

FIGURES

1. Site Location Map
2. Pre-Remedial Action Site Plan
3. Test Pit Investigation Locations
4. Limits of Support of Excavation Sheeting
5. Reused Material, Quantities and Destinations Within Courtyard
6. Soil Waste Characterization Grid (5 to 9 ft bls)
7. Soil Waste Characterization Grid (9 to 19 ft bls)
8. Pre-Remedial Action Underground Storage Tank Locations
9. Post-Remedial Action Site Plan
10. In Situ Treatment Point Locations, Injection Areas and Application Volumes
11. Contamination Remaining in Soil After the Remedial Action Within Courtyard
12. Contamination Remaining in Soil After the Remedial Action Within the Garage
13. Composite Cover System Plan
14. Composite Cover System Details
15. Recovery System Trench and Utility Layout with Design Details



QUADRANGLE LOCATION



SOURCE:
USGS; 2013, Central Park, NY
USGS; 2013, Brooklyn, NY
7.5 Minute Topographic Quadrangle

Title:

SITE LOCATION MAP

FINAL ENGINEERING REPORT
PARAGON PAINT AND VARNISH CORPORATION
LONG ISLAND CITY, NEW YORK

Prepared for:

VERNON 4540 REALTY LLC

Remedial

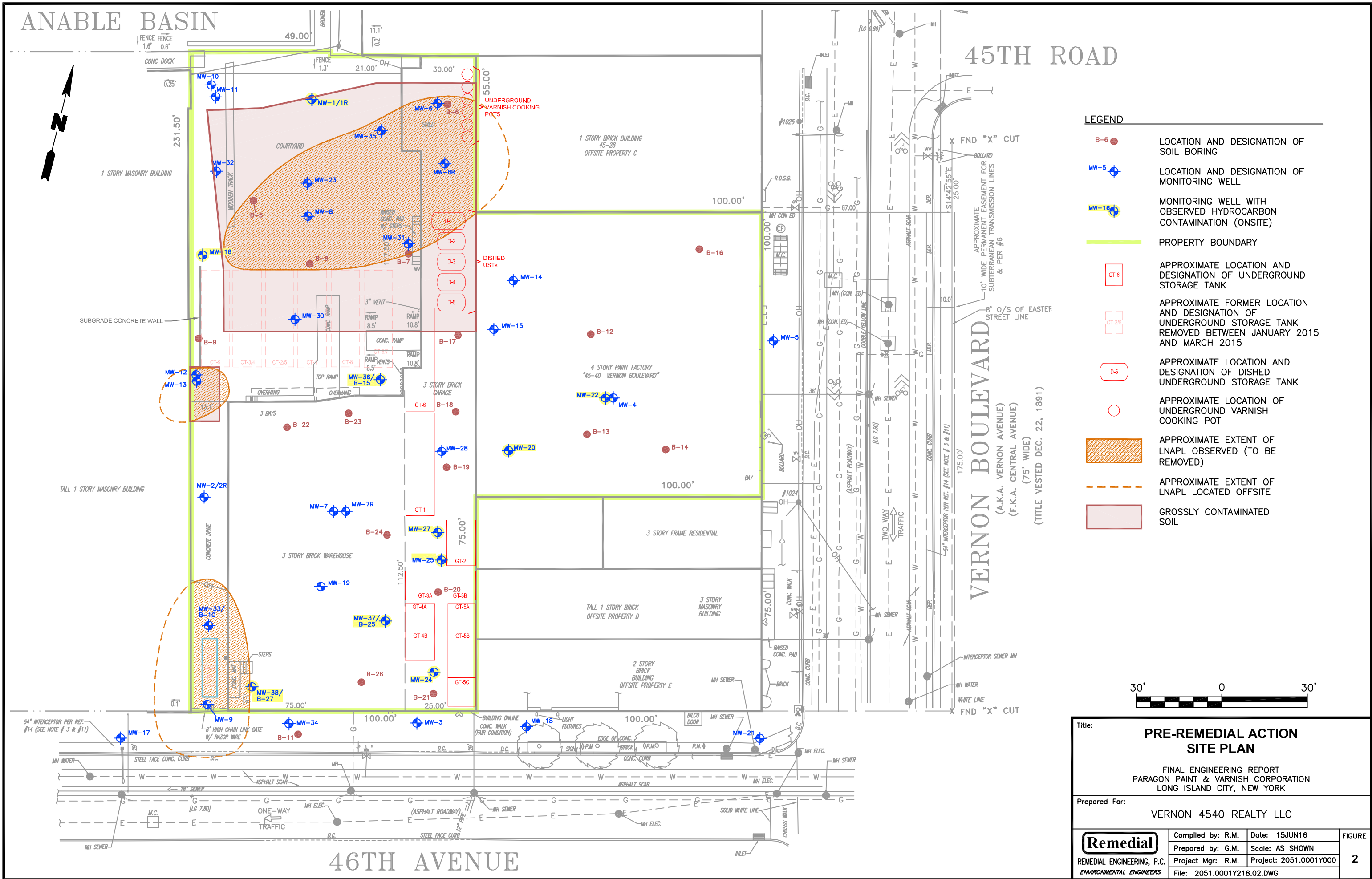
REMEDIAL ENGINEERING, P.C.
ENVIRONMENTAL ENGINEERS

Compiled by: J.K.	Date: 15JUN16
Prepared by: G.M.	Scale: AS SHOWN
Project Mgr.: R.M.	Project No.: 2051.0001Y000
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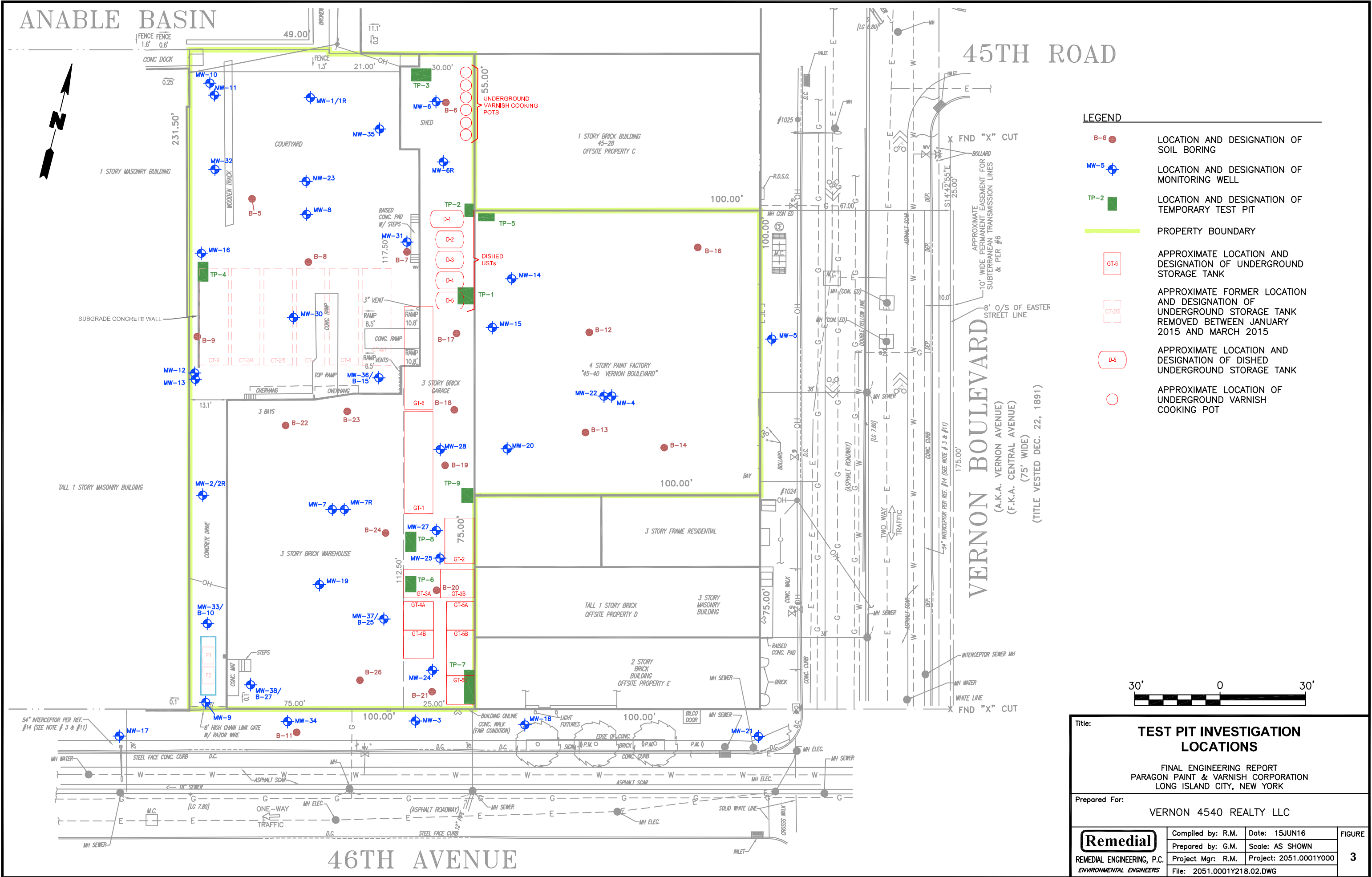
FIGURE

