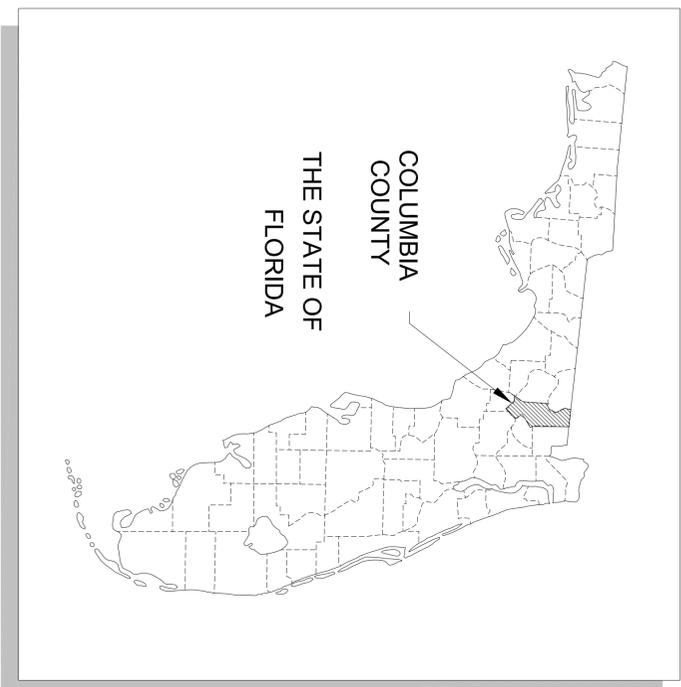


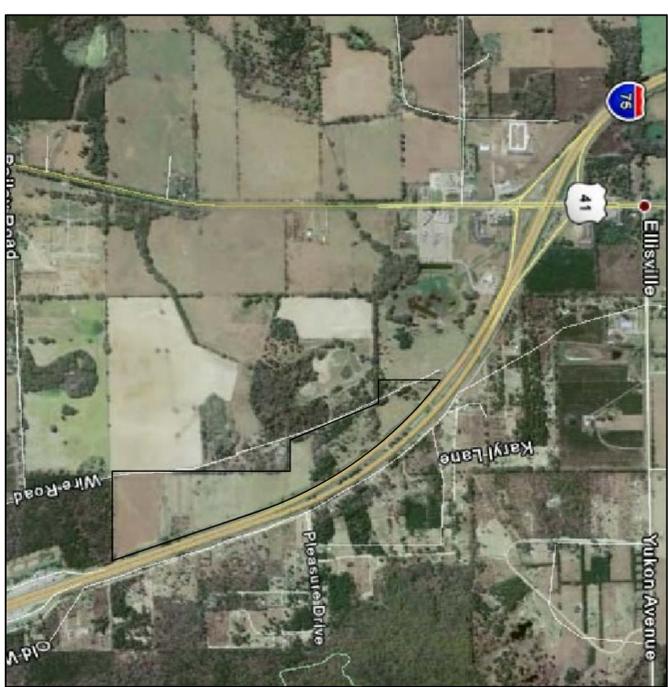
SOUTH COLUMBIA COUNTY REGIONAL WWTP

COLUMBIA COUNTY, FLORIDA FOR BID PURPOSES ONLY

CIVIL			
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		ALT 2	6" FORCEMAIN PLANS
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		ALT 4	LIFT STATION #1 & #2
		ALT 5	LIFT STATION DETAILS
		ALT 6	NOTES AND DETAILS



LOCATION MAP



VICINITY MAP

TPA Tomlinson Peterson Associates, Inc.
architectural engineering consultants
1958-B Commonwealth Lane
Tallahassee, Florida 32303
TEL: 904.633.2200
FAX: 904.633.2203
LIC. # AA002555
Project Number

EU EUTAW UTILITIES, INC.
Project Development - Concepts to Completion
415 Saint Francis St., 4th Fl. #4
Tallahassee, Florida 32301
Tel: (904) 875-2399
Fax: (904) 875-2399
EURE COAL 09861

JIM STIDHAM & ASSOCIATES, INC.
HYDROLOGY, GEOLOGY, CIVIL &
ENVIRONMENTAL ENGINEERING
547 N. MONROE ST., SUITE 201, TALLAHASSEE, FLORIDA 32301
TELEPHONE: 850.222.3975
FACSIMILE: 850.681-0560
FBPE CERTIFICATE OF AUTHORIZATION NO. 00005629

<p>TITLE SHEET/ LOCATION AND VICINITY MAP</p>	<p>SOUTH COLUMBIA COUNTY REGIONAL WASTEWATER TREATMENT PLANT</p> <p>COLUMBIA COUNTY WWTP CONSTRUCTION</p> <p>FOR EUTAW UTILITIES, INC.</p> <p>LAKE CITY, FLORIDA</p>	<p>CHEN H. LIN, P.E. No. 43340</p>	<p>JIM STIDHAM & ASSOCIATES, INC. HYDROLOGY, GEOLOGY, CIVIL & ENVIRONMENTAL ENGINEERING 547 N. MONROE ST., SUITE 201, TALLAHASSEE, FLORIDA 32301 TELEPHONE: 850.222.3975 FACSIMILE: 850.681-0560 FBPE CERTIFICATE OF AUTHORIZATION NO. 00005629</p>	<p>REVISIONS</p>	<p>DATE</p>
				<p>DATE: 06/04/09</p> <p>SCALE: N.T.S.</p> <p>DRAWN BY: AMH</p> <p>CHECKED BY: CHL</p> <p>PROJECT NO.: 50104007</p> <p>SHEET C-1 OF 8</p>	

GENERAL NOTES:

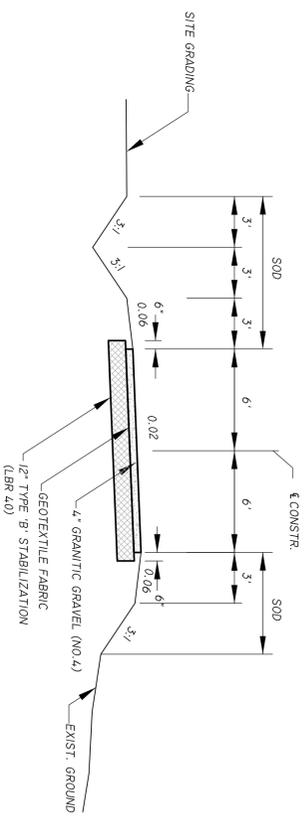
1. ANY PUBLIC LAND CORNER MONUMENT WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED AND HAS NOT BEEN PROPERLY REFERENCED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER WITHOUT DELAY. ANY MONUMENT OTHERWISE DESTROYED BY THE CONTRACTOR SHALL BE RESET BY A FLORIDA P.L.S. AT THE CONTRACTOR'S EXPENSE.
2. BEFORE DIGGING IN AREAS OF UNDERGROUND UTILITIES CALL. SUNSHINE ONE CALL (811). A MINIMUM OF 48 HOURS ADVANCED NOTICE IS REQUIRED. CONTRACTOR IS REQUIRED TO COMPLY WITH SUNSHINE REQUIREMENTS.
3. GRADES SHOWN ARE FINISHED GRADES.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING AN EDEP GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES.

EROSION CONTROL NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF STORMWATER POLLUTION PREVENTION PLAN ON THIS PROJECT, INCLUDING MAINTAINING PROJECT RECORDS OF RAINFALL, INSPECTIONS, ADDITIONAL FEATURES IMPLEMENTED AND MAINTENANCE OF THE EROSION CONTROL FEATURES.
2. THE CONTRACTOR SHALL INSTALL AND MAINTAIN THE EROSION CONTROL FEATURES INDICATED HEREON, AND AS DIRECTED BY ENGINEER, FOR THE DURATION OF THE PROJECT.
3. THE EROSION CONTROL FEATURES SHOWN ARE THE MINIMUM NECESSARY TO CONTROL EROSION AND SEDIMENTATION. ADDITIONAL FEATURES MAY BE REQUIRED TO ACCOUNT FOR ACTUAL SITE CONDITIONS.
4. ALL EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH FOOT STANDARD INDEX 102 AND SHALL BE INSTALLED PRIOR TO ANY LAND CLEARING ACTIVITIES. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT PROJECT CONSTRUCTION.

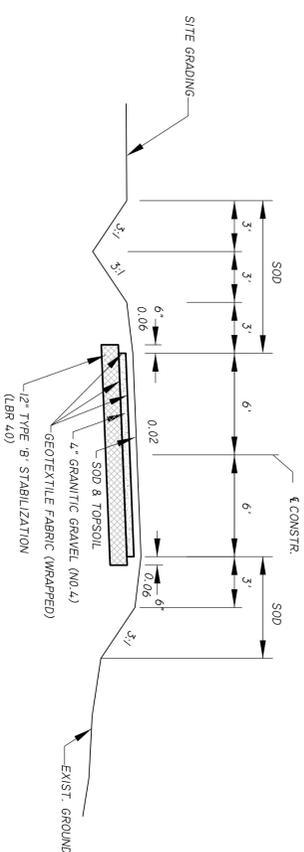
CONSTRUCTION SEQUENCE:

1. CONTRACTOR SHALL REQUEST AN ON-SITE PRECONSTRUCTION MEETING PRIOR TO ANY WORK COMMENCING ON SITE.
2. INSTALL EROSION CONTROL MEASURES AS SHOWN IN THESE PLANS OR AS DIRECTED BY ENGINEER.
3. ROUGH GRADE PROPOSED WATER RETENTION AREAS AND CHANNEL SITE RUNOFF TO THE EXCAVATED AREAS.
4. CLEAR AND GRUB AREAS OF PROPOSED IMPROVEMENTS AND ROUGH GRADE ACCESS ROADWAY.
5. ROUGH GRADE PROJECT SITE.
6. CONSTRUCT SITE IMPROVEMENTS.
7. REMOVE ACCUMULATED SEDIMENTS FROM RETENTION AREAS AND SOD ALL DISTURBED AREAS.
8. INSTALL ROADWAY SURFACE TREATMENTS.
9. REMOVE ALL CONSTRUCTION DEBRIS, INCLUDING SURVEY STAKES AND EROSION CONTROL FEATURES.

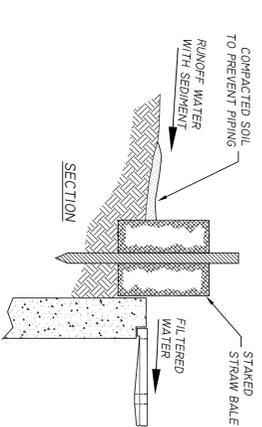
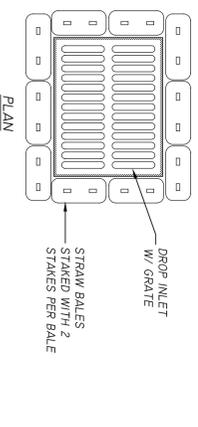


**TYPICAL SECTION
ACCESS ROAD
STA. 10+00 TO 11+20**

STA. 19+40 TO 20+35

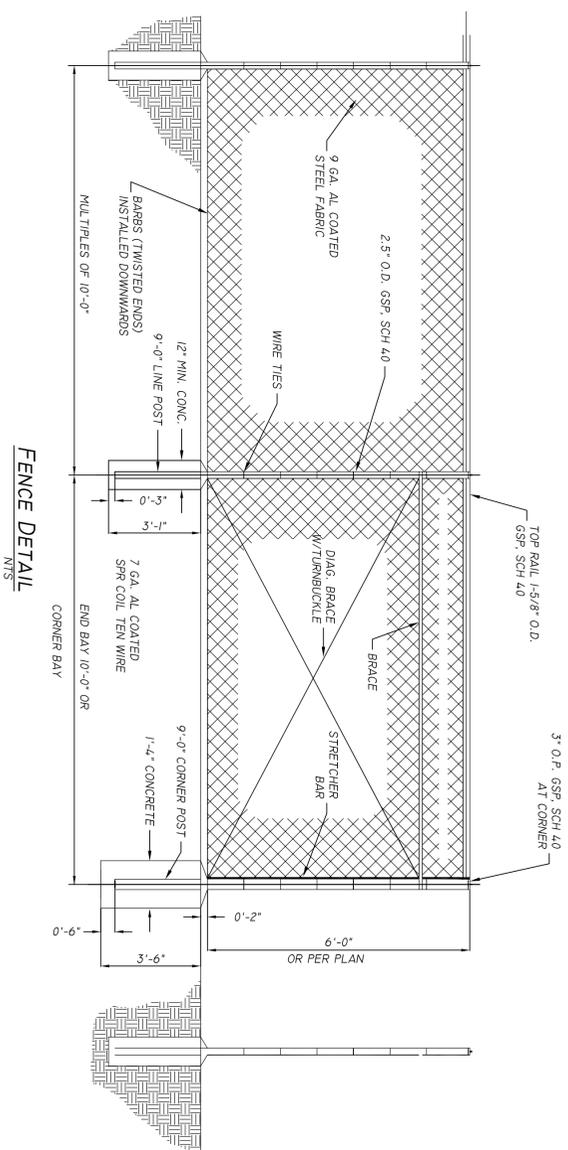


**TYPICAL SECTION
ACCESS ROAD
STA. 11+20 TO 19+40**

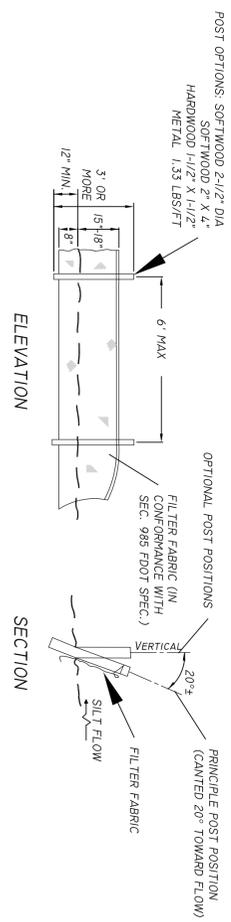


- CONSTRUCTION SPECIFICATIONS FOR STRAW BALE DROP INLET STRUCTURE**
1. BALES SHALL BE EITHER ROUND OR STUNG-TIED WITH THE BINDINGS ORIENTED ALONG THE WATER FLOW AND UNDER THE BALES.
 2. BALES SHALL BE PLACED LENGTHWISE IN A SINGLE ROW SURROUNDING THE INLET. WITH THE ENDS OF ADJACENT BALES PRESSED TOGETHER.
 3. THE FILTER BARRIER SHALL BE ENTRENCHED AND BACKFILLED. A TRENCH SHALL BE EXCAVATED AROUND THE INLET THE WIDTH OF A BALE TO A MIN. DEPTH OF 4 INCHES. AFTER THE BALES ARE STAKED, THE EXCAVATED SOIL SHALL BE BACKFILLED AND COMPACTED AGAINST THE FILTER BARRIER.
 4. EACH BALE SHALL BE SECURELY ANCHORED AND HELD IN PLACE BY AT LEAST TWO STAKES OR REBARS DRIVEN THROUGH THE BALE.
 5. LOOSE STAKES SHALL BE ADDED BETWEEN BALES TO PREVENT WATER FRONT ENVIRING BETWEEN BALES.

**STRAW BALE DROP INLET
STRUCTURE DETAIL
N.T.S.**



**FENCE DETAIL
N.T.S.**



**TYPE III SILT FENCE
N.T.S.**

NOTE: SILT FENCE TO BE CONSTRUCTED IN ACCORDANCE WITH FDOT INDEX 102.

NO.	DATE	REVISION/ACTION TAKEN

DESIGN ENGINEER: SIGNATURE: _____ P. E. NUMBER: 52507 DATE: 12/29/09	SCALE: F=20'
DRAWN BY: _____ DATE: 8/11/09	CHECKED BY: _____ DATE: 8/11/09

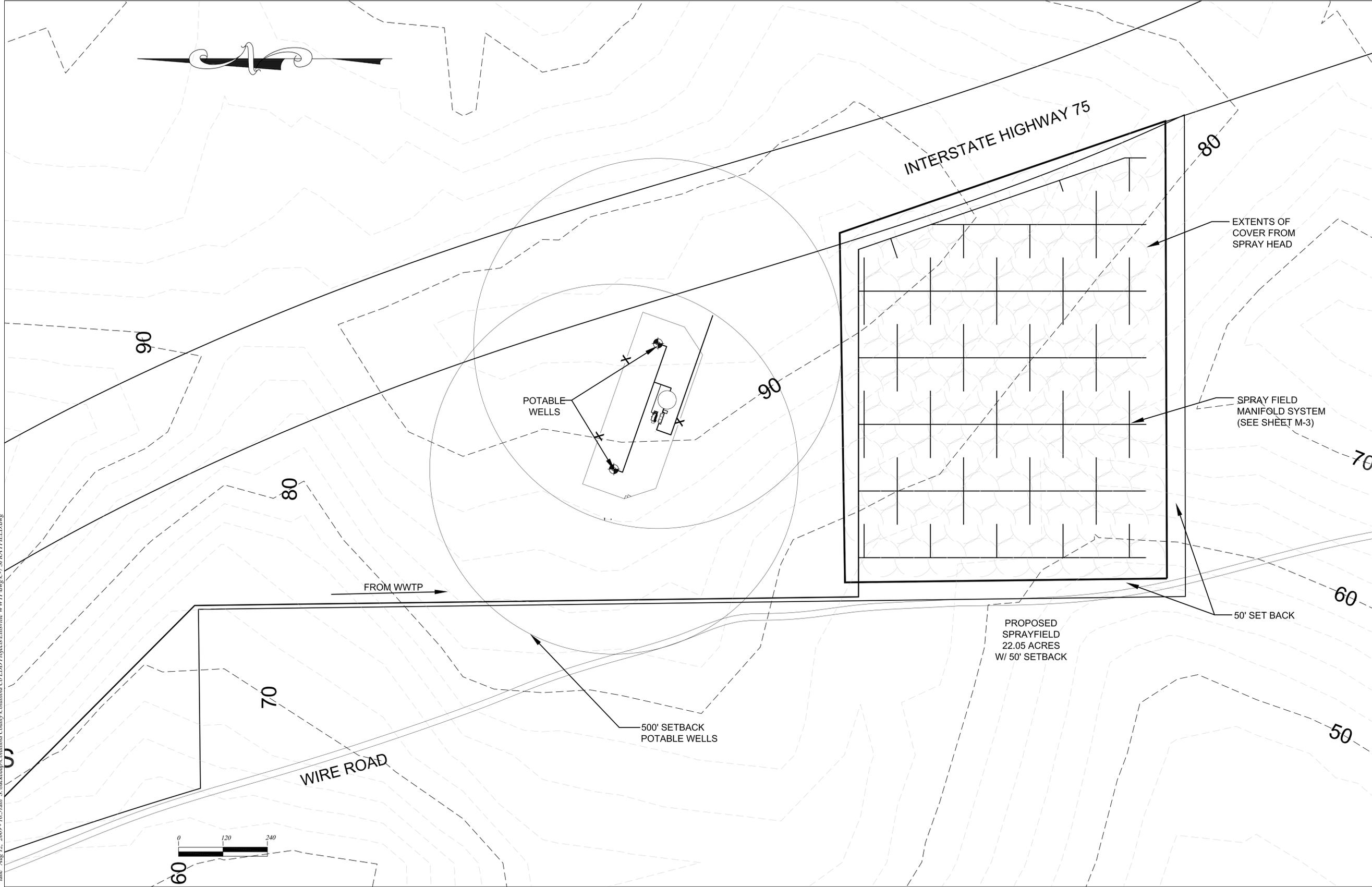
EUTAW UTILITIES, INC.
Project Development...Concept to Completion
415 SAINT FRANCIS ST., UNIT 114 OFFICE PHONE: (850) 383-0400
TALLAHASSEE, FLORIDA 32301 OFFICE FAX: (888) 878-2939

**COLUMBIA COUNTY
WASTEWATER TREATMENT PLANT
CIVIL NOTES & DETAILS**

ELLISVILLE, FL

PRINT DATE: 12 AUG 2009
SHEET NUMBER: C-8 OF C-8

June Aug 12, 2009 - 10:51am S:\backedup\Columbia County\Columbia Co LDD Projects\Ellisville WWTP.dwg\C-7 SPRAYFIELD.dwg

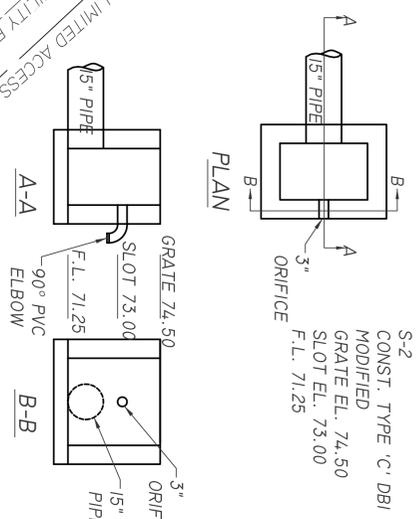
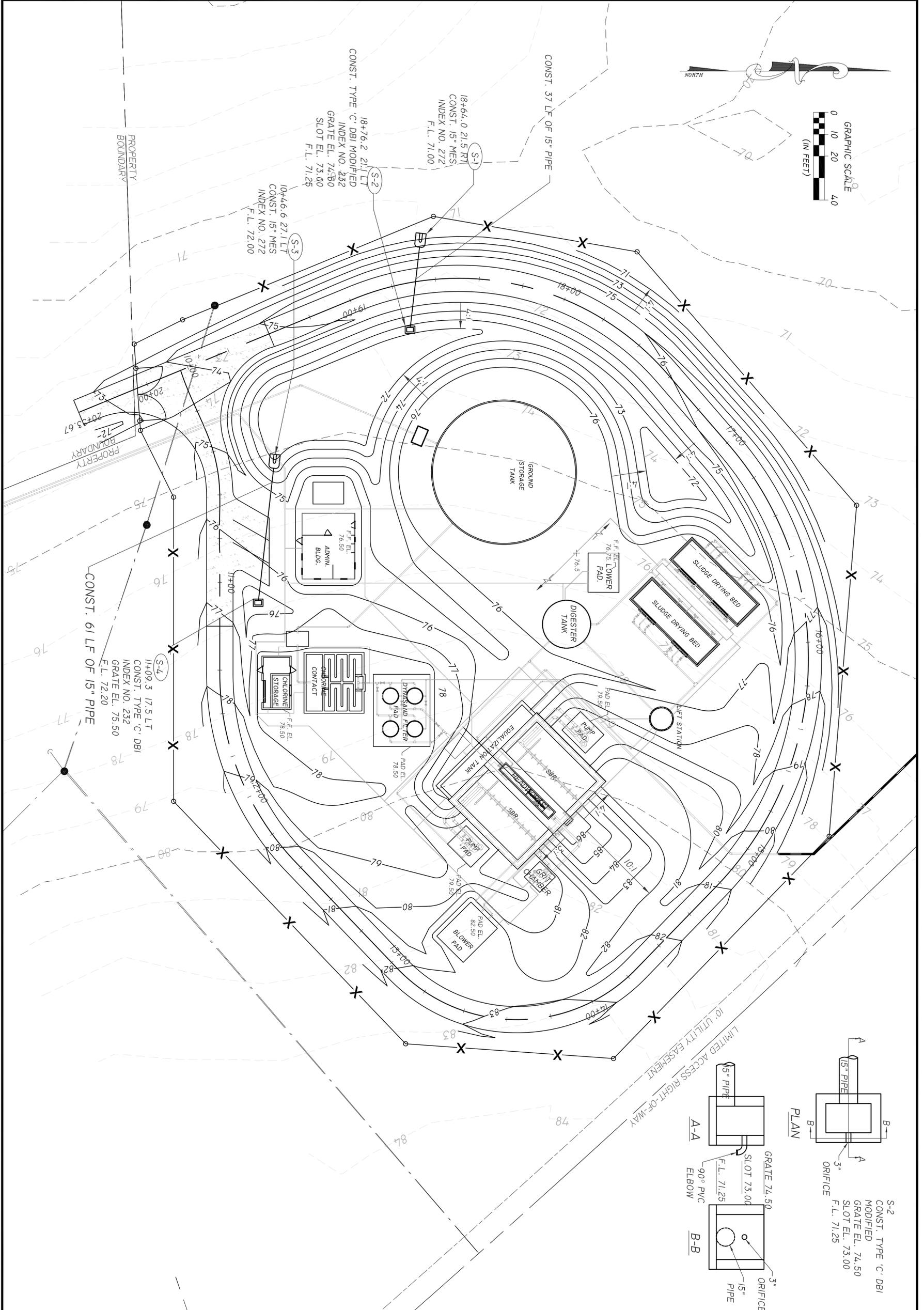


REVISIONS	DATE

<p>JIM STIDHAM & ASSOCIATES, INC. HYDROLOGY, GEOLOGY, CIVIL & ENVIRONMENTAL ENGINEERING 547 N. MONROE ST., SUITE 201, TALLAHASSEE, FLORIDA 32304 TELEPHONE: (904) 224-1111 FAX: (904) 224-1106 PERMITS: (904) 224-1106 P.E. CERTIFICATE OF AUTHORIZATION NO. 0008287</p>	<p>CHEN H. LIN, P.E. No. 43340</p>
---	--

<p>SOUTH COLUMBIA COUNTY REGIONAL WASTEWATER TREATMENT PLANT COLUMBIA COUNTY WWTP CONSTRUCTION FOR EUTAW UTILITIES, INC. LAKE CITY, FLORIDA</p>	<p>DETAILED SITE PLAN OF SPRAY FIELD</p>
---	---

DATE: 06/04/09
SCALE: AS SHOWN
DRAWN BY: AMH
CHECKED BY: CHL
PROJECT NO.: 5010-007
SHEET C-7 OF 8



S-2
 CONST. TYPE 'C' DBI
 MODIFIED
 GRATE EL. 74.50
 SLOT EL. 73.00
 F.L. 71.25

COLUMBIA COUNTY
 WASTEWATER TREATMENT PLANT
 WWTP GRADING & DRAINAGE PLAN
 ELLISVILLE, FL

EUI EUTAW UTILITIES, INC.
 Project Development...Concept to Completion
 415 SAINT FRANCIS ST., UNIT 114 OFFICE PHONE: (850) 383-0400
 TALLAHASSEE, FLORIDA 32301 OFFICE FAX: (888) 878-2939
 F.B.P.E. C.O.A. #9961

NO.	DATE	REVISION/ACTION TAKEN

DESIGN ENGINEER:
 MARC E. NEIHAUS
 SIGNATURE:
 P. E. NUMBER:
 52507
 DATE:
 8/11/09
 DRAWN BY:
 LRS
 DATE:
 8/11/09
 SCALE:
 1"=20'

PRINT DATE:
 12 AUG 2009
 SHEET NUMBER:
 C-6 OF C-8



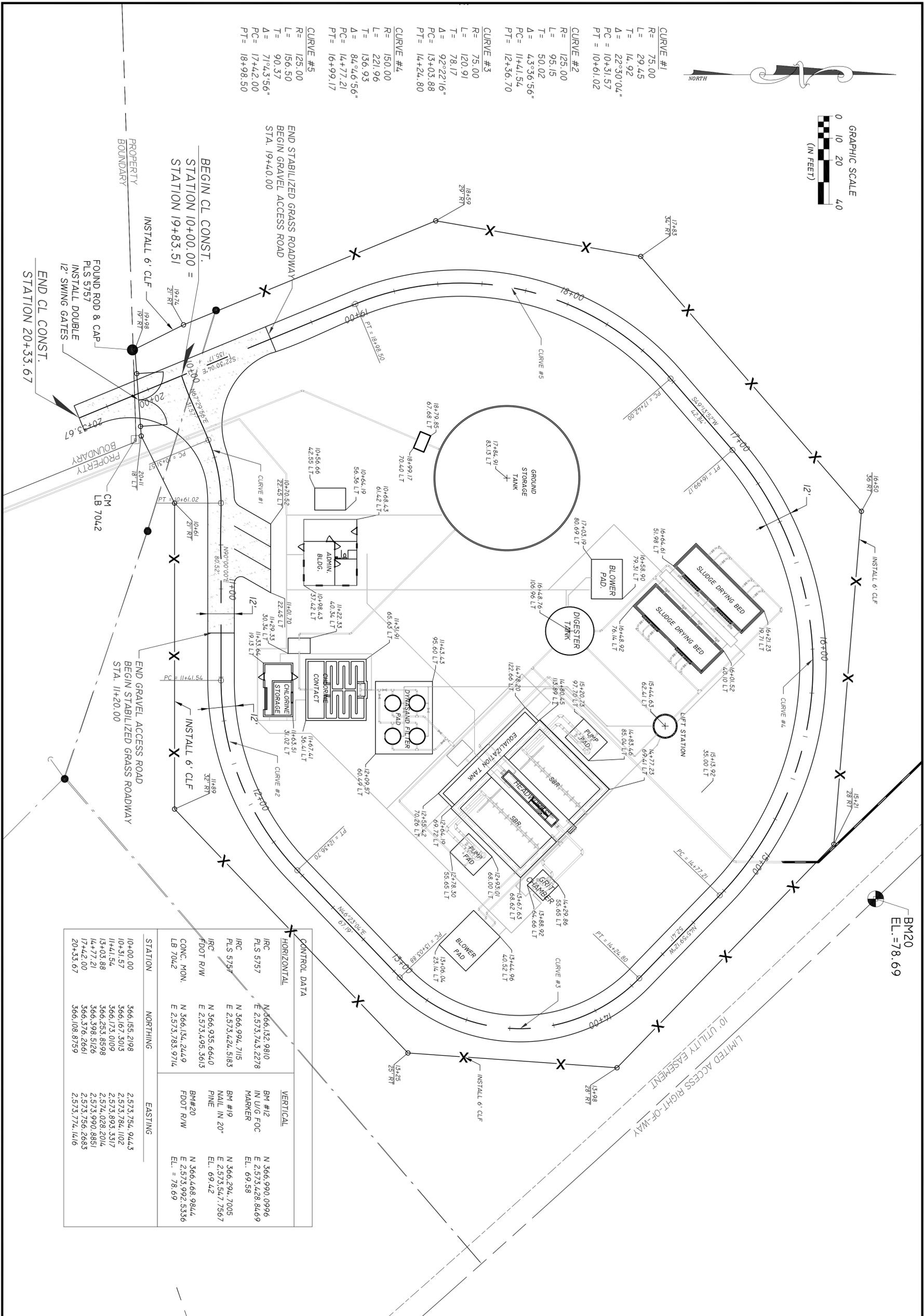
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 R= 75.00
 L= 29.45
 T= 14.92
 Δ = 22°30'04"
 PC = 10+31.57
 PT = 10+61.02

CURVE #2
 R= 125.00
 L= 95.15
 T= 50.02
 Δ = 43°36'56"
 PC = 11+41.54
 PT = 12+36.70

CURVE #3
 R= 75.00
 L= 120.91
 T= 78.17
 Δ = 92°22'16"
 PC = 13+03.88
 PT = 14+24.80

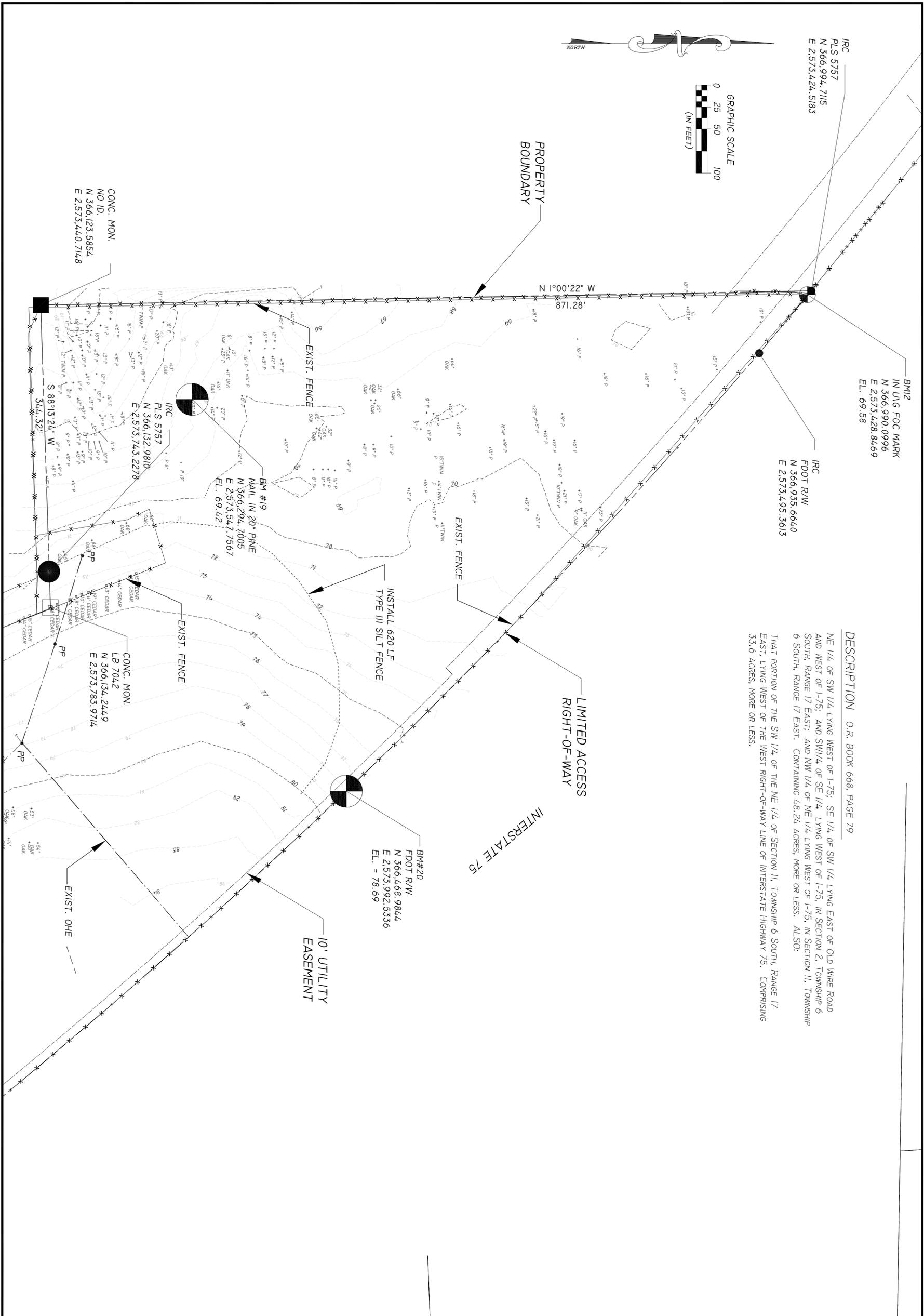
CURVE #4
 R= 150.00
 L= 221.96
 T= 136.93
 Δ = 84°46'56"
 PC = 14+77.21
 PT = 16+99.17

CURVE #5
 R= 125.00
 L= 156.50
 T= 90.37
 Δ = 71°43'56"
 PC = 17+42.00
 PT = 18+98.50



CONTROL DATA		VERTICAL	
HORIZONTAL	NORTHING	BM #12	N 366,990.0996
IRC	N 366,132.9810	IN U/G FOC	E 2,573,428.8469
PLS 5757	E 2,573,743.2278	MARKER	EL. 69.58
IRC	N 366,994.7115	BM #19	N 366,294.7005
PLS 5757	E 2,573,424.5183	NAIL IN 20"	E 2,573,547.7567
IRC	N 366,935.6640	PINE	EL. 69.42
FDOT RW	E 2,573,495.3613	BM#20	N 366,468.9844
CONC. MON.	N 366,134.2449	FDOT R/W	E 2,573,992.5336
LB 7042	E 2,573,783.9714		EL. = 78.69
STATION	NORTHING	EASTING	
10+00.00	366,155,2198	2,573,754,944.3	
10+31.57	366,167,3013	2,573,784,1102	
11+41.54	366,173,0109	2,573,893,3317	
13+03.88	366,253,8598	2,574,028,2014	
14+77.21	366,398,5126	2,573,990,8851	
17+42.00	366,376,2661	2,573,756,2683	
20+33.67	366,108,8759	2,573,774,1416	

<p align="center">COLUMBIA COUNTY WASTEWATER TREATMENT PLANT WWTP GEOMETRY & LAYOUT PLAN</p> <p align="center">ELLISVILLE, FL</p>		<p align="center">EUTAW UTILITIES, INC. Project Development...Concept to Completion 415 SAINT FRANCIS ST., UNIT 114 OFFICE PHONE: (850) 383-0400 TALLAHASSEE, FLORIDA 32301 OFFICE FAX: (888) 878-2939</p>	DESIGN ENGINEER: MARC E. NEIHAUS SIGNATURE: _____ P. E. NUMBER: 52507 DATE: 12/29/09	
			DRAWN BY: LRS DATE: 12/29/09 SCALE: 1"=20' CHECKED BY: MEN DATE: 8/11/09	
PRINT DATE: 12 AUG 2009	SHEET NUMBER: C-5 OF C-8	NO. DATE REVISION/ACTION TAKEN		



IRC
PLS 5757
N 366,994.7115
E 2,573,424.5183

BM12
IN U/G FOC MARK
N 366,990.0996
E 2,573,428.8469
EL. 69.58

IRC
FDOT R/W
N 366,935.6640
E 2,573,495.3613

CONC. MON.
NO ID.
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IRC
PLS 5757
N 366,132.9810
E 2,573,713.2278

BM #19
NAIL IN 20" PINE
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E 2,573,547.7567
EL. 69.42

CONC. MON.
LB 7042
N 366,134.2449
E 2,573,783.9714

BM#20
FDOT R/W
N 366,468.9844
E 2,573,922.5336
EL. = 78.69

DESCRIPTION O.R. BOOK 668, PAGE 79
NE 1/4 OF SW 1/4 LYING WEST OF I-75; SE 1/4 OF SW 1/4 LYING EAST OF OLD WIRE ROAD AND WEST OF I-75; AND SW 1/4 OF SE 1/4 LYING WEST OF I-75, IN SECTION 2, TOWNSHIP 6 SOUTH, RANGE 17 EAST; AND NW 1/4 OF NE 1/4 LYING WEST OF I-75, IN SECTION 11, TOWNSHIP 6 SOUTH, RANGE 17 EAST. CONTAINING 48.24 ACRES, MORE OR LESS. ALSO:
THAT PORTION OF THE SW 1/4 OF THE NE 1/4 OF SECTION 11, TOWNSHIP 6 SOUTH, RANGE 17 EAST, LYING WEST OF THE WEST RIGHT-OF-WAY LINE OF INTERSTATE HIGHWAY 75, COMPRISING 33.0 ACRES, MORE OR LESS.

COLUMBIA COUNTY
WASTEWATER TREATMENT PLANT
EXISTING CONDITIONS & EROSION PLAN
ELLISVILLE, FL

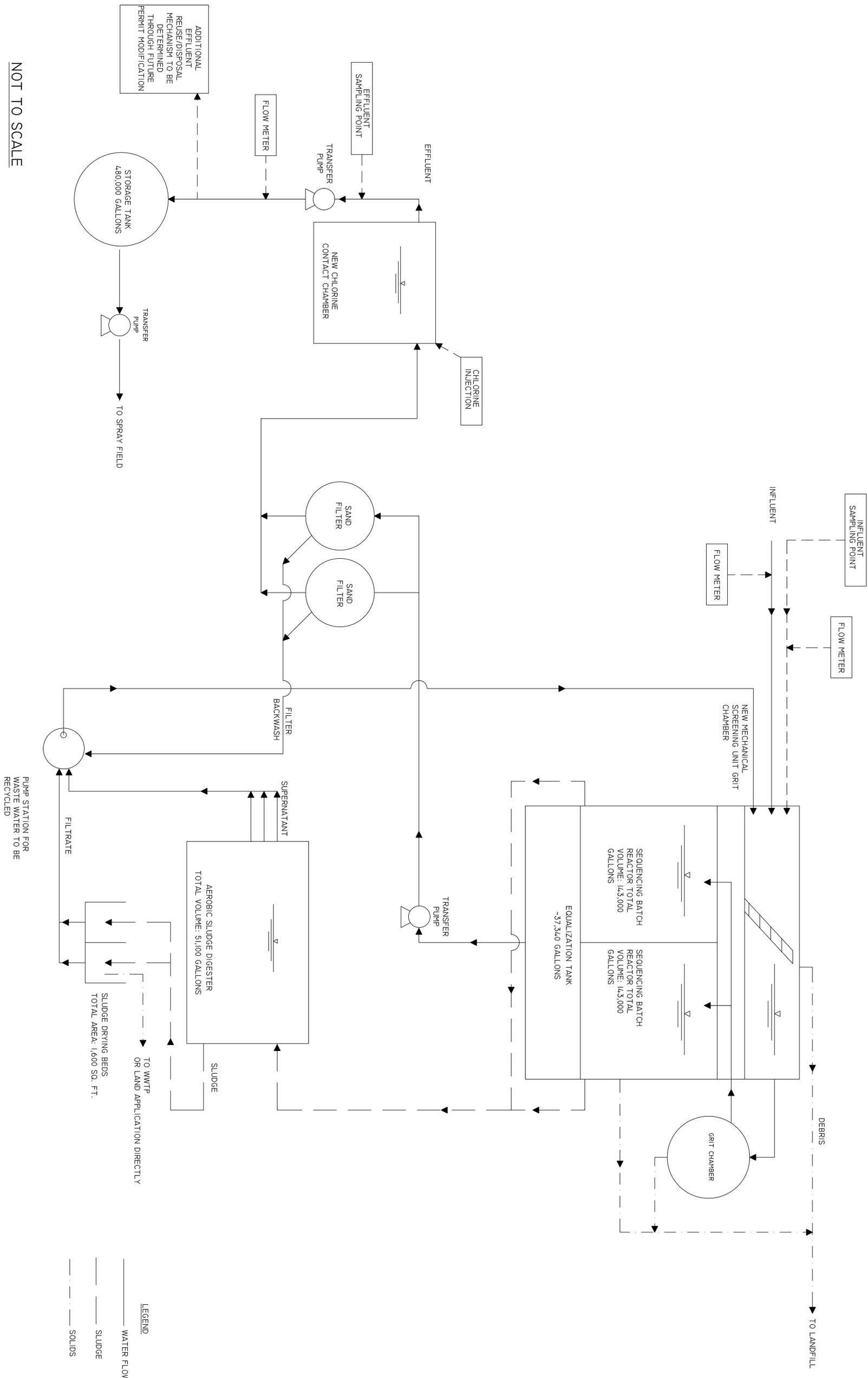
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TALLAHASSEE, FLORIDA 32301 OFFICE FAX: (888) 878-2939
F.B.P.E. C.O.A. #9961

NO.	DATE	REVISION/ACTION TAKEN

DESIGN ENGINEER: MARC E. NEIHAUS	SCALE: 1"=20'
SIGNATURE:	DATE: 12/29/09
P. E. NUMBER: 52507	CHECKED BY: MEN
DATE: 8/11/09	

PRINT DATE:
12 AUG 2009
SHEET NUMBER:
C-4 OF C-8

NOT TO SCALE



PUMP STATION FOR WASTE WATER TO BE RECYCLED

LEGEND
 — WATER FLOW
 - - - SLUDGE
 ····· SOLIDS

PROCESS FLOW DIAGRAM

SOUTH COLUMBIA COUNTY REGIONAL WASTEWATER TREATMENT PLANT
 COLUMBIA COUNTY WWTP CONSTRUCTION
 FOR
EUTAW UTILITIES, INC.
 LAKE CITY, FLORIDA

CHEN H. LIN, P.E.
 No. 43340

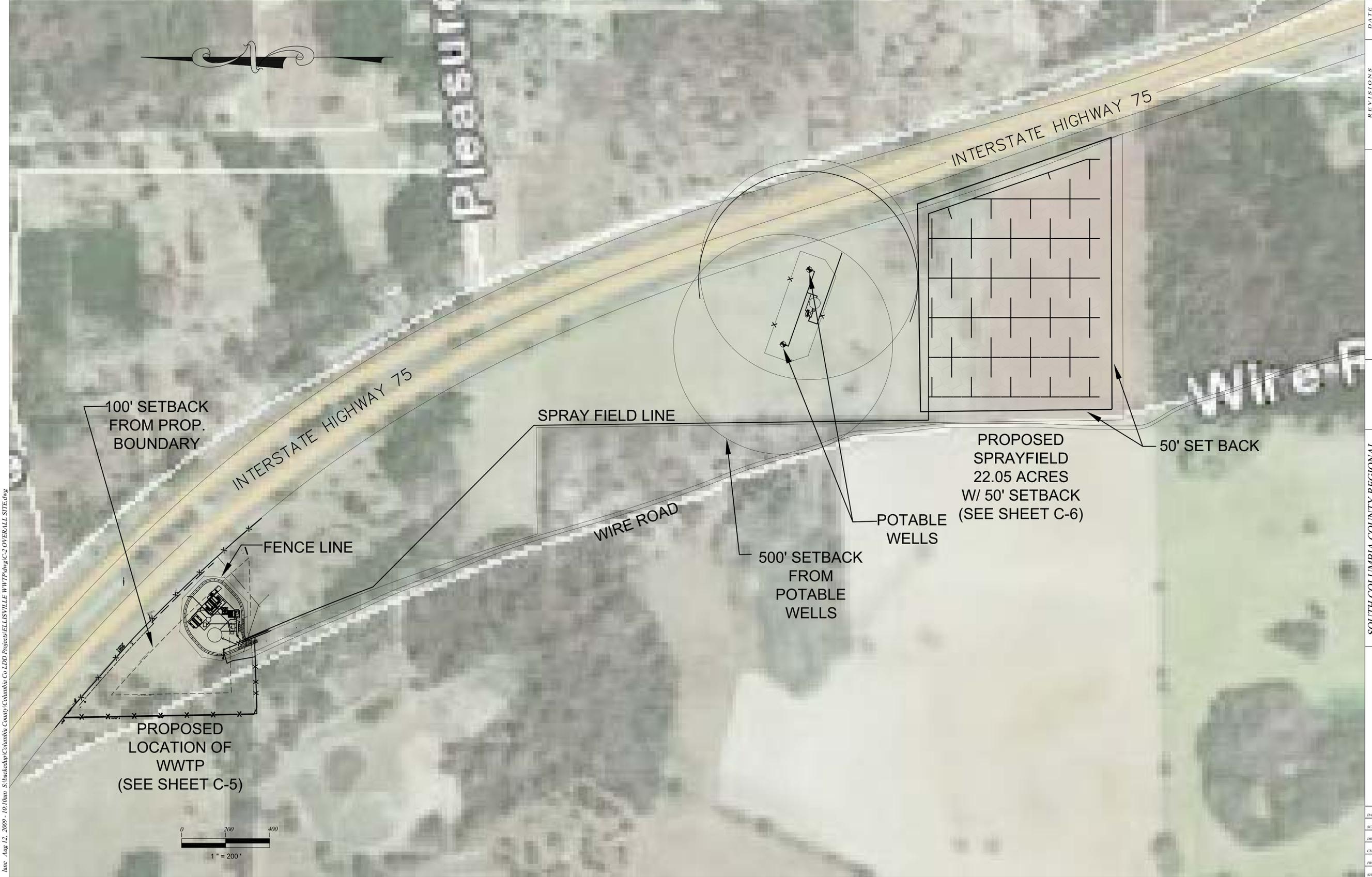


JIM STIDHAM & ASSOCIATES, INC.
 HYDROLOGY, GEOLOGY, CIVIL & ENVIRONMENTAL ENGINEERING
 547 N. MONROE ST., SUITE 201, TALLAHASSEE, FLORIDA 32301
 TELEPHONE: 904.222.2975 FACSIMILE: 904.914.6560
 FBPE CERTIFICATE OF AUTHORIZATION NO. 00065629

REVISIONS	DATE
ISSUE FOR BIDDING	8/10/09

DATE: 06/04/09
 SCALE: N.T.S.
 DRAWN BY: AMH
 CHECKED BY: CHL
 PROJECT NO.: 5010-007
 SHEET C-3 OF 8

I:\ms - Aug 12, 2009 - 10:10am S:\backedup\Columbia County\Columbia Co LDD Projects\ELLISVILLE WWTP\dwg\C-2 OVERALL SITE.dwg



100' SETBACK FROM PROP. BOUNDARY

INTERSTATE HIGHWAY 75

Pleasonton

SPRAY FIELD LINE

WIRE ROAD

INTERSTATE HIGHWAY 75

PROPOSED SPRAYFIELD
22.05 ACRES
W/ 50' SETBACK
(SEE SHEET C-6)

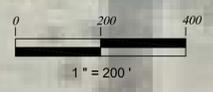
50' SET BACK

500' SETBACK FROM POTABLE WELLS

POTABLE WELLS

FENCE LINE

PROPOSED LOCATION OF WWTP
(SEE SHEET C-5)



REVISIONS	DATE

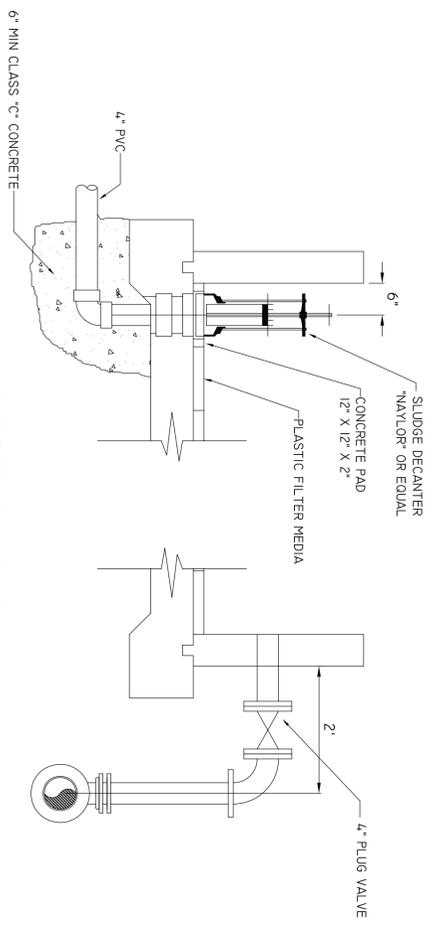
JIM STIDHAM & ASSOCIATES, INC.
HYDROLOGY, GEOLOGY, CIVIL &
ENVIRONMENTAL ENGINEERING
547 N. MONROE ST., SUITE 201, TALLAHASSEE, FLORIDA 32304
TELEPHONE: 904.222.2222 FAX: 904.222.2222
E-MAIL: JSTIDHAM@JSA-FL.COM
P.E. CERTIFICATE OF AUTHORIZATION NO. 0008263

CHEN H. LIN, P.E.
No. 43340

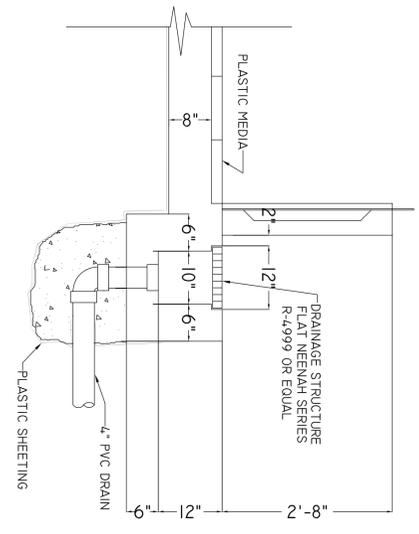
**SOUTH COLUMBIA COUNTY REGIONAL
WASTEWATER TREATMENT PLANT**
COLUMBIA COUNTY WWTP CONSTRUCTION
FOR
EUTAW UTILITIES, INC.
LAKE CITY, FLORIDA

OVERALL SITE PLAN

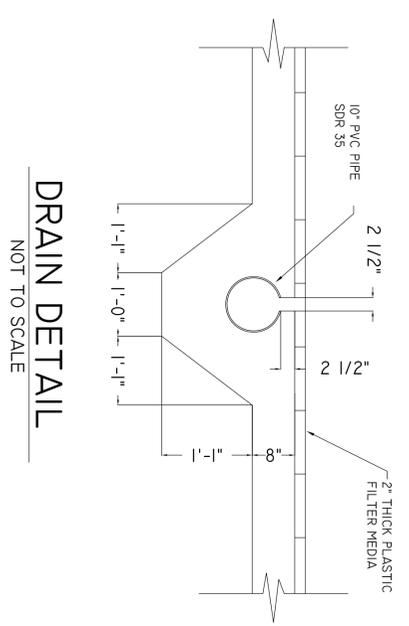
DATE: 06/04/09
SCALE: AS SHOWN
DRAWN BY: AMH
CHECKED BY: CHL
PROJECT NO.: 5010-007
SHEET C-4 OF 2



