

GENERAL NOTES

A. PROVIDE PULL CORDS IN ALL SPARE RACEWAYS.

REVISIONS			REVISIONS		
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION
13	01/25/2012	ISSUED FOR PD BUILDING VALUE ENGINEERING REVIEW AND COMMENTS	1	02/26/2010	ISSUED FOR ELECTRICAL SUBCONTRACTOR SELECTION
14	04/18/2012	ISSUED FOR BUILDING PERMIT SUBMITTAL TO PRRD (PUMP AND DISINFECTION BLDG)	2	08/09/2010	REVISE POWER LOADS
15	05/21/2012	ISSUED FOR CONSTRUCTION PER PRRD BLDG PERMIT #8893 (PUMP AND DISINFECTION BLDG)	3	10/28/2010	ADD NOTES AT EQUIP & MAINT BLDG & BLOWER BLDG
16	06/21/2012	ISSUED FOR BUILDING PERMIT SUBMITTAL TO PRRD (BLOWER BUILDING)	4	03/30/2011	ISSUED FOR BUILDING PERMIT SUBMITTAL TO PRRD (SECONDARY CLARIFIER COMPLEX)
17	06/29/2012	ISSUED FOR BUILDING PERMIT SUBMITTAL TO PRRD (OPERATIONS BUILDING)	5	05/17/2011	ISSUED FOR PREPARATION OF CMO
18	06/15/2012	ISSUED FOR CONSTRUCTION PER PRRD BUILDING PERMIT #135220 (OPERATIONS BLDG)	6	06/20/2011	ISSUED FOR BUILDING PERMIT SUBMITTAL TO PRRD (HEADWORKS BUILDING)
19	11/29/2012	ISSUED FOR VALUE ENGINEERING REVIEW AND PRICING	7	06/10/2011	ISSUED FOR CONSTRUCTION (SECONDARY CLARIFIER COMPLEX)
20	12/12/2012	ISSUED FOR BUILDING PERMIT SUBMITTAL TO PRRD (AERATION BASINS)	8	08/05/2011	ISSUED FOR CONSTRUCTION PER PRRD BUILDING PERMIT #8510 (HEADWORKS BLDG)
21	01/07/2013	ISSUED FOR BUILDING PERMIT SUBMITTAL TO PRRD (BIOSOLIDS HANDLING COMPLEX)	9	10/17/2011	ES NO. 013
22	01/17/2013	REVISIONS PER DEWATERING EQUIPMENT SUPPLIER'S REVISED PROPOSAL	10	11/23/2011	ISSUED FOR BUILDING PERMIT SUBMITTAL TO PRRD (EQUIP. MAINT. & STOR. BLDG)
23	01/29/2013	ISSUED FOR CONSTRUCTION PER PRRD PERMIT #H4746 (AERATION BASINS)	11	01/06/2012	ISSUED FOR VALUE ENGINEERING
24	03/14/2013	ISSUED FOR CONSTRUCTION PER PRRD BLDG PERMIT #65132 (BIOSOLIDS HANDLING COMPLEX)	12	01/09/2012	ISSUED FOR CONSTRUCTION PER PRRD BUILDING PERMIT #H3003 (EQUIP. MAINT. & STOR. BLDG)