1

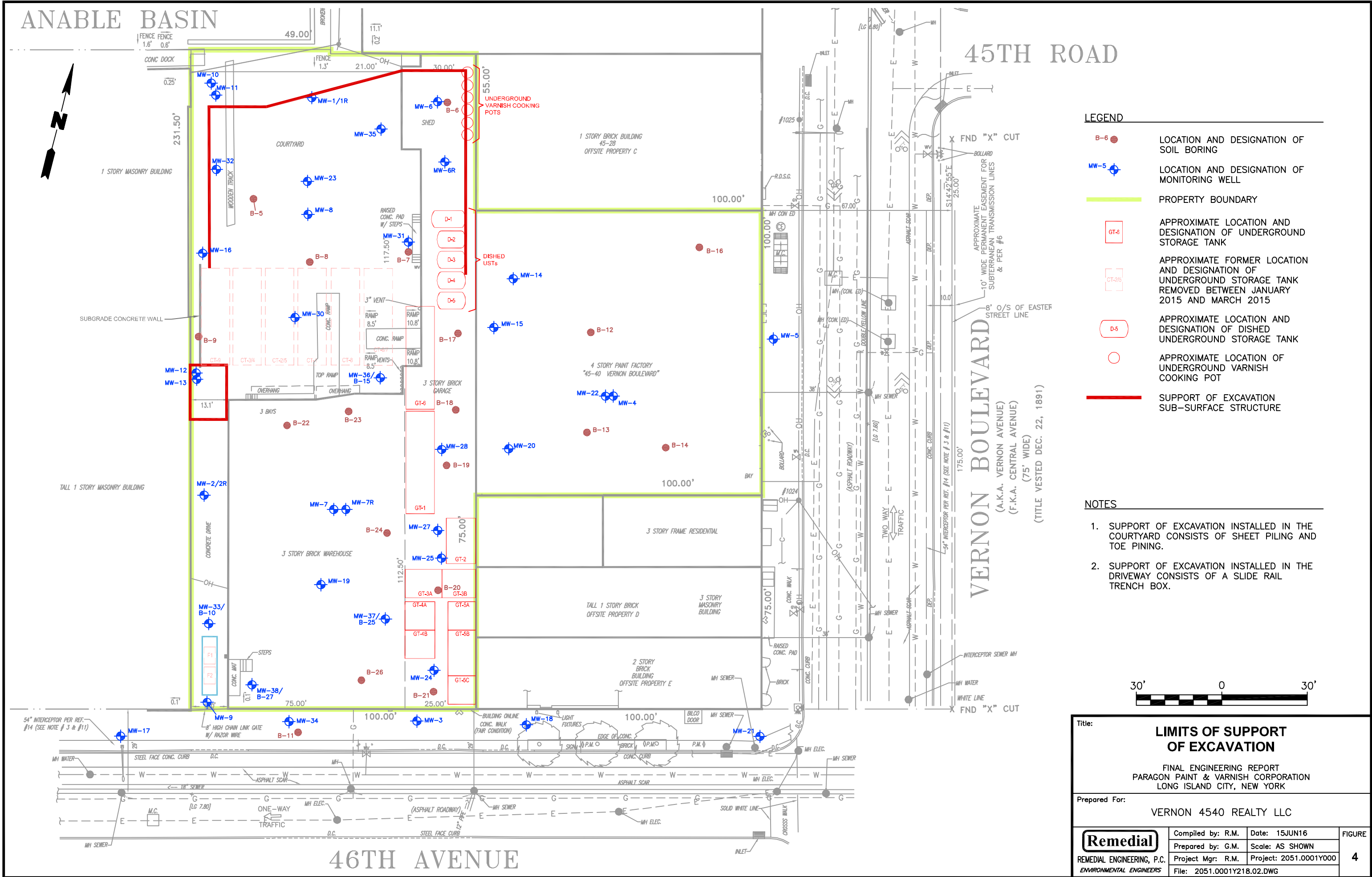
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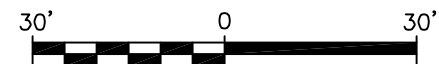
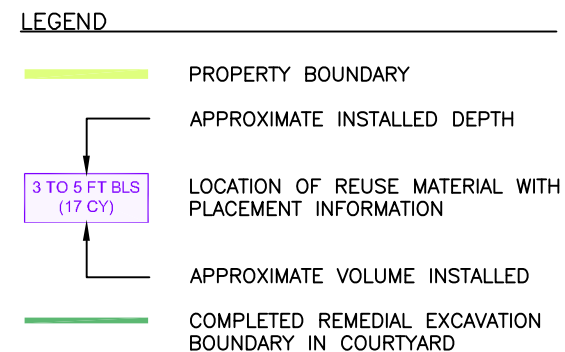


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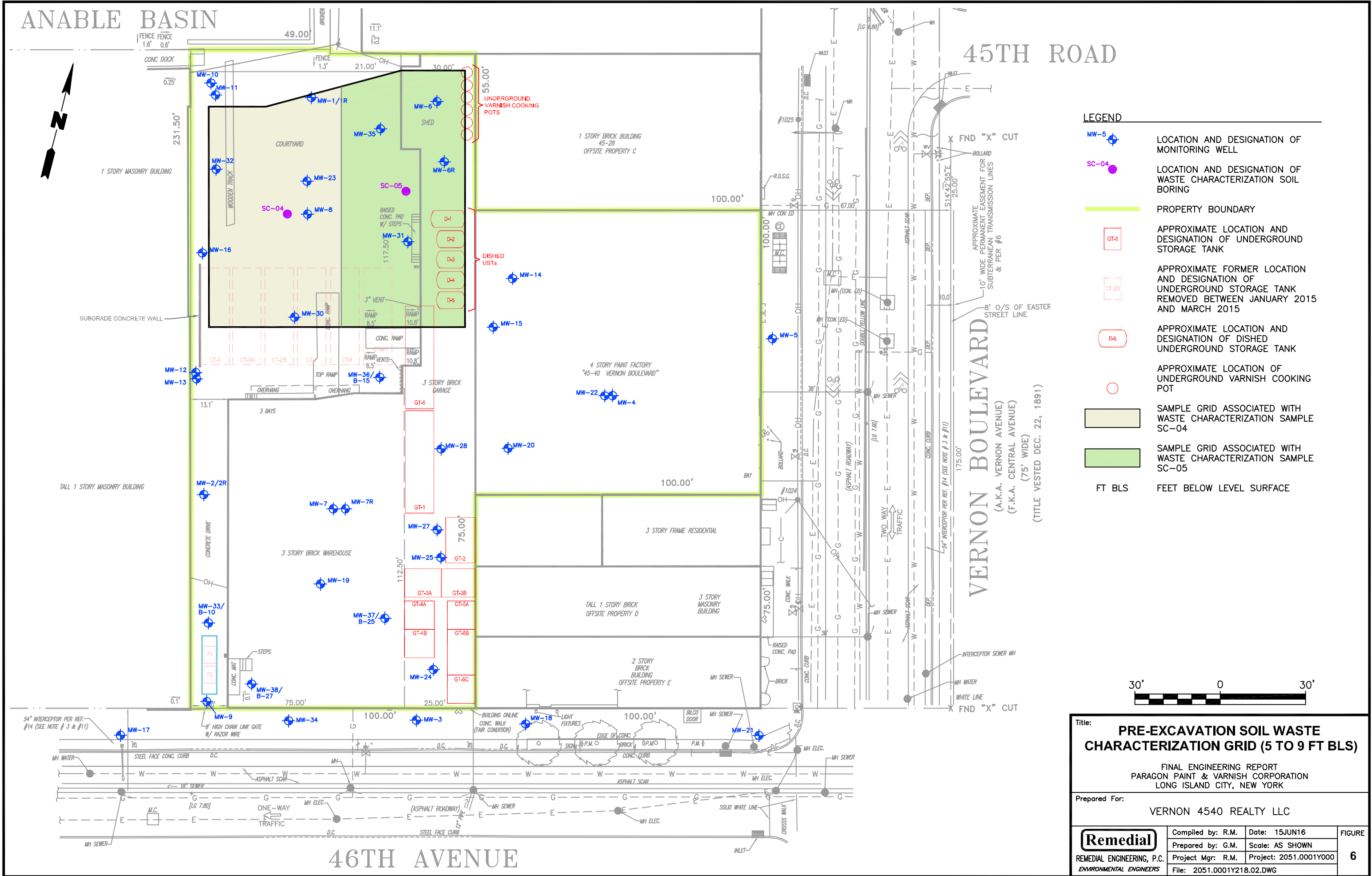
Title: **REUSED MATERIAL QUANTITIES AND LOCATION WITHIN COURTYARD**

