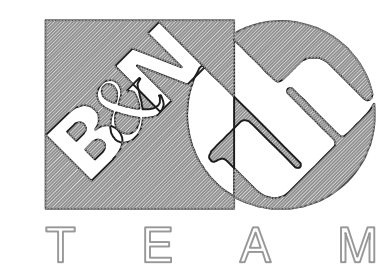
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
 FIRM BURGESS & NIPLE, LIMITED DATE 07/19/02
 MO. / DAY / YR.

Plant Materials List						
Quantity	Botanical Name	Common Name	Size	Root	Spacing	Remarks
4	Pinus nigra	Austrian Pine	4' HT.	B & B	See Plan	Unsheared
3	Pinus nigra	Austrian Pine	6' HT.	B & B	See Plan	" "
1	Pinus resinosa	Red Pine	4' HT.	B & B	See Plan	" "
1	Pinus resinosa	Red Pine	6' HT.	B & B	See Plan	" "
1	Pinus sylvestris	Scotch Pine	4' HT.	B & B	See Plan	" "
3	Pinus sylvestris	Scotch Pine	6' HT.	B & B	See Plan	" "
1	Tsuga canadensis	Canadian Hemlock	4' HT.	B & B	See Plan	" "
1	Tsuga canadensis	Canadian Hemlock	6' HT.	B & B	See Plan	" "
4	Acer rubrum 'October Glory'	October Glory Maple	2 1/2" Col.	B & B	See Plan	" "

P:\PR24025\PMPS\RECDDWG_3A.DWG 04/13/99

NO.	REVISIONS	DATE	BY	CHK.



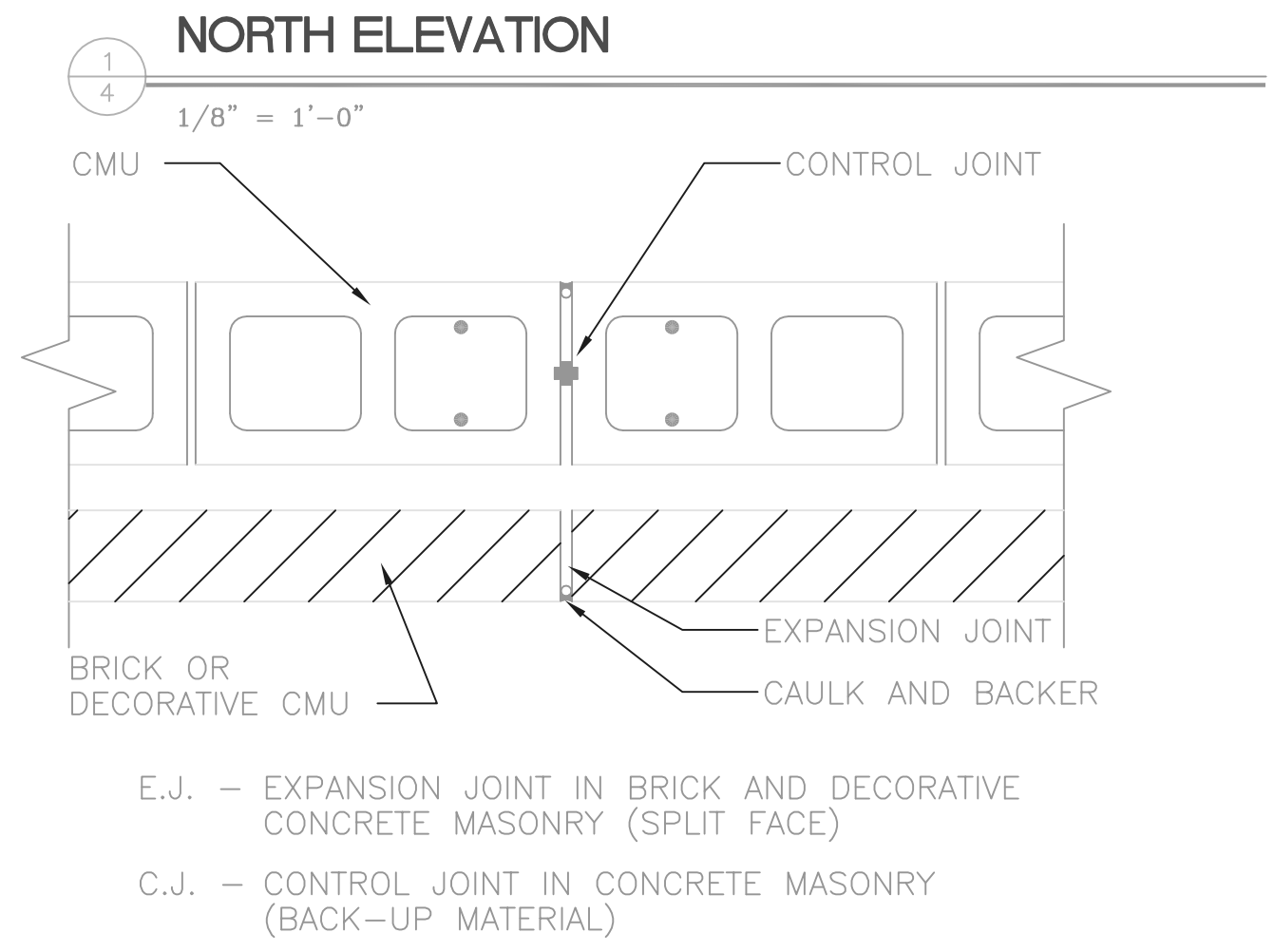
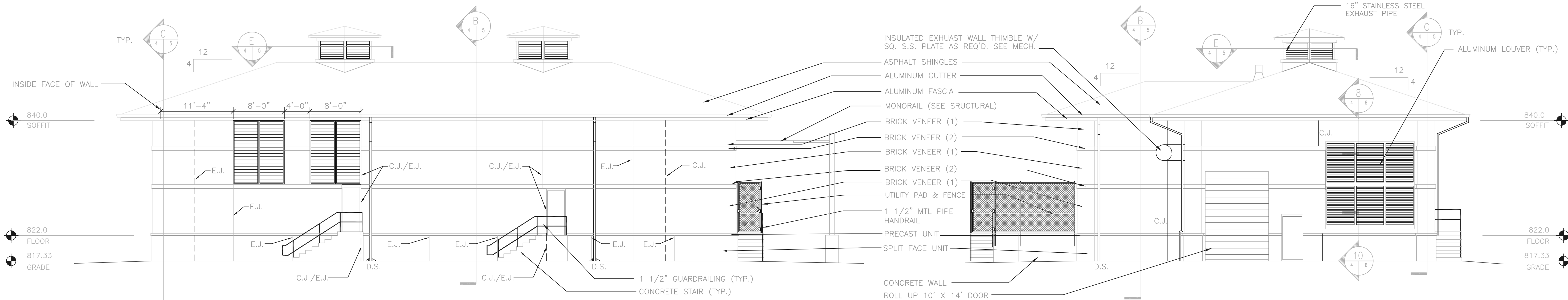
Burgess & Niple, Limited
 Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO. 20571
 DESIGNED BY: SDS
 DRAWN BY: SDS
 CHECKED BY:
 APPROVED BY:
 DATE: 1999

PUMP STATION
 PLANTING PLAN

SCALE: 1"=20'
 SHEET NO. 3A OF 100



NORTH ELEVATION MASONRY JOINT DETAIL
SCALE: 1 1/2" = 1'-0"

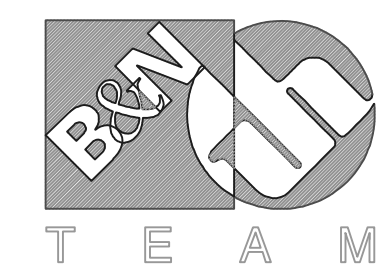
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".

FIRM **BURGESS & NIPLE, LIMITED** DATE 07/18/02
MO. / DAY / YR.

P:\PR24025\PM\STRCDWG\4.DWG 5-5-99 12:54:28 pm

NO.	REVISIONS	DATE	BY	CHK.
1	REVISED DURING CONSTRUCTION	10/10/00	DEH	RBD



Burgess & Niple, Limited

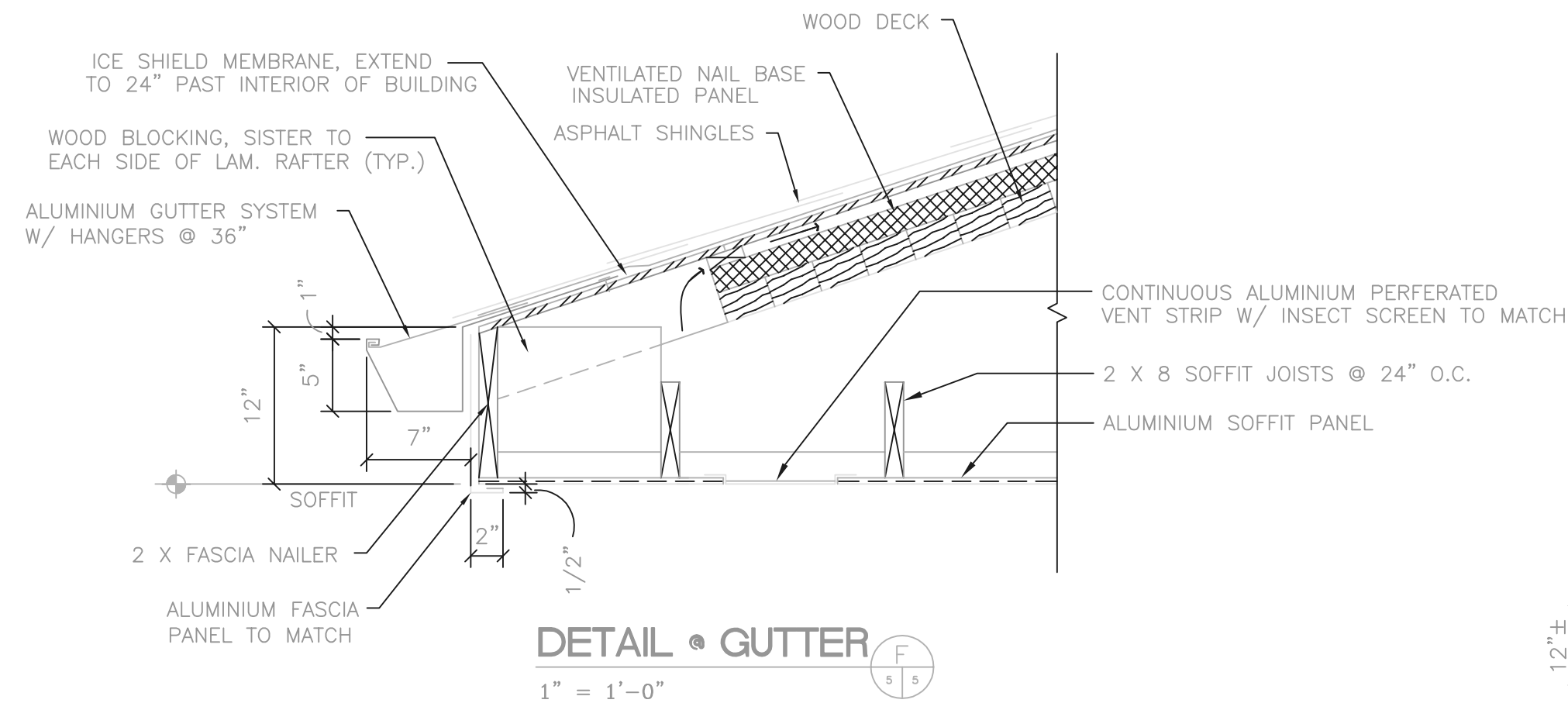
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

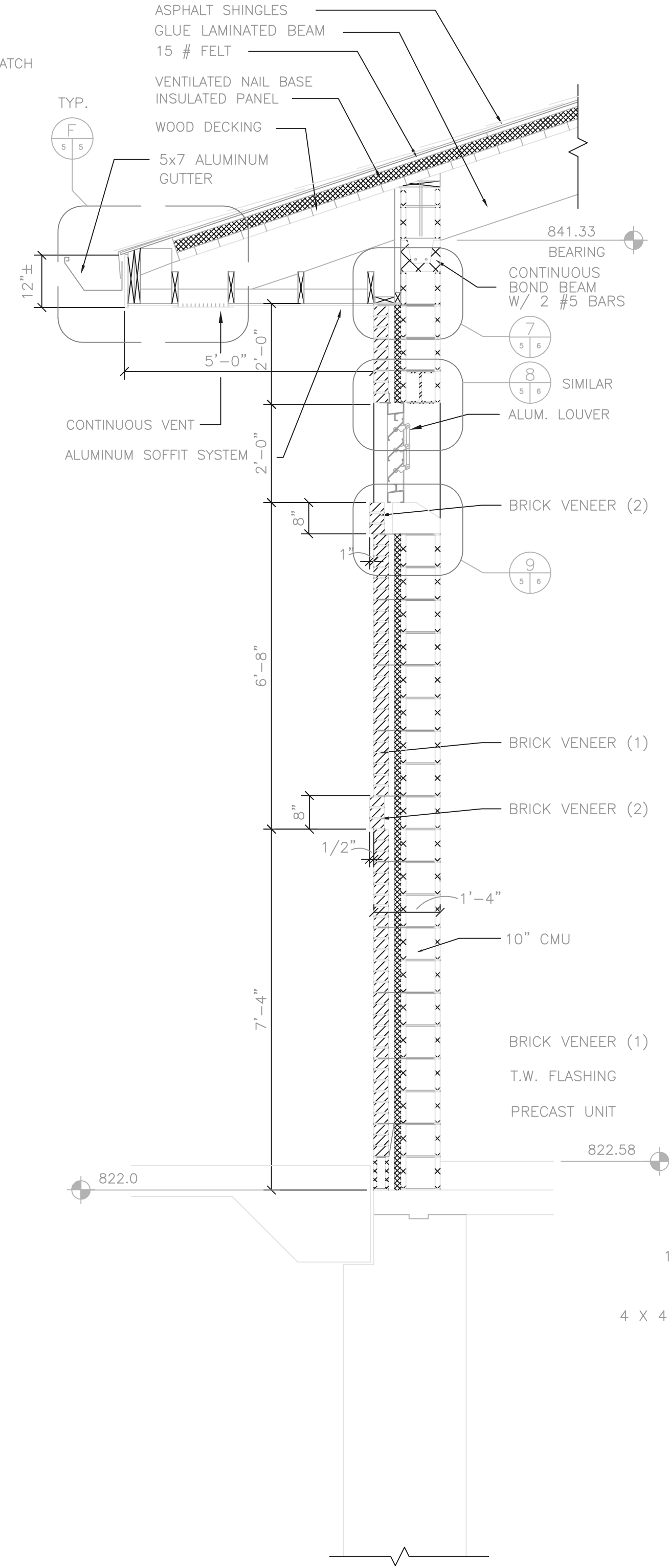
JOB NO.	20571
DESIGNED BY:	DEI/TMO
DRAWN BY:	SJC/DEI
CHECKED BY:	
APPROVED BY:	
DATE:	MAR 1999

PUMP STATION BUILDING
EXTERIOR ELEVATIONS

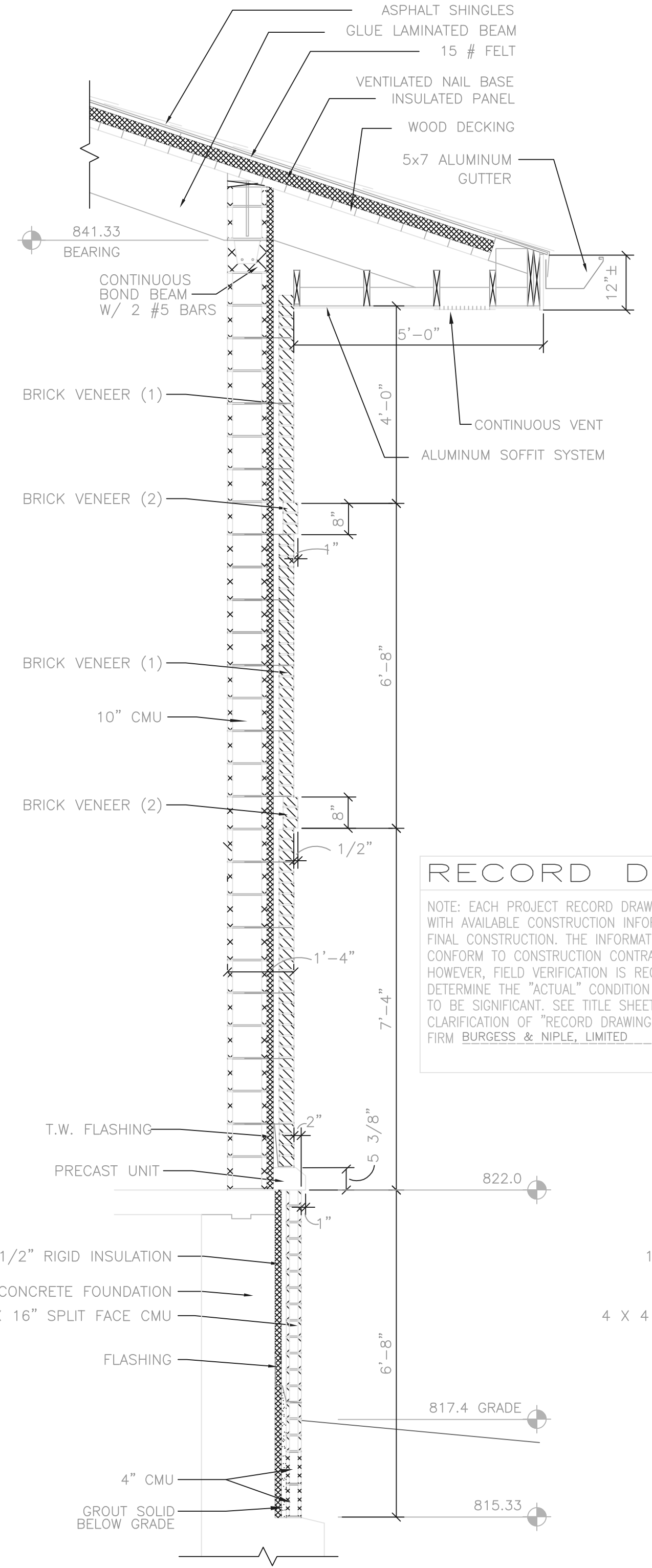
SCALE:	
AS NOTED	
SHEET NO.	OF
4	100



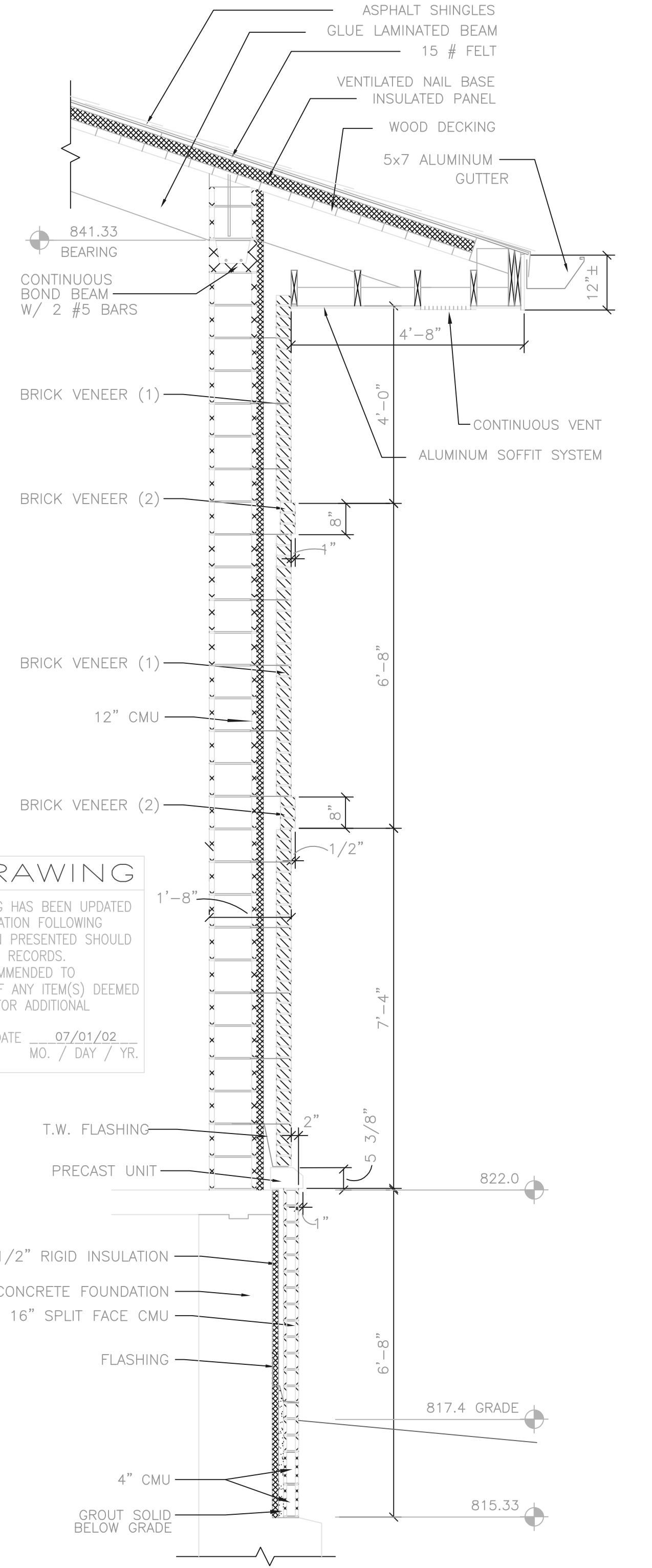
DETAIL - GUTTER
1" = 1'-0"



WALL SECTION A
1/2" = 1'-0"

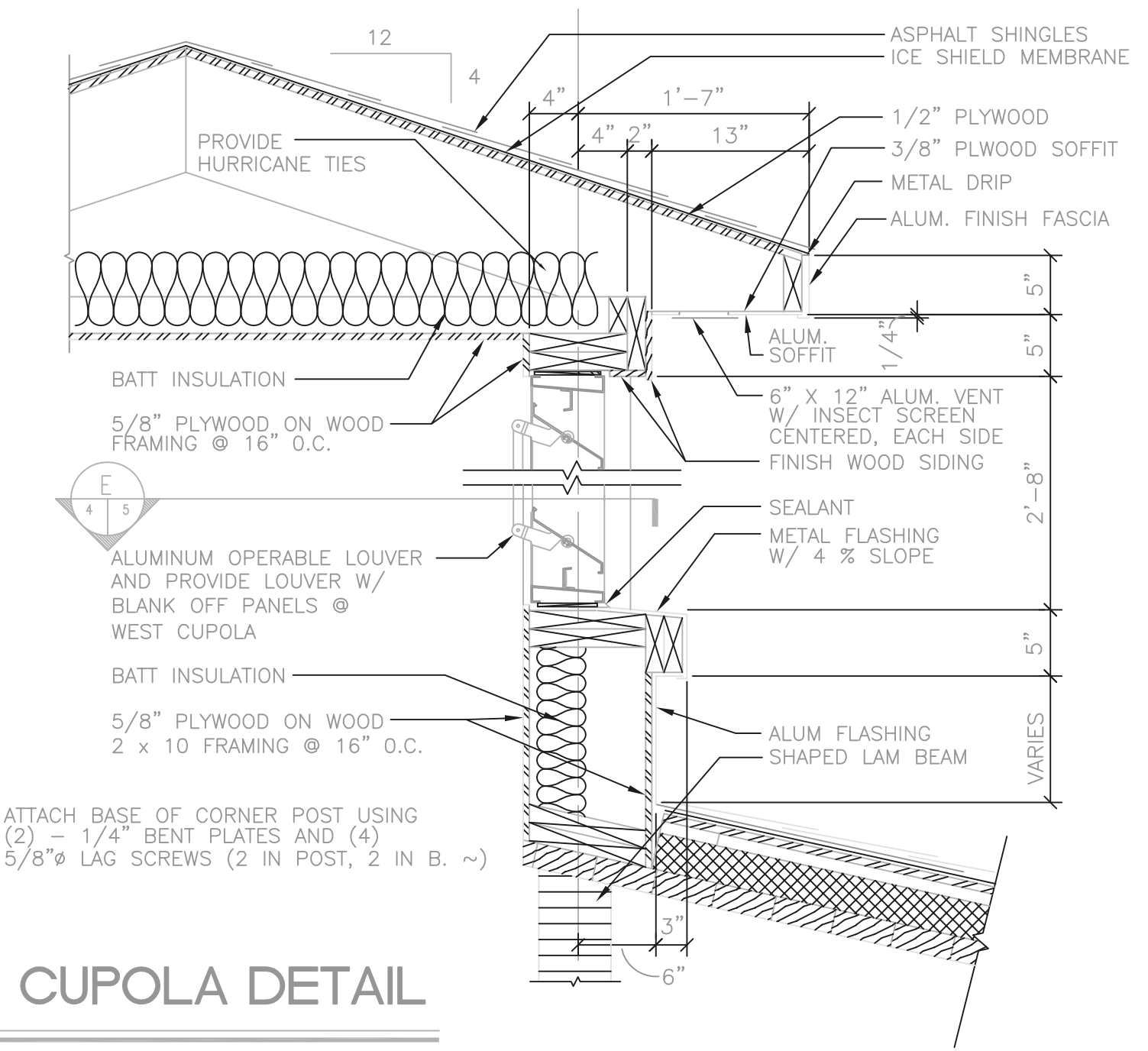


WALL SECTION B
1/2" = 1'-0"

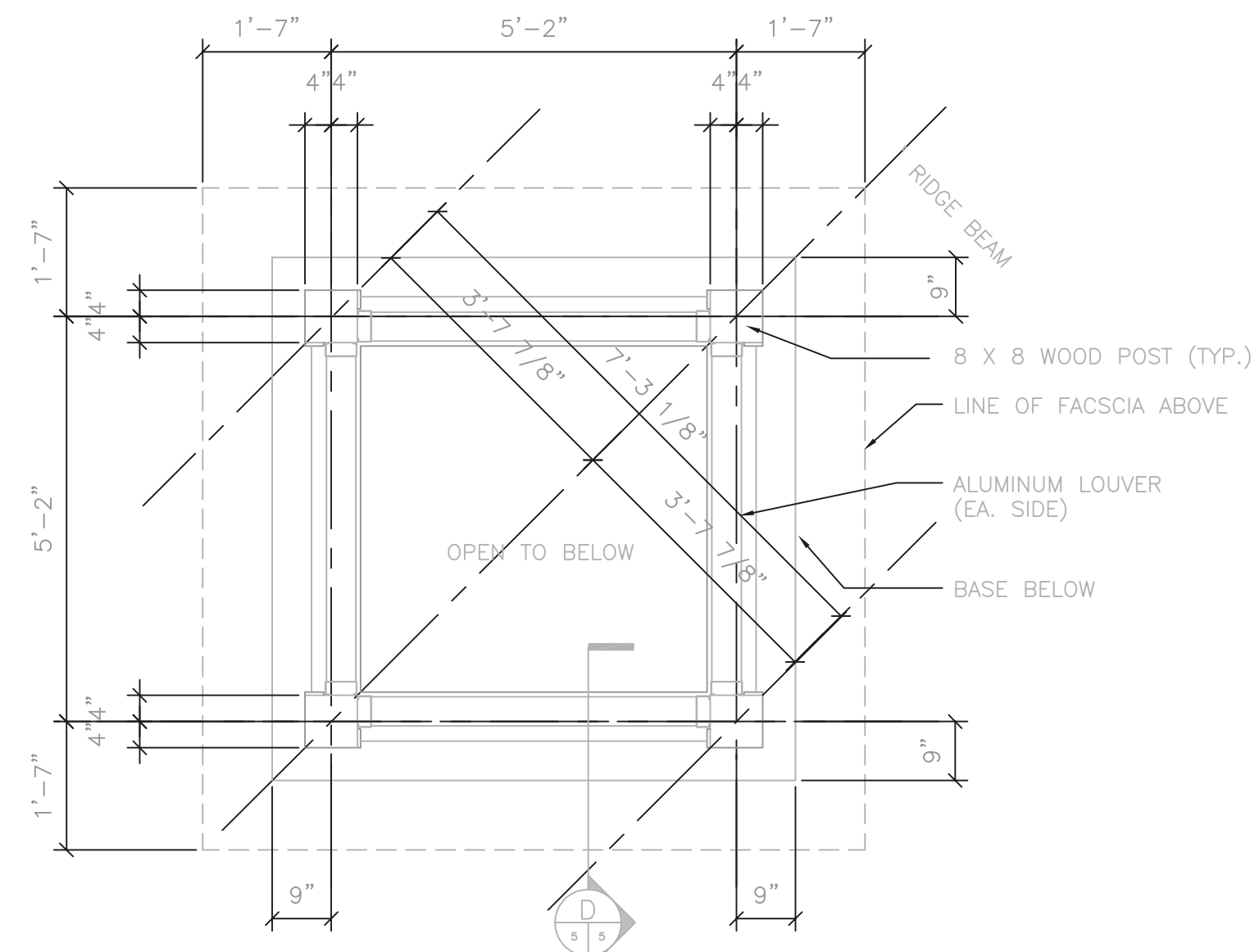


WALL SECTION C
1/2" = 1'-0"

RECORD DRAWING
NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM: BURGESS & NIPLE, LIMITED DATE: 07/01/02
MO. / DAY / YR.



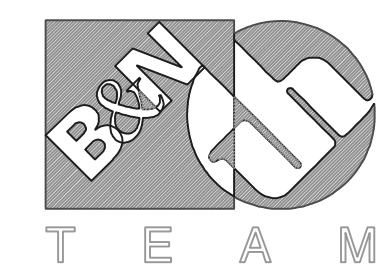
CUPOLA DETAIL
SCALE: 1" = 1'-0"



PLAN - CUPOLA
SCALE: 1/2" = 1'-0"

P:\PR24025\PMPTRECDWG\5.DWG 3-3-99 11:23:39 pm

NO.	REVISIONS	DATE	BY	CHK.



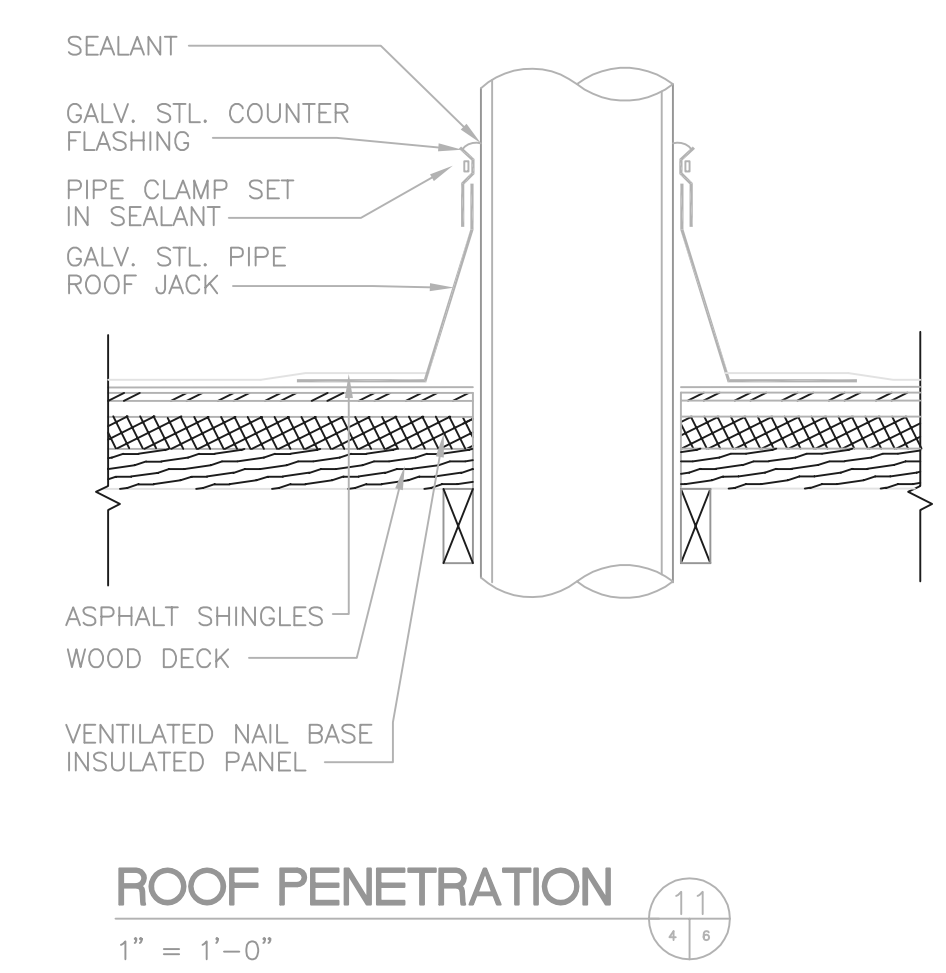
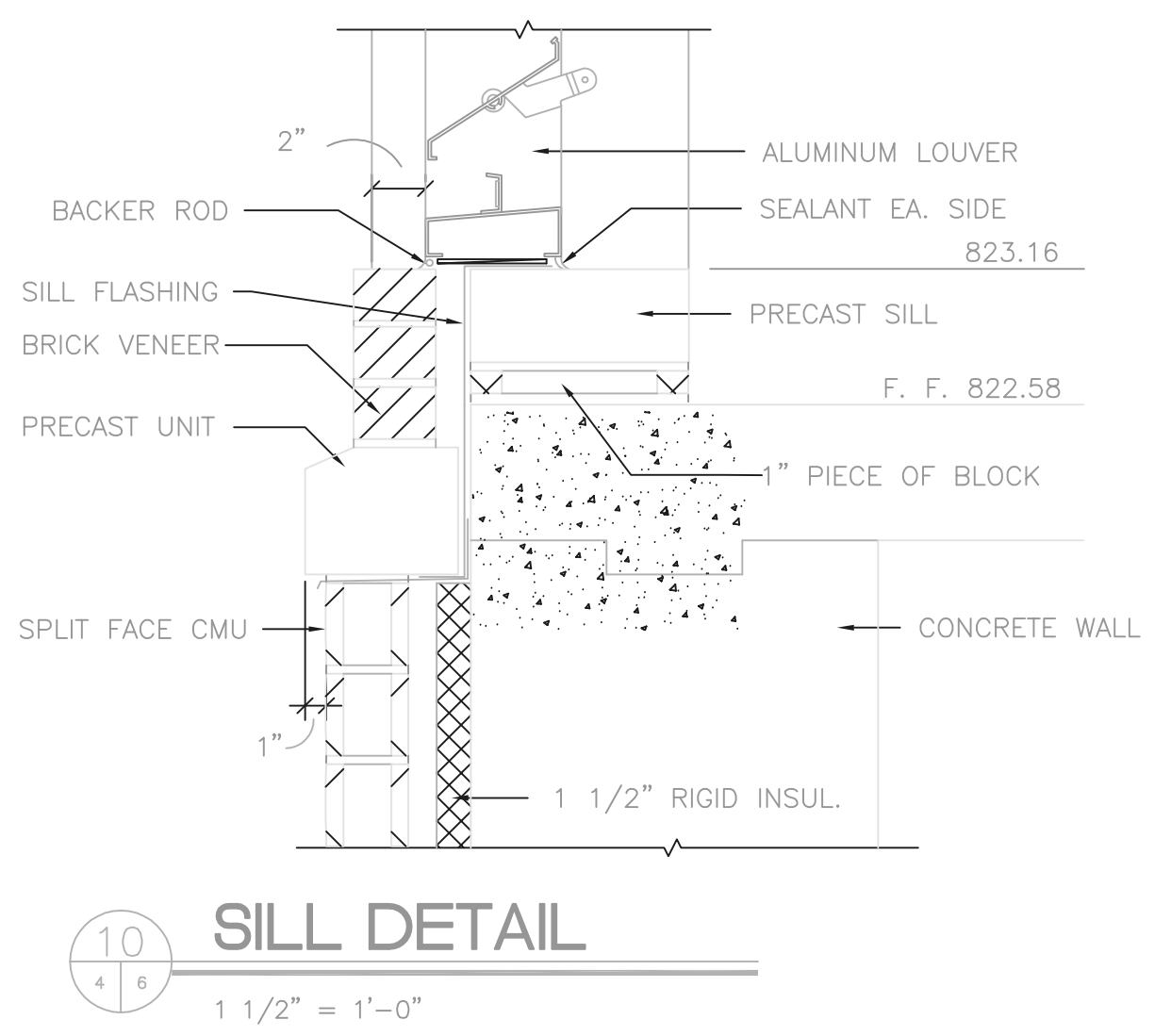
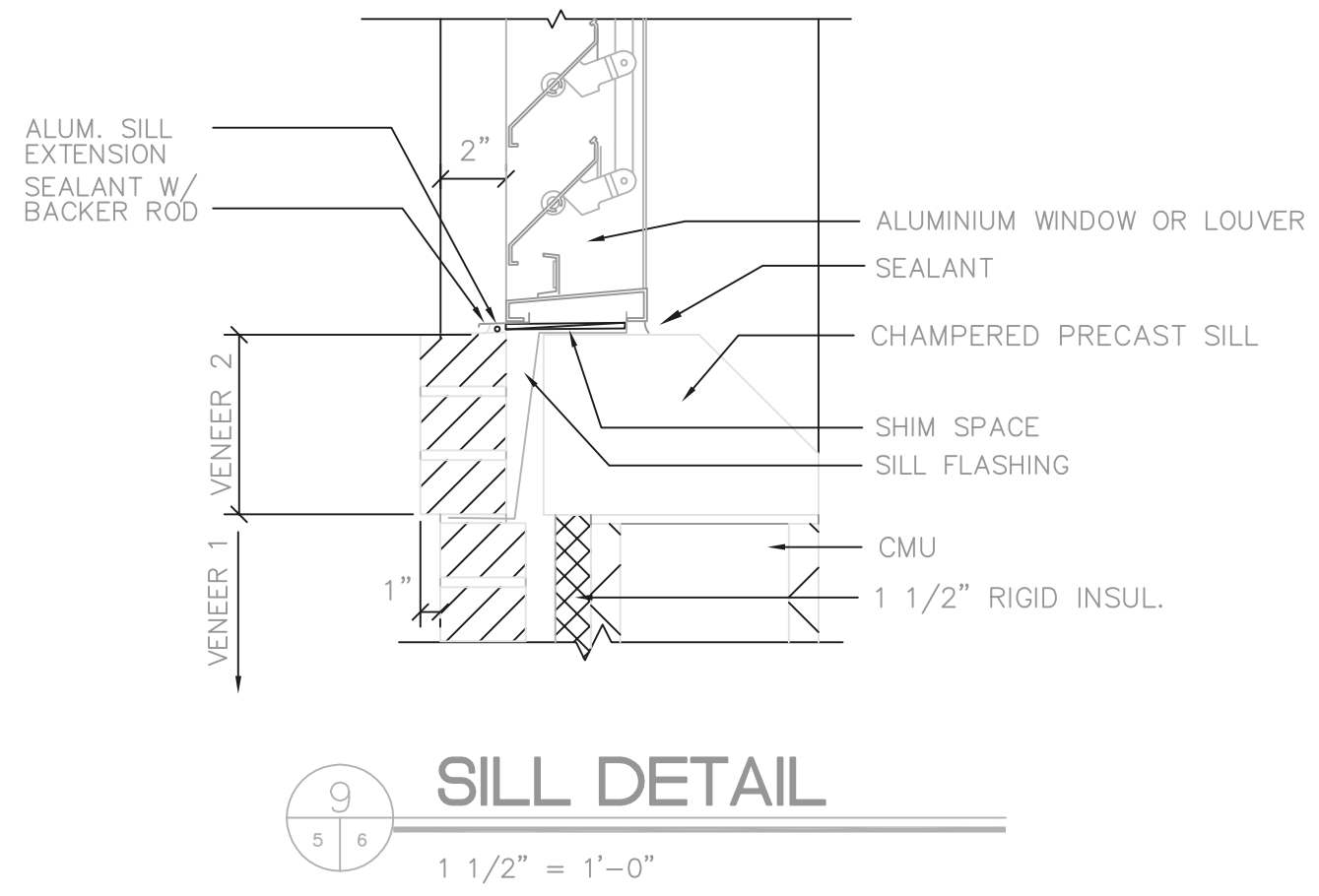
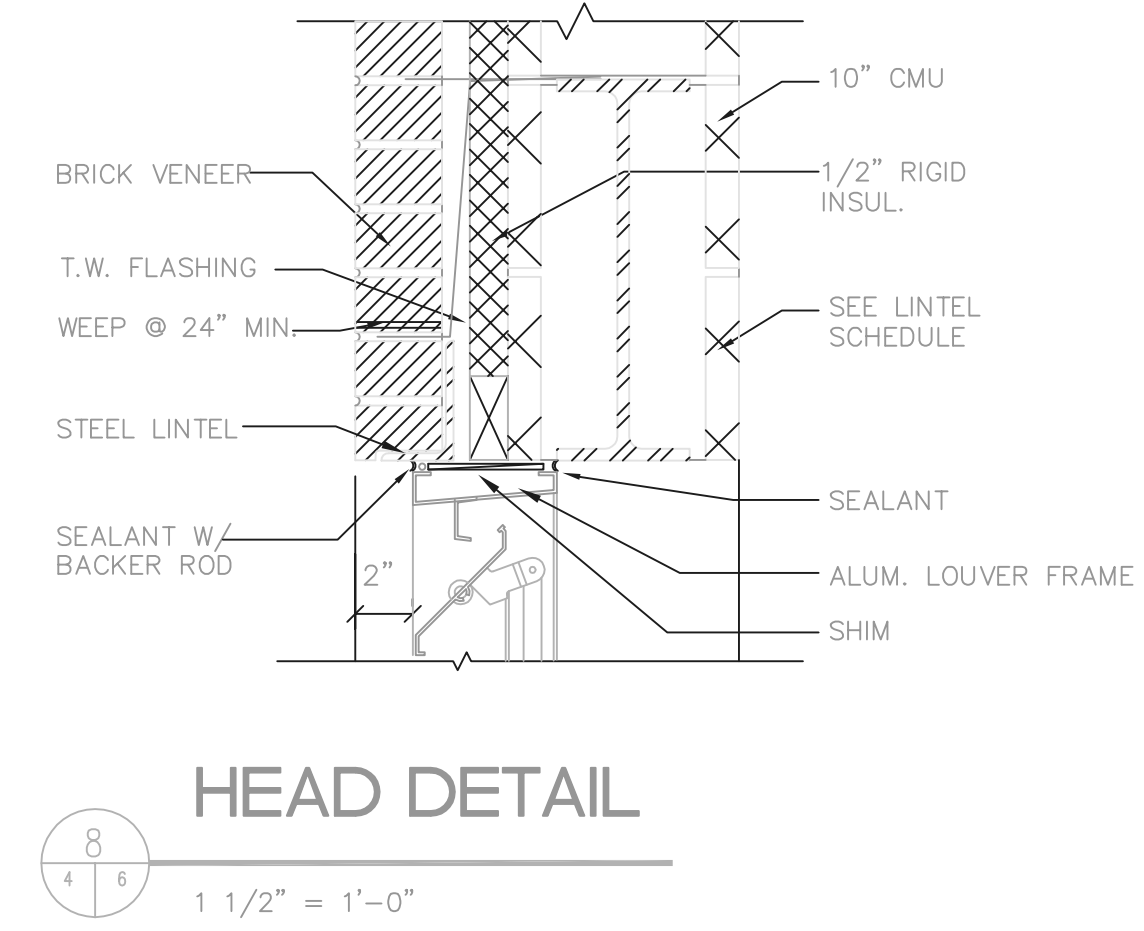
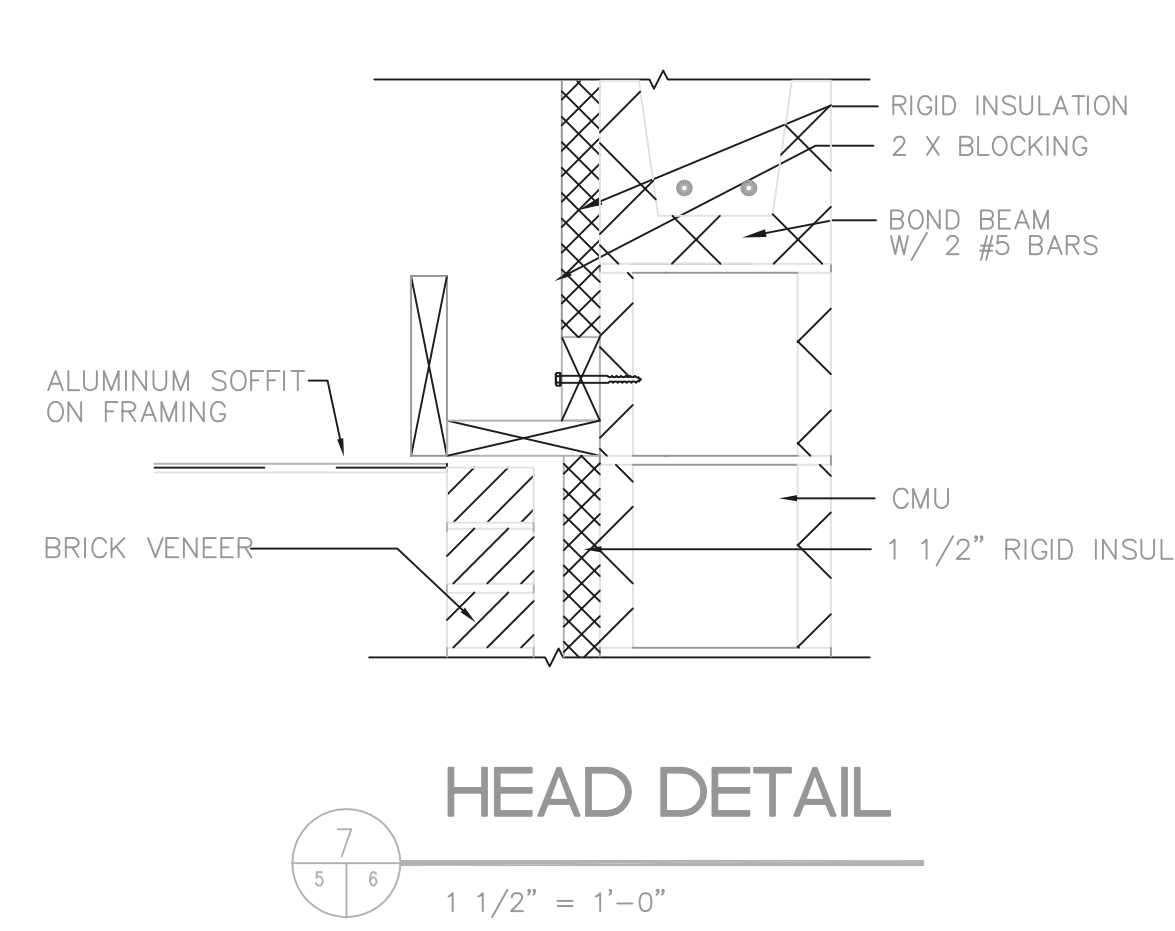
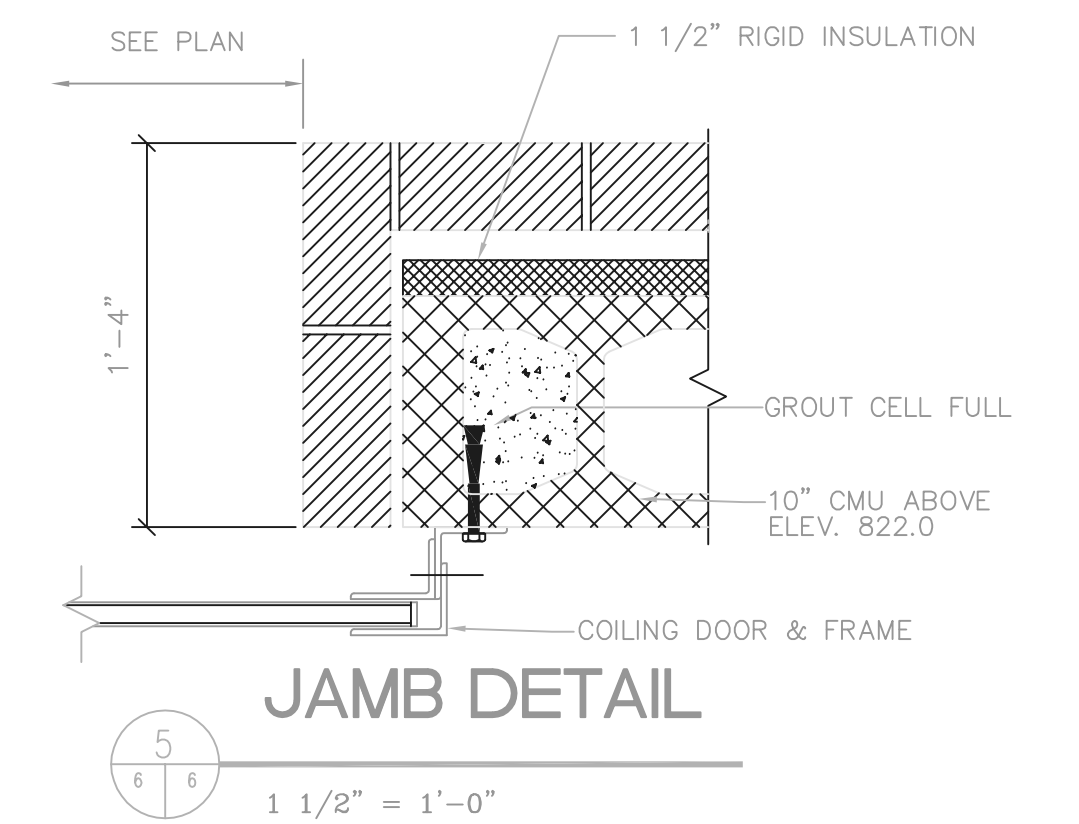
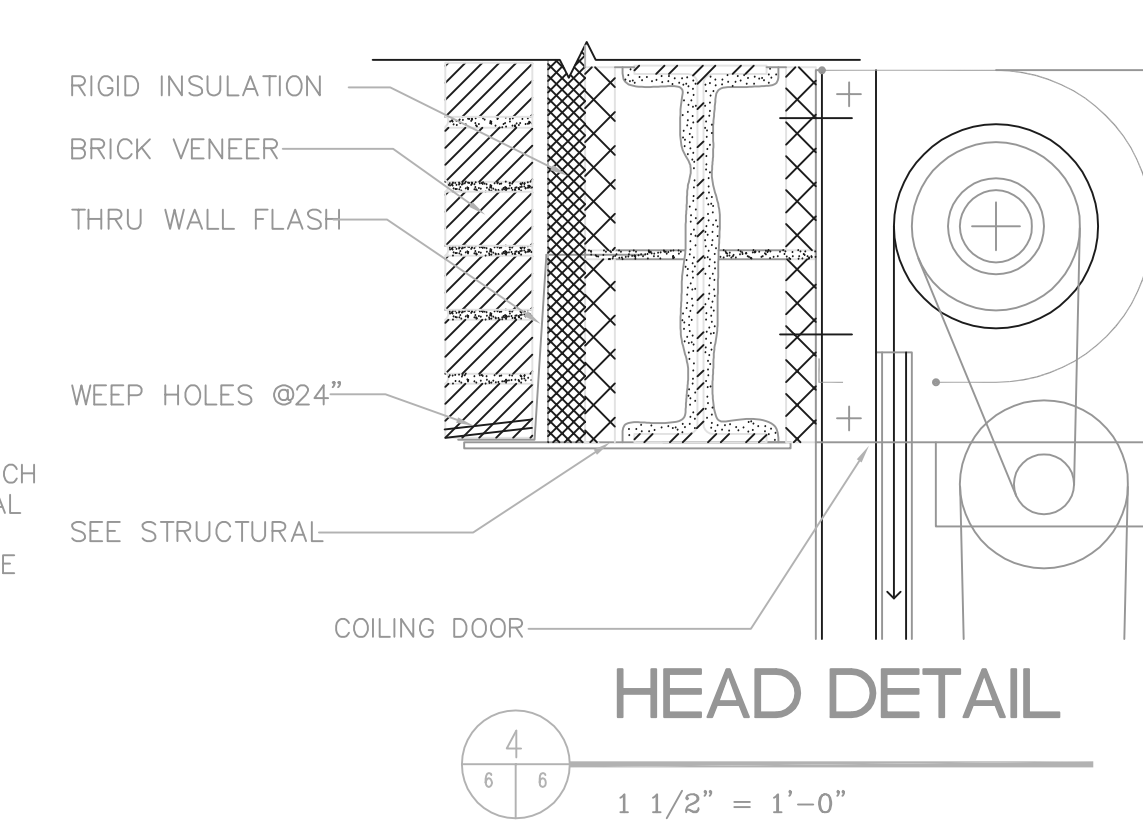
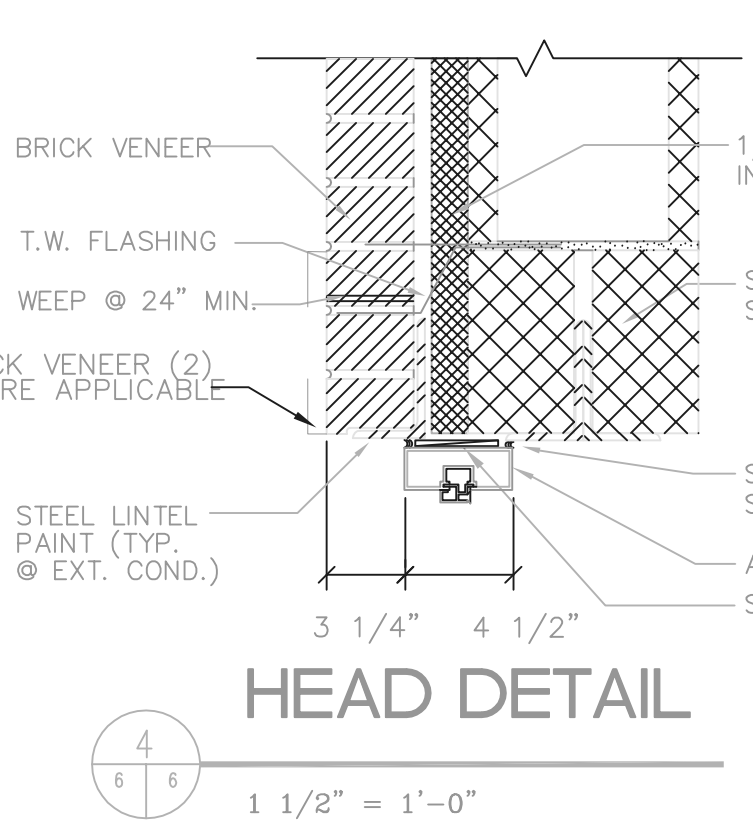
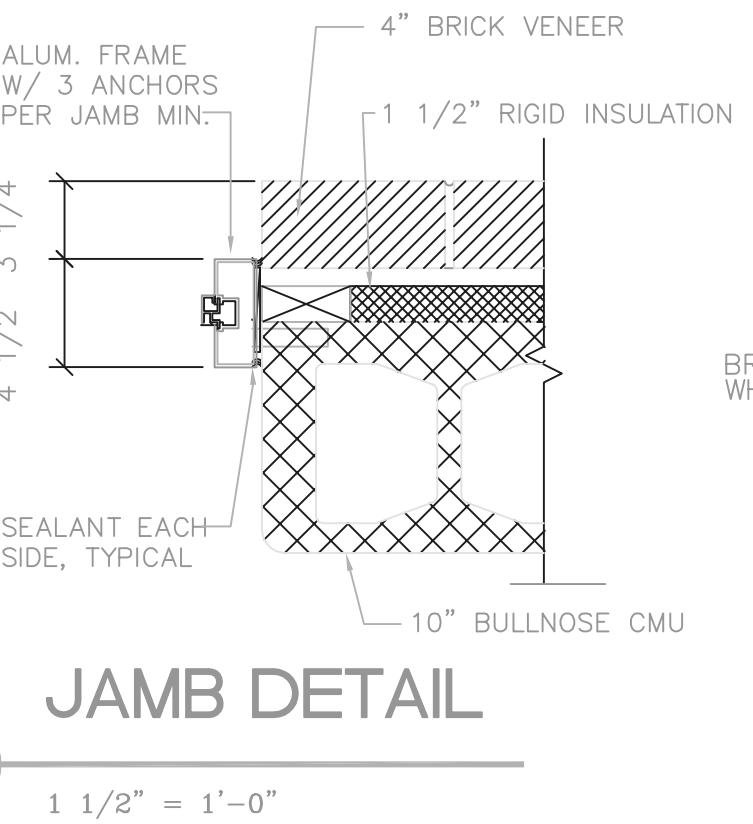
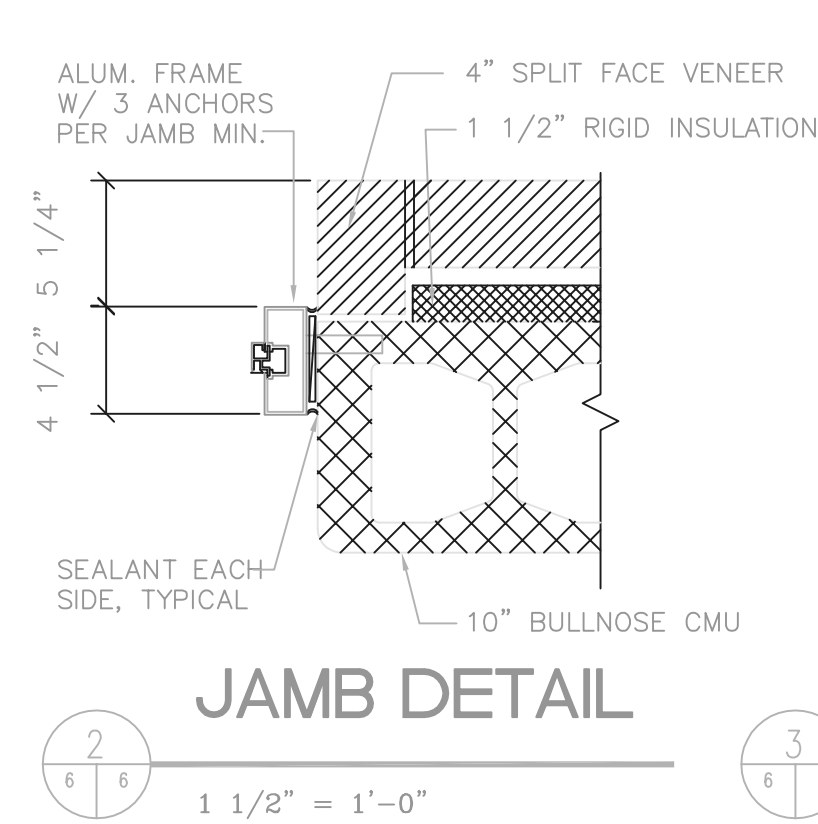
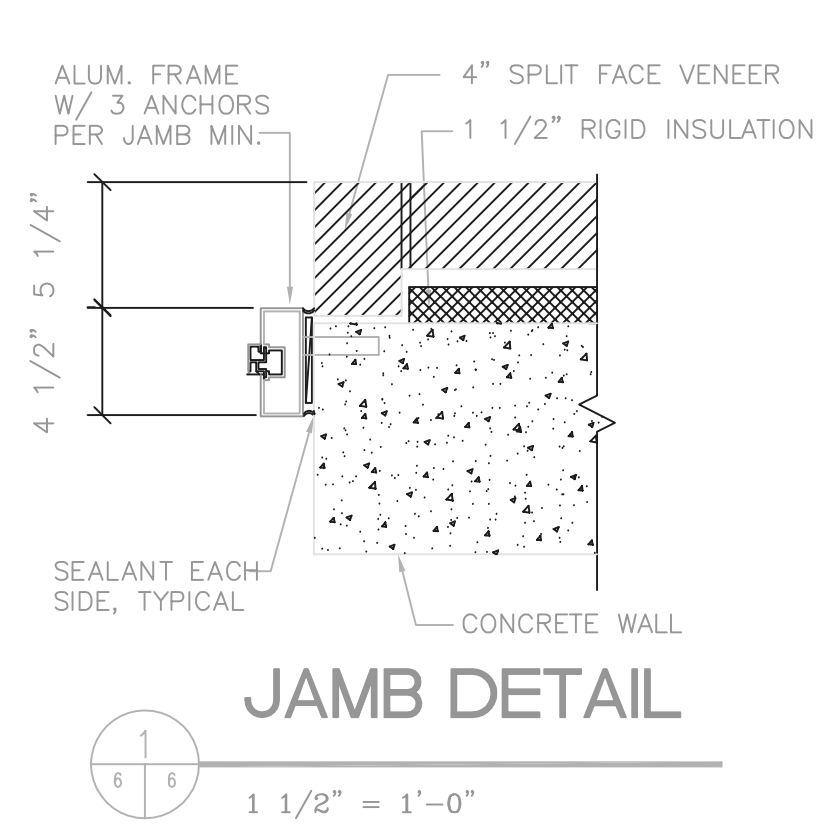
Burgess & Niple, Limited
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	SJC/DEI
DRAWN BY:	SJC
CHECKED BY:	
APPROVED BY:	
DATE:	MAR 1999

ARCHITECTURAL SECTIONS
& DETAILS

SCALE:	
AS NOTED	
SHEET NO.	OF
5	100



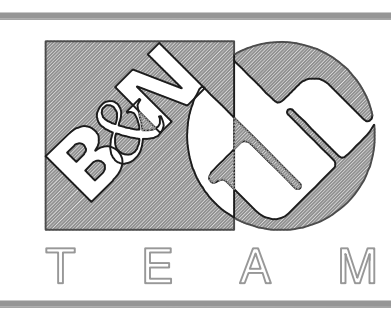
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".

FIRM BURGESS & NIPLÉ, LIMITED DATE 07/19/02 MO. / DAY / YR.

P:\PR24025\PMPS\REC\DWG\6.DWG 5-6-99 10:59:33 am

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

Jones & Henry Engineers, Ltd.

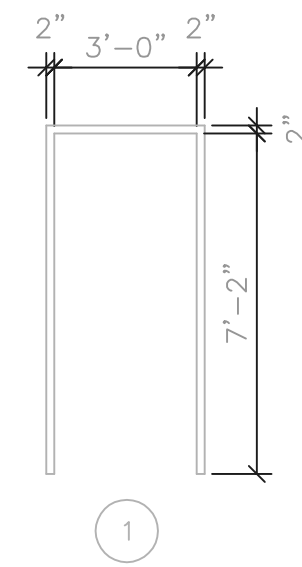
DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	SJC/TMO
DRAWN BY:	SJC
CHECKED BY:	
APPROVED BY:	
DATE:	MAR 1999

SCALE:		AS NOTED
SHEET NO.	OF	
6	100	

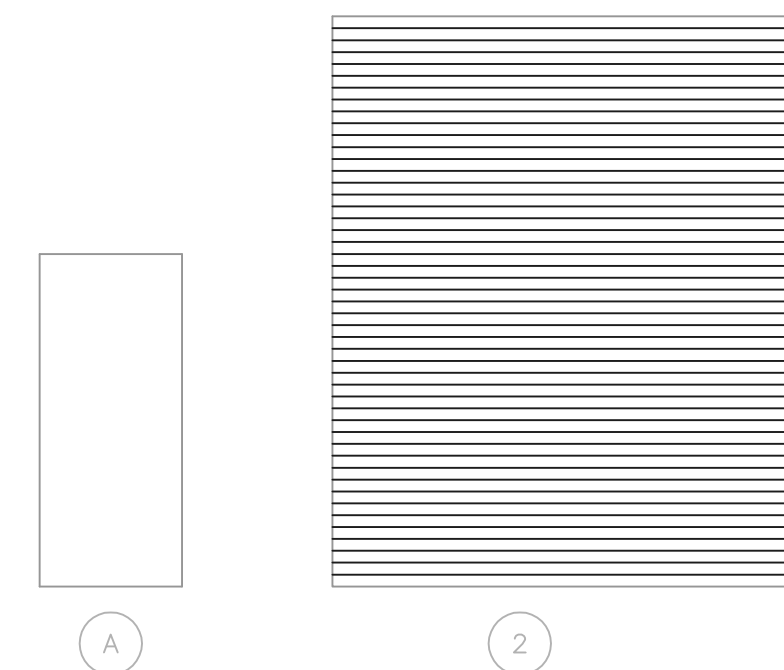
PUMP STATION DOOR SCHEDULE														
DOOR NO.	DOOR						FRAME							REMARKS
	DIMENSION			MAT	TYPE	GLASS	MAT	DETAILS			TYPE	HDW	LABEL	
NUMBER	WIDTH	HEIGHT	THK					HEAD	JAMB	SILL				
100	2'-2"	6'-5"	3/4"	ALUM	A	—	ALUM	4	1,2,3	—	—	1	3	CUSTOM DOOR
101	3'-0"	7'-2"	3/4"	ALUM	A	—	ALUM	4	1,2,3	—	—	1	3	
102	3'-0"	7'-0"	3/4"	ALUM	A	—	ALUM	4	1,2,3	—	—	1	3	
103	3'-0"	7'-2"	3/4"	ALUM	A	—	ALUM	4	1,2,3	—	—	1	3	
104	10'-0"	14'-0"	—	ALUM	B	—	—	5	6	—	—	1	15	
105	3'-0"	7'-2"	3/4"	ALUM	A	—	ALUM	4	1,2,3	—	—	1	3	

ALL HEAD & JAMB DETAILS FOR PUMP STATION ARE ON SHT. 3C



DOOR FRAME TYPES

1/4" = 1'-0"



DOOR TYPES

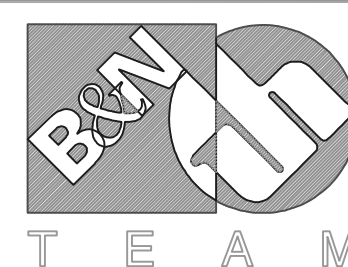
1/4" = 1'-0"

RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
 FIRM BURGESS & NIPLÉ, LIMITED DATE 07/18/02
 MO. / DAY / YR.

P:\PR24025\PMPS\STRECDWG\7.DWG 5--6--99 1:07:27 pm

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

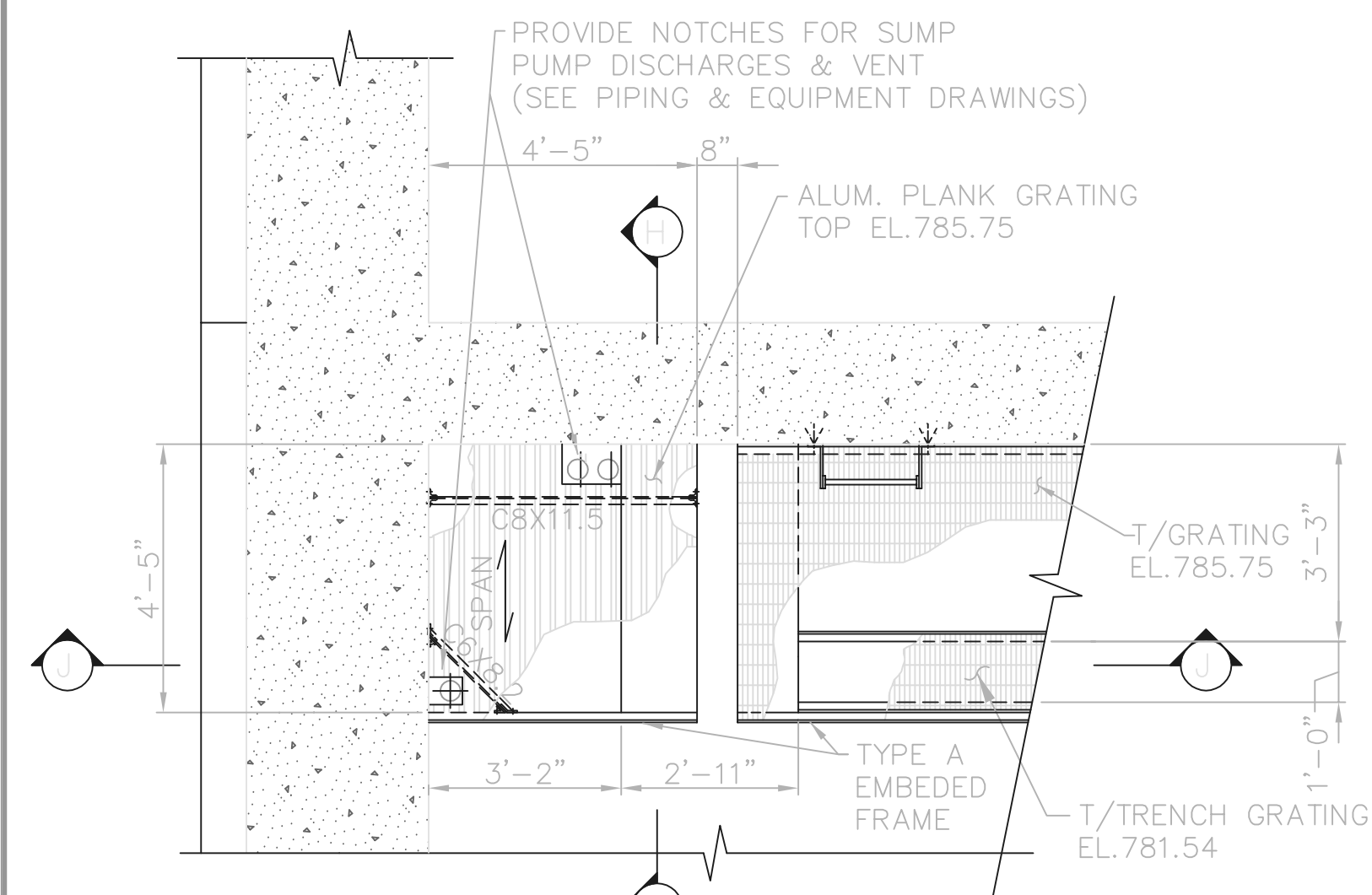
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

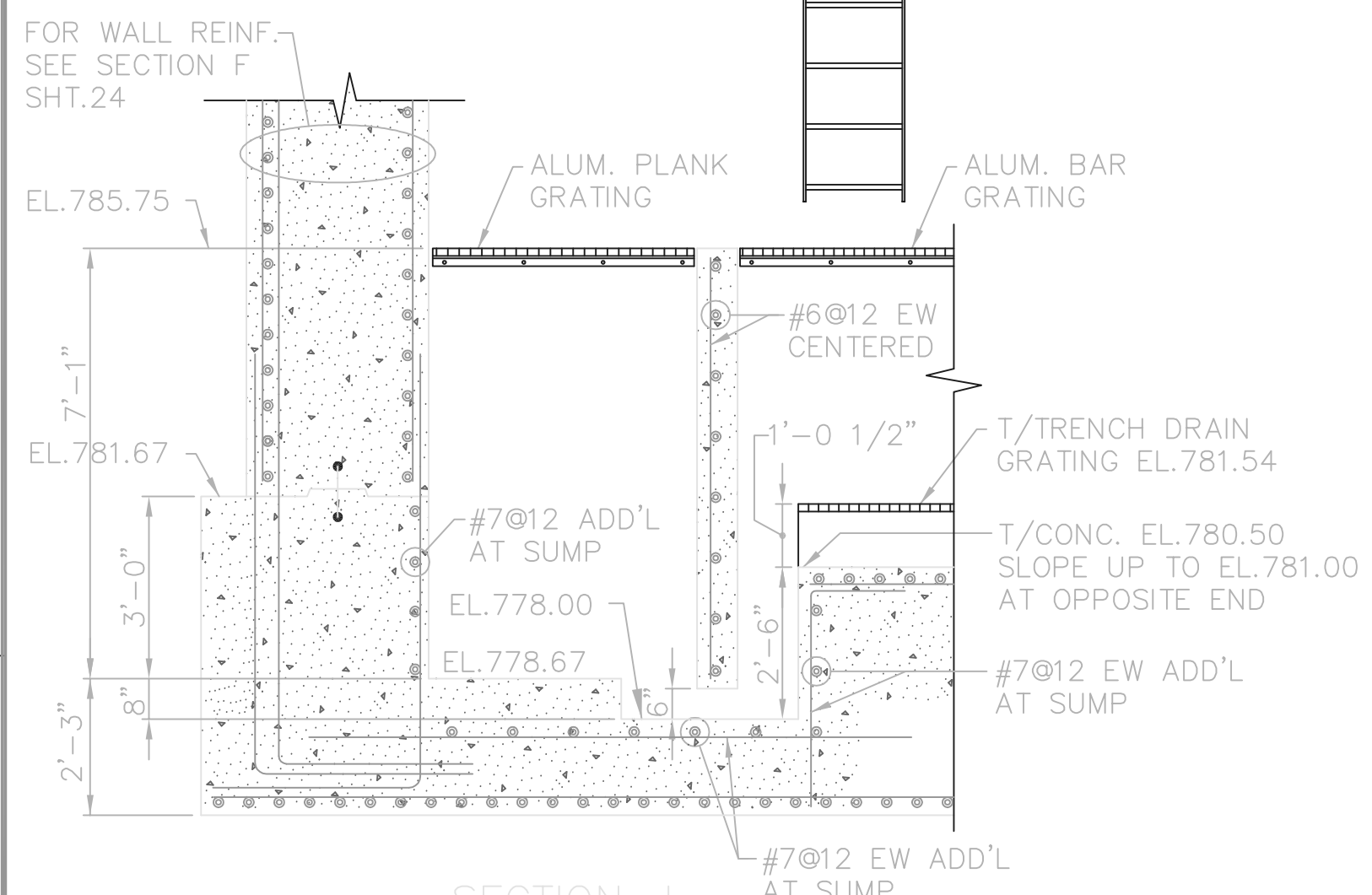
JOB NO.	20571
DESIGNED BY:	SJC/DI
DRAWN BY:	SJC/DI
CHECKED BY:	TO
APPROVED BY:	RD
DATE:	MAR 1999

DOOR SCHEDULE,
 DOOR & FRAME TYPES

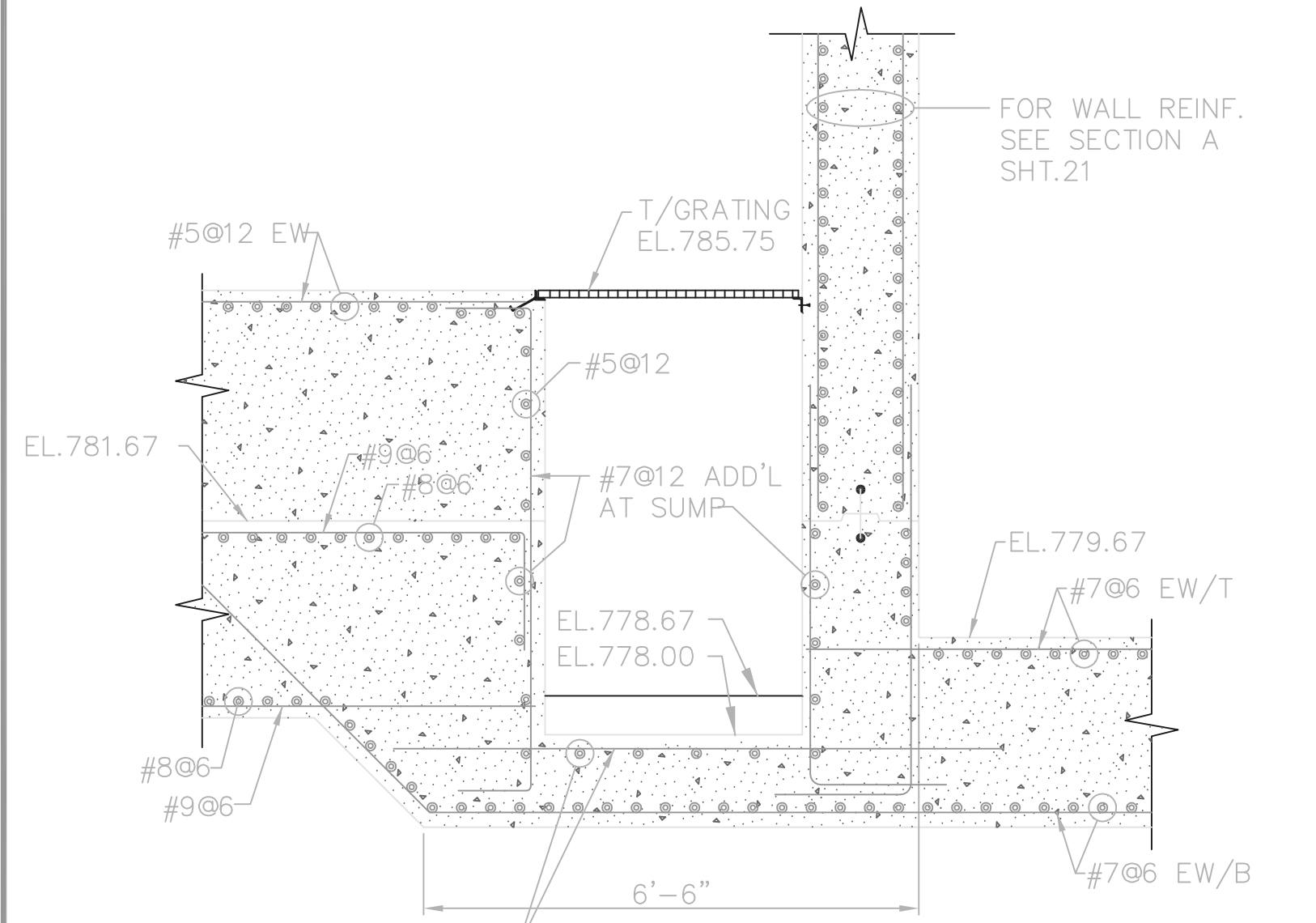
SCALE:	
AS NOTED	
SHEET NO.	OF
7	100



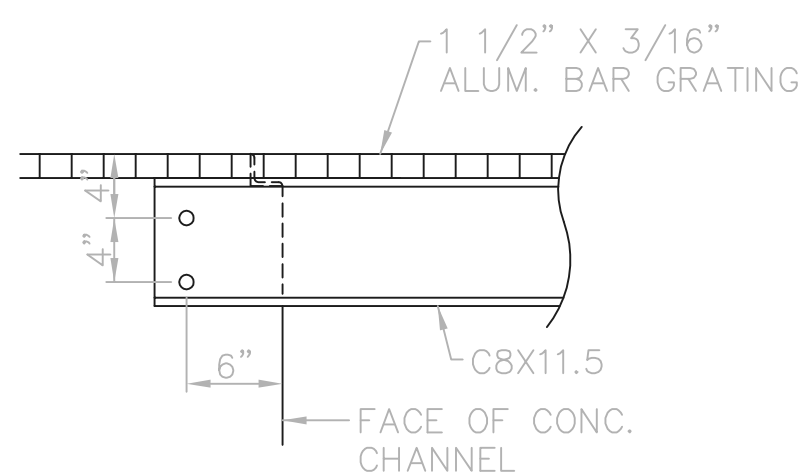
DETAIL E
3/8"=1'-0"



SECTION J
3/8"=1'-0"



SECTION H
3/8"=1'-0"



SECTION L
1"=1'-0"

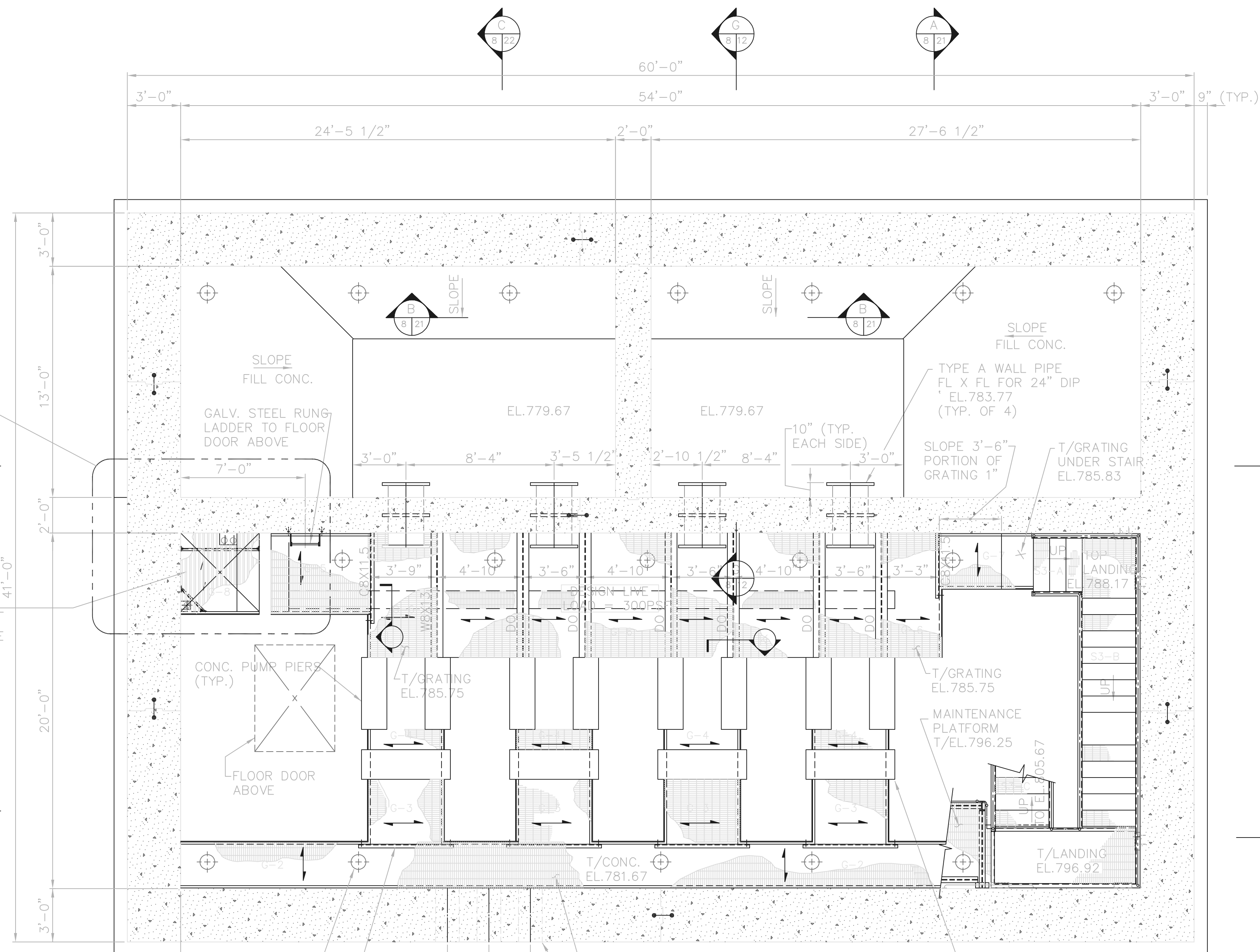
PROVIDE CLIP ANGLES AT OPPOSITE END SIMILAR TO SECTION K

1 1/4" GROUTED POST-TENSIONED ROCK ANCHORS. SEE DETAIL SHT. 4A

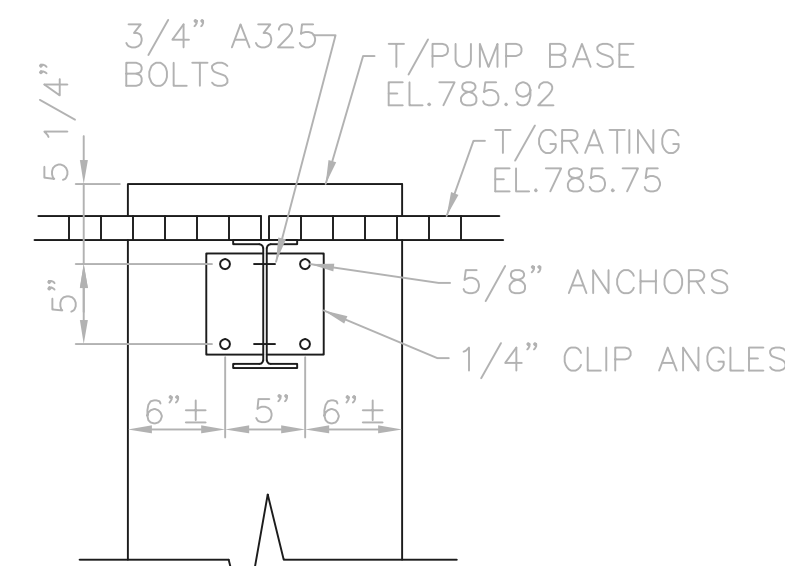
PROVIDE C8X11.5 X 5'-4" LG. SUPPORTS FOR GRATING. SECURE TO WALL W/ (1) 5/8" SS EXP. ANCHOR EACH END. GALV. AFTER FABRICATION (TYP. 4 PLACES)

TOP OF GRATING EL. 785.92
TYPE C WALL SLEEVE FOR 16" PVC (TYP. OF 3)
EL. 794.25

1'-8" X 1'-8" X 5'-0" LONG CONC. PIPE SUPPORT (SPAN OVER TRENCH) TYP. OF 4 SEE DETAIL ON SHEET 43A



PLAN AT EL. 779.67



SECTION K
1"=1'-0"

(SIMILAR AT OPPOSITE END)

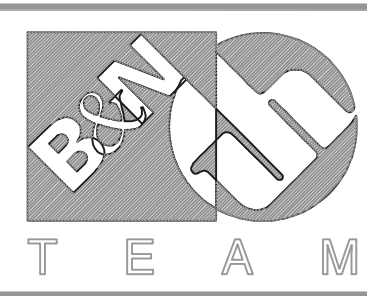
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM Jones & Henry Engineers, Ltd. DATE 08/07/02
MO. / DAY / YR.

© BNW0201

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE
TOL-4714S10
03/08/02 04-V02
P:\PR24025\PM\STARECDWG\8.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

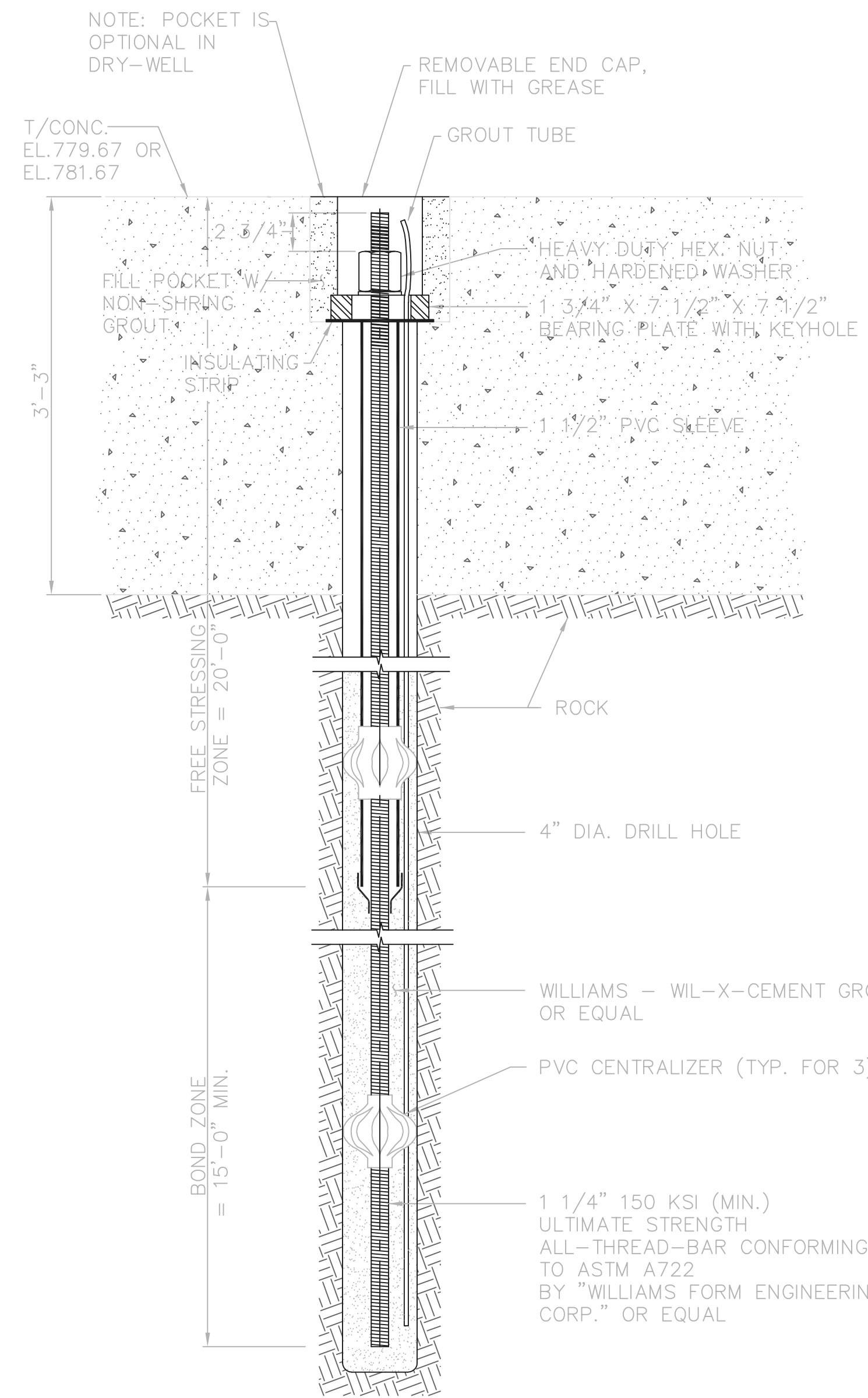
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	84-4714
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

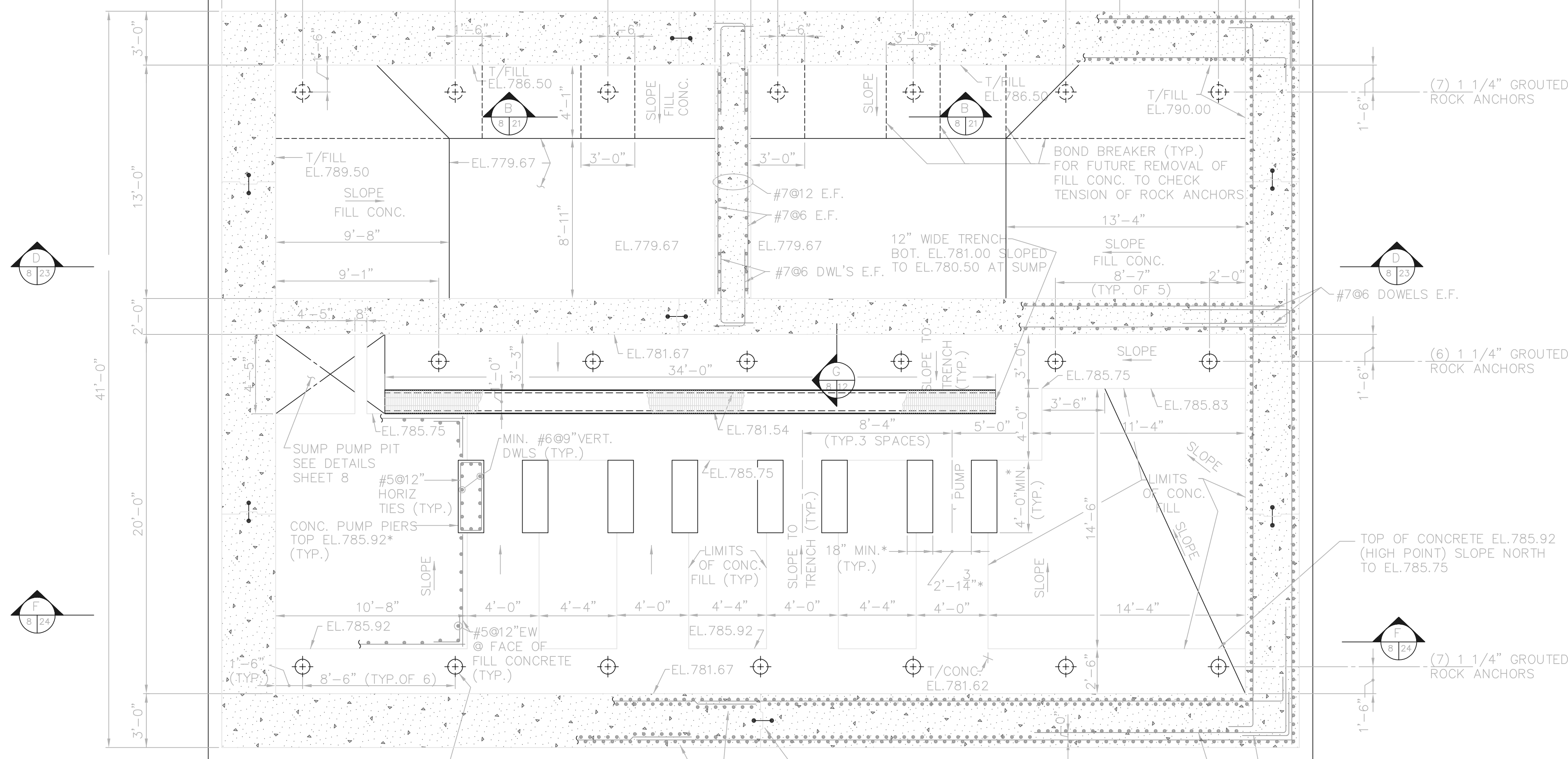
PUMP STATION
STRUCTURAL
PLAN AT EL. 779.67 & 785.92
STAIR & GRATING PLAN AND SUMP DETAILS

SCALE:	1/4"=1'-0"
SHEET NO.	8
OF	100



**GRADED POST-TENSIONED
ROCK ANCHORS**
(TYPICAL OF 20) N.T.S.
DESIGN LOAD = 76,000 LBS.

NOTE:
SLOPING CONC. FILL
IS TYP. EACH SIDE
OF WETWELL



ROCK ANCHOR - SEE DETAIL THIS SHEET
(TYP. OF 20)

NOTE: WHERE BAR SPLICES
ARE REQUIRED, SPLICES OF
ADJACENT BARS SHALL BE
STAGGERED (TYP.)

#6@10 O.F. ADDITIONAL
CORNER BARS BELOW
EL. 801.58 (TYP. S.E.
& S.W. CORNERS)

STANDARD CORNER BAR
TO MATCH HORIZ. REBAR.
(MATCH WALL W/ HEAVIEST
REIN.)

* OR AS REQUIRED BY
PUMP MANUFACTURER.

RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED
WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING
FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD
CONFORM TO CONSTRUCTION CONTRACT RECORDS.
HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO
DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED
TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL
CLARIFICATION OF "RECORD DRAWINGS".
FIRM **Jones & Henry Engineers, Ltd.** DATE 08/07/02
MO. / DAY / YR.

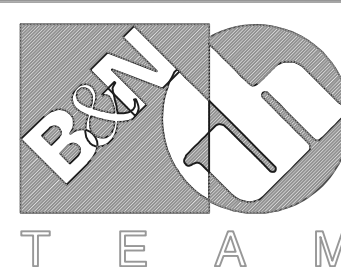
© BNW0201

NOTE:
GRATING SUPPORTS & FRAMES
ARE NOT SHOWN - SEE PLAN
ON SHEET 8

PLAN OF CONC. AT EL. 779.67 & EL. 781.67

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE
TOL-4714515
03/08/02 04-V02
P:\PR24025\PMFSTARECDWG19.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

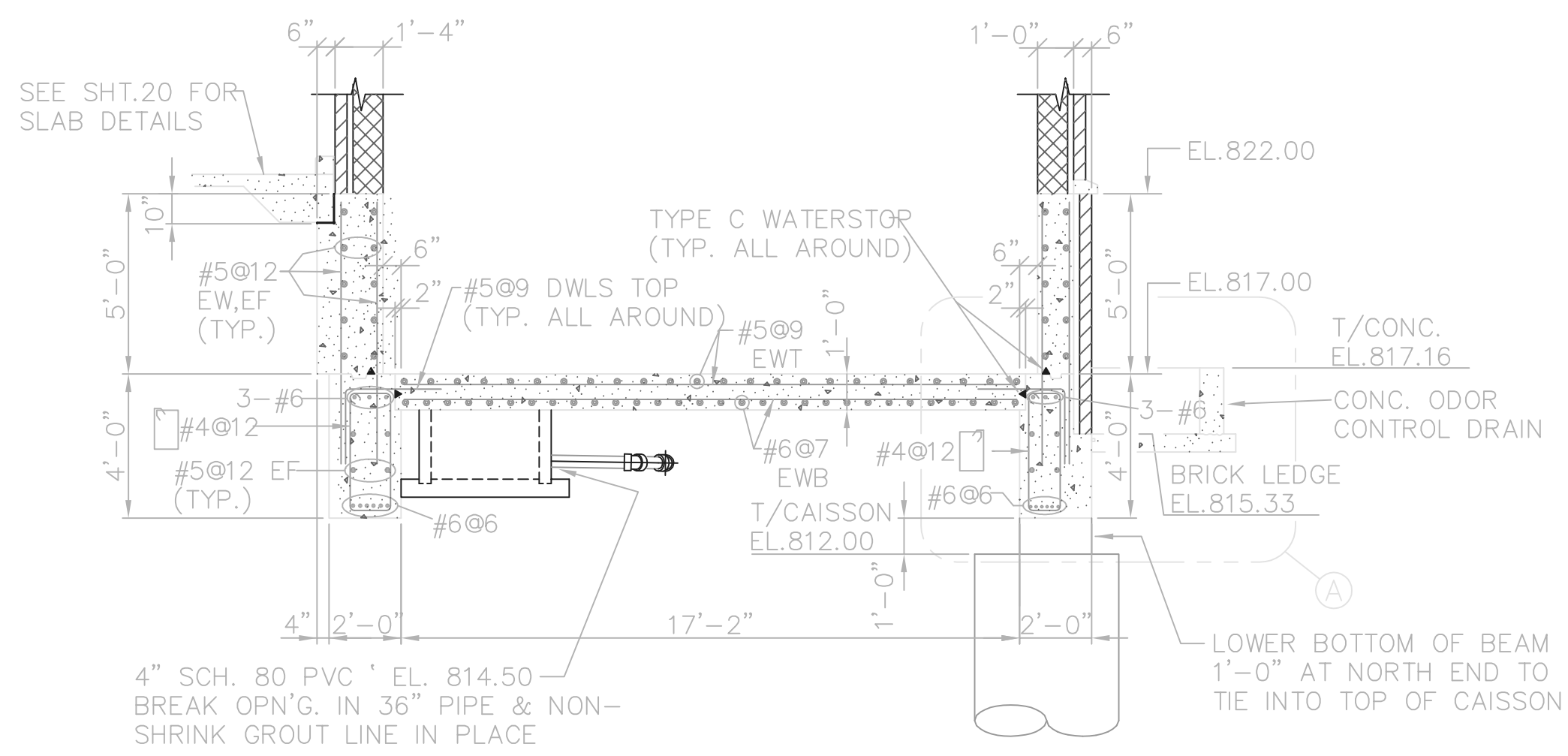
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

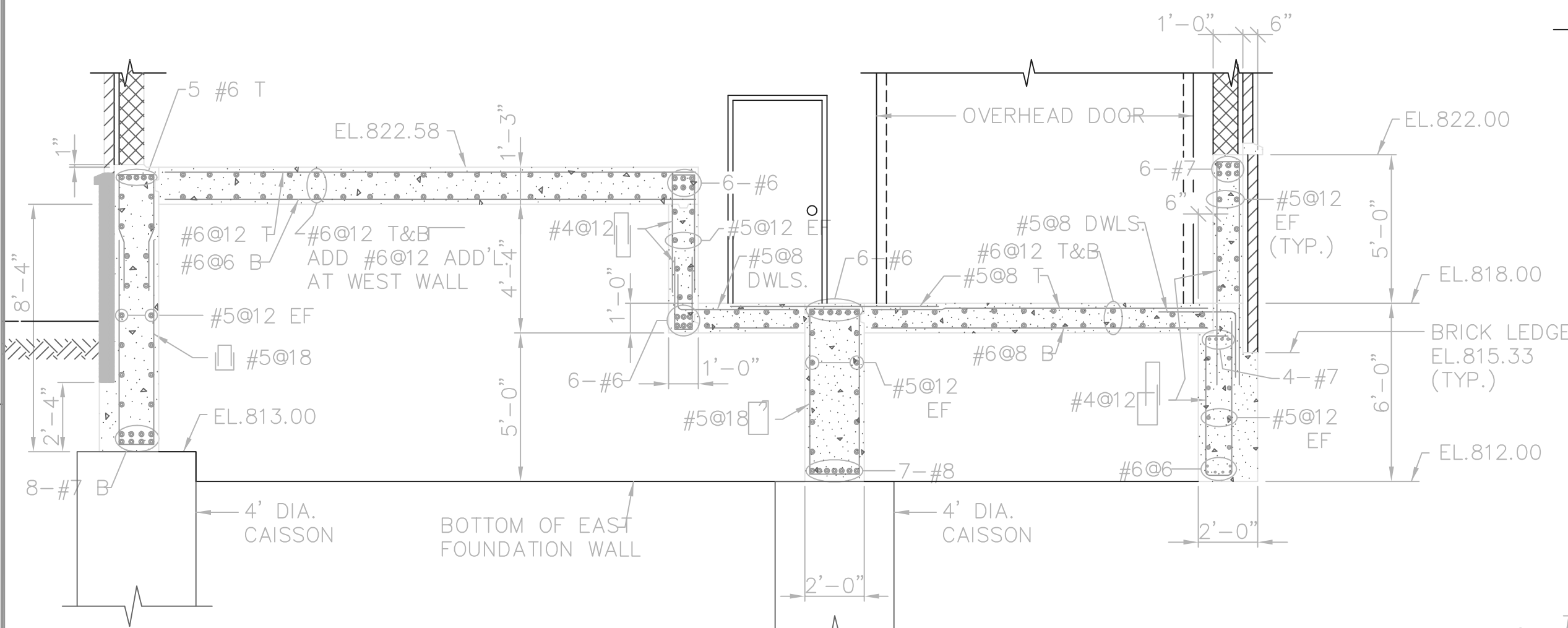
JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
STRUCTURAL
PLAN OF CONCRETE
EL. 779.67 & EL. 781.67

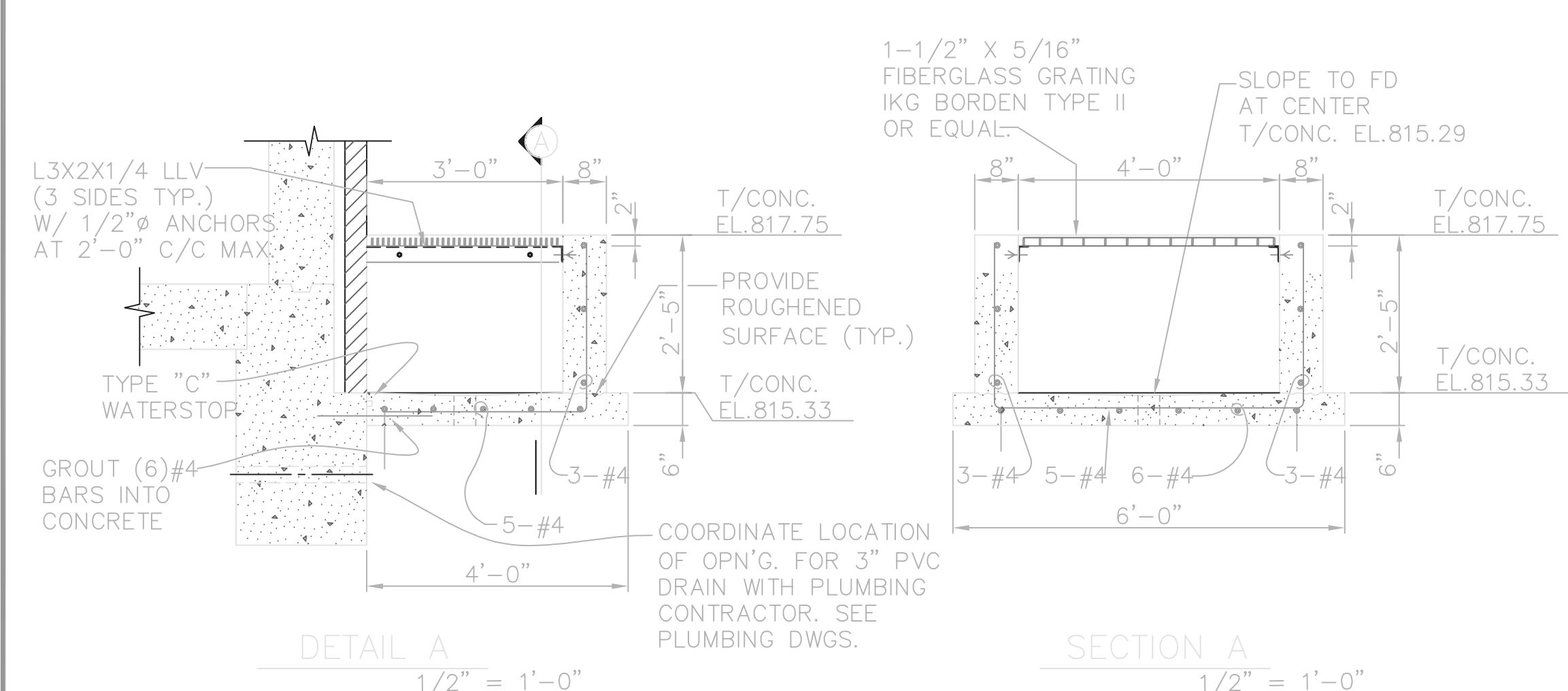
SCALE:	
1/4" = 1'-0"	
SHEET NO.	OF
9	100



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

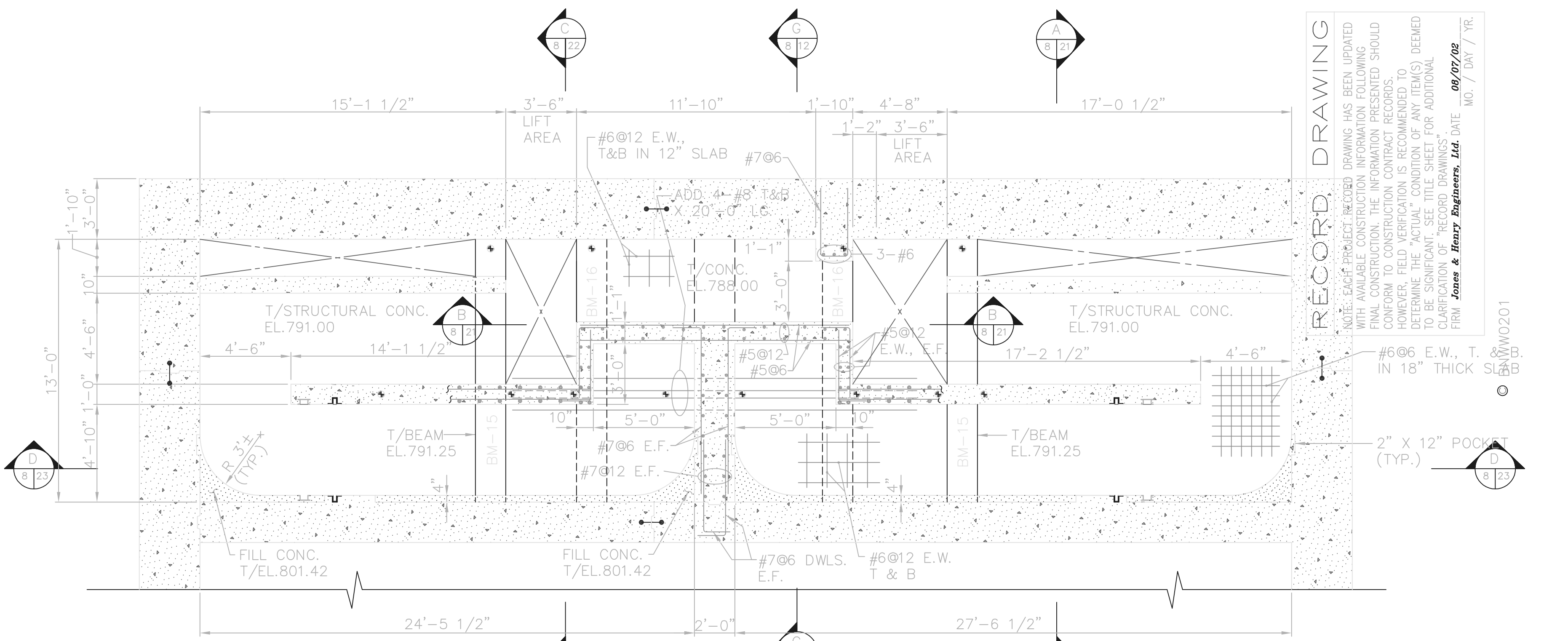


SECTION H
1/4" = 1'-0"

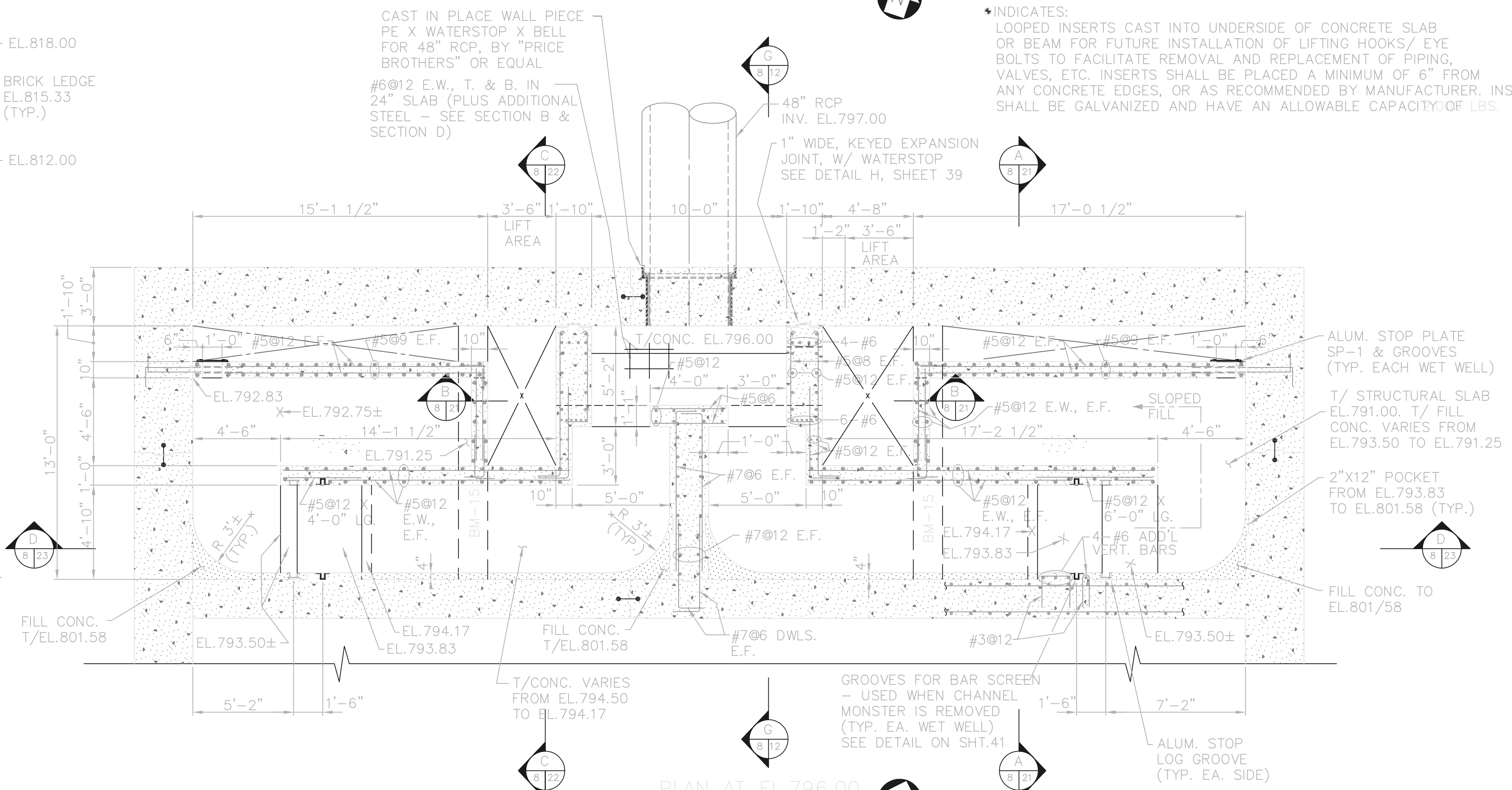


DETAIL A
1/2" = 1'-0"

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



PLAN AT EL. 791.25



PLAN AT EL. 796.00

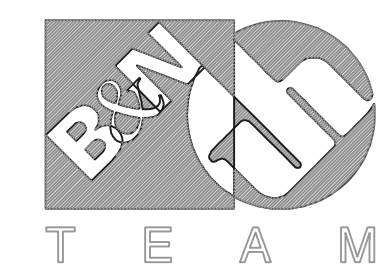
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF RECORD DRAWINGS.

Jones & Henry Engineers, Ltd. DATE: 08/07/02
MO: 7 DAT: / YR: MW0201

TOL-4714516
03/12/02 04-V02
P:\PR24025\PMPS\ARECORD\10.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

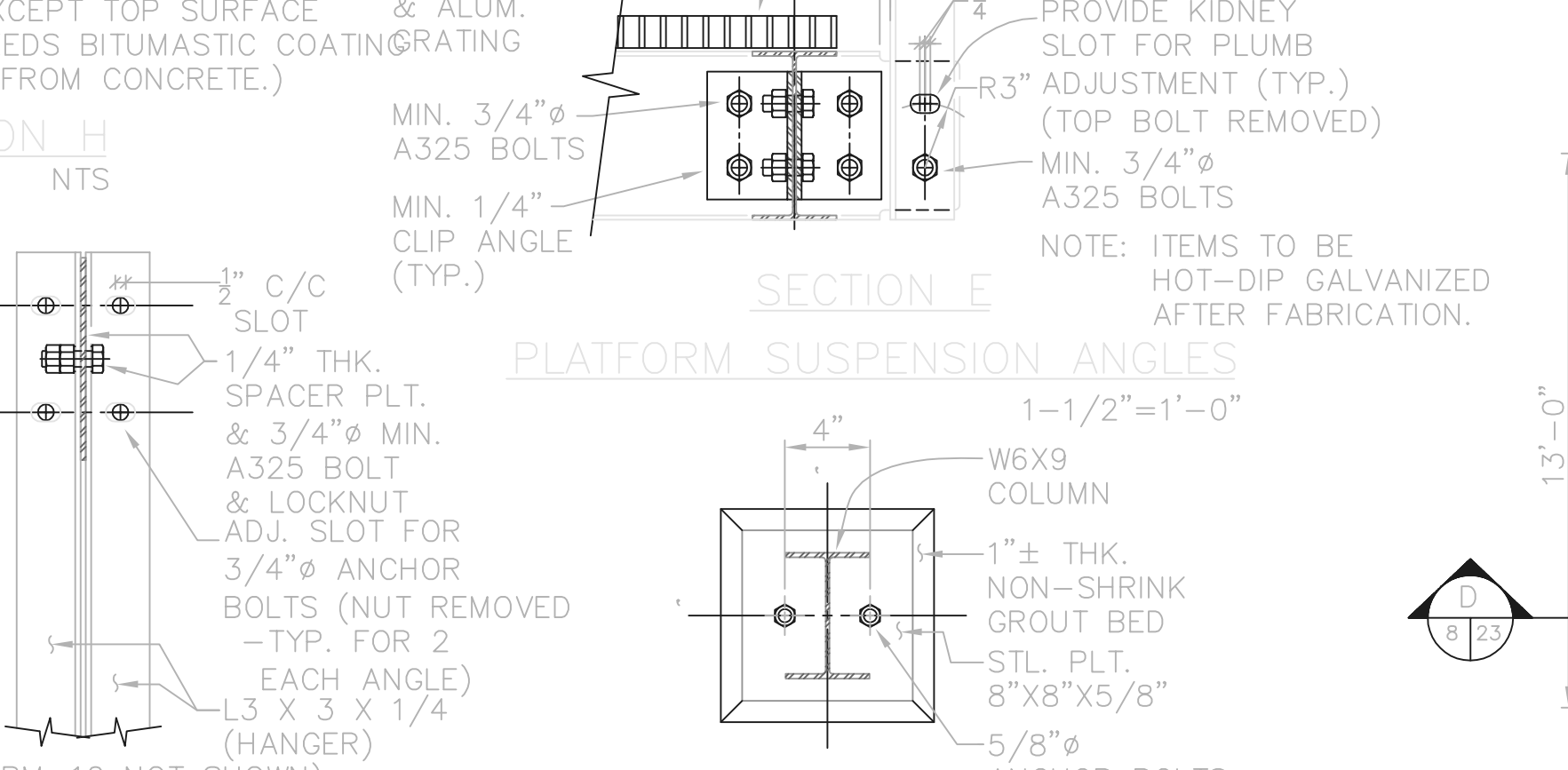
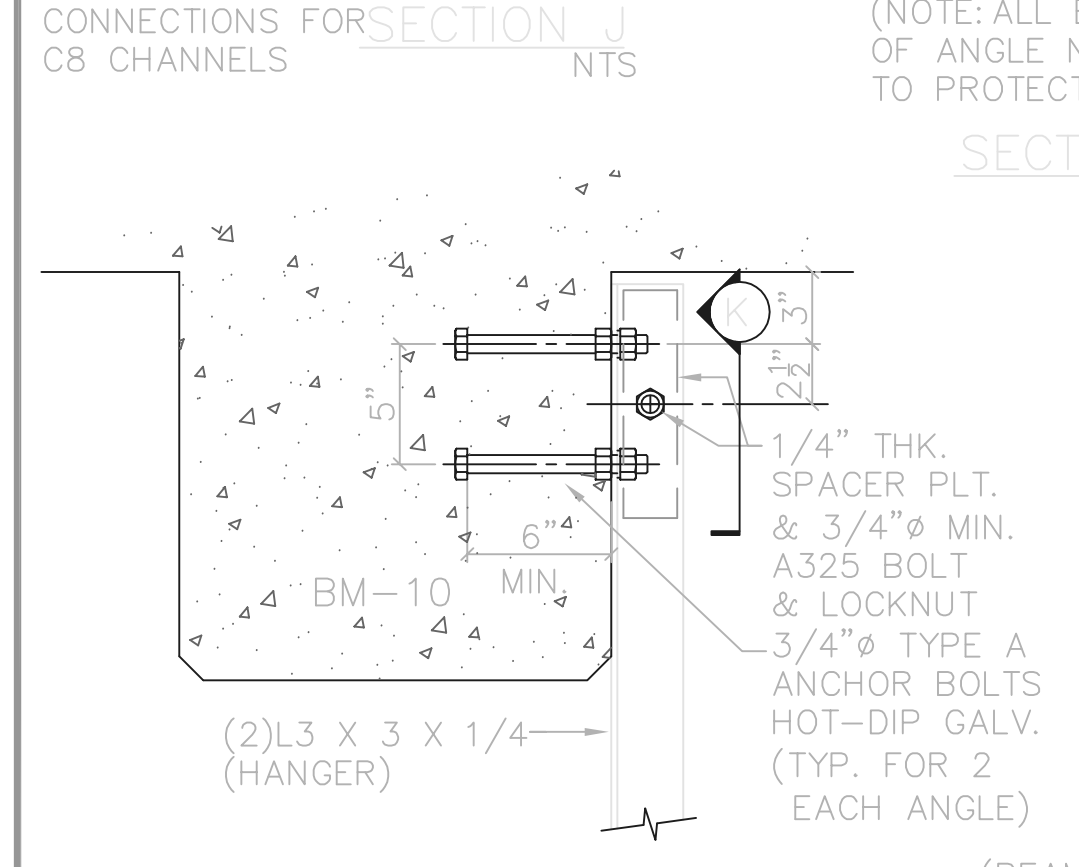
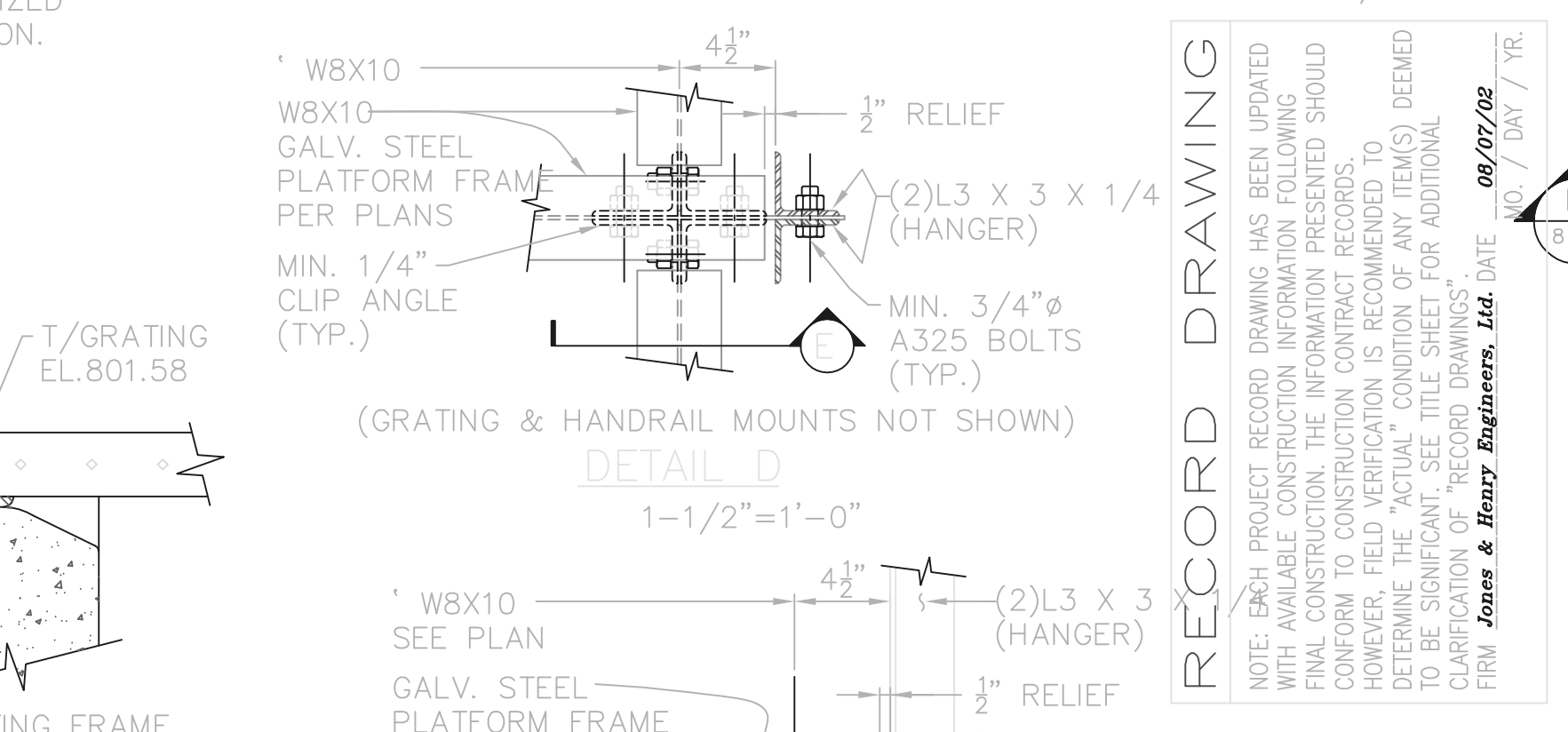
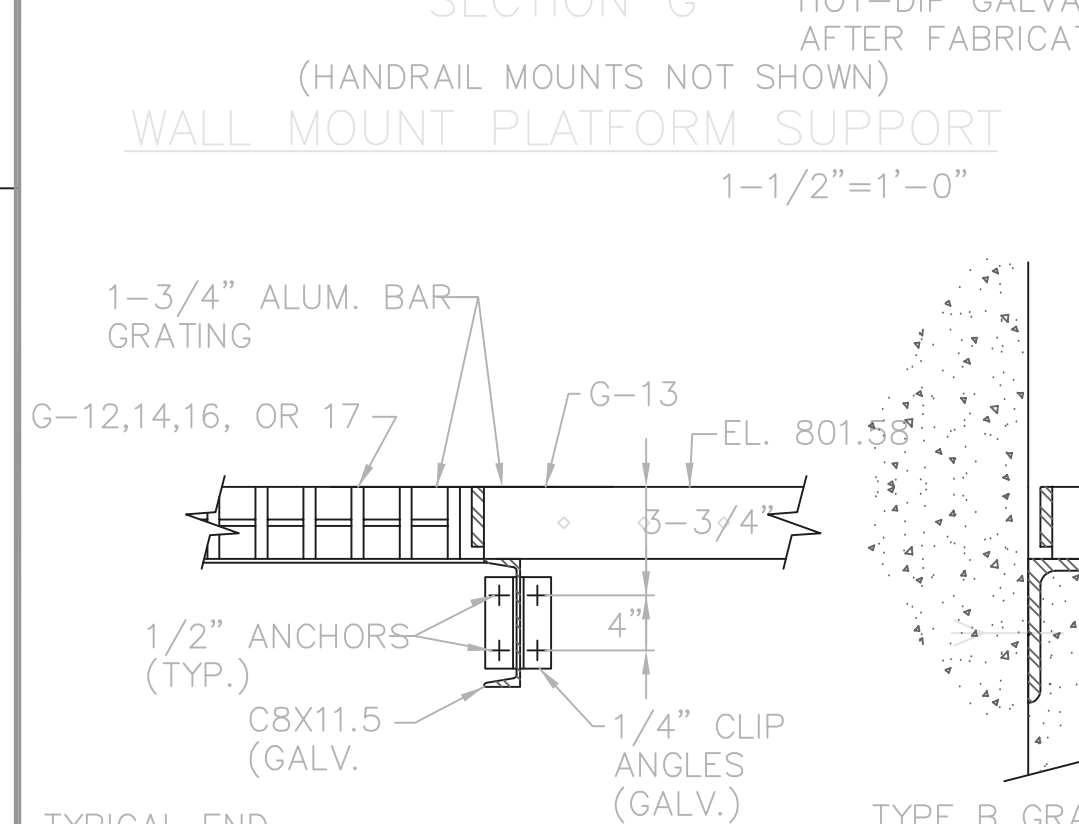
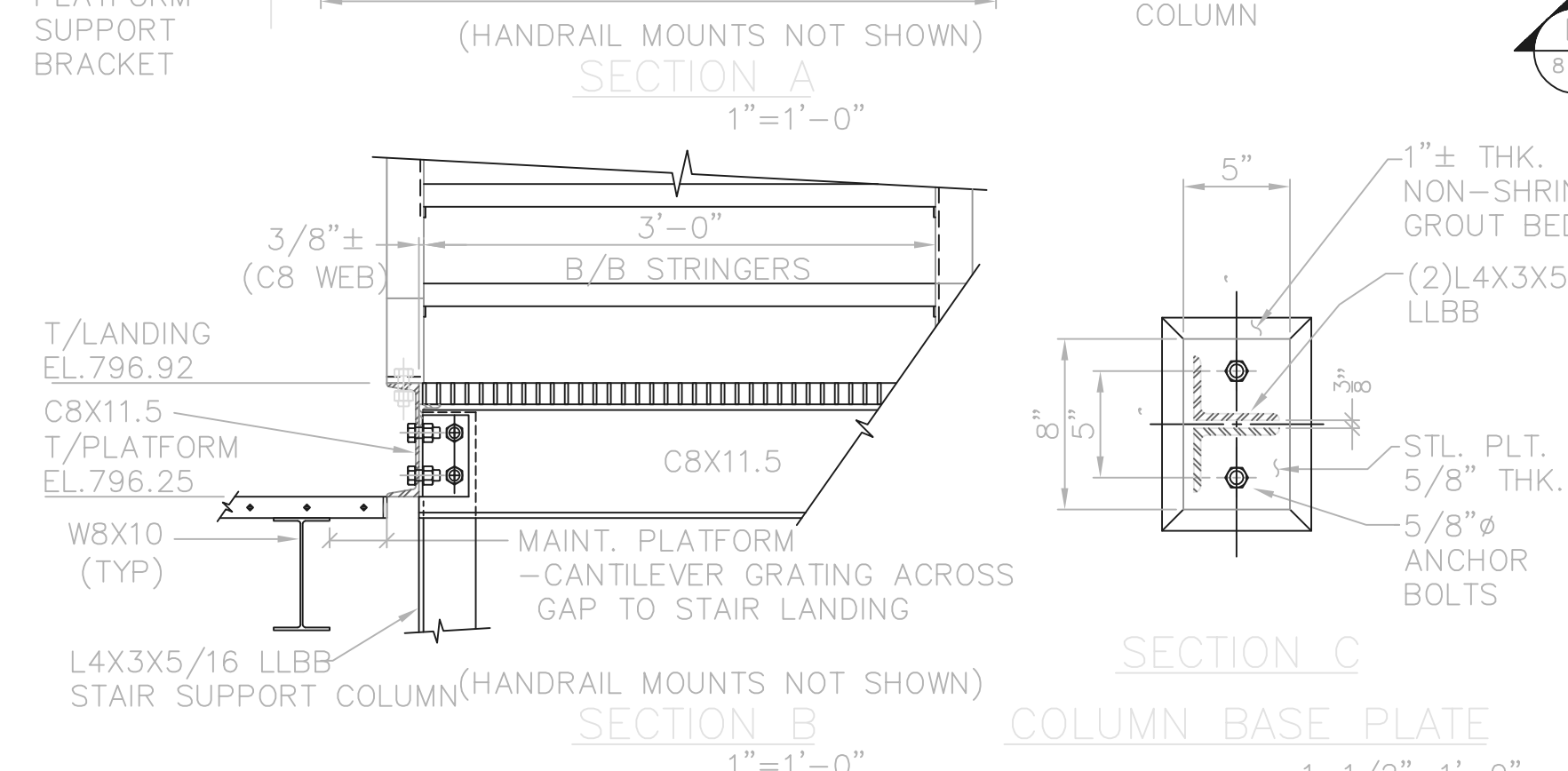
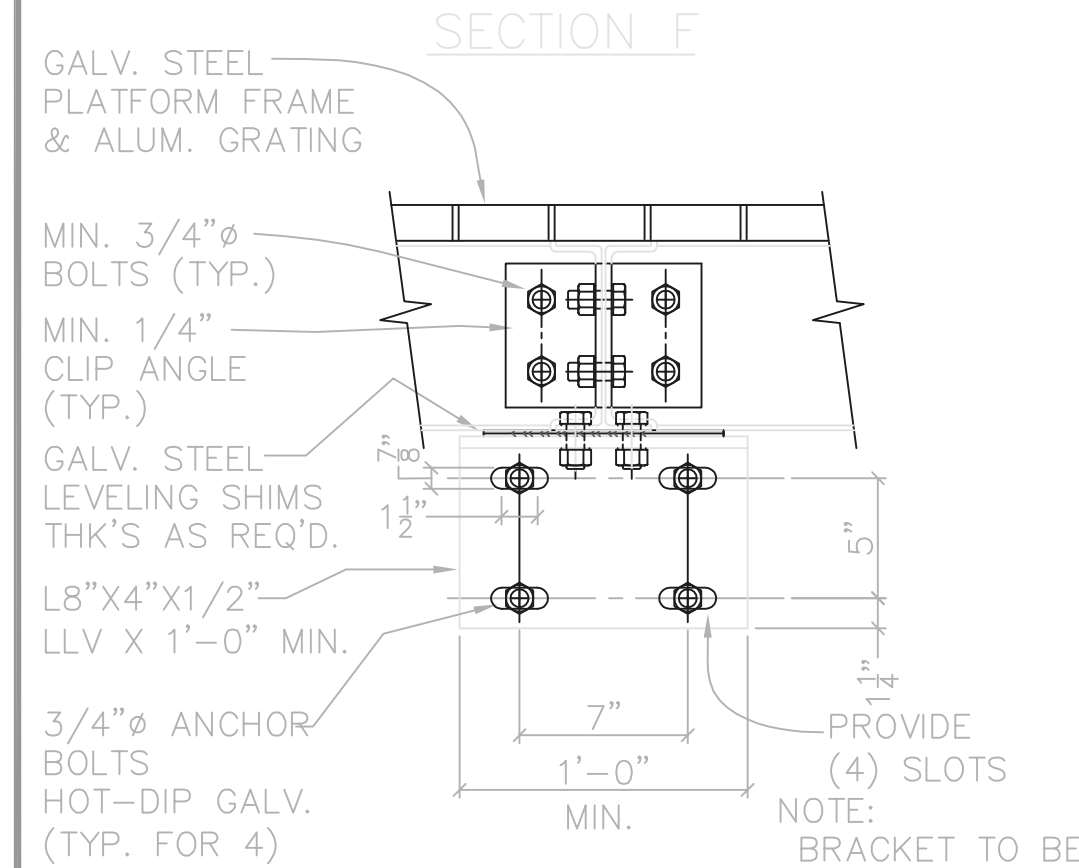
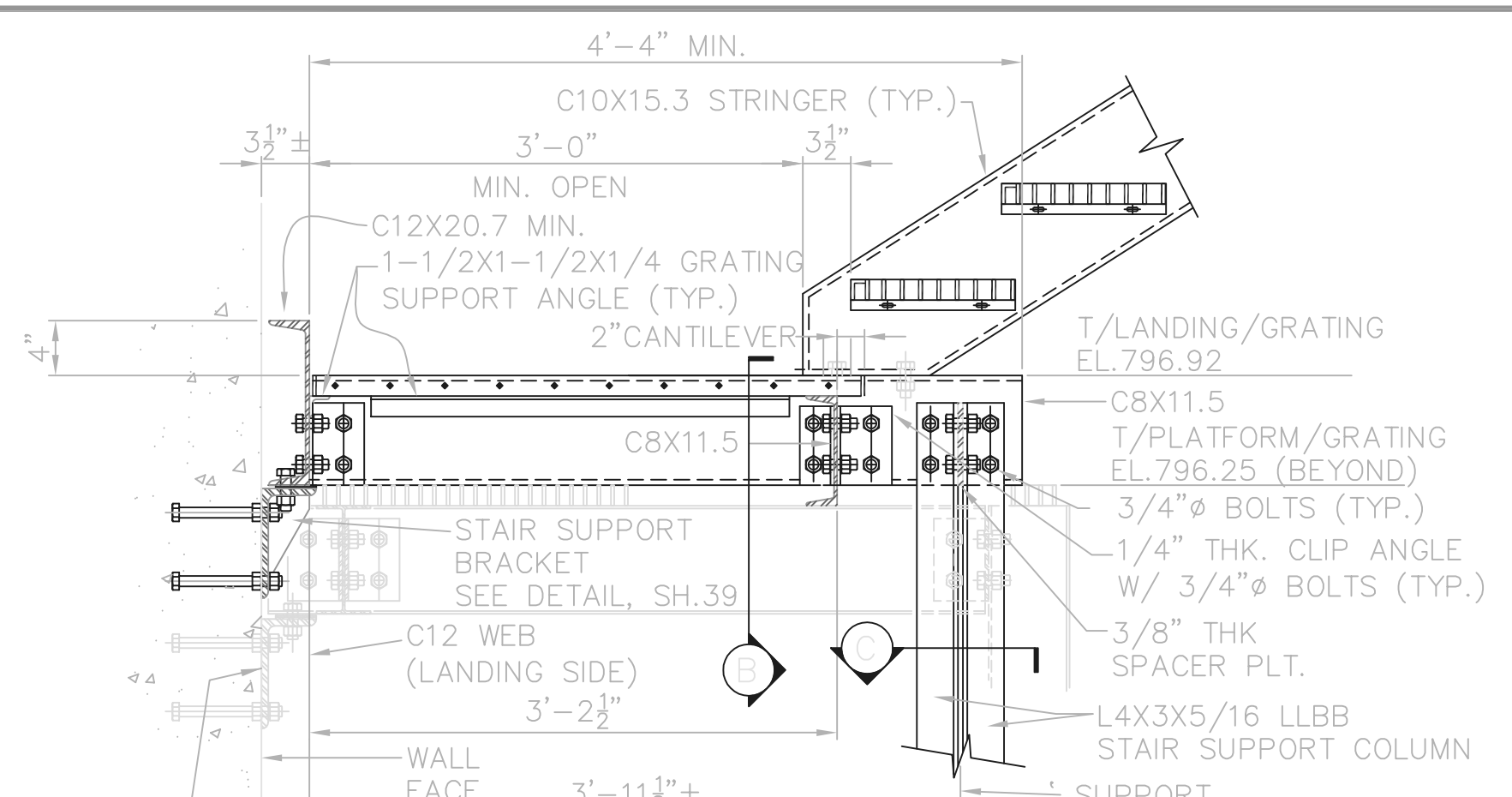
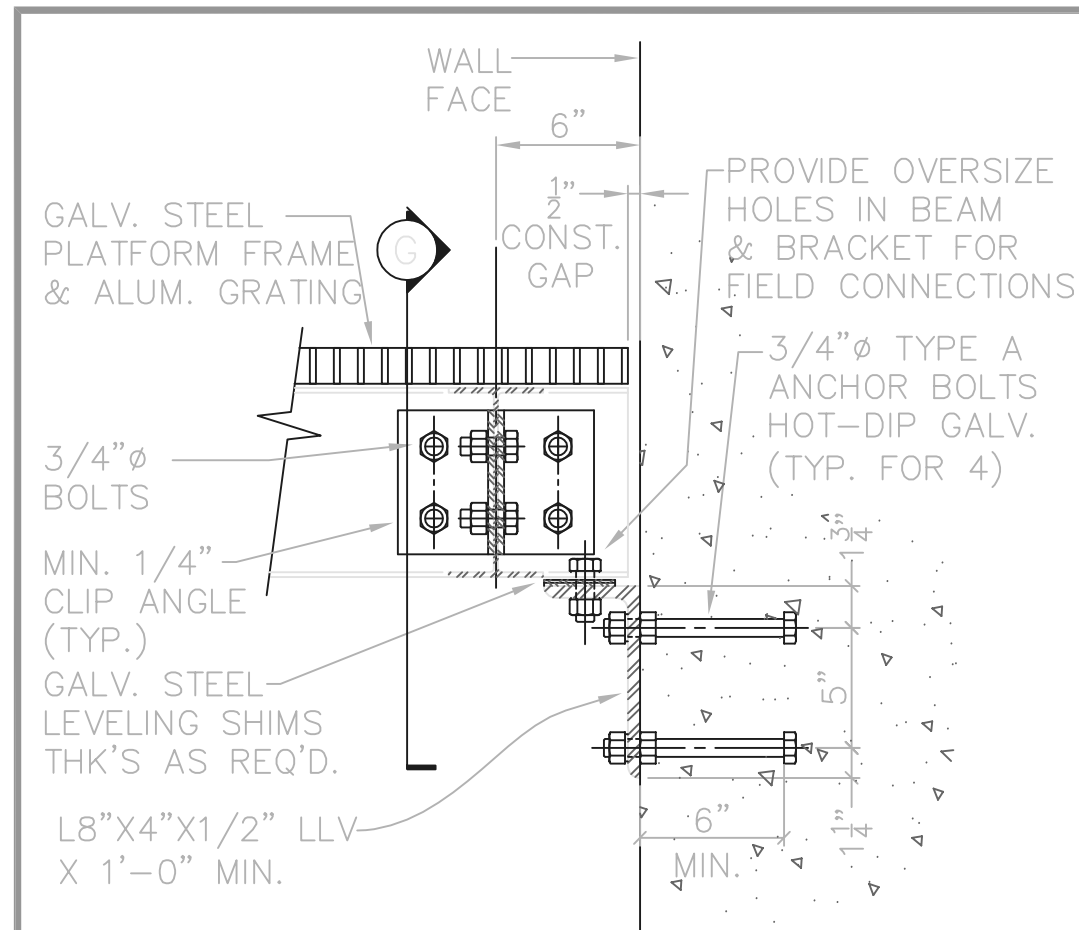
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

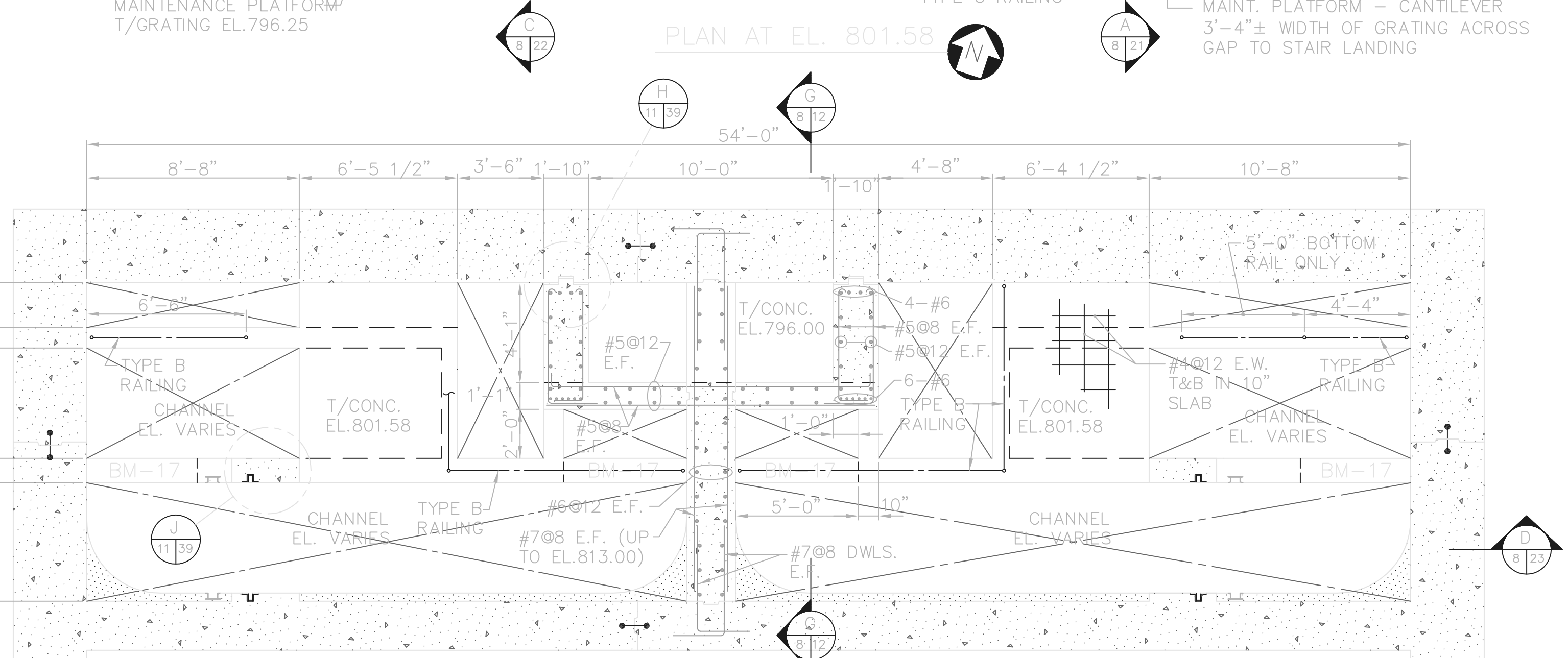
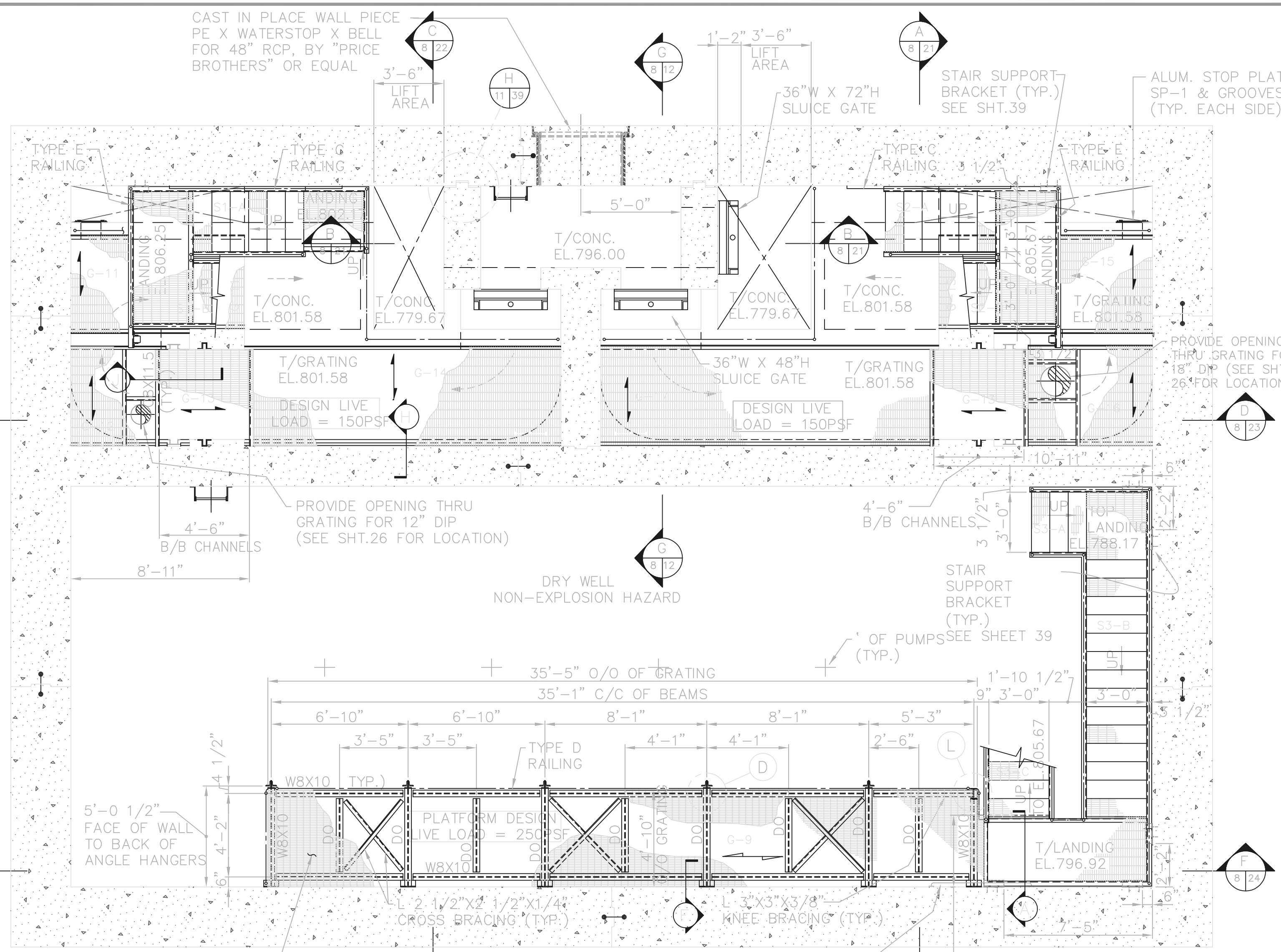
JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
STRUCTURAL
PLAN AT EL. 796.00 & EL. 791.25

SCALE:	1/4" = 1'-0"
SHEET NO.	10
OF	100

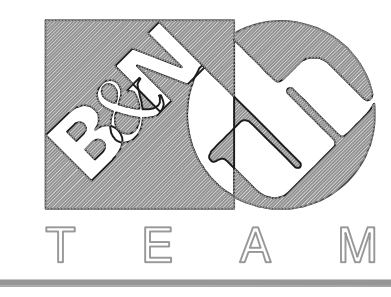


RECORD DRAWING
 NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEMS DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
 FIRM: Jones & Henry Engineers, Ltd. DATE: 09/07/02



TOL-4714509
 04/18/02 04-V02
 P:\PR24025\PMF\RECORDING\11.DWG

NO.	REVISIONS	DATE	BY	CHK.



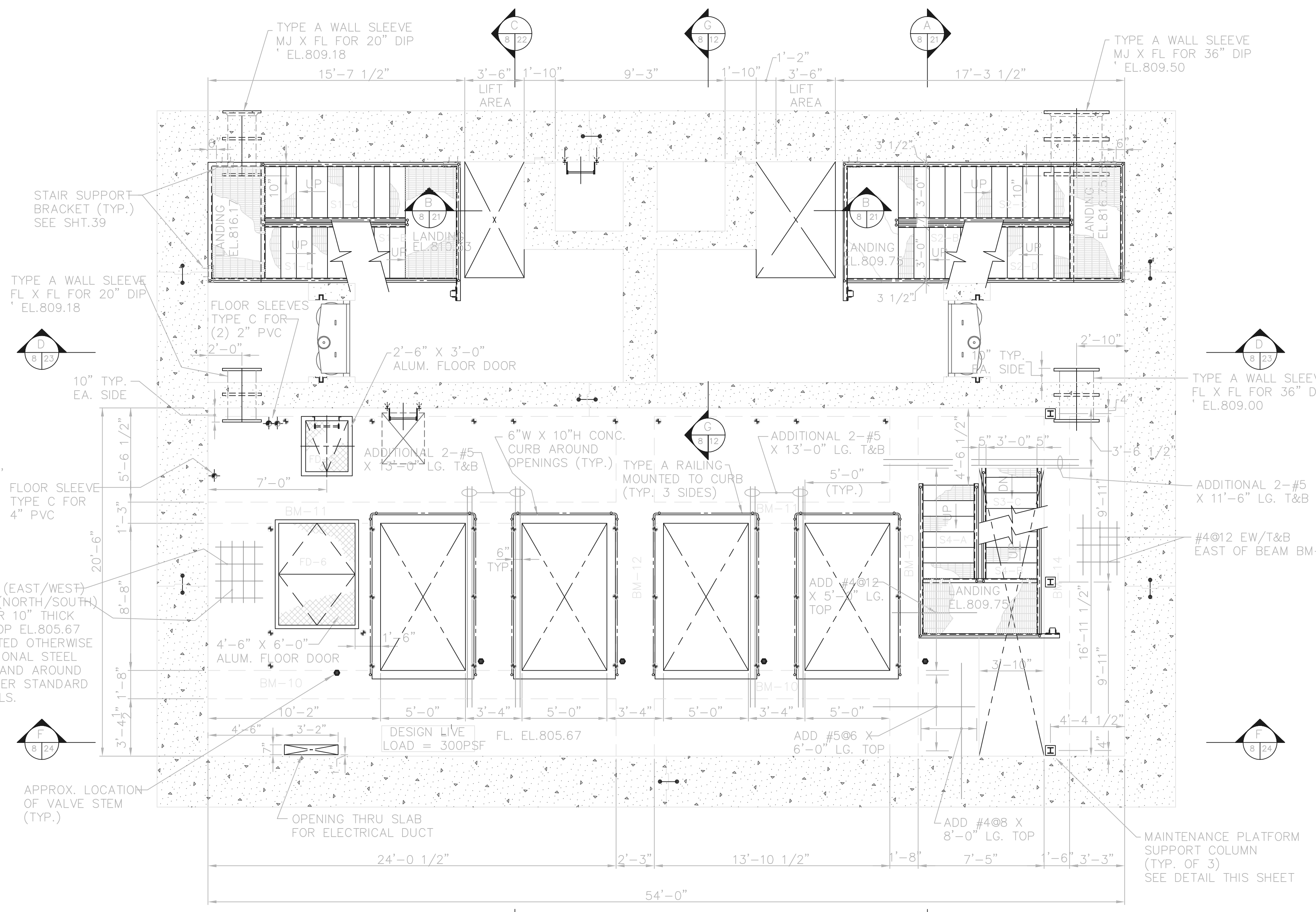
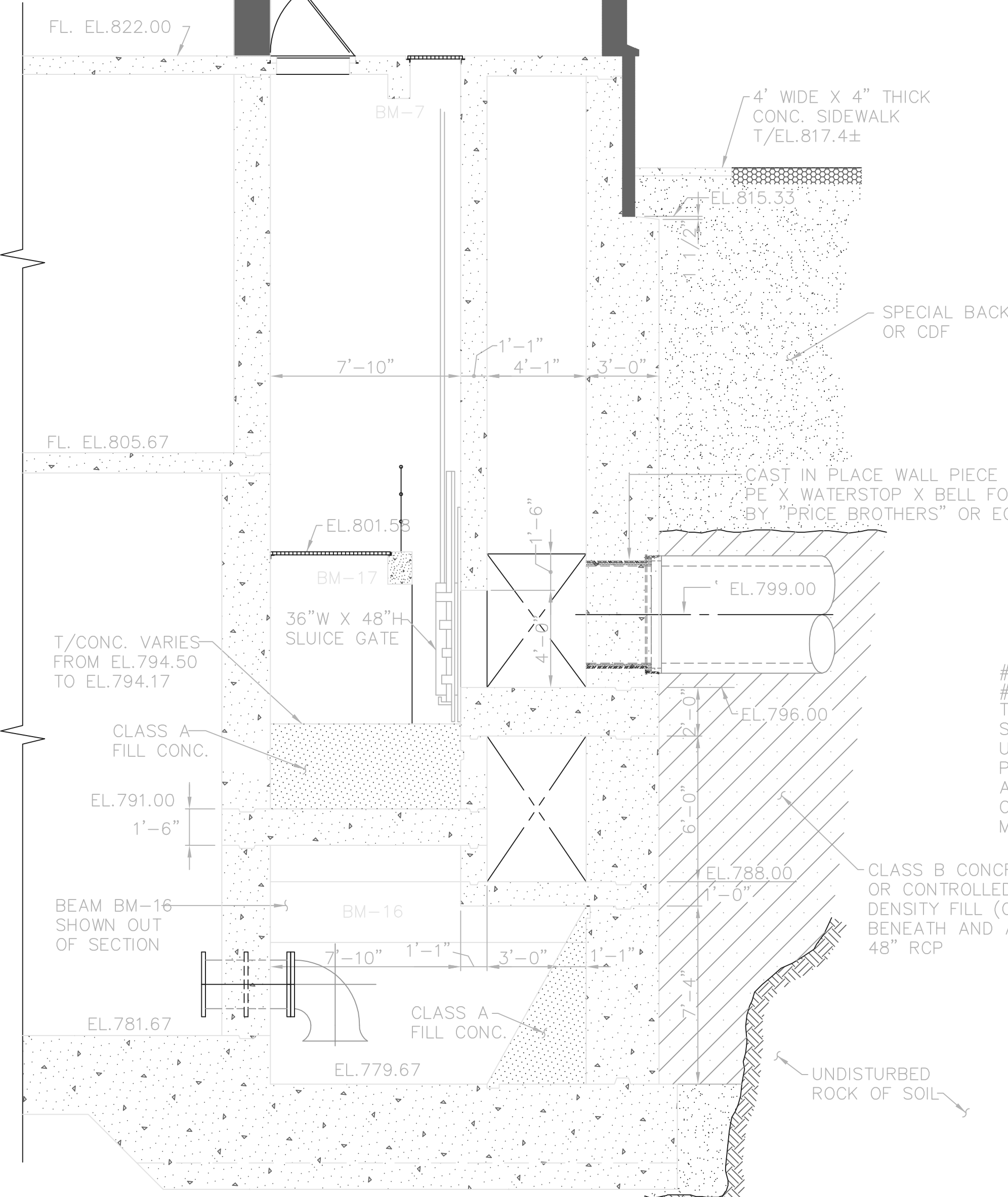
Burgess & Niple, Limited
 Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

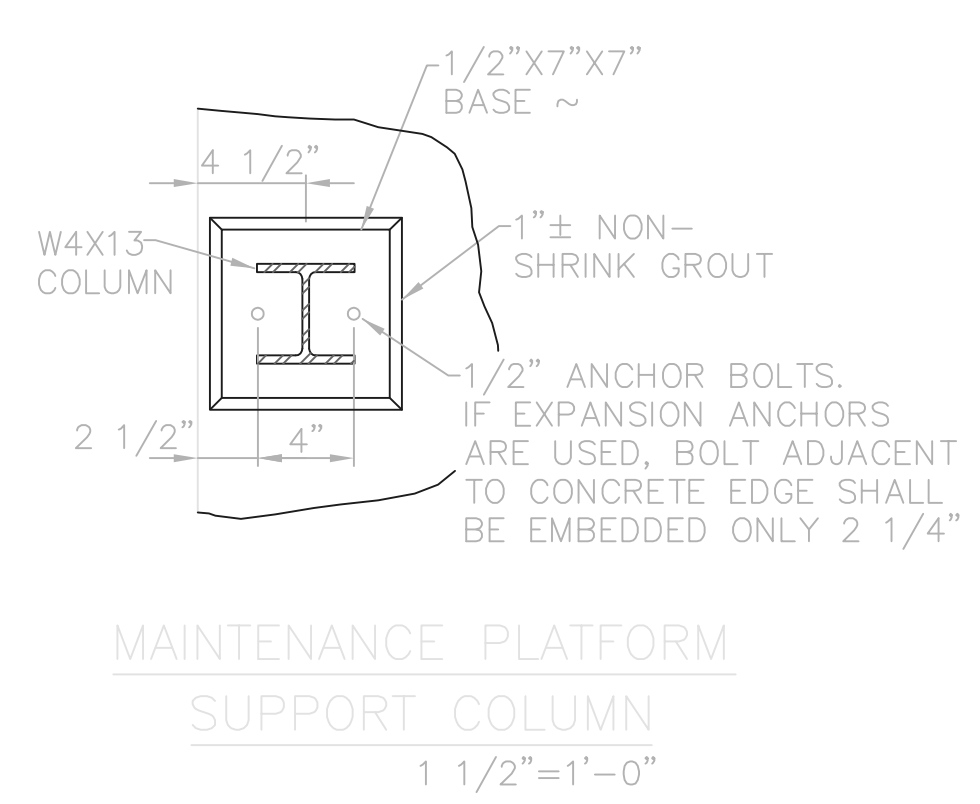
PUMP STATION
 STRUCTURAL
 PLAN AT EL.801.58

SCALE:	1/4"=1'-0"
SHEET NO.	11
OF	100



INDICATES:
 LOOPED INSERTS CAST INTO UNDERSIDE OF CONCRETE SLAB OR BEAM FOR FUTURE INSTALLATION OF LIFTING HOOKS/ EYE BOLTS TO FACILITATE REMOVAL AND REPLACEMENT OF PIPING, VALVES, ETC. INSERTS SHALL BE PLACED A MINIMUM OF 6" FROM ANY CONCRETE EDGES, OR AS RECOMMENDED BY MANUFACTURER. INSERTS SHALL BE GALVANIZED AND HAVE AN ALLOWABLE CAPACITY OF LBS.

RECORD DRAWING
 NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
 FIRM Jones & Henry Engineers, Ltd. DATE 08/07/02
 MO. / DAY / YR.



TOL-4714506
 03/21/02 04-V02
 P:\PR24025\PMPSARECDWG\12.DWG

NO.	REVISIONS	DATE	BY	CHK.

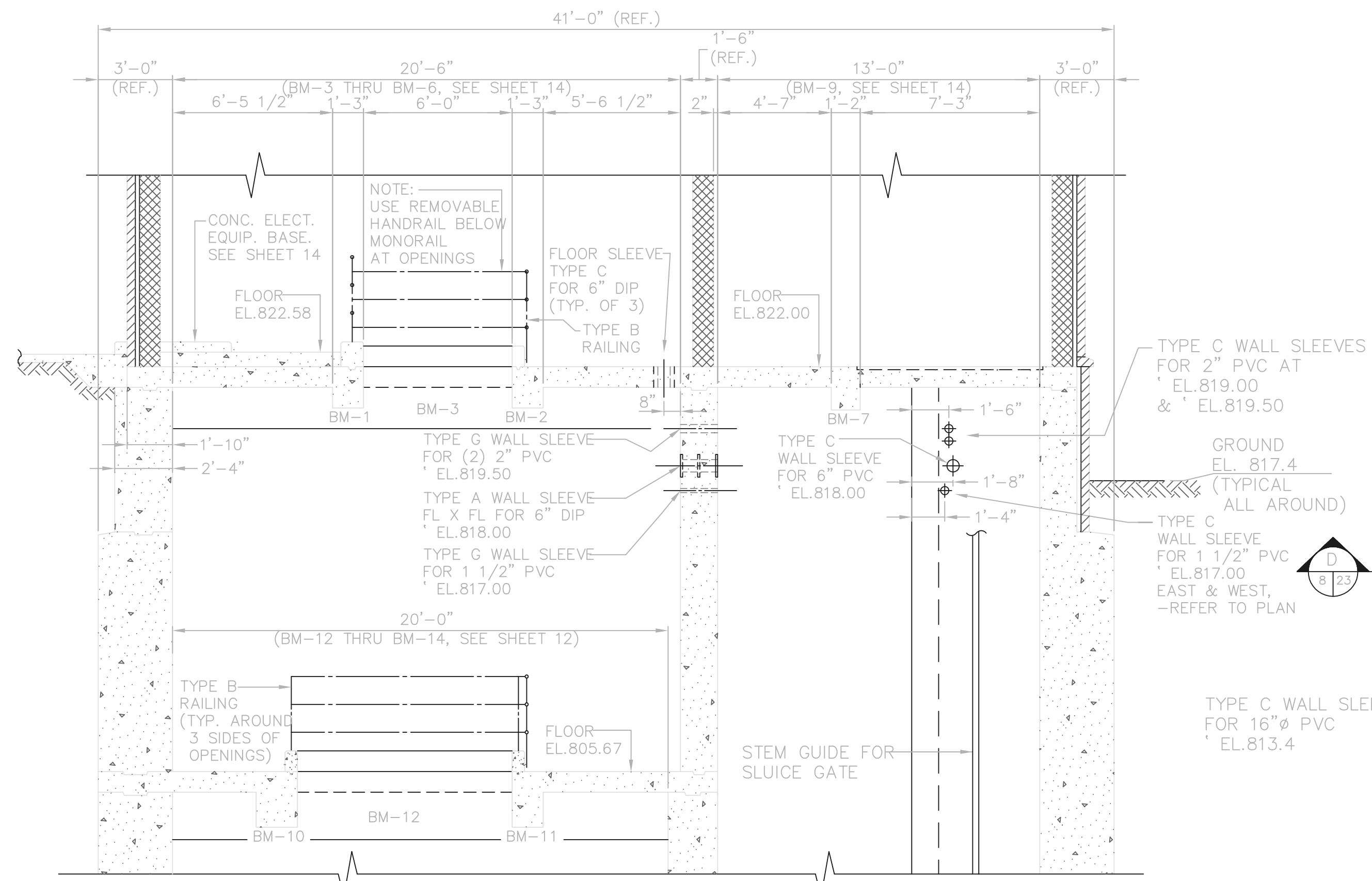
Burgess & Niple, Limited
 Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

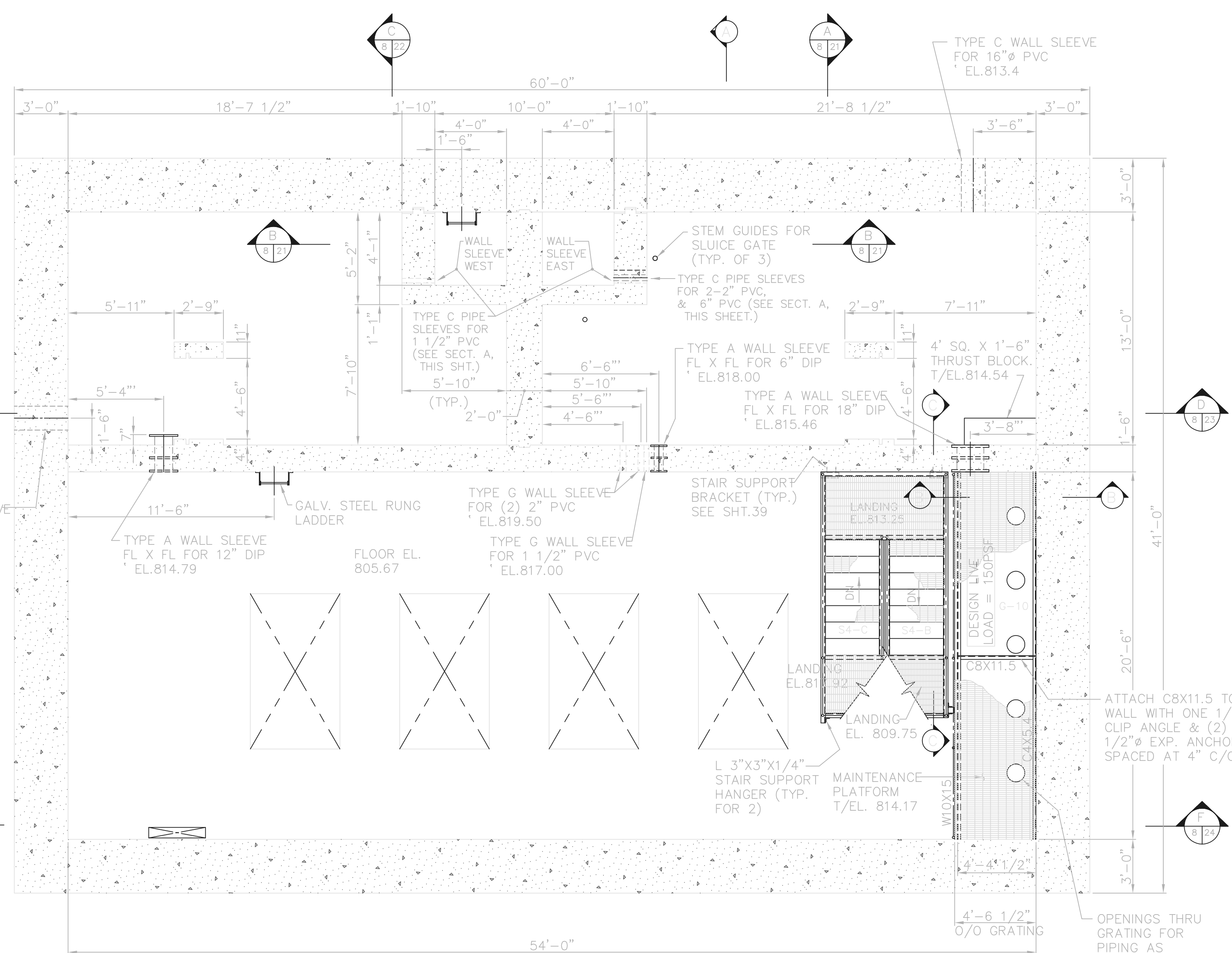
JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
 STRUCTURAL
 PLAN AT EL 805.67

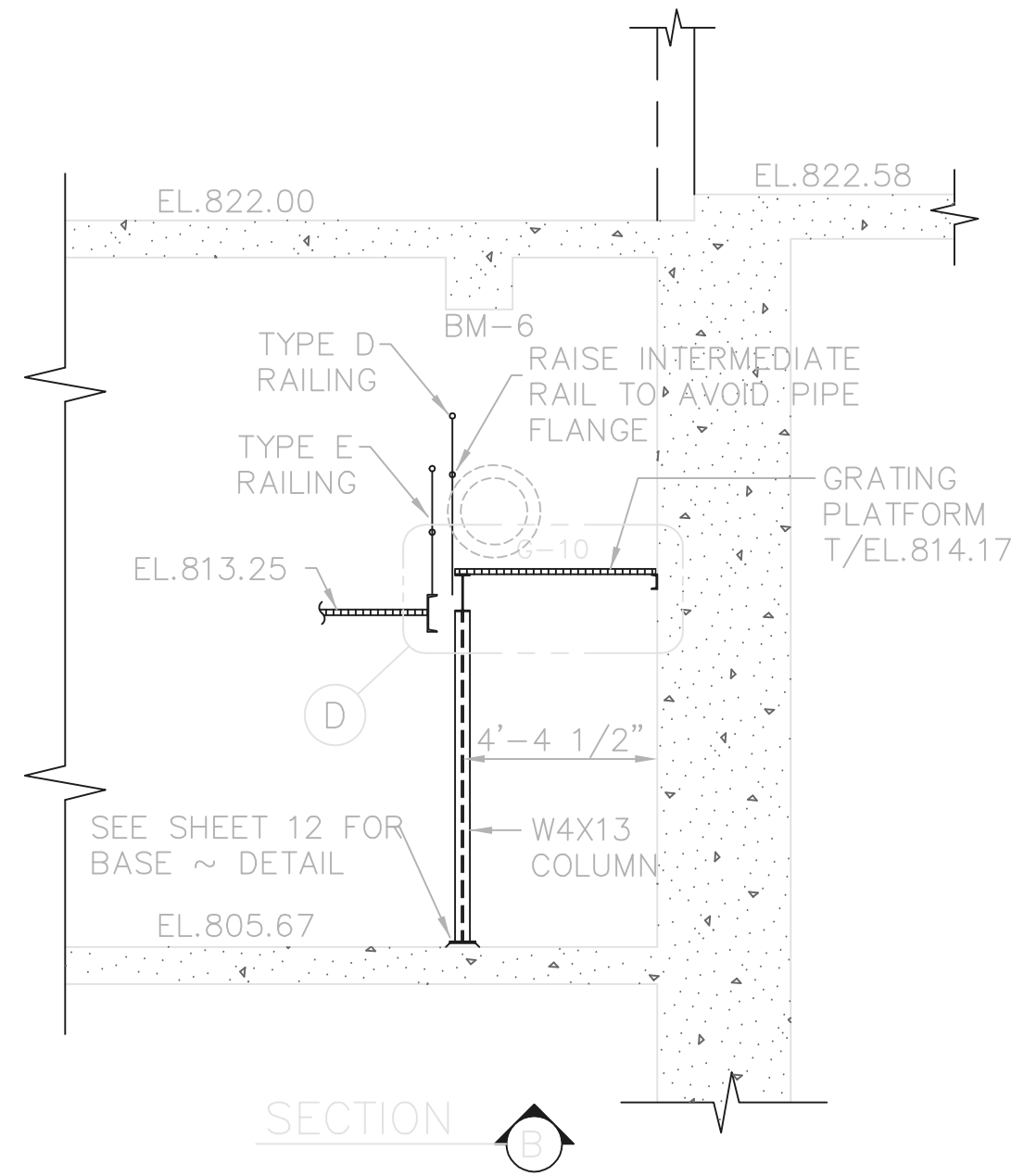
SCALE:	
1/4"=1'-0"	
SHEET NO.	OF
12	100



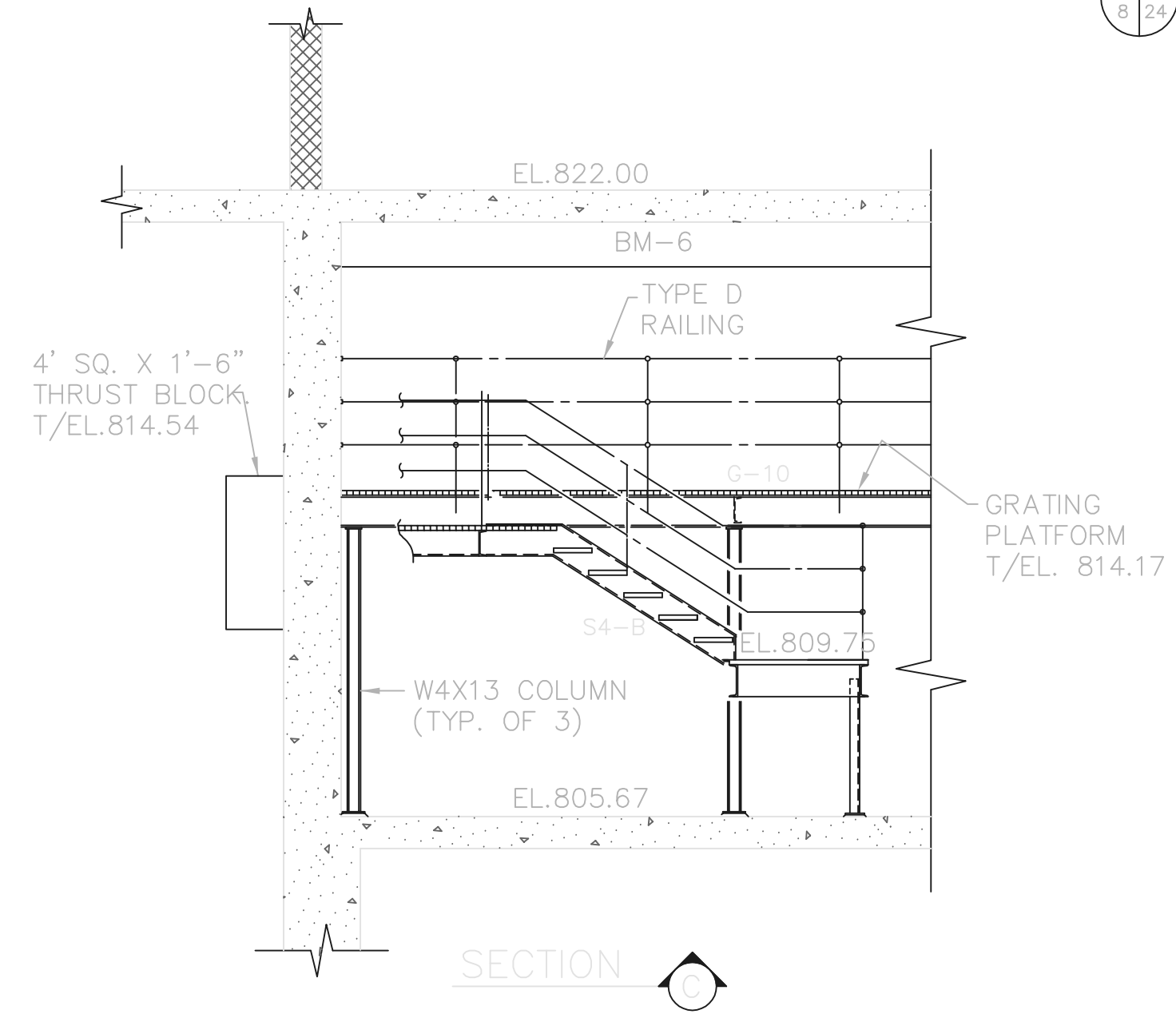
SECTION A-A



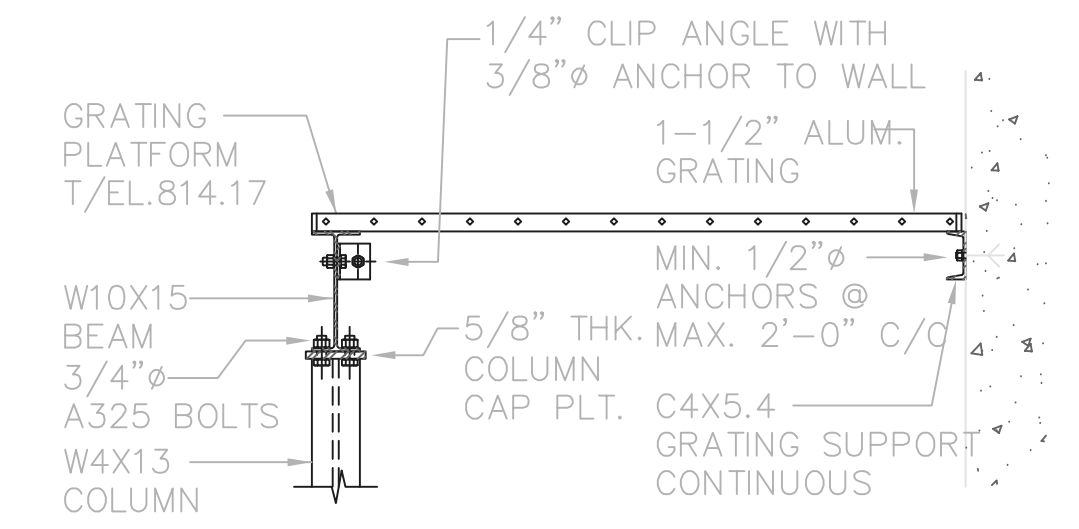
PLAN AT EL. 818.00



SECTION B-B



SECTION C-C



NOTE:
ALL PLATFORM FRAMING
& SUPPORTS TO BE GALVANIZED.

(PIPE RAILING NOT SHOWN)
DETAIL D
1-1/2"=1'-0"

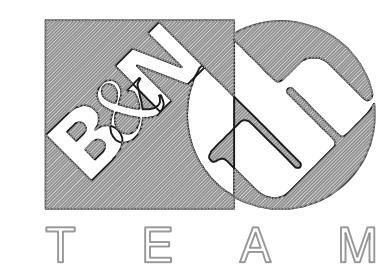
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
MO. / DAY / YR.

© BNW0201

TOL-4714513
04/19/02 04-V02
P:\PR24025\PM\STARECDWG\13.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

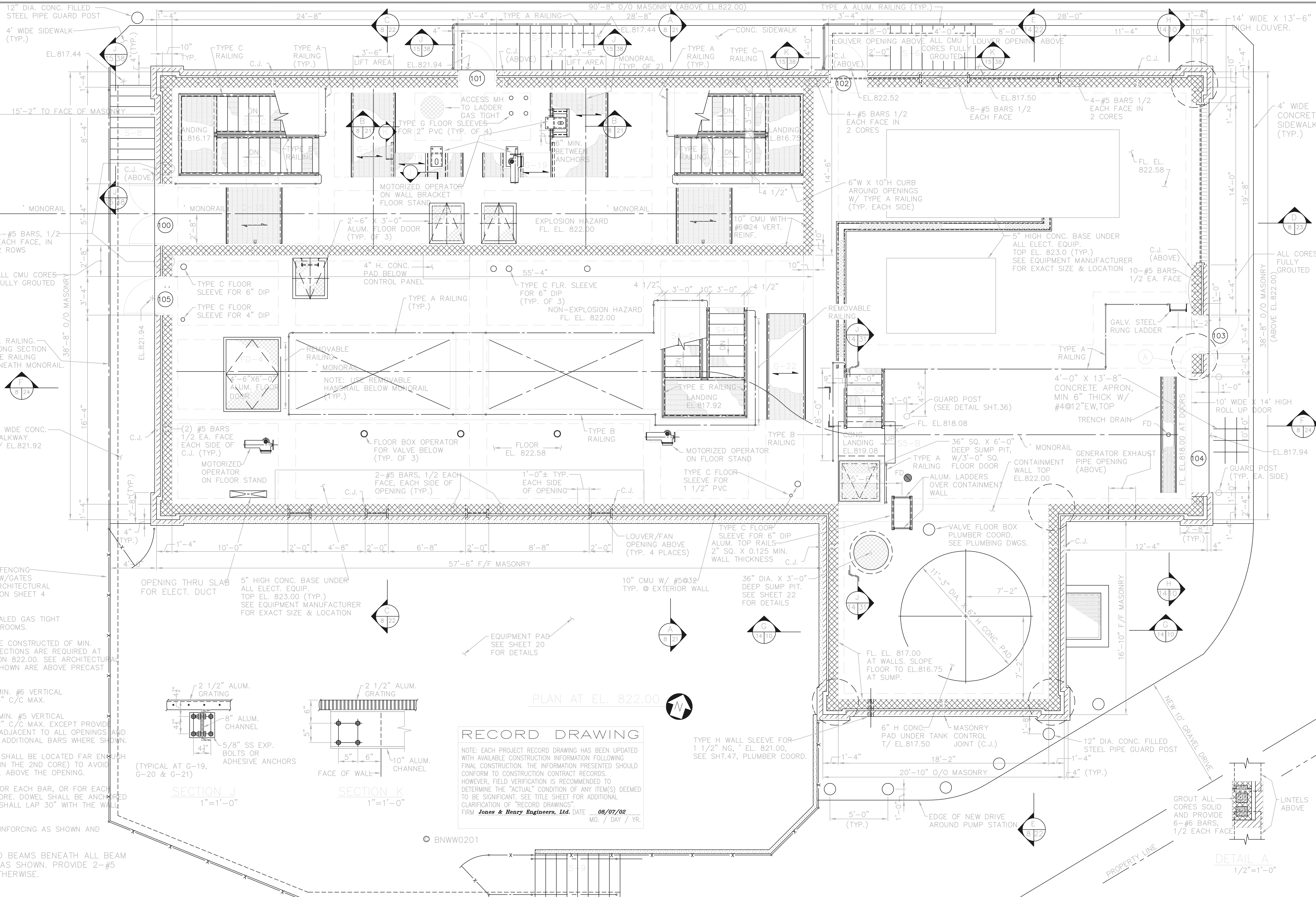
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

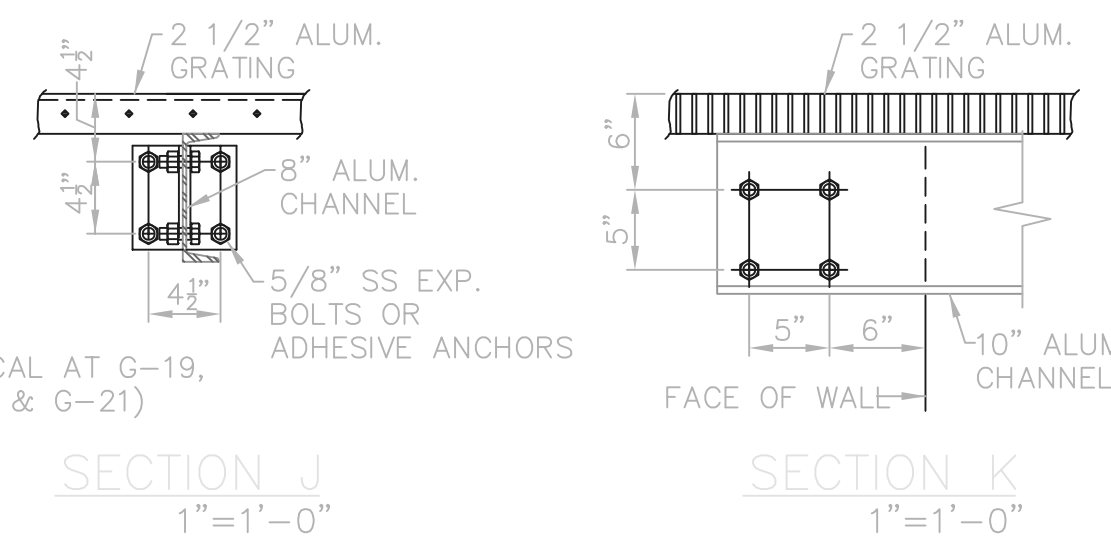
JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
STRUCTURAL
PLAN AT EL.818.00
SECTIONS & DETAILS

SCALE:	
1/4"=1'-0"	
SHEET NO.	OF
13	100



- NOTES:
- WET WELL ROOM SHALL BE SEALED GAS TIGHT WITH RESPECT TO THE OTHER ROOMS.
 - ALL MASONRY WALLS SHALL BE CONSTRUCTED OF MIN. 10" CMU'S. THICKENED WALL SECTIONS ARE REQUIRED AT CORNERS AND BELOW ELEVATION 822.00. SEE ARCHITECTURAL WALL SECTIONS. DIMENSIONS SHOWN ARE ABOVE PRECAST UNIT AT ELEVATION 822.00.
 - INTERIOR WALLS SHALL HAVE MIN. #6 VERTICAL REINFORCEMENT SPACED AT 24" C/C MAX.
 - EXTERIOR WALLS SHALL HAVE MIN. #5 VERTICAL REINFORCEMENT SPACED AT 32" C/C MAX. EXCEPT PROVIDE 2-#5 BARS, 1/2 EACH FACE, ADJACENT TO ALL OPENINGS AND CONTROL JOINTS, AS WELL AS ADDITIONAL BARS WHERE SHOWN.
 - BARS ADJACENT TO OPENINGS SHALL BE LOCATED FAR ENOUGH FROM THE OPENING (USUALLY IN THE 2ND CORE) TO AVOID INTERFERENCE WITH THE LINTEL ABOVE THE OPENING.
 - PROVIDE A MATCHING DOWEL FOR EACH BAR, OR FOR EACH PAIR OF BARS IN THE SAME CORE. DOWEL SHALL BE ANCHORED 24" INTO THE CONCRETE AND SHALL LAP 30" WITH THE WALL REINFORCING.
 - PROVIDE HORIZONTAL JOINT REINFORCING AS SHOWN AND SPECIFIED.
 - PROVIDE CONTINUOUS BOND BEAMS BENEATH ALL BEAM BEARING ELEVATIONS AND AS SHOWN. PROVIDE 2-#5 REBARS UNLESS SHOWN OTHERWISE.



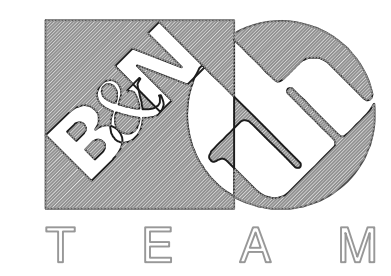
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".

FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
MO. / DAY / YR.

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE
TOL-4714505
04/16/02 04-V02
P:\PR24025\PMFSTARECDWG\15.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
STRUCTURAL
PLAN AT EL. 822.58

SCALE:	1/4"=1'-0"
SHEET NO.	15
OF	100

MONORAIL SUPPORT PIER (TYP. OF 2) SEE DETAILS THIS SHEET

PLATE - 3/4" X 6" X 1'-0" W/ LONG SLOTTED HOLES. ANCHORED TO MASONRY WALLS W/ (2) 1/2" X 15" LG. J-BOLTS GROUTED IN TOP 2 MASONRY COURSES (TYPICAL 8 PLACES)

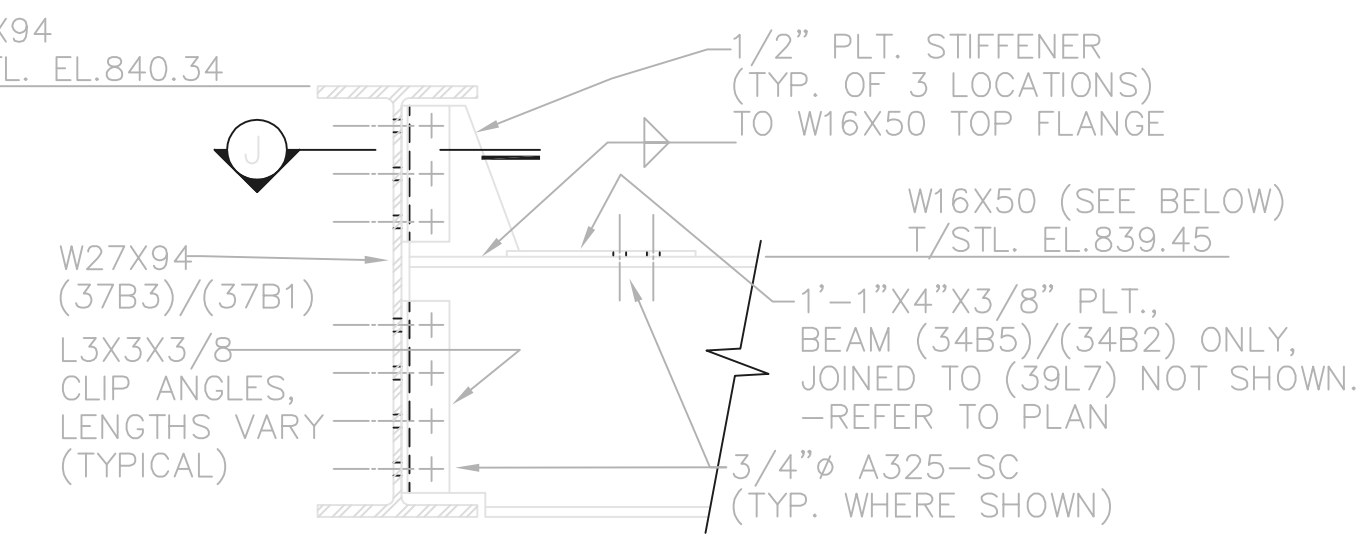
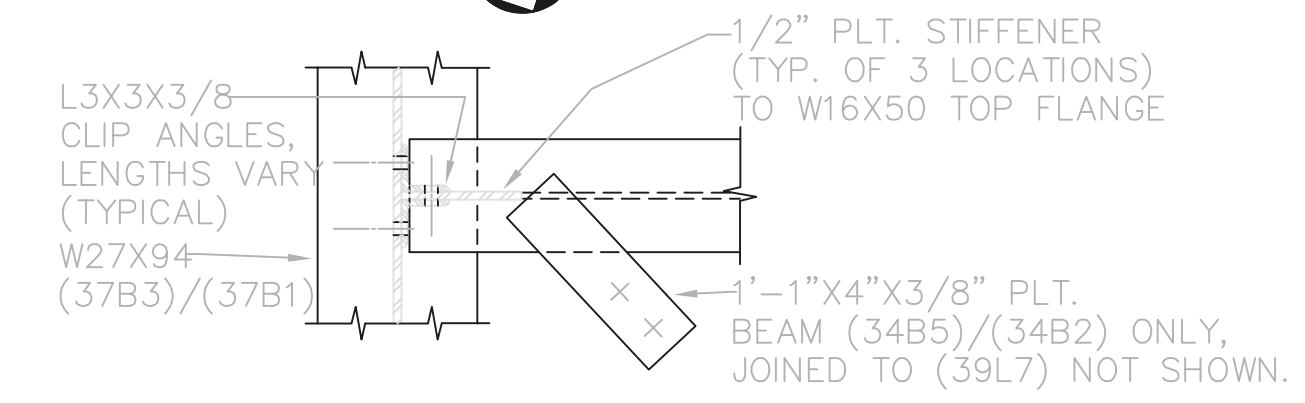
1750 KW EMERGENCY DIESEL GENERATOR

MAIN SWITCH GEAR & TRANSFER SWITCH W27X94 (37B3)/(37B1) ROOF SUPPORT COLUMN (41C3)

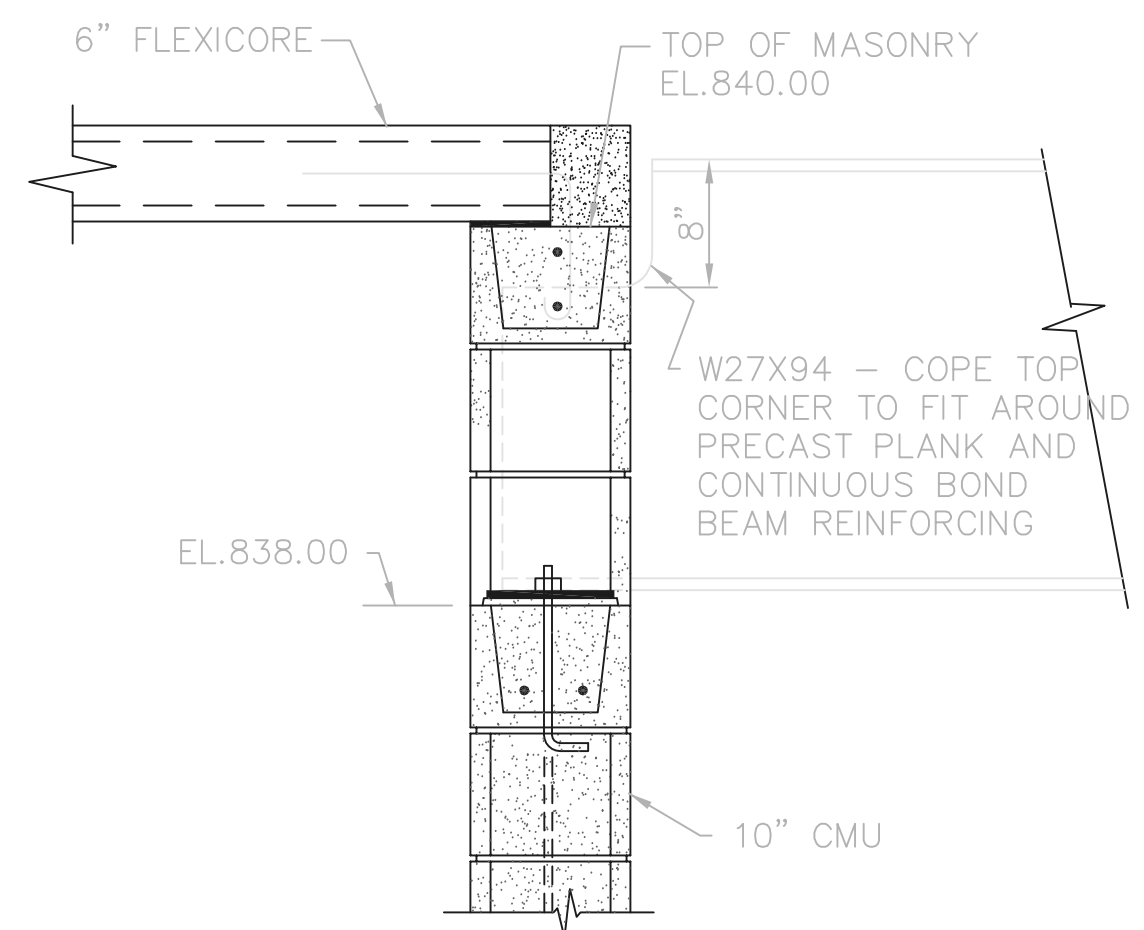
FABRICATOR'S MEMBER SHIP MARK (TYP. WHERE SHOWN) (XXXX)/(XXXX) INDICATES SUBSEQUENT RENUMBERING.

