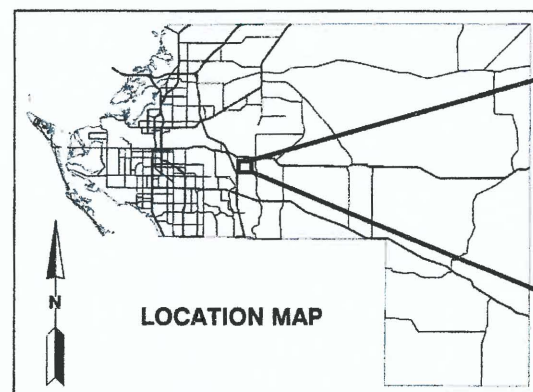


2017 PHASE III GCCS EXPANSION STAGE III - LENA ROAD LANDFILL MANATEE COUNTY, FLORIDA

RFP# 11-2064 FL

PREPARED FOR

MANATEE COUNTY UTILITIES DEPARTMENT
3333 LENA ROAD
BRADENTON, FLORIDA



SITE LOCATION

DRAWING NO.	DRAWING TITLE
1	- COVER SHEET
2	- GENERAL NOTES AND SYMBOLS
3	- EXISTING OVERALL SITE PLAN
4	- EXISTING STAGE III SITE PLAN
5	- PROPOSED SITE PLAN
6	- DETAILS - 1
7	- DETAILS - 2
8	- DETAILS - 3
9	- DETAILS - 4
10	- DETAILS - 5
11	- DETAILS - 6
12	- DETAILS - 7

**SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS**

4041 PARK OAKS BLVD., SUITE 100
TAMPA, FLORIDA 33610

PH NO. (813) 621-0080 FAX NO. (813) 623-6757
WWW.SCSENGINEERS.COM

WHEN DRAWINGS ARE REDUCED IN SIZE FROM
ORIGINAL 24"X36", SCALING WILL NOT BE
ACCURATE

BID DRAWINGS

DATE: 05/05/2017



DANIEL R. COOPER, P.E.
LICENSE NO. 66440

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SPECIFIC NOTES:

- 2 WEEKS PRIOR TO INITIATING WORK, THE CONTRACTOR WILL SUBMIT FOR APPROVAL A SCHEDULE TO THE ENGINEER FOR COMPLETION OF THE PROJECT.
- ALL CONSTRUCTION ACTIVITIES PERFORMED ON THE LANDFILL WILL BE COMPLETED IN ACCORDANCE WITH THE CURRENT AIR AND SOLID WASTE PERMIT.

EROSION AND SEDIMENT CONTROL:

- ALL PRACTICABLE AND NECESSARY EFFORT SHALL BE TAKEN DURING CONSTRUCTION TO CONTROL AND PREVENT EROSION AND TRANSPORT OF SEDIMENT MATERIAL TO INLETS, SURFACE DRAINS, WETLANDS AND DETENTION AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RESTORATION EFFORTS THAT MAY BE REQUIRED.
- CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND AIR AND WATER POLLUTION WILL BE MINIMIZED. STATE AND LOCAL LAWS SHALL BE COMPLIED WITH AT ALL TIMES.
- PROVIDE ALL DISTURBED AREAS WITHIN THE LIMITS OF THE WORK WITH TEMPORARY SOIL EROSION CONTROL AND SEDIMENT CONTROL, UTILIZING EARTH DAMS & PONDS, GRADE TO DRAIN SWALES, SETTLING BASINS, SILT FENCES, STONE FILTERS, HAY BALE FILTERS, ETC., TREATING ALL SOIL SURFACES WITH SEEDED TOPSOIL AND/OR SOD AFTER GRADING. SEE GENERAL NOTES NO. 15.
- EROSION AND SEDIMENT CONTROL WILL BE INSTALLED PRIOR TO CONSTRUCTION, AS NECESSARY, TO PREVENT SEDIMENTATION AND DAMAGE TO ADJACENT AREAS AND AS DIRECTED BY THE COUNTY'S REPRESENTATIVE AND SHALL BE MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
- CONTRACTOR WILL INSPECT AND REPAIR, AS NECESSARY, ANY EROSION AND SEDIMENT CONTROL DAILY AND FOLLOWING EACH RAIN.
- CONTRACTOR IS RESPONSIBLE FOR MONITORING DOWNSTREAM CONDITIONS THROUGHOUT THE CONSTRUCTION PERIOD AND CLEARING ANY DEBRIS AND SEDIMENT RESULTING FROM CONSTRUCTION.
- CONTRACTOR SHALL ENSURE THE MINIMUM AMOUNT OF BARE SOIL EXPOSED AT ONE TIME AND INSTALL SOIL EROSION CONTROL FENCES AS SHOWN AND IN SUCH A MANNER AS TO CAPTURE AND FILTER SURFACE WATER DURING CONSTRUCTION.
- EROSION CONTROL FENCING MUST MEET THE REQUIREMENT OF THE DEPARTMENT OF TRANSPORTATION, STATE OF FLORIDA STANDARD SPECIFICATIONS. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES.
- ALL DISTURBED AREAS WITHIN THE LIMITS OF CONSTRUCTION SHALL RECEIVE VEGETATIVE TREATMENT AFTER FINAL GRADING IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS. DISTURBED AREAS NOT SPECIFICALLY DESIGNATED WITH A VEGETATIVE COVER SHALL BE SODDED UNLESS OTHERWISE DIRECTED. SEE GENERAL NOTES NO. 15.

EARTHWORK:

- SURVEY BENCHMARKS, MONUMENTS AND OTHER REFERENCE POINTS WILL BE PROTECTED FROM DAMAGE AND DISPLACEMENT. IF DISTURBED OR DESTROYED, THEY WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL KEEP DIRT, DUST, NOISE AND OTHER OBJECTIONABLE NUISANCES TO A MINIMUM.

UTILITIES:

- THERE MAY BE UTILITIES NOT SHOWN ON THESE PLANS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR LOCATIONS SHOWN AND IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATIONS OF ALL UTILITIES WITHIN THE LIMITS OF THE WORK PRIOR TO CONSTRUCTION. COUNTY WILL ASSIST WITH UTILITY LOCATES. SUNSHINE 811 UTILITY LOCATORS WILL NOT PROVIDE UTILITY LOCATES ON SITE BECAUSE SITE IS CONSIDERED PRIVATE PROPERTY.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL EXISTING UTILITIES, PAVEMENT OR OTHER IMPROVEMENTS. ANY DAMAGE TO EXISTING UTILITIES AND/OR PAVED/STREETS CAUSED BY CONSTRUCTION OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- UNDERGROUND FACILITIES WHETHER INDICATED OR NOT, WILL BE LOCATED AND FLAGGED BY THE UTILITIES AT THE REQUEST OF THE CONTRACTOR. NO EXCAVATION WILL BE PERMITTED IN THE AREA UNTIL ALL SUCH UNDERGROUND UTILITIES HAVE BEEN LOCATED AND IDENTIFIED TO THE SATISFACTION OF ALL PARTIES AND THEN ONLY WITH EXTREME CARE TO AVOID ANY POSSIBILITY OF DAMAGE TO THE UTILITY LINES.
- THE CONTRACTOR SHALL KEEP ALL WATER, GAS AND EXISTING SEWER LINES (AND THEIR APPURTENANCES) FREE OF DEBRIS AND OPERABLE AT ALL TIMES DURING CONSTRUCTION.

GENERAL NOTES:

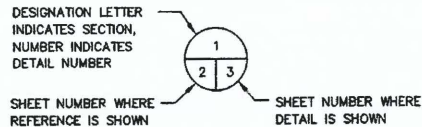
- THE CONTRACTOR IS ADVISED THAT NO ACTIVITIES MAY INTERFERE, DISRUPT, BLOCK, OR OTHERWISE CONFLICT WITH LANDFILL OPERATIONS. IF CONFLICTS ARE ANTICIPATED THEY SHALL BE COORDINATED AND APPROVED BY THE COUNTY AND ENGINEER PRIOR TO DISRUPTION.
- PROJECT SITE IS A SOLID WASTE LANDFILL. AS SUCH, CONDITIONS ARE SUBJECT TO CHANGE WITH TIME, CONTROLS, IN PARTICULAR VERTICAL CONTROL, SHOULD BE EXPECTED (AND ANTICIPATED) TO VARY FROM THOSE SHOWN ON THESE DRAWINGS DUE TO ONGOING SUBSIDENCE RESULTING FROM REFUSE DECOMPOSITION. RELATIVE ELEVATION DIFFERENCES IN EXISTING AND PROPOSED ELEVATIONS SHOWN ON THE DRAWINGS SHALL BE ADJUSTED ACCORDINGLY. LOCATION OF STRUCTURES SHALL BE PLACED IN ACCORDANCE WITH HORIZONTAL CONTROLS. VERTICAL PLACEMENT OF STRUCTURES SHALL BE IN ACCORDANCE WITH CONSTRUCTION DOCUMENTS, OR AS APPROVED BY THE ENGINEER.
- ANY AND ALL FINES IMPOSED ON THE COUNTY BY ANY REGULATORY AGENCY DUE TO ACTION OF THE CONTRACTOR SHALL BE PAID BY THE CONTRACTOR.
- INSPECTION: EXAMINE AREAS FOR CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED. REPORT IN WRITING TO COUNTY'S REPRESENTATIVE ALL CONDITIONS CONTRARY TO THOSE SHOWN ON THE DRAWINGS OR SPECIFIED HEREIN AND ALL OTHER CONDITIONS THAT WILL AFFECT SATISFACTORY EXECUTION OF WORK. DO NOT PROCEED WITH WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED. STARTING WORK CONSTITUTES ACCEPTANCE OF THE CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED. AFTER SUCH ACCEPTANCE, THE CONTRACTOR SHALL AT CONTRACTORS EXPENSE BE RESPONSIBLE FOR CORRECTING ALL UNSATISFACTORY AND DEFECTIVE WORK RESULTING FROM SUCH UNSATISFACTORY CONDITIONS.
- ALL WORK SHALL BE PERFORMED IN A QUALITY WORKMANLIKE MANNER.
- DEVIATIONS FROM THESE PLANS AND SPECIFICATIONS WITHOUT PRIOR WRITTEN CONSENT OF THE ENGINEER OR COUNTY MAY CAUSE THE WORK TO BE UNACCEPTABLE AND WILL BE ADJUSTED OR REPAIRED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY LICENSES AND PERMITS ASSOCIATED WITH THE CONSTRUCTION OF THIS PROJECT UNLESS NOTIFIED OTHERWISE IN WRITING BY THE OWNER.
- ALL WORK SHALL HAVE A ONE YEAR WARRANTY. ONE YEAR WARRANTY WILL BECOME EFFECTIVE WHEN THE PROJECT IS SUBSTANTIALLY COMPLETE, AS DETERMINED BY THE ENGINEER.
- ACTUAL DIMENSIONS AND LOCATIONS MAY VARY BASED ON FIELD LOCATIONS.
- TERMS "COUNTY'S REPRESENTATIVE" AND "ENGINEER" ARE INTERCHANGEABLE.
- THE DISPOSAL OF ALL DEBRIS RESULTING FROM CONSTRUCTION ACTIVITIES AND EXCESS EARTHWORK MATERIALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. APPROVAL OF DISPOSAL SITE SHALL BE OBTAINED FROM THE COUNTY PRIOR TO DISPOSAL AT THE WORKING FACE. ALL EXCESS MATERIAL IS THE PROPERTY OF THE COUNTY.
- THE CONSTRUCTION LENGTHS INDICATED IN THESE PLANS ARE APPROXIMATE. ACTUAL LIMITS MAY BE SET IN THE FIELD AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY BARRICADES, WARNING SIGNS, LIGHTS AND FLAGMEN AS PER MANATEE COUNTY REQUIREMENTS.
- ALL WORK PERFORMED SHALL COMPLY WITH ALL APPLICABLE REGULATIONS AND ORDINANCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PENALTIES/FINES LEVIED DUE TO WORK THAT IS NOT IN ACCORDANCE WITH PERMIT CONDITIONS.
- ALL AREAS OF EXPOSED EARTH RESULTING FROM CONSTRUCTION ACTIVITIES SHALL BE SODDED OR SEEDED AS PER PROJECT SPECIFICATIONS. ALL AREAS OF DISTURBED EARTH ON SIDE SLOPES SHALL BE SODDED ACCORDING TO PROJECT SPECIFICATIONS. ALL OF THE TOP DECK OF STAGE III SHALL BE SEEDED ACCORDING TO PROJECT SPECIFICATIONS.
- PROTECT BY WHATEVER MEANS REQUIRED ALL FENCES, SIGNS, STRUCTURES, DRIVES, SIDEWALKS, STREETS, BUSHES, TREES, ETC. WHICH ARE NOT DESIGNATED FOR REMOVAL, OR ARE OUTSIDE THE LIMITS OF CONSTRUCTION.
- 5% SLOPE FOR ALL PROPOSED PIPING UNLESS APPROVED BY ENGINEER.

GENERAL NOTES AND SYMBOLS

LEGEND	
GW-377	PROPOSED LFG EXTRACTION WELL
8"	PROPOSED LFG HEADER/LATERAL
V-5	PROPOSED VALVE
HP	PROPOSED VACUUM ACCESS RISER
HP	HIGH POINT
	PROPOSED ROAD CROSSING
	PROPOSED COVER
	EXISTING LFG EXTRACTION WELL
	EXISTING LFG HEADER/LATERAL
	EXISTING MANHOLE
	EXISTING LEACHATE COLLECTION PIPE
	EXISTING VALVE
	EXISTING COVER
	EXISTING WASTE

ABBREVIATIONS	
APPROX. ELEV.	APPROXIMATE ELEVATION
LF	LINEAR FEET
EXIST.	EXISTING
SCH.	SCHEDULE
TYP.	TYPICAL
Ø	DIAMETER
CONC.	CONCRETE
MIN.	MINIMUM
MAX.	MAXIMUM
HDPE	HIGH DENSITY POLYETHYLENE
NO.	NUMBER
RCP	REINFORCED CONCRETE PIPE

SECTION AND DETAIL DESIGNATION



BID DRAWINGS

DATE: 05/05/2017

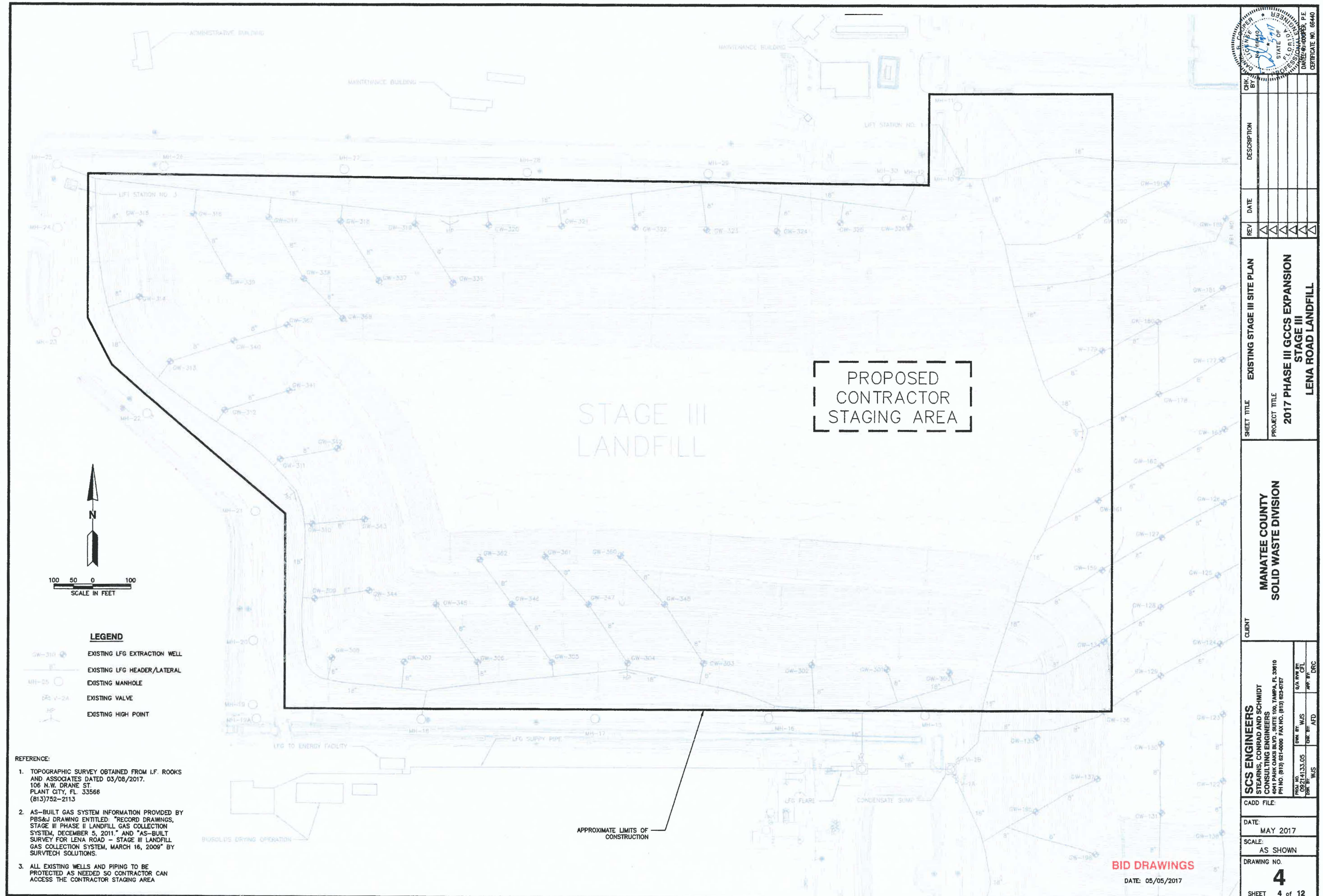
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PROJECT TITLE: 2017 PHASE III GCSCS EXPANSION STAGE III LENA ROAD LANDFILL	
CLIENT: MANATEE COUNTY SOLID WASTE DIVISION	
SCS ENGINEERS STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS 4041 PARK OAKS BLVD., SUITE 100 TAMPA, FL 33610 PH NO. (813) 961-0000 FAX NO. (813) 962-6757	
ISSUED BY: WJS/DFC	CHK BY: AFD
DATE: 05/21/13	DATE: 05/05/17
CADD FILE:	
DATE: MAY 2017	
SCALE: AS SHOWN	
DRAWING NO. 2	
SHEET 2 of 12	

