

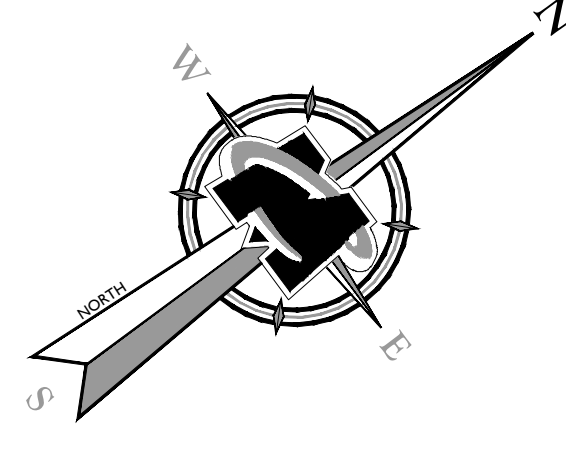
## **Appendix E**

### **As-Built Diagrams**

**2018 Site 107 Excavation As-Built Diagram**



**MASER CONSULTING P.A.**  
 Customer Loyalty through Client Satisfaction  
 www.maserconsulting.com  
 Engineers Planners Surveyors  
 Landscape Architects Environmental Scientists  
 Office Locations:  
 Rad Bank, NJ; Clifton, NJ; Egg Harbor, NJ; Morris Canal, NJ; Mt. Laurel, NJ; Albany, NY; Westchester, NY; Columbia, MD; Lehigh Valley, PA; Bucks, PA; Philadelphia, PA; Pittsburgh, PA; Tampa, FL; Orlando, FL; Miami, FL; Orlando, FL; New Windsor, NY; Westchester, NY; Albany, NY; Columbia, MD; Charlotte, NC  
 Scale of N.J. Certificate of Authorization: 24CA27966500  
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**811** PROTECT YOURSELF  
 Call before you dig  
 Know what's below  
 ALL STATES REQUIRE NOTIFICATION OF EXCAVATION CONDITIONS OR ANY PROTON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE  
 FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION

REV	DATE	DRAWN BY	DESCRIPTION

**R. THOMAS HUGG**  
 NEW JERSEY PROFESSIONAL  
 LAND SURVEYOR - LICENSE NUMBER: G336737

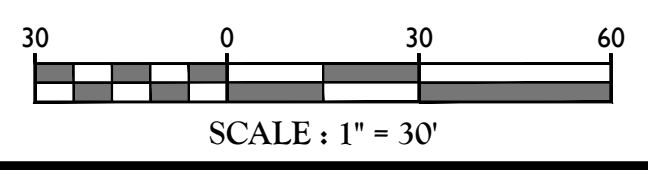
**POST EXCAVATION SURVEY**  
 FOR  
**ENTACT, LLC**  
 PPG SITE 107  
 FASHIONLAND  
 18 CHAPEL AVENUE  
 JERSEY CITY  
 HUDSON COUNTY  
 NEW JERSEY

**EGG HARBOR OFFICE**  
 500 Scarborough Drive,  
 Suite 108  
 Egg Harbor, NJ 08234  
 Phone: 609.390.1927  
 Fax: 609.390.0040

SCALE	DATE	DRAWN BY	CHECKED BY
AS SHOWN	08/07/18	DPS	RTM
PROJECT NUMBER:	DRAWING NAME:		
17007872A	V-POST-EX		

SHEET TITLE
POST EXCAVATION SURVEY
SHEET NUMBER
01 of 01

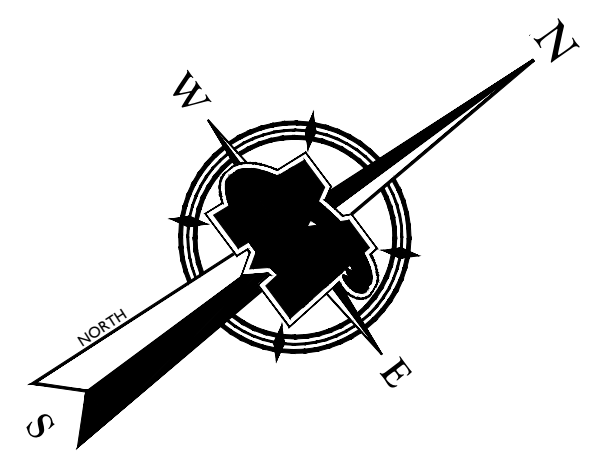
- GENERAL NOTES**
1. THE SOLE PURPOSE OF THIS PLAN IS TO SHOW POST EXCAVATION CONDITIONS & ELEVATIONS AT THE PROJECT SITE.
  2. POST EXCAVATION LOCATIONS AND ELEVATIONS WERE OBTAINED BY MASER CONSULTING P.A. & ENTACT, LLC. BETWEEN 6/18/18 & 9/27/19
  3. HORIZONTAL DATUM NAD 1983, VERTICAL DATUM NAVD 88.
- REFERENCES**
1. PLANS ENTITLED, "PROPOSED DEMOLITION AND EXCAVATION, PPG SITE 107, FASHIONLAND, 18 CHAPEL AVENUE, JERSEY CITY, NEW JERSEY" PREPARED BY ARCADIS U.S., INC., DATED SEPTEMBER, 2017.