- NOTES:
1. SET STOP ANGLES SO THAT NO PART OF THE HOIST OR TROLLEY CAN GO PAST 1' OF W16X50
 2. ALL STRUCTURAL STEEL SHALL BE ASTM A572, GR.50 ENHANCED
 3. CONTRACTOR TO PROVIDE 7 1/2 TON HOIST AND TROLLEY FOR DRY WELL SIDE AND TROLLEY FOR WET WELL SIDE. OWNER TO PROVIDE 5 TON HOIST FOR WET WELL SIDE AS NEEDED.

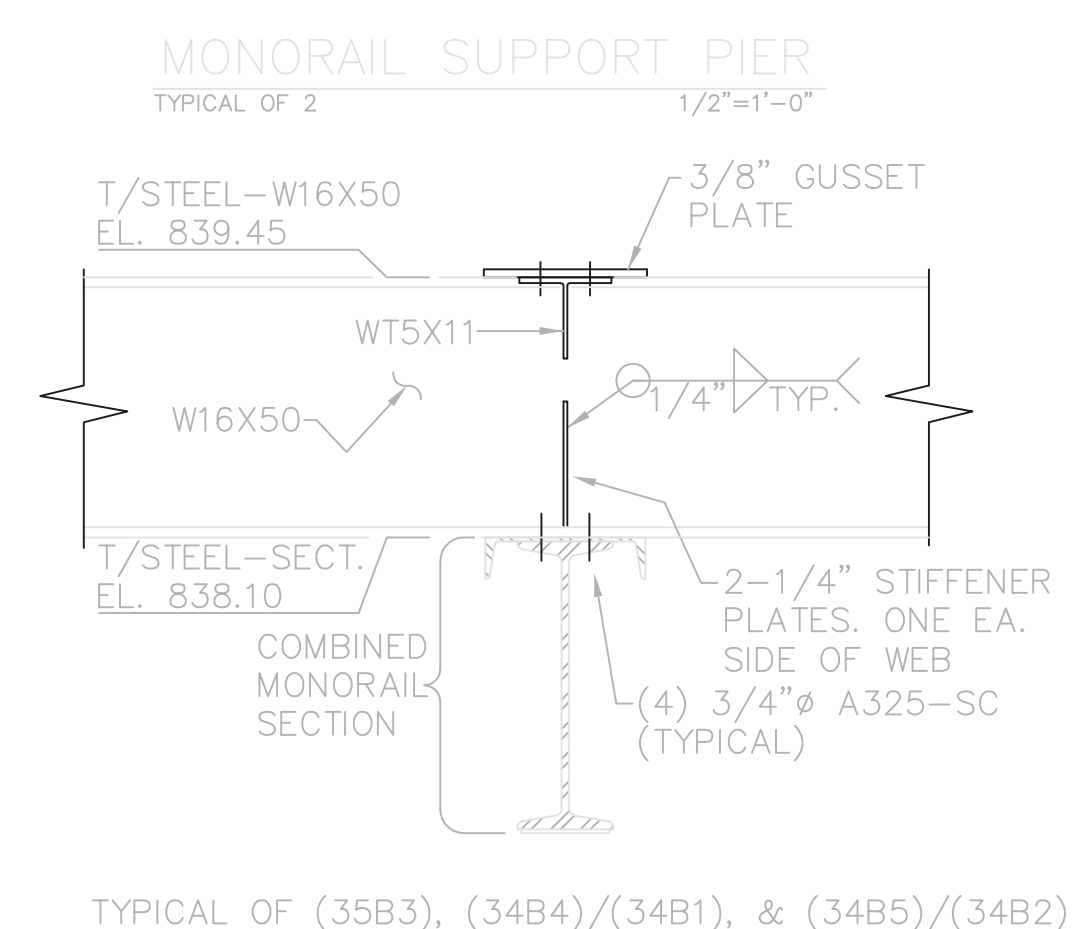
PLAN AT EL. 822.00



TYPICAL OF (35B3), (34B4)/(34B1), & (34B5)/(34B2), NORTH END



SECTION K-K 1"=1'-0"

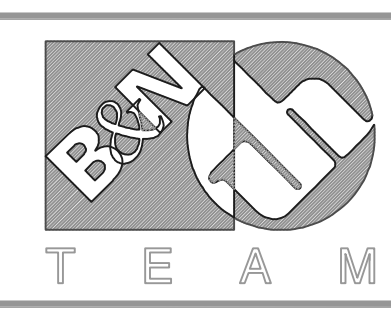


SECTION C-C 1"=1'-0"

MONORAIL SUPPORT PIER TYPICAL OF 2 1/2"=1'-0"

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE
TOL-4714S17
04/05/02 04-Y02
P:\PR24025\PMF\STARC\DWG\16.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

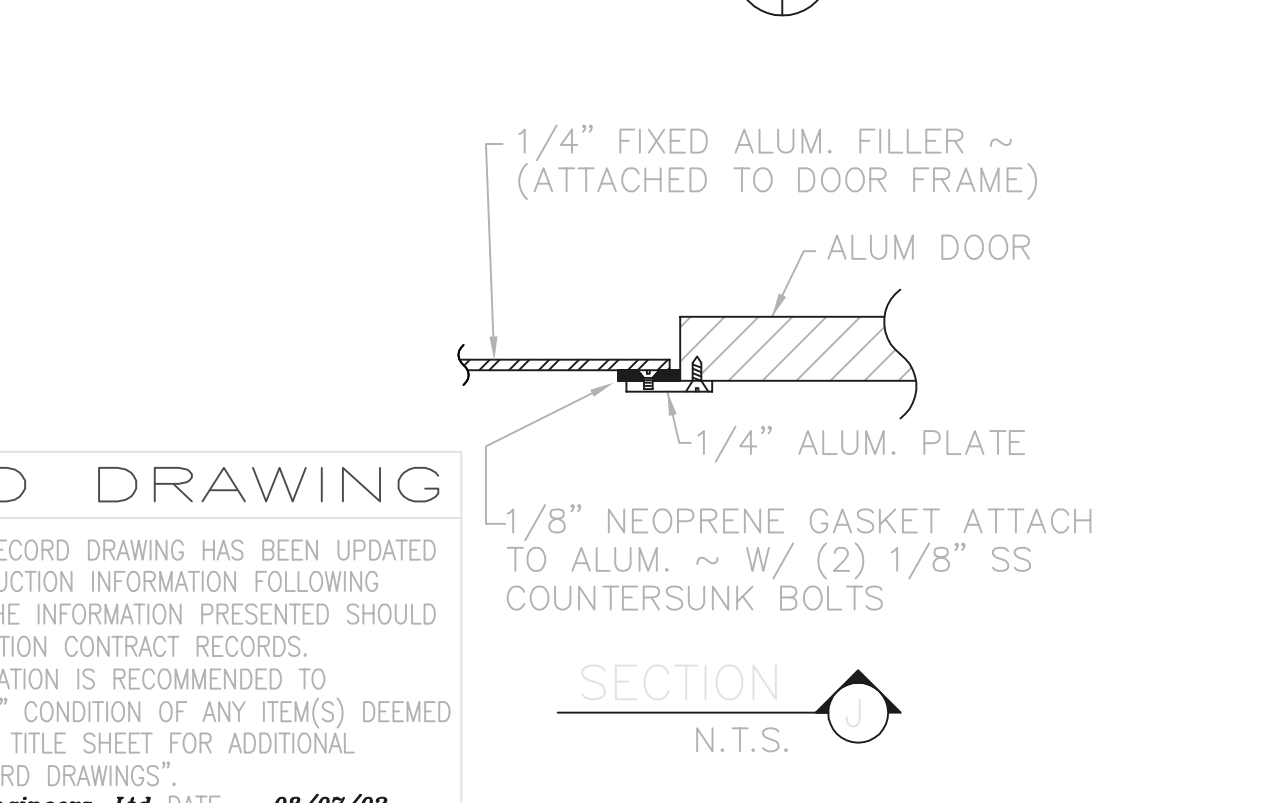
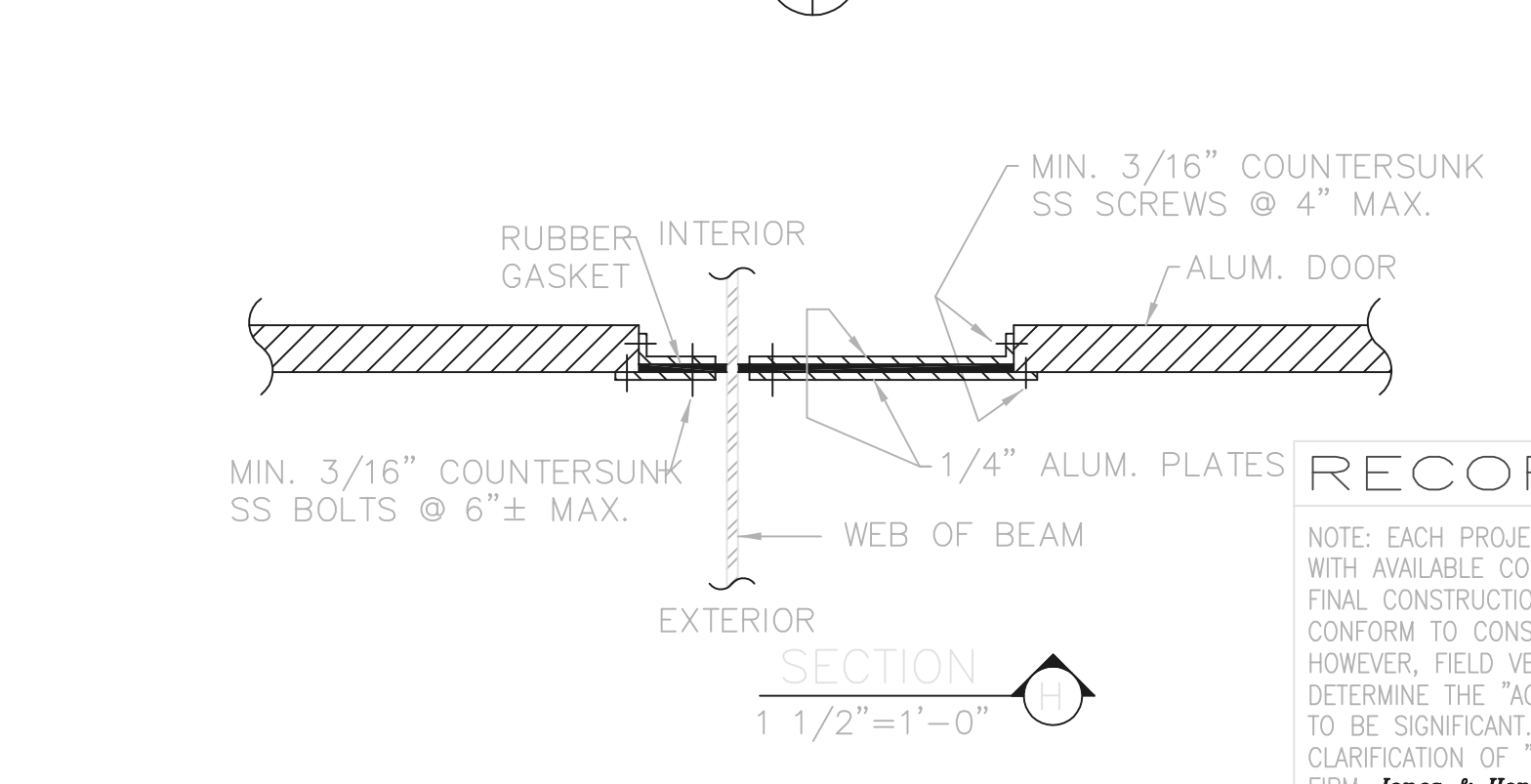
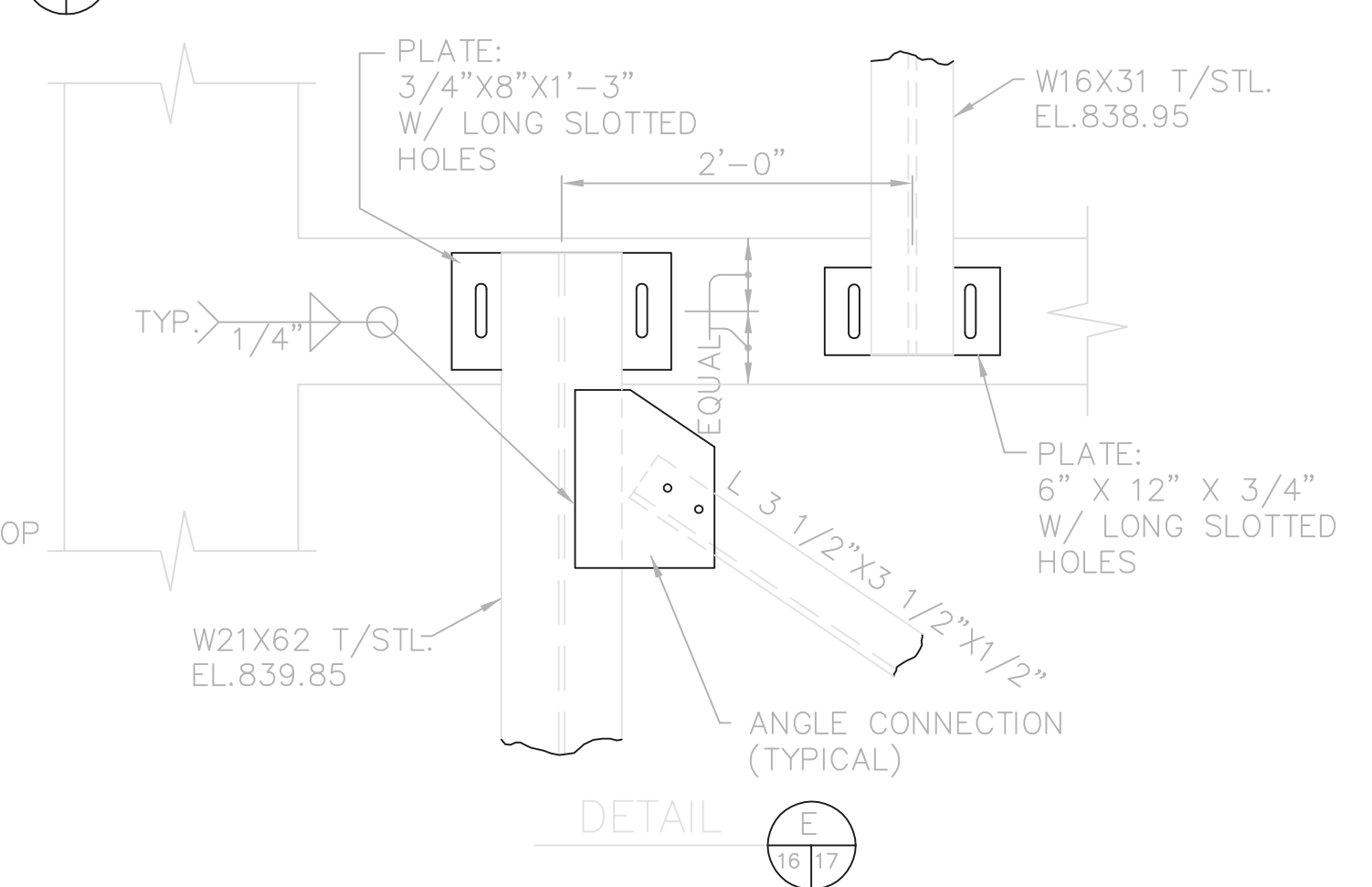
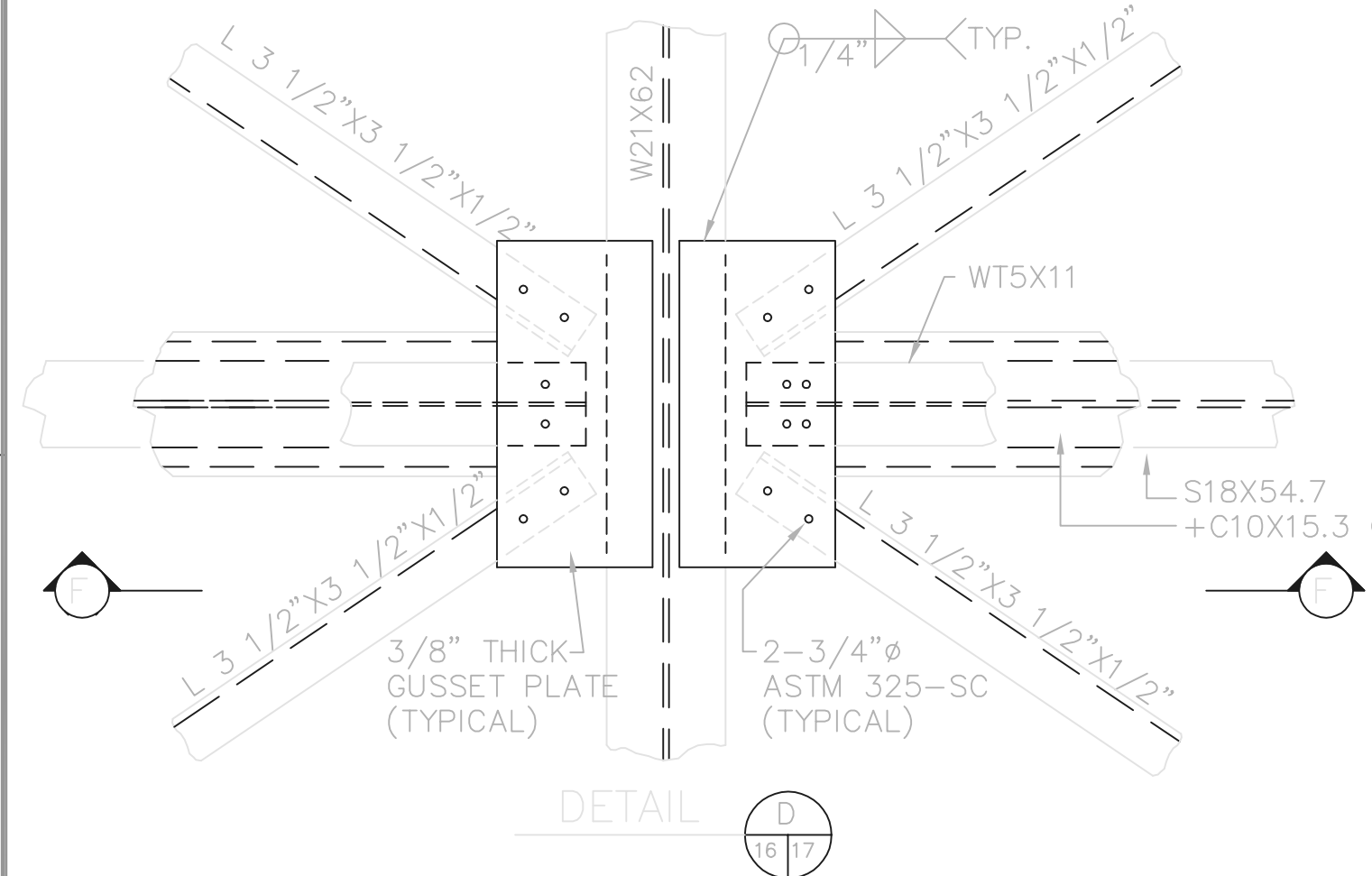
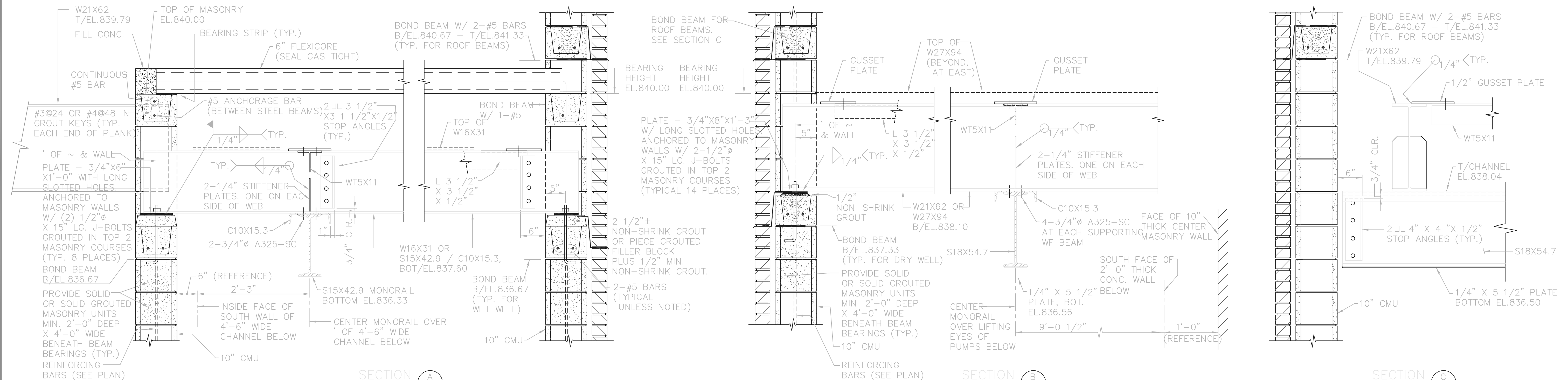
JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
STRUCTURAL
MONORAIL AND ROOF COLUMN
SUPPORT FRAMING
PLAN AT EL.822.00

SCALE:	1/4"=1'-0"
SHEET NO.	16
OF	100

© BNW0201

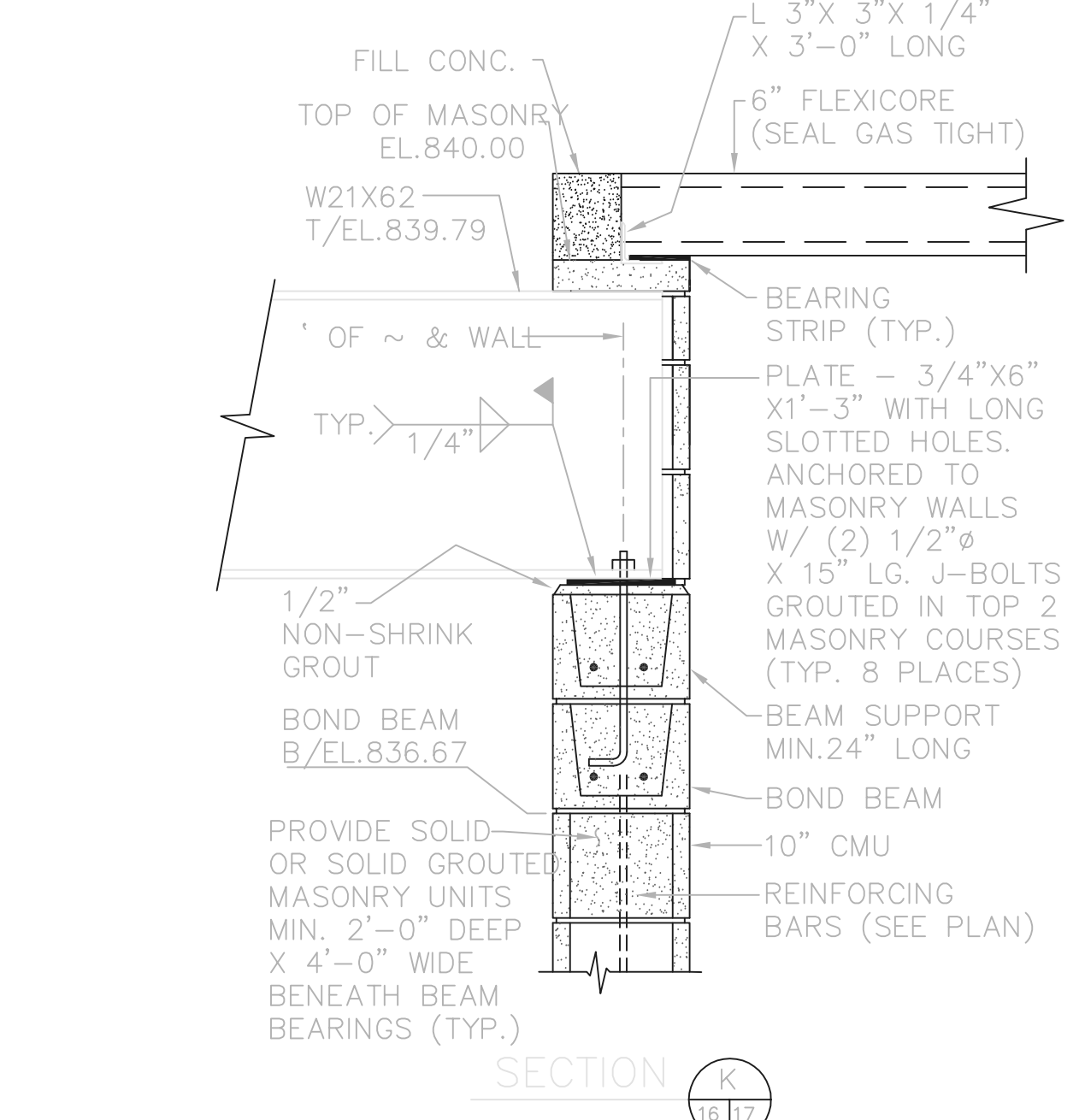
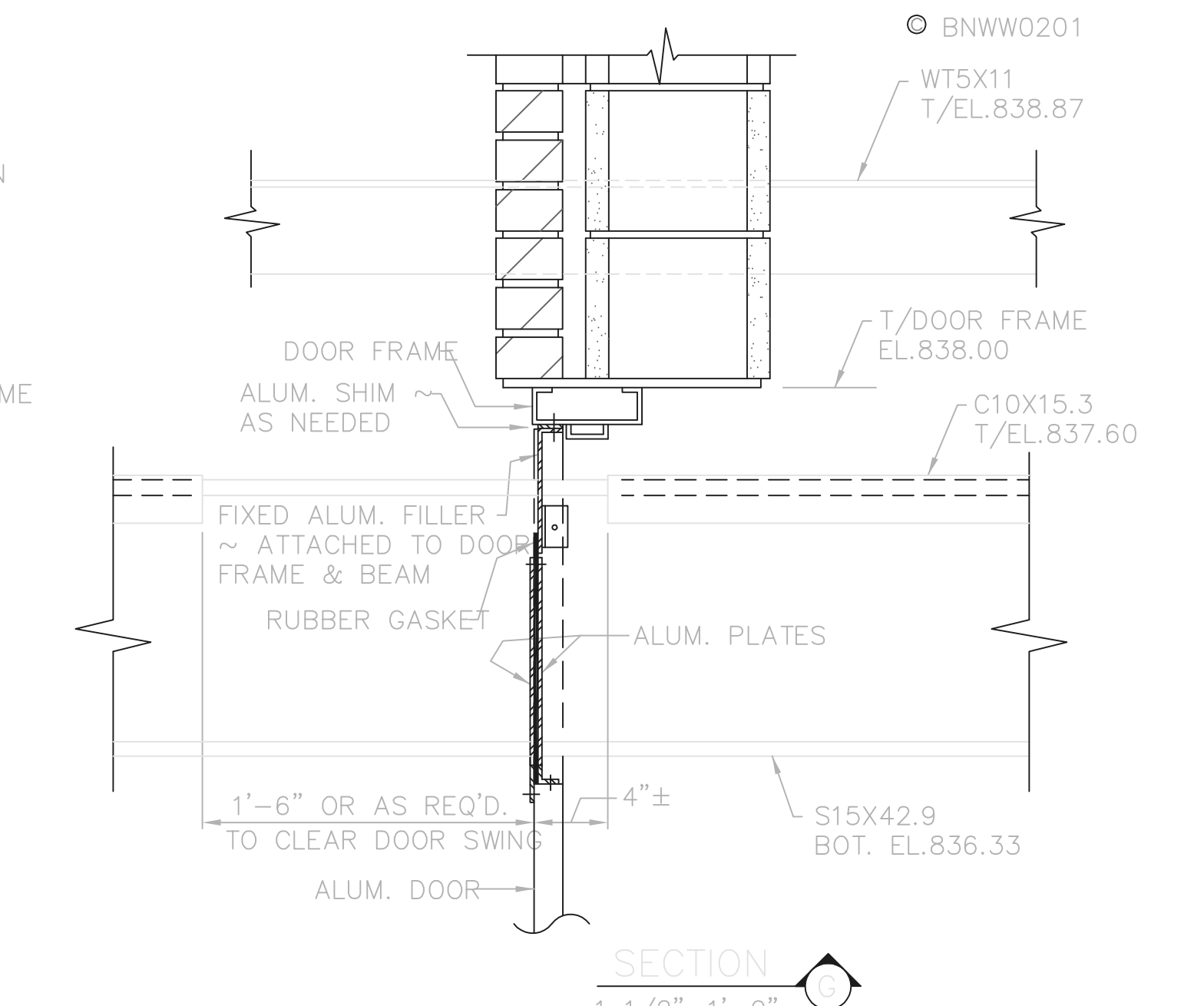
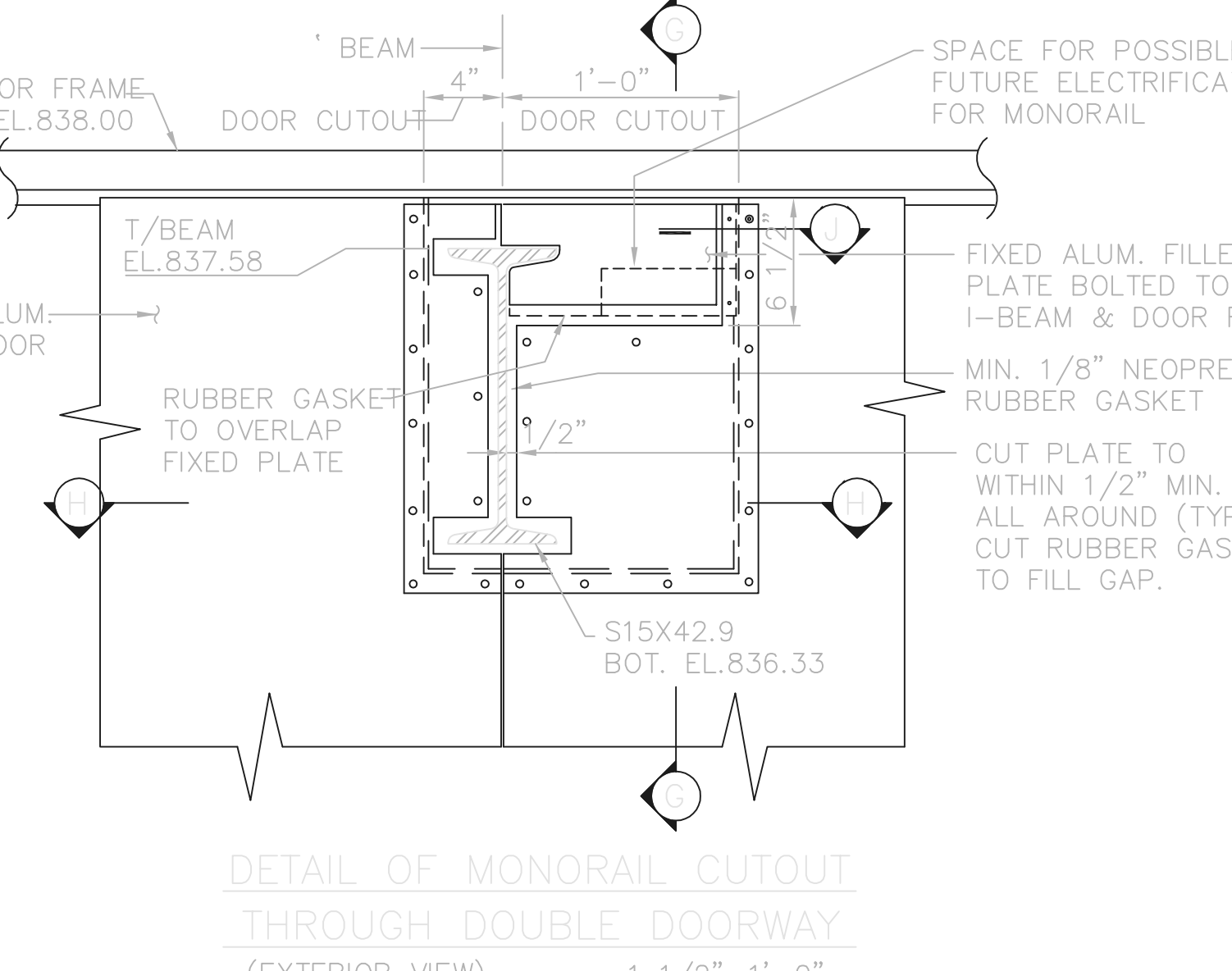
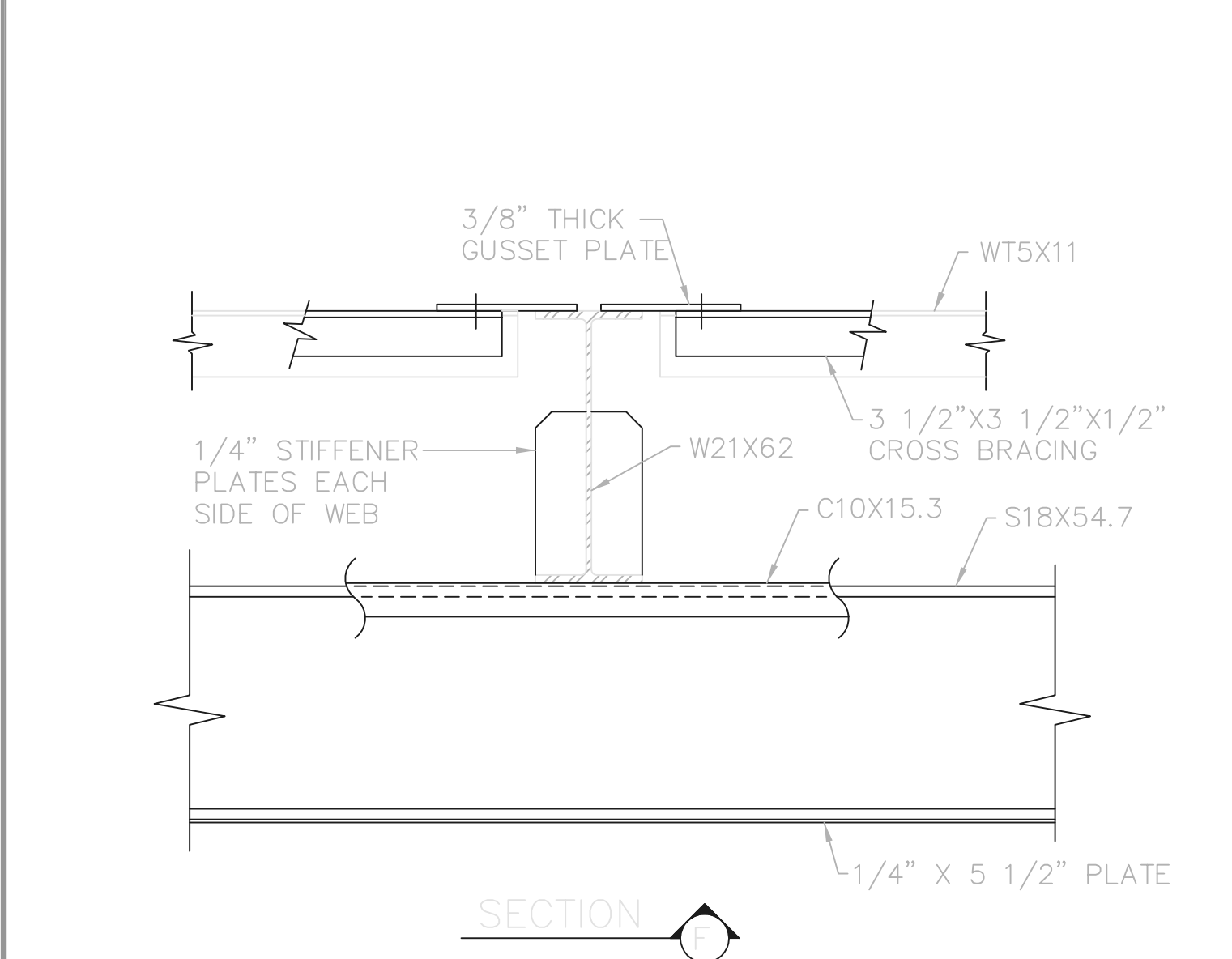
RECORD DRAWING
NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM Jones & Henry Engineers, Ltd. DATE 08/07/02
MO. / DAY / YR.



RECORD DRAWING

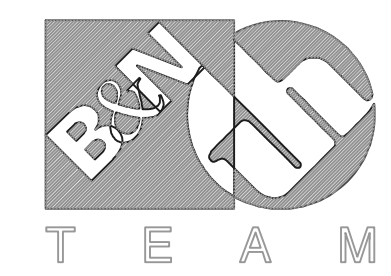
NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".

FIRM: Jones & Henry Engineers, Ltd. DATE: 08/07/02
MO. / DAY / YR.



TOL-4714518
 03/20/02 04-VOZ
 P:\PR24025\PMPS\RECORDING\17.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

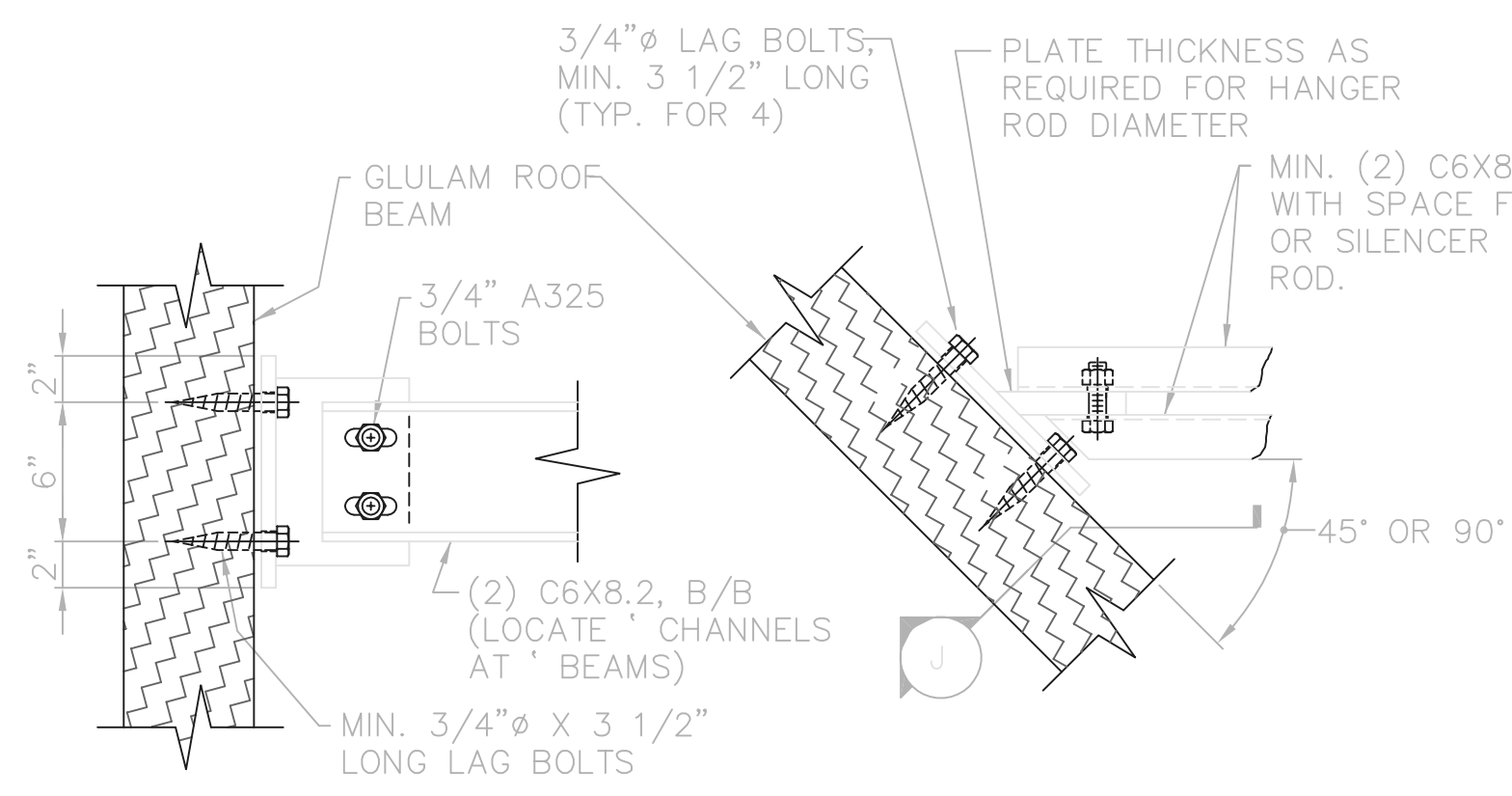
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
 STRUCTURAL
 MONORAIL FRAMING DETAILS

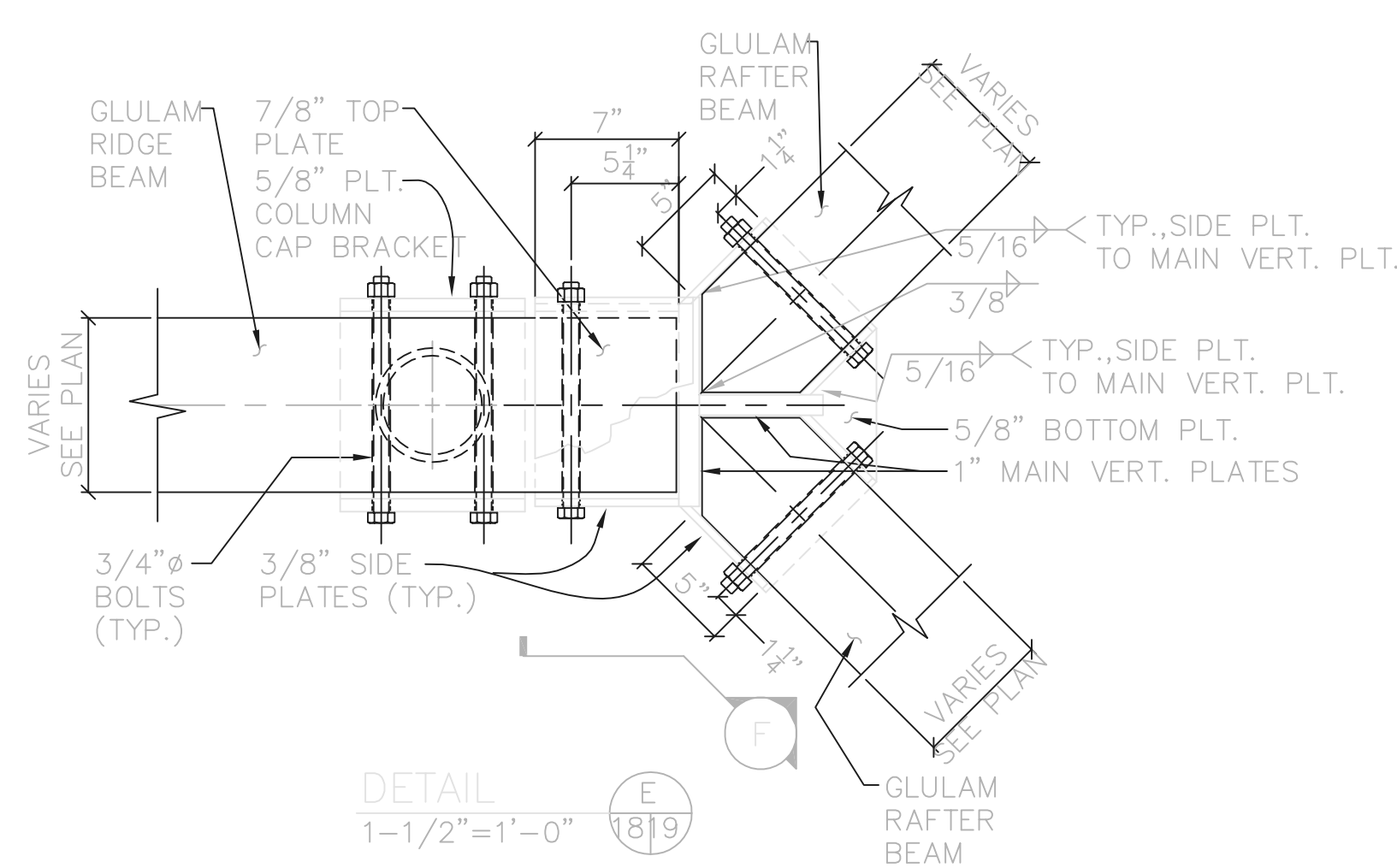
SCALE:	
1" = 1'-0"	
SHEET NO.	OF
17	100



SECTION J

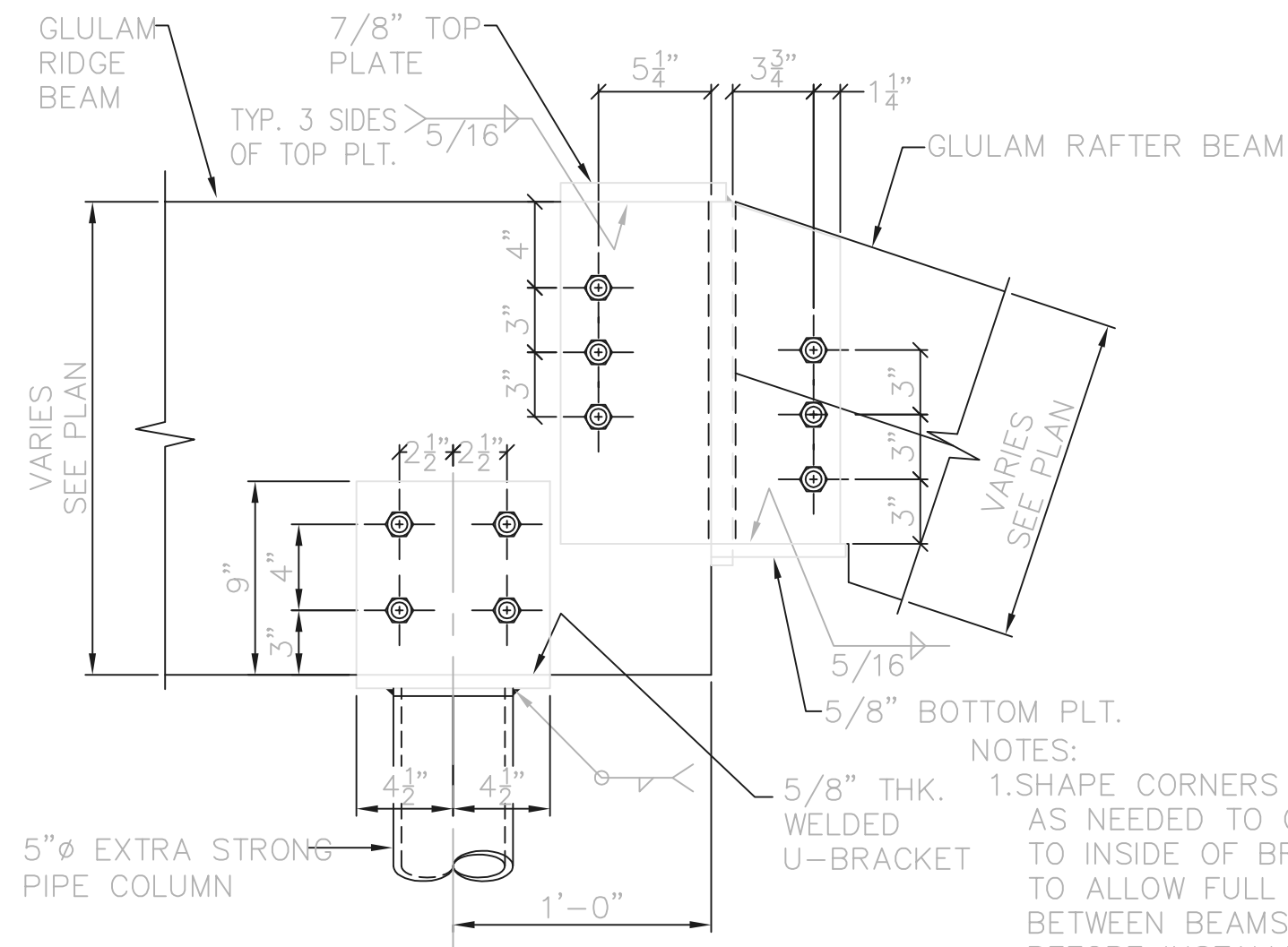
PLAN

DETAIL H
1-1/2"=1'-0" (18/9)



DETAIL E
1-1/2"=1'-0" (18/9)

DETAIL F
1-1/2"=1'-0" (18/9)

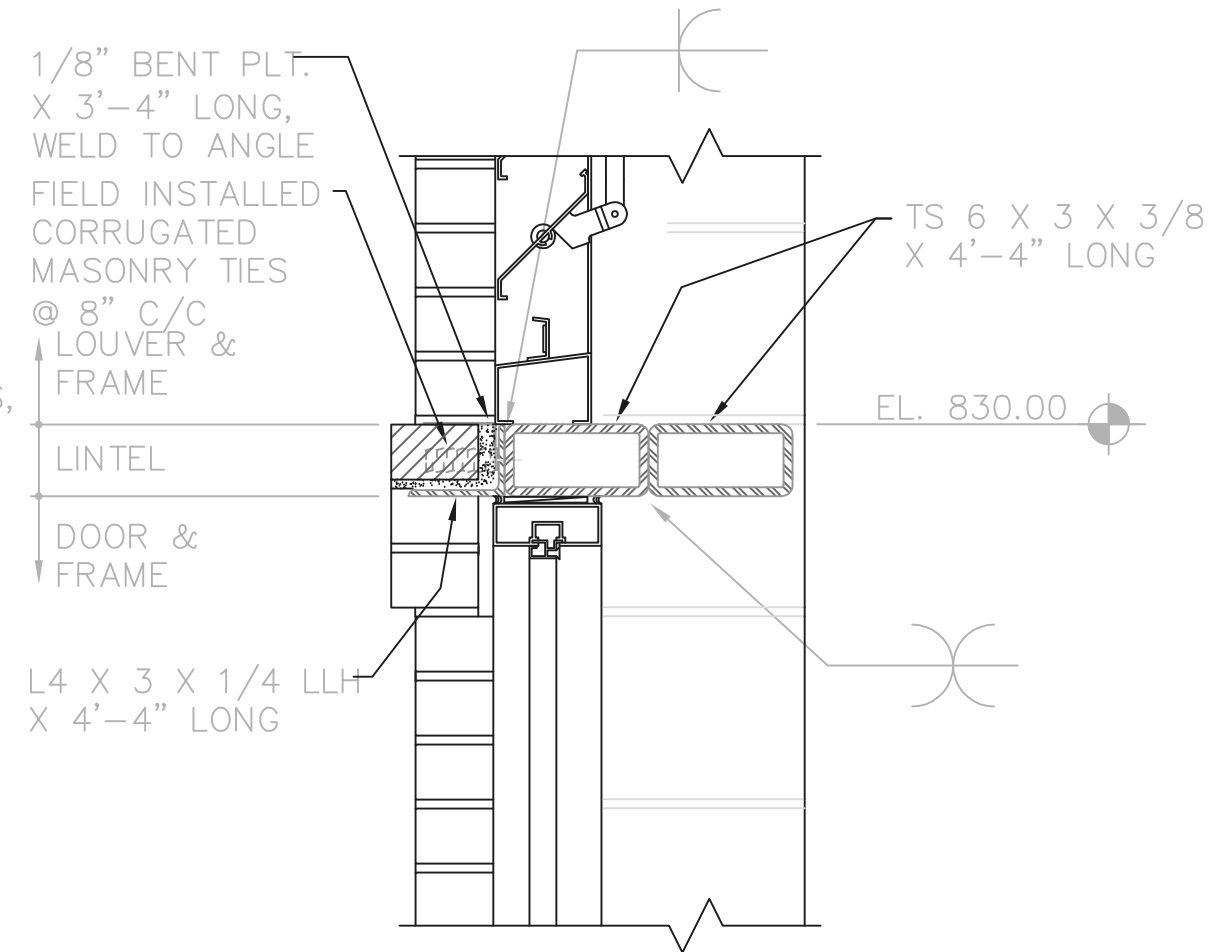


SECTION F

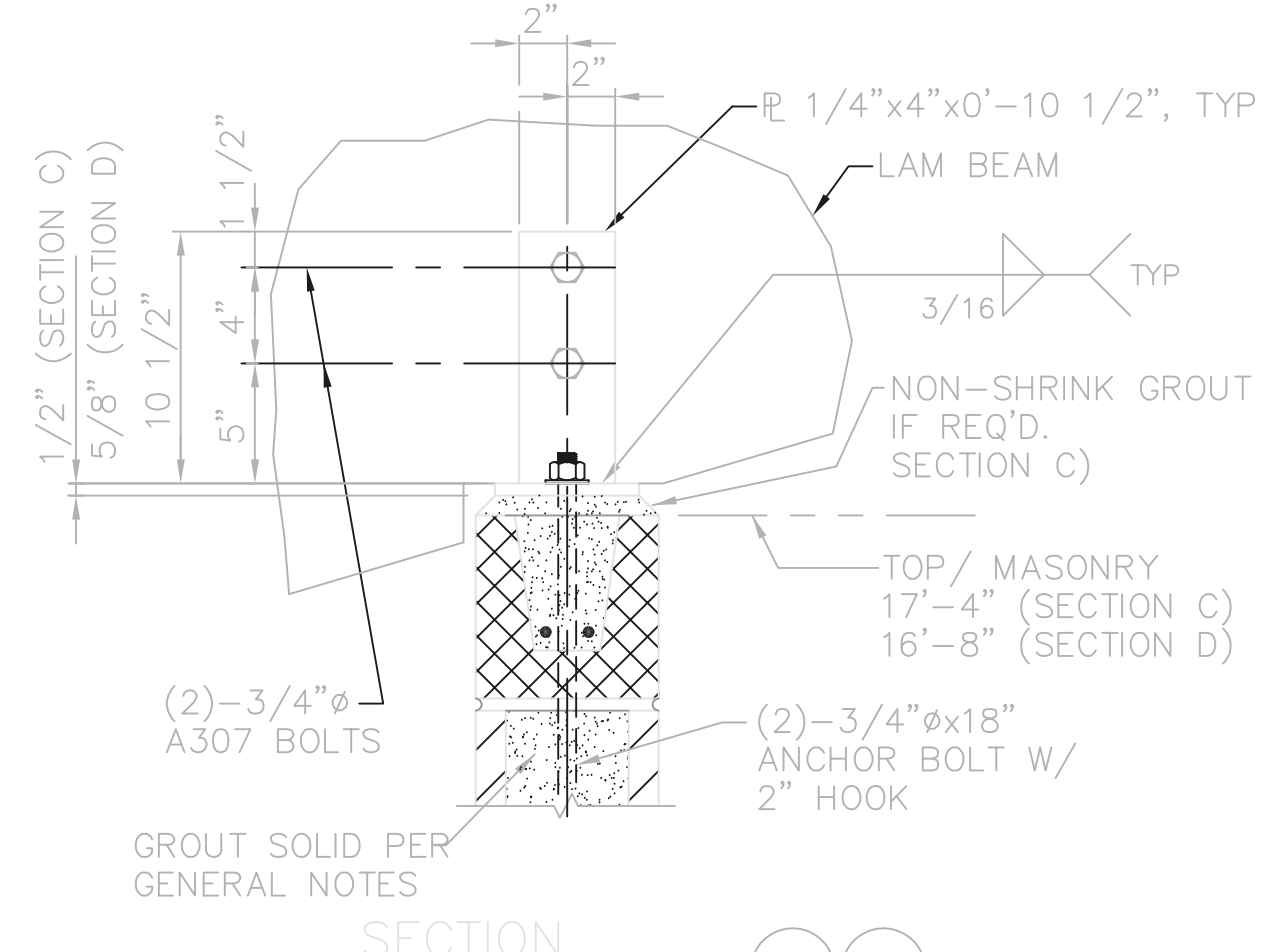
- NOTES:
1. SHAPE CORNERS OF BEAMS AS NEEDED TO CONFORM TO INSIDE OF BRACKETS, TO ALLOW FULL BEARING BETWEEN BEAMS & PLATES, BEFORE INSTALLING BOLTS.
 2. CLEAR INSIDE WIDTH OF BRACKETS SHALL BE 1/8" TO 1/4" GREATER THAN GLULAM BEAM WIDTHS.

LINTEL SCHEDULE						
MARK	DESCRIPTION	CONFIG.	M.O.	BEARING EACH END	LENGTH	REMARKS
L-1	WT12X34, CUT TO 7" DEPTH, & L3-1/2 X 3-1/2 X 5/16	LL	2'-0"	6/6	3'-0"	
L-2	WT12X34, CUT TO 7" DEPTH, & L3-1/2 X 3-1/2 X 5/16	LL	3'-4"	6/6	4'-4"	
L-3	W8X10 AND L5 X 3-1/2 X 5/16 LLV, WITH 1/4" THK. X 15" BOTTOM PLATE	LL	5'-4"	8/8	6'-8"	
L-4	WT12X34, CUT TO 7" DEPTH, & L5 X 3-1/2 X 5/16 LLV,	LL	8'-0"	6/6	9'-0"	
L-5	W16X36 AND L5 X 3-1/2 X 5/16 LLV, WITH 3/8" THK. X 15" BOTTOM PLATE AND 1/4" STIFFENERS @ 32" C/C	LL	14'-0"	8/8	15'-4"	
L-6	W8X10 AND L3-1/2 X 3-1/2 X 5/16, WITH 1/4" THK. X 15" BOTTOM PLATE	LL	3'-4"	5/5	4'-2"	
L-7	W16X26 AND L5 X 3-1/2 X 5/16 LLV, WITH 3/8" THK. X 15" BOTTOM PLATE AND 1/4" STIFFENERS @ 32" C/C	LL	10'-0"	5/5	10'-10"	
L-8	(2) STRUCTURAL TUBES TS6 X 3 X 3/8 AND L4 X 3 X 1/4 LLH		3'-4"	6/6	4'-4"	LINTEL IS BETWEEN TOP OF DOORWAY AND BOTTOM OF LOUVER. SEE DETAIL

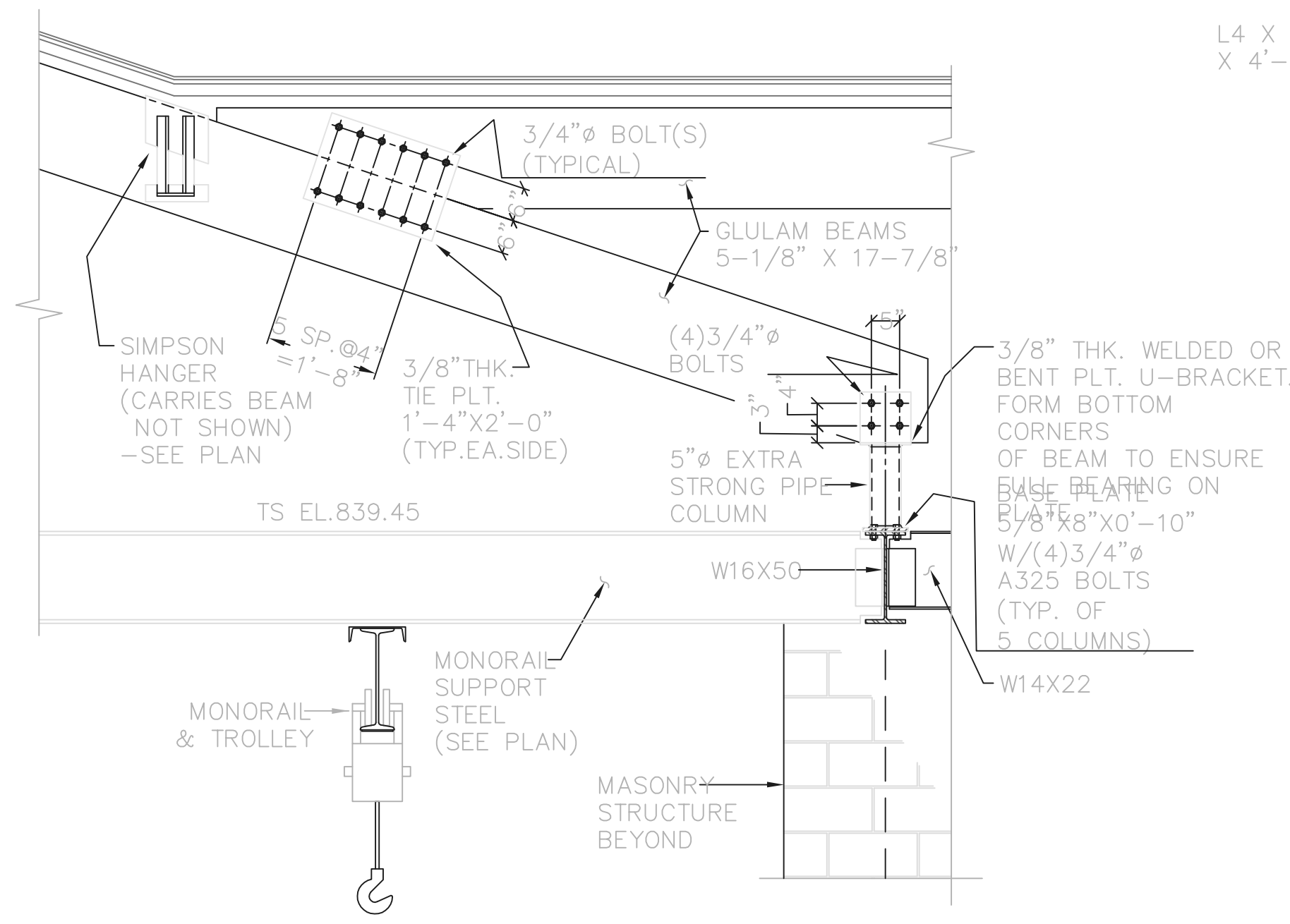
NOTE: ALL LINTELS TO BE HOT-DIP GALVANIZED AFTER FABRICATION.



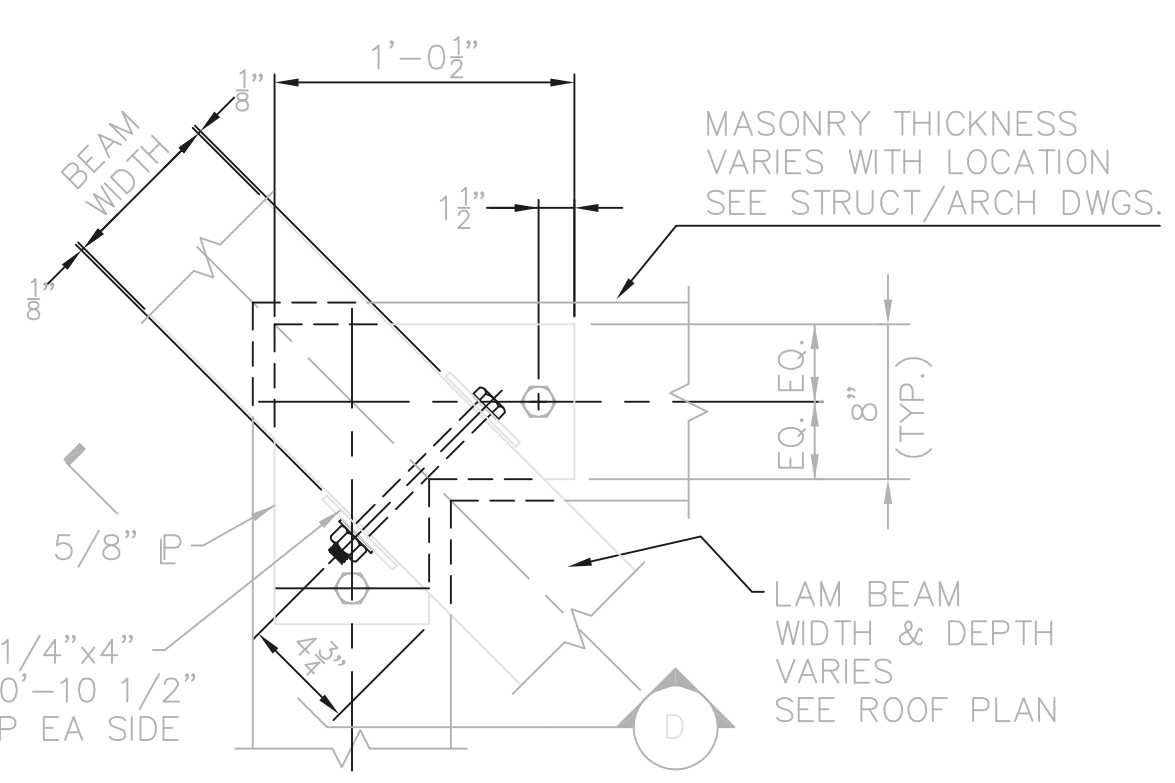
LINTEL L-8 DETAIL
1-1/2"=1'-0"



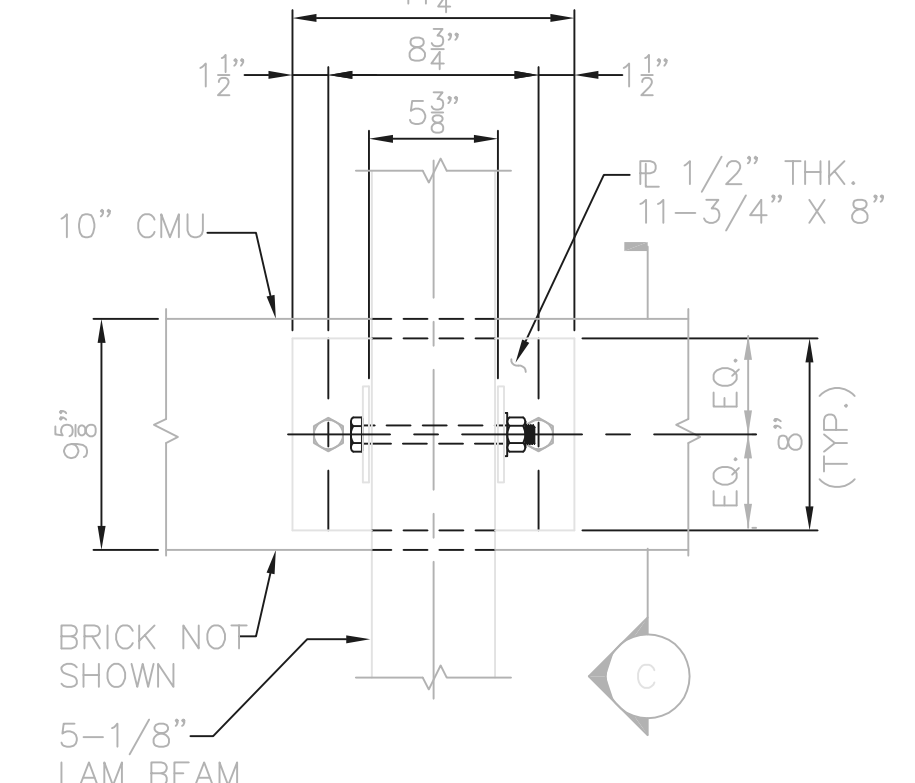
SECTION C & D
NTS



SECTION G
1/2"=1'-0" (18/9)



DETAIL A
NTS (18/9)



DETAIL B
NTS (18/9)

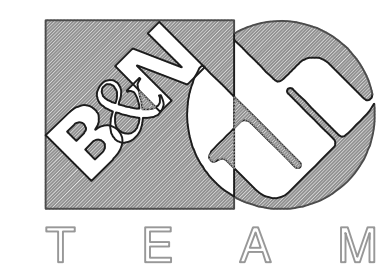
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM Jones & Henry Engineers, Ltd. DATE 08/07/02
MO. / DAY / YR.

© BNW0201

TOL-471-4A02
02/27/02 04-V02
P:\PRG4025\PMFSTARECDWG\19.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

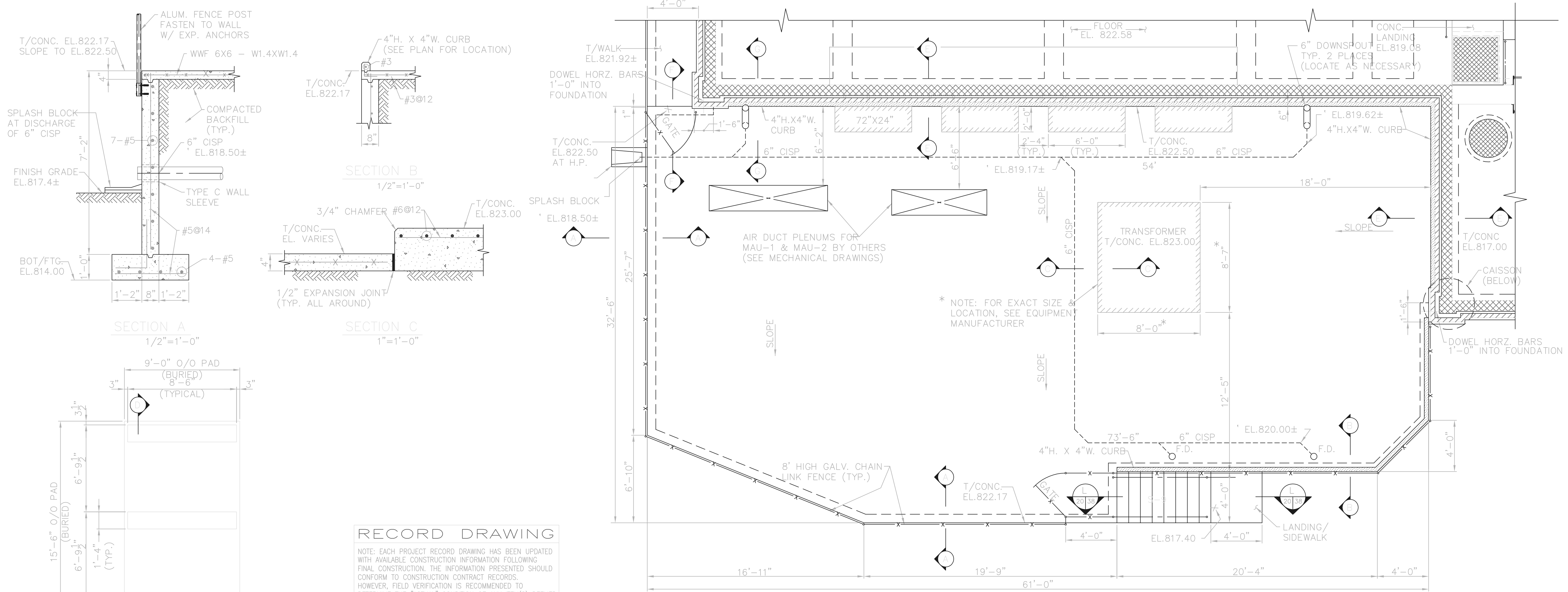
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

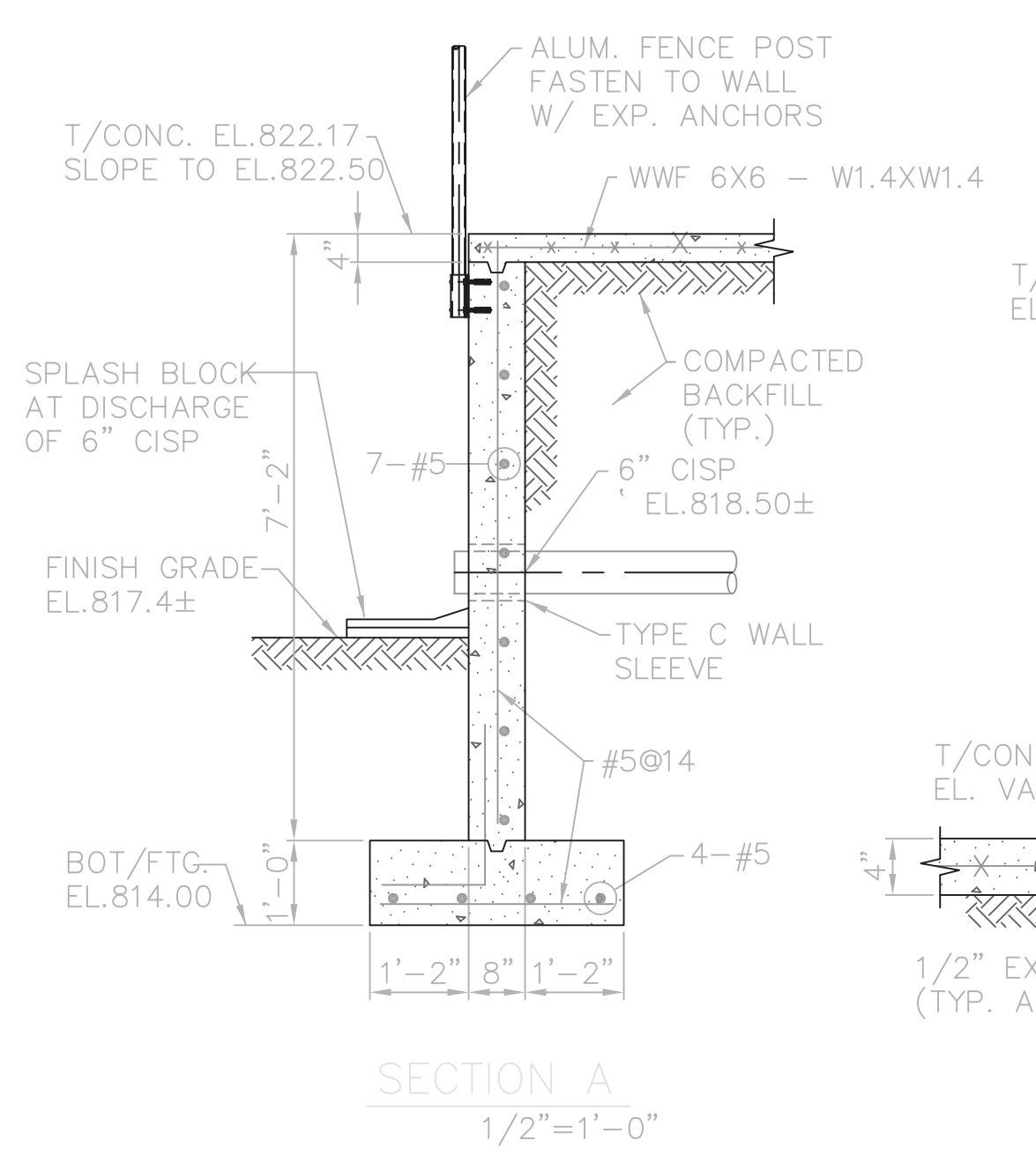
JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	DAR
APPROVED BY:	S.L.W.
DATE:	1999

PUMP STATION
STRUCTURAL
ROOF FRAMING DETAILS

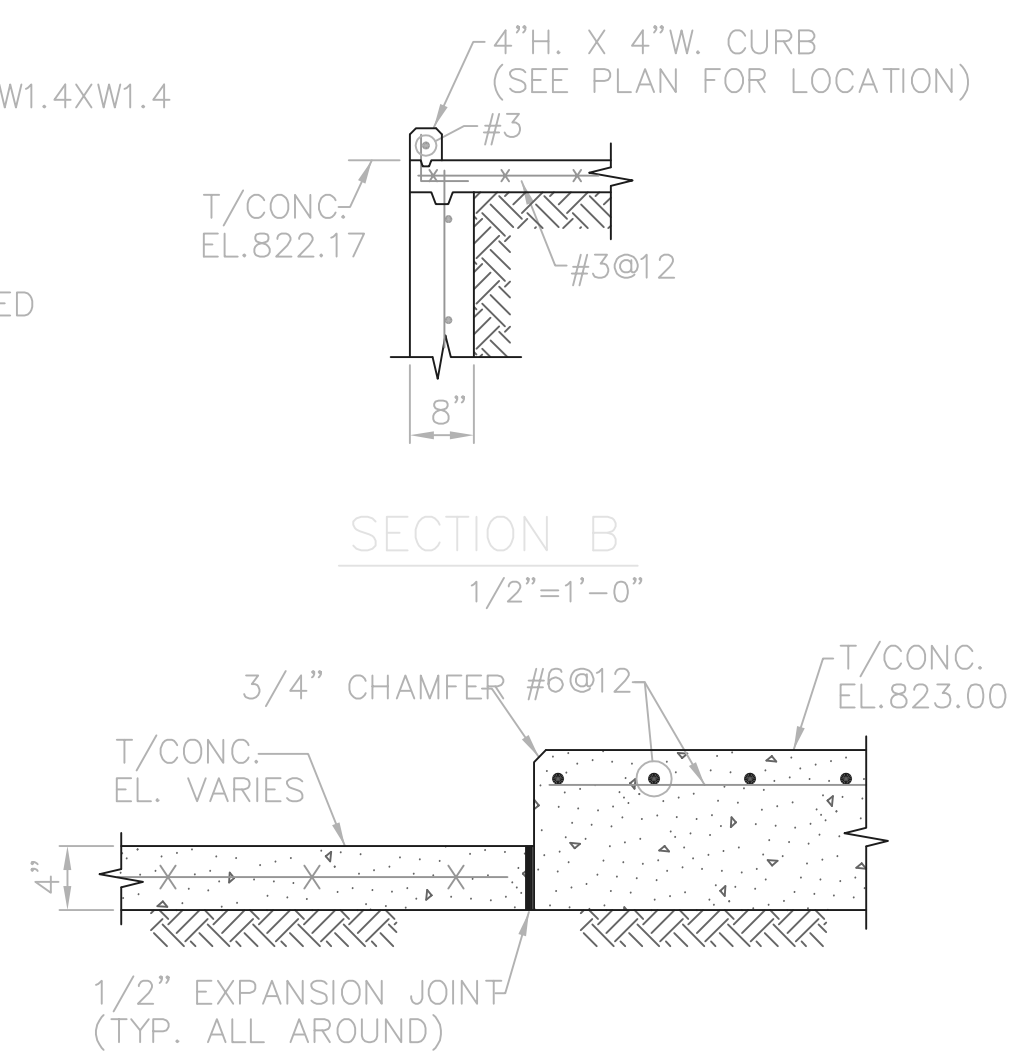
SCALE:	
AS NOTED	
SHEET NO.	OF
19	100



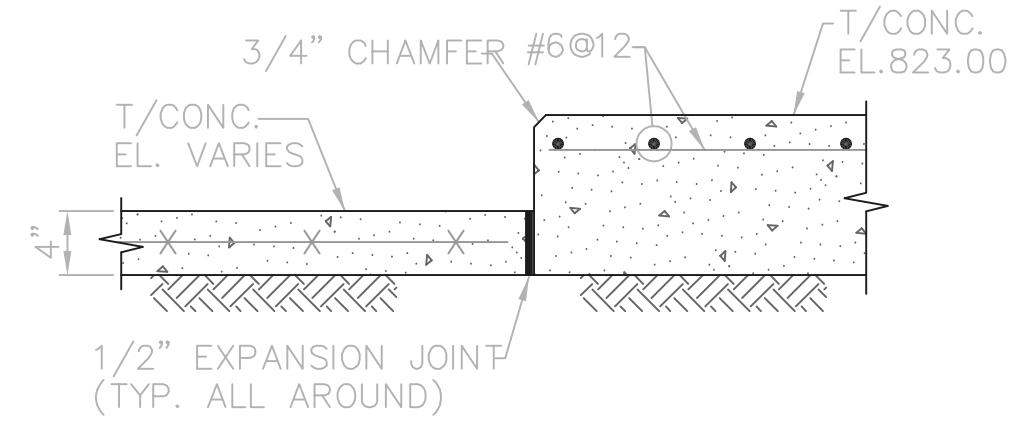
EXTERIOR SLAB PLAN



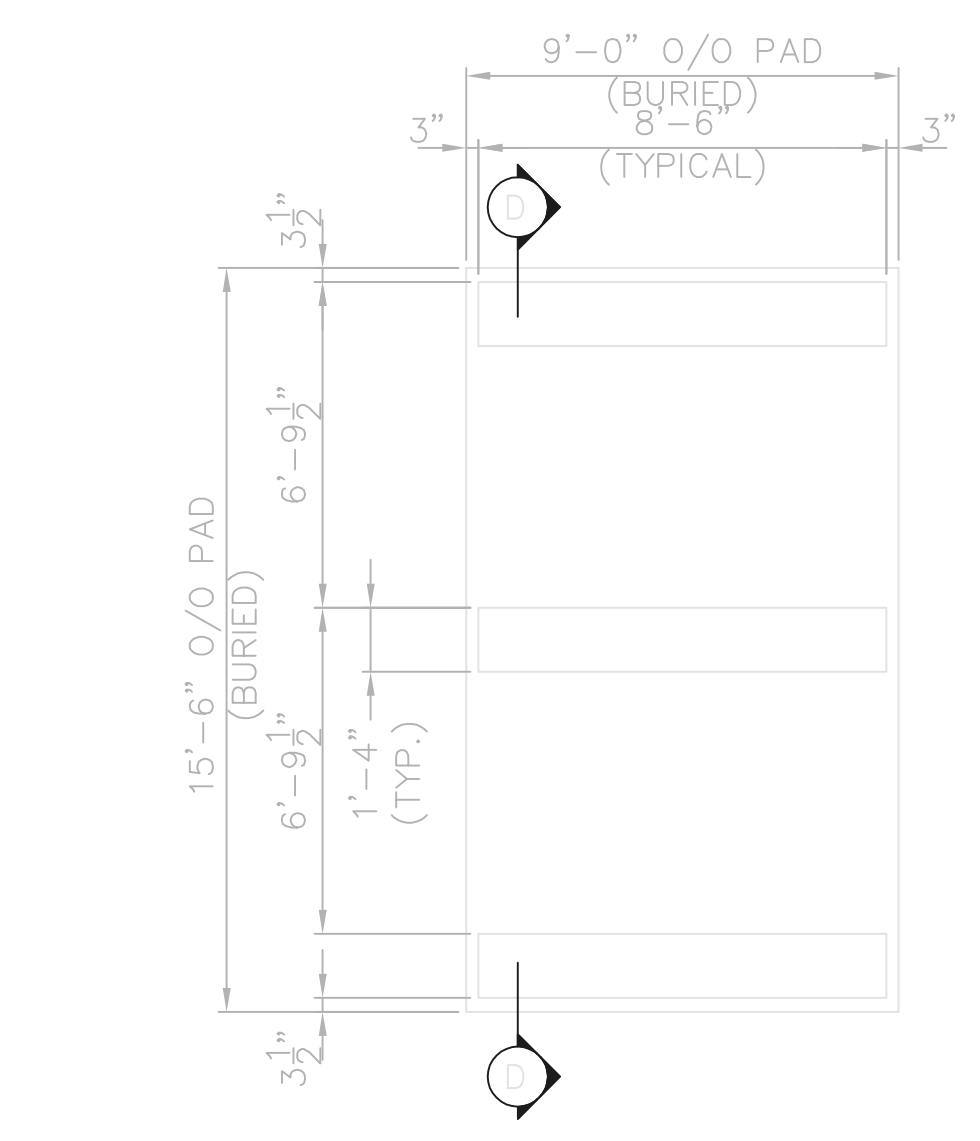
SECTION A
1/2"=1'-0"



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



SECTION C
1"=1'-0"

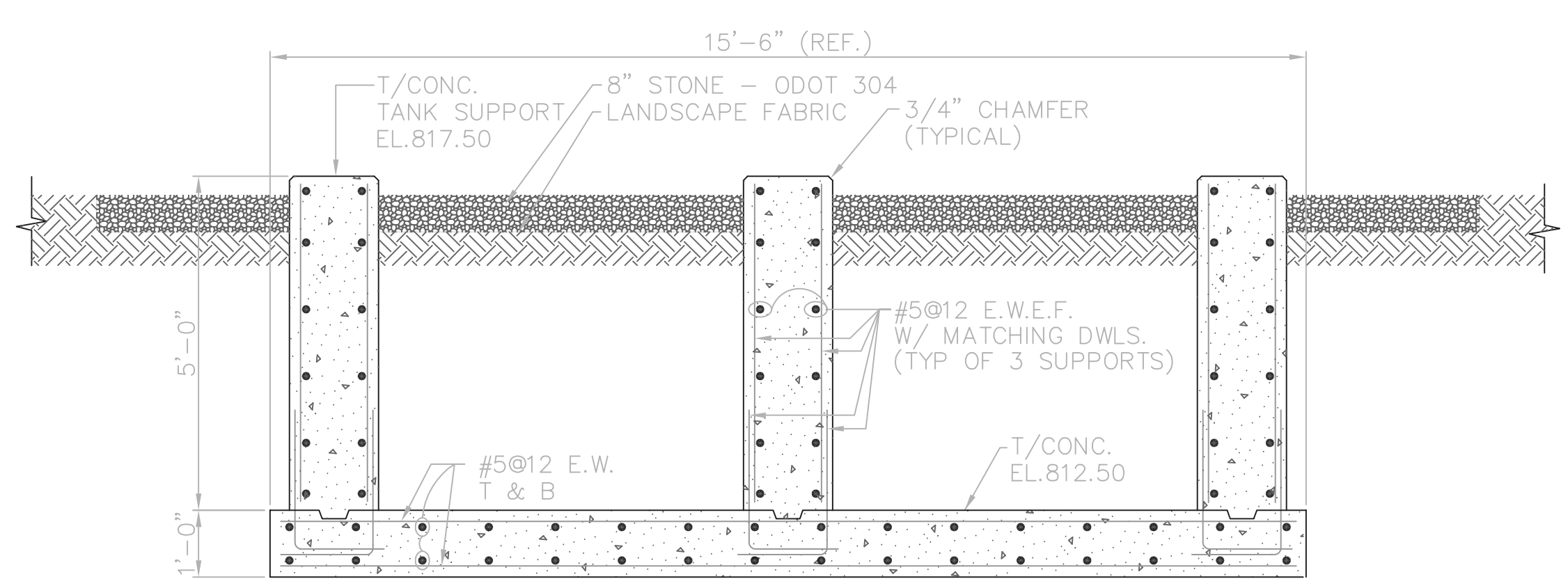


FUEL OIL TANK MOUNTING PAD PLAN
1/4"=1'-0"

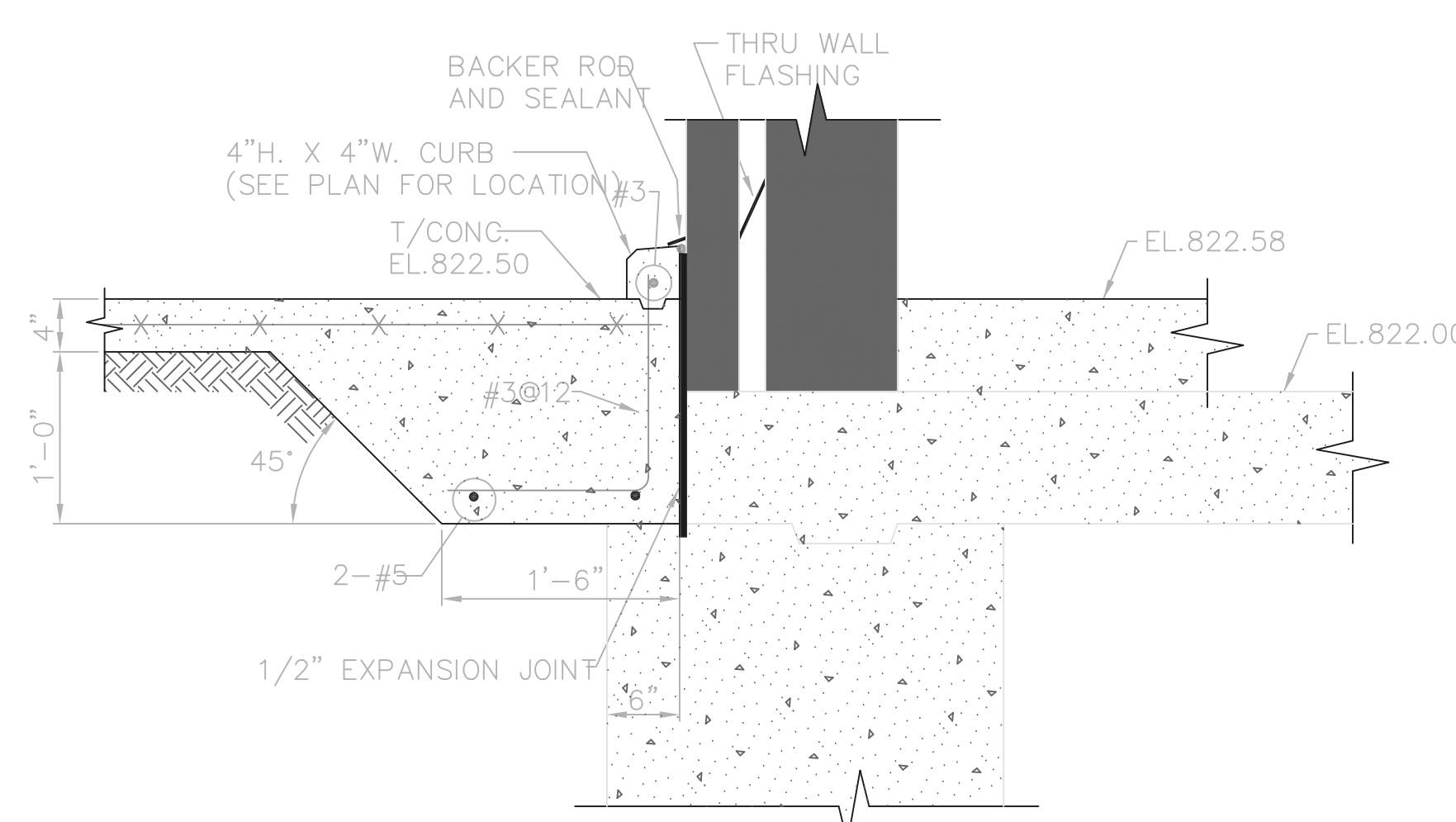
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".

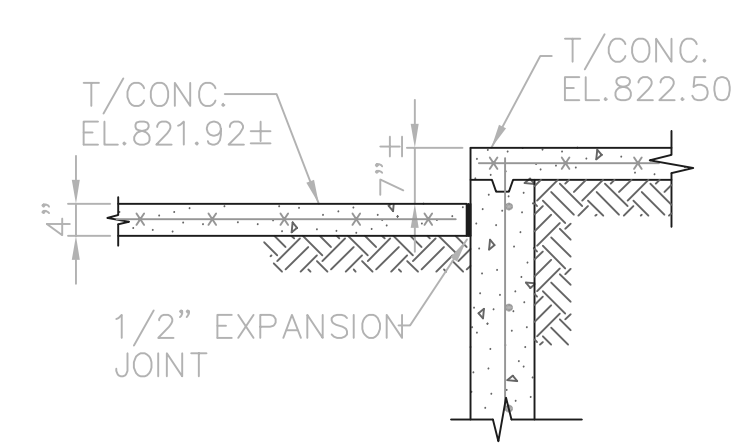
FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
MO. / DAY / YR.



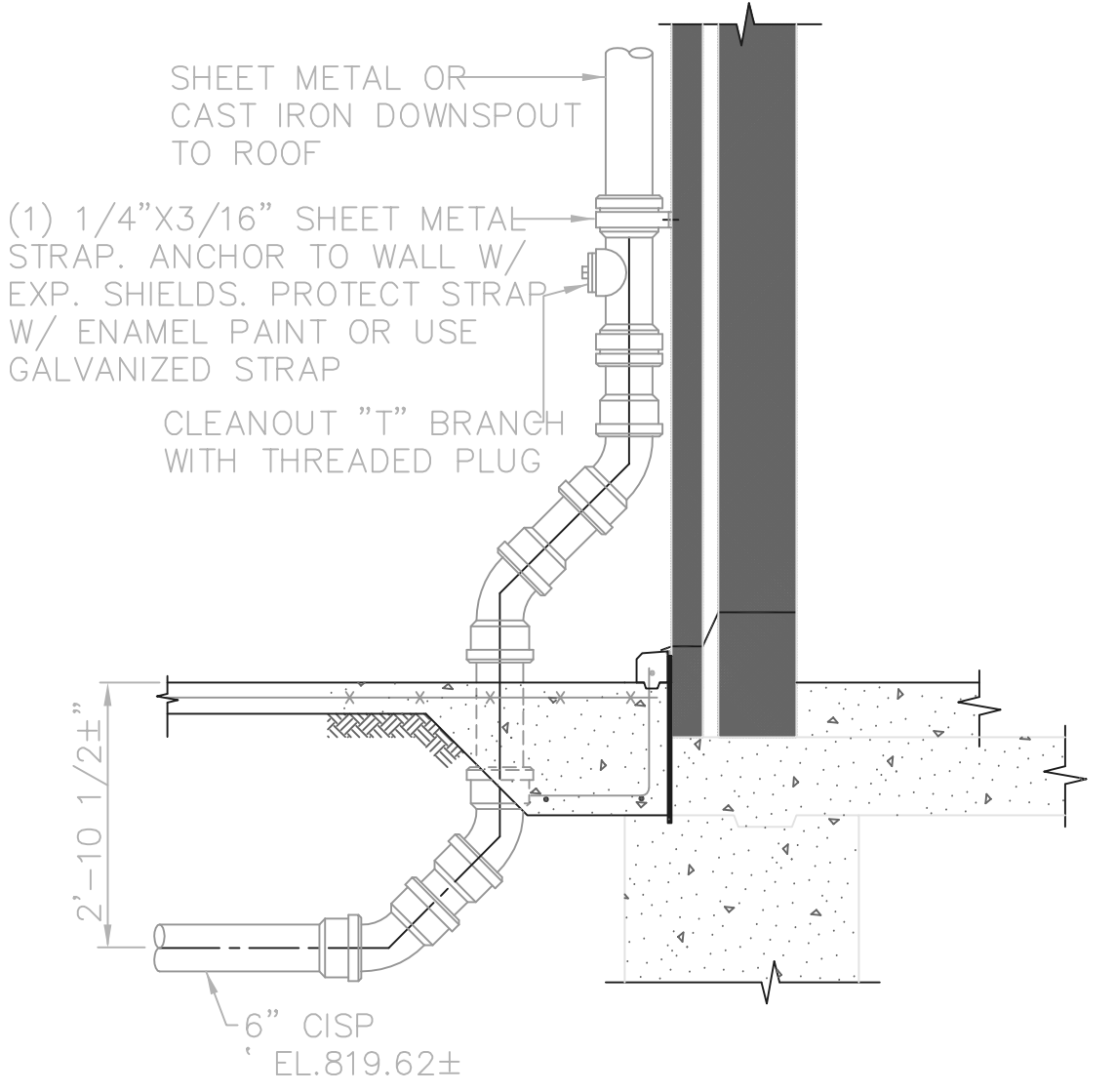
SECTION D
1/2"=1'-0"



SECTION E
1"=1'-0"



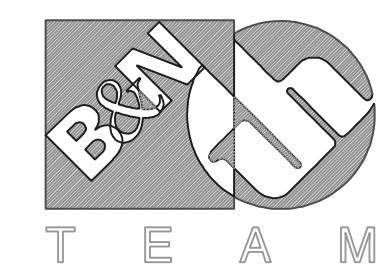
SECTION F
1/2"=1'-0"



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

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE
 TOL-4714525
 04/15/02 04-V02
 P:\PR24025\PMFSTARECDWG\20.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

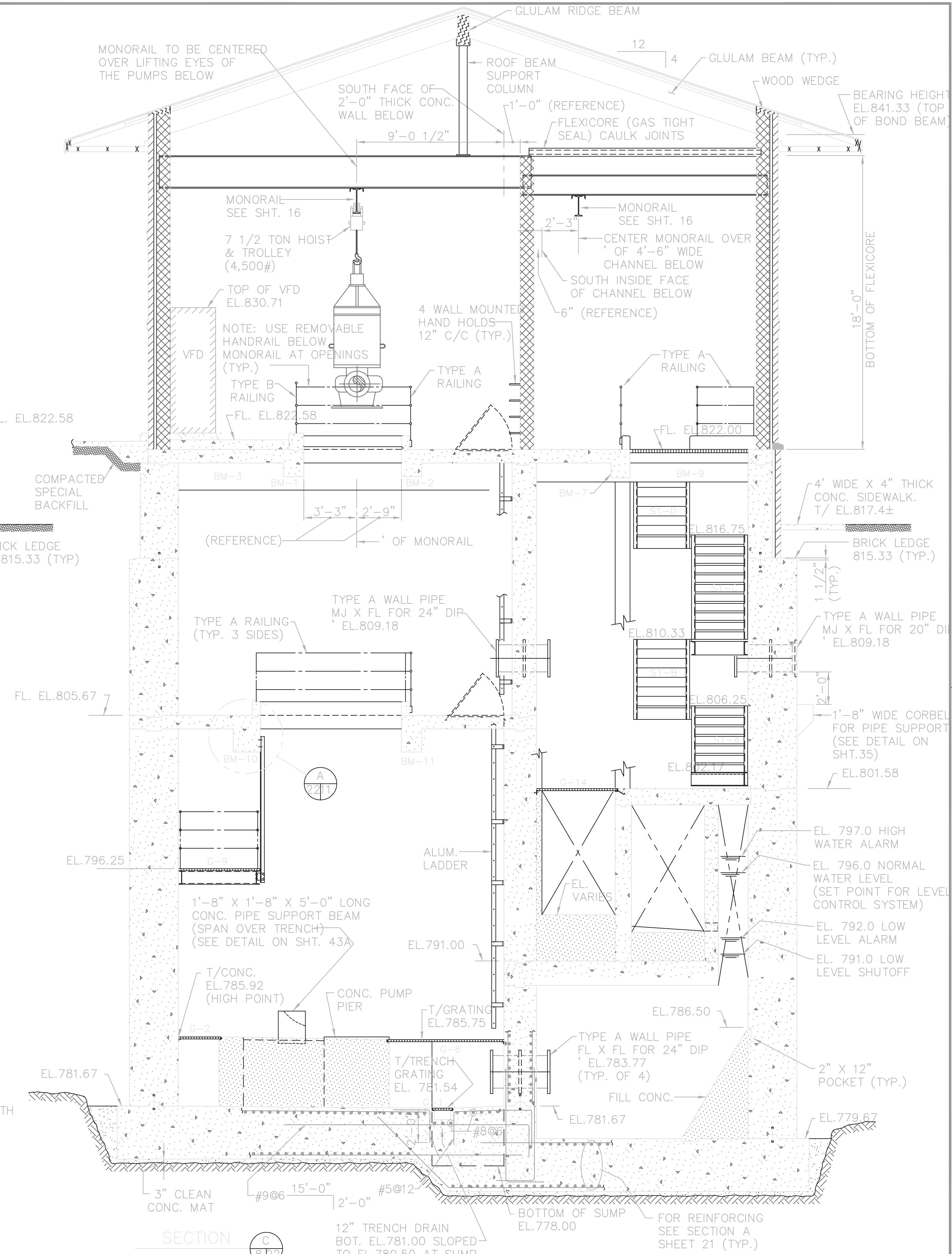
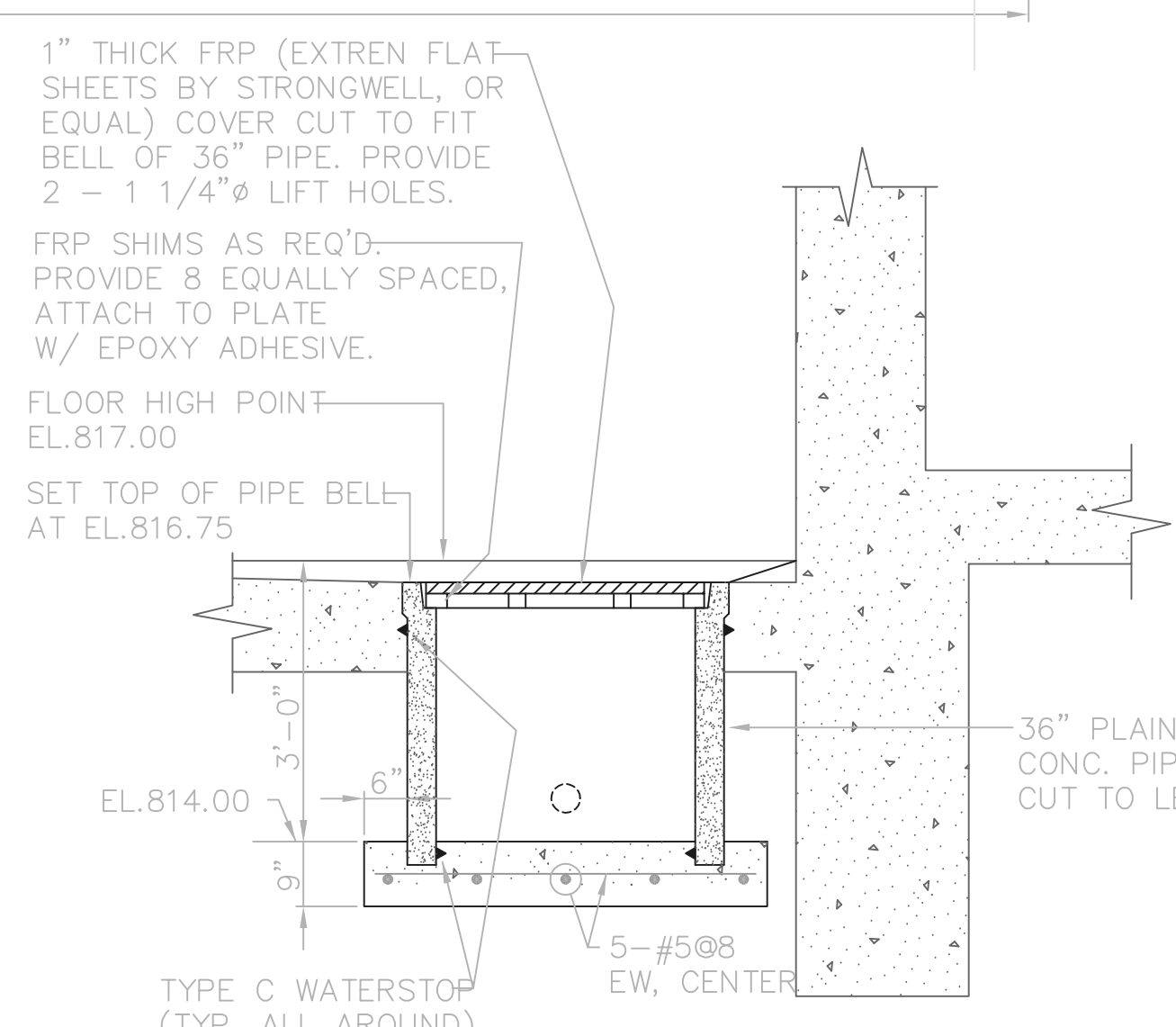
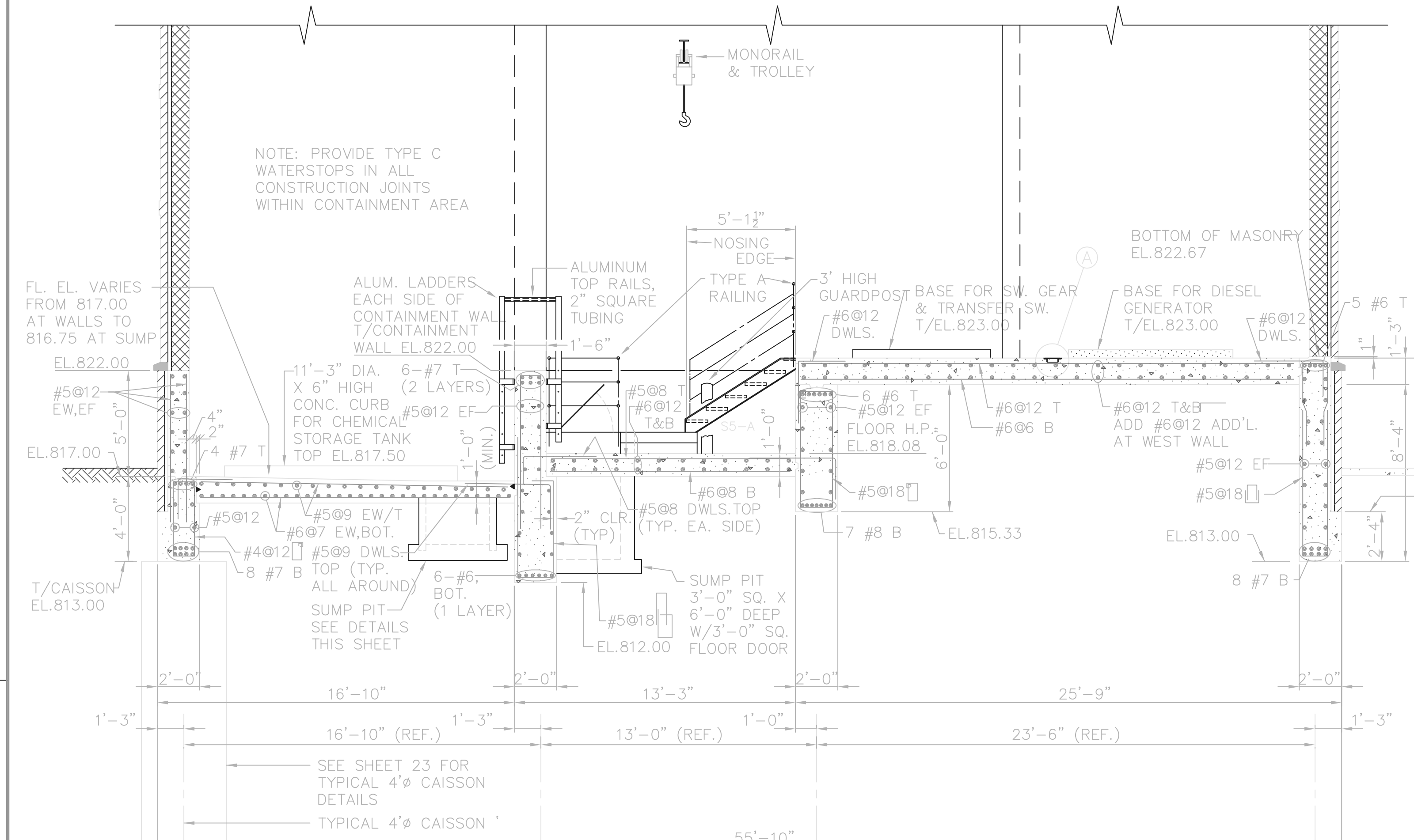
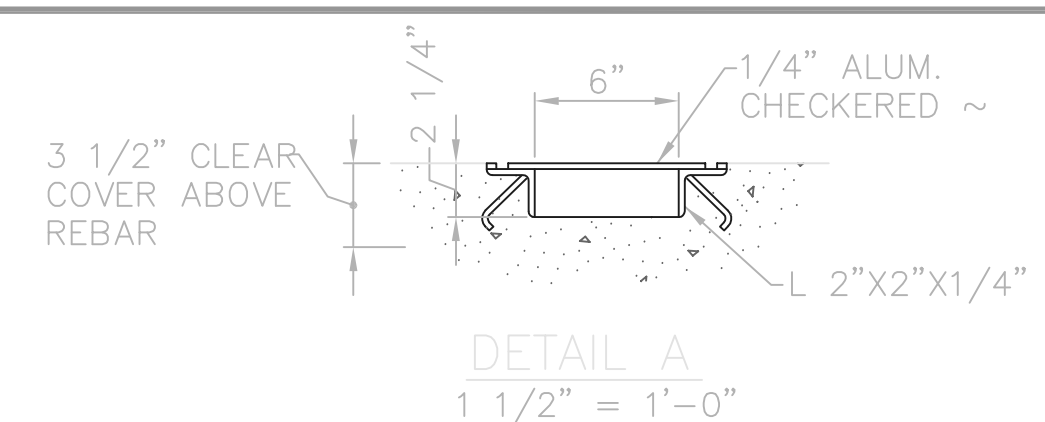
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
 STRUCTURAL
 EQUIPMENT PAD
 PLAN AT EL.822.50

SCALE:	
1/4"=1'-0"	
SHEET NO.	OF
20	100



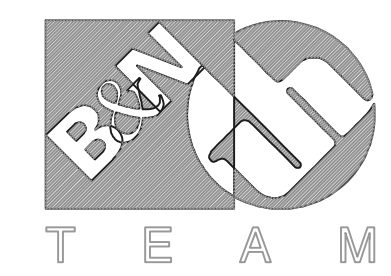
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".

FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
MO. / DAY / YR.

TOL-4714512
 04/17/02 04-V02
 P:\PR24025\PM\STARECDWG\22.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

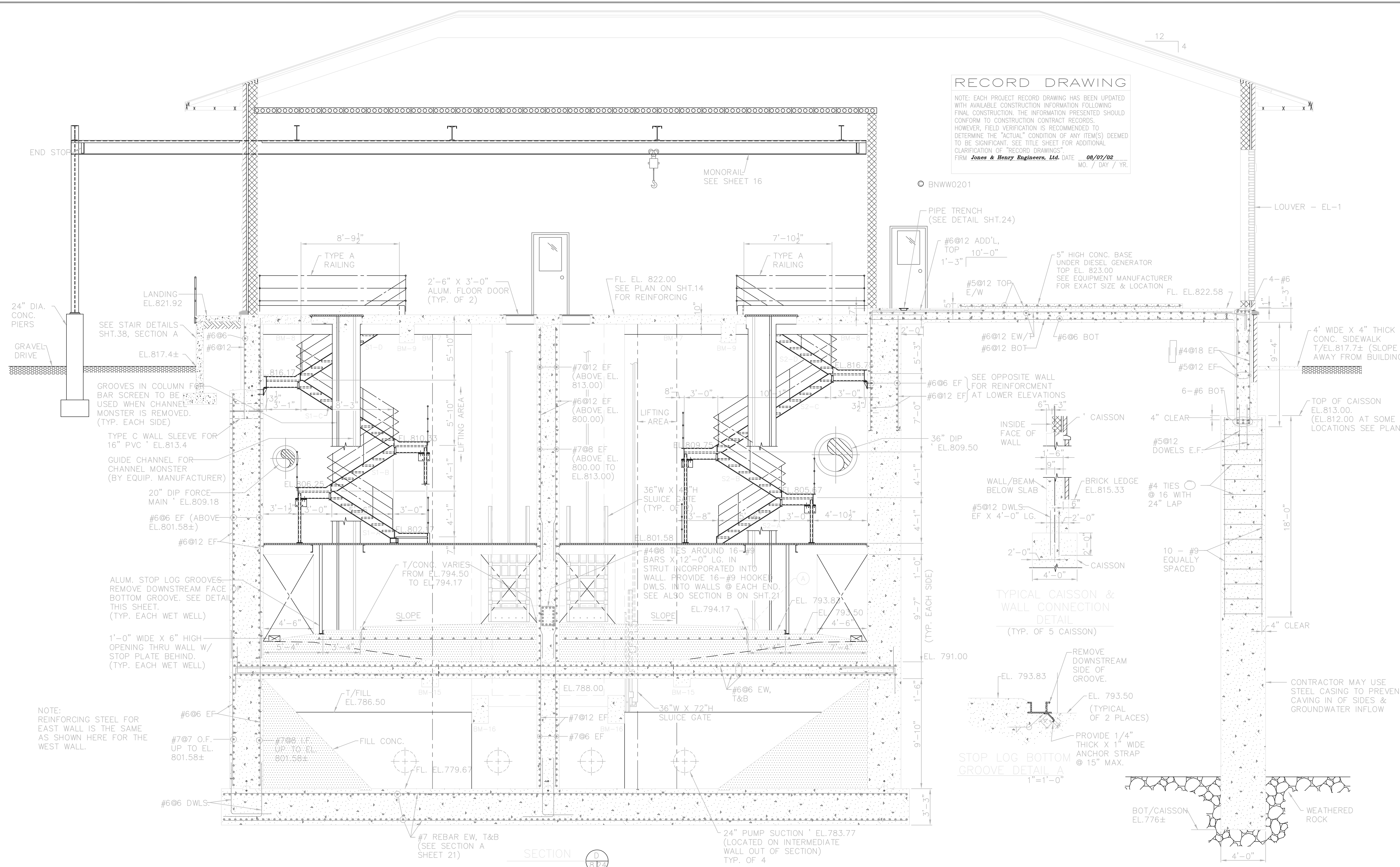
JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
 STRUCTURAL
 SECTIONS AND DETAILS

SCALE:	1/4"=1'-0"
SHEET NO.	22
OF	100

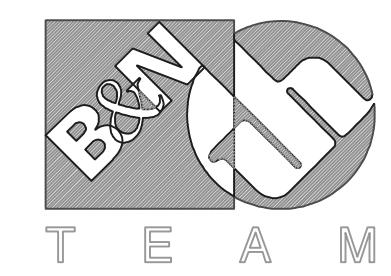
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
 FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
 MO. / DAY / YR.



TOL-4714511
 03/21/02 04-V02
 P:\PR24025\PMF\STARECDWG\23.DWG

NO.	REVISIONS	DATE	BY	CHK.



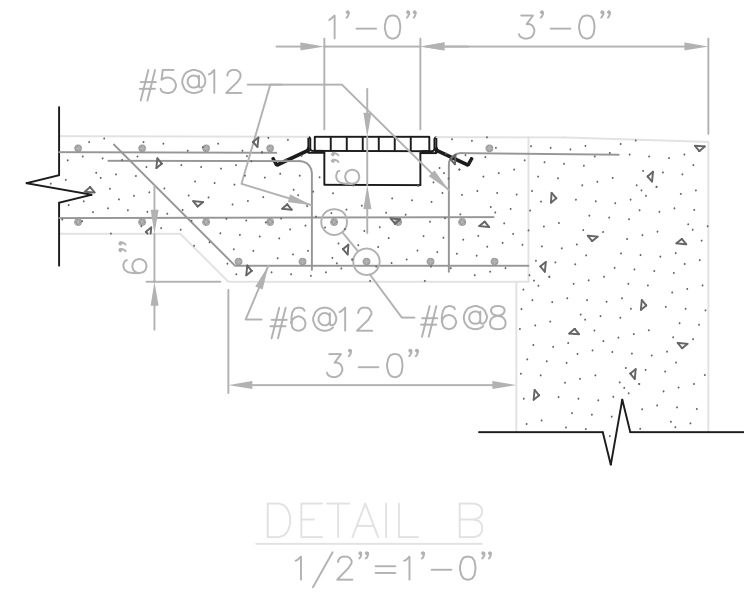
Burgess & Niple, Limited
 Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
 STRUCTURAL
 SECTIONS AND DETAILS

SCALE:	1/4"=1'-0"
SHEET NO.	23
OF	100



DETAIL B
1/2"=1'-0"

LANDING
EL. 821.92
SEE STAIR DETAILS
SHT.38 SECTION A
GRAVEL DRIVE
EL.817.4±
(TYP.)

#6@12 EF (ABOVE
EL.805.67)
#6@6 EF (ABOVE
EL.801.58±)
FL. EL.805.67

#6@6 EF
#7@7 O.F.
UP TO EL.
801.58±
ADDITIONAL
#5@12 DWLS.
T/CONC.
EL.781.67
#6@6 DWLS.

SUMP
BOTTOM EL.778.67
EL.778.00

NOTE: USE REMOVABLE
HANDRAIL BELOW
MONORAIL (TYP.)

4 WALL MOUNTED
HAND HOLDS
(TYP. OF 2
FLOOR DOORS)

LADDER

NOTE:
SEE PLANS FOR
SLAB REINFORCING

TYPE A
RAILING

TYPE A
RAILING
(TYP. 3 SIDES)

MONORAIL
SEE FRAMING PLAN
SHT.16 FOR DETAILS

GUARDPOST TO
3' ABOVE FLOOR
(SEE MISC. DETAILS
SHEET 36)

FL. EL.822.58
6-#6 BEAM TOP
REINFORCEMENT
(HOOK ENDS)

H.P. EL.818.08

SLOPE

#5@8 T
6'-0" (MIN.)

#6@8 B
8'-0"

45° MAX.

7-#8 BEAM BOTTOM
REINFORCEMENT
(#5@12 VERT. NOT
SHOWN)

T/CAISSON
EL.812.00

12'-0"

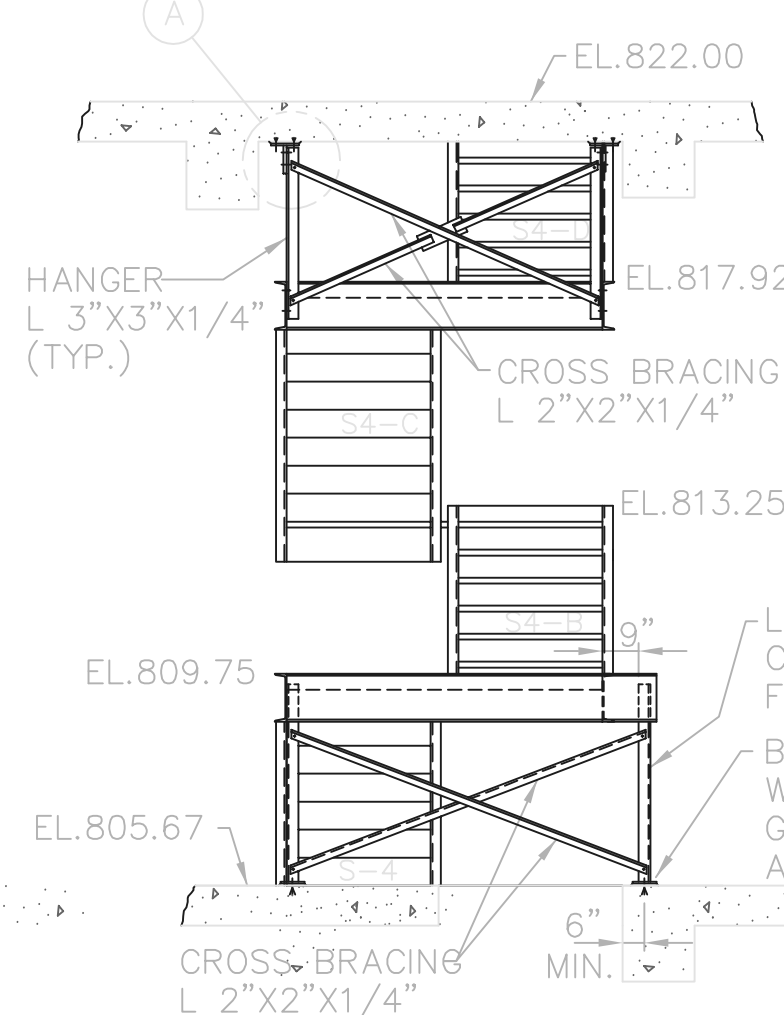
CAISSON

SEE SHEET 23 FOR
TYPICAL CAISSON
DETAILS

RECORD DRAWING

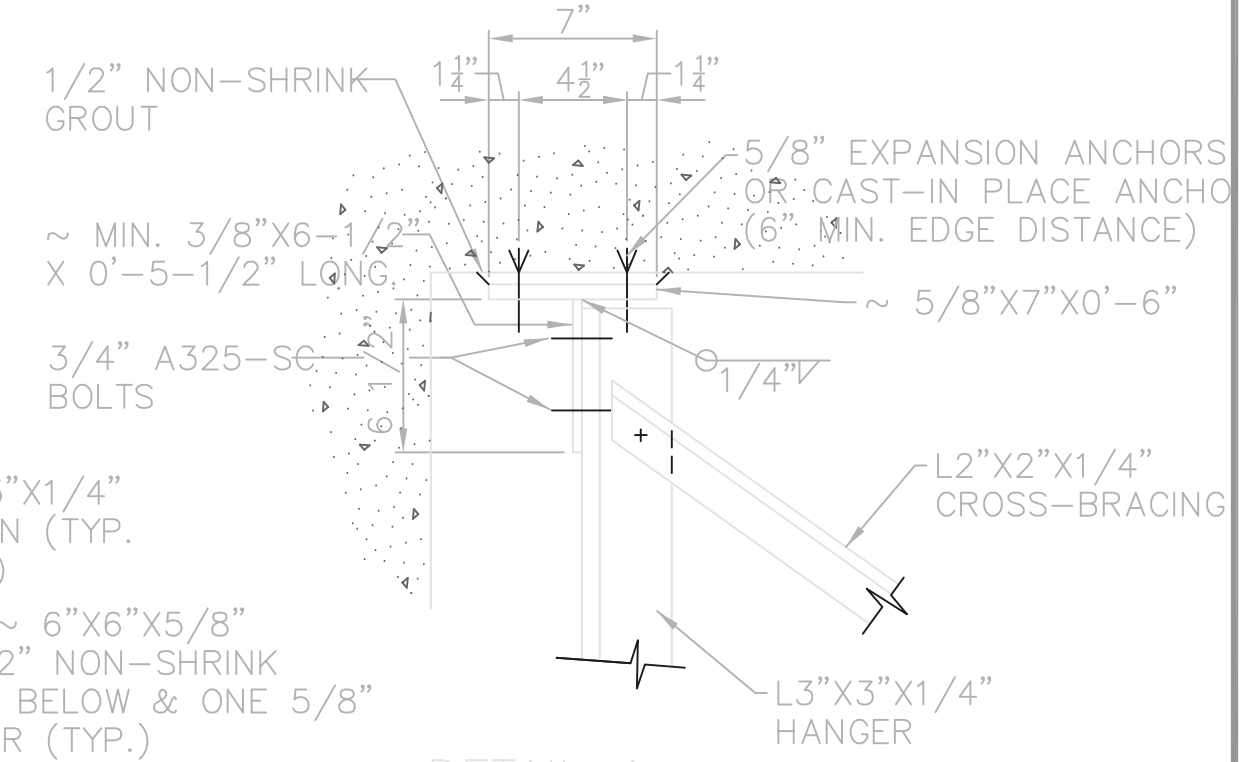
NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM Jones & Henry Engineers, Ltd. DATE 08/07/02
MO. / DAY / YR.

BNWW0201



STAIR S4 FRAMING SUPPORT DETAIL

SECTION SHOWN SOUTH OF OPENING
IN SLAB AT EL.822.00

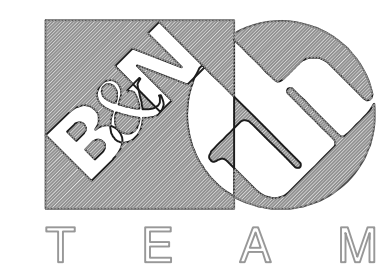


DETAIL A
1-1/2"=1'-0"

- NOTES:
- 1) PIECE WT 7 X 24 X 0'-6" LONG MAY BE SUBSTITUTE FOR WELDED PLATES.
 - 2) ALL STEEL TO BE HOT-DIP GALVANIZED AFTER FABRICATION.

TOL-4714507
03/21/02 04-V02
P:\PR24025\PM\STARECDWG\24.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

Jones & Henry Engineers, Ltd.

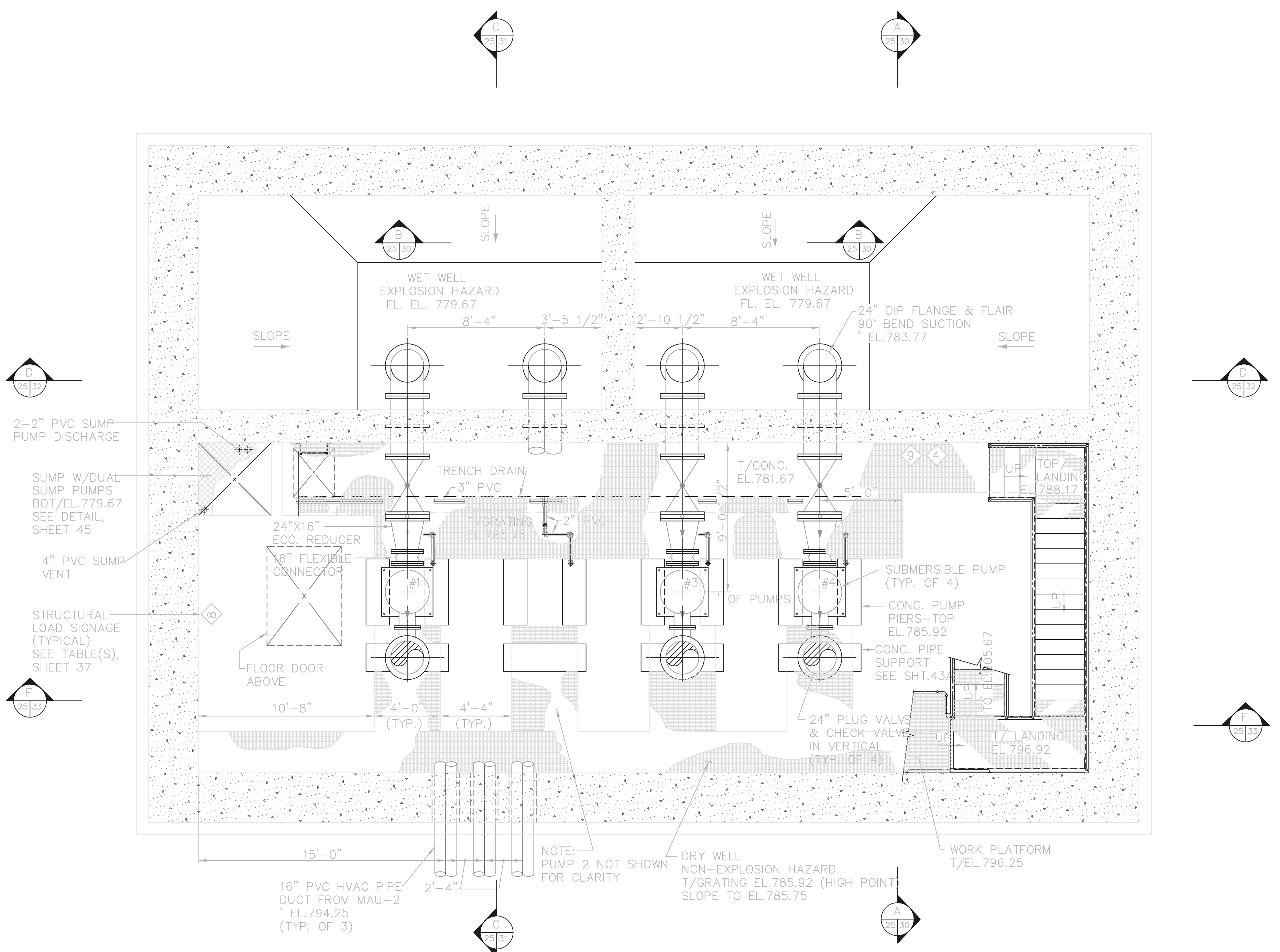
DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	DAR
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
STRUCTURAL
SECTIONS AND DETAILS

SCALE:	
1/4"=1'-0"	
SHEET NO.	OF
24	100

TOL-4714PE04-001
 09/10/02 10-002
 P:\PR24025\PMPS\ARECDWG\25.DWG



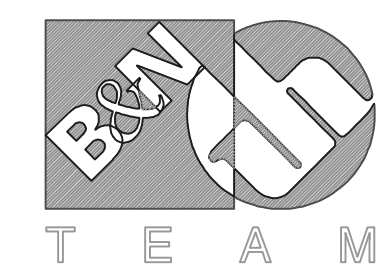
PLAN AT EL. 779.67

RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
 FIRM **Jones & Henry Engineers, Ltd.** DATE 08/07/02
 MO. / DAY / YR.

© BNWW0201

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

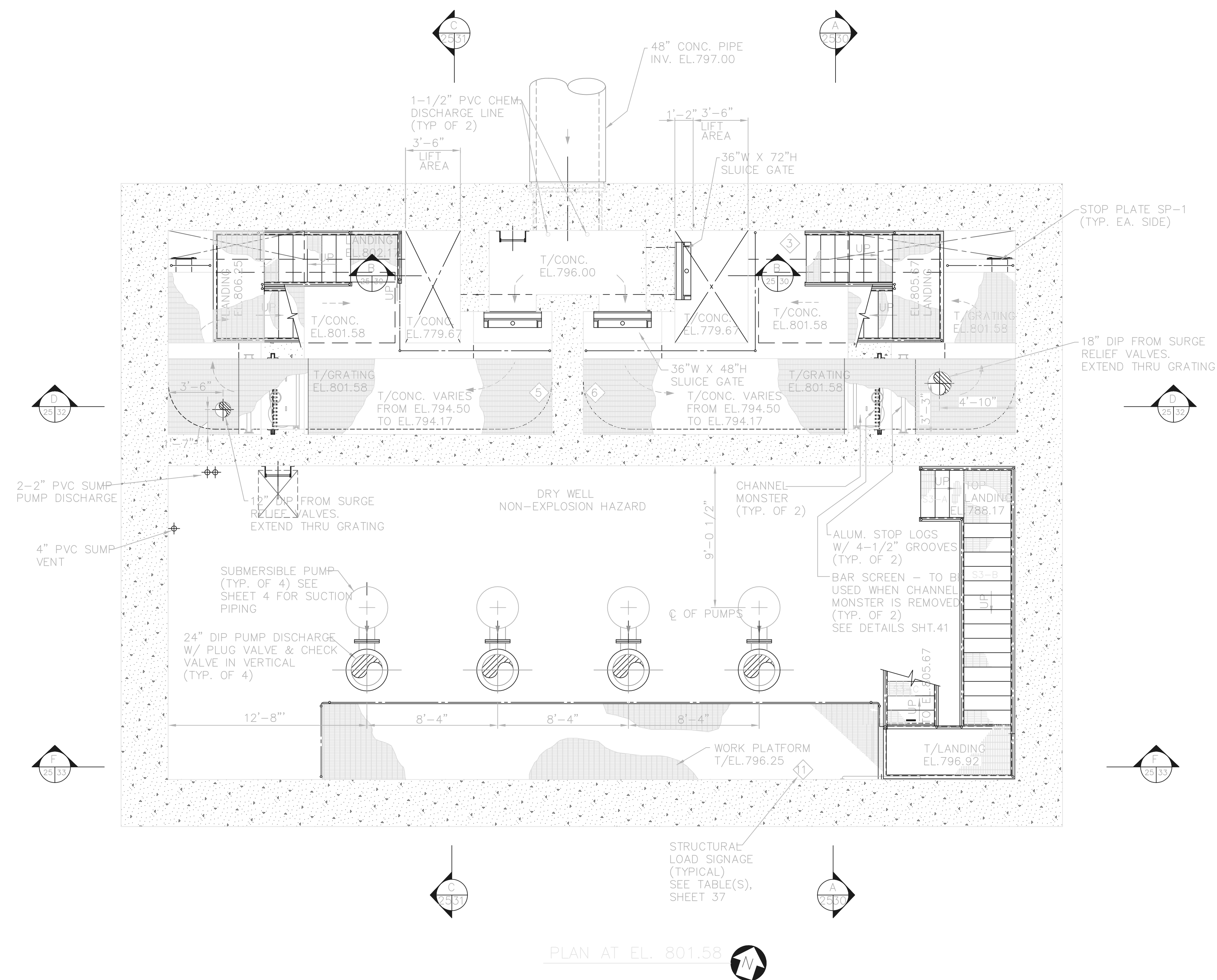
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO.	84-4714
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
 PIPING & EQUIPMENT
 PLAN AT EL. 779.67

SCALE:	
1/4"=1'-0"	
SHEET NO.	OF
25	100



PLAN AT EL. 801.58

RECORD DRAWING

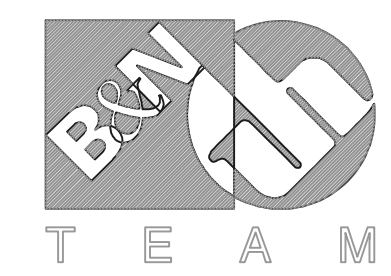
NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".

FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
MO. / DAY / YR.

© BNW0201

TOL-4714PE03
 03/21/02 04-V02
 P:\PR24025\PMPS\RECORDING\26.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

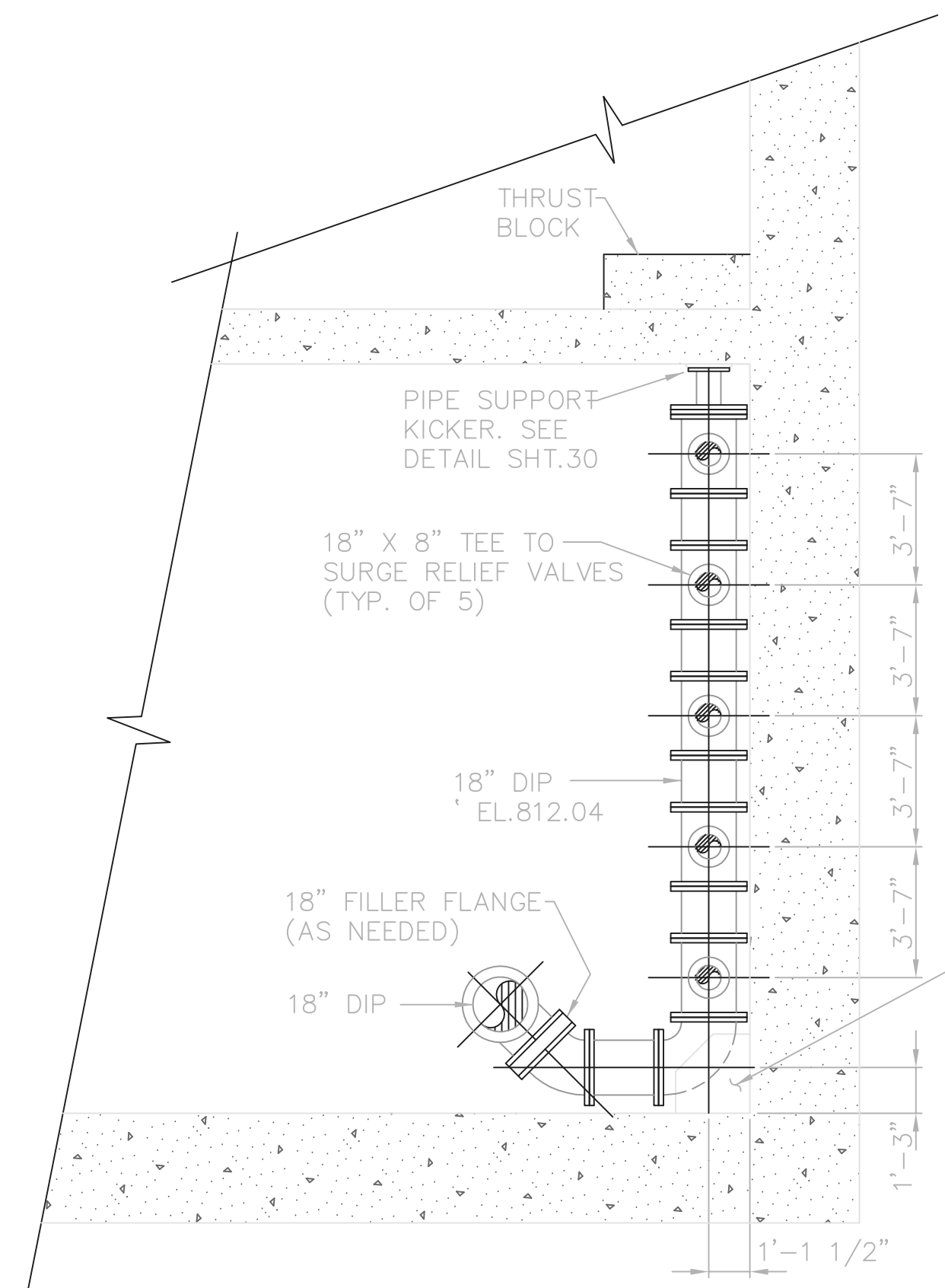
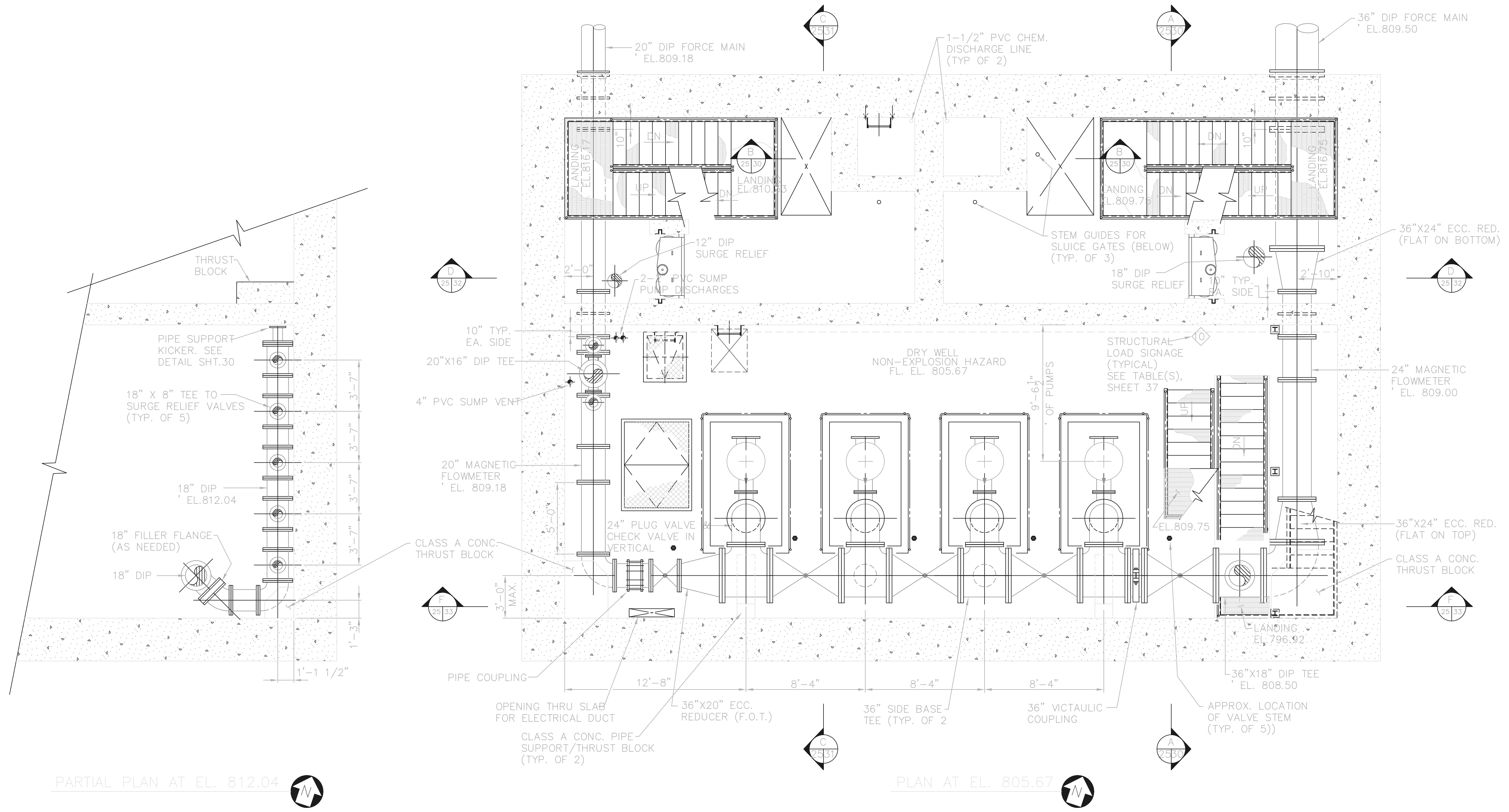
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
 PIPING & EQUIPMENT
 PLAN AT EL. 801.58

SCALE:	
1/4"=1'-0"	
SHEET NO.	OF
26	100



PARTIAL PLAN AT EL. 812.04

PLAN AT EL. 805.67

RECORD DRAWING

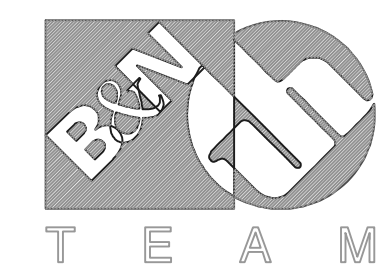
NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".

FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
MO. / DAY / YR.

© BNWW0201

TOL-4714PE02-001
 07/29/02 06-102
 P:\PR24025\PMFSTARECDWG\27.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

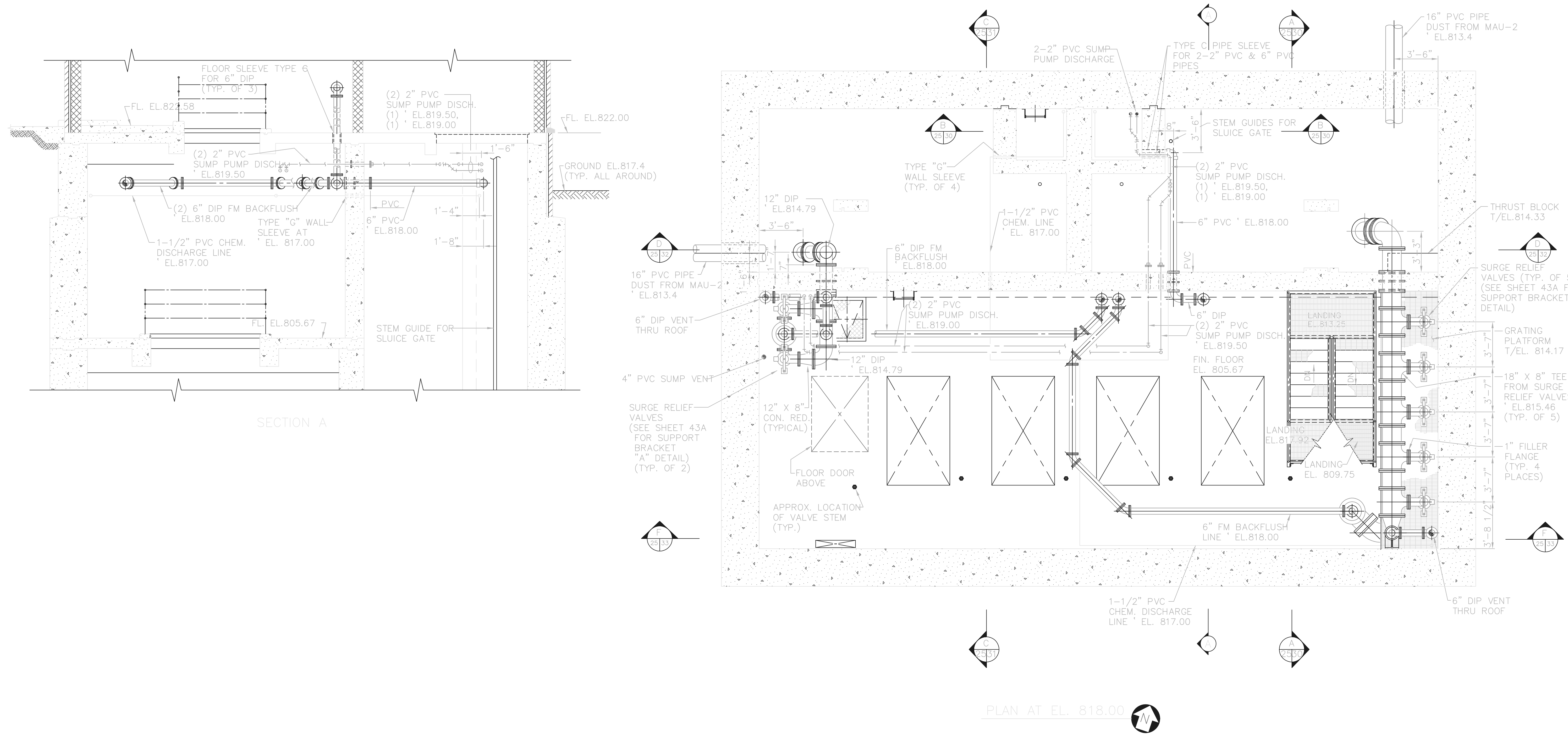
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
 PIPING & EQUIPMENT
 PLAN AT EL. 805.67

SCALE:	
1/4"=1'-0"	
SHEET NO.	OF
27	100



RECORD DRAWING

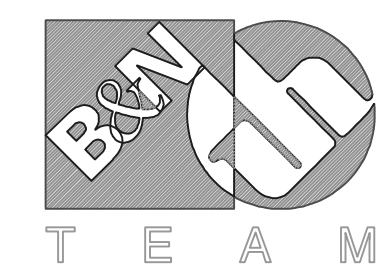
NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".

FIRM **Jones & Henry Engineers, Ltd.** DATE 08/07/02 MO. / DAY / YR.

© BNW0201

TOL-4714PE22
 04/19/02 04-V02
 P:\PR24025\PM\STARECDWG\28.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

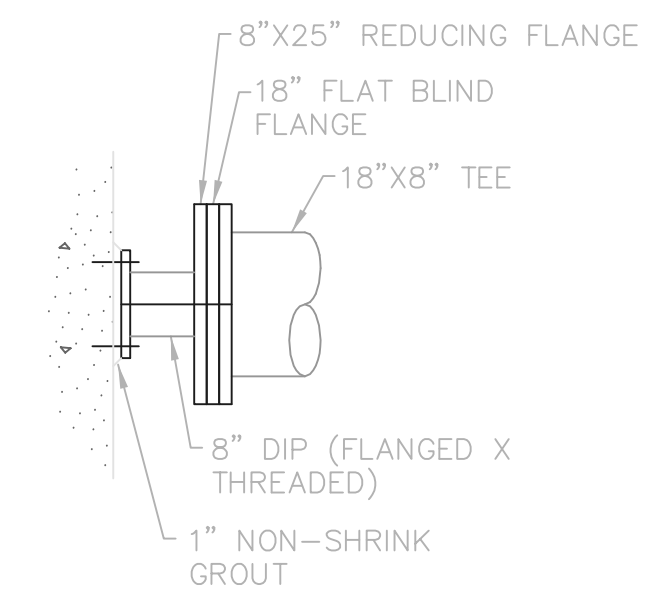
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

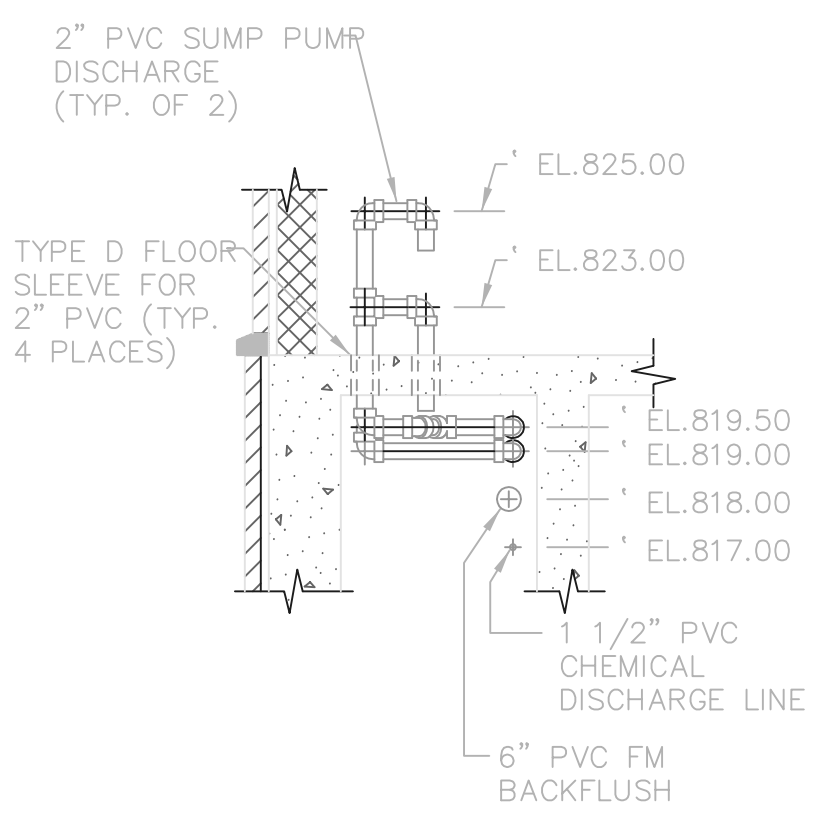
JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
 PIPING & EQUIPMENT
 PLAN AT EL. 818.00

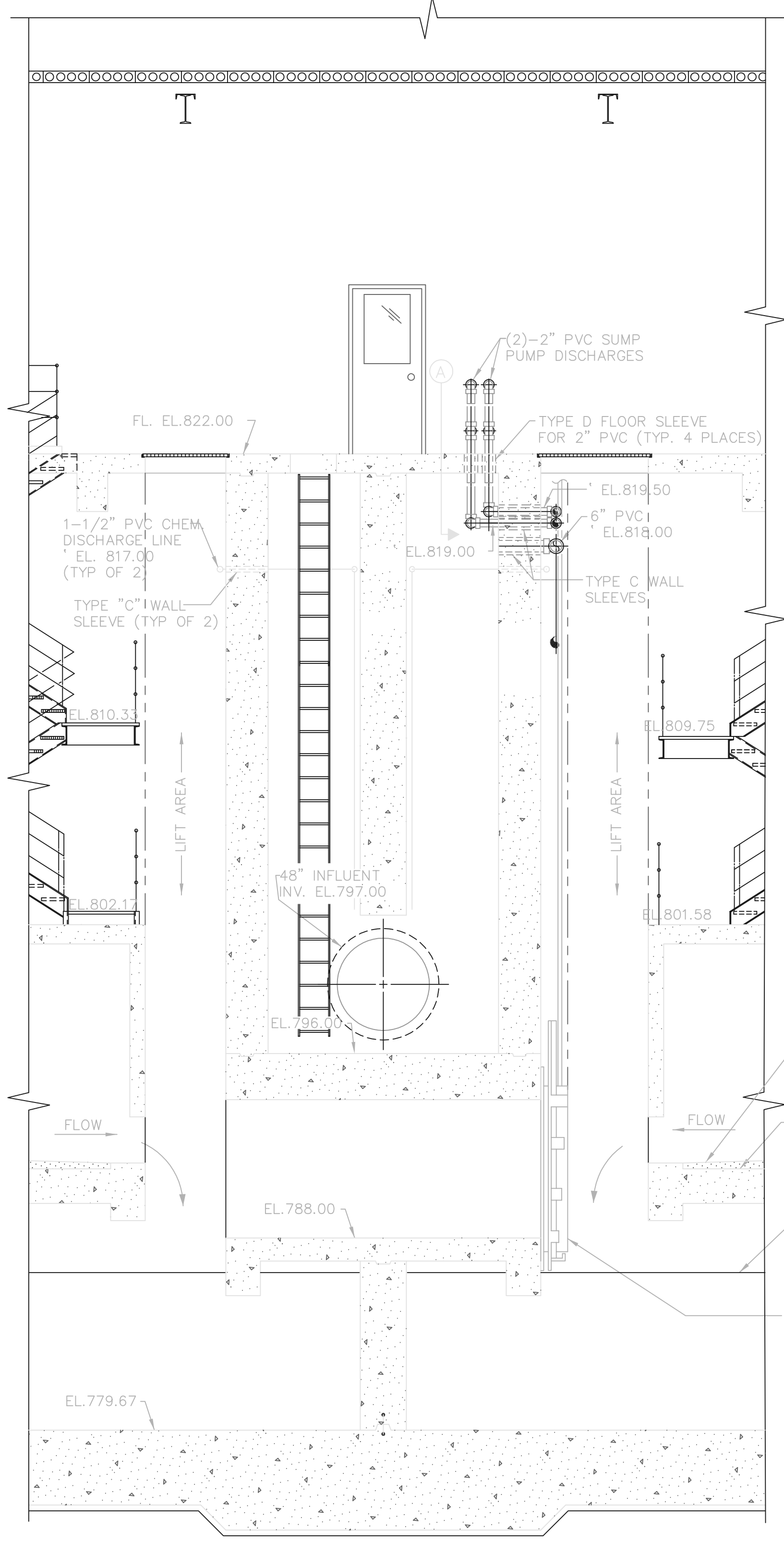
SCALE:	
1/4"=1'-0"	
SHEET NO.	OF
28	100



PIPE SUPPORT DETAIL
1/2"=1'-0"



DETAIL A

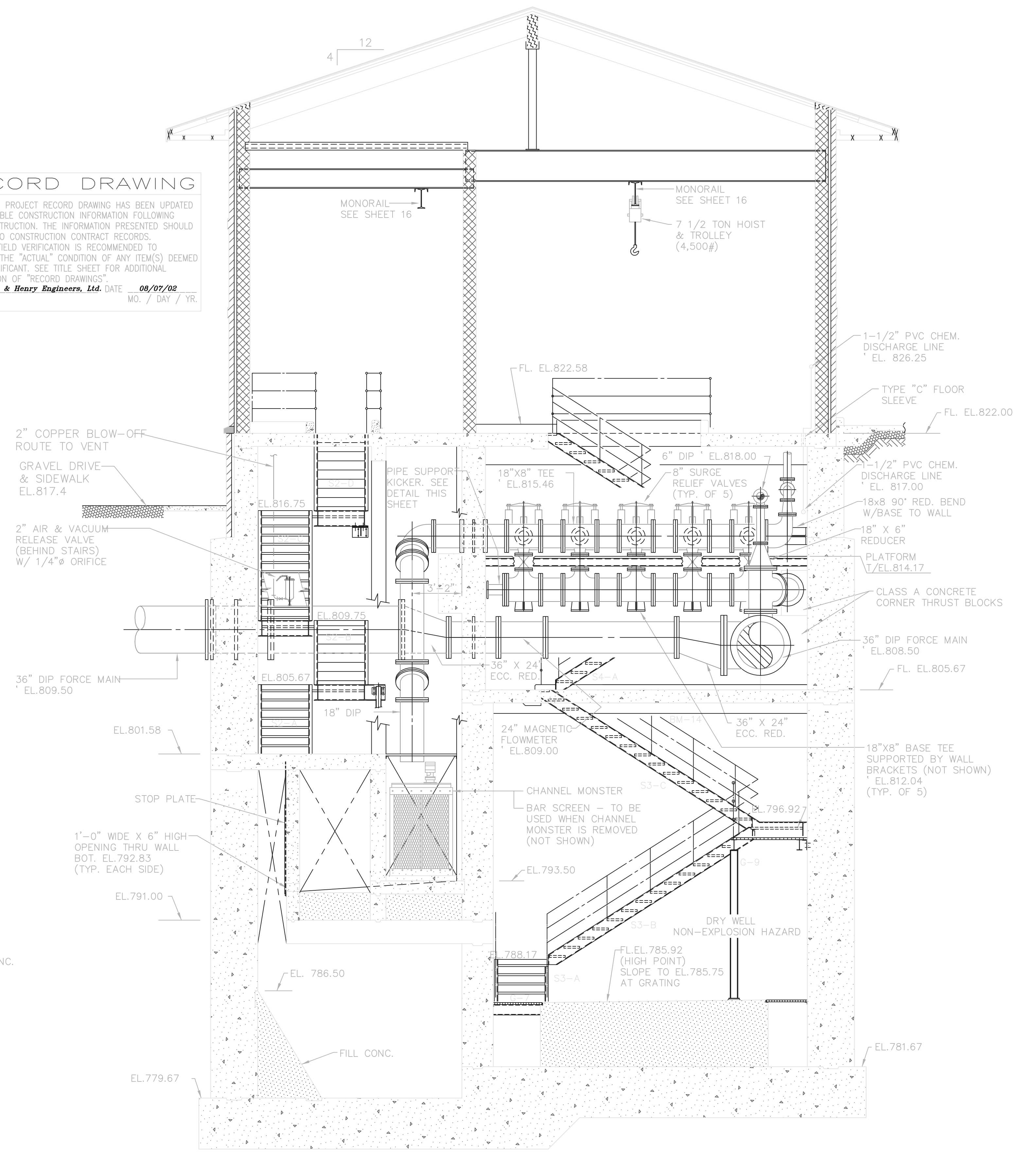


SECTION B
25/30

RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM **Jones & Henry Engineers, Ltd.** DATE 08/07/02
MO. / DAY / YR.

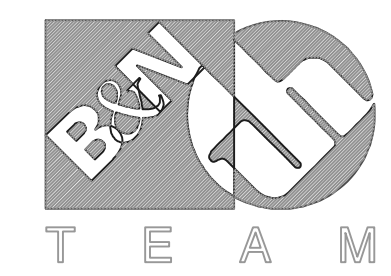
○ BNWW0201



SECTION A
25/30

TOL-4714PED5
 03/26/02 04-V02
 P:\PR24025\NMPSTARECDWG\30.DWG

NO.	REVISIONS	DATE	BY	CHK.



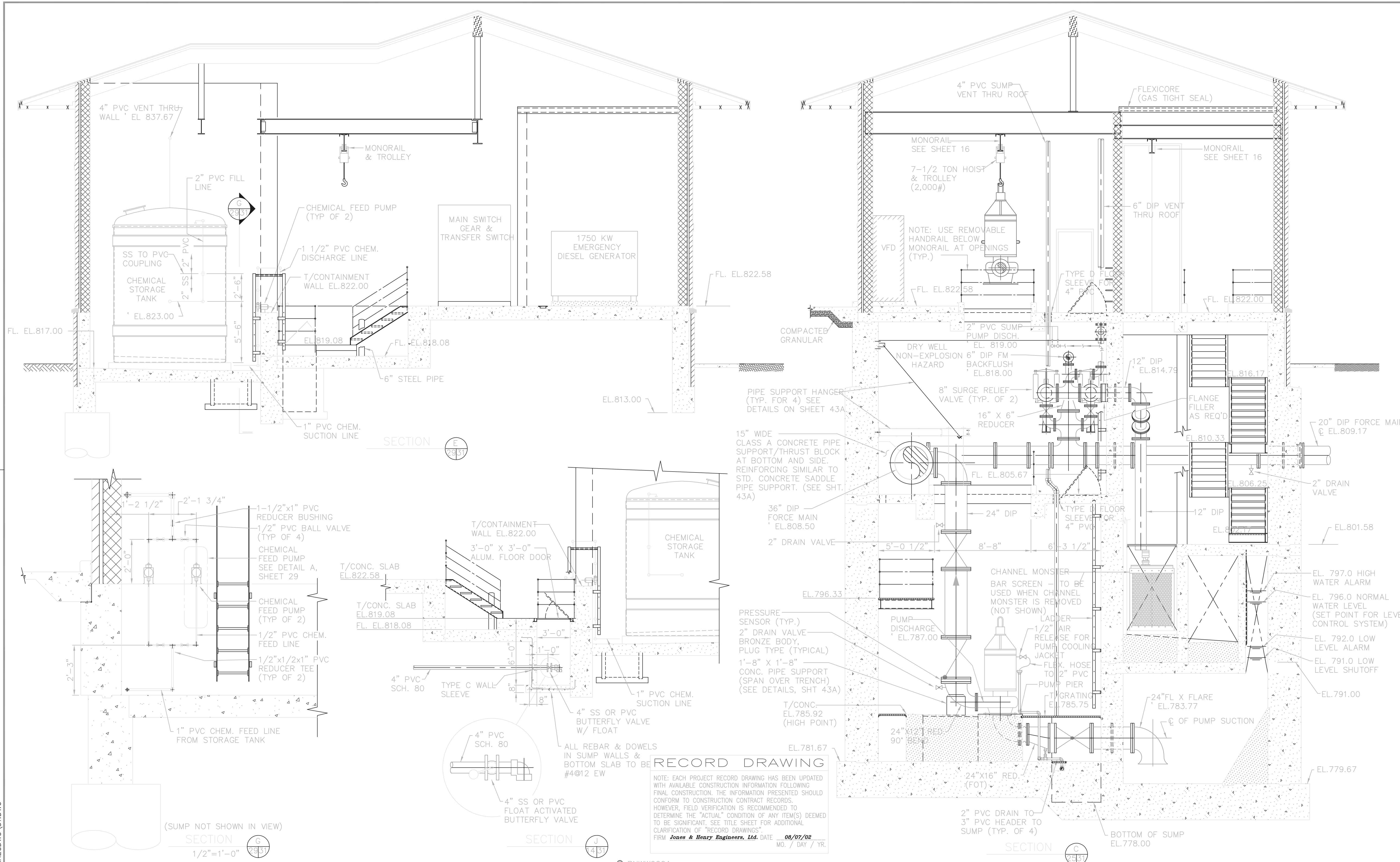
Burgess & Niple, Limited
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
PIPING & EQUIPMENT
SECTIONS AND DETAILS

SCALE:	
1/4"=1'-0"	
SHEET NO.	OF
30	100



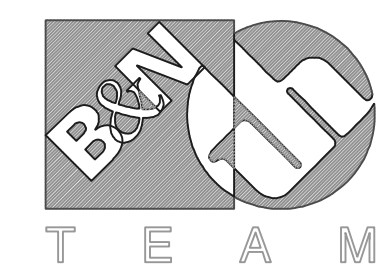
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".

FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
MO. / DAY / YR.

TOL-4714PE06
04/19/02 04-VO2
P:\PR24025\PMPTARECDWG\31.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

Jones & Henry Engineers, Ltd.

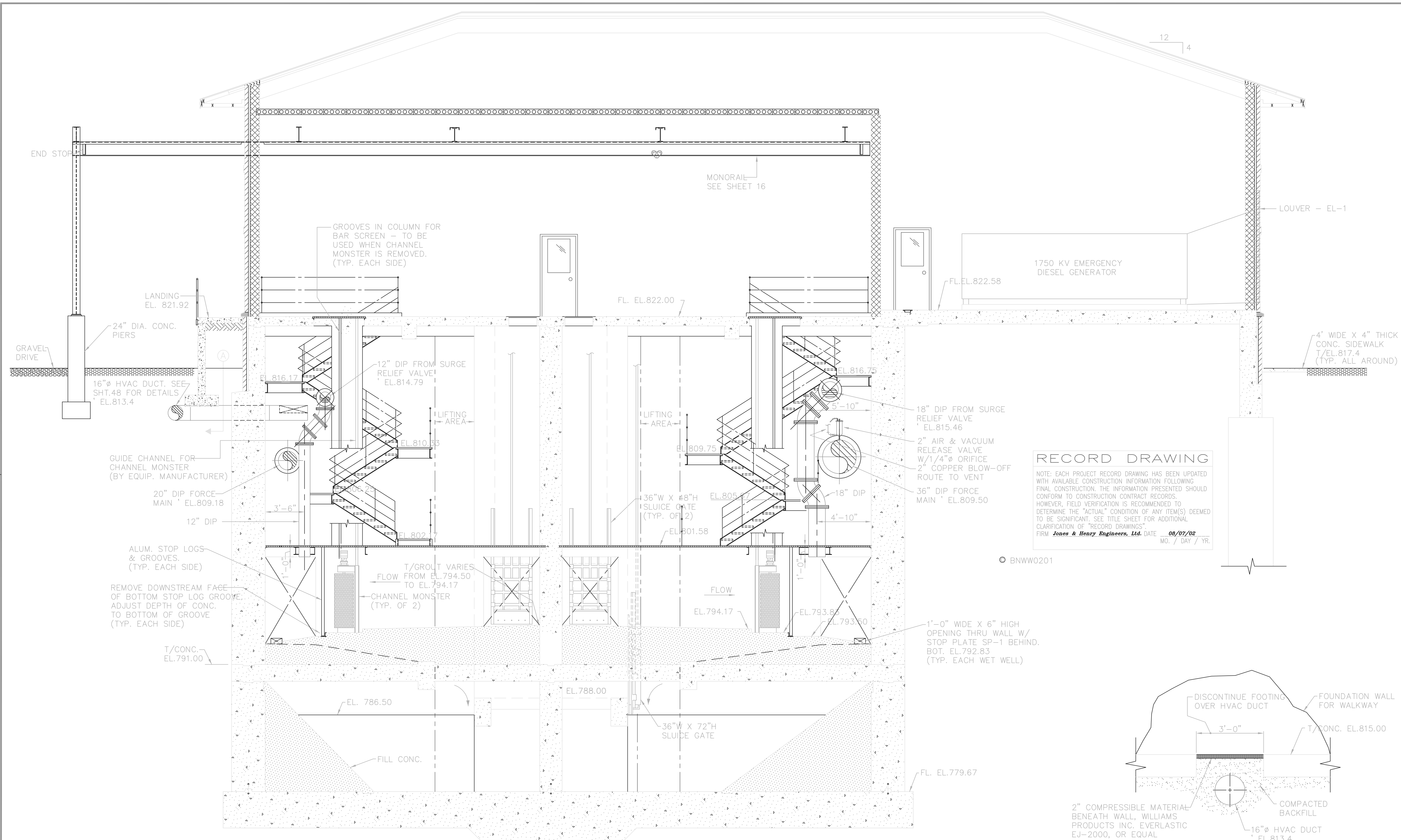
DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
PIPING & EQUIPMENT
SECTIONS AND DETAILS

SCALE:	1/4"=1'-0"
SHEET NO.	OF
31	100

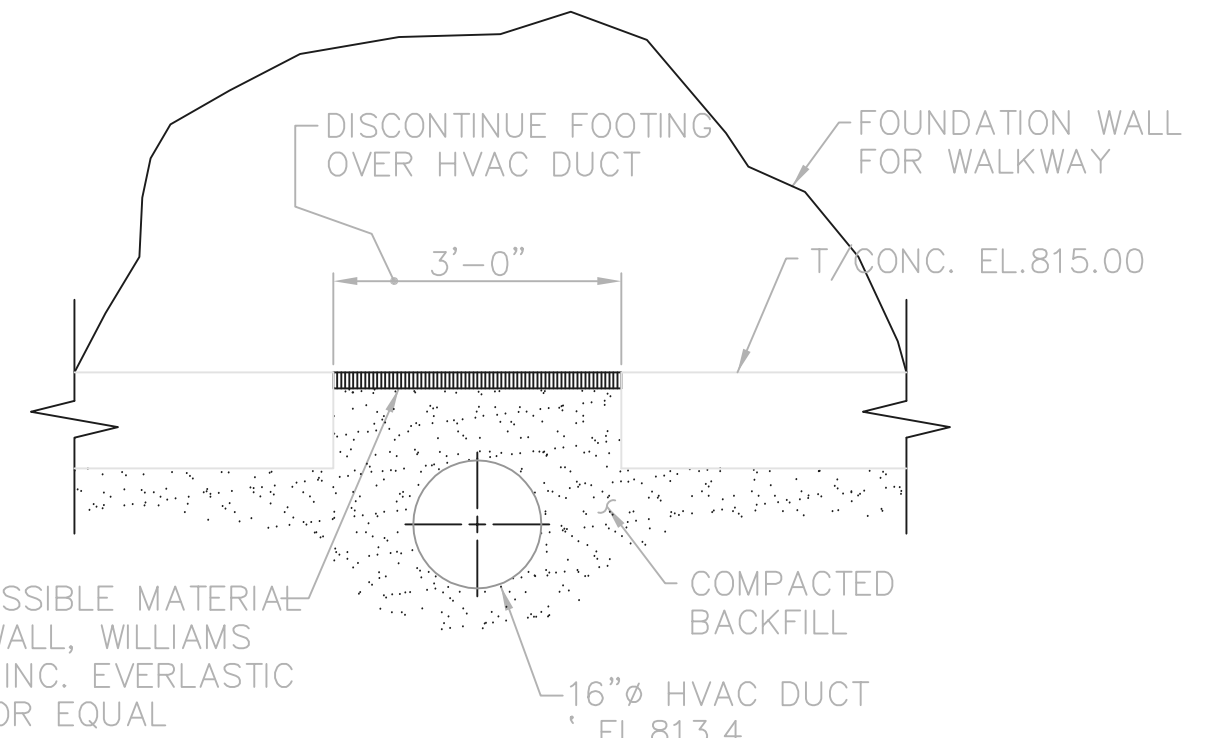
© BNW0201



RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".

FIRM **Jones & Henry Engineers, Ltd.** DATE 08/07/02
MO. / DAY / YR.

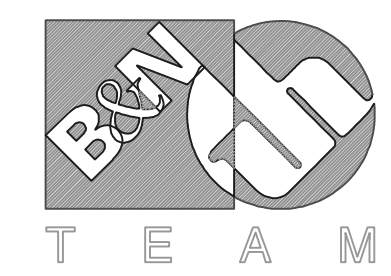


SECTION D

DETAIL A
1/2"=1'-0"

TOL-4714PE07
 03/29/02 04-V02
 P:\PR24025\PM\STARECDWG\32.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

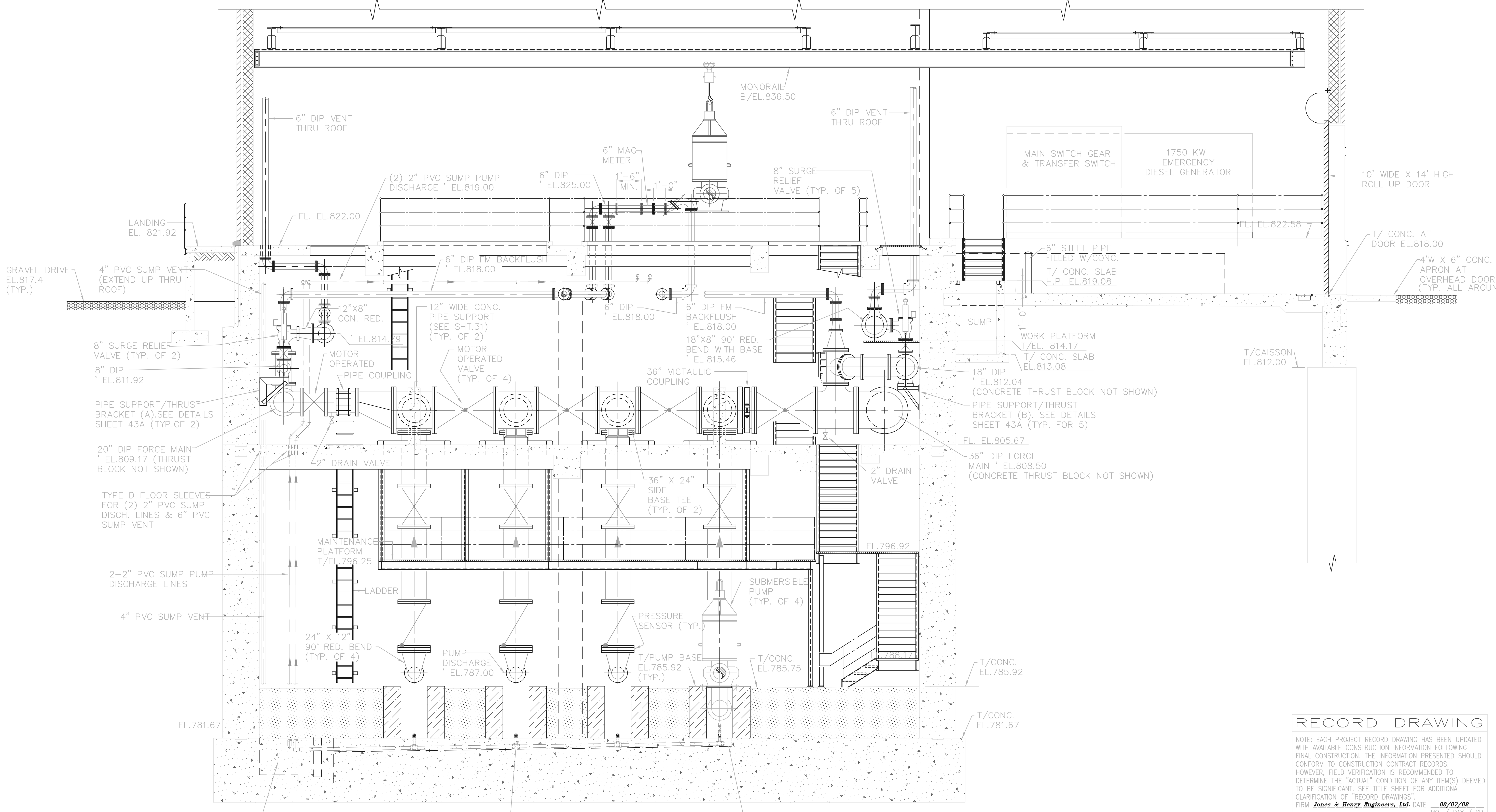
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
 PIPING & EQUIPMENT
 SECTIONS AND DETAILS

SCALE:	1/4"=1'-0"
SHEET NO.	32
OF	100



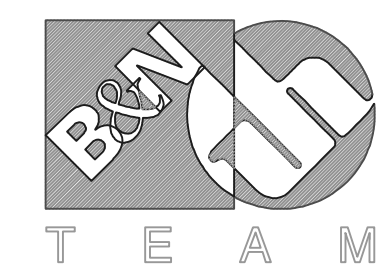
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".

FIRM **Jones & Henry Engineers, Ltd.** DATE 08/07/02 MO. / DAY / YR.

TOL-4714PED09
 03/29/02 04-V02
 P:\PR24025\NMPSTARECDWG\33.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

Jones & Henry Engineers, Ltd.

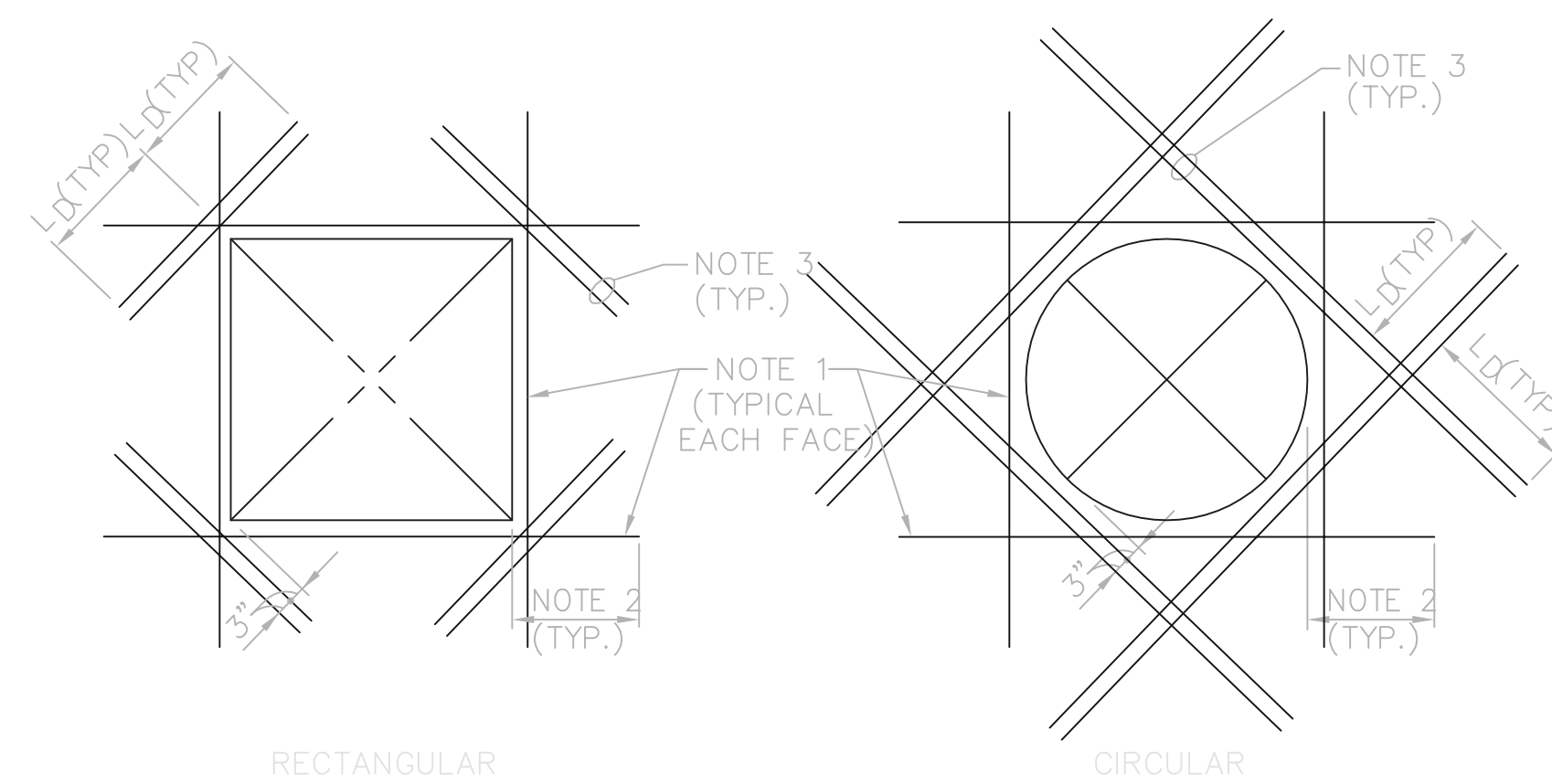
DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
 PIPING & EQUIPMENT
 SECTIONS AND DETAILS

SCALE:	
1/4"=1'-0"	
SHEET NO.	OF
33	100

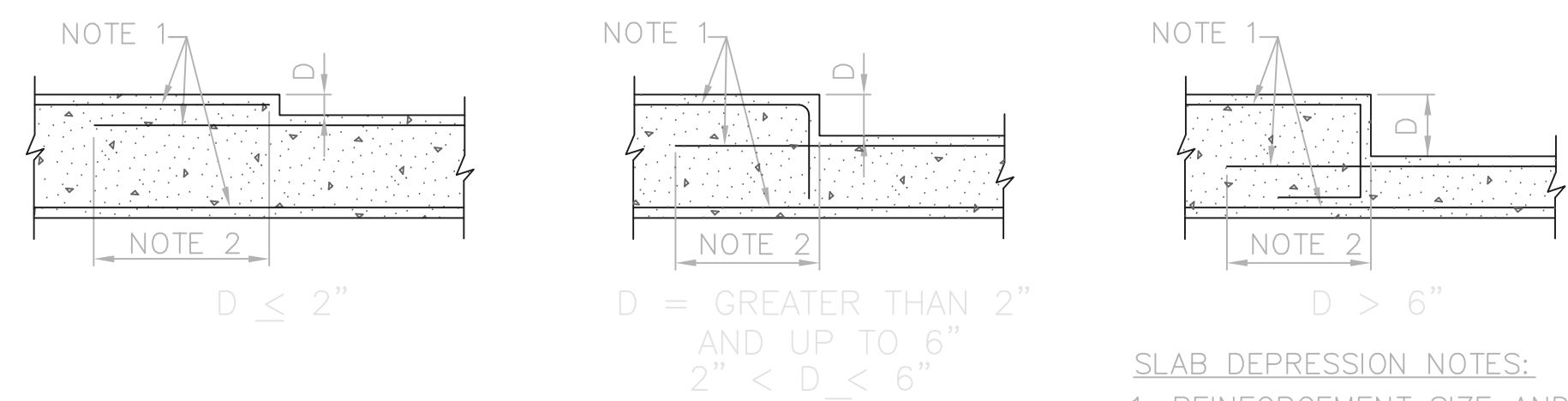
© BNW0201



- REINFORCEMENT AT OPENING NOTES:**
- ADDITIONAL REINFORCEMENT EQUAL IN AREA TO REINFORCEMENT CUT BY OPENING.
 - LAP SPLICE LENGTH FOR TOP BARS.
 - DIAGONAL BARS - EACH FACE, 2 EACH CORNER - SIZE AS FOLLOWS

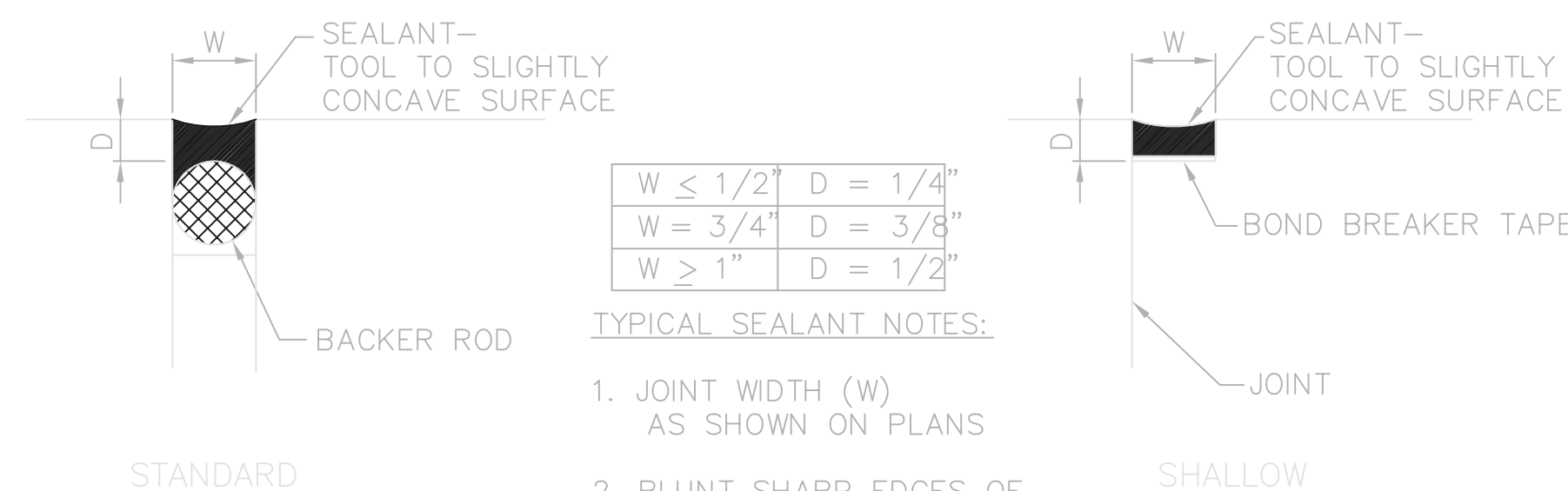
CONC. THICKNESS	BAR SIZE	DEVELOPMENT LENGTH (L _d)
LESS THAN 12"	#4	17"
12" TO 18"	#5	21"
GREATER THAN 18"	#6	25"
 - THIS STANDARD LIMITED TO PENETRATIONS SMALLER THAN 48"

TYPICAL ADDITIONAL REINFORCEMENT AT OPENINGS LARGER THAN 12"



- SLAB DEPRESSION NOTES:**
- REINFORCEMENT SIZE AND SPACING AS SHOWN ON PLANS.
 - LAP SPLICE LENGTH.

TYPICAL SLAB DEPRESSION DETAILS



$W \leq 1/2"$	$D = 1/4"$
$W = 3/4"$	$D = 3/8"$
$W \geq 1"$	$D = 1/2"$

- TYPICAL SEALANT NOTES:**
- JOINT WIDTH (W) AS SHOWN ON PLANS
 - BLUNT SHARP EDGES OF CONCRETE JOINTS WITH GRINDER BEFORE SEALING.

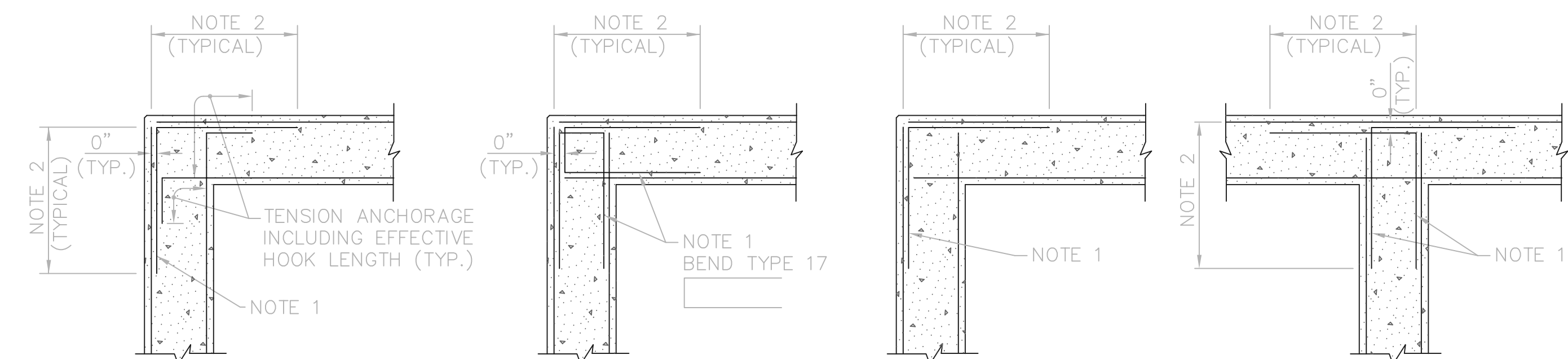
TYPICAL SEALANT DETAILS

TYPICAL CONCRETE COVER

- CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH
- SURFACE EXPOSED TO EARTH OR WEATHER
- SURFACE EXPOSED TO OR OVER WATER, SEWAGE, OR OTHER LIQUIDS
- SLABS, WALLS, JOISTS
- BEAMS, COLUMNS
- PRIMARY REINFORCEMENT: STIRRUPS AND TIES:
- OTHER SURFACES
- SLABS, WALLS, JOISTS - THE LARGER OF:
- BEAMS, COLUMNS
- PRIMARY REINFORCEMENT: STIRRUPS AND TIES:

BAR SIZE	LAP SPLICE LENGTH (IN.) UNLESS SHOWN OTHERWISE			
	CLEAR COVER - 2" OR MORE		LESS THAN 2" OF CLEAR COVER	
	TOP REINF.	BOT. AND VERT. REINF.	TOP REINF.	BOT. AND VERT. REINF.
3"				
2"	#3: 21	16	21	16
	#4: 21	16	24	19
	#5: 21	16	36	27
2"	#6: 24	18	48	37
	#7: 40	30	70	54
	#8: 48	37	80	62
	#9: 60	46	90	70
	#10: 76	58	102	78
	#11: 88	68	114	87

TOP REINFORCEMENT IS DEFINED AS HORIZONTAL REINFORCEMENT WITH MORE THAN 12" OF FRESH CONCRETE CAST BENEATH THE BAR. HORIZONTAL BARS IN WALLS SHALL BE CONSIDERED AS TOP REINFORCEMENT.



ALTERNATE FOR LIQUID-RETAINING STRUCTURES (NOTE 3)

LIQUID-RETAINING STRUCTURES

OTHER STRUCTURES

ALL STRUCTURES

WALL CORNER REINFORCEMENT NOTES:

- SAME SIZE AND SPACING AS HORIZONTAL REINFORCEMENT UNLESS SHOWN OTHERWISE
- LAP SPLICE LENGTH FOR TOP BARS UNLESS SHOWN OTHERWISE. LAP LOCATION MAY BE SHIFTED TO REDUCE CONGESTION AT CORNER.
- ALTERNATE DETAIL REQUIRES ENGINEER APPROVAL.

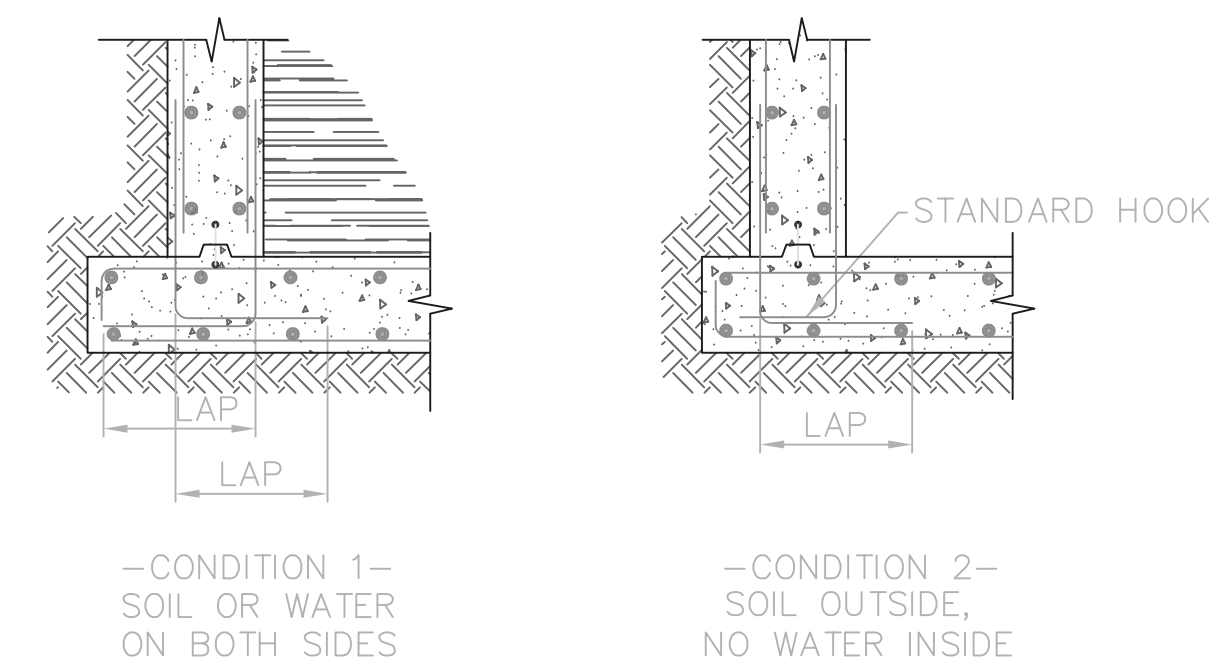
TYPICAL CONCRETE WALL CORNER REINFORCEMENT DETAILS

RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".

FIRM **Jones & Henry Engineers, Ltd.** DATE 08/07/02 MO. / DAY / YR.

