Report of Construction

August 2021 – November 2021
NORTH CELL LANDFILL GAS CONSTRUCTION
PHASE VI CONSTRUCTION AND RETROFIT OF EXISTING GAS COLLECTION SYSTEM
TOMOKA FARMS ROAD LANDFILL

Prepared for:

Volusia County Solid Waste Division
1990 Tomoka Farms Road
Port Orange, FL 32124

Volusia County
FLORIDA

Prepared by:

HDR Engineering, Inc.
76 S. Laura Street, Suite 1600
Jacksonville, FL 32202
(904) 598-8900

Presented to:

Florida Department of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767

1/19/2022

Kanishka Perera Ph.D., PE

FL Registration No: 67647

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Attachments

Introduction

HDR Engineering, Inc. (HDR) was retained by Volusia County (the County) to provide construction quality assurance (CQA) and certification for construction and installation of the Landfill Gas Collection System (LFGCS) expansion at the Class 1 Active Area of the Tomoka Farms Landfill (the Landfill). The gas collection system construction drawings were prepared by HDR dated July 16, 2021. The project included a portion of Phase IV of the landfill gas master plan and retrofit of the existing LFG collection system to enhance gas collection. HDR adjusted the vertical well schedule based on SCS's field survey, received August 20, 2021. SCS Field Services provided construction services for the project from August 2021 to November 2021. Chelsea Williams E.I. (HDR) provided CQA during this time. This Construction Certification Report describes the construction activities involved and documents the materials and components of the project.

Site Background

The Landfill is an active municipal solid waste landfill that is owned and operated by Volusia County, located at 1990 Tomoka Farms Road, Port Orange, Florida. The Landfill has a flare station located adjacent to the former landfill gas to energy (LFGTE) plant to destruct landfill gas before emitting into the atmosphere.

Project Overview

This report provides certification of construction completed for a portion of Phase VI of the Landfill Gas Master Plan. This portion of Phase VI of the landfill gas expansion system included 3 replacement vertical wells, 8 new vertical wells, and header installation. The project also included abandoning horizontal collector wells and connecting new and replacement vertical wells to the gas collection system. As part of the project, damaged and/or clogged laterals, air lines and header lines were repaired/replaced. Construction began August 18, 2021 with substantial completion on November 8, 2021. Attachment A shows the master plan drawings and conformed construction drawings.

Contact List

The parties involved in this project are listed below:

Owner:

Volusia County Solid Waste Division
1990 Tomoka Farms Road
Port Orange, Florida 32124
(386) 947-2952

Landfill Gas Master Plan Design Engineer:

HDR Engineering, Inc.
76 South Laura Street, Suite 1600
Jacksonville, Florida 32202
(904) 598-8900

Construction Contractor:

SCS Field Services
11260 Roger Bacon Drive, Suite 300
Reston, Virginia 20190
(571) 353-2041

Construction Quality Assurance and Record Documentation:

HDR Engineering, Inc.
315 E Robinson Street, Suite 400
Orlando, Florida 32828
(407) 420-4200

Surveyor:

Smith Surveying Group
9770 Baymeadows Road, Suite 121
Jacksonville, Florida 32256
(904) 260-6300

Drilling Operator:

B&H Drilling Services, Inc.
1424 SE 15th Street
Fort Lauderdale, Florida 33316
(954) 522-1969

Abandonment of Horizontal Collectors

SCS Field Services removed the temporary 2-inch vacuum line to the horizontal collectors 1b – 7b and capped off vacuum. The horizontal collectors 1b, 2b, 3b, 4b, 5b, 6b and 7b were abandoned in place with minimum 3-foot depth. SCS Field Services welded 6-inch caps on vacuum side of the riser and backfilled the area.

Vertical Well Installation

The vertical well installation was conducted by B&H Drilling Services, Inc. from September 2, 2021 to September 14, 2021. The vertical extraction wells were made up of 8-inch solid pipe glued to 8-inch perforated pipe and capped at the end. Each well consisted of 15 feet of solid CPVC pipe and the length of perforated pipe required for the specific depth of waste at each location. The completed well drilling logs are provided in **Attachment B**. A total of 165 feet of solid pipe and a total of 817 feet of perforated pipe were installed for a total drill depth of 982 feet.

Construction of the vertical wells consisted of drilling a 3-foot diameter borehole into waste and lowering the pipe into the borehole using the drill rig mast and winch. One foot of gravel was placed into the borehole before setting the well. The borehole was then filled to approximately 3 feet above the top of the perforated pipe with gravel, followed by a single side geocomposite, clean soil fill, hydrated bentonite seal, clean soil fill, hydrated bentonite seal, and backfill. The vertical well as-builts and waste composition data are provided in **Attachment B**.

Abandonments

EW-15R, EW-22A, and EW-71 were abandoned in place. SCS Field Services excavated around EW-15R and EW-22A 3 feet deep. Wellheads were removed, vacuum lines and wells were capped, and air, forcemain and vacuum lines were exposed for future tie-ins. SCS Field Services excavated around EW-71 approximately 10 feet deep to expose remote tee, cut away tee and capped well. The 4-inch forcemain and 2-in airlines were lifted to 3 foot below grade. The well, forcemain, and air lines were cut and capped.

EW-27 and the associated 6-inch vacuum line, 4-inch forcemain and 2-inch airline were also abandoned. SCS Field Services backfilled the trench to finish grade.

Re-Drilled

EW-15R, EW-22A, and EW-71 were replaced with EW-15B, EW-22B, and EW-71A, respectively. These vertical wells are comprised of 8-inch CPVC pipe to withstand higher temperatures. A summary of the replacement wells is provided below.

Well D	Date of Installation	Depth of Well
EW-15B	September 4, 2021	100 feet
EW-22B	September 3, 2021	105 feet
EW-71A	September 6, 2021	101 feet

New Wells

Eight new vertical wells were installed and will be part of updated Master Plan. These vertical wells are comprised of 8-inch PVC SCH 80 pipe. A summary of the new vertical wells is provided below.

Well ID	Date of Installation	Depth of Well
EW-73	September 8, 2021	38 feet
EW-74	September 7, 2021	103 feet
EW-75	September 8, 2021	96 feet
EW-76	September 9, 2021	99 feet
EW-77	September 8, 2021	41 feet
EW-78	September 10, 2021	96 feet
EW-79	September 10, 2021	103 feet
EW-80	September 13, 2021	100 feet

Tie-Ins

The vertical wells were tied into the existing gas collection system. The 6-inch SDR 11 HDPE lateral tie-in lines were constructed with 4-inch forcemain and 2-inch air lines in the same trench. Tie-in connection trenches were backfilled with structural fill, magnetic warning tape, and finished to grade.

Design Modifications/Deviations

While connecting EW-74 and EW-75 to the existing gas collection system, it was discovered the 10-inch pipe at valve pit 1 was filled with sediment material. The County observed the issue and provided assistance to jet clean the 10-inch and 16-inch header. Once the lines were clear, SCS Field Services installed new 10-inch pipe and valves at the V-1 location indicated on the Master Plan drawings. SCS Field Services installed new 4-inch forcemain and 2-inch air lines, connecting to EW-74 and EW-75. Additionally, the placement for vertical well EW-15B was moved 15 feet east of the original design location due to the hole caving in with sand at 35 feet.

Header Installation

According to Smith Surveying Group's Final As-Builts, the installed header piping was fabricated from 824 feet of 16-inch SDR 17 HDPE pipe and 1,392 feet of 12-inch SDR 17 HDPE pipe for a total of 2,216 feet of header. The associated air supply line was fabricated from 2-inch SDR 9 HDPE pipe and the associated forcemain line was fabricated from 4-inch SDR 11 HDPE pipe. All excavated material from trenching activities was removed and transported to the active face of the landfill. During the course of excavation and pipe installation, SCS Field Services used a laser to verify pipe slope and installed temporary access riser pipes on top of the header for Smith Surveying Group to obtain x,y,z coordinates to prepare as-builts. In addition, temporary access pipes were installed at transitions such as tees, valves, and other fittings. After the pipes were placed in the trench, backfilled with structural fill along with warning tape. The header pipe connects to CS-13 on the south side of the hill and connects to CS-6 on the north side of the hill. The final as-built survey can be found in **Attachment C**.

Pressure Test

The air supply line was pressure tested at 50 PSI with no detectable loss of pressure. The header piping was pressure tested at 5 PSI with no detectable loss of pressure. The forcemain line was pressure tested at 25 PSI with no detectable loss of pressure.

Condensate Sump

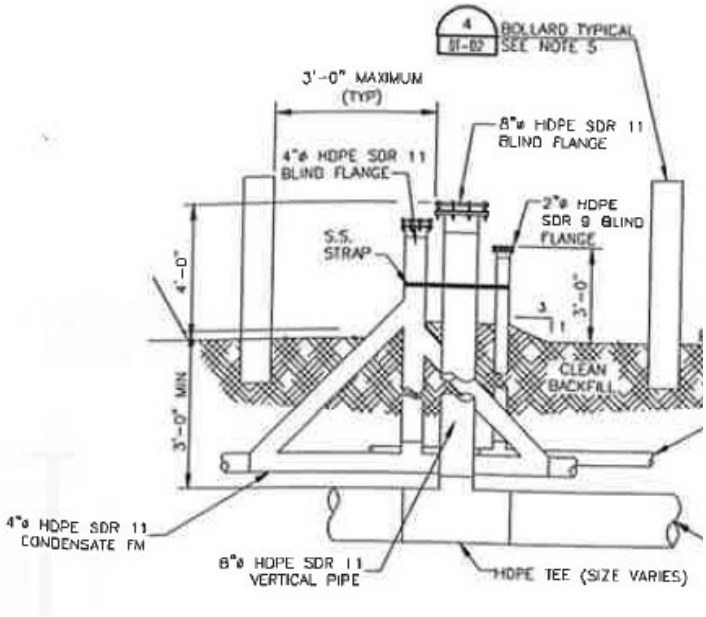
The new condensate sump (CS-12) was fabricated from 36-inch SDR 17 HDPE pipe with 16-inch SDR 17 HDPE pipe flange adapters to connect to the header pipe. SCS Field Services excavated to a depth of 10 feet for sump installation. After the sump was installed, 10 cubic yards of concrete from Daytona Ready Mix was poured 5 feet around the bottom of the sump, to prevent uplift. Once the concrete was dry, SCS Field Services connected CS-12 to the 16-inch header.

Access Points and Valves

Five (5) access points were installed along the header pipe for future tie-in connections. Access points are fabricated with 8-inch SDR 11 HDPE pipe with blind flanges. Six (6) valve pits were installed along the header pipe, including airline valves, forcemain vales and subheader valves. An additional airline valve was installed near CS-9. Existing AV-1, CV-1, V-1, CV-2 and AV-2 were also replaced as part of this project. The locations of these valves and fittings are shown on the as-builts in **Attachment C**. SCS Field Services also installed bollards around the sump and valves.

Design Modifications/Deviations

The alignment of the header in the eastside of the landfill was moved into the waste footprint instead of locating outside the waste footprint as shown in the Master Plan. Accordingly, the minimum slope of the header was increased to 5% within waste limits to allow for settlement. These deviations are reflected in the final as-builts (**Attachment C**). Additionally, the access point locations were modified considering future tie-in locations from the Master Plan. The forcemain access detail was adjusted with two “Y” type access points as shown in the below detail/picture for convenience when accessing the forcemain.



Original FM Access Detail

Modified FM Access Detail

Certification

The project was inspected for acceptance on Thursday, November 4, 2021. CQA inspector Chelsea Williams (HDR) and Design Engineer Kanishka Perera (HDR) walked the header alignment and vertical wells. Daily logs completed by HDR and SCS are provided in **Attachment D**. Key photographs are provided in **Attachment E**.

This Construction Report is submitted by HDR to Volusia County to provide Certification for quality of the construction of the project at the Tomoka Farms Road Landfill. Based upon my review of the documentation, survey, testing results, and visual observations by myself and those under my direct supervision, it is my professional opinion that the construction of the project was performed in general conformance with the approved construction drawings prepared by HDR. I herby certify the construction as a professional engineer licensed in Florida as evidence by my stamp provided below.

HDR ENGINEERING, INC.

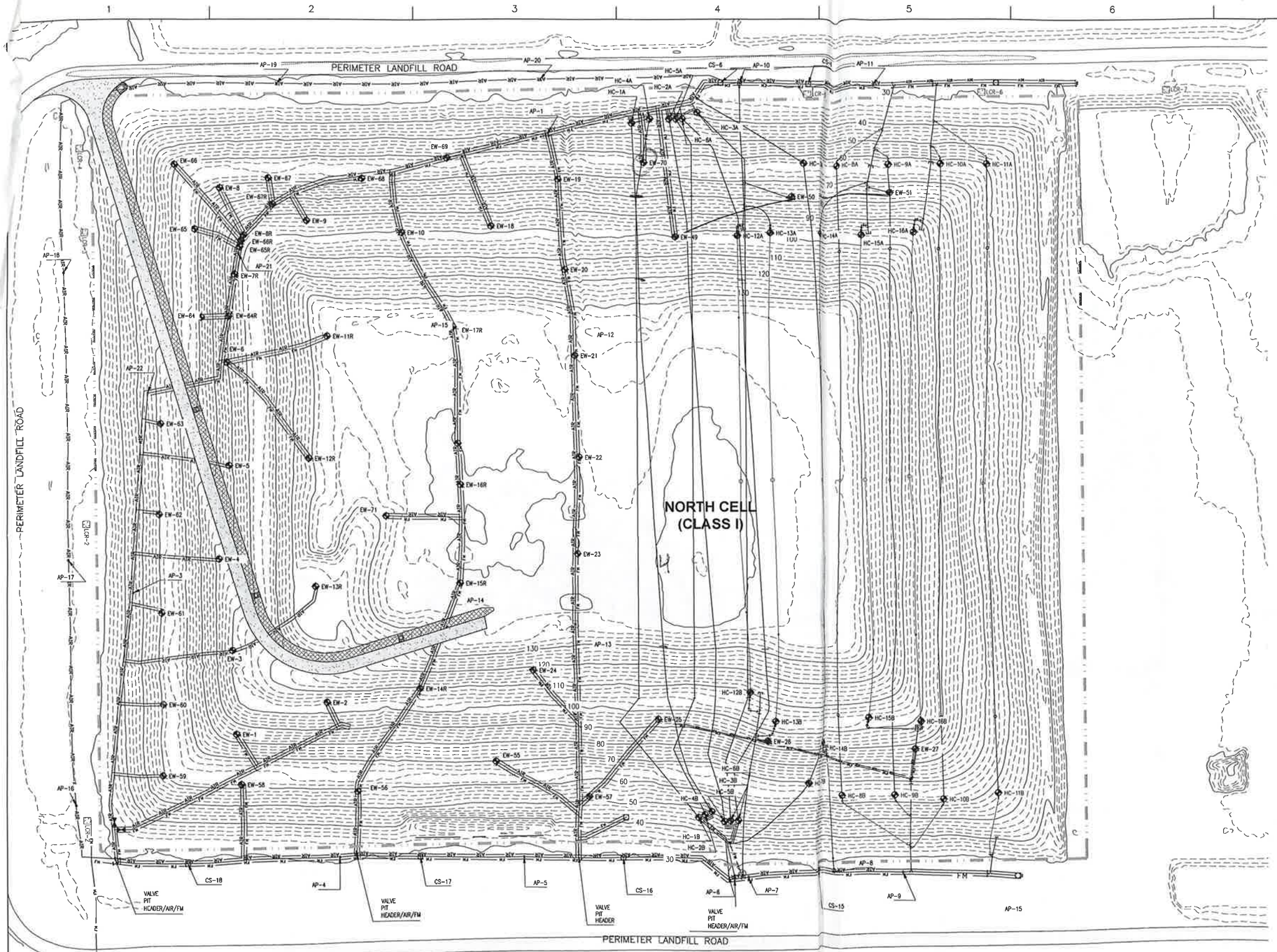
Kanishka Perera, P.E.

Project Engineer

ATTACHMENT A

Select Master Plan Drawings and Conformed Construction Drawings

January 2022



N

SCALE IN FEET

200 100 0 200 500

LEGEND

- PROPERTY BOUNDARY
- LIMITS OF LINER
- 1080 — EXISTING CONTOURS (MAJOR)
- EXISTING CONTOURS (MINOR)
- EXISTING HEADER (SIZE VARIES)
- EXISTING 6" LATERAL
- EXISTING HORIZONTAL WELL
- LCR-1 — EXISTING LEACHATE CLEANOUT RISER
- HC-7B — EXISTING HORIZONTAL LFG WELLHEAD
- EW-1 — EXISTING LFG WELL
- LCRS — EXISTING LEACHATE CLEANOUT
- CS-2 — EXISTING CONDENSATE SUMP

Volusia County
FLORIDA

ISSUE	DATE	DESCRIPTION	PREPARED BY:	JUNOS REED, P.E.
A	JULY-2016	BID DOCUMENTS		

LANDFILL GAS MASTER PLAN

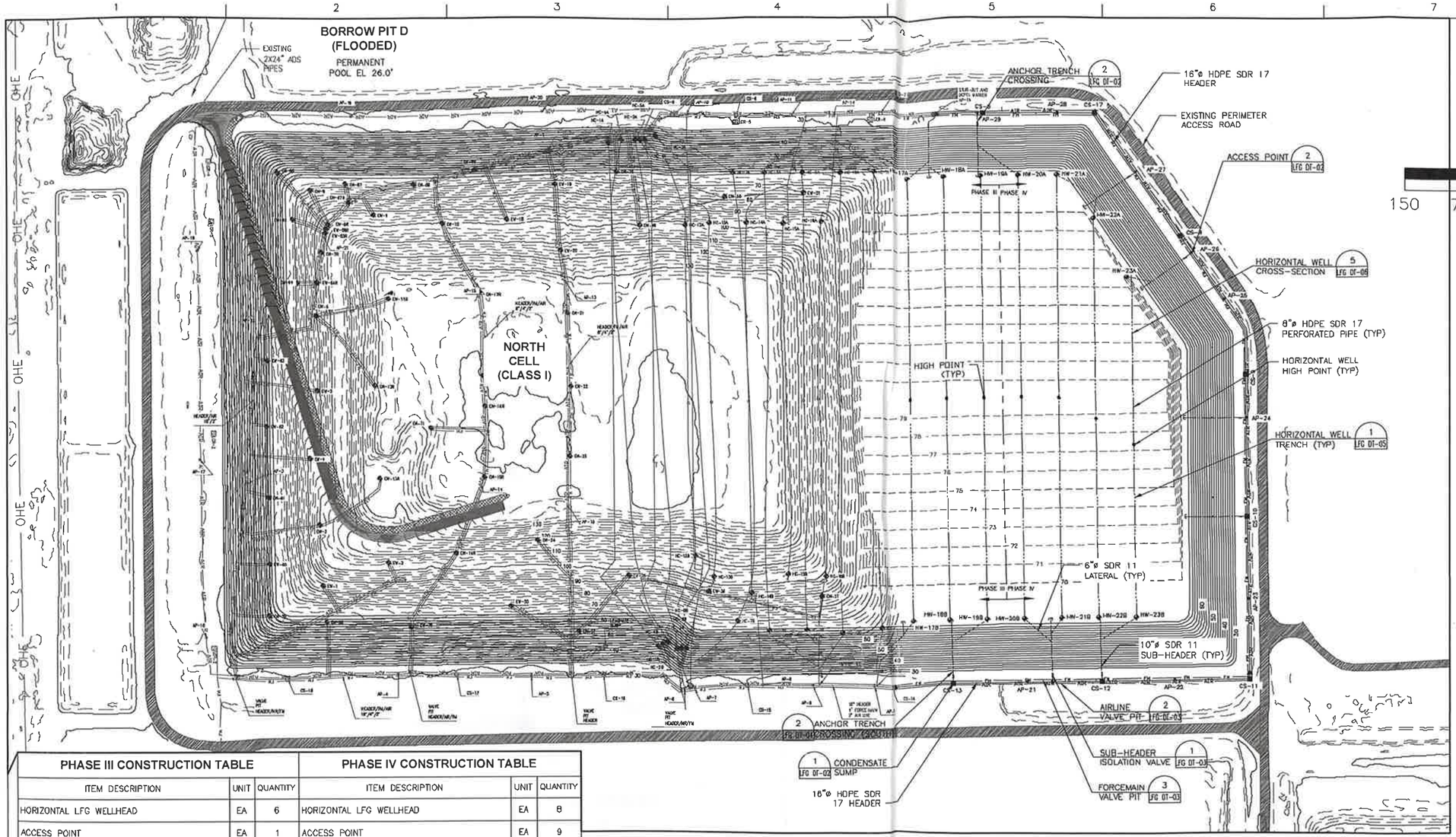
CLASS I ACTIVE AREA
TOMOKA FARMS ROAD LANDFILL
VOLUSIA COUNTY, FLORIDA

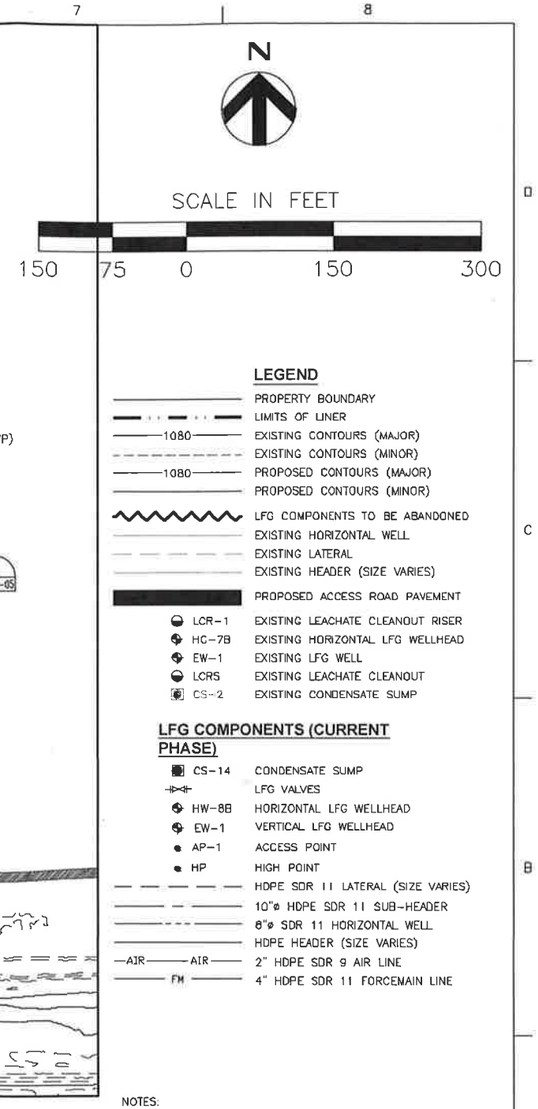
EXISTING CONDITIONS
PHASE I & II

0 1" 2"

SCALE
1" = 200'

LFG-01





LEGEND

- PROPERTY BOUNDARY
- LIMITS OF LINER
- 1080 EXISTING CONTOURS (MAJOR)
- EXISTING CONTOURS (MINOR)
- 1080 PROPOSED CONTOURS (MAJOR)
- PROPOSED CONTOURS (MINOR)
- LFG COMPONENTS TO BE ABANDONED
- EXISTING HORIZONTAL WELL
- EXISTING LATERAL
- EXISTING HEADER (SIZE VARIES)
- PROPOSED ACCESS ROAD PAVEMENT
- LCR-1 EXISTING LEACHATE CLEANOUT RISER
- HC-7B EXISTING HORIZONTAL LFG WELLHEAD
- EW-1 EXISTING LFG WELL
- LCR5 EXISTING LEACHATE CLEANOUT
- CS-2 EXISTING CONDENSATE SUMP

LFG COMPONENTS (CURRENT PHASE)

- CS-14 CONDENSATE SUMP
- LFG VALVES
- HW-8B HORIZONTAL LFG WELLHEAD
- EW-1 VERTICAL LFG WELLHEAD
- AP-1 ACCESS POINT
- HP HIGH POINT
- HDPE SDR 11 LATERAL (SIZE VARIES)
- 10"ø HDPE SDR 11 SUB-HEADER
- 8"ø SDR 11 HORIZONTAL WELL
- HDPE HEADER (SIZE VARIES)
- AIR 2" HDPE SDR 9 AIR LINE
- FM 4" HDPE SDR 11 FORCEMAIN LINE

NOTES:

1. HORIZONTAL WELLS TO PLACED WITHIN THE LIMITS AS SHOWN.
2. 10"ø HDPE SDR 11 SUB-HEADER SHALL CONNECT TO HEADER DIRECTLY VIA TEE FITTING AND 10" ISOLATION VALVE, ADJACENT TO CONDENSATE SUMPS AND ACCESS POINTS.
3. 4" FORCEMAIN & 2" AIR LINE NOT SHOW WITH 10" SUB-HEADER FOR CLARITY. ALL SUB-HEADER LINES SHOWN INCLUDE FORCEMAIN AND AIR LINE IN THE SAME TRENCH.
4. 6" LATERAL LINES FOR VERTICAL WELLS SHALL BE CONSTRUCTED WITH 4" FORCEMAIN AND 2" AIRLINE IN THE SAME TRENCH
5. ELEVATIONS REFERED TO IN THE HORIZONTAL WELL SCHEDULE FOR THE WELLHEADS AND HIGH POINTS ARE GROUND ELEVATIONS
6. QUANTITIES IN PHASE III & IV CONSTRUCTION TABLES ARE APPROXIMATE.

PHASE III CONSTRUCTION TABLE

ITEM DESCRIPTION	UNIT	QUANTITY
HORIZONTAL LFG WELLHEAD	EA	6
ACCESS POINT	EA	1
CONDENSATE SUMP	EA	0
10" ø SUB-HEADER ISOLATION VALVES	EA	3
2"ø HDPE SDR 9 AIRLINE	LF	1,020
4"ø HDPE SDR 11 CONDENSATE FORCEMAIN	LF	1,020
6"ø HDPE SDR 11 LATERAL	LF	960
8"ø HDPE SDR 11 HORIZONTAL WELL	LF	2,630
10"ø HDPE SDR 11 SUB-HEADER	LF	720
16"ø HDPE SDR 17 HEADER	LF	300

PHASE IV CONSTRUCTION TABLE

ITEM DESCRIPTION	UNIT	QUANTITY
HORIZONTAL LFG WELLHEAD	EA	8
ACCESS POINT	EA	9
CONDENSATE SUMP	EA	7
10" ø SUB-HEADER ISOLATION VALVES	EA	6
2"ø HDPE SDR 9 AIRLINE	LF	4,300
4"ø HDPE SDR 11 CONDENSATE FORCEMAIN	LF	4,300
6"ø HDPE SDR 11 LATERAL	LF	1,280
8"ø HDPE SDR 11 HORIZONTAL WELL	LF	2,950
10"ø HDPE SDR 11 SUB-HEADER	LF	1,140
12"ø HDPE SDR 11 HEADER	LF	1,980
16"ø HDPE SDR 17 HEADER	LF	800

PHASE III & IV HORIZONTAL WELL SCHEDULE

	WELL ID	WELLHEAD A			HIGH POINT			WELLHEAD B			SOLID PIPE	PERFORATED PIPE
		NORTHING	EASTING	ELEVATION	NORTHING	EASTING	ELEVATION	NORTHING	EASTING	ELEVATION		
PHASE III	HW-17	1746909.18	625278.50	68	1746321.34	625294.56	80	1745716.81	625295.58	68	320	875
	HW-18	1746910.61	625378.49	68	1746323.24	625394.55	80	1745719.98	625395.55	68	320	875
	HW-19	1746912.05	625478.48	68	1746325.39	625494.53	80	1745722.86	625495.51	68	320	875
PHASE IV	HW-20	1746914.29	625578.46	68	1746327.01	625594.51	80	1745723.85	625595.51	68	320	875
	HW-21	1746915.99	625681.51	68	1746257.57	625695.52	80	1745726.21	625695.49	68	320	870
	HW-22	1746800.86	625779.92	68	1746184.67	625796.57	79	1745734.48	625795.47	68	320	753
	HW-23	1746644.77	625869.21	68	1746111.77	625897.63	77	1745728.50	625895.47	68	320	438

Volusia County
FLORIDA

ISSUE	DATE	DESCRIPTION
A	JULY 2016	BIDDING DOCUMENTS

PREPARED BY: JUNOS REED, P.E.

JUNOS REED LICENSE No 86408 STATE OF FLORIDA PROFESSIONAL ENGINEER

LANDFILL GAS MASTER PLAN

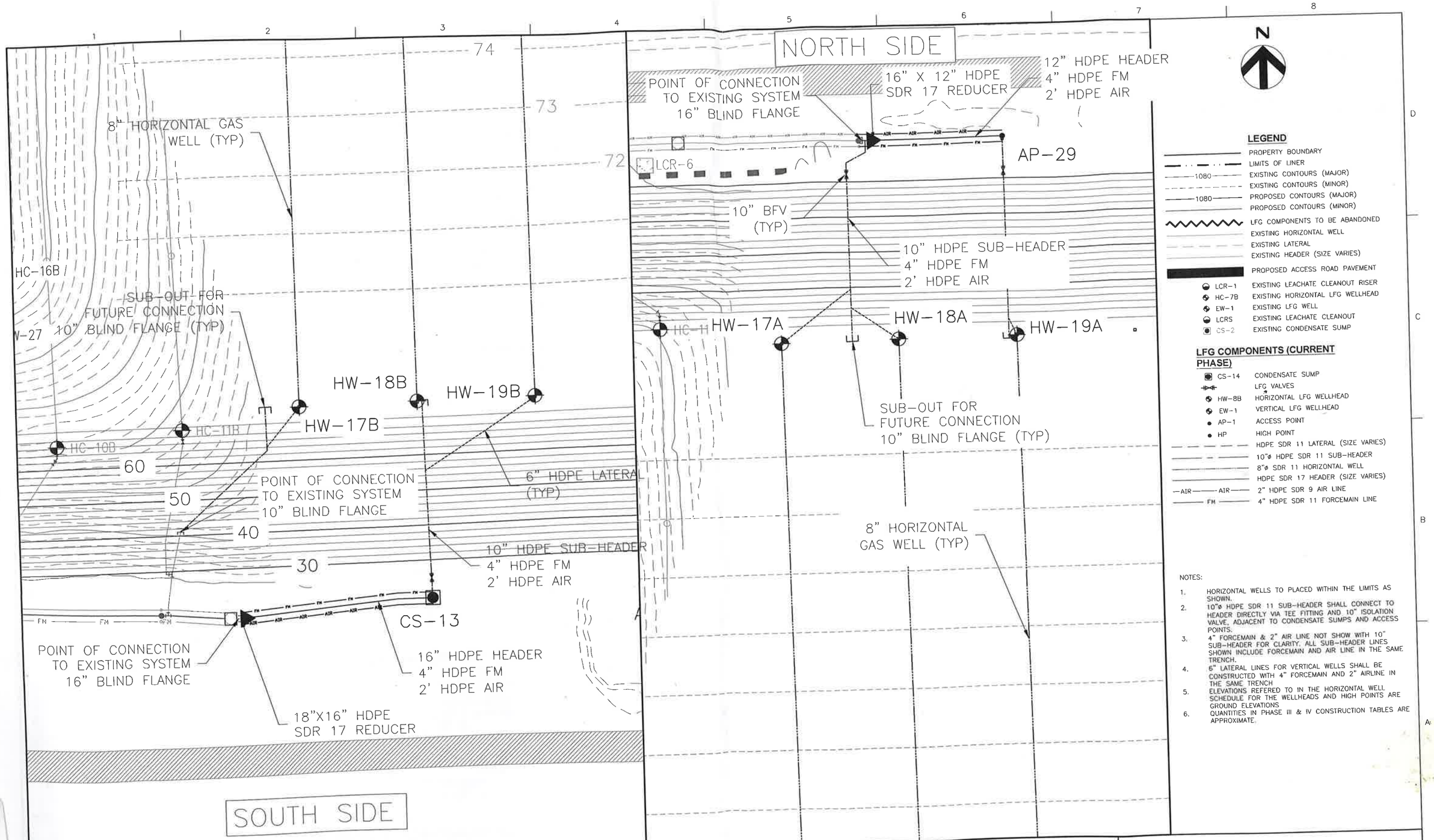
CLASS I ACTIVE AREA
TOMOKA FARMS ROAD LANDFILL
VOLUSIA COUNTY, FLORIDA

LFG MASTER PLAN PHASE III & IV (OVERALL)

0 1" 2"

SCALE 1" = 300'

LFG-02



Volusia County FLORIDA

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PREPARED BY: JUNOS REED, P.E.

JUNOS REED LICENSE No 66408 STATE OF FLORIDA PROFESSIONAL ENGINEER

LANDFILL GAS MASTER PLAN

CLASS I ACTIVE AREA
TOMOKA FARMS ROAD LANDFILL
VOLUSIA COUNTY, FLORIDA

LFG MASTER PLAN PHASE III

SCALE 1" = 75'

LFG-02-PH III

ISSUE	DATE	DESCRIPTION
A	JULY 2016	BIDDING DOCUMENTS

Volusia County
FLORIDA

PREPARED BY: JUNOS REED, P.E.

JUNOS REED LICENSE No 66408 STATE OF FLORIDA PROFESSIONAL ENGINEER

LANDFILL GAS MASTER PLAN

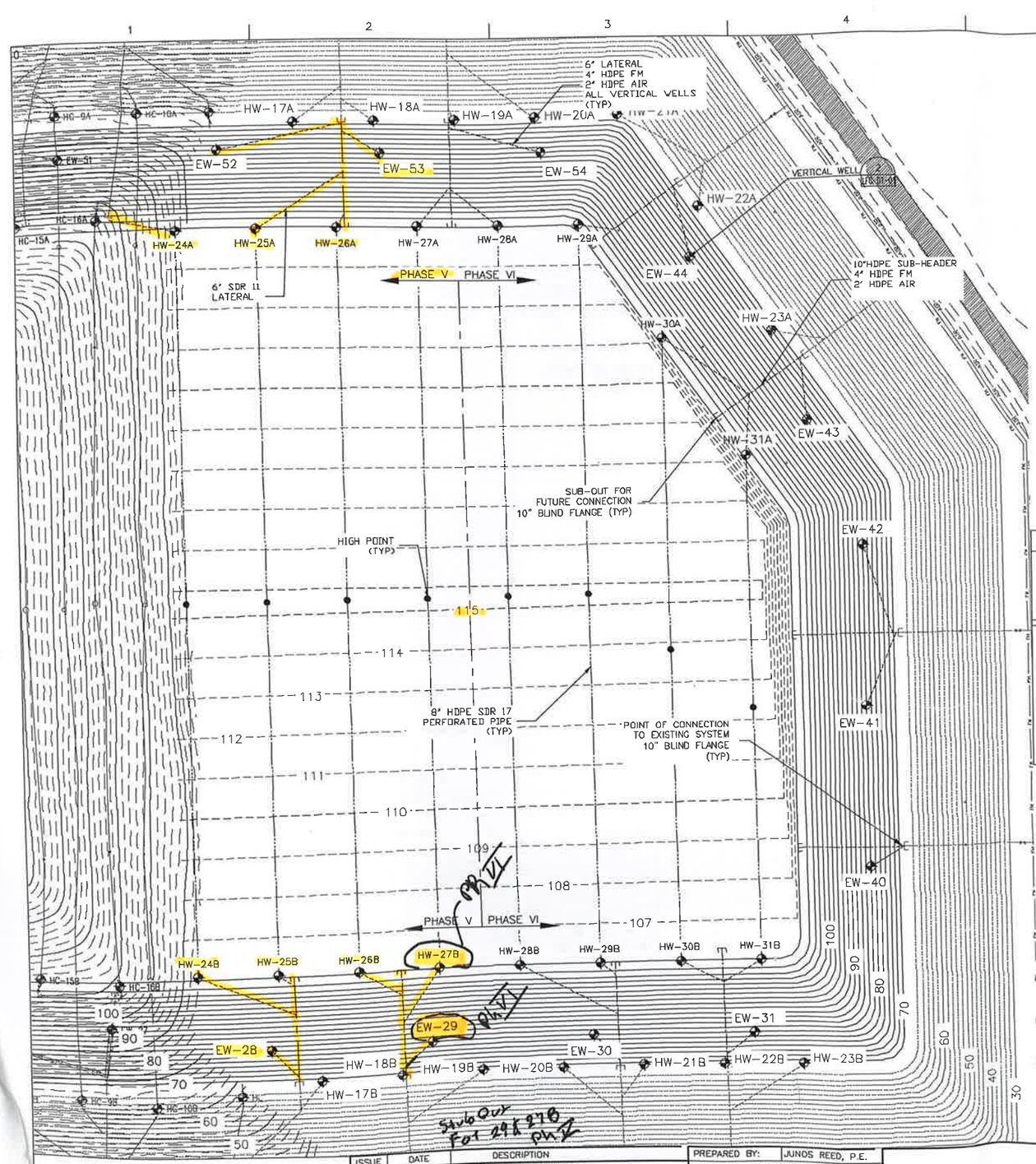
CLASS I ACTIVE AREA
TOMOKA FARMS ROAD LANDFILL
VOLUSIA COUNTY, FLORIDA

LFG MASTER PLAN PHASE IV

0 1"

SCALE 1" = 150'

LFG-02-PHIV



PHASE V CONSTRUCTION TABLE		
ITEM DESCRIPTION	UNIT	QUANTITY
HORIZONTAL LFG WELLHEAD	EA	6
VERTICAL LFG WELLHEAD	EA	4
2"ø HDPE SDR 9 AIRLINE	LF	800
4"ø HDPE SDR 11 CONDENSATE FORCEMAIN	LF	800
6"ø HDPE SDR 11 LATERAL	LF	1,850
8"ø HDPE SDR 11 HORIZONTAL WELL	LF	1,830
10"ø HDPE SDR 11 SUB-HEADER	LF	475

PHASE VI CONSTRUCTION TABLE		
ITEM DESCRIPTION	UNIT	QUANTITY
HORIZONTAL LFG WELLHEAD	EA	10
VERTICAL LFG WELLHEAD	EA	8
2"ø HDPE SDR 9 AIRLINE	LF	950
4"ø HDPE SDR 11 CONDENSATE FORCEMAIN	LF	950
6"ø HDPE SDR 11 LATERAL	LF	3,550
8"ø HDPE SDR 11 HORIZONTAL WELL	LF	2,630
10"ø HDPE SDR 11 SUB-HEADER	LF	1,075

PHASE V & VI VERTICAL WELL SCHEDULE

	Well No.	Northing	Easting	Ground Surface	Well Depth (ft)	Solid Pipe Length (ft)	Slotted Pipe Length (ft)	Gravel Pack (ft)
PHASE V	EW-28	1745755.33	625233.89	82	52	10	42	45
	EW-52	1746875.53	625183.48	85	55	10	45	48
	EW-53	1746870.45	625385.43	82	52	10	42	45
	EW-29	1745760.10	625433.84	82	52	10	42	45
PHASE VI	EW-30	1745764.26	625633.79	82	52	10	42	45
	EW-31	1745766.87	625833.78	82	52	10	42	45
	EW-40	1745974.38	625983.63	82	52	11	42	45
	EW-41	1746174.37	625981.59	82	52	12	42	45
	EW-42	1746374.36	625979.74	82	52	10	42	45
	EW-43	1746531.67	625911.60	82	52	10	42	45
	EW-44	1746738.08	625768.54	82	52	10	42	45
	EW-54	1746870.83	625585.43	82	52	10	42	45

PHASE V & VI HORIZONTAL WELL SCHEDULE

	WELL ID	WELLHEAD A			HIGHT POINT			WELLHEAD B			SOLID PIPE	PERFORATED PIPE
		NORTHING	EASTING	ELEVATION	NORTHING	EASTING	ELEVATION	NORTHING	EASTING	ELEVATION		
PHASE V	HW-24	1746775.30	625130.40	106	1746316.72	625094.65	116	1745847.37	625143.69	106	320	610
	HW-25	1746776.73	625230.39	106	1746320.30	625244.57	116	1745848.81	625243.68	106	320	610
	HW-26	1746778.16	625330.38	106	1746321.74	625344.56	116	1745850.24	625343.67	106	320	610
PHASE VI	HW-27	1746779.96	625430.37	106	1746323.17	625444.55	116	1745851.67	625443.66	106	320	610
	HW-28	1746781.03	625530.36	106	1746324.61	625544.54	116	1745853.10	625543.65	106	320	610
	HW-29	1746781.03	625630.37	106	1746326.03	625644.53	116	1745854.54	625643.64	106	320	610
	HW-30	1746638.41	625732.43	106	1746254.73	625745.56	114	1745855.97	625743.63	106	320	465
	HW-31	1746489.67	625834.57	106	1746181.08	625846.63	112	1745857.40	625843.62	106	320	312

NOTES:

1. HORIZONTAL WELLS TO PLACED WITHIN THE LIMITS AS SHOWN.
2. 10"ø HDPE SDR 11 SUB-HEADER SHALL CONNECT TO HEADER DIRECTLY VIA TEE FITTING AND 10" ISOLATION VALVE, ADJACENT TO CONDENSATE SUMPS AND ACCESS POINTS.
3. 4" FORCEMAIN & 2" AIR LINE NOT SHOW WITH 10" SUB-HEADER FOR CLARITY. ALL SUB-HEADER LINES SHOWN INCLUDE FORCEMAIN AND AIR LINE IN THE SAME TRENCH.
4. 6" LATERAL LINES FOR VERTICAL WELLS SHALL BE CONSTRUCTED WITH 4" FORCEMAIN AND 2" AIRLINE IN THE SAME TRENCH
5. ELEVATIONS REFERED TO IN THE HORIZONTAL WELL SCHEDULE FOR THE WELLHEADS AND HIGH POINTS ARE GROUND ELEVATIONS
6. QUANTITIES IN PHASE V & VI CONSTRUCTION TABLES ARE APPROXIMATE.

