PVEDI

PVEDI-AE.COM

February 27, 2026
Revised June 12, 2026

New York State Department of Environmental Conservation
Division of Environmental Remediation
ATTN: Caroline Jalanti
21 South Putt Corners Road
New Paltz, New York 12561

Re: **Corrective Measures Work Plan – Shoreline Repair & Restoration**; Long Dock Park, 8 Long Dock Road, City of Beacon, Dutchess County, New York 12508
NYSDEC BCP Site #C314112
PVE File #20250047

Dear Ms. Jalanti:

PVEDI Engineering, Architecture and Geology, D.P.C. ("PVEDI"), has been contracted by the property owner, Scenic Hudson Land Trust Inc. (SHLT) and Beacon Waterfront, LLC, to prepare a Corrective Measures Work Plan (CMWP) to be implemented during the anticipated shoreline repair and restoration. Below is the anticiapted scope of work.

1.0 SHORELINE RESTORATION

Existing shoreline conditions (soil, riprap, brick, and concrete slabs) are to be removed, re-graded, and improved with four (4) columns of boulder revetment. Soil and fill excavated from these areas will be staged on-site on and under poly sheeting encircled with a berm and/or silt fence. Stockpiles will be kept covered when not in use such as being added to or used as backfill (See Section 4.0 for more information on backfill use). Improvements include the installation of 4-6-inch rounded river cobble, a mix of 1.5-2-inch rounded gravel with topsoil (stabilized with coconut fiber erosion control blankets), and seed mixtures of ERNMX-106 (ERNST athletic field mix) and ERNMX-155 (deer resistant meadow mix). PVEDI will prepare and submit import requests to the NYSDEC for review and approval at least 3-days prior to planned import of material to the site. Re-grading activities will be followed by the implementation of restorative vegetation with considerable root growth to secure gravel and topsoil. Please see the attached repair and restoration plans in Appendix A. All ground intrusive work will be conducted in accordance with the Excavation Work Plan appended to the Site Management Plan (SMP) and hereto as Appendix B. PVEDI will provide at least 15-days notice to the Department prior to the start of work.

2.0 COMMUNITY AIR MONITORING

Community air monitoring will be performed during all ground intrusive activities to protect the downwind community in accordance with the Community Air Monitoring Plan (CAMP) appended to the SMP and hereto as Appendix C. Two (2) downwind CAMP stations will be erected at locations depending on the wind direction of that day. A PVEDI representative will periodically monitor the breathing zone in the vicinity of the immediate work area using a photoionization detector (PID) capable of measuring total volatile organic compounds (VOCs) in air at concentrations as low as 1 part per million (PPM). Work activities can occur provided that the total organic vapor level in the work area is below 5 ppm over the background for the 15-minute average. If organic vapor levels exceed 25 ppm, earthwork will cease until concentrations meet the acceptable range.

Downwind CAMP stations will each contain one (1) Dustrak^{TM} II Aerosol Monitor 8530 capable of measuring particulate matter less than 10 micrometers in size (PM-10) and one (PID) capable of measuring VOCs to 0.001 ppm. If sustained dust generation is observed at 100 micrograms per cubic meter greater than the background (upwind perimeter) or observed at 150 micrograms per cubic meter greater than the background (downwind perimeter), then the intrusive work will be temporarily halted. If VOC measurements are detected at 5 ppm above the background for the 15-minute average, or if dust generation is observed at 100 micrograms per cubic meter greater than at background (upwind perimeter) locations, then the intrusive work will be temporarily halted. Visual dust monitoring will also continuously occur during all ground intrusive work and anytime stockpiled materials are not covered. Dust suppression techniques consisting of such things as watering down work area(s), spray trucks, low speeds and wheel/track cleaning will be implemented throughout the scope of work. If dust generation issues persist, more rigorous monitoring of dust will be conducted in accordance with the New York State Department of Health (NYSDOH) Generic CAMP.

PVEDI personnel shall document all ground intrusive activities and prepare Daily Field Reports (DFRs) summarizing activities carried out that day including a photo log, and CAMP data.

3.0 IMPORT METHODS

After excavation, materials may be required to raise the elevation of the Site for construction or specified fill may be required for construction purposes. Any fill imported to the site will be sampled in accordance with DER-10 Section 5.4(e) and Part 375 PFAS Sampling Guidance; samples collected will be analyzed for the analytes listed and at the frequency stipulated in Table 5.4(e)10 (see list below) prior to being imported. Samples will be submitted to a NYSDOH ELAP-certified laboratory providing ASP Category B deliverables for analysis, and all analytical data and pertinent source information will be provided to NYSDEC for review and approval prior to import of the fill material.

Exceptions for analytical testing include:

- Gravel, rock, or stone, consisting of virgin material from a permitted mine or quarry;
- Recycled concrete or brick from a DEC-registered construction and demolition debris processing facility if the material conforms to the requirements of Section 304 of the New York Department of Transportation *Standard Specifications Construction and Materials Volume 1* (2002); &
- Materials other than soil imported to the site will be documented with Import/Reuse Request Forms and include sieve testing (size 100 sieve) at a frequency consistent with composite sampling frequency summarized in Table 5.4(e)10.

Table 5.4(e)10 Sampling Guidance

CONTAMINANT	**VOCs**	**SVOCs, Inorganics, PCBs/Pesticides, PFAS & 1,4-Dioxane**	
Soil Quantity (cubic yards)	**Discrete Samples**	**Composite**	**Discrete Samples/Composite**
0-50	1	1	3-5 discrete samples will comprise a composite sample
50-100	2	1	
100-200	3	1	
200-300	4	1	
300-400	4	2	
400-500	5	2	
500-800	6	2	

800-1,000	7	2	
1,000	Add an additional 2 VOC and 1 composite for each additional 1,000 cubic yards OR consults with DER		

4.0 EXPORT METHODS

Selective excavations will be conducted at the shoreline to remove soil, riprap, brick, & concrete slabs). At this time, no excavation is planned or shall be made into contaminated soils beneath the demarcation layer. Excavated soils above the demarcation layer may be reused as backfill during the shoreline restoration. Excavated soils that cannot be reused as backfill will be stockpiled on and under polysheeting for waste characterization and off-site disposal. Waste characterization soil sampling will be performed in a manner required by the receiving facility and in conformance with its applicable permits. Sampling, analytical methods, sampling frequency, analytical results and QA/QC will be reported to DEC as soon as the analytical results are obtained. All soil will be transported by Part 364 permitted haulers. A manifest system for off-Site transportation of exported materials will be employed. Manifest information will be reported to DEC at the end of construction activities.

Should boulders (rock with the smallest dimension larger than 1-foot) be encountered during excavation activities, they will be segregated and stockpiled on-site and assessed by the Remediation Engineer's field representative to determine whether these materials exhibit field evidence of contamination (FEC, odors, sheen, and/or discoloration). Boulders exhibiting FEC will not be reused on-site. Boulders with no FEC could be reused on-site, following a determination by the project's design engineers that the reuse of this material is acceptable. Boulders to be reused as backfill will need to be free from excessive soil/fill prior to placement in order to prevent cross-contamination.

While not anticipated, the handling of the contaminated fill/soil will involve direct loading into dump trucks or trailers, and if not directly loaded, temporarily stockpiled on-Site. Truck/tractor trailers loaded with contaminated soil will be covered during transport; if soil being transported is high in moisture content where free-standing water will be released, truck gates will be sealed and/or lined with plastic. Mesh tarps or covers will not be allowed for trucks hauling contaminated fill/soil from the Site.

Transportation of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed and trucks properly placarded. Material transported by trucks exiting the site will be secured with tight-fitting covers. If loads contain wet material capable of producing free liquid, truck liners will be used.

Disposal truck routes will take the following into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off-site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport.

Trucks will be prohibited from stopping and idling in the neighborhood outside the project site. Egress points for truck and equipment transport from the site will be kept clean of dirt and other materials during site remediation and development. Disposal facility approval letters and other related documentation will be submitted to the Remediation Engineer and the DEC Project Manager for review and approval prior to the exportation of contaminated fill/soil.

5.0 DAILY FIELD REPORTS

PVEDI will prepare a summary report each day. Each report will be submitted to the NYSDEC Project Manager and NYSDOH Project manager within 2 business days of the reporting period. Reports will include the following.

- Weather and general site details;
- Actions conducted during the reporting period;
- Anticipated actions for the next reporting period;
- Unresolved delays or issues encountered during the reporting period;
- Community Air Monitoring summary (wind direction, figure showing air monitoring sections, monitoring data, summary of exceedances and corrective actions, etc.;
- Site photos; &
- Material import and export documentation.

6.0 CORRECTIVE MEASURES REPORT

Following implementation of the corrective measures, PVEDI will prepare a summary report which will include the following.

- Description of field tasks and methods.
- As-built plans and survey.
- Daily Field Reports (including photologs and CAMP data).
- Analytical reports (if applicable) for disposal and/or imported material.
- Import and/or export manifests (if applicable).

7.0 CERTIFICATION

I, Conor Tarbell, certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Corrective Measures Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

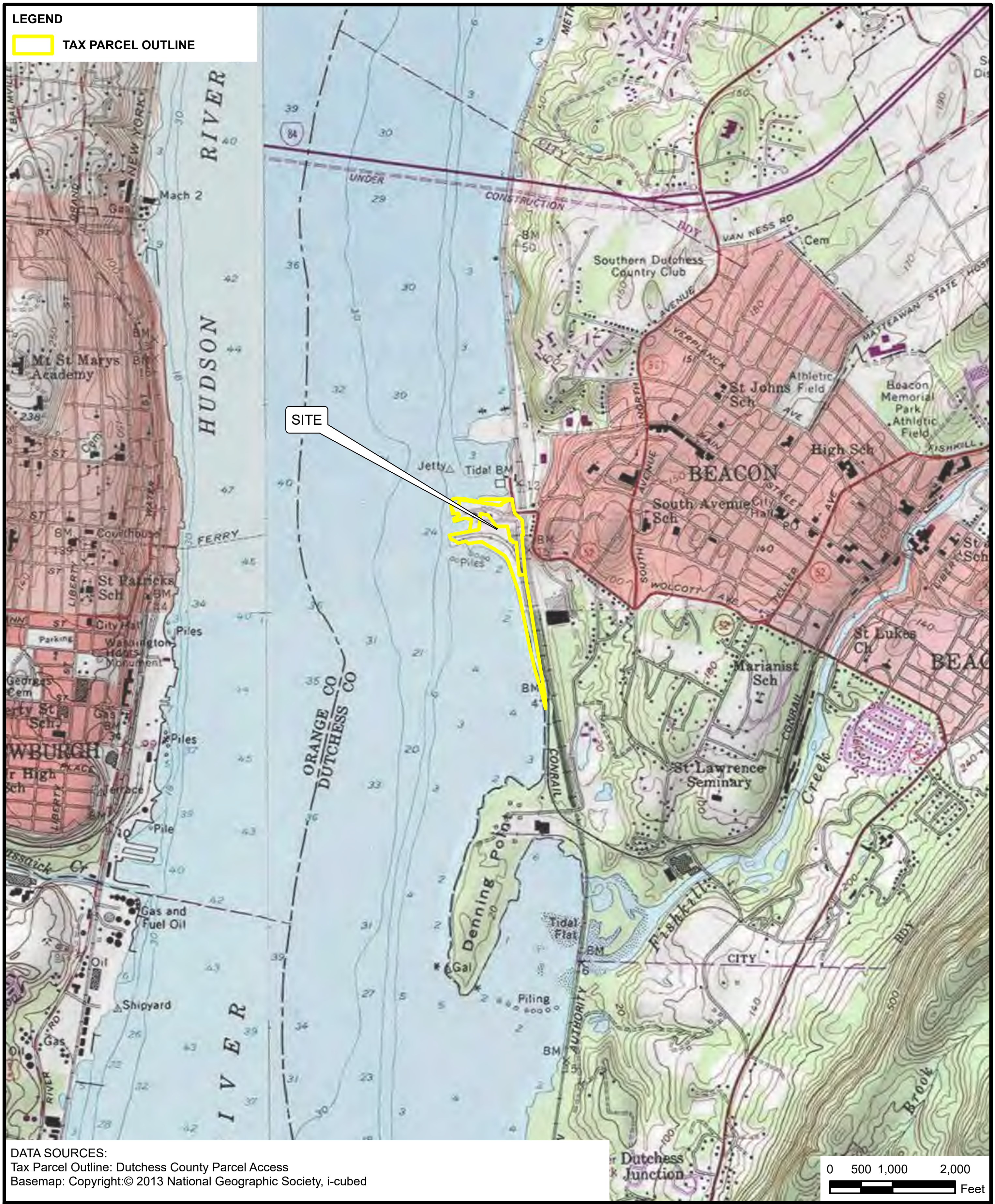
Conor Tarbell, QEP	6/12/2026 Date

Attachments:
Figure 1 – Site Location Map
Figure 2 – Selected Site Features
Figure 3 – Extents of Works
Appendix A – Long Dock Park Shoreline Repair and Restoration Plan
Appendix B – Excavation Work Plan
Appendix C – Community Air Monitoring Plan; Appendix 1A, NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation

FIGURES

LEGEND

▭ TAX PARCEL OUTLINE



SITE
HUDSON RIVER
RIVER
BEACON
WBURGH
Mt St Marys Academy
Southern Dutchess Country Club
St Johns Sch
Athletic Field
Beacon Memorial Park Athletic Field
High Sch
South Avenue Sch
City Hall
PO
St Lukes Ch
Marianist Sch
St Lawrence Seminary
Denning Point
Fishkill Creek
Tidal Flat
Jetty
Tidal BM
Piles
Piling
Gal
CONRAIL
AUTHORITY
ORANGE CO
DUTCHESS CO
UNDER CONSTRUCTION
84
VAN NESS RD
Cem
FERRY
Courthouse
St Patricks Sch
Washington Hdqrs Monument
Gas and Fuel Oil
Shipyard
Mach 2
Dutchess Junction
CITY BDY
0 500 1,000 2,000
Feet

DATA SOURCES:
Tax Parcel Outline: Dutchess County Parcel Access
Basemap: Copyright:© 2013 National Geographic Society, i-cubed

PVEDi

48 Springside Avenue
Poughkeepsie, NY 12603
Office: 845.454.2544
Fax: 845.454.2655

SITE LOCATION MAP

LONG DOCK PARK
8 LONG DOCK ROAD
CITY OF BEACON, NEW YORK 12508

PROJECT NO.
20250047

N

FIGURE 1

DATE: 04/03/2025

SCALE: AS INDICATED

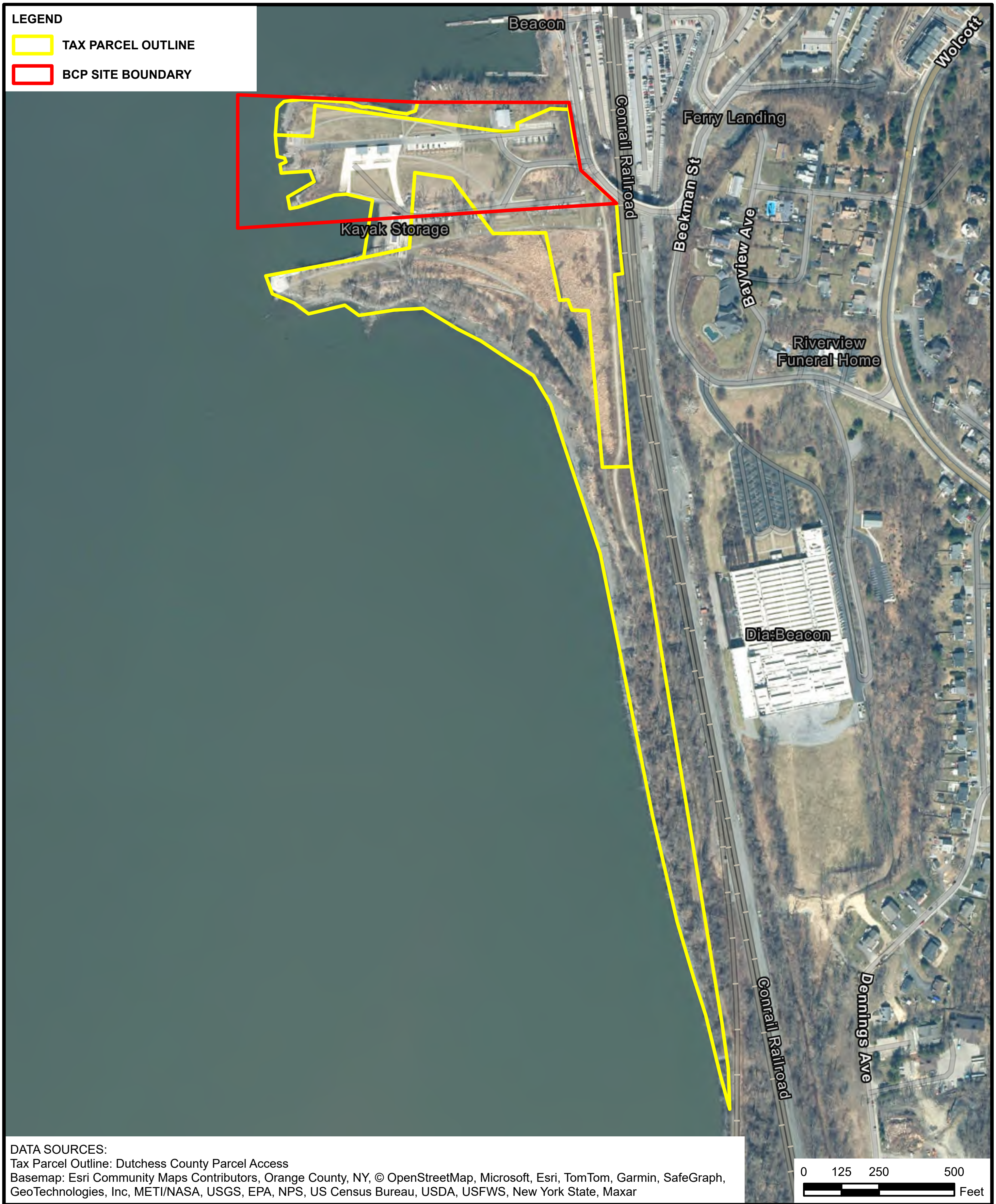
PROJECTION: STATE PLANE NAD83 NY EAST

ALL LOCATIONS APPROXIMATE

LEGEND

🟨 TAX PARCEL OUTLINE

🟥 BCP SITE BOUNDARY


Beacon
Ferry Landing
Wolcott
Conrail Railroad
Beekman St
Bayview Ave
Kayak Storage
Riverview Funeral Home
Dia:Beacon
Conrail Railroad
Dennings Ave
0 125 250 500
Feet

DATA SOURCES:
Tax Parcel Outline: Dutchess County Parcel Access
Basemap: Esri Community Maps Contributors, Orange County, NY, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS, New York State, Maxar

PVEDi
48 Springside Avenue
Poughkeepsie, NY 12603
Office: 845.454.2544
Fax: 845.454.2655

SELECTED SITE FEATURES

LONG DOCK PARK
8 LONG DOCK ROAD
CITY OF BEACON, NEW YORK 12508

PROJECT NO.
20250047

N

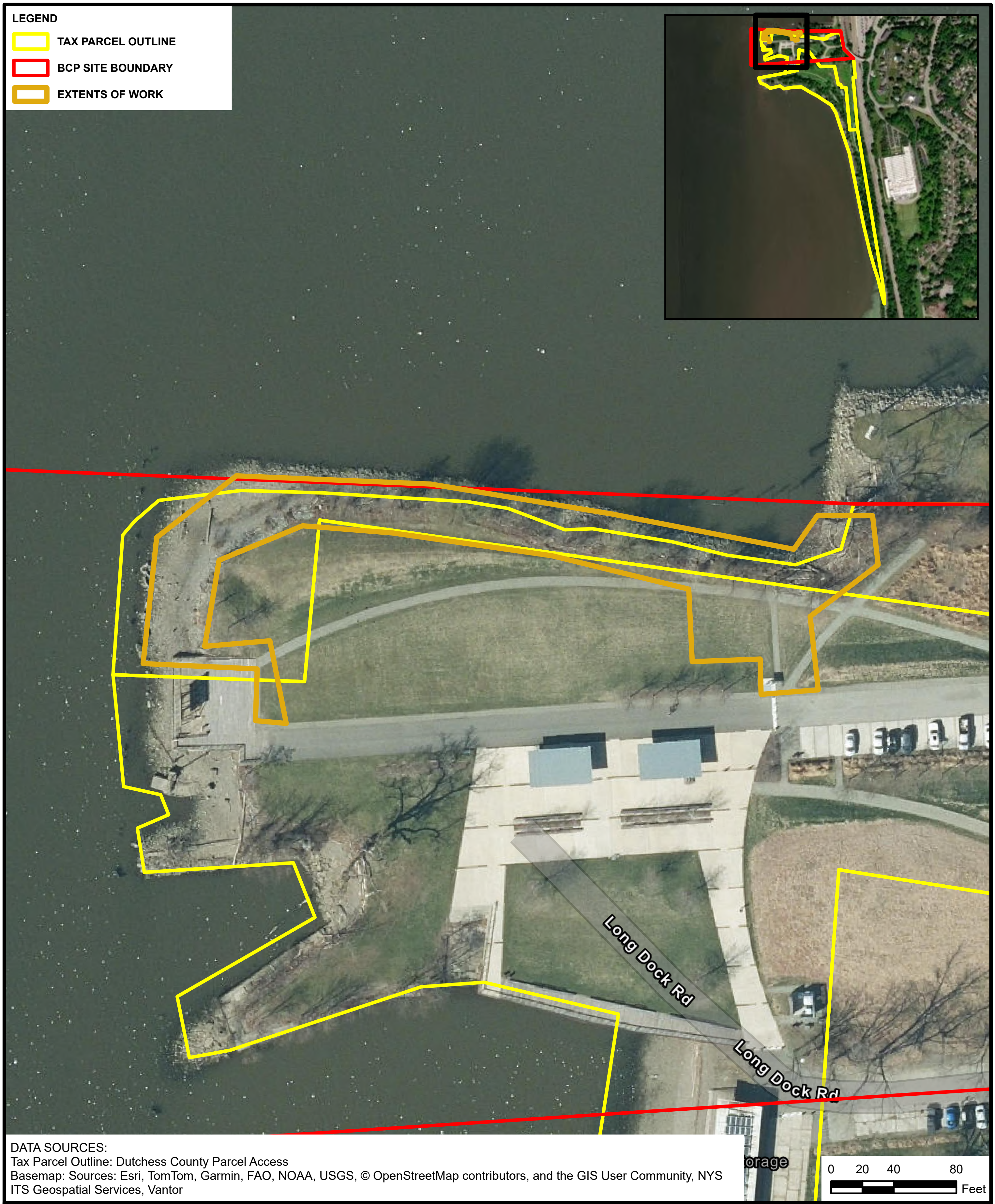
FIGURE 2

DATE: 04/03/2025

SCALE: AS INDICATED

PROJECTION: STATE PLANE NAD83 NY EAST

ALL LOCATIONS APPROXIMATE



LEGEND

🟨 TAX PARCEL OUTLINE

🟥 BCP SITE BOUNDARY

🟧 EXTENTS OF WORK

DATA SOURCES:
Tax Parcel Outline: Dutchess County Parcel Access
Basemap: Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, NYS ITS Geospatial Services, Vantor

PVEDi
48 Springside Avenue
Poughkeepsie, NY 12603
Office: 845.454.2544
Fax: 845.454.2655

EXTENTS OF WORK

LONG DOCK PARK
8 LONG DOCK ROAD
CITY OF BEACON, NEW YORK 12508

PROJECT NO.
20250047

N

FIGURE 3

DATE: 02/26/2026

SCALE: AS INDICATED

PROJECTION: STATE PLANE NAD83 NY EAST

ALL LOCATIONS APPROXIMATE

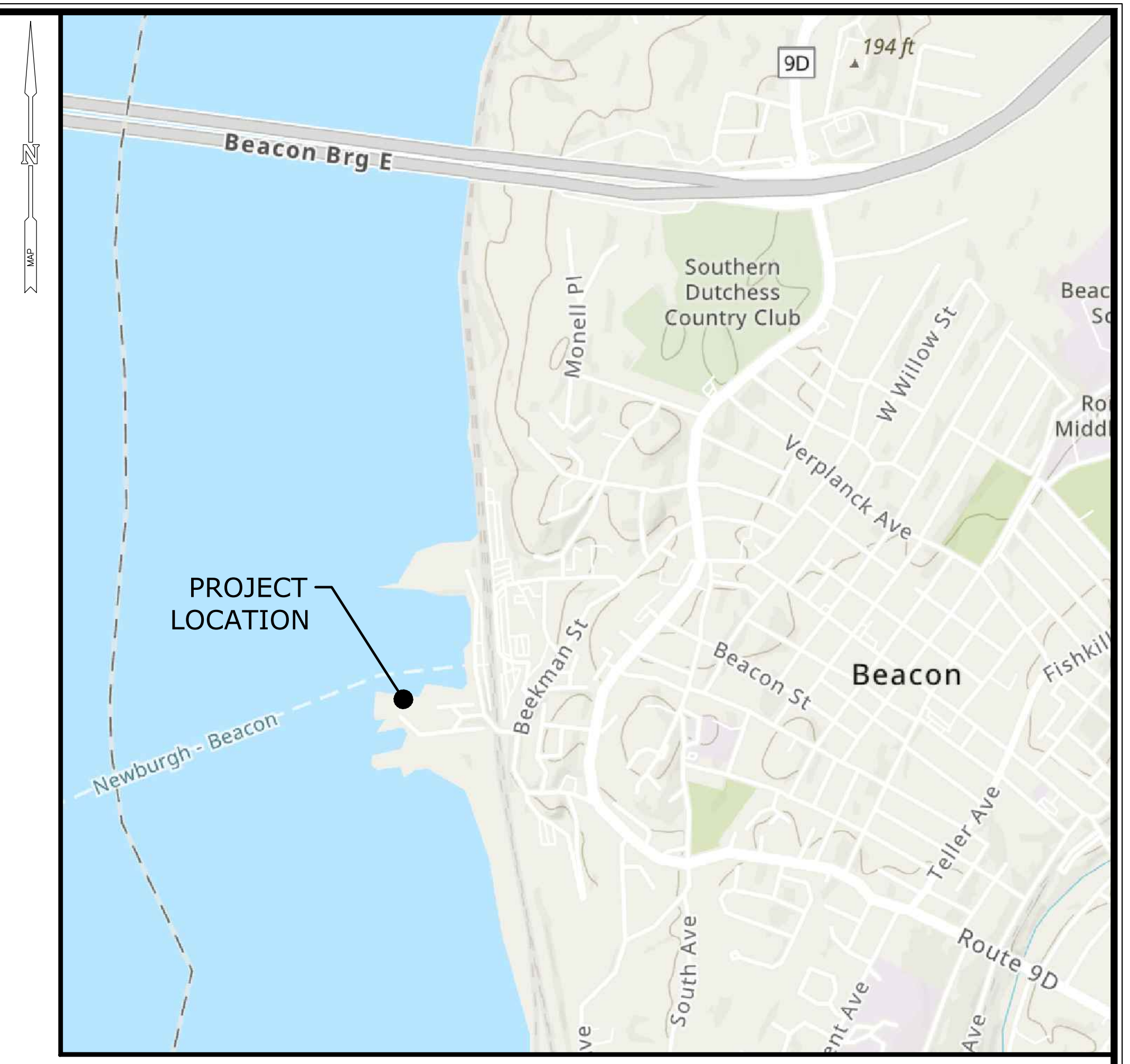
APPENDIX A

Drawing: W:\CADDESIGN\12787.00007-DE\CAD\CAD\BLD-TITLE.DWG Layout Tab:TITLE
Plotted by: KATIE.CASSON On this date: Wed, 2026 February 25 - 12:59pm

LONG DOCK PARK
SHORELINE REPAIR AND RESTORATION

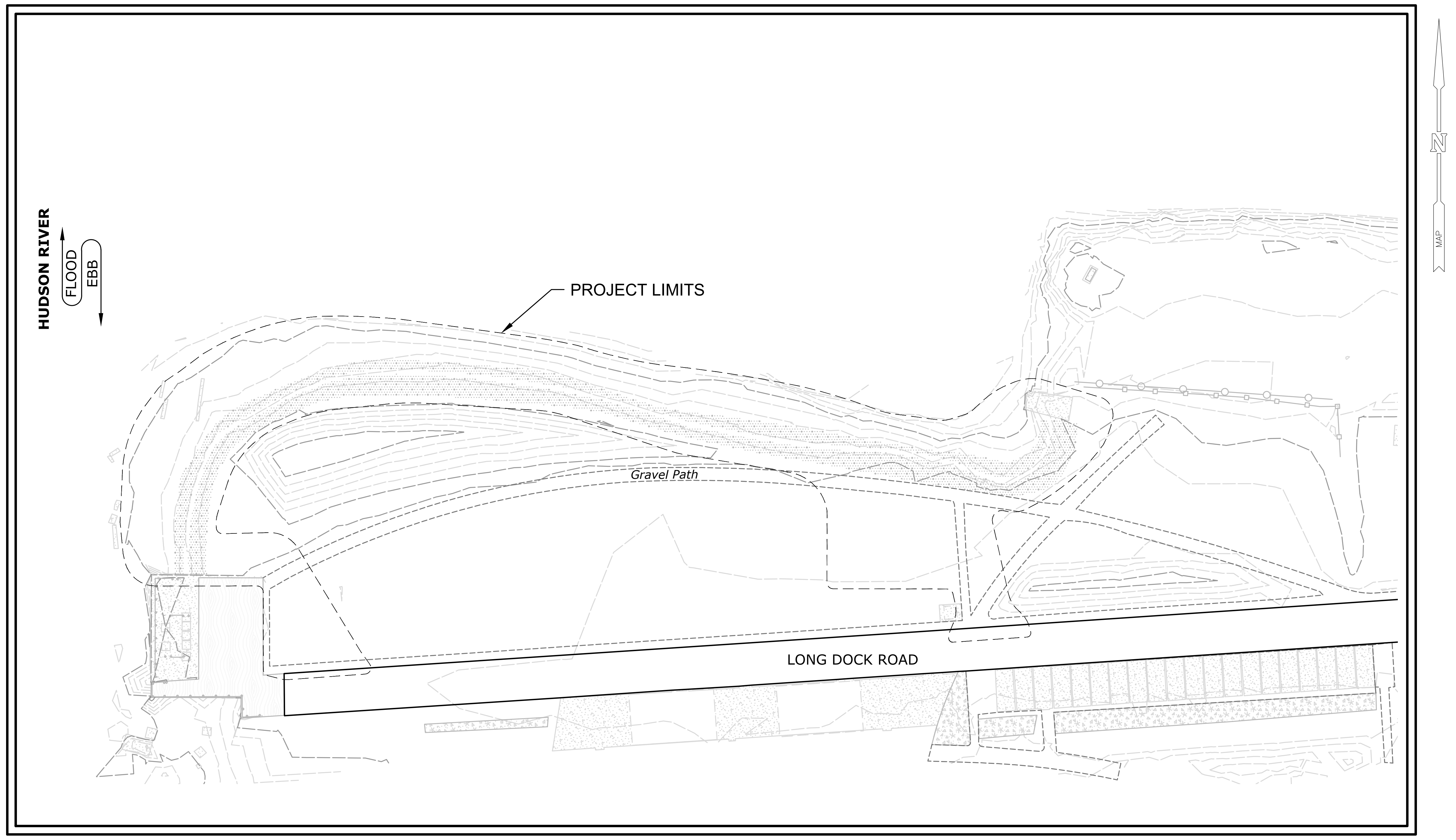
8 LONG DOCK RD
BEACON, NY

60% ADVANCED DESIGN
FEBRUARY 25, 2026


Beacon Brg E
9D
194 ft
Southern Dutchess Country Club
Monell Pl
W Willow St
Verplanck Ave
PROJECT LOCATION
Beekman St
Beacon St
Beacon
Newburgh - Beacon
Teller Ave
Route 9D
South Ave
Fishkill

LOCATION MAP:

0' 30' 60'
0 1/2" 1"
SCALE 1" = 60'


HUDSON RIVER
FLOOD
EBB
PROJECT LIMITS
Gravel Path
LONG DOCK ROAD
N
MAP

PROJECT SITE VICINITY MAP:

0' 20' 40'
0 1/2" 1"
SCALE 1" = 40'

PREPARED FOR:

THE SCENIC HUDSON LAND TRUST INC.
58 PARKER AVE
POUGHKEEPSIE, NY 12601

LIST OF DRAWINGS

NO.	NAME	TITLE
01	--	TITLE SHEET
02	EX-1	EXISTING CONDITIONS
03	EX-2	EXISTING CONDITIONS - AERIAL PHOTOGRAPH
04	LA-1	LAYOUT PLAN
05	GR-1	GRADING PLAN
06	RS-1	RESTORATION PLAN
07	CS-1	CROSS SECTIONS (STA 0+10 TO STA 2+00)
08	CS-2	CROSS SECTIONS (STA 2+50 TO STA 4+76)
09	CP-1	CONSTRUCTION PLAN
10	DE-1	SEDIMENT AND EROSION CONTROLS
11	DE-2	DETAILS
12	RR-1	REGULATED RESOURCES

PREPARED BY:

SLR
231 MAIN STREET, SUITE 102
NEW PALTZ, NY 12561
845.633.8153
SLRCONSULTING.COM

SLR Engineering, Landscape Architecture, and Land Surveying P.C.
Registration No. 083112

811
Know what's below.
Call before you dig.
www.udigny.com

UNAUTHORIZED ALTERATION TO A MAP OR PLAN BEARING A LICENSED PROFESSIONAL ENGINEER'S SEAL IS IN VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW ARTICLE 145. THE PE CERTIFICATION IS NOT AN EXPRESS OR IMPLIED WARRANTY OR GUARANTEE, IT IS PURELY A STATEMENT OF PROFESSIONAL OPINION BASED ON KNOWLEDGE, INFORMATION AND BELIEF AND BASED ON EXISTING FIELD EVIDENCE AND DOCUMENTARY EVIDENCE AVAILABLE. CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS. COPIES OF PLANS NOT HAVING THE SEAL OF THE ENGINEER SHALL NOT BE VALID.