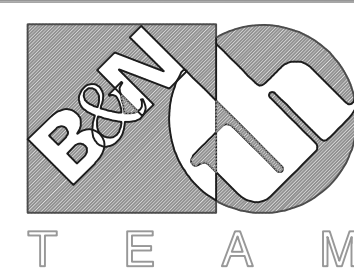
© BNWW0201



TYPICAL CONCRETE WALL TO MAT REINFORCEMENT DETAILS

THIS LINE SCALES 1" WHEN PLOTTED TO NAMED SCALE
TOL-4714M005 03/29/02 04-V02 P:\PR24025\PMPSARECDWG\34.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

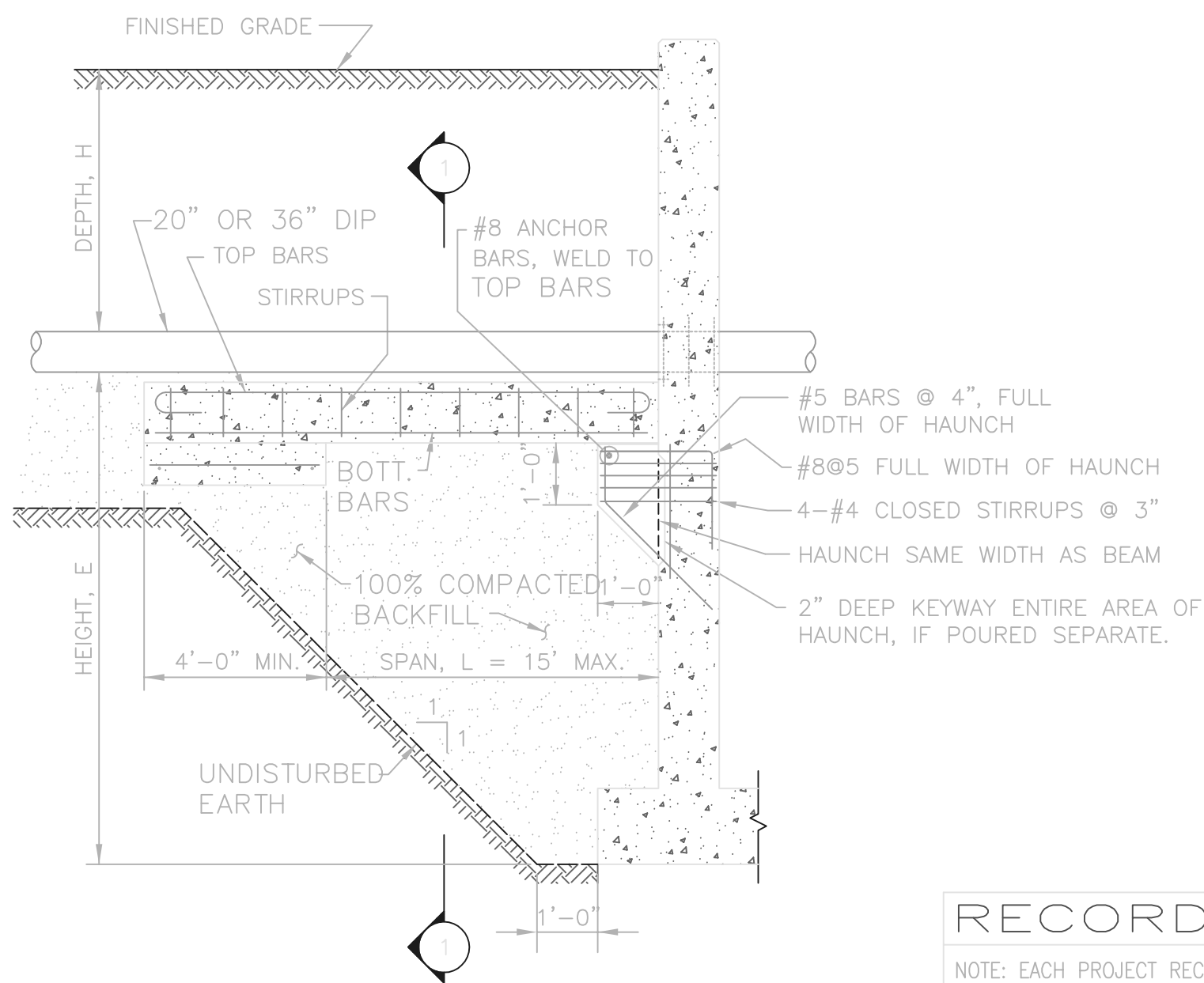
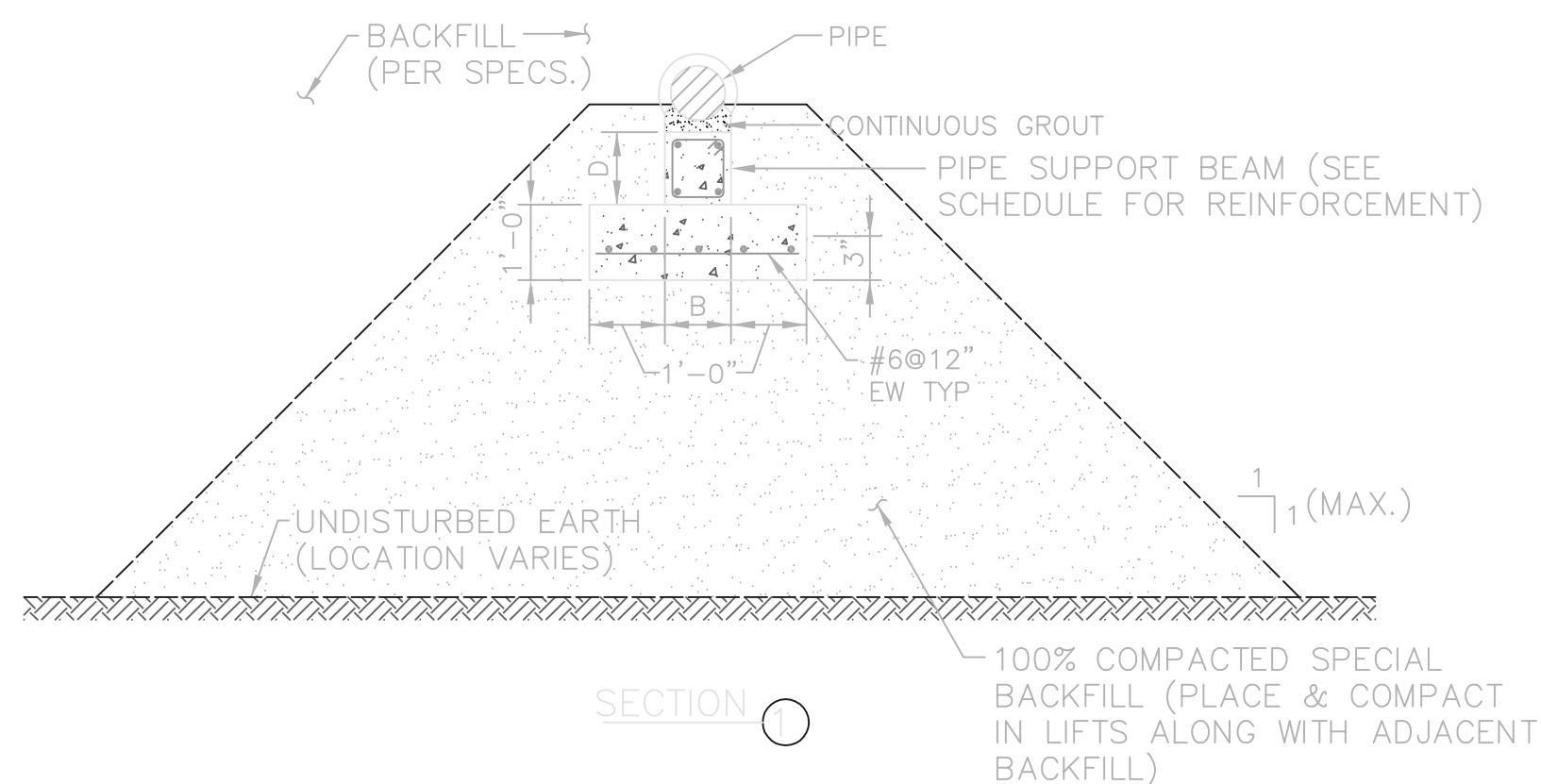
PUMP STATION
MISCELLANEOUS DETAILS
STRUCTURAL
TYPICAL REINFORCING DETAILS

SCALE:	
NONE	
SHEET NO.	OF
34	100

BURIED PIPE SUPPORT BEAM SCHEDULE

PIPE SIZE	BEAM SIZE		REINFORCING		
	B	D	TOP NO. SIZE	BOTTOM NO. SIZE	#3 CLOSED STIRRUPS SPACED CONTINUOUSLY ALONG LENGTH OF BEAM
20"ø	20"	24"	3-#5	6-#9	#3 STIRRUPS SPACED 7 @ 4", 5 @ 6" REM. @ 10"
36"ø	40"	24"	4-#5	12-#9	#4 STIRRUPS SPACED 7 @ 4", 5 @ 6" REM. @ 10"

NOTE:
SUPPORT BEAMS REQUIRED FOR THE 20" & 36" DIP FORCE MAINS AS THEY EXIT THE PUMP STATION. THE 48" RCP ENTERING THE PUMP STATION SHALL BE PLACED OVER CONTROLLED DENSITY FILL AND SHALL BE ENCASED IN CLASS B CONCRETE.

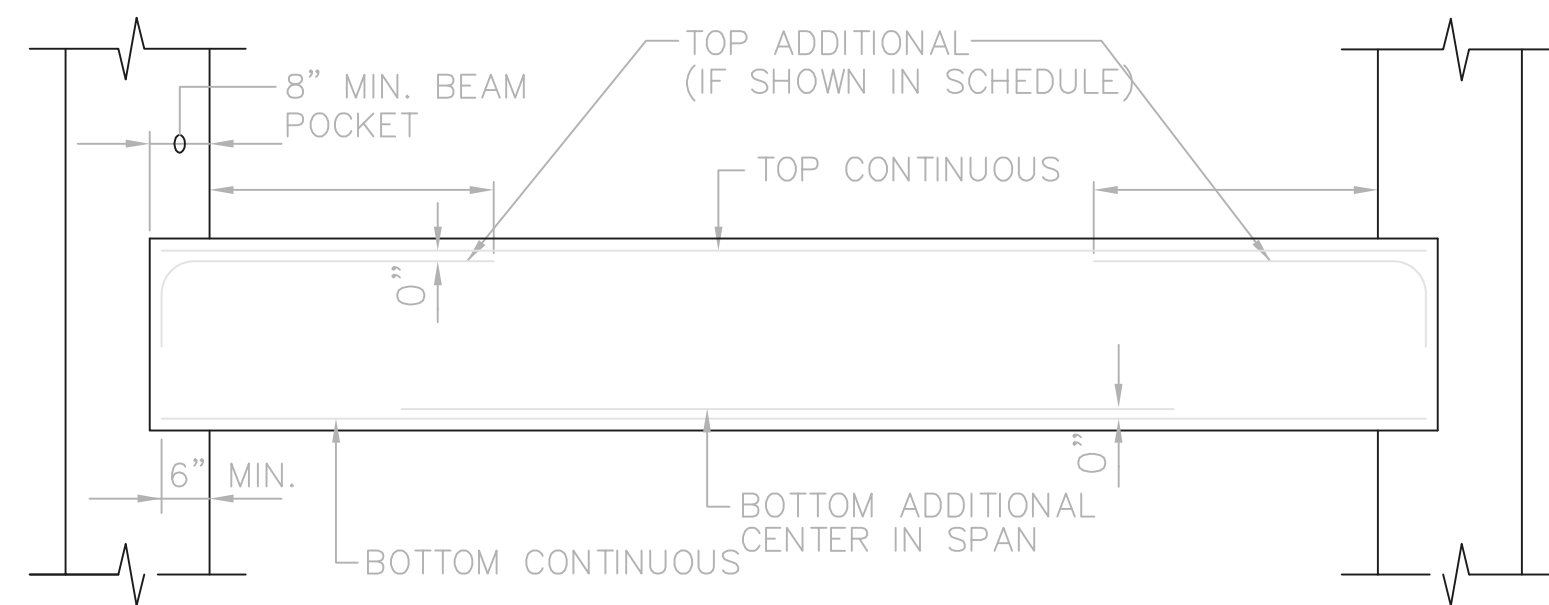
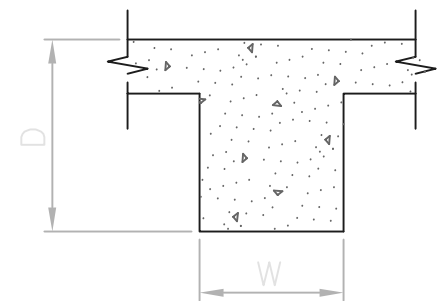


TYPICAL PIPE SUPPORT BEAM DETAIL
1/2"=1'-0"

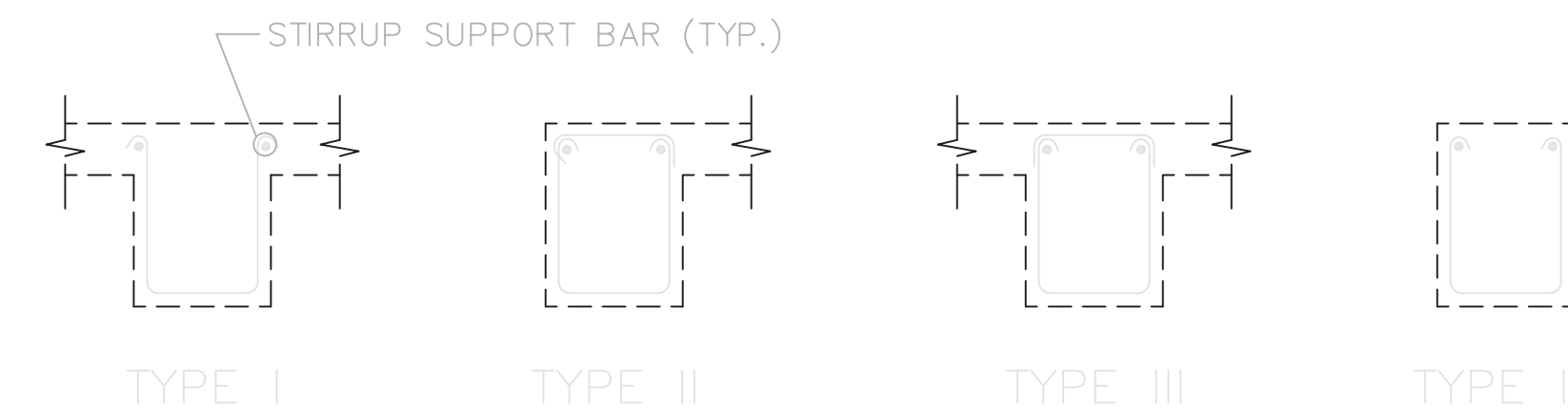
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
MO. / DAY / YR.

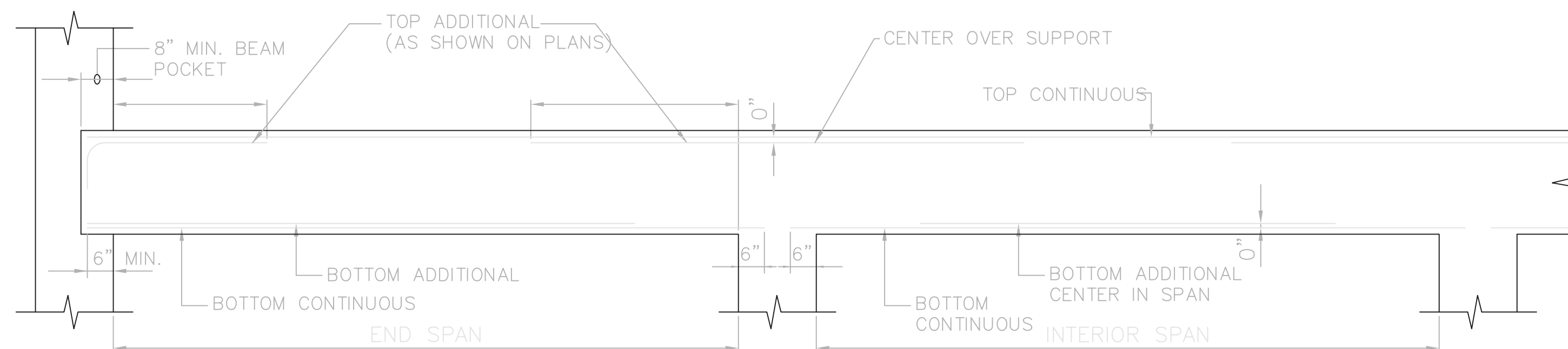
© BNWW0201



SINGLE SPAN BEAM DETAIL



TYPICAL STIRRUP DETAILS



CONTINUOUS BEAM DETAIL

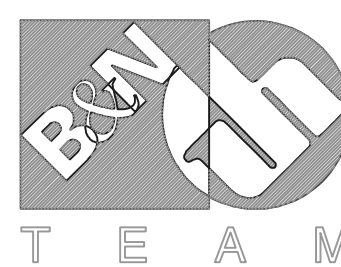
- BEAM NOTES:
1. PLACE REINFORCEMENT IN SINGLE LAYER, UNLESS INDICATED OTHERWISE.
 2. LAP TOP REINFORCEMENT AT MID-SPAN. LAP BOTTOM REINFORCEMENT AT SUPPORT.
 3. WALL REINFORCEMENT SHALL BE CONTINUOUS THROUGH BEAM POCKET.
 4. STIRRUP SPACING IS MEASURED FROM FACE OF SUPPORT.
 5. LENGTH OF TOP ADDITIONAL BARS IS MEASURED FROM FACE OF SUPPORT.

CONCRETE BEAM SCHEDULE

TOP OF BEAM ELEVATION	MARK	SIZE		REINFORCEMENT				REMARKS	STIRRUPS
		W	D	TOP CONT.	TOP ADDITIONAL	BOTTOM CONT.	BOTTOM ADDITIONAL		
822.00	BM-1	15"	20"	2-#6	2-#6	4-#6	---	3 BEAMS W/ CLEAR SPANS OF 8.67', 15.0', & 13.5'	#3 II 104", REMAINING AT 8 1/2"
822.00	BM-2	15"	20"	2-#6	2-#6	4-#6	---	3 BEAMS W/ CLEAR SPANS OF 8.67', 15.0', & 13.5'	#3 II 104", REMAINING AT 8 1/2"
822.00	BM-3	18"	30"	4-#6	---	5-#9	---	CLEAR SPAN = 20.5'. HOOK TOP BARS @ EACH END	#3 II 106", REMAINING AT 12"
822.00	BM-4	18"	30"	4-#6	---	5-#9	---	CLEAR SPAN = 20.5'. HOOK TOP BARS @ EACH END	#3 II 106", REMAINING AT 12"
822.00	BM-5	18"	27"	4-#6	---	5-#8	---	CLEAR SPAN = 20.5'. HOOK TOP BARS @ EACH END	#3 II 106", REMAINING AT 12"
822.00	BM-6	18"	24"	4-#6	---	5-#8	---	CLEAR SPAN = 20.5'. HOOK TOP BARS @ EACH END	#3 II 105", REMAINING AT 10"
822.00	BM-7	14"	21"	3-#7	2-#6	4-#6	---	2 BEAMS W/ CLEAR SPANS OF 10'-11 1/2" & 14'-5 1/2"	#3 II 104 1/2", REMAINING AT 9"
822.00	BM-8	11"	21"	3-#7	---	4-#6	---	2 BEAMS W/ CLEAR SPANS OF 12'-2" & 11'-9"	#3 II 104 1/2", REMAINING AT 9"
822.00	BM-9	16"	24"	3-#6	---	4-#8	---	CLEAR SPAN = 13.0'. HOOK TOP BARS @ EACH END	#3 II 105", REMAINING AT 10"
805.67	BM-10	20"	28"	5-#8	---	4-#8	---	2 BEAMS W/ CLEAR SPANS OF 24'-0 1/2" & 13'-10 1/2" PROVIDE CAST-IN-PLACE ANCHOR BOLTS FOR HANGERS #0R MAINTENANCE PLATFORM BELOW. PROVIDE 2"± MAX. SLEEVE OR NOTCH AS NEEDED FOR VALVE STEM.	II 106", REMAINING AT 12"
805.67	BM-11	15"	24"	4-#8	---	3-#8	---	2 BEAMS W/ CLEAR SPANS OF 24'-0 1/2" & 13'-10 1/2" PROVIDE CAST-IN-PLACE ANCHOR BOLTS FOR HANGERS #0R MAINTENANCE PLATFORM BELOW	II 105", REMAINING AT 10"
805.67	BM-12	27"	33"	4-#6	2-#6	9-#8	---	CLEAR SPAN = 20'-6"	#4 II 105", REMAINING AT 10"
805.67	BM-13	20"	30"	4-#6	---	6-#8	---	CLEAR SPAN = 20'-6"	#4 II 106", REMAINING AT 12"
805.67	BM-14	18"	18"	3-#6	---	6-#6	---	CLEAR SPAN = 20'-6"	#3 II 103", REMAINING AT 7 1/2"
791.25	BM-15	18"	30"	4-#6	---	5-#8	---	CLEAR SPAN = 13'-0"	#3 II 106", REMAINING AT 13"
788.00	BM-16	18"	30"	3-#7	---	5-#7	---	CLEAR SPAN = 13'-0"	#4 II 106", REMAINING AT 12"
801.58	BM-17	12"	16"	2-#5	---	2-#5	---	2 SPANS @ 5'-0" CLEAR; 2 SPANS @ 4'-6" CLEAR	#3 II 103", REMAINING AT 6"

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE
TOL-4714M007
02/28/02 04-V02
P:\PR24025\VP\STARECDWG\35.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

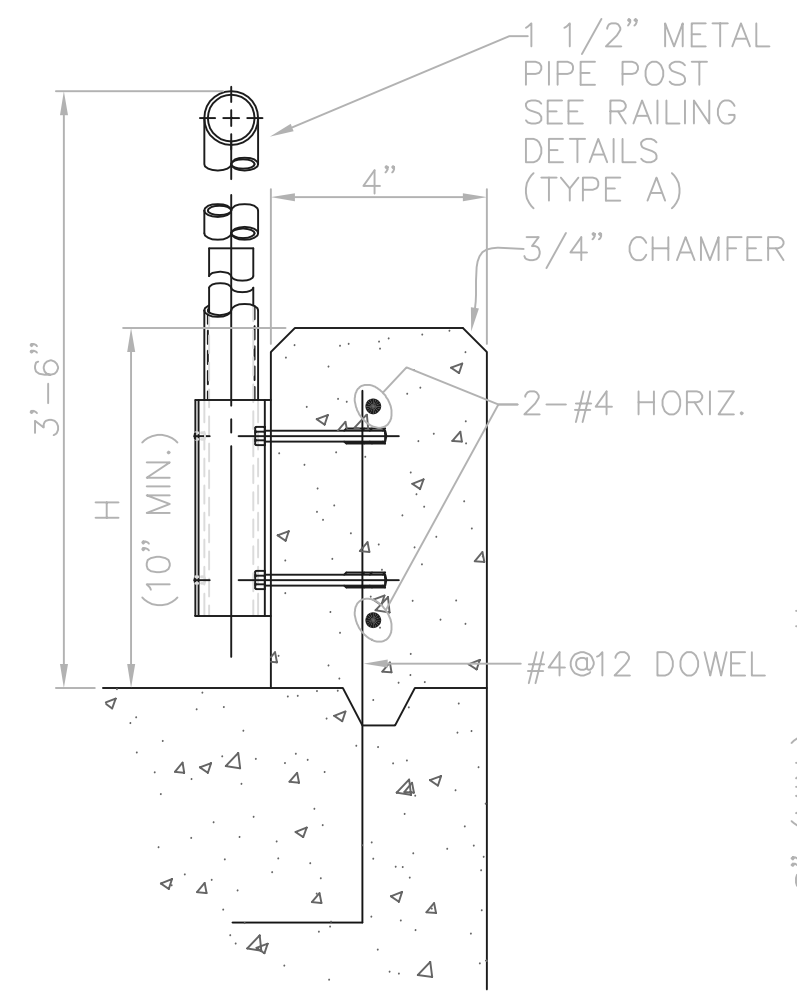
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

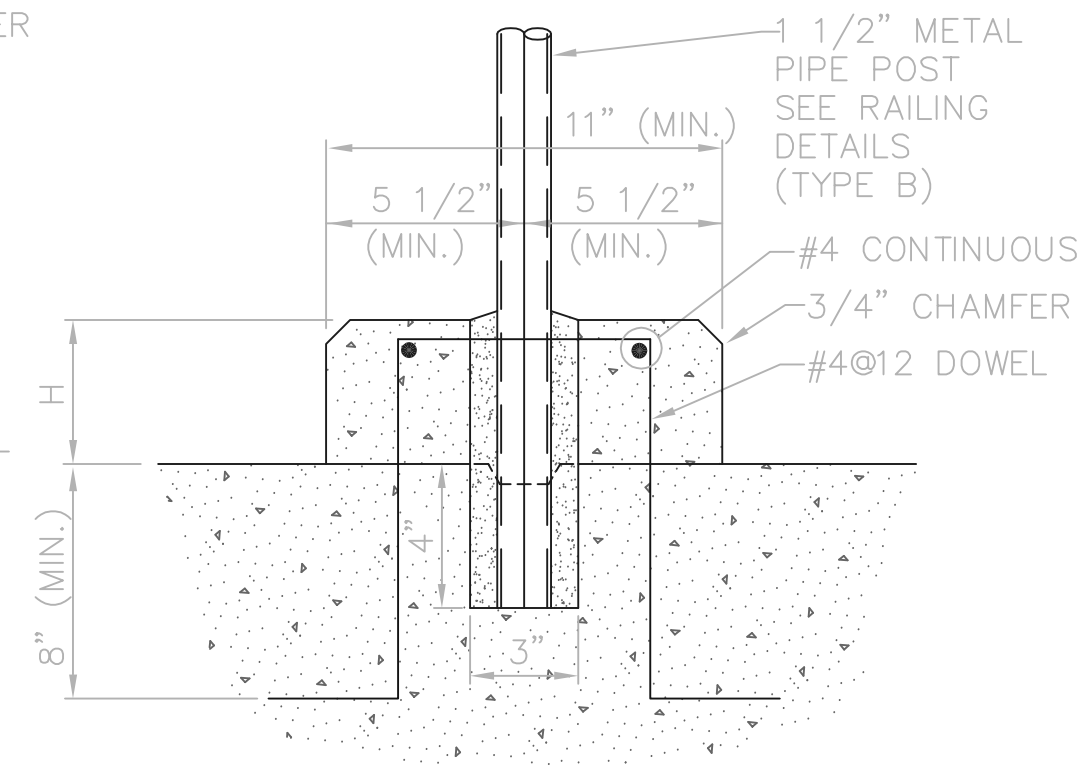
JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
MISCELLANEOUS DETAILS
STRUCTURAL
BEAM DETAILS & SCHEDULE

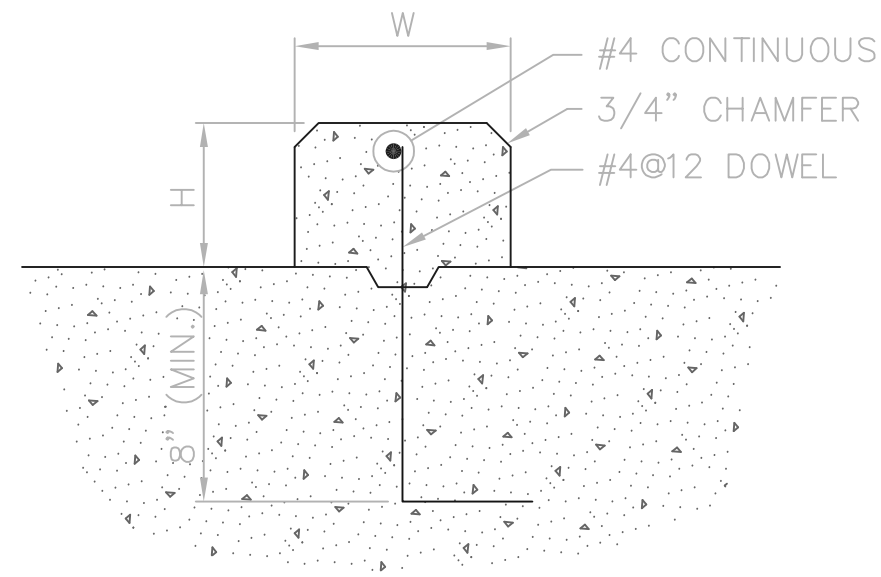
SCALE:		NONE
SHEET NO.	OF	
35	100	



CURB WITH TYPE A RAILING



CURB WITH TYPE B RAILING

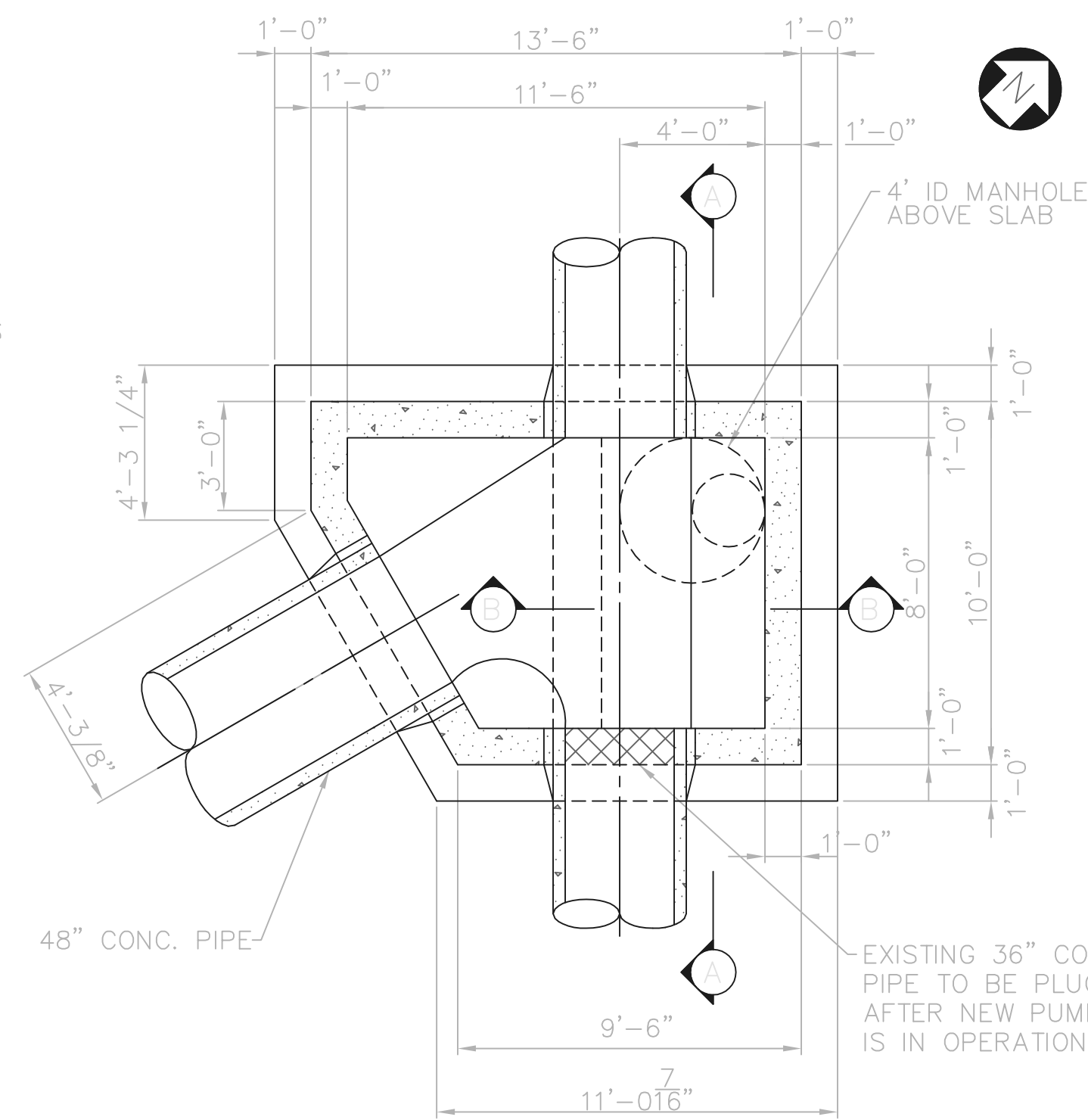


CURB WITHOUT RAILING

TYPICAL CONCRETE CURB DETAILS

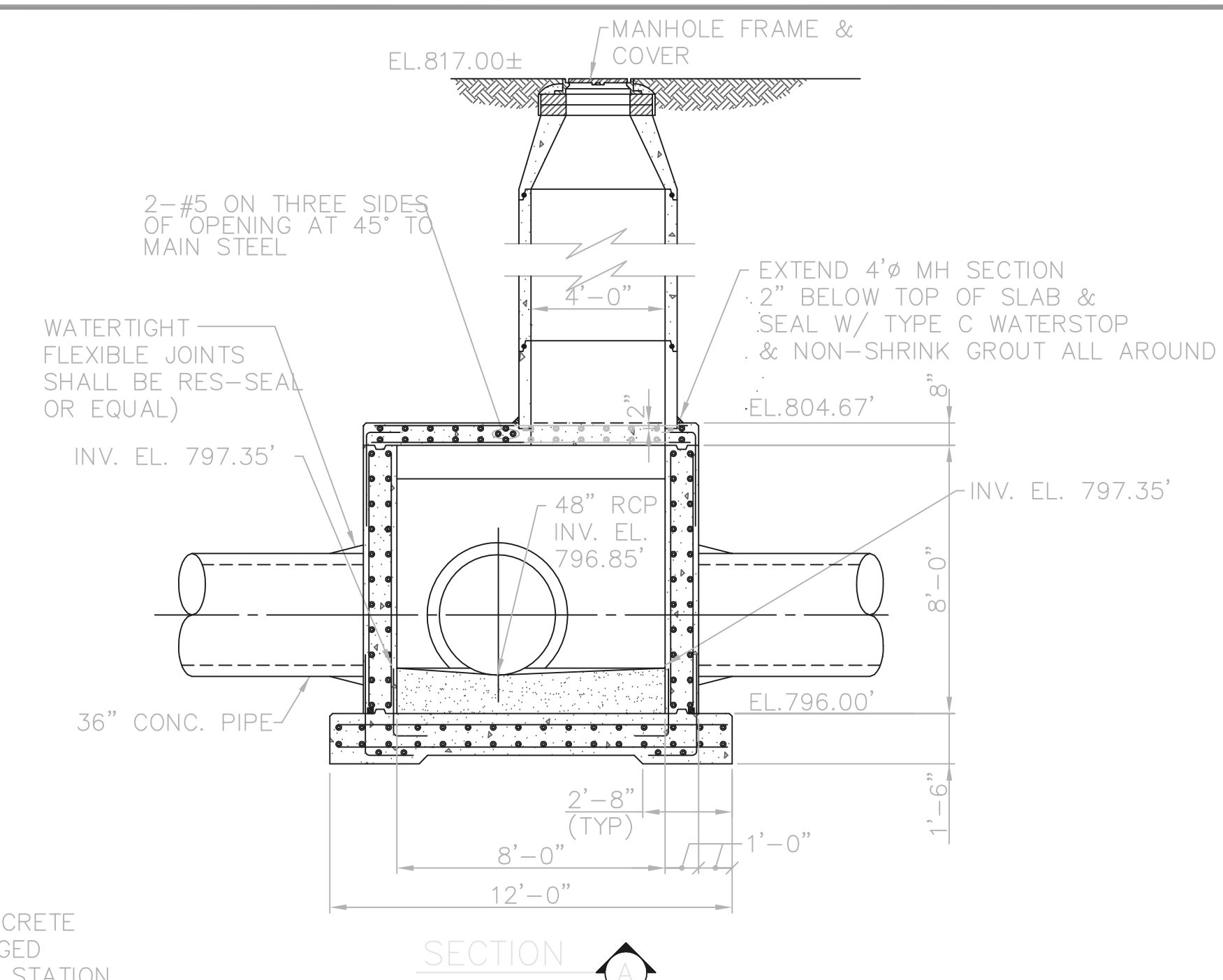
CONCRETE CURB NOTES:

1. "W" X "H" AS SHOWN ON PLANS
2. CURBS WITH W > 10" OR SHALL HAVE TWO CURTAINS OF REINFORCEMENT.

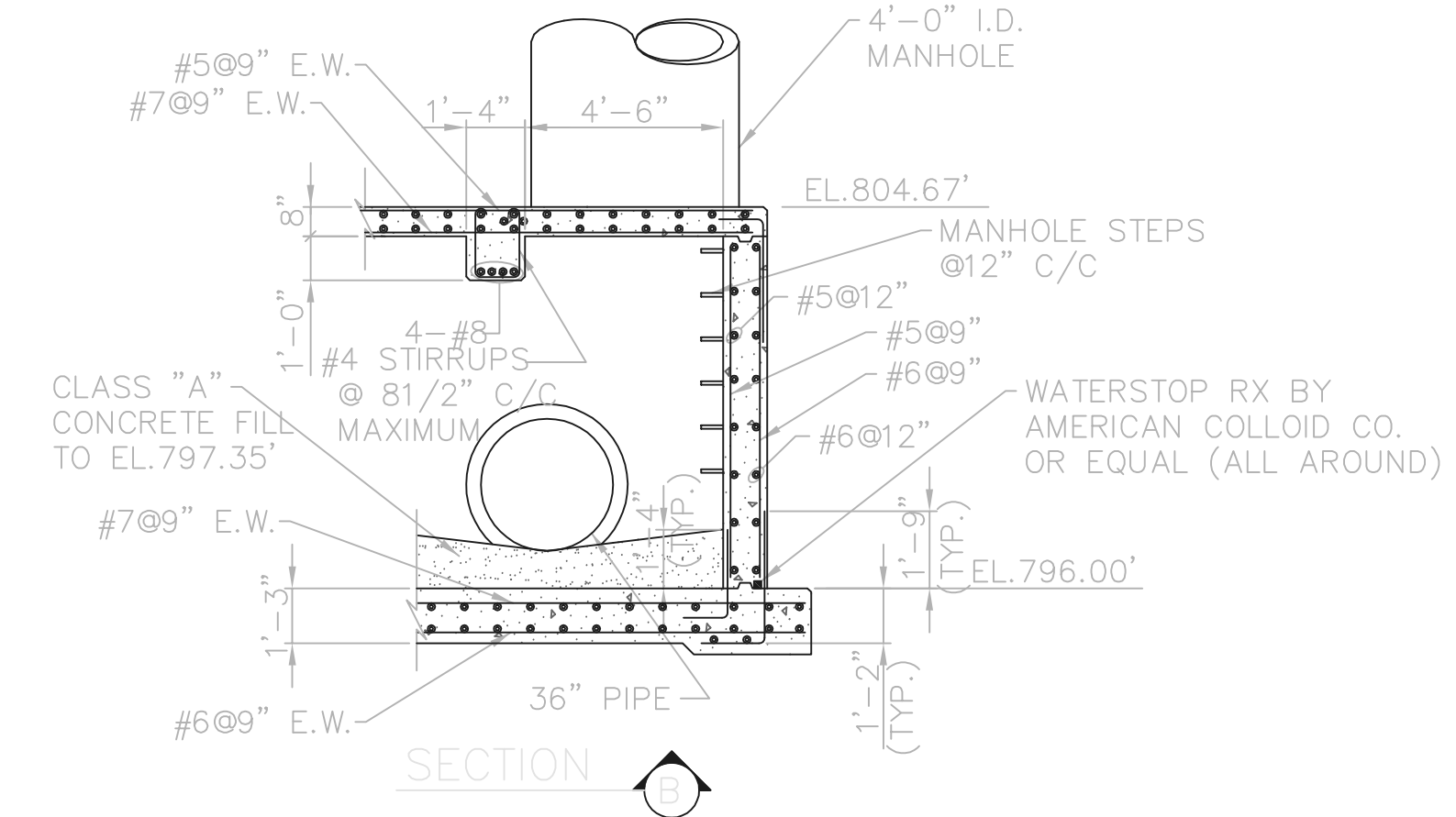


NEW CHAMBER

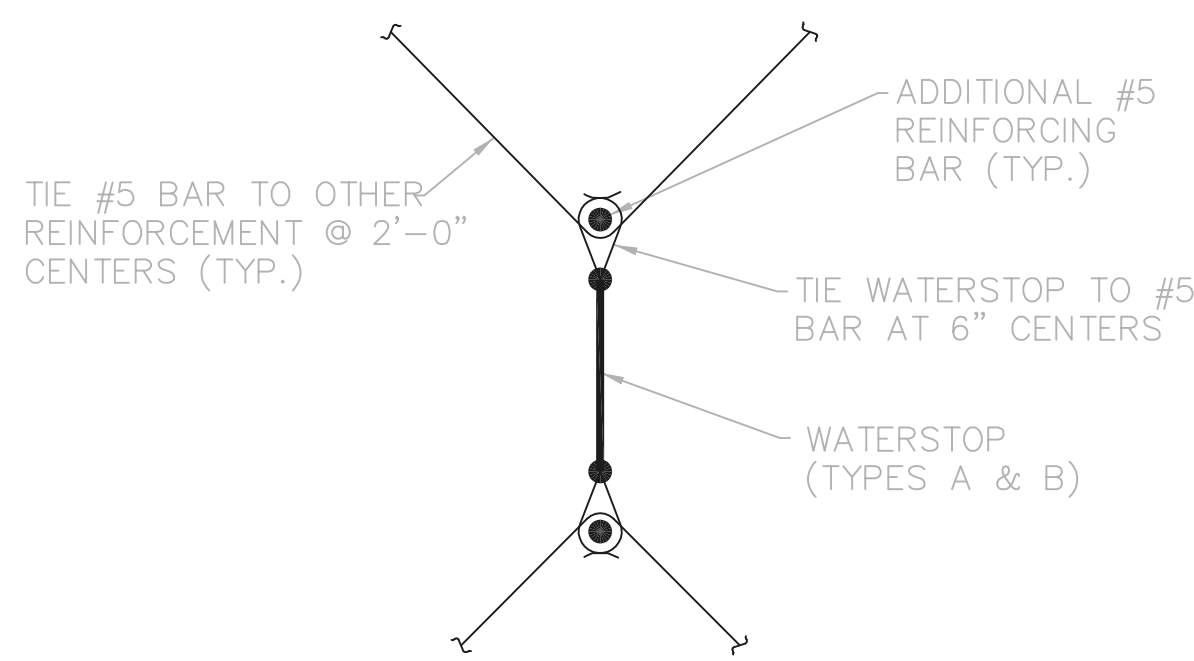
SCALE: 1/4"=1'-0"



SECTION A-A



SECTION B-B



TYPICAL WATERSTOP DETAIL

STRUCTURAL DESIGN DATA	
BUILDING CODE	1999 OHIO BASIC BUILDING CODE
SEISMIC	SEISMIC HAZARD EXPOSURE GROUP II EFFECTIVE PEAK VELOCITY-RELATED ACCELERATION V = 0.077 SEISMIC PERFORMANCE CATEGORY B SITE COEFFICIENT S=1.5
WIND	BASIC WIND SPEED V = 80 MPH EXPOSURE C IMPORTANCE FACTOR I = 1.00
SNOW	GROUND SNOW LOAD PG = 25 PSF SNOW EXPOSURE FACTOR CE = 0.7 IMPORTANCE FACTOR I = 1.0
FLOOR	LIVE LOAD (AS SHOWN) 100 PSF (MIN.) MECHANICAL & ELECTRICAL (ACTUAL LOADS) 20 PSF (MIN.)
ROOF	LIVE LOAD APPLY LARGER LOAD 20 PSF (MIN.) SNOW LOAD (SEE ABOVE) MECHANICAL & ELECTRICAL (ACTUAL LOADS) 15 PSF (MIN.) ROOFING SYSTEM 15 PSF (MIN.)
STAIRS	LIVE LOAD 100 PSF MIN.
EQUIPMENT PLATFORMS	LIVE LOAD (AS SHOWN) 150 PSF MIN.

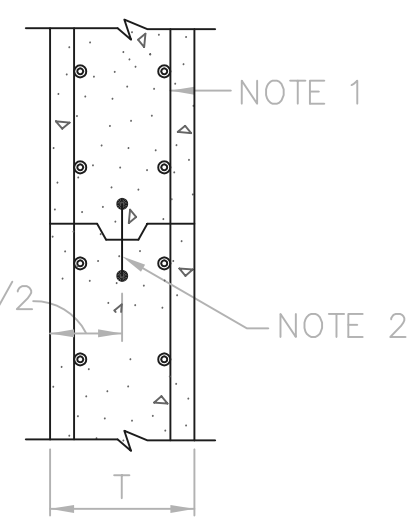
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM Jones & Henry Engineers, Ltd. DATE 08/07/02
MO. / DAY / YR.

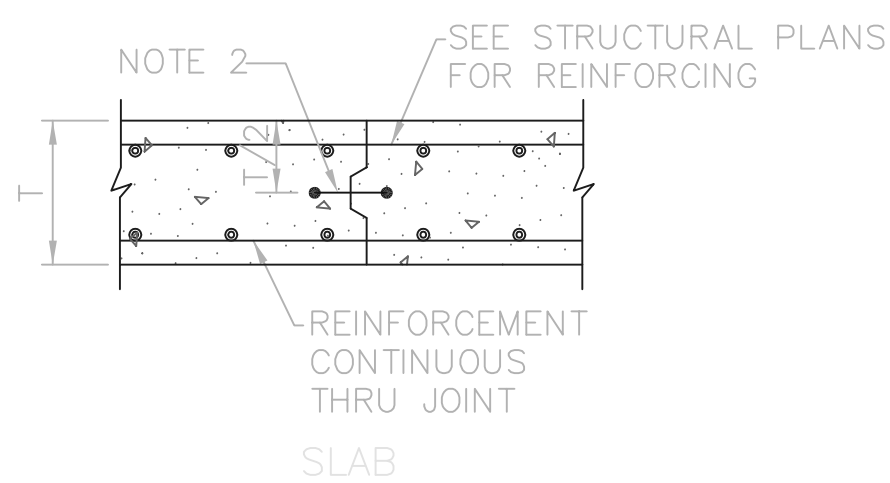
© BNWW0201

CONSTRUCTION JOINT NOTES:

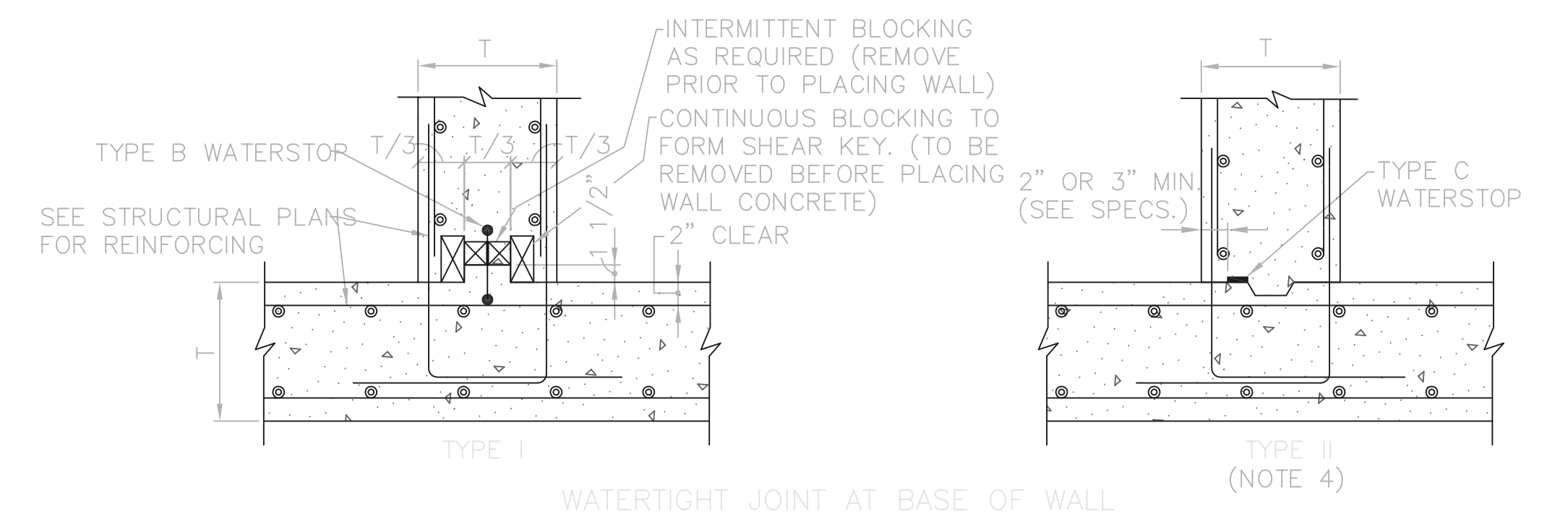
1. CONTINUE REINFORCEMENT THROUGH JOINT
2. TYPE B (6" PVC) WATERSTOP WHERE SHOWN OR SPECIFIED. SEE WATERSTOP DETAIL AND SPECIFICATIONS.
3. PLACE 2" DEEP BED OF BONDING GROUT IN HORIZONTAL JOINTS, BONDING ADHESIVE ON VERTICAL JOINTS, FOR NEW AND "NEW TO EXISTING" CONSTRUCTION.
4. TYPE "II" WATERTIGHT JOINT REQUIRES ENGINEER'S APPROVAL UNLESS SPECIFICALLY CALLED OUT ON DRAWINGS.



WALL

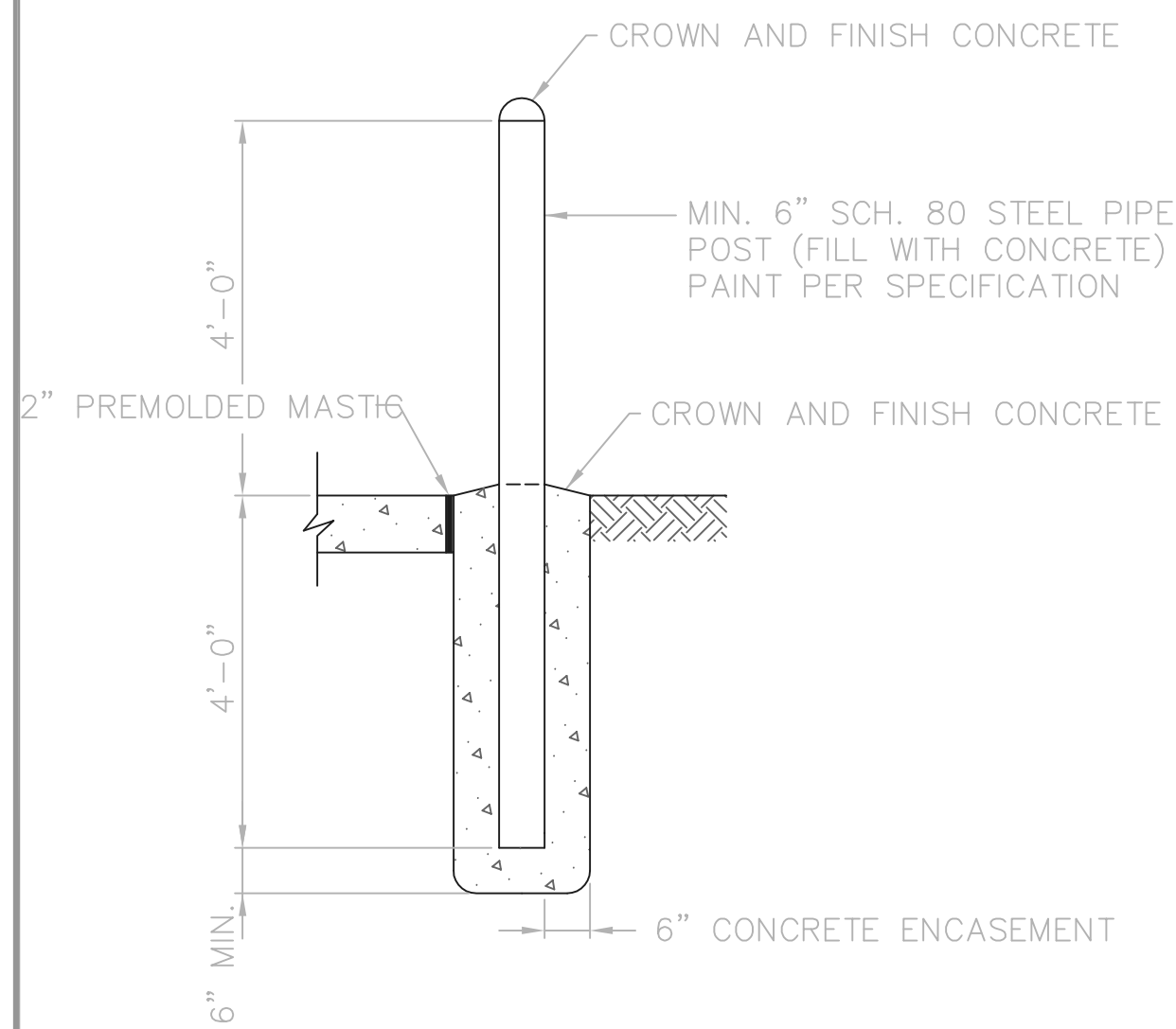


SLAB



WATERTIGHT JOINT AT BASE OF WALL

TYPICAL CONSTRUCTION JOINT DETAILS

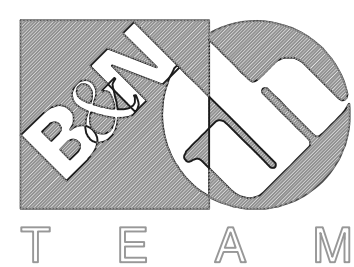


GUARDPOST DETAIL

1/2" = 1'-0"

TOL-4714MD06
02/28/02 04-V02
P:\PR24025\PMPS\ARECORDWG\36.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
MISCELLANEOUS DETAILS
STRUCTURAL

SCALE:

NONE

SHEET NO.

36

OF

100

OCCUPANCY LOAD/BUILDING CLASSIFICATION			
LOCATION	O/L	USE GROUP	QUANTITY
PUMP STATION - WET WELL	13	F2, 3B	1
PUMP STATION - DRY WELL	13	F2, 3B	1
PUMP STATION - LEVEL 3	9	F2, 3B	1
PUMP STATION - LEVEL 4	9	F2, 3B	1

LOCATION
OCCUPANCY LOAD
BUILDING
CLASSIFICATION

FLOOR LOAD PLATE TABLE			
LOCATION	LOAD #	QUANTITY	
WET WELL:			
LOWER LEVEL (X2)	5 X 6	150	1
MAIN LEVEL	7	350	1
DRY WELL:			
LOWER LEVEL	8	300	1
LOWER LEVEL PLATFORM	9	250	1
MIDDLE LEVEL	10	300	1
MIDDLE LEVEL PLATFORM	11	150	1
MAIN LEVEL	12	350	1

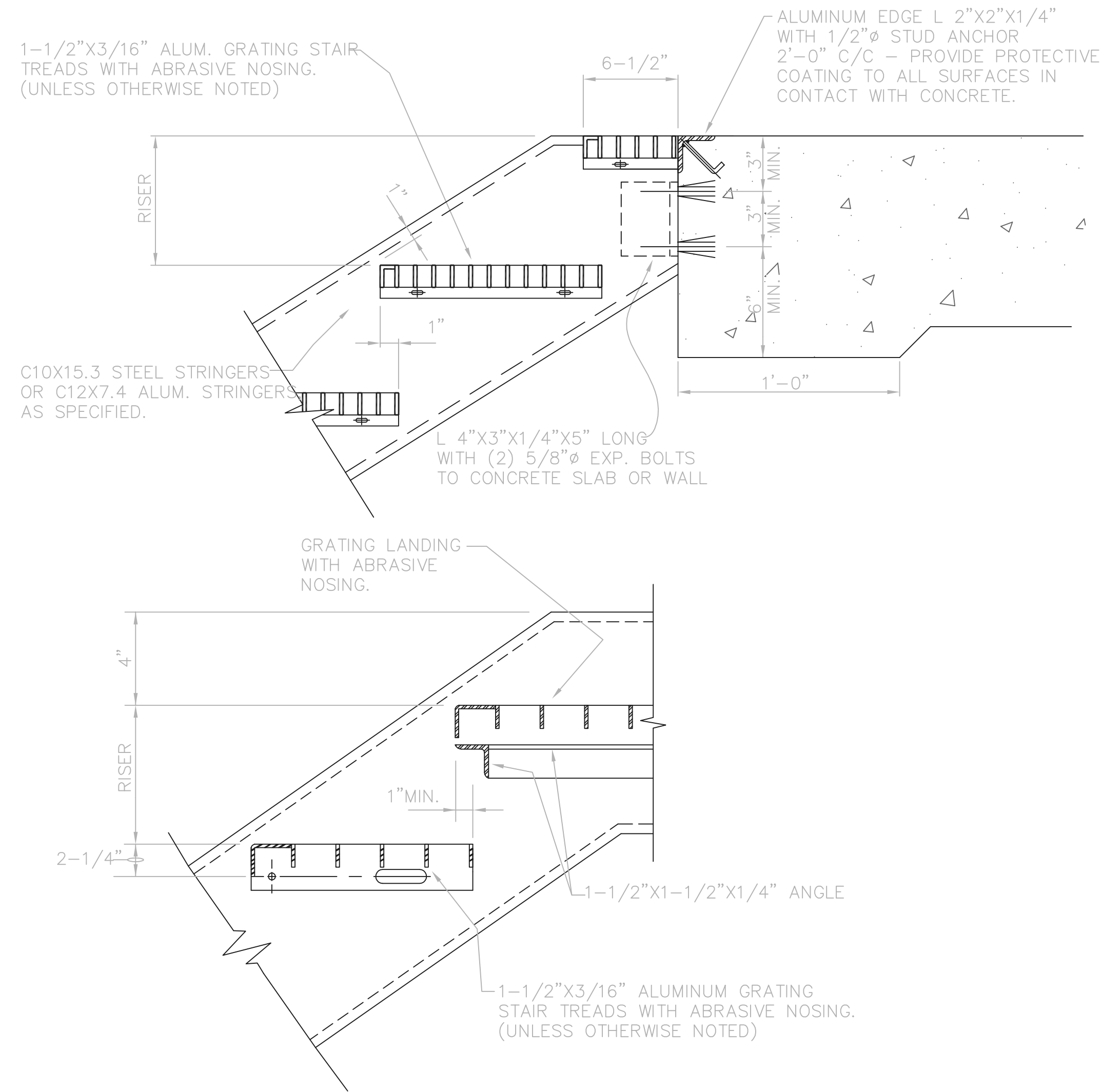
MAXIMUM
FLOOR LOAD
* LBS./SQ. FT.

LIFT LOAD PLATE TABLE		
LOCATION	** LOAD	QUANTITY
WET WELL: FIRST FLOOR	1,000	1
DRY WELL: FIRST FLOOR	15,000	1

MAXIMUM
LIFT LOAD
** POUNDS

- ALL PLATES SHALL BE PLASTIC
- ◇ CODING USED FOR PREFERRED LOCATION, REFER TO PIPING & EQUIPMENT PLANS
- DISTANCE FROM FIN. FLOOR TO TOP OF SIGN SHALL BE 5'-8"

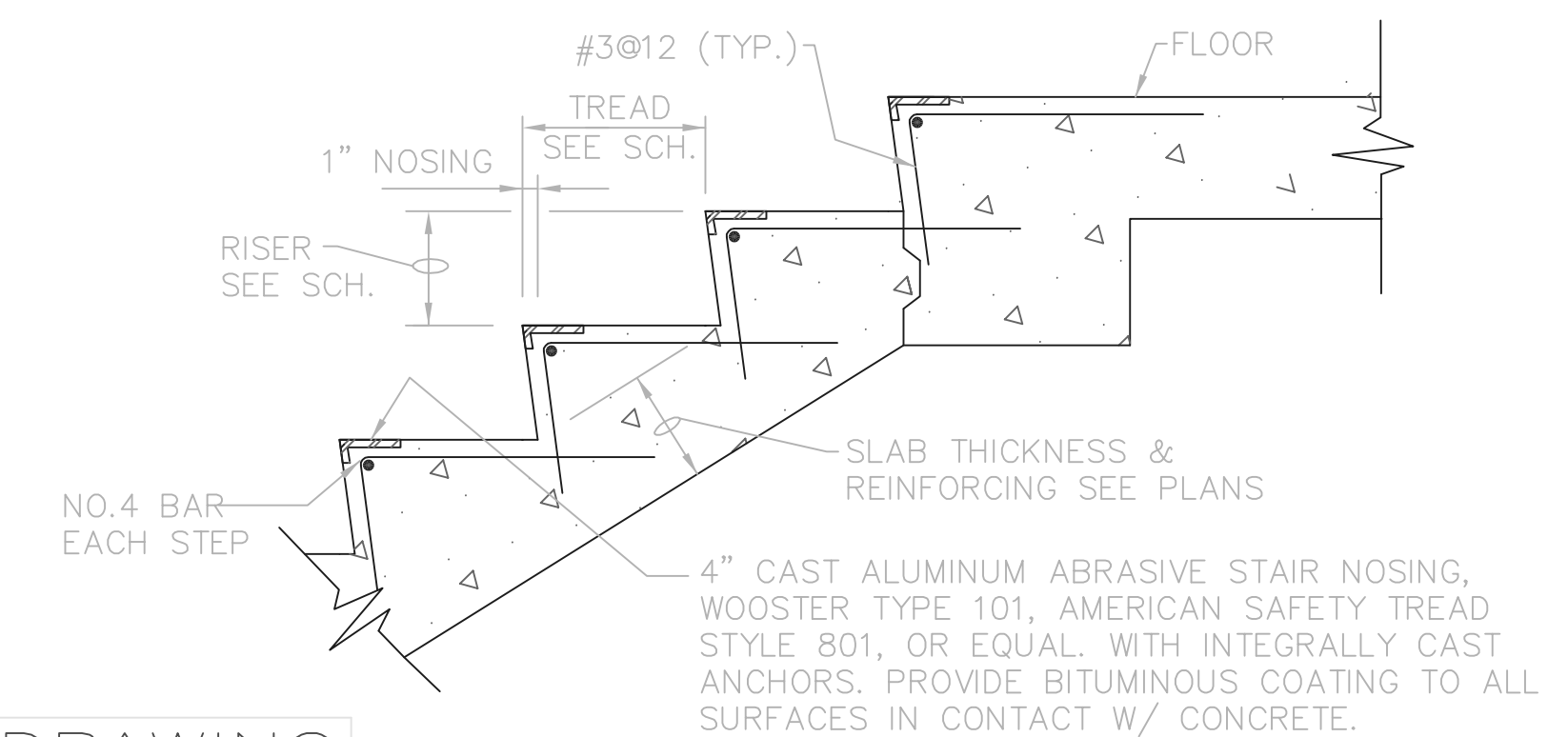
STRUCTURAL SIGNAGE
NTS



GRATING TREADS - METAL STAIR DETAILS
NTS

MARK	NO. REQ'D	TYPE	LOCATION	STRUCTURAL SHEET NO.	NO. OF TREADS	TREAD TYPE	TREAD DIM.	STAIR WIDTH	NO. OF RISERS	RISER DIM.	
S3-A	1	STEEL	PUMP STATION DRY WELL	8 & 21	3	GRATING	11"	3'-0"	4	7"	
S3-E	1	STEEL	PUMP STATION DRY WELL	8 & 21	14	GRATING	11"	3'-0"	15	7"	
S3-C	1	STEEL	PUMP STATION DRY WELL	8 & 21	14 1/2	GRATING	11"	3'-0"	15	7"	TOP HALF - TREAD 6 1/2
S4-A	1	STEEL	PUMP STATION DRY WELL	12 & 21	6	GRATING	11"	3'-0"	7	7"	
S4-E	1	STEEL	PUMP STATION DRY WELL	21	5	GRATING	11"	3'-0"	6	7"	
S4-C	1	STEEL	PUMP STATION DRY WELL	21	7	GRATING	11"	3'-0"	8	7"	
S4-E	1	STEEL	PUMP STATION DRY WELL	21	6 1/2	GRATING	11"	3'-0"	7	7"	TOP HALF - TREAD 6 1/2
S1-A	1	ALUM.	PUMP STATION WEST WET WELL	L11 & 23	6	GRATING	11"	3'-0"	7	7"	
S1-B	1	ALUM.	PUMP STATION WEST WET WELL	L11 & 23	6	GRATING	11"	3'-0"	7	7"	
S1-C	1	ALUM.	PUMP STATION WEST WET WELL	L15 & 23	9	GRATING	11"	3'-0"	10	7"	
S1-D	1	ALUM.	PUMP STATION WEST WET WELL	L15 & 23	9 1/2	GRATING	11"	3'-0"	10	7"	TOP HALF - TREAD 6 1/2
S2-A	1	ALUM.	PUMP STATION EAST WET WELL	L11 & 23	6	GRATING	11"	3'-0"	7	7"	
S2-C	1	ALUM.	PUMP STATION EAST WET WELL	L15 & 23	11	GRATING	11"	3'-0"	12	7"	
S2-E	1	ALUM.	PUMP STATION EAST WET WELL	L15 & 23	8 1/2	GRATING	11"	3'-0"	9	7"	TOP HALF - TREAD 6 1/2
S5-A	1	STEEL	PUMP STATION - LOADING AREA	#5 & 22	5 1/2	GRATING	11"	3'-0"	6	7"	TOP HALF - TREAD 6 1/2
S5-E	1	CONC.	PUMP STATION - LOADING AREA	#5 & 24	1	CONC.	12"	3'-8"	2	6"	
S6	1	CONC.	PUMP STATION - EXTERIOR	15	8	CONC.	11"	4'-0"	9	6 5/8"	
S7	1	CONC.	PUMP STATION - EXTERIOR	15	7	CONC.	11"	4'-0"	8	6 3/4"	
S8	1	CONC.	PUMP STATION - EXTERIOR	15	7	CONC.	11"	4'-0"	8	6 3/4"	
S9	1	CONC.	PUMP STATION - EXTERIOR	15	8	CONC.	11"	4'-0"	9	6 3/8"	

- NOTES:
- STAIR WIDTH FOR METAL STAIRS SHALL BE THE CLEAR DISTANCE BETWEEN CHANNEL STRINGERS. FOR CONCRETE STAIRS, IT SHALL BE THE OUT TO OUT OF CONCRETE DIMENSION.
 - TREAD DIMENSION GIVEN DOES NOT INCLUDE 1" OVERLAP
 - RAILING FOR ALL METAL STAIRWAYS SHALL BE TYPE "E" WITHOUT TOE PLATE UNLESS OTHERWISE NOTED, EXCEPT TYPE "C" RAILING MAY BE USED ALONG WALLS WHERE THERE IS LESS THAN 3" CLEAR BETWEEN WALL AND STRINGER, UNLESS OTHERWISE NOTED.
 - GRATING TREADS AND LANDINGS SHALL BE ALUMINUM FOR BOTH STEEL AND ALUMINUM STAIRS.
 - STEEL STAIRS SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.

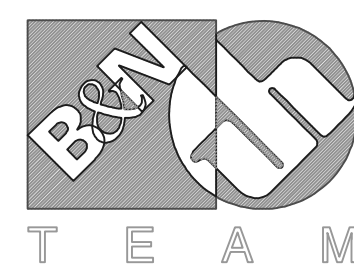


TYPICAL CONCRETE STAIR DETAILS
NTS

RECORD DRAWING
NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM Jones & Henry Engineers, Ltd. DATE 08/07/02
MO. / DAY / YR.

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE
TOL-4714MD12
03/28/02 04-002
P:\PR24025\PMF51\RECORDING\37.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

Jones & Henry Engineers, Ltd.

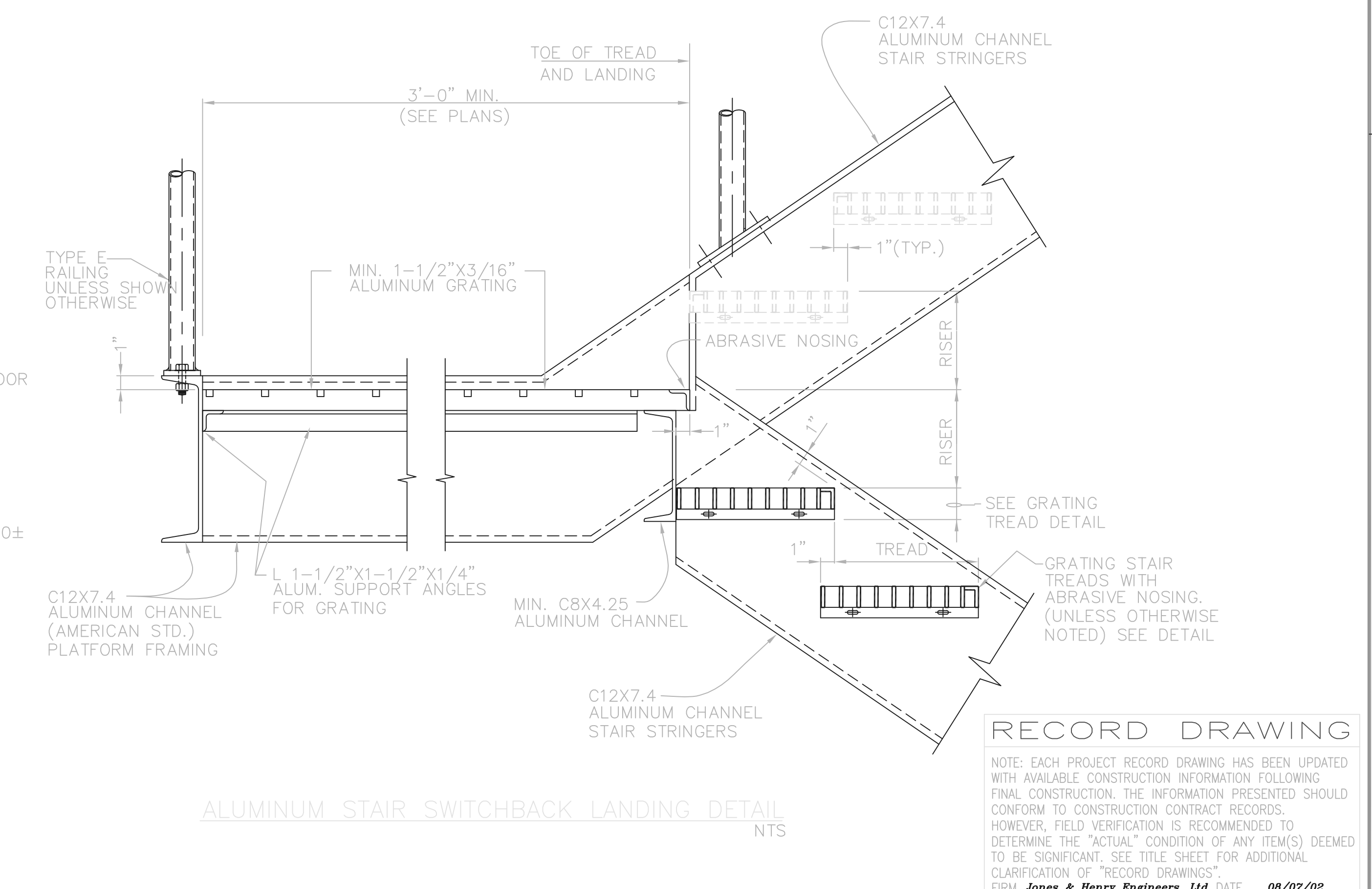
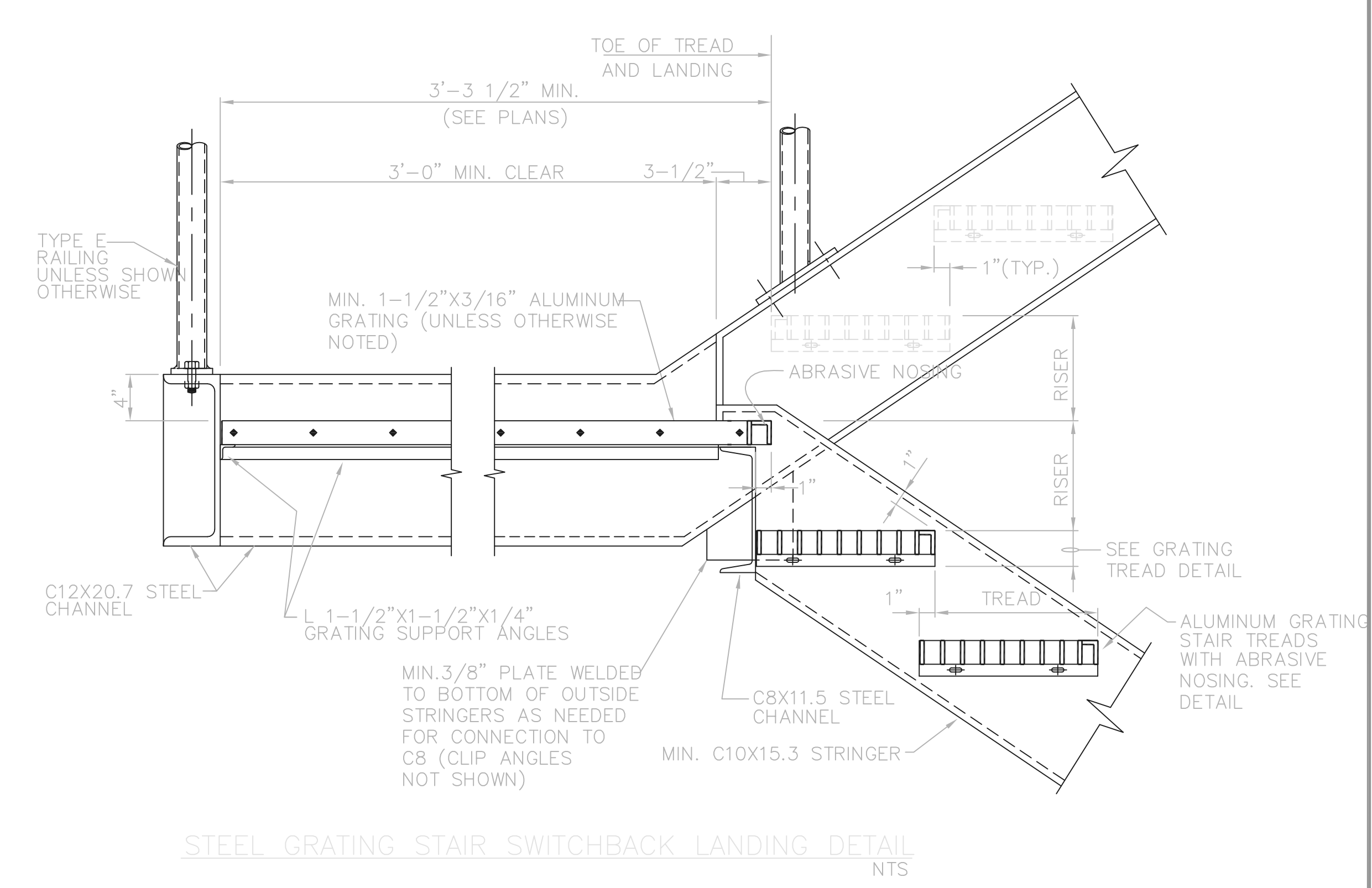
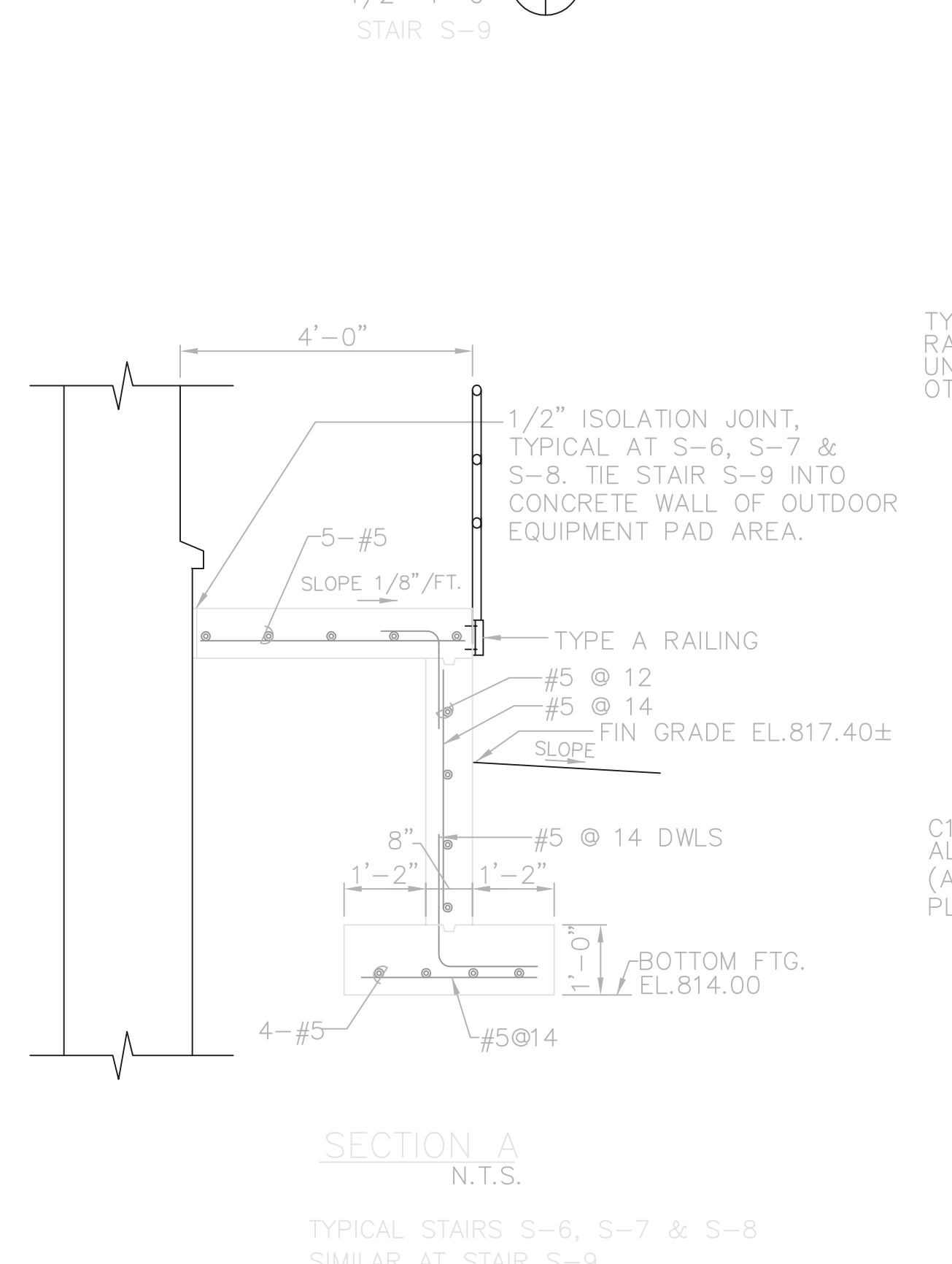
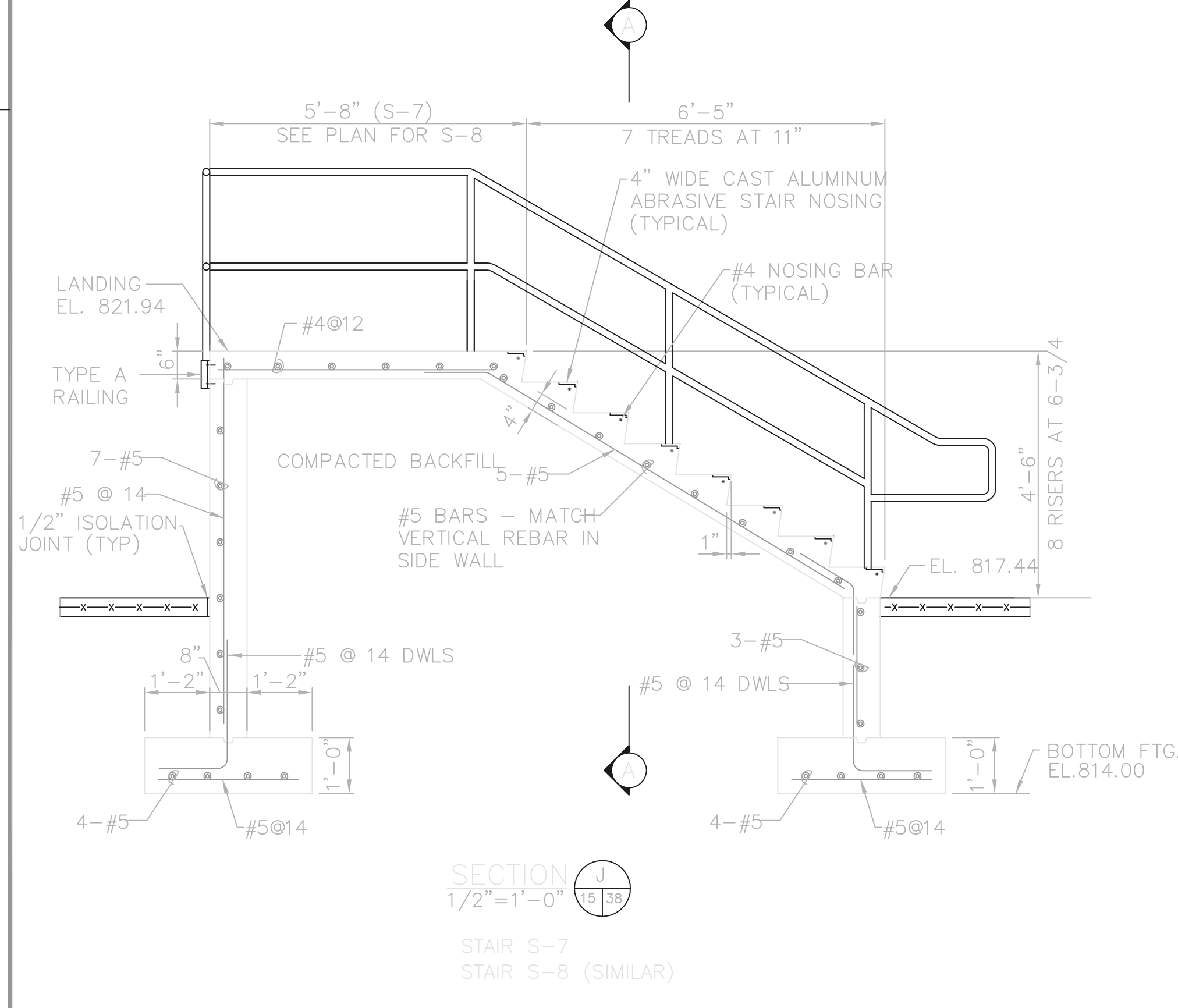
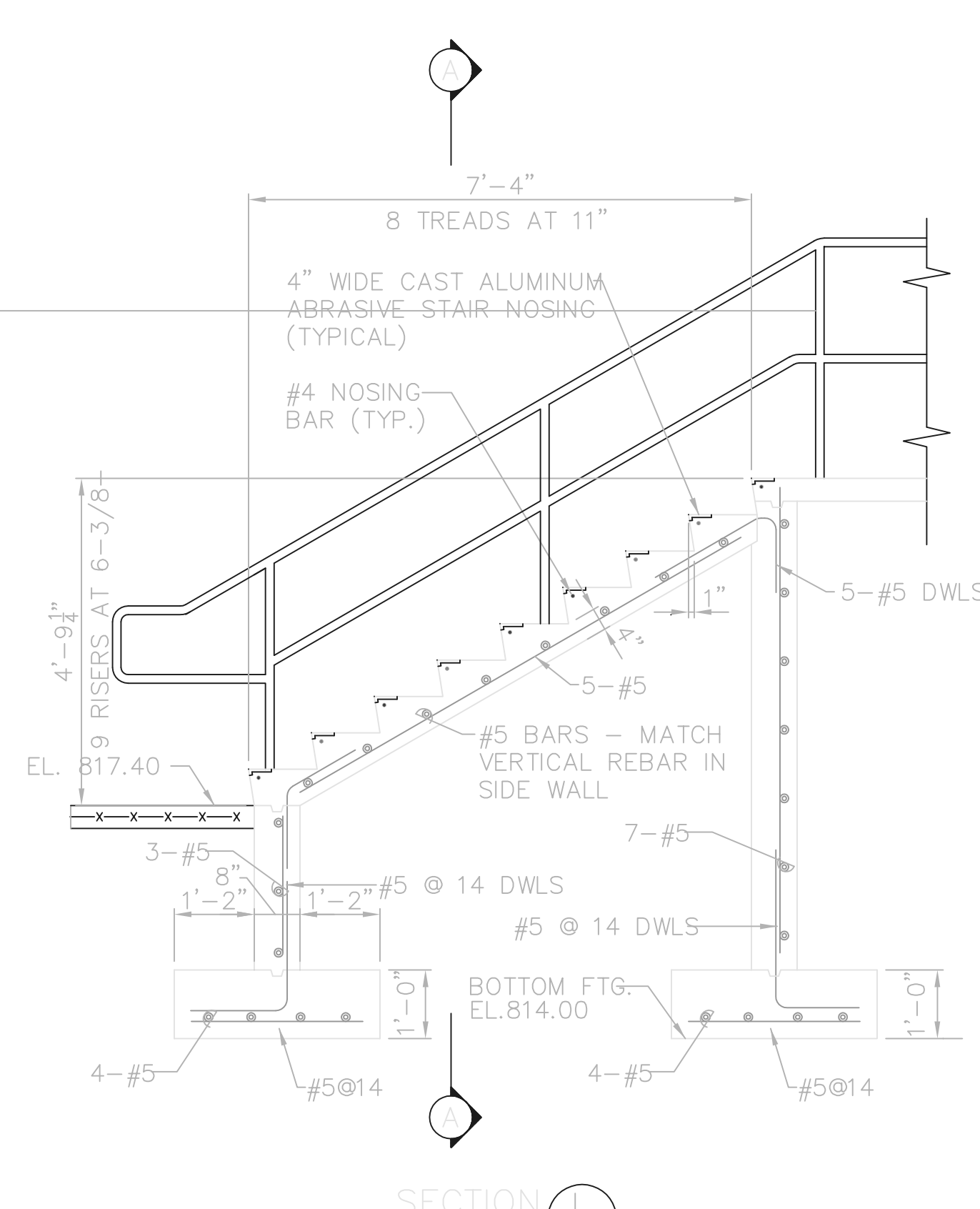
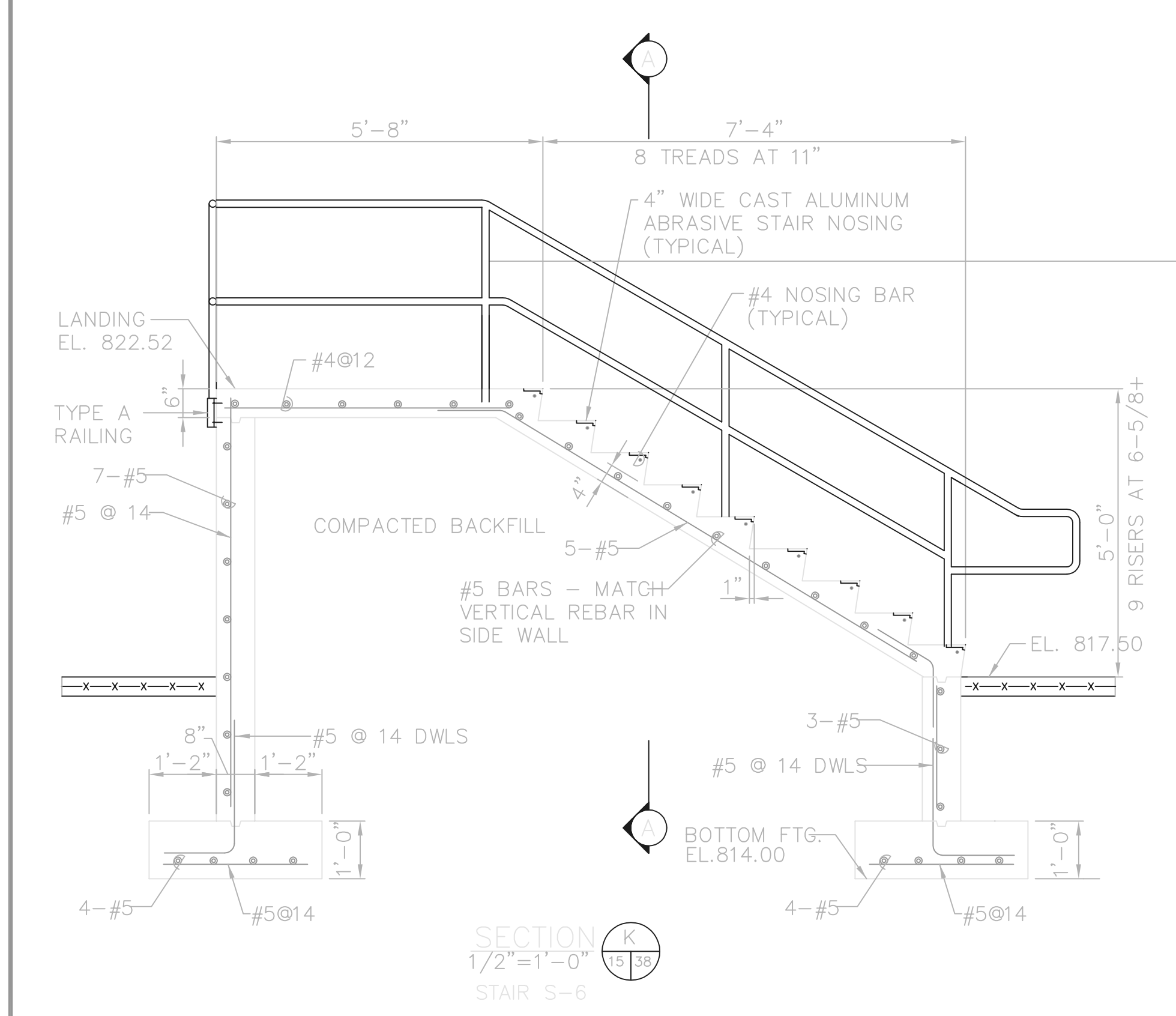
DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
MISCELLANEOUS DETAILS
STRUCTURAL
STAIR DETAILS & SCHEDULE

SCALE:	
NONE	
SHEET NO.	OF
37	100

© BNW0201



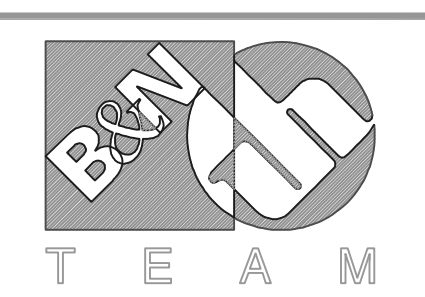
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".

FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
MO. / DAY / YR.

TOL-4714MD17
02/28/02 04-V02
P:\PR24025\PMSTARECORD\WG_38.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

Jones & Henry Engineers, Ltd.

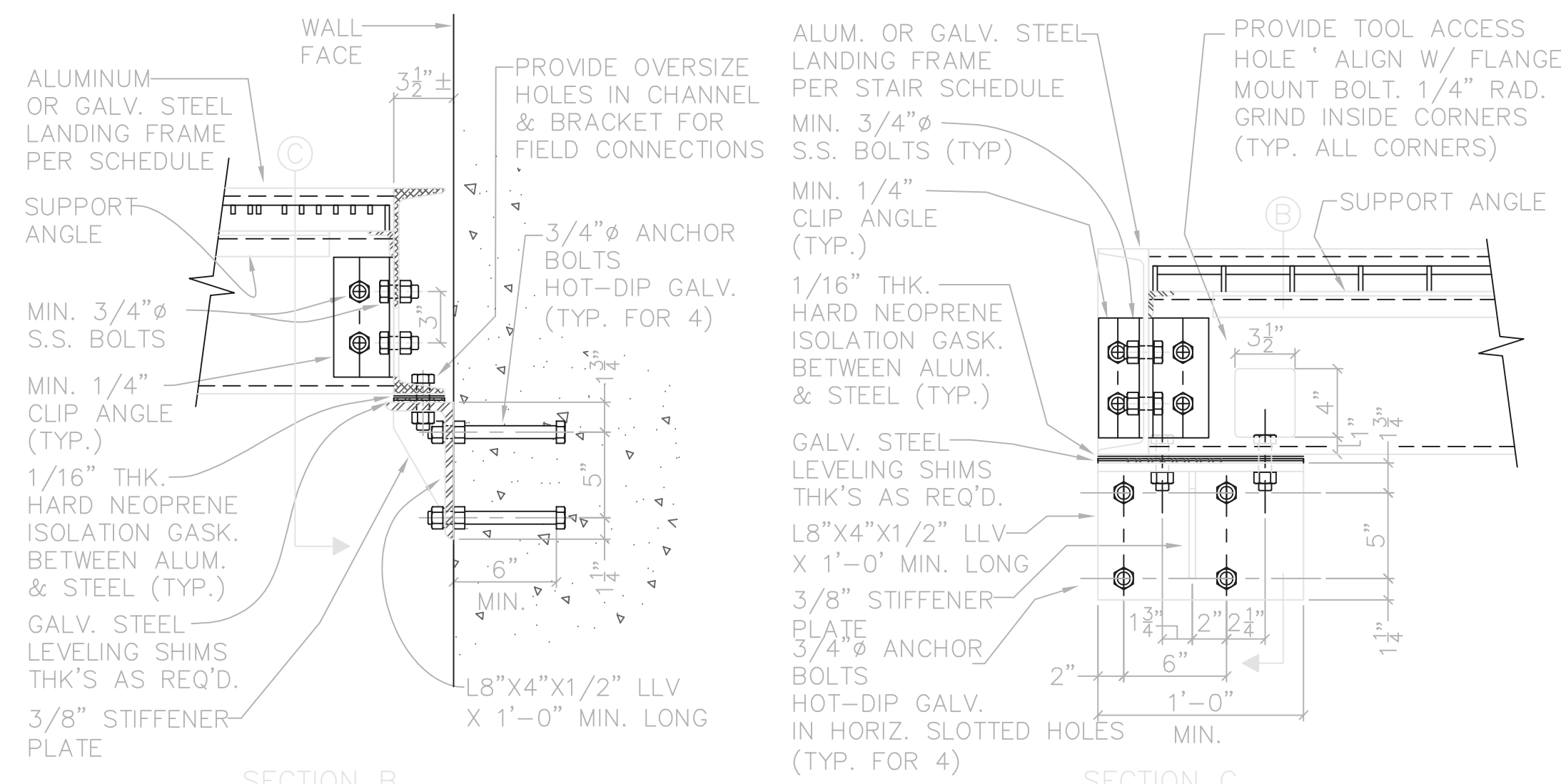
DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO. 20571
DESIGNED BY: FXW
DRAWN BY: RCD
CHECKED BY: FXW
APPROVED BY: SLW
DATE: 1999

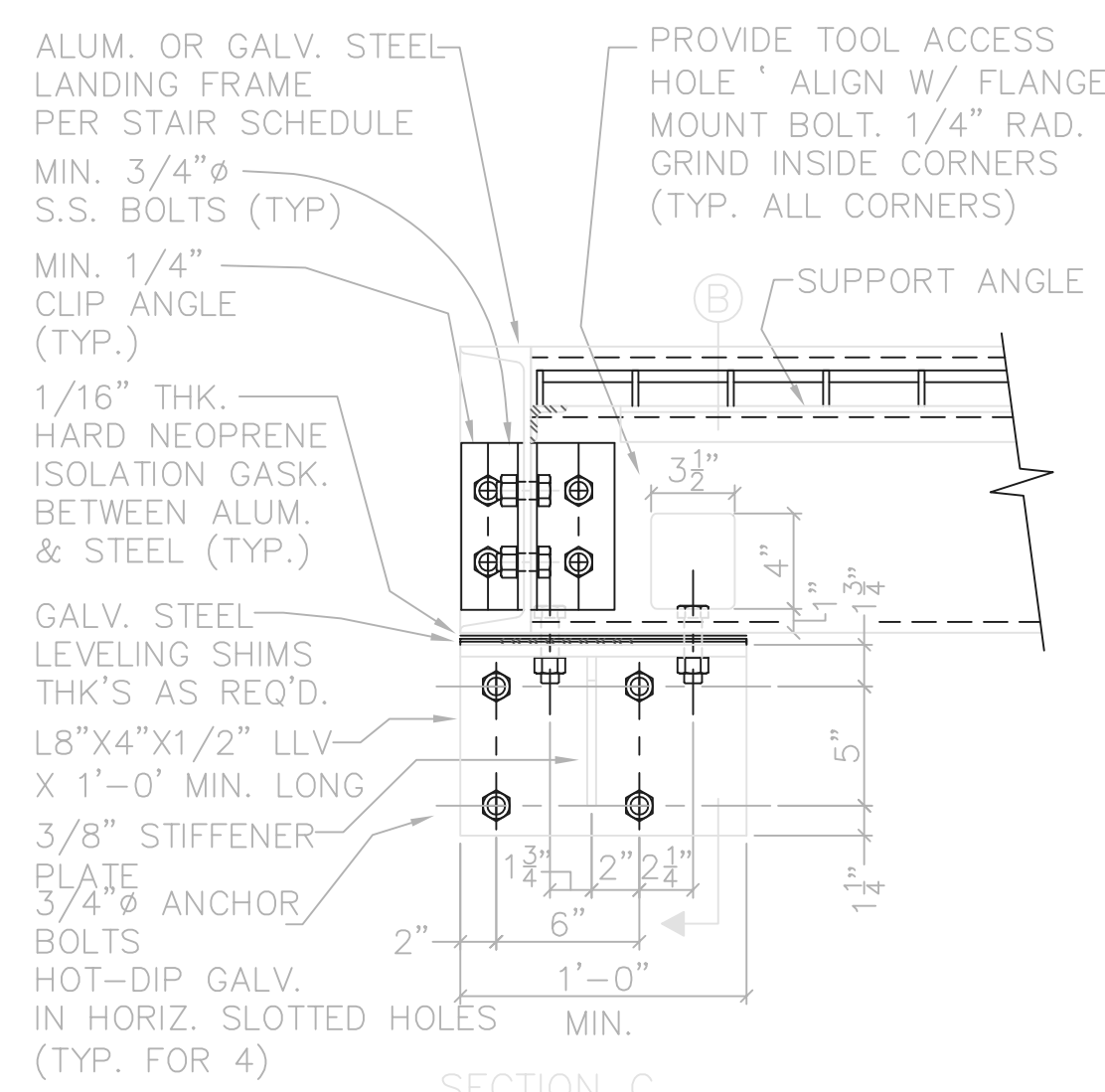
PUMP STATION
MISCELLANEOUS
STRUCTURAL
STAIR DETAILS

SCALE:	
NONE	
SHEET NO.	OF
38	100

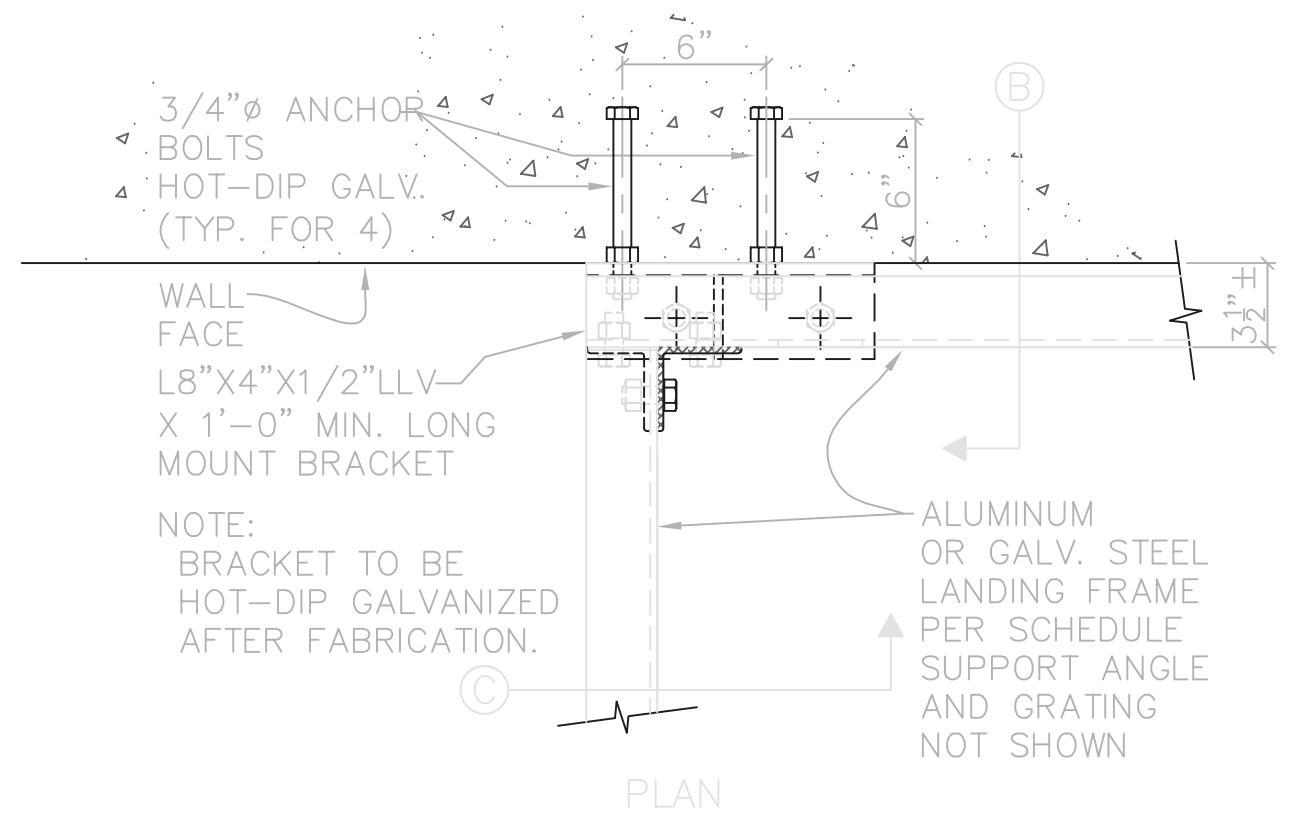
© BNWW0201



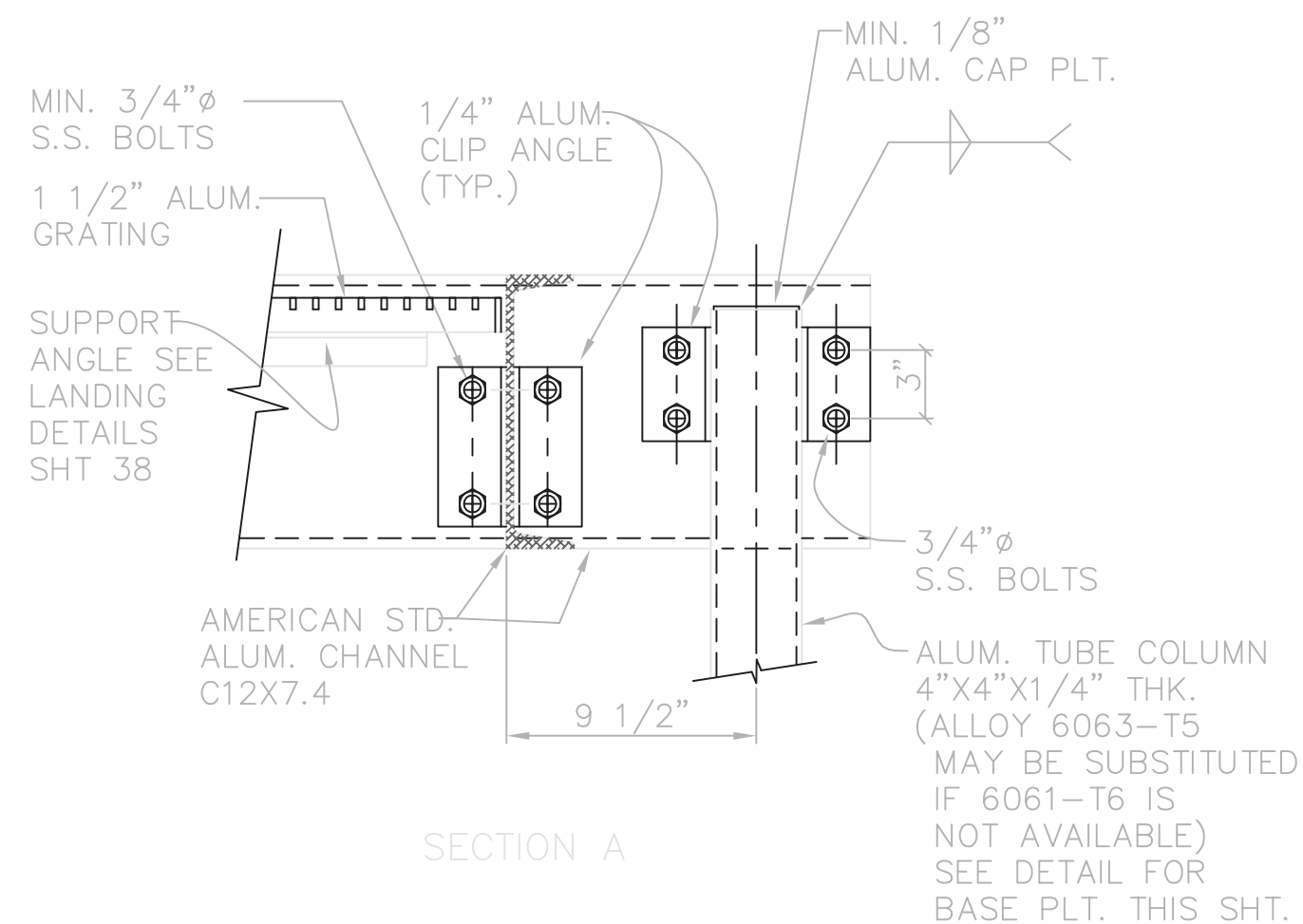
SECTION B



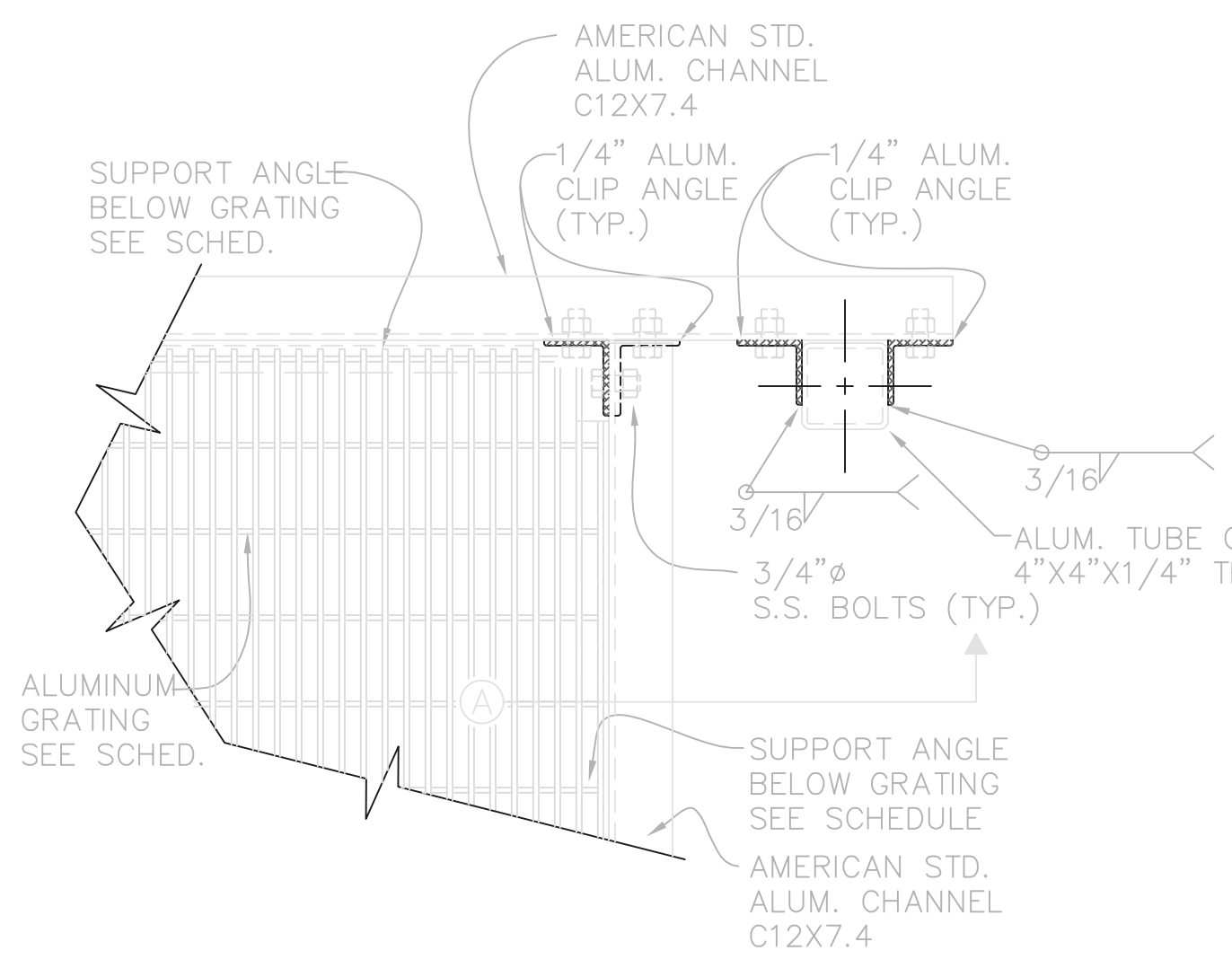
SECTION C



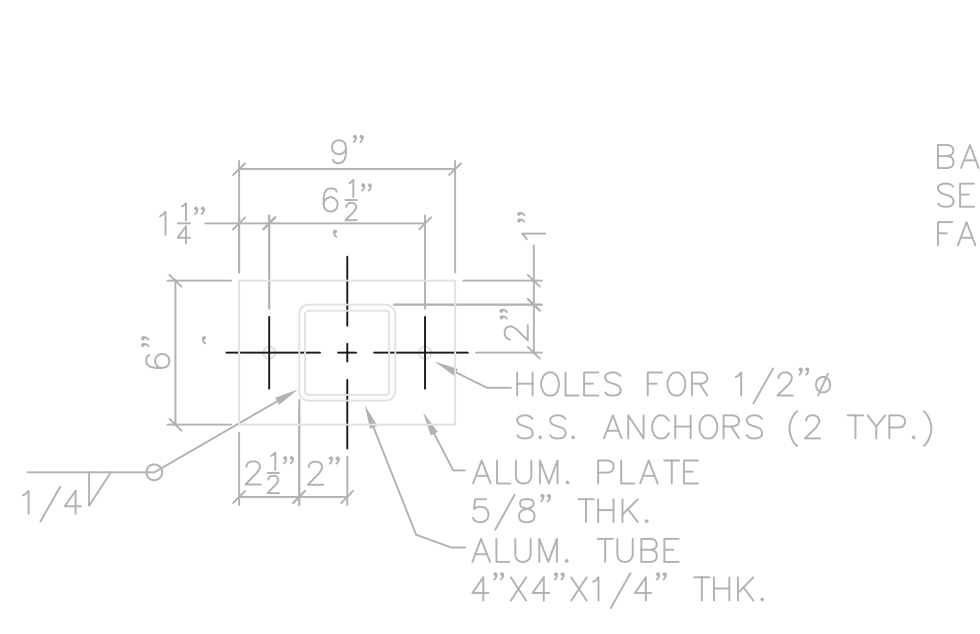
(HANDRAIL MOUNTS NOT SHOWN)
TYPICAL STAIR SUPPORT BRACKET
NTS



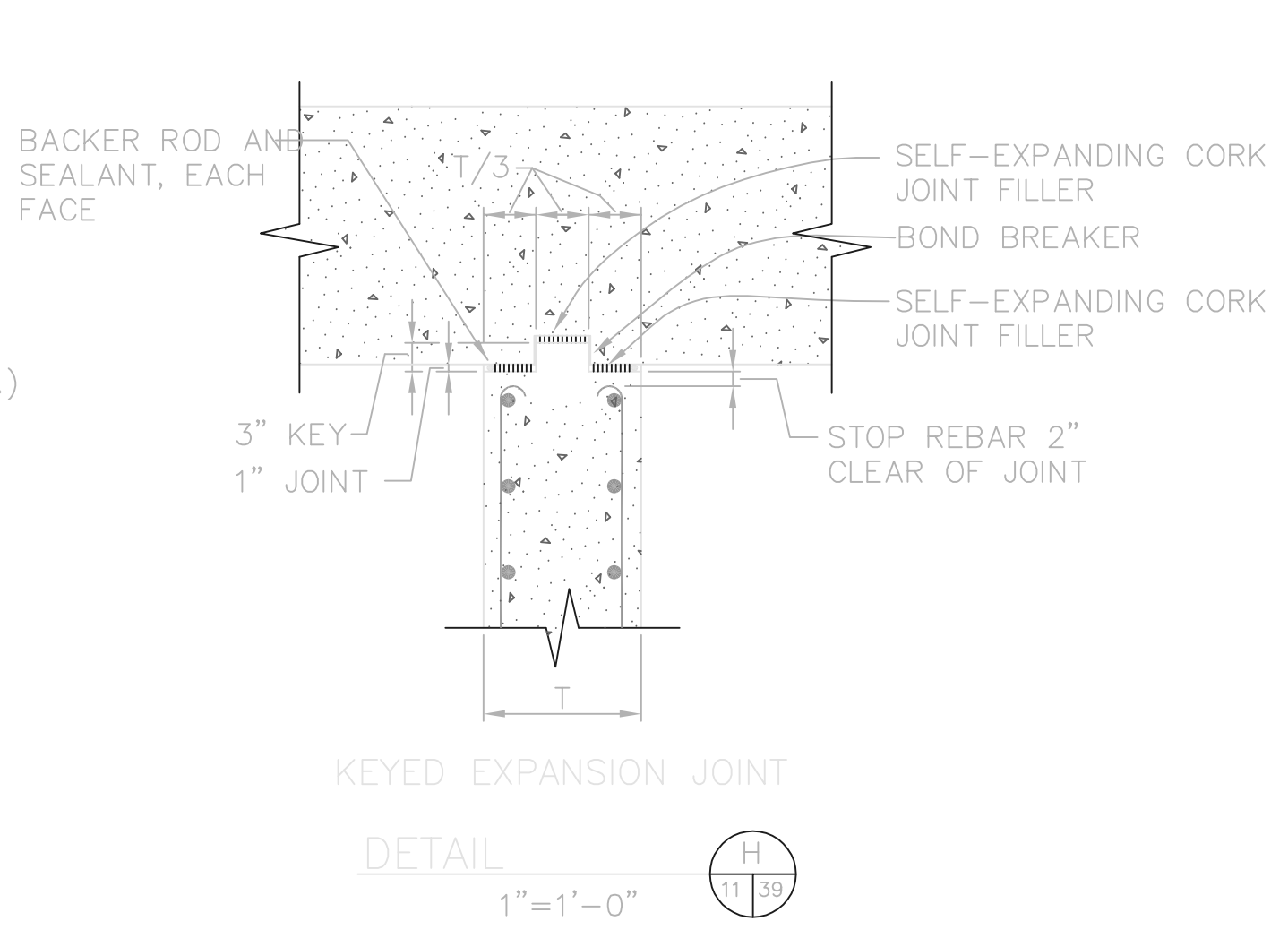
SECTION A



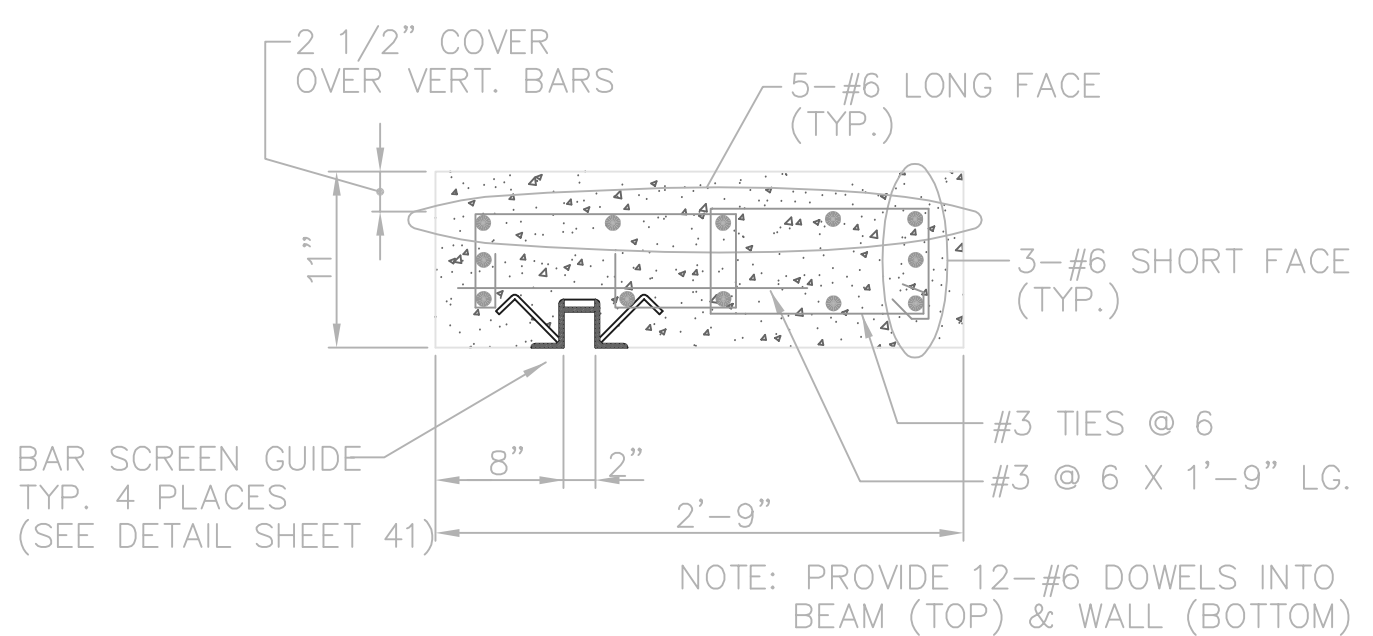
(HANDRAIL CHANNEL MOUNTS NOT SHOWN)
ALUMINUM STAIR SUPPORT COLUMN DETAILS
NTS



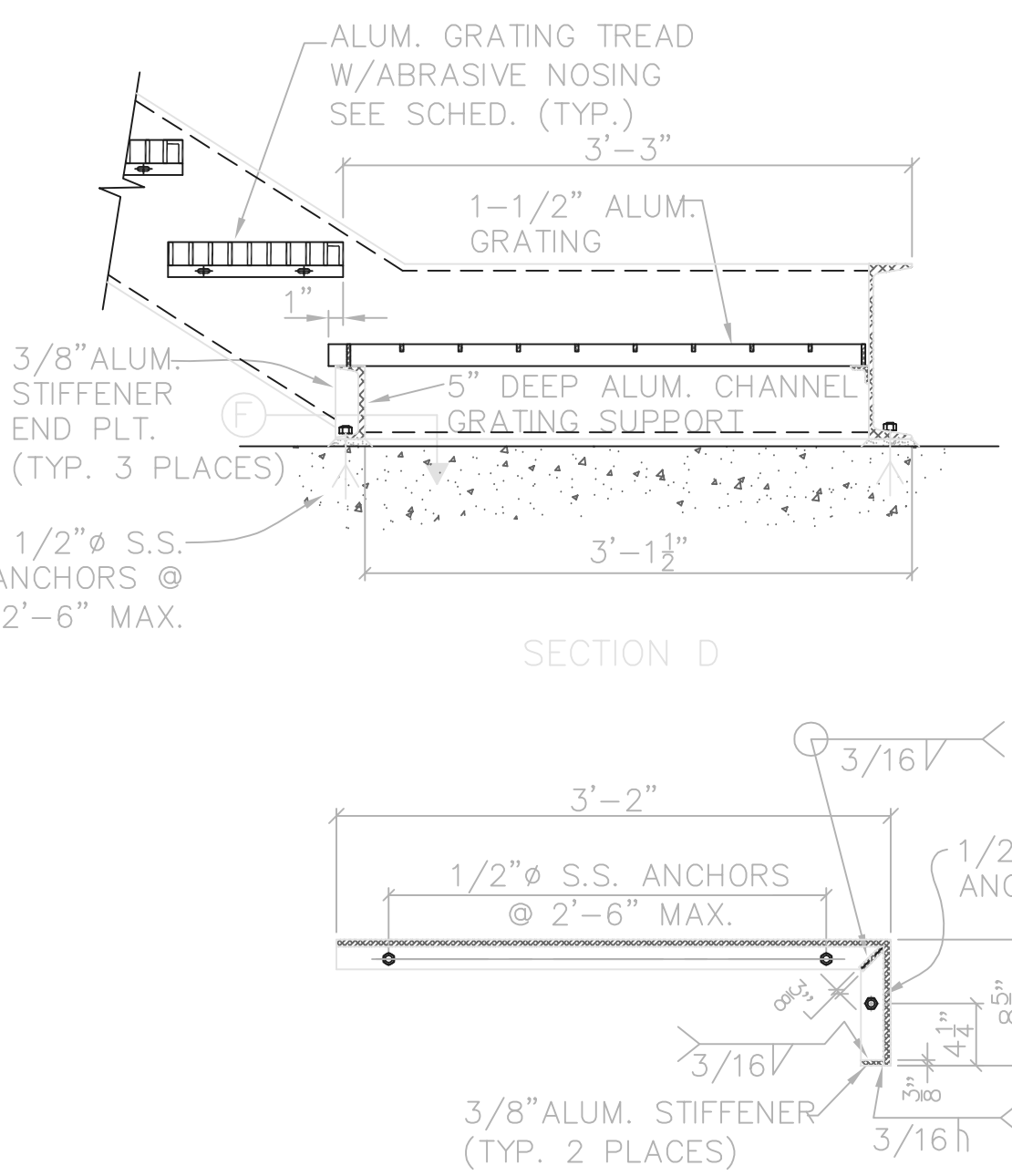
TUBE COLUMN BASE PLATE
NTS



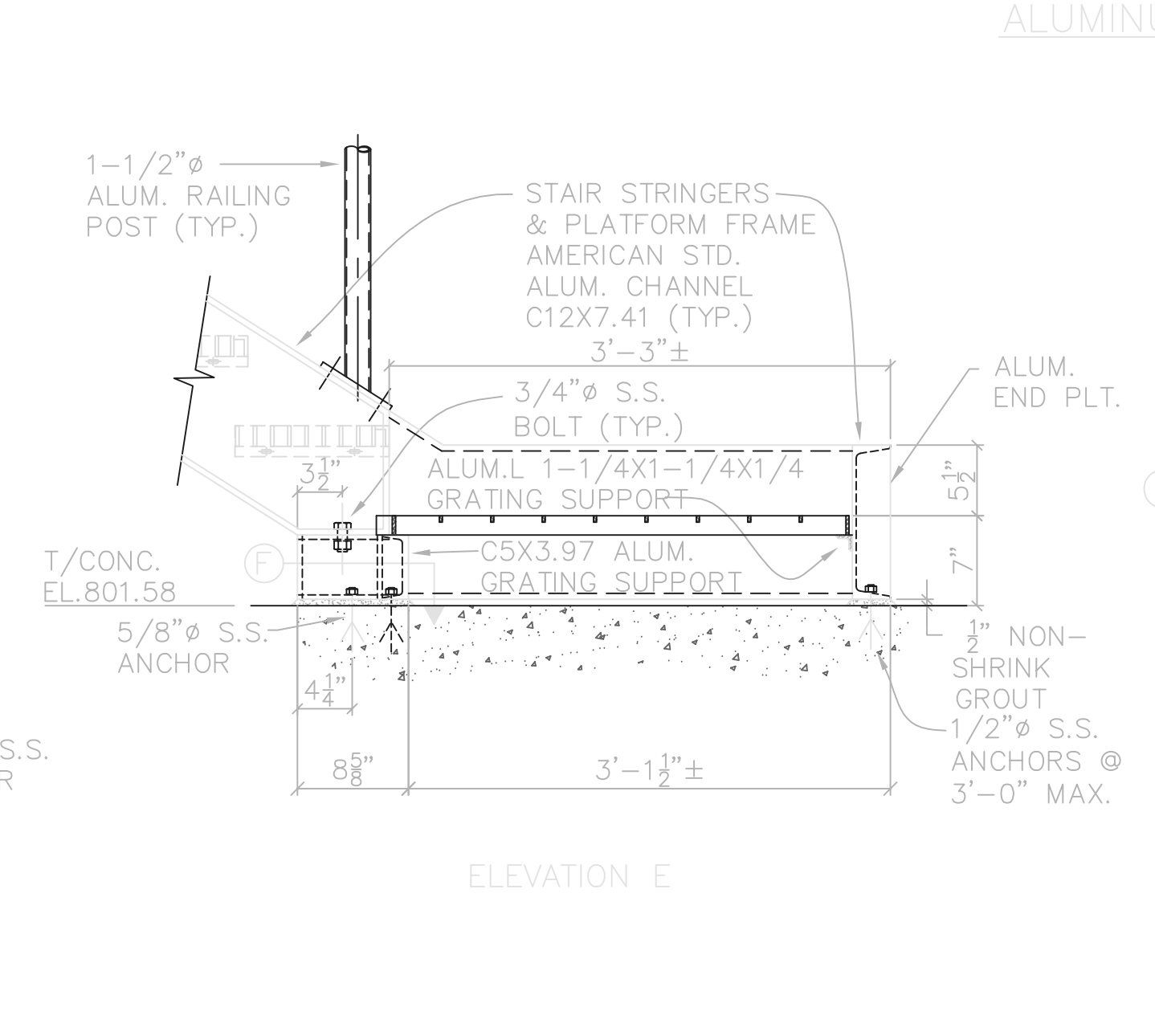
KEYED EXPANSION JOINT
DETAIL



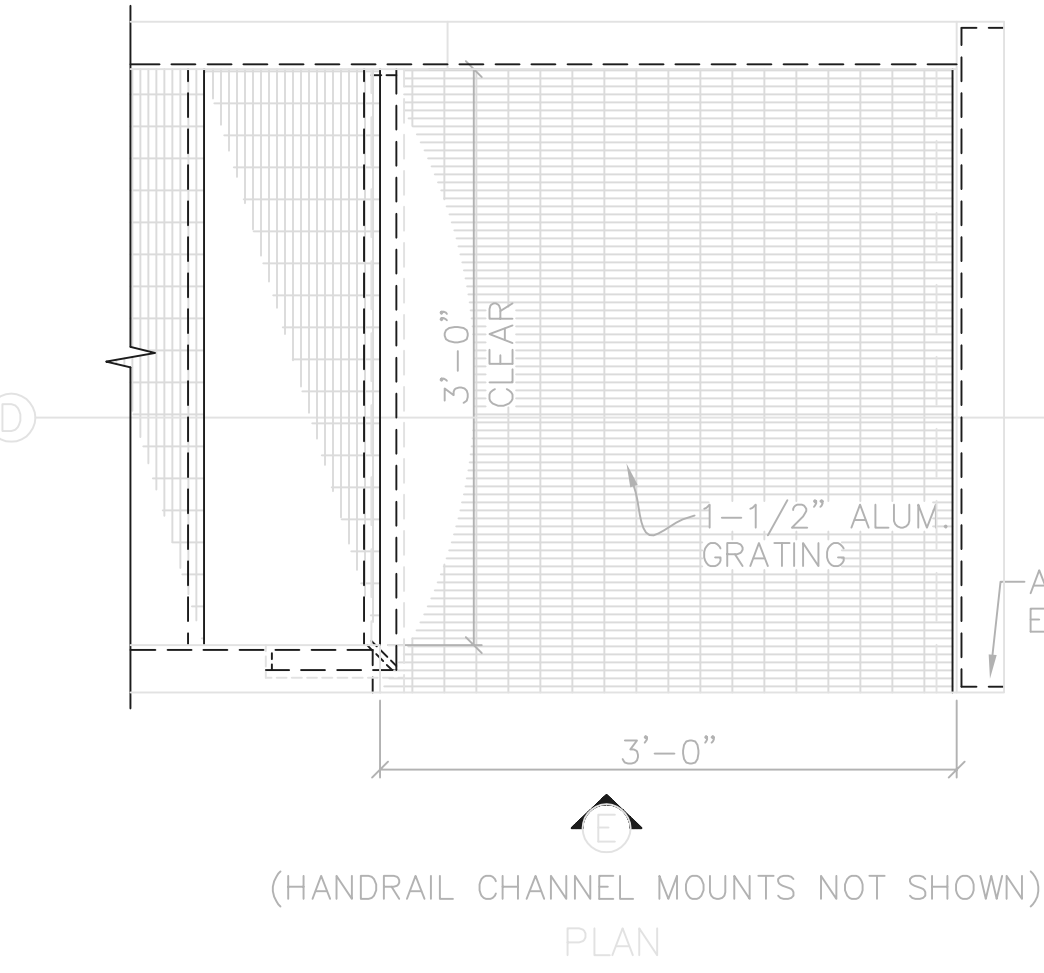
DETAIL
1"=1'-0"



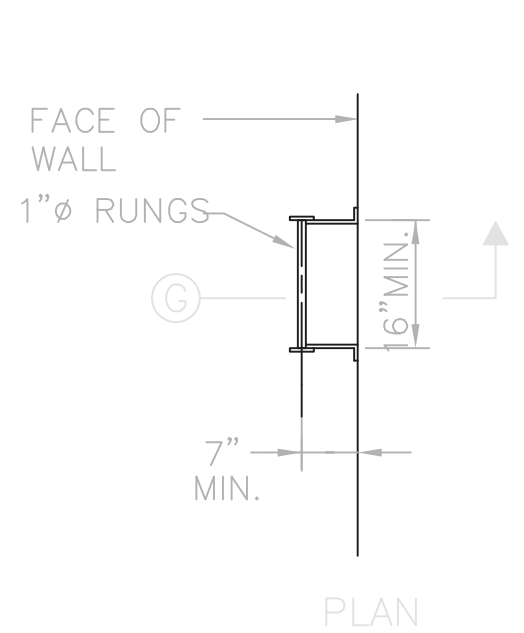
SECTION D



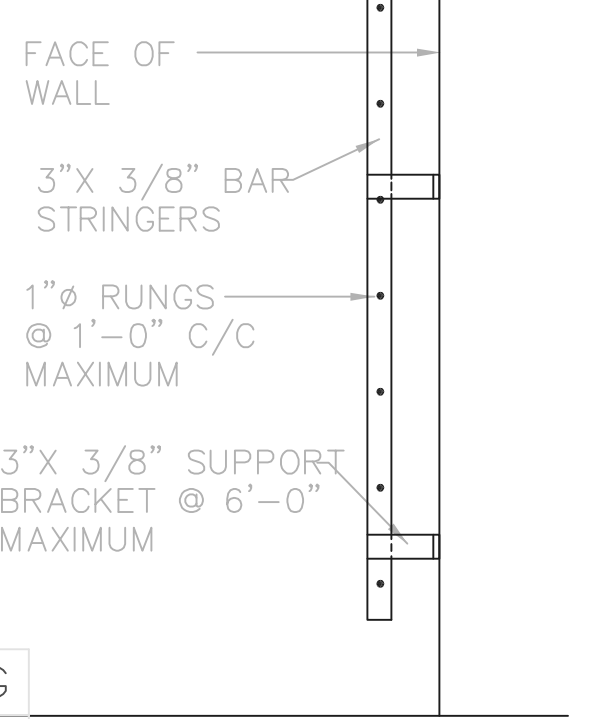
ELEVATION E



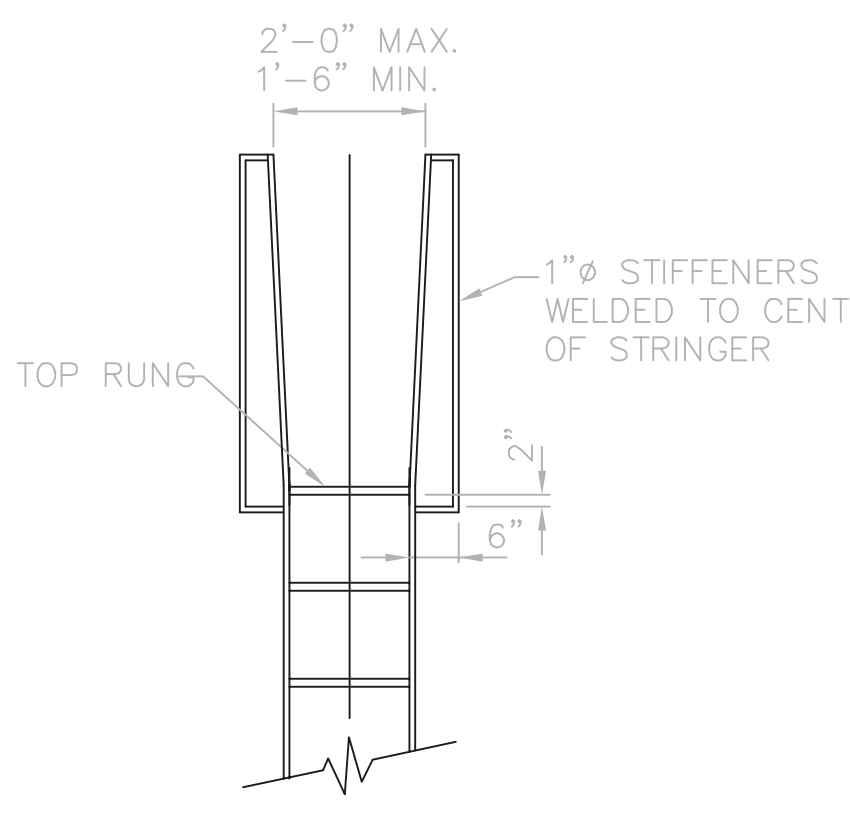
(HANDRAIL CHANNEL MOUNTS NOT SHOWN)
STAIR S1-A SUPPORT DETAILS
NTS



FACE OF WALL



SECTION G
LADDER DETAILS
NTS



(WHERE REQUIRED OR SHOWN)
LADDER EXTENSION DETAIL

RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".

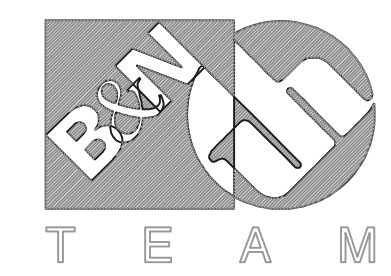
FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02** MO. / DAY / YR.

© BNW0201

NOTES:
1.) ALL CONSTRUCTION TO BE WELDED.
2.) SUPPORT BRACKET FASTENER:
A.) TO CONCRETE, USE 5/8" DIA. GALV. OR CAD. PLT. EXPANSION ANCHORS
B.) TO MASONRY, USE 5/8" DIA. THRU BOLTS.

TOL-4714MD18
02/28/02 04-102
P:\PR24025\IMPSTARECDWG\39.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

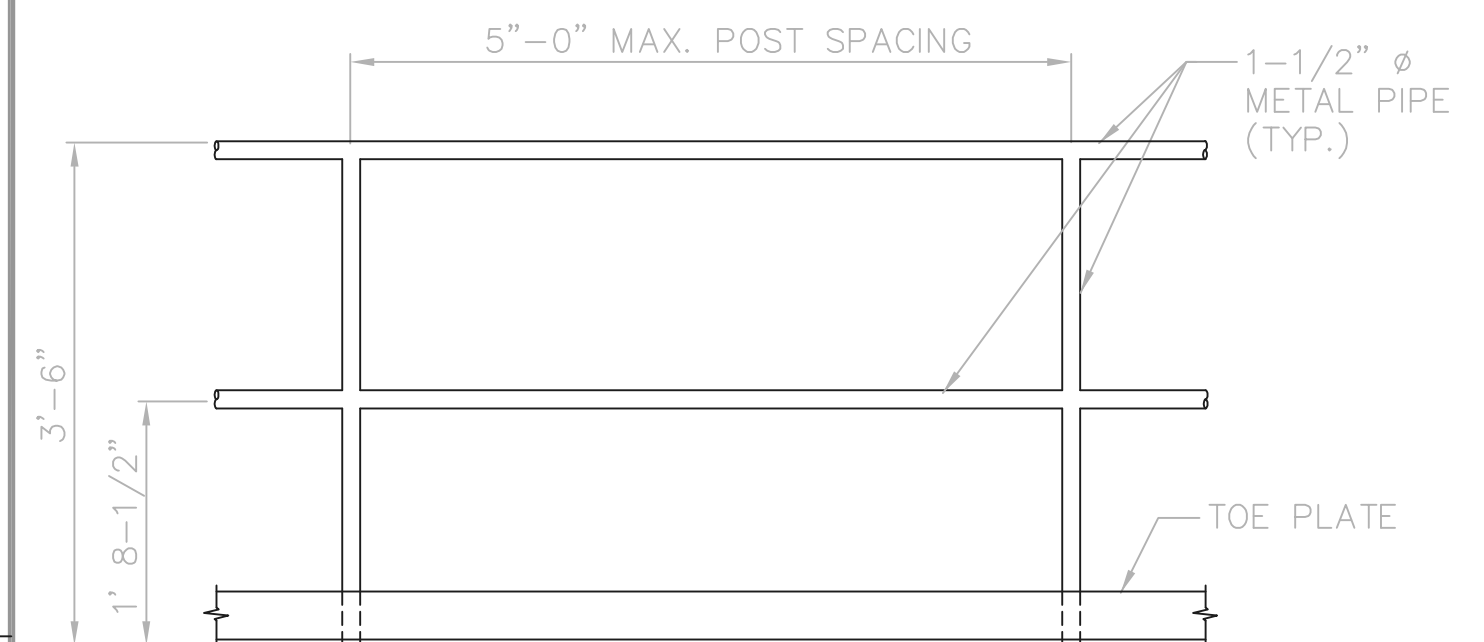
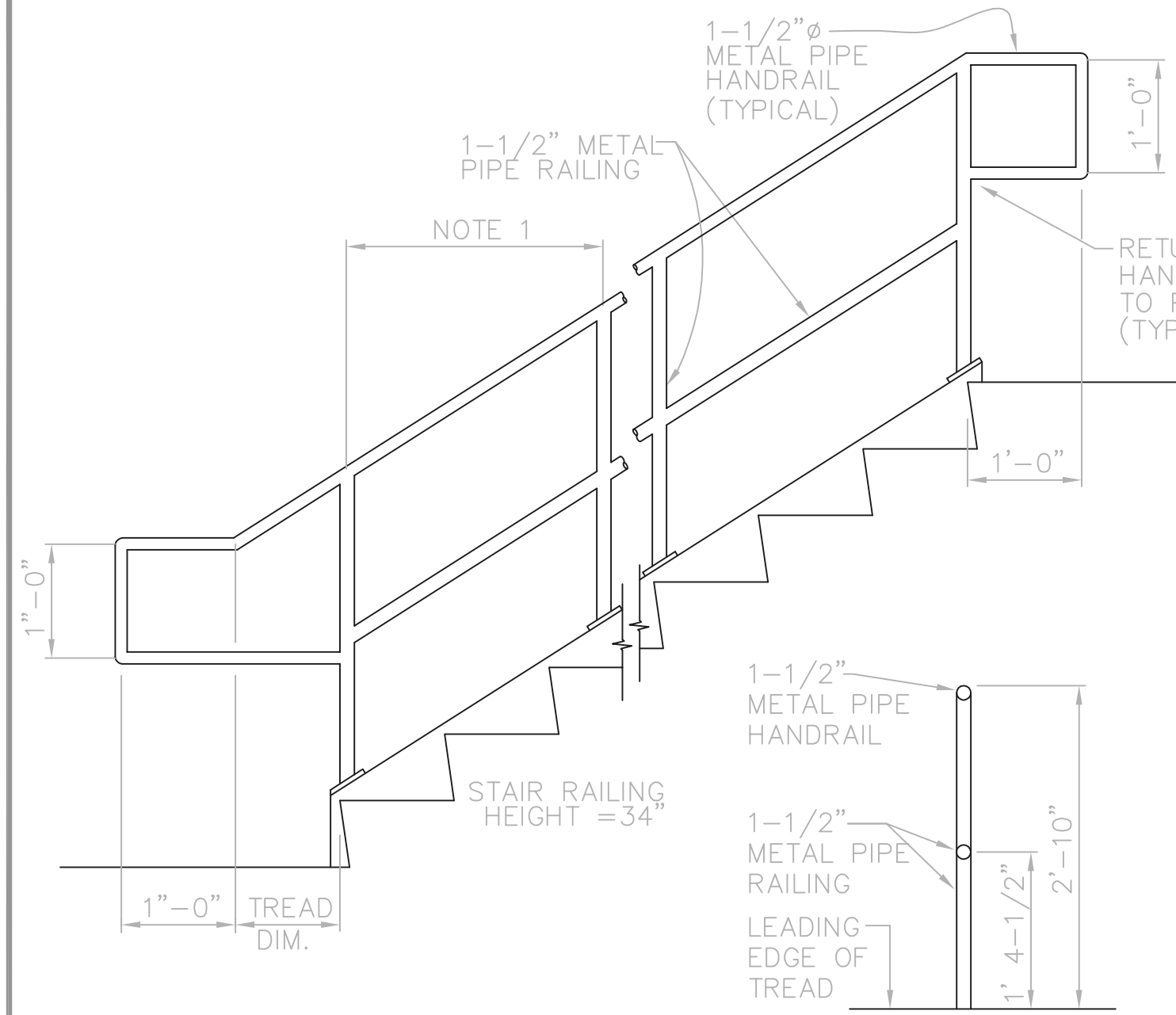
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
MISCELLANEOUS
STRUCTURAL
DETAILS

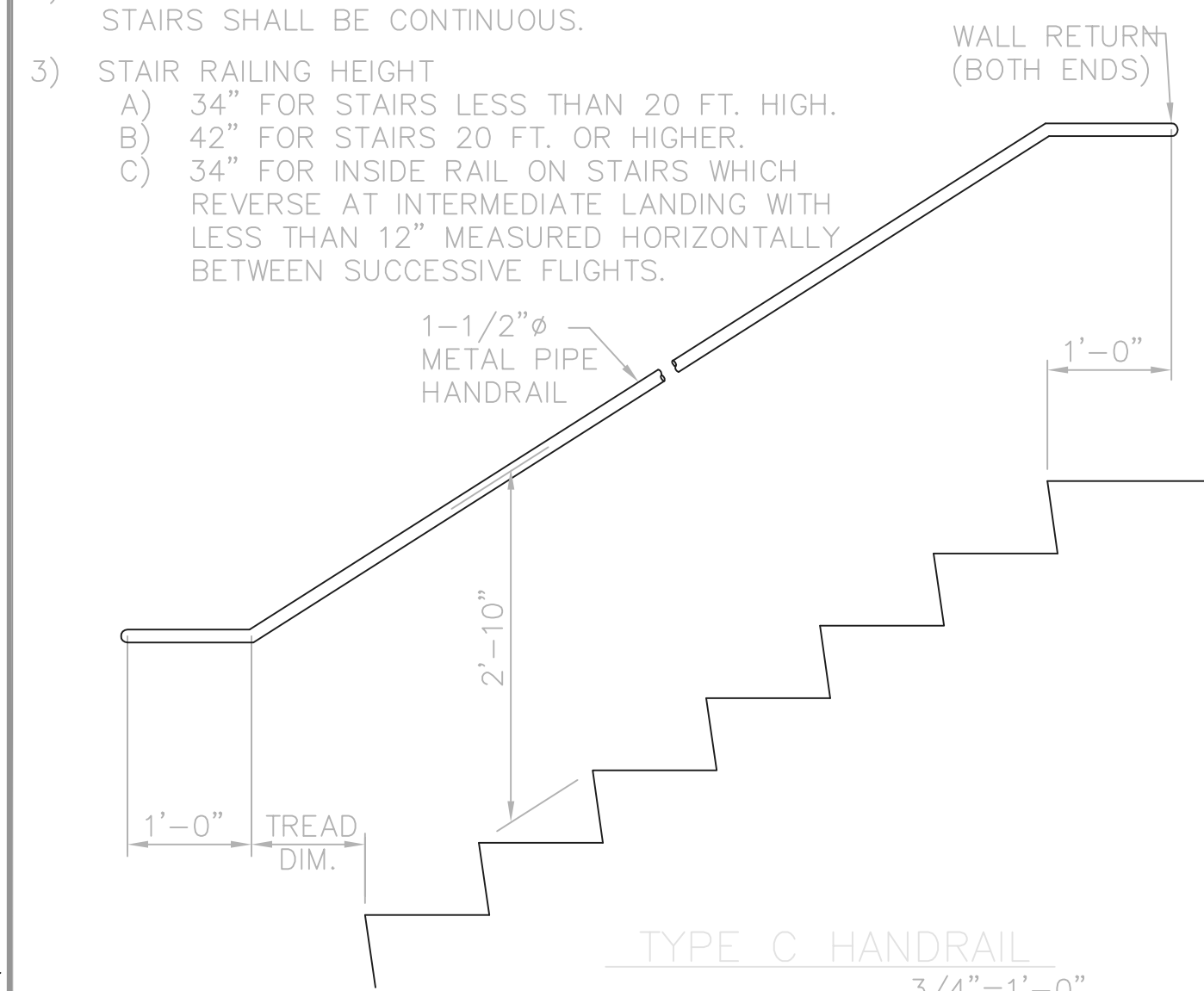
SCALE:	
NONE	
SHEET NO.	OF
39	100



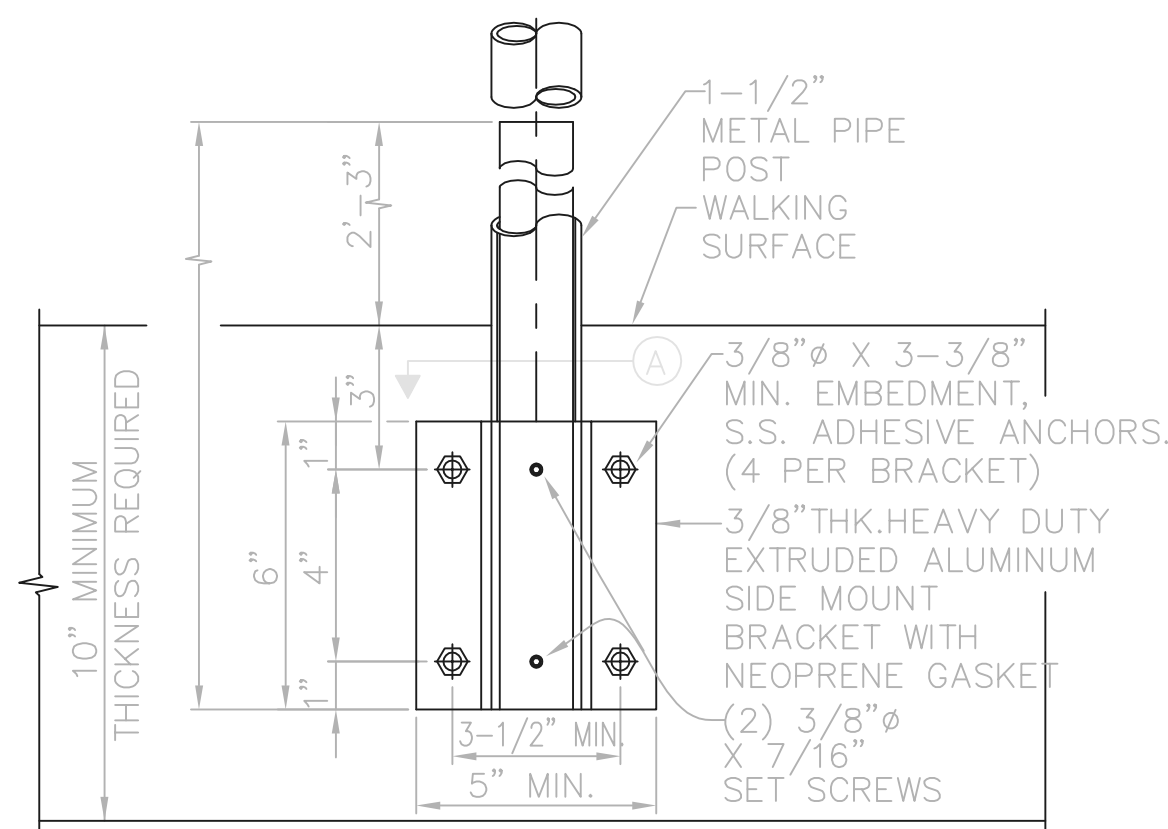
TYPICAL STANDARD RAILING
(BOCA) 3/4"=1'-0"

RAILING NOTES:

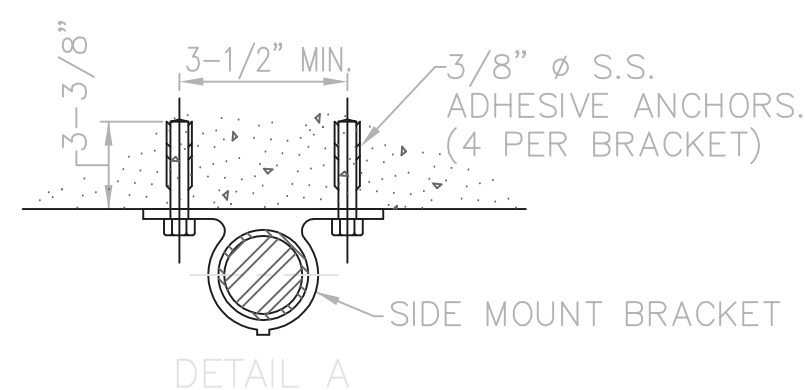
- MAX. STAIR RAILING POST SPACING
 $H=34"$ $H=42"$
 METAL STAIRS 2'-8" 2'-2"
 CONCRETE STAIRS 5'-0" 5'-0"
- INSIDE HANDRAIL ON SWITCHBACK OR DOGLEG STAIRS SHALL BE CONTINUOUS.
- STAIR RAILING HEIGHT
 A) 34" FOR STAIRS LESS THAN 20 FT. HIGH.
 B) 42" FOR STAIRS 20 FT. OR HIGHER.
 C) 34" FOR INSIDE RAIL ON STAIRS WHICH REVERSE AT INTERMEDIATE LANDING WITH LESS THAN 12" MEASURED HORIZONTALLY BETWEEN SUCCESSIVE FLIGHTS.



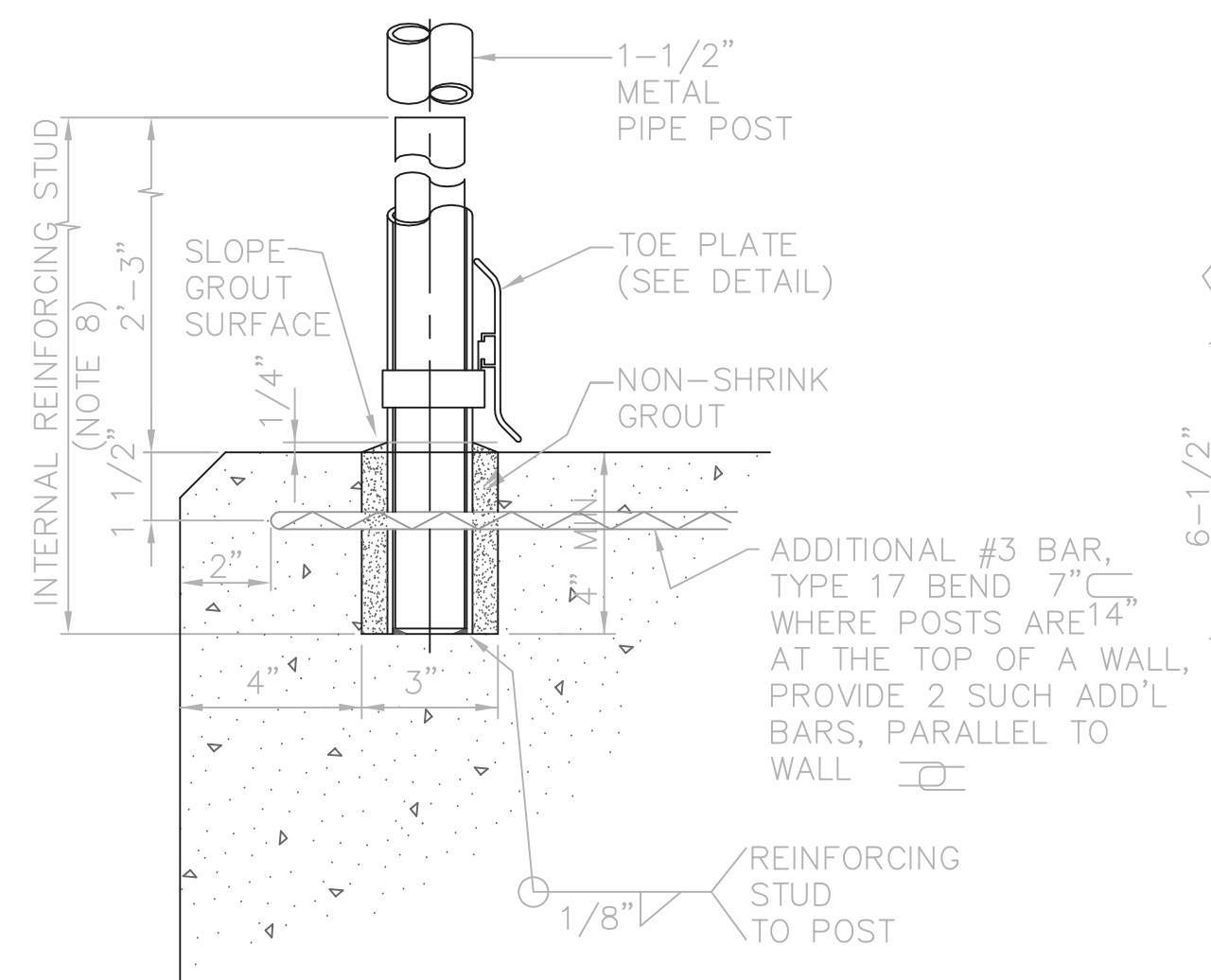
TYPE C HANDRAIL
3/4"=1'-0"



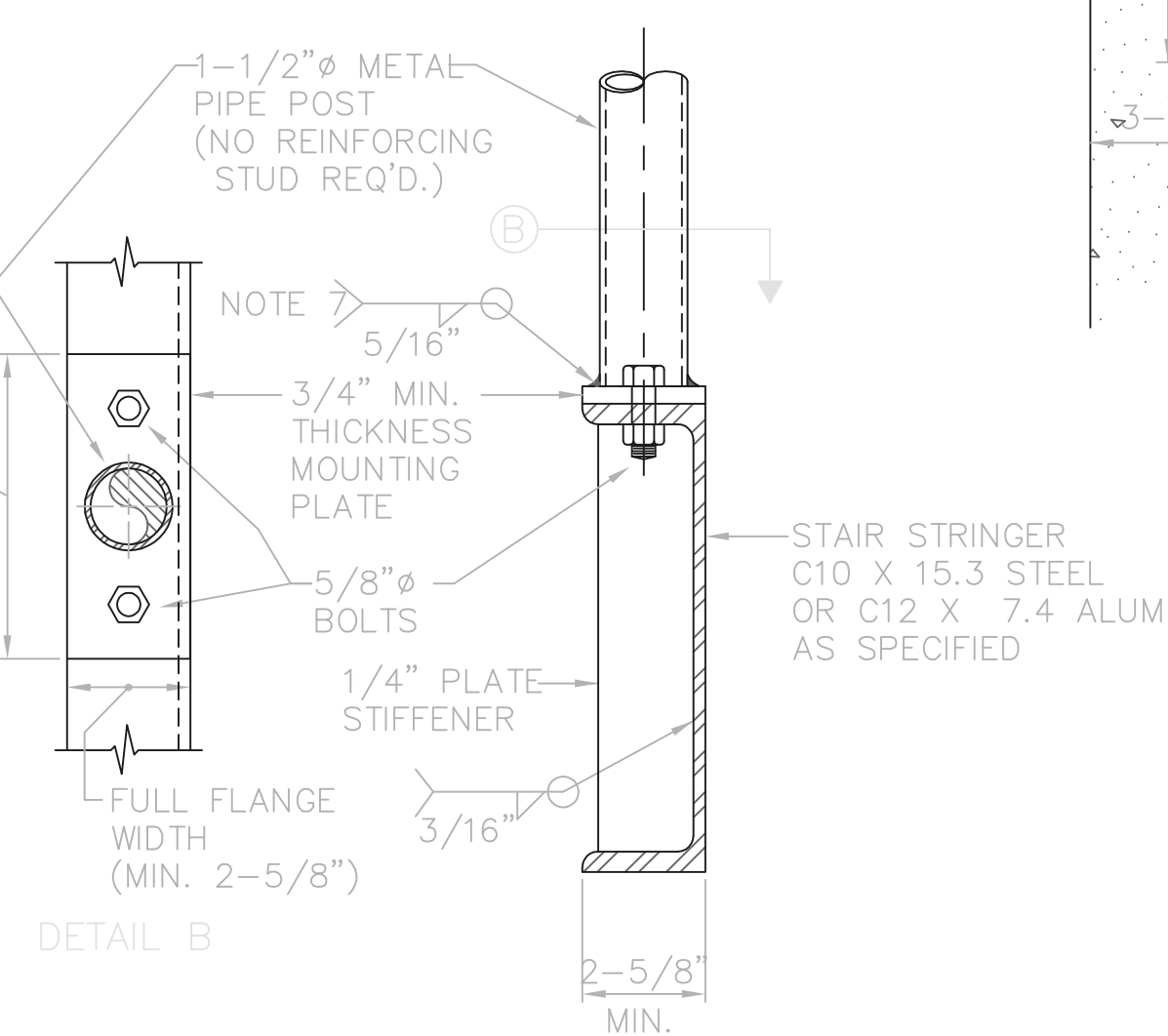
TYPE A RAILING POST



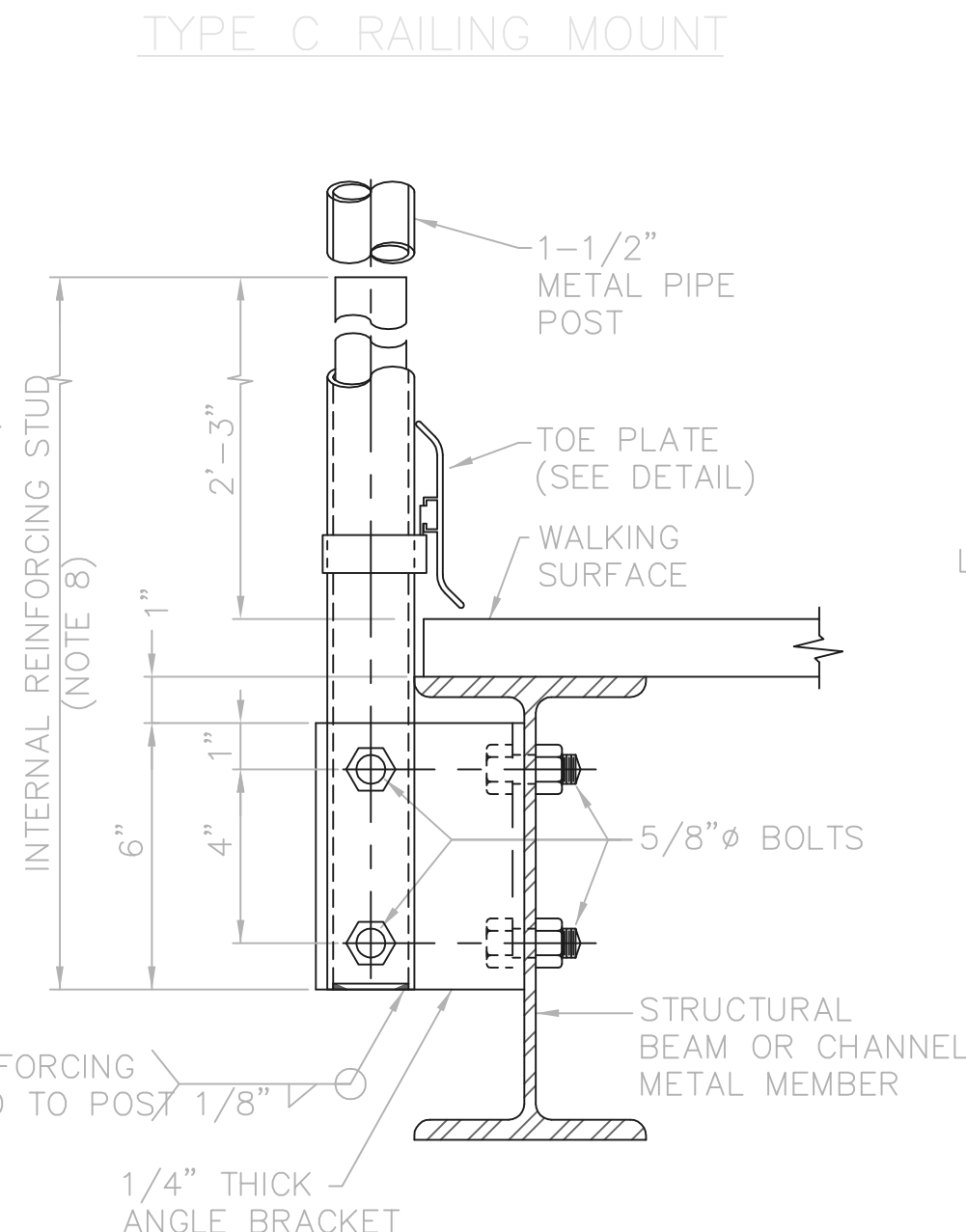
DETAIL A



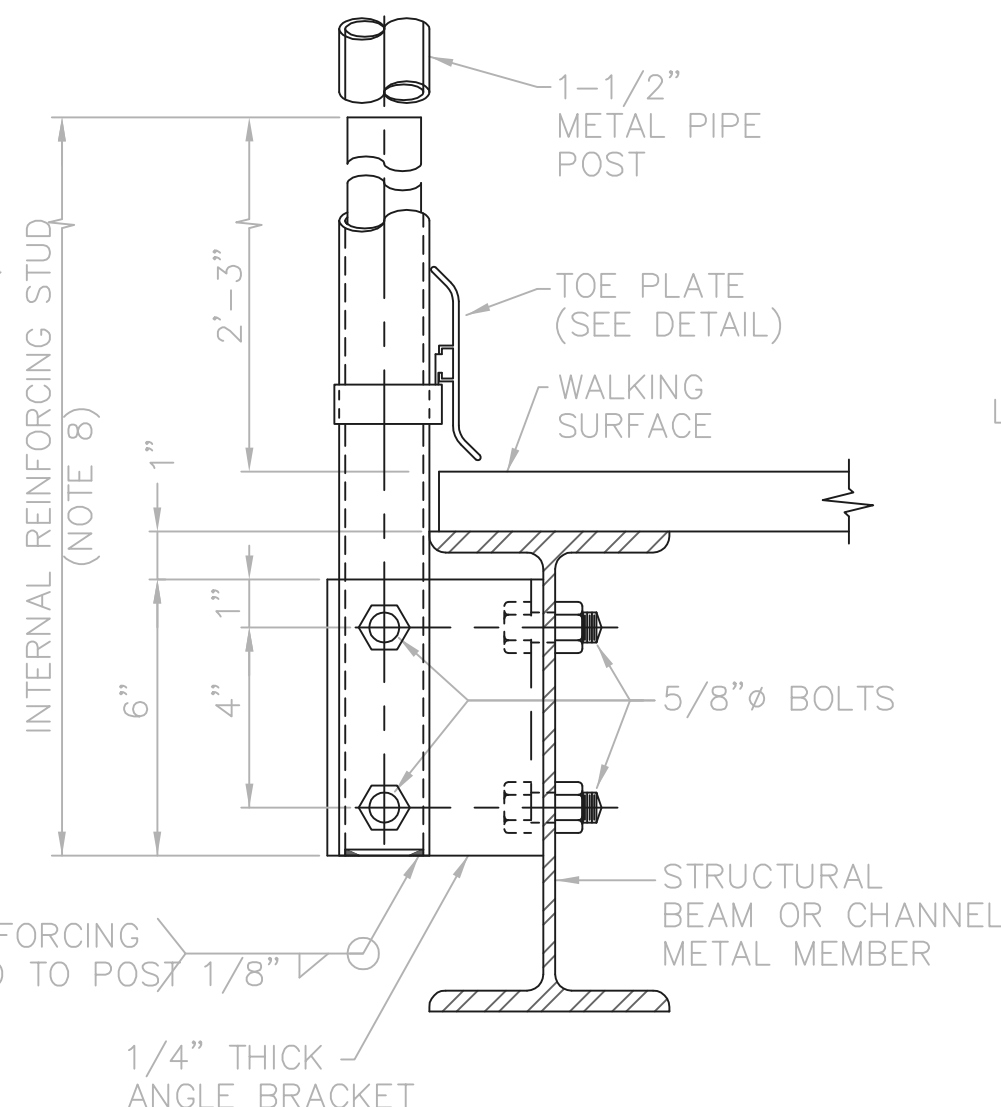
TYPE B RAILING POST



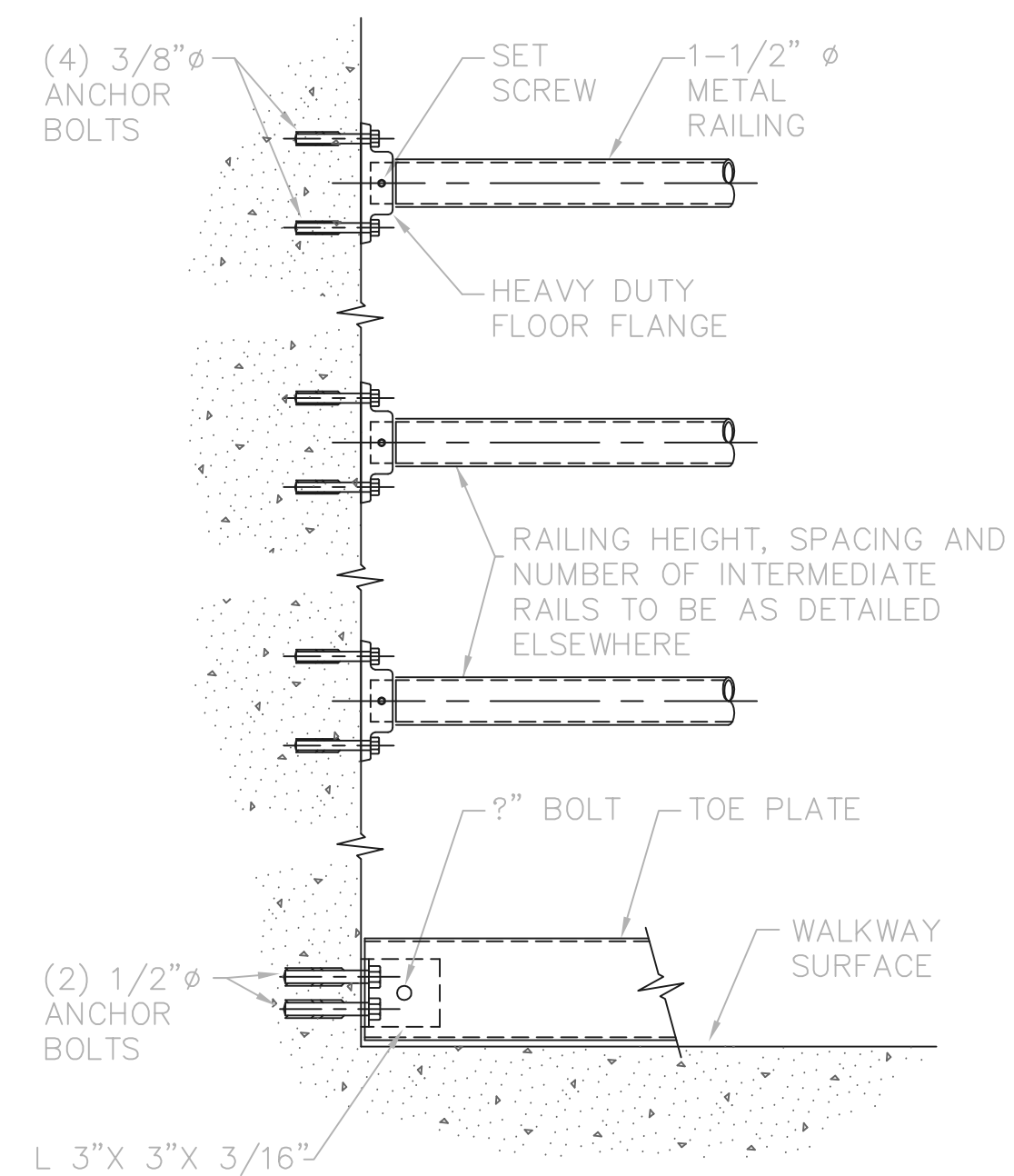
TYPE E RAILING POST



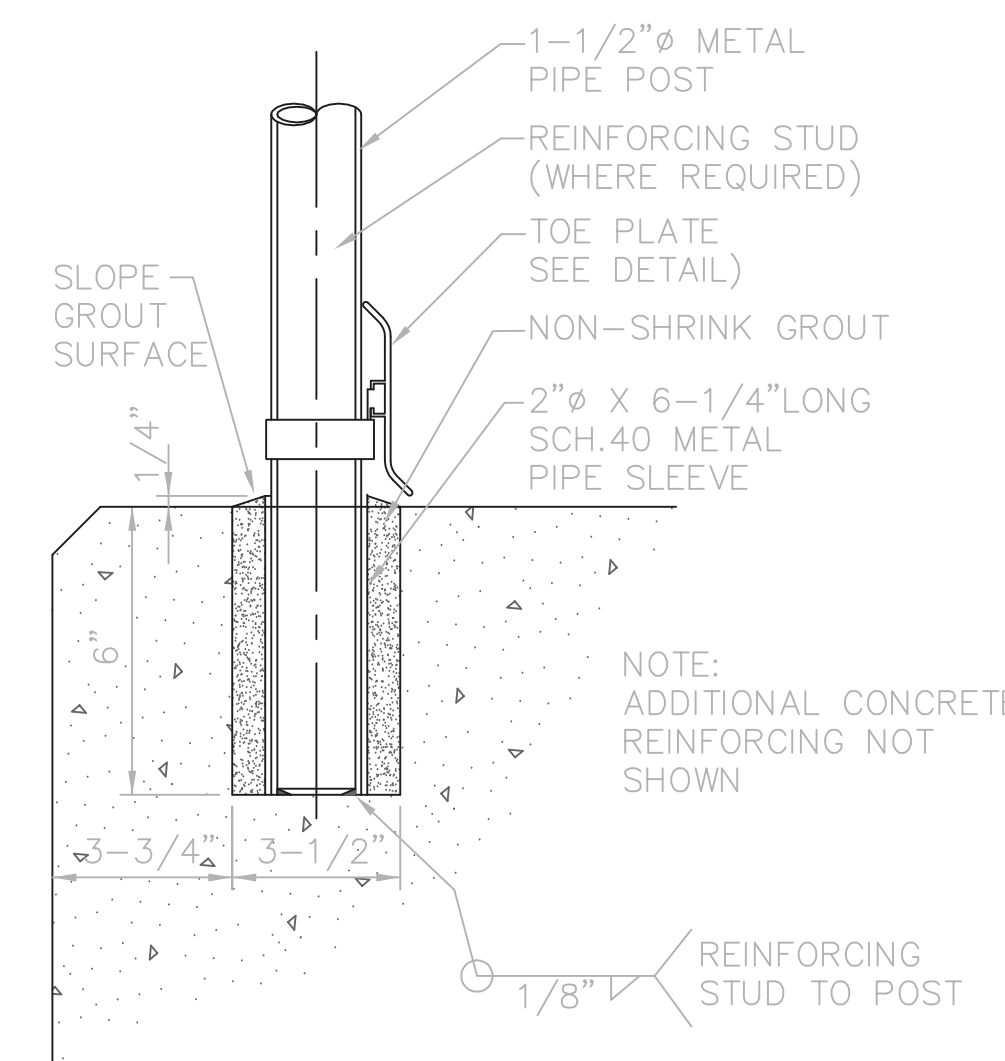
TYPE C RAILING MOUNT



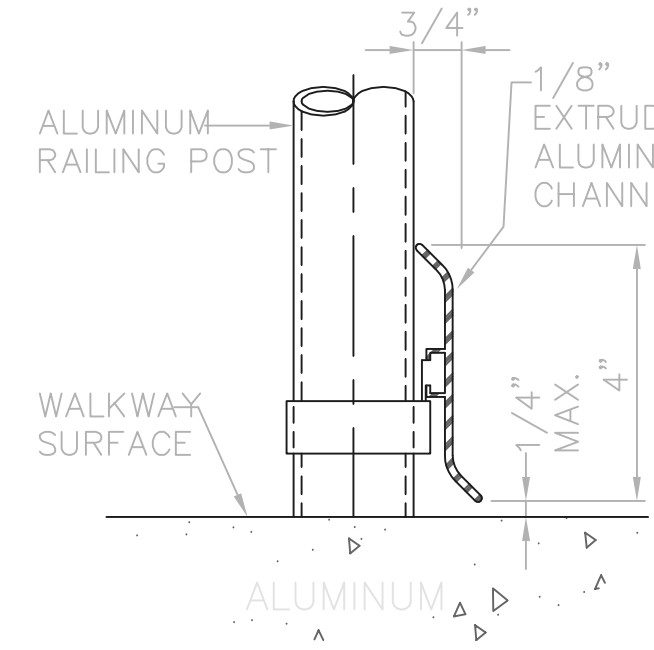
TYPE D RAILING POST



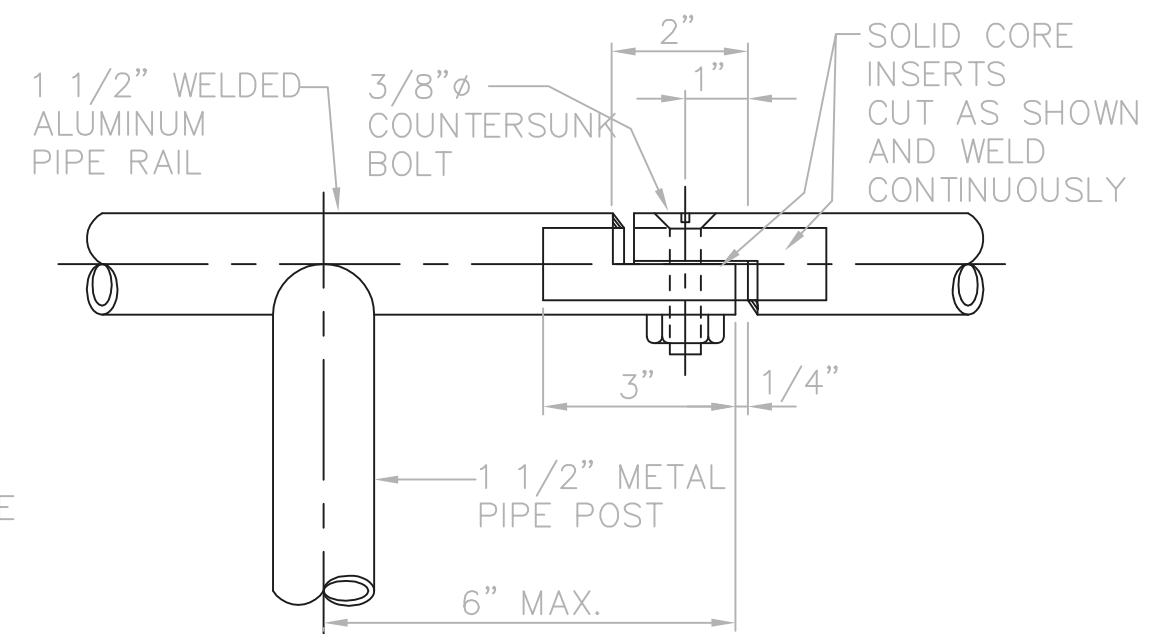
TYPE G RAILING MOUNT



REMOVABLE (TYPE B) POST



TOE PLATE DETAIL



REMOVABLE RAILING

- NOTES:
- APPLY COAL TAR PAINT TO ALUMINUM SURFACES IN CONTACT WITH CONCRETE, MASONRY, OR DISSIMILAR METALS.
 - ANCHORS FASTENERS AND HINGES
 RAILING MATERIAL FASTENER AND HINGE MATERIAL
 CARBON STEEL CARBON STEEL (ZINC PLATED)
 ALUMINUM STAINLESS STEEL
 - RAILING POST BASE DETAILS TYPE A THRU D ARE ACCEPTABLE ONLY UP TO MAXIMUM POST SPACING OF 5'-0"
 - ALL ALUMINUM PIPE & PLATE MUST BE MADE OF 6061T-6 ALLOY
 - UNLESS OTHERWISE SPECIFIED, ALL EXTRUDED ALUMINUM FITTINGS SHALL BE MADE OF 6063T-6 ALLOY. ALL FABRICATED ALUMINUM FITTINGS SHALL BE MADE OF 6061-T6 ALLOY. ALL CAST FITTINGS SHALL BE MADE FROM ALUMINUM-MAGNESIUM ALLOY CONFORMING TO ASTM B26 WITH MINIMUM TENSILE STRENGTH OF 38 KSI AND MINIMUM YIELD STRENGTH OF 20 KSI.
 - CARBON STEEL RAILING MUST BE GALVANIZED BEFORE USING WITH ALUMINUM FITTINGS TO MINIMIZE CORROSION. CARBON STEEL FITTINGS CAN BE USED WITH CARBON STEEL RAILING.
 - FOR WELDING ALUMINUM POST TO PLATE, USE 5556 ALUMINUM ALLOY AS FILLER METAL.
 - 1-5/8" REINFORCING STUDS ARE REQUIRED WHEN POST SPACING EXCEEDS 3'-6". REINFORCING STUDS MAY NEED TO BE TURNED DOWN TO FIT TIGHT INSIDE POST, THEN WELDED TO BOTTOM OF POST.
 - CONTRACTOR MAY USE PREFABRICATED AND PRE-ENGINEERED HANDRAIL SYSTEM IF IT RESULTS IN COST SAVINGS FOR THE OWNER. SUBMIT TEST DATA AND DESIGN CALCULATIONS IN ENOUGH DETAIL TO SHOW THAT STRESSES AND DEFLECTION FOR THE SPECIFIED LOADS ARE WITHIN APPLICABLE CODE MATERIAL ALLOWABLE STRESSES.

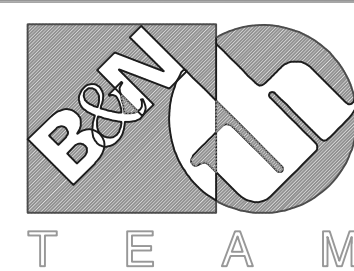
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
 FIRM Jones & Henry Engineers, Ltd. DATE 08/07/02
 MO. / DAY / YR.

© BNW0201

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE
 TOL-4714ND11 02/28/02 04-V02 P:\PR24025\PM\STARCDWG\140.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

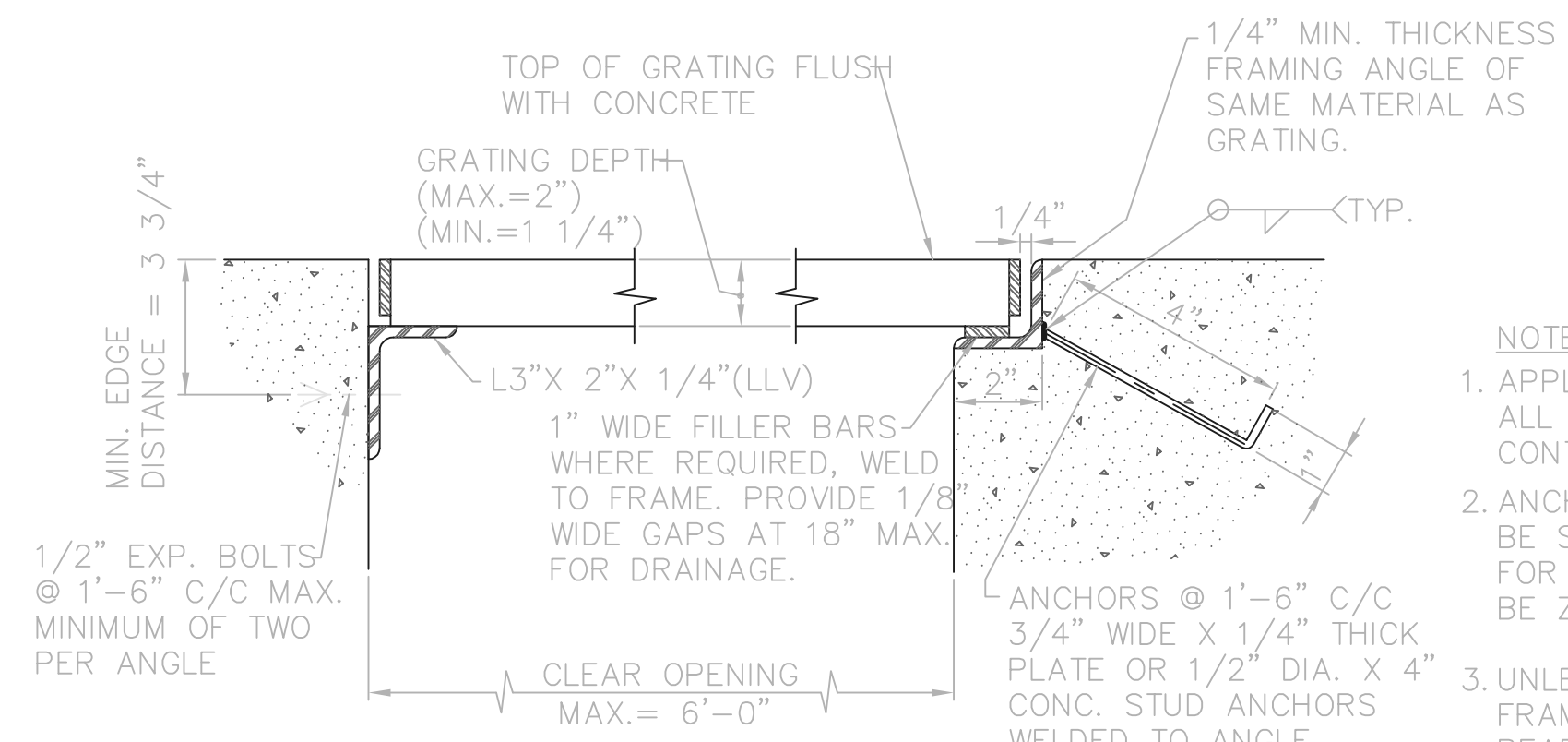
JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
 MISCELLANEOUS DETAILS
 STRUCTURAL
 PIPE RAILING DETAILS

SCALE:	
NONE	
SHEET NO.	OF
40	100

MARK	CLEAR OPENING WIDTH	SETS REQ'D	GROOVES SIZE			STOP PLATES SIZE			STIFFENERS NO.		LOCATION	SHT. NO.
			A	B	C*	W	H	T	REQ'D	REQ'D		
SP-1	1'-0"	2	1/2"	1 1/4"	8'-8"	13 3/4"	8'-6"	1/4"	2		ONE IN EACH WET WELL	

C* = INSIDE FRAME HEIGHT

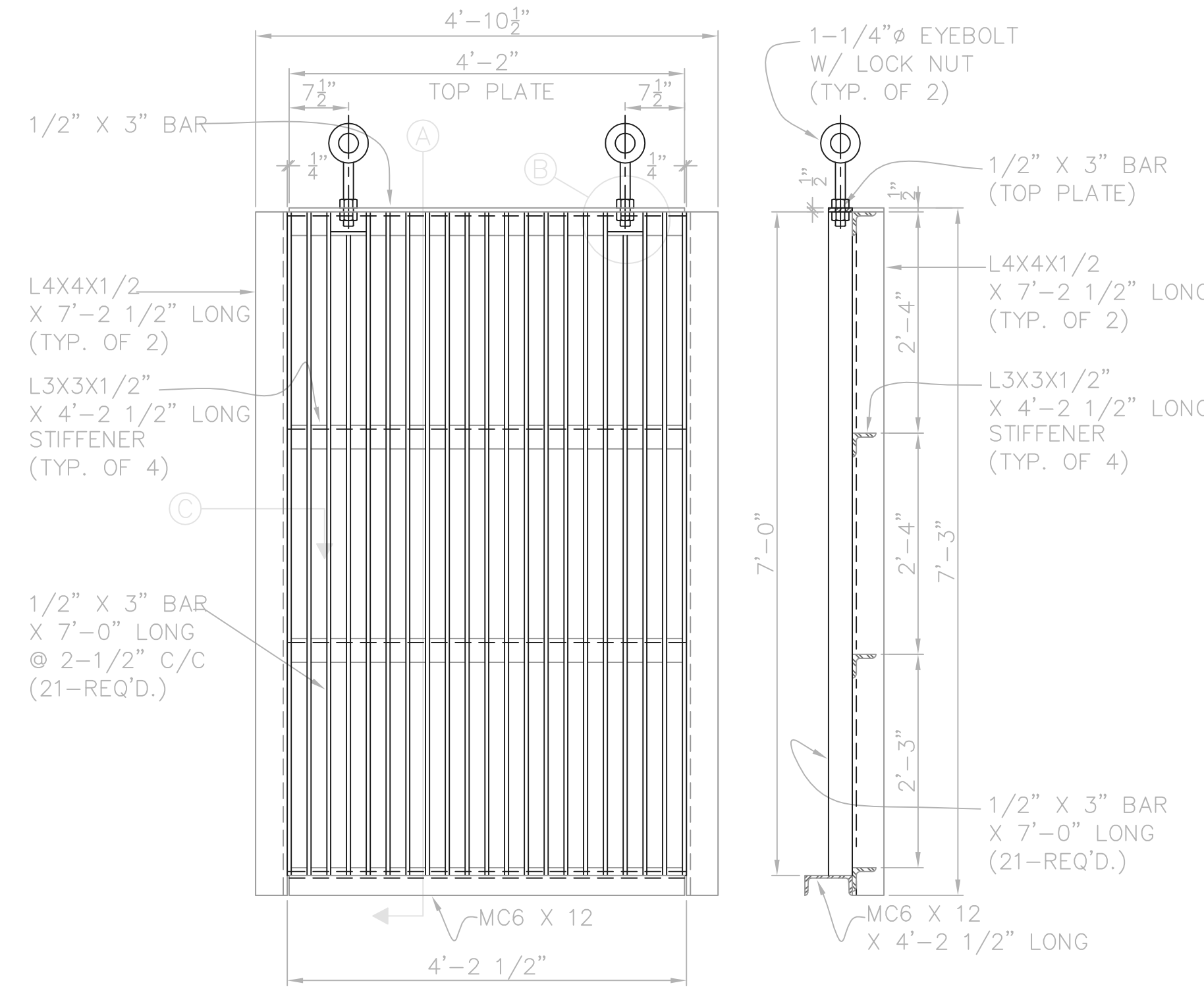


TYPE B
GRATING FRAMES

TYPE A

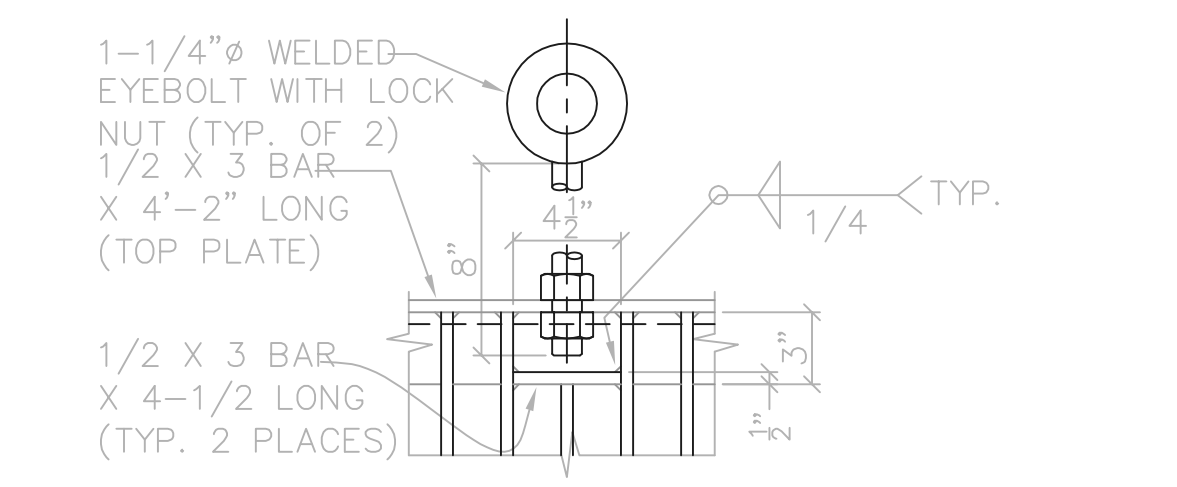
MARK	MATERIAL	SIZE	NO. REQ'D	CLEAR OPENING	FRAME LOCATED ON SHEET NO.	REMARKS	
							G-1
G-2	ALUM.	1-1/2" X 3/16"	1	2'-6" X 54'-0"	A & B	8	PROVIDE PANELS IN MAXIMUM STD. WIDTHS
G-3	ALUM.	1-3/4" X 3/16"	4	4'-0" X 3'-6"±	A	8	
G-4	ALUM.	1-3/4" X 3/16"	4	4'-0" X 1'-2"±	A	8	
G-5	ALUM.	1-3/4" X 3/16"	1	4'-5" X 5'-7"±	A & B	8	
G-6	ALUM.	1-3/4" X 3/16"	1	32'-0" X 7'-0"	A & K	8	
G-7	ALUM.	1-1/2" X 3/16"	1	3'-0" X 11'-4"±	A & B	8	
G-8	ALUM.	1-1/2" PLANK	1	4'-5" X 4'-5"	A & K	8	HEAVY DUTY PLANK, ONE PLANK TO HAVE A RECESSED HANDLE. GRATING TO BE REMOVABLE (UNFASTENED)
G-9	ALUM.	1-1/2" X 3/16"	1	4'-10" X 35'-5"***	*	11,21,22,24	CANTILEVER GRATING AT S.E. CORNER TO EXTEND TO STAIR LANDING
G-10	ALUM.	1-1/2" X 3/16"	1	4'-6 1/2" X 20'-6"***	*	13 & 24	
G-11	ALUM.	1-3/4" X 3/16"	1	4'-6" X 8'-8"	A & B	11	USE TYPE B FRAME AT COLUMN FACE ONLY
G-12	ALUM.	1-3/4" X 3/16"	1	4'-10" X 4'-3"±	A & B	11	
G-13	ALUM.	1-3/4" X 3/16"	2	4'-6" X 4'-6"	*	11	PROVIDE 3 PANELS OF SIMILAR WIDTHS. PANELS SHALL BE REMOVABLE (UNFASTENED). COORDINATE WITH G-12 & 14 AND WITH G-16 & 17. PROVIDE LIFT HANDLES AT EACH END OF EACH PANEL
G-14	ALUM.	1-3/4" X 3/16"	1	4'-10" X 15'-4 1/2"±	A & B	11	
G-15	ALUM.	1-3/4" X 3/16"	1	4'-6" X 10'-8"	A & B	11	USE TYPE B FRAME AT COLUMN FACE ONLY
G-16	ALUM.	1-3/4" X 3/16"	1	4'-10" X 6'-3"±	A & B	11	
G-17	ALUM.	1-3/4" X 3/16"	1	4'-10" X 16'-5 1/2"±	A & B	11	
G-18	ALUM.	2-1/2" X 3/16"	2	4'-6" X 4'-10"	A	15	BEARING BARS SPACED AT 7/16" C/C. PANELS SHALL BE REMOVABLE (UNFASTENED). PROVIDE LIFT HANDLES AT EACH END OF EACH PANEL
G-19	ALUM.	2-1/2" X 3/16"	2	5'-10" X 2'-1"	A & K	15	SUPPORTED ON ALUMINUM BEAMS WHERE SHOWN. PROVIDE OPENING AT GATE SUPPORT BRACKET. BEARING BARS SPACED AT 7/16" C/C.
G-20	ALUM.	2-1/2" X 3/16"	1	3'-6" X 7'-3"	A & K	15	SUPPORTED ON ALUMINUM BEAM WHERE SHOWN. BEARING BARS SPACED AT 7/16" C/C. PANELS SHALL BE REMOVABLE (UNFASTENED). PROVIDE LIFT HANDLES AT EACH END OF EACH PANEL.
G-21	ALUM.	2-1/2" X 3/16"	1	4'-8" X 7'-3"	A & K	15	SUPPORTED ON ALUMINUM BEAMS WHERE SHOWN. PROVIDE OPENING FOR SLUICE GATE SUPPORT BRACKET. BEARING BARS SPACED AT 7/16" C/C. PANELS SHALL BE REMOVABLE (UNFASTENED). PROVIDE LIFT HANDLES AT EACH END OF EACH PANEL.
G-22	ALUM.	1-1/2" X 3/16"	1	3'-0" X 9'-0"	A	15	
G-23	FIBERGLASS	1-1/2" X 5/16"	1	4'-0" X 3'-0"	B	15	
G-24	STL (GALV.)	1-3/4" X 1/4"	1	1'-0" X 10'-0"	A	15	H-15 LOADING

* SUPPORTED ON GALVANIZED STEEL BEAMS (ALUMINUM WHERE INDICATED). SEE DRAWINGS.
** OUT TO OUT OF PLATFORM.

