PUBLIC NOTICE

US Army Corps
of Engineers
New York District
Jacob K. Javits Federal Building
New York, N.Y. 10278-0090
ATTN: Regulatory Branch

In replying refer to:
Public Notice Numbers: **NAN-2023-00525-EMI, NAN-2023-00526-EMI**
NAN-2023-00527-EMI, NAN-2023-00528-EMI
Issue Date: September 12, 2023
Expiration Date: October 12, 2023

To Whom It May Concern:

The New York District, Corps of Engineers has received applications for a Department of the Army permit pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

APPLICANT: Verizon New York, Inc.
230 W. 36th Street
New York, New York 10018

ACTIVITY: Installation of Submarine Fiberoptic Cables

WATERWAY & LOCATION:

NAN-2023-00525-EMI – East River between Manhattan and Roosevelt Island, New York
NAN-2023-00526-EMI – East River between Roosevelt Island and Queens, New York
NAN-2023-00527-EMI – Harlem River between Manhattan and Wards Island, New York
NAN-2023-00528-EMI – Reynolds Channel between Far Rockaway and Atlantic Beach, New York

A detailed description and plans of the applicant's activity are enclosed to assist in your review.

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

ALL COMMENTS REGARDING THE PERMIT APPLICATION MUST BE PREPARED IN WRITING AND EMAILED TO REACH THIS OFFICE BEFORE THE EXPIRATION DATE OF THIS NOTICE, otherwise, it will be presumed that there are no objections to the activity.

Comments submitted in response to this notice will be fully considered during the public interest review for this permit application. Comments provided will become part of the public record for this permit application. All written comments, including contact information, will be made a part of the administrative record, available to the public under the Freedom of Information Act. The Administrative Record, or portions thereof, may also be posted on a Corps of Engineers internet web site. Due to resource limitations, this office will normally not acknowledge the receipt of comments or respond to individual letters of comment.

Any person may request, in writing, before this public notice expires, that a public hearing be held to collect information necessary to consider this application. Requests for public hearings shall state, with particularity, the reasons why a public hearing should be held. It should be noted that information submitted by email is considered just as carefully in the permit decision process and bears the same weight as that furnished at a public hearing.

Our preliminary determination is that the activity for which authorization is sought herein will have no effect on any Federally endangered or threatened species or their critical habitat pursuant to Section 7 of the Endangered Species Act (16 U.S.C. 1531).

The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act (Public Law 104-267), requires all Federal agencies to consult with the National Oceanic and Atmospheric Administration Fisheries Service (NOAA/FS) on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH). The New York District has made the preliminary determination that the activities for which authorization is sought herein will have no effect on EFH or EFH-listed species.

Based upon a review of the latest published version of the National Register of Historic Places, there are no known sites eligible for, or included in, the Register within the permit area. Presently unknown archeological, scientific, prehistorical, or historical data may be lost by work accomplished under the required permit.

Pursuant to Section 307 (c) of the Coastal Zone Management Act of 1972 as amended [16 U.S.C. 1456 (c)], for activities under consideration that are located within the coastal zone of a state which has a federally approved coastal zone management program, the applicant has certified in the permit application that the activity complies with, and will be conducted in a manner that is consistent with, the approved state coastal zone management program. By this public notice, we are requesting the state's concurrence with, objection to, or waiver of the applicant's certification. No permit decision will be made until one of these actions occur. For activities within the coastal zone of New York State, the applicant's certification and accompanying information is available from the Consistency Coordinator, New York State Department of State, Division of Coastal Resources and Waterfront Revitalization, Coastal Zone Management Program, One Commerce Plaza, 99 Washington Avenue, Albany, New York 12231, Telephone (518) 474-6000. Comments regarding the applicant's certification, and copies of any letters to this office commenting upon this proposal, should be so addressed.

In addition to any required water quality certificate and coastal zone management program concurrence, the applicant has obtained or requested the following governmental authorization for the activity under consideration:

- New York State Department of Environmental Conservation

It is requested that you communicate the foregoing information concerning the activity to any persons known by you to be interested and who did not receive a copy of this notice. Please send all comments and questions concerning this application to Christopher.W.Minck@usace.army.mil.

In order for us to better serve you, please complete our Customer Service Survey located at http://www.nan.usace.army.mil/Missions/Regulatory/CustomerSurvey.aspx.

For more information on New York District Corps of Engineers programs, visit our website at http://www.nan.usace.army.mil.

R. Miranda Digitally signed by Rosita Miranda

FOR AND IN BEHALF OF
Stephan A. Ryba
Chief, Regulatory Branch

Enclosures

WORK DESCRIPTION

The permit applicant, Verizon New York, Inc. , has requested Department of the Army (DA) authorization to install four (4) submarine fiberoptic cables beneath the East River, Harlem River, and Reynolds Channel within Manhattan, Queens and Long Island, New York.

The proposed work would involve the following:

NAN-2023-00525-EMI – East River between Manhattan and Roosevelt Island, New York:

Construct via Horizontal Directional Drilling (HDD), a new approximately 1,732-foot-long, 5-inch diameter conduit containing fiberoptic cables. The entry pit will be located on Roosevelt Island (corner of South Loop Road and East Loop Road) and the exit pit will be located on East 54th Street in Manhattan. The top of the conduit will be installed a minimum of 54.5 feet beneath the existing bottom and a minimum of 97.6 feet beneath the authorized depth of the East River Federal Navigation Channel.

NAN-2023-00526-EMI – East River between Roosevelt Island and Queens, New York:

Construct via HDD a new approximately 1,215-foot-long, 5-inch diameter conduit containing fiberoptic cables. The entry pit will be located in Queens (intersection of Vernon Boulevard and 34th Avenue) and the exit pit will be located on Roosevelt Island (Pony Field). The top of the conduit will be installed a minimum of 54.5 feet beneath the existing bottom.

NAN-2023-00527-EMI – Harlem River between Manhattan and Wards Island, New York:

Construct via HDD a new approximately 1,756 foot long, 5-inch diameter conduit containing fiberoptic cables. The entry pit will be located on Ward's Island (River Lane) to an exit pit located in Manhattan (East 102nd Street). The top of the conduit will be installed a minimum of 109.5 feet beneath the existing bottom.

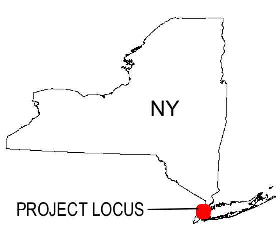
NAN-2023-00528-EMI - Reynolds Channel between Far Rockaway and Atlantic Beach, New York:

Construct via HDD a new approximately 1,715 foot long, 5-inch diameter conduit containing fiberoptic cables. The entry pit will be located in Far Rockaway (Seagirt Avenue) to an exit pit located in Atlantic Beach (Granada Street). The top of the conduit will be installed a minimum of 63.5 feet beneath the existing bottom.

The applicant has stated that they have avoided, minimized, and mitigated for potential impacts proposed, to the maximum extent practicable by utilizing HDD instead of trenching to install the cables. The applicant has additionally prepared an inadvertent return plan and a sediment trap to contain drill slurry. Silt fencing will be utilized around laydown areas to minimize additional ground disturbance.