N

150 75 0 150 300

LEGEND

- PROPERTY BOUNDARY
- LIMITS OF LINER
- 1080 EXISTING CONTOURS (MAJOR)
- EXISTING CONTOURS (MINOR)
- 1080 PROPOSED CONTOURS (MAJOR)
- PROPOSED CONTOURS (MINOR)
- LFG COMPONENTS TO BE ABANDONED
- EXISTING HORIZONTAL WELL
- EXISTING LATERAL
- EXISTING HEADER (SIZE VARIES)
- PROPOSED ACCESS ROAD PAVEMENT
- LCR-1 EXISTING LEACHATE CLEANOUT RISER
- HC-7B EXISTING HORIZONTAL LFG WELLHEAD
- EW-1 EXISTING LFG WELL
- LCRS EXISTING LEACHATE CLEANOUT
- CS-2 EXISTING CONDENSATE SUMP

LFG COMPONENTS (CURRENT PHASE)

- CS-14 CONDENSATE SUMP
- LFG VALVES
- HW-8B HORIZONTAL LFG WELLHEAD
- EW-1 VERTICAL LFG WELLHEAD
- AP-1 ACCESS POINT
- HP HIGH POINT
- HDPE SDR 11 LATERAL (SIZE VARIES)
- 10"ø HDPE SDR 11 SUB-HEADER
- 8"ø SDR 11 HORIZONTAL WELL
- HDPE SDR 17 HEADER (SIZE VARIES)
- AIR AIR 2" HDPE SDR 9 AIR LINE
- FM 4" HDPE SDR 11 FORCEMAIN LINE

ISSUE	DATE	DESCRIPTION
A	JULY 2016	BIDDING DOCUMENTS

PREPARED BY: JUNOS REED, P.E.

JUNOS REED LICENSE No 66408 STATE OF FLORIDA PROFESSIONAL ENGINEER

Volusia County FLORIDA

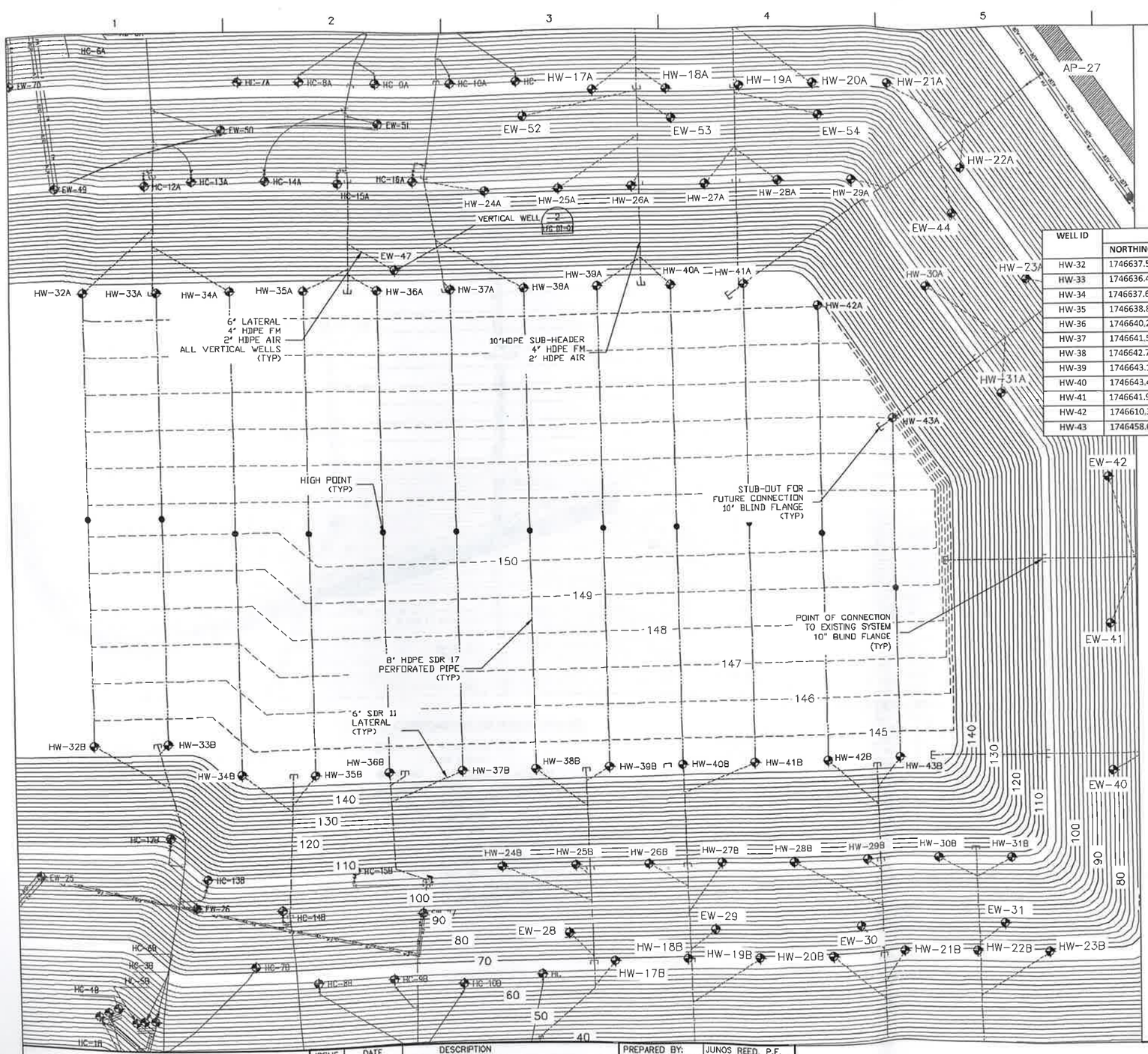
LANDFILL GAS MASTER PLAN

CLASS I ACTIVE AREA
TOMOKA FARMS ROAD LANDFILL
VOLUSIA COUNTY, FLORIDA

PHASE V & VI

SCALE 1" = 150'

LFG-03



N

150 75 0 150 300

PHASE VII HORIZONTAL WELL SCHEDULE

WELL ID	WELLHEAD A			HIGH POINT			WELLHEAD B			SOLID PIPE	PERFORATED PIPE
	NORTHING	EASTING	ELEVATION	NORTHING	EASTING	ELEVATION	NORTHING	EASTING	ELEVATION		
HW-32	1746637.57	624582.32	144	1746336.70	624594.27	151	1746637.57	624582.32	144	320	300
HW-33	1746636.41	624682.34	144	1746336.69	624694.28	151	1746636.41	624682.34	144	320	300
HW-34	1746637.60	624782.34	144	1746316.65	624794.62	151	1746637.60	624782.34	144	320	340
HW-35	1746638.89	624882.33	144	1746315.29	624894.61	151	1746638.89	624882.33	144	320	340
HW-36	1746640.23	624982.32	144	1746316.72	624994.60	151	1746640.23	624982.32	144	320	340
HW-37	1746641.57	625082.31	144	1746316.72	625094.65	151	1746641.57	625082.31	144	320	340
HW-38	1746642.78	625182.30	144	1746316.72	625194.64	151	1746642.78	625182.30	144	320	340
HW-39	1746643.19	625282.31	144	1746319.59	625294.63	151	1746643.19	625282.31	144	320	340
HW-40	1746643.45	625382.32	144	1746319.85	625394.64	151	1746643.45	625382.32	144	320	340
HW-41	1746641.90	625482.35	144	1746322.97	625494.56	151	1746641.90	625482.35	144	320	340
HW-42	1746610.32	625583.57	144	1746308.00	625594.12	151	1746610.32	625583.57	144	320	300
HW-43	1746458.65	625685.05	144	1746233.10	625694.86	151	1746458.65	625685.05	144	320	150

PHASE VII VERTICAL WELL SCHEDULE

Well No.	Northing	Easting	Ground Surface	Well Depth (ft)	Solid Pipe Length (ft)	Slotted Pipe Length (ft)	Gravel Pack (ft)
EW-47	1746668.45	625006.78	142.0	106.7	10.0	96.7	99.7

PHASE VII CONSTRUCTION TABLE

ITEM DESCRIPTION	UNIT	QUANTITY
HORIZONTAL LFG WELLHEAD	EA	24
VERTICAL LFG WELLHEAD	EA	1
2"ø HDPE SDR 9 AIRLINE	LF	2,800
4"ø HDPE SDR 11 CONDENSATE FORCEMAIN	LF	2,800
6"ø HDPE SDR 11 LATERAL	LF	1,850
8"ø HDPE SDR 11 HORIZONTAL WELL	LF	7,600
10"ø HDPE SDR 11 SUB-HEADER	LF	2,700

NOTES:

1. HORIZONTAL WELLS TO PLACED WITHIN THE LIMITS AS SHOWN.
2. 10"ø HDPE SDR 11 SUB-HEADER SHALL CONNECT TO HEADER DIRECTLY VIA TEE FITTING AND 10" ISOLATION VALVE, ADJACENT TO CONDENSATE SUMPS AND ACCESS POINTS.
3. 4" FORCEMAIN & 2" AIR LINE NOT SHOW WITH 10" SUB-HEADER FOR CLARITY. ALL SUB-HEADER LINES SHOWN INCLUDE FORCEMAIN AND AIR LINE IN THE SAME TRENCH.
4. 6" LATERAL LINES FOR VERTICAL WELLS SHALL BE CONSTRUCTED WITH 4" FORCEMAIN AND 2" AIRLINE IN THE SAME TRENCH
5. ELEVATIONS REFERED TO IN THE HORIZONTAL WELL SCHEDULE FOR THE WELLHEADS AND HIGH POINTS ARE GROUND ELEVATIONS
6. QUANTITIES IN PHASE VII CONSTRUCTION TABLES ARE APPROXIMATE.

LEGEND

- PROPERTY BOUNDARY
- LIMITS OF LINER
- 1080 EXISTING CONTOURS (MAJOR)
- EXISTING CONTOURS (MINOR)
- 1080 PROPOSED CONTOURS (MAJOR)
- PROPOSED CONTOURS (MINOR)
- LFG COMPONENTS TO BE ABANDONED
- EXISTING HORIZONTAL WELL
- EXISTING LATERAL
- EXISTING HEADER (SIZE VARIES)
- PROPOSED ACCESS ROAD PAVEMENT
- LCR-1 EXISTING LEACHATE CLEANOUT RISER
- HC-7B EXISTING HORIZONTAL LFG WELLHEAD
- EW-1 EXISTING LFG WELL
- LCRS EXISTING LEACHATE CLEANOUT
- CS-2 EXISTING CONDENSATE SUMP

LFG COMPONENTS (CURRENT PHASE)

- CS-14 CONDENSATE SUMP
- LFG VALVES
- HW-8B HORIZONTAL LFG WELLHEAD
- EW-1 VERTICAL LFG WELLHEAD
- AP-1 ACCESS POINT
- HP HIGH POINT
- HDPE SDR 11 LATERAL (SIZE VARIES)
- 10"ø HDPE SDR 11 SUB-HEADER
- 8"ø SDR 11 HORIZONTAL WELL
- HDPE SDR 17 HEADER (SIZE VARIES)
- AIR AIR 2" HDPE SDR 9 AIR LINE
- FM 4" HDPE SDR 11 FORCEMAIN LINE

Volusia County
FLORIDA

ISSUE	DATE	DESCRIPTION
A	JULY 2016	BIDDING DOCUMENTS

PREPARED BY: JUNOS REED, P.E.

JUNOS REED LICENSE No 66408 STATE OF FLORIDA PROFESSIONAL ENGINEER

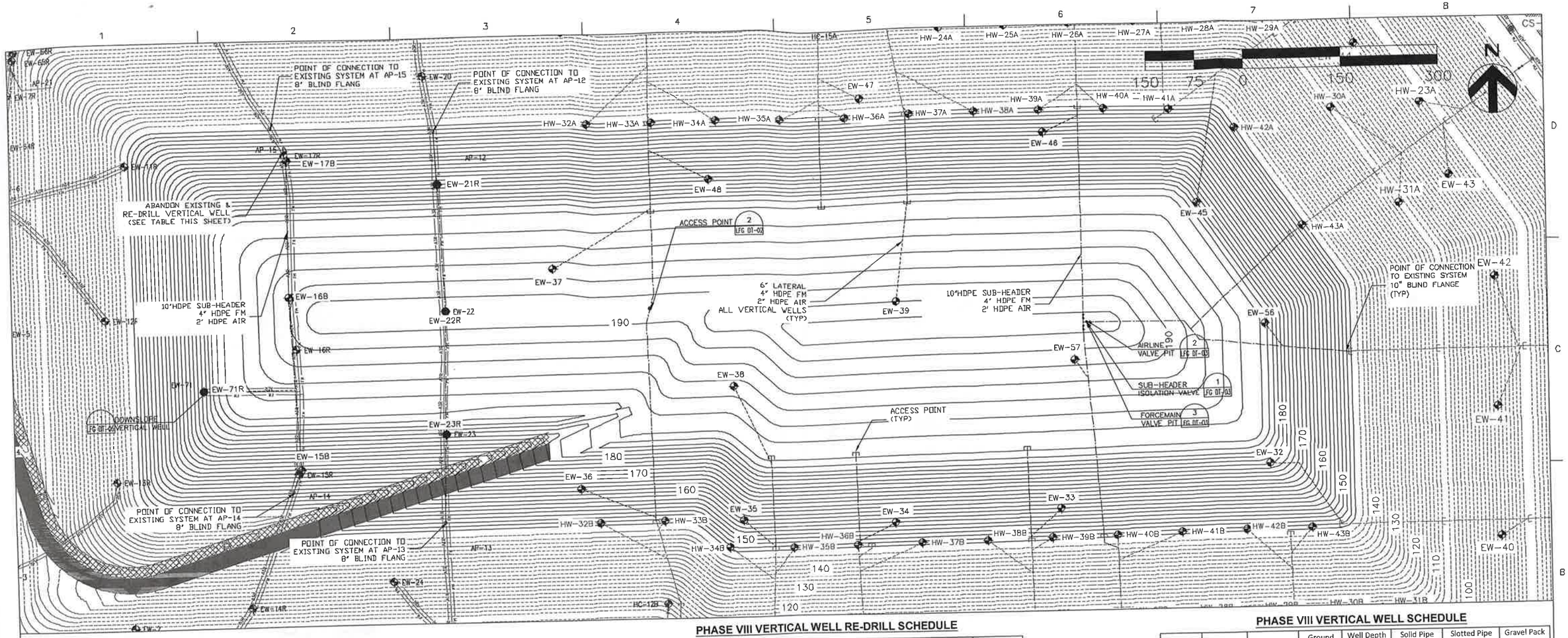
LANDFILL GAS MASTER PLAN

CLASS I ACTIVE AREA
TOMOKA FARMS ROAD LANDFILL
VOLUSIA COUNTY, FLORIDA

PHASE VII

SCALE 1" = 150'

LFG-04



LEGEND

- PROPERTY BOUNDARY
- LIMITS OF LINER
- 1080 EXISTING CONTOURS (MAJOR)
- EXISTING CONTOURS (MINOR)
- 1080 PROPOSED CONTOURS (MAJOR)
- PROPOSED CONTOURS (MINOR)
- LFG COMPONENTS TO BE ABANDONED
- EXISTING HORIZONTAL WELL
- EXISTING LATERAL
- EXISTING HEADER (SIZE VARIES)
- PROPOSED ACCESS ROAD PAVEMENT
- LCR-1 EXISTING LEACHATE CLEANOUT RISER
- HC-7B EXISTING HORIZONTAL LFG WELLHEAD
- EW-1 EXISTING LFG WELL
- LCRS EXISTING LEACHATE CLEANOUT
- CS-2 EXISTING CONDENSATE SUMP

LFG COMPONENTS (CURRENT PHASE)

- CS-14 CONDENSATE SUMP
- LFG VALVES
- HW-8B HORIZONTAL LFG WELLHEAD
- EW-1 VERTICAL LFG WELLHEAD
- AP-1 ACCESS POINT
- HP HIGH POINT
- HDPE SDR 11 LATERAL (SIZE VARIES)
- 10"ø HDPE SDR 11 SUB-HEADER
- 8"ø SDR 11 HORIZONTAL WELL
- HDPE SDR 17 HEADER (SIZE VARIES)
- AIR 2" HDPE SDR 9 AIR LINE
- FM 4" HDPE SDR 11 FORCEMAIN LINE

PHASE VIII VERTICAL WELL RE-DRILL SCHEDULE

Well No.	Northing	Easting	Ground Surface	Well Depth (ft)	Solid Pipe Length (ft)	Slotted Pipe Length (ft)	Gravel Pack (ft)
EW-15B	1746113.2	624132.571	161.6	128.2	10.0	118.2	121.2
EW-16B	1746378.9	624118.3379	188.8	155.2	10.0	145.2	148.2
EW-17B	1746591.8	624119.2361	159.8	126.5	10.0	116.5	119.5
EW-21	1746550.9	624350.8659	174.3	141.1	10.0	131.1	134.1
EW-22	1746353	624359.4495	190.9	157.6	10.0	147.6	150.6
EW-23	1746164.1	624356.5332	179.5	146.5	10.0	136.5	139.5
EW-71	1746237.5	623984.8423	178.9	147.9	10.0	137.9	140.9

NOTES:

1. HORIZONTAL WELLS TO PLACED WITHIN THE LIMITS AS SHOWN.
2. 10"ø HDPE SDR 11 SUB-HEADER SHALL CONNECT TO HEADER DIRECTLY VIA TEE FITTING AND 10" ISOLATION VALVE, ADJACENT TO CONDENSATE SUMPS AND ACCESS POINTS.
3. 4" FORCEMAIN & 2" AIR LINE NOT SHOW WITH 10" SUB-HEADER FOR CLARITY. ALL SUB-HEADER LINES SHOWN INCLUDE FORCEMAIN AND AIR LINE IN THE SAME TRENCH.
4. 6" LATERAL LINES FOR VERTICAL WELLS SHALL BE CONSTRUCTED WITH 4" FORCEMAIN AND 2" AIRLINE IN THE SAME TRENCH
5. ELEVATIONS REFERED TO IN THE HORIZONTAL WELL SCHEDULE FOR THE WELLHEADS AND HIGH POINTS ARE GROUND ELEVATIONS
6. QUANTITIES IN PHASE VIII CONSTRUCTION TABLES ARE APPROXIMATE.

PHASE VIII CONSTRUCTION TABLE

ITEM DESCRIPTION	UNIT	QUANTITY
VERTICAL LFG WELLHEAD	EA	20
2"ø HDPE SDR 9 AIRLINE	LF	5,710
4"ø HDPE SDR 11 CONDENSATE FORCEMAIN	LF	5,710
6"ø HDPE SDR 11 LATERAL	LF	1,725
10"ø HDPE SDR 11 SUB-HEADER	LF	3,985

PHASE VIII VERTICAL WELL SCHEDULE

Well No.	Northing	Easting	Ground Surface	Well Depth (ft)	Solid Pipe Length (ft)	Slotted Pipe Length (ft)	Gravel Pack (ft)
EW-32	1746092.57	625629.71	156.7	120.1	10.0	110.1	113.1
EW-33	1746028.92	625306.44	151.6	113.9	10.0	103.9	106.9
EW-34	1746012.04	625050.81	156.0	118.8	10.0	108.8	111.8
EW-35	1746020.23	624813.49	150.5	115.8	10.0	105.8	108.8
EW-36	1746074.37	624562.89	163.0	128.3	10.0	118.3	121.3
EW-37	1746416.04	624525.79	188.4	153.6	10.0	143.6	146.6
EW-38	1746227.09	624802.27	187.6	152.7	10.0	142.7	145.7
EW-39	1746352.86	625057.07	191.0	155.3	10.0	145.3	148.3
EW-57	1746257.31	625331.44	190.3	153.0	10.0	143.0	146.0
EW-56	1746308.90	625625.00	157.5	121.9	10.0	111.9	114.9
EW-45	1746496.41	625523.06	145.8	112.5	10.0	102.5	105.5
EW-46	1746608.28	625288.15	156.7	121.4	10.0	111.4	114.4
EW-48	1746546.53	624769.92	175.3	141.0	10.0	131.0	134.0

Volusia County FLORIDA

ISSUE	DATE	DESCRIPTION
A	5/19/2016	PROVIDED FOR DEP REVIEW

PREPARED BY: JUNOS REED, P.E.

JUNOS REED LICENSE No 66408 STATE OF FLORIDA PROFESSIONAL ENGINEER

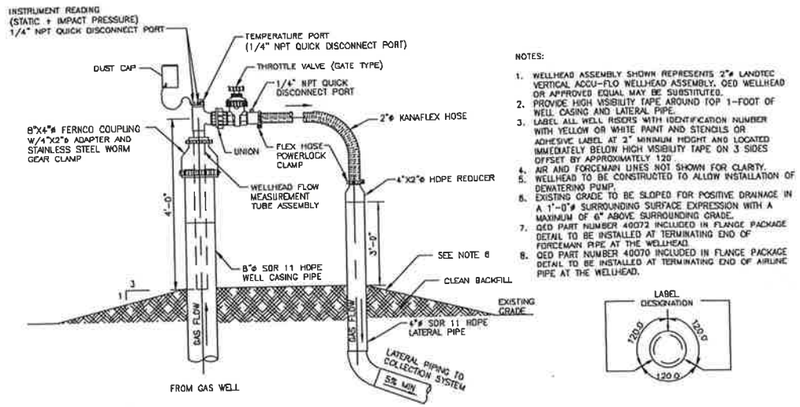
LANDFILL GAS MASTER PLAN

CLASS I ACTIVE AREA
TOMOKA FARMS ROAD LANDFILL
VOLUSIA COUNTY, FLORIDA

PHASE VIII

SCALE 1" = 150'

LFG-05



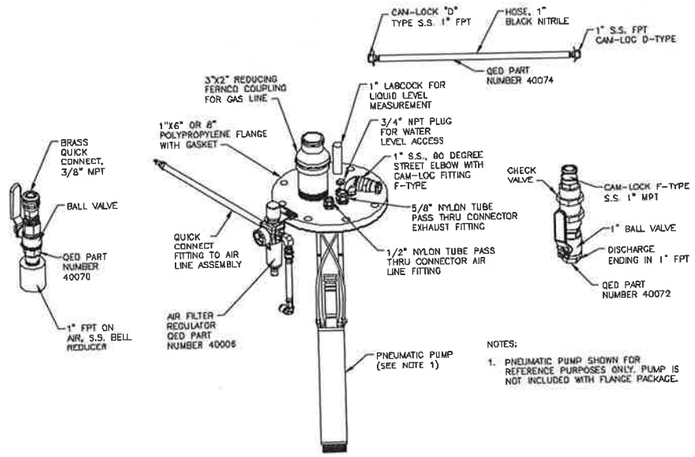
NOTES:

1. WELLHEAD ASSEMBLY SHOWN REPRESENTS 2"ø LANDTEC VERTICAL ACCU-FLO WELLHEAD ASSEMBLY. QED WELLHEAD OR APPROVED EQUAL MAY BE SUBSTITUTED.
2. PROVIDE HIGH VISIBILITY TAPE AROUND TOP 1-FOOT OF WELL CASING AND LATERAL PIPE.
3. LABEL ALL WELL RISERS WITH IDENTIFICATION NUMBER WITH YELLOW OR WHITE PAINT AND STENCILS OR ADHESIVE LABEL AT 2" MINIMUM HEIGHT AND LOCATED IMMEDIATELY BELOW HIGH VISIBILITY TAPE ON 3 SIDES OFFSET BY APPROXIMATELY 120°.
4. AIR AND FORCEMAIN LINES NOT SHOWN FOR CLARITY.
5. WELLHEAD TO BE CONSTRUCTED TO ALLOW INSTALLATION OF DEWATERING PUMP.
6. EXISTING GRADE TO BE SLOPED FOR POSITIVE DRAINAGE IN A 1'-0"ø SURROUNDING SURFACE EXPRESSION WITH A MAXIMUM OF 6" ABOVE SURROUNDING GRADE.
7. QED PART NUMBER 40072 INCLUDED IN FLANGE PACKAGE DETAIL TO BE INSTALLED AT TERMINATING END OF FORCEMAIN PIPE AT THE WELLHEAD.
8. QED PART NUMBER 40070 INCLUDED IN FLANGE PACKAGE DETAIL TO BE INSTALLED AT TERMINATING END OF AIRLINE PIPE AT THE WELLHEAD.

LANDTEC WELLHEAD ASSEMBLY

1 DT-01

NOT TO SCALE



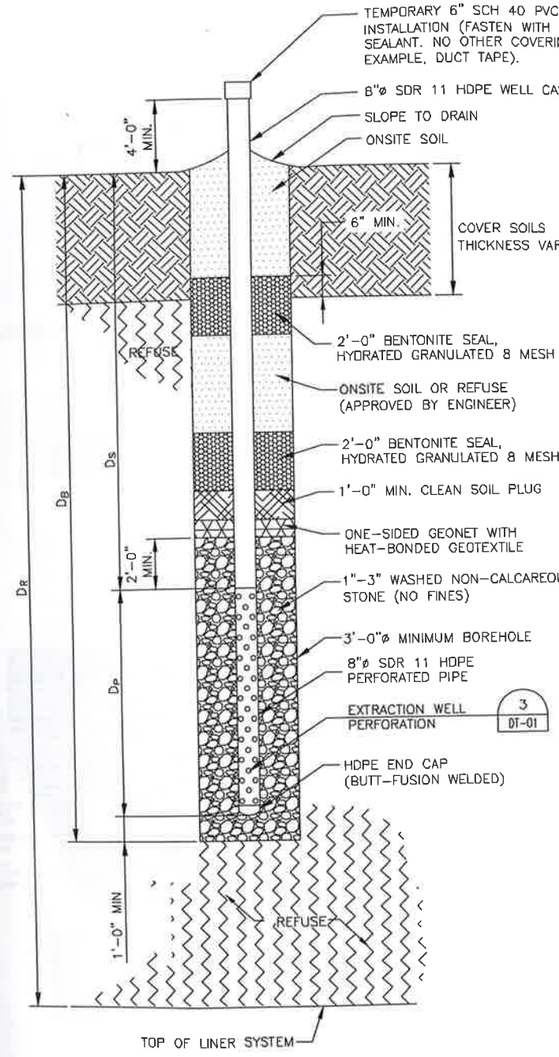
NOTES:

1. PNEUMATIC PUMP SHOWN FOR REFERENCE PURPOSES ONLY. PUMP IS NOT INCLUDED WITH FLANGE PACKAGE.

FLANGE PACKAGE WITH PLUG

4 DT-01

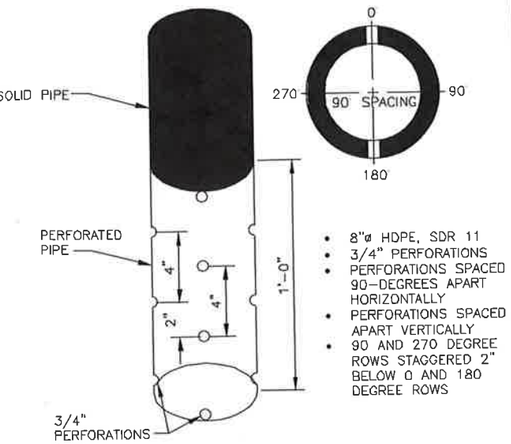
NOT TO SCALE



VERTICAL WELL

2 LFG-03

NOT TO SCALE



- 8"ø HDPE, SDR 11
- 3/4" PERFORATIONS
- PERFORATIONS SPACED 90-DEGREES APART HORIZONTALLY
- PERFORATIONS SPACED APART VERTICALLY
- 90 AND 270 DEGREE ROWS STAGGERED 2" BELOW 0 AND 180 DEGREE ROWS

EXTRACTION WELL PERFORATIONS

3 DT-01

NOT TO SCALE

NOTES:

1. D_R = DEPTH OF REFUSE
   D_B = DEPTH OF BORING
   D_S = DEPTH OF SOLID PIPE (BELOW GRADE) -10 FEET MINIMUM
   D_P = LENGTH OF PERFORATED PIPE

   SEE WELL SCHEDULES.
2. 1"-3" WASHED NON-CALCAREOUS STONE (NO FINES).
3. WELL DRILLING WILL NOT COMMENCE UNTIL EXISTING GRADE ELEVATIONS ARE IDENTIFIED AND VERIFIED BY PROJECT SURVEYOR, DESIGN ENGINEER, AND CQA REPRESENTATIVE.
4. WELL DRILLING TABLE WILL BE MANAGED BY OWNER OR DESIGNATED REPRESENTATIVE TO ENSURE ONLY THE VERIFIED WELL DEPTHS ARE PRESENT, AND THAT DRILLER AND CQA REPRESENTATIVE HAVE THE IDENTICAL INFORMATION PRIOR TO DRILLING.

Volusia County FLORIDA

ISSUE	DATE	DESCRIPTION
A	JULY 2016	BIDDING DOCUMENTS

PROJECT ENGINEER: JUNOS REED, P.E.

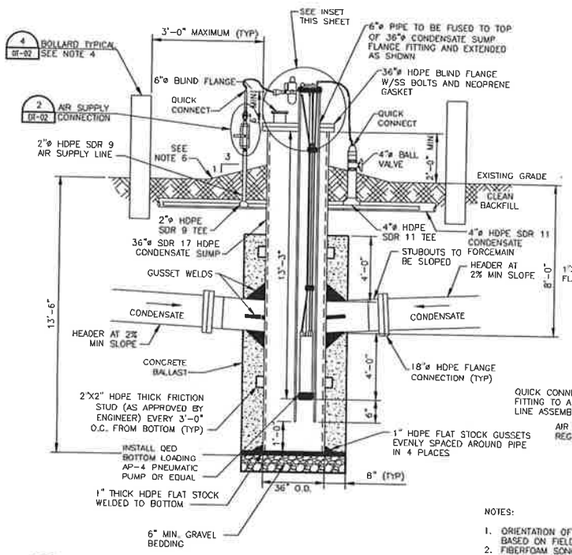
JUNOS REED LICENSE No 66408 STATE OF FLORIDA PROFESSIONAL ENGINEER

LANDFILL GAS MASTER PLAN

CLASS I ACTIVE AREA
TOMOKA FARMS ROAD LANDFILL
VOLUSIA COUNTY, FLORIDA

LANDFILL GAS DETAILS (1 OF 6)

NOT TO SCALE | LFG DT-01



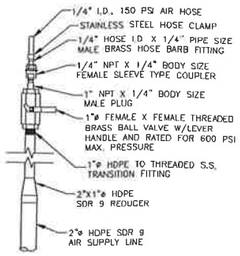
NOTES:

1. ORIENTATION OF HEADER LINES ENTERING CONDENSATE SUMP VARIES BASED ON FIELD CONDITIONS.
2. FIBERFOAM SONOTUBE FORM OR EQUAL AROUND SUMP FOR CONCRETE BALLAST TO BE CONSTRUCTED ON CONDENSATE SUMPS OUTSIDE OF WASTE.
3. CONCRETE SHALL BE POURED AS BALLAST FOR SUMPS LOCATED OUTSIDE OF WASTE. CONCRETE CAN FILL THE ENTIRE EXCAVATION, OR A SONOTUBE (OR APPROVED EQUAL) CAN BE PLACED AROUND THE SUMP AND FILLED WITH CONCRETE AS SHOWN.
4. INSTALL FOUR BOLLARDS AROUND CONDENSATE SUMPS LOCATED OUTSIDE OF WASTE. EACH BOLLARD TO BE 4'-0" TALL AND SPACED 3'-0" AWAY FROM SUMP. PAINT BOLLARDS SAFETY YELLOW.
5. LABEL ALL CONDENSATE SUMPS WITH IDENTIFICATION NUMBER WITH YELLOW OR WHITE PAINT AND STENCILS OR ADHESIVE LABEL AT 2" MINIMUM HEIGHT AND LOCATED IMMEDIATELY BELOW HIGH VISIBILITY TAPE
6. EXISTING GRADE TO BE SLOPED FOR POSITIVE DRAINAGE IN A 1'ø SURROUNDING SURFACE EXPRESSION.
7. THE PNEUMATIC PUMP INSTALLATION SHALL ALSO INCLUDE A PUMP DATA MODULE. DATA MODULE SHALL BE INSTALLED TO SUMP FLANGE VIA BRACKET FITTING.
8. 10"ø HDPE SDR 11 SUB-HEADER SHALL CONNECT TO HEADER DIRECTLY VIA TEE FITTING, ADJACENT TO CONDENSATE SUMPS AND ACCESS POINTS.

CONDENSATE SUMP

NOT TO SCALE

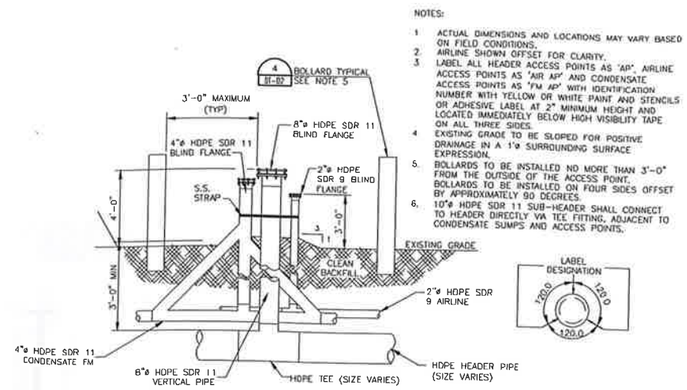
1 LFG-02



AIR SUPPLY CONNECTION

NOT TO SCALE

2 DT-02



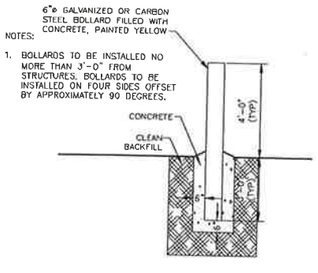
NOTES:

1. ACTUAL DIMENSIONS AND LOCATIONS MAY VARY BASED ON FIELD CONDITIONS.
2. AIRLINE SHOWN OFFSET FOR CLARITY.
3. LABEL ALL HEADER ACCESS POINTS AS 'AP'. AIRLINE ACCESS POINTS AS 'AIR AP' AND CONDENSATE ACCESS POINTS AS 'FM AP' WITH IDENTIFICATION NUMBER WITH YELLOW OR WHITE PAINT AND STENCILS OR ADHESIVE LABEL AT 2" MINIMUM HEIGHT AND LOCATED IMMEDIATELY BELOW HIGH VISIBILITY TAPE ON ALL THREE SIDES.
4. EXISTING GRADE TO BE SLOPED FOR POSITIVE DRAINAGE IN A 1'ø SURROUNDING SURFACE EXPRESSION.
5. BOLLARDS TO BE INSTALLED NO MORE THAN 3'-0" FROM THE OUTSIDE OF THE ACCESS POINT. BOLLARDS TO BE INSTALLED ON FOUR SIDES OFFSET BY APPROXIMATELY 90 DEGREES.
6. 10"ø HDPE SDR 11 SUB-HEADER SHALL CONNECT TO HEADER DIRECTLY VIA TEE FITTING, ADJACENT TO CONDENSATE SUMPS AND ACCESS POINTS.

