

# MANATEE COUNTY UTILITIES DEPARTMENT

## 2019 STAGE II, PHASE I GCCS EXPANSION LENA ROAD LANDFILL

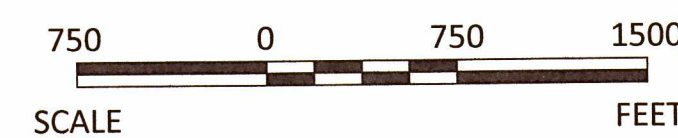
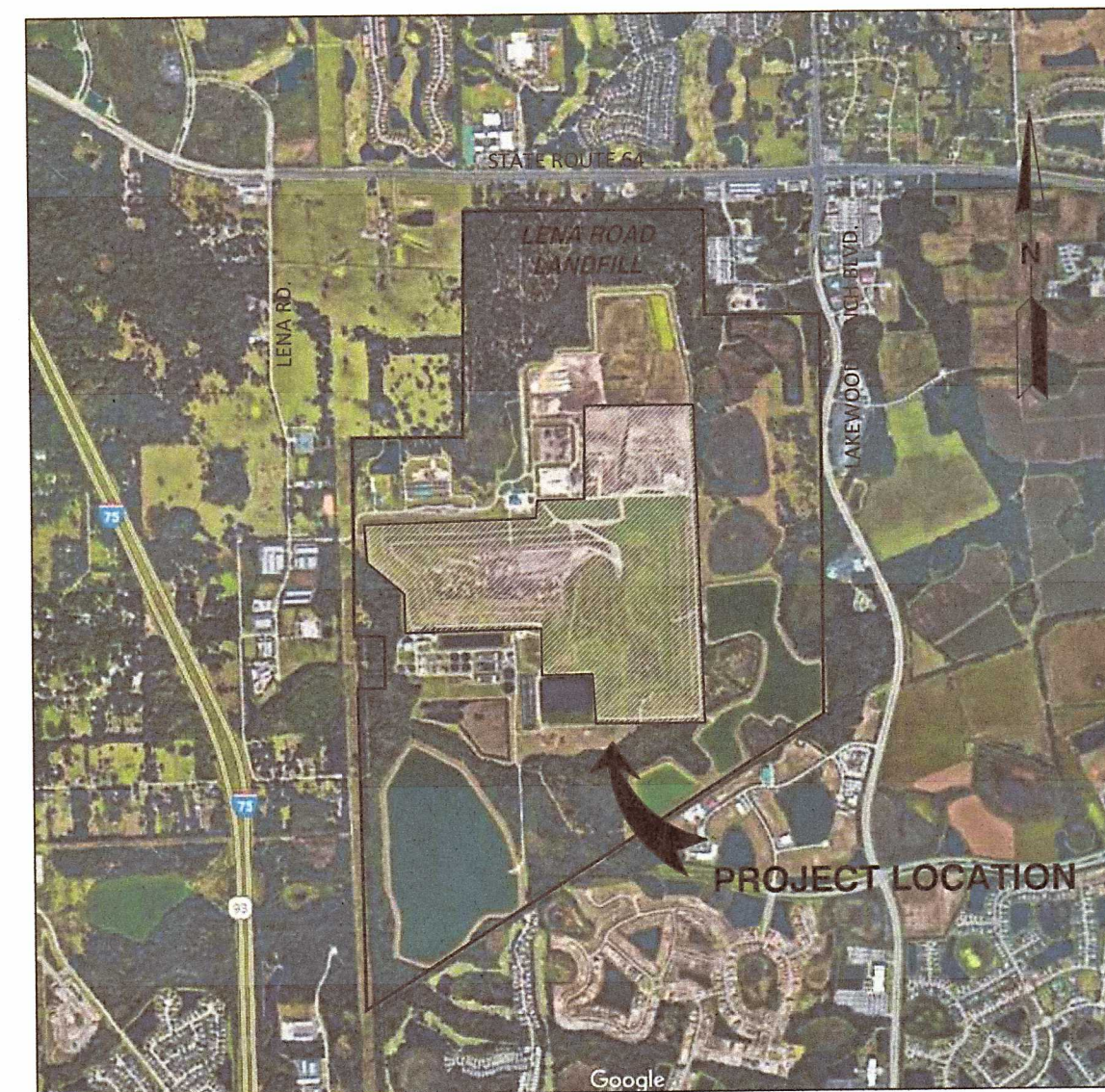
MANATEE COUNTY, FLORIDA

DECEMBER 2019



**PREPARED FOR:**

MANATEE COUNTY UTILITIES DEPARTMENT  
3333 LENA ROAD  
BRADENTON, FLORIDA



LOCATION MAP

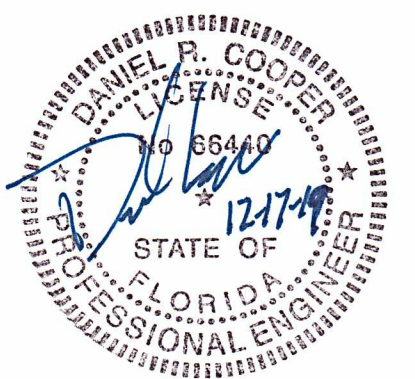
**SCS ENGINEERS**  
STEARNS, CONRAD AND SCHMIDT  
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3922 COCONUT PALM DRIVE, SUITE 102  
TAMPA, FL 33619  
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FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892  
WWW.SCSENGINEERS.COM  
SCS PROJECT NO. 09217088.12

**INDEX OF DRAWINGS**

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WHEN DRAWINGS ARE REDUCED IN SIZE FROM ORIGINAL 24" X 36", SCALING WILL NOT BE ACCURATE.

**ISSUED FOR BID**  
DATE: 12/17/2019



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



## GENERAL NOTES AND SYMBOLS

**SPECIFIC NOTES:**

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

**EROSION AND SEDIMENT CONTROL:**

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

**EARTHWORK:**

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

**UTILITIES:**

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

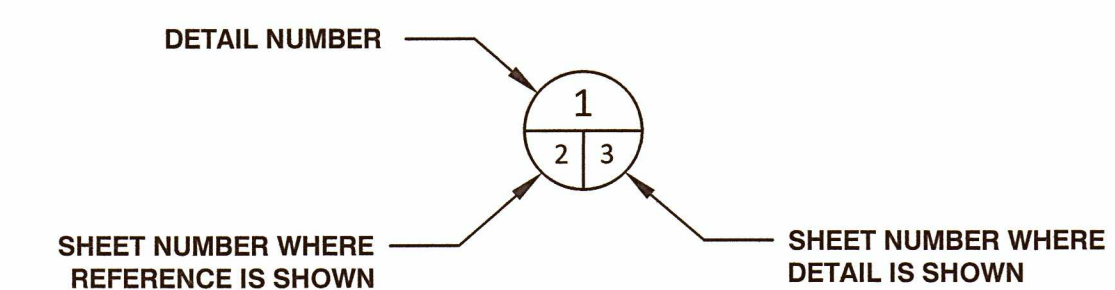
**GENERAL NOTES:**

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

### LEGEND:

	PROPOSED 18" HEADER PIPE
	PROPOSED 8" LATERAL PIPE
	PROPOSED AIR SUPPLY LINE
	PROPOSED DEWATERING DISCHARGE LINE
	PROPOSED CONDENSATE SUMP
	PROPOSED DUAL DEWATERING DISCHARGE LINE CLEANOUT
	PROPOSED SINGLE DEWATERING DISCHARGE LINE CLEANOUT
	PROPOSED PIPE STUB-UP FOR AIR AND/OR DEWATERING DISCHARGE LINES
	PROPOSED HEADER ISOLATION VALVE
	PROPOSED AIR LINE ISOLATION VALVE
	PROPOSED DEWATERING DISCHARGE LINE ISOLATION VALVE
	PROPOSED VACUUM ACCESS RISER
	PROPOSED VERTICAL EXTRACTION WELL
	PROPOSED HORIZONTAL COLLECTOR WELL
	PROPOSED PUMP IN EXISTING VERTICAL EXTRACTION WELL
	PROPOSED ROAD CROSSING
	EXISTING VERTICAL EXTRACTION WELL
	EXISTING BELOW GRADE HEADER/LATERAL PIPE
	EXISTING HEADER ISOLATION VALVE
	EXISTING MANHOLE
	EXISTING CONDENSATE SUMP
	EXISTING LEACHATE COLLECTION PIPE
	EXISTING VACUUM ACCESS RISER
	EXISTING HIGH POINT
	PROPOSED ROAD CROSSING

### DETAIL DESIGNATION



CHK. BY	DESCRIPTION	DATE	REV

SHEET TITLE <b>GENERAL NOTES AND SYMBOLS</b>
PROJECT TITLE <b>STAGE II, PHASE I GCSS SYSTEM EXPANSION</b>

CLIENT <b>MANATEE COUNTY SOLID WASTE DIVISION</b>
--

<b>SCS ENGINEERS</b> STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS 109 TAMPA, FL 33619 PH (813) 821-0060 FAX NO. (813) 824-9757 FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004882 DATE: 09/21/2009 SWT DRA. REV. CAR CHK. BY: SWT APP. BY: CAR DRC
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CADD FILE: 02 NOTES AND SYMBOLS LENA ROAD
DATE: DECEMBER 2019
SCALE: AS SHOWN
DRAWING NO. <b>02</b>
SHEET <b>02</b> of <b>17</b>





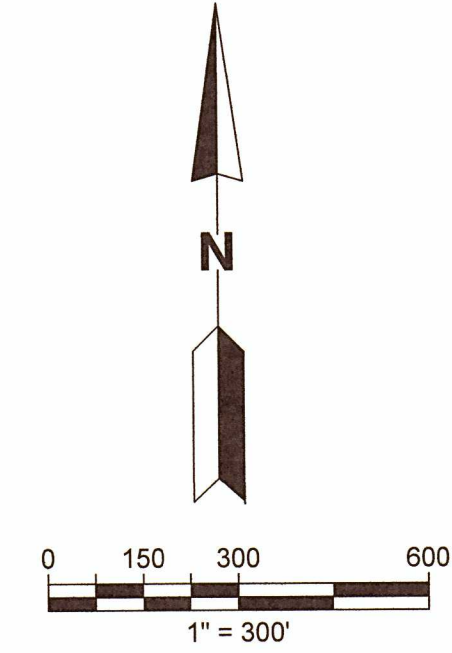
REV	DATE	DESCRIPTION	CHK BY
1			
2			
3			
4			
5			

SHEET TITLE	EXISTING OVERALL SITE PLAN
PROJECT TITLE	STAGE II, PHASE I GCCS SYSTEM EXPANSION

CLIENT	MANATEE COUNTY SOLID WASTE DIVISION
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SCS ENGINEERS STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS 3822 COCONUT PALM DRIVE, SUITE 102, TAMPA, FL 33619 PH (813) 641-0880 FAX (813) 683-9774 FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892	DATE: DECEMBER 12, 2019
PROJECT NO. 17088.12	SCALE: AS SHOWN
DRAWN BY: SWT	CHECKED BY: SWT
APP. BY: CAR	DATE: DECEMBER 12, 2019
DATE: DECEMBER 12, 2019	SCALE: AS SHOWN

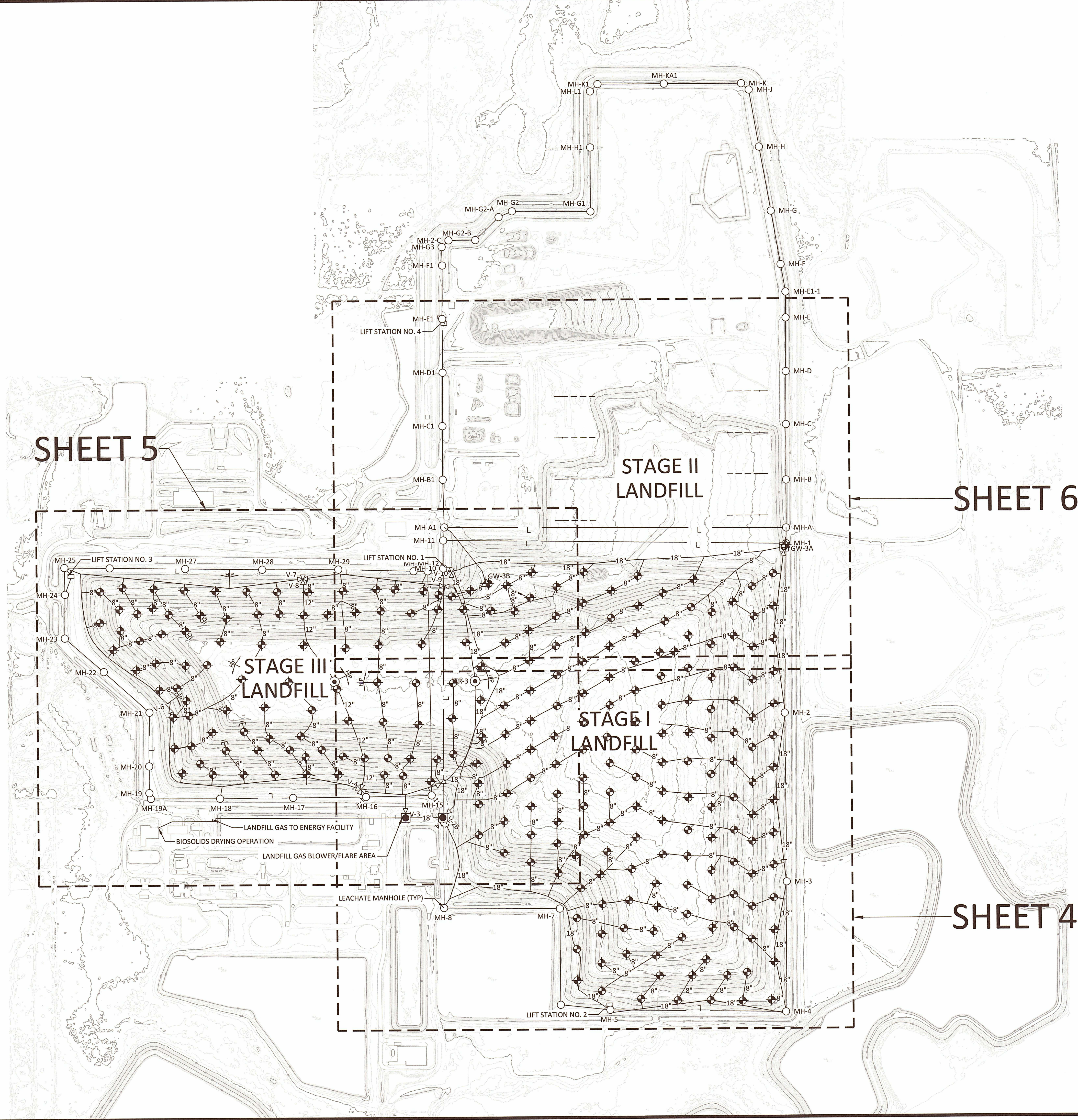
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DATE:	DECEMBER 2019
SCALE:	AS SHOWN
DRAWING NO.	03
SHEET	03 of 17



**LEGEND:**

- EXISTING VERTICAL EXTRACTION WELL
- EXISTING BELOW GRADE HEADER/LATERAL PIPE
- EXISTING HORIZONTAL COLLECTOR PERFORATED PIPE
- EXISTING HEADER ISOLATION VALVE
- EXISTING MANHOLE
- EXISTING CONDENSATE SUMP
- EXISTING LEACHATE COLLECTION PIPE
- EXISTING VACUUM ACCESS RISER
- EXISTING HIGH POINT
- EXISTING ROAD CROSSING

- NOTES:**
- AERIAL PHOTOGRAPHY PERFORMED BY PICKETT AND ASSOCIATES, DATED FEBRUARY 14, 2019.
  - NORTH, THE GRID, AND THE COORDINATES SHOWN HEREON ARE REFERENCED TO THE WEST ZONE OF THE FLORIDA STATE PLANE COORDINATE SYSTEM, NAD 83, 1990 ADJUSTMENT.
  - AS-BUILT STAGE I GAS SYSTEM INFORMATION PROVIDED BY PBS&J DRAWING ENTITLED: "RECORD DRAWINGS, STAGE III PHASE II LANDFILL GAS COLLECTION SYSTEM, DECEMBER 5, 2011" AND "AS-BUILT SURVEY FOR LENA ROAD - STAGE III LANDFILL GAS COLLECTION SYSTEM, MARCH 16, 2009" BY SURVTECH SOLUTIONS.
  - AS-BUILT STAGE III GAS SYSTEM INFORMATION PROVIDED BY HYATT SURVEY SERVICES DRAWING ENTITLED: "AS-BUILT SURVEY 2018 PHASE III GCCS EXPANSION STAGE III", DATED AUGUST 14, 2018.
  - STAGE II HORIZONTAL COLLECTORS INSTALLED DURING OCTOBER 2019 HORIZONTAL COLLECTOR GCCS EXPANSION.



