

December 31, 2014

Mr. Chris Nagel
Missouri Department of Natural Resources
Solid Waste Management Program
1738 East Elm Street
Jefferson City, Missouri 65101

Re: Response to October 7, 2014 Letter
Bridgeton Landfill, Bridgeton, Missouri
Permit No. 0118912

Dear Mr. Nagel:

This letter is being submitted as an update to the installation of nine (9) additional Temperature Monitoring Probes (TMPs) in the North Quarry. The scheduled installation is consistent with MDNR's October 7, 2014 letter and subsequent Bridgeton Landfill (BL) November 5, 2014 response.

The drilling portion of the installation of nine (9) additional TMPs in the North Quarry is scheduled to commence the week of January 5, 2015. The aggressive schedule of material procurement, scheduling of contractors, drilling access construction and other tasks have allowed for the scheduled commencement of drilling on the aforementioned date (weather and unforeseeable circumstances excluded). Pursuant to evaluation of the current infrastructure and drill rig access, the final locations of the nine (9) additional TMPs are shown in Attachment 1.

In addition to the nine (9) TMPs in the North Quarry, the BL is planning to install five (5) additional TMPs as shown in Attachment 1. The replacement of TMP-3 and -4 are included and designated proposed TMP-3R and -4R. BL believes this proactive installation provides prudent data with regards to Neck Area waste temperatures.

Additionally, the BL has tentatively scheduled the installation of TMPs-30, -31 and -32 as shown Attachment 1. The temperature data obtained from these TMPs will be utilized as part of the Expanded Heat Extraction Pilot Study. Specifically, these temperatures will be evaluated to further quantify the heat gradients in the South Quarry. The location and quantity of TMPs-30 through -32, as shown in the plans, is general. The actual number of TMPs and the exact locations will be dependent on field conditions encountered.

The construction of the five (5) additional TMPs is scheduled to be completed directly following the installation of the nine (9) North Quarry TMPs.

Mr. Chris Nagel

12-30-14

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If you need additional information, please contact me at (314) 744-8166.

Sincerely,

A handwritten signature in cursive script that reads "Brian J. Power".

Brian J. Power
Environmental Manager
Bridgeton Landfill, LLC.

Attachments

Attachment 1 (Fourteen Additional Temperature Monitoring Probes)

