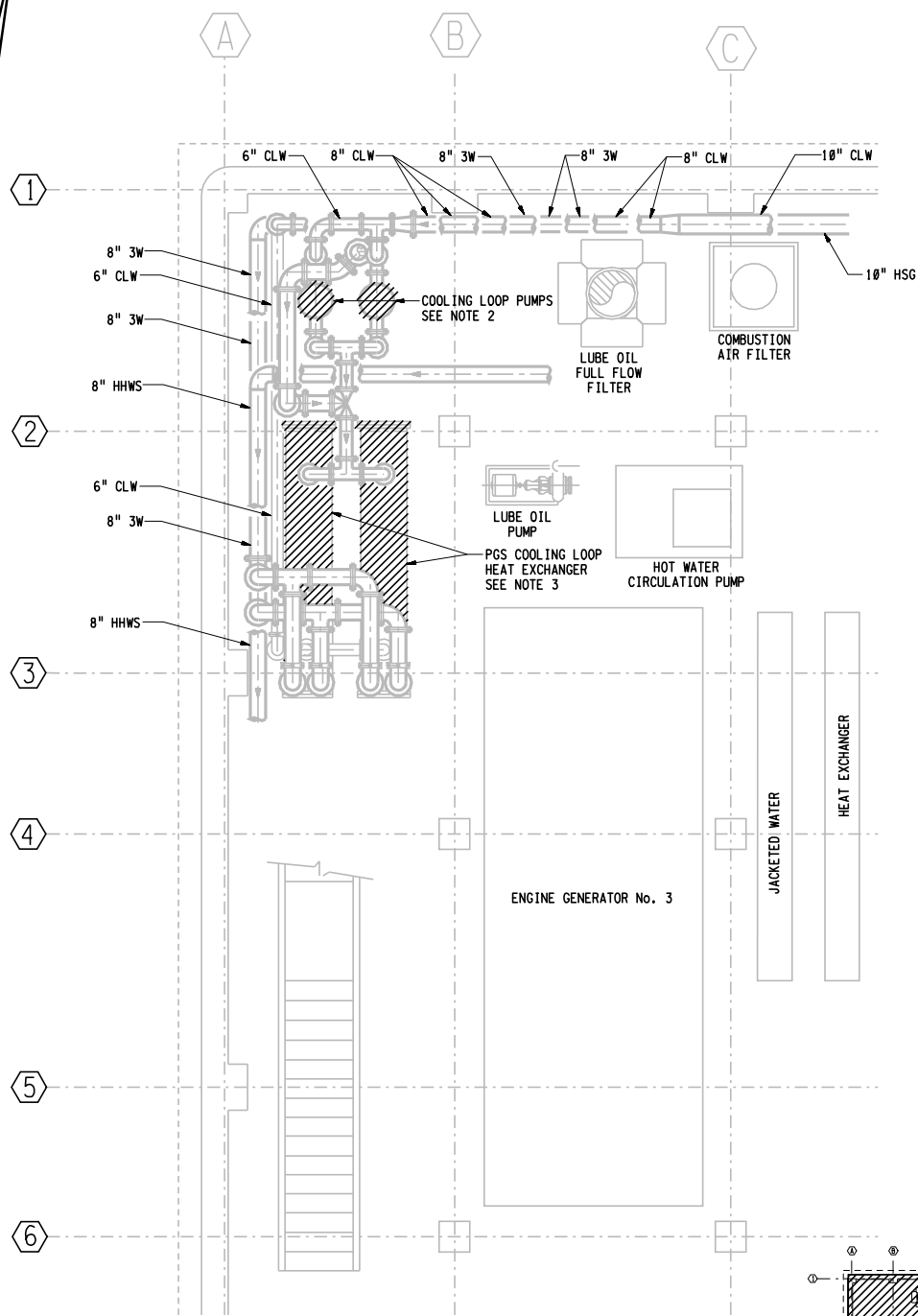
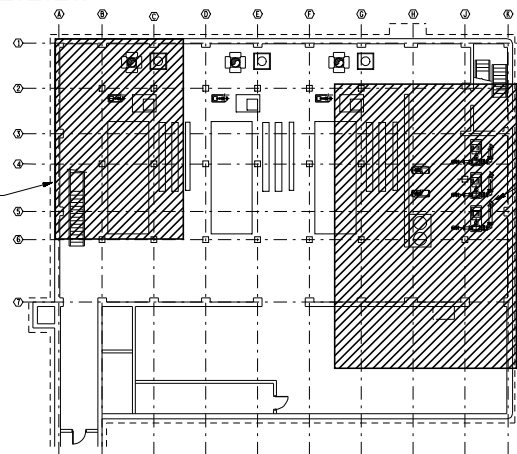


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REF 9: J:\SD\sd275\ref\275BPCS02.mst



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

DETAIL 1



PGS BUILDING KEY MAP

DETAIL 2

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

H J K

ENGINE GENERATOR No. 1

ENGINE GENERATOR No. 3

PGS 3 WATER PUMP No. 3
(SEE NOTE 5)

PGS 3 WATER PUMP No. 2
(SEE NOTE 5)

PGS 3 WATER PUMP No. 1
(SEE NOTE 5)

AREA SHOWN IS BELOW EXISTING 10" 3W.
REMOVE EXISTING CONTROL VALVE,
BUTTERFLY VALVE AND 1/2" IA LINE TO
INDICATED LOCATION. REPLACE WITH
NEW 16" PIPE.