SHEET 5

STAGE II LANDFILL

SHEET 6

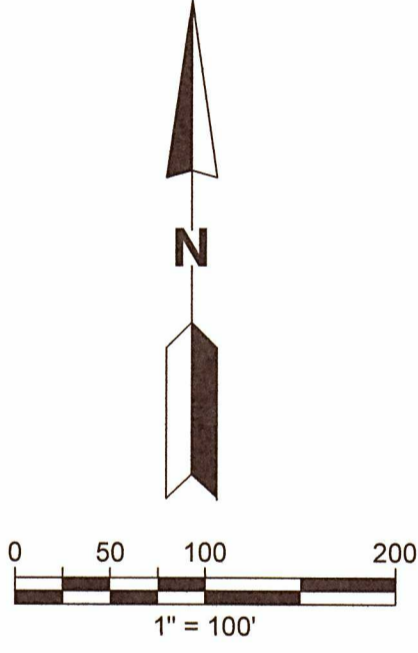
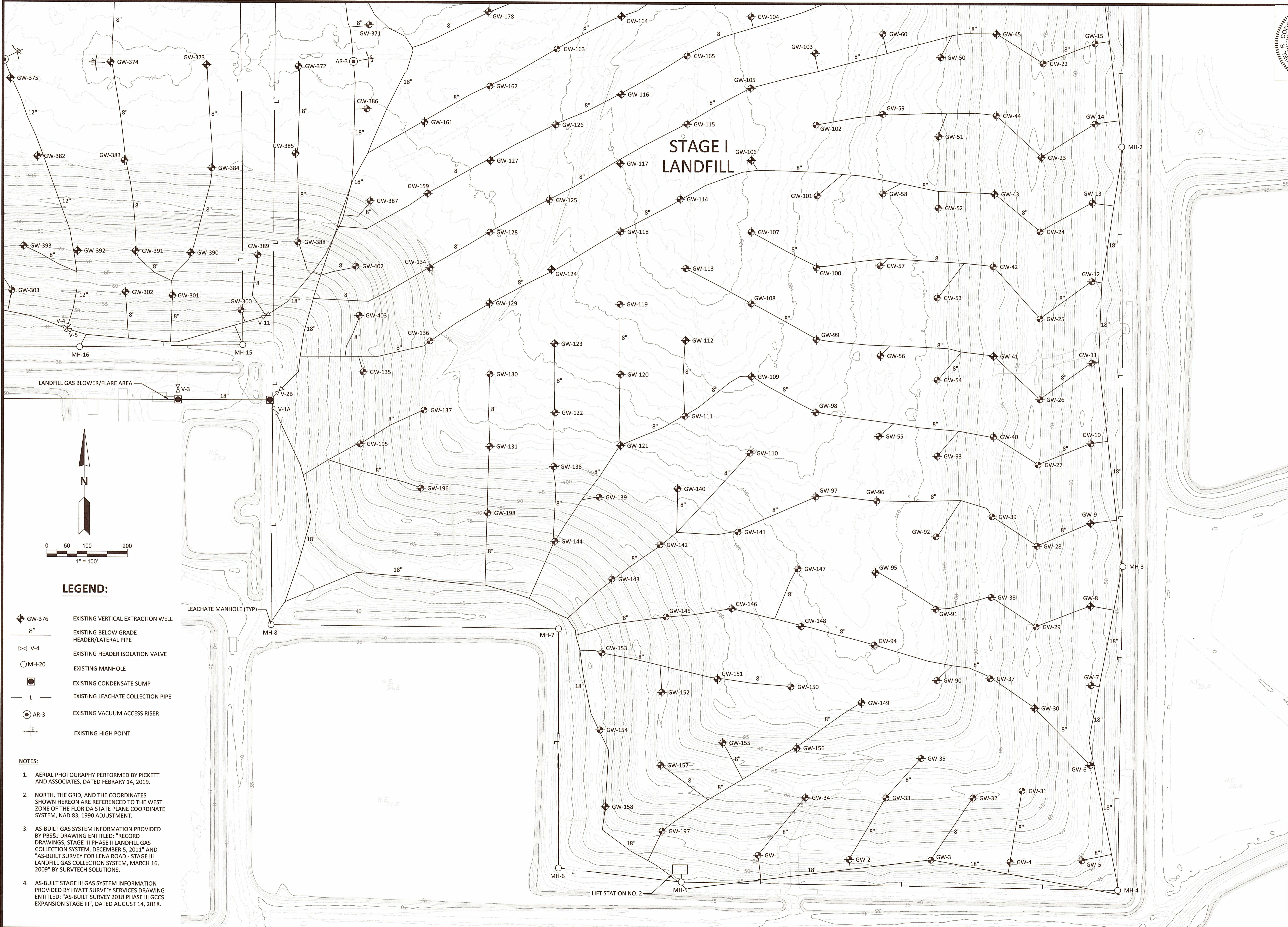
STAGE III LANDFILL

STAGE I LANDFILL

SHEET 4



F:\PROJECT\09217088.12\Task 2 - GCCS Design Services\Drawings\Engineering Drawings\04 EXISTING Leno Road - STAGE I.dwg Dec 17, 2019 - 3:45pm Layout Name: 04 EXISTING SITE CONDITIONS - STAGE I By: 4430swt



**LEGEND:**

- ⊕ GW-376 EXISTING VERTICAL EXTRACTION WELL
- 8" EXISTING BELOW GRADE HEADER/LATERAL PIPE
- ⊗ V-4 EXISTING HEADER ISOLATION VALVE
- MH-20 EXISTING MANHOLE
- EXISTING CONDENSATE SUMP
- L — EXISTING LEACHATE COLLECTION PIPE
- ⊙ AR-3 EXISTING VACUUM ACCESS RISER
- ⊕ EXISTING HIGH POINT

- NOTES:**
- AERIAL PHOTOGRAPHY PERFORMED BY PICKETT AND ASSOCIATES, DATED FEBRUARY 14, 2019.
  - NORTH, THE GRID, AND THE COORDINATES SHOWN HEREON ARE REFERENCED TO THE WEST ZONE OF THE FLORIDA STATE PLANE COORDINATE SYSTEM, NAD 83, 1990 ADJUSTMENT.
  - AS-BUILT GAS SYSTEM INFORMATION PROVIDED BY PBS&J DRAWING ENTITLED: "RECORD DRAWINGS, STAGE III PHASE II LANDFILL GAS COLLECTION SYSTEM, DECEMBER 5, 2011" AND "AS-BUILT SURVEY FOR LENO ROAD - STAGE III LANDFILL GAS COLLECTION SYSTEM, MARCH 16, 2009" BY SURVTECH SOLUTIONS.
  - AS-BUILT STAGE III GAS SYSTEM INFORMATION PROVIDED BY HYATT SURVEY SERVICES DRAWING ENTITLED: "AS-BUILT SURVEY 2018 PHASE III GCCS EXPANSION STAGE III", DATED AUGUST 14, 2018.

REV	DATE	DESCRIPTION	CHK BY

SHEET TITLE	EXISTING SITE PLAN - STAGE I
PROJECT TITLE	STAGE II, PHASE I GCCS SYSTEM EXPANSION

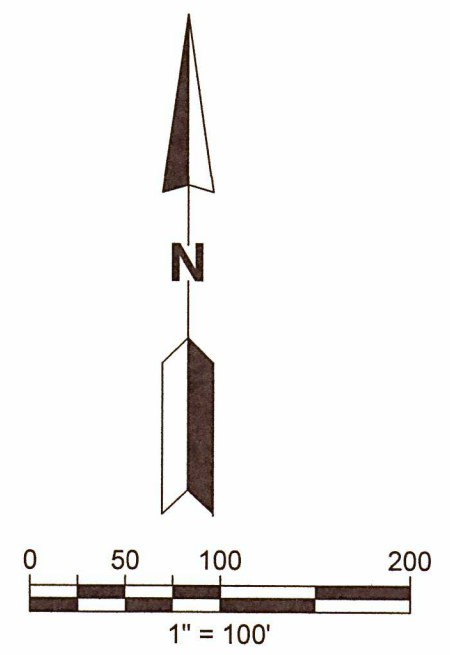
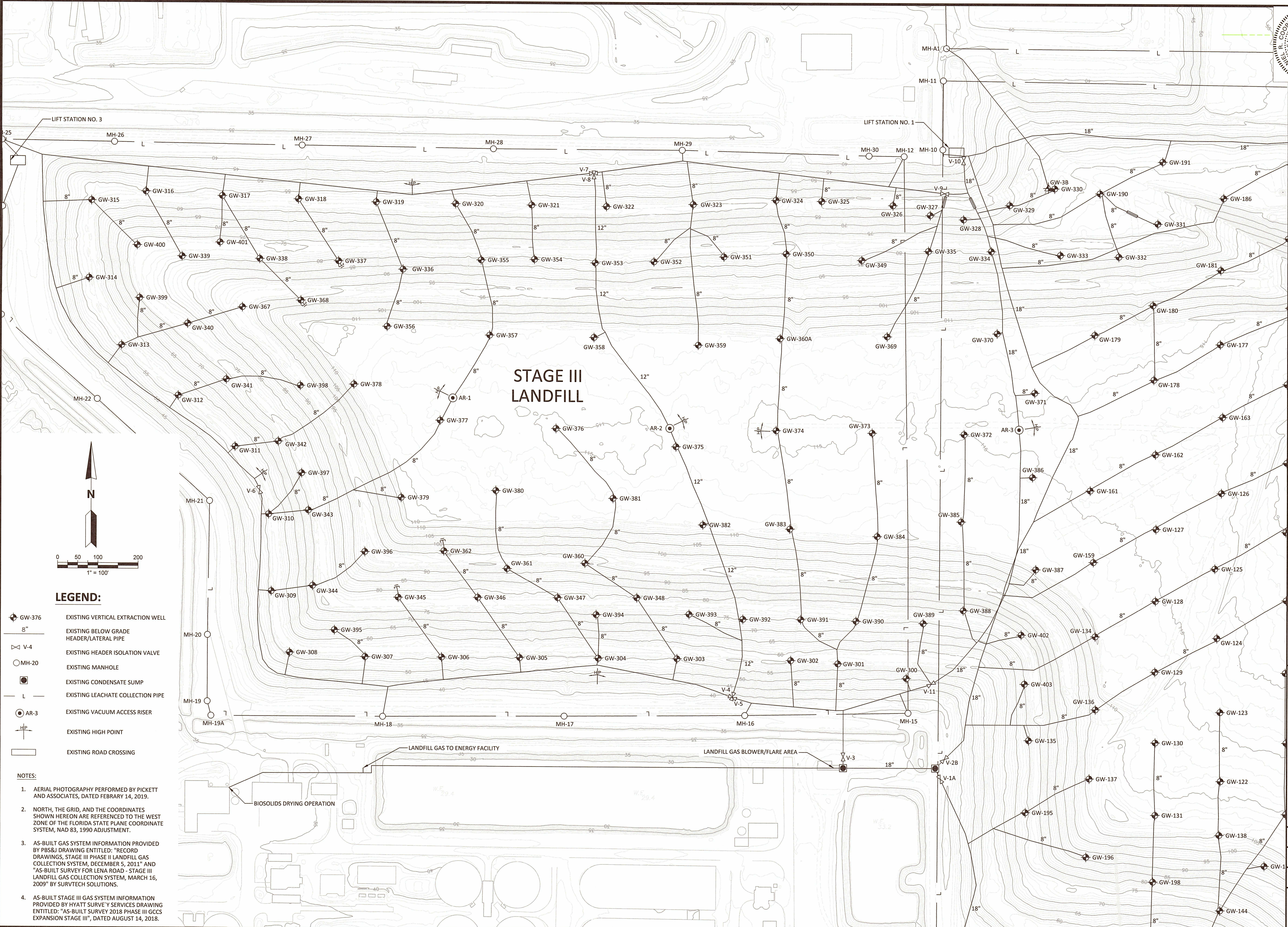
CLIENT	MANATEE COUNTY SOLID WASTE DIVISION
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SCS ENGINEERS STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS 3922 COCONUT PALM DRIVE, SUITE 102, TAMPA, FL 33619 PH (813) 621-0080 FAX NO. (813) 623-6757 FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892	DRAWN BY: SWT CHECKED BY: DRC DATE: 09/21/2018	APP. BY: CAR DATE: 09/21/2018
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CADD FILE:	04 EXISTING LENO ROAD - STAGE I
DATE:	DECEMBER 2019
SCALE:	AS SHOWN
DRAWING NO.	04
SHEET	04 of 17



F:\PROJECT\09217088.12\Task 2 - GCCS Design Services\Drawings\05 EXISTING Leno Road - 3:45pm Layout Name: 05 EXISTING SITE CONDITIONS - STAGE III By: 4430skwt



**LEGEND:**

- ⊕ GW-376 EXISTING VERTICAL EXTRACTION WELL
- 8" EXISTING BELOW GRADE HEADER/LATERAL PIPE
- V-4 EXISTING HEADER ISOLATION VALVE
- MH-20 EXISTING MANHOLE
- ⊕ EXISTING CONDENSATE SUMP
- L EXISTING LEACHATE COLLECTION PIPE
- ⊕ AR-3 EXISTING VACUUM ACCESS RISER
- HP EXISTING HIGH POINT
- ▭ EXISTING ROAD CROSSING

- NOTES:**
1. AERIAL PHOTOGRAPHY PERFORMED BY PICKETT AND ASSOCIATES, DATED FEBRUARY 14, 2019.
  2. NORTH, THE GRID, AND THE COORDINATES SHOWN HEREON ARE REFERENCED TO THE WEST ZONE OF THE FLORIDA STATE PLANE COORDINATE SYSTEM, NAD 83, 1990 ADJUSTMENT.
  3. AS-BUILT GAS SYSTEM INFORMATION PROVIDED BY PBS&J DRAWING ENTITLED: "RECORD DRAWINGS, STAGE III PHASE II LANDFILL GAS COLLECTION SYSTEM, DECEMBER 5, 2011" AND "AS-BUILT SURVEY FOR LENO ROAD - STAGE III LANDFILL GAS COLLECTION SYSTEM, MARCH 16, 2009" BY SURVTECH SOLUTIONS.
  4. AS-BUILT STAGE III GAS SYSTEM INFORMATION PROVIDED BY HYATT SURVEY SERVICES DRAWING ENTITLED: "AS-BUILT SURVEY 2018 PHASE III GCCS EXPANSION STAGE III", DATED AUGUST 14, 2018.