The purpose of this project is to improve Verizon's system reliability and expand network connection in New York City and Long Island.

USACE FILE: NAN-2023-00525-EMI



0 2,000 4,000
SCALE IN FEET

MAP SOURCE: ESRI
SITE COORDINATES: 40°45'16"N, 73°57'37"W

HALEY ALDRICH

ASG
NYC HDD PROJECT 1C:
MANHATTAN - RANDALLS ISLAND - ROOSEVELT ISLAND
NEW YORK, NEW YORK

PROJECT OVERVIEW

APPROXIMATE SCALE: 1 IN = 300 FT
MAY 2023

FIGURE 1

GIS FILE PATH: C:\Users\mmartin\OneDrive - haleyaldrich.com\Desktop\Verizon HDD\135185_001_CROSSING 1C_PROJECT OVERVIEW_D2.mxd — USER: mmartin — LAST SAVED: 5/4/2023 3:33:53 PM

USACE FILE: NAN-2023-00525-EMI

GIS FILE PATH: C:\Users\mmartin\OneDrive - haleyaldrich.com\Desktop\Verizon HDD\135185_001_CROSSING 1C_PROJECT LOD_D1.mxd — USER: mmartin — LAST SAVED: 4/20/2023 11:11:58 AM

LEGEND

- HDD
- LIMITS OF DISTURBANCE

N

0 150 300

SCALE IN FEET

MAP SOURCE: ESRI WORLD IMAGERY (03/21/2020)

HALEY ALDRICH

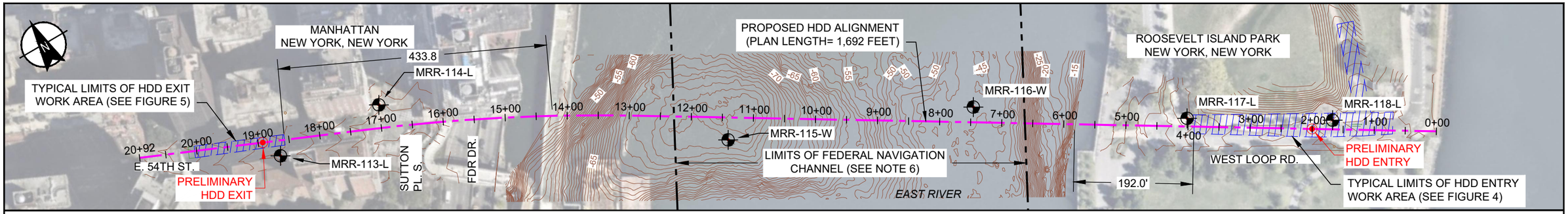
ASG
NYC HDD PROJECT 1C:
MANHATTAN - RANDALLS ISLAND - ROOSEVELT ISLAND
NEW YORK, NEW YORK

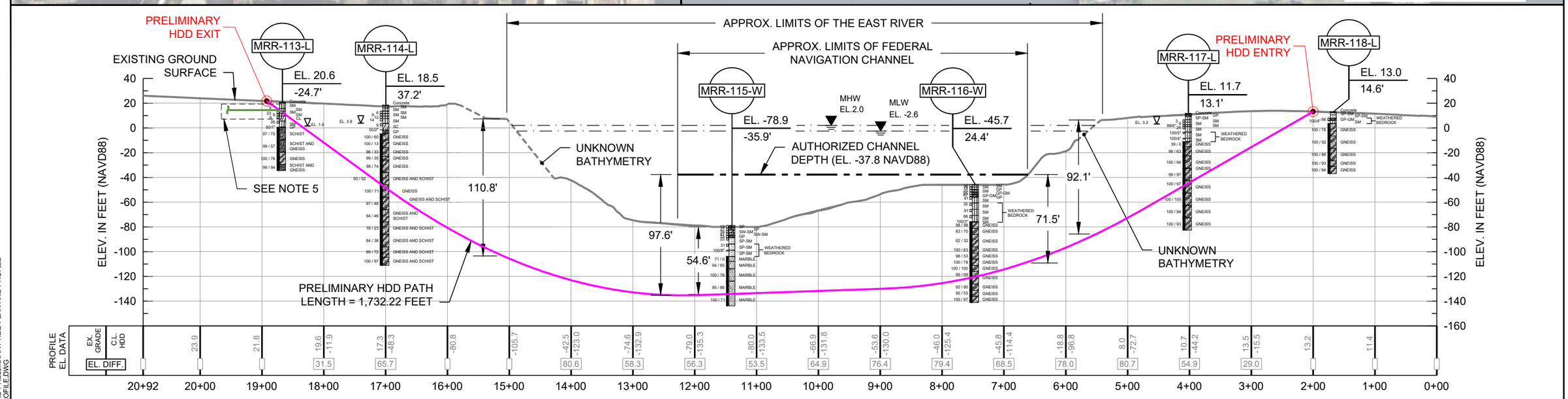
PROJECT LIMITS OF DISTURBANCE

APPROXIMATE SCALE: 1 IN = 300 FT
MAY 2023

FIGURE 2

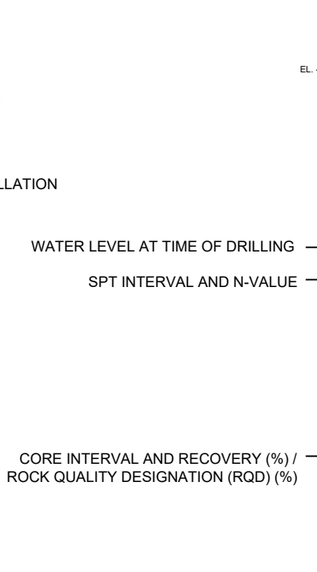
USACE FILE: NAN-2023-00525-EMI





PROFILE LEGEND

- EXISTING GROUND SURFACE (SEE NOTE 2)
- RIVER WATER LEVELS (SEE NOTE 4)
  - MHW: MEAN HIGH WATER
  - MLW: MEAN LOW WATER
- PRELIMINARY HDD DRILL PATH
- PRELIMINARY OPEN TRENCH INSTALLATION
- PRELIMINARY HDD ENTRY AND EXIT LOCATIONS
- MRR-113-L — LOCATION ID
- EL. 5.4 — ELEVATION (NAVD88)
- -0.5' — OFFSET FROM ALIGNMENT (-) INDICATES LEFT OF ALIGNMENT
- WATER LEVEL AT TIME OF DRILLING
- SPT INTERVAL AND N-VALUE
- CORE INTERVAL AND RECOVERY (%) / ROCK QUALITY DESIGNATION (RQD) (%)



PLAN LEGEND

- MRR-113-L — LOCATION AND DESIGNATION OF TEST BORING PERFORMED 23 JULY THROUGH 22 AUGUST 2022 BY AQUIFER DRILLING & TESTING, INC. AND MONITORED BY HALEY & ALDRICH OF NEW YORK.
- PRELIMINARY HDD ALIGNMENT
- TYPICAL HDD WORK AREAS
- PRELIMINARY HDD ENTRY AND EXIT LOCATIONS