ANY ALTERATION OR REVISIONS OF THESE PLANS, UNLESS DONE BY OR UNDER THE DIRECTION OF THE NYS LICENSED AND REGISTERED PROFESSIONAL ENGINEER THAT PREPARED THEM, IS A VIOLATION OF THE NYS EDUCATION LAW.

W. Andrew Greene
P.E. NY# 089373

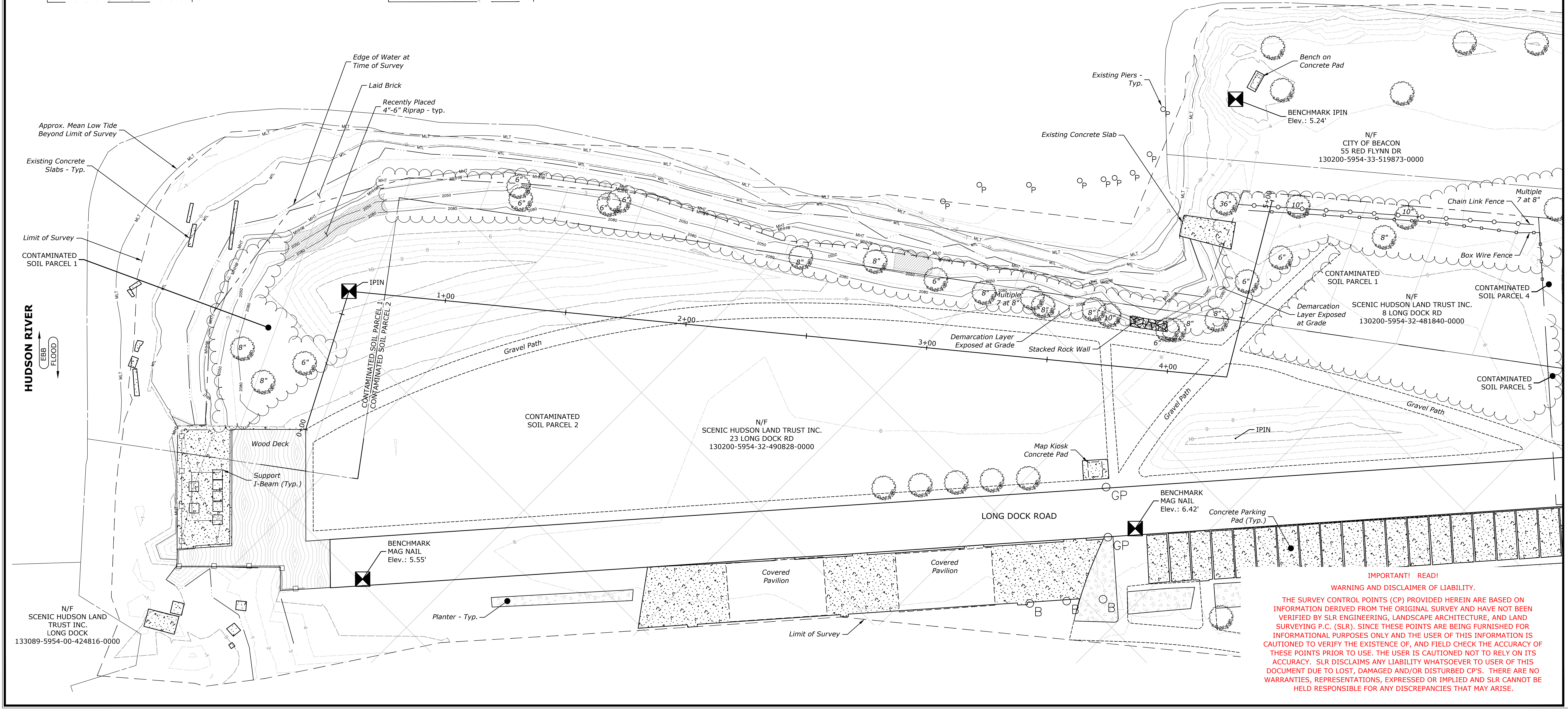
SLR NO.: 12787.00007
SUBMITTED:FEBRUARY 25, 2026

LEGEND

- MEAN LOW TIDE (MLT) ELEV. = -1.41 FT
- MEAN TIDE LINE (MTL) ELEV. = 0.16 FT
- MEAN HIGH TIDE (MHT) ELEV. = 1.72 FT
- MEAN HIGHER HIGH WATER (MHHW) ELEV. = 2.07 FT
- MEAN HIGHER HIGH WATER IN 2050 ELEV. = 3.24 FT
- MEAN HIGHER HIGH WATER IN 2080 ELEV. = 4.24 FT
- EDGE OF WATER AT TIME OF SURVEY
- EXISTING BUILDING
- BUILDING OVERHANG
- RAILING
- STACKED ROCK WALL
- LIMIT OF SURVEY
- PROPERTY BOUNDARY
- GP GATE POST
- PLANTER
- CONTAMINATED SOIL PARCEL 1
- CONTAMINATED SOIL PARCEL 2
- GRAVEL TRAIL
- EXISTING TREE
- EDGE OF PAVEMENT
- EXISTING TREELINE
- MAJOR CONTOUR
- MINOR CONTOUR
- RECENTLY PLACED 4"-6" RIPRAP
- WOOD DECK
- EXISTING CONCRETE
- EXISTING SIGN
- AERIAL DRONE TARGET
- BOX WIRE FENCE
- CHAIN LINK FENCE
- B BOLLARD
- P EXISTING PIERS
- CONTAMINATED SOIL PARCEL 4
- CONTAMINATED SOIL PARCEL 5

NOTES:

1. TOPOGRAPHIC AND BATHYMETRIC DATA IS BASED ON GROUND SURVEY PERFORMED BY SLR ENGINEERING, LANDSCAPE ARCHITECTURE, AND LAND SURVEYING, P.C. (SLR) ON JULY 17 TO 19, 2024.
2. HORIZONTAL MAPPING IS REFERENCED TO NORTH AMERICAN DATUM OF 1983 (NAD83), IN NEW YORK EAST STATE PLANE. ELEVATION DATA IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). ALL HORIZONTAL COORDINATES AND ELEVATIONS ARE PRESENTED IN FEET.
3. INFORMATION REGARDING THE LOCATION OF EXISTING UTILITIES HAS BEEN BASED UPON AVAILABLE INFORMATION AND MAY BE INCOMPLETE, AND WHERE SHOWN SHOULD BE CONSIDERED APPROXIMATE. THE LOCATION OF ALL EXISTING UTILITIES SHOULD BE CONFIRMED PRIOR TO BEGINNING CONSTRUCTION. CONTACT "UDIG NY" BY CALLING 811. ALL UTILITY LOCATIONS THAT DO NOT MATCH THE VERTICAL OR HORIZONTAL CONTROL SHOWN ON THE PLANS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION.
4. SLR ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF MAPS AND DATA WHICH HAVE BEEN SUPPLIED BY OTHERS.
5. ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR DETERMINATION.
6. ALL CONTRACTORS ARE ADVISED TO VISIT THE SITE TO CONFIRM CURRENT CONDITIONS PRIOR TO SUBMITTING BIDS.
7. ELEVATION DATA REFLECTED ON THIS MAP ARE FOR INFORMATION PURPOSES ONLY. THE PROJECT SITE IS SUBJECT TO FLOODING. TOPOGRAPHIC/BATHYMETRIC INFORMATION DEPICTED HEREIN IS SHOWN AS A REPRESENTATION OF THE PROJECT SITE AT THE TIME IT WAS SURVEYED, AND IS SUBJECT TO CHANGE BASED UPON HIGH FLOWS, FLOOD, EROSION, AND/OR CHANGING SITE CONDITIONS. FIELD-VERIFICATION OF DATA IS REQUIRED PRIOR TO USE FOR ANY ANTICIPATED CONSTRUCTION.
8. EXISTING FEATURES INCLUDING BUT NOT LIMITED TO, TREE LINES, EXISTING CONCRETE SLABS, EXISTING PIERS, AND EXISTING RIPRAP HAVE BEEN DIGITIZED FROM AERIAL IMAGERY. LOCATIONS OF EXISTING FEATURES ARE APPROXIMATE AND SHOULD BE VERIFIED PRIOR TO CONSTRUCTION.
9. CONTAMINATED SOIL PARCEL INFORMATION DIGITIZED FROM NYSDEC BCP SITE ID:C314112 ENVIRONMENTAL EASEMENT MAP, DATED MAY 18, 2015. ACCURACY HAS NOT BEEN CONFIRMED WITH GROUND SURVEY.
10. TIDE ELEVATIONS ARE IN NAVD88 AND ARE APPROXIMATED USING DATA FROM THREE NOAA TIDE AND CURRENTS STATIONS: 8518934, BEACON, HUDSON RIVER, NY, 8518951 HYDE PARK NY, AND 8518924 HAVERSTRAW BAY, NY.


HUDSON RIVER
EBB
FLOOD
Approx. Mean Low Tide Beyond Limit of Survey
Existing Concrete Slabs - Typ.
Limit of Survey
CONTAMINATED SOIL PARCEL 1
Edge of Water at Time of Survey
Laid Brick
Recently Placed 4"-6" Riprap - typ.
IPIN
0+00
1+00
2+00
3+00
4+00
5+00
Gravel Path
CONTAMINATED SOIL PARCEL 1
CONTAMINATED SOIL PARCEL 2
CONTAMINATED SOIL PARCEL 2
N/F
SCENIC HUDSON LAND TRUST INC.
23 LONG DOCK RD
130200-5954-32-490828-0000
Wood Deck
Support I-Beam (Typ.)
BENCHMARK MAG NAIL Elev.: 5.55'
N/F
SCENIC HUDSON LAND TRUST INC.
LONG DOCK
133089-5954-00-424816-0000
Planter - Typ.
Limit of Survey
Covered Pavilion
Covered Pavilion
LONG DOCK ROAD
GP
GP
B
B
B
BENCHMARK MAG NAIL Elev.: 6.42'
Concrete Parking Pad (Typ.)
Map Kiosk Concrete Pad
Demarcation Layer Exposed at Grade
Stacked Rock Wall
Multiple 7 at 8"
Existing Concrete Slab
Existing Piers - Typ.
Bench on Concrete Pad
BENCHMARK IPIN Elev.: 5.24'
N/F
CITY OF BEACON
55 RED FLYNN DR
130200-5954-33-519873-0000
Chain Link Fence
Multiple 7 at 8"
Box Wire Fence
CONTAMINATED SOIL PARCEL 1
Demarcation Layer Exposed at Grade
N/F
SCENIC HUDSON LAND TRUST INC.
8 LONG DOCK RD
130200-5954-32-481840-0000
CONTAMINATED SOIL PARCEL 4
CONTAMINATED SOIL PARCEL 5
Gravel Path
Gravel Path
IPIN
MLT
MTL
MHT
MHHW
2050
2080
36"
10"
8"
6"

IMPORTANT! READ!
WARNING AND DISCLAIMER OF LIABILITY.

THE SURVEY CONTROL POINTS (CP) PROVIDED HEREIN ARE BASED ON INFORMATION DERIVED FROM THE ORIGINAL SURVEY AND HAVE NOT BEEN VERIFIED BY SLR ENGINEERING, LANDSCAPE ARCHITECTURE, AND LAND SURVEYING P.C. (SLR). SINCE THESE POINTS ARE BEING FURNISHED FOR INFORMATIONAL PURPOSES ONLY AND THE USER OF THIS INFORMATION IS CAUTIONED TO VERIFY THE EXISTENCE OF, AND FIELD CHECK THE ACCURACY OF THESE POINTS PRIOR TO USE. THE USER IS CAUTIONED NOT TO RELY ON ITS ACCURACY. SLR DISCLAIMS ANY LIABILITY WHATSOEVER TO USER OF THIS DOCUMENT DUE TO LOST, DAMAGED AND/OR DISTURBED CP'S. THERE ARE NO WARRANTIES, REPRESENTATIONS, EXPRESSED OR IMPLIED AND SLR CANNOT BE HELD RESPONSIBLE FOR ANY DISCREPANCIES THAT MAY ARISE.

N
W
E
S
0' 10' 20'
0 1/2" 1"

SLR
231 MAIN STREET, SUITE 102
NEW PALTZ, NY 12561
845.633.8153
SLRCONSULTING.COM

SLR Engineering, Landscape Architecture,
and Land Surveying P.C.
Registration No. 083112

DESCRIPTION	DATE	BY

NOT FOR CONSTRUCTION
60% ADVANCED DESIGN

EXISTING CONDITIONS

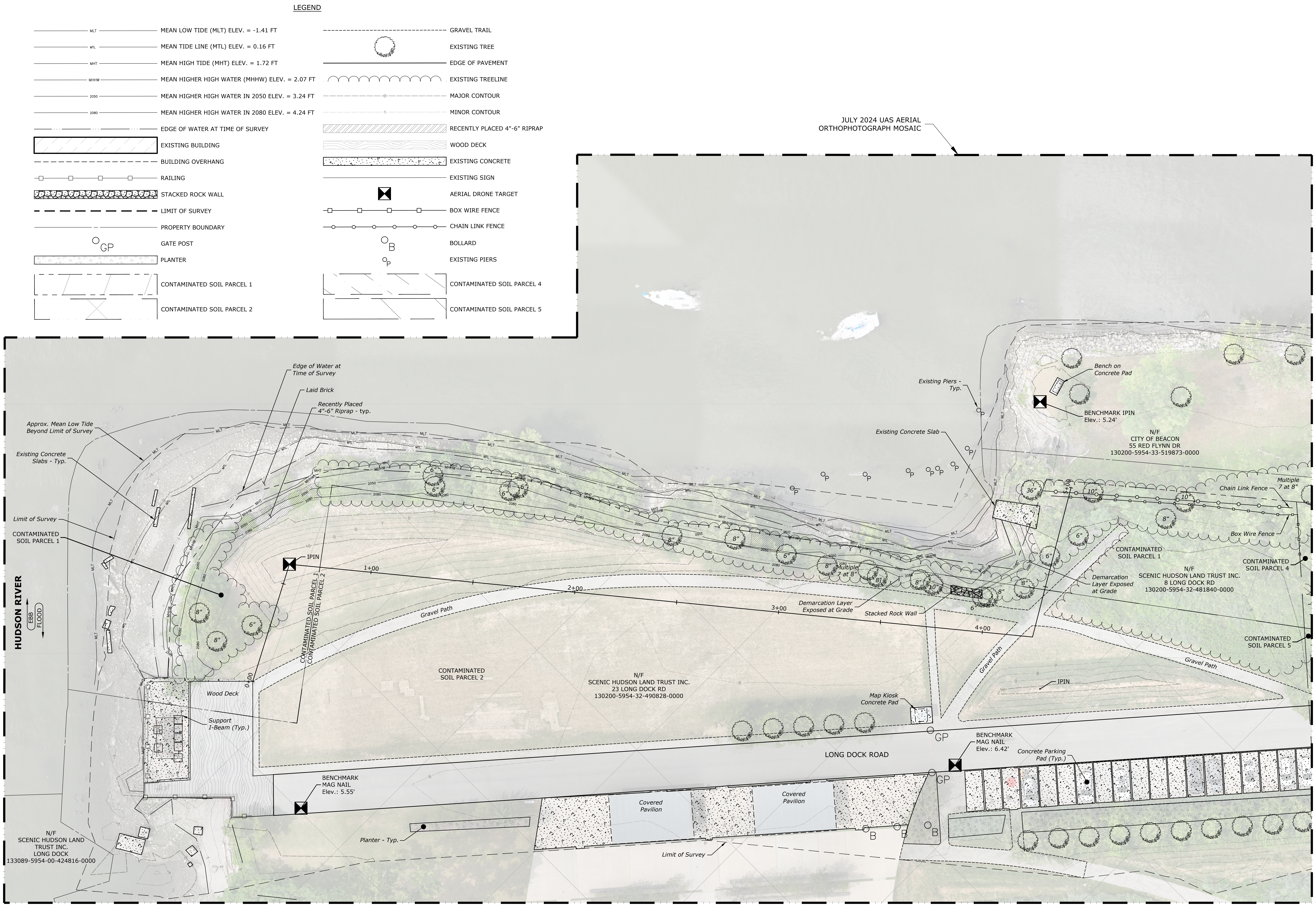
LONG DOCK PARK
SHORELINE REPAIR AND RESTORATION

8 LONG DOCK RD
BEACON, NY

WAG	KJC	MAT
DESIGNED	DRAWN	CHECKED

SCALE: 1"=20'
DATE: FEBRUARY 25, 2026
PROJECT NO.: 12787.00007
SHEET NO.: 02 OF 12
SHEET NAME: **EX-1**

Drawing: W:\CADDESIGN\12787.00007-DE\CAD\CAD\BLD-EXISTING.DWG Layout Tab:EX-2
Plotted by: KATIE.CASSON On this date: Wed, 2026 February 25 - 1:01pm


JULY 2024 UAS AERIAL
ORTHOPHOTOGRAPH MOSAIC
HUDSON RIVER
EBB
FLOOD
Edge of Water at
Time of Survey
Laid Brick
Recently Placed
4"-6" Riprap - typ.
Approx. Mean Low Tide
Beyond Limit of Survey
Existing Concrete
Slabs - Typ.
Limit of Survey
CONTAMINATED
SOIL PARCEL 1
IPIN
1+00
2+00
3+00
4+00
5+00
0+00
CONTAMINATED SOIL PARCEL 1
CONTAMINATED SOIL PARCEL 2
Gravel Path
CONTAMINATED
SOIL PARCEL 2
N/F
SCENIC HUDSON LAND TRUST INC.
23 LONG DOCK RD
130200-5954-32-490828-0000
Wood Deck
Support
I-Beam (Typ.)
N/F
SCENIC HUDSON LAND
TRUST INC.
LONG DOCK
133089-5954-00-424816-0000
BENCHMARK
MAG NAIL
Elev.: 5.55'
Planter - Typ.
Covered
Pavilion
Covered
Pavilion
Limit of Survey
LONG DOCK ROAD
GP
GP
B
B
B
BENCHMARK
MAG NAIL
Elev.: 6.42'
Concrete Parking
Pad (Typ.)
Map Kiosk
Concrete Pad
Demarcation Layer
Exposed at Grade
Stacked Rock Wall
Multiple
7 at 8"
Existing Piers -
Typ.
Existing Concrete Slab
Bench on
Concrete Pad
BENCHMARK IPIN
Elev.: 5.24'
N/F
CITY OF BEACON
55 RED FLYNN DR
130200-5954-33-519873-0000
Chain Link Fence
Multiple
7 at 8"
Box Wire Fence
CONTAMINATED
SOIL PARCEL 1
N/F
SCENIC HUDSON LAND TRUST INC.
8 LONG DOCK RD
130200-5954-32-481840-0000
Demarcation
Layer Exposed
at Grade
CONTAMINATED
SOIL PARCEL 4
CONTAMINATED
SOIL PARCEL 5
Gravel Path
Gravel Path
IPIN
MLT
MTL
MHT
MHHW
2050
2080
36"
10"
10"
8"
6"
8"
6"
8"
8"
6"
8"
6"
8"
8"
8"
10"
8"
8"
6"

LEGEND

- MLT — MEAN LOW TIDE (MLT) ELEV. = -1.41 FT
- MTL — MEAN TIDE LINE (MTL) ELEV. = 0.16 FT
- MHT — MEAN HIGH TIDE (MHT) ELEV. = 1.72 FT
- MHHW — MEAN HIGHER HIGH WATER (MHHW) ELEV. = 2.07 FT
- 2050 — MEAN HIGHER HIGH WATER IN 2050 ELEV. = 3.24 FT
- 2080 — MEAN HIGHER HIGH WATER IN 2080 ELEV. = 4.24 FT
- EDGE OF WATER AT TIME OF SURVEY
- EXISTING BUILDING
- BUILDING OVERHANG
- RAILING
- STACKED ROCK WALL
- LIMIT OF SURVEY
- PROPERTY BOUNDARY
- GP — GATE POST
- PLANTER
- CONTAMINATED SOIL PARCEL 1
- CONTAMINATED SOIL PARCEL 2
- GRAVEL TRAIL
- EXISTING TREE
- EDGE OF PAVEMENT
- EXISTING TREELINE
- MAJOR CONTOUR
- MINOR CONTOUR
- RECENTLY PLACED 4"-6" RIPRAP
- WOOD DECK
- EXISTING CONCRETE
- EXISTING SIGN
- ☒ AERIAL DRONE TARGET
- BOX WIRE FENCE
- CHAIN LINK FENCE
- B — BOLLARD
- P — EXISTING PIERS
- CONTAMINATED SOIL PARCEL 4
- CONTAMINATED SOIL PARCEL 5

N
W E
S
0' 10' 20'
0 1/2" 1"

SLR
231 MAIN STREET, SUITE 102
NEW PALTZ, NY 12561
845.633.8153
SLRCONSULTING.COM

SLR Engineering, Landscape Architecture,
and Land Surveying P.C.
Registration No. 083112

DESCRIPTION	DATE	BY

NOT FOR CONSTRUCTION
60% ADVANCED DESIGN

EXISTING CONDITIONS - AERIAL PHOTOGRAPH

LONG DOCK PARK
SHORELINE REPAIR AND RESTORATION

8 LONG DOCK RD
BEACON, NY

DESIGNED	DRAWN	CHECKED
---	---	---

SCALE: 1"=20'

DATE: FEBRUARY 25, 2026

PROJECT NO.: 12787.00007

SHEET NO.: 03 OF 12

SHEET NAME: EX-2

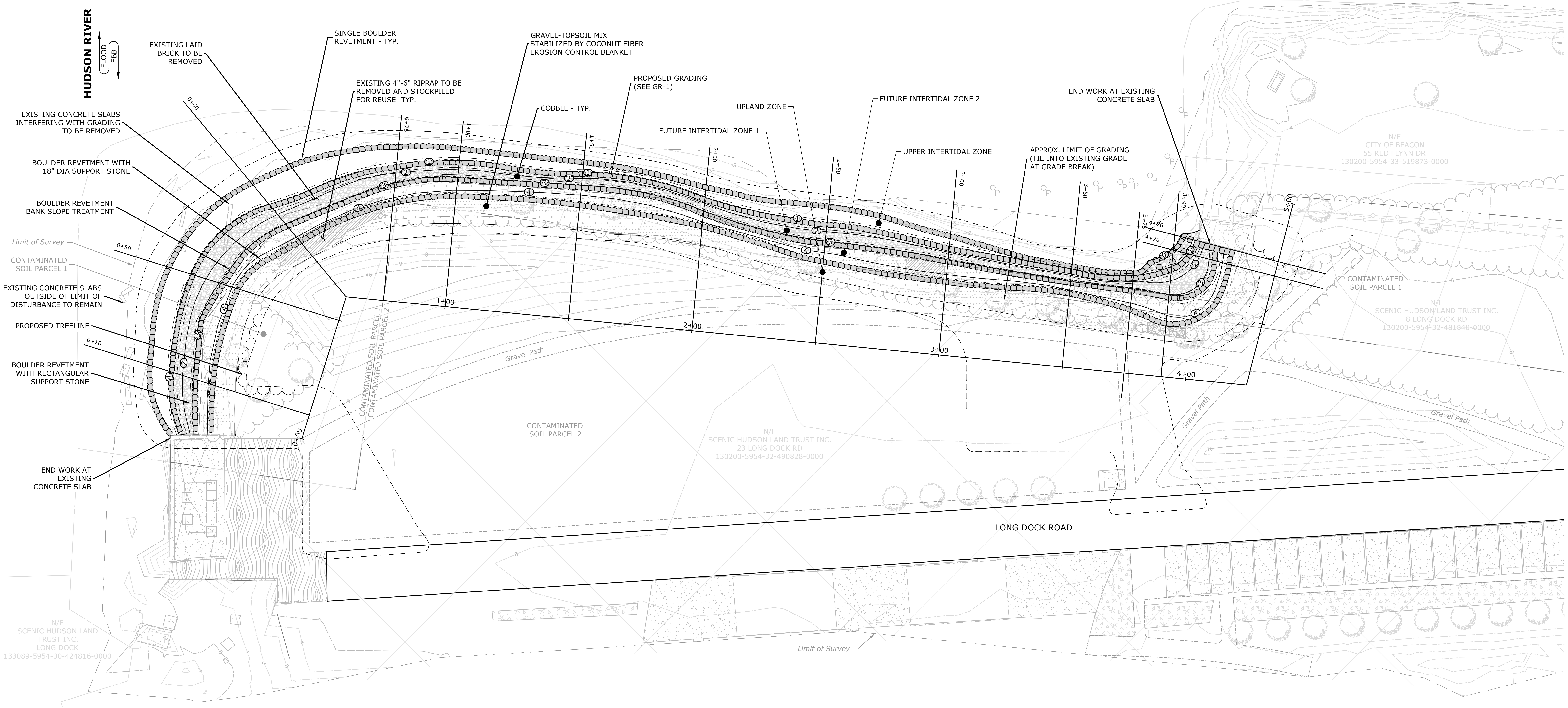
Drawing: W:\CADDESIGN\12787.00007-DE\CAD\CAD\BLD-LAYOUT.DWG Layout Tab:LA-1
Plotted by: KATIE.CASSON On this date: Wed, 2026 February 25 - 1:01pm

LEGEND

- LIMIT OF DISTURBANCE
- APPROX. LIMIT OF GRADING
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- APPROX. UPLAND ZONE LIMIT
- GRAVEL-TOPSOIL MIX STABILIZED BY COCONUT FIBER EROSION CONTROL BLANKET
- PROPOSED TREE LINE
- BOULDER REVETMENT WITH 18" DIA SUPPORT STONE
- BOULDER REVETMENT BANK SLOPE TREATMENT
- BOULDER REVETMENT WITH RECTANGULAR SUPPORT STONE
- SINGLE BOULDER REVETMENT
- COBBLE

GENERAL NOTES:

1. CONTRACTOR SHALL PERFORM WORK DURING THE PERIOD OF TIME WHEN WATER LEVELS ARE THE BELOW MEAN TIDE LINE (ELEV. 0.16), AND SHALL ABIDE BY ALL TIME-OF-YEAR RESTRICTIONS SET FORTH BY THE REGULATORY APPROVALS.
2. ALL FILL SHALL CONSIST OF CLEAN SOIL, SAND, COBBLE, AND/OR GRAVEL THAT IS FREE OF ASPHALT, SLAG, BROKEN CONCRETE, DEMOLITION DEBRIS, GARBAGE, HOUSEHOLD REFUSE, TIRES, WOODY MATERIALS INCLUDING TREE OR LANDSCAPE DEBRIS, AND METAL OBJECTS. THE INTRODUCTION OF MATERIALS TOXIC TO AQUATIC LIFE IS EXPRESSLY PROHIBITED.
3. EACH PIECE OF EQUIPMENT SLATED FOR USE DURING CONSTRUCTION SHALL BE INSPECTED FOR ANY MAINTENANCE ISSUES INCLUDING LEAKING OIL, GAS, OR HYDRAULIC FLUID. ANY LEAKING VEHICLES OR EQUIPMENT SHALL BE IMMEDIATELY REMOVED FROM THE PROJECT SITE, UNTIL ADEQUATELY REPAIRED.
4. NO EQUIPMENT SHALL BE REFUELED WITHIN 50 FEET OF THE CLOSEST LIMITS OF WATER BODIES (I.E., MEAN HIGH TIDE FOR THE HUDSON RIVER), WATERCOURSES AND WETLANDS.
5. ALL CONSTRUCTION MATERIALS AND METHODS SHALL CONFORM TO THE COUNTY OF DUTCHESS REQUIREMENTS AND TO THE APPLICABLE SECTIONS OF THE MOST RECENT NEW YORK STATE HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS.
6. THE PROJECT SITE IS SUBJECT TO FLOODING AND TIDAL INUNDATION. THE CONTRACTOR MUST BE PREPARED TO STOP WORK AND STABILIZE THE SITE IF THE NATIONAL WEATHER SERVICE PREDICTS MORE THAN ONE INCH (1") OF RAINFALL IS PREDICTED BY THE NATIONAL WEATHER SERVICE(70% OR HIGHER). WORK SHALL BE HAULTED UNTIL PRECIPITATION STOPPS, AND CHANCES OF FURTHER RAINFALL FALLS BELOW 50%.
7. IF ABNORMALLY HIGH TIDAL CONDITIONS OCCUR OR ARE PREDICTED TO OCCUR BY THE NATIONAL WEATHER SERVICE, THE CONTRACTOR SHALL MAINTAIN SURVEILLANCE OF THE SITE AND BE PREPARED TO PROVIDE EMERGENCY CORRECTIVE STABILIZATION MEASURES, IF NECESSARY, UNTIL WATER LEVELS RECEDE AND THE CONSTRUCTION SITE IS STABILIZED.
8. CONTRACTOR SHALL SUBMIT A DEWATERING PLAN AND A CONSTRUCTION SEQUENCE TO THE ENGINEER FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION.


