INTERMEDIATE CLASS III OPERATION PERMIT MODIFICATION APPLICATION GAS MANAGEMENT SYSTEM

VISTA LANDFILL, CLASS III FACILITY
242 WEST KEENE ROAD
APOPKA, FLORIDA 32703

Prepared for:

WASTE MANAGEMENT INC. OF FLORIDA

Prepared by:

CEC

CARLSON ENVIRONMENTAL CONSULTANTS, PC
305 South Main Street
Monroe, North Carolina 28112
(704) 283-9765

September 2012

PERMIT MODIFICATION

GAS MANAGEMENT SYSTEM
VISTA LANDFILL - APOPKA, FLORIDA
PERMIT NO. SO 48-0165969-018

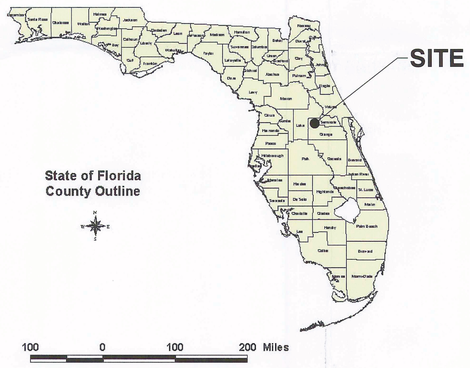
OWNER:

VISTA LANDFILL, LLC
VISTA LANDFILL
242 WEST KEENE ROAD
APOPKA, FLORIDA 32703
(407) 886-2920

OWNER REPRESENTATIVE:
CRAIG PELTON
(954) 984-2000

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	EXISTING LFG SITE PLAN - JANUARY 1, 2012
3	GCCS BUILDOUT PLAN
4	TYPICAL LFG DETAILS



AREA MAP
SCALE: AS SHOWN

ENGINEER:

CARLSON ENVIRONMENTAL CONSULTANTS, PC
305 SOUTH MAIN STREET
MONROE, NORTH CAROLINA 28112
(704) 283-9765

CEC JOB NO. 101.07.07

AUGUST 2012

NOTES:

1. THESE PERMIT MODIFICATION FIGURES ARE FOR PERMITTING PURPOSES ONLY AND ARE NOT SUITABLE FOR CONSTRUCTION.

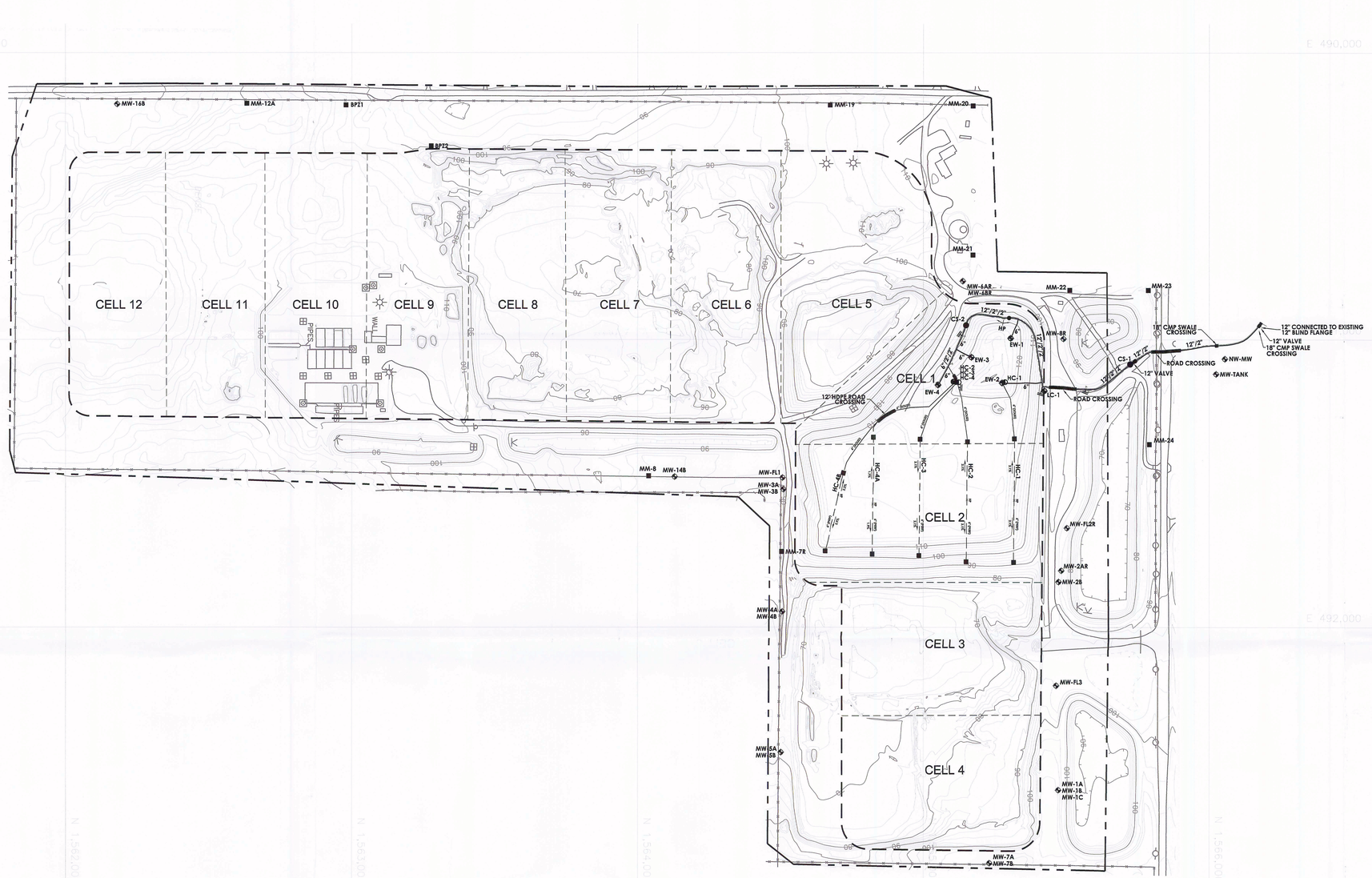
2. PLEASE SEE THE GAS MANAGEMENT PLAN PERMIT MODIFICATION FOR THE VISTA LANDFILL, BY CARLSON ENVIRONMENTAL CONSULTANTS, PC DATED AUGUST 2012 FOR ADDITIONAL INFORMATION.

FOR PERMITTING PURPOSES ONLY
NOT FOR CONSTRUCTION

DRAWING TITLE:	TITLE SHEET
PROJECT:	PERMIT MODIFICATION GAS MANAGEMENT PLAN
SITE:	VISTA LANDFILL, LLC VISTA LANDFILL APOPKA, FLORIDA

CARLSON ENVIRONMENTAL CONSULTANTS, PC
305 SOUTH MAIN STREET, MONROE, NORTH CAROLINA 28112 FLORIDA COA# 27045 (704) 283-9765 FAX (704) 283-9755

CEC PROJECT NO.	101.07.07	DWG.VISTA.MOD.2012.TITLE	REV. 0
SCALE	NO SCALE	FIGURE 1 OF 4	
DATE	AUGUST 2012		



LEGEND

- PROPERTY BOUNDARY
- PERMITTED LIMITS OF WASTE
- 10-FOOT CONTOUR LINE
- 2-FOOT CONTOUR LINE
- CELL BOUNDARY
- GROUNDWATER MONITORING WELL
- METHANE MONITORING DATA
- LFG HEADER/LATERAL
- LFG HORIZONTAL COLLECTOR
- LFG WELLHEAD
- HORIZONTAL COLLECTOR SUMP