NOTES

1. AERIAL REFERENCES NEARMAP IMAGERY © 2022 NEARMAP, HERE, AND DATED 27 SEPTEMBER 2022.
2. EXISTING CONDITIONS BASE MAP REFERENCES DRAWING TITLED "BOUNDARY AND TOPOGRAPHIC SURVEY FOR E. 54TH STREET, SUTTON PLACE S., FRANKLIN D. ROOSEVELT DRIVE, EAST RIVER, & LOOP ROAD" BY COLLIERS ENGINEERING & DESIGN, INC., DATED 25 MAY 2021, REVISED 10 MAY, 2022.
3. HORIZONTAL DATUM IS NORTH AMERICAN DATUM 1983 (2011) EPOCH 2010.00 (NEW YORK STATE PLANE COORDINATE SYSTEM, LONG ISLAND ZONE). ALL LINEAR MEASUREMENTS ARE IN U.S. SURVEY FEET. VERTICAL DATUM IS NORTH AMERICAN VERTICAL DATUM 1988.
4. TIDAL ELEVATION INFORMATION FROM NOAA AND REFERENCE STATION 8518750, THE BATTERY, NY.
5. THE ALIGNMENT TRANSITIONS FROM HDD TO OPEN TRENCH INSTALLATION ARE SHOWN WITH A BURIAL DEPTH OF APPROX. 8 FT BELOW THE GROUND SURFACE AT THE HDD EXIT SIDE. THE TRANSITION IS NOT SHOWN ON THE HDD ENTRY SIDE FOR CLARITY, HOWEVER, SIMILAR TRANSITION WILL BE INSTALLED AT THE HDD ENTRY SIDE.
6. THE FEDERAL NAVIGATION CHANNEL LIMITS AND DEPTHS REFERENCE THE U.S. ARMY COPRS OF ENGINEERS GEOSPATIAL DATABASE, NATIONAL CHANNEL FRAMEWORK EGIS, LAST UPDATED 19 AUGUST 2023.

HORIZ. 0 160 320
VERT. 0 80 160
SCALE IN FEET

HALEY ALDRICH

ASG
NYC HDD PROJECT 1C: MANHATTAN - ROOSEVELT ISLAND
NEW YORK, NEW YORK

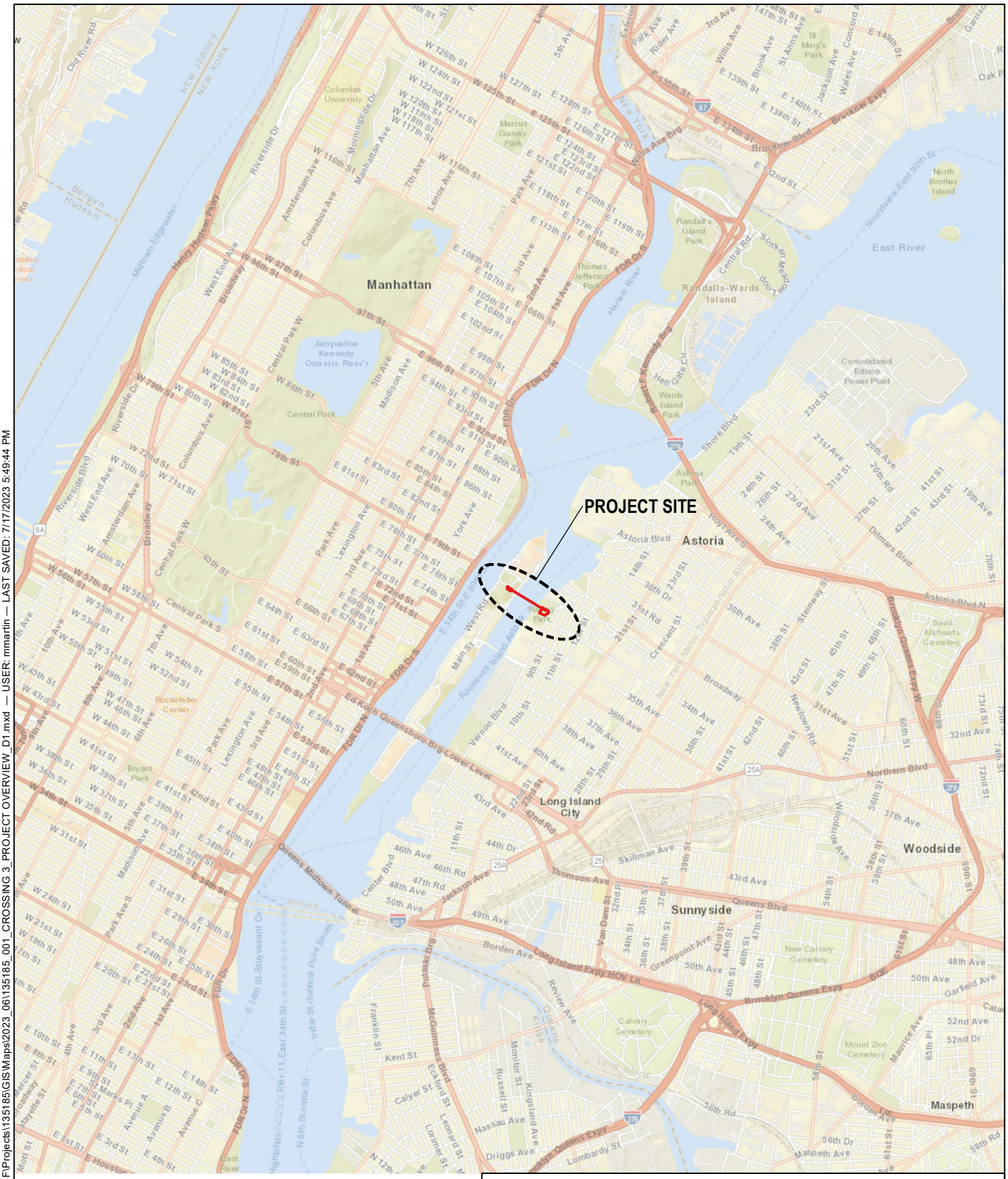
EXPLORATION LOCATION PLAN AND PRELIMINARY HDD PLAN AND PROFILE

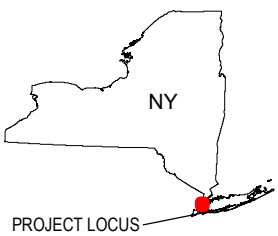
SCALE: AS SHOWN
23 AUGUST 2023

FIGURE 3

Saved by: ZGARDNER Printed: 8/23/2023 10:48 AM Sheet: EXPLORATION LOCATION PLAN AND PRELIMINARY HDD PLAN AND PROFILE
\\HALEYALDRICH.COM\SHARE\CF\PROJECTS\135185\CAD\01_MRR1C\FIGURES\170135185_170_MRR_1C_PLAN_PROFILE.DWG

