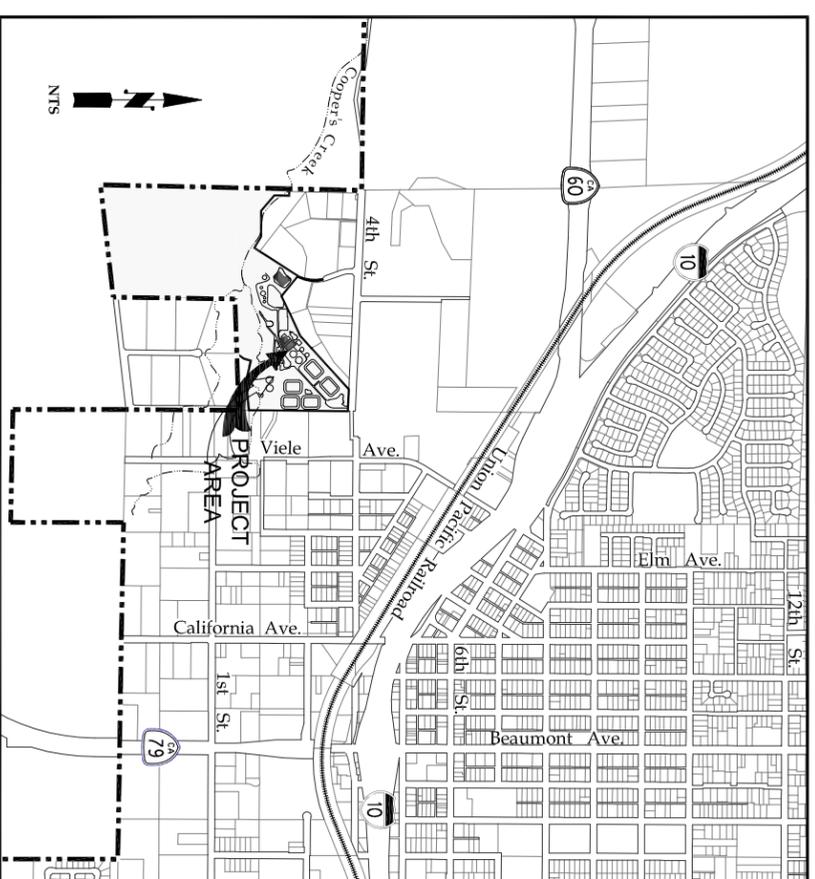
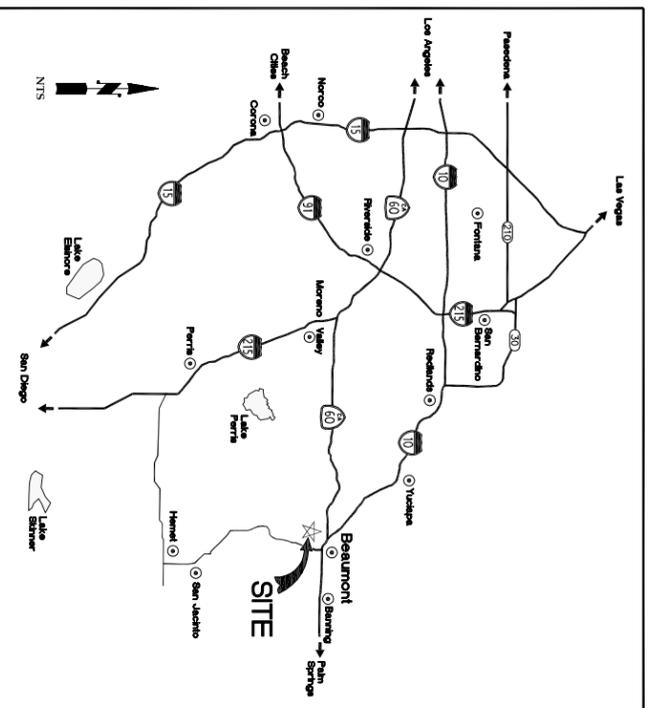


CITY OF BEAUMONT

Riverside County, California

WASTEWATER TREATMENT PLANT INFLUENT BYPASS PROJECT

August, 2012



NOTIFICATIONS:

THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (USA) AT 1-800-227-2800 AT LEAST TWO WORKING DAYS PRIOR TO STARTING WORK, AND CONTACT THE FOLLOWING UTILITIES AND AGENCIES.

- CITY OF BEAUMONT DEPARTMENT OF PUBLIC WORKS (951) 769-8520
- MR. DEEPAK MOORJANI, PE (951) 845-9581
- BEAUMONT-CHERRY VALLEY WATER DISTRICT (951) 845-9581
- TONY LARA (951) 845-0736
- SOUTHERN CALIFORNIA GAS COMPANY (USA) (951) 581-2398
- DON WRIGHT (951) 581-2398
- SOUTHERN CALIFORNIA EDISON COMPANY (USA) (951) 581-2398
- DEBBIE OLSEN (951) 581-2398
- GENERAL TELEPHONE (USA) 1-(800) 227-2800
- RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT (951) 955-1200
- ALL OTHER CONFLICTING UTILITIES NOT USING USA FOR CONTACT

BENCHMARK:

TYPE: STANDARD DISK STAMPED N-71 RESET 1960
ELEVATION: 2573.722 (1970)

LOCATION: THIS MARK IS LOCATED AT BEAUMONT, ABOUT 70 YARDS NORTHEAST OF THE NORTHEAST CORNER OF THE UNION PACIFIC CO. RAILROAD STATION, ABOUT 170 YARDS NORTHWESTERLY OF CALIFORNIA STREET, 21 FEET NORTHERLY OF THE CENTERLINE OF THE NEW FOURTH STREET, 2 FEET SOUTHEASTERLY FROM THE WESTERLY END OF THE WALL, 2.7 FEET BELOW THE TOP OF THE WALL, 2 INCHES ABOVE THE CURB, AND SET IN THE TOP OF A CONCRETE POST.

ESTABLISHED FROM RIVERSIDE COUNTY BENCHMARK 603-98-68
SEE WILDAN JOB NO. 61170

CITY OF BEAUMONT APPROVED FOR CONSTRUCTION BY:

JEFF FOX, MAYOR

DATE

ALAN KAPANICAS, CITY MANAGER

DATE

SHEET INDEX

GENERAL

SHEET NO. T-1 TITLE SHEET
 SHEET NO. G-1 DRAWINGS LIST

CIVIL

SSHEET No. C-03 EXISTING & PROPOSED OVERALL YARD PIPING PLAN
 SHEET No. C-04 BYPASS - 24"Ø GRAVITY & 8"Ø FORCE MAIN - PLAN & PROFILE
 SHEET No. C-05 BYPASS FORCE MAIN PLAN AND PROFILES
 SHEET No. C-06 BYPASS FORCE MAIN DETAILS
 SHEET No. C-07 HOLDING POND AREA GRADING PLAN
 SHEET No. C-08 GRADING PLAN DETAIL SHEET
 SHEET No. C-09 SOLARBEE INSTALLATION PLAN AND PROFILE
 SHEET No. C-10 DEMOLITION, REMOVAL & REPLACEMENT

MECHANICAL

SHEET NO. M-04 PIPE PENETRATION, LINER & ANCHOR DETAILS
 SHEET No. M-05 SOLARBEE & FLOATABLE PUMP DETAILS

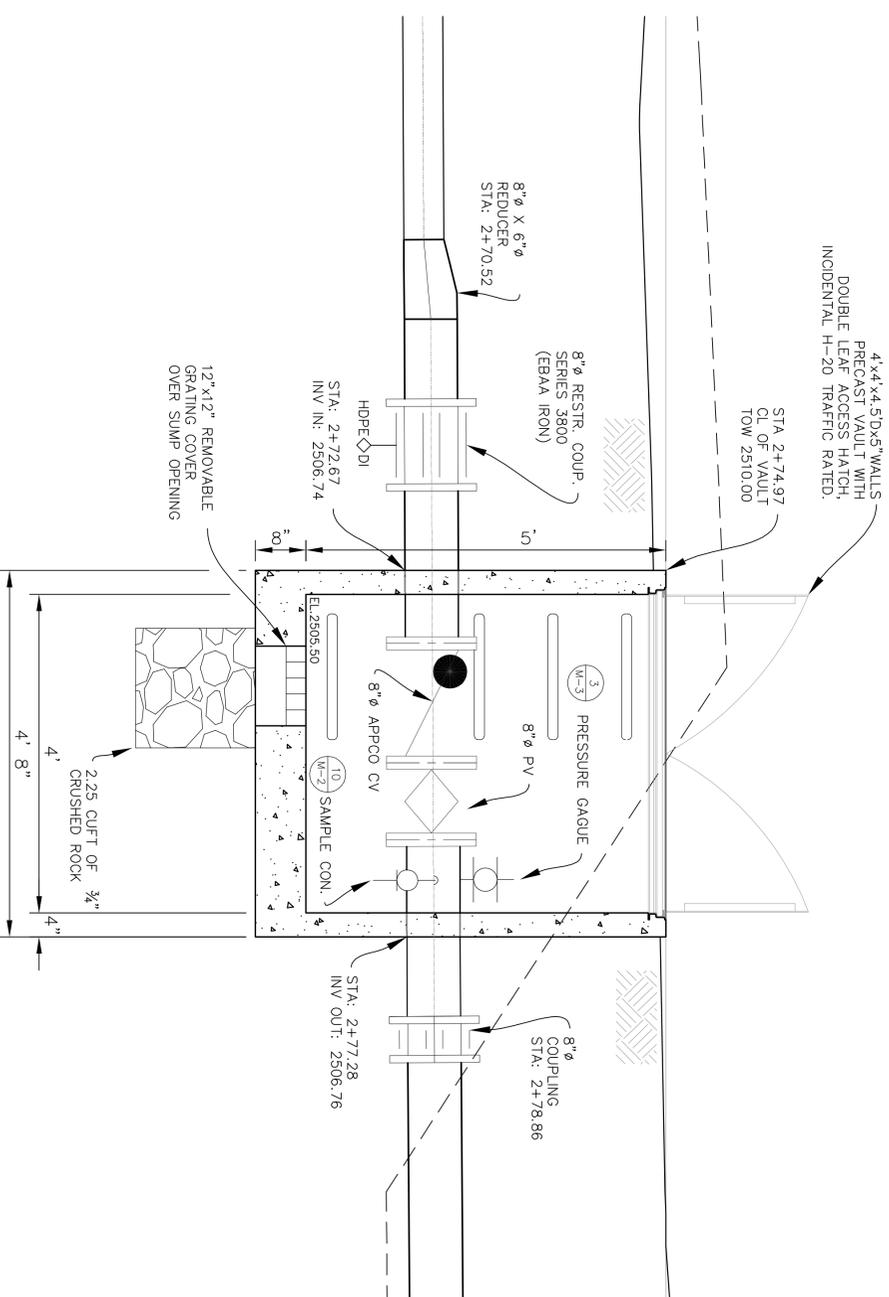
ELECTRICAL

SHEET NO. E-1 ELECTRICAL - SITE PLAN
 SHEET NO. E-2 ELECTRICAL - ABBREVIATIONS, LEGEND AND NOTES
 SHEET NO. E-4 ELECTRICAL - CONDUIT RUN AT HOLDING POND
 SHEET NO. E-6 ELECTRICAL - SINGLE LINE DIAGRAM AND PANEL ELEVATIONS FOR MCC-CF