ACCESS POINT

NOT TO SCALE

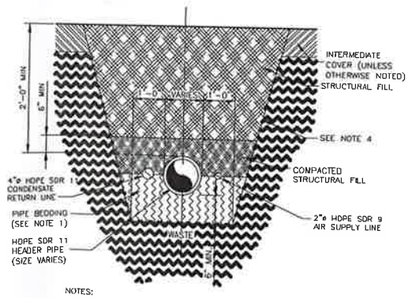
3 LFG-02



BOLLARD TYPICAL

NOT TO SCALE

4 DT-02



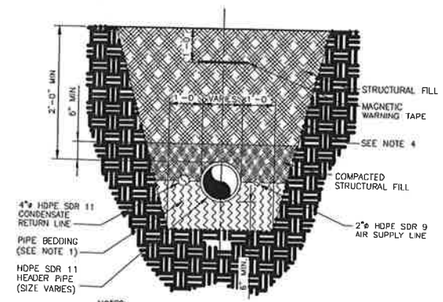
NOTES:

1. PIPE BEDDING TO BE COMPACTED BELOW AND TO THE MIDPOINT ON ALL PIPING.
2. ACTUAL DEPTH OF TRENCH MAY VARY BASED ON FIELD CONDITIONS.
3. ALL PIPES SHALL HAVE A MINIMUM OF 2' OF COVER UNLESS NOTED OTHERWISE.
4. TRENCH WALLS MUST BE SLOPED OR HAVE APPROPRIATE SHORING PROVIDED TO COMPLY WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL SAFETY STANDARDS.

TYPICAL LANDFILL GAS PIPE TRENCH (INSIDE WASTE)

NOT TO SCALE

5 DT-02



NOTES:

1. PIPE BEDDING TO BE COMPACTED BELOW AND TO THE MIDPOINT ON ALL PIPING.
2. ACTUAL DEPTH OF TRENCH MAY VARY BASED ON FIELD CONDITIONS.
3. ALL PIPES SHALL HAVE A MINIMUM OF 2' OF COVER UNLESS NOTED OTHERWISE.
4. TRENCH WALLS MUST BE SLOPED OR HAVE APPROPRIATE SHORING PROVIDED TO COMPLY WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL SAFETY STANDARDS.

TYPICAL LANDFILL GAS PIPE TRENCH (OUTSIDE WASTE)

NOT TO SCALE

6 DT-02

Volusia County FLORIDA

ISSUE	DATE	DESCRIPTION
A	JULY 2016	BIDDING DOCUMENTS

PROJECT ENGINER: JUNOS REED, P.E.

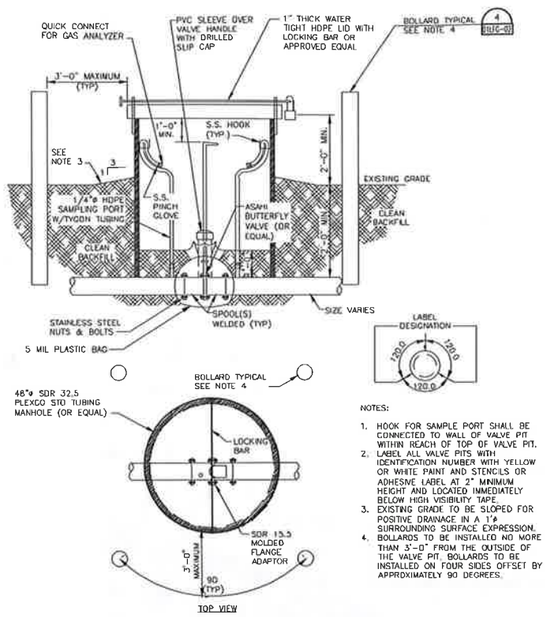
JUNOS REED LICENSE No 66408 STATE OF FLORIDA PROFESSIONAL ENGINEER

LANDFILL GAS MASTER PLAN

CLASS I ACTIVE AREA
TOMOKA FARMS ROAD LANDFILL
VOLUSIA COUNTY, FLORIDA

LANDFILL GAS DETAILS (2 OF 6)

NOT TO SCALE | LFG DT-02



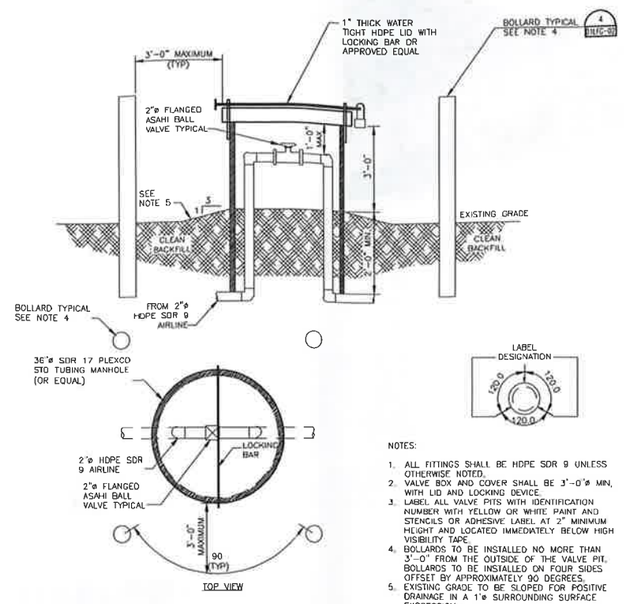
NOTES:

1. HOOK FOR SAMPLE PORT SHALL BE CONNECTED TO WALL OF VALVE PIT WITHIN REACH OF TOP OF VALVE PIT.
2. LABEL ALL VALVE PITS WITH IDENTIFICATION NUMBER WITH YELLOW OR WHITE PAINT AND STENCILS OR ADHESIVE LABEL AT 2" MINIMUM HEIGHT AND LOCATED IMMEDIATELY BELOW HIGH VISIBILITY TAPE.
3. EXISTING GRADE TO BE SLOPED FOR POSITIVE DRAINAGE IN A 1'ø SURROUNDING SURFACE EXPRESSION.
4. BOLLARDS TO BE INSTALLED NO MORE THAN 3'-0" FROM THE OUTSIDE OF THE VALVE PIT. BOLLARDS TO BE INSTALLED ON FOUR SIDES OFFSET BY APPROXIMATELY 90 DEGREES.

HEADER/ SUB-HEADER LINE ISOLATION VALVE PIT

NOT TO SCALE

1 DT-03



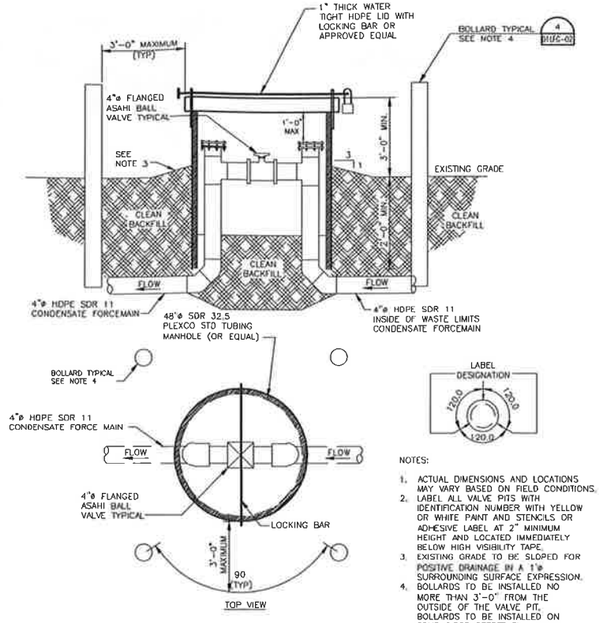
NOTES:

1. ALL FITTINGS SHALL BE HDPE SDR 9 UNLESS OTHERWISE NOTED.
2. VALVE BOX AND COVER SHALL BE 3'-0"ø MIN. WITH LID AND LOCKING DEVICE.
3. LABEL ALL VALVE PITS WITH IDENTIFICATION NUMBER WITH YELLOW OR WHITE PAINT AND STENCILS OR ADHESIVE LABEL AT 2" MINIMUM HEIGHT AND LOCATED IMMEDIATELY BELOW HIGH VISIBILITY TAPE.
4. BOLLARDS TO BE INSTALLED NO MORE THAN 3'-0" FROM THE OUTSIDE OF THE VALVE PIT. BOLLARDS TO BE INSTALLED ON FOUR SIDES OFFSET BY APPROXIMATELY 90 DEGREES.
5. EXISTING GRADE TO BE SLOPED FOR POSITIVE DRAINAGE IN A 1'ø SURROUNDING SURFACE EXPRESSION.

AIRLINE VALVE PIT

NOT TO SCALE

2 DT-03



NOTES:

1. ACTUAL DIMENSIONS AND LOCATIONS MAY VARY BASED ON FIELD CONDITIONS.
2. LABEL ALL VALVE PITS WITH IDENTIFICATION NUMBER WITH YELLOW OR WHITE PAINT AND STENCILS OR ADHESIVE LABEL AT 2" MINIMUM HEIGHT AND LOCATED IMMEDIATELY BELOW HIGH VISIBILITY TAPE.
3. EXISTING GRADE TO BE SLOPED FOR POSITIVE DRAINAGE IN A 1'ø SURROUNDING SURFACE EXPRESSION.
4. BOLLARDS TO BE INSTALLED NO MORE THAN 3'-0" FROM THE OUTSIDE OF THE VALVE PIT. BOLLARDS TO BE INSTALLED ON FOUR SIDES OFFSET BY APPROXIMATELY 90 DEGREES.

FORCE MAIN VALVE PIT

NOT TO SCALE

3 DT-03

Volusia County FLORIDA

ISSUE	DATE	DESCRIPTION
A	5/19/2016	PROVIDED FOR DEP REVIEW

PROJECT ENGINEER: JUNOS REED, P.E.

JUNOS REED LICENSE No 66408 STATE OF FLORIDA PROFESSIONAL ENGINEER

LANDFILL GAS MASTER PLAN

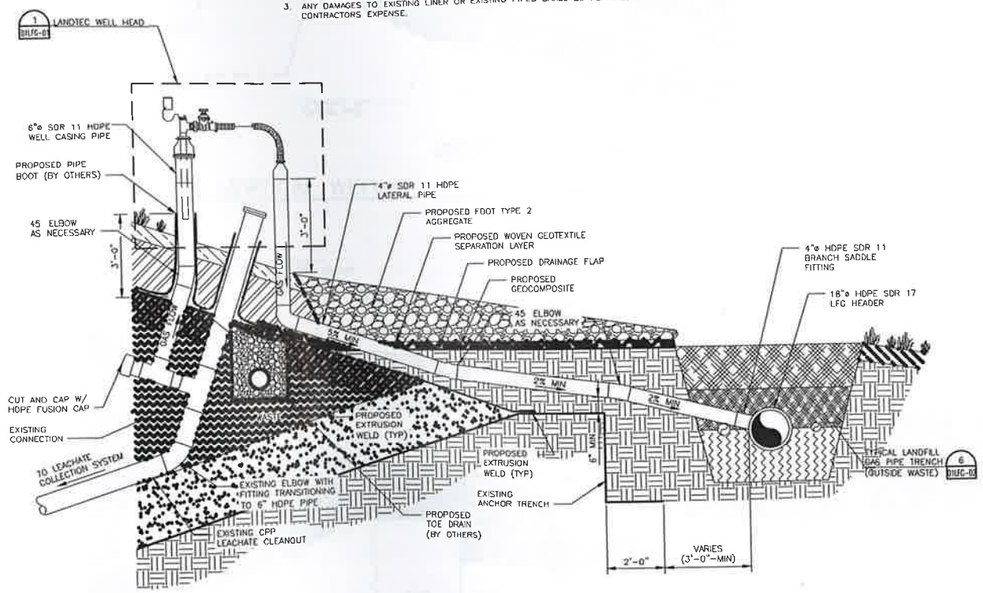
CLASS I ACTIVE AREA
TOMOKA FARMS ROAD LANDFILL
VOLUSIA COUNTY, FLORIDA

LANDFILL GAS DETAILS (3 OF 6)

NOT TO SCALE | LFG DT-03

NOTES:

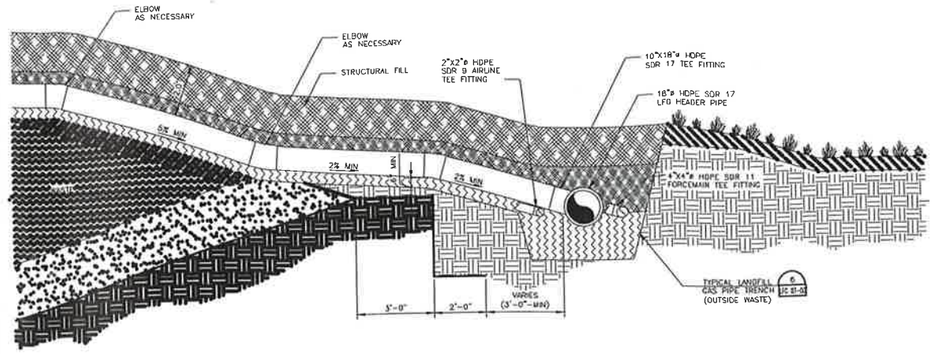
1. THE LFG HEADER AND COMPONENTS BETWEEN LANDTEC WELLHEAD AND EXISTING LEACHATE CLEANOUT ARE TO BE CONSTRUCTED PRIOR TO THE PLACEMENT OF THE LLDPE FINAL COVER. COMPONENTS BETWEEN THE LANDTEC WELLHEAD AND HEADER ARE TO BE CONSTRUCTED AFTER THE PLACEMENT OF THE LLDPE FINAL COVER.
2. CONTRACTOR TO LOCATE EXISTING BOTTOM LINER SYSTEM ANCHOR TRENCH PRIOR TO CONSTRUCTION.
3. ANY DAMAGES TO EXISTING LINER OR EXISTING PIPES SHALL BE REPAIRED AT CONTRACTORS EXPENSE.



LEACHATE CLEAN-OUT HEADER CONNECTION

1 DTLFG-01

NOT TO SCALE



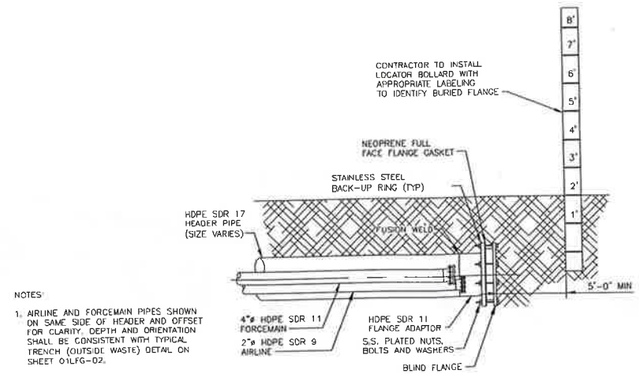
NOTES:

1. CONTRACTOR TO LOCATE EXISTING BOTTOM LINER SYSTEM ANCHOR TRENCH PRIOR TO CONSTRUCTION.
2. ANY DAMAGES TO EXISTING LINER OR EXISTING PIPES SHALL BE REPAIRED AT CONTRACTORS EXPENSE.
3. AIRLINE AND FORCEMAIN PIPE NOT SHOWN CONTINUOUS IN SECTION FOR CLARITY

ANCHOR TRENCH CROSSING

2 LFG-02

NOT TO SCALE



NOTES:

1. AIRLINE AND FORCEMAIN PIPES SHOWN ON SAME SIDE OF HEADER AND OFFSET FOR CLARITY. DEPTH AND ORIENTATION SHALL BE CONSISTENT WITH TYPICAL TRENCH (OUTSIDE WASTE) DETAIL ON SHEET 01LFG-02.

STUB-OUT AND DEPTH MARKER

2 LFG-02

NOT TO SCALE

Volusia County FLORIDA

ISSUE	DATE	DESCRIPTION
A	JULY 2016	BIDDING DOCUMENTS

PROJECT ENGINEER: JUNOS REED, P.E.

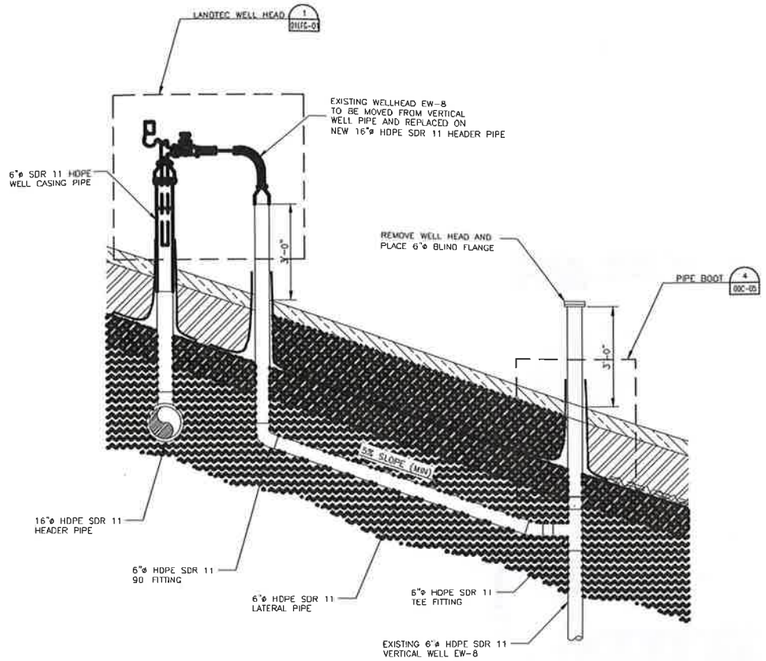
JUNOS REED LICENSE No 66408 STATE OF FLORIDA PROFESSIONAL ENGINEER

LANDFILL GAS MASTER PLAN

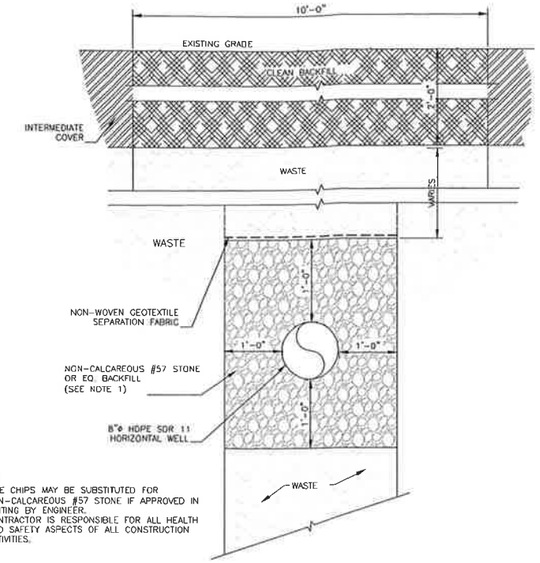
CLASS I ACTIVE AREA
TOMOKA FARMS ROAD LANDFILL
VOLUSIA COUNTY, FLORIDA

LANDFILL GAS DETAILS (4 OF 6)

NOT TO SCALE | LFG DT-04

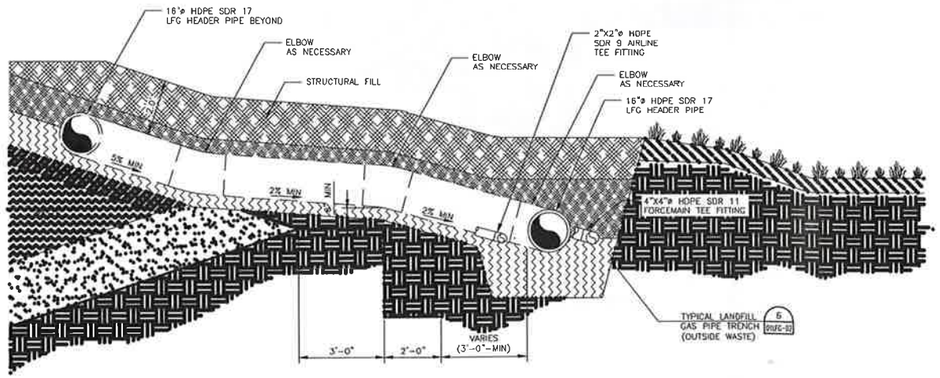


DOWNSLOPE VERTICAL WELL
NOT TO SCALE
1 LFG-05



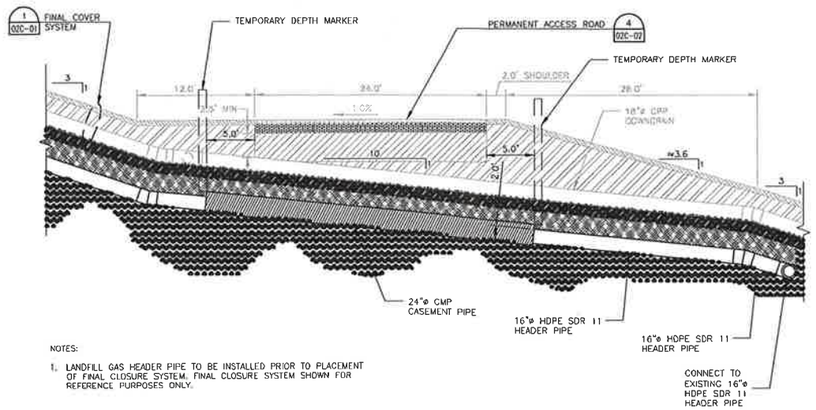
NOTES:
1. TIRE CHIPS MAY BE SUBSTITUTED FOR NON-CALCAREOUS #57 STONE IF APPROVED IN WRITING BY ENGINEER.
2. CONTRACTOR IS RESPONSIBLE FOR ALL HEALTH AND SAFETY ASPECTS OF ALL CONSTRUCTION ACTIVITIES.

TYP. HORIZONTAL
WELL TRENCH (FRONT VIEW)
NOT TO SCALE
1 LFG-02



NOTES:
1. CONTRACTOR TO LOCATE EXISTING BOTTOM LINER SYSTEM ANCHOR TRENCH PRIOR TO CONSTRUCTION.
2. ANY DAMAGES TO EXISTING LINER OR EXISTING PIPES SHALL BE REPAIRED AT CONTRACTORS EXPENSE.
3. AIRLINE AND FORCEMAIN PIPE NOT SHOWN CONTINUOUS IN SECTION FOR CLARITY.

ANCHOR TRENCH CROSSING
NOT TO SCALE
3 LFG-02



NOTES:
1. LANDFILL GAS HEADER PIPE TO BE INSTALLED PRIOR TO PLACEMENT OF FINAL CLOSURE SYSTEM. FINAL CLOSURE SYSTEM SHOWN FOR REFERENCE PURPOSES ONLY.

HEADER ROAD CROSSING
NOT TO SCALE
1 DDLFG-01

Volusia County
FLORIDA

ISSUE	DATE	DESCRIPTION
A	JULY 2016	BIDDING DOCUMENTS

PROJECT ENGINER: JUNOS REED, P.E.

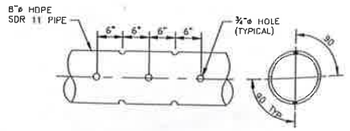
JUNOS REED LICENSE No 66408 STATE OF FLORIDA PROFESSIONAL ENGINEER

LANDFILL GAS MASTER PLAN

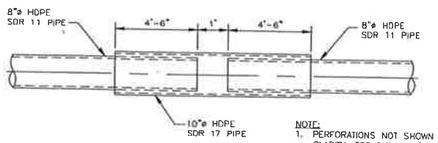
CLASS I ACTIVE AREA
TOMOKA FARMS ROAD LANDFILL
VOLUSIA COUNTY, FLORIDA

LANDFILL GAS DETAILS (5 OF 6)

NOT TO SCALE | LFG DT-05

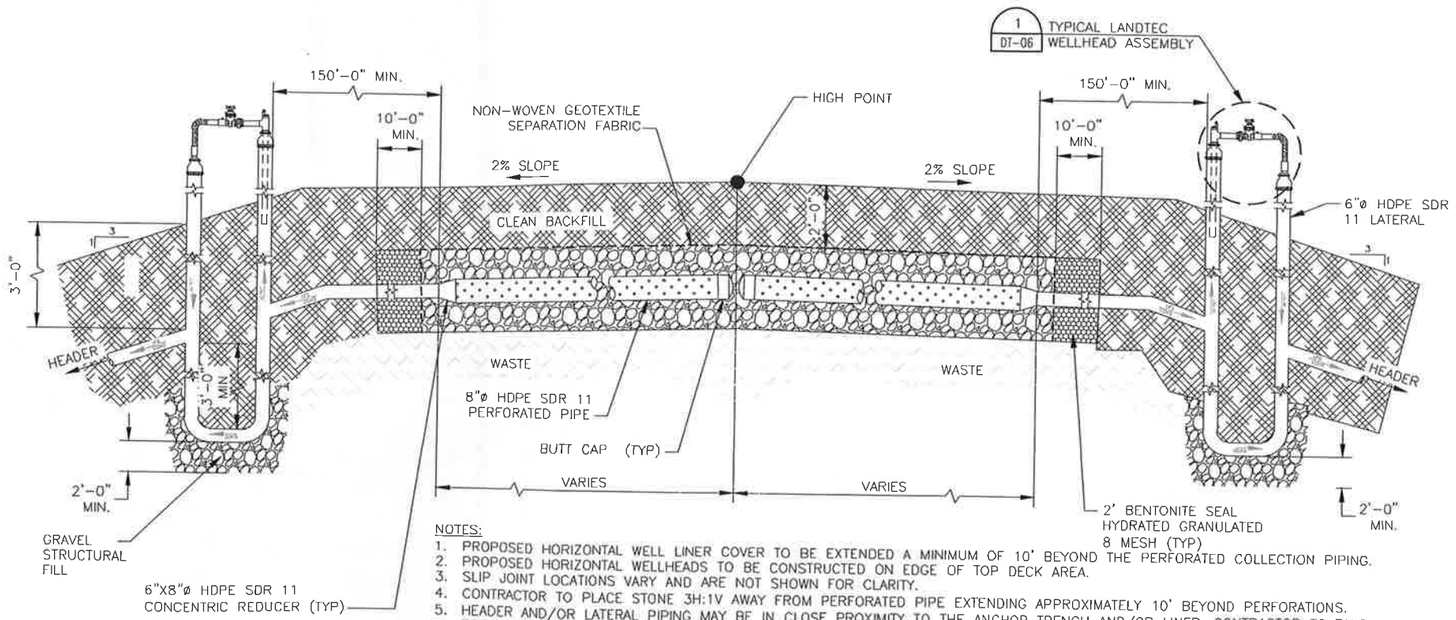


TYPICAL PERFORATED PIPE
NOT TO SCALE
4
00C-08



NOTE:
1. PERFORATIONS NOT SHOWN FOR CLARITY. SEE DETAIL 4/01LF-06 FOR PERFORATED PIPE.
2. SLIP JOINTS TO BE ADDED EVERY 200' OF PERFORATED PIPE.
3. FOR 6"ø HORIZONTAL WELL PIPE, 8"ø SLIP JOINTS SHALL BE INSTALLED.

TYPICAL
HORIZONTAL WELL SLIP JOINT
NOT TO SCALE
3
00C-08



NOTES:
1. PROPOSED HORIZONTAL WELL LINER COVER TO BE EXTENDED A MINIMUM OF 10' BEYOND THE PERFORATED COLLECTION PIPING.
2. PROPOSED HORIZONTAL WELLHEADS TO BE CONSTRUCTED ON EDGE OF TOP DECK AREA.
3. SLIP JOINT LOCATIONS VARY AND ARE NOT SHOWN FOR CLARITY.
4. CONTRACTOR TO PLACE STONE 3H:1V AWAY FROM PERFORATED PIPE EXTENDING APPROXIMATELY 10' BEYOND PERFORATIONS.
5. HEADER AND/OR LATERAL PIPING MAY BE IN CLOSE PROXIMITY TO THE ANCHOR TRENCH AND/OR LINER. CONTRACTOR TO TAKE ADDITIONAL PRECAUTIONS DURING ANY CONSTRUCTION RELATED ACTIVITIES NEAR LINER. ANY DAMAGE CAUSED BY THE CONSTRUCTION ACTIVITIES WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
6. CONDITIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE ONLY AND MUST BE VERIFIED DURING CONSTRUCTION BY THE CONTRACTOR.
7. LINER AND ANCHOR TRENCH HAVE BEEN OMITTED FROM THIS DETAIL FOR CLARITY.
8. 6"ø HDPE SDR11 PERFORATED PIPE MAY SUBSTITUTED FOR 8"ø PIPE.

HIGH POINT HORIZONTAL WELL
CROSS-SECTION
NOT TO SCALE
5
00LFG-02

ISSUE	DATE	DESCRIPTION
A	JULY 2016	BIDDING DOCUMENTS

PROJECT ENGINEER: JUNOS REED, P.E.

JUNOS REED LICENSE No 66408 STATE OF FLORIDA PROFESSIONAL ENGINEER

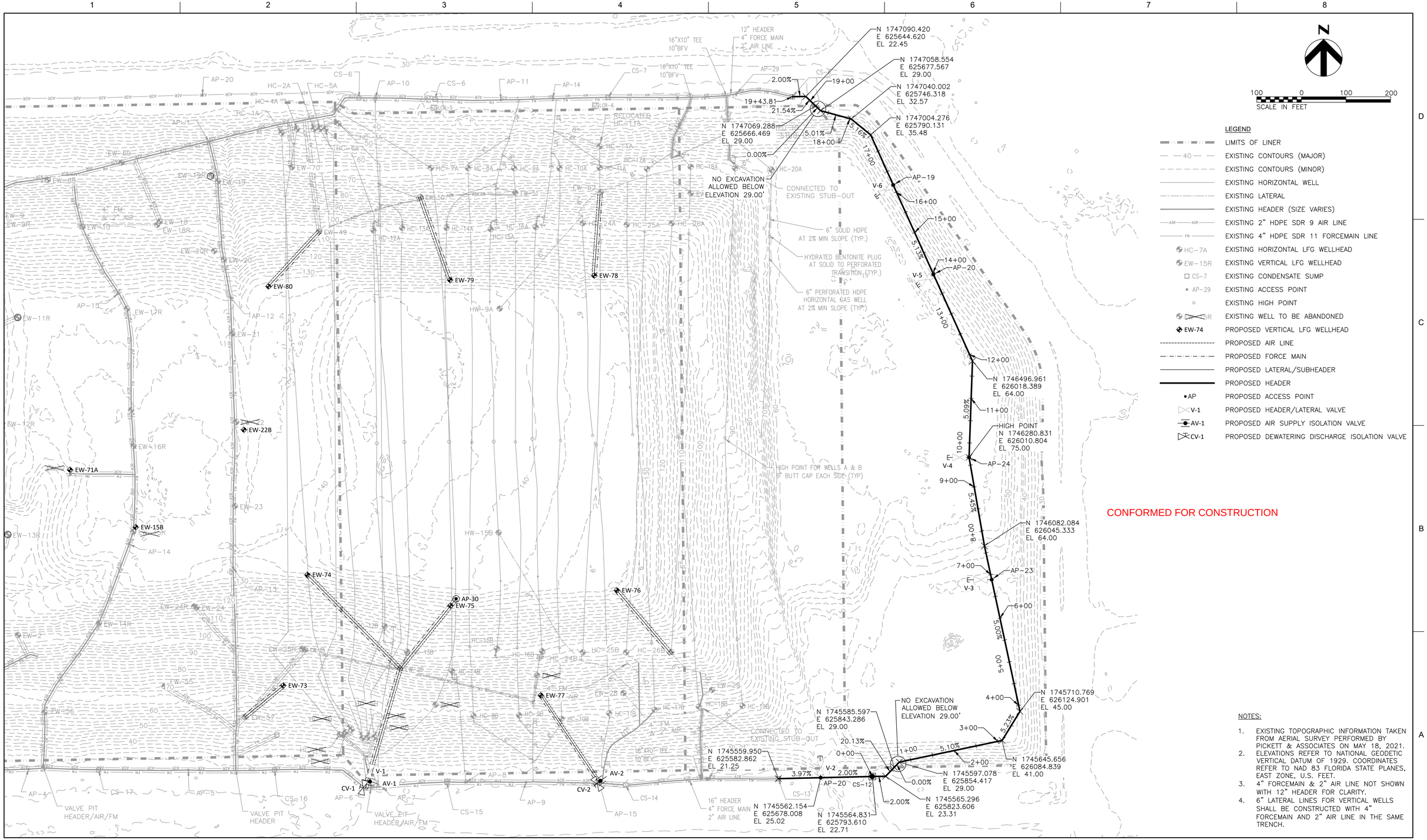
Volusia County
FLORIDA

LANDFILL GAS MASTER PLAN

CLASS I ACTIVE AREA
TOMOKA FARMS ROAD LANDFILL
VOLUSIA COUNTY, FLORIDA

LANDFILL GAS DETAILS (6 OF 6)

NOT TO SCALE | LFG DT-06



CONFORMED FOR CONSTRUCTION

NOTES:

1. EXISTING TOPOGRAPHIC INFORMATION TAKEN FROM AERIAL SURVEY PERFORMED BY PICKETT & ASSOCIATES ON MAY 18, 2021.
2. ELEVATIONS REFER TO NATIONAL GEODETIC VERTICAL DATUM OF 1929. COORDINATES REFER TO NAD 83 FLORIDA STATE PLANES, EAST ZONE, U.S. FEET.
3. 4" FORCEMAIN & 2" AIR LINE NOT SHOWN WITH 12" HEADER FOR CLARITY.
4. 6" LATERAL LINES FOR VERTICAL WELLS SHALL BE CONSTRUCTED WITH 4" FORCEMAIN AND 2" AIR LINE IN THE SAME TRENCH.

ISSUE	DATE	DESCRIPTION
B	8/24/21	CONFORMED CONSTRUCTION DRAWINGS

PROJECT MANAGER	M. ROBERTS, P.E.
DRAWN BY	J. RAYMOND
CHECKED BY	K. PERERA, P.E.
PROJECT NUMBER	10166567

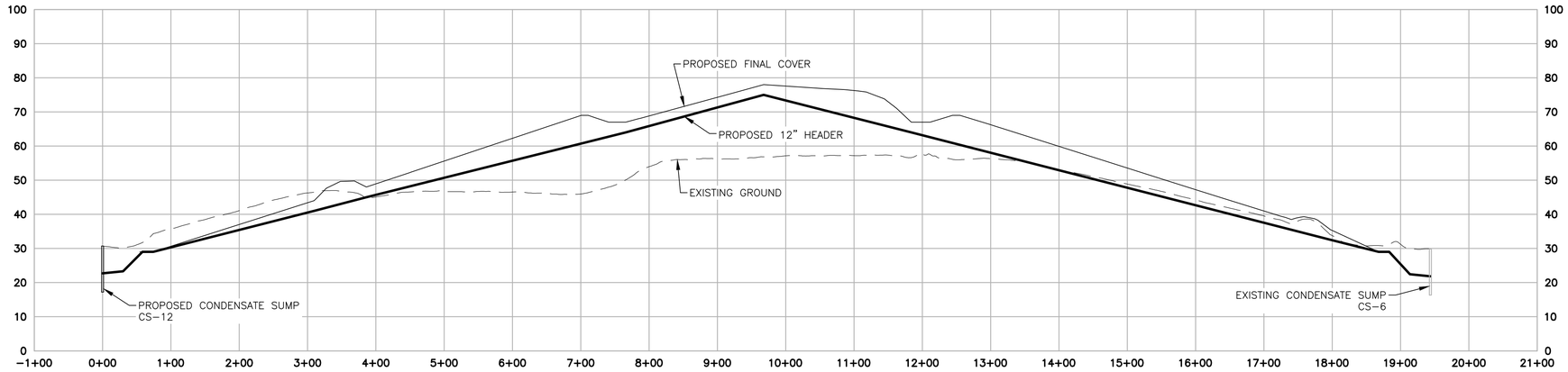
Volusia County FLORIDA

TOMOKA FARMS ROAD LANDFILL
PHASE VI CONSTRUCTION DRAWINGS
VOLUSIA COUNTY, FLORIDA

PROPOSED GAS COLLECTION SYSTEM

0 1" 2"

FILENAME	Gas Well Staking - August 2021.dwg
SCALE	1" = 100'
SHEET	1



100 0 100 200
HORIZONTAL SCALE: 1" = 100'

20 0 20 40
VERTICAL SCALE: 1" = 20'

VERTICAL WELL SCHEDULE

Well	Northing (ft)	Easting (ft)	Top of Protective Cover Elevation (ft)	Existing Ground Elevation (ft)	Calculated Waste Depth (ft) D_R	**Calculated Borehole Depth (ft) D_B**	Solid Pipe (ft) D_S	Slotted Pipe (ft) D_P	Gravel Pack (ft)	Description
EW-15B	1746124.07	624141.80	18.36	136.21	117.8	**104.8**	15	88.8	91.8	Re-Drilled
EW-22B	1746342.61	624384.19	18.88	136.53	117.7	**104.7**	15	88.7	91.7	Re-Drilled
EW-71A	1746252.56	623994.40	16.48	130.77	114.3	**101.3**	15	85.3	88.3	Re-Drilled
EW-73	1745768.78	624472.54	18.80	69.49	50.7	**37.7**	15	21.7	24.7	New
EW-74	1746017.28	624526.49	19.38	135.05	115.7	**102.7**	15	86.7	89.7	New
EW-75	1745947.90	624847.81	21.42	130.54	109.1	**96.1**	15	80.1	83.1	New
EW-76	1745982.31	625220.71	20.92	132.82	111.9	**98.9**	15	82.9	85.9	New
EW-77	1745746.77	625050.20	23.51	77.02	53.5	**40.5**	15	24.5	27.5	New
EW-78	1746688.52	625170.01	17.31	126.05	108.7	**95.7**	15	79.7	82.7	New
EW-79	1746678.58	624846.59	18.60	134.06	115.5	**102.5**	15	86.5	89.5	New
EW-80	1746664.34	624439.48	19.73	132.59	112.9	**99.9**	15	83.9	86.9	New

NOTE: WELL SCHEDULE PREPARED BASED ON VERTICAL WELL DETAIL 2 SHOWN IN LANDFILL GAS DETAILS (1 OF 6) IN LANDFILL GAS MASTER PLAN DATED JULY 2016.

CONFORMED FOR CONSTRUCTION

NOTES:

1. ELEVATIONS REFER TO NATIONAL GEODETIC VERTICAL DATUM OF 1929. COORDINATES REFER TO NAD 83 FLORIDA STATE PLANES, EAST ZONE, U.S. FEET.