CHK. BY	DESCRIPTION
REV	DATE

SHEET TITLE	<b>EXISTING SITE PLAN - STAGE III</b>
PROJECT TITLE	<b>STAGE II, PHASE I GCCS SYSTEM EXPANSION</b>

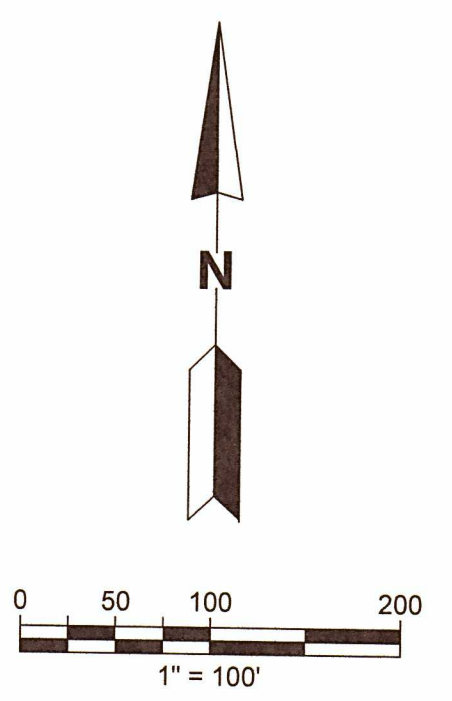
CLIENT	<b>MANATEE COUNTY SOLID WASTE DIVISION</b>
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DESIGNED BY	SWT	DATE	09/21/2019
DRAWN BY	SWT	CHECKED BY	SWT
SCALE	AS SHOWN	DATE	DECEMBER 2019
CADD FILE:	05 EXISTING LENO ROAD - STAGE III	DRAWING NO.	<b>05</b>
PROJECT:	05 EXISTING LENO ROAD, SUITE 102, TAMPA, FL 33619	SHEET	<b>05</b> of 17

**SCS ENGINEERS**  
**SCS ENGINEERS AND SCHMIDT**  
 CONSULTING ENGINEERS  
 3822 COCONUT PALM DRIVE, SUITE 102, TAMPA, FL 33619  
 PH (813) 961-0800 FAX NO. (813) 963-9757  
 FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892



F:\PROJECT\09217088.12\Task 2 - GCCS Design Services\Drawings\Engineering Drawings\06 EXISTING LENA ROAD - STAGE II.dwg Dec 17, 2019 - 3:45pm Layout Name: 06 EXISTING SITE CONDITIONS - STAGE II By: 4430skwt

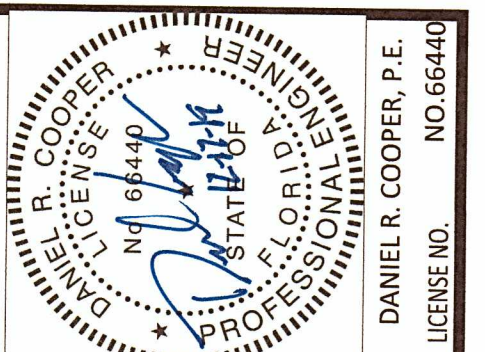
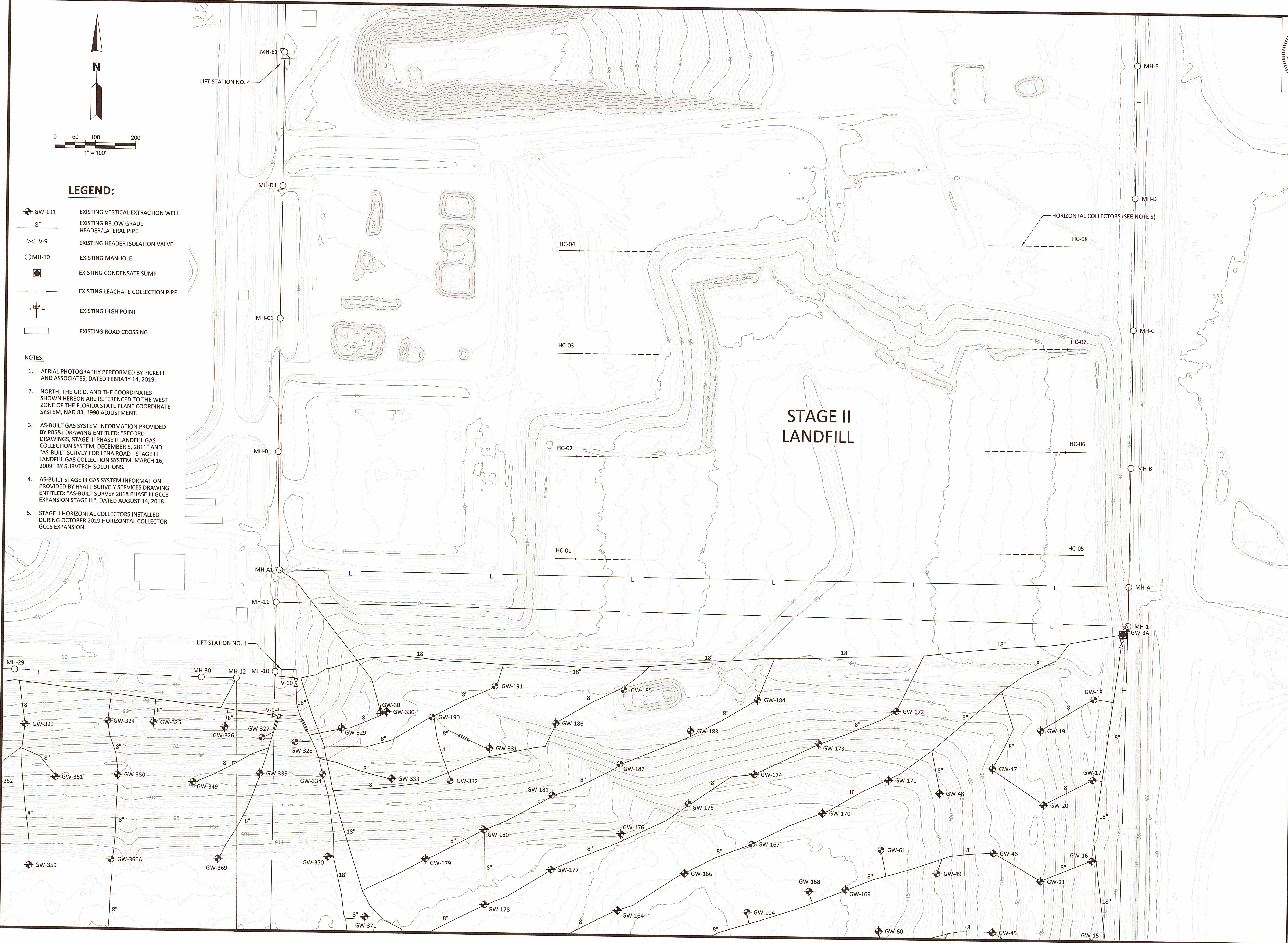


**LEGEND:**

- ◆ GW-191 EXISTING VERTICAL EXTRACTION WELL
- 8" EXISTING BELOW GRADE HEADER/LATERAL PIPE
- V-9 EXISTING HEADER ISOLATION VALVE
- MH-10 EXISTING MANHOLE
- EXISTING CONDENSATE SUMP
- L EXISTING LEACHATE COLLECTION PIPE
- HP EXISTING HIGH POINT
- ▭ EXISTING ROAD CROSSING

**NOTES:**

1. AERIAL PHOTOGRAPHY PERFORMED BY PICKETT AND ASSOCIATES, DATED FEBRUARY 14, 2019.
2. NORTH, THE GRID, AND THE COORDINATES SHOWN HEREON ARE REFERENCED TO THE WEST ZONE OF THE FLORIDA STATE PLANE COORDINATE SYSTEM, NAD 83, 1990 ADJUSTMENT.
3. AS-BUILT GAS SYSTEM INFORMATION PROVIDED BY PBS&J DRAWING ENTITLED: "RECORD DRAWINGS, STAGE III PHASE II LANDFILL GAS COLLECTION SYSTEM, DECEMBER 5, 2011" AND "AS-BUILT SURVEY FOR LENA ROAD - STAGE III LANDFILL GAS COLLECTION SYSTEM, MARCH 16, 2009" BY SURVTECH SOLUTIONS.
4. AS-BUILT STAGE III GAS SYSTEM INFORMATION PROVIDED BY HYATT SURVEY SERVICES DRAWING ENTITLED: "AS-BUILT SURVEY 2018 PHASE III GCCS EXPANSION STAGE III", DATED AUGUST 14, 2018.
5. STAGE II HORIZONTAL COLLECTORS INSTALLED DURING OCTOBER 2019 HORIZONTAL COLLECTOR GCCS EXPANSION.



REV	DATE	DESCRIPTION	CHK. BY
1			
2			
3			
4			

SHEET TITLE	<b>EXISTING SITE PLAN - STAGE II</b>
PROJECT TITLE	<b>STAGE II, PHASE I GCCS SYSTEM EXPANSION</b>

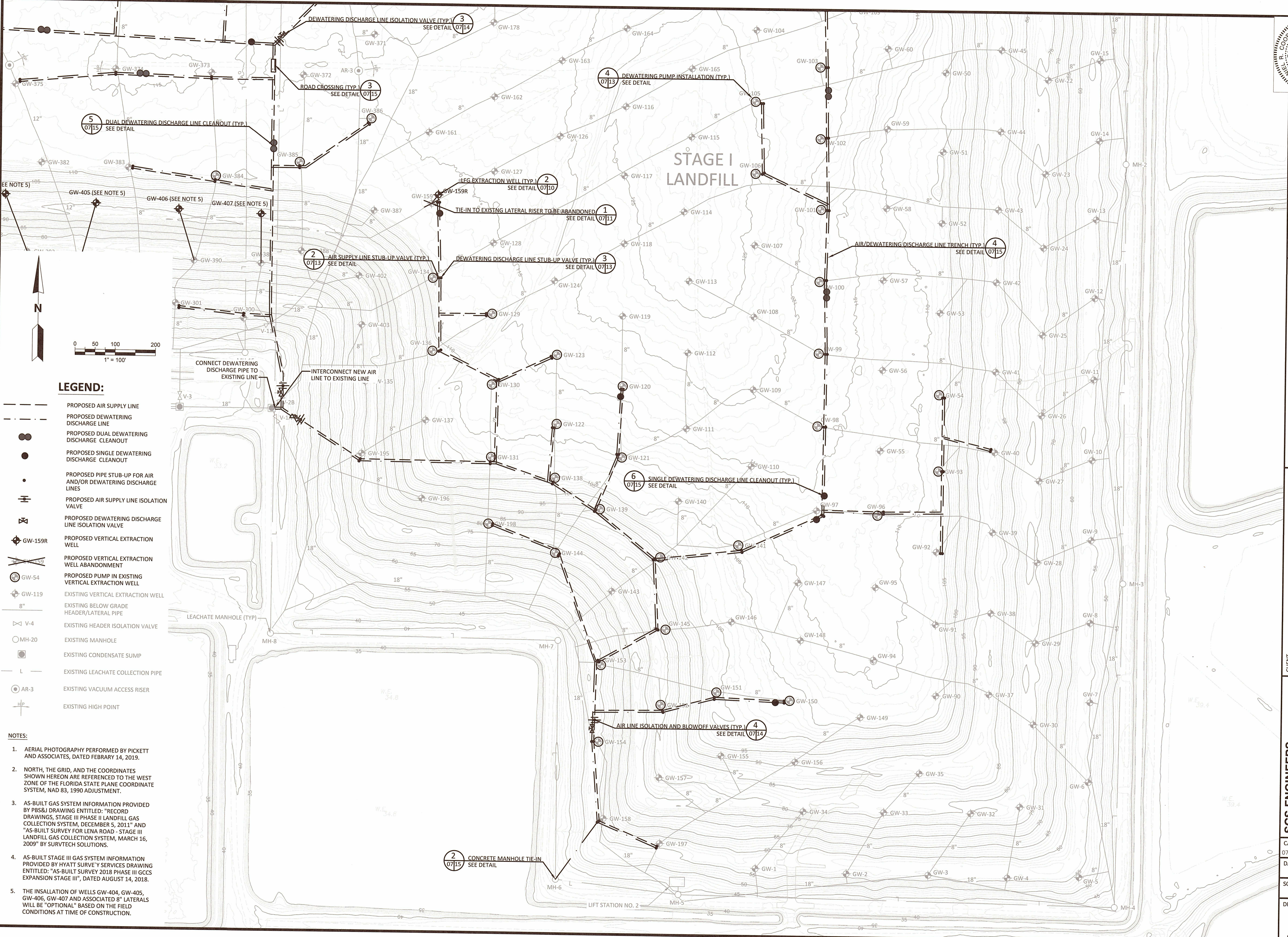
CLIENT  
**MANATEE COUNTY  
 SOLID WASTE DIVISION**

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 PROJ. NO. 09217088.12  
 DWN. BY: SWT  
 CHK. BY: DRC  
 APP. BY: CAR  
 DRC

CADD FILE:  
 06 EXISTING LENA ROAD - STAGE II  
 DATE:  
 DECEMBER 2019  
 SCALE:  
 AS SHOWN  
 DRAWING NO.  
**06**  
 SHEET 06 of 17



F:\PROJECT\09217088.12\Task 2 - GCCS Design Services\Drawings\Engineering Drawings\07 Proposed Leno Road.dwg Dec 17, 2019 - 3:46pm Layout Name: 07 PROPOSED SITE PLAN - STAGE I By: 44308wt



**LEGEND:**

- PROPOSED AIR SUPPLY LINE
- PROPOSED DEWATERING DISCHARGE LINE
- PROPOSED DUAL DEWATERING DISCHARGE CLEANOUT
- PROPOSED SINGLE DEWATERING DISCHARGE CLEANOUT
- PROPOSED PIPE STUB-UP FOR AIR AND/OR DEWATERING DISCHARGE LINES
- ⊥ PROPOSED AIR SUPPLY LINE ISOLATION VALVE
- ⊥ PROPOSED DEWATERING DISCHARGE LINE ISOLATION VALVE
- ⊕ GW-159R PROPOSED VERTICAL EXTRACTION WELL
- ⊕ GW-54 PROPOSED VERTICAL EXTRACTION WELL ABANDONMENT
- ⊕ GW-119 PROPOSED PUMP IN EXISTING VERTICAL EXTRACTION WELL
- 8" EXISTING BELOW GRADE HEADER/LATERAL PIPE
- V-4 EXISTING HEADER ISOLATION VALVE
- MH-20 EXISTING MANHOLE
- EXISTING CONDENSATE SUMP
- L EXISTING LEACHATE COLLECTION PIPE
- AR-3 EXISTING VACUUM ACCESS RISER
- HP EXISTING HIGH POINT

- NOTES:**
1. AERIAL PHOTOGRAPHY PERFORMED BY PICKETT AND ASSOCIATES, DATED FEBRUARY 14, 2019.
  2. NORTH, THE GRID, AND THE COORDINATES SHOWN HEREON ARE REFERENCED TO THE WEST ZONE OF THE FLORIDA STATE PLANE COORDINATE SYSTEM, NAD 83, 1990 ADJUSTMENT.
  3. AS-BUILT GAS SYSTEM INFORMATION PROVIDED BY PBS&J DRAWING ENTITLED: "RECORD DRAWINGS, STAGE III PHASE II LANDFILL GAS COLLECTION SYSTEM, DECEMBER 5, 2011" AND "AS-BUILT SURVEY FOR LENA ROAD - STAGE III LANDFILL GAS COLLECTION SYSTEM, MARCH 16, 2009" BY SURVTECH SOLUTIONS.
  4. AS-BUILT STAGE III GAS SYSTEM INFORMATION PROVIDED BY HYATT SURVEY SERVICES DRAWING ENTITLED: "AS-BUILT SURVEY 2018 PHASE III GCCS EXPANSION STAGE III", DATED AUGUST 14, 2018.
  5. THE INSTALLATION OF WELLS GW-404, GW-405, GW-406, GW-407 AND ASSOCIATED 8" LATERALS WILL BE "OPTIONAL" BASED ON THE FIELD CONDITIONS AT TIME OF CONSTRUCTION.