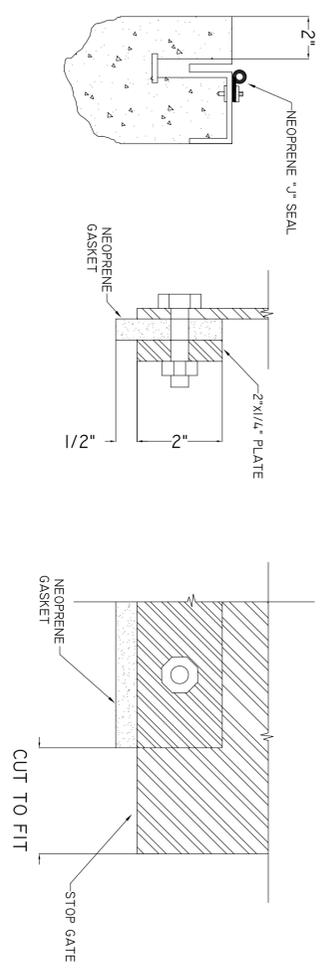
SECTION D-D
NOT TO SCALE



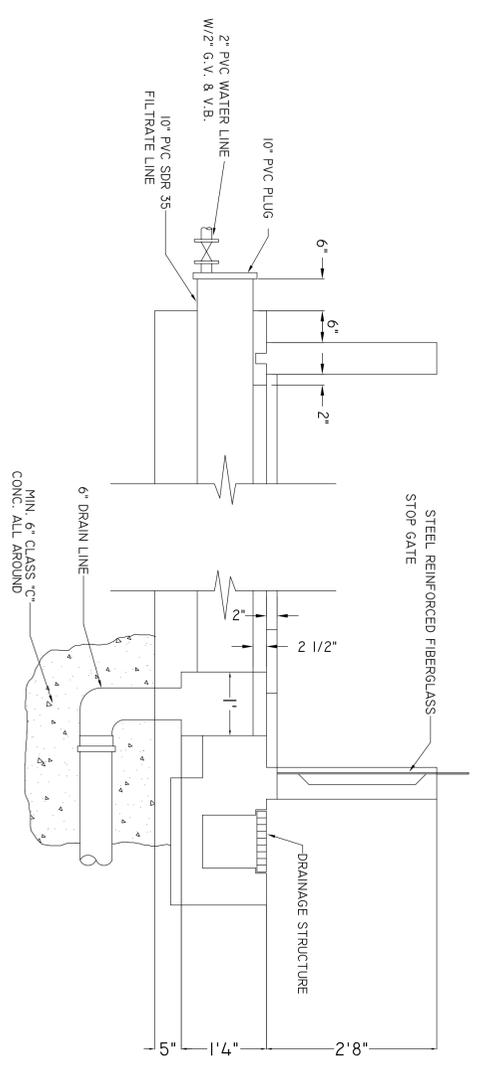
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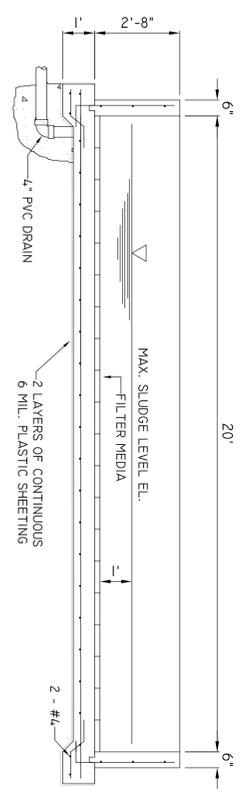
DRAIN DETAIL
NOT TO SCALE



STOP GATE DETAIL
NOT TO SCALE

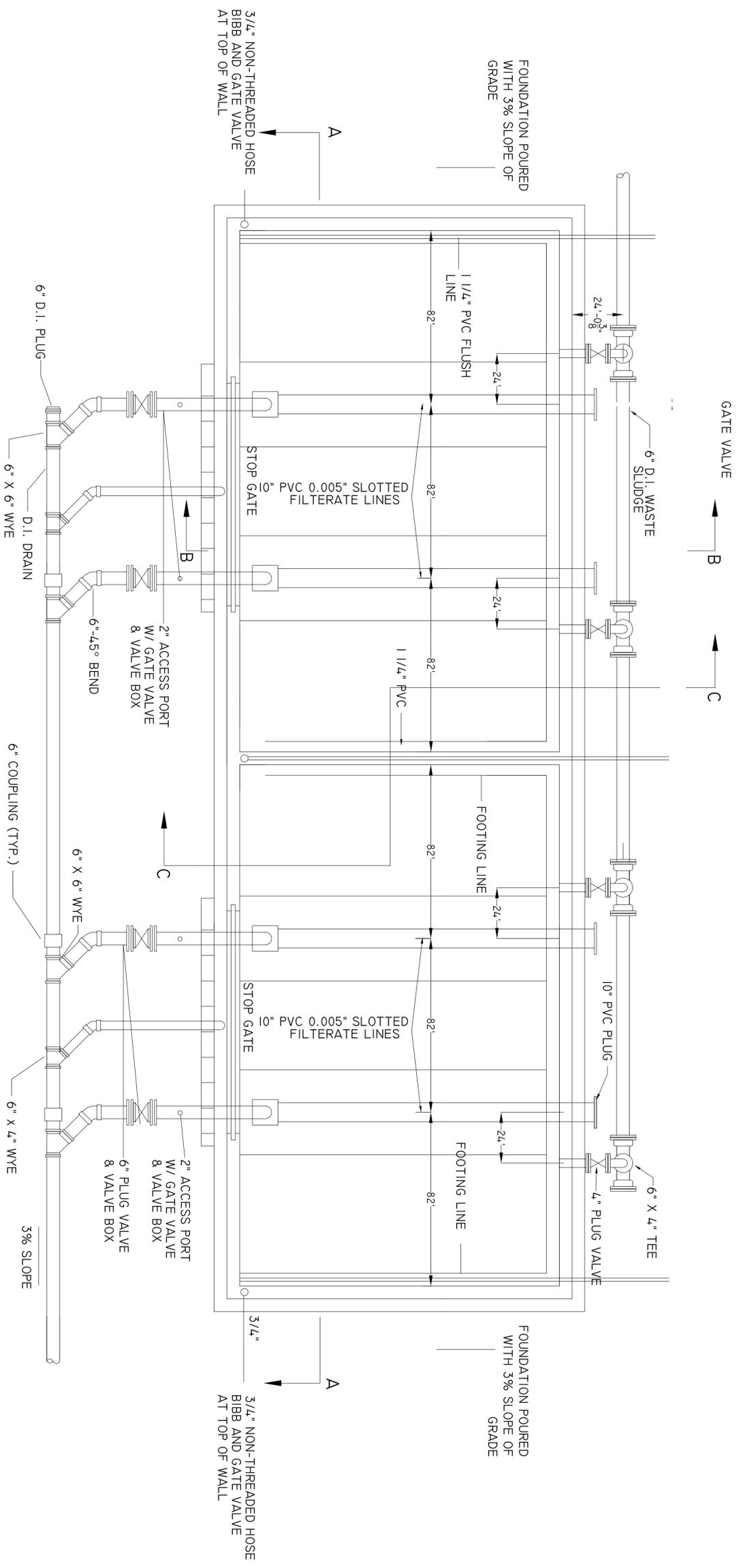


SECTION C-C
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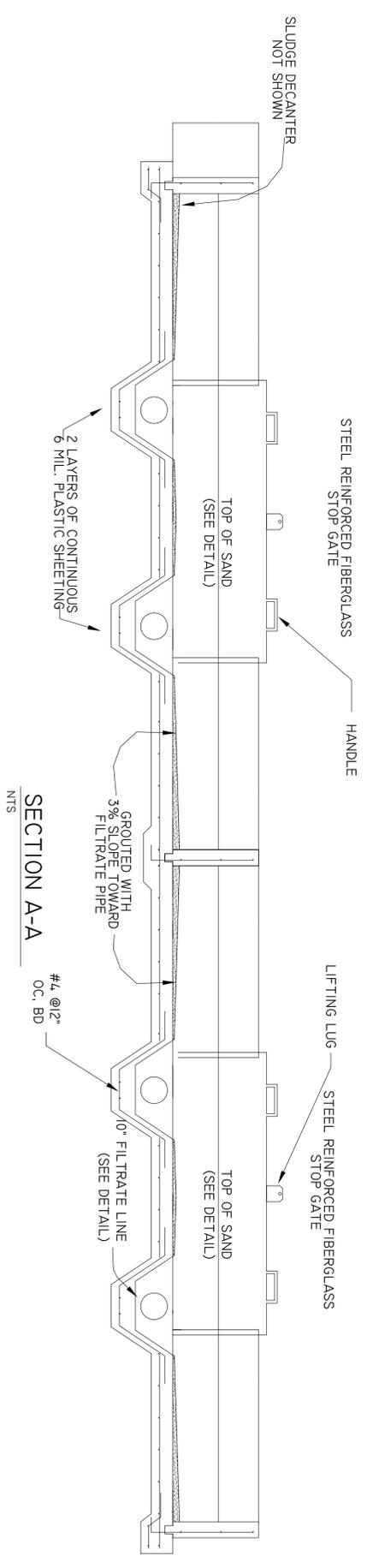


SECTION B-B
NOT TO SCALE

PRINT DATE: 12 AUG 2009 SHEET NUMBER S-21 OF S-22	COLUMBIA COUNTY WASTE WATER TREATMENT PLANT SLUDGE DRYING BEDS DETAILS ELLISVILLE, FL	EUTAW UTILITIES, INC. Project Development...Concept to Completion 415 SAINT FRANCIS ST, UNIT 114 OFFICE PHONE: (850) 383-0400 TALLAHASSEE, FLORIDA 32301 OFFICE FAX: (888) 878-2939	NO.	DATE	REVISION/ACTION TAKEN	DESIGN ENGINEER: MARC E. NEUHAUS
						SIGNATURE:
						P. E. NUMBER: 52507
						PRINT DATE: 12 AUG 2009
						DRAWN BY: DATE: SCALE: 29_AUN09 AS SHOWN
						CHECKED BY: DATE: MEN 29_AUN09



PLAN VIEW
NTS



SECTION A-A
NTS

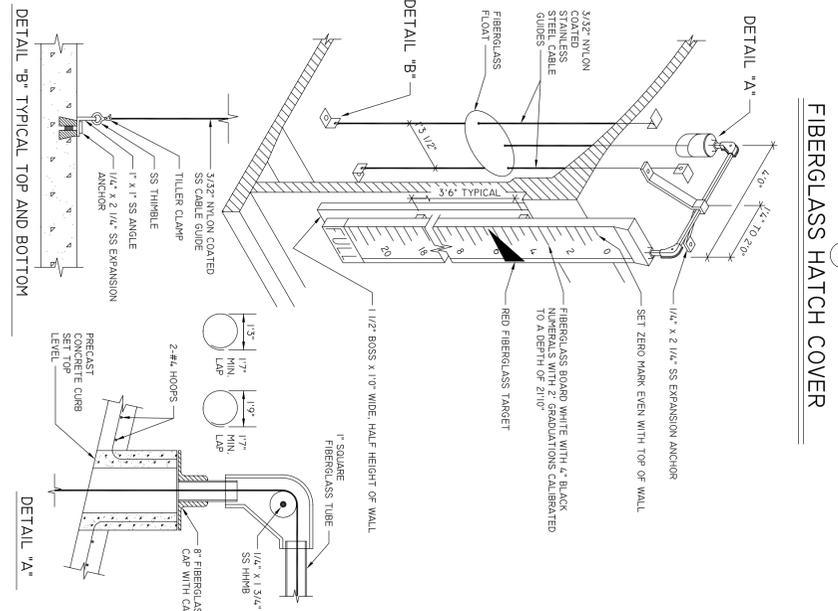
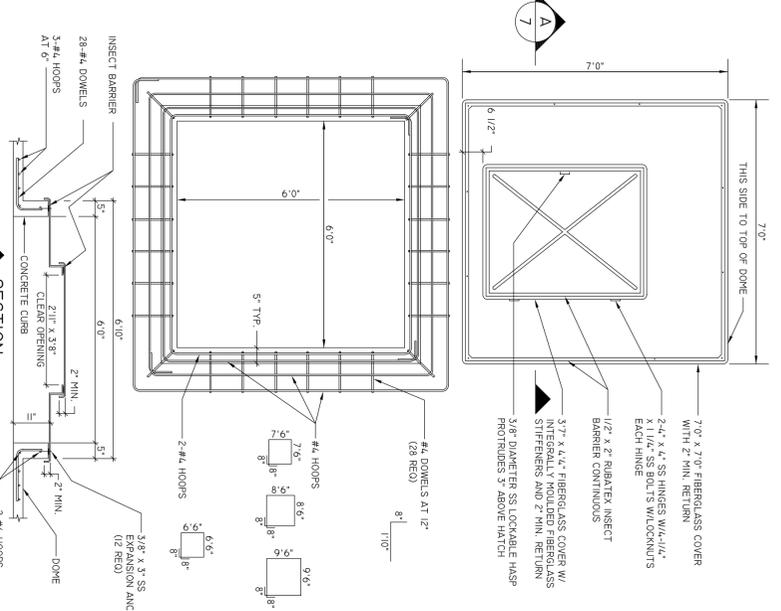
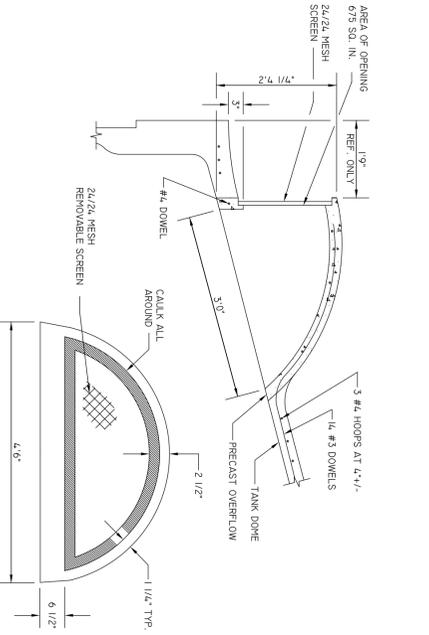
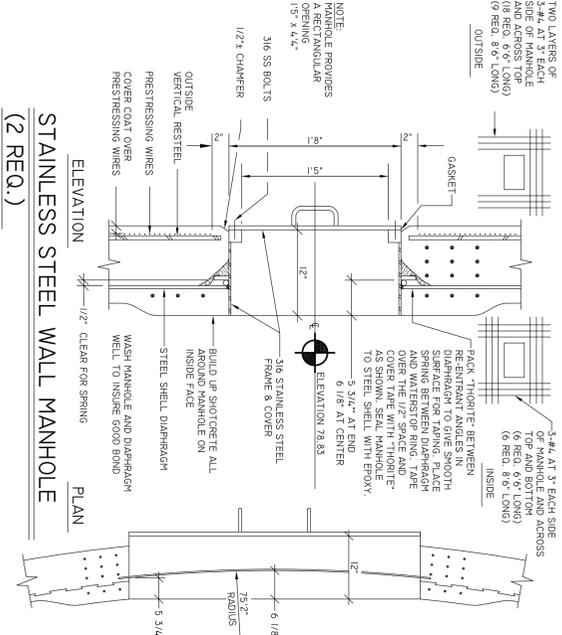
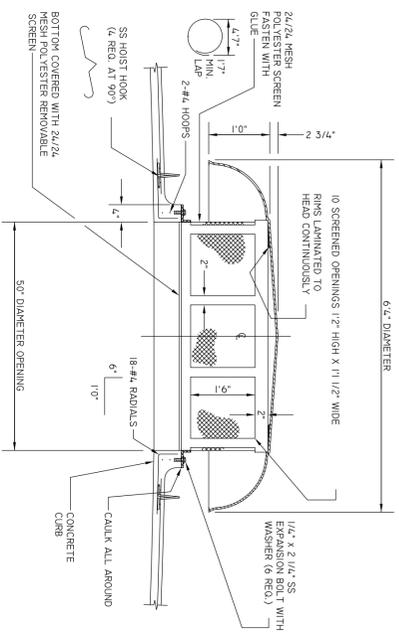
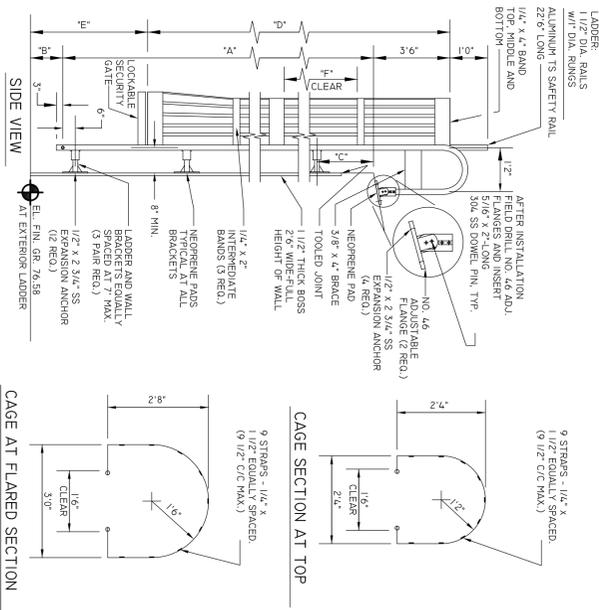
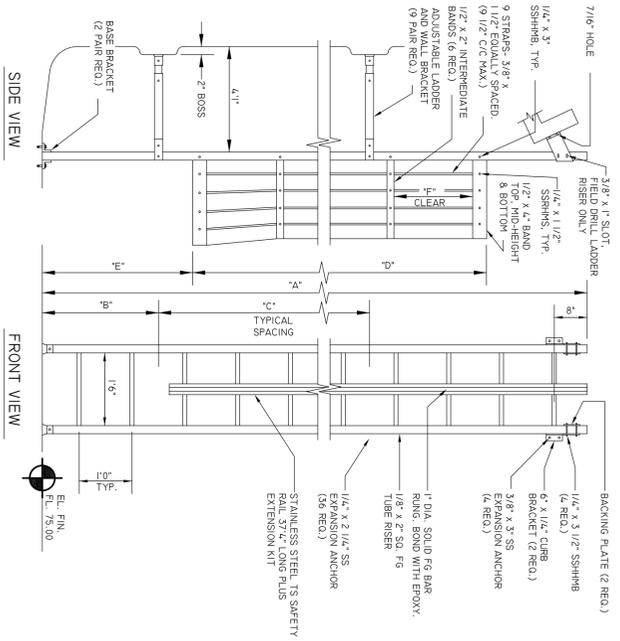
COLUMBIA COUNTY
WASTE WATER TREATMENT PLANT
SLUDGE DRYING BEDS DETAILS
ELLISVILLE, FL

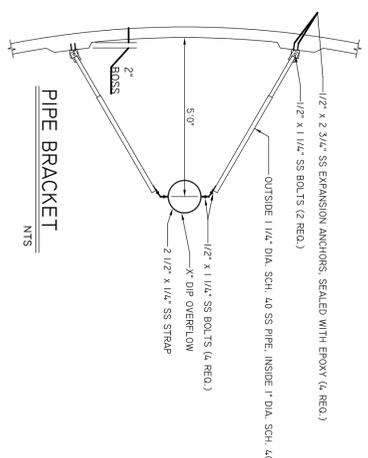
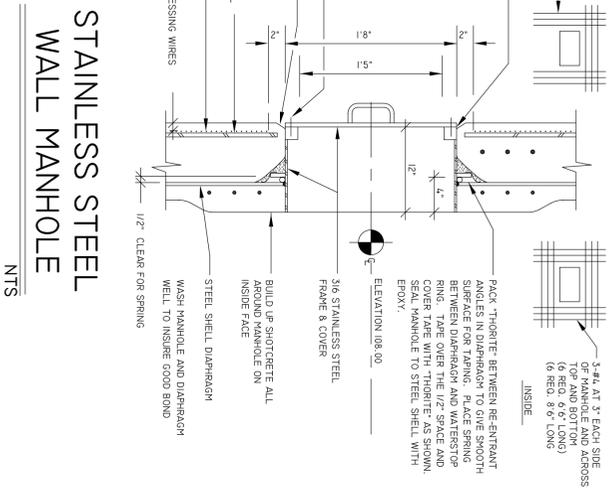
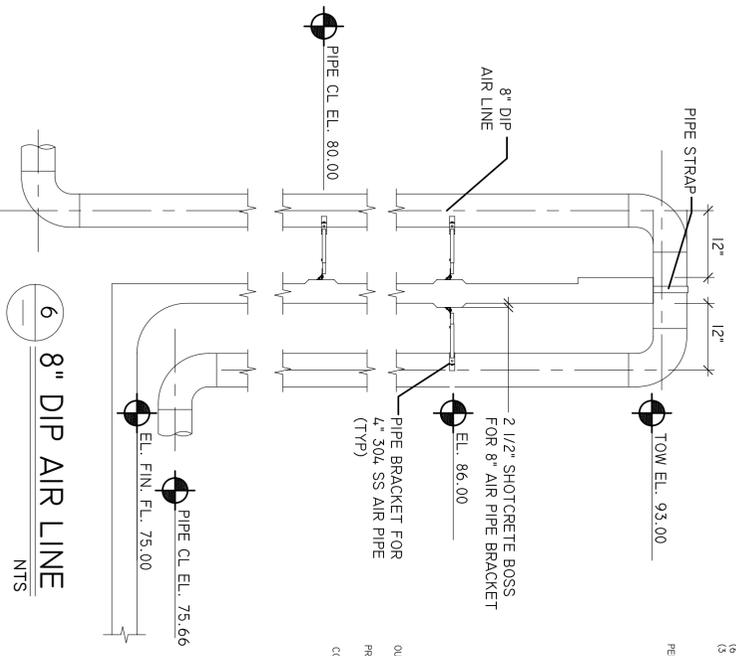
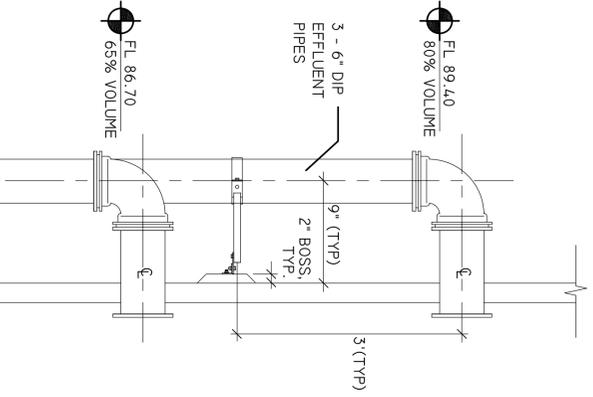
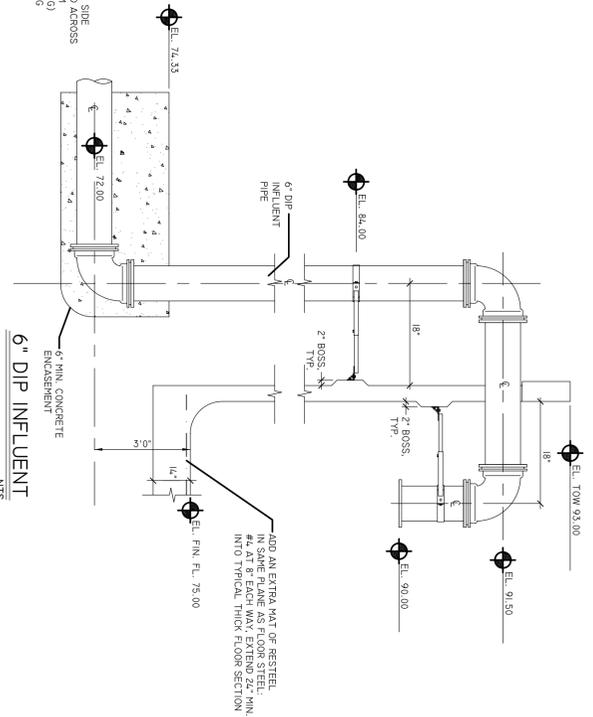
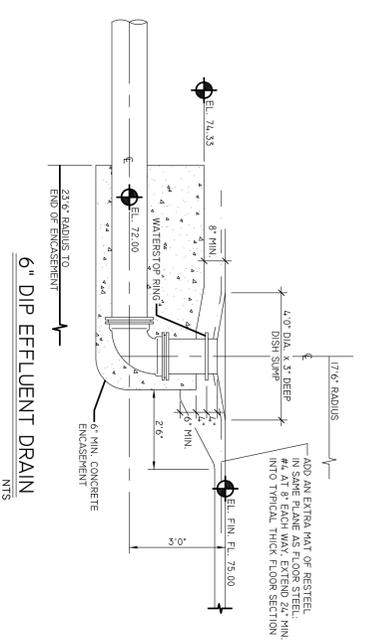
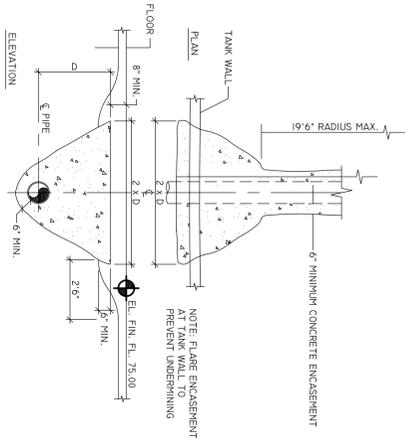
Project Development...Concept to Completion
415 SAINT FRANCIS ST, UNIT 114 OFFICE PHONE: (850) 383-0400
TALLAHASSEE, FLORIDA 32301 OFFICE FAX: (888) 878-2939

NO.	DATE	REVISION/ACTION TAKEN

DESIGN ENGINEER: SIGNATURE: MARC E. NEUHAUS	P. E. NUMBER: 52507	SCALE: AS SHOWN
PRINT DATE: 12 AUG 2009	DRAWN BY: WH	DATE: 29 JUN 09
CHECKED BY: MEN	DATE: 29 JUN 09	

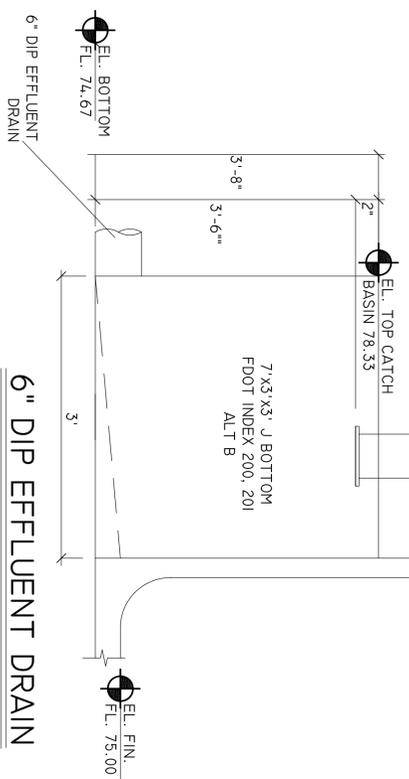
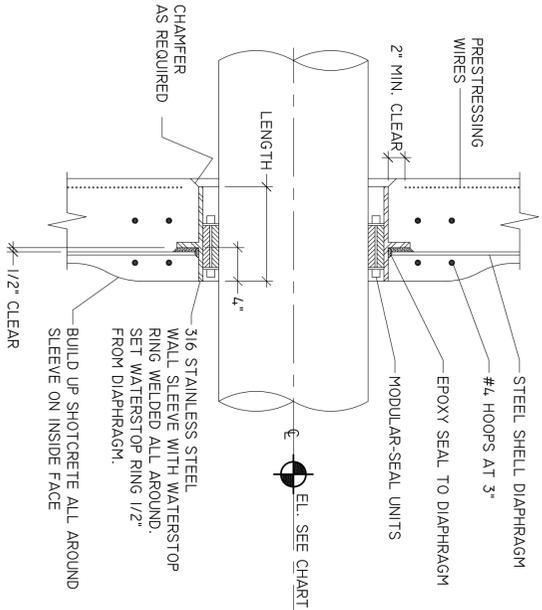
PRINT DATE:
12 AUG 2009
SHEET NUMBER
S-20 OF S-22





PIPE DESCRIPTION	OD	C. EL.	MODULAR SEAL/#	SLEEVE:		ID	WALL THICKNESS	LAP
				WALL LENGTH	DIAMETER			
6" DIP INFLUENT	6.625"	91.50	LS-400/S7	10.02"	0.365"	10.02"	1.5"	(2 REO)
6" DIP SUPERNATANT	6.625"	89.40	LS-475/S10	10.02"	0.365"	10.02"	1.5"	(2 REO)
6" DIP SUPERNATANT	6.625"	86.70	LS-475/S10	10.02"	0.365"	10.02"	1.5"	(2 REO)
6" DIP SUPERNATANT	6.625"	84.00	LS-475/S10	10.02"	0.365"	10.02"	1.5"	(2 REO)

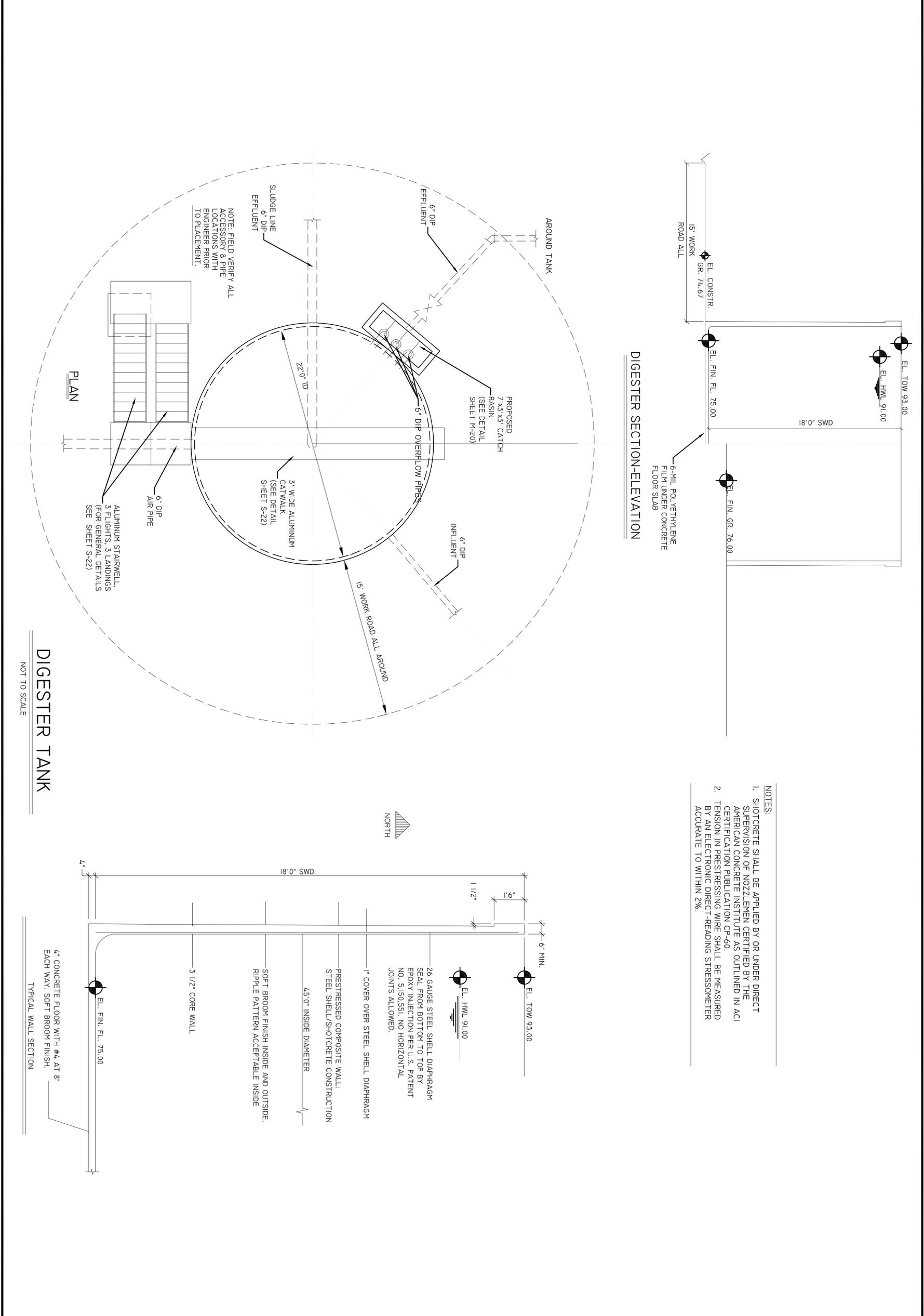
WALL SLEEVE AND MODULAR SEALS



NOTE: SEE M-20 FOR MORE DETAILS

NO.	DATE	REVISION/ACTION TAKEN

DESIGN ENGINEER: MARC E. NEUHAUS	SCALE: AS SHOWN
SIGNATURE:	DATE: 29_AUG09
P. E. NUMBER: 52507	CHECKED BY: MEN
PRINT DATE: 12 AUG 2009	DATE: 29_AUG09
DRAWN BY: MEN	DATE: 29_AUG09



- NOTES:
- SHOTCRETE SHALL BE APPLIED BY OR UNDER DIRECT SUPERVISION OF NOZZLEMEN CERTIFIED BY THE AMERICAN CONCRETE INSTITUTE AS OUTLINED IN ACI CERTIFICATION PUBLICATION CP-60.
 - TENSION IN PRESTRESSING WIRE SHALL BE MEASURED BY AN ELECTRONIC DIRECT-READING STRESSMETER ACCURATE TO WITHIN 2%.

NO.	DATE	REVISION/ACTION TAKEN

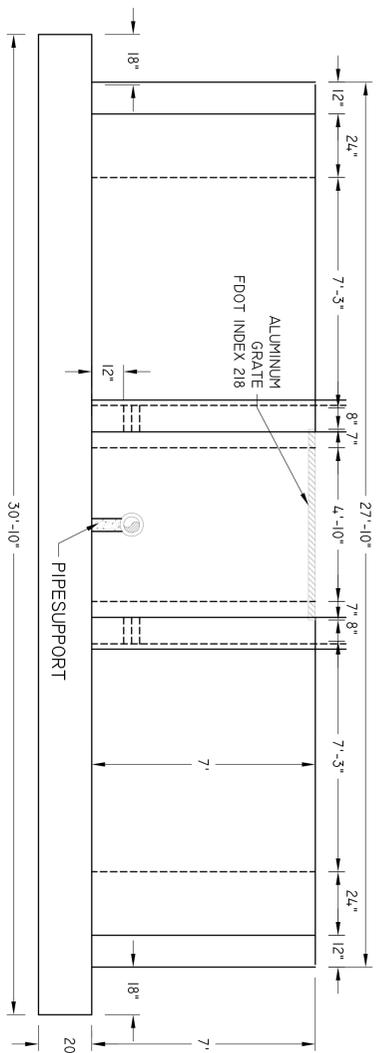
DESIGN ENGINEER: SIGNATURE: _____ P. E. NUMBER: 52507	DATE: 12 AUG 2009	SCALE: AS SHOWN
PRINT DATE: 12 AUG 2009	DRAWN BY: MHN	CHECKED BY: MEN
DATE: 29 JUN 09	DATE: 29 JUN 09	DATE: 29 JUN 09

COLUMBIA COUNTY
WASTE WATER TREATMENT PLANT
DIGESTER TANK DETAILS
ELLISVILLE, FL

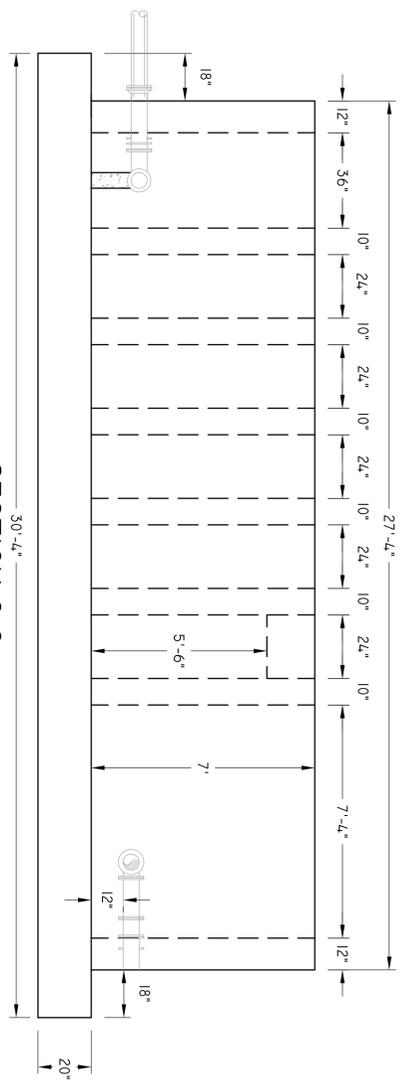
EUI EUTAW UTILITIES, INC.
Project Development...Concept to Completion
415 SAINT FRANCIS ST., UNIT 114 TALLAHASSEE, FLORIDA 32301
OFFICE PHONE: (850) 383-0400
OFFICE FAX: (888) 878-2939
ERP.E.COA.09061

PRINT DATE: 12 AUG 2009
SHEET NUMBER: S-16 OF S-22

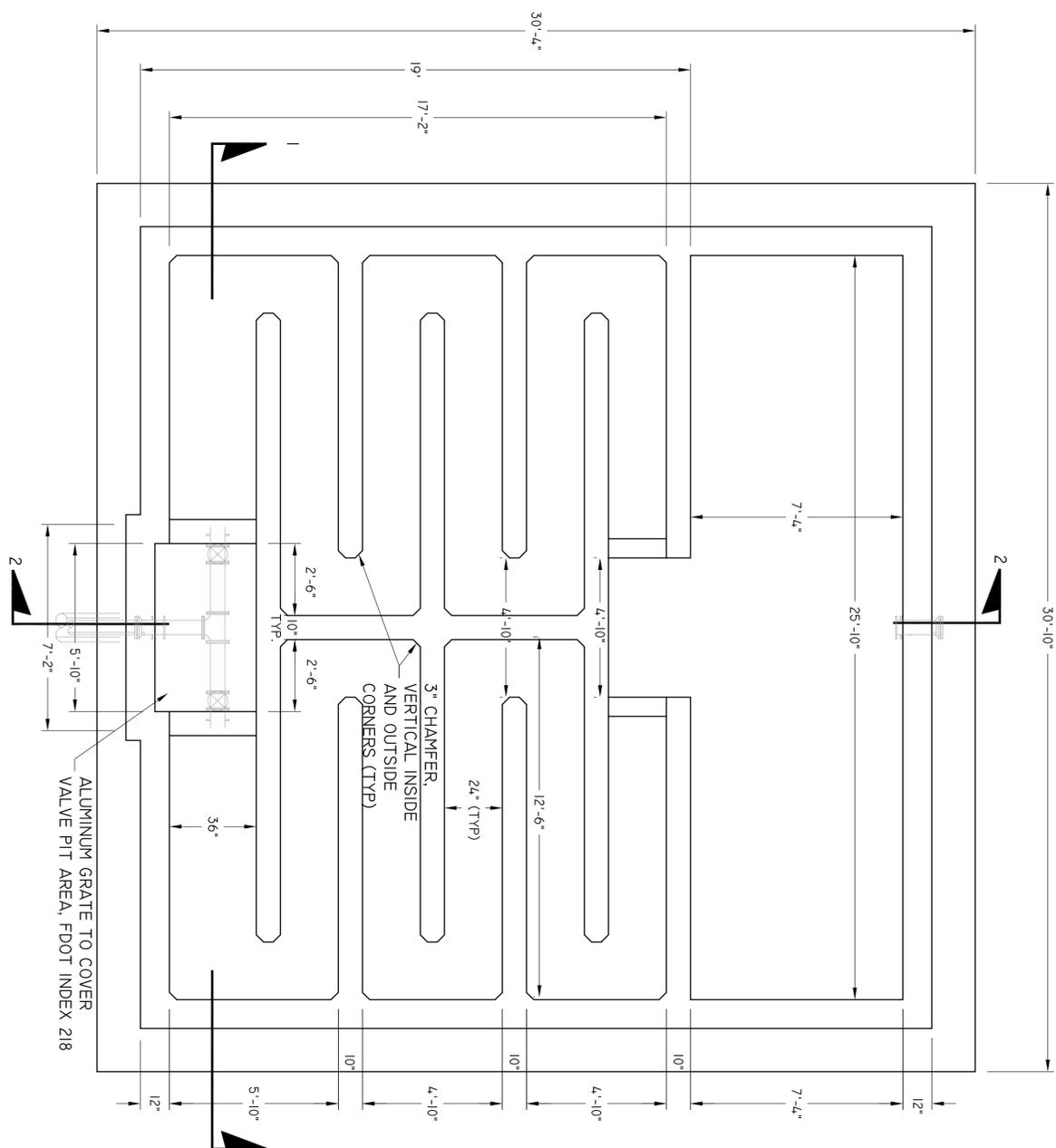
DIGESTER TANK
NOT TO SCALE



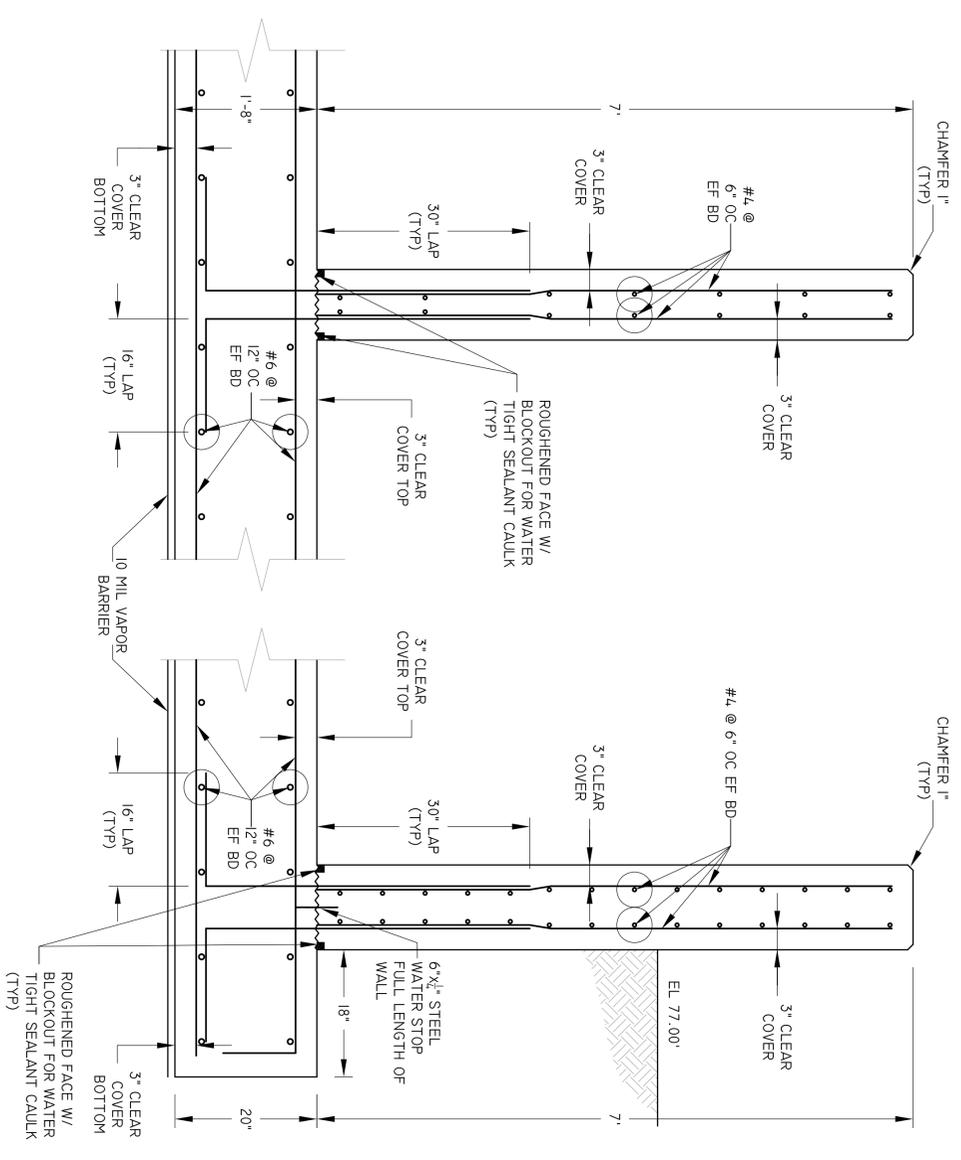
SECTION 1-1
SCALE: 3/8" = 1'



SECTION 2-2
SCALE: 3/8" = 1'



CHLORINE CONTACT CHAMBER PLAN
SCALE: 3/8" = 1'



INTERIOR WALL
DETAIL
SCALE: 1" = 1'

EXTERIOR WALL
DETAIL
SCALE: 1" = 1'

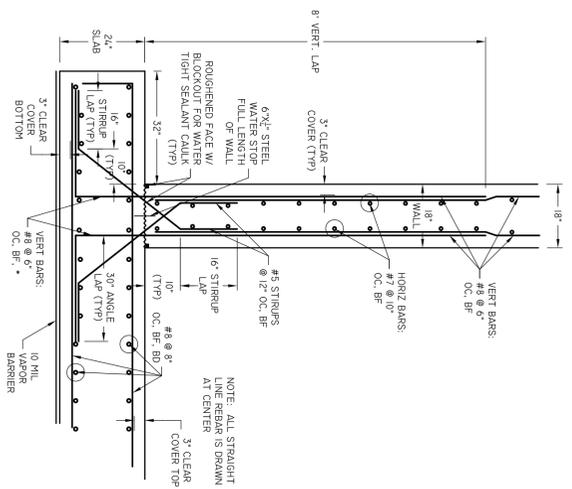
COLUMBIA COUNTY
WASTE WATER TREATMENT PLANT
CHLORINE CONTACT CHAMBER
ELLISVILLE, FL

EUI EUTAW UTILITIES, INC.
Project Development...Concept to Completion
415 SAINT FRANCIS ST., UNIT 114 OFFICE PHONE: (850) 383-0400
TALLAHASSEE, FLORIDA 32301 OFFICE FAX: (888) 878-2939

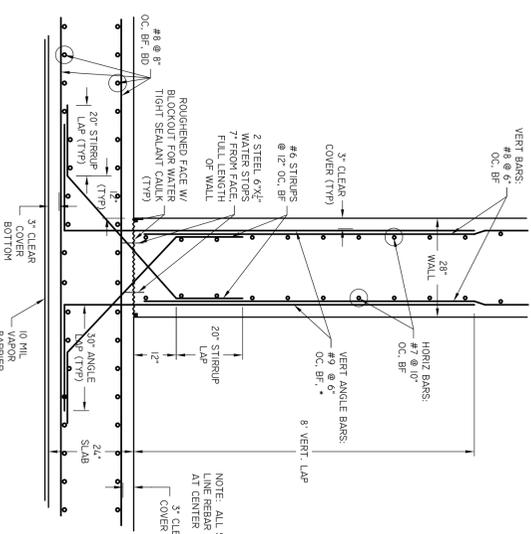
NO.	DATE	REVISION/ACTION TAKEN

DESIGN ENGINEER: SIGNATURE: _____ P. E. NUMBER: 52507 PRINT DATE: 12 AUG 2009	SCALE: AS SHOWN
DRAWN BY: DATE: 29_AUG09	CHECKED BY: DATE: 29_AUG09

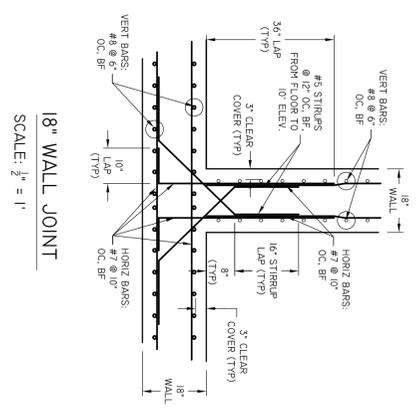
PRINT DATE:
12 AUG 2009
SHEET NUMBER
S-15 OF S-22



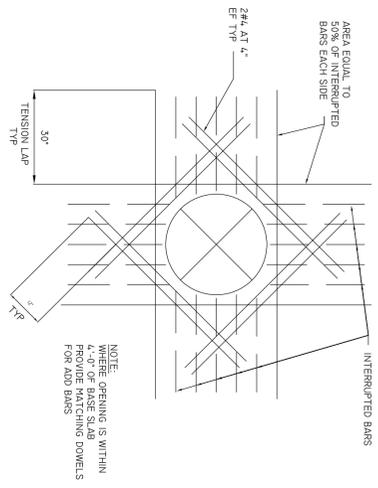
18" WALL & SLAB JOINT
SCALE: 1/2" = 1'



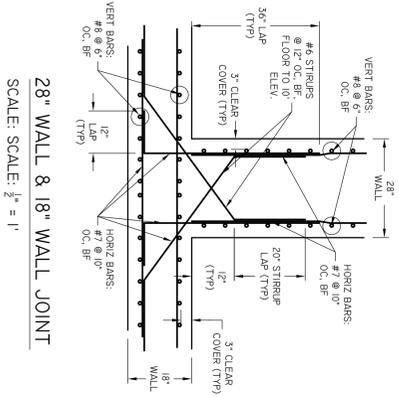
28" WALL & SLAB JOINT
SCALE: 1/2" = 1'



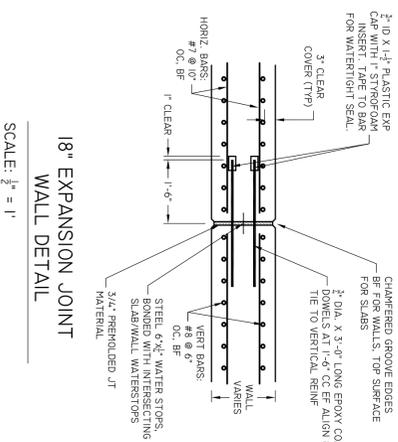
18" WALL JOINT
SCALE: 1/2" = 1'



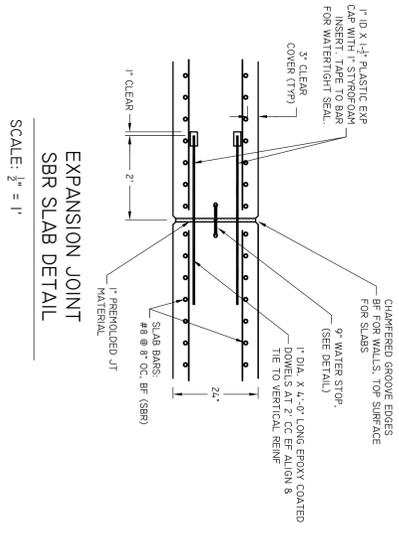
**REIN AT CIRCULAR OPENINGS
GREATER THAN 8\"/>**



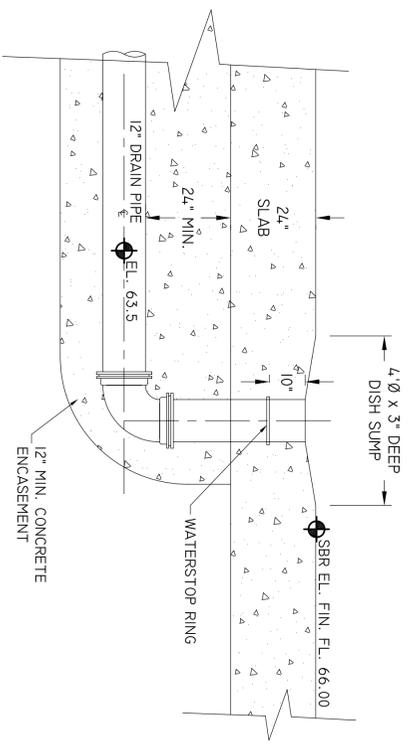
28" WALL & 18" WALL JOINT
SCALE: 1/2" = 1'