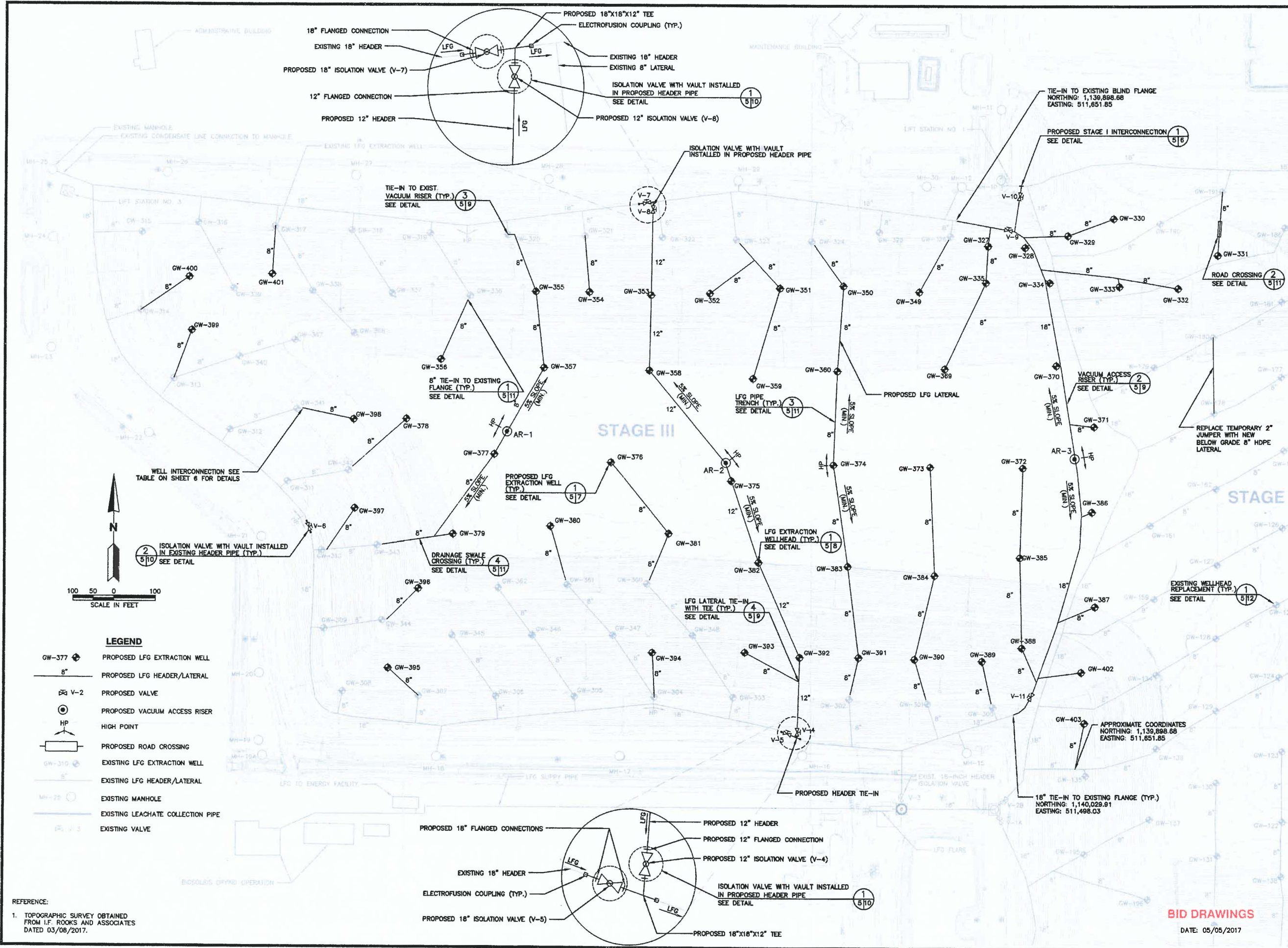



- LEGEND**
- GW-310 EXISTING LFG EXTRACTION WELL
 - 8" EXISTING LFG HEADER/LATERAL
 - M10-25 EXISTING MANHOLE
 - 18" EXISTING LEACHATE COLLECTION PIPE
 - VS V-2A EXISTING VALVE

- REFERENCE:**
1. TOPOGRAPHIC SURVEY OBTAINED FROM L.F. ROOKS AND ASSOCIATES DATED 03/08/2017. 106 N.W. DRANE ST. PLANT CITY, FL 33566 (813)752-2113
 2. AS-BUILT GAS SYSTEM INFORMATION PROVIDED BY PBS&J DRAWING ENTITLED: "RECORD DRAWINGS, STAGE III PHASE II LANDFILL GAS COLLECTION SYSTEM, DECEMBER 5, 2011." AND "AS-BUILT SURVEY FOR LENA ROAD - STAGE III LANDFILL GAS COLLECTION SYSTEM, MARCH 16, 2009" BY SURVTECH SOLUTIONS.

		CHK BY	DESCRIPTION	DATE	REV
SCS ENGINEERS			EXISTING OVERALL SITE PLAN		
STEARNES, CONRAD AND SCHMIDT			PROJECT TITLE		
CONSULTING ENGINEERS			2017 PHASE III GC&S EXPANSION		
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610			STAGE III		
PH NO. (813) 821-0080 FAX NO. (813) 823-6767			LENA ROAD LANDFILL		
CADD FILE:		CLIENT			
DATE: MAY 2017		MANATEE COUNTY			
SCALE: AS SHOWN		SOLID WASTE DIVISION			
DRAWING NO. 3		C/S: R/S: B/S: C/P: A/P: W: DRC:			
SHEET 3 of 12		DATE: 05/05/2017			



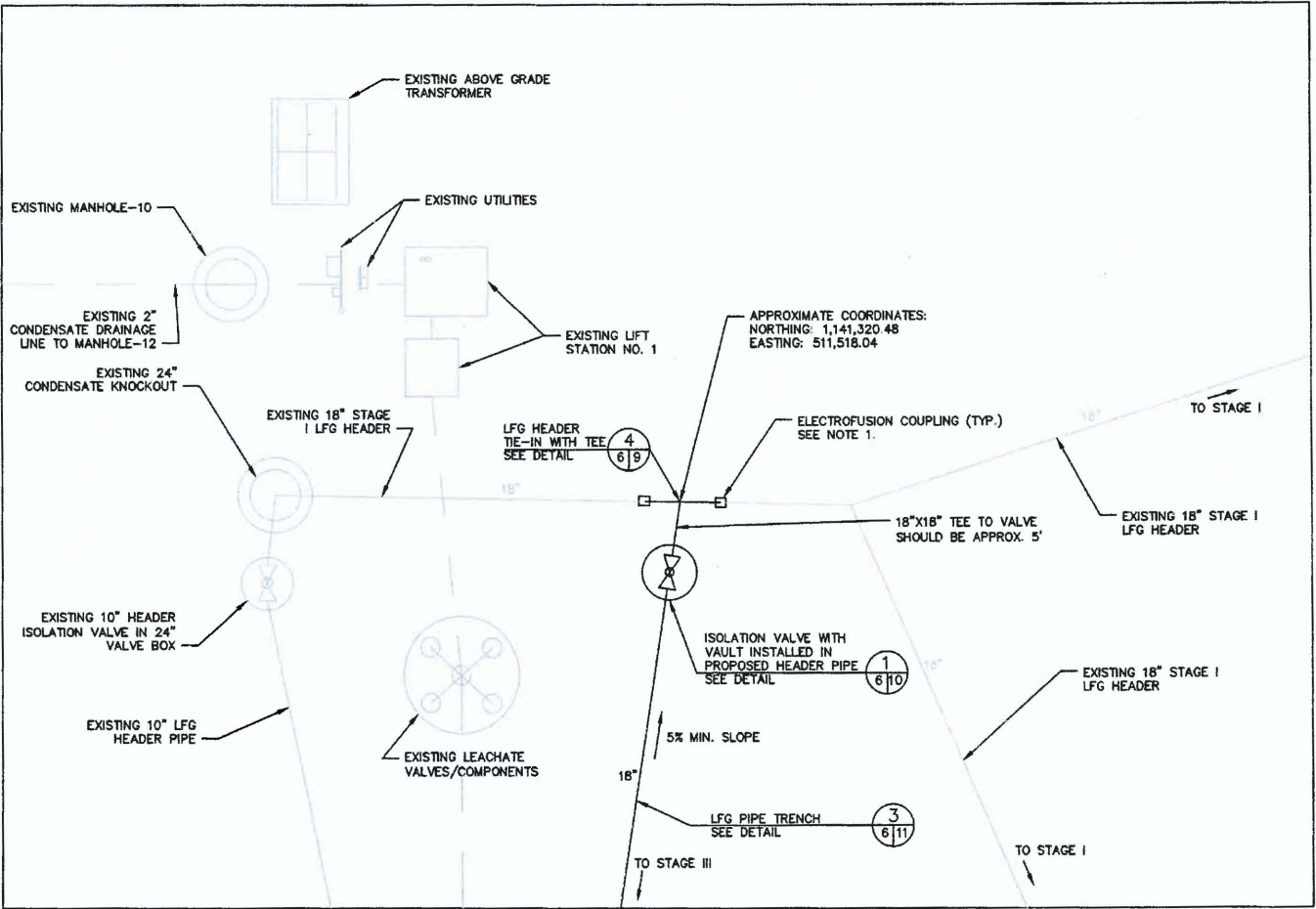


SCS ENGINEERS STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS 4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610 PH NO. (813) 821-0080 FAX NO. (813) 823-6757	CLIENT MANATEE COUNTY SOLID WASTE DIVISION	SHEET TITLE 2017 PHASE III GCCS EXPANSION STAGE III LENA ROAD LANDFILL	REV DATE DESCRIPTION CHK. BY DATE	
CADD FILE:	DATE: MAY 2017	SCALE: AS SHOWN	DRAWING NO. 5	SHEET 5 of 12