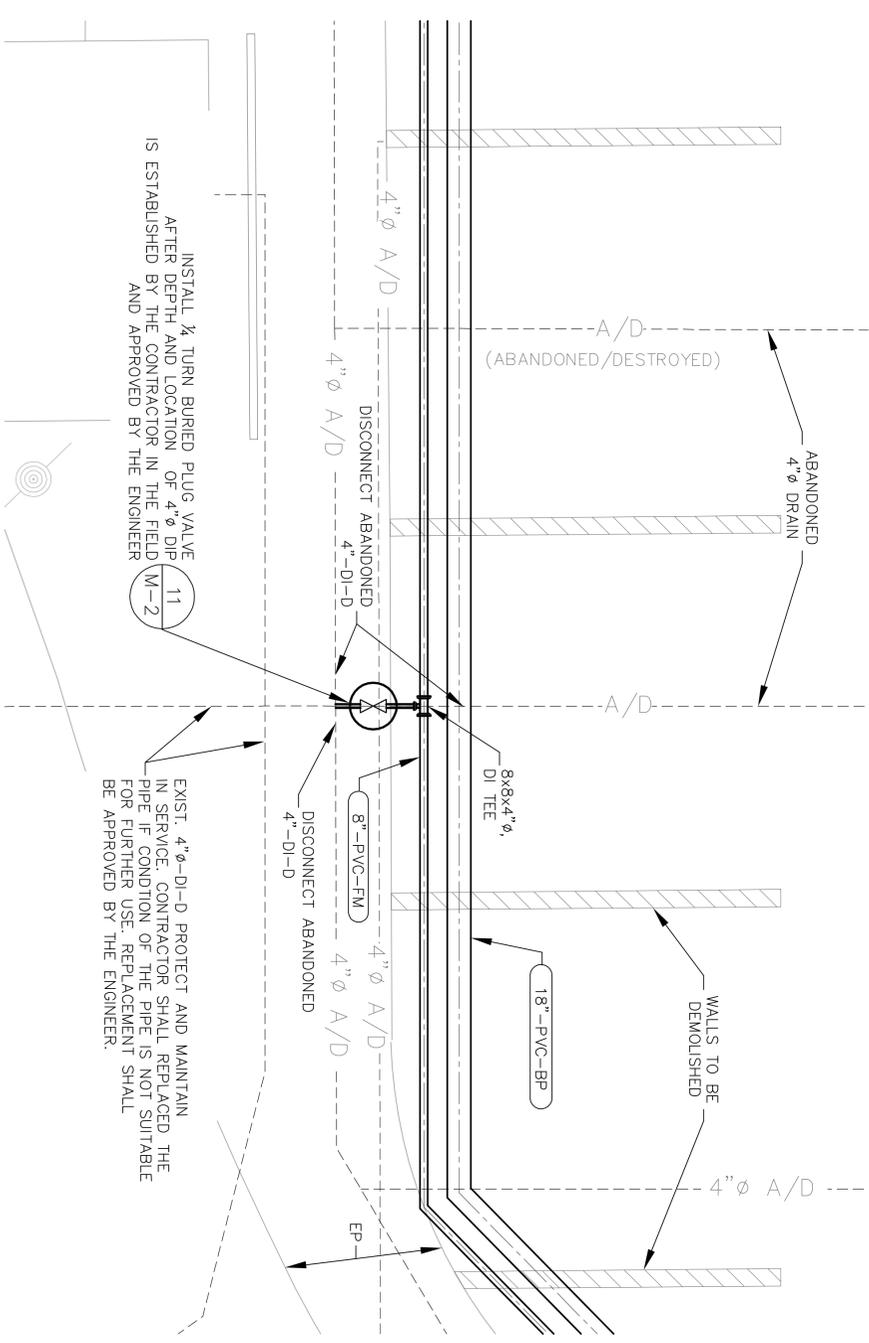
PROCESS, INSTRUMENTATION AND CONTROLS

SHEET NO. I-1 PROCESS INSTRUMENTATION & CONTROLS ABBREVIATIONS, LEGEND & NOTES
 SHEET NO. I-2 PROCESS & INSTRUMENTATION DIAGRAM
 SHEET NO. I-5 EXIST. COOPER'S INSTRUMENTATION CONTROL SCHEMATIC

	Underground Service Alert Call: TOLL FREE 1-800-227-2600 TWO WORKING DAYS BEFORE YOU DIG			
DATE BY MARK ENGINEER	REVISIONS DRAWN BY: RGC/KMC CHECKED BY: ZR	APPROVAL ZR	RECOMMENDED FOR APPROVAL ZR	
APPROVED BY CONSULTING ENGINEER	DATE	APPROVED BY DATE		
SCALE: AS NOTED DATE: 08-15-12	BENCHMARK SEE TITLE SHEET	CITY OF BEAUMONT WASTEWATER TREATMENT PLANT INFLUENT BYPASS PROJECT DRAWINGS LIST		
SHEET NO. G-1	OF SHTS.	FILE NO.		



BYPASS FORCE MAIN - 4'x4'x5' PRECAST VAULT
N.T.S. 2
VAR



DETAIL 1
N.T.S. VAR

NOTE#1
PRIOR TO CONSTRUCTION OF THE NEW PIPES, CONTRACTOR SHALL EXPOSE ALL EXISTING PIPES AND VERIFY THE EXISTING DEPTH, LOCATIONS AND CONDITIONS. ANY AND ALL VARIATION TO THIS ALIGNMENT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.

Underground Service Alert!
Call: TOLL FREE
1-800-227-2600
TWO WORKING DAYS BEFORE YOU DIG

The private engineer signing these plans is responsible for the accuracy of the information shown. The contractor is responsible for the discovery of any discrepancies arising after city approval of utility construction. The private engineer shall be responsible for determining an acceptable solution and revising the plans for approval by the city.

RECOMMENDED FOR APPROVAL
DATE: _____
BY: ZR

SEAL


APPROVED BY DATE: _____
CONSULTING ENGINEER

APPROVED BY DATE: _____
SCALE: AS SHOWN BENCHMARK SEE TITLE SHEET

CITY OF BEAUMONT
WASTEWATER TREATMENT PLANT
INFLUENT BYPASS PROJECT
BYPASS 8" FM DETAILS

SHEET NO. C-6
OF _____ SHTS.
FILE NO. _____

CITY OF BEAUMONT GRADING NOTES:

- ALL GRADING SHALL CONFORM TO THE 2010 UNIFORM BUILDING CODE, APPENDIX J, AND CITY OF BEAUMONT ORDINANCES.
- ALL PROPERTY CORNERS SHALL BE CLEARLY DELINEATED IN THE FIELD PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION/GRADING.
- DURING ROUGH GRADING OPERATIONS AND PRIOR TO CONSTRUCTION OF PERMANENT DRAINAGE STRUCTURES, TEMPORARY DRAINAGE CONTROL SHOULD BE PROVIDED TO PREVENT PONDING WATER AND DAMAGE TO ADJACENT PROPERTIES.
- DUST SHALL BE CONTROLLED BY WATERING OR OTHER APPROVED METHODS.
- NO FILL SHALL BE PLACED ON EXISTING GROUND THAT HAS NOT BEEN CLEARED OF WEEDS, DEBRIS, TOPSOIL, AND OTHER DELETERIOUS MATERIAL.
- MAXIMUM CUT AND FILL SLOPE = 2:1 EXCEPT WHERE SPECIFICALLY APPROVED OTHERWISE.
- STABILITY CALCULATIONS WITH A FACTOR OF SAFETY OF AT LEAST ONE AND FIVE TENTH (1.5) SHALL BE SUBMITTED BY A SOILS ENGINEER TO THE PUBLIC WORKS DEPARTMENT FOR CUT AND FILL SLOPES OVER 30' IN VERTICAL HEIGHT.
- PROVIDE 5' WIDE BY 1' HIGH BERM OR EQUIVALENT ALONG THE TOP OF ALL FILL SLOPES OVER 5' HIGH.
- PROVIDE A BROW DITCH, DESIGNED TO HANDLE 100YR Q STORM FLOWS, ALONG THE TOP OF CUT SLOPES.
- MINIMUM BUILDING PAD AND DRAINAGE SWALE SLOPE SHALL BE = 1% IF CUT OF FILL IS LESS THAN 10', 2% IF CUT OR FILL IS GREATER THAN 10'. DRAINAGE SWALES SHALL BE A MINIMUM OF 0.2' DEEP AND BE CONSTRUCTED A MINIMUM OF 2' FROM THE TOE OF CUT OR FILL SLOPES.
- NO OBSTRUCTION OF FLOOD PLAINS OR NATURAL WATER OCCURS SHALL BE PERMITTED.
- ALL EXISTING DRAINAGE COURSES ON THE PROJECT SITE MUST CONTINUE TO FUNCTION, ESPECIALLY DURING STORM CONDITIONS. PROTECTIVE MEASURES AND TEMPORARY DRAINAGE PROVISIONS MUST BE USED TO PROTECT ADJOINING PROPERTIES DURING GRADING OPERATIONS.
- FINISH GRADE SHALL BE SLOPED AWAY FROM ALL EXTERIOR WALLS AT NOT LESS THAN 5% FOR A MINIMUM OF 10'.
- CUT AND FILL SLOPES EQUAL TO OR GREATER THAN 3' IN VERTICAL HEIGHT SHALL BE PLANTED WITH GRASS OR GROUND COVER TO PROTECT THE SLOPE FROM EROSION AND INSTABILITY IN ACCORDANCE WITH CITY OF BEAUMONT REQUIREMENTS PRIOR TO FINAL GRADING INSPECTION.
- EROSION CONTROL: ALL SLOPES REQUIRED TO BE PLANTED SHALL BE PROVIDED WITH ROSEA ICE PLANT (OR EQUAL) GROUND COVER AT 12" ON CENTER. SLOPES EXCEEDING 15' IN VERTICAL HEIGHT SHALL BE PLANTED WITH APPROVED TREES SPACED NOT TO EXCEED 20' ON CENTER OR SHRUBS NOT TO EXCEED 10', OR A COMBINATION OF SHRUBS AND TREES NOT TO EXCEED 15' IN ADDITION TO A GRASS MIX OR GROUND COVER. SLOPES EQUAL TO OR GREATER THAN 4' IN VERTICAL HEIGHT SHALL BE PROVIDED WITH AN IN-GROUND IRRIGATION SYSTEM COMPLETE WITH AN APPROPRIATE BACKFLOW PREVENTION DEVICE PER U.P.C. CHAPTER 10.
- ALL GRADING SHALL BE DONE IN CONFORMANCE WITH RECOMMENDATIONS OF THE PRELIMINARY SOILS INVESTIGATIONS BY PETRA, DATED APRIL 20, 2006 (# J.N. 558-05) AND GEOTECHNICAL & ENVIRONMENTAL ENGINEERS, INC. DATED JUNE 24, 1993. TWO SETS OF THE FINAL COMPACTION REPORT SHALL BE SUBMITTED TO THE PUBLIC WORKS DEPARTMENT WHICH SHALL INCLUDE FOUNDATION DESIGN IN CONFORMANCE WITH THE RECOMMENDATIONS OF THE SITE INVESTIGATION REPORT.
- IF STEEP SLOPING TERRAIN OCCURS UPON WHICH FILL IS TO BE PLACED, IT MUST BE CLEARED, KEYED AND BENCHED INTO FIRM NATURAL SOIL FOR FULL SUPPORT. PREPARATION SHALL BE APPROVED BY A SUITABLY QUALIFIED AND REGISTERED PROFESSIONAL PRIOR TO PLACEMENT OF FILL MATERIAL.
- ALL GRADING SHALL BE CONTINUOUSLY OBSERVED BY A COMPETENT SOILS ENGINEER WHO SHALL VERIFY THAT ALL FILL HAS BEEN PROPERLY PLACED AND WHO SHALL SUBMIT A FINAL COMPACTION REPORT FOR ALL FILLS OVER 1' DEEP.
- A SUITABLY QUALIFIED AND REGISTERED PROFESSIONAL SHALL SUBMIT AN INSPECTION REPORT OF BUILDING PAD ELEVATION. WHERE SPECIFIC ELEVATIONS ARE REQUIRED, THE ELEVATION (WITH RESPECT TO MEAN SEA LEVEL) SHALL BE GIVEN IF AN ELEVATION WITH RESPECT TO ADJACENT GROUND SURFACE IS REQUIRED, THE ACTUAL DISTANCE ABOVE THE ADJACENT GROUND SHALL BE GIVEN.
- A SUITABLY QUALIFIED AND REGISTERED PROFESSIONAL SHALL SUBMIT TO THE PUBLIC WORKS DEPARTMENT A WRITTEN INSPECTION REPORT OF COMPLETION OF FINAL GRADING IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED PLANS FOR ALL GRADING DESIGNATED AS "ENGINEERED GRADING".
- THE CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS DEPARTMENT AT LEAST 24 HOURS IN ADVANCE REQUESTING FINISH LOT GRADE AND DRAINAGE INSPECTION.
- ALL STORM DRAINS, CATCH BASINS, AND STORM WATER RUNOFF STRUCTURES WILL BE PROVIDED WITH ADEQUATE CAPABILITIES TO FILTER AND RETAIN SEDIMENT AND GRIT, OIL AND GREASE, TO PREVENT POLLUTION IN STORM WATER RUNOFF IN COMPLIANCE WITH THE CITY OF BEAUMONT'S BEST MANAGEMENT PRACTICES AND THE BEAUMONT DRAINAGE MASTER PLAN FOR STORMWATER, AS WELL AS BEST MANAGEMENT PRACTICES IDENTIFIED IN THE CURRENT REPORT OF WASTE DISCHARGE FOR RIVERSIDE COUNTY PERMITTEES.
- CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT, TWO DAYS BEFORE YOU DIG AT 1-800-422-4133.
- ALL PROPOSED WORK CONTRACTOR MUST COORDINATE WITH WWTP OPERATOR TO KEEP THE PLANT IN FULL OPERATION.

