



### JOINT APPLICATION FORM

For Permits for activities affecting streams, waterways, waterbodies, wetlands, coastal areas, sources of water, and endangered and threatened species.

**You must separately apply for and obtain Permits from each involved agency before starting work. Please read all instructions.**

#### 1. Applications To:

##### >NYS Department of Environmental Conservation

☒ Check here to confirm you sent this form to NYSDEC.

Check all permits that apply:

☐ Stream Disturbance

☐ Dams and Impoundment Structures

☐ Tidal Wetlands

☐ Water Withdrawal

☒ Excavation and Fill in Navigable Waters

☒ 401 Water Quality Certification

☐ Wild, Scenic and Recreational Rivers

☐ Long Island Well

☐ Docks, Moorings or Platforms

☐ Freshwater Wetlands

☒ Coastal Erosion Management

☐ Incidental Take of Endangered / Threatened Species

##### >US Army Corps of Engineers

☒ Check here to confirm you sent this form to USACE.

Check all permits that apply: ☒ Section 404 Clean Water Act

☒ Section 10 Rivers and Harbors Act

Is the project Federally funded? ☐ Yes ☒ No

If yes, name of Federal Agency: \_\_\_\_\_

General Permit Type(s), if known: \_\_\_\_\_

Preconstruction Notification: ☒ Yes ☐ No

##### >NYS Office of General Services

☒ Check here to confirm you sent this form to NYSOGS.

Check all permits that apply:

☒ State Owned Lands Under Water

☐ Utility Easement (pipelines, conduits, cables, etc.)

☐ Docks, Moorings or Platforms

##### >NYS Department of State

☒ Check here to confirm you sent this form to NYSDOS.

Check if this applies: ☒ Coastal Consistency Concurrence

#### 2. Name of Applicant

Village of Fair Haven

Taxpayer ID (if applicant is NOT an individual)

15-6001307

Mailing Address

14523 Cayuga Street

Post Office / City

Fair Haven

State

NY

Zip

13064

Telephone 315-947-5112

Email vfairhav@twcny.rr.com

Applicant Must be (check all that apply): ☒ Owner ☐ Operator ☐ Lessee

#### 3. Name of Property Owner (if different than Applicant)

Same as applicant.

Mailing Address

Post Office / City

State

Zip

Telephone

Email

**For Agency Use Only**

Agency Application Number: \_\_\_\_\_

<b>4. Name of Contact / Agent</b>			
Greg Liberman, EDR Associate Principal			
Mailing Address		Post Office / City	State Zip
41 State Street, Suite 806		Albany	NY 12207
Telephone	518.951.9150 x310	Email	GLiberman@edrdpc.com

<b>5. Project / Facility Name</b>		Property Tax Map Section / Block / Lot Number:	
West Barrier Park REDI Project		5.16-1-1.1	
Project Street Address, if applicable		Post Office / City	State Zip
14990 W Bay Rd		Sterling	NY 13156
Provide directions and distances to roads, intersections, bridges and bodies of water			
Take West Bay Rd north, approximately 3 miles, from Road 104A to West Barrier Park at the end.			
<input type="checkbox"/> Town	<input checked="" type="checkbox"/> Village	<input type="checkbox"/> City	County
Fair Haven		Cayuga	Stream/Waterbody Name
		Lake Ontario & Little Sodus Bay	
Project Location Coordinates: Enter Latitude and Longitude in degrees, minutes, seconds:			
Latitude:	40 °	20 '	44.52 N "
		Longitude:	76 ° 42 ' 39.24 W "

**6. Project Description:** Provide the following information about your project. Continue each response and provide any additional information on other pages. **Attach plans on separate pages.**

a. Purpose of the proposed project:

As part of the West Barrier Bar Park Resiliency and Economic Development Initiative (REDI), the Village of Fair Haven will implement a living shoreline on the Little Sodus Bay shoreline and will reshape the existing cobble beach on the Lake Ontario shoreline. The primary purpose of the Project is to prevent further erosion and enhance the overall resiliency of both shorelines. See attached report for more details.

b. Description of current site conditions:

The site is currently a public park and will remain so after completion of the proposed project. The West Barrier Bar Park facilities include an access area, parking area, public boat launch, and fishing area. There are several benches and picnic tables throughout the park.

c. Proposed site changes:

The changes to existing conditions at the Project Site will include the following primary components: reshaping of Lake Ontario shoreline using existing cobble; creation of a submerged planting shelf and shoreline buildout zone on the Little Sodus Bay shoreline; and creation of an offshore Barrier Rock Reef in Little Sodus Bay. See attached report for more details.

d. Type of structures and fill materials to be installed, and quantity of materials to be used (e.g., square feet of coverage, cubic yards of fill material, structures below ordinary/mean high water, etc.):

5,109 cubic yards of stone fill will be used to create the Barrier Rock Reef below ordinary high water in Little Sodus Bay. Additionally, 650 cubic yards of soil fill will be used to create the Little Sodus Bay Living shoreline. Total permanent impacts in Little Sodus Bay are approximately 4,446 square feet and total permanent impacts in Lake Ontario are approximately 61,098 square feet. See attached report for more details

e. Area of excavation or dredging, volume of material to be removed, location of dredged material placement:

No material will be excavated or dredged. See attached report for more details.

f. Is tree cutting or clearing proposed? ☐ Yes If Yes, explain below. ☒ No

Timing of the proposed cutting or clearing (month/year):

Number of trees to be cut: Acreage of trees to be cleared:

g. Work methods and type of equipment to be used:

See attached report.

h. Describe the planned sequence of activities:

See attached report.

i. Pollution control methods and other actions proposed to mitigate environmental impacts:

See attached report.

j. Erosion and silt control methods that will be used to prevent water quality impacts:

See attached report.

k. Alternatives considered to avoid regulated areas. If no feasible alternatives exist, explain how the project will minimize impacts:

See attached report.

l. Proposed use: ☐ Private ☒ Public ☐ Commercial

m. Proposed Start Date:  Estimated Completion Date:

n. Has work begun on project? ☐ Yes If Yes, explain below. ☒ No

o. Will project occupy Federal, State, or Municipal Land? ☒ Yes If Yes, explain below. ☐ No

The Project occupies municipal and state-lands. The shoreline itself is a part of the West Barrier Park, owned and operated by the Village of Fair Haven. Additionally, the lands underwater are state-owned.

p. List any previous DEC, USACE, OGS or DOS Permit / Application numbers for activities at this location:

None applicable.

q. Will this project require additional Federal, State, or Local authorizations, including zoning changes?

☐ Yes If Yes, list below. ☒ No

## **APPENDIX C**

Federal Consistency Assessment Form



NEW YORK STATE DEPARTMENT OF STATE  
COASTAL MANAGEMENT PROGRAM

Federal Consistency Assessment Form

An applicant, seeking a permit, license, waiver, certification or similar type of approval from a federal agency which is subject to the New York State Coastal Management Program (CMP), shall complete this assessment form for any proposed activity that will occur within and/or directly affect the State's Coastal Area. This form is intended to assist an applicant in certifying that the proposed activity is consistent with New York State's CMP as required by U.S. Department of Commerce regulations (15 CFR 930.57). It should be completed at the time when the federal application is prepared. The Department of State will use the completed form and accompanying information in its review of the applicant's certification of consistency.

A. **APPLICANT** (please print)

1. Name: Village of Fair Haven
2. Address: 14523 Cayuga Street, Fair Haven, 13064
3. Telephone: Area Code (     ) 315-947-5112

B. **PROPOSED ACTIVITY:**

1. Brief description of activity:

As part of the West Barrier Bar Park Resiliency and Economic Development Initiative (REDI), the Village of Fair Haven will implement a living shoreline on the Little Sodus Bay shoreline and will reshape the existing cobble beach on the

2. Purpose of activity:

The primary purpose of the Project is to prevent further erosion and enhance the overall resiliency of both shorelines.

3. Location of activity:

<u>Cayuga</u>	<u>Fair Haven</u>	<u>West Barrier Bar Park</u>
County	City, Town, or Village	Street or Site Description

4. Type of federal permit/license required: Section 404 and Section 10

5. Federal application number, if known: N/A

6. If a state permit/license was issued or is required for the proposed activity, identify the state agency and provide the application or permit number, if known:

Excavation & Fill in Navigible Waters, Water Quality Cert.

C. **COASTAL ASSESSMENT** Check either "YES" or "NO" for each of these questions. The numbers following each question refer to the policies described in the CMP document (see footnote on page 2) which may be affected by the proposed activity.

1. Will the proposed activity result in any of the following: YES/NO
  - a. Large physical change to a site within the coastal area which will require the preparation of an environmental impact statement? (11, 22, 25, 32, 37, 38, 41, 43) ☐ ☒
  - b. Physical alteration of more than two acres of land along the shoreline, land under water or coastal waters? (2, 11, 12, 20, 28, 35, 44) ☒ ☐
  - c. Revitalization/redevelopment of a deteriorated or underutilized waterfront site? (1) ☒ ☐
  - d. Reduction of existing or potential public access to or along coastal waters? (19, 20) ☐ ☒
  - e. Adverse effect upon the commercial or recreational use of coastal fish resources? (9,10) ☐ ☒
  - f. Siting of a facility essential to the exploration, development and production of energy resources in coastal waters or on the Outer Continental Shelf? (29) ☐ ☒
  - g. Siting of a facility essential to the generation or transmission of energy? (27) ☐ ☒
  - h. Mining, excavation, or dredging activities, or the placement of dredged or fill material in coastal waters? (15, 35) ☒ ☐
  - i. Discharge of toxics, hazardous substances or other pollutants into coastal waters? (8, 15, 35) ☐ ☒
  - j. Draining of stormwater runoff or sewer overflows into coastal waters? (33) ☐ ☒
  - k. Transport, storage, treatment, or disposal of solid wastes or hazardous materials? (36, 39) ☐ ☒
  - l. Adverse effect upon land or water uses within the State's small harbors? (4) ☐ ☒
  
2. Will the proposed activity affect or be located in, on, or adjacent to any of the following: YES/NO
  - a. State designated freshwater or tidal wetland? (44) ☐ ☒
  - b. Federally designated flood and/or state designated erosion hazard area? (11, 12, 17) ☒ ☐
  - c. State designated significant fish and/or wildlife habitat? (7) ☐ ☒
  - d. State designated significant scenic resource or area? (24) ☐ ☒
  - e. State designated important agricultural lands? (26) ☐ ☒
  - f. Beach, dune or Barrier Island? (12) ☒ ☐
  - g. Major ports of Albany, Buffalo, Ogdensburg, Oswego or New York? (3) ☐ ☒
  - h. State, county, or local park? (19, 20) ☒ ☐
  - i. Historic resource listed on the National or State Register of Historic Places? (23) ☐ ☒
  
3. Will the proposed activity require any of the following: YES/NO
  - a. Waterfront site? (2, 21, 22) ☒ ☐
  - b. Provision of new public services or infrastructure in undeveloped or sparsely populated sections of the coastal area? (5) ☐ ☒
  - c. Construction or reconstruction of a flood or erosion control structure? (13, 14, 16) ☒ ☐
  - d. State water quality permit or certification? (30, 38, 40) ☒ ☐
  - e. State air quality permit or certification? (41, 43) ☐ ☒
  
4. Will the proposed activity occur within and/or affect an area covered by a State-approved local waterfront revitalization program, or State-approved regional coastal management program? (see policies in program document\*) ☐ ☒


#### **D. ADDITIONAL STEPS**

1. If all of the questions in Section C are answered "NO", then the applicant or agency shall complete Section E and submit the documentation required by Section F.
2. If any of the questions in Section C are answered "YES", then the applicant or agent is advised to consult the CMP, or where appropriate, the local waterfront revitalization program document\*. The proposed activity must be analyzed in more detail with respect to the applicable state or local coastal policies. On a separate page(s), the applicant or agent shall: (a) identify, by their policy numbers, which coastal policies are affected by the activity, (b) briefly assess the effects of the activity upon the policy; and, (c) state how the activity is consistent with each policy. Following the completion of this written assessment, the applicant or agency shall complete Section E and submit the documentation required by Section F.

#### **E. CERTIFICATION**

The applicant or agent must certify that the proposed activity is consistent with the State's CMP or the approved local waterfront revitalization program, as appropriate. If this certification cannot be made, the proposed activity shall not be undertaken. If this certification can be made, complete this Section.

"The proposed activity complies with New York State's approved Coastal Management Program, or with the applicable approved local waterfront revitalization program, and will be conducted in a manner consistent with such program."

Applicant/Agent's Name: Village of Fair Haven  
Address: 14523 Cayuga Street, Fair Haven, NY 13064  
Telephone: Area Code ( ) 315-947-5112  
Applicant/Agent's Signature:  Date: 3/23/2021

#### **F. SUBMISSION REQUIREMENTS**

1. The applicant or agent shall submit the following documents to the **New York State Department of State, Office of Planning and Development, Attn: Consistency Review Unit, One Commerce Plaza-Suite 1010, 99 Washington Avenue, Albany, New York 12231.**
  - a. Copy of original signed form.
  - b. Copy of the completed federal agency application.
  - c. Other available information which would support the certification of consistency.
2. The applicant or agent shall also submit a copy of this completed form along with his/her application to the federal agency.
3. If there are any questions regarding the submission of this form, contact the Department of State at (518) 474-6000.

\*These state and local documents are available for inspection at the offices of many federal agencies, Department of environmental Conservation and Department of State regional offices, and the appropriate regional and county planning agencies. Local program documents are also available for inspection at the offices of the appropriate local government.

## West Barrier Bar Park Resiliency and Economic Development Initiative (REDI) Project Coastal Consistency Review

NYS CMP Policy Number	Affected Policy Description	Effects of the Project Upon the Policy	How the Project is Consistent with the Policy
1	Restore, revitalize, and redevelop deteriorated and underutilized waterfront areas for commercial, industrial, cultural, recreational, and other compatible uses.	The proposed project is located along the shoreline of Lake Ontario and Little Sodus Bay.	The project is consistent with this policy because it involves restoration and improvements to the shoreline resiliency of West Barrier Bar Park.
2	Facilitate the siting of water-dependent uses and facilities on or adjacent to coastal waters.	The proposed project is located along the shoreline of Lake Ontario and Little Sodus Bay.	The project is consistent with this policy because it involves improvements to the shoreline resiliency of West Barrier Bar Park.
3	Further develop the State's major ports of Albany, Buffalo, New York, Ogdensburg and Oswego as centers of commerce and industry, and encourage the siting, in these port areas, including those under the jurisdiction of State public authorities, of land use and development which is essential to, or in support of, the waterborne transportation of cargo and people.	Not applicable	Not applicable
4	Strengthen the economic base of smaller harbor areas by encouraging the development and enhancement of those traditional uses and activities which have provided such areas with a unique maritime identity.	Not applicable	Not applicable
5	Encourage the location of development in areas where public services and facilities essential to such development are adequate.	Not applicable	Not applicable
6	Expedite permit procedures in order to facilitate the siting of development activities at suitable locations.	Not applicable	Not applicable
7	Significant coastal fish and wildlife habitats, as identified on the coastal area map, shall be protected, preserved, and where practical, restored so as to maintain their viability as habitats.	Not applicable	Not applicable
8	Protect fish and wildlife resources in the coastal area from the introduction of hazardous wastes and other pollutants which bio-accumulate in the food chain or which cause significant sub-lethal or lethal effect on those resources.	Not applicable	Not applicable

## West Barrier Bar Park Resiliency and Economic Development Initiative (REDI) Project Coastal Consistency Review

NYS CMP Policy Number	Affected Policy Description	Effects of the Project Upon the Policy	How the Project is Consistent with the Policy
9	Expand recreational use of fish and wildlife resources in coastal areas by increasing access to existing resources, supplementing existing stocks and developing new resources.	Not applicable	Not applicable
10	Further develop commercial finfish, shellfish and crustacean resources in the coastal area by encouraging the construction of new, or improvement of existing on-shore commercial fishing facilities; increasing marketing of the state's seafood products; maintaining adequate stocks; and expanding aquaculture facilities.	Not applicable	Not applicable
11	Building and other structures will be sited in the coastal area so as to minimize damage to property and the endangering of human lives caused by flooding and erosion.	The proposed project is located along the shoreline of Lake Ontario and Little Sodus Bay.	The project will provide enhanced resiliency to future flooding and erosion damage. Best management practices will be followed during installation as described in the project's Erosion and Sediment Control plan.
12	Activities or development in the coastal area will be undertaken so as to minimize damage to natural resources and property from flooding and erosion by protecting natural protective features including beaches, dunes, barrier islands, and bluffs.	The proposed project is located along the shoreline of Lake Ontario and Little Sodus Bay, on West Barrier Bar.	The project is consistent with this policy because it improves shoreline resiliency to future flooding and erosion damage by creating a living shoreline and restoring historical flood damage and erosion.
13	The construction or reconstruction of erosion protection structures shall be undertaken only if they have a reasonable probability of controlling erosion for at least thirty years as demonstrated in design and construction standards and/or assured maintenance or replacement programs.	The proposed project is located along the shoreline of Lake Ontario and Little Sodus Bay, an area subject to flooding.	The project is consistent with this policy because it improves shoreline resiliency to future flooding and erosion damage. All engineered elements are designed to comply with this policy.
14	Activities and development, including the construction or reconstruction of erosion protection structures, shall be undertaken so that there will be no measurable increase in erosion or flooding at the site of such activities or development, or at other locations.	The proposed project is located along the shoreline of Lake Ontario and Little Sodus Bay, an area subject to flooding.	The project is consistent with this policy because it improves shoreline resiliency to future flooding and erosion damage. All engineered elements are designed to comply with this policy.
15	Mining, excavation, or dredging in coastal waters shall not significantly interfere with the natural coastal processes which supply beach materials to land adjacent to such waters and shall be undertaken in a manner which will not cause an increase in erosion of such land.	The proposed project is located along the shoreline of Lake Ontario and Little Sodus Bay.	The project is consistent with this policy because it improves shoreline resiliency to future flooding and erosion damage.
16	Public funds shall only be used for erosion protective structures where necessary to protect human life, and new development which requires a location within or adjacent to an erosion hazard area to	Not applicable	Not applicable

Based on New York State Coastal Management Program.



## West Barrier Bar Park Resiliency and Economic Development Initiative (REDI) Project Coastal Consistency Review

NYS CMP Policy Number	Affected Policy Description	Effects of the Project Upon the Policy	How the Project is Consistent with the Policy
	be able to function to be able to function, or existing development; and only where the public benefits outweigh the long-term monetary and other costs including the potential for increasing erosion and adverse effects on natural protective features.		
17	Non-structural measures to minimize damage to natural resources and property from flooding and erosion shall be used whenever possible.	The proposed project is located along the shoreline of Lake Ontario and Little Sodus Bay, an area subject to flooding.	The project is consistent with this policy because it improves shoreline resiliency to future flooding and erosion damage by creating a living shoreline and restoring historical flood damage and erosion.
18	To safeguard the vital economic, social and environmental interests of the State and of its citizens, proposed major actions in the coastal area must give full consideration to those interests, and to the safeguards which the State has established to protect valuable coastal resource areas.	Not applicable	Not applicable
19	Protect, maintain and increase the levels and types of access to public water related recreation resources and facilities.	The proposed project is located along the shoreline of Lake Ontario and Little Sodus Bay.	The project is consistent with this policy because it improves shoreline resiliency to future flooding and erosion damage by creating a living shoreline and restoring historical flood damage and erosion. This project will improve the safety of West Barrier Park.
20	Access to the publicly owned foreshore and to lands immediately adjacent to the foreshore or the water's edge that are publicly owned shall be provided and it should be provided in a manner compatible with adjoining uses.	The proposed project is located along the shoreline of Lake Ontario and Little Sodus Bay, in West Barrier Bar Park.	The project involves improvements to shoreline resiliency to future flooding and erosion damage by creating a living shoreline and restoring historical flood damage and erosion. Public access along the stabilized shorelines will not be impeded by the project except temporarily during installation.
21	Water-dependent and water-enhanced recreation will be encouraged and facilitated and will be given priority over non-water related uses along the coast.	The proposed project is located along the shoreline of Lake Ontario and Little Sodus Bay.	The project is consistent with this policy because it improves shoreline resiliency, furthering accessibility to this area.
22	Development, when located adjacent to the shore, shall provide for water-related recreation, whenever such recreational use is compatible with reasonably anticipated demand for such activities and the primary purpose of the development.	The proposed project is located along the shoreline of Lake Ontario and Little Sodus Bay.	The project is consistent with this policy because it improves shoreline resiliency, furthering accessibility to this area. Public access along the stabilized shorelines will not be impeded by the project except temporarily during installation.

## West Barrier Bar Park Resiliency and Economic Development Initiative (REDI) Project Coastal Consistency Review

NYS CMP Policy Number	Affected Policy Description	Effects of the Project Upon the Policy	How the Project is Consistent with the Policy
23	Protect, enhance and restore structures, districts, areas or sites that are of significance in the history, architecture, archeology or culture of the State, its communities, or the Nation.	Not applicable.	Not applicable.
24	Prevent impairment of scenic resources of statewide significance.	Not applicable.	Not applicable.
25	Protect, restore and enhance natural and man-made resources which are not identified as being of state significance, but which contribute to the scenic quality of the coastal area.	Not applicable.	Not applicable.
26	Conserve and protect agricultural lands in the State's coastal area.	Not applicable.	Not applicable.
27	Decisions on the siting and construction of major energy facilities in the coastal area will be based on public energy needs, compatibility of such facilities with the environment, and the facility's need for a shorefront location.	Not applicable.	Not applicable.
28	Ice management practices shall not interfere with the production of hydroelectric power, damage significant fish and wildlife and their habitats, or increase shoreline erosion or flooding.	The proposed project is located along the shoreline of Lake Ontario and Little Sodus Bay.	No ice management practices are proposed as part of the project.
29	The development of offshore uses and resources, including renewable energy resources, shall accommodate New York's long-standing ocean and Great Lakes industries, such as commercial and recreational fishing and maritime commerce, and the ecological functions of habitats important to New York.	Not applicable.	Not applicable.
30	Municipal, industrial, and commercial discharge of pollutants, including but not limited to, toxic and hazardous substances, into coastal waters will conform to state and national water quality standards.	The proposed project is located along the shoreline of Lake Ontario and Little Sodus Bay.	No discharge of pollutants is proposed as part of the project. The installation will require compliance with all USACE and NYSDEC permit conditions. Appropriate erosion and sediment control measures will be implemented during construction to prevent water quality impacts.

## West Barrier Bar Park Resiliency and Economic Development Initiative (REDI) Project Coastal Consistency Review

NYS CMP Policy Number	Affected Policy Description	Effects of the Project Upon the Policy	How the Project is Consistent with the Policy
31	State coastal area policies and purposes of approved local waterfront revitalization programs will be considered while reviewing coastal water classifications and while modifying water quality standards; however, those waters already overburdened with contaminants will be recognized as being a development constraint.	Not applicable.	Not applicable.
32	Encourage the use of alternative or innovative sanitary waste systems in small communities where the costs of conventional facilities are unreasonably high, given the size of the existing tax base of these communities.	Not applicable.	Not applicable.
33	Best management practices will be used to ensure the control of stormwater runoff and combined sewer overflows draining into coastal waters.	Not applicable.	Not applicable.
34	Discharge of waste materials into coastal waters from vessels subject to State jurisdiction into coastal waters will be limited so as to protect significant fish and wildlife habitats, recreational areas and water supply areas.	Not applicable.	Not applicable.
35	Dredging and filling in coastal waters and disposal of dredged material will be undertaken in a manner that meets existing State dredging permit requirements, and protects significant fish and wildlife habitats, scenic resources, natural protective features, important agricultural lands, and wetlands.	The proposed project is located along the shoreline of Lake Ontario and Little Sodus Bay.	The project is consistent with this policy because it improves shoreline resiliency to future flooding and erosion damage. The dredging will require compliance with all USACE and NYSDEC permit conditions. Appropriate erosion and sediment control measures will be implemented to prevent water quality impacts.
36	Activities related to the shipment and storage of petroleum and other hazardous materials will be conducted in a manner that will prevent or at least minimize spills into coastal waters; all practicable efforts will be undertaken to expedite the cleanup of such discharges; and restitution for damages will be required when these spills occur.	Not applicable.	Not applicable.
37	Best management practices will be utilized to minimize the non-point discharge of excess nutrients, organics and eroded soils into coastal waters.	Not applicable.	Not applicable.
38	The quality and quantity of surface water and groundwater supplies will be conserved and protected, particularly where such waters constitute the primary or sole source of water supply.	The proposed project is located along the shoreline of Lake	The development on the West Barrier Bar is served by public water. This policy is not applicable to this shoreline resiliency project.

Based on New York State Coastal Management Program.



## West Barrier Bar Park Resiliency and Economic Development Initiative (REDI) Project Coastal Consistency Review

NYS CMP Policy Number	Affected Policy Description	Effects of the Project Upon the Policy	How the Project is Consistent with the Policy
		Ontario and Little Sodus Bay, on West Barrier Bar.	
39	The transport, storage, treatment and disposal of solid wastes, particularly hazardous wastes, within coastal areas will be conducted in such a manner so as to protect groundwater and surface water supplies, significant fish and wildlife habitats, recreation areas, important agricultural lands and scenic resources.	Not applicable.	Not applicable.
40	Effluent discharged from major steam electric generating and industrial facilities into coastal waters will not be unduly injurious to fish and wildlife and shall conform to State water quality standards.	The proposed project is located along the shoreline of Lake Ontario and Little Sodus Bay.	No discharged effluent or steam electric-generating and industrial facilities are proposed as part of this project. This policy is not applicable to this shoreline resiliency project.
41	Land use or development in the coastal area will not cause federal or state air quality standards to be violated.	Not applicable.	Not applicable.
42	Coastal management policies will be considered if the state reclassifies land areas pursuant to the prevention of significant deterioration regulations of the Federal Clean Air Act.	Not applicable.	Not applicable.
43	Land use or development in the coastal area must not cause the generation of significant amounts of acid rain precursors: nitrates and sulfates.	Not applicable.	Not applicable.
44	Preserve and protect tidal and freshwater wetlands and preserve the benefits derived from these areas.	The proposed project is located along the shoreline of Lake Ontario and Little Sodus Bay.	The proposed erosion and sediment control plan will protect the waters of Lake Ontario and Little Sodus Bay from temporary impacts during installation. The water quality will be unchanged from existing conditions. All engineered elements are designed to comply with this policy and the applicable permitting and approval requirements.

**7. Signatures.**

Applicant and Owner (If different) must sign the application. If the applicant is the landowner, the **landowner attestation form** can be used as an electronic signature as an alternative to the signature below, if necessary. Append additional pages of this Signature section if there are multiple Applicants, Owners or Contact/Agents.

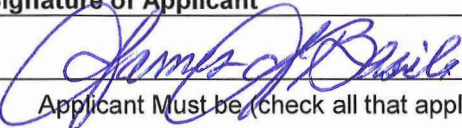
I hereby affirm that information provided on this form and all attachments submitted herewith is true to the best of my knowledge and belief.

Permission to Inspect - I hereby consent to Agency inspection of the project site and adjacent property areas. Agency staff may enter the property without notice between 7:00 am and 7:00 pm, Monday - Friday. Inspection may occur without the owner, applicant or agent present. If the property is posted with "keep out" signs or fenced with an unlocked gate, Agency staff may still enter the property. Agency staff may take measurements, analyze site physical characteristics, take soil and vegetation samples, sketch and photograph the site. I understand that failure to give this consent may result in denial of the permit(s) sought by this application.

False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the NYS Penal Law. Further, the applicant accepts full responsibility for all damage, direct or indirect, of whatever nature, and by whomever suffered, arising out of the project described herein and agrees to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from said project. In addition, Federal Law, 18 U.S.C., Section 1001 provides for a fine of not more than \$10,000 or imprisonment for not more than 5 years, or both where an applicant knowingly and willingly falsifies, conceals, or covers up a material fact; or knowingly makes or uses a false, fictitious or fraudulent statement.

