

October 18, 2024

Himanshu Mehta
Managing Director
Indian River County – Solid Waste Disposal District
1325 74th Avenue SW
Vero Beach, FL 32968

Subject: Proposal to Install Vertical Wells and HDPE Vacuum, Air and Forcemain Piping
Indian River Landfill, Vero Beach, Florida

Dear Mr. Mehta:

SCS Field Services (SCS-FS) is pleased to provide this proposal to you for the subject work based on discussions between SCS-FS and Indian River County (County). SCS-FS is prepared to schedule the work following approval by the County. A summary of the scope of work and cost is outlined below.

BACKGROUND

In September 2024, SCS-FS abandoned eight vertical wells, along with the vacuum lateral piping, air piping, and forcemain piping, due to a sliver fill on the north slope of Cells 1 and 2 in Segment 3 of the landfill. At the County's request, once the sliver fill is completed by operations, SCS-FS will install eight new vertical wells on the north slope of Cells 1 and 2. New vacuum lateral piping, air piping, and forcemain piping will also be installed for each of these wells. Additionally, vacuum lateral piping will be connected to the seven side slope collectors that were left in place. To account for the 20-30 feet of additional waste placed in Cell 2, two new vertical wells will be installed to replace wells EW-179 and EW-177.

SCOPE OF WORK

Task One: Vertical Well Installation

SCS-FS will provide labor equipment and materials to install new vertical wells based on the following scope of work description:

- One mobilization and demobilization of Recovery Drilling Services
- Drilling 1,015 vertical feet to install seven replacement wells: EW-41, EW-56R, EW-69, EW-70, EW-72R, EW-177, EW-179, and three new vertical wells: EW-2401, EW-2402 and EW-2403 based on *Figure 1*. SCS-FS does not recommend installing replacement wells EW-68, EW-71 and EW-74 at this time due to shallow waste depths. The well schedule is presented in *Table 1*.
- Installation of 816 feet of 8-inch schedule 80 perforated PVC pipe. Perforated pipe will be backfilled with #4 non calcareous stone. A geocomposite ring and bentonite seal will be installed on top of the stone.
- Installation of 250 feet of 8-inch schedule 80 solid PVC pipe. Solid pipe will consist of 20 feet below grade and 5 feet above grade. Below grade pipe will be backfilled with clean fill material.



- Each new well will be equipped with an 8-inch dual extraction QED well cap. Wellheads that were removed from abandoned wells will be installed on the seven replacement wells and three new vertical wells.
- Three new QED AP-4 plus pumps, fittings, and hardware will be installed in the three new vertical wells. Existing pumps that were removed from the abandoned wells will be installed in the seven replacement wells.
- Vertical well spoils will be transported to the active work face by SCS-FS.

Task Two: HDPE Vacuum Lateral, Air and Forcemain Piping Installation

SCS-FS will provide labor equipment and materials to install new HDPE vacuum lateral (SDR-17), air (SDR-9) and forcemain (SDR-11) piping based on the following scope of work description:

- Install 280 feet of 6-inch vacuum lateral, 2-inch air and 3-inch forcemain piping from well EW-39 to replacement well EW-56R and tie into the existing piping at EW-55.
- Install 360 feet of 6-inch vacuum lateral, 2-inch air and 3-inch force main piping from well EW-40 to well EW-42.
- Install the 18-inch valve that was removed at location ZV-21. Install 560 feet of 18-inch vacuum lateral, 2-inch air and 3-inch force main piping from ZV-21 to the tie in location at SC-5. Vacuum, air and forcemain risers will be installed at replacement wells EW-69, EW-70 and side slope collectors SC-3 and SC-4.
- Install the 24-inch valve that was removed at location ZV-20. Install 160 feet of 24-inch vacuum lateral, 2-inch air and 3-inch forcemain piping from valve ZV-20 to downslope of SC-1. The 24-inch vacuum lateral will terminate with a blind flange for future lateral piping. A 24-inch by 8-inch tee will be installed prior to the blind flange.
- Install 880 feet of 8-inch vacuum lateral, 2-inch air, and 3-inch forcemain piping to side slope collectors SC-1, SC-2, replacement well EW-72 and new wells EW-2401, EW-2402 and EW-2403.
- Clean fill will be backfilled around all piping. Trench spoils that cannot be backfilled will be transported to the active working face by SCS-FS.

ASSUMPTIONS

The scope of work is based on the following assumptions:

- At a minimum, SCS-FS will have site access and permission to work Monday through Saturday from 7:00 AM to 7:00 PM.
- The scope of work is based on one drill rig mobilization and demobilization. If additional mobilizations are needed there will be an additional cost based on the fee schedule.
- Scope of work does not include new include new wellheads. Additional wellheads will be charged based on the fee schedule.
- Piping installation quantities are approximate and may vary.
- The work area will be accessible and free of obstructions or other work activities performed by others that could delay the installation process.
- SCS-FS may limit or restrict access to any and all traffic adjacent to the work area as needed.
- Any additional drug testing or personnel background requirements to work for this project – those costs need to be passed through. Also, consider the time it takes to perform these checks/tests.
- Additional change orders may be needed if changes to the scope of work are made after the date of this proposal or if costs due to unforeseen circumstances.
- Payment terms to SCS-FS will be NET 30 or less.