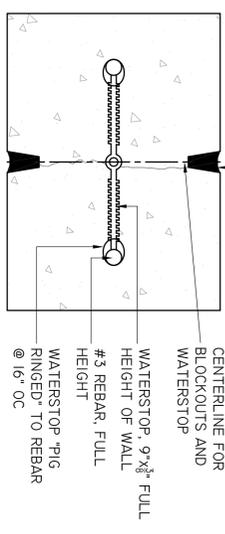
**18" EXPANSION JOINT
WALL DETAIL**
SCALE: 1/2" = 1'



**EXPANSION JOINT
SBR SLAB DETAIL**
SCALE: 1/2" = 1'



12" SBR FLOOR PLUMBING
NTS



**28" WALL WATERSTOP
DETAIL**
NTS

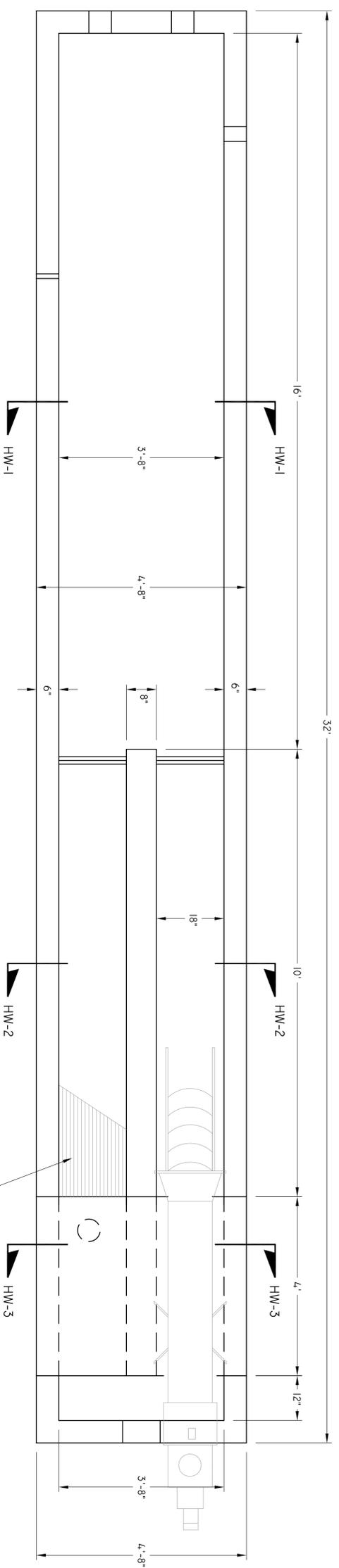
NO.	DATE	REVISION/ACTION TAKEN

DESIGN ENGINEER: SIGNATURE: _____	SCALE: AS SHOWN
P. E. NUMBER: 52507	DATE: 12 AUG 2009
PRINT DATE: 12 AUG 2009	CHECKED BY: DATE: 29_AUG09
DRAWN BY: MEN	DATE: 29_AUG09

EUTAW UTILITIES, INC.
Project Development...Concept to Completion
415 SAINT FRANCIS ST., UNIT 114 TALLAHASSEE, FLORIDA 32301 OFFICE PHONE: (850) 383-0400 OFFICE FAX: (888) 878-2939
ERP.E COA 09061

COLUMBIA COUNTY
WASTE WATER TREATMENT PLANT
VARIOUS WALL AND JOINT DETAILS
ELLISVILLE, FL

PRINT DATE:
12 AUG 2009
SHEET NUMBER
S-14 OF S-22

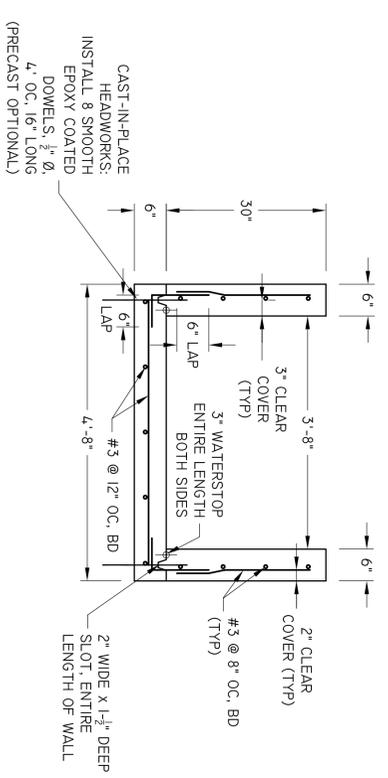


**HEADWORKS PLAN
VIEW DETAIL**

SCALE: $\frac{3}{8}'' = 1'$

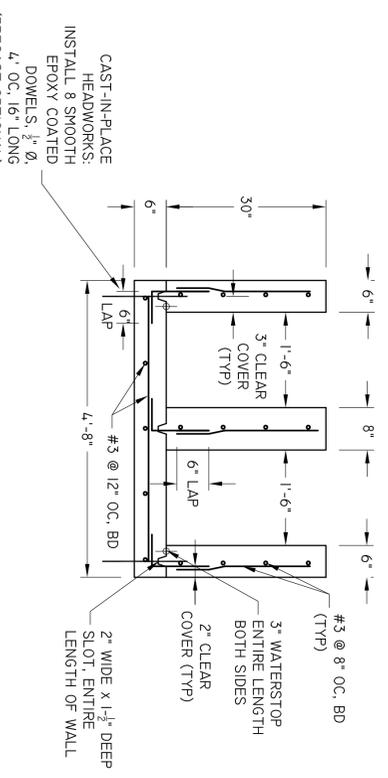
NOTE: ALL STRAIGHT
LINE REBAR IS DRAWN
AT CENTER

BAR SCREEN
SEE SHEET M-5
FOR DETAIL



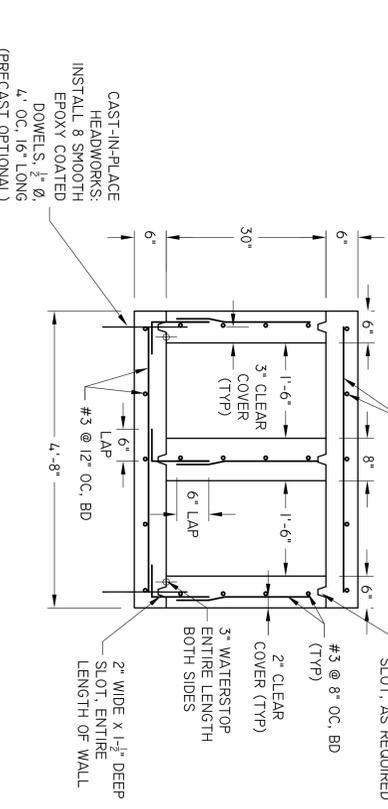
HW-1 DETAIL

SCALE: $\frac{3}{8}'' = 1'$



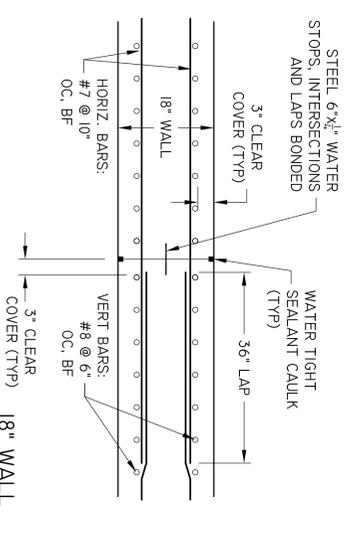
HW-2 DETAIL

SCALE: $\frac{3}{8}'' = 1'$



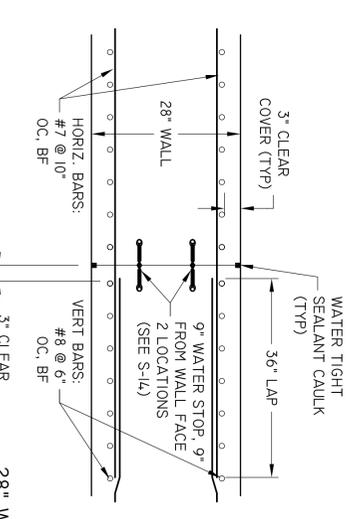
HW-3 DETAIL

SCALE: $\frac{3}{8}'' = 1'$



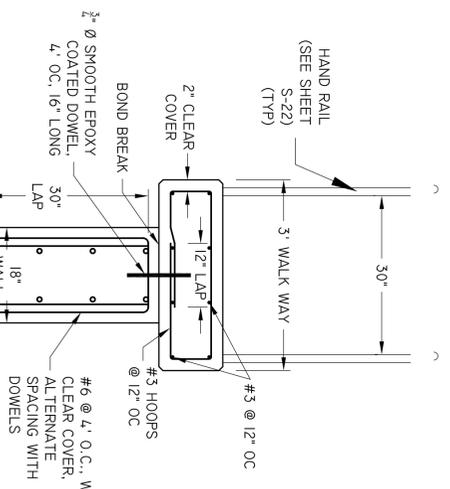
**18" WALL
CONSTRUCTION
JOINT DETAIL**

SCALE: $\frac{3}{8}'' = 1'$



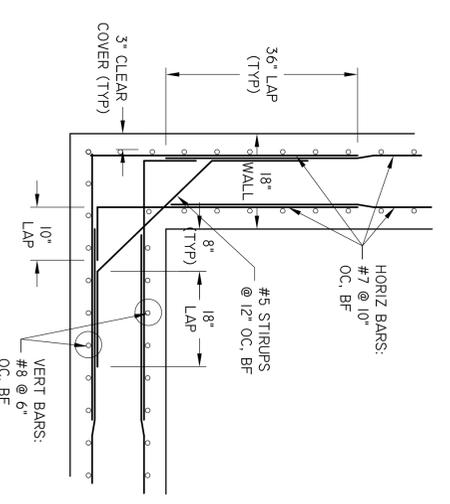
**28" WALL
CONSTRUCTION
JOINT DETAIL**

SCALE: $\frac{3}{8}'' = 1'$



3' WALKWAY DETAIL

SCALE: $\frac{3}{8}'' = 1'$



**18" WALL
CORNER
JOINT**

SCALE: $\frac{3}{8}'' = 1'$

COLUMBIA COUNTY
WASTE WATER TREATMENT PLANT
HEADWORKS & MISC WALL DETAILS

ELLISVILLE, FL

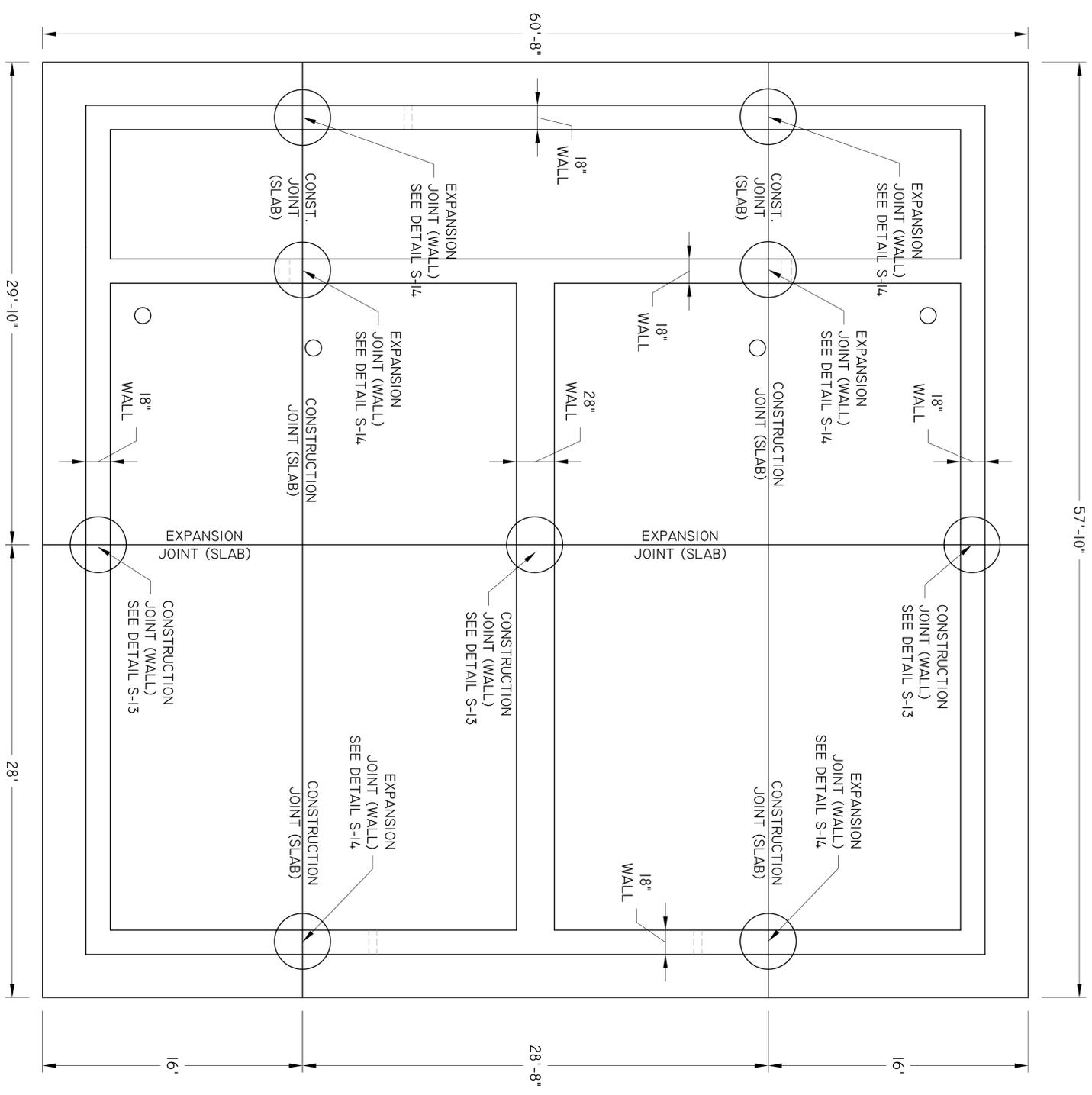
EUTAW UTILITIES, INC.
Project Development... Concept to Completion

415 SAINT FRANCIS ST., UNIT 114 OFFICE PHONE: (850) 383-0400
TALLAHASSEE, FLORIDA 32301 OFFICE FAX: (888) 878-2939

ERP/E COA 09961

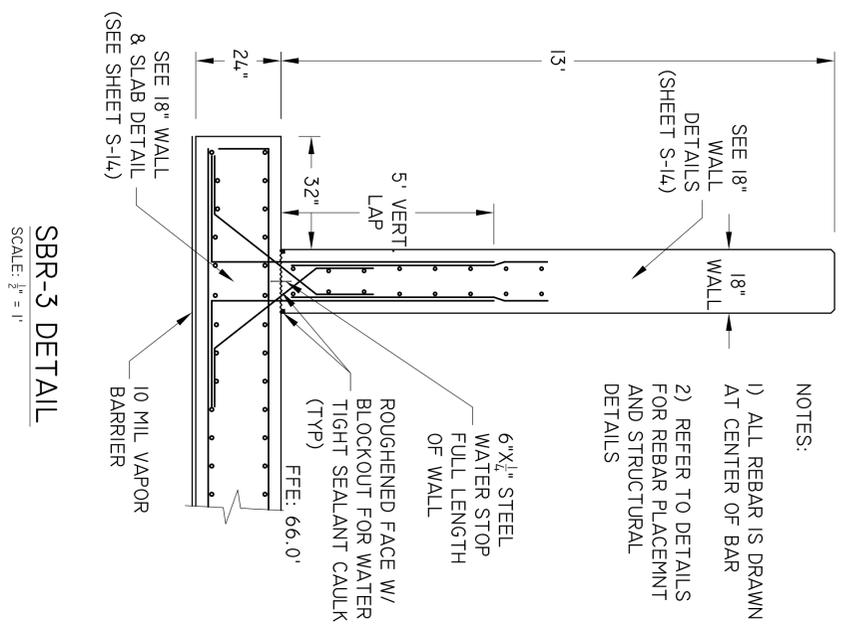
NO.	DATE	REVISION/ACTION TAKEN

DESIGN ENGINEER: SIGNATURE: _____	DATE: 12 Aug 2009	SCALE: AS SHOWN
P. E. NUMBER: 52507	DATE: 29_AUG09	SCALE: AS SHOWN
PRINT DATE: 12 Aug 2009	DATE: 29_AUG09	SCALE: AS SHOWN
DRAWN BY: MEN	DATE: 29_AUG09	SCALE: AS SHOWN
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**SBR-EQUALIZATION-HEADWORKS
FOUNDATION & WALL JOINT
DETAILS**

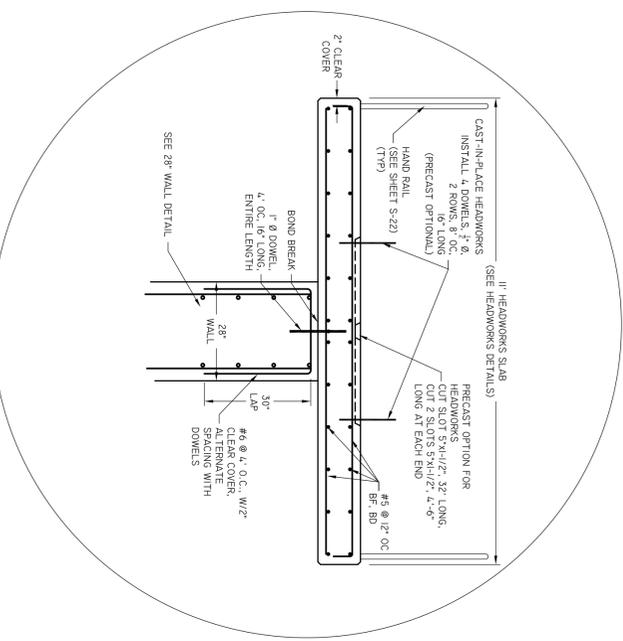
SCALE: $\frac{1}{4}'' = 1'$



SBR-3 DETAIL

SCALE: $\frac{1}{2}'' = 1'$

- NOTES:
- 1) ALL REBAR IS DRAWN AT CENTER OF BAR
 - 2) REFER TO DETAILS FOR REBAR PLACEMENT AND STRUCTURAL DETAILS



SBR-4 WALL DETAIL

SCALE: $\frac{1}{2}'' = 1'$

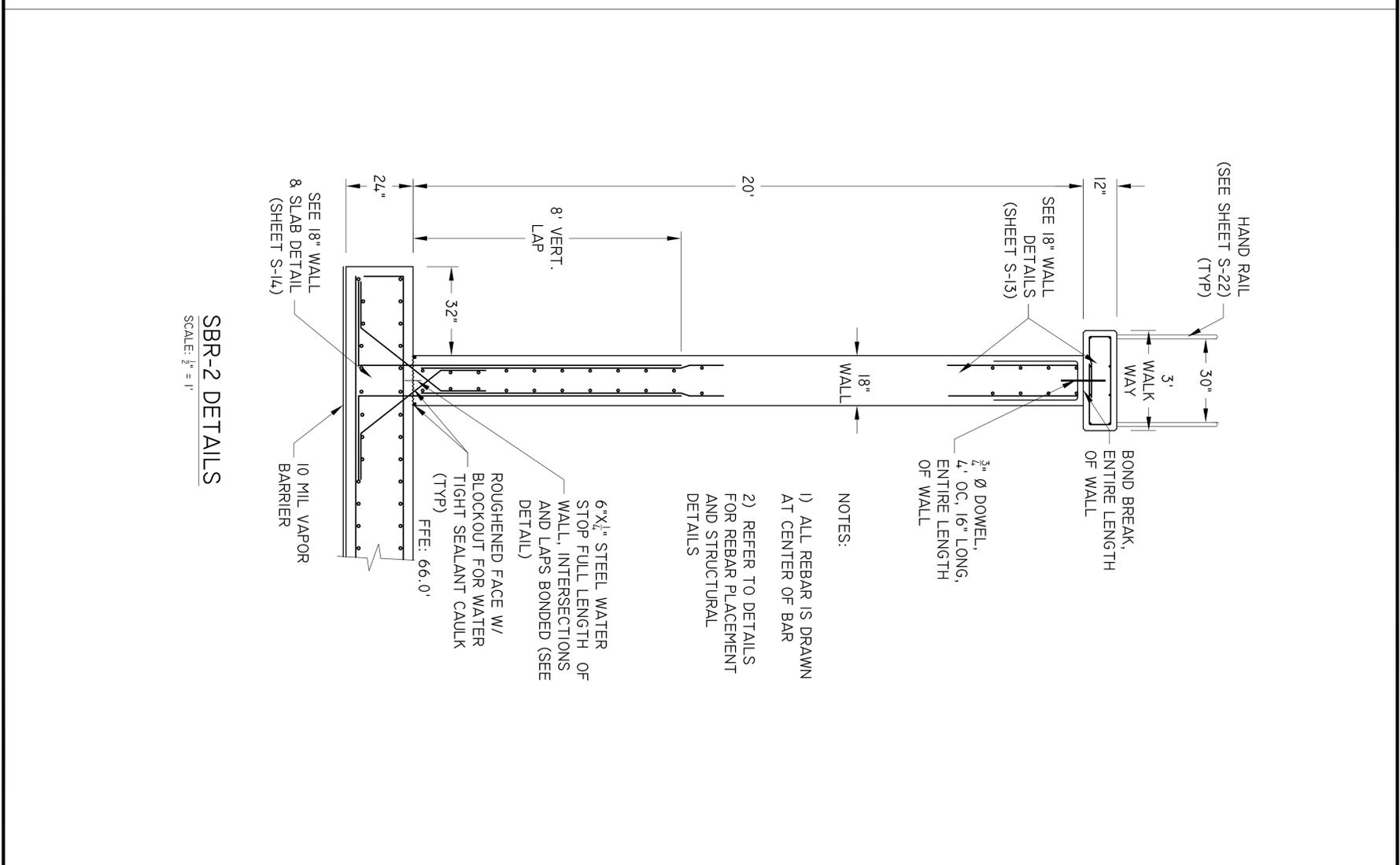
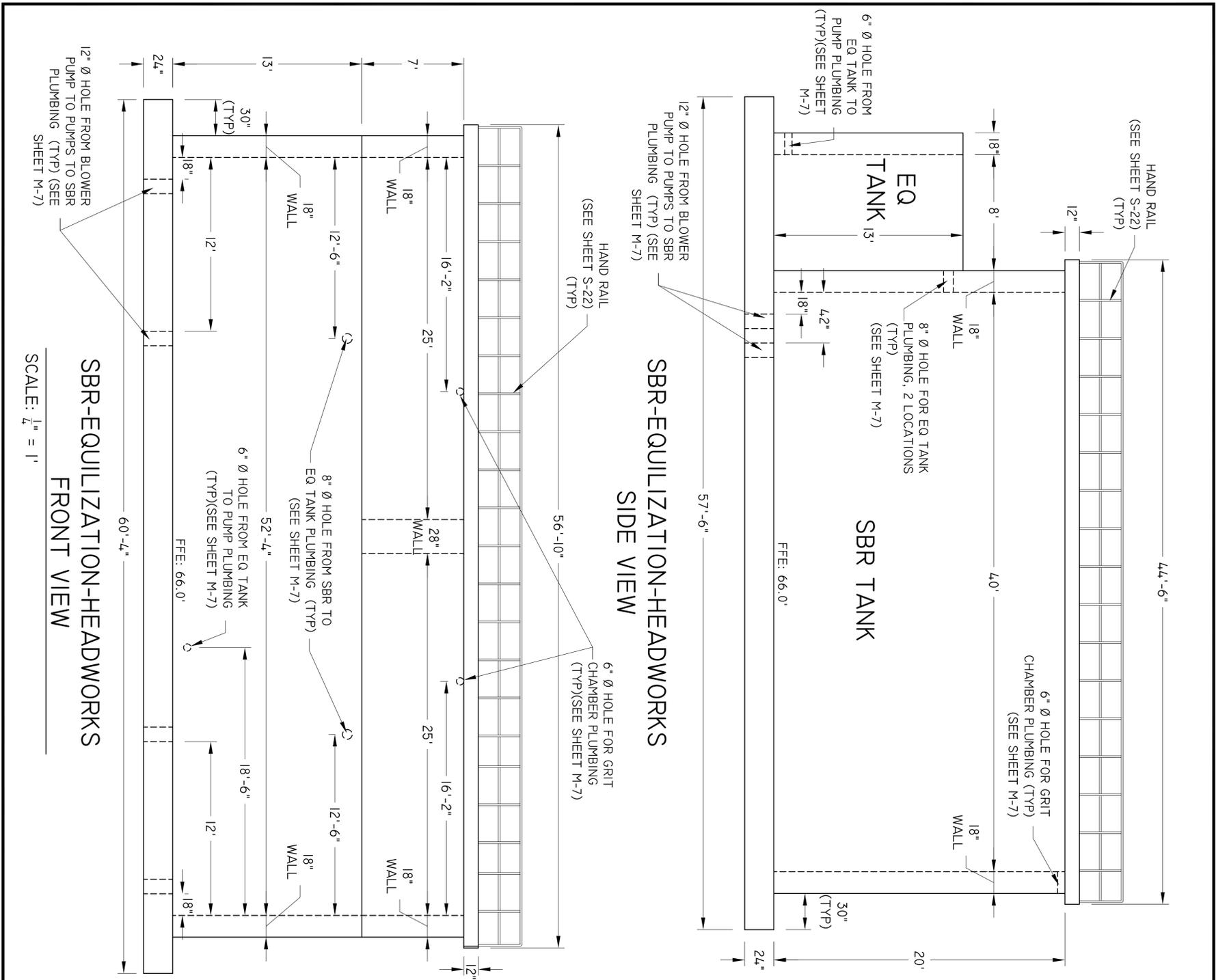
COLUMBIA COUNTY
WASTE WATER TREATMENT PLANT
SBR TANK FOUNDATION
ELLISVILLE, FL



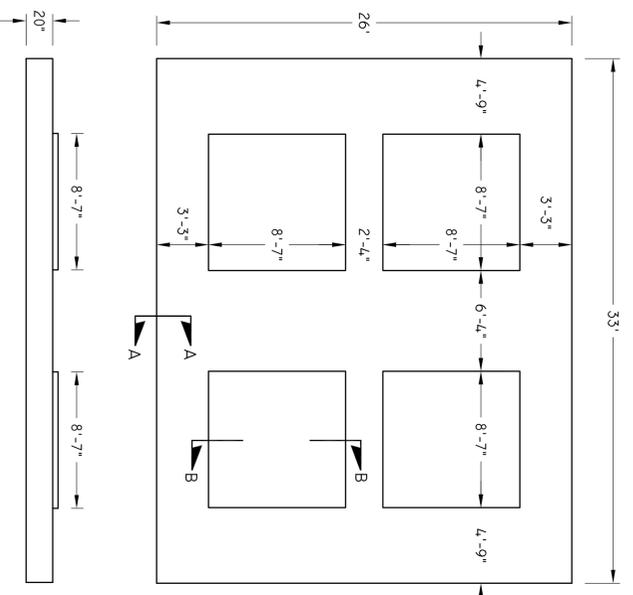
NO.	DATE	REVISION/ACTION TAKEN

DESIGN ENGINEER: SIGNATURE: _____ P. E. NUMBER: 52507	DATE: 12 Aug 2009	SCALE: AS SHOWN
PRINT DATE: 12 Aug 2009	DRAWN BY: WJH	CHECKED BY: MEN
DATE: 29 JUN 09	DATE: 29 JUN 09	DATE: 29 JUN 09

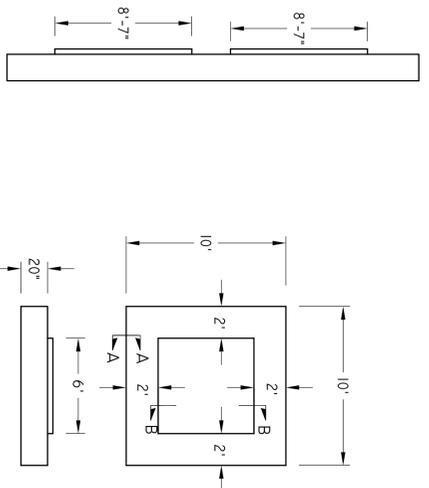
PRINT DATE: 12 Aug 2009
SHEET NUMBER: S-12 OF S-22



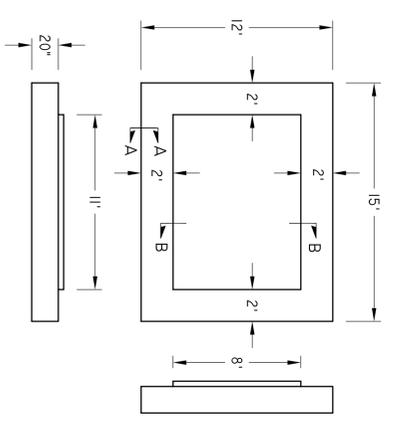
PRINT DATE: 12 AUG 2009 SHEET NUMBER: S-11 OF S-22	COLUMBIA COUNTY WASTE WATER TREATMENT PLANT SBR TANK ELEVATIONS ELLISVILLE, FL	EUTAW UTILITIES, INC. <small>Project Development...Concept to Completion</small> 415 SAINT FRANCIS ST., UNIT 114 OFFICE PHONE: (850) 383-0400 TALLAHASSEE, FLORIDA 32301 OFFICE FAX: (888) 878-2939	DESIGN ENGINEER: MARC E. NEUHAUS SIGNATURE: _____ P. E. NUMBER: 52507 PRINT DATE: 12 AUG 2009	DRAWN BY: DATE: SCALE: WBH 29_JUN09 AS SHOWN CHECKED BY: DATE: MEN 29_JUN09
			NO. DATE REVISION/ACTION TAKEN _____ _____ _____	



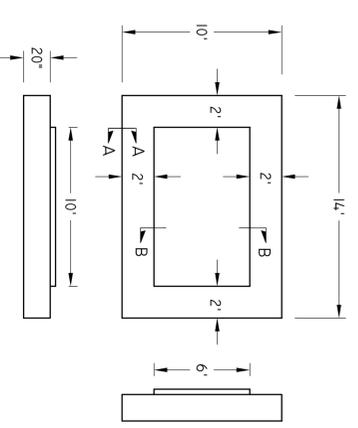
SAND FILTER PAD PLAN VIEW
SCALE: $\frac{3}{16}'' = 1'$



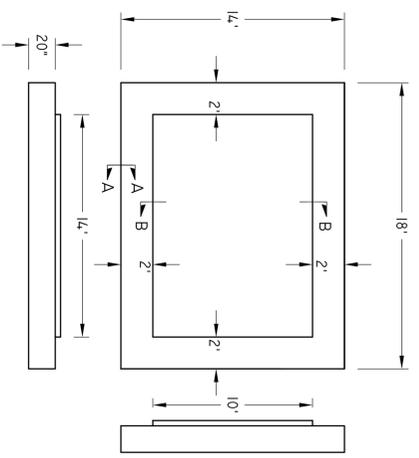
GRIT CHAMBER PAD
PLAN VIEW
SCALE: $\frac{3}{16}'' = 1'$



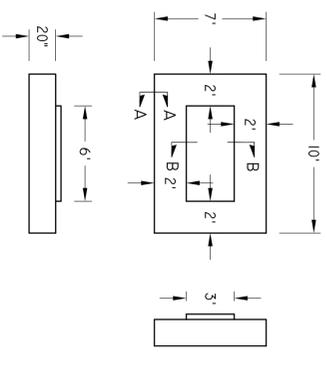
SBR PUMP PAD
PLAN VIEW
2 LOCATIONS
SCALE: $\frac{3}{16}'' = 1'$



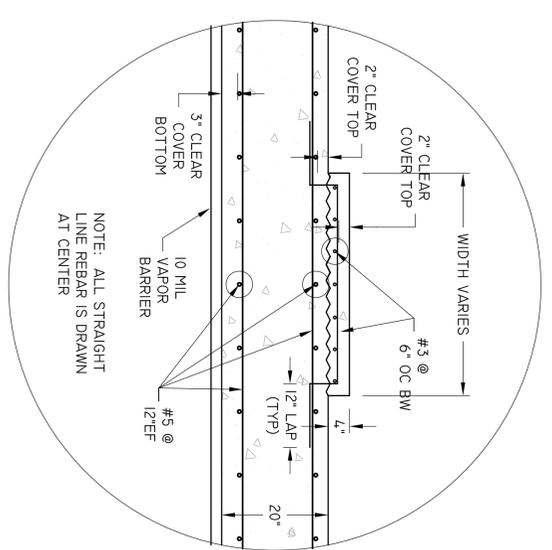
GENERATOR PAD
PLAN VIEW
SCALE: $\frac{3}{16}'' = 1'$



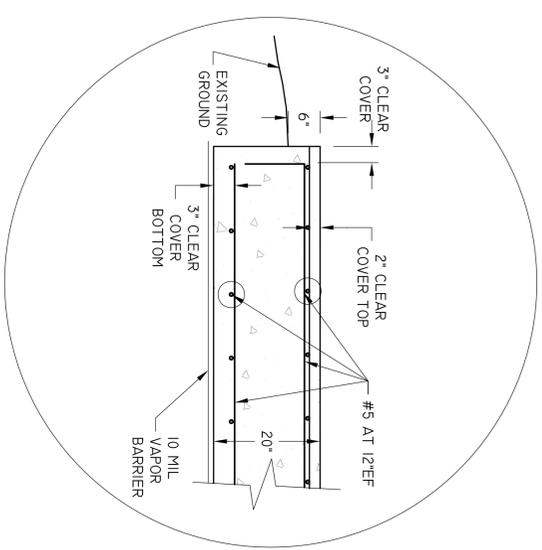
DIGESTER BLOWER PAD
PLAN VIEW
2 LOCATIONS
SCALE: $\frac{3}{16}'' = 1'$



PUMP PAD - PLAN VIEW
3 LOCATIONS
SCALE: $\frac{3}{16}'' = 1'$



SECTION B-B
SCALE: $\frac{3}{8}'' = 1'$



SECTION A-A
SCALE: $\frac{1}{2}'' = 1'$

NO.	DATE	REVISION/ACTION TAKEN

DESIGN ENGINEER: MARC E. NEUHAUS	SCALE: AS SHOWN
SIGNATURE:	
P. E. NUMBER: 52507	
PRINT DATE: 12 Aug 2009	
DRAWN BY: WH	DATE: 29 JUN 09
CHECKED BY: MEN	DATE: 29 JUN 09

EUTAW UTILITIES, INC.
Project Development... Concept to Completion

415 SAINT FRANCIS ST., UNIT 114 OFFICE PHONE: (850) 383-0400
TALLAHASSEE, FLORIDA 32301 OFFICE FAX: (888) 878-2939

ERP.E COA 09961

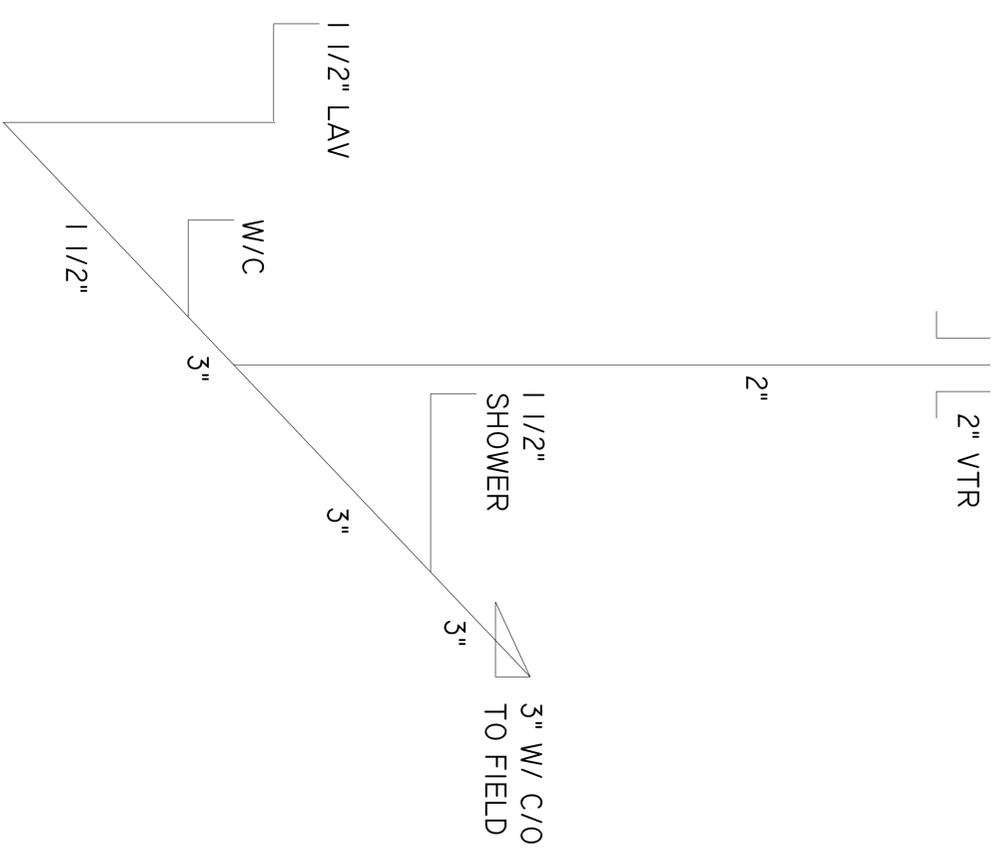
COLUMBIA COUNTY
WASTE WATER TREATMENT PLANT
CONCRETE PADS

ELLISVILLE, FL

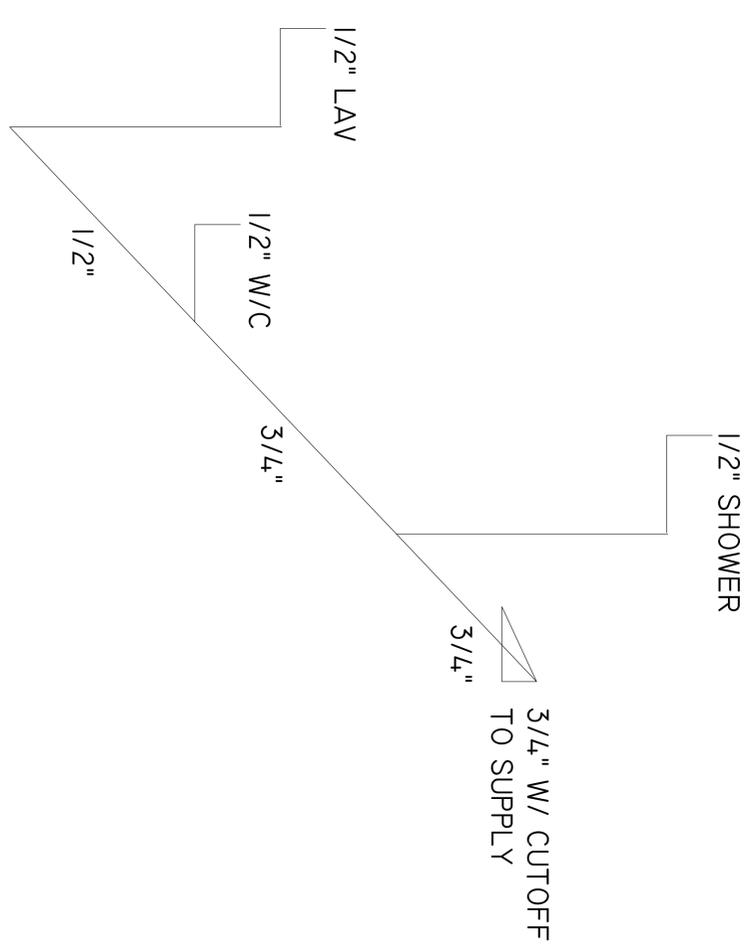
PRINT DATE:
12 Aug 2009

SHEET NUMBER
S-9 OF S-22

SLED. 4.0 PVC SAN. PLUMBING RISER



PEX OR = POTABLE WATER RISER



ADMIN BUILDING DETAILS
SCALE: NTS

- GENERAL NOTES:
1. NO HOT WATER SUPPLY SHOWN.
 2. SHOP DRAWINGS SUPPLIED AND REVIEWED BY OTHERS.

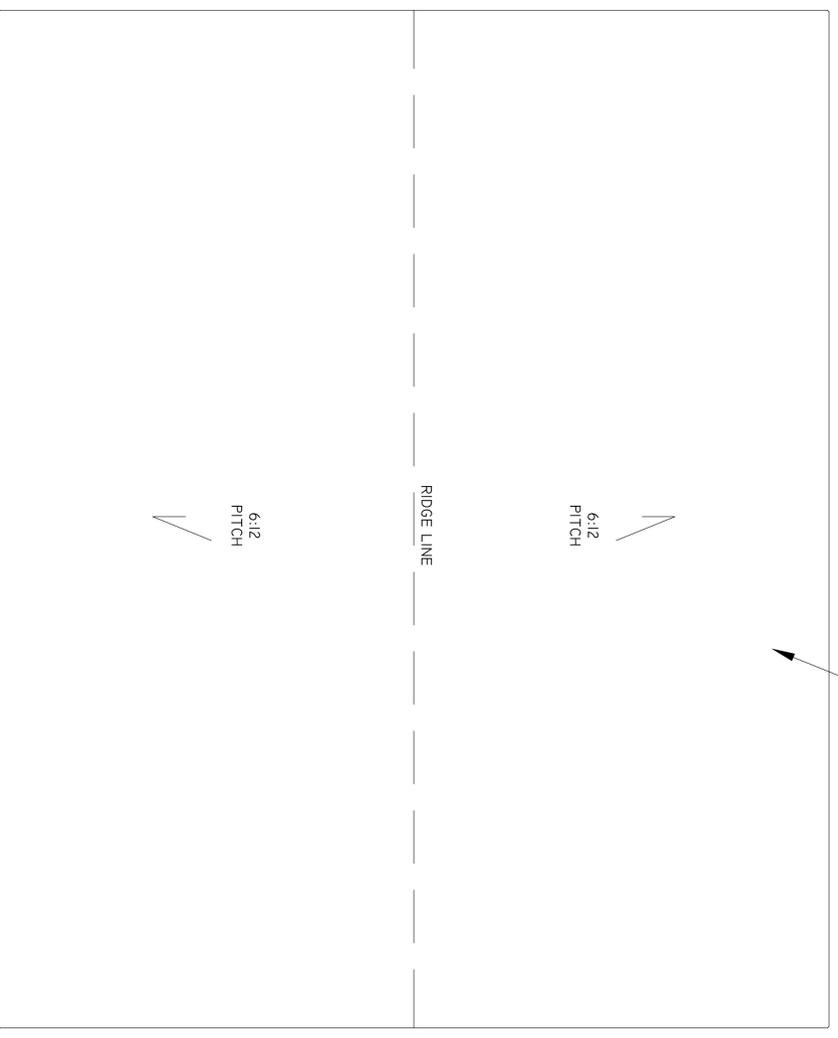
COLUMBIA COUNTY
WASTE WATER TREATMENT PLANT
ADMIN BUILDING PLUMBING
ELLISVILLE, FL

EUTAW UTILITIES, INC.
Project Development...Concept to Completion
415 SAINT FRANCIS ST., UNIT 114 TALLAHASSEE, FLORIDA 32301 OFFICE PHONE: (850) 383-0400 OFFICE FAX: (888) 878-2939

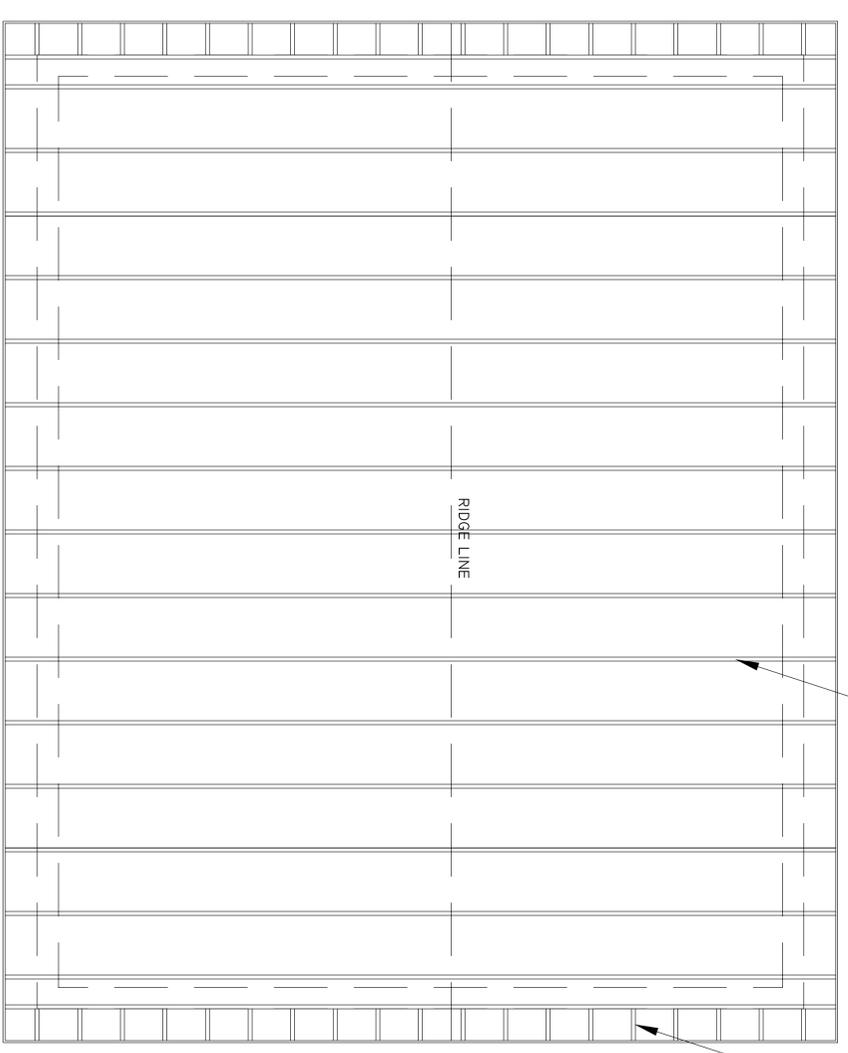
NO.	DATE	REVISION/ACTION TAKEN

DESIGN ENGINEER: SIGNATURE: MARC E. NEUHAUS	P. E. NUMBER: 52507	PRINT DATE: 12 Aug 2009
DRAWN BY: WJH	DATE: 29 JUN 09	SCALE: AS SHOWN
CHECKED BY: MEN	DATE: 29 JUN 09	

PRINT DATE:
12 AUG 2009
SHEET NUMBER
S-8 OF S-22



ROOF PLAN



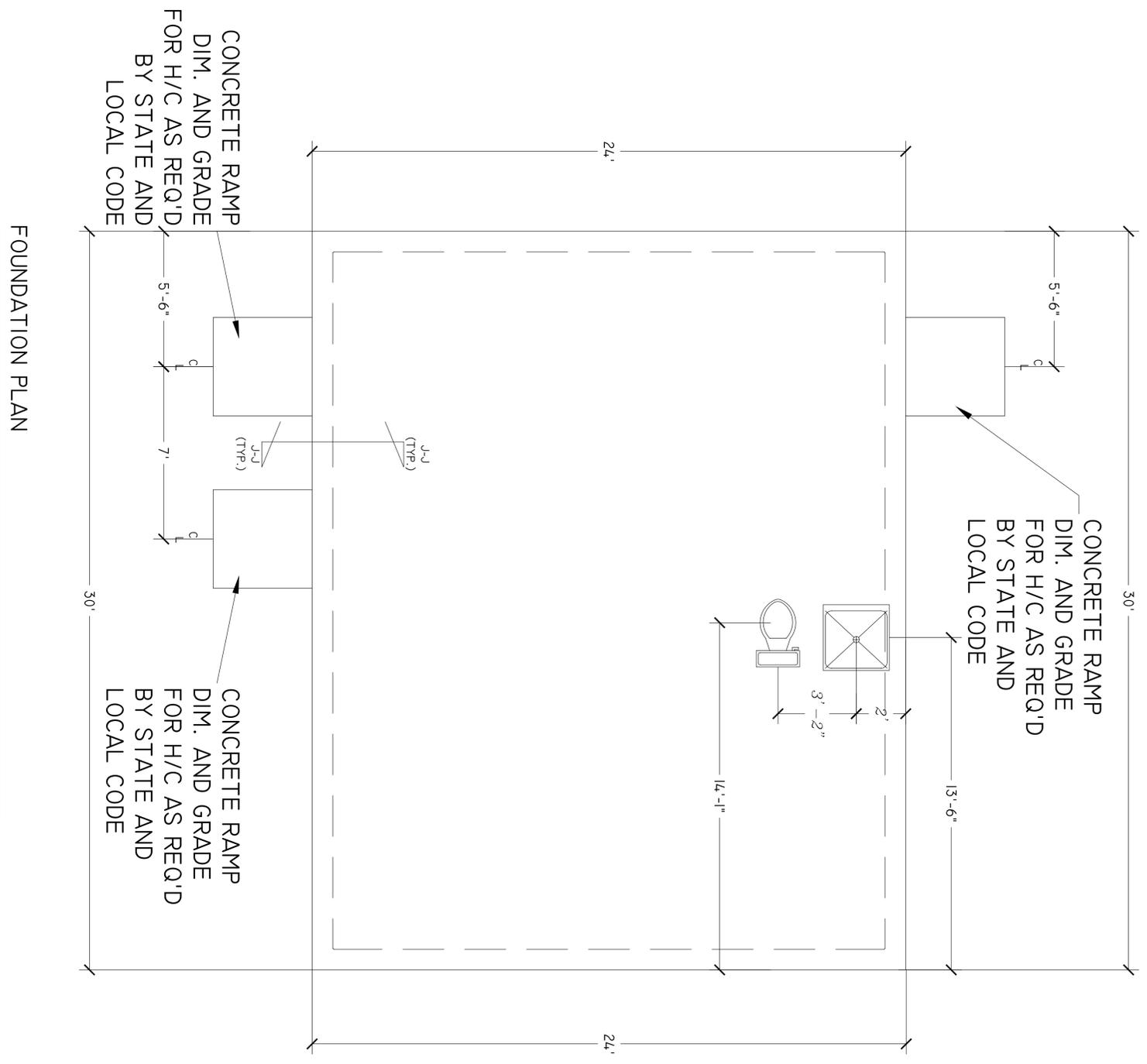
ROOF FRAME PLAN

ADMIN BUILDING DETAILS
SCALE: $\frac{3}{8}'' = 1'$

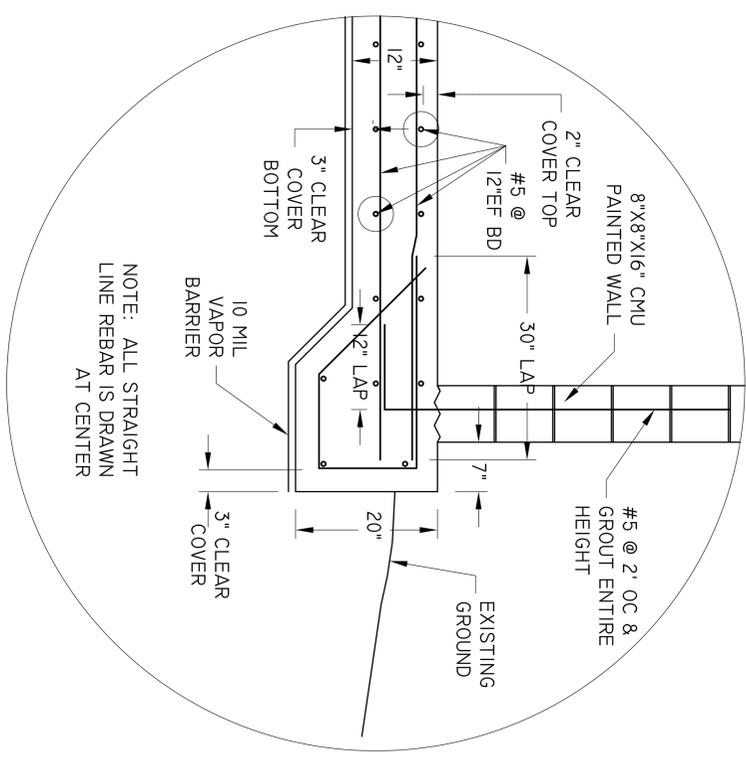
GENERAL NOTES:

- 1. MFR. SHOP DRAWINGS FOR ALL STRUCTURAL AND FINISH ELEMENTS ARE TO BE PROVIDED BY CONTRACTOR FOR LOCAL BUILDING CODE ENFORCEMENT REVIEW AND APPROVAL.