USACE FILE: NAN-2023-00526-EMI





N

0 2,000 4,000

SCALE IN FEET

MAP SOURCE: ESRI

SITE COORDINATES: 40°46'03"N, 73°56'32"W

HALEY ALDRICH

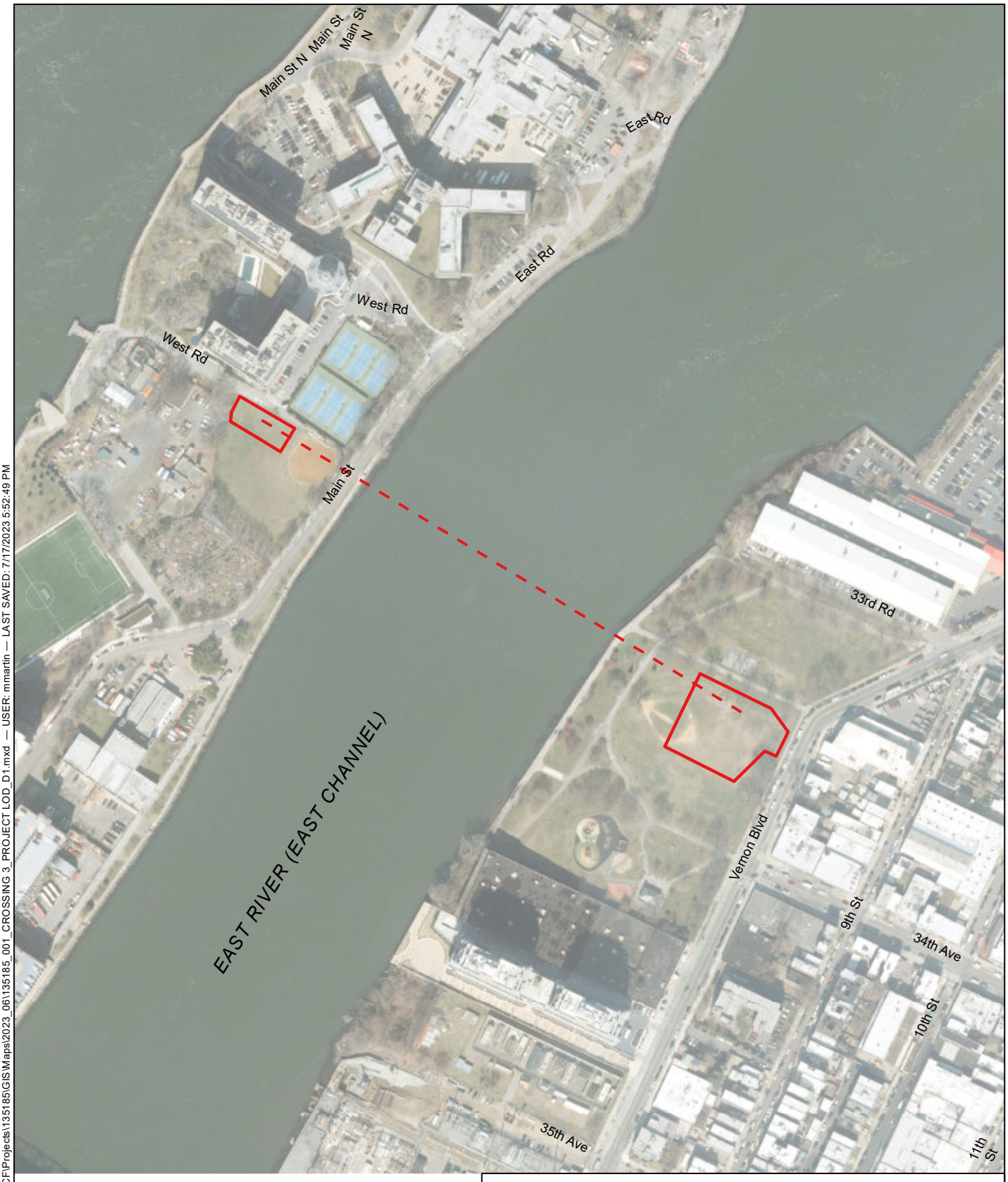
ASG
NYC HDD PROJECT 3:
ROOSEVELT ISLAND - QUEENS
NEW YORK, NEW YORK AND QUEENS, NEW YORK

PROJECT OVERVIEW

APPROXIMATE SCALE: 1 IN = 4000 FT
JULY 2023

FIGURE 1

GIS FILE PATH: \\haleyaldrich.com\share\CF\Projects\135185\GIS\Maps\2023_06\135185_001_CROSSING 3_PROJECT OVERVIEW_D1.mxd — USER: mmartin — LAST SAVED: 7/17/2023 5:49:44 PM



LEGEND

HDD

LIMITS OF DISTURBANCE

N

0 150 300

SCALE IN FEET

MAP SOURCE: ESRI WORLD IMAGERY (03/16/2022)