CAP 1/2" IA LINE

- NOTES:
1. NOT ALL PIPING AND EQUIPMENT SHOWN FOR CLARITY. CONTRACTOR TO VERIFY ALL EQUIPMENT AND PIPING LOCATIONS BEFORE DEMOLITION AND CONSTRUCTION.
 2. REMOVE (2) MOTORS AND PUMP IMPELLERS. SEE SPECIFICATION SECTION 11025.
 3. REMOVE (2) SHELLS AND TUBE SHEETS. SEE SPECIFICATION SECTION 11025.
 4. REMOVE GAS BLENDING SYSTEM. SALVAGE FCI FLOW METERS. GRIND EQUIPMENT PAD TO 1-INCH BELOW FLOOR SURFACE. RESURFACE WITH NON-SHRINK EPOXY GROUT TO MATCH FLOOR LEVEL AND SLOPE.
 5. REMOVE PUMPS, CONCRETE PAD, PIPING AND FITTINGS.
 6. REMOVE TURBINE-TYPE FLOW METER AND 4" GATE VALVE. REPLACE WITH BLIND FLANGE AT TEE INTO 18" LSG.

3" ON ORIGINAL DOCUMENT
0 1 2 3

NO.	DATE	IN SERVICE	RECORD DRAWING	INSP. MAB	SD275	BY	REC.	APP.
19AUG2011	25MAY2008							

BROWN AND CALDWELL

DESIGNED BY A.D. ROSS J.L. BARLETT
DESIGN CHECKED BY T.M. STIGERS
DRAWN BY N. HUNTER
SR. PROJ. ENGR.
APPROVED ROBERT E. GRACE
PRINCIPAL IN CHARGE, R.P.E. NO. C43259

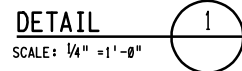
PROJECT ENGR. R.P.E. NO.
PROJECT MGR. MICHIKO MURGITA R.P.E. NO. C 62552
RECOMMENDED OLIVIM YOLOVE SR. ENGR. R.P.E. NO. C 44278

EAST BAY MUNICIPAL UTILITY DISTRICT
SPECIAL DISTRICT No. 1
OAKLAND, CALIFORNIA

MWWTP
DIGESTER UPGRADE PROJECT - PHASE 1

MECHANICAL
PGS BUILDING
LOWER FLOOR DEMOLITION PLAN

FACILITY: MWWTP
SCALE: 1/4" = 1'-0"
DRAWING No. SD275-M-117
SHEET 49 OF 207



1. IF THE CONTRACTOR'S SELECTED PUMP AND REVISED PIPING ARRANGEMENT REQUIRES GREATER LAYOUT DISTANCE THAN SHOWN, REQUIRES DIFFERENT SUCTION AND DISCHARGE CONNECTIONS SIZES OR OTHER MODIFICATIONS THAT CHANGE THE LAYOUT SHOWN, THEN THE CONTRACTOR SHALL MODIFY SUCTION OR DISCHARGE PIPING TO FIT THE EQUIPMENT AT NO ADDITIONAL COST TO THE DISTRICT.
2. CONTRACTOR SHALL REPLACE CONCRETE EQUIPMENT PAD WITH NEW PAD SIZED FOR NEW PUMP. SEE DETAIL 4 ON DRAWING M-302.
3. CONTRACTOR SHALL RECONNECT EXISTING SEAL WATER PIPING TO NEW PUMP SEALS.
4. MODIFY PGS COOLING LOOP HEAT EXCHANGERS PER SPECIFICATION SECTION 11025.
5. MODIFY COOLING LOOP PUMPS PER SPECIFICATION SECTION 11025.
6. EQUIPMENT CONNECTION FITTING. SEE SPECIFICATION.