NOTES

1. AERIAL TOPOGRAPHY COMPILED BY PICKETT AND ASSOCIATES, INC. FROM AERIAL PHOTOGRAPH FLOWN ON JANUARY 1, 2012.

2. THIS FIGURE IS FOR PERMITTING PURPOSES AND IS NOT INTENDED FOR CONSTRUCTION.

SETH A. NUNES LICENSED No. 69457 STATE OF FLORIDA PROFESSIONAL ENGINEER

FOR PERMITTING PURPOSES ONLY
NOT FOR CONSTRUCTION

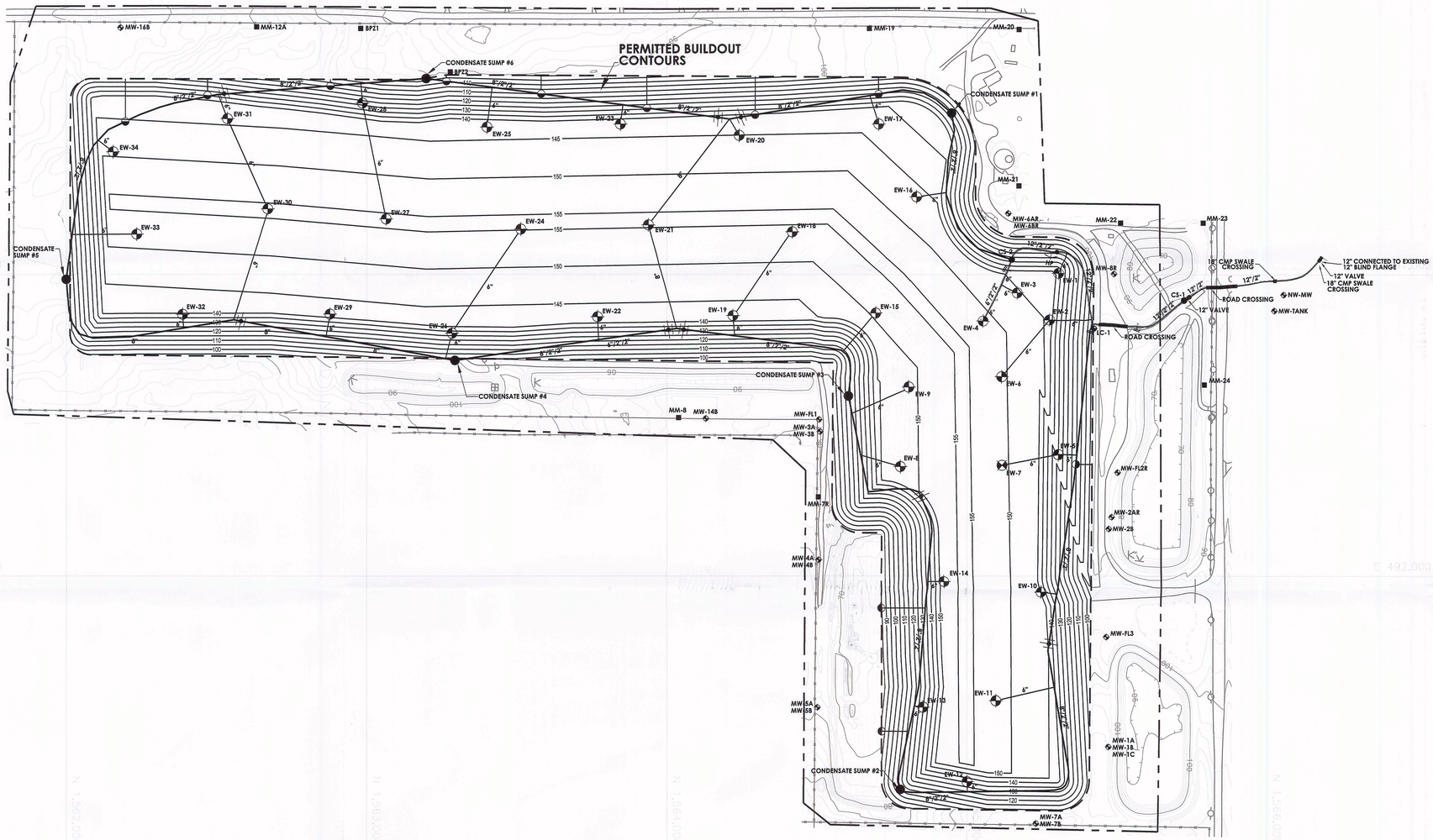
DRAWING TITLE: **EXISTING LFG SITE PLAN**

