



**Pacific Gas and  
Electric Company®**

*Mailing Address:*  
Pacific Gas & Electric Company  
Gateway Generating Station  
3225 Wilbur Ave.  
Antioch, CA 94509  
(925) 522-7801

February 23, 2012

Mr. Craig Hoffman  
Compliance Project Manager  
California Energy Commission  
1516 Ninth Street, MS-2000  
Sacramento, CA 95814

**DOCKET**

**00-AFC-1C**

DATE FEB 23 2012

RECD. MAR 09 2012

Reference: PG&E Gateway Generating Station (00-AFC-01C)

Subject: PETITION FOR INSIGNIFICANT PROJECT CHANGE TO PLANT FACILITY

Dear Mr. Hoffman,

Enclosed is a PETITION FOR INSIGNIFICANT PROJECT CHANGE TO PLANT FACILITY to install a new nominal 40,000 gallons bolted carbon steel storage tank which will be used to contain the additional volume of reclaimed water produced during increased frequency of start-up/shut down activities. The installation of this proposed additional storage tank will result in increased re-use rate of reclaimed water and decreased waste water discharge rate.

We have reviewed Commission Decision (00-AFC-1), and we believe that the above requested insignificant project change will not result in any new environmental impacts or require any modification to the existing Conditions of Certification contained in the Final Decision. However, we decided to submit the enclosed petition in an abundance of caution. If you have any questions regarding this matter, please contact Angel Espiritu at (925) 522-7838.

Sincerely,

Ronald A. Gawer  
Senior Plant Manager

Enclosure: a/s  
Cc: File

**PETITION FOR INSIGNIFICANT PROJECT CHANGE  
AT  
GATEWAY GENERATING STATION (GGS)**

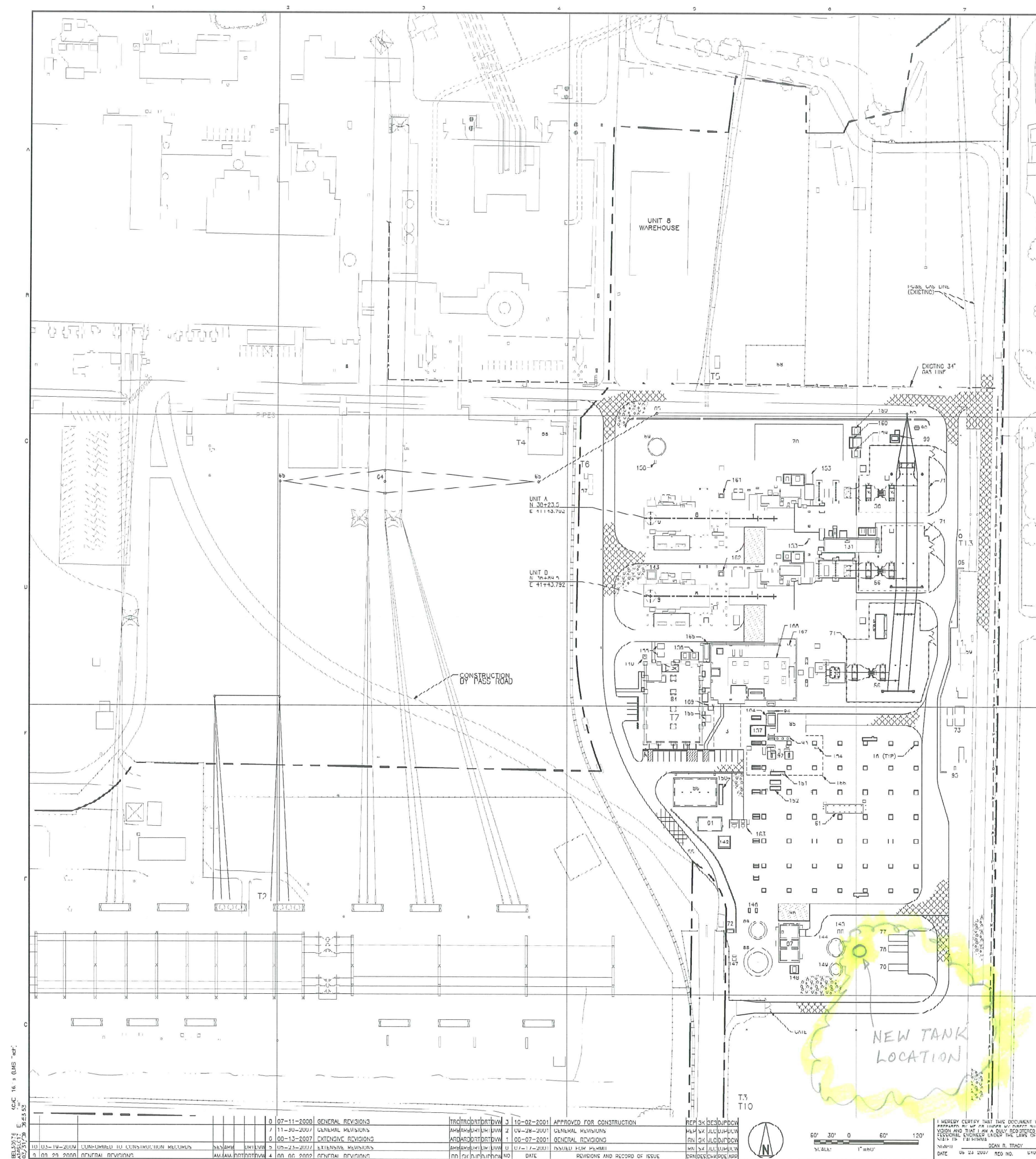
1. Adding One (1) Nominal 40,000 Gallons Storage Tank at the GGS Site – The current GGS facility configuration includes a nominal 100,000 gallons reclaimed water storage tank. This tank is used to contain reclaimed water generated from different sources in the plant, which includes the Heat Recovery Steam Generator (HRSG) blow-down water, and steam condensate. The reclaimed water is re-used in the Wet Surface Air Cooler (WSAC) system and HRSG. In the 2010 operation of the plant, it was found that additional storage capacity is needed to contain the additional volume of reclaimed water resulting from more frequent start-up/shut down activities. As a temporary measure, a 22,000-gallon portable (FRAC) tank is being used to contain the additional volume of reclaimed water.