FACILITY: MWWT	DRAWING No. SD275-M-226
SCALE: $\frac{1}{8}" = 1' - 0"$	
DATE:	SHEET 76 OF 207

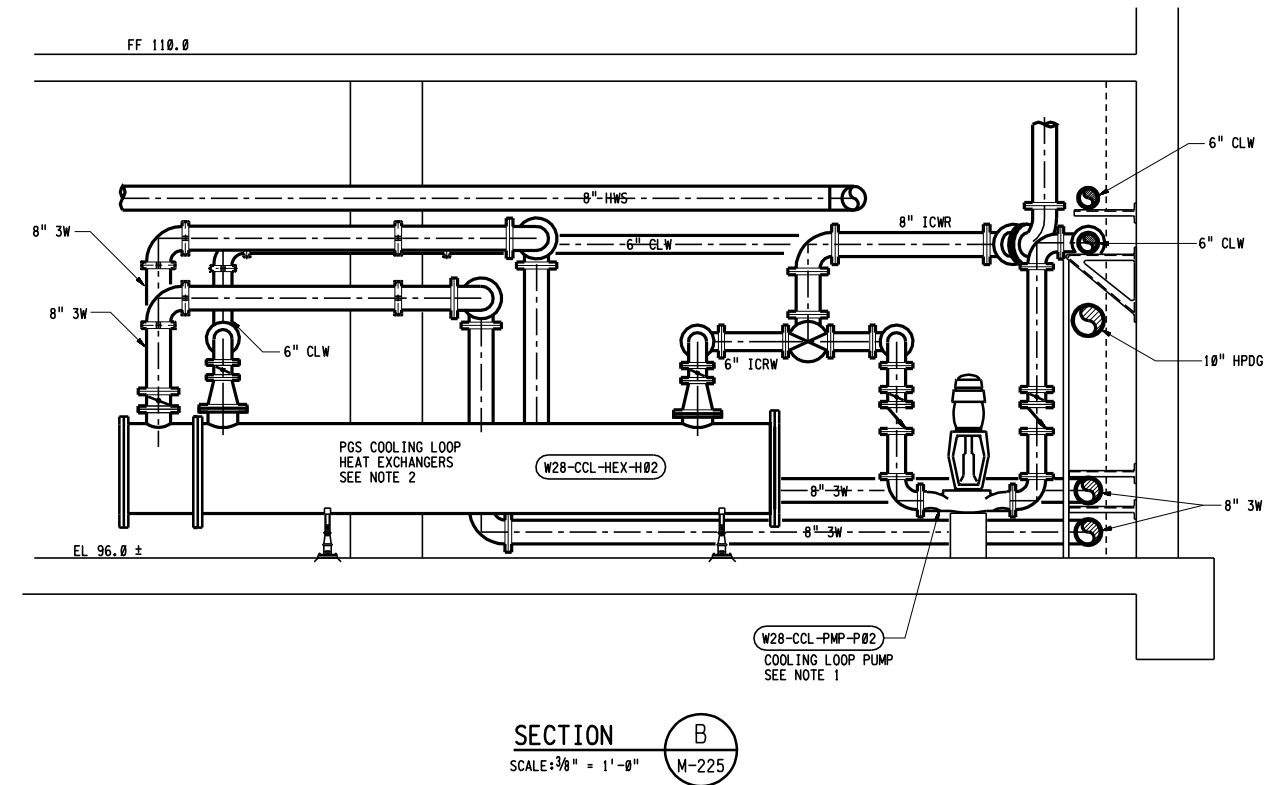
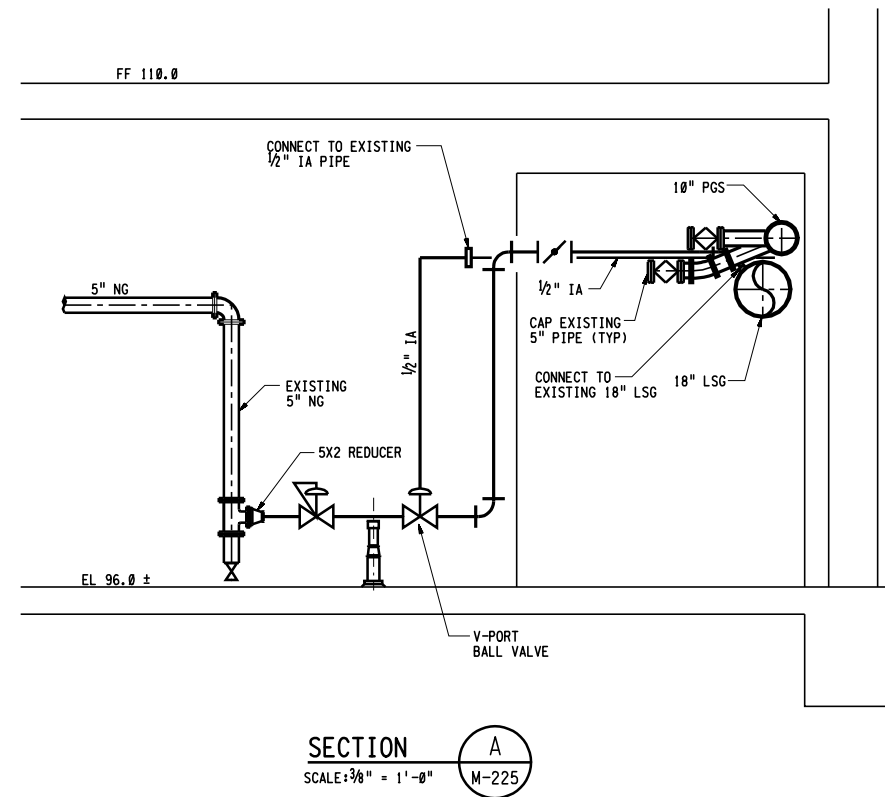
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B R O W N A N D
C A L D W E L L