HALEY ALDRICH

ASG
NYC HDD PROJECT 3:
ROOSEVELT ISLAND - QUEENS
NEW YORK, NEW YORK AND QUEENS, NEW YORK

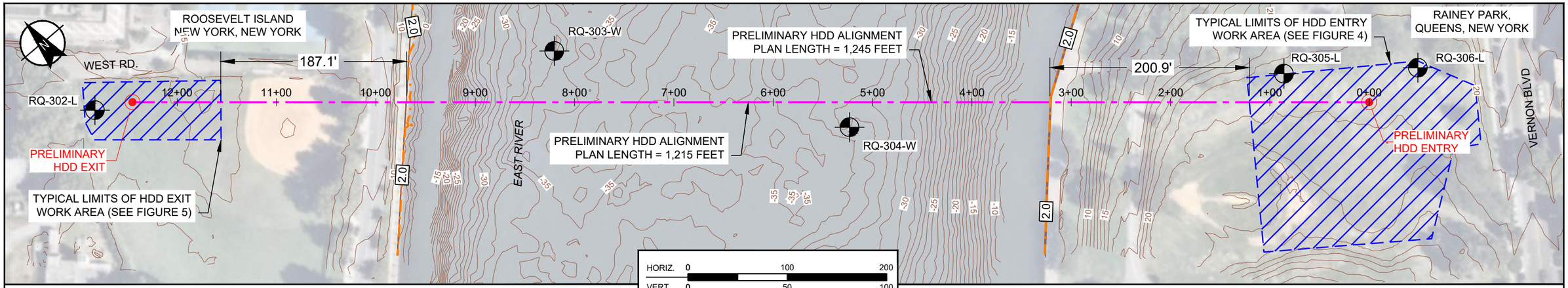
PROJECT LIMITS OF DISTURBANCE

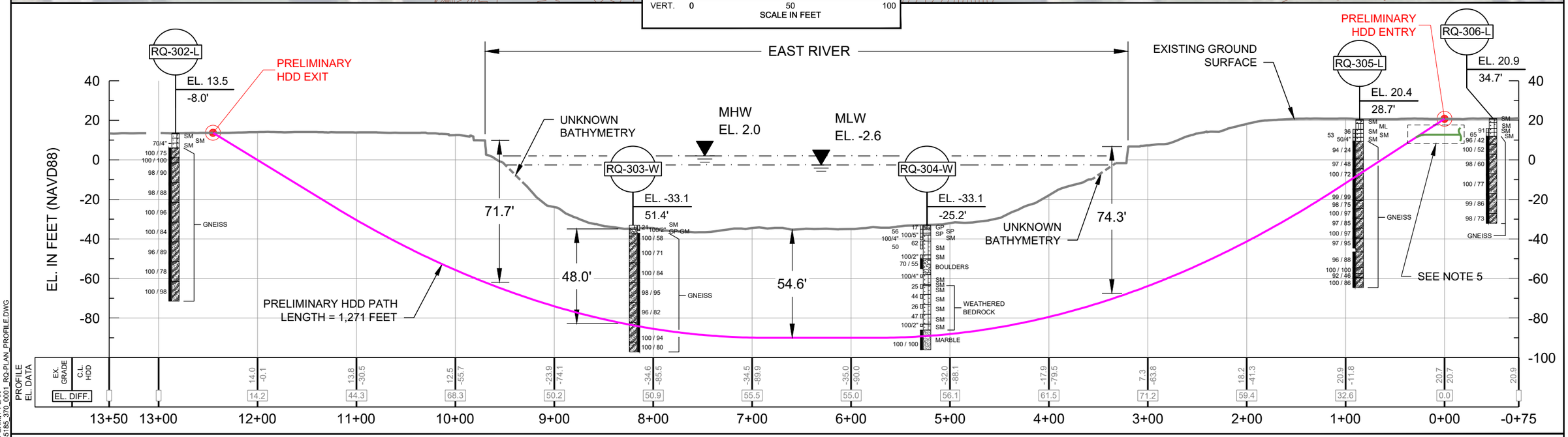
APPROXIMATE SCALE: 1 IN = 300 FT
JULY 2023

FIGURE 2

GIS FILE PATH: \\haleyaldrich.com\share\CF\Projects\135185\GIS\Maps\2023_06\135185_001_CROSSING 3_PROJECT LOD_D1.mxd — USER: mmartin — LAST SAVED: 7/17/2023 5:52:49 PM

USACE FILE: NAN-2023-00526-EMI





PROFILE LEGEND

- EXISTING GROUND SURFACE (SEE NOTE 2)
- RIVER WATER LEVELS (SEE NOTE 4)
  MHW: MEAN HIGH WATER
  MLW: MEAN LOW WATER
- PRELIMINARY HDD DRILL PATH
  PRELIMINARY OPEN TRENCH INSTALLATION
- PRELIMINARY HDD ENTRY AND EXIT LOCATIONS
- RQ-301-L — LOCATION ID
- EL. 9.5 — ELEVATION (NAVD88)
- -41.4' — OFFSET FROM ALIGNMENT (-) INDICATES LEFT OF ALIGNMENT

- SURFACE LAYER (TOPSOIL)
- SP — POORLY-GRADED SAND
- SM — SILTY SAND OR SILTY SAND WITH GRAVEL
- ML — SILT OR SANDY SILT
- GP — POORLY-GRADED GRAVEL WITH SAND
- GP-GM — POORLY-GRADED GRAVEL WITH SILT AND SAND
- BOULDERS
- GNEISS
- MARBLE
- CORE INTERVAL AND RECOVERY (%) / ROCK QUALITY DESIGNATION (RQD) (%)
- SPT INTERVAL AND N-VALUE

PLAN LEGEND

- RQ-##-# — LOCATION AND DESIGNATION OF TEST BORING PERFORMED 31 JULY THROUGH 31 NOVEMBER 2022 BY AQUIFER DRILLING & TESTING, INC. AND MONITORED BY HALEY & ALDRICH OF NEW YORK.
- PRELIMINARY HDD ALIGNMENT
- TYPICAL HDD WORK AREAS
- PRELIMINARY HDD ENTRY AND EXIT LOCATIONS
- 2.0 — MEAN HIGH WATER (MHW) CONTOUR (SEE NOTE 4)

NOTES

1. AERIAL REFERENCES NEARMAP IMAGERY © 2022 NEARMAP, HERE, AND DATED 27 SEPTEMBER 2022.
2. TOPOGRAPHY REFERENCES DRAWING TITLED "TOPOGRAPHIC SURVEY AT WEST ROAD, EAST CHANNEL, EAST RIVER, RAINEY PARK, VERNON BOULEVARD AND 33RD ROAD" BY GDB GEOSPATIAL, DATED 28 JUNE 2022.
3. ELEVATIONS ARE IN FEET AND REFERENCE THE NORTH AMERICAN DATUM OF 1988 (NAVD88). THE HORIZONTAL CONTROL REFERENCES THE NORTH AMERICAN DATUM OF 1983, NEW YORK LONG ISLAND STATE PLANE (NAD83).
4. TIDAL ELEVATION INFORMATION FROM NOAA AND REFERENCE STATION 8518750, THE BATTERY, NY. MEAN LOW WATER (MLW) ELEVATION IS OUTSIDE OF CURRENT SURVEY LIMIT.
5. THE ALIGNMENT TRANSITIONS FROM HDD TO OPEN TRENCH INSTALLATION ARE SHOWN WITH A BURIAL DEPTH OF APPROX. 8 FT BELOW THE GROUND SURFACE AT THE HDD ENTRY SIDE. THE TRANSITION IS NOT SHOWN ON THE HDD EXIT SIDE FOR CLARITY, HOWEVER, SIMILAR TRANSITION WILL BE INSTALLED AT THE HDD EXIT SIDE.

HALEY ALDRICH

ASG
NYC HDD PROJECT 3: ROOSEVELT ISLAND - QUEENS
NEW YORK, NEW YORK AND QUEENS, NEW YORK

EXPLORATION LOCATION PLAN AND PRELIMINARY SUBSURFACE PROFILE

SCALE: AS SHOWN
23 AUGUST 2023

FIGURE 3

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\\HALEYALDRICH.COM\SHARE\CIP\PROJECTS\135185\CAD\03_RQ\FIGURES\370\135185_370_0001_RQ-PLAN_PROFILE.DWG
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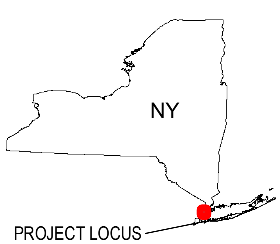

N

0 2,000 4,000

SCALE IN FEET

MAP SOURCE: ESRI
SITE COORDINATES: 40°47'07"N, 73°56'15"W

HALEY ALDRICH

ASG
NYC HDD PROJECT 4:
MANHATTAN - WARDS ISLAND
NEW YORK, NEW YORK

PROJECT OVERVIEW

APPROXIMATE SCALE: 1 IN = 4000 FT
JUNE 2023

FIGURE 1

GIS FILE PATH: Z:\135185\GIS\Maps\2023_06\135185_001_CROSSING 4_PROJECT OVERVIEW_D1.mxd — USER: mmartin — LAST SAVED: 6/14/2023 12:50:03 PM

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LEGEND

- HDD
- LIMITS OF DISTURBANCE

N

0 150 300

SCALE IN FEET

MAP SOURCE: ESRI WORLD IMAGERY (03/16/2022)