- a. **Description of Modification:** This modification proposes to install a new nominal 40,000 gallons bolted carbon steel storage tank, which is the same specification for the existing waste water storage tank at the facility. The proposed tank will be used to contain the additional volume of reclaimed water produced during the increased frequency of start-up/shut down activities. This modification also includes the installation of additional forwarding pump, valves, and interconnecting pipes. The new tank will be located near the existing 100,000 gallon reclaimed water tank (See attached Facility Layout.). Also attached is the Design Drawing for details on equipment specification.

The new tank will provide extended retention time for the reclaimed water, originally at approximately 140 °F, to cool down below 100 °F for re-use in the system without the need to add significant volume of quenching water. By reducing the use of quenching water, the reclaimed water re-use rate is increased and the waste water discharge rate is decreased.

- b. **Necessity for the Modification:** Due to an increase in the frequency of start-up/shut down (cycling) activities, there is a need to contain the resulting additional volume of reclaimed water in a more efficient and safe manner.
- c. **Modification was not known at the time of Certification:** The need for this modification became apparent only after the unit began cycling more frequently.
- d. **If the modification is based on new information that changes or undermines the assumptions, rational, findings, or other bases of the final decision, an explanation of why the change should be permitted:** The modification does not change or undermine in any way the assumptions, rationale, findings, or other basis of the CEC Final Decision (00-AFC-1).

- e. **Analysis of the impacts the modification may have on the environment:**  
The additional tank will be installed next to the existing tanks in the facility, and will have no significant adverse impacts on the environment. This tank is equal in specification to the smallest tank in the tank farm area. The storage tank is above ground, and normally will have no leakage. As a result of the increased retention capacity, the facility will further reduce the overall amount of water usage and discharge, reducing our environmental impact.
- f. **Analysis of the impact of the modification on the facility's ability to comply with applicable laws, ordinances, regulations, and standards:** The proposed modification does not impact the facility's ability to comply with applicable laws, ordinances, regulations and standards.
- g. **A discussion of how the proposed modification affects the public:** This modification will have no adverse effect on the public. The change will not likely be noticeable to the public as it has a low profile configuration, located within the tank farm area and blends with other tanks from the outside view of the plant.
- h. **Property owners potentially affected by the modification:** It is anticipated that no property owners will be affected by this proposed modification.



FACILITIES LEGEND				
ID	FACILITY	FOUNDATION	ELEVATION LOCATION	
			NORTH	EAST
1	COMBUSTION TURBINE	S5011		
3	CRANE ACCESS/STEAM TURBINE MAINTENANCE AREA			
6	HEAT RECOVERY STEAM GENERATOR	S5037		
4	HEAT EXCHANGER STACK	S5037	SFF PLAN	SFF PLAN
16	AIR COOLED CONDENSER	S5601		
66	WASTE HOLD	S5101 & S5102		
66	SWITCHYARD			
67	OH/WATER COOLANT (EXISTING)			
68	AMMONIA STORAGE TANKS AND PUMPS (EXISTING)			
69	GAS MIXING VESSEL (EXISTING)			
61	ALL ELECTRICAL ENCLOSURE	S5080		
64	230KV 1141 LINE AREA			
65	230KV TUBULAR STEEL POLES			
66	UNIT 6 & 7 GAS CONDITIONING STATION (EXISTING)			
69	OH/WATER SEPARATOR DISCHARGE TANK			
70	OT INLET AIR CHILLER	S5670		
71	SECURITY FENCE (NEW)	S5111		
72	GUARDHOUSE (EXISTING)			
73	UNIT 6 GAS CONDITIONING STATION	S5420		
76	HYDROGEN BULK STORAGE	S5440		
77	CO2 BULK STORAGE	S5110		
78	NITROGEN BULK STORAGE	S5110		
84	AMMONIANT STORAGE BUILDING	S5601		
85	MORPH CRANE ACCESS FOR ST MAINTENANCE			
86	CLIPPER CYCLE COOLING WATER HEAT EXCHANGER	S5430		
87	FIRE WATER PUMP ENCLOSURE	S5020		
88	1141/230KV WASTE STORAGE TANK	S5020		
89	DOWN WATER STORAGE TANK	S5020		
90	21 KV SWITCHGEAR	S5230		
91	WET SURFACE AIR COOLER	S5640		
92	ALL CONDENSATE COLLECTION TANK	S5602		
93	CONDENSATE PUMPS	S5603		
94	PIPE RACK FOUNDATION	S5301		
95	RETAINING WALL	S5420		
96	MORPH WATER TREATMENT EQUIPMENT	S5432	3100.00	4420.00
99	21KV/114KV ALTERNATE FEED TRANSFORMER	S5103		
131	MAIN ELECTRICAL CONTROL ENCLOSURE	S5074		
110	SANITARY LIFT STATION	S5320		
141	NOT USED			
142	WASTEWATER SLIMP PIT	S5430		
143	DOWNFLOW PUMP	S5071		
144	WILLIAM WASTE STORAGE TANK	S5412		
145	WILLIAM WASTE STORAGE TANK	S5220		
146	DOWN WATER TRANSFER PUMPS	S5220		
147	DOWN WATER TRANSFER PUMPS	S5220		
148	FIRE WATER PUMP ENCLOSURE TRANSFORMER	S5401		
149	WASTE WATER STORAGE TANK	S5204		
150	DOWN MSC CABINET WITH INCH	S5630		
101	ACC 110000 EXTRACTOR & SILENCER DND	S5004		
102	ACC VACUUM PUMPS	S5004		
103	PIPE RACK - CT TO CHILLER	S5704		
104	ACC CLEANING WATER PUMP	S5003		
155	HMC EQUIPMENT FOUNDATION	S5520		
156	ADMIN/PLANT SERVICES BUILDING TRANSFORMER	S5101		
107	ACC DRAIN POT PIT	S5008		
108	OWS DISCHARGE TRANSFER PUMP	S5720		
109	CT INLET AIR CHILLER TRANSFORMER	S5607		
110	OT INLET AIR CHILLER SWIRLCHAM	S5101		
161	UNIT A FUEL GAS SCRUBBER & DRAIN TANK	S5083		
102	UNIT D FUEL GAS SCRUBBER & DRAIN TANK	S5083		
103	WET SURFACE AIR COOLER ALTERNATE FEED CHIM	S5431		
104	AMINE & DIETHAN SULFONIC ACID FEED SKID	S5430		
105	PHOSPHORIC ACID FEED SKID	S5430		
106	MISC ACID FEED SKID	S5020		
107	OT GLAD ON GRADE	S5031		
100	ST FOUNDATION	S5703		
109	CABLE TRAY SUPPORT FOUNDATION	S5709		

