

Fort Sewall

BID SET 2/07/2020

Fort Restoration - Phase IIB - Site and Accessibility Improvements

Town of Marblehead

Fort Sewall Lane, Marblehead, MA 01945



CLIENT

TOWN OF MARBLEHEAD
188 Washington Street
Marblehead, Massachusetts 01945
Phone: (781) 631-0000

BOARD OF SELECTMEN

Name	Title
Jackie Belf-Becker	Chair
Harry C. Christensen, Jr.	
Judith R. Jacobi	
James E. Nye	
M.C. Moses Grader	

FORT SEWALL OVERSIGHT COMMITTEE

Name	Title
Rebecca Curran Cutting	Town Planner
Judith Jacobi	At Large
Larry Sands	Glover's Regiment
Judy Anderson	At Large
Ed Lang	Disabilities Commission Representative
Charles Gessner	OMIA Representative
Peter James	Recreation & Parks Superintendent

DRAWING LIST

ARCHITECTURAL

- Cover Sheet
A1.1 Redoubt Fence Repairs
A1.2 Alternate No. 1: Granite Cannon Silhouettes /
Alternate No. 3: Flagpole (Base Detail)

LANDSCAPE

- S-000 Site Survey
L-100 Site Demolition Plan
L-200 Site Materials Plan
L-210 Site Layout Plan
L-220 Add Alt. #4 Stone Wall at Gun Platform
L-300 Grading Plan
L-400 Planting Plan
L-500 Paving and Stair Details
L-510 Site Details
L-520 Planting Details

LOCUS PLAN



PRESERVATION ARCHITECT



324 Broadway
Somerville, MA 02145
Phone: 617-625-8901
Fax: 617-625-8902
www.mcginleykalsow.com

LANDSCAPE ARCHITECT



Crowley Cottrell
171 Milk Street, Floor 2
Boston, MA 02109
Phone: 617-338-8400
https://www.crowleycottrell.com/

ALL EXISTING PICKETS
IN THIS PANEL TO BE
REPLACED WITH NEW
TO MATCH EXISTING.
SALVAGE USABLE
EXISTING PICKETS FOR
SELECTIVE PICKET
REPLACEMENT.

REPLACE TOP AND
BOTTOM RAILS TO
MATCH EXISTING.
REFER TO GENERAL
NOTES - EXISTING
REDOUBT FENCE FOR
MORE INFORMATION.

GENERAL NOTE:
RECONFIGURE ALL
COMPONENTS TO
MATCH EXISTING
LAYOUT AND
DIMENSIONS OF
TYPICAL FENCE
PANEL.



BROKEN TOP RAIL



SIDE ELEVATION OF BROKEN
FENCE PANEL

3

ELEVATION OF BROKEN FENCE PANEL

NOT TO SCALE



TYPICAL RAIL BRACKET
CONDITION

STEEL ATTACHMENT RAIL
BRACKET LOCATIONS,
TYP. REPLACE ALL.

STEEL POSTS ARE 3"
X 3", TYP.

STEEL PICKETS ARE
3/4" X 3/4", TYP.

STEEL ATTACHMENT RAIL
BRACKET LOCATIONS,
TYP. REPLACE ALL.



1-3/8" X 1-1/2"
U-CHANNEL RAIL,
TYP.

2

ELEVATION OF TYPICAL HORIZONTAL FENCE PANEL

NOT TO SCALE

NOTE:

REPLACE ALL TOP AND BOTTOM RAIL TO POST BRACKETS. REPLACEMENT BRACKETS TO MATCH EXISTING ORIGINAL DESIGN. REFER TO 2/A1.1 FOR MORE INFORMATION.

GENERAL NOTES - EXISTING REDOUBT FENCE:

1. CONTRACTOR TO VERIFY ALL DIMENSIONS AND QUANTITIES.
2. EXISTING FENCE DESIGN SERIES IS CANTERBURY (2-RAIL) BY IRON WOOD FENCING.
3. NEW COMPONENTS SHALL MATCH EXISTING.
4. REPAIR AND REPLACE ELEMENTS AS SHOWN ON THE DRAWINGS AND IN THE SPECIFICATIONS.
5. ALL EXISTING FENCE COMPONENTS ARE STEEL.
6. EXISTING FENCE POSTS ARE 3" X 3", TYP.
7. EXISTING FENCE PICKETS ARE 3/4" X 3/4", TYP.
8. SALVAGE USABLE PICKETS FROM BROKEN FENCE PANEL FOR SELECTIVE PICKET REPLACEMENT IN OTHER FENCE PANELS (UP TO 10, TYP.).
9. ALL EXISTING HORIZONTAL FENCE RAIL BRACKETS ARE RUSTED. REPLACE ALL BRACKETS. REFER TO 2/A1.1 FOR MORE INFORMATION.
10. REMOVE ALL EXISTING VEGETATION FROM FENCE.



REPLACE RUSTED PICKET
WITH SALVAGED PICKET
(UP TO 10 PICKET
REPLACEMENTS ALONG
FULL RUN OF FENCE, TYP.)

CONNECT NEW
BRACKET TO POST.