FINAL ENGINEERING REPORT
PARAGON PAINT & VARNISH CORPORATION
LONG ISLAND CITY, NEW YORK

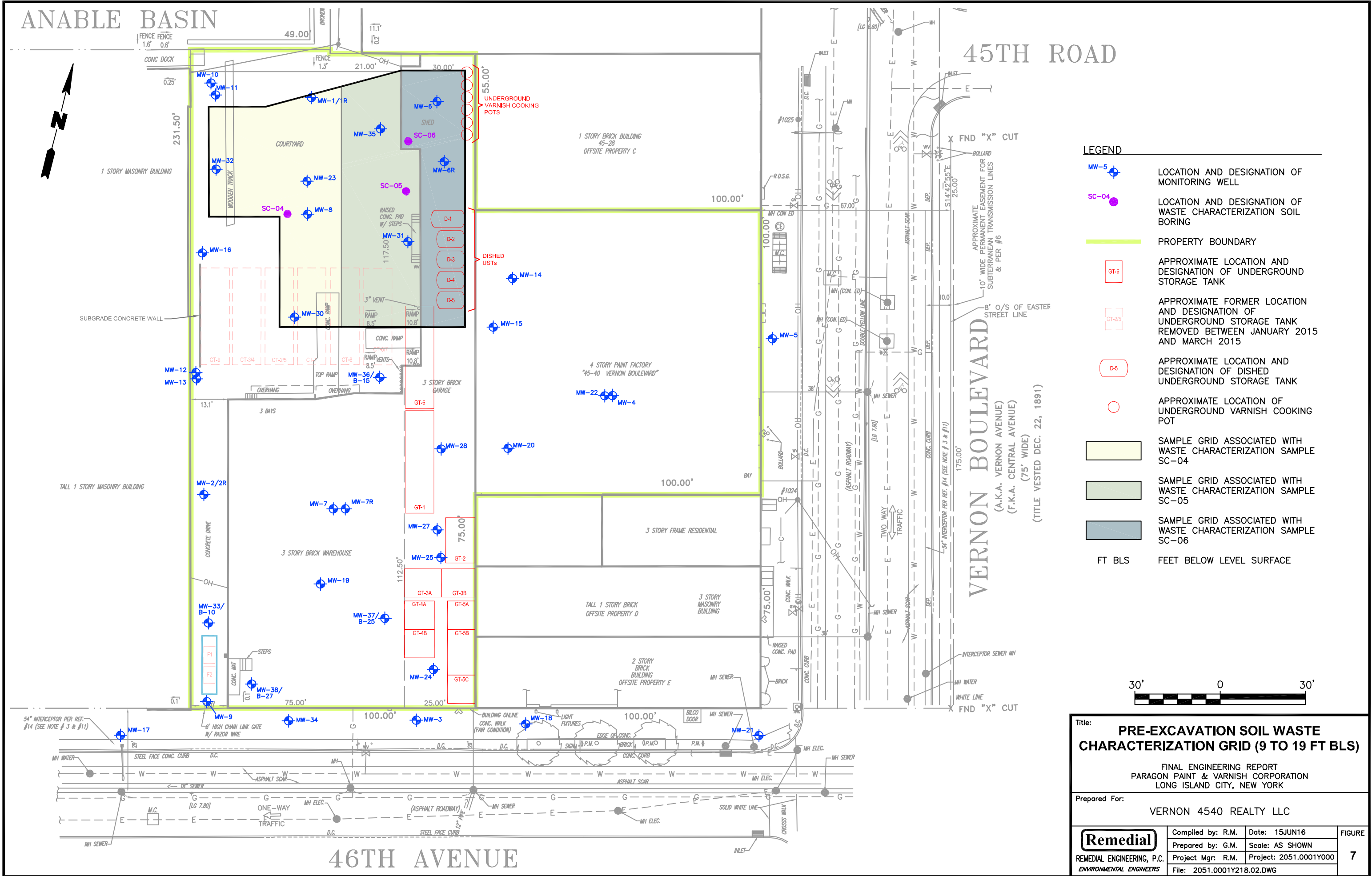
Prepared For: VERNON 4540 REALTY LLC

 REMEDIAL ENGINEERING, P.C. <i>ENVIRONMENTAL ENGINEERS</i>	Compiled by: R.M.	Date: 15JUN16	FIGURE 5
	Prepared by: G.M.	Scale: AS SHOWN	
	Project Mgr: R.M.	Project: 2051.0001Y000	
	File: 2051.0001Y218.03.DWG		

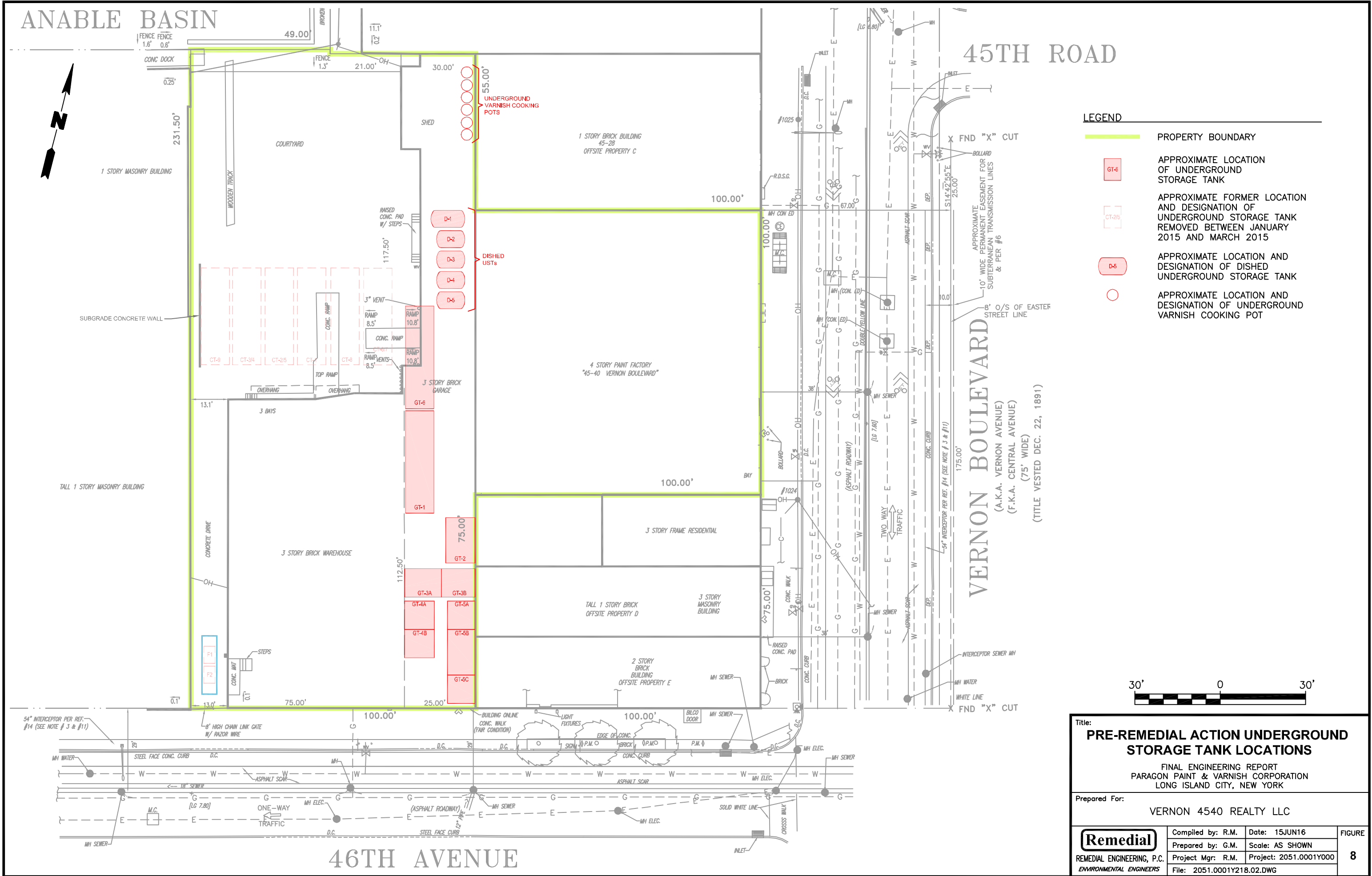
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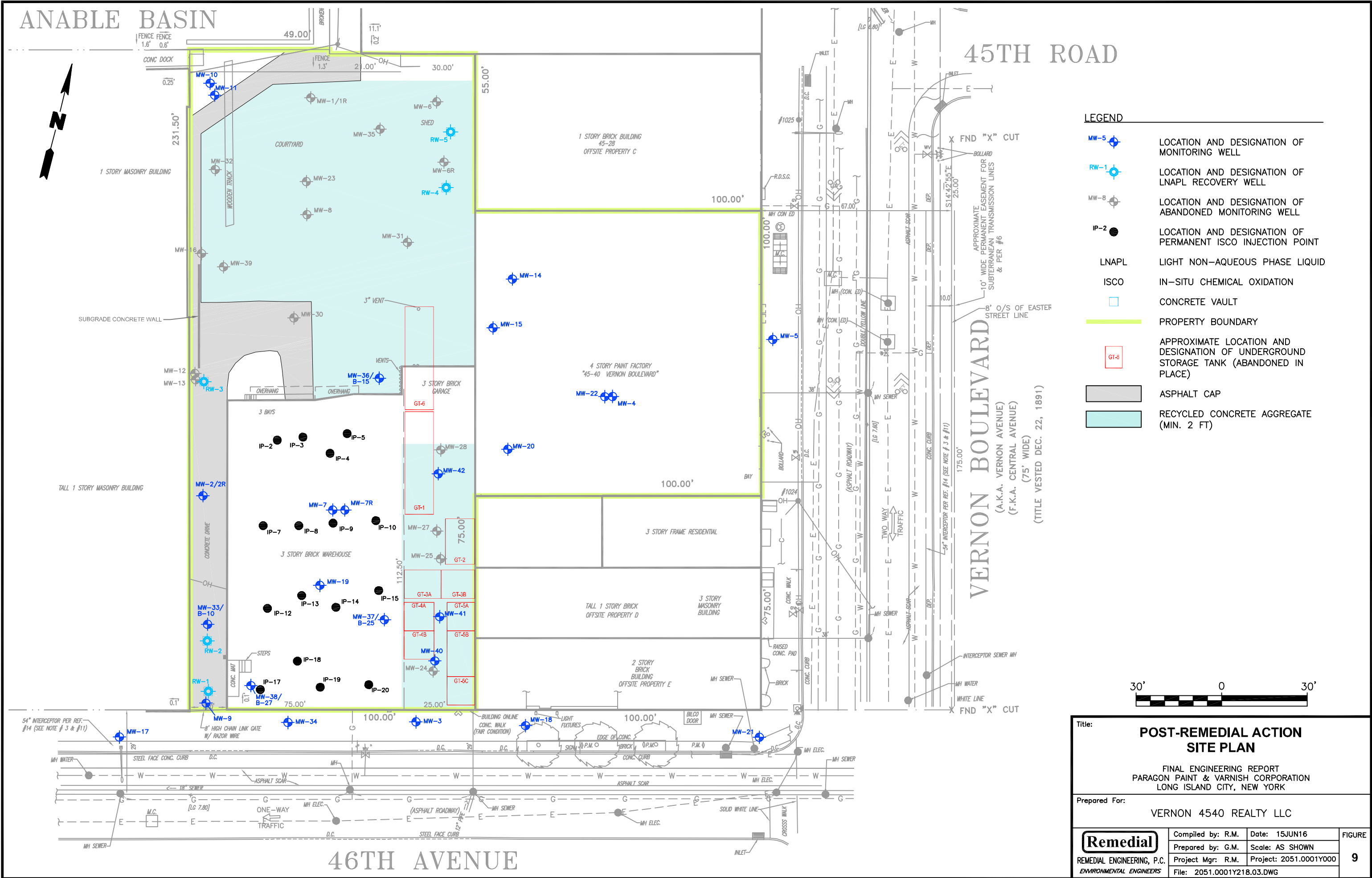
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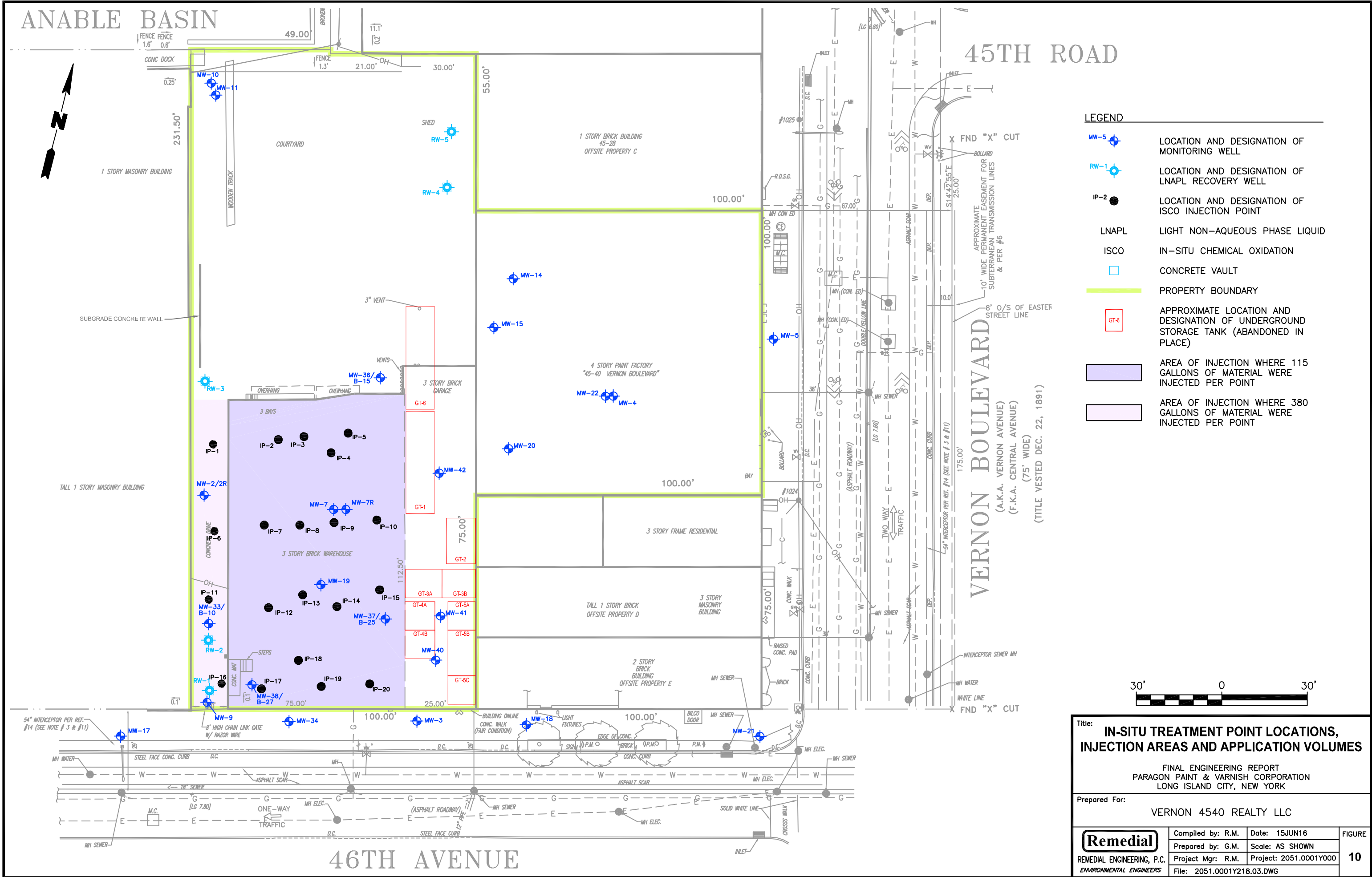
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ANABLE
BASIN