HUDSON RIVER
FLOOD
EBB
EXISTING LAID BRICK TO BE REMOVED
SINGLE BOULDER REVETMENT - TYP.
GRAVEL-TOPSOIL MIX STABILIZED BY COCONUT FIBER EROSION CONTROL BLANKET
EXISTING 4"-6" RIPRAP TO BE REMOVED AND STOCKPILED FOR REUSE -TYP.
PROPOSED GRADING (SEE GR-1)
COBBLE - TYP.
UPLAND ZONE
FUTURE INTERTIDAL ZONE 2
FUTURE INTERTIDAL ZONE 1
UPPER INTERTIDAL ZONE
APPROX. LIMIT OF GRADING (TIE INTO EXISTING GRADE AT GRADE BREAK)
END WORK AT EXISTING CONCRETE SLAB
EXISTING CONCRETE SLABS INTERFERING WITH GRADING TO BE REMOVED
BOULDER REVETMENT WITH 18" DIA SUPPORT STONE
BOULDER REVETMENT BANK SLOPE TREATMENT
Limit of Survey
CONTAMINATED SOIL PARCEL 1
EXISTING CONCRETE SLABS OUTSIDE OF LIMIT OF DISTURBANCE TO REMAIN
PROPOSED TREELINE
BOULDER REVETMENT WITH RECTANGULAR SUPPORT STONE
END WORK AT EXISTING CONCRETE SLAB
0+00
0+10
0+50
0+60
0+75
1+00
1+50
2+00
2+50
3+00
3+50
3+75
3+90
4+00
4+70
4+76
5+00
CONTAMINATED SOIL PARCEL 1
CONTAMINATED SOIL PARCEL 2
CONTAMINATED SOIL PARCEL 2
Gravel Path
N/F
CITY OF BEACON
55 RED FLYNN DR
130200-5954-33-519873-0000
CONTAMINATED SOIL PARCEL 1
N/F
SCENIC HUDSON LAND TRUST INC.
8 LONG DOCK RD
130200-5954-32-481840-0000
N/F
SCENIC HUDSON LAND TRUST INC.
23 LONG DOCK RD
130200-5954-32-490828-0000
LONG DOCK ROAD
N/F
SCENIC HUDSON LAND
TRUST INC.
LONG DOCK
133089-5954-00-424816-0000
Limit of Survey
Gravel Path

SLR
231 MAIN STREET, SUITE 102
NEW PALTZ, NY 12561
845.633.8153
SLRCONSULTING.COM

SLR Engineering, Landscape Architecture,
and Land Surveying P.C.
Registration No. 083112

DESCRIPTION	DATE	BY

NOT FOR CONSTRUCTION
60% ADVANCED DESIGN

LAYOUT PLAN

LONG DOCK PARK
SHORELINE REPAIR AND RESTORATION
8 LONG DOCK RD
BEACON, NY

WAG	KJC	MAT
DESIGNED	DRAWN	CHECKED

SCALE: 1"=20'
DATE: FEBRUARY 25, 2026
PROJECT NO.: 12787.00007
SHEET NO.: 04 OF 12
SHEET NAME: **LA-1**

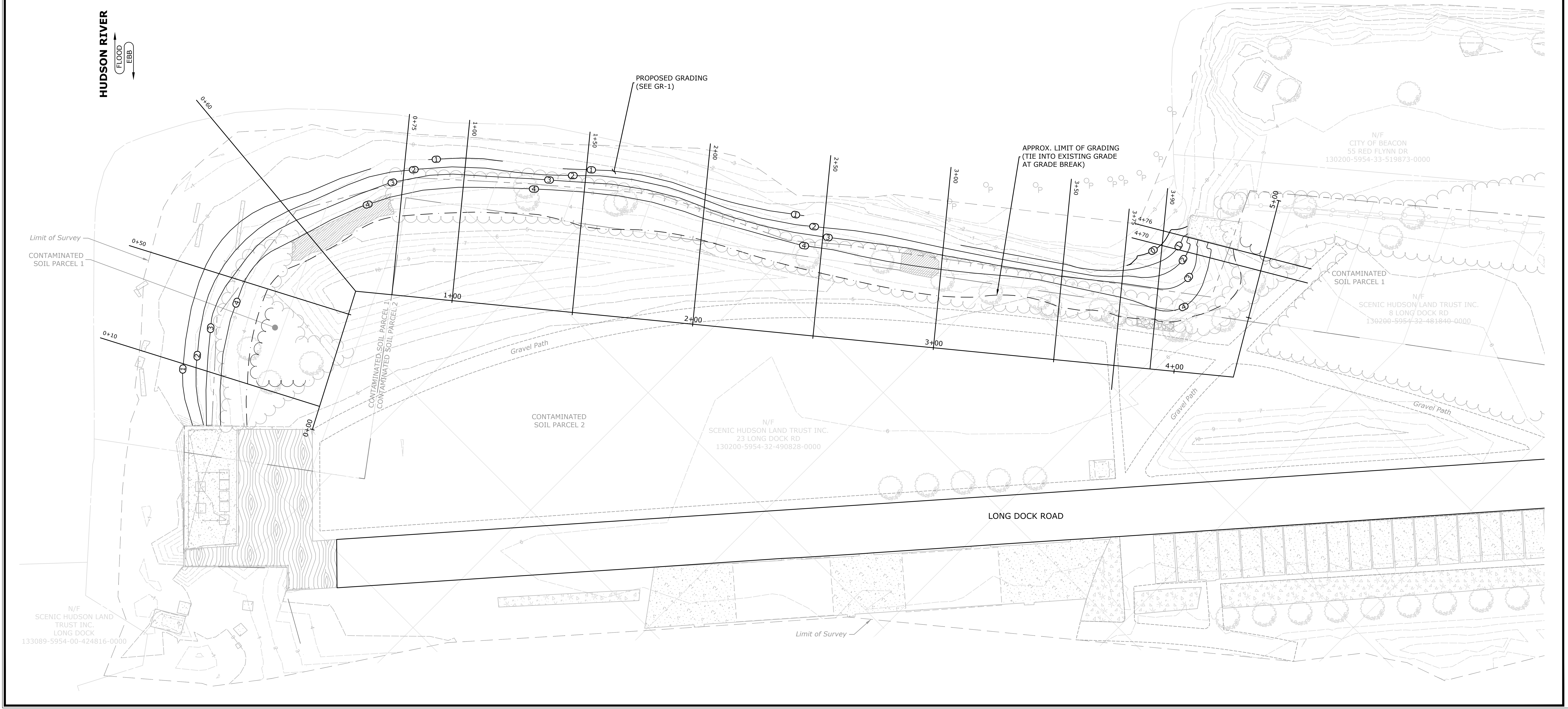
Drawing: W:\CADDESIGN\12787.00007-DE\CAD\CAD\BLD-LAYOUT.DWG Layout Tab:GR-1
Plotted by: KATIE.CASSON On this date: Wed, 2026 February 25 - 1:01pm

LEGEND

- LIMIT OF DISTURBANCE
- APPROX. LIMIT OF GRADING
- ⓪ PROPOSED MAJOR CONTOUR
- ② PROPOSED MINOR CONTOUR
- APPROX. UPLAND ZONE LIMIT

GENERAL NOTES:

1. PROPOSED GRADING IS APPROXIMATE AND CHANGES MAY BE MADE WITH APPROVAL OF ENGINEER.
2. NO CUT SHALL BE MADE INTO CONTAMINATED SOIL TO PERFORM GRADING. IF CONTAMINATED SOIL DEMARCATION LAYER IS FOUND OUTSIDE OF CONTAMINATED SOIL PARCELS AS INDICATED ON THE PLANS, NOTIFY ENGINEER OR OWNERS REPRESENTATIVE IMMEDIATELY.
3. UPLAND GRADING LIMITS ARE APPROXIMATE. GRADING SHOULD TIE INTO EXISTING GRADE AT NATURAL BREAK IN GRADE.
4. SLOPES SHALL NOT EXCEED 3H:1V.


HUDSON RIVER
FLOOD
EBB
PROPOSED GRADING
(SEE GR-1)
APPROX. LIMIT OF GRADING
(TIE INTO EXISTING GRADE
AT GRADE BREAK)
0+00
0+10
0+50
0+60
0+75
1+00
1+50
2+00
2+50
3+00
3+50
3+75
3+90
4+00
4+70
4+76
5+00
0
1
2
3
4
Limit of Survey
CONTAMINATED
SOIL PARCEL 1
CONTAMINATED SOIL PARCEL 1
CONTAMINATED SOIL PARCEL 2
CONTAMINATED
SOIL PARCEL 2
Gravel Path
N/F
CITY OF BEACON
55 RED FLYNN DR
130200-5954-33-519873-0000
N/F
SCENIC HUDSON LAND TRUST INC.
8 LONG DOCK RD
130200-5954-32-481840-0000
N/F
SCENIC HUDSON LAND TRUST INC.
23 LONG DOCK RD
130200-5954-32-490828-0000
N/F
SCENIC HUDSON LAND
TRUST INC.
LONG DOCK
133089-5954-00-424816-0000
LONG DOCK ROAD
N
W
E
S
0'
10'
20'
0
1/2"
1"

DESCRIPTION	DATE	BY

SLR

231 MAIN STREET, SUITE 102
NEW PALTZ, NY 12561
845.633.8153
SLRCONSULTING.COM

SLR Engineering, Landscape Architecture,
and Land Surveying P.C.
Registration No. 083112

NOT FOR CONSTRUCTION
60% ADVANCED DESIGN

GRADING PLAN

LONG DOCK PARK SHORELINE REPAIR AND RESTORATION

8 LONG DOCK RD
BEACON, NY

WAG	KJC	MAT
DESIGNED	DRAWN	CHECKED

1"=20'
SCALE

FEBRUARY 25, 2026
DATE

12787.00007
PROJECT NO.

05 OF 12
SHEET NO.

GR-1
SHEET NAME

RESTORATION SCHEDULE: PLANTING AND FORM

UPPER INTERTIDAL ZONE

	SUBSTRATE	BOTANICAL NAME	COMMON NAME	FORM	QUANTITY	SPACING
▤	4"-6" ROUNDED RIVER COBBLE	SALIX DISCOLOR	PUSSY WILLOW	LIVE STAKE	40	3 FT (O.C.)
		SALIX INTERIOR	SANDBAR WILLOW	LIVE STAKE	40	3 FT (O.C.)
		CORNUS AMOMUM	SILKY DOGWOOD	LIVE STAKE	40	3 FT (O.C.)

FUTURE INTERTIDAL ZONE 1

	SUBSTRATE	BOTANICAL NAME	COMMON NAME	FORM	QUANTITY	SPACING
▨	4"-6" ROUNDED RIVER COBBLE	SALIX DISCOLOR	PUSSY WILLOW	LIVE STAKE	34	3 FT (O.C.)
		CORNUS AMOMUM	SILKY DOGWOOD	LIVE STAKE	34	3 FT (O.C.)
		PHYSOCARPUS OPULIFOLIUS	NINEBARK	LIVE STAKE	34	3 FT (O.C.)
		ALNUS INCANA	SPECKLED ALDER	LIVE STAKE	34	3 FT (O.C.)

FUTURE INTERTIDAL ZONE 2

	SUBSTRATE	BOTANICAL NAME	COMMON NAME	FORM	QUANTITY	SPACING
⁂	MIX OF 1.5"-2" ROUNDED GRAVEL WITH TOPSOIL AND STABILIZED WITH COCONUT FIBER EROSION CONTROL BLANKET	CORNUS RACEMOSA	GRAY DOGWOOD	CONTAINER	8	5 FT (O.C.)
		ROSA PALUSTRIS	SWAMP ROSE	CONTAINER	8	5 FT (O.C.)
		ALNUS INCANA	SPECKLED ALDER	CONTAINER	8	5 FT (O.C.)
		LINDERA BENZOIN	SPICE BUSH	CONTAINER	8	5 FT (O.C.)
		SPIRAEA LATIFOLIA	MEADOWSWEET	CONTAINER	8	5 FT (O.C.)
		AMELANCHIER LAEVIS	SMOOTH SHADBUSH	CONTAINER	8	5 FT (O.C.)

UPLAND ZONE

	SUBSTRATE	BOTANICAL NAME	COMMON NAME	FORM	QUANTITY	SPACING
▩	MIX OF 1.5"-2" ROUNDED GRAVEL WITH TOPSOIL AND STABILIZED WITH COCONUT FIBER EROSION CONTROL BLANKET	CORNUS RACEMOSA	GRAY DOGWOOD	CONTAINER	12	5 FT (O.C.)
		PHYSOCARPUS OPULIFOLIUS	NINEBARK	CONTAINER	12	5 FT (O.C.)
		JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	CONTAINER	12	5 FT (O.C.)
		LINDERA BENZOIN	SPICE BUSH	CONTAINER	12	5 FT (O.C.)
		SPIRAEA LATIFOLIA	MEADOWSWEET	CONTAINER	12	5 FT (O.C.)
		AMELANCHIER LAEVIS	SMOOTH SHADBUSH	CONTAINER	12	5 FT (O.C.)

DISTURBED LAWN RESTORATION

	SEED MIX	AREA	NOTES
⁂	ERNMX-106: ERNST ATHLETIC FIELD MIX (OR EQUIVALENT)	APPROX. 0.15 AC	SEEDING RATE: 75-150 LB PER ACRE

RESTORATION SEED MIX FOR FUTURE INTERTIDAL ZONE 2 AND UPLAND ZONES:

	SEED MIX	AREA	NOTES
░	ERNMX-155: DEER RESISTANT MEADOW MIX (OR EQUIVALENT)	APPROX. 0.22 AC	SEEDING RATE: 15 LB PER ACRE WITH 30 LB PER ACRE OF A COVER CROP (GRAIN OATS, JAN 1-AUG 1; GRAIN RYE, AUG 2- DEC 31)

PLANTING NOTES:

1. EROSION CONTROLS SHALL BE INSTALLED, REPAIRED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD UNTIL THE SITE IS FULLY STABILIZED BY VEGETATION (SEED MIX). EROSION CONTROLS, EXCEPT COCONUT FIBER EROSION CONTROL BLANKET, SHALL THEN BE REMOVED FROM THE SITE.

2. ALL PLANT MATERIALS, EXCEPT FOR LIVE STAKES, SHALL CARRY A FULL SURVIVAL GUARANTEE FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE. THIS GUARANTEE INCLUDES PROMPT TREATMENT, REMOVAL, AND REPLACEMENT OF ANY PLANTS FOUND TO BE IN AN UNHEALTHY CONDITION BY A REPRESENTATIVE OF THE PROJECT OWNER. ALL REPLACEMENTS SHALL BE OF THE SAME KIND AND SIZE AS SPECIFIED IN THE PLANT LIST. FOR LIVE STAKES CONTRACTOR SHALL WARRANT A MINIMUM OF 80% SURVIVABILITY OVER A ONE-YEAR PERIOD. IF SURVIVABILITY FALLS BELOW 80%, THE CONTRACTOR SHALL REPLACE THE NON-LIVING STAKES TO MEET THE REQUIRED SURVIVAL PERCENTAGE.

3. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER PLANTING AND SHALL CONTINUE UNTIL ACCEPTANCE. MAINTENANCE SHALL INCLUDE WATERING, MULCHING, TIGHTENING & REPLACING OF GUYS, REPLACEMENT OF SICK OR DEAD PLANTS, RESETTING PLANTS TO PROPER GRADE OR UPRIGHT (PLUMB) POSITION, RESTORATION OF SAUCERS, AND ALL OTHER CARE NEEDED FOR PROPER GROWTH OF THE PLANTS.

4. ALL PLANT MATERIAL IS SUBJECT TO INSPECTION AND APPROVAL BY OWNER. LOCATION OF SPECIFIC PLANT SPECIES TO BE DETERMINED BY ON-SITE ENGINEER OR OWNERS REPRESENTATIVE.

5. PLANT SPECIES MAY BE ADJUSTED BASED ON AVAILABILITY AT TIME OF PLANTING ALL PLANT MATERIAL SUBSTITUTIONS ARE SUBJECT TO REVIEW AND APPROVAL BY OWNER.

6. SEED MIXES SHOULD BE APPLIED AFTER PLANTING OF LIVE STAKES AND CONTAINER PLANTS IS COMPLETE.

CONTAINER PLANTS

1. GROWING SEASON PLANTINGS (CONTAINER PLANTS) SHALL BE LIMITED TO THE INSTALLATION PERIODS OF APRIL 15 - JUNE 30, OR SEPTEMBER 1 - OCTOBER 15. ONLY QUALITY NATIVE PLANTS FROM A NURSERY SHALL BE USED.

2. ALL WOODY PLANT MATERIAL SHALL BE PROVIDED IN CONTAINERS THAT ARE APPROPRIATELY SIZED FOR THE SPECIFIED PLANT. CONTAINERS AND ANY OTHER NON-BIODEGRADABLE MATERIAL SHALL BE REMOVED FROM ENTIRE ROOT BALL BEFORE INSTALLING WOODY PLANT MATERIAL.

3. ALL TREES AND SHRUBS PLANTED IN UPLAND AND FUTURE INTERTIDAL ZONES ONLY SHALL BE MULCHED WITH NON-DYE CEDAR MULCH TO A DEPTH OF 4 INCHES. TREES AND SHRUBS SHALL HAVE A MINIMUM 4 FOOT DIAMETER MULCH BED AROUND EACH SHRUB AND/OR TREE.

LIVE STAKES

1. LIVE STAKE SPECIES SHALL BE AS NOTED ON THE RESTORATION SCHEDULE AND IN THE SPECIFICATIONS.

2. PLANT SPECIES AND CONDITION SHALL BE INSPECTED AND APPROVED BY ENGINEER PRIOR TO INSTALLATION.

3. STAKES THAT ARE SPLIT OR DAMAGED DURING INSTALLATION SHALL BE REMOVED AND REPLACED.

4. LIVE STAKE INSTALLATIONS SHALL OCCUR DURING THE DORMANT SEASON. DORMANT SEASON PLANTINGS SHALL BE LIMITED TO THE INSTALLATION PERIODS OF NOVEMBER 1 THROUGH MARCH 31, BUT NOT WHILE THE GROUND IS FROZEN.

5. LIVE STAKES SHALL BE SOAKED FOR 24-72 HOURS PRIOR TO INSTILLATION.

6. ALL PLANT MATERIAL MUST BE MAINTAINED IN A CONTINUOUSLY COOL, COVERED, MOIST SETTING AND BE IN GOOD CONDITION AT TIME OF INSTALLATION.

7. BEGIN LIVE STAKE INSTALLATION BY USING STINGER OR SIMILAR METHOD TO CREATE PILOT HOLES.

8. LIVE STAKES SHALL BE AT LEAST 1 INCH IN DIAMETER AND AT LEAST 3 FEET LONG, WITH AT LEAST 5 BUD NODES PER STAKE.

9. BASIL END OF EACH STAKE SHALL BE CUT TO A POINT FOR INSERTION INTO THE GROUND.

10. STAKES SHALL BE INSTALLED WITH APPROXIMATELY TWO-THIRDS OF THE STAKE INSERTED INTO THE SOIL WITH THE CORRECT END ORIENTED UPWARDS.

11. TO ENSURE GOOD SOIL-TO-STAKE CONTACT, APPLY WATER-SOIL SLURRY, TO THE CONSISTENCY OF CHEAP SYRUP, AROUND STAKES IMMEDIATELY AFTER.

SEED MIX

1. IF SEEDING IS TO BE DONE AFTER SEPTEMBER 30, INCREASE THE SEEDING RATE BY 50% OVER SPECIFIED RATES.

2. DISTURBED PORTIONS OF THE PROJECT AREA WHERE CONSTRUCTION ACTIVITIES CEASE SHALL BE STABILIZED WITH PERMANENT SEED NO LATER THAN SEVEN (7) DAYS AFTER THE LAST CONSTRUCTION ACTIVITY. THE PERMANENT SEED MIX SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND PLANS.

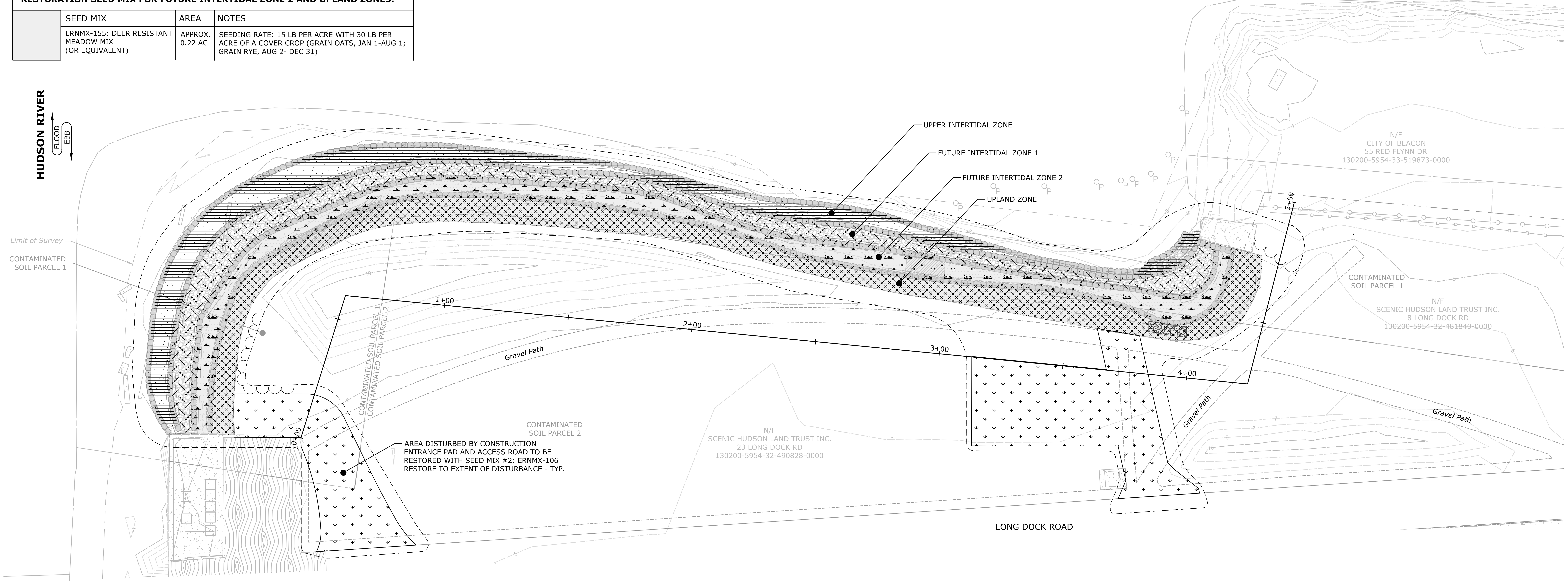
3. SEED MIXES SHALL BE INSPECTED AND APPROVED BY ENGINEER PRIOR TO PLANTING.

4. SEEDING RATES AND USE OF COVER CROPS SHALL BE AS SPECIFIED ON THE RESTORATION PLAN (RS-1).

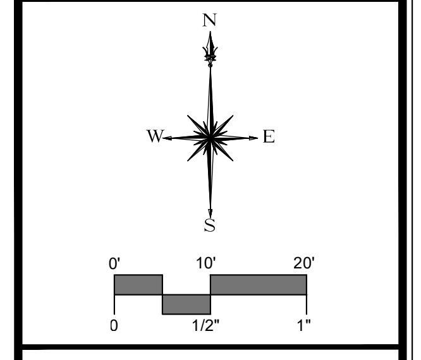
5. IF SEEDING IS TO BE DONE AFTER SEPTEMBER 30, INCREASE THE SEEDING RATE BY 50% OVER SPECIFIED RATES.

6. AREAS TO BE SEEDED SHALL BE HAND RAKED TO SCARIFY THE SOIL SURFACE, THEN HAND SEEDED, RAKED LIGHTLY TO ENSURE SEED TO SOIL CONTACT, AND HYDRO-MULCHED, OR HAND SPREAD WITH STRAW MULCH. STRAW MULCH SHALL BE WET AFTER PLACEMENT.

7. ONCE SEED MIXES HAVE GERMINATED AND GROWN, COVER CROPS SHALL BE TERMINATED BY MECHANICAL MOWING JUST PRIOR TO OR DURING FLOWERING.



AREA DISTURBED BY CONSTRUCTION ENTRANCE PAD AND ACCESS ROAD TO BE RESTORED WITH SEED MIX #2: ERNMX-106 RESTORE TO EXTENT OF DISTURBANCE - TYP.