1

PLAN AT EXISTING REDOUBT FENCE

SCALE: 1/8" = 1'-0"



Fort Sewall

Fort Restoration - Phase IIB -

Site and Accessibility Improvements

Fort Sewall Lane
Marblehead, MA 01945

BID SET

Date:	02/07/2020
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Drawn By:	EC
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Reviewed By:	WK
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Project No:	1698.03
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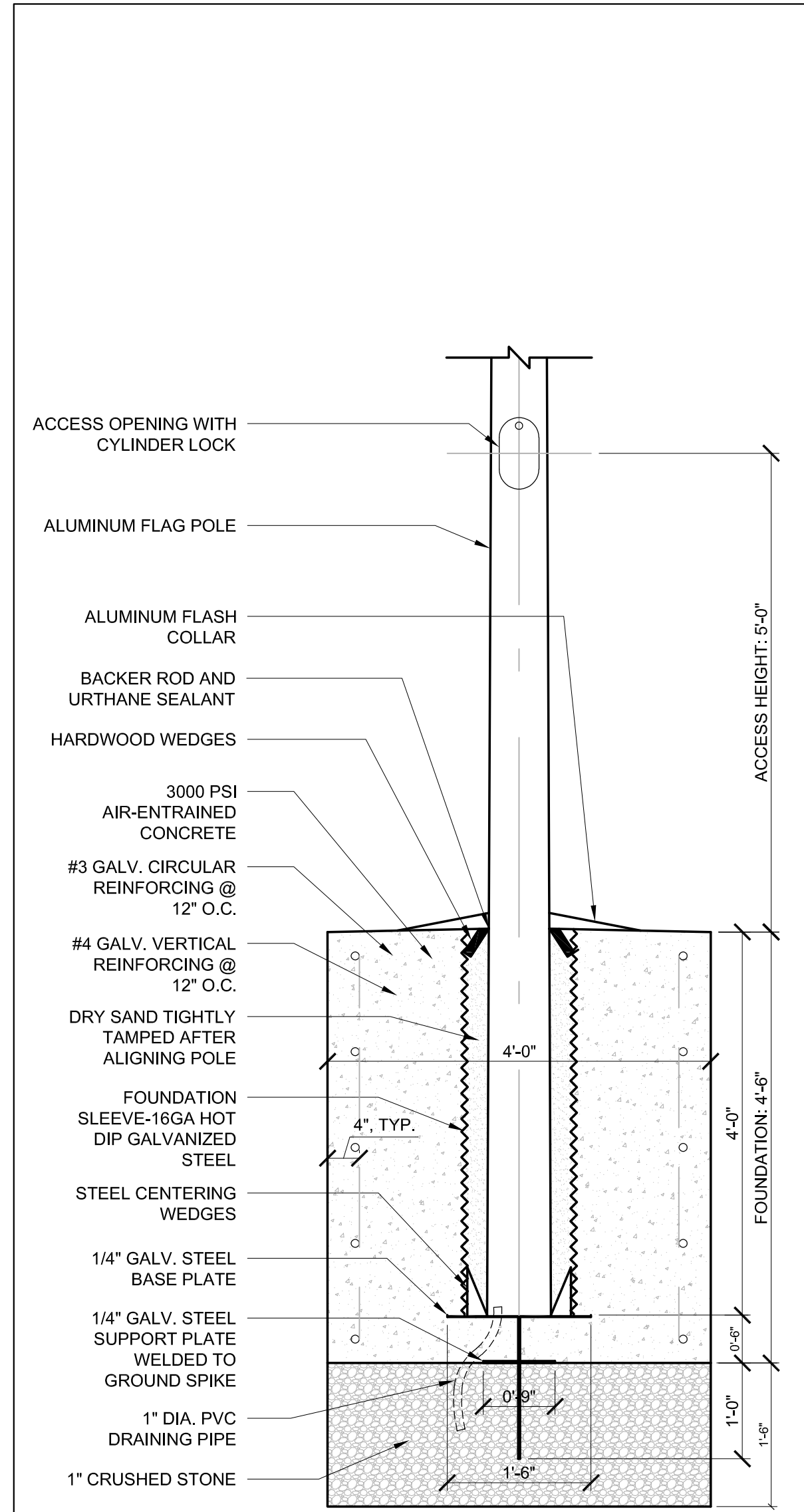