ISSUE	DATE	DESCRIPTION
B	8/24/21	CONFORMED CONSTRUCTION DRAWINGS

PROJECT MANAGER	M. ROBERTS, P.E.
DRAWN BY	J. RAYMOND
CHECKED BY	K. PERERA, P.E.
PROJECT NUMBER	10166567

Volusia County FLORIDA

TOMOKA FARMS ROAD LANDFILL
PHASE VI CONSTRUCTION DRAWINGS
VOLUSIA COUNTY, FLORIDA

HEADER PROFILE AND WELL SCHEDULE

0 1" 2"

FILENAME Gas Well Staking - August 2021.dwg
SCALE AS SHOWN
SHEET 2

ATTACHMENT B

Completed Well Drilling Logs

January 2022

SUBMITTAL FORM

General Information

Project Name: Volusia County Landfill
Phase IV 2021 LFG Expansion
1990 Tomoka Farms Road,
Port Orange, FL 32128

Number: 02-R

Project Number: 12221017.00

Date: 10/15/2021

Submittal Description:
Revised Well Drilling Logs per Engineer's review comments received on 10/11/2021.

Contractor's Certification

Contract Drawing:

Specification No:

This Submittal has been reviewed for the accuracy of the content. It is my opinion that the material and/or equipment are in compliance with the Contract Drawings and Technical Specifications. The information contained herein has been fully coordinated with all involved subcontractors.

Contractor: SCS Field Services / Pierce Wu

Signed: Pierce Wu

Date: 10/15/2021

Engineer's Review

No Exceptions Taken	☐	Engineer: _____
Make Corrections Noted	☐	Signed: _____
Amend and Resubmit	☐	Date: _____
Rejected - See Remarks	☐	

Approval is only for conformance with the design concept of the project and compliance with the information given in the Contract Documents. Contractor is responsible for dimensions to be confirmed and correlated at the job site, for information that pertains solely to the fabrication process or to techniques of construction and for coordination of the work of all trades.

SCS FIELD SERVICE

GAS EXTRACTION WELL LOG

PROJECT NAME Volusia Tomoka Farms County Landfill **DATE:** 9/3/2021~9/13/2021

PROJECT# 12221017.00

#	Well ID	Date	Drill Depth (Feet)	Abandonment (Feet)	Design Depth (Feet)	Design-Drill (Feet)	Note
1	EW-15B	09/04/21	100	37	100	0	
2	EW-22B	09/03/21	105	0	105	0	
3	EW-71A	09/06/21	101	0	101	0	
4	EW-73	09/08/21	38	0	38	0	
5	EW-74	09/07/21	103	0	103	0	
6	EW-75	09/08/21	96	0	96	0	
7	EW-76	09/09/21	99	0	99	0	
8	EW-77	09/08/21	41	0	41	0	
9	EW-78	09/10/21	96	0	96	0	
10	EW-79	09/10/21	103	0	103	0	
11	EW-80	09/13/21	100	0	100	0	
	Total		**982**	**37**	**982**	**0**	
			1019				

Larry Taylor 9/13/2021

CLIENT REPRESENTATIVE DATE

SCS SITE SUPERINTENDENT DATE

NAME & TITLE

SCS FIELD SERVICE

GAS EXTRACTION WELL LOG

DATE: 9/4/2021

PROJECT NAME Tomoka Farms Landfill

PROJECT# 12221017.00

DRILLING

EW-15B WELL NUMBER OR NAME

LINEAR FEET OF DRILLING

LINEAR FEET OF COMPLETION

37 LINEAR FEET OF ABANDONMENT

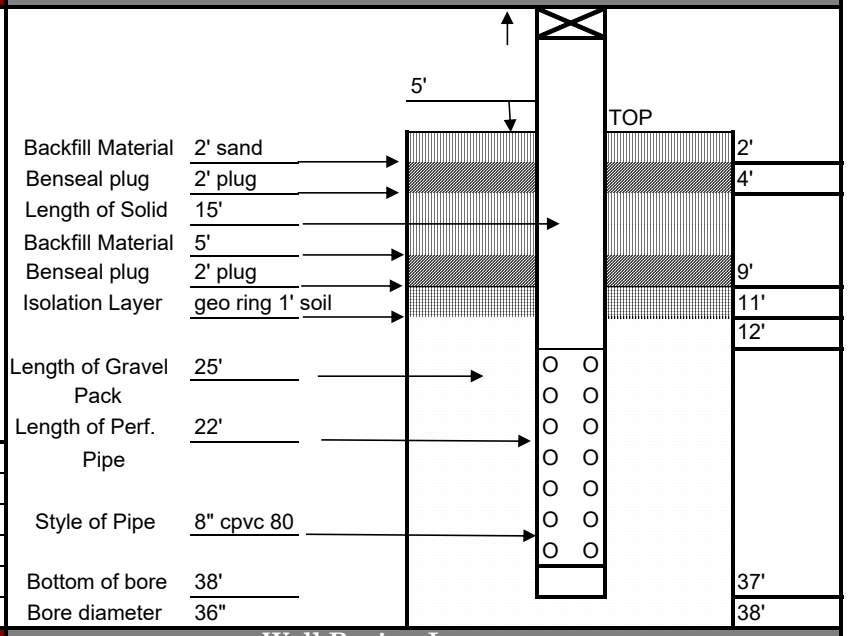
Weather conditions: Sunny

Site conditions: Dry

abandoned

NOTES: Sand layer at 34 to 37' absdon well due to cave-in. Moved well 15' to the east.

Well Asbuild



MONITORING LOG

Time	OXYGEN	H2S	LEL / CO
7:00	20.9	0	0/0
8:00	20.9	0	0/0
9:00	20.9	0	0/0
10:00			
11:00			
12:00			
1:00			
2:00			
3:00			
4:00			
5:00			
6:00			

Well Boring Log

Depth	Composition	Degree of Decomp.	Degree of Moisture	Temp
0-10	sand msw	slight	dry	98
10-20	msw sand	slight	dry	108
20-30	sand	slight	dry	106
30-40	sand	slight	dry	97
40-50				
50-60				
60-70				
70-80				
80-90				
90-100				
100-110				
110-120				
120-130				
130-140				

CLIENT REPRESENTATIVE DATE

Larry Taylor 9-8-2021

SCS SITE SUPERINTENDENT DATE

NAME & TITLE

SCS FIELD SERVICE

GAS EXTRACTION WELL LOG

DATE: 9/4/2021

PROJECT NAME Tomoka Farms Landfill

PROJECT# 12221017.00

DRILLING

EW-15B WELL NUMBER OR NAME

100 LINEAR FEET OF DRILLING

100 LINEAR FEET OF COMPLETION

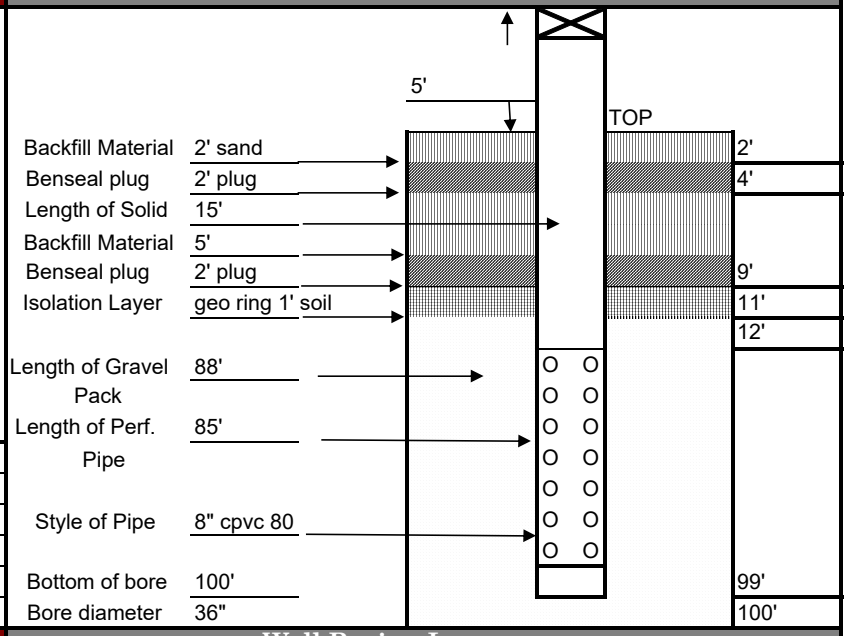
LINEAR FEET OF ABANDONMENT

Weather conditions: Sunny

Site conditions: Dry

NOTES:

Well Asbuild



MONITORING LOG

Time	OXYGEN	H2S	LEL / CO
7:00	20.9	0	0/0
8:00	20.9	0	0/0
9:00	20.9	0	0/0
10:00	20.9	0	0/0
11:00	20.9	0	0/0
12:00	20.9	0	0/0
1:00	20.9	0	0/0
2:00	20.9	0	0/0
3:00	20.9	0	0/0
4:00	20.9	0	0/0
5:00	20.9	0	0/0
6:00			

Well Boring Log

Depth	Composition	Degree of Decomp.	Degree of Moisture	Temp
0-10	sand msw	slight	dry	102
10-20	msw sand	slight	dry	96
20-30	msw sand	slight	dry	103
30-40	sand	slight	dry	119
40-50	sand/plastic	none	dry	123
50-60	msw mulch	slight	dry	129
60-70	msw/dirt/wood/steel	slight	dry	128
70-80	sand msw mulch	slight	dry	133
80-90	msw wood sand	slight	dry	128
90-100	sand msw wood	slight	dry	130
100-110				
110-120				
120-130				
130-140				

CLIENT REPRESENTATIVE DATE

NAME & TITLE

Larry Taylor 9-4-2021

SCS SITE SUPERINTENDENT DATE

SCS FIELD SERVICE

GAS EXTRACTION WELL LOG

DATE: 9/3/2021

PROJECT NAME Tomoka Farms Landfill

PROJECT# 12221017.00

DRILLING

EW-22B WELL NUMBER OR NAME

105 LINEAR FEET OF DRILLING

105 LINEAR FEET OF COMPLETION

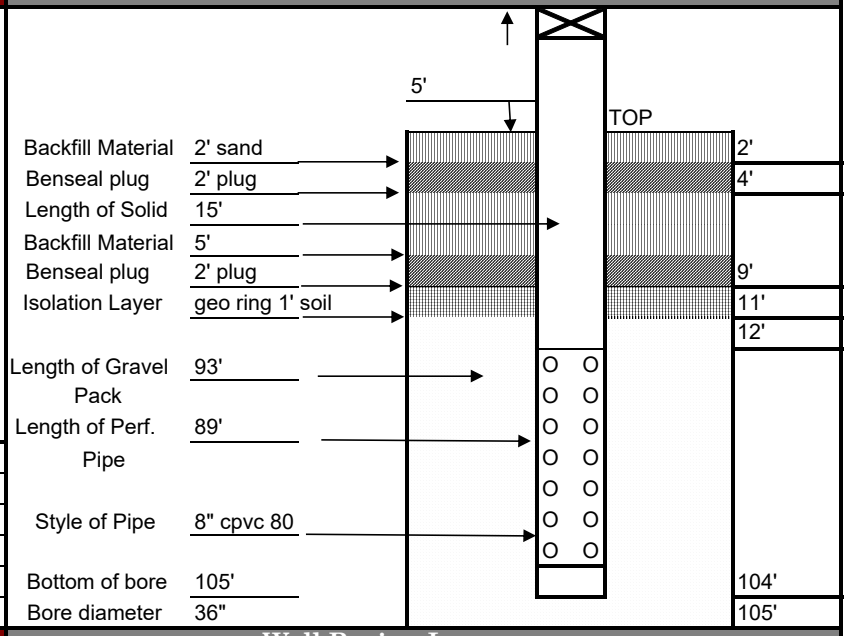
LINEAR FEET OF ABANDONMENT

Weather conditions: Sunny

Site conditions: Dry

NOTES:

Well Asbuild



MONITORING LOG

Time	OXYGEN	H2S	LEL / CO
7:00	20.9	0	0/0
8:00	20.9	0	0/0
9:00	20.9	0	0/0
10:00	20.9	0	0/0
11:00	20.9	0	0/0
12:00	20.9	0	0/0
1:00	20.9	0	0/0
2:00	20.9	0	0/0
3:00	20.9	0	0/0
4:00	20.9	0	0/0
5:00			
6:00			

Well Boring Log

Depth	Composition	Degree of Decomp.	Degree of Moisture	Temp
0-10	sand msw	slight	dry	97
10-20	msw sand	slight	dry	119
20-30	msw sand	slight	dry	117
30-40	msw sand	slight	dry	124
40-50	msw sand wood	slight	dry	129
50-60	msw sand wood	slight	dry	121
60-70	msw sand	slight	dry	119
70-80	sand msw	slight	dry	115
80-90	msw sand	slight	wet	118
90-100	sand msw	slight	wet	114
100-110	msw sand	slight	wet	117
110-120				
120-130				
130-140				

CLIENT REPRESENTATIVE DATE

Larry Taylor 9-3-2021

SCS SITE SUPERINTENDENT DATE

NAME & TITLE

SCS FIELD SERVICE

GAS EXTRACTION WELL LOG

DATE: 9/6/2021

PROJECT NAME Tomoka Farms Landfill

PROJECT# 12221017.00

DRILLING

EW-71A WELL NUMBER OR NAME

101 LINEAR FEET OF DRILLING

101 LINEAR FEET OF COMPLETION

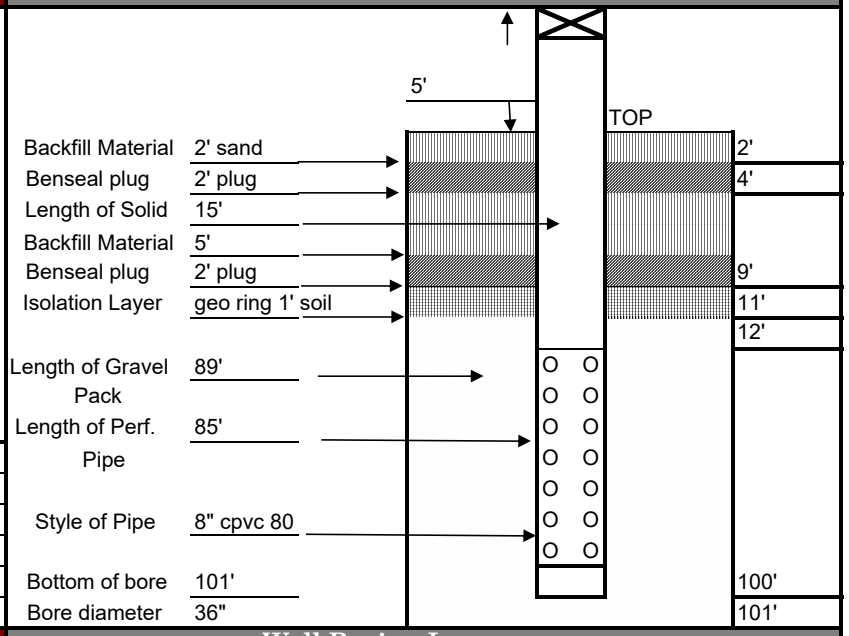
LINEAR FEET OF ABANDONMENT

Weather conditions: Sunny

Site conditions: Dry

NOTES:

Well Asbuild



MONITORING LOG

Time	OXYGEN	H2S	LEL / CO
7:00	20.9	0	0/0
8:00	20.9	0	0/0
9:00	20.9	0	0/0
10:00	20.9	0	0/0
11:00	20.9	0	0/0
12:00	20.9	0	0/0
1:00	20.9	0	0/0
2:00	20.9	0	0/0
3:00	20.9	0	0/0
4:00	20.9	0	0/0
5:00	20.9	0	0/0
6:00			

Well Boring Log

Depth	Composition	Degree of Decomp.	Degree of Moisture	Temp
0-10	sand msw	slight	dry	89
10-20	msw sand	slight	dry	111
20-30	msw sand	slight	dry	119
30-40	sand msw	slight	dry	129
40-50	mulch msw sand	slight	dry	131
50-60	msw mulch sand	slight	dry	138
60-70	msw mulch sand	slight	dry	139
70-80	sand msw mulch	slight	dry	136
80-90	msw sand	slight	wet	139
90-100	sand msw	slight	wet	131
100-110				
110-120				
120-130				
130-140				

CLIENT REPRESENTATIVE DATE

Larry Taylor 9-6-2021

SCS SITE SUPERINTENDENT DATE

NAME & TITLE

SCS FIELD SERVICE

GAS EXTRACTION WELL LOG

DATE: 9/8/2021

PROJECT NAME Tomoka Farms Landfill

PROJECT# 12221017.00

DRILLING

EW-73 WELL NUMBER OR NAME

38 LINEAR FEET OF DRILLING

38 LINEAR FEET OF COMPLETION

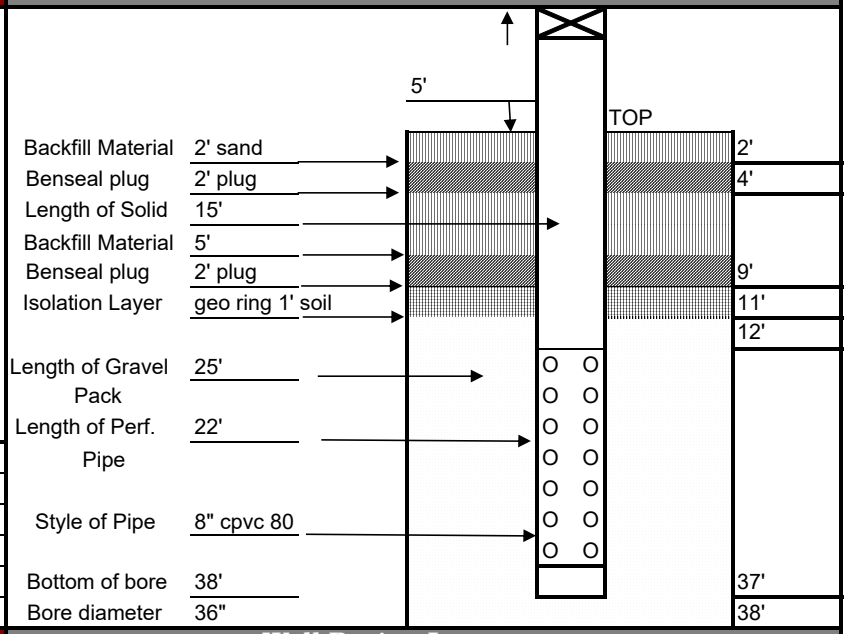
LINEAR FEET OF ABANDONMENT

Weather conditions: Sunny

Site conditions: Dry

NOTES:

Well Asbuild



MONITORING LOG

Time	OXYGEN	H2S	LEL / CO
7:00	20.9	0	0/0
8:00	20.9	0	0/0
9:00	20.9	0	0/0
10:00	20.9	0	0/0
11:00	20.9	0	0/0
12:00	20.9	0	0/0
1:00	20.9	0	0/0
2:00	20.9	0	0/0
3:00	20.9	0	0/0
4:00	20.9	0	0/0
5:00	20.9	0	0/0
6:00			

Well Boring Log

Depth	Composition	Degree of Decomp.	Degree of Moisture	Temp
0-10	sand msw	slight	dry	96
10-20	msw sand	slight	dry	104
20-30	msw sand	slight	wet	102
30-40	msw sand	slight	wet	97
40-50				
50-60				
60-70				
70-80				
80-90				
90-100				
100-110				
110-120				
120-130				
130-140				

CLIENT REPRESENTATIVE DATE

NAME & TITLE

Larry Taylor 9-8-2021

SCS SITE SUPERINTENDENT DATE

SCS FIELD SERVICE

GAS EXTRACTION WELL LOG

DATE: 9/7/2021

PROJECT NAME Tomoka Farms Landfill

PROJECT# 12221017.00

DRILLING

EW-74 WELL NUMBER OR NAME

103 LINEAR FEET OF DRILLING

103 LINEAR FEET OF COMPLETION

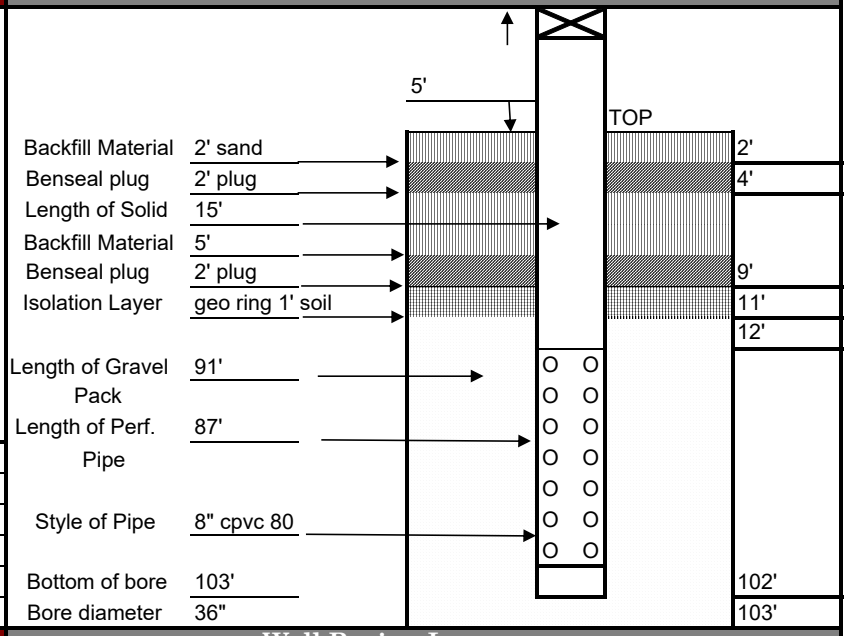
LINEAR FEET OF ABANDONMENT

Weather conditions: Sunny

Site conditions: Dry

NOTES:

Well Asbuild



MONITORING LOG

Time	OXYGEN	H2S	LEL / CO
7:00	20.9	0	0/0
8:00	20.9	0	0/0
9:00	20.9	0	0/0
10:00	20.9	0	0/0
11:00	20.9	0	0/0
12:00	20.9	0	0/0
1:00	20.9	0	0/0
2:00	20.9	0	0/0
3:00	20.9	0	0/0
4:00	20.9	0	0/0
5:00	20.9	0	0/0
6:00			

Well Boring Log

Depth	Composition	Decomp.	Moisture	Temp
0-10	sand msw	slight	dry	97
10-20	msw sand	slight	dry	99
20-30	msw sand	slight	dry	118
30-40	msw sand	slight	dry	127
40-50	msw	slight	dry	122
50-60	msw mulch sand	slight	dry	127
60-70	msw sand	slight	dry	132
70-80	msw sand	slight	dry	128
80-90	msw sand	slight	dry	125
90-100	sand msw	slight	wet	129
100-110	msw	slight	wet	129
110-120				
120-130				
130-140				

CLIENT REPRESENTATIVE DATE

Larry Taylor 9-7-2021

SCS SITE SUPERINTENDENT DATE

NAME & TITLE

SCS FIELD SERVICE

GAS EXTRACTION WELL LOG

DATE: 9/8/2021

PROJECT NAME Tomoka Farms Landfill

PROJECT# 12221017.00

DRILLING

EW-75 WELL NUMBER OR NAME

96 LINEAR FEET OF DRILLING

96 LINEAR FEET OF COMPLETION

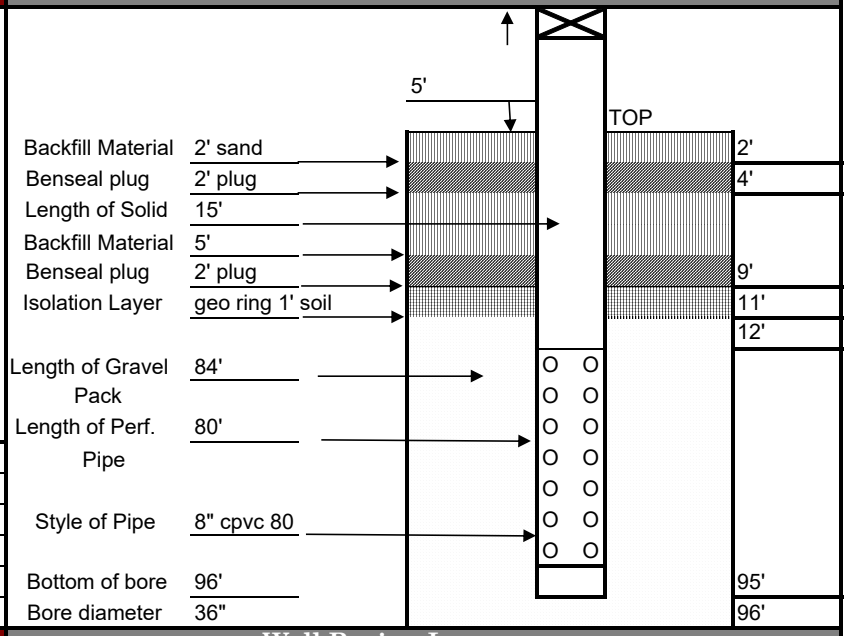
LINEAR FEET OF ABANDONMENT

Weather conditions: Sunny

Site conditions: Dry

NOTES:

Well Asbuild



MONITORING LOG

Time	OXYGEN	H2S	LEL / CO
7:00	20.9	0	0/0
8:00	20.9	0	0/0
9:00	20.9	0	0/0
10:00	20.9	0	0/0
11:00	20.9	0	0/0
12:00	20.9	0	0/0
1:00	20.9	0	0/0
2:00	20.9	0	0/0
3:00	20.9	0	0/0
4:00	20.9	0	0/0
5:00	20.9	0	0/0
6:00			

Well Boring Log

Depth	Composition	Degree of Decomp.	Degree of Moisture	Temp
0-10	sand msw	slight	dry	96
10-20	msw sand	slight	dry	111
20-30	msw sand	slight	dry	125
30-40	msw sand	slight	dry	119
40-50	msw sand	slight	dry	122
50-60	msw sand	slight	dry	119
60-70	msw sand	slight	wet	117
70-80	msw sand	slight	dry	121
80-90	msw sand	slight	dry	124
90-100	sand msw	slight	wet	119
100-110				
110-120				
120-130				
130-140				

CLIENT REPRESENTATIVE DATE

Larry Taylor 9-8-2021

SCS SITE SUPERINTENDENT DATE

NAME & TITLE

SCS FIELD SERVICE

GAS EXTRACTION WELL LOG

DATE: 9/9/2021

PROJECT NAME Tomoka Farms Landfill

PROJECT# 12221017.00

DRILLING

EW-76 WELL NUMBER OR NAME

99 LINEAR FEET OF DRILLING

99 LINEAR FEET OF COMPLETION

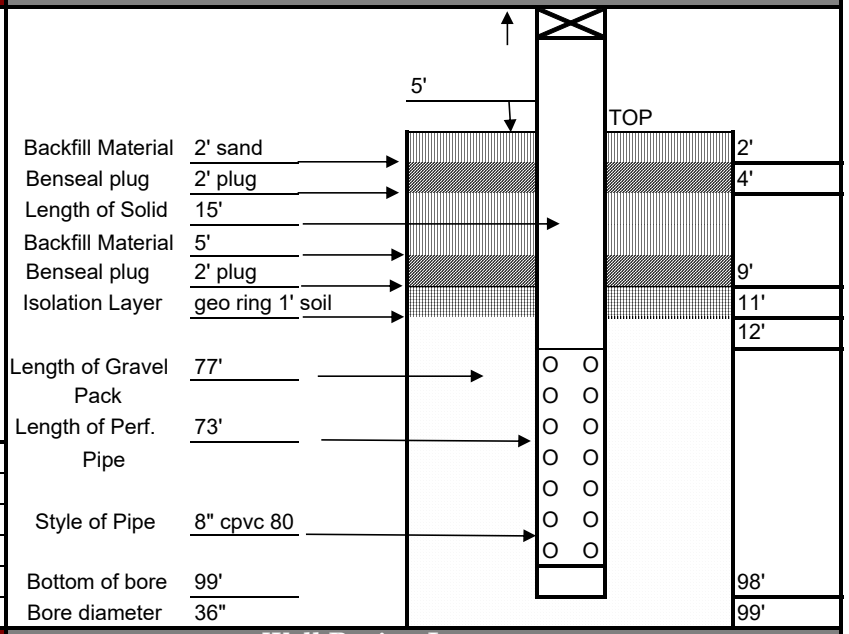
LINEAR FEET OF ABANDONMENT

Weather conditions: Sunny

Site conditions: Dry

NOTES:

Well Asbuild



MONITORING LOG

Time	OXYGEN	H2S	LEL / CO
7:00	20.9	0	0/0
8:00	20.9	0	0/0
9:00	20.9	0	0/0
10:00	20.9	0	0/0
11:00	20.9	0	0/0
12:00	20.9	0	0/0
1:00	20.9	0	0/0
2:00	20.9	0	0/0
3:00	20.9	0	0/0
4:00	20.9	0	0/0
5:00	20.9	0	0/0
6:00			

Well Boring Log

Depth	Composition	Degree of Decomp.	Degree of Moisture	Temp
0-10	msw	none	dry	108
10-20	msw	slight	dry	102
20-30	msw mulch	slight	dry	107
30-40	msw mulch	slight	dry	124
40-50	msw sand	slight	dry	122
50-60	msw sand	slight	dry	119
60-70	msw sand	slight	dry	111
70-80	msw sand	slight	dry	114
80-90	msw sand	slight	dry	116
90-100	sand msw wood	slight	dry	107
100-110				
110-120				
120-130				
130-140				

CLIENT REPRESENTATIVE DATE

Larry Taylor 9-9-2021

SCS SITE SUPERINTENDENT DATE

NAME & TITLE

SCS FIELD SERVICE

GAS EXTRACTION WELL LOG

DATE: 9/8/2021

PROJECT NAME Tomoka Farms Landfill

PROJECT# 12221017.00

DRILLING

EW-77 WELL NUMBER OR NAME

41 LINEAR FEET OF DRILLING

41 LINEAR FEET OF COMPLETION

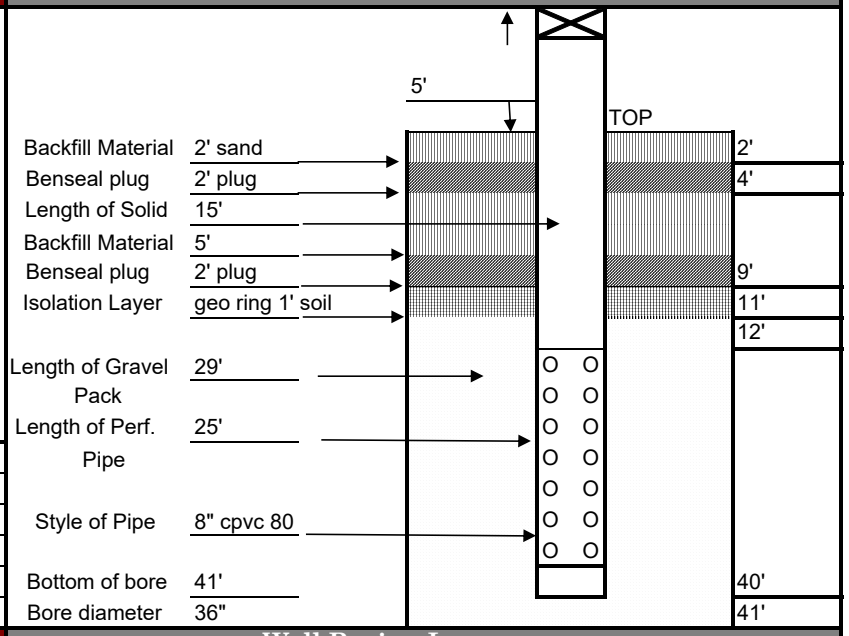
LINEAR FEET OF ABANDONMENT

Weather conditions: Sunny

Site conditions: Dry

NOTES:

Well Asbuild



MONITORING LOG

Time	OXYGEN	H2S	LEL / CO
7:00	20.9	0	0/0
8:00	20.9	0	0/0
9:00	20.9	0	0/0
10:00	20.9	0	0/0
11:00	20.9	0	0/0
12:00	20.9	0	0/0
1:00	20.9	0	0/0
2:00	20.9	0	0/0
3:00	20.9	0	0/0
4:00	20.9	0	0/0
5:00	20.9	0	0/0
6:00			

Well Boring Log

Depth	Composition	Degree of Decomp.	Degree of Moisture	Temp
0-10	sand msw mulch	slight	dry	101
10-20	msw mulch sand	slight	damp	100
20-30	msw sand mulch	slight	dry	103
30-40	msw sand	slight	dry	98
40-50				
50-60				
60-70				
70-80				
80-90				
90-100				
100-110				
110-120				
120-130				
130-140				

CLIENT REPRESENTATIVE DATE

NAME & TITLE

Larry Taylor 9-8-2021

SCS SITE SUPERINTENDENT DATE

SCS FIELD SERVICE

GAS EXTRACTION WELL LOG

DATE: 9/10/2021

PROJECT NAME Tomoka Farms Landfill

PROJECT# 12221017.00

DRILLING

EW-78 WELL NUMBER OR NAME

96 LINEAR FEET OF DRILLING

96 LINEAR FEET OF COMPLETION

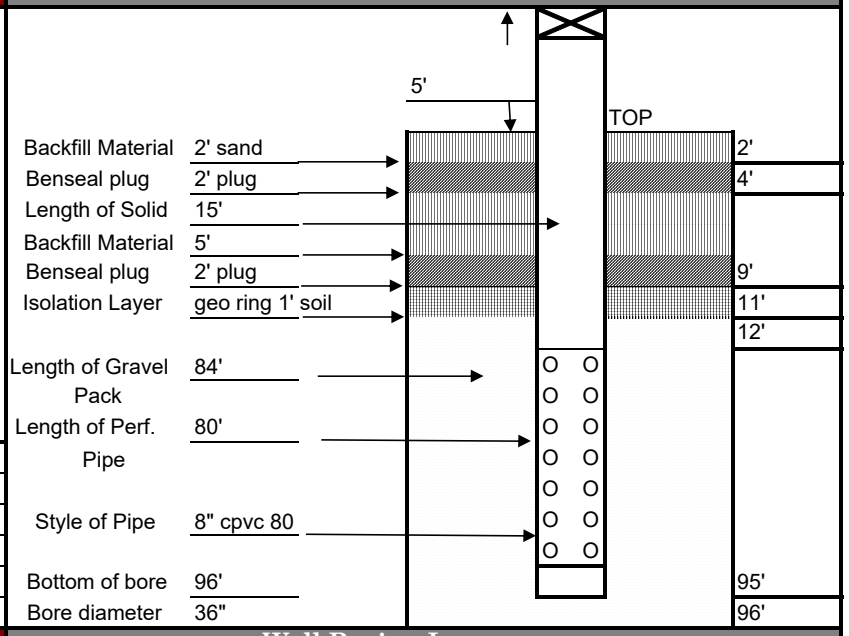
LINEAR FEET OF ABANDONMENT

Weather conditions: rain

Site conditions: wet

NOTES:

Well Asbuild



MONITORING LOG

Time	OXYGEN	H2S	LEL / CO
7:00	20.9	0	0/0
8:00	20.9	0	0/0
9:00	20.9	0	0/0
10:00	20.9	0	0/0
11:00	20.9	0	0/0
12:00	20.9	0	0/0
1:00	20.9	0	0/0
2:00	20.9	0	0/0
3:00	20.9	0	0/0
4:00	20.9	0	0/0
5:00	20.9	0	0/0
6:00			

Well Boring Log

Depth	Composition	Degree of Decomp.	Degree of Moisture	Temp
0-10	sand msw mulch	none	dry	102
10-20	msw sand mulch	slight	dry	105
20-30	msw mulch	slight	dry	107
30-40	msw mulch	slight	dry	117
40-50	msw mulch	slight	dry	122
50-60	msw mulch sand	slight	wet	120
60-70	msw sand	slight	dry	119
70-80	msw sand	slight	dry	116
80-90	msw sand	slight	dry	117
90-100	sand msw	slight	wet	114
100-110				
110-120				
120-130				
130-140				

CLIENT REPRESENTATIVE DATE

Larry Taylor 9-10-2021

SCS SITE SUPERINTENDENT DATE

NAME & TITLE

SCS FIELD SERVICE

GAS EXTRACTION WELL LOG

DATE: 9/10/2021

PROJECT NAME Tomoka Farms Landfill

PROJECT# 12221017.00

DRILLING

EW-79 WELL NUMBER OR NAME

103 LINEAR FEET OF DRILLING

103 LINEAR FEET OF COMPLETION

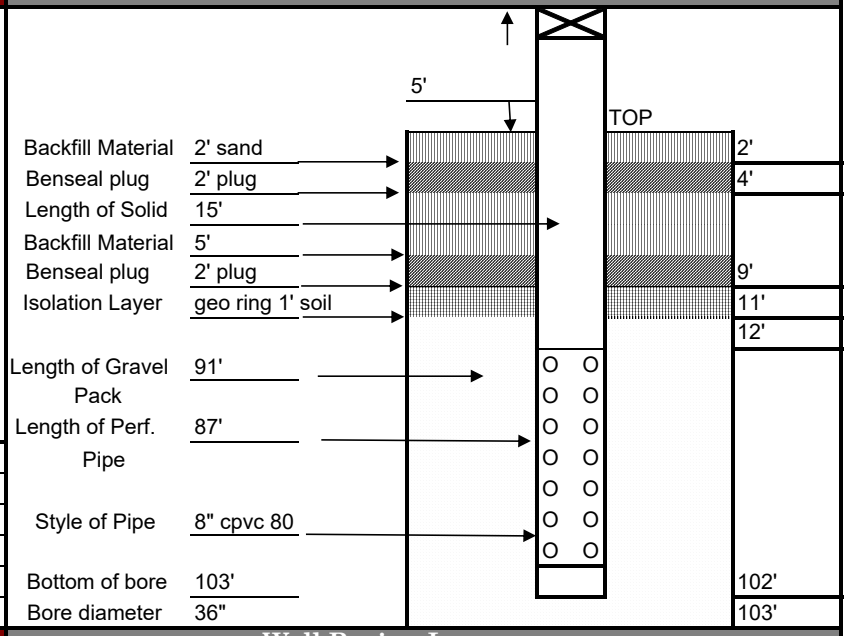
LINEAR FEET OF ABANDONMENT

Weather conditions: Sunny

Site conditions: Dry

NOTES:

Well Asbuild



MONITORING LOG

Time	OXYGEN	H2S	LEL / CO
7:00	20.9	0	0/0
8:00	20.9	0	0/0
9:00	20.9	0	0/0
10:00	20.9	0	0/0
11:00	20.9	0	0/0
12:00	20.9	0	0/0
1:00	20.9	0	0/0
2:00	20.9	0	0/0
3:00	20.9	0	0/0
4:00	20.9	0	0/0
5:00	20.9	0	0/0
6:00			

Well Boring Log

Depth	Composition	Degree of Decomp.	Degree of Moisture	Temp
0-10	msw mulch	none	dry	102
10-20	msw mulch	slight	dry	119
20-30	msw mulch	slight	dry	121
30-40	msw mulch	slight	dry	127
40-50	msw mulch	slight	dry	131
50-60	msw sand	slight	dry	136
60-70	msw sand	slight	damp	127
70-80	msw sand	slight	dry	120
80-90	msw sand	slight	dry	121
90-100	sand msw	slight	wet	119
100-110	sand msw	slight	wet	119
110-120				
120-130				
130-140				

CLIENT REPRESENTATIVE DATE

Larry Taylor 9-10-2021

SCS SITE SUPERINTENDENT DATE

NAME & TITLE

SCS FIELD SERVICE

GAS EXTRACTION WELL LOG

DATE: 9/13/2021

PROJECT NAME Tomoka Farms Landfill

PROJECT# 12221017.00

DRILLING

EW-80 WELL NUMBER OR NAME

100 LINEAR FEET OF DRILLING

100 LINEAR FEET OF COMPLETION

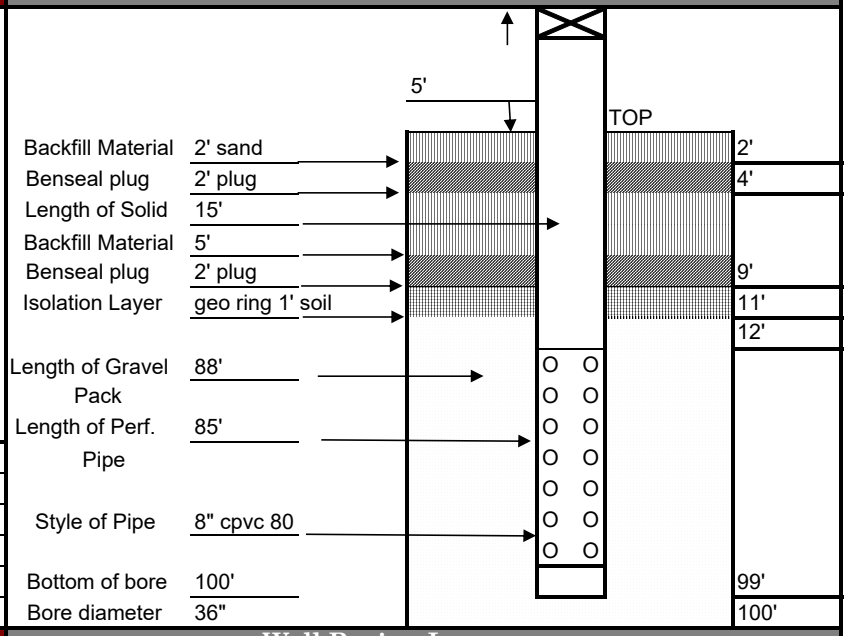
LINEAR FEET OF ABANDONMENT

Weather conditions: Sunny

Site conditions: Dry

NOTES:

Well Asbuild



MONITORING LOG

Time	OXYGEN	H2S	LEL / CO
7:00	20.9	0	0/0
8:00	20.9	0	0/0
9:00	20.9	0	0/0
10:00	20.9	0	0/0
11:00	20.9	0	0/0
12:00	20.9	0	0/0
1:00	20.9	0	0/0
2:00	20.9	0	0/0
3:00	20.9	0	0/0
4:00	20.9	0	0/0
5:00	20.9	0	0/0
6:00			

Well Boring Log

Depth	Composition	Degree of Decomp.	Degree of Moisture	Temp
0-10	sand msw mulch	none	dry	88
10-20	msw mulch	slight	dry	108
20-30	msw sand	slight	dry	122
30-40	msw sand	slight	dry	123
40-50	mulch msw	slight	dry	119
50-60	msw sand	slight	dry	125
60-70	msw sand	slight	dry	129
70-80	sand msw	slight	dry	126
80-90	msw sand	slight	dry	121
90-100	sand msw	slight	wet	109
100-110				
110-120				
120-130				
130-140				

CLIENT REPRESENTATIVE DATE

Larry Taylor 9-13-2021

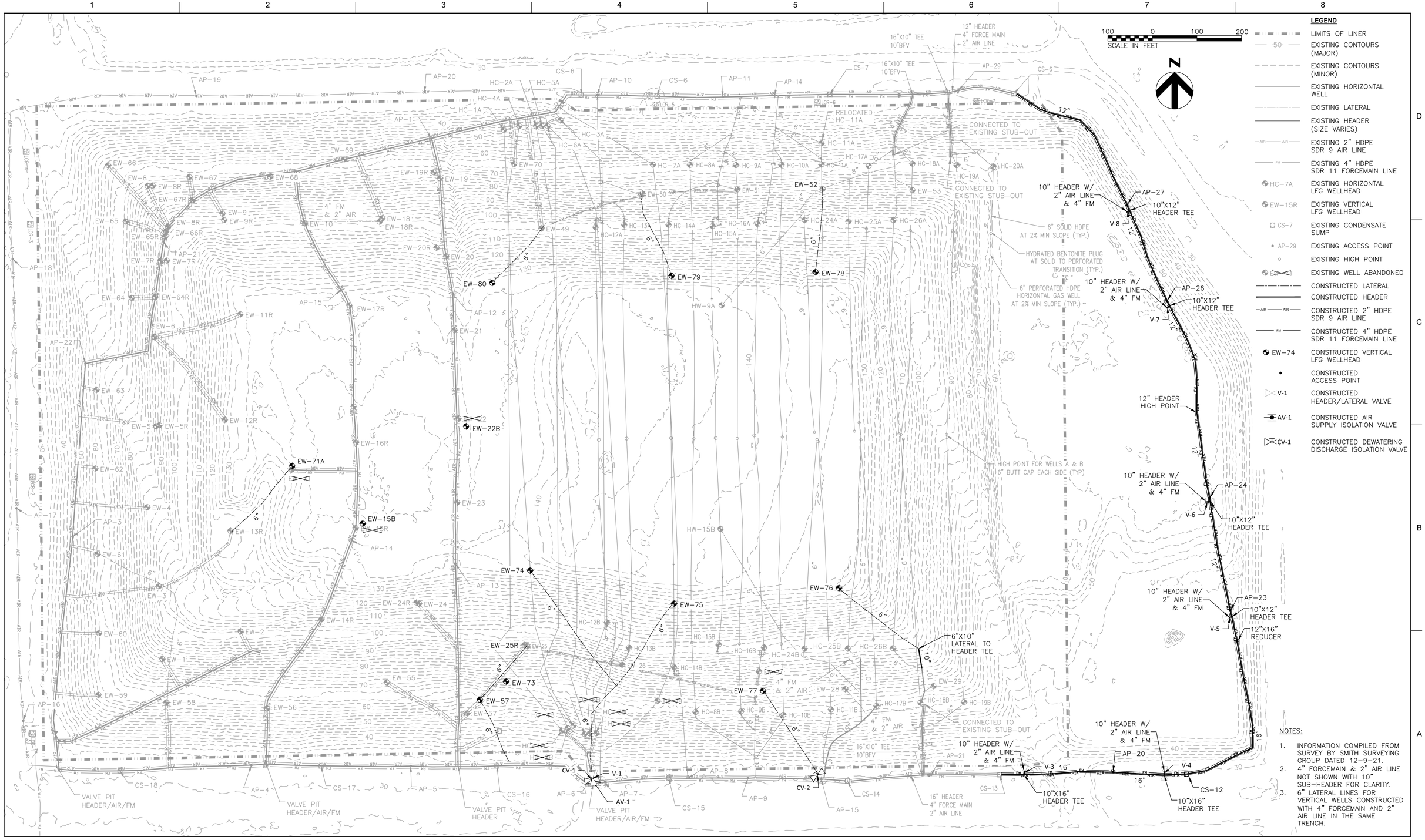
SCS SITE SUPERINTENDENT DATE

NAME & TITLE

ATTACHMENT C

Record Drawings (HDR Engineering) and As-Built Survey (Smith Surveying Group)

January 2022



ISSUE	DATE	DESCRIPTION
B	01/2022	AS-BUILT
A	08/2019	AS-BUILT

PROJECT MANAGER	M. ROBERTS, P.E.
DRAWN BY	J. RAYMOND
CHECKED BY	K. PERERA, P.E.
PROJECT NUMBER	10166567

Volusia County FLORIDA

TOMOKA FARMS ROAD LANDFILL PHASE VI RECORD DRAWINGS VOLUSIA COUNTY, FLORIDA

PHASE VI CONSTRUCTION AND RE-DRILLING

0 1" 2"

FILENAME LFG-03.dwg

SCALE 1" = 100'

SHEET LFG-03

PHASE VI & REPLACEMENT VERTICAL WELL SCHEDULE

Well	Northing (ft)	Easting (ft)	Top of Protective Cover Elevation (ft)	Existing Ground Elevation (ft)	Calculated Waste Depth (ft) D_R	**As-Built Borehole Depth (ft) D_B**	Solid Pipe (ft) D_S	Slotted Pipe (ft) D_P	Gravel Pack (ft)
EW-15B	1746124.07	624151.80	18.36	136.21	117.8	**100.0**	15	84.0	87.0
EW-22B	1746342.61	624384.19	18.88	136.53	117.7	**105.0**	15	89.0	92.0
EW-71A	1746253.41	623993.46	16.48	131.92	115.4	**101.0**	15	85.0	88.0
EW-73	1745769.14	624473.82	18.80	69.85	51.1	**38.0**	15	22.0	25.0
EW-74	1746018.43	624527.88	19.38	136.06	116.7	**103.0**	15	87.0	90.0
EW-75	1745944.09	624851.22	21.42	129.15	107.7	**96.0**	15	80.0	83.0
EW-76	1745979.29	625221.68	20.92	131.71	110.8	**99.0**	15	83.0	86.0
EW-77	1745748.15	625051.07	23.51	77.71	54.2	**41.0**	15	25.0	28.0
EW-78	1746689.09	625169.03	17.31	126.47	109.2	**96.0**	15	80.0	83.0
EW-79	1746680.60	624845.49	18.60	132.92	114.3	**103.0**	15	87.0	90.0
EW-80	1746664.80	624442.75	19.73	133.09	113.4	**100.0**	15	84.0	87.0

PHASE VI CONSTRUCTION TABLE	
VERTICAL LFG WELLHEAD	12
2"ø HDPE SDR 9 AIRLINE	2312
4"ø HDPE SDR 11 CONDENSATE FORCEMAIN	2312
6"ø HDPE SDR 11 LATERAL	2275
10"ø HDPE SDR 11 SUB-HEADER	96
12"ø HDPE SDR 11 HEADER	1392
16"ø HDPE SDR 11 HEADER	824
16"X12" REDUCER	1
CONDENSATE SUMP	1
10"ø SUBHEADER VALVE	6
AIR VALVE	7
FORCEMAIN VALVE	7
HEADER ACCESS POINT	5

ISSUE	DATE	DESCRIPTION
B	01/2022	AS-BUILT
A	08/2019	AS-BUILT

PROJECT MANAGER	M. ROBERTS, P.E.
DRAWN BY	J. RAYMOND
CHECKED BY	K. PERERA, P.E.
PROJECT NUMBER	10166567

Volusia County FLORIDA

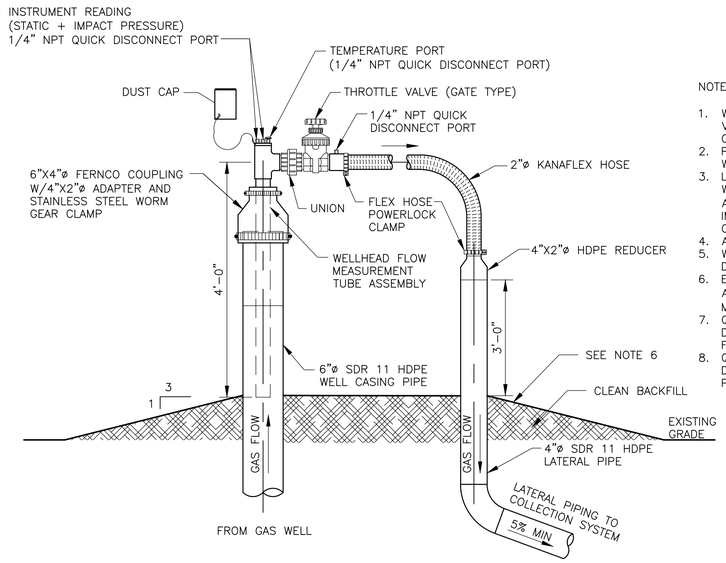
TOMOKA FARMS ROAD LANDFILL
PHASE VI RECORD DRAWINGS
VOLUSIA COUNTY, FLORIDA

PHASE V CONSTRUCTION AND RE-DRILLING WELL SCHEDULE

0 1" 2"

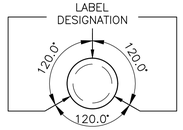
FILENAME LFG-04.dwg
SCALE ##########

SHEET LFG-04



NOTES:

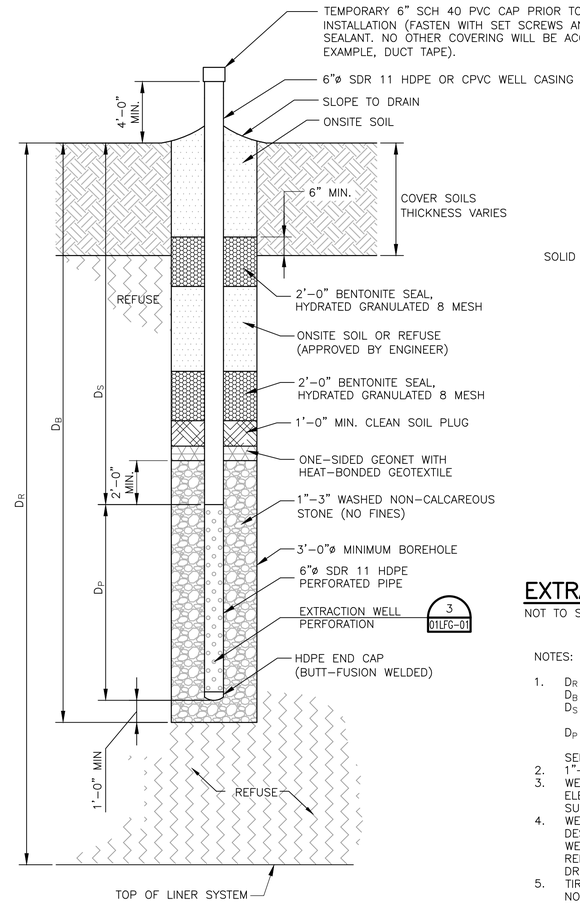
1. WELLHEAD ASSEMBLY SHOWN REPRESENTS 2"ø LANDTEC VERTICAL ACCU-FLO WELLHEAD ASSEMBLY. QED WELLHEAD OR APPROVED EQUAL MAY BE SUBSTITUTED.
2. PROVIDE HIGH VISIBILITY TAPE AROUND TOP 1-FOOT OF WELL CASING AND LATERAL PIPE.
3. LABEL ALL WELL RISERS WITH IDENTIFICATION NUMBER WITH YELLOW OR WHITE PAINT AND STENCILS OR ADHESIVE LABEL AT 2" MINIMUM HEIGHT AND LOCATED IMMEDIATELY BELOW HIGH VISIBILITY TAPE ON 3 SIDES OFFSET BY APPROXIMATELY 120°.
4. AIR AND FORCEMAIN LINES NOT SHOWN FOR CLARITY.
5. WELLHEAD TO BE CONSTRUCTED TO ALLOW INSTALLATION OF DEWATERING PUMP.
6. EXISTING GRADE TO BE SLOPED FOR POSITIVE DRAINAGE IN A 1'-0"ø SURROUNDING SURFACE EXPRESSION WITH A MAXIMUM OF 6" ABOVE SURROUNDING GRADE.
7. QED PART NUMBER 40072 INCLUDED IN FLANGE PACKAGE DETAIL TO BE INSTALLED AT TERMINATING END OF FORCEMAIN PIPE AT THE WELLHEAD.
8. QED PART NUMBER 40070 INCLUDED IN FLANGE PACKAGE DETAIL TO BE INSTALLED AT TERMINATING END OF AIRLINE PIPE AT THE WELLHEAD.



LANDTEC WELLHEAD ASSEMBLY

1 / 01LFG-04

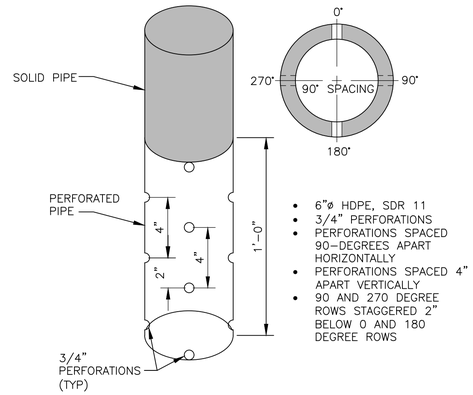
NOT TO SCALE



VERTICAL WELL

2 / 00LFG-02

NOT TO SCALE



- 6"ø HDPE, SDR 11
- 3/4" PERFORATIONS
- PERFORATIONS SPACED 90-DEGREES APART HORIZONTALLY
- PERFORATIONS SPACED 4" APART VERTICALLY
- 90 AND 270 DEGREE ROWS STAGGERED 2" BELOW 0 AND 180 DEGREE ROWS

EXTRACTION WELL PERFORATIONS

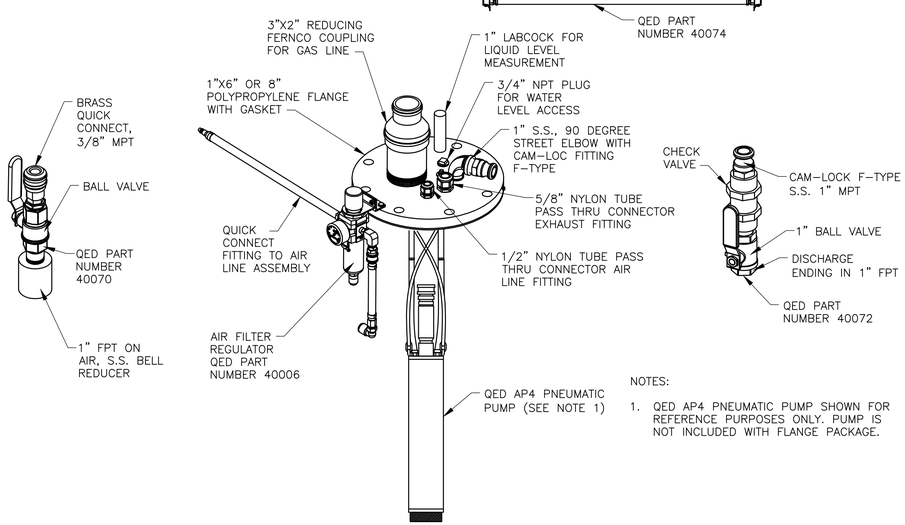
3 / 01LFG-01

NOT TO SCALE

NOTES:

1. D_R = DEPTH OF REFUSE
   D_B = DEPTH OF BORING
   D_S = DEPTH OF SOLID PIPE (BELOW GRADE) -10 FEET MINIMUM
   D_P = LENGTH OF PERFORATED PIPE

   SEE WELL SCHEDULES.
2. 1"-3" WASHED NON-CALCAREOUS STONE (NO FINES).
3. WELL DRILLING WILL NOT COMMENCE UNTIL EXISTING GRADE ELEVATIONS ARE IDENTIFIED AND VERIFIED BY PROJECT SURVEYOR, DESIGN ENGINEER, AND CQA REPRESENTATIVE.
4. WELL DRILLING TABLE WILL BE MANAGED BY OWNER OR DESIGNATED REPRESENTATIVE TO ENSURE ONLY THE VERIFIED WELL DEPTHS ARE PRESENT, AND THAT DRILLER AND CQA REPRESENTATIVE HAVE THE IDENTICAL INFORMATION PRIOR TO DRILLING.
5. TIRE CHIPS OR GLASS CULLET MAY BE SUBSTITUTED FOR NO-CALCAREOUS STONE IF APPROVED IN WRITING BY THE ENGINEER.
6. PERFORATIONS SHALL BE ADJUSTED 1/4" SMALLER THAN THE GRAVEL, TIRE CHIP OR GLASS CULLET SIZE.



NOTES:

1. QED AP4 PNEUMATIC PUMP SHOWN FOR REFERENCE PURPOSES ONLY. PUMP IS NOT INCLUDED WITH FLANGE PACKAGE.

FLANGE PACKAGE WITH PLUG

4 / 01LFG-01

NOT TO SCALE

ISSUE	DATE	DESCRIPTION
B	01/2022	AS-BUILT
A	08/2019	AS-BUILT

PROJECT MANAGER	M. ROBERTS, P.E.
DRAWN BY	J. RAYMOND
CHECKED BY	K. PERERA, P.E.
PROJECT NUMBER	10166567

Volusia County
FLORIDA

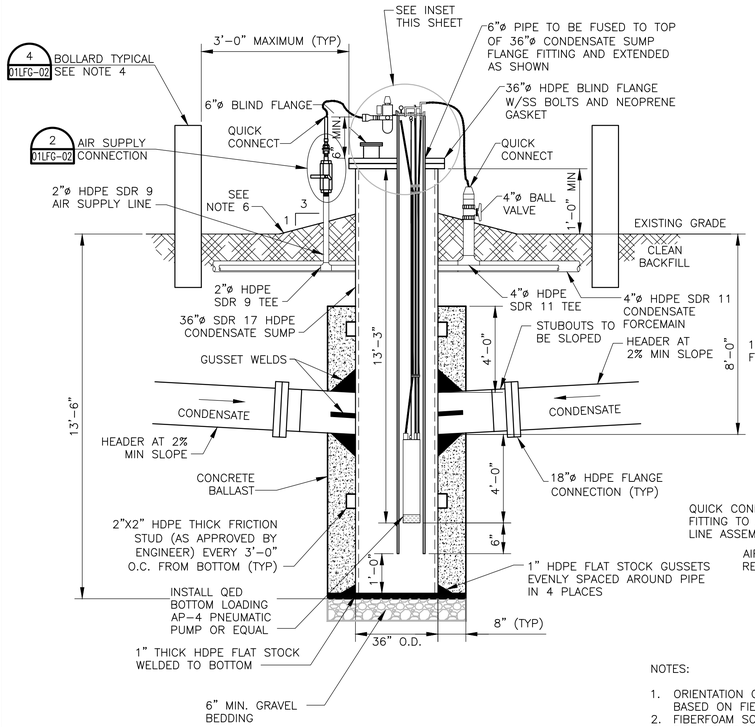
TOMOKA FARMS ROAD LANDFILL
PHASE VI RECORD DRAWINGS
VOLUSIA COUNTY, FLORIDA

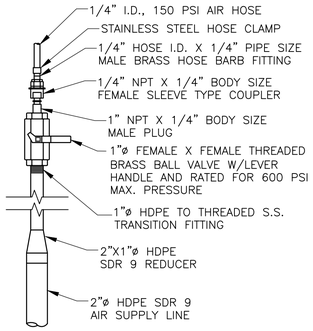
LANDFILL GAS DETAILS

0 1" 2"

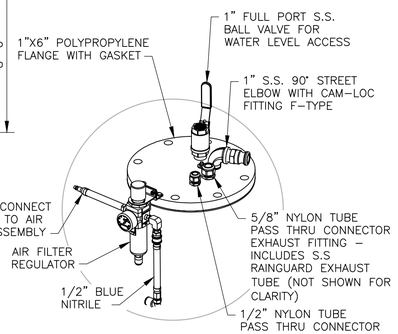
FILENAME LFG DT-01.dwg
SCALE ##########

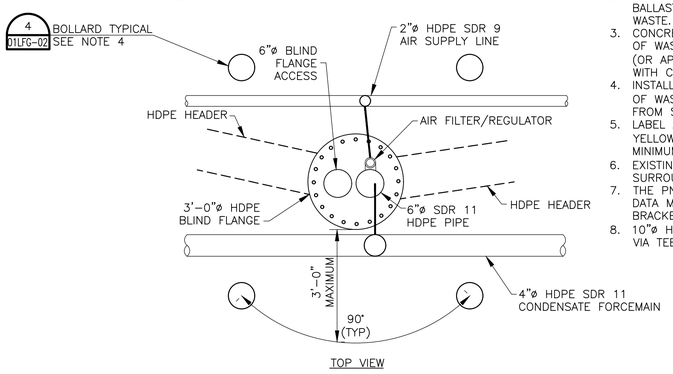
SHEET
LFG DT-01

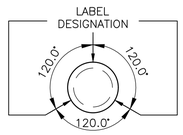




AIR SUPPLY CONNECTION
2 01LFG-02
NOT TO SCALE



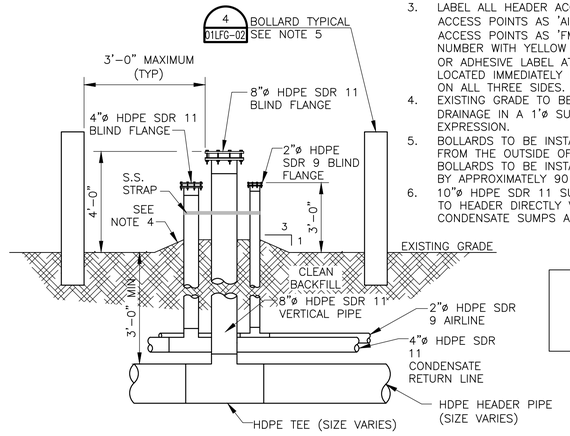




NOTES:

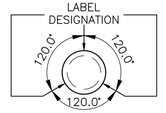
1. ORIENTATION OF HEADER LINES ENTERING CONDENSATE SUMP VARIES BASED ON FIELD CONDITIONS.
2. FIBERFOAM SONOTUBE FORM OR EQUAL AROUND SUMP FOR CONCRETE BALLAST TO BE CONSTRUCTED ON CONDENSATE SUMPS OUTSIDE OF WASTE.
3. CONCRETE SHALL BE POURED AS BALLAST FOR SUMPS LOCATED OUTSIDE OF WASTE. CONCRETE CAN FILL THE ENTIRE EXCAVATION, OR A SONOTUBE (OR APPROVED EQUAL) CAN BE PLACED AROUND THE SUMP AND FILLED WITH CONCRETE AS SHOWN.
4. INSTALL FOUR BOLLARDS AROUND CONDENSATE SUMPS LOCATED OUTSIDE OF WASTE. EACH BOLLARD TO BE 4'-0" TALL AND SPACED 3'-0" AWAY FROM SUMP. PAINT BOLLARDS SAFETY YELLOW.
5. LABEL ALL CONDENSATE SUMPS WITH IDENTIFICATION NUMBER WITH YELLOW OR WHITE PAINT AND STENCILS OR ADHESIVE LABEL AT 2" MINIMUM HEIGHT AND LOCATED IMMEDIATELY BELOW HIGH VISIBILITY TAPE.
6. EXISTING GRADE TO BE SLOPED FOR POSITIVE DRAINAGE IN A 1'ø SURROUNDING SURFACE EXPRESSION.
7. THE PNEUMATIC PUMP INSTALLATION SHALL ALSO INCLUDE A PUMP DATA MODULE. DATA MODULE SHALL BE INSTALLED TO SUMP FLANGE VIA BRACKET FITTING.
8. 10"ø HDPE SDR 11 SUB-HEADER SHALL CONNECT TO HEADER DIRECTLY VIA TEE FITTING, ADJACENT TO CONDENSATE SUMPS AND ACCESS POINTS.

CONDENSATE SUMP
1 00LFG-02
NOT TO SCALE

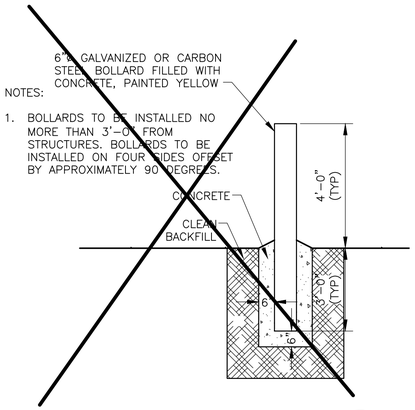


NOTES:

1. ACTUAL DIMENSIONS AND LOCATIONS MAY VARY BASED ON FIELD CONDITIONS.
2. AIRLINE SHOWN OFFSET FOR CLARITY.
3. LABEL ALL HEADER ACCESS POINTS AS 'AP', AIRLINE ACCESS POINTS AS 'AIR AP' AND CONDENSATE ACCESS POINTS AS 'FM AP' WITH IDENTIFICATION NUMBER WITH YELLOW OR WHITE PAINT AND STENCILS OR ADHESIVE LABEL AT 2" MINIMUM HEIGHT AND LOCATED IMMEDIATELY BELOW HIGH VISIBILITY TAPE ON ALL THREE SIDES.
4. EXISTING GRADE TO BE SLOPED FOR POSITIVE DRAINAGE IN A 1'ø SURROUNDING SURFACE EXPRESSION.
5. BOLLARDS TO BE INSTALLED NO MORE THAN 3'-0" FROM THE OUTSIDE OF THE ACCESS POINT. BOLLARDS TO BE INSTALLED ON FOUR SIDES OFFSET BY APPROXIMATELY 90 DEGREES.
6. 10"ø HDPE SDR 11 SUB-HEADER SHALL CONNECT TO HEADER DIRECTLY VIA TEE FITTING, ADJACENT TO CONDENSATE SUMPS AND ACCESS POINTS.



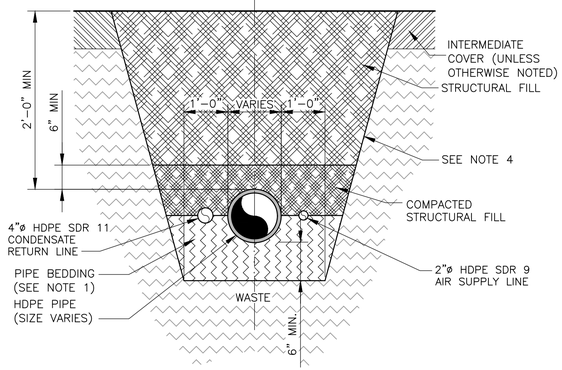
HEADER ACCESS POINT
3 00LFG-02
NOT TO SCALE



NOTES:

1. BOLLARDS TO BE INSTALLED NO MORE THAN 3'-0" FROM STRUCTURES. BOLLARDS TO BE INSTALLED ON FOUR SIDES OFFSET BY APPROXIMATELY 90 DEGREES.

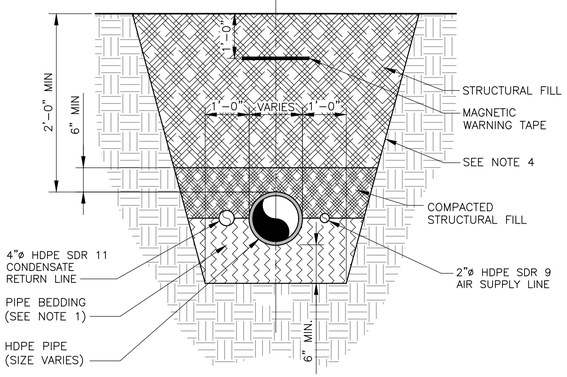
BOLLARD TYPICAL
4 01LFG-02
NOT TO SCALE



NOTES:

1. PIPE BEDDING TO BE COMPACTED BELOW AND TO THE MIDPOINT ON ALL PIPING.
2. ACTUAL DEPTH OF TRENCH MAY VARY BASED ON FIELD CONDITIONS.
3. ALL PIPES SHALL HAVE A MINIMUM OF 2' OF COVER UNLESS NOTED OTHERWISE.
4. TRENCH WALLS MUST BE SLOPED OR HAVE APPROPRIATE SHORING PROVIDED TO COMPLY WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL SAFETY STANDARDS.

TYPICAL LANDFILL GAS PIPE TRENCH (INSIDE WASTE)
5 00LFG-02
NOT TO SCALE



NOTES:

1. PIPE BEDDING TO BE COMPACTED BELOW AND TO THE MIDPOINT ON ALL PIPING.
2. ACTUAL DEPTH OF TRENCH MAY VARY BASED ON FIELD CONDITIONS.
3. ALL PIPES SHALL HAVE A MINIMUM OF 2' OF COVER UNLESS NOTED OTHERWISE.
4. TRENCH WALLS MUST BE SLOPED OR HAVE APPROPRIATE SHORING PROVIDED TO COMPLY WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL SAFETY STANDARDS.

TYPICAL LANDFILL GAS PIPE TRENCH (OUTSIDE WASTE)
6 00LFG-02
NOT TO SCALE

ISSUE	DATE	DESCRIPTION
B	01/2022	AS-BUILT
A	08/2019	AS-BUILT

PROJECT MANAGER	M. ROBERTS, P.E.
DRAWN BY	J. RAYMOND
CHECKED BY	K. PERERA, P.E.
PROJECT NUMBER	10166567

Volusia County FLORIDA

TOMOKA FARMS ROAD LANDFILL
PHASE VI RECORD DRAWINGS
VOLUSIA COUNTY, FLORIDA

LANDFILL GAS DETAILS

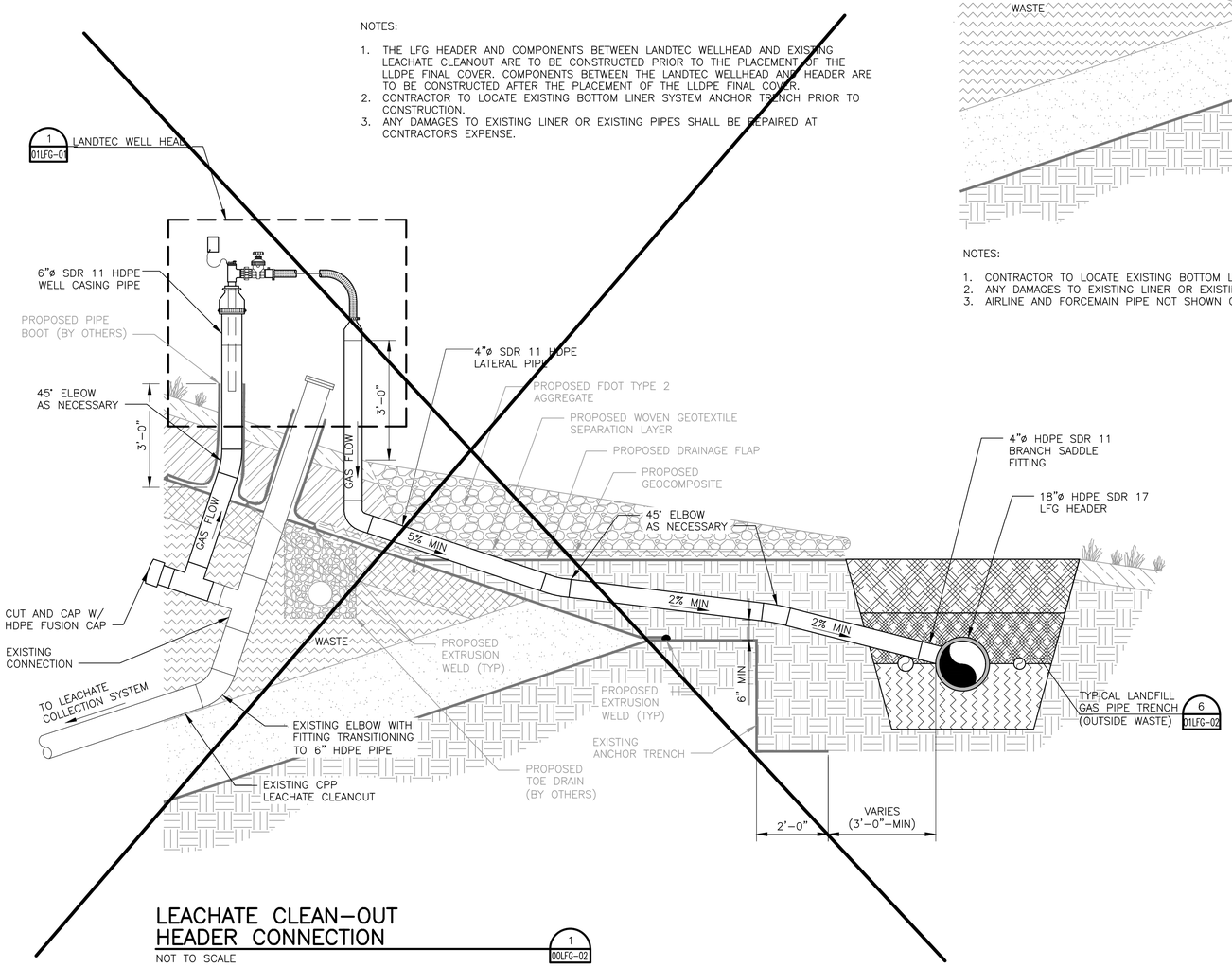
0 1" 2"

FILENAME LFG DT-02.dwg
SCALE ##########

SHEET
LFG DT-02

NOTES:

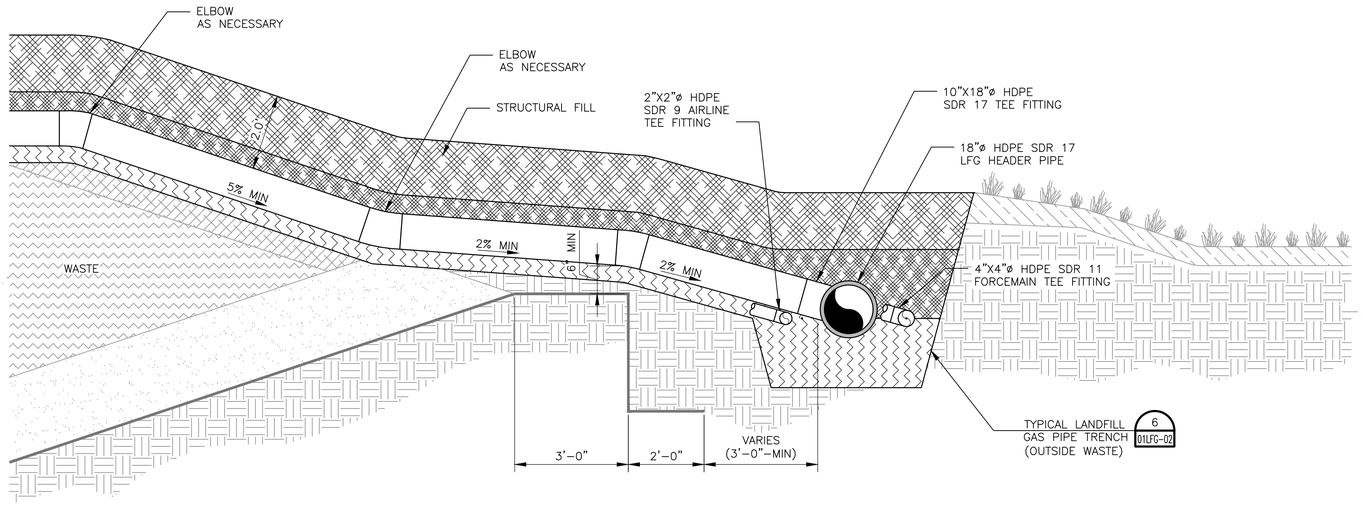
1. THE LFG HEADER AND COMPONENTS BETWEEN LANDTEC WELLHEAD AND EXISTING LEACHATE CLEANOUT ARE TO BE CONSTRUCTED PRIOR TO THE PLACEMENT OF THE LLDPE FINAL COVER. COMPONENTS BETWEEN THE LANDTEC WELLHEAD AND HEADER ARE TO BE CONSTRUCTED AFTER THE PLACEMENT OF THE LLDPE FINAL COVER.
2. CONTRACTOR TO LOCATE EXISTING BOTTOM LINER SYSTEM ANCHOR TRENCH PRIOR TO CONSTRUCTION.
3. ANY DAMAGES TO EXISTING LINER OR EXISTING PIPES SHALL BE REPAIRED AT CONTRACTORS EXPENSE.