DESCRIPTION	DATE	BY

SLR
231 MAIN STREET, SUITE 102
NEW PALTZ, NY 12561
845.633.8153
SLRCONSULTING.COM

SLR Engineering, Landscape Architecture,
and Land Surveying P.C.
Registration No. 083112

NOT FOR CONSTRUCTION
60% ADVANCED DESIGN

RESTORATION PLAN

LONG DOCK PARK
SHORELINE REPAIR AND RESTORATION

8 LONG DOCK RD
BEACON, NY

WAG	KJC	MAT
DESIGNED	DRAWN	CHECKED

SCALE: **1"=20'**

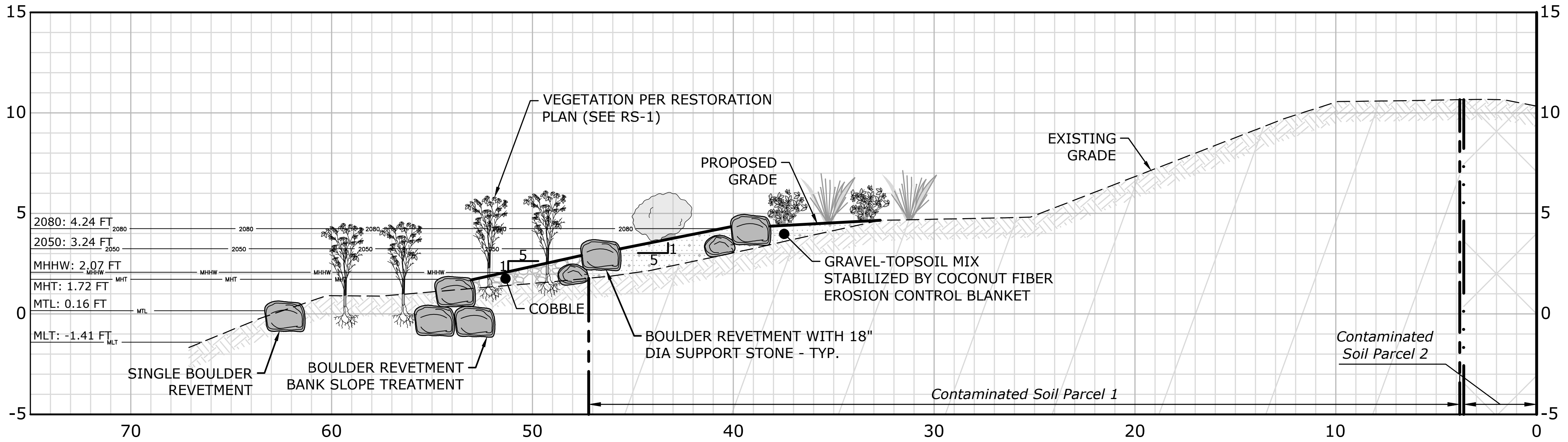
DATE: **FEBRUARY 25, 2026**

PROJECT NO.: **12787.00007**

SHEET NO.: **06 OF 12**

SHEET NAME: **RS-1**

Drawing: W:\CADDESIGN\12787.00007-DE\CAD\CAD\BLD-SECTIONS.DWG Layout Tab:CS-1
Plotted by: KATIE.CASSON On this date: Wed, 2026 February 25 - 1:02pm

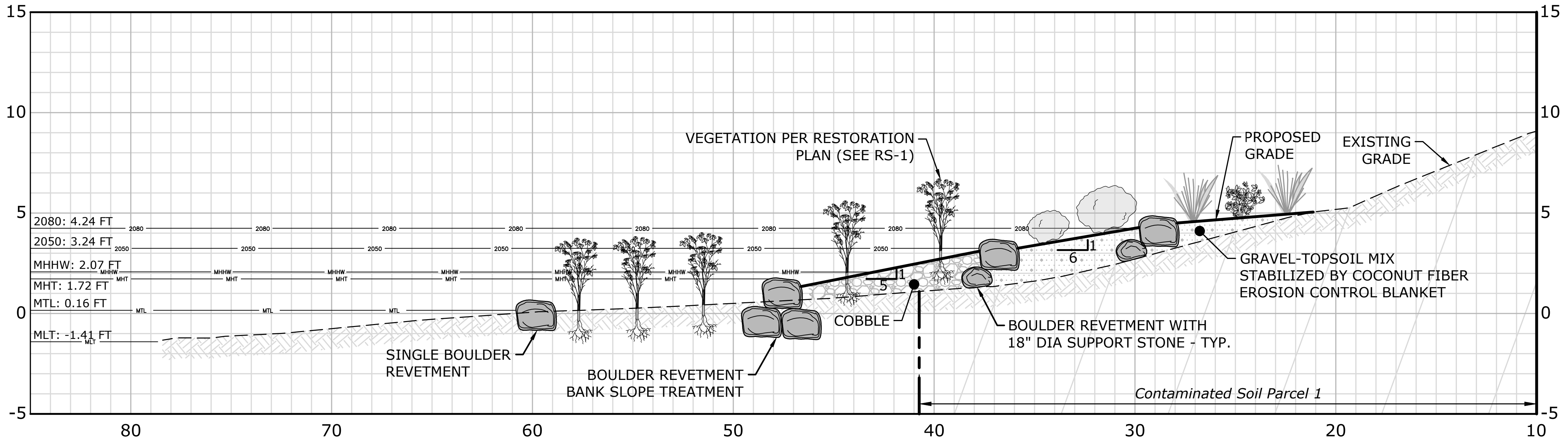


VEGETATION PER RESTORATION PLAN (SEE RS-1)
PROPOSED GRADE
EXISTING GRADE
2080: 4.24 FT
2050: 3.24 FT
MHHW: 2.07 FT
MHT: 1.72 FT
MTL: 0.16 FT
MLT: -1.41 FT
5
1
GRAVEL-TOPSOIL MIX STABILIZED BY COCONUT FIBER EROSION CONTROL BLANKET
COBBLE
BOULDER REVETMENT WITH 18" DIA SUPPORT STONE - TYP.
SINGLE BOULDER REVETMENT
BOULDER REVETMENT BANK SLOPE TREATMENT
Contaminated Soil Parcel 2
Contaminated Soil Parcel 1
15
10
5
0
-5
70
60
50
40
30
20
10
0

STA 0+75

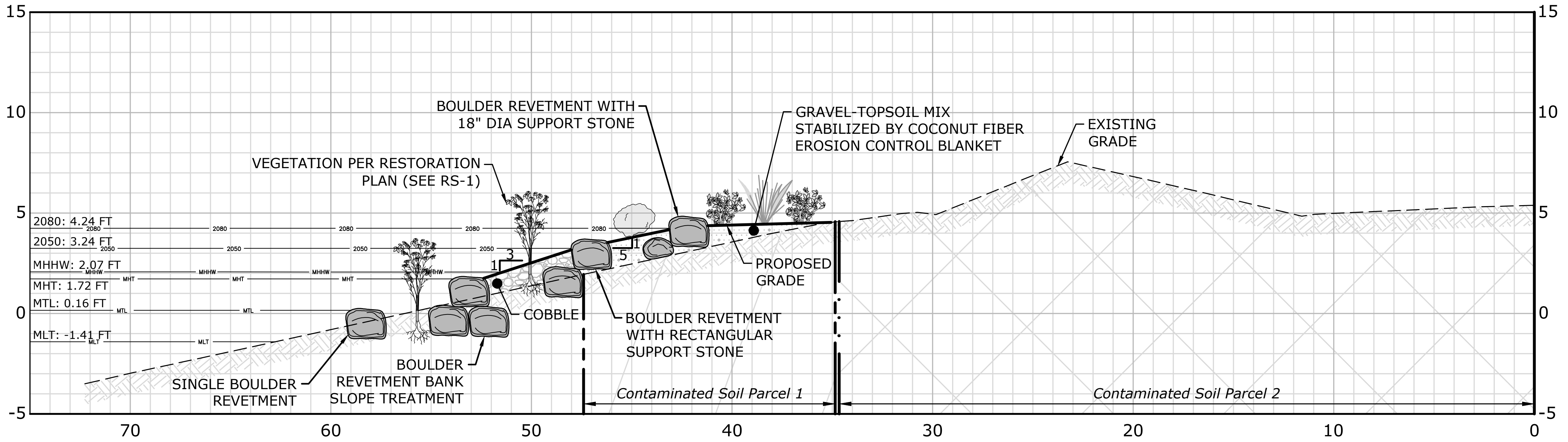
LEGEND

- MLT — MEAN LOW TIDE (MLT) ELEV. = -1.41 FT
- MTL — MEAN TIDE LINE (MTL) ELEV. = 0.16 FT
- MHT — MEAN HIGH TIDE (MHT) ELEV. = 1.72 FT
- MHHW — MEAN HIGHER HIGH WATER (MHHW) ELEV. = 2.07 FT
- 2050 — MEAN HIGHER HIGH WATER IN 2050 ELEV. = 3.24 FT
- 2080 — MEAN HIGHER HIGH WATER IN 2080 ELEV. = 4.24 FT
- PROPOSED GRADE
- EXISTING GRADE
- CONTAMINATED SOIL PARCEL 1
- CONTAMINATED SOIL PARCEL 2
- COBBLE
- GRAVEL-TOPSOIL MIX FILL STABILIZED BY COCONUT FIBER EROSION CONTROL BLANKET



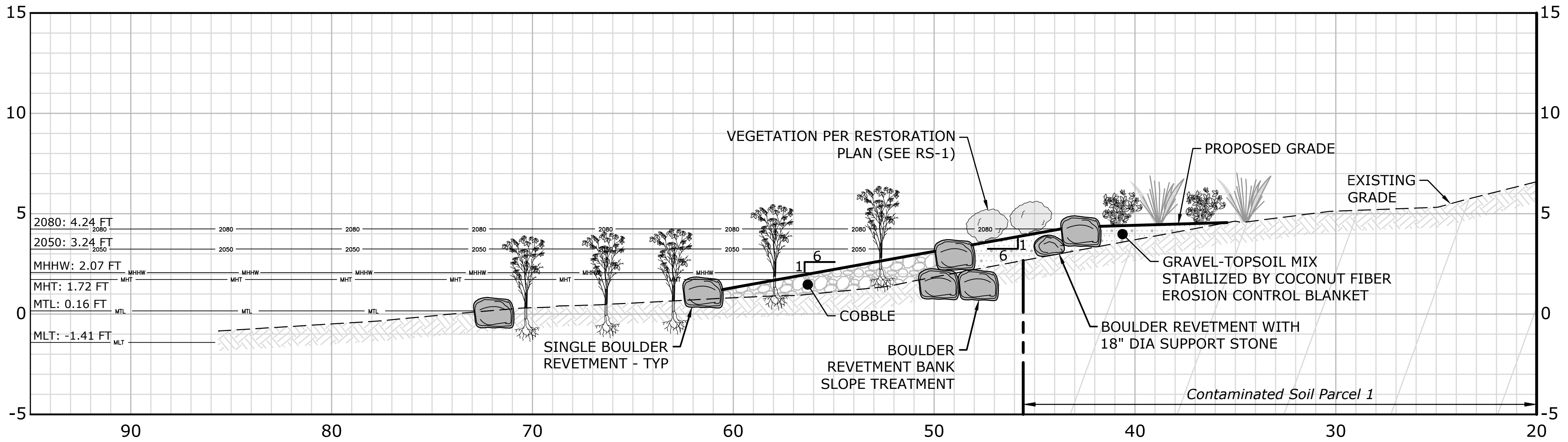
VEGETATION PER RESTORATION PLAN (SEE RS-1)
PROPOSED GRADE
EXISTING GRADE
2080: 4.24 FT
2050: 3.24 FT
MHHW: 2.07 FT
MHT: 1.72 FT
MTL: 0.16 FT
MLT: -1.41 FT
1
5
1
6
GRAVEL-TOPSOIL MIX STABILIZED BY COCONUT FIBER EROSION CONTROL BLANKET
COBBLE
BOULDER REVETMENT WITH 18" DIA SUPPORT STONE - TYP.
SINGLE BOULDER REVETMENT
BOULDER REVETMENT BANK SLOPE TREATMENT
Contaminated Soil Parcel 1
15
10
5
0
-5
80
70
60
50
40
30
20
10

STA 0+60



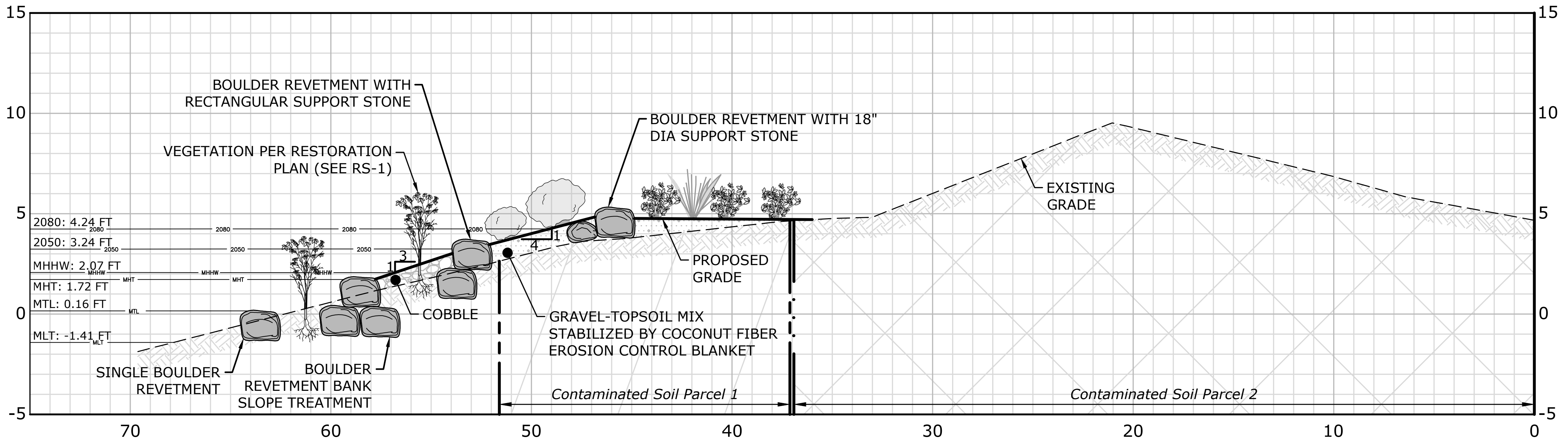
BOULDER REVETMENT WITH 18" DIA SUPPORT STONE
GRAVEL-TOPSOIL MIX STABILIZED BY COCONUT FIBER EROSION CONTROL BLANKET
EXISTING GRADE
VEGETATION PER RESTORATION PLAN (SEE RS-1)
2080: 4.24 FT
2050: 3.24 FT
MHHW: 2.07 FT
MHT: 1.72 FT
MTL: 0.16 FT
MLT: -1.41 FT
1
3
1
5
PROPOSED GRADE
COBBLE
BOULDER REVETMENT WITH RECTANGULAR SUPPORT STONE
SINGLE BOULDER REVETMENT
BOULDER REVETMENT BANK SLOPE TREATMENT
Contaminated Soil Parcel 1
Contaminated Soil Parcel 2
15
10
5
0
-5
70
60
50
40
30
20
10
0

STA 2+00



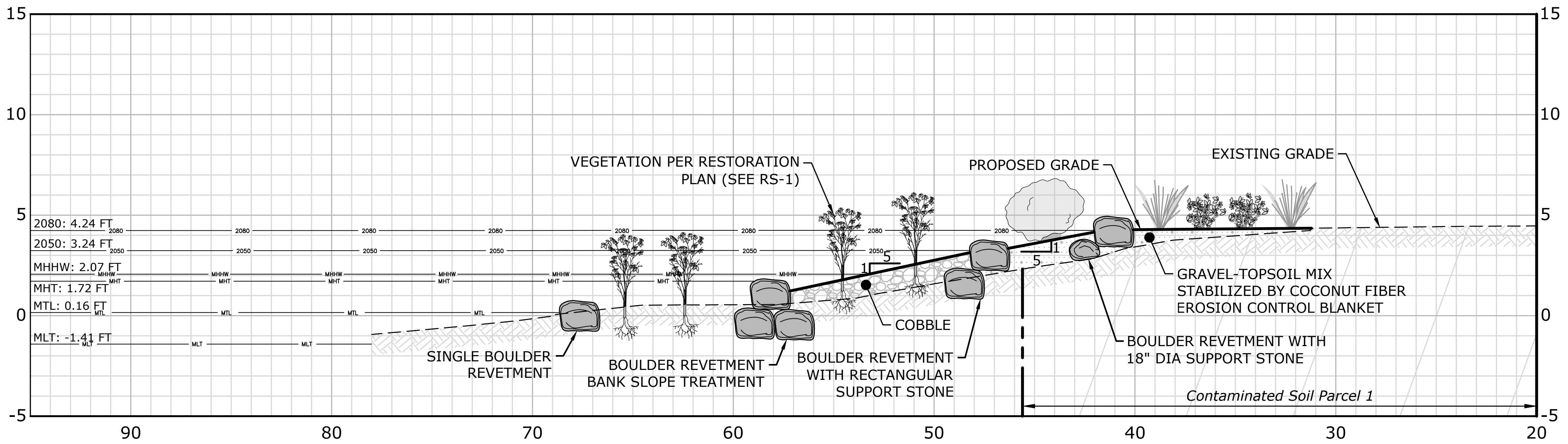
VEGETATION PER RESTORATION PLAN (SEE RS-1)
PROPOSED GRADE
EXISTING GRADE
2080: 4.24 FT
2050: 3.24 FT
MHHW: 2.07 FT
MHT: 1.72 FT
MTL: 0.16 FT
MLT: -1.41 FT
1
6
1
6
GRAVEL-TOPSOIL MIX STABILIZED BY COCONUT FIBER EROSION CONTROL BLANKET
COBBLE
BOULDER REVETMENT WITH 18" DIA SUPPORT STONE
SINGLE BOULDER REVETMENT - TYP
BOULDER REVETMENT BANK SLOPE TREATMENT
Contaminated Soil Parcel 1
15
10
5
0
-5
90
80
70
60
50
40
30
20

STA 0+50



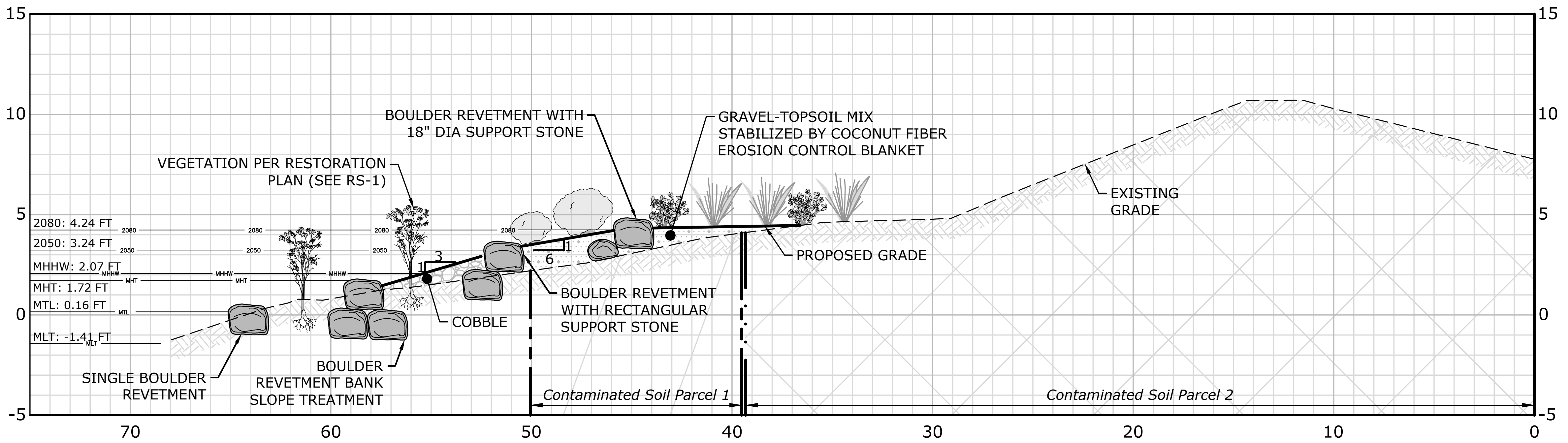
BOULDER REVETMENT WITH RECTANGULAR SUPPORT STONE
BOULDER REVETMENT WITH 18" DIA SUPPORT STONE
VEGETATION PER RESTORATION PLAN (SEE RS-1)
EXISTING GRADE
2080: 4.24 FT
2050: 3.24 FT
MHHW: 2.07 FT
MHT: 1.72 FT
MTL: 0.16 FT
MLT: -1.41 FT
1
3
1
4
PROPOSED GRADE
COBBLE
GRAVEL-TOPSOIL MIX STABILIZED BY COCONUT FIBER EROSION CONTROL BLANKET
SINGLE BOULDER REVETMENT
BOULDER REVETMENT BANK SLOPE TREATMENT
Contaminated Soil Parcel 1
Contaminated Soil Parcel 2
15
10
5
0
-5
70
60
50
40
30
20
10
0

STA 1+50



VEGETATION PER RESTORATION PLAN (SEE RS-1)
PROPOSED GRADE
EXISTING GRADE
2080: 4.24 FT
2050: 3.24 FT
MHHW: 2.07 FT
MHT: 1.72 FT
MTL: 0.16 FT
MLT: -1.41 FT
1
5
1
5
GRAVEL-TOPSOIL MIX STABILIZED BY COCONUT FIBER EROSION CONTROL BLANKET
COBBLE
SINGLE BOULDER REVETMENT
BOULDER REVETMENT BANK SLOPE TREATMENT
BOULDER REVETMENT WITH RECTANGULAR SUPPORT STONE
BOULDER REVETMENT WITH 18" DIA SUPPORT STONE
Contaminated Soil Parcel 1
15
10
5
0
-5
90
80
70
60
50
40
30
20

STA 0+10



BOULDER REVETMENT WITH 18" DIA SUPPORT STONE
GRAVEL-TOPSOIL MIX STABILIZED BY COCONUT FIBER EROSION CONTROL BLANKET
VEGETATION PER RESTORATION PLAN (SEE RS-1)
EXISTING GRADE
2080: 4.24 FT
2050: 3.24 FT
MHHW: 2.07 FT
MHT: 1.72 FT
MTL: 0.16 FT
MLT: -1.41 FT
1
3
1
6
PROPOSED GRADE
COBBLE
BOULDER REVETMENT WITH RECTANGULAR SUPPORT STONE
SINGLE BOULDER REVETMENT
BOULDER REVETMENT BANK SLOPE TREATMENT
Contaminated Soil Parcel 1
Contaminated Soil Parcel 2
15
10
5
0
-5
70
60
50
40
30
20
10
0

STA 1+00

N
W
E
S
0' 2.5' 5'
0 1/2" 1"

SLR

231 MAIN STREET, SUITE 102
NEW PALTZ, NY 12561
845.633.8153
SLRCONSULTING.COM

SLR Engineering, Landscape Architecture,
and Land Surveying P.C.
Registration No. 083112

DESCRIPTION	DATE	BY

NOT FOR CONSTRUCTION
60% ADVANCED DESIGN

CROSS SECTIONS (STA 0+10 TO STA 2+00)

LONG DOCK PARK
SHORELINE REPAIR AND RESTORATION

8 LONG DOCK RD
BEACON, NY

WAG	KJC	MAT
DESIGNED	DRAWN	CHECKED

1"=5'
SCALE

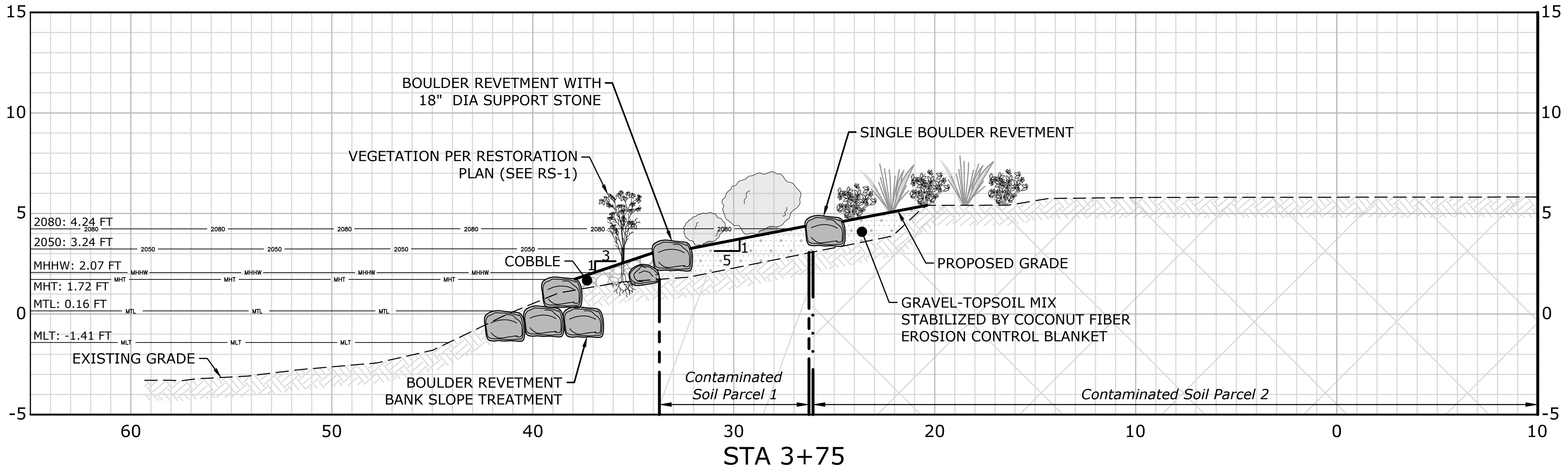
FEBRUARY 25, 2026
DATE

12787.00007
PROJECT NO.

07 OF 12
SHEET NO.

CS-1
SHEET NAME

Drawing: W:\CADDESIGN\12787.00007-DE\CAD\CAD\BLD-SECTIONS.DWG Layout Tab:CS-2
Plotted by: KATIE.CASSON On this date: Wed, 2026 February 25 - 1:02pm

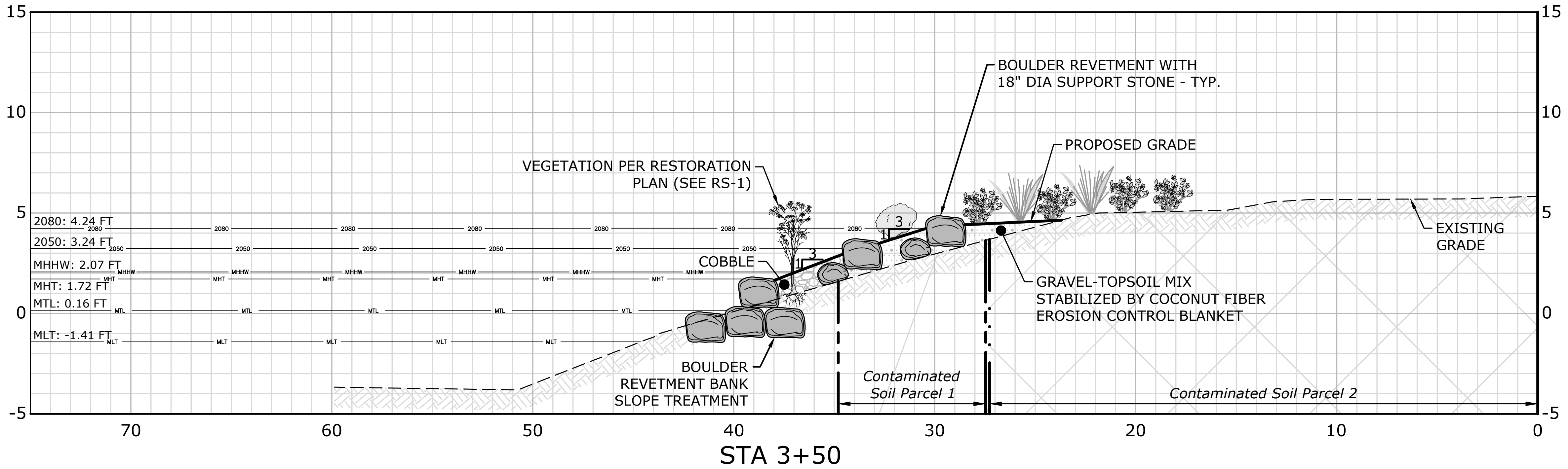


BOULDER REVETMENT WITH 18" DIA SUPPORT STONE
VEGETATION PER RESTORATION PLAN (SEE RS-1)
SINGLE BOULDER REVETMENT
2080: 4.24 FT
2050: 3.24 FT
MHHW: 2.07 FT
MHT: 1.72 FT
MTL: 0.16 FT
MLT: -1.41 FT
COBBLE
PROPOSED GRADE
GRAVEL-TOPSOIL MIX STABILIZED BY COCONUT FIBER EROSION CONTROL BLANKET
EXISTING GRADE
BOULDER REVETMENT BANK SLOPE TREATMENT
Contaminated Soil Parcel 1
Contaminated Soil Parcel 2
3
1
5
1
15
10
5
0
-5
60
50
40
30
20
10
0
10

STA 3+75

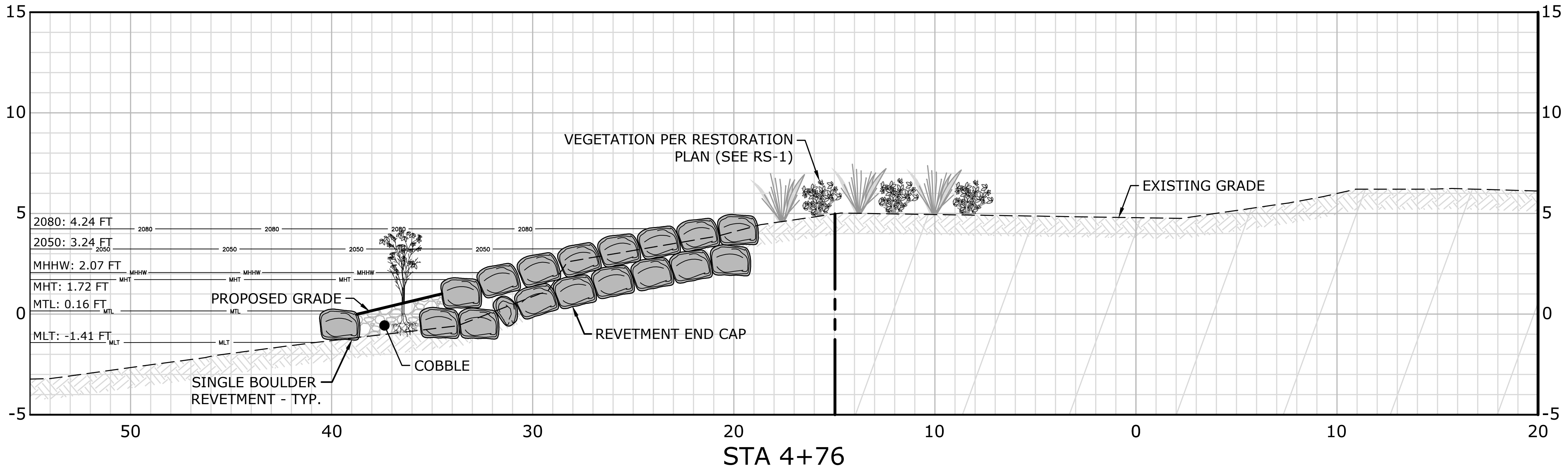
LEGEND

- MEAN LOW TIDE (MLT) ELEV. = -1.41 FT
- MEAN TIDE LINE (MTL) ELEV. = 0.16 FT
- MEAN HIGH TIDE (MHT) ELEV. = 1.72 FT
- MEAN HIGHER HIGH WATER (MHHW) ELEV. = 2.07 FT
- MEAN HIGHER HIGH WATER IN 2050 ELEV. = 3.24 FT
- MEAN HIGHER HIGH WATER IN 2080 ELEV. = 4.24 FT
- PROPOSED GRADE
- EXISTING GRADE
- CONTAMINATED SOIL PARCEL 1
- CONTAMINATED SOIL PARCEL 2
- COBBLE
- GRAVEL-TOPSOIL MIX FILL STABILIZED BY COCONUT FIBER EROSION CONTROL BLANKET