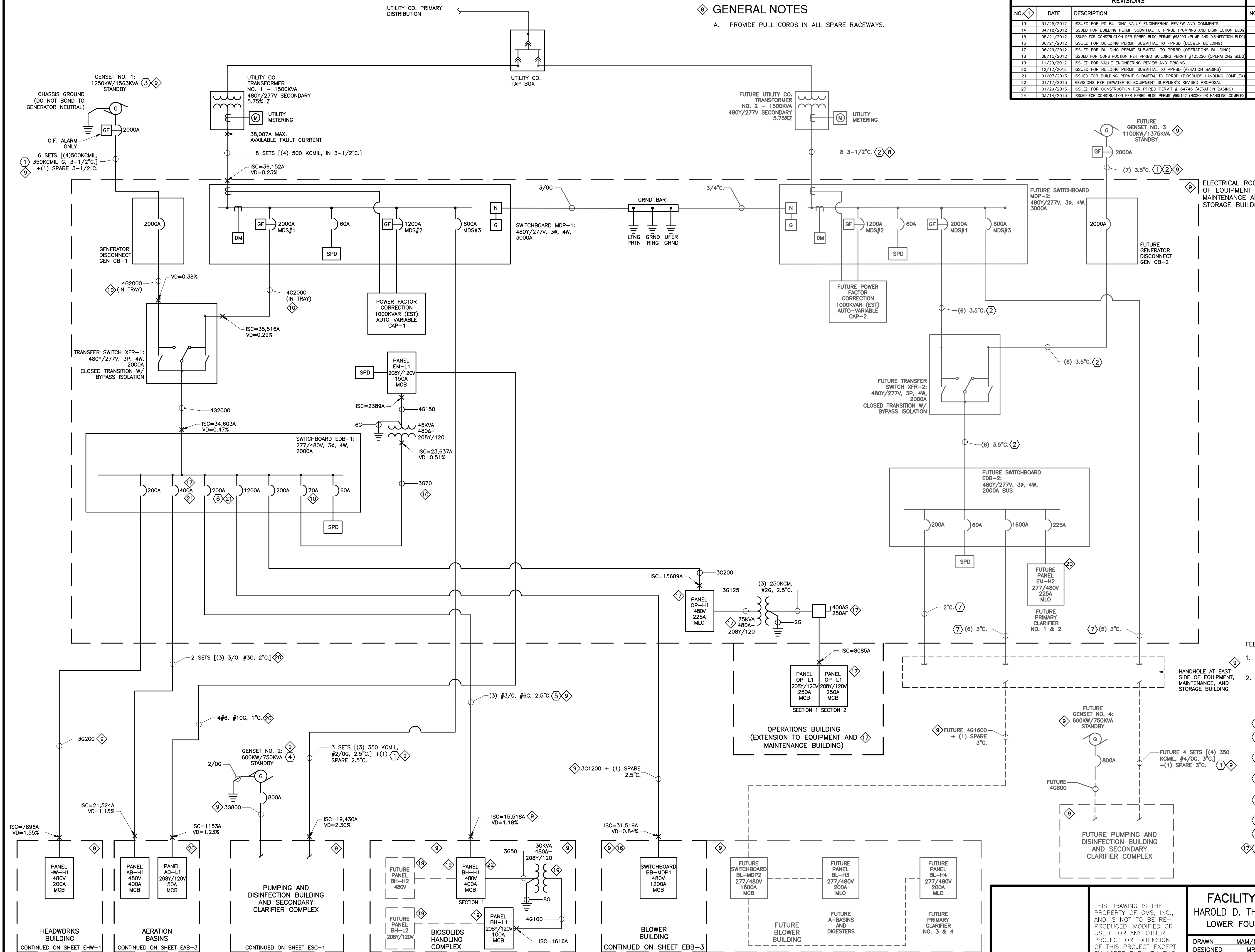
FEEDER SCHEDULE	
TAG NO.	CONDUCTORS AND CONDUIT
4 WIRE + GROUND	
4G20	4#12, #12G, 3/4" C
4G30	4#10, #10G, 3/4" C
4G40	4#8, #10G, 3/4" C
4G50	4#6, #10G, 1" C
4G60	4#6, #10G, 1" C
4G70	4#4, #8G, 1-1/4" C
4G80	4#3, #8G, 1-1/4" C
4G90	4#2, #8G, 1-1/4" C
4G100	4#2, #8G, 1-1/4" C
4G125	4#1, #6G, 1-1/2" C
4G150	4#1/0, #6G, 2" C
4G175	4#2/0, #6G, 2" C
4G200	4#3/0, #6G, 2" C
4G225	4#4/0, #4G, 2-1/2" C
4G250	4-250KCMIL, #4G, 3" C
4G300	4-350KCMIL, #4G, 3" C
4G350	4-500KCMIL, #3G, 3-1/2" C
4G400	4-500KCMIL, #3G, 3-1/2" C
4G500	2 [4-250KCMIL, #2G, 3" C]
4G600	2 [4-350KCMIL, #1G, 3" C]
4G800	2 [4-500KCMIL, #1/0G, 3-1/2" C]
4G1000	3 [4-400KCMIL, #2/0G, 3" C]
4G1200	4 [4-350KCMIL, #3/0G, 3" C]
4G1600	5 [4-400KCMIL, #4/0G, 3" C]
4G2000	6 [4-400KCMIL, #250KCMILG, 3-1/2" C]
4G2500	7 [4-500KCMIL, #350KCMILG, 3-1/2" C]
4G3000	8 [4-500KCMIL, #400KCMILG, 3-1/2" C]
3 WIRE + GROUND	
3G20	3#12, #12G, 3/4" C
3G30	3#10, #10G, 3/4" C
3G40	3#8, #10G, 3/4" C
3G50	3#6, #10G, 3/4" C
3G60	3#6, #10G, 3/4" C
3G70	3#4, #8G, 1" C
3G80	3#3, #8G, 1" C
3G90	3#2, #8G, 1-1/4" C
3G100	3#2, #8G, 1-1/4" C
3G125	3#1, #6G, 1-1/4" C
3G150	3#1/0, #6G, 1-1/4" C
3G175	3#2/0, #6G, 2" C
3G200	3#3/0, #6G, 2" C
3G225	3#4/0, #4G, 2" C
3G250	3-250KCMIL, #4G, 2-1/2" C
3G300	3-350KCMIL, #4G, 2-1/2" C
3G350	3-500KCMIL, #3G, 3" C
3G400	3-500KCMIL, #3G, 3" C
3G500	2 [3-250KCMIL, #2G, 2-1/2" C]
3G600	2 [3-350KCMIL, #1G, 2-1/2" C]
3G800	2 [3-500KCMIL, #1/0G, 3" C]
3G1000	3 [3-400KCMIL, #2/0G, 2-1/2" C]
3G1200	4 [3-350KCMIL, #3/0G, 2-1/2" C]
3G1600	5 [3-400KCMIL, #4/0G, 3" C]
3G2000	6 [3-400KCMIL, #250KCMILG, 3" C]
3G2500	7 [3-500KCMIL, #350KCMILG, 3" C]
3G3000	8 [3-500KCMIL, #400KCMILG, 3" C]
GROUNDING ELECTRODE CONDUCTORS	
8G	#8G
6G	#6G
4G	#4G
2G	#2G
1/0G	#1/0G
2/0G	#2/0G
3/0G	#3/0G