CHK. BY	DESCRIPTION	DATE	REV

**SHEET TITLE**  
PROPOSED SITE PLAN - STAGE I

**PROJECT TITLE**  
STAGE II, PHASE I GCCS SYSTEM EXPANSION

**CLIENT**  
MANATEE COUNTY  
SOLID WASTE DIVISION

**SCS ENGINEERS**  
STEARNS, CONRAD AND SCHMIDT  
CONSULTING ENGINEERS  
3922 COCONUT PALM DRIVE, SUITE 102, TAMPA, FL 33619  
PH (813) 621-0880 FAX NO. (813) 623-6757  
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004882

PROJ. NO. 09217088.12  
DWN. BY: SVT  
CHK. BY: CAR

APP. BY: DRC  
DRC

CADD FILE:  
07 PROPOSED LENA ROAD

DATE:  
DECEMBER 2019

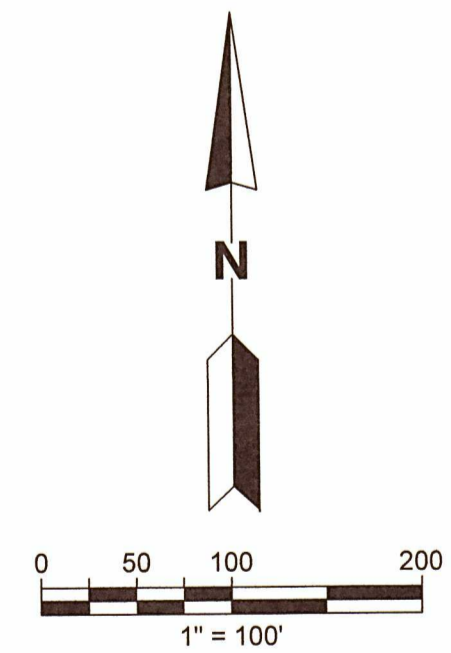
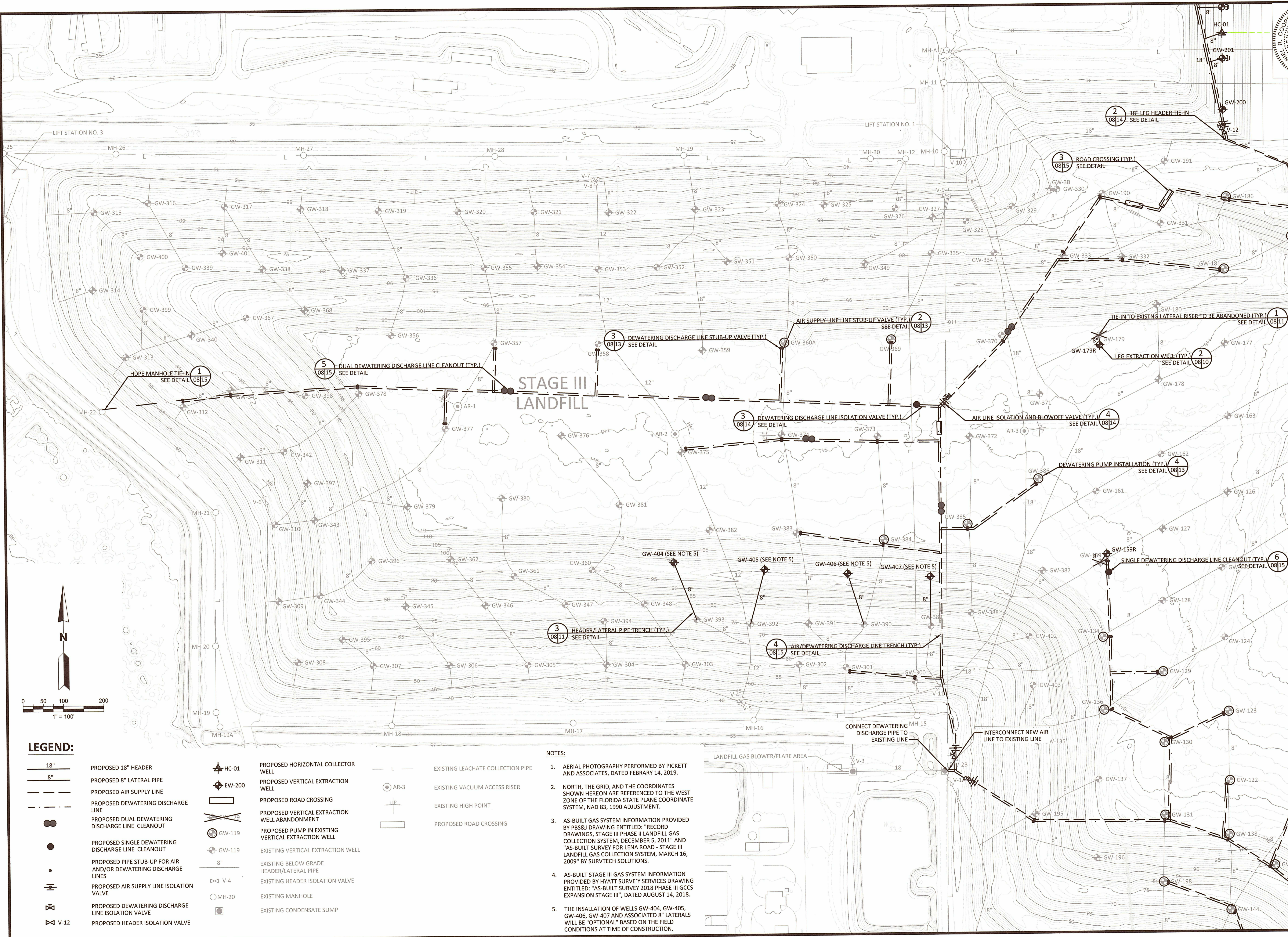
SCALE:  
AS SHOWN

DRAWING NO.  
**07**

SHEET **07** of **17**



F:\PROJECT\09217088.12\Task 2 - GCCS Design Services\Drawings\07 Proposed Lena Road.dwg Dec 17, 2019 - 3:46pm Layout Name: 08 PROPOSED SITE PLAN - STAGE III By: 4430swt



**LEGEND:**

- |   |  |   |
|---|--|---|
| <ul style="list-style-type: none"> <li>— 18" — PROPOSED 18" HEADER</li> <li>— 8" — PROPOSED 8" LATERAL PIPE</li> <li>— — PROPOSED AIR SUPPLY LINE</li> <li>- - - - PROPOSED DEWATERING DISCHARGE LINE</li> <li>● ● PROPOSED DUAL DEWATERING DISCHARGE LINE CLEANOUT</li> <li>● PROPOSED SINGLE DEWATERING DISCHARGE LINE CLEANOUT</li> <li>— PROPOSED PIPE STUB-UP FOR AIR AND/OR DEWATERING DISCHARGE LINES</li> <li>— PROPOSED AIR SUPPLY LINE ISOLATION VALVE</li> <li>— PROPOSED DEWATERING DISCHARGE LINE ISOLATION VALVE</li> <li>— V-12 PROPOSED HEADER ISOLATION VALVE</li> </ul> | <ul style="list-style-type: none"> <li>▲ HC-01 PROPOSED HORIZONTAL COLLECTOR WELL</li> <li>⊕ EW-200 PROPOSED VERTICAL EXTRACTION WELL</li> <li>□ PROPOSED ROAD CROSSING</li> <li>⊗ PROPOSED VERTICAL EXTRACTION WELL ABANDONMENT</li> <li>⊕ GW-119 PROPOSED PUMP IN EXISTING VERTICAL EXTRACTION WELL</li> <li>⊕ GW-119 EXISTING VERTICAL EXTRACTION WELL</li> <li>— 8" EXISTING BELOW GRADE HEADER/LATERAL PIPE</li> <li>⊕ V-4 EXISTING HEADER ISOLATION VALVE</li> <li>○ MH-20 EXISTING MANHOLE</li> <li>⊕ EXISTING CONDENSATE SUMP</li> </ul> | <ul style="list-style-type: none"> <li>— L — EXISTING LEACHATE COLLECTION PIPE</li> <li>⊕ AR-3 EXISTING VACUUM ACCESS RISER</li> <li>⊕ EXISTING HIGH POINT</li> <li>□ PROPOSED ROAD CROSSING</li> </ul> |
|---|--|---|

**NOTES:**

1. AERIAL PHOTOGRAPHY PERFORMED BY PICKETT AND ASSOCIATES, DATED FEBRUARY 14, 2019.
2. NORTH, THE GRID, AND THE COORDINATES SHOWN HEREON ARE REFERENCED TO THE WEST ZONE OF THE FLORIDA STATE PLANE COORDINATE SYSTEM, NAD 83, 1990 ADJUSTMENT.
3. AS-BUILT GAS SYSTEM INFORMATION PROVIDED BY PBS&J DRAWING ENTITLED: "RECORD DRAWINGS, STAGE III PHASE II LANDFILL GAS COLLECTION SYSTEM, DECEMBER 5, 2011" AND "AS-BUILT SURVEY FOR LENA ROAD - STAGE III LANDFILL GAS COLLECTION SYSTEM, MARCH 16, 2009" BY SURVTECH SOLUTIONS.
4. AS-BUILT STAGE III GAS SYSTEM INFORMATION PROVIDED BY HYATT SURVEY SERVICES DRAWING ENTITLED: "AS-BUILT SURVEY 2018 PHASE III GCCS EXPANSION STAGE III", DATED AUGUST 14, 2018.
5. THE INSTALLATION OF WELLS GW-404, GW-405, GW-406, GW-407 AND ASSOCIATED 8" LATERALS WILL BE "OPTIONAL" BASED ON THE FIELD CONDITIONS AT TIME OF CONSTRUCTION.

CHK. BY	DESCRIPTION

REV	DATE	DESCRIPTION

SHEET TITLE  
**PROPOSED SITE PLAN - STAGE III**

PROJECT TITLE  
**STAGE II, PHASE I GCCS SYSTEM EXPANSION**

CLIENT  
**MANATEE COUNTY SOLID WASTE DIVISION**

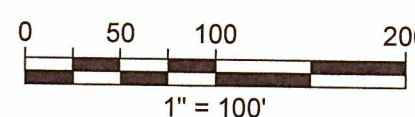
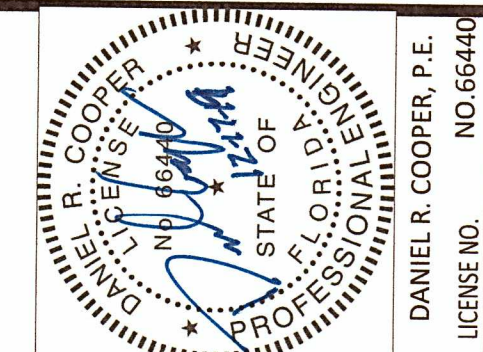
**SCS ENGINEERS**  
STEARNS, CONRAD AND SCHMIDT  
CONSULTING ENGINEERS  
3922 COCONUT PALM DRIVE, SUITE 102, TAMPA, FL 33619  
PH (813) 621-0080 FAX NO. (813) 623-6757  
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00040892

PROJ. NO. 09217088.12  
DWN. BY: SVT  
CHK. BY: DRC

CADD FILE:  
07 PROPOSED LENA ROAD  
DATE:  
DECEMBER 2019  
SCALE:  
AS SHOWN  
DRAWING NO.  
**08**  
SHEET 08 of 17



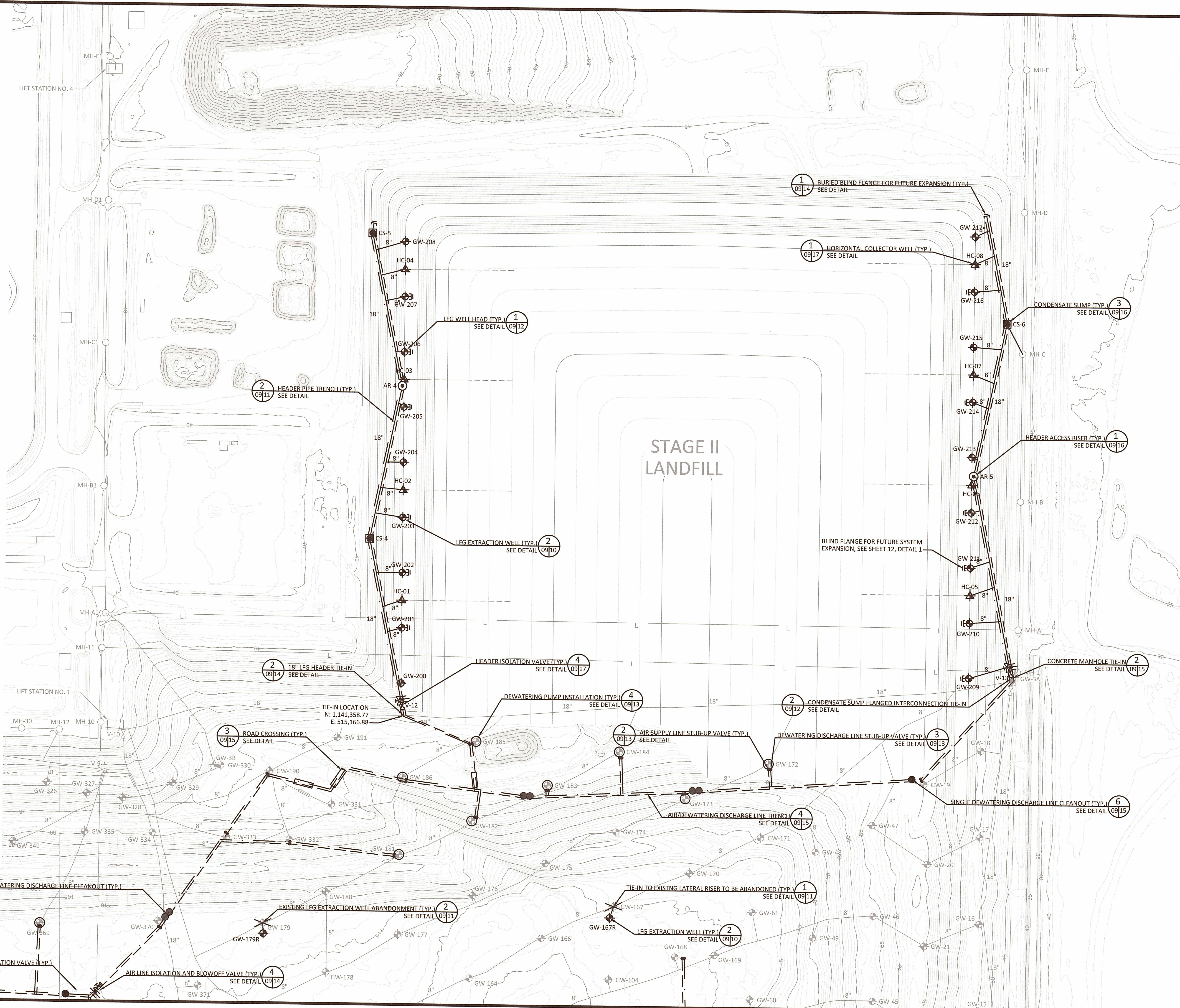
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**LEGEND:**

- PROPOSED 18" HEADER
- PROPOSED LATERAL PIPE
- PROPOSED AIR SUPPLY LINE
- PROPOSED DEWATERING DISCHARGE LINE
- PROPOSED CONDENSATE SUMP
- PROPOSED PIPE STUB-UP FOR AIR AND/OR DEWATERING DISCHARGE LINES
- PROPOSED ACCESS RISER
- PROPOSED BLIND FLANGE
- PROPOSED DEWATERING DISCHARGE LINE CLEANOUT
- PROPOSED SINGLE DEWATERING DISCHARGE LINE CLEANOUT
- PROPOSED HEADER ISOLATION VALVE
- PROPOSED HORIZONTAL COLLECTOR WELL HEAD
- PROPOSED VERTICAL EXTRACTION WELL
- PROPOSED ROAD CROSSING
- PROPOSED VERTICAL EXTRACTION WELL ABANDONMENT
- PROPOSED PUMP IN VERTICAL EXTRACTION WELL
- 
- EXISTING HEADER ISOLATION VALVE
- EXISTING MANHOLE
- EXISTING CONDENSATE SUMP
- EXISTING LEACHATE COLLECTION PIPE
- EXISTING ROAD CROSSING
- EXISTING SOLID HORIZONTAL COLLECTOR PIPE
- EXISTING PERFORATED HORIZONTAL COLLECTOR PIPE

- NOTES:**
- AERIAL PHOTOGRAPHY PERFORMED BY PICKETT AND ASSOCIATES, DATED FEBRUARY 14, 2019.
  - NORTH, THE GRID, AND THE COORDINATES SHOWN HEREON ARE REFERENCED TO THE WEST ZONE OF THE FLORIDA STATE PLANE COORDINATE SYSTEM, NAD 83, 1990 ADJUSTMENT.
  - AS-BUILT GAS SYSTEM INFORMATION PROVIDED BY PBS&J DRAWING ENTITLED: "RECORD DRAWINGS, STAGE III PHASE II LANDFILL GAS COLLECTION SYSTEM, DECEMBER 5, 2011" AND "AS-BUILT SURVEY FOR LENA ROAD - STAGE III LANDFILL GAS COLLECTION SYSTEM, MARCH 16, 2009" BY SURVTECH SOLUTIONS.
  - AS-BUILT STAGE III GAS SYSTEM INFORMATION PROVIDED BY HYATT SURVEY SERVICES DRAWING ENTITLED: "AS-BUILT SURVEY 2018 PHASE III GCSS EXPANSION STAGE III", DATED AUGUST 14, 2018.
  - STAGE II HORIZONTAL COLLECTORS INSTALLED DURING OCTOBER 2019 HORIZONTAL COLLECTOR GCSS EXPANSION.