NOTES

1. SEE DRAWING 35079 FOR COMBUSTION TURBINE AREA COMPOSITE PLAN.

GENERAL LEGEND

ASPHALT PAVING

AGGREGATE SURFACING

CONCRETE

NEW FENCE

EXISTING FENCE

TERMINAL POINTS

T1 FUEL GAS

T2 ELECTRICAL TRANSMISSION

T3 POTABLE WATER (AT WILLIAM AVE)

T4 AMMONIA

T5 STEAMWATER DISCHARGE

T6 CONSTRUCTION POWER

T7 TELEPHONE

T10 SANITARY (AT WILLIAM AVE)

T13 ALTERNATE POWER FEED

BLACK & VEATCH

PACIFIC GAS & ELECTRIC CO.

GATEWAY GENERATING STATION

065108-8STU-S1001

10

SCALE: 1" = 100'

NO.	DATE	REVISIONS AND RECORD OF ISSUE
1	07-11-2000	GENERAL REVISIONS
2	11-30-2000	GENERAL REVISIONS
3	00-13-2001	EXTENSIVE REVISIONS
4	05-23-2001	EXTENSIVE REVISIONS
5	00-06-2002	GENERAL REVISIONS

APPROVED FOR CONSTRUCTION	DATE	REVISIONS AND RECORD OF ISSUE
10-02-2001	10-02-2001	GENERAL REVISIONS
09-28-2001	09-28-2001	GENERAL REVISIONS
09-07-2001	09-07-2001	GENERAL REVISIONS
07-17-2001	07-17-2001	GENERAL REVISIONS

DATE: 09-24-2007

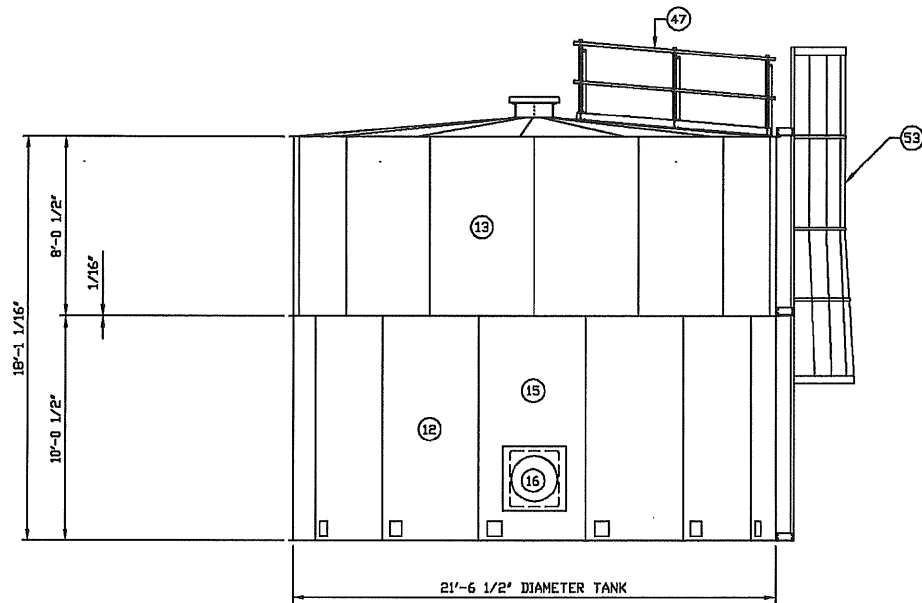
SCALE: 1" = 100'