OVER-EXCAVATION & RECOMPACTION:

IT IS THE GRADING CONTRACTOR'S RESPONSIBILITY TO REVIEW THE GRADING PLANS AND SOILS REPORT THOROUGHLY PRIOR TO SITE MOBILIZATION. IT IS ALSO THE GRADING CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE CIVIL AND SOILS ENGINEERS IF ON-SITE DISCREPANCIES ARE OBSERVED THAT WOULD AFFECT THE EARTHWORK QUANTITIES.

THE EXISTING TOPOGRAPHY AS DELINEATED ON THESE DRAWINGS SHALL BE UTILIZED AS THE BASIS FOR ALL EARTHWORK COMPUTATIONS. SAID TOPOGRAPHY SHALL BE PRESUMED TO BE ACCEPTABLE TO ALL INTERESTED PARTIES UNLESS A DEVIATION IS FOUND PRIOR TO THE START OF GRADING IN ANY SPECIFIC AREAS. ANY DEVIATION SO DETERMINED SHALL BE PROMPTLY TRANSMITTED TO ALL INTERESTED PARTIES.

THE CONTRACTOR IS REQUIRED TO ESTIMATE THE QUANTITIES OF GRADING WORK TO BE DONE AND INCLUDE ALL COSTS THEREFROM IN HIS BID AS NO ADDITIONAL ALLOWANCE WILL BE MADE WITHOUT PRIOR CONSENT FROM THE OWNER.

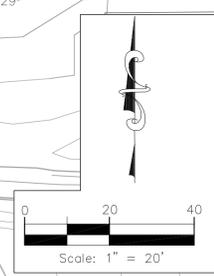
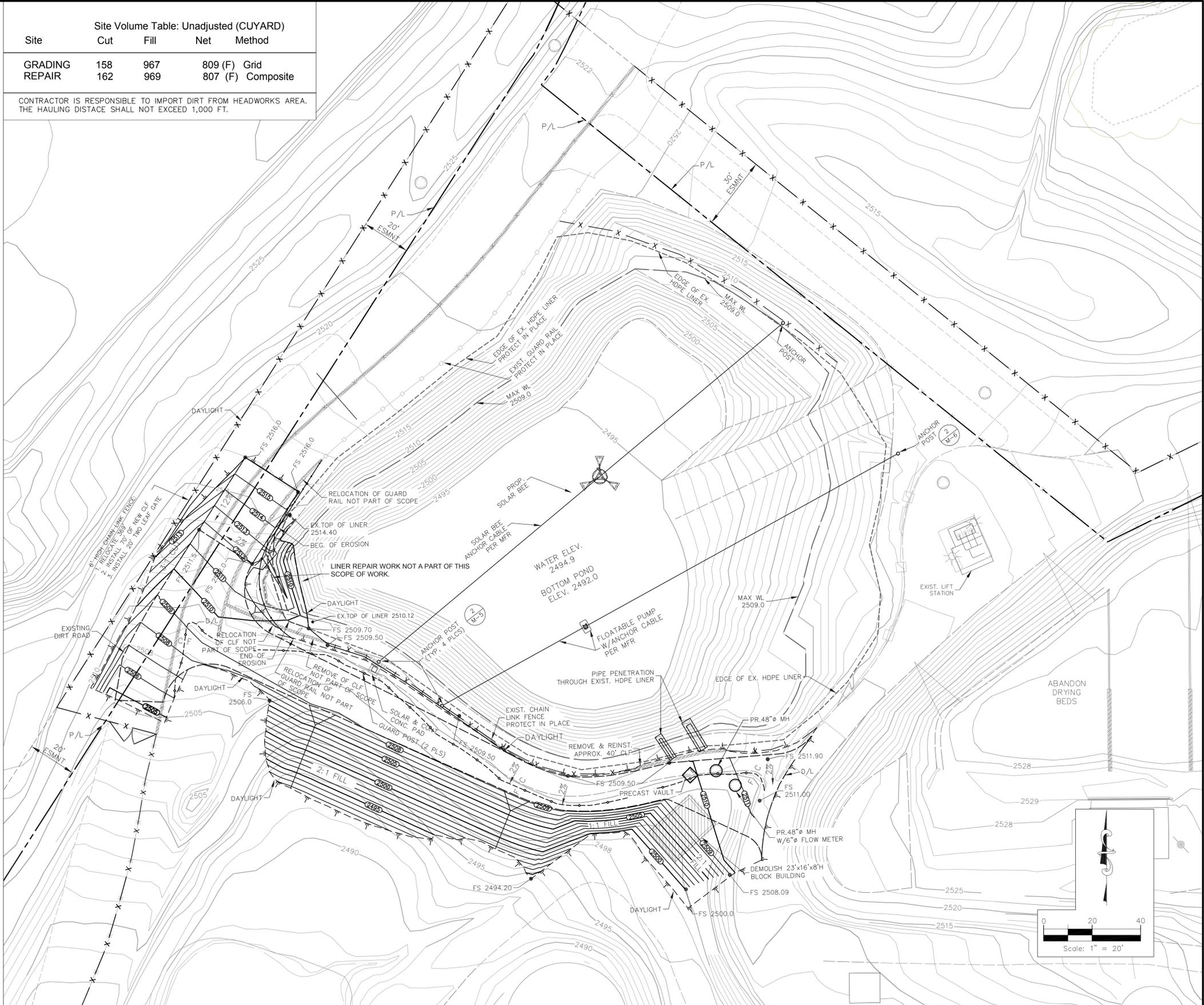
OVER EXCAVATION AND/OR EXCESS BACKFILLING OR DUPLICATION OF GRADING ACTIVITIES IS NOT A BASIS FOR ADDITIONAL COMPENSATION. THIS ALSO APPLIES WHERE MATERIAL IS TO BE REMOVED AND REPLACED TO REDUCE MOISTURE CONTENT.

OFFSITE DISPOSAL OF EXCAVATION MATERIAL IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE INCLUDED IN HIS BID. THE CONTRACTOR SHALL HOLD THE OWNER AND ENGINEER HARMLESS AS A RESULT OF ANY CLAIMS ARISING FROM ACTIONS IN ROUTE OR AWAY FROM THE SITE.

EARTH VOLUMES SHOWN ARE ESTIMATES BASED UPON THE GEOTECHNICAL ANALYSIS PERFORMED BY THE NAMED SOILS ENGINEER AND TOPOGRAPHIC SURVEY OF THE EXISTING GROUND SURFACE AT THE TIME OF PLAN PREPARATION. EARTHWORK VOLUMES ARE COMPUTED BY METHODS COMMONLY USED IN STANDARD ENGINEERING PRACTICE, AND ARE INTENDED AS GUIDELINES ONLY. ACTUAL FIELD CONDITIONS MAY VARY FROM OBSERVED OR MEASURED CONDITIONS AT THE TIME OF PLAN PREPARATION. EARTHWORK QUANTITIES MAY VARY AS A RESULT. THE QUANTITIES FOR THESE PLANS ARE BASED UPON FACTORS PRESENTED IN.

Site Volume Table: Unadjusted (CUYARD)				
Site	Cut	Fill	Net	Method
GRADING	158	967	809 (F)	Grid
REPAIR	162	969	807 (F)	Composite

CONTRACTOR IS RESPONSIBLE TO IMPORT DIRT FROM HEADWORKS AREA. THE HAULING DISTANCE SHALL NOT EXCEED 1,000 FT.



Underground Service Alert
 Call: TOLL FREE
 1-800-227-2600
 TWO WORKING DAYS BEFORE YOU DIG

The private engineer signing these plans is responsible for the accuracy and acceptability of the design hereon. In the event of discrepancies arising after city approval or during construction, the private engineer shall be responsible for determining an acceptable solution and revising the plans for approval by the city.

DATE	BY	MARK	REVISIONS	APPR. DATE

DESIGNED BY: ZR DRAWN BY: RGC/KMC CHECKED BY: ZR

RECOMMENDED FOR APPROVAL

ZR

DATE

CHECKED BY: ZR

DATE

SEAL

REGISTERED PROFESSIONAL ENGINEER
 ZUZUWANA M.
 NO. C65967
 Exp. 6-30-14
 CIVIL
 STATE OF CALIFORNIA

APPROVED BY _____ DATE _____

CONSULTING ENGINEER

Urban Logic Consultants

43517 Ridge Park Drive, Suite 200
 Temecula, California 92590
 Tel.: (951) 676-1944 Fax (951) 676-2054

SCALE: AS NOTED BENCHMARK

DATE: 08-15-2012 SEE TITLE SHEET

CITY OF BEAUMONT
 WASTEWATER TREATMENT PLANT
 INFLUENT & EFFLUENT BYPASS PROJECT
 BYPASS POND AREA - GRADING PLAN

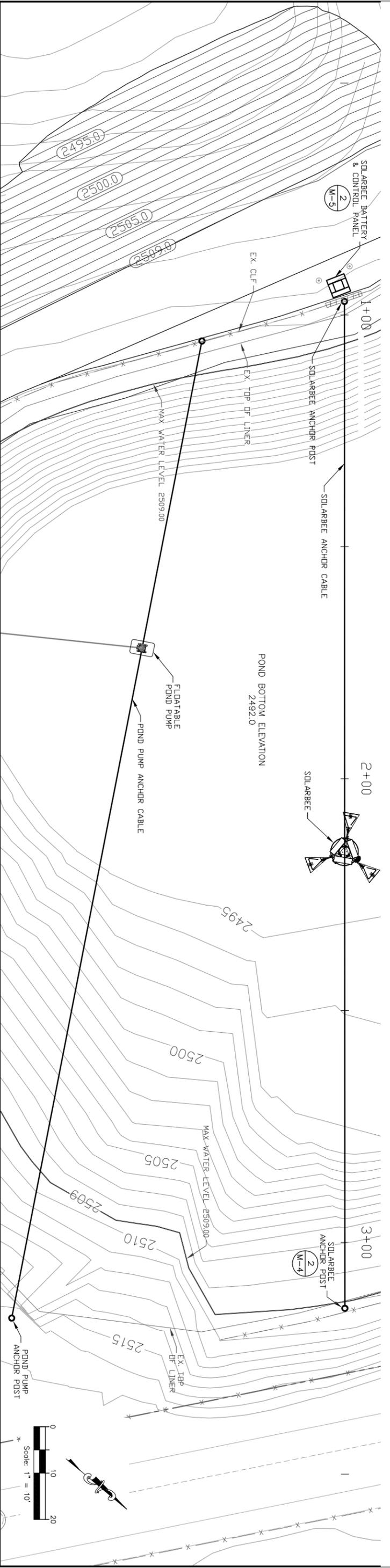
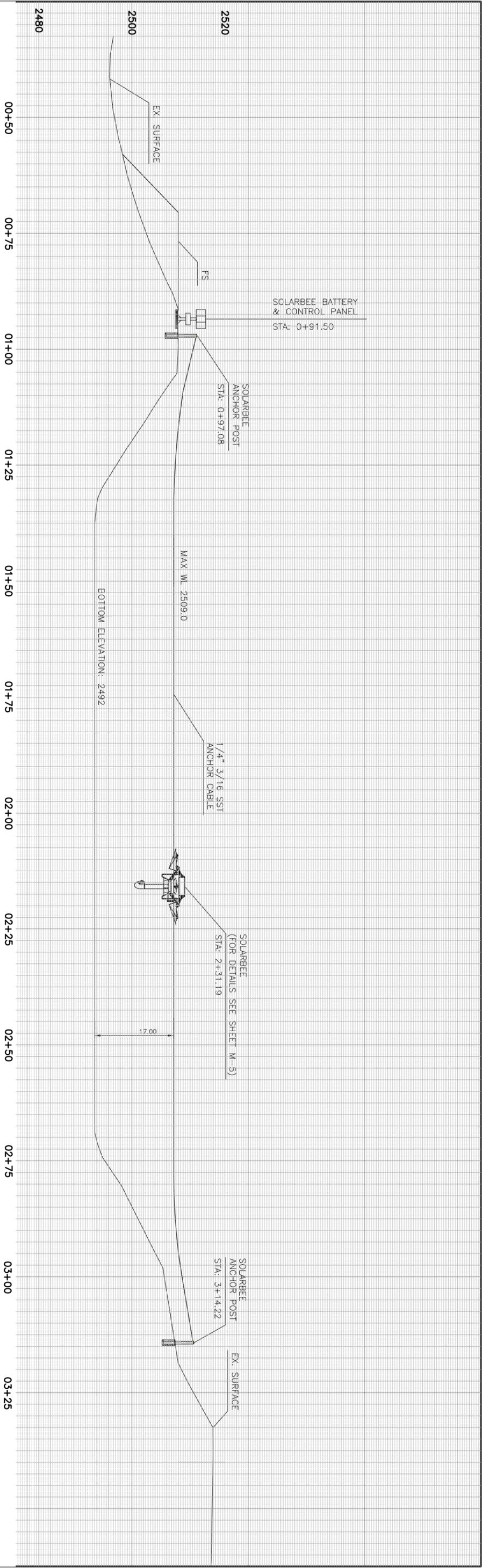
FOR _____ W.O. _____