**Signature of Applicant**

Date



3/23/2021

Applicant Must be (check all that apply): ☒ Owner ☐ Operator ☐ Lessee

Printed Name

James Basile

Title

Mayor

**Signature of Owner (if different than Applicant)**

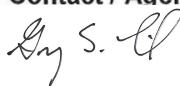
Date

Printed Name

Title

**Signature of Contact / Agent**

Date



3/23/2021

Printed Name

Gregory S. Liberman

Title

Associate Principal

**For Agency Use Only****DETERMINATION OF NO PERMIT REQUIRED**

Agency Application Number

(Agency Name) has determined that No Permit is required from this Agency for the project described in this application.

Agency Representative:

Printed Name

Title

Signature

Date

## **JOINT APPLICATION INFORMATION**

### **1.0 OVERVIEW**

The Village of Fair Haven owns and maintains West Barrier Bar Park (the Project Site or the Park). The Park is bordered by Lake Ontario (approximately 1,725 linear feet) and Little Sodus Bay (approximately 1,100 linear feet). The shorelines of both Lake Ontario and Little Sodus Bay have incurred damage from the flooding over the past several years, with the most significant flood event occurring in 2019. In response to the extended pattern of flooding along the shores of Lake Ontario and the St. Lawrence River, Governor Cuomo created the Resiliency and Economic Development Initiative (REDI) to increase the resilience of shoreline communities and bolster economic development in the region. Five REDI regions were established to identify local priorities, at-risk infrastructure and other assets, and public safety concerns. The West Barrier Bar Park was selected as a project by the REDI Commission. As part of the West Barrier Bar Park REDI, the Village of Fair Haven will implement a “living shoreline”, including barrier rock reefs, on the Little Sodus Bay shoreline and will reshape the existing cobble beach on the Lake Ontario shoreline (the Project). See Appendix A for the preliminary engineering REDI report.

#### **1.2 Project Purpose**

The West Barrier Bar Park is an important landmark in the local community. It provides residents and seasonal tourists to the Village of Fair Haven and Town of Sterling access to Lake Ontario and serves as critical protection for Little Sodus Bay. Over the past several years, record high water levels in Lake Ontario and Little Sodus Bay have caused significant flooding in the Park, resulting in the damage and loss of property along the Little Sodus Bay shoreline. This recent flooding has led to dangerous conditions at the Park, as well as eroding of the shoreline on both the lake and bay sides of the Park. The primary objective of the Project is to prevent further erosion of the Little Sodus Bay shoreline from wave action and enhance the overall resiliency of the Park’s shorelines.

## **2.0 PROJECT LOCATION & DESCRIPTION**

### **2.1 Project Location**

The Project Site is in the Village of Fair Haven, within the Town of Sterling in Cayuga County, New York (Figure 1). The Project Site is located at the eastern tip of the 0.7-mile-long, narrow, barrier bar beach (West Barrier Bar) on the southern shore of Lake Ontario and the northwest shore of Little Sodus Bay (Figure 2). A jetty borders the eastern boundary of the Project Site adjacent to the narrow outlet where water flows out of the bay into Lake Ontario. The Project Site is roughly bounded by Fair Point Marina immediately to the southwest and Shady Shore RV Resort farther to the west (Figure 3).

As indicated previously, the Project Site is located within West Barrier Bar Park. The park encompasses 14 acres of open, undeveloped land on the West Barrier Bar, which extends onto a natural sandbar separating Little Sodus Bay from Lake Ontario. Both the Little Sodus Bay and Lake Ontario shorelines are primarily composed of cobble and gravel and range from 246 to 252 feet above mean sea level. Between both shorelines lies a sparsely forested/shrub habitat which may experience some ponding in depressional areas.

Overall, the Project Site is within the Ontario Lowlands physiographic province of New York State (USDA, 1971). Soils within the Project Site are composed entirely of lake beaches which are somewhat excessively drained and have bedrock depth beyond 200 centimeters (Soil Survey Staff, 2020). The entire Project Site is located within a 100-year Federal Emergency Management Agency (FEMA) designated flood zone (zone AE).

## **2.2 Project Description**

Based on the preliminary engineering evaluation, the Village is proposing to implement a living shoreline on the Little Sodus Bay shoreline and to reshape the existing cobble beach on the Lake Ontario shoreline (Figure 3).

### *Little Sodus Bay Living Shoreline*

A living shoreline will be installed on the Little Sodus Bay shoreline to reduce wave energy that erodes the shoreline. The living shoreline will be a protected, stabilized coastal edge made of natural materials such as plants, sand, or rock. Unlike a concrete seawall or other hard structure, which impede the growth of plants and animals, the living shoreline will grow over time. Please see Appendix B, the Site Plan Drawings, for detailed drawings of the Project. The living shoreline design was developed in accordance with guidelines by agencies such as the National Oceanographic and Atmospheric Administration's (NOAA) "Guidance for Considering the Use of Living Shorelines" and the U.S. Army Corps of Engineers' (USACE) "Use of Natural and Nature-Based Features for Coastal Resilience" (NOAA, 2015; USACE Engineer Research and Development Center, 2015). The living shoreline will include offshore barrier rock reefs, submerged planting shelf, and shoreline buildout zone.

Five barrier rock reefs are proposed. The barrier rock reefs will be comprised of mounded rock that will be placed approximately 120 feet offshore on the bayside of West Barrier Bar using barges. The barrier rock reefs will be submerged at high water levels and exposed at ordinary low water. The mounded rock materials will be sourced from an off-site crushed stone supplier and will consist of an inner core material, light stone fill, and an outer armor material, medium stone fill. The material would be placed on grade, but based on the geotechnical evaluation, some settlement of the material is expected. The stone is sufficiently heavy to remain embedded in place. The reefs have been designed to withstand wave and ice forces within Little Sodus Bay, with an anticipated life of approximately 20 years. The slope of each barrier rock reef will be gentler on the bayside to reduce wave action

so the sheltered area on the upland-side of the barrier rock reefs will create more quiescent nearshore conditions that promote the development of natural features and accommodate nature-based recreational opportunities.

The creation of the sheltered area behind the barrier rock reef includes a submerged planting shelf and shoreline buildout zone. The submerged plant shelf will be created by installing coir logs. The coir logs used in the submerged planting shelf are biodegradable pieces that are designed to provide soil stabilization and support erosion prone areas. Soil fill from off-site will be placed and spread on the upland-side of the coir logs. Vegetation in the form of live stakes and plugs will be planted in the coir logs and in the soil. The coir logs will either be single or stacked, depending on the location, and will be secured with a notch stake and twine tie to create a terrace. By introducing the coir logs, the shoreline will be adjusted and moved back into the bay. The upland-side of the submerged planting shelf is considered the shoreline buildout zone. The shoreline buildout zone will also require the addition of soil fill, which will be hauled in and spread, and installation of vegetation for stabilization purposes. Vegetation in the form of live stakes and plugs will be planted in the shoreline buildout zone. In both the submerged planting shelf and shoreline buildout zone, species have been carefully selected to align with the environment they will be planted in. See Appendix B (Site Plan Drawings) for more details regarding the placement and species of vegetation proposed. Vegetation maintenance will be the responsibility of the Village of Fair Haven post-construction.

#### *Lake Ontario Cobble*

The cobble of the Lake Ontario shoreline will be reshaped to a more natural profile similar to what existed prior to the 2019 high Lake Ontario levels. Based on the review of the aerial imagery, the historic profile will be re-established in consideration of variations in Lake Ontario water level and the cross-shore profile development in response to short-term wave events. This will return the beach shape to a condition that would allow the public access to the water and provide an enjoyable beach and park experience. Since the existing cobbles are deposited on shore, the existing cobbles on the Park property will be reused for regrading. Therefore, no new material will be added, and no existing material will be removed as a part of the proposed reshaping of the lakeside shoreline. The cobble beach profile would be based on the elevations of the Park and widths of the beach (in relation to wave runup elevations). The cobbles will not be secured in place and could potentially be moved by waves; therefore, additional regrading of the cobble beach would likely be necessary after significant Lake flood events.

Based on the Project design, the changes to existing conditions at the Project Site will include the following primary components: reshaping of Lake Ontario shoreline using existing cobble; creation of a submerged planting shelf and shoreline buildout zone on the Little Sodus Bay shoreline; and creation of an offshore barrier rock reef in Little Sodus Bay (see Appendix B for 90% Site Plan Drawings). Project work will include a temporary construction measures, such

as the installation of turbidity curtains, as well as the placement of permanent fill in Little Sodus Bay and Lake Ontario to facilitate shoreline stabilization and create the barrier rock reef. See Section 3.0 for more details regarding disturbances and jurisdictional impacts.

It is anticipated that construction would begin on this Project in June 2021 and continue through October 2021. Much of the construction work would occur simultaneously on each shoreline. Construction along the shorelines would take place in the early part of the season and the barrier rock reef would be installed later in the season, when water levels are typically at their lowest.

## **2.3 Water Resources**

In accordance with Section 404 of the Clean Water Act (CWA), the USACE has regulatory jurisdiction over Waters of the United States (WOUS). A Section 404 permit from the USACE is required for activities that result in the placement of dredged or fill materials in WOTUS. In addition to Section 404 of the CWA, Section 10 of the Rivers and Harbor Act requires a permit from the USACE to construct any structure in or over any traditional navigable waters of the United States, as well as any proposed action that would alter or disturb these waters (such as excavation/dredging or deposition of materials). Review of U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) mapping indicates there are two mapped water resources within the proposed Project Site (USFWS, 2020) (Figure 4). These waterbodies are Lake Ontario and Little Sodus Bay and both are traditional navigable waters. The NWI map designates this portion of Lake Ontario as a lacustrine deepwater (L1UBH) habitat with depths greater than 2.5 meters. Little Sodus Bay has lacustrine deepwater habitat as well. However, a portion of Little Sodus Bay (the southeastern portion of the Project Site) has a lacustrine littoral zone (L2UBH) with depth reaching a maximum of 2.5 meters.

In accordance with Section 401 of the CWA, applicants for a Federal permit for activities are required to apply for and obtain a Water Quality Certification from the NYSDEC indicating that the proposed activity will not violate water quality standards. Therefore, where a permit is required from the USACE under Section 404 of the Clean Water Act for placing fill or undertaking activities resulting in a discharge to WOUS, NYSDEC Water Quality Certification is required. Additionally, based on available NYSDEC stream classification and waterbody mapping, Lake Ontario is a protected Class A waterbody and Little Sodus Bay is a Class B protected waterbody (Figure 4).

The Freshwater Wetlands Act (Article 24 and Title 23 of Article 71 of the Environmental Conservation Law (ECL)) gives the NYSDEC jurisdiction over state-protected wetlands and an adjacent 100-foot upland buffer area. Review of New York State (NYS) Freshwater Wetlands maps indicates that there are no State-mapped wetlands regulated under Article 24 of the ECL within or adjacent to the proposed Project Site.

### 3.0 JURISDICTIONAL IMPACTS

The proposed Project includes the creation of a living shoreline on the Little Sodus Bay shoreline and reshaping the existing cobble beach on the Lake Ontario shoreline. The Project utilizes natural features and creates natural structures that will ultimately have a beneficial effect on shoreline functions and services. To accomplish these objectives, the proposed Project will result in both temporary and permanent disturbances to Little Sodus Bay and Lake Ontario below the ordinary high-water mark (OHWM). Impacts to the Little Sodus Bay and Lake Ontario were determined using an OHWM elevation of approximately 247.3 feet amsl (as indicated on the design drawings, Appendix B).

The Project will temporarily impact approximately 0.7 acre of Little Sodus Bay and approximately 0.2 acre of Lake Ontario below OHWM as a result of construction activities (i.e., installation of temporary turbidity curtain). The Project will also result in permanent impacts to approximately 1.3 acres of Little Sodus Bay and approximately 0.1 acre of Lake Ontario below OHWM. See Sections 3.1 and 3.2 for more details on temporary and permanent impacts, respectively. Although, the proposed Project will be located within and/or near jurisdictional coastal resource areas, it will not adversely affect any coastal resources. See Section 3.3 for more details about coastal zone management.

#### 3.1 Temporary Impacts

Temporary impacts to Lake Ontario and Little Sodus Bay will primarily result from construction activities between OHWM and the temporary turbidity curtains. Temporary construction impacts to Little Sodus Bay and Lake Ontario were approximated and are depicted in Figure 5 and summarized in Table 1, below.

**Table 1: Temporary Impacts to Water Resources**

Water Resource	NYSDEC Classification	Federal Jurisdiction	Project Component(s)	Impact Below OHWM (Square Feet)	Impact Below OHWM (Acres)
Lake Ontario	Class A	Yes	Construction Activity Area	9,003	0.2
Little Sodus Bay	Class B	Yes	Construction Activity Area	29,650	0.7

#### 3.2 Permanent Impacts

No permanent net loss of Waters of the United States (WOUS) will result from Project activities. Rather, the stabilization of the shorelines of West Barrier Bar Park in Little Sodus Bay and Lake Ontario and the construction of the proposed

barrier rock reef in Little Sodus Bay will alter the character of the existing water resources and ultimately result in a more resilient shoreline at the Project Site.

Permanent impacts to Lake Ontario below OHWM will result from reshaping the shoreline using existing cobble. No new material will be added, and no existing material will be removed as a part of the proposed reshaping of the lakeside shoreline. However, there will be material moved from above the OHWM elevation to below the OHWM elevation as part of the reshaping.

Additionally, permanent impacts to Little Sodus Bay below OHWM will result from shoreline stabilization (the shoreline buildout and submerged planting shelf) and the construction of the proposed barrier rock reef. Construction of these features will require the placement of 5,759 cubic yards of fill into Little Sodus Bay, with a total permanent impact footprint of approximately 1.3 acres. Within the approximated 1.3 acres area, approximately 0.4 acre of impact will result from the addition of 650 cubic yards of soil fill along the shoreline, the installation of coir logs to create terraced planting areas, and the vegetation of the shoreline with live stakes and plugs for stabilization purposes. The remaining approximately 0.9 acre of permanent impacts will result from the placement of 5,109 cubic yards of stone for the proposed barrier rock reef.

Permanent jurisdictional impacts are depicted in Figure 5 and summarized in Table 2, below. Please note that the area calculations have been approximated based on the site plan drawings and may not be exact.

**Table 2: Permanent Impacts to Water Resources**

Water Resource	NYSDEC Classification	Federal Jurisdiction	Project Component(s)	Fill Below OHWM (Cubic Yards)		Impact Below OHWM (Square Feet)	Impact Below OHWM (Acres)
Lake Ontario	Class A	Yes	Reshaping Shoreline with Existing Cobble	N/A		4,446	0.1
Little Sodus Bay	Class B	Yes	Shoreline Buildout Zone – Soil Fill	500		18,686	0.4
			Submerged Planting Shelf Zone – Soil Fill	150			
			Barrier Rock Reef – Light Stone Fill	1,495	5,109	42,412	0.9
			Barrier Rock Reef – Medium Stone Fill	3,614			
			Total	5,759		61,098	1.3



A series of erosion and sediment control measures will be implemented to minimize impacts to Little Sodus Bay and Lake Ontario, during and after construction, to the maximum extent practicable at all Project work areas (see Section 4.0).

### **3.3 Coastal Zone Management**

Based on a review of the New York State Coastal Boundary Map, the Project Site is within the official NYS Coastal Area Boundary as established by the NYS Coastal Management Program (Figure 6). Though the proposed Project will take place within the coastal zone, the Project will not adversely affect any coastal resources. Rather, the proposed Project will have a beneficial effect on coastal resources, including water quality and fish and wildlife habitat, by improving shoreline resiliency on the barrier bar.

As the Project Site is located within the NYS Coastal Area Boundary, the Project requires a coastal consistency determination by the New York State Department of State (NYSDOS) as per the Coastal Zone Management Act, Section 15 CFR, Part 930, Subpart D and 19 NYCRR Part 600. The NYSDOS conducts review and consistency determinations for actions, including permit review, in coastal areas. A Coastal Assessment Form and a table demonstrating the Project's consistency with the applicable NYSDOS coastal policies is included as Appendix C.

Currently, the Village of Fair Haven and Town of Sterling do not have a designated Local Waterfront Revitalization Program (LWRP) in place. Cayuga County, in partnership with the Village of Fair Haven and the Town of Sterling, are in the process of developing a joint LWRP and Harbor Management Plan (HMP) to guide land and water uses along Lake Ontario and Little Sodus Bay. The LWRP and HMP will identify policies and projects that address public waterfront access, recreation, sustainable development, coastal resiliency, flooding, tourism. The LWRP and HMP are anticipated to be completed in 2024.

Additionally, notification will be provided to the U.S. Coast Guard (USCG) prior to construction for boating safety. The barrier rock reefs will be marked in accordance with any applicable USCG, state, or local requirements, and may ultimately be added to National Oceanographic Atmospheric Administration (NOAA) navigation charts as well.

### **3.4 Impacts to State-Owned Lands Underwater**

Pursuant to Section 75(7) of the New York Public Lands Law, the New York State Office of General Services (NYSOGS) has regulatory jurisdiction over activities that disturb state-owned lands underwater (i.e., to which the State of New York holds title). It is anticipated that the Project will require an easement and construction approval from NYSOGS.

### 3.5 Summary of Impacts

In summary, the proposed Project will not result in a permanent net loss of WOUS. Likewise, although the proposed Project will take place within and/or near coastal resource areas, the Project will not adversely affect any coastal resources. Creating a living shoreline on the Little Sodus Bay shoreline and reshaping the existing cobble beach on the Lake Ontario shoreline will result in a more resilient shoreline at the Project Site. Ultimately, the proposed Project will utilize natural features and creates natural structures that will have a positive impact on shoreline functions and services. In order to achieve these outcomes and fulfill the goals of the REDI Project, minor impacts to water resources are unavoidable. A summary of total temporary and permanent impacts within approximated areas of each water resource on site is presented below in Table 3.

**Table 3: Summary of Total Impacts to Water Resources**

Water Resource	NYSDEC Classification	Federal Jurisdiction	Impact Type	Total Fill (Cubic Yards)	Total Impact (Square Feet)	Total Impact (Acres)
Lake Ontario	Class A	Yes	Temporary	N/A	9,003	0.2
			Permanent	N/A	4,446	0.1
Little Sodus Bay	Class B	Yes	Temporary	N/A	29,650	0.7
			Permanent	5,759	61,098	1.3
Total Temporary Impact				N/A	38,653	0.9
Total Permanent Impact				5,759	65,544	1.4

### 4.0 AVOIDANCE, MINIMIZATION, AND MITIGATION

The Applicant has developed the proposed design based on detailed modeling of existing and proposed conditions at the Project Site, as well as an alternative analysis used to identify the optimal means of achieving the goals of the REDI Project (see Preliminary Engineering Report, Appendix A for additional details). One alternative considered was the installation of sheet pile bulkhead or rock revetment on each shoreline. However, this alternative was not selected because it would restrict access, reduces recreational opportunities, and does not utilize natural features. Likewise, a “no action” alternative was considered, where the shorelines would be left in their current condition. This alternative was not selected because the shorelines would continue to erode unimpeded. Compared to existing conditions, the proposed design will more effectively prevent further erosion of the Little Sodus Bay shoreline from wave action and enhance the overall resiliency and safety of shorelines at West Barrier Bar Park. Following Project construction, the

Project Site will more closely resemble historical conditions at the Project Site and conditions that would allow for improved public access to the water and an enjoyable beach experience for Park users (Appendix A).

Disturbance impacts will be minimized by using on-site materials to the extent practicable and installing native plant materials. Impacts to on-site water resources will be further avoided and/or minimized by implementing a variety of erosion and sediment control measures, which will include the following:

- Weather conditions will be evaluated so that disturbances can be scheduled during relative dry conditions with low water levels. In general, construction along the shorelines will take place in the early part of the season and the barrier rock reef would be installed later in the season, when water levels are typically at their lowest.
- Disturbances to existing vegetation on the site will be avoided to the extent practicable
- Turbidity (silt) curtains will be installed at the work areas to maintain water quality (see Figure 5).
- The Applicant will require the site contractor(s) to follow the erosion and sediment control plan and implement corresponding measures as needed so that there will be no direct discharge of turbid water to surface water resources.

Please see Appendix D, Stormwater Pollution Prevention Plan, for more details regarding proposed erosion and sediment control practices.

## **5.0 COMPLIANCE WITH THE FEDERAL AND STATE ENDANGERED SPECIES ACTS**

A written request for information regarding listed species and unique or significant natural communities was sent to the New York State Natural Heritage Program (NYNHP) on October 19, 2020. NYNHP responded to the request on November 25, 2020. According to the response, there are no records of rare or state-listed animals or plants, or significant natural communities at the Project Site (Appendix E). However, the NYNHP has documented the occurrence of a state-listed species of special concern, spiny softshell turtle (*Apalone spinifera*) within 0.5 mile of the Project Site. The proximity of the documented locations to the Project Site indicate that turtles may also occur in Little Sodus Bay if habitat conditions are suitable. Areas with open sandy or soft mud bottoms with sparse aquatic vegetation or areas with submerged and floating vegetation and floating vegetation mats provide suitable habitat for spiny softshell turtles. They typically avoid rocky areas. Mudflats, sandbars, and floating mats of vegetation used for basking and nesting are important components of high-quality habitat (NYNHP, 2020). However, current conditions at the Project Site do not indicate suitable habitat. Additionally, a Stormwater Pollution Prevention Plan will be followed during construction to reduce or eliminate any potential impacts on this species due to runoff from nearby construction (Appendix D). No

impacts to spiny softshell turtle are anticipated as a result of Project construction or operation. If any turtles are observed during Project work, the Applicant will contact the NYSDEC Regional Office.

The USFWS Information for Planning and Consultation (IPaC) decision support system was also consulted in October 2020. Results from the IPaC system indicated that there are no critical habitats or threatened and endangered species expected to occur in the vicinity of the Project. While the IPaC review listed 14 migratory birds that could occur on the Project Site and are protected under the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act, no federally-listed threatened or endangered species were identified in the vicinity of the Project Site. Therefore, no impacts to federally-listed fish, wildlife or plant species are expected to result from construction and operation of the proposed Project.

## **6.0 COMPLIANCE WITH THE HISTORIC PRESERVATION ACT**

Pursuant to the National Historic Preservation Act of 1966, Section 106, and the New York State Historic Preservation Act of 1980, Section 14.09, a written request for information on cultural resources was submitted to the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP) Cultural Resource Information System (CRIS) for the proposed Project. The State Historic Preservation Office (SHPO) provided a response letter dated August 26, 2020, in which they concluded that no historic properties, including archaeological and/or historic resources, will be affected by the proposed Project (see Appendix E for SHPO correspondence).

## **7.0 COMPLIANCE WITH SEQRA**

Pursuant to the requirements of New York State Environmental Quality Review Act (SEQRA) the Village Board of Fair Haven, serving as Lead Agency, has reviewed a Full Environmental Assessment Form and determined the Project will not result in significant adverse environmental impacts and will result in substantial improvements to local and regional surface water quality. The Board issued a Negative Declaration under SEQRA on January 13, 2019. A copy of the Environmental Notice Bulletin (ENB) negative declaration is provided in Appendix F.

## 8.0 REFERENCES

New York State Department of Environmental Conservation (NYSDEC). 2020. Environmental Resource Mapper [website]. Available at: <https://gisservices.dec.ny.gov/gis/erm/>. (Accessed October 2020)

New York State Historic Preservation Office (NYSHPO). 2020. Cultural Resources Information System. <https://cris.parks.ny.gov/>

New York Natural Heritage Program (NYNHP). 2020. *Online Conservation Guide for Apalone spinifera*. Available at: <https://guides.nynhp.org/spiny-softshell/>. (Accessed December 2020).

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Soil Survey Staff. 2020. *Web Soil Survey*. Natural Resources Conservation Service, United States Department of Agriculture Available at: <http://websoilsurvey.nrcs.usda.gov/> (Accessed October 2020).

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United States Department of Agriculture (USDA). 1971. *Soil Survey of Cayuga County, New York*. United States Department of Agriculture, Soil Conservation Service. Available at: [https://www.nrcs.usda.gov/Internet/FSE\\_MANUSCRIPTS/new\\_york/cayugaNY1971/cayugaNY1971.pdf](https://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/new_york/cayugaNY1971/cayugaNY1971.pdf). (Accessed October 2020).