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WELL INTERCONNECTION SCHEDULE

Well ID	Type of Connection to Existing GCCS	Existing Well Tie-In Location
327	new 8" lateral to new 18" header	--
328	new 8" lateral to new 18" header	--
329	new 8" lateral to new 18" header	--
330	new 8" lateral to new 18" header	--
331	new 8" lateral to vacuum riser	GW-191
332	new 8" lateral	--
333	new 8" lateral	--
334	new 8" lateral to new 18" header	--
335	new 8" lateral	--
349	new 8" lateral to buried blind flange	GW-326
350	new 8" lateral to buried blind flange	GW-324
351	new 8" lateral to buried blind flange	GW-323
352	new 8" lateral to new 8" lateral	--
353	on new 12" header	--
354	new 8" lateral to existing vacuum riser	GW-321
355	new 8" lateral to existing vacuum riser	GW-320
356	new 8" lateral to buried blind flange	GW-336
357	new 8" lateral to new 8" lateral	--
358	on new 12" header	--
359	new 8" lateral to new 8" lateral	--
360	new 8" lateral to new 8" lateral	--
369	new 8" lateral to new 8" lateral	--
370	new 8" lateral to new 18" header	--
371	new 8" lateral to new 18" header	--
372	new 8" lateral to new 8" lateral	--
373	new 8" lateral to new 8" lateral	--
374	new 8" lateral to new 8" lateral	--
375	on new 12" header	--
376	new 8" lateral to new 8" lateral	--
377	new 8" lateral to new 8" lateral	--
378	new 8" lateral to buried blind flange	GW-342
379	new 8" lateral to buried blind flange	GW-343
380	new 8" lateral to buried blind flange	GW-361
381	new 8" lateral to buried blind flange	GW-360
382	on new 12" header	--
383	new 8" lateral to new 8" lateral	--
384	new 8" lateral to new 8" lateral	--
385	new 8" lateral to new 8" lateral	--
386	new 8" lateral to new 18" header	--
387	new 8" lateral to new 18" header	--
388	new 8" lateral to new 18" header	--
389	new 8" lateral to buried blind flange	GW-300
390	new 8" lateral to buried blind flange	GW-301
391	new 8" lateral to buried blind flange	GW-302
392	on new 12" header	--
393	new 8" lateral to new 12" header	--
394	new 8" lateral to existing vacuum riser	GW-304
395	new 8" lateral to existing vacuum riser	GW-307
396	new 8" lateral to buried blind flange	GW-344
397	new 8" lateral to existing vacuum riser	GW-310
398	new 8" lateral to buried blind flange	GW-341
399	new 8" lateral to existing vacuum riser	GW-313
400	new 8" lateral to existing vacuum riser	GW-314
401	new 8" lateral to existing vacuum riser	GW-317
402	new 8" lateral to new 18" header	--
403	new 8" lateral to existing vacuum riser	GW-135



NOTES:
1. ELECTROFUSION COUPLINGS TO BE INSTALLED DIRECTLY TO 18-INCH TEE FITTING TO MINIMIZE EXCAVATION. DRAWING SHOWN ILLUSTRATES CONNECTIONS AND IS NOT TO SCALE.

PROPOSED STAGE I INTERCONNECTION DETAIL

NOT TO SCALE

BID DRAWINGS

DATE: 05/05/2017

CHK BY	DESCRIPTION
DATE	REV
SHEET TITLE DETAILS - 1	
PROJECT TITLE 2017 PHASE III GCCS EXPANSION STAGE III LENA ROAD LANDFILL	
CLIENT MANATEE COUNTY SOLID WASTE DIVISION	
SCS ENGINEERS STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS 4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610 PH NO. (813) 821-0080 FAX NO. (813) 823-8757	
DATE: 05/05/2017	DATE: 05/05/2017
SCALE: AS SHOWN	SCALE: AS SHOWN
DRAWING NO. 6	DRAWING NO. 6
SHEET 6 of 12	SHEET 6 of 12

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WELL SCHEDULE

Well ID	Northing	Easting	Approx. Ground Surface (ft)	Approx. Base Grade Elevation (ft)	Well Depth (ft)	Slotted Pipe Length (ft)	Solid Pipe Length Below Grade (ft)	Solid Pipe Length Above Grade (ft)	Total Solid Pipe Length (ft)	Thickness of Gravel Pack (ft)
GW - 327	1141171.95	511436.39	63	35	28	12	15	3	18	15
GW - 328	1141168.36	511527.83	63	35	28	12	15	3	18	15
GW - 329	1141197.35	511633.07	64	35	29	13	15	3	18	16
GW - 330	1141239.07	511746.05	77	35	42	26	15	3	18	29
GW - 331	1141150.18	512002.24	77	35	42	26	15	3	18	29
GW - 332	1141069.00	511904.00	84	35	49	33	15	3	18	36
GW - 333	1141073.61	511760.00	82	35	47	31	15	3	18	34
GW - 334	1141082.43	511588.79	78	35	43	27	15	3	18	30
GW - 335	1141082.58	511431.15	79	35	44	28	15	3	18	31
GW - 349	1141059.37	511266.50	83	35	48	32	15	3	18	35
GW - 350	1141073.58	511078.77	80	35	45	29	15	3	18	32
GW - 351	1141067.69	510924.28	80	35	45	29	15	3	18	32
GW - 352	1141054.61	510751.87	80	35	45	29	15	3	18	32
GW - 353	1141049.86	510605.76	80	35	45	29	15	3	18	32
GW - 354	1141057.09	510454.14	80	35	45	29	15	3	18	32
GW - 355	1141057.71	510322.29	79	35	44	28	15	3	18	31
GW - 356	1140891.32	510089.19	111	35	76	55	20	3	23	58
GW - 357	1140871.15	510343.27	111	35	76	55	20	3	23	58
GW - 358	1140866.12	510601.59	112	35	77	56	20	3	23	59
GW - 359	1140846.68	510858.95	112	35	77	56	20	3	23	59
GW - 360	1140865.34	511063.83	115	35	80	59	20	3	23	62
GW - 369	1140871.19	511330.05	116	35	81	60	20	3	23	63
GW - 370	1140879.48	511604.83	115	35	80	59	20	3	23	62
GW - 371	1140730.85	511697.78	116	35	81	60	20	3	23	63
GW - 372	1140629.42	511522.25	116	35	81	60	20	3	23	63
GW - 373	1140631.21	511293.82	116	35	81	60	20	3	23	63
GW - 374	1140636.06	511054.52	116	35	81	60	20	3	23	63
GW - 375	1140596.44	510805.66	115	35	80	59	20	3	23	62
GW - 376	1140641.30	510508.44	115	35	80	59	20	3	23	62
GW - 377	1140660.50	510221.57	114	35	79	58	20	3	23	61
GW - 378	1140746.06	510005.12	113	35	78	57	20	3	23	60
GW - 379	1140465.56	510120.31	111	35	76	55	20	3	23	58
GW - 380	1140485.14	510360.26	112	35	77	56	20	3	23	59
GW - 381	1140467.88	510650.31	113	35	78	57	20	3	23	60
GW - 382	1140398.80	510872.97	114	35	79	58	20	3	23	61
GW - 383	1140389.52	511089.90	114	35	79	58	20	3	23	61
GW - 384	1140368.16	511305.05	114	35	79	58	20	3	23	61
GW - 385	1140411.84	511514.77	112	35	77	56	20	3	23	59
GW - 386	1140522.49	511692.38	115	35	80	59	20	3	23	62
GW - 387	1140292.59	511699.77	113	35	78	57	20	3	23	60
GW - 388	1140192.28	511519.63	80	35	45	29	15	3	18	32
GW - 389	1140159.63	511421.91	74	35	39	23	15	3	18	26
GW - 390	1140163.69	511255.27	73	35	38	22	15	3	18	25
GW - 391	1140167.52	511116.74	73	35	38	22	15	3	18	25
GW - 392	1140167.69	510973.40	73	35	38	22	15	3	18	25
GW - 393	1140179.52	510840.00	74	35	39	23	15	3	18	26
GW - 394	1140176.37	510610.32	73	35	38	22	15	3	18	25
GW - 395	1140138.55	509961.83	64	35	29	13	15	3	18	16
GW - 396	1140332.47	510035.47	93	35	58	37	20	3	23	40
GW - 397	1140527.26	509677.98	76	35	41	25	15	3	18	28
GW - 398	1140744.71	509874.81	93	35	58	37	20	3	23	40
GW - 399	1140960.58	509474.39	74	35	39	23	15	3	18	26
GW - 400	1141091.56	509468.10	75	35	40	24	15	3	18	27
GW - 401	1141099.12	509673.72	75	35	40	24	15	3	18	27
GW - 402	1140133.07	511666.58	79	35	44	28	15	3	18	31
GW - 403	1140008.83	511673.70	73	35	38	22	15	3	18	25
TOTALS					3222	2196	970	168	1138	2364

NOTES:

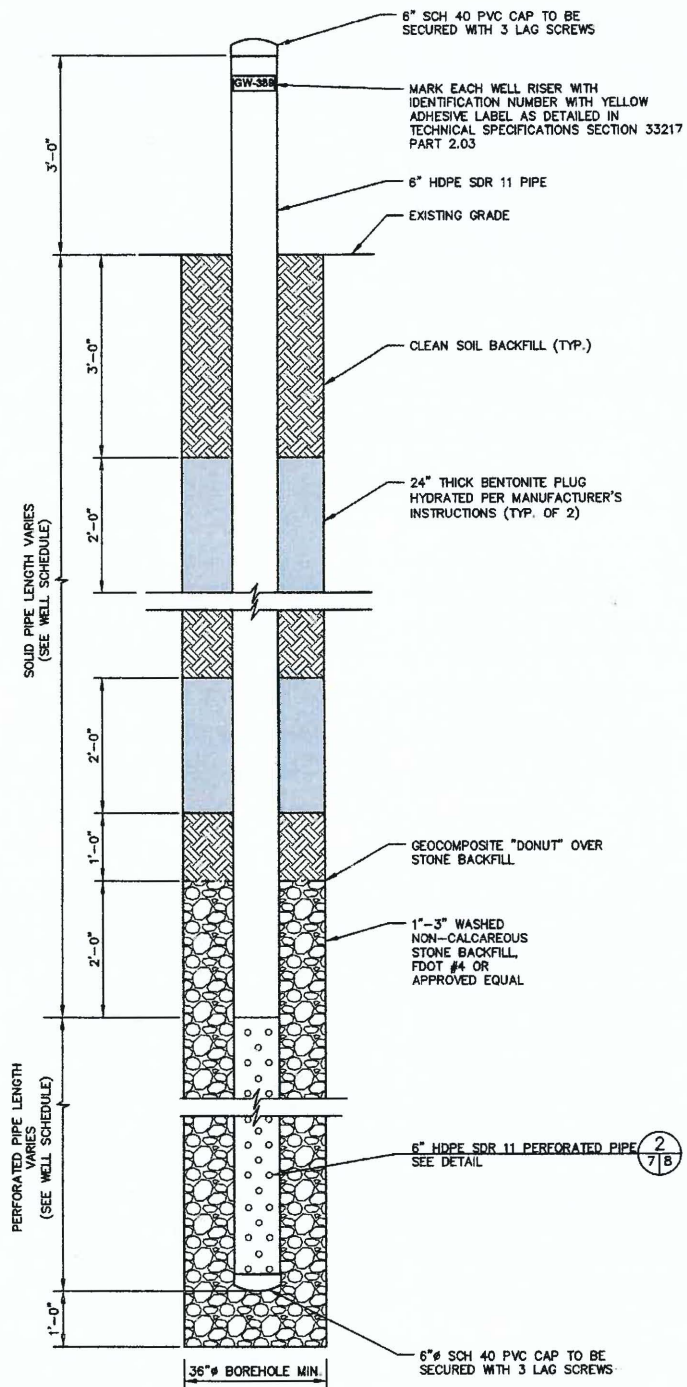
- CONTRACTOR SHALL SURVEY THE PROPOSED WELL LOCATIONS AND PROVIDE THE EXISTING GROUND SURFACE ELEVATION AT EACH LOCATION TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF WELL DRILLING.
- ENGINEER SHALL ADJUST WELL SCHEDULE AS NECESSARY BASED ON THE PRE-CONSTRUCTION SURVEY.
- ALL SIGNATURES REQUIRED ON THE FINAL WELL SCHEDULE PRIOR TO COMMENCEMENT OF DRILLING.

COA INSPECTOR DATE

DRILLER DATE

ENGINEER DATE

COUNTY REPRESENTATIVE DATE



NOTES:

- PVC CAP TO BE SCREWED TO NEW WELL UNTIL WELL CAN BE CONNECTED TO VACUUM.
- BENTONITE TO BE HYDRATED AS IT IS ADDED TO BORING.
- GEOCOMPOSITE RING TO BE INSTALLED OVER GRAVEL AND TAMPED IN PLACE BEFORE BACKFILLING.

LFG EXTRACTION WELL DETAIL
NOT TO SCALE

1
5 17

BID DRAWINGS
DATE: 05/05/2017

MANATEE COUNTY
SOLID WASTE DIVISION

CLIENT

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610
PH: (813) 821-0060 FAX: (813) 823-6737

PROJ. NO. 0921413.05
TOWN OF LEE
W.S./DRC

DATE: 05/05/2017
BY: [Signature]
CHK: [Signature]
APP: [Signature]

DATE: 05/05/2017
BY: [Signature]
CHK: [Signature]
APP: [Signature]

2017 PHASE III GCCS EXPANSION
STAGE III
LENA ROAD LANDFILL

PROJECT TITLE

DETAILS - 2

SHEET TITLE

CHK BY

DESCRIPTION

DATE

REV

DATE: MAY 2017

SCALE: AS SHOWN

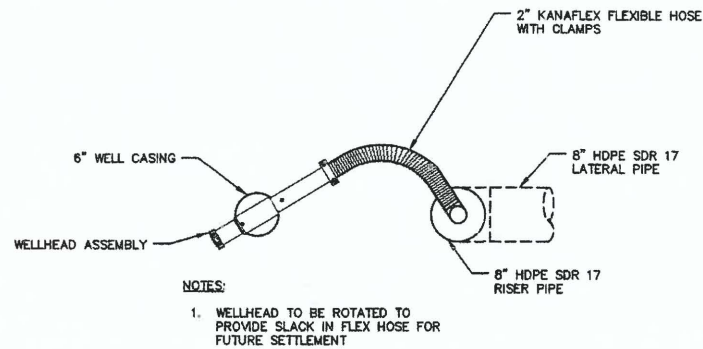
DRAWING NO. 7

SHEET 7 of 12

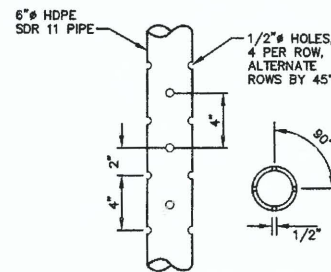
STATE OF FLORIDA
REGISTERED PROFESSIONAL ENGINEER
P.E.
CERTIFICATE NO. 66440

DATE: 05/05/2017

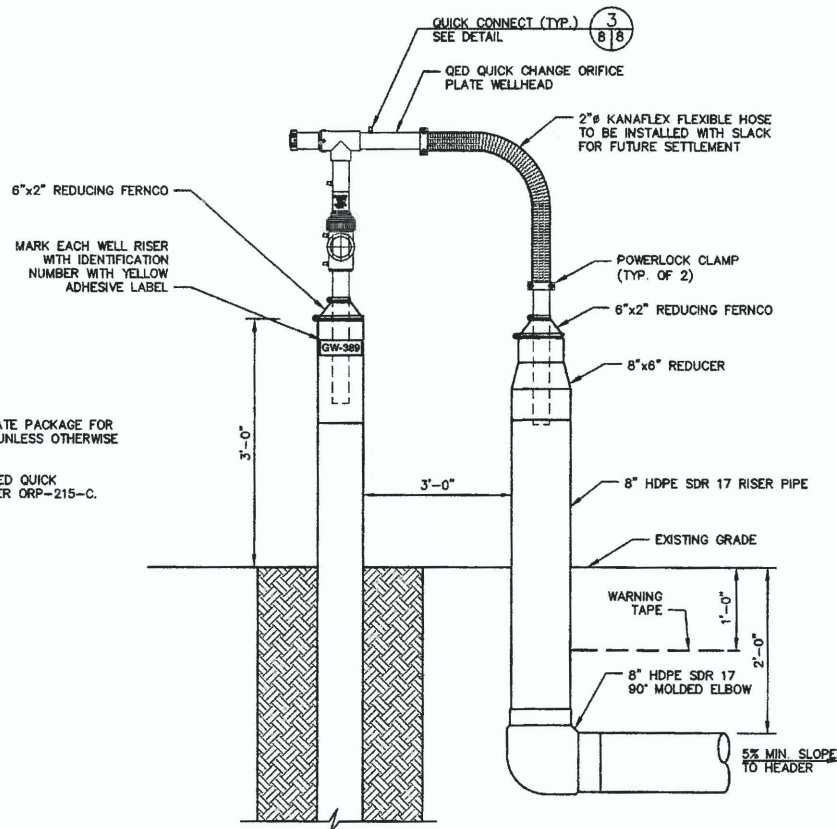
G:\PROJECT\Manatee\0921413.05 GCCS Design\Drawings\Details.dwg May 05, 2017 - 5:10pm Layout Name: Sheet 8 By: 4283mjt



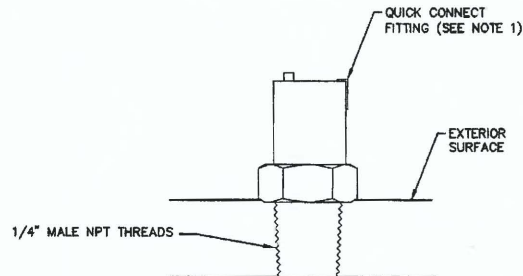
PLAN VIEW



6" HDPE SDR 11 PERFORATED PIPE DETAIL



LFG EXTRACTION WELLHEAD DETAIL



QUICK CONNECT DETAIL

BID DRAWINGS

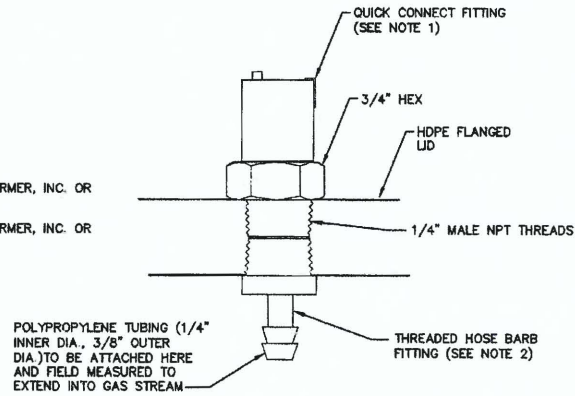
DATE: 05/05/2017

PROJECT TITLE	2017 PHASE III GCCS EXPANSION
STAGE III	LENA ROAD LANDFILL
CLIENT	MANATEE COUNTY SOLID WASTE DIVISION
DESIGNER	SCS ENGINEERS STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS 4041 PARK OAKS BLVD., SUITE 100, TAMPA, FL 33610 PH: (813) 621-0090 FAX: (813) 623-6757
DATE	MAY 2017
SCALE	AS SHOWN
DRAWING NO.	8
SHEET	8 of 12