PERMIT DRAWINGS FOR

**FOURTEEN ADDITIONAL
TEMPERATURE
MONITORING PROBES**

**BRIDGETON LANDFILL
BRIDGETON, ST. LOUIS COUNTY, MISSOURI**

DECEMBER 2014

**PREPARED FOR:
BRIDGETON LANDFILL, LLC.**

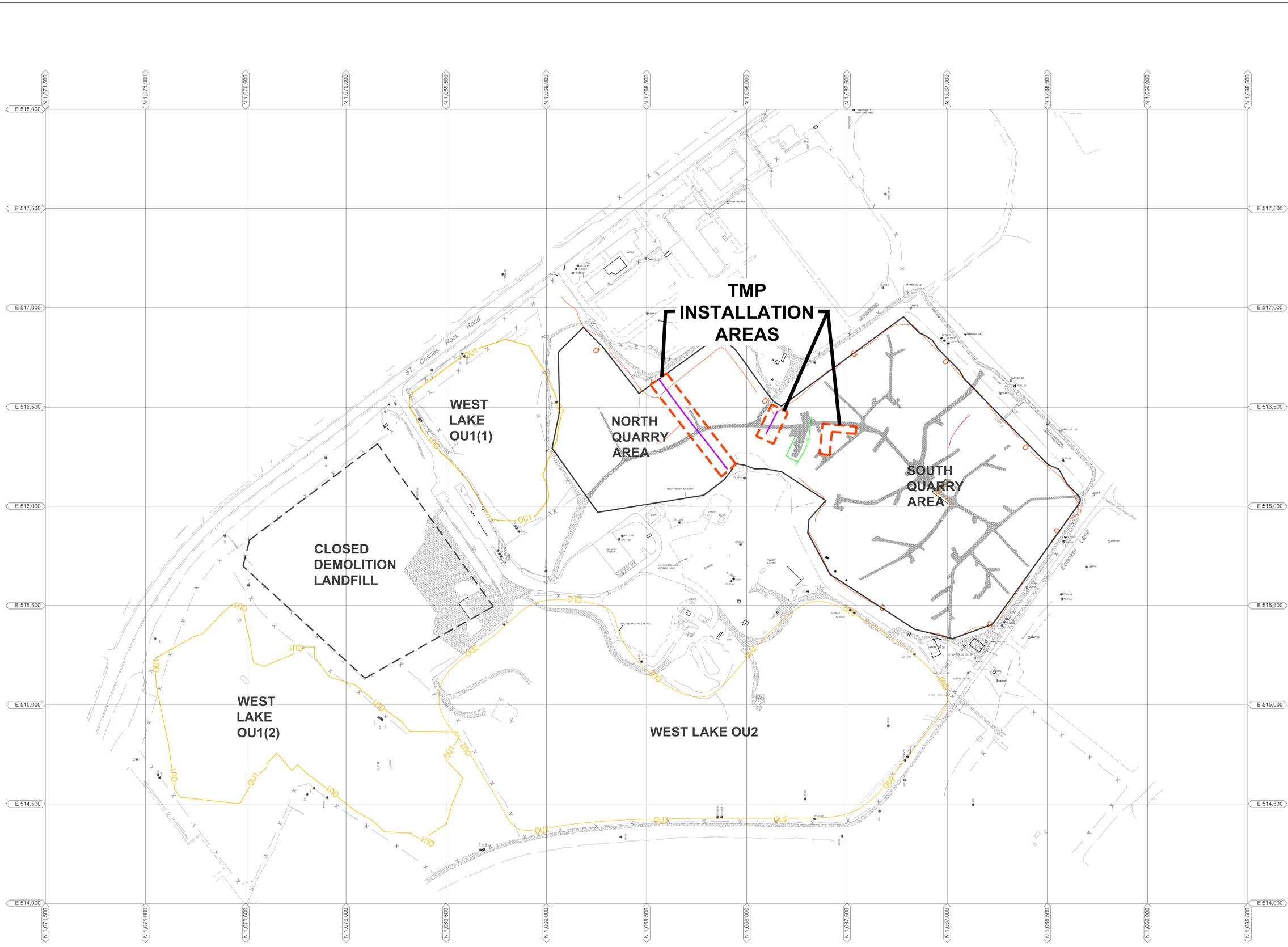


3405 HOLLENBERG DRIVE
BRIDGETON, MO 63044
TEL. (314) 736-5794