COMPENSATION

SCS-FS can perform the services described in the scope of work based on the following cost table:

Description	Unit Rate	Qty.	Sub-Total
Task One: Vertical Well Installation			
Drill Rig Mobilization and Demobilization	\$10,350	1 ea.	\$10,350
Vertical Well Installation per Foot (all inclusive)	\$200/FT.	1015	\$203,000
Task One Sub-Total:			\$213,350
Task Two: HDPE Vacuum Lateral, Air and Forcemain Piping Installation			
HDPE Vacuum Lateral, Air and Forcemain Piping	\$252,000	Lump Sum	\$252,000
QED AP-4 Plus Pumps	\$6,900	3 ea.	\$20,700
QED 2-inch Orifice Plate Style Wellheads	\$805	0 ea.	\$0
Task Two Sub-Total:			\$272,700
Total Cost:			\$486,050

CLOSING

SCS-FS appreciates the opportunity to provide our proposal to Indian River County. If you have any questions or require any additional information, please contact Brian Basconi at 401-486-4897.

Sincerely,



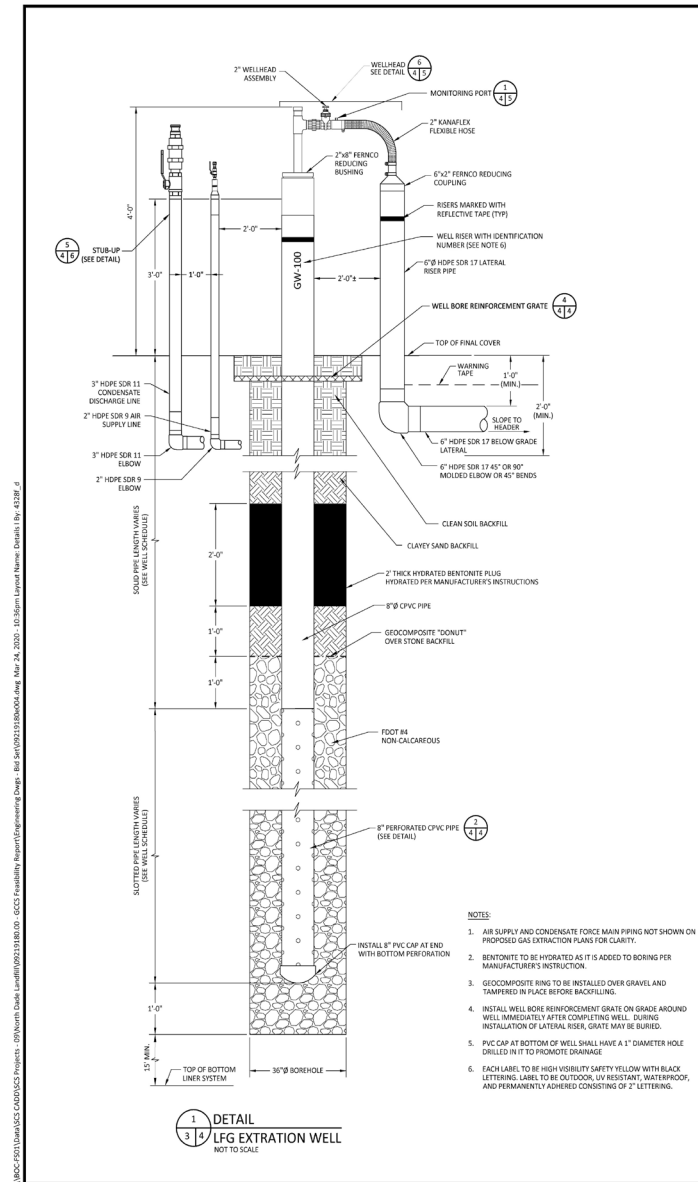
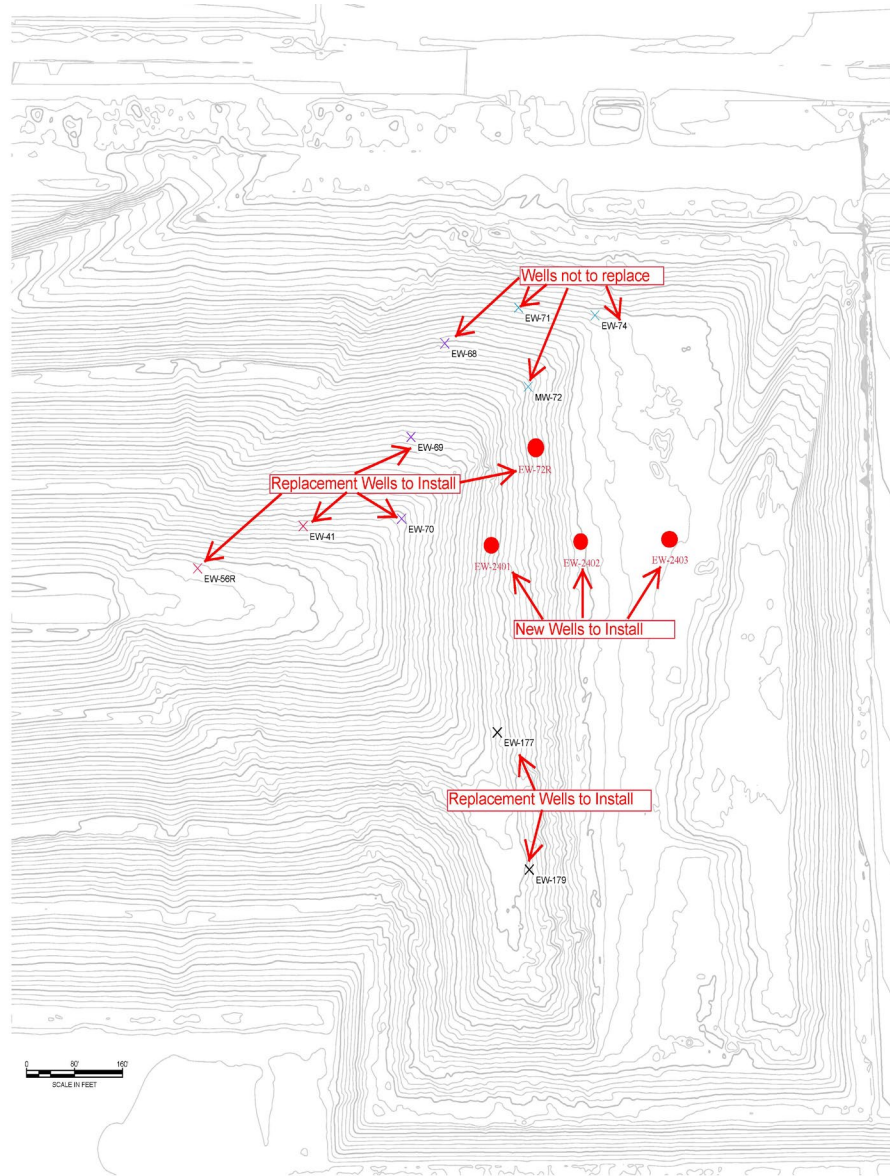
Brian Basconi
Project Manager
SCS Field Services