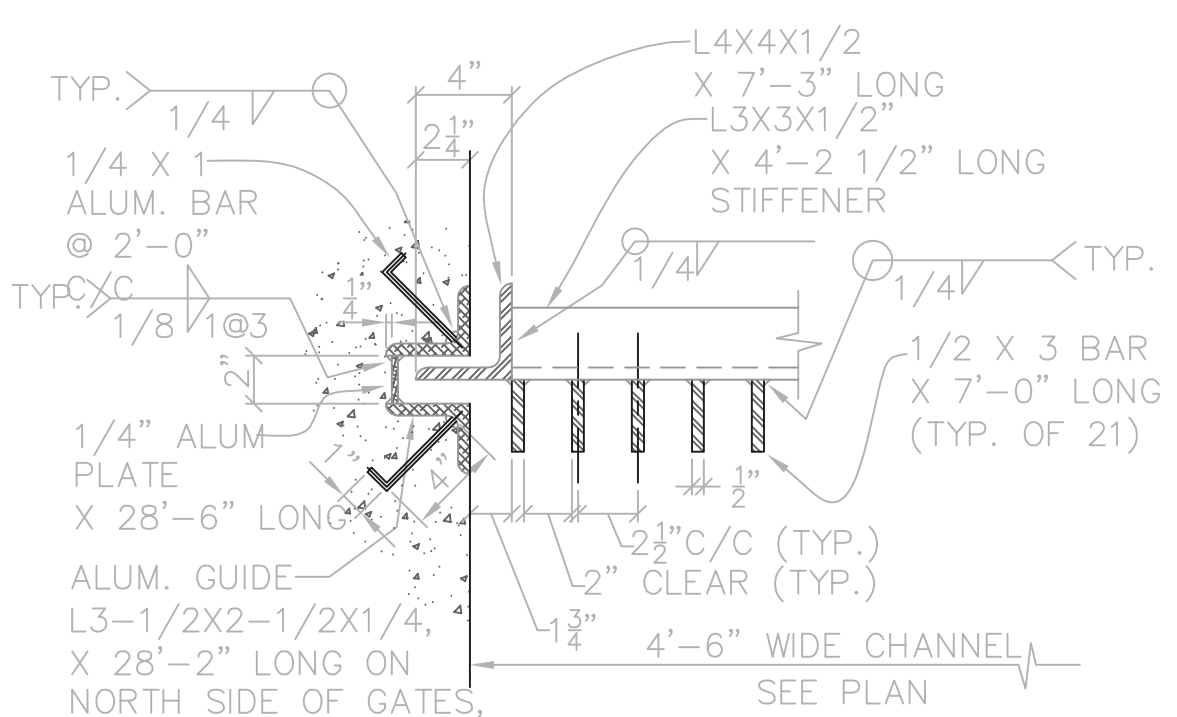


ELEVATION
3/4"=1'-0"

SECTION A
3/4"=1'-0"



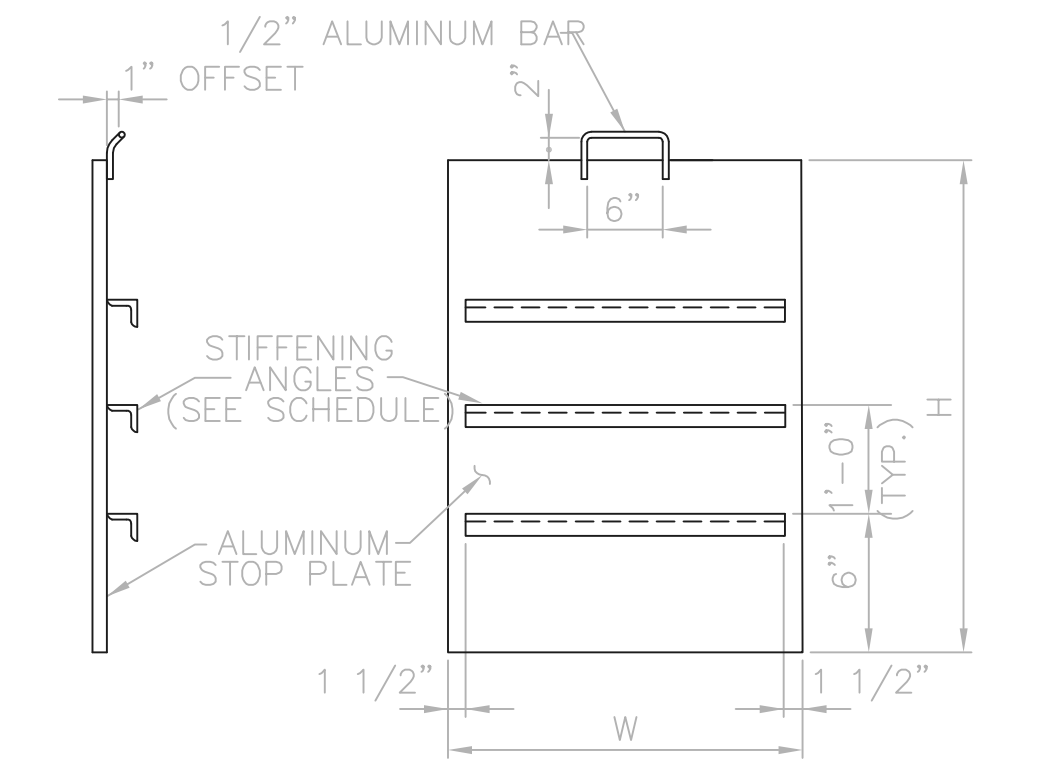
EYEBOLT DETAIL B
1-1/2"=1'-0"



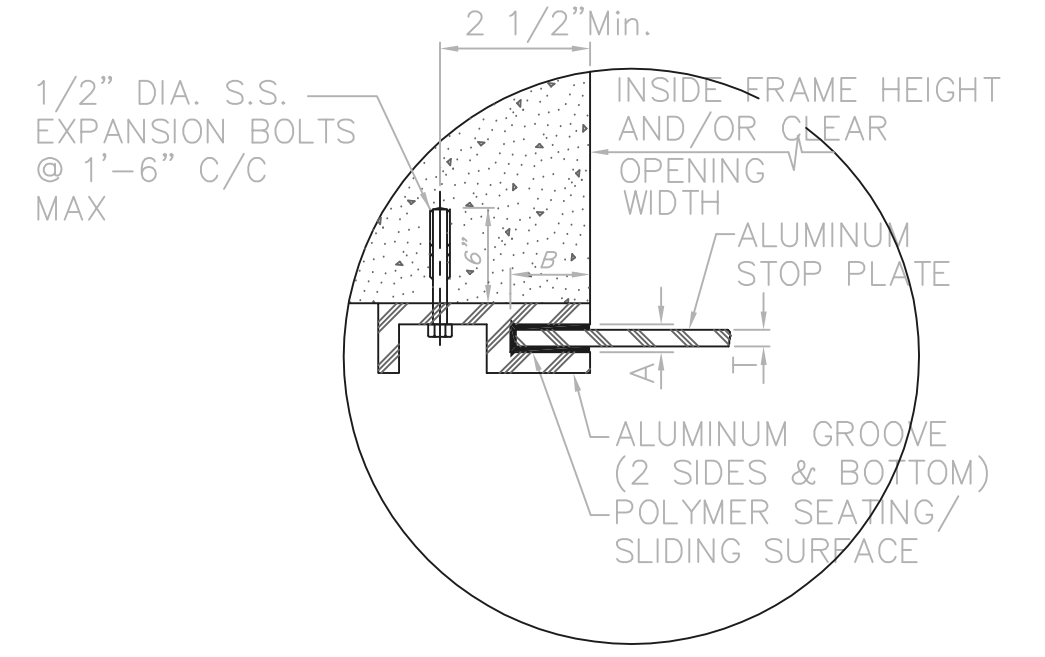
ALUM. GUIDE DETAIL C
1-1/2"=1'-0"

- NOTES:
- SCREENS ARE ALL STEEL CONSTRUCTION, GUIDES ARE ALUMINUM.
 - ALL SHAPES, BARS & PLATES ATTACH WITH 1/4" FILLET WELD(S) EXCEPT AS NOTED. AFTER FABRICATION.
 - STEEL ITEM(S) SHALL BE HOT-DIP GALVANIZED
 - PROVIDE TWO SCREENS AND TWO SETS OF GUIDES

BAR SCREEN
AS NOTED



STOP PLATE



GROOVE DETAIL

STOP PLATE DETAILS

RECORD DRAWING

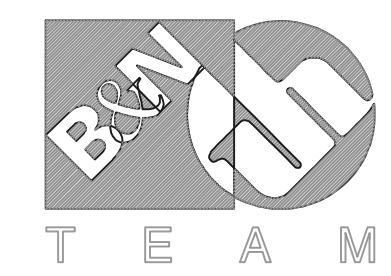
NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".

FIRM **Jones & Henry Engineers, Ltd.** DATE 06/07/02 MO. / DAY / YR.

© BNW0201

TOL-471AMD10
02/28/02 04-V02
P:\PR24\025\PMF\STARECOM\41.DWG

NO.	REVISIONS	DATE	BY	CHK.



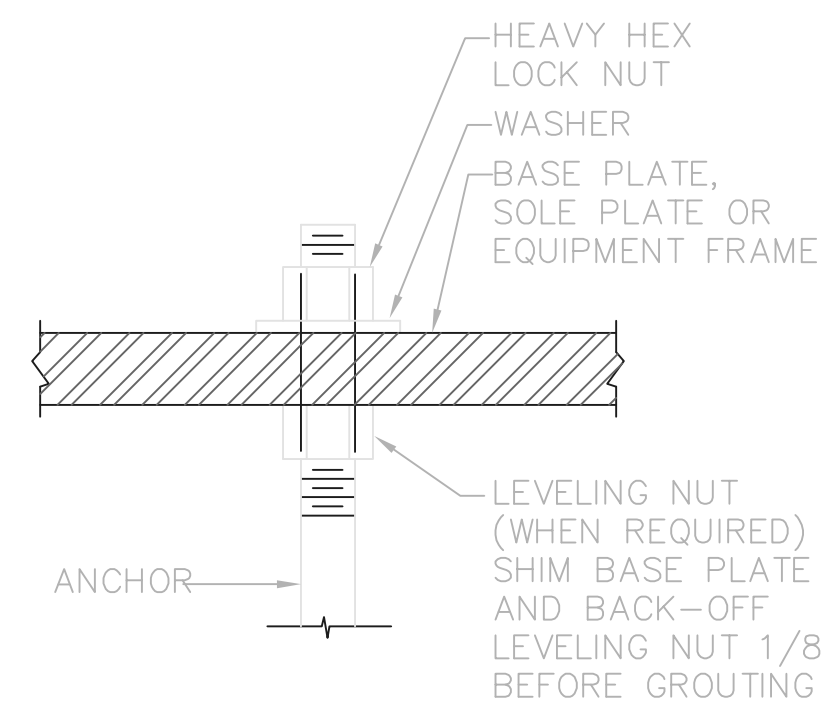
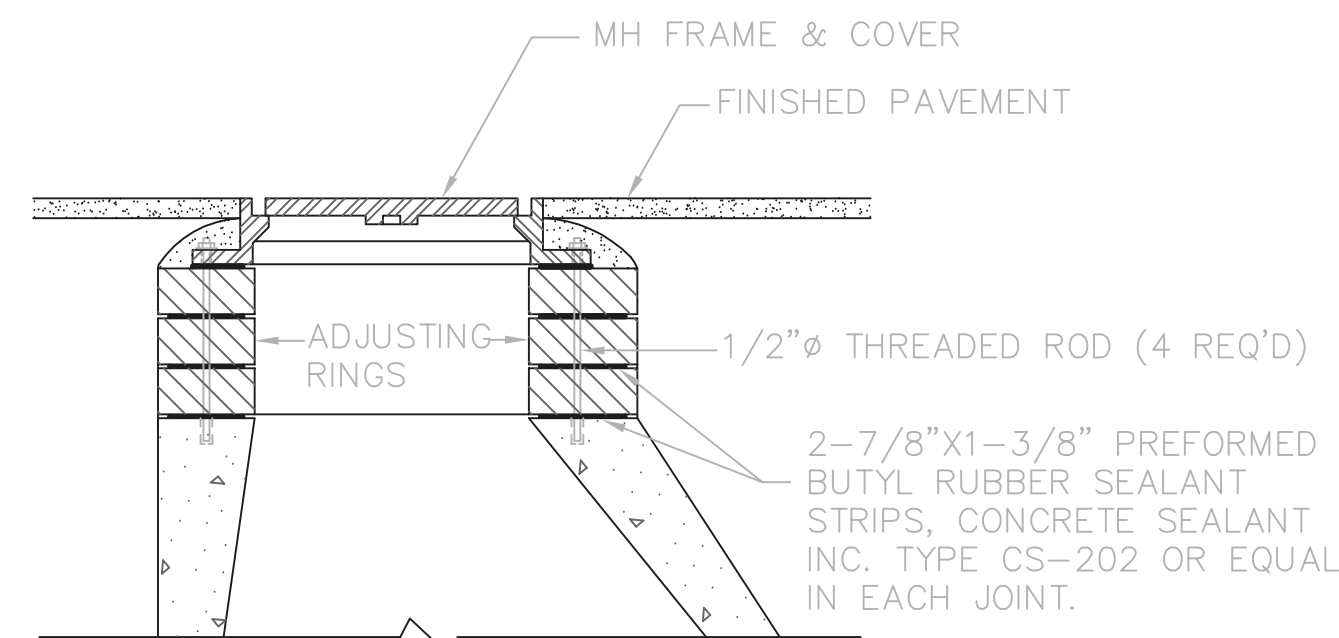
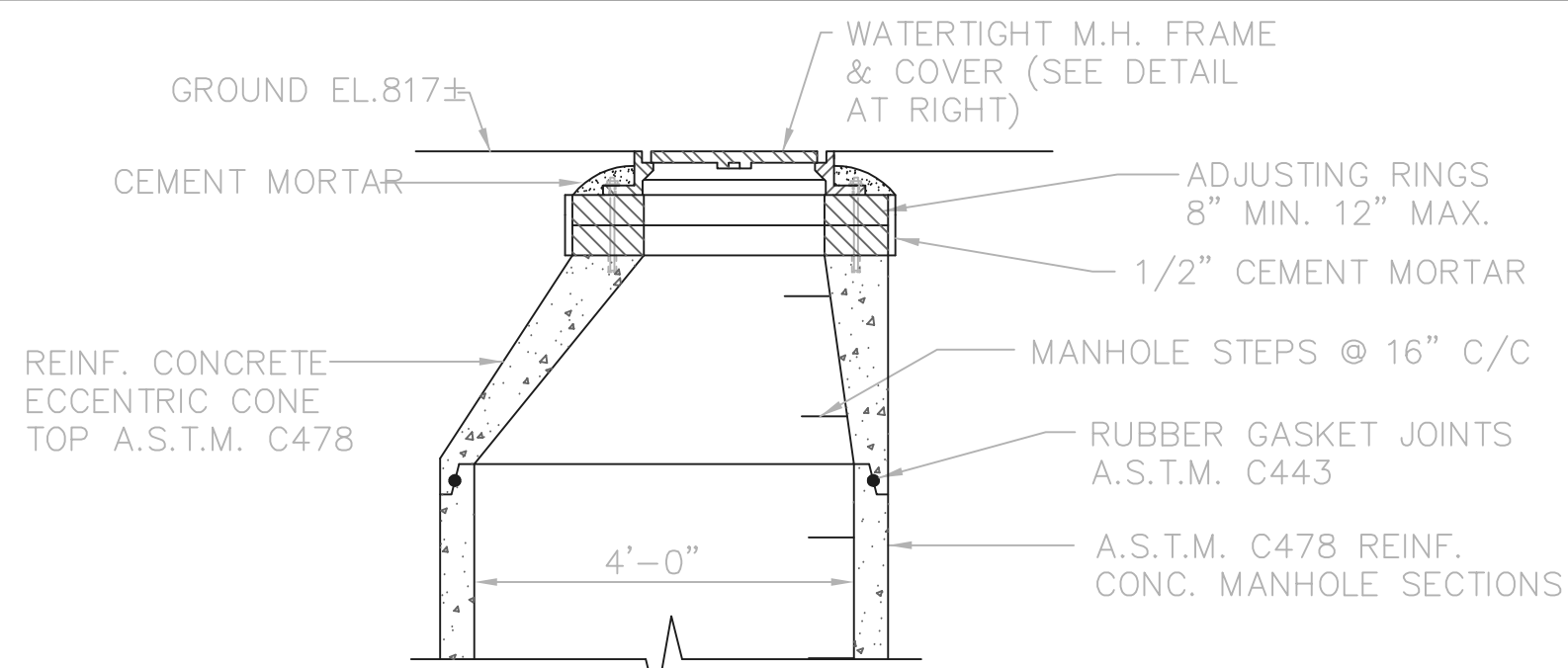
Burgess & Niple, Limited
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
MISCELLANEOUS DETAILS
STRUCTURAL
GRATING & STOP PLATE DETAILS
& SCHEDULES

SCALE:	NONE
SHEET NO.	41
OF	100

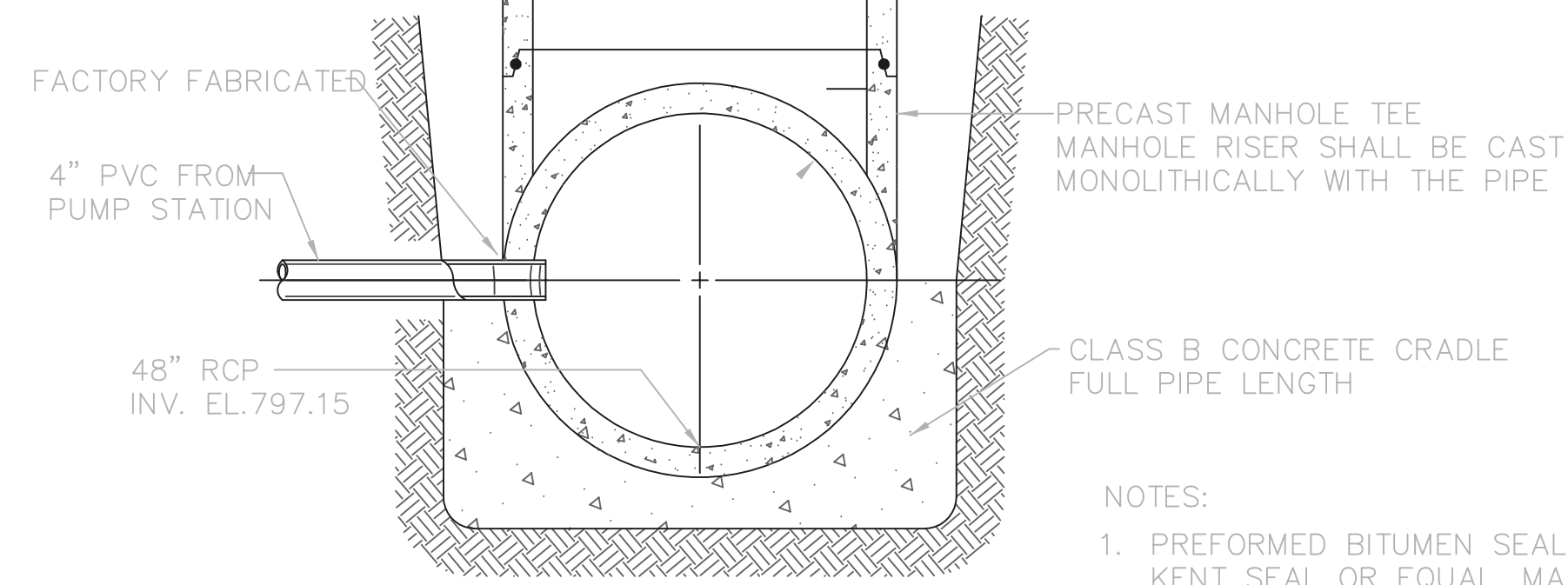


EQUIPMENT BASE NOTES:

1. BASE DIMENSIONS AS SHOWN ON PLANS. MODIFY TO SUIT EQUIPMENT FURNISHED.
2. MINIMUM ANCHOR EDGE DISTANCE - SEE ANCHOR DETAILS
3. MINIMUM ANCHOR EMBEDMENT - SEE ANCHOR DETAILS. ANCHOR MAY EXTEND INTO OR THROUGH FLOOR SLAB
4. ANCHORS AS SPECIFIED BY EQUIPMENT MANUFACTURER
5. 1" MIN. - 3" MAX.
6. MINIMUM ANCHOR SIZE = 3/4"

WATERTIGHT MANHOLE SEALANT DETAIL
(TO BE USED ON WATERTIGHT MANHOLES)

DETAIL A

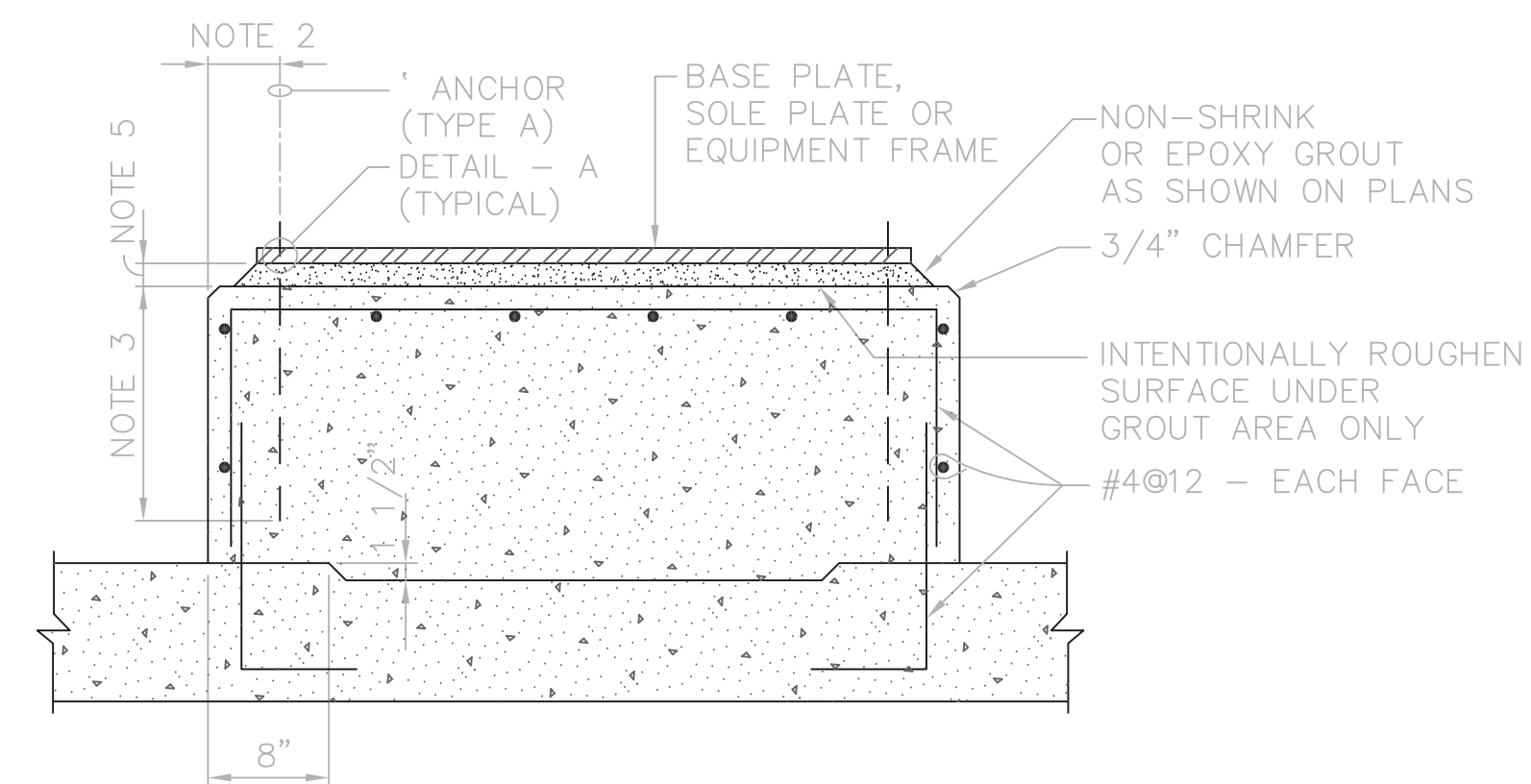


TEE MANHOLE

NTS

NOTES:

1. PREFORMED BITUMEN SEALS, KENT SEAL OR EQUAL, MAY BE USED BETWEEN ADJUSTING RINGS IN LIEU OF MORTAR
2. LIFT HOLES SHALL BE FILLED IN WITH NON-SHRINK MORTAR



TYPE I (ON NEW SLAB)

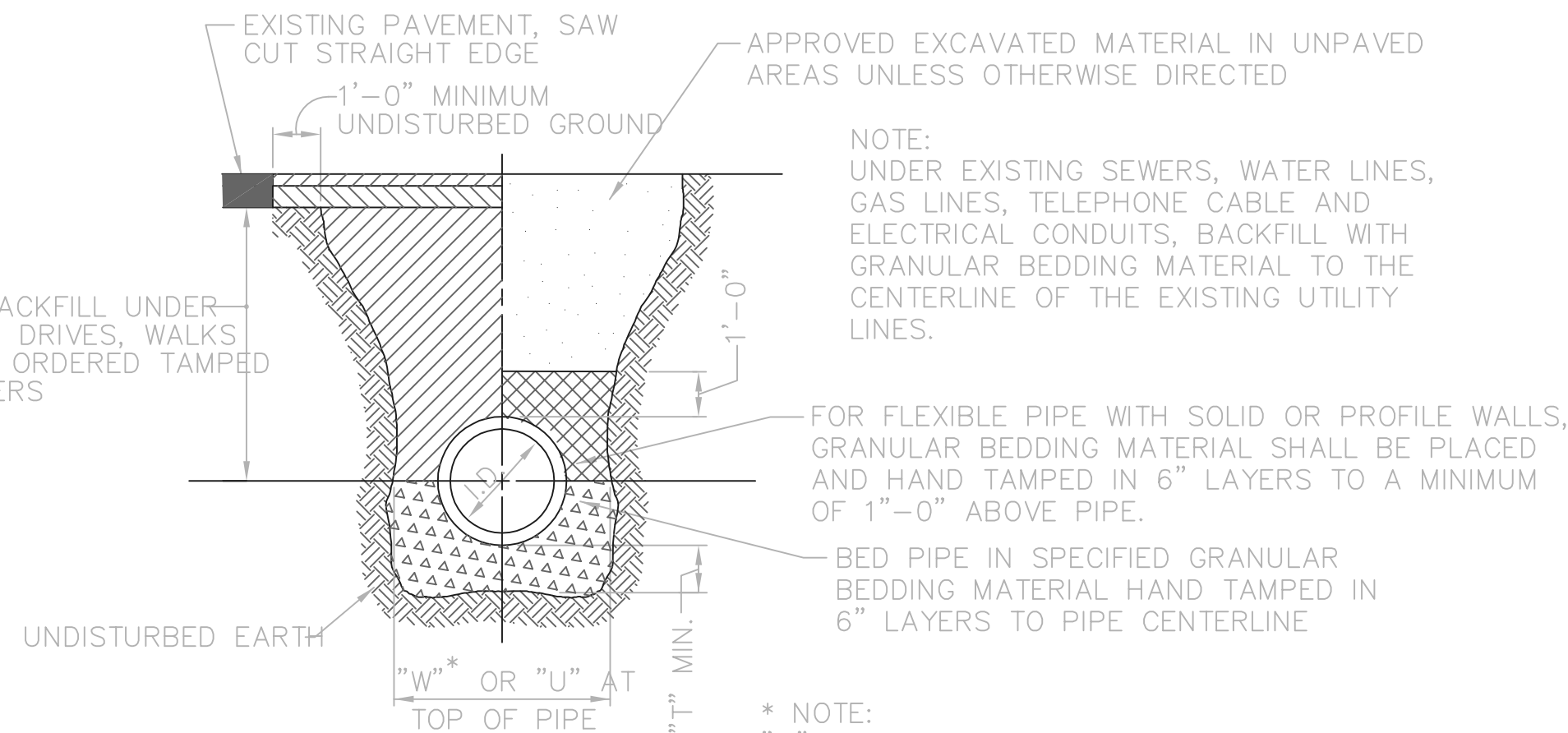
TYPICAL CAST-IN ANCHORS (TYPE A)				
ANCHOR DIAMETER	MINIMUM EMBEDMENT (IN)	MINIMUM EDGE DISTANCE (IN)	MINIMUM SPACING (IN)	SLEEVE
3/8"	6.0	3.5	4.5	
1/2"	7.5	4.5	6.0	
5/8"	5.5	4.5	7.5	
3/4"	11.5	4.5	9.0	2" X 6"
7/8"	13.5	4.5	10.5	2" X 7"
1"	15.0	4.5	12.0	2" X 8"
1 1/8"	17.0	4.5	13.5	2 1/2" X 9"
1 1/4"	19.0	5.0	15.0	2 1/2" X 10"
1 1/2"	22.5	6.0	18.0	3" X 12"

* - SLEEVE LENGTH MAY BE INCREASED IF ANCHOR EMBEDMENT IS INCREASED BY SAME AMOUNT.

SIZE	"W"	"U" **	"T"
6"	2'-6"	2'-0"	4"
8"	2'-6"	2'-1"	4"
10"	2'-6"	2'-3"	4"
12"	2'-9"	2'-5"	4"
15"	3'-0"	2'-8"	5"
18"	3'-6"	3'-0"	5"
21"	3'-11"	3'-4"	6"
24"	4'-3"	3'-8"	6"
27"	5'-6"	3'-11"	6"
30"	5'-9"	4'-4"	6"
36"	6'-3"	5'-2"	6"

TRENCH SCHEDULE

** TABLE IS FOR ASTM D-3034, WALL THICKNESS CLASS SDR 35 FOR 6"-15" AND ASTM F-679 WALL THICKNESS CLASS T-1 FOR 18"-36. FOR OTHER FLEXIBLE PIPES, MINIMUM TRENCH WIDTH "U" SHALL MEET MANUFACTURER'S REQUIREMENTS.



TRENCH DETAIL

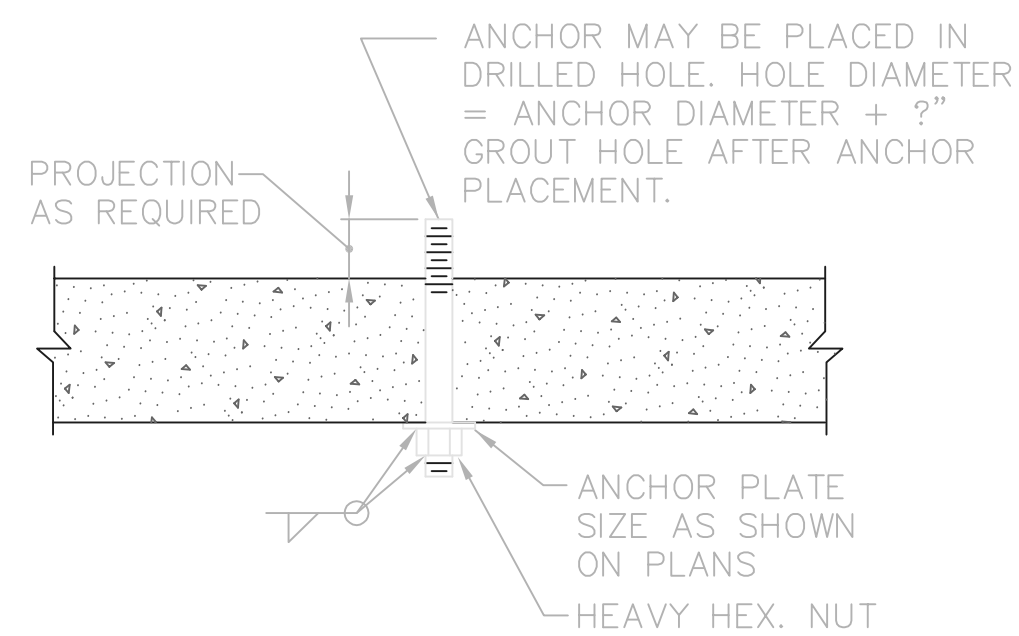
NTS

NOTE: UNDER EXISTING SEWERS, WATER LINES, GAS LINES, TELEPHONE CABLE AND ELECTRICAL CONDUITS, BACKFILL WITH GRANULAR BEDDING MATERIAL TO THE CENTERLINE OF THE EXISTING UTILITY LINES.

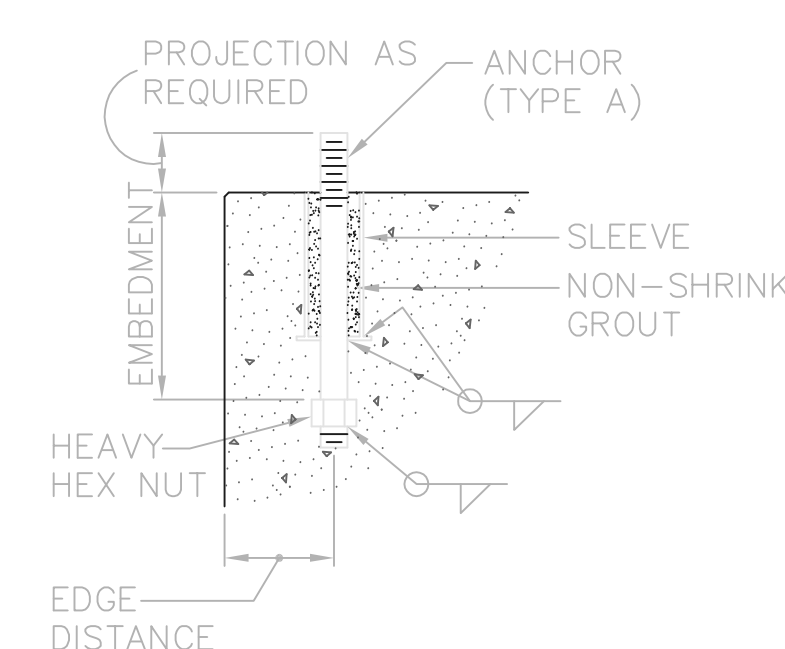
FOR FLEXIBLE PIPE WITH SOLID OR PROFILE WALLS, GRANULAR BEDDING MATERIAL SHALL BE PLACED AND HAND TAMPED IN 6" LAYERS TO A MINIMUM OF 1'-0" ABOVE PIPE.

BED PIPE IN SPECIFIED GRANULAR BEDDING MATERIAL HAND TAMPED IN 6" LAYERS TO PIPE CENTERLINE

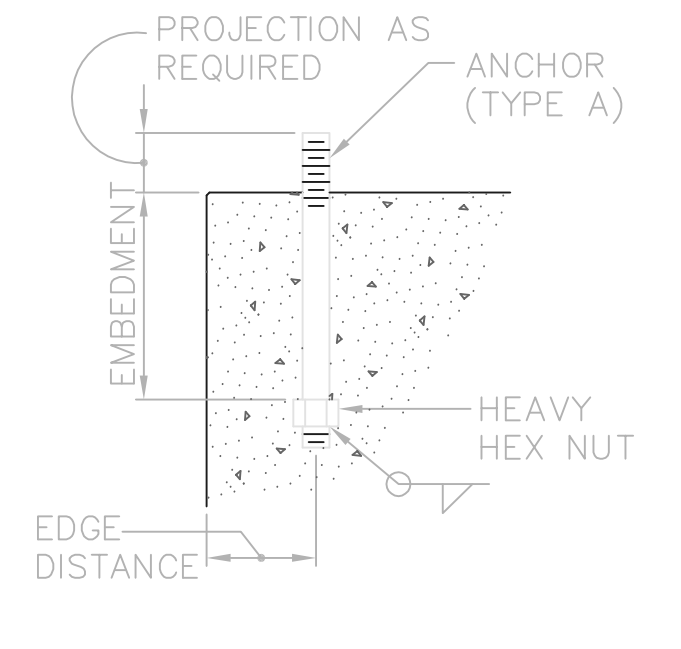
* NOTE: "W" IS THE MAXIMUM WIDTH FOR RIGID PIPES. "U" IS THE MINIMUM WIDTH FOR FLEXIBLE PIPES IN ACCORDANCE WITH ASTM D-2321.



LIMITED ANCHORAGE DEPTH

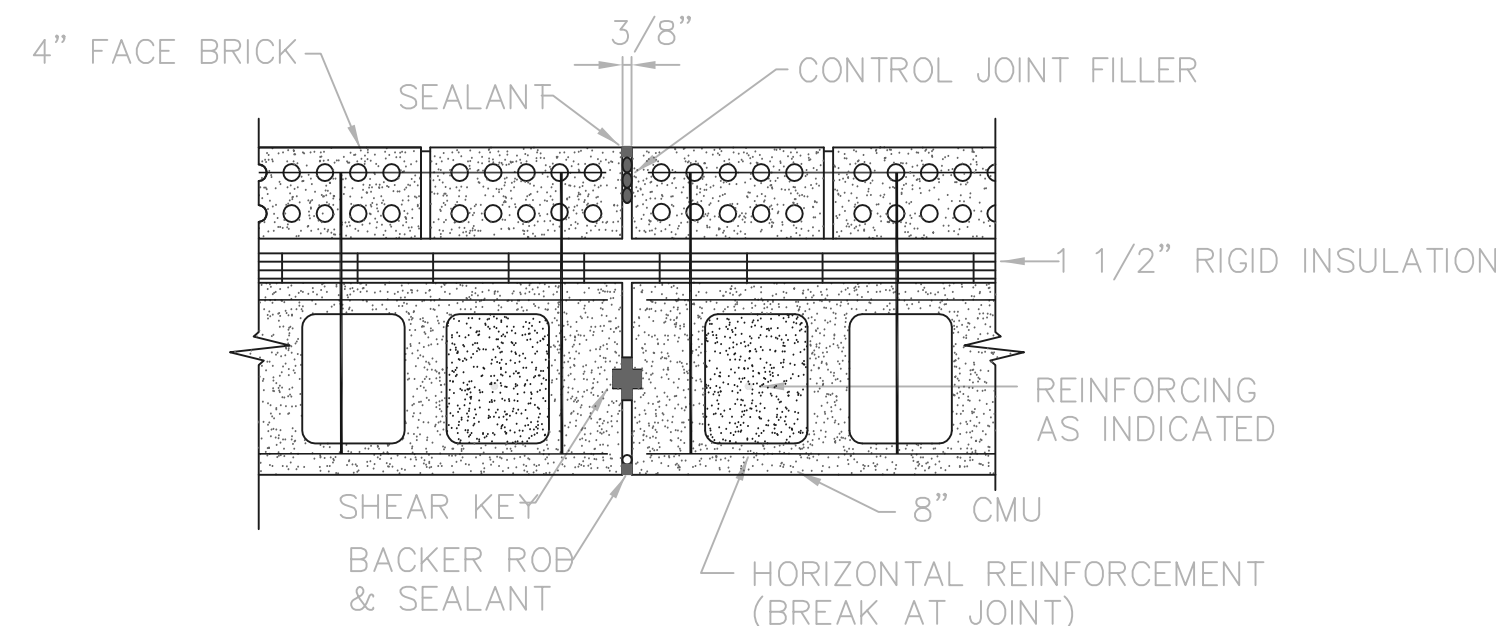


WITH SLEEVE

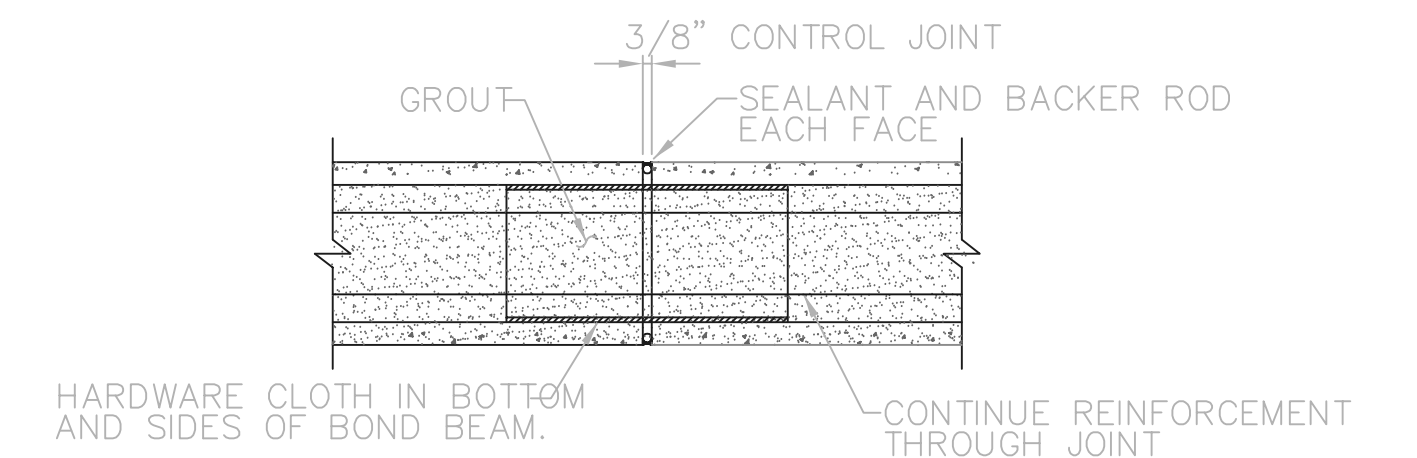


WITHOUT SLEEVE

TYPICAL EQUIPMENT BASE DETAILS



CONTROL JOINT DETAIL (CJ)
CAVITY WALL CONSTRUCTION 1 1/2" = 1'-0"



TYPICAL BOND BEAM CONTROL JOINT DETAIL
N.T.S.

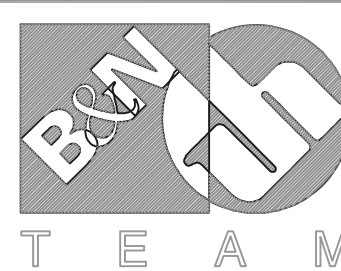
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
MO. / DAY / YR.

© BNWW0201

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE
TOL-4714M008 03/29/02 04-V02 P:\PR24025\PMFSTAR\CDWG\142.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
MISCELLANEOUS DETAILS
STRUCTURAL
MANHOLE & TRENCH DETAILS

SCALE:

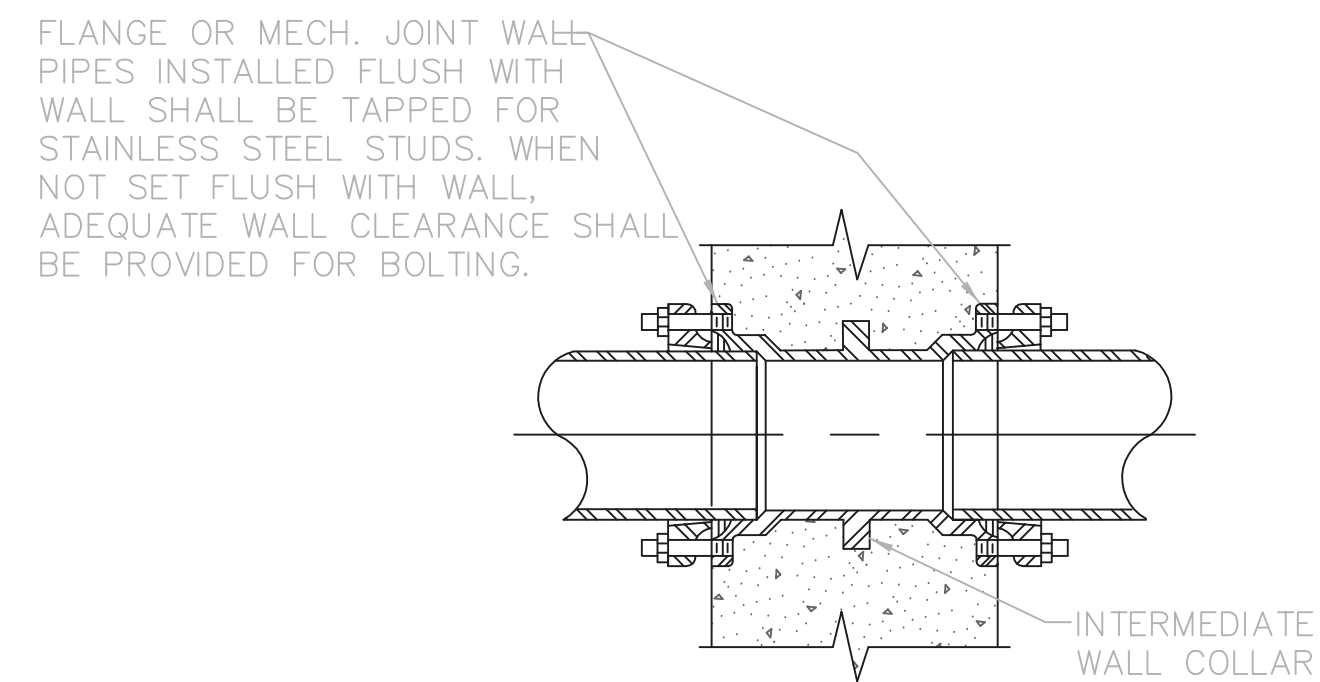
NONE

SHEET NO.

42

OF

100

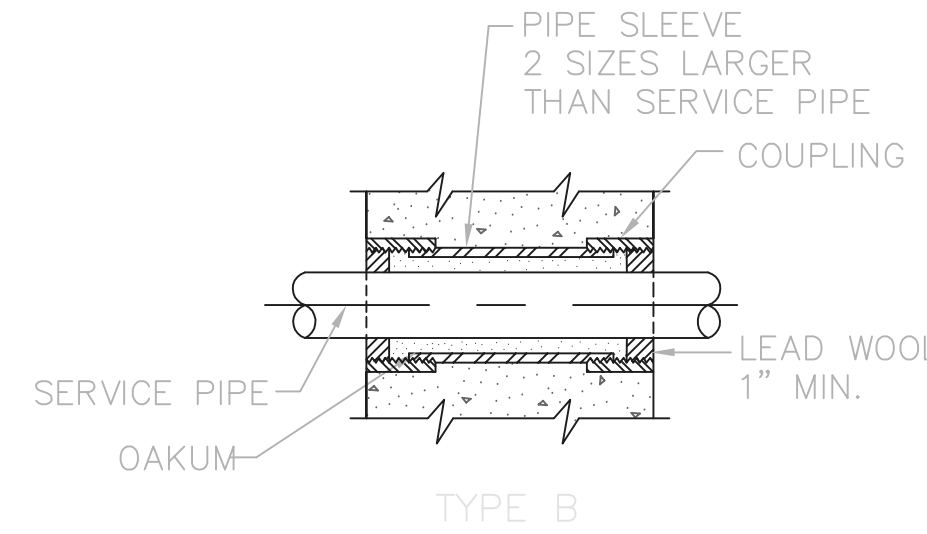


NOTE: JOINT TYPES ARE SHOWN ON DRAWINGS.

TYPE A

NOTE: UNLESS SHOWN OTHERWISE, CAST IRON OR DUCTILE IRON WALL PIPES SHALL BE USED FOR 4" DIAMETER AND LARGER PIPING.

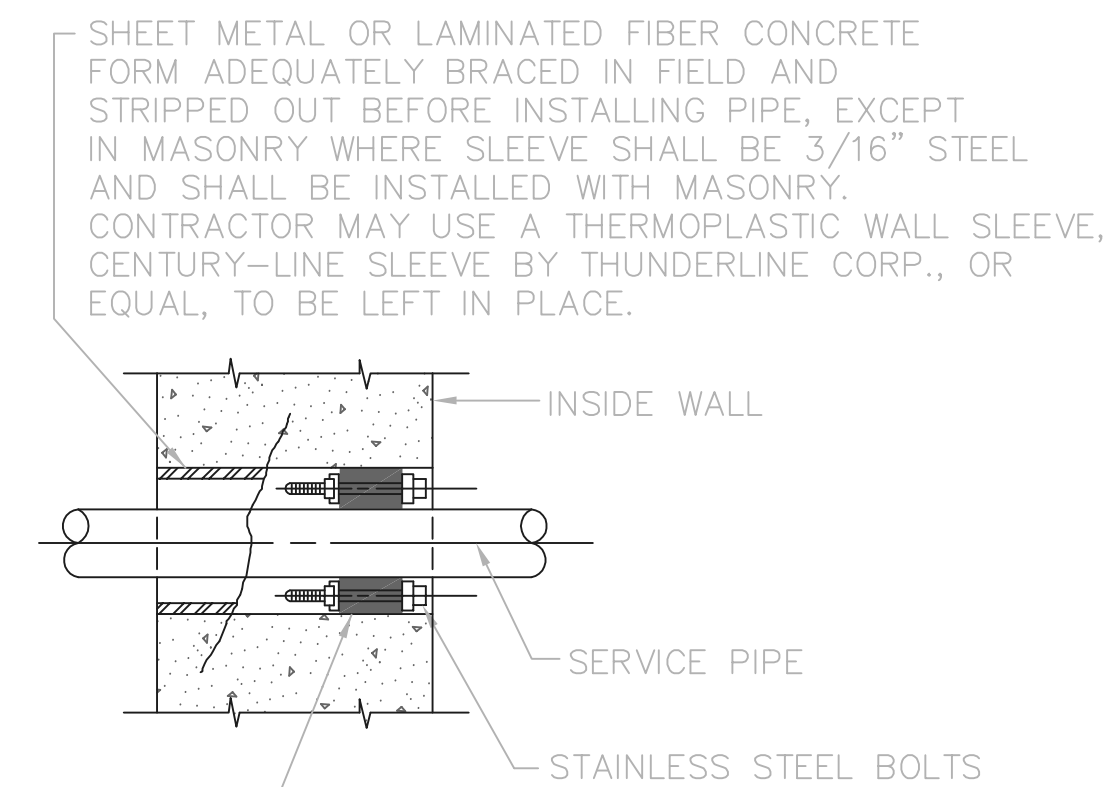
WALL PIPE



TYPE B

NOTE: FOR PIPES LESS THAN 4" DIA., USE GALVANIZED STEEL PIPE SLEEVE. FOR PIPES 4" DIA. OR LARGER, USE CI OR DI TYPE "E" SLEEVE.

EXTERIOR WALL SLEEVE

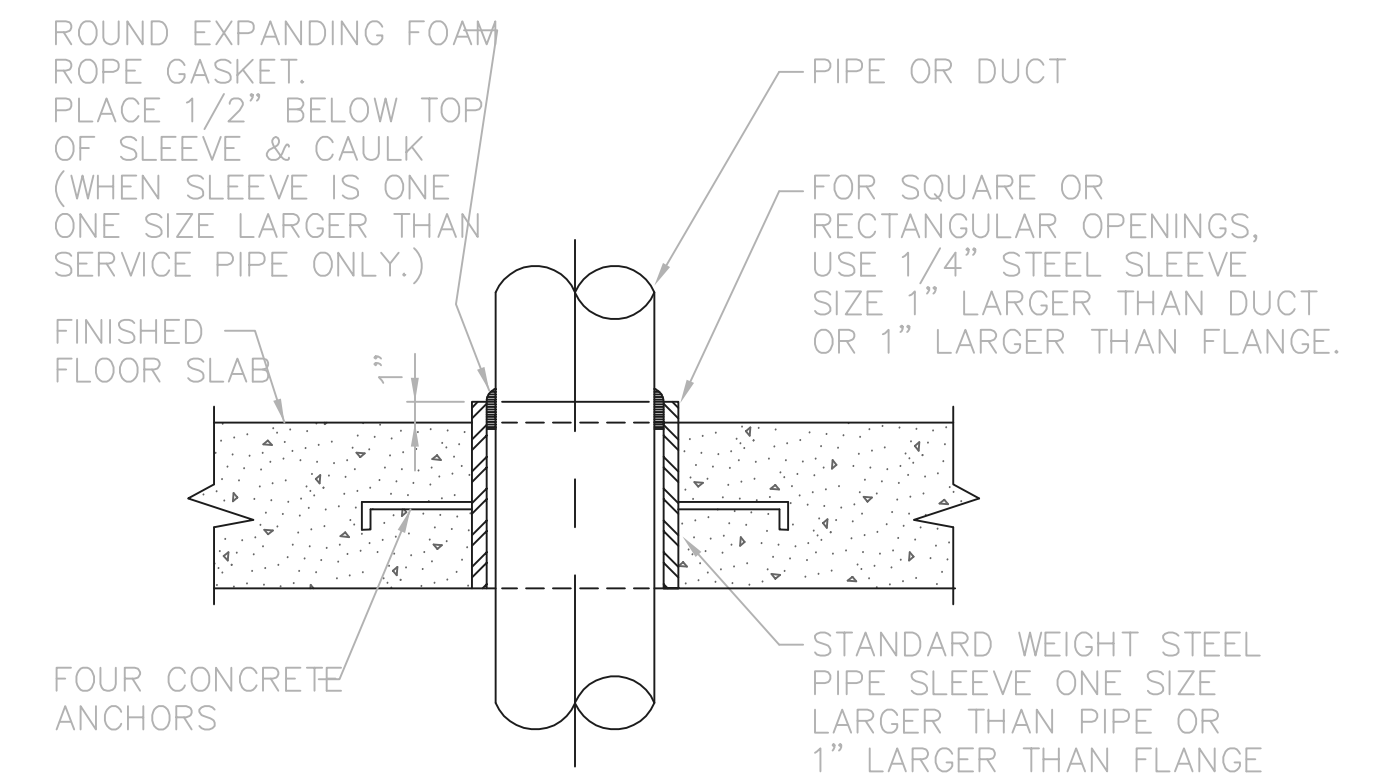


MODULAR MECHANICAL TYPE SEAL OF INTERLOCKING SYNTHETIC RUBBER LINKS

TYPE C

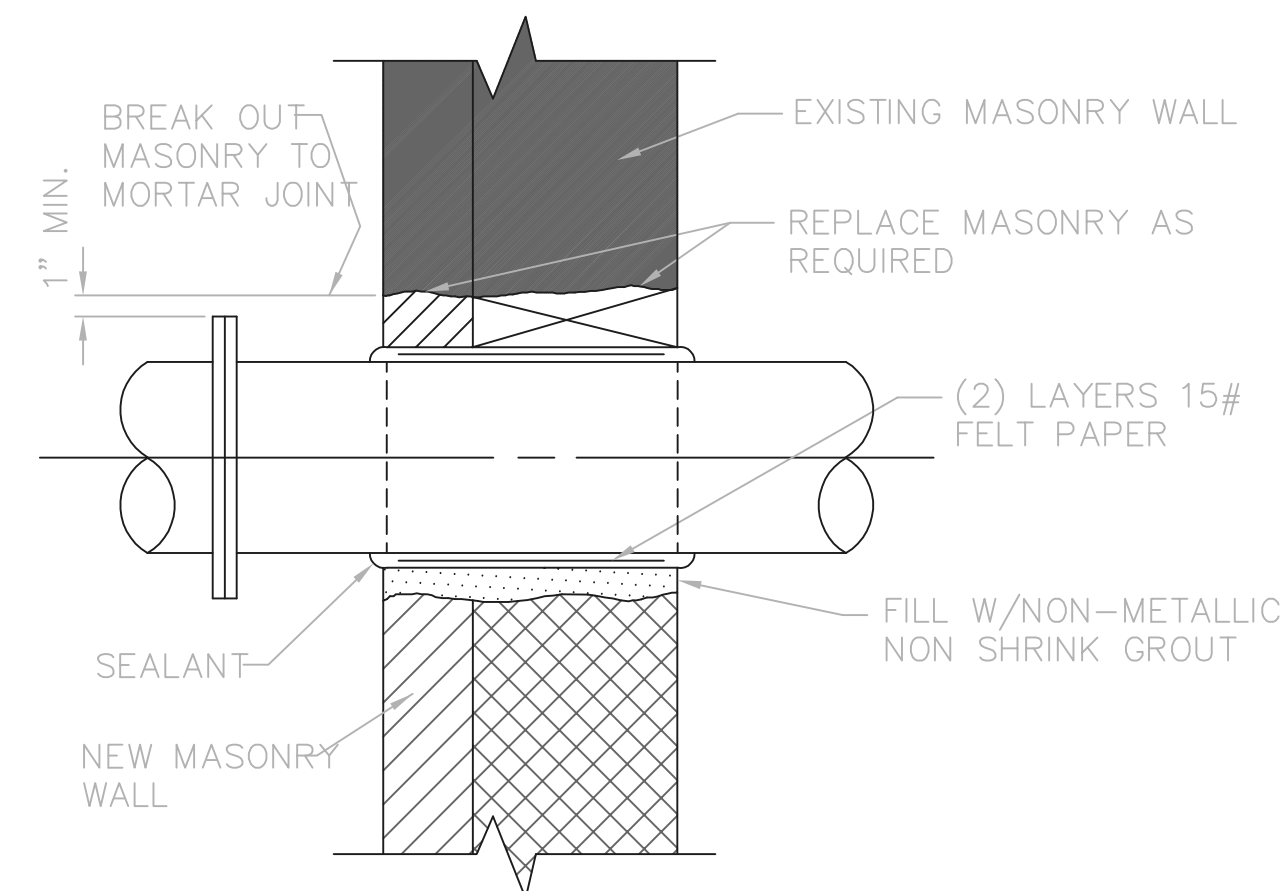
- NOTE:
- EXISTING WALLS SHALL BE CORE DRILLED.
 - CONCRETE SHALL BE WORKED IN AND VIBRATED TO ELIMINATE ALL VOIDS IN CONCRETE - IF VOIDS DO REMAIN, FILL WITH GROUT BEFORE INSTALLING PIPE AND RUBBER SEALS.
 - UNLESS OTHERWISE SHOWN ON THE DRAWINGS ALL INTERIOR WALL PENETRATIONS SHALL USE TYPE C PIPE SLEEVE.

PIPE SLEEVE



NOTE: THRU EXISTING FLOORS WHERE TYPE "D" FLOOR SLEEVES ARE CALLED OUT, THE CONTRACTOR SHALL CORE FLOOR AND CAULK AS SHOWN, ELIMINATING THE STEEL SLEEVE.

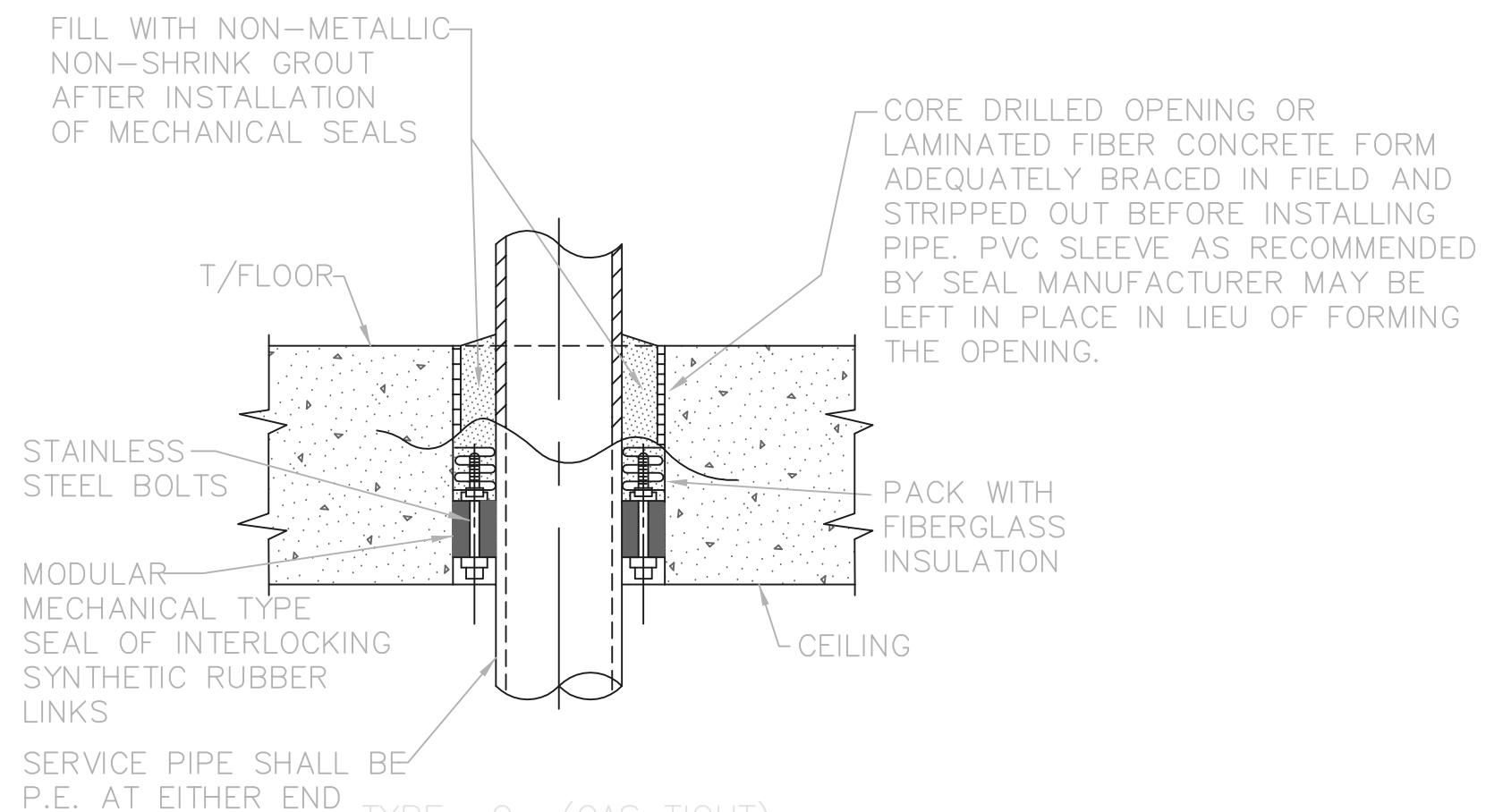
FLOOR SLEEVE



TYPE F

NOTE: FOR EXTERIOR WALLS, FACE COURSES TO BE MASONRY AND MIDDLE COURSE TO BE FILLED WITH FIBERGLASS INSULATION

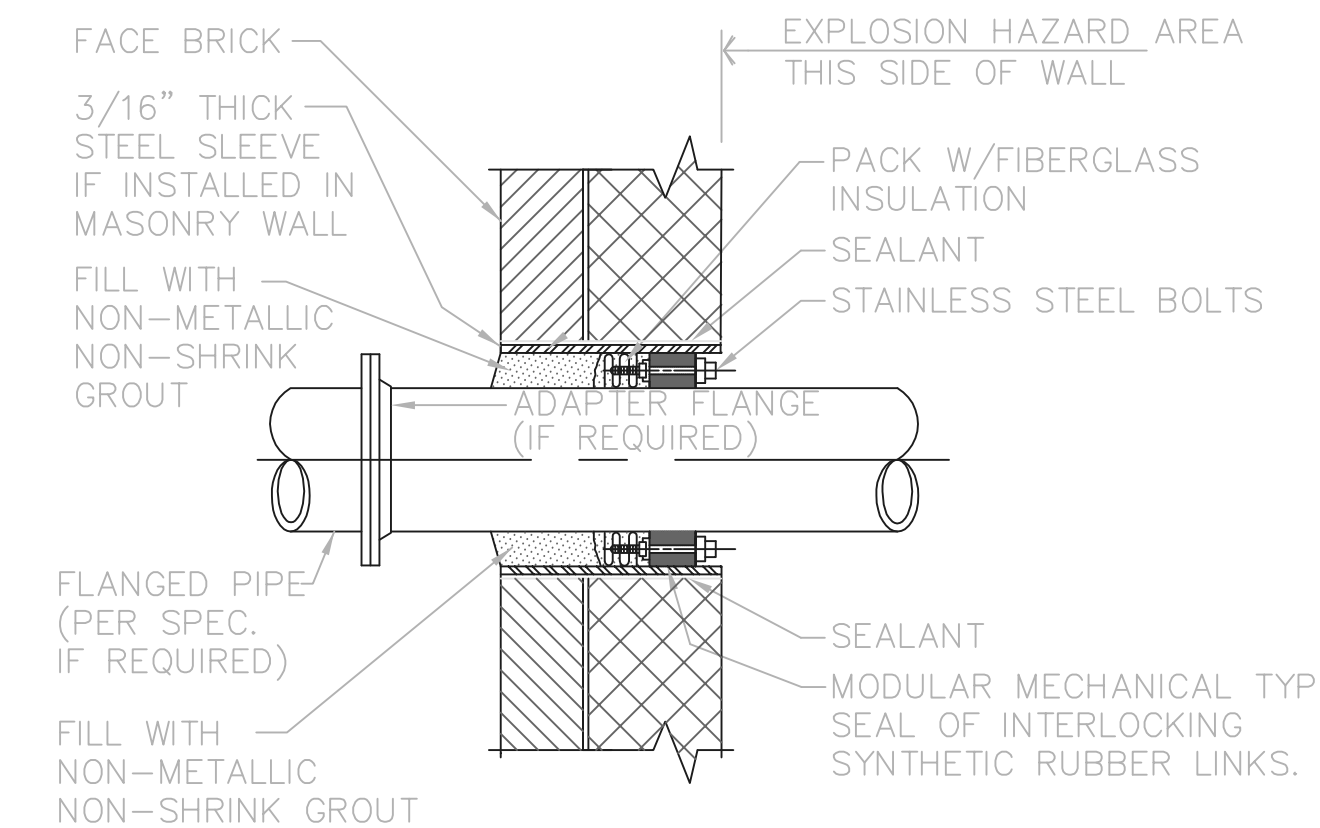
PIPE SLEEVE THRU EXISTING OR NEW MASONRY WALL



TYPE G (GAS TIGHT)

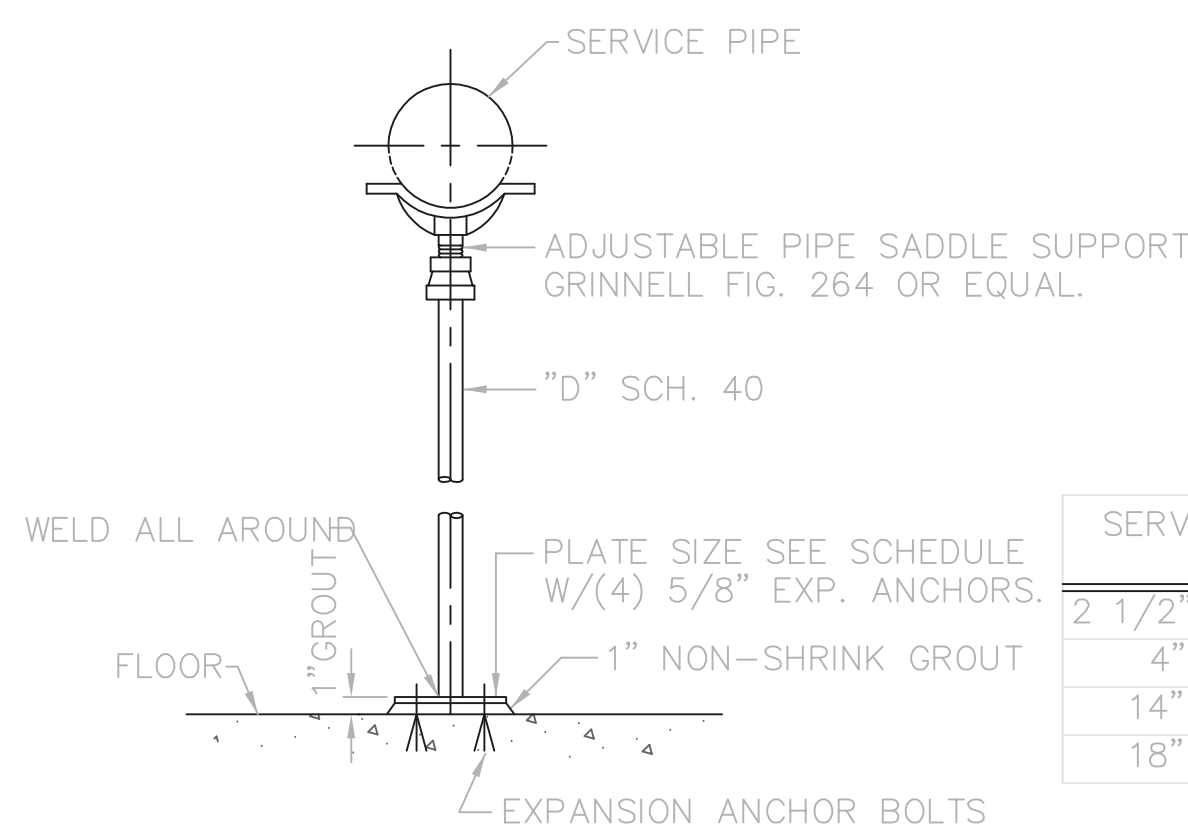
NOTE: CONCRETE SHALL BE WORKED IN AND VIBRATED TO ELIMINATE ALL VOIDS IN CONCRETE - IF VOIDS DO REMAIN, FILL WITH GROUT BEFORE INSTALLING PIPE AND RUBBER SEALS

FLOOR SLEEVE



TYPE H (GAS TIGHT)

MASONRY WALL SLEEVE



- NOTES:
- PIPE SUPPORTS SHALL BE SPACED NOT MORE THAN 12'-0" ON CENTER. SUPPORT PIPING NEAR EACH SIDE OF VALVES, FLOWMETERS, AND COUPLINGS.
 - GALVANIZE AFTER FABRICATION

STANCHION PIPE SUPPORT DETAIL

SERVICE PIPE SIZE	"D" SIZE	"PLATE" SIZE
2 1/2" TO 3 1/2"	2 1/2"	4"X3/8"X0'-4"
4" TO 12"	3"	6"X1/2"X0'-6"
14" TO 16"	4"	8"X1/2"X0'-8"
18" TO 36"	6"	8"X1/2"X0'-8"

RECORD DRAWING

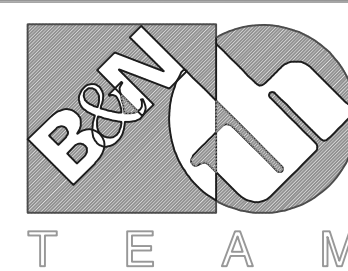
NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".

FIRM **Jones & Henry Engineers, Ltd.** DATE 08/07/02 MO. / DAY / YR.

© BNW0201

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE
04/23/02 04-V02
P:\PR24025\PMFSTARCDWG\3.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
MISCELLANEOUS DETAILS
PIPING
FLOOR AND WALL SLEEVES

SCALE:

NONE

SHEET NO.	OF
43	100

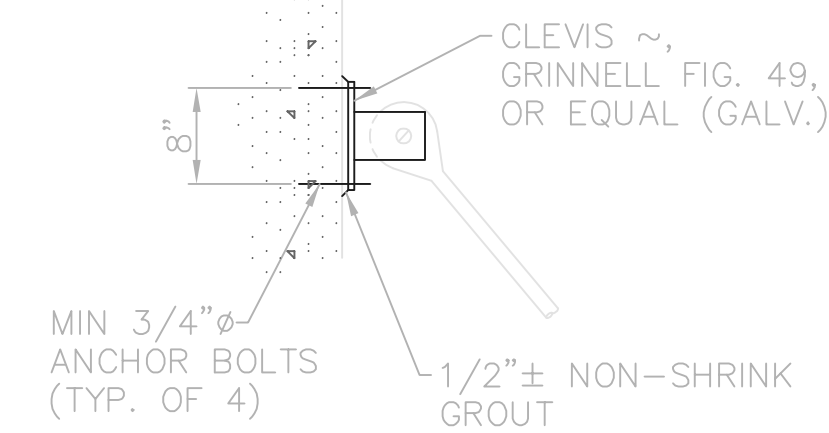
GENERAL NOTES:

- CONCRETE STRUCTURES ARE DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318) AND COMMENTARY (ACI 318R) AND, WHERE APPLICABLE, "ENVIRONMENTAL ENGINEERING CONCRETE STRUCTURES" (ACI 350R). THESE STRUCTURES SHALL BE CONSTRUCTED IN STRICT COMPLIANCE WITH THE LATEST VERSION OF THESE CODES AND OTHER REFERENCES SPECIFIED THEREIN. IF A CONFLICTING REQUIREMENT IS SPECIFIED BETWEEN THE APPLICABLE CODES, THE MORE CONSERVATIVE RECOMMENDATIONS SHALL BE FOLLOWED.
- LAP SPLICES, CONSTRUCTION JOINT DETAILS, WALL CORNER REINFORCEMENT DETAILS, JOINT SEALING DETAILS, SHEAR KEY DETAILS, ETC., UNLESS OTHERWISE SHOWN ON THE DRAWINGS, SHALL ADHERE TO STANDARD STRUCTURAL DETAIL DRAWINGS.
- VERTICAL CONSTRUCTION JOINTS SHALL BE LOCATED TO MINIMIZE SHRINKAGE CRACKS AND NOT TO ADVERSELY AFFECT THE STRENGTH OF THE STRUCTURE. WALLS SHALL NOT BE PLACED IN SEGMENTS GREATER THAN 40 FT. AT A TIME. THE POURS WILL BE ALTERNATELY SEQUENCED IN A WAY THAT "ADJACENT POURS" WILL NOT BE PLACED FOR AT LEAST 7 DAYS TO ALLOW SOME SHRINKAGE TO OCCUR.
- HORIZONTAL REBARS SHALL BE SPLICED WITHIN THE LIMITS OF "ADJACENT POURS" TO BE POURED LATER TO ALLOW FOR UNRESTRAINED SHRINKAGE MOVEMENTS. ADJACENT SPLICES SHOULD BE STAGGERED HORIZONTALLY BY NOT LESS THAN ONE LAP LENGTH OR 3'-0", WHICHEVER IS GREATER.
- ALL CONSTRUCTION JOINTS BELOW 100 YR. FLOOD LEVEL OR HIGHEST KNOWN GROUND WATER LEVEL IN WALLS AND BASE SLABS OF WATER-RETAINING BUILDING COMPONENTS OR OCCUPIED AREAS SHALL HAVE CONTINUOUS WATERSTOPS TO MAKE A WATERTIGHT STRUCTURE. JOIN WATERSTOPS AT ALL INTERSECTIONS SO THAT A CONTINUOUS SEAL IS PROVIDED. WATERSTOPS SHALL BE SECURED RIGIDLY IN THEIR DESIGNED LOCATIONS DURING ALL PHASES OF CONCRETE PLACEMENT AND CONSOLIDATION. VIBRATE CONCRETE TO OBTAIN IMPERVIOUS CONCRETE IN THE VICINITY OF WATERSTOPS.
- PLANNED LOCATION OF ALL CONSTRUCTION JOINTS, POURING SEQUENCE, AND THE TIME BETWEEN ADJACENT POURS SHALL BE SUBMITTED TO THE ENGINEER FOR HIS REVIEW.
- NO BACKFILLING SHALL BE DONE UNTIL HORIZONTAL SLAB SUPPORT OR CROSS-BRACING WALLS ARE IN PLACE. ANY TEMPORARY BRACING REQUIRED TO SUPPORT WALLS DURING CONSTRUCTION SHALL BE DESIGNED AND INSTALLED BY THE CONTRACTOR AT HIS OWN EXPENSE.
- ULTIMATE STRENGTH OF CONCRETE AT 28 DAYS (FC') SHALL BE MINIMUM 4000 PSI. REINFORCING BARS SHALL CONFORM TO DEFORMED BILLET STEEL SPECIFICATION ASTM A615 AND SHALL HAVE MINIMUM YIELD STRENGTH OF 60 KSI.
- THE CONTRACTOR SHALL MAINTAIN ADEQUATE SUPERVISION AND CONTROL OF DEWATERING OPERATIONS (IF REQUIRED) TO ENSURE THAT STABILITY OF EXCAVATED AND CONSTRUCTED SLOPES ARE NOT ADVERSELY AFFECTED BY INFLOW OF GROUNDWATER AND TO PERMIT PLACEMENT AND CURING OF CONCRETE UNDER CONTROLLED ENVIRONMENTS.
- ALL MASONRY IS DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" (ACI 530-95/ASCE 5-95/TMS 402-95) AND MASONRY CONSTRUCTION AND MATERIALS SHALL CONFORM TO ALL REQUIREMENTS OF THIS CODE.
- THE BACKFILL UNDERNEATH BASE SLABS SHALL BE SPECIAL BACKFILL, UNLESS OTHERWISE APPROVED, IN ACCORDANCE WITH THE SPECIFICATIONS AND SHALL BE WELL COMPACTED TO NOT LESS THAN 98% MAXIMUM DRY DENSITY IN ACCORDANCE WITH THE MODIFIED PROCTOR TEST ASTM D-1557, OR NOT LESS THAN 100% MAXIMUM DRY DENSITY PER THE STANDARD PROCTOR TEST ASTM D-698.
- STRUCTURAL STEEL COMPONENTS (STEEL BEAMS) ARE DESIGNED IN ACCORDANCE WITH "MANUAL OF STEEL CONSTRUCTION" ASD (NINTH EDITION) AND SHALL BE ERECTED IN ACCORDANCE WITH THE REQUIREMENTS OF THIS CODE.
- WHEREVER REINFORCEMENT REQUIREMENTS FOR STRUCTURAL COMPONENTS (BEAMS, SLABS, WALLS, ETC.) DON'T AGREE AMONG DIFFERENT SECTIONS, THE MOST CONSERVATIVE REQUIREMENT AMONG THEM WILL GOVERN UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- UNLESS OTHERWISE SHOWN OR SPECIFIED, ALL VERTICAL / HORIZONTAL / CONCRETE SUPPORTS SHALL MATCH THE MAIN REINFORCEMENT.
- DURING CONSTRUCTION OF NEW STRUCTURES OR STRUCTURAL ELEMENTS, PREVENT UNDERMINING THE FOUNDATIONS OF NEARBY EXISTING STRUCTURES BY SHEET PILING OR BY UNDERPINNING AS REQUIRED. TAKE ALL NECESSARY PROTECTIVE MEASURES TO PREVENT DAMAGE TO THE EXISTING STRUCTURES. CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF SHEET PILING OR UNDERPINNING OPERATIONS.
- WHERE SAW CUTTING AND REMOVAL OF CONCRETE WALLS, SLABS, ETC. EXPOSES REINFORCING STEEL BARS, THE CONTRACTOR SHALL FIRST APPLY SIKAGARD 75 EPOXY CEMENT AS MANUFACTURED BY SIKA CORPORATION OR EQUAL (APPROX. 80 MILS IN THICKNESS) ALL AROUND THE CUT SURFACE. THIS SURFACE SHALL BE FINISH COATED WITH 2 COATS OF SIKAGARD 62 (20 MILS IN THICKNESS) MANUFACTURED BY SIKA CORPORATION. APPLICATION SHALL BE ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- CRANE BEAMS SHALL BE STRAIGHT AND PARALLEL. THE WHEEL RUNNING SURFACE SHALL BE AT A CONSTANT ELEVATION, HAVE NO TRANSVERSE TILT AND SHALL BE HELD IN ALIGNMENT AT JOINTS.
- UNLESS SHOWN OR SPECIFIED OTHERWISE ALL CONCRETE MEMBERS SHALL HAVE A MINIMUM REINFORCING OF #5 @ 12" EACH WAY, EACH FACE.
- THE CONTRACTOR SHALL ENSURE THAT FOUNDATIONS REST ON FIRM MATERIAL OVER THEIR ENTIRE AREA. THE TESTING LAB SHALL VERIFY THAT A SOIL BEARING CAPACITY OF AT LEAST 4000 PSF IS OBTAINED. THE BEARING CAPACITY VERIFICATION IS REQUIRED AT REGULAR INTERVALS IN EACH DIRECTION. NOTIFY THE ENGINEER OF ANY UNSUITABLE SOIL ENCOUNTERED. SUCH SOIL SHALL BE REMOVED AND REPLACED WITH COMPACTED SPECIAL BACKFILL AS DIRECTED BY THE ENGINEER.
- UNLESS OTHERWISE APPROVED, BACKFILL AGAINST CONCRETE WALLS SHALL BE A WELL GRADED GRANULAR MATERIAL.

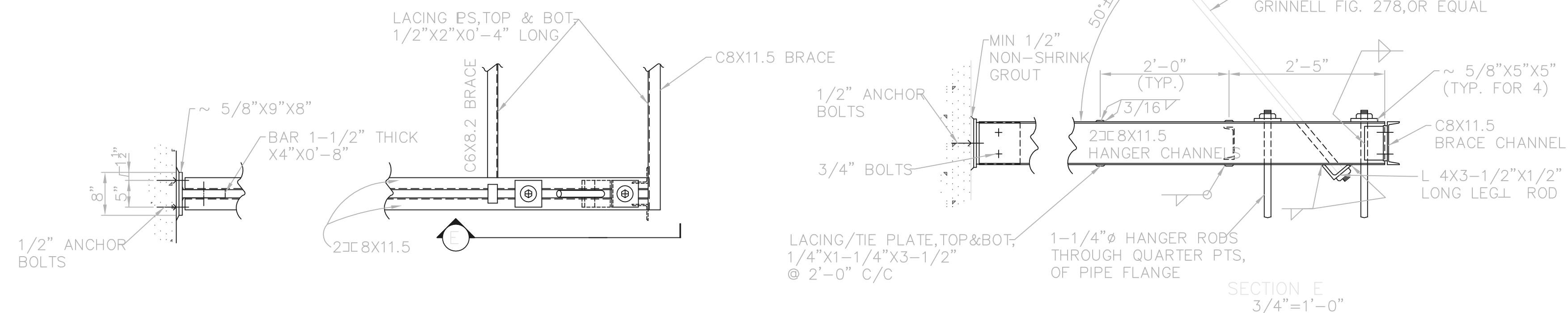
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
 FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
 MO. / DAY / YR.

○ BNWW0201



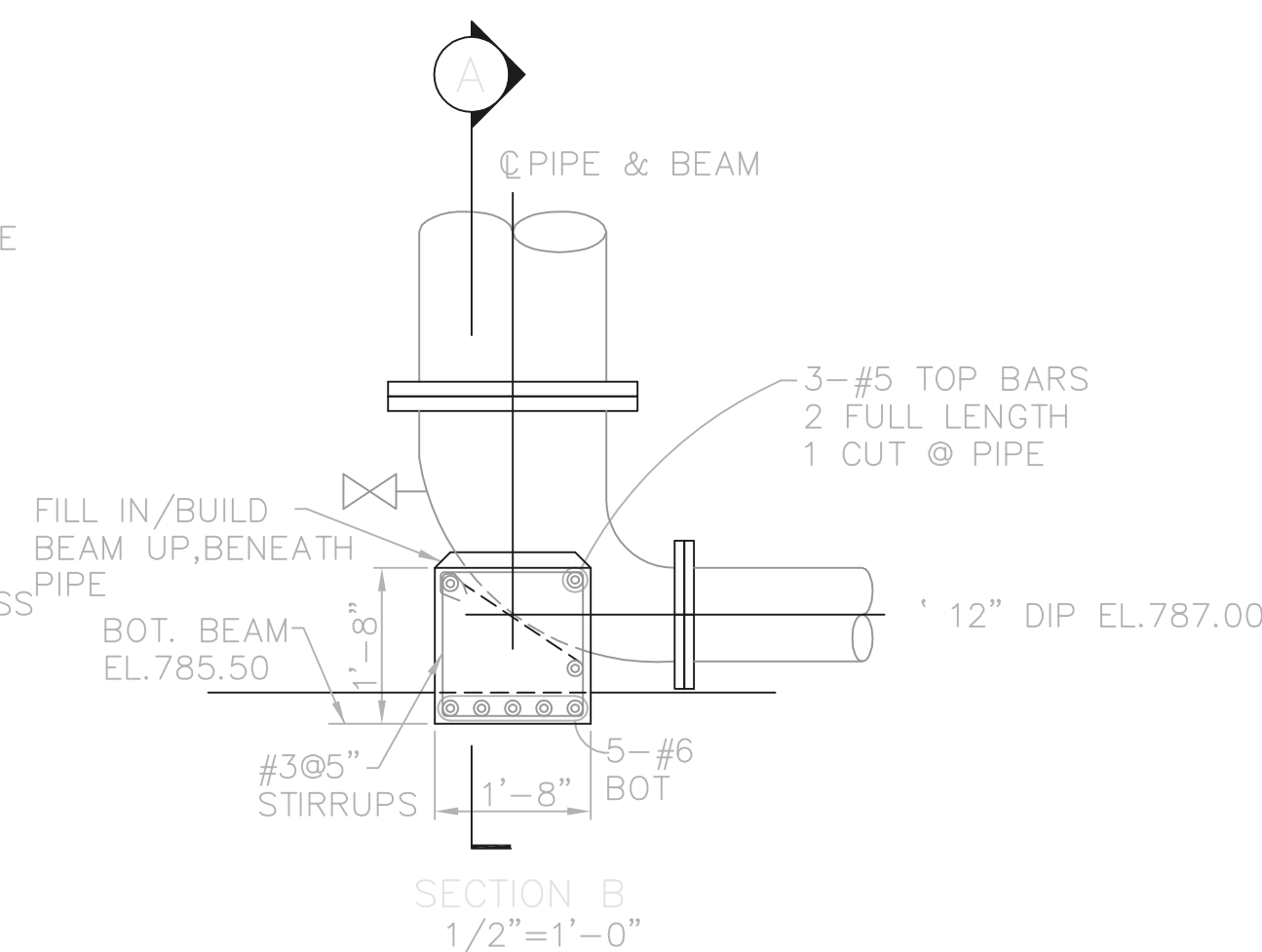
NOTE: ALL STEEL TO BE GALVANIZED AFTER FABRICATION.



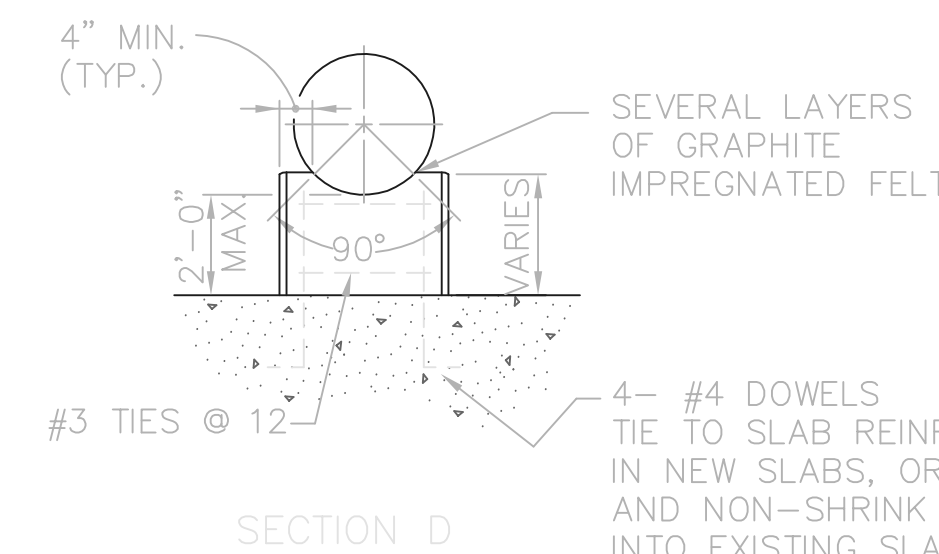
PLAN
3/4"=1'-0"

PIPE SUPPORT HANGER DETAIL
(TYP. OF 4) 3/4"=1'-0"

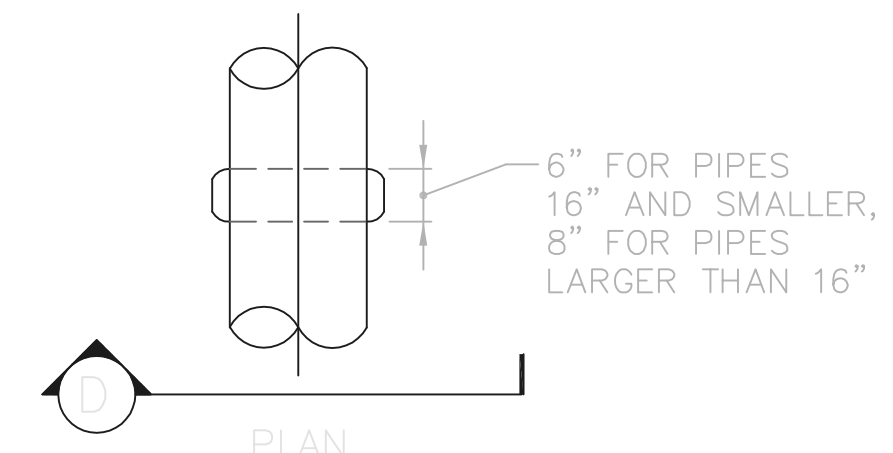
SECTION E
3/4"=1'-0"



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



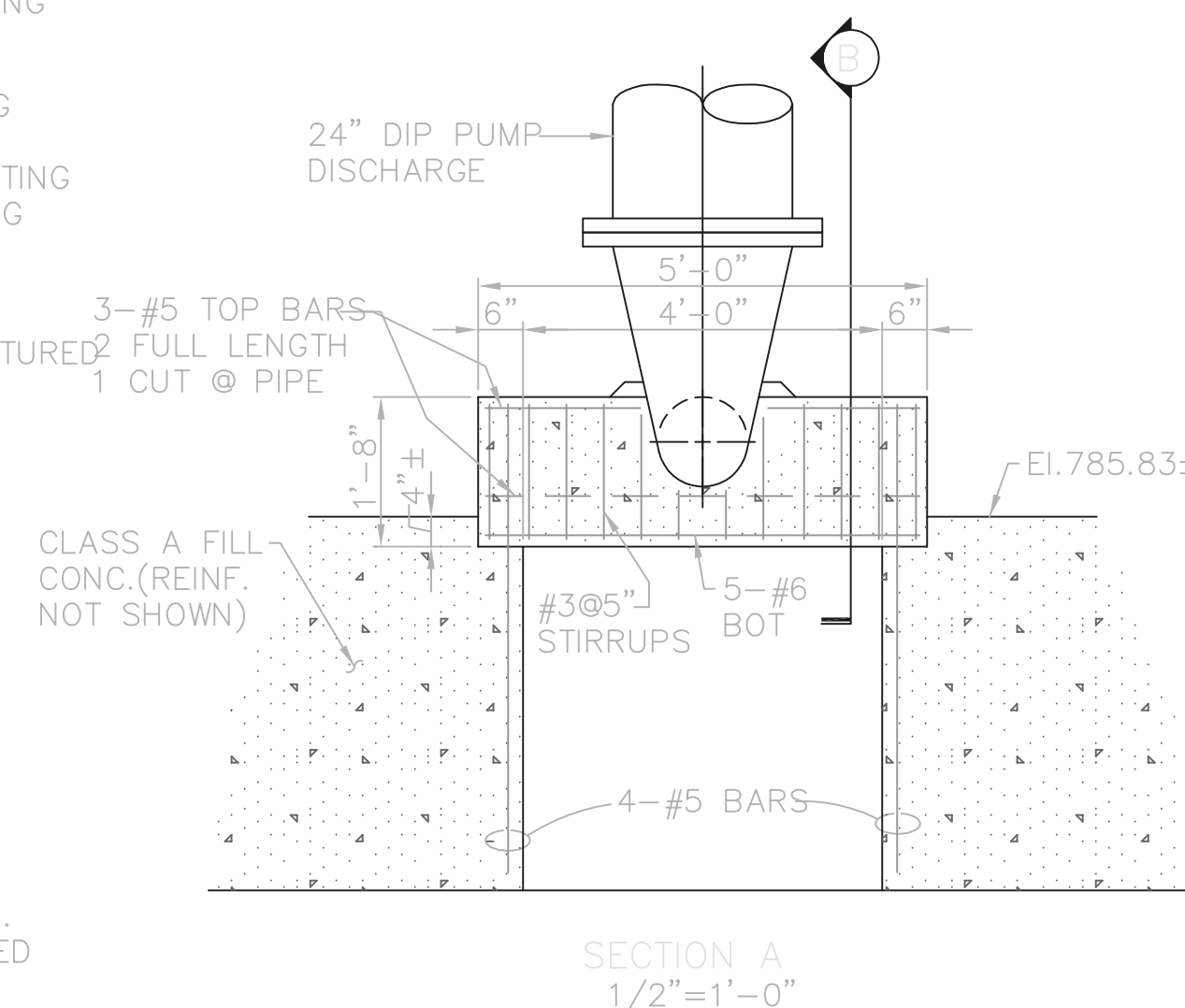
SECTION D



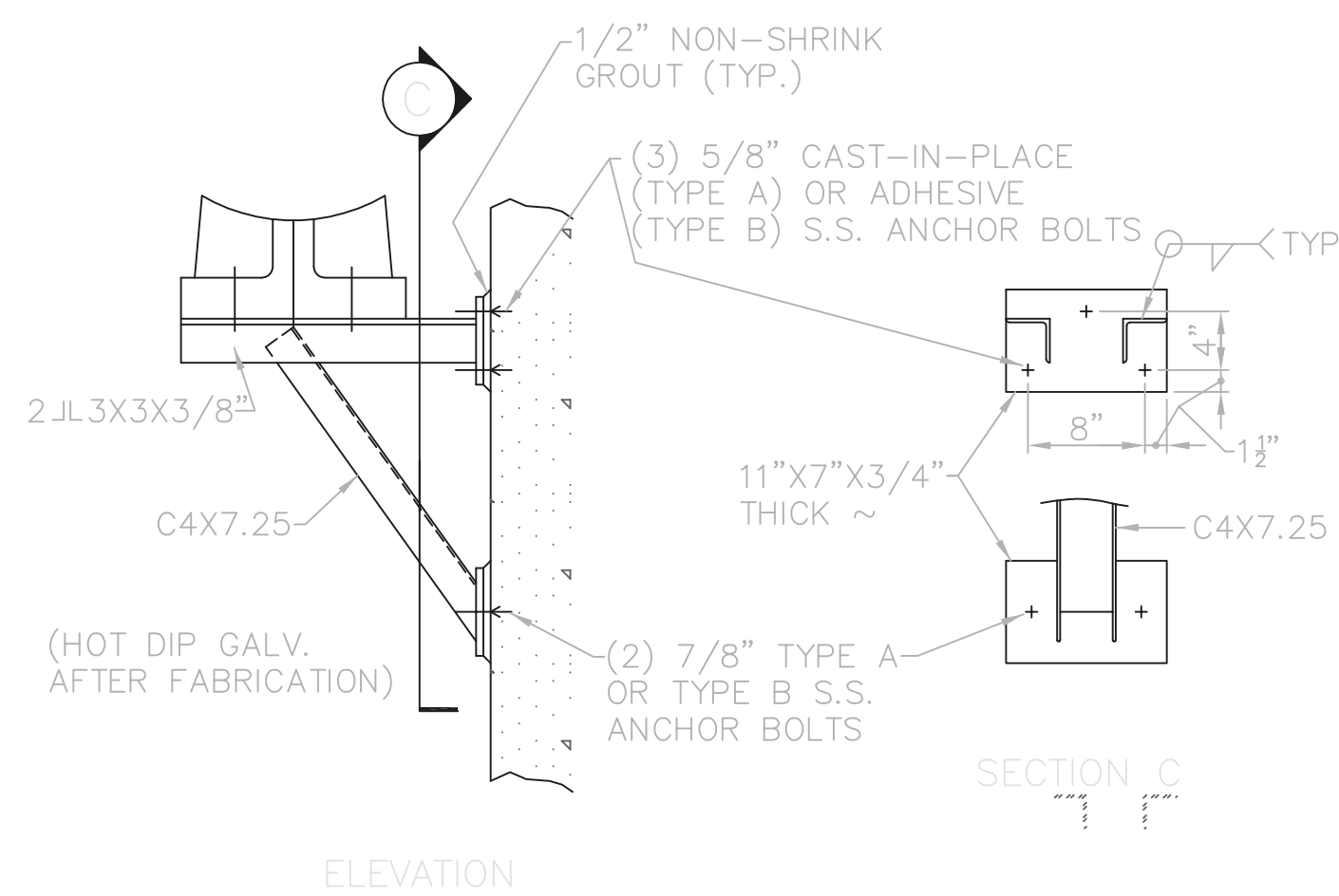
PLAN

NOTE: CONCRETE SUPPORTS SHALL BE SPACED NOT MORE THAN 12'-0" ON CENTER. SUPPORT PIPING NEAR EACH SIDE OF VALVES, RATE CONTROLLERS, AND COUPLINGS.

CONCRETE SADDLE SUPPORT

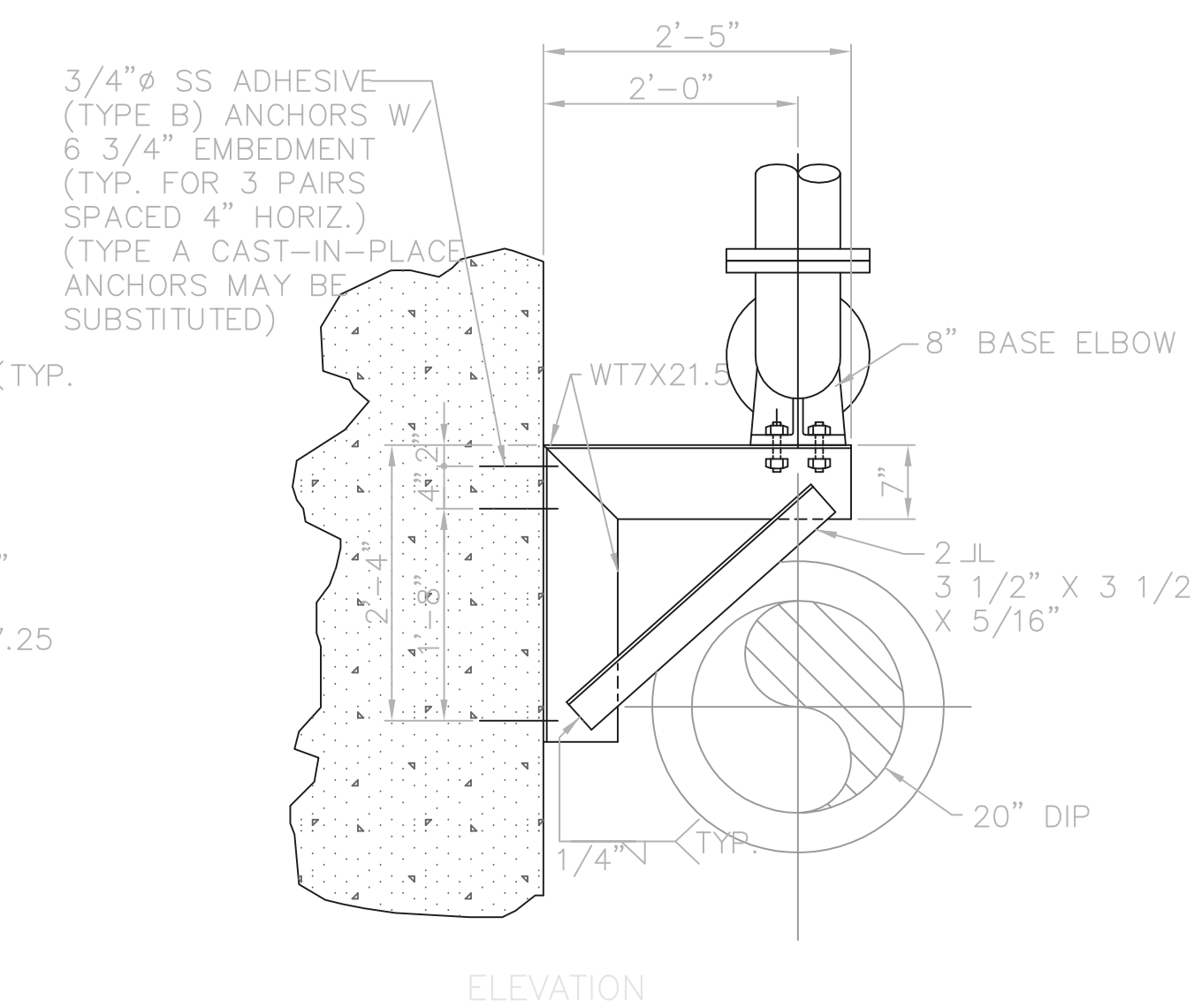


SECTION A
1/2"=1'-0"



ELEVATION

PIPE SUPPORT/THRUST BRACKET (B)
(TYP. OF 5) 3/4"=1'-0"



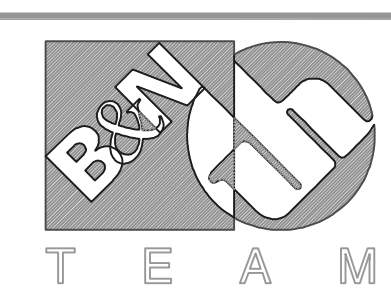
ELEVATION

PIPE SUPPORT/THRUST BRACKET (A)
(TYP. OF 2) 3/4"=1'-0"

CONCRETE PIPE SUPPORT BEAM
(TYP. OF 4) 3/4"=1'-0"

THIS LINE SCALES 1" WHEN PLOTTED TO NAMED SCALE
 02/28/02 04-V02
 P:\PR24025\PMSTAR\CDWG\33ADWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

Jones & Henry Engineers, Ltd.

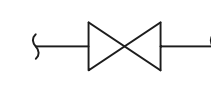
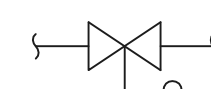
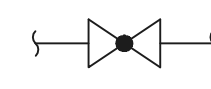
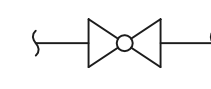
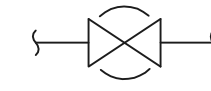
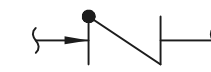
DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	NJB
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
 MISCELLANEOUS DETAILS
 STRUCTURAL
 PIPE SUPPORT DETAILS
 & GENERAL NOTES

SCALE: AS NOTED	
SHEET NO. 43A	OF 100

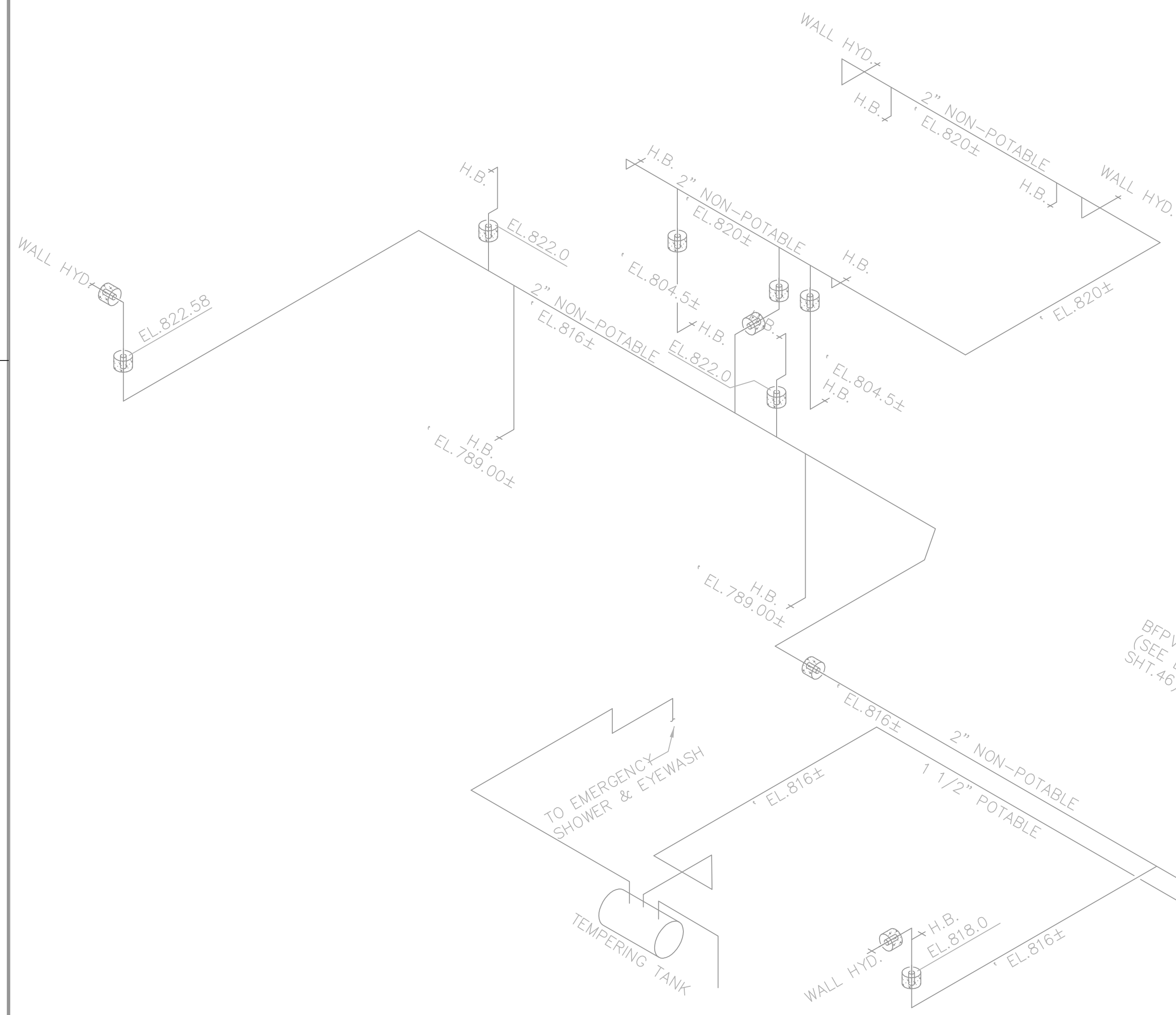
VALVE SYMBOL LEGEND

-  GATE, KNIFE GATE, BUTTERFLY OR GLOBE VALVES
-  BUTTERFLY VALVE WITH FLOAT
-  PLUG VALVE
-  BALL VALVE
-  PINCH VALVE
-  CHECK VALVE

RECORD DRAWING

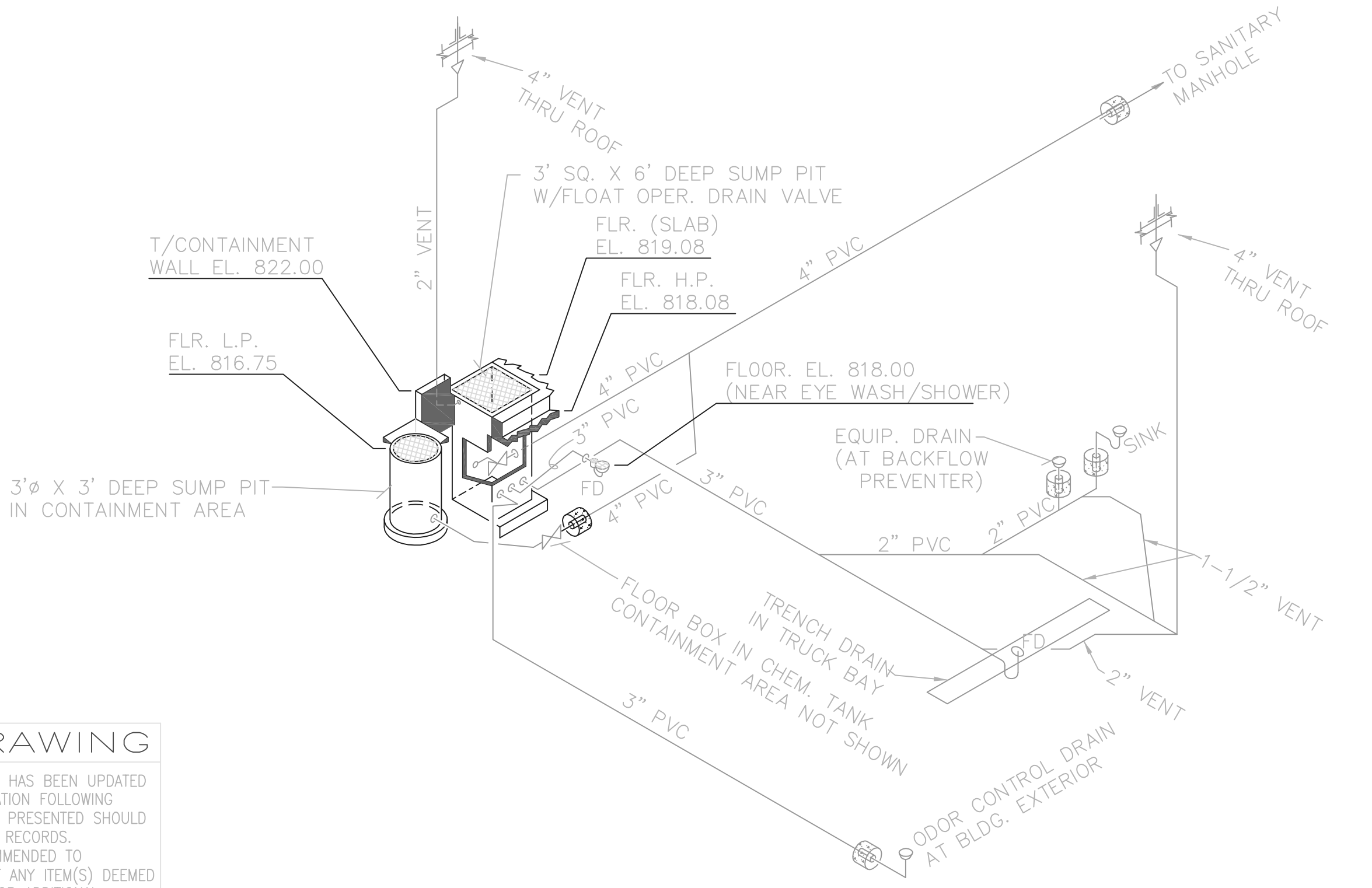
NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE "SIGNIFICANT". SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
 FIRM **Jones & Henry Engineers, Ltd.** DATE 08/07/02
 MO. / DAY / YR.

© BNWW0201

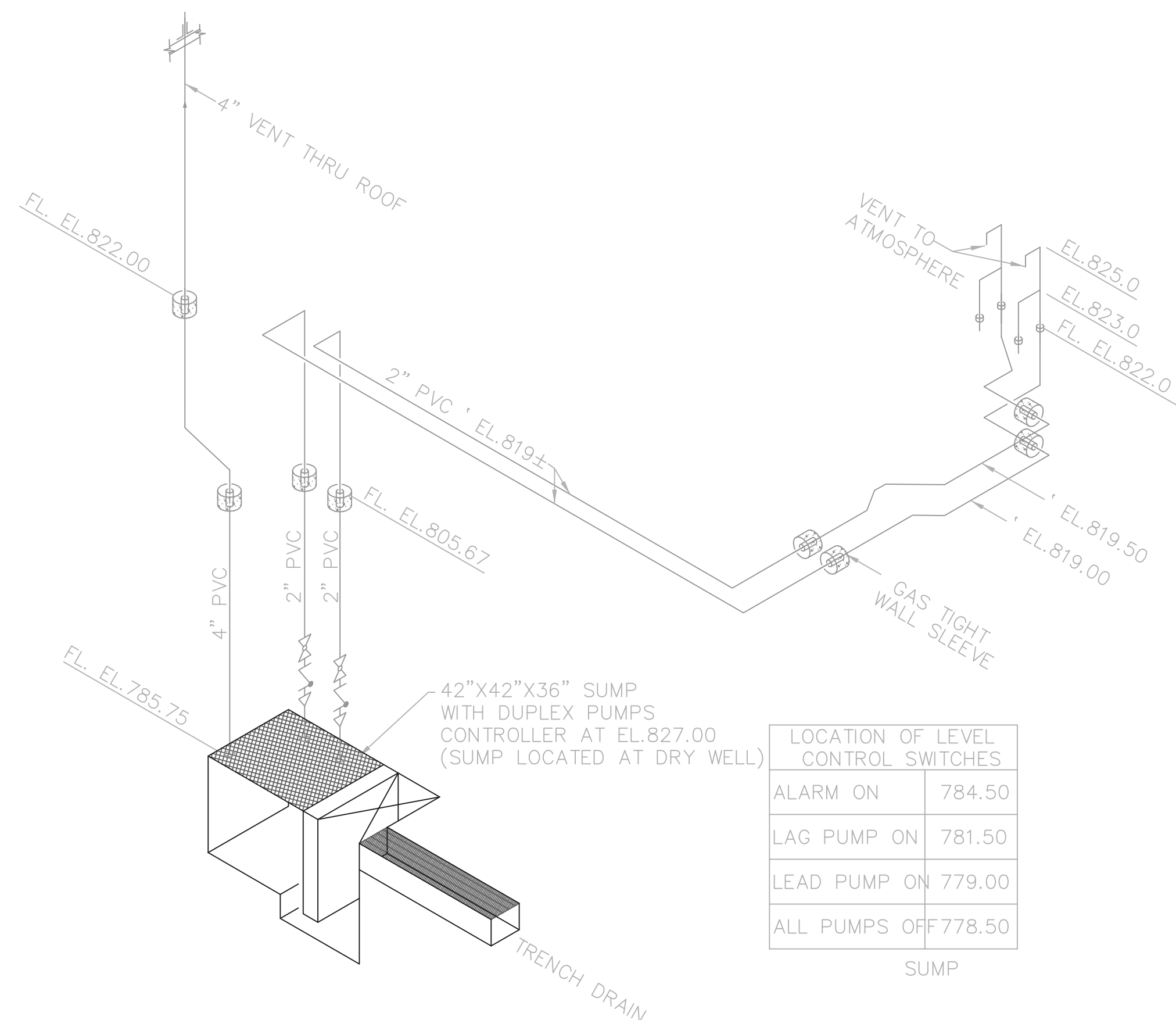


POTABLE & NON-POTABLE WATER ISOMETRIC

ALL PIPING TO BE PVC N.T.S.
 UNLESS OTHERWISE NOTED



SANITARY ISOMETRIC
 N.T.S.

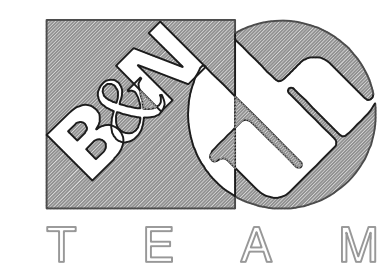


SUMP SYSTEM
 N.T.S.

LOCATION OF LEVEL CONTROL SWITCHES	
ALARM ON	784.50
LAG PUMP ON	781.50
LEAD PUMP ON	779.00
ALL PUMPS OFF	778.50

TOL-4714P07-001
 08/15/02 06-002
 P:\PR24025\PMPS\ARECDWG\45.DWG

NO.	REVISIONS	DATE	BY	CHK.



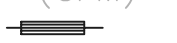
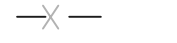

















Burgess & Niple, Limited
 Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

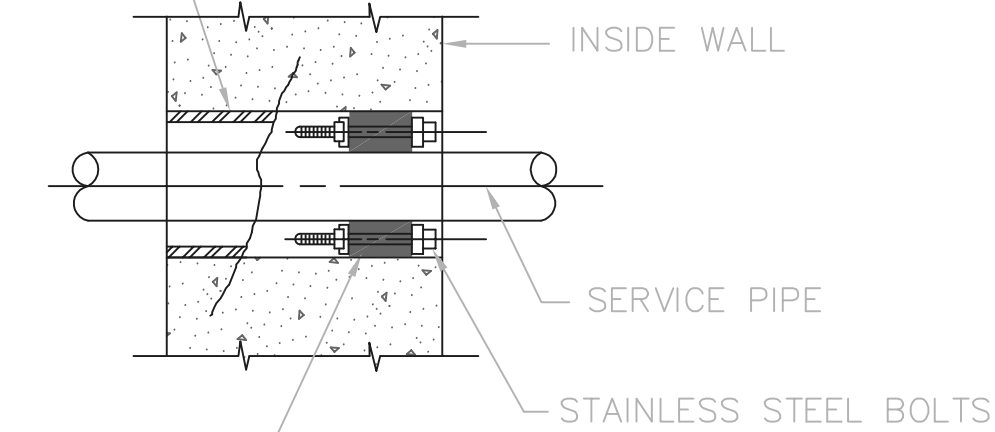
JOB NO.	20571
DESIGNED BY:	CCW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
 PLUMBING
 POTABLE & NON-POTABLE WATER ISOMETRICS

SCALE:	NONE
SHEET NO.	45
OF	100

HEATING, VENTILATION, AND AIR CONDITIONING LEGEND		
SYMBOL / ABBREVIATION		DESCRIPTION
O.A.L. (#,SIZE) (CFM)		OUTSIDE AIR LOUVER
S.A.G. (#,SIZE) (CFM)		SUPPLY AIR GRILLE
R.A.G. (#,SIZE) (CFM)		RETURN AIR GRILLE
D.L. (#,SIZE) (CFM)		DOOR LOUVER
		FLEXIBLE CONNECTION
		ANCHOR
	UH	UNIT HEATER
	B.D.	BACK DRAFT DAMPER
	E.A.	EXHAUST AIR
	E.A.R.	EXHAUST AIR REGISTER
	E.A.T.	ENTERING AIR TEMP.
	E.F.	EXHAUST FAN
	HVAC	HEATING VENTILATION & AIR CONDITIONING
	L.A.T.	LEAVING AIR TEMP.
	M.A.V.	MANUAL AIR VENT
	M.D.	MOTORIZED DAMPER
	O.A.	OUTSIDE AIR
	O.A.L.	OUTSIDE AIR LOUVER
	R.A.	RETURN AIR
	S.A.	SUPPLY AIR
	S.F.	SUPPLY FAN
	T.U.	TERMINAL UNIT
	V.A.V.	VARIABLE AIR VOLUME

SHEET METAL OR LAMINATED FIBER CONCRETE FORM ADEQUATELY BRACED IN FIELD AND STRIPPED OUT BEFORE INSTALLING PIPE, EXCEPT IN MASONRY WHERE SLEEVE SHALL BE 3/16" STEEL AND SHALL BE INSTALLED WITH MASONRY. CONTRACTOR MAY USE A THERMOPLASTIC WALL SLEEVE, CENTURY-LINE SLEEVE BY THUNDERLINE CORP., OR EQUAL, TO BE LEFT IN PLACE.

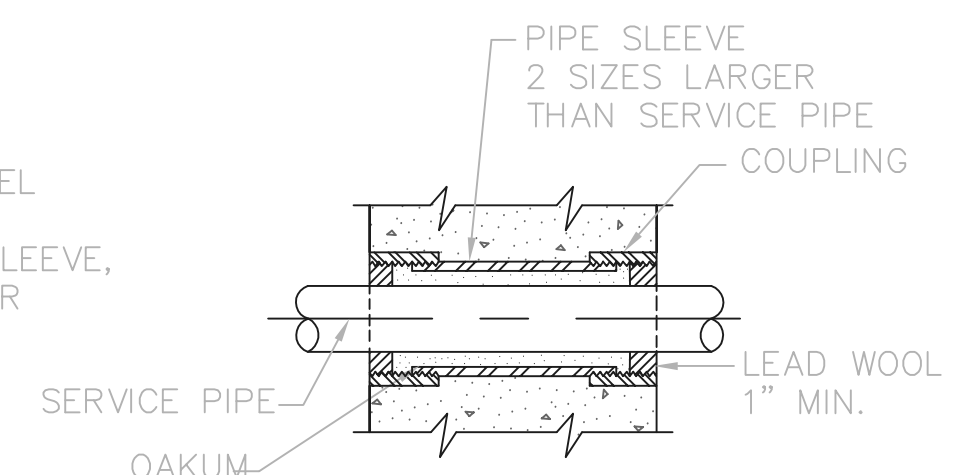


MODULAR MECHANICAL TYPE SEAL OF INTERLOCKING SYNTHETIC RUBBER LINKS

TYPE C

- NOTE:
- EXISTING WALLS SHALL BE CORE DRILLED.
 - CONCRETE SHALL BE WORKED IN AND VIBRATED TO ELIMINATE ALL VOIDS IN CONCRETE - IF VOIDS DO REMAIN, FILL WITH GROUT BEFORE INSTALLING PIPE AND RUBBER SEALS.
 - UNLESS OTHERWISE SHOWN ON THE DRAWINGS ALL INTERIOR WALL PENETRATIONS SHALL USE TYPE C PIPE SLEEVE.

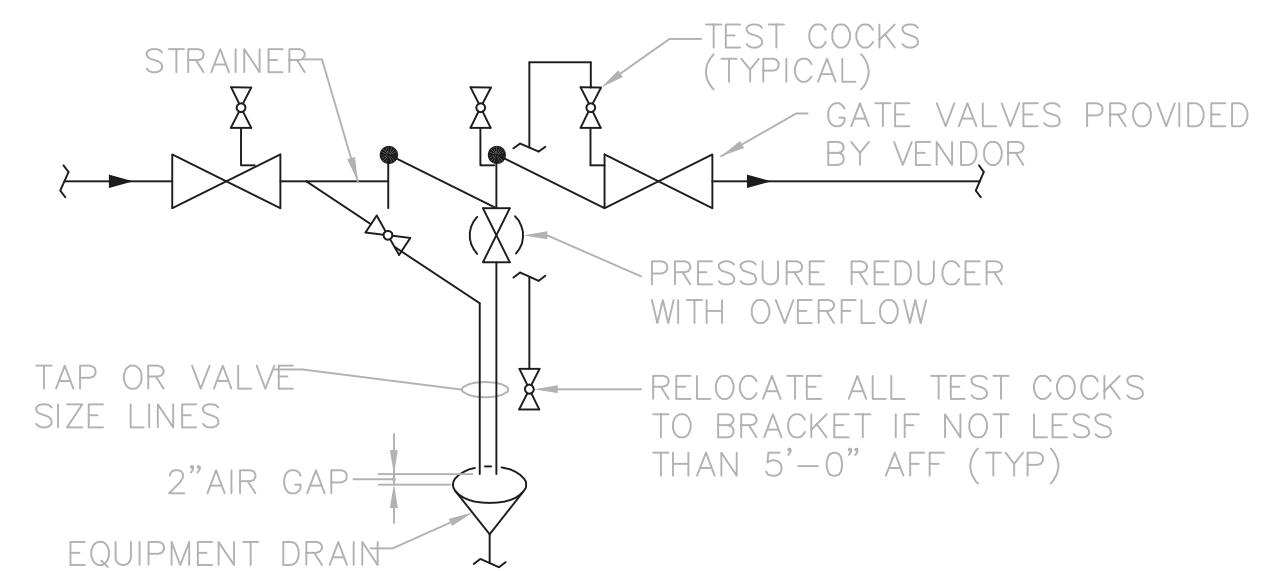
PIPE SLEEVE



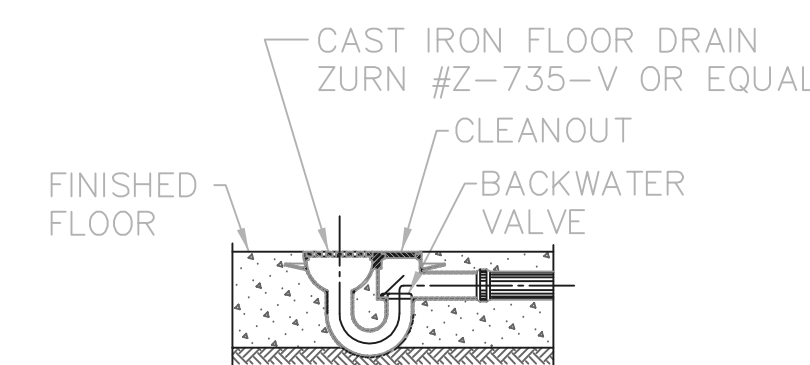
TYPE B

NOTE: FOR PIPES LESS THAN 4" DIA., USE GALVANIZED STEEL PIPE SLEEVE. FOR PIPES 4" DIA. OR LARGER, USE CI OR DI TYPE "E" SLEEVE.

EXTERIOR WALL SLEEVE

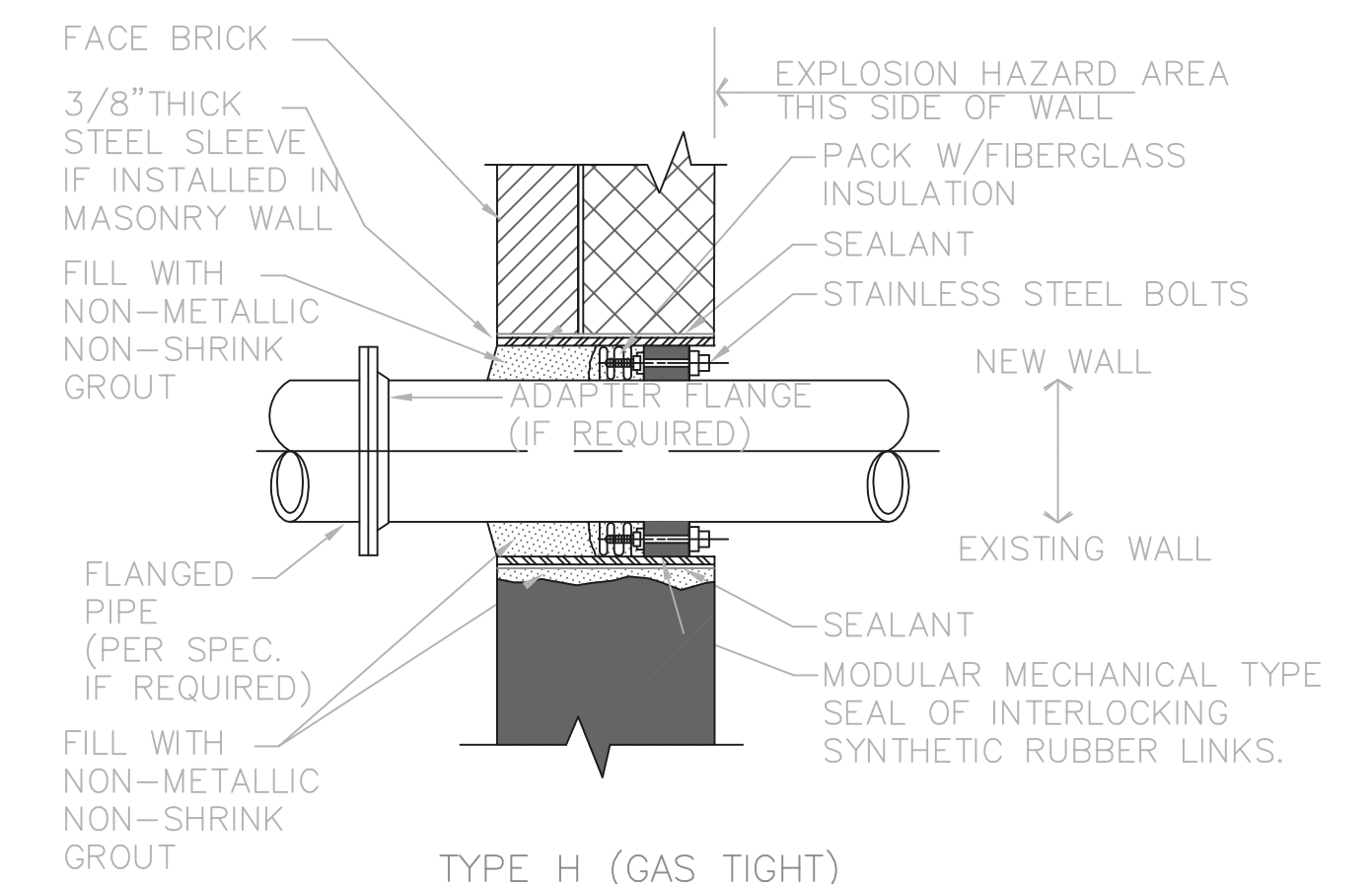


BACKFLOW PREVENTER DETAIL
(REDUCED PRESSURE TYPE SHOWN) NTS



TYPE A

FLOOR DRAIN DETAIL
N.T.S.



TYPE H (GAS TIGHT)

MASONRY WALL SLEEVE

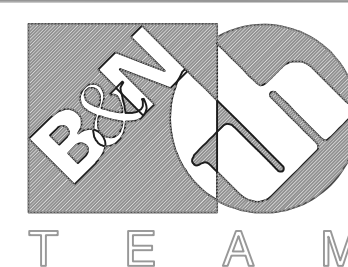
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM **Jones & Henry Engineers, Ltd.** DATE 08/07/02
MO. / DAY / YR.

© BNWW0201

TOL-4714P05-001
08/01/02 06-002
P:\PR24025\MPSTARECDWG\46.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

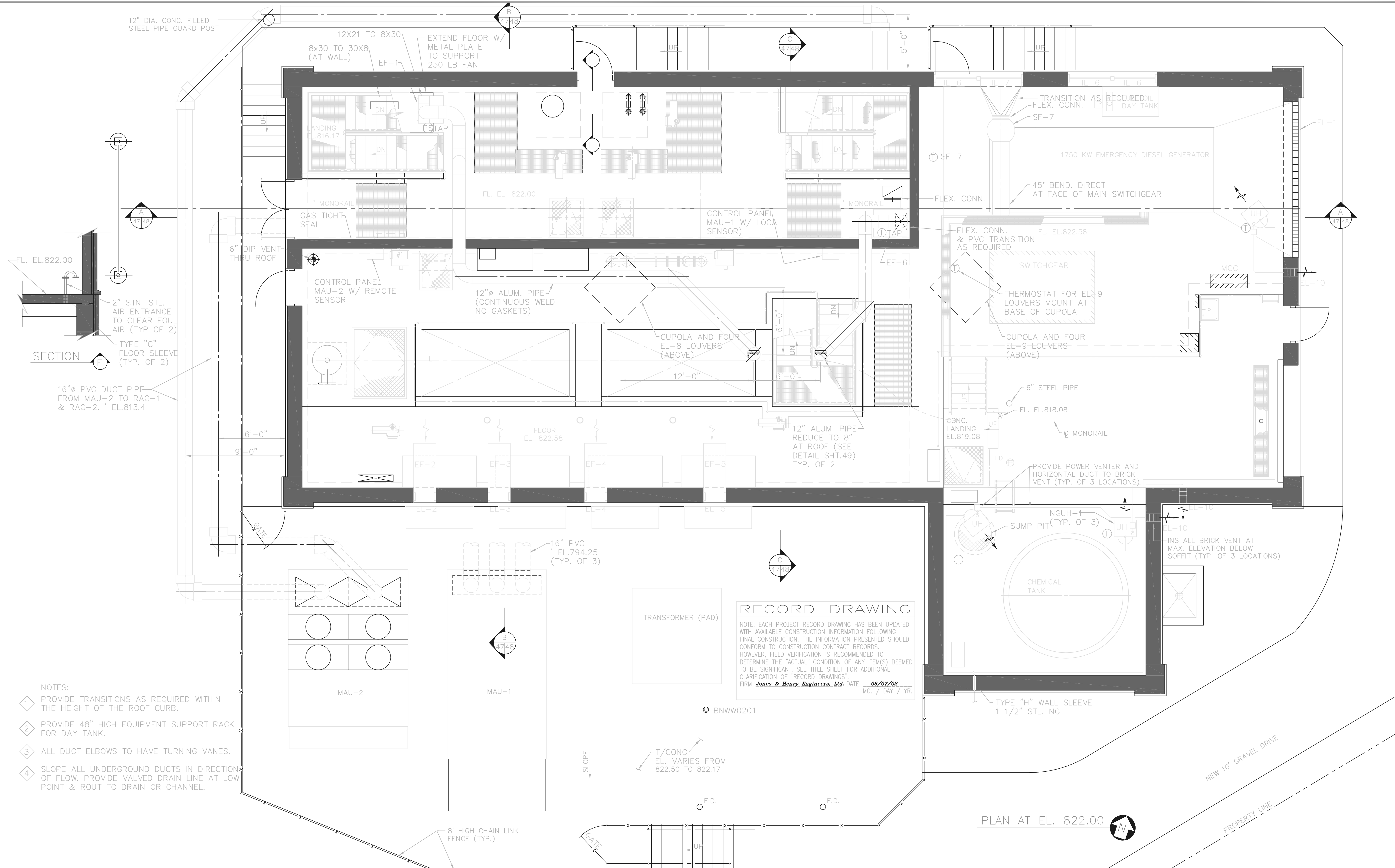
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
PLUMBING
DETAILS

SCALE:	
1/4" = 1'-0"	
SHEET NO.	OF
46	100



RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".

FIRM **Jones & Henry Engineers, Ltd.** DATE 08/07/02 MO. / DAY / YR.

- NOTES:
- 1 PROVIDE TRANSITIONS AS REQUIRED WITHIN THE HEIGHT OF THE ROOF CURB.
 - 2 PROVIDE 48" HIGH EQUIPMENT SUPPORT RACK FOR DAY TANK.
 - 3 ALL DUCT ELBOWS TO HAVE TURNING VANES.
 - 4 SLOPE ALL UNDERGROUND DUCTS IN DIRECTION OF FLOW. PROVIDE VALVED DRAIN LINE AT LOW POINT & ROUT TO DRAIN OR CHANNEL.

TOL-4714P06-001
 09/10/02 10-V02
 P:\PR24025\PMPS\ARECDWG\47.DWG

NO.	REVISIONS	DATE	BY	CHK.

Burgess & Niple, Limited

Jones & Henry Engineers, Ltd.

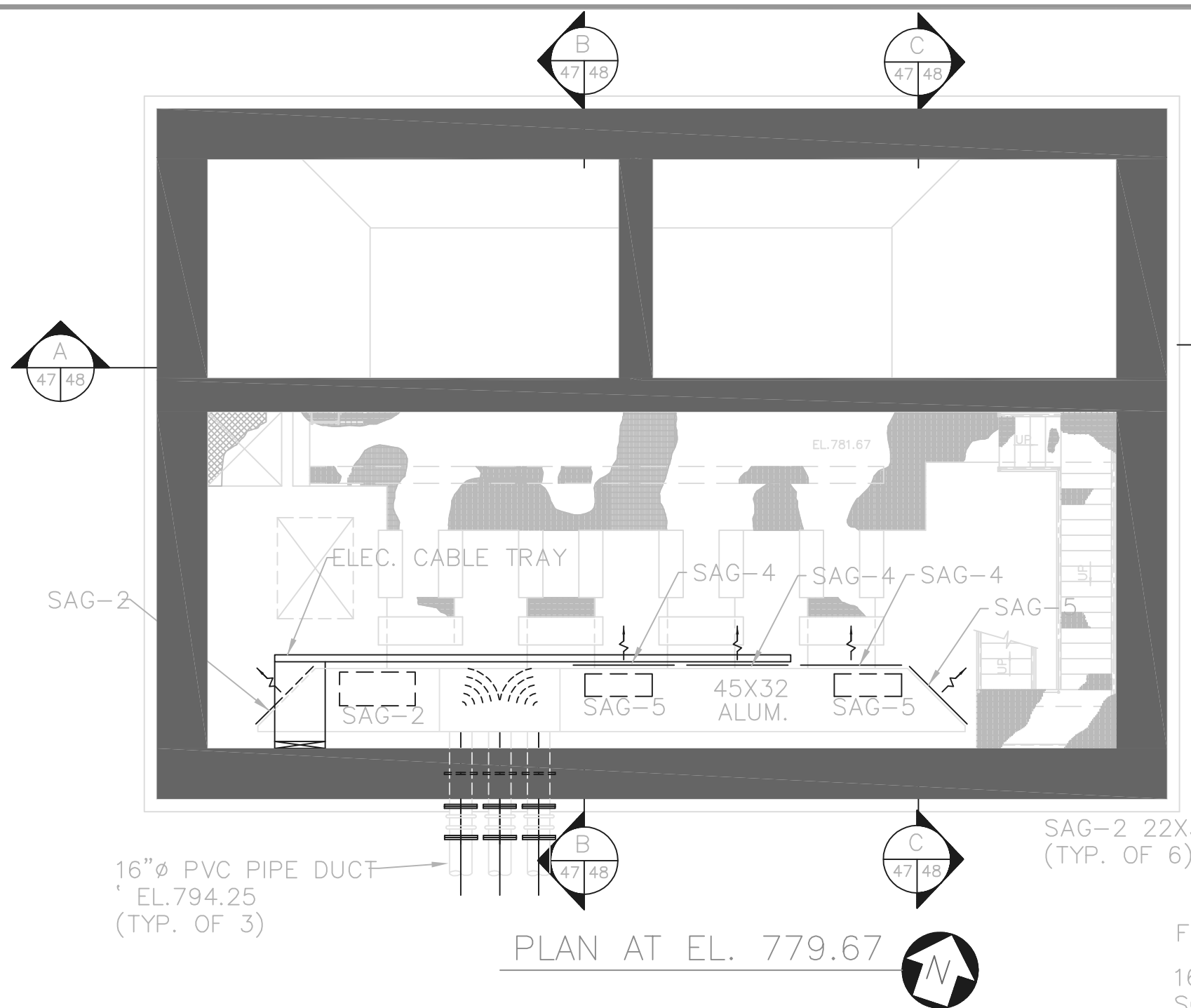
DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

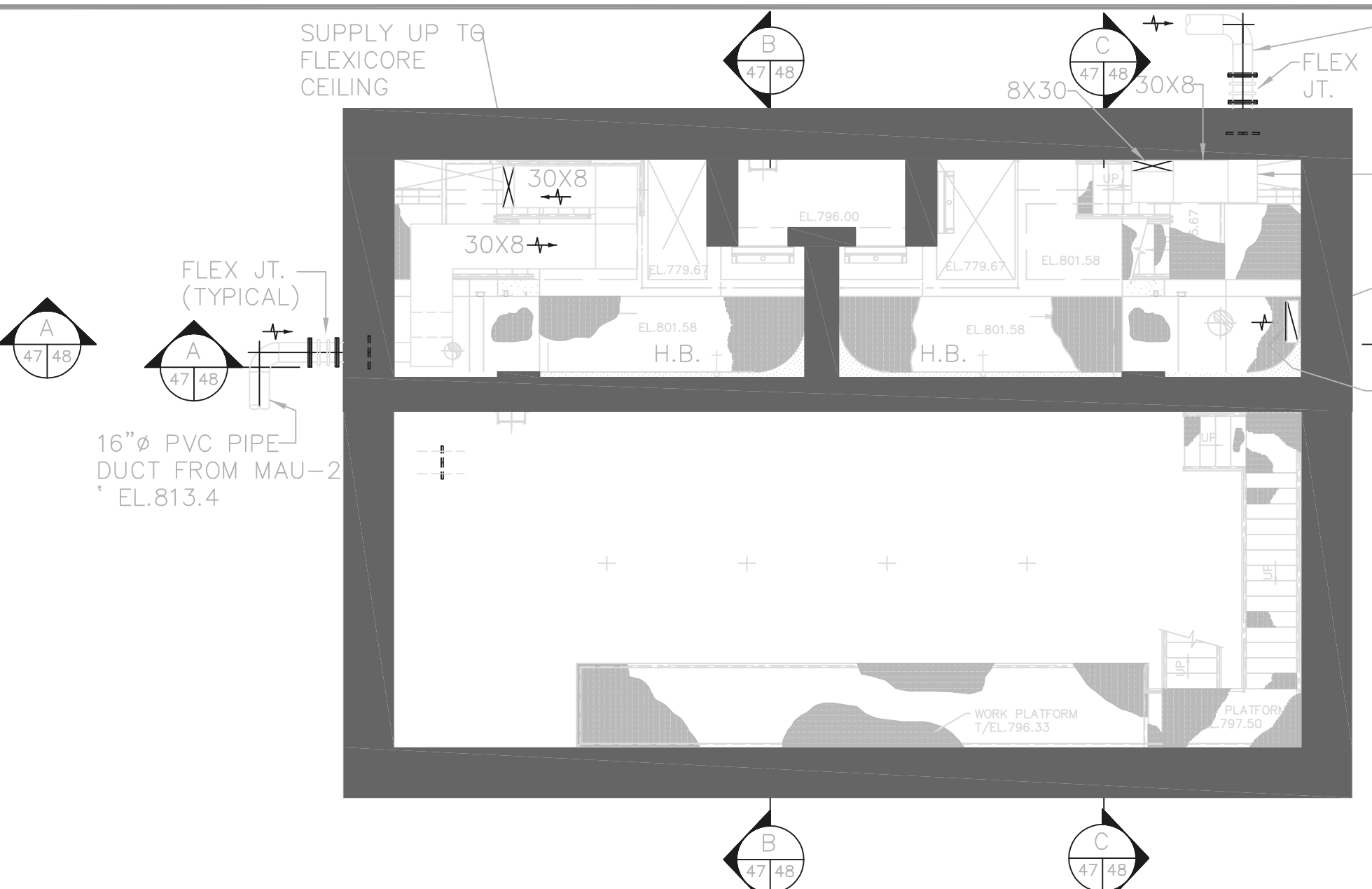
PUMP STATION
 HVAC
 PLAN AT EL. 822.00

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

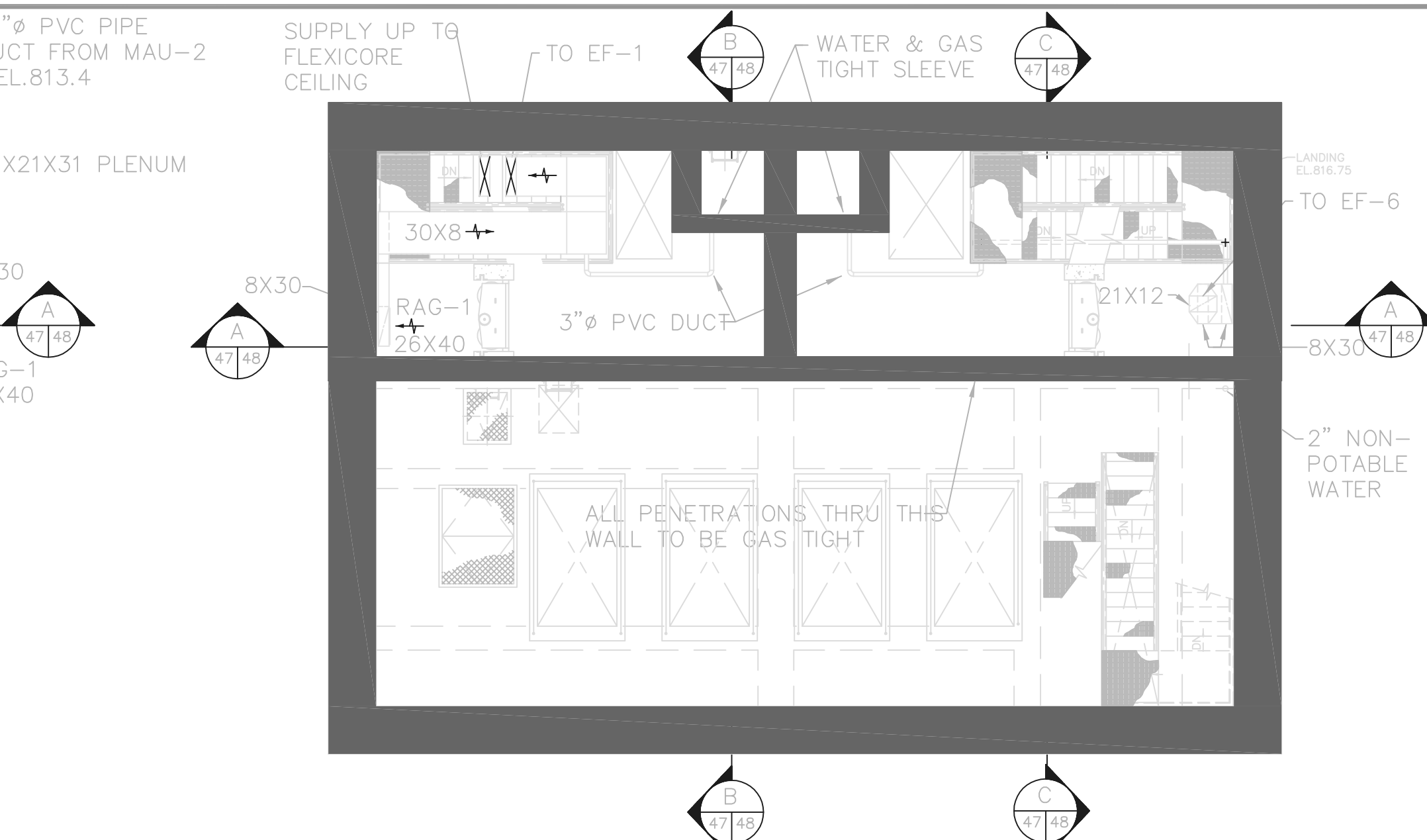
SHEET NO.	OF
47	100



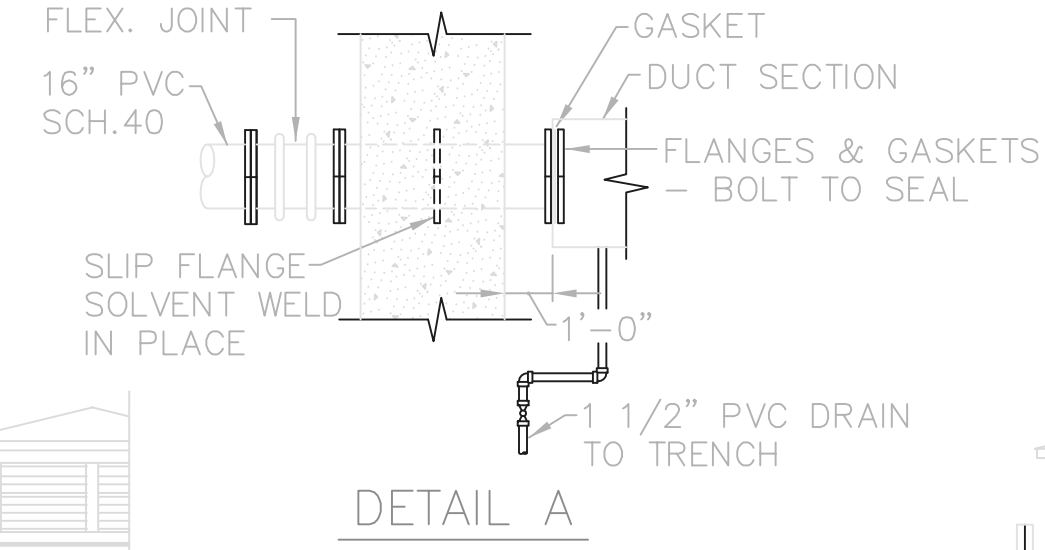
PLAN AT EL. 779.67



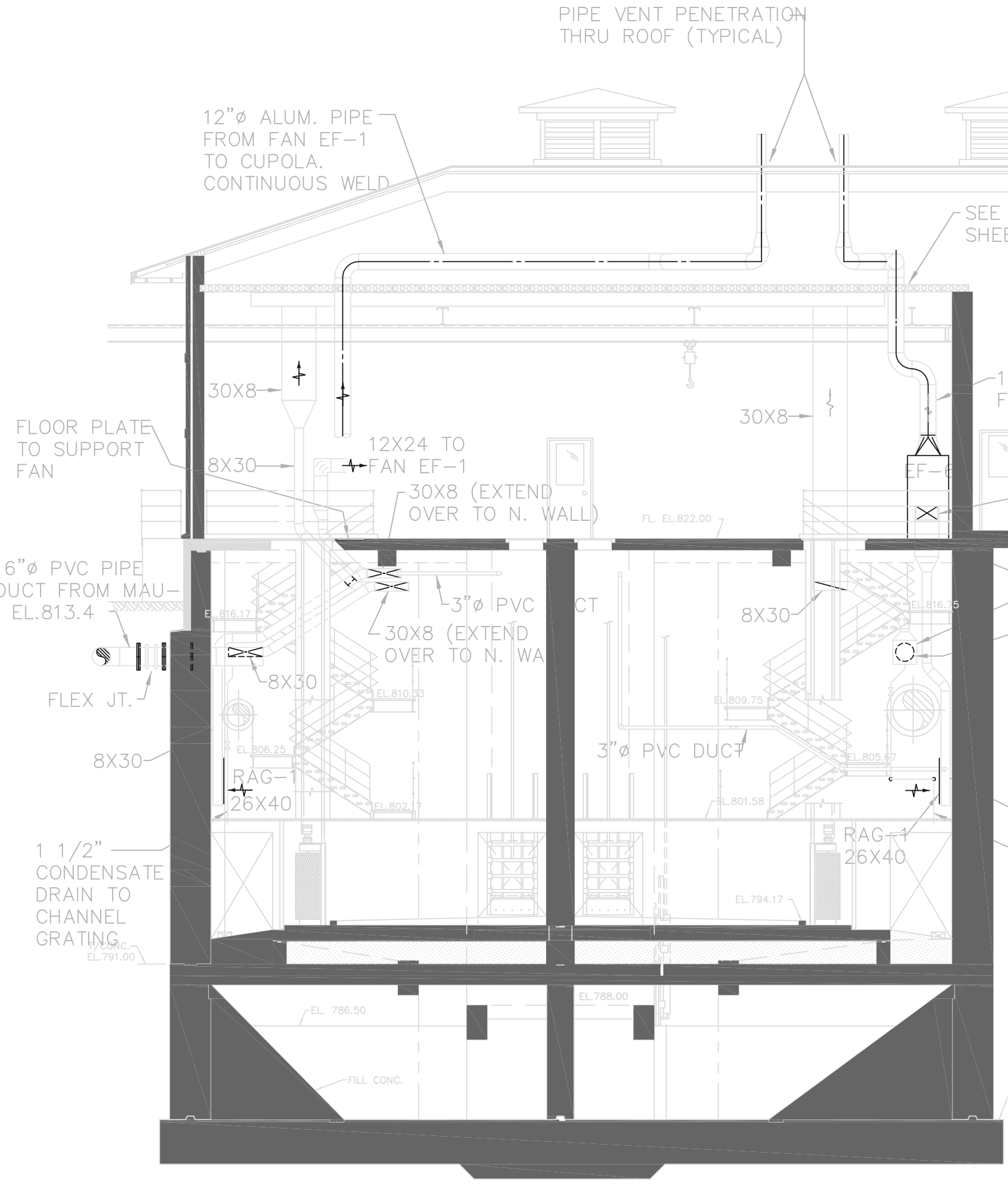
PLAN AT EL. 801.58



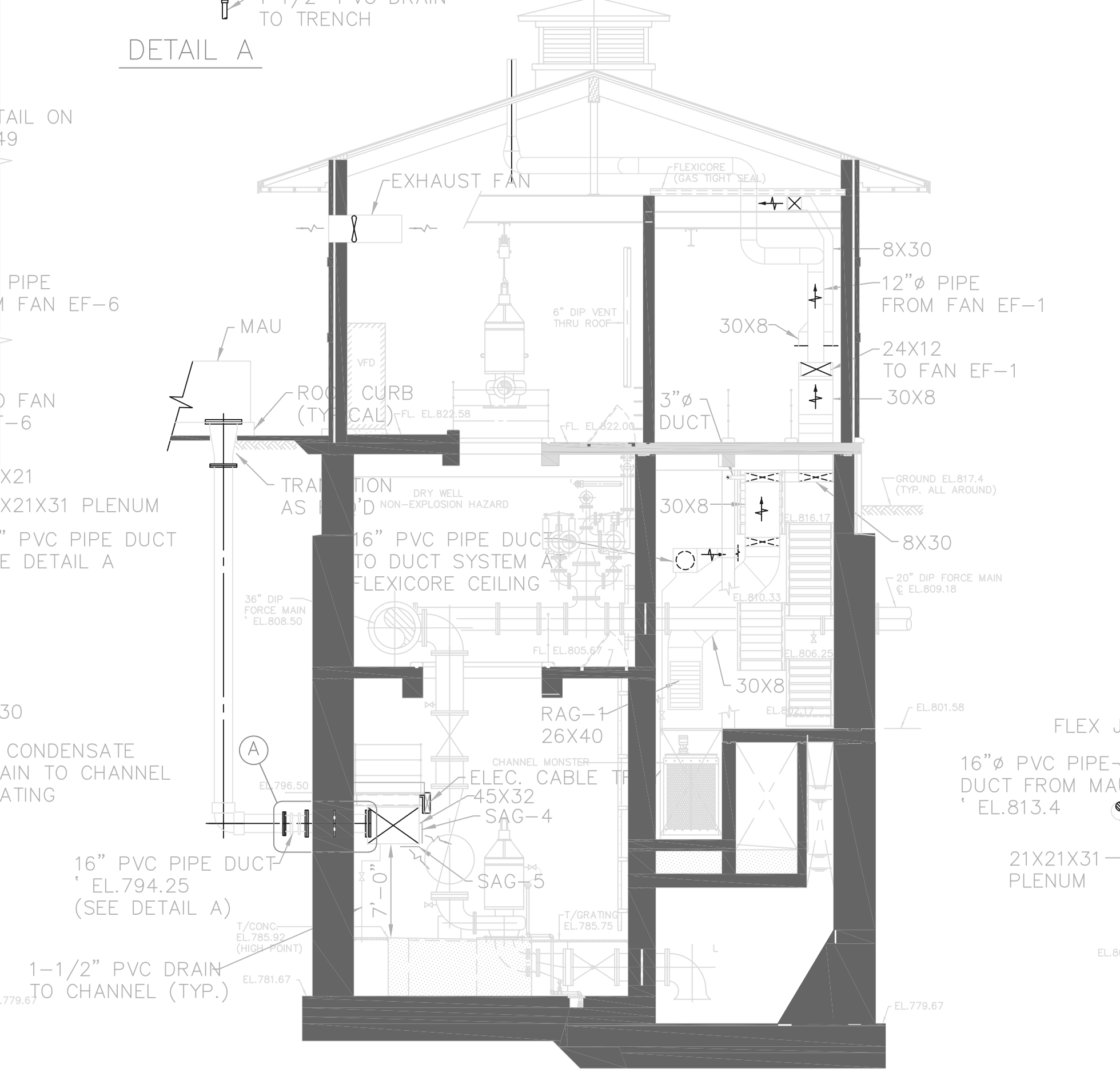
PLAN AT EL. 805.67



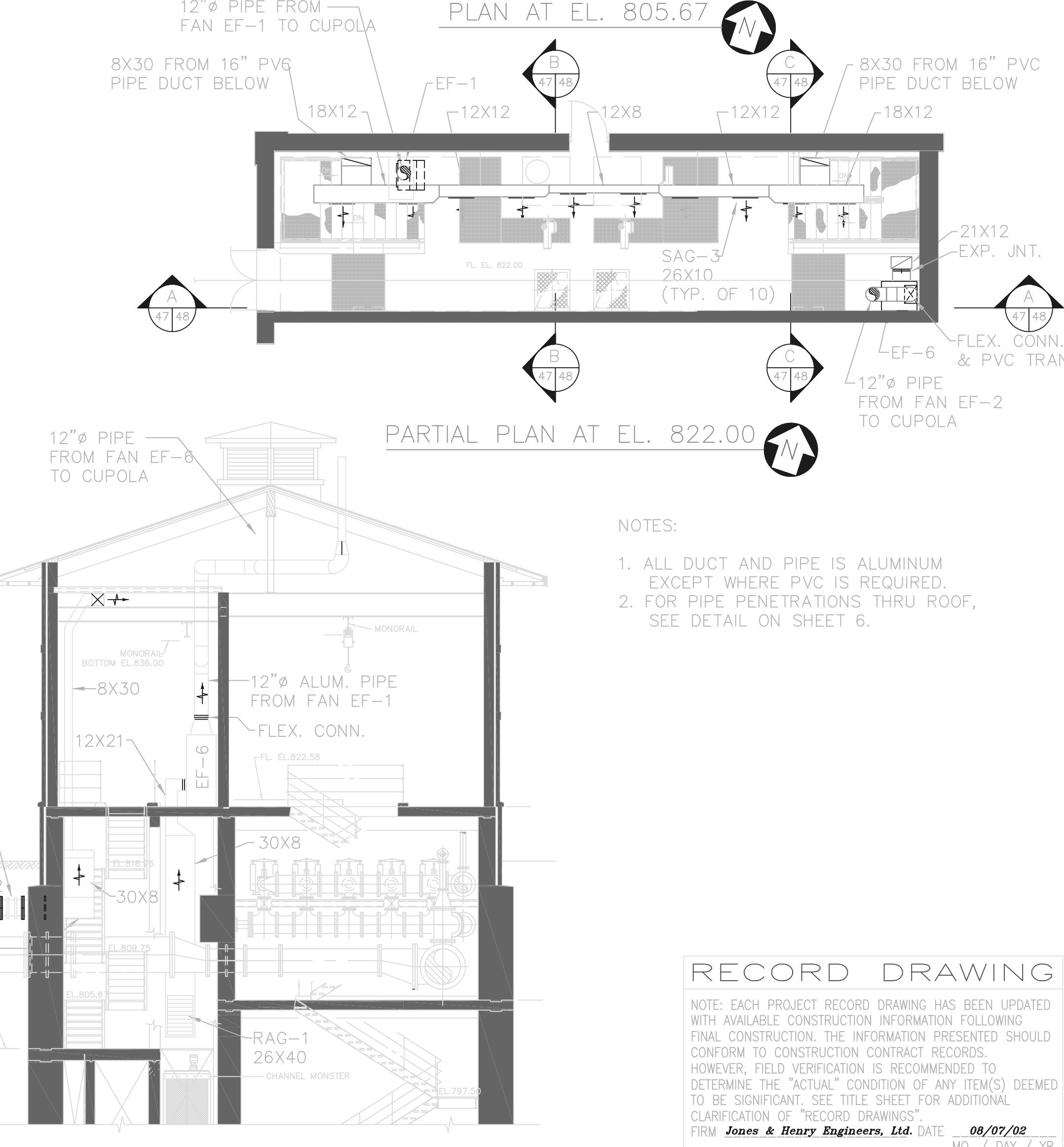
DETAIL A



SECTION A



SECTION B



SECTION C

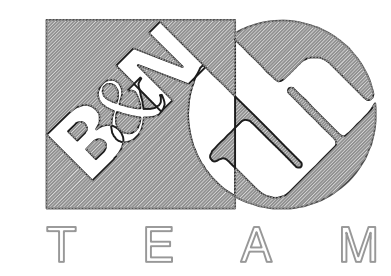
- NOTES:
1. ALL DUCT AND PIPE IS ALUMINUM EXCEPT WHERE PVC IS REQUIRED.
 2. FOR PIPE PENETRATIONS THRU ROOF, SEE DETAIL ON SHEET 6.

RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
 FIRM Jones & Henry Engineers, Ltd. DATE 08/07/02
 MO. / DAY / YR.

TOL-4714P01-001
 08/01/02 06-V02
 P:\PR24025\PM\STARECDWG\48.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited
 Jones & Henry Engineers, Ltd.

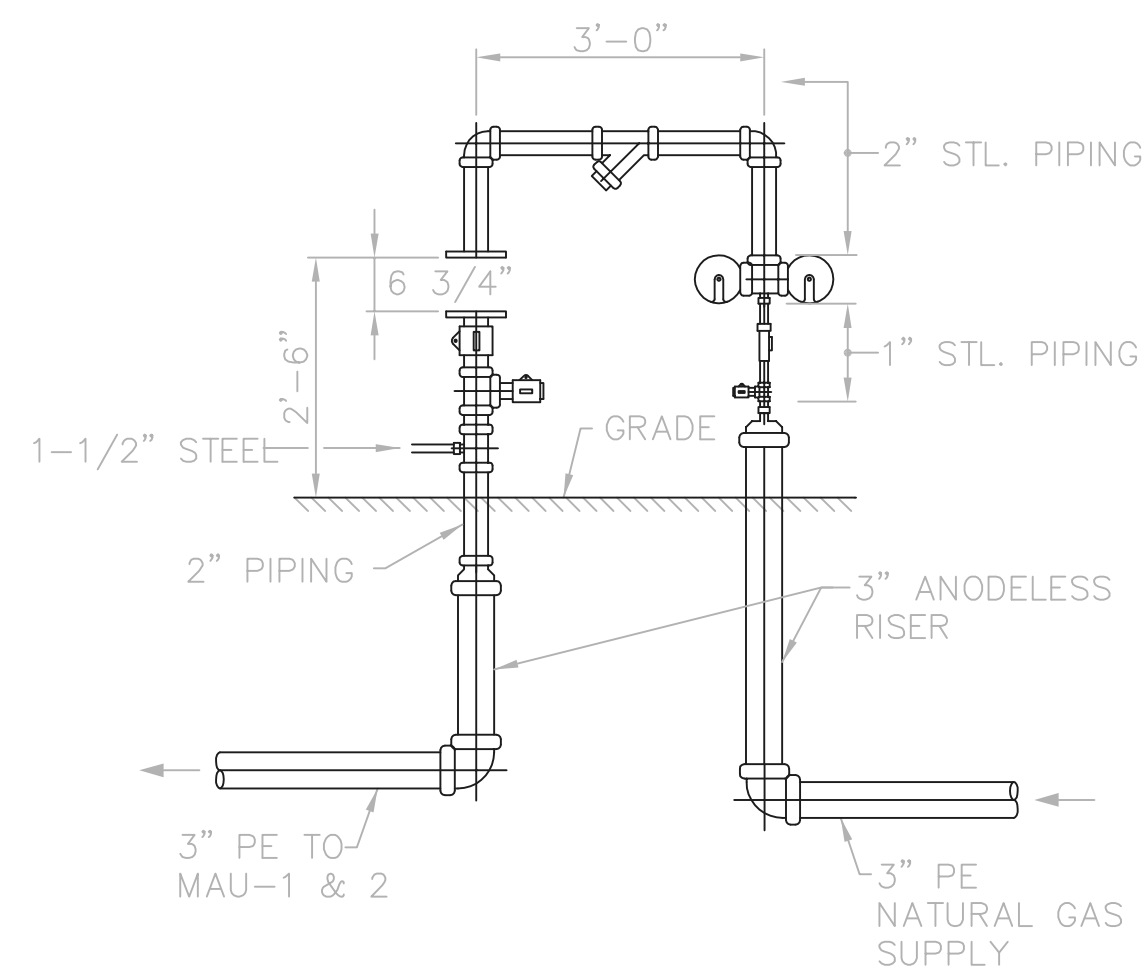
DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	CCW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

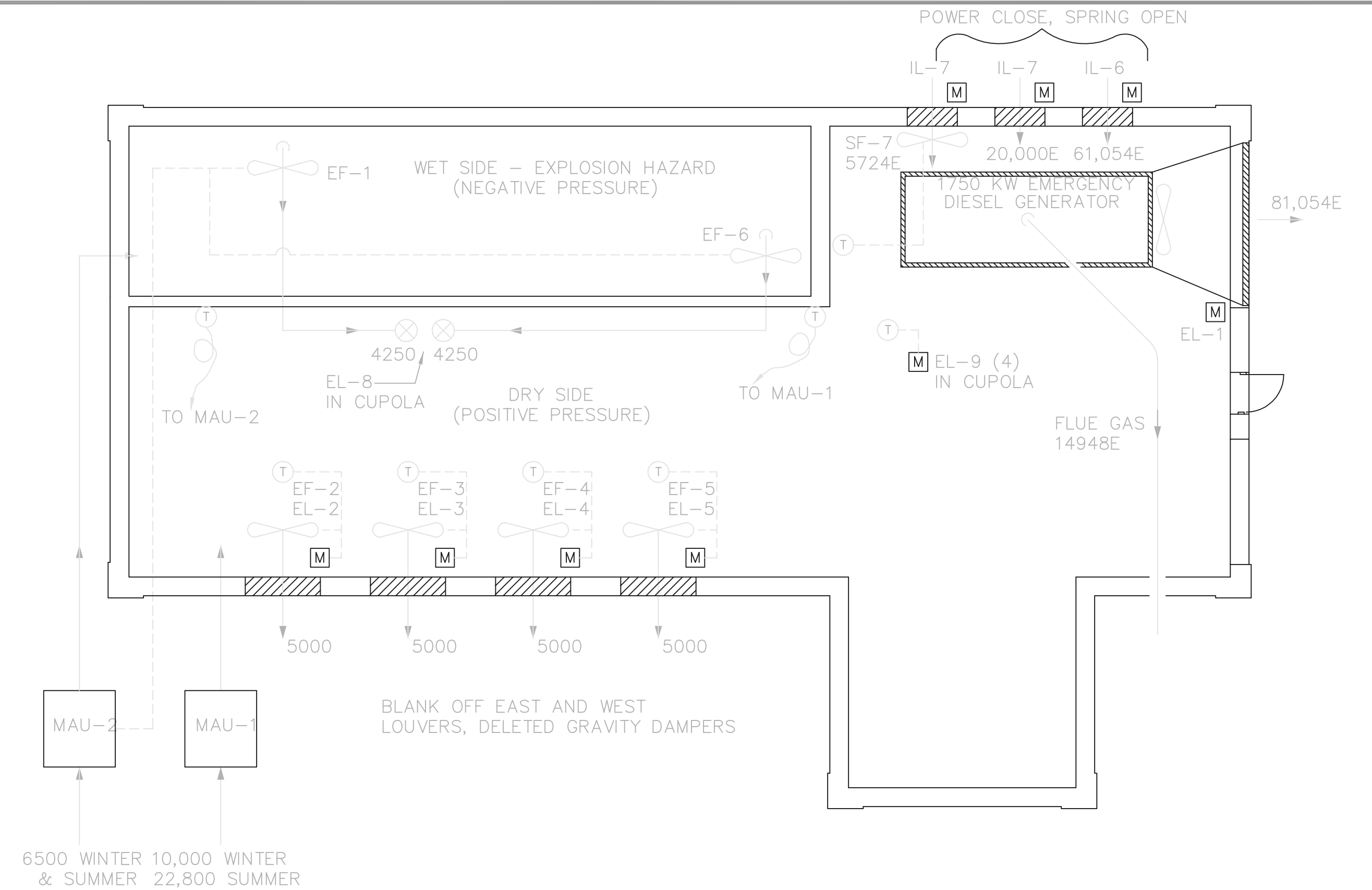
PUMP STATION
 HVAC
 PLAN AT EL. 779.67, 801.58, AND 805.6

SCALE:	1/8"=1'-0"
SHEET NO.	48
OF	100

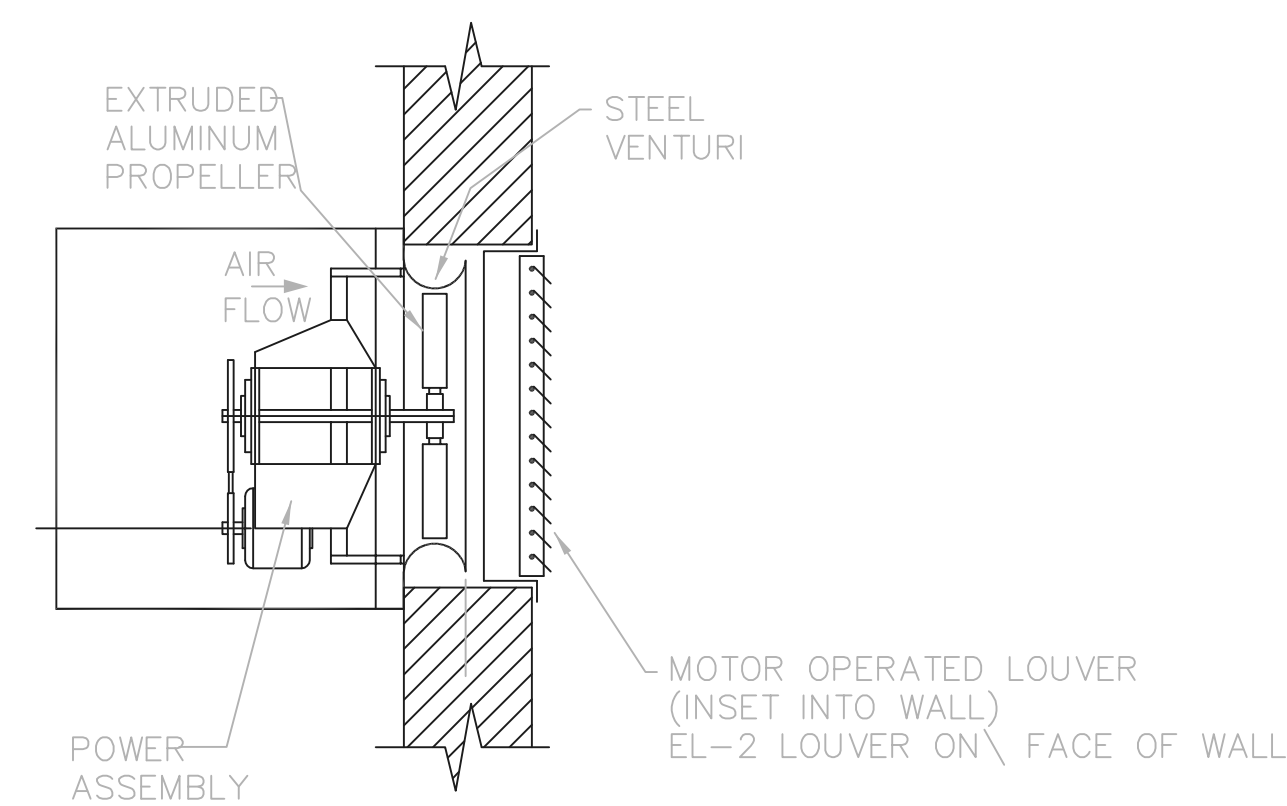
© BNWW0201



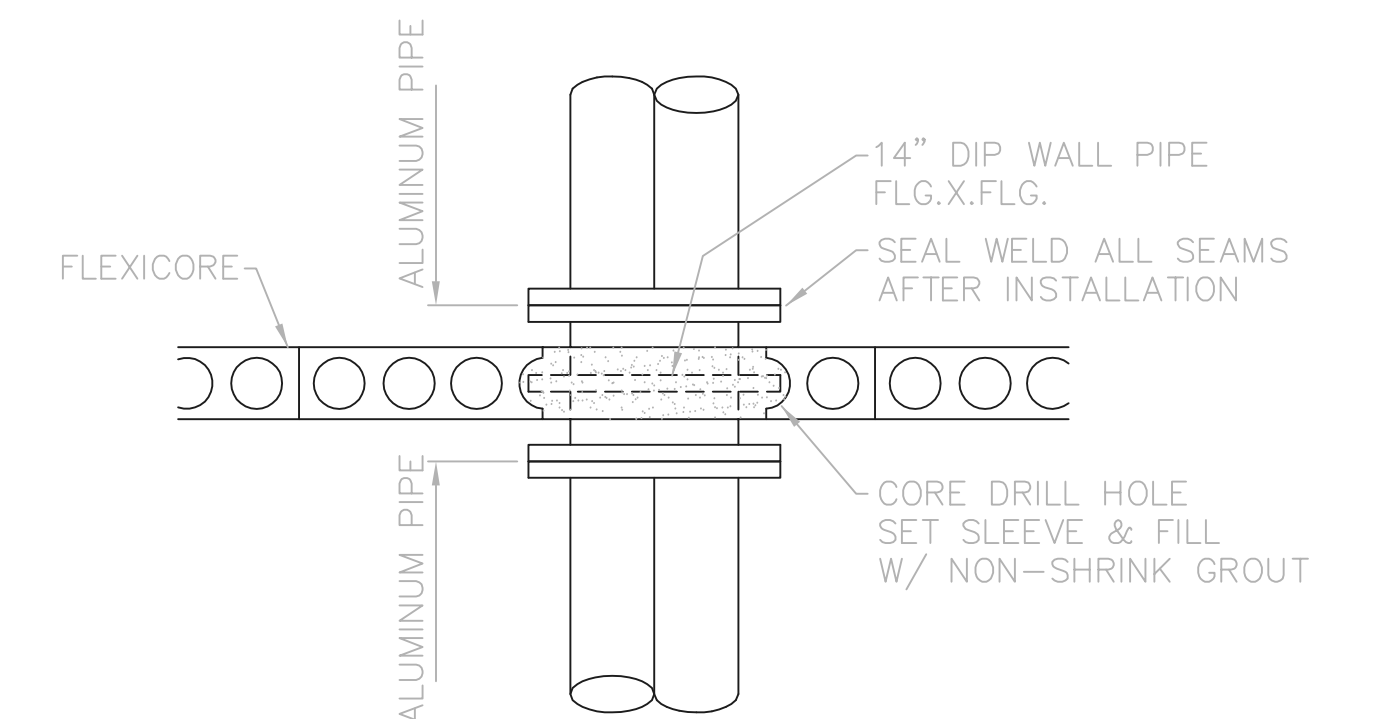
METER SET
N.T.S.
PROVIDE REDUCERS AS REQUIRED



VENTILATION AIR BALANCE & CONTROL SCHEMATIC
ALL NUMBERS ARE CFM
E = EMERGENCY GENERATOR REQUIREMENTS
N.T.S.



TYPICAL WALL FAN AND EXHAUST LOUVER DETAIL
N.T.S.



DETAIL A
N.T.S.

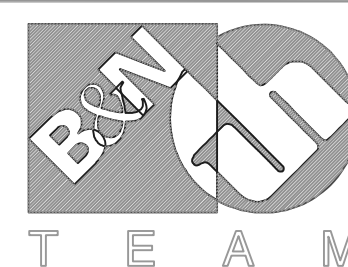
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
MO. / DAY / YR.

© BNWW0201

TOL-4714P08-001
09/10/02 10-102
P:\PR24025\PMPS\REC\DWG\48.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

Jones & Henry Engineers, Ltd.

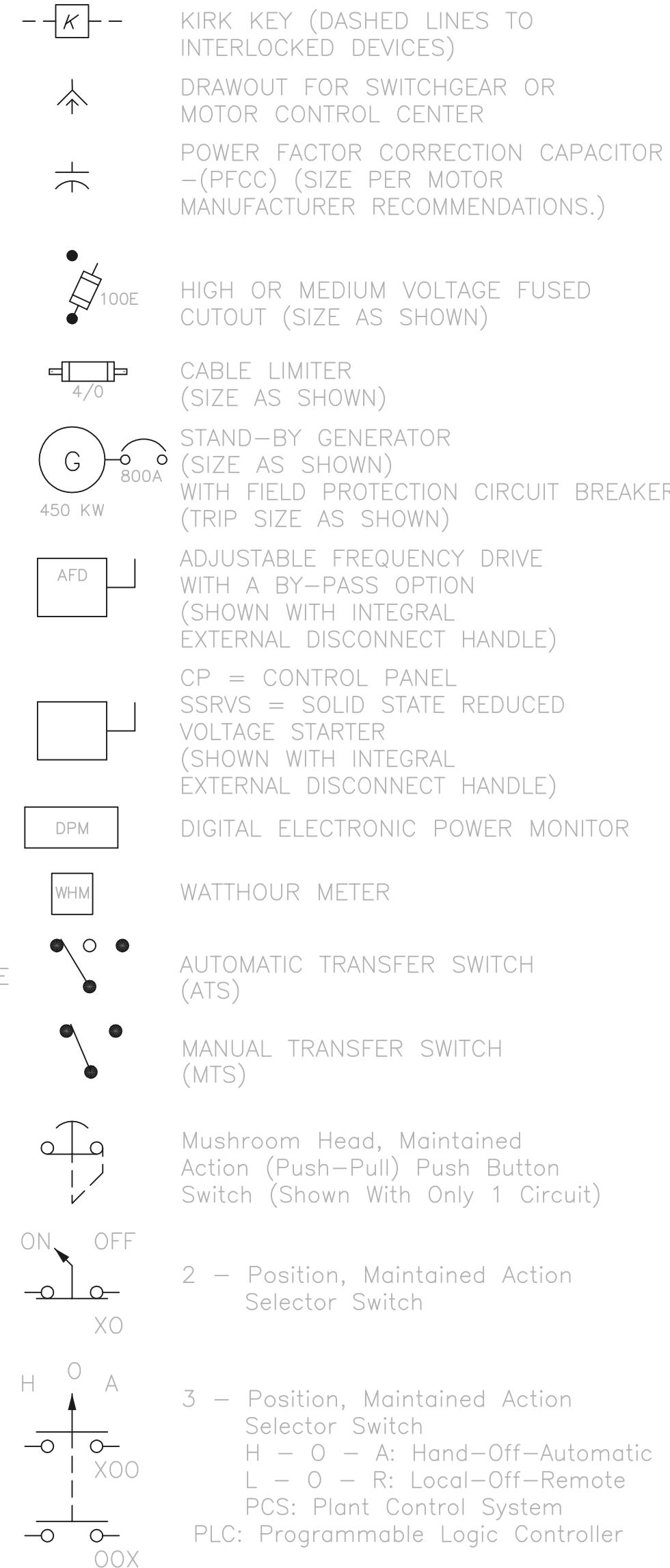
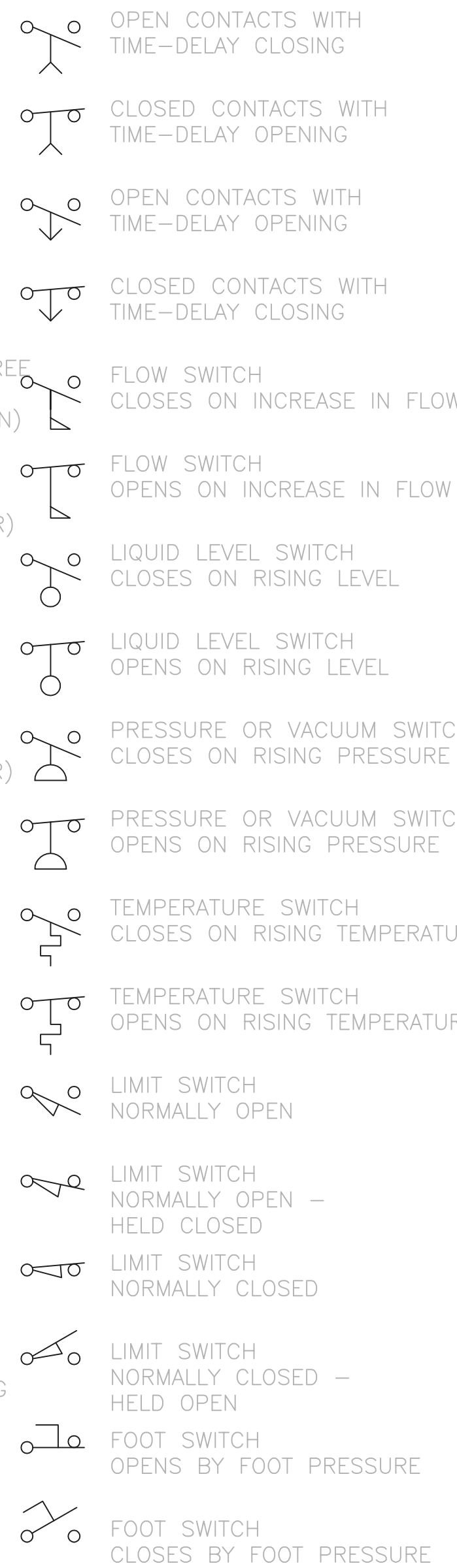
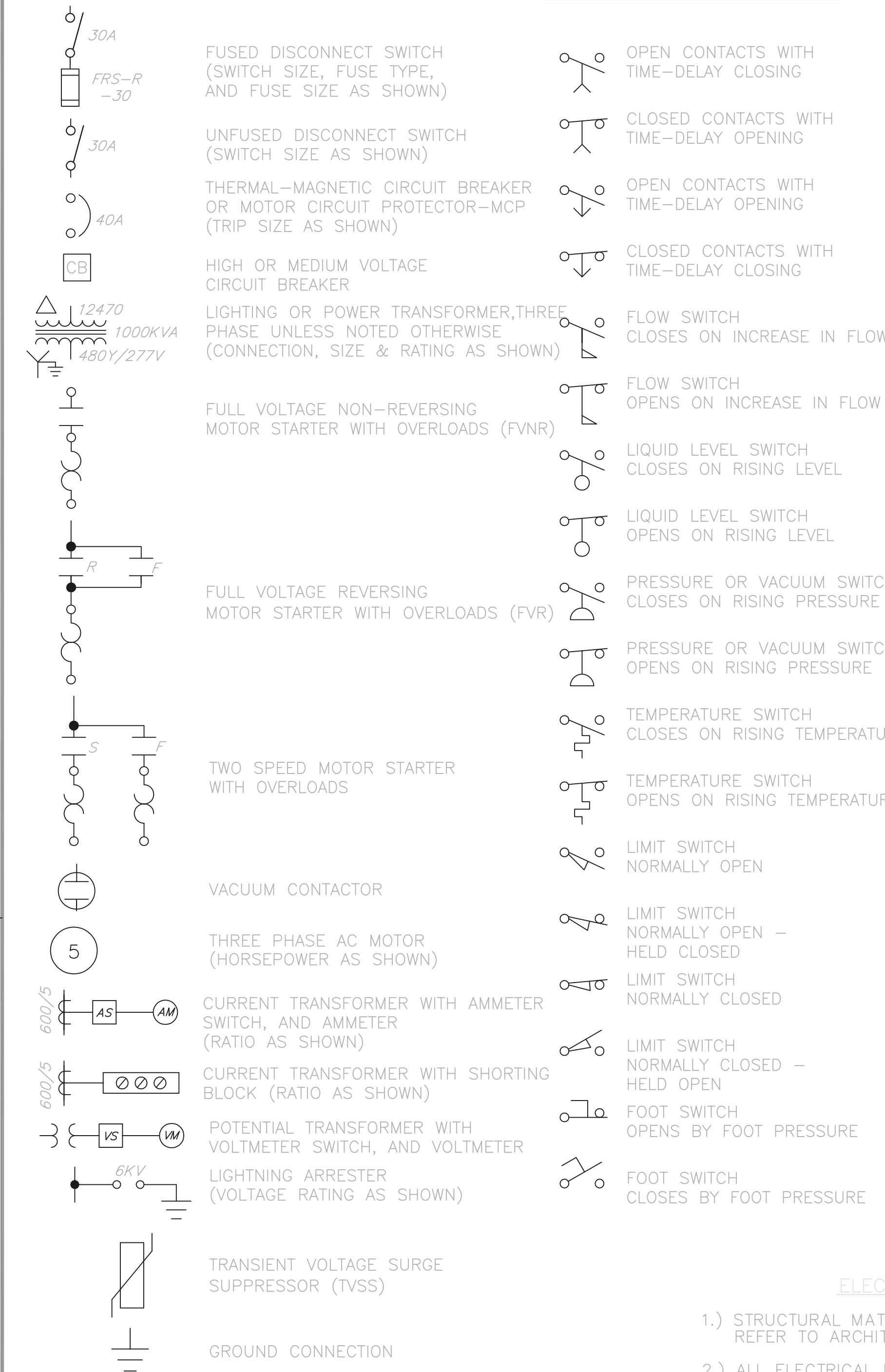
DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
MISC. HVAC DETAILS

SCALE:	
1/4" = 1'-0"	
SHEET NO.	OF
49	100

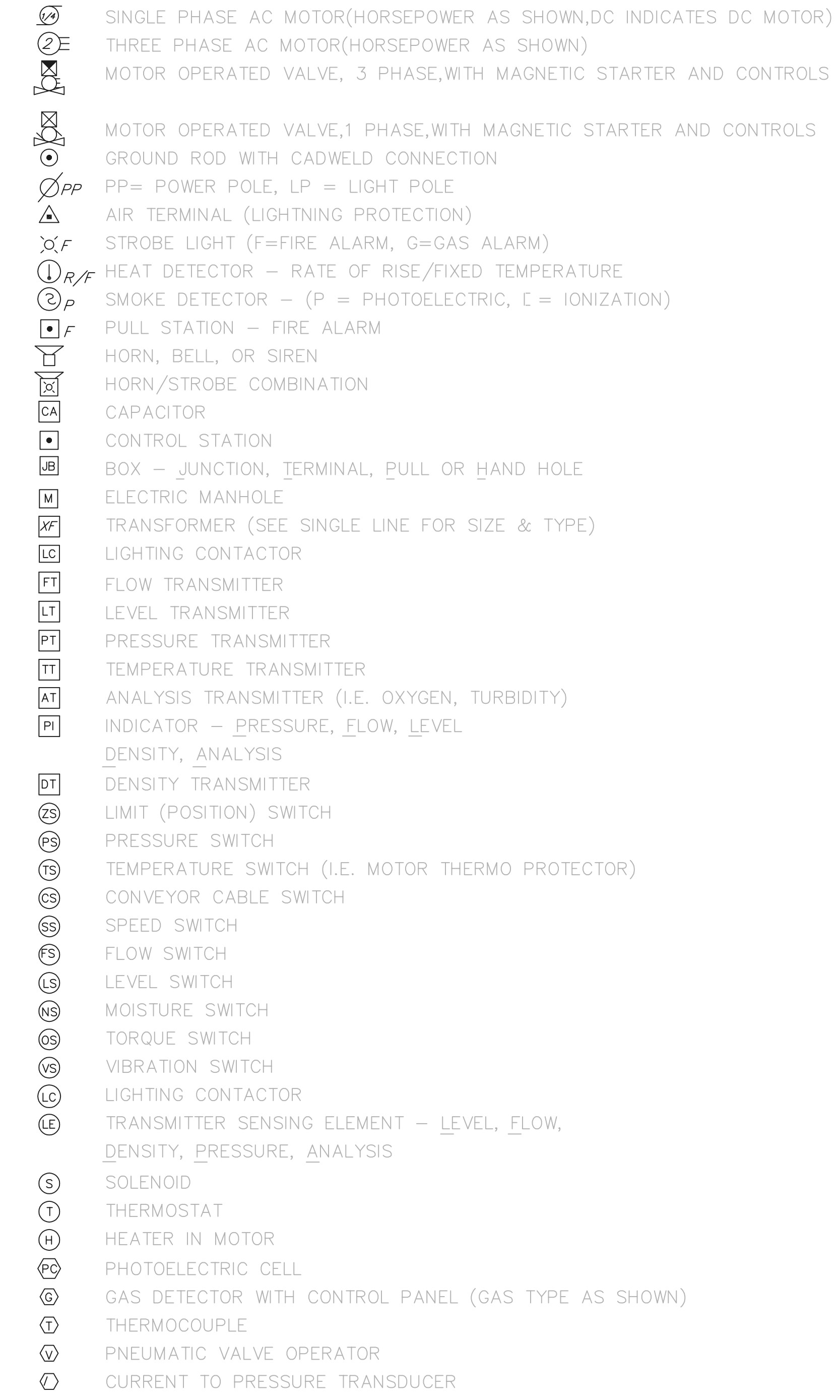
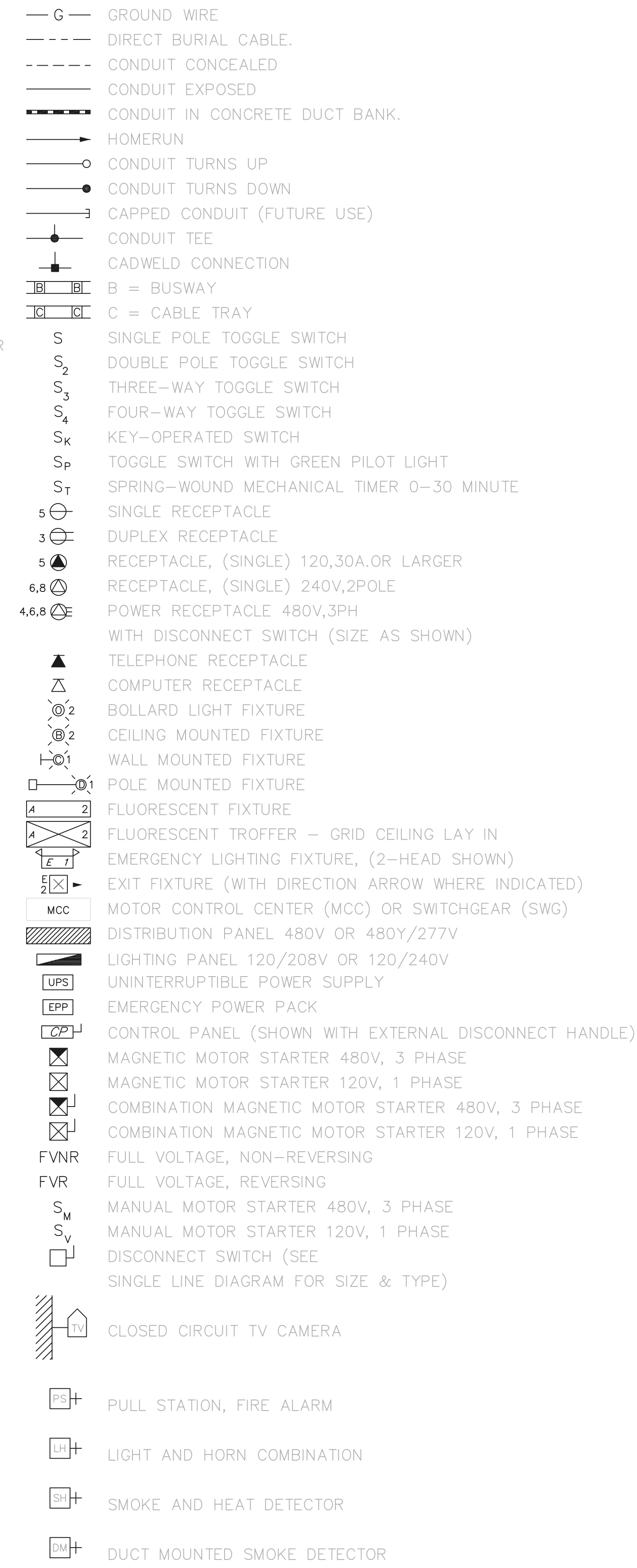
SINGLE LINE DIAGRAM LEGEND



ELECTRICAL NOTES

- STRUCTURAL MATERIALS ARE NOT SHOWN ON ELECTRICAL DRAWINGS. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS.
- ALL ELECTRICAL EQUIPMENT ELEVATIONS SHOWN ARE TO BOTTOM OF DEVICE OR PANEL, UNLESS OTHERWISE NOTED.
- NUMBER SHOWN (I.E.11735), INDICATES A SPECIFICATION REFERENCE FOR ITEMS OTHER THAN DIVISION 16. THE ELECTRICAL ITEM UNDER THIS REFERENCE IS SUPPLIED BY THE GENERAL CONTRACTOR. UNLESS OTHERWISE NOTED IN THAT SPECIFICATION, THE ELECTRICAL CONTRACTOR SHALL INSTALL AND WIRE THE ITEM PER THE DRAWINGS AND DIVISION 16 SPECIFICATIONS.
- CONTROL WIRING SHALL CONFORM TO ALL REQUIREMENTS AS SHOWN ON THE P & ID DRAWINGS WHETHER SHOWN ON THE ELECTRICAL DRAWINGS OR NOT.
- WHERE LINES ARE SHOWN CONNECTING ELECTRICAL EQUIPMENT, THEY ARE NOT INTENDED AS CONDUIT ROUTING. CONTRACTOR SHALL ROUTE ALL CONDUIT RUNS (SHOWN OR NOT) PER DIVISION 16 SPECIFICATIONS.
- WP INDICATES WATERPROOF. LETTER ON LIGHT FIXTURE INDICATES TYPE, PER SECTION 16500. NUMBER WITH LIGHT FIXTURE OR RECEPTACLE INDICATES CIRCUIT NUMBER.