PROJECT: **PERMIT MODIFICATION**
GAS MANAGEMENT PLAN

SITE: VISTA LANDFILL, LLC
VISTA LANDFILL
APOPKA, FLORIDA

CARLSON ENVIRONMENTAL CONSULTANTS, PC
305 SOUTH MAIN STREET
MONROE, NORTH CAROLINA 28112 FLORIDA COA# 27045
(704) 283-9765
FAX (704) 283-9755

CEC PROJECT NO.	101.07.07	DWG. VISTA.MOD.2012.SITE	REV. 0
SCALE	1" = 200'	FIGURE 2 OF 4	
DATE	AUGUST 2012		



LEGEND

- PROPERTY BOUNDARY
- PERMITTED LIMITS OF WASTE
- 10-FOOT CONTOUR LINE
- 2-FOOT CONTOUR LINE
- FINAL CONTOURS
- GROUNDWATER MONITORING WELL
- METHANE MONITORING DATA
- BUILDOUT LFG HEADER/LATERAL
- BUILDOUT LFG WELLHEAD

NOTES

1. AERIAL TOPOGRAPHY COMPILED BY PICKETT AND ASSOCIATES, INC. FROM AERIAL PHOTOGRAPH FLOWN ON JANUARY 1, 2012.
2. FINAL GRADING PLAN AND CONTOURS PROVIDED BY APPLIED TECHNOLOGY & MANAGEMENT, INC. IN MAY 2012.
3. THIS FIGURE IS FOR PERMITTING PURPOSES AND IS NOT FOR CONSTRUCTION.

