NEW HANOVER COUNTY
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

SECURE LANDFILL CELLS NO. 2-6E
PARTIAL CLOSURE PHASE 3
CONSTRUCTION SET

NEW HANOVER COUNTY, NORTH CAROLINA
JANUARY 2020

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1. PROPOSED GRADES SHOWN ON PLAN ARE BASED ON PLANS AS PLACED TO TOP OF INTERMEDIATE COVER. SEE THE SPECIFICATIONS AND DETAILS FOR THE INTERMEDIATE COVER PREPARATION.

2. ALL PLOT AREAS SHOWN ON THIS PLAN ARE SHOWN AS AS IS WITH PREVIOUS CONSTRUCTION INTERMEDIATE COVER ELEVATIONS SHOWN AT TOE OF SLOPE ARE TO INDICATE GENERAL BOTTOM ELEVATIONS AND MAY NOT REFLECT ACTUAL ELEVATIONS.

3. CONTRACTOR SHALL REMOVE MULCH AND STRIP EXISTING VEGETATION WITHIN THE CONTRACTOR TO EXPOSE EDGE OF EXISTING LINER TO WHICH THE CAP LINER WILL BE WELDED.

4. LINER TIE-IN TO EXISTING CLOSED AREA

5. TOE DRAIN AT EXCAVATION

6. APPROXIMATE EDGE OF EXISTING CLOSURE

7. APPROXIMATE LIMITS OF CLOSURE

8. SIDE SLOPE LINER LIMIT

9. RIP RAP

10. EXISTING ELEVATION CONTOURS

11. CELL BOUNDARY

12. CLOSURE GRADE ELEVATION CONTOUR

13. TERRACE GRADING DETAIL

14. TYPICAL CLOSURE GRADING AT TOE OF SLOPE

15. SIDE SLOPE LINER LIMIT

16. CLOSURE CAPPING AT EXISTING HEADER/LATERAL CLEANOUT

17. ACCESS ROAD DETAIL

18. LINER TIE-IN TO EXISTING CLOSED AREA

19. CELL BOUNDARY

20. CLOSURE GRADE ELEVATION CONTOUR

21. INTERMEDIATE COVER ELEVATIONS SHOWN AT TOE OF SLOPE ARE TO INDICATE GENERAL BOTTOM ELEVATIONS AND MAY NOT REFLECT ACTUAL ELEVATIONS.

22. CONTRACTOR SHALL DO THE CLOSURE CAPPING SYSTEM (13.4 ACRES)
1. Proposed contour listed herein is Concept Final Cover Grading. The actual finished contours will vary based on the final top of existing grade.

2. Refer to the field engineering and survey specifications section for detailed instructions and documentation of final cover preparation.

3. Contractor shall provide a flag or marker every 50 feet to mark the toe of liner. A flowchart shall be provided in the project's project manual. See Figures 4.4 and 4.5 for details.

4. Contractor shall provide 4" x 4" posts spaced every 100' to mark the edge of liner.

5. IF CONTRACTOR DAMAGES EXISTING ASPHALT PAVEMENT, REPAIRS WILL BE MADE AT NO COST TO THE OWNER. REPAIR WILL UTILIZE EQUAL OR SUPERIOR MATERIAL.

6. CONTRACTOR SHALL PROVIDE 4X4 POSTS SPACED EVERY 100' TO MARK THE EDGE OF LINER.

7. CONTRACTOR SHALL PROVIDE 4X4 POSTS SPACED EVERY 100' TO MARK THE EDGE OF LINER.

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40. CONTRACTOR SHALL PROVIDE 4X4 POSTS SPACED EVERY 100' TO MARK THE EDGE OF LINER.
DISCHARGE INTO THE GFFR. SEE DETAILS 6 SHEET 9 AND DETAIL 2 SHEET 12.

GRADES WILL VARY BASED ON THE FINAL TOP OF INTERMEDIATE COVER.

TOE DRAIN AT MID-SLOPE SLOPE (TYP) SEE DETAIL 9.5

STORMWATER INTERCEPTOR SPILLWAY (TYP) SEE DETAIL 6

REGULATIONS.