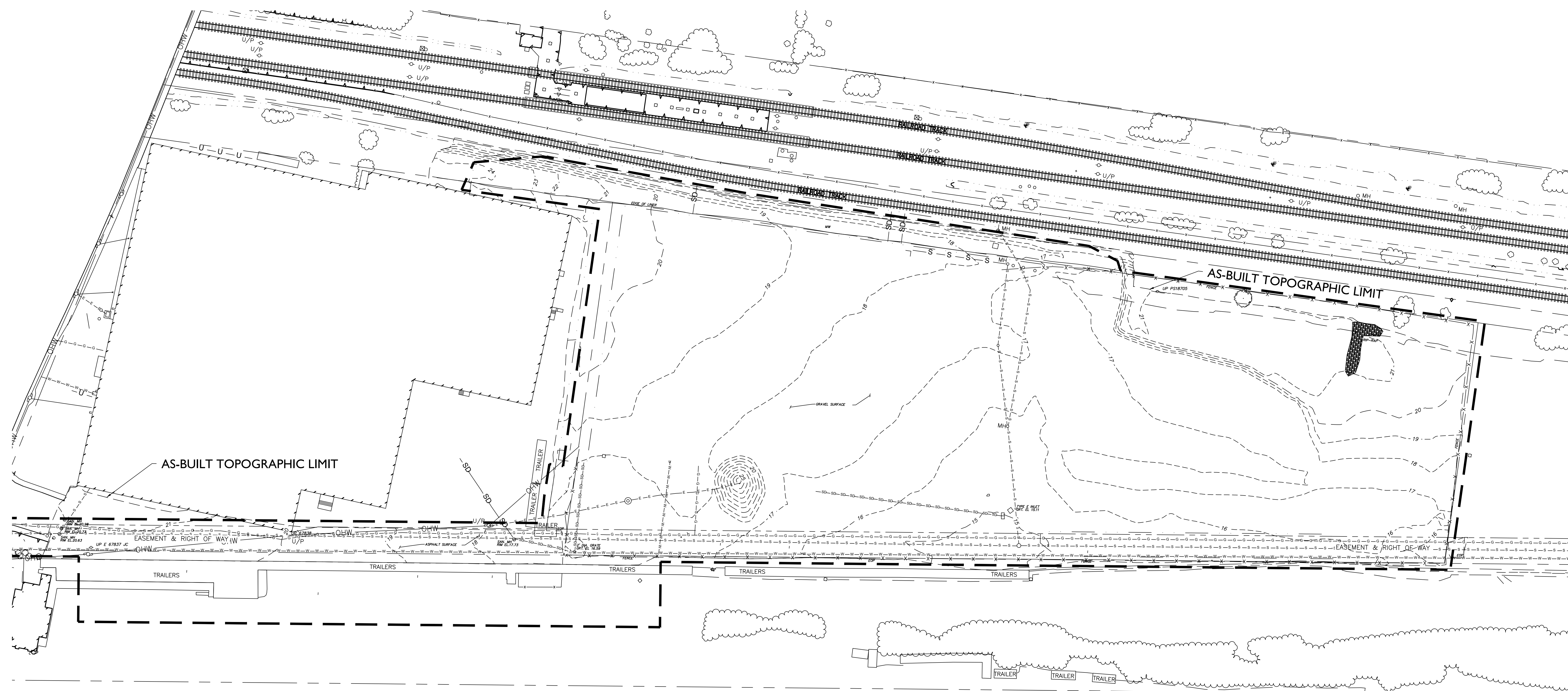
17007872A-PPG-POST-EX-18-08-2018-RTM



**2018 Site 107 Restoration As-Built Diagram**



**811** PROTECT YOURSELF  
 ALL STATES REQUIRE NOTIFICATION OF  
 EXCAVATION LOCATIONS OR ANY PERSON  
 PREPARING TO DISTURB THE EARTH'S  
 SURFACE MUST CALL 811 AND STATE:  
 Know what's below.  
 Call before you dig.  
 FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT:  
 WWW.CALL811.COM



REV	DATE	DRAWN BY	DESCRIPTION

REV	DATE	DRAWN BY	DESCRIPTION

**R. THOMAS HUGG**  
 NEW JERSEY PROFESSIONAL  
 LAND SURVEYOR - LICENSE NUMBER: G336737

**FINAL AS-BUILT SURVEY**  
 FOR  
**ENTACT, LLC**

PPG SITE 107  
 FASHIONLAND  
 18 CHAPEL AVENUE  
 JERSEY CITY  
 HUDSON COUNTY  
 NEW JERSEY

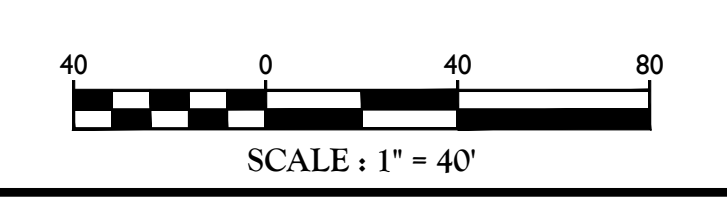
**EGG HARBOR OFFICE**  
 500 Scarborough Drive,  
 Suite 108  
 Egg Harbor, NJ 08234  
 Phone: 609.390.1927  
 Fax: 609.390.0040

SCALE	DATE	DRAWN BY	CHECKED BY
AS SHOWN	10/30/19	DHS	RTM
PROJECT NUMBER:	17007872A	DATE OF PREPARATION:	RESTORATION

**FINAL AS-BUILT TOPOGRAPHIC SURVEY**  
 SHEET NUMBER:  
**01 of 01**

- GENERAL NOTES**
1. THE SOLE PURPOSE OF THIS PLAN IS TO SHOW THE FINAL AS-BUILT LOCATIONS & ELEVATIONS AT THE PROJECT SITE.
  2. FINAL AS-BUILT LOCATIONS AND ELEVATIONS WERE OBTAINED BY MASER CONSULTING P.A. ON 10/19/19.
  3. HORIZONTAL DATUM NAD 1983, VERTICAL DATUM NAVD 88.