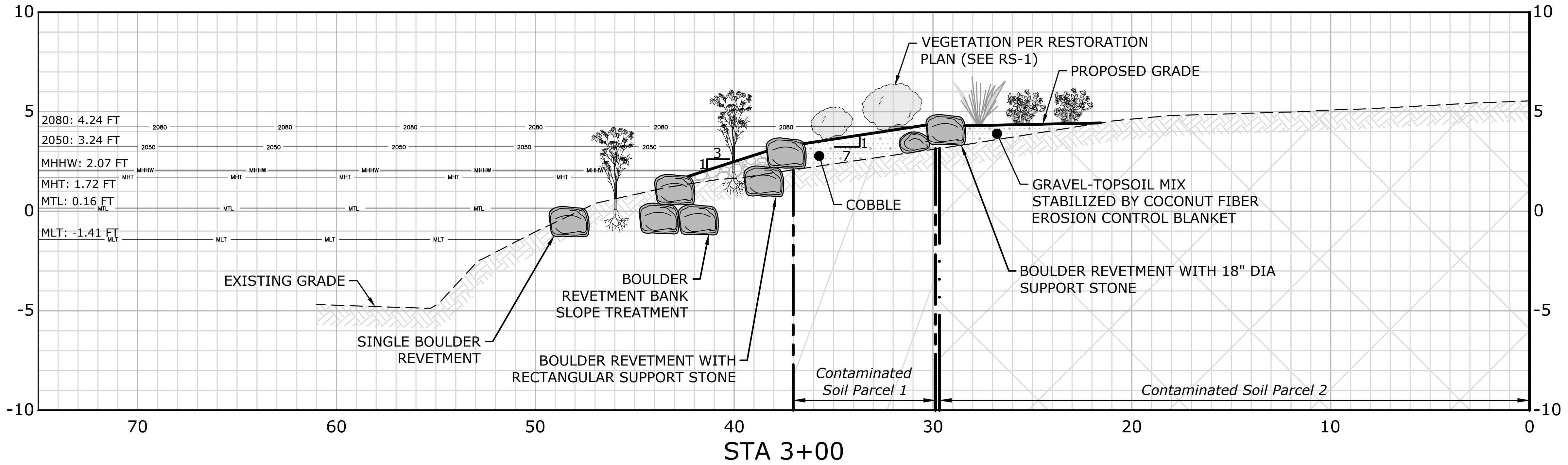
BOULDER REVETMENT WITH 18" DIA SUPPORT STONE - TYP.
PROPOSED GRADE
VEGETATION PER RESTORATION PLAN (SEE RS-1)
EXISTING GRADE
COBBLE
GRAVEL-TOPSOIL MIX STABILIZED BY COCONUT FIBER EROSION CONTROL BLANKET
BOULDER REVETMENT BANK SLOPE TREATMENT
Contaminated Soil Parcel 1
Contaminated Soil Parcel 2
2080: 4.24 FT
2050: 3.24 FT
MHHW: 2.07 FT
MHT: 1.72 FT
MTL: 0.16 FT
MLT: -1.41 FT
3
1
3
15
10
5
0
-5
70
60
50
40
30
20
10
0

STA 3+50



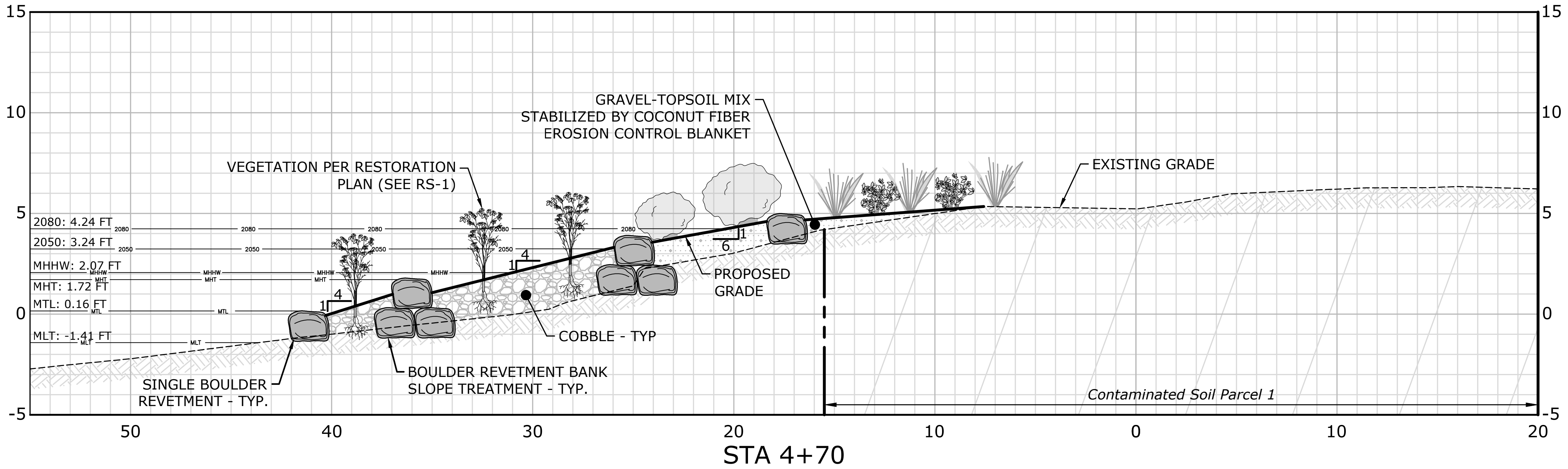
VEGETATION PER RESTORATION PLAN (SEE RS-1)
EXISTING GRADE
PROPOSED GRADE
COBBLE
REVETMENT END CAP
SINGLE BOULDER REVETMENT - TYP.
2080: 4.24 FT
2050: 3.24 FT
MHHW: 2.07 FT
MHT: 1.72 FT
MTL: 0.16 FT
MLT: -1.41 FT
15
10
5
0
-5
50
40
30
20
10
0
10
20

STA 4+76



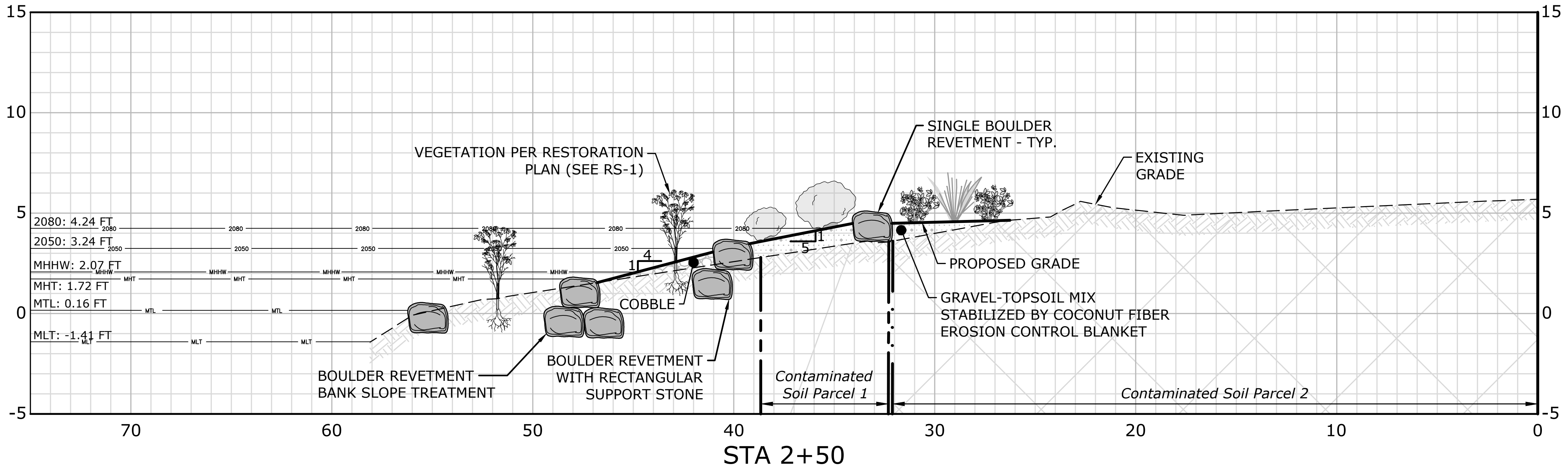
VEGETATION PER RESTORATION PLAN (SEE RS-1)
PROPOSED GRADE
GRAVEL-TOPSOIL MIX STABILIZED BY COCONUT FIBER EROSION CONTROL BLANKET
COBBLE
BOULDER REVETMENT WITH 18" DIA SUPPORT STONE
EXISTING GRADE
SINGLE BOULDER REVETMENT
BOULDER REVETMENT BANK SLOPE TREATMENT
BOULDER REVETMENT WITH RECTANGULAR SUPPORT STONE
Contaminated Soil Parcel 1
Contaminated Soil Parcel 2
2080: 4.24 FT
2050: 3.24 FT
MHHW: 2.07 FT
MHT: 1.72 FT
MTL: 0.16 FT
MLT: -1.41 FT
3
7
1
10
5
0
-5
-10
70
60
50
40
30
20
10
0

STA 3+00



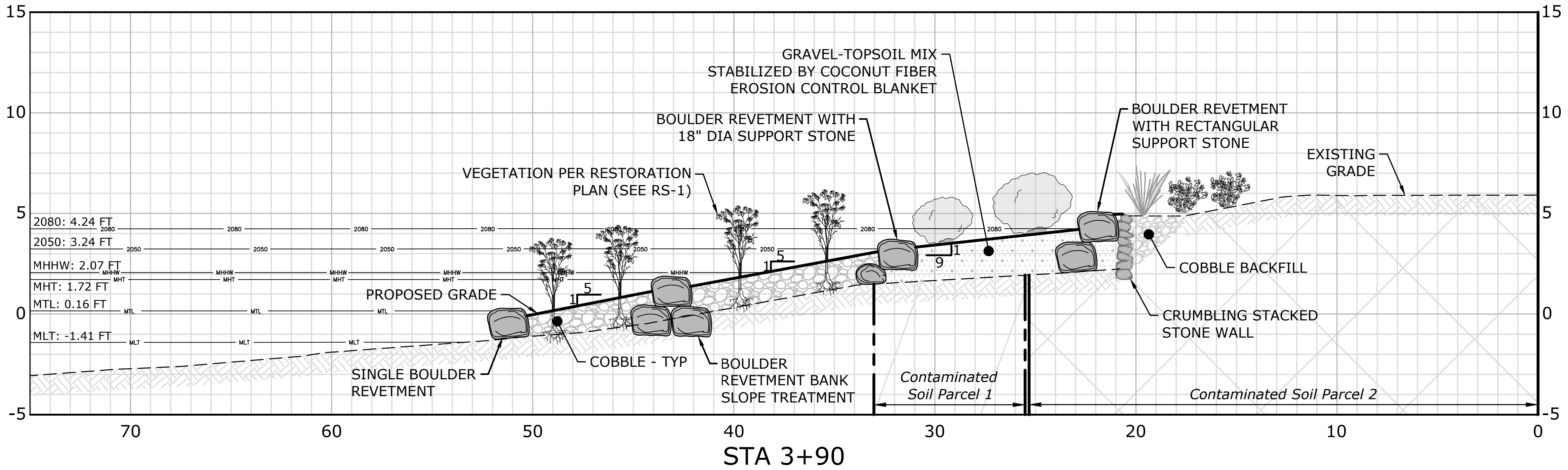
GRAVEL-TOPSOIL MIX STABILIZED BY COCONUT FIBER EROSION CONTROL BLANKET
VEGETATION PER RESTORATION PLAN (SEE RS-1)
EXISTING GRADE
PROPOSED GRADE
COBBLE - TYP
BOULDER REVETMENT BANK SLOPE TREATMENT - TYP.
SINGLE BOULDER REVETMENT - TYP.
Contaminated Soil Parcel 1
2080: 4.24 FT
2050: 3.24 FT
MHHW: 2.07 FT
MHT: 1.72 FT
MTL: 0.16 FT
MLT: -1.41 FT
4
4
6
1
15
10
5
0
-5
50
40
30
20
10
0
10
20

STA 4+70



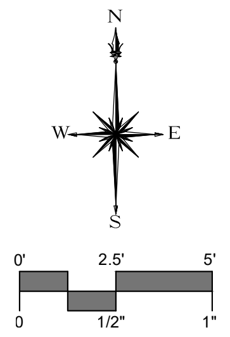
SINGLE BOULDER REVETMENT - TYP.
EXISTING GRADE
VEGETATION PER RESTORATION PLAN (SEE RS-1)
PROPOSED GRADE
GRAVEL-TOPSOIL MIX STABILIZED BY COCONUT FIBER EROSION CONTROL BLANKET
COBBLE
BOULDER REVETMENT BANK SLOPE TREATMENT
BOULDER REVETMENT WITH RECTANGULAR SUPPORT STONE
Contaminated Soil Parcel 1
Contaminated Soil Parcel 2
2080: 4.24 FT
2050: 3.24 FT
MHHW: 2.07 FT
MHT: 1.72 FT
MTL: 0.16 FT
MLT: -1.41 FT
4
5
1
15
10
5
0
-5
70
60
50
40
30
20
10
0

STA 2+50



GRAVEL-TOPSOIL MIX STABILIZED BY COCONUT FIBER EROSION CONTROL BLANKET
BOULDER REVETMENT WITH 18" DIA SUPPORT STONE
VEGETATION PER RESTORATION PLAN (SEE RS-1)
BOULDER REVETMENT WITH RECTANGULAR SUPPORT STONE
EXISTING GRADE
PROPOSED GRADE
COBBLE BACKFILL
CRUMBLING STACKED STONE WALL
SINGLE BOULDER REVETMENT
COBBLE - TYP
BOULDER REVETMENT BANK SLOPE TREATMENT
Contaminated Soil Parcel 1
Contaminated Soil Parcel 2
2080: 4.24 FT
2050: 3.24 FT
MHHW: 2.07 FT
MHT: 1.72 FT
MTL: 0.16 FT
MLT: -1.41 FT
5
5
9
1
15
10
5
0
-5
70
60
50
40
30
20
10
0

STA 3+90



N
W
E
S
0'
2.5'
5'
0
1/2"
1"

SLR
231 MAIN STREET, SUITE 102
NEW PALTZ, NY 12561
845.633.8153
SLRCONSULTING.COM

SLR Engineering, Landscape Architecture,
and Land Surveying P.C.
Registration No. 083112

DESCRIPTION	DATE	BY

NOT FOR CONSTRUCTION
60% ADVANCED DESIGN

CROSS SECTIONS (STA 2+50 TO STA 4+76)

LONG DOCK PARK
SHORELINE REPAIR AND RESTORATION

8 LONG DOCK RD
BEACON, NY

WAG	KJC	MAT
DESIGNED	DRAWN	CHECKED

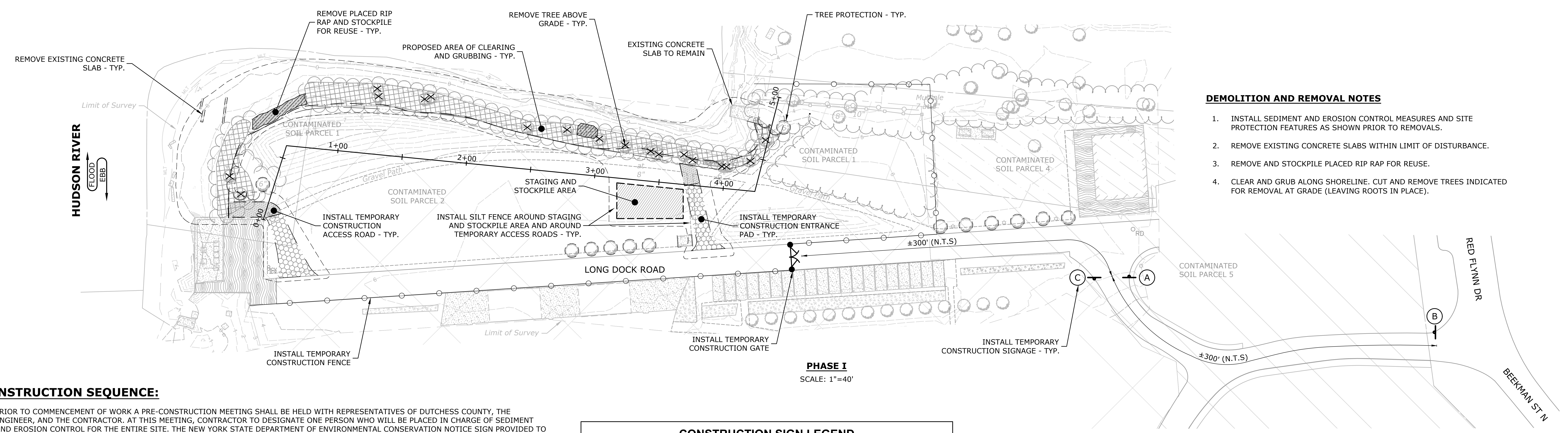
1"=5'
SCALE

FEBRUARY 25, 2026
DATE

12787.00007
PROJECT NO.

08 OF 12
SHEET NO.

CS-2
SHEET NAME


REMOVE EXISTING CONCRETE SLAB - TYP.
REMOVE PLACED RIP RAP AND STOCKPILE FOR REUSE - TYP.
PROPOSED AREA OF CLEARING AND GRUBBING - TYP.
REMOVE TREE ABOVE GRADE - TYP.
EXISTING CONCRETE SLAB TO REMAIN
TREE PROTECTION - TYP.
HUDSON RIVER
FLOOD
EBB
Limit of Survey
CONTAMINATED SOIL PARCEL 1
CONTAMINATED SOIL PARCEL 2
CONTAMINATED SOIL PARCEL 4
CONTAMINATED SOIL PARCEL 5
Gravel Path
0+00
1+00
2+00
3+00
4+00
5+00
STAGING AND STOCKPILE AREA
INSTALL TEMPORARY CONSTRUCTION ACCESS ROAD - TYP.
INSTALL SILT FENCE AROUND STAGING AND STOCKPILE AREA AND AROUND TEMPORARY ACCESS ROADS - TYP.
INSTALL TEMPORARY CONSTRUCTION ENTRANCE PAD - TYP.
±300' (N.T.S)
LONG DOCK ROAD
INSTALL TEMPORARY CONSTRUCTION FENCE
INSTALL TEMPORARY CONSTRUCTION GATE
INSTALL TEMPORARY CONSTRUCTION SIGNAGE - TYP.
C
A
B
RED FLYNN DR
BEEKMAN ST N
±300' (N.T.S)

PHASE I

SCALE: 1"=40'

DEMOLITION AND REMOVAL NOTES

1. INSTALL SEDIMENT AND EROSION CONTROL MEASURES AND SITE PROTECTION FEATURES AS SHOWN PRIOR TO REMOVALS.
2. REMOVE EXISTING CONCRETE SLABS WITHIN LIMIT OF DISTURBANCE.
3. REMOVE AND STOCKPILE PLACED RIP RAP FOR REUSE.
4. CLEAR AND GRUB ALONG SHORELINE. CUT AND REMOVE TREES INDICATED FOR REMOVAL AT GRADE (LEAVING ROOTS IN PLACE).

CONSTRUCTION SEQUENCE:

1. PRIOR TO COMMENCEMENT OF WORK A PRE-CONSTRUCTION MEETING SHALL BE HELD WITH REPRESENTATIVES OF DUTCHESS COUNTY, THE ENGINEER, AND THE CONTRACTOR. AT THIS MEETING, CONTRACTOR TO DESIGNATE ONE PERSON WHO WILL BE PLACED IN CHARGE OF SEDIMENT AND EROSION CONTROL FOR THE ENTIRE SITE. THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION NOTICE SIGN PROVIDED TO THE CONTRACTOR SHALL BE POSTED IN A CONSPICUOUS LOCATION ON THE WORKSITE AND ADEQUATELY PROTECTED FROM THE WEATHER.
2. THE PROPOSED CONSTRUCTION SEQUENCE IS PROVIDED AS A RECOMMENDED APPROACH. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING A PROPOSED CONSTRUCTION SEQUENCE TO THE PROJECT ENGINEER FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION.

PHASE I

1. INSTALL SILT FENCE, CONSTRUCTION ENTRANCE/EXISTS OFF OF LONG DOCK ROAD, AND SEDIMENT AND EROSION CONTROL MEASURES AS SHOWN ON THE PLANS. REINFORCE SILT FENCE WITH STRAWBALE DIKE AS NEEDED.
2. INSTALL TEMPORARY CONSTRUCTION SIGNS.
3. INSTALL TREE AND STRUCTURE PROTECTION MEASURES.
4. CLEAR VEGETATION AS SHOWN ON THE PLANS.
5. IMPLEMENT WATER CONTROL AND FLOOD CONTINGENCY PLAN PRIOR TO STARTING CONSTRUCTION.

PHASE II

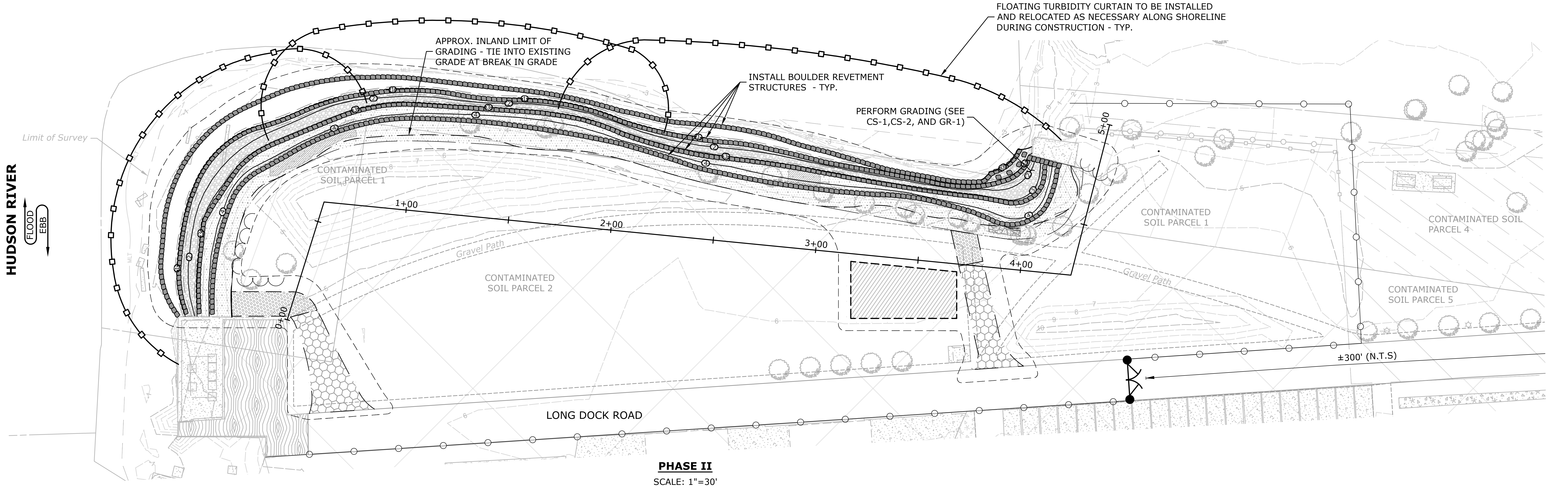
1. DEPLOY TURBIDITY CURTAIN TO BE INSTALLED AND RELOCATED ALONG SHORELINE AS NECESSARY DURING CONSTRUCTION.
2. INSTALL BOULDER REVETMENT BANK SLOPE TREATMENTS AS SHOWN ON THE SITE PLAN (SHEET LA-1).
3. PERFORM GRADING AS SHOWN ON THE GRADING PLAN (SHEET GR-1).
4. INSTALL PROPOSED SHRUBS, TREES, AND PLANTINGS AS SHOWN ON THE RESTORATION PLAN (SHEET RS-1).
5. REMOVE ALL TEMPORARY ACCESS ROADS, E&S, AND WATER CONTROL MEASURES, AND RESTORE ALL DISTURBED AREAS TO EXISTING CONDITIONS, TOPSOIL AND SEED.

CONSTRUCTION SIGN LEGEND

PLAN DESIGNATION	MESSAGE	SIZE	MUTCD DESIGNATION
Ⓐ	TRUCK CROSSING	60" x 42"	W8-6
Ⓑ	CONSTRUCTION WORK AHEAD	36" x 36"	W20-SERIES
Ⓒ	END CONSTRUCTION WORK	48" x 10" 48" x 18"	G20-2

LEGEND

◌	TREE PROTECTION	— — —	APPROX. LIMIT OF DISTURBANCE
×	TREE REMOVAL	– – · – –	APPROX. INLAND LIMIT OF GRADING
— · · —	EXISTING STRUCTURE PROTECTION	· · · · ·	SILT FENCE
▦	AREA OF CLEARING AND GRUBBING	▒	TEMPORARY CONSTRUCTION ACCESS ROAD
▨	REMOVE PLACED RIP RAP AND STOCKPILE FOR REUSE	⬡	TEMPORARY CONSTRUCTION ENTRANCE PAD
┌ – – ┘	CONCRETE SLAB REMOVAL	▨	CONSTRUCTION STAGING AND STOCKPILE AREA
—○—○—	TEMPORARY CONSTRUCTION FENCE	—□—□—	FLOATING TURBIDITY BARRIER
●⋀⋀●	TEMPORARY CONSTRUCTION GATE		


FLOATING TURBIDITY CURTAIN TO BE INSTALLED AND RELOCATED AS NECESSARY ALONG SHORELINE DURING CONSTRUCTION - TYP.
APPROX. INLAND LIMIT OF GRADING - TIE INTO EXISTING GRADE AT BREAK IN GRADE
INSTALL BOULDER REVETMENT STRUCTURES - TYP.
PERFORM GRADING (SEE CS-1,CS-2, AND GR-1)
Limit of Survey
HUDSON RIVER
FLOOD
EBB
CONTAMINATED SOIL PARCEL 1
CONTAMINATED SOIL PARCEL 2
CONTAMINATED SOIL PARCEL 1
CONTAMINATED SOIL PARCEL 4
CONTAMINATED SOIL PARCEL 5
Gravel Path
0+00
1+00
2+00
3+00
4+00
5+00
LONG DOCK ROAD
±300' (N.T.S)

PHASE II

SCALE: 1"=30'

CONSTRUCTION ACCESS NOTES:

1. CONSTRUCTION ACCESS ROUTES AND STAGING/STOCKPILE AREAS SHOWN ARE SCHEMATIC IN NATURE - FINAL ROUTES/STAGING AREAS TO BE NEGOTIATED WITH PROPERTY OWNERS PRIOR TO START OF CONSTRUCTION.
2. ALL LAWN, GARDEN, SHRUBS, TREES, FENCING, AND OTHER YARD FEATURES SHALL BE RESTORED OR REPAIRED AT PROJECT COMPLETION TO THE APPROVAL OF THE PROPERTY OWNER.
3. UNDERGROUND UTILITIES SHALL BE LOCATED AND AVOIDED WHEN PLANNING THE CONSTRUCTION ACCESS ROUTES. ANY DISRUPTION OR DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AND IN ACCORDANCE WITH REGULATIONS ESTABLISHED BY EFFECTED UTILITY(S).

WATER CONTROL NOTES:

1. THE PROJECT SITE IS SUBJECT TO FLOODING WITHIN LIMITS OF 100-YEAR FEMA FLOODPLAIN. THE CONTRACTOR SHALL MONITOR WEATHER FORECASTS AND STABILIZE THE CONSTRUCTION SITE AND REMOVE EQUIPMENT FROM FLOOD PRONE AREAS IN THE EVENT OF FLOOD WARNINGS. WORK SHOULD BE PERFORMED DURING LOW TIDE ONLY.
2. THE WATER CONTROL MEASURES AS REPRESENTED ON THIS PLAN ARE PRESENTED AS INFORMATIONAL ONLY, AND SUBJECT TO CHANGE BASED ON SEASONAL, WEATHER, AND FIELD CONDITIONS.
3. CONTRACTOR SHALL PREPARE AND SUBMIT A WATER CONTROL PLAN FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION.

SLR
231 MAIN STREET, SUITE 102
NEW PALTZ, NY 12561
845.633.8153
SLRCONSULTING.COM

SLR Engineering, Landscape Architecture,
and Land Surveying P.C.
Registration No. 083112

DESCRIPTION	DATE	BY

NOT FOR CONSTRUCTION
60% ADVANCED DESIGN

CONSTRUCTION PLAN

LONG DOCK PARK
SHORELINE REPAIR AND RESTORATION

8 LONG DOCK RD
BEACON, NY

WAG	KJC	MAT
DESIGNED	DRAWN	CHECKED

AS SHOWN
SCALE

FEBRUARY 25, 2026
DATE

12787.00007
PROJECT NO.

09 OF 12
SHEET NO.

CP-1
SHEET NAME

Drawing: W:\CADDESIGN\12787.00007-DE\CAD\CAD\BLD-DETAILS.DWG Layout Tab:DE-1
Plotted by: KATIE.CASSON On this date: Wed, 2026 February 25 - 1:02pm

PROJECT DESCRIPTION

THE PURPOSE OF THIS SHORELINE REPAIR AND RESTORATION PROJECT IS TO DESIGN A STABILIZED, SUSTAINABLE SHORELINE AT LONG DOCK PARK IN BEACON, NY. THIS PROJECT AIMS TO REESTABLISH LONG-TERM BANK PROTECTION AGAINST EROSION, REPAIR THE COMPROMISED CLEAN-FILL "CAP" ON ENVIRONMENTALLY REGULATED SOIL/FILL, AND IMPROVE THE ECOLOGICAL HABITAT AND SHORELINE RESILIENCE THROUGH NATURALIZED RESTORATION METHODS.

SITE DESCRIPTION

LONG DOCK PARK IS LOCATED IN THE CITY OF BEACON, NEW YORK ON A RECLAIMED PENINSULA AND IS OWNED, OPERATED, AND MANAGED BY SCENIC HUDSON. HISTORICALLY, THE SITE WAS AN INDUSTRIAL HUB IN THE 19TH CENTURY BEFORE BECOMING A POPULAR RIVER-SIDE PARK PROVIDING A PROTECTED ECOLOGICAL HABITAT FOR COASTAL WILDLIFE AS WELL AS PASSIVE RECREATION AND EDUCATIONAL OPPORTUNITIES FOR VISITORS. THE SITE CONTAINS ENVIRONMENTALLY REGULATED SOIL/FILL AND IS PART OF NEW YORK STATE'S BROWNFIELD CLEANUP PROGRAM, REQUIRING ONGOING MAINTENANCE AND REMEDIAL MEASURES. THE SITE HAS BEEN PARTIALLY REMEDIATED THROUGH THE PLACEMENT OF A PROTECTIVE CAP, CONSISTING OF A VISUAL DEMARCATION LAYER AND APPROXIMATELY 12 INCHES OF CLEAN SOIL. HOWEVER, SHORELINE EROSION HAS COMPROMISED THE INTEGRITY OF THE CAP, EXPOSING REGULATED MATERIALS AND NECESSITATING PERMANENT REPAIRS. THE PARK FACES ADDITIONAL CHALLENGES FROM CLIMATE CHANGE, INCLUDING RISING SEA LEVELS THAT ELEVATE THE BASELINE FOR FLOOD TIDES AND INTENSIFIED PRECIPITATION LEADING TO INCREASED SHORELINE EROSION.