<p style="text-align: center;">COLUMBIA COUNTY WASTE WATER TREATMENT PLANT ADMIN BUILDING ROOF DETAILS</p> <hr style="width: 80%; margin: auto;"/> <p style="text-align: center;">ELLISVILLE, FL</p>	<p>EUTAW UTILITIES, INC. <small>Project Development...Concept to Completion</small></p> <p><small>415 SAINT FRANCIS ST., UNIT 114 TALLAHASSEE, FLORIDA 32301</small> <small>OFFICE PHONE: (850) 383-0400</small> <small>OFFICE FAX: (888) 878-2939</small></p> <p><small>EPPE COA 99961</small></p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">NO.</th> <th style="width: 10%;">DATE</th> <th style="width: 85%;">REVISION/ACTION TAKEN</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	NO.	DATE	REVISION/ACTION TAKEN																						<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2">DESIGN ENGINEER: MARC E. NEUHAUS</td> </tr> <tr> <td colspan="2">SIGNATURE: _____</td> </tr> <tr> <td colspan="2">P. E. NUMBER: 52507</td> </tr> <tr> <td colspan="2">PRINT DATE: 12 AUG 2009</td> </tr> <tr> <td>DRAWN BY: WJH</td> <td>DATE: 29 JUN 09</td> </tr> <tr> <td>CHECKED BY: MEN</td> <td>DATE: 29 JUN 09</td> </tr> <tr> <td>SCALE: AS SHOWN</td> <td> </td> </tr> </table>	DESIGN ENGINEER: MARC E. NEUHAUS		SIGNATURE: _____		P. E. NUMBER: 52507		PRINT DATE: 12 AUG 2009		DRAWN BY: WJH	DATE: 29 JUN 09	CHECKED BY: MEN	DATE: 29 JUN 09	SCALE: AS SHOWN	
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<p>PRINT DATE: 12 AUG 2009</p> <p>SHEET NUMBER: S-7 OF S-22</p>																																									



ADMIN BUILDING DETAILS
SCALE: 3/8" = 1'



SECTION J-J
SCALE: 1" = 1'

GENERAL NOTES:
1. MFR. SHOP DRAWINGS FOR ALL STRUCTURAL AND FINISH ELEMENTS ARE TO BE PROVIDED BY CONTRACTOR FOR LOCAL BUILDING CODE ENFORCEMENT REVIEW AND APPROVAL.

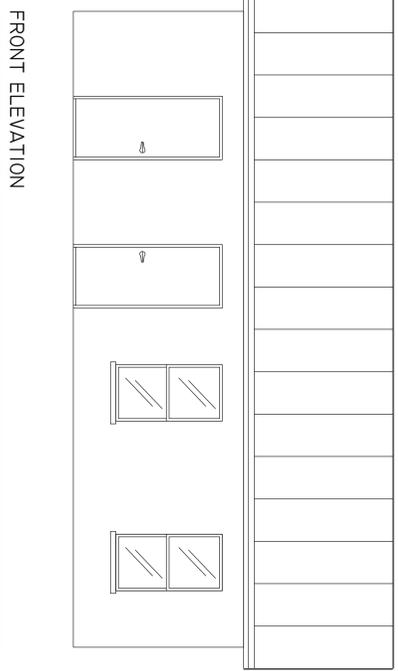
PRINT DATE:
12 AUG 2009
SHEET NUMBER
S-6 OF S-22

COLUMBIA COUNTY
WASTE WATER TREATMENT PLANT
ADMIN BUILDING FOUNDATION
ELLISVILLE, FL

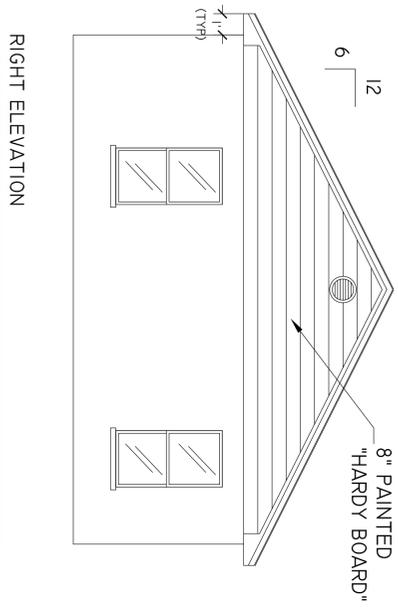
EUI EUTAW UTILITIES, INC.
Project Development...Concept to Completion
415 SAINT FRANCIS ST., UNIT 114 TALLAHASSEE, FLORIDA 32301 OFFICE PHONE: (850) 383-0400 OFFICE FAX: (888) 878-2939
ERP/E COA 09961

NO.	DATE	REVISION/ACTION TAKEN

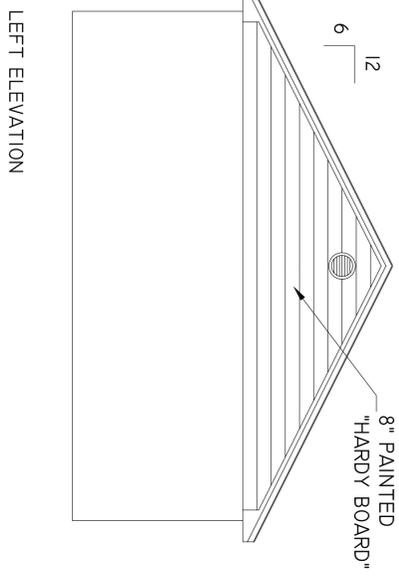
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PRINT DATE: 12 AUG 2009	DRAWN BY: WJH	DATE: 29 JUN 09
CHECKED BY: MEN	DATE: 29 JUN 09	SCALE: AS SHOWN



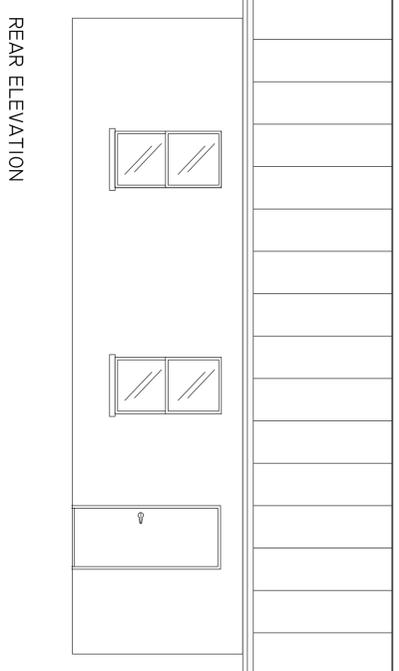
FRONT ELEVATION



RIGHT ELEVATION

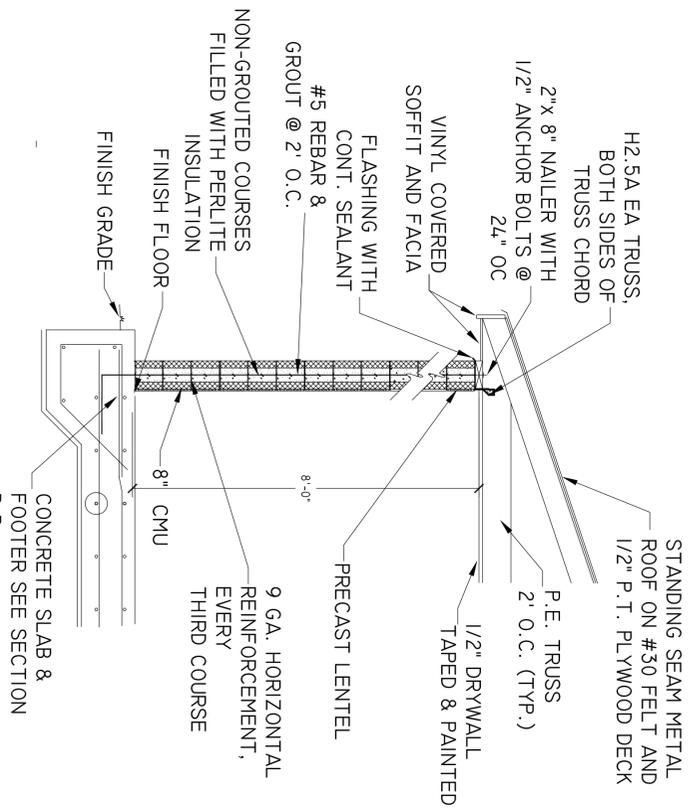


LEFT ELEVATION



REAR ELEVATION

ADMIN BUILDING DETAILS
SCALE: 1/2" = 1'



SECTION H-H (EXTERIOR WALL)
NTS

GENERAL NOTES:

1. INTERIOR AND EXTERIOR FINISH SCHEDULE TO BE PROVIDED BY CLIENT TO CONTRACTOR.
2. ALL INTERIOR AND EXTERIOR ARCHITECTURAL ELEMENTS ARE TO MEET OR EXCEED FLORIDA AND LOCAL STANDARDS.
3. MFR. SHOP DRAWINGS FOR ALL STRUCTURAL AND FINISH ELEMENTS ARE TO BE PROVIDED BY CONTRACTOR FOR LOCAL BUILDING CODE ENFORCEMENT REVIEW AND APPROVAL.

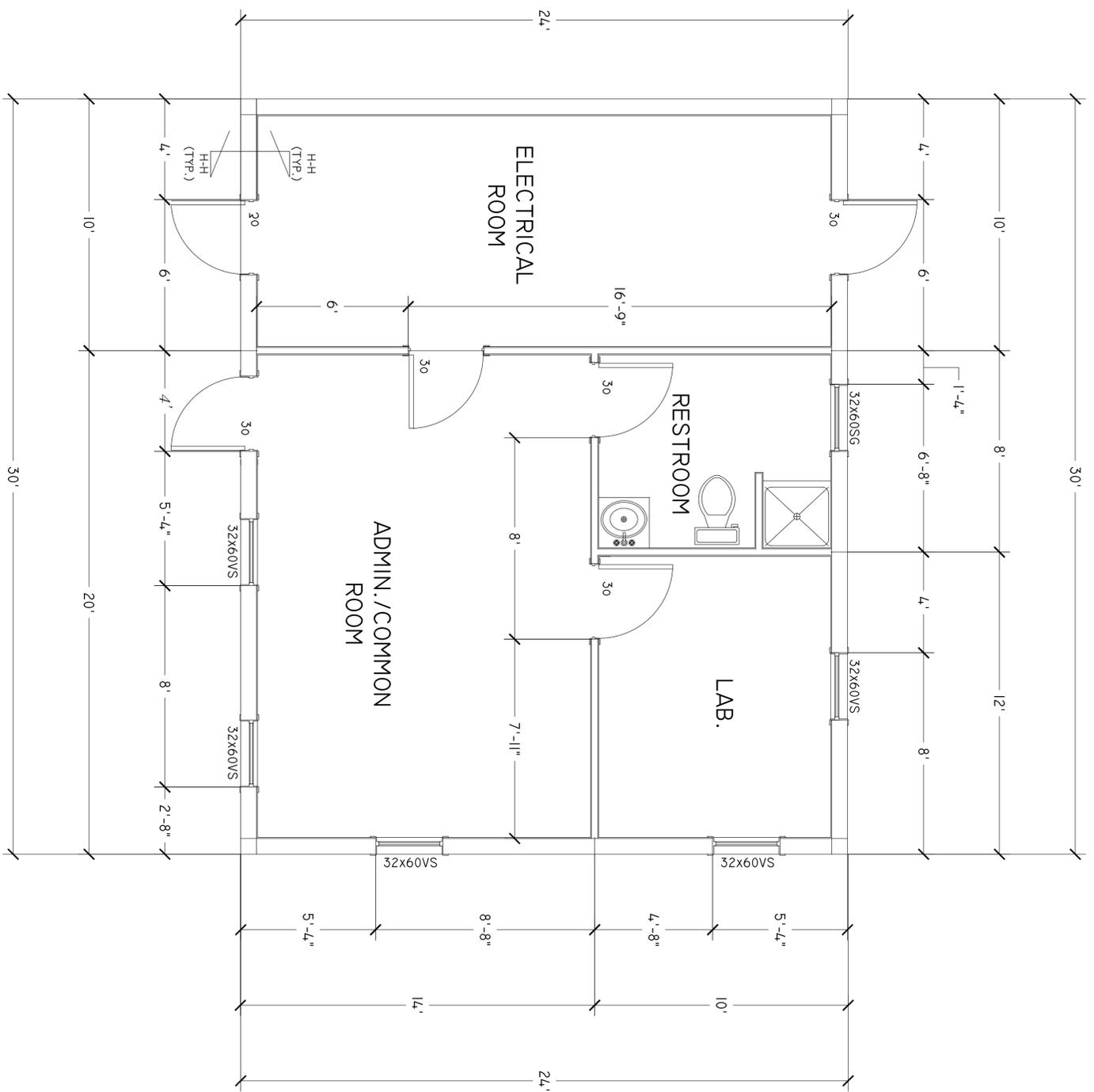
NO.	DATE	REVISION/ACTION TAKEN

DESIGN ENGINEER: SIGNATURE: _____ P. E. NUMBER: 52507 PRINT DATE: 12 Aug 2009	DRAWN BY: _____ DATE: 29_AUG09 SCALE: AS SHOWN
CHECKED BY: _____ DATE: 29_AUG09	

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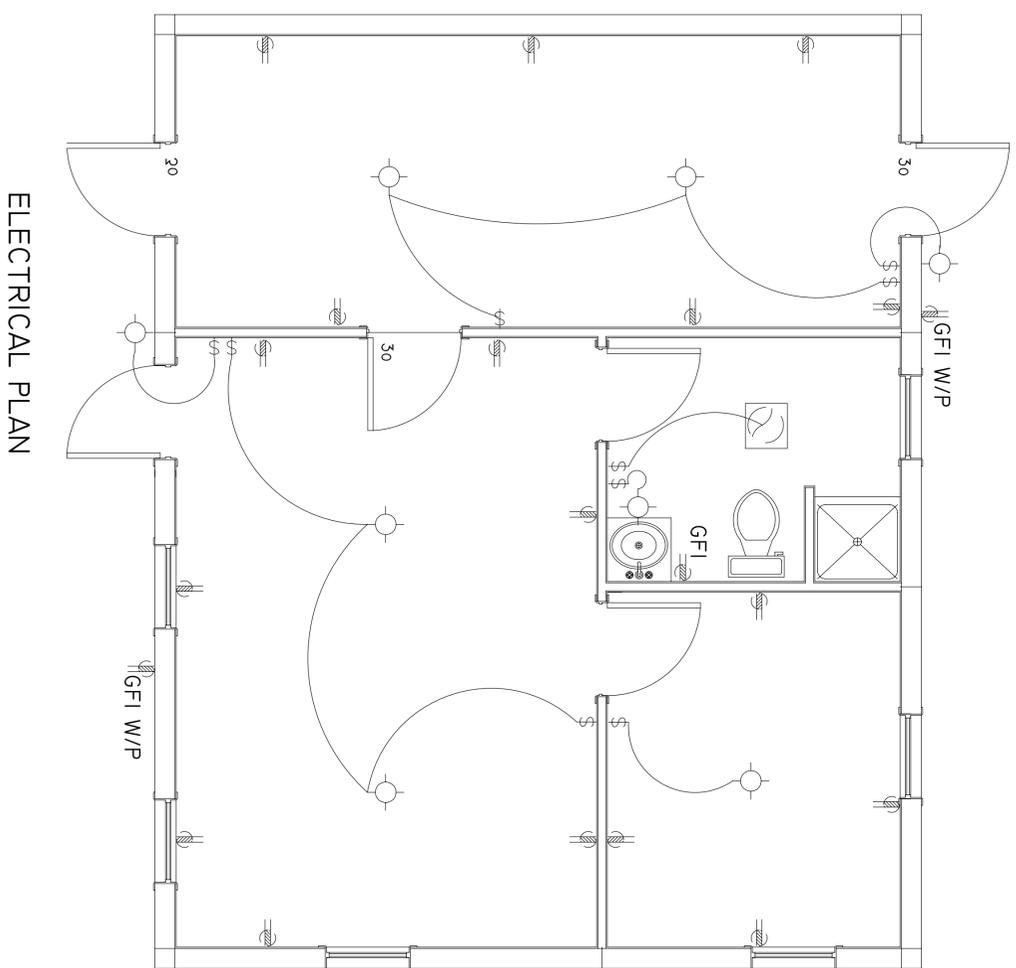
COLUMBIA COUNTY
WASTE WATER TREATMENT PLANT
ADMIN BUILDING ELEVATIONS
ELLISVILLE, FL

PRINT DATE: 12 Aug 2009
SHEET NUMBER: S-5 OF S-22



ADMIN BUILDING DETAILS
SCALE: $\frac{3}{8}'' = 1''$

ELECTRICAL NOTES:
1. FOR ELECTRICAL NOTES, SEE SHEETS E-1 THRU E-4

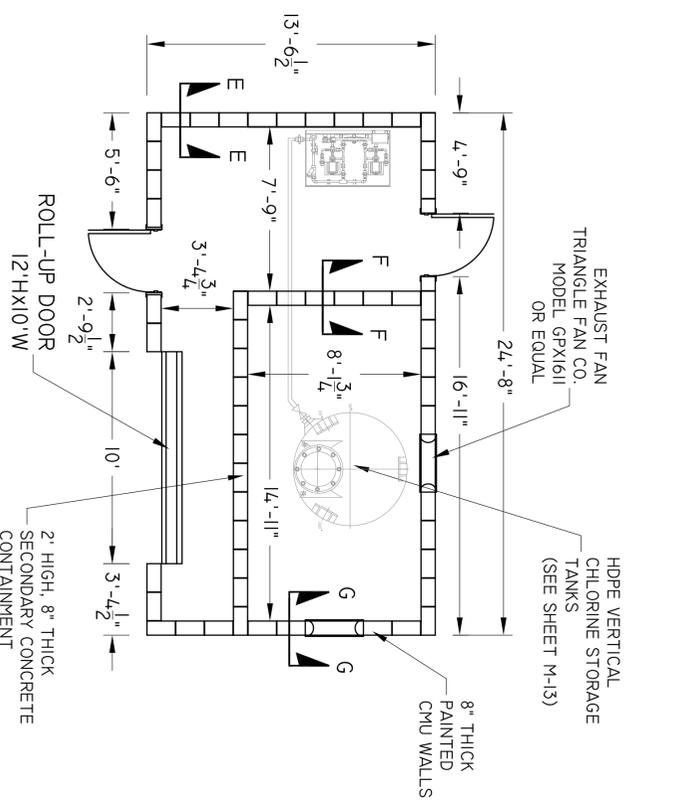


GENERAL NOTES:

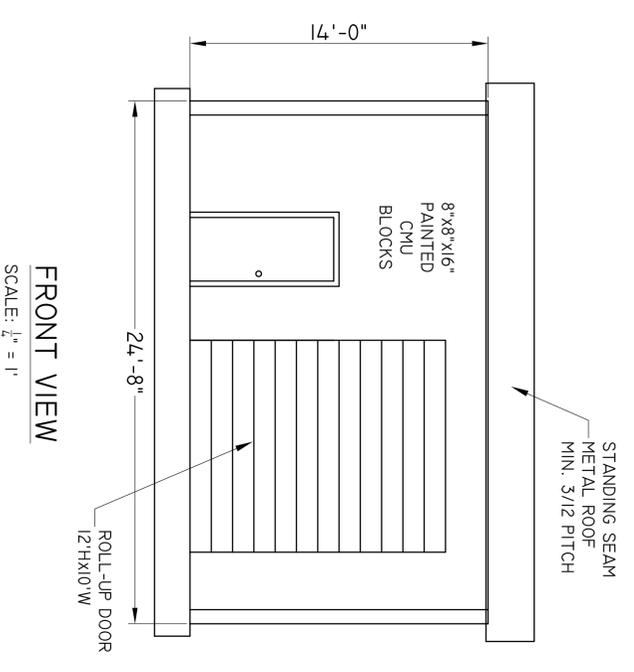
1. MFR. SHOP DRAWINGS FOR ALL STRUCTURAL AND FINISH ELEMENTS ARE TO BE PROVIDED BY CONTRACTOR FOR LOCAL BUILDING CODE ENFORCEMENT REVIEW AND APPROVAL.
2. MEP, STRUCTURAL, AND CIVIL SYSTEMS DESIGN AND REVIEW SUPPLIED FOR REVIEW BY OTHERS AS ATTACHED ADDENDUMS.
3. ALL HANDICAP HARDWARE IS TO BE INSTALLED AS NEEDED AND AS PER STATE AND LOCAL CODE.

NO.	DATE	REVISION/ACTION TAKEN

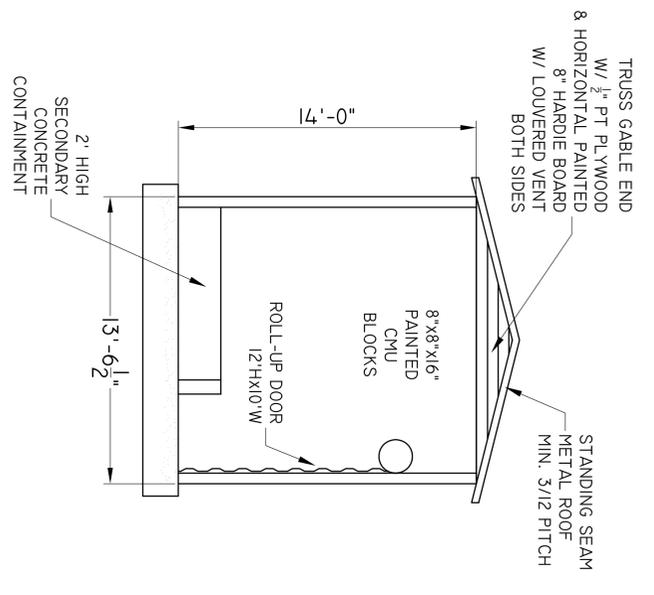
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DRAWN BY: WJH	DATE: 29_AUG09	CHECKED BY: MEN	DATE: 29_AUG09



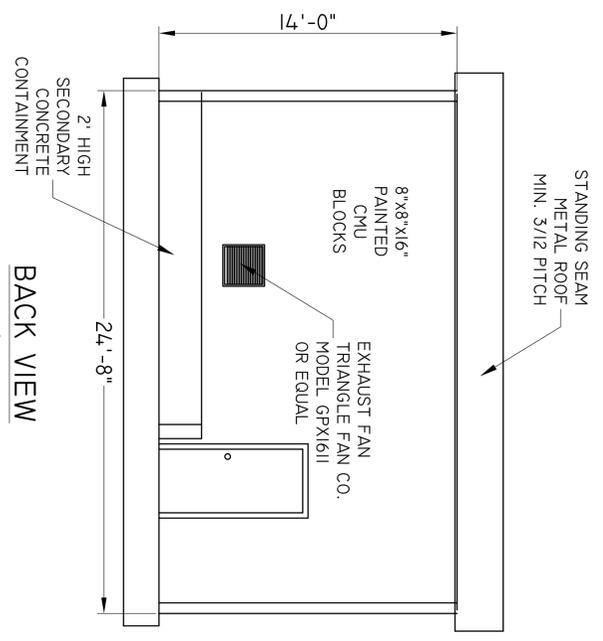
PLAN VIEW
SCALE: 1/4" = 1'



FRONT VIEW
SCALE: 1/4" = 1'

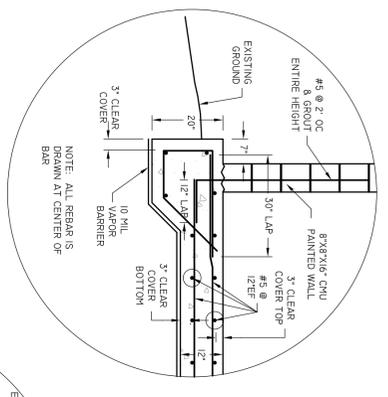


SIDE VIEW
SCALE: 1/4" = 1'

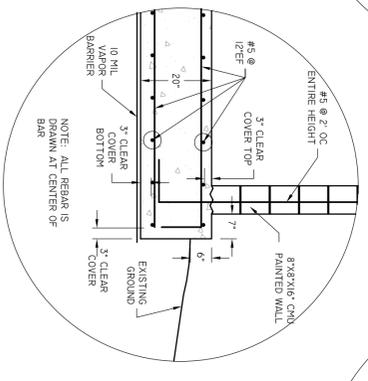


BACK VIEW
SCALE: 1/4" = 1'

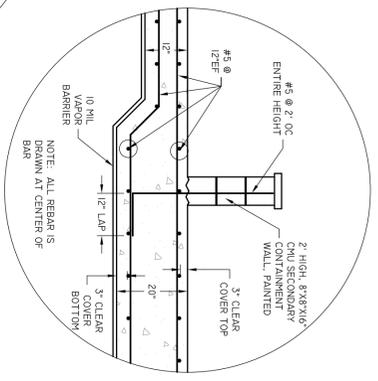
CHLORINATION BLDG



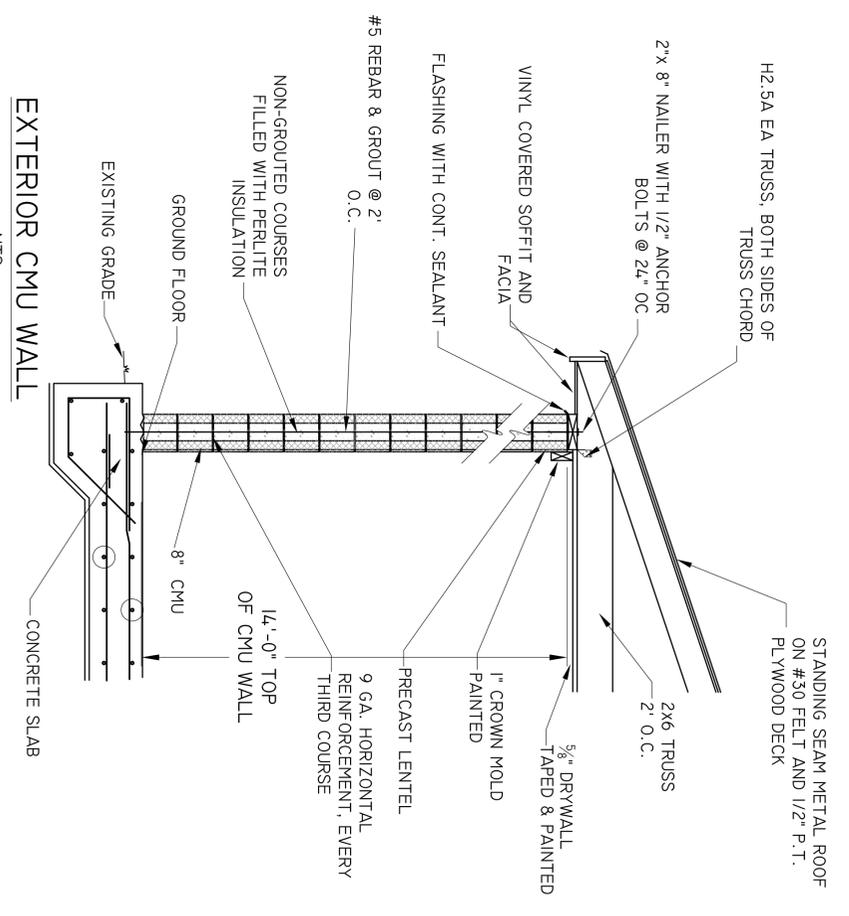
SECTION E-E
SCALE: 1/2" = 1'



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



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



EXTERIOR CMU WALL
NTS

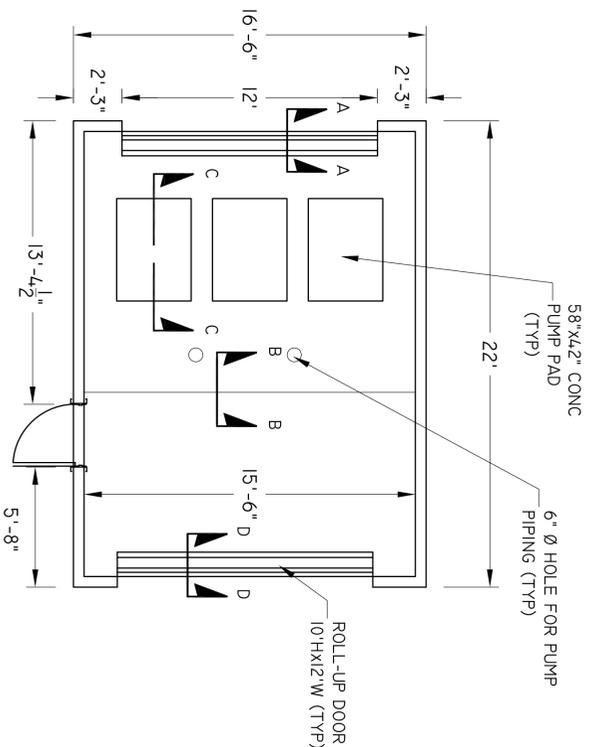
NO.	DATE	REVISION/ACTION TAKEN

DESIGN ENGINEER: MARC E. NEUHAUS
SIGNATURE: _____
P. E. NUMBER: 52507
PRINT DATE: 12 Aug 2009
DRAWN BY: DATE: _____ SCALE: AS SHOWN
CHECKED BY: DATE: _____
MEN 29_AUG09

COLUMBIA COUNTY
WASTE WATER TREATMENT PLANT
CHLORINATION BUILDING
ELLISVILLE, FL

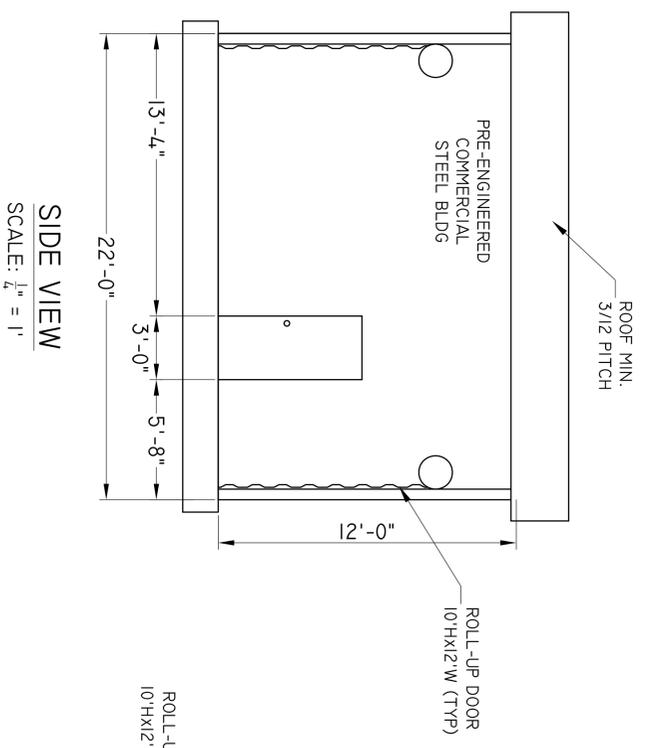
EUI EUTAW UTILITIES, INC.
Project Development...Concept to Completion
415 SAINT FRANCIS ST, UNIT 114 OFFICE PHONE: (850) 383-0400
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PRINT DATE: 12 AUG 2009
SHEET NUMBER: S-3 OF S-22



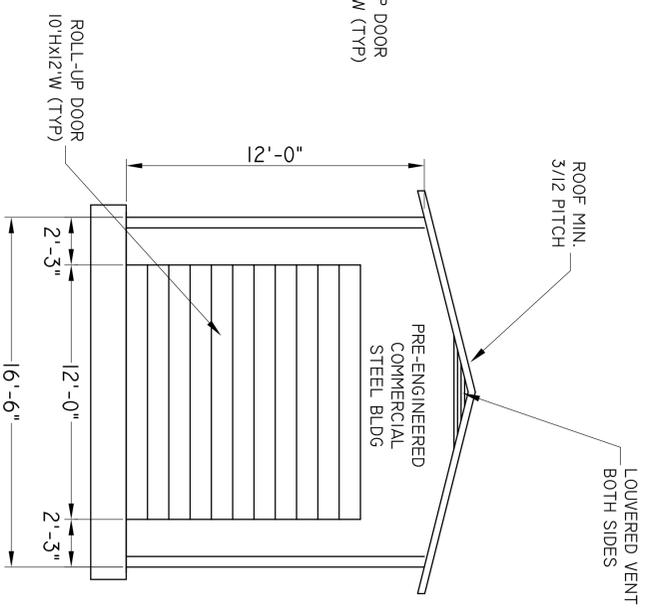
PLAN VIEW - BLOWER BLDG

SCALE: 1/4" = 1'



SIDE VIEW

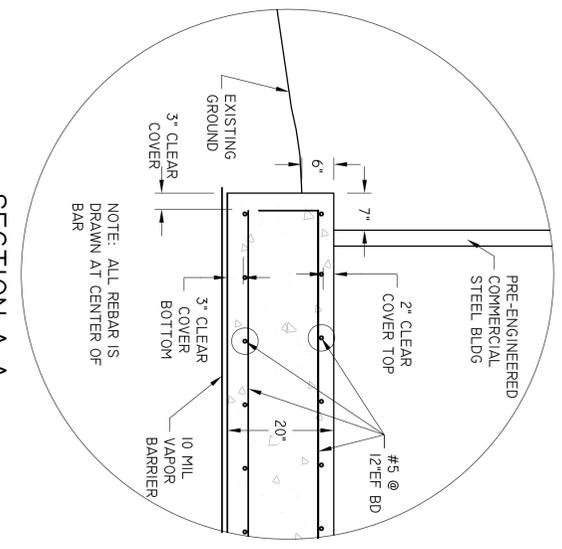
SCALE: 1/4" = 1'



FRONT VIEW

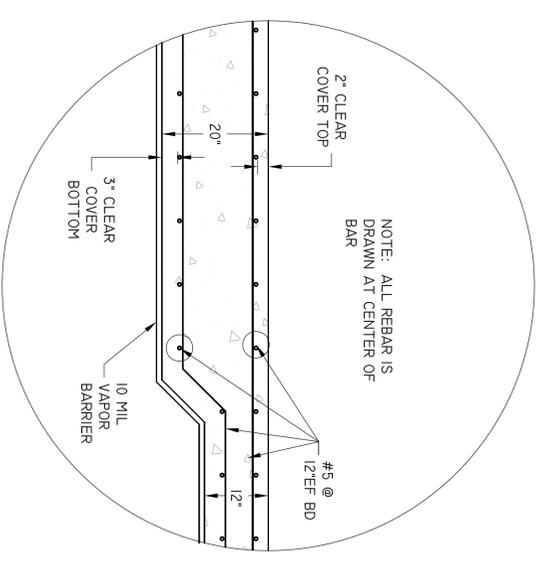
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BLOWER BUILDING



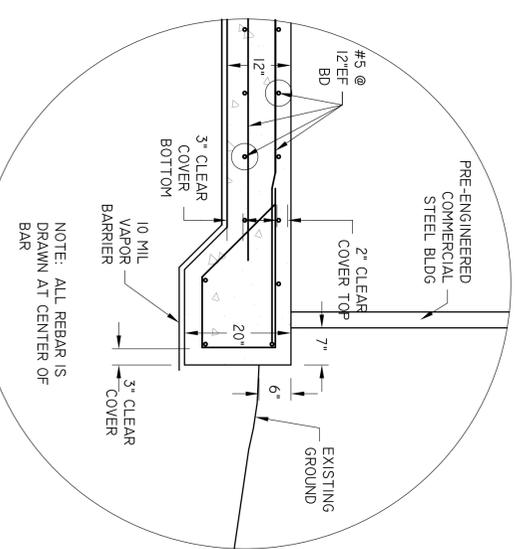
SECTION A-A

SCALE: 3/8" = 1'



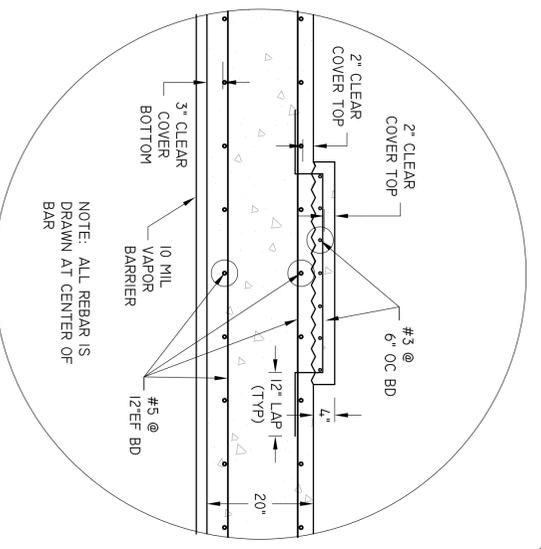
SECTION B-B

SCALE: 3/8" = 1'



SECTION C-C

SCALE: 3/8" = 1'



SECTION D-D

SCALE: 3/8" = 1'

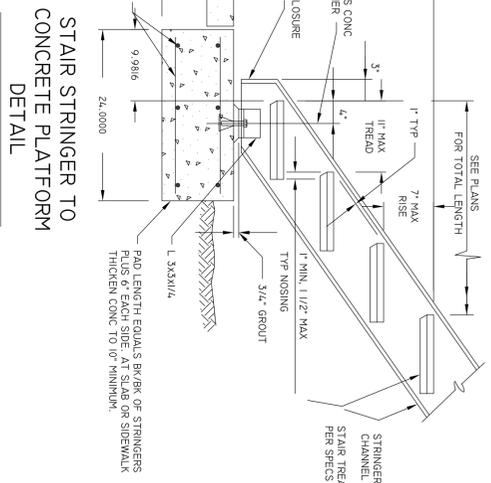
NO.	DATE	REVISION/ACTION TAKEN

DESIGN ENGINEER:	MARC E. NEUHAUS
SIGNATURE:	
P. E. NUMBER:	52507
PRINT DATE:	12 Aug 2009
DRAWN BY:	
DATE:	29_AUG09
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SCALE:	AS SHOWN

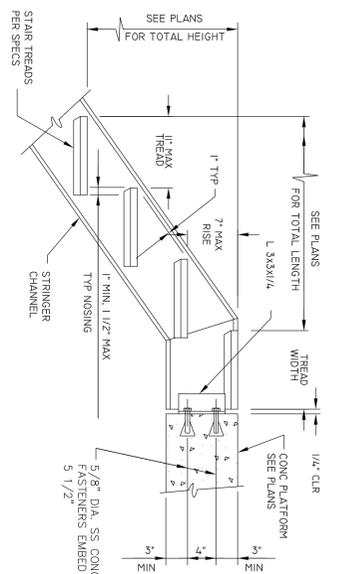
EUTAW UTILITIES, INC.
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COLUMBIA COUNTY
 WASTE WATER TREATMENT PLANT
 BLOWER BUILDING
 ELLISVILLE, FL

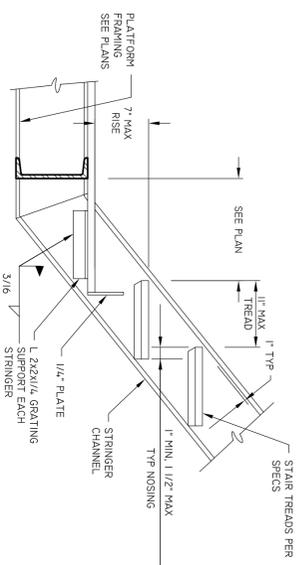
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 12 Aug 2009
 SHEET NUMBER
 S-2 OF S-22



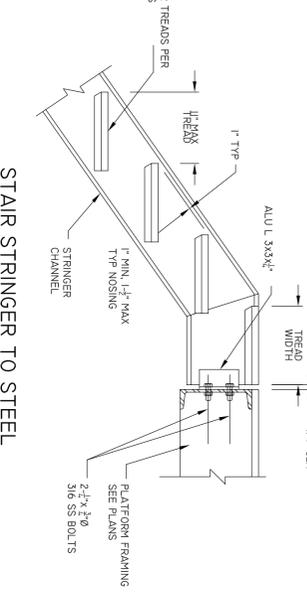
STAIR STRINGER TO CONCRETE PLATFORM DETAIL
NTS



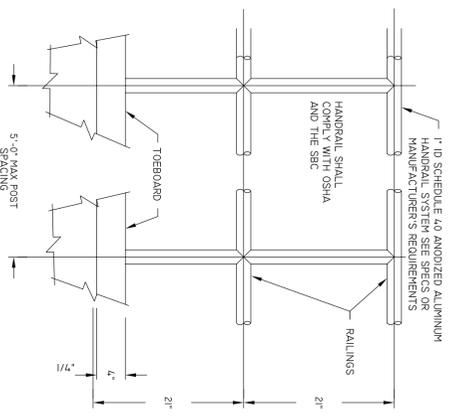
STAIR STRINGER TO CONCRETE PLATFORM TOP DETAIL
NTS



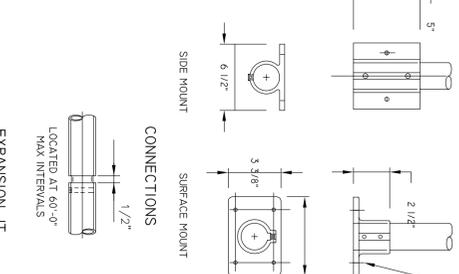
STAIR STRINGER TO PLATFORM TO PLATFORM DETAIL
NTS



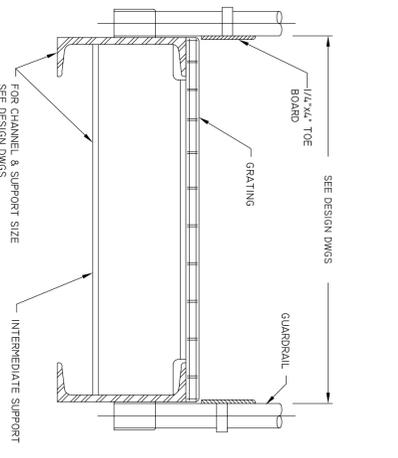
STAIR STRINGER TO STEEL PLATFORM TOP DETAIL
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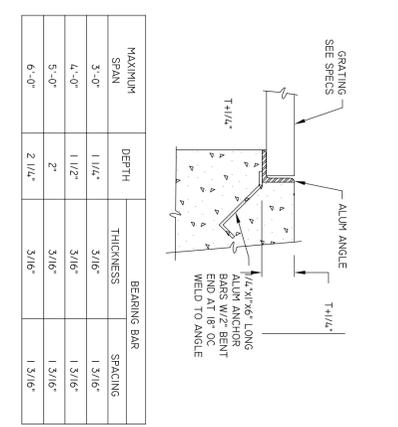
HANDRAIL DETAIL
NTS



EXPANSION JT
NTS

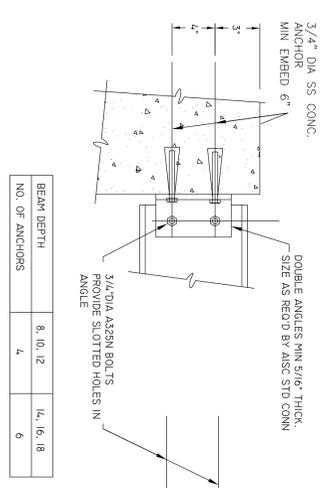


TYPICAL PLATFORM SECTION
NTS

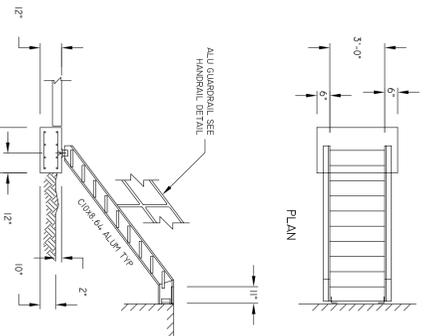


GRATING AND GRATING SUPPORT DETAIL
NTS

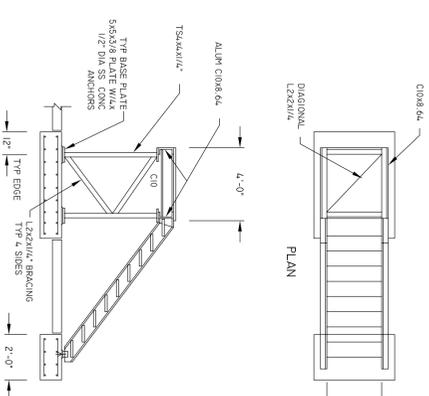
MAXIMUM SPAN	DEPTH	THICKNESS	BEARING BAR SPACING
3'-0"	1 1/2"	3/16"	1 3/16"
4'-0"	1 1/2"	3/16"	1 3/16"
5'-0"	2"	3/16"	1 3/16"
6'-0"	2 1/2"	3/16"	1 3/16"



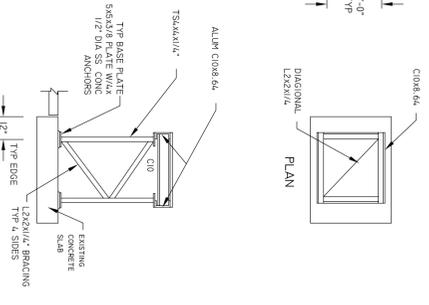
STEEL/ALUM BEAM TO CONCRETE DETAIL
NTS



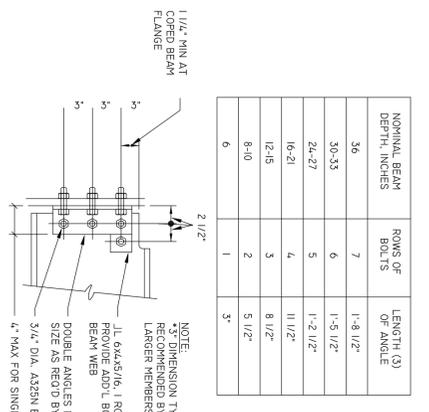
SECTION TYPE 'T1'
NTS



SECTION TYPE 'T2'
NTS



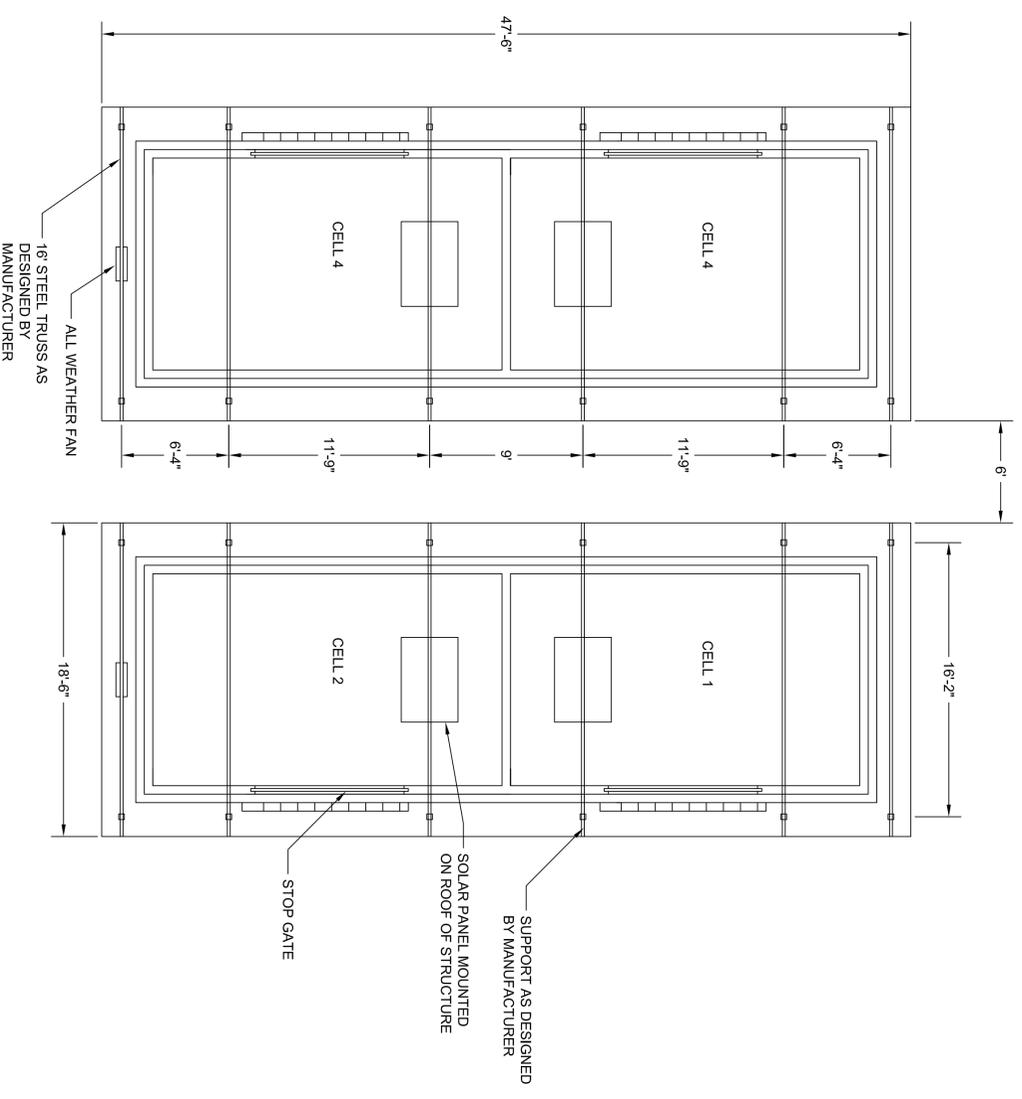
SECTION TYPE 'T3'
NTS



TYPICAL FRAMING CONNECTION
NTS

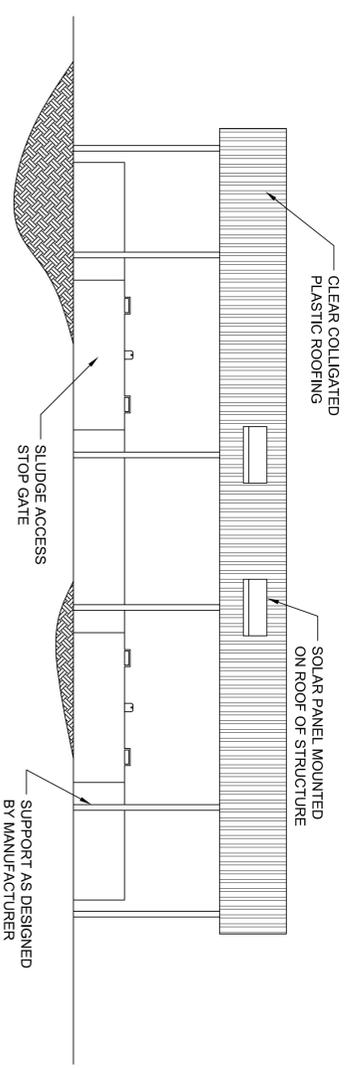
NOMINAL BEAM DEPTH, INCHES	ROWS OF BOLTS	LENGTH (3) OF ANGLE
36	7	1'-8 1/2"
30-33	6	1'-5 1/2"
24-27	5	1'-2 1/2"
16-21	4	11 1/2"
12-15	3	8 1/2"
8-10	2	5 1/2"
6	1	3"

- NOTES:
- NUMBER OF ROWS IS EQUAL TO NUMBER OF BOLTS TO ENCLOSED WEB.
 - ALL FRAMING CONNECTIONS SHALL CONFORM TO SCHEDULE UNLESS OTHERWISE INDICATED ON DRAWINGS.
 - ADD 1/2" TO ANGLE LENGTH FOR STAGGERED BOLT CONNECTIONS.
 - USE AISC BOLTS FOR ALL ALUMINUM FRAMING.