Garold (Tony) A. Cartee
Regional Manager / Vice President
SCS Field Services

BB/GAC

Figure 1.



\NRC-F011210a\GIS CAD\DWG\2023\Projects - 20North Dade Landfill\021188100 - GGGC Feasibility Report\Engineering Draw - Bid Set\021188100\04.dwg, Mar 24, 2023, 10:35:01am (owner Name: Dade) 1 of 43328 4

Table 1. Indian River Landfill Segment Three, Cells One and Two Well Installation Schedule

New and Replacement Wells to Install								
Gas Well ID	Northing	Easting	Final Cover Elevation	Approx. Bottom Liner Elevation	Waste Depth	Drill Depth (15 FT Offset from Bottom)	Solid Pipe (5 FT Riser)	Perforated Pipe
EW-41	1179851.06	821905.67	170.383	30	140.383	125.383	25	105.383
EW-56R	1179789.36	821729.72	176.825	30	146.825	131.825	25	111.825
EW-69	1179981.05	822085.52	131.839	30	101.839	86.839	25	66.839
EW-70	1179861.69	822069.84	169.891	30	139.891	124.891	25	104.891
EW-177	1179549.94	822229.24	112.526	36	76.526	61.526	25	41.526
EW-179	1179349.75	822282.54	127.998	36	91.998	76.998	25	56.998
EW-72R	1179965.436	822293.181	139.92	29.76	110.16	95.16	25	75.16
EW-2401	1179820.084	822218.516	188.79	32.36	156.43	141.43	25	121.43
EW-2402	1179827.421	822368.441	151.23	31.1	120.13	105.13	25	85.13
EW-2403	1179829.273	822516.923	114.09	32.69	81.4	66.4	25	46.4
					Total:	1015.582	250	815.582

Replacement Wells Not to be Installed								
EW-68	1180117.65	822141.69	90.749	30	60.749	45.749	25	25.749
EW-71	1180169.91	822264.58	73.396	30	43.396	28.396	25	8.396
EW-74	1180158.71	822391.9	72.757	30	42.757	27.757	25	7.757