INDEX OF DRAWINGS

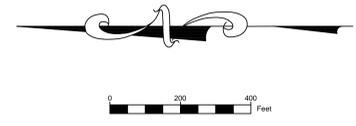
001	TITLE PAGE
002	FULL SITE PLAN VIEW
003a	PROFILE VIEW (TMP 21-29)
003b	PROFILE VIEW (TMP 3R & 4R)
003c	PLAN VIEW (TMP 30-32)
004	DETAILS



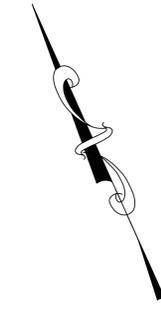
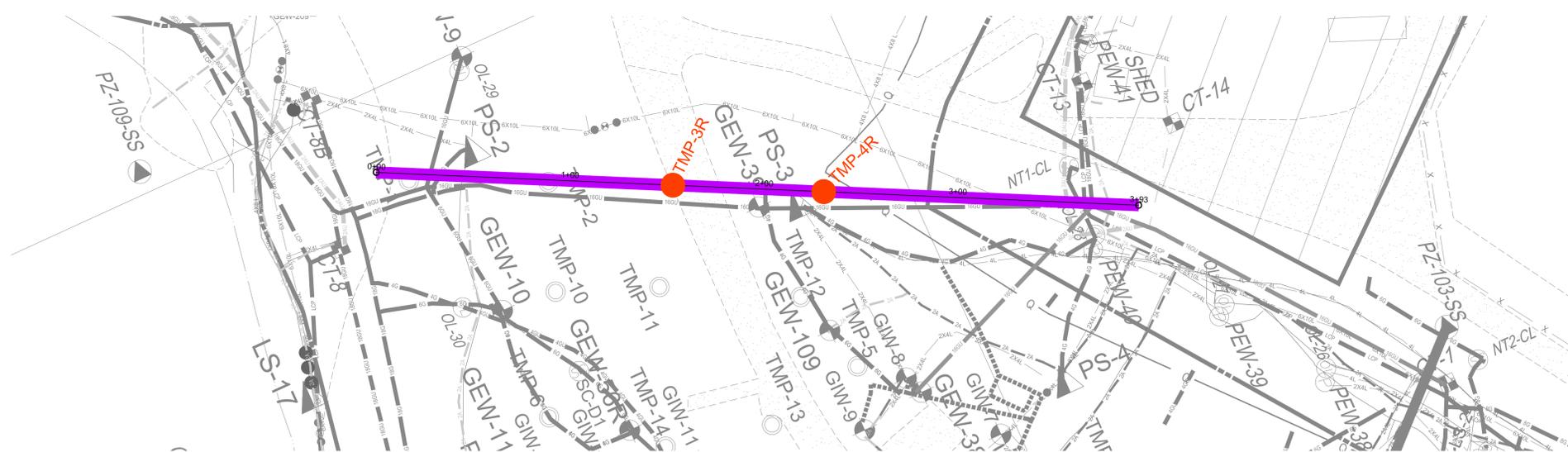