SHEET NO. 7

C-7

OF ____ SHTS.

FILE NO. _____



Underground Service Alert
 Call: TOLL FREE
 1-800-227-2600
 TWO WORKING DAYS BEFORE YOU DIG

The private engineer signing these plans is responsible for the accuracy and acceptability of the design herein. In the event of discrepancies arising after city approval or during construction, the private engineer shall be responsible for determining on the applicable solution and revising the plans for approval by the city.

RECOMMENDED FOR SEAL

APPROVAL
 ZR _____ DATE _____

APPROVED BY
 DATE _____

Urban Logic Consultants
 45517 Ridge Park Drive, Suite 200
 Temecula, California 92590
 Tel.: (951) 876-1944 Fax: (951) 876-2064

CITY OF BEAUMONT
 WASTEWATER TREATMENT PLANT
 INFLUENT BYPASS PROJECT
 SOLARBEE INSTALLATION PLAN AND PROFILE

DESIGNED BY: ZR _____

ENGINEER _____

DATE _____

CHECKED BY: ZR _____

DATE _____

APPR. DATE _____

CITY _____

DATE _____

REVISIONS

DRAWN BY: RGC/KMC

CHECKED BY: ZR _____

REGISTERED PROFESSIONAL ENGINEER
 ZUZUANN M.
 NO. 05696
 Exp. 6-30-14
 STATE OF CALIFORNIA

CONSULTING ENGINEER

SCALE: _____

DATE: 08-15-12

BENCHMARK
 SEE TITLE SHEET

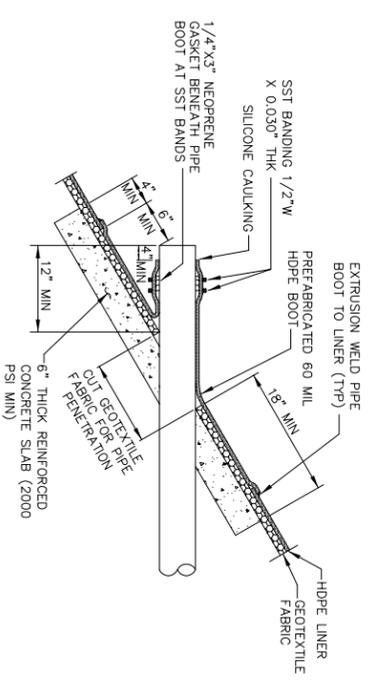
SHEET NO.
 C-9

OF _____ SHTS.

FILE NO.

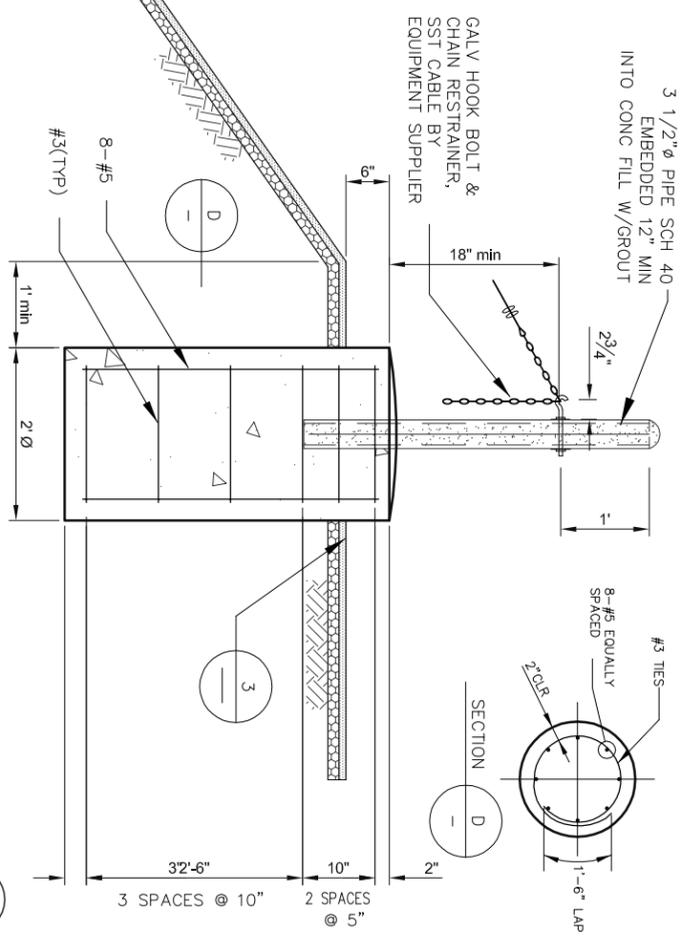
FOR _____

SCALE: 1" = 10'

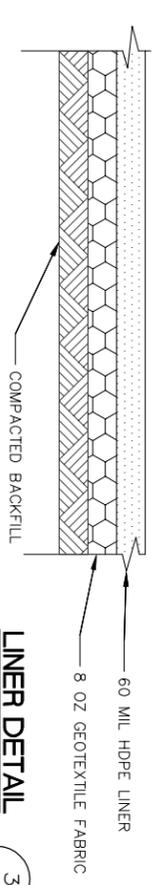


- NOTES:
1. KEEP LENGTH OF PIPE STUB AS SHORT AS PRACTICAL TO ALLOW ROOM TO WELD ON LINER.
 2. EXTEND END OF CONCRETE A MIN OF 18" BEYOND END OF PIPE.

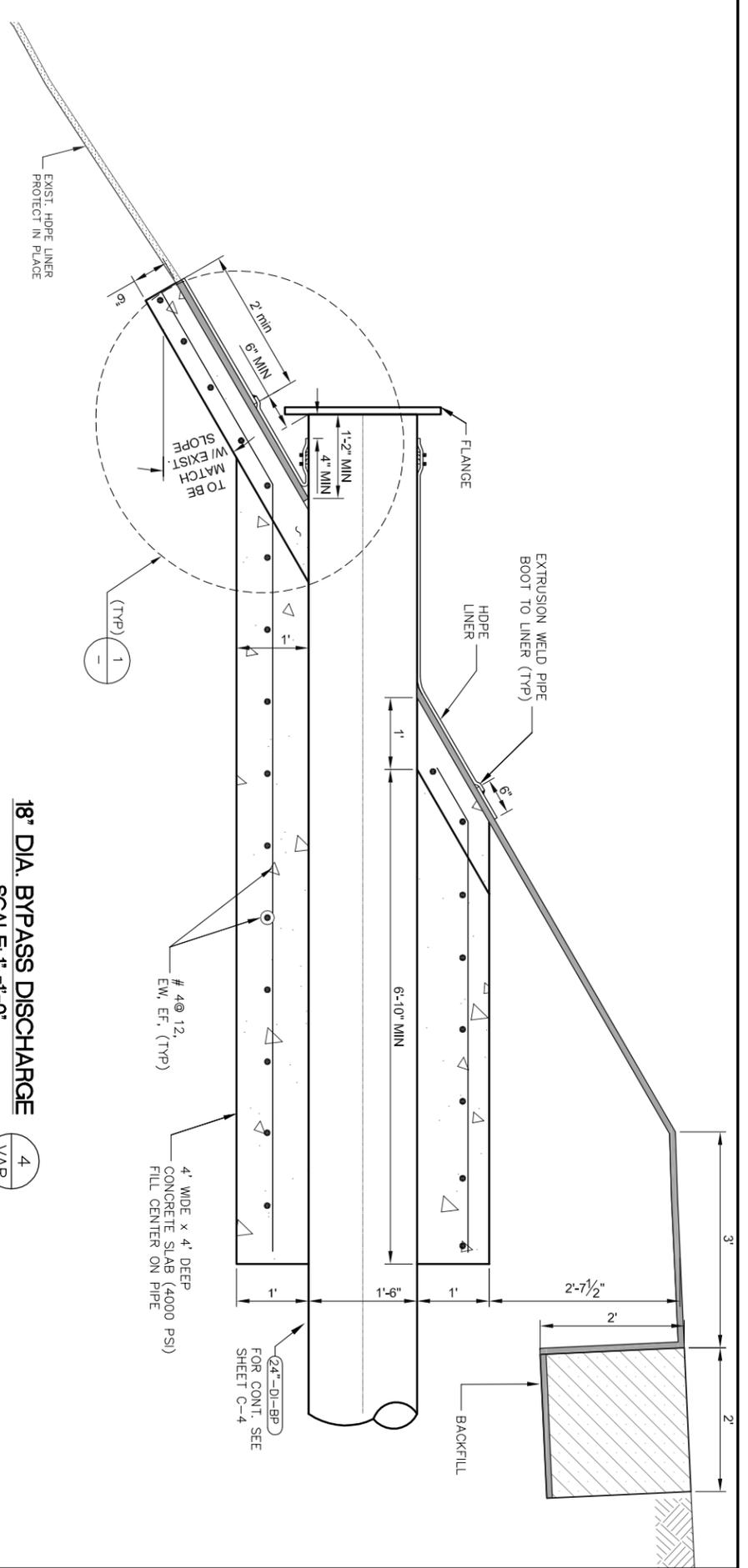
PIPE PENETRATION DETAIL
SCALE: 1" = 1'-0"