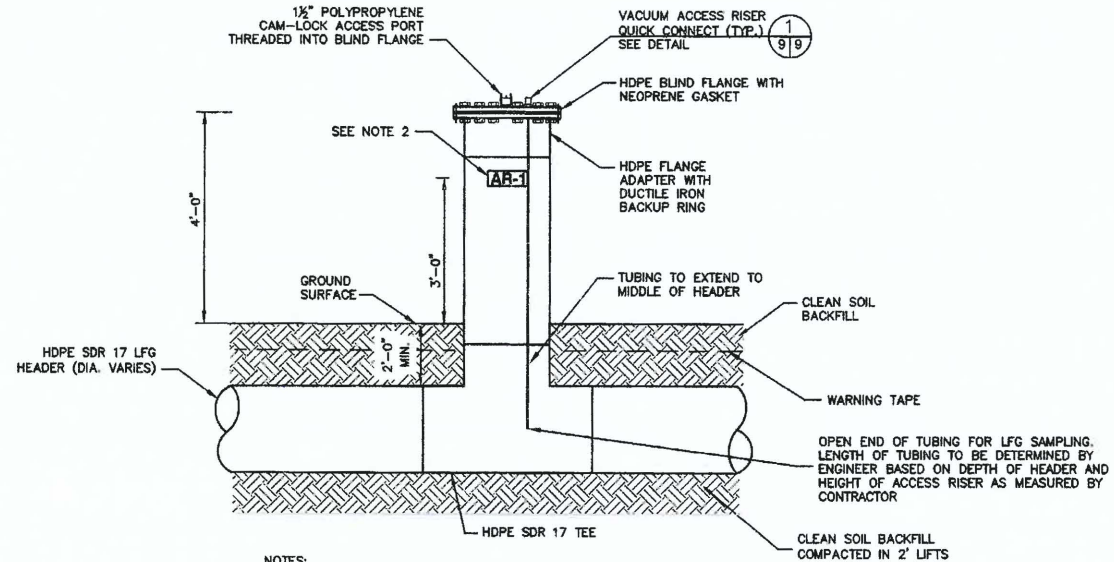
G:\PROJECT\Manatee\09214113.05 GCCS Design\100% Drawings\Details.dwg May 05, 2017 - 4:37pm Layout Name: Sheet 9 By: 4253mjt

NOTES:

1. PART NUMBER EW-06359-72 BY COLE-PARMER, INC. OR APPROVED EQUIVALENT.
2. PART NUMBER EW-34030-76 BY COLE-PARMER, INC. OR APPROVED EQUIVALENT.



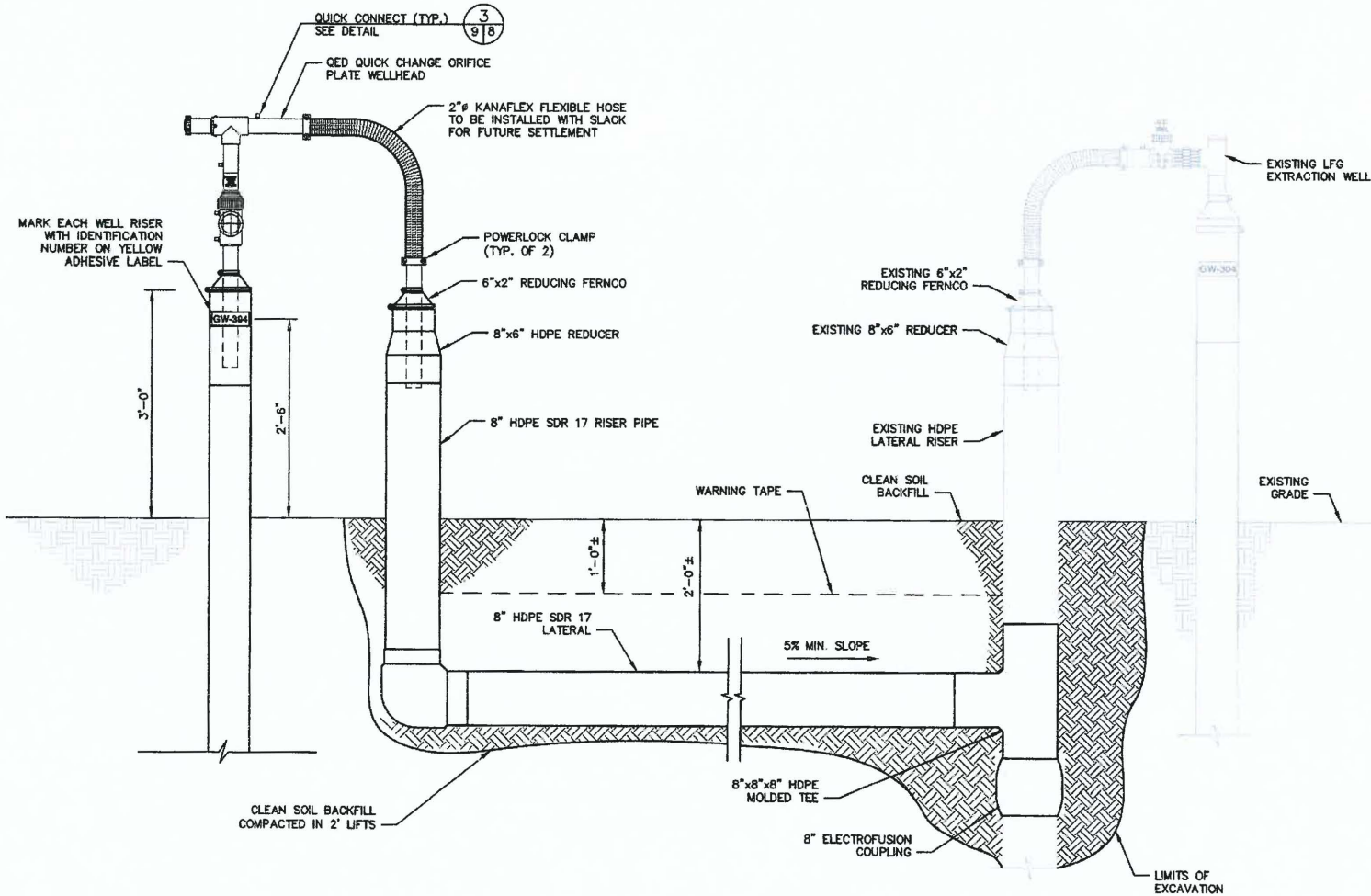
VACUUM ACCESS RISER
QUICK CONNECT DETAIL 1
NOT TO SCALE



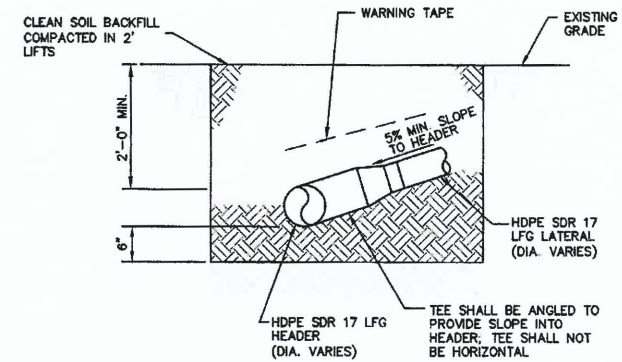
NOTES:

1. DIAMETER OF ACCESS RISER TO MATCH THE HEADER DIAMETER.
2. IDENTIFY EACH ACCESS RISER WITH IDENTIFICATION NUMBER ON YELLOW ADHESIVE LABEL. SEE SPECIFICATIONS SECTION 33217 PART 2.03.