- REFERENCES**
1. PLANS ENTITLED, "PROPOSED DEMOLITION AND EXCAVATION, PPG SITE 107, FASHIONLAND, 18 CHAPEL AVENUE, JERSEY CITY, NEW JERSEY" PREPARED BY ARCADIS U.S., INC., DATED SEPTEMBER, 2017.



C:\Users\jgordon\OneDrive\Desktop\17007872A\Final\17007872A-Final.dwg 10/30/19 10:58:48 AM

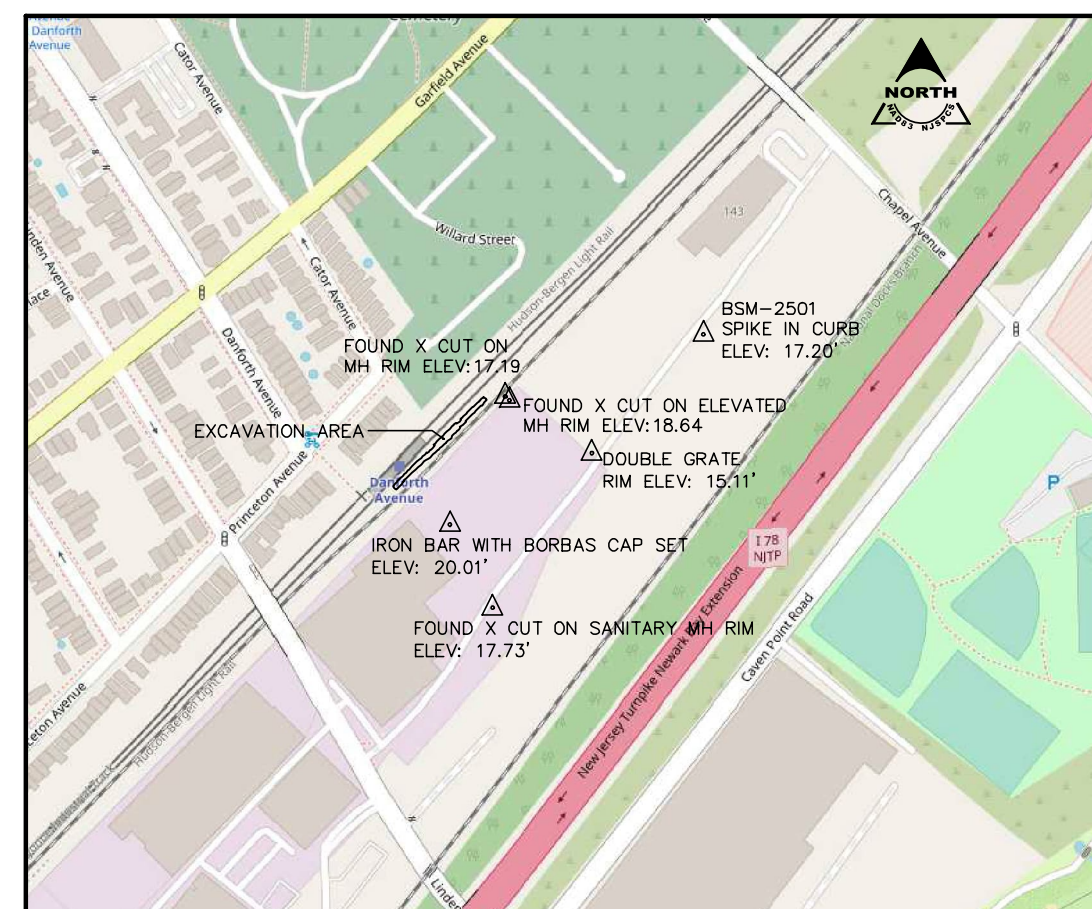
**2023 Conrail Right-of-Way Excavation  
As-Built Diagram**