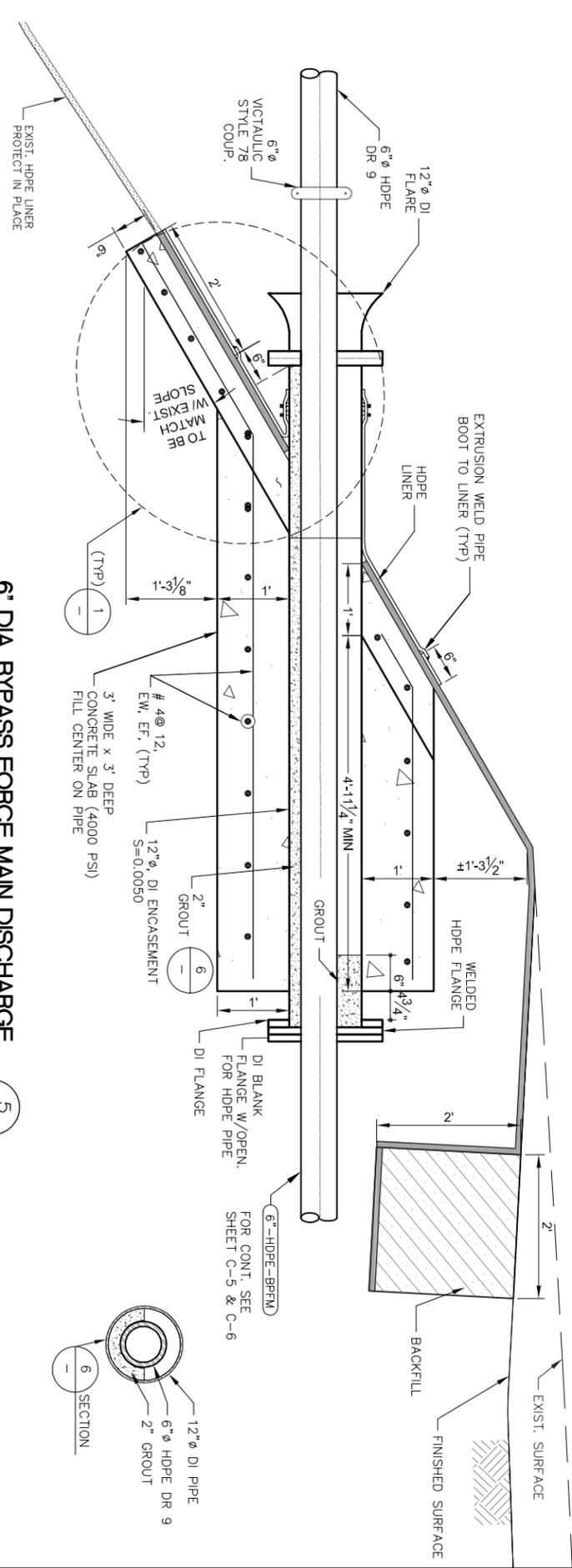
ANCHOR POST
SCALE: 3/4" = 1'-0"



LINER DETAIL
NOT TO SCALE



18\"/>



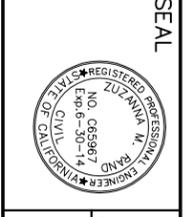
6\"/>



Underground Service Alert
Call: TOLL FREE
1-800-227-2600
TWO WORKING DAYS BEFORE YOU DIG

DATE	BY	MARK	REVISIONS	APPROVAL	DATE
DESIGNED BY: ZR	ENGINEER			ZR	
DRAWN BY: RGS/MAC	CHECKED BY: ZR				

DATE	BY	MARK	REVISIONS	APPROVAL	DATE

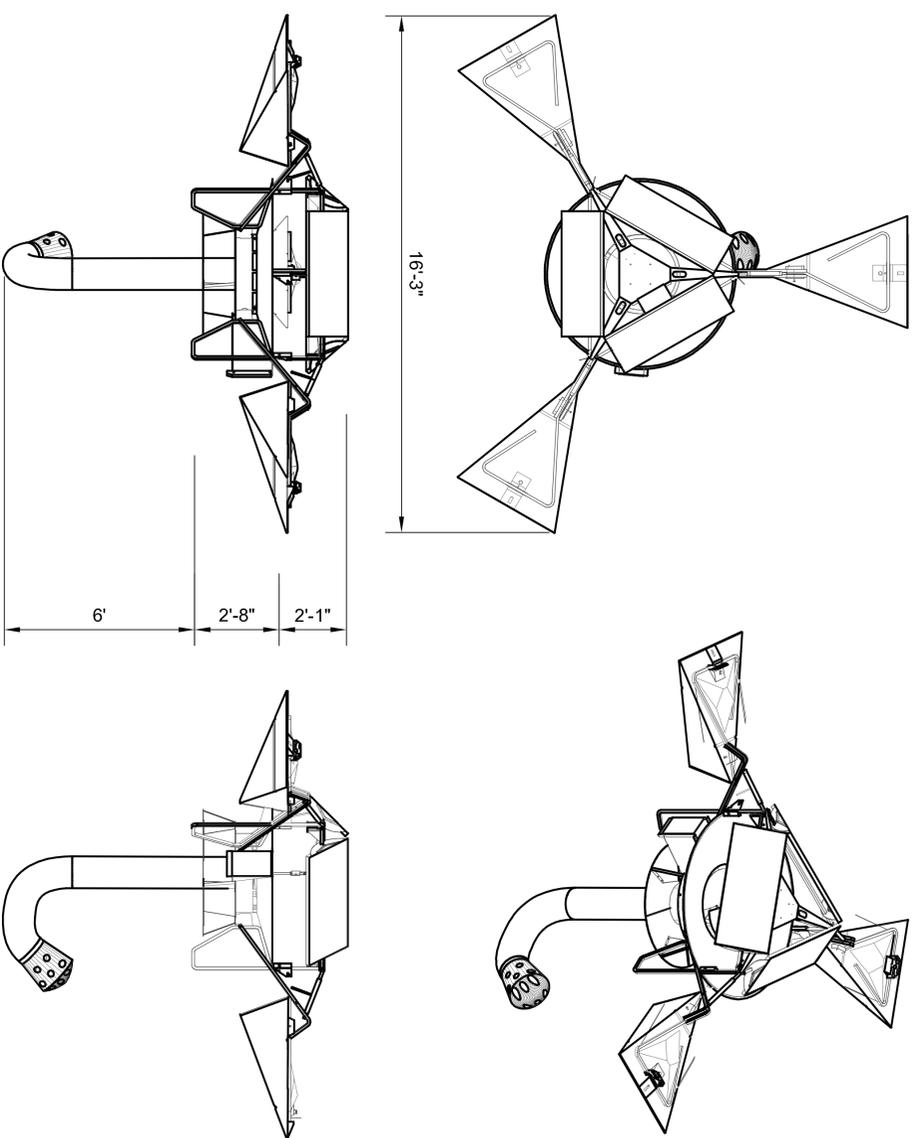


APPROVED BY DATE _____
CONSULTING ENGINEER

Urban Logic Consultants
45517 Ridge Park Drive, Suite 200
Tremont, California 92550
Tel: (951) 676-1944 Fax: (951) 676-2054

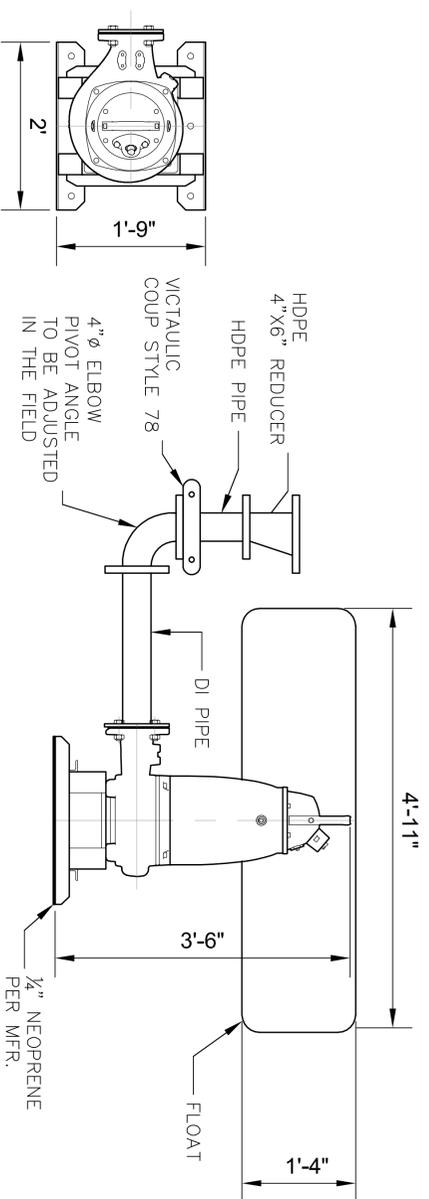
CITY OF BEAUMONT
WASTEWATER TREATMENT PLANT
INFLUENT BYPASS PROJECT
PIPE PENETRATION, LINER & ANCHOR DETAILS

SHEET NO. **M-4**
OF _____ SHTS.
FILE NO. _____



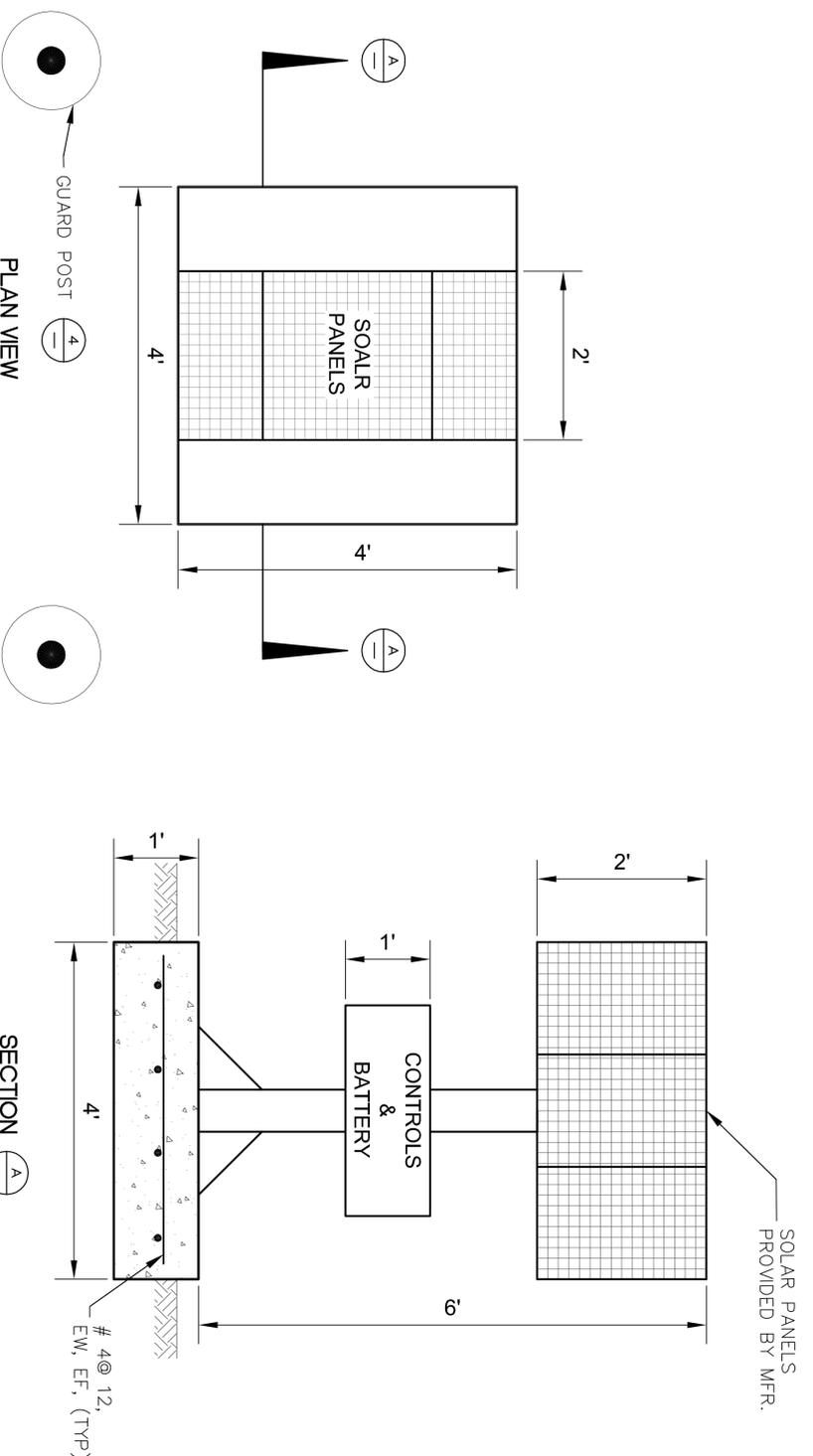
SOLARBEE
SCALE: 3/8" = 1' - 0"

1
VAR



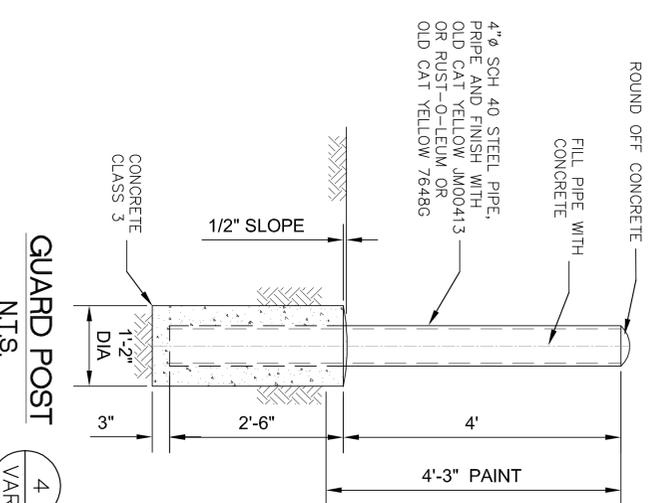
FLOATABLE BYPASS PUMP
SCALE: 1" = 1' - 0"

3
VAR



SOLARBEE PANELS AND CONTROLLER
SCALE: 1" = 1' - 0"

2
VAR



GUARD POST
NT.S.