ELECTRICAL PLAN LEGEND



MOTOR STARTER ABBREVIATIONS

- FVNR - FULL VOLTAGE, NON-REVERSING
- FVR - FULL VOLTAGE REVERSING
- TS1W - TWO SPEED, ONE WINDING
- TS2W - TWO SPEED, TWO WINDING
- TSR1W - TWO SPEED REVERSING, ONE WINDING
- TSR2W - TWO SPEED REVERSING, TWO WINDING

MISCELLANEOUS ABBREVIATIONS

A.E.P. - AMERICAN ELECTRIC POWER

RECORD DRAWING

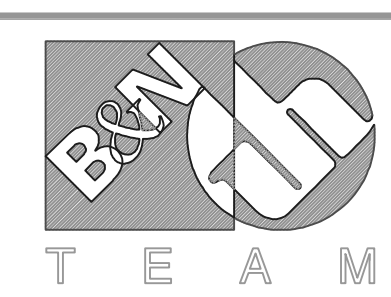
NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".

FIRM **Jones & Henry Engineers, Ltd.** DATE 08/07/02 MO. / DAY / YR.

© BNWW0201

TOL-4714E51
03/01/02 04-002
P:\PR24025\PMFSTARECDWG\50.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

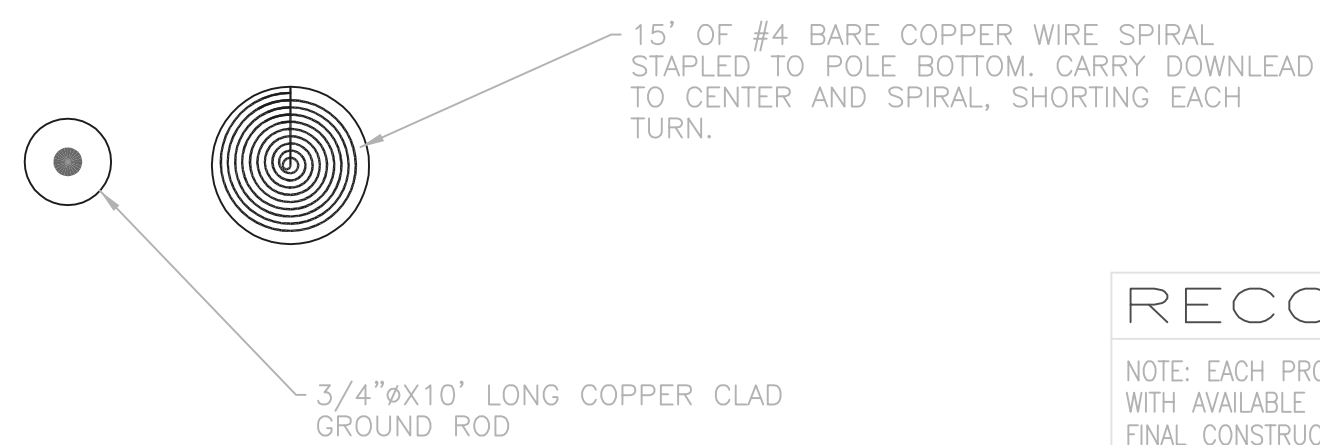
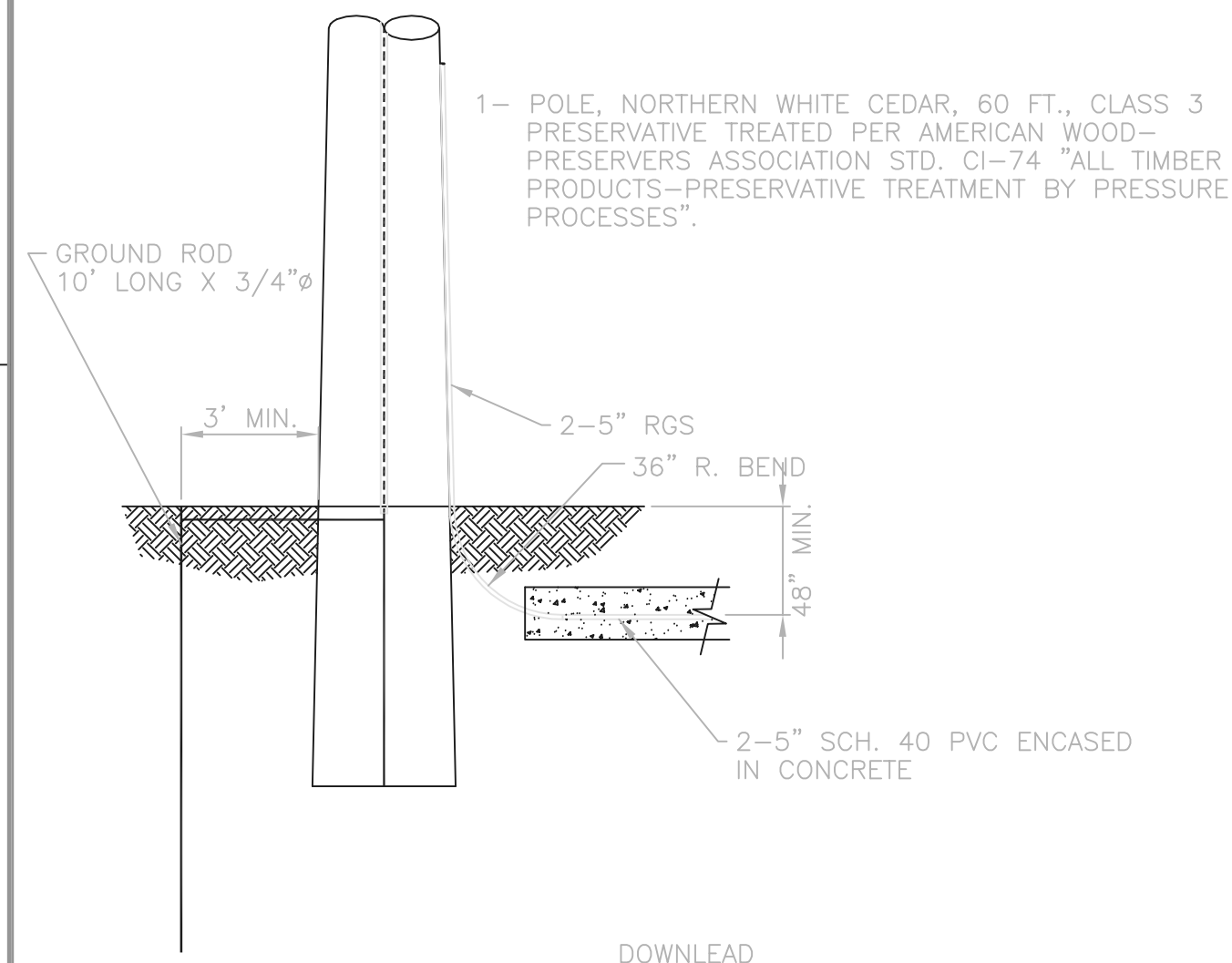
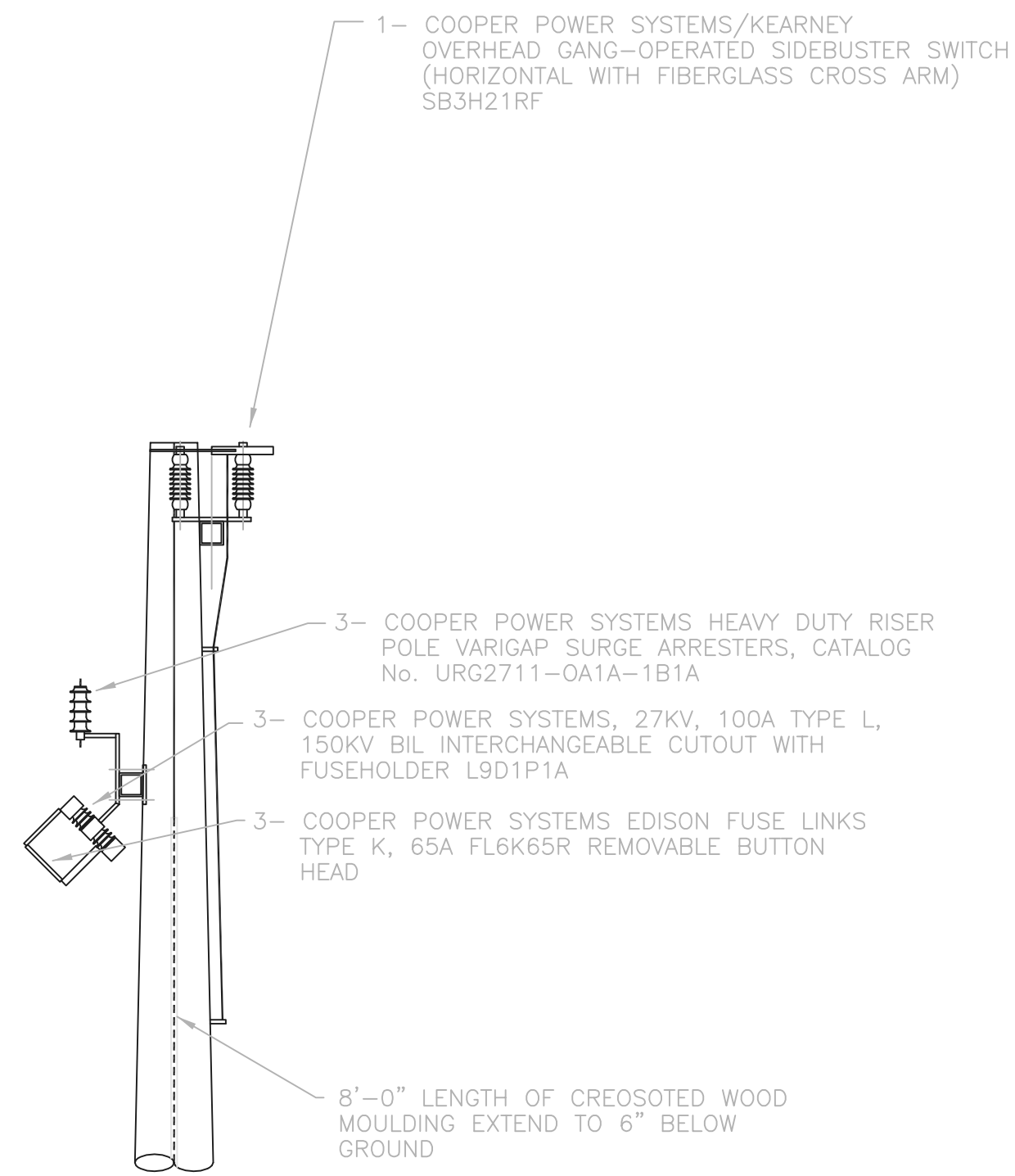
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	DLH
DRAWN BY:	KMH
CHECKED BY:	DLH
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
ELECTRICAL LEGEND

SCALE:	
NONE	
SHEET NO.	OF
50	100

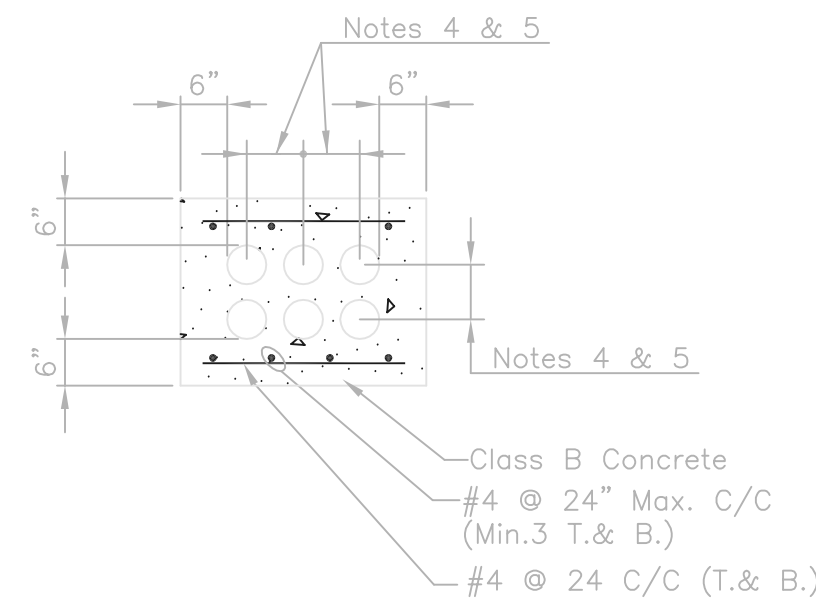
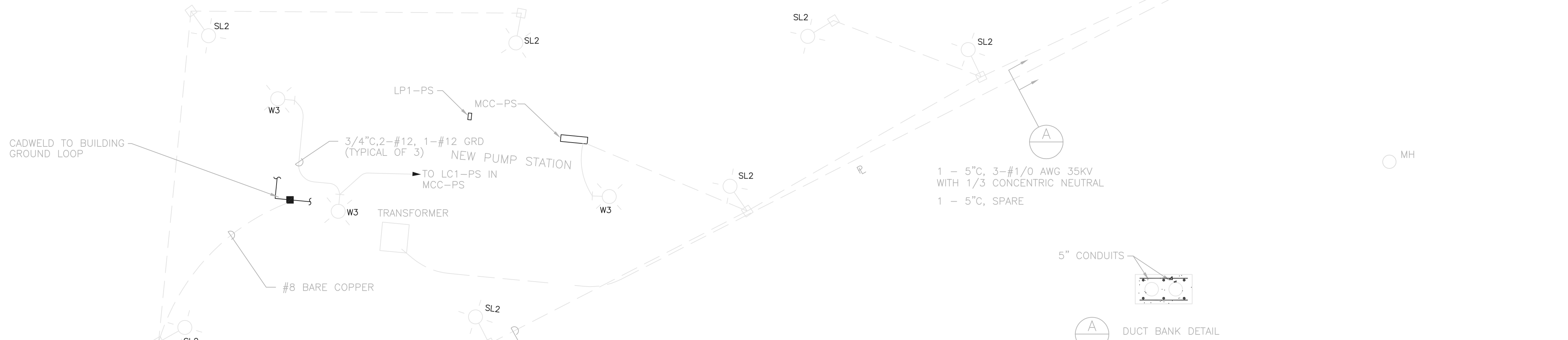


35KV RISER POLE
NTS
(BY CONTRACTOR)

RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM **Jones & Henry Engineers, Ltd.** DATE 08/07/02
MO. / DAY / YR.

BNWW0201

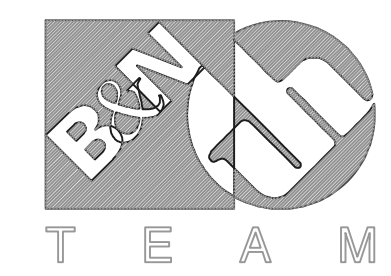


TYPICAL UNDER PAVEMENT CONDUIT DETAIL
NTS

- NOTES:
- ALL DUCT BANKS TO BE REINFORCED UNDER ALL EXISTING & PROPOSED ROADS, DRIVES AND PARKING AREAS.
 - REINFORCING TO EXTEND A MINIMUM OF 5'-0" FROM EACH SIDE OF PAVEMENT.
 - REINFORCING SHOWN IS TYPICAL FOR ALL SIZES OF DUCT BANKS.
 - 7 1/2" MIN. SPACING EXCEPT TO SIGNAL COND.
 - SIGNAL CONDUITS TO BE MAINTAINED 12" MIN. FROM ALL OTHER .
 - THE CONCRETE ENCASUREMENT OF ANY NUMBER OF CONDUITS ONE OR SIX CONDUIT(S) SHALL USE THIS DETAIL AS AN EXAMPLE OF AN INSTALLATION. CROSS SECTIONAL SIZE SHALL VARY WITH THE NUMBER OF CONDUITS REQUIRED.
 - SEE SHEET 54 FOR SITE LIGHTING LUMINAIRE SCHEDULE.
 - SEE SHEET 61 FOR LIGHT POLE BASE DETAIL. OBTAIN ALL FOUNDATION DIMENSIONS FROM THE LIGHTING MANUFACTURER BEFORE INSTALLING ANCHOR BOLTS AND CONDUITS.
 - SEE SHEET 20 FOR PAD MOUNTED TRANSFORMER PAD DETAIL
 - TRENCH AND DUCT BANK FROM NEW RISER POLE BY CONTRACTOR. 35 KV CABLE AND TERMINATIONS ON METERING POLE AND LINE SIDE OF GANG OPERATED SWITCH ON RISER POLE, AND C.T.'S AND P.T.'S BY A.E.P. ALL OTHER 35 KV CABLE AND TERMINATIONS BY CONTRACTOR.
 - LOCATE KV RISER POLE CENTER LINE 35 FEET FROM CENTER LINE OF A.E.P. POLE, AND 13 FEET FROM EAST EDGE OF ENTRANCE DRIVEWAY PAVEMENT.

TOL-4714E32-001
08/06/02 06-002
P:\PR24025\PMPS\REC'DWG\51.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

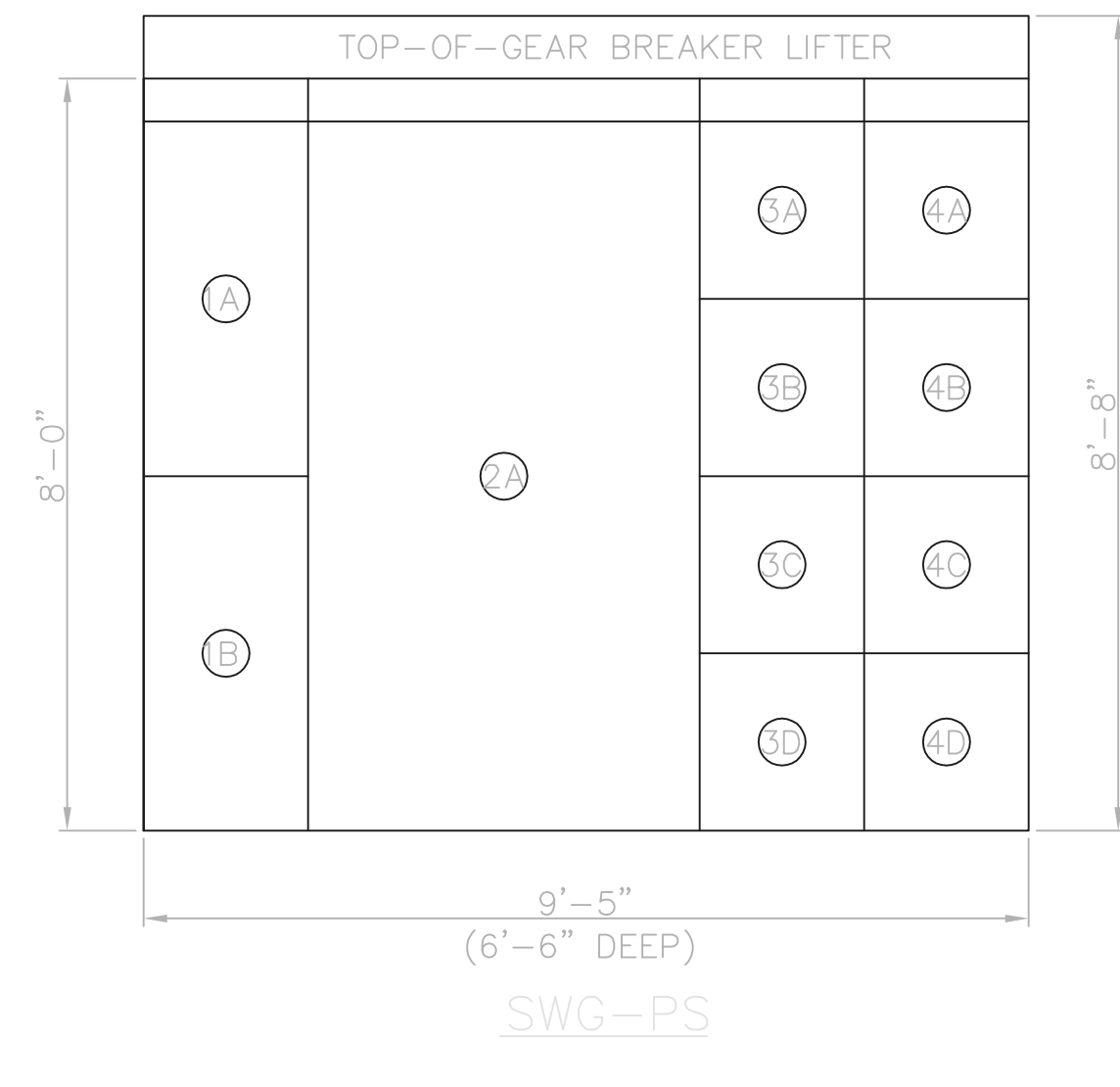
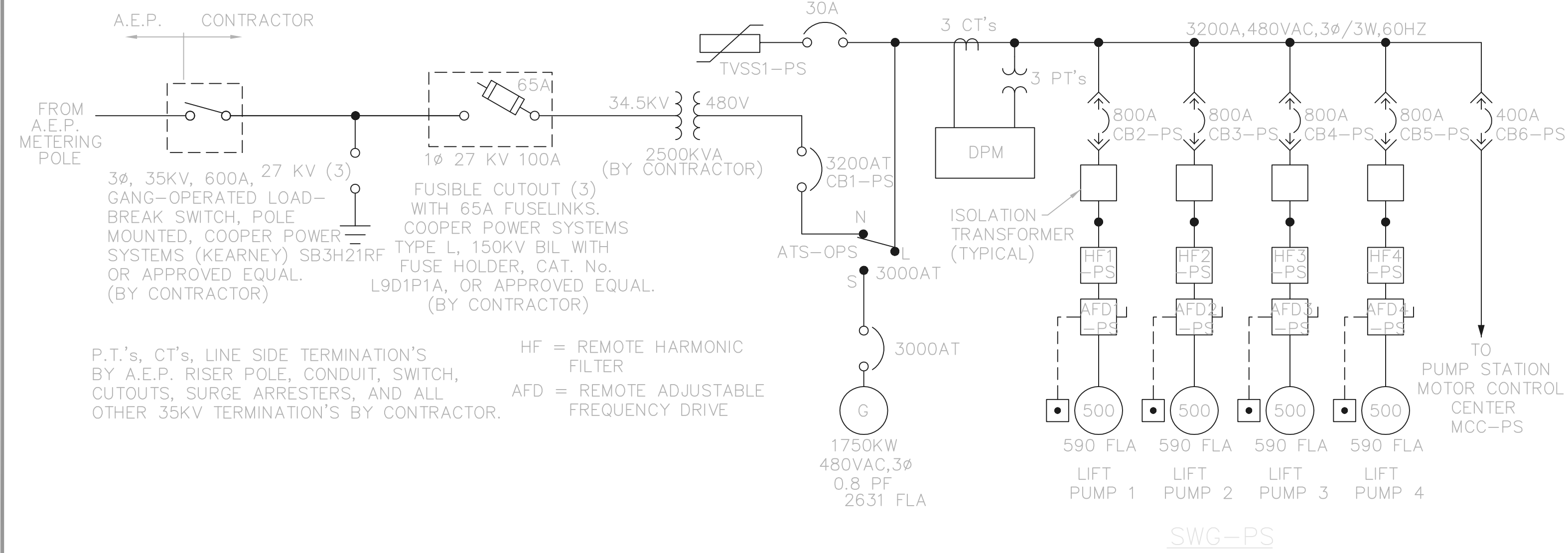
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

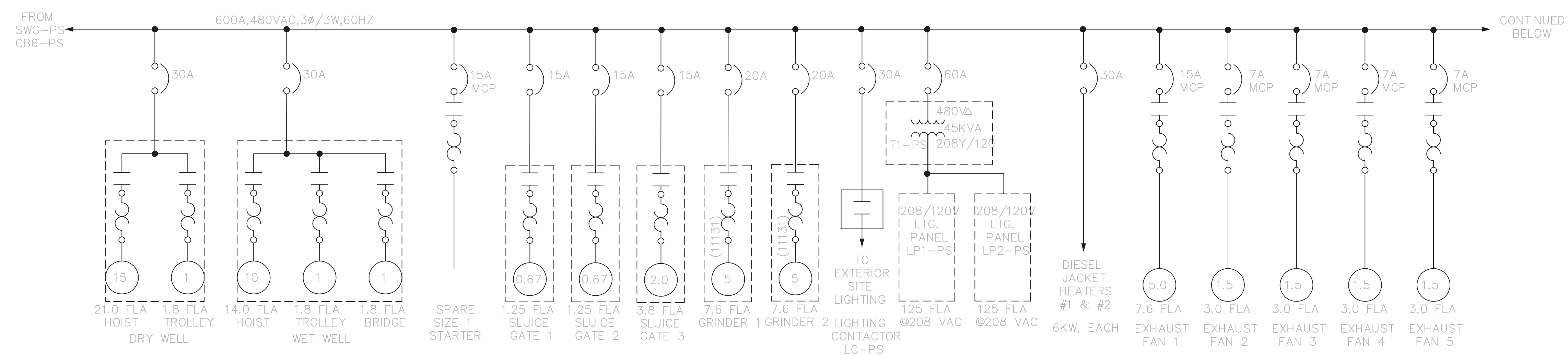
PUMP STATION
ELECTRICAL SITE PLAN

SCALE:	
1=20'	
SHEET NO.	OF
51	100

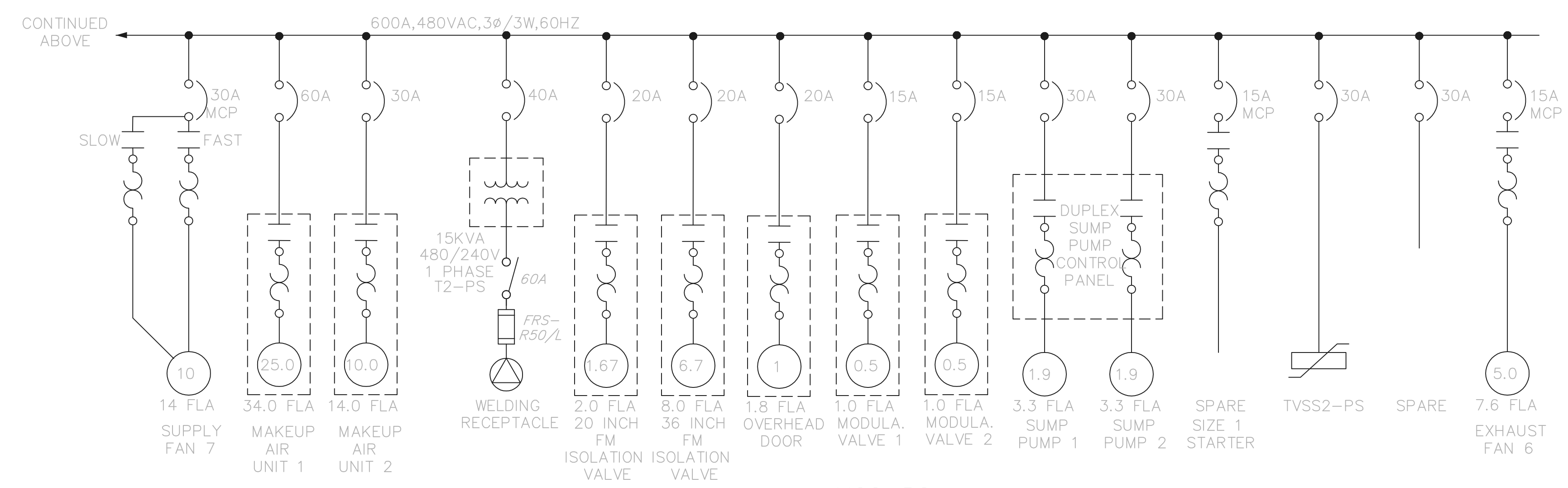


SWG-PS	
POSITION	LEGEND PLATES
1A	SERVICE ENTRANCE METERING / TRANSIENT VOLTAGE SURGE SUPPRESSOR (TVSS1-PS)
1B	SERVICE ENTRANCE MAIN DISCONNECT (SE-PS)
2A	AUTOMATIC TRANSFER SWITCH (ATS-PS)
3A	----- NONE -----
3B	MOTOR CONTROL CENTER FEED (MCC-PS)
3C	LIFT PUMP 1 (HF1-PS & AFD1-PS)
3D	LIFT PUMP 2 (HF2-PS & AFD2-PS)
4A	----- NONE -----
4B	----- NONE -----
4C	LIFT PUMP 3 (HF3-PS & AFD3-PS)
4D	LIFT PUMP 4 (HF4-PS & AFD4-PS)

SWG-PS SWITCH GEAR LEGEND PLATES



MCC-PS



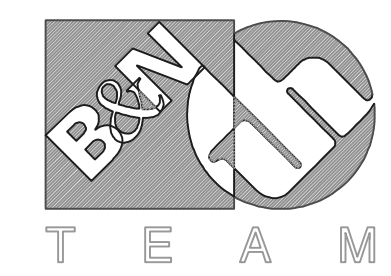
MCC-PS

RECORD DRAWING
NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM **Jones & Henry Engineers, Ltd.** DATE 08/07/02 MO. / DAY / YR.

© BNWW0201

TOL-4714E23-001
09/10/02 10-002
P:\PR24025\NMP\STARECDWG\52.DWG

NO.	REVISIONS	DATE	BY	CHK.



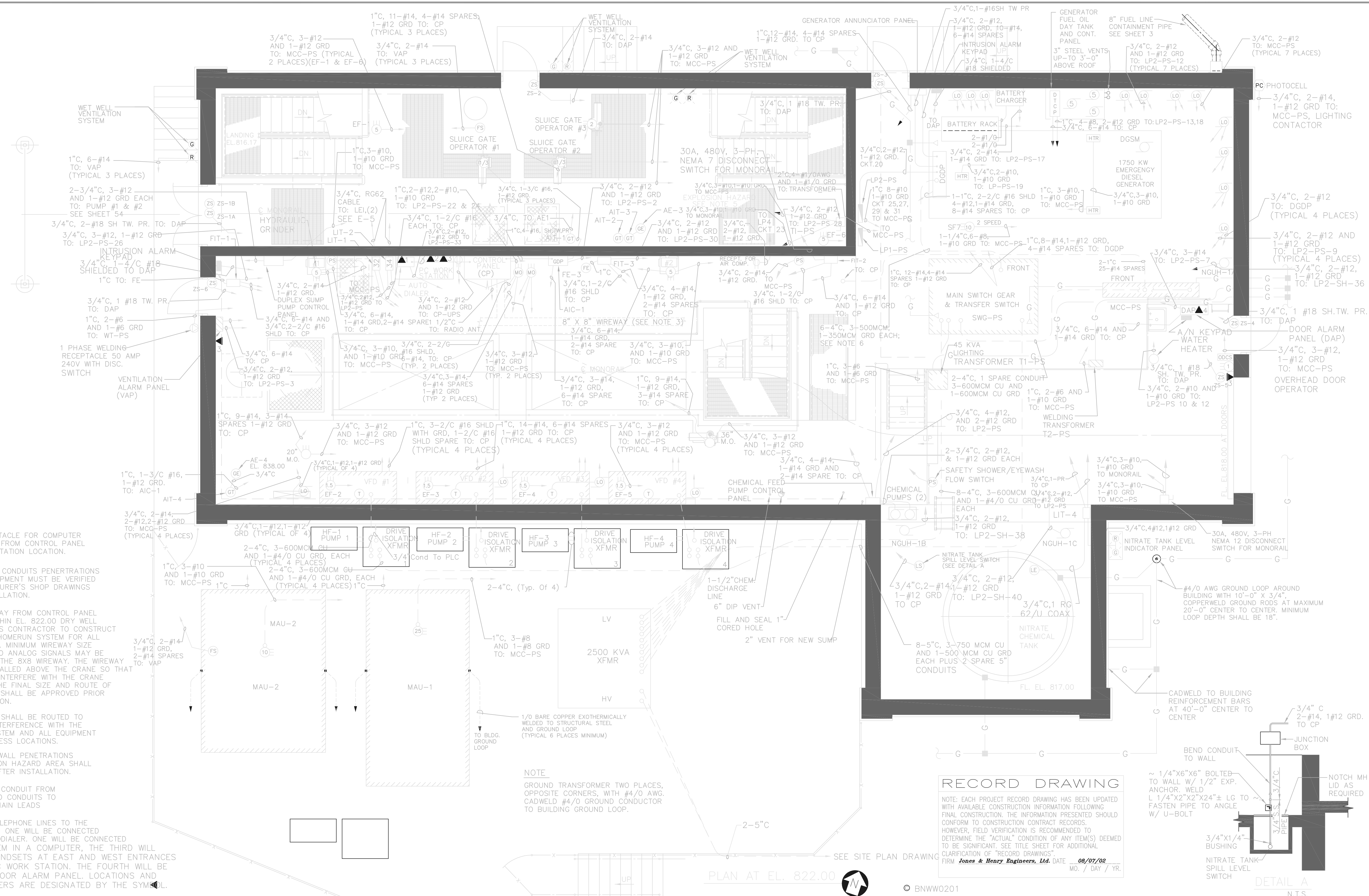
Burgess & Niple, Limited
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	DLH
DRAWN BY:	BEF
CHECKED BY:	DLH
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
ELECTRICAL
SINGLE LINE DIAGRAM, SWG-PS & MCC-PS

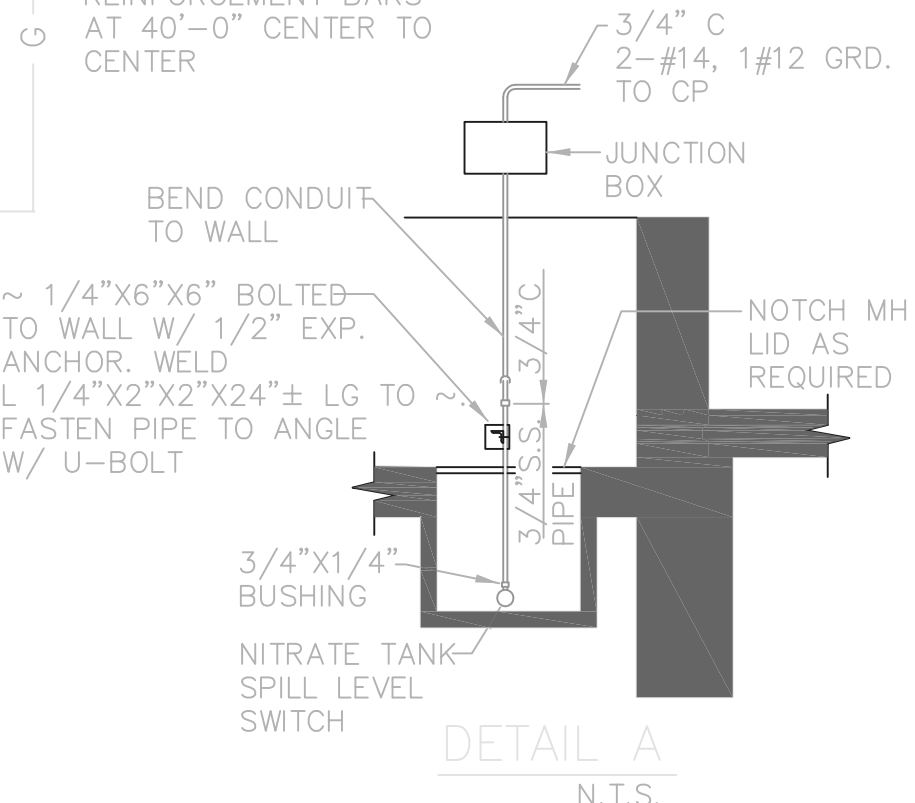
SCALE:		NONE
SHEET NO.	OF	
52	100	



- NOTES**
- INSTALL RECEPTACLE FOR COMPUTER WORK STATION FROM CONTROL PANEL UPS TO WORKSTATION LOCATION.
 - UNDERGROUND CONDUITS PENETRATIONS BETWEEN EQUIPMENT MUST BE VERIFIED ON MANUFACTURER'S SHOP DRAWINGS BEFORE INSTALLATION.
 - INSTALL WIREWAY FROM CONTROL PANEL TO AREAS WITHIN EL. 822.00 DRY WELL TO ALLOW THIS CONTRACTOR TO CONSTRUCT A COMPLETE HOMERUN SYSTEM FOR ALL FIELD DEVICES. MINIMUM WIREWAY SIZE IS 8" X 8". NO ANALOG SIGNALS MAY BE INSTALLED IN THE 8X8 WIREWAY. THE WIREWAY MUST BE INSTALLED ABOVE THE CRANE SO THAT IT DOES NOT INTERFERE WITH THE CRANE OPERATION. THE FINAL SIZE AND ROUTE OF THE WIREWAY SHALL BE APPROVED PRIOR TO INSTALLATION.
 - ALL CONDUITS SHALL BE ROUTED TO AVOID ANY INTERFERENCE WITH THE MONORAIL SYSTEM AND ALL EQUIPMENT REMOVAL ACCESS LOCATIONS.
 - ALL CONDUIT WALL PENETRATIONS INTO EXPLOSION HAZARD AREA SHALL BE SEALED AFTER INSTALLATION.
 - USE FLEXIBLE CONDUIT FROM UNDERGROUND CONDUITS TO GENERATOR MAIN LEADS
 - PROVIDE 4 TELEPHONE LINES TO THE LIFT STATION. ONE WILL BE CONNECTED TO THE AUTODIALER. ONE WILL BE CONNECTED TO A MODEM IN A COMPUTER. THE THIRD WILL BE FOR HANDSETS AT EAST AND WEST ENTRANCES AND AT PC WORK STATION. THE FOURTH WILL BE FOR THE DOOR ALARM PANEL. LOCATIONS AND LINE NUMBERS ARE DESIGNATED BY THE SYMBOL.

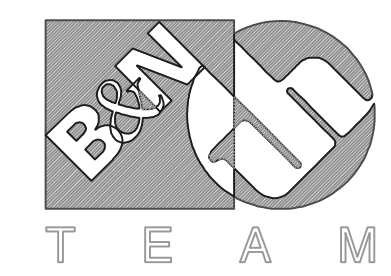
NOTE
GROUND TRANSFORMER TWO PLACES, OPPOSITE CORNERS, WITH #4/0 AWG. CADWELD #4/0 GROUND CONDUCTOR TO BUILDING GROUND LOOP.

RECORD DRAWING
NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
MO. / DAY / YR.



THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE
08/09/02 06-002
P:\PR24025\NIPM\STARECD\W3.DWG

NO.	REVISIONS	DATE	BY	CHK.
1	FUEL OIL TANK RELOCATION	2/6/01	CCW	



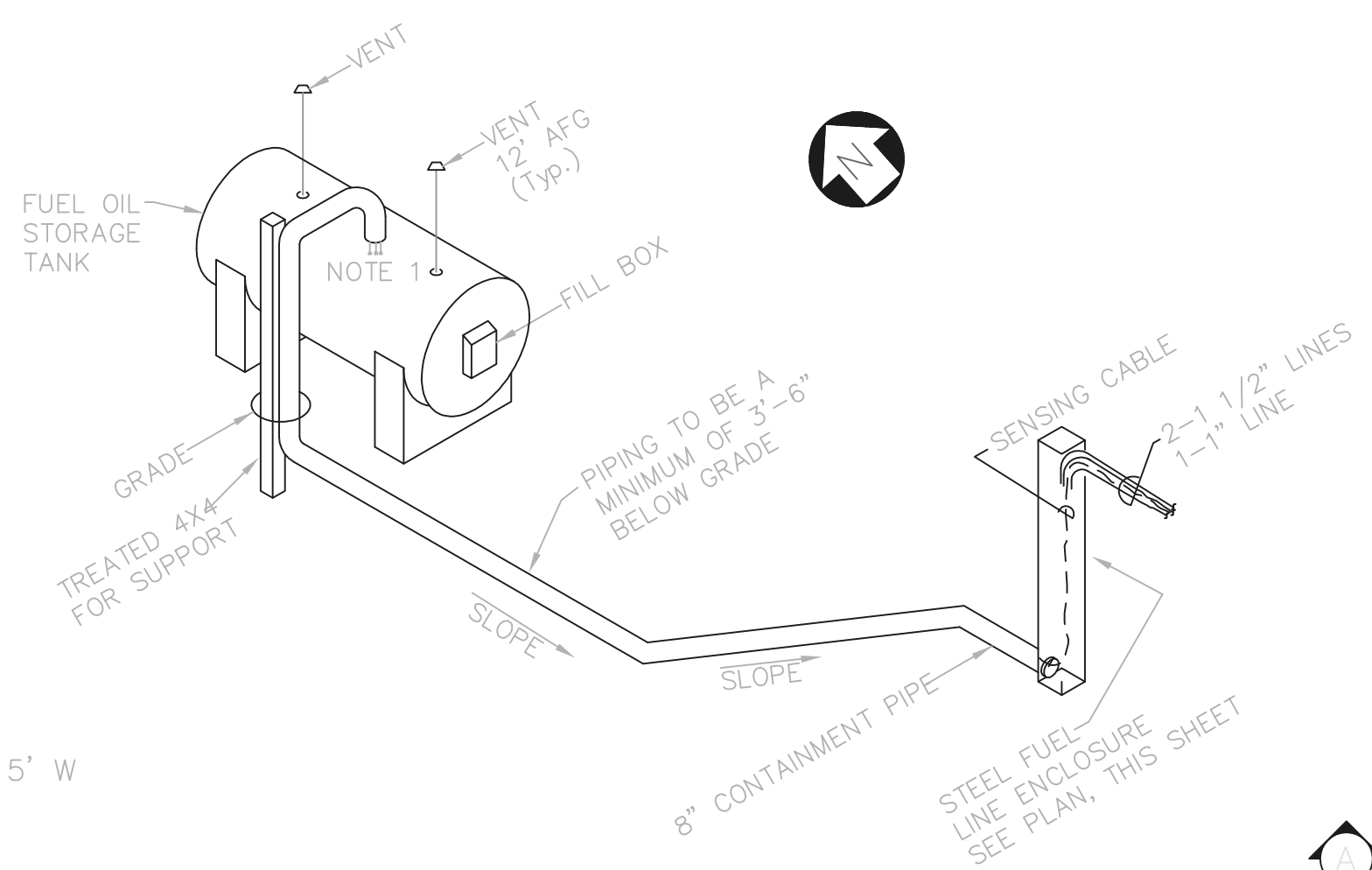
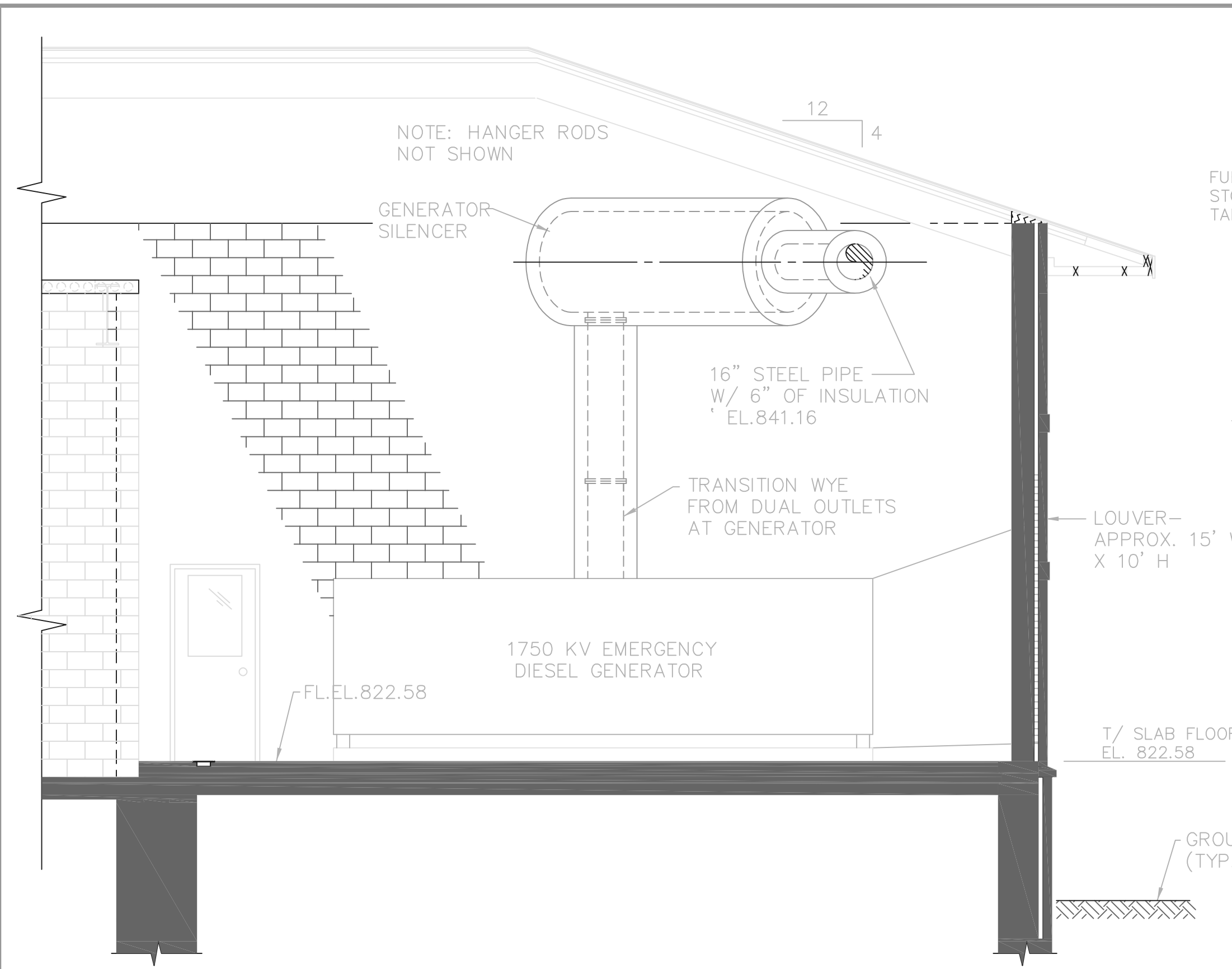
Burgess & Niple, Limited
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	DLH
DRAWN BY:	KMH
CHECKED BY:	DLH
APPROVED BY:	SLW
DATE:	1999

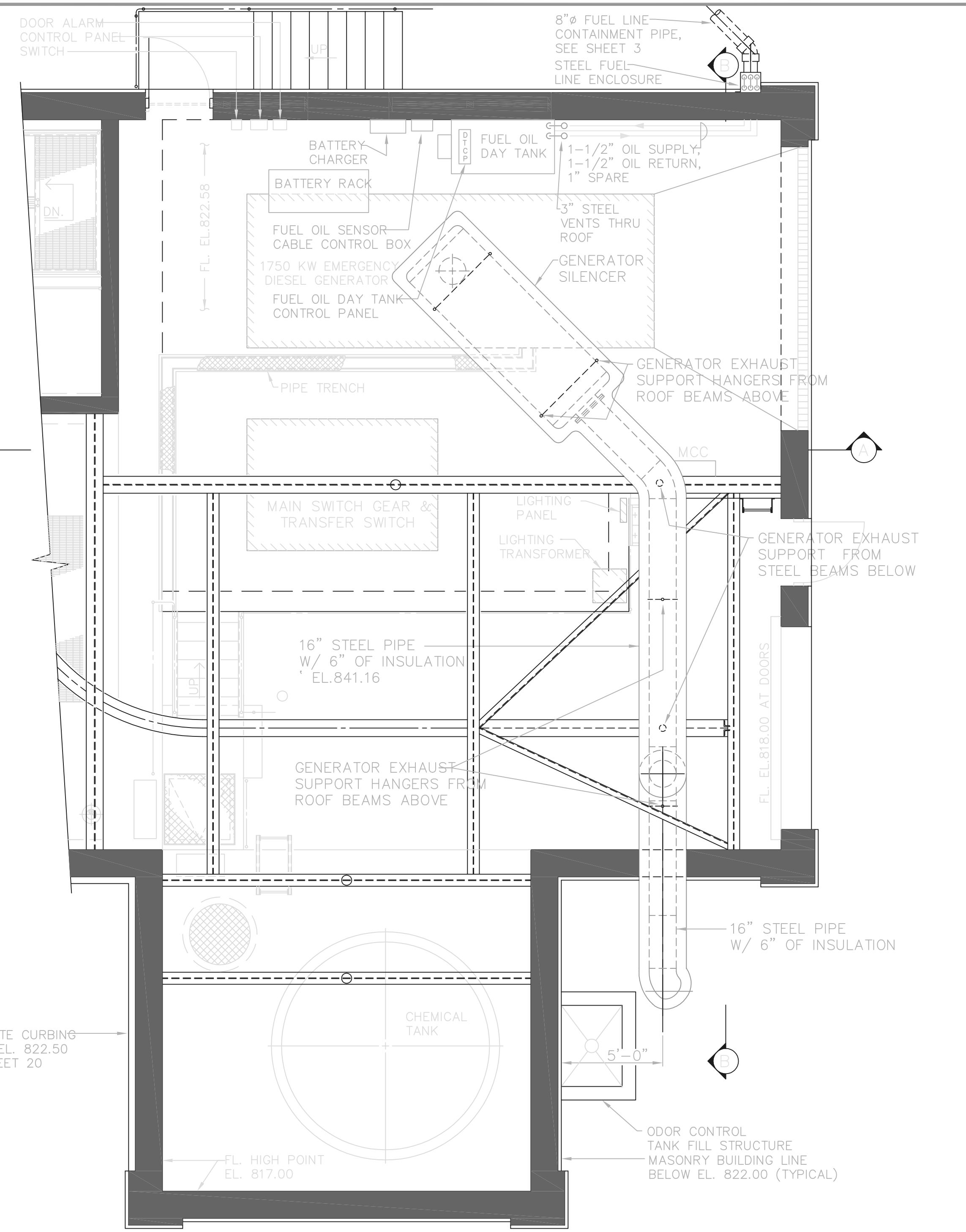
PUMP STATION
ELECTRICAL
PLAN AT EL. 822.50

SCALE:	1/4" = 1'-0"
SHEET NO.	53
OF	100

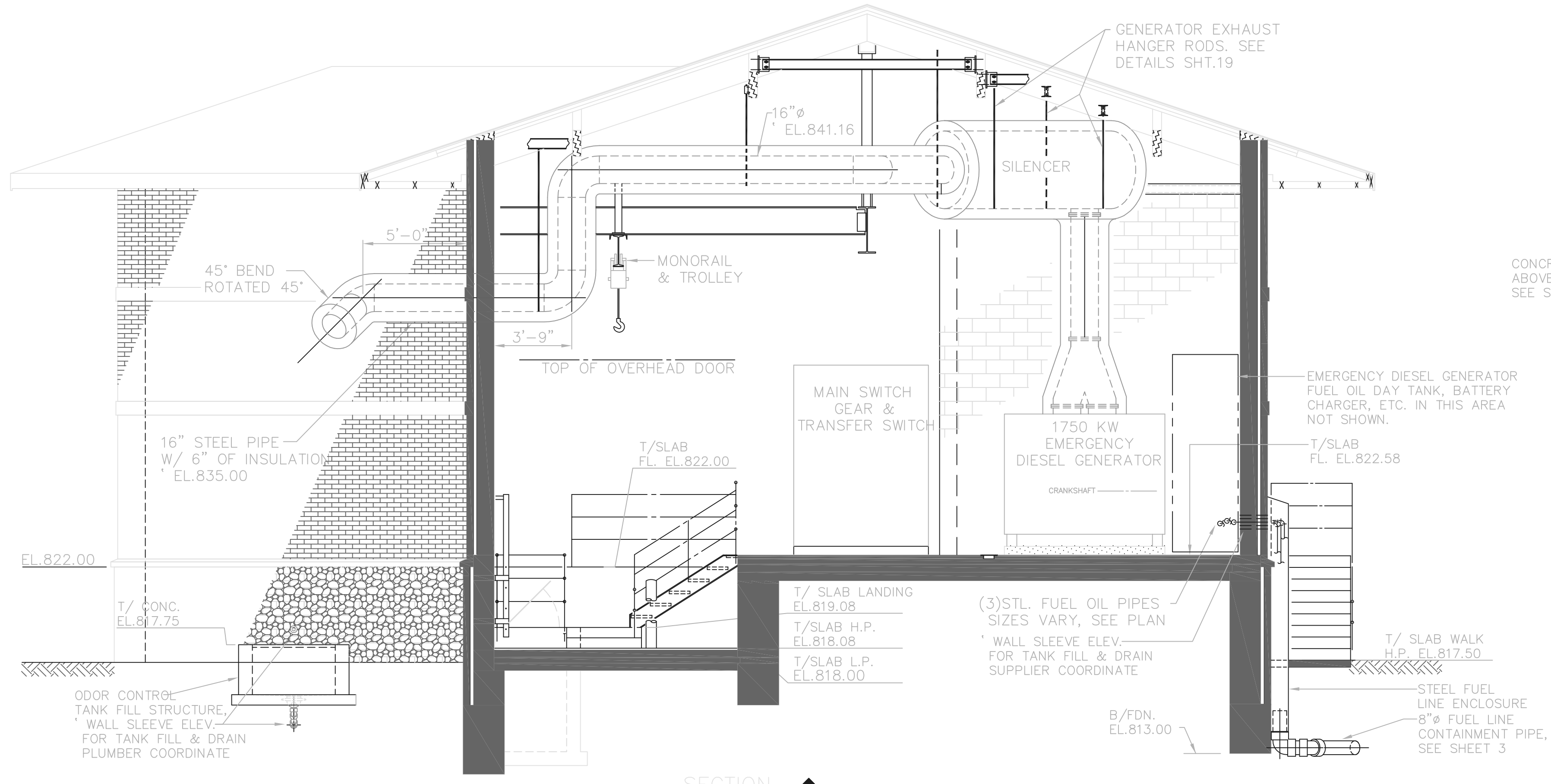


FUEL OIL PIPING ISOMETRIC
 NOTE: ELECTRIC CONTRACTOR SHALL FURNISH AND INSTALL THE ENTIRE FUEL OIL SYSTEM IN CONJUNCTION WITH THE GENERATOR SYSTEMS

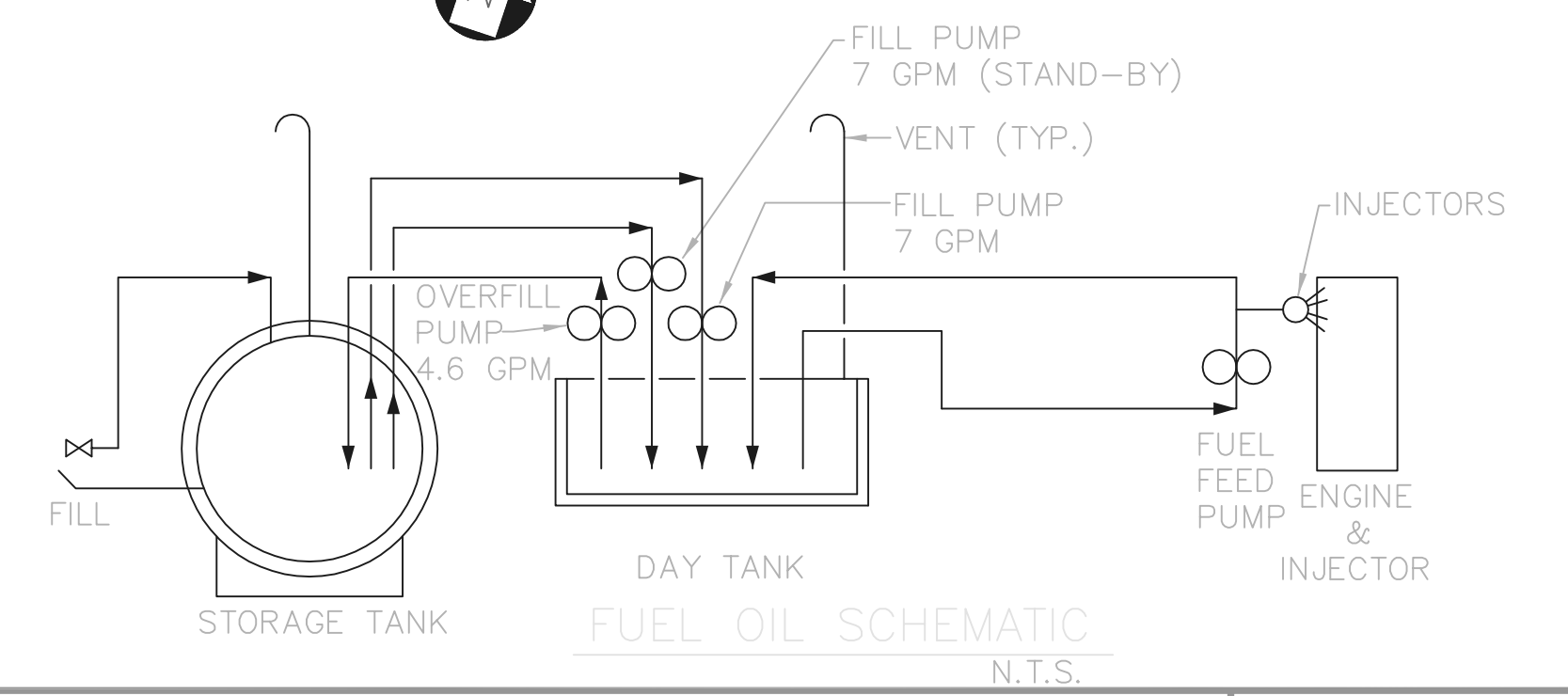
RECORD DRAWING
 NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
 FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
 MO. / DAY / YR.



PLAN AT EL. 822.58

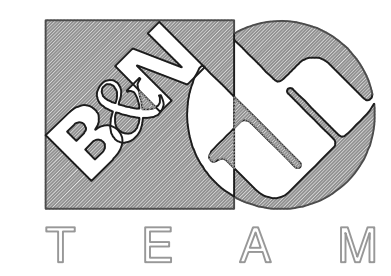


SECTION B



THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE
 TOL-4714EB6-001
 08/06/02 06-V02
 P:\PR24025\PMF\STARECDWG\53A.DWG

NO.	REVISIONS	DATE	BY	CHK.



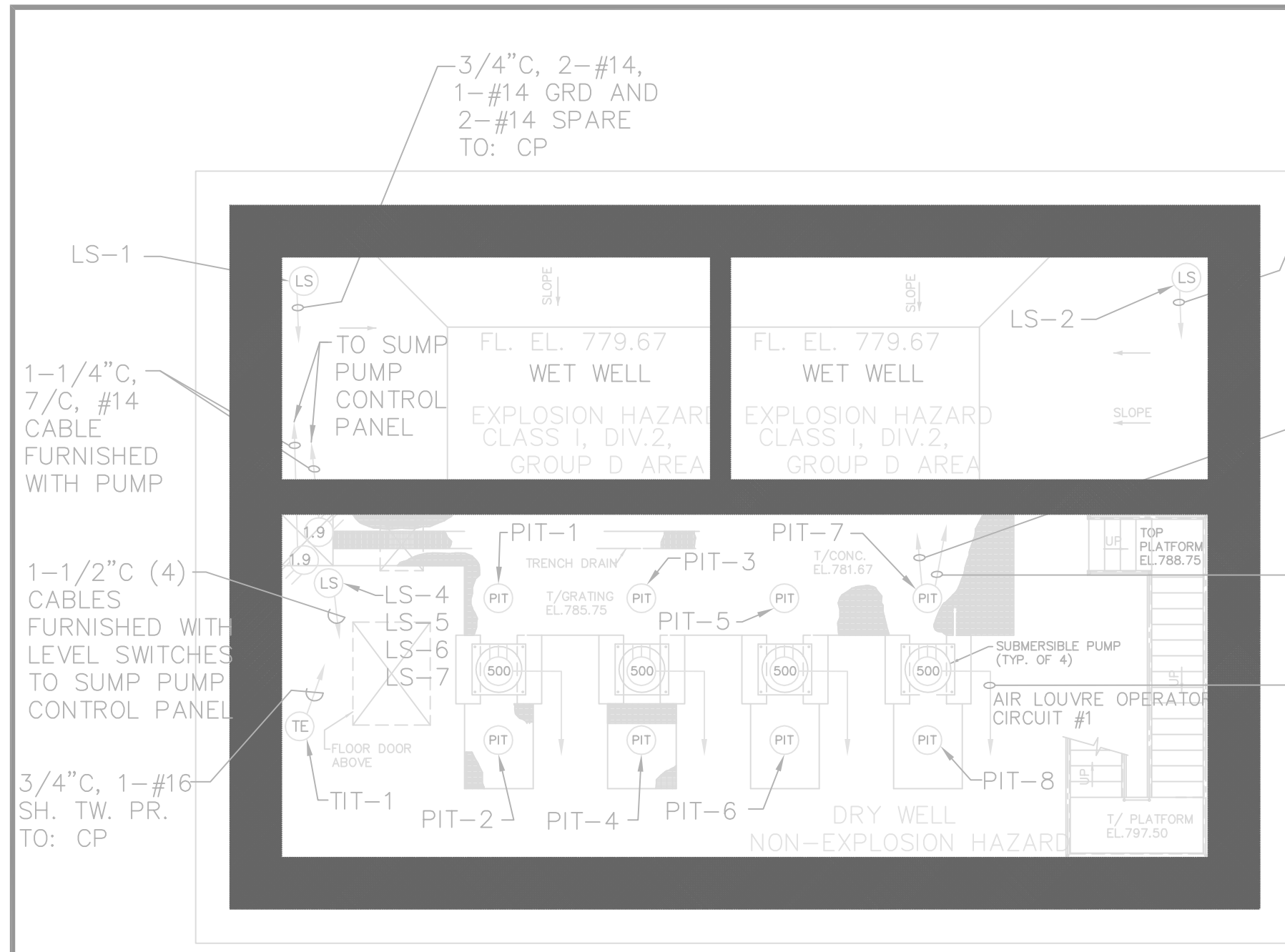
Burgess & Niple, Limited
 Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

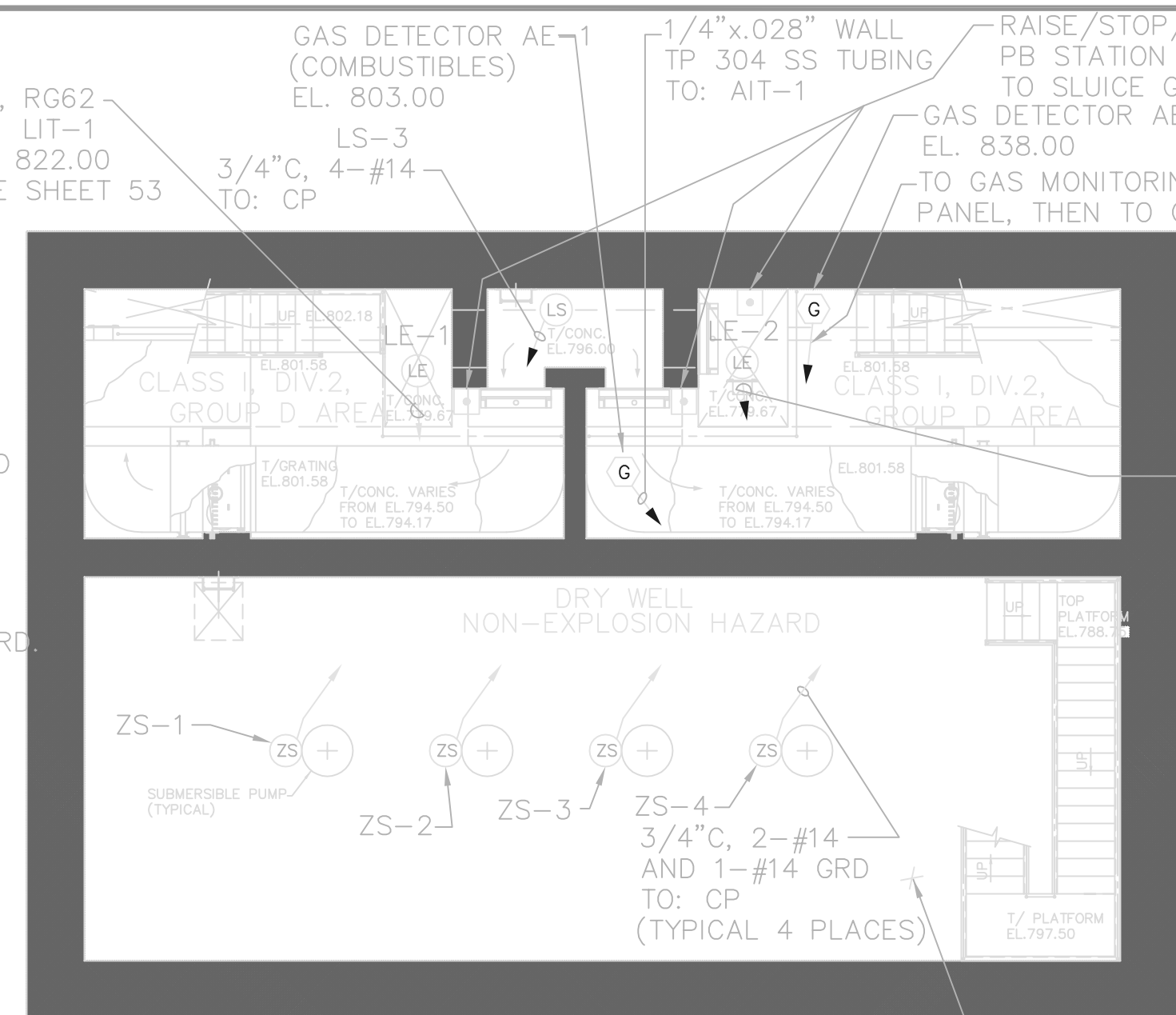
JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	RCD
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
 ELECTRICAL
 EMERGENCY GENERATOR SILENCER DETAILS
 PLAN AT EL. 822.58 & SECTIONS

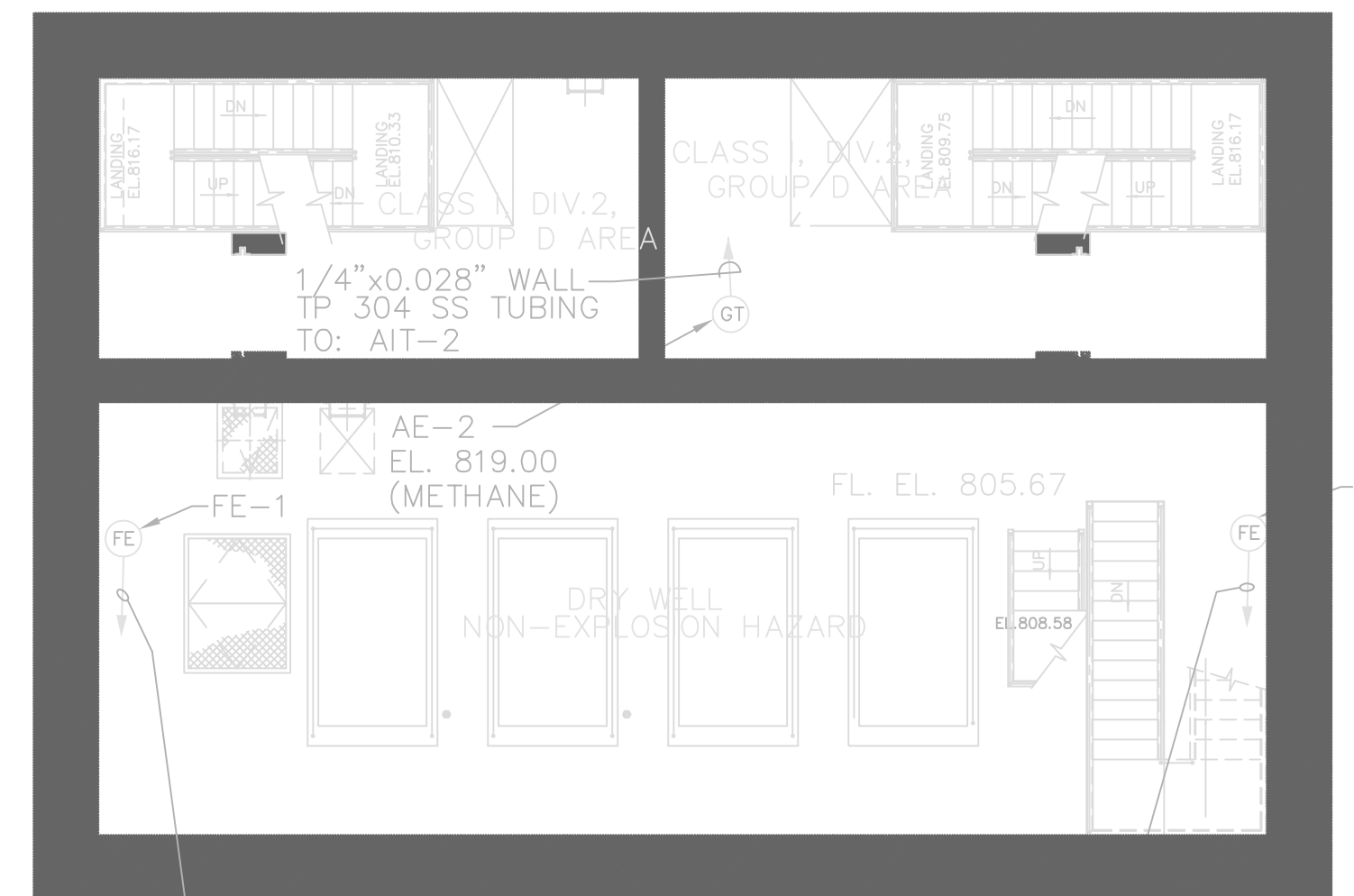
SCALE:	1/4" = 1'-0"
SHEET NO.	53A
OF	100



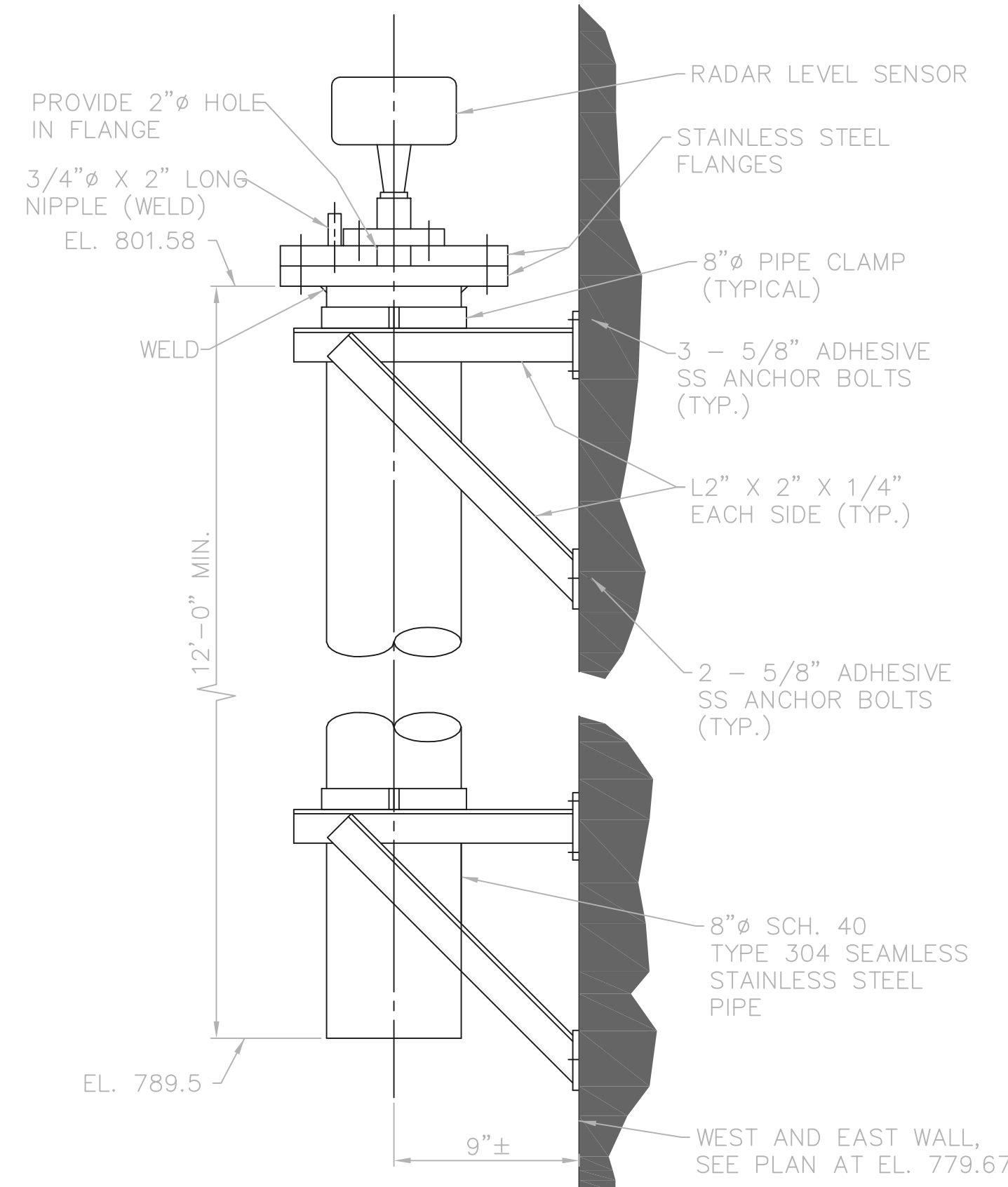
PLAN AT EL. 779.67



PLAN AT EL. 801.58



PLAN AT EL. 805.67



RADAR LEVEL SENSOR (LS) PIPE SLEEVE DETAIL NTS

LIGHTING LUMINAIRE SCHEDULE										
FIXTURE CODE ABBREVIATIONS					LAMP ABBREVIATIONS					
CL - CEILING MOUNT	P - PENDANT MOUNT	S - SITE LIGHT	FLR - FLUORESCENT	LPS - LOW PRESSURE SODIUM	INC - INCANDESCENT	HPS - HIGH PRESSURE SODIUM	MER - MERCURY VAPOR	HALO - HALOGEN	MH - METAL HALIDE	TUN - TUNGSTEN
R - RECESSED	E - EMERGENCY	B - BOLLARD	W - WALL MOUNT	X - EXIT SIGN						
FIXT CODE	MANUFACTURER	MODEL	OPTICS	TYPE	QTY	SIZE	VOLT	REMARKS		
SL 1	RUUD LIGHTING	WPR2515-5FBZ 16"x16" WITH 6" EXTENDED POLE 20"x4"x4" STEEL HINGED STEEL POLE, BRONZE FINISH, DUAL FUSING	TYPE III	HPS	1	150W	480	- PROVIDE 150W HPS LAMP - PROVIDE 16"x16" WEDGE LUMINAIRE - PROVIDE TYPE III OPTICS - PROVIDE 480 VOLT HIGH POWER FACTOR BALLAST WITH DUAL FUSING - PROVIDE 20"x4"x4" HINGED STEEL POLES - PROVIDE E-COAT EPOXY PRIMER WITH BRONZE ACRYLIC POWDER TOP COAT ON LUMINAIRE & POLE		
SL 2	RUUD LIGHTING	WPR2592-5FBZ 22"x22" WITH 6" EXTENDED POLE 20"x4"x4" STEEL HINGED STEEL POLE, BRONZE FINISH, DUAL FUSING	TYPE II/III FIELD ADJUSTABLE	HPS	1	250W	480	- PROVIDE 250W HPS LAMP - PROVIDE 22"x22" WEDGE LUMINAIRE - PROVIDE TYPE II/III FIELD ADJUSTABLE OPTICS - PROVIDE 480 VOLT HIGH POWER FACTOR BALLAST WITH DUAL FUSING - PROVIDE 20"x4"x4" STEEL HINGED POLE - PROVIDE E-COAT EPOXY PRIMER WITH BRONZE ACRYLIC POWDER TOP COAT ON LUMINAIRE & POLE		
W3	RUUD LIGHTING	WACW510-5FBZ 16" X 16" WALL MOUNT, BRONZE FINISH, DUAL FUSING	TYPE IV WITH BACKLIGHT SHIELD	HPS	1	100W	480	- PROVIDE 100W HPS LAMP - PROVIDE 16"x16" WEDGE LUMINAIRE - PROVIDE TYPE IV OPTICS WITH BACKLIGHT SHIELD - PROVIDE 480 VOLT HIGH POWER FACTOR BALLAST WITH DUAL FUSING - PROVIDE E-COAT EPOXY PRIMER WITH BRONZE ACRYLIC POWDER TOP COAT		
NOTE: FOR INTERIOR LIGHTING LUMINAIRES, SEE SHEET 59										

PANELBOARD DESIGNATION PUMPSTATION LP2-PS											
LOCATION EL. 827.00											
120/208 VOLTS 3 PHASE 4 WIRE											
X AC, DC, SOLID NEUTRAL											
X SURFACE FLUSH MOUNTING											
125 AMPERE BUS											
X MAIN LUGS											
125 AMPERE MAIN BREAKER											
10,000 AMPERE INTERRUPTING CAP											
ENCLOSURE											
SP. NO.	LOAD DESCRIPTION	KVA	20A	30A	40A	50A	60A	KVA	LOAD DESCRIPTION	SP. NO.	
1	COMPUTER CABINET AIR CONDITIONER	1.2						.5	GAS DETECTOR	2	
3	VENT. ALARM PANEL (VAP)							1.2	DAY TANK CONTROL PANEL		
5	SPARE								SPARE	6	
7	DOOR ALARM PANEL	.5								8	
9	AIR LOUVRE OPERATOR CIRCUIT #1	.5						4.6	WATER HEATER	10	
11	CHEMICAL PUMP #2	3.0						4.6	WATER HEATER	12	
13	SPARE							3.0	CHEMICAL PUMP #1	14	
15	DG SP HTR DISCNT RLY	.05						.2	AIR LOUVRE OPERATOR CIRCUIT #2 (EL-9)	16	
17	DIESEL BATT CHR	2.0							SPARE	18	
19	DIESEL SPACE HTR	1.2						.5	DG CONTROL PANEL	20	
21	AIR LOUVRE OPERATOR CIRCUIT #3	.5						1.0	CONTROL PANEL CP	22	
23	GAS DETECTOR AIR COMPRESSOR	.5							CONTROL PANEL CP LIGHT & RECEPTACLE	24	
25	EF-2 LOUVER								20" FORCE MAIN FLOW TRANSMITTER FIT-1	26	
27	EF-3 LOUVER								20" FORCE MAIN FLOW TRANSMITTER FIT-2	28	
29	EF-4 LOUVER								BACKFLUSH FLOW TRANSMITTER FIT-3	30	
31	EF-5 LOUVER								WEST WET WELL LEVEL TRANSMITTER LIT-1	32	
33	AUTODIALER								EAST WET WELL LEVEL TRANSMITTER LIT-2	34	
35	NITRATE TANK LEVEL TRANSMITTER LIT-4								GAS UNIT HEATER NGUH-1A	36	
37	TVSS								GAS UNIT HEATER NGUH-1B	38	
39	TVSS								GAS UNIT HEATER NGUH-1C	40	
41	TVSS								CONTROL PANEL TO MAU#2		
SUB TOTAL KVA							SUB TOTAL KVA				
TOTAL KVA							TOTAL AMPERES				

RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE ACTUAL CONDITION OF ANY ITEMS DEEMED TO BE SUBJECT OF RECORD. FOR ADDITIONAL INFORMATION, CONTACT THE RECORDS DEPARTMENT OF THE FIRM.

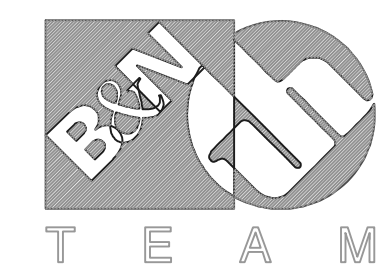
Jones & Henry Engineers, Ltd. DATE: 08/07/02 MO. / DAY / YR.

BNW0201

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE

TOL-4714E33-004 08/06/02 06-V02 P:\PR24025\NMPSTARECDWG\54.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

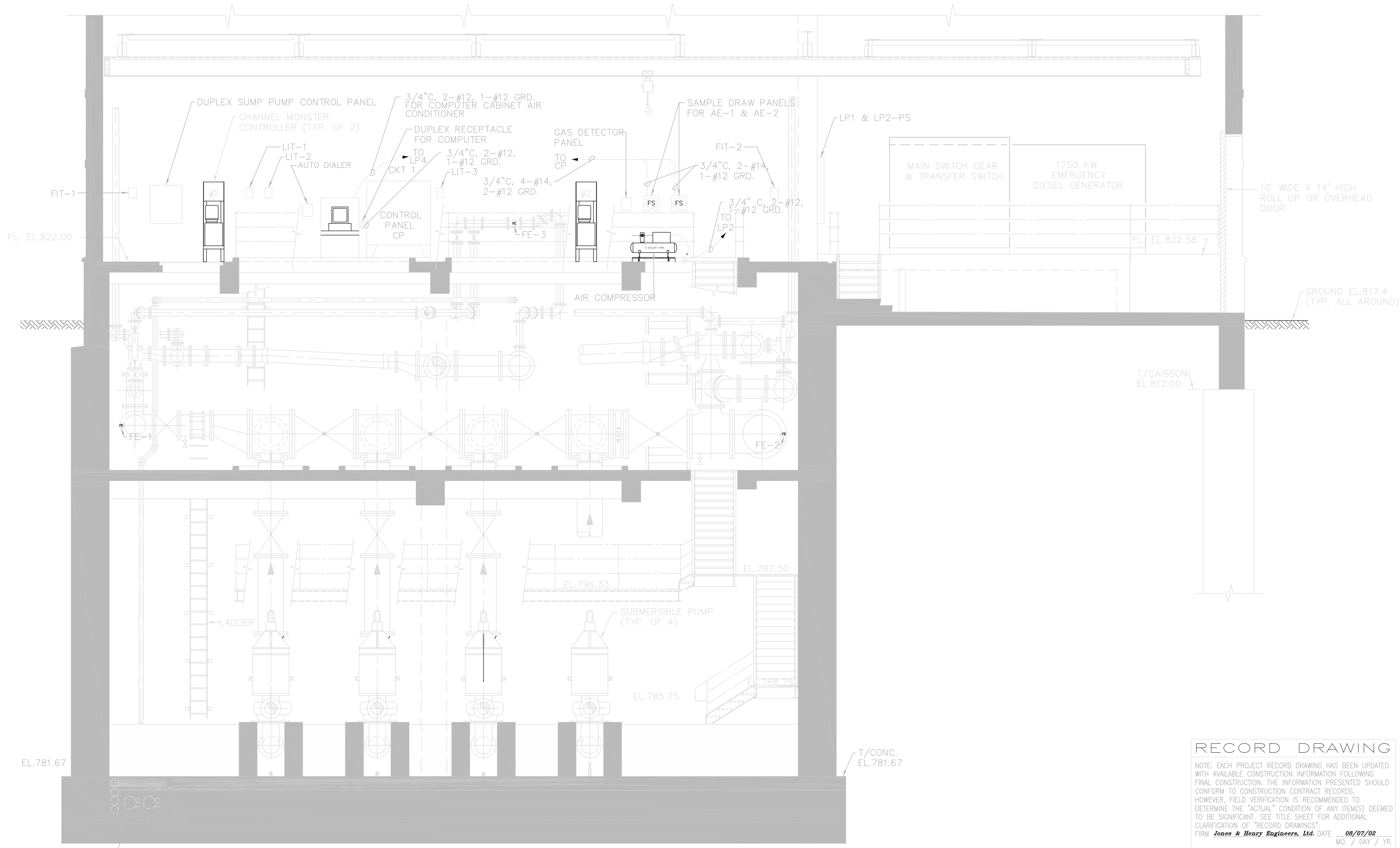
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	DLH
DRAWN BY:	KMH
CHECKED BY:	DLH
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
ELECTRICAL
PLANS AT EL. 779.67, 801.58,
805.67 AND 818.00

SCALE:	
1/8"=1'-0"	
SHEET NO.	OF
54	100



SECTION A
54 | 55

NOTE: THIS SHEET WAS CREATED FROM SHEET No. 21

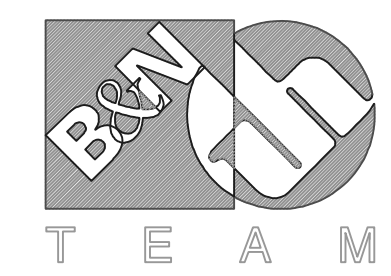
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM **Jones & Henry Engineers, Ltd.** DATE 08/07/02
MO. / DAY / YR.

© BNWW0201

T01-4714E72
 03/01/02 04-V02
 P:\PR24025\PMFSTARECDWG\55.DWG

NO.	REVISIONS	DATE	BY	CHK.



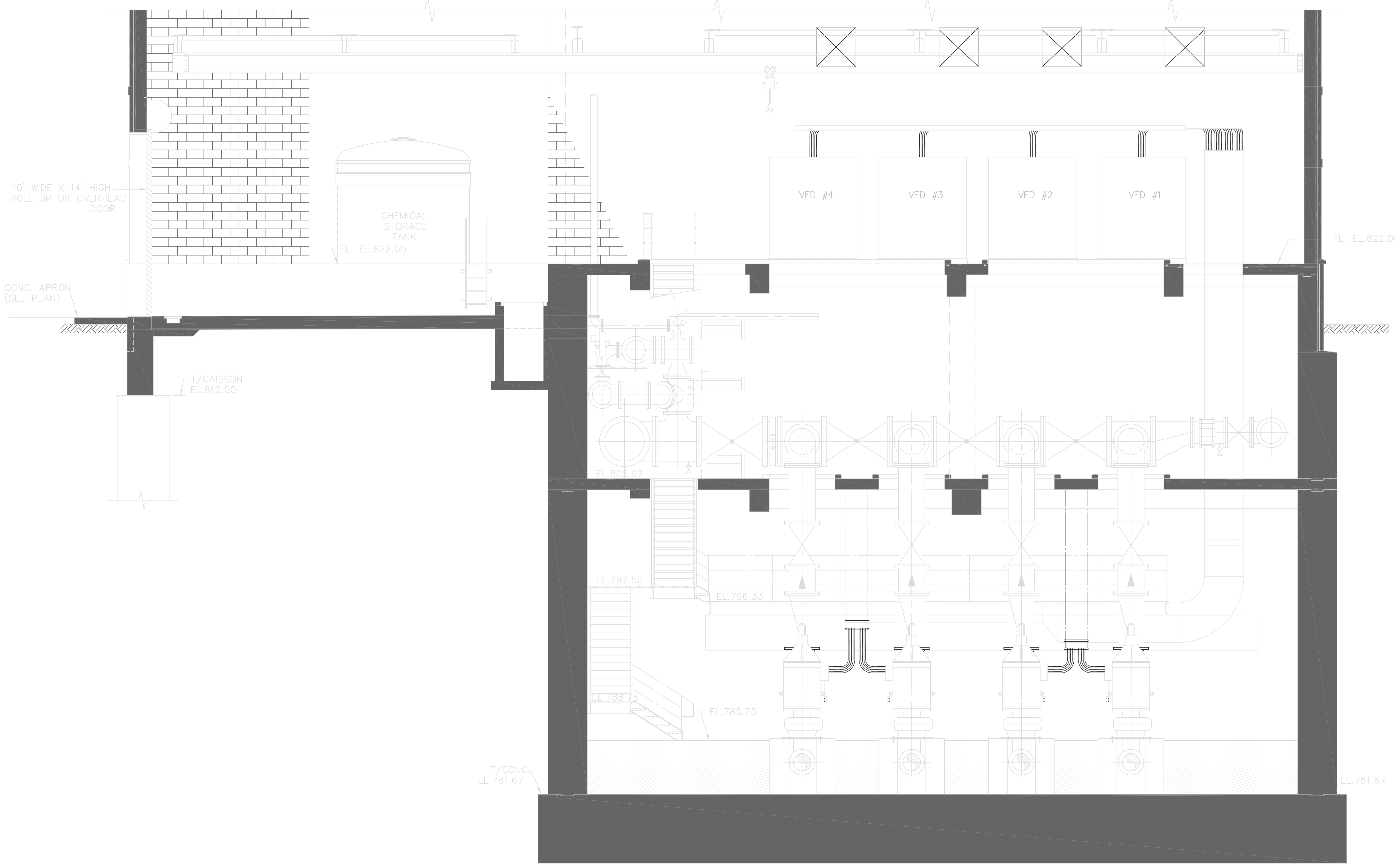
Burgess & Niple, Limited
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	KMH
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
ELECTRICAL FOR PUMPS AND
EQUIPMENT

SCALE:	
1/4" = 1'-0"	
SHEET NO.	OF
55	100



SECTION F
13/27

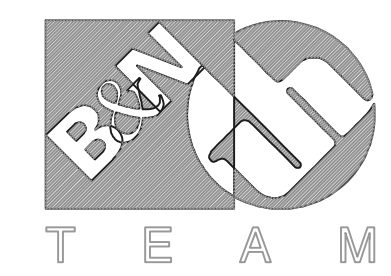
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM **Jones & Henry Engineers, Ltd.** DATE 08/07/02
MO. / DAY / YR.

© BNWW0201

TOL-4714E73
04/23/02 04-002
P:\PR24025\NMPSTARECDWG\56.DWG

NO.	REVISIONS	DATE	BY	CHK.



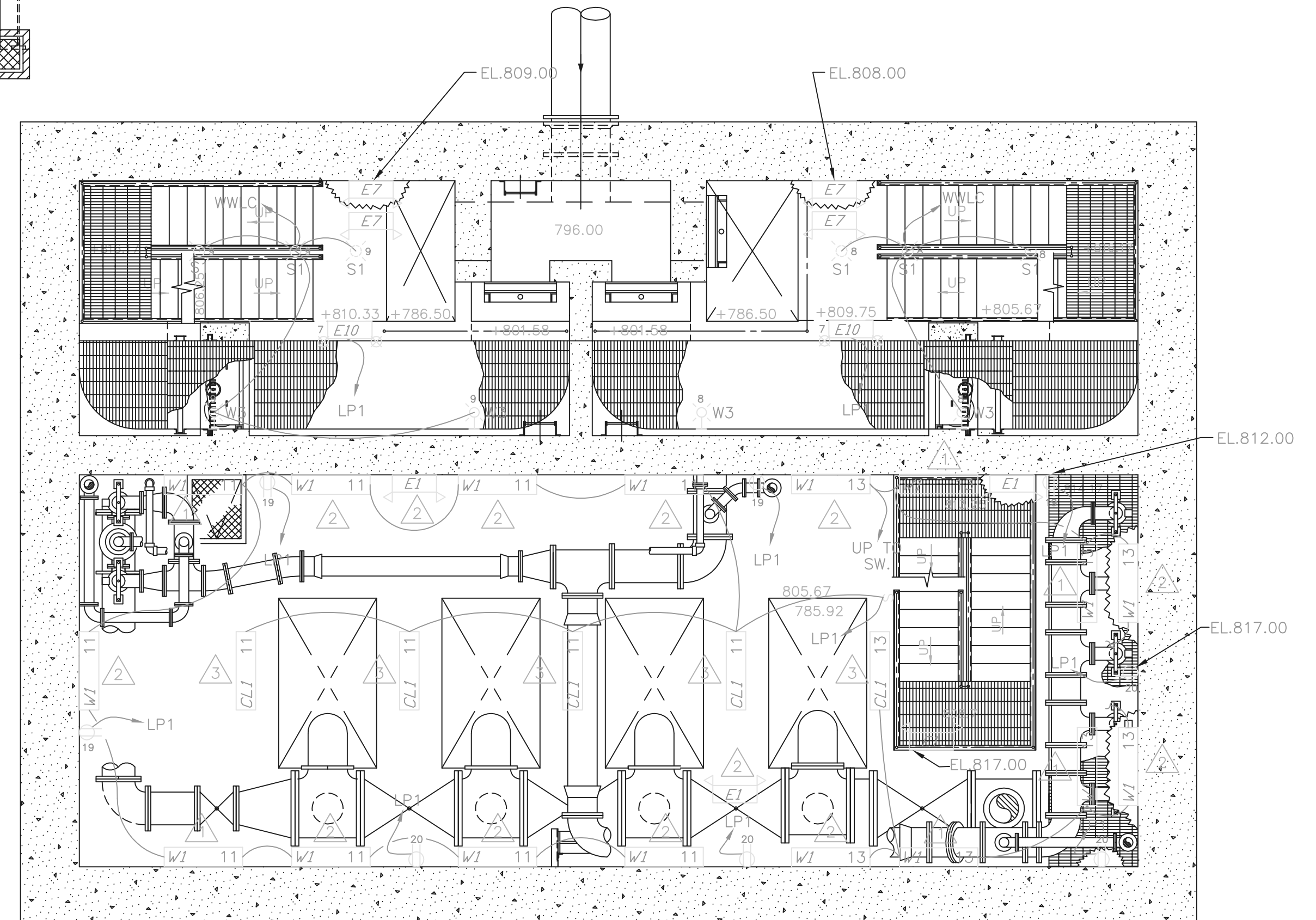
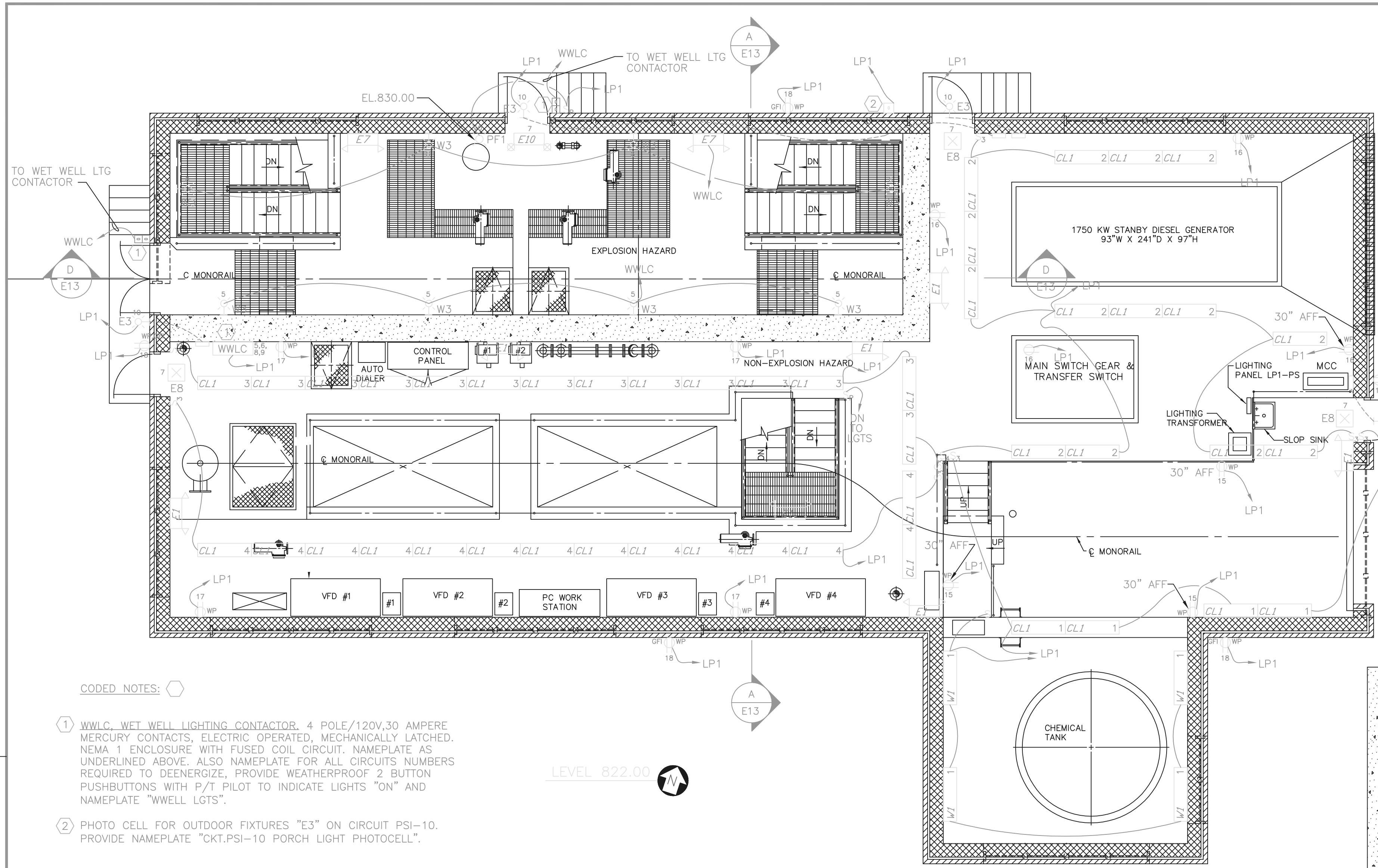
Burgess & Niple, Limited
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	FXW
DRAWN BY:	KMH
CHECKED BY:	FXW
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
ELECTRICAL FOR PUMPS, VFD,S AND
EQUIPMENT

SCALE:	
1/4"=1'-0"	
SHEET NO.	OF
56	100



CODED NOTES: △

① 14' AFF. WALL MOUNTED. USE 1/2" WALL STANDOFFS.

② 8' AFF. WALL MOUNTED. USE 1/2" WALL STANDOFFS.

③ 14' AFF. CEILING MOUNTED, SWIVEL HANGERS.

NOTE:
ALL RECEPTACLES ON THIS PLAN ARE 4'-0" AFF. OR AT ELEV. MARKED. ALL RECEPTACLES WEATHERPROOF.

CODED NOTES: ○

① WWLC, WET WELL LIGHTING CONTACTOR, 4 POLE/120V,30 AMPERE MERCURY CONTACTS, ELECTRIC OPERATED, MECHANICALLY LATCHED. NEMA 1 ENCLOSURE WITH FUSED COIL CIRCUIT. NAMEPLATE AS UNDERLINED ABOVE. ALSO NAMEPLATE FOR ALL CIRCUITS NUMBERS REQUIRED TO DEENERGIZE, PROVIDE WEATHERPROOF 2 BUTTON PUSHBUTTONS WITH P/T PILOT TO INDICATE LIGHTS "ON" AND NAMEPLATE "WWELL LGTS".

② PHOTO CELL FOR OUTDOOR FIXTURES "E3" ON CIRCUIT PSI-10. PROVIDE NAMEPLATE "CKT.PSI-10 PORCH LIGHT PHOTOCELL".

GENERAL NOTES:

- SEE SHEET E15 FOR LIGHT FIXTURE SCHEDULE.
- SEE SHEET E16 FOR PANELBOARD SCHEDULES.
- CONDUIT HOME RUNS NOT OTHERWISE MARKED SHALL BE CONSIDERED 3/4" WITH 2 #12, 1 #12 GRD.
- CIRCUIT ALL EMERGENCY EGRESS/EXIT LIGHTS TO LOCAL LIGHTING CIRCUIT AHEAD OF SWITCH.
- UNLESS OTHERWISE NOTED, FIXTURE MOUNTING HEIGHT SHALL BE 10'-0" AFF. TO BOTTOM OF FIXTURE.
- ALL HOMERUNS ON THIS SHEET INCLUDE THE SUFFIX "-PS" EVEN THOUGH NOT SHOWN.

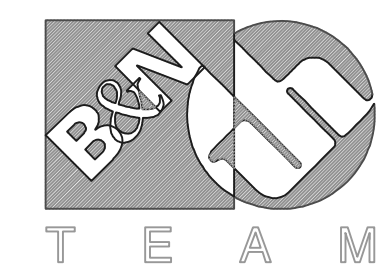
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM BURGESS & NIPLE, LIMITED DATE 07/18/02 MO. / DAY / YR.

LEVEL 801/805.5

P:\PR24025\PMF\STRECDWG\57.DWG 3-4-99 10:37:30 am EST

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	EDT
DRAWN BY:	MSW
CHECKED BY:	EDT
APPROVED BY:	EDT
DATE:	MAR 1999

PUMP STATION- ELECTRICAL RECEPTACLES & LIGHTING PLAN, LEVELS 822.00 & 801/805.5

SCALE:	3/16"=1'-0"
SHEET NO.	57
OF	100

GENERAL NOTES:

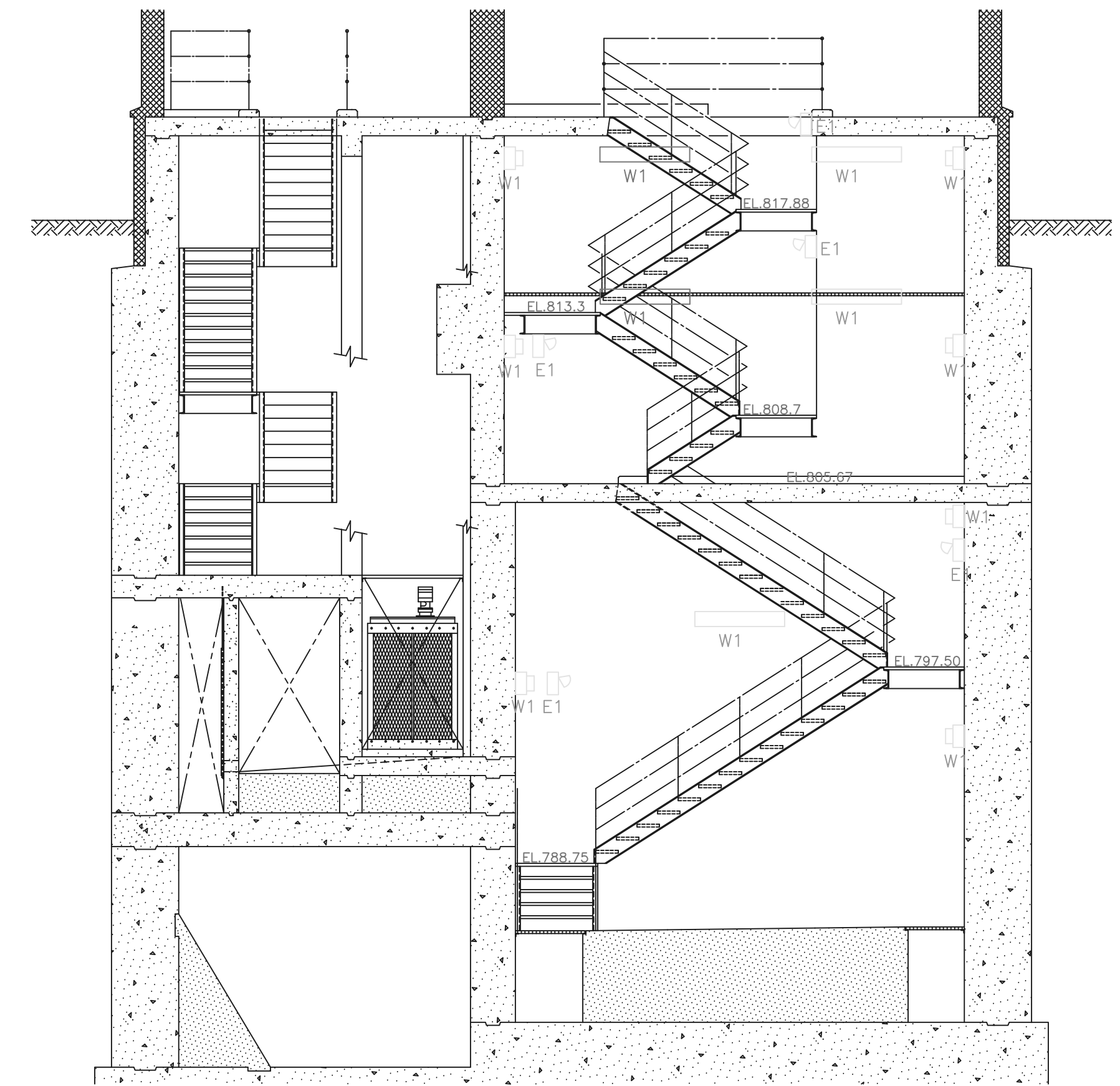
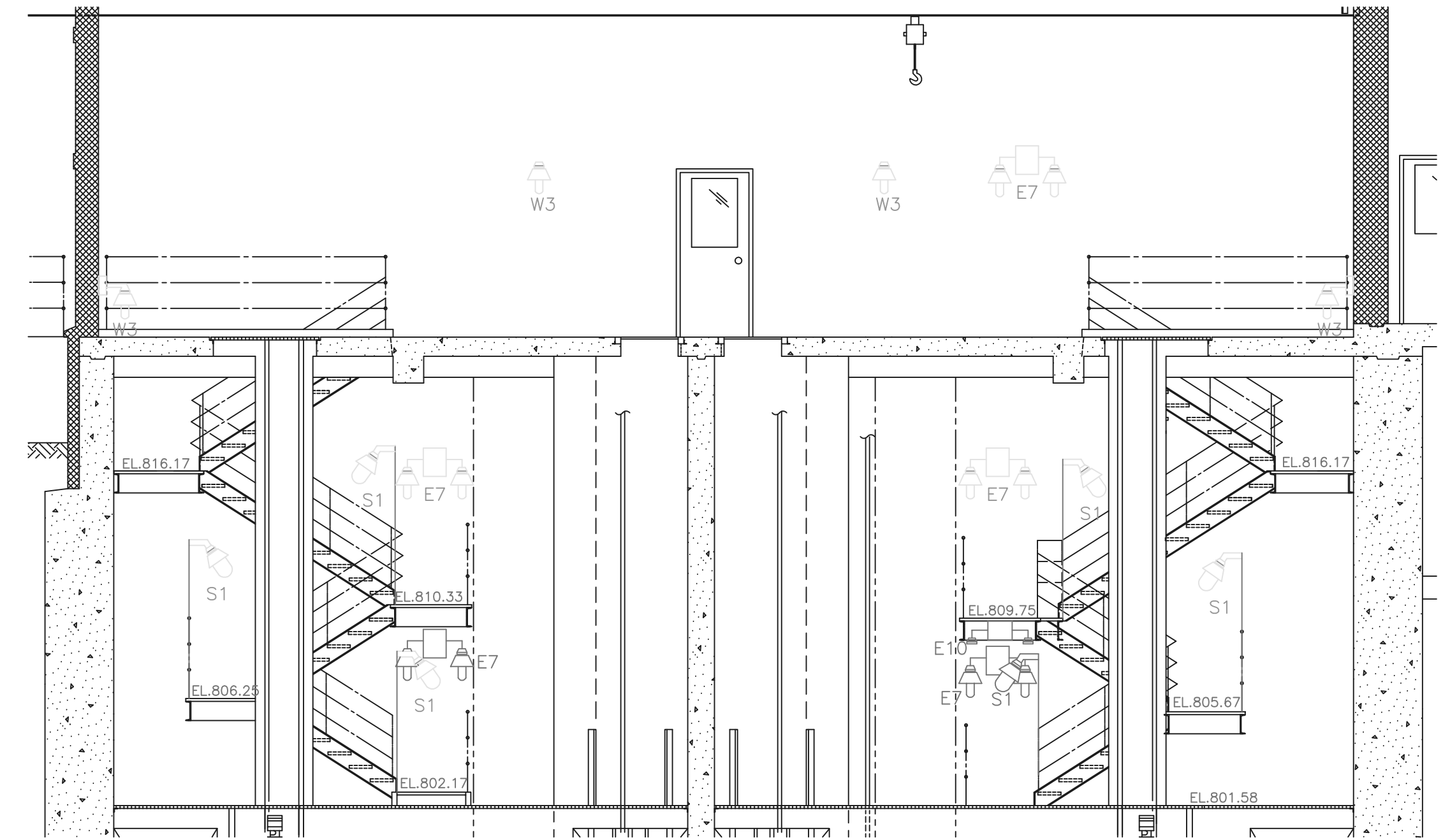
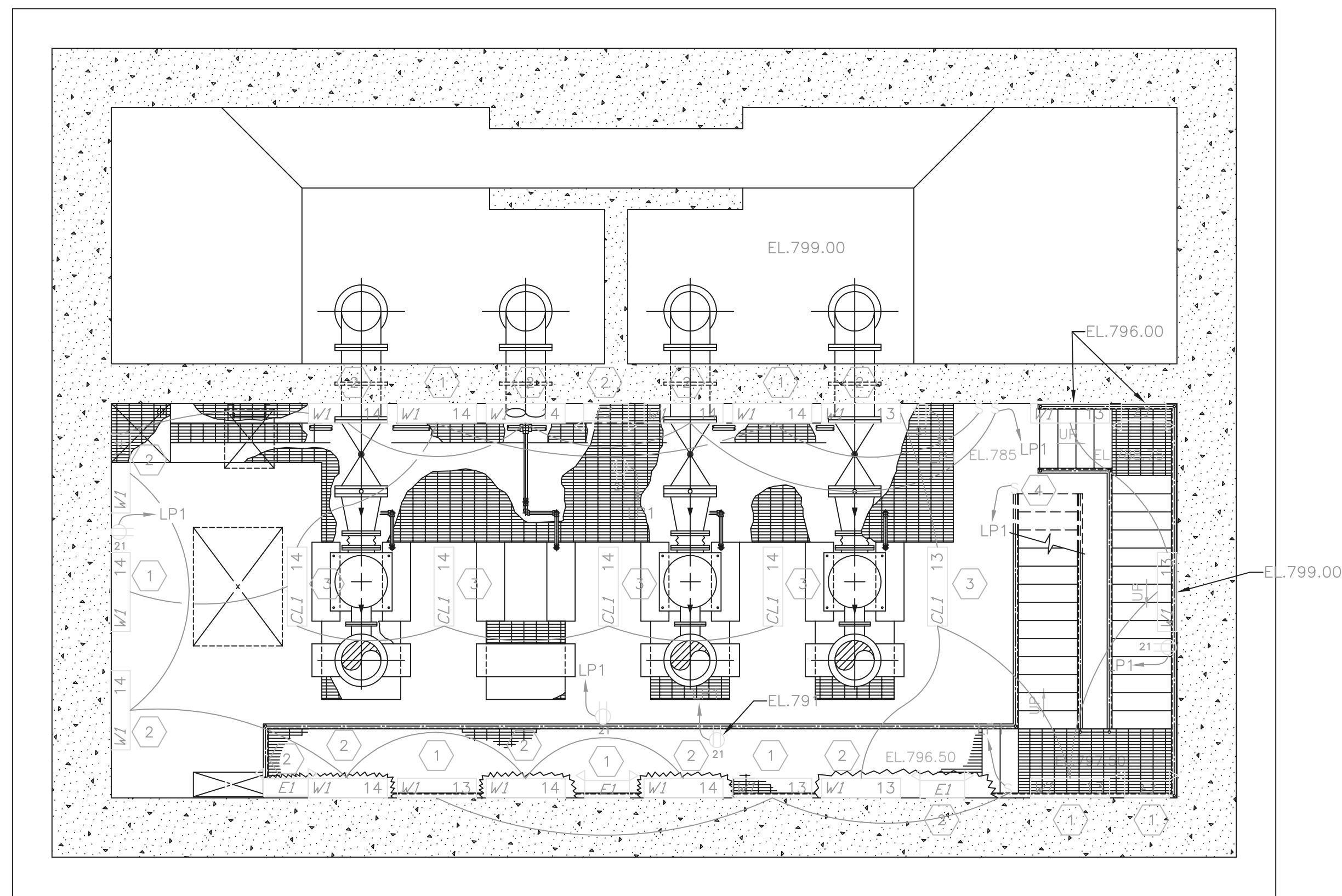
1. SEE SHEET E15 FOR LIGHT FIXTURE SCHEDULE.
2. SEE SHEET E16 FOR PANELBOARD SCHEDULES.
3. CONDUIT HOME RUNS NOT OTHERWISE MARKED SHALL BE CONSIDERED 3/4" WITH 2 #12, 1 #12 GRD.
4. CIRCUIT ALL EMERGENCY EGRESS/EXIT LIGHTS TO LOCAL LIGHTING CIRCUIT AHEAD OF SWITCH.
5. UNLESS OTHERWISE NOTED, FIXTURE MOUNTING HEIGHT SHALL BE 10'-0" AFF. TO BOTTOM OF FIXTURE.
6. ALL HOMERUNS ON THIS SHEET INCLUDE THE SUFFIX "-PS", EVEN THOUGH NOT SHOWN.

CODED NOTES:

- 1 17' AFF. WALL MOUNT. USE 1/2" WALL STANDOFFS.
- 2 8' AFF. WALL MOUNT. USE 1/2" WALL STANDOFFS.
- 3 17' AFF. CEILING MOUNT, SWIVEL HANGERS.
- 4 EL.809.67. MOUNT AT HANDRAIL.

NOTE:

ALL RECEPTACLES ON THIS PLAN ARE 4'-0" AFF. OR AT ELEV. MARKED. ALL RECEPTACLES WEATHERPROOF, AND WALL MOUNTED.

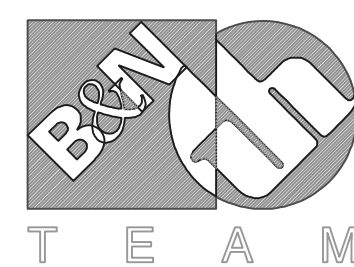


RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
 FIRM BURGESS & NIPLE, LIMITED DATE 07/18/02 MO. / DAY / YR.

P:\PR24025\PMPS\REC\DWG\58.DWG 3-4-99 10:38:48 am EST

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

Jones & Henry Engineers, Ltd.

RECORD DRAWING
 DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	EDT
DRAWN BY:	MSW
CHECKED BY:	EDT
APPROVED BY:	EDT
DATE:	MAR 1999

PUMP STATION- ELECTRICAL RECEPTACLES & LIGHTING PLAN, LEVEL 785/779 & SECTIONS

SCALE:	
3/16"=1'-0"	
SHEET NO.	OF
58	100

LIGHTING LUMINAIRE SCHEDULE									
FIXTURE CODE ABBREVIATIONS					LAMP ABBREVIATIONS				
CL - CEILING MOUNT	P - PENDANT MOUNT	BL - SITE LIGHT	FLR - FLUORESCENT	LPS - LOW PRESSURE SODIUM					
R - RECESSED	E - EMERGENCY	B - BOLLARD	INC - INCANDESCENT	HPS - HIGH PRESSURE SODIUM					
W - WALL MOUNT	X - EXIT SIGN	S - SURFACE	MER - MERCURY VAPOR	HAL - HALOGEN					
			MH - METAL HALIDE	TUN - TUNGSEN					
FIXT CODE	MANUFACTURER	MODEL	OPTICS	LAMP			REMARKS		
				TYPE	QTY	SIZE			
CL1	COLUMBIA	LUN4-232-EB8 120-HUBK	HIGH IMPACT ACRYLIC DIFFUSER	FLR	2	32	120	- PROVIDE OSRAM/SYLVANIA #F032/835 LAMPS OR EQUAL. - PROVIDE ELECTRONIC BALLAST - PROVIDE 1-1/2" CEILING SPACER (OPTION "1B") FOR THOSE FIXTURES SURFACE MOUNTED ON A FLAT CEILING. - PROVIDE FIXTURE WITH SLOPE CEILING SWIVEL STEM HANGERS (OPTION SQ) WITH SUFFICIENT STEM LENGTH TO MOUNT FIXTURE AT 10'-0" AFF (UNLESS NOTED OTHERWISE) FOR THOSE FIXTURES MOUNTED ON A SLOPED CEILING. - UL LISTED FOR WET LOCATIONS.	
E1	PRESCOLITE	EDP3-H0612	EMERGENCY EGRESS FLOOD	INC	2	12	120	- PAR 36, 6 VOLT, 12 WATT, HALOGEN LAMPS FURNISHED WITH FIXTURE. - NEMA 4X HOUSING - WALL MOUNTED AT 7'-6" AFF UNLESS NOTED - 90 MIN. BATTERY WITH TEST SWITCH.	
E3	DESIGNPLAN	PSE8A01-XX-10P	EXTERIOR EGRESS	FLR	2	13	120	- CONTRACTOR TO COORDINATE COLOR FOR EACH BLDG. WITH ENGINEER. - WALL MOUNT 12" ABOVE DOOR. PROVIDE REMOTE BALLAST WITH 90 MIN. BATTERY WITH TEST SWITCH.	
E7	PRESCOLITE	EXP3-EXPDREF	EXPLOSION PROOF EMERGENCY EGRESS FLOOD	INC	2	28	120	- 6 VOLT, 28 WATT, LAMPS FURNISHED WITH FIXTURE. - 90 MIN. BATTERY WITH TEST SWITCH. - CLASS 1, DIVISION 1 RATING - WALL MOUNT AT 7'-6" AFF UNLESS NOTED OTHERWISE.	
E8	PRESCOLITE	NEX1RW3-EN-120	OLEAR POLYCARBONATE COVER WITH RED LETTERS	FLR	2	5	120	- LAMPS FURNISHED WITH FIXTURE. - WALL MOUNT NEMA 4X EXIT LIGHT ABOVE DOOR.	
E10	PRESCOLITE	EXP2EXPEXL AC/DC	FLUTED GLASS GLOBE	FLR	2	9	120	- WALL MOUNT DUAL EXIT LIGHT - EXPLOSION PROOF CLASS 1, DIVISION 1, GROUP D. - 90 MINUTE BATTERY WITH TEST SWITCH.	
PF1	KILLARK	EM5P151	PORTABLE FLOOD	HPS	1	150	120	- PERM. CONN. TO 100FT 16/3 50W CORD. - PROVIDE WALL HOOK FOR FLOOD & HOOK FOR CORD. - PROVIDE SIGN AT HOOK "SWITCH OUTSIDE DOOR" - PROVIDE SIGN AT SWITCH "PORTABLE INDOOR LIGHT".	
S1	KILLARK	EM130D5G	FLUTED GLASS W/ GUARD	INC	1	300	120	- STANCHION MOUNT 8'-0" AFF. UNLESS NOTED - X/P CLASS 1, DIV.1, GRP. D.	
W1	COLUMBIA	LUN4-232- EB8 120	HIGH IMPACT ACRYLIC DIFFUSER	FLR	2	32	120	- PROVIDE OSRAM/SYLVANIA #F032/835 LAMPS OR EQUAL. - PROVIDE ELECTRONIC BALLAST - UL LISTED FOR WET LOCATIONS. - PROVIDE EACH FIXTURE WITH TWO UNISTRUT #P1944 MOUNTING BRACKETS (PROVIDE EACH BRACKET WITH APPROPRIATE MOUNTING HOLES FOR ATTACHMENT OF FIXTURE).	
W3	KILLARK	EM130B2G	FLUTED GLASS W/ GUARD	INC	1	300	120	- WALL MOUNT 7'-6" AFF. UNLESS NOTED - X/P CLASS 1, DIV.1, GRP. D.	

PANELBOARD "LP1-PS"											
208/120 V, 3Ø, 4W, 225 AMP BUS					PANEL LOADING SCHEDULE						
150 AMP MAIN: CB (X) SW () LUGS ()					CONNECTED				DEMAND		
FEED THRU LUGS ()					PHASE	A	B	C	TOTAL		
SURFACE (X) FLUSH () COLUMN TYPE ()					AMPS	78.6	70.4	45			
ENCLOSURE: NEMA 1(X) 3R() 12() 4X()					KVA	9.4	8.4	5.4	23.2	-	
CIRCUIT DESCRIPTION		LOAD AMPS	BKR./POLES	CKT. NO.	BKR./POLES	LOAD AMPS	CIRCUIT DESCRIPTION				
CHEM. AREA LTS.		6.7	20/1	1	2	20/1	11.7	GEN. AREA LTS			
UPPER PUMP RM. N. LTS		11.7	20/1	3	4	20/1	11.7	UPPER PUMP RM. S. LTS			
UPPER WETWELL S. LTS		1.7	20/1	5	6	20/1	10	UPPER WETWELL N. LTS			
EXIT LTS		1	20/1	7	8	20/1	12.5	MID WETWELL LTS			
MID WETWELL LTS		12.5	20/1	9	10	20/1	2	OUTDOOR EGRESS			
MID DRYWELL LTS		10.8	20/1	11	12	20/1	-	SPARE			
LOW & MID DRYWELL LTS		14.2	20/1	13	14	20/1	12.5	LOW DRYWELL LTS			
TRUCK BAY RECEPTS.		7.5	20/1	15	16	20/1	10	GEN. AREA RECEPTS			
UPPER PUMP ROOMS RECEPTS.		10	20/1	17	18	20/1	12.5	OUTDOOR RECEPTS			
MID DRYWELL N & W RECEPTS.		10	20/1	19	20	20/1	10	MID DRYWELL S & E RECEPTS			
LOW DRYWELL RECEPTS.		15	20/1	21	22	20/1	-	SPARE			
-		-	-	23	24	-	-	-			
-		-	-	25	26	-	-	-			
-		-	-	27	28	-	-	-			
-		-	-	29	30	-	-	-			
-		-	-	31	32	-	-	-			
-		-	-	33	34	-	-	-			
-		-	-	35	36	-	-	-			
-		-	-	37	38	-	-	-			
-		-	-	39	40	-	-	-			
=		=	=	41	42	=	=	=			

P:\PR24025\PMPS\TRCDWG\59.DWG 3-4-99 10:40:10 am EST

RECORD DRAWING
 NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
 FIRM BURGESS & NIPLE, LIMITED DATE 07/18/02 MO. / DAY / YR.

NO.	REVISIONS	DATE	BY	CHK.



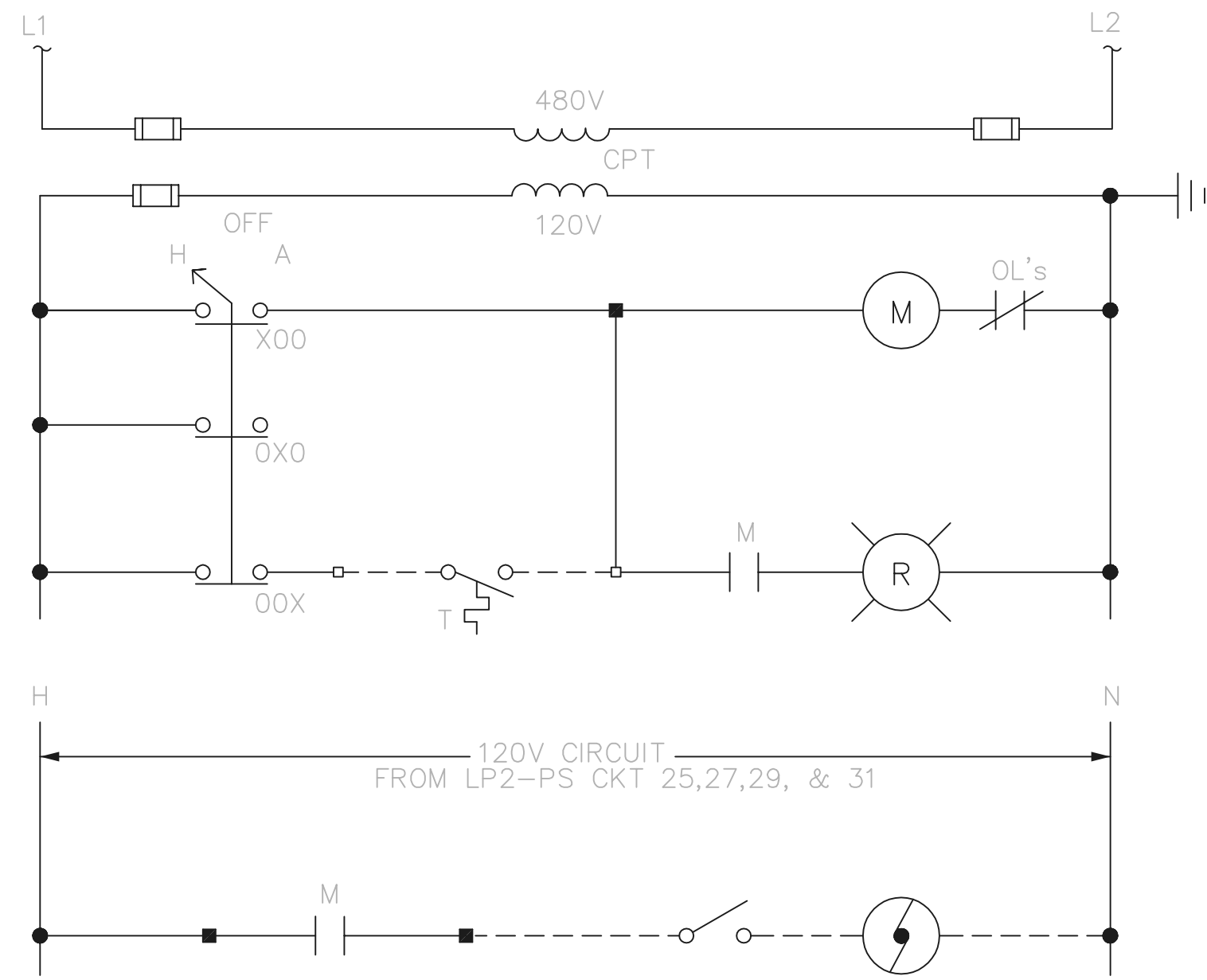
Burgess & Niple, Limited
 Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

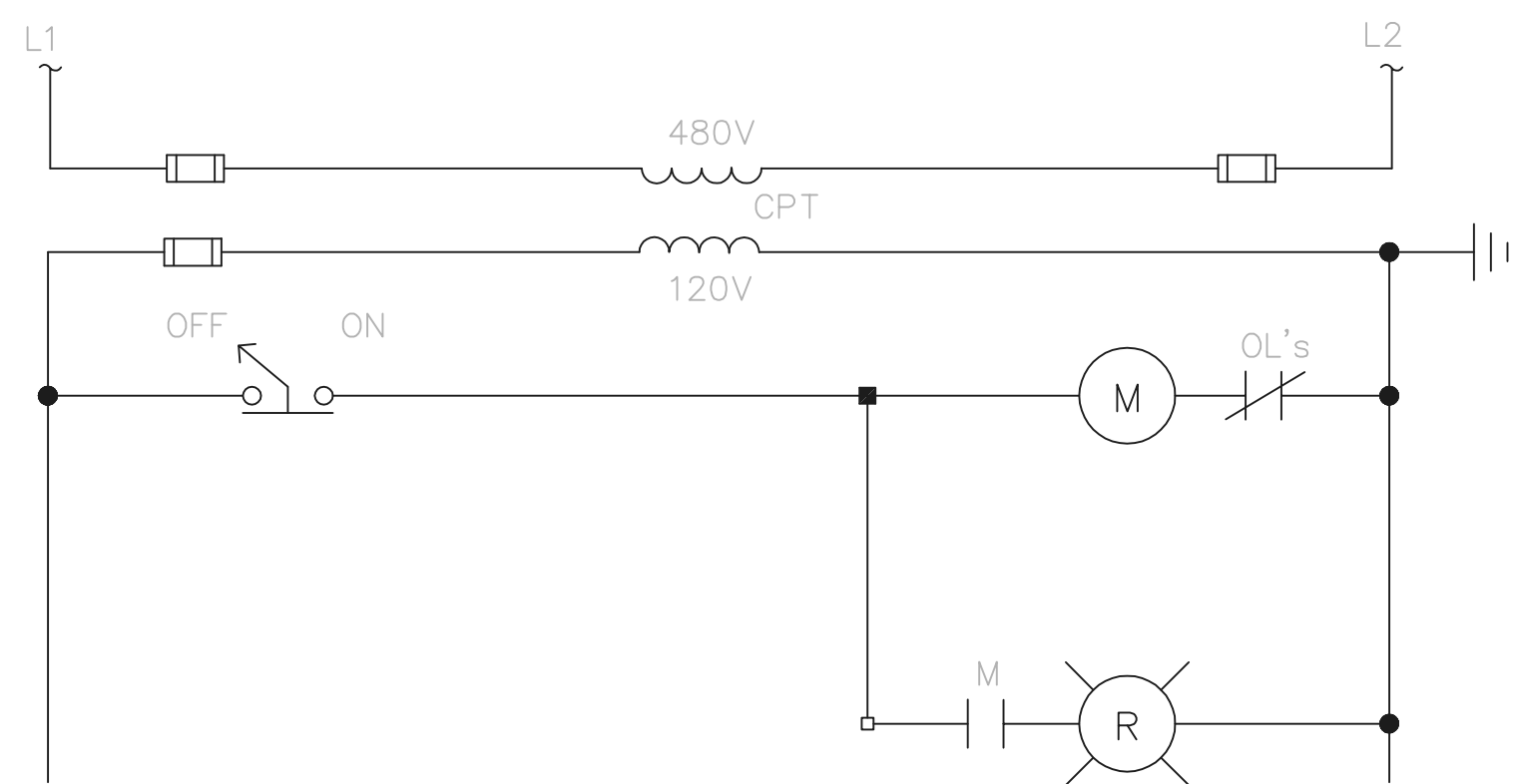
JOB NO.	20571
DESIGNED BY:	MSW
DRAWN BY:	MSW
CHECKED BY:	EDT
APPROVED BY:	EDT
DATE:	MAR 1999

PUMP STATION LIGHTING LUMINAIRE SCHEDULE
 AND PANELBOARD SCHEDULE

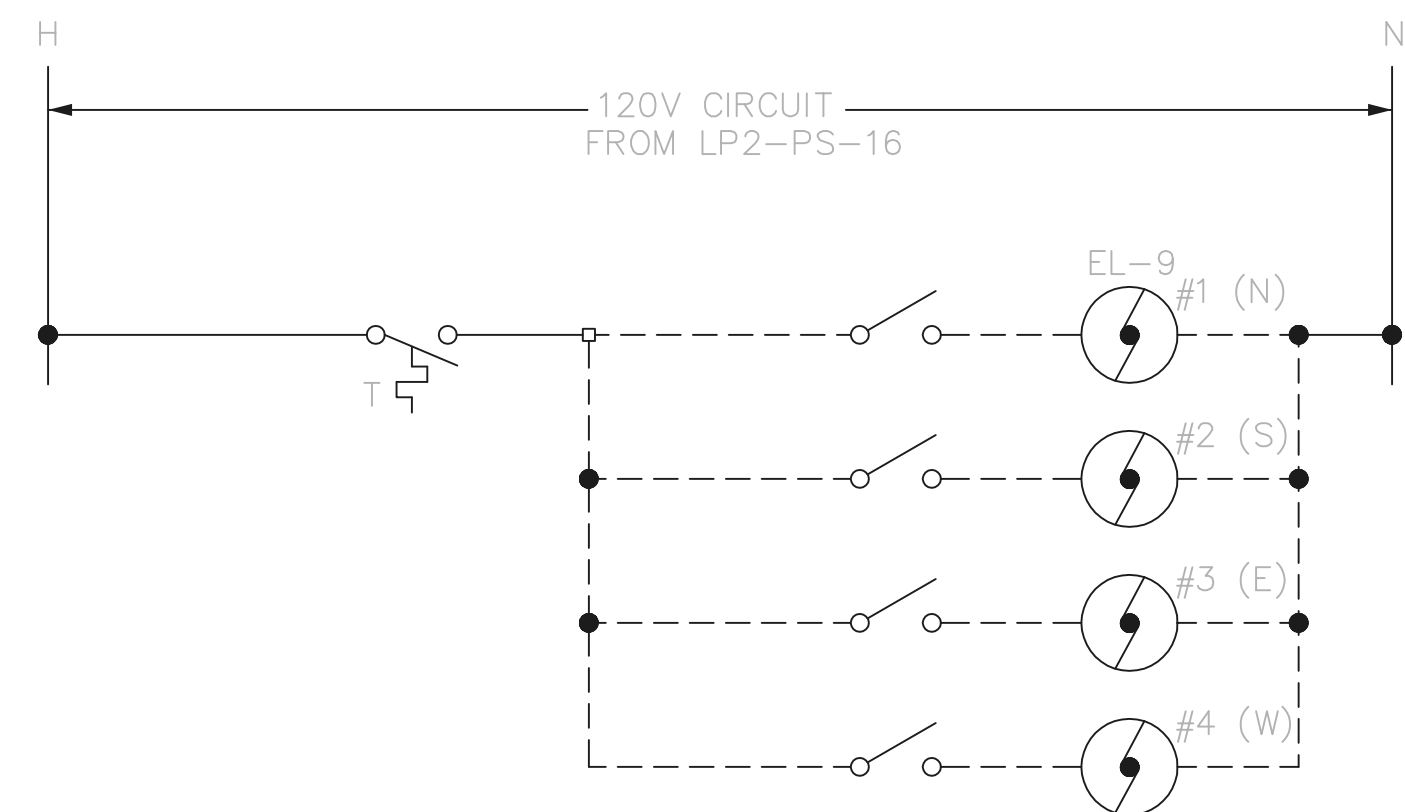
SCALE: NONE	
SHEET NO. 59	OF 100



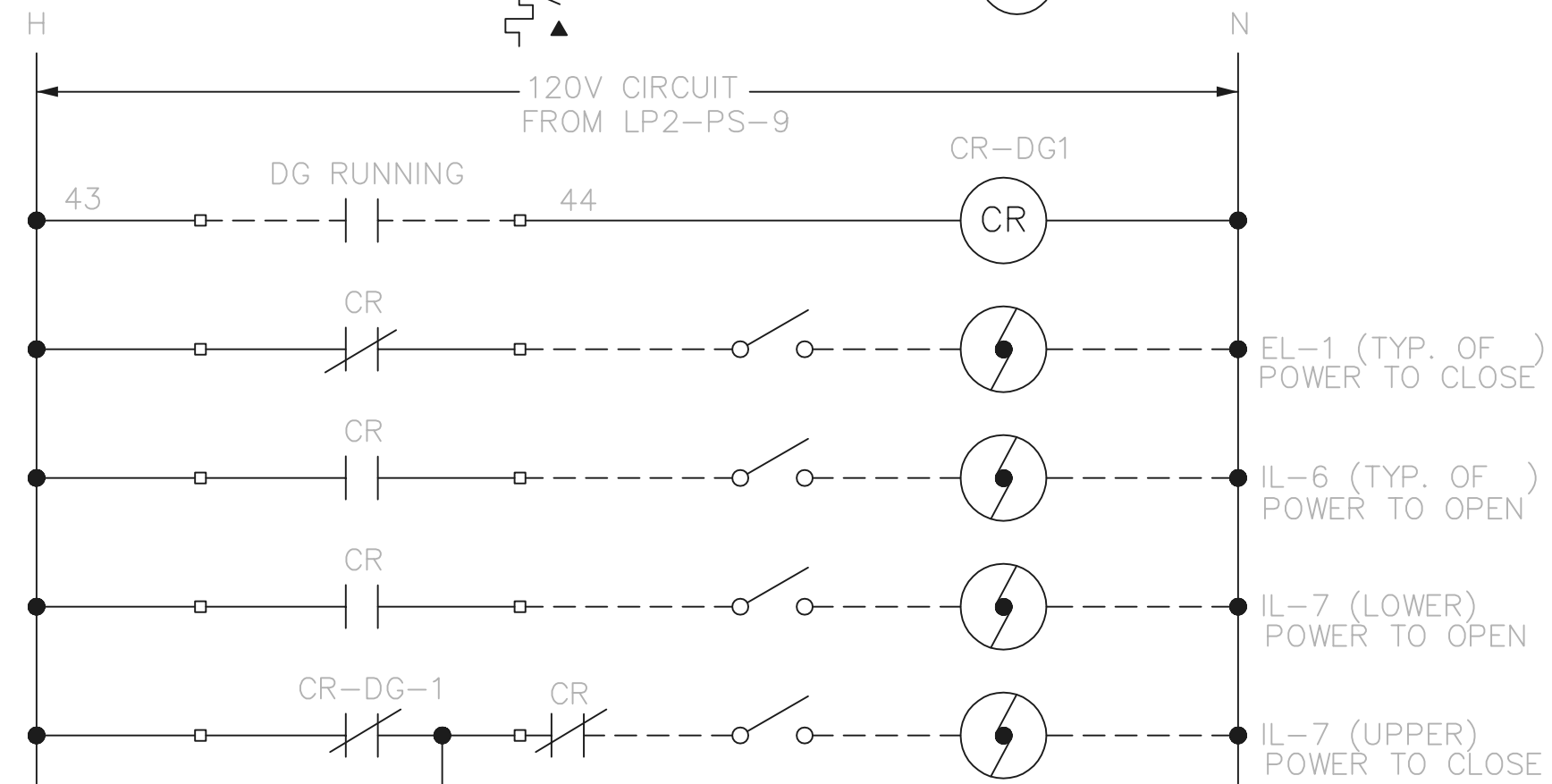
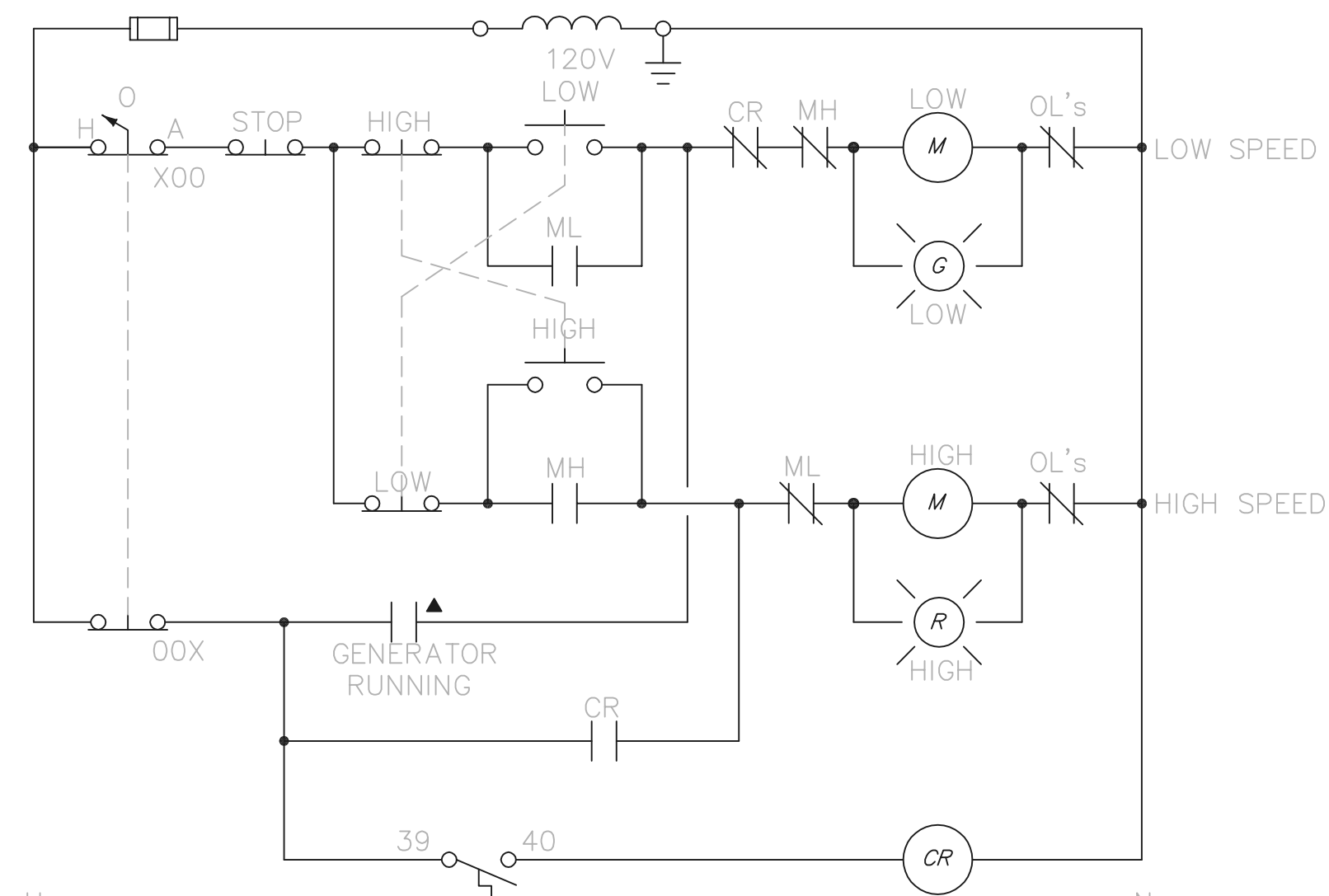
SUPPLY FAN AND LOUVER CONTROL DIAGRAMS
TYPICAL FOR EF-2, EF-3, EF-4 & EF-5
TYPICAL FOR LP2-25, LP2-27, LP2-29, & LP2-31



SUPPLY FAN AND LOUVER CONTROL DIAGRAMS
TYPICAL FOR EF-1 & EF-6

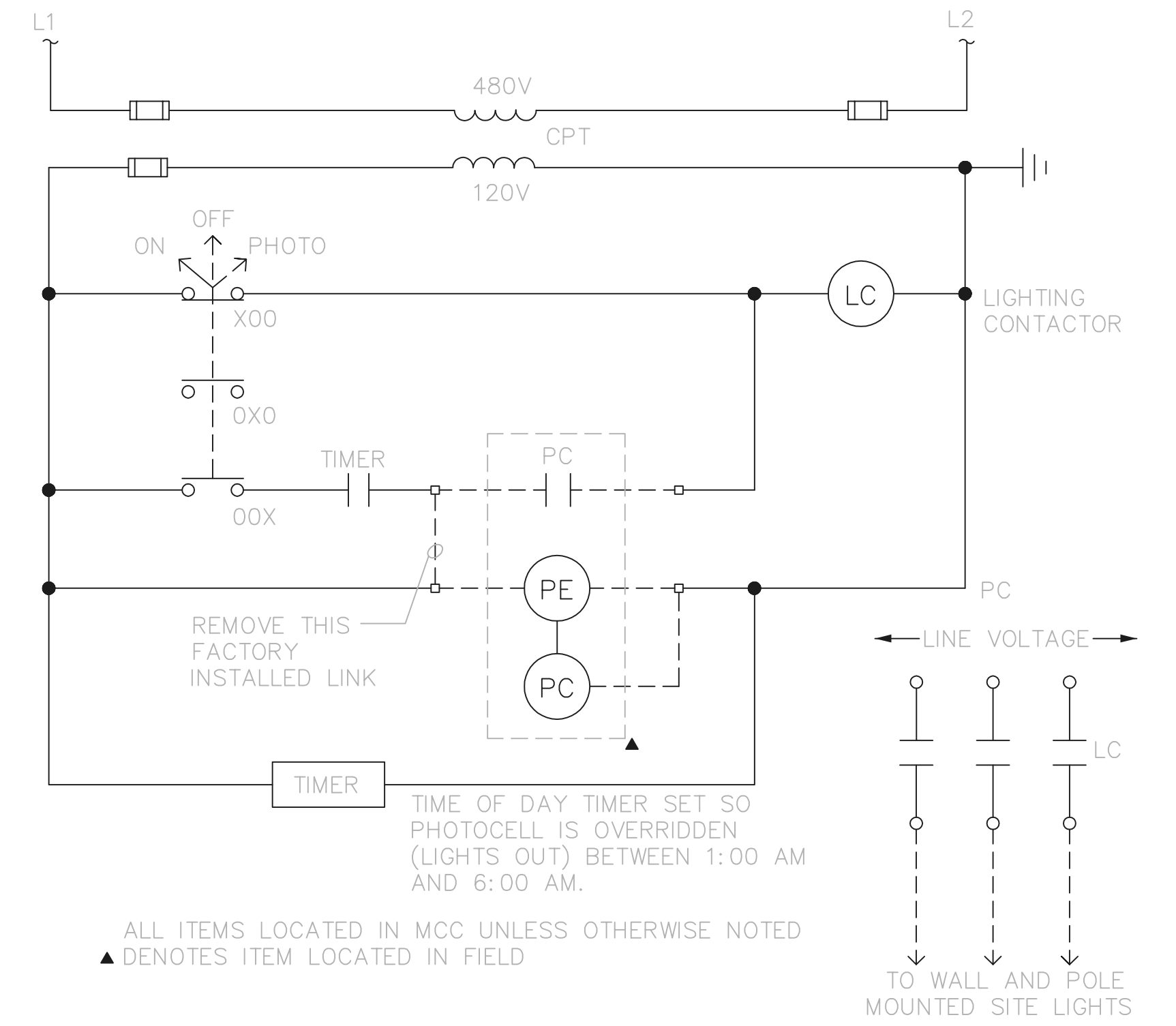


EXHAUST LOUVER EL-9 CONTROL DIAGRAM



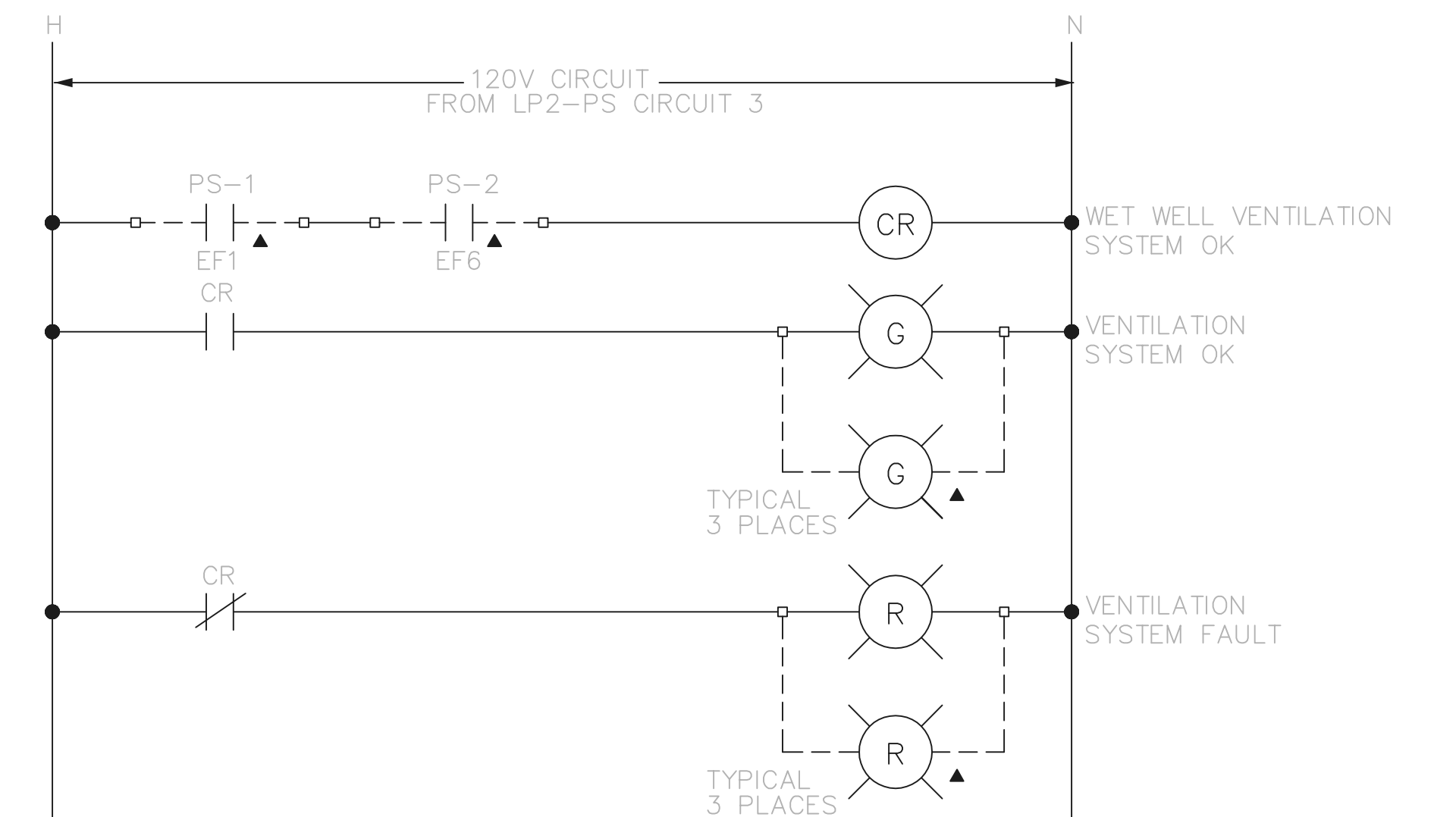
ALL ITEMS LOCATED IN MCC UNLESS OTHERWISE NOTED
▲ DENOTES ITEM LOCATED IN FIELD

DIESEL COOLING SYSTEM AND SUPPLY FAN SF-7



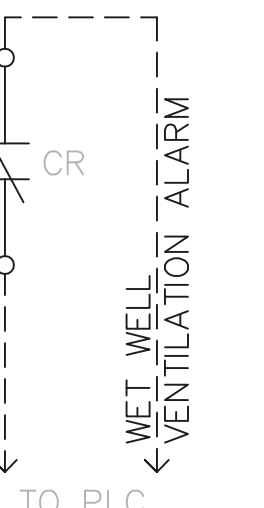
ALL ITEMS LOCATED IN MCC UNLESS OTHERWISE NOTED
▲ DENOTES ITEM LOCATED IN FIELD

SITE LIGHTING CONTROL DIAGRAM



WET WELL VENTILATION SYSTEM ALARM

NOTE: CR ENERGIZED IN SAFE CONDITION.
CR DE-ENERGIZES ON LOSS OF VENTILATION.
▲ DENOTES ITEM LOCATED IN FIELD

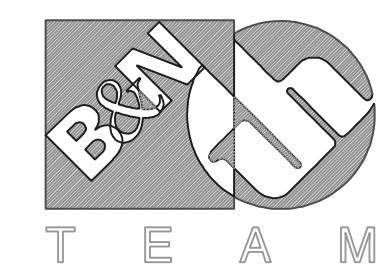


RECORD DRAWING
NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
MO. / DAY / YR.

© BNW0201

TOL-4714E13-004
08/06/02 06-V02
P:\PR24025\PMPSARECDWG\60DWG

NO.	REVISIONS	DATE	BY	CHK.



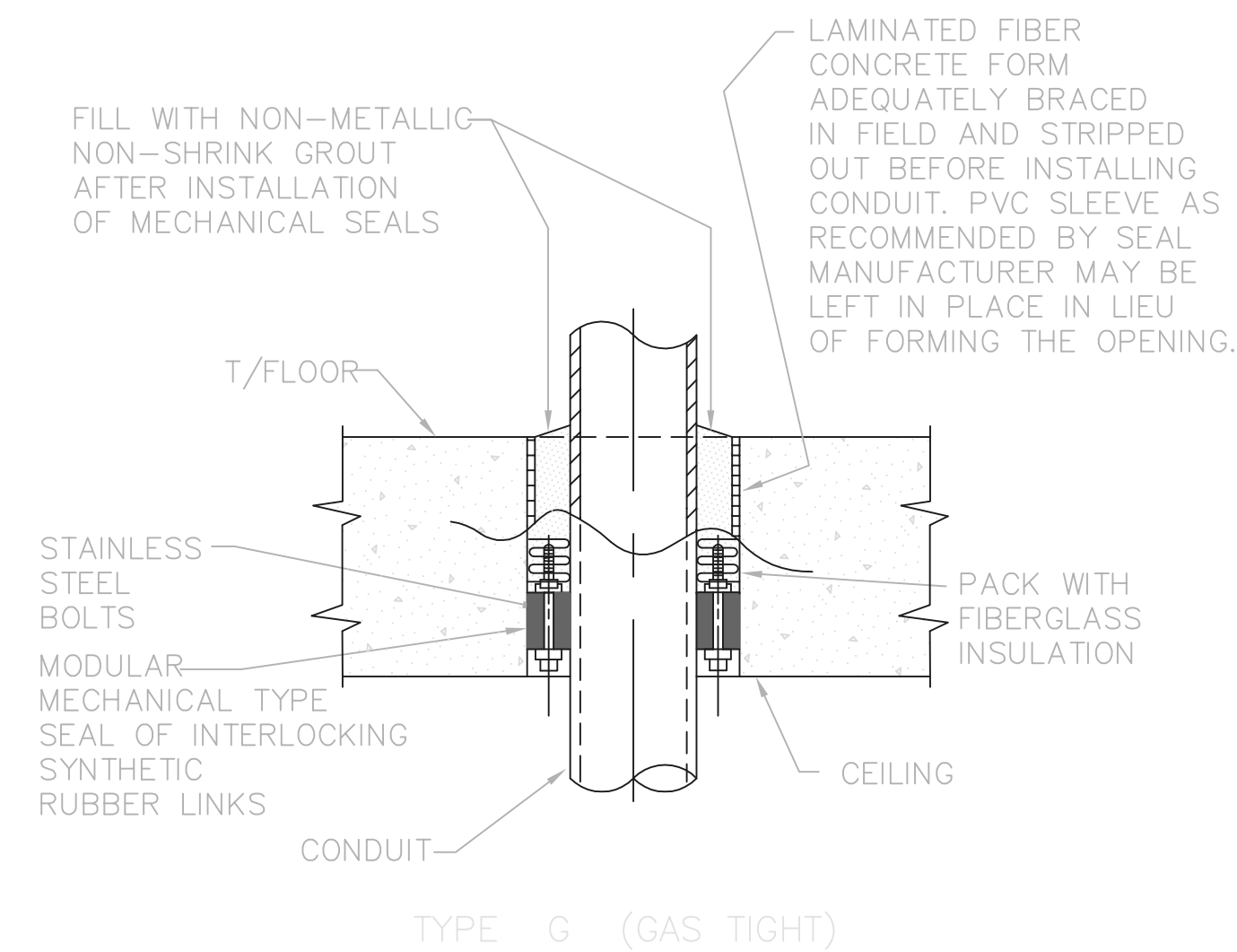
Burgess & Niple, Limited
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	
DATE:	1999

PUMP STATION
ELECTRICAL SCHEMATIC DIAGRAMS

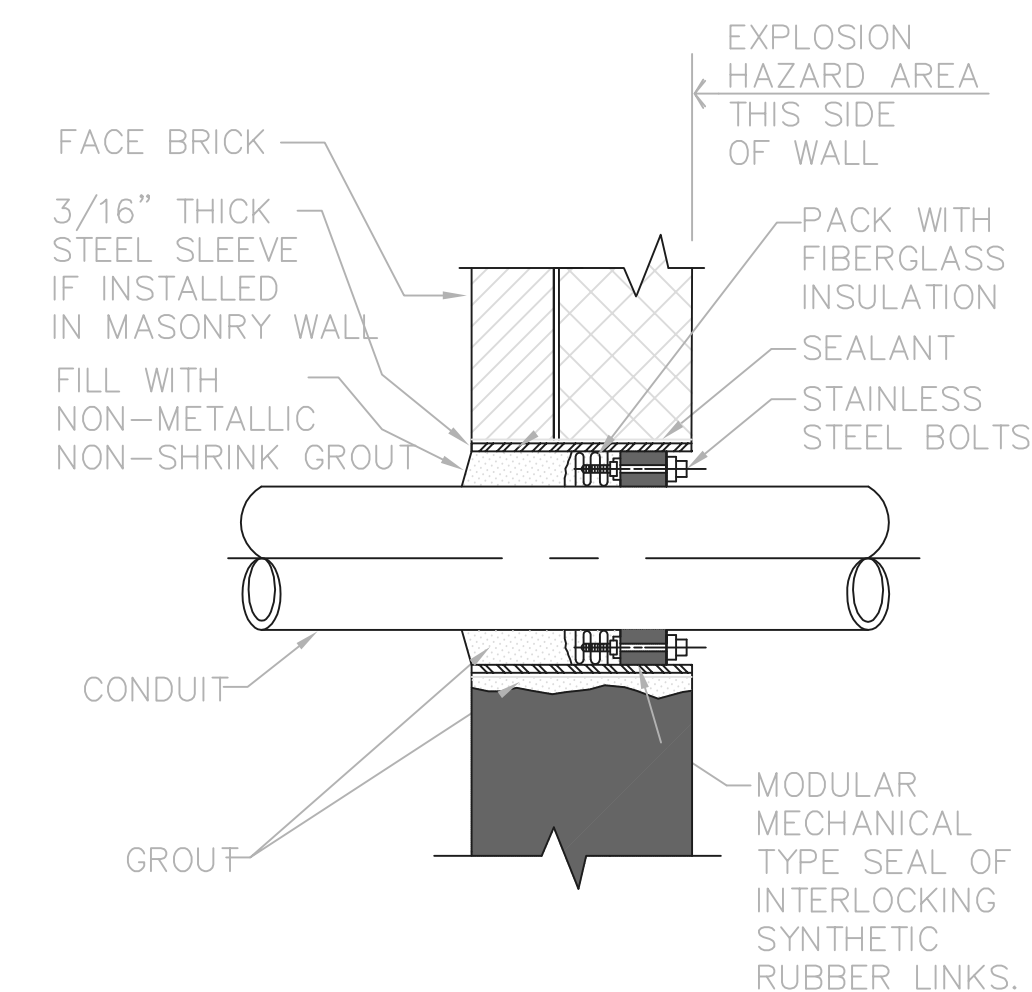
SCALE:	NONE
SHEET NO.	60
OF	100



TYPE G (GAS TIGHT)

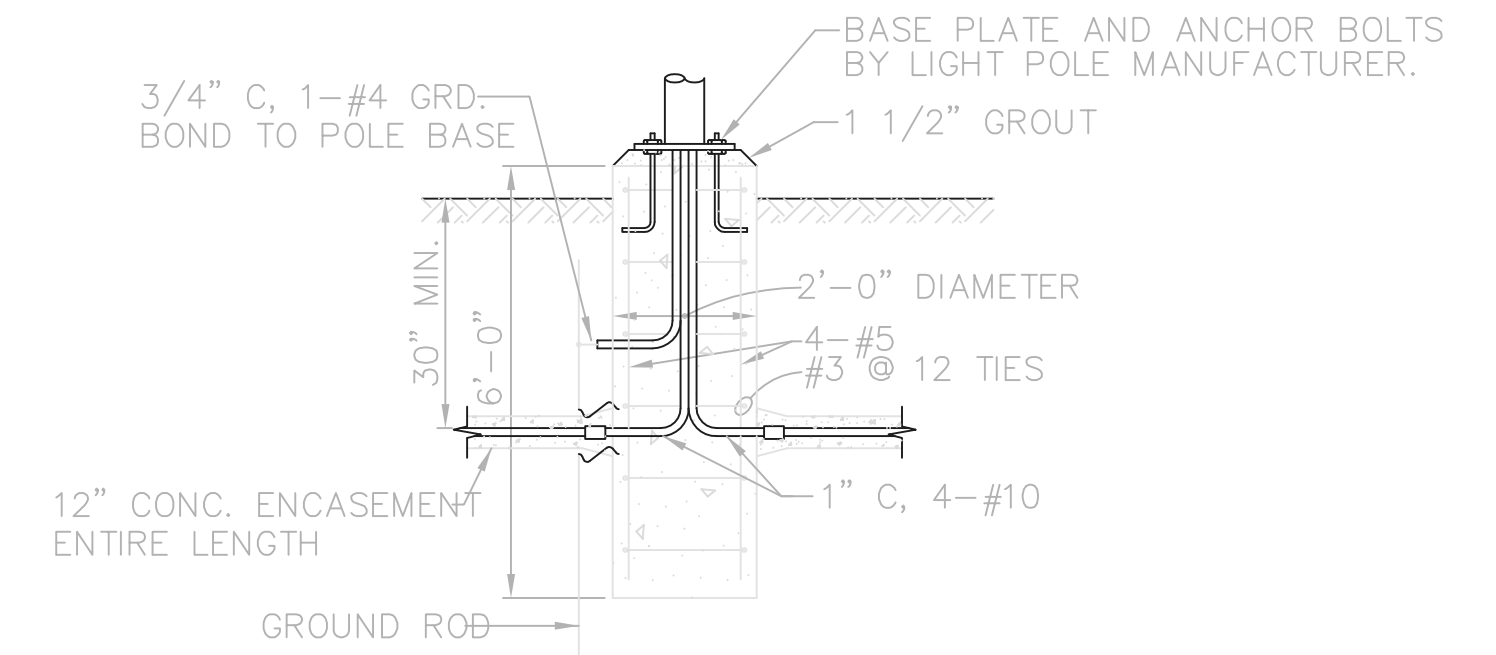
NOTE:
CONCRETE SHALL BE WORKED IN AND VIBRATED TO ELIMINATE ALL VOIDS IN CONCRETE - IF VOIDS DO REMAIN, FILL WITH GROUT BEFORE INSTALLING CONDUIT AND RUBBER SEALS

FLOOR SLEEVE
NTS



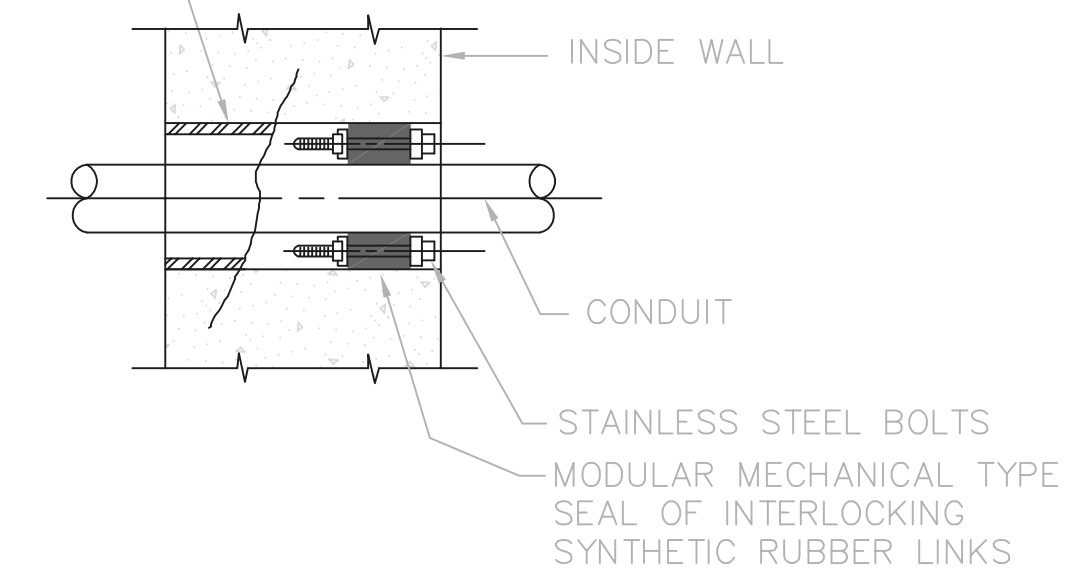
TYPE H (GAS TIGHT)

MASONRY WALL SLEEVE
NTS



LIGHT POLE BASE DETAIL
NTS

SHEET METAL OR LAMINATED FIBER CONCRETE FORM ADEQUATELY BRACED IN FIELD AND STRIPPED OUT BEFORE INSTALLING CONDUIT, EXCEPT IN MASONRY WHERE SLEEVE SHALL BE 3/16" STEEL AND SHALL BE INSTALLED WITH MASONRY. CONTRACTOR MAY USE A THERMOPLASTIC WALL SLEEVE, CENTURY-LINE SLEEVE BY THUNDERLINE CORP., OR EQUAL, TO BE LEFT IN PLACE.

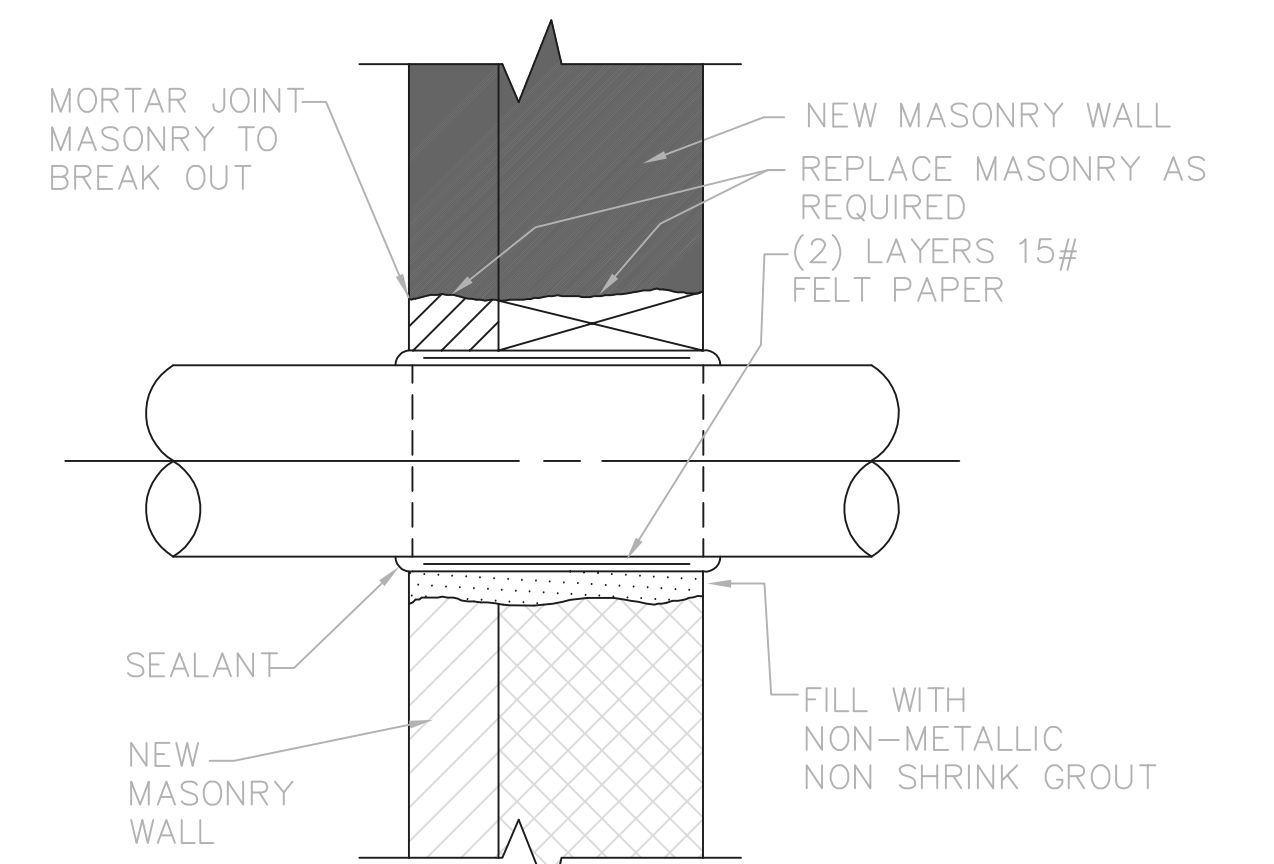


TYPE C

NOTE:

- CONCRETE SHALL BE WORKED IN AND VIBRATED TO ELIMINATE ALL VOIDS IN CONCRETE - IF VOIDS DO REMAIN, FILL WITH GROUT BEFORE INSTALLING CONDUIT AND RUBBER SEALS.
- UNLESS OTHERWISE SHOWN ON THE DRAWINGS ALL INTERIOR WALL PENETRATIONS SHALL USE TYPE C CONDUIT SLEEVE.

CONDUIT SLEEVE
NTS



TYPE F

NOTE:

FOR EXTERIOR WALLS, FACE COURSES TO BE MASONRY AND MIDDLE COURSE TO BE FILLED WITH FIBERGLASS INSULATION

CONDUIT SLEEVE THRU
NEW MASONRY WALL
NTS

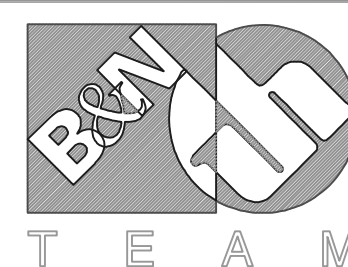
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM **Jones & Henry Engineers, Ltd.** DATE 08/07/02
MO. / DAY / YR.

© BNWW0201

TOL-4714E79
03/01/02 04-V02
P:\PR24025\NMPSTARECDWG\61.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

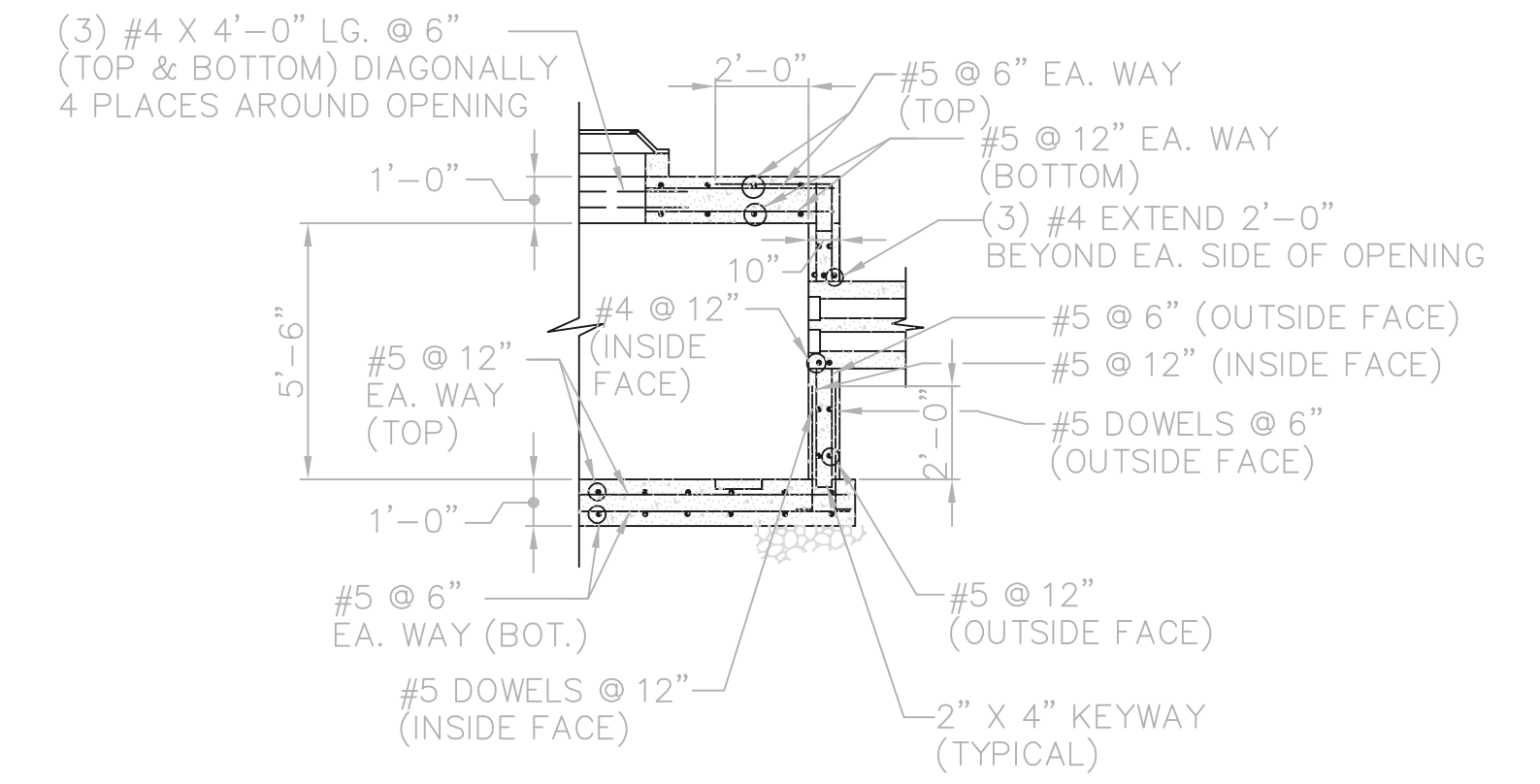
JOB NO.	20571
DESIGNED BY:	DLH
DRAWN BY:	BEF/LEY
CHECKED BY:	DLH
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
ELECTRICAL
MISCELLANEOUS DETAILS

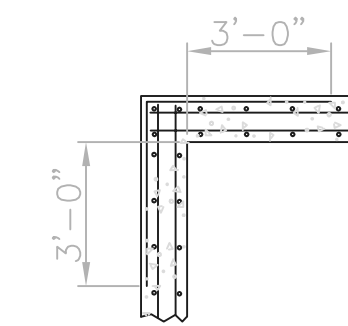
SCALE:

AS NOTED

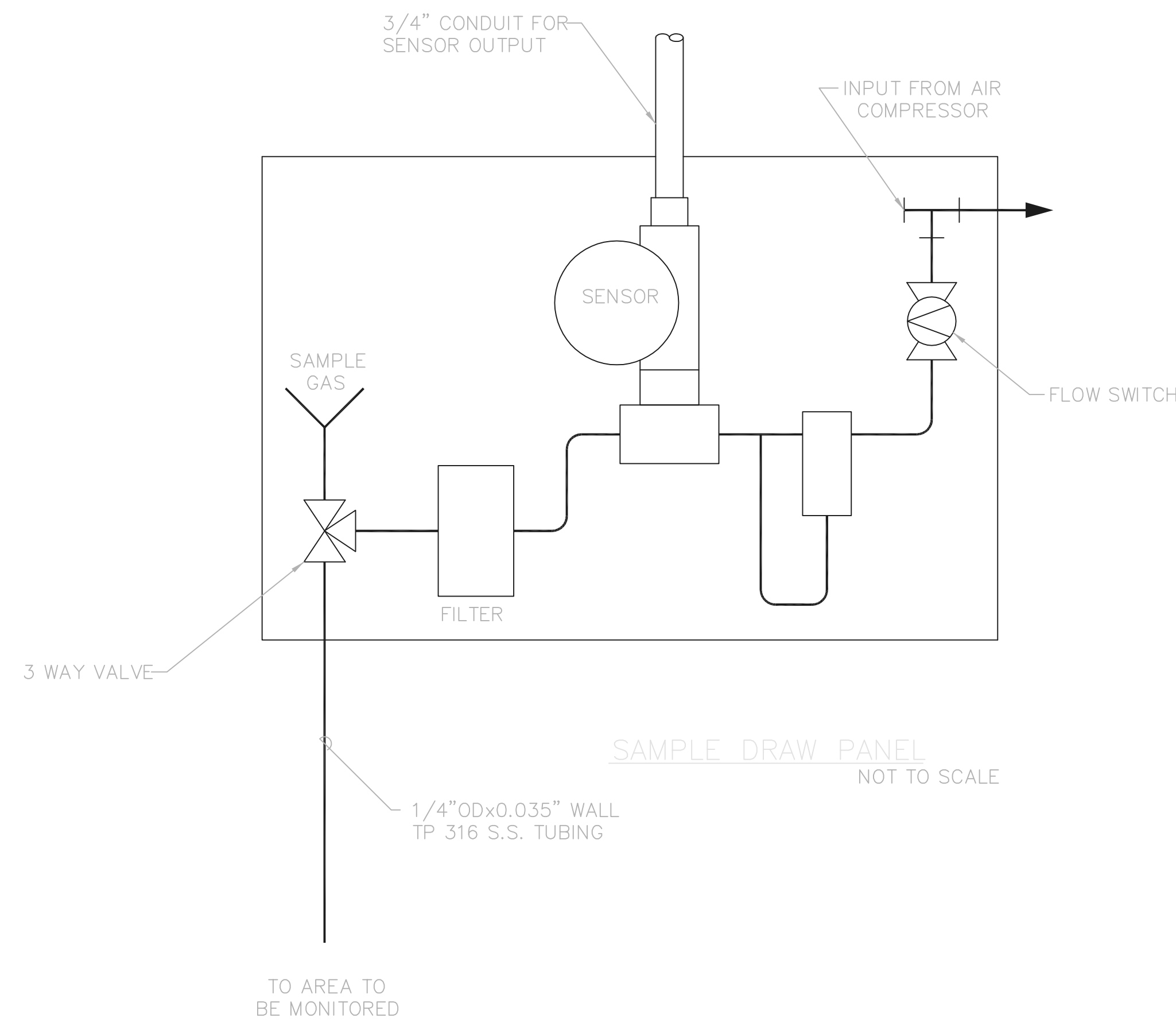
SHEET NO. 61 OF 100



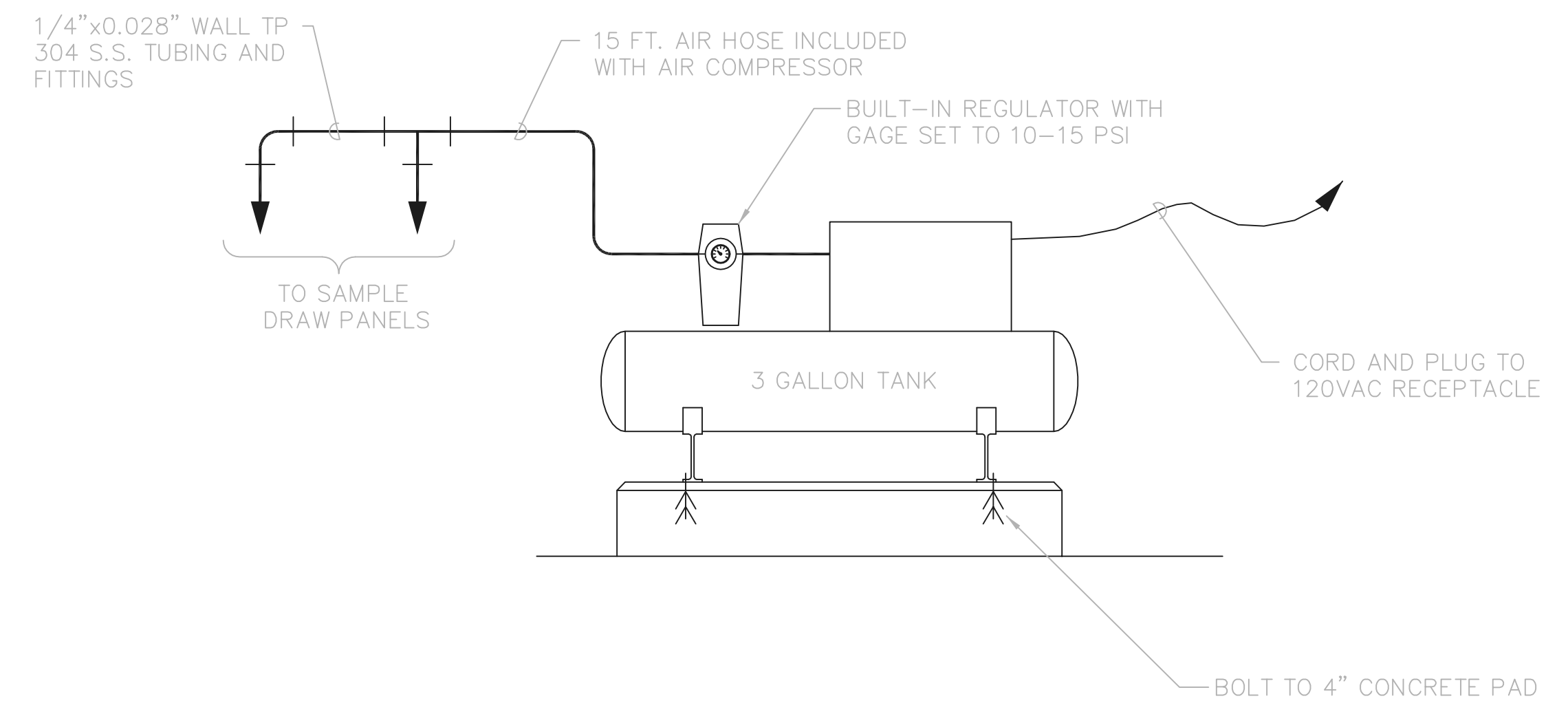
TYPICAL ELECTRICAL MANHOLE REINFORCING DETAIL
NOT TO SCALE



TYPICAL CORNER REINFORCING
NOT TO SCALE



SAMPLE DRAW PANEL
NOT TO SCALE



AIR COMPRESSOR DETAIL
NOT TO SCALE

NOTE:
OIL CARRYOVER LESS THAN 4 PPM
5 YEAR WARRANTY.

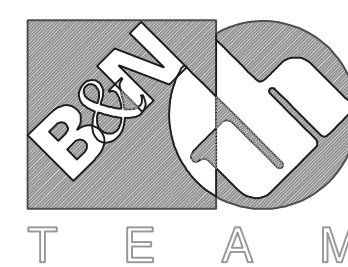
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
MO. / DAY / YR.

© BNWW0201

TOL-4714E80
03/01/02 04-V02 PLOTTED TO NOTED SCALE
P:\PR24025\PM\PS\RECORDWG 62.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

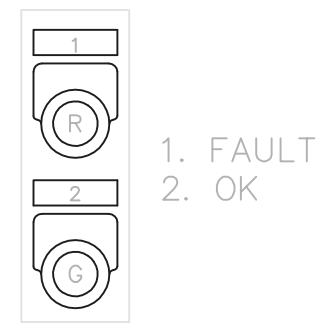
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

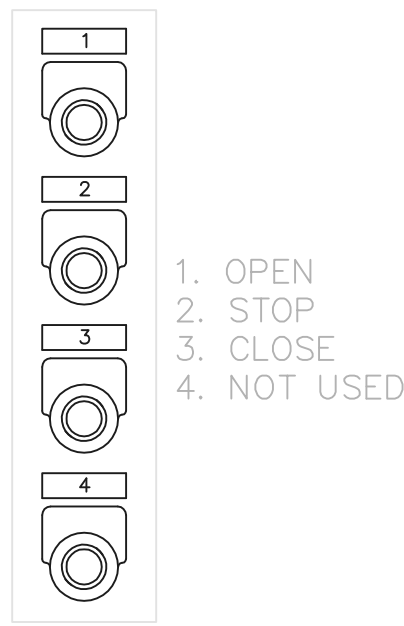
JOB NO.	20571
DESIGNED BY:	DLH
DRAWN BY:	LEY
CHECKED BY:	FM
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
PRIMARY LOOP FEED PAD
AND MISCELLANEOUS DETAILS

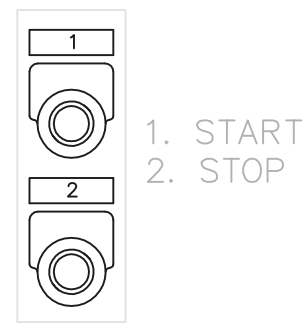
SCALE: AS NOTED	
SHEET NO. 62	OF 100



VENTILATION ALARM PANEL



SLUICE GATE 1, 2, & 3
PUSH BUTTON STATION

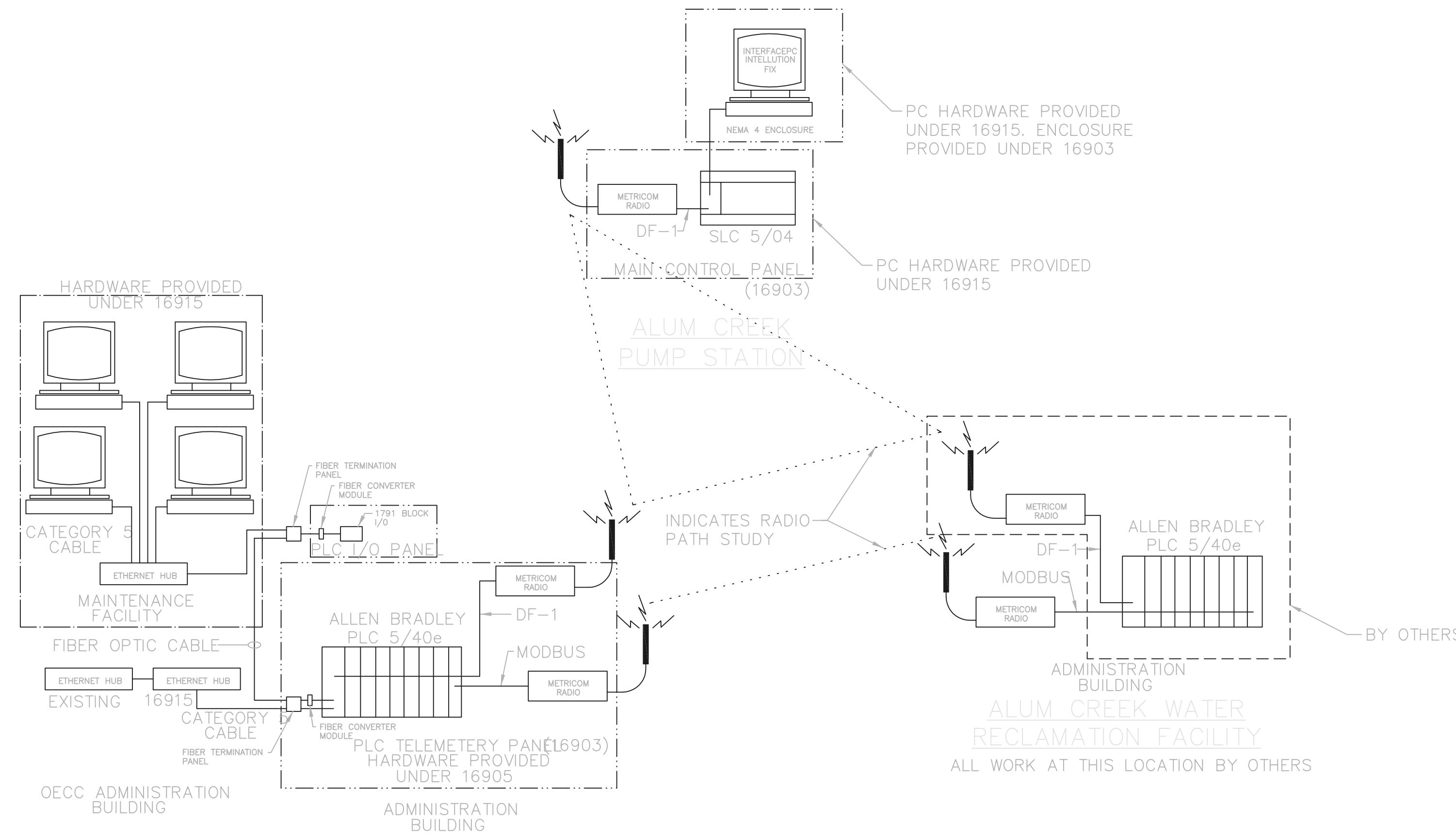


LIFT PUMP 1 THRU 4
PUSH BUTTON STATION

INSTRUMENT AND DEVICE LETTERING TABLE		
	FIRST LETTER	SUCCEEDING LETTERS
A	ANALYSIS	ALARM
B	BURNER FLAME	CLOSE OR DECREASE
C	CONDUCTIVITY	CONTROL
D	DENSITY	OPEN OR INCREASE
E	VOLTAGE	PRIMARY ELEMENT
F	FLOW RATE	RATIO
G	GAUGE	SUM OR ADD
H	HAND (MANUALLY OPERATED)	HIGH
I	CURRENT (ELEC.)	INDICATE
J	POWER	LIGHT
K	TIME	CONTROL STATION
L	LEVEL	LOW
M	MOTOR	OPERATE OR ON/OFF
N	USER'S CHOICE	START/STOP OR OPEN/CLOSE
O	TORQUE	OVERLOAD
P	PRESSURE OR VACUUM	POINT OR TEST
Q	QUANTITY OR EVENT	TOTALIZE OR INTEGRATE
R	RADIOACTIVITY	RECORDER
S	SPEED OR FREQUENCY	SWITCH
T	TEMPERATURE	TRANSMITTER
U	MULTIVARIABLE	MULTIFUNCTION
V	VIBRATION, MOTION	USER'S CHOICE
W	WEIGHT OR FORCE	WELL
X	USER'S CHOICE	EXCESS
Y	COMPUTER	RELAY OR COMPUTE
Z	POSITION	DRIVE OR ACTUATE
Δ	DIFFERENTIAL	

PROCESS AND INSTRUMENTATION DIAGRAM DEVICE SYMBOLS AND DESIGNATION			
SYMBOL	DESCRIPTION	SYMBOL	INSTRUMENT OR DEVICE IDENTIFICATION
	FIRST LETTER SUCCEEDING LETTER SUCCEEDING LETTER LOOP NUMBER		ELECTRIC SUPPLY VOLTAGE (24VDC, 120VAC, ETC.)
	FRONT PANEL MOUNTED INSTRUMENT OR DEVICE		DISCRETE DATA INPUT POINT
	BACK PANEL MOUNTED INSTRUMENT OR DEVICE		ANALOG DATA OUTPUT POINT
	FIELD MOUNTED INSTRUMENT OR DEVICE		ANALOG DATA INPUT POINT
	ANNUNCIATOR WINDOW WITH DESCRIPTION		PROCESS FLOW DIRECTION NORMAL
	SINGLE PHASE AC MOTOR (DC INDICATES DC MOTOR)		ELECTRICAL CONNECTION WIRE (24V, 120V, 240V, ETC.)
	THREE PHASE AC MOTOR		ELECTRICAL CONNECTION WIRE 480V
	STAND-BY GENERATOR		ANALOG SIGNAL WIRE (USUALLY 4-20 MA)
	MOTOR STARTER		PROCESS FLOW LINE
	COMBINATION MOTOR STARTER		MECHANICAL CONNECTION
	DISCONNECT SWITCH		PNEUMATIC OR HYDRAULIC SIGNAL
	EQUIPMENT PROVIDED UNDER SPECIFICATION NUMBER SHOWN.		HORN, BELL OR SIREN
	EQUIPMENT PROVIDED UNDER DIVISION 16	B-1	TYPICAL VALVE IDENTIFICATION LETTER INDICATES VALVE TYPE (SEE DIVISION 15)
	PUMP	(2.67)	TYPICAL SPECIFICATION REFERENCE NUMBER WITHIN SECTION 16902
	BLOWER	(11735)	TYPICAL SPECIFICATION SECTION NUMBER
	AIR COMPRESSOR		
	-SLUICE GATE (SG) OR -SLIDE GATE (SLG)		
	VALVE		
	THREE WAY VALVE		
	CHECK VALVE		
	SOLENOID VALVE		

- INSTRUMENTATION AND CONTROL NOTES**
- NUMBER SHOWN (I.E. 11735), INDICATES A SPECIFICATION REFERENCE FOR ITEMS OTHER THAN DIVISION 16. THE ELECTRICAL ITEM UNDER THIS REFERENCE IS SUPPLIED BY THE GENERAL CONTRACTOR. UNLESS OTHERWISE NOTED IN THAT SPECIFICATION, THE ELECTRICAL CONTRACTOR SHALL INSTALL AND WIRE THE ITEM PER THE DRAWINGS AND DIVISION 16 SPECIFICATIONS.
 - THE CONTRACTOR SHALL PROVIDE ALL ITEMS NECESSARY FOR THE COMPLETE INSTALLATION OF THE EQUIPMENT AS RECOMMENDED OR REQUIRED BY THE MANUFACTURER OF THE EQUIPMENT OR REQUIRED BY CODE WITHOUT ADDITIONAL COST TO THE OWNER REGARDLESS WHETHER THE ITEMS ARE SHOWN ON THE DRAWINGS OR COVERED IN IN THE SPECIFICATIONS.