PROJECT: GATEWAY GENERATING STATION

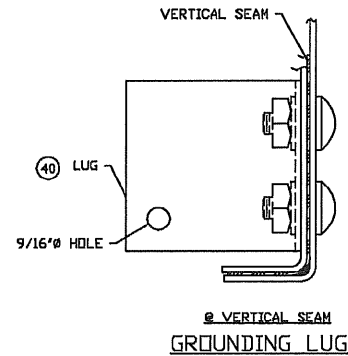
DRAWING NUMBER: 065108-8STU-S1001

THE DISTRIBUTION AND USE OF THE NATIVE FILE FORMAT OF THIS DRAWING OUTSIDE OF BLACK & VEATCH IS UNCONTROLLED AND SHALL BE USED FOR REFERENCE PURPOSES ONLY.

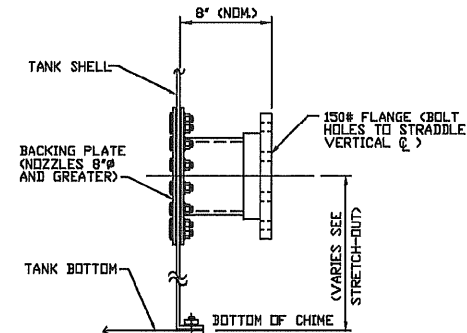




ELEVATION



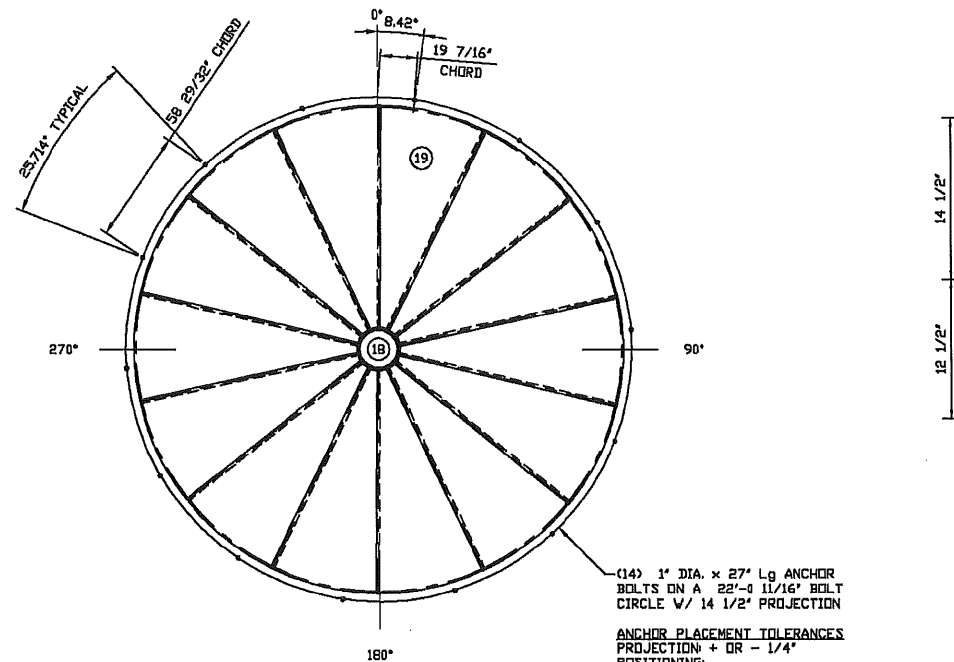
VERTICAL SEAM  
GROUNDING LUG



NOZZLE ELEVATIONS ARE REFERENCED FROM THE BOTTOM OF CHINE. FOR TANKS WITH CONCRETE FOUNDATIONS THE DISTANCE FROM THE TOP OF CONCRETE TO THE BOTTOM OF CHINE IS 5/8\"/>