U.S. Fish and Wildlife Service (USFWS). 2020a. *National Wetlands Inventory* [website]. Available at: <http://www.fws.gov/wetlands/Data/State-Downloads.html> (Accessed October 2020)

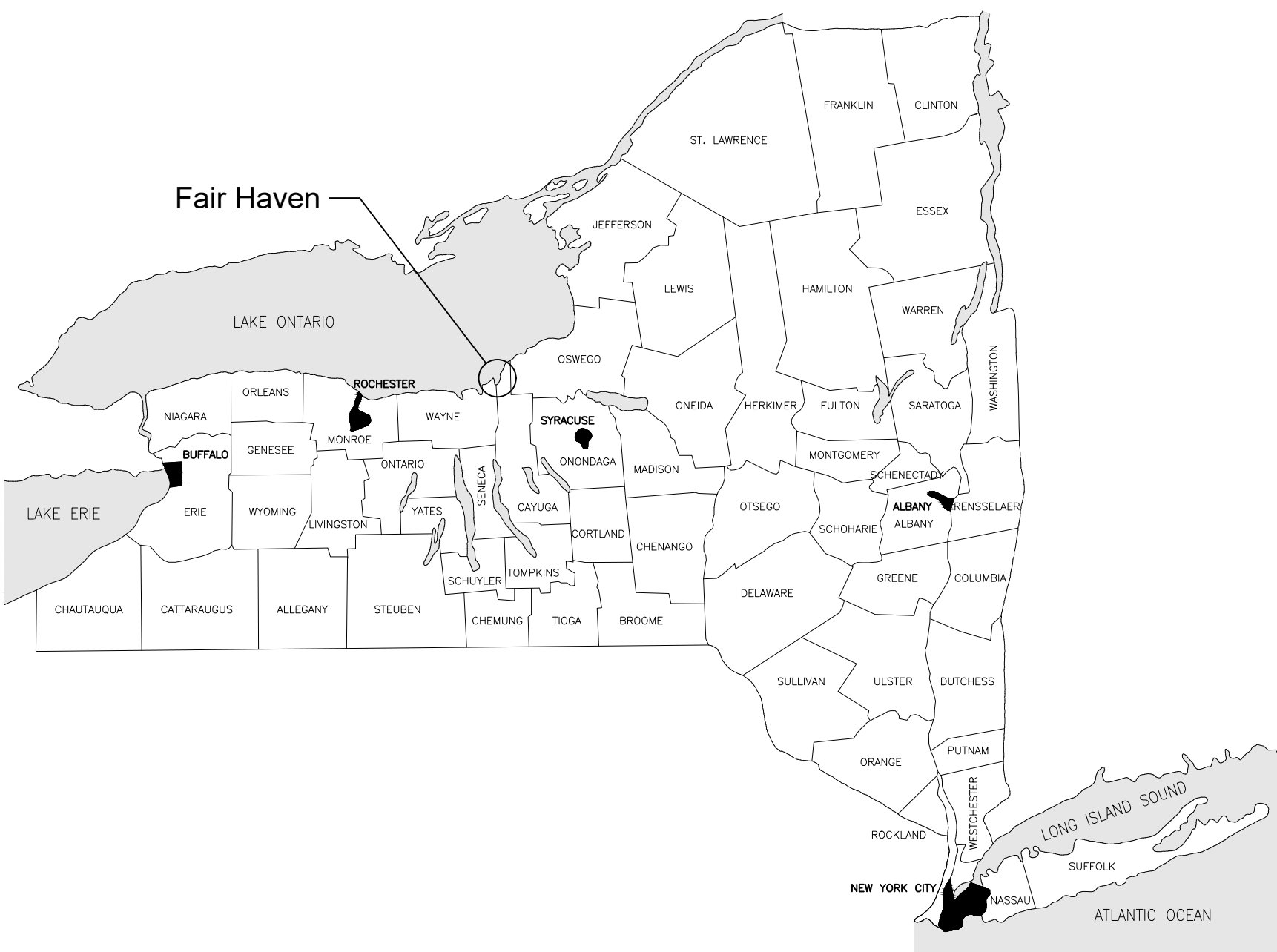
USFWS. 2020b. *IPaC – Information, Planning, and Conservation System* [website]. Available at: <https://ecos.fws.gov/ipac/> (Accessed October 2020)



# REDI CO.7 WEST BARRIER BAR PARK FLOOD REMEDIATION PROJECT

VILLAGE OF FAIR HAVEN, CAYUGA COUNTY, NEW YORK

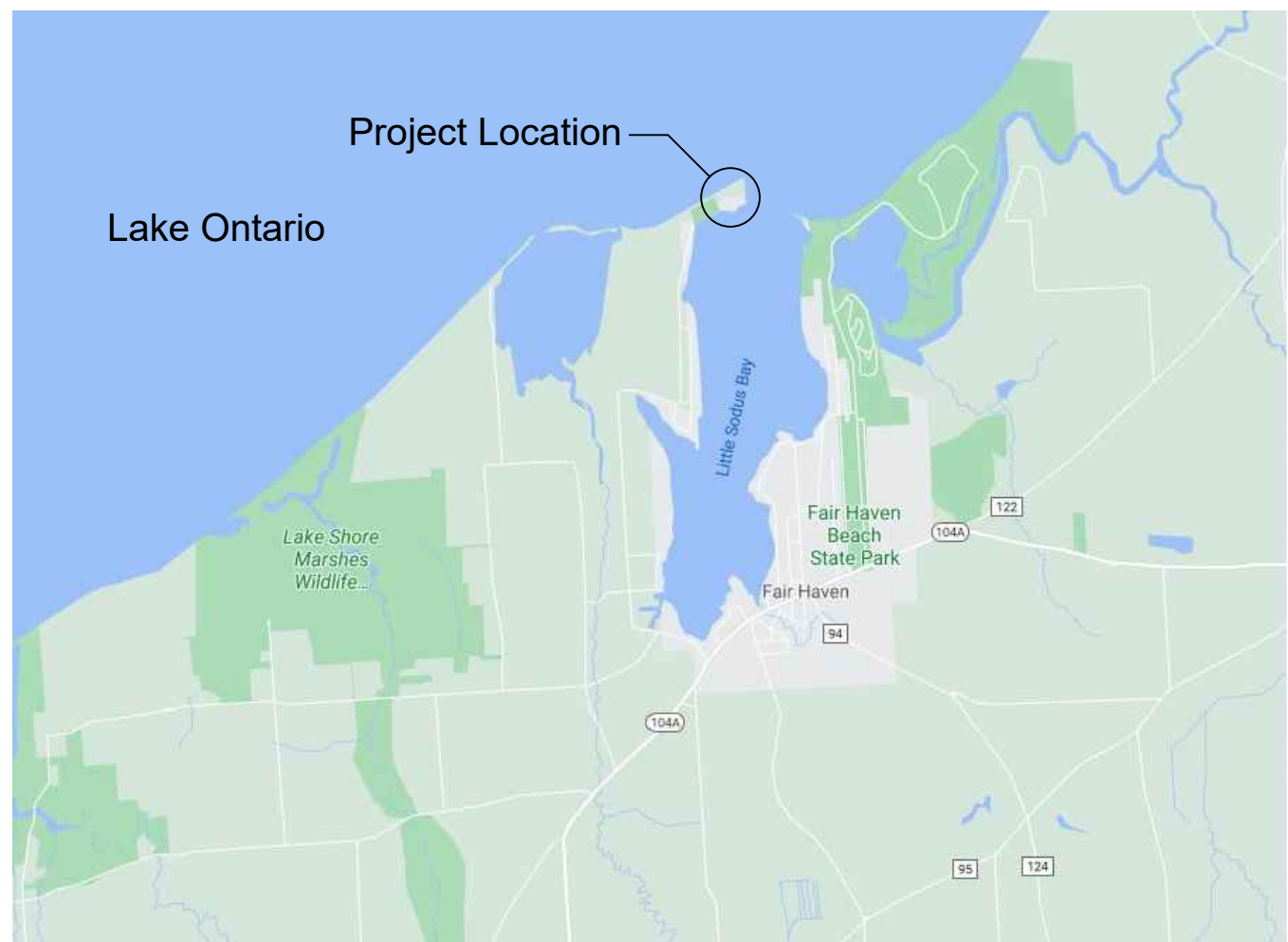
New York State Project Location Map



Scale: Not to Scale



Project Vicinity Map



Scale: Not to Scale



Project Area Map



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## GENERAL NOTES

1. REFER TO PROJECT SPECIFICATIONS FOR DETAILED INFORMATION AND COORDINATE WITH PROJECT DRAWINGS
2. THE CONTRACTOR SHALL USE THE WRITTEN DIMENSIONS PROVIDED WITHIN THE CONTRACT DRAWINGS. SOLID DIMENSIONS SHALL NOT BE USED FOR CONSTRUCTION PURPOSES.
3. THE CONTRACTOR SHALL CONTACT OWNER'S REPRESENTATIVE IMMEDIATELY IF CLARIFICATION OR INTERPRETATION OF THE CONTRACT DOCUMENTS, OR ANY OTHER ASPECTS OF THE PROJECT, IS REQUIRED.
4. THE CONTRACTOR SHALL REVIEW AND COMPLY WITH THE PERMIT REQUIREMENTS LISTED WITHIN THE SPECIFICATIONS AND INCLUDED AS AN APPENDIX TO THE PROJECT MANUAL.
5. THE CONTRACTOR SHALL COMPLY WITH THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), STATE AND LOCAL SAFETY REGULATIONS.
6. PROMPTLY REPORT TO THE OWNER'S REPRESENTATIVE ANY DISCREPANCIES FOUND ON THE SITE OR IN THE CONTRACT DOCUMENTS FOR REVIEW AND RESOLUTION BEFORE PROCEEDING WITH THE WORK IN THE AREA IN QUESTION. PROVIDE FIELD INFORMATION SPECIFIC TO THE DISCREPANCY TO EXPEDITE RESOLUTION.
7. AVOID ANY DISTURBANCE OF EXISTING VEGETATION ON THE SITE EXCEPT THE VEGETATION SPECIFICALLY DESIGNATED TO BE REMOVED.
8. TAKE ALL PRECAUTIONS NECESSARY TO PREVENT EROSION AND CONTROL SEDIMENTATION AS REQUIRED BY THE AGENCIES OF GOVERNMENT HAVING JURISDICTION.
9. THIS PROJECT DOES NOT REQUIRE COVERAGE UNDER THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC) STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES) GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES, PERMIT NO. GP-0-15-002 (GENERAL PERMIT). THE GENERAL PERMIT AUTHORIZES STORMWATER DISCHARGES TO SURFACE WATERS OF THE STATE FROM CONSTRUCTION RELATED ACTIVITIES.
10. TOPOGRAPHICAL SURVEY BY LAFAYE, WHITE & MCGIVERN, L.S., P.C. LAND SURVEYORS, PHOTOGRAMMETRISTS, THERESA, NEW YORK, DATED 5/20/2019, (REVISED 6/10/2020).
11. SURVEY DATA FOR THIS PROJECT WAS OBTAINED ON THIS SITE FOR THIS CONSTRUCTION AND IS INCLUDED IN THE PROJECT MANUAL AS AN APPENDIX.
12. THE START OF ANY ON-SITE CONSTRUCTION INCLUDING STRIPPING TOPSOIL, REMOVING CUT OR PLACING FILL MATERIAL ESTABLISHES THAT THE CONTRACTOR ACCEPTS THE CONTRACT DOCUMENTS AS ACCURATELY REPRESENTING THE EXISTING SITE CONDITIONS.
13. ALL FACILITIES TO BE CONSTRUCTED OR INSTALLED SHALL COMPLY WITH ALL SECTIONS AND LATEST EDITIONS OF THE REGULATIONS OF ALL AGENCIES OF GOVERNMENT HAVING JURISDICTION.
14. EXISTING UTILITIES (LOCATIONS, SIZES AND INVERT ELEVATIONS) SHOWN ON THE PLANS HAVE BEEN PLOTTED FROM FIELD SURVEYS AND RECORDED MAPS AND SHALL BE INTERPRETED AS APPROXIMATE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING THE EXISTING INFORMATION AT LOCATIONS IN CLOSE PROXIMITY TO UTILITIES UNDER CONSTRUCTION.
15. LONG LEAD AND SCARCE MATERIALS SHALL BE ORDERED IN A TIMELY MANNER TO PREVENT AVAILABILITY OF MATERIALS DELAYS.
16. THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE CAUSED BY CONSTRUCTION TO EXISTING UTILITIES AND FACILITIES WHICH ARE NOT INCLUDED AS PART OF THE INTENDED WORK. THE CONTRACTOR SHALL REPAIR, RESTORE AND/OR REPLACE ALL DAMAGE TO THE SATISFACTION OF OWNER'S REPRESENTATIVE AT NO ADDITIONAL COST TO THE OWNER.
17. THE CONTRACTOR SHALL RESTORE ALL DISTURBED SURFACES TO ORIGINAL OR BETTER CONDITION INCLUDING 6 INCH TOPSOIL, SEED, FERTILIZER, AND MULCH. OTHER SURFACES SHALL BE RESTORED AS SHOWN ON THE DETAILS.
18. THE OWNER'S REPRESENTATIVE SHALL REVIEW THE LAYOUT OF ALL PLANTINGS IN THE FIELD BEFORE INSTALLATION. THE CONTRACTOR SHALL SCHEDULE ADVANCED NOTIFICATION TO THE OWNER'S REPRESENTATIVE TO FACILITATE TIMELY REVIEW.
19. TOP DRESS, SEED AND MULCH ALL LAWN AREAS DISTURBED BY THE CONSTRUCTION AS SHOWN AS THE FINISHED GRADING OPERATION IS COMPLETED.
20. ADJUST THE RIM ELEVATIONS OF EXISTING UTILITY STRUCTURES SCHEDULED TO REMAIN TO BE FLUSH WITH THE FINISHED GRADE ELEVATIONS.
21. MAINTAIN AN ADEQUATE SUPPLY OF EROSION AND SEDIMENT CONTROL MATERIALS AT THE CONSTRUCTION SITE AT ALL TIMES TO BE USED FOR URGENT SITUATIONS, SUCH AS UNEXPECTED HEAVY RAINFALL.
22. MAINTENANCE AND REPAIR OF ALL EQUIPMENT AND VEHICLES INVOLVING OIL CHANGES, HYDRAULIC SYSTEM AND FUEL TANK DRAIN DOWN, DEGREASING OPERATIONS AND OTHER ACTIVITIES THAT MAY RESULT IN THE ACCIDENTAL RELEASE OF CONTAMINANTS MUST BE CONDUCTED OFF-SITE. ACCIDENTAL SPILLS MUST BE CLEANED UP IMMEDIATELY AND CONTAMINANTS DISPOSED OF PROPERLY.
23. THE CONTRACTOR SHALL ULTIMATELY BE RESPONSIBLE FOR LOCATING SOIL AND EXCESS EXCAVATED MATERIALS TO BE USED FOR FILL. STOCK PILES SHALL BE STABILIZED PER THE DETAIL.
24. CONSTRUCTION ROUTES SHALL BE STABILIZED PER THE NY'S STANDARDS FOR EROSION AND SEDIMENT CONTROL, AS NECESSARY BASED ON SITE CONDITIONS.
25. SOLID WASTE SHALL BE STORED IN COVERED DUMPSTERS OR OTHER APPROPRIATE CONTAINERS. WASTE IS TO BE DISPOSED OF REGULARLY AND PROPERLY IN ACCORDANCE WITH LOCAL, STATE, AND/OR FEDERAL REGULATIONS.
26. EROSION AND SEDIMENT CONTROLS ARE SHOWN FOR A CONDITION WHEN ALL WORK IS OCCURRING SIMULTANEOUSLY. ACTUAL INSTALLATIONS SHALL BE ADJUSTED BASED ON CURRENT CONSTRUCTION ACTIVITY AND SITE CONDITIONS.
27. TURBIDITY CURTAINS ARE NOT REQUIRED AROUND BARRIER ROCK REEF LOCATIONS.
28. BARRIER ROCK REEF ARMOR STONE SIZE WAS DESIGNED BASED ON A SIGNIFICANT WAVE HEIGHT OF 3 FEET AND A MEAN WAVE PERIOD OF 2.4 SECONDS (100-YEAR RETURN INTERVAL EVENT WAVE CONDITIONS). THE BARRIER ROCK REEF ARMOR STONE SIZE WAS LEVEL ELEVATION EQUIVALENT TO 249.0 FEET (GLD85 HISTORICAL PEAK WATER LEVEL FROM 2019) AND AN ICE THICKNESS OF 1 FOOT. BARRIER ROCK REEF ARMOR STONE WAS DESIGNED IN ACCORDANCE WITH THE U.S. ARMY CORPS OF ENGINEERS COASTAL ENGINEERING MANUAL (EM 1110-2-1-1100) TABLE VI-5-23.

## ABBREVIATIONS

AL ACT APPR	ALUMINUM ACTUAL APPROXIMATE/ APPROXIMATELY	GC GR GV	GENERAL CONTRACTOR GUARDRAIL GAS VALVE	REINF REQD REV ROW RT	REINFORCING REQUIRED REVISION RIGHT OF WAY RIGHT
BC BLDG	BOTTOM OF CURB BUILDING	HP HT	HORIZONTAL HIGH POINT HEIGHT	S	SOUTH
BM	BENCHMARK	HW	HEAD WALL	SAN	SANITARY
BOS	BOTTOM OF SLOPE	HWY	HIGHWAY	SECT	SECTION
BS	BOTTOM OF STAIR	HYD	HYDRANT	SG	SQUARE FOOT
BW	BOTTOM OF WALL			SF	SUB GRADE
B&B	BALLED AND BURLAPPED	ID	INSIDE DIAMETER	SH	SH
		IN	INCH/INCHES	SI	STORM INLET
CAL	CALIPER	INL	INLET	SL	STREET LIGHT
CB	CATCH BASIN	INV	INVERT	SPEC	SPECIFICATIONS/
CF	CUBIC FEET	IP	IRON PIPE		SPECIFIED
CIP	CAST IRON			SQ	SQUARE
CI	CAST IN PLACE	JB	JUNCTION BOX	SS	STAINLESS STEEL
CIR	CIRCULAR			STA	STATION
CJ	CONTROL LINK	L	LENGTH/LONG	STL	STEEL
CLF	CHAIN-LINK FENCE	LA	LANDSCAPE ARCHITECT	SY	SQUARE YARD
CLL	CONTRACT LIMIT LINE	LAT	LATITUDE		
CLR	CLEAR	LF	LINEAR FEET	T	TANGENT
CMO	CORRUGATED METAL PIPE	LFT	LEFT	TB	TEST BORING
COP	CLEANOUT	LIN	LINEAR	TC	TOP OF CURB
COL	COLUMN	LP	LOW POINT	TOS	TOP OF SLOPE
CONC	CONCRETE			TS	TOP OF STAIR
CONT	CONTAINER	M	METER	TW	TOP OF WALL
CONTR	CONTRACTOR	MAX	MAXIMUM	TYP	TYPICAL
CY	CUBIC YARDS	MH	MANHOLE	T&G	TONGUE AND GROOVE
		MIN	MINIMUM		
		MISC	MISCELLANEOUS		
DET	DETAIL	MON	MONUMENT	UD	UNDERDRAIN
DIM	DIMENSION			USGS	UNITED STATES
DIA	DIAMETER				GEOLOGICAL SURVEY
DMH	DROP MANHOLE	N	NORTH		
DWG	DRAWING	NIC	NOT IN CONTRACT		
		NOM	NOMINAL	VAR	VARIES/VARIABLE
E	EAST	NTS	NOT TO SCALE	VCP	VITRIFIED CLAY PIPE
EA	EACH	NUM	NUMBER	VERT	VERTICAL
EJ	EXPANSION JOINT				
EL	ELEVATION	OC	ON CENTER	W	WEST
EQU	EQUAL	OCEW	ON CENTER EACH WAY	WE	WATER ELEVATION
ES	END SECTION	OD	OUTSIDE DIAMETER	WL	WALK LIGHT
EX	EXISTING	OP	OUTLET PROTECTION	WV	WATER VALVE
EXP	EXPANSION			WWM	WOVEN WIRE MESH
		PA	PLANTING AREA	WITH	
FEE	FINISHED FLOOR ELEVATION	PC	POINT OF CURVATURE	W/O	WITHOUT
FG	FINISHED GRADE	PL	PROPERTY LINE		
FIN	FINISH	PT	POINT OF TANGENT/	YD	YARD DRAIN
FL	FLOOR		PERCOLATION TEST		
FTG	FOOTING		LOCATION	±	CENTER LINE
FT	FOOT/FEET	PVC	POLYVINYL CHLORIDE	±	PLUS OR MINUS
		R	RADIUS	A	CHANGE IN VALUE
GAL	GAUGE	RCP	REINFORCED CONCRETE	<	LESS THAN
GALV	GALLON GALVANIZED		PIPE	>	GREATER THAN

## PROJECT KEY PLAN



## Drawing Index:

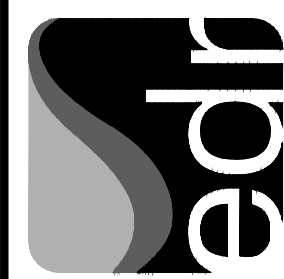
G-000	COVER SHEET
G-001	GENERAL INFORMATION
C-101	EXISTING CONDITIONS / STAGING PLAN
C-201	GRADING & EROSION & SEDIMENT CONTROL PLAN (AREA 1)
C-202	GRADING & EROSION & SEDIMENT CONTROL PLAN (AREA 2)
C-203	GRADING & EROSION & SEDIMENT CONTROL PLAN (AREA 3)
C-204	GRADING & EROSION & SEDIMENT CONTROL PLAN (AREA 4)
C-205	GRADING & EROSION & SEDIMENT CONTROL PLAN (AREA 5)
C-401	PLANTING PLAN (AREA 4)
C-402	PLANTING PLAN (AREA 5)
C-501	SECTIONS KEY PLAN
C-502	SECTIONS LAKE SIDE
C-503	SECTIONS BAY SIDE
C-504	SECTIONS ROCK BARRIER REEFS
C-601	DETAILS
C-602	DETAILS

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3/27/2021

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# REDI CO.7 WEST BARRIER BAR PARK FLOOD REMEDIATION PROJECT

VILLAGE OF FAIR HAVEN, CAYUGA COUNTY, NEW YORK

## GENERAL INFORMATION




[illegible]

PRELIMINARY DESIGN





## STAGING PLAN LEGEND

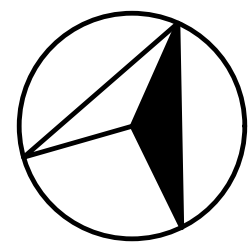
ITEM	SYMBOL
STABILIZED CONSTRUCTION STAGING AREA	
STABILIZED SOIL STOCKPILE	
STABILIZED CONSTRUCTION ENTRANCE	

## NOTES

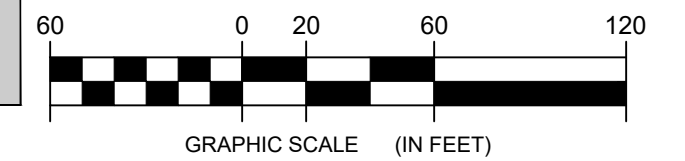
1. PROTECT EXISTING VEGETATION FROM IMPACTS BY CONSTRUCTION ACTIVITIES. REPLACE ANY VEGETATION LOST OR DAMAGED BY CONSTRUCTION ACTIVITIES WITH LIKE SPECIES AND SIZE AT A 3:1 RATIO.
2. UTILIZE EXISTING STONE SURFACED ROADS AND PATHWAYS FOR CONSTRUCTION ACCESSWAYS

C-101

KEYMAP



NORTH



REVISIONS

[illegible]

PROJ. #: 190042

DATE: TBD

SHEET

C-101

# REDI CO.7 WEST BARRIER BAR PARK FLOOD REMEDIATION PROJECT

VILLAGE OF FAIR HAVEN, CAYUGA COUNTY, NEW YORK

## EXISTING CONDITIONS / STAGING PLAN

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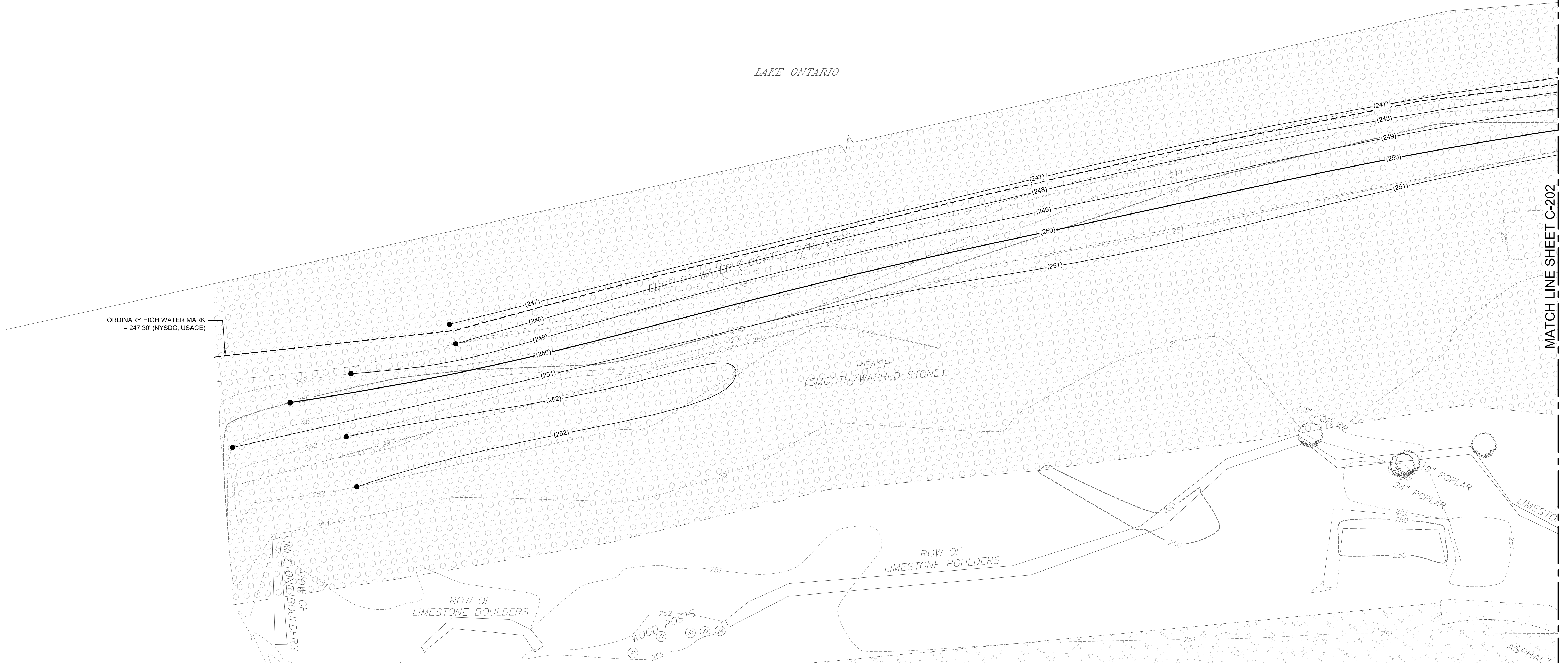
**CAPITAL CONSULTANTS**  
**ARCHITECTURE AND ENGINEERING**

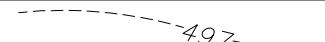
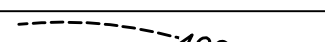








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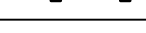
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## PRELIMINARY DESIGN





GRADING PLAN LEGEND	
ITEM	SYMBOL
CONTOUR - EXISTING	
CONTOUR- EXISTING - INDEX	
ORDINARY HIGH WATER MARK	
ORDINARY LOW WATER MARK	
SINGLE COIR LOG	
STACKED COIR LOG	
TRENCHED COIR LOG	
SPOT ELEVATION - TOP OF COIR LOG	 ———— TCL (123.45)
SPOT ELEVATION - BOTTOM OF COIR LOG	 ———— BCL (123.45)
EXISTING BEACH SMOOTH / WASHED STONE	

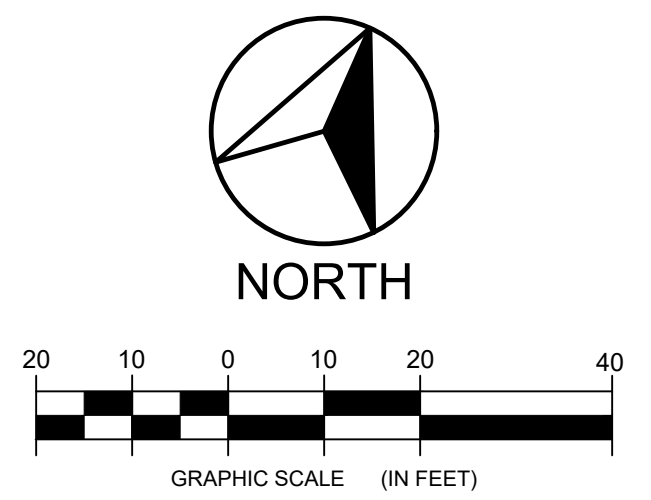
EROSION & SEDIMENTATION CONTROL PLAN LEGEND	
ITEM	SYMBOL
SILT FENCE	
VEGETATION PROTECTION	
STABILIZED CONSTRUCTION ENTRANCE	

# EROSION & SEDIMENT CONTROL DETAIL KEYNOTES

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2. 1	Vegetation Protection	C-601

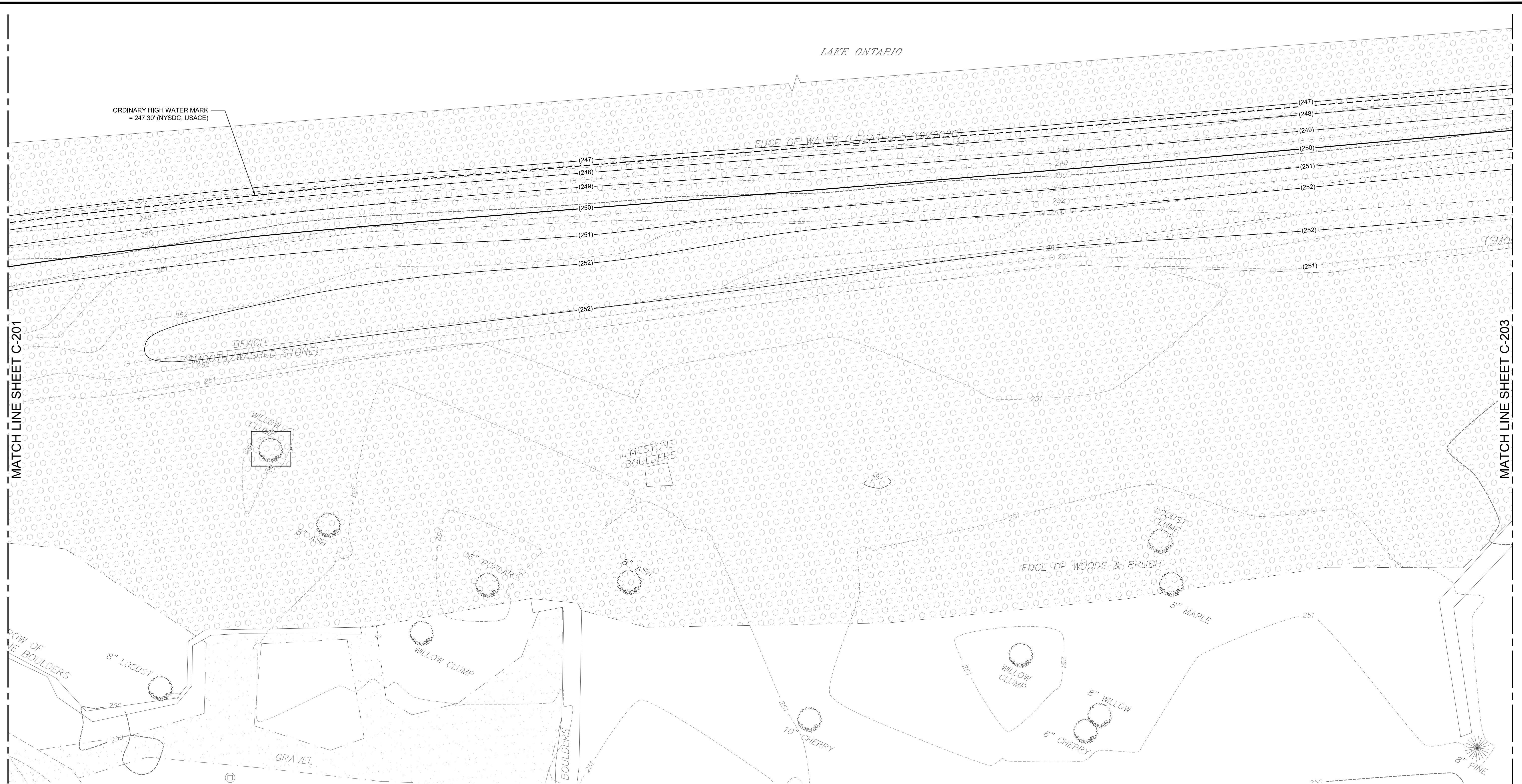
C-201	C-202	C-203
<div> <div>C-204</div> <div>C-205</div> </div>		