E: 606500  
N: 677620

E: 606950  
N: 677620

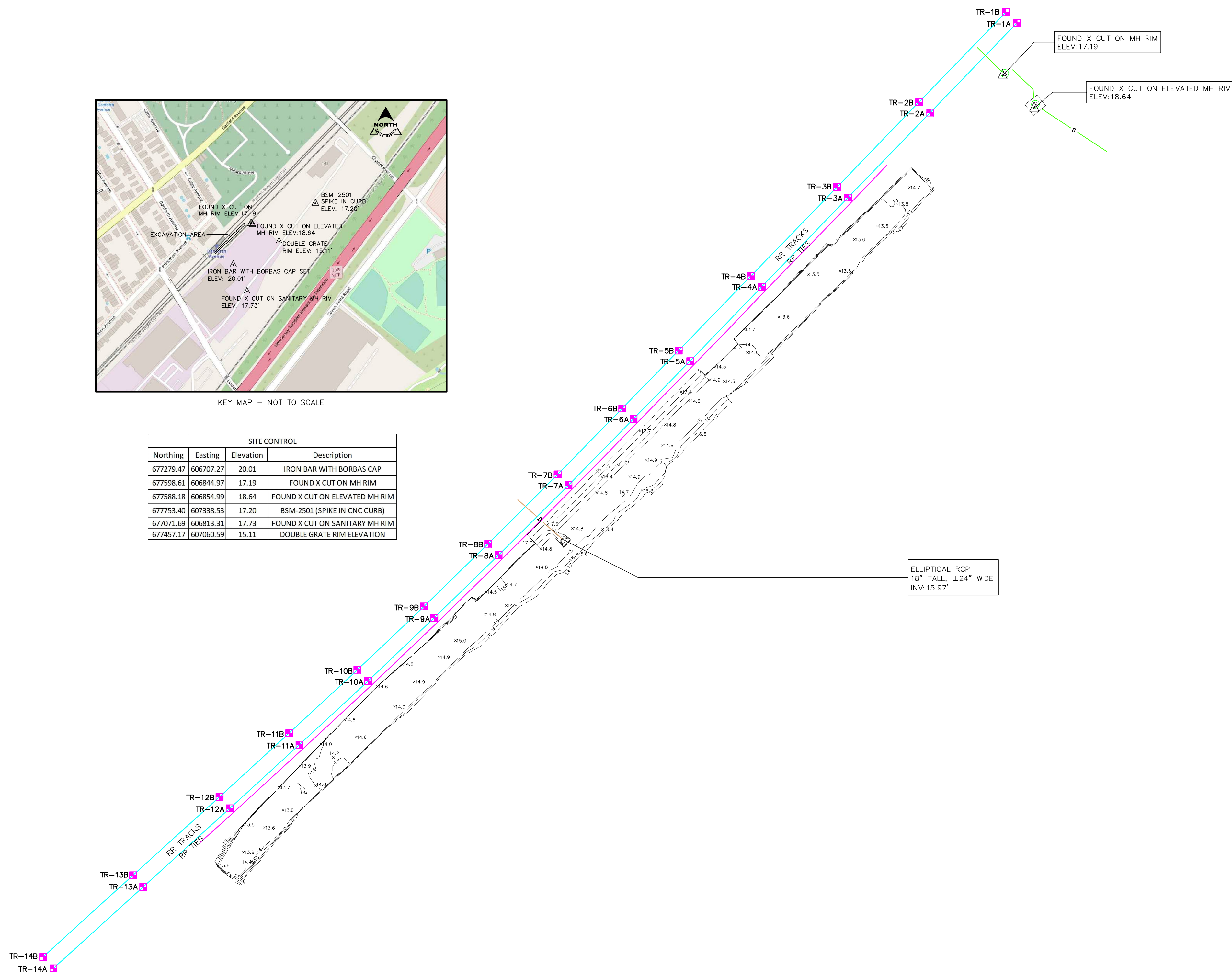
SCALE: 1"=20'



KEY MAP - NOT TO SCALE

SITE CONTROL			
Northing	Easting	Elevation	Description
677279.47	606707.27	20.01	IRON BAR WITH BORBAS CAP
677598.61	606844.97	17.19	FOUND X CUT ON MH RIM
677588.18	606854.99	18.64	FOUND X CUT ON ELEVATED MH RIM
677753.40	607338.53	17.20	BSM-2501 (SPIKE IN CNC CURB)
677071.69	606813.31	17.73	FOUND X CUT ON SANITARY MH RIM
677457.17	607060.59	15.11	DOUBLE GRATE RIM ELEVATION

LEGEND	
	RAIL ROAD
	TOP OF TIE
	MONITORING POINT
	CONTROL POINT
	DRAINAGE MARK-OUT
	SANITARY MARK-OUT
	SANITARY SEWER MANHOLE
	100 - MAJOR CONTOUR LINE
	101 - MINOR CONTOUR LINE



NOTES:

1. THE HORIZONTAL DATUM IS THE NEW JERSEY STATE PLANE COORDINATE SYSTEM NAD83 VERIFIED BY DIFFERENTIAL GPS ON AUGUST 8, 2022 USING THE NGS CORS SYSTEM, REFERENCE STATION N.J.H.T.
2. THE VERTICAL DATUM IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), AS SHOWN ON A MAP ENTITLED "FINAL AS-BUILT SURVEY FOR ENTACT, LLC PPG SITE 107, FASHIONLAND, 18 CHAPEL AVENUE, JERSEY CITY, HUDSON COUNTY, NEW JERSEY" DATED OCTOBER 30, 2019, PREPARED BY MASER CONSULTING, SUPPLIED BY THE CLIENT. BENCHMARK: X-CUT ON SOUTHERLY SIDE OF A SANITARY MANHOLE RIM (ELEVATION = 17.73' NAVD88).
3. THIS BASE MAP DEPICTS THE COMPLETED EXCAVATION AS IT PROGRESSED BETWEEN JULY 15, 2023 AND OCTOBER 29, 2023, IN THE AREA OF THE CONRAIL RIGHT-OF-WAY. NO ATTEMPT HAS BEEN MADE TO DETERMINE THE LOCATION OF PROPERTY LINES, EASEMENTS OR RIGHT-OF-WAY LINES.
4. ALL COORDINATES AND ELEVATIONS SHOWN HEREON ARE IN U.S. SURVEY FEET.
5. THE UTILITIES SHOWN HAVE BEEN LOCATED FROM EVIDENCE OBSERVED ON THE SURFACE ONLY. THE SURVEYOR MAKES NO GUARANTEES THAT THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN-SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

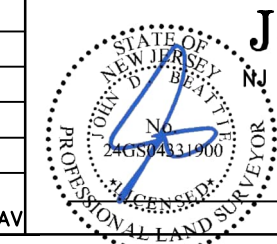
E: 606500  
N: 677250

E: 606950  
N: 677250

**SURVEY OF CONRAIL RIGHT-OF-WAY EXCAVATION AT  
PPG SITE 107 AND 108  
LOT 42, 43, AND 45, BLOCK 27401  
JERSEY CITY, HUDSON COUNTY, NEW JERSEY**