SETH A. NUNES LICENSE NO. 69457 STATE OF FLORIDA PROFESSIONAL ENGINEER

FOR PERMITTING PURPOSES ONLY
NOT FOR CONSTRUCTION

DRAWING TITLE: **LFG FINAL BUILDOUT PLAN**

PROJECT: **PERMIT MODIFICATION**
GAS MANAGEMENT PLAN

SITE: VISTA LANDFILL, LLC
VISTA LANDFILL
APOPKA, FLORIDA

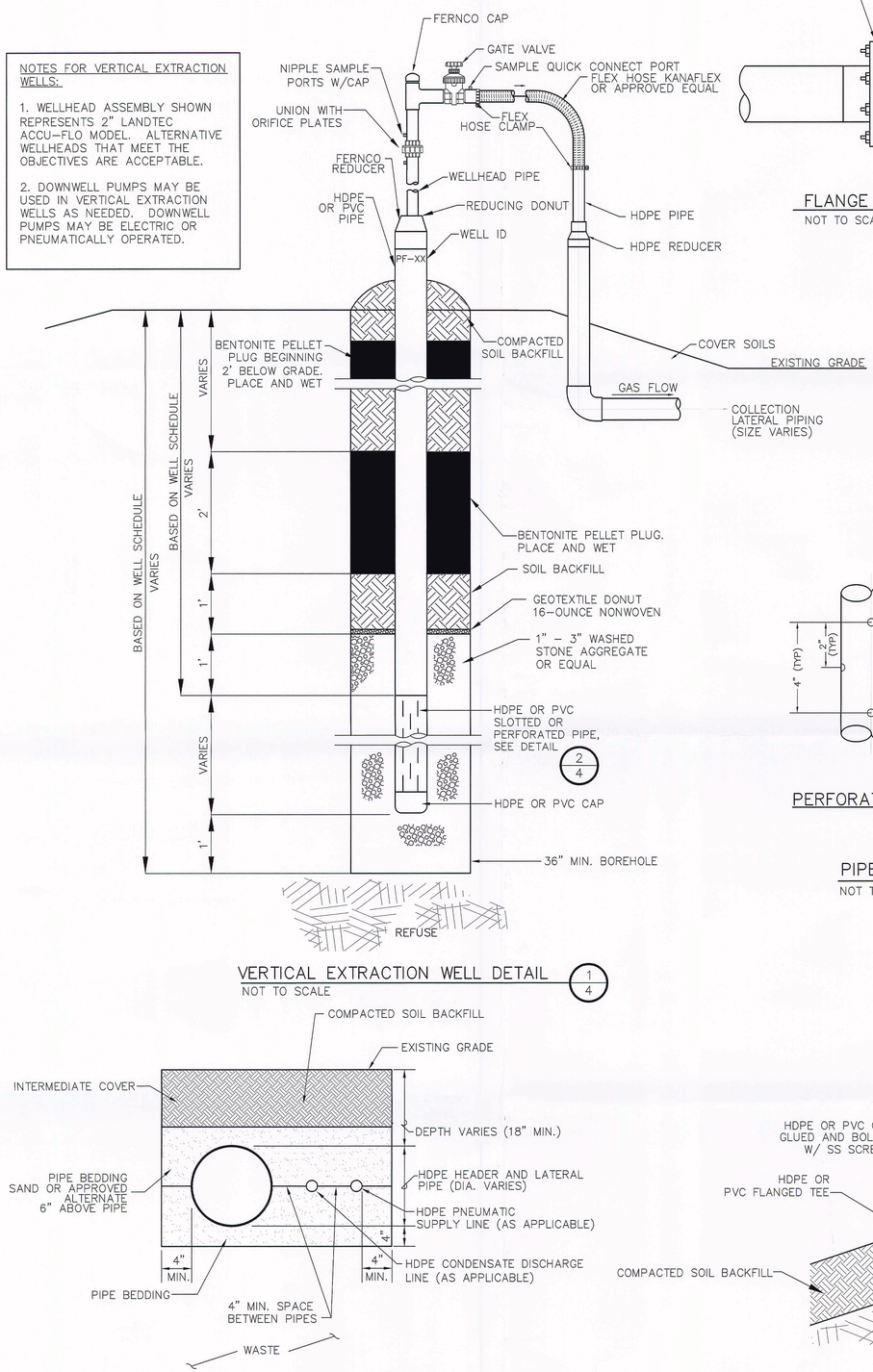
CARLSON ENVIRONMENTAL CONSULTANTS, PC
305 SOUTH MAIN STREET
MONROE, NORTH CAROLINA 28112
FLORIDA COA# 27045
(704) 283-9765
FAX (704) 283-9755

CEC PROJECT NO.	101.07.07	DWG. VISTA.MOD.2012.BUILD	REV. 0
SCALE	1" = 200'	FIGURE 3 OF 4	
DATE	AUGUST 2012		

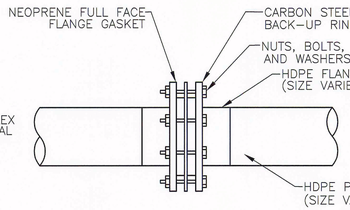
NOTES FOR VERTICAL EXTRACTION WELLS:

1. WELLHEAD ASSEMBLY SHOWN REPRESENTS 2" LANDTEC ACCU-FLO MODEL. ALTERNATIVE WELLHEADS THAT MEET THE OBJECTIVES ARE ACCEPTABLE.

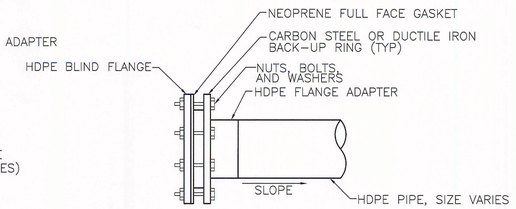
2. DOWNWELL PUMPS MAY BE USED IN VERTICAL EXTRACTION WELLS AS NEEDED. DOWNWELL PUMPS MAY BE ELECTRIC OR PNEUMATICALLY OPERATED.