CHK BY	DESCRIPTION
DATE	REV

SHEET TITLE	<b>PROPOSED SITE PLAN - STAGE II</b>
PROJECT TITLE	<b>STAGE II, PHASE I GCSS SYSTEM EXPANSION</b>

CLIENT	<b>MANATEE COUNTY SOLID WASTE DIVISION</b>
--------	--

<b>SCS ENGINEERS</b> STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS 3822 COCONUT PALM DRIVE, SUITE 102, TAMPA, FL 33619 PH (813) 821-0080 FAX NO. (813) 623-6757 FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892 PROJ. NO. 09217088.12 DWG. NO. 09 DATE: 12/17/19	CADD FILE: 07 PROPOSED LENA ROAD DATE: DECEMBER 2019 SCALE: AS SHOWN DRAWING NO. <b>09</b> SHEET <b>09</b> of <b>17</b>
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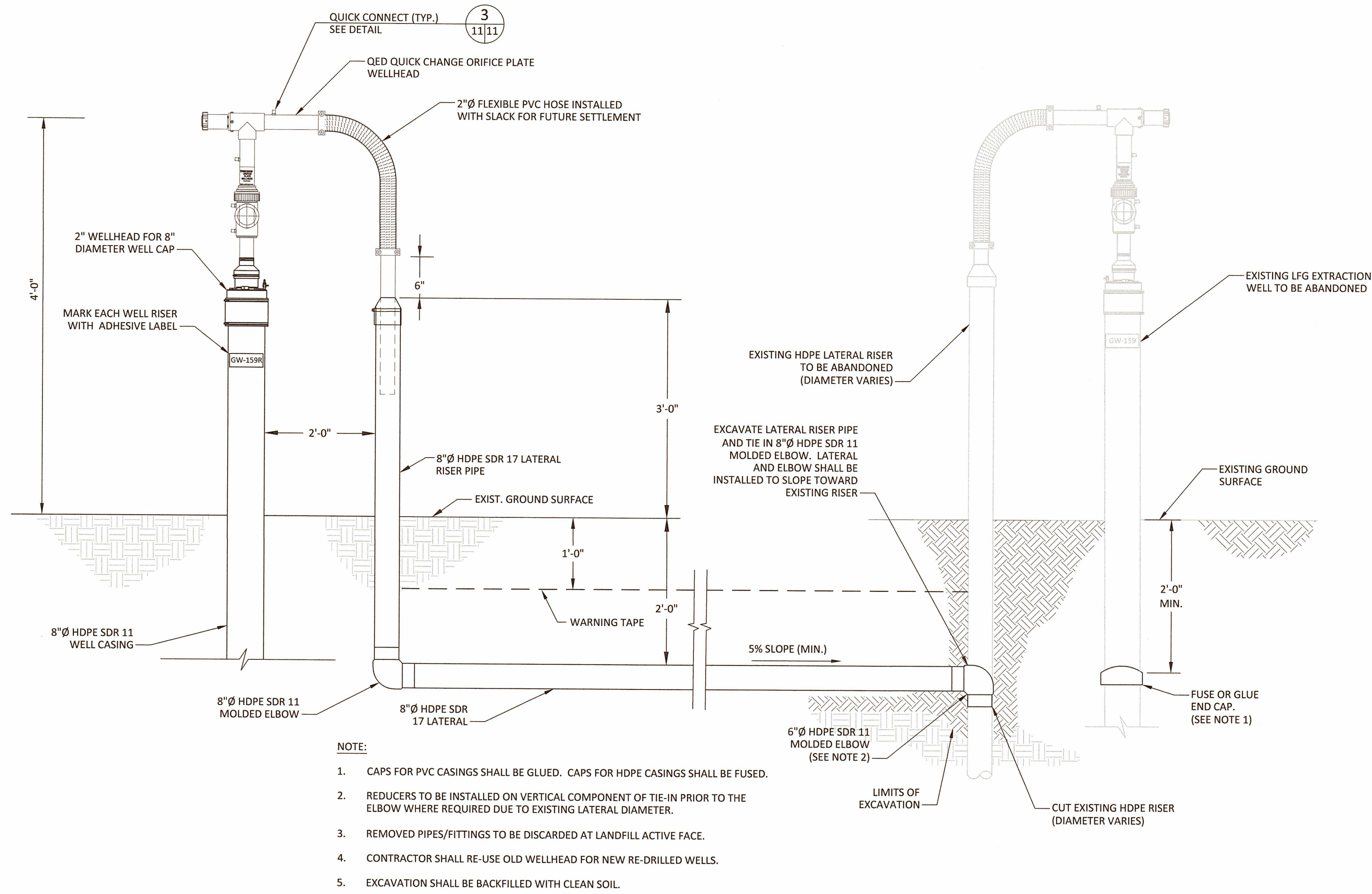






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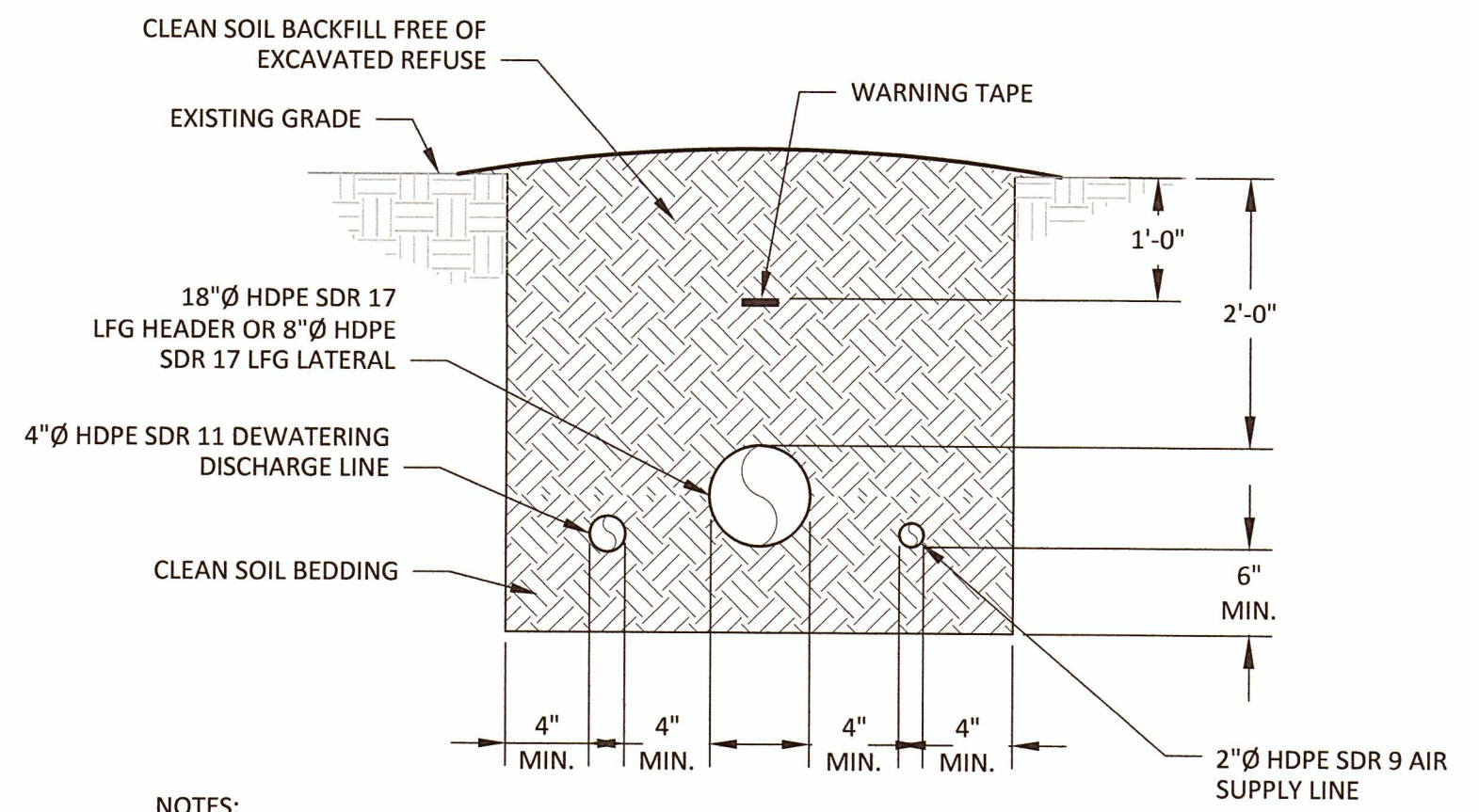
EXTRACTION WELLS TO TIE-IN AND ABANDON  
 GW-159  
 GW-167  
 GW-179



- NOTE:
1. CAPS FOR PVC CASINGS SHALL BE GLUED. CAPS FOR HDPE CASINGS SHALL BE FUSED.
  2. REDUCERS TO BE INSTALLED ON VERTICAL COMPONENT OF TIE-IN PRIOR TO THE ELBOW WHERE REQUIRED DUE TO EXISTING LATERAL DIAMETER.
  3. REMOVED PIPES/FITTINGS TO BE DISCARDED AT LANDFILL ACTIVE FACE.
  4. CONTRACTOR SHALL RE-USE OLD WELLHEAD FOR NEW RE-DRILLED WELLS.
  5. EXCAVATION SHALL BE BACKFILLED WITH CLEAN SOIL.

**TIE-IN TO EXISTING LATERAL RISER TO BE ABANDONED**  
 NOT TO SCALE

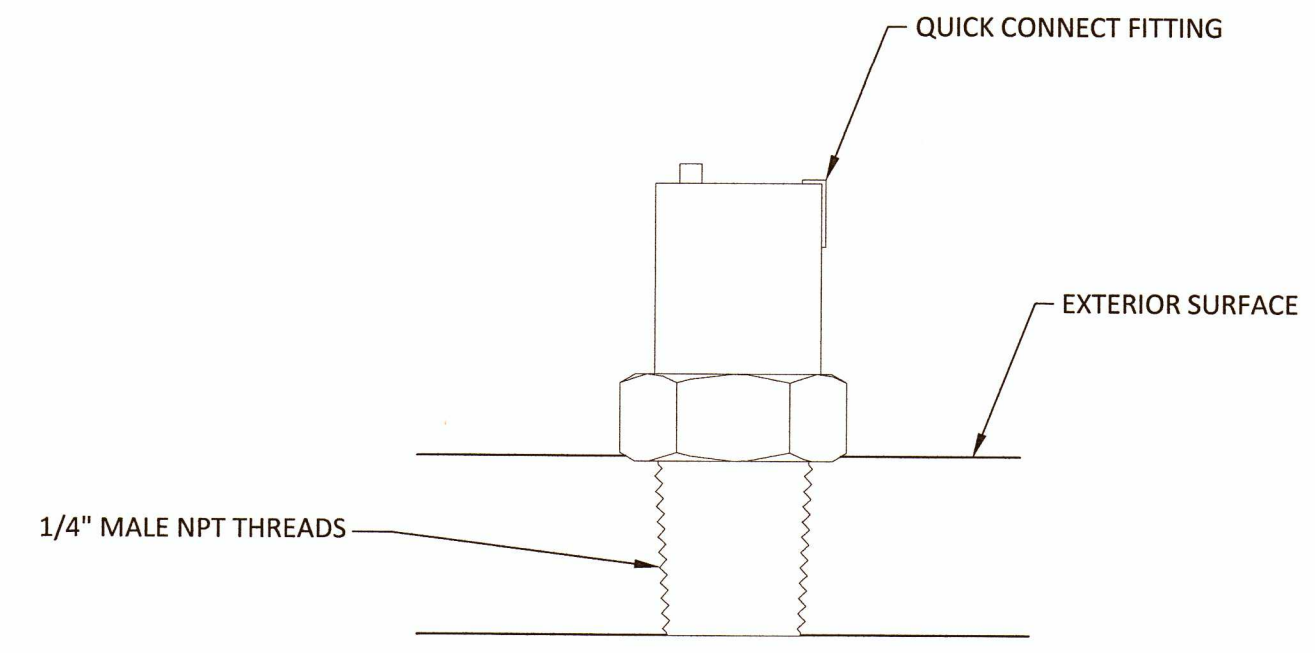
07,08,09 1  
11



- NOTES:
1. WARNING TAPE SHALL BE MIN. 3" WIDE AND IMPRINTED WITH "GAS LINE BURIED BELOW".
  2. ALL HEADER AND LATERAL SHALL BE INSTALLED AT 5% MIN. SLOPE UNLESS APPROVED IN ADVANCE BY ENGINEER.
  3. EACH PIPE MAY NOT BE PRESENT IN EVERY TRENCH.

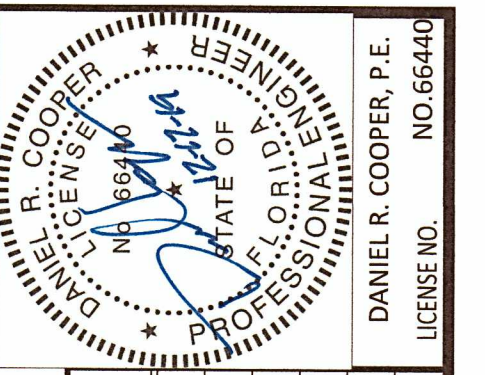
**HEADER/LATERAL PIPE TRENCH DETAIL**  
 NOT TO SCALE

09 11 2  
11



**QUICK CONNECT DETAIL**  
 NOT TO SCALE

11,12,16,17 3  
11



REV	DATE	DESCRIPTION	CHK. BY

SHEET TITLE: **DETAILS-02**  
 PROJECT TITLE: **STAGE II, PHASE I GCCS SYSTEM EXPANSION**

CLIENT: **MANATEE COUNTY SOLID WASTE DIVISION**

**SCS ENGINEERS**  
 STEARNS, CONRAD AND SCHMIDT  
 CONSULTING ENGINEERS  
 3922 COCONUT PALM DRIVE, SUITE 102, TAMPA, FL 33619  
 PH (813) 621-0080 FAX NO. (813) 623-6757  
 FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004882  
 PROJECT NO. 09217088.12 DRAWN BY: SWT CHECKED BY: CAR APPR BY: DRC

CADD FILE: 10 DETAILS LENA ROAD  
 DATE: DECEMBER 2019  
 SCALE: AS SHOWN  
 DRAWING NO. **11**  
 SHEET 11 of 17









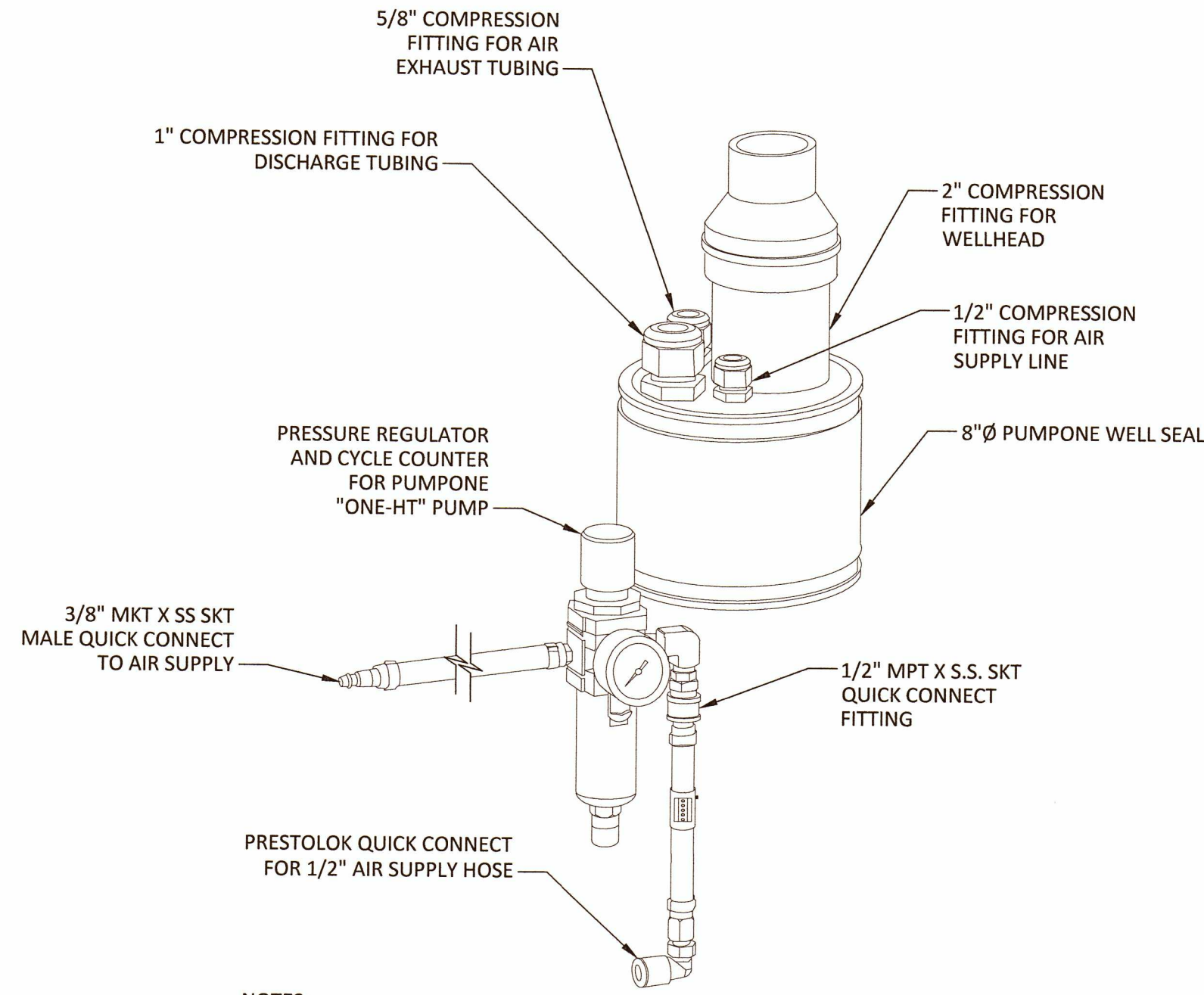
CHK. BY	DESCRIPTION	DATE	REV
			1
			2
			3
			4