SEE DETAIL 11.5

ENERGY DISSIPATER BASIN

SEE DETAIL 22.5

PROTECT EXISTING GFFR FROM CLOSURE PHASE 3

LIMIT OF SOD

DURING CONSTRUCTION AND PIPE TO BE PROTECTED IN PLACE

LEGEND

APPROXIMATE LOCATION OF CLOSURE ICED SLICE

SURFACE WATER FLOW DIRECTION

CLOSING CEMENT CURTAINS

APPROXIMATE LIMITS OF CLOSURE CURTAIN SYSTEM (AS SHOWN)

APPROXIMATE EDGE OF EXISTING CLOSURE

CLOSING CURTAIN

LIMIT OF SSI

TOP OF SSI
1. Ensure proper functioning of equipment at the toe of the slope near the bottom liner system.

2. Implement proper drainage solutions at the toe of the structure to prevent water accumulation.

3. Place drainage pipes at 100'-0" intervals along the side of the closure area.

4. SDR 11 solid drain pipe is suitable for this application.

5. Elevations vary, specific requirements are indicated on the cover page.

NOTES:

1. Off-site source.

2. Geosynthetic drainage net with geotextile on both sides.

3. 40 mil LLDPE liner shall be textured on both sides.

4.Lineral to be verified.

5. Stormwater swale at the toe of slope.

The contractor shall regrade and sod the area as per the sheet (#?).

The swale shall provide for stormwater to flow without obstruction to the invert of existing stormwater swale at the toe of stormwater drop inlets as per sheet (#?).

Slope, with the intent of directing flow to where GFFR is to be placed around drop inlet.

The open throat of the structure.

_Typical closure grading at toe of slope detail_
1. ROOFING EXISTING ROOF SHEET METAL TRENCH AND CAREFULLY REMOVE EXISTING DECOMPACT. REMOVE BOLTS DECOMPACTS AND SCRAP FROM TRENCH TO EXISTING LINER. CREATE NEW AND REMOVE EXISTING DECOMPACTS TO EXISTING LINER. CONNECT NEW AND REMOVE EXISTING DECOMPACT TO EXISTING LINER.

2. EDGE OF LINER MARKER WITH 4" X 4" MARKER STAKE TO BE LOCATED EVERY 100' AND AT ANGLE CHANGES OF EDGE OF LINER. MARKER 100' WILL BE PAINTED OSHA SAFETY YELLOW. EXISTING PROTECTIVE COVER 4" X 4" MARKER STAKE TO BE LOCATED EVERY 100' AND AT ANGLE CHANGES OF EDGE OF LINER. MARKER 100' WILL BE PAINTED OSHA SAFETY YELLOW.

3. NEW DECOMPACTS AND EXISTING DECOMPACTS. REMOVE BOLTS DECOMPACTS AND SCRAP FROM TRENCH TO EXISTING LINER. CREATE NEW AND REMOVE EXISTING DECOMPACTS TO EXISTING LINER. CONNECT NEW AND REMOVE EXISTING DECOMPACTS TO EXISTING LINER.

4. SIDE OF THE BOLLARD FROM THE LINER. THEY HAVE BEEN DAMAGED OR REMOVED BY CONTRACTOR. BOLLARDS TO BE INSTALLED AROUND EXIST. CLEANOUTS WHERE THEY HAVE BEEN DAMAGED OR REMOVED BY CONTRACTOR. "EOL" TO BE PAINTED IN 2" HIGH BLACK LETTERS ON THE OPPOSITE SIDE OF THE BOLLARD FROM THE LINER.

5. CONCRETE - HAND TROWEL FINISH SLOPE AWAY FROM CENTER IN ALL DIRECTIONS TO PROMOTE DRAINAGE AWAY FROM BOLLARD AND SLAB.