4
VAR



Underground Service Alert
Call: TOLL FREE
1-800-227-2600
TWO WORKING DAYS BEFORE YOU DIG

The provider engineer signing these plans is responsible for the accuracy of the information shown. The provider engineer shall be responsible for determining an acceptable solution and raising the plans for approval by the city.

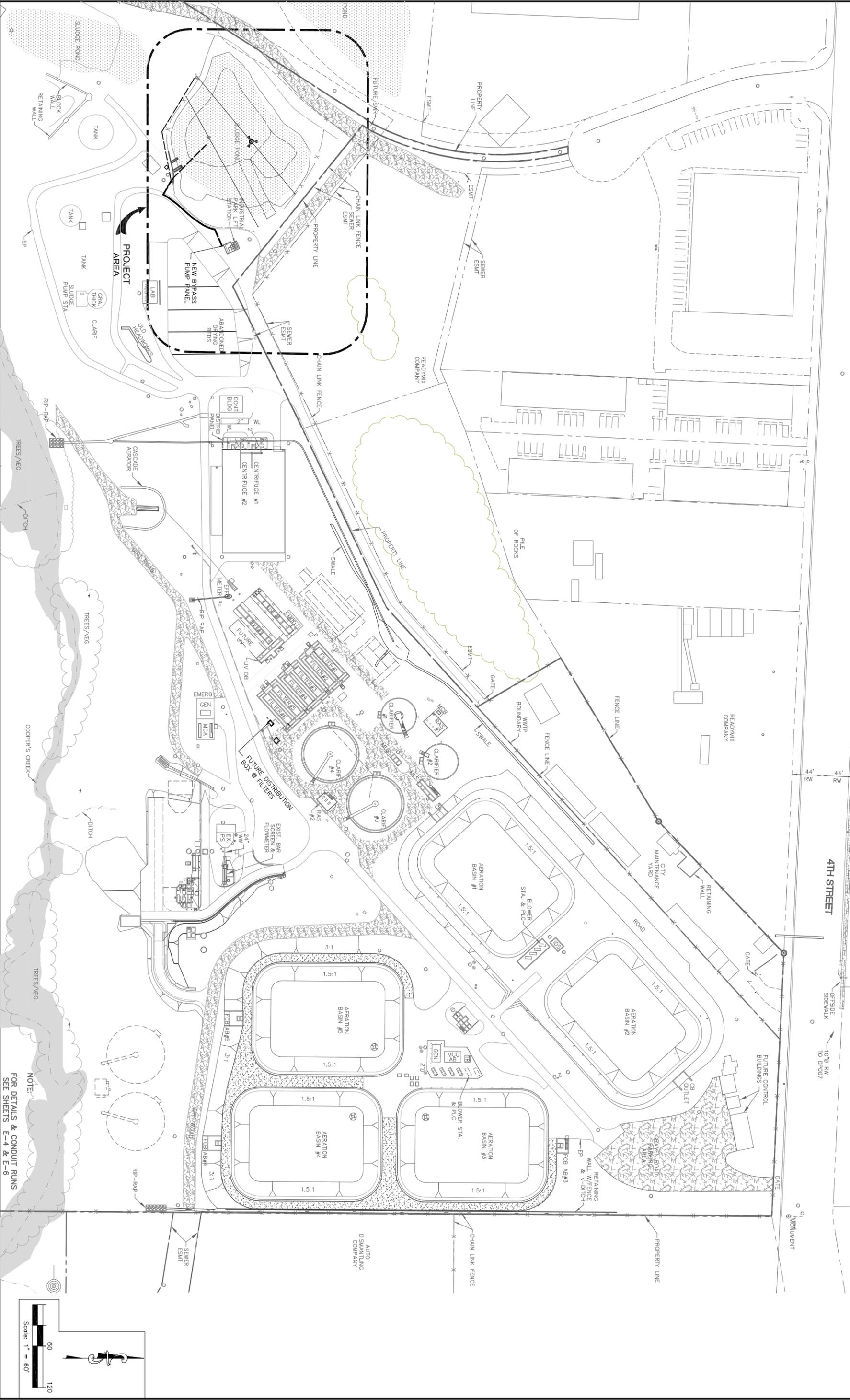
DESIGNED BY: ZR	APPROVED BY: ZR	DATE:
ENGINEER	DATE:	DATE:
REVISIONS:	CHECKED BY: ZR	DATE:
NO. 065987	CHECKED BY: ZR	DATE:
EXP. 06-30-11	CHECKED BY: ZR	DATE:
REGISTERED PROFESSIONAL ENGINEER CIVIL	CHECKED BY: ZR	DATE:
STATE OF CALIFORNIA	CHECKED BY: ZR	DATE:

APPROVED BY _____ DATE: _____
CONSULTING ENGINEER

Urban Logic Consultants
4557 Ridge Park Drive, Suite 200
Tennessee, California 92590
Tel.: (951) 676-1944 Fax: (951) 676-2054

CITY OF BEAUMONT
WASTEWATER TREATMENT PLANT
INFLUENT BYPASS PROJECT
SOLARBEE & BYPASS PUMP

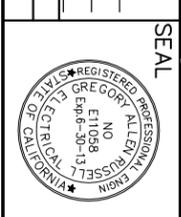
SHEET NO. **M-5**
OF _____ SHTS.
FILE NO. _____



Underground Service Alert
 Call: TOLL FREE
 1-800-227-2600
 TWO WORKING DAYS BEFORE YOU DIG

DATE	BY	MARK	REVISIONS

RECOMMENDED FOR APPROVAL
 DATE: _____
 BY: _____



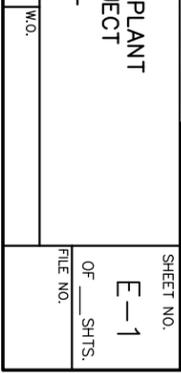
APPROVED BY DATE _____
 CONSULTING ENGINEER

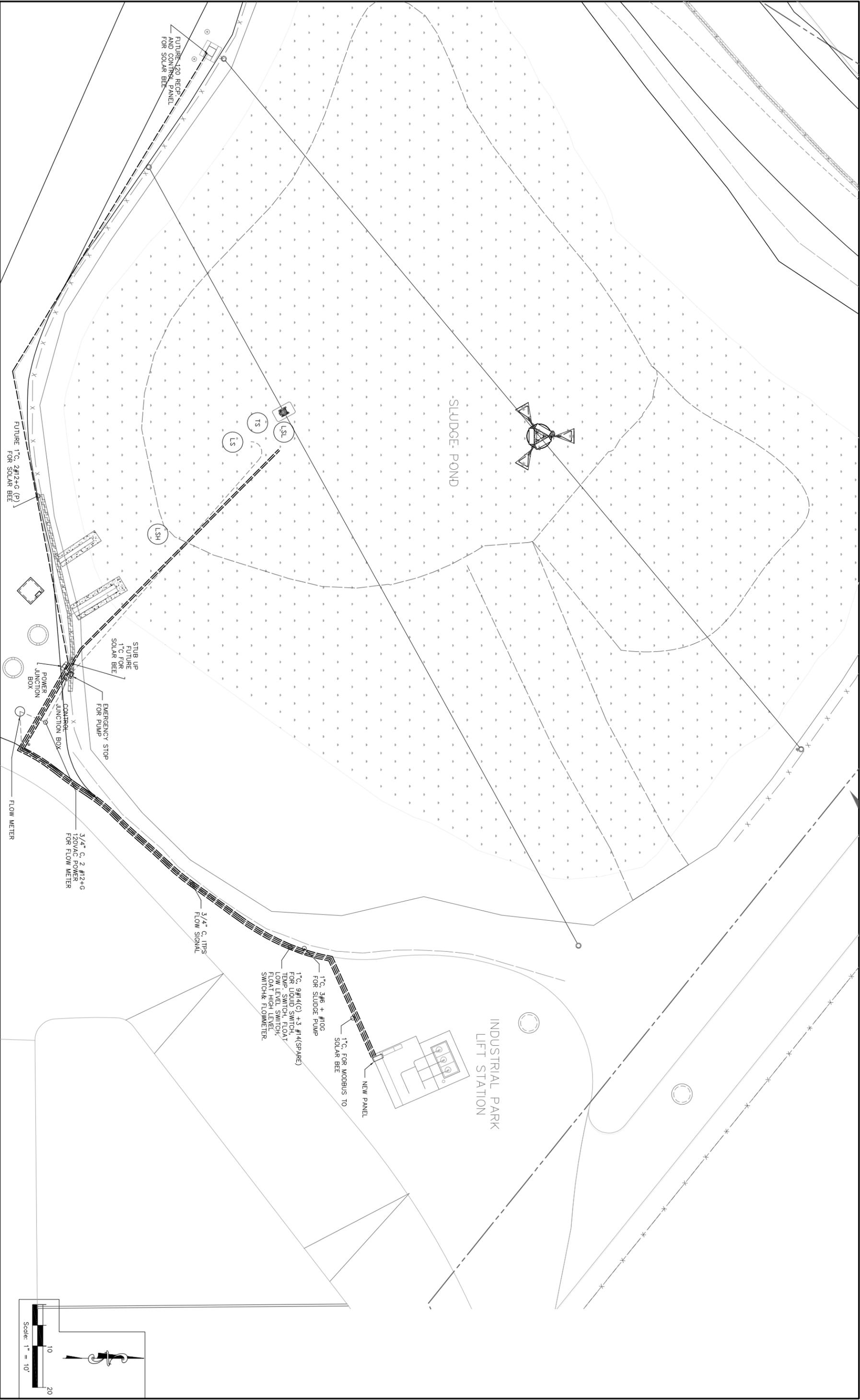
Urban Logic Consultants
 4517 Ridge Park Drive, Suite 200
 Temecula, California 92590
 Tel: (951) 876-1944 Fax: (951) 876-2054

CITY OF BEAUMONT
 WASTEWATER TREATMENT PLANT
 INFLUENT BYPASS PROJECT
 ELECTRICAL OVERALL
 SITE PLAN

SHEET NO. E-1
 OF 5 SHTS.
 FILE NO. _____

NOTE:
 FOR DETAILS & CONDUIT RUNS
 SEE SHEETS E-4 & E-6





Underground Service Alert
 Call: TOLL FREE
 1-800-227-2600
 TWO WORKING DAYS BEFORE YOU DIG

DATE	BY	MARK	REVISIONS

APPROVED BY	DATE

SEAL
 REGISTERED PROFESSIONAL ENGINEER
 ALLEN RUSSELL
 NO. E11058
 EXPIRES 06-30-13
 STATE OF CALIFORNIA

APPROVED BY DATE
 CONSULTING ENGINEER
Urban Logic Consultants
 45517 Ridge Park Drive, Suite 200
 Peninsula, California 92050
 Tel.: (951) 876-1944 Fax: (951) 876-2054

CITY OF BEAUMONT
WASTEWATER TREATMENT PLANT
INFLUENT BYPASS PROJECT
CONDUIT RUNS AT SLUDGE HOLDING POND

SCALE: AS NOTED
 DATE: 08-15-12

FOR

W.O.

SHEET NO.
E-4
 OF SHTS.
 FILE NO.