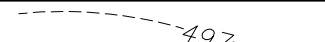
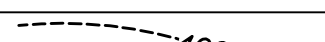







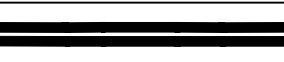
KEYMAP



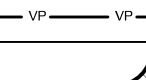


NORTH





GRADING PLAN LEGEND	
ITEM	SYMBOL
CONTOUR - EXISTING	
CONTOUR- EXISTING - INDEX	
ORDINARY HIGH WATER MARK	
ORDINARY LOW WATER MARK	
SINGLE COIR LOG	
STACKED COIR LOG	
TRENCHED COIR LOG	
SPOT ELEVATION - TOP OF COIR LOG	 ———— TCL (123.45)
SPOT ELEVATION - BOTTOM OF COIR LOG	 ———— BCL (123.45)
EXISTING BEACH SMOOTH / WASHED STONE	

EROSION & SEDIMENTATION CONTROL PLAN LEGEND	
ITEM	SYMBOL
SILT FENCE	
VEGETATION PROTECTION	
STABILIZED CONSTRUCTION ENTRANCE	

## EROSION & SEDIMENT CONTROL

### DETAIL KEYNOTES

2	PLANT PROTECTION		SHEET #
2.	1	Vegetation Protection	C-601

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FLOOD REMEDIATION PROJECT

VILLAGE OF FAIR HAVEN, CAYUGA COUNTY, NEW YORK

## GRADING & EROSION & SEDIMENT CONTROL PLAN AREA 2

REVISIONS		
REV	DESCRIPTION	DATE

[illegible]

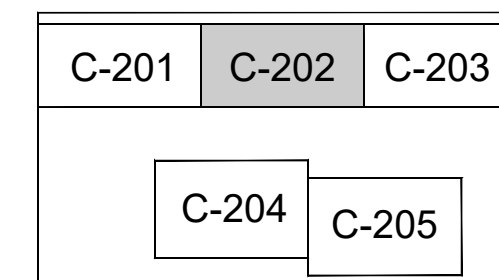
PROJ. #:	19004
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DATE: TBC

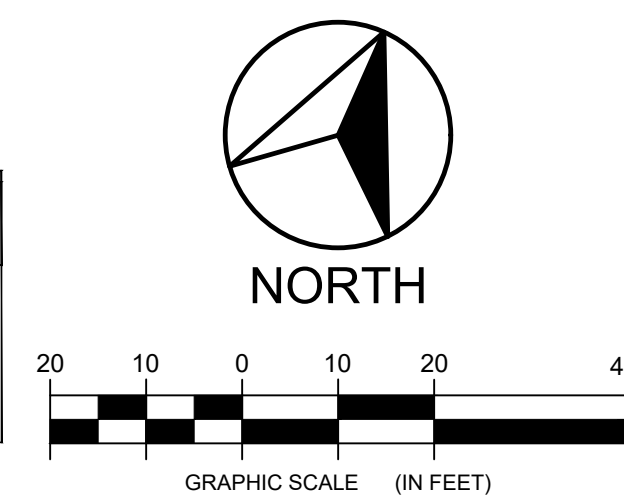
SHEET

C-202

PRELIMINARY DESIGN

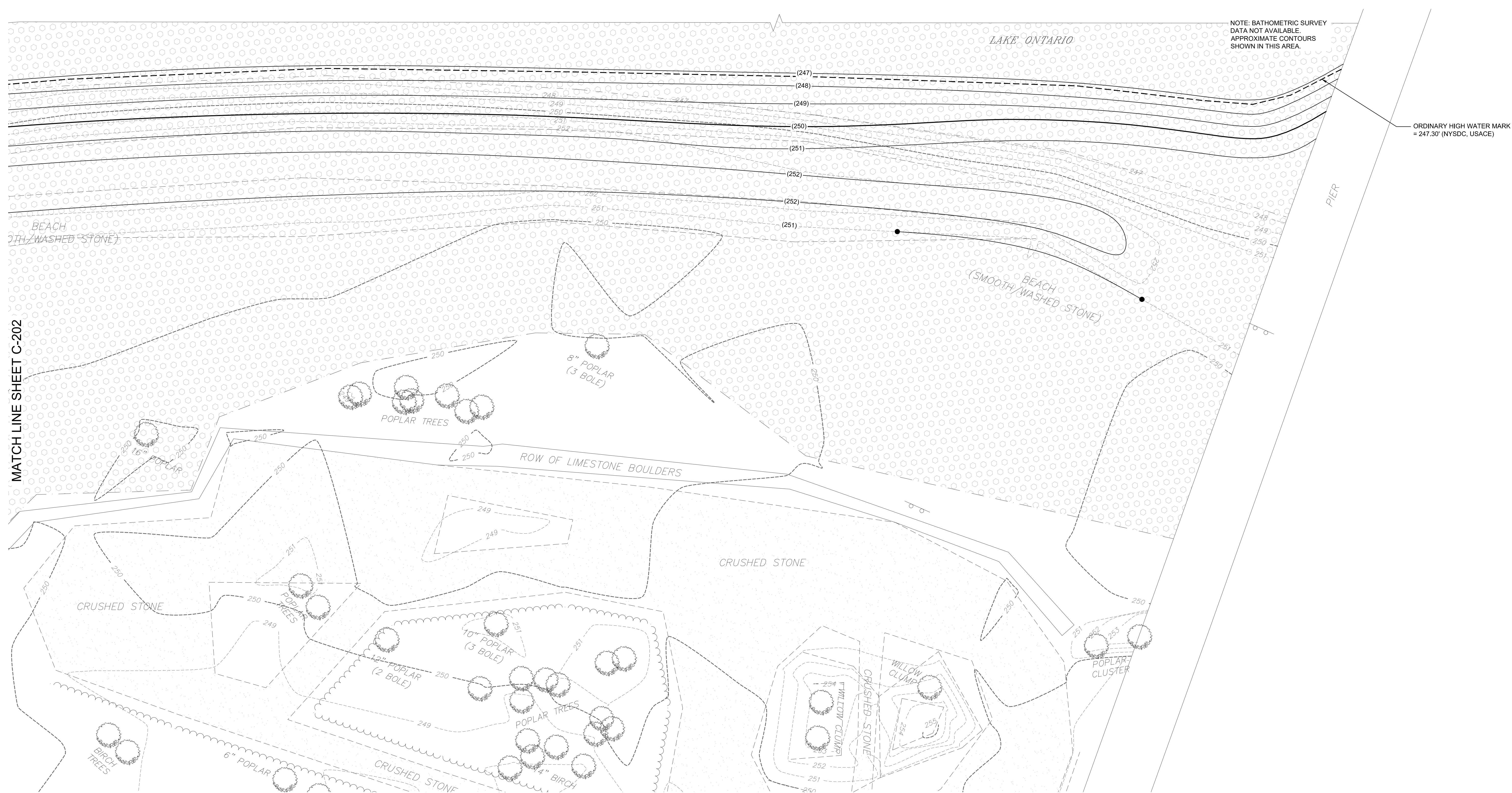


## KEYMAP



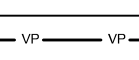


GRAPHIC SCALE (IN FEET)





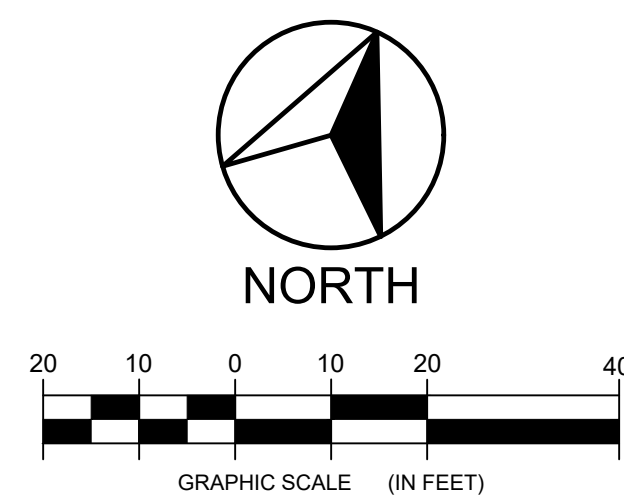
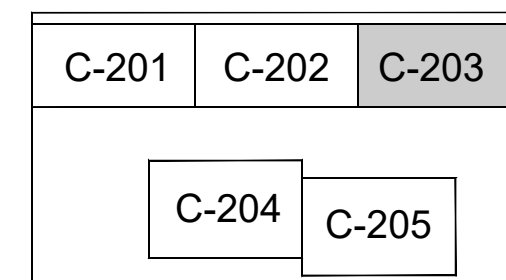
GRADING PLAN LEGEND	
ITEM	SYMBOL
CONTOUR - EXISTING	
CONTOUR- EXISTING - INDEX	
ORDINARY HIGH WATER MARK	
ORDINARY LOW WATER MARK	
SINGLE COIR LOG	
STACKED COIR LOG	
TRENCHED COIR LOG	
SPOT ELEVATION - TOP OF COIR LOG	
SPOT ELEVATION - BOTTOM OF COIR LOG	
EXISTING BEACH SMOOTH / WASHED STONE	

EROSION & SEDIMENTATION CONTROL PLAN LEGEND	
ITEM	SYMBOL
SILT FENCE	
VEGETATION PROTECTION	
STABILIZED CONSTRUCTION ENTRANCE	

## EROSION & SEDIMENT CONTROL



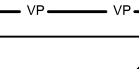
### DETAIL KEYNOTES

2	PLANT PROTECTION		SHEET #
2.	1	Vegetation Protection	C-601

[illegible]



GRADING PLAN LEGEND	
ITEM	SYMBOL
CONTOUR - EXISTING	
CONTOUR - EXISTING - INDEX	
ORDINARY HIGH WATER MARK	
ORDINARY LOW WATER MARK	
SINGLE COIR LOG	
STACKED COIR LOG	
TRENCHED COIR LOG	
SPOT ELEVATION - TOP OF COIR LOG	
SPOT ELEVATION - BOTTOM OF COIR LOG	

EROSION & SEDIMENTATION CONTROL PLAN LEGEND	
ITEM	SYMBOL
SILT FENCE	
VEGETATION PROTECTION	
STABILIZED CONSTRUCTION ENTRANCE	

## EROSION & SEDIMENT CONTROL

### DETAIL KEYNOTES

2	PLANT PROTECTION		SHEET #
2.	1	Vegetation Protection	C-601

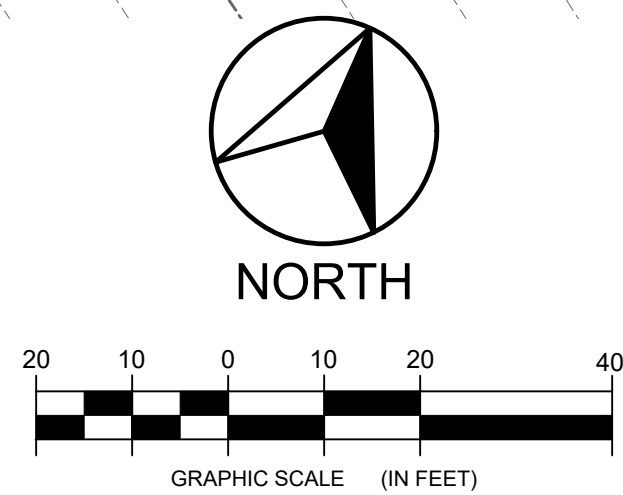
## EROSION & SEDIMENT CONTROL

### REFERENCE NOTES

1 BARRIER ROCK REEF - SEE C-602



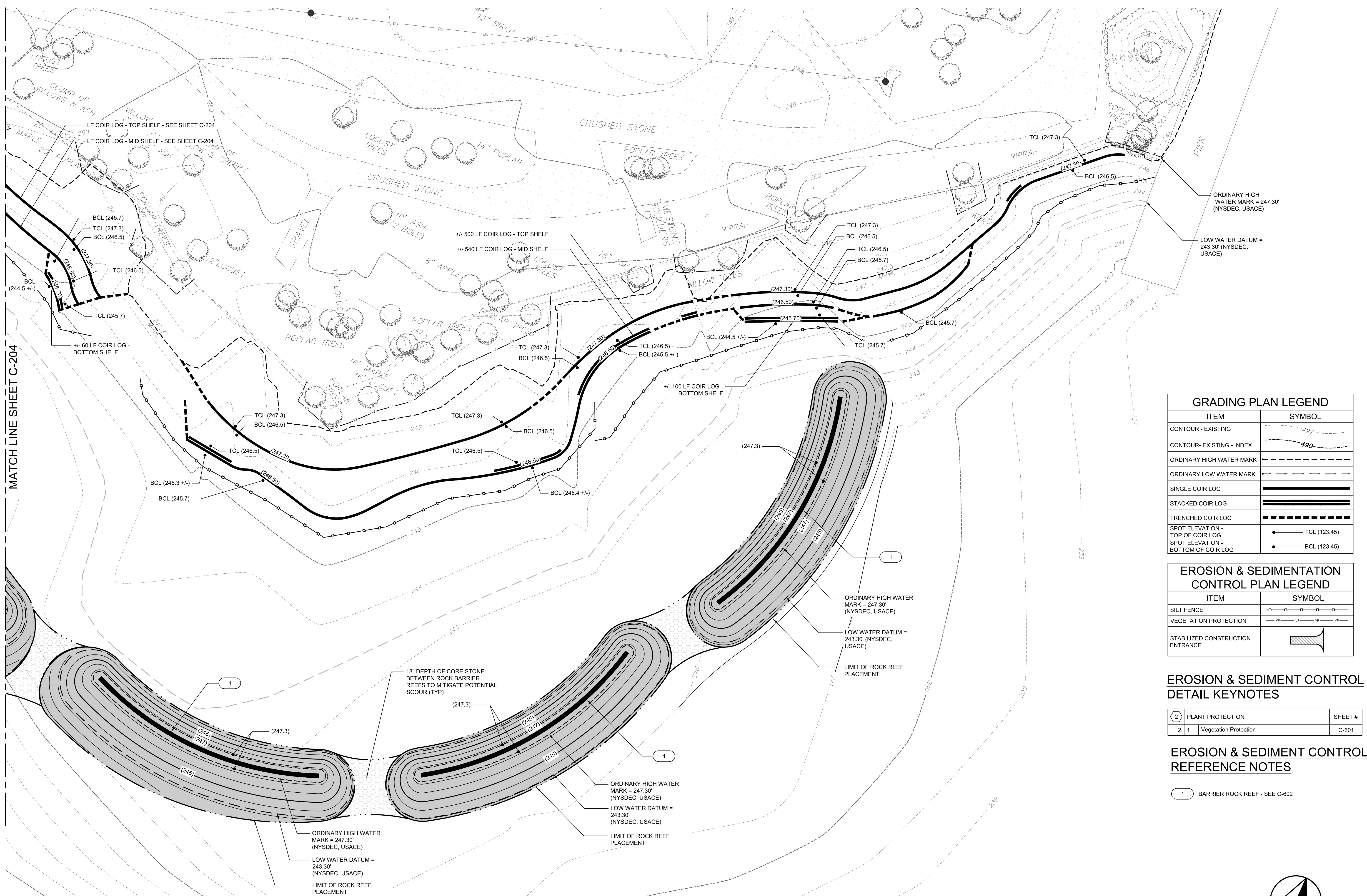
C-201	C-202	C-203
	C-204	C-205

[illegible]



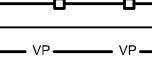




MATCH LINE SHEET C-204



GRADING PLAN LEGEND	
ITEM	SYMBOL
CONTOUR - EXISTING	
CONTOUR - EXISTING - INDEX	
ORDINARY HIGH WATER MARK	
ORDINARY LOW WATER MARK	
SINGLE COIR LOG	
STACKED COIR LOG	
TRENCHED COIR LOG	
SPOT ELEVATION - TOP OF COIR LOG	
SPOT ELEVATION - BOTTOM OF COIR LOG	

EROSION & SEDIMENTATION CONTROL PLAN LEGEND	
ITEM	SYMBOL
SILT FENCE	
VEGETATION PROTECTION	
STABILIZED CONSTRUCTION ENTRANCE	

## EROSION & SEDIMENT CONTROL

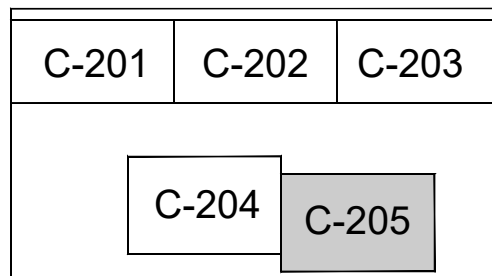
### DETAIL KEYNOTES

2	PLANT PROTECTION		SHEET #
2.	1	Vegetation Protection	C-601

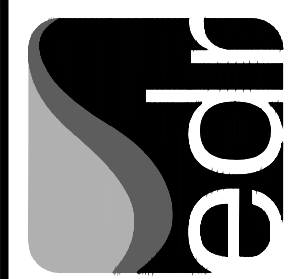
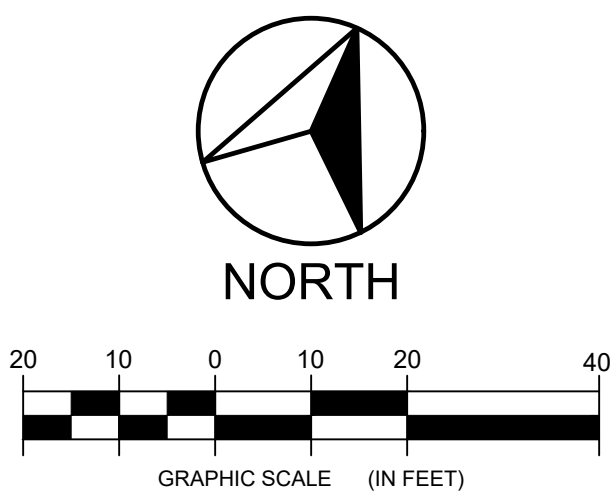
## EROSION & SEDIMENT CONTROL

### REFERENCE NOTES

1 BARRIER ROCK REEF - SEE C-602



## KEYMAP



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# REDI CO.7 WEST BARRIER BAR PARK FLOOD REMEDIATION PROJECT

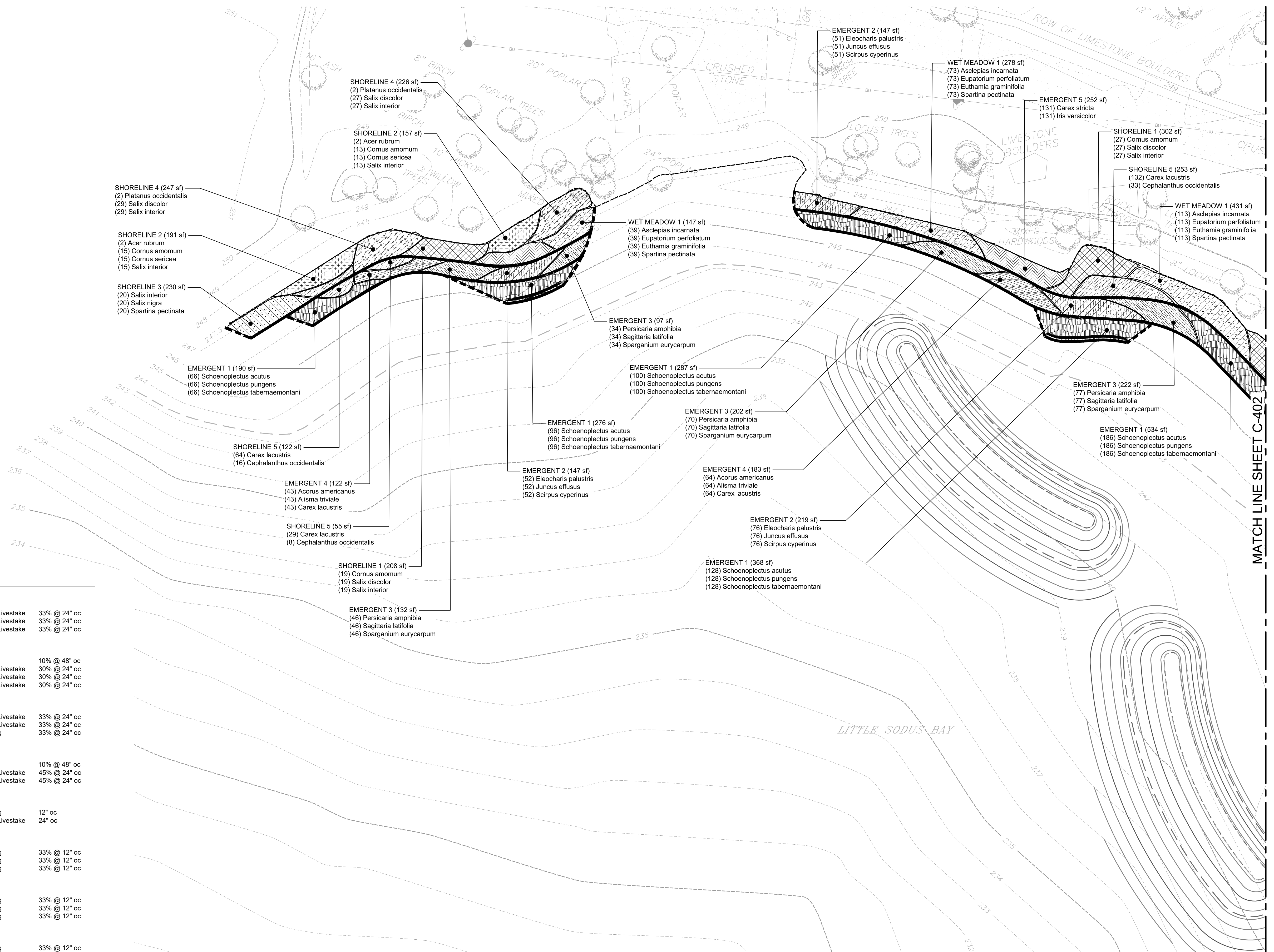
VILLAGE OF FAIR HAVEN, CAYUGA COUNTY, NEW YORK

## GRADING & EROSION & SEDIMENT CONTROL PLAN AREA 5

[illegible]

C-205





## PLANT SCHEDULE

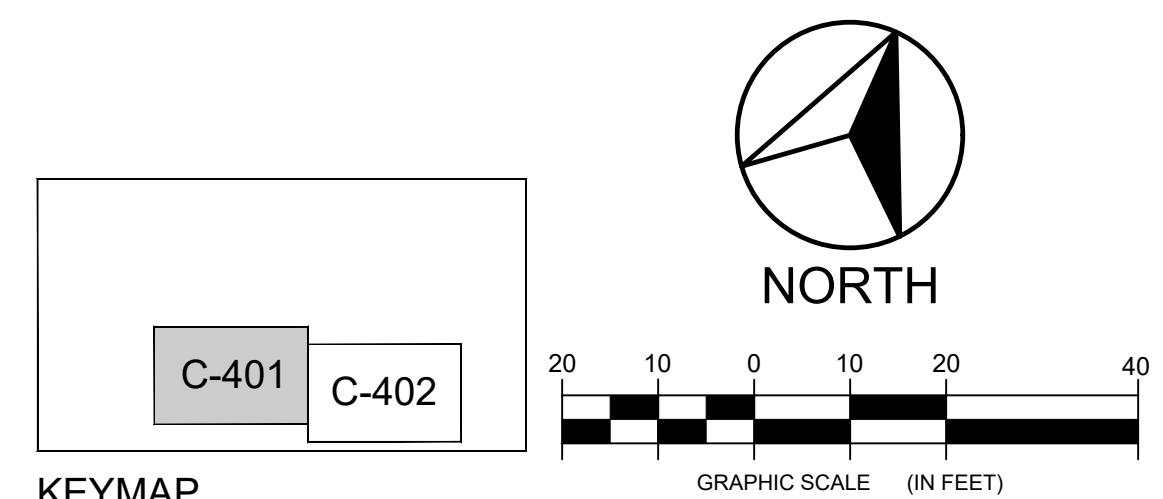
	<b>SHORELINE 1</b>	2,564 sf		
	Cornus amomum / Silky Dogwood	223	1" x 36", Livestake	33% @ 24" oc
	Salix discolor / Pussy Willow	223	1" x 36", Livestake	33% @ 24" oc
	Salix interior / Sandbar Willow	223	1" x 36", Livestake	33% @ 24" oc
	<b>SHORELINE 2</b>	1,940 sf		
	Acer rubrum / Red Maple	13	Tubeling	10% @ 48" oc
	Cornus amomum / Silky Dogwood	152	1" x 36", Livestake	30% @ 24" oc
	Cornus sericea / Red Twig Dogwood	152	1" x 36", Livestake	30% @ 24" oc
	Salix interior / Sandbar Willow	152	1" x 36", Livestake	30% @ 24" oc
	<b>SHORELINE 3</b>	1,481 sf		
	Salix interior / Sandbar Willow	129	1" x 36", Livestake	33% @ 24" oc
	Salix nigra / Black Willow	129	1" x 36", Livestake	33% @ 24" oc
	Spartina pectinata / Prairie Cordgrass	129	LP50 Plug	33% @ 24" oc
	<b>SHORELINE 4</b>	1,176 sf		
	Platanus occidentalis / American Sycamore	8	Tubeling	10% @ 48" oc
	Salix discolor / Pussy Willow	138	1" x 36", Livestake	45% @ 24" oc
	Salix interior / Sandbar Willow	138	1" x 36", Livestake	45% @ 24" oc
	<b>SHORELINE 5</b>	1,907 sf		
	Carex lacustris / Common Lake Sedge	1,982	LP50 Plug	12" oc
	Cephalanthus occidentalis / Buttonbush	496	1" x 36", Livestake	24" oc
	<b>EMERGENT 1</b>	3,462 sf		
	Schoenoplectus acutus / Hardstem Bulrush	1,200	LP50 Plug	33% @ 12" oc
	Schoenoplectus pungens / Common Threesquare	1,200	LP50 Plug	33% @ 12" oc
	Schoenoplectus tabernaemontani / Softstem Bulrush	1,200	LP50 Plug	33% @ 12" oc
	<b>EMERGENT 2</b>	2,006 sf		
	Echinochloa polystachya / Great Spike Rush	697	LP50 Plug	33% @ 12" oc
	Juncus effusus / Soft Rush	696	LP50 Plug	33% @ 12" oc
	Scirpus cyperinus / Wool Grass	696	LP50 Plug	33% @ 12" oc
	<b>EMERGENT 3</b>	2,029 sf		
	Potamogeton amplibia / Water Smartweed	703	LP50 Plug	33% @ 12" oc
	Sagittaria latifolia / Lance-Leafed Arrowhead	703	LP50 Plug	33% @ 12" oc
	Sparganium eurycarpum / Common Bur Reed	703	LP50 Plug	33% @ 12" oc
	<b>EMERGENT 4</b>	1,591 sf		
	Acorus americanus / Sweet Flag	552	LP50 Plug	33% @ 12" oc
	Alisma triviale / Northern Water Plantain	552	LP50 Plug	33% @ 12" oc
	Carex lacustris / Common Lake Sedge	552	LP50 Plug	33% @ 12" oc
	<b>EMERGENT 5</b>	490 sf		
	Carex stricta / Tussock Sedge	255	LP50 Plug	50% @ 12" oc
	Iris versicolor / Blue Flag	255	LP50 Plug	50% @ 12" oc
	<b>WET MEADOW 1</b>	1,834 sf		
	Asclepias incarnata / Swamp Milkweed	477	LP50 Plug	25% @ 12" oc
	Eupatorium perfoliatum / Common Boneset	477	LP50 Plug	25% @ 12" oc
	Euthamia graminifolia / Grass Leafed Golden Rod	477	LP50 Plug	25% @ 12" oc
	Spartina pectinata / Prairie Cordgrass	477	LP50 Plug	25% @ 12" oc

NOTE:  
QUANTITIES LISTED ARE FOR ENTIRE PROJECT.