OLENTANGY ENVIRONMENTAL CONTROL CENTER
TELEMETRY HARDWARE OVERVIEW

RECORD DRAWING

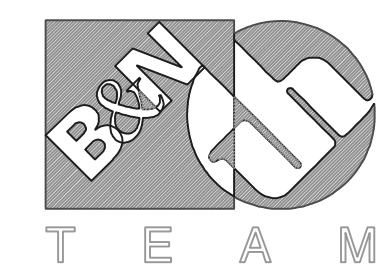
NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".

FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
MO. / DAY / YR.

© BNW0201

TOL-4714C02-001
07/03/02 05-102
P:\PR24025\PMPS\ARECDWG\63.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

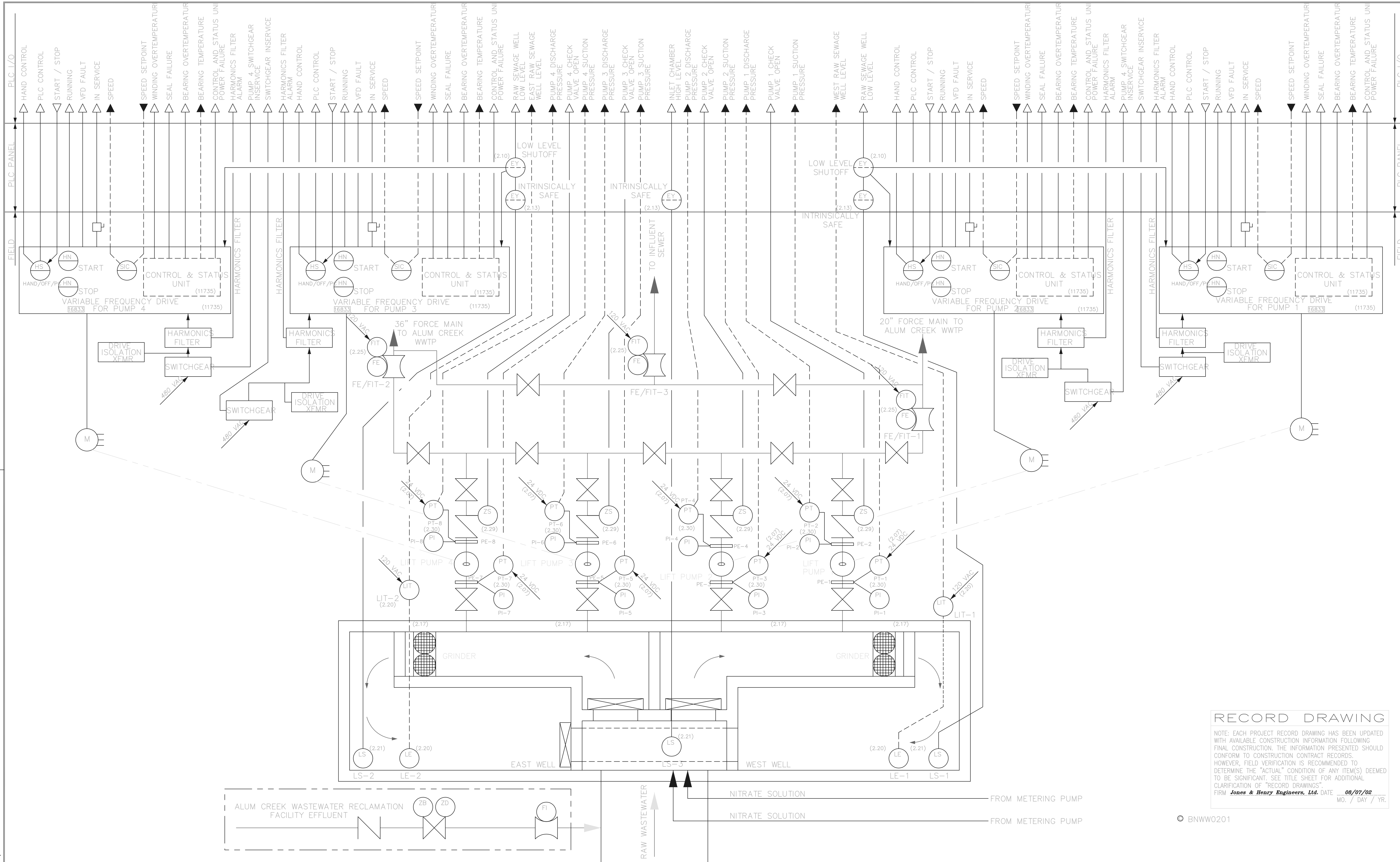
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	DLH
DRAWN BY:	DRR
CHECKED BY:	DLH
APPROVED BY:	
DATE:	1999

PUMP STATION
INSTRUMENTATION AND CONTROL
SYMBOLS AND ABBREVIATIONS

SCALE:	
NONE	
SHEET NO.	OF
63	100



RECORD DRAWING

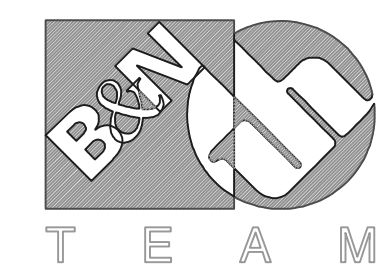
NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".

FIRM **Jones & Henry Engineers, Ltd.** DATE 08/07/02 MO. / DAY / YR.

© BNW0201

TOL-4714E01-001
 08/06/02 06-002
 P:\PR24025\PMPS\ARECDWG\64.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

Jones & Henry Engineers, Ltd.

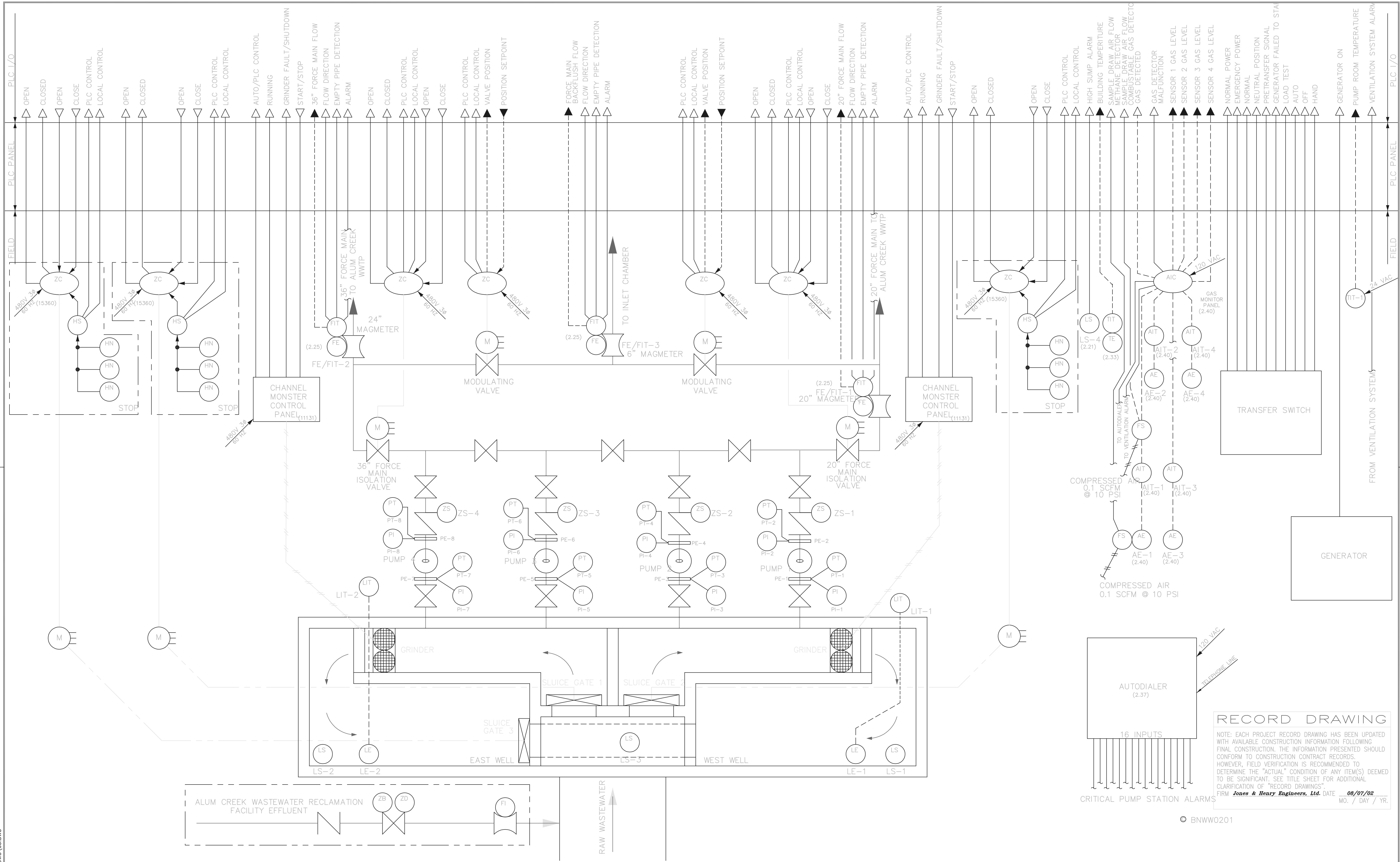
DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	MAM
DRAWN BY:	LEY
CHECKED BY:	MAM
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
 RAW WASTEWATER PUMPS
 PROCESS DIAGRAM

SCALE:	NONE
SHEET NO.	64
OF	100

TOL-4714E01-001
08/06/02 06-V02
P:\PR24025\PMPS1\ARECDWG\65.DWG



NO.	REVISIONS	DATE	BY	CHK.

Burgess & Niple, Limited
TEAM

Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	MAM
DRAWN BY:	LEY
CHECKED BY:	MAM
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
PROCESS DIAGRAM

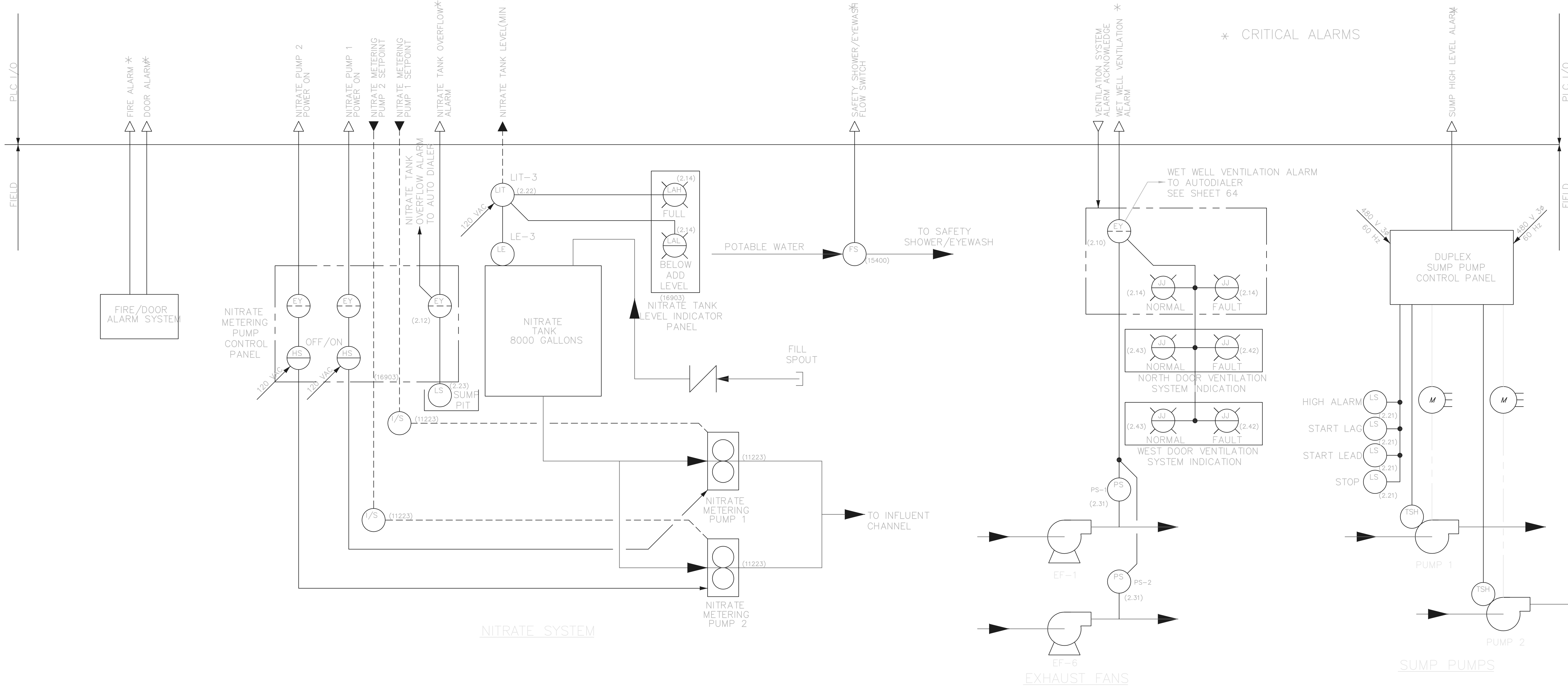
SCALE:	NONE
SHEET NO.	OF
65	100

RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".

FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
MO. / DAY / YR.

© BNW0201



* CRITICAL ALARMS

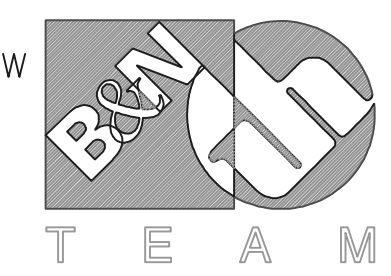
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
 FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
 MO. / DAY / YR.

© BNWW0201

TOL-4714EB7
 04/23/02 04-V02
 P:\PR24025\NMPSTARECDWG\65A.DWG

NO.	REVISIONS	DATE	BY	CHK.
1	ADD DOOR AND FIRE SIGNALS	10/00		SLW



Burgess & Niple, Limited

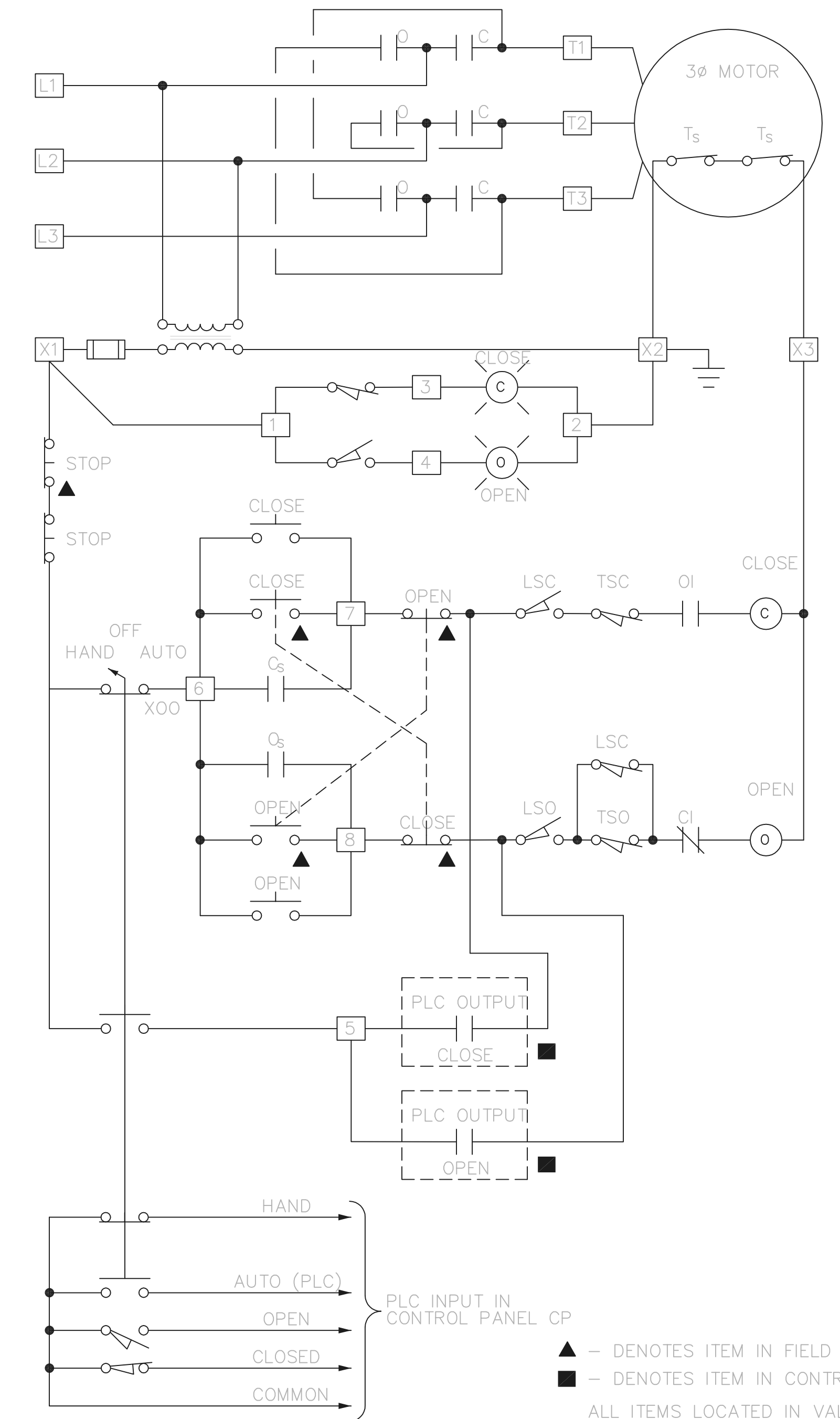
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	FLJ
DRAWN BY:	KMH
CHECKED BY:	FLJ
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
 NITRATE CONTROL,
 SUMP PUMPS 1 & 2, AND
 VENTILATION DIAGRAMS

SCALE:	
NONE	
SHEET NO.	OF
65A	100



SLUICE GATES 1-3

NOTE: THERE IS NO CONTROL STATION IN THE FIELD.

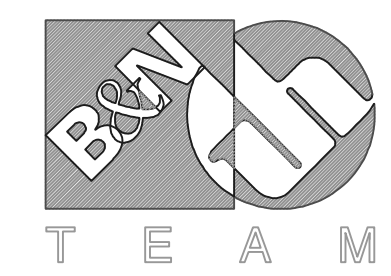
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
 FIRM **Jones & Henry Engineers, Ltd.** DATE 08/07/02
 MO. / DAY / YR.

© BNW0201

TOL-4714EB5-004
 08/06/02 06-002
 P:\PR24025\NMPSTARECDWG\65B.DWG

NO.	REVISIONS	DATE	BY	CHK.



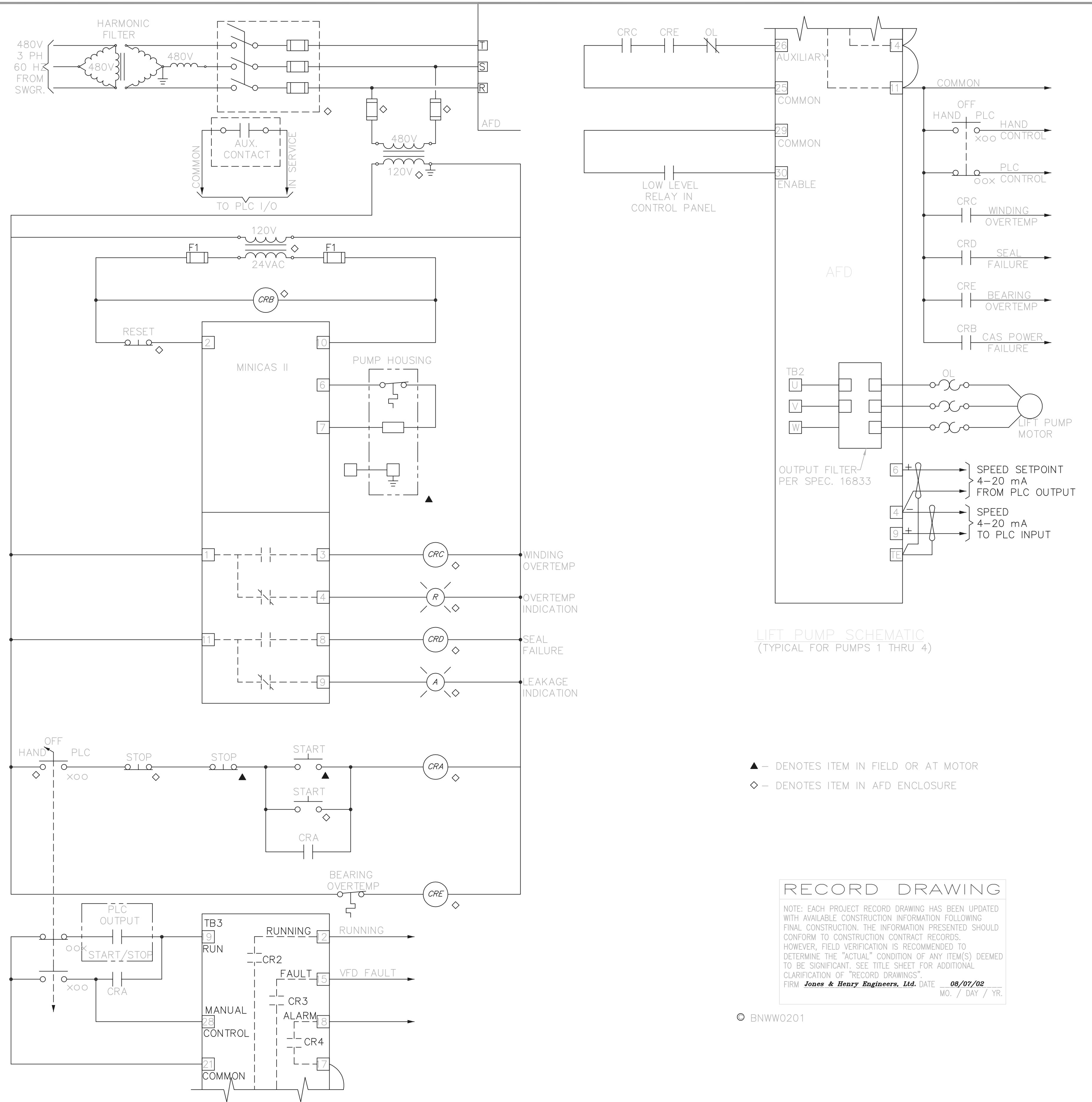
Burgess & Niple, Limited
 Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	FLJ
DRAWN BY:	KMH
CHECKED BY:	FLJ
APPROVED BY:	SLW
DATE:	1999

PUMP STATION
 SLUICE GATES 1-3

SCALE:	
NONE	
SHEET NO.	OF
65B	100



LIFT PUMP SCHEMATIC
(TYPICAL FOR PUMPS 1 THRU 4)

- ▲ - DENOTES ITEM IN FIELD OR AT MOTOR
- ◇ - DENOTES ITEM IN AFD ENCLOSURE

RECORD DRAWING

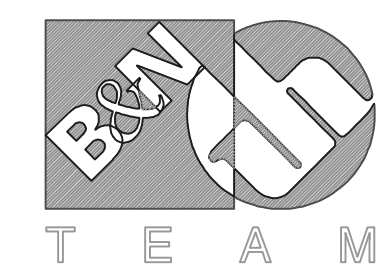
NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".

FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
MO. / DAY / YR.

© BNWW0201

TOL-4714E76 THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE
 03/01/02 04-V02
 P:\PR24025\MPSTARECDWG\65C.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

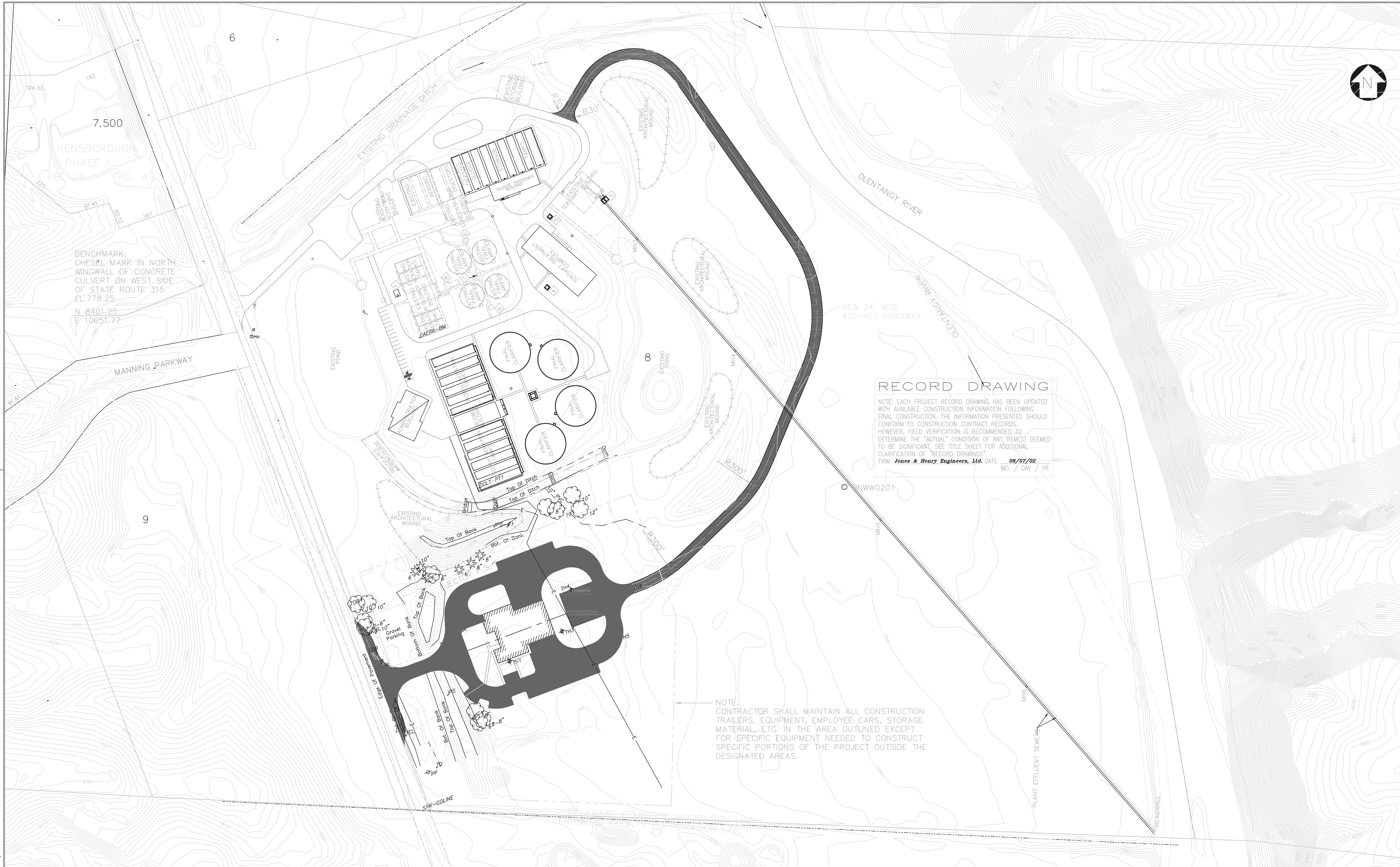
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	FLJ
DRAWN BY:	KMH
CHECKED BY:	FLJ
APPROVED BY:	SLW
DATE:	1998

PUMP STATION
LIFT PUMP SCHEMATIC

SCALE:	
1=1	
SHEET NO.	OF
65C	100



7.500
 KENSBOROUGH
 PHASE I
 PB 24 PG. 45
 BENCHMARK:
 CHESEL MARK IN NORTH
 WINGWALL OF CONCRETE
 CULVERT ON WEST SIDE
 OF STATE ROUTE 315
 EL. 778.25
 N 8401.25
 E 10651.77

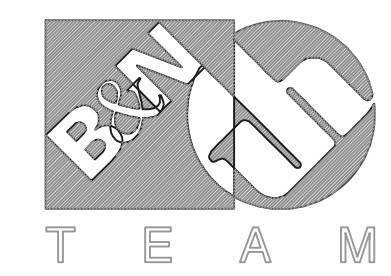
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
 FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
 MO. / DAY / YR.

NOTE:
 CONTRACTOR SHALL MAINTAIN ALL CONSTRUCTION TRAILERS, EQUIPMENT, EMPLOYEE CARS, STORAGE MATERIAL, ETC. IN THE AREA OUTLINED EXCEPT FOR SPECIFIC EQUIPMENT NEEDED TO CONSTRUCT SPECIFIC PORTIONS OF THE PROJECT OUTSIDE THE DESIGNATED AREAS.

TOL-471451Z
 03/11/02 04-W02
 P:\PR24025\PMPS\RECORDWG 66.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited
 Jones & Henry Engineers, Ltd.

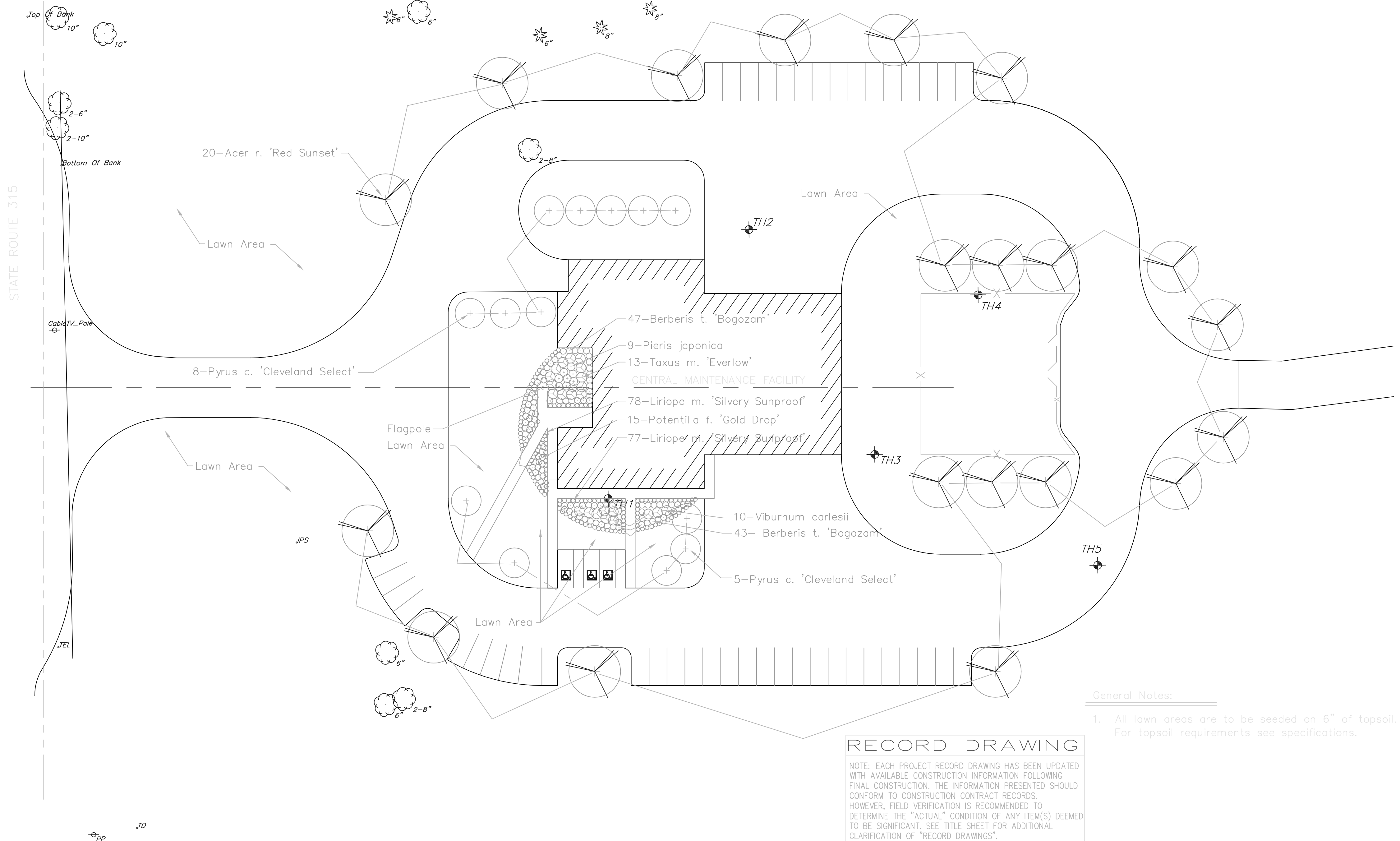
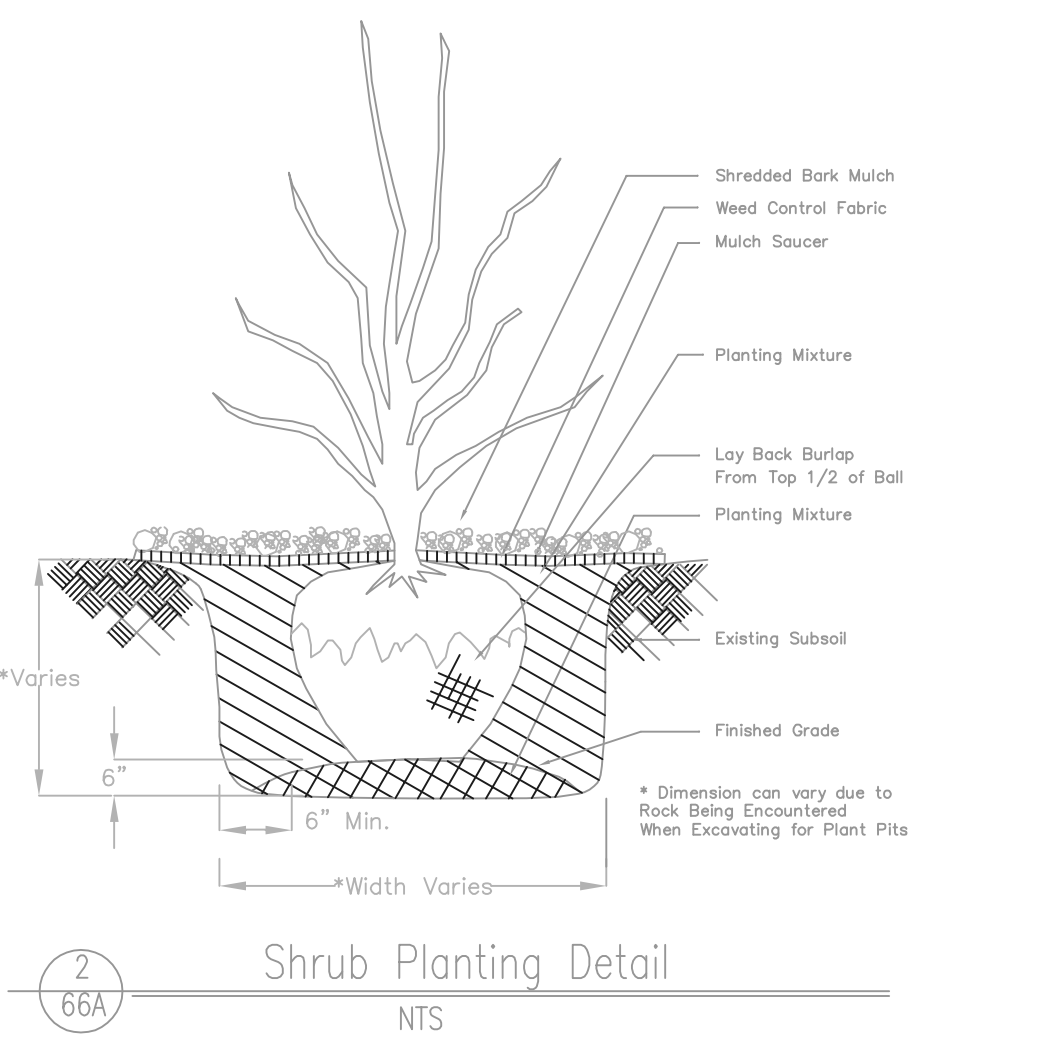
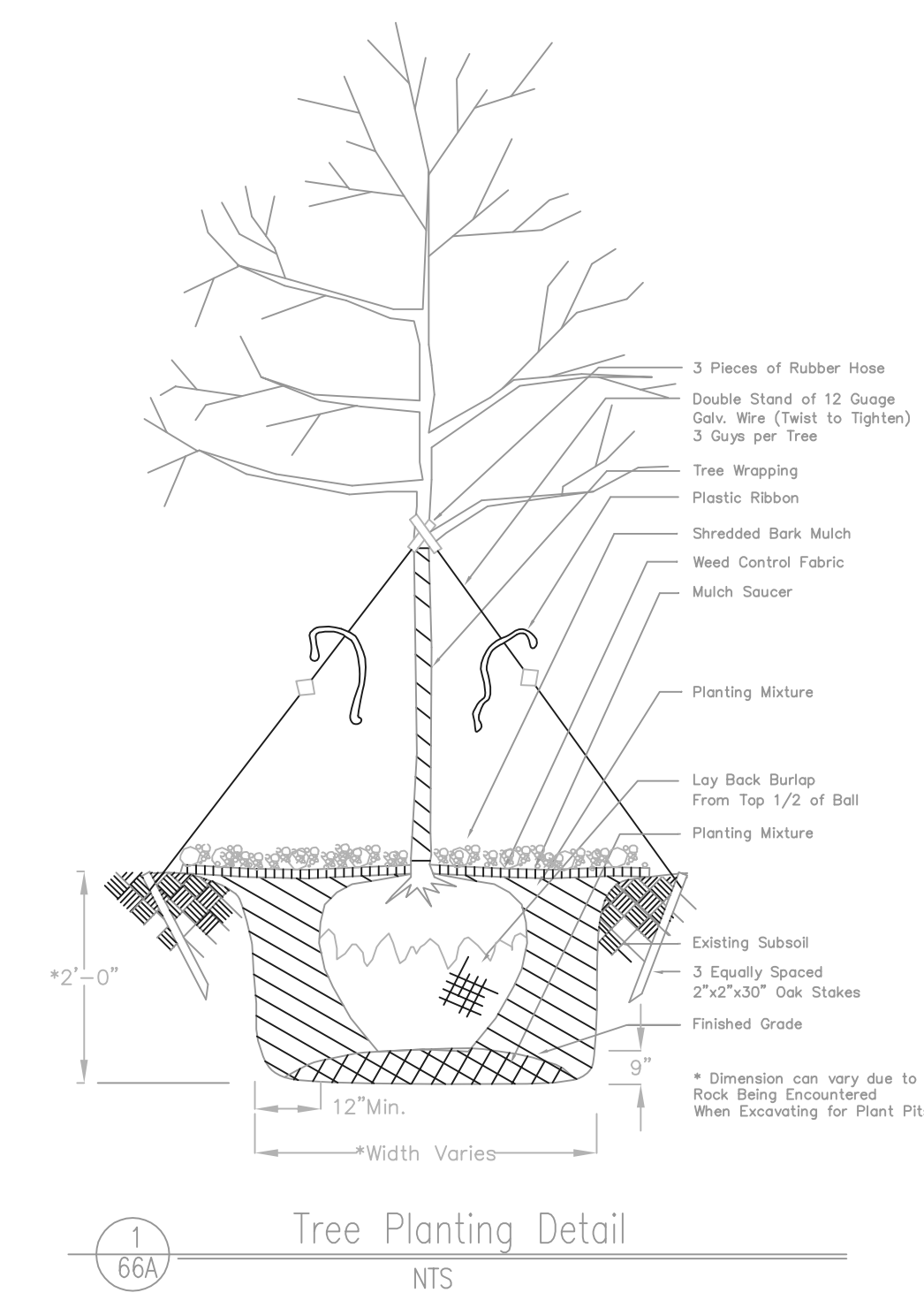
DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	ATZ
DRAWN BY:	BEF
CHECKED BY:	SLW
APPROVED BY:	
DATE:	1999

CENTRAL MAINTENANCE FACILITY
 SITE PLAN

SCALE:	
1"=100'	
SHEET NO.	OF
66	100

Plant Materials List						
Quantity	Botanical Name	Common Name	Size	Root	Spacing	Remarks
20	Acer rubrum 'Red Sunset'	Red Sunset Maple	2-1/2" Cal.	B & B	See Plan	Fully Branched
16	Pyrus calleryana 'Cleveland Select'	Cleveland Select Pear	2" Cal.	B & B	See Plan	-
90	Berberis thunbergii 'Bogozam'	Dwarf Golden Pygmy Barberry	15" Spd.	No. 3 Cont.	3' o.c.	
156	Liriope muscari 'Silvery Sunproof'	Silvery Sunproof Lily Turf		No. 1 Cont.	2' o.c.	
9	Pieris japonica	Japanese Andromeda	15" Ht.	No. 3 Cont.	4' o.c.	
15	Potentilla fruticosa 'Gold Drop'	Gold Drop Potentilla	15" Ht.	No. 3 Cont.	3' o.c.	
13	Taxus media 'Everlow'	Everlow Yew	15" Ht.	B & B	4-5' o.c.	
10	Viburnum carlesii	Korean Spice Viburnum	24" Ht.	B & B	5' o.c.	

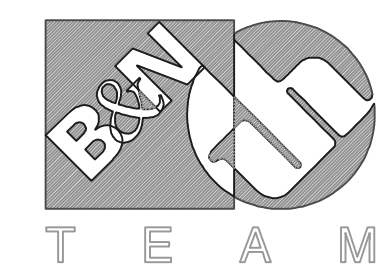


General Notes:
 1. All lawn areas are to be seeded on 6" of topsoil. For topsoil requirements see specifications.

RECORD DRAWING
 NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
 FIRM: BURGESS & NIPLÉ, LIMITED DATE: 07/19/02 MO. / DAY / YR.

P:\PR24025\PMPS\REC\DWG\66A.DWG

NO.	REVISIONS	DATE	BY	CHK.



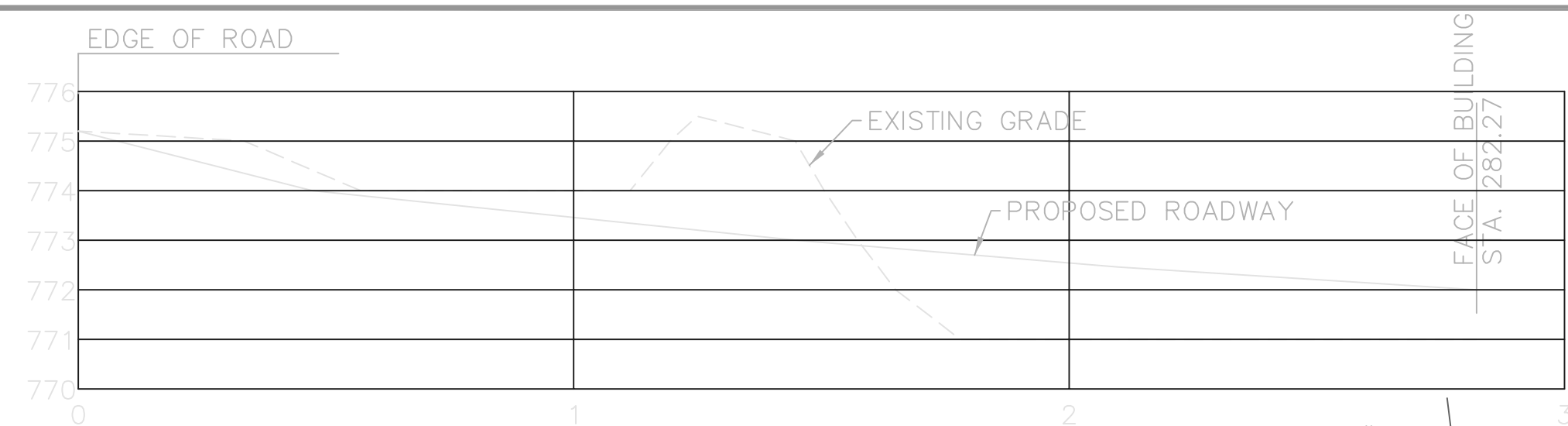
Burgess & Niple, Limited
 Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

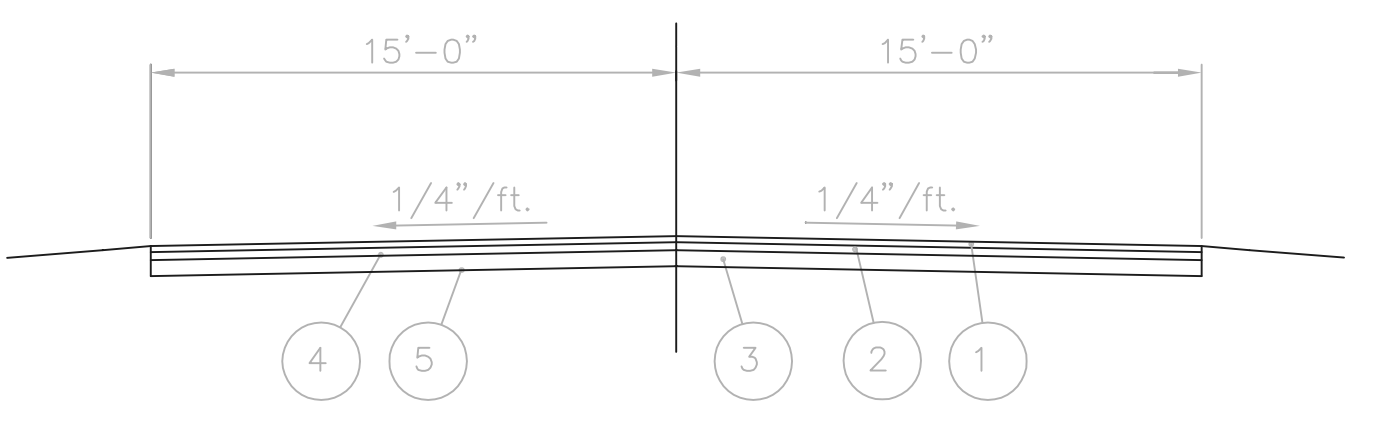
JOB NO.	20571
DESIGNED BY:	SDS
DRAWN BY:	SDS
CHECKED BY:	
APPROVED BY:	
DATE:	1999

CENTRAL MAINTENANCE FACILITY
 PLANTING PLAN

SCALE:	
1"=30'	
SHEET NO.	OF
66A	100

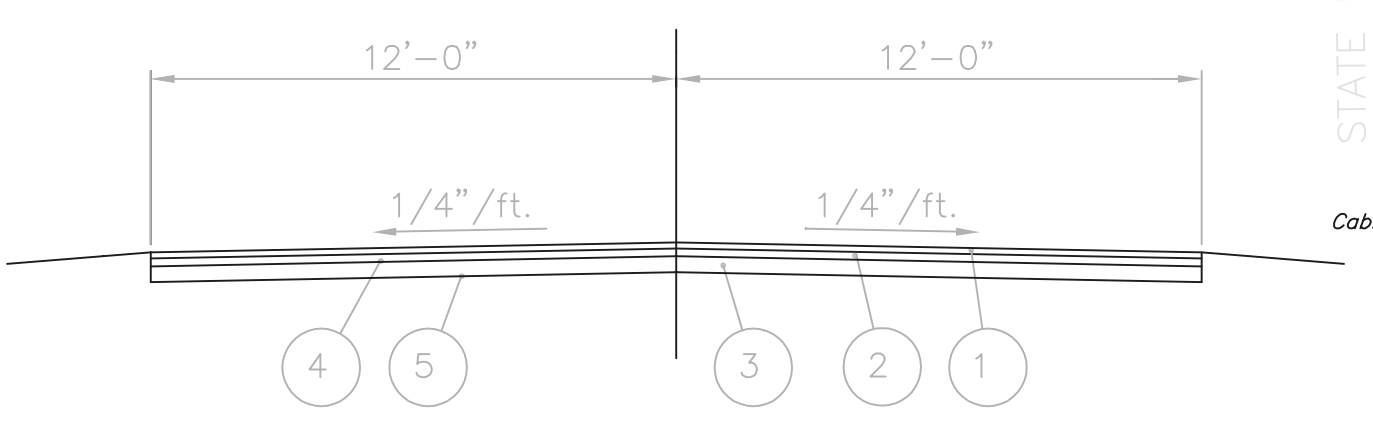


ENTRANCE ROAD PROFILE
 1"=30' HOR.
 1"=3' VERT.



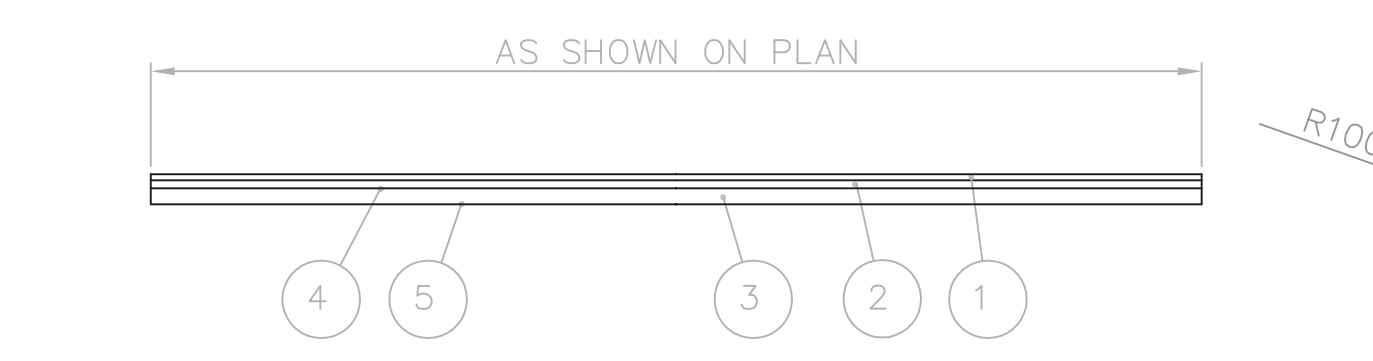
- ① 2" ASPHALT CONCRETE SURFACE COURSE (ODOT ITEM 404)
- ② 3" ASPHALT CONCRETE LEVELING COURSE (ODOT ITEM 402)
- ③ 10" AGGREGATE BASE (ODOT ITEM 304)
- ④ PRIME COAT 0.40 GAL/SQ.YD. (ODOT ITEM 408)
- ⑤ COMPACTED SUBGRADE (ODOT ITEM 203)

ENTRANCE ROAD PAVEMENT SECTION
 N.T.S.



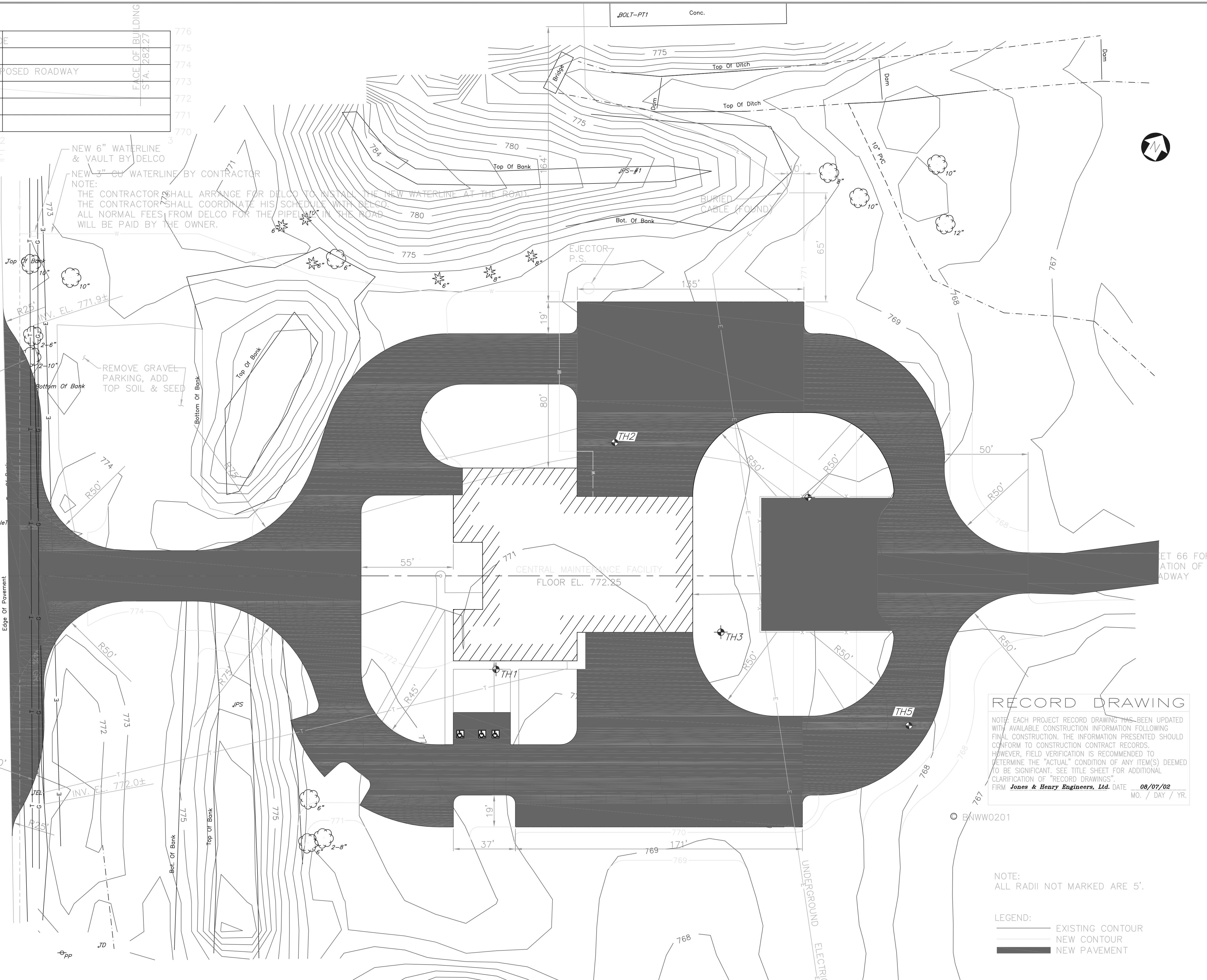
- ① 1" ASPHALT CONCRETE SURFACE COURSE (ODOT ITEM 404)
- ② 1" ASPHALT CONCRETE LEVELING COURSE (ODOT ITEM 402)
- ③ 8" AGGREGATE BASE (ODOT ITEM 304)
- ④ PRIME COAT 0.40 GAL/SQ.YD. (ODOT ITEM 408)
- ⑤ COMPACTED SUBGRADE (ODOT ITEM 203)

BACK ROAD PAVEMENT SECTION
 N.T.S.



- ① 2" ASPHALT CONCRETE SURFACE COURSE (ODOT ITEM 404)
- ② 3" ASPHALT CONCRETE LEVELING COURSE (ODOT ITEM 402)
- ③ 10" AGGREGATE BASE (ODOT ITEM 304)
- ④ PRIME COAT 0.40 GAL/SQ.YD. (ODOT ITEM 408)
- ⑤ COMPACTED SUBGRADE (ODOT ITEM 203)

TYPICAL PAVEMENT SECTION
 N.T.S.



RECORD DRAWING

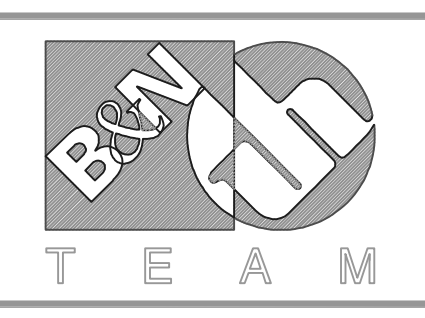
NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
 FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
 MO. / DAY / YR.

NOTE:
 ALL RADII NOT MARKED ARE 5'.

LEGEND:
 — EXISTING CONTOUR
 — NEW CONTOUR
 ■ NEW PAVEMENT

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE
 TOL-4714R001
 03/11/02 04-V02
 P:\PR24025\NMPSTARECDWG\67.DWG

NO.	REVISIONS	DATE	BY	CHK.



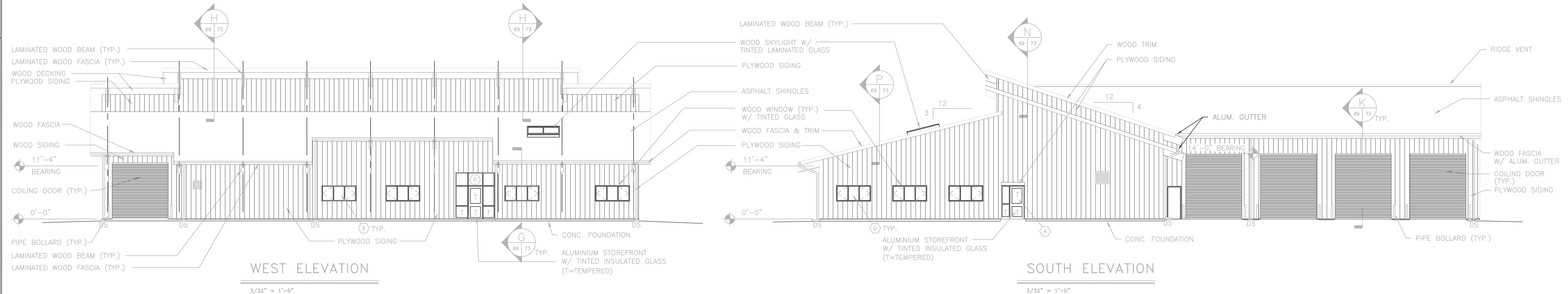
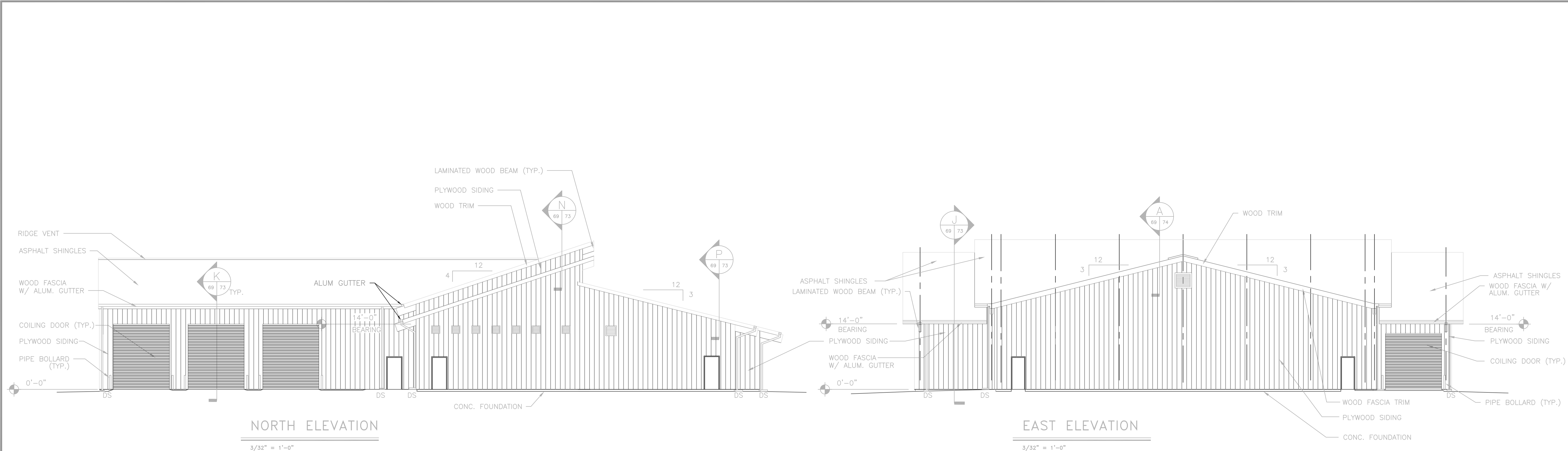
Burgess & Niple, Limited
 Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	RCD
DRAWN BY:	BEF
CHECKED BY:	
APPROVED BY:	SLW
DATE:	1999

CENTRAL MAINTENANCE FACILITY
 ROADWAY AND GRADING PLAN

SCALE:	
1"=30'	
SHEET NO.	OF
67	100



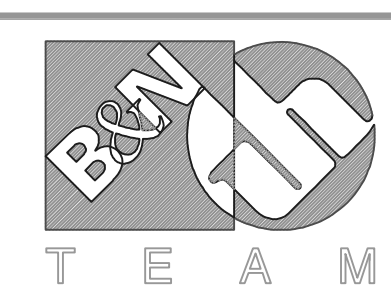
NOTE: REFER TO SHEET 75 FOR WINDOW FRAME TYPES.

RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
 FIRM BURGESS & NIPLE, LIMITED DATE 07/01/02 MO. / DAY / YR.

P:\PR24025\PMPS\REC.DWG 69.DWG 5-5-99 1:48:50 pm

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited
 Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

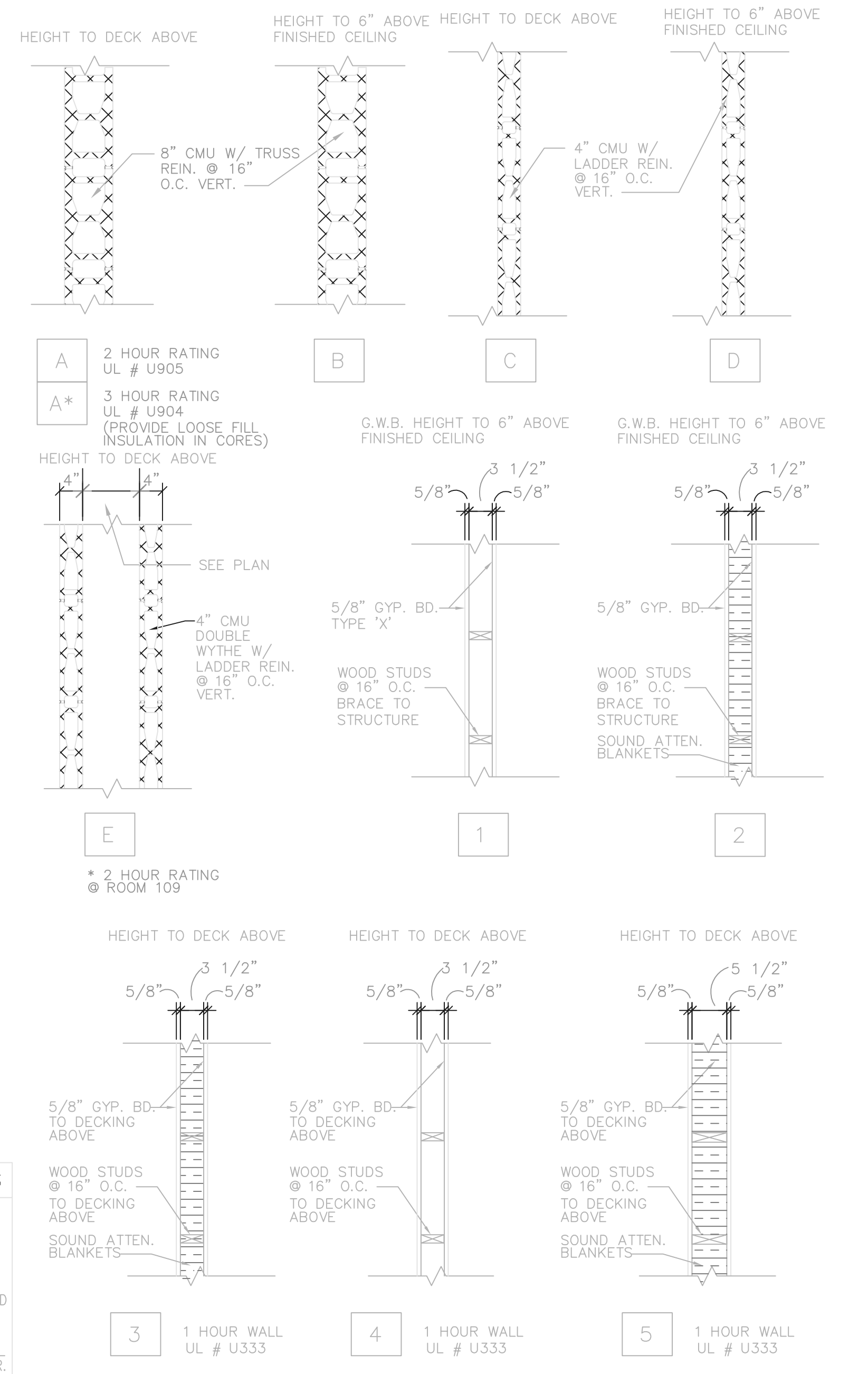
JOB NO.	20571
DESIGNED BY:	TMO/SJC
DRAWN BY:	SJC
CHECKED BY:	
APPROVED BY:	RBD
DATE:	MAR 1999

CENTRAL MAINTENANCE
 FACILITY ELEVATIONS

SCALE:	
3/32"=1'-0"	
SHEET NO.	OF
69	100

CODED NOTES

- 1 ALUMINIUM SKYLIGHTS ABOVE
- 2 LOCATE DOOR FRAME 4" FROM ADJACENT WALL
- 3 LINE OF ROOF SOFFIT ABOVE
- 4 MARKERBOARD
- 5 TACKBOARD
- 6 FINISH FLOOR TRANSITION
- 7 WIRE PARTITION, TOP @ 10'-5"
- 8 ELECTRIC WATER COOLER
- 9 PIPE BOLLARD (TYP.)
- 10 8" CMU HEAD @ 8'-8"
- 11 HI-LO ELEC. WATER COOLER
- 12 CORNER GUARD
- 13 16'-0" W X 14'-0" H VINYL CURTAIN SEE DETAIL J/71
- 14 REMOVE 2'-0" DEPTH OF EXISTING MATERIAL BELOW PROPOSED BASE. REPLACE WITH COMPACTED SPECIAL BACKFILL. ISOLATE BASE FROM SURROUNDING SLAB WITH 1/2" JOINT.

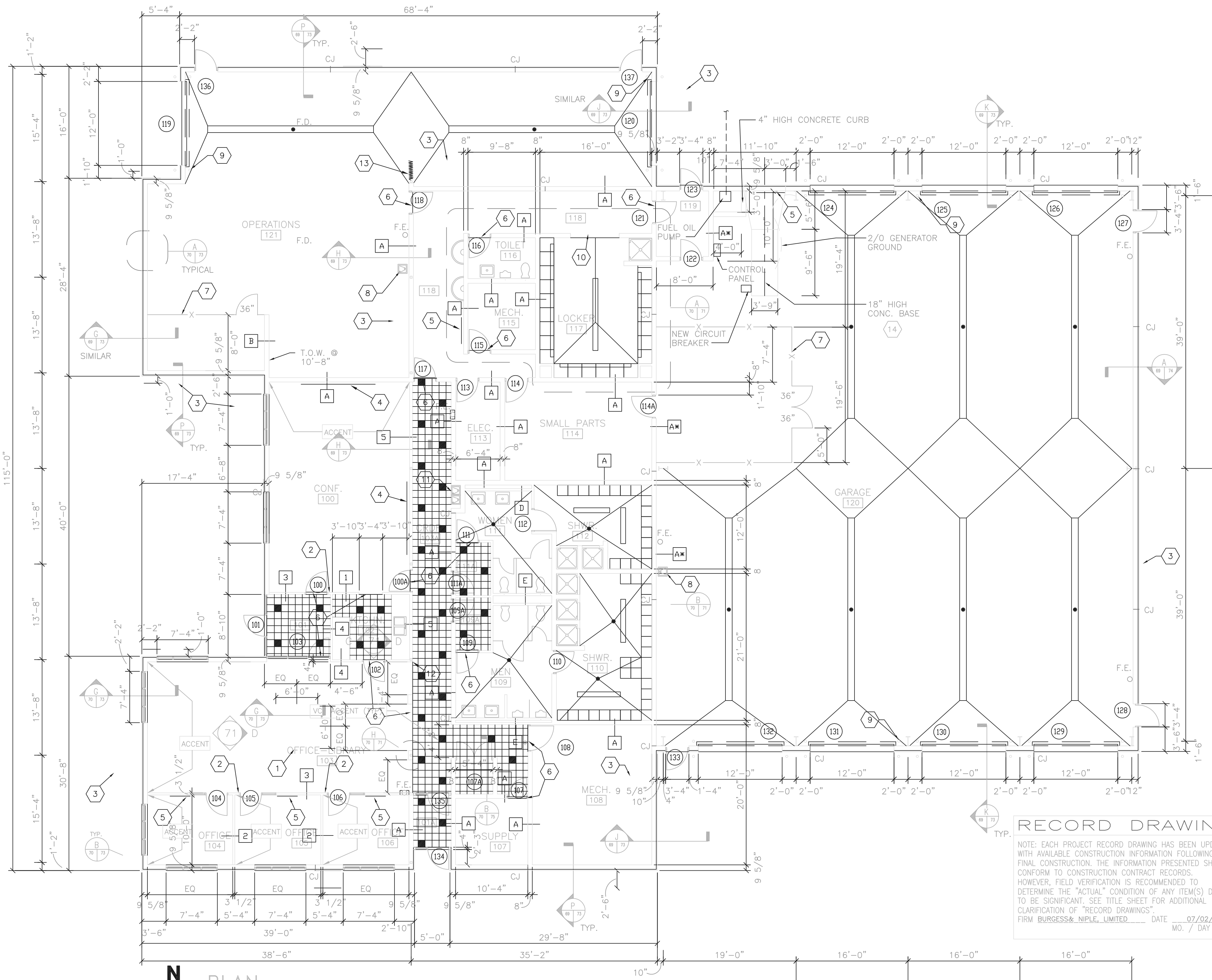


WALL TYPES - INTERIOR
SCALE: 3/4"=1'-0"

USE (MR) MOISTURE RESISTANT GYP. BOARD AT ANY WALL SURFACE WITHIN 4'-0" OF ANY WATER SOURCE.
VERIFY IF ALL BLOCK WALL TYPES ARE TO RECEIVE EITHER ADHERED 1/2" G.W.B. OR CERAMIC TILE, SEE FINISH SCHEDULE.

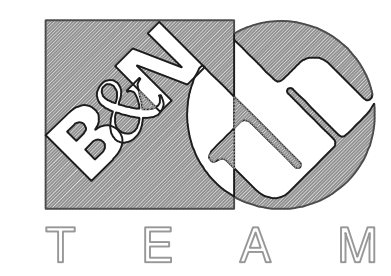
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM BURGESS & NIPLE, LIMITED DATE 07/02/02 MO. / DAY / YR.



P:\PMPSTREC\DWG\70.DWG 6-6-00 3:13:58 PM

NO.	REVISIONS	DATE	BY	CHK.
1	CODE REVISIONS	4.26.99		



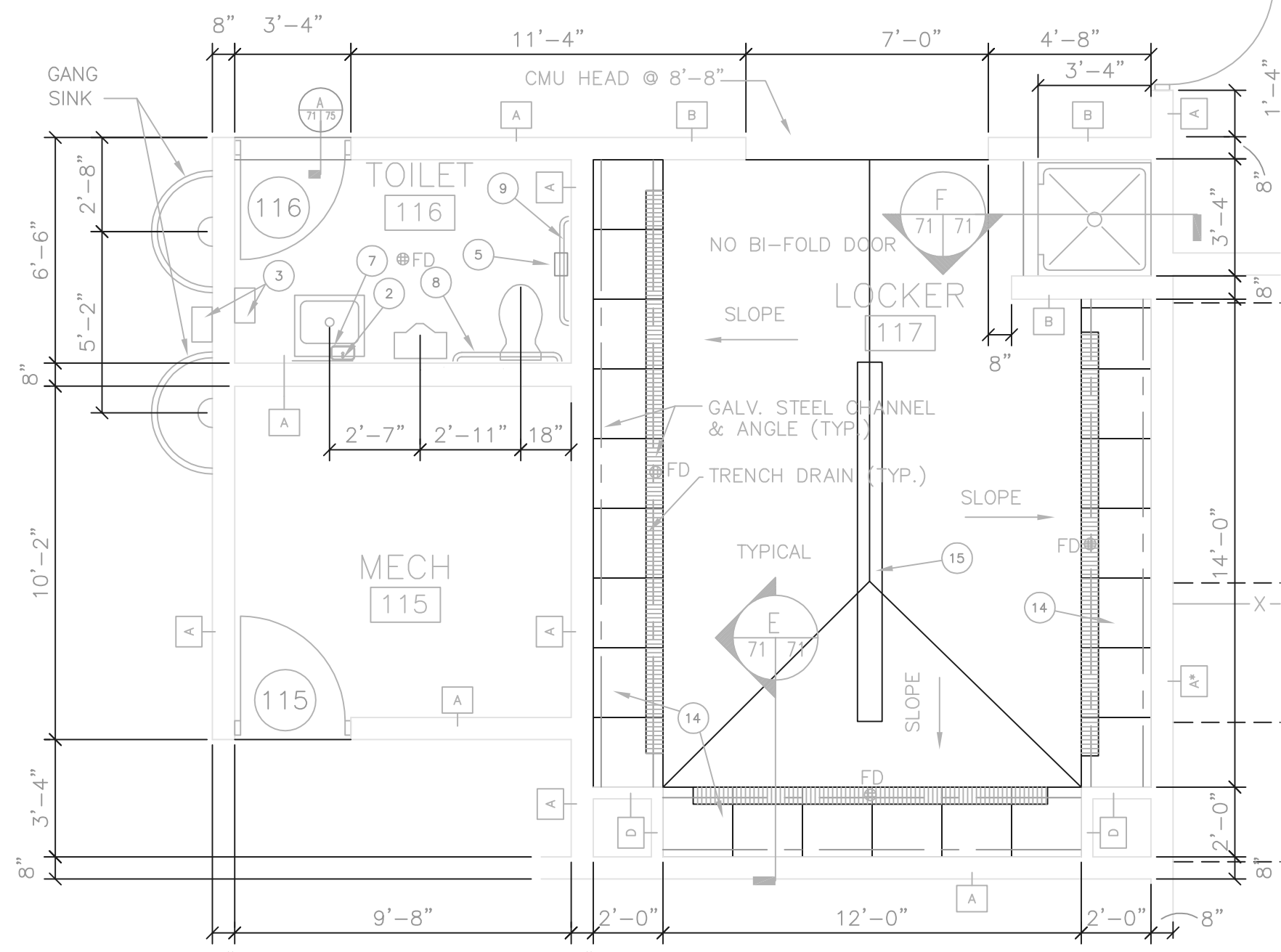
Burgess & Niple, Limited
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	TO
DRAWN BY:	SJC
CHECKED BY:	
APPROVED BY:	RBD
DATE:	MAR 1999

CENTRAL MAINTENANCE
FACILITY PLAN
FINISH PLAN

SCALE:	1/8"=1'-0"
SHEET NO.	70
OF	100

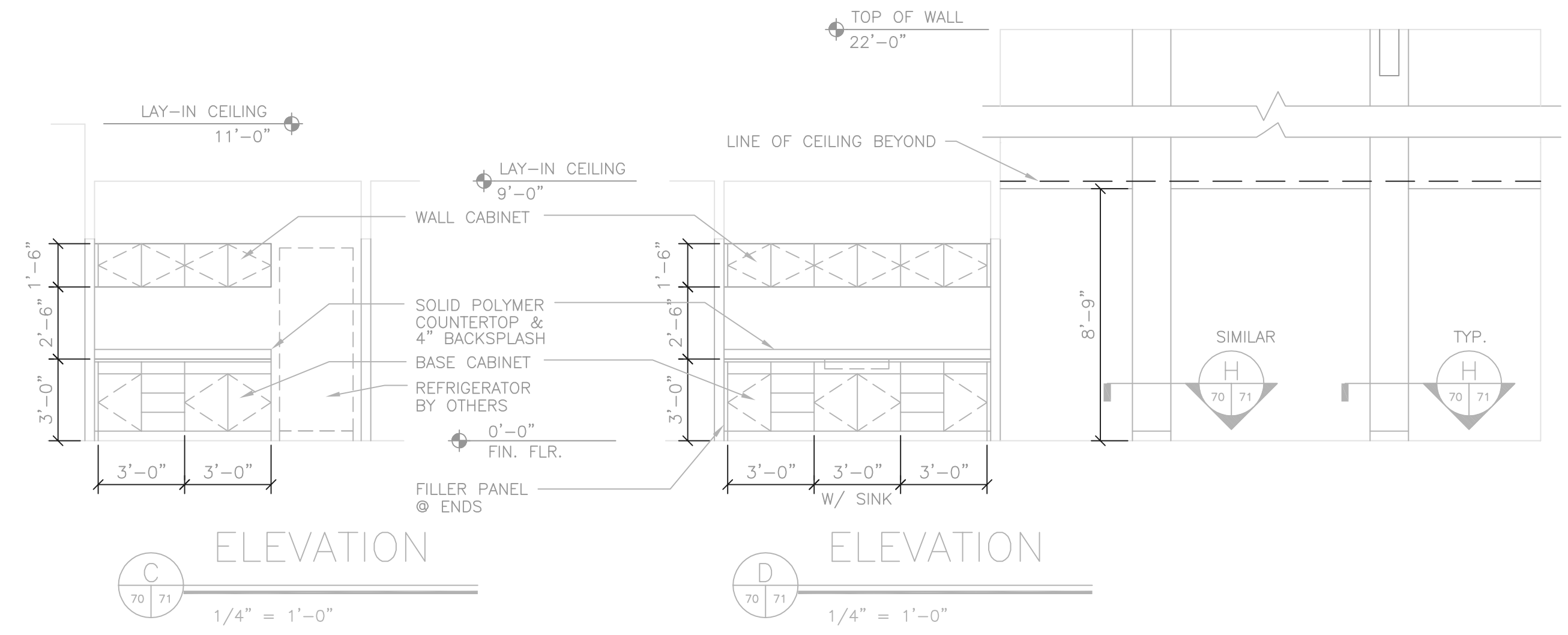


TOILET PLAN

1/4" = 1'-0"

TOILET ACCESSORIES SCHEDULE

MARK	DESCRIPTION	BOBRICK MODEL # OR SIZE
1	TOILET PARTITION	
2	MIRROR 18" x 30"	B-290, BOTTOM @ 38" H
3	PAPER TOWEL / WASTE RECEPTACLE	B-3944
4	METAL LOCKERS (TYP.)	6' X 18" X 18"
5	TOILET PAPER DISPENSER DOUBLE ROLL	B-2740
6	WALL MOUNTED URINAL SCREEN	18" X 42"
7	SOAP DISPENSER	B-40
8	GRAB BAR 36"	B-6806 x 36 @ 34" H
9	GRAB BAR 42"	B-6806 x 42 @ 34" H
10	SANITARY NAPKIN DISPOSAL DOUBLE	B-354
11	TOWEL BAR (2 WOMEN - 2 MEN)	B-205 x 18
12	WOOD BENCH	5'-0" X 9 1/2" X 18" H.
13	BIFOLD SHOWER DOOR (TYP.)	30"
14	EXPANDED METAL LOCKERS (TYP.)	5' X 24" X 24"
15	WOOD BENCH	10'-0" X 9 1/2" X 18" H.
16	"NOT USED"	
17	TILTED MIRROR 18" X 30"	B-293, BOTTOM @ 38" H

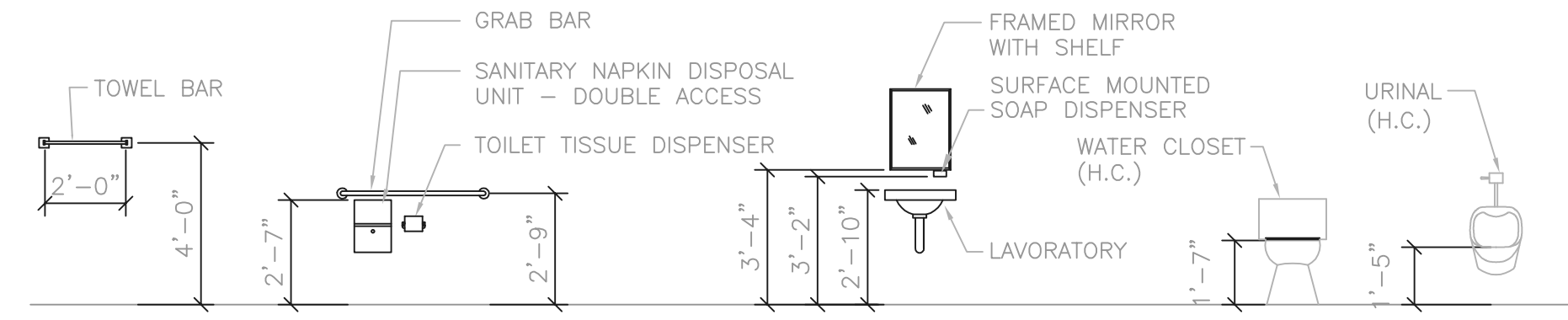


ELEVATION

ELEVATION

1/4" = 1'-0"

1/4" = 1'-0"



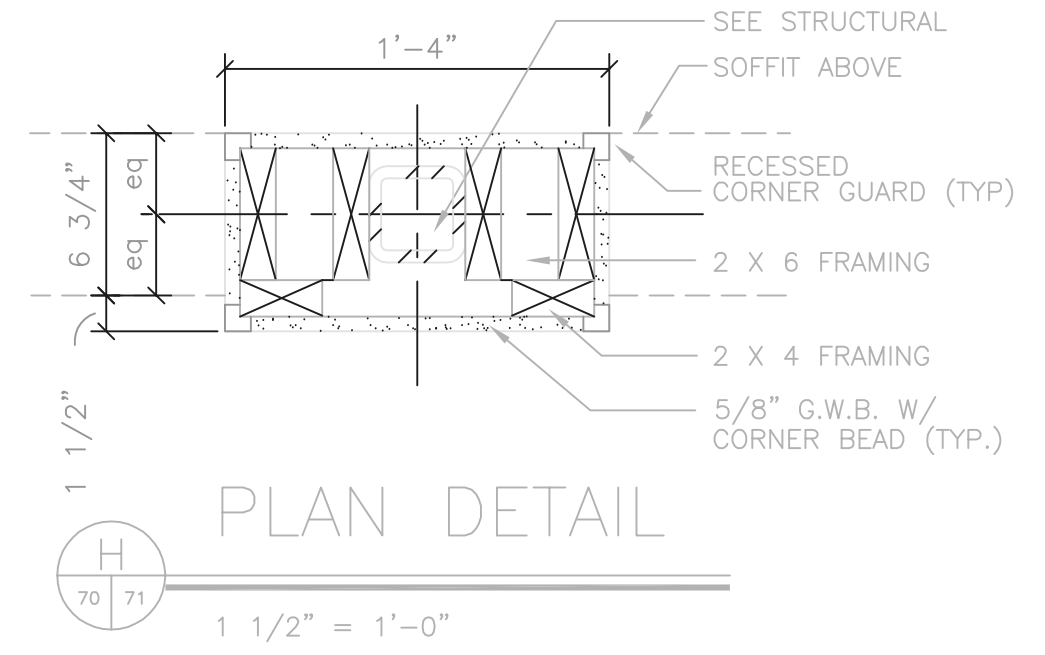
HANDICAP TOILET ACCESSORIES AND FIXTURE HEIGHT SCHEDULE

1/4" = 1'-0"

RECORD DRAWING

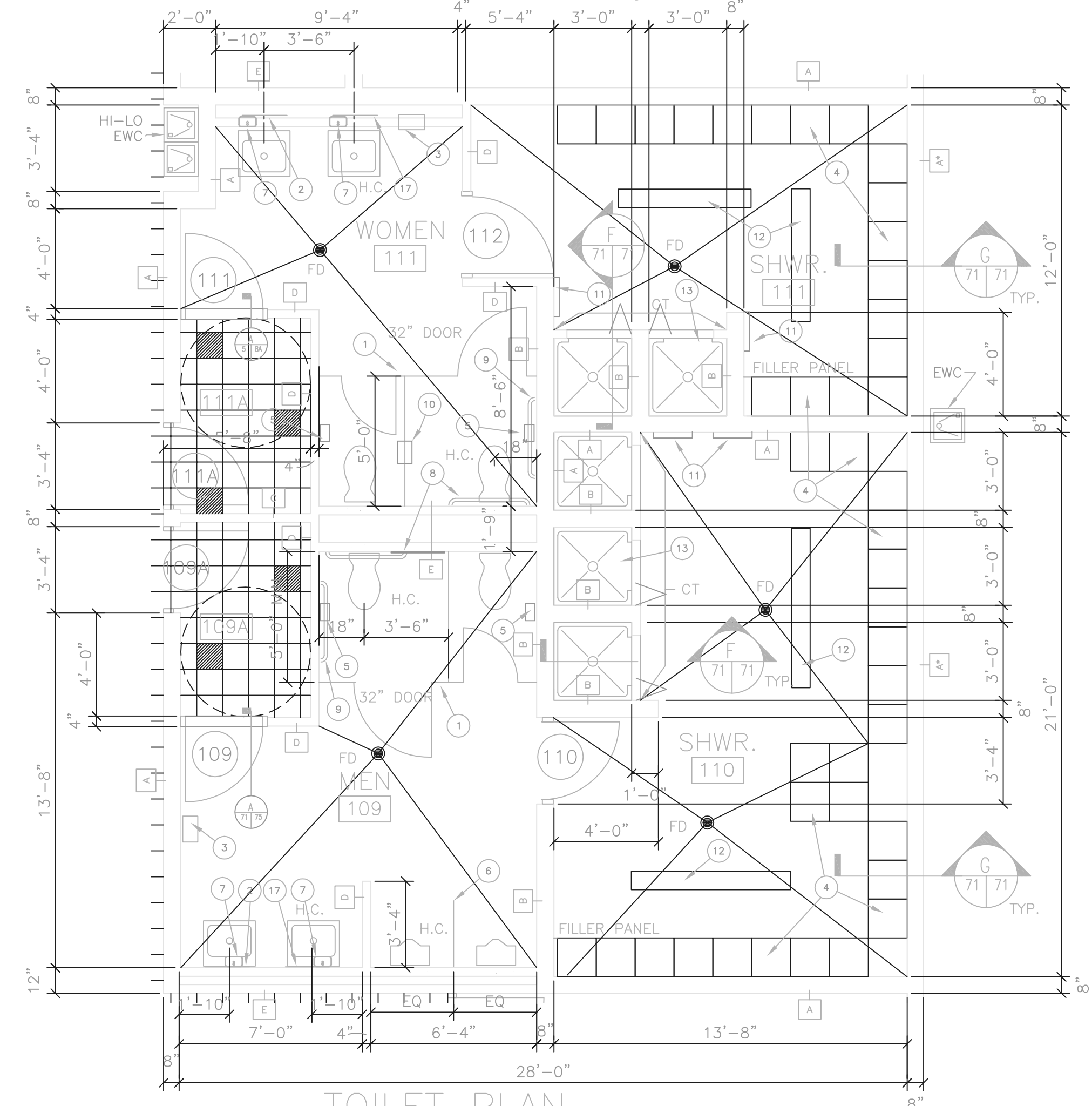
NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".

FIRM **BURGESS & NIPLE, LIMITED** DATE 07/02/02 MO. / DAY / YR.



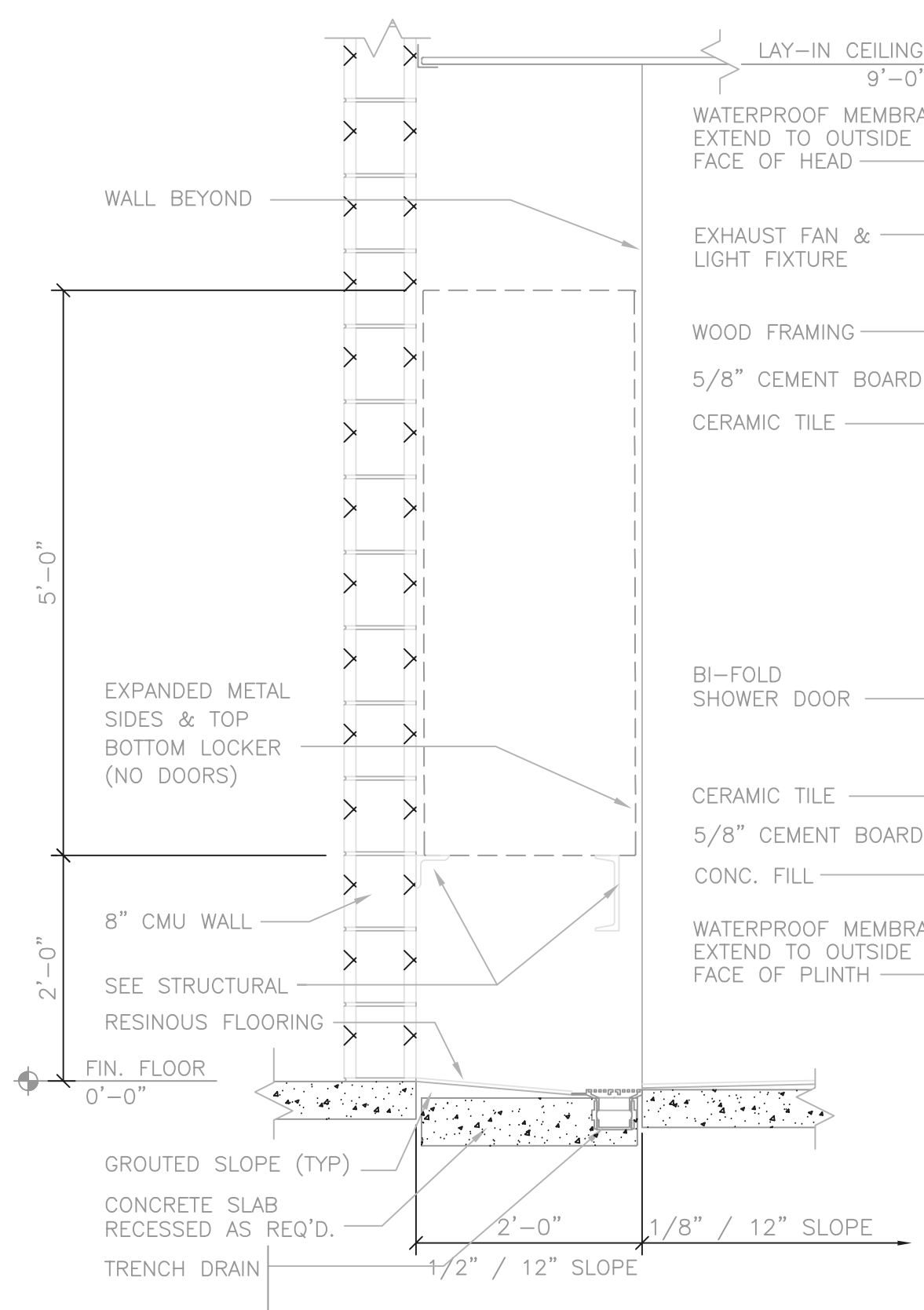
PLAN DETAIL

1 1/2" = 1'-0"



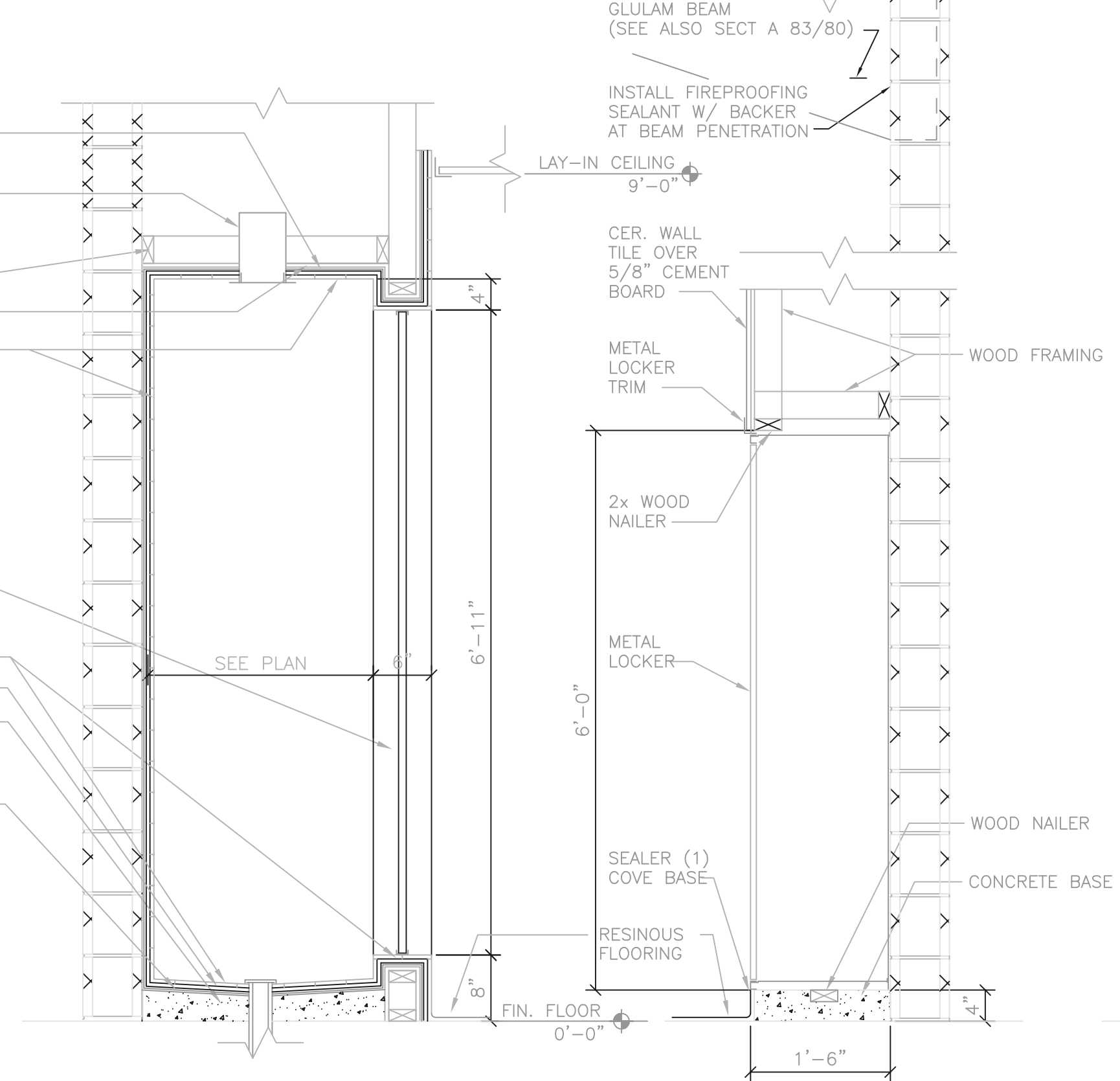
TOILET PLAN

1/4" = 1'-0"



SECTION

3/4" = 1'-0"

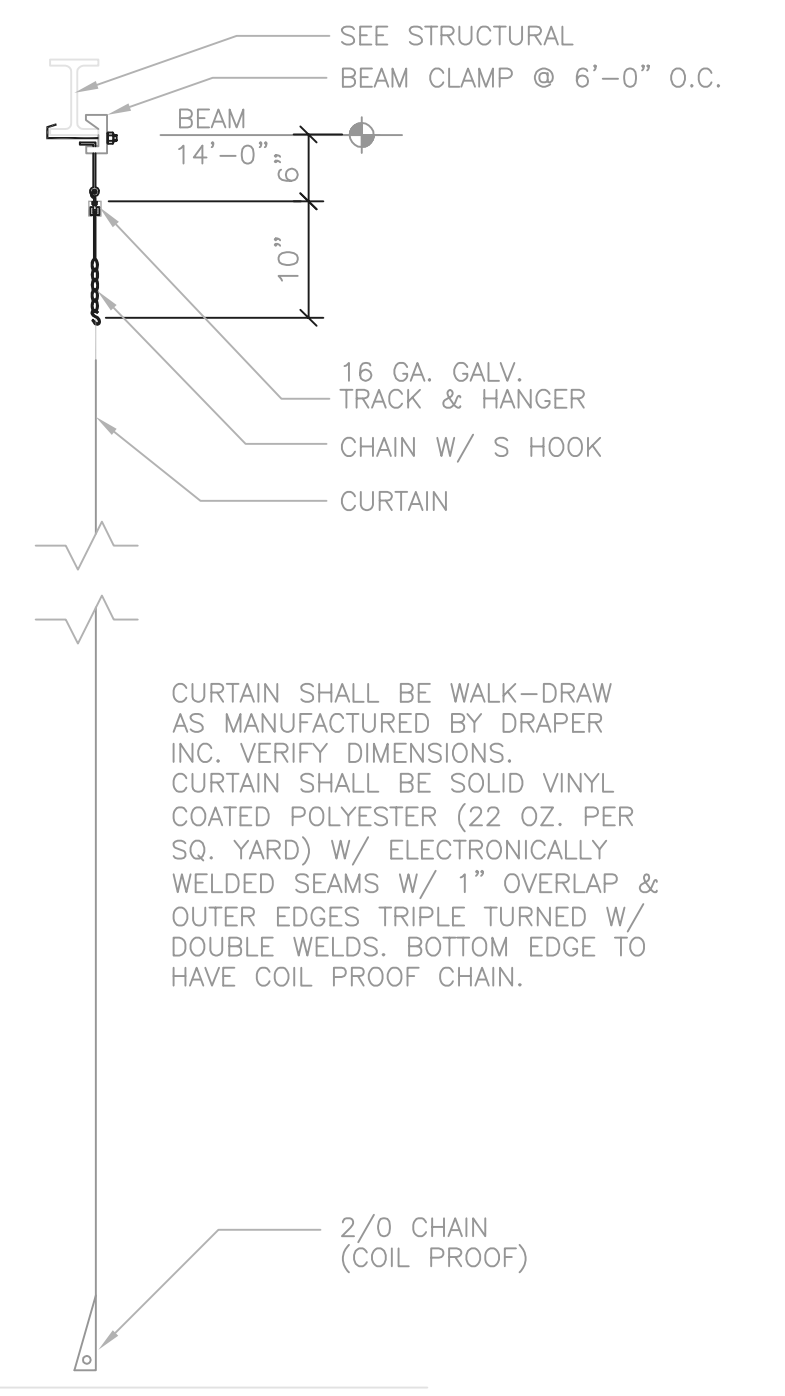


SECTION

3/4" = 1'-0"

SECTION

3/4" = 1'-0"

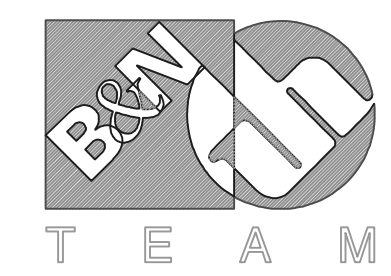


SECTION

3/4" = 1'-0"

P:\PR24025\PM\STREC\DWG\71.DWG 5-6-99 10:08:23 am

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

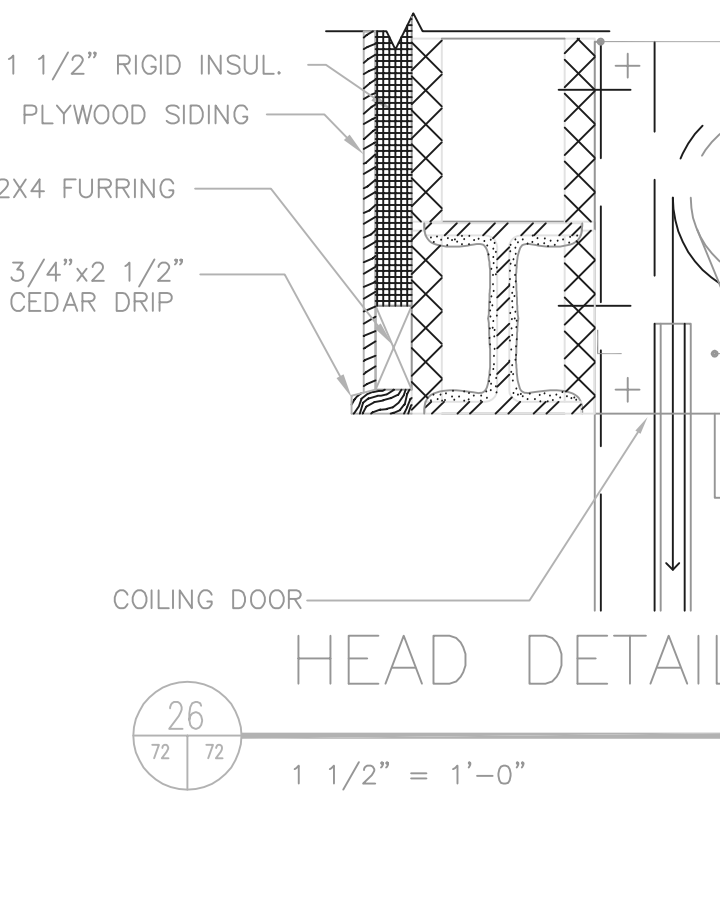
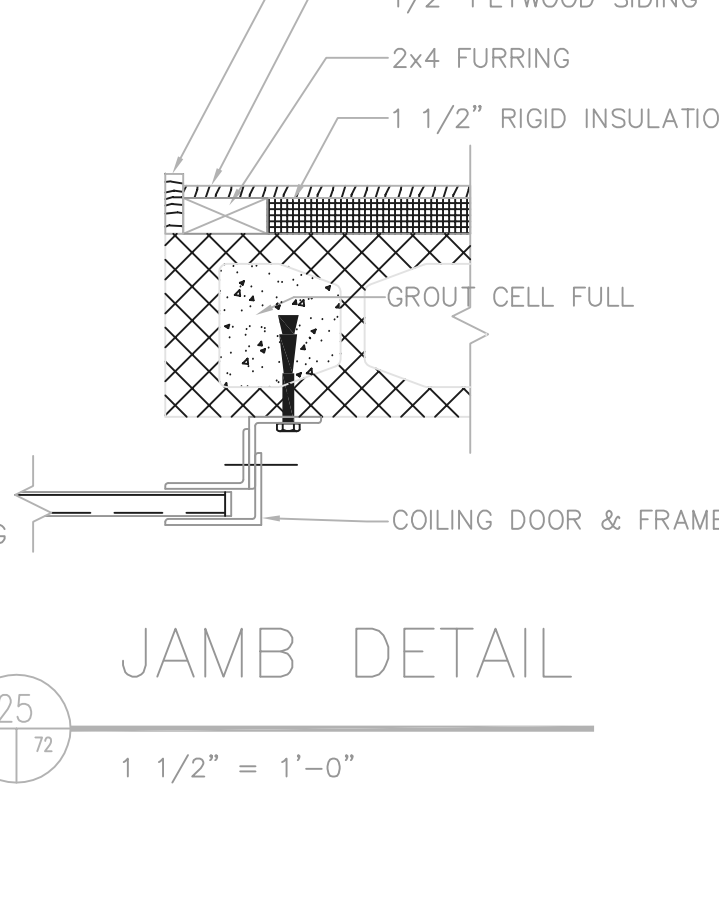
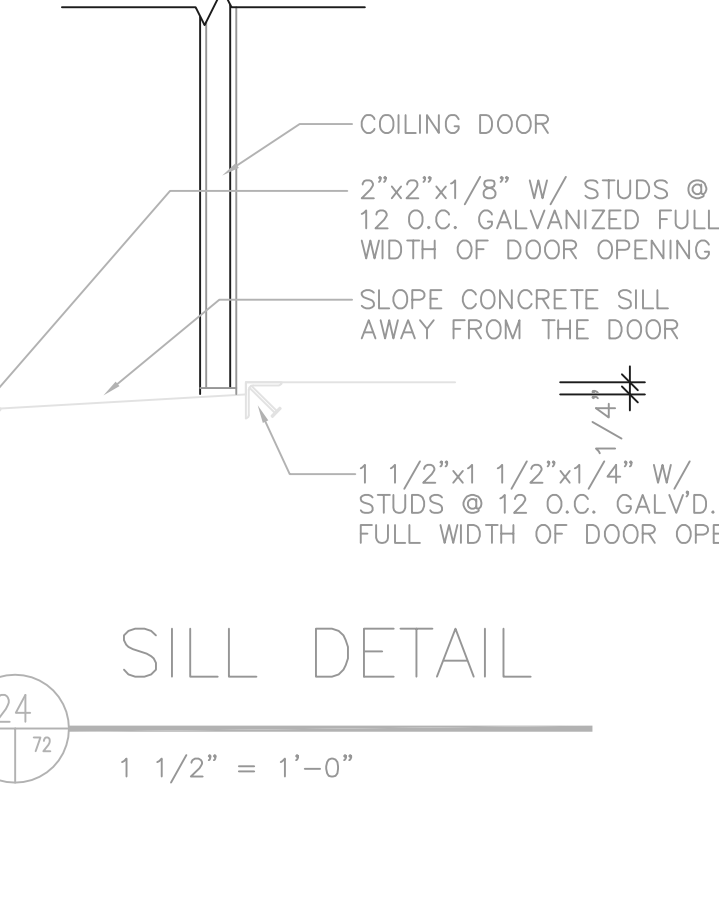
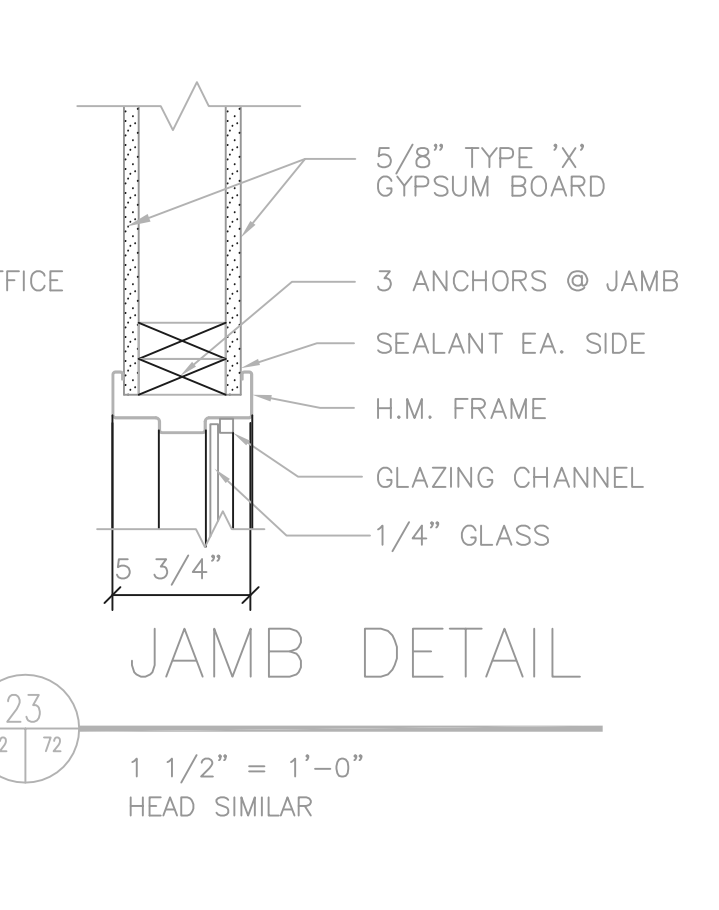
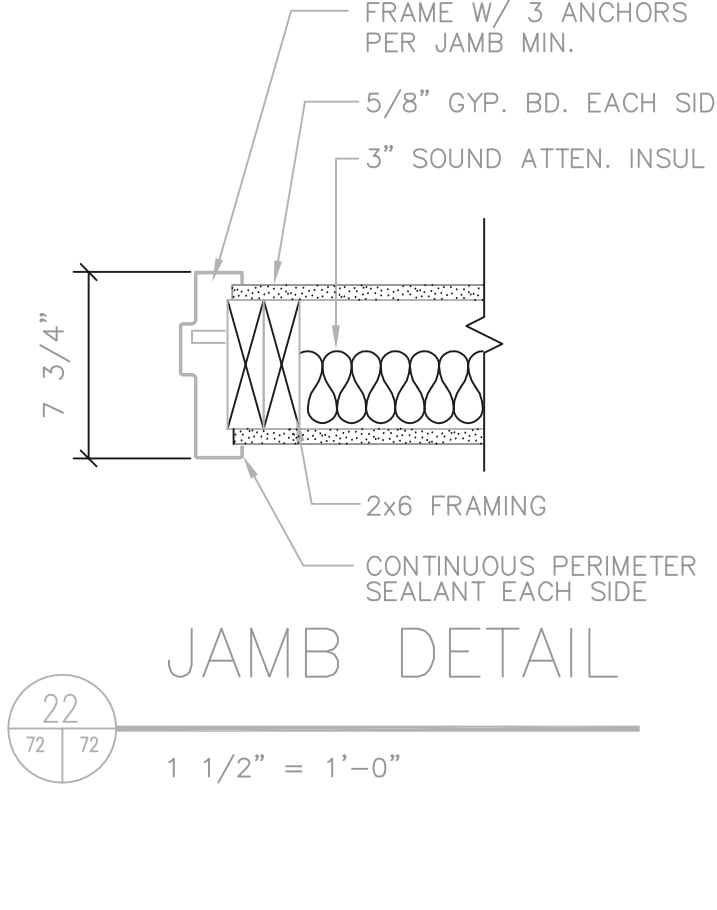
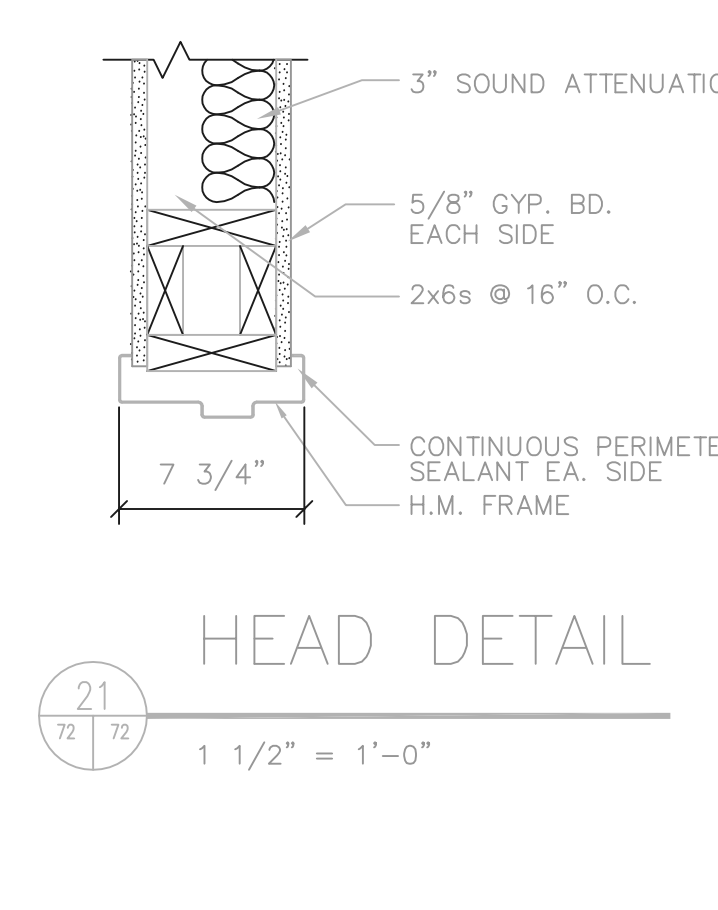
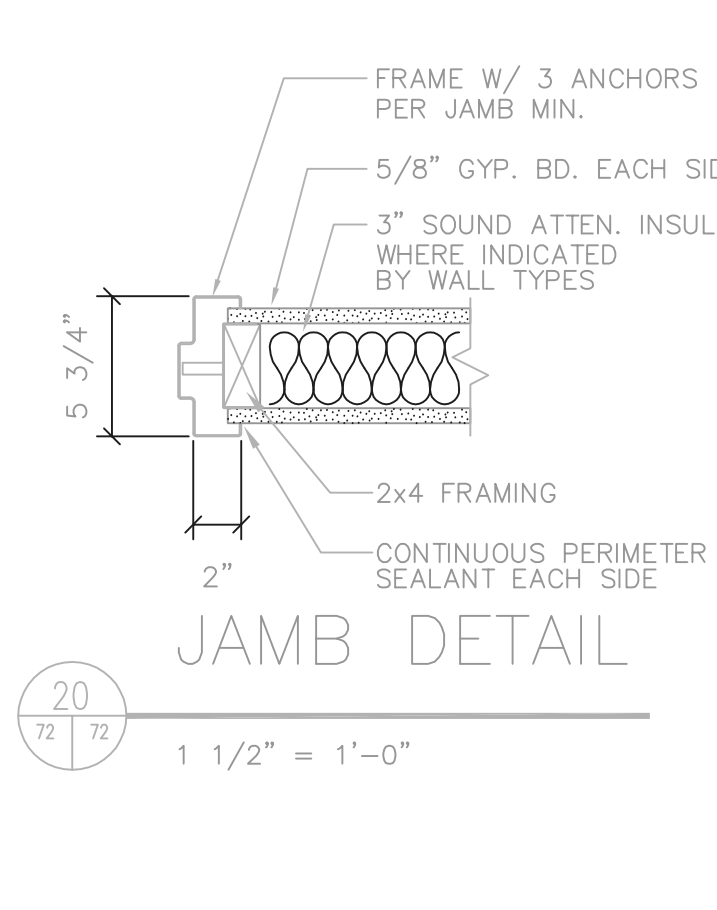
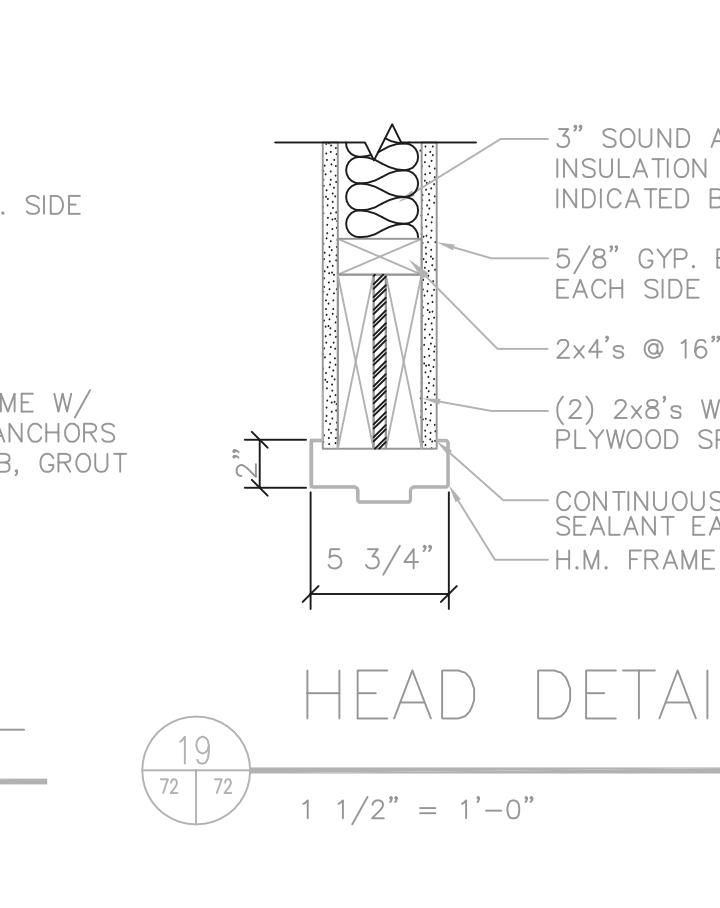
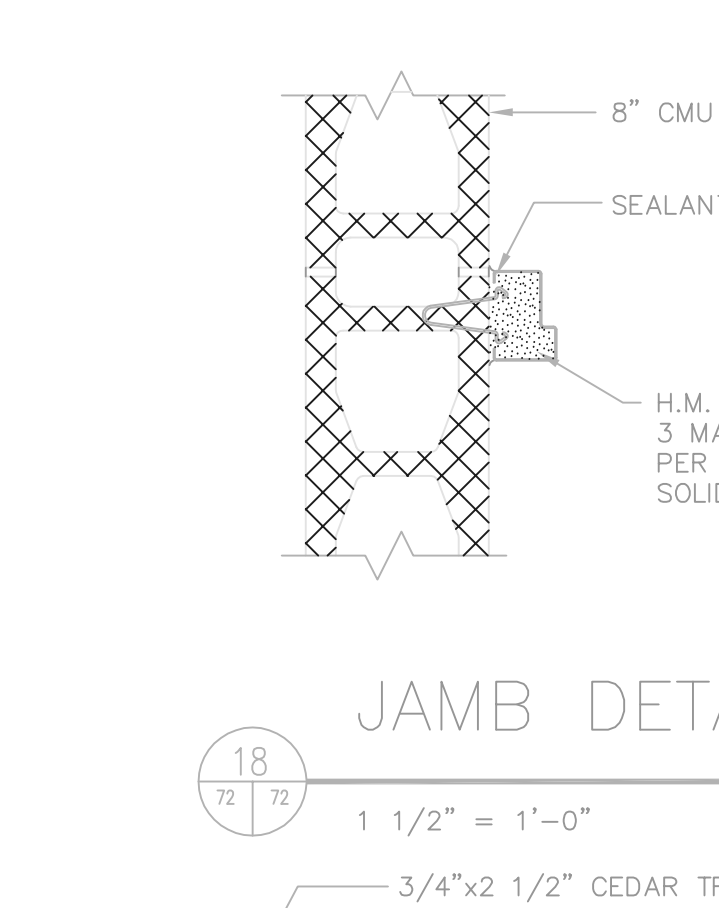
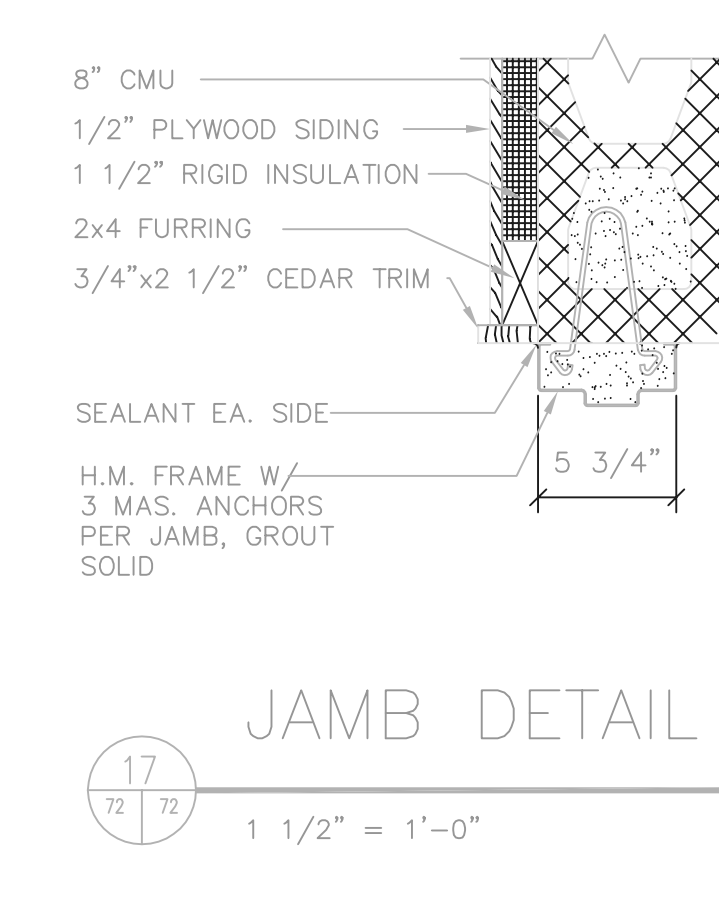
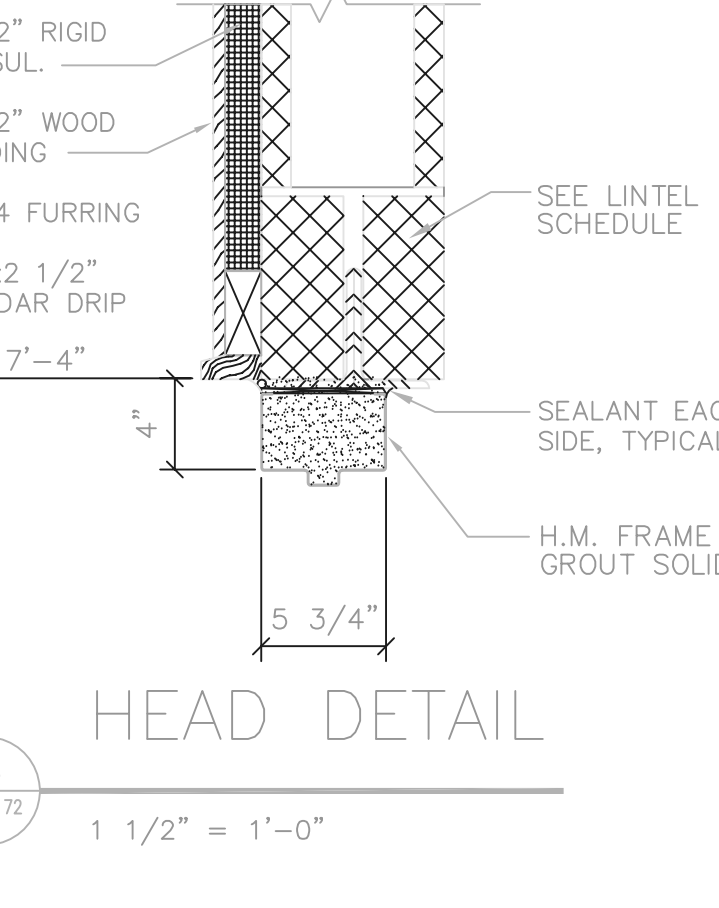
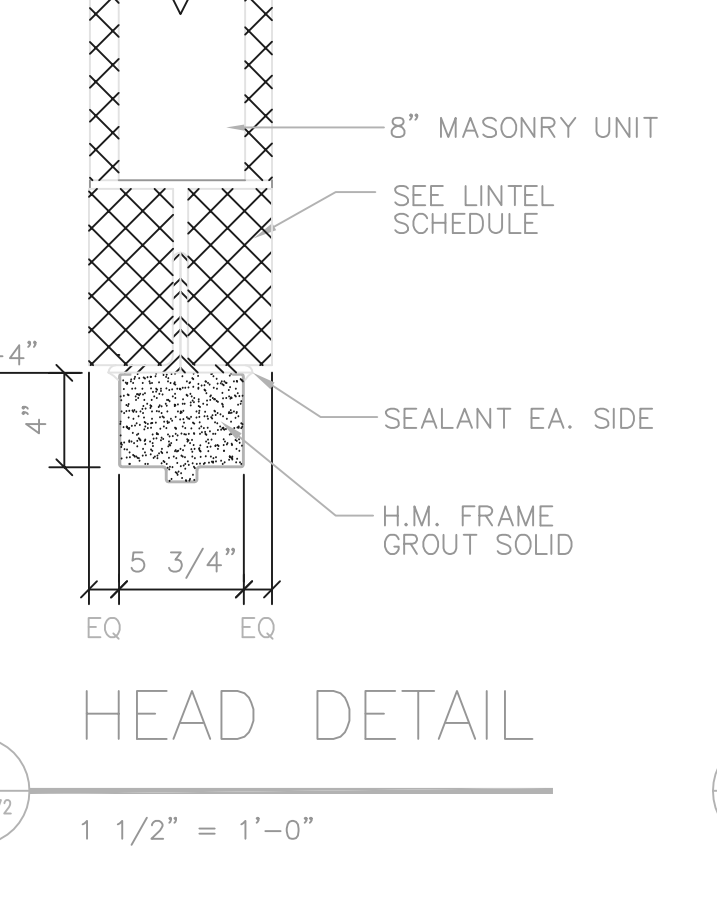
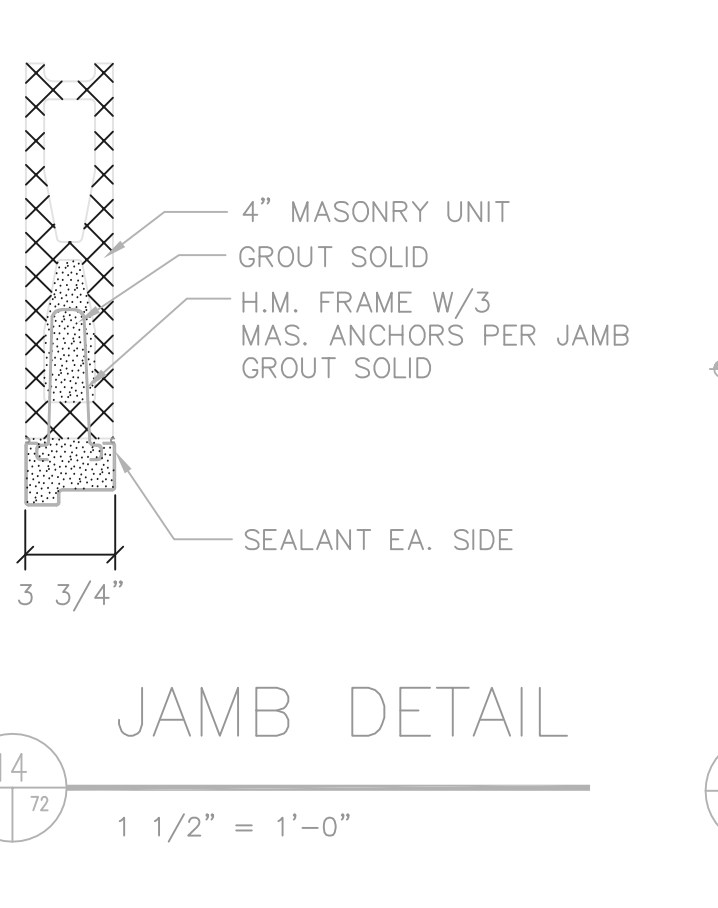
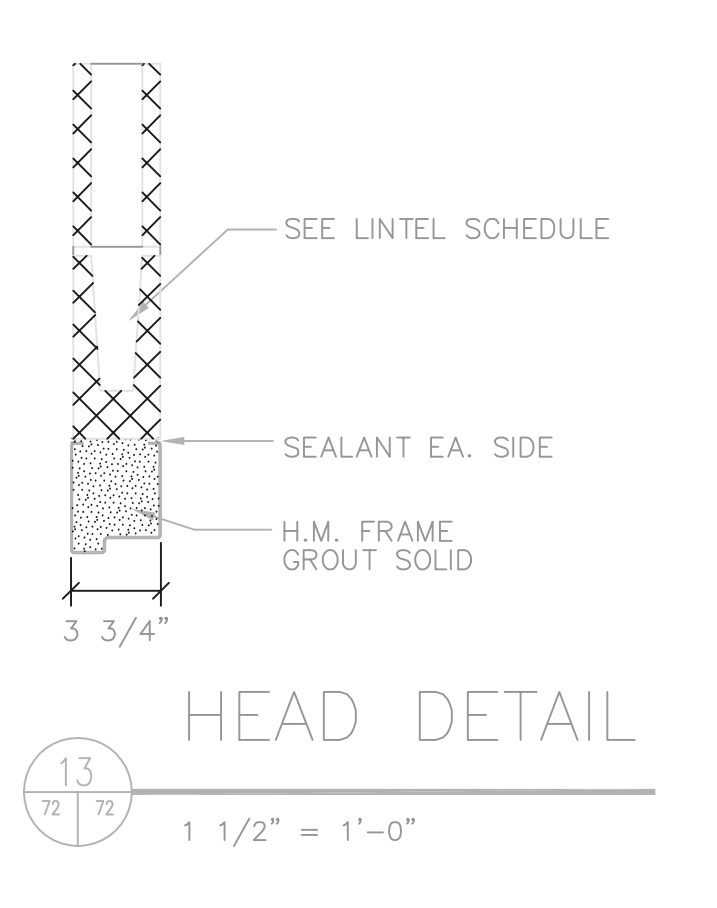
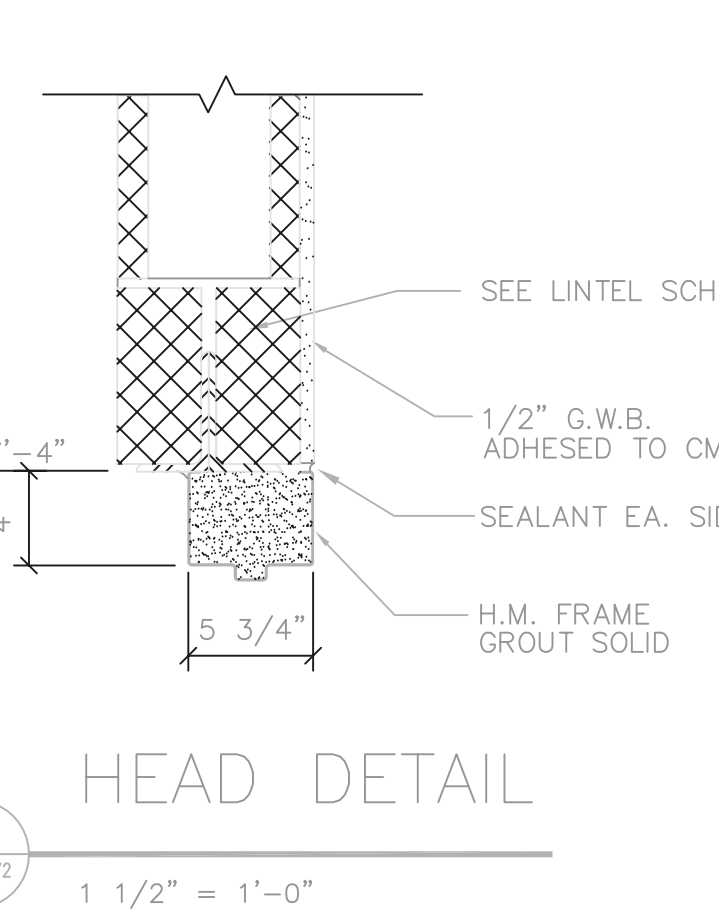
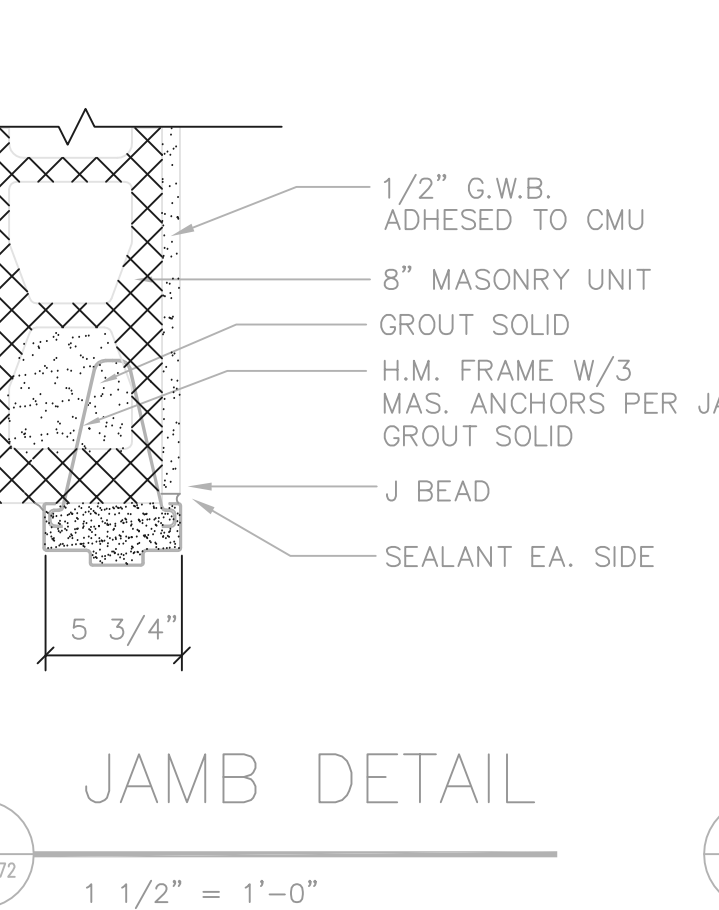
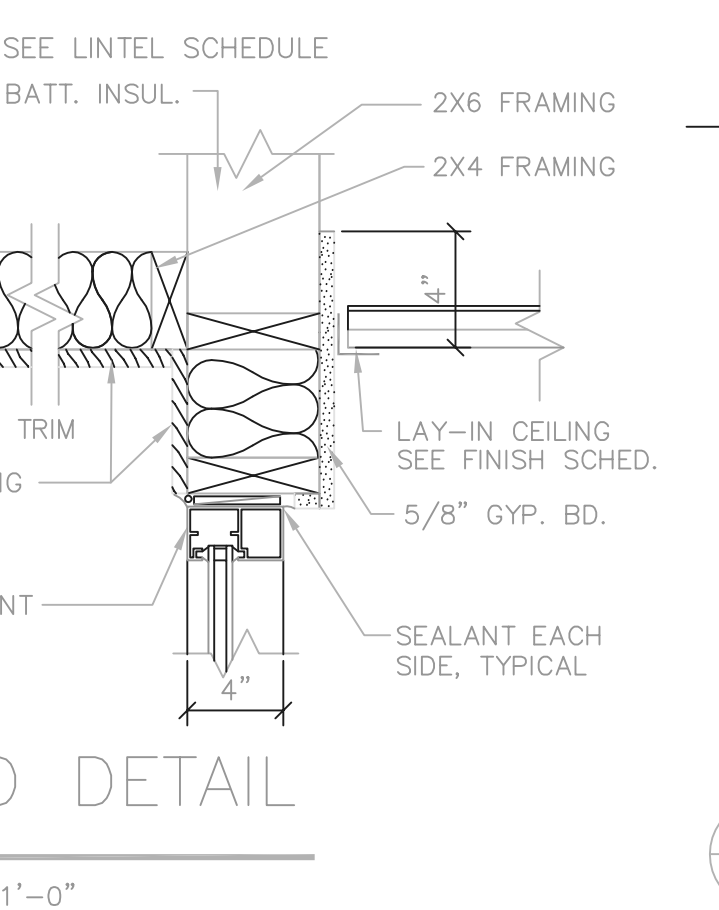
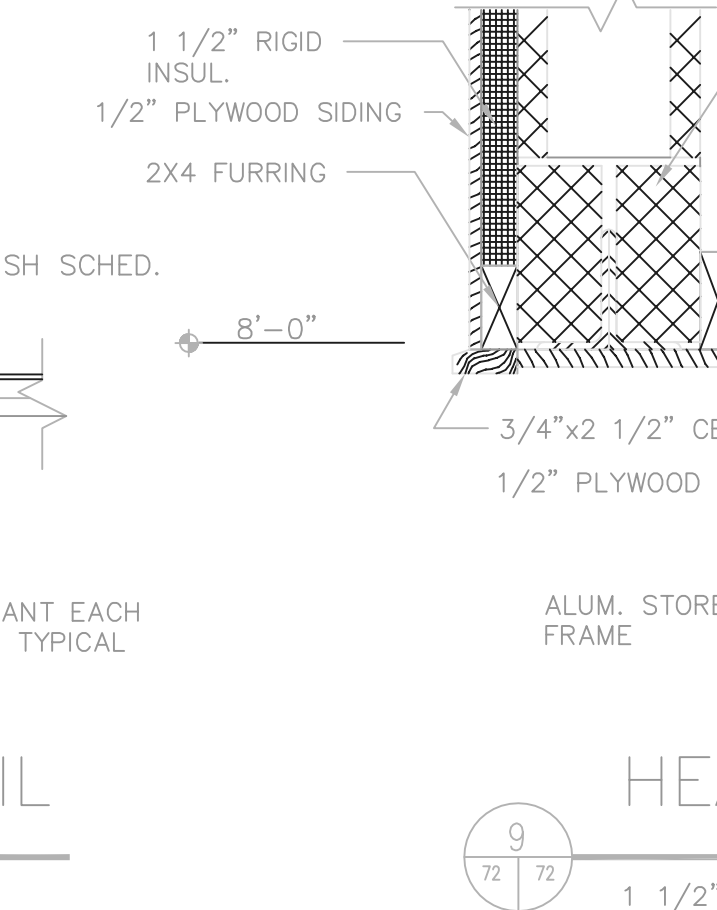
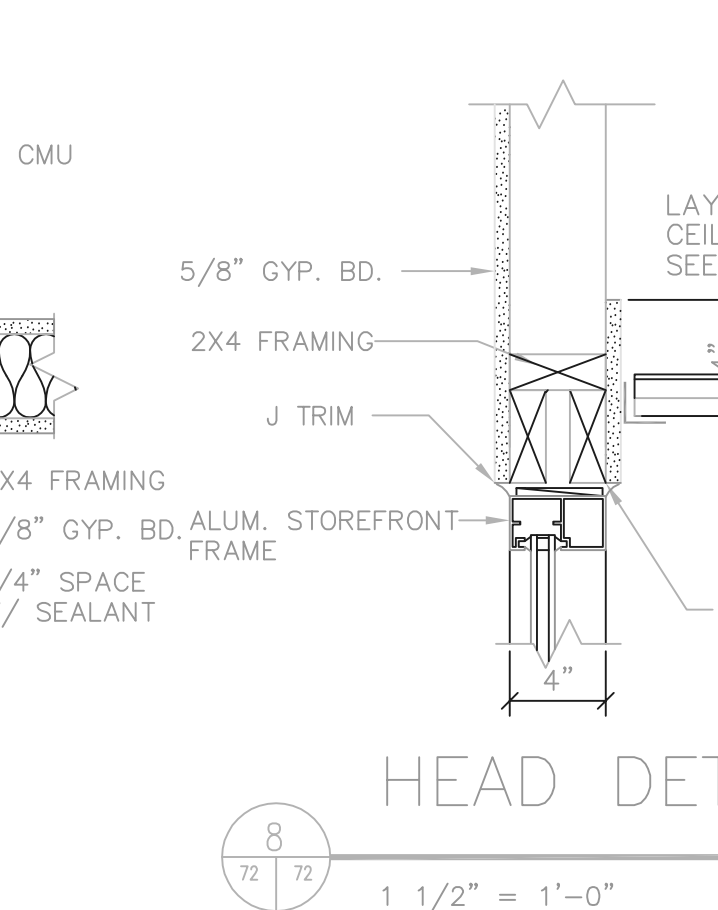
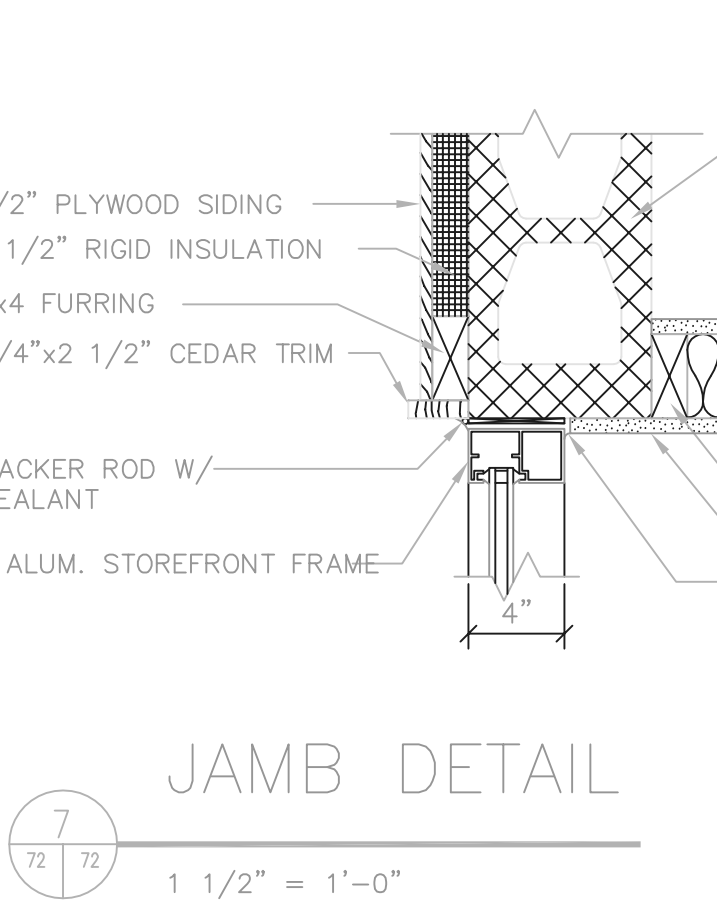
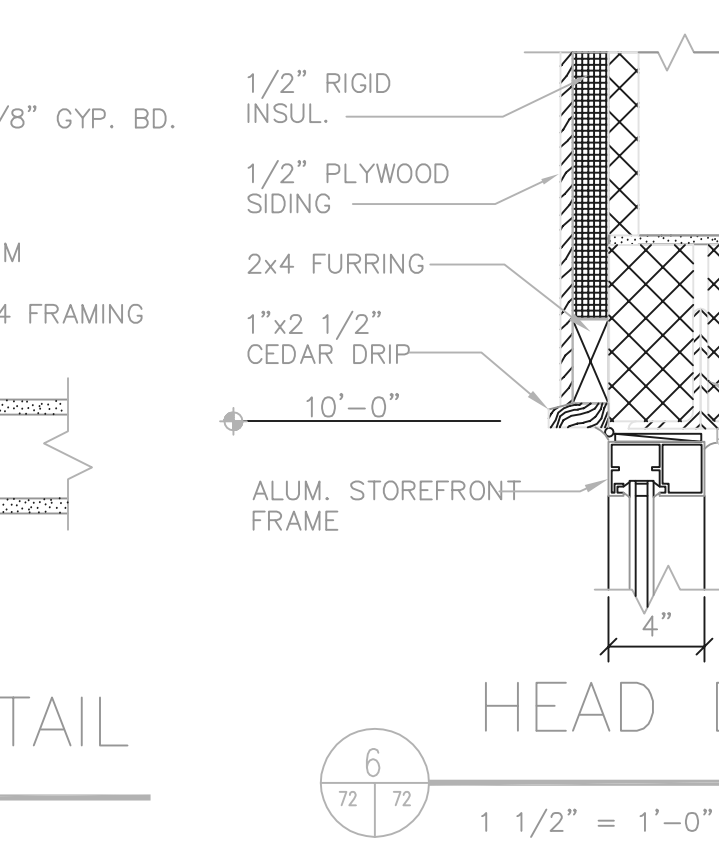
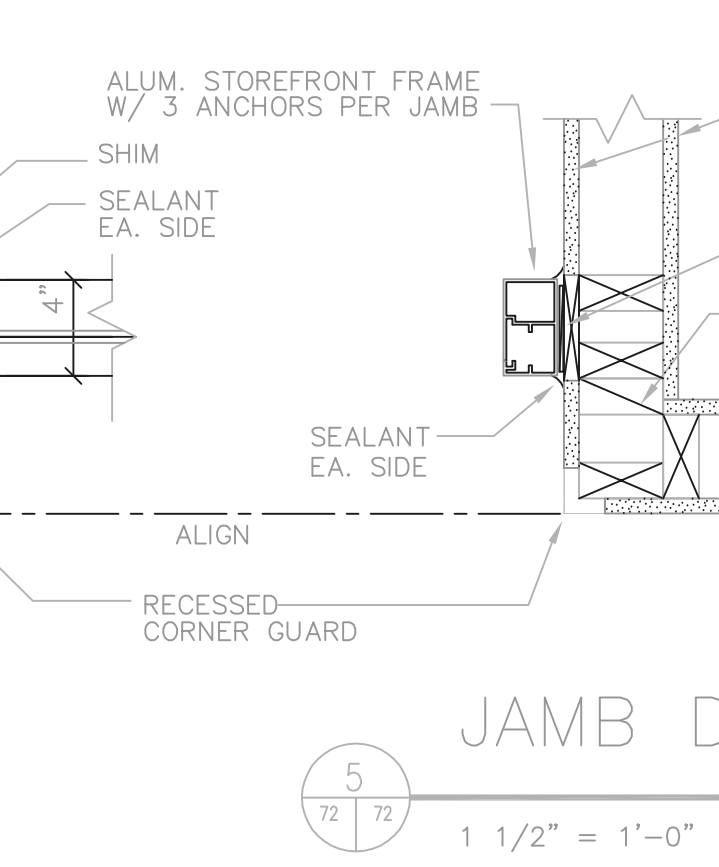
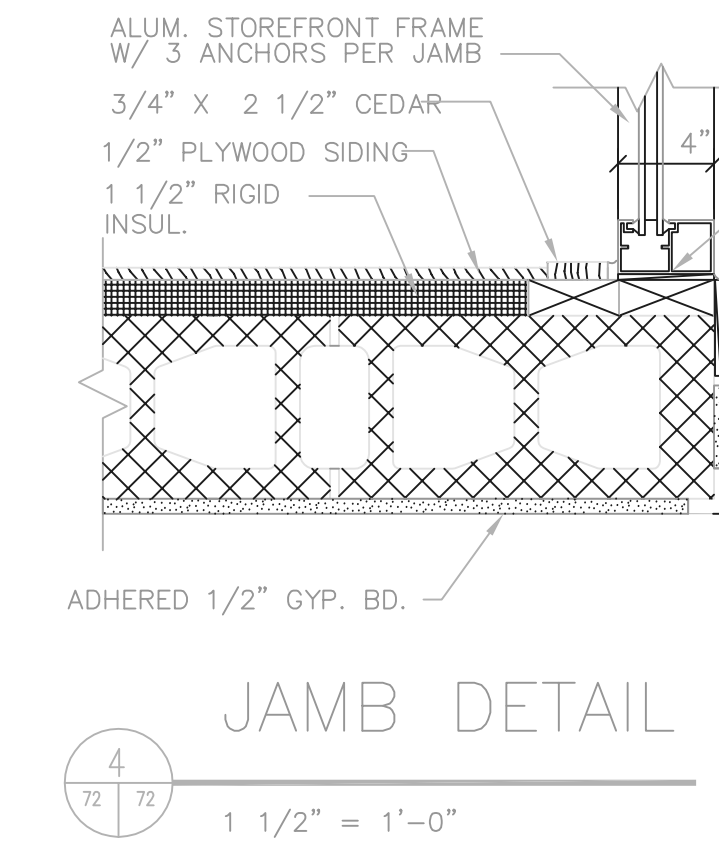
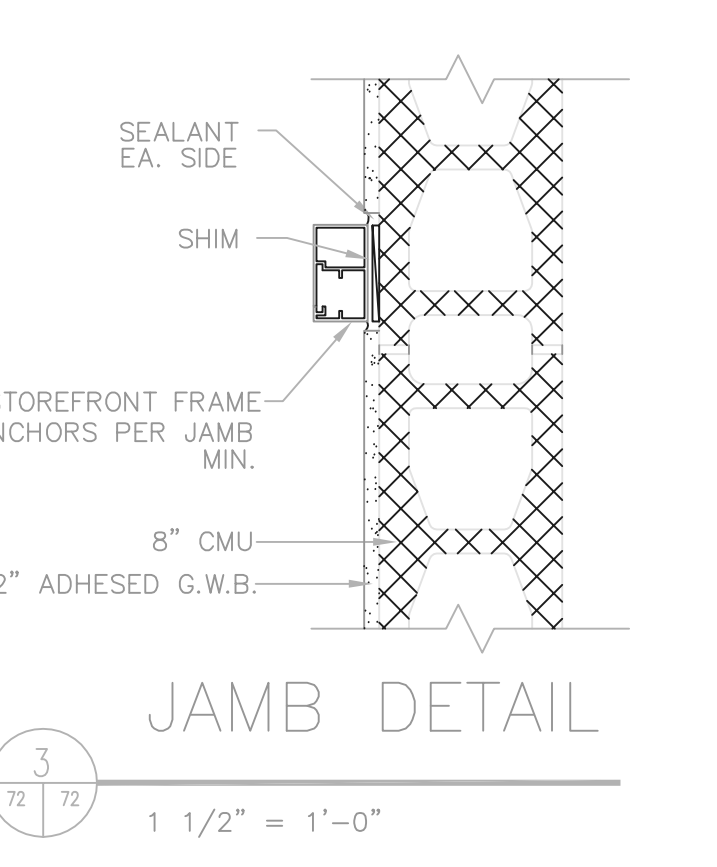
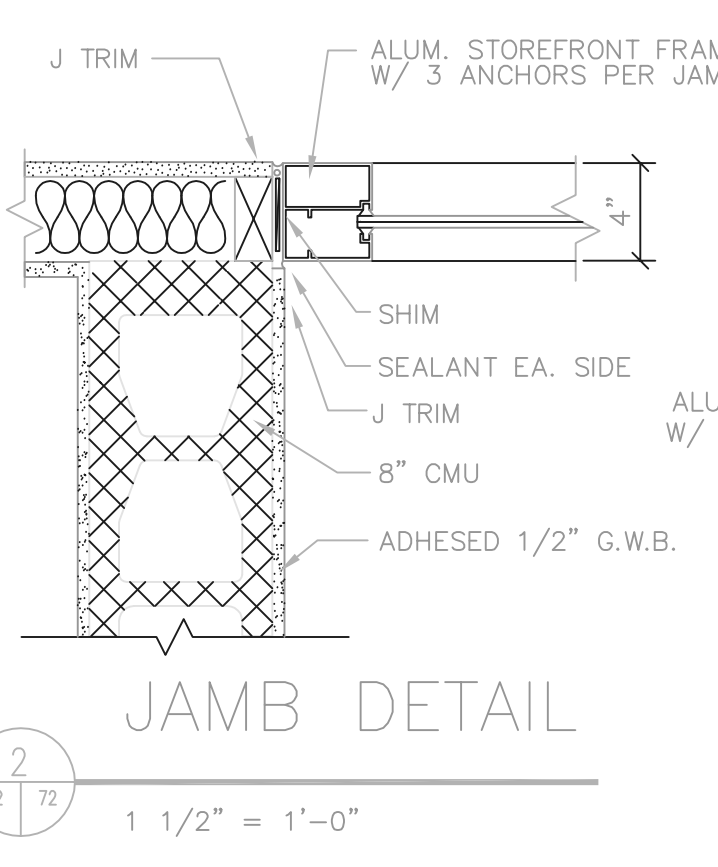
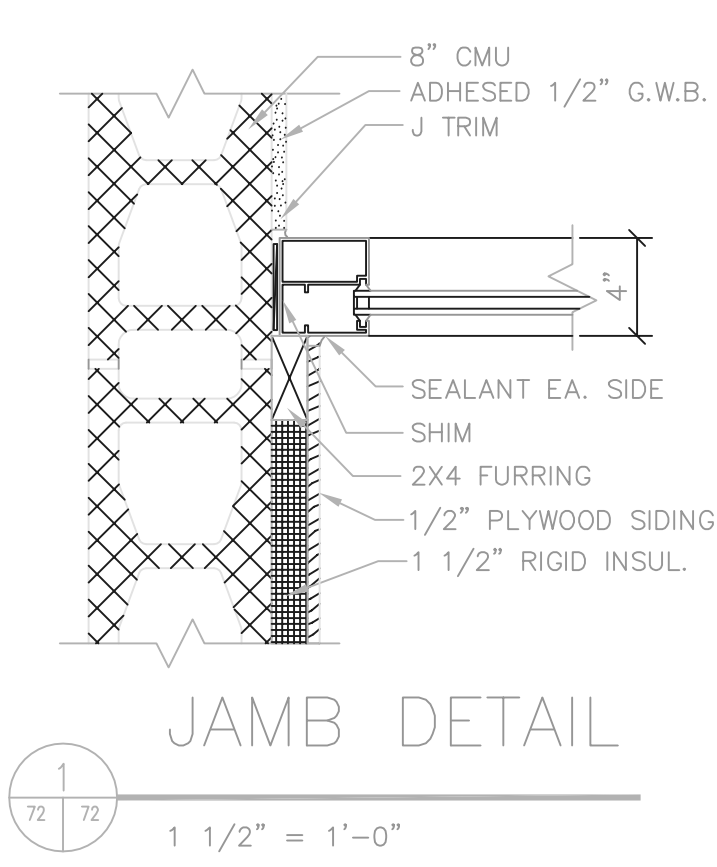
JOB NO.	20571
DESIGNED BY:	SJC
DRAWN BY:	SJC
CHECKED BY:	TO
APPROVED BY:	RBD
DATE:	MAR 1999

MAINTENANCE BUILDING
PLANS SECTIONS & DETAILS

SCALE:	
1/8" = 1'-0"	
SHEET NO.	OF
71	100

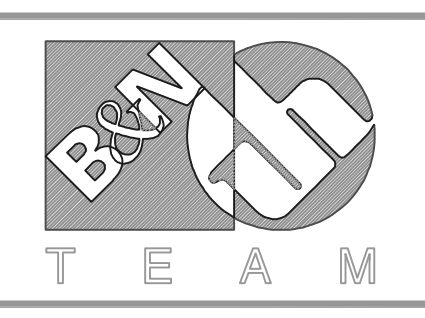
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
 FIRM BURGESS & NIPLE, LIMITED DATE 07/19/02
 MO. / DAY / YR.



P:\PR24025\PMPTRECDWG\72.DWG 5-6-99 1:15:23 pm

NO.	REVISIONS	DATE	BY	CHK.



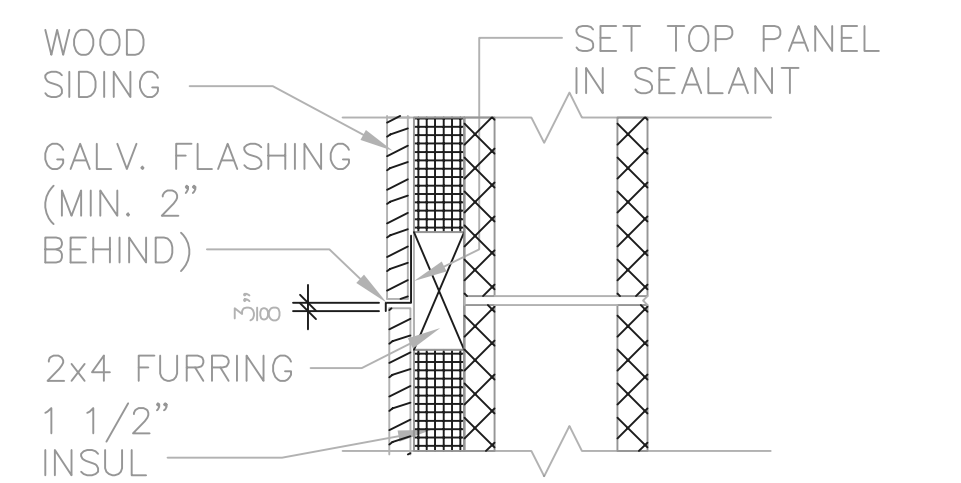
Burgess & Niple, Limited
 Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	SJC
DRAWN BY:	SJC
CHECKED BY:	TO
APPROVED BY:	RBD
DATE:	MAR 1999

SCALE:
 AS NOTED
 SHEET NO. 72 OF 100

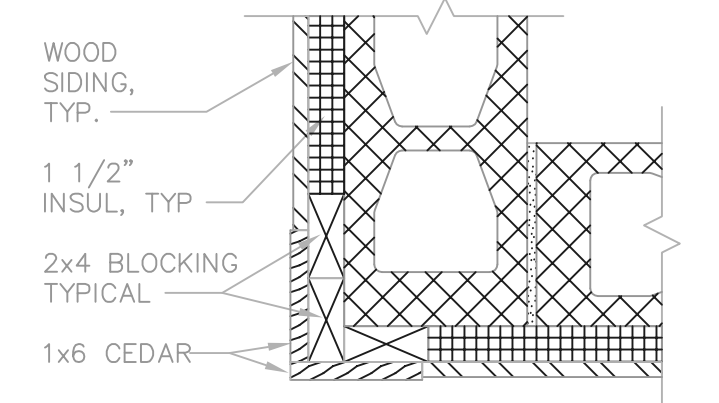
DOOR DETAILS



TYP. HORIZ.-JOINT IN PLYWOOD SIDING

70 | 73

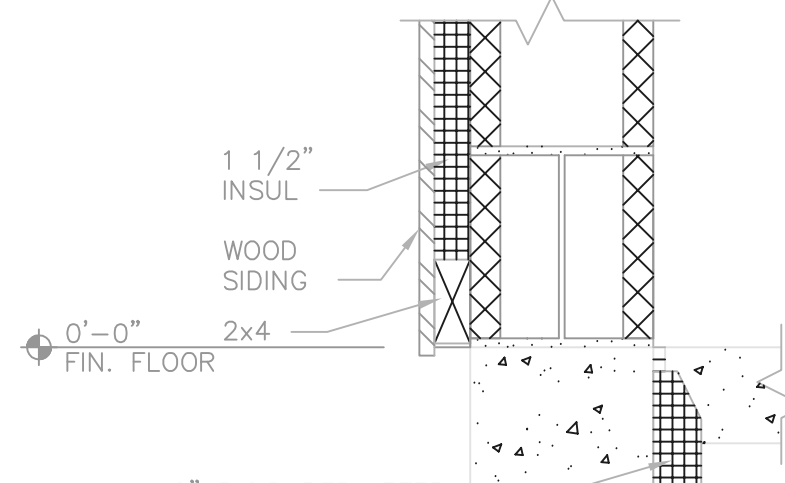
1 1/2" = 1'-0"



TYP. CORNER

70 | 73

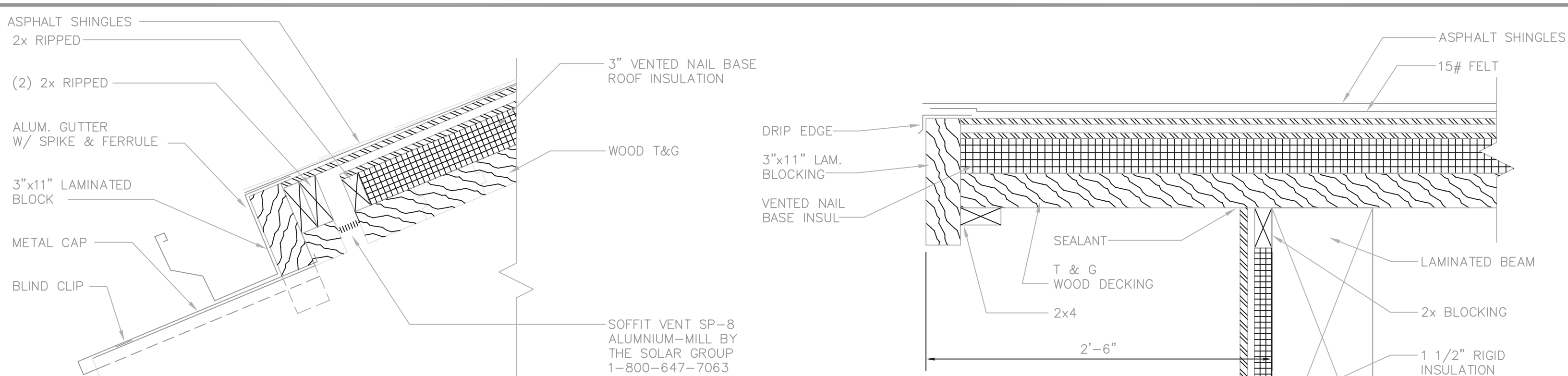
1 1/2" = 1'-0"



TYP. WALL BASE

73 | 73

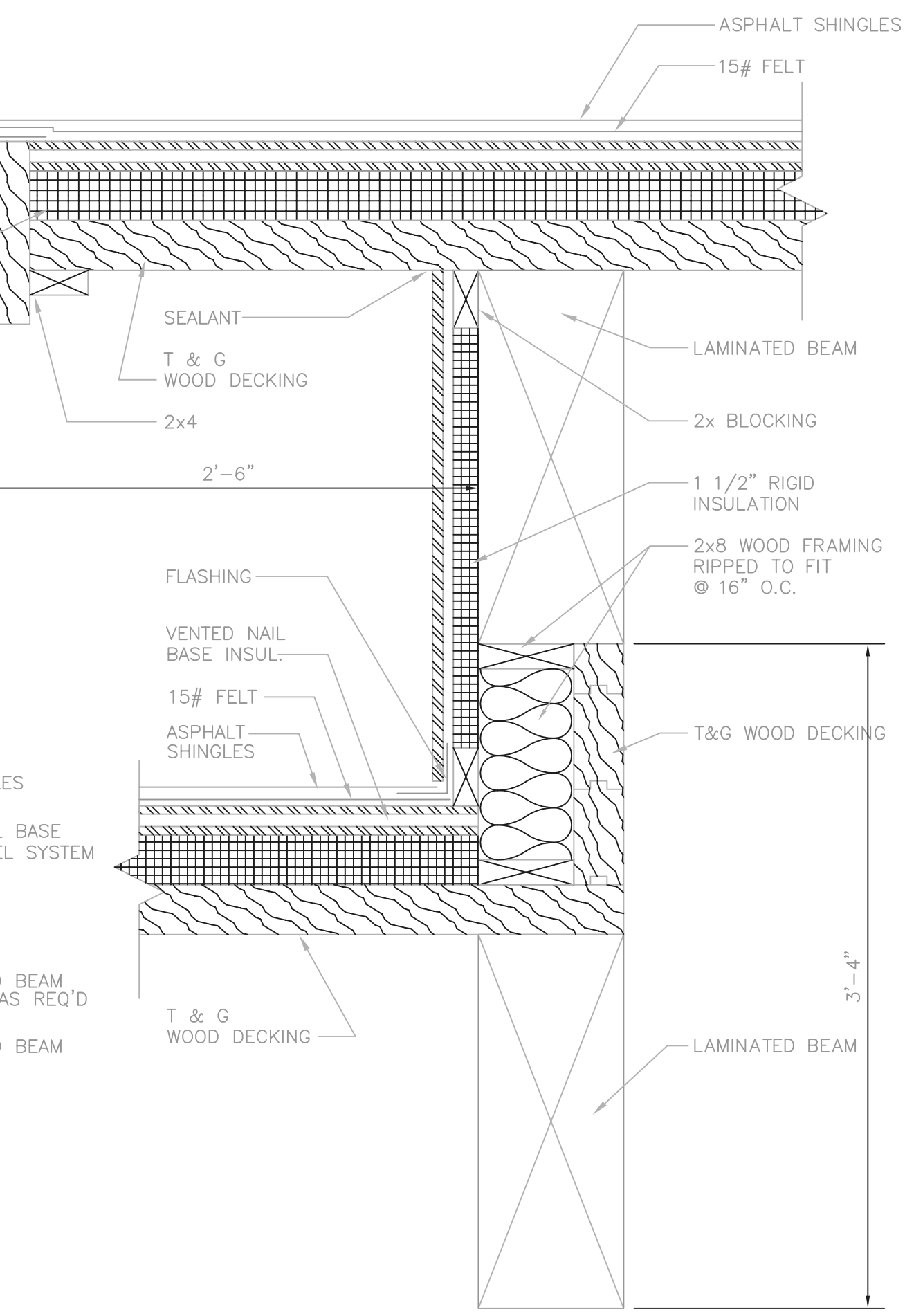
1 1/2" = 1'-0"



SECTION THRU METAL CAP

73 | 73

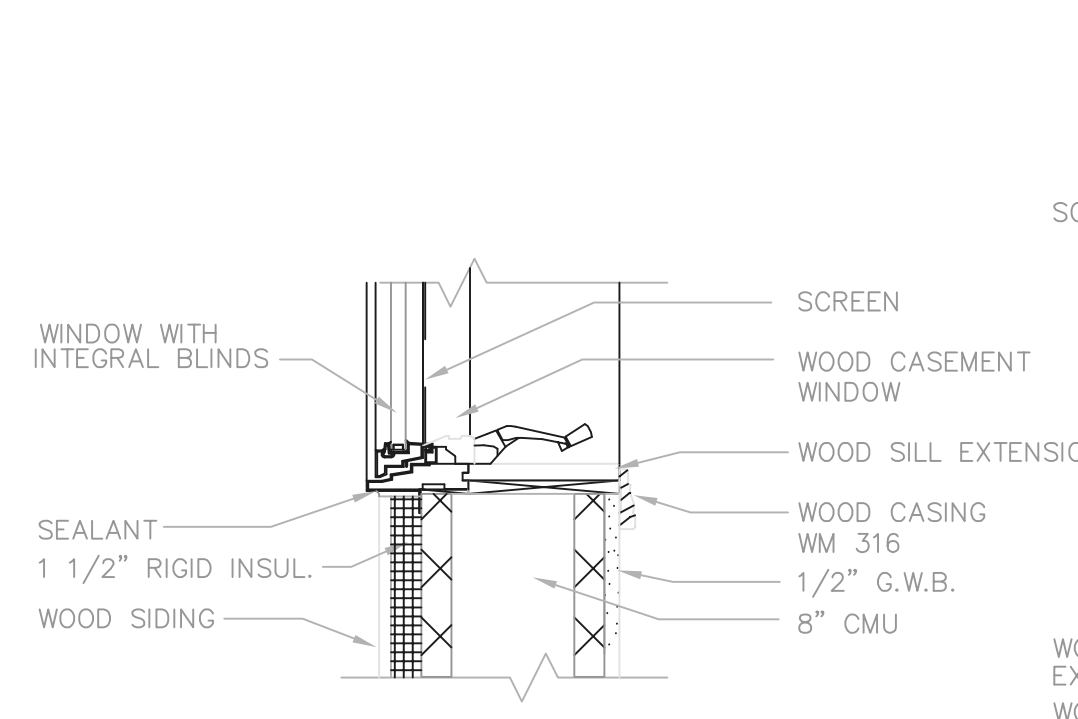
1 1/2" = 1'-0"



ROOF TRANSITION DETAIL

69 | 73

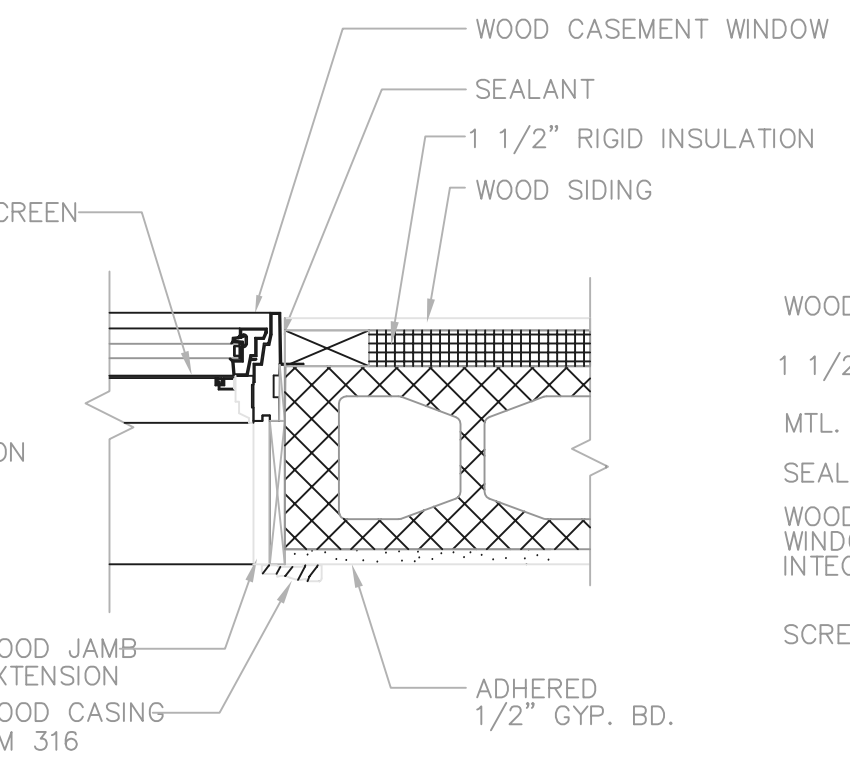
1 1/2" = 1'-0"



SILL DETAIL

73 | 73

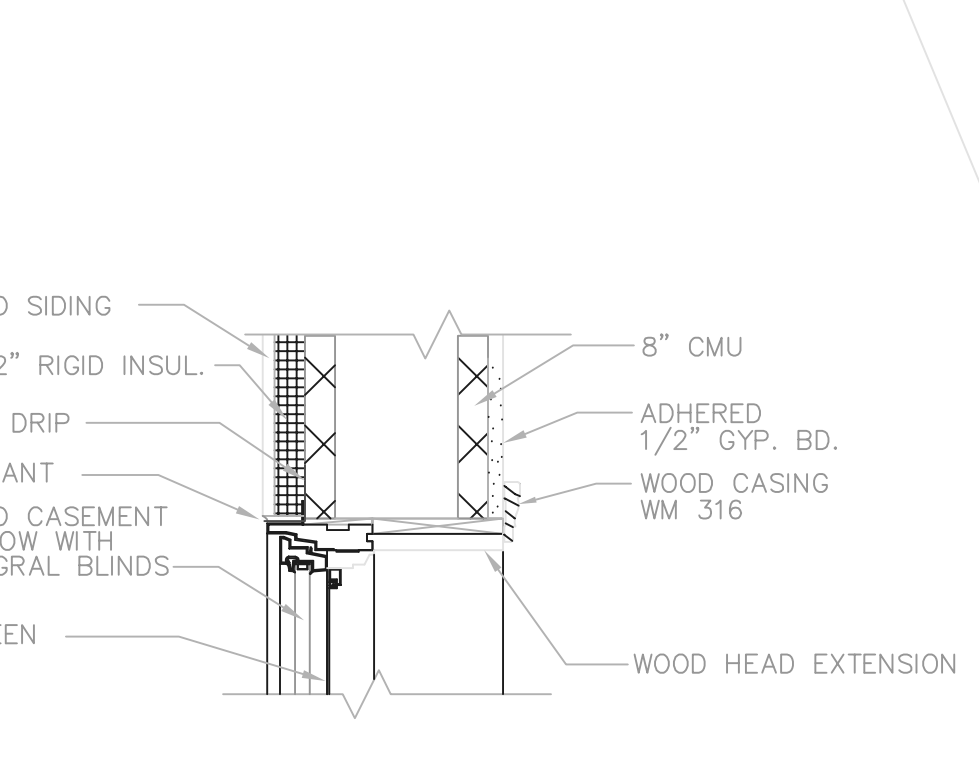
1 1/2" = 1'-0"



JAMB DETAIL

73 | 73

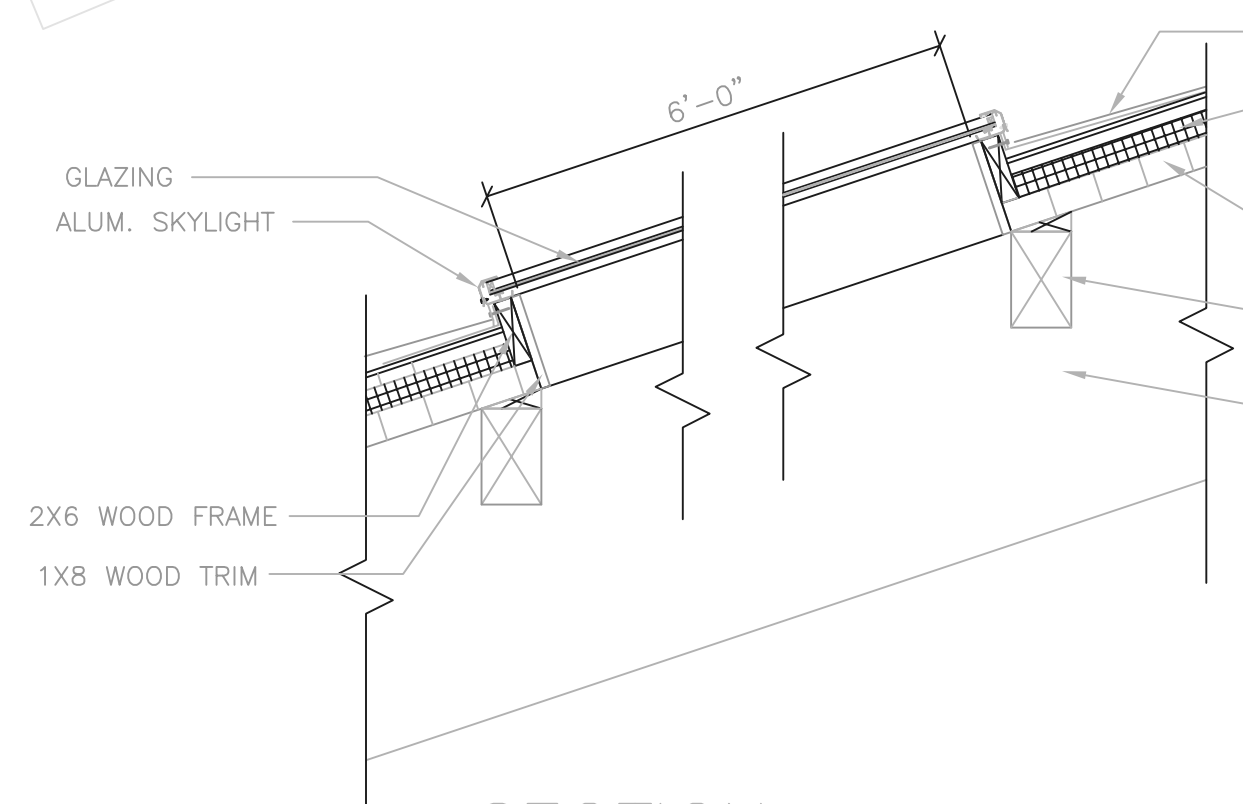
1 1/2" = 1'-0"



HEAD DETAIL

73 | 73

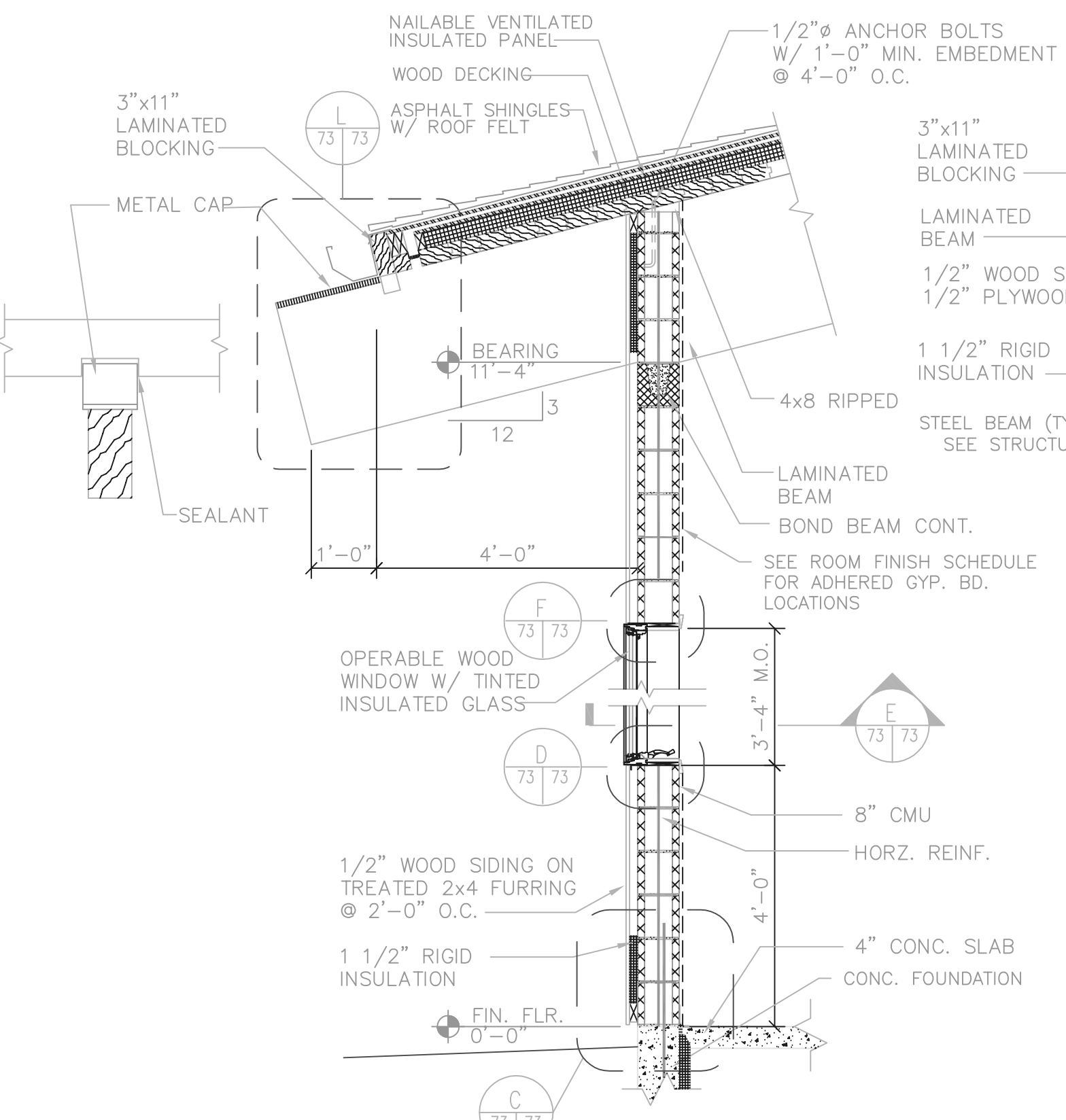
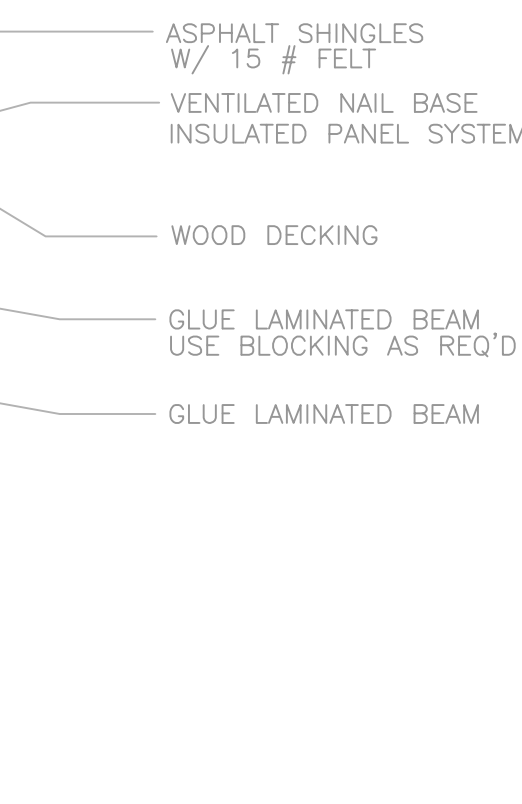
1 1/2" = 1'-0"



SECTION

70 | 73

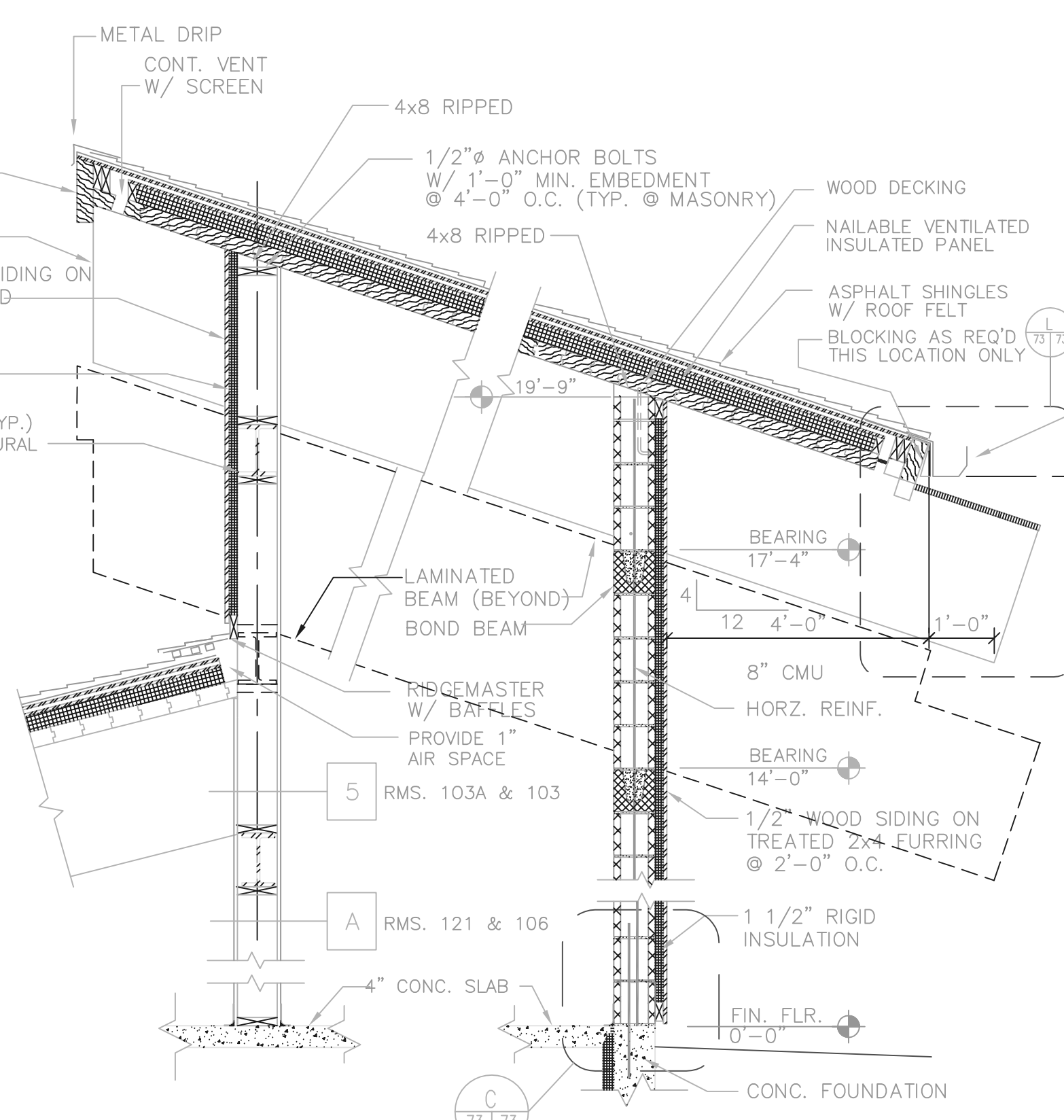
3/4" = 1'-0"



WALL SECTION

69 | 73

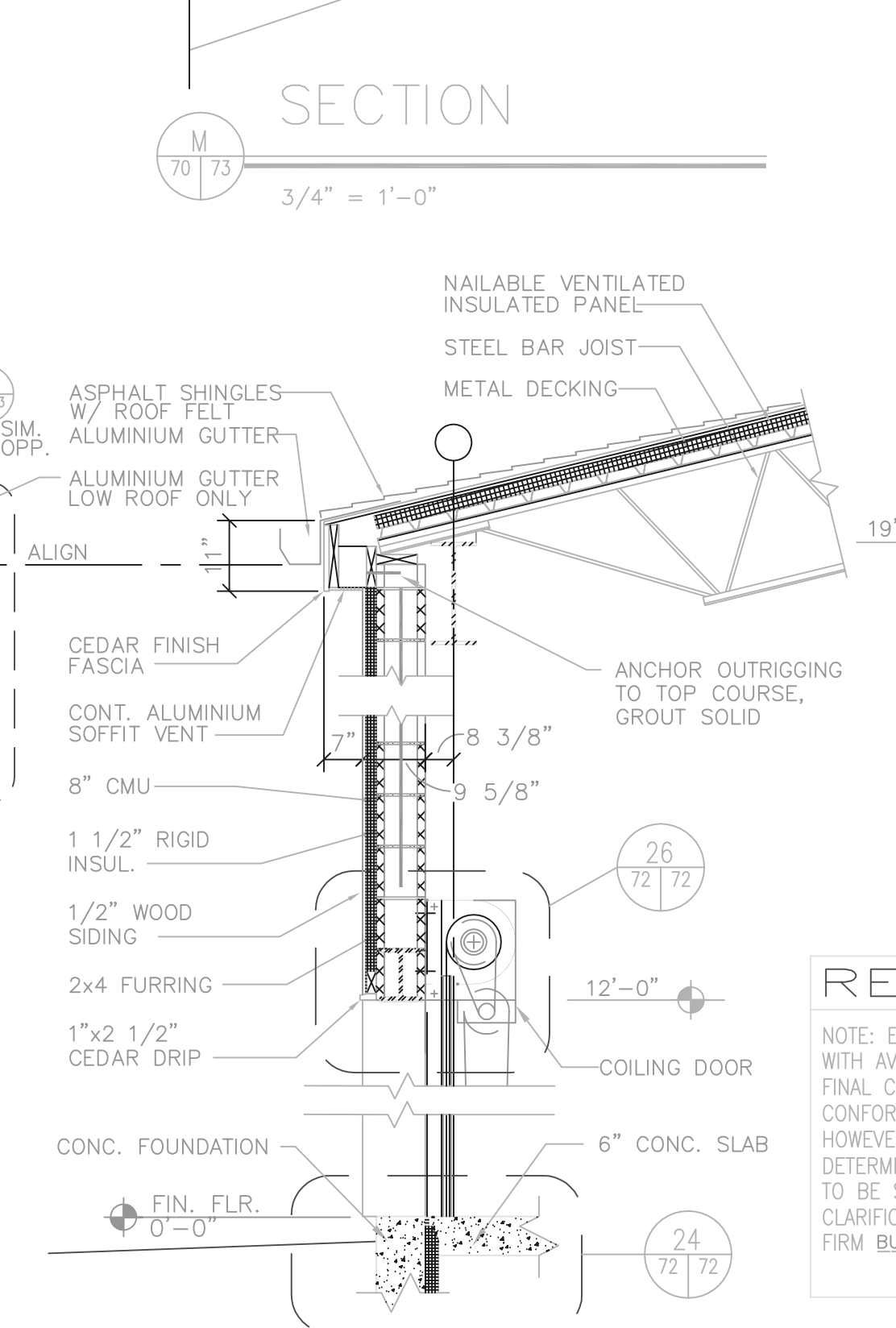
1/2" = 1'-0"



SECTION

69 | 73

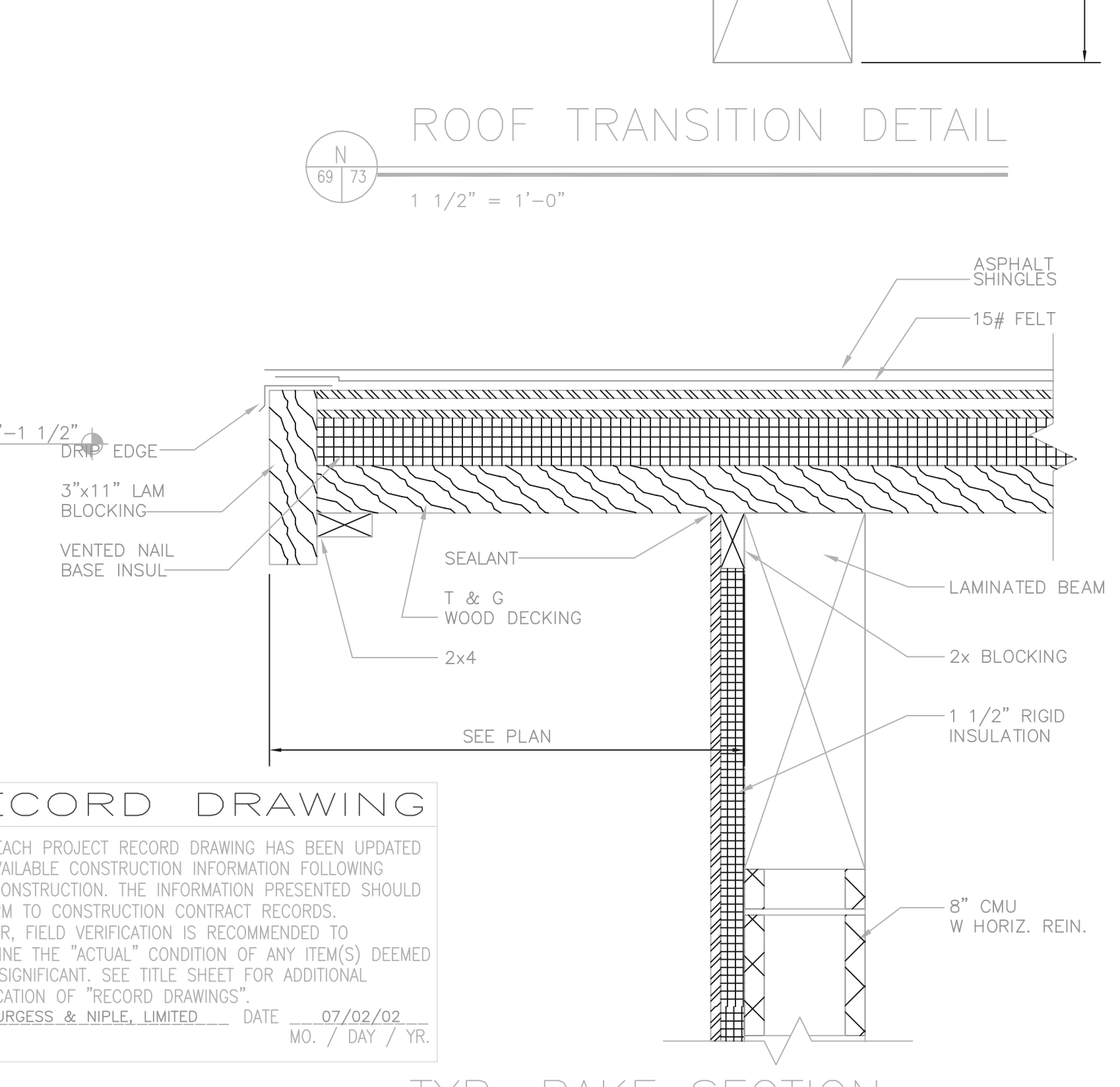
1/2" = 1'-0"



WALL SECTION

69 | 73

1/2" = 1'-0"



TYP. RAKE SECTION

69 | 73

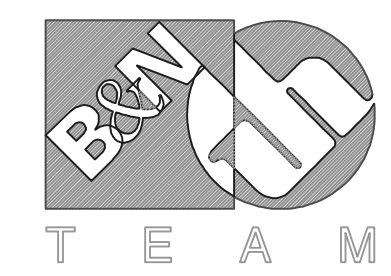
1 1/2" = 1'-0"

RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM BURGESS & NIPLE, LIMITED DATE 07/02/02 MO. / DAY / YR.

P:\PR24025\PM\STRECDWG\73.DWG 6-23-00 2:31:08 PM

NO.	REVISIONS	DATE	BY	CHK.
1	CODE REVISIONS	4.26.99		



Burgess & Niple, Limited
Jones & Henry Engineers, Ltd.