LEGEND

	SOLID WASTE BOUNDARY
	GAS MONITORING PROBE
	PIEZOMETER MONITORING WELL
	QUARRY WALL
	WEST LAKE AREA 1
	WEST LAKE AREA 2
	DEMOLITION LANDFILL AREA

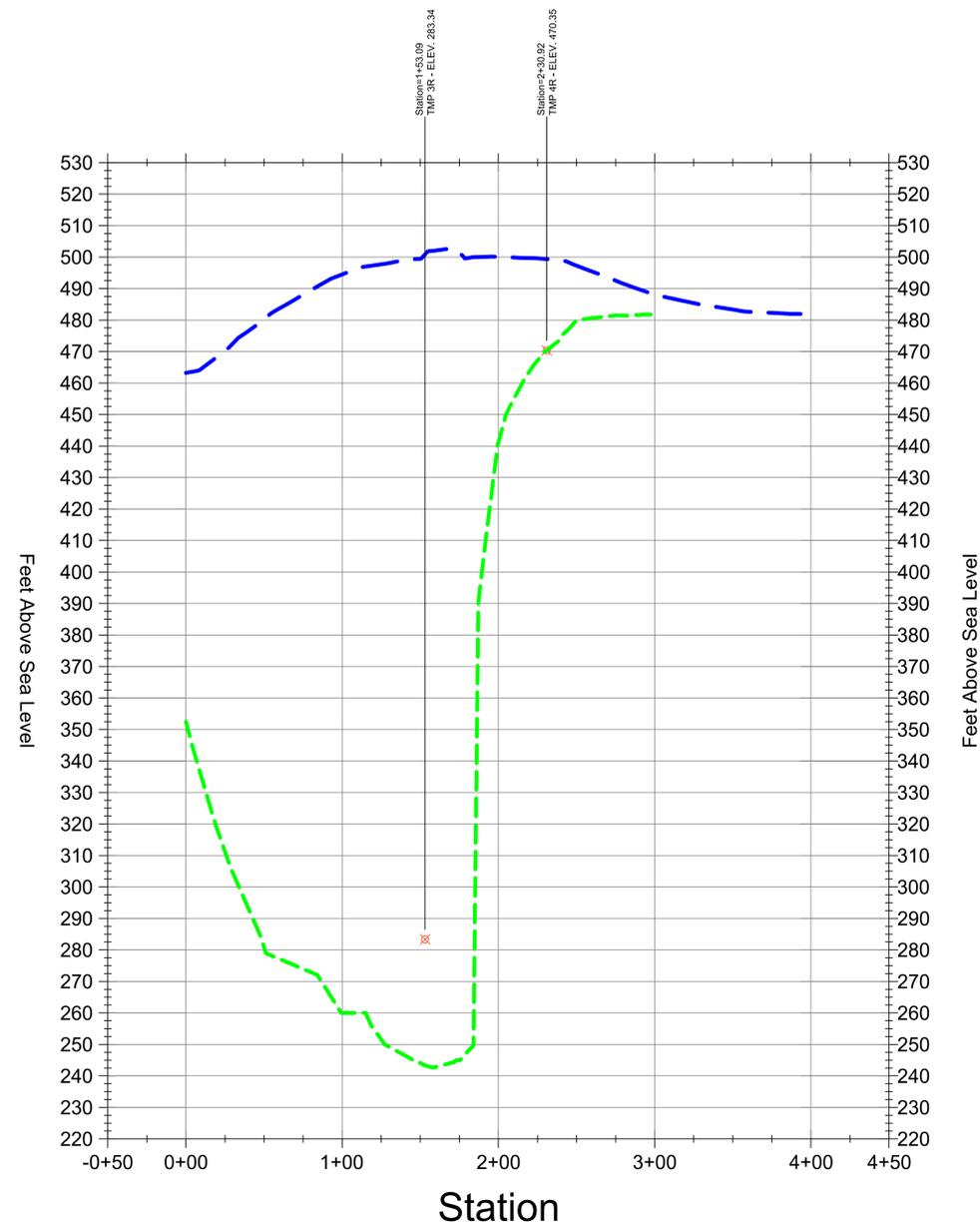


BRIDGETON LANDFILL, LLC 13570 ST. CHARLES ROCK ROAD BRIDGETON, MISSOURI 63044	BRIDGETON LANDFILL FOURTEEN ADDITIONAL TMPs		DECEMBER 2014	DRAWING NO.: 002				
			DESIGNED BY: DMK					
FULL SITE PLAN VIEW			APPROVED BY: ALK	<table border="1"> <tr> <th>REVISION</th> <th>DATE</th> </tr> <tr> <td> </td> <td> </td> </tr> </table>	REVISION	DATE		
			REVISION		DATE			
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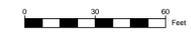
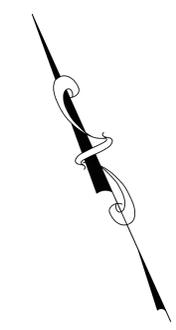
LEGEND

- ⊕ TMP-16 TEMPERATURE MONITORING PROBE (EXISTING)
- TMP-21 TEMPERATURE MONITORING PROBE (PROPOSED)
- ⊗ BOTTOM OF TEMPERATURE MONITORING PROBE
- PROFILE LINE



- - - 2014 AERIAL TOPOGRAPHY
- - - 1979 QUARRY BOTTOM FROM AQUATERRA

TMP I.D.	NORTHING	EASTING	2014 AERIAL ELEV	QUARRY BOTTOM	DIFFERENCE	TMP DEPTH	TMP BOTTOM ELEV
TMP-3R	1067891.46	516389.97	500.85	243.34	257.5	217.5	283.34
TMP-4R	1067856.28	516459.39	499.37	470.35	29.0	29.0	470.35