LIVE STAKES FOR COIR LOG PLANTING				
KEY	QTY	BOTANICAL NAME	COMMON NAME	ROOT
CA	212	CORNUS AMOMUM	SILKY DOGWOOD	LIVE STAKE
CS	212	CORNUS SERICEA	RED OSIER DOGWOOD	LIVE STAKE
SD	212	SALIX DISCOLOR	PUSSY WILLOW	LIVE STAKE
SE	212	SALIX EXIGUA SSP. INTERIOR	SANDBAR WILLOW	LIVE STAKE

NOTE: ALTERNATE SPECIES IN GROUPS OF 4-6 STAKES OF LIKE SPECIES

LEGEND	
ITEM	SYMBOL
EXISTING ORDINARY HIGH WATER MARK 247.3	-----
PROPOSED ORDINARY HIGH WATER MARK 247.3	
EDGE OF PLANTING SHELF 246.3	



KEYMAP



90%  
DESIGN  
DEVELOPMENT

3/27/2021

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# REDI CO. / WEST BARRIER BAR PARK FLOOD REMEDIATION PROJECT

VILLAGE OF FAIR HAVEN, CAYUGA COUNTY, NEW YORK

## PLANTING PLAN AREA 4

[illegible]

ROJ. #: 19004

DATE: TBC

SHEET

C-401





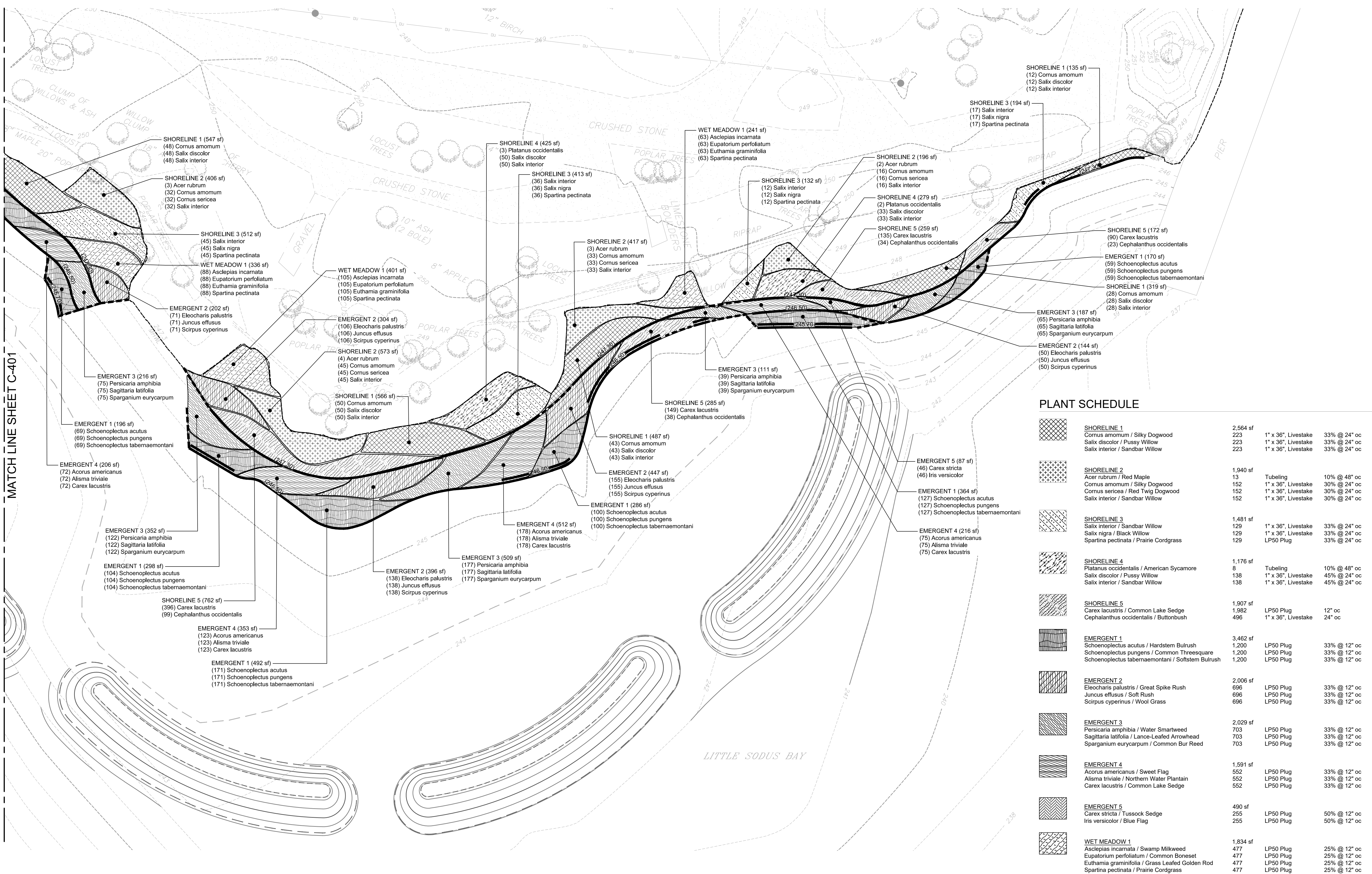
THE BAR BELOW SHOWS GRAYSCALE FROM WHITE TO SOLID BLACK



WHITE BLACK

**WE RECYCLE**

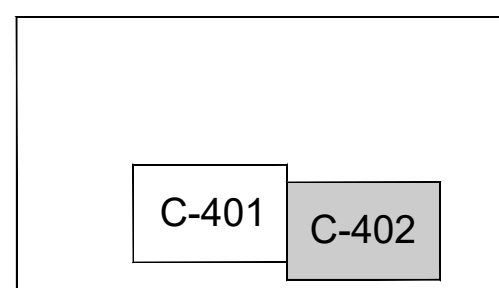
MATCH LINE SHEET C-401



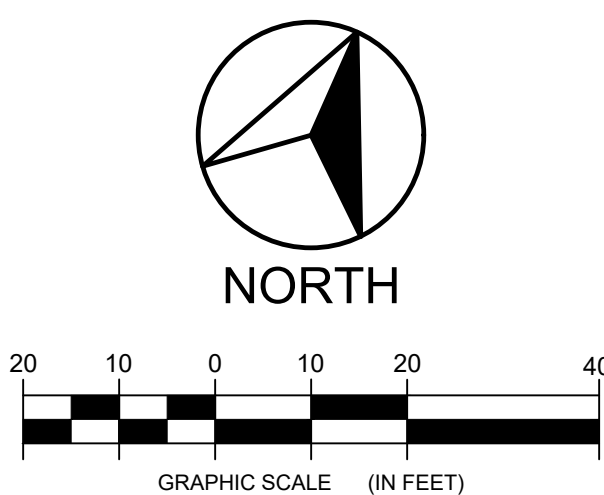
LEGEND	
ITEM	SYMBOL
EXISTING ORDINARY HIGH WATER MARK 247.3	— — — — —
PROPOSED ORDINARY HIGH WATER MARK 247.3	
EDGE OF PLANTING SHELF 246.3	

LIVE STAKES FOR COIR LOG PLANTING				
KEY	QTY	BOTANICAL NAME	COMMON NAME	ROOT
CA	212	CORNUS AMOMUM	SILKY DOGWOOD	LIVE STAKE
CS	212	CORNUS SERICEA	RED OSIER DOGWOOD	LIVE STAKE
SD	212	SALIX DISCOLOR	PUSSY WILLOW	LIVE STAKE
SE	212	SALIX EXIGUA SSP. INTERIOR	SANDBAR WILLOW	LIVE STAKE

NOTE: ALTERNATE SPECIES IN GROUPS OF 4-6 STAKES OF LIKE SPECIES



KEYMAP

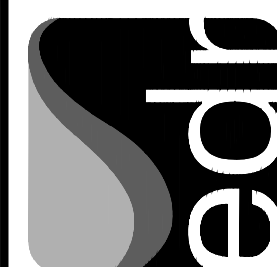


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**90%  
DESIGN  
DEVELOPMENT**

3/27/2021

NOT FOR CONSTRUCTION

REDI CO.7 WEST BARRIER BAR PARK  
FLOOD REMEDIATION PROJECT

VILLAGE OF FAIR HAVEN, CAYUGA COUNTY, NEW YORK

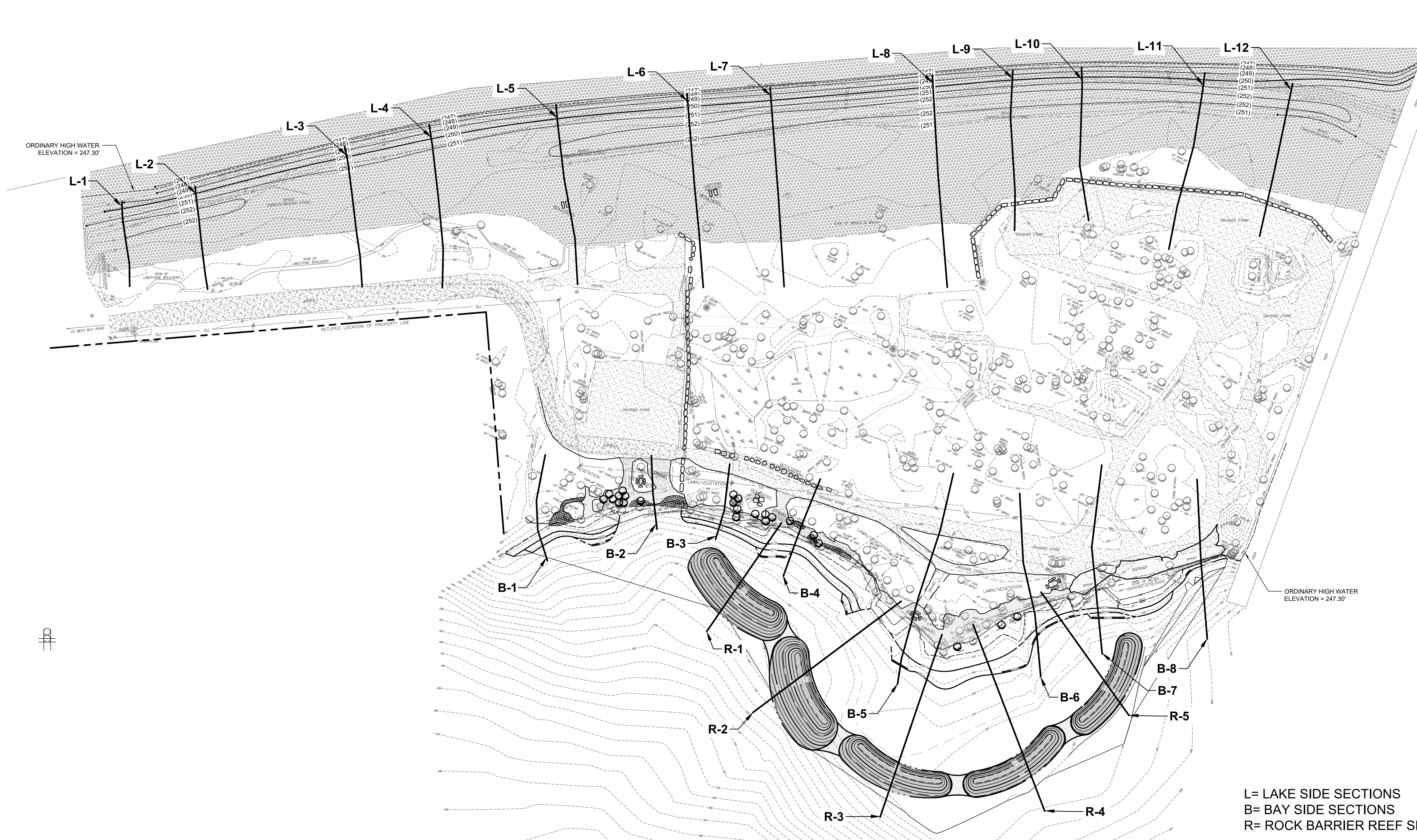
PLANTING PLAN  
AREA 5

[illegible]

C-402

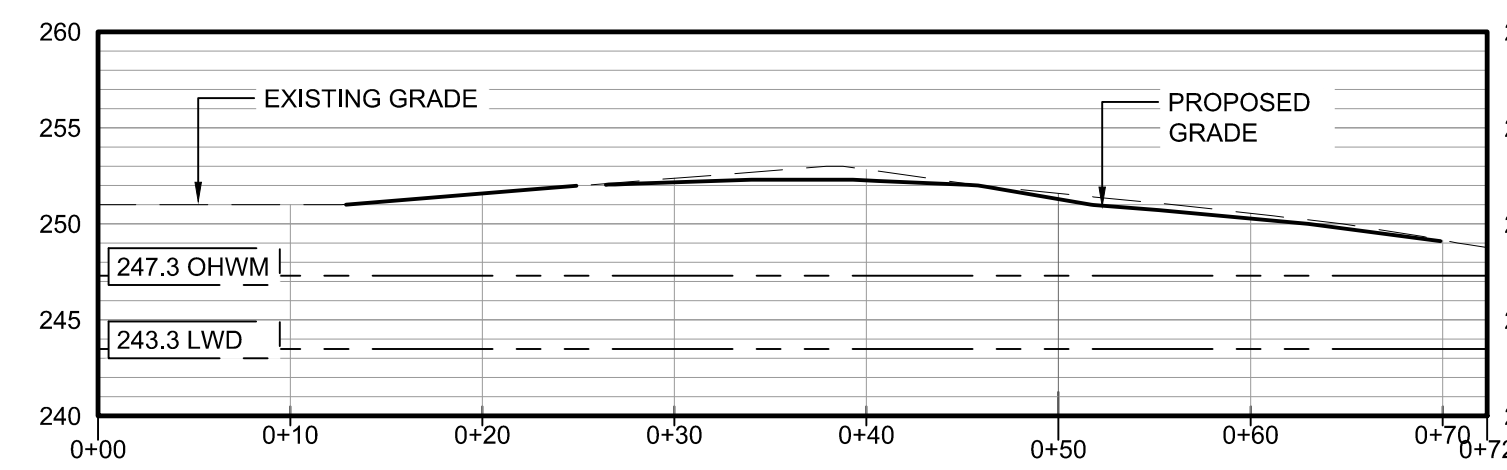
PRELIMINARY DESIGN





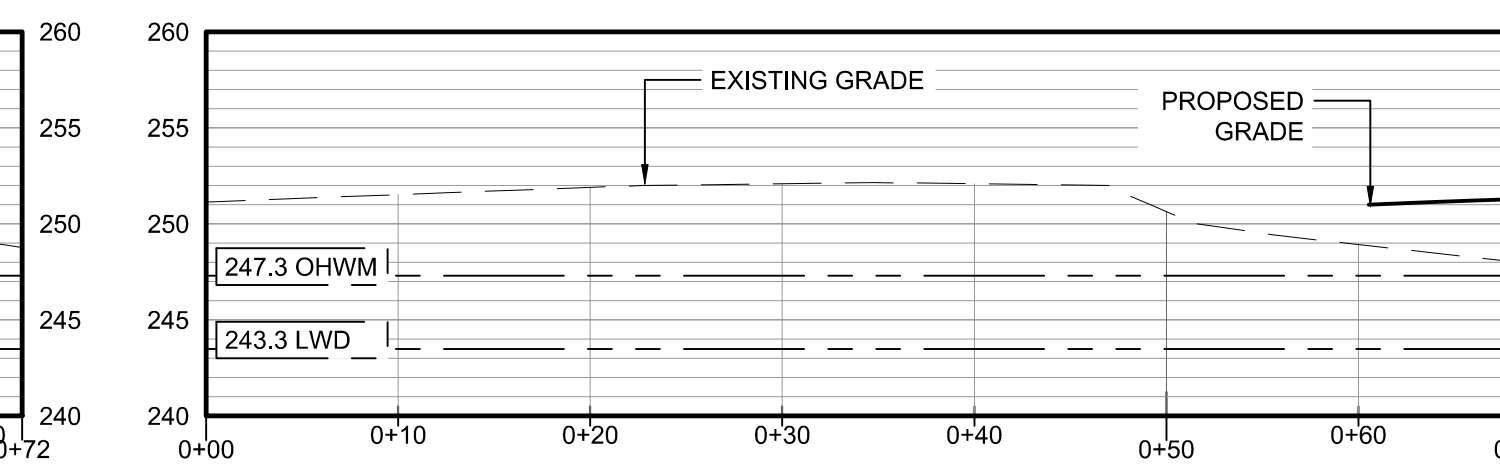
L= LAKE SIDE SECTIONS  
B= BAY SIDE SECTIONS  
R= ROCK BARRIER REEF SECTIONS





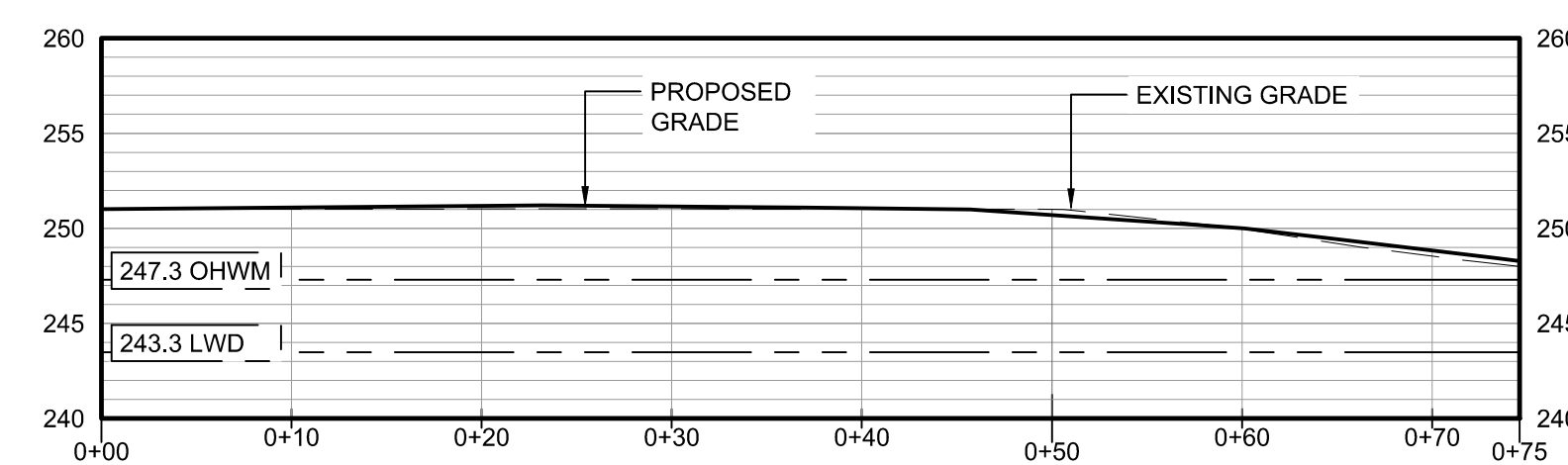
### SECTION VIEW L-1

Scale: 1" = 10'



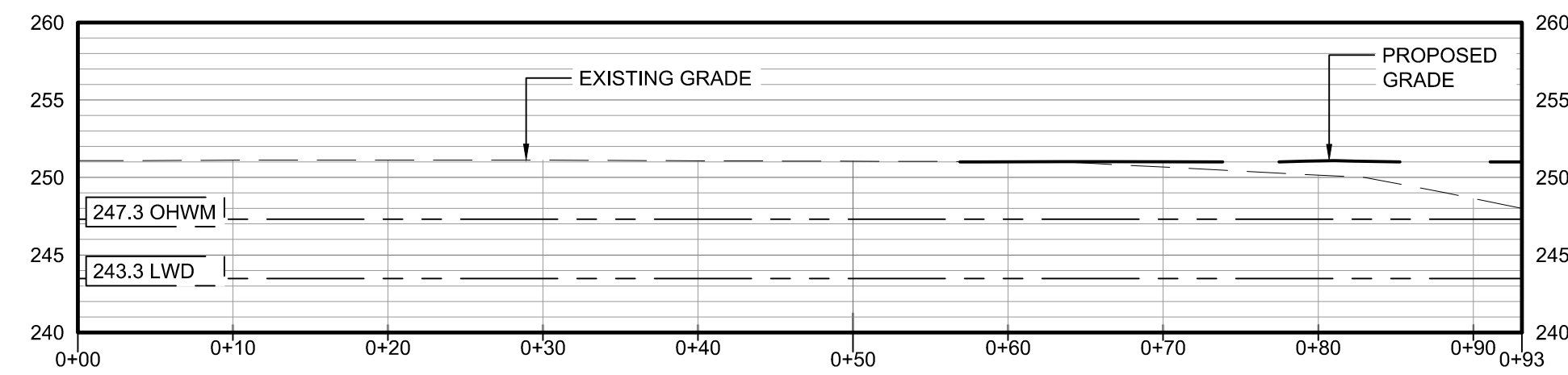
### SECTION VIEW L-2

Scale: 1" = 10'



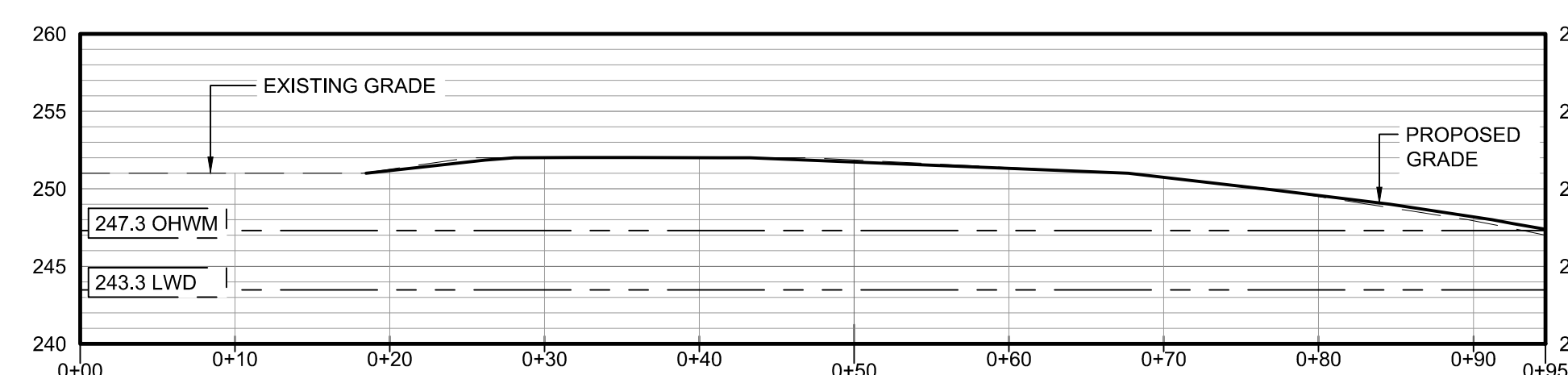
### SECTION VIEW L-3

Scale: 1" = 10'



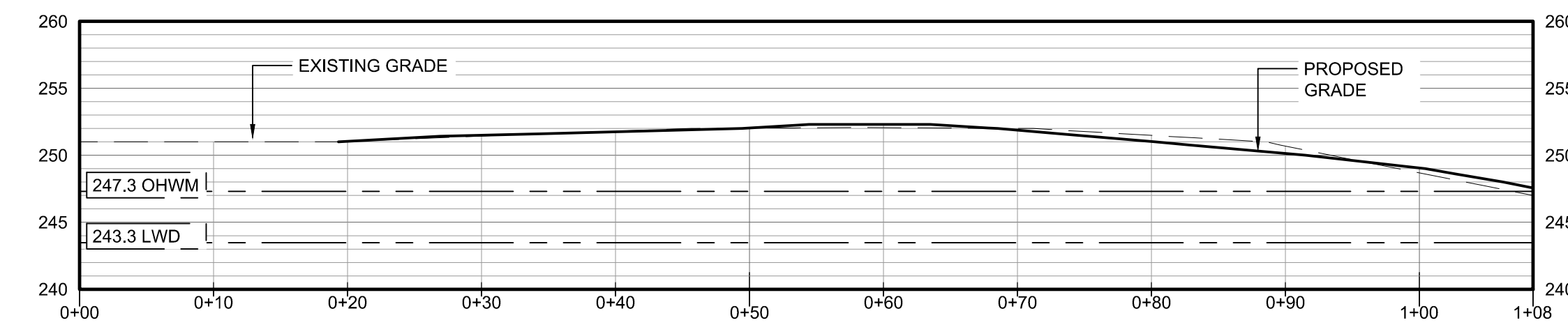
SECTION VIEW L-4

Scale: 1" = 10'



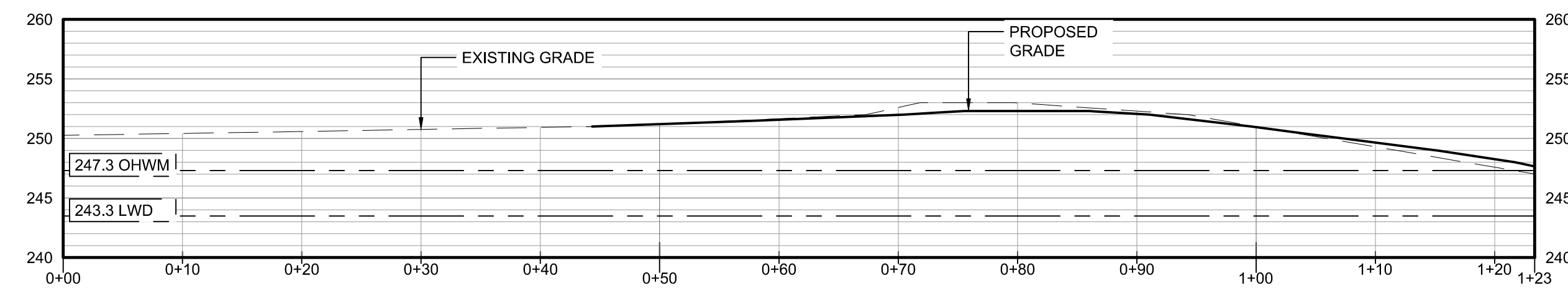
SECTION VIEW L-5

Scale: 1" = 10'