**BORBAS SURVEYING & MAPPING, LLC**  
402 MAIN STREET, BOONTON, NEW JERSEY 07005  
Phone (973) 316-8743 www.borbas.com  
NJ CERTIFICATE OF AUTHORIZATION NO. 246A28056200  
Environmental Site Mapping • Hazardous Materials and Waste Surveys  
Aerial Control and GPS Surveys • Topographic and Existing Condition Surveys  
Remote Sensing and GIS • Hydrographic/Bathymetric Surveys • ALTA/NFPA Certified Surveys  
Transportation and Right of Way Surveys • Deformation and Structure Monitoring Surveys



**JOHN D. BEATTIE**  
NJ PROFESSIONAL LAND SURVEYOR 246S04331900

SCALE: 1"=20'	
SHEET NO.: 1 OF 1	
FIELD BOOK: FBK 2023-9	
JOB NO.: 051201	
PROJECT NAME: 051201_PPG 107&108	
DRAWING NO.: 051201_2023-11-14_SITE107-108_CONRAIL EXCAV	
NOV 14, 2023 ORIGINAL ISSUE	
ADDITIONS AND UPDATES	

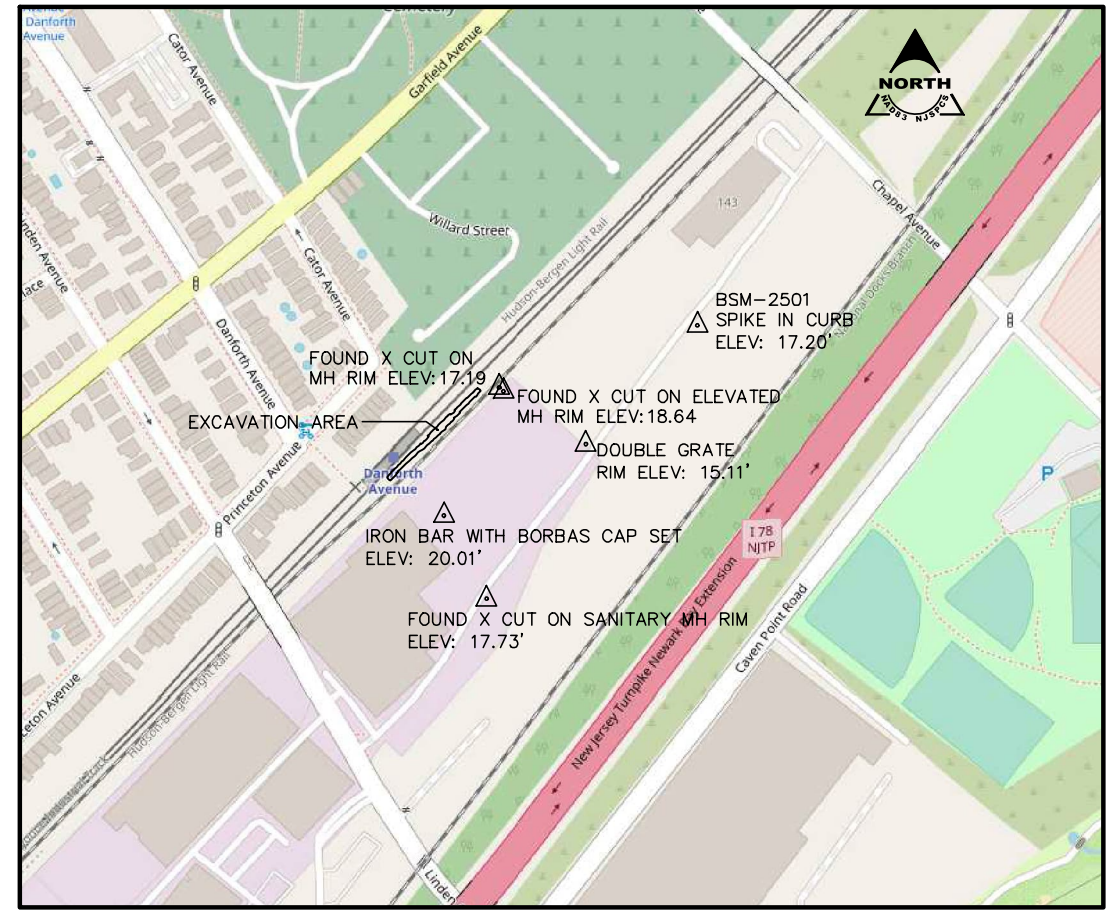
Date: NOVEMBER 14, 2023.