45TH ROAD

VERNON BOULEVARD
(A.K.A. VERNON AVENUE)
(F.K.A. CENTRAL AVENUE)
(75' WIDE)
(TITLE VESTED DEC. 22, 1891)

46TH AVENUE

LEGEND

- PD-12-S-B EXCAVATION BOTTOM SOIL SAMPLE LOCATION AND DESIGNATION WITH COMPOUND OF CONCERN EXCEEDANCES OF CLEANUP STANDARDS
- PD-10 EXCAVATION SIDEWALL SOIL SAMPLE LOCATION AND DESIGNATION WITH COMPOUND OF CONCERN EXCEEDANCES OF CLEANUP STANDARDS
- SC-04-SW-B-SR CONCRETE SLAB BOTTOM SOIL SAMPLE LOCATION AND DESIGNATION WITH COMPOUND OF CONCERN EXCEEDANCES OF CLEANUP STANDARDS
- SC-05-NW-B-S EXCAVATION BOTTOM SOIL SAMPLE LOCATION AND DESIGNATION WITH COMPOUND OF CONCERN DETECTIONS BELOW CLEANUP STANDARDS
- D-5S EXCAVATION SIDEWALL SOIL SAMPLE LOCATION AND DESIGNATION WITH COMPOUND OF CONCERN DETECTIONS BELOW CLEANUP STANDARDS
- SC-04-SW-B-S CONCRETE SLAB BOTTOM SOIL SAMPLE LOCATION AND DESIGNATION WITH COMPOUND OF CONCERN DETECTIONS BELOW CLEANUP STANDARDS (SEE NOTE 1)
- SC-04-NE POTENTIAL SAMPLE LOCATION AND DESIGNATION ABANDONED DUE TO REFUSAL
- PROPERTY BOUNDARY
- APPROXIMATE LOCATION AND DESIGNATION OF UNDERGROUND STORAGE TANK (ABANDONED IN PLACE)
- APPROXIMATE LOCATION AND DESIGNATION OF DISHED UNDERGROUND STORAGE TANK (REMOVED)
- REMEDIAL ACTION EXCAVATION LIMITS
- CONCRETE SLAB
- 9 FT BLS EXCAVATION FOOTPRINT
- 11 FT BLS EXCAVATION FOOTPRINT (TOPOGRAPHY OF CONCRETE SLAB)
- 13 FT BLS EXCAVATION FOOTPRINT
- 15 FT-15.5 FT BLS EXCAVATION FOOTPRINT
- 16 FT BLS EXCAVATION FOOTPRINT
- 17 FT BLS EXCAVATION FOOTPRINT
- 18 FT BLS EXCAVATION FOOTPRINT
- GC AREA 1 (4-6 FT BLS) DESIGNATION AND INFERRED HORIZONTAL AND VERTICAL LIMITS OF REMAINING GROSSLY CONTAMINATED MATERIAL BASED ON FIELD OBSERVATION AND RESULTS OF POST-EXCAVATION SAMPLING AND FIELD SCREENING

Parameter	Standards*	µg/kg
VOCs		
Benzene	60	
Ethylbenzene	1000	
Isopropylbenzene	**2300	
Total Xylenes	1600	

CONCENTRATIONS IN µg/kg

µg/kg - MICROGRAMS PER KILOGRAM
NYSDC - NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
* - NYSDC PART 375 PROTECTION OF GROUNDWATER
** - NYSDC CP-51 PROTECTION OF GROUNDWATER STANDARDS
VOCs - VOLATILE ORGANIC COMPOUNDS
J - ESTIMATED VALUE
FT BLS - FEET BELOW LAND SURFACE

- NOTE**
- CONCRETE SLAB LOCATED IN COURTYARD AT APPROXIMATELY 11 TO 13 FT BLS WAS NOT REMOVED DURING REMEDIAL ACTION DUE TO SIZE. POST EXCAVATION SOIL SAMPLES WERE COLLECTED AT ACCESSIBLE EDGE BENEATH CONCRETE SLAB AS SHOWN DURING THE PERFORMANCE OF THE REMEDIAL ACTION.
 - GROSS CONTAMINATION PRESENT FROM 17.5' TO 20' BLS. ADDITIONAL EXCAVATION NOT PERFORMED DUE TO LIMITATIONS OF SHORING METHOD USED.