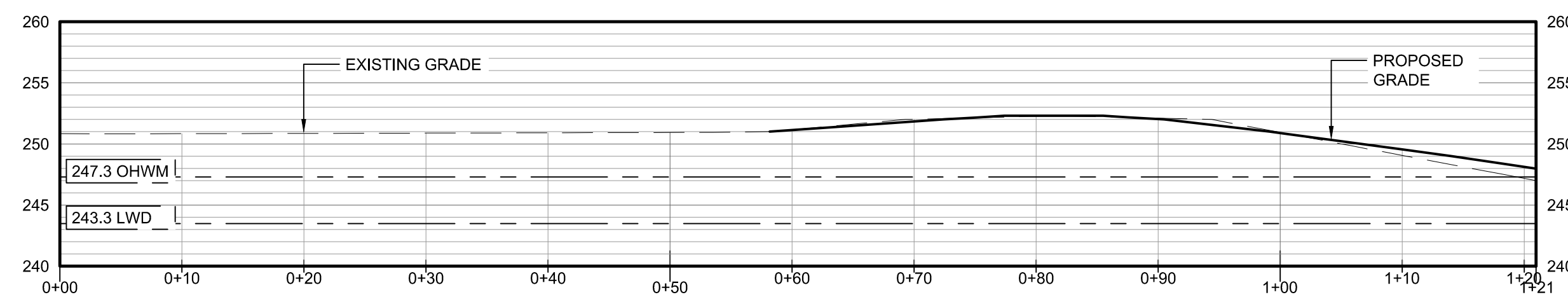
SECTION VIEW L-6

Scale: 1" = 10'



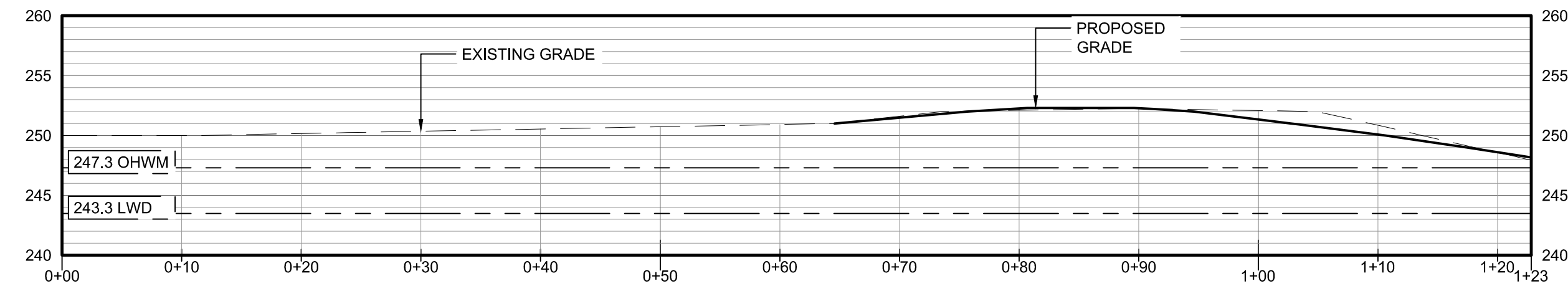
SECTION VIEW L-7

Scale: 1" = 10'



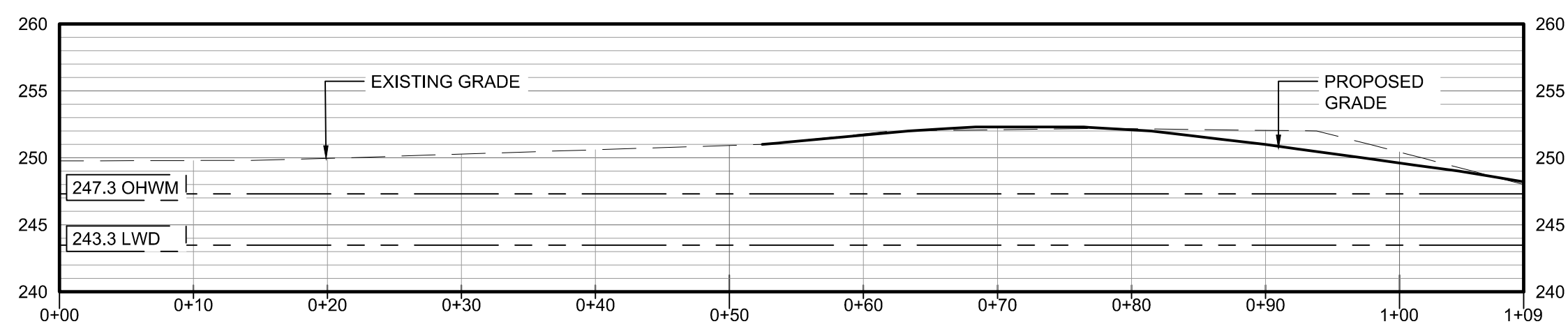
SECTION VIEW L-8

Scale: 1" = 10'



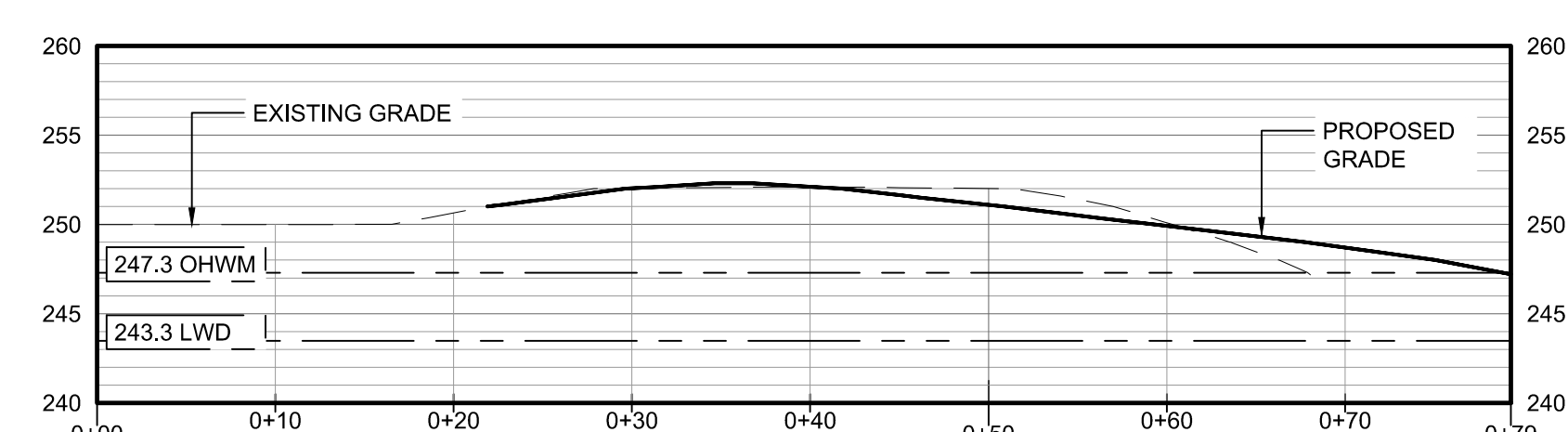
### SECTION VIEW L-9

Scale: 1" = 10'



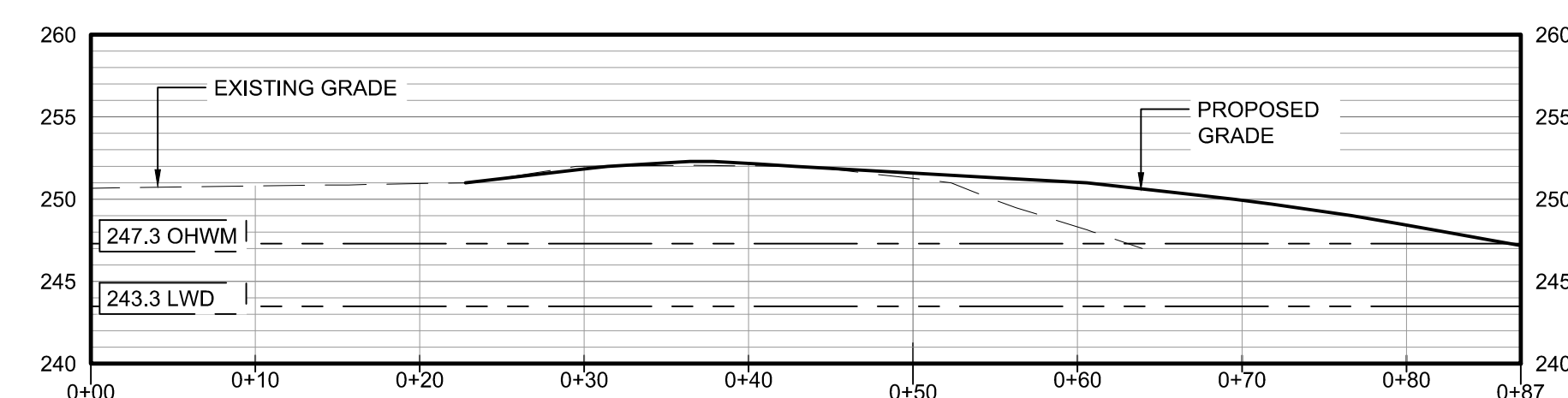
SECTION VIEW L-10

Scale: 1" = 10'



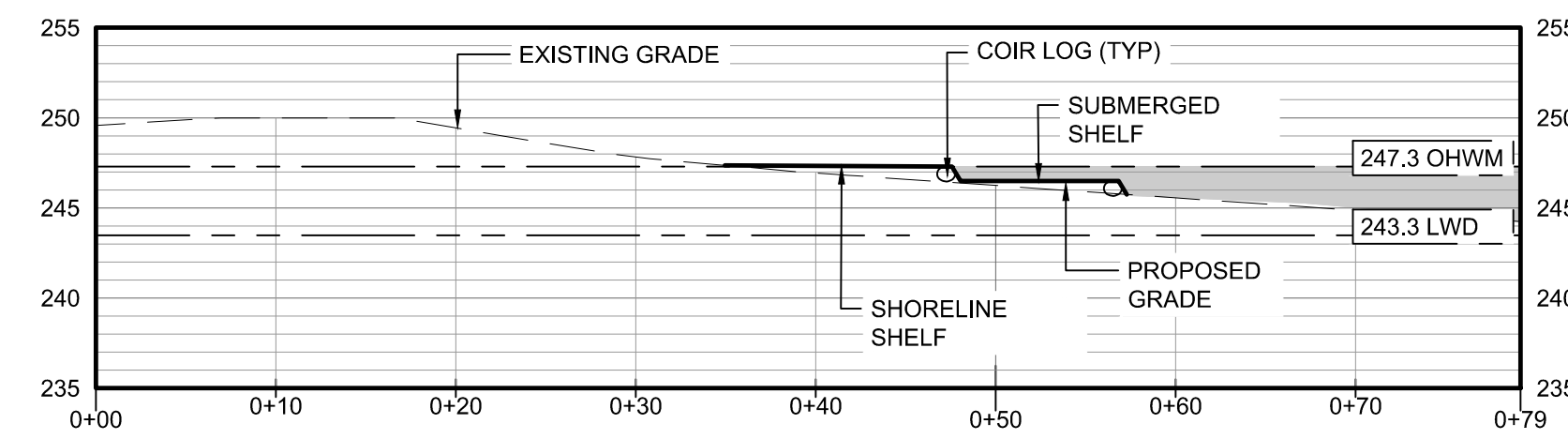
SECTION VIEW L-11

Scale: 1" = 10'



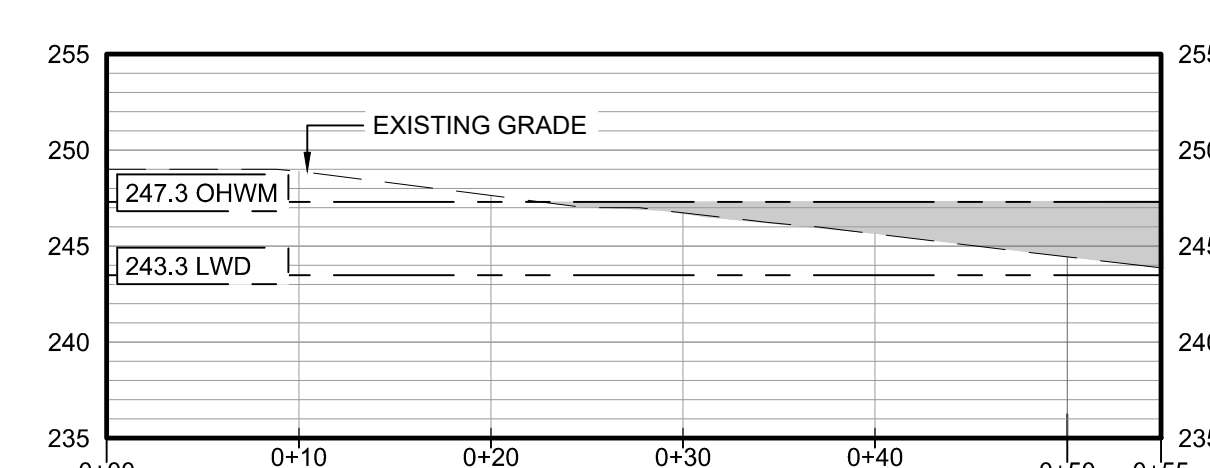
SECTION VIEW L-12

Scale: 1" = 10'



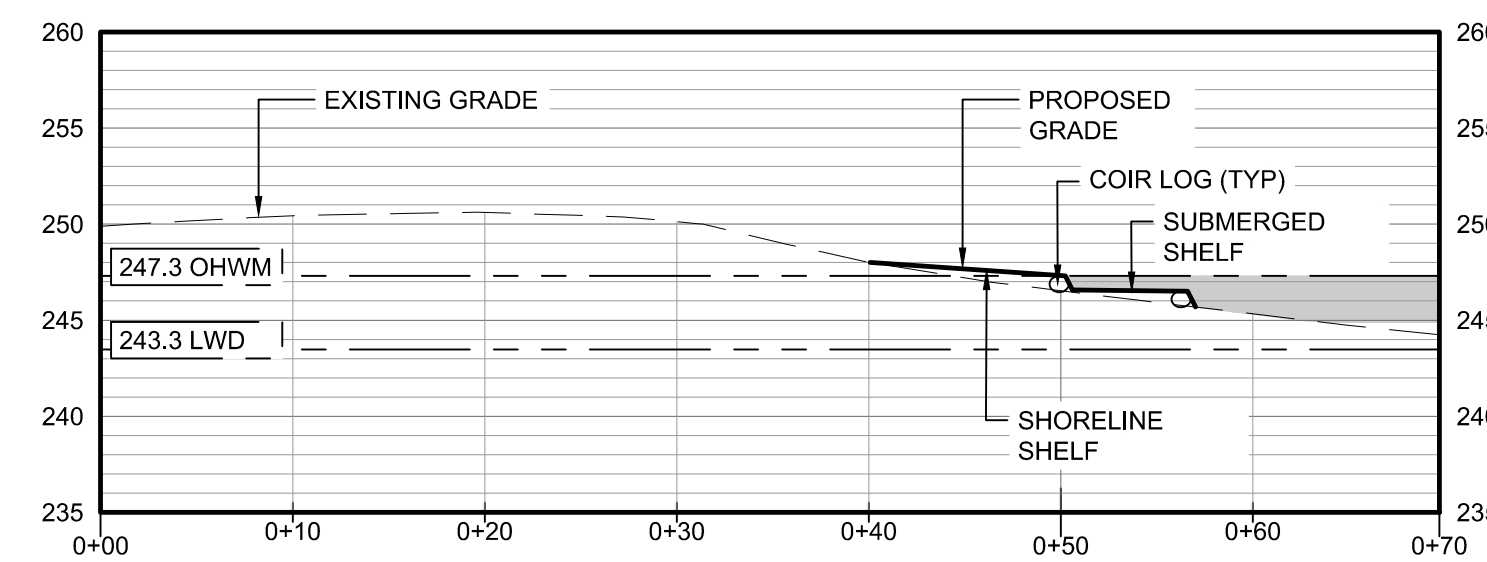
### SECTION VIEW B-1

Scale: 1" = 10'



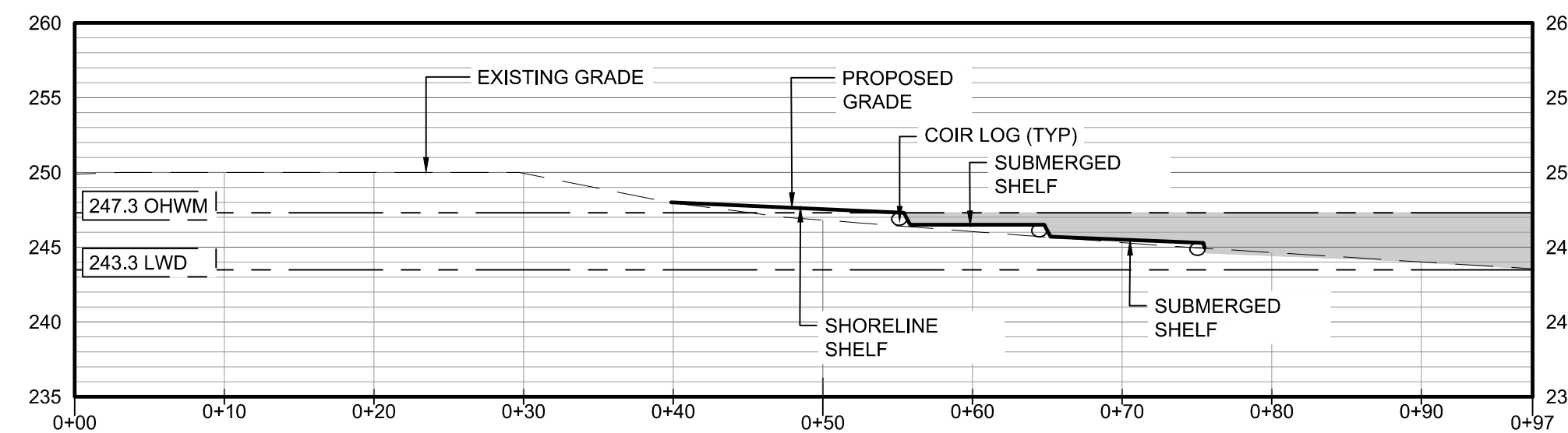
### SECTION VIEW B-2

Scale: 1" = 10'



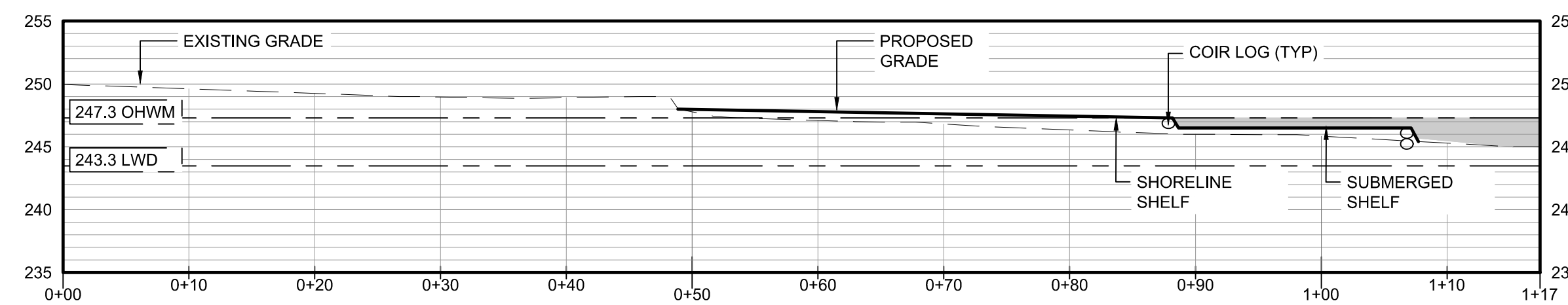
SECTION VIEW B-3

Scale: 1" = 10'



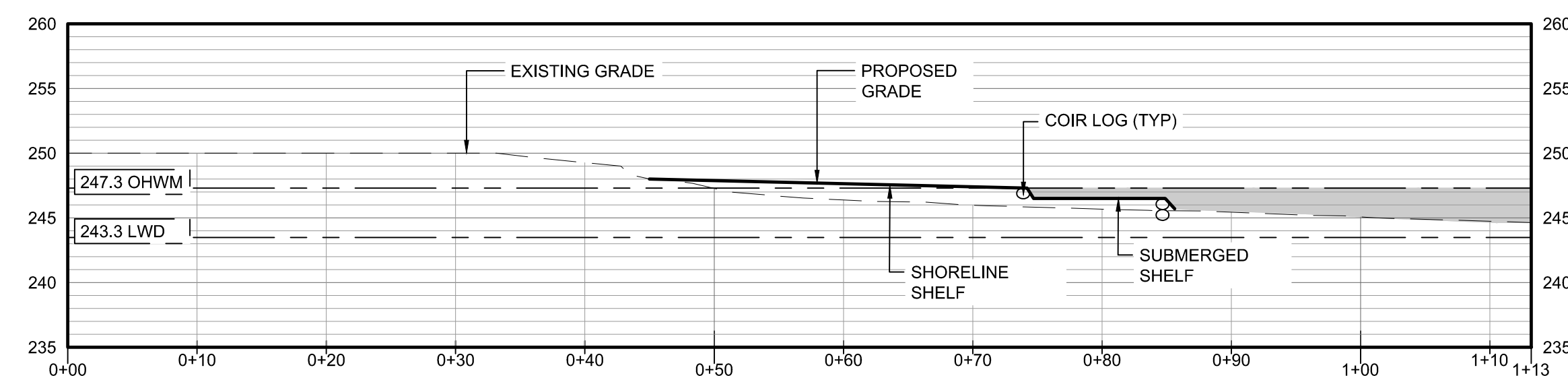
### SECTION VIEW B-4

Scale: 1" = 10'



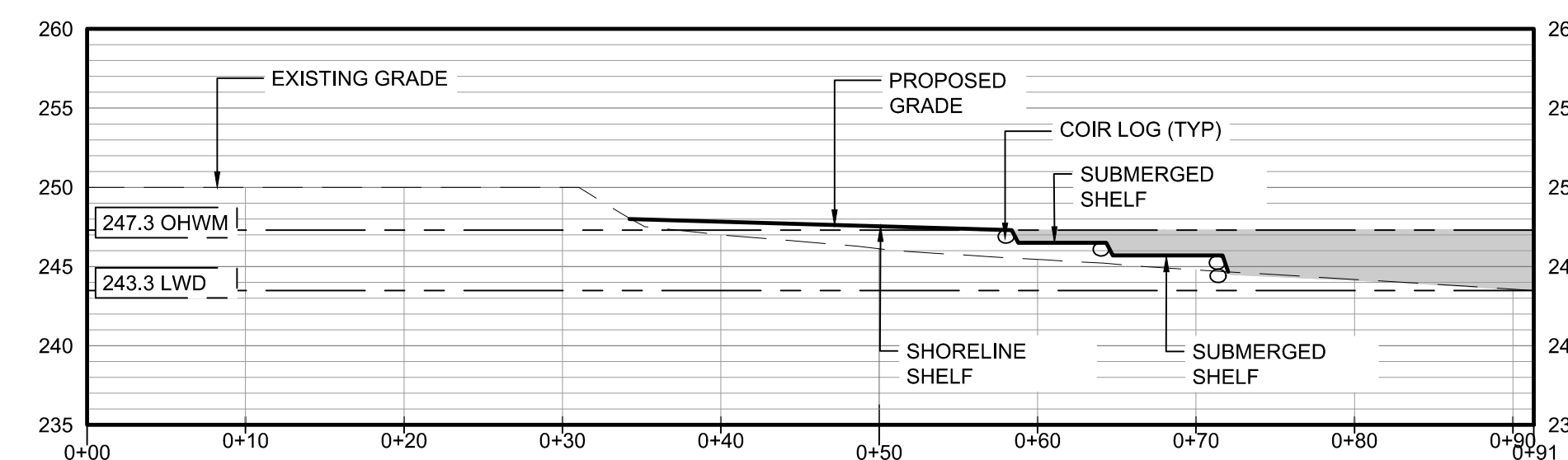
### SECTION VIEW B-5

Scale: 1" = 10'



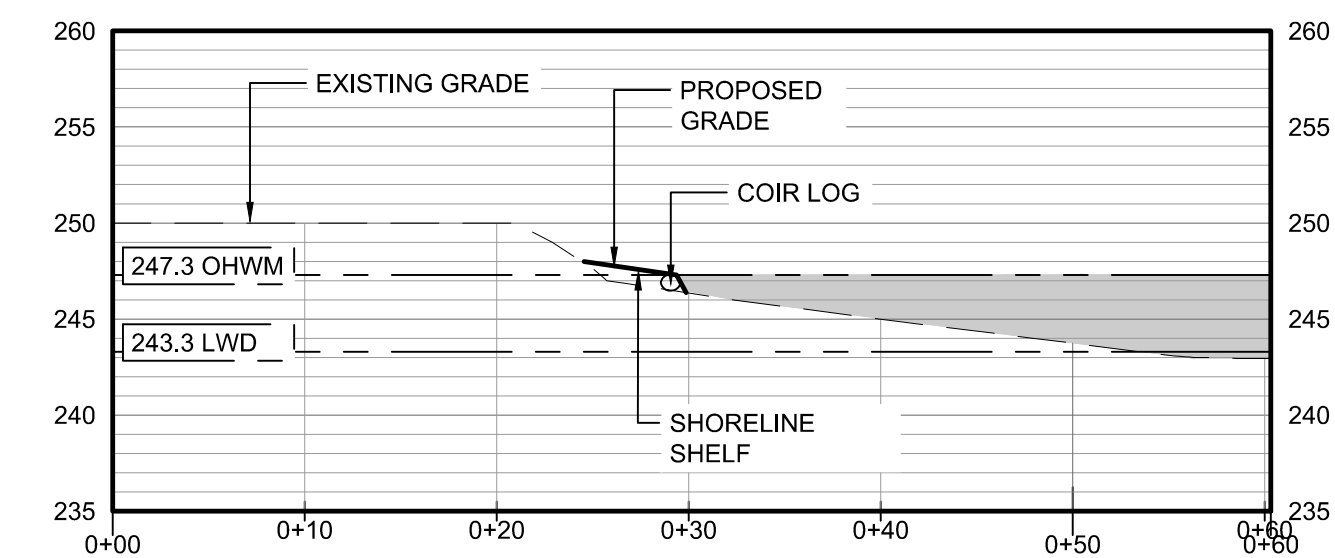
### SECTION VIEW B-6

Scale: 1" = 10'



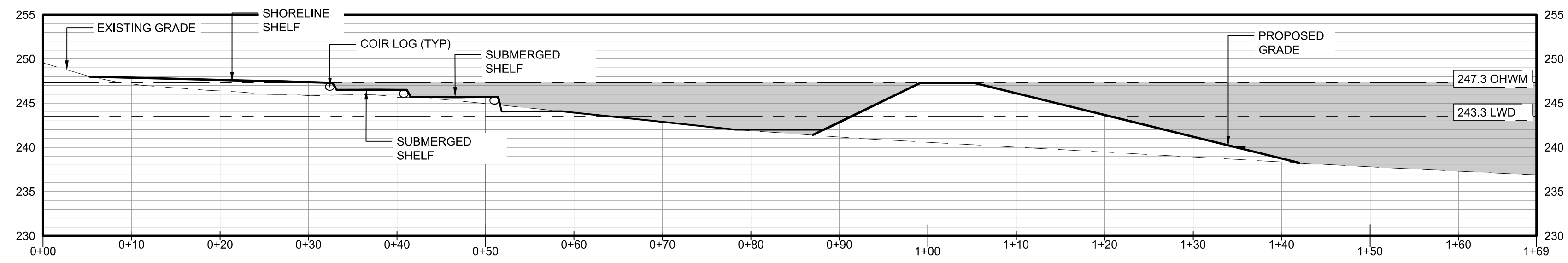
### SECTION VIEW B-7

Scale: 1" = 10'