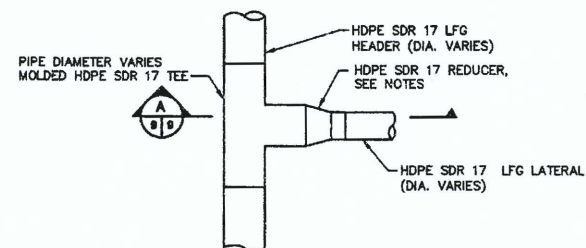
VACUUM ACCESS RISER DETAIL 2
NOT TO SCALE



TIE-IN TO EXISTING VACUUM RISER DETAIL 3
NOT TO SCALE



SECTION VIEW A
NOT TO SCALE



LFG HEADER/LATERAL
TIE-IN WITH TEE DETAIL 4
NOT TO SCALE

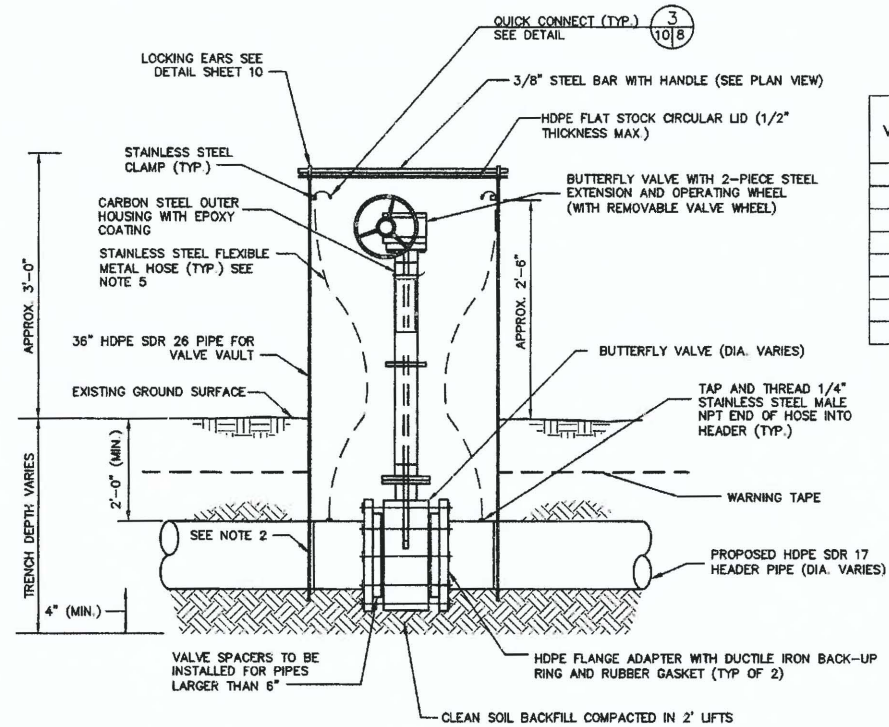
NOTES:

1. CONSECUTIVE SIZE REDUCERS SHALL BE USED TO TRANSITION FROM THE FULL SIZE TEE TO THE LRG LATERAL. FOR EXAMPLE, TO TRANSITION FROM A 12" TEE, A 12"x10" REDUCER AND 10"x8" REDUCER SHALL BE INSTALLED.
2. FULL SIZE MOLDED HDPE TEES SHALL BE INSTALLED FOR ALL TIE-INS OF LATERALS TO HEADER SMALLER THAN 12". TEE SHALL BE ANGLED TO MAINTAIN SLOPE INTO THE HEADER AS SHOWN IN SECTION VIEW. FABRICATED FULL SIZE TEES SHALL BE USED FOR ALL HEADER GREATER THAN 12".
3. ALL HEADER, LATERAL, AND FITTINGS SHALL HAVE A MINIMUM URIAL DEPTH OF 2 FEET.

BID DRAWINGS

DATE: 05/05/2017

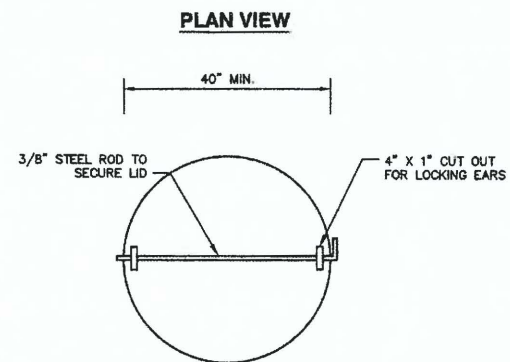
CLIENT	MANATEE COUNTY SOLID WASTE DIVISION
SHEET TITLE	DETAILS - 4
PROJECT TITLE	2017 PHASE III GCCS EXPANSION STAGE III LENA ROAD LANDFILL
CADD FILE	DETAILS
DATE	MAY 2017
SCALE	AS SHOWN
DRAWING NO.	9
SHEET	9 of 12



- NOTES:

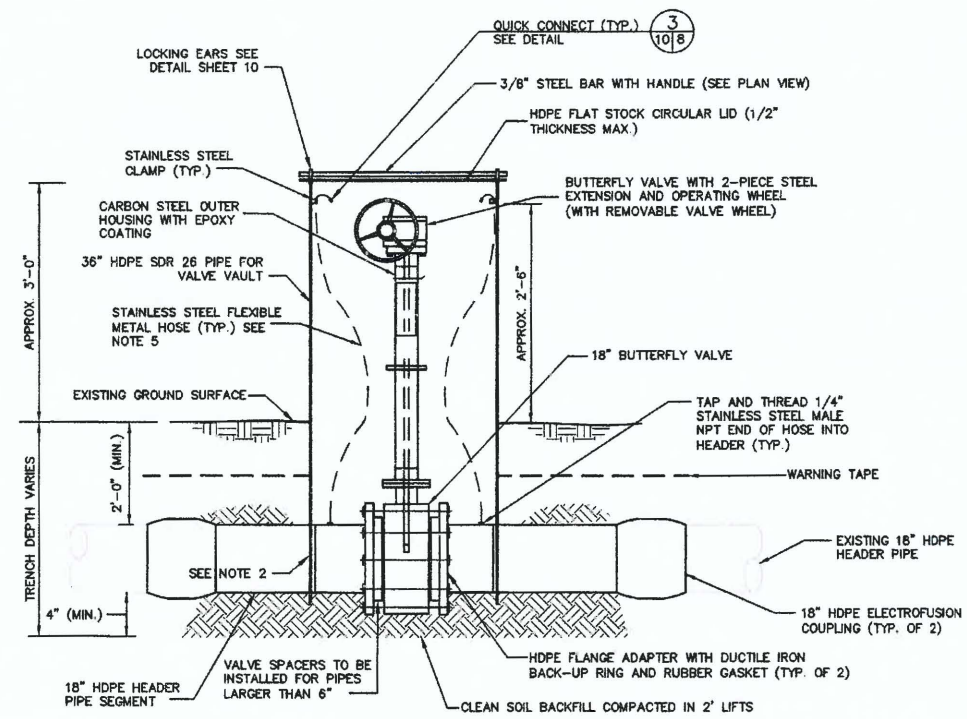
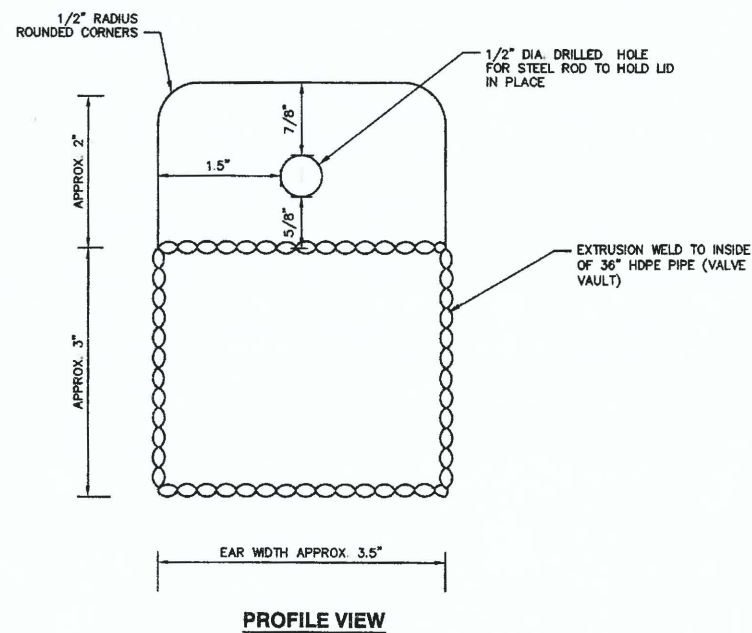
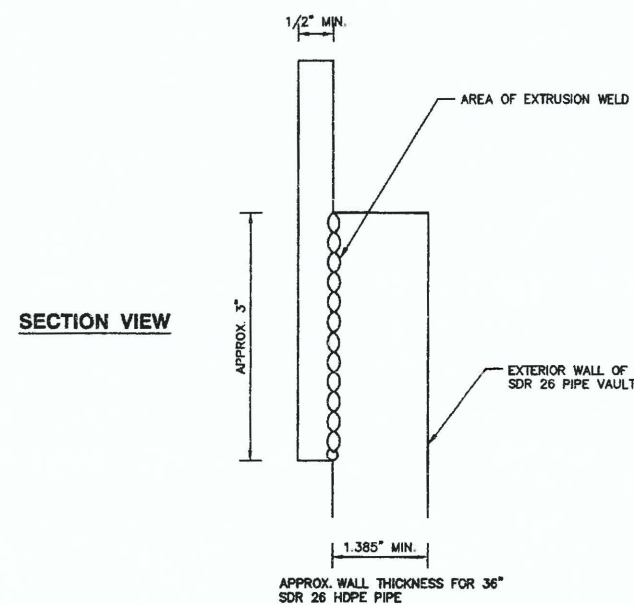
1. THOROUGHLY COAT ENTIRE SURFACE OF BOLTS, WASHERS, NUTS AND BACKUP RINGS WITH POLYCOAT RUBBERIZED PRIMER, OR EQUAL, AFTER TIGHTENING BOLTS.
2. CUT OUT ARCH FOR PIPE (DIA. OF PIPE VARIES).
3. TOP OF VALVE STEM TO BE APPROXIMATELY 6" BELOW VAULT LID.
4. FOR VALVE IDENTIFICATION, AN ADHESIVE YELLOW LABEL MUST BE AFFIXED TO THE EXTERIOR OF VALVE VAULT IN A VISIBLE AREA. LABEL TO INCLUDE "LENA ROAD LANDFILL" AND VALVE NUMBER. SEE VALVE SCHEDULE ON SHEET 10.
5. SWAGelok STAINLESS STEEL FLEXIBLE METAL HOSE, PART NO. SS-FM4PMFF4 (LENGTH VARIES).