**GENERAL INSTRUMENTATION
AND CONTROL FUNCTION SYMBOLS**

SYMBOLS

ABBREVIATIONS

NOTES:

1. IGNORE SYMBOLS AND ABBREVIATIONS ABOVE WHICH DO NOT APPEAR ON THE ACCOMPANYING CONTRACT PLANS OR ELSEWHERE IN THE CONTRACT DOCUMENTS FOR THIS PROJECT.
2. REFERENCE DWG E-2B FOR ELECTRICAL SYMBOLS AND ABBREVIATIONS WHICH MAY NOT BE SHOWN ON THIS DRAWING.
3. FOR MECHANICAL (PIPING) SYMBOLS SEE DWG G-2.

PLC FUNCTIONS

- PLC INPUT/OUTPUT POINT:
 DI = DISCRETE INPUT
 DO = DISCRETE OUTPUT
 AI = ANALOG INPUT
 AO = ANALOG OUTPUT
 SI = SERIAL INPUT

INSTRUMENT SYMBOL

- *1 = ANALYZER SENSOR
 AE = ANALYZER TRANSMITTER
 AIT = ANALYZER OUTPUT SIGNAL RECORDER
 AR = ANALYZER OUTPUT SIGNAL RECORDER
 FE = FLOW SENSOR
 FIT = FLOW TRANSMITTER
 FR = FLOW RECORDER
 FIO = FLOW METER WITH FLOW INDICATOR & TOTALIZER
 LE = LEVEL SENSOR
 LIT = LEVEL TRANSMITTER
 MS = MOTOR STARTER
 HS = HAND SWITCH
 TOS = TORQUE SWITCH
 LSHH = HIGH-HIGH LEVEL SWITCH (FLOAT)
 LSH = HIGH LEVEL SWITCH (FLOAT)
 LSL = LOW LEVEL SWITCH (FLOAT)
 XX = HIGHEST SIGNAL SELECTOR
 XT = SIGNAL BIAS AMPLIFIER
 XY = SIGNAL ISOLATOR

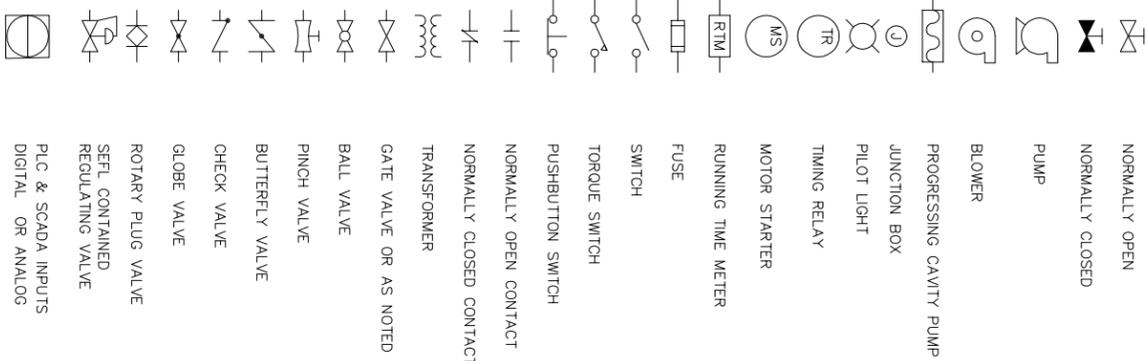
*2

- PH = PH ANALYZER
 COND = CONDUCTIVITY ANALYZER
 HOA = HAND-OFF-AUTOMATIC SWITCH
 LOS = LOCK-OUT STOP SWITCH
 SS = START-STOP SWITCH
 TURB = TURBIDITY
 MFR = FURNISHED WITH PACKAGE EQUIPMENT
 DO = DISSOLVED OXYGEN

PIPE LINE DWG CONTINUATION



INSTRUMENT LINE SYMBOLS



MECHANICAL EQUIPMENT

- AB AIR BLOWER
 CWG WEIR GATE AT CLARIFIER
 IMG WEIR GATE AT INFLUENT TO AERATION BASINS
 PINV PINCH VALVE
 SLP SLUDGE PUMP
 SC SECONDARY CLARIFIER
 PV PLUG VALVE

PIPE FLOW ABBREVIATIONS

- A AIR
 AB AIR BLOWER
 BW BACKWASH
 D DRAIN
 DB DISTRIBUTION BOX
 FCB FLOW CONTROL BOX
 FE FLOW EFFLUENT
 EFF EFFLUENT
 MH MANHOLE
 MLSS MIXED LIQUOR SUSPENDED SOLIDS
 RAS (AERATION EFFLUENT RETURN ACTIVE SLUDGE SCUM/SECONDARY CLARIFIER SECONDARY EFFLUENT)
 SC SECONDARY EFFLUENT
 SLP SLUDGE PUMP
 SN SUPERNATANT
 UV ULTRAVIOLET
 WAS WASTE WATER
 WW WASTEWATER

- A AMPERE OR AUTOMATIC
 BLDG BUILDING
 C CONDUIT
 C/B OR CB CIRCUIT BREAKER
 CO CIRCUIT ONLY
 CONC CONCRETE
 CONN CONNECT, CONNECTION, CONNECTED
 CPM CENTRAL PROCESSING UNIT
 CR CORROSION RESISTANT
 CRT CATHODE RAY TUBE
 DC DIRECT CURRENT
 DISC DISCONNECT
 DWG DRAWING
 EA EACH
 EL ELEVATION
 ELECT ELECTRICAL
 EMERG EMERGENCY
 EMI ELECTROMAGNETIC INTERFERENCE
 EP EXPLOSION PROOF
 EQUIP EQUIPMENT
 EX EXISTING
 F FUSE
 GEN GENERATOR
 GFI GROUND FAULT INTERRUPT
 GND GROUND
 H HAND
 HID HIGH INTENSITY DISCHARGE
 HOA HAND-OFF-AUTOMATIC
 HP HORSEPOWER
 HPS HIGH PRESSURE SODIUM
 HT HEIGHT
 HV HIGH VOLTAGE
 IC RIMS, SYM. INTERRUPTING CAPACITY
 I/O INPUT AND OUTPUT
 JB JUNCTION BOX
 KVA KILOWATT-AMPERE
 KW KILOWATT
 LCL LOCAL CONTINUOUS LOAD
 LCP LOCAL CONTROL PANEL
 LOS LOOKOUT STOP
 LT LIGHT
 LTG LIGHTING
 M MOTOR
 MAX MAXIMUM
 MCG MOTOR CONTROL CENTER
 MCM THOUSAND CIRCULAR MILS
 MFR MANUFACTURER
 MIC MANUFACTURERS INTERCONNECTING CABLE
 MIN MINIMUM
 MTD MOUNTED
 MS MOUNTING
 MTC MOTOR STARTER
 N/C OR NC NORMALLY CLOSED
 NEC NATIONAL ELECTRICAL CODE
 NEMA NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
 NF NON FUSED, NON FUSIBLE
 NIC NOT IN CONTRACT
 N/O OR NO NORMALLY OPEN
 NO. OR # NUMBER
 NTS NOT TO SCALE
 N/P OR NP NAMEPLATE
- O OPEN
 OD OUTSIDE DIAMETER
 O/I OPERATOR INTERFACE
 P POLE
 P/B PUSHBUTTON
 PH PULL BOX
 P&ID PIPING AND INSTRUMENT DIAGRAM, POINT IDENTIFICATION
 PID PROPORTIONAL, INTEGRAL, AND DERIVATIVE (TUNING COEFFICIENTS)
 P/L PROGRAMMABLE LOGIC CONTROLLER
 PLC PANEL POSITION
 PNL POSITION
 POS POSITION
 PP POWER POLE
 PVC POLYVINYL CHLORIDE
 PWR POWER
 PHASE PHASE
 QTY QUANTITY
 RAM RANDOM ACCESS MEMORY
 REOD REQUIRED
 SF-X SUPPLY FAN NO. X
 SHT SHEET
 SIA SET IN AUTO
 SP SPECIFICATION
 S/N SOLID NEUTRAL
 S/S START-STOP
 SS SELECTOR SWITCH
 SW SWITCH
 SWBD SWITCHBOARD
 TB TERMINAL BLOCK
 TC TIME CLOCK
 TEL TELEPHONE
 TEMP TEMPERATURE
 TS TRANSFER SWITCH
 TEL TELEVISION
 TYP TYPICAL
 TSP TWISTED SHIELDED PAIR, #16 AWG
 UL UNDERWRITERS LABORATORIES
 UNLESS OTHERWISE NOTED
 UNINTERRUPTIBLE POWER SUPPLY
 V VOLTAGE
 VA VOLT-AMPERES
 VB VIBRATION
 W WATT
 WATT WEATHERPROOF
 TRANSFORMER TRANSFORMER
 XTMR IMPEDANCE
 Z THREE-WIRE
 3W FOUR-WIRE
 4W



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 TWO WORKING DAYS BEFORE YOU DIG

The private engineer signing these plans is responsible for the accuracy and acceptability of the design herein. In the event of discrepancies arising after city approval or during construction, the private engineer shall be responsible for determining on the applicable solution and resubmitting the plans for approval by the city.

DESIGNED BY: GAE/RGC	REVISIONS	DATE	BY: MARK
DRAWN BY: RGC	CHECKED BY: GAE	DATE	BY: GAE

APPROVAL	DATE
RECOMMENDED FOR	DATE
SEAL	DATE

APPROVED BY	DATE
CONSULTING ENGINEER	DATE

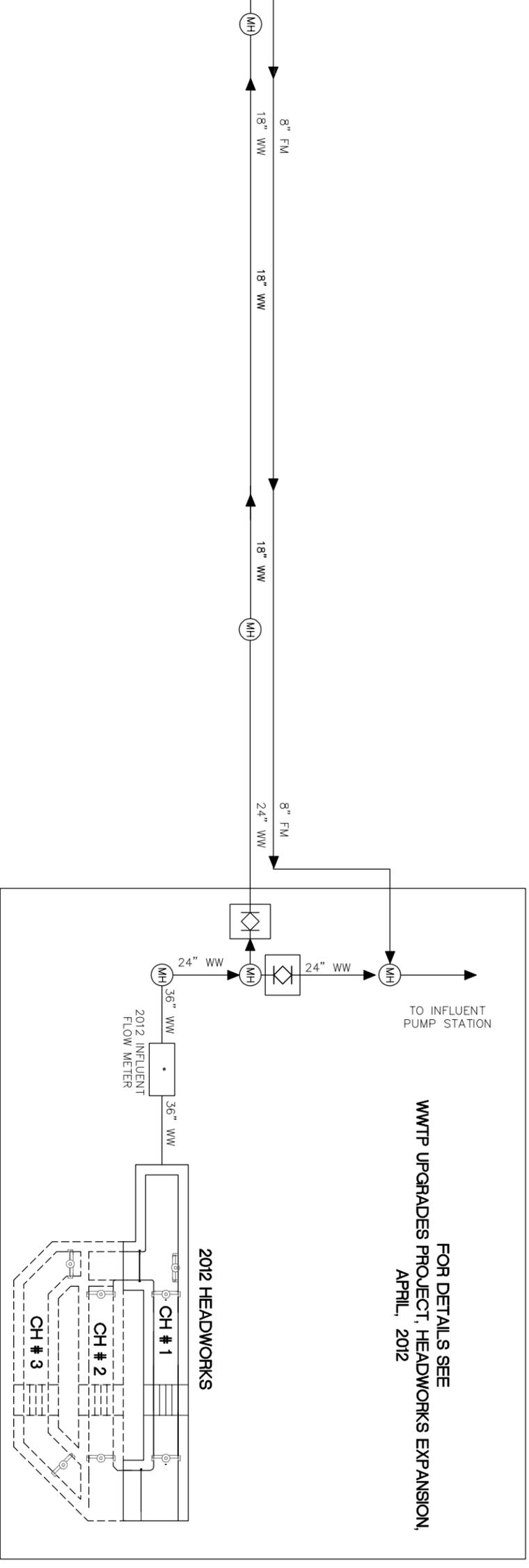
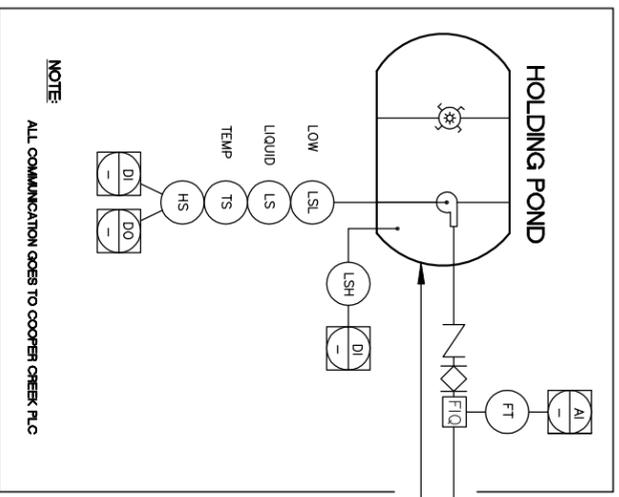