HALEY ALDRICH

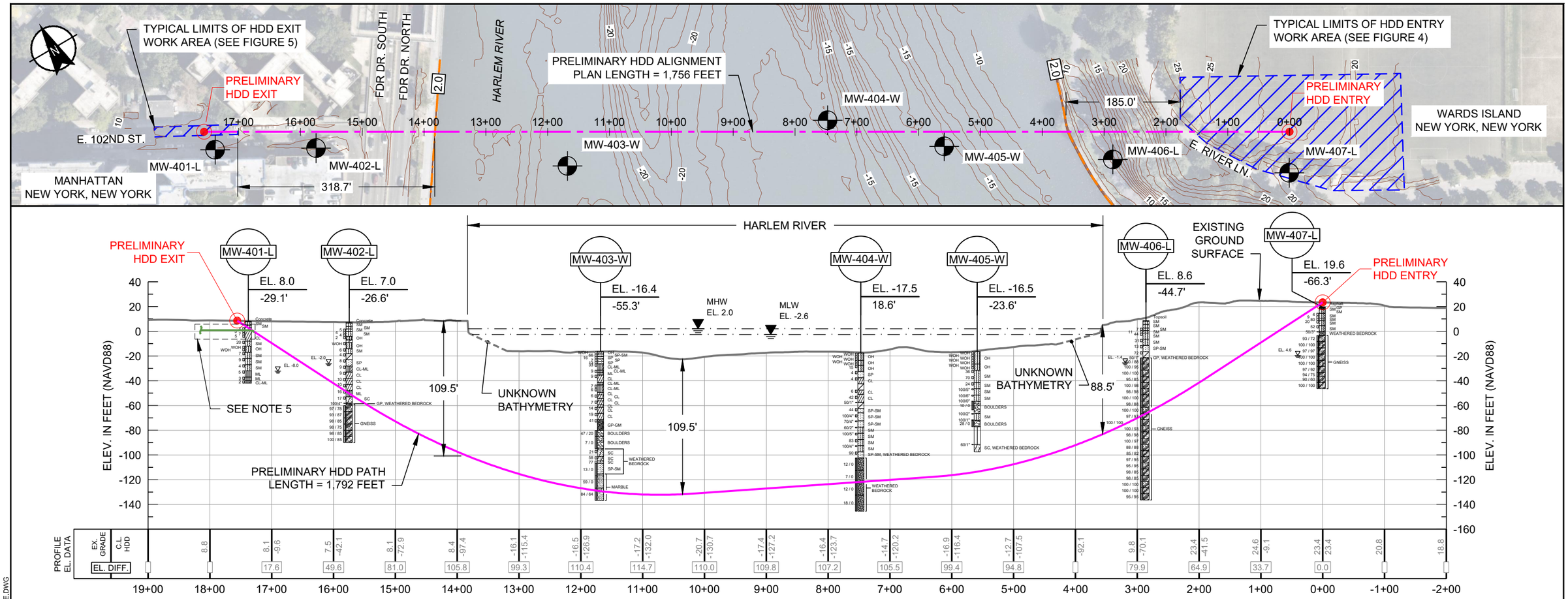
ASG
NYC HDD PROJECT 4:
MANHATTAN - WARDS ISLAND
NEW YORK, NEW YORK

PROJECT LIMITS OF DISTURBANCE

APPROXIMATE SCALE: 1 IN = 300 FT
JUNE 2023

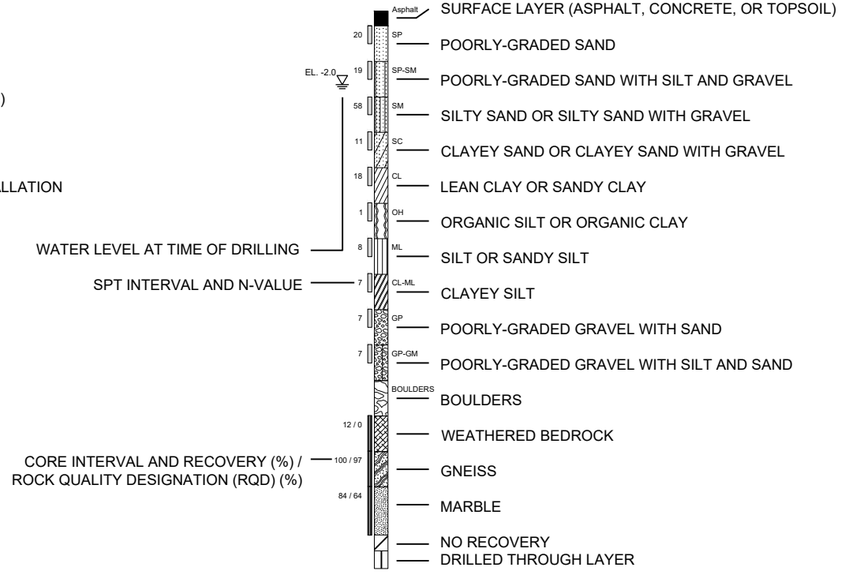
FIGURE 2

USACE FILE: NAN-2023-00527-EMI



PROFILE LEGEND

- EXISTING GROUND SURFACE (SEE NOTE 2)
- RIVER WATER LEVELS (SEE NOTE 4)
  - MHW: MEAN HIGH WATER
  - MLW: MEAN LOW WATER
- PRELIMINARY HDD DRILL PATH
- PRELIMINARY OPEN TRENCH INSTALLATION
- PRELIMINARY HDD ENTRY AND EXIT LOCATIONS
- MW-401-L — LOCATION ID
- EL. 5.4 — ELEVATION (NAVD88)
- -0.5' — OFFSET FROM ALIGNMENT (-) INDICATES LEFT OF ALIGNMENT



PLAN LEGEND

- MW-##-# — LOCATION AND DESIGNATION OF TEST BORING PERFORMED 13 JULY THROUGH 03 NOVEMBER 2022 BY AQUIFER DRILLING & TESTING, INC. AND MONITORED BY HALEY & ALDRICH OF NEW YORK.
- PRELIMINARY HDD ALIGNMENT
- TYPICAL HDD WORK AREAS
- PRELIMINARY HDD ENTRY AND EXIT LOCATIONS
- 2.0 — MHW OR MLW CONTOUR

NOTES

1. AERIAL REFERENCES NEARMAP IMAGERY © 2022 NEARMAP, HERE, AND DATED 27 SEPTEMBER 2022.
2. TOPOGRAPHY REFERENCES DRAWING TITLED "TOPOGRAPHIC SURVEY AT EAST 102ND STREET, HARLEM ROVER AND EAST RIVER LANE" BY GdB GEOSPATIAL, DATED 28 JUNE 2022.
3. ELEVATIONS ARE IN FEET AND REFERENCE THE NORTH AMERICAN DATUM OF 1988 (NAVD88). THE HORIZONTAL CONTROL REFERENCES THE NORTH AMERICAN DATUM OF 1983, NEW YORK LONG ISLAND STATE PLANE (NAD83).
4. TIDAL ELEVATION INFORMATION FROM NOAA AND REFERENCE STATION 8518750, THE BATTERY, NY.
5. THE ALIGNMENT TRANSITIONS FROM HDD TO OPEN TRENCH INSTALLATION ARE SHOWN WITH A BURIAL DEPTH OF APPROX. 8 FT BELOW THE GROUND SURFACE AT THE HDD EXIT SIDE. THE TRANSITION IS NOT SHOWN ON THE HDD ENTRY SIDE FOR CLARITY, HOWEVER, SIMILAR TRANSITION WILL BE INSTALLED AT THE HDD ENTRY SIDE.