**McGinley Kalsow
& Associates Inc.**
ARCHITECTS & PRESERVATION PLANNERS

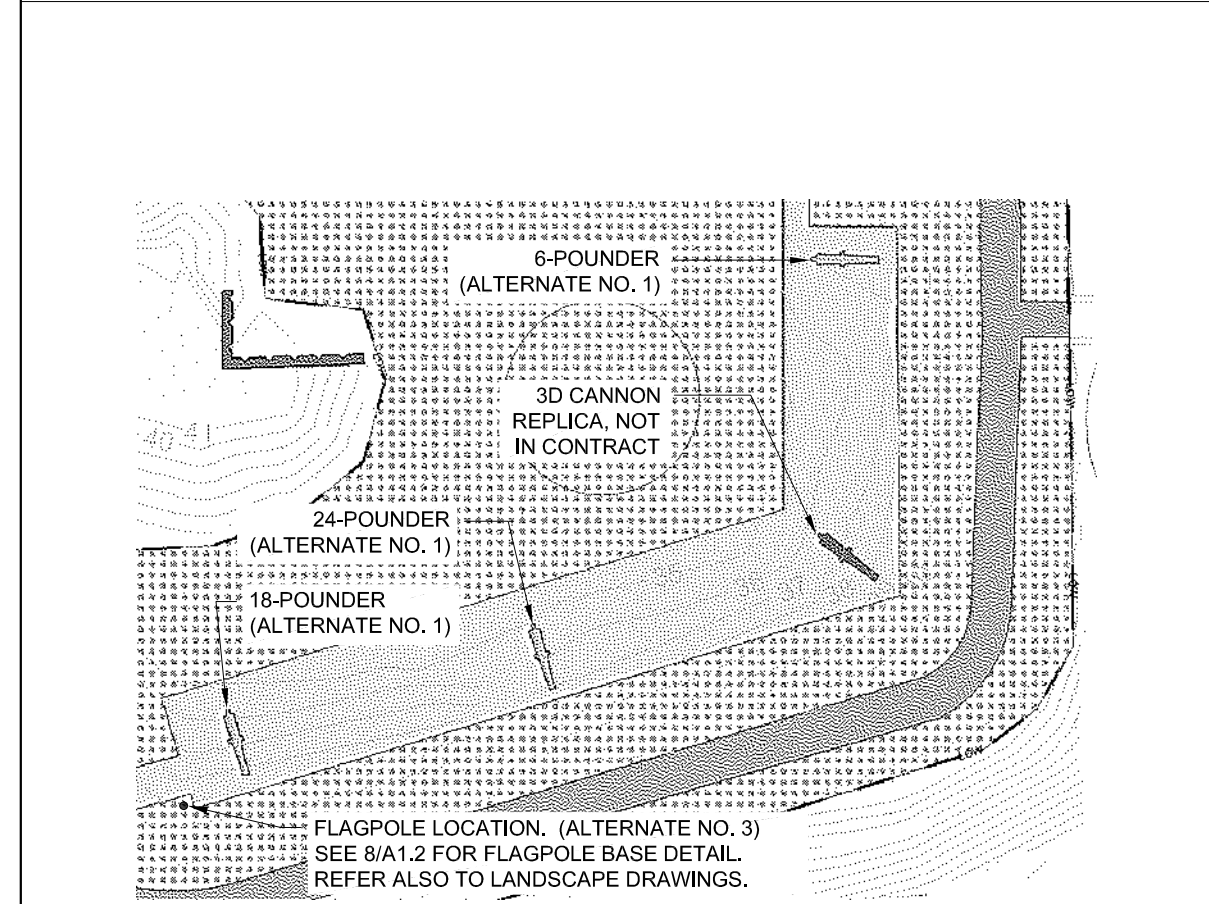
324 Broadway, P.O. Box 45248
Somerville, MA 02145
617.625.8901 - www.mcginleykalsow.com