DESIGNED BY J.L. BARLETT J. MILES
DESIGN CHECKED BY T.W. STIGERS
DRAWN BY N. HUNTER
SR. PROJ ENGR. R.P.E. NO.
APPROVED ROBERT E GRACE
PRINCIPAL IN CHARGE, R.P.E. NO. C4325

EBMUD REVIEW	PROJECT ENGR. R.P.E. NO.
	PROJECT MGR. MICHIKO MURGUIA R.P.E. NO. C 62552
	RECOMMENDED OLUJIMI YOLOYE SR. ENGR. R.P.E. NO. C 44278

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DATE: 23-AUG-2011 16:53
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NOTES:

1. MODIFY COOLING LOOP PUMP PER SPECIFICATION SECTION 11025.
2. MODIFY PGS COOLING LOOP HEAT EXCHANGER PER SPECIFICATION SECTION 11025.

A COPY OF THE ORIGINAL DRAWING
WITH ORIGINAL SIGNATURES CAN BE FOUND IN
WASTEWATER DRAFTING

EAST BAY MUNICIPAL UTILITY DISTRICT
SPECIAL DISTRICT No. 1
OAKLAND, CALIFORNIA

MWWTP
DIGESTER UPGRADE PROJECT - PHASE 1

MECHANICAL

PGS BUILDING

100 BUILDING SECTIONS

FACILITY: MWWTP	DRAWING No.
SCALE: 3/8" = 1'-0"	SD275-M-227

DATE:	SHEET 77 OF 207
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C A L D W E L L

DESIGNED BY J.L. BARLETT J. MILES	EMUD REVIEW	PROJECT ENGR. R.P.E. NO.
DESIGN CHECKED BY T.M. STIGERS		
DRAWN BY N. HUNTER		PROJECT MGR. MICHIKO MURGUJA R.P.E. NO. C 62552
SR. PROJ. ENGR. R.P.E. NO.		
APPROVED ROBERT E GRACE		RECOMMENDED OLUWIMI YOLOYE SR. ENGR. R.P.E. NO. C 44278
PRINCIPAL IN CHARGE, R.P.E. NO. C43256		