LEACHATE CLEAN-OUT HEADER CONNECTION

1 00LFG-02

NOT TO SCALE



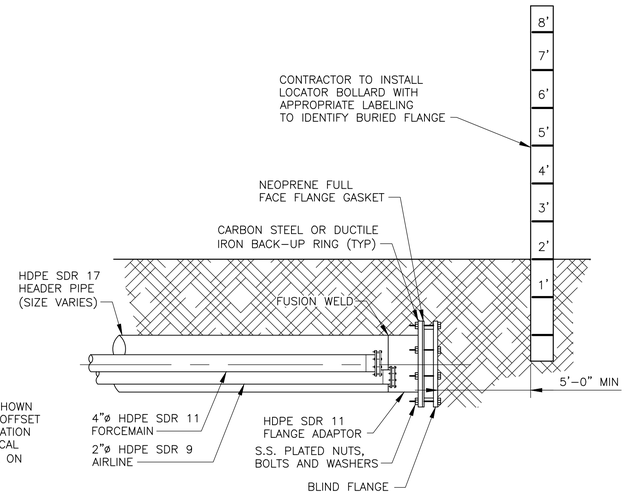
NOTES:

1. CONTRACTOR TO LOCATE EXISTING BOTTOM LINER SYSTEM ANCHOR TRENCH PRIOR TO CONSTRUCTION.
2. ANY DAMAGES TO EXISTING LINER OR EXISTING PIPES SHALL BE REPAIRED AT CONTRACTORS EXPENSE.
3. AIRLINE AND FORCEMAIN PIPE NOT SHOWN CONTINUOUS IN SECTION FOR CLARITY.

ANCHOR TRENCH CROSSING

2 00LFG-02

NOT TO SCALE



NOTES:

1. AIRLINE AND FORCEMAIN PIPES SHOWN ON SAME SIDE OF HEADER AND OFFSET FOR CLARITY. DEPTH AND ORIENTATION SHALL BE CONSISTENT WITH TYPICAL TRENCH (OUTSIDE WASTE) DETAIL ON SHEET LFG DT-02.

STUB-OUT AND DEPTH MARKER

3 00LFG-02

NOT TO SCALE

ISSUE	DATE	DESCRIPTION
B	01/2022	AS-BUILT
A	08/2019	AS-BUILT

PROJECT MANAGER	M. ROBERTS, P.E.
DRAWN BY	J. RAYMOND
CHECKED BY	K. PERERA, P.E.
PROJECT NUMBER	10166567

Volusia County FLORIDA

TOMOKA FARMS ROAD LANDFILL
PHASE VI RECORD DRAWINGS
VOLUSIA COUNTY, FLORIDA

LANDFILL GAS DETAILS

0 1" 2"

FILENAME LFG DT-04.dwg

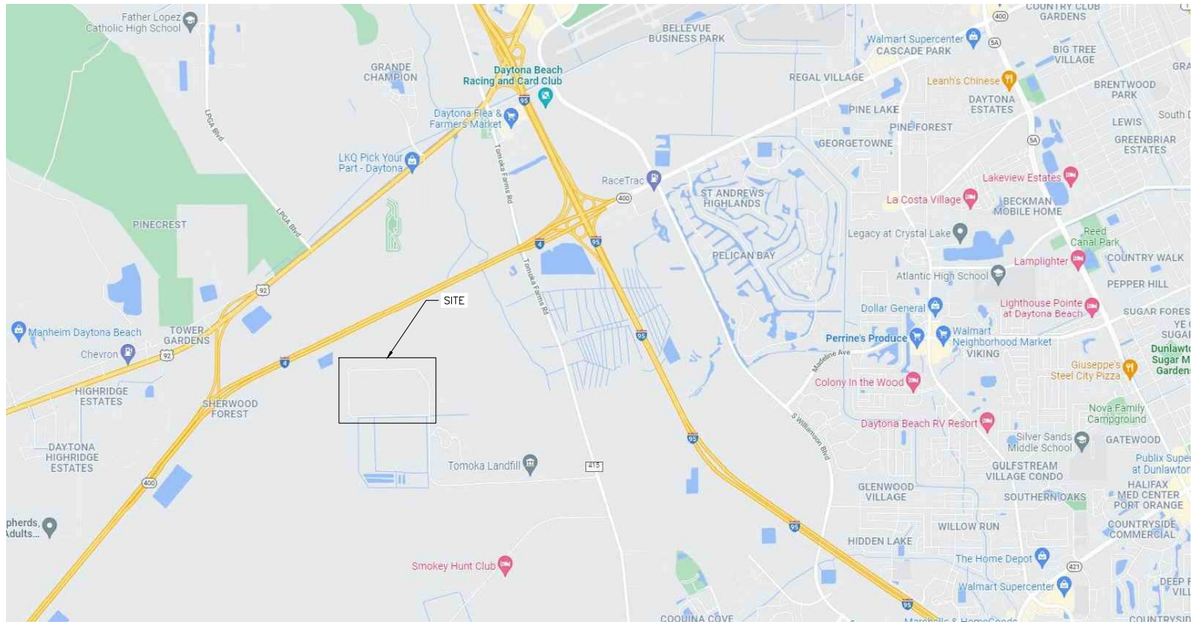
SCALE ##########

SHEET
LFG DT-04

MAP SHOWING A AS-BUILT SURVEY OF

NOT A BOUNDARY SURVEY

TAMOKA FARMS ROAD LANDFILL
PHASE VI CONSTRUCTION DRAWINGS
VOLUSIA COUNTY, FLORIDA



VICINITY MAP

NOTES:

1. EXISTING TOPOGRAPHIC INFORMATION TAKEN FROM AERIAL SURVEY PERFORMED BY PICKETT & ASSOCIATES ON MAY 18, 2021.
2. ELEVATIONS REFER TO NATIONAL GEODETIC VERTICAL DATUM OF 1929. COORDINATES REFER TO NAD 83 FLORIDA STATE PLANES, EAST ZONE, U.S. FEET.
3. 4" FORCEMAIN & 2" AIR LINE NOT SHOWN WITH 12" HEADER FOR CLARITY.
4. 6" LATERAL LINES FOR VERTICAL WELLS SHALL BE CONSTRUCTED WITH 4" FORCEMAIN AND 2" AIR LINE IN THE SAME TRENCH.

LEGEND:

EW-27	EXISTING VERTICAL EXTRACTION WELL
EW-27	EXISTING VERTICAL EXTRACTION WELL WITH PUMP
HC-16B	EXISTING HORIZONTAL COLLECTOR
HC-15B	EXISTING HORIZONTAL COLLECTOR WITH PUMP
RW-9	EXISTING REMOTE EXTRACTION WELL
LS-1	EXISTING LEACHATE SUMP
AP-6	EXISTING ACCESS POINT
CS-15	EXISTING CONDENSATE SUMP
	EXISTING HORIZONTAL COLLECTOR HIGH POINT
	EXISTING AIR SUPPLY LINE
	EXISTING HEADER/LATERAL
	EXISTING DEWATERING DISCHARGE LINE
EW-27	PHASE 1 - PROPOSED VERTICAL EXTRACTION WELL
EW-27	PHASE 2 - PROPOSED VERTICAL EXTRACTION WELL
~~EW-27~~	PHASE 1 - EXISTING WELL TO BE ABANDONED
~~EW-27~~	PHASE 2 - EXISTING WELL TO BE ABANDONED
LS-2	PHASE 1 - PROPOSED LEACHATE SUMP
EW-27	PHASE 1 - PROPOSED PUMP IN EXISTING EXTRACTION WELL
V-1	PHASE 1 - PROPOSED HEADER/LATERAL VALVE
AV-1	PHASE 1 - PROPOSED AIR SUPPLY ISOLATION VALVE
AV-4	PHASE 2 - PROPOSED AIR SUPPLY ISOLATION VALVE
CV-1	PHASE 1 - PROPOSED DEWATERING DISCHARGE ISOLATION VALVE
CV-5	PHASE 2 - PROPOSED DEWATERING DISCHARGE ISOLATION VALVE
	PHASE 1 - PROPOSED AIR SUPPLY LINE
	PHASE 2 - PROPOSED AIR SUPPLY LINE
	PHASE 1 - PROPOSED HEADER/LATERAL
	PHASE 2 - PROPOSED HEADER/LATERAL
	PHASE 1 - PROPOSED DEWATERING DISCHARGE LINE
	PHASE 2 - PROPOSED DEWATERING DISCHARGE LINE

SURVEYOR LEGEND

AB AS-BUILT
LF LINIER FEET

SURVEYOR NOTES:

1. THIS SURVEY IS TO SHOW AS-BUILT CONDITIONS OF THE PHASE VI GAS SYSTEM.
2. THE LAST DATE IN FIELD FOR THIS SURVEY WAS 11/18/2021.
3. ELEVATIONS WERE DERIVED FROM ON SITE BENCH MARKS AS SUPPLIED BY CLIENT AND ARE BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929.
4. COORDINATES SHOWN HEREON WERE SUPPLIED BY CLIENT AND ARE ASSUMED TO BE RELATIVE NORTH AMERICAN DATUM OF 1983, FLORIDA EAST ZONE 901, IN U.S. SURVEY FEET.
5. ALL ELEVATIONS UNLESS NOTED OTHERWISE ARE TO TOP OF PIPE.
6. * DENOTES INFORMATION AS SUPPLIED BY CONTRACTOR AND NOT CERTIFIED BY THIS FIRM.

THIS MAP IS NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

SSG
SMITH SURVEYING GROUP
FLORIDA CERTIFICATE OF AUTHORIZATION NO. LB 8368
9770 BAYMEADOWS ROAD, SUITE 121
JACKSONVILLE, FLORIDA 32256
TJS@smithsurvey.net PH# (904)260-6300

DocuSigned by: Tom Smith
THOMAS J. SMITH
FL PSM NO. 6500
DATE SIGNED: 1/13/2022

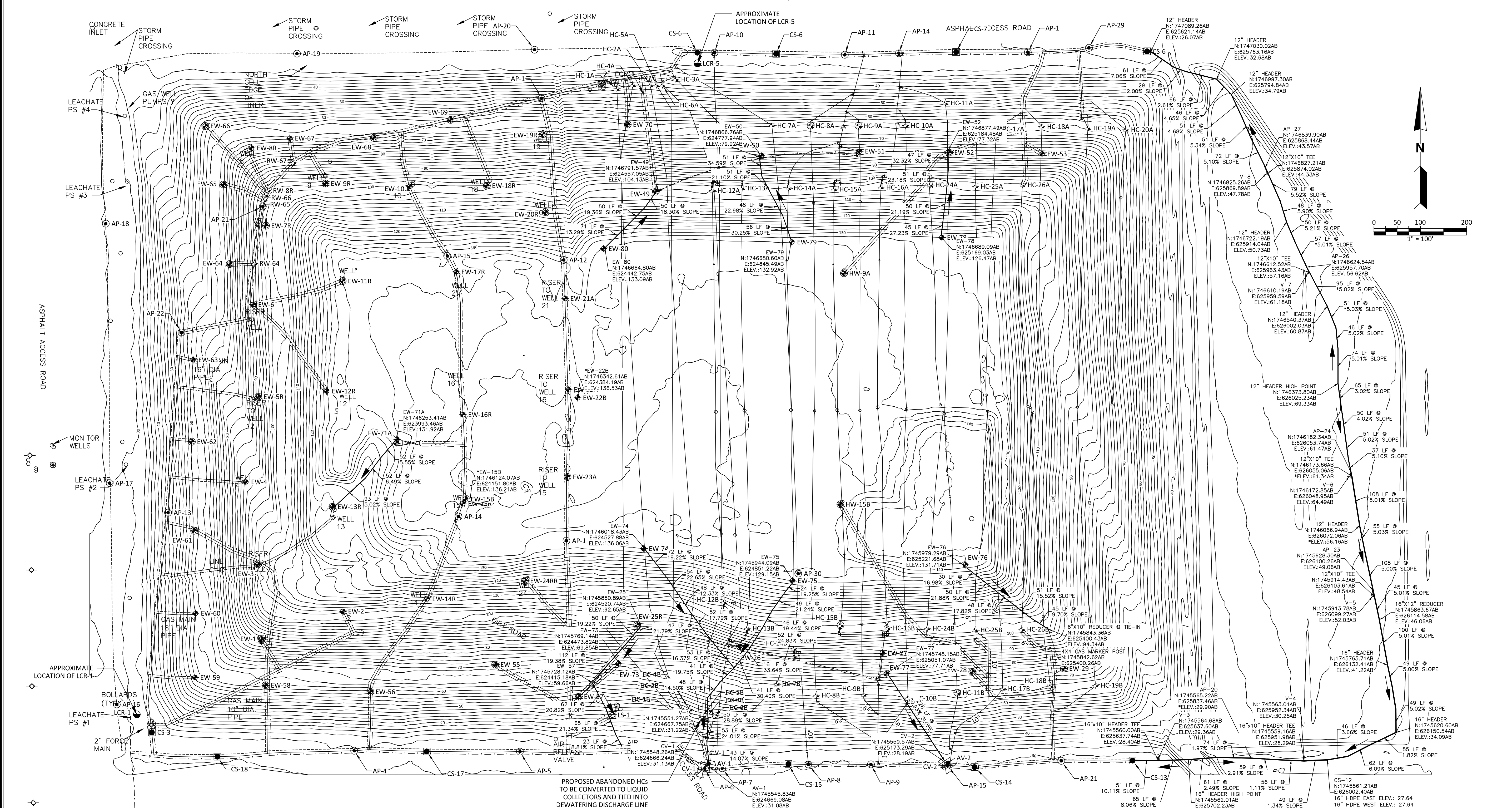
FOR: SCS FIELD SERVICES
DATE: 12/9/2021
WORK ORDER NO.: 574-21
PROJECT NUMBER: 43721
SHEET 1 OF 2 SHEETS
DRAWING NO. D-43721

PARTY CHIEF: RUSS COMPUTED BY: N/A CADD TECH: DTS DC FILE NO.: 43721 F.B.: N/A P.G.: N/A

MAP SHOWING A AS-BUILT SURVEY OF

NOT A BOUNDARY SURVEY

TAMOKA FARMS ROAD LANDFILL
PHASE VI CONSTRUCTION DRAWINGS
VOLUSIA COUNTY, FLORIDA



THIS MAP IS NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

SSG
SMITH SURVEYING GROUP

FLORIDA CERTIFICATE OF AUTHORIZATION NO. LB 8368
9770 BAYMEADOWS ROAD, SUITE 121
JACKSONVILLE, FLORIDA 32256
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DocuSigned by:
Tom Smith
THOMAS J. SMITH
FL PSM NO. 6500
DATE SIGNED: 1/13/2022

THOMAS J SMITH License Number 6500 STATE OF FLORIDA Professional Surveyor and Mapper

DS

FOR: SCS FIELD SERVICES

DATE: 12/9/2021	
WORK ORDER NO.: 574-21	
PROJECT NUMBER: 43721	
SHEET 2 OF 2 SHEETS	
DRAWING NO. D-43721	

PARTY CHIEF: RUSS COMPUTED BY: N/A CADD TECH: DTS DC FILE NO.: 43721 F.B.: N/A P.G.: N/A

ATTACHMENT D

Daily Field Logs

January 2022

SCS FIELD LOGS

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 8/18/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor			Tony Taylor	10	
Dustin Voils	10				
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1		T-180 Skid steer	1	
F-150 Pick up	2		30 ton Dump truck		
Tool trailer	2		650 dozer		
Gator	1				
210 excavator	1				
6k fork lift	1				

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Unloaded equipment. Held meeting with site to discuss laydown areas.		
Unloaded materials and fittings.		

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 8/19/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor			Tony Taylor	10	
Dustin Voils	10				
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1		T-180 Skid steer	1	
F-150 Pick up	2		30 ton Dump truck	1	
Tool trailer	2		650 dozer		
Gator	1				
210 excavator	1				
6k fork lift	1				

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: welded 16” and 12” pipe. Inventory fittings. Survey 11 wells.		

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 8/20/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor			Tony Taylor	8	
Dustin Voils	8				
Troy Zerbe	8				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1		T-180 Skid steer	1	
F-150 Pick up	2		30 ton Dump truck		
Tool trailer	2		650 dozer		
Gator	1				
210 excavator	1				
6k fork lift	1				

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: finished welding 12” pipe. Checked well locations. Inventory fittings		

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 8/23/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	13		Tony Taylor	8	
Dustin Voils	8				
Troy Zerbe	8				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1		T-180 Skid steer	1	
F-150 Pick up	2		30 ton Dump truck		
Tool trailer	2		650 dozer		
Gator	1				
210 excavator	1				
6k fork lift	1				

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Serviced equipment		

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 8/24/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	8		Tony Taylor	8	
Dustin Voils	8				
Troy Zerbe	8				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1		T-180 Skid steer	1	
F-150 Pick up	2		30 ton Dump truck	1	
Tool trailer	2		650 dozer		
Gator	1		2-8 machine		
210 excavator	1		generator		
6k fork lift	1				

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Laid out 16” and 12” headers. Unloaded 4500’ of 2” coils and bentonite.		
String out 2” coils. Move bentonite to the top of hill. Moved equipment to HC –2b thru		
6B collectors to begin abandonment.		

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 8/25/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	8		Tony Taylor	8	
Dustin Voils	8				
Troy Zerbe	8				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	2	30 ton Dump truck	1	1
Tool trailer	2	2	8” fusion machine	1	1
210 excavator	1	1	Generator	1	

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: removed temporary 2” vacuum line to HC collectors and capped off.		
Excavate 3’ deep and abandon HC-2b, 3b, 4b, 5b and 6b. Welded on 6” cap on vacuum		
And horizontal riser. Backfilled area. Removed well heads and took to maintenance		
Shop.		

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 8/26/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	8		Tony Taylor	8	
Dustin Voils	8				
Troy Zerbe	8				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	2	30 ton Dump truck	1	1
Tool trailer	2	2	8” fusion machine	1	1
210 excavator	1	1	generator	1	1
			4” fusion Machine	1	1

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Excavated around EW-22A 3 feet deep. Removed well head and capped		
Vacuum side. Cut and capped well. Exposed air drain and vacuum line for future tie in.		
Excavated around 15R 3 feet deep. Removed well head and capped vacuum line. cut		
And capped well. Exposed air drain and vacuum lines for future tie in. well heads		
Were taken to the maintenance shop.		

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 8/27/21 | Weather: Rain

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	4		Tony Taylor	4	
Dustin Voils	4				
Troy Zerbe	4				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	2	30 ton Dump truck	1	1
Tool trailer	2	2	4” fusion machine	1	1
210 excavator	1	1	8 fusion machine	1	1
			generator	1	1

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Excavated around EW-71 for abandonment. Heavy rain shut down job		

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 8/30/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	8		Tony Taylor	8	
Dustin Voils	8				
Troy Zerbe	8				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	2	30 ton Dump truck	1	1
Tool trailer	2	2	4" machine		
210 excavator	1	1	8 machine	1	1
			generator	1	1

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Excavated around EW-71 about 10' deep to remote tee. Cut away tee		
And caped well. Lifted 4" force main and 2" air to 3' deep. Excavated around remote		
Well head for 71. Removed well head cut and capped 4" riser. Cut and capped 4"		
Vacuum riser. Backfilled excavations. Received 3" stone for well drilling.		

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 8/31/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	8		Tony Taylor	8	
Dustin Voils	8				
Troy Zerbe	4				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1		T-180 Skid steer	1	
F-150 Pick up	2		30 ton Dump truck	1	
Tool trailer	2		650 dozer		
Gator	1				
210 excavator	1				
6k fork lift	1				

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Unloaded CPVC pipe. Moved drilling equipment to top of hill.		
Drill rig arrived at 11:00 am. Hauled dirt for backfill		

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 9/1/21 | Weather: rain

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	8		Tony Taylor	8	
Dustin Voils	8				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1		T-180 Skid steer	1	
F-150 Pick up	2		30 ton Dump truck	1	
Tool trailer	2				
Gator	1				
210 excavator	1				
6k fork lift	1				

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Laid out well casing by wells. Built 12” tees with pups for tie ins.		
Built 2” air valves and 4” clean outs.		

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 9/2/21 | Weather: sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	8		Tony Taylor	8	
Dustin Voils	8		Anthony Lawless	8	

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1		T-180 Skid steer	1	
F-150 Pick up	2		30 ton Dump truck	1	
Tool trailer	2				
Gator	1				
210 excavator	1				
	1				

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Built 12” tees with pups. Unloaded well pipe and fittings. Built well		
Casings. B&H arrived on site at 2:00 set up drill rig ready to begin drilling.		

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 9/3/21 | Weather: sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor	10	
Dustin Voils	10		Anthony Lawless	10	

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1		T-180 Skid steer	1	
F-150 Pick up	2		30 ton Dump truck	1	
Tool trailer	2				
Gator	1				
210 excavator	1				
	1				

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Drilled EW-22B to 105' set and completed well. Moved rig to EW-15B		
Drilled to 35'. Covered bore hole and placed excavator bucket over hole.		

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 9/4/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	5		Tony Taylor	5	
Dustin Voils	5				
Antony Lawless	5				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	2	30 ton Dump truck	1	1
Tool trailer	2	2	4” fusion machine	1	1
210 excavator	1	1	8” fusion machine	1	1
			generator	1	1
			Electrofusion machine	1	1

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Excavated existing 6” 4” and 2”. Cut and laid down tee on 6” pipe.		
Ran new 6” 4” and 2” lines to 22B. Backfilled excavation and installed well head.		
6 4 2	15	LF

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 9/4/21 | Weather: sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor	10	
Dustin Voils	10		Anthony Lawless	10	

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1		T-180 Skid steer	1	
F-150 Pick up	2		30 ton Dump truck	1	
Tool trailer	2				
Gator	1				
210 excavator	1				
	1				

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Drilled on 15B for 2 hours and bore hole began to collapse abandon		
Well at 35'. Back With sand and moved well 15' to the east. Drilled 15 B to 100' set		
And completed well.		

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 9/6/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	5		Tony Taylor	5	
Dustin Voils	5		Troy zerbe	5	
Antony Lawless	5				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	2	30 ton Dump truck	1	1
Tool trailer	2	2	4” fusion machine	1	1
210 excavator	1	1	8” fusion machine	1	1
			generator	1	1
			Electrofusion machine	1	1

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Excavated existing 6” 4” and 2”. Cut and laid down tee on 6” pipe.		
Ran new 6” 4” and 2” lines to 15B. Backfilled excavation with sand. Installed well head.		
6 4 2	27	LF

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 9/6/21 | Weather: sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor	10	
Dustin Voils	10		Anthony Lawless	10	
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1		T-180 Skid steer	1	
F-150 Pick up	2		30 ton Dump truck	1	
Tool trailer	2				
Gator	1				
210 excavator	1				
	1				

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Drilled EW-71 A to 101' set and completed well. Moved rig to EW 74		
Drilled to 70' covered well bore hole with well grate and covered with plastic. Set		
Excavator bucket over hole.		

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 9/7/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	5		Tony Taylor	5	
Dustin Voils	5		Troy zerbe	5	
Antony Lawless	5				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	2	30 ton Dump truck	1	1
Tool trailer	2	2	4” fusion machine	1	1
210 excavator	1	1	8” fusion machine	1	1
			generator	1	1
			Electrofusion machine	1	1

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Excavated existing lines at 13R for tie into 71 B. lines were 5’ deep clean		
Off lines ready for tie in. Ran 875’ of airline from EW-10 to CS-2 above grade on old		
South hill. Regulator will have to be replaced for pump.		
6 4 2	27	LF

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 9/7/21 | Weather: sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor	10	
Dustin Voils	10		Anthony Lawless	10	
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1		T-180 Skid steer	1	
F-150 Pick up	2		30 ton Dump truck	1	
Tool trailer	2				
Gator	1				
210 excavator	1				
	1				

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Drilled EW-74 70' to 103' set and completed well. Bill worked on his		
Bucket 2 shanks needed hard coat welded on. Resume drilling at 12:30 on EW-75		
Heavy rain and lightning from 2:30 to 3:30. Resume drilling to 65'. Covered well bore.		
Total drilling	98	LF

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 9/8/21 | Weather: sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor	10	
Dustin Voils	10				
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1		T-180 Skid steer	1	
F-150 Pick up	2		30 ton Dump truck	1	
Tool trailer	2				
Gator	1				
210 excavator	1				

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Drilled EW-75 65' to 96' set and completed well. Drilled EW-73 to 38'		
Set and completed well. Drilled EW-77 to 41' set and completed well. Drilled EW-76		
To 50' covered bore hole. Heavy rain at 5:00		
Total drilling	160	LF

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 9/9/21 | Weather: Rain

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	2		Tony Taylor	3	
Dustin Voils			Troy zerbe	3	

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
Tool trailer	2	2			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Installed tee post every 20' along 875' of 2" above grade pipe. To avoid		
Mower damage.		
6 4 2	27	LF

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 9/9/21 | Weather: Rain

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor	10	
Dustin Voils	10				
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1		T-180 Skid steer	1	
F-150 Pick up	2		30 ton Dump truck	1	
Tool trailer	2				
Gator	1				
210 excavator	1				

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Drilled EW-76 50' to 99' set and completed well. Drilled EW-78 to 85'		
Covered bore hole. Heavy rain from 8:30 to 10:30. Light rain from 11:00 to 12:30.		
Total drilling	134	LF

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 9/10/21 | Weather: Rain

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor	10	
Dustin Voils	10				
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1		T-180 Skid steer	1	
F-150 Pick up	2		30 ton Dump truck	1	
Tool trailer	2				
Gator	1				
210 excavator	1				

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Drilled EW-78 85' to 96' set and completed well. Drilled EW-79 to 103'		
Set and completed well. Rain off and on all day.		
Total drilling	114	LF

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 9/11/21 | Weather: Rain

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	5		Tony Taylor	5	
Dustin Voils	5				
Troy Zerbe	5				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1		T-180 Skid steer	1	
F-150 Pick up	2		30 ton Dump truck	1	
Tool trailer	2				
Gator	1				
210 excavator	1				

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Drilled EW-80 to 20' hydraulic line on rig burst. Removed 2" line		
Nowhere open today to get repaired. Begin welding 6" pipe.		
Total drilling	20	LF

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 9/13/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor	10	
Dustin Voils	10		Troy zerbe	10	

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 pick up	1	1	210 excavator	1	1
Tool trailer	2	2	30 ton truck	1	1
8” fusion machine	1	1			
4” fusion machine	1	1			
generator	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: welded 6” and 4” pipe. Welded air valves and force main valves for		
Tie ins.		

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 9/13/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor			Tony Taylor	4	
Dustin Voils					
Troy Zerbe					

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1		T-180 Skid steer	1	
F-150 Pick up	2		30 ton Dump truck	1	
Tool trailer	2				
Gator	1				
210 excavator	1				

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Repaired hydraulic line on rig by 1:30 drilled from 20’ to 90’ covered		
Borehole and hauled away waste.		
Total drilling	70	LF

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 9/14/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor			Tony Taylor	8	
Dustin Voils	8		Troy zerbe	8	

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 pick up	1	1	6k forklift	1	1
Tool trailer	2	2	210 Excavator	1	1
2-8 fusion machine	1	1	30 ton truck	1	1
1-4 fusion machine	1	1			
generator	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Excavated and cleaned off lines at 13R. Tied in 6” line and run to 71A		
Excavated 4” and 2” lines at existing 71 and moved to 71A. backfilled with sand and		
Trench tape. Finished to grade.		
6” pipe	200	LF
4” and 2”	15	LF

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 9/14/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	8		Tony Taylor	3	
Dustin Voils	3				
Troy Zerbe	3				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1		T-180 Skid steer	1	
F-150 Pick up	2		30 ton Dump truck	1	
Tool trailer	2				
Gator	1				
210 excavator	1				

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Drilled EW-80 from 90 to 100 set and completed well.		
Drilling completed		
Total drilling	10	LF

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 9/21/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor	10	
Dustin Voils	10				
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1	4" fusion machine	1	1
			generator	1	1
210 excavator	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: excavate tie in point around AP-7. 10" line air and drain were 6' deep.		
Excavated back line 40' for future tie in. Excavated by EW-57 uncovered 6" 4" and 2".		
Excavated back lines to make connections. Ordered additional fittings need to make		
Tie in. welded riser and pipes for tie ins.		

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 9/22/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor	10	
Dustin Voils	10				
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1	4” fusion machine	1	1
			generator	1	1
210 excavator	1	1	8” fusion machine	1	1

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: excavated around EW-49 and exposed 6” 4” and 2”. Excavated trench to		
EW-80. Tied into existing lines and installed new 6” 4” and 2”. Backfilled trench with		
Sand trench tape and finished to grade. Excavated around EW-50 and exposed 6” 4” 2”		
For tie in.		
6” 4” 2”	171	LF

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 9/23/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor	10	
Dustin Voils	10				
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1	4” fusion machine	1	1
			generator	1	1
210 excavator	1	1	8” fusion machine	1	1

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: excavated around EW-50 and exposed 6” 4” and 2”. Excavated trench to		
EW-79. Tied into existing lines and installed new 6” 4” and 2”. Backfilled trench with		
Sand trench tape and finished to grade. Excavated around 4” condensate at 22B cut and		
Lowered tee to protect piping. Hauled sand to EW-71A and 22B and graded areas.		
6” 4” 2”	210	LF

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 9/24/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor	10	
Dustin Voils	10				
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1	4” fusion machine	1	1
			generator	1	1
210 excavator	1	1	8” fusion machine	1	1
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: excavated around EW-52 and exposed 6” 4” and 2”. Excavated trench to		
EW-78. Tied into existing lines and installed new 6” 4” and 2”. Backfilled trench with		
Sand trench tape and finished to grade. Excavated around EW-57 cleaned off 6” 4” 2”		
6” 4” 2”	200	LF

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 9/25/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	5		Tony Taylor	5	
Dustin Voils	5				
Troy Zerbe	5				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1	4” fusion machine	1	1
			generator	1	1
210 excavator	1	1	8” fusion machine	1	1
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Excavated trench from EW-57 to EW-73 tied into existing 6” 4” 2”		
Backfilled trench with sand trench tape and completed to grade. Dressed slopes.		
6” 4” 2”	25	LF

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 9/27/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor	10	
Dustin Voils	10				
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1	4” fusion machine	1	1
			generator	1	1
210 excavator	1	1	8” fusion machine	1	1
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Excavated trench from 10” stub out to EW-76 tied into existing 10” 4” 2”		
Reduced 10” to 6”.Backfilled trench with sand trench tape and completed to grade.		
Dressed slopes and begin building 4” force main valves.		
6” 4” 2”	240	LF

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 9/28/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor	10	
Dustin Voils	10				
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1	4” fusion machine	1	1
			generator	1	1
210 excavator	1	1	8” fusion machine	1	1
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Excavated from EW-74 and 75 to tee point. Built installed 6” 4” 2”pipes		
To tie in at tee point. Backfilled with sand trench tape and finished to grade. Hauled		
Away waste. Hand dig around 10” tie in and clean out liquid with excavator.		
6” 4” 2”	580	LF
Time and material	5	Hrs

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 9/29/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor	10	
Dustin Voils	10				
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1	4” fusion machine	1	1
Electric fusion machine	1	1	generator	1	1
210 excavator	1	1	8” fusion machine	1	1
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Excavated around 10” x 6 tees and cleaned out area Drilled a pin hole		
In the 10” and there was no vacuum between tees. Cut 10” pipe and pipe was full of		
Sand. Cut away 10 x 6 tees and capped two 6” lines that were abandon. Removed 10”		
Line and tees. Welded on 10” cap for abandonment to HC-b2 b3 b4 b5 and b6.		
Excavated to existing 10” valve.		

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 9/30/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor	10	
Dustin Voils	10				
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1	4” fusion machine	1	1
Electric fusion machine	1	1	generator	1	1
210 excavator	1	1	8” fusion machine	1	1
650 Dozer	1	1	6-18 fusion machine	1	1

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Excavated around existing 10” valve. Unbolted pipe from valve and		
Removed valve. Pipe was full of sand on both sides of the valve. Broke away as much		
Sand as we could in the 10” pipe and jet clean the line down the 10” and 16” header.		
Line is clear. Installed new 10” valve and pipe. Installed new 4” and 2” airline. Hauled		
Scrap pipe and fitting to the face. Backfilled with sand trench tape and finished to grade.		
10” 4” 2” pipe	60	LF
10” valve, steam and 4” sample port	1	EA

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 10/1/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor	10	
Dustin Voils	10				
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1	4” fusion machine	1	1
Electric fusion machine	1	1	generator	1	1
210 excavator	1	1	8” fusion machine	1	1
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Excavated and installed 6 4 2 pipes to EW-75 and 74. Backfilled with		
Sand trench tape and finished to grade. Hauled away waste and dressed slopes.		
Built new valves for CV-1 and AV-1.		
6” 4” 2” pipe	190	LF

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 10/2/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	5		Tony Taylor	5	
Dustin Voils	5				
Troy Zerbe	5				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1	4” fusion machine	1	1
Electric fusion machine	1	1	generator	1	1
210 excavator	1	1	8” fusion machine	1	1
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Excavated and pinched off existing PVC air and drain valves. Cut away		
Old valves and installed new valves AV-1 and CV-1 Backfilled around valves		
AV-1	1	EA
CV-1	1	EA

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 10/4/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor	10	
Dustin Voils	10				
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1	4” fusion machine	1	1
Electric fusion machine	1	1	generator	1	1
210 excavator	1	1	8” fusion machine	1	1
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Excavated and removed bollards from around AP-15. Removed well		
Head from 6” leachate clean out riser and cut 6” 10’ away from tie in point. Excavated		
Around an cleaned off existing 8” 4” and 2”. Tie in new 8x6 tee 4” tee and 2” tee.		
Installed new valve cluster AV-2 CV-2 and V-2. Backfilled around AP-15 and valve		
Cluster.		
6” 4” 2”	10	LF
AV-2	1	ea
CV-2	1	ea
V-2	1	ea

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 10/5/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor		
Dustin Voils	10				
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1	4” fusion machine	1	1
Electric fusion machine	1	1	generator	1	1
210 excavator	1	1	8” fusion machine	1	1
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Excavated and installed 6” 4” 2” to well from valve cluster to well EW-77		
Excavated around existing well EW-27 and cleaned around pipes for abandonment.		
Backfilled trench with sand trench tape and finished to grade.		
6” 4” 2”	230	LF

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 10/6/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor	10	
Dustin Voils	10				
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1	4” fusion machine	1	1
Electric fusion machine	1	1	generator	1	1
210 excavator	1	1	8” fusion machine	1	1
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Abandon EW-27 6” vacuum, 4” and 2”. Backfilled excavation. Installed		
Well head on EW-77 and air and force main valves. Excavated around EW-26 Abandon		
2” air 4” force main and 6” vacuum. Excavated new lines 6” 4” and 2” to EW-26.		
Backfilled with sand trench tape and finished to grade. Excavated around EW- 25 cut		
And abandon 2” air and 4” force main.		
6” 4” 2”	40	LF

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 10/7/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor	10	
Dustin Voils	10				
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1	4” fusion machine	1	1
Electric fusion machine	1	1	generator	1	1
210 excavator	1	1	8” fusion machine	1	1
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Excavated leachate break outs on south lower berm by HC-8A 16’ deep.		
Installed stone over waste and placed sand back into excavation. Placed bentonite		
Seal 3’ deep where seep started. Excavated leachate seep by HC-11A 10’ deep into		
Dry waste. Installed stone over waste and placed sand back into excavation. Placed		
Bentonite seal 3’ deep where seep started. Excavate around HC-10A excavate 14’		
Deep. Leachate came rushing in backfilled trench to 8’ deep. Capped 6” will have to		
Pump out excavation in the morning.		

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 10/8/21 | Weather: Rain

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	8		Tony Taylor	8	
Dustin Voils	8				
Troy Zerbe	8				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1	4” fusion machine	1	1
Electric fusion machine	1	1	generator	1	1
210 excavator	1	1	8” fusion machine	1	1
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Pump down leachate around HC-10A shut existing 6” valve on u trap		
And confirmed no vacuum. Cut and capped 6” vacuum riser and 6” gas flow riser.		
Removed valve steam from valve. Backfilled area around abandonment. Excavated		
Around HC-8A removed temporary 6” vacuum line and 2” airline. Removed pump from		
U-trap. Shut existing 6” valve on u-trap and confirmed no vacuum. Cut and capped		
Gas flow and vacuum risers. Cut away existing valve steam. Backfilled area around		
Abandonment. Heavy rain started at 3:30.		