REDOUBT FENCE REPAIRS

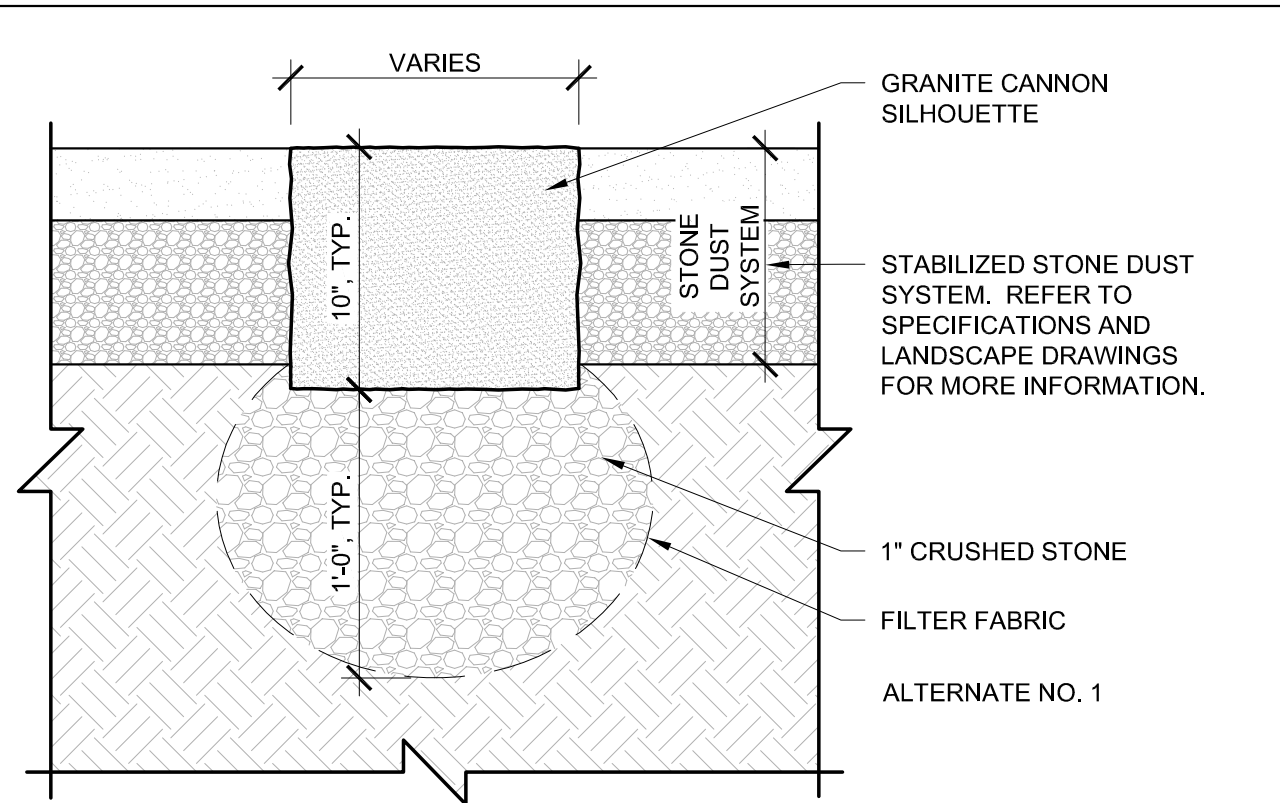
A1.1



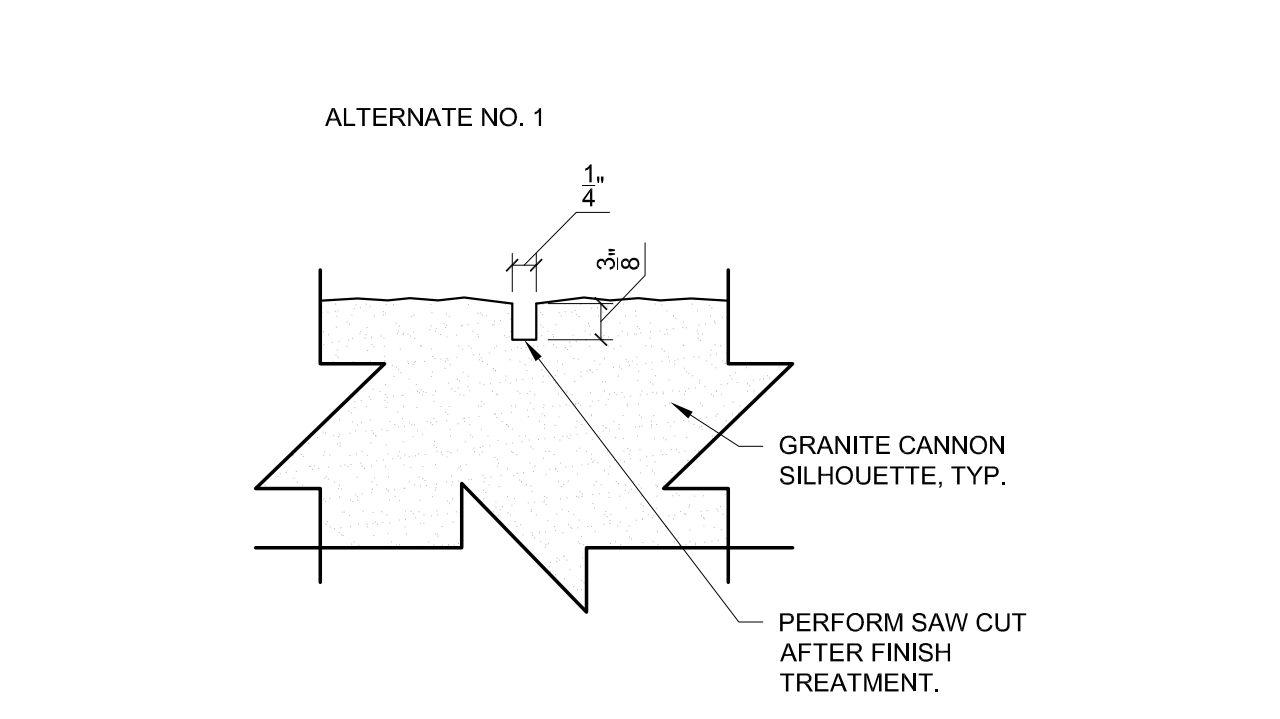
8 FLAGPOLE BASE DETAIL (ALTERNATE NO. 3)
3/4" = 1'-0"