ABANDONED IN PLACE UNDERGROUND STORAGE TANK INFORMATION			
TANK ID	ESTIMATED DIAMETER (FT)	ESTIMATED LENGTH (FT)	ESTIMATED CAPACITY (GAL)
GT-1	10	36	21,000
GT-2	10	13	7,500
GT-3A	10	11.5	6,700
GT-3B	10	11.5	6,700
GT-4A	10	9	5,000
GT-4B	10	9	5,000
GT-5A	10	12	7,000
GT-5B	10	12	7,000
GT-5C	10	12	7,000
GT-6	10	36	21,000

REMOVED UNDERGROUND STORAGE TANK INFORMATION			
D-1	6	12	2,500
D-2	6	10	2,000
D-3	6	10	2,000
D-4	6	10	2,000
D-5	6	10	2,000



Title: **CONTAMINATION REMAINING IN SOIL AFTER THE REMEDIAL ACTION WITHIN COURTYARD**

FINAL ENGINEERING REPORT
PARAGON PAINT & VARNISH CORPORATION
LONG ISLAND CITY, NEW YORK

Prepared For: VERNON 4540 REALTY LLC

Remedial REMEDIAL ENGINEERING, P.C. ENVIRONMENTAL ENGINEERS	Compiled by: J.K.	Date: 15JUN16	FIGURE 11
	Prepared by: G.M.	Scale: AS SHOWN	
	Project Mgr: R.M.	Project: 2051.0001Y000	
	File: 2051.0001Y1218.05.DWG		

SC-04-SW-B-SR	12/28/15	12/28/15 DUP
Depth (ft bls)	13	13
VOCs		
Benzene	2600 J	3600
Ethylbenzene	6000	8900
Isopropylbenzene	8100 J	8600 J
Total Xylenes		

SC-05-SW-B	12/28/15	12/28/15 DUP
Depth (ft bls)	13	13
VOCs		
Benzene	2600 J	3600
Ethylbenzene	6000	8900
Isopropylbenzene	8100 J	8600 J
Total Xylenes		

Driveway-B	12/28/15	12/28/15 DUP
Depth (ft bls)	13	13
VOCs		
Benzene	2600 J	3600
Ethylbenzene	6000	8900
Isopropylbenzene	8100 J	8600 J
Total Xylenes		

PD-06B	12/27/16	12/27/16
Depth (ft bls)	9-11	9-11
VOCs		
Benzene	150	150
Ethylbenzene	9600	9600
Isopropylbenzene	28000	28000
Total Xylenes	100000	100000

PD-01	12/7/15	12/7/15
Depth (ft bls)	4-6	4-6
VOCs		
Benzene	150	150
Ethylbenzene	9600	9600
Isopropylbenzene	28000	28000
Total Xylenes	27000	27000

PD-11	12/7/15	12/7/15
Depth (ft bls)	4-6	4-6
VOCs		
Benzene	150	150
Ethylbenzene	9600	9600
Isopropylbenzene	28000	28000
Total Xylenes	27000	27000

D-1 B	1/13/16	1/13/16
Depth (ft bls)	11-13	11-13
VOCs		
Benzene	150	150
Ethylbenzene	9600	9600
Isopropylbenzene	28000	28000
Total Xylenes	27000	27000

PD-10	12/2/15	12/2/15
Depth (ft bls)	4-6	4-6
VOCs		
Benzene	150	150
Ethylbenzene	9600	9600
Isopropylbenzene	28000	28000
Total Xylenes	27000	27000

D-1-East	10/29/16	10/29/16
Depth (ft bls)	6-7	6-7
VOCs		
Benzene	150	150
Ethylbenzene	9600	9600
Isopropylbenzene	28000	28000
Total Xylenes	27000	27000

D-2-East	10/29/16	10/29/16
Depth (ft bls)	6-7	6-7
VOCs		
Benzene	150	150
Ethylbenzene	9600	9600
Isopropylbenzene	28000	28000
Total Xylenes	27000	27000

D-2 B	1/13/16	1/13/16
Depth (ft bls)	10-12	10-12
VOCs		
Benzene	150	150
Ethylbenzene	9600	9600
Isopropylbenzene	28000	28000
Total Xylenes	27000	27000

D-3-East	10/29/16	10/29/16
Depth (ft bls)	6-7	6-7
VOCs		
Benzene	150	150
Ethylbenzene	9600	9600
Isopropylbenzene	28000	28000
Total Xylenes	27000	27000

D-3 B	1/13/16	1/13/16
Depth (ft bls)	10-12	10-12
VOCs		
Benzene	150	150
Ethylbenzene	9600	9600
Isopropylbenzene	28000	28000
Total Xylenes	27000	27000

D-4 B	1/13/16	1/13/16
Depth (ft bls)	10-12	10-12
VOCs		
Benzene	150	150
Ethylbenzene	9600	9600
Isopropylbenzene	28000	28000
Total Xylenes	27000	27000

D-5 B	1/13/16	1/13/16
Depth (ft bls)	10-12	10-12
VOCs		
Benzene	150	150
Ethylbenzene	9600	9600
Isopropylbenzene	28000	28000
Total Xylenes	27000	27000

PD-12-E-SW	1/21/16	1/21/16
Depth (ft bls)	4-6	4-6
VOCs		
Benzene	150	150
Ethylbenzene	9600	9600
Isopropylbenzene	28000	28000
Total Xylenes	27000	27000

PD-12-S-B	1/21/16	1/21/16
Depth (ft bls)	11-13	11-13
VOCs		
Benzene	150	150
Ethylbenzene	9600	9600
Isopropylbenzene	28000	28000
Total Xylenes	27000	27000

PD-12-S-SW	1/21/16	1/21/16
Depth (ft bls)	4-6	4-6
VOCs		
Benzene	150	150
Ethylbenzene	9600	9600
Isopropylbenzene	28000	28000
Total Xylenes	27000	27000

ANABLE BASIN

45TH ROAD

VERNON BOULEVARD
(A.K.A. VERNON AVENUE)
(F.K.A. CENTRAL AVENUE)
(TITLE VESTED DEC. 22, 1891)

46TH AVENUE

LEGEND

- GT-1-E-B ● POTENTIAL CONFIRMATORY SOIL SAMPLE LOCATION AND DESIGNATION WHERE CONCRETE REFUSAL ENCOUNTERED
- GT-6-N-SW ● UNDERGROUND STORAGE TANK BOTTOM SOIL SAMPLE LOCATION AND DESIGNATION BENEATH CONCRETE SLAB WITH COMPOUND OF CONCERN DETECTIONS BELOW CLEANUP STANDARDS
- GT-4A-E-B ● UNDERGROUND STORAGE TANK SIDEWALL SOIL SAMPLE LOCATION AND DESIGNATION WITH COMPOUND OF CONCERN DETECTIONS BELOW CLEANUP STANDARDS
- GT-5C-W-B ● UNDERGROUND STORAGE TANK BOTTOM SOIL SAMPLE LOCATION AND DESIGNATION BENEATH CONCRETE SLAB WITH COMPOUND OF CONCERN EXCEEDANCES OF CLEANUP STANDARDS
- GT-2-N-SW ● UNDERGROUND STORAGE TANK SIDEWALL SOIL SAMPLE LOCATION AND DESIGNATION WITH COMPOUND OF CONCERN EXCEEDANCES OF CLEANUP STANDARDS
- PROPERTY BOUNDARY
- APPROXIMATE LOCATION AND DESIGNATION OF UNDERGROUND STORAGE TANK (ABANDONED IN PLACE)
- GC AREA 8 (9-13 FT BLS)
- DESIGNATION AND INFERRED HORIZONTAL AND VERTICAL LIMITS OF REMAINING GROSSLY CONTAMINATED MATERIAL BASED ON FIELD OBSERVATION AND RESULTS OF POST-EXCAVATION SAMPLING AND FIELD SCREENING

Parameter	Standards*
VOCS	
Benzene	60
Isopropylbenzene	**2300

CONCENTRATIONS IN µg/kg

µg/kg - MICROGRAMS PER KILOGRAM

NYSDEC - NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

* - NYSDEC PART 375 PROTECTION OF GROUNDWATER

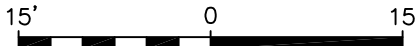
** - NYSDEC CP-51 PROTECTION OF GROUNDWATER STANDARDS