SHEET TITLE	DETAILS-04
PROJECT TITLE	STAGE II, PHASE I GCCS SYSTEM EXPANSION

CLIENT	MANATEE COUNTY SOLID WASTE DIVISION
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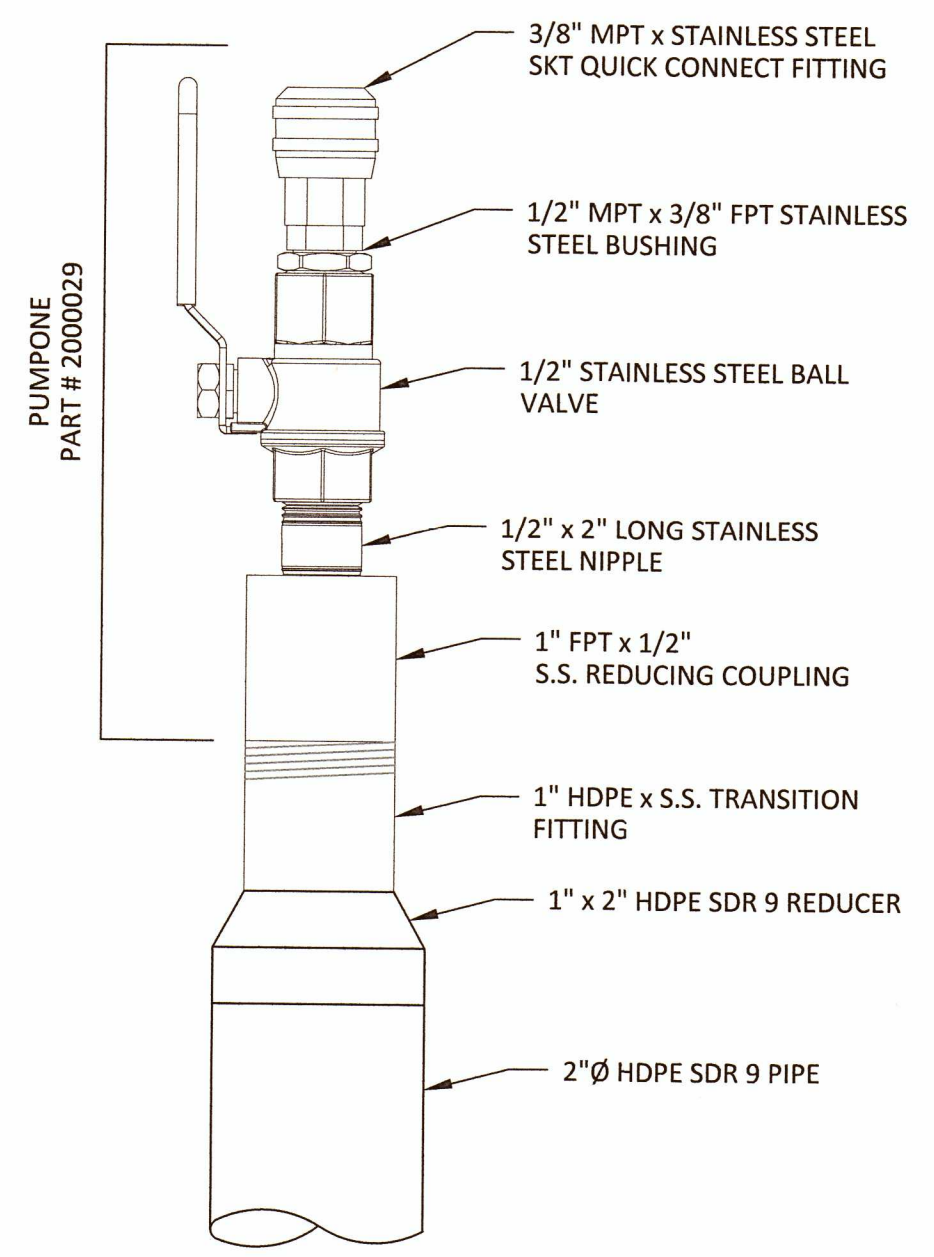
SCS ENGINEERS STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS 3922 COCONUT PALM DRIVE, SUITE 102, TAMPA, FL 33619 PH (813) 821-0080 FAX NO. (813) 822-9757 FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892	DRAWN BY: SWT CHECKED BY: DRC DATE: 09/21/2019
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CADD FILE:	10 DETAILS LENA ROAD
DATE:	DECEMBER 2019
SCALE:	AS SHOWN
DRAWING NO.	13
SHEET	13 of 17

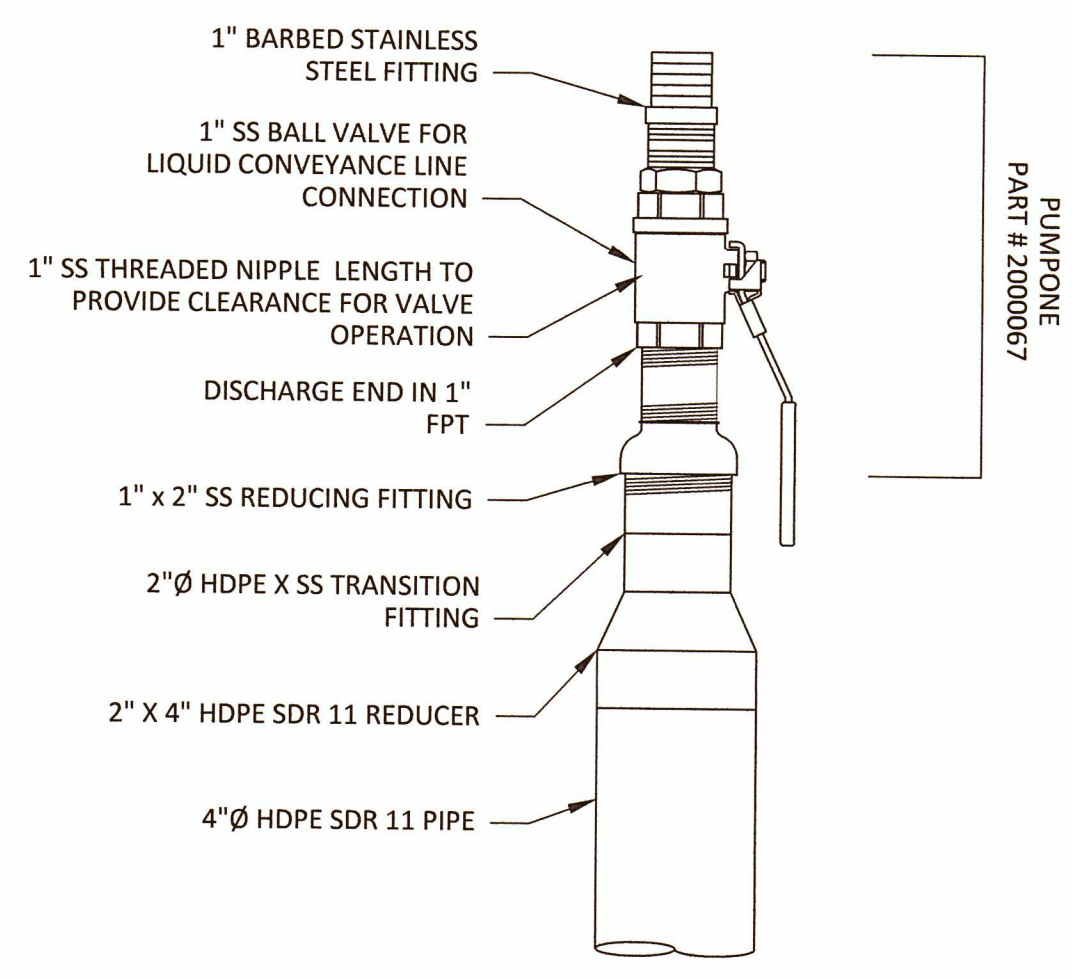


- NOTES:
- 8" PUMP ONE WELL CAP PART # 2000070 TO BE USED.
  - ASSEMBLY TO INCLUDE PRESSURE REGULATOR FOR "ONE-HT" SERIES PUMP AND CYCLE COUNTER.

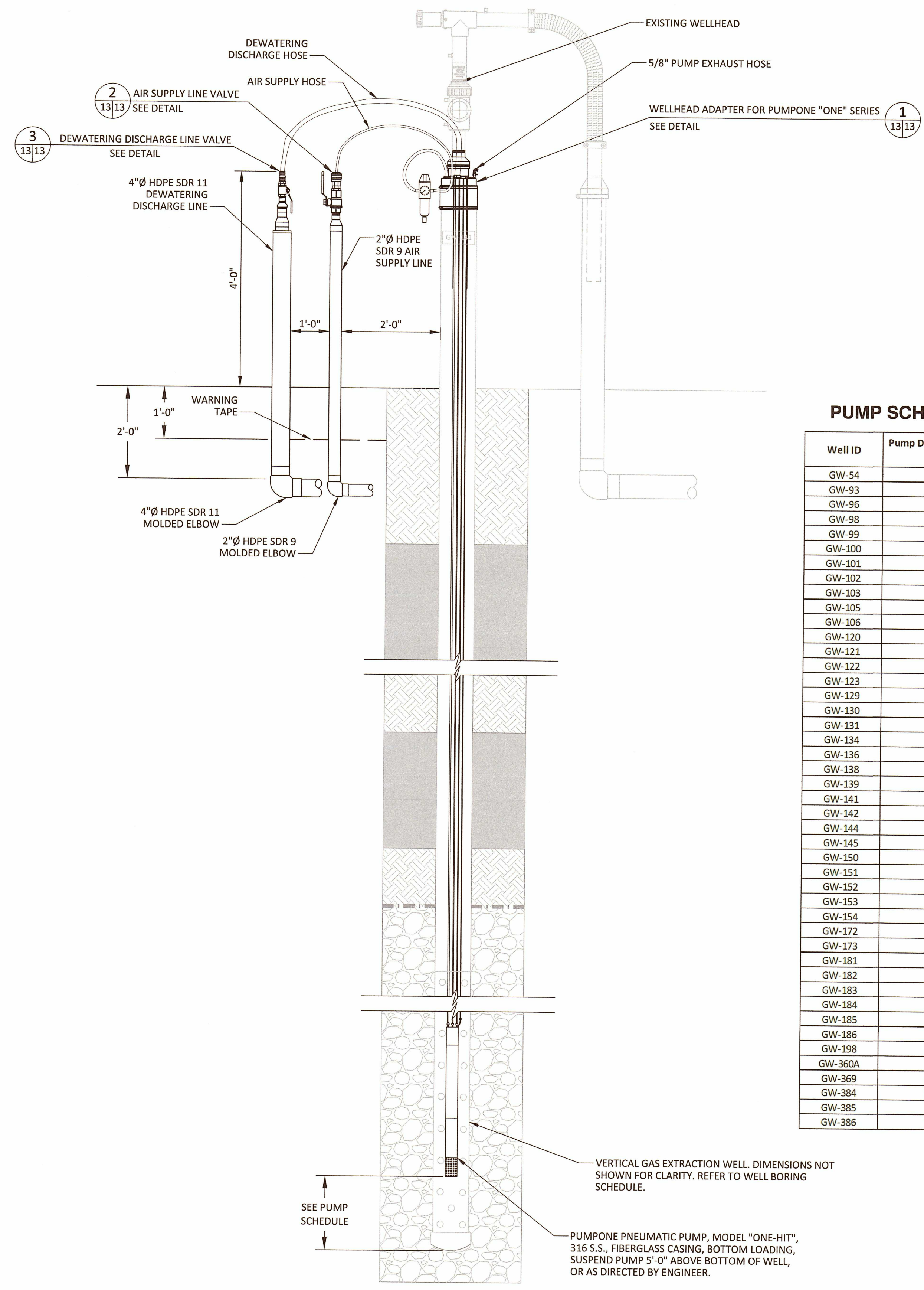
**WELLHEAD ADAPTER FOR PUMPONE "ONE" SERIES PUMP DETAIL** 1  
NOT TO SCALE



**AIR SUPPLY LINE STUB-UP VALVE DETAIL** 2  
NOT TO SCALE



**DEWATERING DISCHARGE STUB-UP VALVE DETAIL** 3  
NOT TO SCALE



**DEWATERING PUMP INSTALLATION DETAIL** 4  
NOT TO SCALE

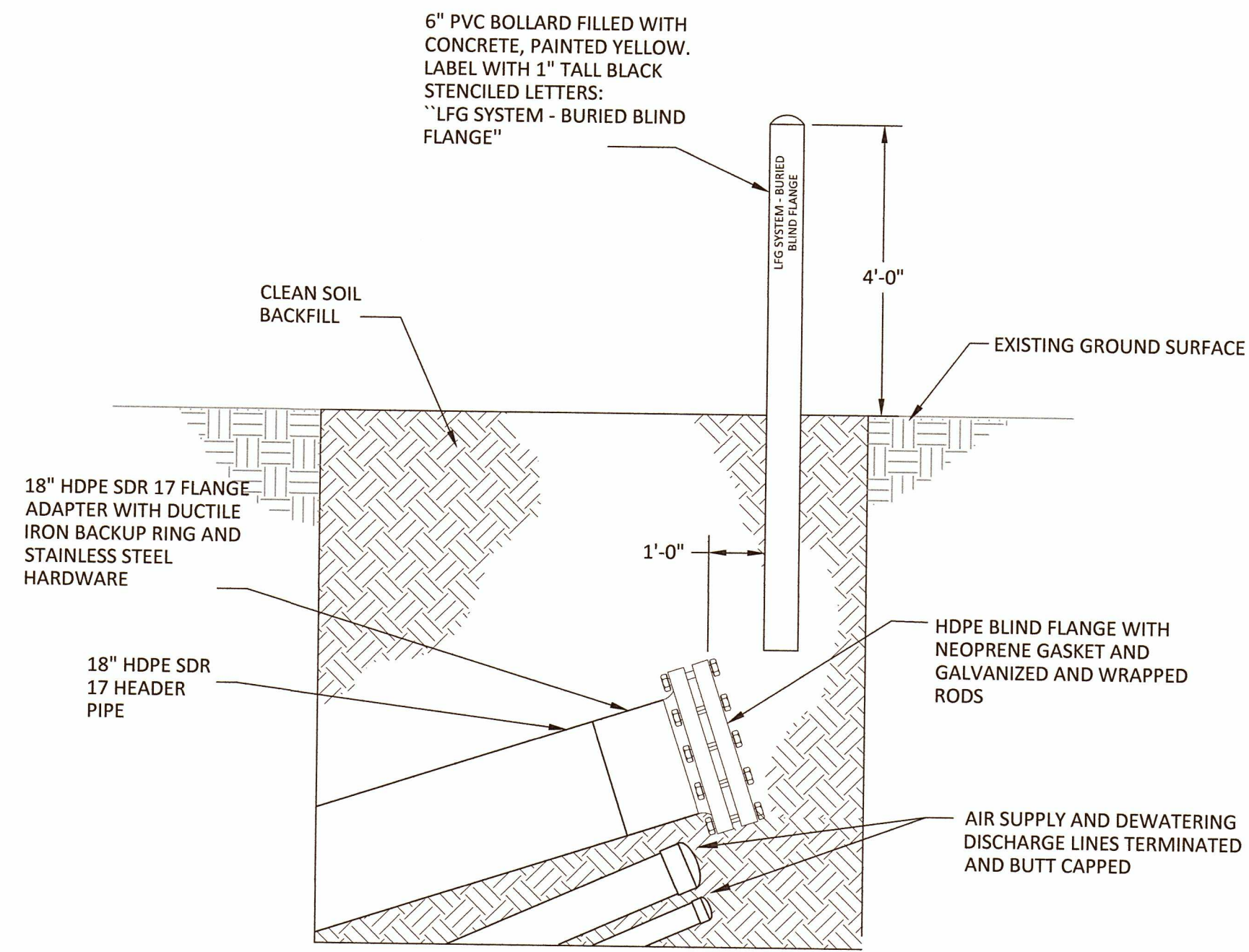
**PUMP SCHEDULE**

Well ID	Pump Depth from TOC (ft)
GW-54	66.5
GW-93	58.4
GW-96	62.4
GW-98	65.8
GW-99	65.4
GW-100	66.2
GW-101	64.4
GW-102	66.0
GW-103	65.6
GW-105	69.6
GW-106	68.4
GW-120	64.6
GW-121	57.2
GW-122	53.0
GW-123	67.2
GW-129	60.6
GW-130	61.6
GW-131	57.3
GW-134	65.0
GW-136	55.9
GW-138	57.6
GW-139	46.0
GW-141	57.0
GW-142	47.0
GW-144	47.0
GW-145	43.3
GW-150	57.5
GW-151	56.5
GW-152	37.0
GW-153	18.8
GW-154	17.7
GW-172	37.0
GW-173	50.8
GW-181	55.1
GW-182	40.8
GW-183	36.9
GW-184	37.0
GW-185	30.7
GW-186	31.6
GW-198	38.4
GW-360A	73.0
GW-369	66.8
GW-384	57.2
GW-385	71.9
GW-386	76.5

- NOTES:
- PUMPS TO BE INSTALLED IN ALL WELLS LISTED IN PUMP SCHEDULE AT DEPTHS PROVIDED.
  - CONTRACTOR SHALL CONFIRM REQUIRED HOSE LENGTHS PRIOR TO INSTALLATION.