PROPOSED IMPROVEMENTS

THE SHORELINE WILL BE ENGINEERED AND ENHANCED TO PROVIDE ECOLOGICAL, RECREATIONAL, AND FLOODPLAIN FUNCTIONS WITH DESIGN ELEMENTS THAT ALLOW FOR CONTINUED FUNCTIONALITY AS THE SEA LEVEL RISES WHILE ACCOMMODATING INCREASED FREQUENCY AND INTENSITY OF WAVE ACTION, VELOCITY, AND INUNDATION. THE DESIGN INCLUDES, THE INSTALLATION OF NATIVE SHORELINE PLANTINGS IN VARIOUS PLANTING ZONES DELINEATED BASED ON TIDAL INUNDATION TO ENSURE LONG TERM STABILIZATION, MIGRATION, AND ADAPTATION OF VEGETATED AREAS. THE DESIGN ALSO INCLUDES THE INSTALLATION OF BOULDER STRUCTURES BELOW GRADE TO PROTECT AGAINST SEVERE FLOOD EVENTS AND THE EFECTS OF CLIMATE CHANGE. WETLAND AND UPLAND PLANTINGS WILL PROVIDE IMPROVED HABITAT AND ADDITIONAL EROSION REDUCTION.

PLANNED EROSION AND SEDIMENT CONTROL PRACTICES

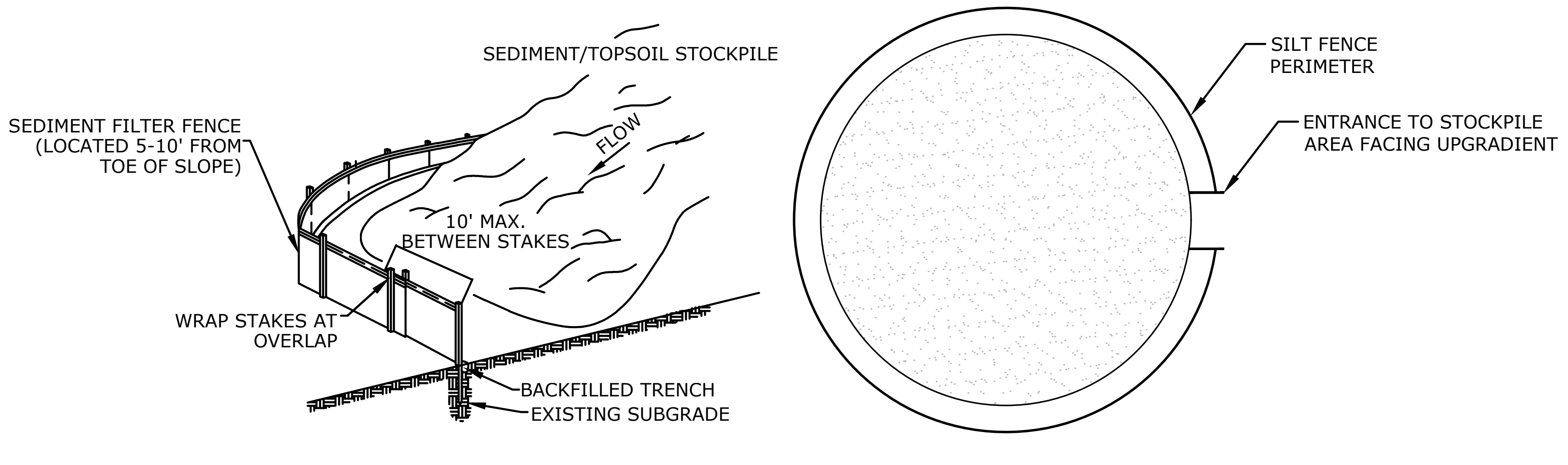
1. CONSTRUCTION ENTRANCE/EXIT WILL BE CONSTRUCTED OFF OF LONG DOCK ROAD.
2. SILT FENCE WILL BE INSTALLED ALONG THE TEMPORARY CONSTRUCTION ACCESS ROAD AND AROUND ANY STOCKPILE AREAS.
3. SUMP PIT: A SUMP PIT WILL BE UTILIZED TO DEWATER THE WORK AREA IF GROUNDWATER IS ENCOUNTERED.
4. CONTAMINATED SOILS SHALL NOT BE DISTURBED.
5. SURFACE STABILIZATION: STABILIZATION OF THE SURFACE WILL BE ACCOMPLISHED WITH VEGETATION AS SPECIFIED ON THE RESTORATION PLAN (SEE RS-1).
6. ALL SILT, SEDIMENT OR DEBRIS THAT IS REMOVED FROM ANY EROSION AND SEDIMENT CONTROL PRACTICE MUST BE DISPOSED OF, PREFERABLY ONSITE, IN A STABLE VEGETATED AREA AND PERMANENTLY STABILIZED.

EROSION CONTROL NOTES

1. ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED IN ACCORDANCE WITH THE "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL."
2. ALL EROSION CONTROL MATERIALS (EXCEPT SILT FENCE) MUST BE COMPLETELY BIODEGRADABLE MATERIAL WITHOUT THE USE OF ANY PLASTIC IN THE MESH. DEGRADABLE, PHOTODEGRADABLE, UV-DEGRADABLE, OXO-DEGRADABLE, OR OXO-DEGRADABLE PLASTIC NETTING (INCLUDING POLYPROPYLENE, NYLON, POLYETHYLENE, AND POLYESTER) MATERIALS ARE NOT PERMITTED.
3. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
4. ALL WETLANDS SHALL BE AVOIDED AND PROTECTED FROM CONSTRUCTION ACTIVITIES WITH SEDIMENT CONTROL MEASURES WHERE NECESSARY AS DETERMINED BY THE PROJECT ENGINEER.
4. CLEARING OF NATIVE VEGETATION FOR CONSTRUCTION ACCESS SHOULD BE MINIMIZED.
5. TEMPORARY ACCESS AREAS SHALL BE BORDERED WITH SEDIMENT AND EROSION CONTROL FENCES. SEE PLANS AND DETAILS.
6. STOCKPILE AREAS TO BE ENCLOSED BY SILT FENCE. SEE PLANS AND DETAILS.
7. THE CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES. THE CONSTRUCTION INSPECTOR WILL VERIFY THE MAINTENANCE WEEKLY AND AFTER RAIN EVENTS.
8. THE FINAL LOCATION OF THE TEMPORARY HAUL ROAD SHALL BE DETERMINED PRIOR TO CONSTRUCTION. THE HAUL ROAD SHALL BE CONSTRUCTED WITH PROPER EROSION CONTROLS, INCLUDING SILT FENCE WHERE NECESSARY, AND A CONSTRUCTION ENTRANCE PAD AT THE ENTRANCE. RESTORATION OF THE DISTURBED AREA SHALL BE COORDINATED WITH THE PROPERTY OWNER.

EROSION CONTROL MAINTENANCE INTERVALS

EROSION CONTROL MEASURE	CONTROL OBJECTIVE	INSPECTION/MAINTENANCE	FAILURE INDICATORS	REMOVAL
SILT FENCE	- INTERCEPT, AND REDIRECT/DETAIN SMALL AMOUNTS OF SEDIMENT FROM SMALL DISTURBED AREAS. - DECREASE VELOCITY OF SHEET FLOW. - PROTECT SENSITIVE SLOPES OR SOILS FROM EXCESSIVE WATER FLOW.	INSPECT AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL OF 0.5 INCHES OR MORE. ACCUMULATED SEDIMENT MUST BE REMOVED ONCE ITS DEPTH IS EQUAL TO ½ THE TRENCH HEIGHT. INSPECT FREQUENTLY DURING PUMPING OPERATIONS IF USED FOR DEWATERING OPERATIONS.	- PHYSICAL DAMAGE OR DECOMPOSITION - EVIDENCE OF OVERTOPPED OR UNDERCUT FENCE - EVIDENCE OF SIGNIFICANT FLOWS EVADING CAPTURE - REPETITIVE FAILURE	SILT FENCE MAY BE REMOVED AFTER UPHILL AND SENSITIVE AREAS HAVE BEEN PERMANENTLY STABILIZED.
CONSTRUCTION ENTRANCE/EXIT	- REDUCE THE TRACKING OF SEDIMENT OFF-SITE ONTO PAVED SURFACES.	INSPECT AT THE END OF EACH WORK DAY AND IMMEDIATELY REPAIR DAMAGES. PERIODIC ADDITION OF STONE, OR LENGTHENING OF ENTRANCE MAY BE REQUIRED AS CONDITIONS DEMAND. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PAVED SURFACES AS A RESULT OF INEFFICIENCY OF CONSTRUCTION ENTRANCE SHALL BE IMMEDIATELY REMOVED.	- SEDIMENT IN ROADWAY ADJACENT TO SITE	CONSTRUCTION ENTRANCE MAY BE REMOVED ONCE THE SITE HAS BEEN PERMANENTLY STABILIZED, AND ALL OTHER SECTIONS OF ROADWAY HAVE BEEN PERMANENTLY PAVED.

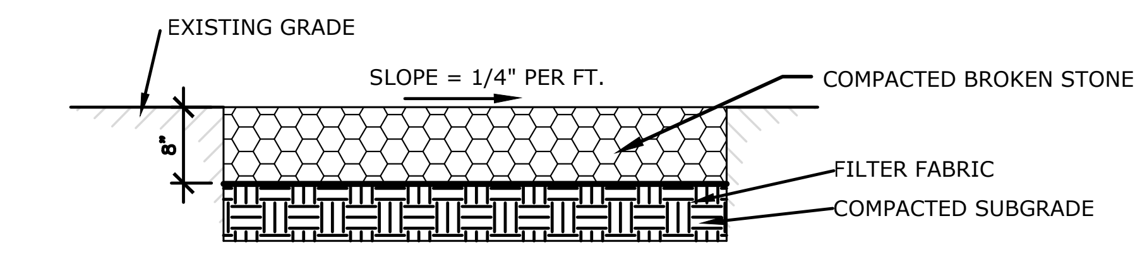


SEDIMENT/TOPSOIL STOCKPILE
SEDIMENT FILTER FENCE (LOCATED 5-10' FROM TOE OF SLOPE)
FLOW
10' MAX. BETWEEN STAKES
WRAP STAKES AT OVERLAP
BACKFILLED TRENCH
EXISTING SUBGRADE
SILT FENCE PERIMETER
ENTRANCE TO STOCKPILE AREA FACING UPGRADIENT

PLAN VIEW

TEMPORARY STOCKPILE AREA

NOT TO SCALE

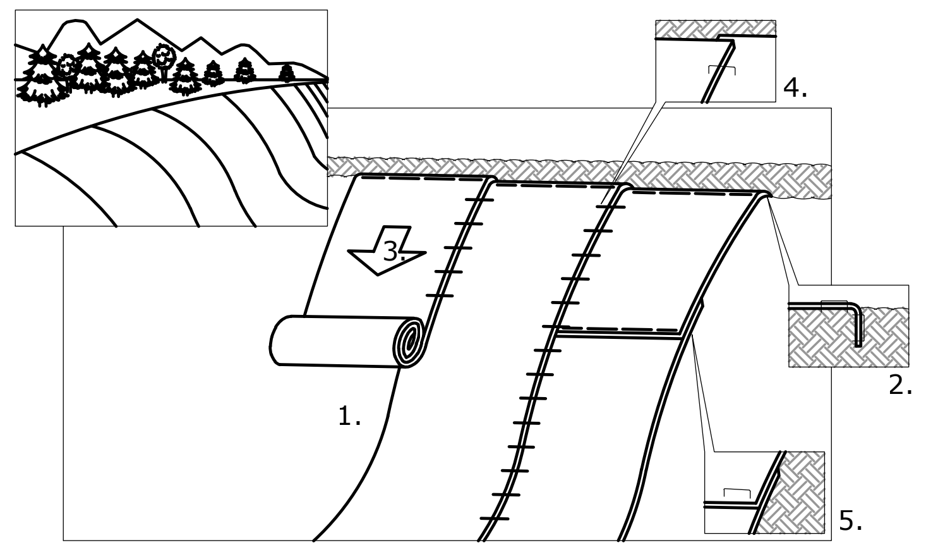


EXISTING GRADE
SLOPE = 1/4" PER FT.
8"
COMPACTED BROKEN STONE
FILTER FABRIC
COMPACTED SUBGRADE

NOTES:
BROKEN STONE TO BE REMOVED UPON COMPLETION OF CONSTRUCTION, AND REPLACED WITH TOPSOIL/COMPOST MIX. DISTURBED AREAS TO BE SEEDED AND MULCHED ACCORDING TO THE RESTORATION PLAN.

TEMPORARY CONSTRUCTION ACCESS ROAD

NOT TO SCALE

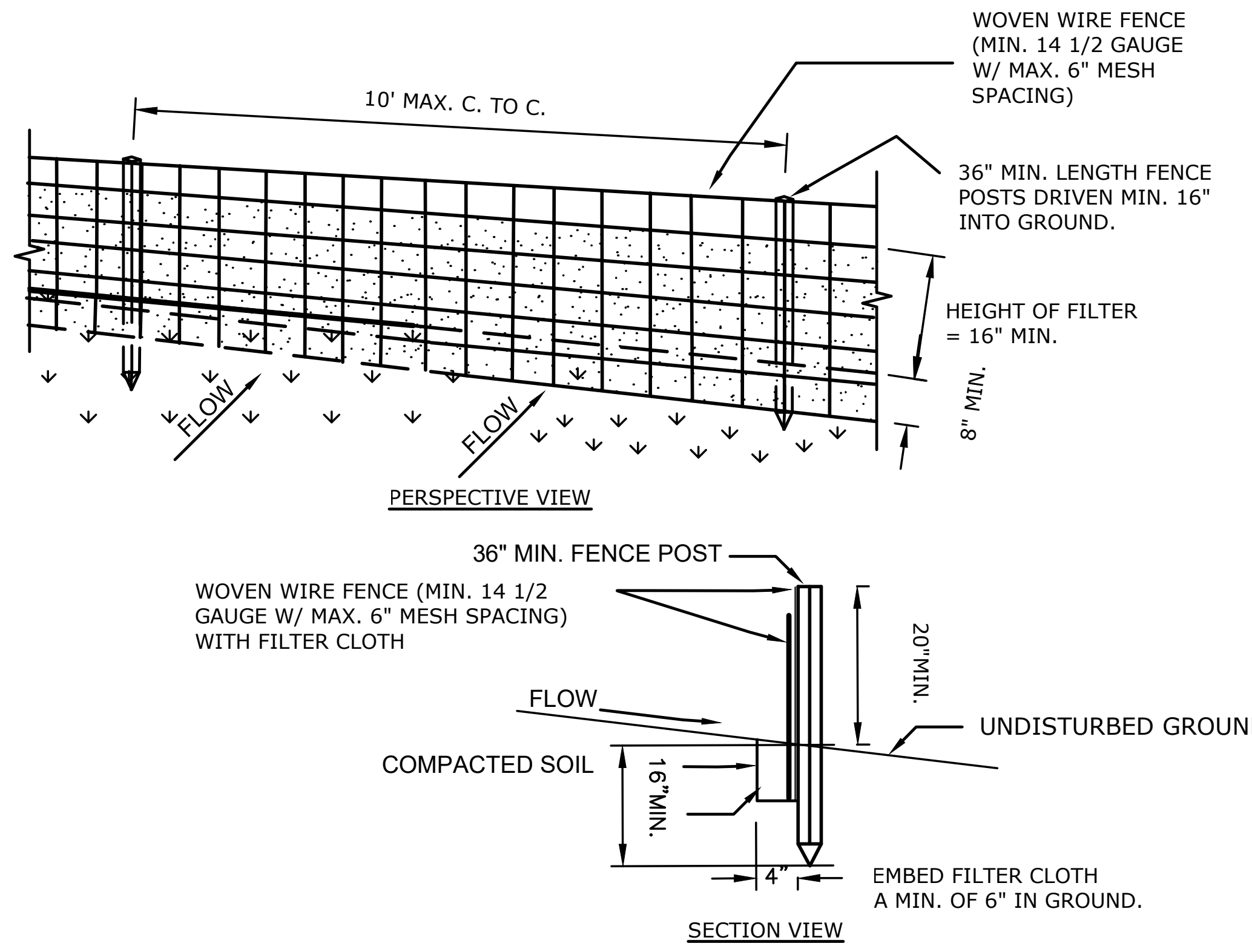


NOTES:
1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF TOPSOIL/COMPOST, LIME, FERTILIZER MULCH, AND SEED.
2. ECB SHALL BE TENSAR, NORTH AMERICAN GREEN SC150BN, OR APPROVED EQUAL.
3. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP BY 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
4. ROLL THE BLANKETS DOWN THE SLOPE IN THE DIRECTION OF THE WATERWAY.
5. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP.
6. WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 6" OVERLAP. STABLE THROUGH OVERLAP AREA, APPROXIMATELY 12" APART.

REFER TO GENERAL STAPLE PATTERN GUIDE IN NORTH AMERICAN GREEN CATALOG FOR CORRECT STAPLE PATTERN RECOMMENDATIONS FOR SLOPE INSTALLATION.

EROSION CONTROL BLANKET

NOT TO SCALE



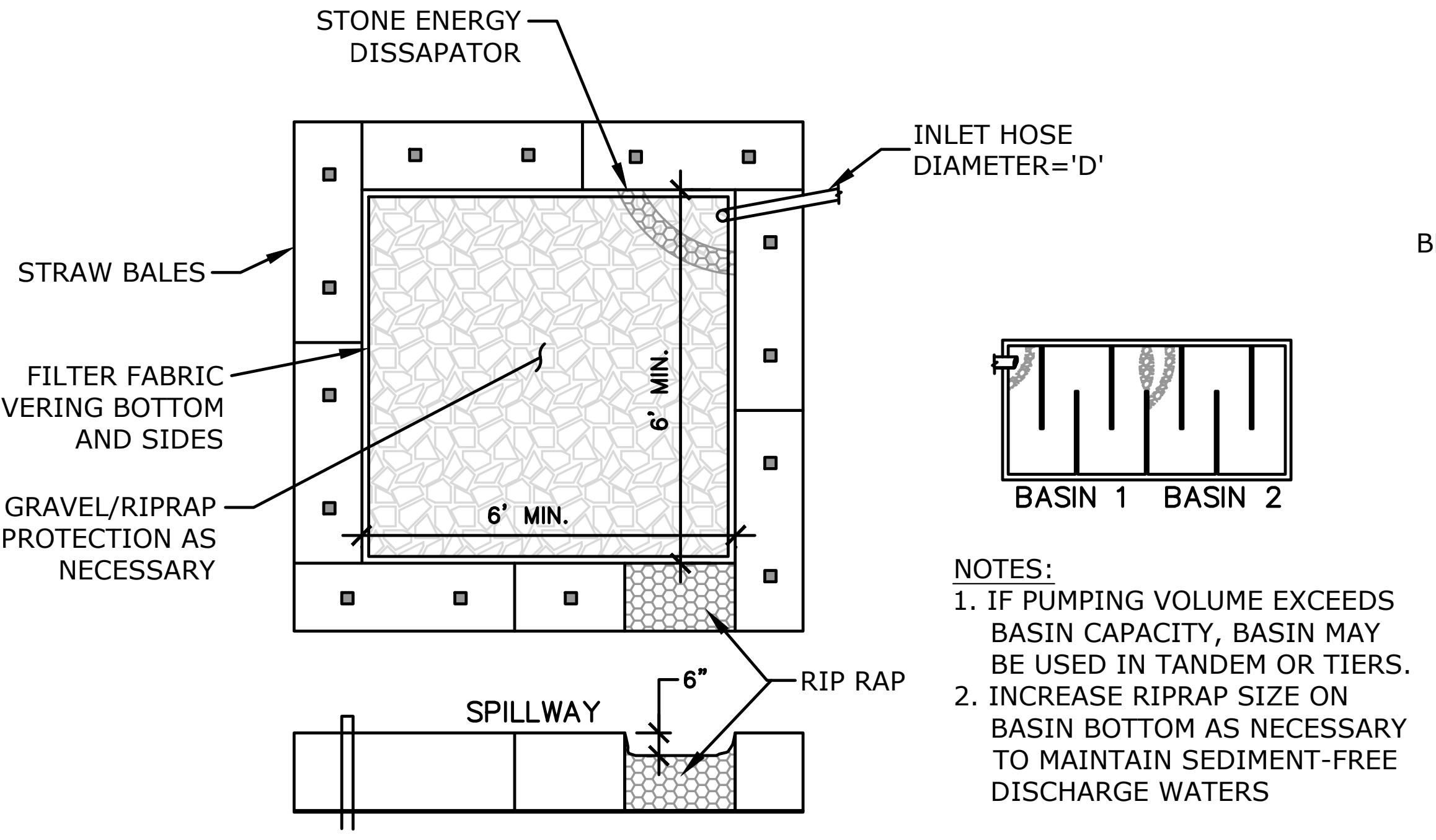
10' MAX. C. TO C.
WOVEN WIRE FENCE (MIN. 14 1/2 GAUGE W/ MAX. 6" MESH SPACING)
36" MIN. LENGTH FENCE POSTS DRIVEN MIN. 16" INTO GROUND.
HEIGHT OF FILTER = 16" MIN.
8" MIN.
FLOW
FLOW
PERSPECTIVE VIEW
36" MIN. FENCE POST
WOVEN WIRE FENCE (MIN. 14 1/2 GAUGE W/ MAX. 6" MESH SPACING) WITH FILTER CLOTH
FLOW
20"MIN.
UNDISTURBED GROUND
COMPACTED SOIL
16"MIN.
4"
EMBED FILTER CLOTH A MIN. OF 6" IN GROUND.
SECTION VIEW

SILT FENCE

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 12 1/2 GAUGE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.



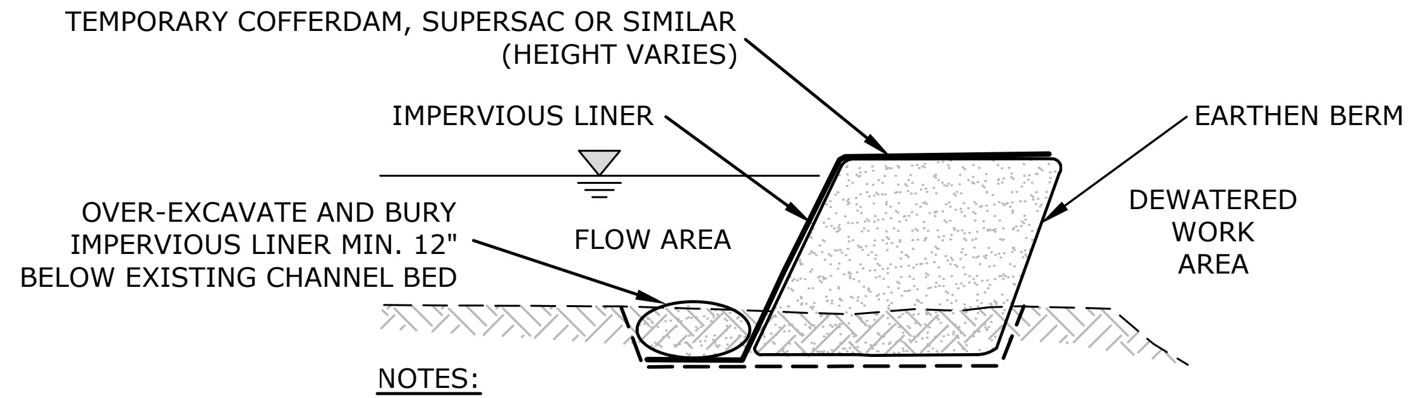
STONE ENERGY DISSAPATOR
INLET HOSE DIAMETER='D'
STRAW BALES
FILTER FABRIC COVERING BOTTOM AND SIDES
GRAVEL/RIPRAP PROTECTION AS NECESSARY
6' MIN.
6' MIN.
6"
RIP RAP
SPILLWAY
BASIN 1
BASIN 2

FLAT BOTTOM COVERED BY FILTER FABRIC

NOTES:
1. IF PUMPING VOLUME EXCEEDS BASIN CAPACITY, BASIN MAY BE USED IN TANDEM OR TIERS.
2. INCREASE RIPRAP SIZE ON BASIN BOTTOM AS NECESSARY TO MAINTAIN SEDIMENT-FREE DISCHARGE WATERS

DEWATERING BASIN

NOT TO SCALE



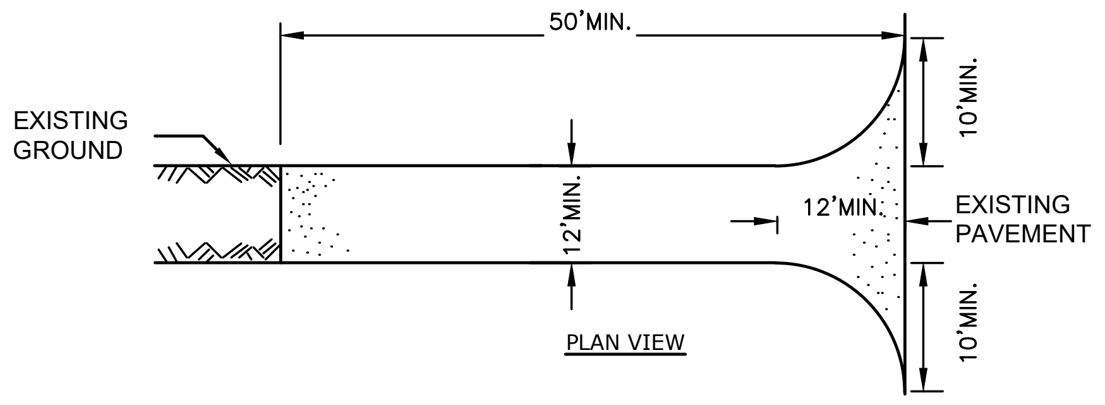
TEMPORARY COFFERDAM, SUPERSAC OR SIMILAR (HEIGHT VARIES)
IMPERVIOUS LINER
EARTHEN BERM
OVER-EXCAVATE AND BURY IMPERVIOUS LINER MIN. 12" BELOW EXISTING CHANNEL BED
FLOW AREA
DEWATERED WORK AREA

NOTES:
1. COFFERDAM TO BE SIZED FOR NORMAL FLOW CONDITIONS. TOP ELEVATION OF COFFERDAM TO ISOLATE LAGOON FROM TIDAL INFLUENCE AND STREAM FLOWS.
2. COFFERDAM TO BE CONSTRUCTED OF SUPERSAC OR SIMILAR PRODUCT.