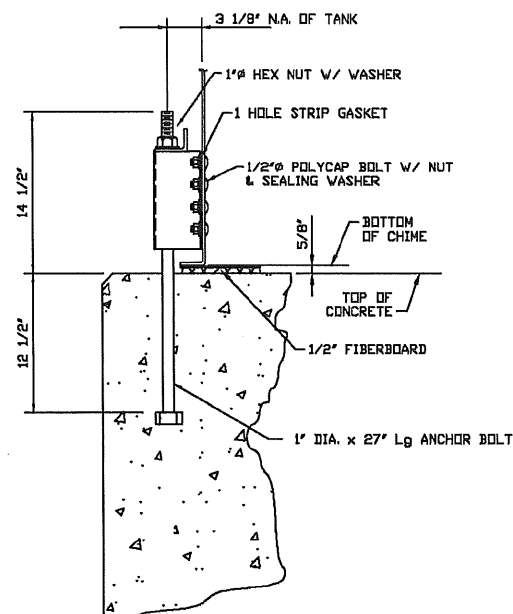
TYPICAL EXTERIOR  
NOZZLE INSTALLATION

NOTE:  
ALL NOZZLES ARE RADIAL UNLESS NOTED AS PARALLEL



BOTTOM PLAN

ANCHOR PLAN NOT TO SCALE



ANCHOR BOLT DETAIL

## WASTE WATER TANK

### NOTES:

- THIS BILL OF MATERIAL IS FOR ONE COMPLETE TANK.
- DRAWINGS REQUIRED FOR FIELD USE.
- INTERIOR AND BOTH SIDES OF BOTTOM PAINTED ONE COAT TRICO BOND EP @ THERMOSET CORROSION RESISTANT POWDER EPOXY (7 MILS AVERAGE, DFT). EXTERIOR ONE COAT TRICO BOND EP @ POWDER EPOXY WITH FINISH COAT OF BAKED ON (SHERWIN WILLIAMS FUNCTIONAL GRAY-SW-7024) PERFORMANCE URETHANE (4.5 MILS AVERAGE, DFT).
- WATER STORAGE TANK DESIGNED IN ACCORDANCE WITH AWWA D103-97 SPEC. SEISMIC ZONE 4, I=1.25, RW=4.50, S=1.50 PER AWWA, 100 MPH WINDLOAD PER AWWA, 25 PSF LIVE DECK LOAD, SPECIFIC GRAVITY = 1.0.
- STAVE SHOP DRAWING REQUIRED FOR FABRICATION. OTHERWISE, USE STRETCH OUT DRAWING FOR FABRICATION.
- STANDARD CENTER DOME WITH VENT (20") WILL RELIEVE 24 CFS (11,000 GPM) WHEN CLEAN. ADDITIONAL VENTING TO PREVENT A VACUUM GREATER THAN 0.4 OZ PER SQUARE INCH IS THE RESPONSIBILITY OF THE OWNER.
- FIBERBOARD SHALL BE INSTALLED IN ACCORDANCE WITH AWWA D103-97, SECTION 11.4.

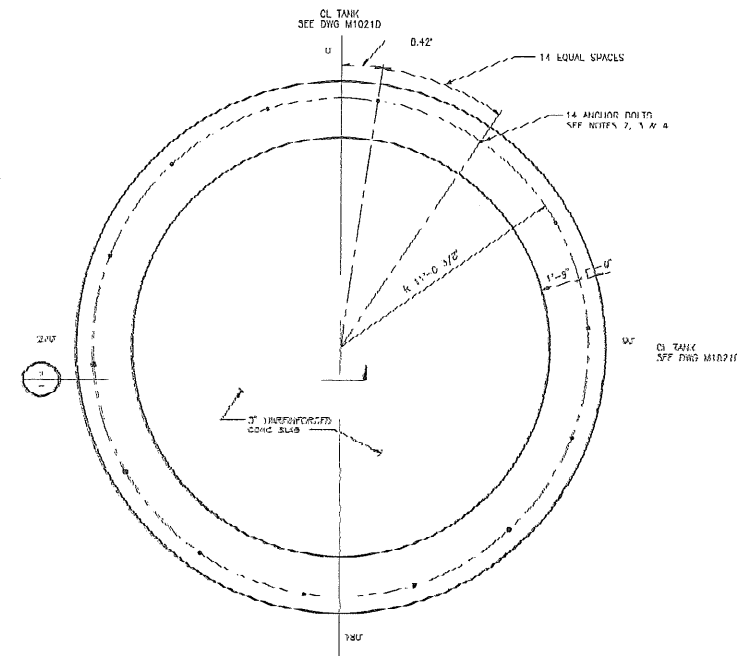
### MATERIAL LIST FOR TANK

ITEM	PART NUMBER	DESCRIPTION	QUANTITY
1	201T12021	STD. 12 GA DECK SHEET	13
2	353T00001	MANHOLE COLLAR W/20" VENT (28 HL)	1
3	201T1221-075819A	STD. 12 GA DECK SHEET W/ (2) 24" DIA. MANWAY OPNGS	1
4			
5	510T04021	MANHOLE SUPT. 2" X 2" X 1/4" ANGLE X 20 3/4"	2
6	400T07252	DECK SUPT. BEAM C7X 9.8 X 21'-0" LG.	2
7	378T06021	HANGER FOR DECK BEAM	4
8	18-06-3059-00	ANGLE 1 1/2" X 1 1/2" X 1/8" (59 HOLE)	14
9	520T04019	DECK SUPT. CROSS BRACE C4 X 5.4 X 19 3/8" LG	4
10	521T02004	CLIP ANGLE	8
11			
12	115T1212101	12 GA X 60" SP STV X 120 1/2" W/1 STR PCH	7
13	112T1212100	12 GA X 60" SP STV X 96 1/2"	14
14			
15	115T1212101J	12 GA X 60" SP STV X 120 1/2" W/1 STR PCH W/24" DIA SHELL NW OPNG	2
16	83662PW06421	24" DIA. DOUBLE PUNCH SHELL MANWAY KIT	2
17			
18	351T10001	10 GA BOTTOM CENTER COVER (28 HL)	1
19	226T12021	12 GA FLAT BOTTOM SHEET	14
20			
21			
22	8PW1010703P	ANCHOR BOLT KIT 1" DIA. X 27" LG	14
23			
24	115T1221-075819A	12 GA X 60" SP STV X 120 1/2" W/1 STR PCH W/3" NZL DPNG	1
25	115T1221-075819B	12 GA X 60" SP STV X 120 1/2" W/1 STR PCH W/6" NZL DPNG	1
26	115T1221-075819C	12 GA X 60" SP STV X 120 1/2" W/1 STR PCH W/6" NZL DPNG	1
27	115T1221-075819D	12 GA X 60" SP STV X 120 1/2" W/1 STR PCH W/3" NZL DPNG	1
28	115T1221-075819E	12 GA X 60" SP STV X 120 1/2" W/1 STR PCH W/2" NZL DPNG	1
29			
30	8704BPW020R0	2" EXTERIOR RF NOZZLE KIT	1
31	8704BPW030R0	3" EXTERIOR RF NOZZLE KIT	2
32	8704BPW060R1	6" EXTERIOR RF NOZZLE KIT	2
33			
34			
35	350T2400-075096A	24" HILLSIDE COLLAR ASSY	2
36	754W00040	MANWAY GASKET (40 HOLES)	4
37	349T0024-075097A	24" MANWAY COLLAR PLATE (40) HOLES	2
38			
39			
40	390T0205-046478A	GROUNDING LUG- 5' X 2' X 1/4" X 3 1/2" LG.	4
41	8708BGW020WT	2" DIA - BLIND FLG KIT (EPDM) BLIND FLANGE KIT WT	1
42	8708BGW030WT	3" DIA - BLIND FLG KIT (EPDM) BLIND FLANGE KIT WT	2
43	8708BGW060WT	6" DIA - BLIND FLG KIT (EPDM) BLIND FLANGE KIT WT	2
44			
45			
46			
47	07-5819-ES-S1	RADIAL SEAM GUARDRAIL (BOLTED ASSY)	1
48			
49			
50	795ASPEXJT48	ASPHALT IMPREGNATED FIBERBOARD 5'-0" X 48"	22
51	10-09-0654-35	LIQUID TANK - NAMEPLATE	1
52			
53	07-5819-ES-S2	EXTERIOR LADDER - WELDED W/CAGE	1
54			
55			
56	L-M 01/02	ERECTION MANUAL	1
57			
58			
59	921T018-075819A	ELEVATION, BOTTOM PLAN & BILL OF MATERIAL	1
60	921T018-075819B	STRUCTURE & DECK PLAN - CROSS BEAM SUPPORTED	1
61	921T018-075819C	TANK STRETCH-OUT	1
62	921T018-075819D	LIQUID TANK DETAILS	1
63			