VOCS - VOLATILE ORGANIC COMPOUNDS

ND - NO DETECTION

NE - NO EXCEEDANCE

FT BLS - FEET BELOW LAND SURFACE



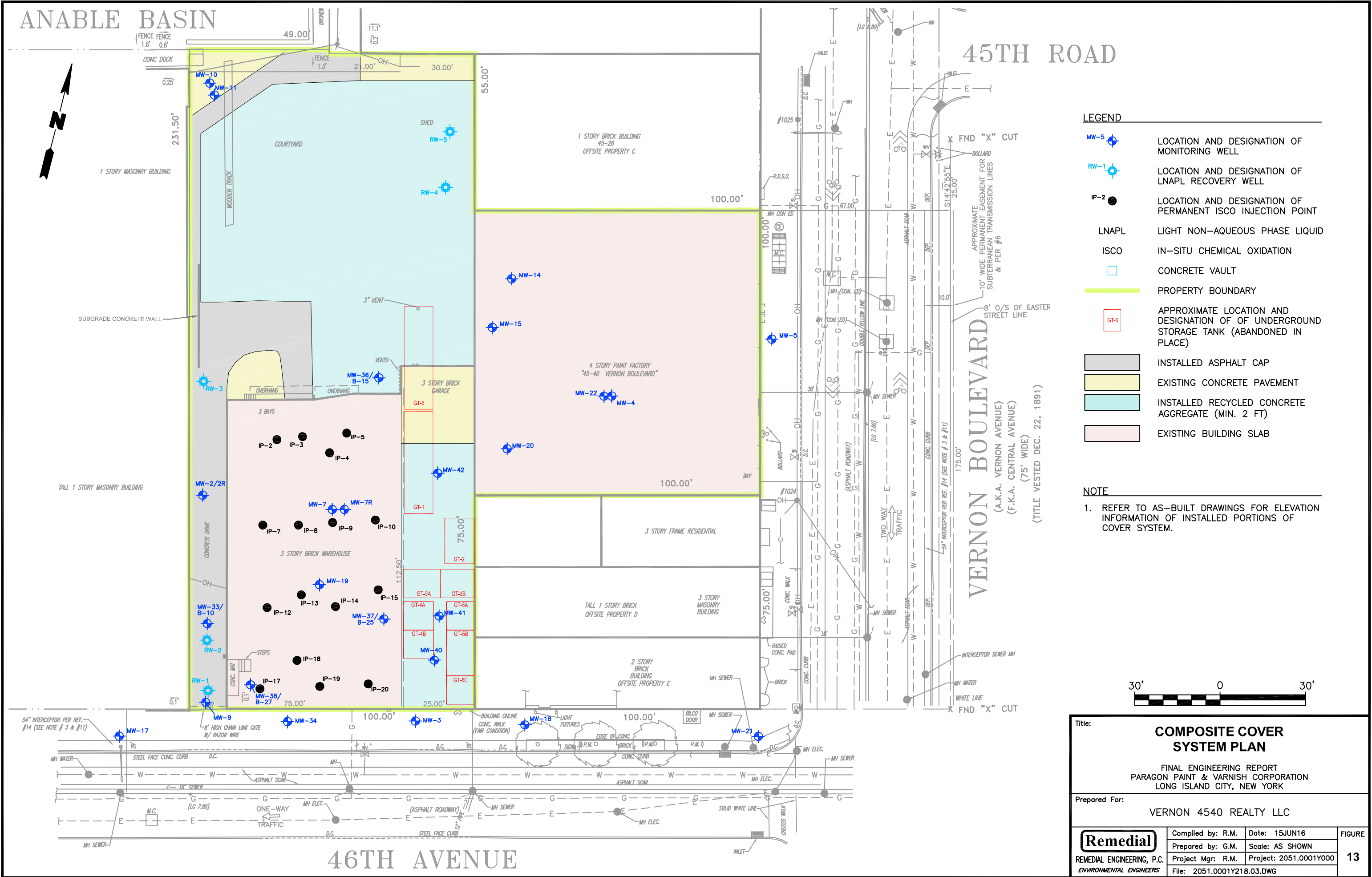
Title: **CONTAMINATION REMAINING IN SOIL AFTER THE REMEDIAL ACTION WITHIN THE GARAGE**

FINAL ENGINEERING REPORT
PARAGON PAINT & VARNISH CORPORATION
LONG ISLAND CITY, NEW YORK

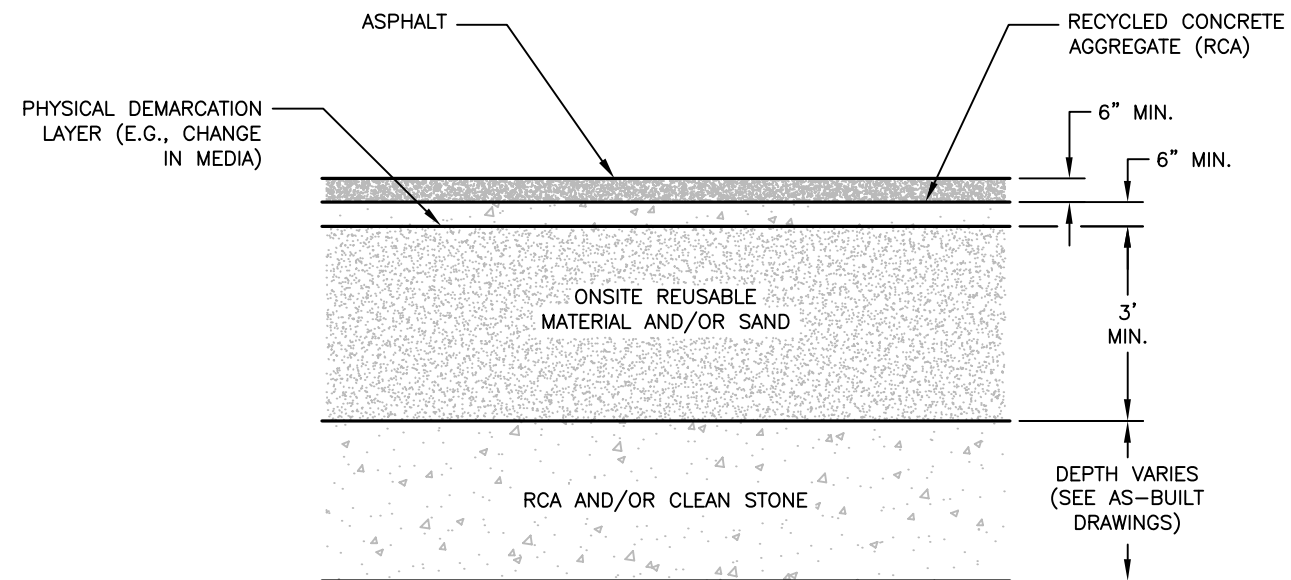
Prepared For: **VERNON 4540 REALTY LLC**

<div>Remedial</div> <div>REMEDIAL ENGINEERING, P.C.</div> <div>ENVIRONMENTAL ENGINEERS</div>	Compiled by: J.K.	Date: 15JUN16	PL
	Prepared by: G.M.	Scale: AS SHOWN	1
	Project Mgr: R.M.	Project: 2051.0001Y000	
	File: 2051.0001Y218.03.DWG		