3" ON ORIGINAL DOCUMENT

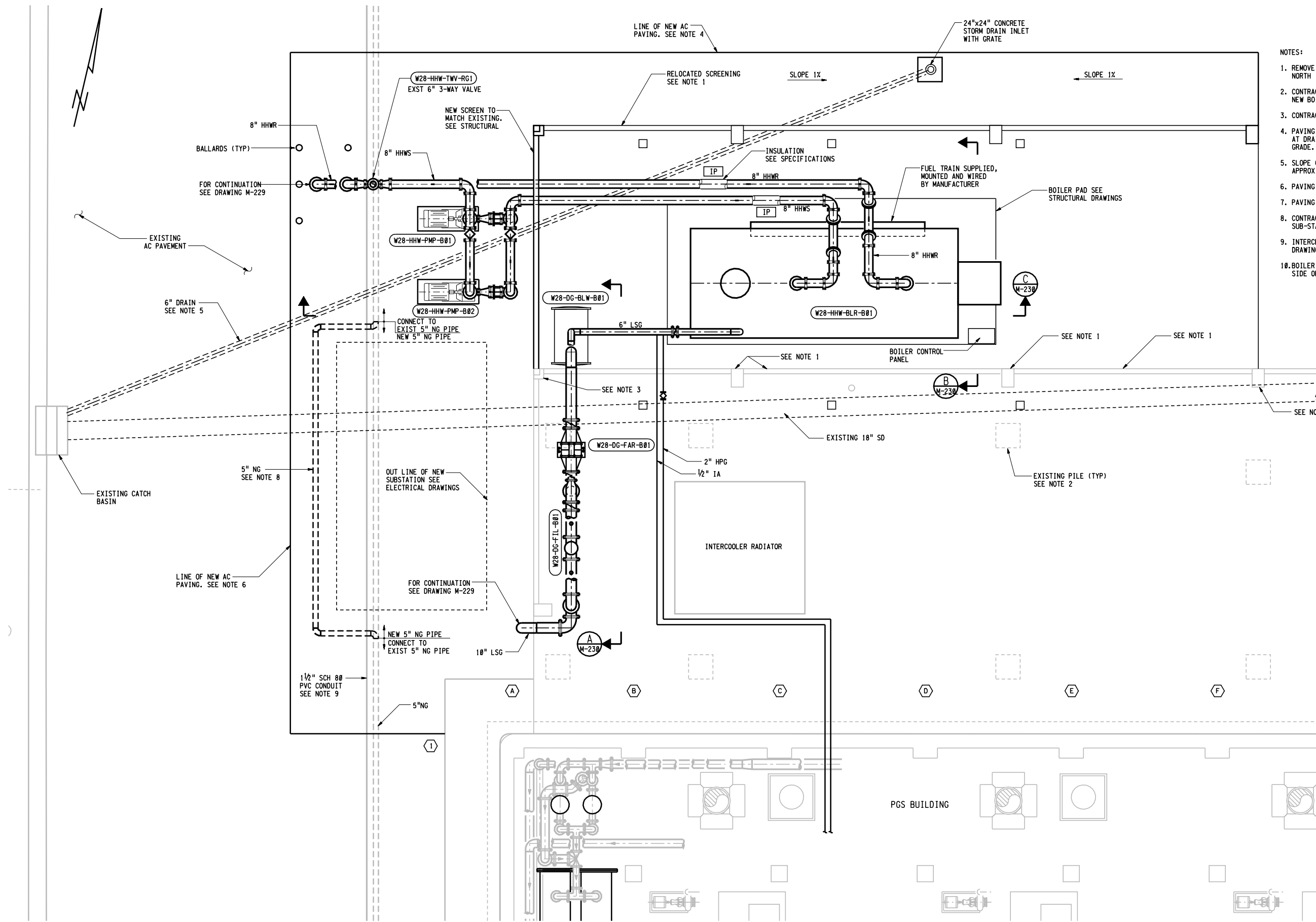
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- NOTES:
1. REMOVE AND RELOCATE APPROXIMATELY 60'-0" OF EXISTING SCREENING NORTH 18'-0". SEE STRUCTURAL DRAWINGS FOR DETAIL.
 2. CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS IN PROPOSED NEW BOILER AREA.
 3. CONTRACTOR TO LEAVE EXISTING COLUMN.
 4. PAVING IN THIS AREA TO FORM SWALE THAT SLOPES TO LOW POINT AT DRAIN. SLOPE CENTERLINE, CONFORM NORTH EDGE TO EXISTING GRADE. CONFORM SOUTH EDGE TO CONCRETE PAD.
 5. SLOPE 6" DRAIN FROM 2-FEET BELOW INLET TO INVERT OF CATCH BASIN, APPROXIMATELY 4'-0" BELOW GRADE.
 6. PAVING IN THIS AREA SHALL CONFORM TO EXISTING PAVING.
 7. PAVING SHALL BE 2" AC ON 8" TYPE F MATERIAL.
 8. CONTRACTOR SHALL RE-ROUTE EXISTING 5" NG PIPE AROUND THE NEW SUB-STATION.
 9. INTERCEPT CONDUIT AND ROUTE INTO SUBSTATION PULL BOX. SEE ELECTRICAL DRAWINGS.
 10. BOILER PRV PIPING NOT SHOWN. ROUTE TO 6" ABOVE CONCRETE SLAB ON NORTH SIDE OF BOILER.

A COPY OF THE ORIGINAL DRAWING
WITH ORIGINAL SIGNATURES CAN BE FOUND IN
WASTEWATER DRAFTING

EAST BAY MUNICIPAL UTILITY DISTRICT SPECIAL DISTRICT No. 1 OAKLAND, CALIFORNIA	
MWWTP DIGESTER UPGRADE PROJECT - PHASE 1 MECHANICAL BOILER PLAN	
FACILITY: MWWTP	DRAWING No. SD275-M-228
SCALE: 1/4" = 1'-0"	SHEET 78 OF 207
DATE: 03-17-05	

3" ON ORIGINAL DOCUMENT

NO.	DATE	DESCRIPTION	INSR.	MGR.	SD275
1	19AUG2011	IN SERVICE RECORD DRAWING			
2	17MAR2005	ADDENDUM 2			

BROWN AND
CALDWELL

DESIGNED BY A.D. ROSS J.L. BARLETT
DESIGN CHECKED BY T.M. STIGERS
DRAWN BY N. HUNTER
SR. PROJ. ENGR.
R.P.E. NO.
APPROVED ROBERT E. GRACE
PRINCIPAL IN CHARGE, R.P.E. NO. C43259

PROJECT ENGR.
R.P.E. NO.
PROJECT MGR. MICHIO MURUGIA
R.P.E. NO. C 62552
RECOMMENDED OLIVIM YOLOVE
SR. ENGR.
R.P.E. NO. C 44278