FEEDER SCHEDULE NOTES:

- CONDUCTOR SIZE BASED ON AMPACITY OF COPPER CONDUCTORS AS LISTED IN NEC TABLE 310.16C.
- CONDUIT SIZES BASED ON TYPE THWN CONDUCTOR INSULATION.

KEYED NOTES

- FEEDER UPSIZED TO REDUCE VOLTAGE DROP.
- EXTEND CONDUITS TO FUTURE EQUIPMENT LOCATION AND PROVIDE PULL CORD.
- GENERATOR NO. 1 MINIMUM SITE RATED STARTING SURGE CAPACITY: 1523KW/4602KVA.
- GENERATOR NO. 2 MINIMUM SITE RATED STARTING SURGE CAPACITY: 824KW/2944KVA.
- CONDUIT UPSIZED TO ALLOW FUTURE UPSIZING OF BIOSOLIDS BUILDING FEEDER.
- 400A FRAME WITH 200A RATING PLUG.
- EXTEND CONDUITS TO HANDHOLE AND PROVIDE PULL CORD.
- EXTEND CONDUIT 5' BEYOND BUILDING FOUNDATION, PROVIDE PULL CORD, AND CAP OFF.



1 FACILITY ONE-LINE DIAGRAM
ED-1 SCALE: NONE

THIS DRAWING IS THE PROPERTY OF GMS, INC., AND IS NOT TO BE REPRODUCED, MODIFIED OR USED FOR ANY OTHER PROJECT OR EXTENSION OF THIS PROJECT EXCEPT BY AGREEMENT WITH THIS COMPANY.

FACILITY ELECTRICAL ONE-LINE DIAGRAM
HAROLD D. THOMPSON REGIONAL WATER RECLAMATION FACILITY
LOWER FOUNTAIN METROPOLITAN SEWAGE DISPOSAL DISTRICT

DRAWN	MAM/MAL
DESIGNED	MR
CHECKED	CP
DATE	2010
PROJECT NO.	20166.330
GMS FILE NO.	2599

GMS, INC.
CONSULTING ENGINEERS
611 N. WEBER, SUITE 300
COLORADO SPRINGS, COLORADO 80903

SHEET **ED-1** OF -

G:\ANS\2010\166330\ED1.dwg, ED1, 3/14/2010 2:20:23 PM, K. DWG TO PDF, 1:1