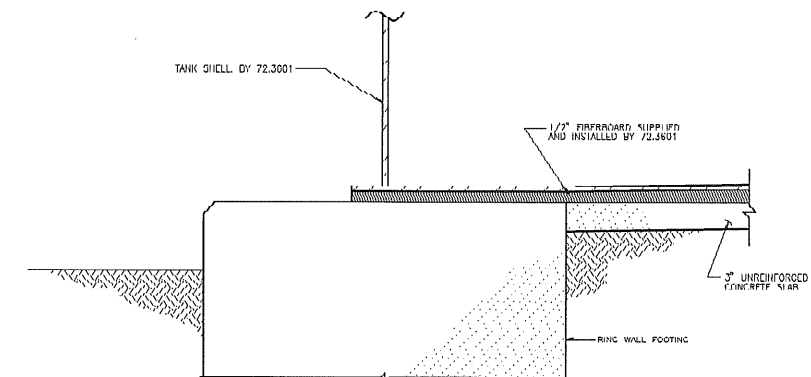
OWNER: PG&E  
PROJECT: GATEWAY GENERATING STATION  
NUMBER: 065108.72.3601  
TAG# 8WWC-TNK-X1  
NAME: WASTE WATER TANK

REV. & RE-SUBMIT FOR FINAL REVIEW & REL FOR FAB. PER CHANGE ORDER-43 DATED 10/8/07		11/19/07	MVH	RDR
REV. & RE-SUBMIT PER CHANGE ORDERS-41 & 42.		10/8/07	MVH	RDR
<div> <div> </div> <div> ELEVATION, BOTTOM &amp; BILL OF MATERIAL FOR: BLACK &amp; VEATCH ANN ARBOR, MI, USA </div> </div>				
DRAWN BY MVH CHECKED BY JDB	ORDER NO. 07-5819 APPROVED BY RDR	DATE 14 Aug 2007	SWG NO. 921T018-075819A	

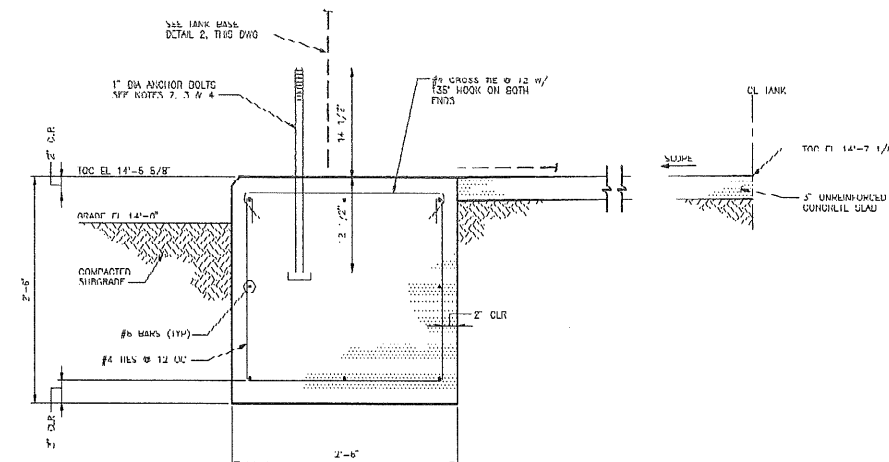
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WASTEWATER TANK FOUNDATION  
SCALE: 1/4\"/>