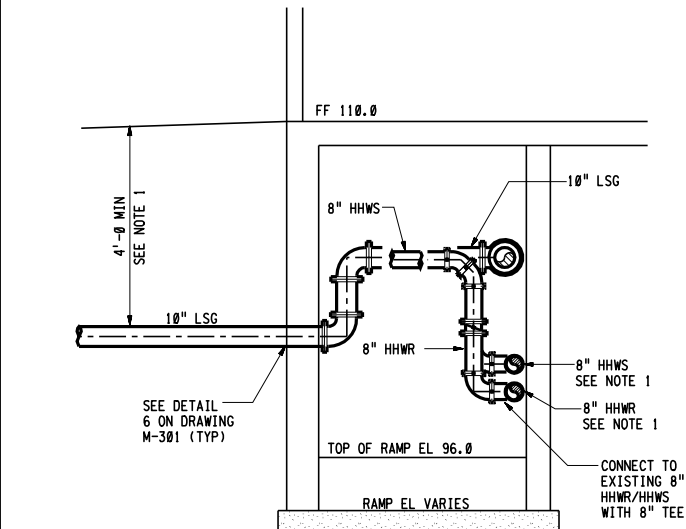
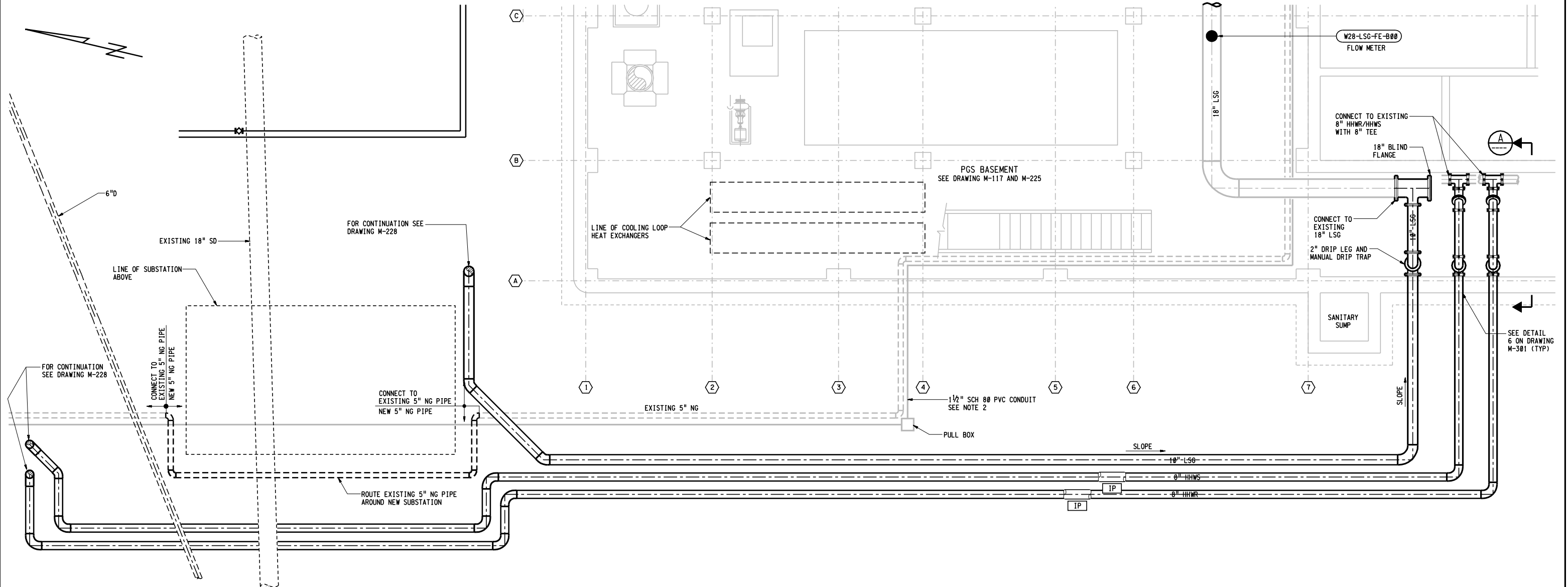
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PLOT SCALE: 8:1

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SECTION

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



3" ON ORIGINAL DOCUMENT
0 1 2 3

NOTE:

1. CONTRACTOR TO VERIFY ELEVATIONS OF EXISTING 18" LSG, 8"HHWS AND 8" HHWR IN GALLERY. PIPING IN ROAD SHALL HAVE MINIMUM OF 4'-0" COVERAGE.
2. SEE ELECTRICAL DRAWINGS FOR CONDUIT RELOCATION REQUIREMENTS.
3. FIELD ROUTE DRAIN PIPING TO NEAREST DRAIN IN HALLWAY. PROVIDE MANUAL DRIP TRAP.