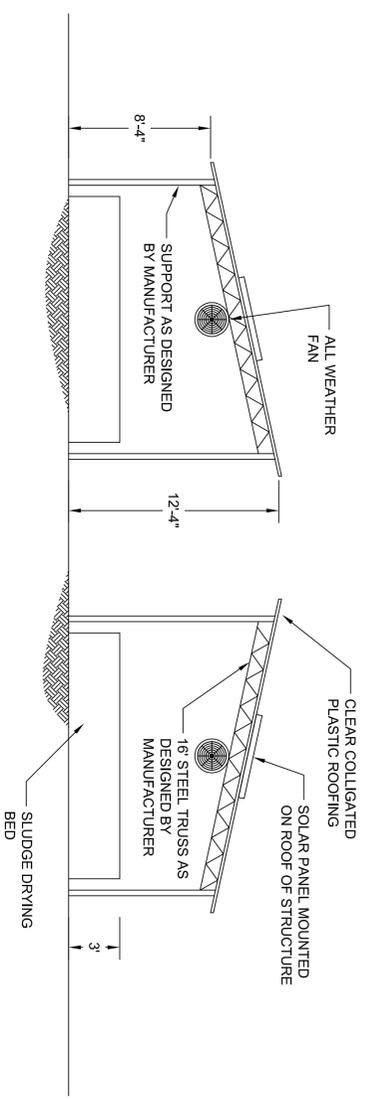


PLAN VIEW

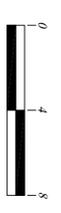
NOTE:
 -BUILDING SUPPORT COLUMNS PER MANUFACTURERS SPECIFICATIONS.
 -CLEAR CORRUGATED PLASTIC ROOFING TO BE INSTALLED TO MANUFACTURERS SPECIFICATIONS, MUST MEET WINDLOAD CRITERIA AS STATED IN SPECIFICATIONS



ELEVATION VIEW - SIDE VIEW



ELEVATION VIEW - END VIEW



REVISIONS	DATE
ISSUE FOR BIDDING	8/10/09

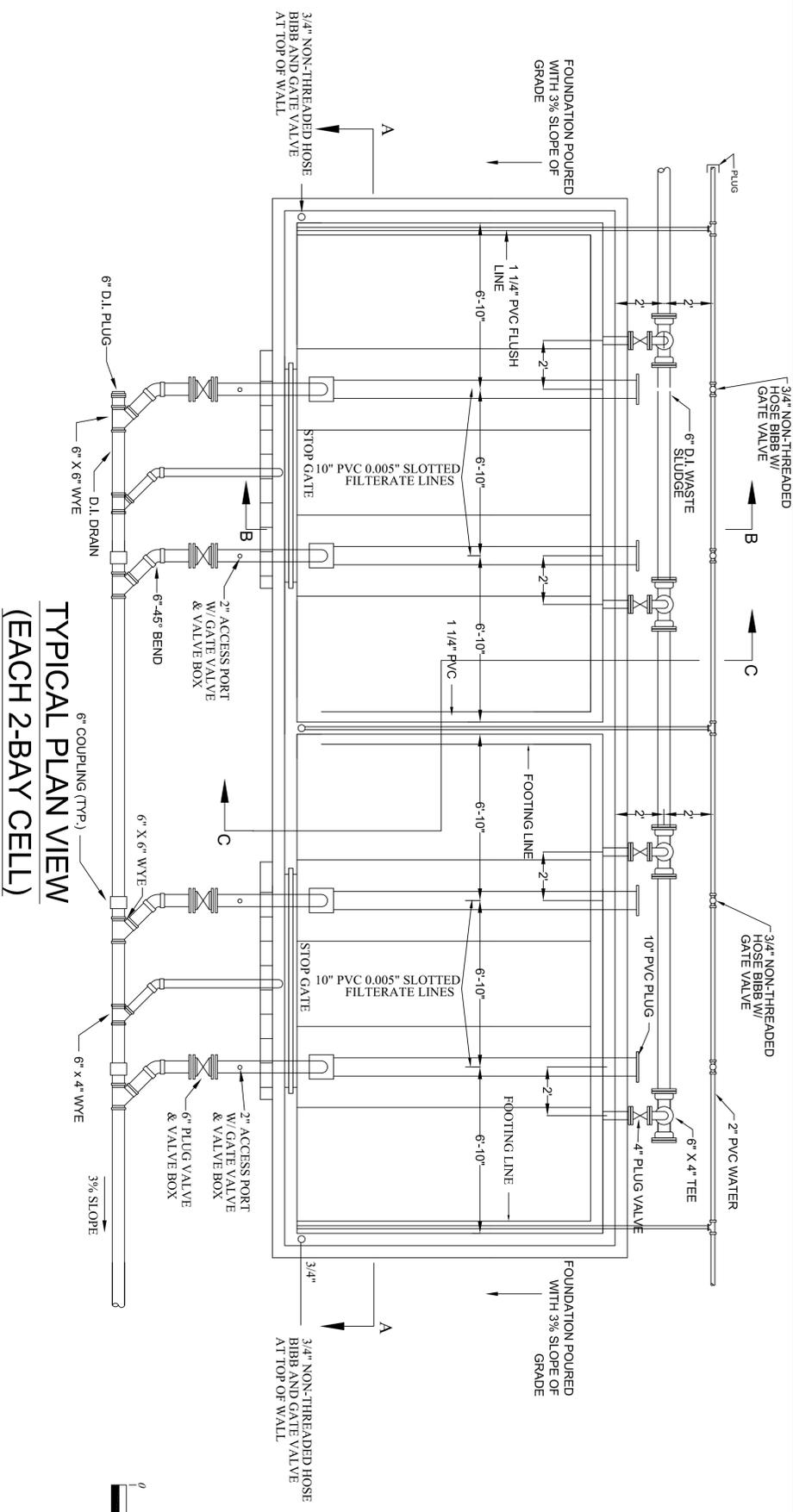
JIM STIDHAM & ASSOCIATES, INC.
 HYDROLOGY, GEOLOGY, CIVIL & ENVIRONMENTAL ENGINEERING
 547 N. MONROE ST., SUITE 201, TALLAHASSEE, FLORIDA 32301
 TELEPHONE: 850.222.2975 FACSIMILE: 850.914.6560
 FBPE CERTIFICATE OF AUTHORIZATION NO. 00055629

CHEN H. LIN, P.E.
 No. 43340

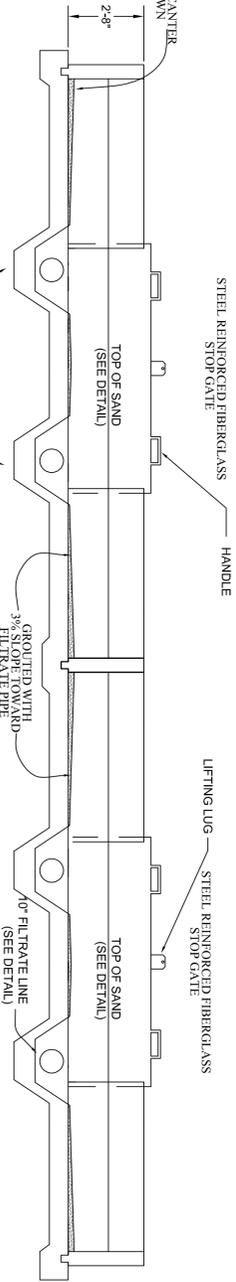
SOUTH COLUMBIA COUNTY REGIONAL WASTEWATER TREATMENT PLANT
 COLUMBIA COUNTY WWTP CONSTRUCTION
 FOR
EUTAW UTILITIES, INC.
 LAKE CITY, FLORIDA

SLUDGE DRYING BED SHED
 DETAIL

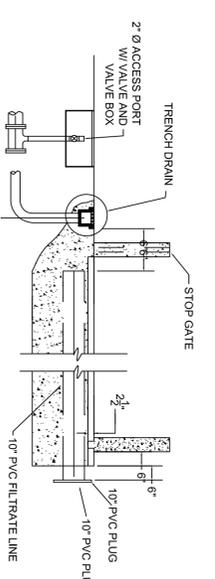
DATE	06/04/09
DRAWN	AS SHIQUIN
DESIGNED	AMH
CHECKED	CHL
PROJECT NO.	5010-007
SHEET	M-23 OF 24



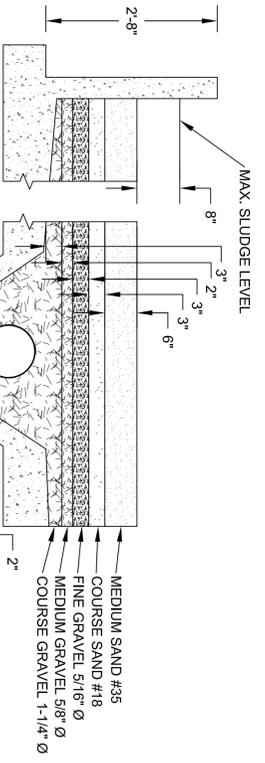
TYPICAL PLAN VIEW
(EACH 2-BAY CELL)



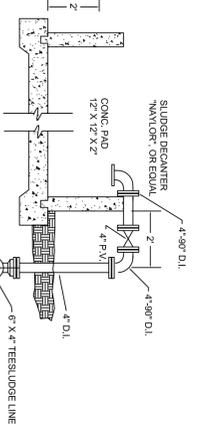
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N.T.S.



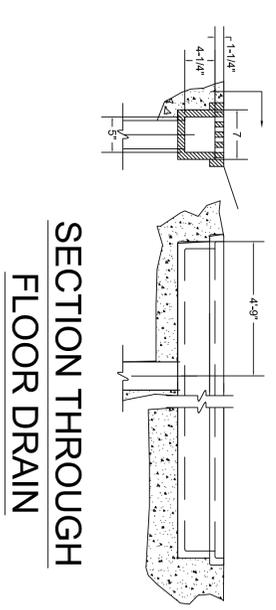
SECTION B-B
N.T.S.



BED CROSS-SECTIONAL DETAIL
N.T.S.



SECTION C-C
N.T.S.



SECTION THROUGH
FLOOR DRAIN
N.T.S.

* SEE STRUCTURAL SHEET FOR
FOUNDATION AND BUILDING DETAIL

REVISIONS	DATE
ISSUE FOR BIDDING	8/10/09

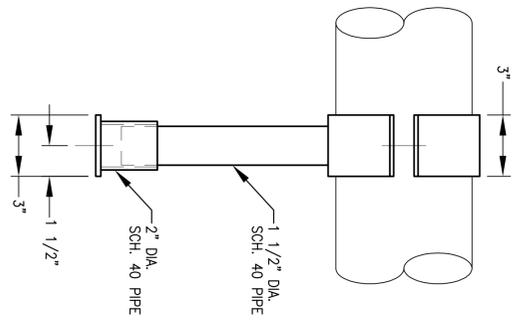
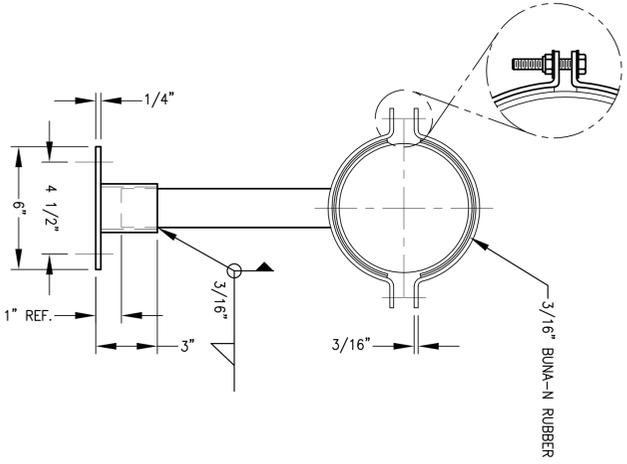
JIM STIDHAM & ASSOCIATES, INC.
 HYDROLOGY, GEOLOGY, CIVIL &
 ENVIRONMENTAL ENGINEERING
 547 N. MONROE ST., SUITE 201, TALLAHASSEE, FLORIDA 32301
 TELEPHONE: 850.222.3975 FACSIMILE: 850.914.6560
 FBPE CERTIFICATE OF AUTHORIZATION NO. 00065629

**SOUTH COLUMBIA COUNTY REGIONAL
 WASTEWATER TREATMENT PLANT**
 COLUMBIA COUNTY WWTP CONSTRUCTION
 FOR
EUTAW UTILITIES, INC.
 LAKE CITY, FLORIDA

**SLUDGE DRYING BEDS
 MECHANICAL DETAILS**

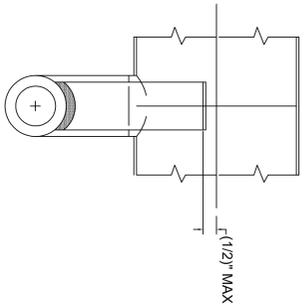
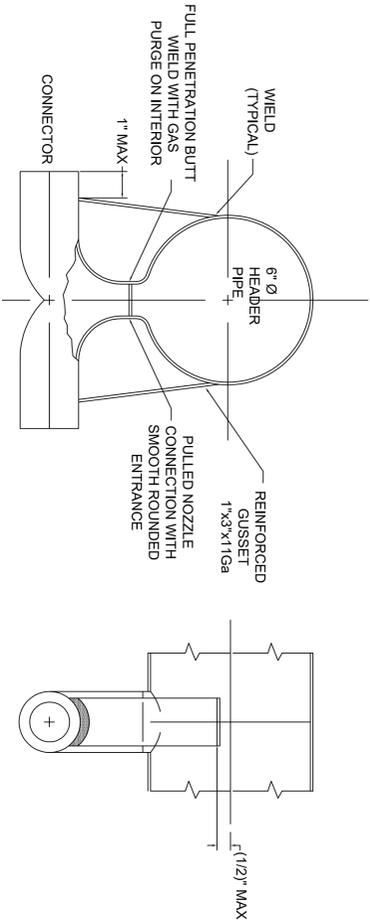
DATE	06/04/09
DESIGN	ASS SIQ/UVN
MANAGER	AMH
CHECKED BY	CHL
PROJECT NO.	5010/007
SHEET	M-22 OF 24

CHEN H. LIN, P.E.
No. 43340

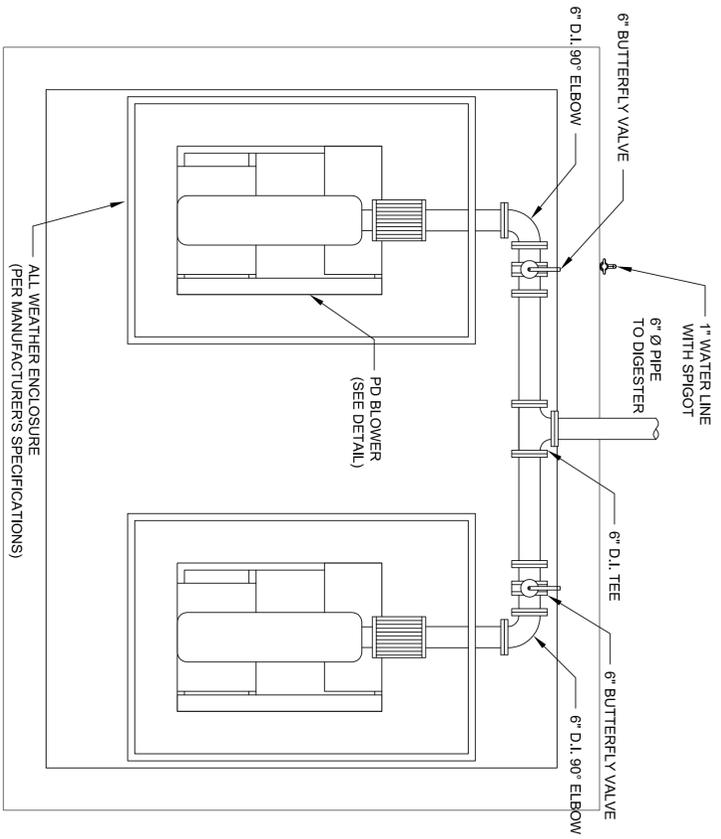


PIPE SUPPORT
N.T.S.

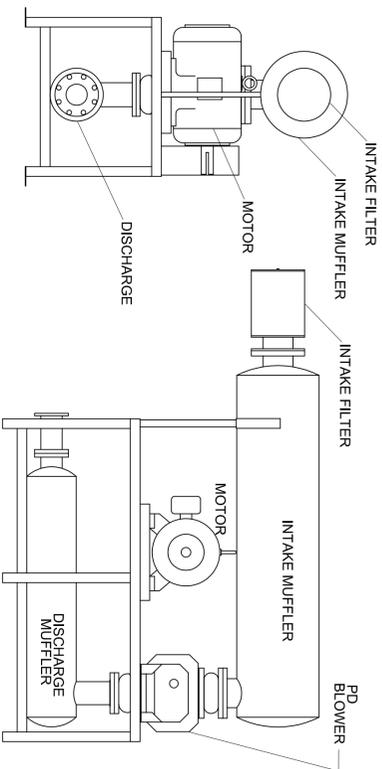
* SEE STRUCTURAL SHEET FOR FOUNDATION AND BUILDING DETAIL



AERATOR MANIFOLD DETAIL
N.T.S.



BLOWER PLAN VIEW
N.T.S.



BLOWER DETAIL
N.T.S.

REVISIONS	DATE
ISSUE FOR BIDDING	8/10/09



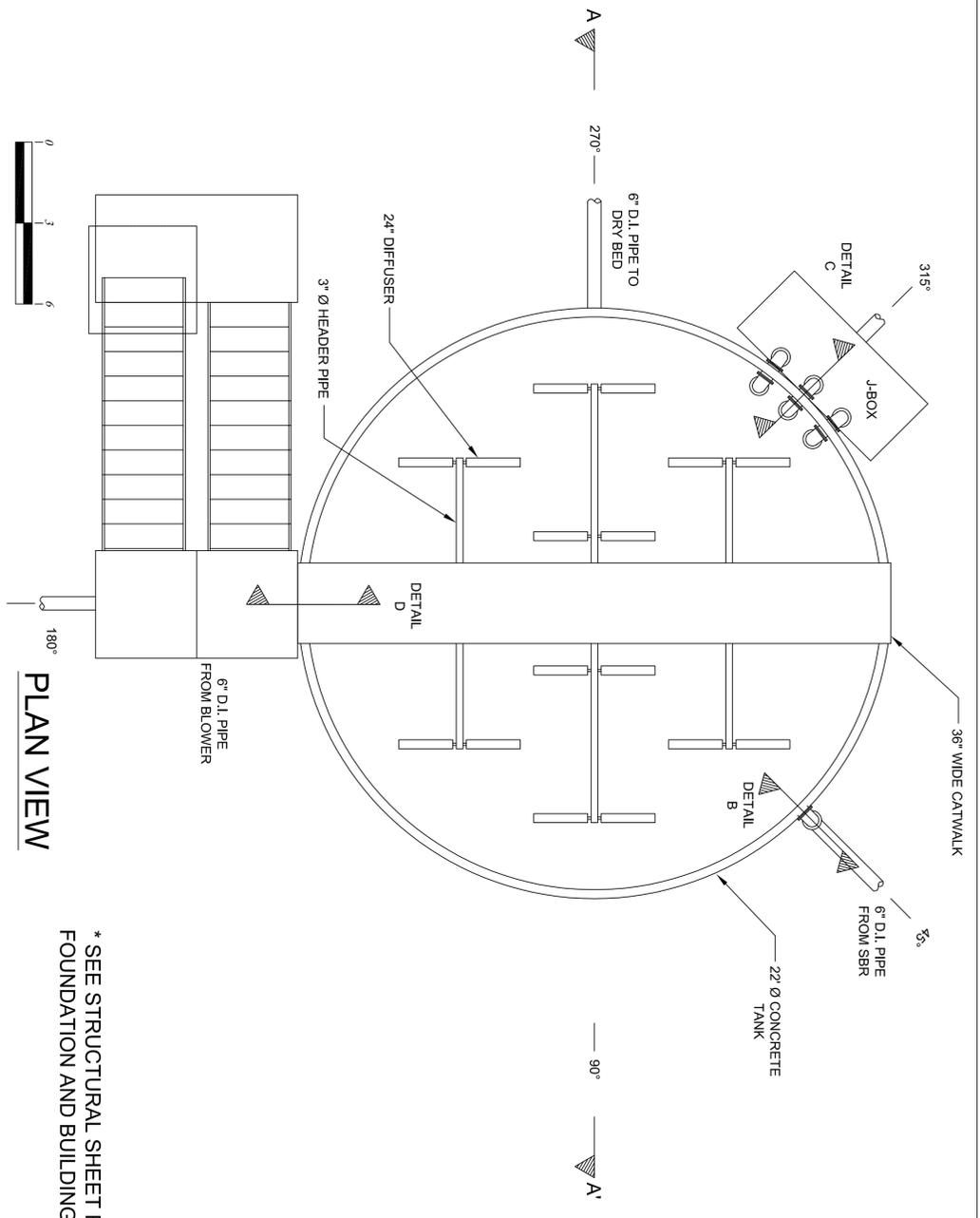
JIM STIDHAM & ASSOCIATES, INC.
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TELEPHONE: 904.222.2975 FACSIMILE: 904.914.6560
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CHEN H. LIN, P.E.
No. 43340

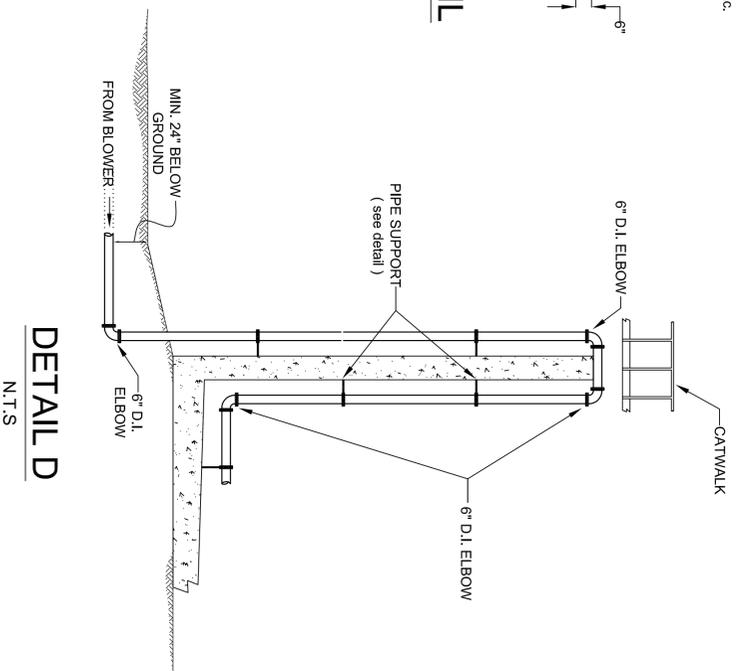
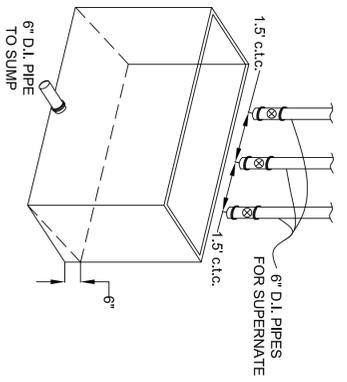
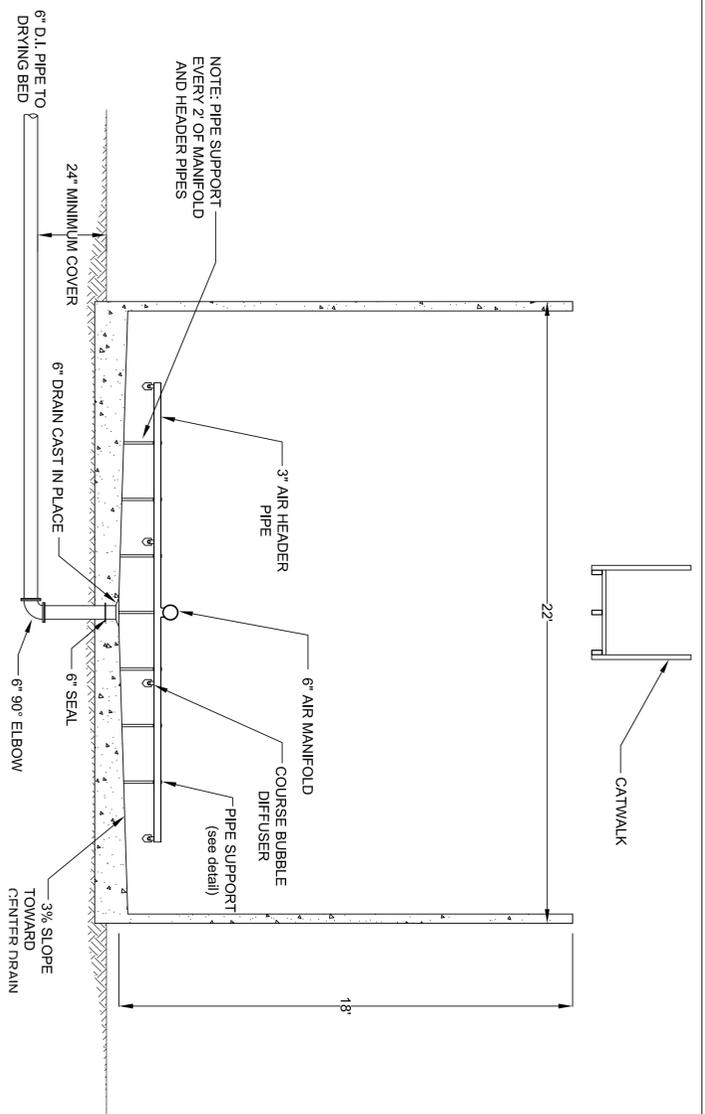
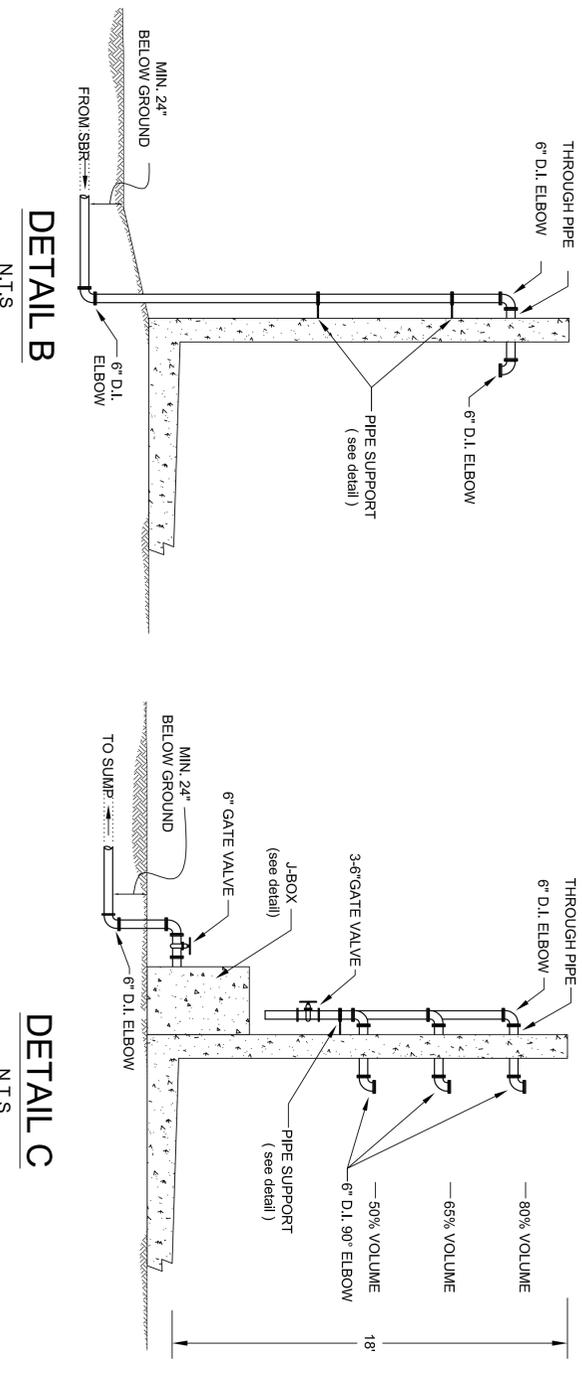
SOUTH COLUMBIA COUNTY REGIONAL WASTEWATER TREATMENT PLANT
COLUMBIA COUNTY WWTP CONSTRUCTION
FOR
EUTAW UTILITIES, INC.
LAKE CITY, FLORIDA

DIGESTER MISCELLANEOUS MECHANICAL DETAILS

DATE	06/04/09
SCALE	N.T.S.
DRAWN BY	AMH
CHECKED BY	CHL
PROJECT NO.	5010/007
SHEET	M-21 OF 24



* SEE STRUCTURAL SHEET FOR FOUNDATION AND BUILDING DETAIL



REVISIONS	DATE
ISSUE FOR BIDDING	8/10/09

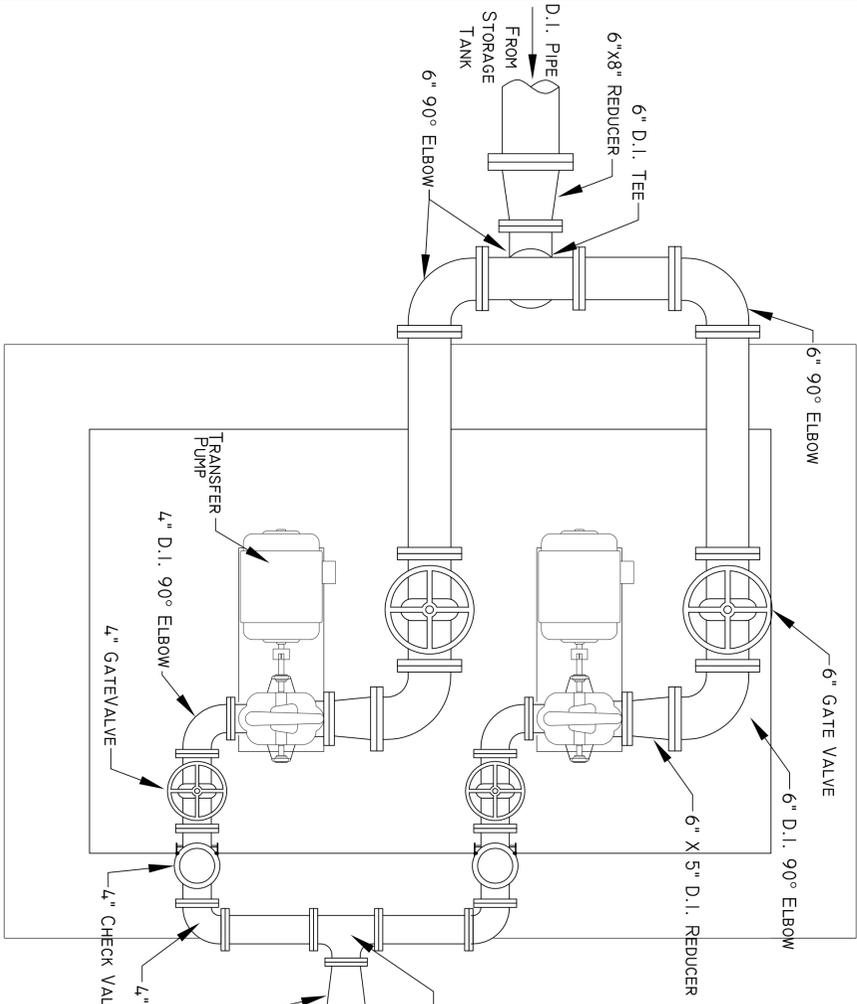
JIM STIDHAM & ASSOCIATES, INC.
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 547 N. MONROE ST., SUITE 201, TALLAHASSEE, FLORIDA 32301
 TELEPHONE: 850.222.9975 FAX: 850.888.8560
 FBP# CERTIFICATE OF AUTHORIZATION NO. 00005629

SOUTH COLUMBIA COUNTY REGIONAL WASTEWATER TREATMENT PLANT
 COLUMBIA COUNTY WWTP CONSTRUCTION
 FOR
EUTAW UTILITIES, INC.
 LAKE CITY, FLORIDA

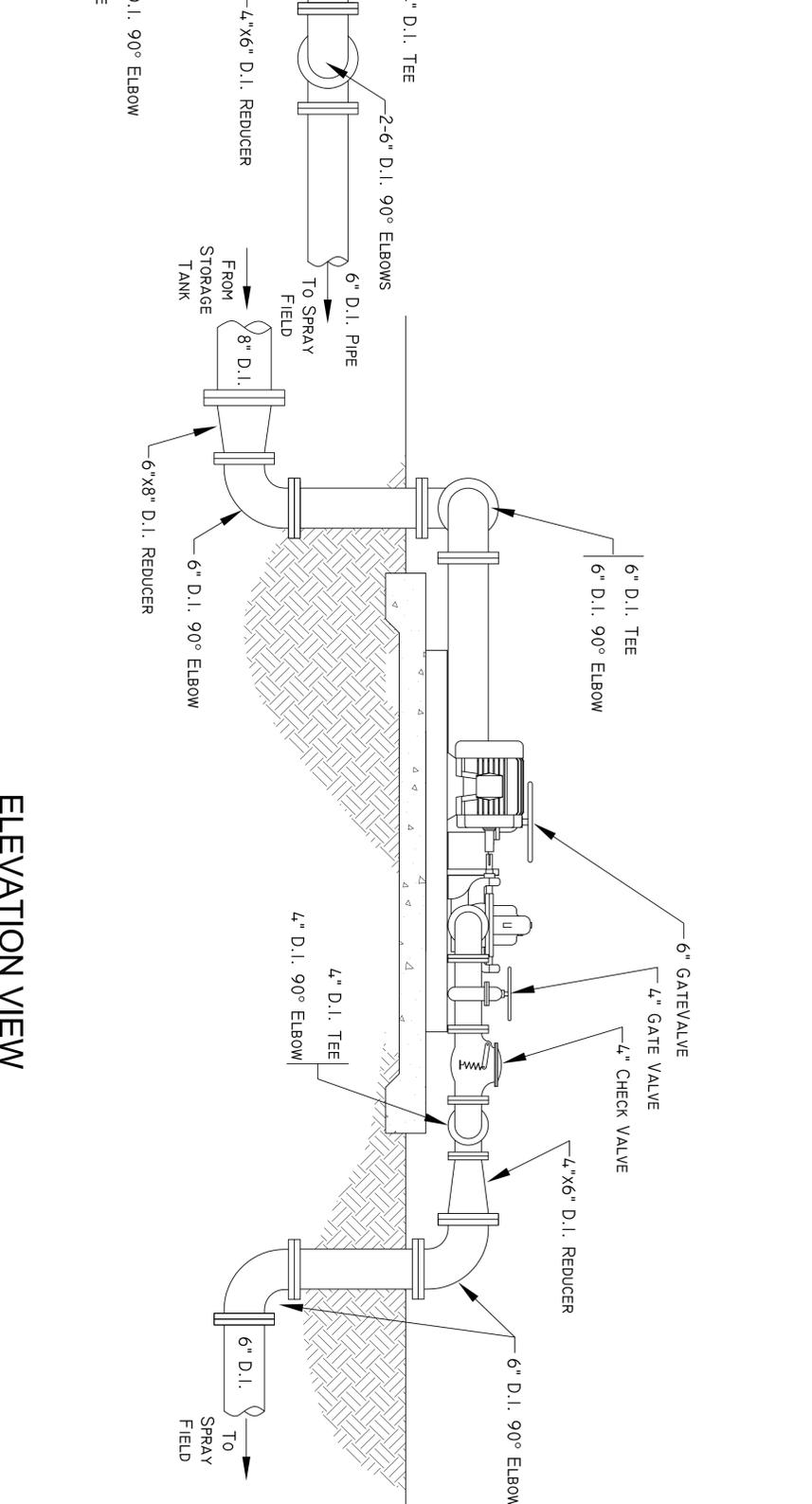
DIGESTER MECHANICAL DETAILS

DATE	06/04/09
SCALE	AS SHOWN
DRAWN BY	AMH
CHECKED BY	CHL
PROJECT NO.	5010A007
SHEET	M-20 OF 24

CHEN H. LIN, P.E.
No. 43340



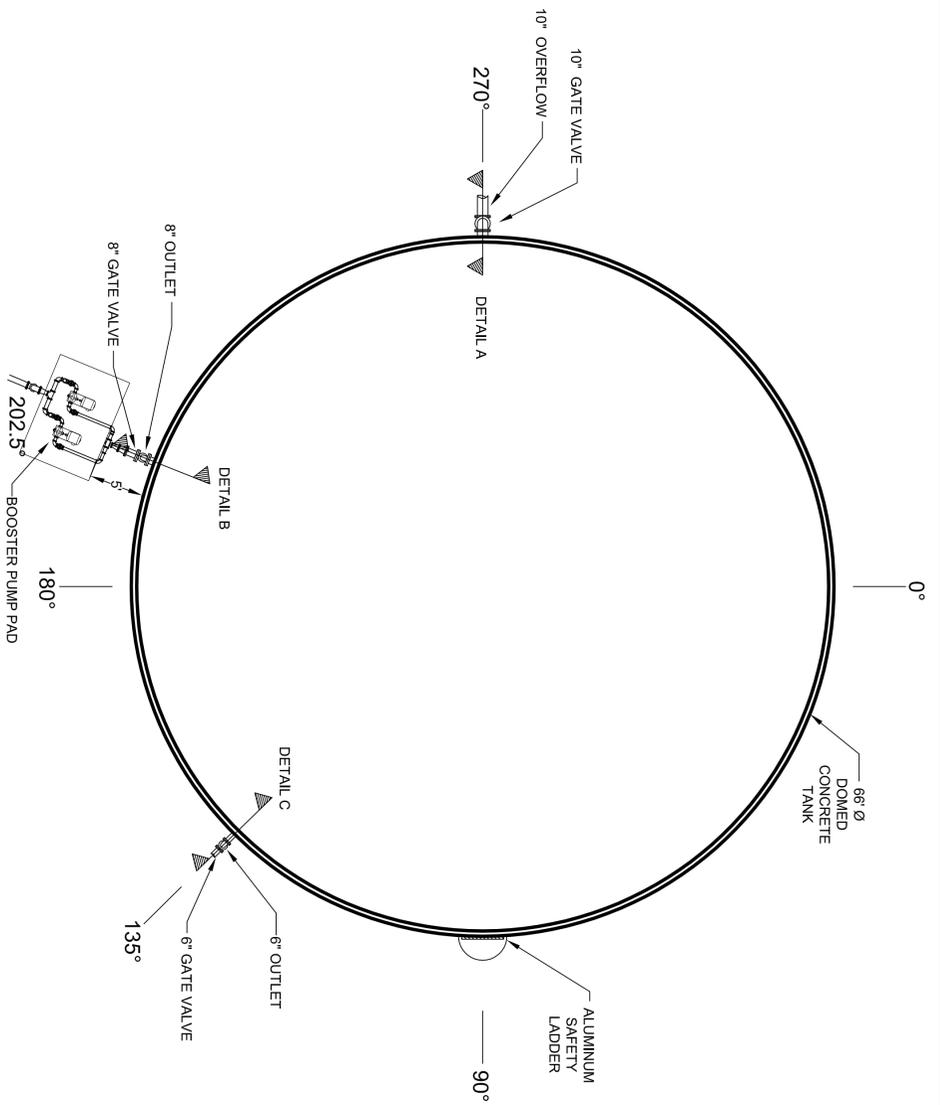
PLAN VIEW



ELEVATION VIEW

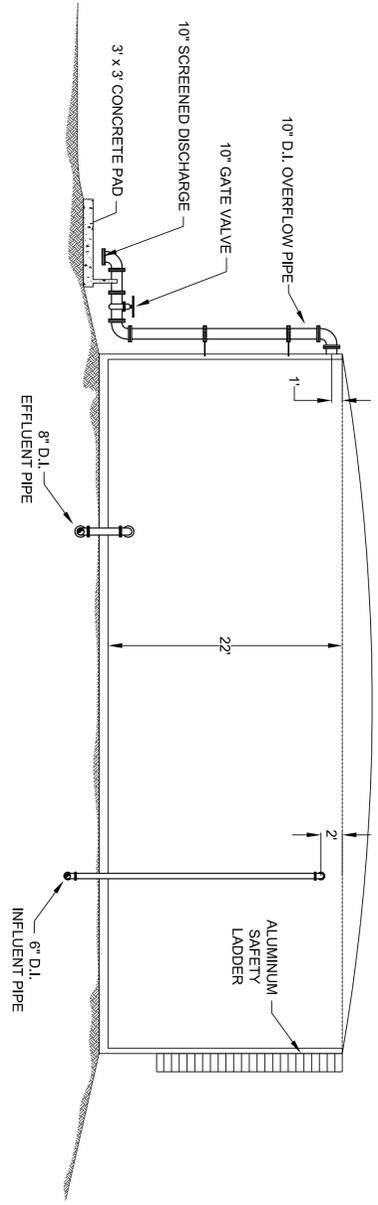
* SEE STRUCTURAL SHEET FOR FOUNDATION AND BUILDING DETAIL

<p>DATE: 06/04/09 DESIGNED BY: AS SHOUVIN DRAWN BY: AMH CHECKED BY: CHL PROJECT NO.: 5010/007 SHEET: M-19 OF 24</p>	<p>STORAGE TANK EFFLUENT TRANSFER PUMP MECHANICAL DETAILS</p>	<p>SOUTH COLUMBIA COUNTY REGIONAL WASTEWATER TREATMENT PLANT COLUMBIA COUNTY WWTP CONSTRUCTION FOR EUTAW UTILITIES, INC. LAKE CITY, FLORIDA</p>	<p>CHEN H. LIN, P.E. No. 43340</p>	 <p>JIM STIDHAM & ASSOCIATES, INC. HYDROLOGY, GEOLOGY, CIVIL & ENVIRONMENTAL ENGINEERING 547 N. MONROE ST., SUITE 201, TALLAHASSEE, FLORIDA 32301 TELEPHONE: 850.222.3975 FACSIMILE: 850.914.6560 FBPE CERTIFICATE OF AUTHORIZATION NO. 00055629</p>	<p>REVISIONS</p>	<p>DATE</p>
					<p>ISSUE FOR BIDDING</p>	<p>8/10/09</p>

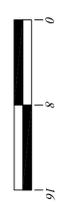


PLAN VIEW

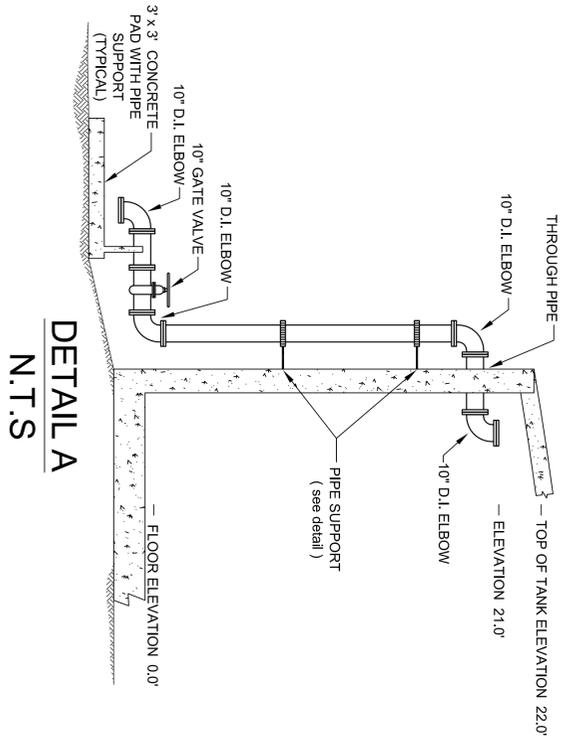
* SEE STRUCTURAL SHEET FOR FOUNDATION AND BUILDING DETAIL



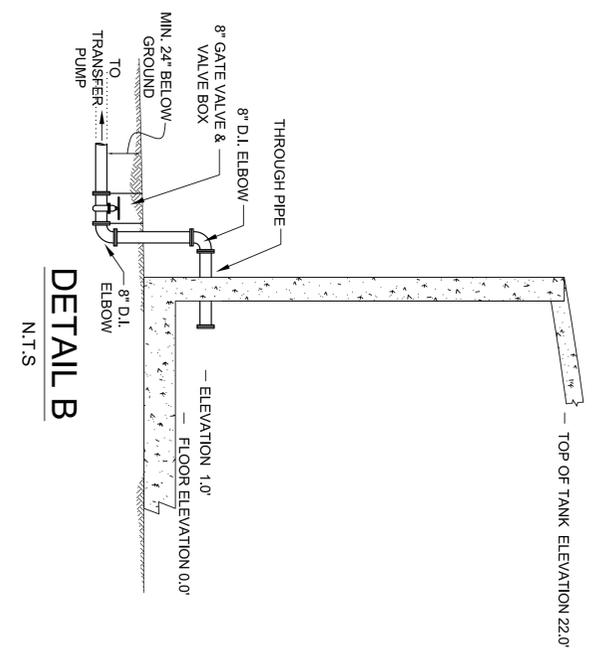
ELEVATION VIEW



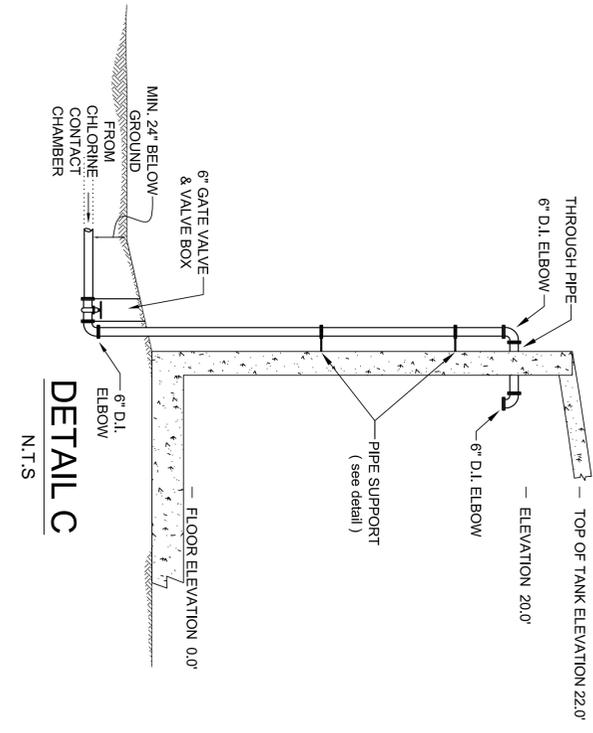
* ALL ELEVATIONS SHOWN ARE RELATIVE TO ELEVATION OF 0.0' AT FLOOR OF STORAGE TANK



**DETAIL A
N.T.S.**



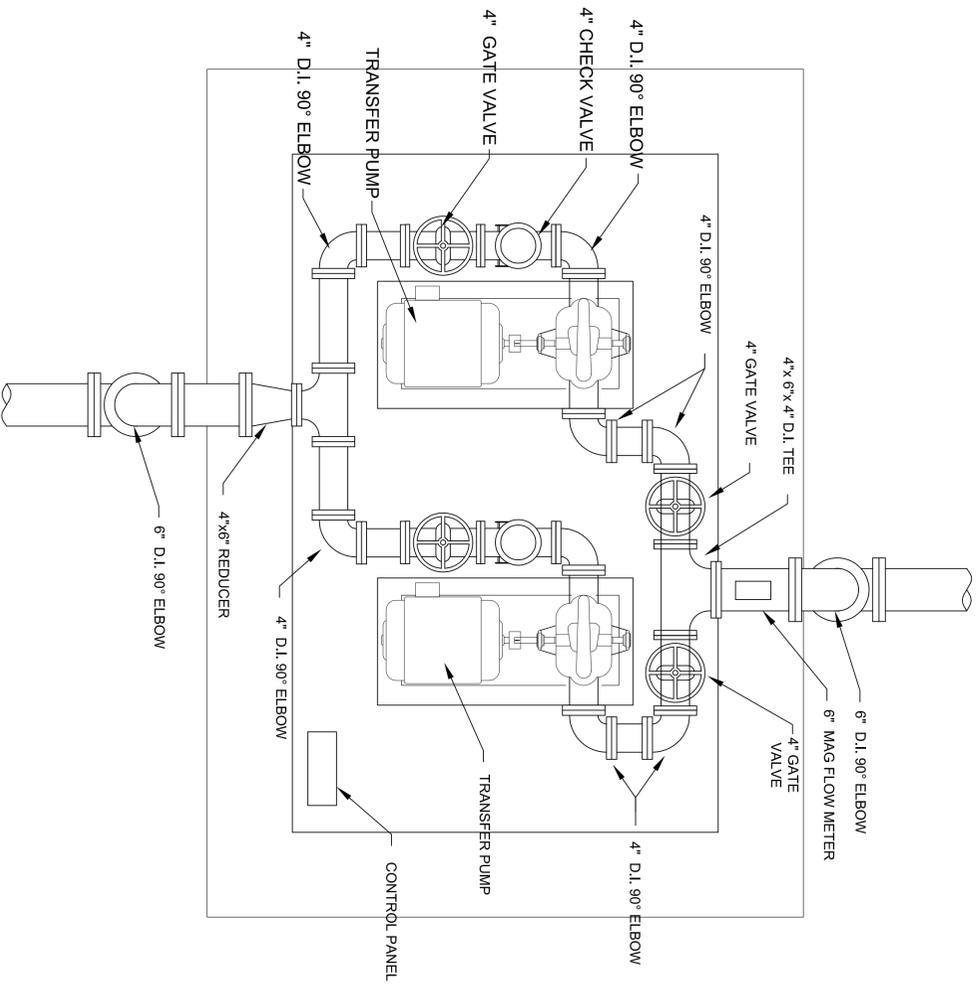
**DETAIL B
N.T.S.**



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

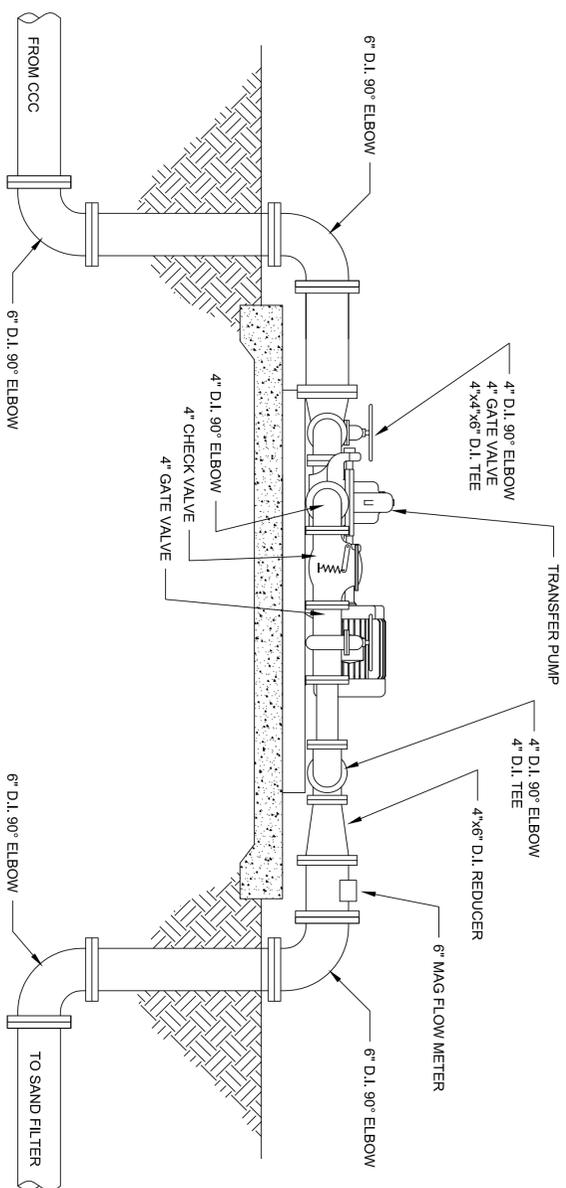
REVISIONS	DATE
ISSUE FOR BIDDING	8/10/09