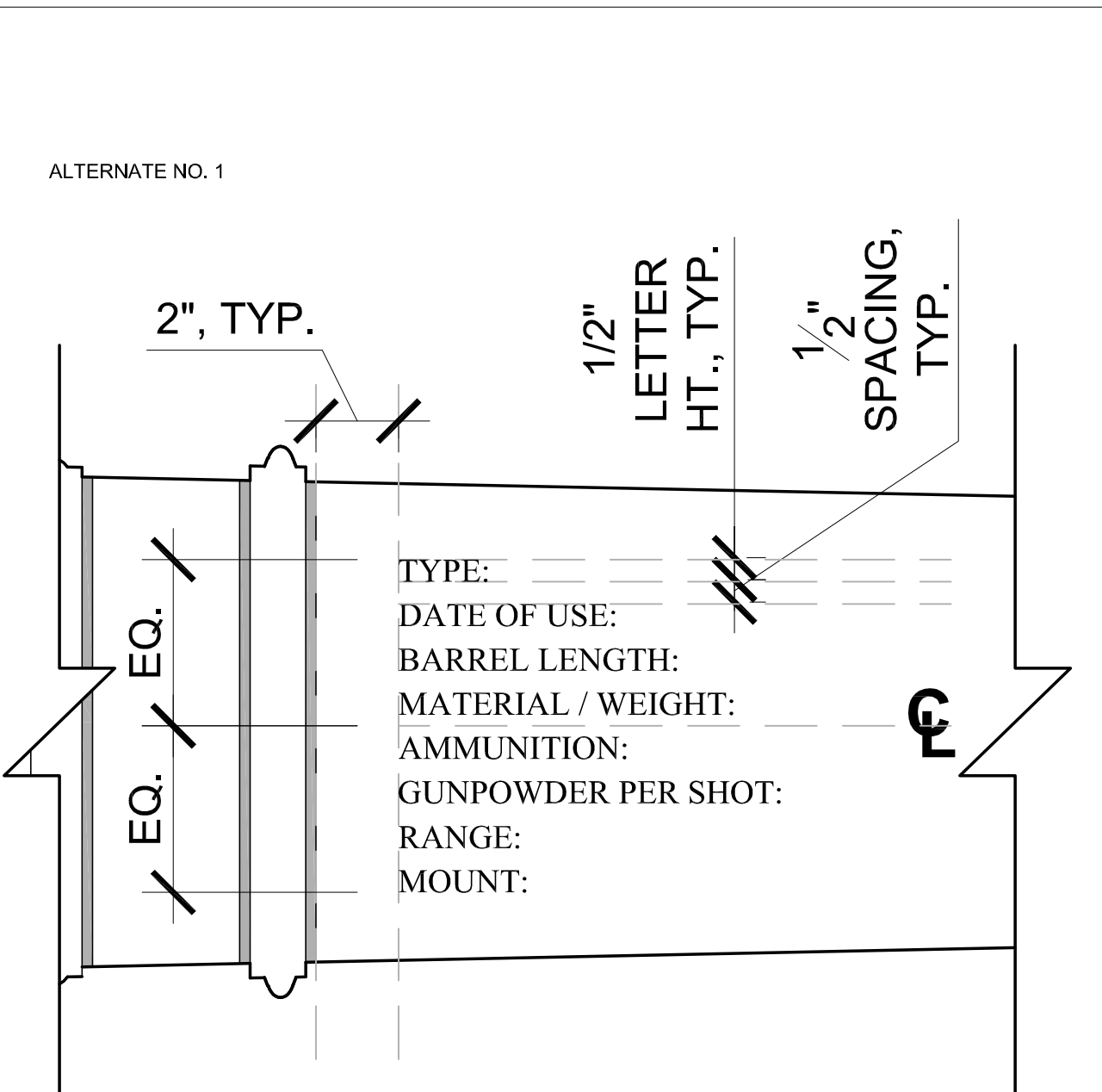
7 CANNON SILHOUETTE AND FLAGPOLE KEY PLAN
NOT TO SCALE



6 TRANSVERSE SECTION AT GRANITE, TYP.
SCALE: 1 1/2" = 1'-0"



5 DETAIL AT GRANITE SAW CUT
SCALE: 6" = 1'-0"



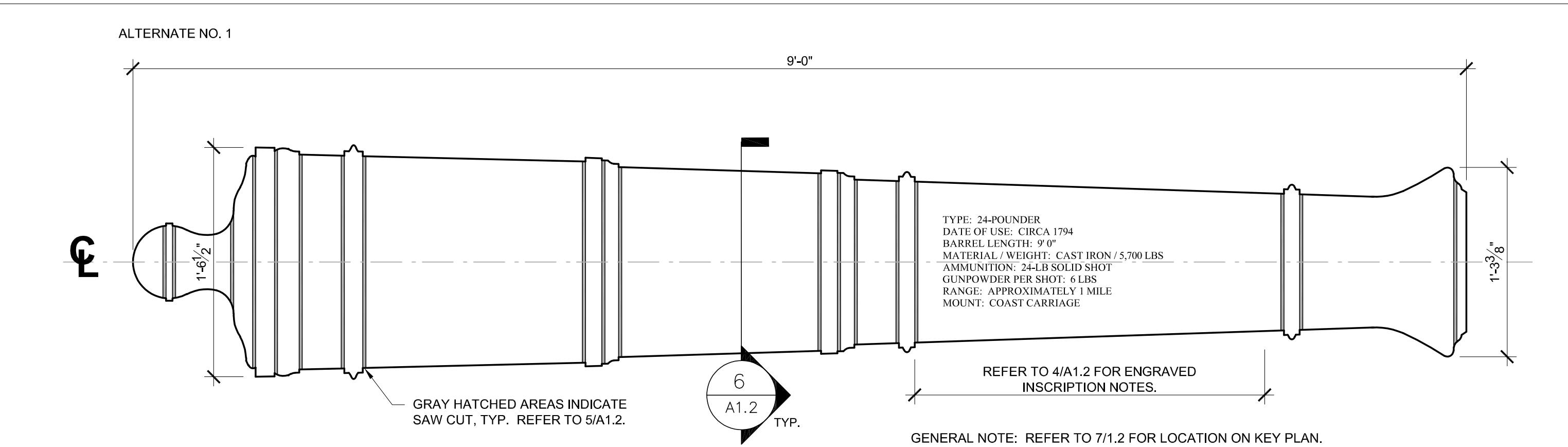
4 ENGRAVED INSCRIPTION DETAIL, TYP.
SCALE: 3" = 1'-0"

GENERAL LETTERING NOTES:

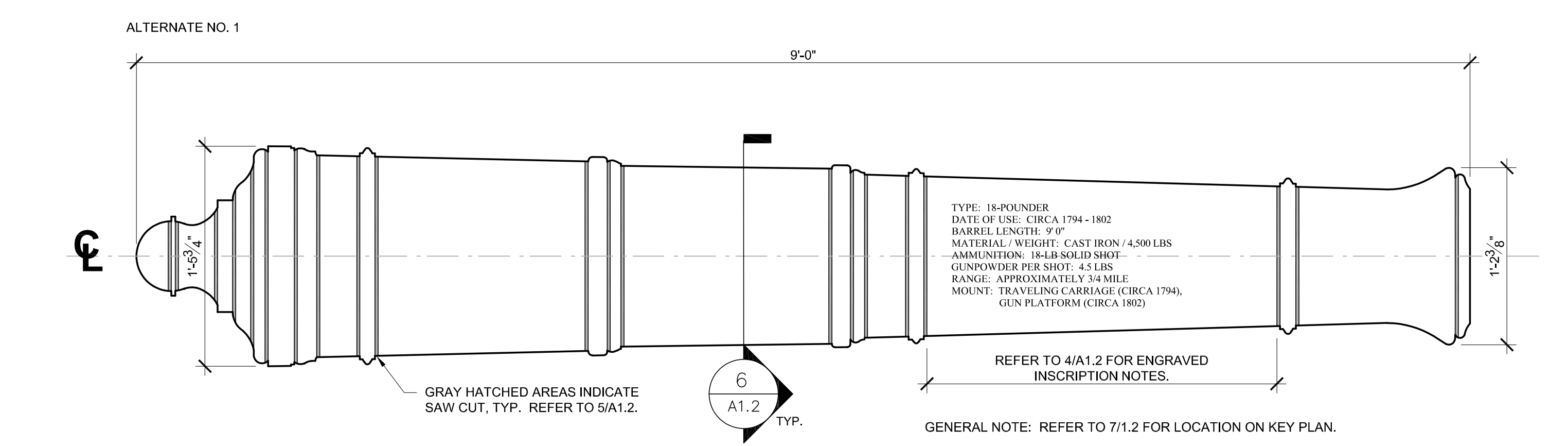
1. FONT TO BE TIMES NEW ROMAN.
2. LETTERS TO BE ENGRAVED.
3. ENGRAVING INSETS TO BE PAINTED BLACK WITH LITHOCHROME COLOR HARDENER.
4. REFER TO SPECIFICATIONS.
5. CENTER BODY OF ENGRAVED INSCRIPTION ON CENTERLINE OF CANNON SILHOUETTE.