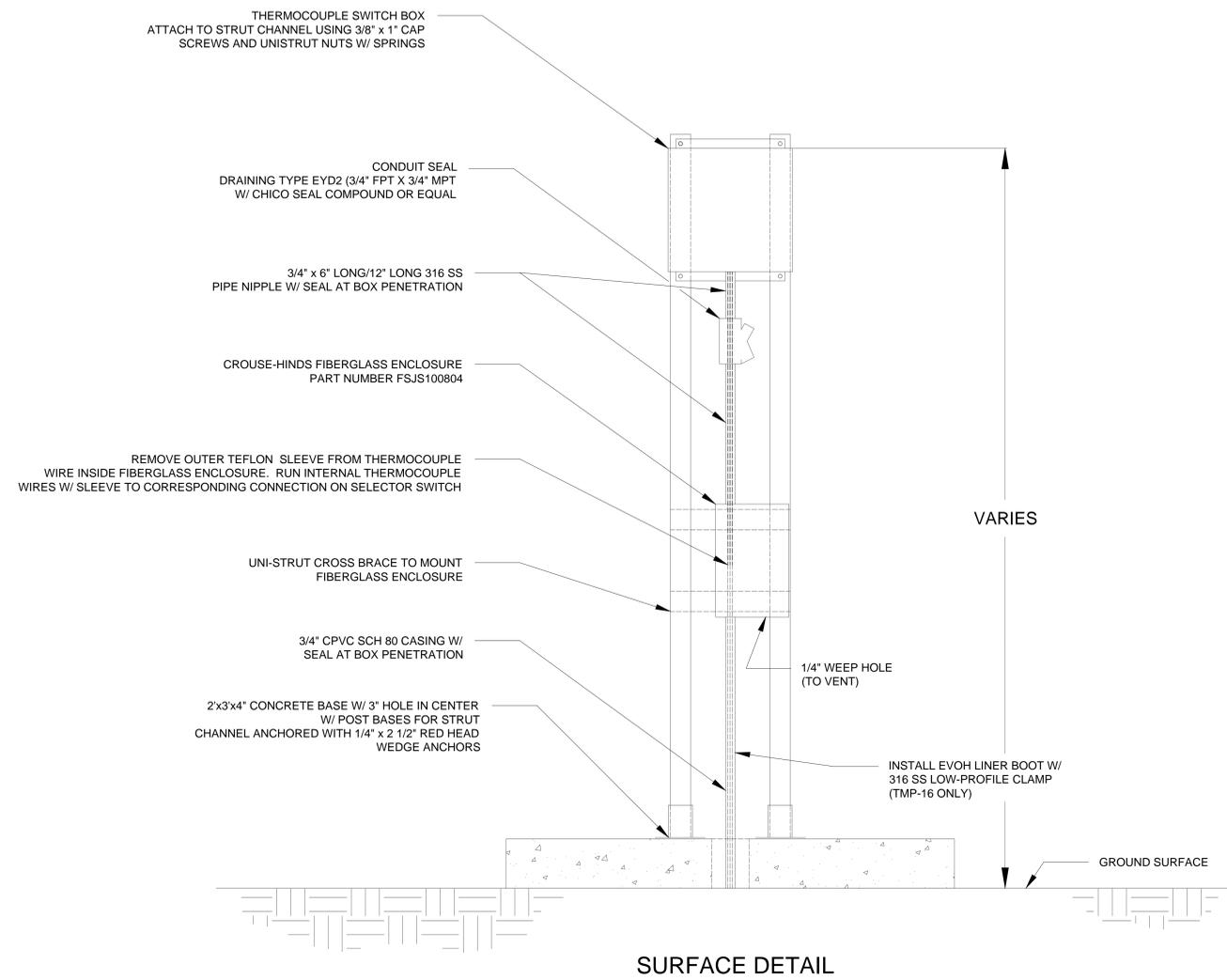
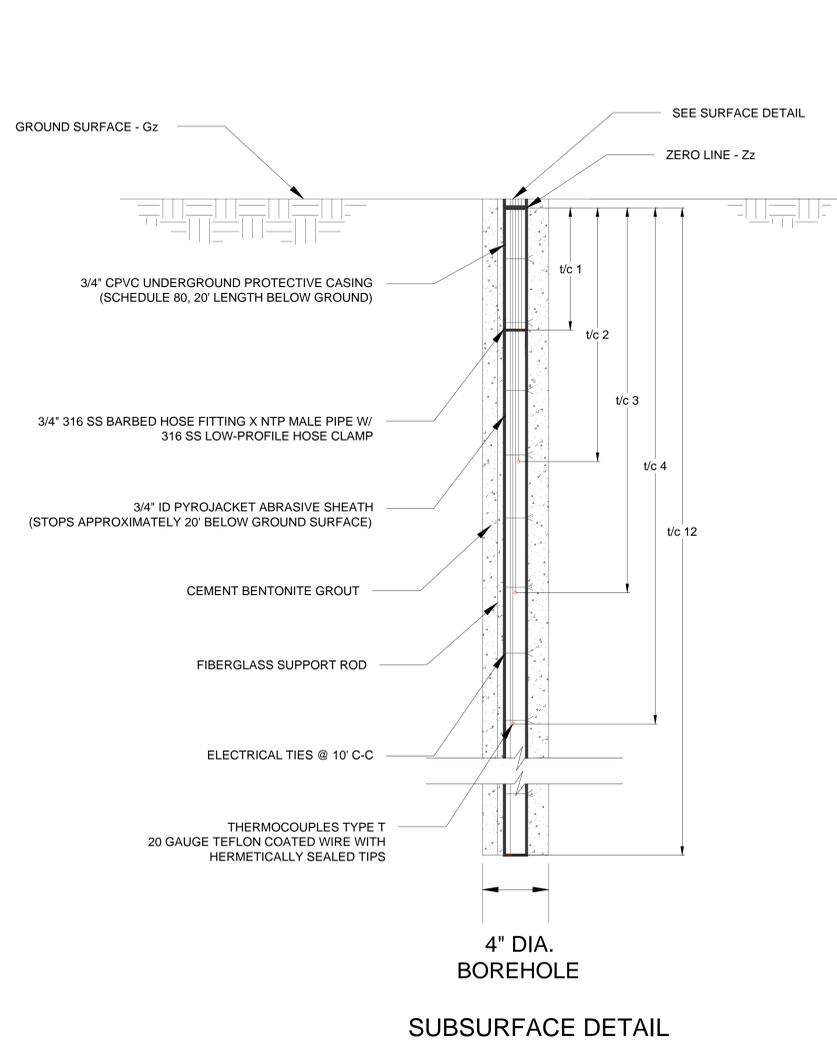