DETAIL 2  
NOT TO SCALE  
SEE THIS DWG



SECTION 1  
SCALE: 1/4\"/>

CONCRETE TOTALS FOR THIS DRAWING: 18.00 CY  
\* FOR TACKLING PURPOSES ONLY

# NOTES

- SEE DRAWING 05950 FOR GENERAL NOTES, LEGEND AND TYPICAL DETAILS.
- ANCHOR BOLTS SUPPLIED BY TANK VENDOR CONTRACT 72.4601. ANCHORS INSTALLED BY 72.0402.3.
- ANCHOR BOLTS SHALL BE USUALLY SPACED AND ANCHOR CIRCUMFERENCE.
- ANCHOR PLACEMENT TO CRACKS:  
PROJECTION: + OR - 1/4"  
BUSHING: MINIMUM 4 1/4" MIN  
CHORD: + OR - 1/4" (NON-ACCUMULATIVE)  
PLUMBNESS: 3 DEGREES FROM VERTICAL
- ALL WORK ON THIS DRAWING BY CONTRACT 71.0402.3, UNLESS OTHERWISE NOTED.

THE DISTRIBUTION AND USE OF THE NATIVE FILE FORMAT OF THIS DRAWING OUTSIDE OF BLACK & VEATCH IS UNCONTROLLED AND SHALL BE USED FOR RE-USE PURPOSES ONLY.

REVISIONS  
DATE  
BY  
DESCRIPTION

NO.	DATE	REVISIONS AND RECORD OF ISSUE	DESIGNED	CHECKED	APPROVED
1	02-11-2000	ADDED DETAIL 2	ADAR	ADAR	ADAR
2	03-10-2000	CONFORMS WITH CONSTRUCTION RECORDS-NIC	ADAR	ADAR	ADAR
3	10-14-2007	ISSUED APPROVED FOR CONSTRUCTION	ADAR	ADAR	ADAR



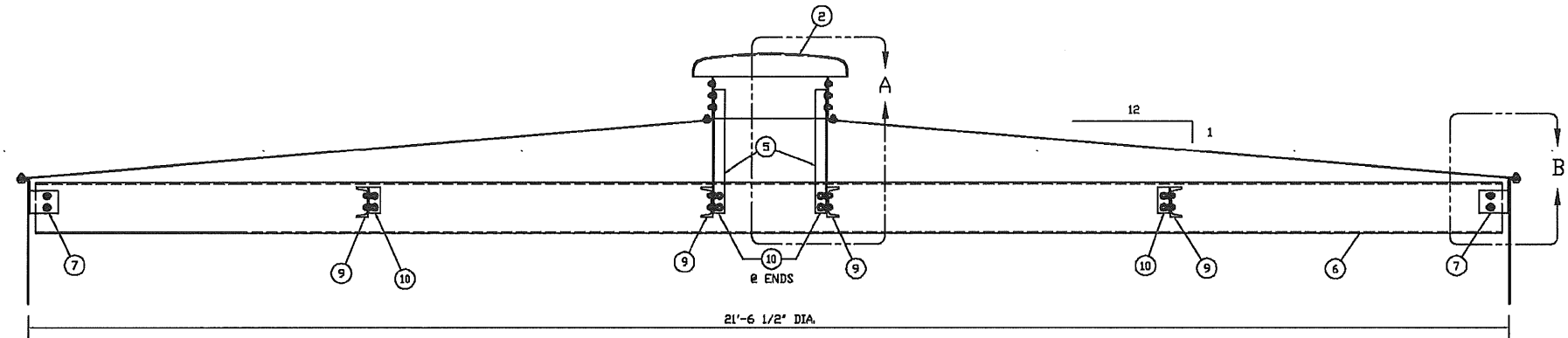
SCALE: AS NOTED

I HEREBY CERTIFY THAT THE DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A duly licensed PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF CALIFORNIA.

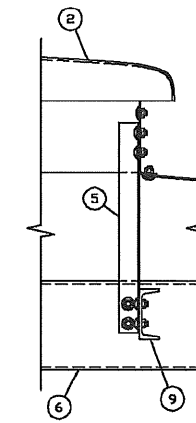
BLACK & VEATCH  
CONSTRUCTION, INC.  
DATE: 10/10/2007  
REV NO: 010003

PACIFIC GAS & ELECTRIC CO.  
GAIL WAY GENERATING STATION  
FOUNDATIONS, WASTEWATER TANK  
PLAN, SECTIONS & DETAILS

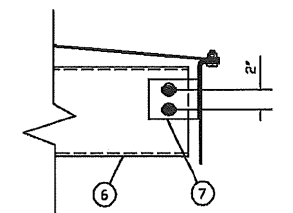
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CODE: 0000  
DATE: 10/10/2007