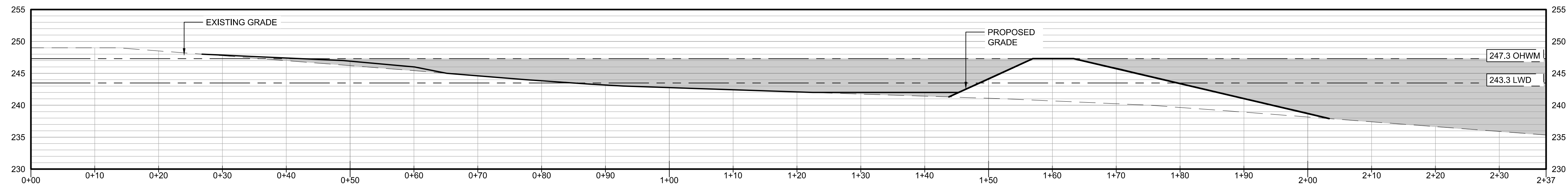
SECTION VIEW B-8

Scale: 1" = 10'



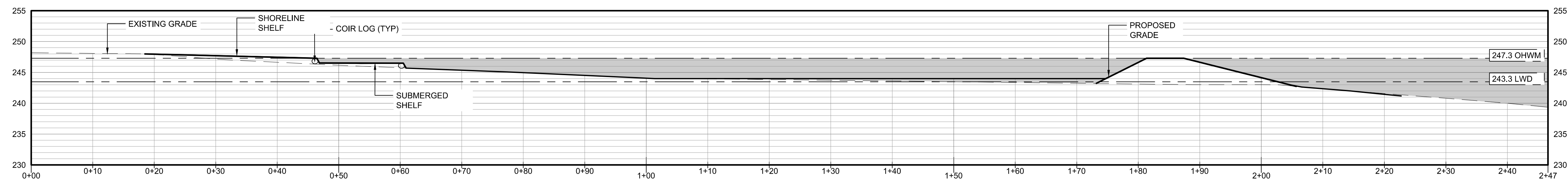
### SECTION VIEW R-1

Scale: 1" = 10'



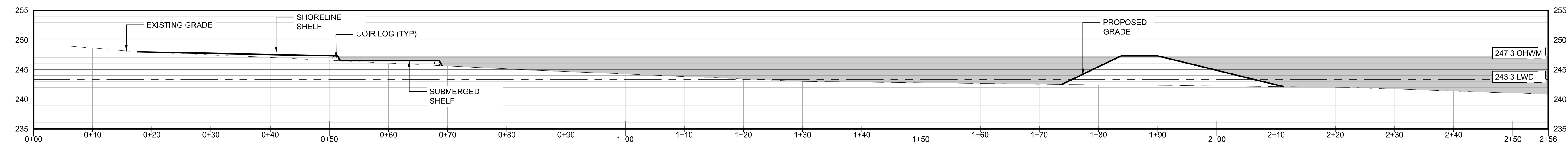
### SECTION VIEW R-2

Scale: 1" = 10'



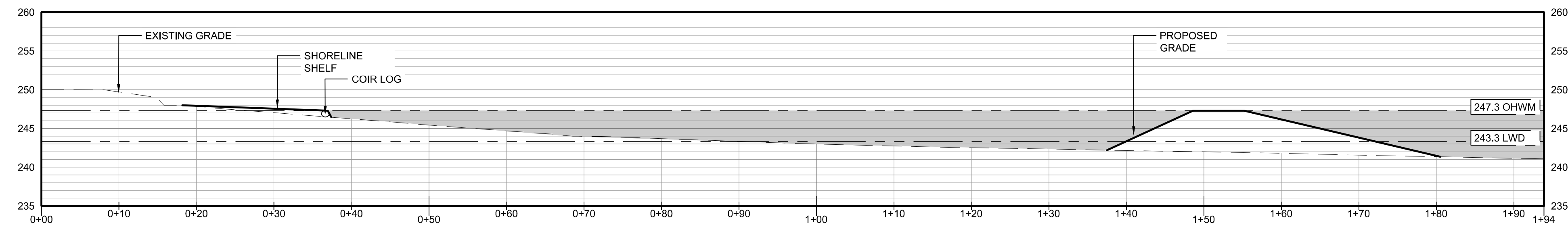
### SECTION VIEW R-3

Scale: 1" = 10'



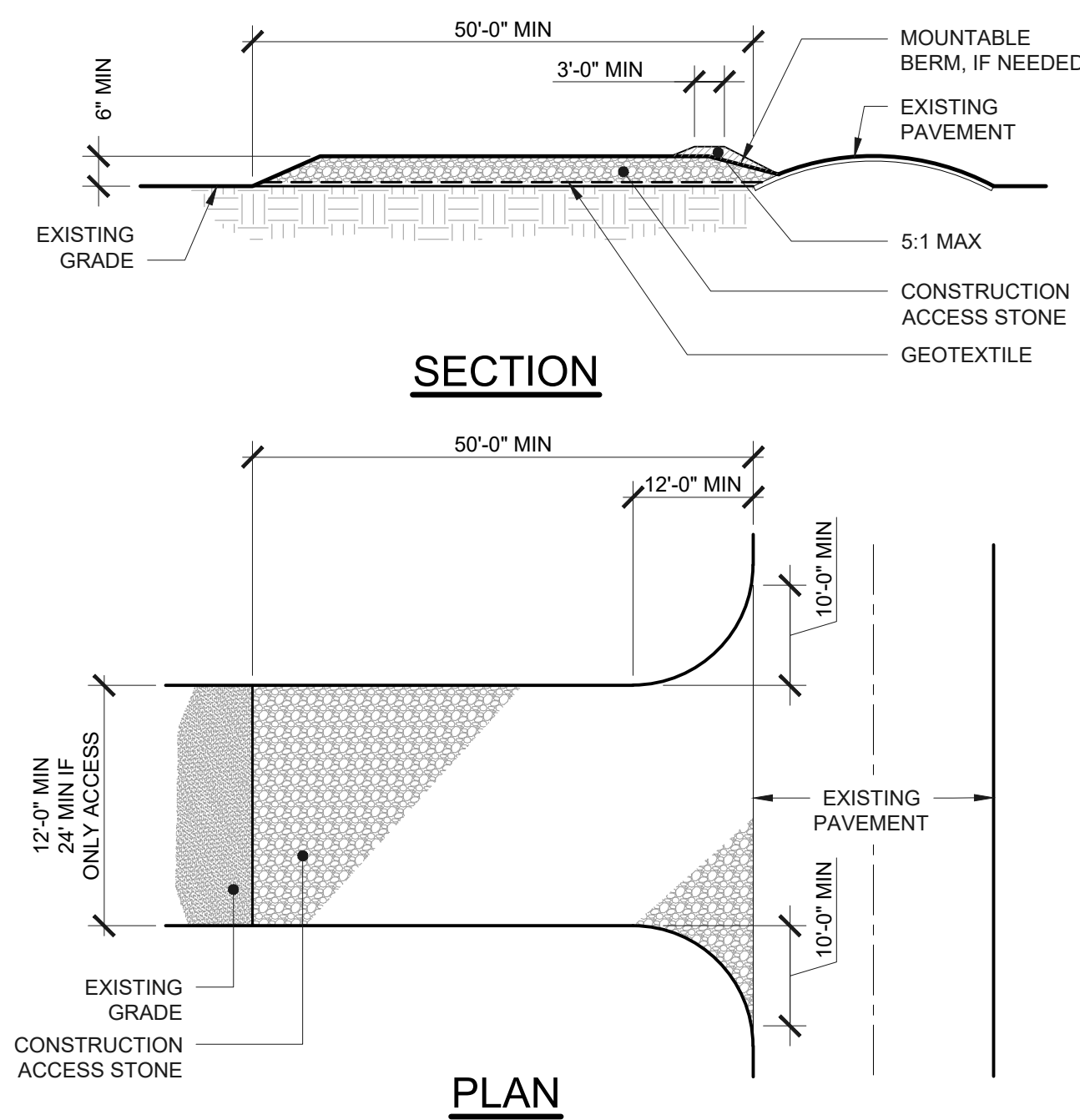
### SECTION VIEW R-4

Scale: 1" = 10'



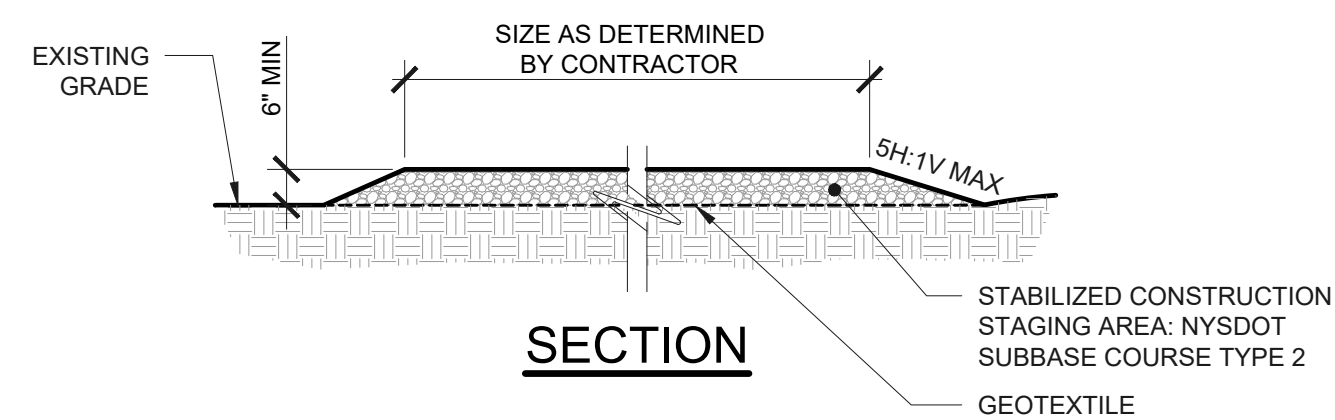
### SECTION VIEW R-5

Scale: 1" = 10'



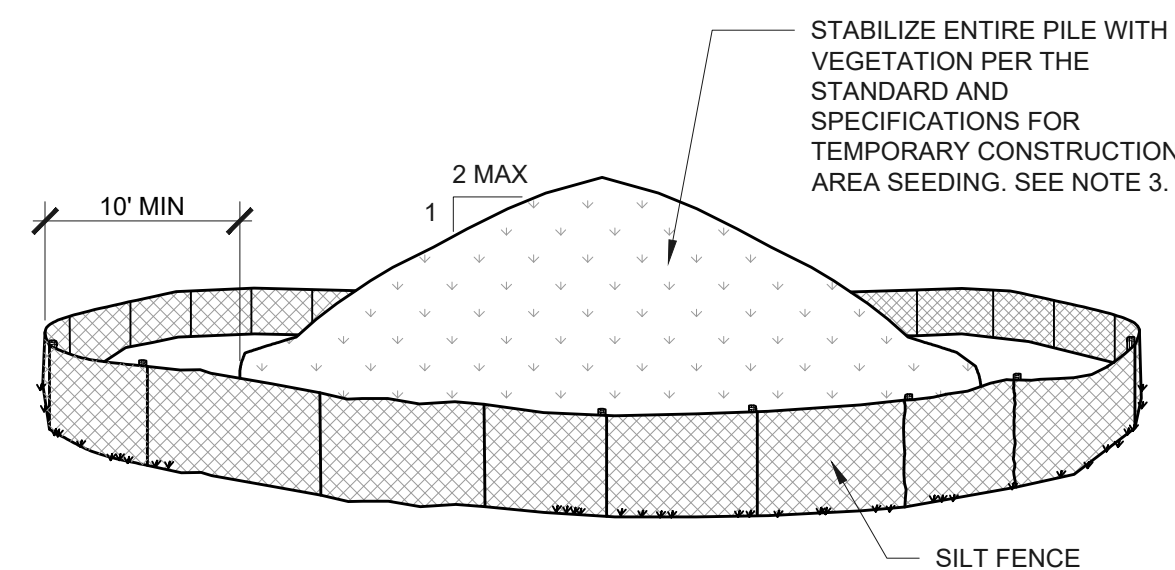
- NOTES:**
1. CONSTRUCTION ACCESS STONE SIZE - USE A 50% TO 50% MIX OF NYSDOT #4 AND #5 STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
  2. GEOTEXTILE:
    - 2.A. MIRAFI 500X OR APPROVED EQUAL.
    - 2.B. SHALL BE PLACED UNDER THE ENTIRE STABILIZED CONSTRUCTION ENTRANCE PRIOR TO PLACING OF STONE.
  3. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ACCESS SHALL BE PIPED ACROSS THE STABILIZED CONSTRUCTION ACCESS. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM SHALL BE USED.
  4. MAINTENANCE - THE CONSTRUCTION ACCESS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO THE PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
  5. WHEN A SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ACCESS ONTO PUBLIC RIGHT-OF-WAYS. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO A NYSDC APPROVED SEDIMENT TRAPPING DEVICE.
  6. TRAINED CONTRACTOR SHALL PROVIDE DAILY INSPECTIONS.

## STABILIZED CONSTRUCTION ENTRANCE

Scale: NTS TEMPORARY

## STABILIZED CONST STAGING AREA

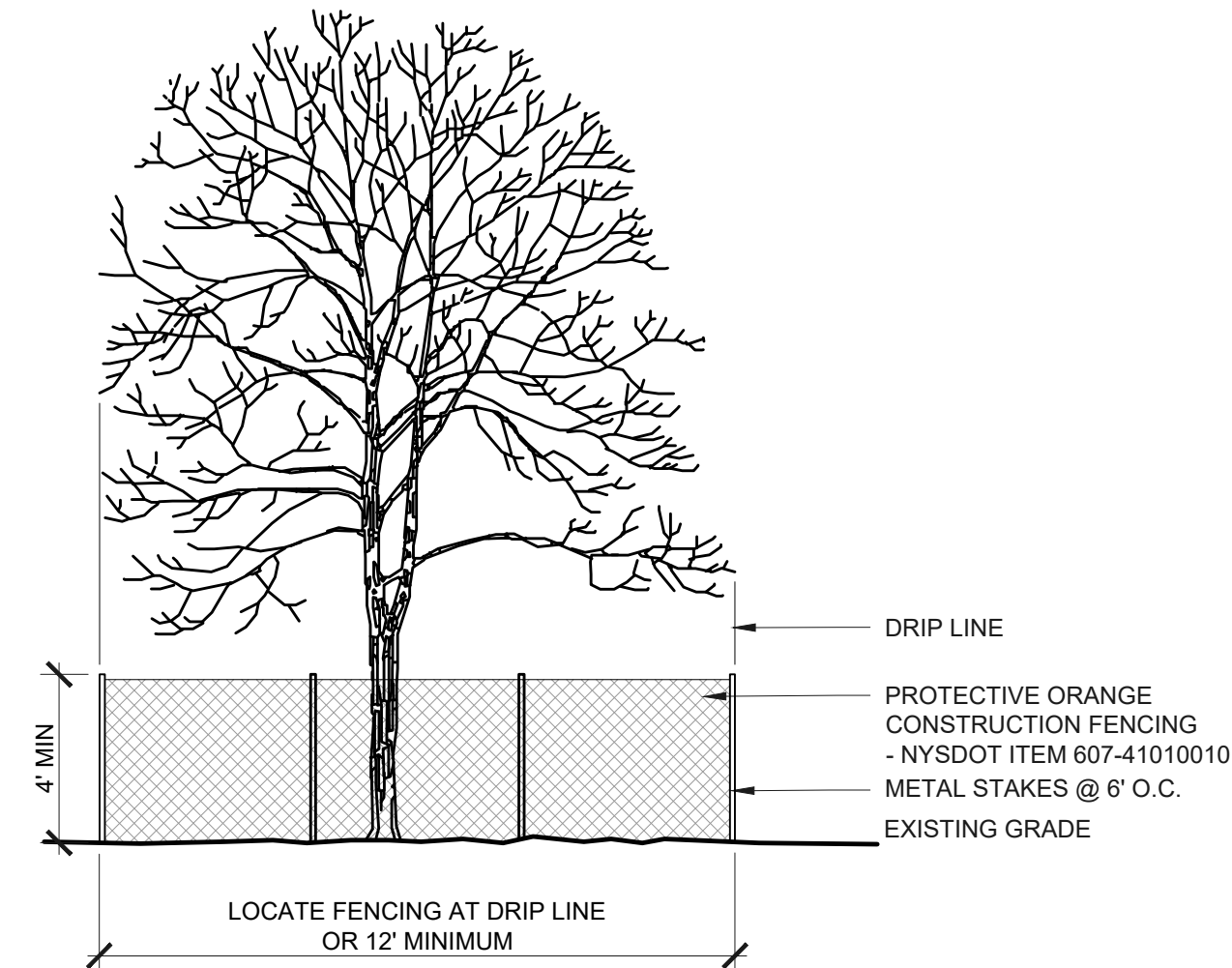
Scale: NTS TEMPORARY



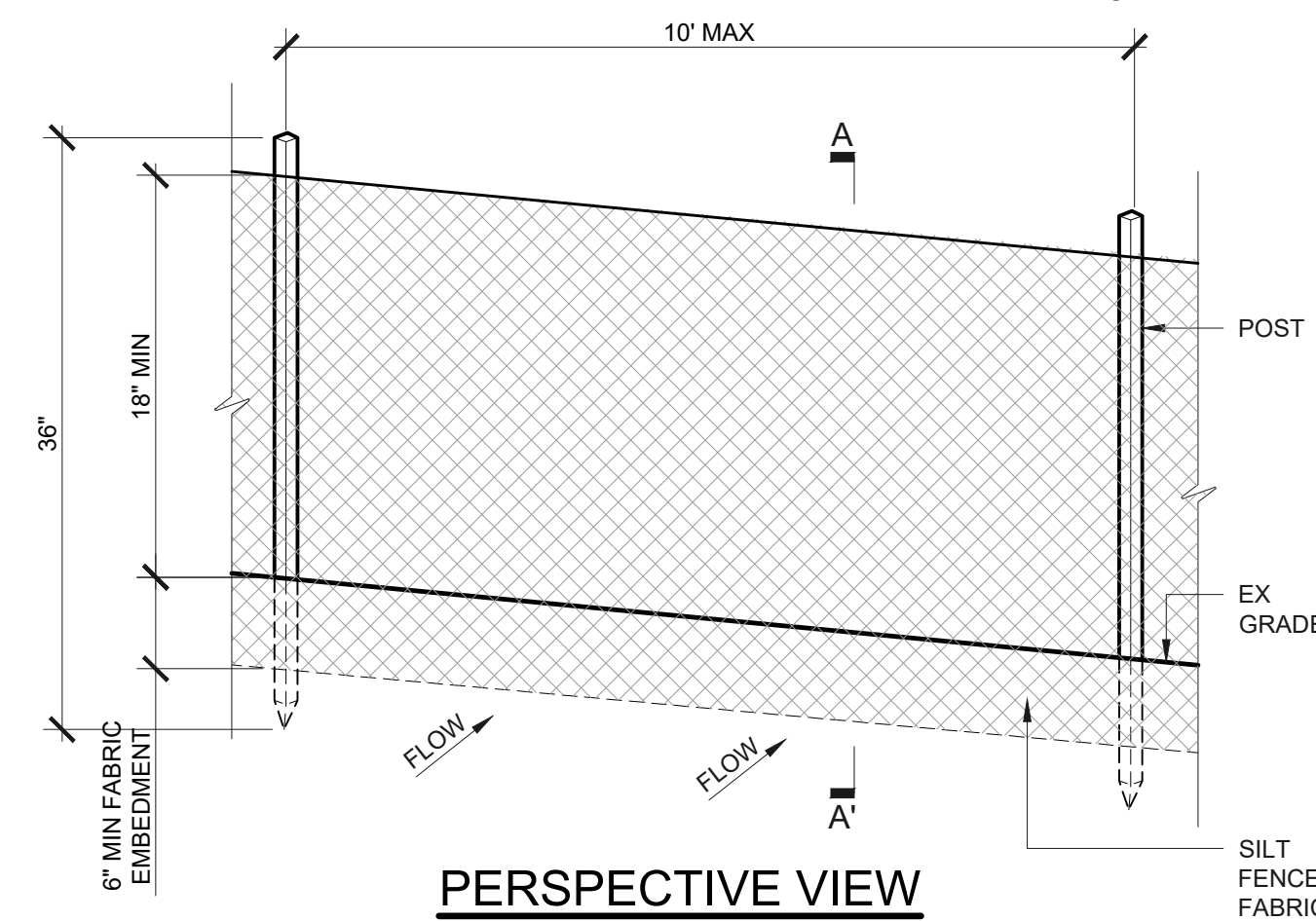
- NOTES:
1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY, STABILIZED AND LOCATED AWAY FROM KNOWN WORN AREAS TO PREVENT RELOCATION.
  2. MAXIMUM STOCKPILE HEIGHT SHALL BE 12 FEET.
  3. EACH PILE SHALL BE SURROUNDED WITH SILT FENCING, INSTALLED PER SILT FENCE SPECIFICATIONS WHEN STABILIZED IN ACCORDANCE WITH THE NYSDEC STANDARD AND SPECIFICATIONS FOR TEMPORARY CONSTRUCTION AREA SEEDING WITHIN 7 DAYS OF COMPLETION.
  4. A PERIMETER DIKE/SWALE SHALL BE LOCATED UP-SLOPE OF THE TOPSOIL STOCKPILE TO DIVERT STORMWATER AROUND THE STOCKPILE.

## STABILIZED SOIL STOCKPILE

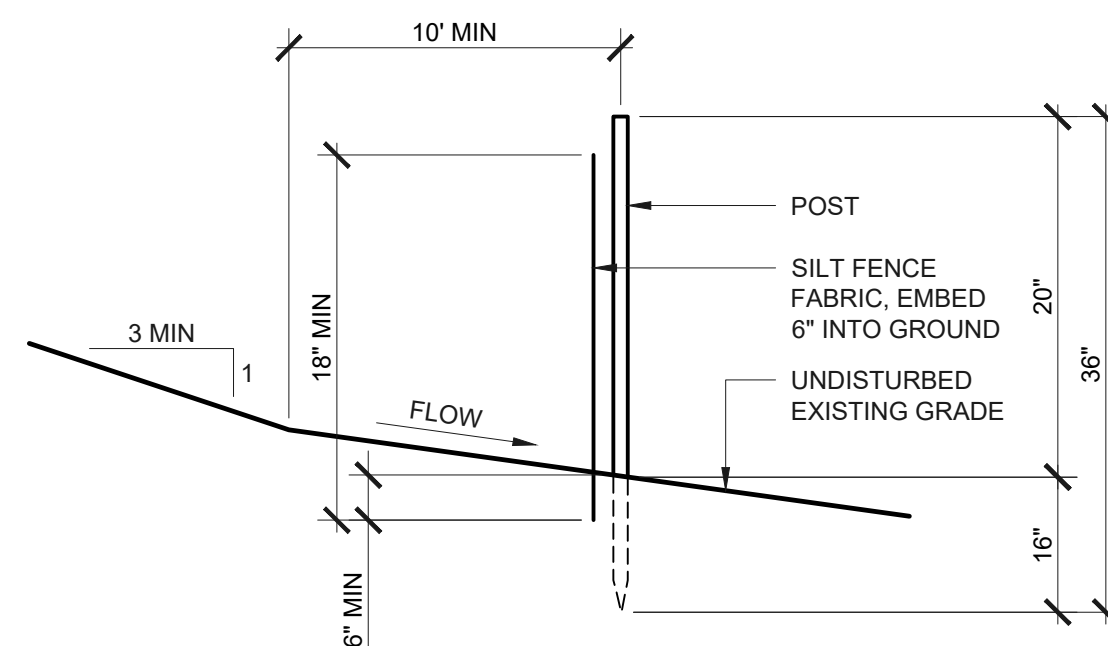
Scale: NTS TEMPORARY



## VEGETATION PROTECTION

Scale: NTS TEMPORARY

PERSPECTIVE VIEW

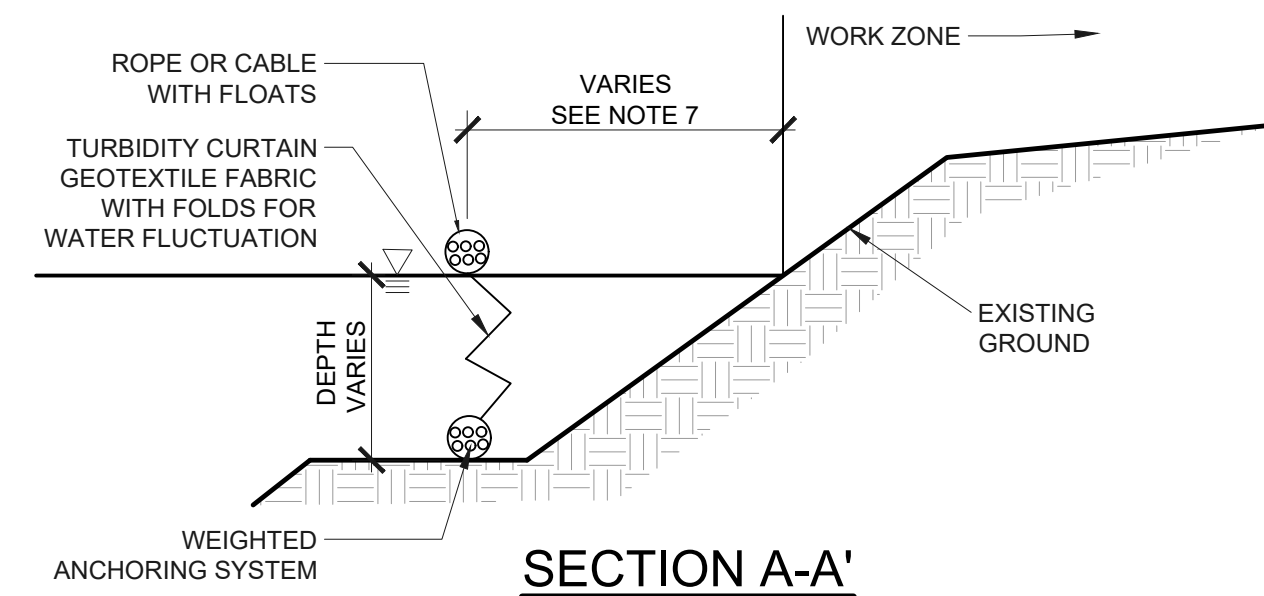


SECTION A-A'