HORIZ. 0 160 320
VERT. 0 80 160
SCALE IN FEET

HALEY ALDRICH

ASG
NYC HDD PROJECT 4: MANHATTAN - WARDS ISLAND
NEW YORK, NEW YORK

EXPLORATION LOCATION PLAN AND PRELIMINARY SUBSURFACE PROFILE

SCALE: AS SHOWN
23 AUGUST 2023

FIGURE 3

Saved by: ZGARDNER
\\HALEYALDRICH.COM\SHARE\CF\PROJECTS\135185\CAD\04_MXD\FIGURES\470\00135185_470_0001_MW-PLAN_PROFILE.DWG
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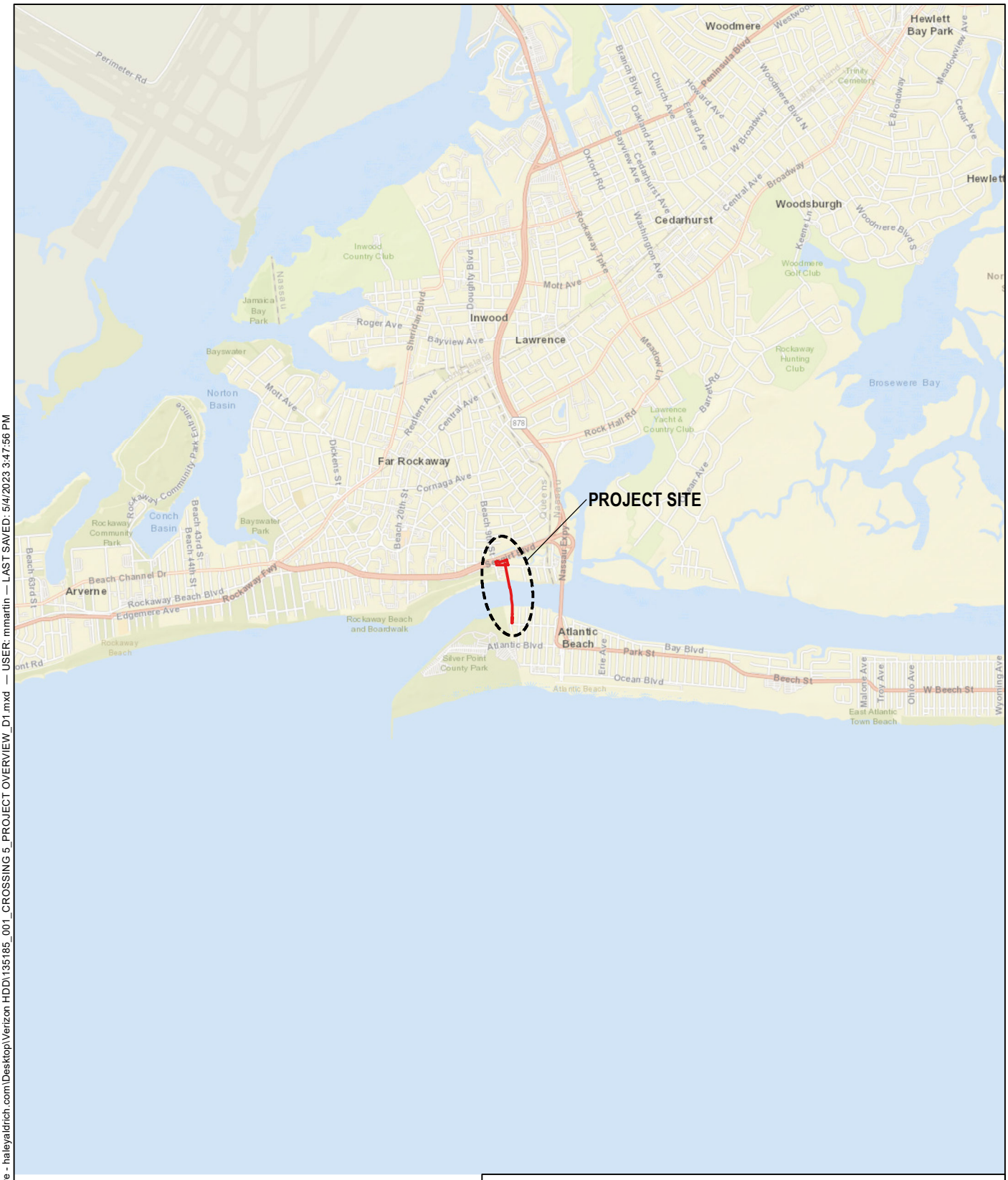
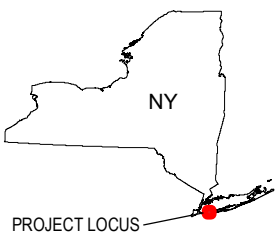
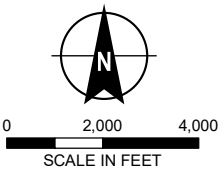






MAP SOURCE: ESRI
SITE COORDINATES: 40°35'39"N, 73°44'33"W

HALEY ALDRICH

ASG
NYC HDD PROJECT 5:
ROCKAWAY - ATLANTIC BEACH
NEW YORK, NEW YORK

PROJECT OVERVIEW

APPROXIMATE SCALE: 1 IN = 300 FT
MAY 2023

FIGURE 1

GIS FILE PATH: C:\Users\mmartin\OneDrive - haleyaldrich.com\Desktop\Verizon HDD\135185_001_CROSSING 5_PROJECT OVERVIEW_D1.mxd — USER: mmartin — LAST SAVED: 5/4/2023 3:47:56 PM

USACE FILE: NAN-2023-00528-EMI

LEGEND

HDD

LIMITS OF DISTURBANCE

N

0 150 300

SCALE IN FEET

MAP SOURCE: ESRI WORLD IMAGERY (03/21/2020)