LEGEND

● TMP-30 TEMPERATURE MONITORING PROBE (PROPOSED)

TMP I.D.	NORTHING	EASTING	GROUND ELEV.	DESIGN ELEV.	TMP DEPTH
TMP-30	1067615.40	516277.79	480.00	300.00	180.00
TMP-31	1067602.62	516403.08	492.96	300.00	192.96
TMP-32	1067475.72	516393.00	505.20	300.00	205.20

BRIDGETON LANDFILL, LLC 13570 ST. CHARLES ROCK ROAD BRIDGETON, MISSOURI 63044	BRIDGETON LANDFILL FOURTEEN ADDITIONAL TMPS		DECEMBER 2014 DESIGNED BY: DMK APPROVED BY: ALK	DRAWING NO.:
PLAN VIEW (TMP 30 - 32)				003c
<small>PROJECT NUMBER: BT-041 FILE PATH: C:\Users\Paul.Dwyer\Documents\BT-041\Brideton\GIS\Drawings\003c\003c_Plan_Vis.dwg</small>			REVISION DATE	



1
004 NTS

TEMPERATURE MONITORING PROBE (TMP)

- NOTES:
- 1.) SWITCH BOX IS SAGINAW CONTROL & ENGINEERING ENCLOSURE 1210ELJ - PANEL IS SCE-12P10J WITH JIC SWING OUT PANEL KIT - MOUNTED WITH HINGE ON RIGHT.
 - 2.) HOLE FOR ROTARY SWITCH TO ACCOMMODATE SW142G-12-B
 - 3.) ALL PERFORATIONS AND CLAMPS NEMA 4 RATED

Probe ID	t/c 1 (depth)	t/c 2 (depth)	t/c 3 (depth)	t/c 4 (depth)	t/c 5 (depth)	t/c 6 (depth)	t/c 7 (depth)	t/c 8 (depth)	t/c 9 (depth)	t/c 10 (depth)	t/c 11 (depth)	t/c 12 (depth)
TMP-3R	20'	40'	60'	80'	100'	120'	140'	160'	180'	200'	217.5'	-
TMP-4R	10'	20'	29'	-	-	-	-	-	-	-	-	-
TMP-21	13'	26'	41.3'	-	-	-	-	-	-	-	-	-
TMP-22	15'	31'	50'	69.8'	-	-	-	-	-	-	-	-
TMP-23	20'	38'	56'	74'	92'	106.1	-	-	-	-	-	-
TMP-24	20'	39'	58'	77'	96'	115'	134'	153'	172'	191'	210'	225.3'
TMP-25	20'	40'	60'	80'	100'	120'	140'	160'	180'	200'	220'	235'
TMP-26	20'	40'	60'	80'	100'	120'	140'	160'	180'	200'	220'	234.8'
TMP-27	20'	40'	60'	80'	100'	120'	140'	160'	180'	200'	220'	232.9
TMP-28	20'	40'	60'	80'	100'	120'	140'	160'	180'	200'	217'	-
TMP-29	8'	16'	24.6'	-	-	-	-	-	-	-	-	-
TMP-30	20'	40'	60'	80'	100'	120'	140'	160'	180'	-	-	-
TMP-31	20'	40'	60'	80'	100'	120'	140'	160'	180'	192.96	-	-
TMP-32	20'	40'	60'	80'	100'	120'	140'	160'	180'	195	205.2	-