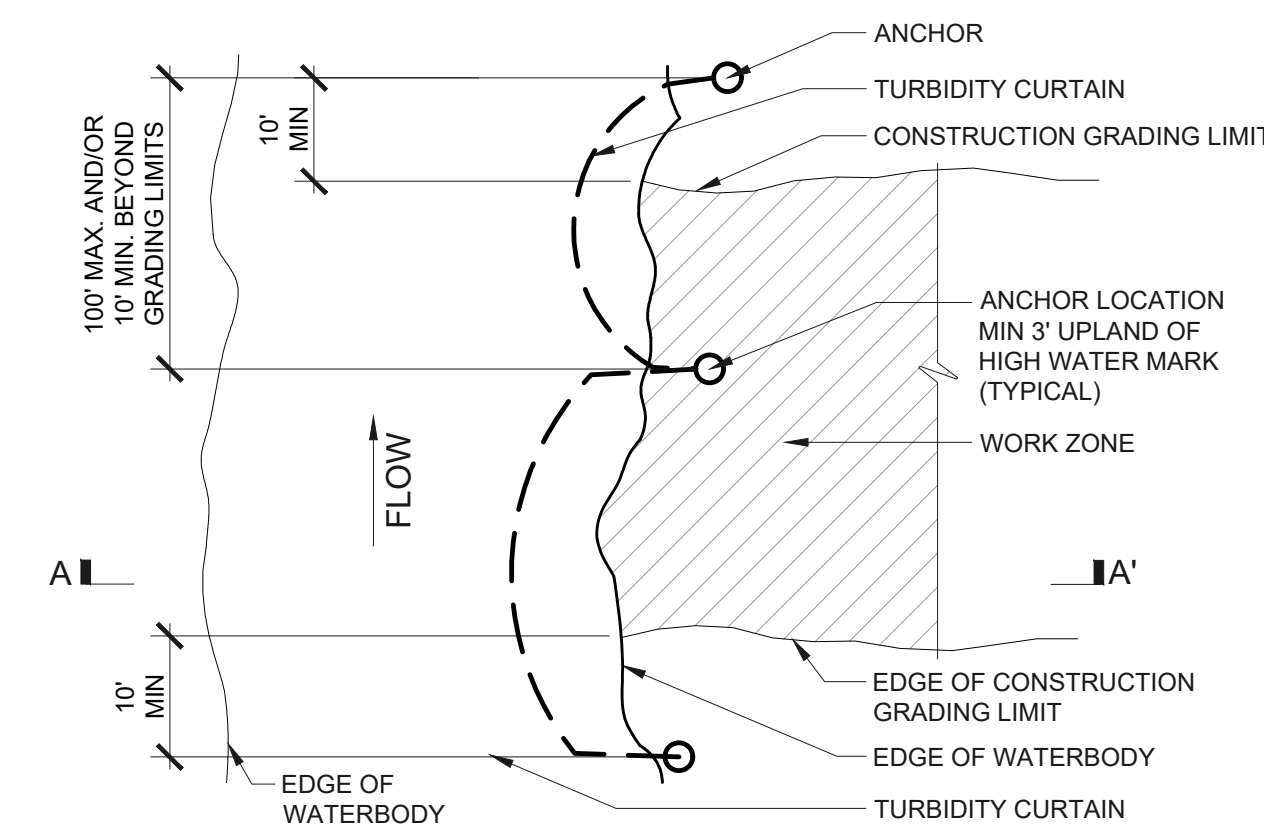
- NOTES:**
1. WHEN TWO SECTIONS OF SILT FENCE FABRIC ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6" AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABLIKA T140N, OR APPROVED EQUAL.
  2. PREFABRICATED UNITS SHALL MEET THE MINIMUM REQUIREMENTS SHOWN.
  3. MAINTENANCE SHALL BE PERFORMED IMMEDIATELY AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

SILT FENCE

Scale: NTS



SECTION A-A'



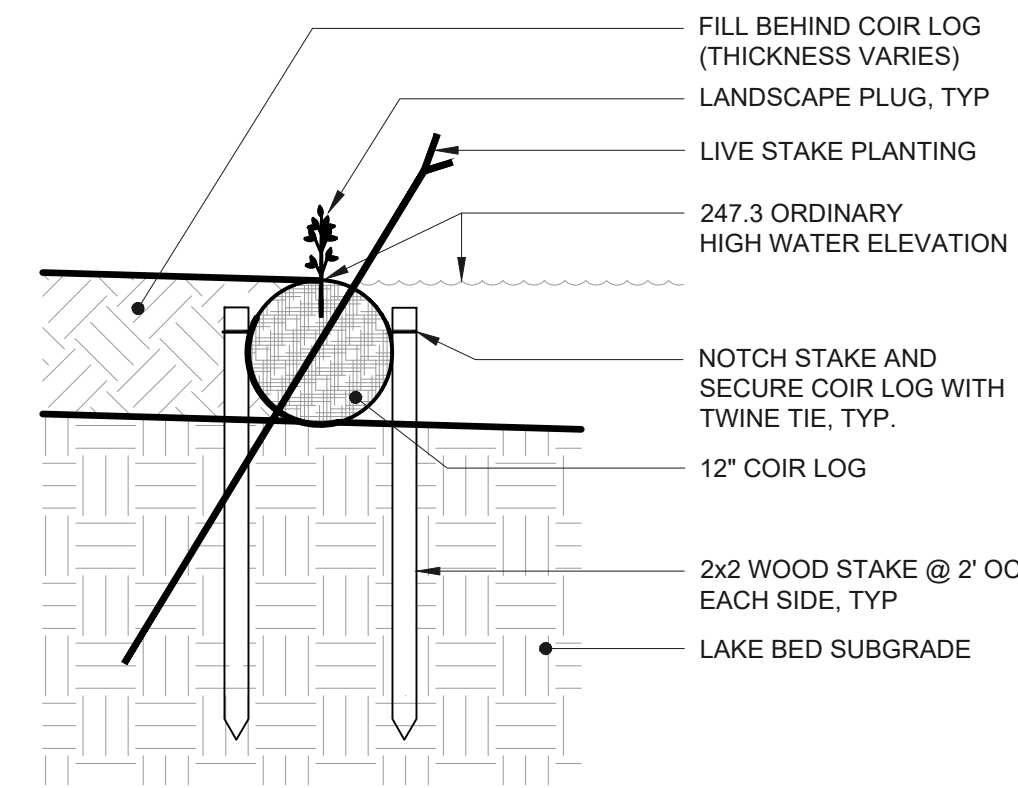
## PLAN

- NOTES:**
1. TURBIDITY CURTAIN SHALL NOT BE PLACED ACROSS A FLOWING WATERWAY.
  2. TURBIDITY CURTAIN SHALL BE A MAXIMUM OF 100' LONG FOR EACH SECTION OF CURTAIN REQUIRED.
  3. THE CONTRACTOR SHALL CONTINUALLY MONITOR THE INSTALLATION, TAKING INTO ACCOUNT WEATHER PATTERNS AND PREVAILING WIND DIRECTIONS THAT MAY AFFECT WATER LEVELS, VELOCITY AND MOVEMENT OF THE TURBIDITY CURTAIN.
  4. TURBIDITY CURTAIN SHALL BE REMOVED BY PULLING TOWARD THE SHORE TO MINIMIZE THE ESCAPE OF SEDIMENTS INTO THE WATERWAY.
  5. THE SHORELINE ANCHOR POINT SHALL BE LOCATED A MINIMUM OF 3'-0" UPLAND OF ORDINARY HIGH WATER MARK.
  6. CONCENTRATED FLOW OUTLETS SUCH AS CULVERT OUTLETS, DITCHES, ETC. SHALL NOT BE LOCATED BEHIND TURBIDITY CURTAIN.
  7. THE TURBIDITY CURTAIN SHALL BE PLACED AS CLOSE TO THE WORK AREA AS POSSIBLE WITHOUT INTERFERING WITH CONSTRUCTION OPERATIONS.
  8. TURBIDITY CURTAIN IS NOT REQUIRED IN AREA OF BARRIER ROCK REEFS.

## TURBIDITY CURTAIN

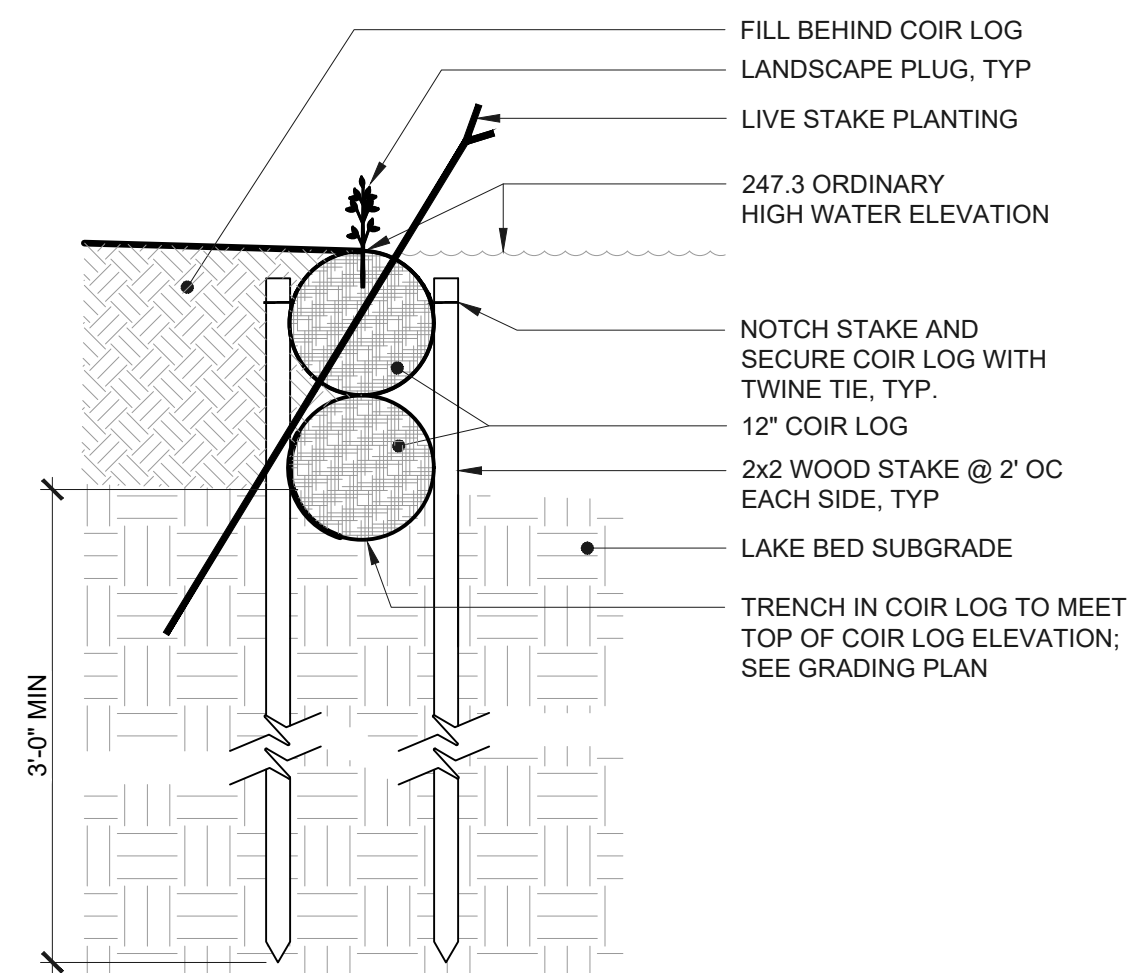
Scale: NTS TEMPORARY

REVISIONS		
REV	DESCRIPTION	DATE
PROJ. #:	1900-	
DATE:	TB	
SHEET		



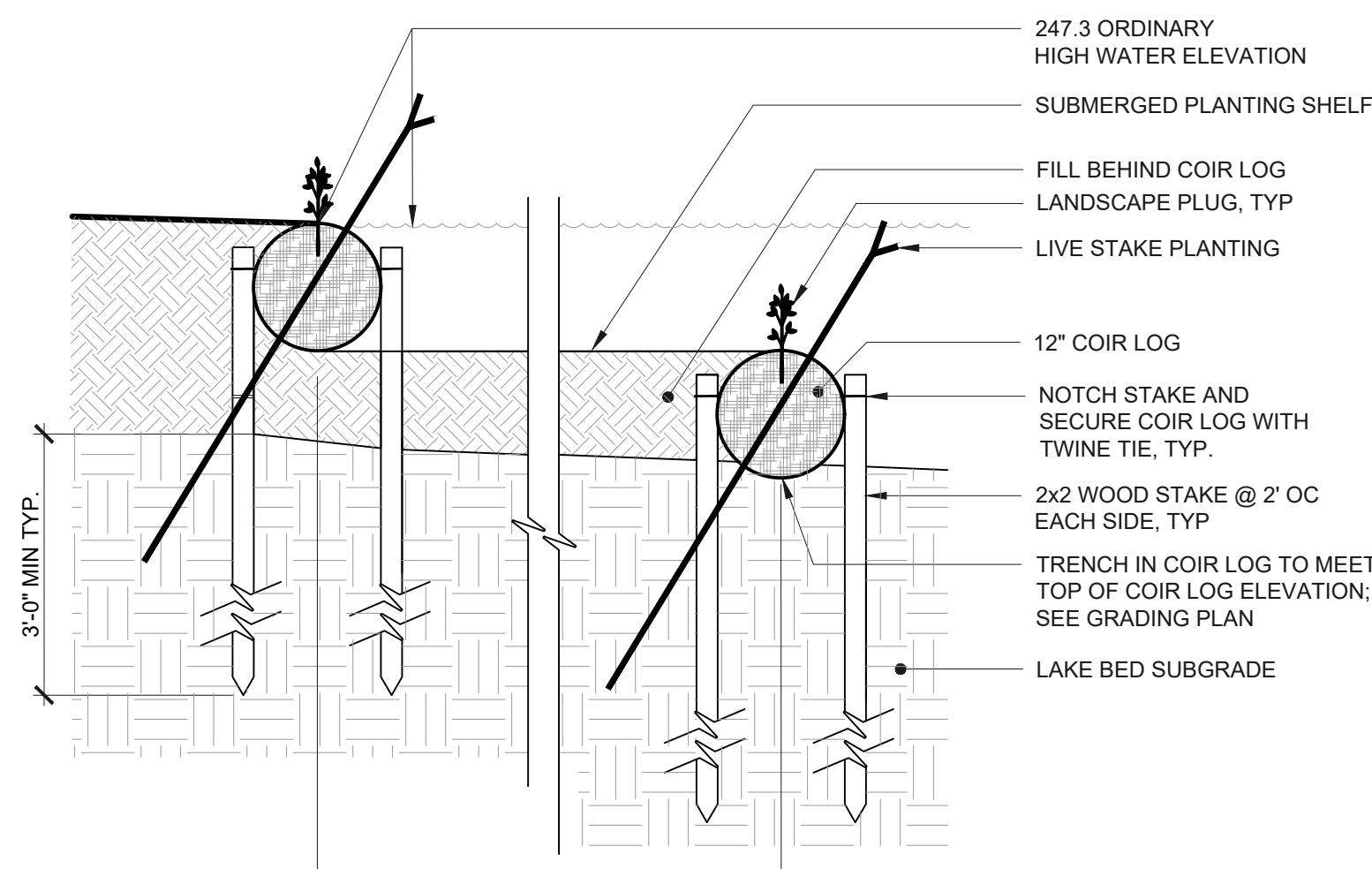
## SINGLE COIR LOG

Scale: NTS



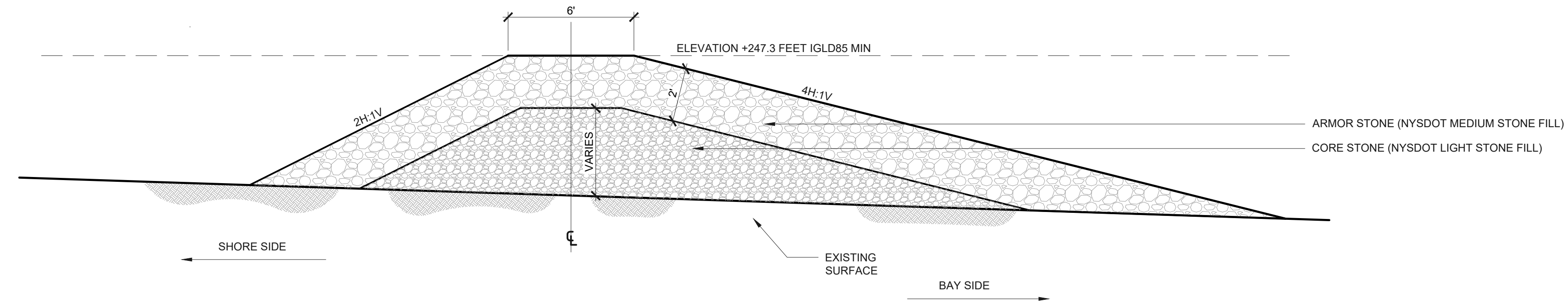
## STACKED COIR LOG

Scale: NTS



## SUBMERGED PLANTING SHELF

Scale: NTS

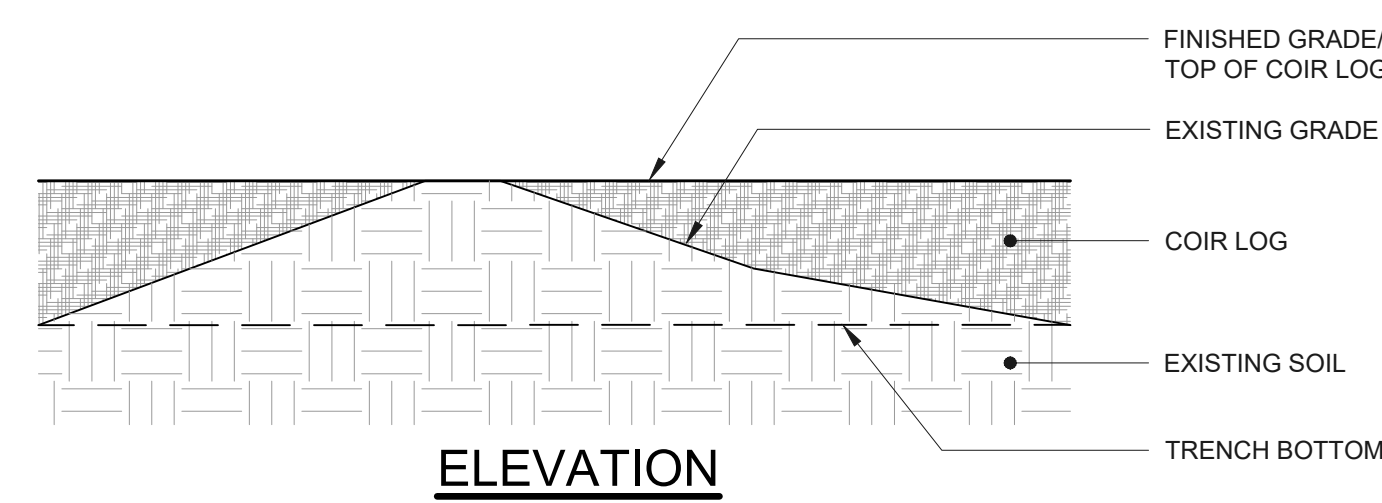


NOTES:  
1. REQUIREMENTS FOR AIDS TO NAVIGATION WILL BE REVIEWED BY AGENCIES  
HAVING JURISDICTION AND WILL BE PROVIDED IF DEEMED NESCESSARY

SECTION

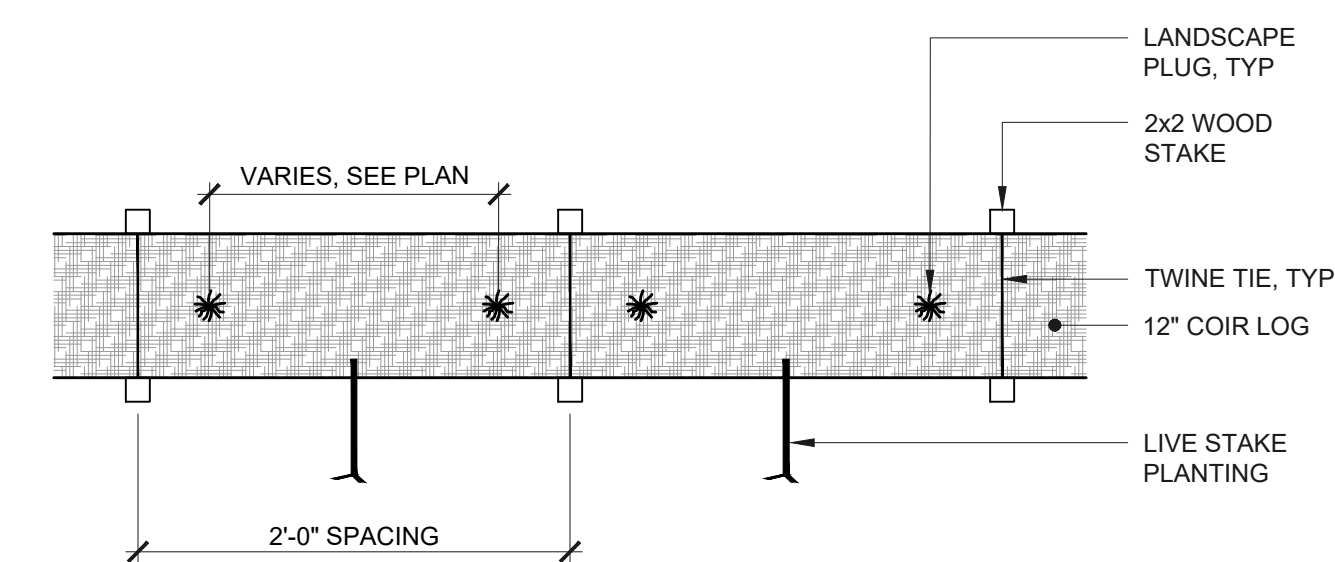
## BARRIER ROCK REEF

Scale: NTS



## TRENCHED COIR LOG

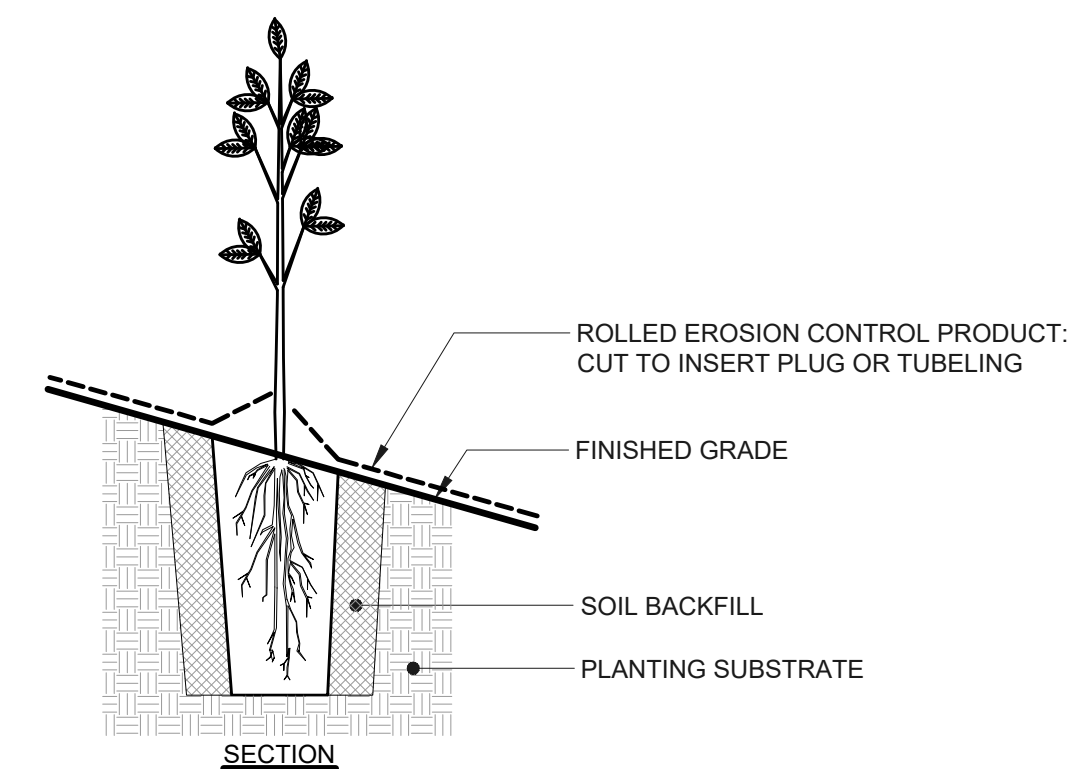
Scale: NTS



## PLAN

## COIR LOG PLANTING

Scale: NTS

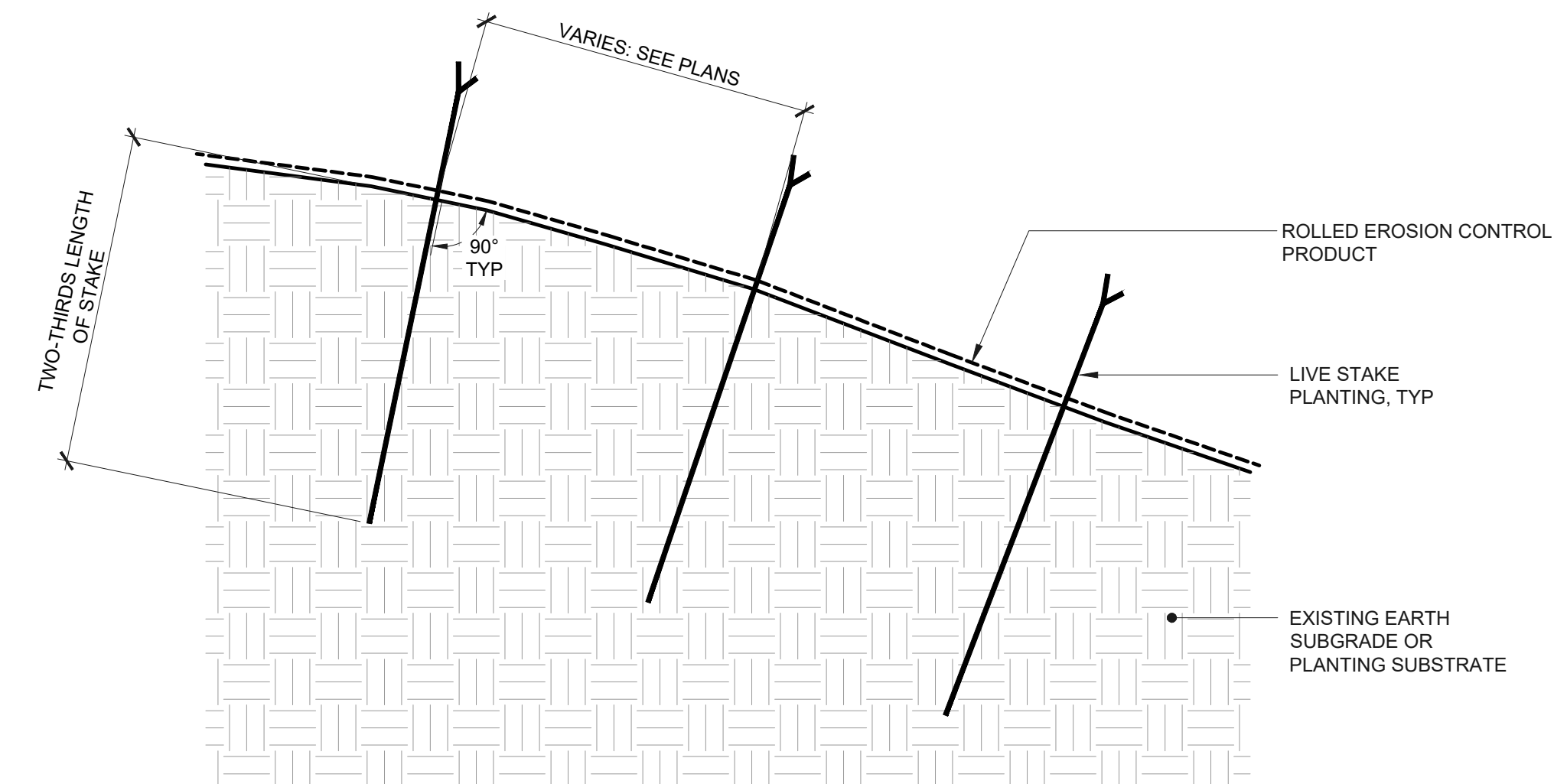


**NOTES:**

1. REMOVE SEEDLING OR PLUG FROM CONTAINER OR WRAPPING; GENTLY LOOSEN ROOTS IF CONTAINER BOUND BEFORE PLANTING.
2. DIG A PLANTING HOLE TWICE THE WIDTH OF THE CONTAINER.
3. PLANT AT PROPER DEPTH WITH ROOT COLLAR LEVEL WITH SURROUNDING GRADE.
4. BACKFILL PLANTING HOLE WITH EXISTING SITE SOIL AND LIGHTLY PACK TO SECURE PLANTING.

## PLUG AND TUBELING PLANTING

Scale: NTS



**NOTES:**

1. DRIVE A PILOT HOLE THROUGH ROLLED EROSION CONTROL PRODUCT INTO FIRM SOIL.
2. INSERT LIVE STAKE INTO PILOT HOLE.
3. PLANT STAKES AT RIGHT ANGLE TO FINISHED GRADE, BUDS ORIENTED UP.
4. TAMP SOIL AROUND STAKE AND WATER.

## LIVE STAKE PLANTING

Scale: NTS

IN STONE SURFACE