**2023 Conrail Right-of-Way Restoration  
As-Built Diagram**



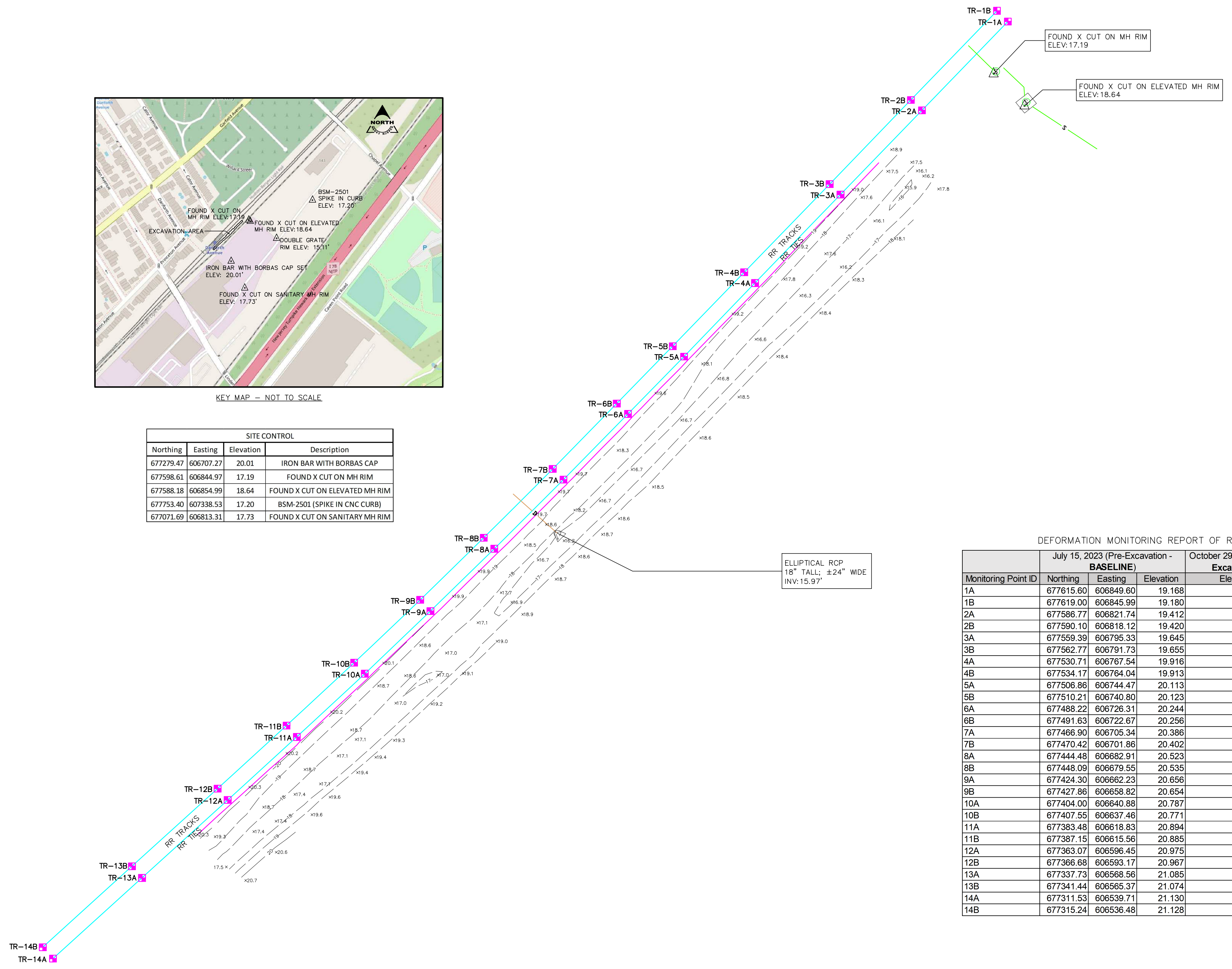
E: 606500  
N: 677620

SCALE: 1"=20'



KEY MAP - NOT TO SCALE

SITE CONTROL			
Northing	Easting	Elevation	Description
677279.47	606707.27	20.01	IRON BAR WITH BORBAS CAP
677598.61	606844.97	17.19	FOUND X CUT ON MH RIM
677588.18	606854.99	18.64	FOUND X CUT ON ELEVATED MH RIM
677753.40	607338.53	17.20	BSM-2501 (SPIKE IN CNC CURB)
677071.69	606813.31	17.73	FOUND X CUT ON SANITARY MH RIM

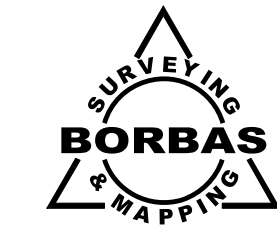


DEFORMATION MONITORING REPORT OF RAILROAD TRACKS

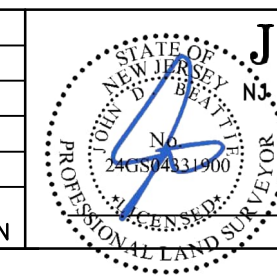
Monitoring Point ID	July 15, 2023 (Pre-Excavation - BASELINE)			October 29, 2023 (Post-Excavation)		Difference from Baseline	
	Northing	Easting	Elevation	Elevation	Δ Elevation (ft)	Mobilization	
1A	677615.60	606849.60	19.168	19.171	0.003		
1B	677619.00	606845.99	19.180	19.178	-0.002		
2A	677586.77	606821.74	19.412	19.404	-0.008		
2B	677590.10	606818.12	19.420	19.414	-0.006		
3A	677559.39	606795.33	19.645	19.629	-0.016		
3B	677562.77	606791.73	19.655	19.641	-0.014		
4A	677530.71	606767.54	19.916	19.894	-0.022		
4B	677534.17	606764.04	19.913	19.890	-0.023		
5A	677506.86	606744.47	20.113	20.084	-0.029		
5B	677510.21	606740.80	20.123	20.097	-0.026		
6A	677488.22	606726.31	20.244	20.212	-0.032		
6B	677491.63	606722.67	20.256	20.225	-0.031		
7A	677468.90	606705.34	20.386	20.350	-0.036		
7B	677470.42	606701.86	20.402	20.365	-0.037		
8A	677444.48	606682.91	20.523	20.486	-0.037		
8B	677448.09	606679.55	20.535	20.499	-0.036		
9A	677424.30	606662.23	20.656	20.620	-0.036		
9B	677427.86	606658.82	20.654	20.618	-0.036		
10A	677404.00	606640.88	20.787	20.754	-0.033		
10B	677407.55	606637.46	20.771	20.738	-0.033		
11A	677383.48	606618.83	20.894	20.868	-0.026		
11B	677387.15	606615.56	20.885	20.858	-0.027		
12A	677363.07	606596.45	20.975	20.939	-0.036		
12B	677366.68	606593.17	20.967	20.944	-0.023		
13A	677337.73	606568.56	21.085	21.066	-0.019		
13B	677341.44	606565.37	21.074	21.055	-0.019		
14A	677311.53	606539.71	21.130	21.114	-0.016		
14B	677315.24	606536.48	21.128	21.113	-0.015		