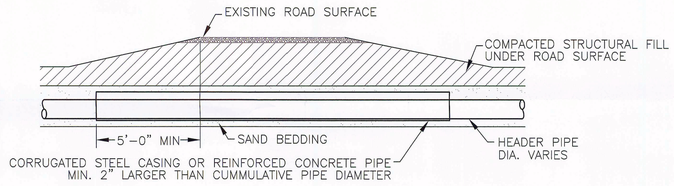
VERTICAL EXTRACTION WELL DETAIL 1/4
NOT TO SCALE



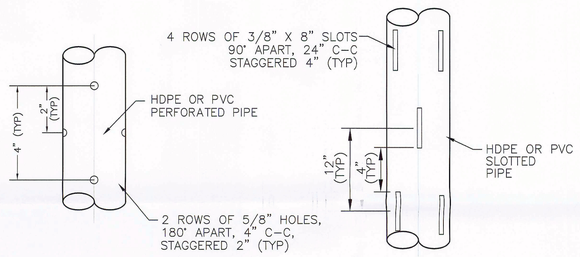
FLANGE CONNECTION 3/4
NOT TO SCALE



HEADER PIPE BLIND FLANGE 4/4
NOT TO SCALE



ROAD CROSSING DETAIL 5/4
NOT TO SCALE

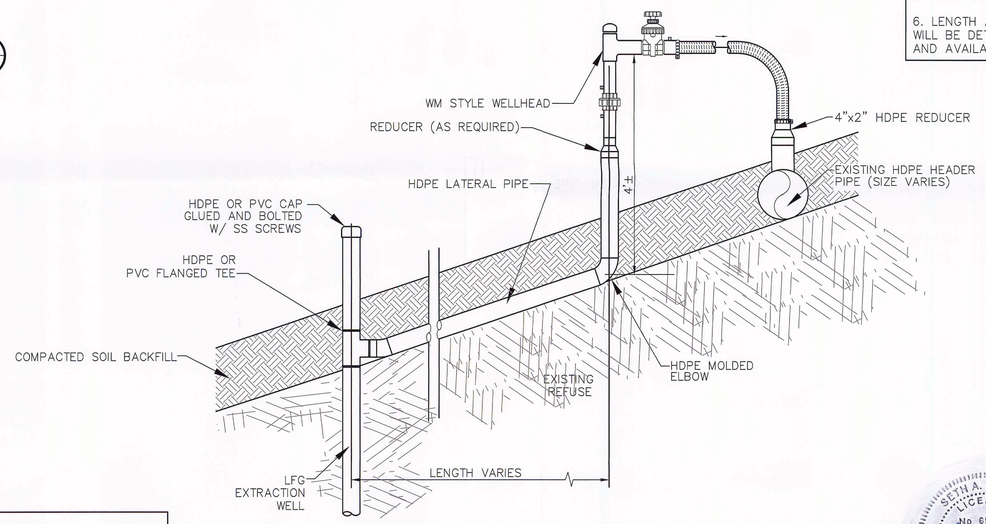


PERFORATED PIPE

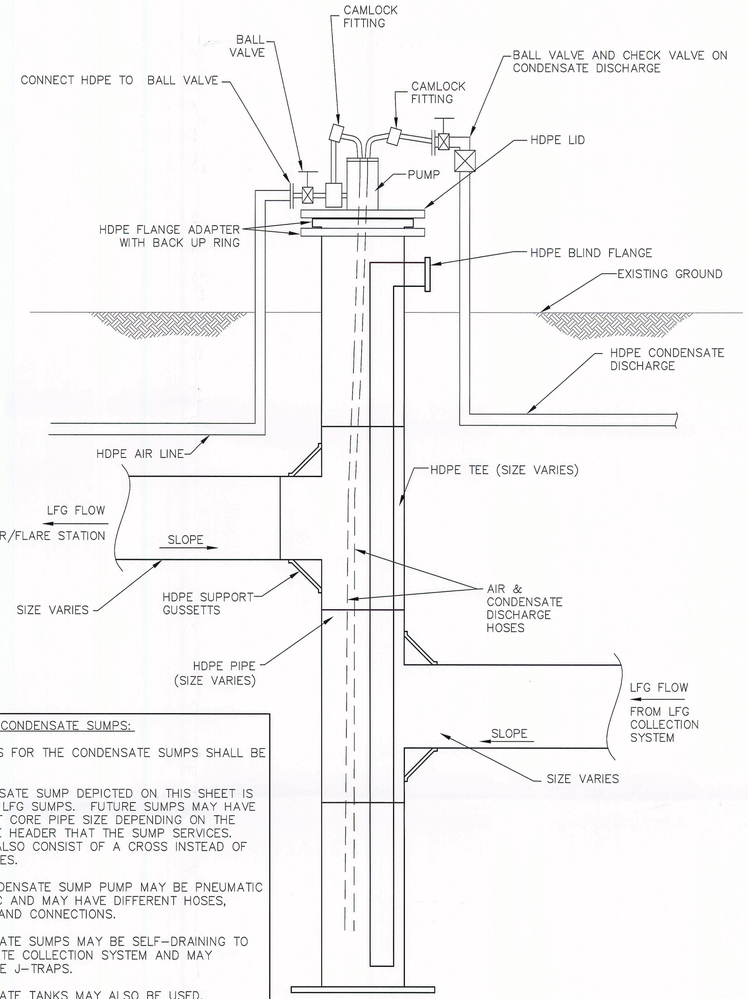
SLOTTED PIPE

PIPE FOR VERTICAL WELLS DETAIL 2/4
NOT TO SCALE

LFG HEADER/LATERAL TRENCH DETAIL 6/4
NO SCALE



DOWNSLOPE EXTRACTION WELL DETAIL 7/4
NOT TO SCALE



NOTES FOR CONDENSATE SUMPS:

1. ALL PIPES FOR THE CONDENSATE SUMPS SHALL BE HDPE.

2. CONDENSATE SUMP DEPICTED ON THIS SHEET IS TYPICAL OF LFG SUMPS. FUTURE SUMPS MAY HAVE A DIFFERENT CORE PIPE SIZE DEPENDING ON THE SIZE OF THE HEADER THAT THE SUMP SERVICES. THEY MAY ALSO CONSIST OF A CROSS INSTEAD OF STACKED TEES.

3. THE CONDENSATE SUMP PUMP MAY BE PNEUMATIC OR ELECTRIC AND MAY HAVE DIFFERENT HOSES, CONTROLS, AND CONNECTIONS.