6. EXISTING INTERTMEDIATE COVER LLDPE LINER

7. NEW INTERMEDIATE COVER

8. NEW 40 MIL TEXTURED LINER SYSTEM

9. TREATED 4" X 4" POST. SEE NOTE 1

10. EDGE OF LINER TO WELD TO CLOSURE LINER

11. LINER TIE-IN TO EXISTING CLOSED AREA DETAIL

12. TOE DRAIN AT EXCAVATION DETAIL

13. TOP LINER LIMIT DETAIL

14. ACCESS COVER PLATE CONNECTION DETAIL

15. BOLLARD DETAIL

16. EXISTING PROTECTIVE COVER

17. EXISTING LINER AND GEOCOMPOSITE

18. EXISTING GRASS

19. TOE OF SLOPE GRADING MAY VARY FROM 4:1 TO 3:1

20. TOE OF SLOPE OF CLOSURE AREA

21. SIDESLOPE OF CLOSURE AREA

22. COVER ELEVATIONS AND AVOID WASTE STORMWATER CANAL AT THE TOE OF SLOPE.

23. NOTE 1: 0% TO 2%
NOTE 1: AS A RESULT OF THE INCONSISTENT SIDE SLOPE GRADE THE LENGTH OF THE SIDE SLOPE BERM REQUIRED TO MATCH EXISTING GRADE WILL ALSO VARY. THE LENGTH OF THE BERS WILL DIRECTLY EFFECT THE VOLUME OF PROTECTIVE COVER REQUIRED FOR BERM CONSTRUCTION.

NOTE 2: ALL HDPE TEE'S, CROSSES AND WYE'S WILL MEET THE 12" DOWNCHUTE PIPE INVERT TO INVERT.

NOTE 3: DOUBLE WYE'S WILL NOT BE ALLOWED ALL CONNECTIONS LARGER THAN 4" WILL BE Offset BY 1.0' MINIMUM WHERE THEY MEET THE 12" DOWNCHUTE.

NOTE 4: USE GEOTEXTILE A MINIMUM OF 36" IN WIDTH AND FASTEN ADEQUATELY TO THE POSTS AND WIRE AS DIRECTED.

NOTE 5: USE WIRE A MINIMUM OF 32" IN WIDTH AND WITH A MINIMUM OF 5 LINE WIRES WITH 12" VERTICAL SPACING.

NOTE 6: PROVIDE 5.0' STEEL POST OF THE SELF-FASTENER ANGLE STEEL TYPE.