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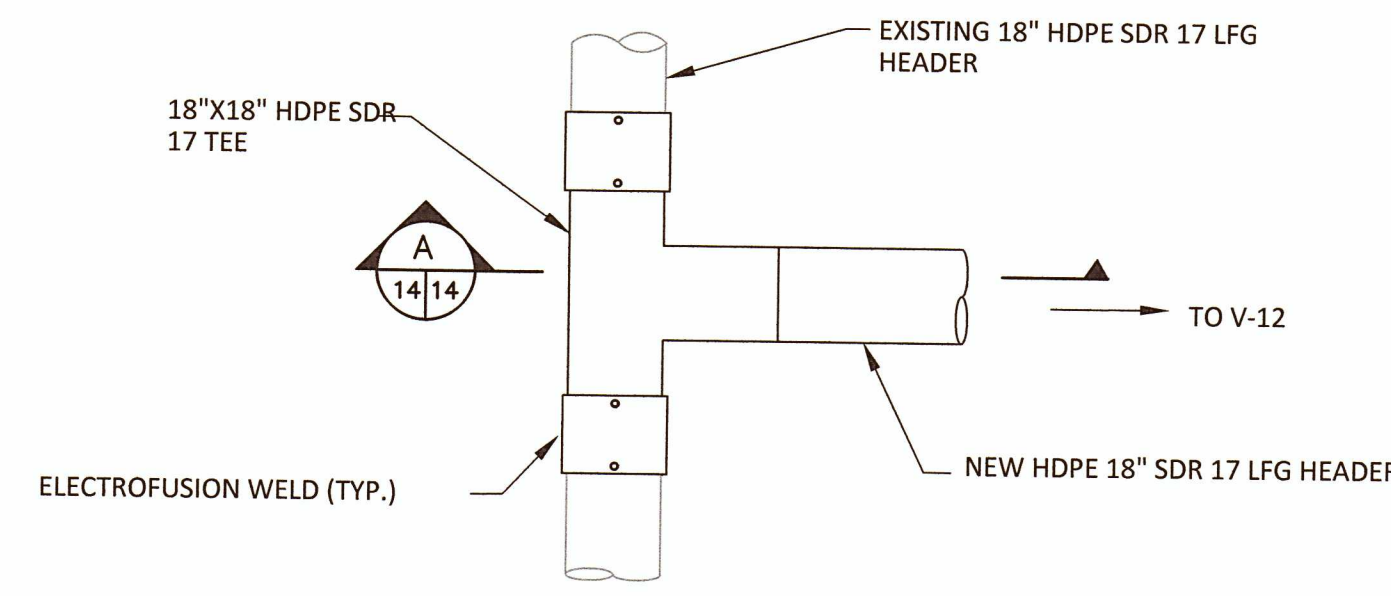


- NOTES:**
1. STAINLESS STEEL THREADED RODS, WASHERS, NUTS AND BACKUP RINGS THOROUGHLY COATED WITH POLYCOAT RUBBERIZED PRIMER, OR EQUAL, AFTER TIGHTENING BOLTS. FLANGE TO BE WRAPPED IN PLASTIC WRAP PRIOR TO BACKFILLING.
  2. FLANGE INSTALLED WITH THE PROPER SLOPE TO PROVIDE FOR FUTURE CONDENSATE DRAINAGE.
  3. 2" AIR SUPPLY AND 4" DEWATERING DISCHARGE LINES BUTT-CAPPED.
  4. 18" HDPE SDR 17 HEADER PIPE BLIND FLANGE SHOWN. CONTRACTOR ADJUSTED PIPE SIZES IN ACCORDANCE WITH PROPOSED LFG SITE PLAN.