BROWN AND
CALDWELL

DESIGNED BY S. PARR J.L. BARLETT
DESIGN CHECKED BY T.M. STIGERS
DRAWN BY N. HUNTER
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R.P.E. NO.
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PRINCIPAL IN CHARGE, R.P.E. NO. C43259

PROJECT ENGR.
R.P.E. NO.

PROJECT MGR. MICHIKO MURGUA
R.P.E. NO. C 62552

RECOMMENDED OLIVIM YOLOYE
SR. ENGR.
R.P.E. NO. C 44278

EAST BAY MUNICIPAL UTILITY DISTRICT
SPECIAL DISTRICT No. 1
OAKLAND, CALIFORNIA

MWWTP
DIGESTER UPGRADE PROJECT - PHASE 1

MECHANICAL
BOILER BELOW GRADE PIPING
AND SECTIONS

FACILITY: MWWTP

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

DATE:

DRAWING No.

SD275-M-229

SHEET 79 OF 207

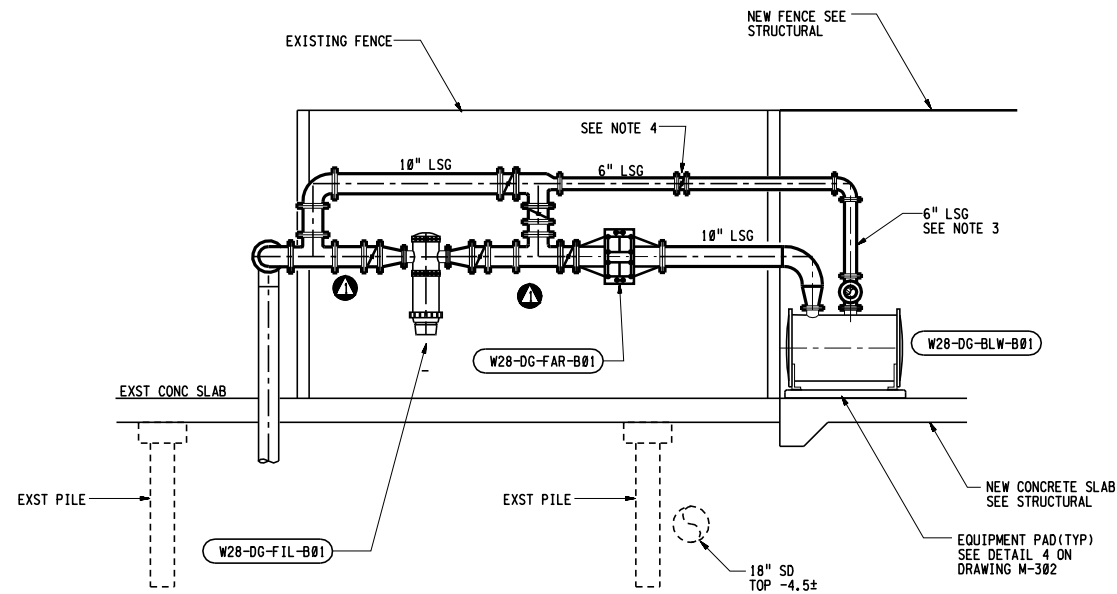
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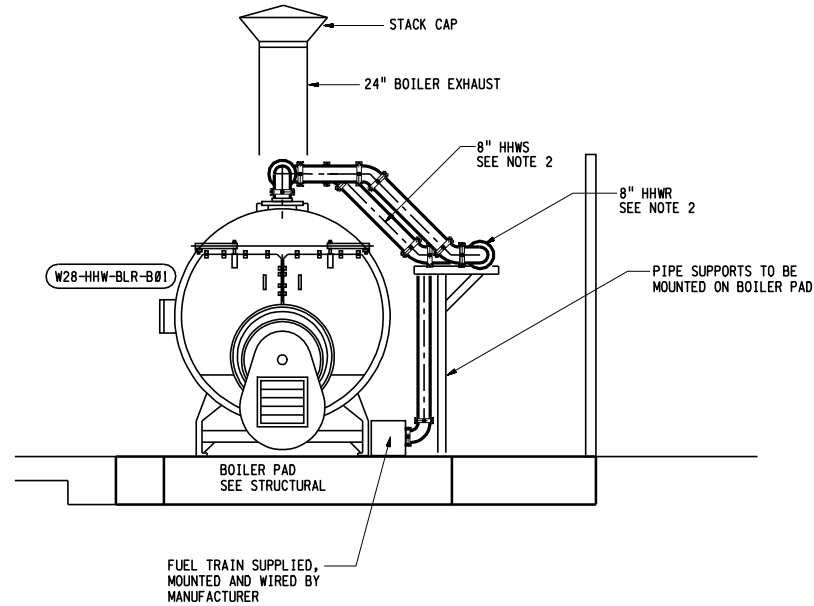
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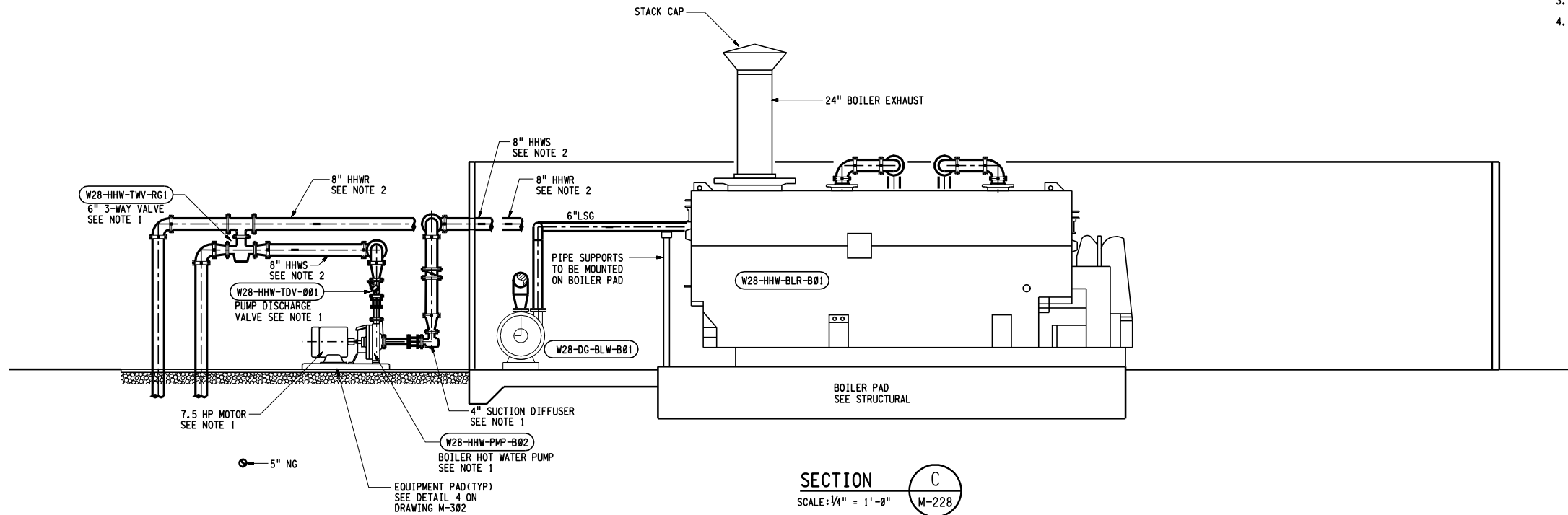
SECTION A
SCALE: 1/4" = 1'-0"
M-228