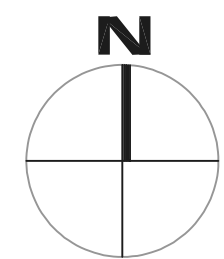
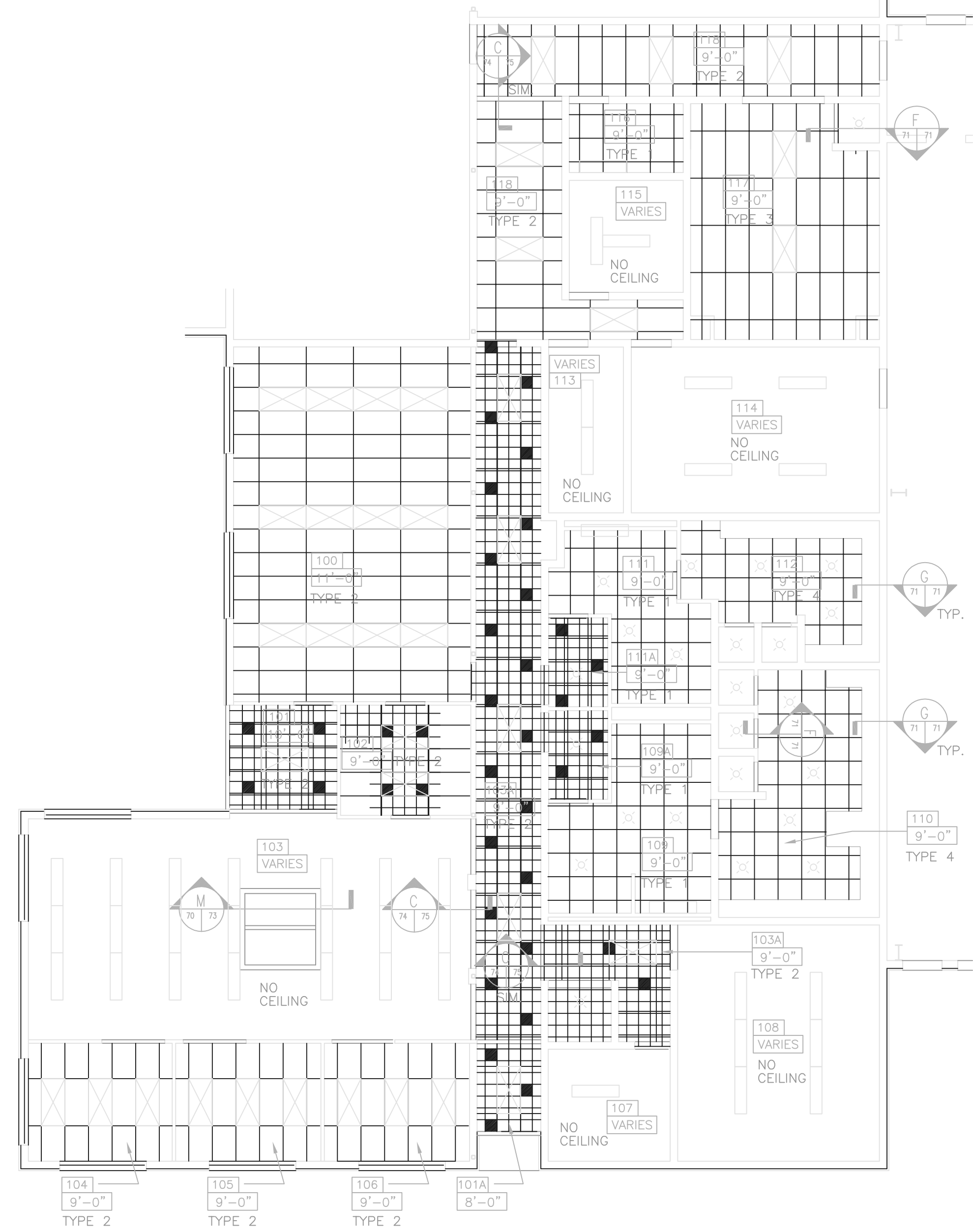
DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	SJC/ TO
DRAWN BY:	SJC
CHECKED BY:	
APPROVED BY:	RBD
DATE:	MAR 1999

CENTRAL MAINTENANCE
SECTION & DETAILS

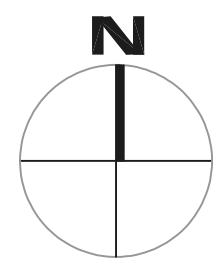
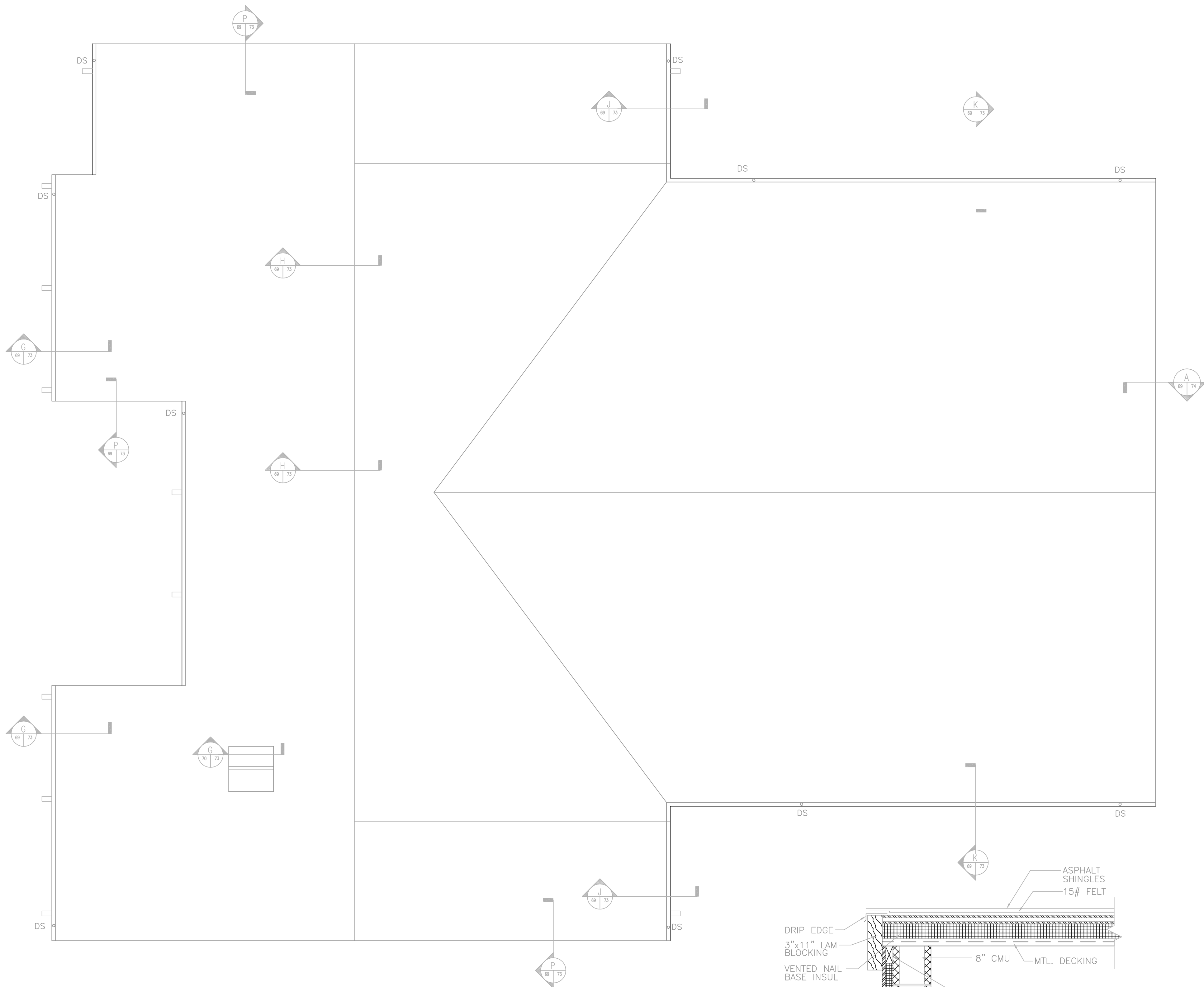
SCALE:	
AS NOTED	
SHEET NO.	OF
73	100

P:\PR24025\PM\STRCDWG\74.DWG 5-6-99 1:18:00 pm



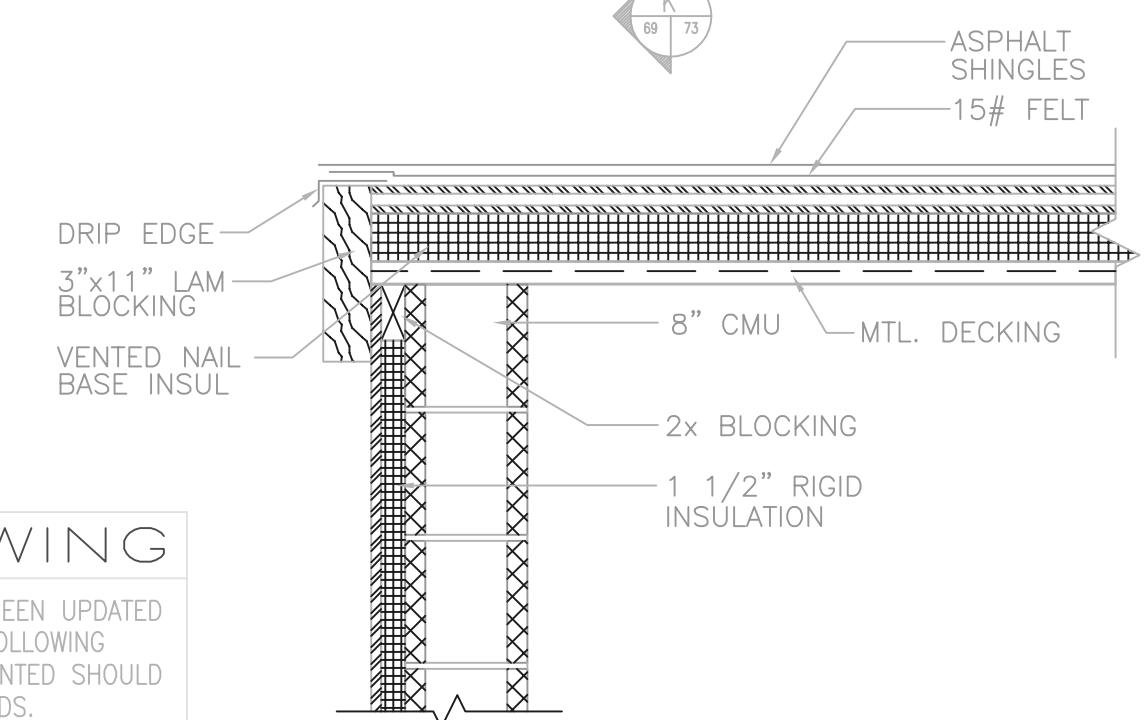
PARTIAL REFLECTED CEILING PLAN

1/8" = 1'-0"



ROOF PLAN

1/8" = 1'-0"



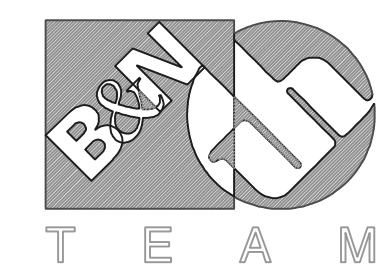
TYP. RAKE SECTION

1" = 1'-0"

RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
 FIRM **BURGESS & NIPLE, LIMITED** DATE 07/19/02
 MO. / DAY / YR.

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited
 Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	TO
DRAWN BY:	SJC
CHECKED BY:	
APPROVED BY:	RBD
DATE:	MAR 1999

CENTRAL MAINTENANCE
 REFLECTED CEILING PLAN

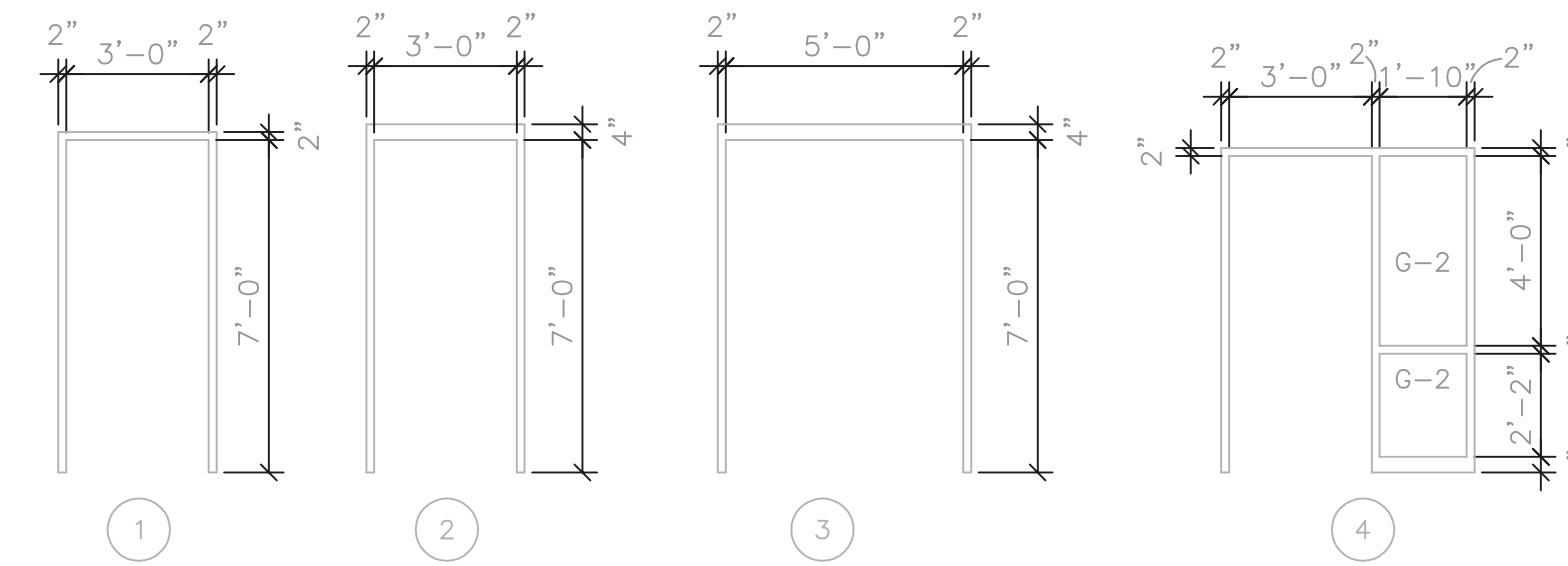
SCALE:	
1/8" = 1'-0"	
SHEET NO.	OF
74	100

MAINTENANCE BUILDING DOOR SCHEDULE

DOOR NO.	DOOR				FRAME				REMARKS					
	DIMENSION			MAT	TYPE	GLASS	DETAILS							
	W	H	T				H	J		S				
100	3'-0"	7'-0"	3/4"	WD	A	-	HM	19	20	-	1	2	20 MIN	
100A	3'-0"	7'-0"	3/4"	WD	A	-	HM	21	22	-	1	1	20 MIN	
101	3'-0"	7'-0"	3/4"	ALUM	C1	T	ALUM	6	4/7	-	3	-		STOREFRONT SYSTEM
102	3'-0"	7'-0"	3/4"	WD	A	-	HM	19	20	-	1	2	20 MIN	
103	3'-0"	7'-0"	3/4"	ALUM	C2	T	ALUM	8	4/5	-	4	-		STOREFRONT SYSTEM
104	3'-0"	7'-0"	3/4"	WD	A	-	HM	19	20/23	-	4	12	-	
105	3'-0"	7'-0"	3/4"	WD	A	-	HM	19	20/23	-	4	12	-	
106	3'-0"	7'-0"	3/4"	WD	A	-	HM	19	20/23	-	4	12	-	
107	3'-0"	7'-0"	3/4"	WD	A	-	HM	11	10	-	2	1	45 MIN	45 MIN. RATING REQUIRED BY TOWNSHIP
107A	2'-2"	6'	3/4"	WD	A	-	HM	11	10	-	3	7	20 MIN	
108	3'-6"	7'-0"	3/4"	WD	A	-	HM	11	10	-	2	1	20 MIN	
109	3'-0"	7'-0"	3/4"	WD	A	-	HM	13	14/18	-	2	6	-	
109A	3'-0"	7'-0"	3/4"	WD	A	-	HM	11	10	-	2	5	20 MIN	
110	3'-0"	7'-0"	3/4"	WD	A	-	HM	15	12	-	2	6	-	
111	3'-0"	7'-0"	3/4"	WD	A	-	HM	13	14/18	-	2	6	-	
111A	3'-0"	7'-0"	3/4"	WD	A	-	HM	11	10	-	2	5	20 MIN	
112	3'-0"	7'-0"	3/4"	WD	A	-	HM	13	14	-	2	6	-	
113	3'-0"	7'-0"	3/4"	HM	A	-	HM	15	12	-	2	1	20 MIN	
114	3'-0"	7'-0"	3/4"	HM	B	W	HM	15	12	-	2	1	20 MIN	
114A	3'-0"	7'-0"	3/4"	HM	A	-	HM	15	12	-	2	2	3 HR.	
115	3'-0"	7'-0"	3/4"	HM	A	-	HM	15	12	-	2	1	20 MIN	
116	3'-0"	7'-0"	3/4"	HM	A	-	HM	15	12	-	2	1	20 MIN	
117	3'-0"	7'-0"	3/4"	WD	B	W	HM	11	10	-	2	1	20 MIN	
118	3'-0"	7'-0"	3/4"	HM	B	W	HM	15	12	-	2	1	20 MIN	
119	12'-0"	12'-0"	-	ALUM	D	-	-	26	25	24	-	15	-	
120	12'-0"	12'-0"	-	ALUM	D	-	-	26	25	24	-	15	-	
121	3'-0"	7'-0"	3/4"	HM	B	W	HM	15	12	-	2	2	20 MIN	
122	3'-0"	7'-0"	3/4"	HM	A	-	HM	15	12	-	2	1	3 HR.	
123	3'-0"	7'-0"	3/4"	HM	A	-	HM	16	17	-	2	10	-	
124	12'-0"	14'-0"	-	ALUM	D	-	-	26	25	24	-	15	-	
125	12'-0"	14'-0"	-	ALUM	D	-	-	26	25	24	-	15	-	
126	12'-0"	14'-0"	-	ALUM	D	-	-	26	25	24	-	15	-	
127	3'-0"	7'-0"	3/4"	HM	A	-	HM	16	17	-	2	10	-	
128	3'-0"	7'-0"	3/4"	HM	A	-	HM	16	17	-	2	10	-	
129	12'-0"	14'-0"	-	ALUM	D	-	-	26	25	24	-	15	-	
130	12'-0"	14'-0"	-	ALUM	D	-	-	26	25	24	-	15	-	
131	12'-0"	14'-0"	-	ALUM	D	-	-	26	25	24	-	15	-	
132	12'-0"	14'-0"	-	ALUM	D	-	-	26	25	24	-	15	-	
133	3'-0"	7'-0"	3/4"	HM	A	-	HM	16	17	-	2	10	-	
134	3'-0"	7'-0"	3/4"	ALUM	C1	T	ALUM	9	1	-	3	-		STOREFRONT SYSTEM
135	3'-0"	7'-0"	3/4"	ALUM	C2	T	ALUM	8	2/3	-	4	-		STOREFRONT SYSTEM, HEAD SIMILAR
136	3'-0"	7'-0"	3/4"	HM	A	-	HM	16	17	-	2	10	-	
137	3'-0"	7'-0"	3/4"	HM	A	-	HM	16	17	-	2	10	-	

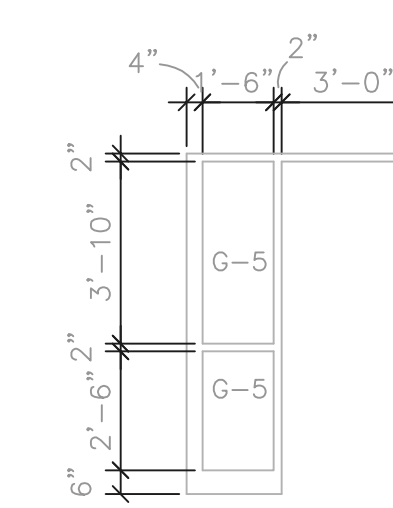
NOTE: ALL HEAD & JAMB DETAILS FOR MAINTENANCE BUILDING ARE ON SHT. 6
 W = WIRE GLASS
 T = TEMPERED GLASS

GLASS SCHEDULE	
GL-1	- CLEAR GLASS
GL-2	- CLEAR TEMPERED GLASS
GL-4	- TINTED INSULATED GLASS
GL-5	- TINTED TEMPERED INSULATED GLASS
GL-6	- WIRE GLASS

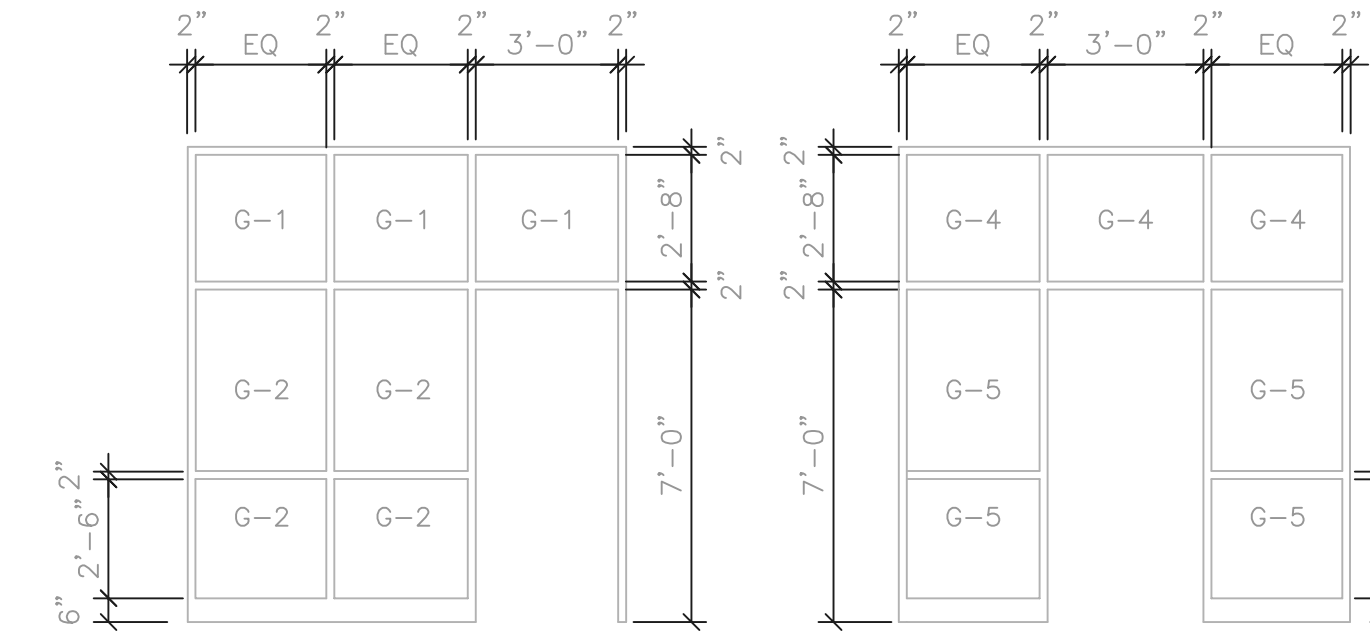


DOOR FRAME TYPES

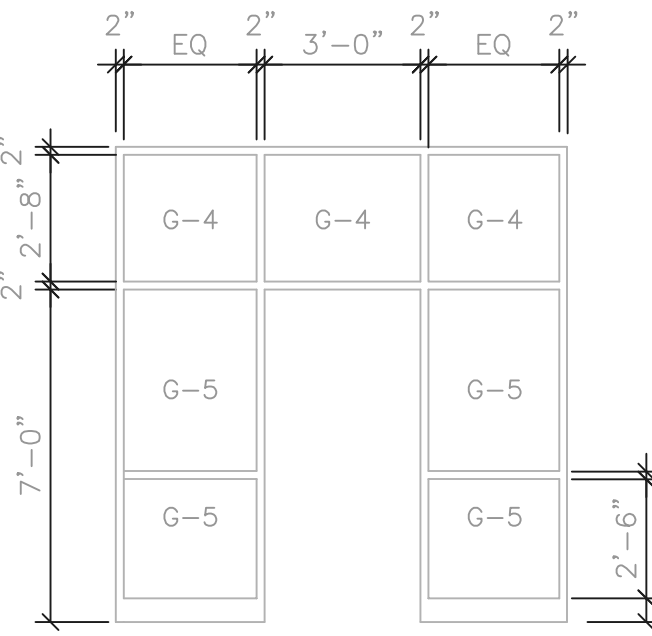
1/4" = 1'-0"



A 1/2" STOREFRONT



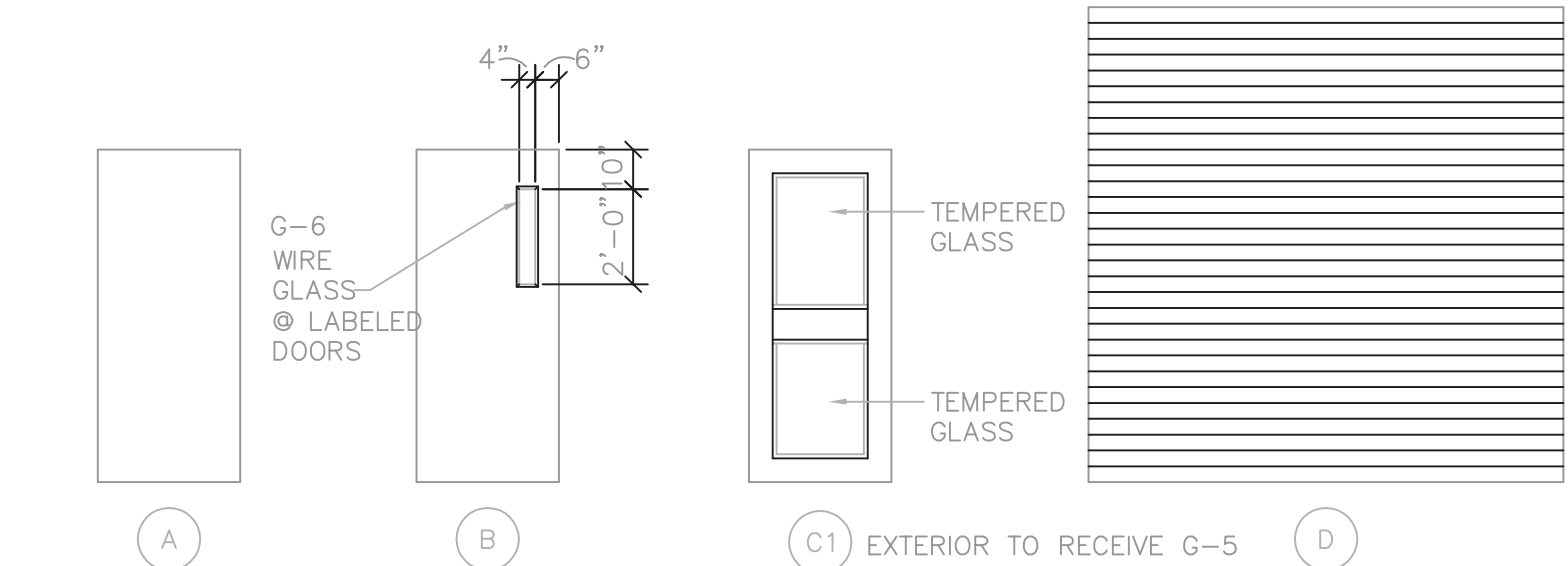
B 1/2" STOREFRONT



C 1/2" STOREFRONT

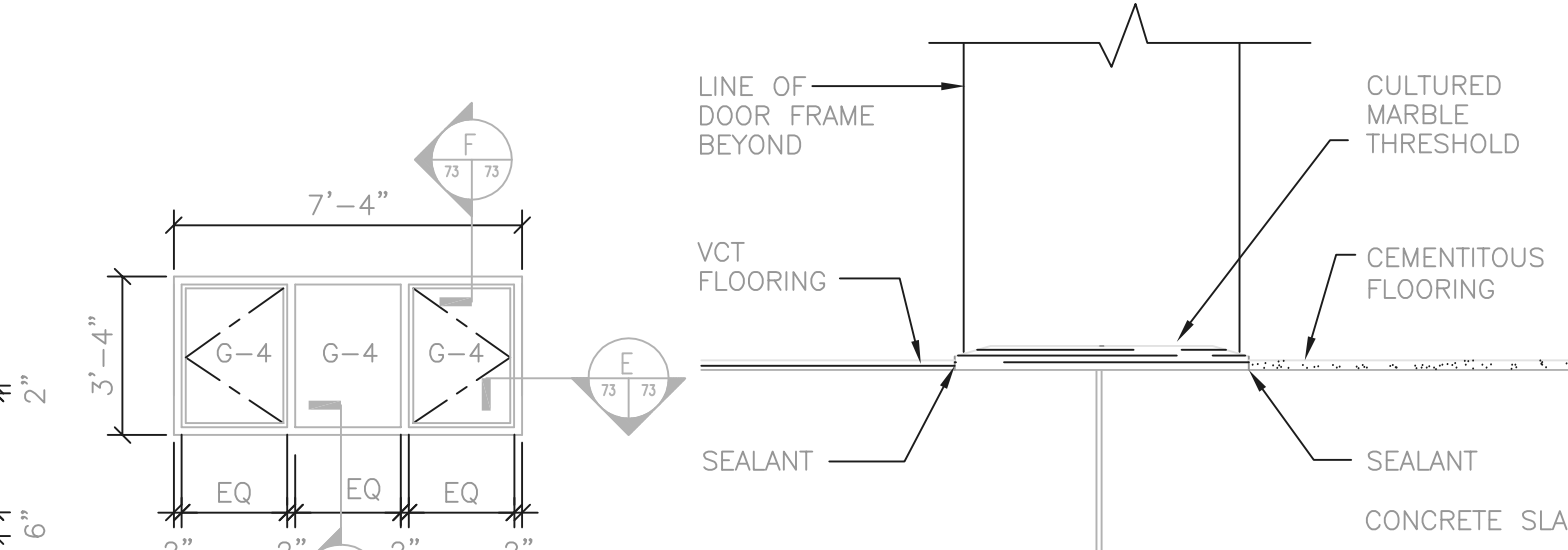
WINDOW FRAME TYPES

1/4" = 1'-0"

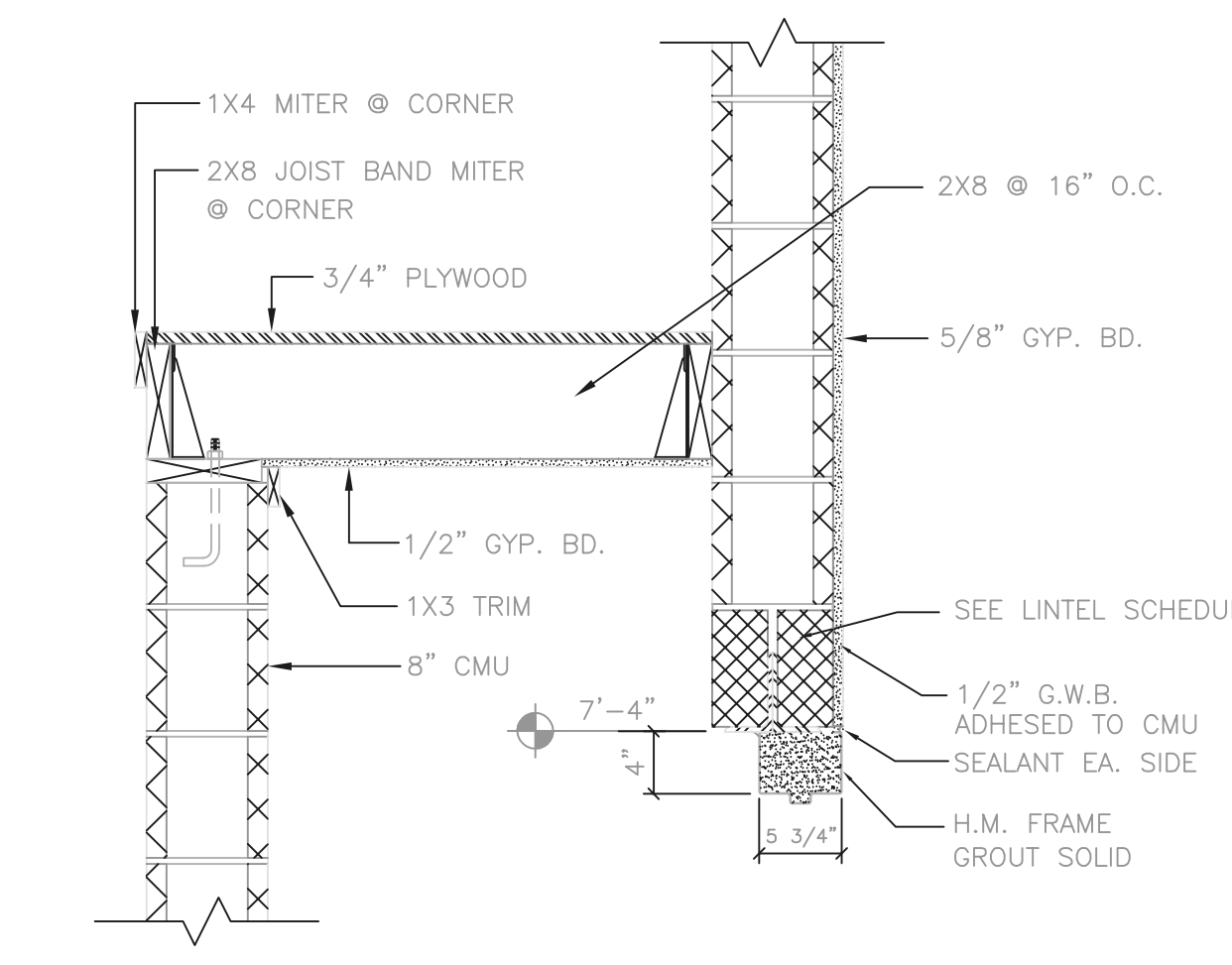


DOOR TYPES

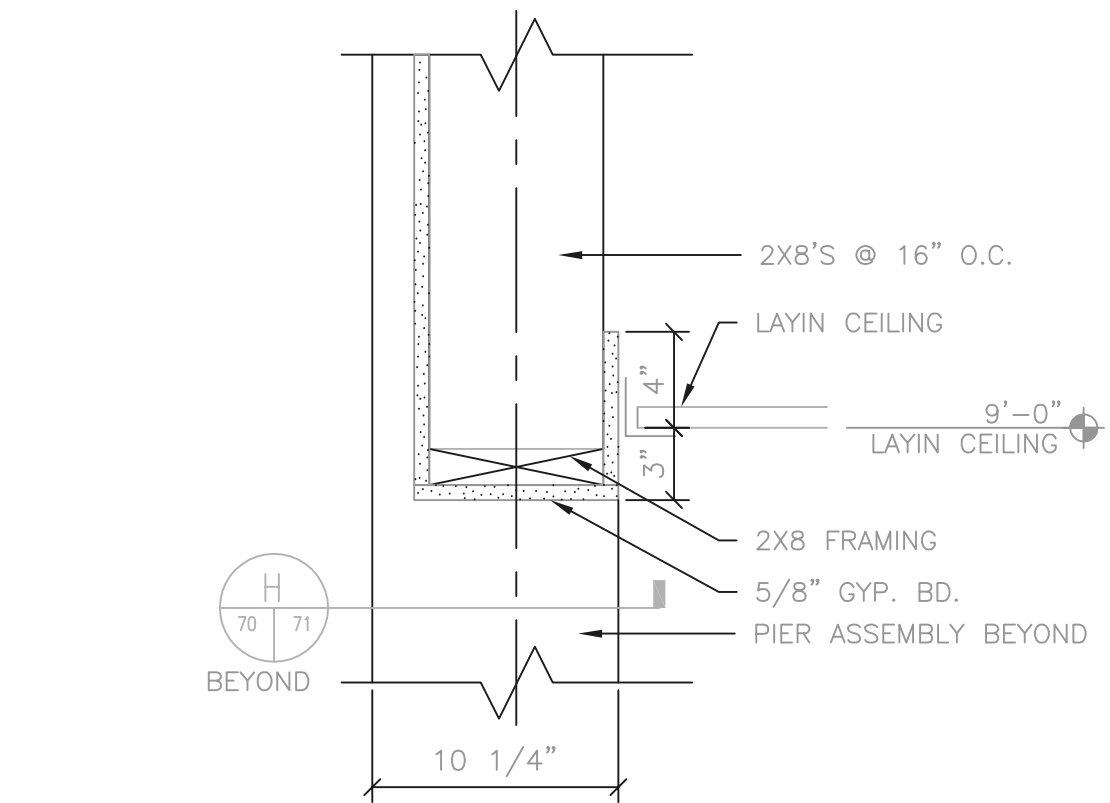
1/4" = 1'-0"



A FLOOR TRANSITION
SCALE: 3" = 1'-0"



B SECTION @ CLOSET
SCALE: 3/4" = 1'-0"



C SECTION @ OFFICE/LIBRARY
SCALE: 1 1/4" = 1'-0"

ROOM NO.	DESCRIPTION	ROOM FINISH SCHEDULE												REMARKS			
		FLOOR		NORTH WALL		EAST WALL		SOUTH WALL		WEST WALL		CEILING					
		BASE	MATERIAL	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH		HEIGHT		
100	CONF. ROOM	RES.	CARPET	GYP	PAINT	GYP	PAINT	GYP	PAINT	GYP	PAINT	GYP	PAINT	ACT2	-	11'-0"	N WALL PAINT AS ACCENT
101	VESTIBULE	RES.	VCT	GYP	PAINT	GYP	PAINT	GYP	PAINT	GYP	PAINT	GYP	PAINT	ACT2	-	10'-3"	PAINT SOFFIT ABOVE STOREFRONT
101A	VESTIBULE	RES.	VCT	GYP	PAINT	GYP	PAINT	GYP	PAINT	GYP	PAINT	GYP	PAINT	ACT2	-	8'-0"	PAINT SOFFIT ABOVE STOREFRONT
102	KITCHEN	RES.	VCT	GYP	PAINT	GYP	PAINT	GYP	PAINT	GYP	PAINT	GYP	PAINT	ACT2	-	9'-0"	
103	OFFICE/LIBRARY	RES.	CARPET	GYP	PAINT	GYP	PAINT	GYP	PAINT	GYP	PAINT	GYP	PAINT	PAINT	VARIABLES		EXPOSED WOOD DECK, W WALL ACCENT PAINT
103A	CORRIDOR	RES.	VCT	GYP	PAINT	GYP	PAINT	GYP	PAINT	GYP	PAINT	GYP	PAINT	ACT2	-	9'-0"	W WALL ACCENT PAINT
104	OFFICE	RES.	CARPET	GYP	PAINT	GYP	PAINT	GYP	PAINT	GYP	PAINT	GYP	PAINT	ACT2	-	9'-0"	W WALL ACCENT PAINT
105	OFFICE	RES.	CARPET	GYP	PAINT	GYP	PAINT	GYP	PAINT	GYP	PAINT	GYP	PAINT	ACT2	-	9'-0"	W WALL ACCENT PAINT
106	OFFICE	RES.	CARPET	GYP	PAINT	GYP	PAINT	GYP	PAINT	GYP	PAINT	GYP	PAINT	ACT2	-	9'-0"	W WALL ACCENT PAINT
107	SUPPLY	-	CONC./SEAL	CMU	PAINT	CMU	PAINT	CMU	PAINT	CMU	PAINT	CMU	PAINT	-	PAINT	VARIABLES	EXPOSED WOOD DECK
107A	CLOSET	RES.	VCT	CMU	PAINT	CMU	PAINT	CMU	PAINT	CMU	PAINT	CMU	PAINT	GYP.	PAINT	8'-8"	
108	MECHANICAL	-	CONC./SEAL	CMU	PAINT	CMU	PAINT	CMU	PAINT	CMU	PAINT	CMU	PAINT	-	PAINT	VARIABLES	EXPOSED WOOD DECK
109	MEN'S TOILET	RNS	RNS	CMU	*PAINT	CMU	*PAINT	CMU	*PAINT	CMU	*PAINT	CMU	*PAINT	ACT1	-	9'-0"	* EPOXY PAINT
109A	VESTIBULE	RES.	VCT	CMU	PAINT	CMU	PAINT	CMU	PAINT	CMU	PAINT	CMU	PAINT	ACT1	-	9'-0"	
110	SHOWER	RNS	RNS	CMU	*PAINT	CMU	*PAINT	CMU	*PAINT	CMU	*PAINT	CMU	*PAINT	ACT4	-	9'-0"	* EPOXY PAINT, CT SHOWERS
111	WOMEN'S TOILET	RNS	RNS	CMU	*PAINT	CMU	*PAINT	CMU	*PAINT	CMU	*PAINT	CMU	*PAINT	ACT1	-	9'-0"	* EPOXY PAINT
111A	VESTIBULE	RES.	VCT	CMU	PAINT	CMU	PAINT	CMU	PAINT	CMU	PAINT	CMU	PAINT	ACT1	-	9'-0"	
112	SHOWER	RNS	RNS	CMU	*PAINT	CMU	*PAINT	CMU	*PAINT	CMU	*PAINT	CMU	*PAINT	ACT4	-	9'-0"	* EPOXY PAINT, CT SHOWERS
113	ELECTRICAL	-	CONC./SEAL	CMU	PAINT	CMU	PAINT	CMU	PAINT	CMU	PAINT	CMU	PAINT	-	PAINT	VARIABLES	EXPOSED WOOD DECK / STEEL DECK
114	SMALL PARTS	-	CONC./SEAL	CMU	PAINT	CMU	PAINT	CMU	PAINT	CMU	PAINT	CMU	PAINT	-	PAINT	VARIABLES	EXPOSED WOOD DECK / STEEL DECK
115	MECHANICAL	-	CONC./SEAL	CMU	PAINT	CMU	PAINT	CMU	PAINT	CMU	PAINT	CMU	PAINT	-	PAINT	VARIABLES	EXPOSED WOOD DECK
116	TOILET	RES.	VCT	CMU	*PAINT	CMU	*PAINT	CMU	*PAINT	CMU	*PAINT	CMU	*PAINT	ACT1	-	9'-0"	* EPOXY PAINT
117	LOCKER ROOM	RNS	RNS	CMU	*PAINT	CMU	*PAINT	CMU	*PAINT	CMU	*PAINT	CMU	*PAINT	ACT3	-	9'-0"	* EPOXY PAINT, CT SHOWERS
118	CORRIDOR	RNS	RNS	CMU	PAINT	CMU	PAINT	CMU	PAINT	CMU	PAINT	CMU	PAINT	ACT2	-	9'-0"	
119	VESTIBULE	-	CONC./SEAL	CMU	PAINT	CMU	PAINT	CMU	PAINT	CMU	PAINT	CMU	PAINT	ACT2	-	9'-0"	
120	GARAGE	-	CONC./SEAL	CMU	PAINT	CMU	PAINT	CMU	PAINT	CMU	PAINT	CMU	PAINT	-	PAINT	VARIABLES	EXPOSED METAL DECK
121	OPERATIONS	-	CONC./SEAL	CMU	PAINT	CMU	PAINT	CMU	PAINT	CMU	PAINT	CMU	PAINT	-	PAINT	VARIABLES	EXPOSED WOOD DECK

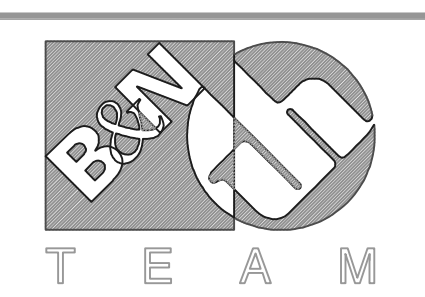
CMU - CONCRETE MASONRY UNIT
 ACT - ACOUSTICAL TILE
 CT - CERAMIC TILE
 VCT - VINYL COMPOSITE TILE

INTERIOR FINISHES
 WALL/CEILING: CORRIDORS - CLASS II
 ROOMS - CLASS III
 FLOOR: ROOMS - DOC FF-1
 CORRIDORS - CLASS II
 SMOKE DEVELOPED RATING: 450 OR LESS

CODED NOTES:
 VCT FLOORS TO HAVE VINYL ACCENT
 TILES IN 6% OF FLOOR AREA.

P:\PR24025\PMPS\STRECDWG\75.DWG 5-6-99 1:19:56 pm

NO.	REVISIONS	DATE	BY	CHK.
1	CODE REVISIONS	4.26.99		



Burgess & Niple, Limited
 Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	SJC/DI
DRAWN BY:	SJC/DI
CHECKED BY:	TO
APPROVED BY:	RD
DATE:	MAR 1999

DOOR SCHEDULE,
 DOOR & FRAME TYPES
 WINDOW TYPES

SCALE: AS NOTED	
SHEET NO.	OF
75	100

OCCUPANT LOAD/BUILDING CLASSIFICATION				
LOCATION	O/L	USE GROUP	QUANTITY	
101 VESTIBULE	50	B, 111B	1	
100 CONFERENCE	50	B, 111B	1	

ROOM _____
OCCUPANCY LOAD
CENTRAL MAINTENANCE FACILITY
50 PERSONS
USE GROUP B, 111B

FLOOR LOAD PLATE TABLE			
LOCATION	LOAD	QUANTITY	
101 VESTIBULE	400	1	
100 CONFERENCE	400	1	
121 OPERATIONS	400	1	
120 GARAGE	400	1	

MAXIMUM
FLOOR LOAD
400 LBS./SQ. FT.

MAXIMUM
LIFT LOAD
15,000 POUNDS

- ALL PLATES SHALL BE PLASTIC
- ◇ CODING USED FOR PREFERRED LOCATION, SEE SHEET 70
- DISTANCE FROM FIN. FLOOR TO TOP OF SIGN SHALL BE 5'-8"

STRUCTURAL SIGNAGE

STRUCTURAL DESIGN DATA		
BUILDING CODE	1998 OHIO BASIC BUILDING CODE	
SEISMIC	SEISMIC HAZARD EXPOSURE GROUP EFFECTIVE PEAK VELOCITY-RELATED ACCELERATION SITE COEFFICIENT SEISMIC PERFORMANCE CATEGORY	II AV = 0.077 S = 1.5 B
WIND	BASIC WIND SPEED EXPOSURE IMPORTANCE FACTOR	V = 80 MPH C I = 1.00
SNOW	GROUND SNOW LOAD SNOW EXPOSURE FACTOR IMPORTANCE FACTOR	PG = 25 PSF CE = 0.7 I = 1.0
FLOOR	LIVE LOAD (AS SHOWN) MECHANICAL & ELECTRICAL (ACTUAL LOADS) PARTITIONS	100 PSF (MIN.) 10 PSF (MIN.) 20 PSF (MIN.)
ROOF	LIVE LOAD } APPLY LARGER LOAD SNOW LOAD } MECHANICAL & ELECTRICAL (ACTUAL LOADS) ROOFING SYSTEM	20 PSF (MIN.) (SEE ABOVE) 10 PSF (MIN.) 15 PSF (MIN.)
STAIRS	LIVE LOAD	100 PSF
CORRIDORS	LIVE LOAD	100 PSF
EQUIPMENT PLATFORMS	LIVE LOAD (AS SHOWN)	100 PSF MIN.
BEARING CAPACITY	PRESUMED BEARING CAPACITY AT 4' FT. BELOW GRADE	3000 PSF

GENERAL NOTES:

- LAP SPLICES, CONSTRUCTION JOINT DETAILS, WALL CORNER REINFORCEMENT DETAILS, JOINT SEALING DETAILS, SHEAR KEY DETAILS, ETC., UNLESS OTHERWISE SHOWN ON THE DRAWINGS, SHALL ADHERE TO STANDARD STRUCTURAL DETAIL DRAWINGS.
- VERTICAL CONSTRUCTION JOINTS SHALL BE LOCATED TO MINIMIZE SHRINKAGE CRACKS AND NOT TO ADVERSELY AFFECT THE STRENGTH OF THE STRUCTURE. WALLS SHALL NOT BE PLACED IN SEGMENTS GREATER THAN 50 FT. AT A TIME.
- HORIZONTAL REBARS SHALL BE SPLICED WITHIN THE LIMITS OF "ADJACENT POURS" TO BE POURED LATER TO ALLOW FOR UNRESTRAINED SHRINKAGE MOVEMENTS. ADJACENT SPLICES SHOULD BE STAGGERED HORIZONTALLY BY NOT LESS THAN ONE LAP LENGTH OR 3'-0", WHICHEVER IS GREATER.
- NO BACKFILLING SHALL BE DONE UNTIL HORIZONTAL SLAB SUPPORT OR CROSS-BRACING WALLS ARE IN PLACE. ANY TEMPORARY BRACING REQUIRED TO SUPPORT WALLS DURING CONSTRUCTION SHALL BE DESIGNED AND INSTALLED BY THE CONTRACTOR AT HIS OWN EXPENSE.
- ULTIMATE STRENGTH OF CONCRETE AT 28 DAYS (FC') SHALL BE MINIMUM 4000 PSI. REINFORCING BARS SHALL CONFORM TO DEFORMED BILLET STEEL SPECIFICATION ASTM A615 AND SHALL HAVE MINIMUM YIELD STRENGTH OF 60 KSI.
- THE CONTRACTOR SHALL MAINTAIN ADEQUATE SUPERVISION AND CONTROL OF DEWATERING OPERATIONS (IF REQUIRED) TO ENSURE THAT STABILITY OF EXCAVATED AND CONSTRUCTED SLOPES ARE NOT ADVERSELY AFFECTED BY INFLOW OF GROUNDWATER AND TO PERMIT PLACEMENT AND CURING OF CONCRETE UNDER CONTROLLED ENVIRONMENTS.
- ALL MASONRY IS DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" (ACI 530-95/ASCE 5-95/TMS 402-95) AND MASONRY CONSTRUCTION AND MATERIALS SHALL CONFORM TO ALL REQUIREMENTS OF THIS CODE.
- WOODEN BEAMS AND DECK ARE DESIGNED IN ACCORDANCE WITH THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" 1997 EDITION. (ANSI/AF&PA NDS-1997) MATERIALS SHALL CONFORM TO THIS STANDARD.
- THE BACKFILL UNDERNEATH BASE SLABS SHALL BE SPECIAL BACKFILL, UNLESS OTHERWISE APPROVED, IN ACCORDANCE WITH THE SPECIFICATIONS AND SHALL BE WELL COMPACTED TO NOT LESS THAN 98% MAXIMUM DRY DENSITY IN ACCORDANCE WITH THE MODIFIED PROCTOR TEST ASTM D-1557.
- STRUCTURAL STEEL COMPONENTS (STEEL BEAMS) ARE DESIGNED IN ACCORDANCE WITH "MANUAL OF STEEL CONSTRUCTION" ASD (NINTH EDITION) AND SHALL BE ERECTED IN ACCORDANCE WITH THE REQUIREMENTS OF THIS CODE.
- WHEREVER REINFORCEMENT REQUIREMENTS FOR STRUCTURAL COMPONENTS (BEAMS, SLABS, WALLS, ETC.) DON'T AGREE AMONG DIFFERENT SECTIONS, THE MOST CONSERVATIVE REQUIREMENT AMONG THEM WILL GOVERN UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- UNLESS OTHERWISE SHOWN OR SPECIFIED, ALL VERTICAL / HORIZONTAL DOWELS INTO SUPPORTING STRUCTURAL COMPONENTS SHALL MATCH THE MAIN REINFORCEMENT.
- VERIFY ALL EXISTING DIMENSIONS, ELEVATIONS AND CONDITIONS AT INTERFACE BETWEEN EXISTING & NEW CONSTRUCTION BEFORE STARTING TO FABRICATE STRUCTURAL STEEL OR DETAILING REBARS. NOTIFY THE ENGINEER OF ANY DISCREPANCIES FOR RESOLUTION.
- DURING CONSTRUCTION OF NEW STRUCTURES OR STRUCTURAL ELEMENTS, PREVENT UNDERMINING THE FOUNDATIONS OF NEARBY EXISTING STRUCTURES BY SHEET PILING OR BY UNDERPINNING AS REQUIRED. TAKE ALL NECESSARY PROTECTIVE MEASURES TO PREVENT DAMAGE TO THE EXISTING STRUCTURES. CAREFULLY MONITOR THE SETTLEMENT OF EXISTING STRUCTURES DURING SHEET PILING OR UNDERPINNING OPERATIONS. CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF SHEET PILING OR UNDERPINNING OPERATIONS & SHALL SUBMIT THIS DESIGN TO THE ENGINEER FOR REVIEW.
- CRANE BEAMS SHALL BE STRAIGHT AND PARALLEL. THE WHEEL RUNNING SURFACE SHALL BE AT A CONSTANT ELEVATION, HAVE NO TRANSVERSE TILT AND SHALL BE HELD IN ALIGNMENT AT JOINTS.
- THE CONTRACTOR SHALL ENSURE THAT FOUNDATIONS REST ON FIRM MATERIAL OVER THEIR ENTIRE AREA. THE TESTING LAB SHALL VERIFY THAT A SOIL BEARING CAPACITY OF AT LEAST 3000 PSF IS OBTAINED. THE BEARING CAPACITY VERIFICATION IS REQUIRED AT REGULAR INTERVALS IN EACH DIRECTION. NOTIFY THE ENGINEER OF ANY UNSUITABLE SOIL ENCOUNTERED. SUCH SOIL SHALL BE REMOVED AND REPLACED WITH COMPACTED SPECIAL BACKFILL AS DIRECTED BY THE ENGINEER.
- UNLESS OTHERWISE APPROVED, BACKFILL AGAINST CONCRETE WALLS SHALL BE A WELL GRADED GRANULAR MATERIAL.

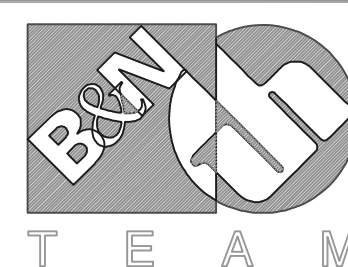
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM **Jones & Henry Engineers, Ltd.** DATE 08/07/02
MO. / DAY / YR.

© BNWW0201

TOL-471.4MD14
 02/27/02 04-V02
 P:\PR24025\PMPS\RECORDING\76.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

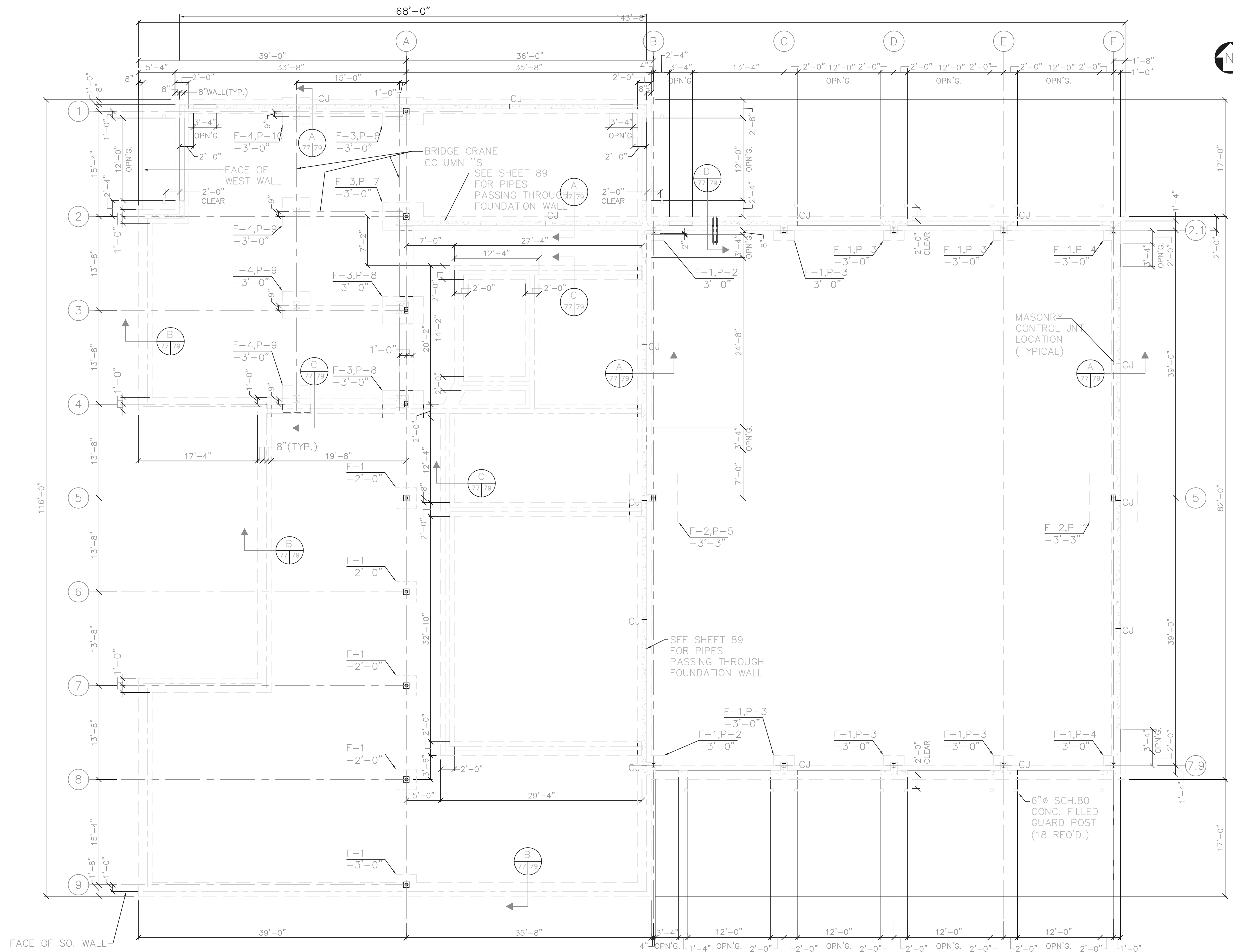
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	MVD
DRAWN BY:	PMc
CHECKED BY:	MVD
APPROVED BY:	SLW
DATE:	1999

CENTRAL MAINTENANCE FACILITY
STRUCTURAL
GENERAL NOTES & DESIGN LOADS

SCALE:		NONE
SHEET NO.	OF	
76	100	



RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
 FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
 MO. / DAY / YR.

© BNWW0201

FOUNDATION PLAN

1/8" = 1'-0"

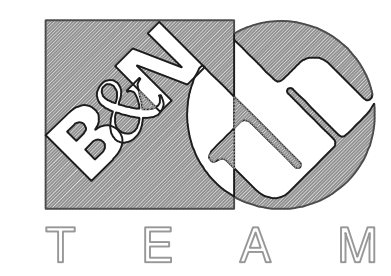
REFER TO SHEET 95 FOR GROUNDING REQUIREMENTS

LEGEND

INDICATES FOOTING AND PIER DESIGNATION (IF APPLICABLE) — F-X,P-X — 2'-0"
 INDICATES DEPTH OF FOOTING BELOW FIN. FLR. (FIN. FLR. = 772.25) [Symbol]

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE
 TOL-4714S15-004
 08/07/02 06-V02
 P:\PR24025\PM\STATECDWG\77.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	MVD
DRAWN BY:	PMc
CHECKED BY:	MVD
APPROVED BY:	SLW
DATE:	1999

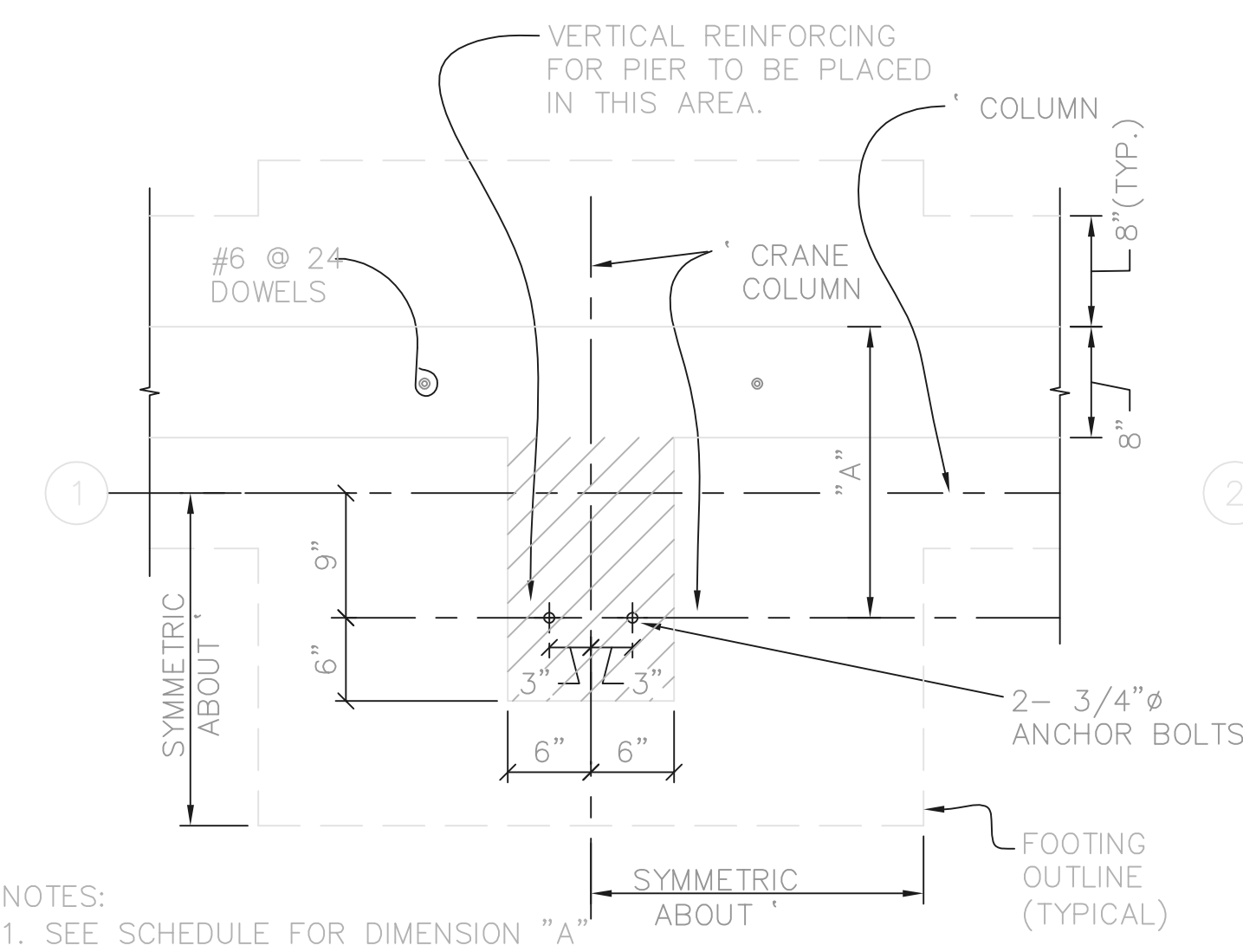
CENTRAL MAINTENANCE FACILITY
 FOUNDATION PLAN

SCALE:	
1/8" = 1'-0"	
SHEET NO.	OF
77	100

PIER SCHEDULE				
DESIGNATION	A	B	REINFORCING	T/PIER ELEV.
P-1	1'-0"	-	6-#5 W/#3 TIES @ 10"	+ 3'-4"
P-2	1'-4"	1'-8"	8-#6 W/#3 TIES @ 12"	+ 3'-4"
P-3	1'-4"	-	6-#5 W/#3 TIES @ 10"	+ 3'-4"
P-4	1'-4"	1'-0"	8-#5 W/#3 TIES @ 10"	+ 3'-4"
P-5	1'-8"	-	6-#5 W/#3 TIES @ 10"	+ 3'-4"
P-6	1'-0"	-	8-#5 W/#3 TIES @ 10"	+ 3'-4"
P-7	1'-4"	-	8-#6 W/#3 TIES @ 12"	+ 3'-4"
P-8	-	-	8-#5 W/#3 TIES @ 10"	+ 0'-0"
P-9	-	-	4-#5 W/#3 TIES @ 10"	+ 0'-0"
P-10	1'-9"	-	6-#5 W/#3 TIES @ 10"	+ 3'-4"

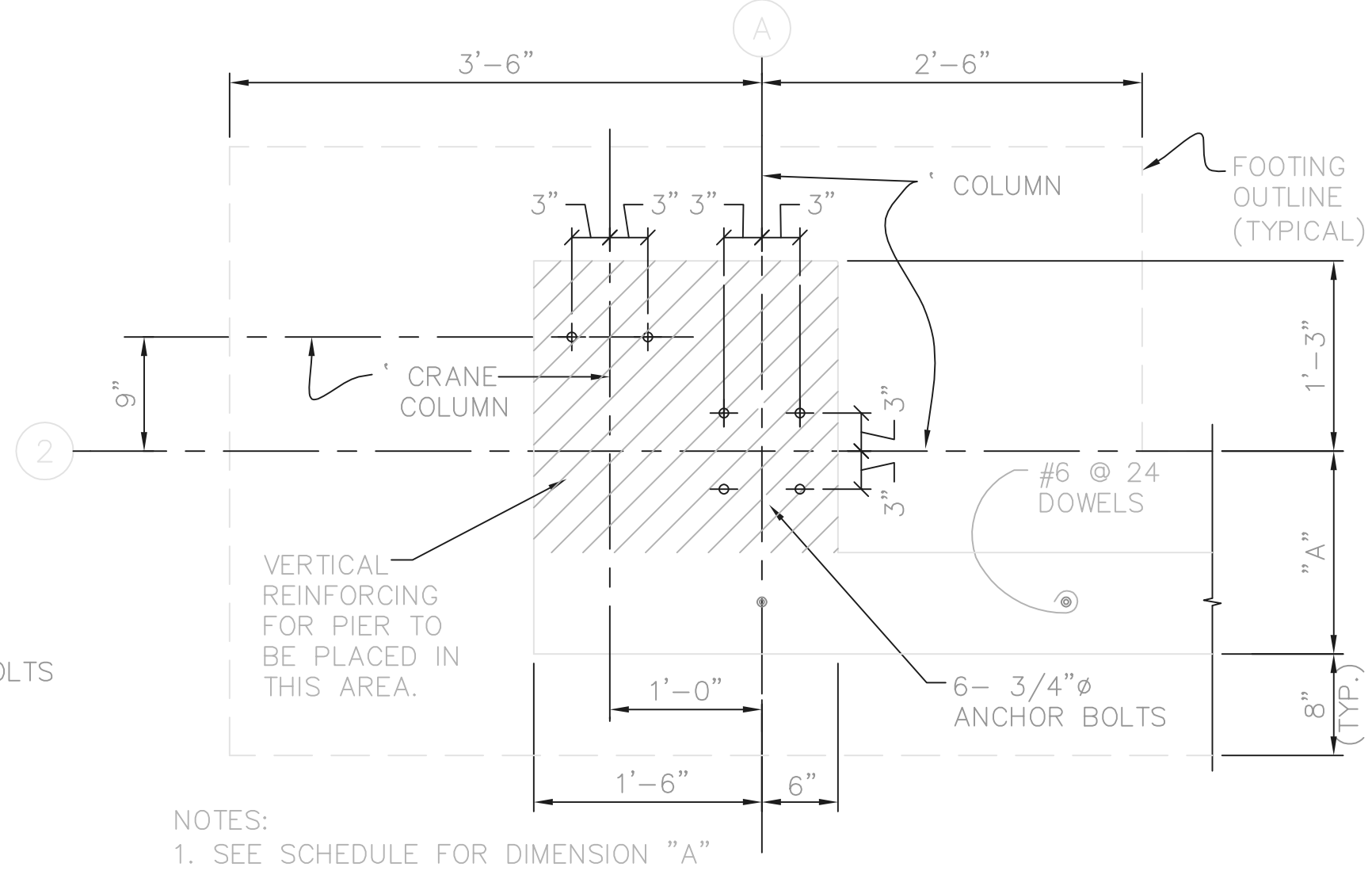
FOOTING SCHEDULE		
DESIGNATION	SIZE	REINFORCING
F-1	3'-0"x3'-0"x1'-0" THK.	4-#4 EACH WAY
F-2	7'-0"x7'-0"x1'-3" THK.	7-#6 EACH WAY
F-3	4'-0"x6'-0"x1'-0" THK.	6-#5 SHORT WAY 4-#5 LONG WAY
F-4	4'-0"x4'-0"x1'-0" THK.	5-#5 EACH WAY

- NOTES:
- FOOTING SIZE BASED ON AN ALLOWABLE SOIL BEARING VALUE OF 3000 PSF. NOTIFY ENGINEER IF UNSOUND CONDITIONS EXIST.
 - WHERE NO PIER IS PRESENT, EMBED ANCHOR BOLTS INTO FOOTING.



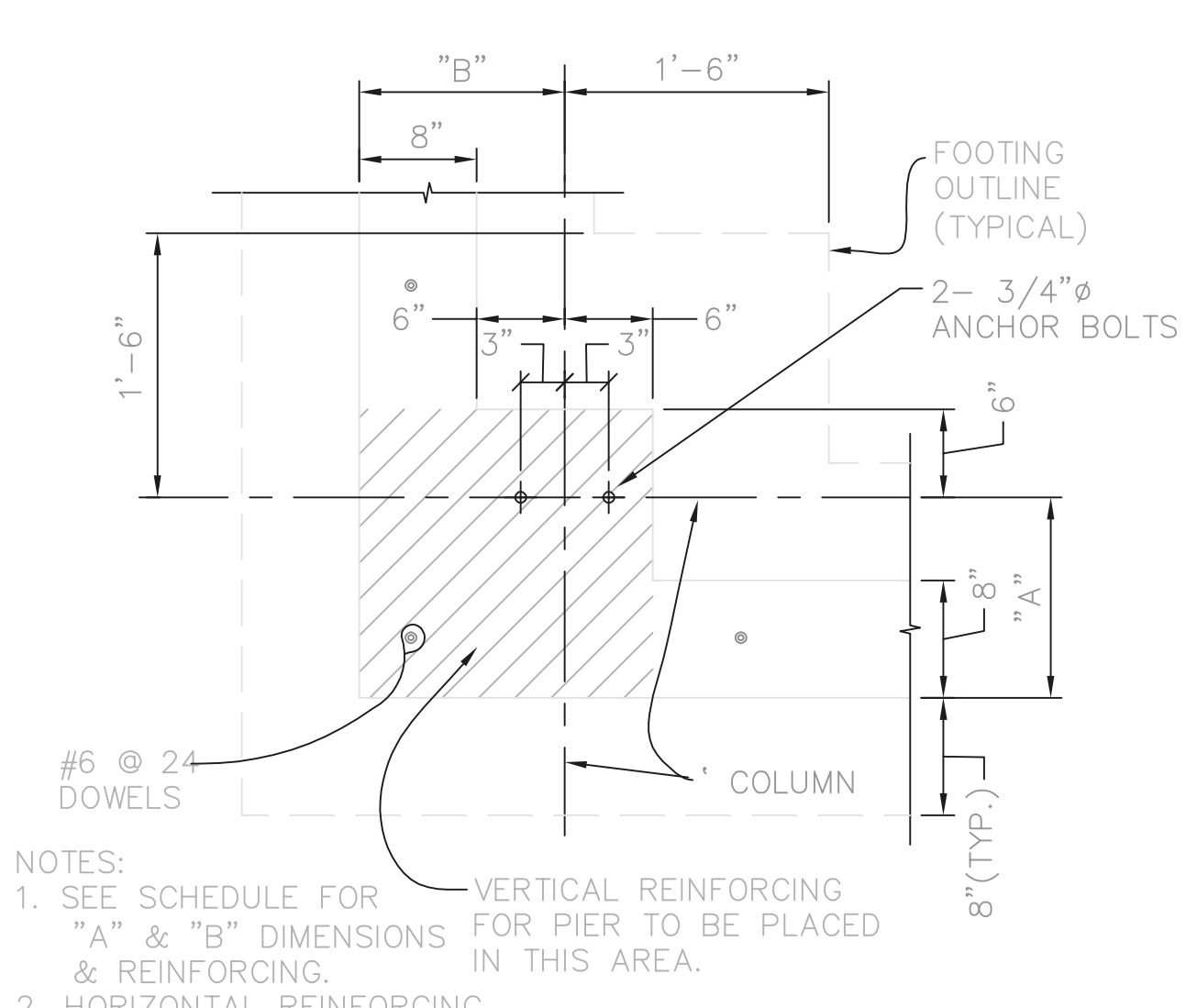
- NOTES:
- SEE SCHEDULE FOR DIMENSION "A" & REINFORCING.
 - HORIZONTAL REINFORCING FOR WALL SHALL CONTINUE THROUGH PIER.

DETAIL-PIER P-10
1" = 1'-0"



- NOTES:
- SEE SCHEDULE FOR DIMENSION "A" & REINFORCING.
 - HORIZONTAL REINFORCING FOR WALL SHALL CONTINUE THROUGH PIER.

DETAIL-PIER P-7
1" = 1'-0"



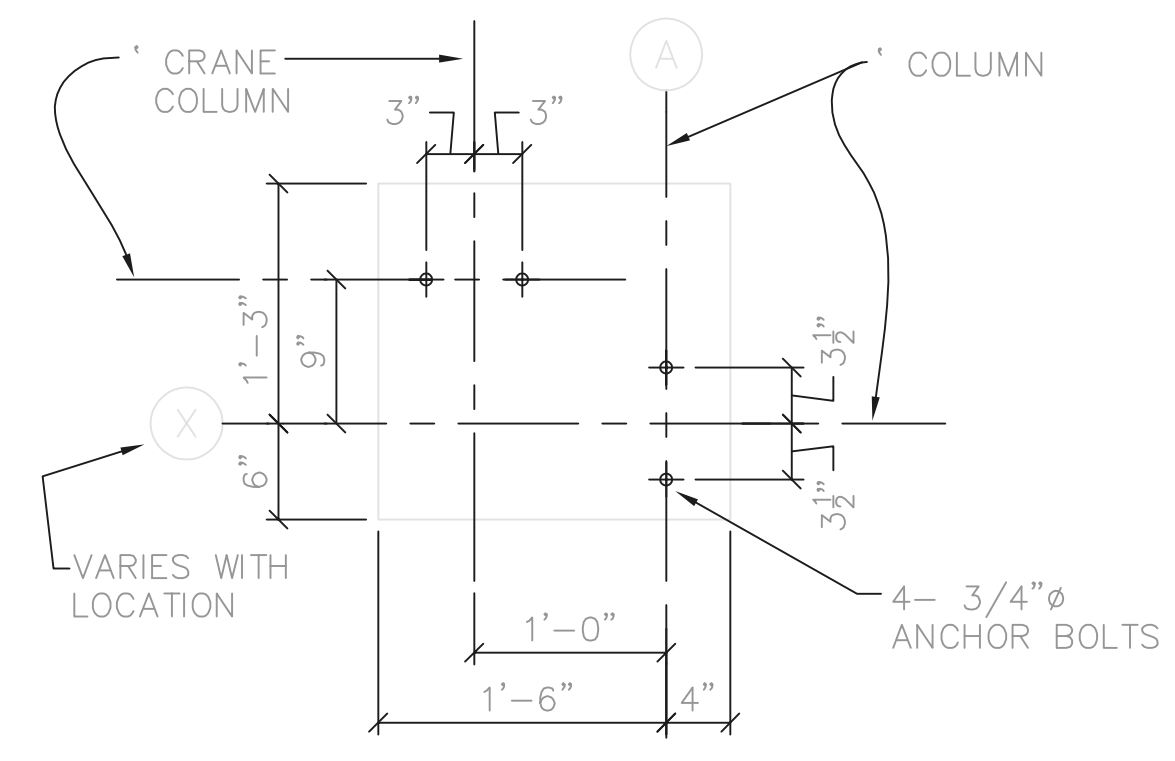
- NOTES:
- SEE SCHEDULE FOR "A" & "B" DIMENSIONS FOR PIER TO BE PLACED & REINFORCING.
 - HORIZONTAL REINFORCING FOR WALLS TO CONTINUE INTO PIER AND INCLUDE #4@12 CORNER REINFORCING.

DETAIL-PIERS P-2, & P-4
1" = 1'-0"

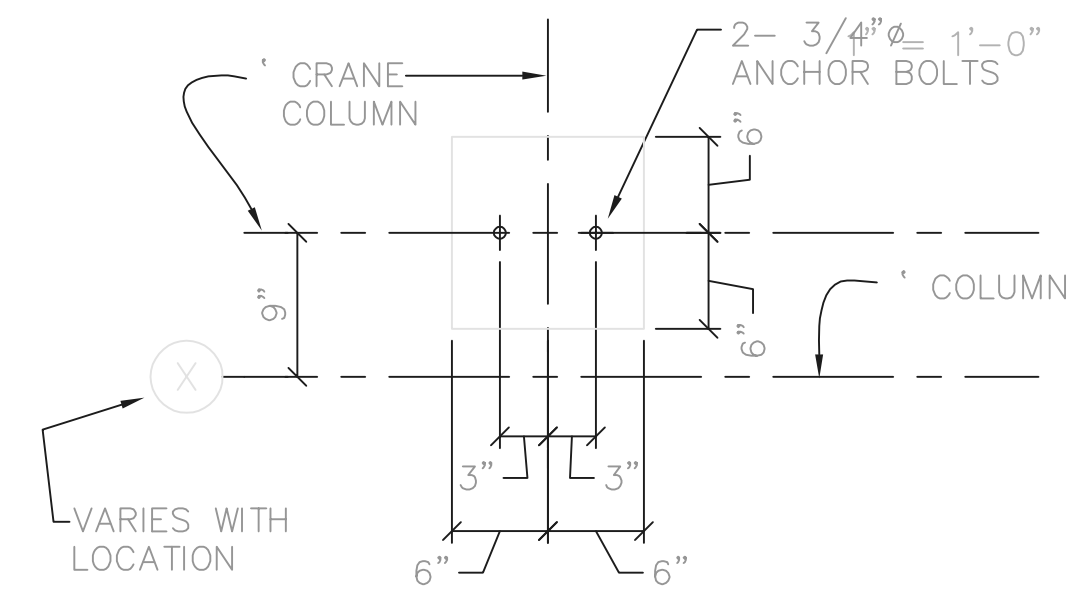
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM Jones & Henry Engineers, Ltd. DATE 08/07/02
MO. / DAY / YR.

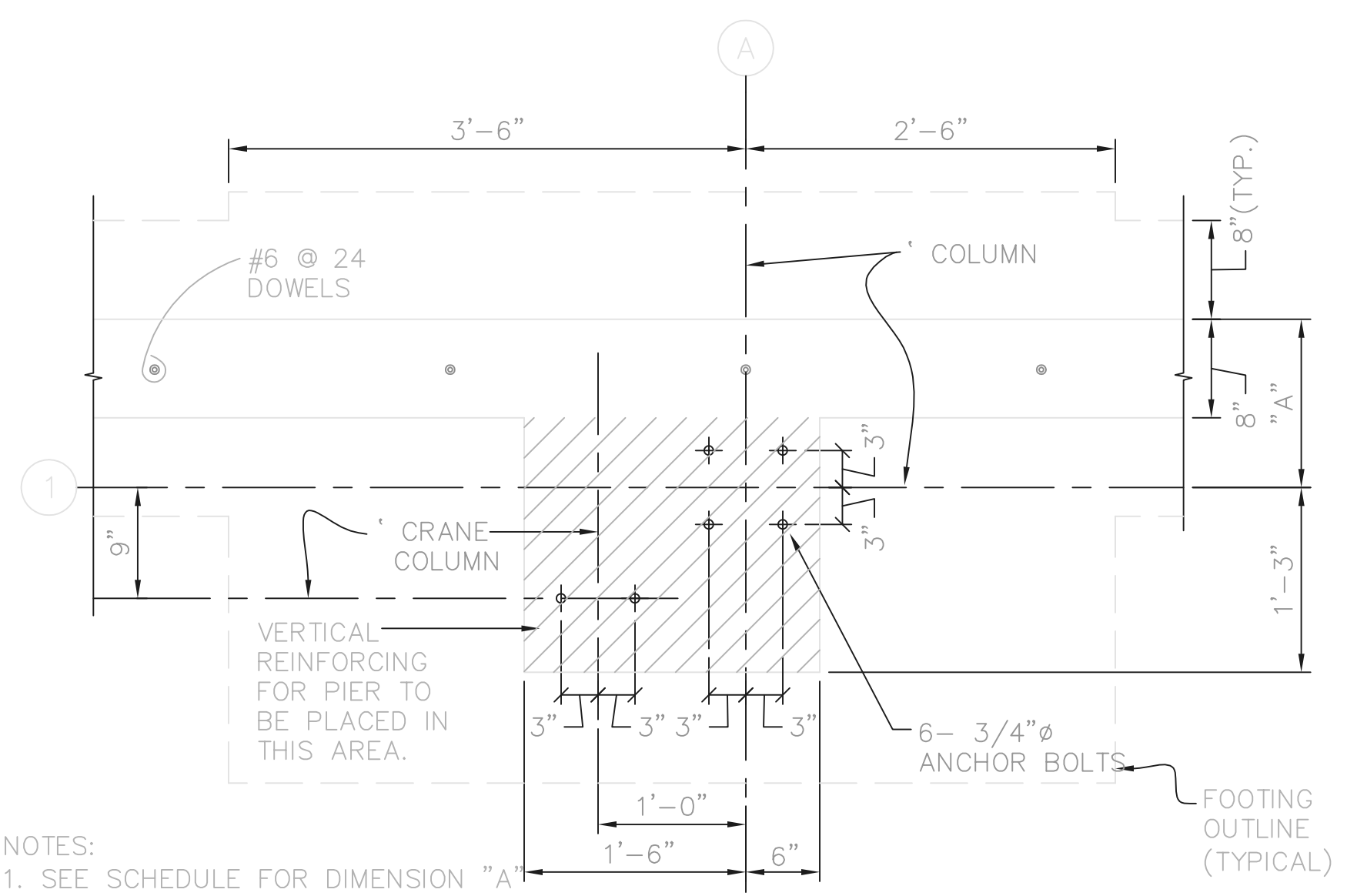
BNW0201



DETAIL-PIER P-8
1" = 1'-0"

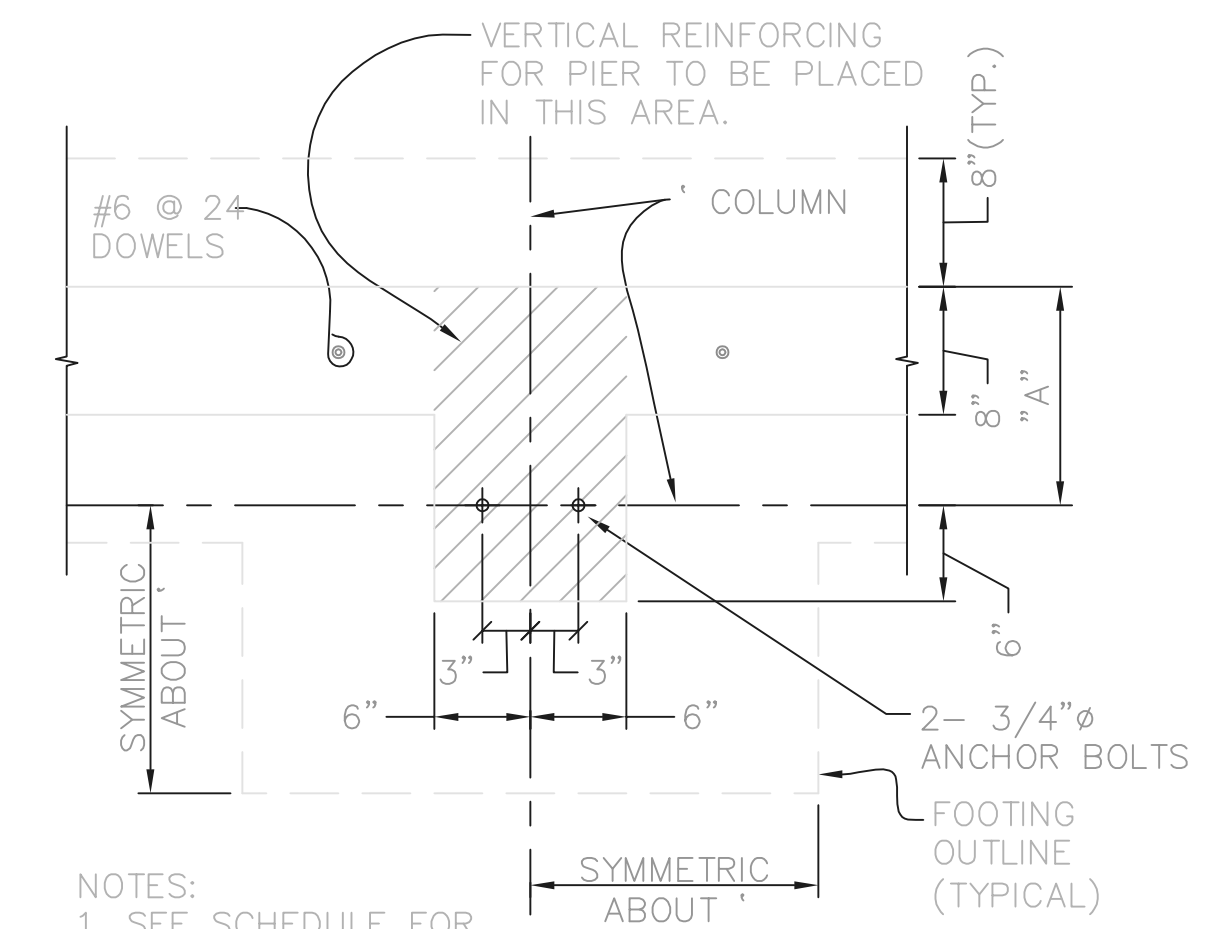


DETAIL-PIER P-9
1" = 1'-0"



- NOTES:
- SEE SCHEDULE FOR DIMENSION "A" & REINFORCING.
 - HORIZONTAL REINFORCING FOR WALL SHALL CONTINUE THROUGH PIER.

DETAIL-PIER P-6
1" = 1'-0"

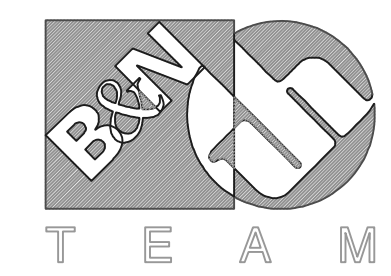


- NOTES:
- SEE SCHEDULE FOR DIMENSION "A" & REINFORCING.
 - HORIZONTAL REINFORCING FOR WALL SHALL CONTINUE THROUGH PIER.

DETAIL-PIERS P-1, P-3, & P-5
1" = 1'-0"

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE
TOL-471463EA
02/27/02 04-V02
P:\PR24025\PMFSTARECDWG\76.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

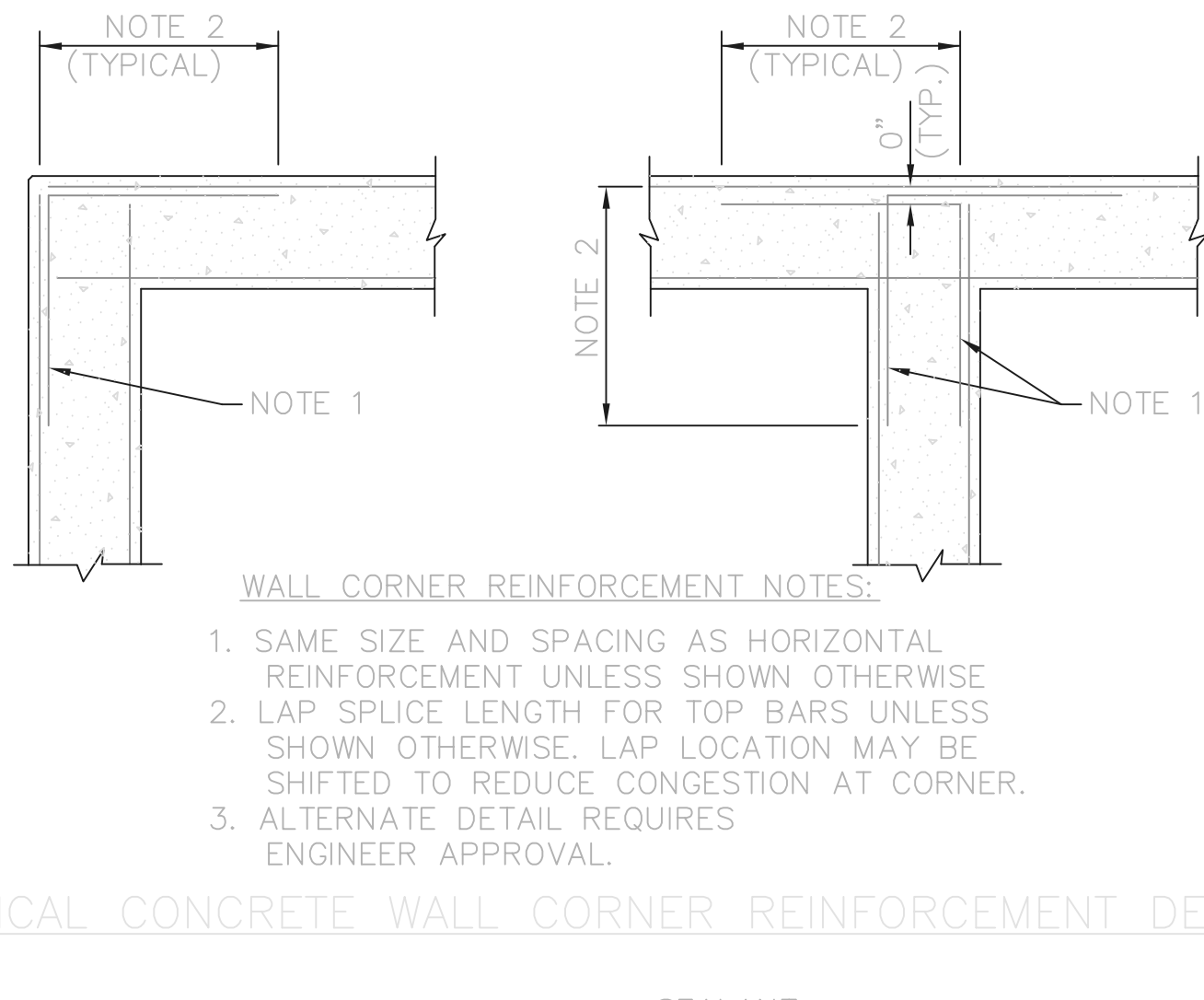
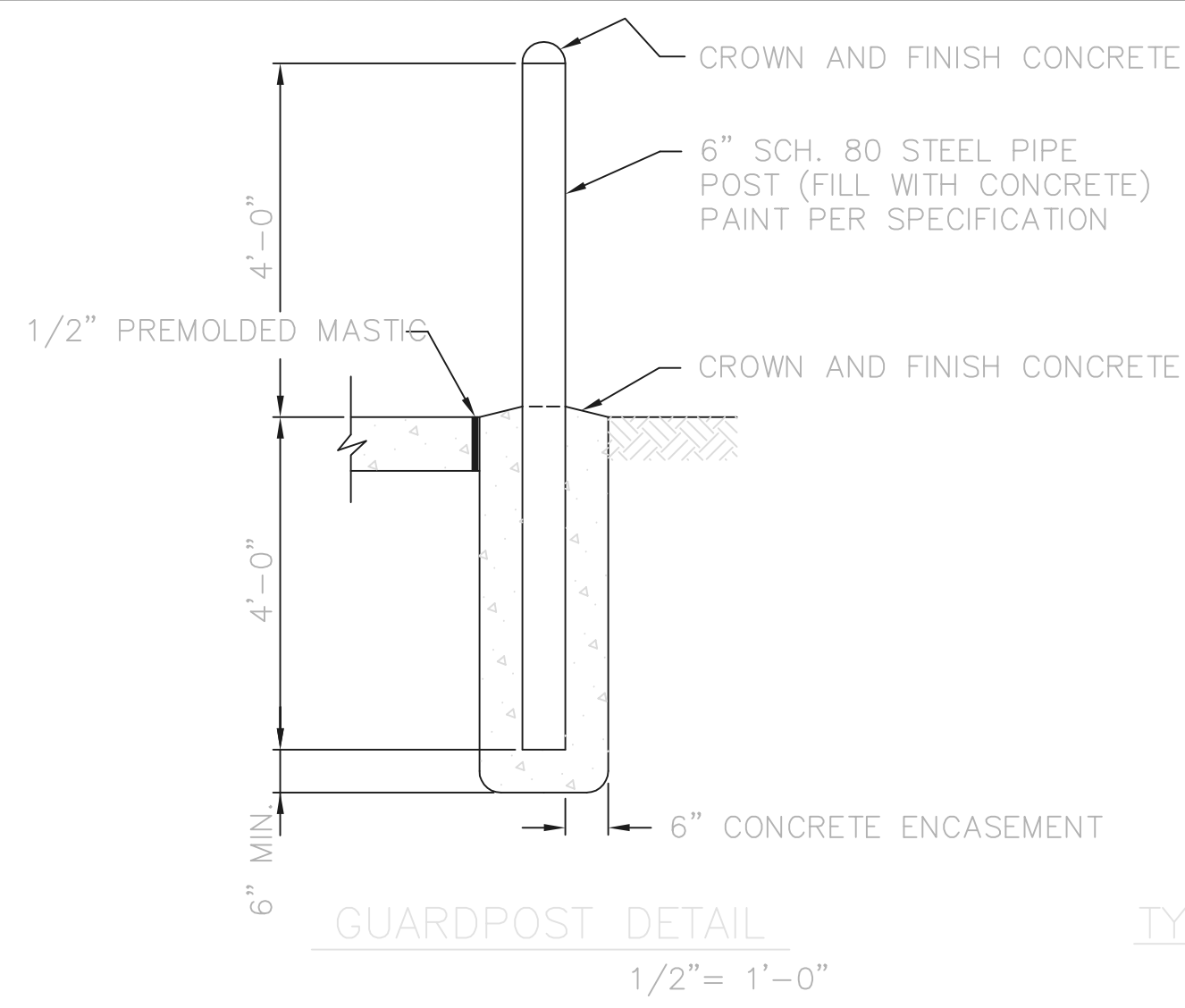
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	MVD
DRAWN BY:	PMc
CHECKED BY:	MVD
APPROVED BY:	SLW
DATE:	1999

CENTRAL MAINTENANCE FACILITY
FOUNDATION
SCHEDULE & DETAILS

SCALE:	
AS NOTED	
SHEET NO.	OF
78	100



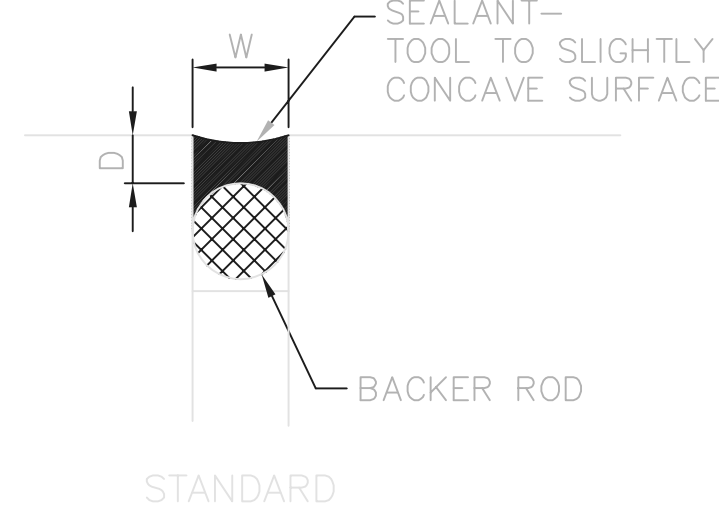
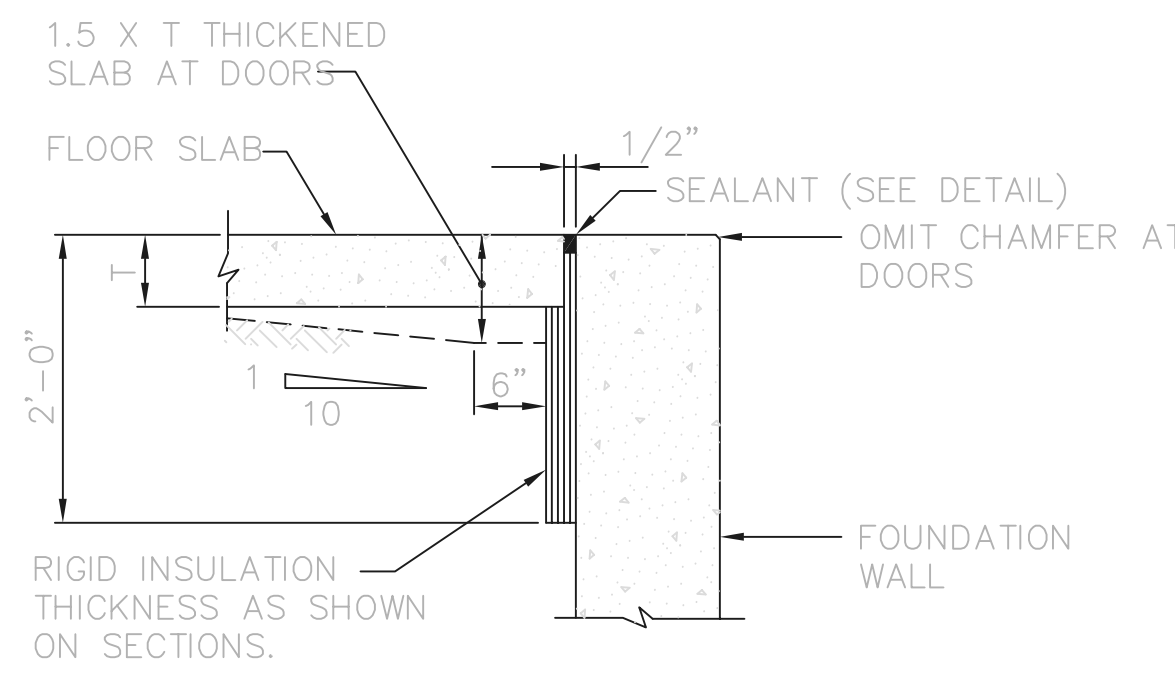
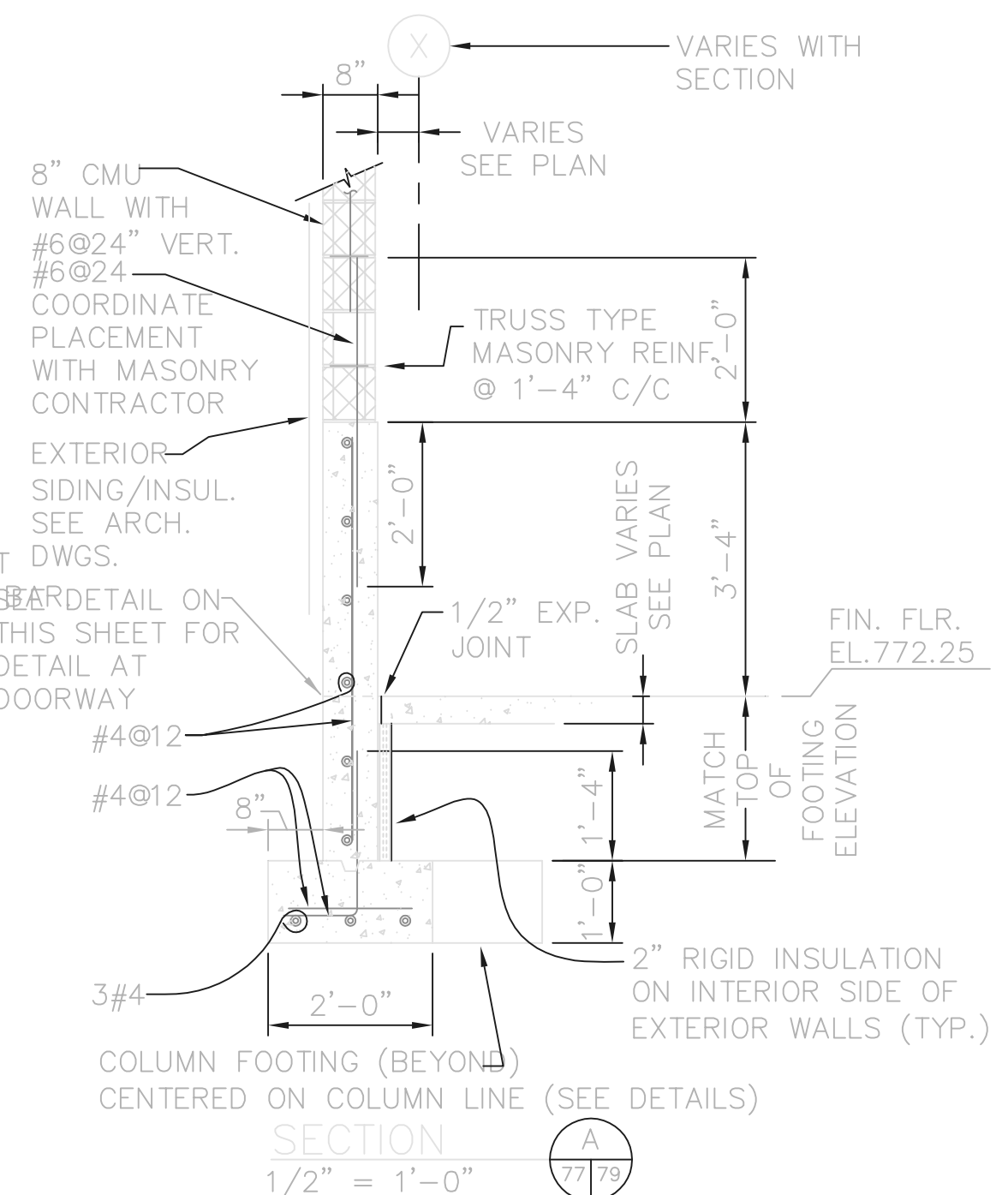
TYPICAL CONCRETE COVER

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3"
SURFACE EXPOSED TO EARTH OR WEATHER	2"
SURFACE EXPOSED TO OR OVER WATER, SEWAGE, OR OTHER LIQUIDS	2"
SLABS, WALLS, JOISTS	2"
BEAMS, COLUMNS	2-1/2"
PRIMARY REINFORCEMENT: STIRRUPS AND TIES:	2"
OTHER SURFACES	3/4"
SLABS, WALLS, JOISTS	3/4"
BEAMS, COLUMNS	2"
PRIMARY REINFORCEMENT: STIRRUPS AND TIES:	1-1/2"

LAP SPLICE LENGTH (IN.) UNLESS SHOWN OTHERWISE

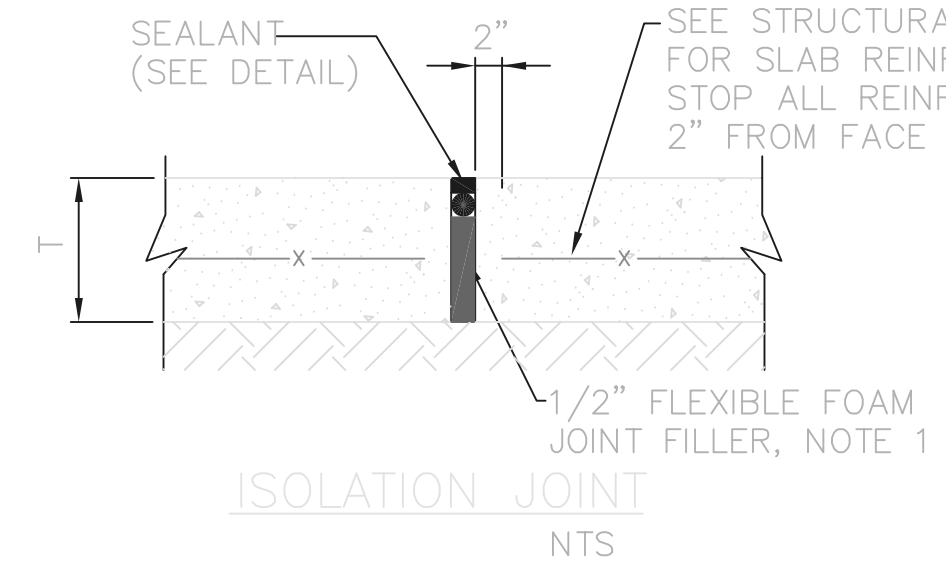
BAR SIZE	TOP REINFORCEMENT	BOTTOM AND VERTICAL REINFORCEMENT
#3	21	16
#4	21	16
#5	21	16
#6	24	18
#7	40	30
#8	48	37
#9	60	46
#10	76	58
#11	88	68

TOP REINFORCEMENT IS DEFINED AS HORIZONTAL REINFORCEMENT WITH MORE THAN 12" OF FRESH CONCRETE CAST BENEATH THE BAR.

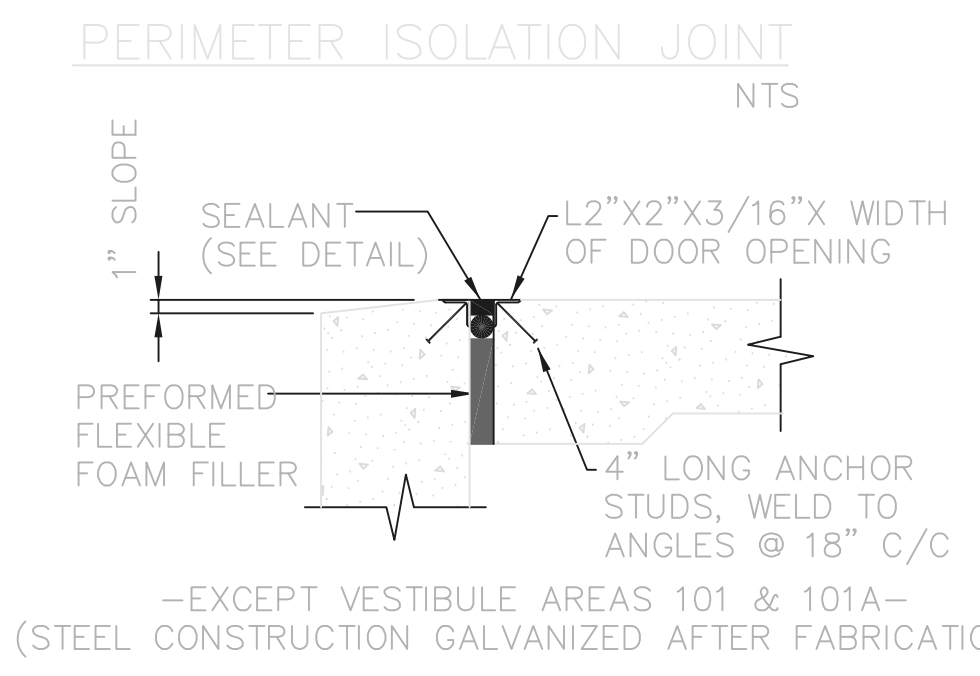
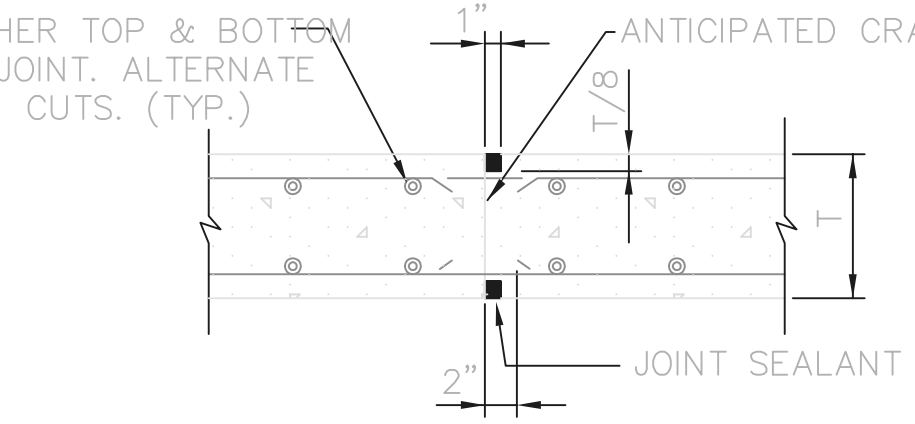


- TYPICAL SEALANT NOTES:**
- JOINT WIDTH (W) AS SHOWN ON PLANS
 - BLUNT SHARP EDGES OF CONCRETE JOINTS WITH GRINDER BEFORE SEALING.

W ≤ 1/2" D = 1/4"
W = 3/4" D = 3/8"
W ≥ 1" D = 1/2"



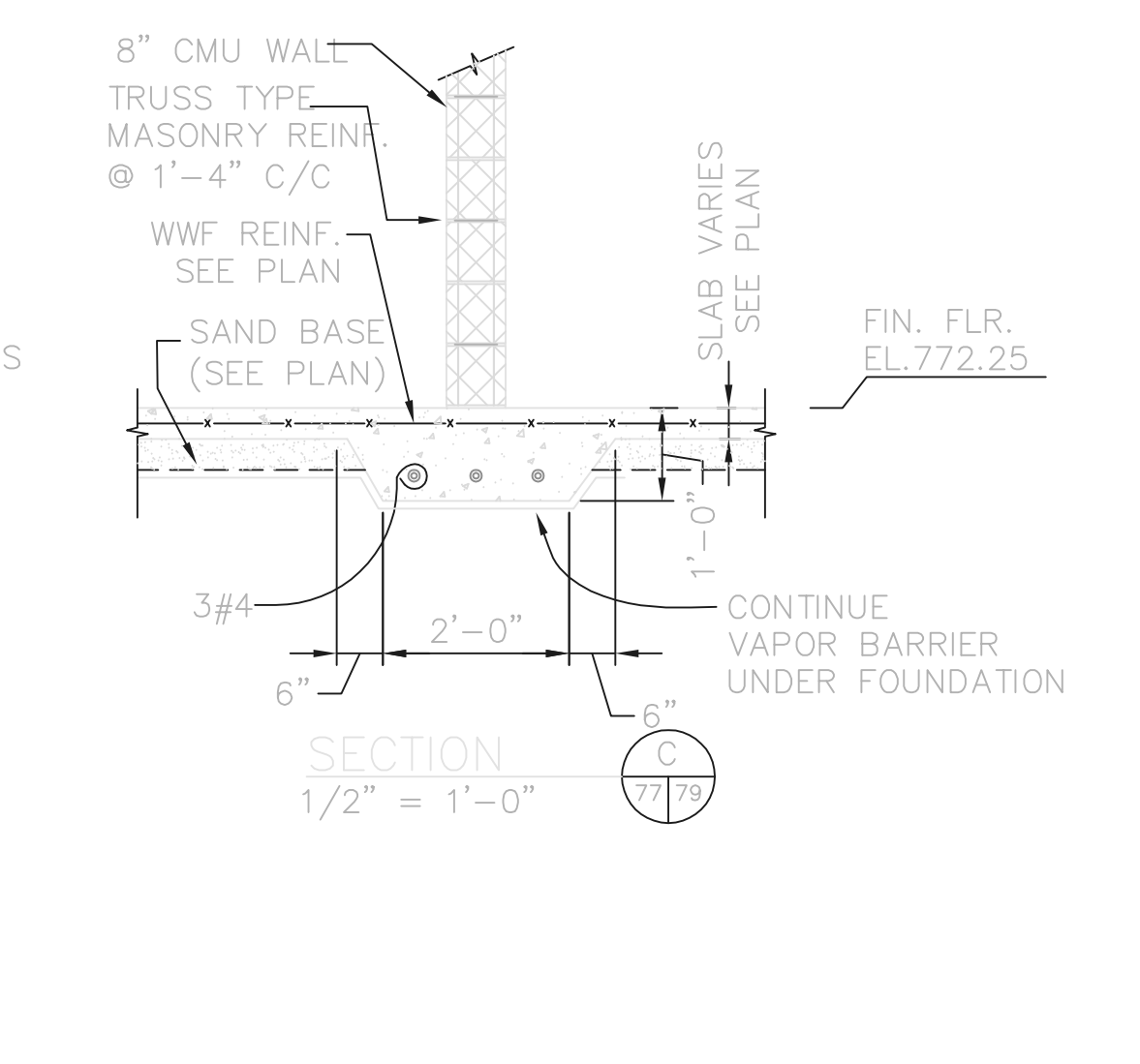
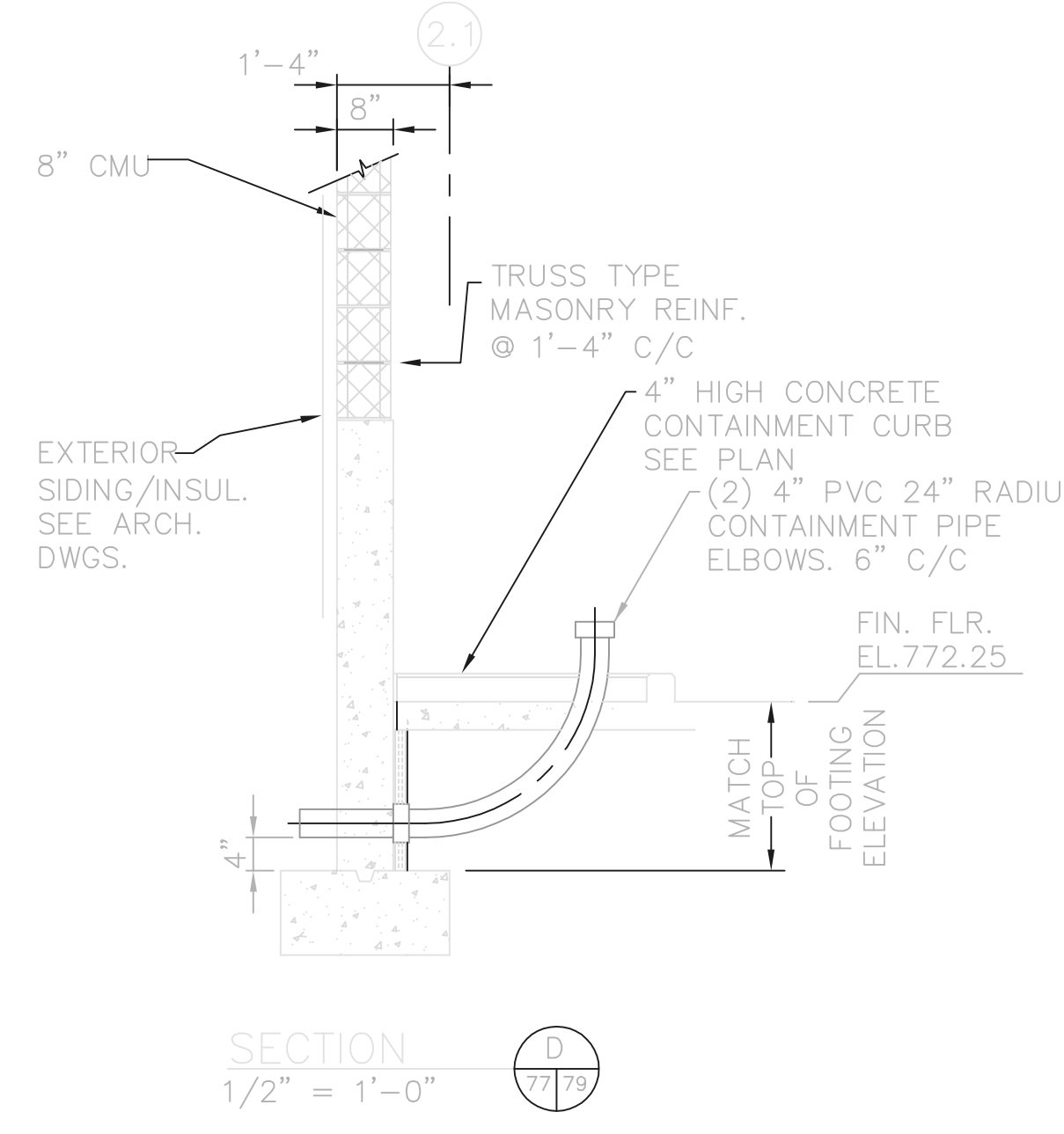
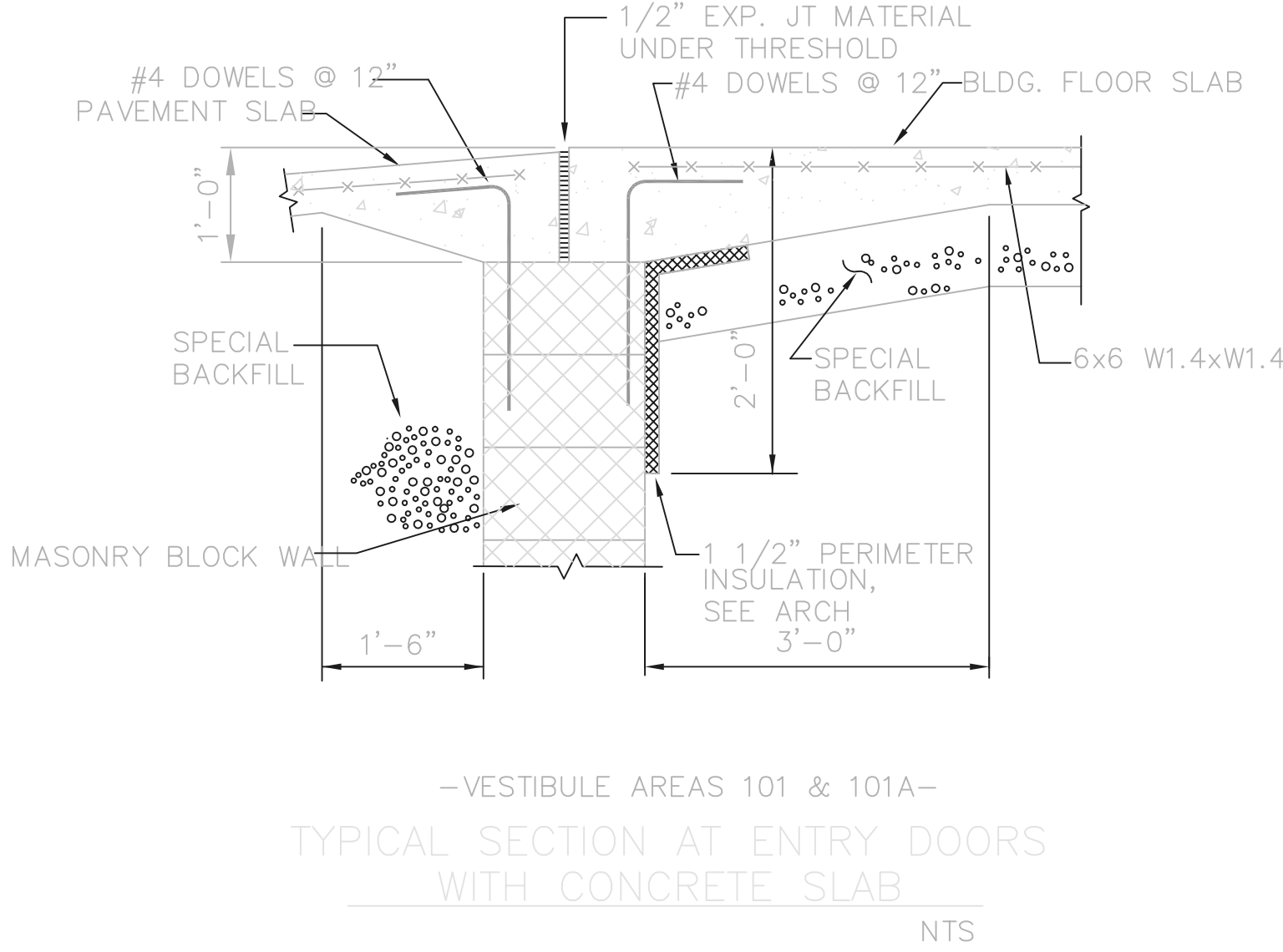
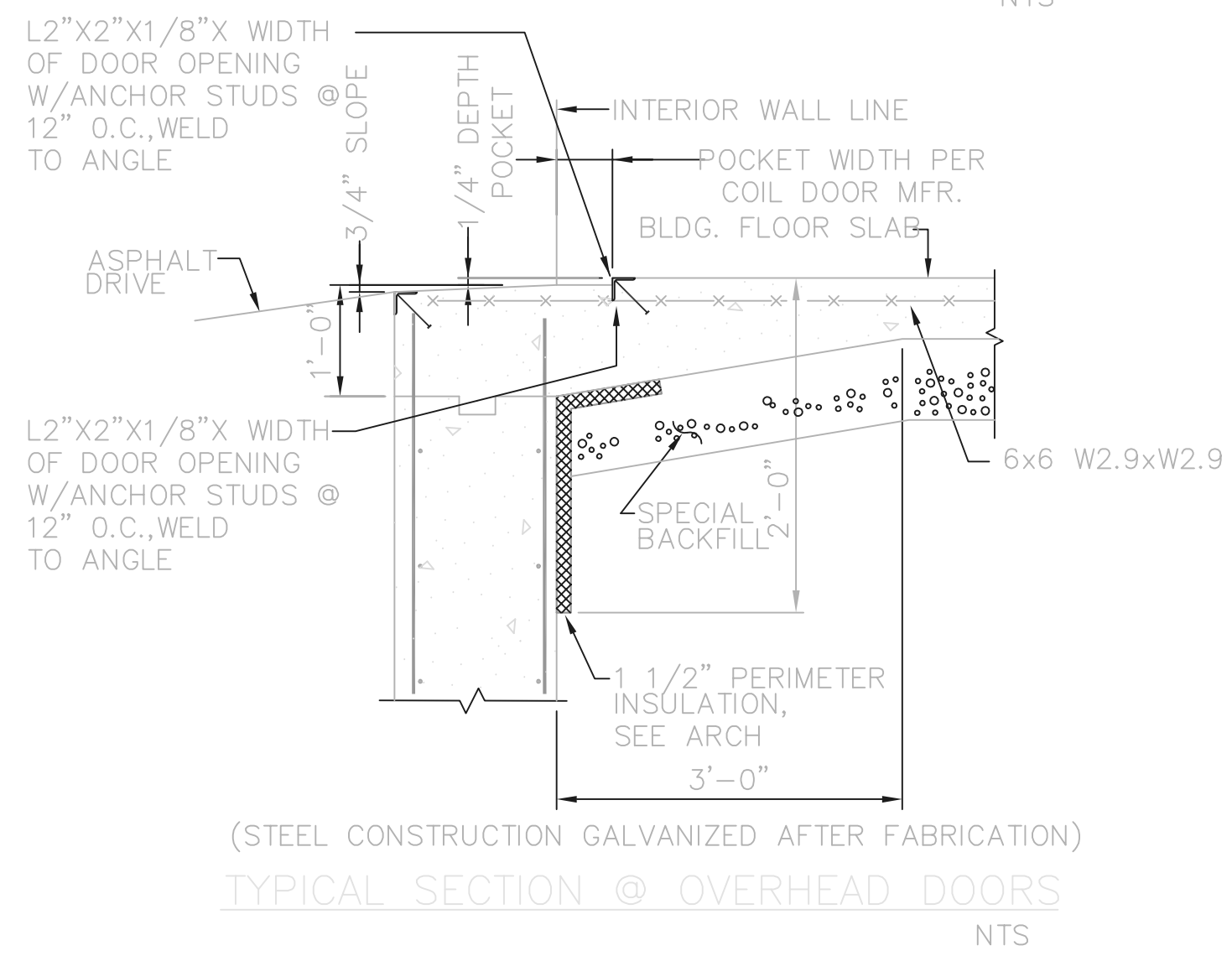
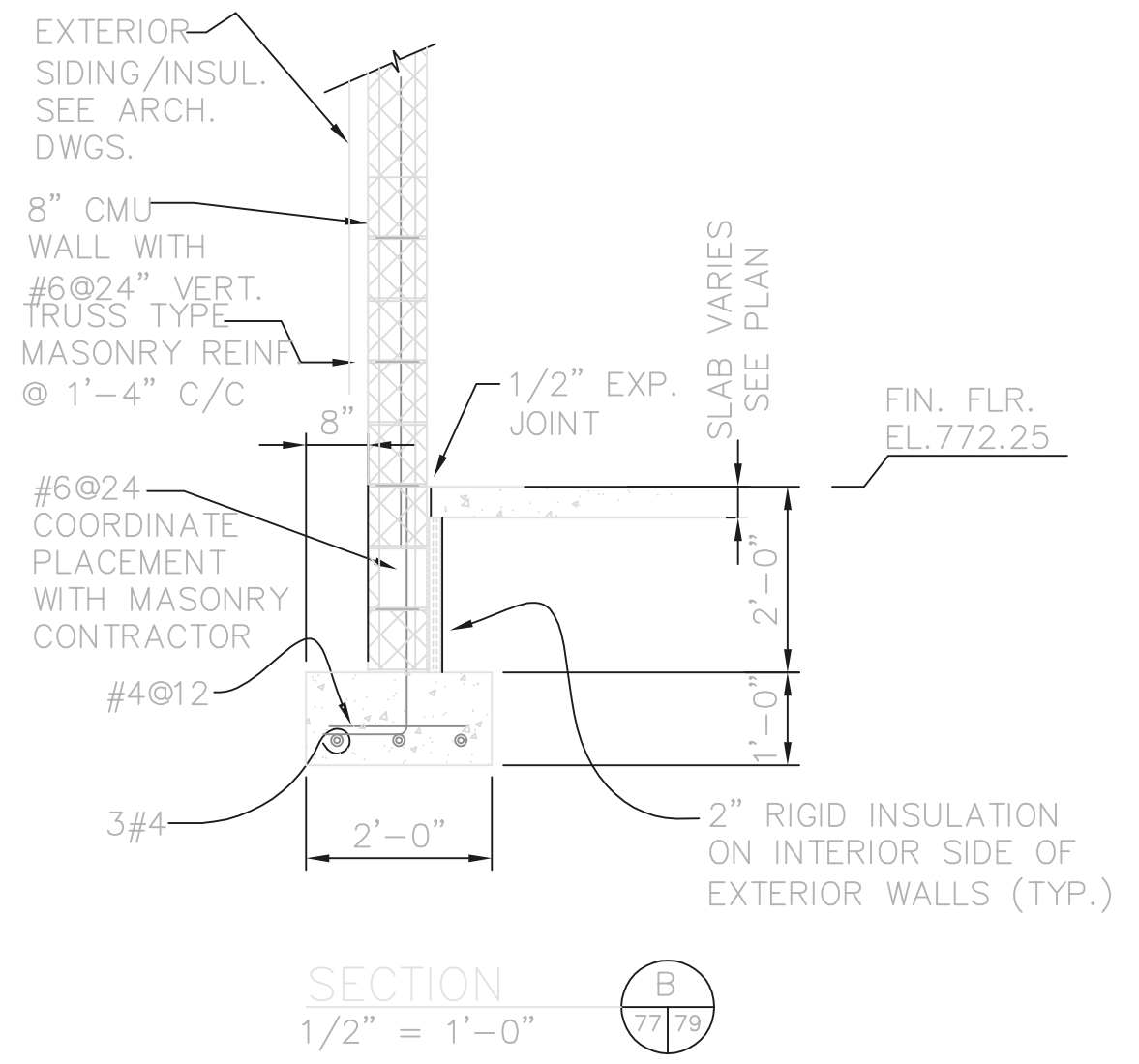
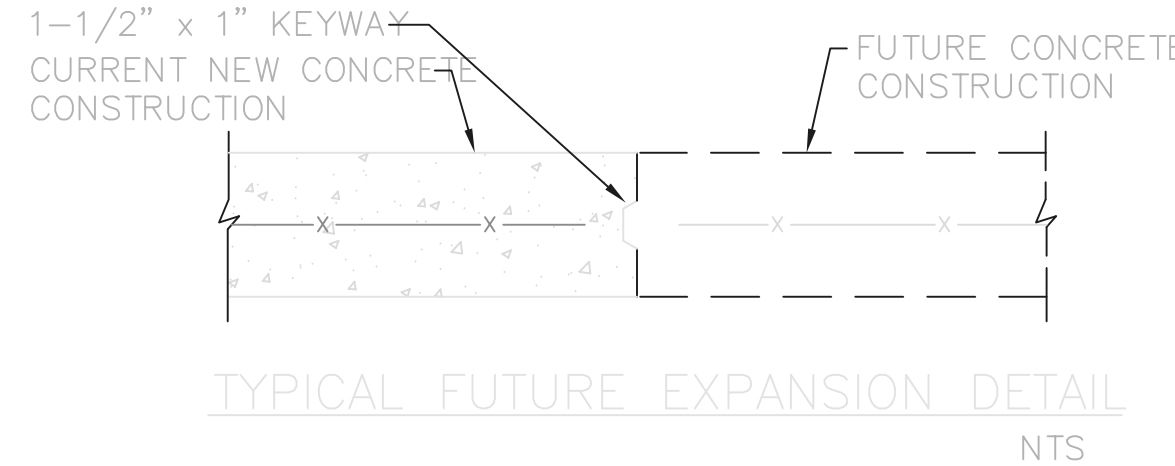
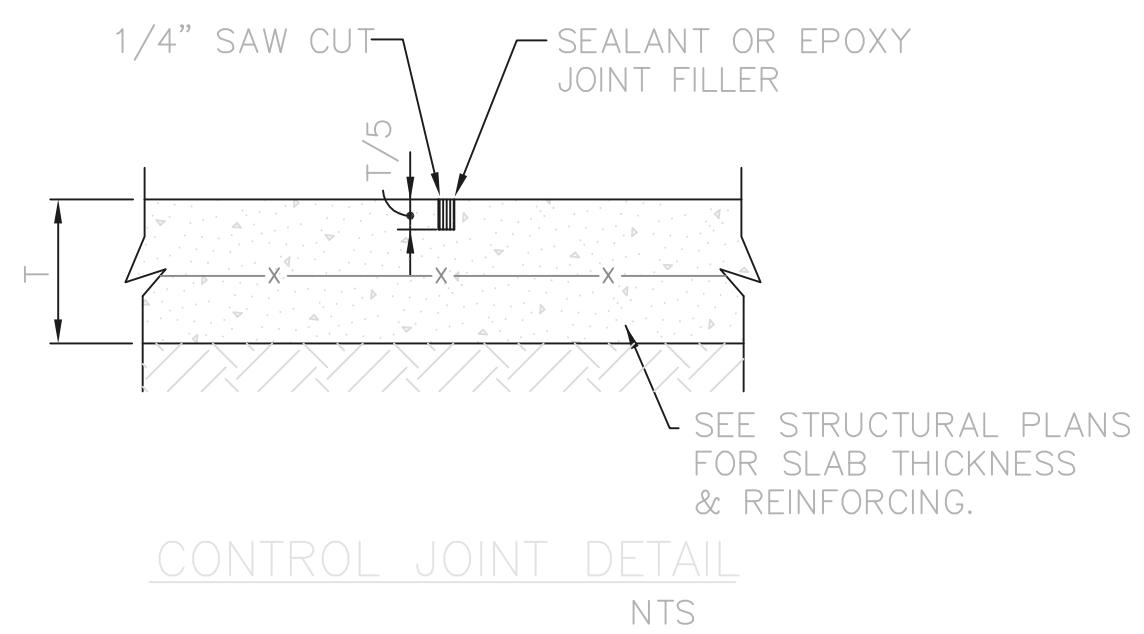
CUT EVERY OTHER TOP & BOTTOM BAR 2" FROM JOINT. ALTERNATE TOP & BOTTOM CUTS. (TYP.)



RECORD DRAWING

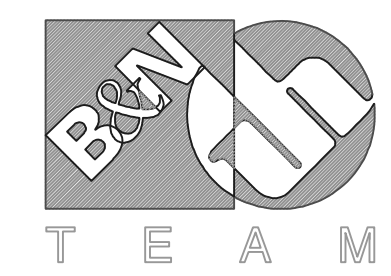
NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".

FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
MO. / DAY / YR.



THIS LINE SCALES 1" WHEN PLOTTED TO NAMED SCALE
TOL-4714635B-004
08/07/02 06-V02
P:\PR24025\PM\STARECDWG\79.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

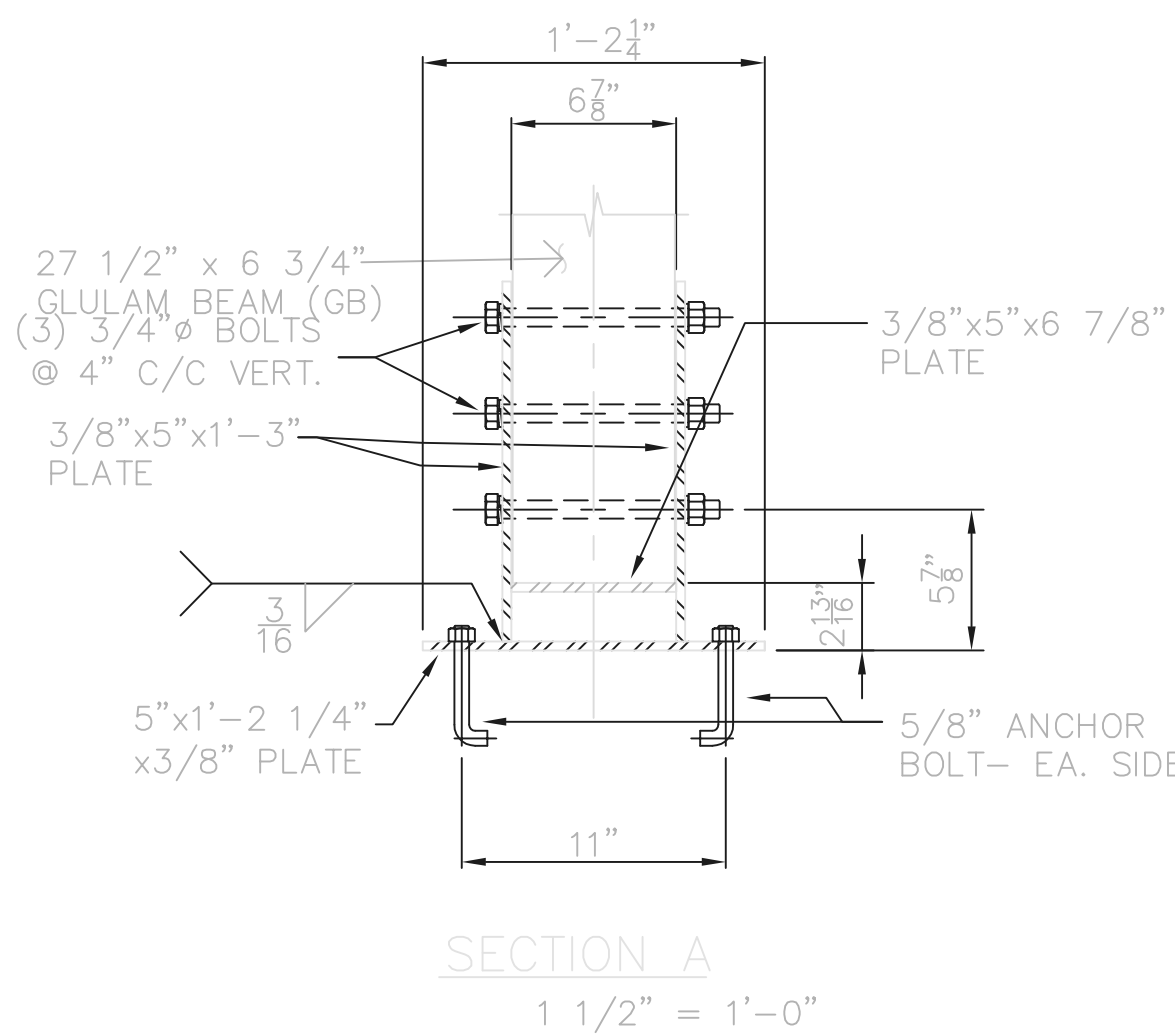
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

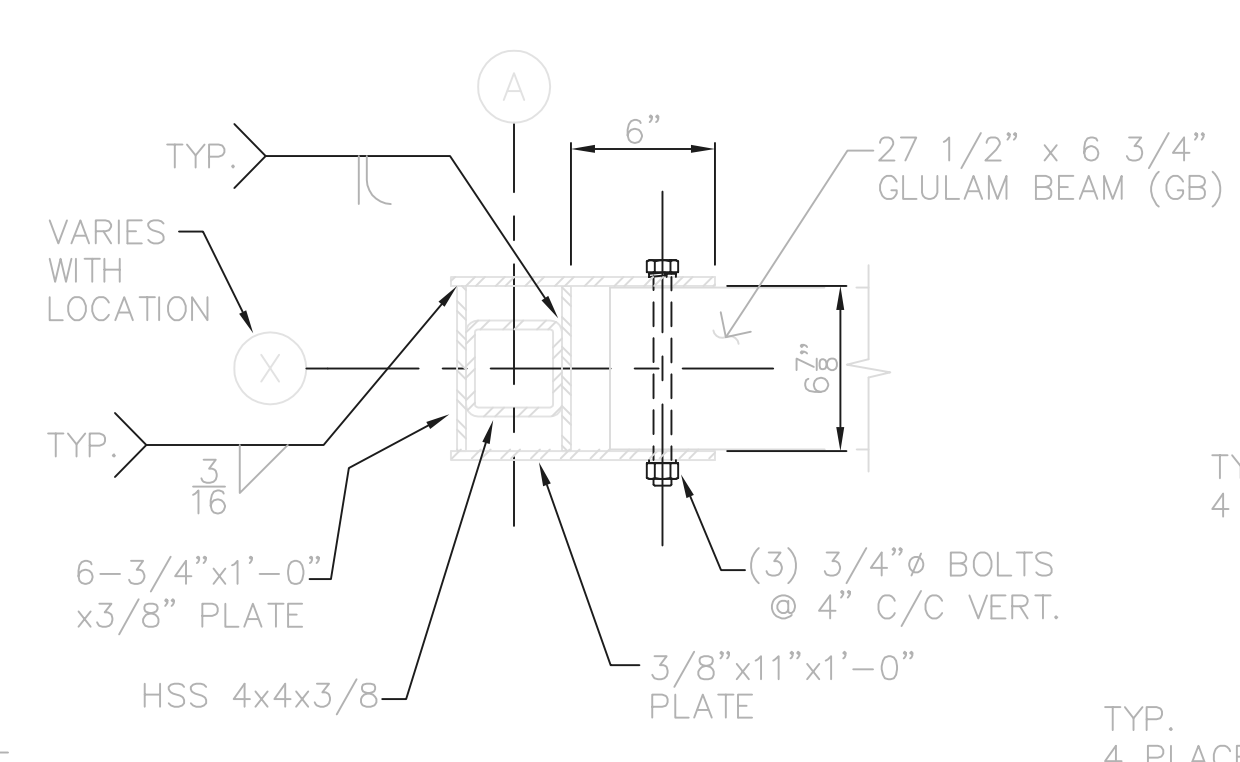
JOB NO.	20571
DESIGNED BY:	MVD
DRAWN BY:	PMc
CHECKED BY:	MVD
APPROVED BY:	SLW
DATE:	1999

CENTRAL MAINTENANCE FACILITY
MISCELLANEOUS CONCRETE
SECTIONS & DETAILS

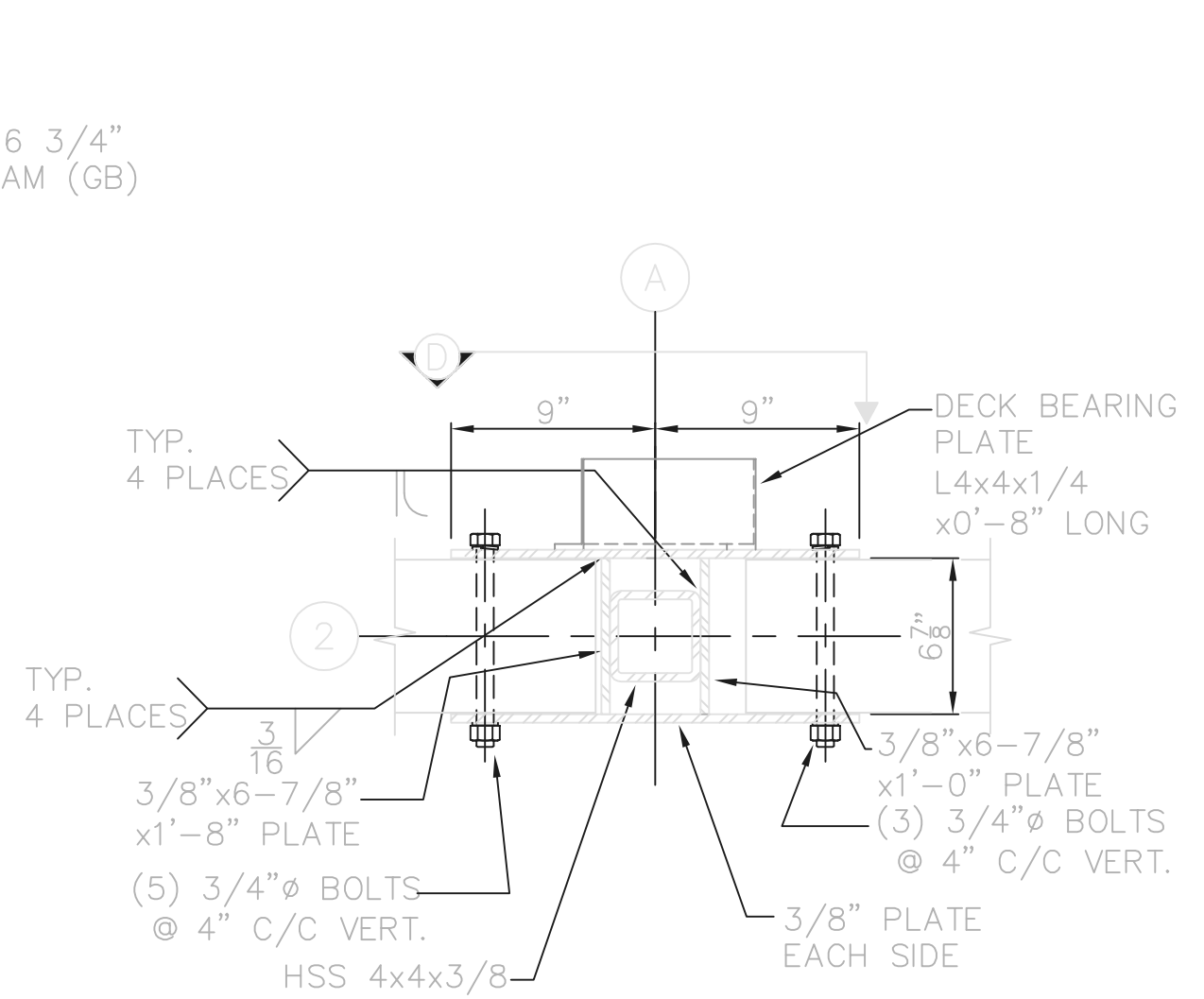
SCALE:	
AS NOTED	
SHEET NO.	OF
79	100



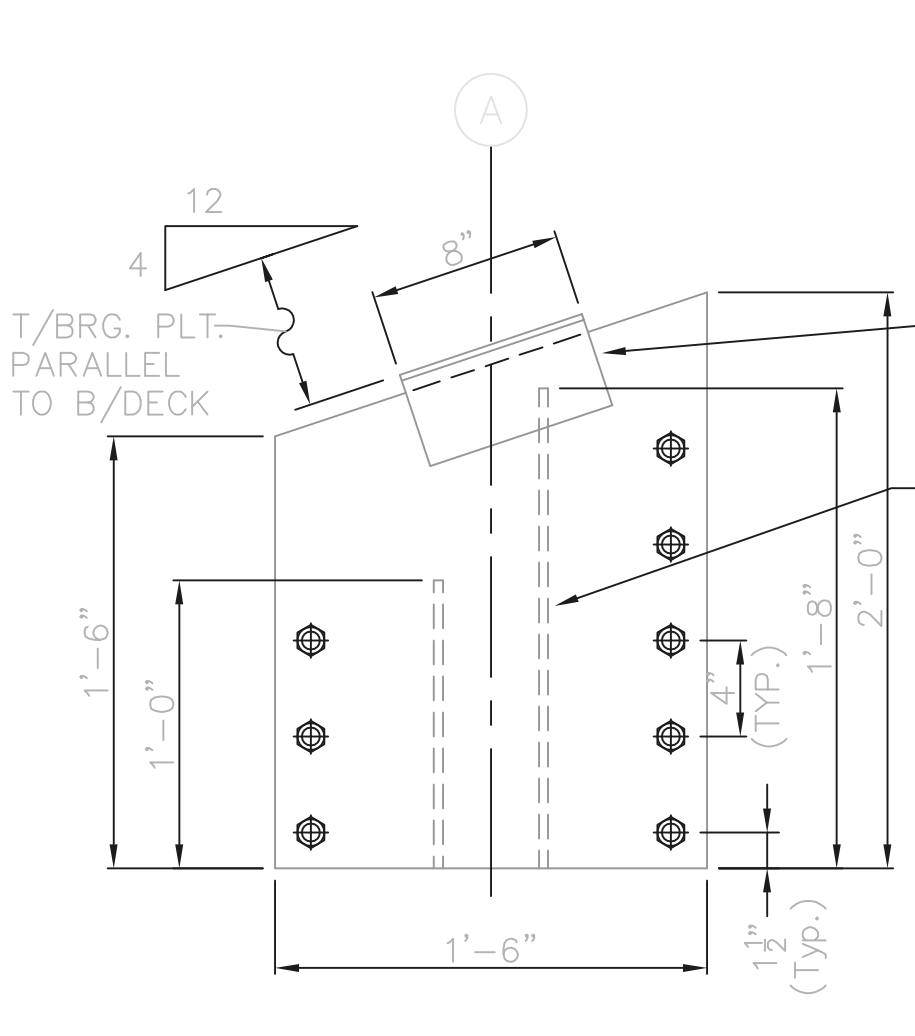
SECTION A
1 1/2" = 1'-0"



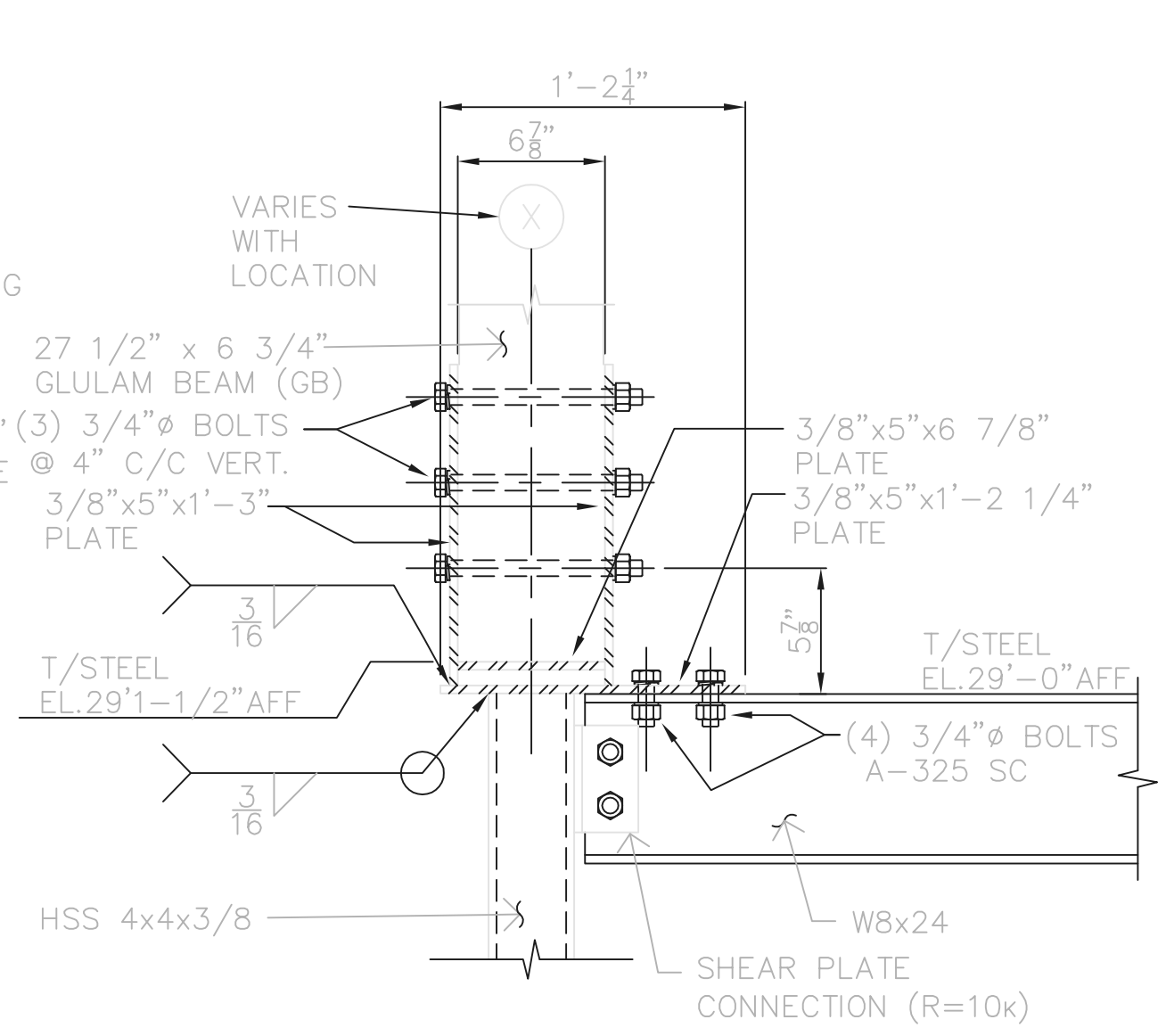
SECTION B
1 1/2" = 1'-0"



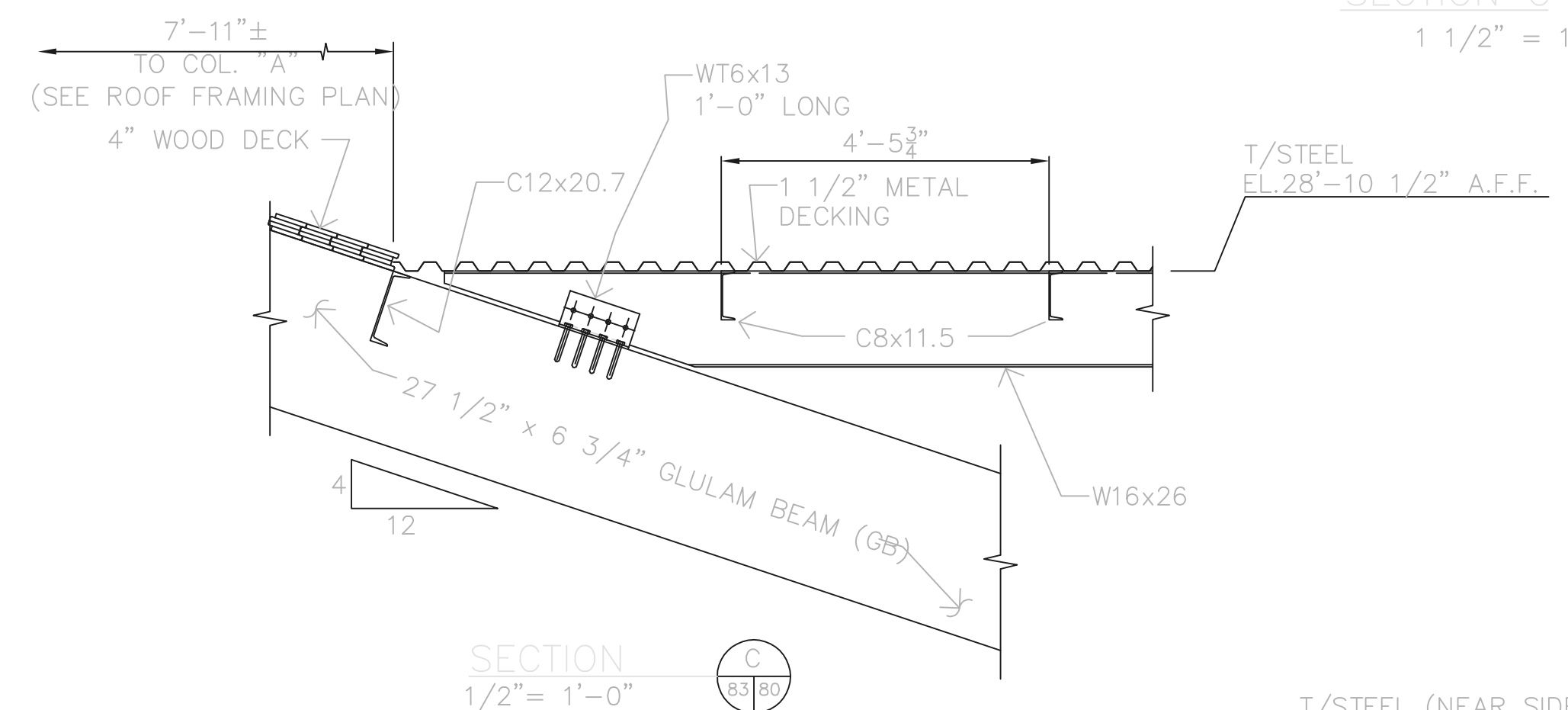
(COLUMN A-8 IS OPP. HAND)
SECTION C
1 1/2" = 1'-0"



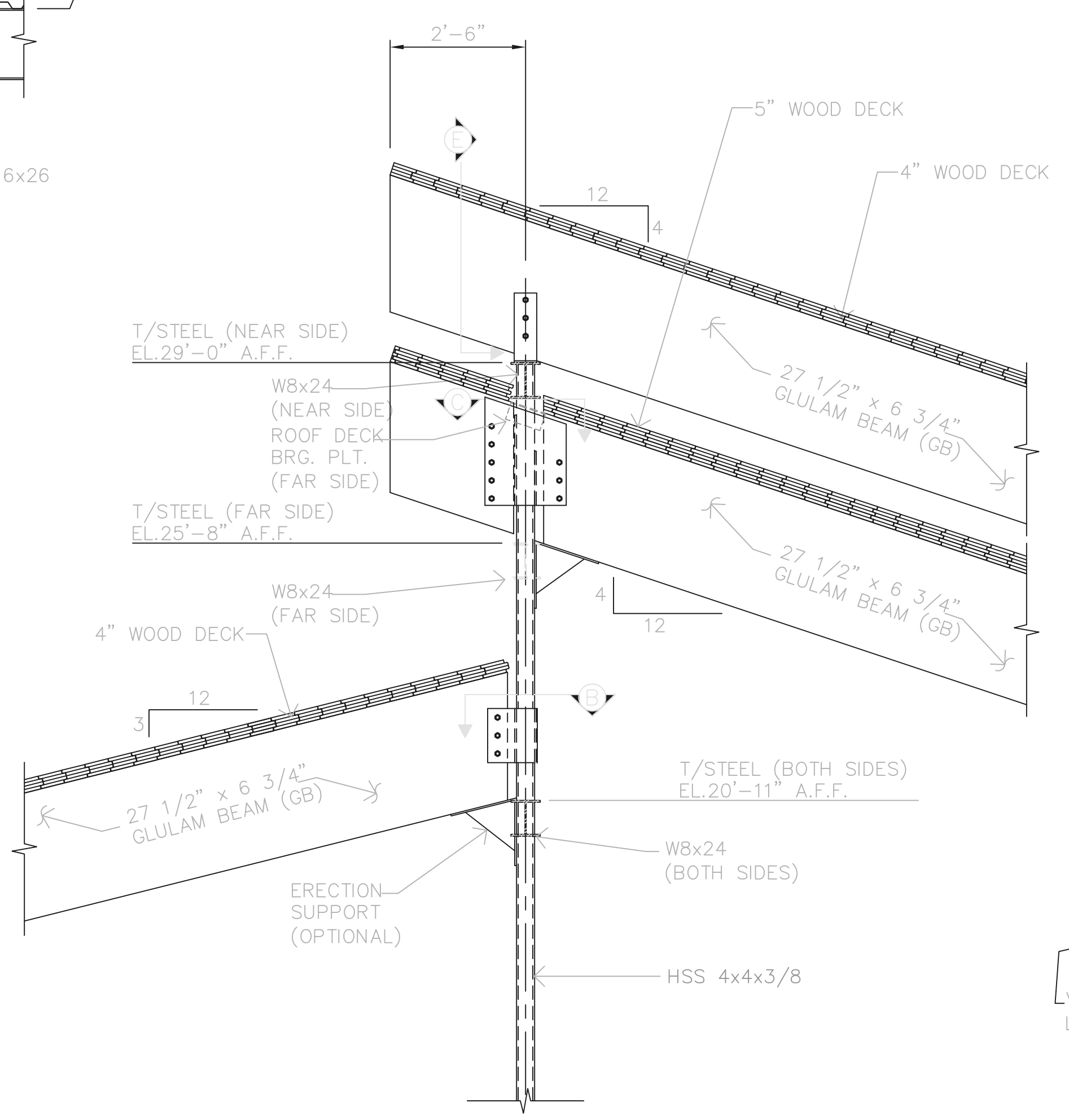
3/8\"/>



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

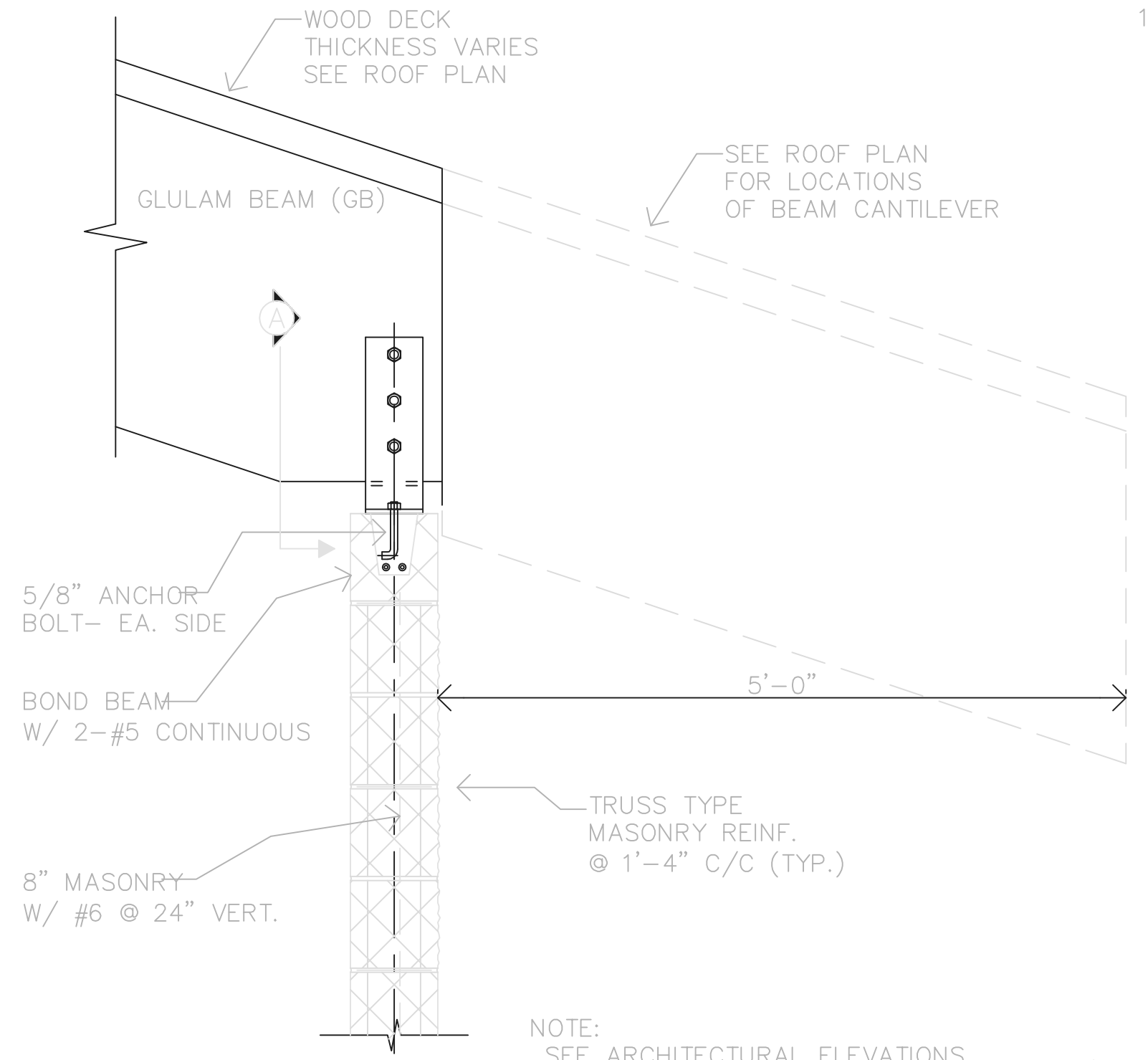


SECTION C
1 1/2" = 1'-0"



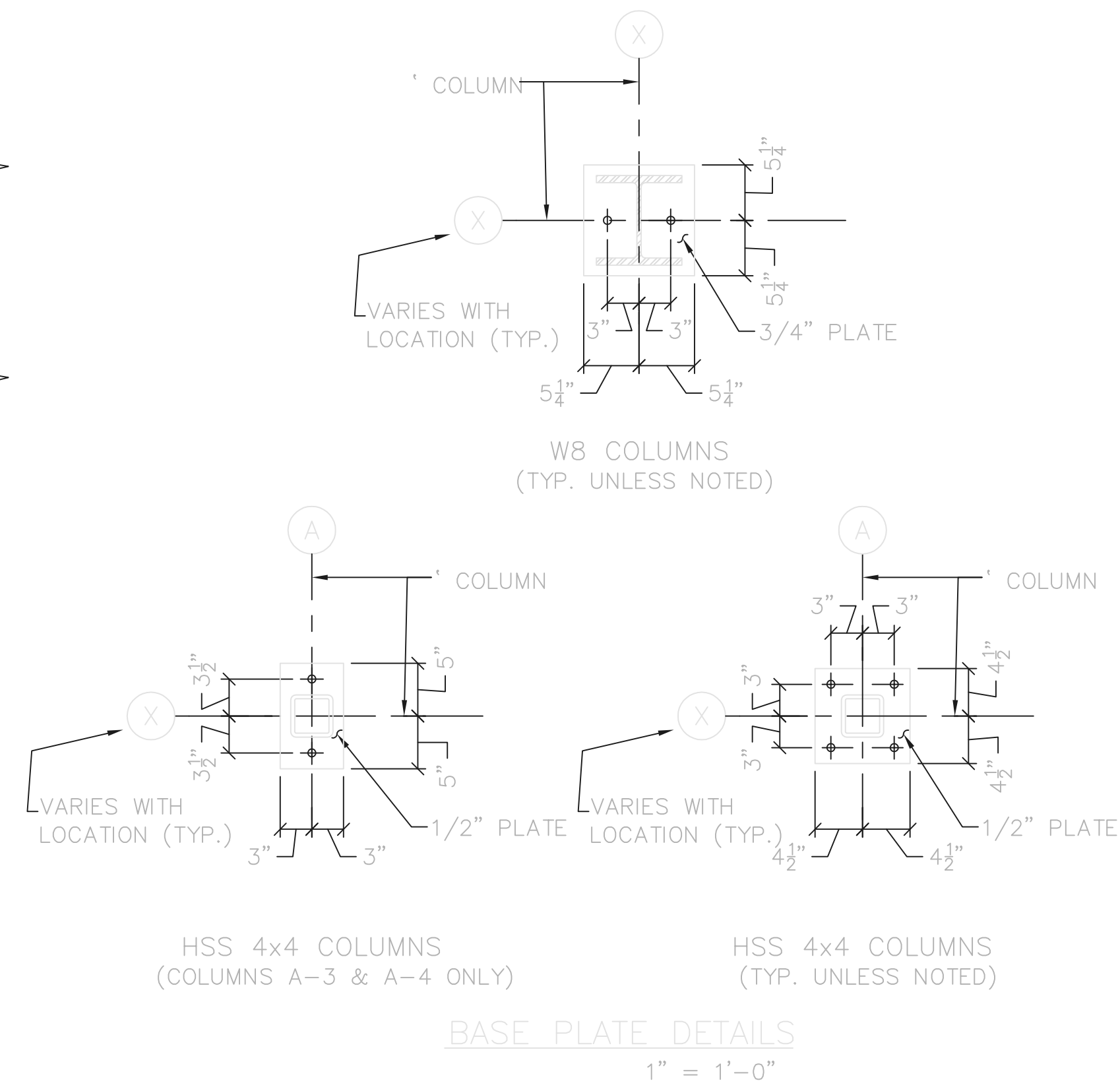
SECTION B
1 1/2" = 1'-0"

LINTEL SCHEDULE	
OPENING SIZE	LINTEL SIZE
LESS THAN 6'-0"	2L 3-1/2 x 3-1/2 x 1/4 SLBB
6'-0" TO 8'-8"	2L 4 x 3-1/2 x 1/4 LLBB
GREATER THAN 8'-8"	W8x24 + 1/4 x 7-1/2 PLT. ON BOT. FLO.



SECTION A
1" = 1'-0"

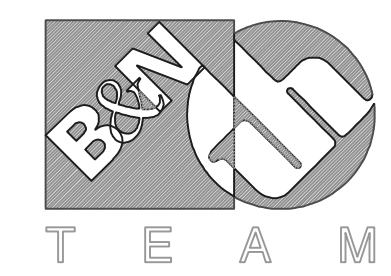
RECORD DRAWING
 NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
 FIRM Jones & Henry Engineers, Ltd. DATE 08/07/02 MO. / DAY / YR.



BASE PLATE DETAILS
1" = 1'-0"

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE
 08/07/02 06-V02
 P:\PR24025\PMF\STARECDWG\BO.DWG

NO.	REVISIONS	DATE	BY	CHK.



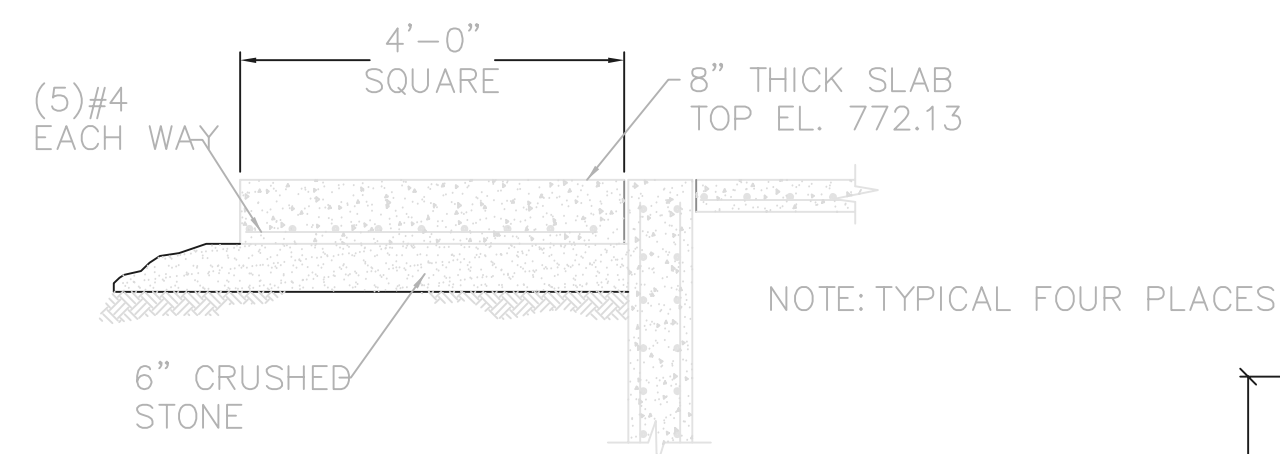
Burgess & Niple, Limited
 Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	MVD
DRAWN BY:	PMc
CHECKED BY:	MVD
APPROVED BY:	SLW
DATE:	1999

CENTRAL MAINTENANCE FACILITY
 STRUCTURAL
 SECTIONS & DETAILS

SCALE:	
AS NOTED	
SHEET NO.	OF
80	100

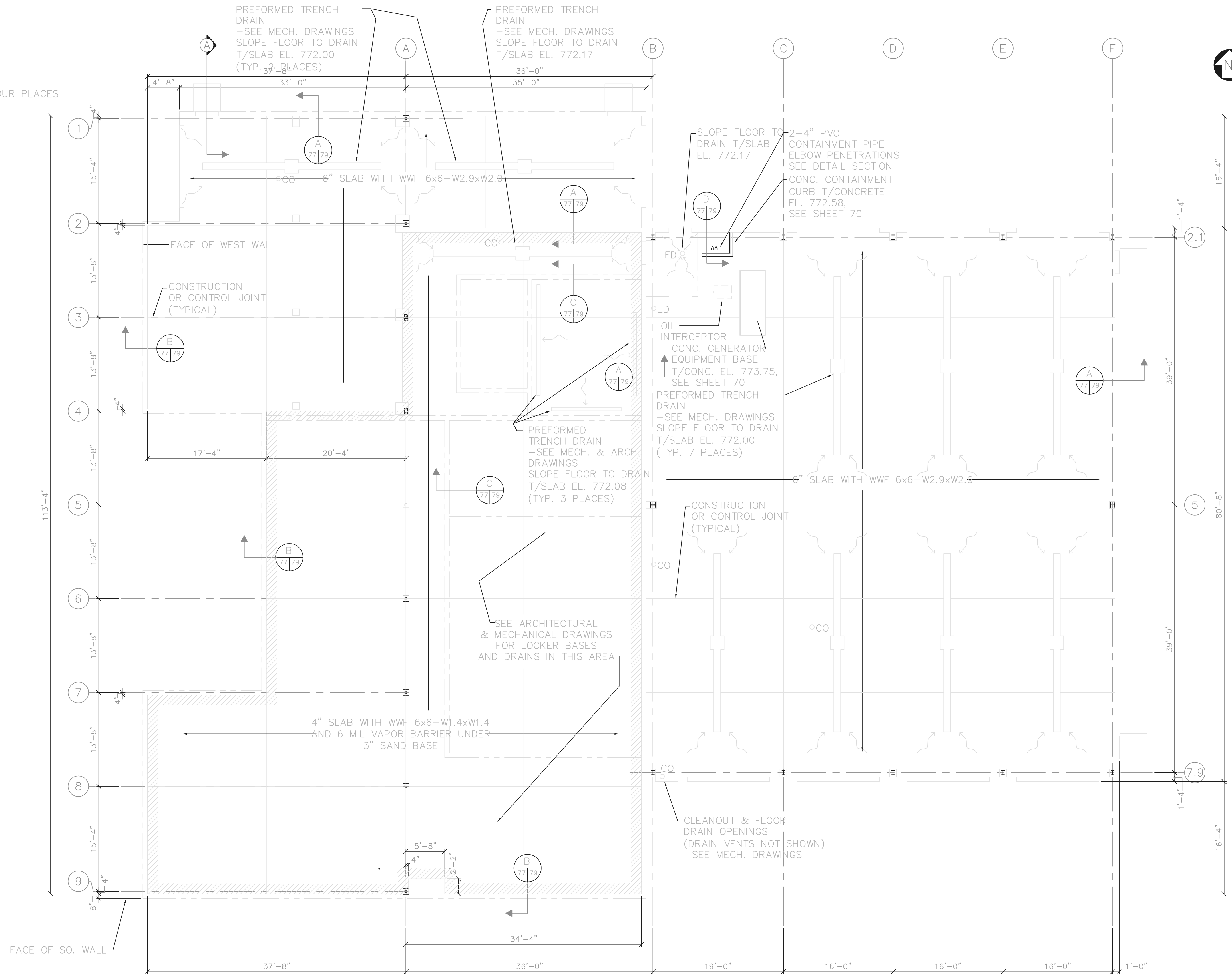


SECTION A
1/2" = 1'-0"

RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM **Jones & Henry Engineers, Ltd.** DATE 08/07/02
MO. / DAY / YR.

© BNWW0201

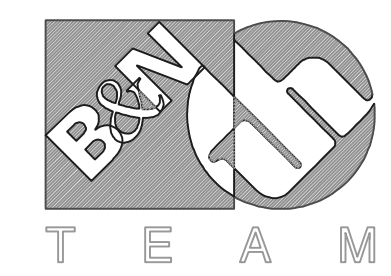


SLAB PLAN

1/8" = 1'-0"
FINISHED FLOOR ELEVATION 772.25

THIS LINE SCALES 1" WHEN PLOTTED TO NAMED SCALE
T01-4714536
02/27/02 04-V02
P:\PR24025\PM\FSTARECDWG\82.DWG

NO.	REVISIONS	DATE	BY	CHK.



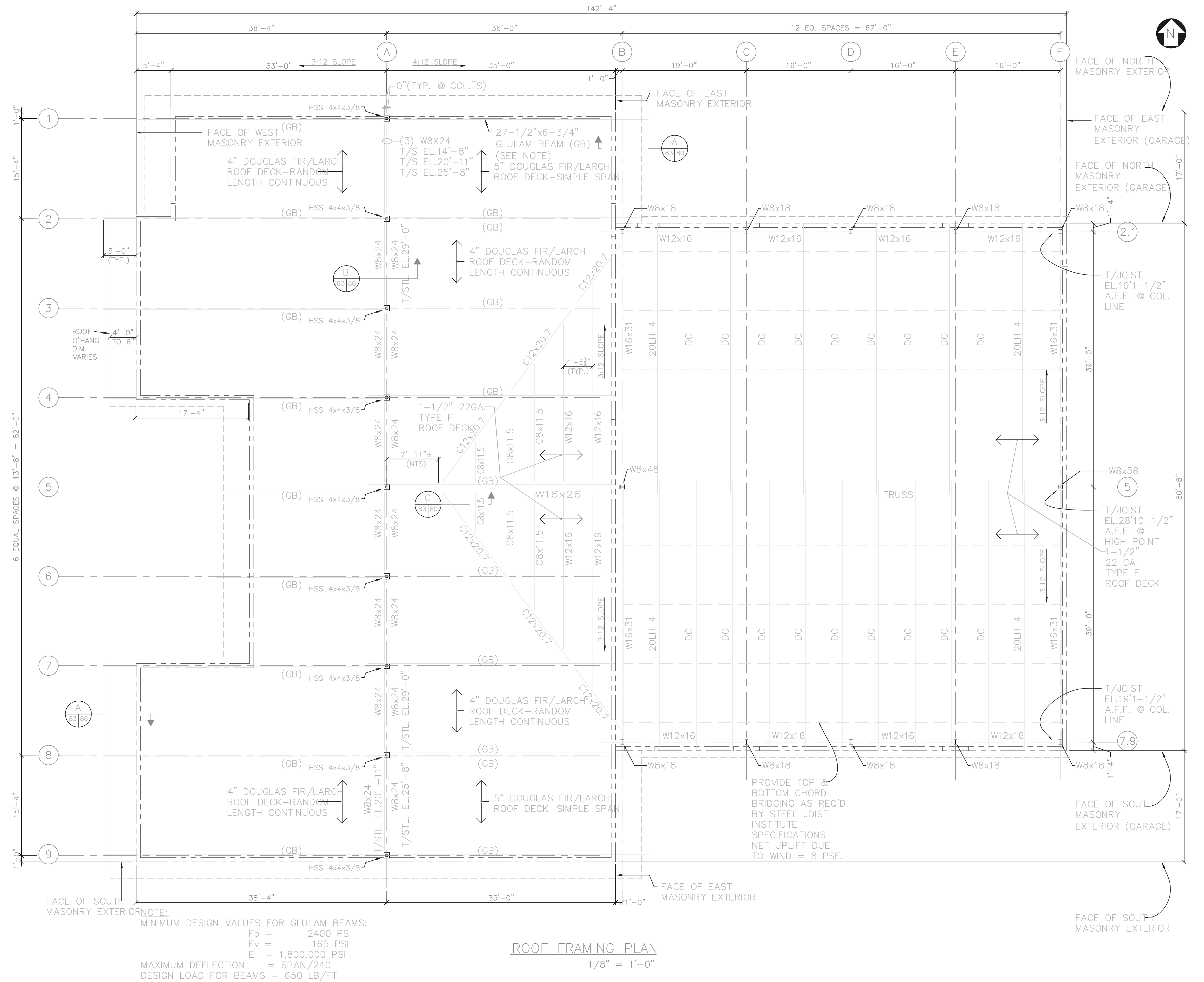
Burgess & Niple, Limited
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	MVD
DRAWN BY:	PMc
CHECKED BY:	MVD
APPROVED BY:	SLW
DATE:	1999

CENTRAL MAINTENANCE FACILITY
FLOOR SLAB PLAN

SCALE:	
1/8" = 1'-0"	
SHEET NO.	OF
82	100



RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".

FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
MO. / DAY / YR.

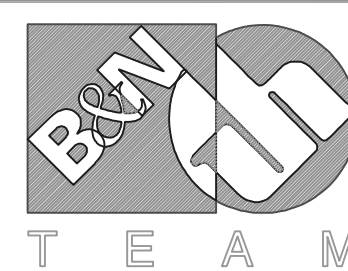
© BNW0201

NOTE:
MINIMUM DESIGN VALUES FOR GLULAM BEAMS:
F_b = 2400 PSI
F_v = 165 PSI
E = 1,800,000 PSI
MAXIMUM DEFLECTION = SPAN/240
DESIGN LOAD FOR BEAMS = 650 LB/FT

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

THIS LINE SCALES 1" WHEN PLOTTED TO NAMED SCALE
T01-4714537
02/27/02 04-V02
P:\PR24025\PM\STARECDWG\83.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CONTROL MAINTENANCE FACILITY

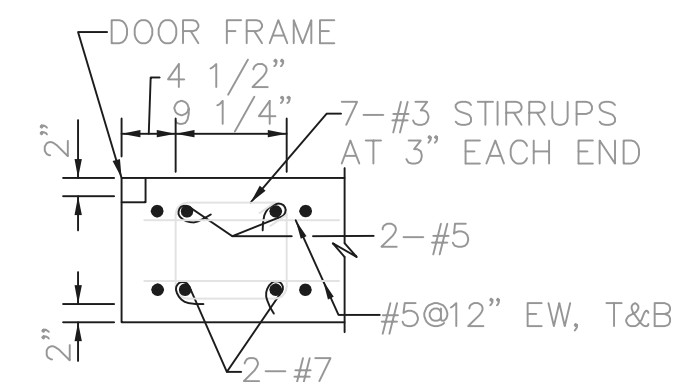
JOB NO.	20571
DESIGNED BY:	MVD
DRAWN BY:	PMc
CHECKED BY:	MVD
APPROVED BY:	SLW
DATE:	1999

CENTRAL MAINTENANCE FACILITY
ROOF FRAMING PLAN

SCALE:	
1/8" = 1'-0"	
SHEET NO.	OF
83	100

NOTES:

- ALL JOINTS WITHIN CHAMBERS SHALL BE FLANGED UNLESS SHOWN OTHERWISE.
- CONTRACTOR SHALL PROVIDE FLEXIBLE JOINTS 2' OUTSIDE OF THE CHAMBERS ON THE INFLUENT PIPE AND THE DUCTILE IRON EFFLUENT PIPE.
- PRIOR TO PLACEMENT OF COVER THE CHAMBERS MAY BE BUOYANT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OVERCOMING THIS CONDITION.



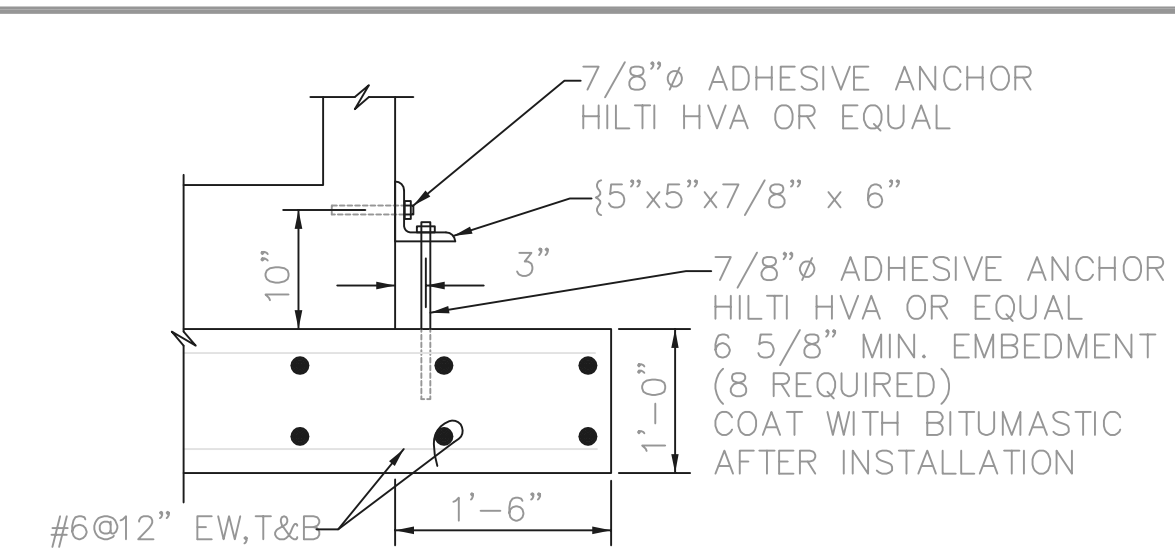
TYPICAL TOP SLAB BEAM REINFORCING

PUMPING STATION DATA	
ITEM	DATA
A	8'-0"
B	8'-0"
C	1'-0"
D	0'-8"
E	7" MIN.
F	7" MIN.
G	0'-11" MIN.
H	0'-9" MIN.
I	6'-0"x3'-0"
J	3'-0"x4'-0"
K	NOT USED
L	2'-0"
M	6"
N	1'-8"
O	3"
P	8"
Q	6"
R	771.00
S	772.00
T	765.00
U	761.00
V	766.00
W	764.00
X	763.00
Y	762.00

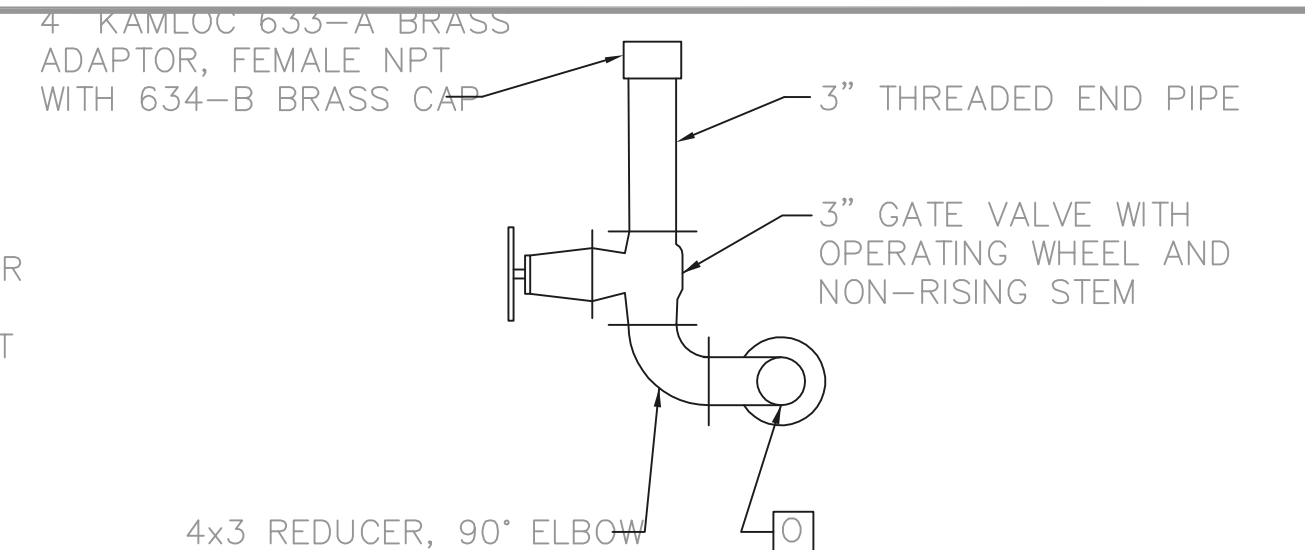
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
 FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
 MO. / DAY / YR.

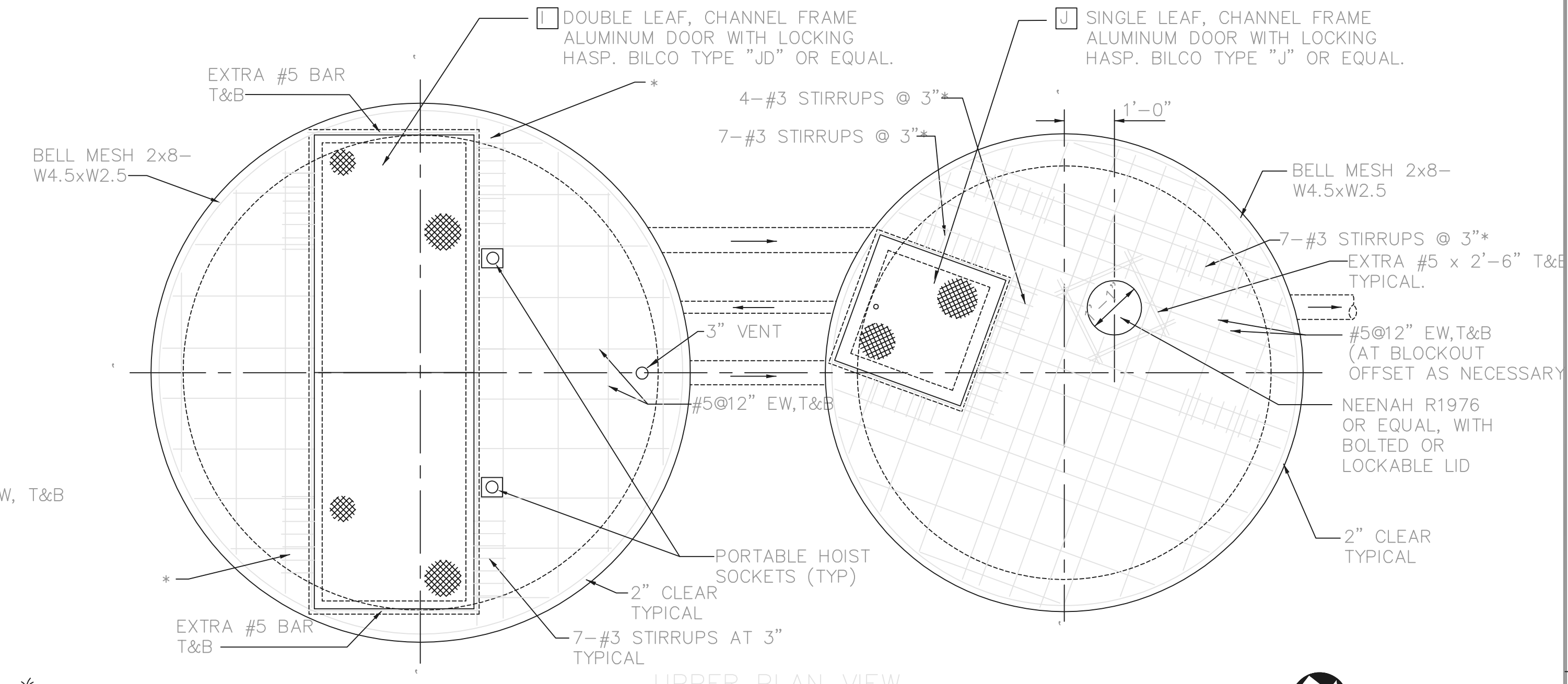
© BNWW0201



FOUNDATION ANCHOR DETAIL

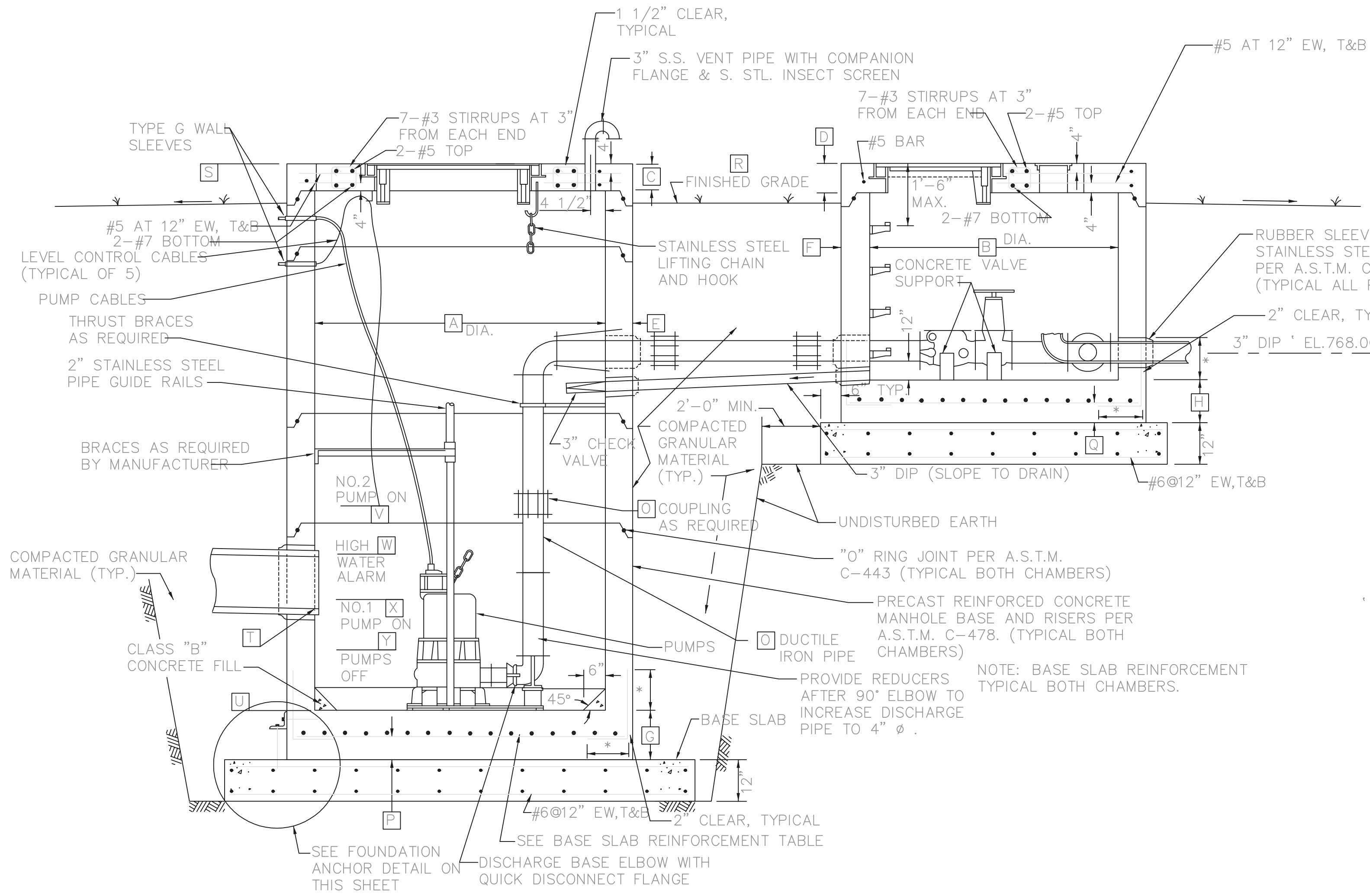


FORCE MAIN ACCESS DETAIL

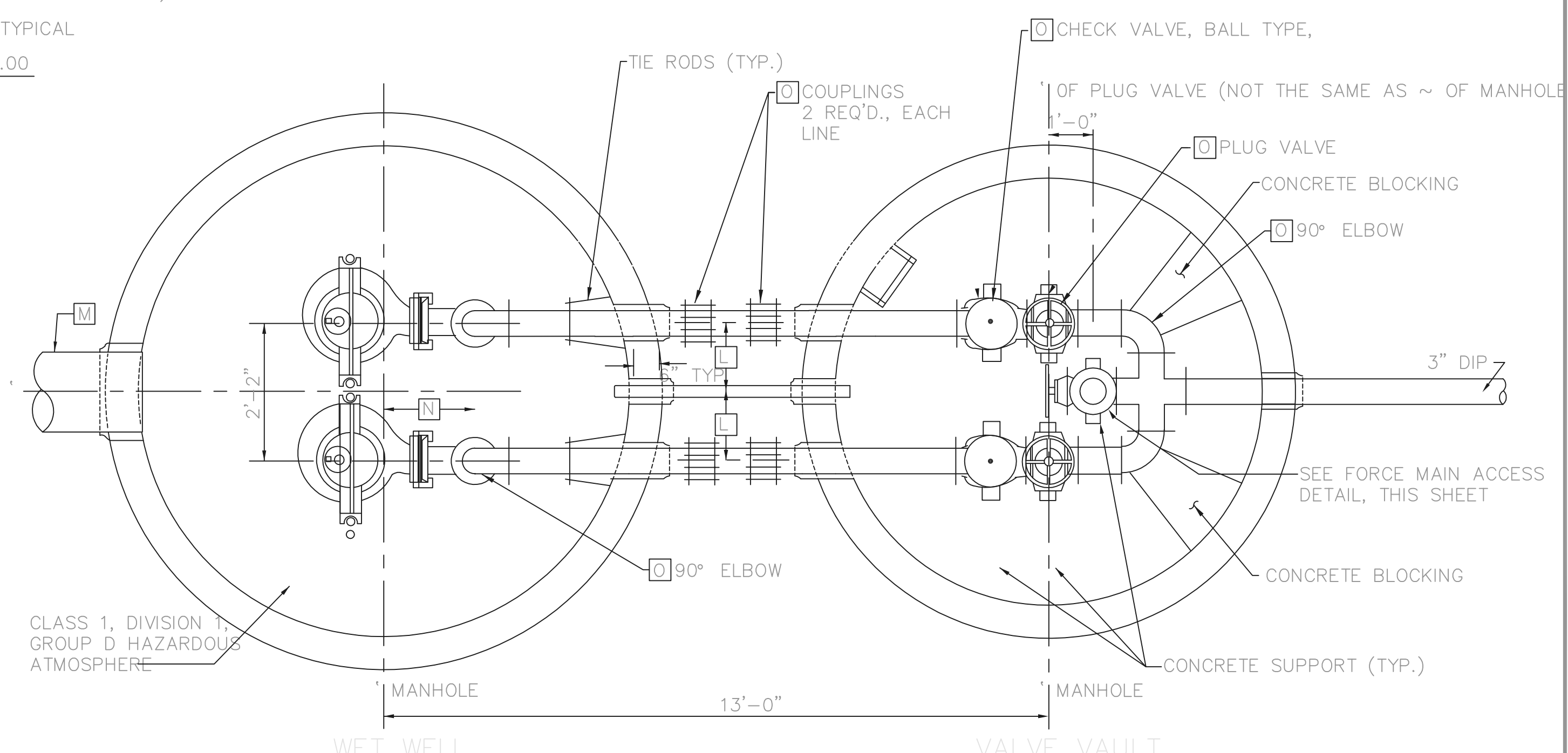


UPPER PLAN VIEW

* SEE TYPICAL TOP SLAB BEAM REINFORCING



ELEVATION VIEW



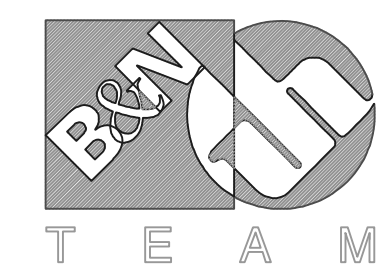
WET WELL

LOWER PLAN VIEW

VALVE VAULT

TOL-4714PE29-004
 09/10/02 10-V02
 P:\PR24025\PMFSTARECDWG\84.DWG

NO.	REVISIONS	DATE	BY	CHK.