4. CONDENSATE SUMPS MAY BE SELF-DRAINING TO THE LEACHATE COLLECTION SYSTEM AND MAY INCORPORATE J-TRAPS.

5. CONDENSATE TANKS MAY ALSO BE USED.

6. LENGTH AND DEPTH OF THE CONDENSATE SUMP WILL BE DETERMINED BASED ON THE DESIRED VACUUM AND AVAILABLE REFUSE DEPTH.

CONDENSATE SUMP DETAIL 8/4
NO SCALE

NOTES:

1. THE DETAILS SHOWN ON THIS SHEET ARE TYPICAL LANDFILL GAS COMPONENTS THAT MAY BE USED IN THE ACTUAL LFG COLLECTION SYSTEM AT THE VISTA LANDFILL. THE OWNER MAY ALTER THE DETAILS SHOWN HERE AS NEEDED TO SUIT ACTUAL FIELD CONDITIONS.

FOR PERMITTING PURPOSES ONLY
NOT FOR CONSTRUCTION

SETH A. NUNES LICENSE No 69457 STATE OF FLORIDA PROFESSIONAL ENGINEER

DRAWING TITLE: TYPICAL LFG DETAILS

PROJECT: PERMIT MODIFICATION
GAS MANAGEMENT PLAN

SITE: VISTA LANDFILL, LLC
VISTA LANDFILL
APOPKA, FLORIDA

CARLSON ENVIRONMENTAL CONSULTANTS, PC
305 SOUTH MAIN STREET
MONROE, NORTH CAROLINA 28112
FLORIDA COA# 27045
(704) 283-9765
FAX (704) 283-9755

CEC PROJECT NO.	101.07.07	DWG. VISTA.MOD.2012.DET	REV. 0
SCALE	NO SCALE	FIGURE 4 OF 4	
DATE	AUGUST 2012		