<p>STORAGE TANK MECHANICAL DETAILS</p>	<p>SOUTH COLUMBIA COUNTY REGIONAL WASTEWATER TREATMENT PLANT</p> <p>COLUMBIA COUNTY WWTP CONSTRUCTION</p> <p>FOR EUTAW UTILITIES, INC.</p> <p>LAKE CITY, FLORIDA</p>	<p>JIM STIDHAM & ASSOCIATES, INC.</p> <p>HYDROLOGY, GEOLOGY, CIVIL & ENVIRONMENTAL ENGINEERING</p> <p>547 N. MONROE ST., SUITE 201, TALLAHASSEE, FLORIDA 32301</p> <p>TELEPHONE: 850.222.3975 FACSIMILE: 850.911.6560</p> <p>FPBE CERTIFICATE OF AUTHORIZATION NO. 00065629</p>
	<p>CHEN H. LIN, P.E. No. 43340</p>	<p>DATE: 06/04/09 SCALE: AS SHOWN DESIGNED BY: AMH CHECKED BY: CHL PROJECT NO.: 5010/007 SHEET: M-18 OF 24</p>



PLAN VIEW

* SEE STRUCTURAL SHEET FOR FOUNDATION AND BUILDING DETAIL



ELEVATION VIEW

CCC EFFLUENT TRANSFER
PUMP MECHANICAL DETAILS

**SOUTH COLUMBIA COUNTY REGIONAL
WASTEWATER TREATMENT PLANT**
COLUMBIA COUNTY WWTP CONSTRUCTION
FOR
EUTAW UTILITIES, INC.
LAKE CITY, FLORIDA

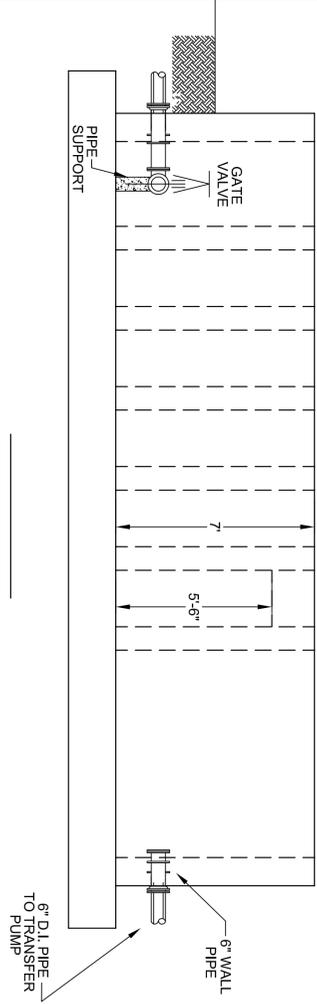
CHEN H. LIN, P.E.
No. 43340



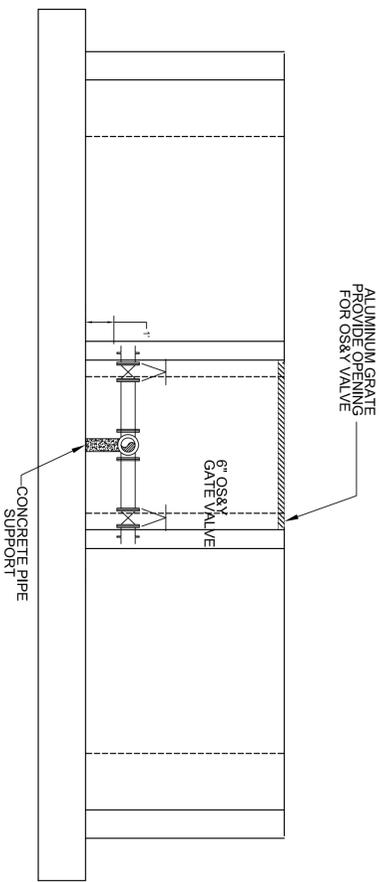
JIM STIDHAM & ASSOCIATES, INC.
HYDROLOGY, GEOLOGY, CIVIL &
ENVIRONMENTAL ENGINEERING
547 N. MONROE ST., SUITE 201, TALLAHASSEE, FLORIDA 32301
TELEPHONE: 850-222-3975 FACSIMILE: 850/914-6560
FBPE CERTIFICATE OF AUTHORIZATION NO. 00055629

REVISIONS	DATE
ISSUE FOR BIDDING	8/10/09

DATE: 06/04/09
SCALE: AS SHOWN
DRAWN BY: AMH
CHECKED BY: CHL
PROJECT NO.: 5010-007
SHEET: M-17 OF 24

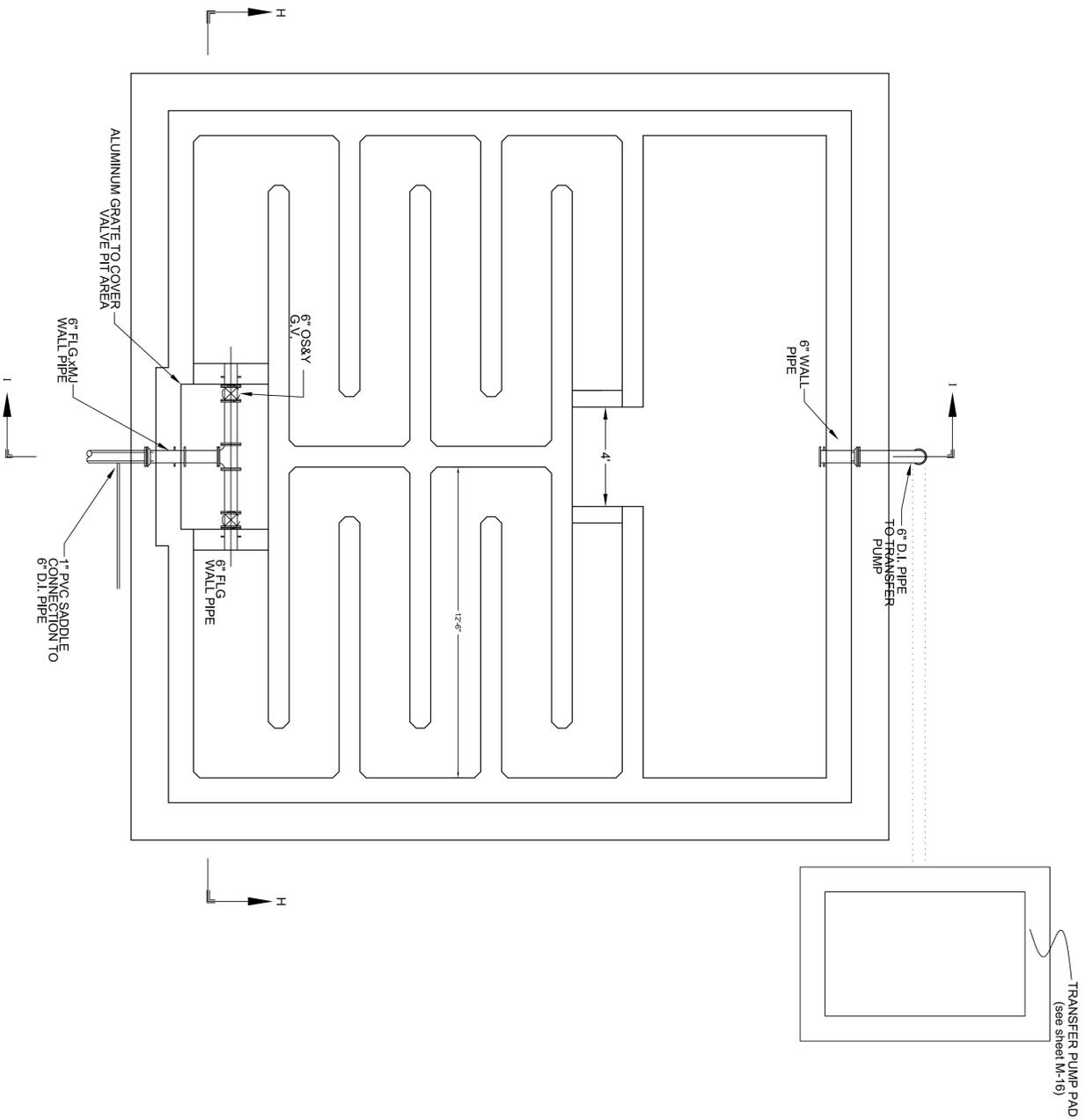


SECTION I-I



SECTION H-H

* SEE STRUCTURAL SHEET FOR FOUNDATION AND BUILDING DETAIL



PLAN VIEW



CHLORINE CONTACT CHAMBER MECHANICAL DETAILS	
DATE: 06/04/09	DESIGNER: AS SHOUVIN
DRAWN BY: AMH	CHECKED BY: CHL
PROJECT NO.: 5010-007	SHEET: M-16 OF 23

SOUTH COLUMBIA COUNTY REGIONAL WASTEWATER TREATMENT PLANT
 COLUMBIA COUNTY WWTP CONSTRUCTION
 FOR
EUTAW UTILITIES, INC.
 LAKE CITY, FLORIDA

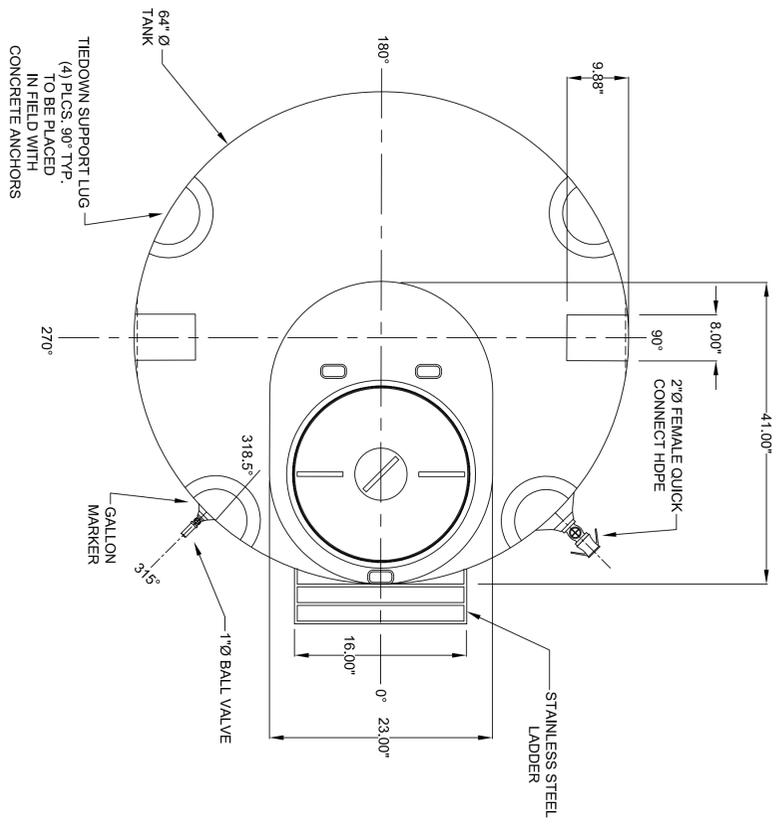
CHEN H. LIN, P.E.
 No. 43340



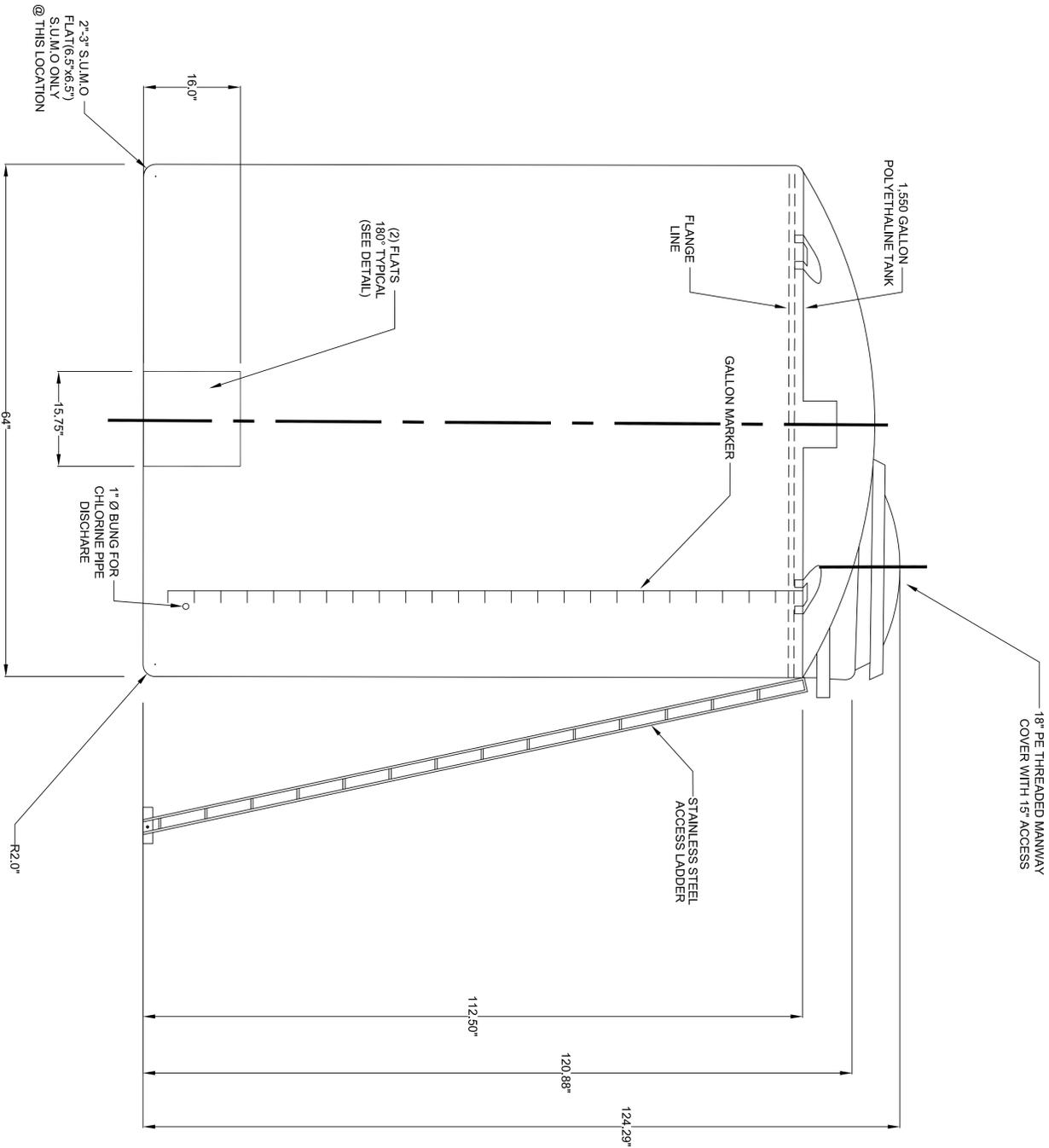
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 547 N. MONROE ST., SUITE 201, TALLAHASSEE, FLORIDA 32301
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REVISIONS	DATE
ISSUE FOR BIDDING	8/10/09

TOP VIEW
N.T.S



SIDE VIEW
N.T.S



* SEE STRUCTURAL SHEET FOR FOUNDATION AND BUILDING DETAIL

DATE	06/04/09
SCALE	N.T.S.
DESIGNED BY	AMH
CHECKED BY	CHL
PROJECT NO.	5010-007
SHEET	M-15 OF 24

CHLORINE TANK MECHANICAL DETAILS

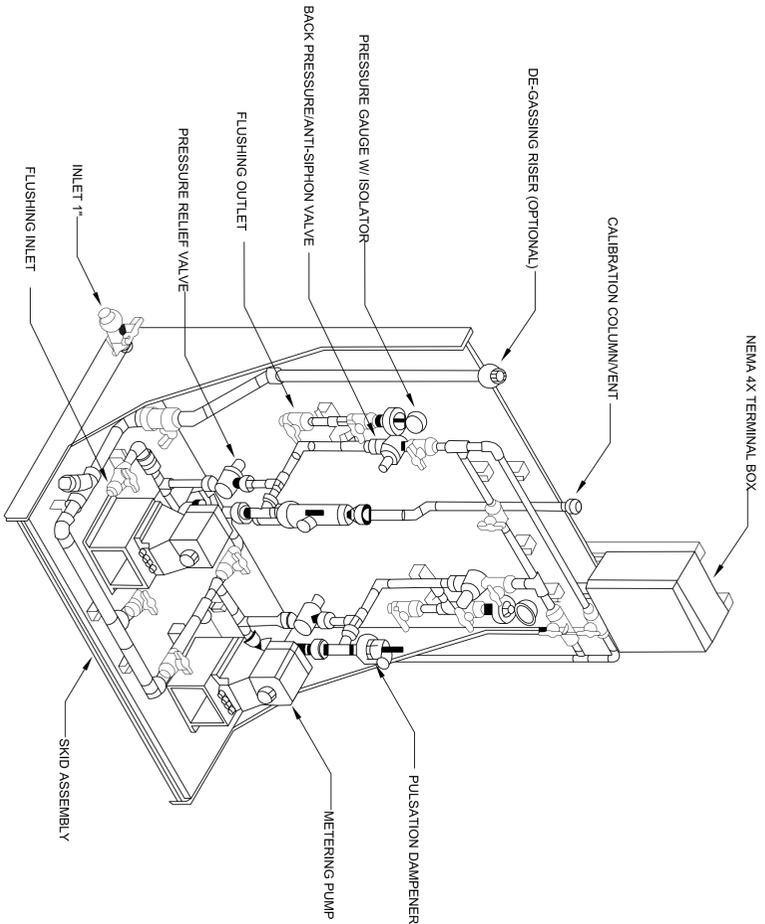
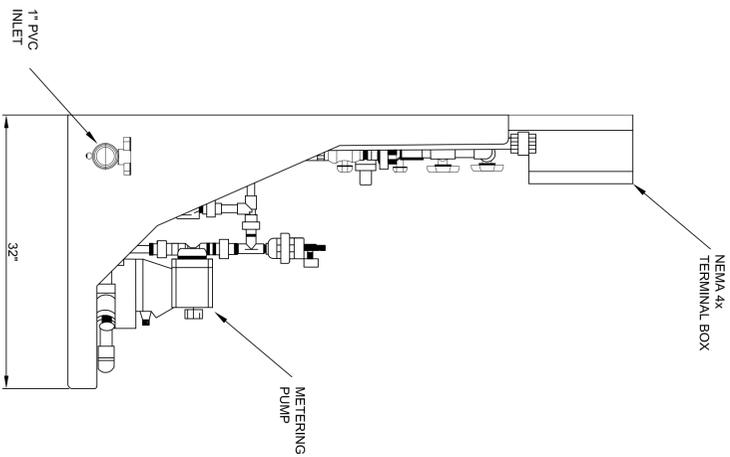
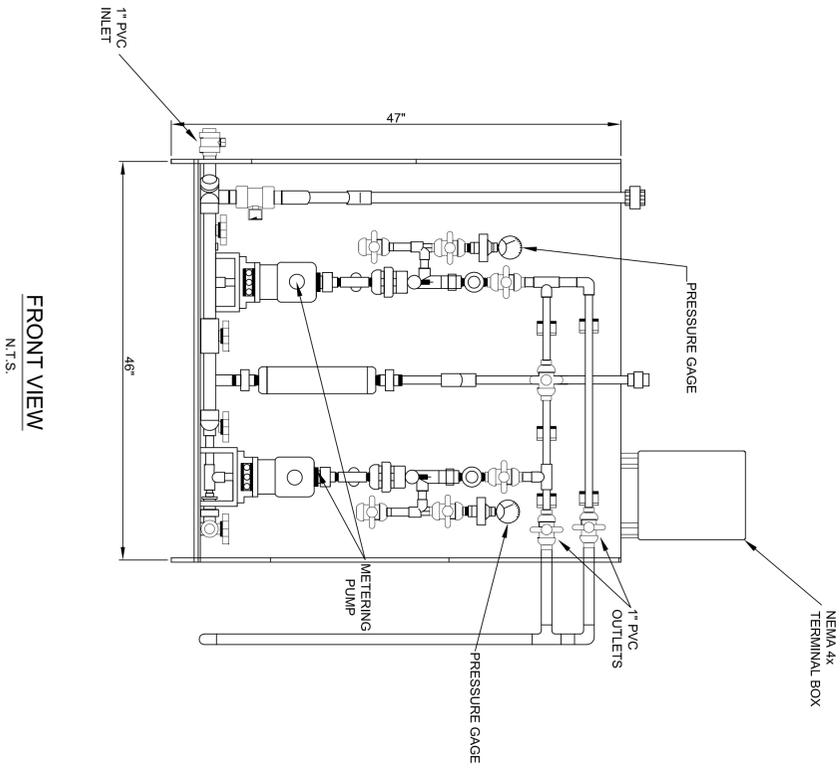
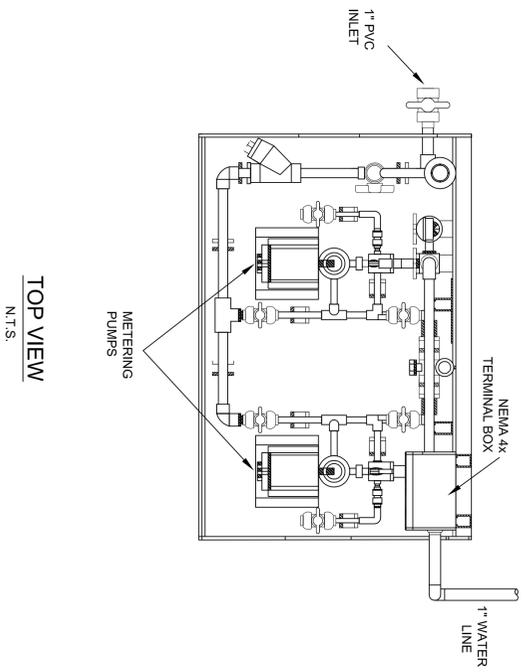
SOUTH COLUMBIA COUNTY REGIONAL WASTEWATER TREATMENT PLANT
COLUMBIA COUNTY WWTP CONSTRUCTION
FOR
EUTAW UTILITIES, INC.
LAKE CITY, FLORIDA

CHEN H. LIN, P.E.
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547 N. MONROE ST., SUITE 201, TALLAHASSEE, FLORIDA 32301
TELEPHONE: 904-222-3975 FACSIMILE: 904-914-0560
FBPE CERTIFICATE OF AUTHORIZATION NO. 00055629

REVISIONS	DATE
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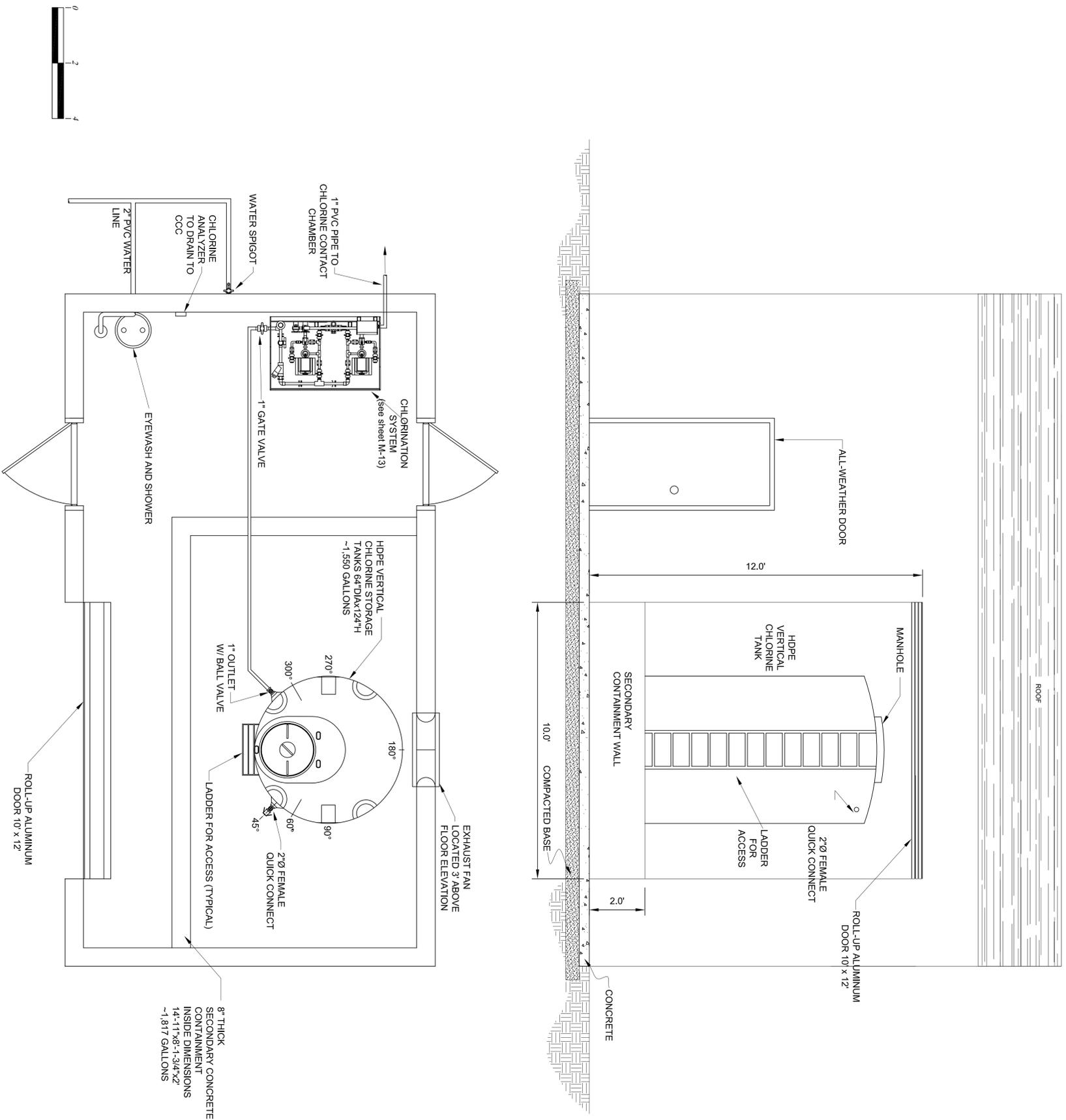


SKID MOUNTED CHLORINATOR ASSEMBLY DETAIL
N.T.S.

* SEE STRUCTURAL SHEET FOR
FOUNDATION AND BUILDING DETAIL

REVISIONS	DATE
ISSUE FOR BIDDING	8/10/09

<p>CHLORINE SYSTEM MECHANICAL DETAILS</p>	<p>SOUTH COLUMBIA COUNTY REGIONAL WASTEWATER TREATMENT PLANT COLUMBIA COUNTY WWTP CONSTRUCTION FOR EUTAW UTILITIES, INC. LAKE CITY, FLORIDA</p>	<p>JIM STIDHAM & ASSOCIATES, INC. HYDROLOGY, GEOLOGY, CIVIL & ENVIRONMENTAL ENGINEERING 547 N. MONROE ST., SUITE 201, TALLAHASSEE, FLORIDA 32301 TELEPHONE: 850/222-2975 FACSIMILE: 850/914-0560 FBPE CERTIFICATE OF AUTHORIZATION NO. 00055629</p>	<p>CHEN H. LIN, P.E. No. 43340</p>
<p>DATE: 06/04/09 SCALE: N.T.S. DRAWN BY: AMH CHECKED BY: CHL PROJECT NO.: 5010/007 SHEET M-14 OF 24</p>	<p>* SEE STRUCTURAL SHEET FOR FOUNDATION AND BUILDING DETAIL</p>		



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DATE	06/04/09
SCALE	AS SHOWN
DESIGNED BY	AMH
CHECKED BY	CHL
PROJECT NO.	5010-007
SHEET	M-13 OF 24

CHLORINATION BUILDING MECHANICAL DETAILS

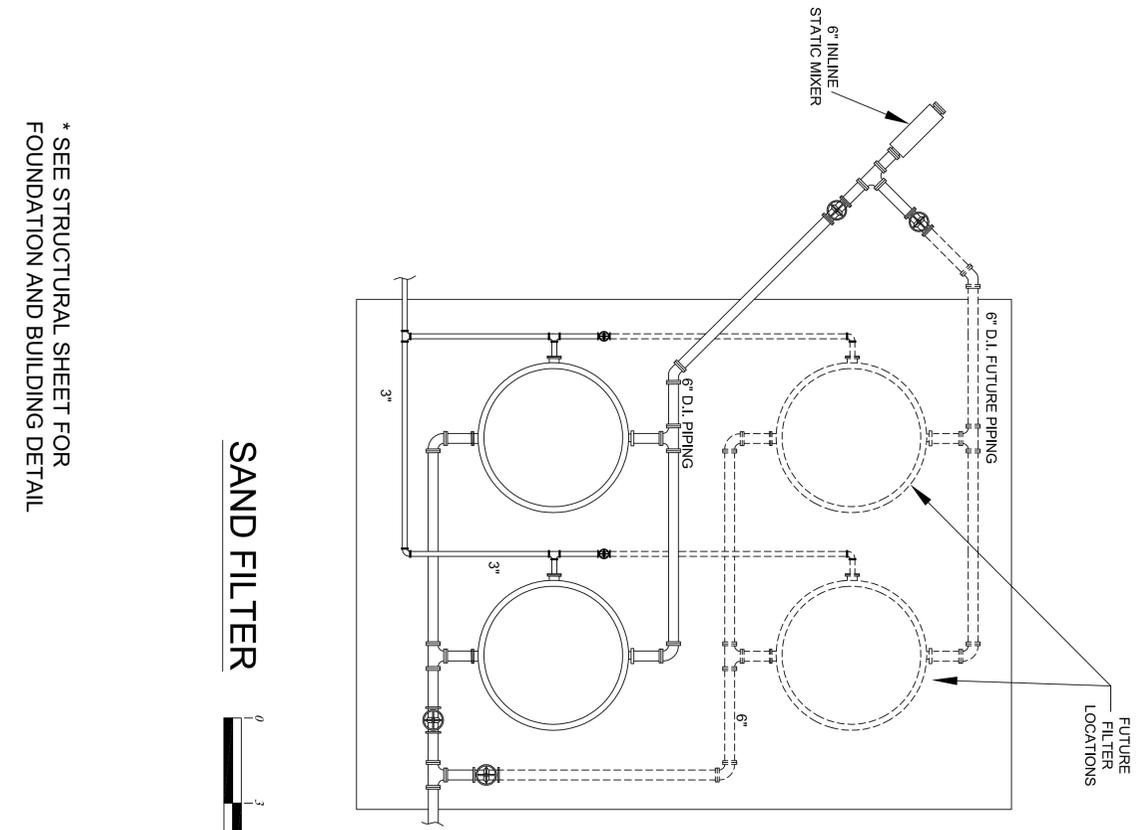
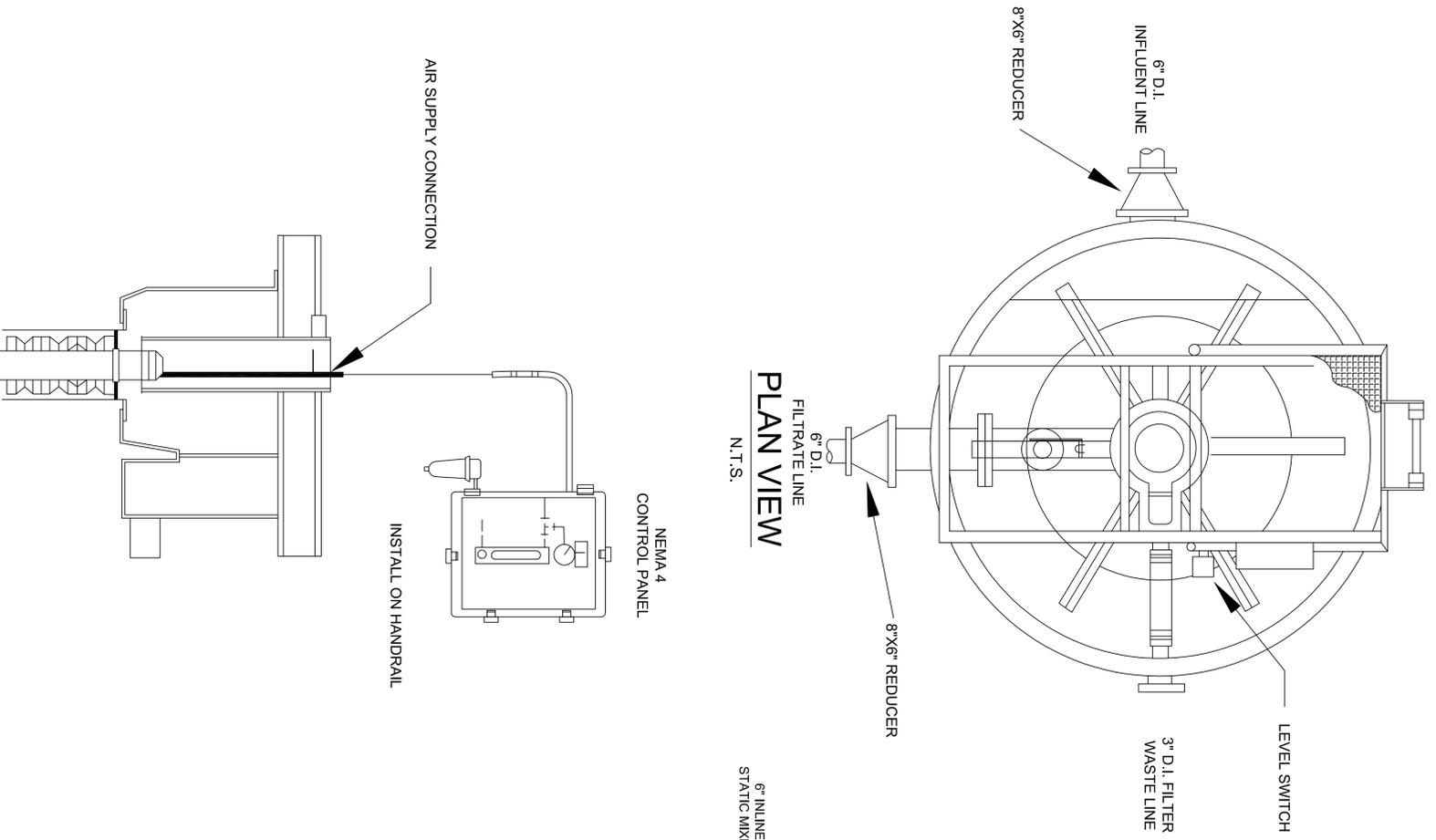
SOUTH COLUMBIA COUNTY REGIONAL WASTEWATER TREATMENT PLANT
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CHEN H. LIN, P.E.
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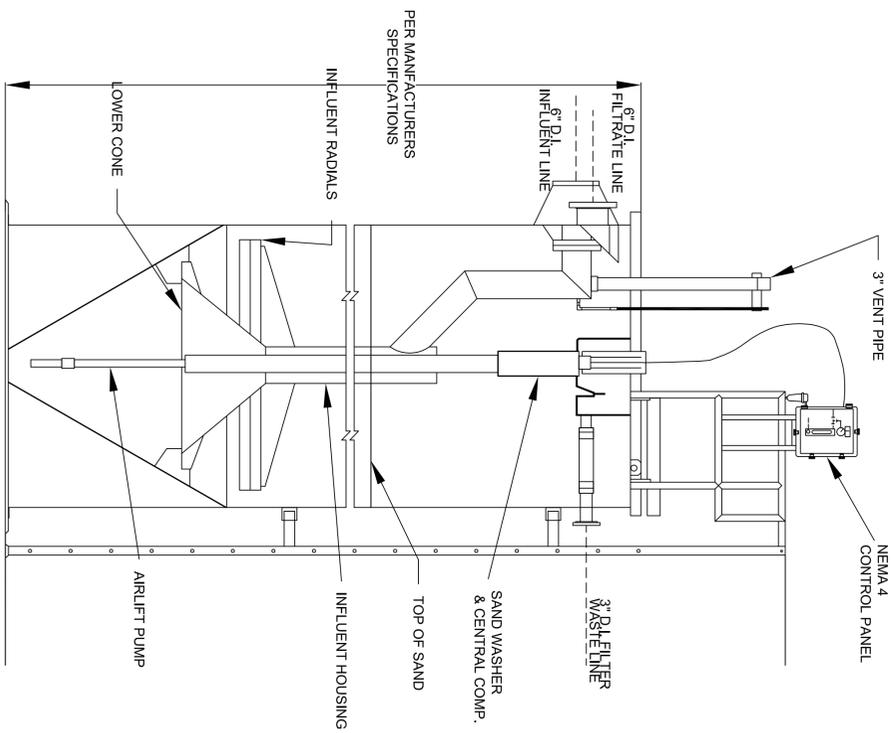


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 TELEPHONE: 904-222-2975 FACSIMILE: 904-914-0560
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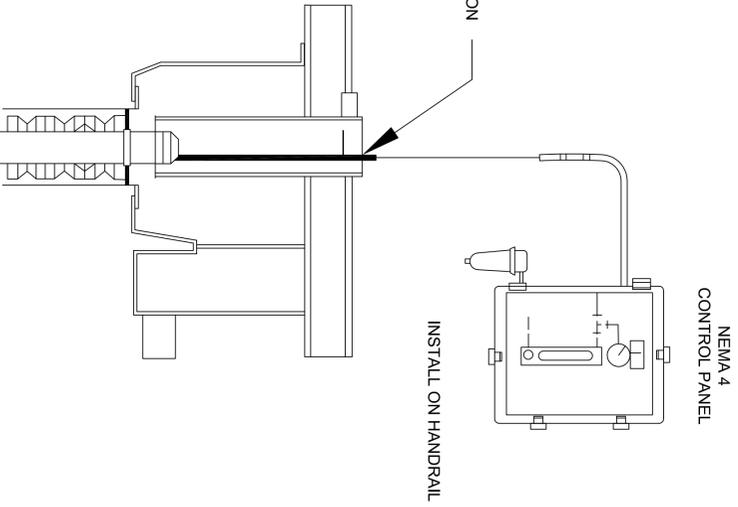


----- FUTURE INSTALLATION
 _____ PROPOSED PIPING



* SEE STRUCTURAL SHEET FOR FOUNDATION AND BUILDING DETAIL

LOCAL CONTROL PANEL DETAIL
N.T.S.



FILTERS PER MANUFACTURERS SPECIFICATIONS

DATE	06/04/09
DESIGN	AS SHOWN
DESIGNED BY	AMH
CHECKED BY	CHL
PROJECT NO.	5010-007
SHEET	M-12 OF 24

SAND FILTER MECHANICAL DETAILS

SOUTH COLUMBIA COUNTY REGIONAL WASTEWATER TREATMENT PLANT
 COLUMBIA COUNTY WWTP CONSTRUCTION
 FOR
EUTAW UTILITIES, INC.
 LAKE CITY, FLORIDA

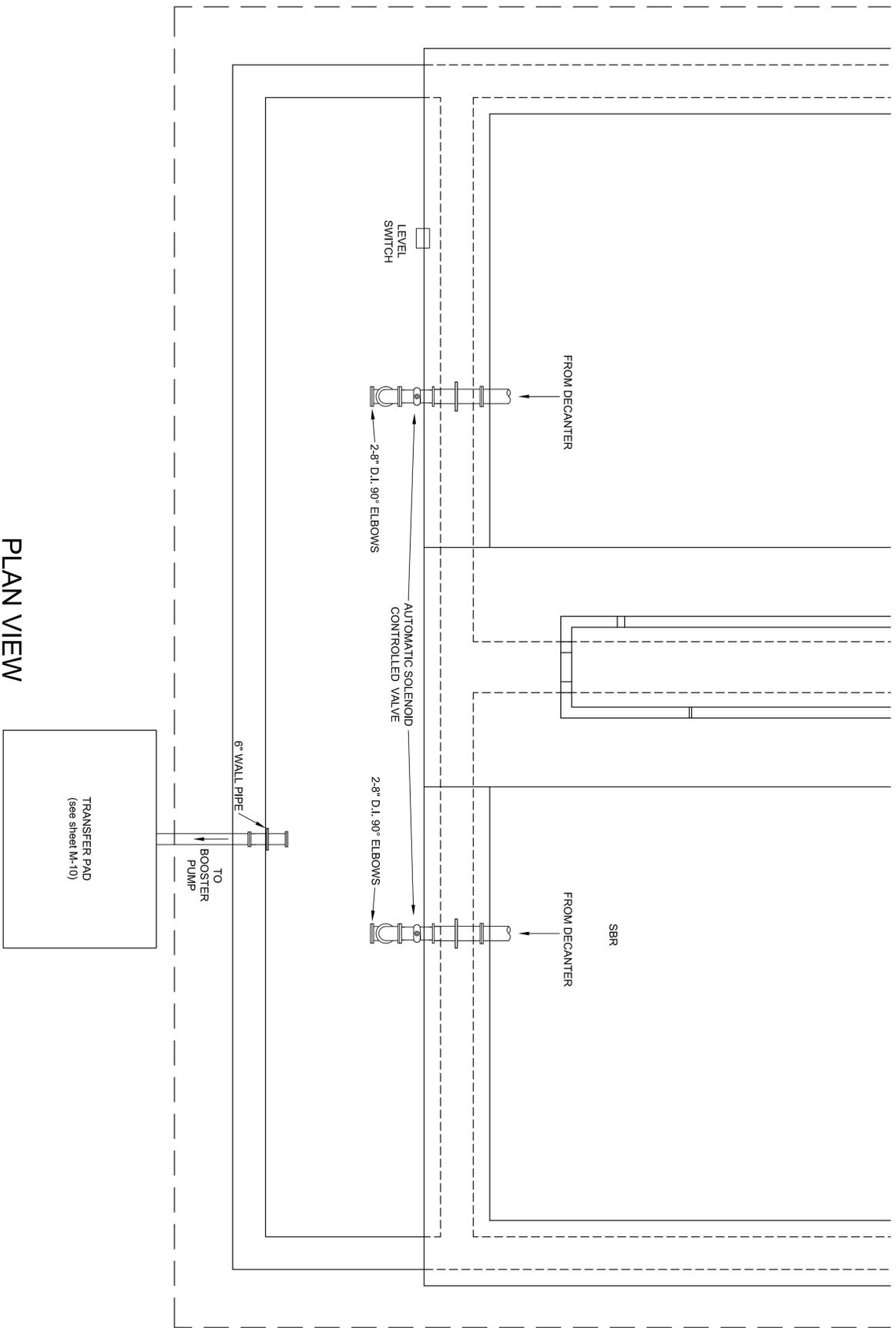
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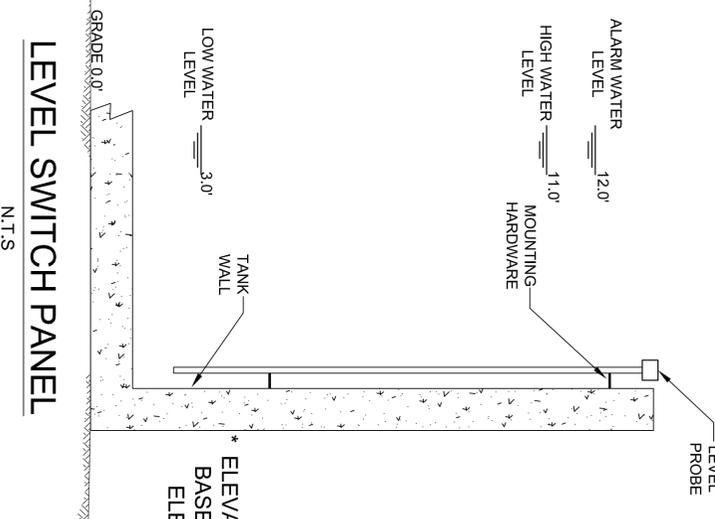
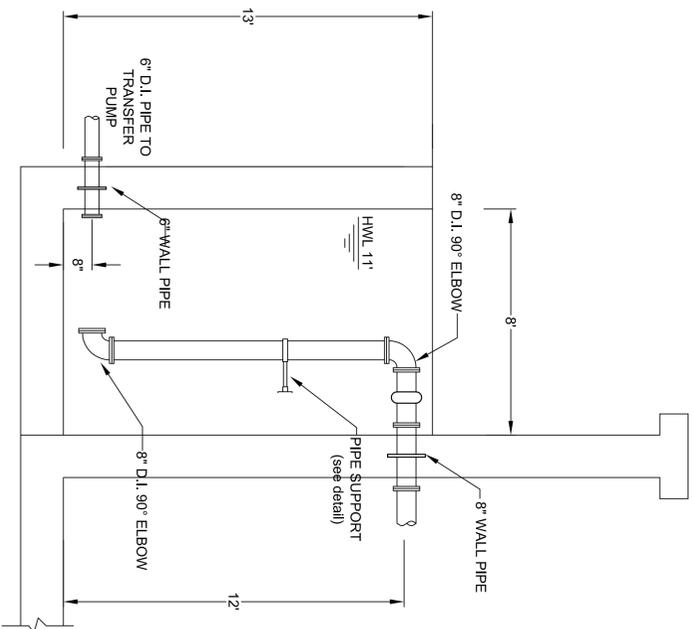
PLAN VIEW



* SEE STRUCTURAL SHEET FOR FOUNDATION AND BUILDING DETAIL



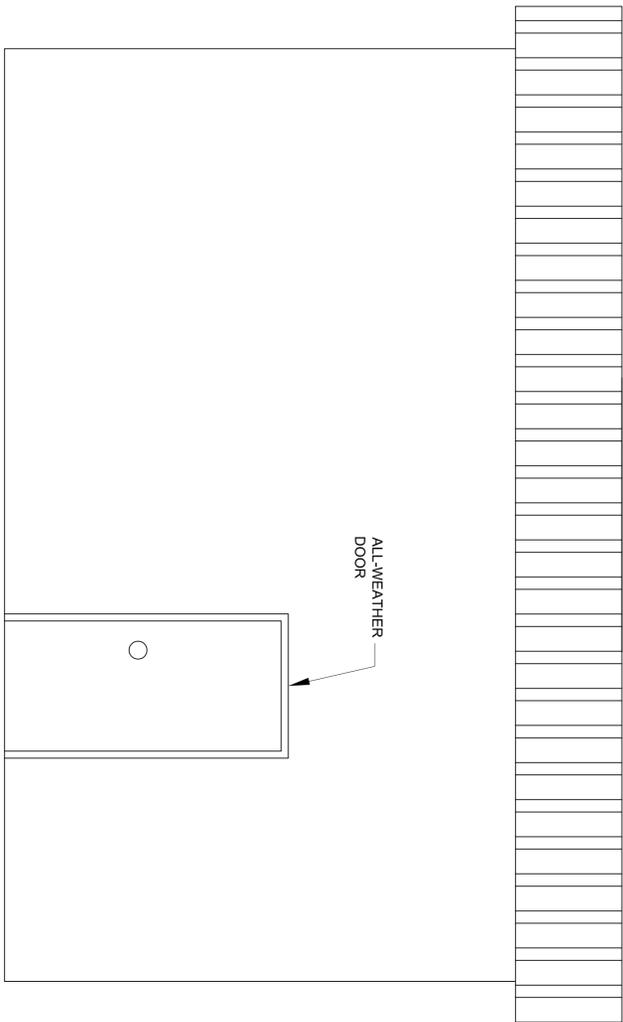
ELEVATION VIEW
N.T.S.



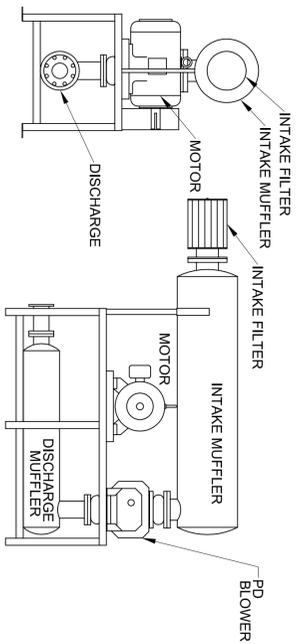
* ELEVATIONS SHOWN ARE BASED OFF OF GRADE ELEVATION AT 0.0'

DATE: 06/04/09 DESIGNED BY: AS SHOUVIN DRAWN BY: AMH CHECKED BY: CHL PROJECT NO.: 5010-007 SHEET: M-10 OF 24	SOUTH COLUMBIA COUNTY REGIONAL WASTEWATER TREATMENT PLANT COLUMBIA COUNTY WWTP CONSTRUCTION FOR EUTAW UTILITIES, INC. LAKE CITY, FLORIDA	CHEN H. LIN, P.E. No. 43340	 JIM STIDHAM & ASSOCIATES, INC. HYDROLOGY, GEOLOGY, CIVIL & ENVIRONMENTAL ENGINEERING 547 N. MONROE ST., SUITE 201, TALLAHASSEE, FLORIDA 32301 TELEPHONE: 850-222-2975 FACSIMILE: 850-914-0560 FBPE CERTIFICATE OF AUTHORIZATION NO. 00055629	REVISIONS ISSUE FOR BIDDING	DATE 8/10/09

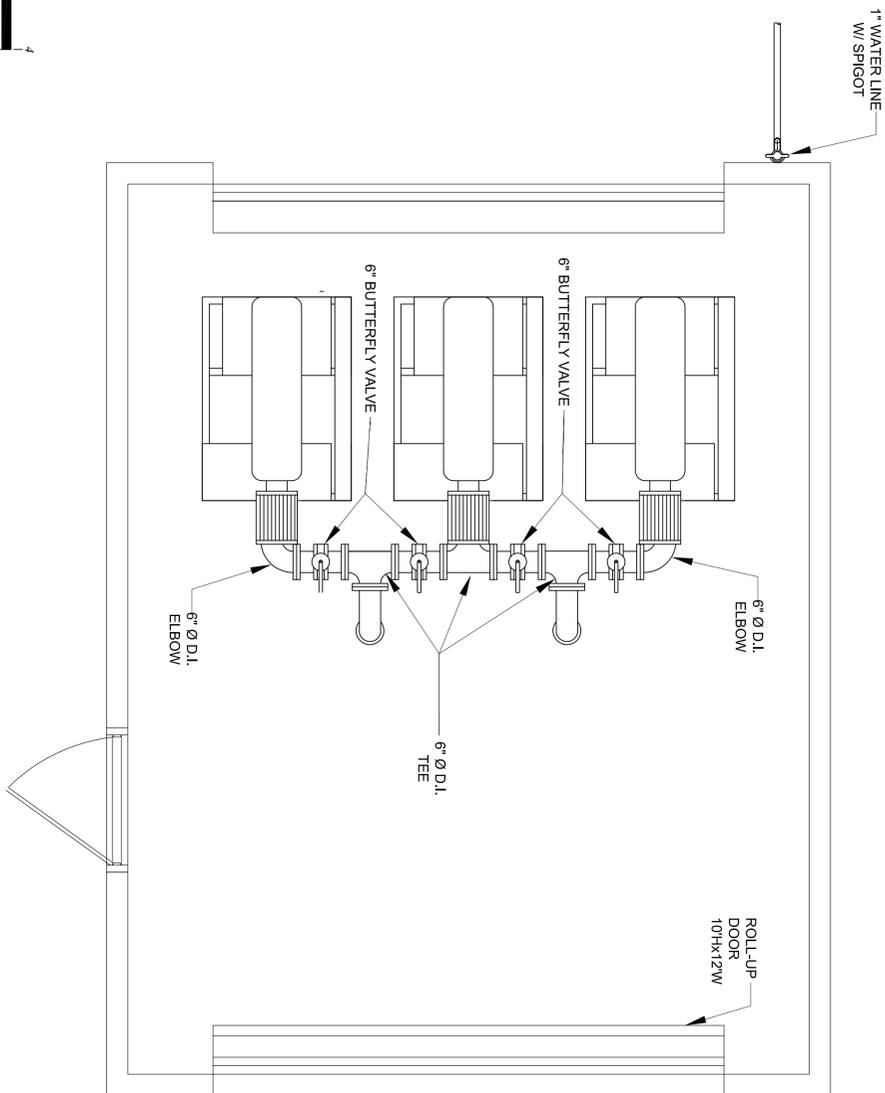
EQUALIZATION TANK MECHANICAL DETAILS



SIDE VIEW OF BLOWER BUILDING



BLOWER DETAIL
N.T.S.