GENERAL NOTES - GRANITE CANNONS - ALTERNATE #1

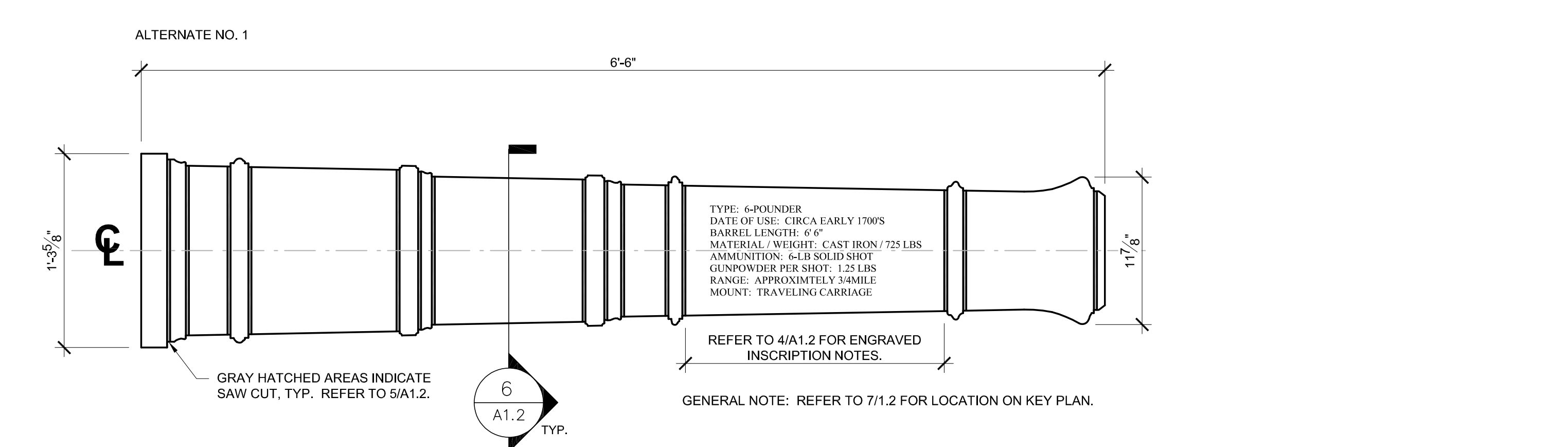
1. FOR CANNON PROFILES, CAD FILES TO BE FURNISHED TO CONTRACTOR AND FABRICATOR.
2. CANNON SILHOUETTES TO BE SET IN LOCATIONS AS SHOWN ON 7/A1.2 (KEY PLAN). REFER ALSO TO LANDSCAPE DRAWINGS.
3. CANNON SILHOUETTES TO BE SET IN STONE DUST. SEE 6/A1.2. REFER ALSO TO SPECIFICATIONS AND LANDSCAPE DRAWINGS FOR ADDITIONAL INFORMATION.
4. CANNON GROOVES TO BE SAW CUT AFTER FINISHING FACE OF GRANITE.