APPROVED BY	DATE
CONSULTING ENGINEER	DATE

Urban Logic Consultants
 45517 Ridge Park Drive, Suite 200
 Temecula, California 92590
 Tel.: (951) 876-1944 Fax: (951) 876-2054

SCALE: AS NOTED	BENCHMARK
DATE: 08-15-12	SEE TITLE SHEET

CITY OF BEAUMONT
 WASTEWATER TREATMENT PLANT
 INFLUENT BYPASS PROJECT
 PROCESS INSTRUMENTATION AND CONTROLS
 ABBREVIATIONS, LEGEND AND NOTES



LEGEND:

— 2012 PROPOSED FACILITIES/ EQUIPMENT/PIPES

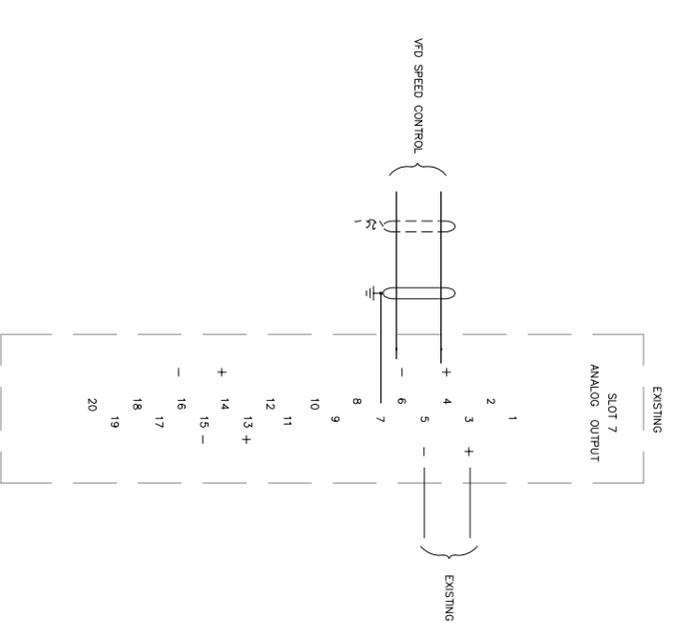
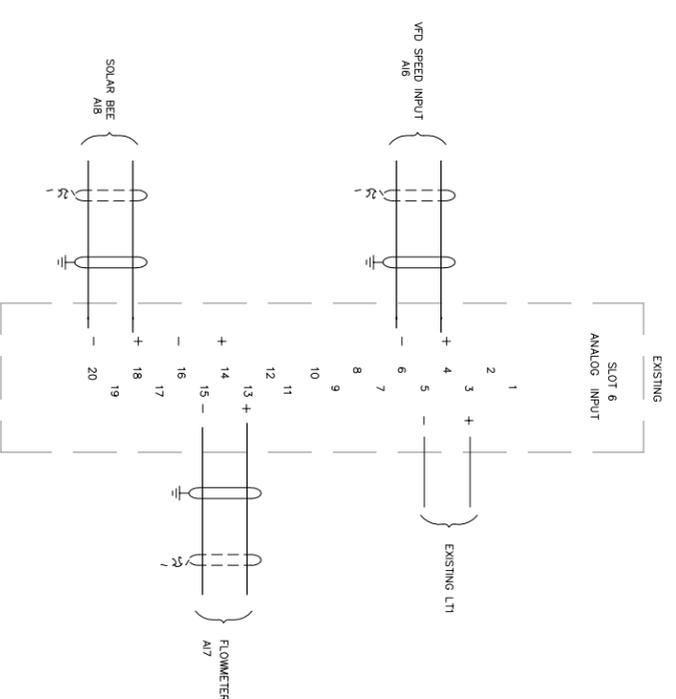
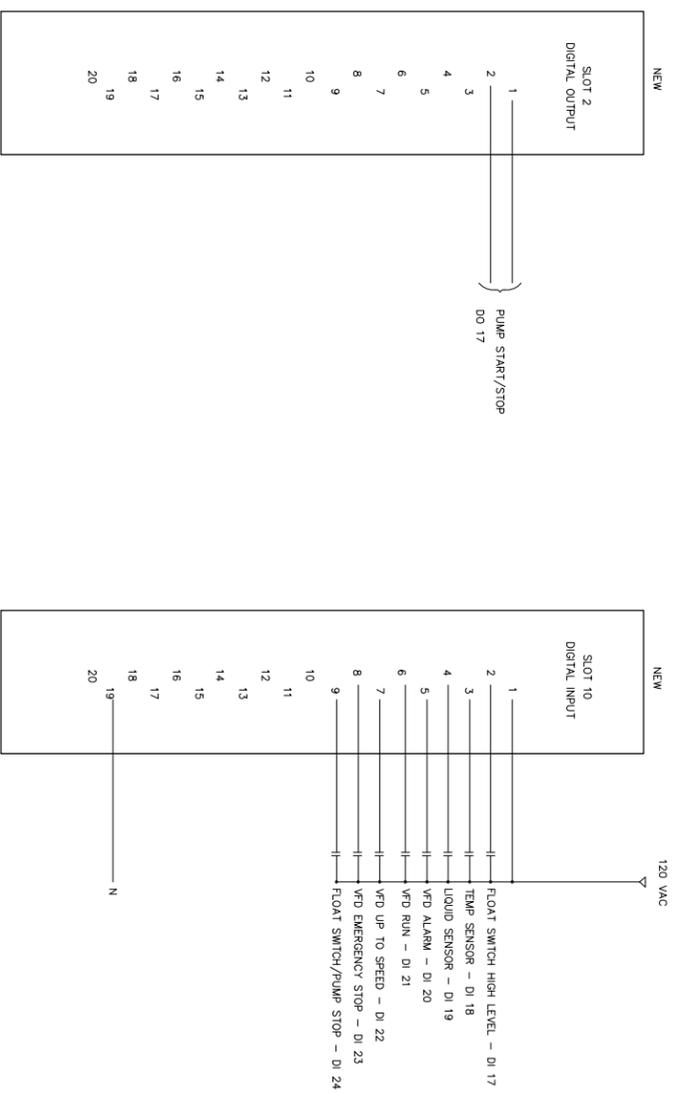
— EXISTING FACILITIES/EQUIPMENT/PIPES

- - - FUTURE FACILITIES/EQUIPMENT/PIPES

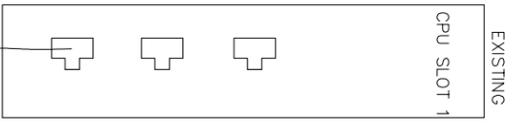
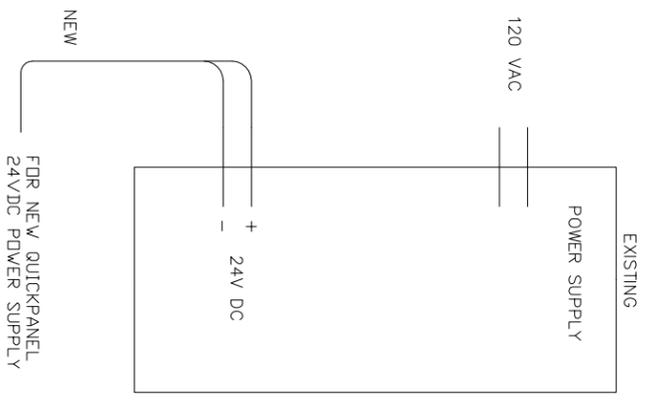
2012 INFLUENT/EFFLUENT BYPASS - PROCESS AND INSTRUMENTATION DIAGRAM

NO SCALE

<p>Underground Service Alert Call: TOLL FREE 1-800-227-2600 TWO WORKING DAYS BEFORE YOU DIG</p>	<p>RECOMMENDED FOR APPROVAL</p> <p>APPROVAL</p> <p>ZR</p>	<p>SEAL</p>	<p>APPROVED BY</p> <p>DATE</p>	<p>Urban Logic Consultants 45517 Ridge Park Drive, Suite 200 Tremont, California 92550 Tel: (951) 878-1944 Fax (951) 878-2064</p>	<p>CITY OF BEAUMONT WASTEWATER TREATMENT PLANT INFLUENT BYPASS PROJECT P & I DIAGRAM</p>	<p>SHEET NO. 1-2 OF SHTS. FILE NO.</p>
	<p>DATE BY: MARK</p> <p>ENGINEER</p> <p>DESIGNED BY: GAR/RGC</p>		<p>REVISIONS</p> <p>CHECKED BY: GAR</p> <p>DATE</p>			

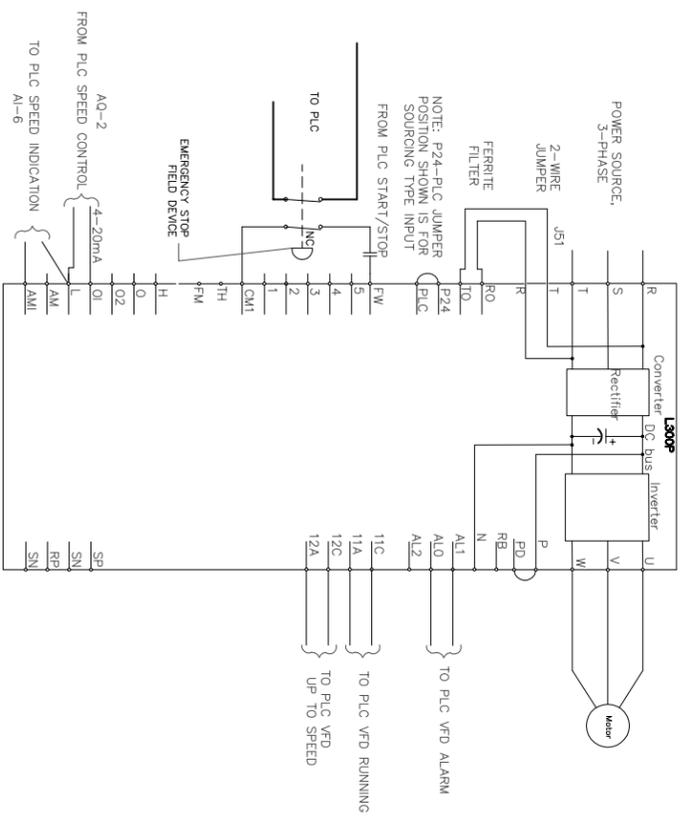


PART OF EXISTING COOPER CREEK PLC



NEW ETHERNET CABLE TO NEW QUICKPANEL FOR SLUDGE POND PUMP CONTROLS

NOTE:
ADD COMMUNICATION CARD IC693CMM321 TO EXISTING PLC



NEW VFD L300P WIRING DIAGRAM FOR SLUDGE POND PUMP

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TWO WORKING DAYS BEFORE YOU DIG

DATE	BY	MARK
ENGINEER		
DESIGNED BY	AJM	RGC
REVISIONS		
CHECKED BY	GAR	

RECOMMENDED FOR APPROVAL
DATE: ZR



APPROVED BY DATE
CONSULTING ENGINEER

Urban Logic Consultants
48517 Ridge Park Drive, Suite 200
Tennessee, California 92590
Tel: (951) 878-1944 Fax: (951) 878-2864

SCALE: AS NOTED
DATE: 04-12-12

BENCHMARK
SEE TITLE SHEET

CITY OF BEAUMONT
WASTEWATER TREATMENT PLANT
UPGRADE PROJECT HEADWORKS EXPANSION
EXIST. COOPER'S CREEK INSTRUMENTATION
CONTROL SCHEMATIC

SHEET NO. 1-5
OF 58 SHTS.
FILE NO.