* SEE STRUCTURAL SHEET FOR FOUNDATION AND BUILDING DETAIL

PLAN VIEW OF BLOWER BUILDING

DATE	06/04/09
DESIGN	AS SHOWN
REVISION	AMH
CHECKED	CHL
PROJECT NO.	5010-007
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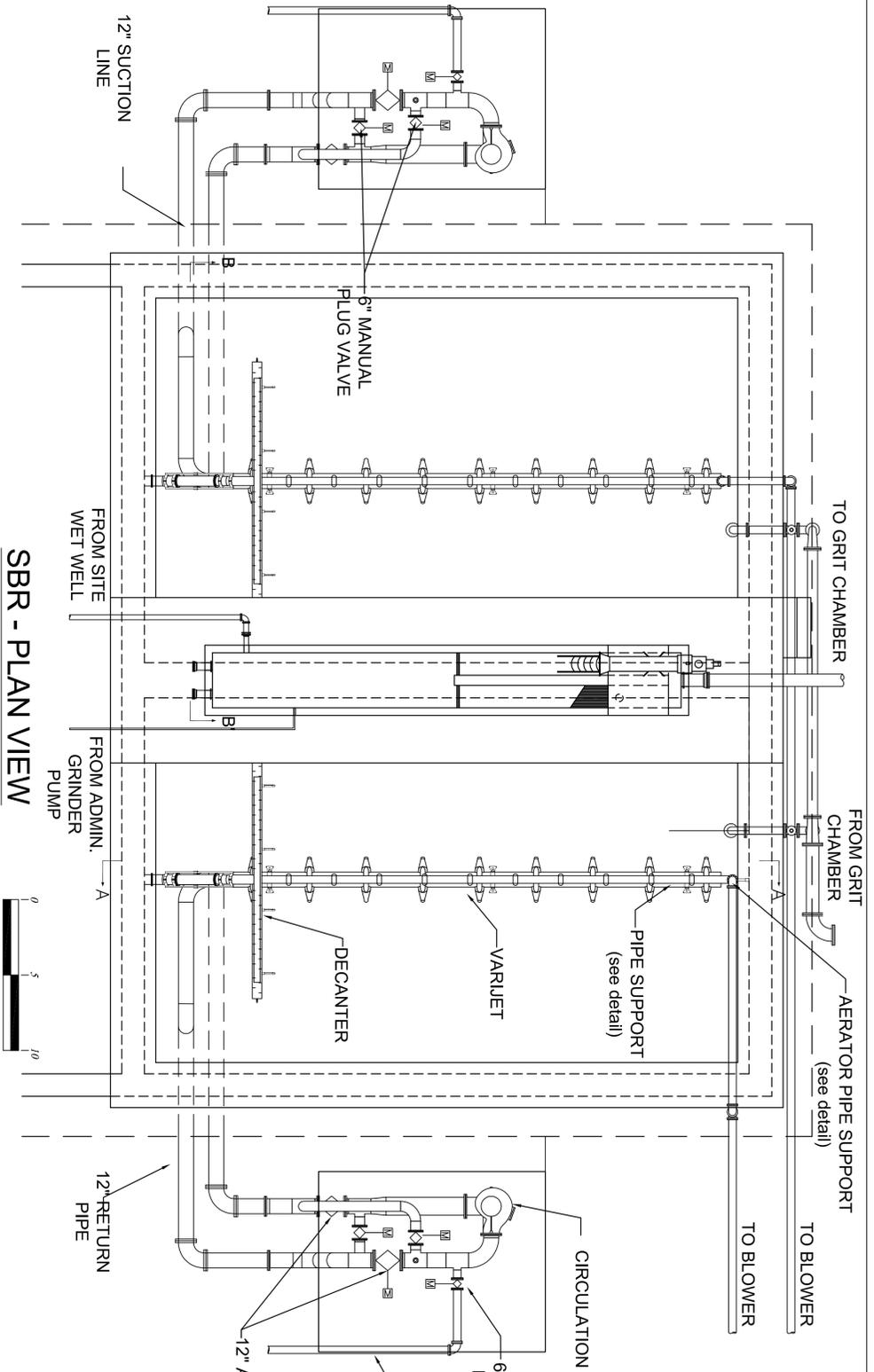
SBR BLOWER MECHANICAL DETAILS

SOUTH COLUMBIA COUNTY REGIONAL WASTEWATER TREATMENT PLANT
COLUMBIA COUNTY WWTP CONSTRUCTION
FOR
EUTAW UTILITIES, INC.
LAKE CITY, FLORIDA

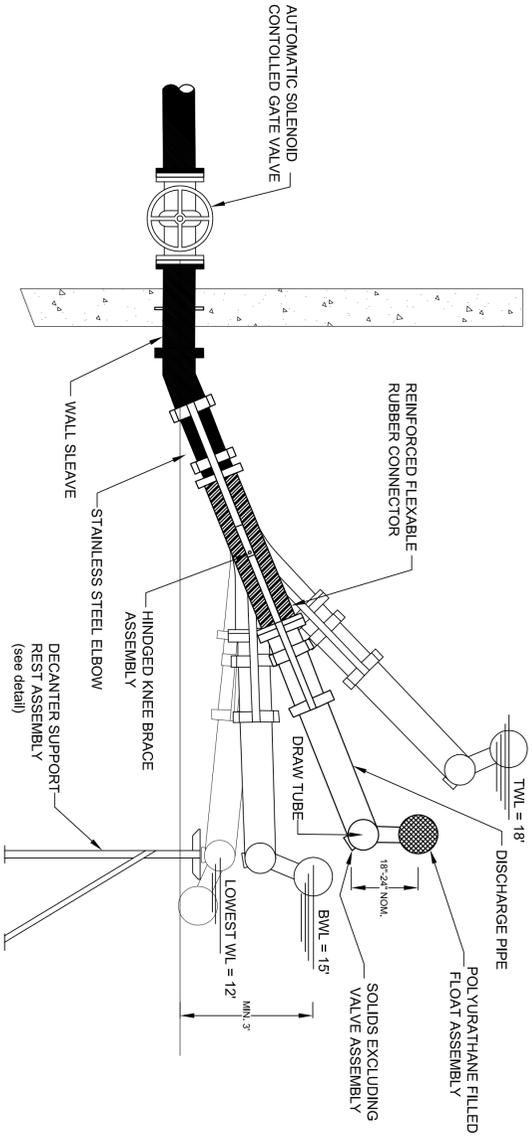
CHEN H. LIN, P.E.
No. 43340

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TELEPHONE: 904.222.3975 FACSIMILE: 904.914.6760
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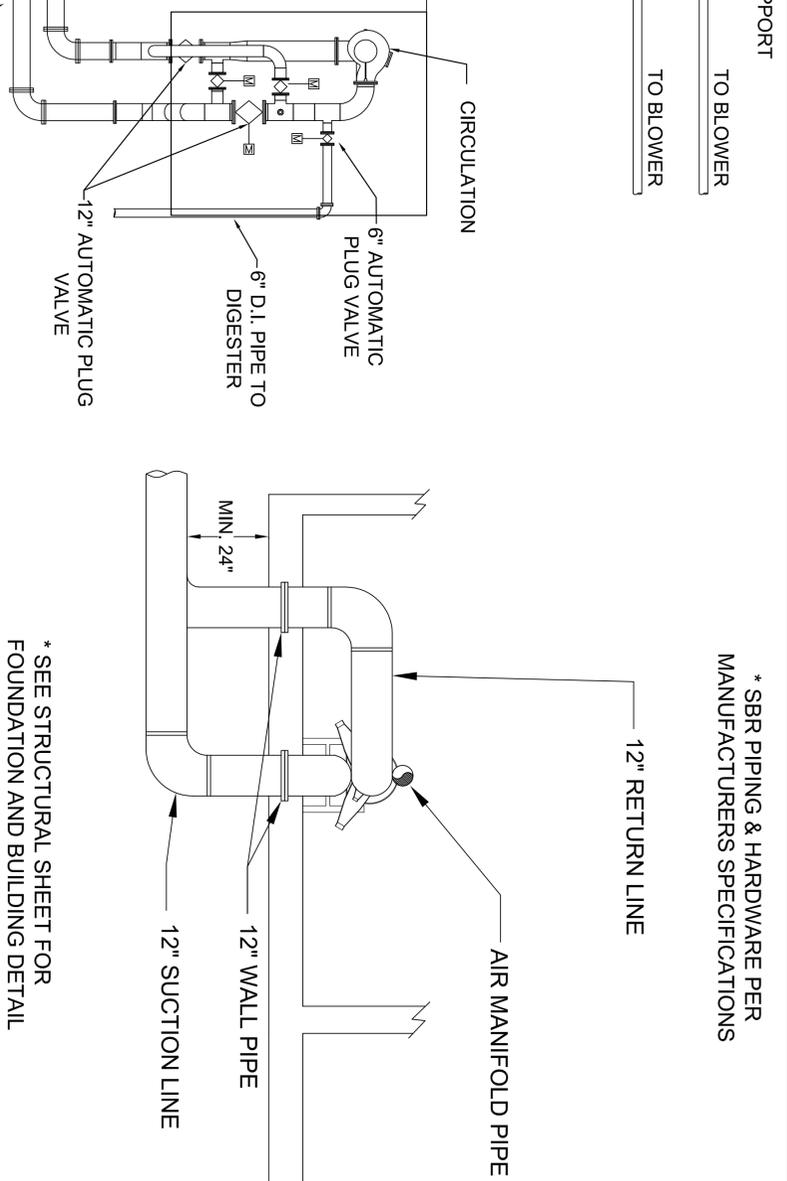


SBR - PLAN VIEW
N.T.S.



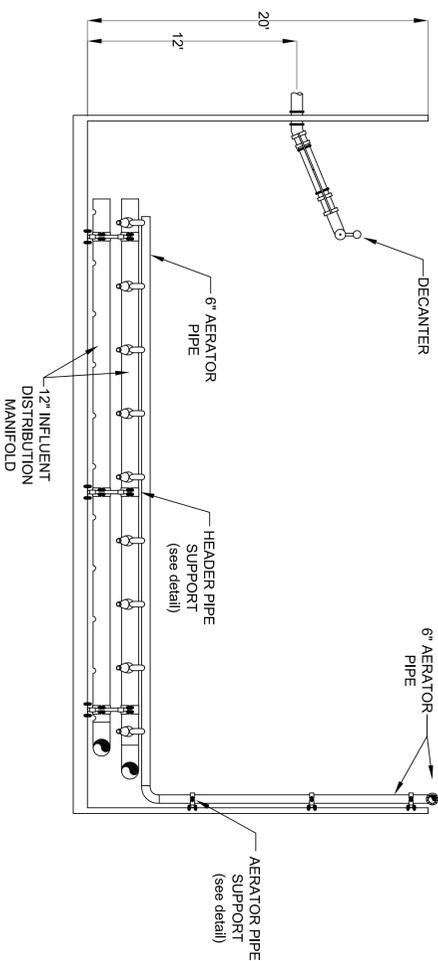
DECANTER DETAIL
N.T.S.

* SEE STRUCTURAL SHEET FOR FOUNDATION AND BUILDING DETAIL



SECTION B - B'
N.T.S.

* SEE STRUCTURAL SHEET FOR FOUNDATION AND BUILDING DETAIL



SECTION A - A'
N.T.S.

* SBR PIPING & HARDWARE PER MANUFACTURERS SPECIFICATIONS

REVISIONS	DATE
ISSUE FOR BIDDING	8/10/09



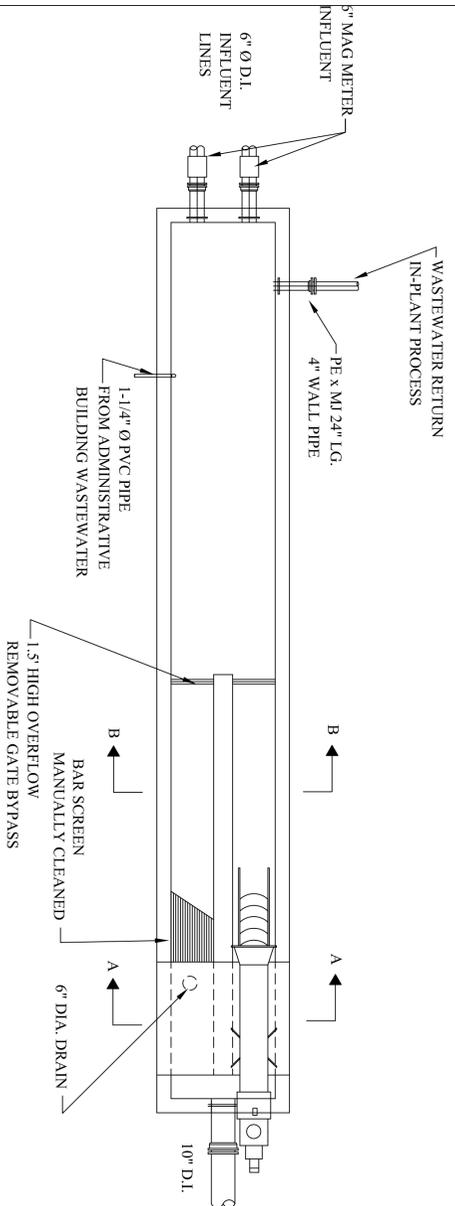
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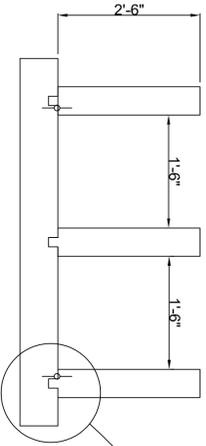
SOUTH COLUMBIA COUNTY REGIONAL WASTEWATER TREATMENT PLANT
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FOR
EUTAW UTILITIES, INC.
LAKE CITY, FLORIDA

SBR UNIT MECHANICAL DETAILS

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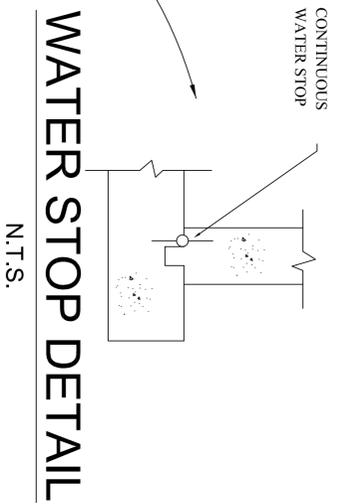


PLAN VIEW

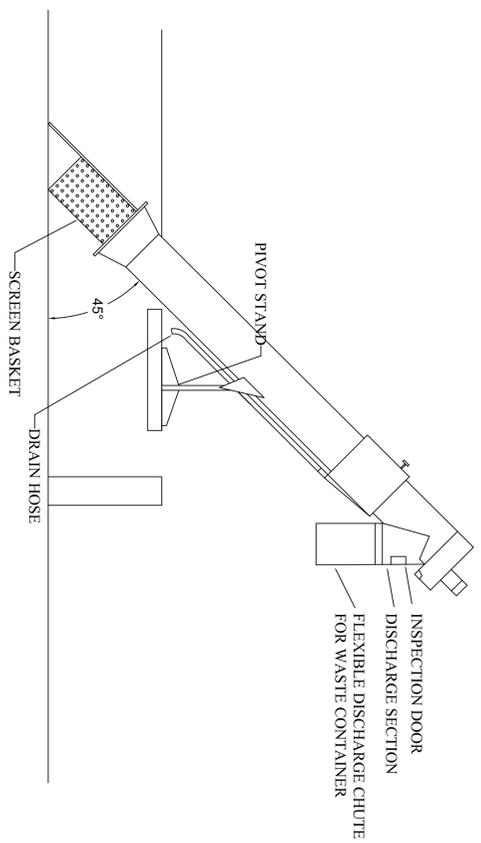


SECTION B-B
N.T.S.

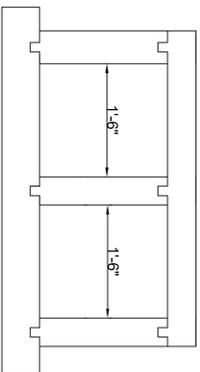
* SEE STRUCTURAL SHEET FOR FOUNDATION AND BUILDING DETAIL



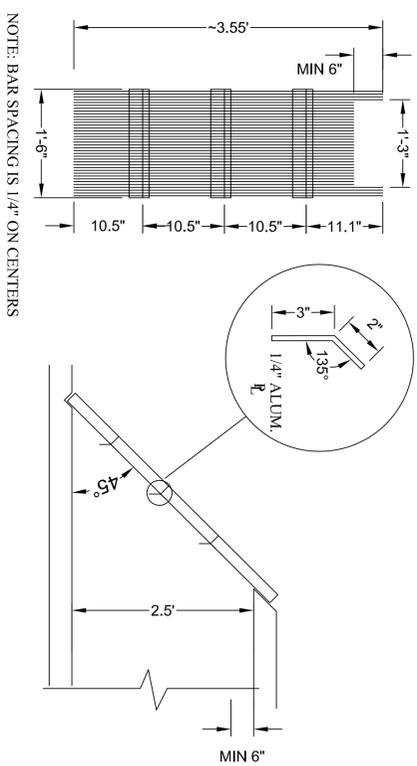
N.T.S.



MECHANICAL SCREEN DETAIL
N.T.S.



SECTION A-A
N.T.S.



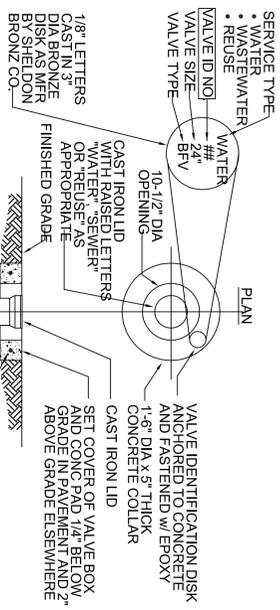
NOTE: BAR SPACING IS 1/4\"/>

BAR SCREEN DETAIL
N.T.S.

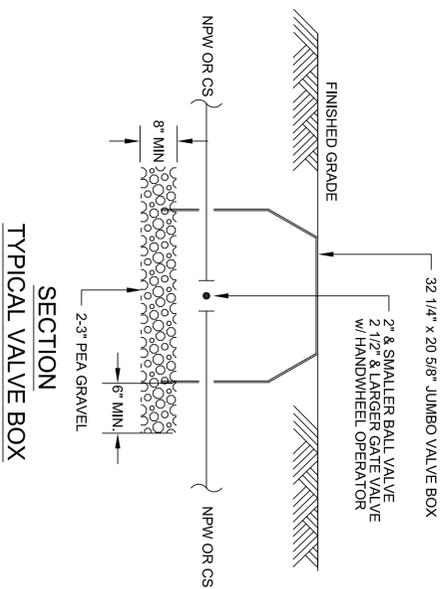
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HEADWORKS MECHANICAL DETAILS	SOUTH COLUMBIA COUNTY REGIONAL WASTEWATER TREATMENT PLANT COLUMBIA COUNTY WWTP CONSTRUCTION FOR EUTAW UTILITIES, INC. LAKE CITY, FLORIDA	CHEN H. LIN, P.E. No. 43340	JIM STIDHAM & ASSOCIATES, INC. HYDROLOGY, GEOLOGY, CIVIL & ENVIRONMENTAL ENGINEERING 547 N. MONROE ST., SUITE 201, TALLAHASSEE, FLORIDA 32301 TELEPHONE: 904.222.2975 FACSIMILE: 904.914.6560 FBPE CERTIFICATE OF AUTHORIZATION NO. 00055629	
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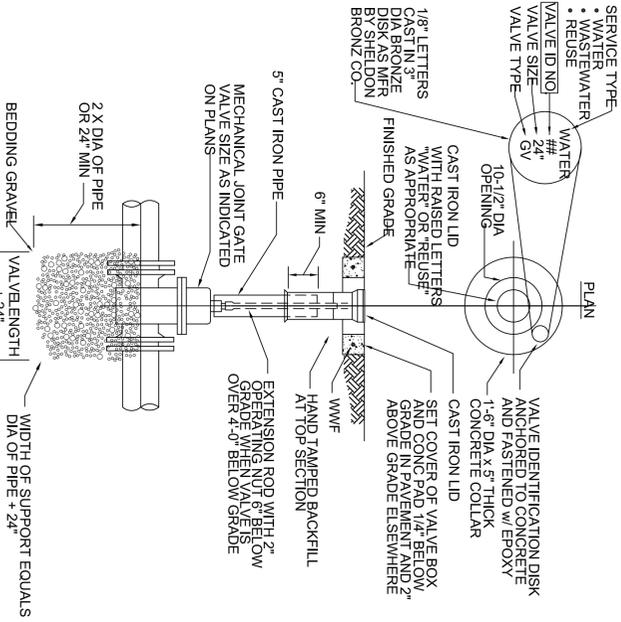
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VALVE, BUTTERFLY OR PLUG

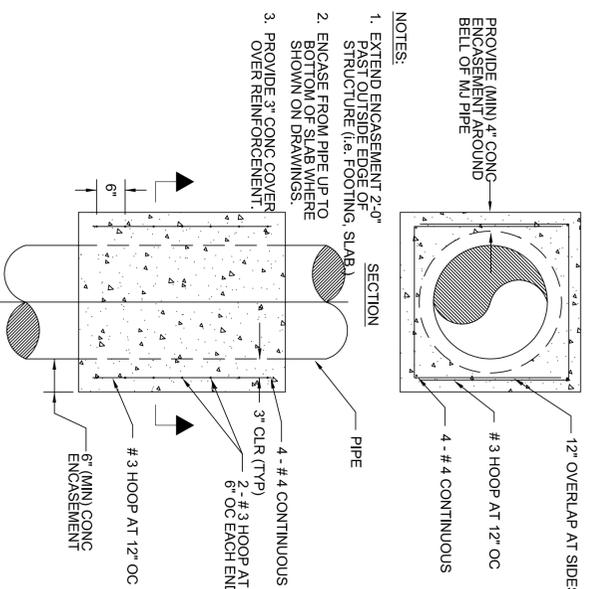


TYPICAL VALVE BOX

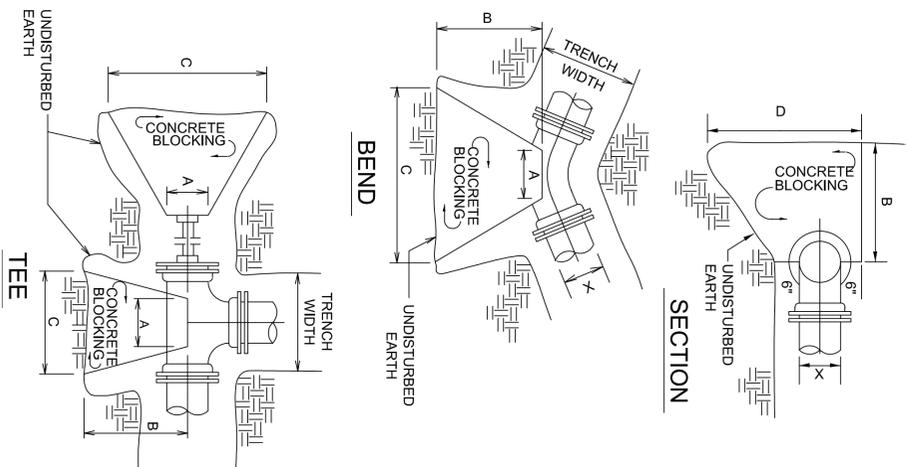


SECTION VALVE GATE

CONCRETE ENCASEMENT



- NOTES:
1. EXTEND ENCASEMENT 2'-0" STRAIGHT ABOVE FOOTING, SLAB.
 2. ENCASE FROM PIPE UP TO BOTTOM OF SLAB WHERE SHOWN ON DRAWINGS.
 3. PROVIDE 3" CONG COVER OVER REINFORCEMENT.



BLOCKING DETAIL FOR D.I. FITTINGS N.T.S.

CONCRETE BLOCKING DIMENSIONS						
X	A	B	C	D	CU YD.	
TEES - 8" RUN						
12"	14"	2'-6"	3'-9"	3'-0"	0.69	
10"	12"	2'-5"	2'-10"	2'-10"	0.48	
8"	10"	2'-4"	1'-9"	2'-8"	0.32	
6"	8"	2'-3"	1'-3"	2'-6"	0.19	
4"	6"	2'-0"	1'-0"	2'-0"	0.07	
90 BENDS						
12"	12"	2'-8"	5'-4"	3'-0"	0.91	
10"	10"	2'-6"	4'-0"	2'-10"	0.46	
8"	8"	2'-4"	2'-8"	2'-8"	0.38	
6"	6"	2'-3"	1'-8"	2'-6"	0.22	
4"	4"	2'-2"	8"	2'-2"	0.09	
45 BENDS						
12"	6"	2'-6"	2'-10"	3'-0"	0.47	
10"	5"	2'-5"	2'-2"	2'-10"	0.32	
8"	4"	2'-4"	1'-3"	2'-8"	0.21	
6"	3"	2'-3"	9"	2'-6"	0.11	
4"	2"	2'-0"	6"	2'-2"	0.01	
22-1/2 BENDS						
12"	6"	2'-6"	1'-6"	3'-0"	0.27	
10"	5"	2'-5"	1'-1"	2'-10"	0.19	
8"	4"	2'-4"	9"	2'-8"	0.12	
6"	3"	2'-3"	6"	2'-6"	0.07	
4"	2"	2'-0"	4"	2'-2"	0.02	
PLUGS						
12"	12"	2'-6"	3'-10"	3'-0"	0.66	
10"	12"	2'-5"	2'-10"	2'-10"	0.48	
8"	12"	2'-4"	1'-10"	2'-8"	0.33	
6"	12"	2'-3"	1'-2"	2'-6"	0.22	
4"	12"	2'-2"	1'-0"	2'-4"	0.11	



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 TELEPHONE: 904-833-8838 FACSIMILE: 904-833-6560
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 No. 43340

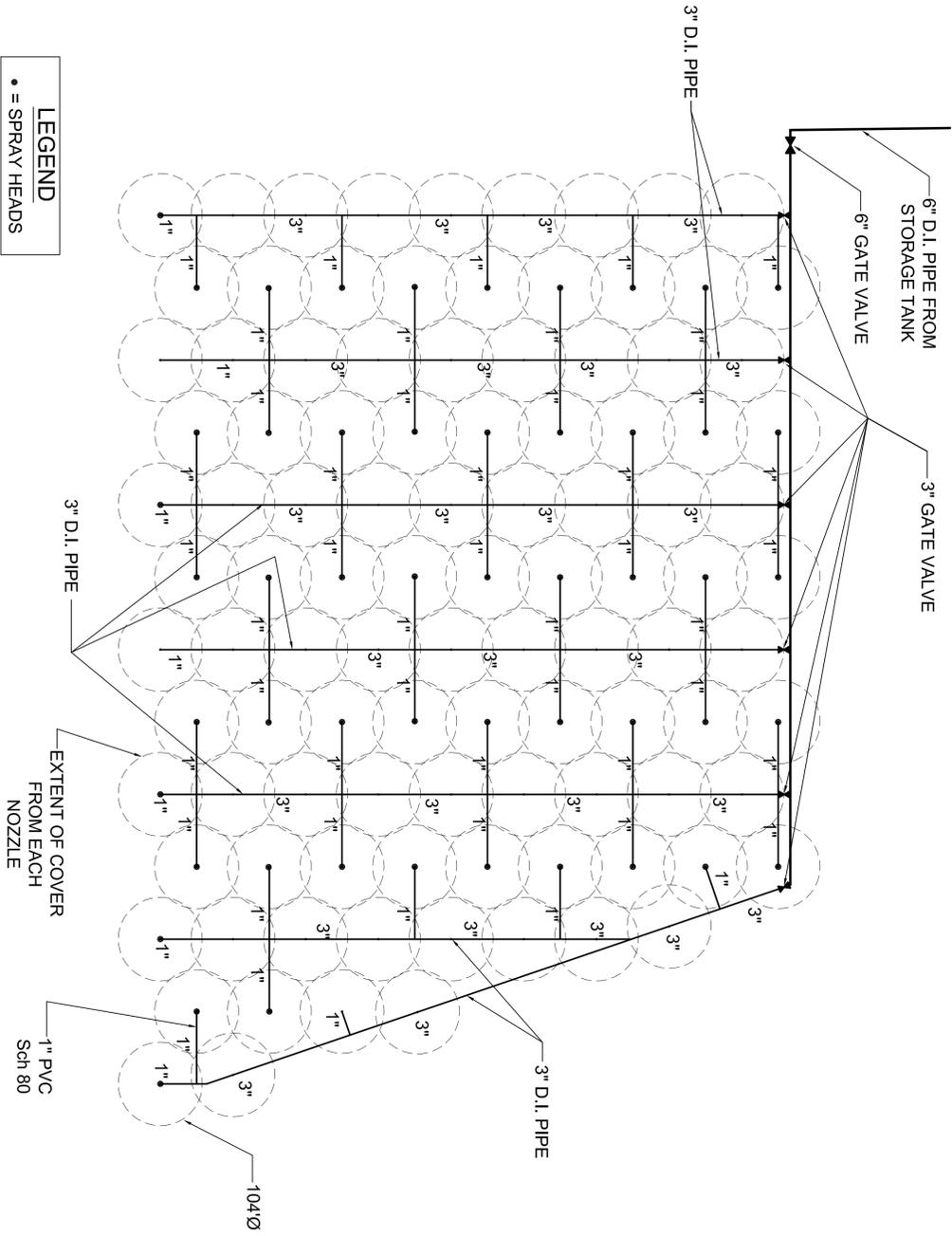
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 WASTEWATER TREATMENT PLANT
 COLUMBIA COUNTY WWTP CONSTRUCTION
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 LAKE CITY, FLORIDA

STANDARD
 YARD PIPING DETAILS

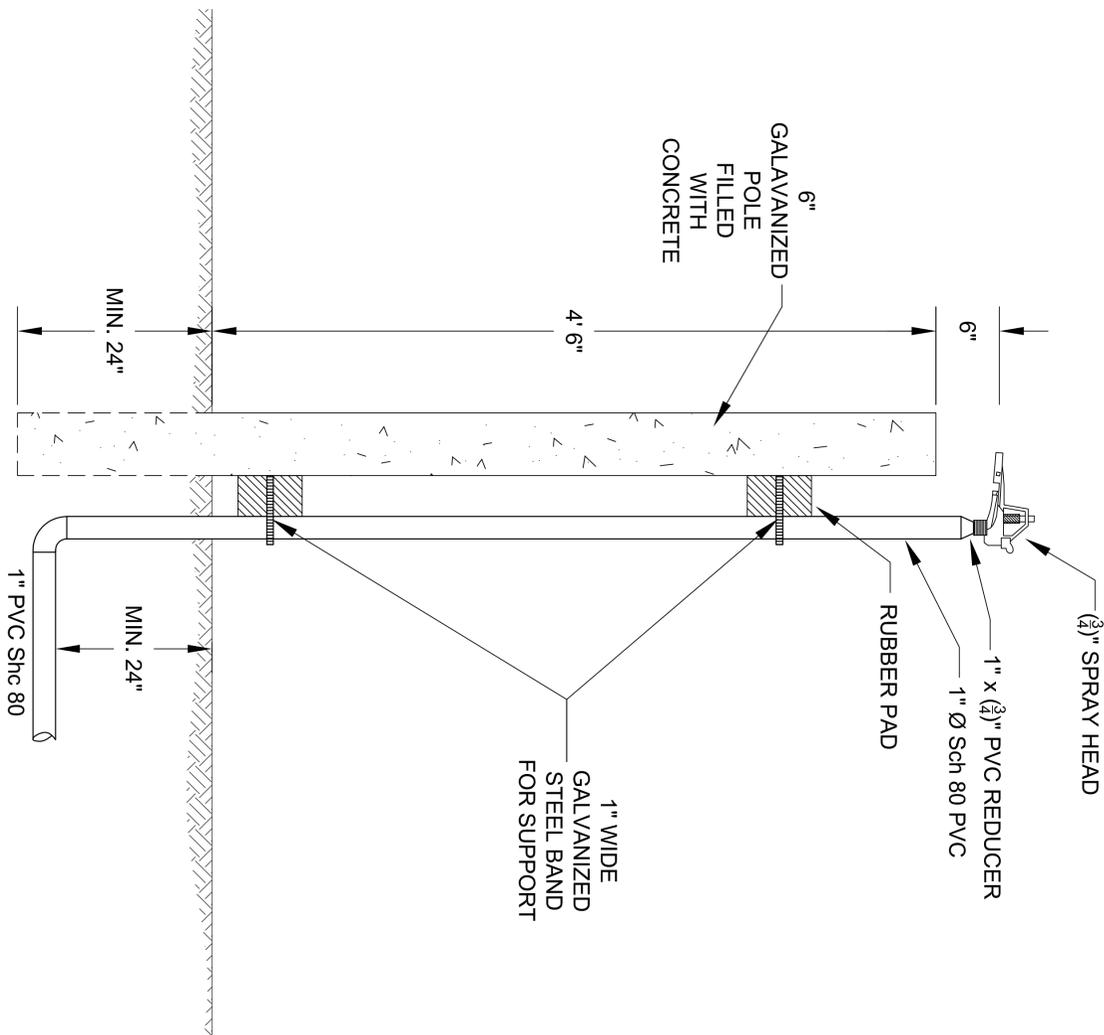
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PROJECT NO.	5010-007
SHEET	M-4 OF 24

NOTE: ALL PIPES 1-INCH AND SMALLER ARE SCHEDULE 80 PVC, OTHERS ARE D.I. PIPE

LEGEND
• = SPRAY HEADS



PLAN VIEW



SPRAY HEAD DETAIL
N.T.S.

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YARD PIPING FOR SPRAY FIELD

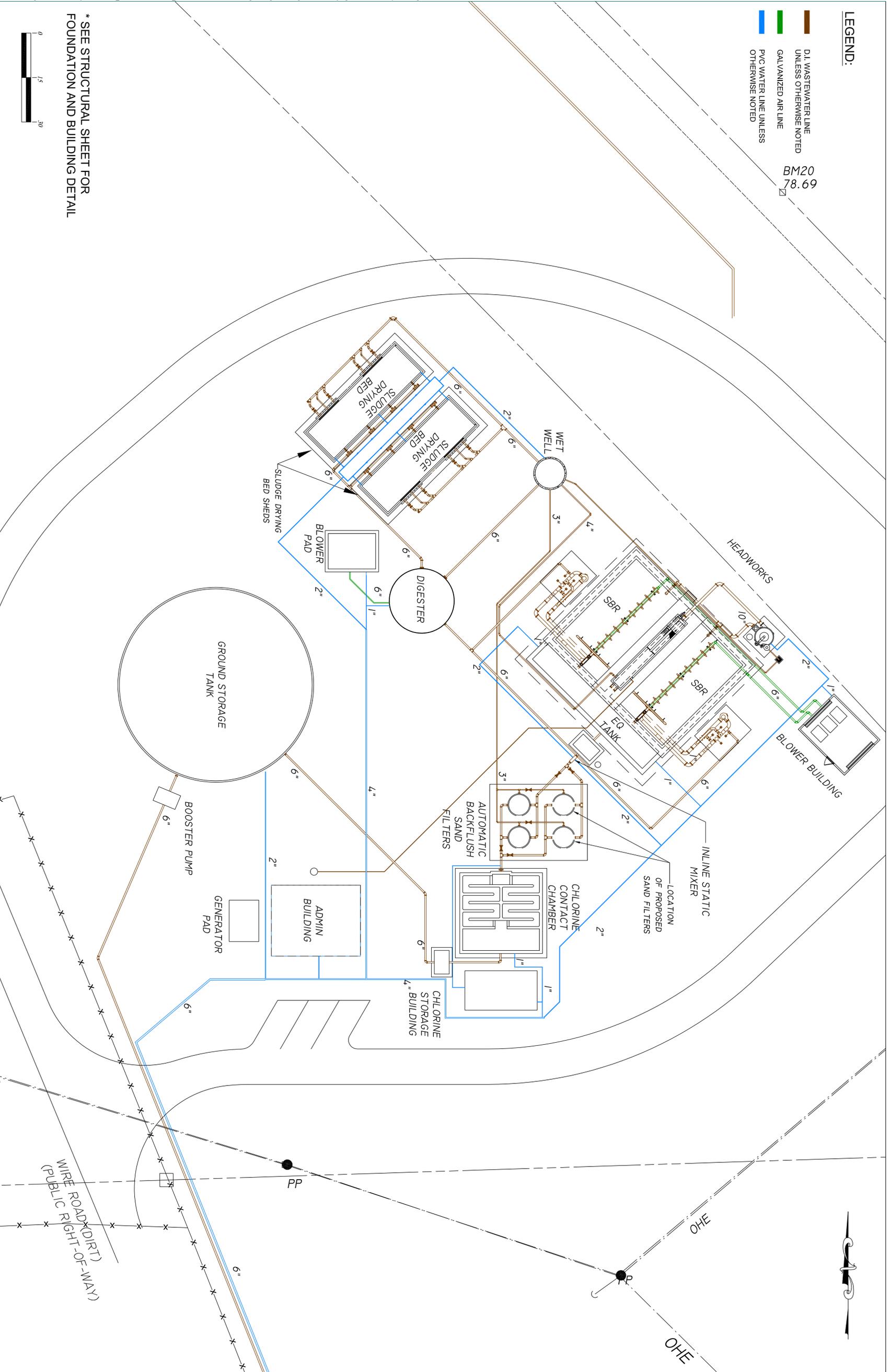
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LEGEND:

- D.I. WASTEWATER LINE UNLESS OTHERWISE NOTED
- GALVANIZED AIR LINE
- PVC WATER LINE UNLESS OTHERWISE NOTED

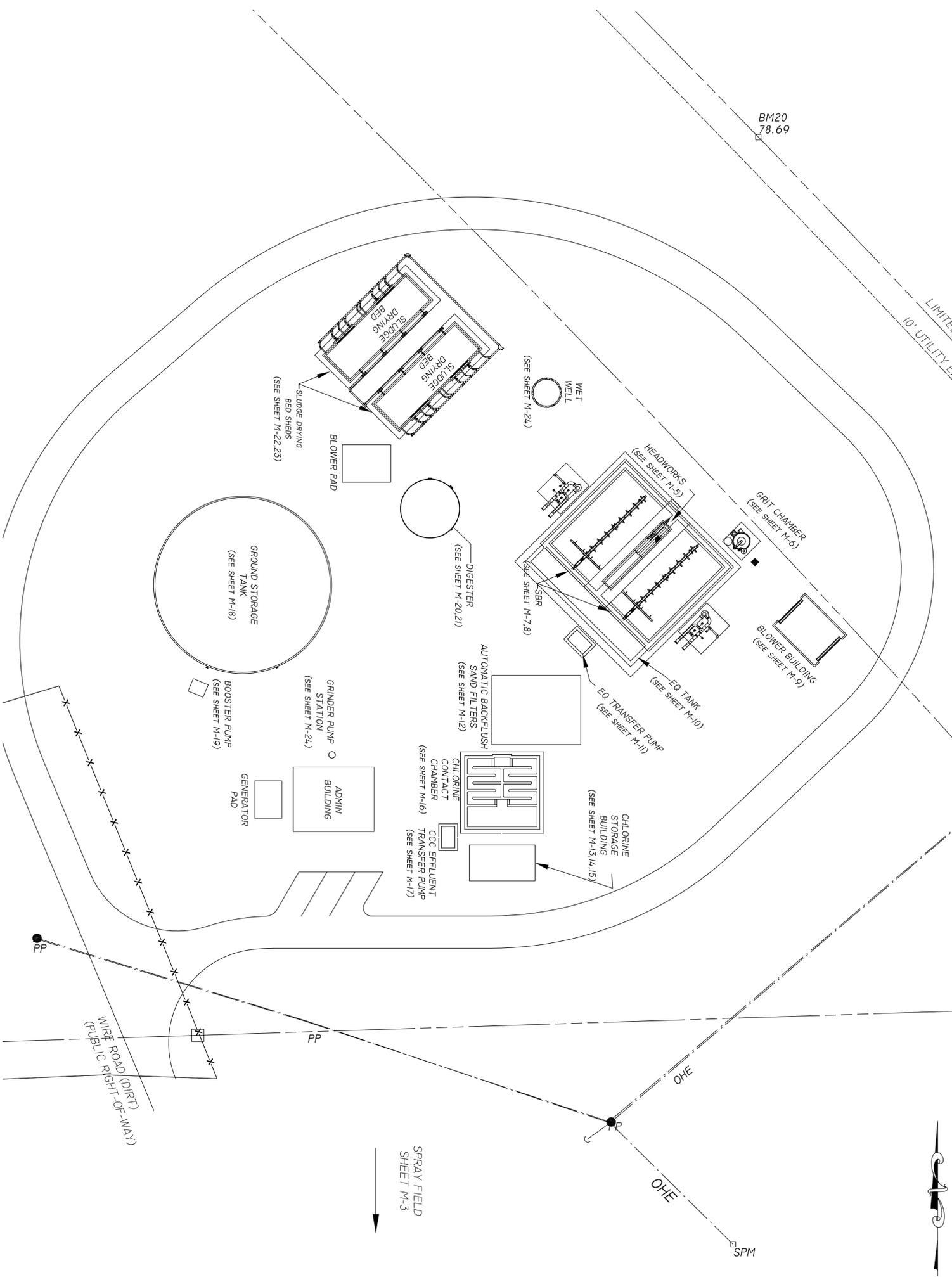
BM20
78.69

* SEE STRUCTURAL SHEET FOR FOUNDATION AND BUILDING DETAIL



<p>DATE: 06/04/09 DESIGNED BY: AS SIKOVIN DRAWN BY: AMH CHECKED BY: CHL PROJECT NO.: 5010/007 SHEET: M-2 OF 24</p>	<p>SOUTH COLUMBIA COUNTY REGIONAL WASTEWATER TREATMENT PLANT COLUMBIA COUNTY WWTP CONSTRUCTION FOR EUTAW UTILITIES, INC. LAKE CITY, FLORIDA</p>	<p>CHEN H. LIN, P.E. No. 43340</p>	 <p>JIM STIDHAM & ASSOCIATES, INC. HYDROLOGY, GEOLOGY, CIVIL & ENVIRONMENTAL ENGINEERING 547 N. MONROE ST., SUITE 201, TALLAHASSEE, FLORIDA 32301 TELEPHONE: 904.222.2975 FACSIMILE: 904.914.0560 FBPE CERTIFICATE OF AUTHORIZATION NO. 00055629</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">REVISIONS</th> <th style="text-align: left;">DATE</th> </tr> </thead> <tbody> <tr> <td>ISSUE FOR BIDDING</td> <td>8/10/09</td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </tbody> </table>	REVISIONS	DATE	ISSUE FOR BIDDING	8/10/09						
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YARD PIPING FOR WWTP



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MECHANICAL OVERVIEW

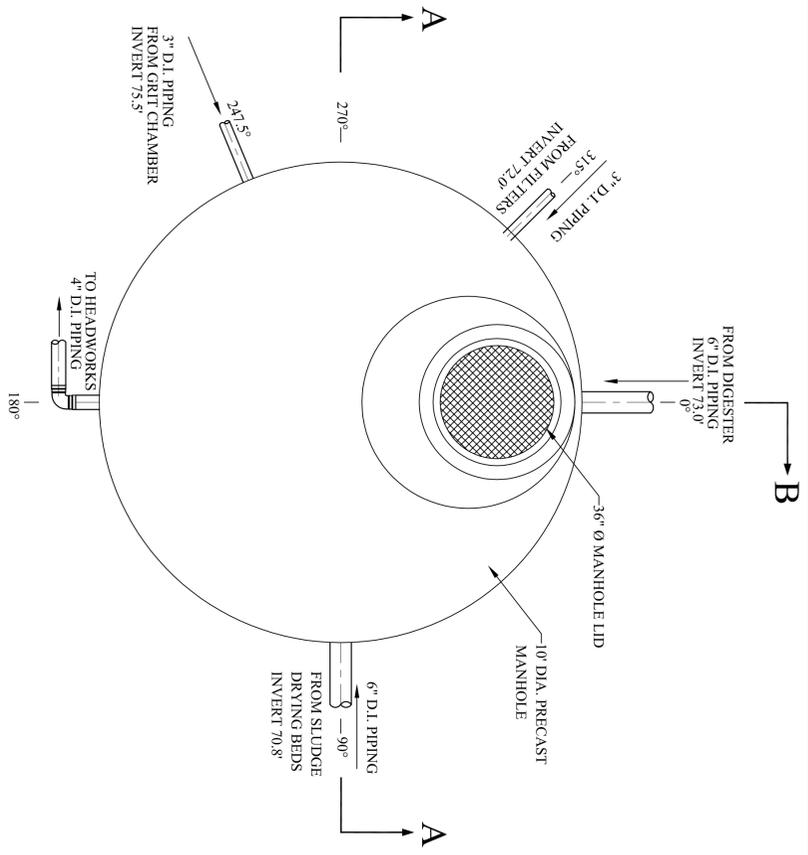
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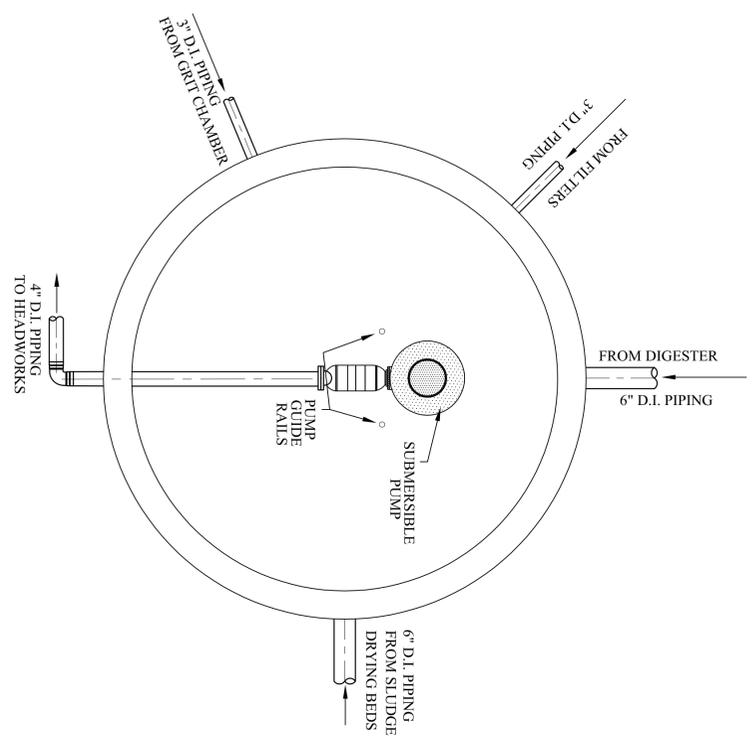


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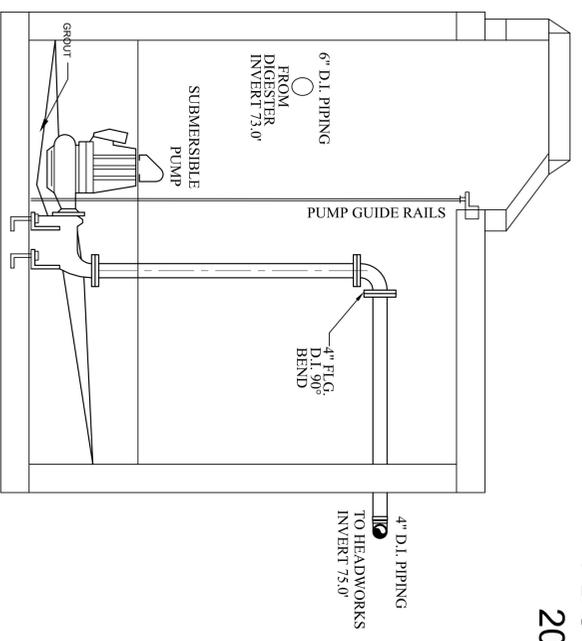
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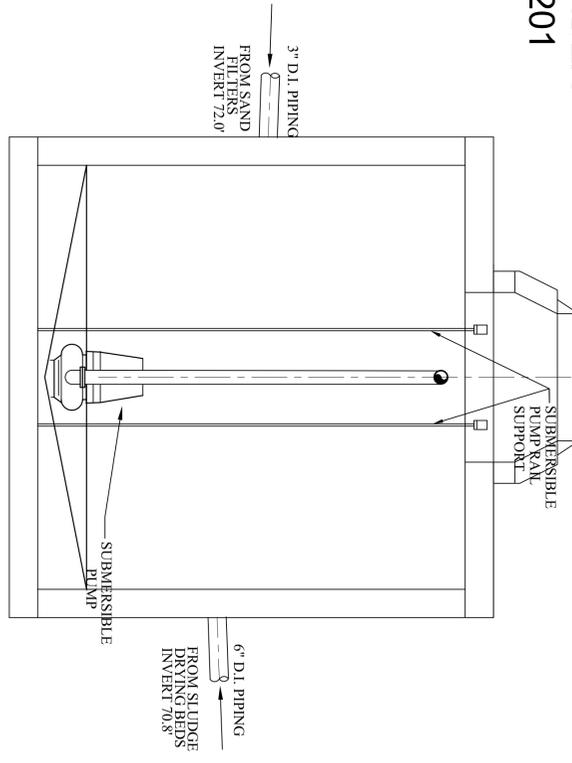
WET WELL - PLAN VIEW
N.T.S.



WET WELL - TOP INSIDE VIEW
N.T.S.

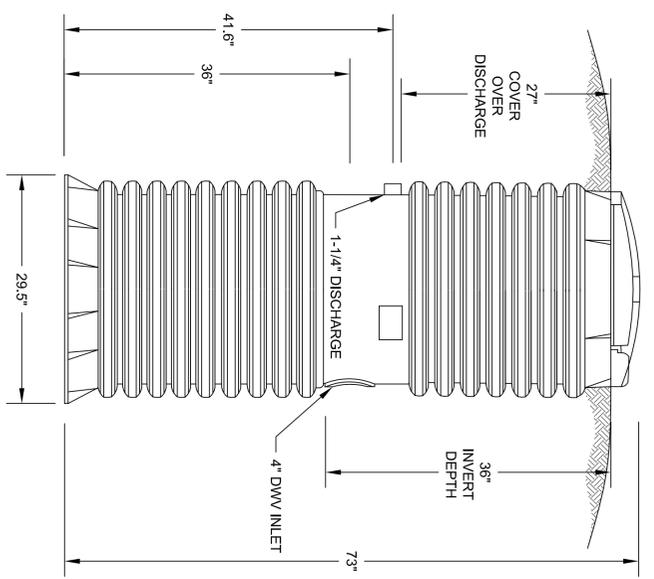


WET WELL - SECTION A-A
N.T.S.



WET WELL - SECTION B-B
N.T.S.

**10' Ø J-BOTTOM -
W/ TYPE 8
ECCENTRIC TOP
FDOT INDEX
200,201**



GRINDER PUMP STATION DETAIL
N.T.S.