SECTION B
SCALE: 1/4" = 1'-0"
M-228

NOTES:

- EQUIPMENT MODIFIED AND/OR RELOCATED PER SPECIFICATION SECTION 11025.
- INSULATION ON HHWS AND HHWR PIPE NOT SHOWN. SEE SPECIFICATION SECTIONS 15050 AND 15250.
- INSULATE BLOWER DISCHARGE PIPING TO 8 FEET ABOVE GRADE
- CONTROL VALVE SHALL BE BUTTERFLY OR BALL VALVE WITH STAINLESS STEEL CONSTRUCTION PROVIDE WITH ELECTRIC ACTIVATOR



SECTION C
SCALE: 1/4" = 1'-0"
M-228

3" ON ORIGINAL DOCUMENT
0 1 2 3

NO.	DATE	DESCRIPTION	INSR.	INSR. NO.	BY	REC.	APP.
1	19AUG2011	IN SERVICE RECORD DRAWING	INSR.	SD275			
2	17MAR2005	ADDENDUM 2					

BROWN AND
CALDWELL

DESIGNED BY S. PARR J.L. BARLETT
DESIGN CHECKED BY T.W. STIGERS
DRAWN BY N. HUNTER
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APPROVED ROBERT E. GRACE
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PROJECT ENGR.
R.P.E. NO.

PROJECT MGR. MICHIKO MURGUA
R.P.E. NO. C 62952

RECOMMENDED OLUJIMI YOLOYE
SR. ENGR.
R.P.E. NO. C 44278

EAST BAY MUNICIPAL UTILITY DISTRICT
SPECIAL DISTRICT No. 1
OAKLAND, CALIFORNIA

MWWTP
DIGESTER UPGRADE PROJECT - PHASE 1
MECHANICAL
BOILER SECTIONS AND DETAILS

FACILITY: MWWTP

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

DATE:

DRAWING No.

SD275-M-230

SHEET 80 OF 207