TEMPORARY COFFERDAM DETAIL

TEMPORARY COBBLE BARRIER WITH PLASTIC SHEETING (OR APPROVED EQUAL)

NOT TO SCALE



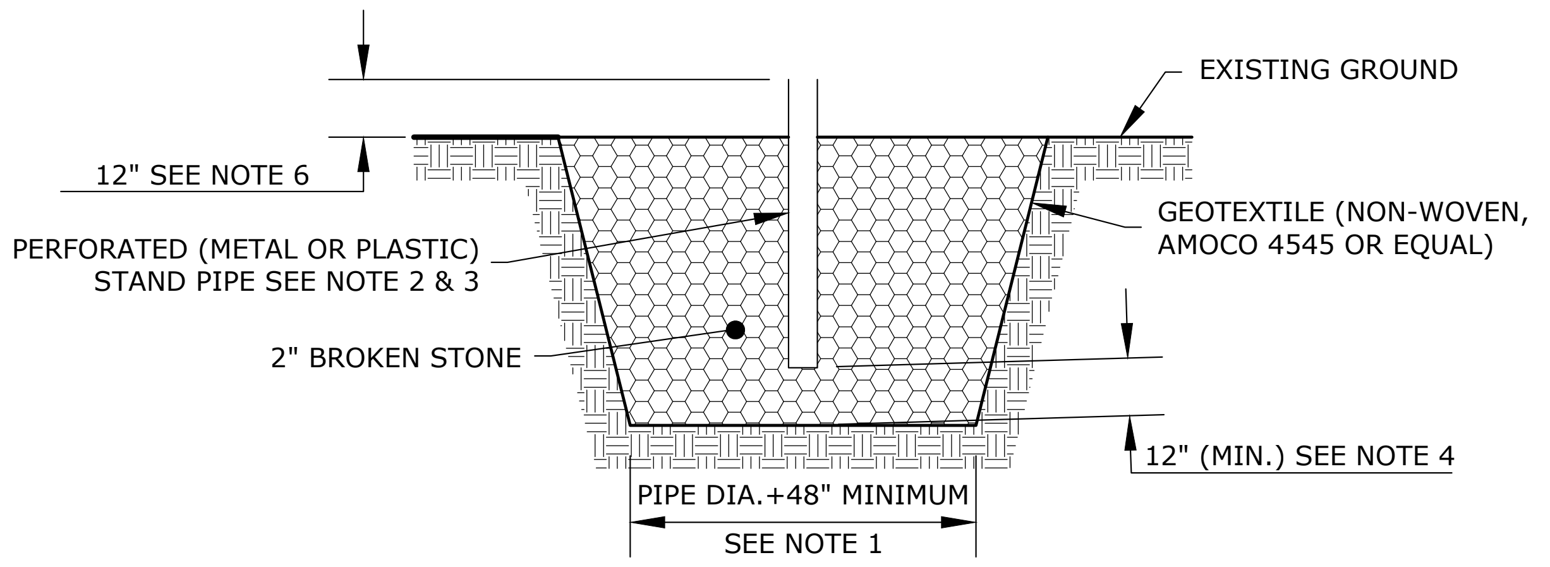
50'MIN.
EXISTING GROUND
12'MIN.
12"MIN.
10'MIN.
10'MIN.
EXISTING PAVEMENT
PLAN VIEW

STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

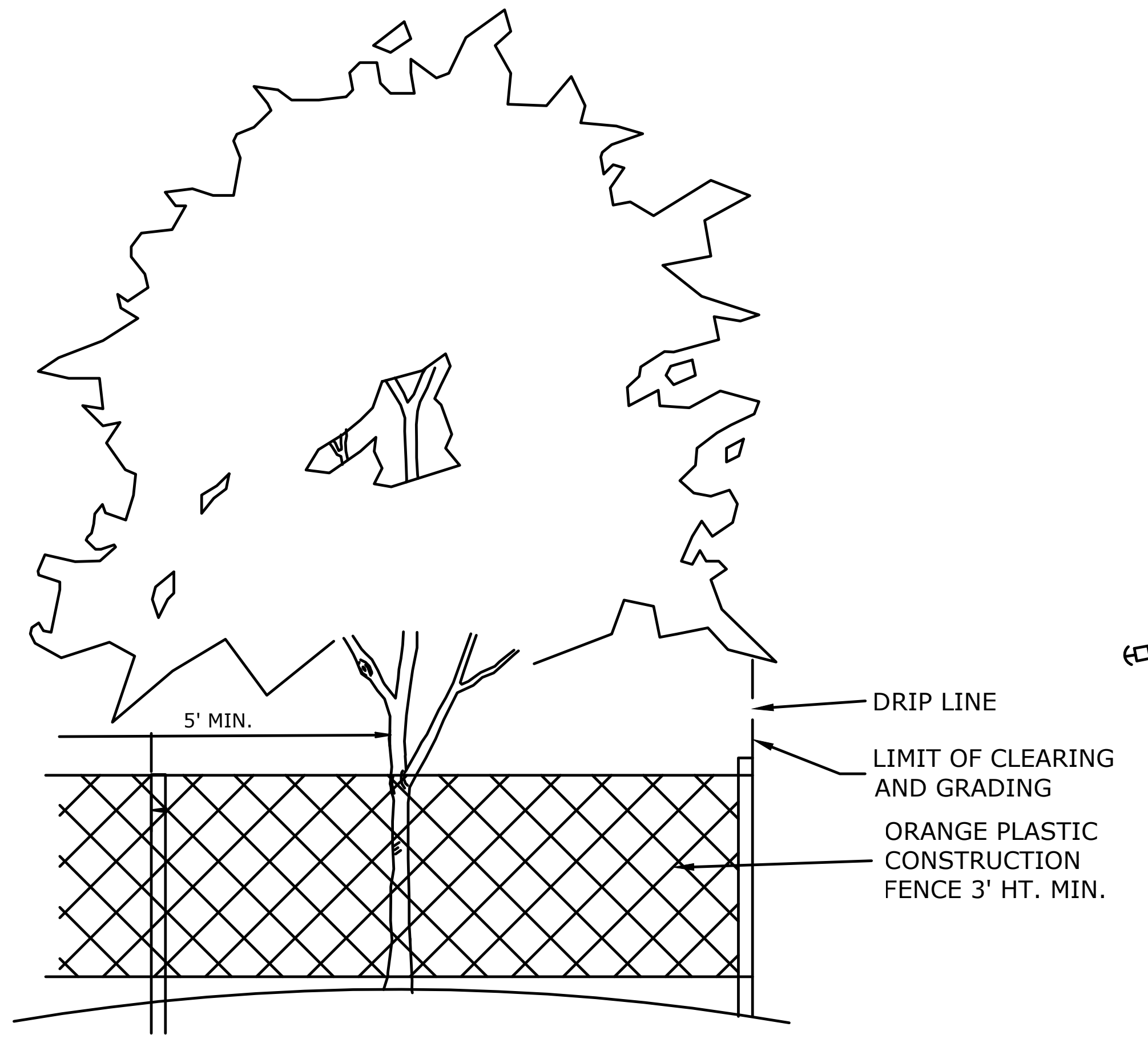


12" SEE NOTE 6
EXISTING GROUND
PERFORATED (METAL OR PLASTIC) STAND PIPE SEE NOTE 2 & 3
GEOTEXTILE (NON-WOVEN, AMOCO 4545 OR EQUAL)
2" BROKEN STONE
12" (MIN.) SEE NOTE 4
PIPE DIA.+48" MINIMUM
SEE NOTE 1

TEMPORARY CONSTRUCTION DEWATERING SUMP

NOT TO SCALE

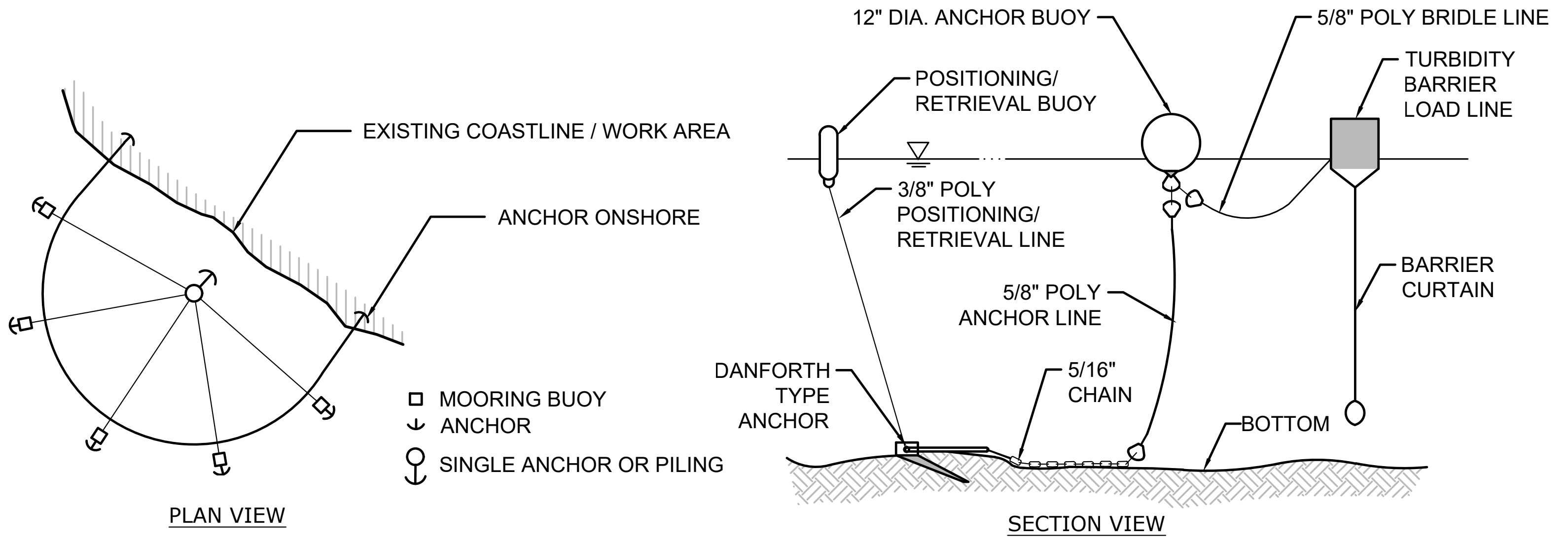
NOTES:
1. OVERALL SUMP PIT DIMENSIONS TO BE COMPATIBLE WITH ANTICIPATED SEEPAGE RATES AND PUMP TO BE USED.
2. THE STAND PIPE DIAMETER AND NUMBER OF PERFORATIONS TO BE COMPATIBLE WITH THE PUMP SIZE BEING USED.
3. PERFORATIONS IN THE STANDPIPE TO BE EITHER CIRCULAR OR SLOTS, PERFORATION SIZE SHALL NOT EXCEED 1/2" DIAMETER.
4. 2" BROKEN STONE SHALL EXTEND A MINIMUM OF 12" BELOW THE BOTTOM OF THE STANDPIPE.
5. A PROPERLY DESIGNED GEOTEXTILE TO BE PLACED BETWEEN THE EXISTING SOILS AND THE CRUSHED STONE BACKFILL.
6. THE STANDPIPE SHALL EXTEND A MINIMUM OF 12" ABOVE THE SURROUNDING GROUND.



5' MIN.
DRIP LINE
LIMIT OF CLEARING AND GRADING
ORANGE PLASTIC CONSTRUCTION FENCE 3' HT. MIN.

TREE PROTECTION DETAIL

NOT TO SCALE



EXISTING COASTLINE / WORK AREA
ANCHOR ONSHORE
□ MOORING BUOY
ANCHOR
SINGLE ANCHOR OR PILING
PLAN VIEW
12" DIA. ANCHOR BUOY
5/8" POLY BRIDLE LINE
POSITIONING/ RETRIEVAL BUOY
TURBIDITY BARRIER LOAD LINE
3/8" POLY POSITIONING/ RETRIEVAL LINE
BARRIER CURTAIN
5/8" POLY ANCHOR LINE
DANFORTH TYPE ANCHOR
5/16" CHAIN
BOTTOM
SECTION VIEW

NOTES:
1. FLOATING TURBIDITY BARRIER TO BE TOUGH GUY ANCHOR KIT OR APPROVED EQUAL.
2. BARRIER TO BE POLYPROPYLENE FILTER FABRIC.

FLOATING TURBIDITY BARRIER

NOT TO SCALE

DESCRIPTION	DATE	BY

SLR
231 MAIN STREET, SUITE 102
NEW PALTZ, NY 12561
845.633.8153
SLRCONSULTING.COM

SLR Engineering, Landscape Architecture,
and Land Surveying P.C.
Registration No. 083112

NOT FOR CONSTRUCTION
60% ADVANCED DESIGN

SEDIMENT AND EROSION CONTROLS

LONG DOCK PARK
SHORELINE REPAIR AND RESTORATION

8 LONG DOCK RD
BEACON, NY

DESIGNED	DRAWN	CHECKED
WAG	KJC	MAT

SCALE

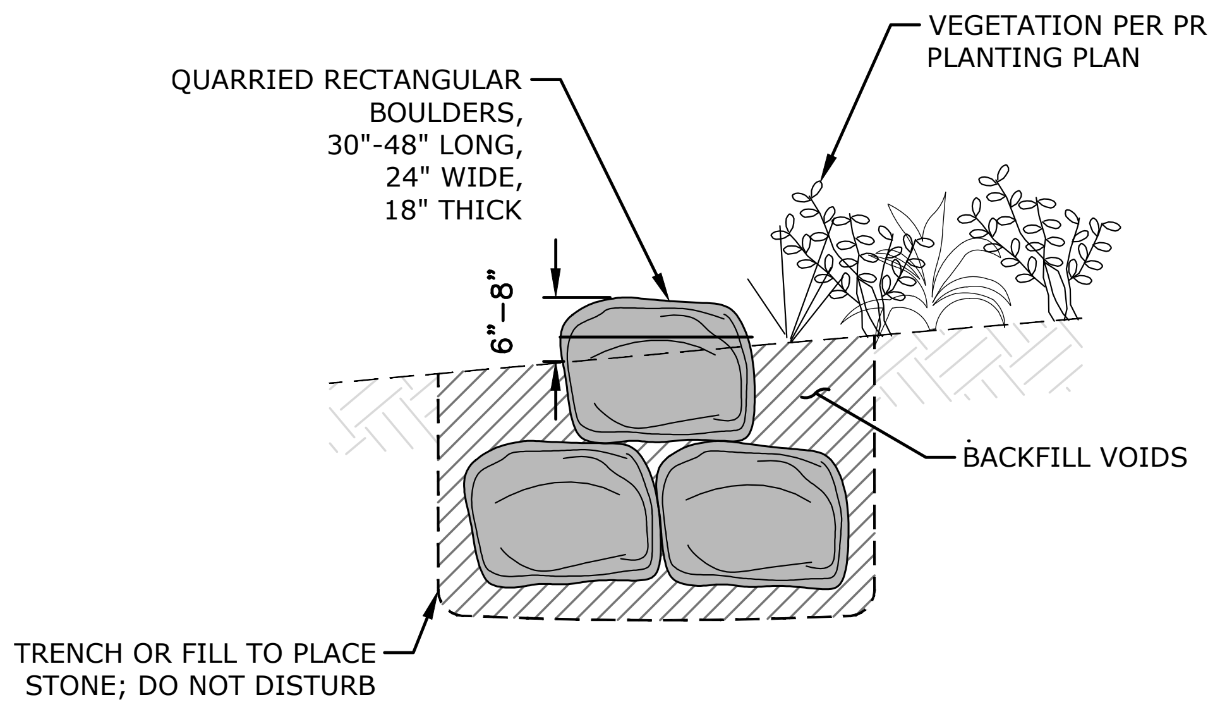
DATE: **FEBRUARY 25, 2026**

PROJECT NO.: **12787.00007**

SHEET NO.: **10 OF 12**

SHEET NAME: **DE-1**

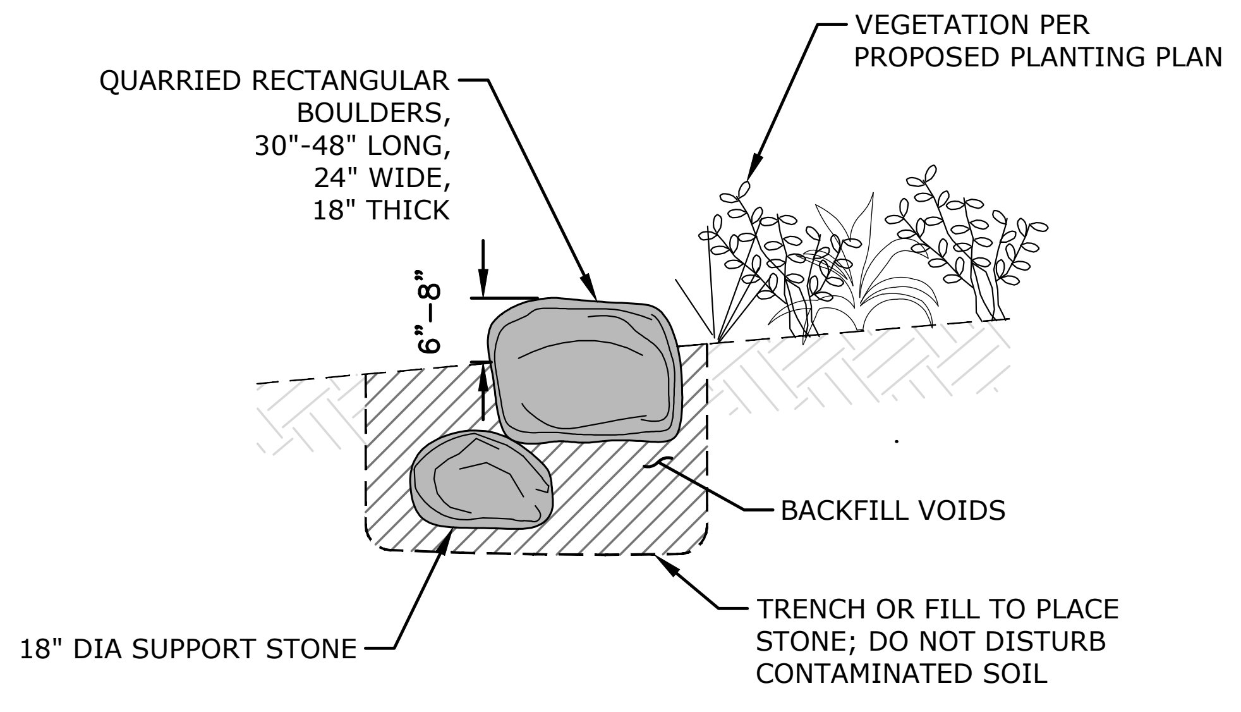
Drawing: W:\CADDESIGN\12787.00007-DE\CAD\CAD\BLD-DETAILS.DWG Layout Tab:DE-2
Plotted by: KATIE.CASSON On this date: Wed, 2026 February 25 - 1:02pm


QUARRIED RECTANGULAR BOULDERS, 30"-48" LONG, 24" WIDE, 18" THICK
VEGETATION PER PROPOSED PLANTING PLAN
6"-8"
BACKFILL VOIDS
TRENCH OR FILL TO PLACE STONE; DO NOT DISTURB CONTAMINATED SOIL

SECTION VIEW

BOULDER REVETMENT BANK SLOPE TREATMENT

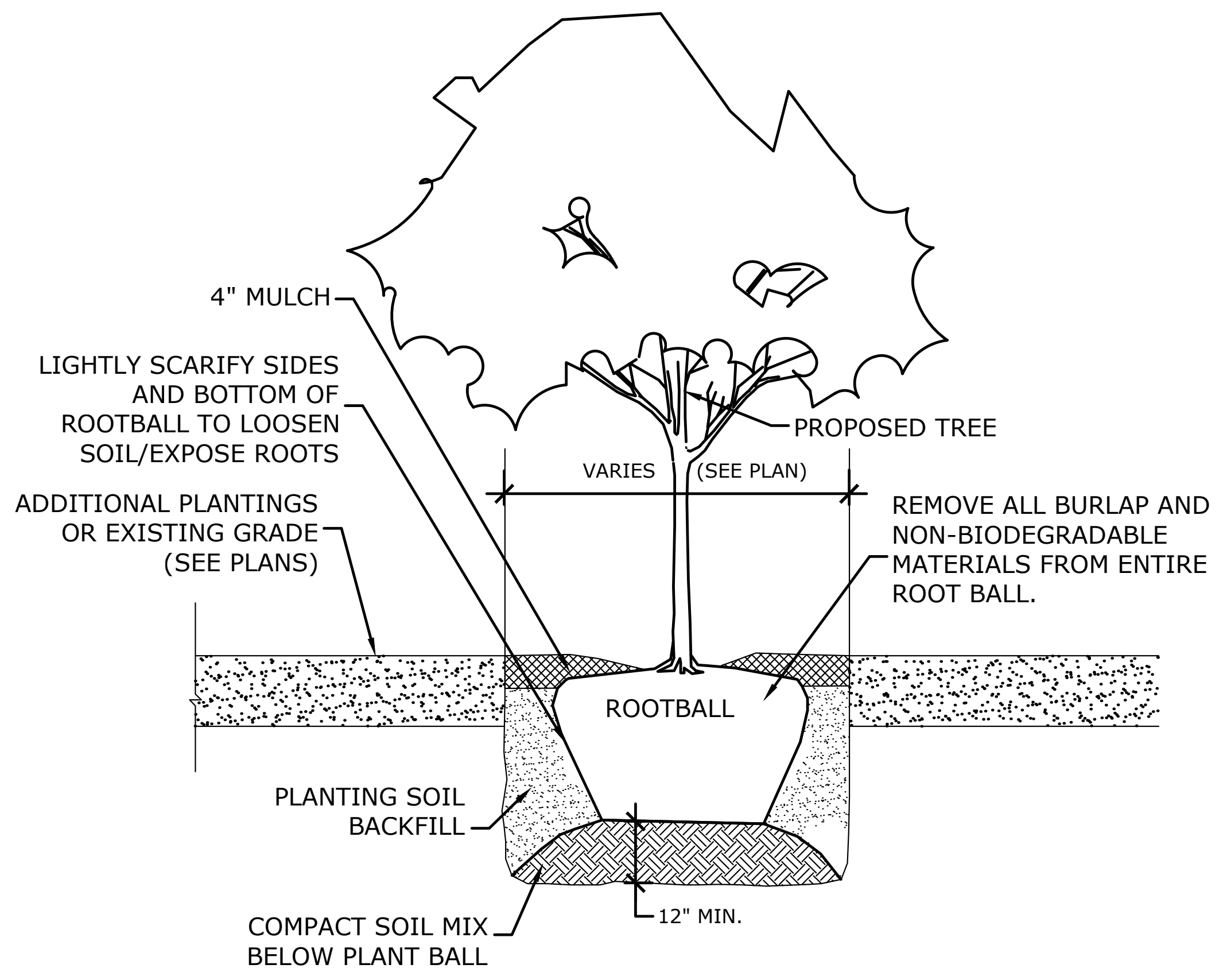
NOT TO SCALE


QUARRIED RECTANGULAR BOULDERS, 30"-48" LONG, 24" WIDE, 18" THICK
VEGETATION PER PROPOSED PLANTING PLAN
6"-8"
BACKFILL VOIDS
TRENCH OR FILL TO PLACE STONE; DO NOT DISTURB CONTAMINATED SOIL
18" DIA SUPPORT STONE

SECTION VIEW

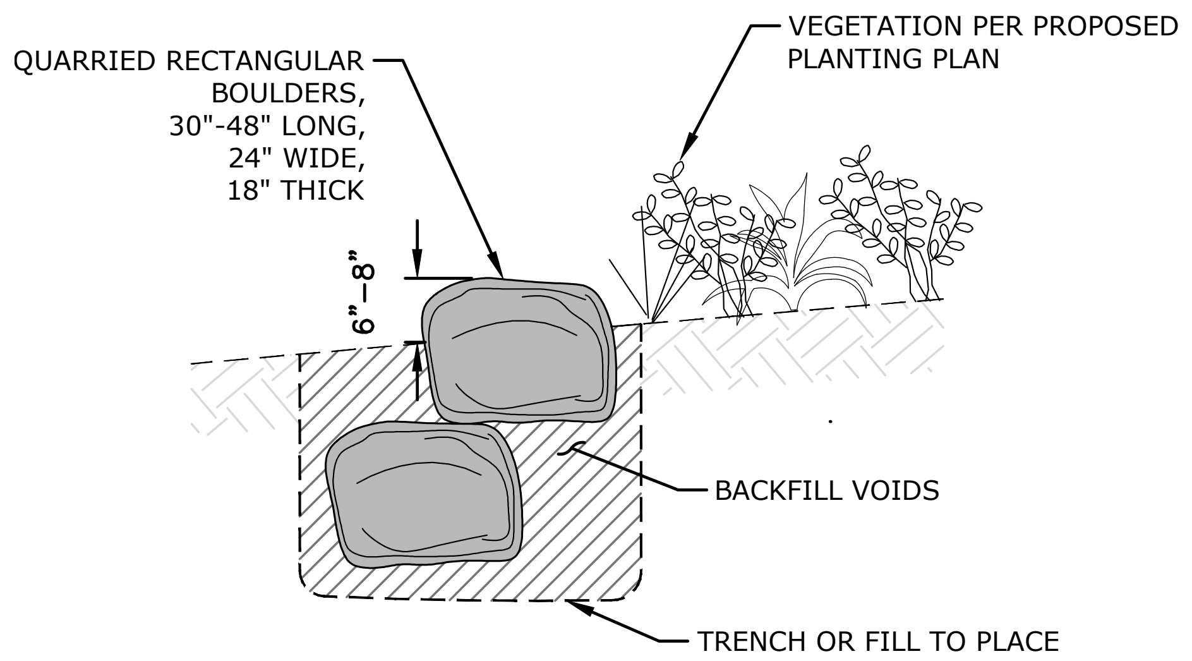
BOULDER REVETMENT WITH 18" DIA SUPPORT STONE

NOT TO SCALE


4" MULCH
LIGHTLY SCARIFY SIDES AND BOTTOM OF ROOTBALL TO LOOSEN SOIL/EXPOSE ROOTS
ADDITIONAL PLANTINGS OR EXISTING GRADE (SEE PLANS)
PROPOSED TREE
VARIES (SEE PLAN)
REMOVE ALL BURLAP AND NON-BIODEGRADABLE MATERIALS FROM ENTIRE ROOT BALL.
ROOTBALL
PLANTING SOIL BACKFILL
COMPACT SOIL MIX BELOW PLANT BALL
12" MIN.

TREE PLANTING DETAIL

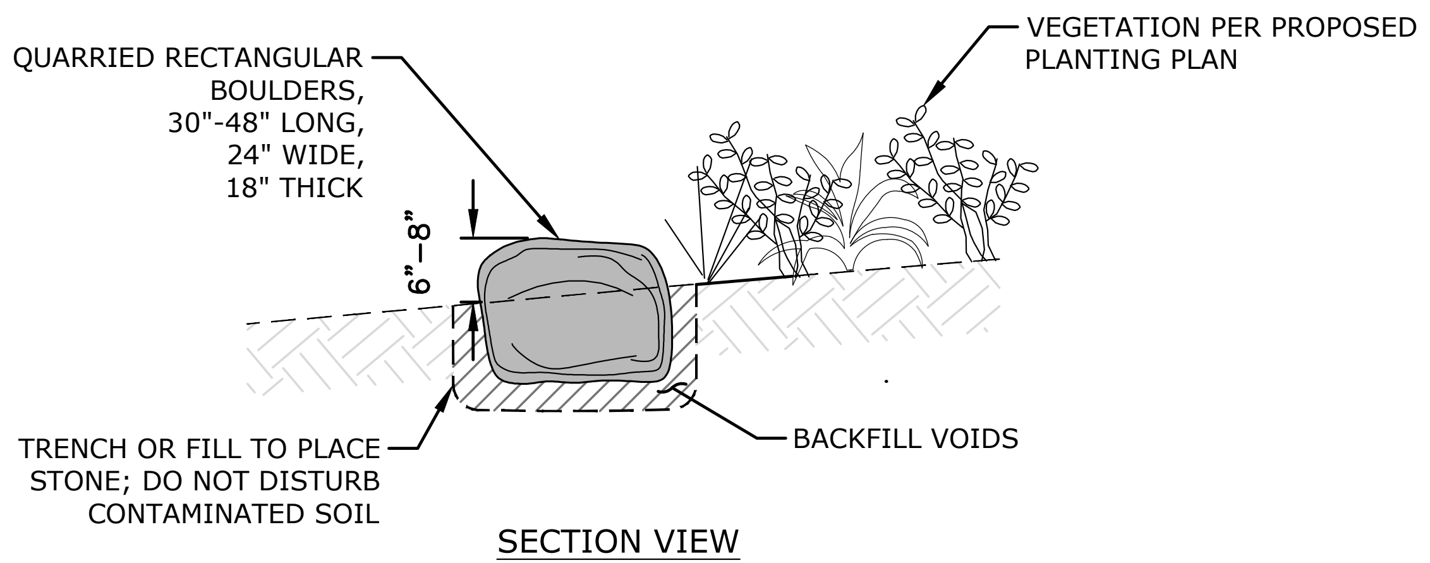
NOT TO SCALE


QUARRIED RECTANGULAR BOULDERS, 30"-48" LONG, 24" WIDE, 18" THICK
VEGETATION PER PROPOSED PLANTING PLAN
6"-8"
BACKFILL VOIDS
TRENCH OR FILL TO PLACE STONE; DO NOT DISTURB CONTAMINATED SOIL

SECTION VIEW

BOULDER REVETMENT WITH RECTANGULAR SUPPORT STONE

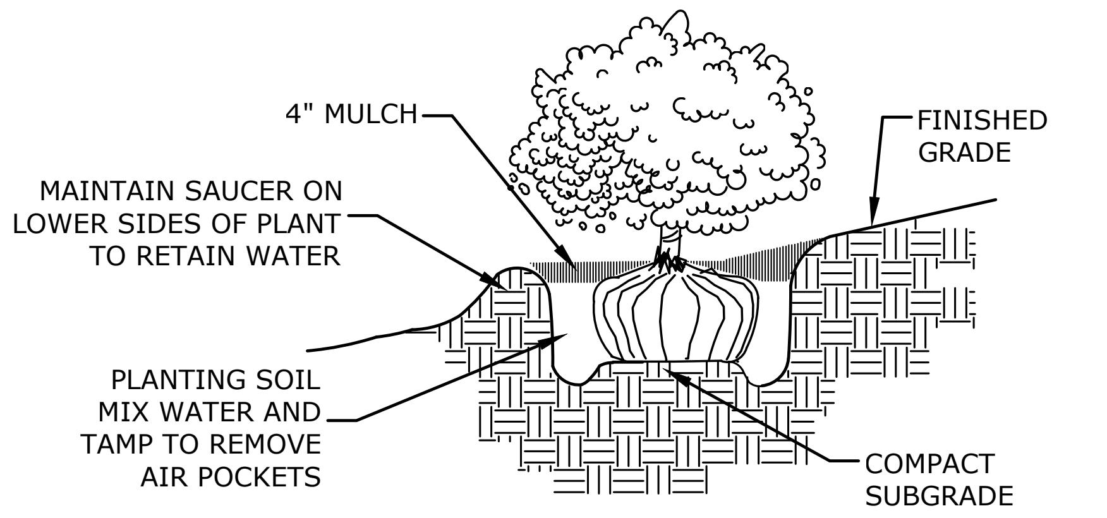
NOT TO SCALE


QUARRIED RECTANGULAR BOULDERS, 30"-48" LONG, 24" WIDE, 18" THICK
VEGETATION PER PROPOSED PLANTING PLAN
6"-8"
TRENCH OR FILL TO PLACE STONE; DO NOT DISTURB CONTAMINATED SOIL
BACKFILL VOIDS

SECTION VIEW

SINGLE BOULDER REVETMENT

NOT TO SCALE


4" MULCH
MAINTAIN SAUCER ON LOWER SIDES OF PLANT TO RETAIN WATER
PLANTING SOIL MIX WATER AND TAMP TO REMOVE AIR POCKETS
FINISHED GRADE
COMPACT SUBGRADE

NOTE:
UNLESS OTHERWISE DIRECTED SHREDDED MULCH SHALL BE PLACED TO A LIMIT OF ONE FOOT BEYOND THE CENTER OF THE OUTERMOST SHRUBS IN PLANTING BED. SPECIES SHALL BE EQUALLY DISTRIBUTED THROUGHOUT THE SITE.

SHRUB PLANTING

NOT TO SCALE

BANK SLOPE TREATMENTS

NOTES:

1. EMBED RECTANGULAR BOULDER REVETMENTS SUCH THAT STONES SIT 6"-8" ABOVE GRADE. IF PLACEMENT IS WITHIN CONTAMINATED SOIL PARCELS (AS INDICATED ON LAYOUT AND CROSS SECTIONS), DO NOT BURY STONES, INSTEAD, PLACE ON EXISTING GRADE AND FILL SUCH THAT STONES EXTEND 6"-8" ABOVE GRADE.

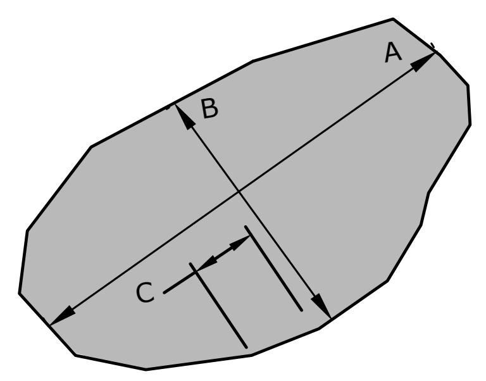
2. FINISHED ELEVATION OF THE STONES AS SHOWN ON CROSS SECTIONS

3. IF BEDROCK IS ENCOUNTERED THE FIRST COURSE OF ROCK SHALL BE PINNED A MINIMUM OF 2 TIMES PER ROCK UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THE DRILLED HOLES SHALL BE A MINIMUM OF 1 ½" IN DIAMETER AND EXTEND A MINIMUM OF 12" INTO THE ROCK BELOW. A #8 REBAR SHALL BE USED AS THE PIN IN EACH HOLE. THE REBAR SHALL BE CUT SO THAT IT IS RECESSED 2" TO 6" DOWN INTO THE ROCK.