NOTE 7: FOR MECHANICAL SLICING METHOD INSTALLATION, GEOTEXTILE SHALL BE A MAXIMUM OF 18" ABOVE GROUND SURFACE.
GENERAL NOTES:
1. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF CONSTRUCTION.
2. CONTRACTOR IS RESPONSIBLE FOR HEALTH AND SAFETY OF ALL CONTRACTOR’S EMPLOYEES, WORKERS, AND (OR) SUBCONTRACTORS AT PROJECT SITE.
3. CONTRACTOR WILL PREPARE A SITE-SPECIFIC HEALTH AND SAFETY (H&S) PLAN FOR EACH WORK SITE AND PROVIDE A COPY OF THIS H&S PLAN TO ENGINEER OR OWNER SOLELY FOR RECORDS. CONTRACTOR IS SOLELY RESPONSIBLE FOR THE ENFORCEMENT OF THE H&S PLAN AND WILL IMPLEMENT OTHER SAFETY PROCEDURES TO ADDRESS HAZARDS TO WORKERS, PUBLIC, AND ENVIRONMENT ARising OUT OF CONTRACTOR’S ACTIVITIES AT THE SITE.
4. WORK AT A LANDFILL SITE IS GENERALLY WITHIN A ZONE OF POTENTIAL LANDFILL GAS MIGRATION AND (OR) ACCUMULATION. CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR OBTAINING AND USING LANDFILL GAS MONITORING INSTRUMENTATION (E.G., PHOTOLUMINESCE DETECTOR, H2S, ETc.) FOR MEASURING LOWER EXPLOSIVE LIMIT (LEL) AND HYDROGEN SULFIDE (H2S) WITHIN ALL EXCAVATIONS, DRILLS, TRENCHES, TUNNELS, ETc., FOR THE SAFETY OF ITS PERSONNEL.
5. SMOKING IS STRICTLY PROHIBITED AT THE LANDFILL.
6. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR INITIATING, MAINTAINING AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONJUNCTION WITH THE WORK. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE SAFETY OF, AND SHALL PROVIDE THE NECESSARY PROTECTION TO PREVENT DAMAGE, INJURY OR LOSS TO ALL PERSONS ON THE SITE OR WHO MAY BE AFFECTED BY THE WORK; ALL THE WORK AND MATERIALS AND EQUIPMENT TO BE INCORPORATED THEREIN, WHETHER IN STORAGE ON OR OFF THE SITE, AND OTHER PROPERTY AT THE SITE.
7. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS AND REGULATIONS RELATING TO THE SAFETY OF PERSONS OR PROPERTY, OR TO THE PROTECTION OF PERSONS OR PROPERTY FROM DAMAGE, INJURY OR LOSS. CONTRACTOR SHALL SELECT AND MAINTAIN ALL NECESSARY SAFEGUARDS FOR SUCH SAFETY AND PROTECTION.
8. CONTRACTOR’S DUTIES AND RESPONSIBILITIES FOR SAFETY AND FOR PROTECTION OF PERSONS AND PROPERTY SHALL CONTINUE UNTIL SUCH TIME AS THE WORK IS COMPLETED.
10. CONTRACTOR SHALL SUPERVISE, INSPECT, AND DIRECT THE WORK COMPETENTLY AND EFFECTIVELY, DEVOTING SUCH ATTENTION THERETO AND APPLYING SUCH SKILLS AND EXPERTISE AS MAY BE NECESSARY TO PERFORM THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
11. AT ALL TIMES DURING THE PROGRESS OF THE WORK, CONTRACTOR SHALL ASSIGN A COMPETENT RESIDENT SUPERVISOR WHO SHALL NOT BE REPLACED WITHOUT WRITTEN NOTICE TO OWNER AND ENGINEER EXCEPT UNDER EXTRAORDINARY CIRCUMSTANCES. THE SUPERVISOR WILL BE CONTRACTOR’S REPRESENTATIVE AT THE SITE AND SHALL HAVE AUTHORITY TO ACT ON BEHALF OF CONTRACTOR, ALL COMMUNICATIONS GIVEN TO OR RECEIVED FROM THE SUPERVISOR SHALL BE BINDING ON CONTRACTOR.
12. CONTRACTOR SHALL PROVIDE COMPETENT, SUITABLY QUALIFIED PERSONNEL TO SURVEY AND LAY OUT THE WORK AND PERFORM CONSTRUCTION AS REQUIRED BY THE CONTRACT DOCUMENTS AND TECHNICAL SPECIFICATION. CONTRACTOR SHALL AT ALL TIMES MAINTAIN GOOD ORDER AND DECORUM AT THE SITE. THE OWNER MAY DIRECT IMMEDIATE REMOVAL OF ANY PERSONS VIOLATING THE REQUIREMENTS.
13. THE WORK TO BE PERFORMED INCLUDES, BUT IS NOT LIMITED TO, THE CONSTRUCTION AND INSTALLATION OF THE LANDFILL GAS COLLECTION AND CONTROL SYSTEM DEPICTED ON THESE CONSTRUCTION DRAWINGS AND DEFINED IN THE CONTRACT DOCUMENTS AND TECHNICAL SPECIFICATIONS.