Valve ID	Diameter (Inches)	Installed in Existing or New Pipe	Northing	Easting
V-4	12	New	1,139,986.34	510,967.56
V-5	18	Existing	1,139,981.92	510,943.62
V-6	18	Existing	1,140,481.05	509,764.82
V-7	18	Existing	1,141,275.94	510,593.93
V-8	12	New	1,141,259.78	510,608.89
V-9	18	New	1,141,210.98	511,485.59
V-10	18	New	1,141,294.41	511,514.04
V-11	18	New	1,140,077.72	511,544.24



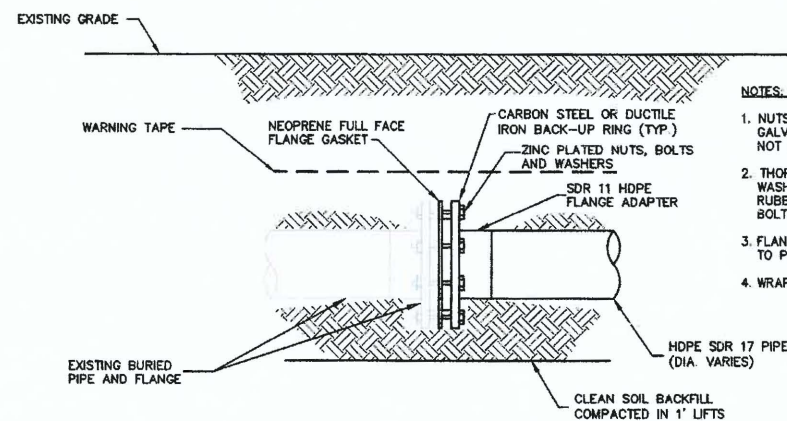
- NOTES:

1. 4" X 1" CUTOUT ON 1/4" FLATSTOCK LID FOR LOCKING EARS TO FIT INTO.

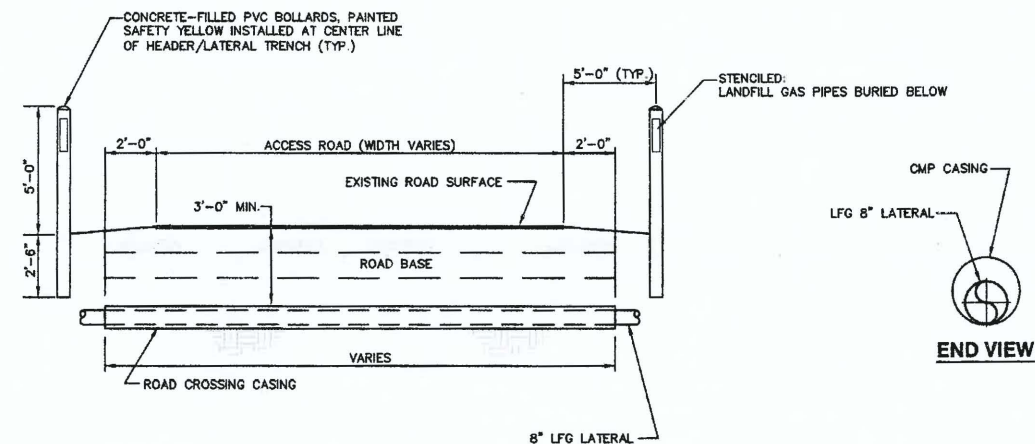


- NOTES:

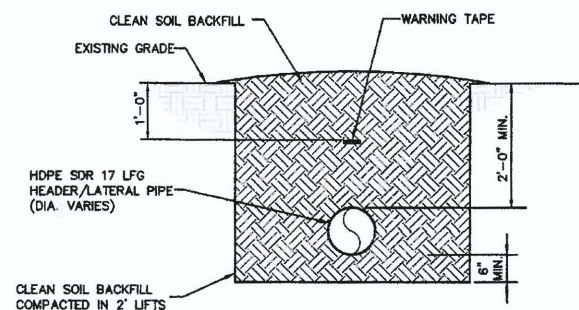
1. THOROUGHLY COAT ENTIRE SURFACE OF BOLTS, WASHERS, NUTS AND BACKUP RINGS WITH POLYCOAT RUBBERIZED PRIMER, OR EQUAL, AFTER TIGHTENING BOLTS.
2. CUT OUT ARCH FOR PIPE (DIA. OF PIPE VARIES).
3. TOP OF VALVE STEM TO BE APPROXIMATELY 8" BELOW VAULT LID.
4. FOR VALVE IDENTIFICATION, AN ADHESIVE YELLOW LABEL MUST BE AFFIXED TO THE EXTERIOR OF VALVE VAULT IN A VISIBLE AREA. LABEL TO INCLUDE "LENA ROAD LANDFILL" AND VALVE NUMBER. SEE VALVE SCHEDULE ON SHEET 10.
5. SWAGelok STAINLESS STEEL FLEXIBLE METAL HOSE, PART NO. SS-FM4PMFPP4 (LENGTH VARIES).



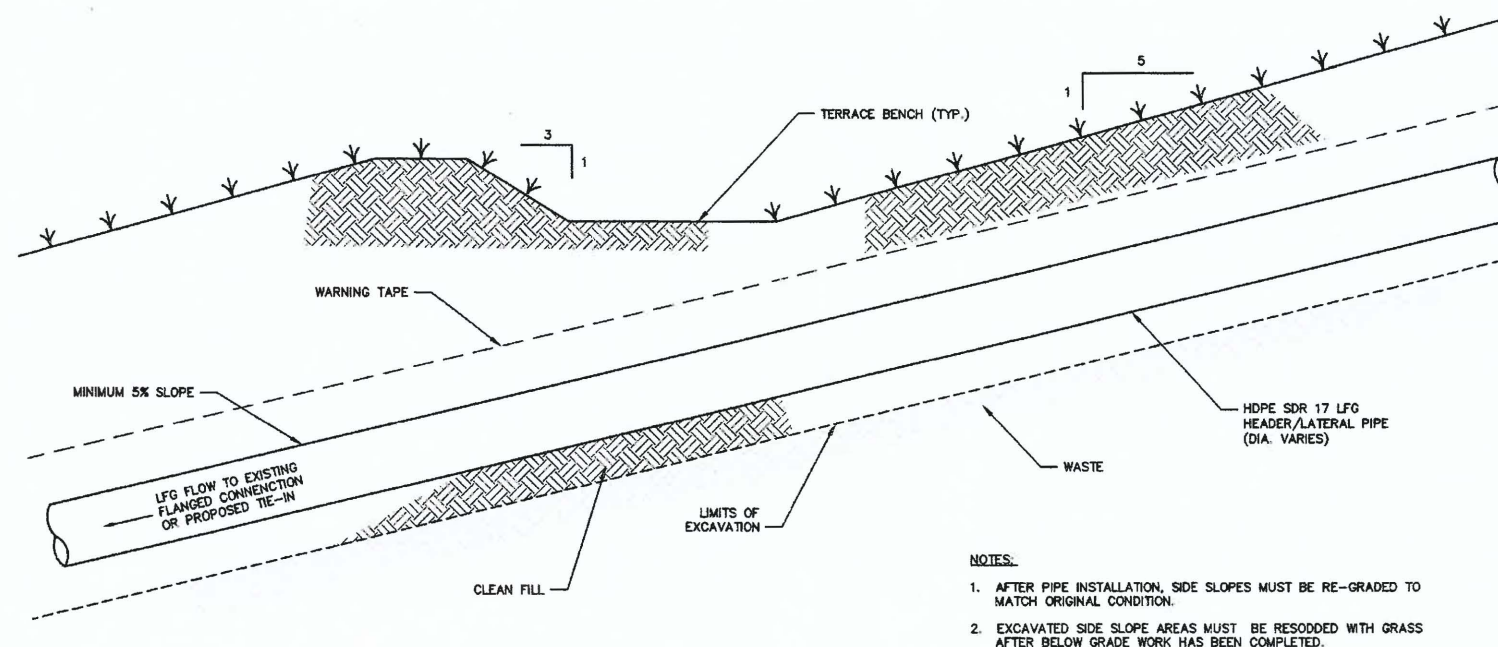
8" TIE-IN TO EXISTING FLANGE DETAIL 1
NOT TO SCALE 5/11



ROAD CROSSING DETAIL 2
NOT TO SCALE 5



LFG PIPE TRENCH DETAIL 3
NOT TO SCALE



DRAINAGE SWALE CROSSING DETAIL (4)
(TYP.) NOT TO SCALE

BID DRAWINGS

DATE: 05/05/2017

A circular professional engineer seal for Daniel R. Cooper. The outer ring contains the text "DANIEL R. COOPER, P.E." at the top and "LICENSE NO. 66440" at the bottom. The inner circle contains the text "STATE OF FLORIDA" and "PROFESSIONAL ENGINEER". A handwritten signature "D Cooper" and the date "11-5-17" are visible over the seal.

[illegible]

SHEET TITLE	DETAILS - 6
PROJECT TITLE	2017 PHASE III GCCS EXPANSION STAGE III LENA ROAD LANDFILL

CLIENT

PROJ. NO.	05214133.05	DRAW. BY	WJS	Q/A RW BY	CFL
DATE	08/11/97	CHK. BY		APP. BY	DOC

CADD FILE:
DETAILS

DATE:
MAY 2017

SCALE:
AS SHOWN

DRAWING NO.
11

SHEET 11 of 12

S: \PROJECT\Monatee\09214113.05 GCOS Design\100% Drawings\Details.dwg May 05, 2017 - 5:09pm Layout Name: Sheet 11 By: 4283mj