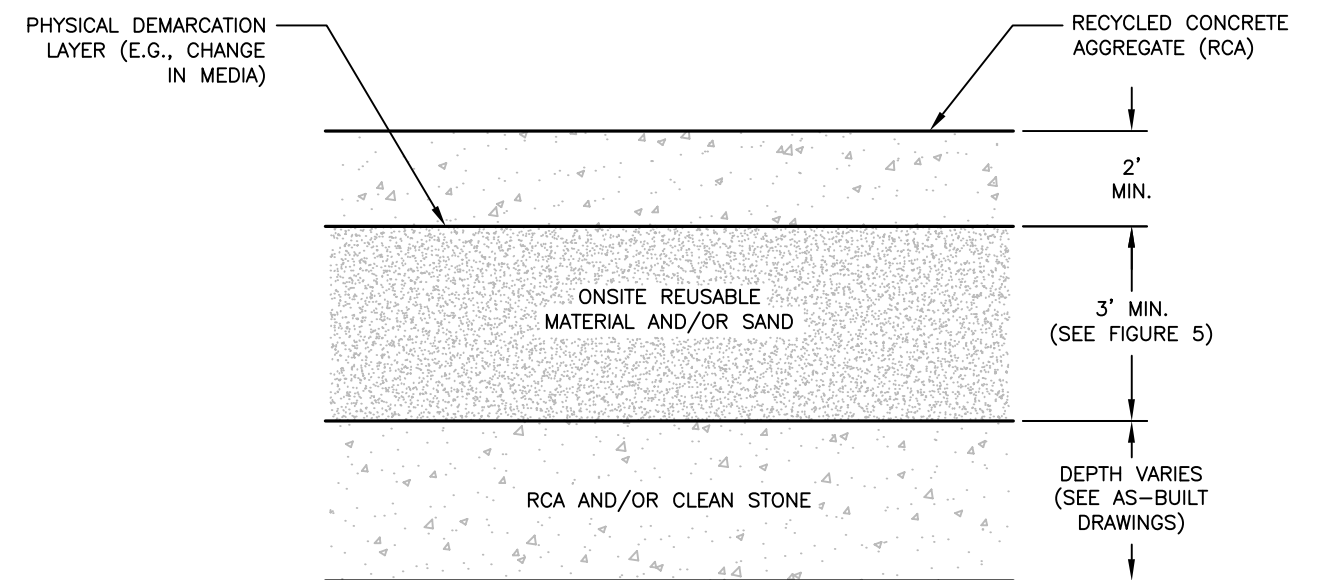
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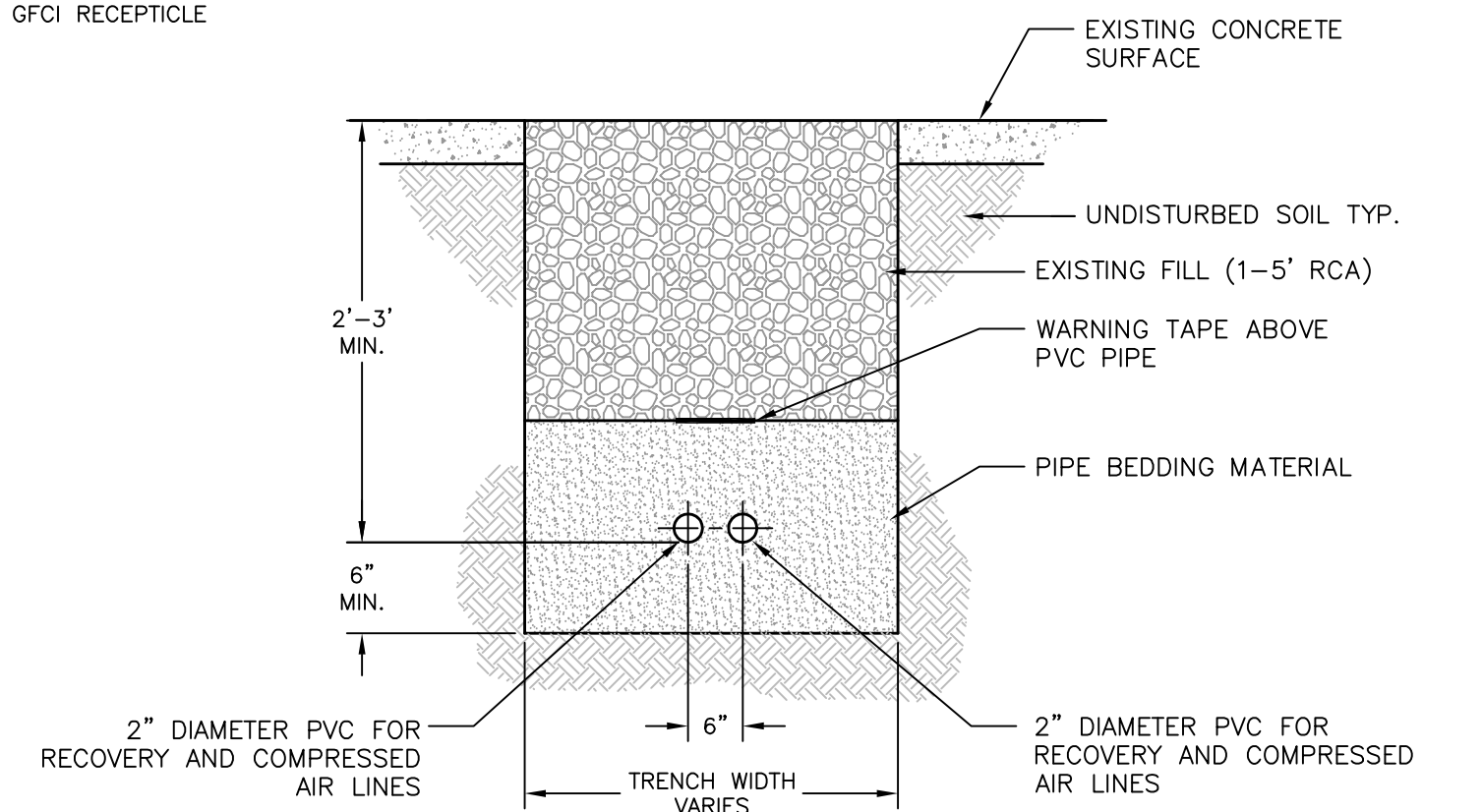
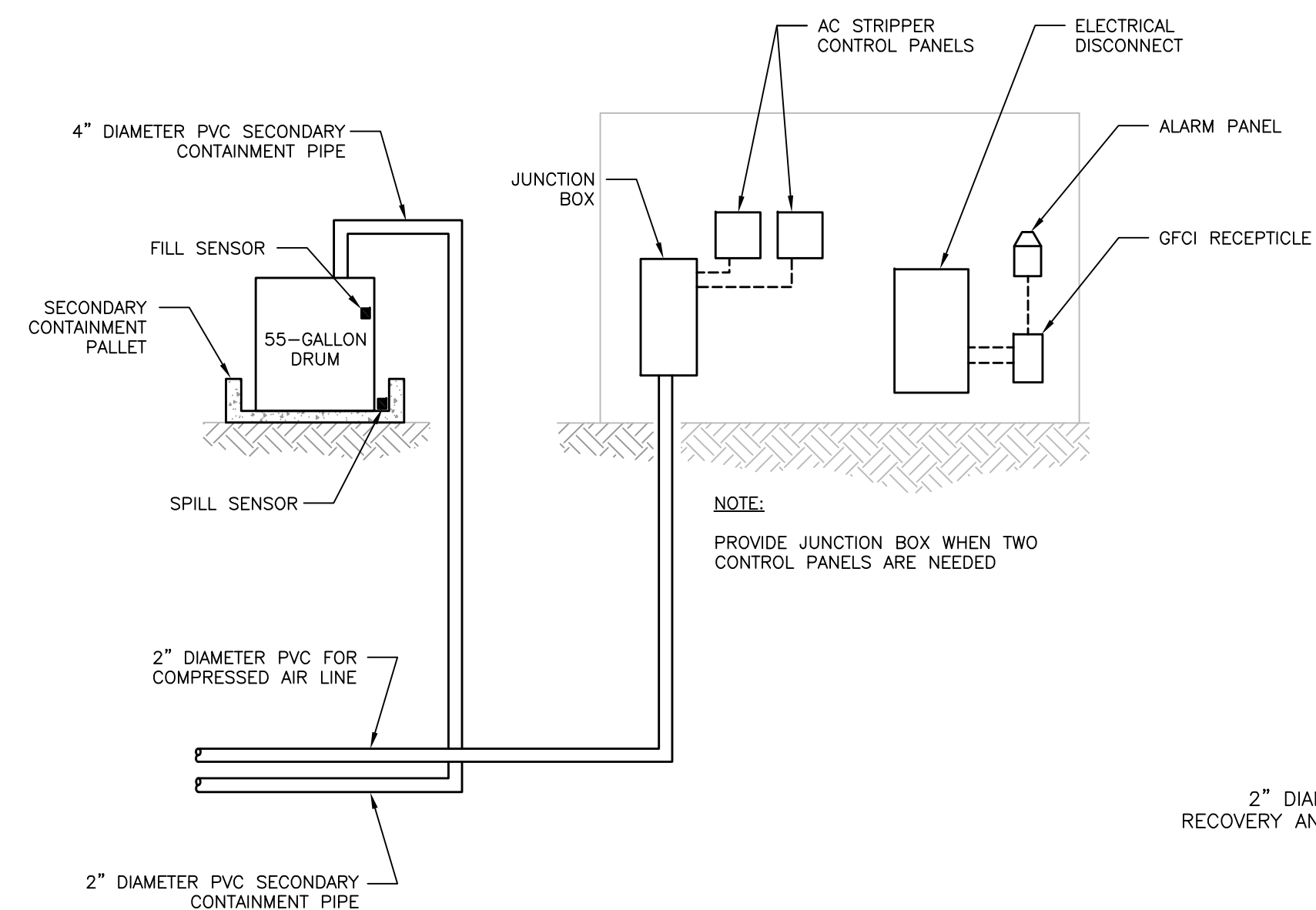
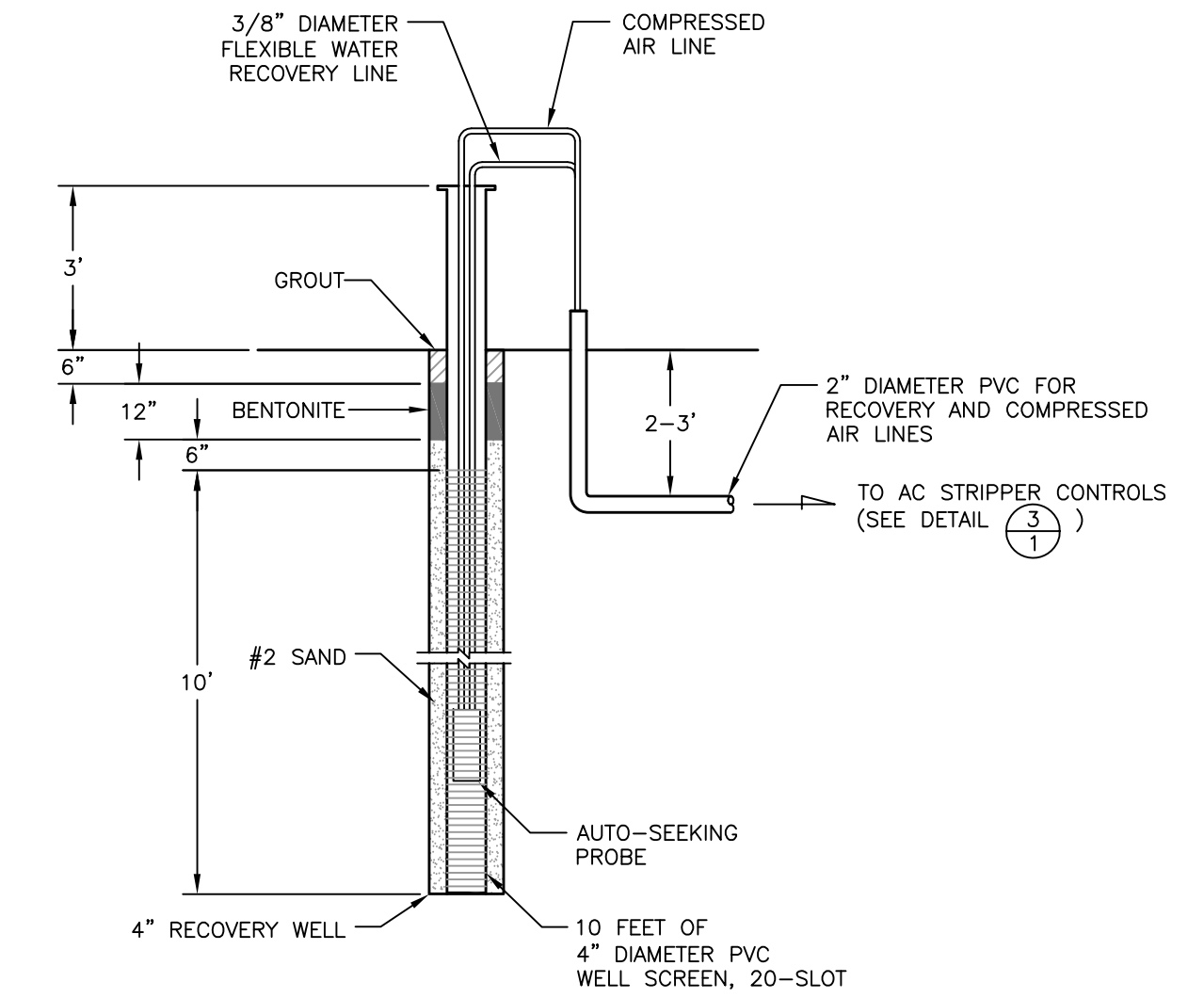
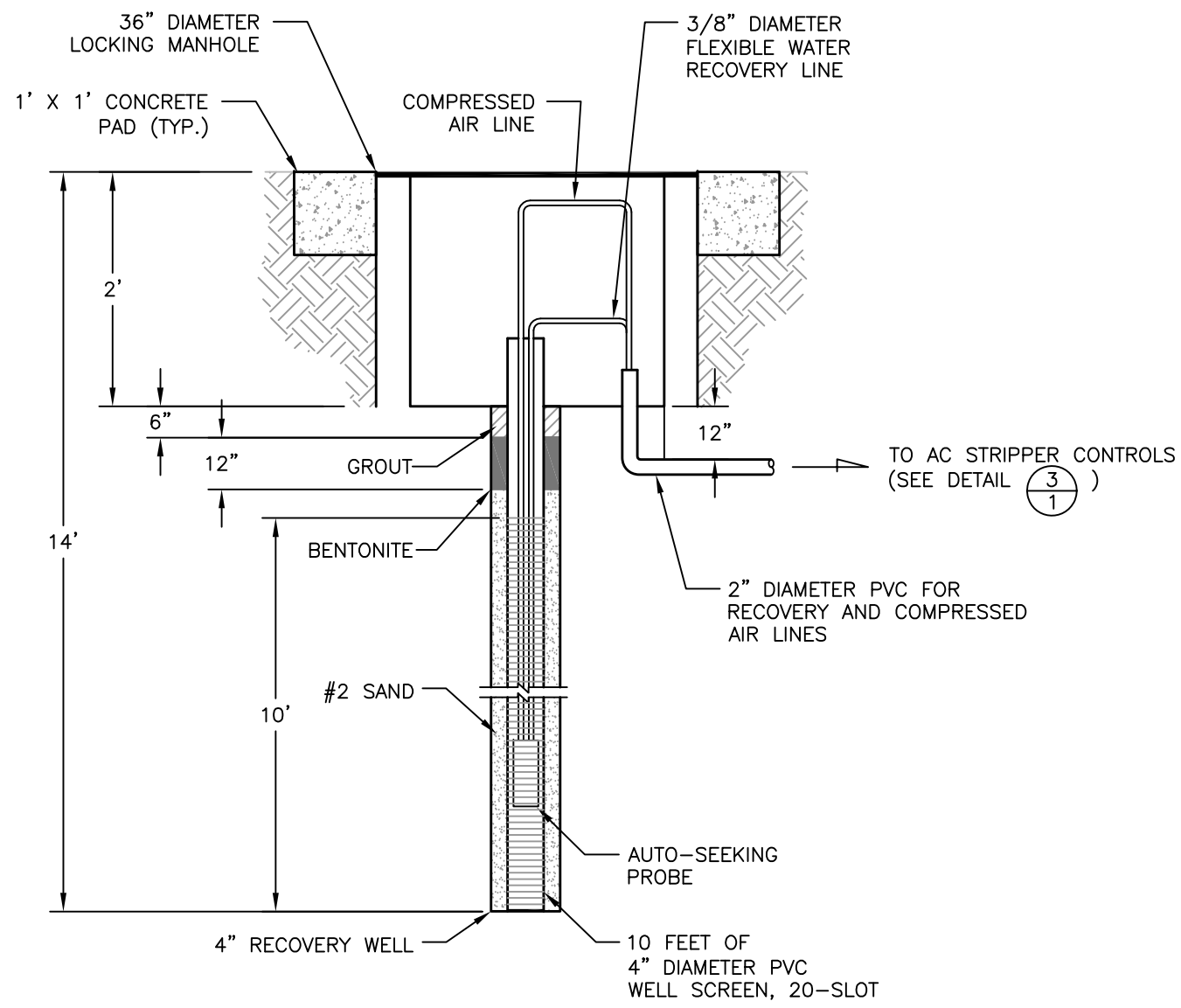
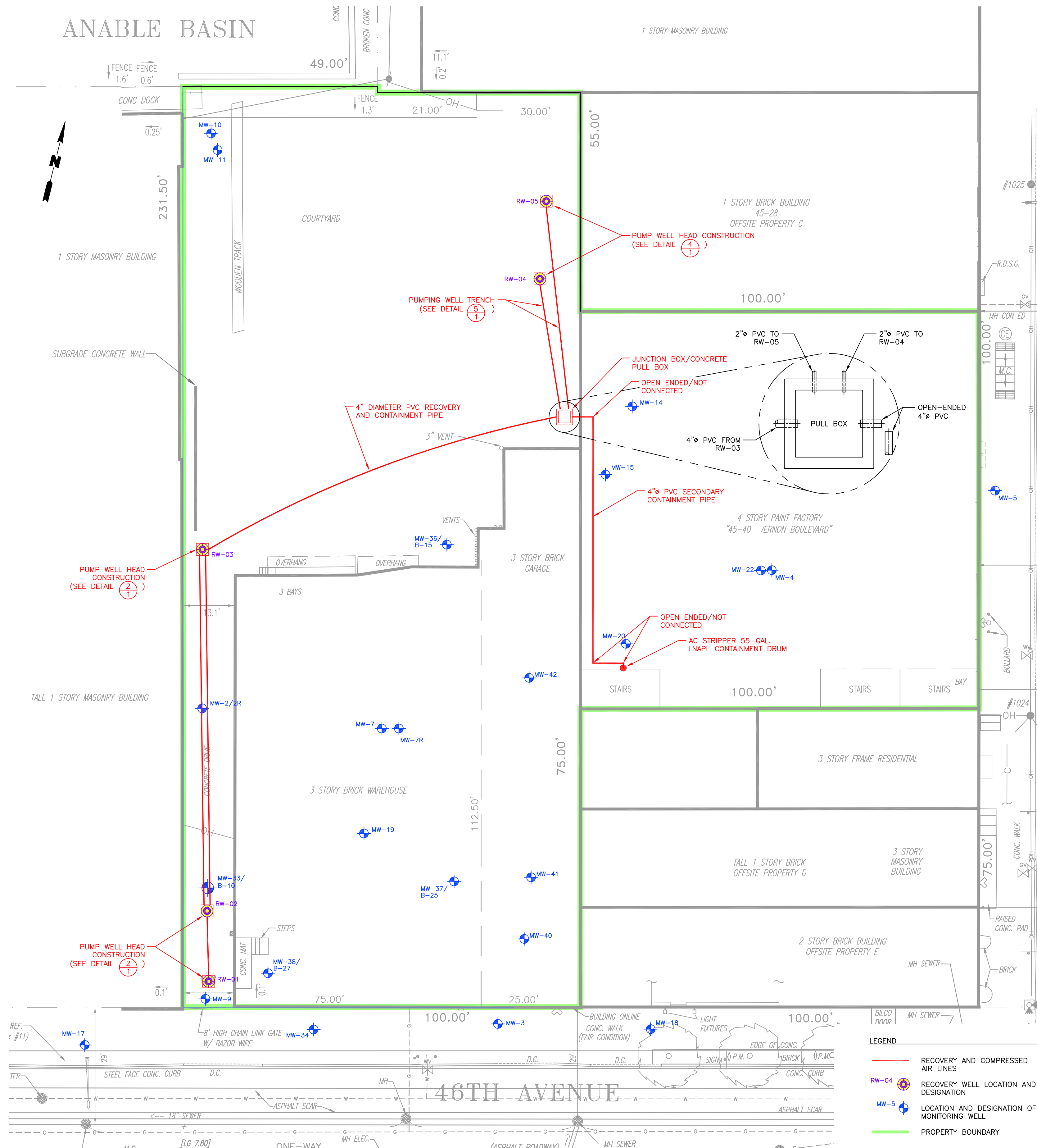
1
14 TYPICAL ASPHALT CAP DETAIL