CONSTRUCTION NOTES:
1. CONTRACTOR SHALL PURCHASE ALL LABOR, MATERIALS, TESTING, TOOLS, EQUIPMENT, SUPERVISION AND INSTALLATION SERVICES REQUIRED TO CONSTRUCT THE LANDFILL GAS COLLECTION AND CONTROL SYSTEM DEPICTED ON THESE CONSTRUCTION DRAWINGS AND DEFINED IN THE CONTRACT DOCUMENTS AND TECHNICAL SPECIFICATIONS.
2. CONTRACTOR SHALL RECOGNIZE THAT THE LANDFILL IS AN ACTIVE LANDFILL, AND ACTIVITIES SHALL NOT HINDER OR OBSTRUCT THE NORMAL WORKING ACTIVITIES ASSOCIATED WITH LANDFILL OPERATIONS.
3. CONTRACTOR SHALL MINIMIZE LAND DISTURBANCE RELATED TO CONSTRUCTION ACTIVITIES TO THE GREATEST EXTENT POSSIBLE. CONTRACTOR SHALL RESTORE ALL DISTURBED LAND TO AT LEAST ITS ORIGINAL CONDITION.
4. CONTRACTOR SHALL PROPERLY STORE ALL MATERIALS IN ACCORDANCE WITH MANUFACTURER’S RECOMMENDATIONS. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MATERIALS AND EQUIPMENT STORED ON-SITE.
5. ALL LANDFILLED WASTE ENCOUNTERED DURING INSTALLATION ACTIVITIES SHALL BE REMOVED AND HAULED BY THE CONTRACTOR TO THE ACTIVE LANDFILL WORKING FACE.
6. LOCATIONS OF EXISTING UTILITIES (E.G., UNDERGROUND AND AERIAL PIPES, CONDUITS, AND STRUCTURES ALONG OR ACROSS PROJECT SITE) ARE NOT NECESSARILY SHOWN ON THESE DRAWINGS, AND WHERE SHOWN ARE NOT NECESSARILY SURVEY LOCATED OR ARE ONLY APPROXIMATELY ACCURATE. CONTRACTOR IS THE RESPONSIBLE IN LOCATING EXISTING UTILITIES, AS NECESSARY, TO COMPLETE PROJECT CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES DURING PROJECT CONSTRUCTION.
7. CONTRACTOR WILL VERIFY DIMENSIONS, GRADES, LEVELS, BOUNDARIES, AND OTHER CONSTRUCTION-RELATED FIELD CONDITIONS AT PROJECT SITE BEFORE PROCEEDING WITH PROJECT CONSTRUCTION. IF CONDITIONS, IN VIGENCY OF PROJECT SITE OR THAT INTERFERS WITH PROJECT CONSTRUCTION, VARY FROM CONDITIONS DEPICTED ON PROJECT DRAWINGS OR THERE ARE ANY OTHER DISCREPANCIES, CONTRACTOR SHALL NOT PERMIT WORKER PRIOR TO PROCEEDING WITH PROJECT CONSTRUCTION.
8. CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND COOPERATING WITH OWNER, ENGINEER, OR ANY OTHER CONTRACTOR, AND ALL INSURANCE (CGL) REPRESENTATIVE AT ALL TIMES DURING PROJECT CONSTRUCTION. WORK THAT IS NOT DESIGNED TO COMPLIANCE WITH OWNER’S REQUIREMENTS ARE THE RESPONSIBILITY OF THE CONTRACTOR, INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION DRAWINGS AND SPECIFICATIONS (INCLUDING BIDDRAW DRAWINGS) MUST BE REPAIRED BY CONTRACTOR TO REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS AT NO ADDITIONAL COST TO OWNER.

PIPE REQUIREMENTS:
1. ALL LPG HEADER AND LATERAL PIPING SHALL BE HIGH DENSITY POLYETHYLENE (HDPE), 50K-36 OR SDR-17 PE, 3408 OR PE ID 7, UNLESS OTHERWISE NOTED. ALL AIR LINE SHALL BE HDPE SDR-9 AND LIQUID PORCELAIN PIPE SHALL BE HDPE SDR-11, UNLESS OTHERWISE NOTED.
2. ALL PIPE AND PIPE FITTINGS SHALL BE PROVIDED BY ONE MANUFACTURER, UNLESS APPROVED BY ENGINEER OR OWNER.
3. FLANGE FOR PIPING SHALL CONTAIN CONVOLVULATED STAINLESS STEEL, CLASS 150, BACK-UP BONDS. FLANGE PASTERS SHALL BE STAINLESS STEEL.
4. PIPE INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS OF AST-N-2231, PIP-19.1-7-9-7, AND THE MANUFACTURER’S RECOMMENDATIONS.
5. ALL HEADER AND LATERAL PIPING SHALL BE SUBJECT TO AN AIR TEST TO DETECT ANY LEAKS. TESTING SHALL BE CONDUCTED WITH THE PIPE IN THE TRENCH. CONTRACTOR SHALL TEST THE PIPE AT A PSI FOR A PERIOD NOT LESS THAN 1 HOUR. PRESSURE DROP DURING THE TEST SHALL NOT EXCEED TEN (10) PERCENT OF THE TESTED PRESSURE.
6. ALL AIR AND FUMIGATION PIPING SHALL BE SUBJECT TO AN AIR TEST TO DETECT ANY LEAKS. CONTRACTOR SHALL INITIALLY PRESSURIZE THE PIPE TO 4 PSI AND HELD FOR 30 MINUTES. THE AIR IS RAISED TO 40 PSI FOR AN ADDITIONAL 30 MINUTES. PRESSURE DROP DURING THE TEST SHALL NOT EXCEED TEN (10) PERCENT OF THE TESTING PRESSURE. TESTING SHALL BE CONDUCTED WITH THE PIPE IN THE TRENCHES WHEN APPLICABLE.
7. ALL HEADER AND LATERAL PIPING SHALL BE INSTALLED AT A MINIMUM GRADE OF 3 PERCENT, UNLESS OTHERWISE SHOWN ON THE CONSTRUCTION DRAWINGS OR APPROVED BY THE ENGINEER OR OWNER.
WELL SCHEDULE NOTES:

1. BASE GRADE DATA FOR ALL PHASES WAS TAKEN FROM HISTORICAL DRAWINGS.
2. EXISTING LANDFILL SURFACE TOPOGRAPHY SHOWN ON SITE PLAN IS FROM MAY 15, 2019.
3. ACTUAL SURFACE ELEVATIONS FROM SURVEY DATA PROVIDED BY

4. CONTRACTOR AND CGA CONSULTANT SHALL VERIFY ALL FIELD CONDITIONS INCLUDING PRE-CONSTRUCTION WELL SURVEY STAKES AND NOTIFY ENGINEER OF ANY DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND THE WELL SCHEDULE AND CONDITIONS DEFINED IN THE CONTRACT DRAWINGS PRIOR TO DRILLING.
5. FOLLOWING REVIEW OF SURVEY DATA CONTRACTOR SHALL GIVE AUTHORIZATION TO THE OWNER, CGA CONSULTANT AND ENGINEER PRIOR TO DRILLING.
6. NO DRILLING SHALL PROCEED WITHOUT AUTHORIZATION AND ACCEPTANCE INDICATED BY SIGNATURES BELOW.
7. WELL DEPTHS MAY VARY ACCORDING TO CONDITIONS ENCOUNTERED.

CGA CONSULTANT

OWNER

CONTRACTOR

NEW LGF VERTICAL EXTRACTION WELL SCHEDULE

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<th>Northing</th>
<th>Existing</th>
<th>Estimated Ground Elevation (feet)</th>
<th>Base Grade</th>
<th>Borehole Depth (feet)</th>
<th>Perforated Pipe (feet)</th>
<th>Solid Pipe Below Grade (feet)</th>
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TOTALS: 417 387 30 35 387

WELL BORE REINFORCEMENT GRATE DETAIL

NOTES:
1. WELL BORE REINFORCEMENT GRATE SHALL BE 100% WELDED AND CONFIGURED WITH "N" REBAR WITH 6"x6" SPACING. GRATE SHALL HAVE A 12"x12" SQUARE CENTER SPACED CUTOUT FOR WELL CASING PIPE.
2. WELL BORE REINFORCEMENT GRATE SHALL BE INSTALLED A MINIMUM OF 2 FEET BELOW THE EXISTING GROUND SURFACE IMMEDIATELY AFTER COMPLETING THE WELL.
1. Contractor shall take precautions as to not damage the geomembrane or decomposite during pipe installation. Any damage shall be the responsibility of the contractor to repair at the contractor's own expense. This shall be confirmed by the owner or owner's representative.

2. The pipe shall be compacted within 24 hours of being installed.

3. The pipe shall be compacted within 24 hours of being installed.

4. The pipe shall be compacted within 24 hours of being installed.

5. The pipe shall be compacted within 24 hours of being installed.

6. The pipe shall be compacted within 24 hours of being installed.

7. The pipe shall be compacted within 24 hours of being installed.

8. Any additional soil needed for backfill shall be from offsite source.
ACCESS ROAD HEADER/LATERAL PIPE CROSSING DETAIL

NOTES:
1. INSTALL PERMANENT MARKER PIPE TO NOTE EDGES OF ROAD CROSSING.

BOLLARD DETAIL

NOTES:
1. HOPE Welded Tee shall be used to tie-in 2" and larger LFG Lateral to 2" Header and smaller.
2. 1" Min. of Sand will be placed below each Tee. The sand will be installed to extend 3' Min. in each direction of the Tee. The sand will be slightly widened and raised formed by placing to add support to all parts of the Tee. The sand's width must support to add support to all parts of the Tee. 1" Min. of sand will be added above the Tee (1" Min.) being dugout to eliminate all voids.