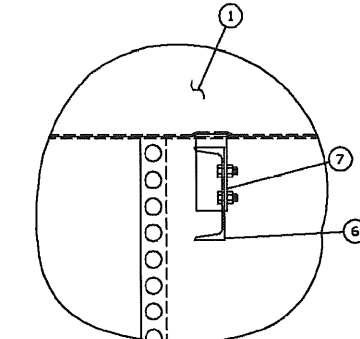
SECTION A-A



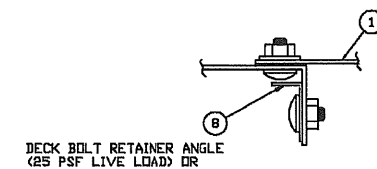
DETAIL-A



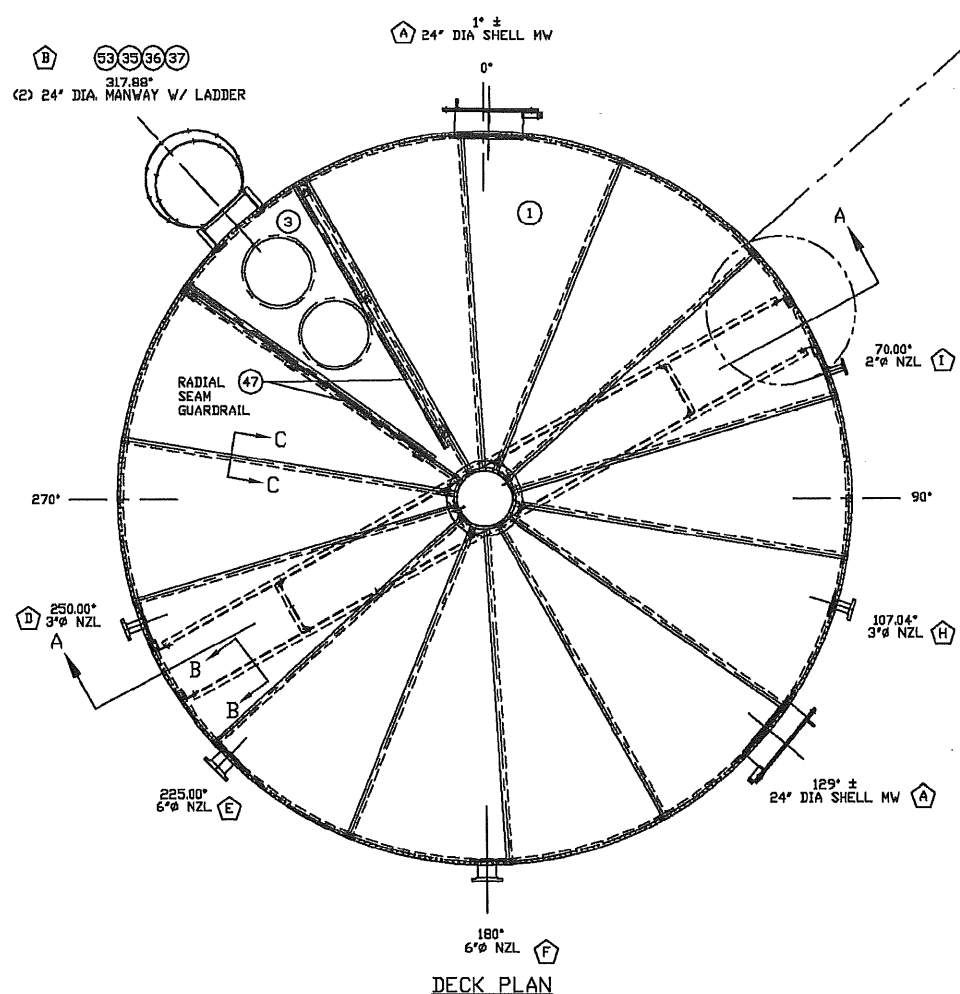
DETAIL-B  
BEAM & HANGER



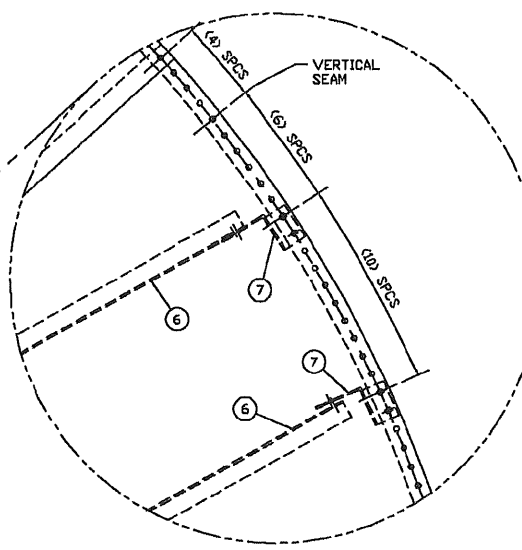
SECTION B-B




SECTION C-C  
DECK SEAM



DECK PLAN



OWNER: PG&E  
PROJECT: GATEWAY GENERATING STATION  
NUMBER: 065108.72.3601  
TAG# 8WWC-TNK-X1  
NAME: WASTE WATER TANK

REV & RE-SUBMIT FOR FINAL REVIEW & REL FOR FAB. PER CHANGE ORDER-#3, DATED 11/8/07.		11/13/07	MVH	RDR
REV & RE-SUBMIT PER CHANGE ORDER-#1 & #2.		10/8/07	MVH	RDR
REV	REVISION	DATE	BY	APP.
 STRUCTURE & DECK PLAN 21'-6 1/2" x 18' HIGH TANK FOR: BLACK & VEATCH ANN ARBOR, MI, USA				
DRAWN BY MVH		ORDER NO. 07-5819	DATE 9 Dec 2007	DWG. NO. 921T018-075819B
CHECKED BY JDB		APPROVED BY RDR		
CONFIDENTIAL / TRADE SECRETS: BY ACCEPTING POSSESSION OF THIS DOCUMENT, RECIPIENT AGREES THAT ITS CONTENTS ARE CONFIDENTIAL, PROPRIETARY TRADE SECRETS OF COLUMBIAN TECTANK. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED, DISTRIBUTED OR USED IN ANY MANNER WITHOUT WRITTEN PERMISSION FROM COLUMBIAN TECTANK.				