HALEY ALDRICH

ASG
NYC HDD PROJECT 5:
ROCKAWAY - ATLANTIC BEACH
NEW YORK, NEW YORK

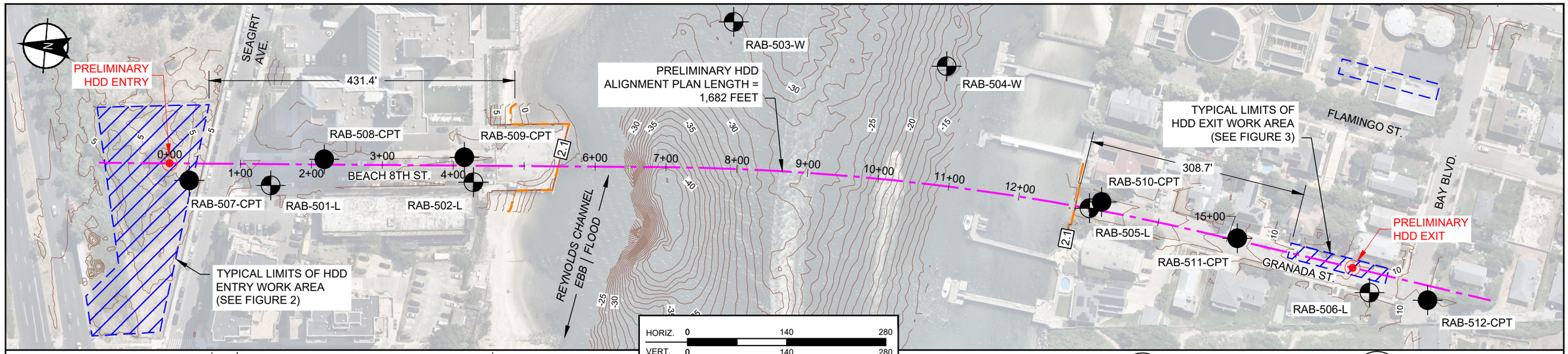
PROJECT LIMITS OF DISTURBANCE

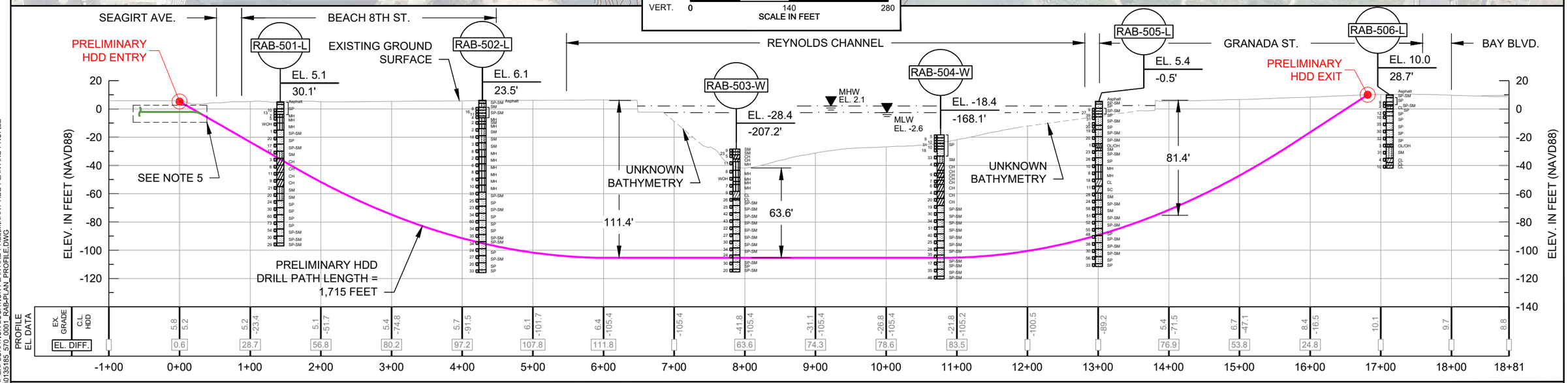
APPROXIMATE SCALE: 1 IN = 300 FT
MAY 2023

FIGURE 2

GIS FILE PATH: C:\Users\mmartin\OneDrive - haleyaldrich.com\Desktop\Verizon HDD\135185_001_CROSSING 5_PROJECT LOD_D1.mxd — USER: mmartin — LAST SAVED: 5/4/2023 5:34:15 PM

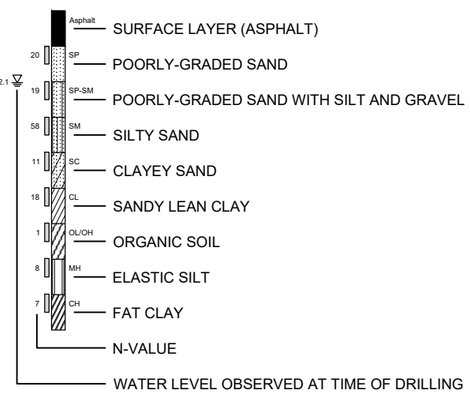
USACE FILE: NAN-2023-00528-EMI





PROFILE LEGEND

- EXISTING GROUND SURFACE (SEE NOTE 2)
- CHANNEL WATER LEVELS (SEE NOTE 4)
  - MHW: MEAN HIGH WATER
  - MLW: MEAN LOW WATER
- PRELIMINARY HDD DRILL PATH
- PRELIMINARY OPEN TRENCH INSTALLATION
- PRELIMINARY HDD ENTRY AND EXIT LOCATIONS
- RAB-505-L — LOCATION ID
- EL. 5.4 — ELEVATION (NAVD88)
- -0.5' — OFFSET FROM ALIGNMENT (-) INDICATES LEFT OF ALIGNMENT



PLAN LEGEND

- RAB-##-# — LOCATION AND DESIGNATION OF TEST BORING PERFORMED 07 SEPTEMBER THROUGH 10 OCTOBER 2022 BY AQUIFER DRILLING & TESTING, INC. AND MONITORED BY HALEY & ALDRICH OF NEW YORK.
- RAB-##-CPT — LOCATION AND DESIGNATION OF CONE PENETROMETER TEST PERFORMED 11 OCTOBER THROUGH 12 OCTOBER 2022 BY CONETEC.
- PRELIMINARY HDD ALIGNMENT
- TYPICAL HDD WORK AREAS
- PRELIMINARY HDD ENTRY AND EXIT
- 2.1 — MEAN HIGH WATER (MHW) CONTOUR (SEE NOTE4)

NOTES

1. AERIAL REFERENCES NEARMAP IMAGERY © 2022 NEARMAP, HERE, AND DATED 19 JULY 2022.
2. TOPOGRAPHY REFERENCES DRAWING TITLED "TOPOGRAPHIC SURVEY AT ELDORADO STREET, REYNOLDS CHANNEL, BEACH 6TH STREET, BEACH 5TH STREET AND SEAGIRT AVENUE" BY GdB GEOSPATIAL, DATED 06 JULY 2022.
3. ELEVATIONS ARE IN FEET AND REFERENCE THE NORTH AMERICAN DATUM OF 1988 (NAVD88). THE HORIZONTAL CONTROL REFERENCES THE NORTH AMERICAN DATUM OF 1983, NEW YORK LONG ISLAND STATE PLANE (NAD83).
4. TIDAL ELEVATION INFORMATION FROM NOAA AND REFERENCE STATION 8531680, SANDY HOOK, NJ. MEAN LOW WATER (MLW) ELEVATION IS OUTSIDE OF CURRENT SURVEY LIMIT.
5. THE ALIGNMENT TRANSITIONS FROM HDD TO OPEN TRENCH INSTALLATION ARE SHOWN WITH A BURIAL DEPTH OF APPROX. 8 FT BELOW THE GROUND SURFACE AT THE HDD ENTRY SIDE. THE TRANSITION IS NOT SHOWN ON THE HDD EXIT SIDE FOR CLARITY, HOWEVER, SIMILAR TRANSITION WILL BE INSTALLED AT THE HDD EXIT SIDE.

HALEY ALDRICH

ASG
NYC HDD PROJECT 5: ROCKAWAY - ATLANTIC BEACH
FAR ROCKAWAY, NEW YORK AND ATLANTIC BEACH, NEW YORK

EXPLORATION LOCATION PLAN AND PRELIMINARY HDD PLAN AND PROFILE

SCALE: AS SHOWN
23 AUGUST 2023

FIGURE 3

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Sheet: EXPLORATION LOCATION PLAN AND PRELIMINARY HDD PLAN AND PROFILE