MATERIALS:

QUARRIED RECTANGULAR BOULDERS: SHALL BE GENERALLY RECTANGULAR AND FLAT IN SHAPE, AND SUITABLE FOR HAND STACKING AND PLACEMENT SUCH THAT THEY FORM A STRONG, STABLE, INTERLOCKING, AND GENERALLY FLAT SURFACE WHEN COMPLETED. STONE SHALL BE IMPORTED FROM OFF-SITE BUT SHALL BE CHOSEN TO EXISTING BOULDERS FOUND ON SITE IN COLOR, SHAPE, AND GENERAL STONE TYPE. SAMPLES SHALL BE SUBMITTED FOR APPROVAL.

18" DIA SUPPORT BOULDERS: SHALL BE GENERALLY SPHERICAL OR OVAL IN SHAPE AND SUITABLE FOR PLACEMENT INSIDE A STREAM CHANNEL SUCH THAT THEY MATCH THE CHARACTER, STYLE, SIZE AND COLOR OF EXISTING STREAM BED MATERIAL UPSTREAM AND DOWNSTREAM OF THE SITE. STONE MAY BE IMPORTED FROM OFF-SITE, OR REUSED FROM ON-SITE. SAMPLES SHALL BE SUBMITTED FOR APPROVAL.



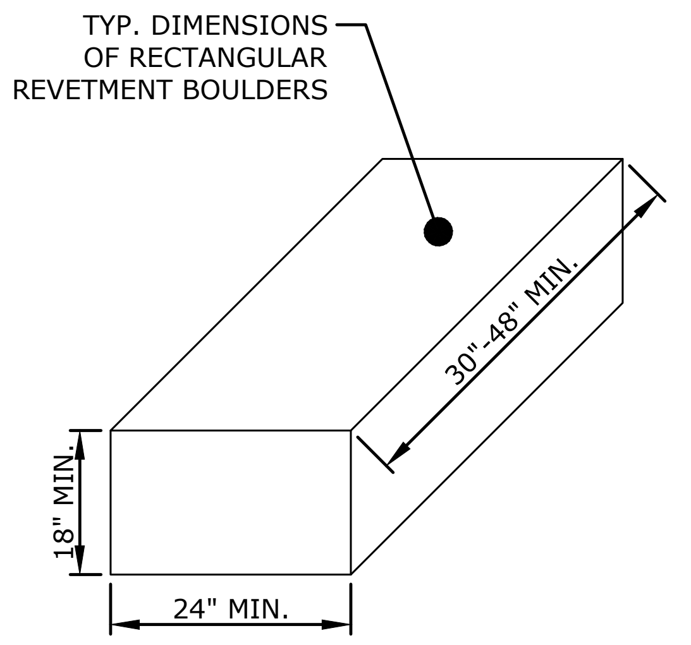
NOTES:

A. LONGEST AXIST (LENGTH)
B. INTERMEDIATE AXIS (WIDTH)
C. SHORTEST AXIST (THICKNESS/DEPTH)

1. THE "AVERAGE DIAMETER" (DIAMETER) OF A SINGLE, IRREGULARLY SHAPED STONE SHALL BE MEASURED ALONG ITS MEDIAN AXIS, ILLUSTRATED ABOVE AS THE "B" AXIS.

ROCK MEASUREMENT

NOT TO SCALE


TYP. DIMENSIONS OF RECTANGULAR REVETMENT BOULDERS
30"-48" MIN.
18" MIN.
24" MIN.

RECTANGULAR BOULDER DIMENSIONS

NOT TO SCALE

SLR
231 MAIN STREET, SUITE 102
NEW PALTZ, NY 12561
845.633.8153
SLRCONSULTING.COM

SLR Engineering, Landscape Architecture,
and Land Surveying P.C.
Registration No. 083112

DESCRIPTION	DATE	BY

NOT FOR CONSTRUCTION
60% ADVANCED DESIGN

DETAILS

LONG DOCK PARK
SHORELINE REPAIR AND RESTORATION

8 LONG DOCK RD
BEACON, NY

WAG	KJC	MAT
DESIGNED	DRAWN	CHECKED

SCALE

FEBRUARY 25, 2026
DATE

12787.00007
PROJECT NO.

11 OF 12
SHEET NO.

DE-2
SHEET NAME

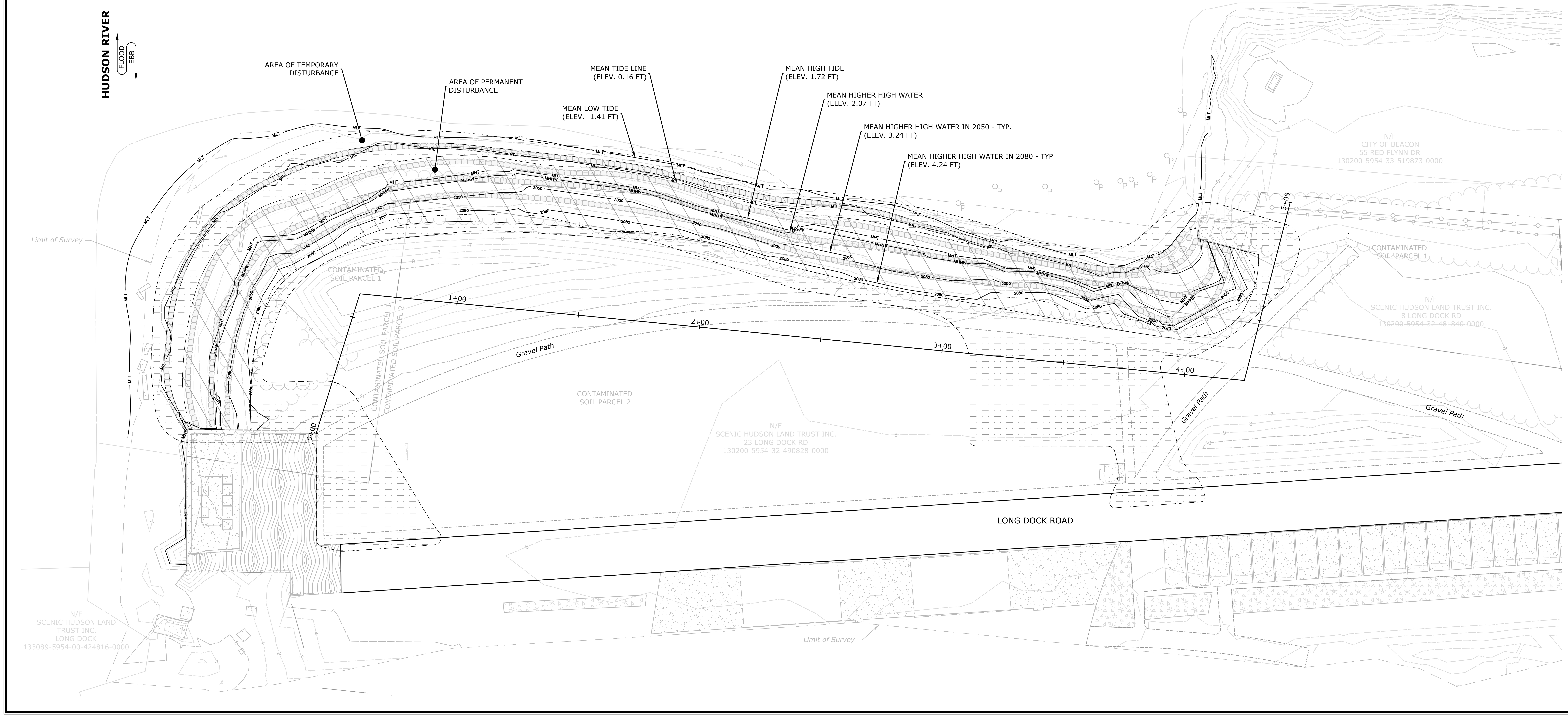
Drawing: W:\CADDESIGN\12787.00007-DE\CAD\CAD\BLD-REGULATED-RESOURCES.DWG Layout Tab:RR-1
Plotted by: KATIE.CASSON On this date: Wed, 2026 February 25 - 1:03pm

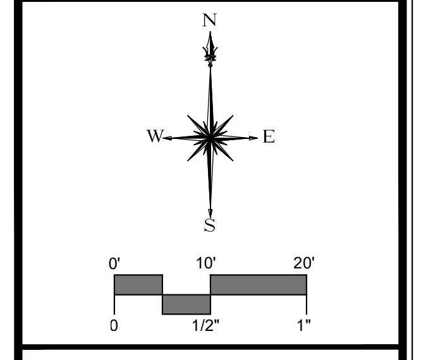
REGULATED RESOURCE IMPACTS

REGULATED AREA	AREA OF DISTURBANCE (TEMPORARY AND PERMANENT)(AC)	AREA OF PERMANENT DISTURBANCE (AC)	DISTURBANCE AREA DUE TO EXCAVATION (AC)	DISTURBANCE AREA DUE TO FILL (AC)	VOLUME OF MATERIAL EXPORTED (CY)	VOLUME OF FILL IMPORTED (CY)	LENGTH OF DISTURBANCE ALONG SHORELINE (LF)
TOTAL PROJECT AREA	0.73	0.38	0.14	0.31	415	745	495
BELOW MEAN HIGH TIDE (MHT)	0.18	0.17	0.12	0.17	395	345	495
BELOW TOP OF BANK	0.43	0.31	0.14	0.31	415	730	495

LEGEND

MLT	MEAN LOW TIDE (MLT) ELEV. = -1.41 FT
MTL	MEAN TIDE LINE (MTL) ELEV. = 0.16 FT
MHT	MEAN HIGH TIDE (MHT) ELEV. = 1.72 FT
MHHW	MEAN HIGHER HIGH WATER (MHHW) ELEV. = 2.07 FT
2050	MEAN HIGHER HIGH WATER IN 2050 ELEV. = 3.24 FT
2080	MEAN HIGHER HIGH WATER IN 2080 ELEV. = 4.24 FT
- - - -	TOP OF BANK
▨	AREA OF TEMPORARY DISTURBANCE
▨	AREA OF PERMANENT DISTURBANCE


HUDSON RIVER
FLOOD
EBB
AREA OF TEMPORARY DISTURBANCE
AREA OF PERMANENT DISTURBANCE
MEAN TIDE LINE (ELEV. 0.16 FT)
MEAN LOW TIDE (ELEV. -1.41 FT)
MEAN HIGH TIDE (ELEV. 1.72 FT)
MEAN HIGHER HIGH WATER (ELEV. 2.07 FT)
MEAN HIGHER HIGH WATER IN 2050 - TYP. (ELEV. 3.24 FT)
MEAN HIGHER HIGH WATER IN 2080 - TYP (ELEV. 4.24 FT)
MLT
MTL
MHT
MHHW
2050
2080
Limit of Survey
CONTAMINATED SOIL PARCEL 1
CONTAMINATED SOIL PARCEL 2
CONTAMINATED SOIL PARCEL 1
CONTAMINATED SOIL PARCEL 2
0+00
1+00
2+00
3+00
4+00
5+00
Gravel Path
Gravel Path
Gravel Path
N/F CITY OF BEACON 55 RED FLYNN DR 130200-5954-33-519873-0000
CONTAMINATED SOIL PARCEL 1
N/F SCENIC HUDSON LAND TRUST INC. 8 LONG DOCK RD 130200-5954-32-481840-0000
N/F SCENIC HUDSON LAND TRUST INC. 23 LONG DOCK RD 130200-5954-32-490828-0000
LONG DOCK ROAD
N/F SCENIC HUDSON LAND TRUST INC. LONG DOCK 133089-5954-00-424816-0000
Limit of Survey


N
W
E
S
0'
10'
20'
0
1/2"
1"

DESCRIPTION	DATE	BY

SLR
231 MAIN STREET, SUITE 102
NEW PALTZ, NY 12561
845.633.8153
SLRCONSULTING.COM

SLR Engineering, Landscape Architecture,
and Land Surveying P.C.
Registration No. 083112

NOT FOR CONSTRUCTION
60% ADVANCED DESIGN

REGULATED RESOURCES

LONG DOCK PARK
SHORELINE REPAIR AND RESTORATION

8 LONG DOCK RD
BEACON, NY

DESIGNED	DRAWN	CHECKED
WAG	KJC	MAT

SCALE 1"=20'

DATE FEBRUARY 25, 2026

PROJECT NO. 12787.00007

SHEET NO. 12 OF 12

SHEET NAME **RR-1**

APPENDIX B

APPENDIX L – EXCAVATION WORK PLAN (EWP)

L-1 NOTIFICATION

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination, the site owner or their representative will notify the NYSDEC. Table 1 includes contact information for the above notification. The information on this table will be updated as necessary to provide accurate contact information. A full listing of site-related contact information is provided in Appendix C.

Table [1]: Notifications*

Caroline Jalanti NYSDEC Project Manager	Tel: (518) 402-9650 Email: Caroline.Jalanti@dec.ny.gov
Edward L. Moore, P.E. (NYSDEC, Department's Region 3 Hazardous Waste Engineer)	Tel: (845)-265-3000 Email: Edward.Moore@dec.ny.gov
Kelly A. Lewandowski, P.E. (NYSDEC, Chief of Site Control)	Tel: (518) 402-9553 Email: Kelly.Lewandowski@dec.ny.gov
Anthony Perretta (NYSDOH, Project Manager)	Tel: (518) 402-7860 Email: BEEI@health.ny.gov

* Note: Notifications, recipients, phone numbers and email addresses are subject to change and will be updated as necessary.

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent of excavation, plans/drawings for site re-grading, intrusive elements or utilities to be installed below the soil cover, estimated volumes of contaminated soil to be excavated and any work that may impact an engineering control;
- A summary of environmental conditions anticipated to be encountered in the work areas, including the nature and concentration levels of contaminants of concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling;

- A schedule for the work, detailing the start and completion of all intrusive work;
- A summary of the applicable components of this EWP;
- A statement that the work will be performed in compliance with this EWP and 29 CFR 1910.120;
- A copy of the contractor's health and safety plan (HASP), in electronic format, if it differs from the HASP provided in Appendix I of this SMP;
- Identification of disposal facilities for potential waste streams; and
- Identification of sources of any anticipated backfill, along with all required chemical testing results.

L-2 SOIL SCREENING METHODS

Visual, olfactory and instrument-based (e.g. photoionization detector) soil screening will be performed by a qualified environmental professional during all excavations into known or potentially contaminated material (remaining contamination). Soil screening will be performed when invasive work is done and will include all excavation and invasive work performed during development, such as excavations for foundations and utility work, after issuance of the COC.

Soils will be segregated based on previous environmental data and screening results into material that requires off-site disposal and material that requires testing to determine if the material can be reused on-site as soil beneath a cover or if the material can be used as cover soil. Further discussion of off-site disposal of materials and on-site reuse is provided in Section L-5 of this Appendix.

L-3 SOIL STAGING METHODS

Soil stockpiles will be continuously encircled with a berm and/or silt fence. Hay bales will be used as needed near catch basins, surface waters and other discharge points.

Stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.

Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by the NYSDEC.

L-4 MATERIALS EXCAVATION AND LOAD-OUT

A qualified environmental professional or person under their supervision will oversee all invasive work and the excavation and load-out of all excavated material.

The owner of the property and remedial party (if applicable) and its contractors are responsible for safe execution of all invasive and other work performed under this Plan.

The presence of utilities and easements on the site will be investigated by the qualified environmental professional. It will be determined whether a [material] risk or impediment to the planned work under this SMP is posed by utilities or easements on the site.

Loaded vehicles leaving the site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and NYSDOT requirements (and all other applicable transportation requirements).

A truck wash will be operated on-site, as appropriate. The qualified environmental professional will be responsible for ensuring that all outbound trucks will be washed at the truck wash before leaving the site until the activities performed under this section are complete Truck wash waters will be collected and disposed of off-site in an appropriate manner.

Locations where vehicles enter or exit the site shall be inspected daily for evidence of off-site soil tracking.

The qualified environmental professional will be responsible for ensuring that all egress points for truck and equipment transport from the site are clean of dirt and other materials derived from the site during intrusive excavation activities. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to site-derived materials.

L-5 MATERIALS TRANSPORT OFF-SITE

All transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed and trucks properly placarded.

Material transported by trucks exiting the site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

Truck transport routes are provided in Figure 15 - Truck Route Map All trucks loaded with site materials will exit the vicinity of the site using only these approved truck routes. This is the most appropriate route and takes into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off-site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport; [(g) community input [where necessary]

Trucks will be prohibited from stopping and idling in the neighborhood outside the project site.

Egress points for truck and equipment transport from the site will be kept clean of dirt and other materials during site remediation and development.

Queuing of trucks will be performed on-site in order to minimize off-site disturbance. Off-site queuing will be prohibited.

L-6 MATERIALS DISPOSAL OFF-SITE

All material excavated and removed from the site will be treated as contaminated and regulated material and will be transported and disposed in accordance with all local, State (including 6NYCRR Part 360) and Federal regulations. If disposal of material from this site is proposed for unregulated off-site disposal (i.e. clean soil removed for development purposes), a formal request with an associated plan will be made to the NYSDEC. Unregulated off-site management of materials from this site will not occur without formal NYSDEC approval.

Off-site disposal locations for excavated soils will be identified in the pre-excavation notification. This will include estimated quantities and a breakdown by class of disposal facility if appropriate, i.e. hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, C/D recycling facility, etc. Actual disposal quantities and associated documentation will be reported to the NYSDEC in the Periodic Review Report. This documentation will include: waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

Non-hazardous historic fill and contaminated soils taken off-site will be handled, at minimum, as a Municipal Solid Waste per 6NYCRR Part 360-1.2. Material that does not meet Unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6NYCRR Part 360-16 Registration Facility).

L-7 MATERIALS REUSE ON-SITE

The qualified environmental professional will ensure that procedures defined for materials reuse in this SMP are followed and that unacceptable material does not remain on-site. Contaminated on-site material, including historic fill and contaminated soil, that is acceptable for reuse on-site will be placed below the demarcation layer or impervious surface, and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.

Any demolition material proposed for reuse on-site will be sampled for asbestos and the results will be reported to the NYSDEC for acceptance. Concrete crushing or processing on-site will not be performed without prior NYSDEC approval. Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the site will not be reused on-site.

L-8 FLUIDS MANAGEMENT

All liquids to be removed from the site, including but not limited to, excavation dewatering, decontamination waters and groundwater monitoring well purge and development waters, will be handled, transported and disposed in accordance with applicable local, State, and Federal regulations. Dewatering, purge and development fluids will not be recharged back to the land surface or subsurface of the site, and will be managed off-site, unless prior approval is obtained from NYSDEC.

Discharge of water generated during large-scale construction activities to surface waters (i.e. a local pond, stream or river) will be performed under a SPDES permit.

L-9 COVER SYSTEM RESTORATION

After the completion of soil removal and any other invasive activities the cover system will be restored in a manner that complies with the [RAWP, decision document, or Record of Decision]. The existing cover system is comprised of a minimum of 12 or 24 inches of clean soil, asphalt pavement, concrete covered sidewalks and concrete building, etc.]. The demarcation layer, consisting of orange snow fencing material will be replaced to provide a visual reference to the top of the remaining contamination zone, the zone that requires adherence to special conditions for disturbance of remaining contaminated soils defined in this SMP. If the type of cover system changes from that which exists prior to the excavation (i.e., a soil cover is replaced by asphalt), this will constitute a modification of the cover element of the remedy and the upper surface of the remaining contamination. A figure showing the modified surface will be included in the subsequent Periodic Review Report and in an updated SMP.

L-10 BACKFILL FROM OFF-SITE SOURCES

All materials proposed for import onto the site will be approved by the qualified environmental professional and will be in compliance with provisions in this SMP prior to receipt at the site. A Request to Import/Reuse Fill or Soil form, which can be found at http://www.dec.ny.gov/regulations/67386.html, will be prepared and submitted to the NYSDEC project manager allowing a minimum of 5 business days for review.

Material from industrial sites, spill sites, or other environmental remediation sites or potentially contaminated sites will not be imported to the site.

All imported soils will meet the backfill and cover soil quality standards established in 6NYCRR 375-6.7(d). Based on an evaluation of the land use, protection of groundwater and protection of ecological resources criteria, the resulting soil quality standards are listed in Tables L-1a through L-1d. Soils that meet 'exempt' fill requirements under 6

NYCRR Part 360, but do not meet backfill or cover soil objectives for this site, will not be imported onto the site without prior approval by NYSDEC. Solid waste will not be imported onto the site.

Trucks entering the site with imported soils will be securely covered with tight fitting covers. Imported soils will be stockpiled separately from excavated materials and covered to prevent dust releases.

L-11 STORMWATER POLLUTION PREVENTION

Barriers and hay bale checks will be installed and inspected once a week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by the NYSDEC. All necessary repairs shall be made immediately.

Accumulated sediments will be removed as required to keep the barrier and hay bale check functional.

All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials.

Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

Erosion and sediment control measures identified in the SMP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters.

Silt fencing or hay bales will be installed around the entire perimeter of the construction area.

L-12 EXCAVATION CONTINGENCY PLAN

If underground tanks or other previously unidentified contaminant sources are found during post-remedial subsurface excavations or development related construction, excavation activities will be suspended until sufficient equipment is mobilized to address the condition.

Sampling will be performed on product, sediment and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for a full list of analytes (TAL metals; TCL volatiles and semi-volatiles, TCL pesticides and PCBs), unless the site history and previous sampling results provide a sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to the NYSDEC for approval prior to sampling.

Identification of unknown or unexpected contaminated media identified by screening during invasive site work will be promptly communicated by phone to NYSDEC's Project Manager. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline. These findings will be also included in the Periodic Review Report.

L-13 COMMUNITY AIR MONITORING PLAN

A figure showing the location of air sampling stations based on generally prevailing wind conditions will be provided. These locations will be adjusted on a daily or more frequent basis based on actual wind directions to provide an upwind and at least two downwind monitoring stations.

Exceedances of action levels listed in the CAMP will be reported to NYSDEC and NYSDOH Project Managers.

L-14 ODOR CONTROL PLAN

This odor control plan is capable of controlling emissions of nuisance odors off-site. Specific odor control methods to be used on a routine basis will include applying a deodorant to exposed soils to mitigate odors. If nuisance odors are identified at the site boundary, or if odor complaints are received, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of any other complaints about the project. Implementation of all odor controls, including the halt of work, is the responsibility of the remedial party's Remediation Engineer, and any measures that are implemented will be discussed in the Periodic Review Report.

All necessary means will be employed to prevent on- and off-site nuisances. At a minimum, these measures will include: (a) limiting the area of open excavations and size of soil stockpiles; (b) shrouding open excavations with tarps and other covers; and (c) using foams to cover exposed odorous soils. If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-site disposal; (e) use of chemical odorants in spray or misting systems; and, (f) use of staff to monitor odors in surrounding neighborhoods.

If nuisance odors develop during intrusive work that cannot be corrected, or where the control of nuisance odors cannot otherwise be achieved due to on-site conditions or close proximity to sensitive receptors, odor control will be achieved by sheltering the excavation and handling areas in a temporary containment structure equipped with appropriate air venting/filtering systems.

L-15 DUST CONTROL PLAN

A dust suppression plan that addresses dust management during invasive on-site work will include, at a minimum, the items listed below:

- Dust suppression will be achieved through the use of a dedicated on-site water truck for road wetting. The truck will be equipped with a water cannon capable of spraying water directly onto off-road areas including excavations and stockpiles.
- Clearing and grubbing of larger sites will be done in stages to limit the area of exposed, unvegetated soils vulnerable to dust production.
- Gravel will be used on roadways to provide a clean and dust-free road surface.
- On-site roads will be limited in total area to minimize the area required for water truck sprinkling.

L-16 OTHER NUISANCES

A plan for rodent control will be developed and utilized by the contractor prior to and during site clearing and site grubbing, and during all remedial work.

A plan will be developed and utilized by the contractor for all remedial work to ensure compliance with local noise control ordinances.

Table L-1a: ACLs for Imported Fill or Soil - VOCs

VOCs	Allowable Constituent Levels (ACLs)		
	Unrestricted Use	**Restricted-Residential Use**	**Restricted Commercial Use**
1,1,1-Trichloroethane	0.68	0.68	0.68
1,1-Dichloroethane	0.27	0.27	0.27
1,1-Dichloroethylene (1,1-DCE)	0.33	0.33	0.33
1,2,4-Trimethylbenzene	3.6	3.6	3.6
1,2-Dichlorobenzene	1.1	1.1	1.1
1,2-Dichloroethane	0.02	0.02	0.02
1,3,5-Trimethylbenzene	8.4	8.4	8.4
1,3-Dichlorobenzene	2.4	2.4	2.4
1,4-Dichlorobenzene	1.8	1.8	1.8
1,4-Dioxane	0.1	0.1	0.1
2-Butanone (MEK)	0.12	0.12	0.12
Acetone	0.05	0.05	0.05
Benzene	0.06	0.06	0.06
Carbon tetrachloride	0.76	0.76	0.76
Chlorobenzene	1.1	1.1	1.1
Chloroform	0.37	0.37	0.37
cis-1,2-Dichloroethylene (cis-DCE)	0.25	0.25	0.25
Ethyl Benzene	1	1	1
Isopropylbenzene	2.3	2.3	2.3
Methyl tert-butyl ether (MTBE)	0.93	0.93	0.93
Methylene chloride	0.05	0.05	0.05
n-Butylbenzene	12	12	12
n-Propylbenzene	3.9	3.9	3.9
p-Isopropyltoluene	10	10	10
sec-Butylbenzene	11	11	11
tert-Butylbenzene	5.9	5.9	5.9
Tetrachloroethylene (PCE)	1.3	1.3	1.3
Toluene	0.7	0.7	0.7
trans-1,2-Dichloroethylene (trans-DCE)	0.19	0.19	0.19
Trichloroethylene (TCE)	0.47	0.47	0.47
Vinyl chloride (VC)	0.02	0.02	0.02
Xylenes, Total	0.26	1.6	1.6

ACLs (Allowable Constituent Levels) in mg/Kg (ppm)

Notes: ACLs based on NYSDEC DER-10 Appendix 5, Allowable Constituent Levels for Imported Fill or Soil Subdivision 5.4(e)

Table L-1b: ACLs for Imported Fill or Soil - SVOCs

SVOCs	Allowable Constituent Levels (ACLs)		
	Unrestricted Use	**Restricted-Residential Use**	**Restricted Commercial Use**
2-Methylphenol	0.33	0.33	0.33
3- & 4-Methylphenols	0.33	0.33	0.33
Acenaphthene	20	98	98
Acenaphthylene	100	100	107
Anthracene	100	100	500
Benzo(a)anthracene	1	1	1
Benzo(a)pyrene	1	1	1
Benzo(b)fluoranthene	1	1	1.7
Benzo(g,h,i)perylene	100	100	500
Benzo(k)fluoranthene	0.8	1.7	1.7
Chrysene	1	1	1
Dibenzo(a,h)anthracene	0.33	0.33	0.56
Dibenzofuran	7	59	210
Fluoranthene	100	100	500
Fluorene	30	100	386
Hexachlorobenzene	0.33	1.2	3.2
Indeno(1,2,3-cd)pyrene	0.5	0.5	5.6
Naphthalene	12	12	12
Pentachlorophenol	0.8	0.8	0.8
Phenanthrene	100	100	500
Phenol	0.33	0.33	0.33
Pyrene	100	100	500

ACLs (Allowable Constituent Levels) in mg/Kg (ppm)

Notes: ACLs based on NYSDEC DER-10 Appendix 5, Allowable Constituent Levels for Imported Fill or Soil Subdivision 5.4(e)

Table L-1c: ACLs for Imported Fill or Soil - TAL Metals

	Allowable Constituent Levels (ACLs)		
	Unrestricted Use	**Restricted-Residential Use**	**Restricted Commercial Use**
Arsenic	13	16	16
Barium	350	400	400
Beryllium	7.2	47	47
Cadmium	2.5	4.3	7.5
Chromium	30	180	1,500
Chromium (hexavalent)	1	19	19
Copper	50	270	270
Lead	63	400	450
Manganese	1,600	2,000	2,000
Mercury	0.18	0.73	0.73
Nickel	30	130	130
Selenium	3.9	4	4
Silver	2	8.3	8.3
Zinc	109	2,480	2,480
Cyanide	27	27	27

ACLs (Allowable Constituent Levels) in mg/Kg (ppm)

Notes: ACLs based on NYSDEC DER-10 Appendix 5, Allowable Constituent Levels for Imported Fill or Soil Subdivision 5.4(e)

Table L-1d: ACLs for Imported Fill or Soil - Pesticides/PCBs

	Allowable Constituent Levels (ACLs)		
	Unrestricted Use	**Restricted-Residential Use**	**Restricted Commercial Use**
2,4,5-TP Acid (Silvex)	3.8	3.8	3.8
4,4'-DDD	0.0033	13	14
4,4'-DDE	0.0033	8.9	17
4,4'-DDT	0.0033	7.9	47
Aldrin	0.005	0.097	0.19
alpha-BHC	0.02	0.02	0.02
alpha-Chlordane	0.094	2.9	2.9
beta-BHC	0.036	0.09	0.09
Chlordane (total)	NA	NA	NA
delta-BHC	0.04	0.25	0.25
Dieldrin	0.005	0.1	0.1
Endosulfan I	2.4	24	102
Endosulfan II	2.4	24	102
Endosulfan sulfate	2.4	24	200
Endrin	0.014	0.06	0.06
Endrin aldehyde	NA	NA	NA
Endrin ketone	NA	NA	NA
gamma-BHC (Lindane)	0.1	0.1	0.1
gamma-Chlordane	NA	NA	NA
Heptachlor	0.042	0.38	0.38
Heptachlor Epoxide	NA	NA	NA
Methoxychlor	NA	NA	NA
Toxaphene	NA	NA	NA
PCBs	**Unrestricted Use**	**Restricted-Residential Use**	**Restricted Commercial Use**
Total PCBs	0.1	1	1

ACLs (Allowable Constituent Levels) in mg/Kg (ppm)

Notes: ACLs based on NYSDEC DER-10 Appendix 5, Allowable Constituent Levels for Imported Fill or Soil Subdivision 5.4(e)

APPENDIX C

Appendix 1A
New York State Department of Health
Generic Community Air Monitoring Plan

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical- specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate DEC/NYSDOH staff.

> **Continuous monitoring** will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.
>
> **Periodic monitoring** for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or

overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

2. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

December 2009