2
14 TYPICAL RECYCLED CONCRETE AGGREGATE CAP DETAIL

Title: INSTALLED COVER SYSTEM DETAILS			
FINAL ENGINEERING REPORT PARAGON PAINT & VARNISH CORPORATION LONG ISLAND CITY, NEW YORK			
Prepared For: VERNON 4540 REALTY LLC			
Remedial REMEDIAL ENGINEERING, P.C. ENVIRONMENTAL ENGINEERS	Compiled by: R.M.	Date: 15JUN16	FIGURE 14
	Prepared by: G.M.	Scale: AS SHOWN	
	Project Mgr: R.M.	Project: 2051.0001Y000	
		File: 2051.0001Y218.02.DWG	

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Title: RECOVERY SYSTEM TRENCH AND UTILITY LAYOUT WITH DESIGN DETAILS			
FINAL ENGINEERING REPORT PARAGON PAINT & VARNISH CORPORATION LONG ISLAND CITY, NEW YORK			
Prepared For: VERNON 4540 REALTY LLC			
Remedial REMEDIAL ENGINEERING, P.C. ENVIRONMENTAL ENGINEERS	Compiled by: J.K.	Date: 15JUN16	FIGURE 15
	Prepared by: G.M.	Scale: AS SHOWN	
	Project Mgr: R.M.	Project: 2051.0001Y000	
	File: 2051.0001Y218.04.DWG		