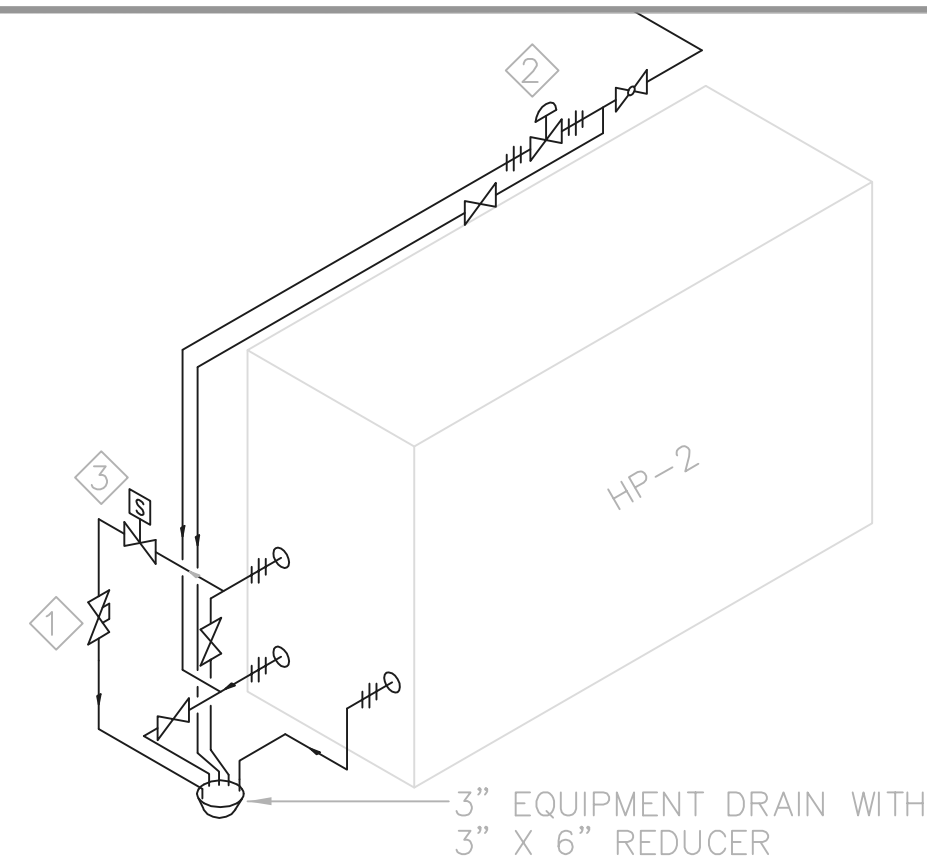
Burgess & Niple, Limited
 Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	CCW
DRAWN BY:	AHR
CHECKED BY:	SLW
APPROVED BY:	SLW
DATE:	1999

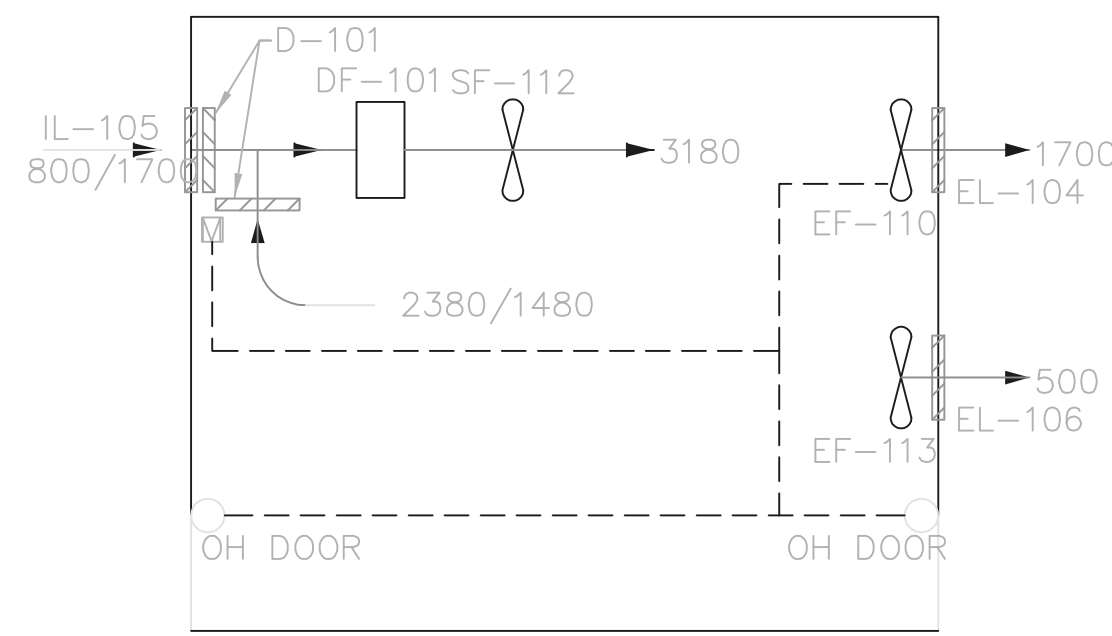
CENTRAL MAINTENANCE FACILITY
 SANITARY PUMP STATION
 PLAN, SECTION, AND DETAILS

SCALE:	
NONE	
SHEET NO.	OF
84	100

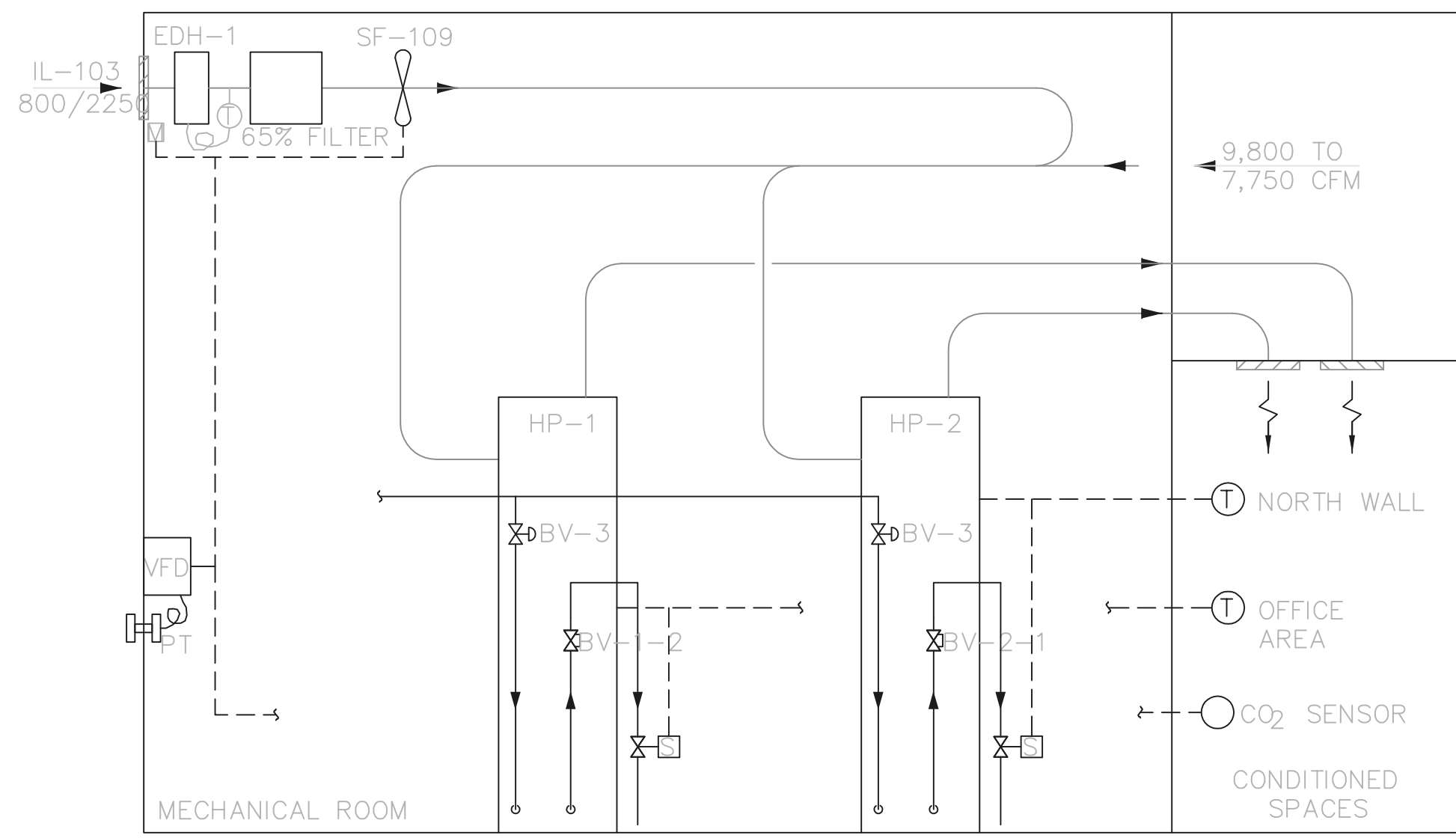


- CODED NOTES**
- ① AMTROL FLORATER # TFR-2 OR EQUAL
 - ② HAYES FLOW CONTROL VALVE 2"-2550-44GPM
 - ③ HAYES ELECTRO - FLOW 2110-2"

HEAT PUMP WATER BALANCE ISOMETRIC
TYPICAL FOR HEAT PUMP 2, HEAT PUMP 1 OPPOSITE HAND
NTS



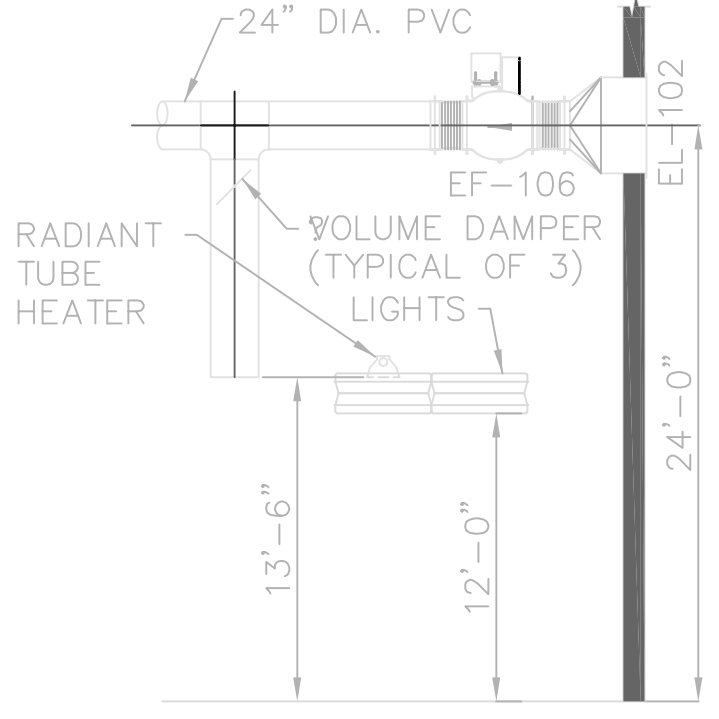
OPERATIONS AIR BALANCE AND CONTROL SCHEMATIC
NTS



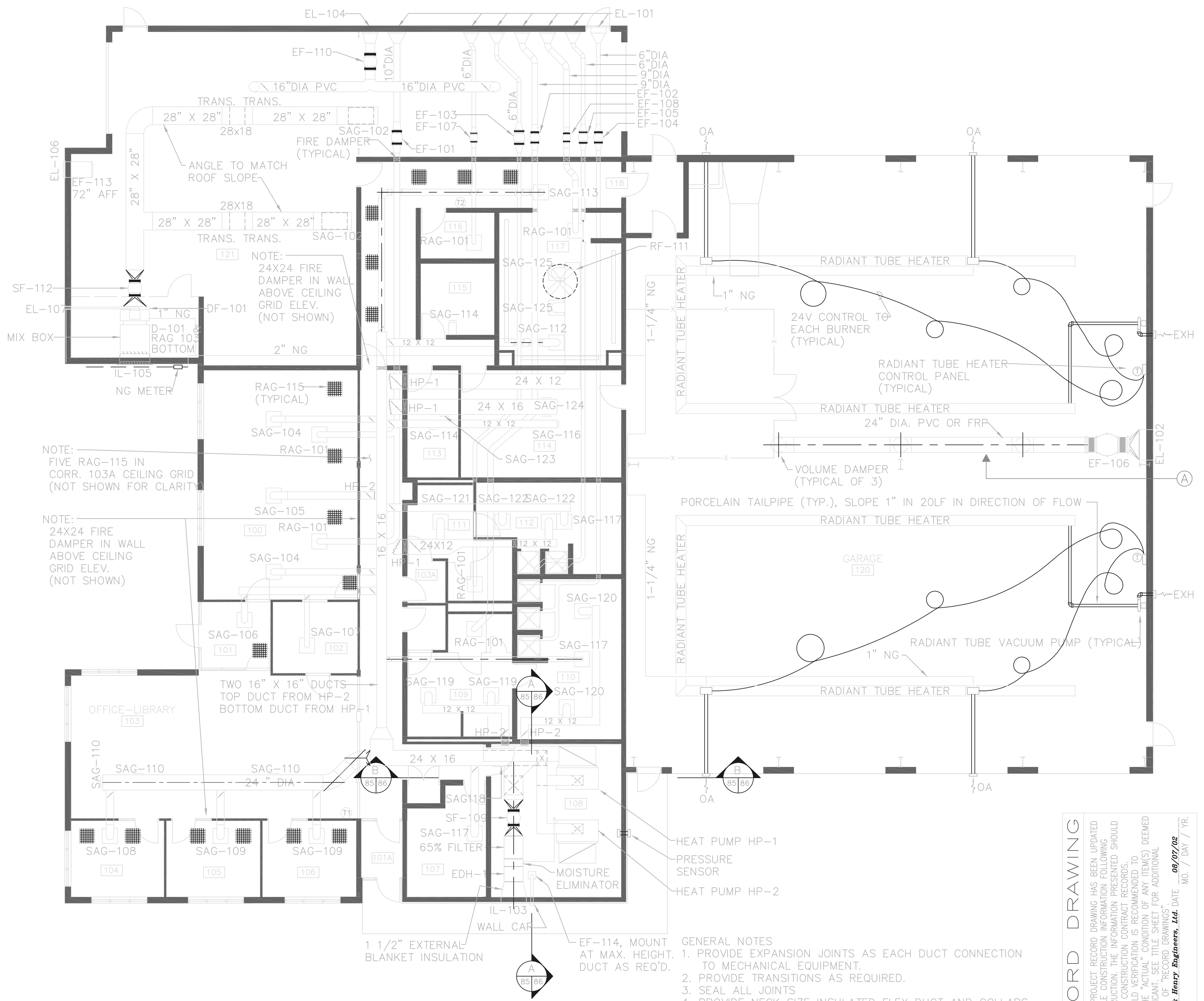
AIR AND NON-POTABLE BALANCE SCHEMATIC
NTS

VALVE NO	GPM	INITIAL SETTING	INITIAL AP
BV-1-1	44	20"	10 FT.
BV-2-1	44	20"	10 FT.
BV-3	44		AS REQ'D

- ◇ LOCATE ALL THERMOSTATS 5'-0" AFF
- ◇ RANGE 40°F TO 80°F THERMOSTAT



SECTION A



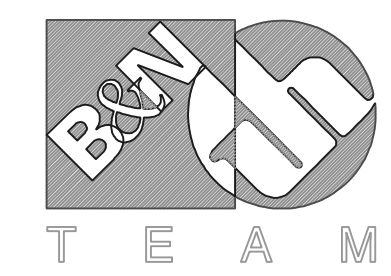
PLAN
1/8" = 1'-0"

- GENERAL NOTES**
1. PROVIDE EXPANSION JOINTS AS EACH DUCT CONNECTION TO MECHANICAL EQUIPMENT.
 2. PROVIDE TRANSITIONS AS REQUIRED.
 3. SEAL ALL JOINTS
 4. PROVIDE NECK SIZE INSULATED FLEX DUCT AND COLLARS AS REQUIRED FOR DUCT CONNECTION TO ALL LAY-IN GRILLS.
 5. ALL DUCT BRANCHES FROM THE MAIN SUPPLY DUCT TO BE NECK SIZE FOR THE SUPPLY GRILL OR GRILLS UNLESS NOTED.
 6. SLOPE RADIANT TUBE HEATERS 1/2"/20 LF AND IN DIRECTION OF FLOW.
 7. ALL HVAC EQUIPMENT, WATER HEATING EQUIPMENT, AND WATER PIPING INSULATION SHALL MEET OR EXCEED THE REQUIREMENTS OF ASHRAE/ANSI 90.1, 1989 AND THE MOST RECENT REVISION.

RECORD DRAWING
NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEMS DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM: Jones & Henry Engineers, Ltd. DATE: 09/07/02
MO. / DAY / YR.

TOL-4714-06-004
08/01/02 06-002
P:\PR24025\PMPS\ARECDWG\65.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

Jones & Henry Engineers, Ltd.

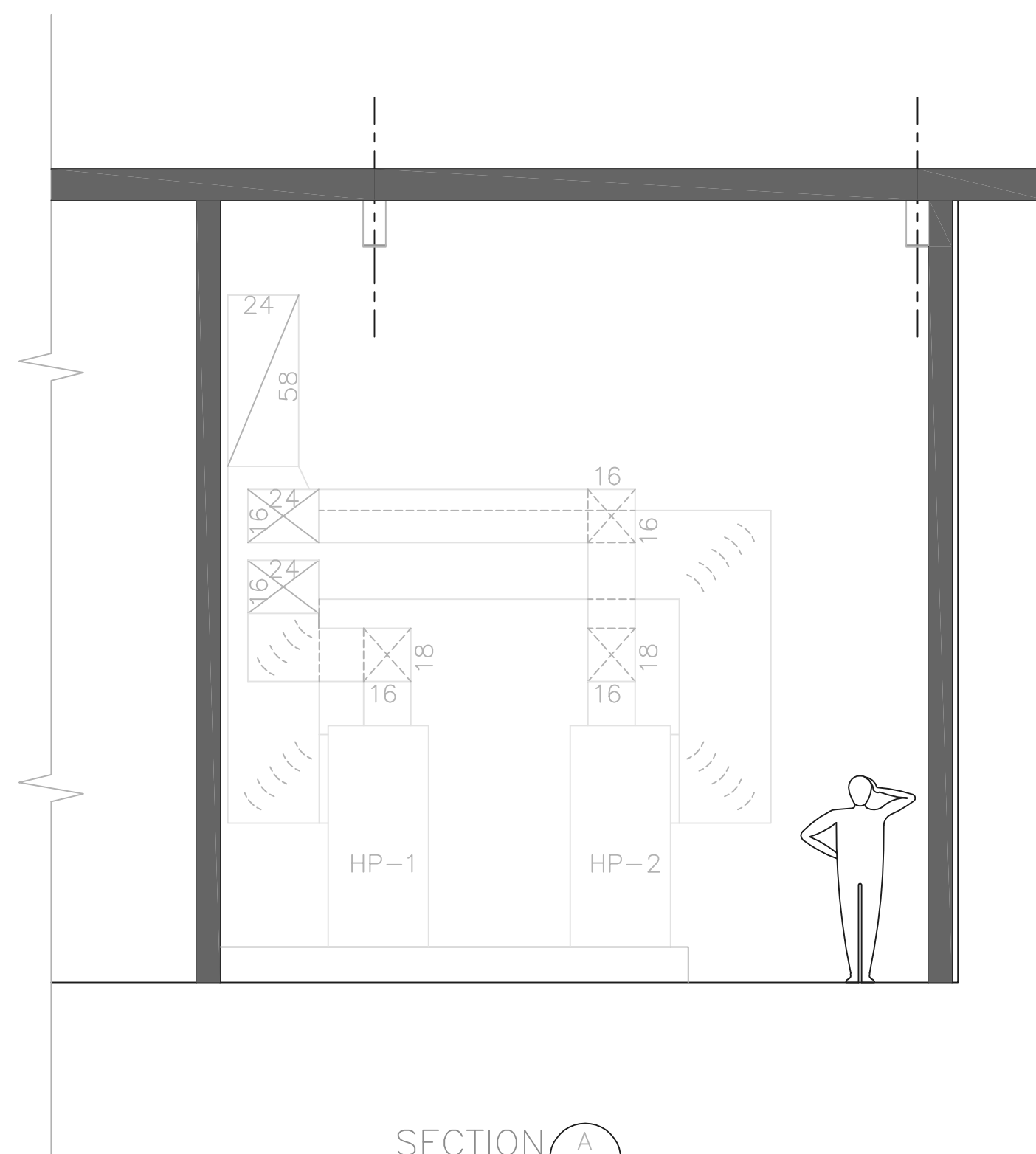
DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	DLH
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	SLW
DATE:	1999

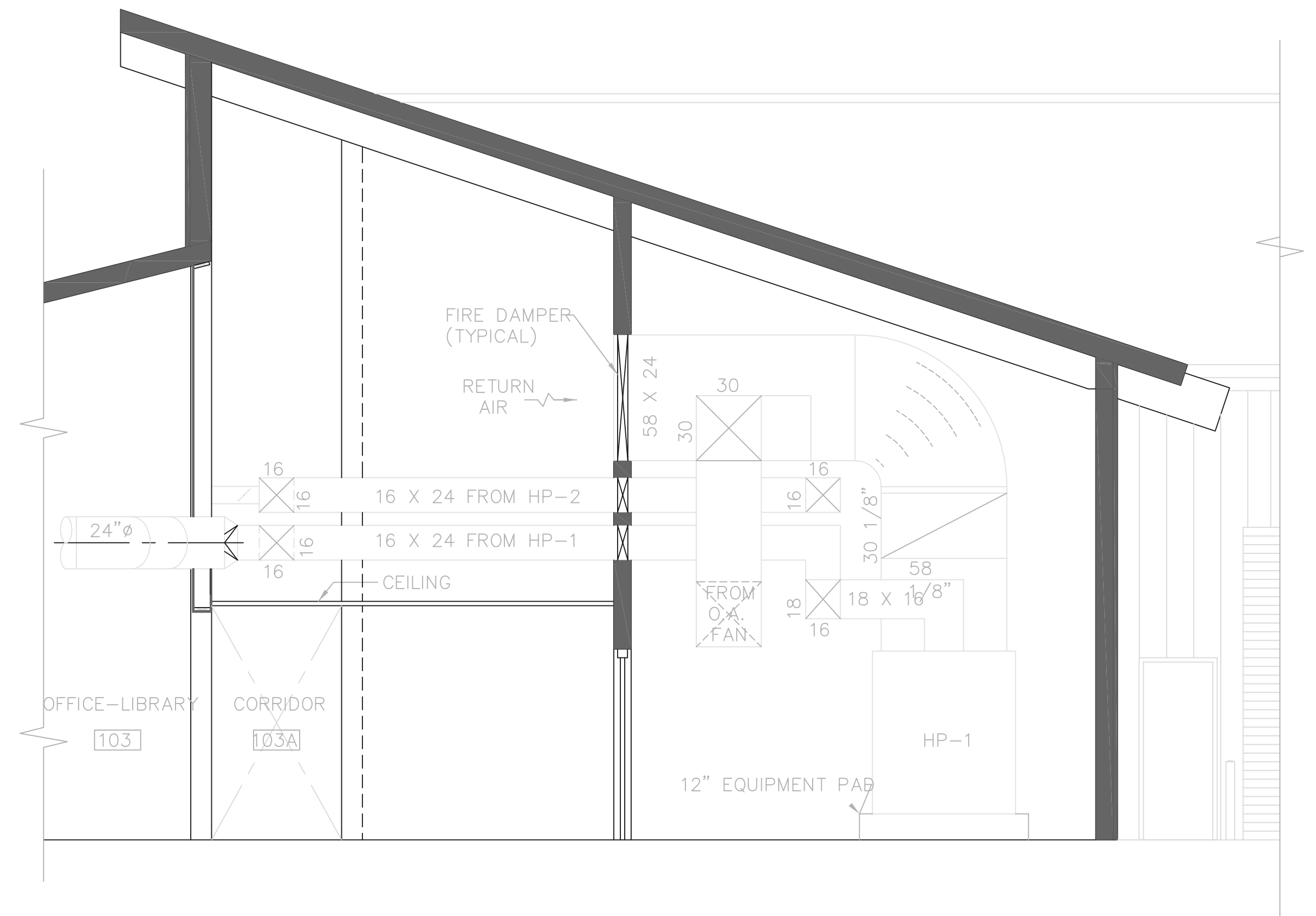
HEATING & VENTILATION
CENTRAL MAINTENANCE FACILITY
PLAN

SCALE:	
1/8"=1'-0"	
SHEET NO.	OF
85	100

© BNHW0201



SECTION A
85/86

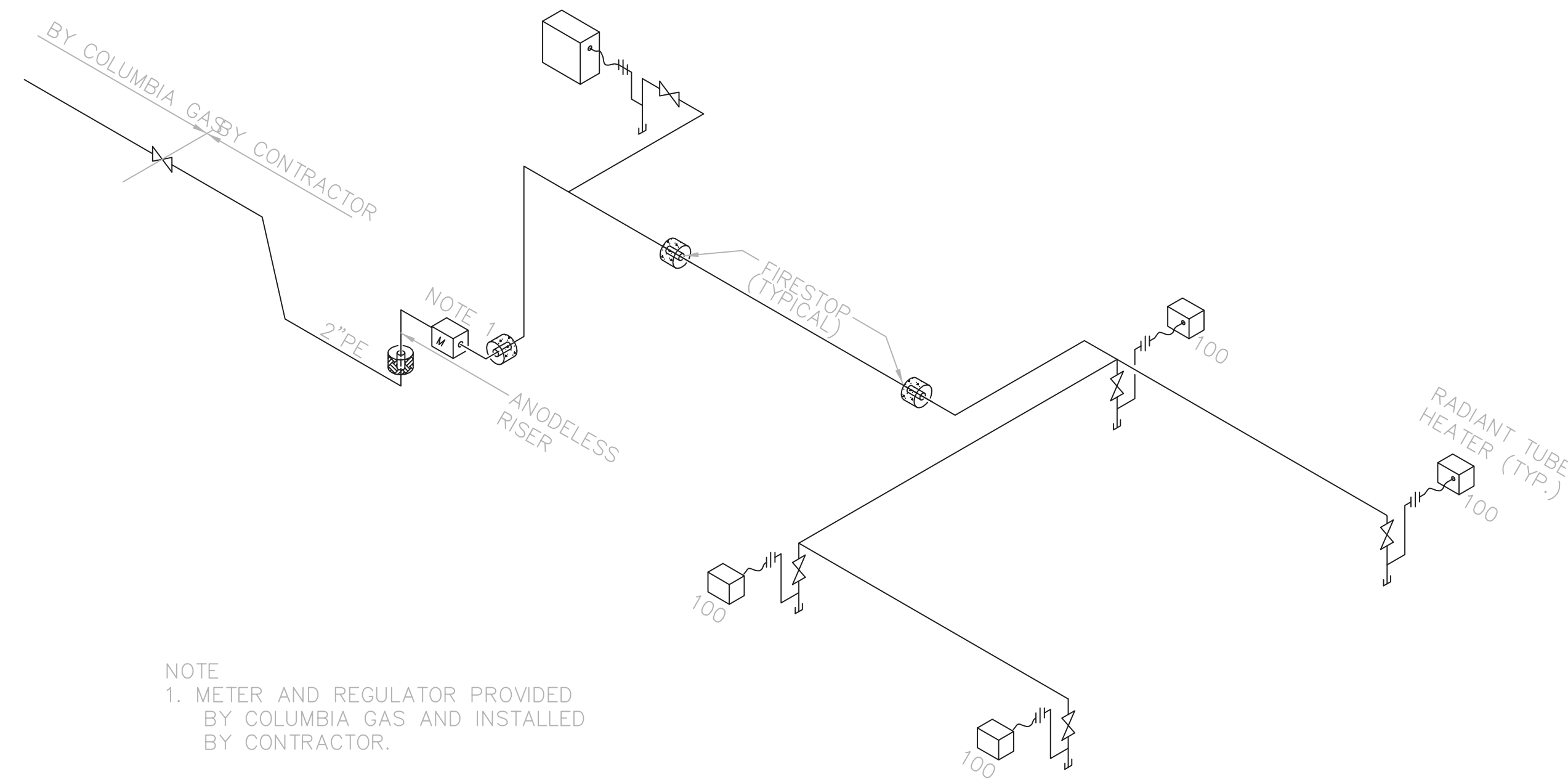


SECTION B
85/86

RECORD DRAWING

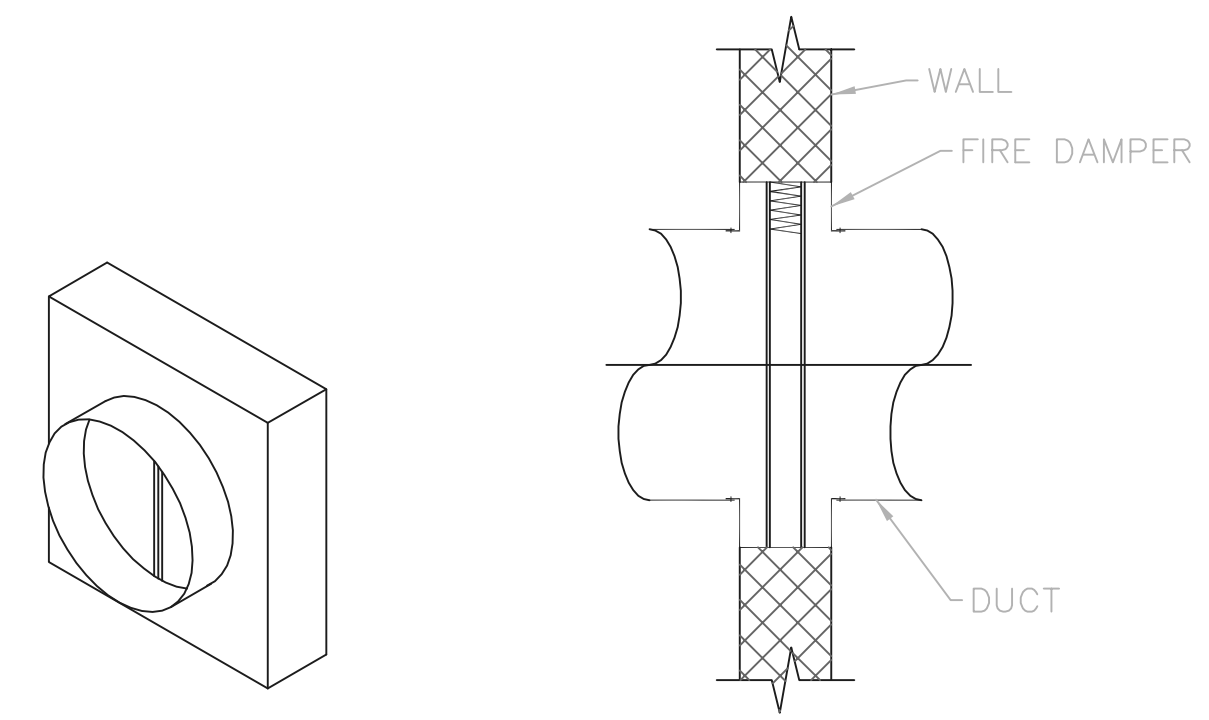
NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM **Jones & Henry Engineers, Ltd.** DATE 08/07/02
MO. / DAY / YR.

© BNWW0201



NOTE
1. METER AND REGULATOR PROVIDED BY COLUMBIA GAS AND INSTALLED BY CONTRACTOR.

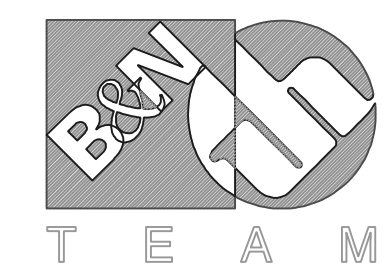
NATURAL GAS ISOMETRIC
ALL QUALITIES IN CFH NTS



FIRE WALL DAMPER DETAIL

TOL-4714H07-004
08/10/02 10-V02
P:\PR24025\PMF\STARECDWG\86.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

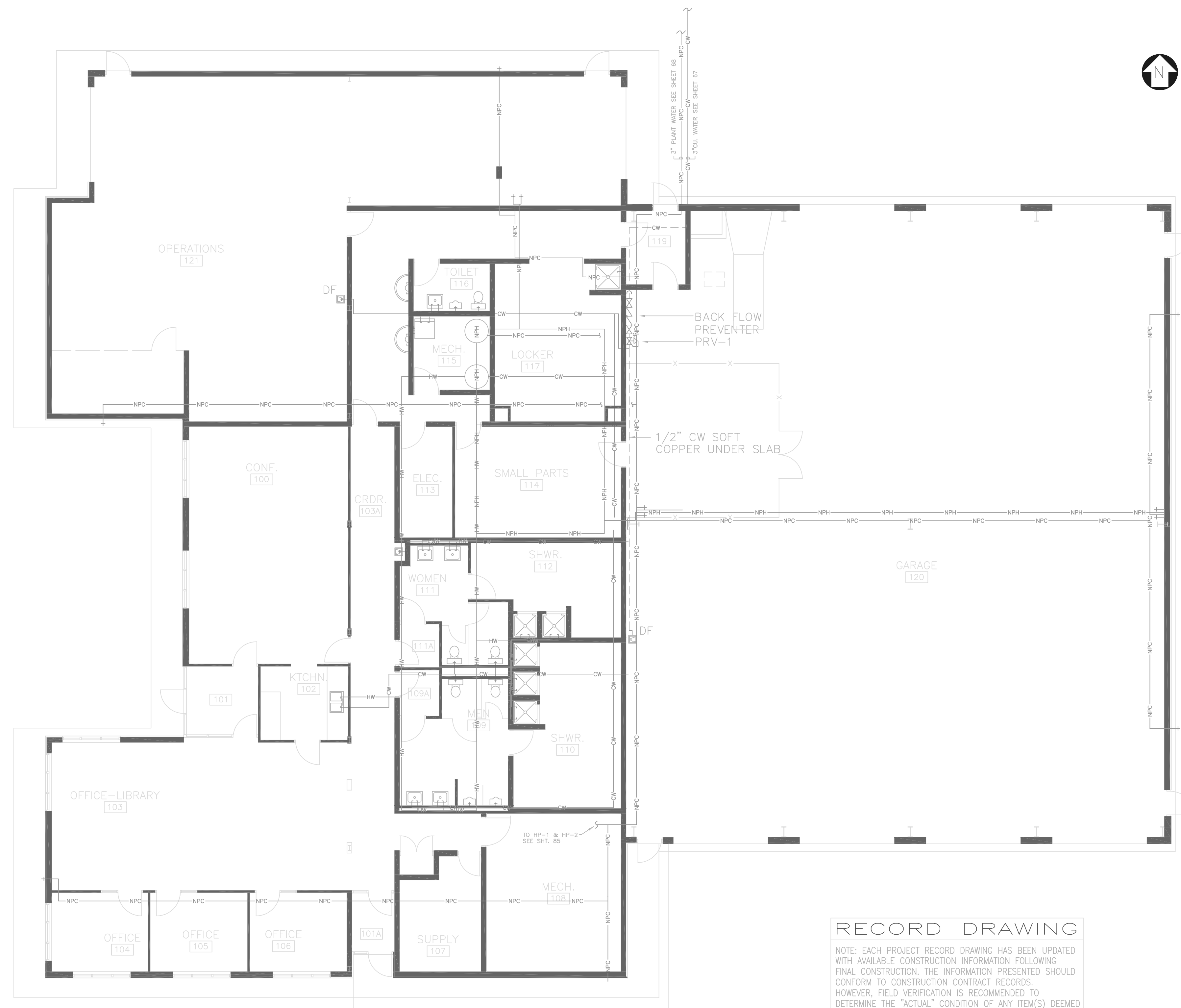
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	
DRAWN BY:	CADD
CHECKED BY:	
APPROVED BY:	
DATE:	1999

HEATING AND VENTILATION
CENTRAL MAINTENANCE FACILITY
SECTIONS

SCALE:	
1/4"=1'-0"	
SHEET NO.	OF
86	100



RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM **Jones & Henry Engineers, Ltd.** DATE 08/07/02
MO. / DAY / YR.

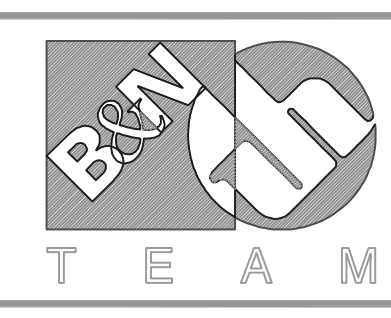
© BNWW0201

LEGEND

- COLD WATER SUPPLY — CW —
- HOT WATER SUPPLY — HW —
- NON-POTABLE H.W. — NPH —
- NON-POTABLE C.W. — NPC —

TOL-4714P2-004
09/10/02 10-002
P:\PRG4025\PM\STARECDWG\87.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	DLH
DRAWN BY:	DNY
CHECKED BY:	
APPROVED BY:	SLW
DATE:	1999

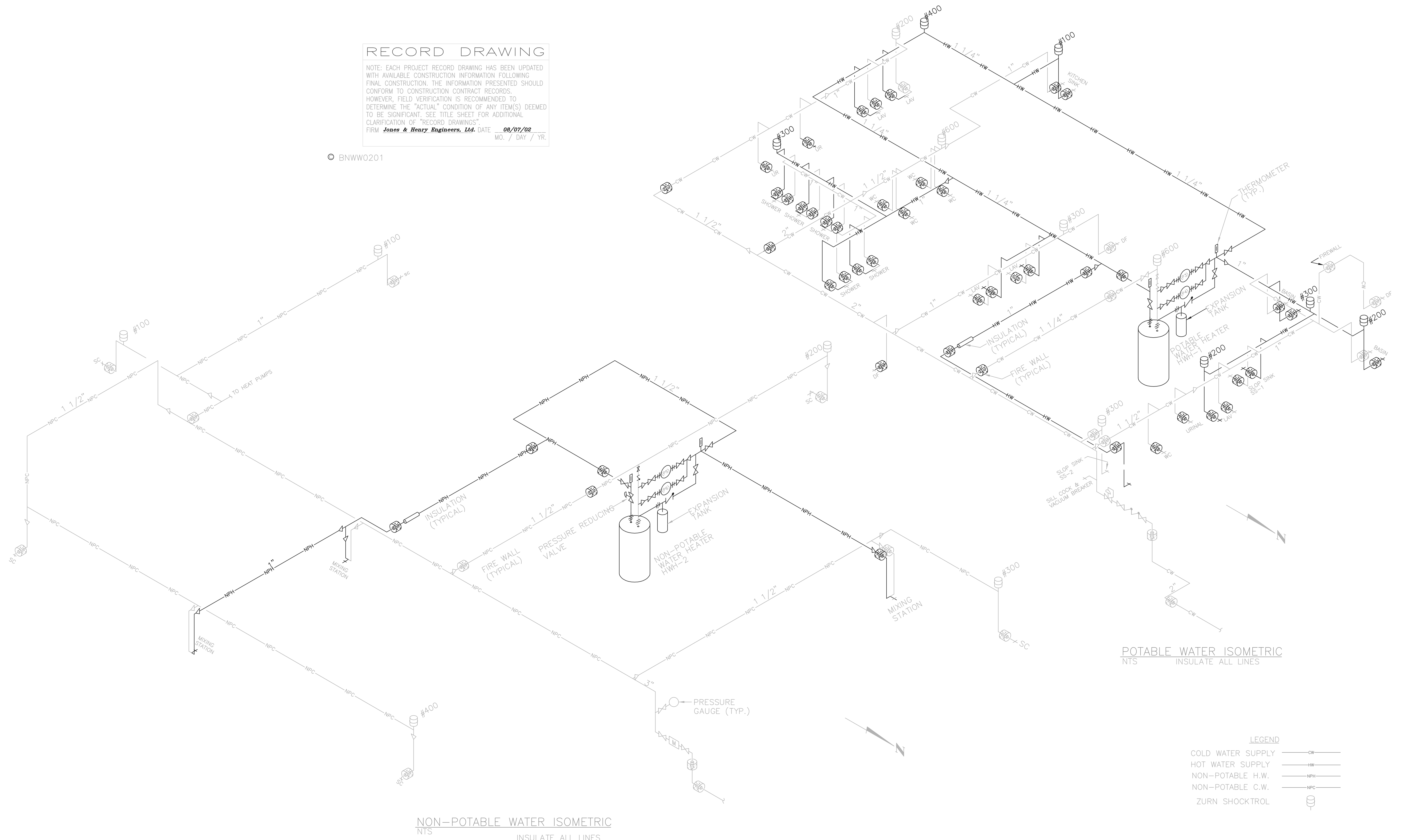
CENTRAL MAINTENANCE FACILITY
PLUMBING
POTABLE & NON-POTABLE WATER PLAN

SCALE:	
1/8"=1'-0"	
SHEET NO.	OF
87	100

RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
 FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
 MO. / DAY / YR.

© BNWW0201



POTABLE WATER ISOMETRIC
 NTS INSULATE ALL LINES

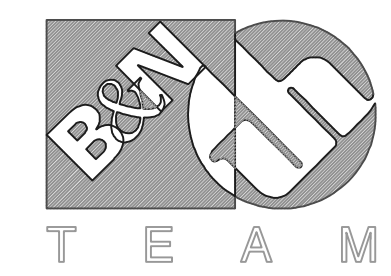
NON-POTABLE WATER ISOMETRIC
 NTS INSULATE ALL LINES

LEGEND

COLD WATER SUPPLY	— CW —
HOT WATER SUPPLY	— HW —
NON-POTABLE H.W.	— NPH —
NON-POTABLE C.W.	— NPC —
ZURN SHOCKTROL	⊕

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE
 08/07/02 06-V02
 P:\PR24025\PMPS\ARECDWG\BBDWG

NO.	REVISIONS	DATE	BY	CHK.



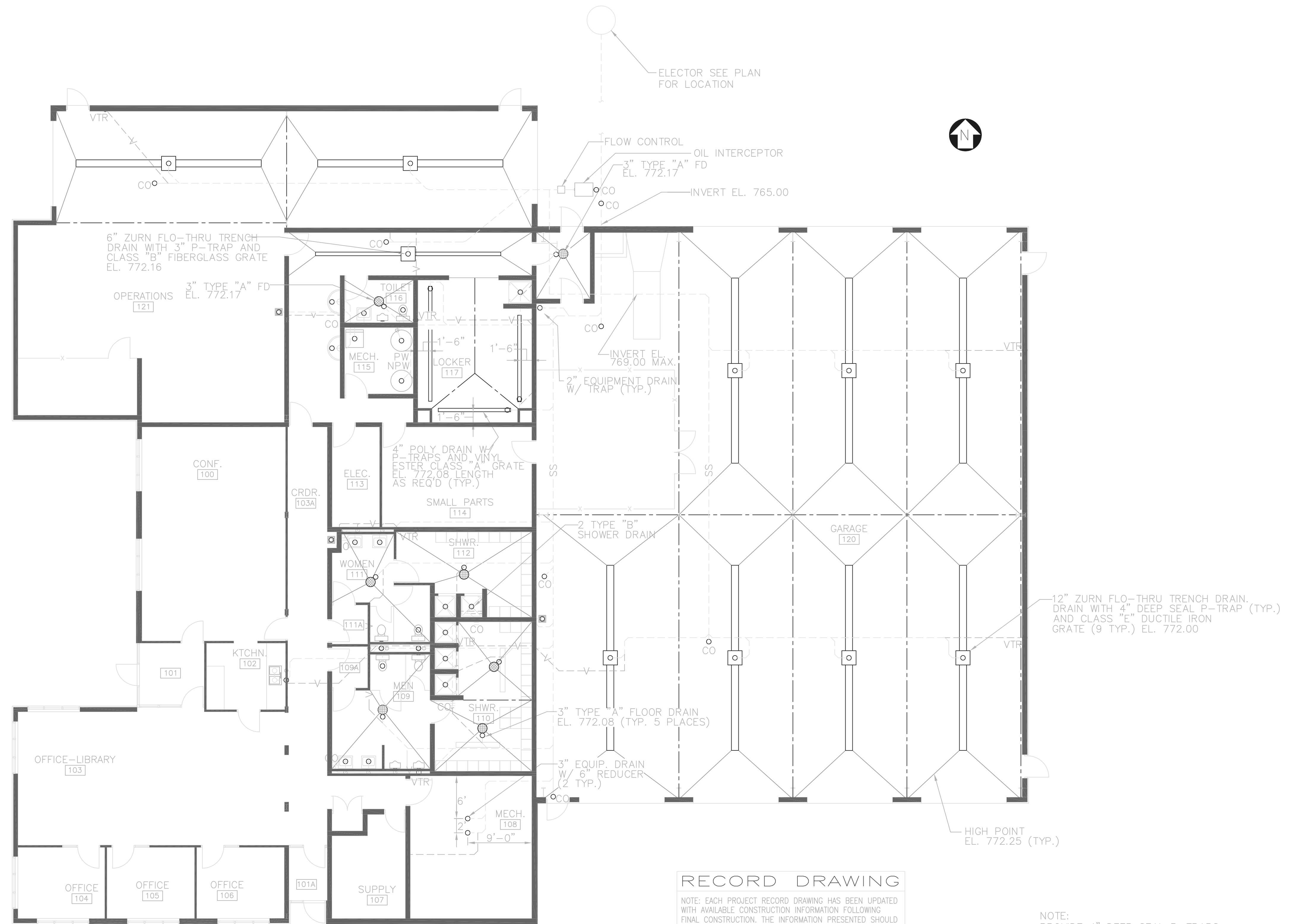
Burgess & Niple, Limited
 Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	DLH
DRAWN BY:	DNY
CHECKED BY:	
APPROVED BY:	SLW
DATE:	1999

PLUMBING
 WATER SUPPLY PIPING ISOMETRIC
 CENTRAL MAINTENANCE FACILITY

SCALE: AS NOTED	
SHEET NO. 88	OF 100



RECORD DRAWING

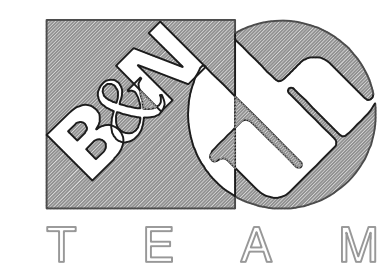
NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
 FIRM *Jones & Henry Engineers, Ltd.* DATE 08/07/02
 MO. / DAY / YR.

NOTE: PROVIDE 4" DEEP SEAL P-TRAPS FOR LOCKER ROOM TRENCH DRAINS & RESTROOM FLOOR DRAINS.

© BNWW0201

TOL-4714P4-004
 09/10/02 10-V02
 P:\PR24025\PMPS\ARECDWG\88.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited
 Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	DLH
DRAWN BY:	DNY
CHECKED BY:	
APPROVED BY:	SLW
DATE:	1999

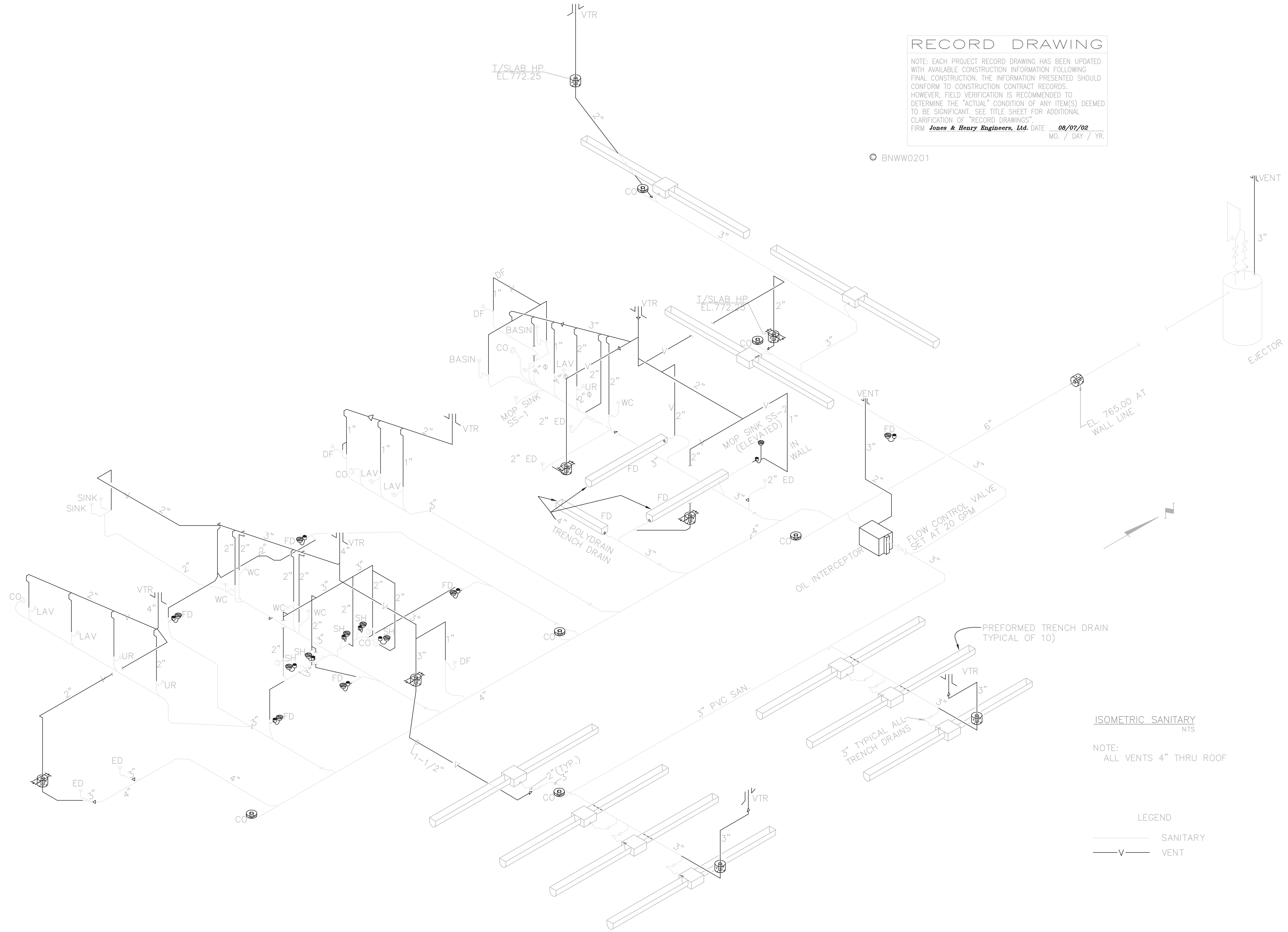
PLUMBING
 SANITARY PIPING PLAN
 CENTRAL MAINTENANCE FACILITY

SCALE:	
1/8" = 1'-0"	
SHEET NO.	OF
89	100

RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
 FIRM **Jones & Henry Engineers, Ltd.** DATE 08/07/02
 MO. / DAY / YR.

© BNW0201



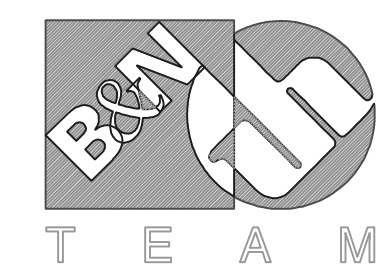
ISOMETRIC SANITARY
 NTS

NOTE:
 ALL VENTS 4" THRU ROOF

LEGEND
 ——— SANITARY
 —V— VENT

TOL-4714PE28-004
 08/01/02 06-V02
 P:\PR24025\PMPSARECDWG\90.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited
 Jones & Henry Engineers, Ltd.

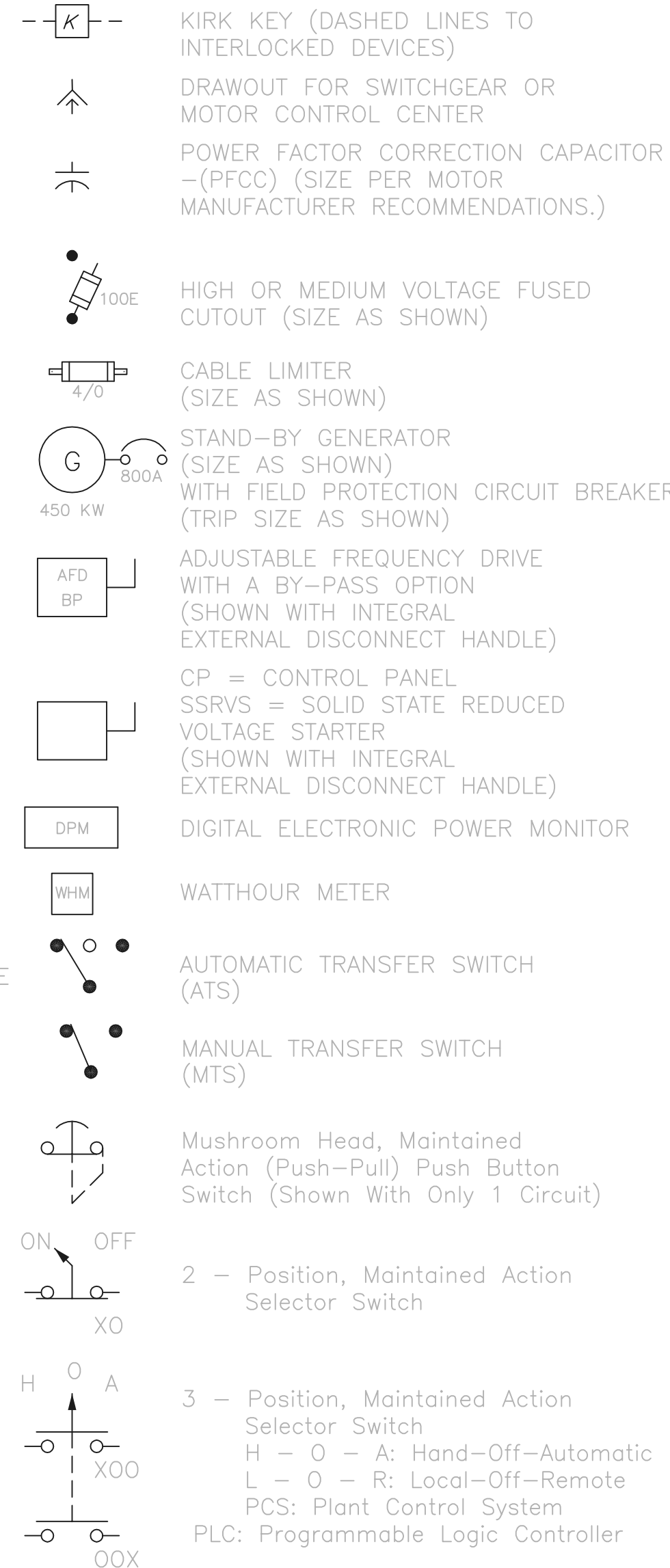
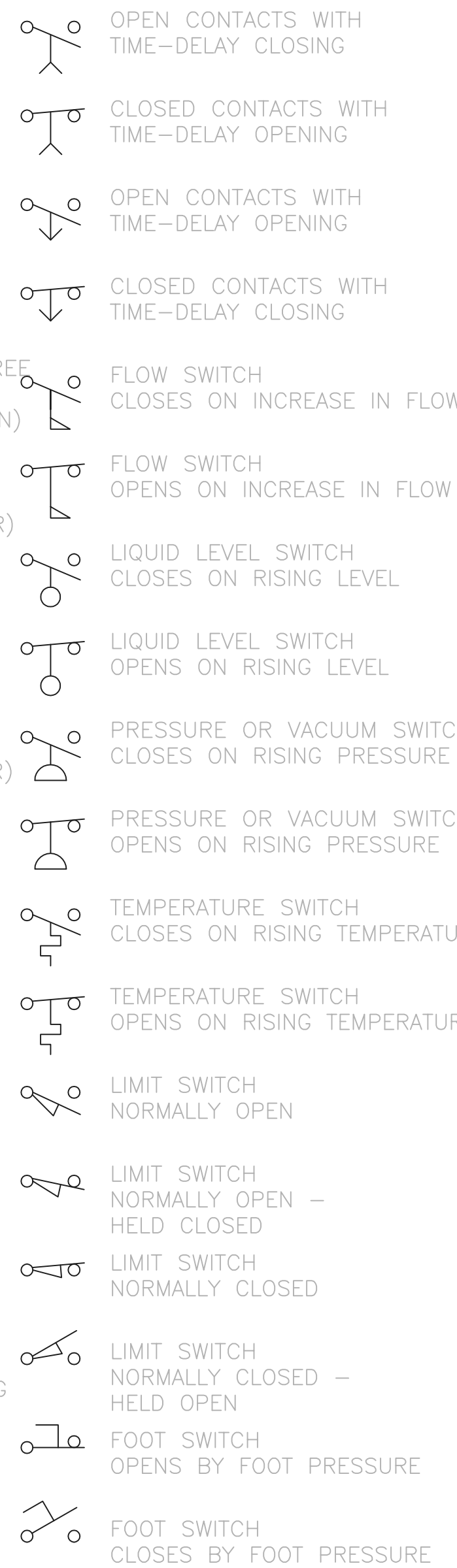
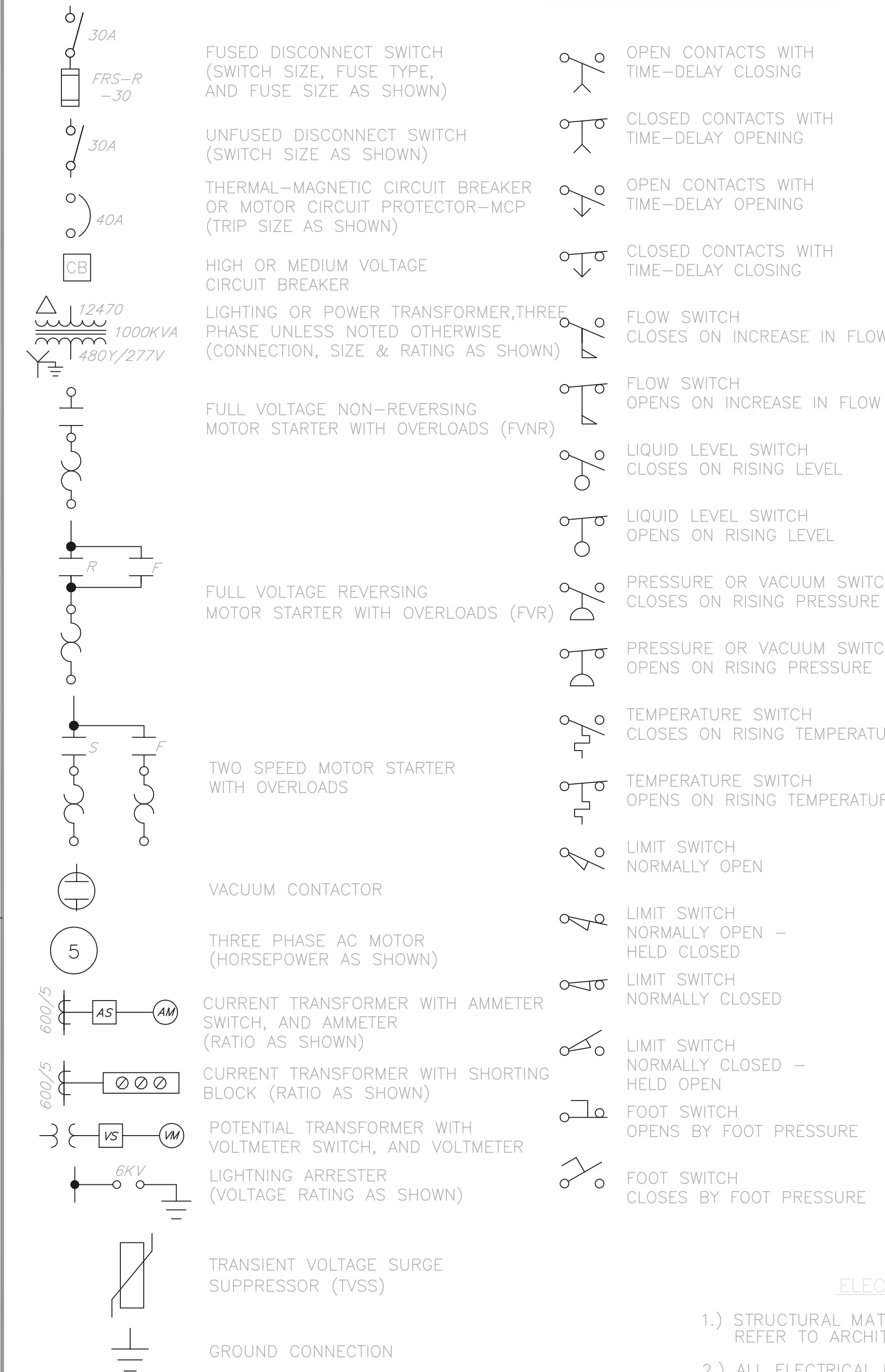
DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	CCW
DRAWN BY:	NB
CHECKED BY:	DY
APPROVED BY:	
DATE:	1999

CENTRAL MAINTENANCE FACILITY
 PLUMBING
 SANITARY ISOMETRICS

SCALE:		NONE
SHEET NO.	OF	
90	100	

SINGLE LINE DIAGRAM LEGEND



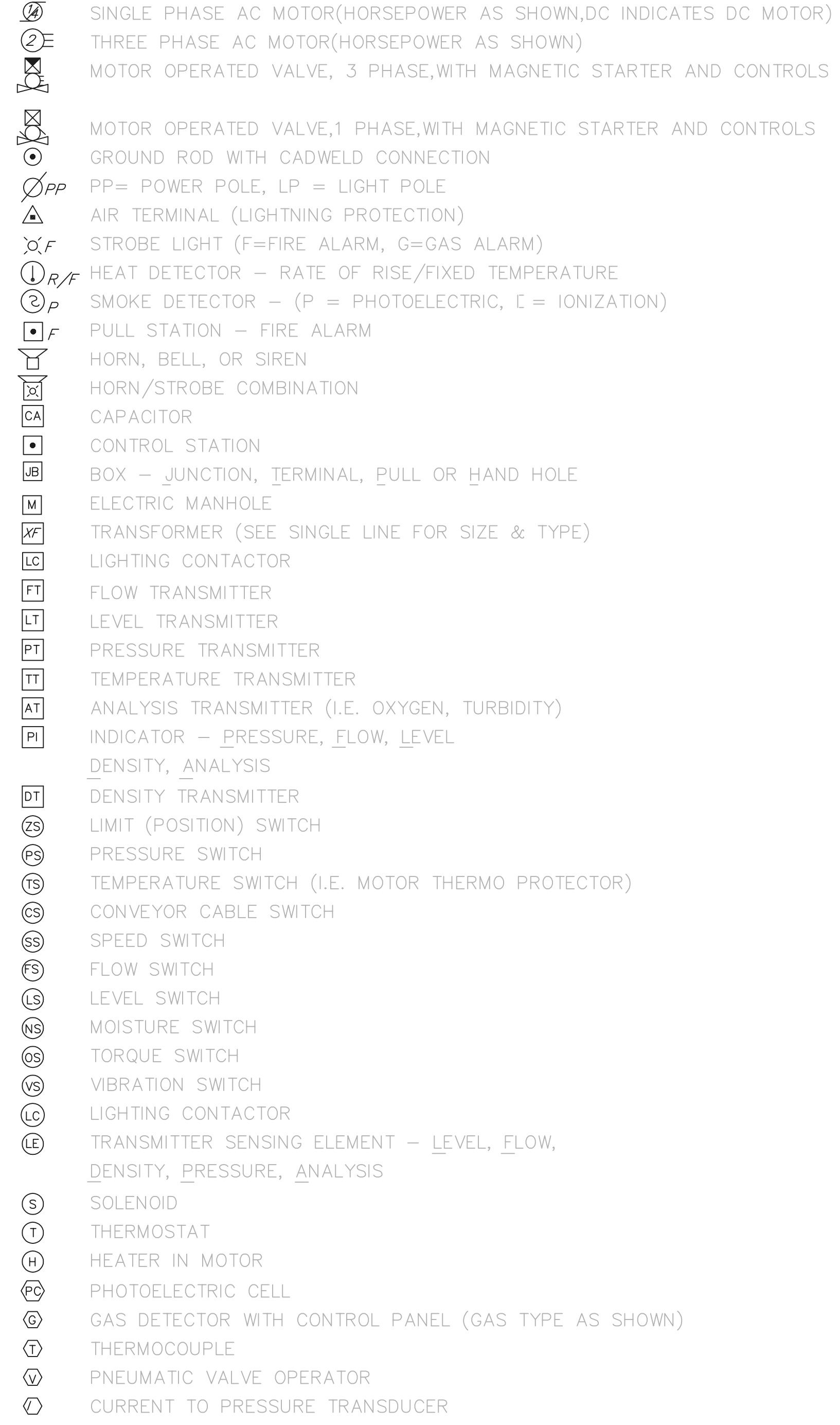
ELECTRICAL NOTES

- STRUCTURAL MATERIALS ARE NOT SHOWN ON ELECTRICAL DRAWINGS. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS.
- ALL ELECTRICAL EQUIPMENT ELEVATIONS SHOWN ARE TO BOTTOM OF DEVICE OR PANEL, UNLESS OTHERWISE NOTED.
- NUMBER SHOWN (I.E.11735), INDICATES A SPECIFICATION REFERENCE FOR ITEMS OTHER THAN DIVISION 16. THE ELECTRICAL ITEM UNDER THIS REFERENCE IS SUPPLIED BY THE GENERAL CONTRACTOR. UNLESS OTHERWISE NOTED IN THAT SPECIFICATION, THE ELECTRICAL CONTRACTOR SHALL INSTALL AND WIRE THE ITEM PER THE DRAWINGS AND DIVISION 16 SPECIFICATIONS.
- CONTROL WIRING SHALL CONFORM TO ALL REQUIREMENTS AS SHOWN ON THE P & ID DRAWINGS WHETHER SHOWN ON THE ELECTRICAL DRAWINGS OR NOT.
- WHERE LINES ARE SHOWN CONNECTING ELECTRICAL EQUIPMENT, THEY ARE NOT INTENDED AS CONDUIT ROUTING. CONTRACTOR SHALL ROUTE ALL CONDUIT RUNS (SHOWN OR NOT) PER DIVISION 16 SPECIFICATIONS.
- WP INDICATES WATERPROOF. LETTER ON LIGHT FIXTURE INDICATES TYPE, PER SECTION 16500. NUMBER WITH LIGHT FIXTURE OR RECEPTACLE INDICATES CIRCUIT NUMBER.

MOTOR STARTER ABBREVIATIONS

- FVNR - FULL VOLTAGE, NON-REVERSING
- FVR - FULL VOLTAGE REVERSING
- TS1W - TWO SPEED, ONE WINDING
- TS2W - TWO SPEED, TWO WINDING
- TSR1W - TWO SPEED REVERSING, ONE WINDING
- TSR2W - TWO SPEED REVERSING, TWO WINDING

ELECTRICAL PLAN LEGEND



RECORD DRAWING

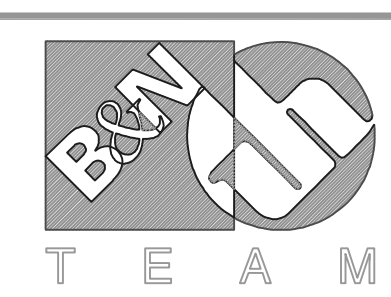
NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".

FIRM Jones & Henry Engineers, Ltd. DATE 08/07/02 MO. / DAY / YR.

© BNW0201

TOL-4714E74
02/27/02 04-002
P:\PR24025\PM\STARECORDING\91.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

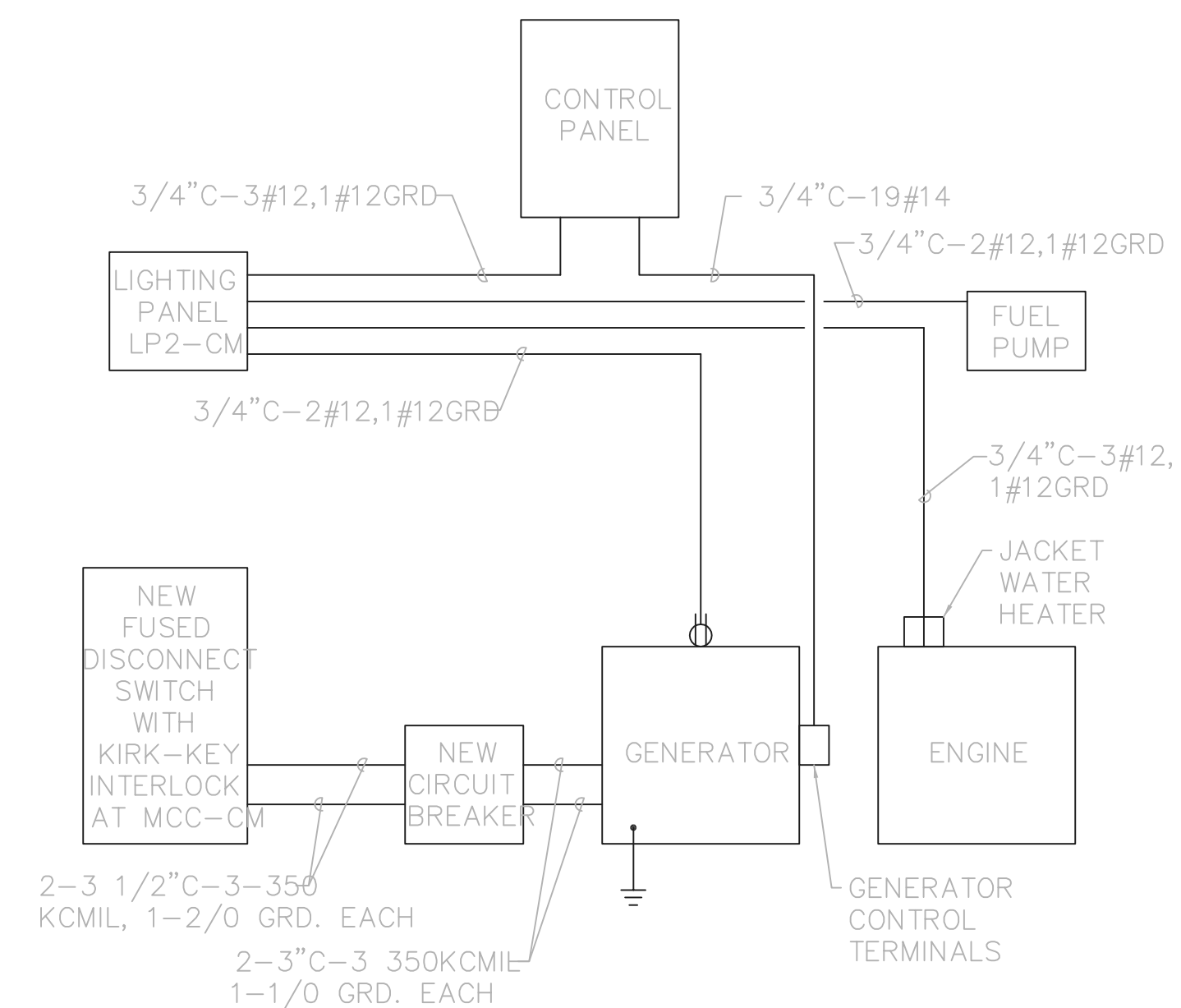
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

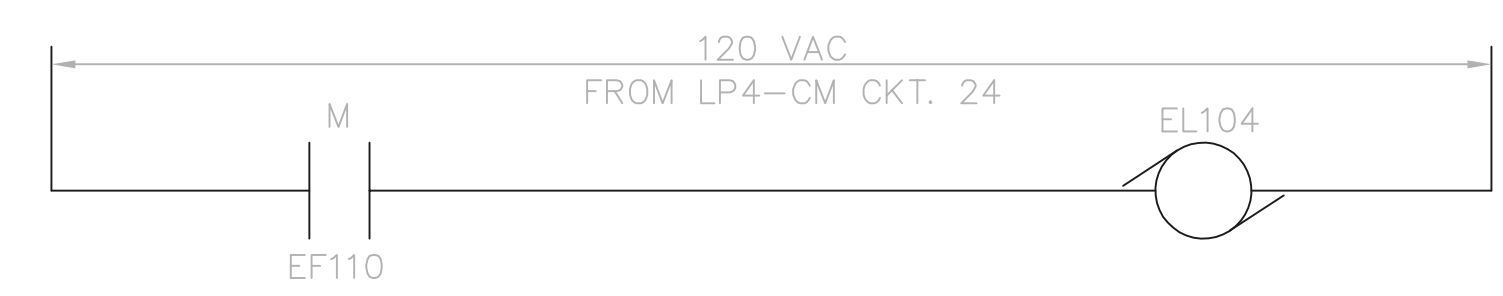
JOB NO.	20571
DESIGNED BY:	DLH
DRAWN BY:	KMH
CHECKED BY:	
APPROVED BY:	
DATE:	1999

CENTRAL MAINTENANCE FACILITY
ELECTRICAL LEGEND

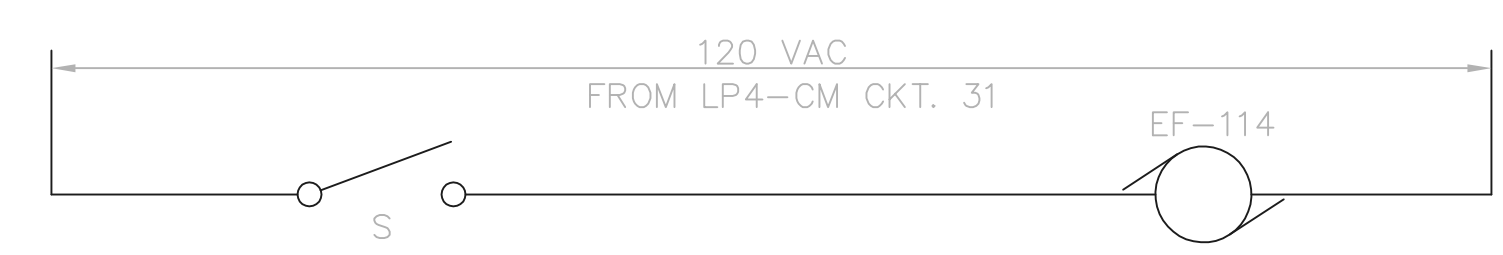
SCALE:		NONE
SHEET NO.	OF	
91	100	



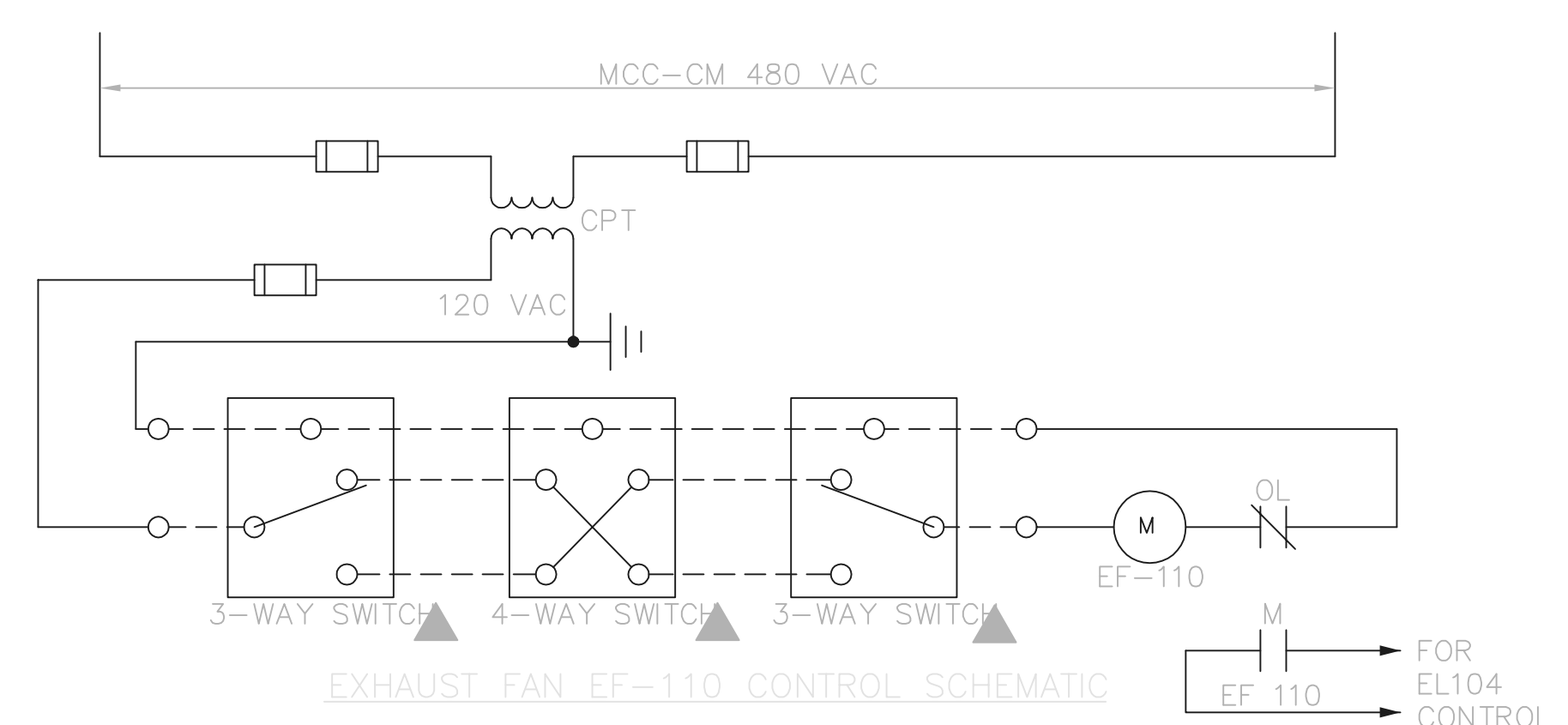
ENGINE/GENERATOR ELECTRICAL SCHEMATIC



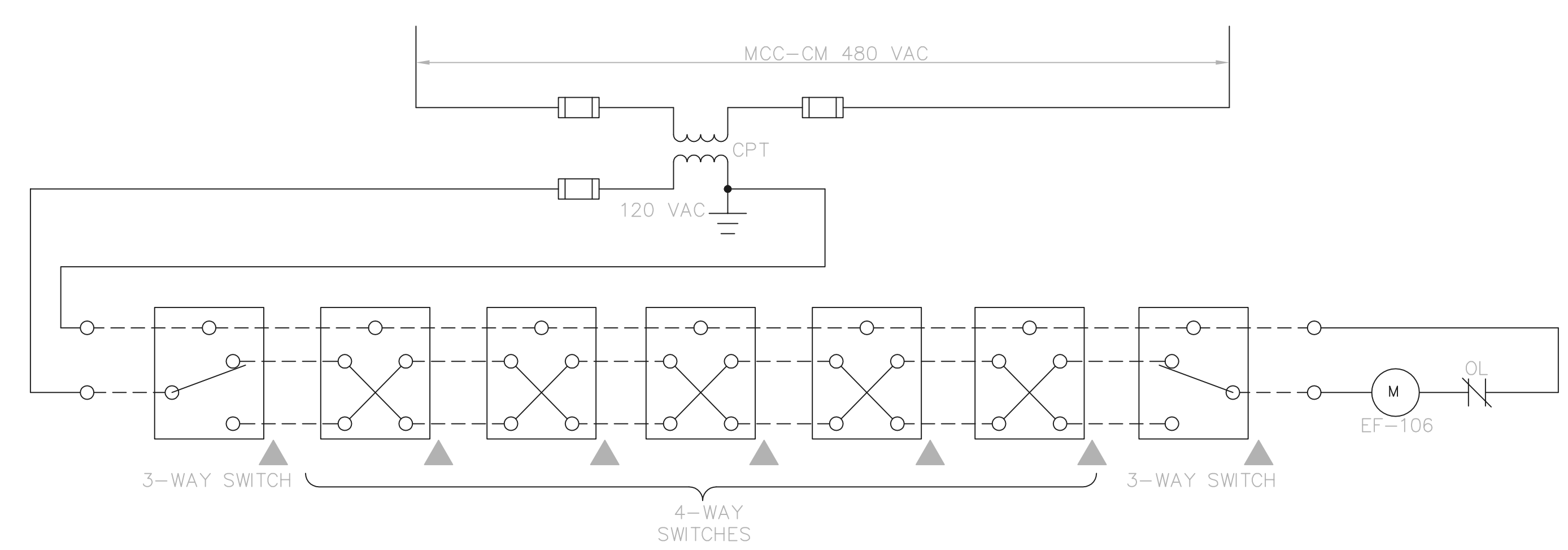
EXHAUST LOUVER EL104 CONTROL SCHEMATIC



EXHAUST FAN EF-114 CONTROL SCHEMATIC



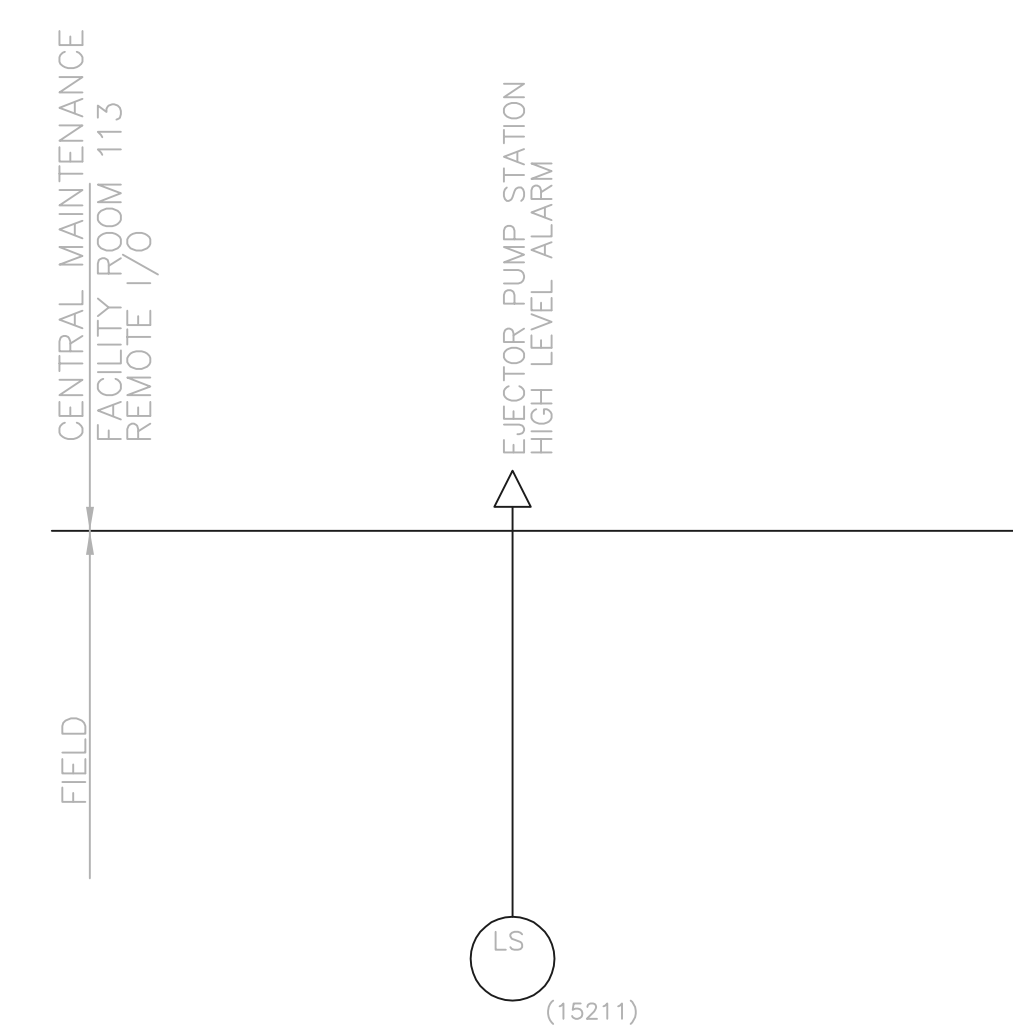
EXHAUST FAN EF-110 CONTROL SCHEMATIC



EXHAUST FAN EF-106 CONTROL SCHEMATIC

RECORD DRAWING
 NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
 FIRM **Jones & Henry Engineers, Ltd.** DATE 08/07/02
 MO. / DAY / YR.

© BNWW0201

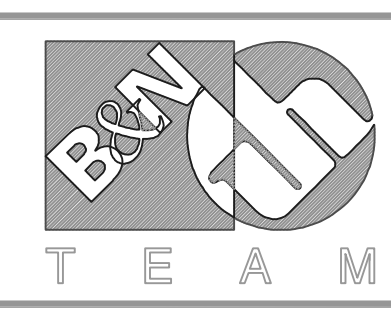


EJECTOR PUMP STATION HIGH LEVEL ALARM P & ID

SYMBOL LOCATION
 NONE MOTOR CONTROL CENTER MCC-CM
 ▲ FIELD

TOL-4714E78
 02/27/02 04-V02
 P:\PR24025\NMPSTARECDWG\93.DWG

NO.	REVISIONS	DATE	BY	CHK.



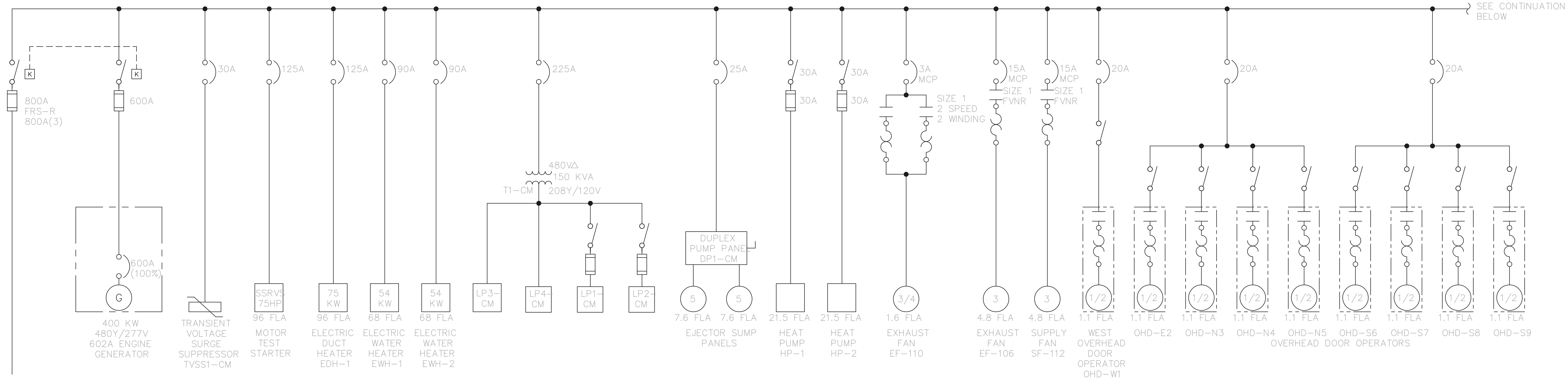
Burgess & Niple, Limited
 Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

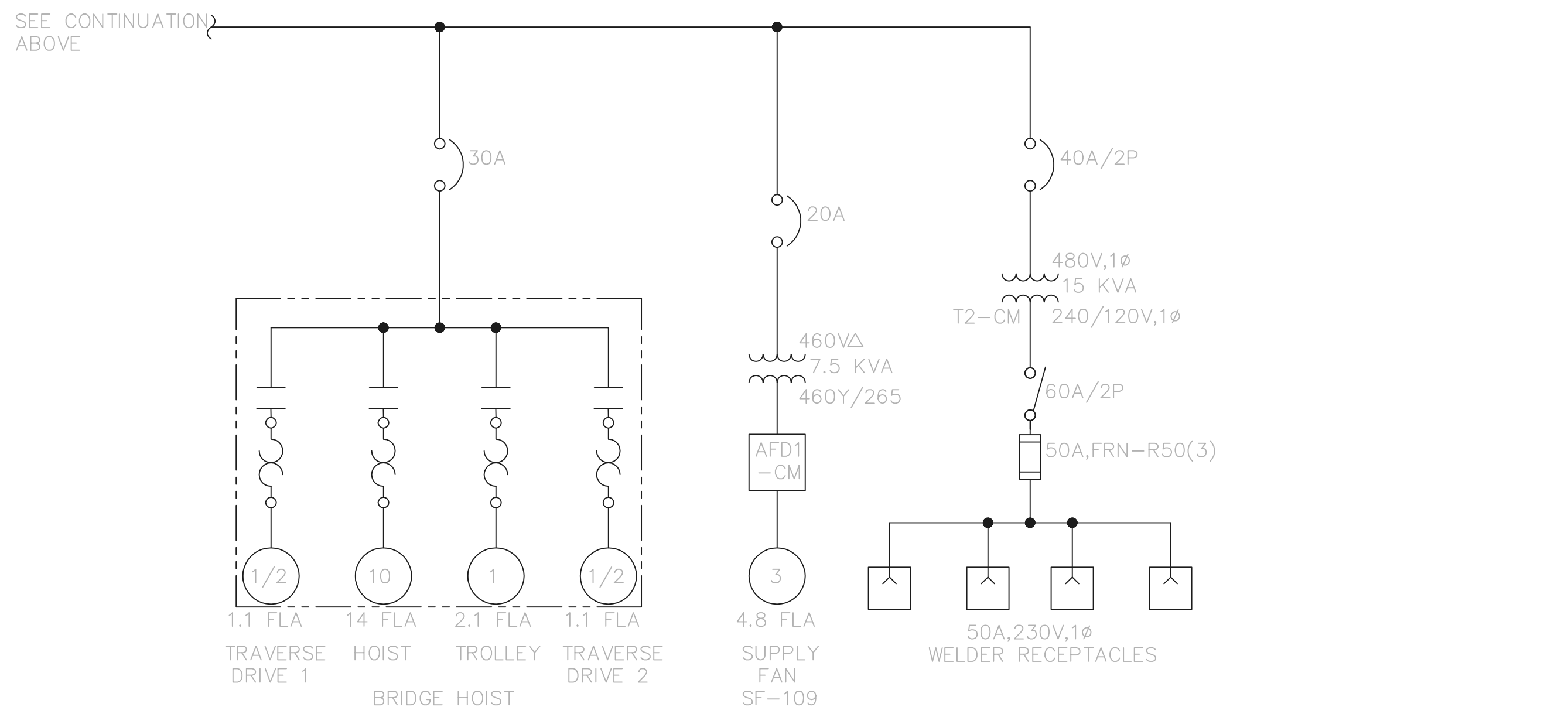
JOB NO. 20571
 DESIGNED BY: DLH
 DRAWN BY: KMH
 CHECKED BY:
 APPROVED BY:
 DATE: 1999

CENTRAL MAINTENANCE FACILITY
 ELECTRICAL
 CONTROL SCHEMATICS

SCALE: NONE	
SHEET NO. 93	OF 100



CENTRAL MAINTENANCE FACILITY MOTOR CONTROL CENTER - MCC-CM
800A, 3φ/3W, 60HZ, 480V



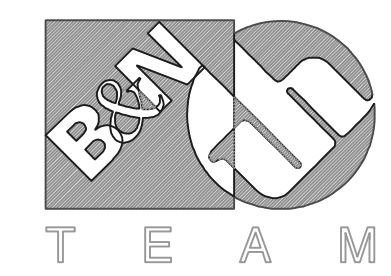
CENTRAL MAINTENANCE FACILITY MOTOR CONTROL CENTER - MCC-CM (CONT'D)
800A, 3φ/3W, 60HZ, 480V

RECORD DRAWING
NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM **Jones & Henry Engineers, Ltd.** DATE 06/07/02
MO. / DAY / YR.

© BNWW0201

TOL-471-4E77
02/27/02 04-V02
P:\PR24025\PMF51REC.DWG\94.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	DLH
DRAWN BY:	BEF
CHECKED BY:	DLH
APPROVED BY:	SLW
DATE:	1999

CENTRAL MAINTENANCE FACILITY
ELECTRICAL
SINGLE LINE DIAGRAM MCC-CM

SCALE:	NONE
SHEET NO.	94
OF	100

CODE NOTES:

- 1 3/4"C, 2-#12, 1-#12 GRD.
- 2 3/4"C, 3-#12, 1-#12 GRD.
- 3 3/4"C, 3-#10, 1-#10 GRD.
- 4 1-1/4"C, 3-#4, 1-#8 GRD.
- 5 1"C, 2-#8, 1-#10 GRD.
- 6 3/4"C, 2-#14, 1-#14 GRD.
- 7 1"C, 2-#6, 1-#10 GRD.
- 8 1-1/2"C, 3-#1, 1-#6 GRD.
- 9 2-4"C, 3-600 Kcmil, 1-2/0 GRD. EACH 1-4"C, SPARE
- 10 1"C, 2-#12, 1-#12 GRD.
- 11 3/4"C, 10-#14, 1-#12 GRD.
- 12 1-4"C, 4-600 Kcmil, 1-2/0 GRD.
- 13 INSTALL 24"Hx24"Wx18"D PULL BOX 8 FT. A.F.F., AND RUN 2-4"C, (RGS) FROM PULL BOX TO 6" SOUTH OF NORTH WALL OF MECH. ROOM 108. PROVIDE PULL STRING IN EACH AND CAP ENDS.
- 14 4"C, PULL STRING, FOR TELEPHONE CO. USE.
- 15 3/4"C, 19-#14
- 16 3"C, 3-350 Kcmil, 1-1/0 GRD.
- 17 3 1/2"C, 3-350 Kcmil, 1-2/0 GRD.

NOTES:

1. PROVIDE COMPLETE SECURITY/ACCESS CONTROL SYSTEM PER SPECIFICATION 16722. RUN 3/4"C, 1-#18 SH. TW. PR FROM EACH INTRUSION SENSOR TO SECURITY CONTROL PANEL. RUN 3/4"C, 4/C-#18 SHIELDED FROM EACH KEYPAD TO SECURITY CONTROL PANEL.

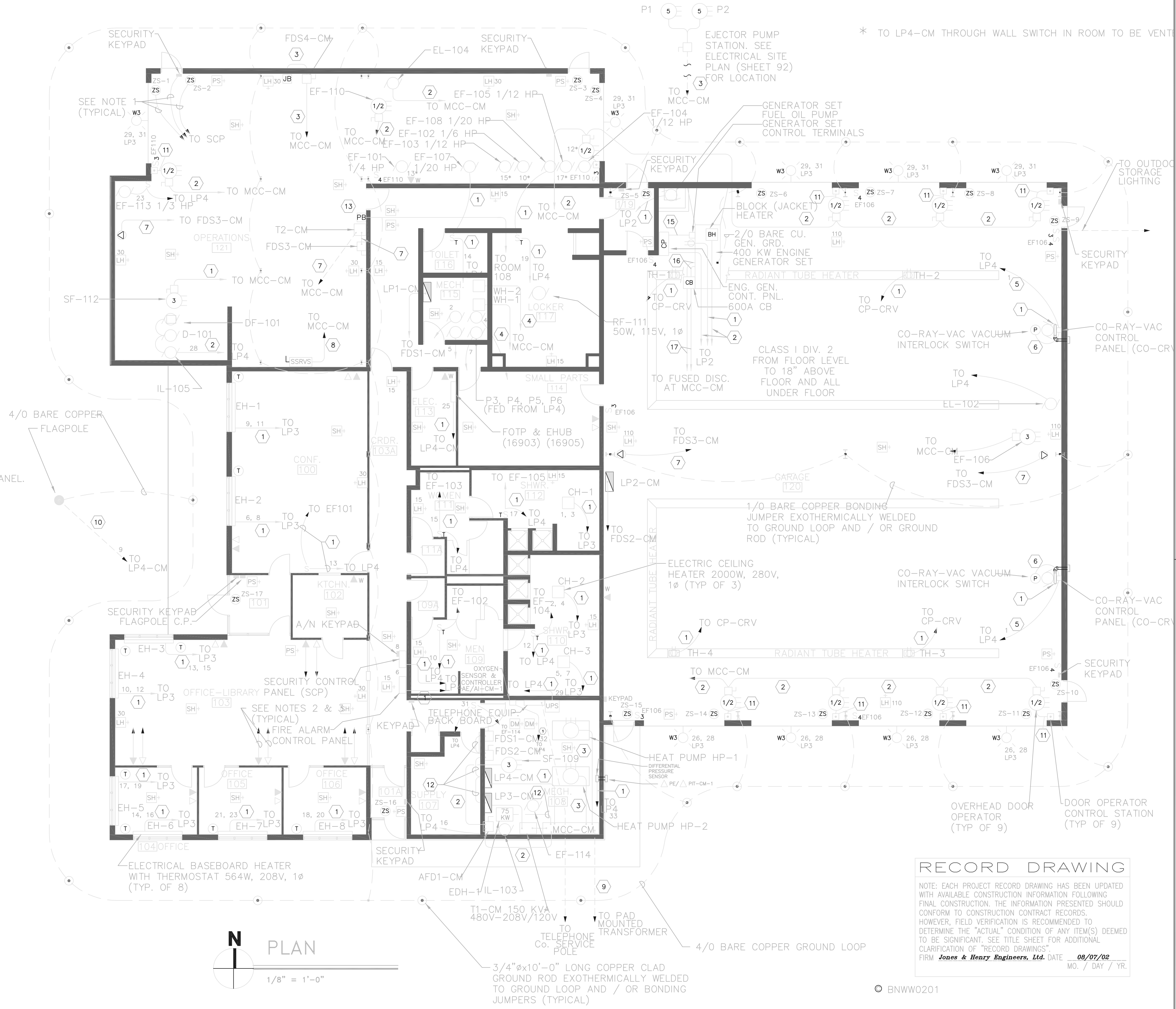
- SECURITY CONTROL PANEL (SCP)
- KEYPAD AT ACCESS DOORS (4 MINIMUM)

2. PROVIDE EACH TELEPHONE OUTLET () WITH FLUSH MOUNTED OUTLET BOX WITH CONNECTING JACK MOUNTED ON THE COVER PLATE. INSTALL WALL MOUNTED BOXES AT SAME ELEVATION AS DUPLEX POWER RECEPTACLES. PROVIDE WALL TELEPHONE JACKS WITH PHONE MOUNTING STUDS AT THE LOCATIONS DESIGNATED WITH (▲ W). THESE WALL MOUNTED UNITS SHALL BE A 48" ABOVE THE FINISHED FLOOR. ROUTE 1-4 PAIR TELEPHONE CABLE FROM EACH LOCATION TO TELEPHONE CABLE FROM EACH LOCATION TO TELEPHONE BACK BOARD.
3. PROVIDE RJ-45 DATA OUTLET () LOCATIONS WITH A SINGLE GANG FLUSH WALL BOX FOR INSTALLATION OF DATA JACK AND CONDUCTOR. ROUTE COMPUTER NETWORK CATEGORY 5 TWISTED PAIR FROM EACH LOCATION TO ETHERNET HUB (EHUB) IN ROOM 113.
4. PROVIDE A COMPLETE FIRE ALARM SYSTEM PER SPEC. 16720 WITH THE FIRE ALARM

SYSTEM DEVICES DESIGNATED AS FOLLOWS:
ROUTE ALL DEVICE CONDUCTORS FROM FIELD DEVICES TO THE FIRE ALARM PANEL.

- LH - LIGHT AND HORN (NUMBER DENOTES LIGHT OUTPUT EFFECTIVE INTENSITY)
- SH - SMOKE AND HEAT DETECTOR
- DM - DUCT MOUNTED SMOKE DETECTOR
- PS - PULL STATION

5. CONDUIT CONTAINING FIBER OPTIC CABLE SHALL HAVE NO BENDS WITH RADII LESS THAN 30".



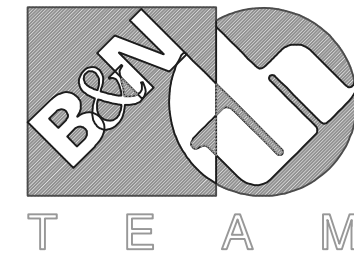
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
MO. / DAY / YR.

© BNWW0201

TOL-4714E75
02/27/02 04-002
P:\PR\4025\PM\STARECDWG\95.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

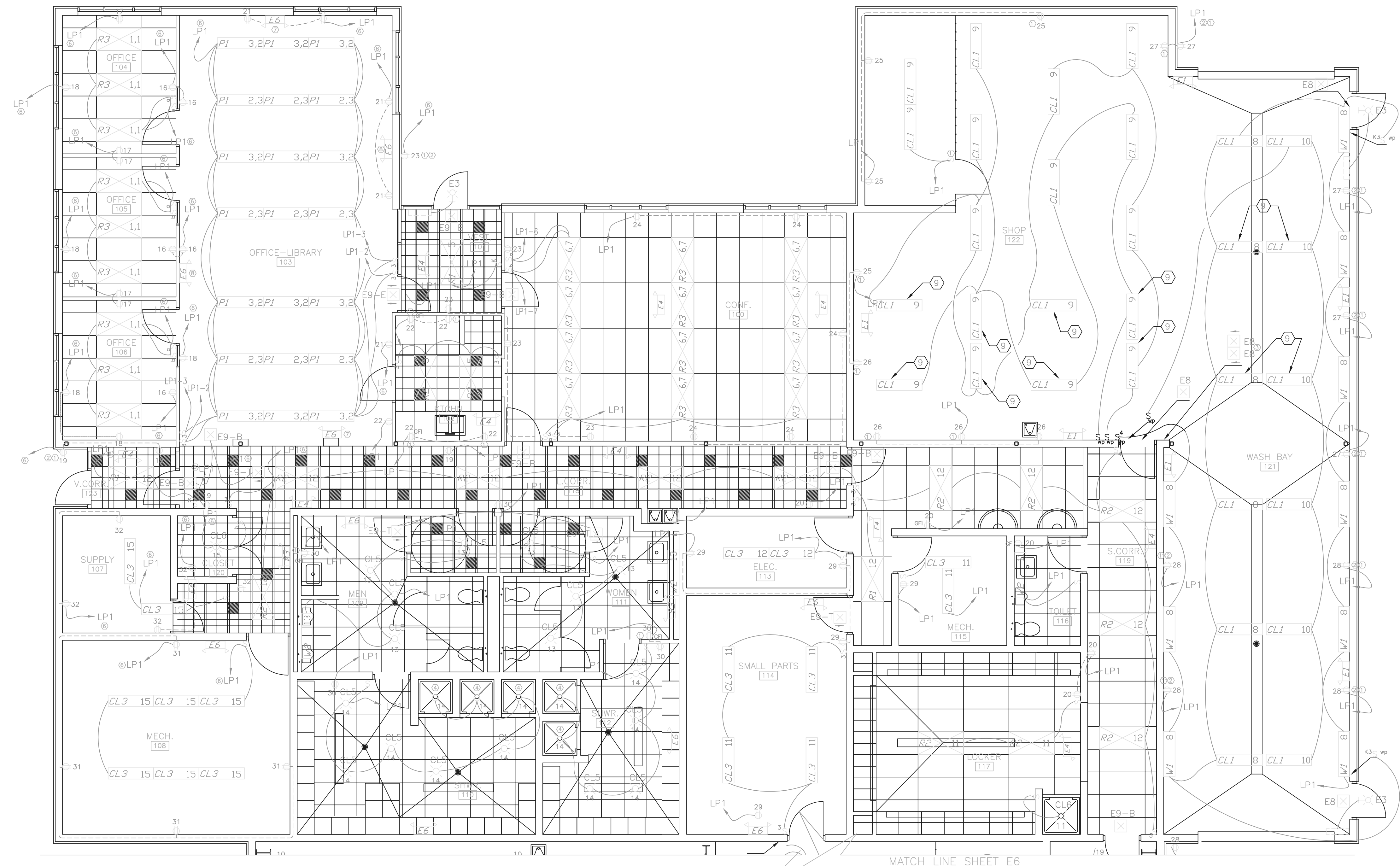
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY


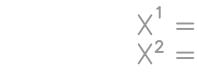
JOB NO.	20571
DESIGNED BY:	DLH
DRAWN BY:	KMH
CHECKED BY:	
APPROVED BY:	SLW
DATE:	1999

CENTRAL MAINTENANCE FACILITY
ELECTRICAL
PLAN

SCALE:	
1/8" = 1'-0"	
SHEET NO.	OF
95	100



- CODED NOTES:**
- ① MT. AT 36" AFF.
 - ② WEATHERPROOF, GFI RECEPTACLE.
 - ③ PROVIDE UNISTRUT WALL BRACKET FOR BACK TO BACK MOUNTING.
 - ④ COMB. SHOWER FAN/LIGHT SEE DIV. 15
 - ⑤ FINAL LAYOUT AND LOCATION OF LUMINAIRES TO BE APPROVED BY ENGINEER/ARCHITECT.
 - ⑥ HOME RUN SHALL BE 2-#10, #10 GRD IN 3/4" C.
 - ⑦ CIRCUIT TO LP1-2, AHEAD OF SWITCH.
 - ⑧ CIRCUIT TO LP1-3, AHEAD OF SWITCH.
 - ⑨ FIXTURE TO BE MOUNTED AT 16"-1.6" AFF. TO BOTTOM OF FIXTURE. CONTRACTOR TO ADJUST AND SET FINAL MOUNTING HEIGHT OF FIXTURE FOR CLEARANCE OF BRIDGE CRANE OPERATION.

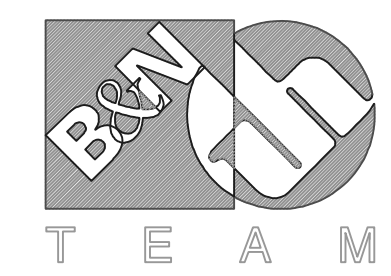
- GENERAL NOTES:**
- 1. ALL CIRCUIT HOMERUNS ON THIS SHEET INCLUDE THE SUFFIX "-CM" EVEN THOUGH NOT SHOWN.
 - 2. S_o - INSIDE LAMP
S_e - OUTSIDE LAMP
 - 3. ALL OUTDOOR "E3" FIXTURES ARE ON CIRCUIT #20 IN "LP2-CM".
 - 4. ALL INDOOR EGRESS FIXTURES ARE ON CIRCUIT #21 IN "LP2-CM".
 - 5. CONSOLIDATION OF INDIVIDUAL CONDUIT HOMERUNS SHALL NOT BE PERMITTED WITHOUT PRIOR APPROVAL BY THE ENGINEER.
 - 6. MOUNT ALL P1 LUMINAIRES AT 10'-0" AFF.
 - 7. ALL HOME RUNS NOT OTHERWISE MARKED SHALL BE 2-#12, #12 GRD IN 3/4" C.
 - 8.  X₁ = INSIDE LAMP CIRCUIT
 X₂ = OUTSIDE LAMP CIRCUIT

RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM **BURGESS & NIPLE, LIMITED** DATE 07/18/02
MO. / DAY / YR.

P:\PR24025\PMPTREC\DWG\96.DWG 4-27-99 1:57:53 pm EST

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	EDT
DRAWN BY:	MSW
CHECKED BY:	EDT
APPROVED BY:	EDT
DATE:	MAR 1999

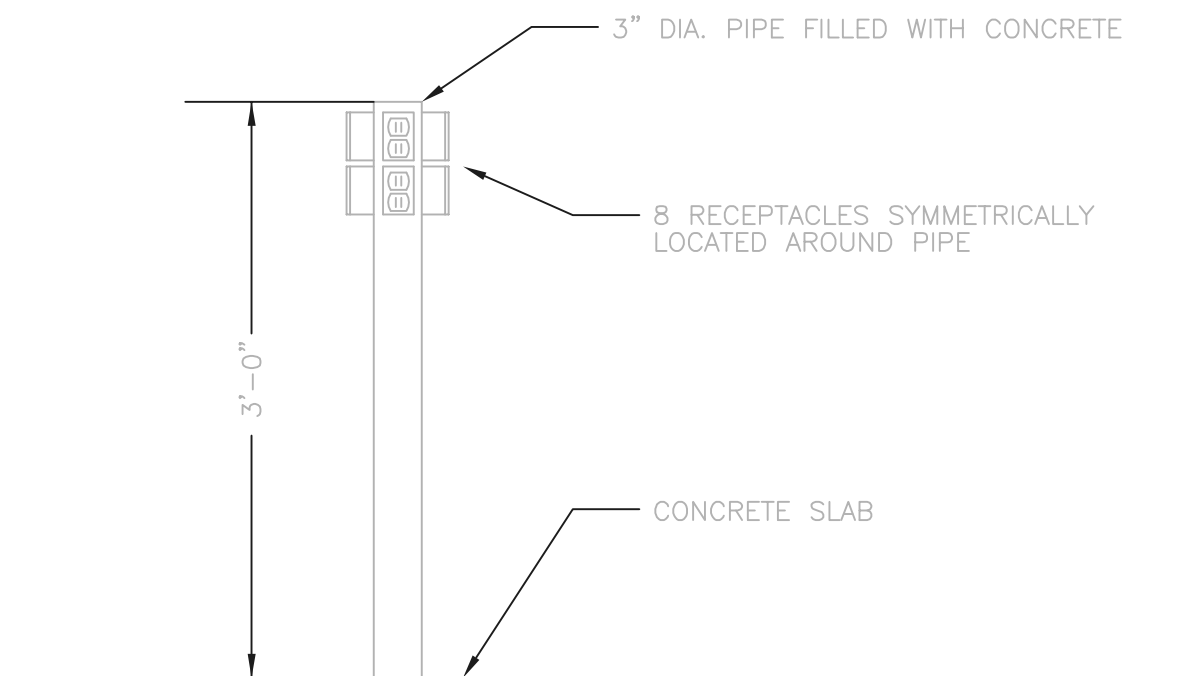
CENTRAL MAINTENANCE BUILDING (WEST)
ELECTRICAL POWER & LIGHTING PLAN

SCALE:	3/16"=1'-0"
SHEET NO.	96
OF	100

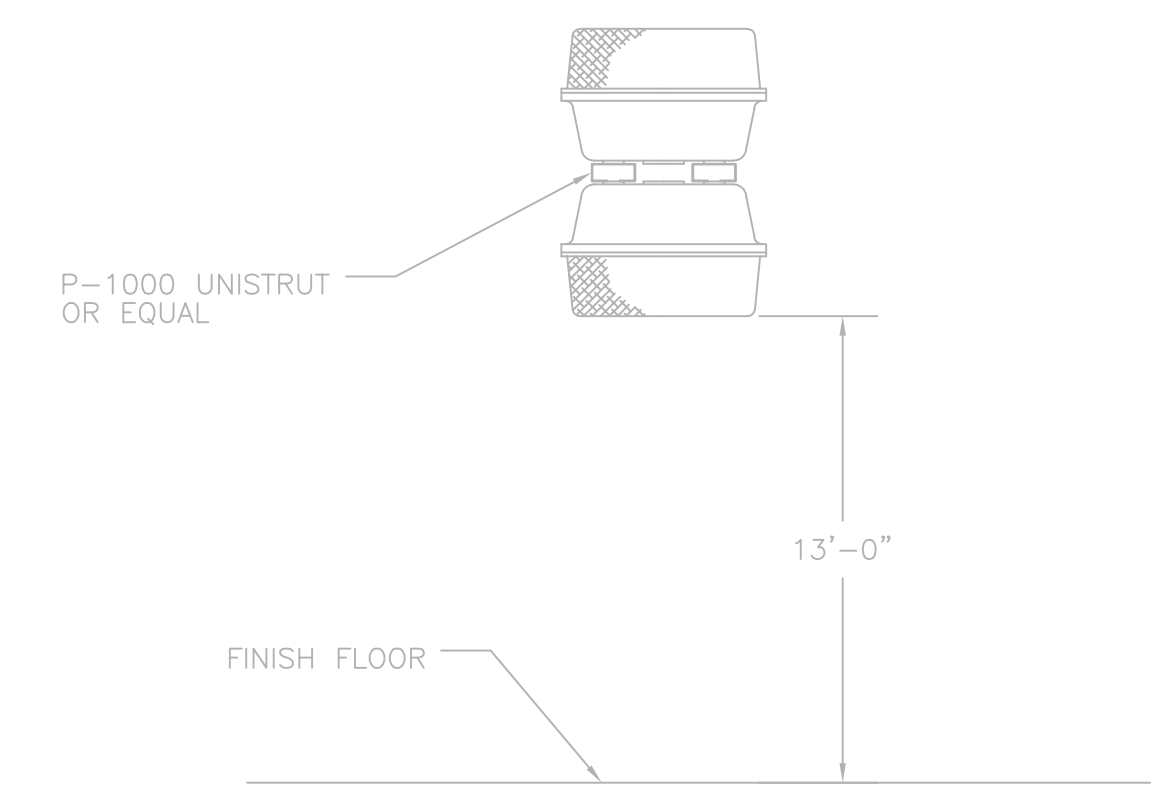


- GENERAL NOTES:
1. ALL CIRCUIT HOMERUNS FOR THIS SHEET INCLUDE THE SUFFIX "-CM", EVEN THOUGH NOT SHOWN.
 2. ALL OUTDOOR "E3" FIXTURES ARE ON CIRCUIT #20 IN "LP2-CM".
 3. HOMERUNS NOT OTHERWISE MARKED SHALL BE 2-#12,#12 GRD IN 3/4" C.
 4. UNLESS OTHERWISE NOTED, MOUNT ALL "CL1" LUMINAIRES AT 13' AFF.

- CODED NOTES:
- 1 MT. AT 36" AFF.
 - WEATHERPROOF, GFI RECEPTACLE
 - PUSHBUTTON SWITCHES FOR NORTH AND SOUTH BAYS.
 - TOTAL QTY. OF EIGHT RECEPTACLES.
 - TOTAL QTY. OF SIX RECEPTACLES.
 - SEE POLE DETAIL, THIS SHEET
 - PHOTO CELL FOR OUTDOOR FIXTURES "E3" ON CIRCUIT 20. PROVIDE NAMEPLATE "CKT.20,LP2-CM. PORCH LIGHT PHOTOCELL".
 - MGLC-MASTER GARAGE LIGHTING CONTACTORS (QTY.2)
4 POLE,120V,30 AMPERE MERCURY CONTACTS, ELECTRIC OPERATED, MECHANICALLY LATCHED. NEMA 1 ENCLOSURE WITH FUSED COIL CIRCUIT. NAME PLATE AS UNDERLINED ABOVE, ALSO, NAME PLATE FOR ALL CIRCUITS NUMBERS REQUIRED TO DEENERGIZE.
 - SEE LUMINAIRE MOUNTING DETAIL, THIS SHEET
 - WEATHERPROOF 2-BUTTON PUSHBUTTON WITH P/T PILOT AND NAMEPLATE FOR APPROX. (NORTH OR SOUTH) LIGHTING.
 - FIXTURES FED FROM MGLC, CIRCUIT LP2-2. FIXTURES TO BE MOUNTED AT 10'-0" AAF.
 - PUSHBUTTONS FOR NORTH AND SOUTH BAYS.
 - MOUNT FIXTURE AT 14'-0" AFF.
 - FIXTURE TO BE SURFACE MOUNTED.
 - MOUNT FIXTURE ABOVE DOOR



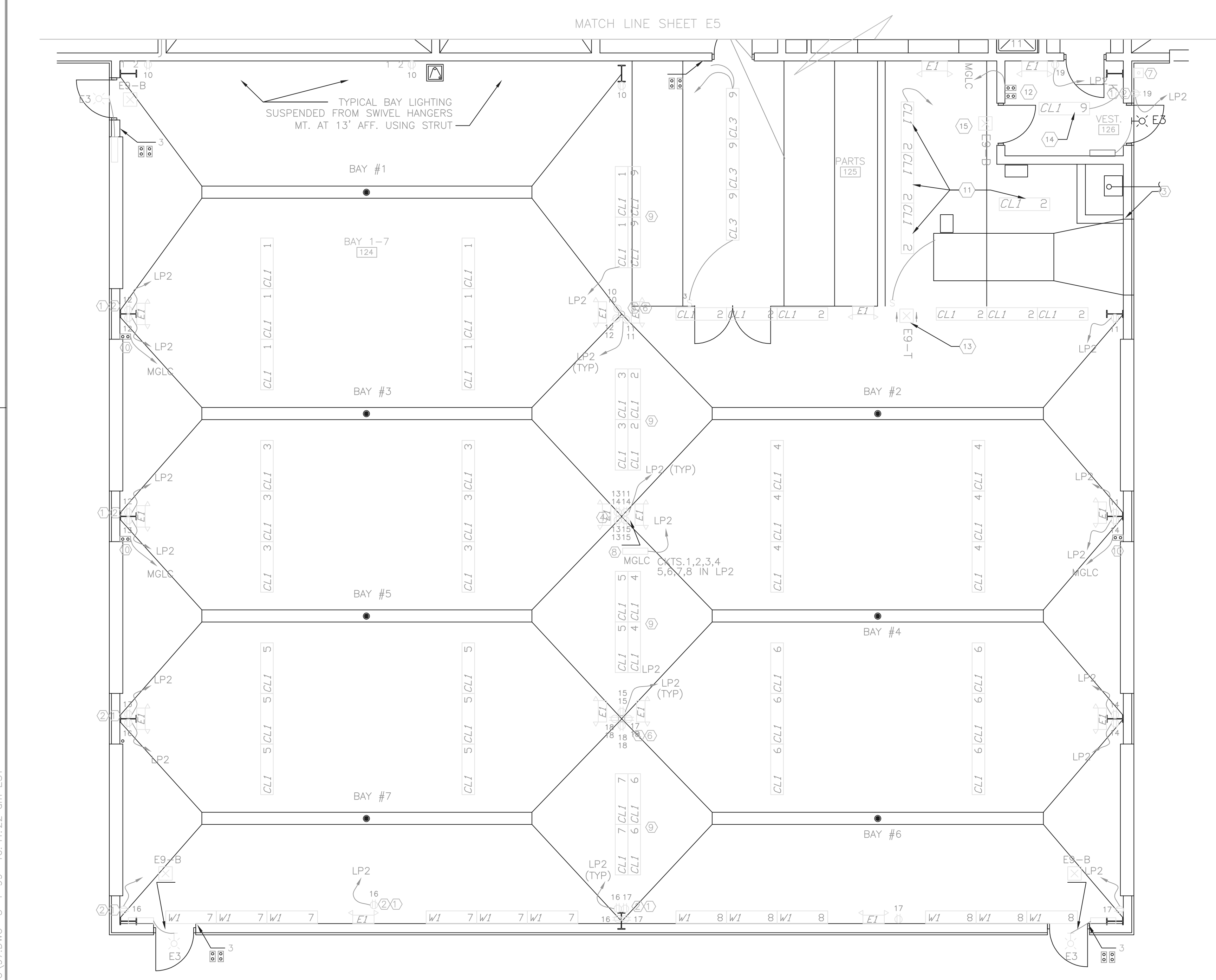
POLE DETAIL
SCALE" 1=1



LUMINAIRE MOUNTING DETAIL
NOT TO SCALE

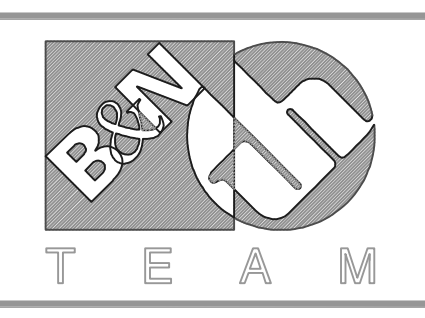
RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
FIRM BURGESS & NIPLE, LIMITED DATE 07/02/02 MO. / DAY / YR.



P:\PR24025\PMPS\REC\DWG\97.DWG 3-4-99 10:41:22 am EST

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited
Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	EDT
DRAWN BY:	MSW
CHECKED BY:	EDT
APPROVED BY:	EDT
DATE:	MAR 1999

CENTRAL MAINTENANCE BUILDING (EAST)
ELECTRICAL POWER & LIGHTING PLAN

SCALE:	
3/16"=1'-0"	
SHEET NO.	OF
97	100

LIGHTING LUMINAIRE SCHEDULE									
FIXTURE CODE ABBREVIATIONS					LAMP ABBREVIATIONS				
CL - CEILING MOUNT	P - PENDANT MOUNT	BL - SITE LIGHT	FLR - FLUORESCENT	LPS - LOW PRESSURE SODIUM	INC - INCANDESCENT	HPS - HIGH PRESSURE SODIUM	W - WALL MOUNT	X - EXIT SIGN	S - SURFACE
R - RECESSED	E - EMERGENCY	B - BOLLARD	MH - METAL HALIDE	TUN - TUNGSEN	MER - MERCURY VAPOR	AL - ALUMINUM			
FIXT CODE	MANUFACTURER	MODEL	OPTICS	LAMP TYPE	QTY	SIZE	VOLT	REMARKS	
CL1	COLUMBIA	LUN4-232-EB8 120-HUBK	HIGH IMPACT ACRYLIC DIFFUSER	FLR	2	32	120	PROVIDE OSRAM/SYLVANIA #F032/835 LAMPS OR EQUAL. PROVIDE ELECTRONIC BALLAST PROVIDE 1-1/2" CEILING SPACER (OPTION "1B") FOR THOSE FIXTURES SURFACE MOUNTED ON A FLAT CEILING. PROVIDE FIXTURE WITH SLOPE CEILING SWIVEL STEM HANGERS (OPTION SQ) WITH SUFFICIENT STEM LENGTH TO MOUNT FIXTURE AT 10'-0" AFF (UNLESS NOTED OTHERWISE) FOR THOSE FIXTURES MOUNTED ON A SLOPED CEILING. UL LISTED FOR WET LOCATIONS.	
CL3	COLUMBIA	K4-232-EB8 120-CSWG4	BARE LAMP STRIP	FLR	2	32	120	PROVIDE OSRAM/SYLVANIA #F032/835 LAMPS OR EQUAL. PROVIDE ELECTRONIC BALLAST. PROVIDE SWIVEL STEM HANGER WITH SUFFICIENT STEM LENGTHS TO MOUNT FIXTURE AT 8'-0" AFF TO BOTTOM OF FIXTURE.	
CL5	KIRLIN	RR90944 WITH FRESNEL LENS.	CLASS FRESNEL LENS	FLR	1	32	120	PROVIDE PHILIPS #PL-T32W/35/4P LAMP	
CL6	GE	H7X15F3CDD	CLEAR GLASS GLOBE WITH GUARD	INC	1	100	120	PROVIDE OSRAM/SYLVANIA #100A21 LAMP OR EQUAL.	
E1	PRESCOLITE	EDP3-H0612	EMERGENCY EGRESS FLOOD	INC	2	12	120	PAR 36, 6 VOLT, 12 WATT, HALOGEN LAMPS FURNISHED WITH FIXTURE. NEMA 4X HOUSING WALL MOUNTED AT 7'-6" AFF UNLESS NOTED 90 MIN. BATTERY WITH TEST SWITCH.	
E3	DESIGNPLAN	PSE8A01-XX-10P	EXTERIOR EGRESS	FLR	2	13	120	CONTRACTOR TO COORDINATE COLOR FOR EACH BLDG. WITH ENGINEER. WALL MOUNT 12" ABOVE DOOR. PROVIDE REMOTE BALLAST WITH 90 MIN. BATTERY WITH TEST SWITCH.	
E4	YORKLITE	AR2E12BE-120	EMERGENCY FLOOD	INC	2	12	6	6 VOLT, 12 WATT, HALOGEN LAMPS FURNISHED WITH FIXTURE. RECESSED CLG. MOUNTED. 90 MIN. BATTERY BACK UP W/ TEST SWITCH	
E6	YORKLITE	A2E120TBE	EMERGENCY FLOOD	INC	2	12	6	6 VOLT, 12 WATT, HALOGEN LAMPS FURNISHED WITH FIXTURE. WALL MOUNT AT 7'-6" AFF. UNLESS OTHERWISE NOTED. 90 MIN. BATTERY BACK UP W/ TEST SWITCH	
E8	PRESCOLITE	NEX1RW3-EN-120	CLEAR POLYCARBONATE COVER WITH RED LETTERS	FLR	2	5	120	LAMPS FURNISHED WITH FIXTURE. WALL MOUNT NEMA 4X EXIT LIGHT ABOVE DOOR.	
E9	PRESCOLITE	LED-R-1-NB-B	BRUSHED ALUMINUM STENCIL FACE WITH RED LETTERS	LED LAMPS FURNISHED WITH FIXTURE			120	PROVIDE ARROWS PER PLAN. EXIT LIGHT E9-E= EDGE MOUNT, DOUBLE FACE EXIT LIGHT E9-B= BACK MOUNT, SINGLE FACE EXIT LIGHT E9-T= TOP MOUNT, DOUBLE FACE	

LIGHTING LUMINAIRE SCHEDULE (CONTINUED)									
FIXTURE CODE ABBREVIATIONS					LAMP ABBREVIATIONS				
CL - CEILING MOUNT	P - PENDANT MOUNT	BL - SITE LIGHT	FLR - FLUORESCENT	LPS - LOW PRESSURE SODIUM	INC - INCANDESCENT	HPS - HIGH PRESSURE SODIUM	W - WALL MOUNT	X - EXIT SIGN	S - SURFACE
R - RECESSED	E - EMERGENCY	B - BOLLARD	MH - METAL HALIDE	TUN - TUNGSEN	MER - MERCURY VAPOR	AL - ALUMINUM			
FIXT CODE	MANUFACTURER	MODEL	OPTICS	LAMP TYPE	QTY	SIZE	VOLT	REMARKS	
P1	LITECONTROL	PID90XXT8 PALSS30XXTW 120	SEMI-SPECULAR ALUMINUM PARABOLIC BAFFLES	FLR	3	34	120	PROVIDE THREE OSRAM/SYLVANIA #F032/835 LAMPS FOR EACH 4'-3" LENGTH OF LIGHTED SECTIONS. PROVIDE FIXTURE FINISH PER ARCHITECT'S SELECTION. SUBMIT MANUFACTURER'S STANDARD COLOR SELECTION CHART. PROVIDE STRAIGHT ROWS OF FIXTURES WITH TWO SC/P6 SWIVEL HANGERS (ONE AT EACH END, ONE POWER FEED) AND ADDITIONAL ACC INTERIM SUPPORT CABLES AS RECOMMENDED BY MANUFACTURER. PROVIDE ON TWO-LAMP AND ONE SINGLE-LAMP BALLAST FOR EACH LUMINAIRE	
R1	COOPER/METALUX	2P5GX332S 39MI-120V-EB8		FLR	1	32	120	PROVIDE OSRAM/SYLVANIA #F032/835 LAMP OR EQUAL. PROVIDE ELECTRONIC BALLAST	
R2	COOPER/METALUX	2P2GX332S 26MI-120V-EB8		FLR	2	32	120	PROVIDE OSRAM/SYLVANIA #F032/835 LAMP OR EQUAL. PROVIDE ELECTRONIC BALLAST	
R3	COOPER/METALUX	2P5GX332S 39MI-120V-EB8		FLR	3	32	120	PROVIDE OSRAM/SYLVANIA #F032/835 LAMP OR EQUAL. PROVIDE ELECTRONIC BALLAST PROVIDE ON TWO-LAMP AND ONE SINGLE-LAMP BALLAST FOR EACH LUMINAIRE	
W1	COLUMBIA	LUN4-232-EB8 120	HIGH IMPACT ACRYLIC DIFFUSER	FLR	2	32	120	PROVIDE OSRAM/SYLVANIA #F032/835 LAMPS OR EQUAL. PROVIDE ELECTRONIC BALLAST UL LISTED FOR WET LOCATIONS. PROVIDE EACH FIXTURE WITH TWO UNISTRUT #P1944 MOUNTING BRACKETS (PROVIDE EACH BRACKET WITH APPROPRIATE MOUNTING HOLES FOR ATTACHMENT OF FIXTURE).	
W2	LITHONIA	W232120 AE	CLEAR PRISMATIC DOWN LENS, WHITE OPAL UP LENS	FLR	2	32	120	PROVIDE OSRAM/SYLVANIA #F032/835 LAMPS OR EQUAL. PROVIDE ELECTRONIC BALLAST. PROVIDE BRUSHED ALUMINUM AND CAPS. WALL MOUNT ABOVE MIRROR.	

PANELBOARD "LP2-CM"										
208/120 V, 3Ø, 4W, 225 AMP BUS					PANEL LOADING SCHEDULE					
150 AMP MAIN: CB (X) SW () LUGS ()					CONNECTED				DEMAND	
FEED THRU LUGS ()					PHASE	A	B	C	TOTAL	
SURFACE (X) FLUSH () COLUMN TYPE ()					AMPS	-	-	-	-	-
ENCLOSURE: NEMA 1(X) 3R() 12() 4X()					KVA	-	-	-	-	-
CIRCUIT DESCRIPTION	LOAD AMPS	BKR./POLES	CKT. NO.	BKR./POLES	LOAD AMPS	CIRCUIT DESCRIPTION				
LTS- NORTH BAYS	11.6	20/1	1 2	20/1	10.0	LTS- SOUTH BAYS				
LTS- NORTH BAYS	6.6	20/1	3 4	20/1	6.6	LTS- SOUTH BAYS				
LTS- NORTH BAYS	6.6	20/1	5 6	20/1	6.6	LTS- SOUTH BAYS				
LTS- NORTH BAYS	6.6	20/1	7 8	20/1	5.0	LTS- SOUTH BAYS				
LTS-RM. 125,119	5.0	20/1	9 10	20/1	10	RECEPT- NORTH BAYS				
RECEPT- SOUTH BAYS	12.5	20/1	11 12	20/1	12.5	RECEPT- NORTH BAYS				
RECEPT- NORTH BAYS	12.5	20/1	13 14	20/1	12.5	RECEPT- SOUTH BAYS				
RECEPT- SOUTH BAYS	10	20/1	15 16	20/1	10	RECEPT- NORTH BAYS				
RECEPT- SOUTH BAYS	12.5	20/1	17 18	20/1	12.5	RECEPT- NORTH BAYS				
RECEPT-RM. 126	5.0	20/1	19 20	20/1	-	OUTDOOR EGRESS LIGHTS				
EGRESS LIGHTS	1	20/1	21 22	-	-					
-	-	-	23 24	-	-					
-	-	-	25 26	-	-					
-	-	-	27 28	-	-					
-	-	-	29 30	-	-					
-	-	-	31 32	-	-					
-	-	-	33 34	-	-					
-	-	-	35 36	-	-					
-	-	-	37 38	-	-					
-	-	-	39 40	-	-					
-	-	-	41 42	-	-					

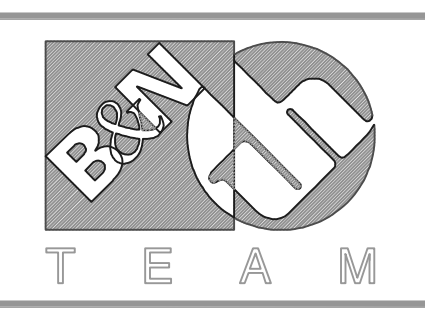
PANELBOARD "LP1-CM"										
208/120 V, 3Ø, 4W, 225 AMP BUS					PANEL LOADING SCHEDULE					
150 AMP MAIN: CB (X) SW () LUGS ()					CONNECTED				DEMAND	
FEED THRU LUGS ()					PHASE	A	B	C	TOTAL	
SURFACE (X) FLUSH () COLUMN TYPE ()					AMPS	117.6	106.9	97.9	-	-
ENCLOSURE: NEMA 1(X) 3R() 12() 4X()					KVA	14.04	12.8	11.7	38.7	-
CIRCUIT DESCRIPTION	LOAD AMPS	BKR./POLES	CKT. NO.	BKR./POLES	LOAD AMPS	CIRCUIT DESCRIPTION				
LTS-RM. 104,105,106	11.3	20/1	1 2	20/1	12.5	LTS-RM. 103				
LTS-RM. 103	13.8	20/1	3 4	20/1	-	SPARE				
LTS-RM. 101,102	2.1	20/1	5 6	20/1	4.0	LTS-RM. 100				
LTS-RM. 100	8.0	20/1	7 8	20/1	12.5	LTS-RM. 121				
LTS-RM. 122	15.0	20/1	9 10	20/1	5.0	LTS-RM. 121				
LTS-RM. 114,115,116,117	8.0	20/1	11 12	20/1	10	LTS-RM. 113,118,119,123				
LTS-RM. 109,111	4.2	20/1	13 14	20/1	5.0	LTS-RM. 110,112				
LTS-RM. 107,108,120	6.7	20/1	15 16	20/1	12.5	RECEPT-RM. 103,104,105,106				
RECEPT-RM. 104,105,106	12.5	20/1	17 18	20/1	12.5	RECEPT-RM. 103,104,105,106				
RECEPT-RM. 118-123	12.5	20/1	19 20	20/1	12.5	RECEPT-RM. 116,117,118,119				
RECEPT-RM. 103	12.5	20/1	21 22	20/1	12.5	RECEPT-RM. 102,103				
RECEPT-RM. 100,101	12.5	20/1	23 24	20/1	12.5	RECEPT-RM. 100				
RECEPT-RM. 122	10	20/1	25 26	20/1	10	RECEPT-RM. 122				
RECEPT-RM. 121,122	10	20/1	27 28	20/1	12.5	RECEPT-RM. 121				
RECEPT-RM. 113,114,115	12.5	20/1	29 30	20/1	12.5	RECEPT-RM. 109,110,111,112				
RECEPT-RM. 108	10	20/1	31 32	20/1	12.5	RECEPT-RM. 107,118				
-	-	-	33 34	-	-					
-	-	-	35 36	-	-					
-	-	-	37 38	-	-					
-	-	-	39 40	-	-					

RECORD DRAWING

NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
 FIRM BURGESS & NIPLE, LIMITED DATE 07/19/02 MO. / DAY / YR.

P:\P24025\PM\STRECDWG\98.DWG 4-27-99 2:18:15 pm EST

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited
 Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	MSW
DRAWN BY:	MSW
CHECKED BY:	EDT
APPROVED BY:	EDT
DATE:	MAR 1999

CENTRAL MAINTENANCE FACILITY LIGHTING
 LIGHTING SHEDULE AND PANELBOARD SCHEDULES

SCALE:	NONE
SHEET NO.	98
OF	100

LIGHTING LUMINAIRE SCHEDULE														
FIXTURE CODE ABBREVIATIONS					LAMP ABBREVIATIONS									
CL	-	CEILING MOUNT	P	-	PENDANT MOUNT	S	-	SITE LIGHT	FLR	-	FLUORESCENT LPS	LPS	-	LOW PRESSURE SODIUM
R	-	RECESSED	E	-	EMERGENCY	B	-	BOLLARD	INC	-	INCANDESCENT HPS	HPS	-	HIGH PRESSURE SODIUM
W	-	WALL MOUNT	X	-	EXIT SIGN	M	-	MERCURY VAPOR	MER	-	MERCURY VAPOR	HAL	-	HALOGEN
						MH	-	METAL HALIDE	TUN	-	TUNGSTEN			
FIXT CODE	MANUFACTURER	MODEL	OPTICS	LAMP TYPE	QTY	SIZE	VOLT	REMARKS						
SL 1	RUUD LIGHTING	WPR2515-3FBZ	TYPE III	HPS	1	150W	208	- PROVIDE 150W HPS LAMP - PROVIDE 16"x16" WEDGE LUMINAIRE - PROVIDE TYPE III OPTICS - PROVIDE 208 VOLT HIGH POWER FACTOR BALLAST WITH DUAL FUSING - PROVIDE 20"x4"x4" HINGED STEEL POLES - PROVIDE E-COAT EPOXY PRIMER WITH BRONZE ACRYLIC POWDER TOP COAT ON LUMINAIRE & POLE						
SL 2	RUUD LIGHTING	WPR2592-3FBZ	TYPE II/III FIELD ADJUSTABLE	HPS	1	250W	208	- PROVIDE 250W HPS LAMP - PROVIDE 22"x22" WEDGE LUMINAIRE - PROVIDE TYPE II/III FIELD ADJUSTABLE OPTICS - PROVIDE 208 VOLT HIGH POWER FACTOR BALLAST WITH DUAL FUSING - PROVIDE 20"x4"x4" STEEL HINGED POLE - PROVIDE E-COAT EPOXY PRIMER WITH BRONZE ACRYLIC POWDER TOP COAT ON LUMINAIRE & POLE						
W3	RUUD LIGHTING	WACW510-3FBZ	TYPE IV WITH BACKLIGHT SHIELD	HPS	1	100W	208	- PROVIDE 150W HPS LAMP - PROVIDE 16"x16" WEDGE LUMINAIRE - PROVIDE TYPE IV OPTICS WITH BACKLIGHT SHIELD - PROVIDE 208 VOLT HIGH POWER FACTOR BALLAST WITH DUAL FUSING - PROVIDE E-COAT EPOXY PRIMER WITH BRONZE ACRYLIC POWDER TOP COAT						

NOTE: FOR INTERIOR LIGHTING LUMINAIRES, SEE SHEET 98

RECORD DRAWING

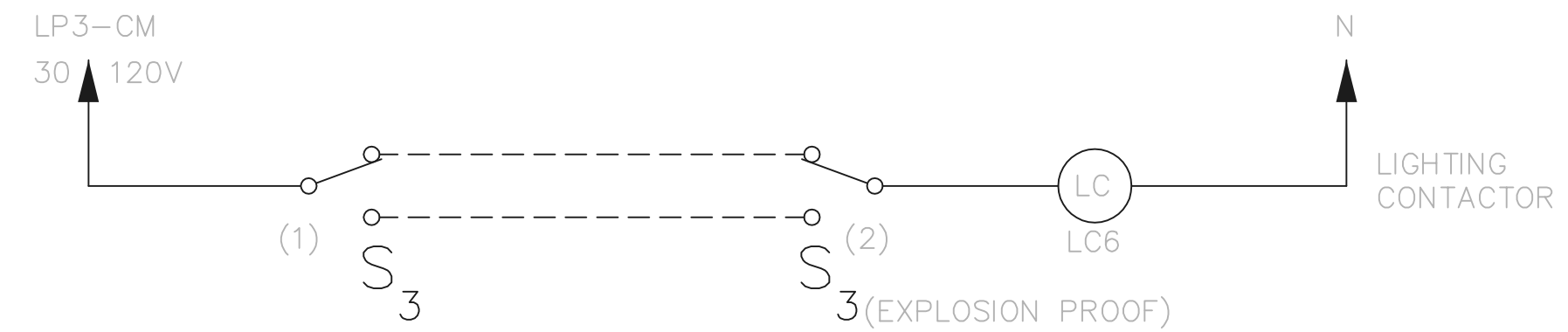
NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".
 FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
 MO. / DAY / YR.

© BNWW0201

LP4-CM: 150 MAIN CB 208/120V 3-PH/4W 225A BUS						
EQUIPMENT DESCRIPTION	AMPS.	BREAKER POLES	CIRCUIT NUMBER	BREAKER POLES	AMPS.	EQUIPMENT DESCRIPTION
TUBE HEATER CONTROL PANEL	25.8	35/1	1	2	20/1	0.5 RECIRCULATION PUMP P4 (L)
AIR MIXER MOD D-101	3.0	20/1	3	4	20/1	0.5 RECIRCULATION PUMP P6 (L)
RECIRCULATION PUMP P3 (L)	0.5	20/1	5	6	20/1	---
RECIRCULATION PUMP P5 (L)	0.5	20/1	7	8	20/1	---
SECURITY CONTROL PANEL	10.0	20/1	9	10	20/1	4.4 EXHAUST FAN EF-102
EXHAUST FAN EF-101	5.8	20/1	11	12	20/1	2.9 EXHAUST FAN EF-104
EXHAUST FAN EF-103	2.9	20/1	13	14	20/1	1.9 EXHAUST FAN EF-107
EXHAUST FAN EF-105	2.9	20/1	15	16	20/1	1.0 INTAKE LOUVER MOD IL-103
EXHAUST FAN EF-108	1.9	20/1	17	18	20/1	1.0 INTAKE LOUVER MOD IL-105
RECIRCULATION FAN RF-111	1.9	20/1	19	20	20/1	3.0 DUCT FURN./POWER VENT DF-101
EXHAUST FAN EF-113	0.5	20/1	21	22	20/1	1.0 EXHAUST LOUVER MOD EL-102
OUTDOOR STORAGE AREA LIGHTING	7.2	20/1	23	24	20/1	1.0 EXHAUST LOUVER MOD EL-104
OUTDOOR STORAGE AREA LIGHTING	6.5	20/2	25	26	20/1	---
TELEPHONE SYSTEM UPS	6.5	---	27	28	20/2	1.5 FIBEROPTIC TERMINAL PANEL & FIBER STORAGE & DRIVE ENTRANCE
EXHAUST FAN EF-114	1.5	20/1	29	30	20/1	1.5 FUEL STORAGE & DRIVE ENTRANCE
DIFFERENTIAL PRESSURE TRANS. (APIT)	---	20/1	31	32	20/1	---
SPARE		20/1	33	34	20/1	SPARE
SPARE		20/1	35	36	20/1	SPARE
SPARE		20/1	37	38	20/1	SPARE
SPARE		20/1	39	40	20/1	SPARE
SPARE		20/1	41	42	20/1	SPARE

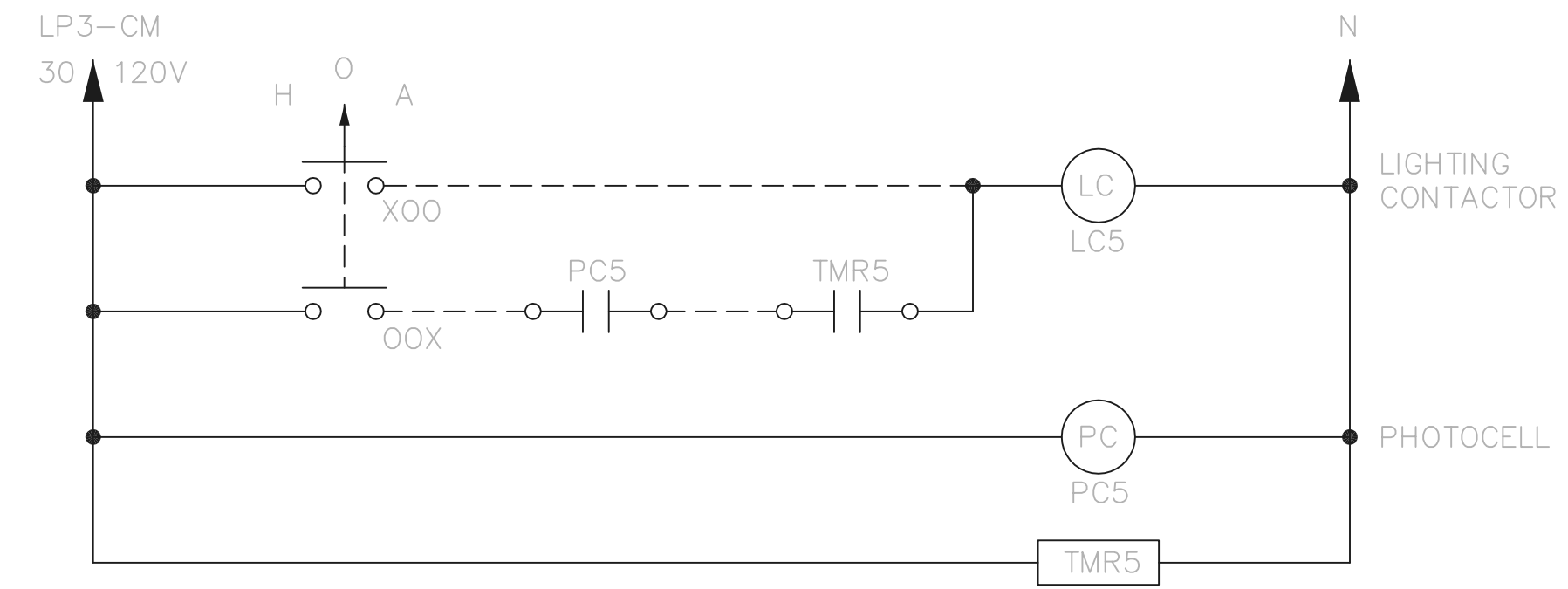
(L) PROVIDE CIRCUIT BREAKER PADLOCK HARDWARE

LP3-CM: 150 MAIN CB 208/120V 3-PH/4W 225A BUS						
EQUIPMENT DESCRIPTION	AMPS.	BREAKER POLES	CIRCUIT NUMBER	BREAKER POLES	AMPS.	EQUIPMENT DESCRIPTION
CEILING HEATER CH-1	9.6	20/2	1	2	20/2	9.6 CEILING HEATER CH-2
CEILING HEATER CH-3	9.6	20/2	3	4	20/2	9.6
ELECTRIC BASEBOARD HTR EH-1	9.6	20/2	5	6	20/2	2.7 ELECTRIC BASEBOARD HTR EH-2
ELECTRIC BASEBOARD HTR EH-3	2.7	20/2	7	8	20/2	2.7
ELECTRIC BASEBOARD HTR EH-5	2.7	20/2	9	10	20/2	2.7 ELECTRIC BASEBOARD HTR EH-4
ELECTRIC BASEBOARD HTR EH-7	2.7	20/2	11	12	20/2	2.7
ELECTRIC BASEBOARD HTR EH-9	2.7	20/2	13	14	20/2	2.7 ELECTRIC BASEBOARD HTR EH-6
ELECTRIC BASEBOARD HTR EH-11	2.7	20/2	15	16	20/2	2.7
ELECTRIC BASEBOARD HTR EH-13	2.7	20/2	17	18	20/2	2.7 ELECTRIC BASEBOARD HTR EH-8
ELECTRIC BASEBOARD HTR EH-15	2.7	20/2	19	20	20/2	2.7
ELECTRIC BASEBOARD HTR EH-17	2.7	20/2	21	22	20/2	6.7 SITE LIGHTING S.POLE MOUNTED (6)
ELECTRIC BASEBOARD HTR EH-19	2.7	20/2	23	24	20/2	6.7
ELECTRIC BASEBOARD HTR EH-21	2.4	20/2	25	26	20/2	1.9 SITE LIGHTING S.WALL MOUNTED (4)
ELECTRIC BASEBOARD HTR EH-23	2.4	20/2	27	28	20/2	1.9
ELECTRIC BASEBOARD HTR EH-25	2.4	20/2	29	30	20/1	---
ELECTRIC BASEBOARD HTR EH-27	2.4	20/2	31	32	20/1	---
ELECTRIC BASEBOARD HTR EH-29	2.4	20/1	33	34	20/1	SPARE
ELECTRIC BASEBOARD HTR EH-31	2.4	20/1	35	36	20/1	SPARE
ELECTRIC BASEBOARD HTR EH-33	2.4	20/1	37	38	20/1	SPARE
ELECTRIC BASEBOARD HTR EH-35	2.4	20/1	39	40	20/1	SPARE
ELECTRIC BASEBOARD HTR EH-37	2.4	20/1	41	42	20/1	SPARE

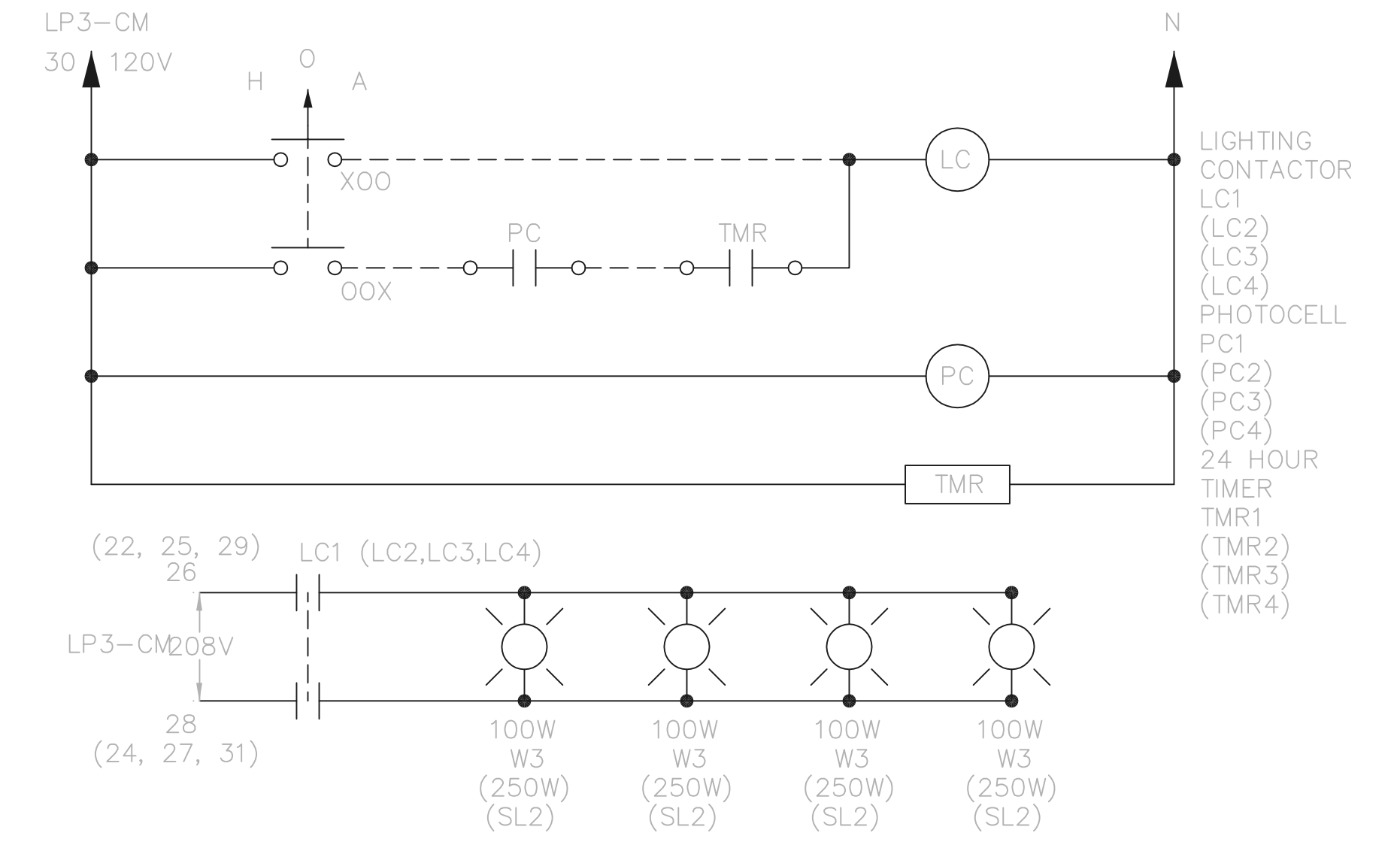


- (1) LOCATED NEXT TO PEDESTRIAN DOOR AT NORTHEAST CORNER OF VEHICLE SERVICE AREA.
- (2) LOCATED AT PEDESTRIAN GATE AT NORTHEAST CORNER OF OUTSIDE STORAGE AREA.

CENTRAL MAINTENANCE FACILITY
 POLE MOUNTED SITE LIGHTING - OUTSIDE STORAGE AREA CONTROL SCHEMATIC



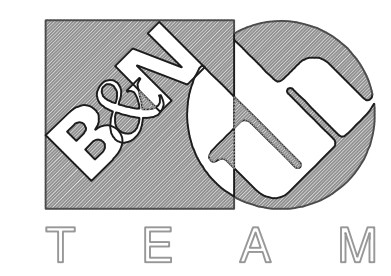
CENTRAL MAINTENANCE FACILITY
 POLE MOUNTED SITE LIGHTING - DRIVEWAY GATE AND FUEL STORAGE LIGHTS CONTROL SCHEMATIC



CENTRAL MAINTENANCE FACILITY
 WALL MOUNTED SITE LIGHTING - SOUTH CONTROL SCHEMATIC
 (TYP. FOR NORTH SIDE AND POLE MOUNTED NORTH PARKING, AND SOUTH PARKING)

THIS LINE SCALES 1" WHEN PLOTTED TO NOTED SCALE
 TOL-4714EB3 02/27/02 04-V02 P:\PR24025\NMP\STARECDWG\98.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited
 Jones & Henry Engineers, Ltd.

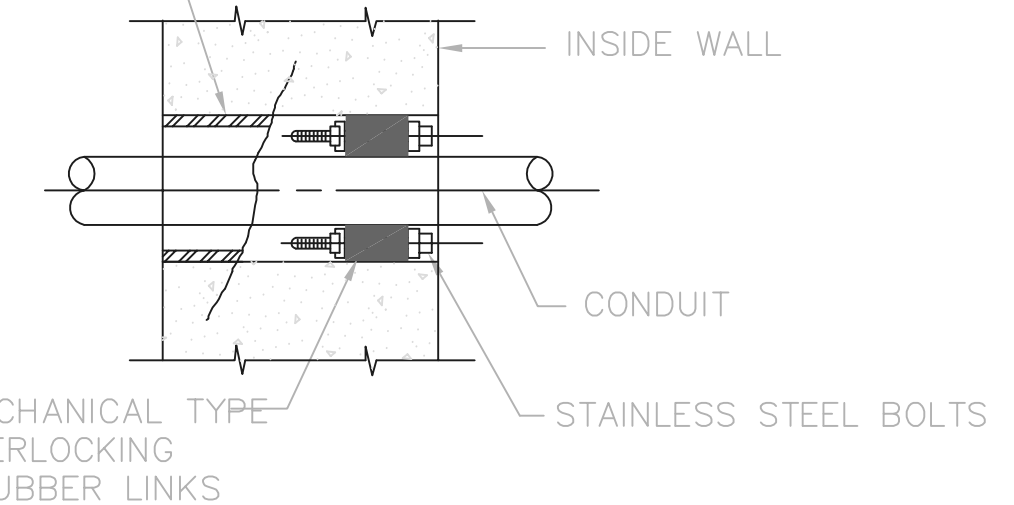
DELAWARE COUNTY, OHIO
 ALUM CREEK PUMP STATION
 & CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	DLH
DRAWN BY:	KMH
CHECKED BY:	
APPROVED BY:	
DATE:	1999

CENTRAL MAINTENANCE FACILITY
 ELECTRICAL
 SITE LIGHTING LUMINAIRE SCHEDULE
 AND CONTROL SCHEMATICS,
 AND PANELBOARDS LP3-CM & LP4-CM

SCALE:	NONE
SHEET NO.	99
OF	100

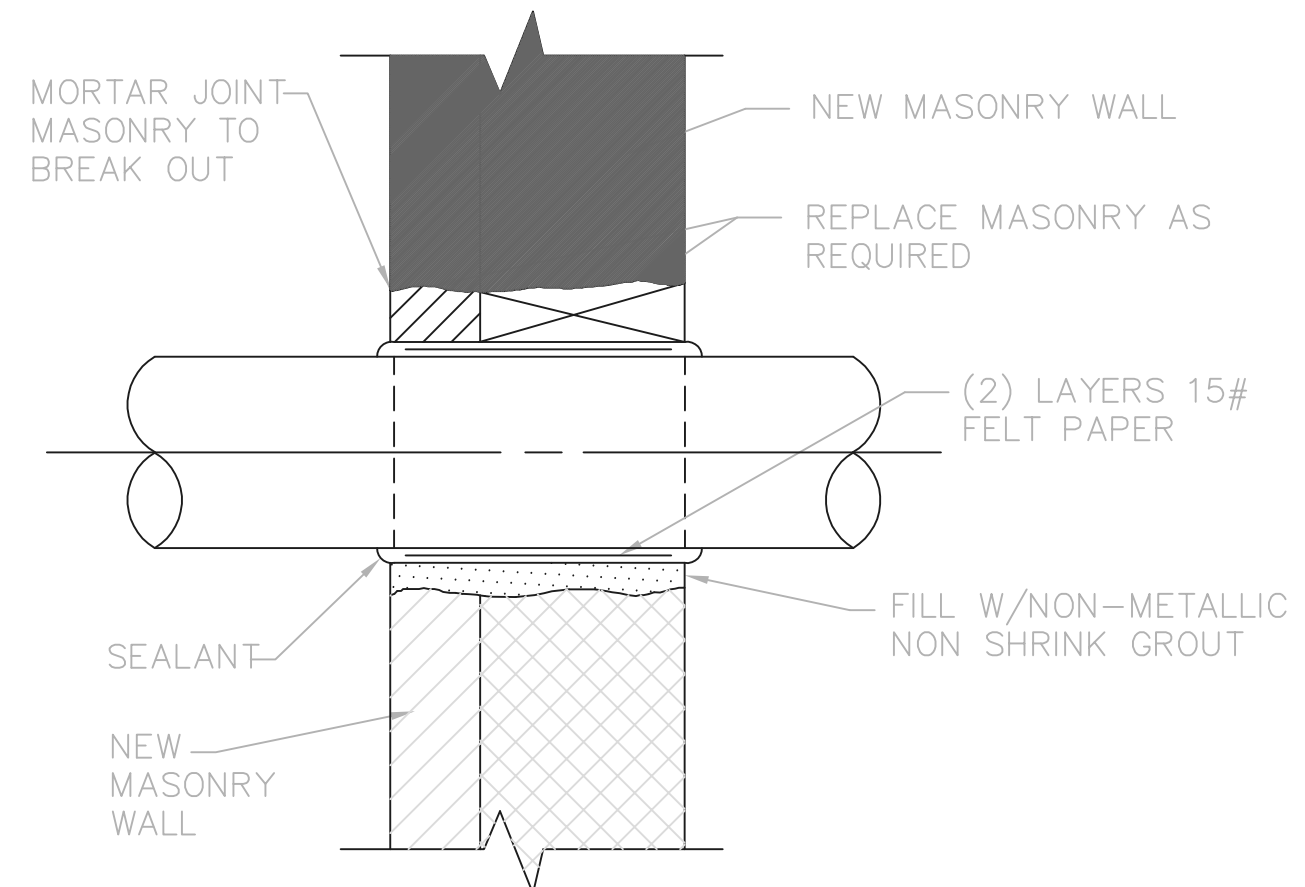
SHEET METAL OR LAMINATED FIBER CONCRETE FORM ADEQUATELY BRACED IN FIELD AND STRIPPED OUT BEFORE INSTALLING CONDUIT, EXCEPT IN MASONRY WHERE SLEEVE SHALL BE 3/16" STEEL AND SHALL BE INSTALLED WITH MASONRY. CONTRACTOR MAY USE A THERMOPLASTIC WALL SLEEVE, CENTURY-LINE SLEEVE BY THUNDERLINE CORP., OR EQUAL, TO BE LEFT IN PLACE.



TYPE C

- NOTE:
- CONCRETE SHALL BE WORKED IN AND VIBRATED TO ELIMINATE ALL VOIDS IN CONCRETE - IF VOIDS DO REMAIN, FILL WITH GROUT BEFORE INSTALLING CONDUIT AND RUBBER SEALS.
 - UNLESS OTHERWISE SHOWN ON THE DRAWINGS ALL INTERIOR WALL PENETRATIONS SHALL USE TYPE C CONDUIT SLEEVE.

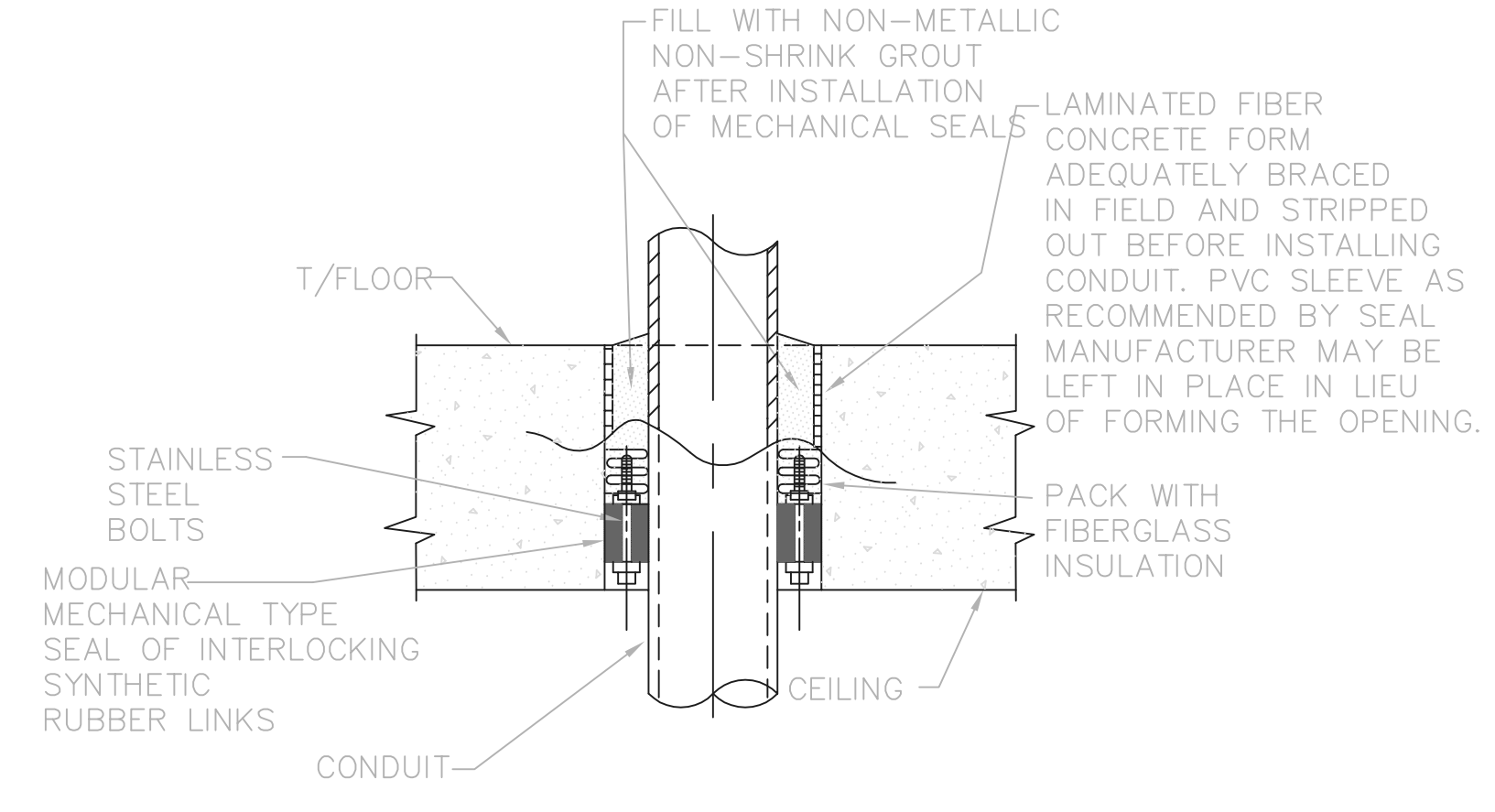
CONDUIT SLEEVE



TYPE F

- NOTE:
- FOR EXTERIOR WALLS, FACE COURSES TO BE MASONRY AND MIDDLE COURSE TO BE FILLED WITH FIBERGLASS INSULATION

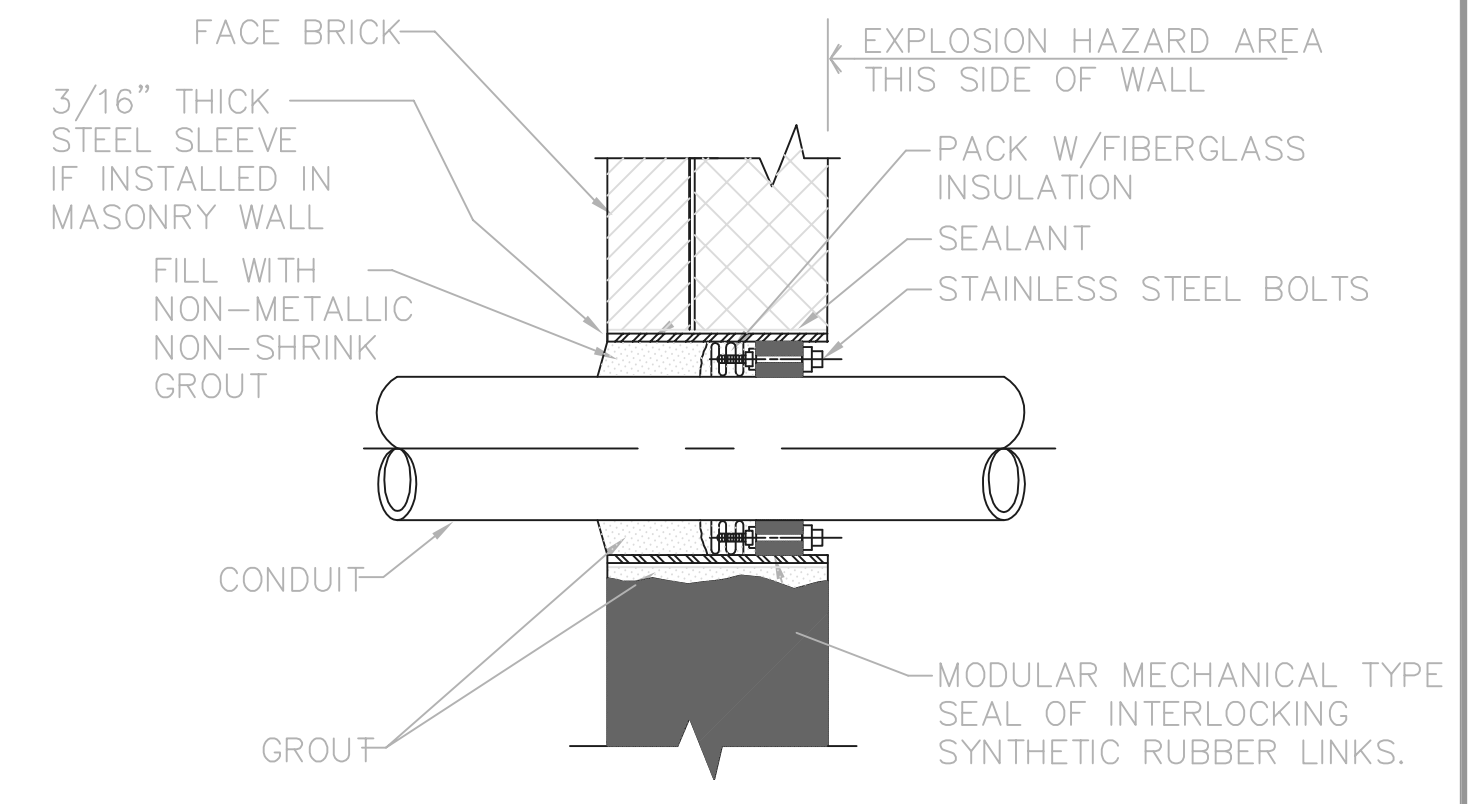
CONDUIT SLEEVE THRU NEW MASONRY WALL



TYPE G (GAS TIGHT)

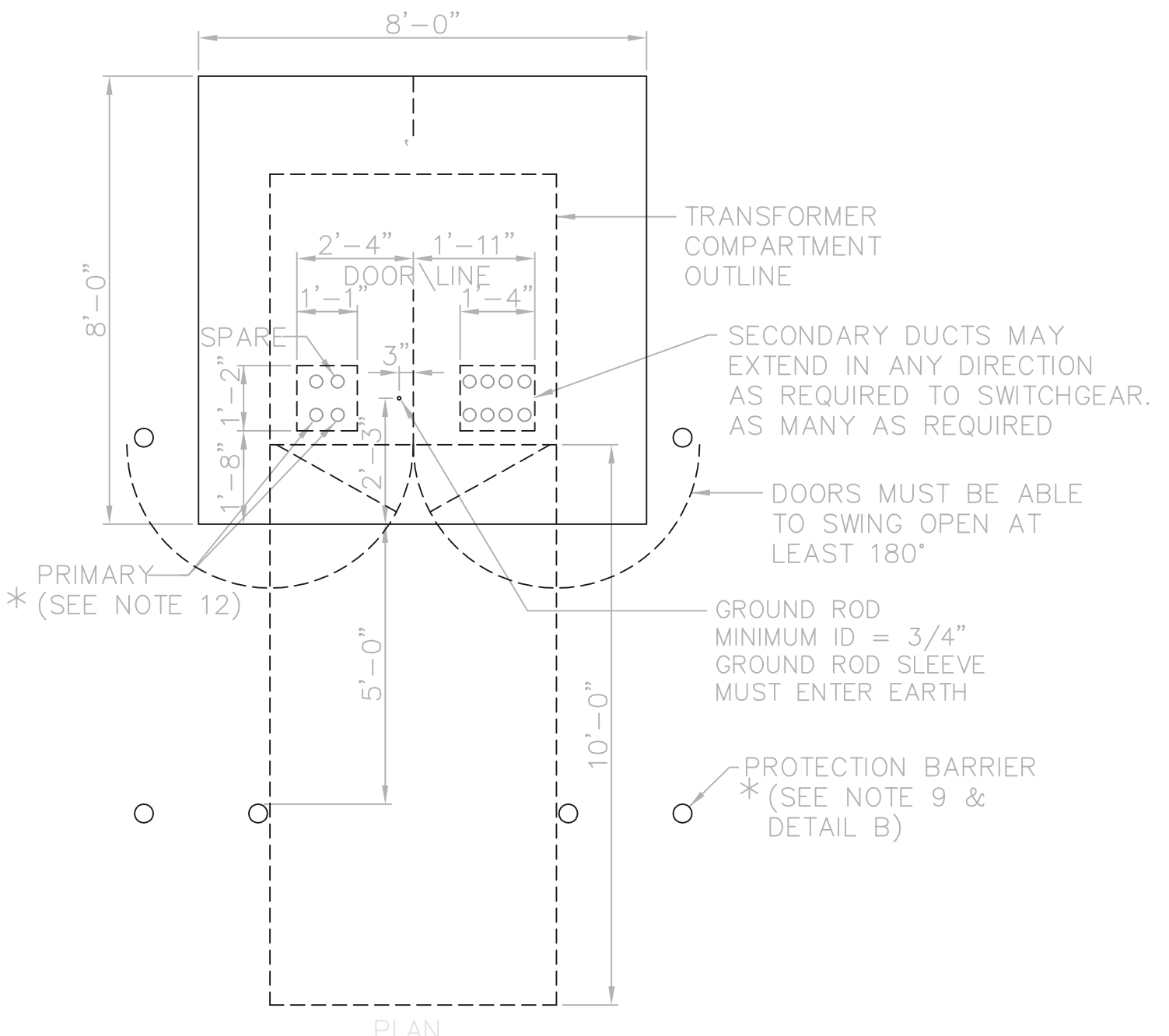
- NOTE:
- CONCRETE SHALL BE WORKED IN AND VIBRATED TO ELIMINATE ALL VOIDS IN CONCRETE - IF VOIDS DO REMAIN, FILL WITH GROUT BEFORE INSTALLING CONDUIT AND RUBBER SEALS

FLOOR SLEEVE

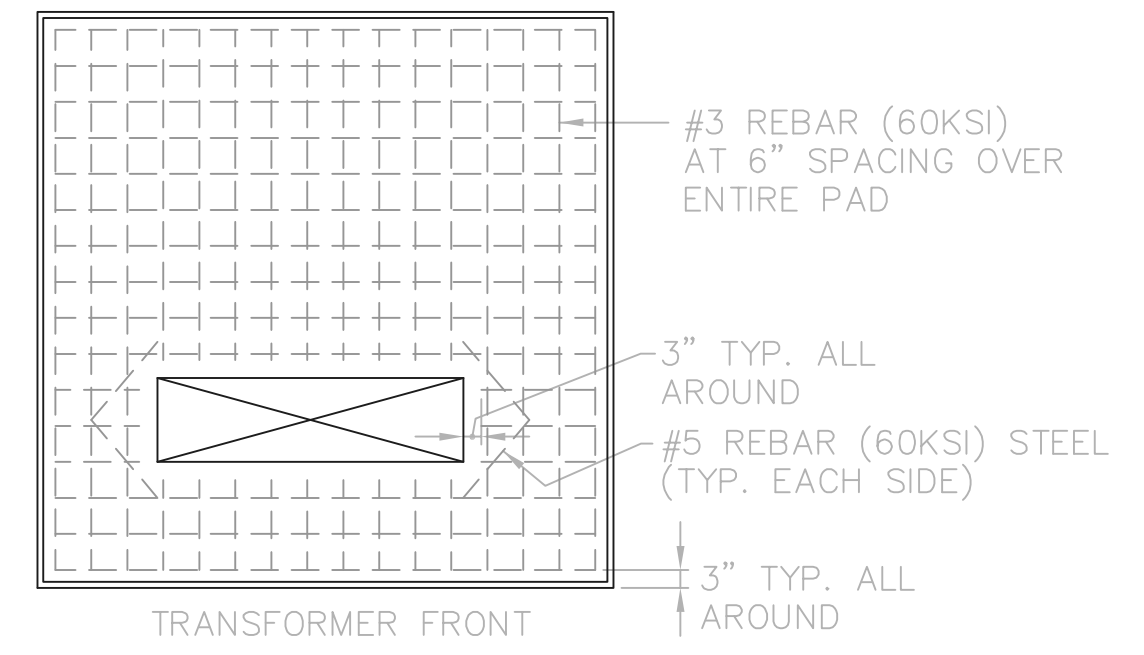


TYPE H (GAS TIGHT)

MASONRY WALL SLEEVE



PLAN



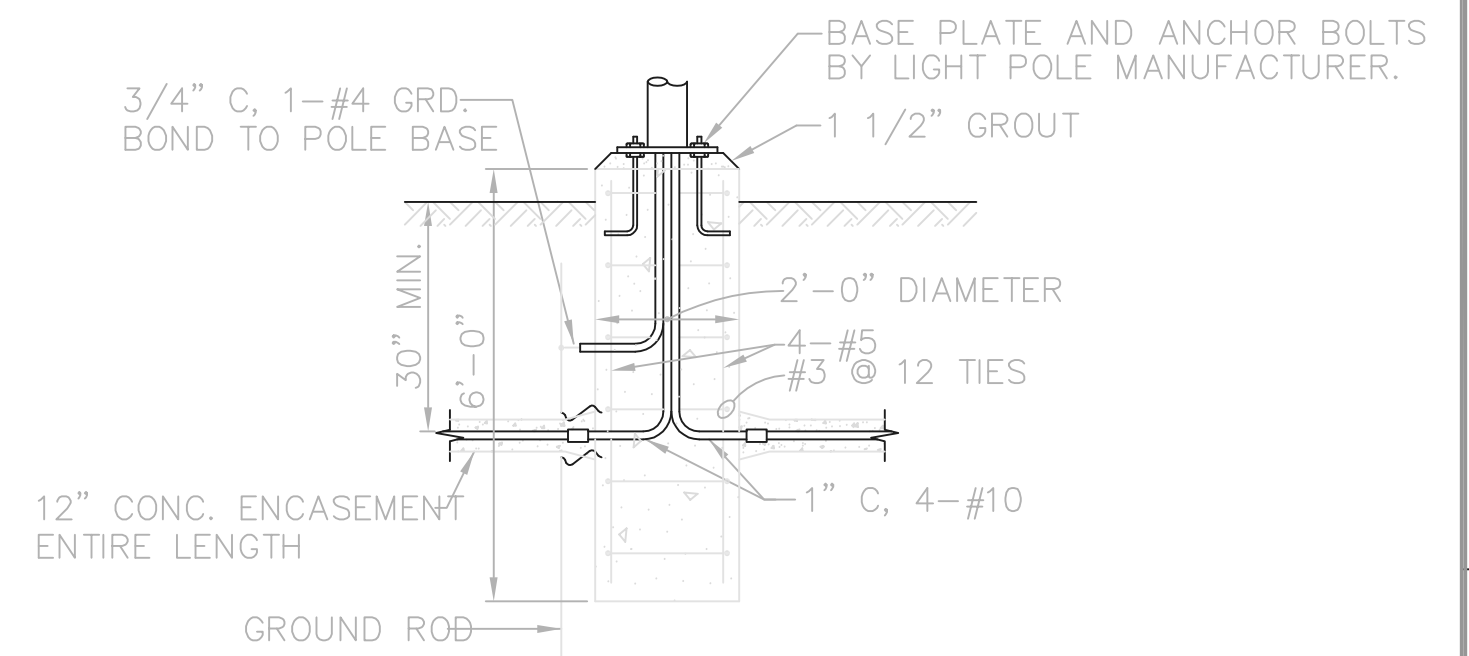
TYPICAL PAD REBAR
SEE FOUNDATION REQUIREMENTS

RECORD DRAWING

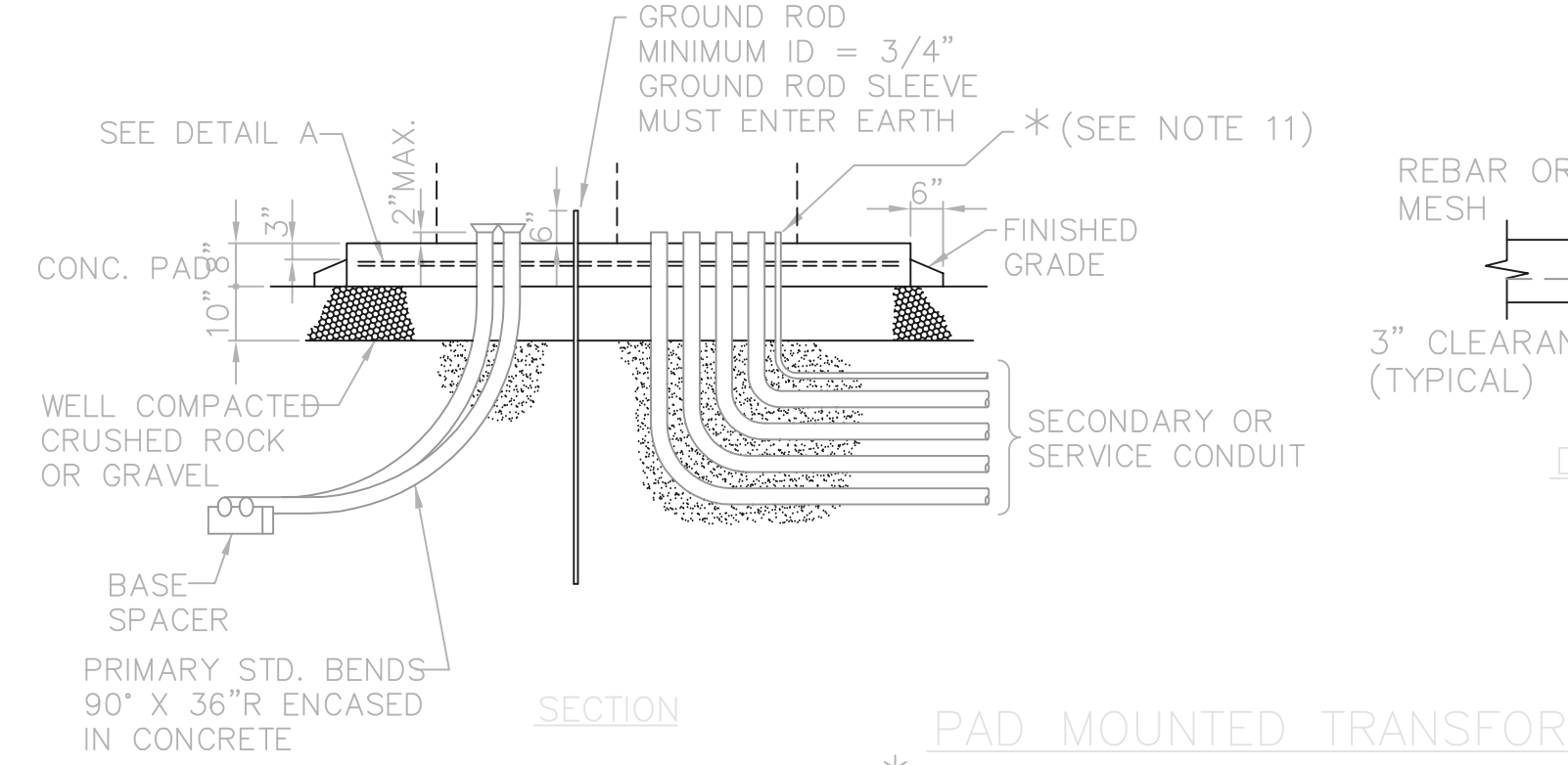
NOTE: EACH PROJECT RECORD DRAWING HAS BEEN UPDATED WITH AVAILABLE CONSTRUCTION INFORMATION FOLLOWING FINAL CONSTRUCTION. THE INFORMATION PRESENTED SHOULD CONFORM TO CONSTRUCTION CONTRACT RECORDS. HOWEVER, FIELD VERIFICATION IS RECOMMENDED TO DETERMINE THE "ACTUAL" CONDITION OF ANY ITEM(S) DEEMED TO BE SIGNIFICANT. SEE TITLE SHEET FOR ADDITIONAL CLARIFICATION OF "RECORD DRAWINGS".

FIRM **Jones & Henry Engineers, Ltd.** DATE **08/07/02**
MO. / DAY / YR.

© BNWW0201



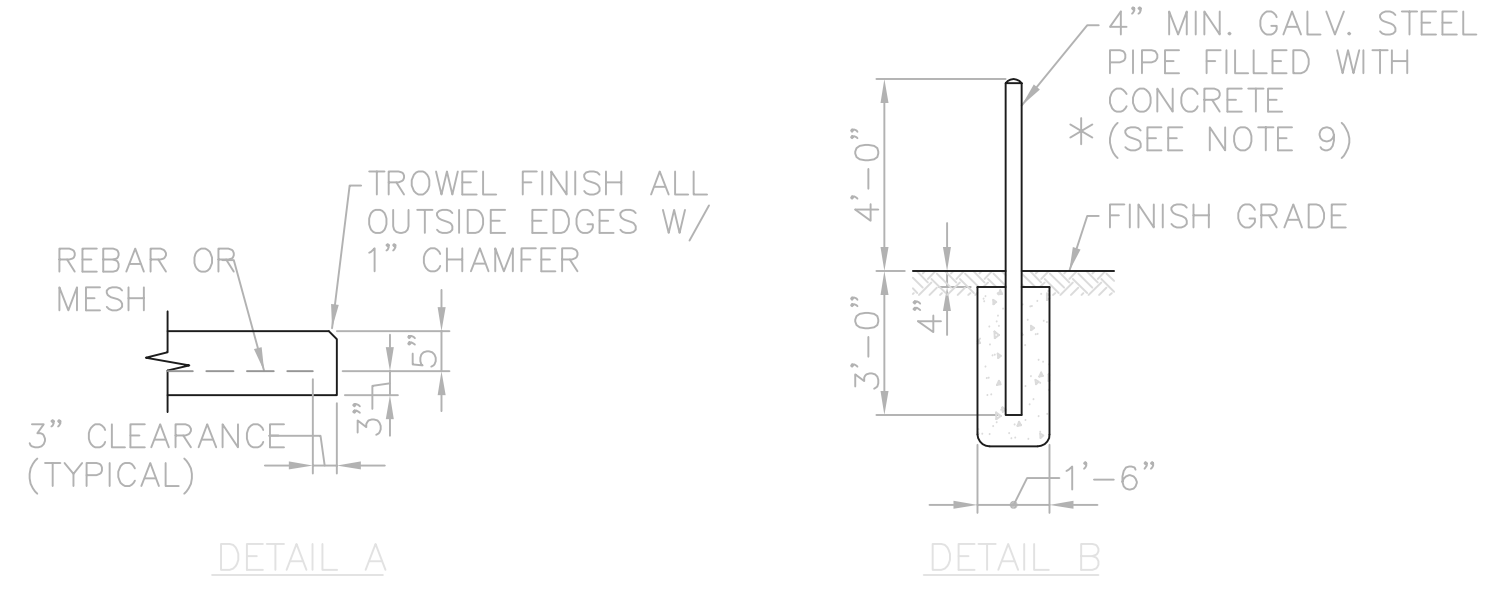
LIGHT POLE BASE DETAIL
NTS



SECTION

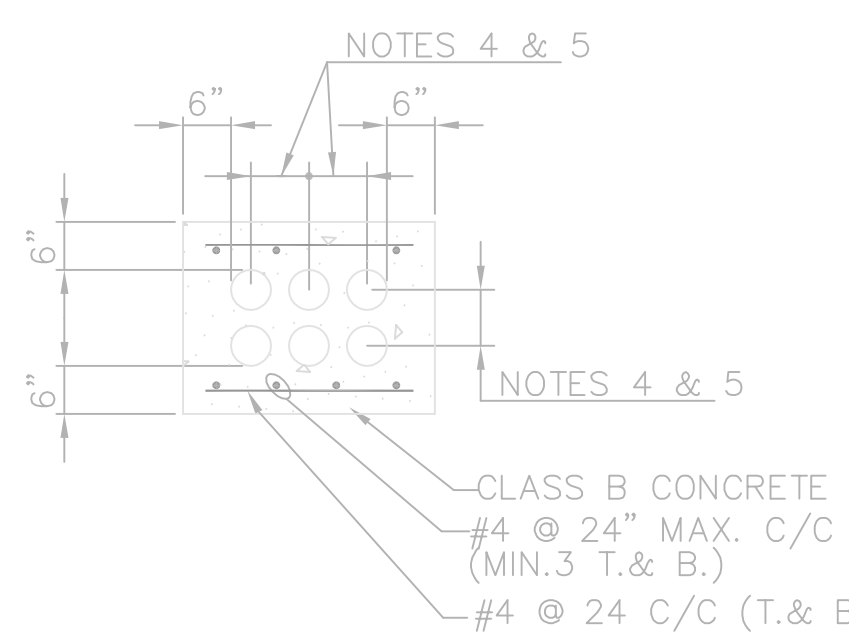
PAD MOUNTED TRANSFORMER PAD DETAIL

- * NOTE: ALSO SEE A.E.P. DWG. 91826 FOR 10333 SS OLENTANGY RIVER ROAD. N.T.S.



DETAIL A

DETAIL B

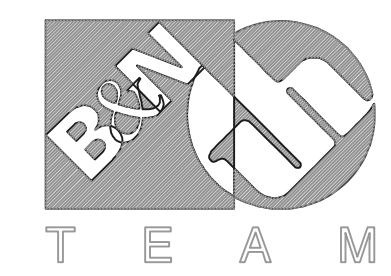


TYPICAL UNDER PAVEMENT CONDUIT DETAIL
NTS

- NOTES:
- ALL DUCT BANKS TO BE REINFORCED UNDER ALL EXISTING & PROPOSED ROADS, DRIVES AND PARKING AREAS.
 - REINFORCING TO EXTEND A MINIMUM OF 5'-0" FROM EACH SIDE OF PAVEMENT.
 - REINFORCING SHOWN IS TYPICAL FOR ALL SIZES OF DUCT BANKS.
 - 8" MIN. SPACING EXCEPT TO SIGNAL COND. FROM ALL OTHER.
 - SIGNAL CONDUITS TO BE MAINTAINED 12" MIN. FROM ALL OTHER.
 - THE CONCRETE ENCASUREMENT OF ANY NUMBER OF CONDUITS ONE OR SIX CONDUIT(S) SHALL USE THIS DETAIL AS AN EXAMPLE OF AN INSTALLATION. CROSS SECTIONAL SIZE SHALL VARY WITH THE NUMBER OF CONDUITS REQUIRED.

TOL-4714EB1
02/27/02 04-V02
P:\PR24025\PMPSARECDWG\100.DWG

NO.	REVISIONS	DATE	BY	CHK.



Burgess & Niple, Limited

Jones & Henry Engineers, Ltd.

DELAWARE COUNTY, OHIO
ALUM CREEK PUMP STATION
& CENTRAL MAINTENANCE FACILITY

JOB NO.	20571
DESIGNED BY:	DLH
DRAWN BY:	BEF/LEY
CHECKED BY:	DLH
APPROVED BY:	SLW
DATE:	1999

CENTRAL MAINTENANCE FACILITY
ELECTRICAL
MISCELLANEOUS DETAILS

SCALE:	
AS NOTED	
SHEET NO.	OF
100	100