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 10/9/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	8		Tony Taylor	8	
Dustin Voils	8				
Troy Zerbe	8				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1	4” fusion machine	1	1
Electric fusion machine	1	1	generator	1	1
210 excavator	1	1	8” fusion machine	1	1
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: excavated around EW-25 and abandon vacuum line run new 6” 4” 2”		
From EW-77. Uncovered lines for tie in at EW-77 and made connections. Backfilled		
Trench with sand trench tape and finished to grade. Very muddy conditions 3.5” of rain		
Overnight.		
6 4 2	115	LF

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 10/11/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor	10	
Dustin Voils	10				
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1			
210 excavator	1	1			
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Dressed areas that washed out from heavy rain. Litter lug around wells		
And trench lines. Cleaned up around all laterals. Laid out header line to move sump		
And lower line down slop to avoid future waste cover.		

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 10/12/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor	10	
Dustin Voils	10				
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1			
210 excavator	1	1			
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Excavated and installed 12" header from high point to 300'. Installed		
AP 24 and valve tee V-5. Backfilled trench with sand trench tape and finished to grade.		
12" 4" 2"	300	LF
AP 24	1	EA
V-5	1	ea
AV-5	1	ea
CV-5	1	ea

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 10/12/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	12		Tony Taylor	12	
Dustin Voils	12				
Troy Zerbe	12				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1			
210 excavator	1	1			
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Excavated and installed 12” header from high point to 300’. Installed		
AP 23 and valve tee V-4. Backfilled trench with sand trench tape and finished to grade.		
Installed road crossing backfilled and finished to grade.		
16” 4” 2”	240	LF
12” 4” 2”	120	LF
AP 23	1	EA
V-4	1	EA
AV-4	1	EA
CV-4	1	EA
24” CMP	60	LF
road base	2	EA

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 10/14/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor	10	
Dustin Voils	10				
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1			
210 excavator	1	1			
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Excavated and installed 16" 4" and 2" 40' from sump location on south		
Slope and crossed over liner at 1%.. Backfilled with sand trench tape and finished to		
Grade. Finished berm on roadway.		
16" 4" 2"	350	LF

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 10/15/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor	10	
Dustin Voils	10				
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1			
210 excavator	1	1			
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Excavated and installed 12” 4” and 2” ’ from high point to north east		
Slope. Backfilled with sand trench tape and finished to grade.		
12” 4” 2”	300	LF

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 10/16/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	6		Tony Taylor	6	
Dustin Voils	6				
Troy Zerbe	6				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1			
210 excavator	1	1			
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Installed 10” valves at V-4 and V-5. Installed stub outs at both locations.		
Installed blind flanges on 4” 8” 10” blinds. A total of 12. Installed 10” valve steams.		
Backfilled around valves.		

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 10/18/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor	10	
Dustin Voils	10				
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1			
210 excavator	1	1			
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Built and installed 6 pumps in wells EW=73,78, 77, 75, 76 and 79.		
Installed well heads on remaining wells. Installed air and force main valves on risers.		

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 10/19/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	8		Tony Taylor	10	
Dustin Voils	10				
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1			
210 excavator	1	1			
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Built 16” tees and 12 “tees for valves and access points. Built 4” and 2”		
Valves and access risers.		

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 10/20/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor			Tony Taylor	10	
Dustin Voils	10				
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1			
210 excavator	1	1			
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Installed pump in condensate sump on south hill. Finished building		
Fittings for tie ins. Dropped 16’ trailer off to be repaired.		
Time and material	3	HR
AP 4 short pump and fittings	1	EA

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 10/26/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor	10	
Dustin Voils	10				
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1			
210 excavator	1	1			
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Excavated an installed 12” 4” and 2” header. Installed 10” 4” 2” valve 6.		
Installed access point 20. Backfilled with sand trench tape and finished to grade.		
12” 4” 2”	300	LF
10” 4” 2” valves	1	EA
12” access point	1	EA

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 10/27/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor	10	
Dustin Voils	10				
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1			
210 excavator	1	1			
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Excavated an installed 12” 4” and 2” header. Installed 10” 4” 2” valve 7.		
Installed access point 18. Backfilled with sand trench tape and finished to grade.		
12” 4” 2”	310	LF
10” 4” 2” valves	1	EA
12” access point	1	EA

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 10/28/21 | Weather: Rain

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	8		Tony Taylor	8	
Dustin Voils	8				
Troy Zerbe	8				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1			
210 excavator	1	1			
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Called of concrete for sump due to weather. Welded 16” header to		
Close to sump. Installed AP 20 and welded caps on 16” 4” 2” for air test. Rain on and of		
All day. Heavy rain at 3:30. Performed H&S training.		
16” 4” 2”	100	LF
Ap-20	1	EA

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 10/29/21 | Weather: Cloudy

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor	10	
Dustin Voils	10				
Troy Zerbe					

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1			
210 excavator	1	1			
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Cleaned up laydown area. Took additional pipe and fittings to shop.		
Placed stickers on wells. Cleaned up pipe pieces on hill side. Installed 1” valves on 2”		
Air valves. Clean up finished on site.		

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 10/30/21 | Weather: Cloudy

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	8		Tony Taylor	8	
Dustin Voils	8				
Troy Zerbe					

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1	4" fusion machine	1	1
			generator	1	1
210 excavator	1	1	Electric fusion machine	1	1
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Installed 180' of 4" from EW-52 to clean out riser at 16" header.		
Installed additional clean out riser on new line. Old 4" force main was blocked.		
4" pipe	180	LF
4" tee	2	EA
4" y	2	EA
2" 45	2	EA
2" flange b/u ring gasket and bolt kit	2	EA
4" electrofusion coupler	1	EA

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 11/1/21 | Weather: Cloudy

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor		
Dustin Voils	10				
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1			
210 excavator	1	1			
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: excavated and installed 36” sump 10’ deep. Poured 10 yards 3,000 psi		
Concrete 5’ around sump. Backfilled excavation to bottom of flanges and taped off area.		
Built pump for sump.		
1 36” Sump	1	EA

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 11/2/21 | Weather: Cloudy

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor	10	
Dustin Voils	10				
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1			
210 excavator	1	1			
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: excavated and installed 16” 4” and 2” header pipe. Connected to new		
Sump. Backfilled excavation with sand tape and finished to grade.		
10”4” 2” Valve	1	EA
I AP riser	1	EA
16” 4” 2”	240	LF

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 11/3/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor	10	
Dustin Voils	10				
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1			
210 excavator	1	1			
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: excavated and installed 16” 4” and 2” header pipe to existing sump 13.		
Tie in was 8’. 6” deep. Tied in 16” to sump. Installed airline valve and tied into force		
Main.		
10”4” 2” Valve	1	EA
16” 4” 2”	60	LF

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 11/4/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	10		Tony Taylor	10	
Dustin Voils	10				
Troy Zerbe	10				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1			
210 excavator	1	1			
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: excavated and installed 12” 4” and 2” header pipe to existing sump CS-9		
Tie in was 7’ 6” deep. Tied in 12” to sump. Installed airline valve and tied into force		
Main.		
2” airline valve	1	EA
16” 4” 2”	60	LF

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 11/5/21 | Weather: Rain

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	8		Tony Taylor		
Dustin Voils					
Troy Zerbe	4				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1			
210 excavator	1	1			
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Cleaned up pipe and fitting around site. Heavy rain started around 11:00		
8. 5 total inches of rain.		

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 11/6/21 | Weather: Rain

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	5		Tony Taylor		
Dustin Voils					
Troy Zerbe	5				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1			
210 excavator	1	1			
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Pulled marker poles and disposed of. Placed stickers on wells and valves.		
Site to wet to finish grade work.		

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

SCS FIELD SERVICES DAILY LOG

Job Name: Volusia County | Job No.: 12221017.00 | Task No.: | Date: 11/8/21 | Weather: Sunny

SCS-FS Labors	Hours	OT	SCS-FS Labors	Hours	OT
Larry Taylor	5		Tony Taylor		
Dustin Voils					
Troy Zerbe	5				

Equip, SVCS, MLG	Qty	TM day	Equip, SVCS, MLG	QTY	TM day
F-250 Pick up	1	1	T-180 Skid steer	1	1
F-150 Pick up	2	1	30 ton Dump truck	1	1
Tool trailer	2	1			
210 excavator	1	1			
650 Dozer	1	1			

Instrument Calibration (Cal. Gas)		CH4 (%-VOL)	CH4 (%-LEL)	02 Low Scale (%-VOL)	CO2 (%-VOL)	H2S (PPM)
Model	S/N					

Work Summary	Quantity	Unit
Arrived on site: Installed bollards around sump and valves. Backfilled slope on north and		
South corners. Job completed called off equipment.		

Prepared By: Larry Taylor Accepted By: _____

I understand that when performing a one person job assignment, I am acting as my own supervisor.

HDR FIELD LOGS

Day & Date:
Friday, September 3, 2021

Project Name & Location:
Tomoka Farms Road Landfill Phase VI Construction; 1990 Tomoka Farms Road Volusia County, Florida

Weather:
Sunny

SCS Construction Team Members on Site:	**Relevant Visitors to Observed Work Areas:**
1. Larry Taylor	1. Bill (B.H. Drilling): Well Drilling Operator
2. Dustin Voils	2. Kanishka Perera (HDR): Observed operations
3. Tony Taylor	3. United Rentals: Skid Steer repair
4. Anthony Lawless	

Summary of Work:
Completed EW-22B. Began drilling EW-15B.

Detailed Description of Work:	
Vertical Well Drilling	Began drilling EW-22B in the morning, completed to 105 feet. Placed 110 feet of pipe, backfilled with gravel, felt pad, bentonite activated with water, and soil. Started drilling EW-15B, stopped at 35 feet. Covered well bore hole with well grate and covered with plastic. Set excavator bucket over hole.
Header Trench	None
Pipe Fusing	None
Waste Hauling	Waste hauled from vertical well extraction was taken to the pit for proper disposal.
Pressure Testing	None

Vertical Well: EW-22B

Depth	Composition	Degree of Decomposition	Moisture	Comments
0-2	Soil Cover	N/A	Dry	
2-10	Dirt/MSW	Slight	Dry	97 degrees F
10-20	Dirt/MSW	Slight	Dry	119 degrees F
20-30	Dirt/MSW	Slight	Dry	117 degrees F
30-40	Dirt/MSW	Slight	Dry	124 degrees F
40-50	Dirt/MSW/Wood	Slight	Dry	129 degrees F
50-60	Dirt/MSW/Wood	Slight	Dry	121 degrees F
60-70	Dirt/MSW	Slight	Dry	119 degrees F
70-80	Dirt/MSW	Slight	Dry	115 degrees F
80-90	Dirt/MSW	Slight	Wet	118 degrees F wet @ 86 ft
90-100	Dirt/MSW	Slight	Wet	114 degrees F
100-105	Dirt/MSW	Slight	Wet	117 degrees F

Equipment Observed Onsite:	
F-250 Pick-up	30-ton Dump Truck
F-150 Pick-up (2)	Drill Rig
Tool Trailer (2)	T-180 Skid Steer
Gator	
210 Excavator	

SIGNATURE: Amanda Meade
TITLE: HDR CQA Lead

Misc. Notes & Pictures:

SIGNATURE: Amanda Meade
TITLE: HDR CQA Lead

SIGNATURE: Amanda Meade
TITLE: HDR CQA Lead

Day & Date:
Saturday, September 4, 2021

Project Name & Location:
Tomoka Farms Road Landfill Phase VI Construction; 1990 Tomoka Farms Road Volusia County, Florida

Weather:
Sunny and Warm

SCS Construction Team Members on Site:	**Relevant Visitors to Observed Work Areas:**
1. Larry Taylor	1. Bill (B.H. Drilling): Well Drilling Operator
2. Dustin Voils	
3. Tony Taylor	
4. Anthony Lawless	

Summary of Work:
Completed EW-15B and tie-in to EW-22B.

Detailed Description of Work:	
Vertical Well Drilling	Bill continued drilling EW-15B. After 30 minutes, drill rig started pulling up sand at 35 feet, hole started caving, abandoned and backfilled with soil. Moved 15 feet east, started drilling new hole. Staged pipe, bentonite and water near EW-15B. Backfilled pipe with gravel, felt pad, bentonite activated with water, and soil.
Header Trench	None
Pipe Fusing	Tie-in to EW-22B, 15 linear feet of new 6-inch, 4-inch and 2-inch pipe.
Waste Hauling	Waste hauled from vertical well extraction was taken to the pit for proper disposal.
Pressure Testing	None

Vertical Well: EW-15B

Depth	Composition	Degree of Decomposition	Moisture	Comments
0-3	Soil Cover	N/A	Dry	
3-10	Dirt/MSW	Slight	Dry	94 degrees F
10-20	Dirt/MSW	Slight	Dry	108 degrees F
20-25	Dirt/MSW	Slight	Dry	106 degrees F wet @ 24-25 ft
25-37	Dirt	N/A	Dry	Caving from 32-37 feet – no progress

Vertical Well: EW-15B

Depth	Composition	Degree of Decomposition	Moisture	Comments
0-3	Soil Cover	N/A	Dry	
3-10	Dirt/MSW	Slight	Dry	102 degrees F
10-20	Dirt/MSW	Slight	Dry	96 degrees F
20-24	Dirt/MSW	Slight	Dry	
24-36	Sand	N/A	Dry	103 degrees F
36-40	Dirt/MSW	Slight	Dry	119 degrees F
40-50	Dirt/Plastic	N/A	Dry	123 degrees F
50-58	Dirt/Mulch	Slight	Dry	
58-60	Dirt/Mulch	Slight	Dry	129 degrees F
60-70	Dirt/MSW/Wood/Steel	Slight	Dry	128 degrees F wet @ 66-68 ft

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TITLE: HDR CQA Lead

70-80	Dirt/MSW/Mulch	Slight	Dry	133 degrees F wet @ 77-78 ft
80-90	Dirt/MSW/Wood	Slight	Dry	128 degrees F wet @ 84-86 ft
90-100	Dirt/MSW/Wood	Slight	Dry	130 degrees F wet @ 93-98 ft

Equipment Observed Onsite:	
F-250 Pick-up	30-ton Dump Truck
F-150 Pick-up (2)	Drill Rig
Tool Trailer (2)	4” fusion machine
Gator	8” fusion machine
210 Excavator	Generator
T-180 Skid steer	Electrofusion machine

Misc. Notes & Pictures:

SIGNATURE: Amanda Meade
TITLE: HDR CQA Lead

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TITLE: HDR CQA Lead

Day & Date:
Monday, September 6, 2021

Project Name & Location:
Tomoka Farms Road Landfill Phase VI Construction; 1990 Tomoka Farms Road Volusia County, Florida

Weather:
Sunny

SCS Construction Team Members on Site:	**Relevant Visitors to Observed Work Areas:**
1. Larry Taylor	1. Bill (B.H. Drilling): Well Drilling Operator
2. Dustin Voils	
3. Tony Taylor	
4. Anthony Lawless	
5. Troy Zerbe	

Summary of Work:
Completed EW-71A and tie-in to EW-15B. Began drilling EW-74.

Detailed Description of Work:	
Vertical Well Drilling	Bill began drilling EW-71A, set and completed well. Placed 106 feet of pipe, backfilled with gravel, felt pad, bentonite activated with water, and soil. Started EW-74, stopped at 70 feet. Covered well bore hole with well grate and covered with plastic. Set excavator bucket over hole.
Header Trench	None
Pipe Fusing	Tie-in to EW-15B, 27 linear feet of new 6-inch, 4-inch and 2-inch pipe.
Waste Hauling	Waste hauled from vertical well extraction was taken to the pit for proper disposal.
Pressure Testing	None

Vertical Well: EW-71A

Depth	Composition	Degree of Decomposition	Moisture	Comments
0-2	Soil Cover	N/A	Dry	
2-10	Dirt/MSW	Slight	Dry	89 degrees F wet @ 8-9 ft
10-20	Dirt/MSW	Slight	Dry	111 degrees F
20-30	Dirt/MSW	Slight	Dry	119 degrees F
30-40	Dirt/MSW	Slight	Dry	129 degrees F
40-50	Dirt/MSW/Mulch	Slight	Dry	131 degrees F
50-60	Dirt/MSW/Mulch	Slight	Dry	138 degrees F
60-70	Dirt/MSW/Mulch	Slight	Dry	139 degrees F
70-80	Dirt/MSW/Mulch	Slight	Dry	136 degrees F
80-90	Dirt/MSW	Slight	Wet	139 degrees F wet @ 89 ft
90-101	Dirt/MSW	Slight	Wet	131 degrees F

Equipment Observed Onsite:	
F-250 Pick-up	30-ton Dump Truck
F-150 Pick-up (2)	Drill Rig
Tool Trailer (2)	4” fusion machine
Gator	8” fusion machine
210 Excavator	Generator

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

T-180 Skid steer	Electrofusion machine

Misc. Notes & Pictures:

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Day & Date:
Tuesday, September 7, 2021

Project Name & Location:
Tomoka Farms Road Landfill Phase VI Construction; 1990 Tomoka Farms Road Volusia County, Florida

Weather:
Sunny Morning; Rainy Afternoon; Lightning 2:30-3:30

SCS Construction Team Members on Site:	**Relevant Visitors to Observed Work Areas:**
1. Larry Taylor	1. Bill (B.H. Drilling): Well Drilling Operator
2. Dustin Voils	2. Pipe Delivery
3. Tony Taylor	
4. Anthony Lawless	
5. Troy Zerbe	

Summary of Work:
Completed EW-74. Began drilling EW-75. SCS excavated existing lines at 13R for tie-in to 71B. Off lines ready for tie-in. SCS ran 875 feet of airline from EW-10 to CS-2 above grade on old south hill. Regulator will have to be replaced for pump.

Detailed Description of Work:	
Vertical Well Drilling	Bill continued drilling EW-74, set and completed well. Placed 108 feet of pipe, backfilled with gravel, felt pad, bentonite activated with water, and soil. Bill worked on his bucket – 2 shanks need hard coat welded on. Resumed drilling, started on EW-75. Heavy rain and lightning from 2:30-3:30. Continued drilling EW-75, stopped at 65 feet. Covered well bore hole with well grate and covered with plastic. Set excavator bucket over hole.
Header Trench	None
Pipe Fusing	None
Waste Hauling	Waste hauled from vertical well extraction was taken to the pit for proper disposal.
Pressure Testing	None

Vertical Well: EW-71A

Depth	Composition	Degree of Decomposition	Moisture	Comments
0-2	Soil Cover	N/A	Dry	
2-10	Dirt/MSW	Slight	Dry	89 degrees F wet @ 8-9 ft
10-20	Dirt/MSW	Slight	Dry	111 degrees F
20-30	Dirt/MSW	Slight	Dry	119 degrees F
30-40	Dirt/MSW	Slight	Dry	129 degrees F
40-50	Dirt/MSW/Mulch	Slight	Dry	131 degrees F
50-60	Dirt/MSW/Mulch	Slight	Dry	138 degrees F
60-70	Dirt/MSW/Mulch	Slight	Dry	139 degrees F
70-80	Dirt/MSW/Mulch	Slight	Dry	136 degrees F
80-90	Dirt/MSW	Slight	Wet	139 degrees F wet @ 89 ft
90-101	Dirt/MSW	Slight	Wet	131 degrees F

Equipment Observed Onsite:	
F-250 Pick-up	30-ton Dump Truck

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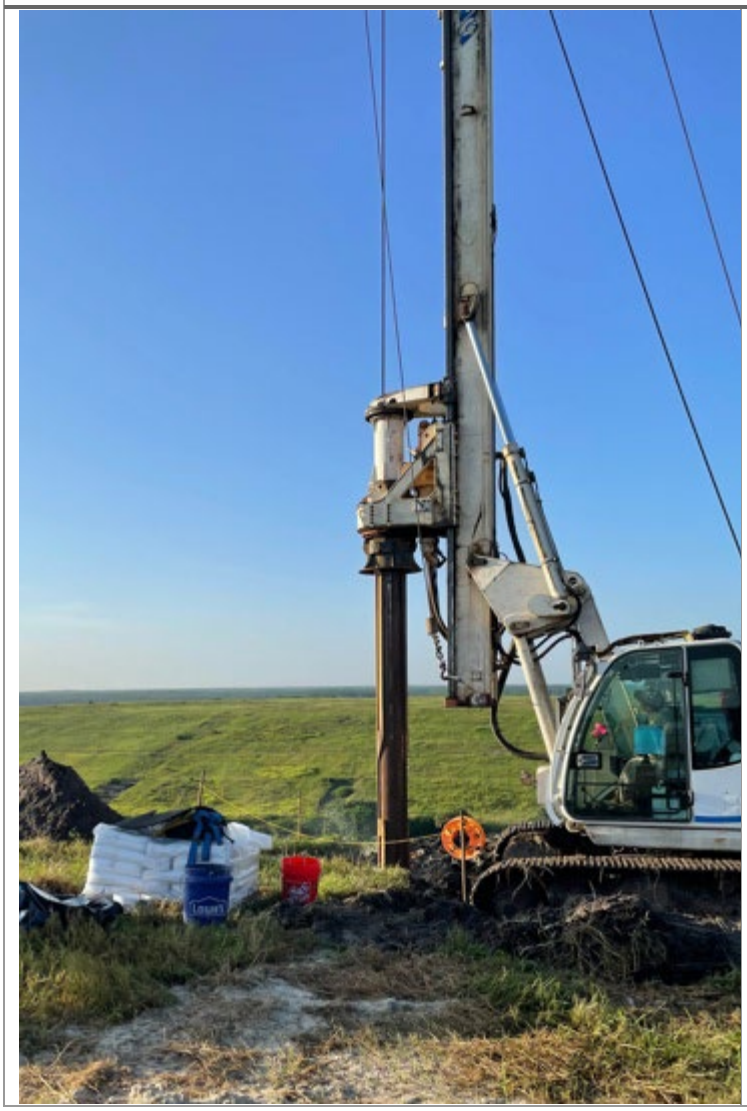
TITLE: HDR CQA Lead

F-150 Pick-up (2)	Drill Rig
Tool Trailer (2)	4” fusion machine
Gator	8” fusion machine
210 Excavator	Generator
T-180 Skid steer	Electrofusion machine

Misc. Notes & Pictures:



SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

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TITLE: HDR CQA Lead

Day & Date:
Wednesday, September 8, 2021

Project Name & Location:
Tomoka Farms Road Landfill Phase VI Construction; 1990 Tomoka Farms Road Volusia County, Florida

Weather:
Sunny; Heavy rain 5:00 PM

SCS Construction Team Members on Site:	**Relevant Visitors to Observed Work Areas:**
1. Larry Taylor	1. Bill (B.H. Drilling): Well Drilling Operator
2. Dustin Voils	
2. Tony Taylor	
3. Troy Zerbe	

Summary of Work:
Completed EW-75, EW-73, and EW-77. Began drilling EW-76.

Detailed Description of Work:	
Vertical Well Drilling	Bill continued drilling EW-75, set and completed well. Placed 101 feet of pipe, backfilled with gravel, felt pad, bentonite activated with water, and soil. Bill started on EW-73, set and completed well. Placed 43 feet of pipe, backfilled with gravel, felt pad, bentonite activated with water, and soil. Bill started drilling EW-77, set and completed well. Placed 46 feet of pipe, backfilled with gravel, felt pad, bentonite activated with water, and soil. Bill started drilling EW-76, stopped at 50 feet. Covered well bore hole with well grate and covered with plastic. Set excavator bucket over hole.
Header Trench	None
Pipe Fusing	None
Waste Hauling	Waste hauled from vertical well extraction was taken to the pit for proper disposal.
Pressure Testing	None

Vertical Well: EW-75

Depth	Composition	Degree of Decomposition	Moisture	Comments
0-2	Soil Cover	N/A	Dry	
2-10	Dirt/MSW	N/A	Dry	96 degrees F
10-20	Dirt/MSW	Slight	Dry	111 degrees F
20-30	Dirt/MSW	Slight	Dry	125 degrees F
30-40	Dirt/MSW	Slight	Dry	119 degrees F
40-50	Dirt/MSW	Slight	Dry	122 degrees F
50-60	Dirt/MSW	Slight	Dry	119 degrees F
60-70	Dirt/MSW	Slight	Wet	1117 degrees F wet @ 66 ft
70-80	Dirt/MSW	Slight	Dry	121 degrees F dry @ 77 ft
80-90	Dirt/MSW	Slight	Dry	124 degrees F
90-96	Dirt/MSW	Slight	Wet	119 degrees F wet @ 91 ft

Vertical Well: EW-73

Depth	Composition	Degree of Decomposition	Moisture	Comments
0-1	Soil Cover	N/A	Dry	

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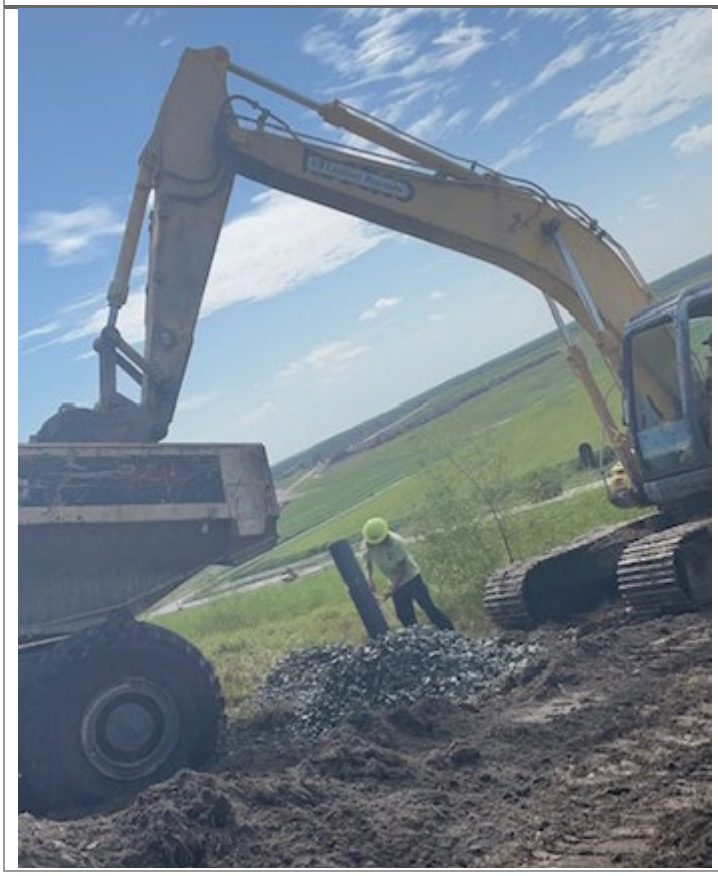
1-10	Dirt/MSW	Slight	Dry	96 degrees F
10-20	Dirt/MSW	Slight	Dry	104 degrees F
20-30	Dirt/MSW	Slight	Wet	102 degrees F wet @ 28 ft
30-37	Dirt/MSW	Slight	Wet	97 degrees F

Vertical Well: EW-77

Depth	Composition	Degree of Decomposition	Moisture	Comments
0-2	Soil Cover	N/A	Dry	
2-10	Dirt/MSW/Mulch	Slight	Dry	101 degrees F wet @ 7-8 ft
10-20	Dirt/MSW/Mulch	Slight	Moist	100 degrees F
20-30	Dirt/MSW/Mulch	Slight	Moist	103 degrees F
30-41	Dirt/MSW	Slight	Dry	98 degrees F wet @ 34-36 ft

Equipment Observed Onsite:	
F-250 Pick-up	30-ton Dump Truck
F-150 Pick-up (2)	Drill Rig
Tool Trailer (2)	4” fusion machine
Gator	8” fusion machine
210 Excavator	Generator
T-180 Skid steer	Electrofusion machine

Misc. Notes & Pictures:



SIGNATURE: Chelsea Williams
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Day & Date:
Thursday, September 9, 2021

Project Name & Location:
Tomoka Farms Road Landfill Phase VI Construction; 1990 Tomoka Farms Road Volusia County, Florida

Weather:
Cloudy Morning; Rain All Day

SCS Construction Team Members on Site:	**Relevant Visitors to Observed Work Areas:**
1. Larry Taylor	1. Bill (B.H. Drilling): Well Drilling Operator
2. Dustin Voils	2. Stone Delivery
3. Tony Taylor	
4. Troy Zerbe	

Summary of Work:
Completed EW-76. Installed tee post ever 20 feet along 875 feet of 2-inch from EW-10 to CS-2 above grade on old south hill pipe to avoid mower damage.

Detailed Description of Work:	
Vertical Well Drilling	Bill continued drilling EW-76, set and completed well. Placed 104 feet of pipe, backfilled with gravel, felt pad, bentonite activated with water, and soil. Began drilling EW-78, stopped at 85 feet. Covered well bore hole with well grate and covered with plastic. Set excavator bucket over hole.
Header Trench	None
Pipe Fusing	None
Waste Hauling	Waste hauled from vertical well extraction was taken to the pit for proper disposal.
Pressure Testing	None

Vertical Well: EW-76

Depth	Composition	Degree of Decomposition	Moisture	Comments
0-5	Soil Cover/Mulch	N/A	Dry	
5-10	MSW	N/A	Dry	108 degrees F
10-20	MSW	N/A	Dry	102 degrees F
20-30	MSW/Mulch	Slight	Dry	107 degrees F
30-40	MSW/Mulch	Slight	Dry	124 degrees F
40-50	Dirt/MSW	Slight	Dry	122 degrees F
50-60	Dirt/MSW	Slight	Dry	119 degrees F
60-70	Dirt/MSW	Slight	Dry	111 degrees F
70-80	Dirt/MSW	Slight	Dry	114 degrees F
80-90	Dirt/MSW	Slight	Dry	116 degrees F
90-99	Dirt/MSW/Wood	Slight	Dry	107 degrees F

Equipment Observed Onsite:	
F-250 Pick-up	30-ton Dump Truck
F-150 Pick-up (2)	Drill Rig
Tool Trailer (2)	4” fusion machine
Gator	8” fusion machine
210 Excavator	Generator

SIGNATURE: Chelsea Williams
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T-180 Skid steer	Electrofusion machine

Misc. Notes & Pictures:

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Day & Date:
Friday, September 10, 2021

Project Name & Location:
Tomoka Farms Road Landfill Phase VI Construction; 1990 Tomoka Farms Road Volusia County, Florida

Weather:
Cloudy Morning; Sporadic Rain

SCS Construction Team Members on Site:	**Relevant Visitors to Observed Work Areas:**
1. Larry Taylor	1. Bill (B.H. Drilling): Well Drilling Operator
2. Dustin Voils	2. Pipe Delivery
3. Tony Taylor	
4. Troy Zerbe	

Summary of Work:
Completed EW-78 and EW-79.

Detailed Description of Work:	
Vertical Well Drilling	Bill continued drilling EW-78, set and completed well. Placed 101 feet of pipe, backfilled with gravel, felt pad, bentonite activated with water, and soil. Began drilling EW-79, set and completed well. Placed 108 feet of pipe, backfilled with gravel, felt pad, bentonite activated with water, and soil.
Header Trench	None
Pipe Fusing	None
Waste Hauling	Waste hauled from vertical well extraction was taken to the pit for proper disposal.
Pressure Testing	None

Vertical Well: EW-78

Depth	Composition	Degree of Decomposition	Moisture	Comments
0-3	Soil Cover	N/A	Dry	
3-10	Dirt/MSW/Mulch	N/A	Dry	102 degrees F
10-20	Dirt/MSW/Mulch	N/A	Dry	105 degrees F
20-30	MSW/Mulch	Slight	Dry	107 degrees F
30-40	MSW/Mulch	Slight	Dry	117 degrees F
40-50	MSW/Mulch	Slight	Dry	122 degrees F wet @ 47-48 ft
50-60	Dirt/MSW/Mulch	Slight	Wet	120 degrees F wet @ 557 ft
60-70	Dirt/MSW	Slight	Moist	119 degrees F
70-80	Dirt/MSW	Slight	Dry	116 degrees F
80-90	Dirt/MSW	Slight	Dry	117 degrees F
90-96	Dirt/MSW	Slight	Dry	114 degrees F wet @ 91 ft

Vertical Well: EW-79

Depth	Composition	Degree of Decomposition	Moisture	Comments
0-2	Soil Cover	N/A	Dry	
2-10	MSW/Mulch	N/A	Dry	102 degrees F
10-20	MSW/Mulch	N/A	Dry	119 degrees F
20-30	MSW/Mulch	Slight	Dry	121 degrees F

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30-40	MSW/Mulch	Slight	Dry	127 degrees F
40-50	MSW/Mulch	Slight	Dry	131 degrees F
50-60	Dirt/MSW	Slight	Dry	136 degrees F
60-70	Dirt/MSW	Slight	Moist	127 degrees F
70-80	Dirt/MSW	Slight	Dry	120 degrees F
80-90	Dirt/MSW	Slight	Dry	121 degrees F
90-103	Dirt/MSW	Slight	Wet	119 degrees F wet @ 101 ft

Equipment Observed Onsite:	
F-250 Pick-up	30-ton Dump Truck
F-150 Pick-up (2)	Drill Rig
Tool Trailer (2)	4” fusion machine
Gator	8” fusion machine
210 Excavator	Generator
T-180 Skid steer	Electrofusion machine

Misc. Notes & Pictures:

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

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Day & Date:
Saturday, September 11, 2021

Project Name & Location:
Tomoka Farms Road Landfill Phase VI Construction; 1990 Tomoka Farms Road Volusia County, Florida

Weather:
Cloudy Morning; Sporadic Rain

SCS Construction Team Members on Site:	**Relevant Visitors to Observed Work Areas:**
1. Larry Taylor	1. Bill (B.H. Drilling): Well Drilling Operator
2. Dustin Voils	
3. Tony Taylor	
4. Troy Zerbe	

Summary of Work:
Drilled EW-80 to 20 feet. Hydraulic line on rig burst. Repair scheduled for Monday 9/13.

Detailed Description of Work:	
Vertical Well Drilling	Began drilling EW-80, stopped at 20 feet. Hydraulic line on rig burst. Nowhere open today to get repaired.
Header Trench	None
Pipe Fusing	Welded 6-inch pipe.
Waste Hauling	Waste hauled from vertical well extraction was taken to the pit for proper disposal.
Pressure Testing	None

Equipment Observed Onsite:	
F-250 Pick-up	30-ton Dump Truck
F-150 Pick-up (2)	Drill Rig
Tool Trailer (2)	4” fusion machine
Gator	8” fusion machine
210 Excavator	Generator
T-180 Skid steer	Electrofusion machine

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Misc. Notes & Pictures:

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Day & Date:
Monday, September 13, 2021

Project Name & Location:
Tomoka Farms Road Landfill Phase VI Construction; 1990 Tomoka Farms Road Volusia County, Florida

Weather:
Sunny

SCS Construction Team Members on Site:	**Relevant Visitors to Observed Work Areas:**
1. Larry Taylor	1. Bill (B.H. Drilling): Well Drilling Operator
2. Dustin Voils	
3. Tony Taylor	
4. Troy Zerbe	

Summary of Work:
Hydraulic line on rig repaired. Drilled EW-80 to 90 feet. Welded 6-inch pipe, 4-inch pipe, air valves and forcemain valves for tie-ins.

Detailed Description of Work:	
Vertical Well Drilling	Continued drilling EW-80, stopped at 90 feet. Covered well bore hole with well grate and covered with plastic. Set excavator bucket over hole.
Header Trench	None
Pipe Fusing	Welded 6-inch pipe, 4-inch pipe, air valves and forcemain vales for tie-ins.
Waste Hauling	Waste hauled from vertical well extraction was taken to the pit for proper disposal.
Pressure Testing	None

Equipment Observed Onsite:	
F-250 Pick-up	30-ton Dump Truck
F-150 Pick-up (2)	Drill Rig
Tool Trailer (2)	4” fusion machine
Gator	8” fusion machine
210 Excavator	Generator
T-180 Skid steer	Electrofusion machine

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Misc. Notes & Pictures:

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Day & Date:
Tuesday, September 14, 2021

Project Name & Location:
Tomoka Farms Road Landfill Phase VI Construction; 1990 Tomoka Farms Road Volusia County, Florida

Weather:
Sunny and Warm

SCS Construction Team Members on Site:	**Relevant Visitors to Observed Work Areas:**
1. Larry Taylor	1. Bill (B.H. Drilling): Well Drilling Operator
2. Dustin Voils	
3. Tony Taylor	
4. Troy Zerbe	

Summary of Work:
Completed EW-80 and tie-in to EW-71A.

Detailed Description of Work:	
Vertical Well Drilling	Continued drilling EW-80, set and completed well. Placed 105 feet of pipe, backfilled with gravel, felt pad, bentonite activated with water, and soil.
Header Trench	None
Pipe Fusing	Excavated and cleaned off lines at EW-13R. Tied in 6-inch line and run to EW-71A. Excavated 4-inch and 2-inch lines at existing EW-71 and moved to EW-71A. Backfilled with sand, trench tape, and finished to grade.
Waste Hauling	Waste hauled from vertical well extraction was taken to the pit for proper disposal.
Pressure Testing	None

Vertical Well: EW-80

Depth	Composition	Degree of Decomposition	Moisture	Comments
0-2	Soil Cover	N/A	Dry	
2-10	Dirt/MSW/Mulch	N/A	Dry	88 degrees F
10-20	MSW/Mulch	Slight	Dry	108 degrees F
20-30	Dirt/MSW	Slight	Dry	122 degrees F
30-40	Dirt/MSW	Slight	Dry	129 degrees F
40-50	Dirt/MSW	Slight	Dry	119 degrees F
50-60	Dirt/MSW	Slight	Dry	125 degrees F
60-70	Dirt/MSW	Slight	Dry	129 degrees F
70-80	Dirt/MSW	Slight	Dry	126 degrees F
80-90	Dirt/MSW	Slight	Dry	121 degrees F
90-100	Dirt/MSW	Slight	Moist	109 degrees F wet @93-94 ft

Equipment Observed Onsite:	
F-250 Pick-up	30-ton Dump Truck
F-150 Pick-up (2)	Drill Rig
Tool Trailer (2)	4” fusion machine
Gator	8” fusion machine
210 Excavator	Generator
T-180 Skid steer	Electrofusion machine

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Misc. Notes & Pictures:

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Day & Date:
Wednesday, September 22, 2021

Project Name & Location:
Tomoka Farms Road Landfill Phase VI Construction; 1990 Tomoka Farms Road Volusia County, Florida

Weather:
Sunny

SCS Construction Team Members on Site:	**Relevant Visitors to Observed Work Areas:**
1. Larry Taylor	
2. Dustin Voils	
3. Tony Taylor	
4. Troy Zerbe	

Summary of Work:
Tie-in to EW-80.