3 PLAN AT 24-POUNDER CANNON
SCALE: 1 1/2" = 1'-0"



2 PLAN AT 18-POUNDER CANNON
SCALE: 1 1/2" = 1'-0"



1 PLAN AT 6-POUNDER CANNON
SCALE: 1 1/2" = 1'-0"



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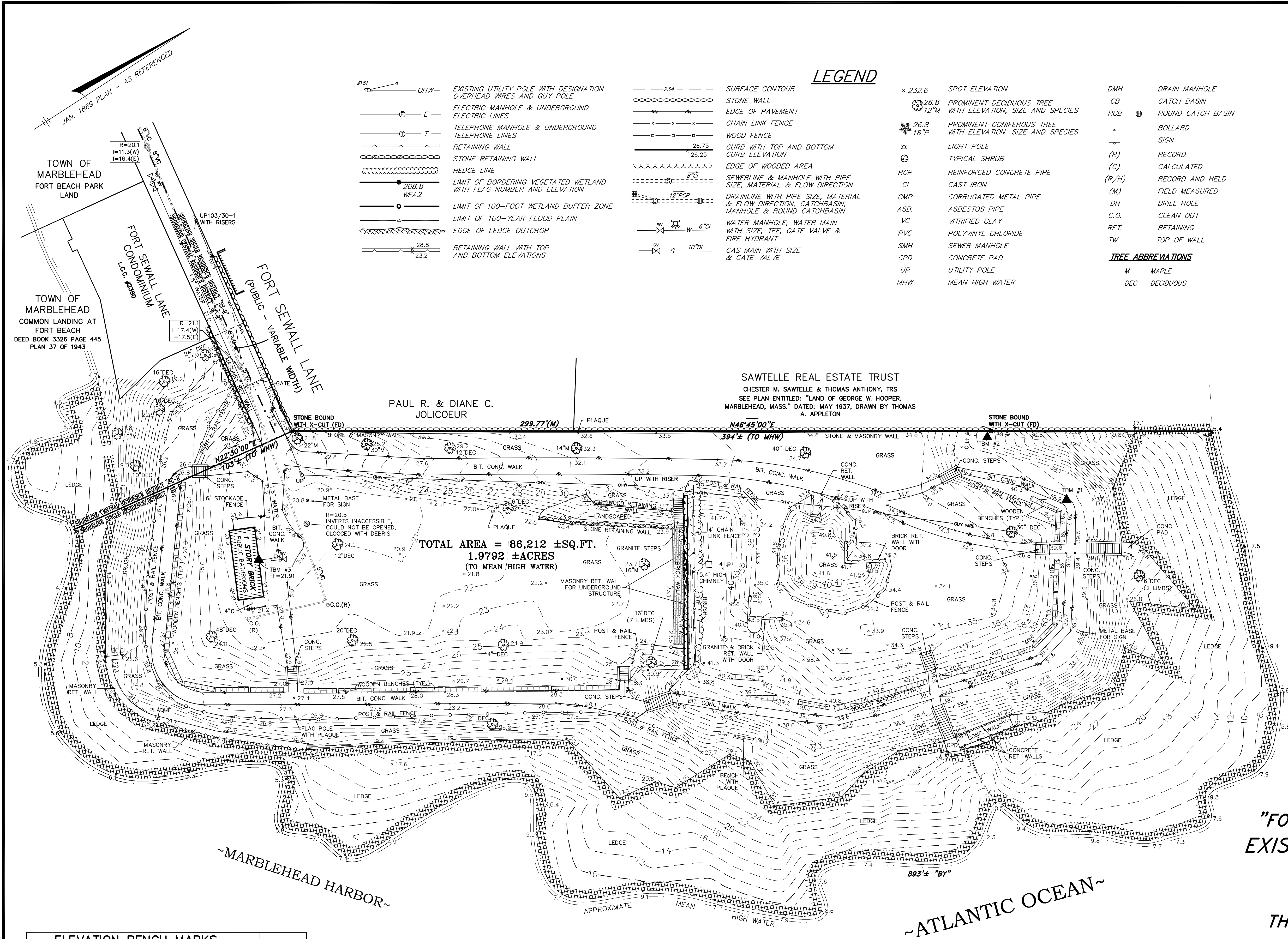
MK & A McGinley Kalsow & Associates Inc.
ARCHITECTS & PRESERVATION PLANNERS

324 Broadway, P.O. Box 45248
Somerville, MA 02145
617.625.8901 - www.mcginleykalsow.com

ALTERNATE NO.1:
GRANITE CANNON
SILHOUETTES

ALTERNATE NO. 3:
FLAGPOLE (BASE
DETAIL)