- NOTES:
1. THE HORIZONTAL DATUM IS THE NEW JERSEY STATE PLANE COORDINATE SYSTEM NAD83 VERIFIED BY DIFFERENTIAL GPS ON AUGUST 8, 2022 USING THE NGS CORS SYSTEM, REFERENCE STATION NJHT.
  2. THE VERTICAL DATUM IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), AS SHOWN ON A MAP ENTITLED "FINAL AS-BUILT SURVEY FOR ENACT, LLC PPG SITE 107, FASHIONLAND, 18 CHAPEL AVENUE, JERSEY CITY, HUDSON COUNTY, NEW JERSEY" DATED OCTOBER 30, 2019, PREPARED BY MASER CONSULTING, SUPPLIED BY THE CLIENT. BENCHMARK: X-CUT ON SOUTHERLY SIDE OF A SANITARY MANHOLE RIM (ELEVATION = 17.73' NAVD88).
  3. THIS BASE MAP DEPICTS LIMITED PHYSICAL IMPROVEMENTS AS THEY EXISTED ON OCTOBER 29, 2023, IN THE AREA OF THE EXISTING RAILROAD TRACKS AND CONRAL RIGHT-OF-WAY. NO ATTEMPT HAS BEEN MADE TO DETERMINE THE LOCATION OF PROPERTY LINES, EASEMENTS OR RIGHT-OF-WAY LINES.
  4. ALL COORDINATES AND ELEVATIONS SHOWN HEREON ARE IN U.S. SURVEY FEET.
  5. THE UTILITIES SHOWN HAVE BEEN LOCATED FROM EVIDENCE OBSERVED ON THE SURFACE ONLY. THE SURVEYOR MAKES NO GUARANTEES THAT THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN-SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

**RAIL MONITORING AND RESTORATION SURVEY FOR EXCAVATION AT PPG SITE 107 AND 108 LOT 42, 43, AND 45, BLOCK 27401 JERSEY CITY, HUDSON COUNTY, NEW JERSEY**



**BORBAS SURVEYING & MAPPING, LLC**  
 402 MAIN STREET, BOONTON, NEW JERSEY 07005  
 Phone (973) 316-8743 www.borbas.com  
 NJ CERTIFICATE OF AUTHORIZATION NO. 246A28056200  
 Environmental Site Mapping • Hazardous Materials and Waste Surveys  
 Aerial Control and GPS Surveys • Topographic and Existing Condition Surveys  
 Remote Sensing and GIS • Hydrographic/Bathymetric Surveys • ALTA/NRPS Certified Surveys  
 Transportation and Right of Way Surveys • Deformation and Structure Monitoring Surveys



**JOHN D. BEATTIE**  
 NJ PROFESSIONAL LAND SURVEYOR 246S04331900

SCALE: 1"=20'	
SHEET NO.: 1 OF 1	
FIELD BOOK: FBK 2023-9	
JOB NO.: 051201	
PROJECT NAME: 051201_PPG 107&108	
DRAWING NO.: 051201_2023-11-14_SITE107-108_RAIL MN	
NOV 14, 2023 ORIGINAL ISSUE	
ADDITIONS AND UPDATES	
Date: NOVEMBER 14, 2023.	







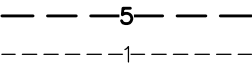

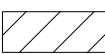

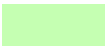
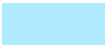