LATERAL TIE-IN WITH TEE DETAIL

NOTES:
1. CONTRACTOR SHALL REPAIR DAMAGE TO LATERAL WHILE INSTALLING LFG PIPE AT THE CONTRACTORS EXPENSE.
2. AIRLINE AND FORK Lift Piping NOT SHOWN FOR CLARITY.

ANCHOR TRENCH CROSSING DETAIL

NOTES:
1. CONTRACTOR SHALL REPAIR DAMAGE TO LATERAL WHILE INSTALLING LFG PIPE AT THE CONTRACTORS EXPENSE.
2. AIRLINE AND FORK Lift Piping NOT SHOWN FOR CLARITY.
NOTES:
1. 3/8" S.S. BALL VALVE AND GLYCOL FILLED PRESSURE GAUGE (0-200 PSI RANGE)
2. CLEANOUT TYPE SHALL BE INSTALLED WHERE MARKED BY "CUT" ON THE GC's PROPOSED SITE PLAN – DRAWING NO. 15.
3. CONTRACTOR SHALL INSTALL TWO (2) 8-INCH DIAMETER STEEL BOLLARDS ON ROAD SIDE OF THE CLEANOUT FOR PROTECTION (SEE DETAIL NO. 2 ON DRAWING NO. 15). DO NOT PLACE BOLLARDS ON THE ROAD.

DUAL CONTAINMENT FORCEMAIN
PIPE CLEANOUT DETAIL

3" OR 4" HOPE SDR-11 VALUE OR STAINLESS STEEL VALVE

3" X 6" MAX

1/8" FEMALE X 1/4" MALE THREADS, STAINLESS STEEL BALL VALVE, WITH LEVER HANDLE AND PLATED FOR 250 PSI MAX PRESSURE

3/4" X 3/4" S.S. BUSHING

5/8" HOPE REDUCER AND 3" HOPE TO 3/4" TAPER TO THREADED FITTING

GALVANIZED WORK GEAR CLAMP (TYP.) SECEDED AROUND PIPE AND SUPPORT POST

NOTE:
1. TO BE PLACED INSIDE OF LANDFILL

FORCEMAIN BLOW-OFF
VALVE DETAIL

3" OR 4" HOPE SDR-11 VALUE

90° MOLDED ELBOW (TYP.)

LOCATED INSIDE LANDFILL – FASTEN 3/4" X 8 SQUARE MARINE PLYWOOD TO VERTICAL POSTS
SUMP CONSTRUCTION NOTES:

1. CONTRACTOR SHALL PROVIDE ALL COMPONENTS SHOWN AND NOT SHOWN FOR A COMPLETE AND OPERATIONAL SUMP.

1.1. 3/4" ID STAINLESS STEEL PIPE HOSE FOR PIPE SUPPORT AND RETRIEVAL HOSE HOPE AT EACH END SHALL HAVE STAINLESS STEEL PIPE SADDLE, BUT STAINLESS STEEL QUICK LINKS AND FIELD ASSEMBLY STEEL CLAMP (2 FOR EACH END).

1.2. BRASS VACUUM MONITORING PORT WITH JACKETED VACUUM TUBING (1/2" OD MIN.) AND HOSE BARB WITH DUST CAP, TYP, FOR BOTH PIPES.

1.3. PLACE PUMP BOTTOM 6" ABOVE START OF 1" HOLES.

1.4. CONTRACTOR SHALL PROVIDE FOUR (4) STEEL PIPE SADDLERS AROUND SUMP.

2. SUBMIT SHOP DRAWING FOR SUMP PRIOR TO FABRICATION.

3. CONTRACTOR SHALL INSTALL TWO (2) 6-INCH DIAMETER STEEL SADDLERS ON ROAD SIDE OF EACH SUMP FOR PROTECTION (SEE DETAIL NO. 2 ON DRAWING NO. 11). DO NOT PLACE SADDLERS ON THE ROAD.

4. GROUNDWATER ESTIMATED AT 9 FT WILL CONTRACTOR'S RESPONSIBILITY TO DE-WATER DURING CONSTRUCTION.

CONDESATE SUMP CS-6 DETAIL