**BURIED BLIND FLANGE FOR FUTURE EXPANSION DETAIL**

NOT TO SCALE

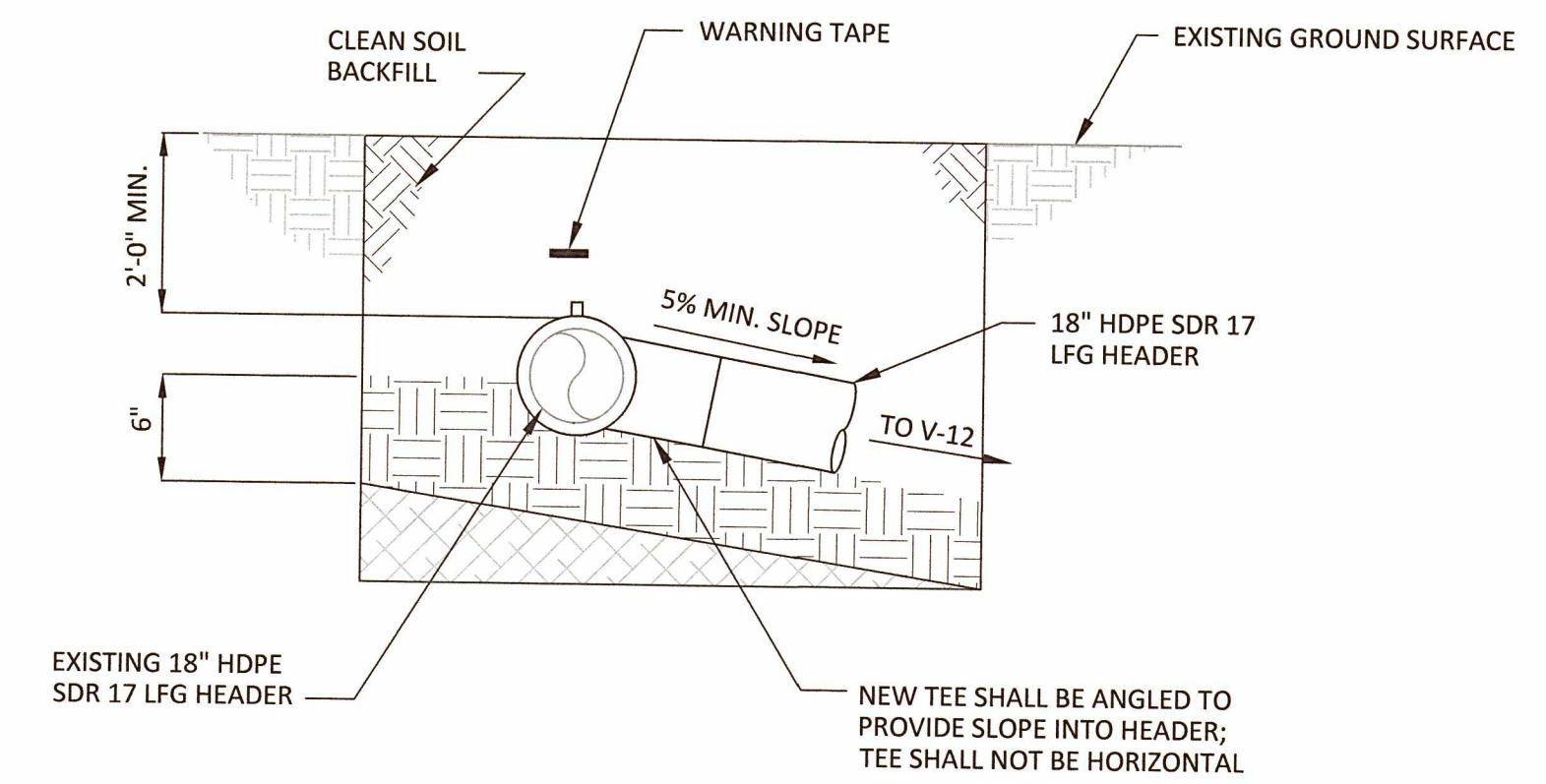
1  
09/14



**18" LFG HEADER TIE-IN WITH TEE DETAIL**

NOT TO SCALE

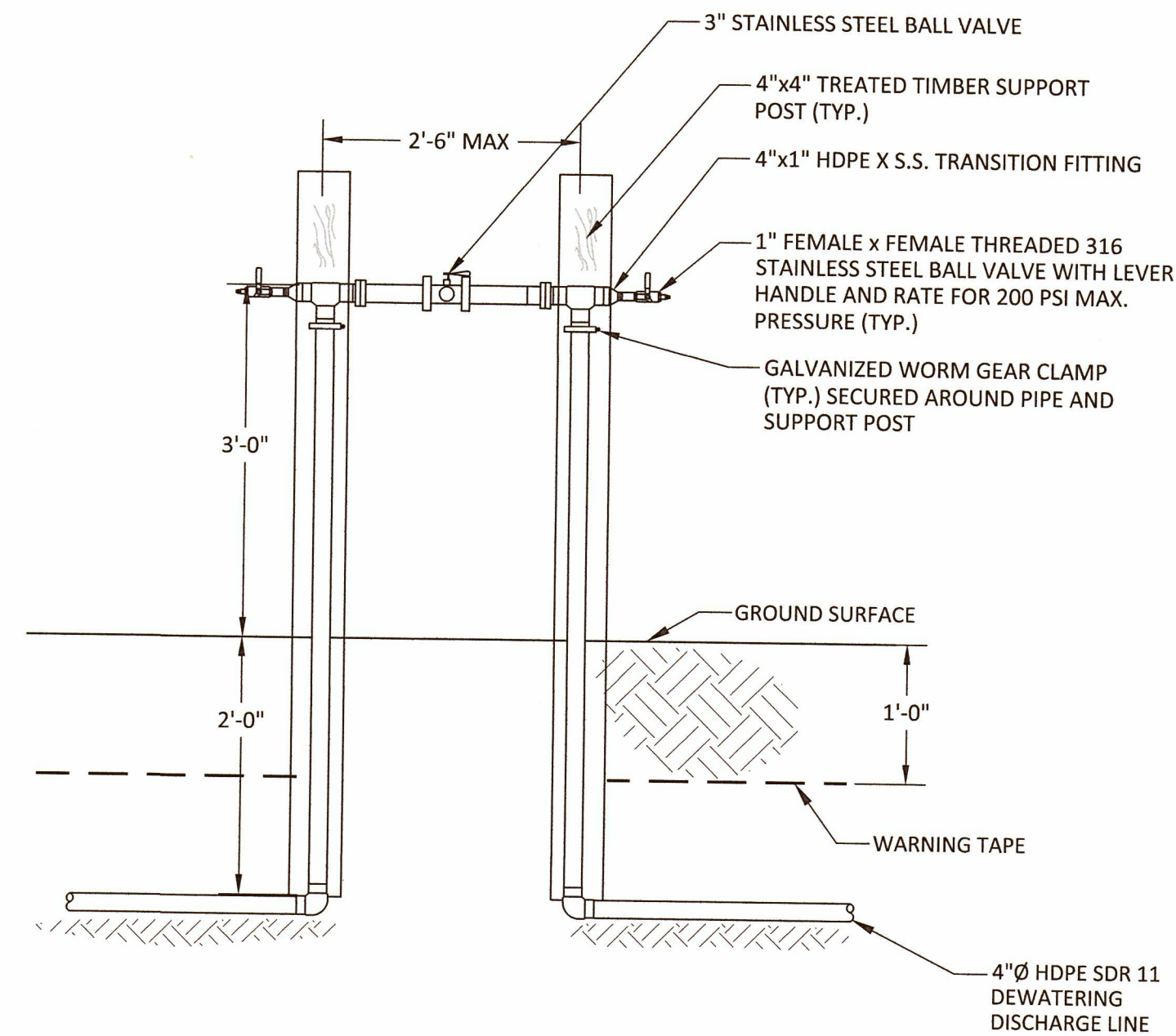
2  
08/09/14



**SECTION VIEW**

NOT TO SCALE

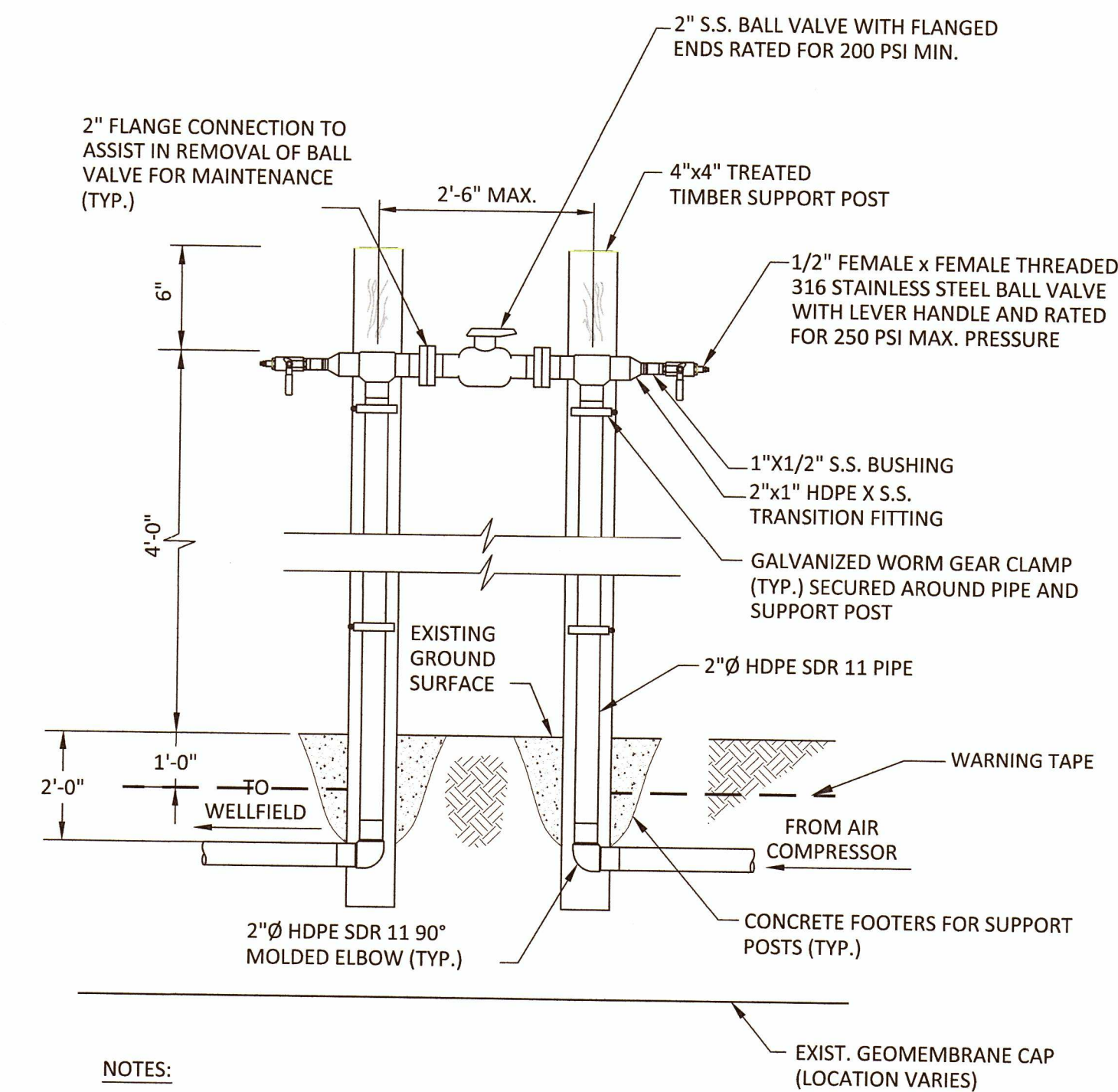
A  
14/14



**DEWATERING DISCHARGE LINE ISOLATION VALVE DETAIL**

NOT TO SCALE

3  
07/08/09/14



**AIR LINE ISOLATION AND BLOWOFF VALVES DETAIL**

NOT TO SCALE

4  
07/08/09/14



CHK. BY	DESCRIPTION	DATE	REV

SHEET TITLE	DETAILS-05
PROJECT TITLE	STAGE II, PHASE I GCCS SYSTEM EXPANSION

CLIENT	MANATEE COUNTY SOLID WASTE DIVISION
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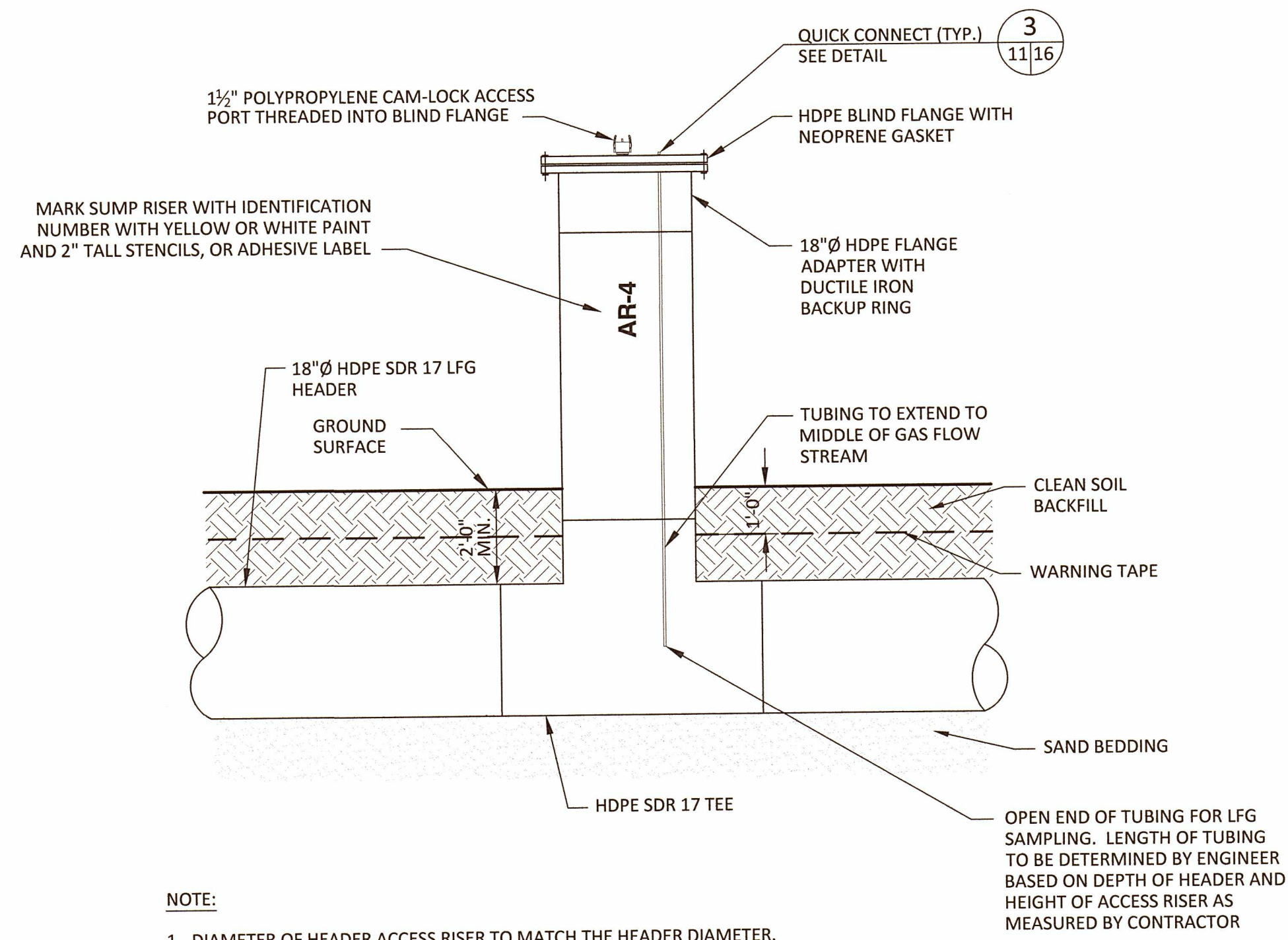
DESIGNER	SCS ENGINEERS
CHECKED BY	CONRAD AND SCHMIDT CONSULTING ENGINEERS
DATE	09/21/2008.12
SCALE	AS SHOWN
DRAWING NO.	14

CADD FILE:	10 DETAILS LENA ROAD
DATE:	DECEMBER 2019
SCALE:	AS SHOWN
DRAWING NO.	14
SHEET	14 of 17

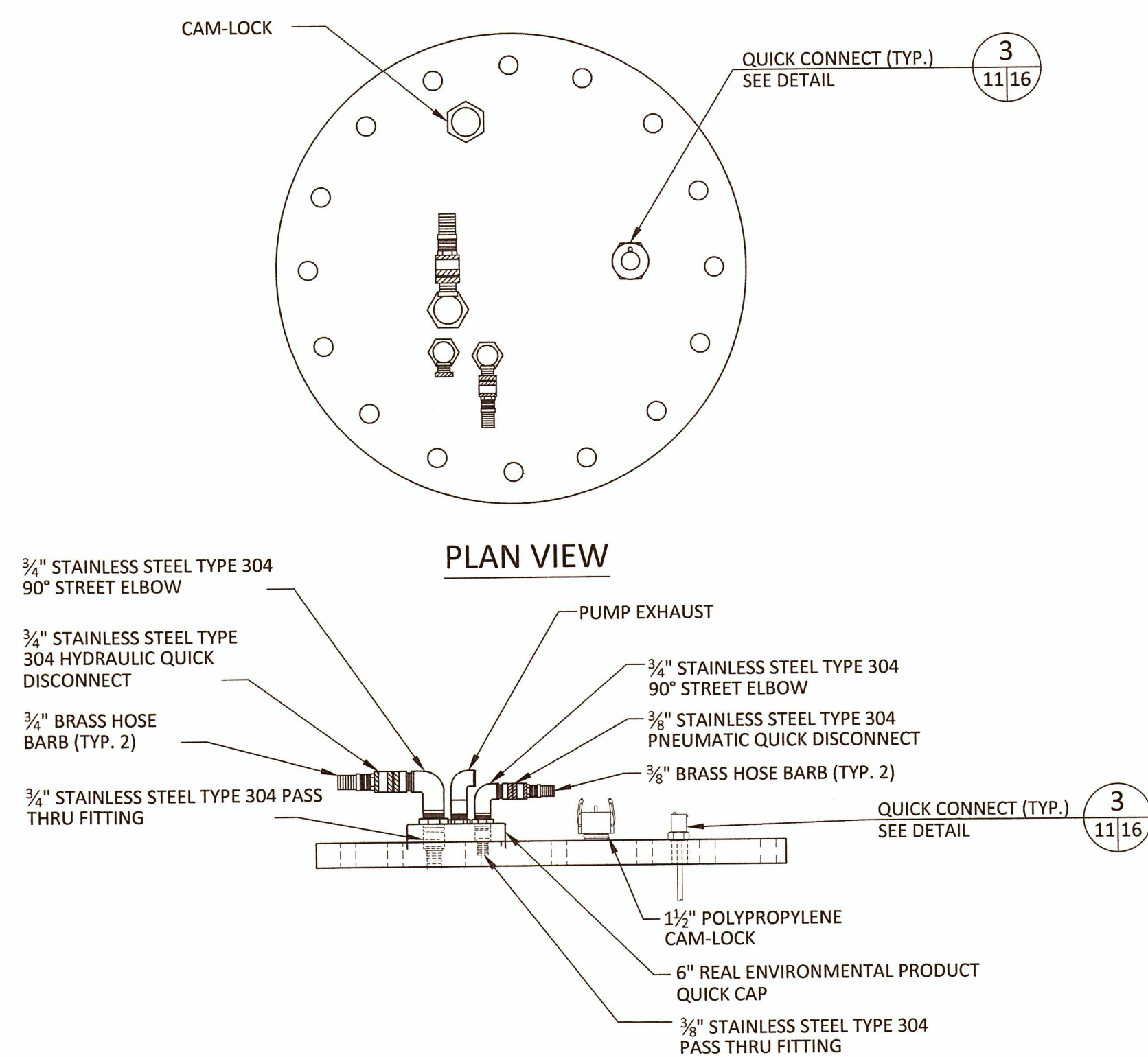




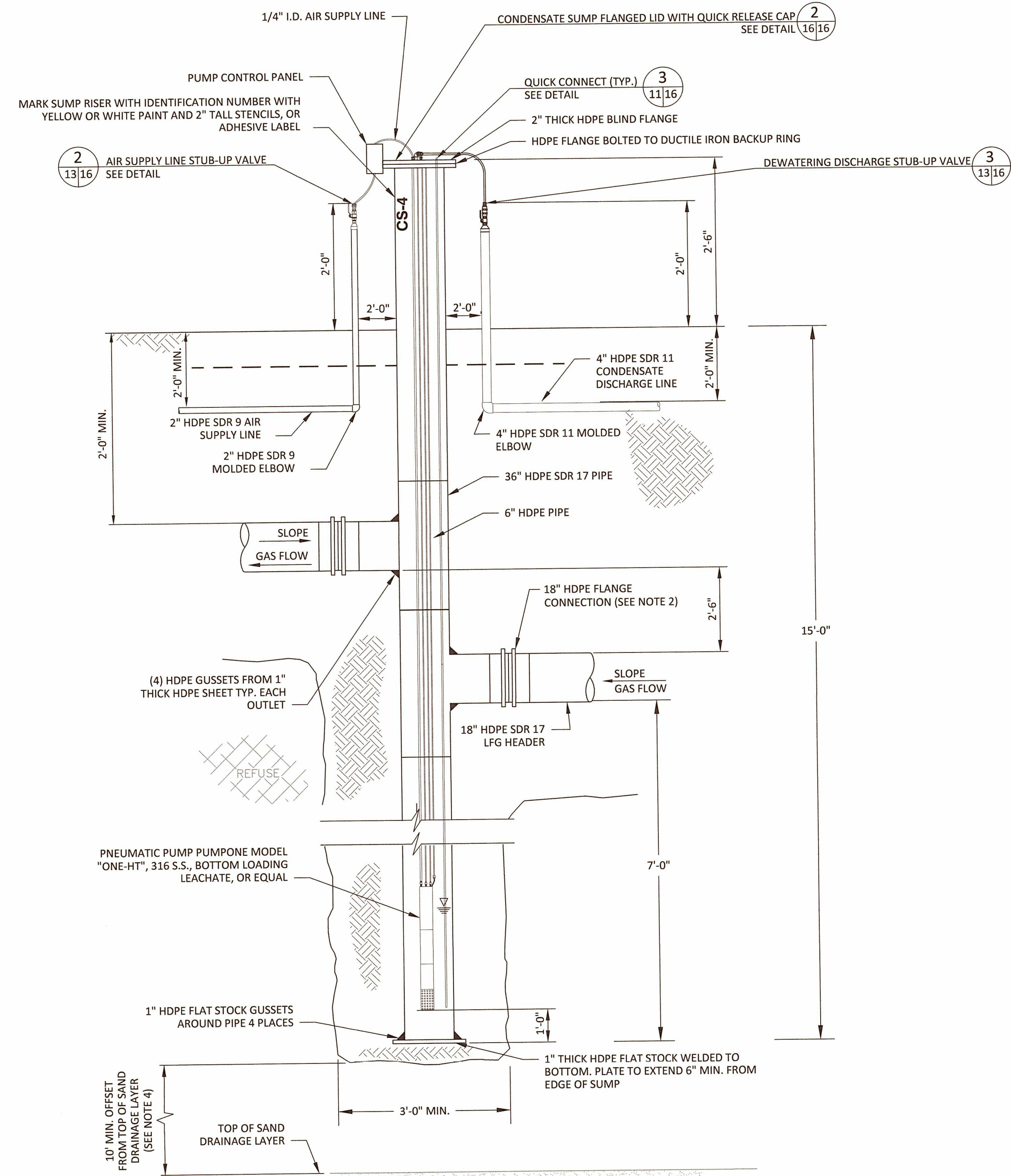




**HEADER ACCESS RISER DETAIL 1**  
NOT TO SCALE  
09/16

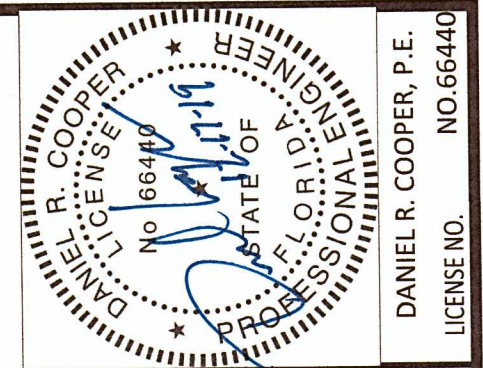


**CONDENSATE SUMP FLANGED LID WITH QUICK RELEASE CAP DETAIL 2**  
NOT TO SCALE  
16/16



- NOTES:
- 6" Ø HDPE SDR 17 VACUUM BREAK PIPE EXTRUSION WELDED TO FLANGE LID. 1'-0" OF PIPE TO PROTRUDE THROUGH TOP OF FLANGE. EXTRUSION WELD PIPE TO BOTH SIDES OF BLIND FLANGE. CENTER OF PIPE LOCATED 2" OFF CENTER OF BLIND FLANGE.
  - THOROUGHLY COAT ENTIRE SURFACE OF BOLTS, WASHERS, NUTS AND BACKUP RINGS WITH POLYCOAT RUBBERIZED PRIMER, OR EQUAL, AFTER TIGHTENING BOLTS. WRAP FLANGE IN PLASTIC WRAP PRIOR TO BACKFILLING.
  - CONTRACTOR SHALL VERIFY CONDENSATE SUMP CONFIGURATION IN FIELD. ADJUSTMENTS SHALL BE APPROVED BY ENGINEER PRIOR TO INSTALLATION.
  - ENGINEER SHALL APPROVE DEPTH BASED ON GROUND SURFACE ELEVATION PRIOR TO INSTALLATION.

**CONDENSATE SUMP DETAIL 3**  
NOT TO SCALE  
09/16



CHK BY	DESCRIPTION	DATE	REV

**DETAILS-07**  
PROJECT TITLE  
**STAGE II, PHASE I GCCS SYSTEM EXPANSION**

CLIENT  
**MANATEE COUNTY SOLID WASTE DIVISION**

**SCS ENGINEERS**  
STEARNS, CONRAD AND SCHMIDT  
CONSULTING ENGINEERS  
3922 COCONUT PALM DRIVE, SUITE 109, TAMPA, FL 33619  
PH (813) 621-6080 FAX (813) 624-7477  
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004882  
PROJ. NO. 17088.12 DWG. NO. SWT  
DATE: 11/16/16  
SCALE: AS SHOWN  
DRAWING NO. 16  
SHEET 16 of 17

CADD FILE:  
10 DETAILS LENA ROAD  
DATE:  
DECEMBER 2019  
SCALE:  
AS SHOWN  
DRAWING NO.  
**16**  
SHEET 16 of 17