**WET WELL
MECHANICAL DETAILS**

**SOUTH COLUMBIA COUNTY REGIONAL
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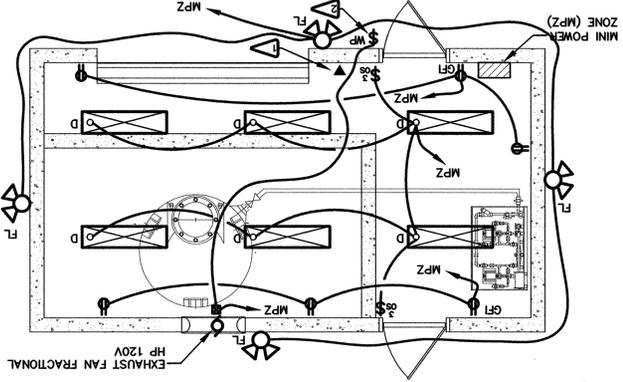
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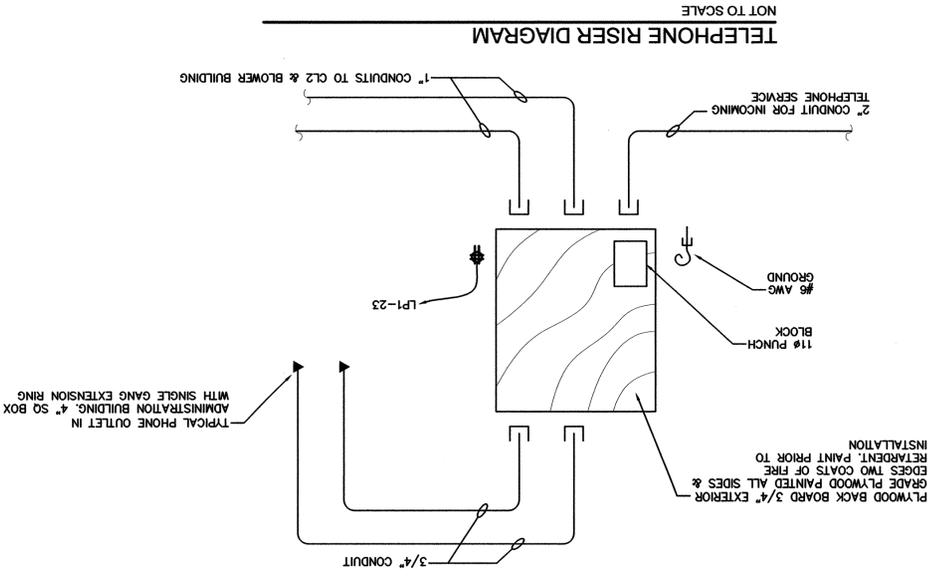


Chlorine Building
Floor Plan - Electrical

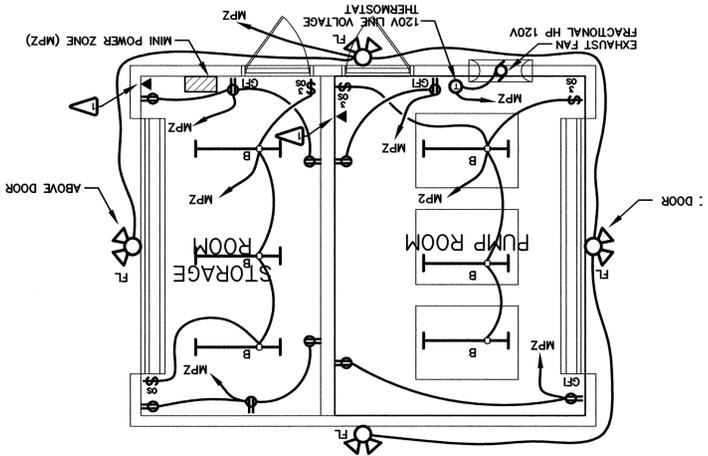
- 1/4"=1'-0"
- NON-GFI RECEPTACLES TO BE WIRED THROUGH GFI
 - ALL RACEWAYS BOXES COVER PLATES, ETC. IN CHLORINE BUILDING TO BE NON METALLIC PVC OR FRP
 - EXHAUST FAN - RUN AT LEAST 5 MINUTES PRIOR TO ENTERING BUILDING

FLAG NOTES

- ▷ TELEPHONE PROVISIONS, SINGLE GANG BOX WITH 1" C TO TBB IN ADMINISTRATION BUILDING
- ▷ MOTOR RATED SWITCH WITH PILOT LIGHT IN WEATHER PROOF BOX, PROVIDE PERMANENT ENGRAVED PLaque TO READ, EXHAUST FAN - RUN AT LEAST 5 MINUTES PRIOR TO ENTERING BUILDING



TELEPHONE RISER DIAGRAM
NOT TO SCALE



Blower Building
Floor Plan - Electrical

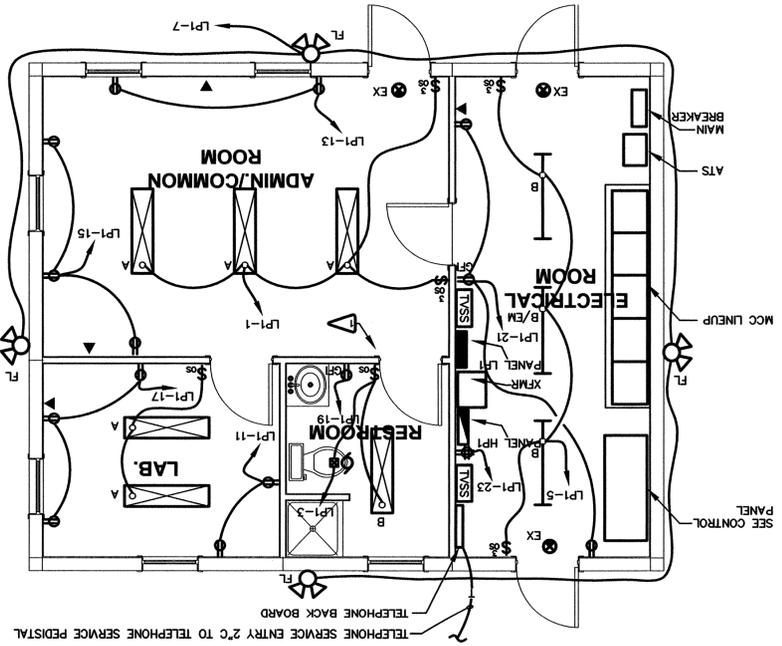
- 1/4"=1'-0"
- NON-GFI RECEPTACLES TO BE WIRED THROUGH GFI

FLAG NOTES

- ▷ TELEPHONE PROVISIONS, SINGLE GANG BOX WITH 1" C TO TBB IN ADMINISTRATION BUILDING

Item	Description	Quantity	Notes
A	1' x 4' 2 Lamp fluorescent industrial	Beghelli	BS100 4 HT E UNV
B	1' x 4' 2 Lamp fluorescent strip fixture	Daybrite	T 32 UNV WCG
B/E/M	Fluorescent strip fixture as above with emergency standby battery pack	Daybrite	T 32 120 WCG WITH BODINE BATTERY BALLAST
D	1' x 4' two lamp corrosion resistant vapor light fluorescent fixture	Beghelli	
FL	Flood light 2 lamp par lamp holder with motion detector activation	Daybrite	'nightlights'
PL	Pole light 150 Watt HPS lamp "security ballast"		
EX	Illuminated Exit Direction Signage with standby emergency battery pack	Beghelli	

Lighting Fixture Schedule



Admin Building
Floor Plan - Electrical

- 1/4"=1'-0"
- NON-GFI RECEPTACLES TO BE WIRED THROUGH GFI
 - SEE ONE LINE DIAGRAMS FOR DESCRIPTION OF EQUIPMENT NOT GIVEN HERE
 - NON-GFI RECEPTACLES TO BE WIRED THROUGH GFI

FLAG NOTES

- ▷ THIS LINE VOLTAGE OCCUPANCY SENSOR TO HAVE TWO POLES. ONE FOR LIGHTING AND SECOND FOR EXHAUST FAN

Panel "L.P.1"

120/240 V, 1 Phase, 3 wire, 100A main breaker
Serves 11 C.C.
MEKA 1 Enclosure, Surface mounted

Calc. Load	Contd.	Breaker	Wire	Panel
500	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	1
296	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	2
240	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	3
300	3 #10, 3/4" C	1F-20	3 #10, 3/4" C	4
500	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	5
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	6
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	7
500	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	8
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	9
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	10
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	11
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	12
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	13
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	14
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	15
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	16
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	17
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	18
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	19
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	20
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	21
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	22
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	23
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	24
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	25
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	26
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	27
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	28
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	29
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	30
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	31
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	32
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	33
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	34
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	35
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	36
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	37
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	38
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	39
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	40
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	41
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	42
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	43
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	44
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	45
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	46
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	47
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	48
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	49
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	50
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	51
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	52
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	53
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	54
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	55
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	56
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	57
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	58
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	59
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300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	61
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300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	63
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	64
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	65
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	66
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	67
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	68
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	69
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300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	71
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	72
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288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	74
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	75
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300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	77
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	78
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300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	81
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	82
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	83
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	84
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	85
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	86
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	87
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	88
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	89
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	90
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	91
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	92
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	93
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	94
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	95
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	96
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	97
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	98
300	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	99
288	3 #12, 1/2" C	1F-20	3 #12, 1/2" C	100

Notes:
1) These loads are estimated. Coordinate with actual equipment to be installed.
2) Connect TVSS device to breaker in bottom position. Keep wire leads as short as possible with a minimum of bends.

Panel "L.P.1"

120/240 V, 1 Phase, 3 wire, 100A main breaker
Serves 11 C.C.
MEKA 1 Enclosure, Surface mounted

FOR
EUTAW UTILITIES, INC.
LAKE CITY, FLORIDA

SOUTH COLUMBIA COUNTY REGIONAL
WASTEWATER TREATMENT PLANT
COLUMBIA COUNTY WWP CONSTRUCTION

BUILDING ELECTRICAL PLANS

DATE: 07-31-2009
SCALE: N.T.S.
DRAWN BY: AMB
CHECKED BY: JCT
PROJECT NO.: 5010-007
SHEET E-3

REVISIONS	DATE

TPA
199-B Commonwealth Lane
Tallahassee, Florida 32309
L.C. # 00002555
200891

DATE: 07-31-2009
 SCALE: AS NOTED
 DRAWN BY: AMB
 CHECKED BY: JCT
 PROJECT NO.: 5010-007
 SHEET E-1

ELECTRICAL SITE PLAN

**SOUTH COLUMBIA COUNTY REGIONAL
 WASTEWATER TREATMENT PLANT**
 SOUTH COLUMBIA COUNTY REGIONAL
 FOR
EUTAW UTILITIES, INC.
 LAKE CITY, FLORIDA

JOHN C. TOMLINSON
 No. 23416

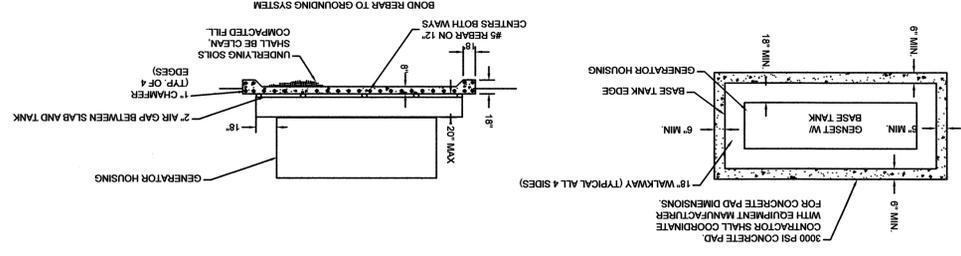
tpa Tomlinson Peterson Associates, Inc.
 19959 Commonwealth Lane
 Palm Bay, FL 32909
 L.C. 200837

REVISIONS

DATE

- LEGEND**
- DOUBLE DUPLEX QUAD OUTLET - TYPICALLY MOUNTED AT 18" A.F.F.
 - DUPLEX CONVENIENCE OUTLET - TYPICALLY MOUNTED AT 18" A.F.F.
 - SUBSCRIPT 'N' INDICATES DEVICE IS MOUNTED AT ABOVE COUNTER HEIGHT - TYPICALLY AT 42" A.F.F. HORIZONTALLY MOUNTED.
 - GROUND FAULT INTERRUPTER PROTECTED OUTLET
 - DUPLEX RECEPTACLE IN FLOOR BOX
 - SINGLE POLE LIGHTING TOGGLE SWITCH 20A - TYPICALLY AT 48" A.F.F.
 - THREWAY LIGHTING TOGGLE SWITCH
 - LINE VOLTAGE OCCUPANCY SENSOR LIGHTING CONTROL
 - LINE VOLTAGE OCCUPANCY SENSOR LIGHTING CONTROL THREE WAY TYPE
 - SPECIAL OUTLET USUALLY 2 POLE DEVICE. COORDINATE WITH EQUIPMENT TO BE CONNECTED.
 - THERMOSTAT - MOUNTED AT 48" A.F.F. BOX AND PIPE BY E.C.
 - EXHAUST FAN
 - JUNCTION BOX
 - LIGHT FIXTURE. SUBSCRIPT 'N' DENOTES TYPE. REFER TO FIXTURE SCHEDULE.
 - TRAY INDICATES EMERGENCY CIRCUIT.
 - DISCONNECT SWITCH. TYPICALLY HEAVY DUTY FUSED UNLESS OTHERWISE NOTED.
 - ELECTRIC MOTOR
 - TELEPHONE EQUIPMENT BACKBOARD
 - TELEPHONE OUTLET

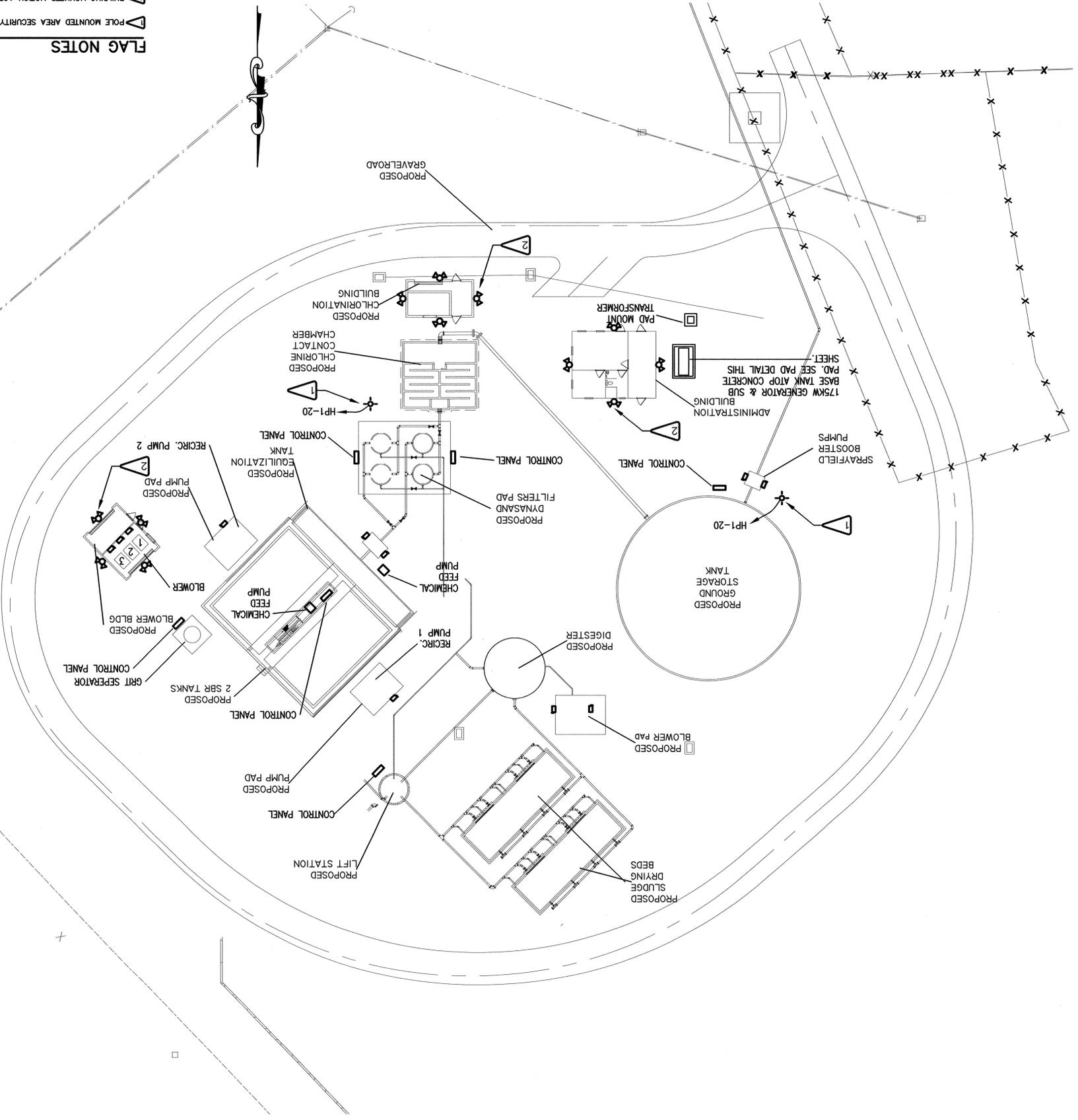
GENERATOR AND PAD DETAIL
 NOT TO SCALE



FLAG NOTES

- POLE MOUNTED AREA SECURITY LIGHT TYPE PL. SEE SCHEDULE SHEET E-3.
- BUILDING MOUNTED MOTION ACTVATED FLOOD LIGHTS. SEE SHEET E-3.

ELECTRICAL SITE PLAN
 1"=20'-0"

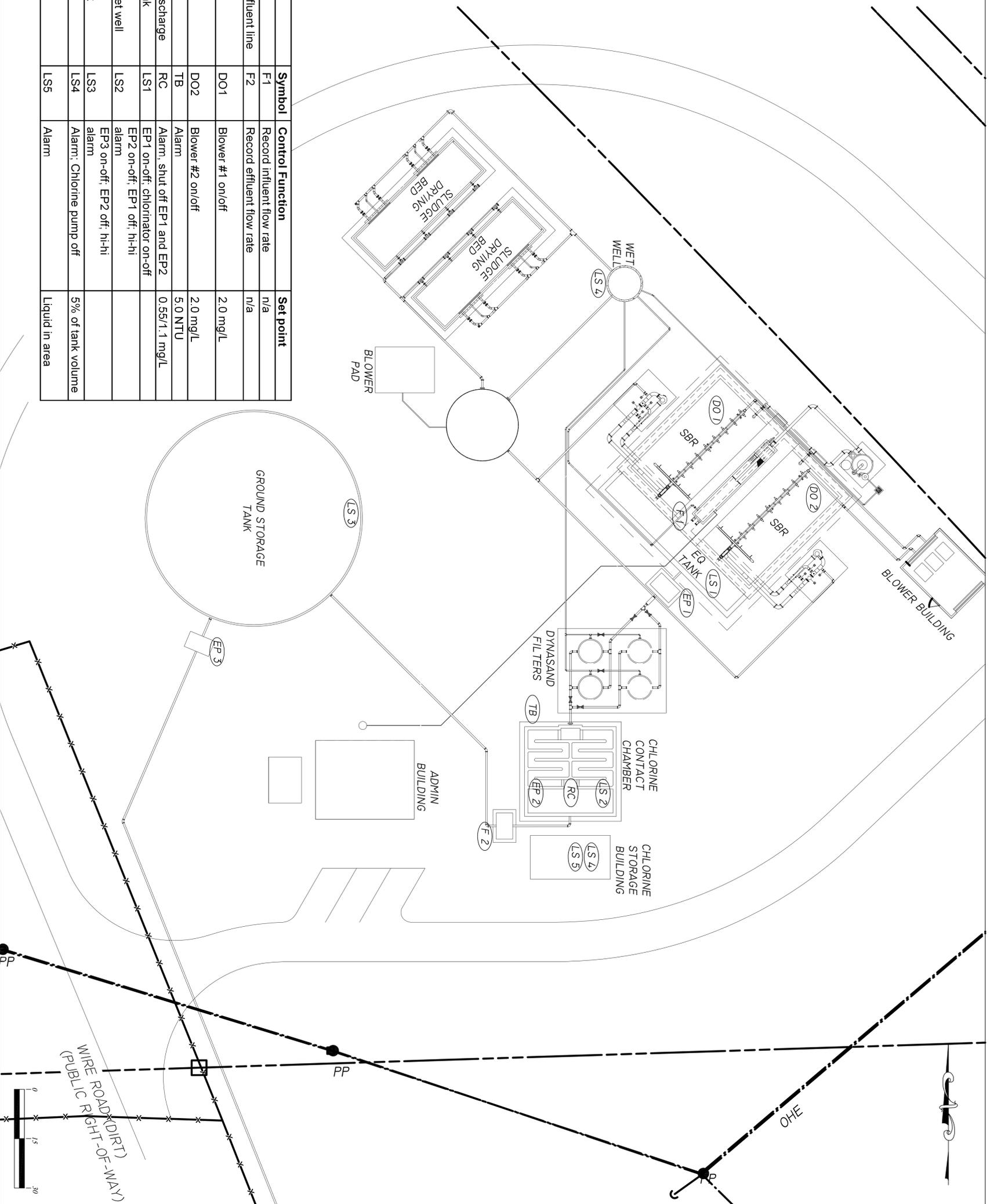


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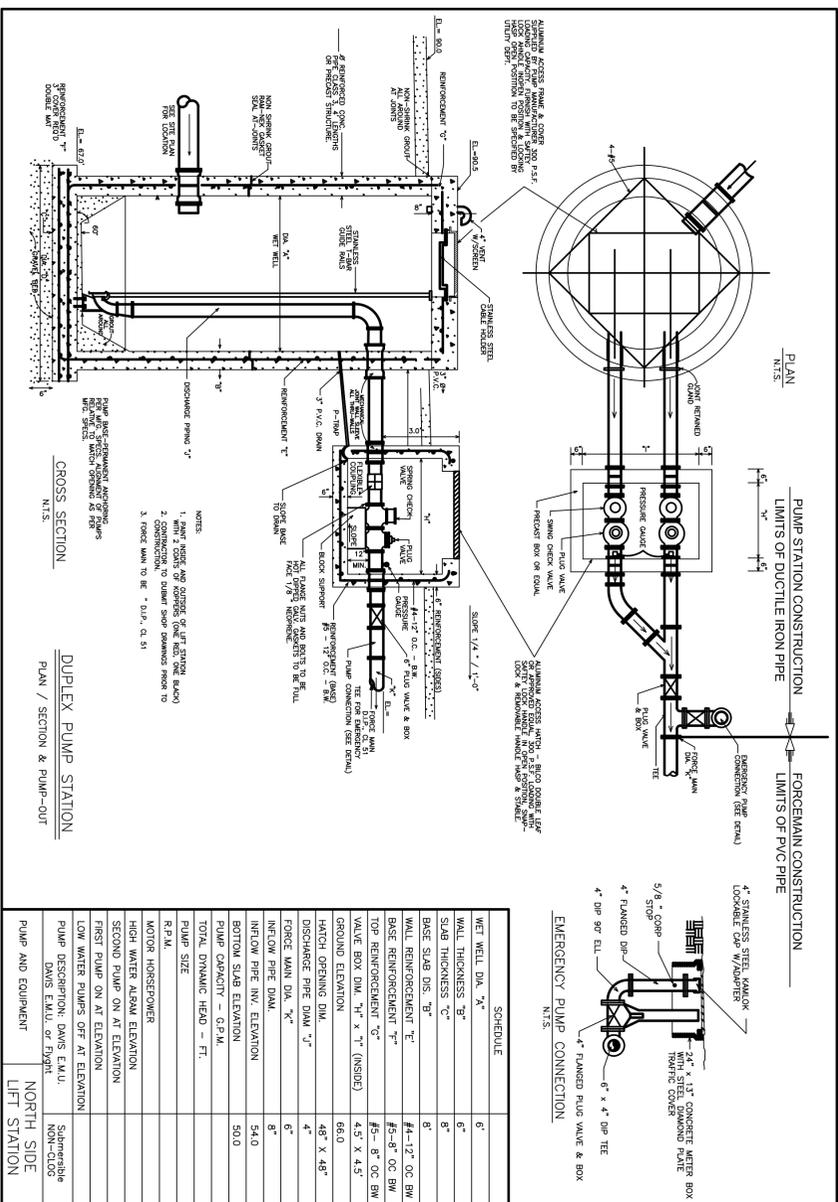
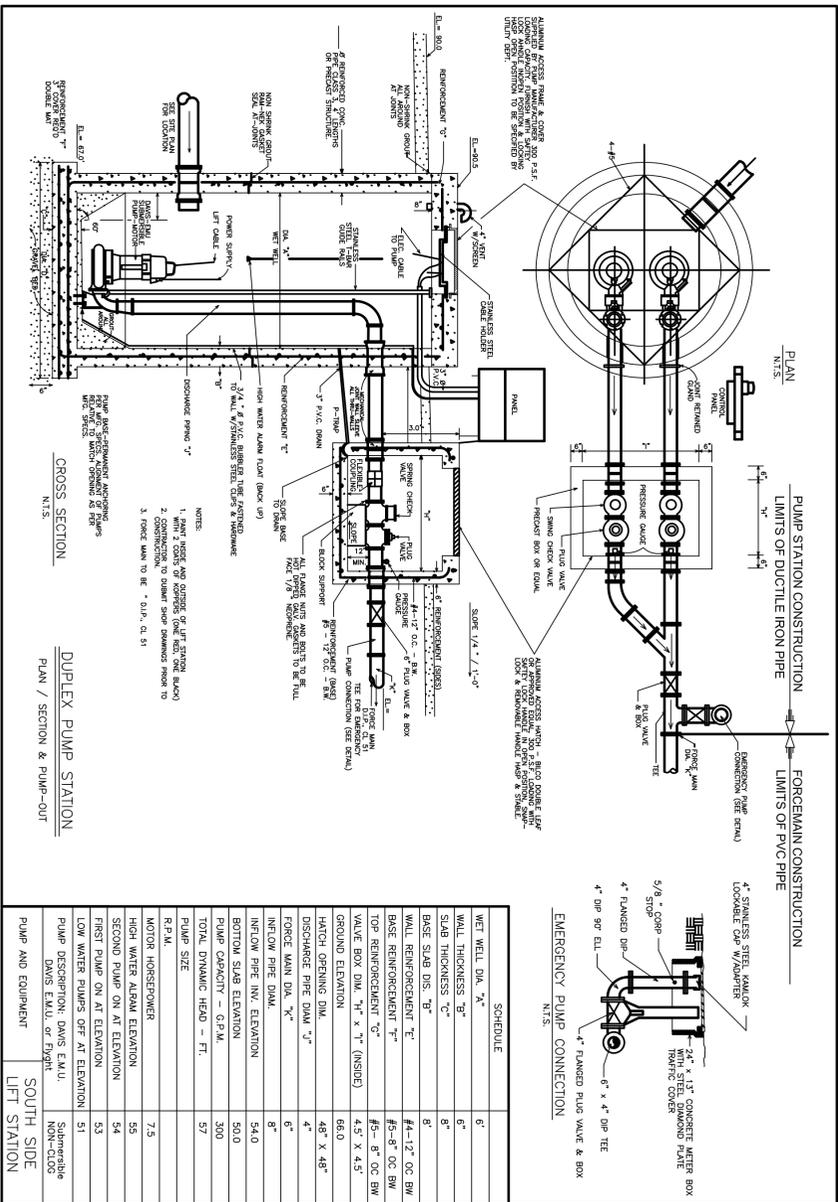
- (F) FLOW METER/ RECORDER
- (DO) DISSOLVED OXYGEN METER/
CONTROLLER - BLOWER
ALARM
- (TB) TURBIDITY METER/
CONTROLLER
- (RC) RESIDUAL CHLORINE
DETECTOR
- (LS) WATER LEVEL SWITCH
- (EP) EFFLUENT PUMP

NOTE: Decanter operations and aeration sequence of the SBR are timer controlled. These and water level controls are integral parts of the SBR system and to be provided by the SBR suppliers

Description	Location	Symbol	Control Function	Set point
Ultrasonic Flow Meter/Recorder	Headworks	F1	Record influent flow rate	n/a
Ultrasonic Flow Meter/Recorder	Chlorine chamber influent line	F2	Record effluent flow rate	n/a
Dissolved oxygen meter/controller	SBR #1	DO1	Blower #1 on/off	2.0 mg/L
Dissolved oxygen meter/controller	SBR #2	DO2	Blower #2 on/off	2.0 mg/L
Turbidity meter/controller	Effluent side of filter	TB	Alarm	5.0 NTU
Residual chlorine detector	Chlorine chamber discharge	RC	Alarm, shut off EP1 and EP2	0.55/1.1 mg/L
Water level switch	SBR Effluent EQ tank	LS1	EP1 on-off; chlorinator on-off	
Water level switch	Chlorine chamber wet well	LS2	EP2 on-off; EP1 off; hi-hi alarm	
Water level switch	Ground storage tank	LS3	EP3 on-off; EP2 off; hi-hi alarm	
Water level switch	Chlorine tank	LS4	Alarm; Chlorine pump off	5% of tank volume
Water level switch	Chlorine secondary containment	LS5	Alarm	Liquid in area



<p>CONTROL SCHEME</p> <p>DATE: 06/04/09 DESIGNED BY: AS SIKOVIN DRAWN BY: ANH CHECKED BY: CHL PROJECT NO.: 5010-007 SHEET E-4 OF 4</p>	<p>SOUTH COLUMBIA COUNTY REGIONAL WASTEWATER TREATMENT PLANT</p> <p>COLUMBIA COUNTY WWTP CONSTRUCTION</p> <p>FOR EUTAW UTILITIES, INC.</p> <p>LAKE CITY, FLORIDA</p>	<p>CHEN H. LIN, P.E. No. 43340</p>	<p>JIM STIDHAM & ASSOCIATES, INC.</p> <p>HYDROLOGY, GEOLOGY, CIVIL & ENVIRONMENTAL ENGINEERING</p> <p>547 N. MONROE ST., SUITE 201, TALLAHASSEE, FLORIDA 32301 TELEPHONE: 904-222-2975 FACSIMILE: 904/914-0560 FBPE CERTIFICATE OF AUTHORIZATION NO. 00065629</p>	<table border="1"> <thead> <tr> <th>REVISIONS</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>ISSUE FOR BIDDING</td> <td>8/10/09</td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </tbody> </table>	REVISIONS	DATE	ISSUE FOR BIDDING	8/10/09						
REVISIONS	DATE													
ISSUE FOR BIDDING	8/10/09													



COLUMBIA COUNTY
WASTEWATER TREATMENT PLANT
ALTERNATE - LIFT STATION DETAILS

ELLISVILLE, FL

PRINT DATE: 12 AUG 2009
SHEET NUMBER: AL T 5

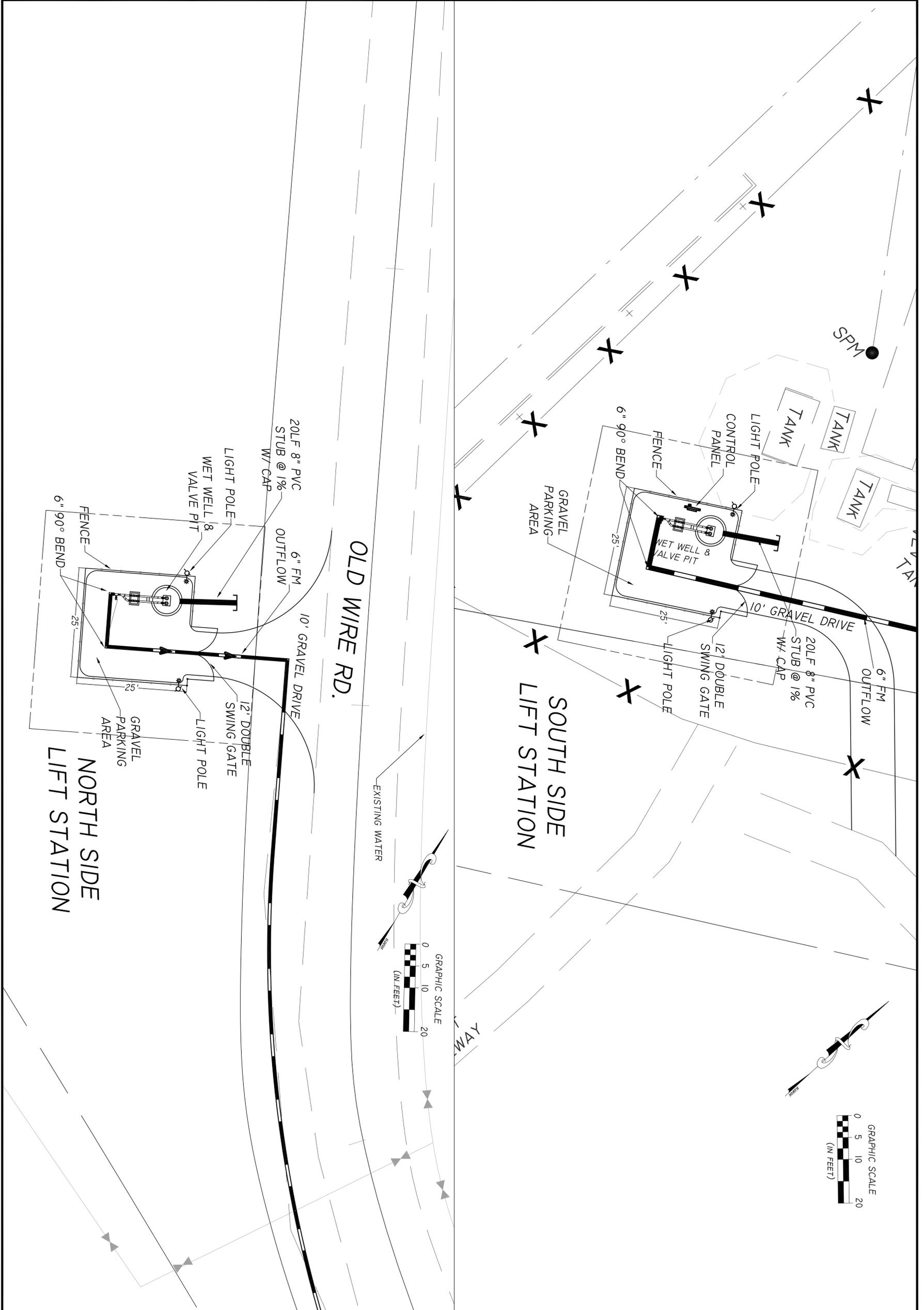
EUTAW UTILITIES, INC.
Project Development...Concept to Completion

415 SAINT FRANCIS ST., UNIT 114 OFFICE PHONE: (850) 383-0400
TALLAHASSEE, FLORIDA 32301 OFFICE FAX: (888) 878-2939

F.B.R.E. C.O.A. #9961

NO.	DATE	REVISION/ACTION TAKEN

DESIGN ENGINEER:	MARC E. NEIHAUS
SIGNATURE:	
P. E. NUMBER:	
DATE:	
DRAWN BY:	
DATE:	08/25/09
CHECKED BY:	RMC
DATE:	8/11/09
SCALE:	1"=20'



COLUMBIA COUNTY
 WASTEWATER TREATMENT PLANT
 ALTERNATE - LIFT STATION #1 & #2
 ELLISVILLE, FL

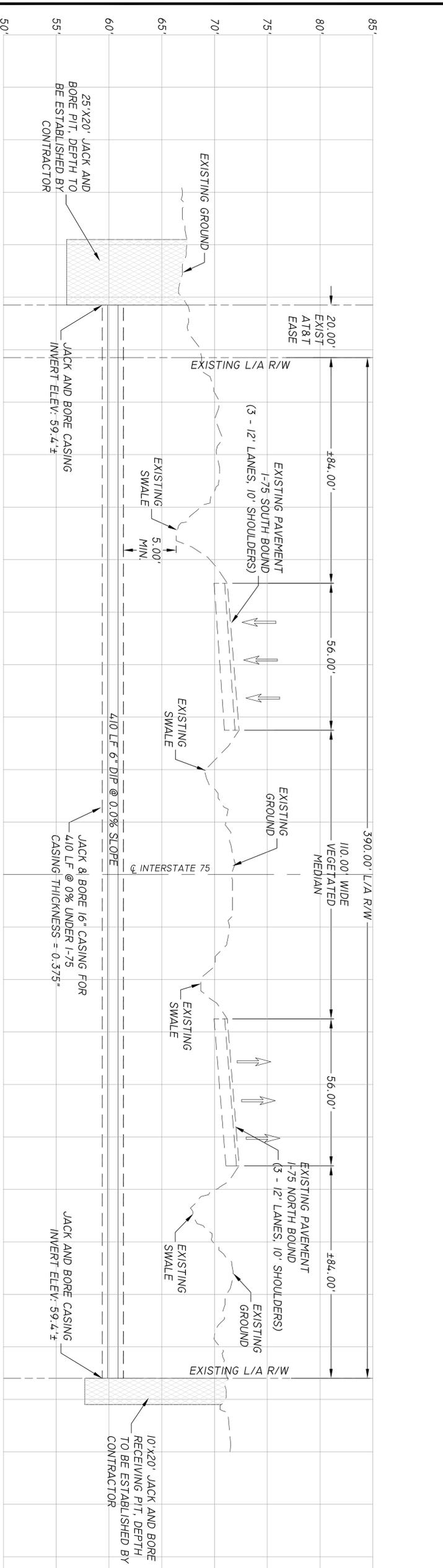
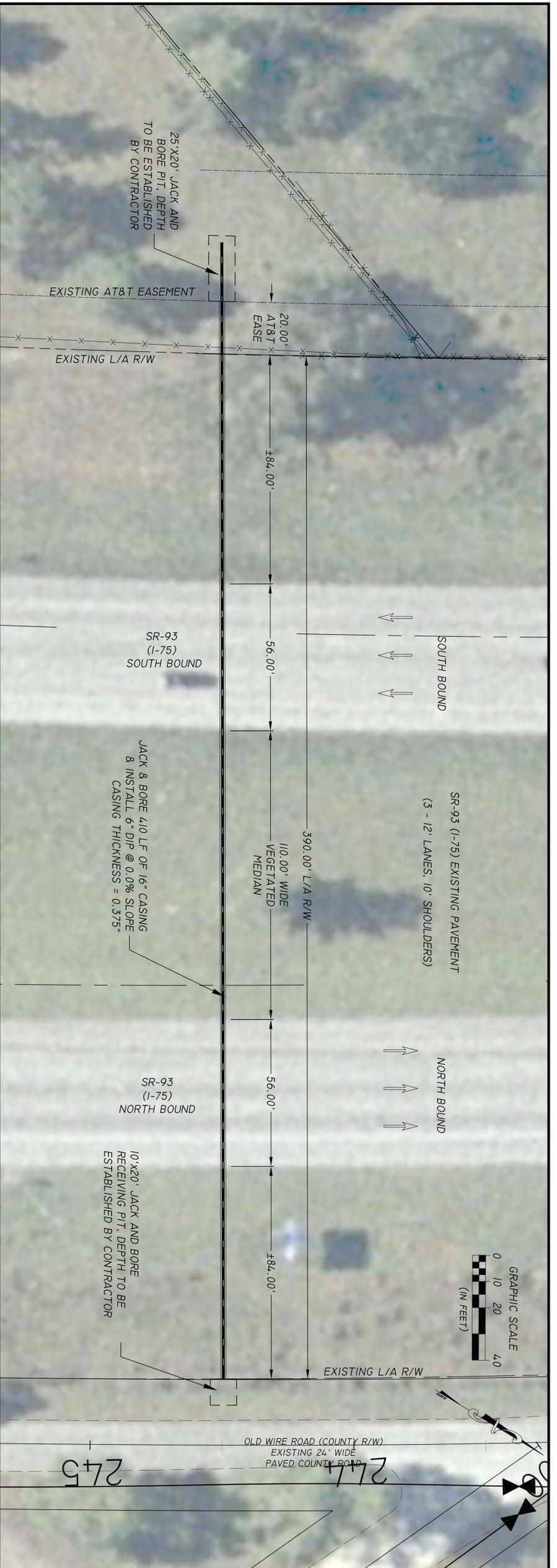
PRINT DATE: 12 AUG 2009
 SHEET NUMBER: ALT 4

EUI EUTAW UTILITIES, INC.
 Project Development...Concept to Completion
 415 SAINT FRANCIS ST., UNIT 114 OFFICE PHONE: (850) 383-0400
 TALLAHASSEE, FLORIDA 32301 OFFICE FAX: (888) 878-2939

F.B.P.E. C.O.A. #9961

NO.	DATE	REVISION/ACTION TAKEN

DESIGN ENGINEER:
 MARC E. NEIHAUS
 SIGNATURE: _____
 P. E. NUMBER:
 DATE: _____
 DRAWN BY: _____ DATE: 12/25/09 SCALE: 1"=20'
 CHECKED BY: _____ DATE: 8/1/09



SR-93 (I-75) FORCEMAIN CROSSING AT M.P. 5.1

SCALE: VERT. 1"=5'
HORIZ. 1"=20'



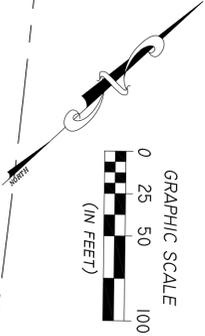
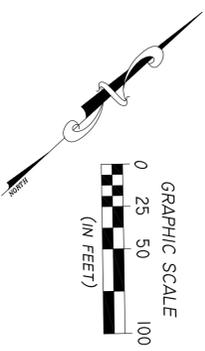
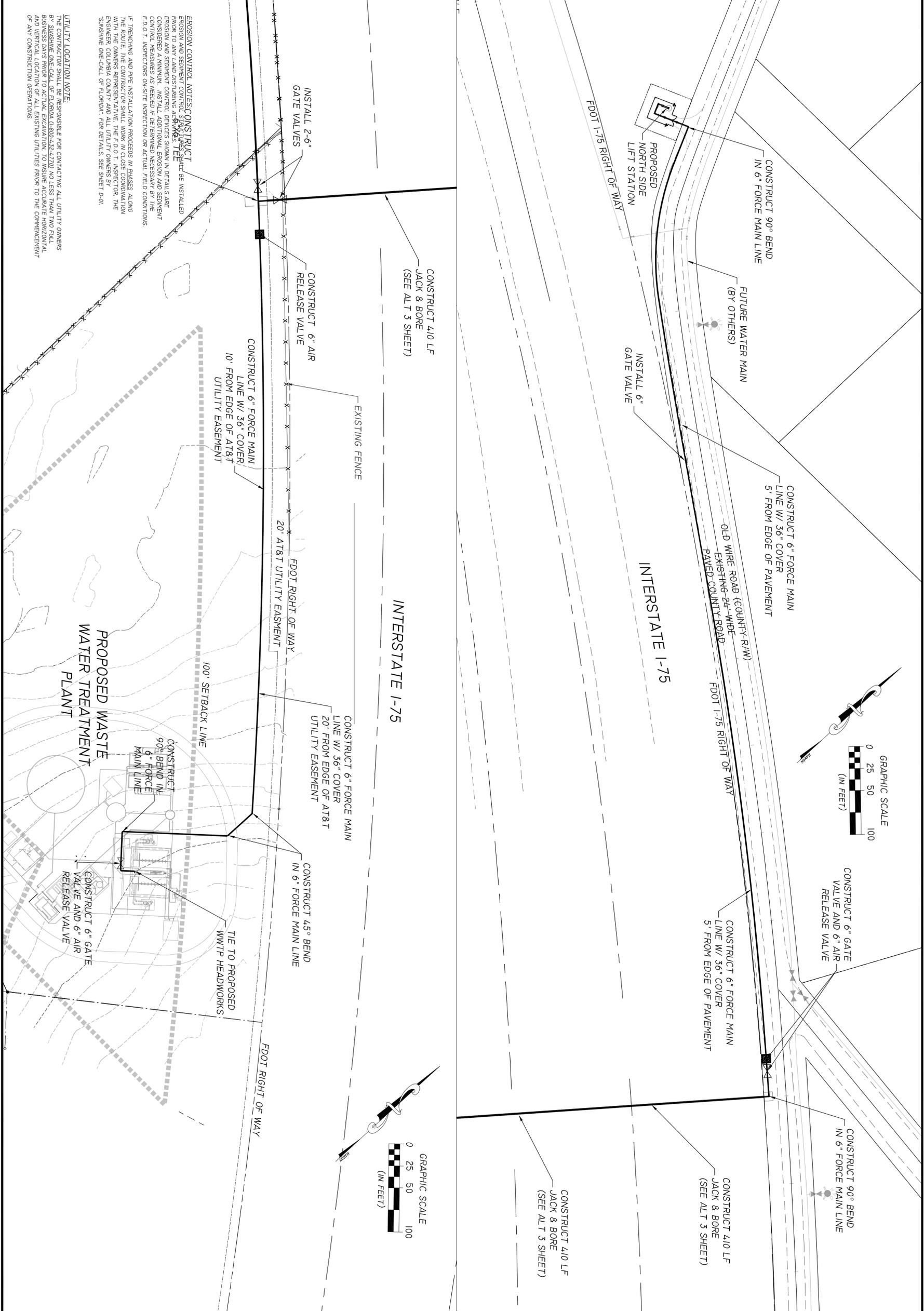
COLUMBIA COUNTY
WASTEWATER TREATMENT PLANT
ALTERNATE - I-75 JACK & BORE
ELLISVILLE, FL

EUTAW UTILITIES, INC.
Project Development...Concept to Completion
415 SAINT FRANCIS ST., UNIT 114 OFFICE PHONE: (850) 383-0400
TALLAHASSEE, FLORIDA 32301 OFFICE FAX: (888) 878-2939
F.B.P.E. C.O.A. #9961

NO.	DATE	REVISION/ACTION TAKEN

DESIGN ENGINEER:
SIGNATURE: MARC E. NEIHAUS
P. E. NUMBER:
DATE:
DRAWN BY: DATE: 12/28/09 SCALE: 1/2"=20'
CHECKED BY: DATE: 8/1/09

PRINT DATE: 12 AUG 2009
SHEET NUMBER: ALT 3



EROSION CONTROL NOTES:
 CONSTRUCT EROSION AND SEDIMENT CONTROL STRUCTURES AS SHOWN IN DETAILS AND SPECIFICATIONS. EROSION AND SEDIMENT CONTROL DEVICES SHOWN IN DETAILS ARE CONSIDERED A MINIMUM. INSTALL ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES AS NEEDED IF DETERMINED NECESSARY BY THE F.D.O.T. INSPECTORS ON-SITE INSPECTION OR ACTUAL FIELD CONDITIONS.
 IF TRENCING AND PIPE INSTALLATION PROCEEDS IN PHASES ALONG THE ROUTE, THE CONTRACTOR SHALL WORK IN CLOSE COORDINATION WITH THE OWNERS REPRESENTATIVE, THE F.D.O.T. INSPECTOR, THE ENGINEER, COLUMBIA COUNTY AND ALL UTILITY OWNERS BY SUNSHINE ONE-CALL OF FLORIDA, FOR DETAILS, SEE SHEET D-01.

UTILITY LOCATION NOTE:
 THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY OWNERS BY SUNSHINE ONE-CALL OF FLORIDA (1-800-432-4270) NO LESS THAN TWO FULL BUSINESS DAYS PRIOR TO ACTUAL EXCAVATION, TO INSURE ACCURATE HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION OPERATIONS.

**COLUMBIA COUNTY
 WASTEWATER TREATMENT PLANT
 ALTERNATE - 6" FORCE MAIN**

ELLISVILLE, FL

PRINT DATE: 12 AUG 2009
 SHEET NUMBER: ALT 2

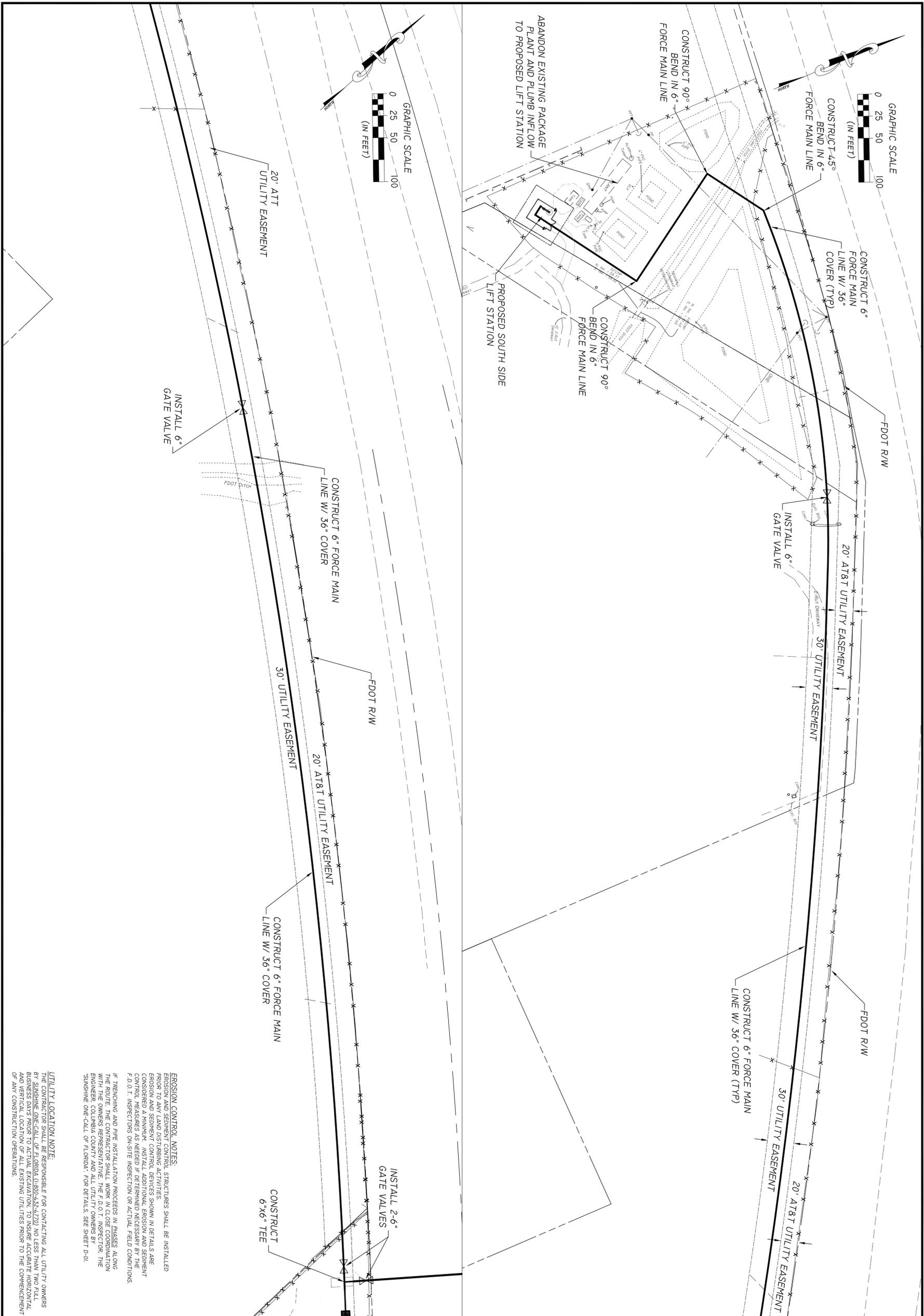
EUTAW UTILITIES, INC.
 Project Development...Concept to Completion

415 SAINT FRANCIS ST., UNIT 114 OFFICE PHONE: (850) 383-0400
 TALLAHASSEE, FLORIDA 32301 OFFICE FAX: (888) 878-2939

F.B.P.E. C.O.A. #9961

NO.	DATE	REVISION/ACTION TAKEN

DESIGN ENGINEER: MARC E. NEIHAUS	SCALE: 1"=20'
SIGNATURE:	DATE: 12/29/09
P. E. NUMBER:	CHECKED BY: RMC
DATE:	DATE: 8/11/09



EROSION CONTROL NOTES:
 EROSION AND SEDIMENT CONTROL STRUCTURES SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
 EROSION AND SEDIMENT CONTROL DEVICES SHOWN IN DETAILS ARE CONSIDERED A MINIMUM. INSTALL ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES AS NEEDED IF DETERMINED NECESSARY BY THE F.D.O.T. INSPECTORS ON-SITE INSPECTION OR ACTUAL FIELD CONDITIONS.
 IF TRENCHING AND PIPE INSTALLATION PROCEEDS IN PHASES ALONG THE ROUTE, THE CONTRACTOR SHALL WORK IN CLOSE COORDINATION WITH THE OWNERS REPRESENTATIVE, THE F.D.O.T. INSPECTOR, THE ENGINEER, COLUMBIA COUNTY AND ALL UTILITY OWNERS BY SUNSHINE ONE-CALL OF FLORIDA. FOR DETAILS, SEE SHEET D-01.

UTILITY LOCATION NOTE:
 THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY OWNERS BY SUNSHINE ONE-CALL OF FLORIDA (1-800-432-4272) NO LESS THAN TWO FULL BUSINESS DAYS PRIOR TO ACTUAL EXCAVATION TO INSURE ACCURATE HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION OPERATIONS.

**COLUMBIA COUNTY
 WASTEWATER TREATMENT PLANT
 ALTERNATE - 6" FORCE MAIN**

ELLISVILLE, FL



FB.P.E. C.O.A. #9961

NO.	DATE	REVISION/ACTION TAKEN

DESIGN ENGINEER: MARC E. NEHAUS	SCALE: 1"=20'
SIGNATURE:	DATE: 12/29/09
P. E. NUMBER:	CHECKED BY: RMC
DATE:	DATE: 8/11/09

PRINT DATE:
12 AUG 2009
SHEET NUMBER
ALT /