E: 606500  
N: 677250

E: 606950  
N: 677250

**Conrail Right-of-Way  
FerroBlack®-H Backfill Placement  
As-Built Diagram**



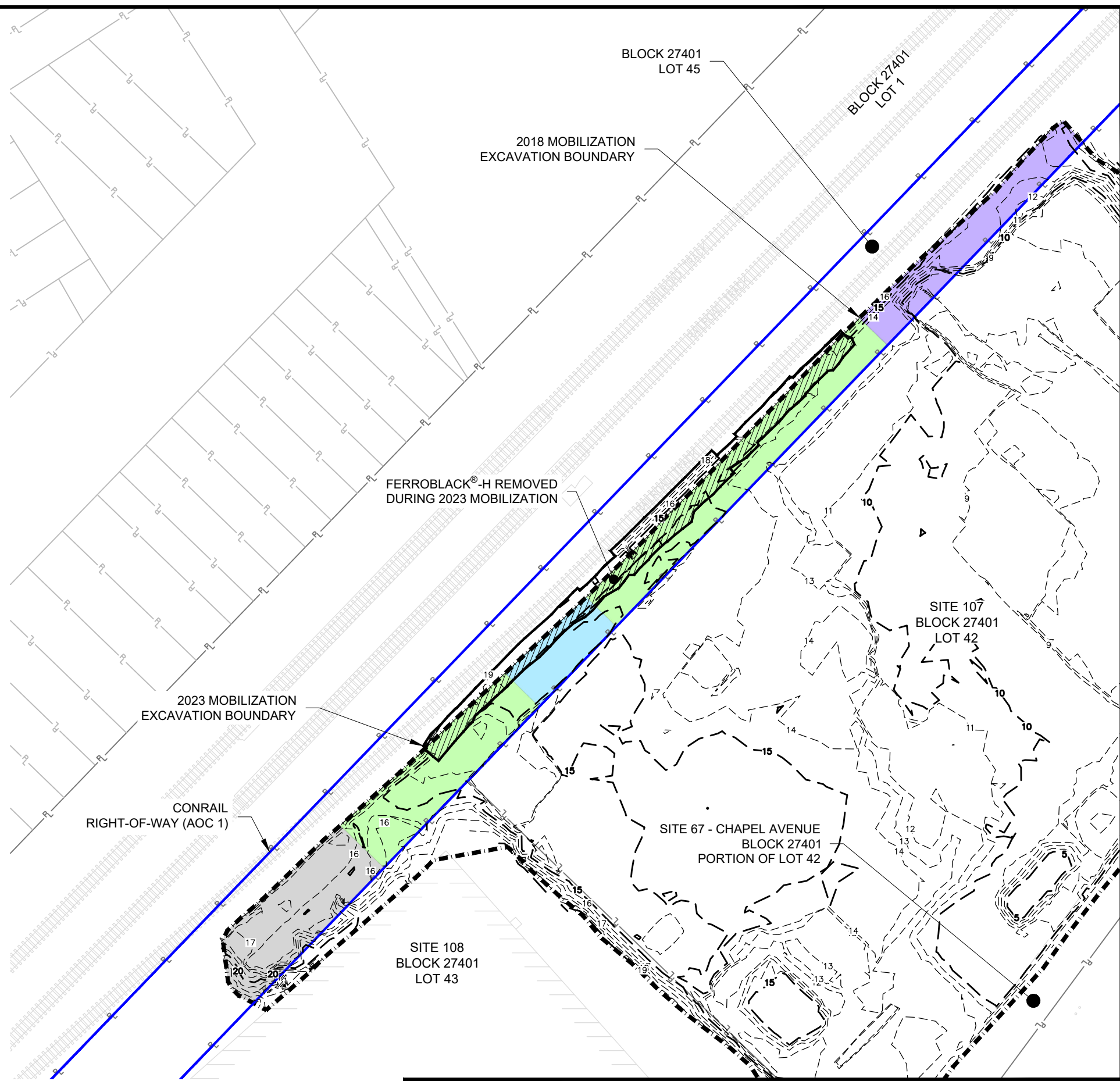
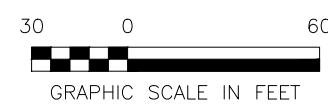
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- LEGEND**
-  PROPERTY LINE
  -  APPROXIMATE PROPERTY LINE
  -  2023 MOBILIZATION EXCAVATION BOUNDARY
  -  2018 MOBILIZATION EXCAVATION BOUNDARY
  -  EXISTING BUILDING
  -  EXISTING RAILROAD TRACKS
  -  EXCAVATION BOTTOM ELEVATION CONTOURS 1' INTERVAL, 5' INDEX
  -  CONRAIL RIGHT-OF-WAY (AOC 1) BOUNDARY
  -  PORTION OF PREVIOUSLY PLACED FERROBLACK®-H REMOVED DURING 2023 MOBILIZATION
  -  PLACED FROM BASE OF EXCAVATION TO 15.5FT NAVD88
  -  PLACED FROM BASE OF EXCAVATION TO 16.5FT NAVD88
  -  PLACED FROM BASE OF EXCAVATION TO 17.5FT NAVD88
  -  NO AMENDMENT

**ACRONYMS:**

AOC AREA OF CONCERN  
 FT FEET  
 NAVD88 NORTH AMERICAN VERTICAL DATUM OF 1988

- NOTES:**
1. THE AS-BUILT EXCAVATION CONTOURS REPRESENT A COMPOSITE SURFACE THAT INCLUDES DATA FROM TOPOGRAPHIC SURVEYS CONDUCTED BY MASER CONSULTING, P.A. BETWEEN JUNE 2018 AND SEPTEMBER 2019, AND BY BORBAS SURVEYING AND MAPPING CONDUCTED BETWEEN JULY 2023 AND NOVEMBER 2023.
  2. THE LIMITS AND DEPTHS OF FERROBLACK-H-AMENDED BACKFILL ARE SOURCED FROM THE "BACKFILL AMENDED WITH 0.5% FERROBLACK-H" FIGURE PREPARED BY ARCADIS IN MARCH 2020.
  3. CLEAN BACKFILL WAS BLENDED WITH A LOW DOSE OF FERROBLACK®-H (0.0-0.5% BY WEIGHT) DURING THE 2018 MOBILIZATION. BACKFILL PLACED DURING THE 2023 MOBILIZATION WAS NOT AMENDED WITH FERROBLACK®-H.



PPG CONRAIL RIGHT-OF-WAY (AOC 1) JERSEY CITY, NEW JERSEY	<b>APPENDIX E</b> <b>FERROBLACK®-H-AMENDED BACKFILL</b> <b>AS-BUILT DRAWING</b> <b>CONRAIL RIGHT-OF-WAY</b>
DATE: 06/03/2024	DRWN: MDN
FIGURE 1	