Detailed Description of Work:	
Vertical Well Drilling	None/Completed
Header Trench	None
Pipe Fusing	Excavated around EW-49 and exposed 6-inch, 4-inch, and 2-inch pipe. Excavated trench to EW-80. Tied into existing lines and installed new 6-inch, 4-inch, and 2-inch pipe. Backfilled trench with sand, trench tape, and finished to grade. Excavated around EW-50 and exposed 6-inch, 4-inch, and 2-inch for tie-in.
Waste Hauling	None
Pressure Testing	None

Equipment Observed Onsite:	
F-250 Pick-up	30-ton Dump Truck
F-150 Pick-up (2)	
Tool Trailer (2)	4” fusion machine
Gator	8” fusion machine
210 Excavator	Generator
T-180 Skid steer	Electrofusion machine

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Misc. Notes & Pictures:

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Day & Date:
Thursday, September 23, 2021

Project Name & Location:
Tomoka Farms Road Landfill Phase VI Construction; 1990 Tomoka Farms Road Volusia County, Florida

Weather:
Sunny

SCS Construction Team Members on Site:	**Relevant Visitors to Observed Work Areas:**
1. Larry Taylor	
2. Dustin Voils	
3. Tony Taylor	
4. Troy Zerbe	

Summary of Work:
Tie-in to EW-79. Hauled sand to EW-71A and EW-22B and graded areas.

Detailed Description of Work:	
Vertical Well Drilling	None/Completed
Header Trench	None
Pipe Fusing	Excavated around EW-50 and exposed 6-inch, 4-inch, and 2-inch pipe. Excavated trench to EW-79. Tied into existing lines and installed new 6-inch, 4-inch, and 2-inch pipe. Backfilled trench with sand, trench tape, and finished to grade. Excavated around 4-inch condensate at EW-22B cut and lowered tee to protect piping.
Waste Hauling	None
Pressure Testing	None

Equipment Observed Onsite:	
F-250 Pick-up	30-ton Dump Truck
F-150 Pick-up (2)	
Tool Trailer (2)	4” fusion machine
Gator	8” fusion machine
210 Excavator	Generator
T-180 Skid steer	Electrofusion machine

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Day & Date:
Monday, September 27, 2021

Project Name & Location:
Tomoka Farms Road Landfill Phase VI Construction; 1990 Tomoka Farms Road Volusia County, Florida

Weather:
Sunny

SCS Construction Team Members on Site:	**Relevant Visitors to Observed Work Areas:**
1. Larry Taylor	
2. Dustin Voils	
3. Tony Taylor	
4. Troy Zerbe	

Summary of Work:
Tie-in to EW-76. Backfilled trench with sand, trench tape, and completed to grade. Dressed slopes

Detailed Description of Work:	
Vertical Well Drilling	None/Completed
Header Trench	None
Pipe Fusing	Excavated trench from 10-inch stub out to EW-76 tied into existing 10-inch, 4-inch and 2-inch lines. Reduced 10-inch to 6-inch. Began building 4-inch forcemain valves.
Waste Hauling	None
Pressure Testing	None

Equipment Observed Onsite:	
F-250 Pick-up	30-ton Dump Truck
F-150 Pick-up (2)	
Tool Trailer (2)	4” fusion machine
Gator	8” fusion machine
210 Excavator	Generator
T-180 Skid steer	Electrofusion machine

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Misc. Notes & Pictures:

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Day & Date:
Wednesday, September 29, 2021

Project Name & Location:
Tomoka Farms Road Landfill Phase VI Construction; 1990 Tomoka Farms Road Volusia County, Florida

Weather:
Sunny

SCS Construction Team Members on Site:	**Relevant Visitors to Observed Work Areas:**
1. Larry Taylor	1. Volusia County Staff
2. Dustin Voils	
3. Tony Taylor	
4. Troy Zerbe	

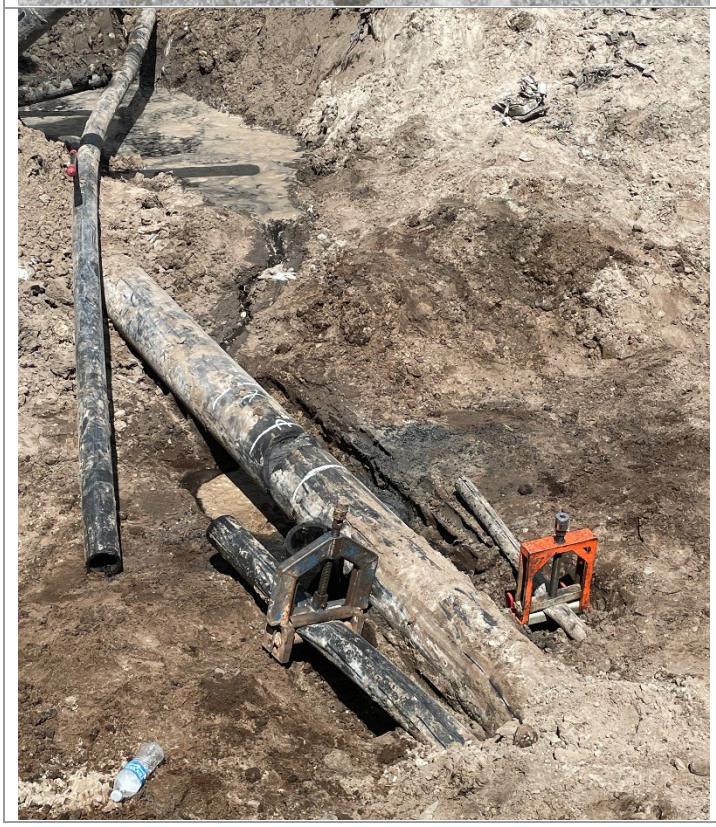
Summary of Work:
Excavated around 10-inch x 6-inch tees and cleaned out area. SCS drilled a pin hole in the 10-inch and discovered there was no vacuum between the tees. SCS then cut the 10-inch and discovered the pipe was full of sand. SCS cut away the 10-inch x 6-inch tees, capped two 6-inch lines that were abandoned and removed 10-inch lines and tees. Welded on 10-inch cap for abandonment to Hc-b2, b3, b4, b5, and b6. Excavated to existing 10-inch valve.

Detailed Description of Work:	
Vertical Well Drilling	None/Completed
Header Trench	None
Pipe Fusing	Welded on 10-inch cap for abandonment to Hc-b2, b3, b4, b5, and b6.
Waste Hauling	None
Pressure Testing	None

Equipment Observed Onsite:	
F-250 Pick-up	30-ton Dump Truck
F-150 Pick-up (2)	
Tool Trailer (2)	4” fusion machine
Gator	8” fusion machine
210 Excavator	Generator
T-180 Skid steer	Electrofusion machine

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Misc. Notes & Pictures:



SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Day & Date:
Thursday, September 30, 2021

Project Name & Location:
Tomoka Farms Road Landfill Phase VI Construction; 1990 Tomoka Farms Road Volusia County, Florida

Weather:
Sunny

SCS Construction Team Members on Site:	**Relevant Visitors to Observed Work Areas:**
1. Larry Taylor	1. Volusia County Staff
2. Dustin Voils	
3. Tony Taylor	
4. Troy Zerbe	

Summary of Work:
Excavated around existing 10-inch valve, unbolted pipe from valve and removed valve. Pipe was full of sand on both sides of the valve. Volusia County staff jet cleaned the 10-inch pipe and 16-inch header. Line cleared and installed new 10-inch valve and pipe. SCS Field Services also installed new 4-inch and 2-inch, backfilled with sand, trench tape and finished to grade.

Detailed Description of Work:	
Vertical Well Drilling	None/Completed
Header Trench	None
Pipe Fusing	10-inch pipe and valve. New 4-inch and 2-inch lines
Waste Hauling	None
Pressure Testing	None

Equipment Observed Onsite:	
F-250 Pick-up	30-ton Dump Truck
F-150 Pick-up (2)	
Tool Trailer (2)	4” fusion machine
Gator	8” fusion machine
210 Excavator	Generator
T-180 Skid steer	Electrofusion machine

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Misc. Notes & Pictures:

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Day & Date:
Tuesday, October 5, 2021

Project Name & Location:
Tomoka Farms Road Landfill Phase VI Construction; 1990 Tomoka Farms Road Volusia County, Florida

Weather:
Sunny

SCS Construction Team Members on Site:	**Relevant Visitors to Observed Work Areas:**
1. Larry Taylor	
2. Dustin Voils	
3. Tony Taylor	
4. Troy Zerbe	

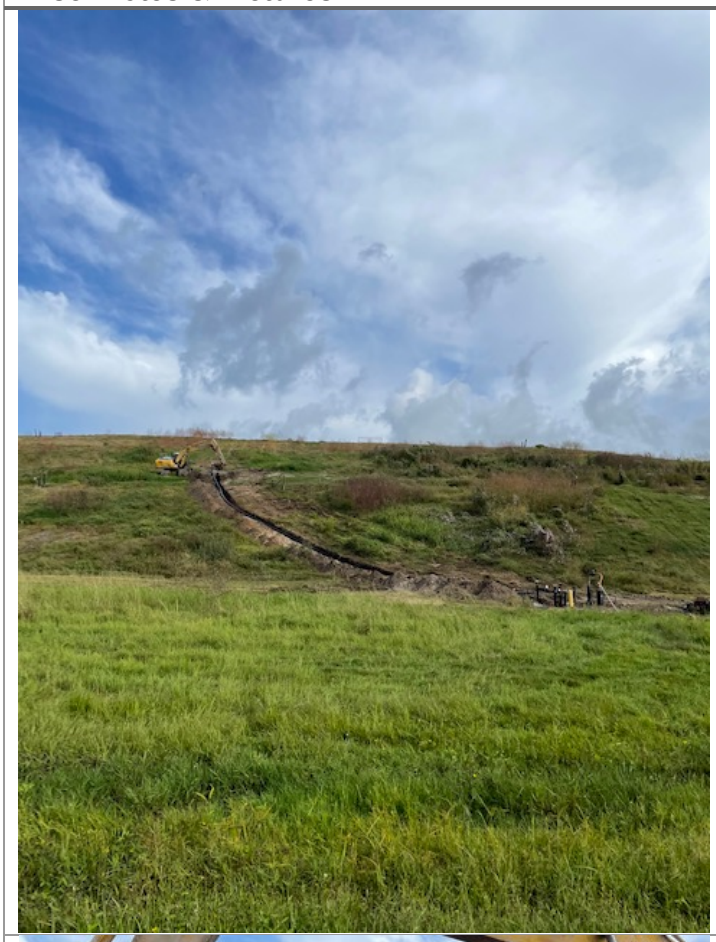
Summary of Work:
Excavated and installed 6-inch, 4-inch, and 2-inch to well from valve cluster to well EW-77. Excavated around existing EW-27 and cleaned around pipes for abandonment. Backfilled trench with sand, trench tape, and finished to grade.

Detailed Description of Work:	
Vertical Well Drilling	None/Completed
Header Trench	None
Pipe Fusing	None
Waste Hauling	None
Pressure Testing	None

Equipment Observed Onsite:	
F-250 Pick-up	30-ton Dump Truck
F-150 Pick-up (2)	
Tool Trailer (2)	4” fusion machine
Gator	8” fusion machine
210 Excavator	Generator
T-180 Skid steer	Electrofusion machine

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Misc. Notes & Pictures:



SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Day & Date:
Wednesday, October 6, 2021

Project Name & Location:
Tomoka Farms Road Landfill Phase VI Construction; 1990 Tomoka Farms Road Volusia County, Florida

Weather:
Sunny

SCS Construction Team Members on Site:	**Relevant Visitors to Observed Work Areas:**
1. Larry Taylor	
2. Dustin Voils	
3. Tony Taylor	
4. Troy Zerbe	

Summary of Work:
Abandoned EW-27 6-inch vacuum, 4-inch and 2-inch. Backfilled excavation. Installed wellhead on EW-77 and air and force main valves. Excavated around EW-26 abandoned 6-inch vacuum, 4-inch and 2-inch. Excavated new lines 6-inch, 4-inch and 2-inch to EW-26. Backfilled with sand, trench tape, and finished to grade. Excavated around EW-25, cut and abandoned 2-inch and 4-inch.

Detailed Description of Work:	
Vertical Well Drilling	None/Completed
Header Trench	None
Pipe Fusing	None
Waste Hauling	None
Pressure Testing	None

Equipment Observed Onsite:	
F-250 Pick-up	30-ton Dump Truck
F-150 Pick-up (2)	
Tool Trailer (2)	4” fusion machine
Gator	8” fusion machine
210 Excavator	Generator
T-180 Skid steer	Electrofusion machine

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Day & Date:
Thursday, October 7, 2021

Project Name & Location:
Tomoka Farms Road Landfill Phase VI Construction; 1990 Tomoka Farms Road Volusia County, Florida

Weather:
Sunny

SCS Construction Team Members on Site:	**Relevant Visitors to Observed Work Areas:**
1. Larry Taylor	
2. Dustin Voils	
3. Tony Taylor	
4. Troy Zerbe	

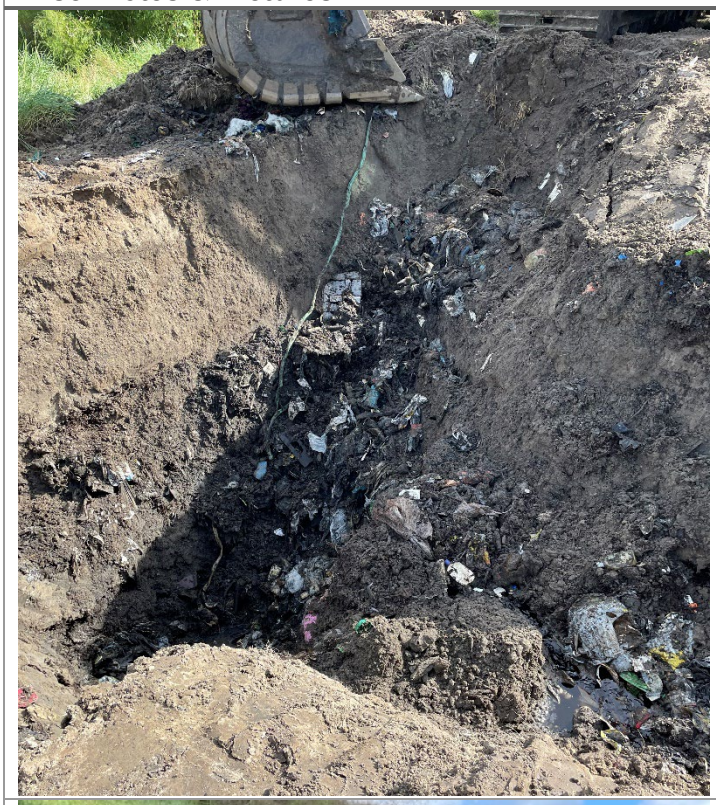
Summary of Work:
SCS responded to leachate breakouts on south lower berm by HC-8A 16 feet deep. SCS installed stone over waste, placed sand back into excavation, and placed bentonite seal 3 feet deep where seep started. SCS responded to a leachate seep by HC-11A, 10 feet deep into dry waste. SCS installed stone over waste, placed sand back into excavation, and placed bentonite seal 3 feet deep where seep started. SCS responded to a leachate seep around HC-10A. SCS excavated 14 feet deep. The leachate came rushing in backfilled trench to 8 feet deep. SCS capped the 6-inch pipe, plans to pump out excavation in the morning.

Detailed Description of Work:	
Vertical Well Drilling	None/Completed
Header Trench	None
Pipe Fusing	None
Waste Hauling	None
Pressure Testing	None

Equipment Observed Onsite:	
F-250 Pick-up	30-ton Dump Truck
F-150 Pick-up (2)	
Tool Trailer (2)	4” fusion machine
Gator	8” fusion machine
210 Excavator	Generator
T-180 Skid steer	Electrofusion machine

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Misc. Notes & Pictures:



SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Day & Date:
Monday, October 11, 2021

Project Name & Location:
Tomoka Farms Road Landfill Phase VI Construction; 1990 Tomoka Farms Road Volusia County, Florida

Weather:
Sunny

SCS Construction Team Members on Site:	**Relevant Visitors to Observed Work Areas:**
1. Larry Taylor	
2. Dustin Voils	
3. Tony Taylor	
4. Troy Zerbe	

Summary of Work:
SCS dressed areas that washed out from heavy rain. Laid out header line to move sump and prepped for header trench excavation for Tuesday, 10/12. Discussion to move sump location and header line placement down slope to avoid future waste cover.

Detailed Description of Work:	
Vertical Well Drilling	None/Completed
Header Trench	None
Pipe Fusing	None
Waste Hauling	None
Pressure Testing	None

Equipment Observed Onsite:	
F-250 Pick-up	30-ton Dump Truck
F-150 Pick-up (2)	
Tool Trailer (2)	4” fusion machine
Gator	8” fusion machine
210 Excavator	Generator
T-180 Skid steer	Electrofusion machine

Misc. Notes & Pictures:

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Day & Date:
Tuesday, October 12, 2021

Project Name & Location:
Tomoka Farms Road Landfill Phase VI Construction; 1990 Tomoka Farms Road Volusia County, Florida

Weather:
Sunny

SCS Construction Team Members on Site:	**Relevant Visitors to Observed Work Areas:**
1. Larry Taylor	
2. Dustin Voils	
3. Tony Taylor	
4. Troy Zerbe	

Summary of Work:
SCS began the header trench, excavated and installed 12-inch header from the high point south down the hill to 300 feet. This included excavation, hauling waste, placement of 12-inch header pipe, 4-inch force main pipe, 2-inch air supply line and backfill.

Detailed Description of Work:	
Vertical Well Drilling	None/Completed
Header Trench	300 feet of header excavated. Survey site tubes were set. Backfilled trench with sand, trench tape, and finished to grade. Installed access point 24 and valve tee V-5.
Pipe Fusing	None
Waste Hauling	Waste hauled from vertical well extraction was taken to the pit for proper disposal.
Pressure Testing	None

Equipment Observed Onsite:	
F-250 Pick-up	30-ton Dump Truck
F-150 Pick-up (2)	
Tool Trailer (2)	4” fusion machine
Gator	8” fusion machine
210 Excavator	Generator
T-180 Skid steer	Electrofusion machine

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Misc. Notes & Pictures:

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Day & Date:
Wednesday, October 13, 2021

Project Name & Location:
Tomoka Farms Road Landfill Phase VI Construction; 1990 Tomoka Farms Road Volusia County, Florida

Weather:
Sunny

SCS Construction Team Members on Site:	**Relevant Visitors to Observed Work Areas:**
1. Larry Taylor	
2. Dustin Voils	
3. Tony Taylor	
4. Troy Zerbe	

Summary of Work:
SCS continued with the header trench. This entailed excavation, hauling waste, placement of 12-inch pipe, 4-inch force main pipe, 2-inch air supply line and backfill. SCS completed an additional 200 feet continuing down the hill south. SCS stayed after facility closing time to conduct pipe road crossing.

Detailed Description of Work:	
Vertical Well Drilling	None/Completed
Header Trench	200 feet of header excavated. Survey site tubes were set. Backfilled trench with sand, trench tape, and finished to grade. Installed access point 23 and valve tee V-4.
Pipe Fusing	None
Waste Hauling	Waste hauled from vertical well extraction was taken to the pit for proper disposal.
Pressure Testing	None

Equipment Observed Onsite:	
F-250 Pick-up	30-ton Dump Truck
F-150 Pick-up (2)	
Tool Trailer (2)	4” fusion machine
Gator	8” fusion machine
210 Excavator	Generator
T-180 Skid steer	Electrofusion machine

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Misc. Notes & Pictures:

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Day & Date:
Thursday, October 14, 2021

Project Name & Location:
Tomoka Farms Road Landfill Phase VI Construction; 1990 Tomoka Farms Road Volusia County, Florida

Weather:
Sunny

SCS Construction Team Members on Site:	**Relevant Visitors to Observed Work Areas:**
1. Larry Taylor	
2. Dustin Voils	
3. Tony Taylor	
4. Troy Zerbe	

Summary of Work:
SCS continued with the header trench. Excavated and installed 16-inch header pipe, 4-inch, and 2-inch.

Detailed Description of Work:	
Vertical Well Drilling	None/Completed
Header Trench	40 feet of header excavated from sump location on south slope. Crossed over liner at 1%. Survey site tubes were set. Backfilled trench with sand, trench tape, and finished to grade.
Pipe Fusing	None
Waste Hauling	Waste hauled from vertical well extraction was taken to the pit for proper disposal.
Pressure Testing	None

Equipment Observed Onsite:	
F-250 Pick-up	30-ton Dump Truck
F-150 Pick-up (2)	4-inch Fusion Machine
Tool Trailer (2)	8-inch Fusion Machine
Gator	Generator
210 Excavator	
T-180 Skid steer	

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Misc. Notes & Pictures:

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Day & Date:
Friday, October 15, 2021

Project Name & Location:
Tomoka Farms Road Landfill Phase VI Construction; 1990 Tomoka Farms Road Volusia County, Florida

Weather:
Sunny

SCS Construction Team Members on Site:	**Relevant Visitors to Observed Work Areas:**
1. Larry Taylor	
2. Dustin Voils	
3. Tony Taylor	
4. Troy Zerbe	

Summary of Work:
SCS continued with the header trench. Excavated and installed 12-inch header pipe, 4-inch, and 2-inch.

Detailed Description of Work:	
Vertical Well Drilling	None/Completed
Header Trench	300 feet of header excavated from high point to north east. Survey site tubes were set. Backfilled trench with sand, trench tape, and finished to grade.
Pipe Fusing	None
Waste Hauling	Waste hauled from vertical well extraction was taken to the pit for proper disposal.
Pressure Testing	None

Equipment Observed Onsite:	
F-250 Pick-up	30-ton Dump Truck
F-150 Pick-up (2)	
Tool Trailer (2)	4” fusion machine
Gator	8” fusion machine
210 Excavator	Generator
T-180 Skid steer	Electrofusion machine

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Misc. Notes & Pictures:

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Day & Date:
Monday, October 18, 2021

Project Name & Location:
Tomoka Farms Road Landfill Phase VI Construction; 1990 Tomoka Farms Road Volusia County, Florida

Weather:
Sunny

SCS Construction Team Members on Site:	**Relevant Visitors to Observed Work Areas:**
1. Larry Taylor	
2. Dustin Voils	
3. Tony Taylor	
4. Troy Zerbe	

Summary of Work:
Built and installed 6 pumps for wells EW-73, EW-78, EW-77, EW-75, EW-76, and EW-79. Installed well heads on remaining wells. Installed air and forcemain valves on risers.

Detailed Description of Work:	
Vertical Well Drilling	None/Completed
Header Trench	None
Pipe Fusing	None
Waste Hauling	None
Pressure Testing	None

Equipment Observed Onsite:	
F-250 Pick-up	30-ton Dump Truck
F-150 Pick-up (2)	
Tool Trailer (2)	4” fusion machine
Gator	8” fusion machine
210 Excavator	Generator
T-180 Skid steer	Electrofusion machine

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Misc. Notes & Pictures:

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Day & Date:
Tuesday, October 19, 2021

Project Name & Location:
Tomoka Farms Road Landfill Phase VI Construction; 1990 Tomoka Farms Road Volusia County, Florida

Weather:
Sunny

SCS Construction Team Members on Site:	**Relevant Visitors to Observed Work Areas:**
1. Larry Taylor	
2. Dustin Voils	
3. Tony Taylor	
4. Troy Zerbe	

Summary of Work:
Built 16-inch tees and 12-inch tees for valves and access points. Built 4-inch and 2-inch valves and access risers.

Detailed Description of Work:	
Vertical Well Drilling	None/Completed
Header Trench	None
Pipe Fusing	16-inch and 12-inch tees for header trench
Waste Hauling	None
Pressure Testing	None

Equipment Observed Onsite:	
F-250 Pick-up	30-ton Dump Truck
F-150 Pick-up (2)	
Tool Trailer (2)	4” fusion machine
Gator	8” fusion machine
210 Excavator	Generator
T-180 Skid steer	Electrofusion machine

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Misc. Notes & Pictures:

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Day & Date:
Tuesday, October 26, 2021

Project Name & Location:
Tomoka Farms Road Landfill Phase VI Construction; 1990 Tomoka Farms Road Volusia County, Florida

Weather:
Sunny

SCS Construction Team Members on Site:	**Relevant Visitors to Observed Work Areas:**
1. Larry Taylor	
2. Dustin Voils	
3. Tony Taylor	
4. Troy Zerbe	

Summary of Work:
Excavated and installed 12-inch, 4-inch, and 2-inch header. Installed 10-inch, 4-inch, and 2-inch valve 6. Installed access point 20. Backfilled with sand trench tape and finished to grade.

Detailed Description of Work:	
Vertical Well Drilling	None/Completed
Header Trench	300 feet of header excavated from high point to north east. Survey site tubes were set. Backfilled trench with sand, trench tape, and finished to grade.
Pipe Fusing	12-inch header pipe, 4-inch forcemain and 2-inch air line
Waste Hauling	None
Pressure Testing	None

Equipment Observed Onsite:	
F-250 Pick-up	30-ton Dump Truck
F-150 Pick-up (2)	
Tool Trailer (2)	4” fusion machine
Gator	8” fusion machine
210 Excavator	Generator
T-180 Skid steer	Electrofusion machine

Misc. Notes & Pictures:

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Day & Date:
Thursday, October 28, 2021

Project Name & Location:
Tomoka Farms Road Landfill Phase VI Construction; 1990 Tomoka Farms Road Volusia County, Florida

Weather:
Sporadic rain all morning; Heavy rain 3:30

SCS Construction Team Members on Site:	**Relevant Visitors to Observed Work Areas:**
1. Larry Taylor	
2. Dustin Voils	
3. Tony Taylor	
4. Troy Zerbe	

Summary of Work:
Welded 16-inch header at south end of hill near sump location. Installed access point 20 and welded caps on 16-inch, 4-inch forcemain, and 2-inch air supply line for pressure test.

Detailed Description of Work:	
Vertical Well Drilling	None/Completed
Header Trench	100 feet of 16-inch header near sump location
Pipe Fusing	Welded caps on pipe for pressure test
Waste Hauling	None
Pressure Testing	None

Equipment Observed Onsite:	
F-250 Pick-up	30-ton Dump Truck
F-150 Pick-up (2)	
Tool Trailer (2)	4” fusion machine
Gator	8” fusion machine
210 Excavator	Generator
T-180 Skid steer	Electrofusion machine

Misc. Notes & Pictures:

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Day & Date:
Monday, November 1, 2021

Project Name & Location:
Tomoka Farms Road Landfill Phase VI Construction; 1990 Tomoka Farms Road Volusia County, Florida

Weather:
Cloudy

SCS Construction Team Members on Site:	**Relevant Visitors to Observed Work Areas:**
1. Larry Taylor	1. Daytona Ready Mix – Concrete for sump
2. Dustin Voils	2. Air compressor delivery
3. Tony Taylor	
4. Troy Zerbe	

Summary of Work:
Excavated and installed 36-inch sump 10 feet deep. Poured 10 cubic yards of concrete 5 feet around sump. Backfilled excavation to bottom of flanges and taped off area. Built pump for sump.

Detailed Description of Work:	
Vertical Well Drilling	None/Completed
Header Trench	Sump installation
Pipe Fusing	None
Waste Hauling	None
Pressure Testing	None

Equipment Observed Onsite:	
F-250 Pick-up	30-ton Dump Truck
F-150 Pick-up (2)	
Tool Trailer (2)	4” fusion machine
Gator	8” fusion machine
210 Excavator	Generator
T-180 Skid steer	Electrofusion machine

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Misc. Notes & Pictures:

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Day & Date:
Tuesday, November 2, 2021

Project Name & Location:
Tomoka Farms Road Landfill Phase VI Construction; 1990 Tomoka Farms Road Volusia County, Florida

Weather:
Cloudy

SCS Construction Team Members on Site:	**Relevant Visitors to Observed Work Areas:**
1. Larry Taylor	1. Smith Survey Group, Inc.
2. Dustin Voils	
3. Tony Taylor	
4. Troy Zerbe	

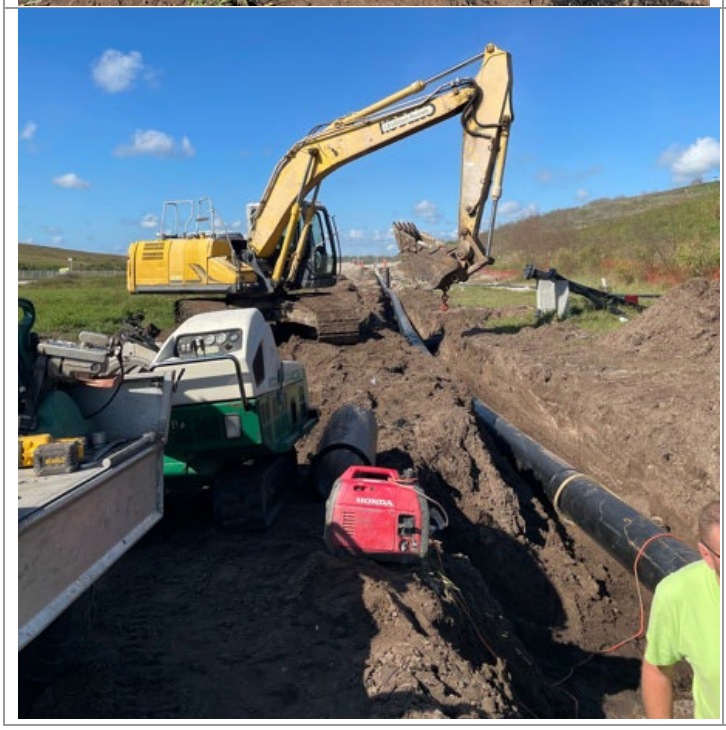
Summary of Work:
Excavated and installed 16-inch header pipe, 4-inch forcemain and 2-inch air supply line. Connected to new sump. Backfilled excavation with sand, tape, and finished to grade.

Detailed Description of Work:	
Vertical Well Drilling	None/Completed
Header Trench	240 feet of 16-inch header pipe, 4-inch forcemain and 2-inch air supply line
Pipe Fusing	16-inch header to sump
Waste Hauling	None
Pressure Testing	None

Equipment Observed Onsite:	
F-250 Pick-up	30-ton Dump Truck
F-150 Pick-up (2)	
Tool Trailer (2)	4” fusion machine
Gator	8” fusion machine
210 Excavator	Generator
T-180 Skid steer	Electrofusion machine

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Misc. Notes & Pictures:



SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Day & Date:
Wednesday, November 3, 2021

Project Name & Location:
Tomoka Farms Road Landfill Phase VI Construction; 1990 Tomoka Farms Road Volusia County, Florida

Weather:
Sunny

SCS Construction Team Members on Site:	**Relevant Visitors to Observed Work Areas:**
1. Larry Taylor	1. Smith Survey Group, Inc.
2. Dustin Voils	
3. Tony Taylor	
4. Troy Zerbe	

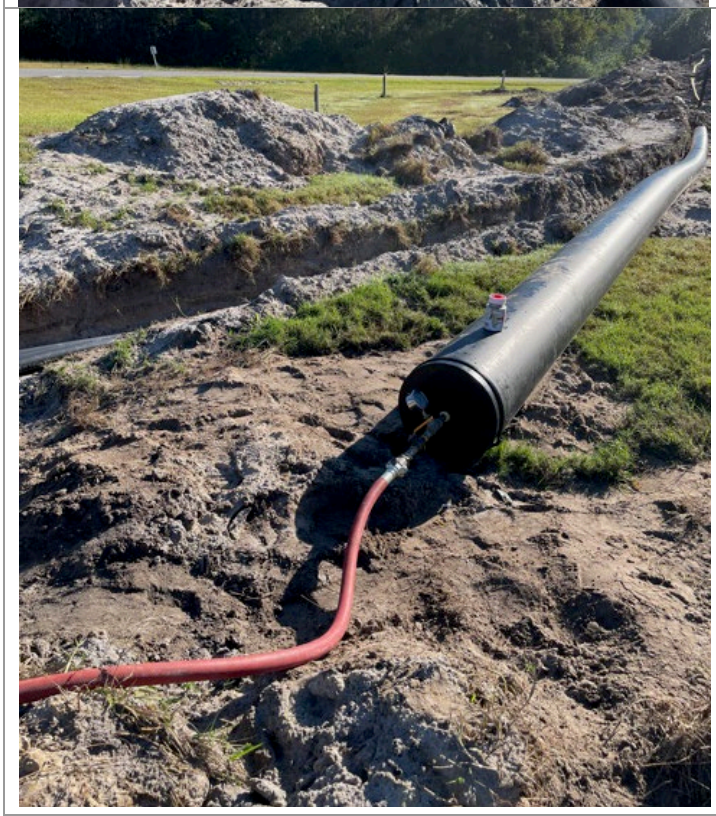
Summary of Work:
Excavated and installed 16-inch header pipe, 4-inch forcemain and 2-inch air line to existing sump CS-13. Tie in was 8 feet and 6 inches deep. Tied in 16-inch header pipe to sump. Installed airline valve and tied into forcemain.

Detailed Description of Work:	
Vertical Well Drilling	None/Completed
Header Trench	60 feet of 16-inch, 4-inch and 2-inch header line
Pipe Fusing	16-inch to sump
Waste Hauling	None
Pressure Testing	None

Equipment Observed Onsite:	
F-250 Pick-up	30-ton Dump Truck
F-150 Pick-up (2)	
Tool Trailer (2)	4” fusion machine
Gator	8” fusion machine
210 Excavator	Generator
T-180 Skid steer	Electrofusion machine

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Misc. Notes & Pictures:



SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Day & Date:
Thursday, November 4, 2021

Project Name & Location:
Tomoka Farms Road Landfill Phase VI Construction; 1990 Tomoka Farms Road Volusia County, Florida

Weather:
Sunny

SCS Construction Team Members on Site:	**Relevant Visitors to Observed Work Areas:**
1. Larry Taylor	1. Kanishka Perera (HDR) – Final Walkthrough
2. Dustin Voils	
3. Tony Taylor	
4. Troy Zerbe	

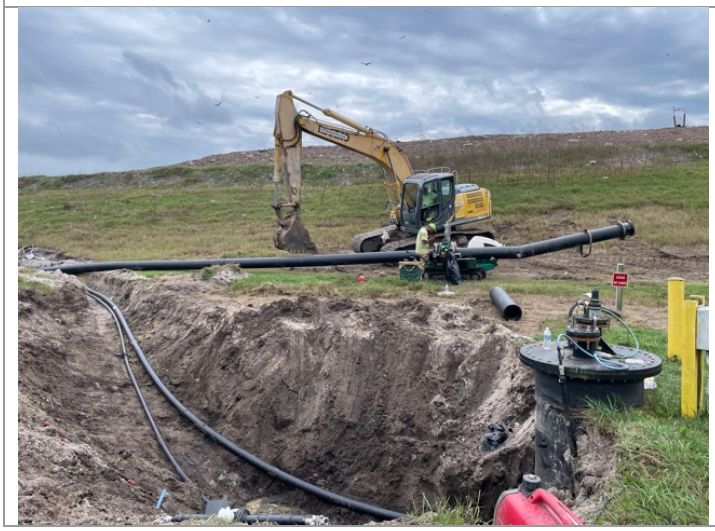
Summary of Work:
Excavated and installed 12-inch, 4-inch and 2-inch header pipe to existing sump CS-6. Tie in was 7 feet and 6 inches deep. Tied in 12-inch to sump. Installed airline valve and tied into forcemain.

Detailed Description of Work:	
Vertical Well Drilling	None/Completed
Header Trench	Tied in 12-inch header to sump.
Pipe Fusing	Tied in 12-inch header to sump. Tie-in to forcemain pipe.
Waste Hauling	None
Pressure Testing	None

Equipment Observed Onsite:	
F-250 Pick-up	30-ton Dump Truck
F-150 Pick-up (2)	
Tool Trailer (2)	4” fusion machine
Gator	8” fusion machine
210 Excavator	Generator
T-180 Skid steer	Electrofusion machine

SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

Misc. Notes & Pictures:

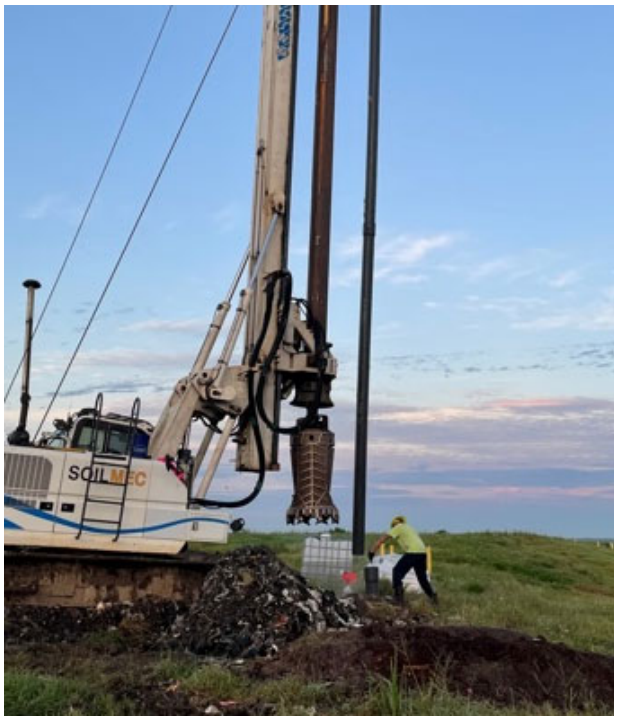


SIGNATURE: Chelsea Williams
TITLE: HDR CQA Lead

ATTACHMENT E

Construction Photographs

January 2022



Vertical Well Installation

Vertical Well, Forcemain and Air Line

Vertical Well Installation

Vertical Well Installation

Sump Installation CS-12

16-inch Header Connection with CS-12

16-inch Header Connection to CS-13

16-inch Header Line Connection to CS-13

12-inch Header Connection to CS-9

12-inch Header Connection to CS-9

Pressure Testing Header Lines

Pressure Testing Header Lines

Header Trench

Valve Pit and Access Point in Header