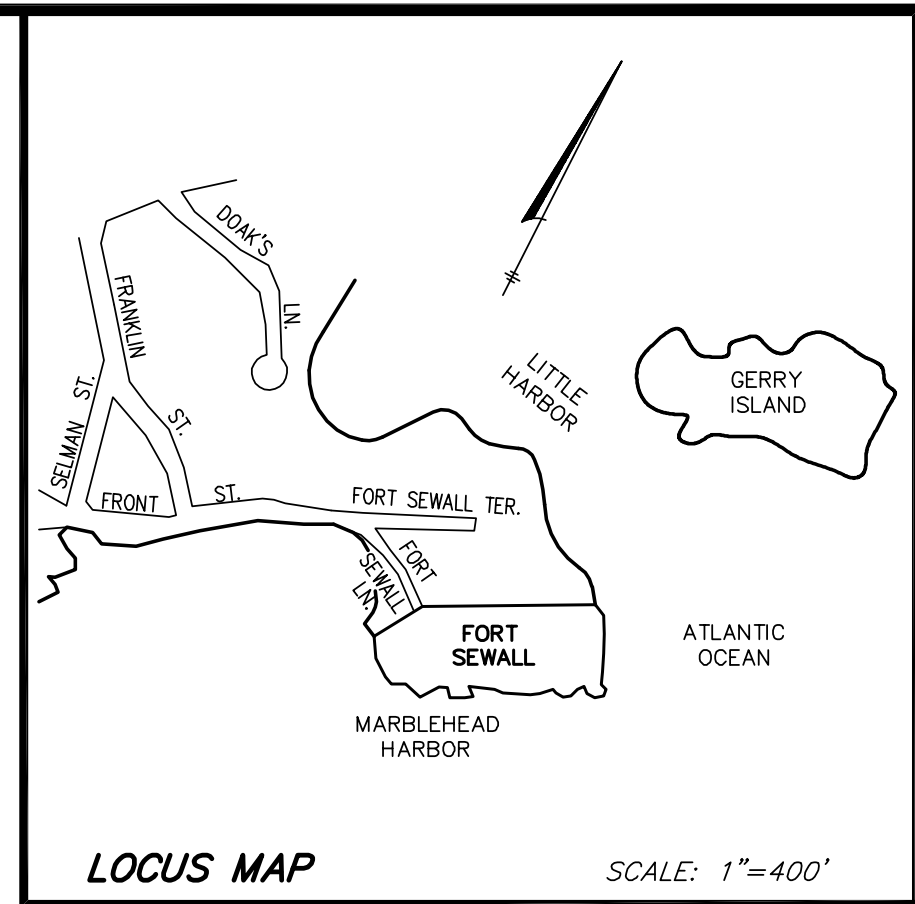
A1.2



ELEVATION BENCH MARKS		
▲ DATUM: N.A.V.D. 1988		
NO.	DESCRIPTION	ELEV.
1.	TOP OF RR SPIKE FOUND IN BIT. CONC.	39.72
2.	TOP OF STONE BOUND WITH X-CUT	40.30
3.	FINISHED FLOOR: CONC. DOORWAY	21.91

LEGEND

	EXISTING UTILITY POLE WITH DESIGNATION OVERHEAD WIRES AND GUY POLE		SURFACE CONTOUR		SPOT ELEVATION		DRAIN MANHOLE
	ELECTRIC MANHOLE & UNDERGROUND ELECTRIC LINES		STONE WALL		PROMINENT DECIDUOUS TREE WITH ELEVATION, SIZE AND SPECIES		CATCH BASIN
	TELEPHONE MANHOLE & UNDERGROUND TELEPHONE LINES		EDGE OF PAVEMENT		PROMINENT CONIFEROUS TREE WITH ELEVATION, SIZE AND SPECIES		ROUND CATCH BASIN
	RETAINING WALL		CHAIN LINK FENCE		LIGHT POLE		BOLLARD
	STONE RETAINING WALL		WOOD FENCE		TYPICAL SHRUB		RECORD
	HEDGE LINE		CURB WITH TOP AND BOTTOM CURB ELEVATION		REINFORCED CONCRETE PIPE		CALCULATED
	LIMIT OF BORDERING VEGETATED WETLAND WITH FLAG NUMBER AND ELEVATION		EDGE OF WOODED AREA		CAST IRON		RECORD AND HELD
	LIMIT OF 100-FOOT WETLAND BUFFER ZONE		SEWERLINE & MANHOLE WITH PIPE SIZE, MATERIAL & FLOW DIRECTION		CORRUGATED METAL PIPE		FIELD MEASURED
	LIMIT OF 100-YEAR FLOOD PLAIN		DRAINLINE WITH PIPE SIZE, MATERIAL & FLOW DIRECTION, CATCHBASIN, MANHOLE & ROUND CATCHBASIN		ASBESTOS PIPE		DRILL HOLE
	EDGE OF LEDGE OUTCROP		WATER MANHOLE, WATER MAIN WITH SIZE, TEE, GATE VALVE & FIRE HYDRANT		VITRIFIED CLAY		CLEAN OUT
	RETAINING WALL WITH TOP AND BOTTOM ELEVATIONS		GAS MAIN WITH SIZE & GATE VALVE		POLYVINYL CHLORIDE		RETAINING WALL
			UTILITY POLE		SEWER MANHOLE		TOP OF WALL
			CONCRETE PAD		CONCRETE PAD		
			UTILITY POLE		UTILITY POLE		
			MEAN HIGH WATER		MEAN HIGH WATER		



ASSESSORS:

MAP 16 LOT 11

ZONING:

SHORELINE SINGLE RESIDENCE - "SS-R"
HISTORIC DISTRICT

REFERENCES:

DEED BOOK 2521 PAGE 469

A PLAN ENTITLED: "PLAN OF PORTION OF THE ESTATE OF HENRY F. PITMAN AT MARBLEHEAD, MASS.", PREPARED BY: CHAS. A. PUTNAM, C.E., DATED: JANUARY, 1889, SCALE: 40' FEET TO AN INCH - (UNRECORDED) ON FILE AT HANCOCK SURVEY ASSOCIATES, INC.

RECORD OWNER:

THE TOWN OF MARBLEHEAD

NOTES:

- THIS PLAN PREPARED FOR THE TOWN OF MARBLEHEAD TO ASSIST THE FORT SEWALL MASTER PLAN.
- UNDERGROUND FORT CHAMBERS NOT DEPICTED HEREON.
- UNDERGROUND UTILITIES SHOWN HEREON ARE COMPILED FROM FIELD LOCATIONS OF STRUCTURES AND FROM AVAILABLE RECORD INFORMATION ON FILE AT THE TOWN ENGINEERING OFFICES, TOWN D.P.W., MASS HIGHWAY DEPT. AND UTILITY COMPANIES. OTHER UNDERGROUND UTILITIES MAY EXIST. IT SHALL BE THE RESPONSIBILITY OF THE DESIGN ENGINEER AND THE CONTRACTOR TO VERIFY THE LOCATION, SIZE & ELEVATION OF ALL UTILITIES WITHIN THE AREA OF PROPOSED WORK AND TO CONTACT "DIG-SAFE" AT 1-888-344-7233 AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION, DEMOLITION OR CONSTRUCTION.
- VERTICAL DATUM DERIVED FROM GPS. SURVEY BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988.
- COASTAL BANK AND BUFFER ZONE NOT DELINEATED HEREON.

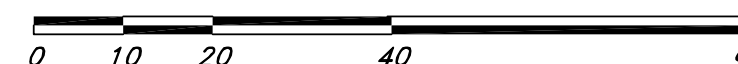
"FORT SEWALL MASTER PLAN" EXISTING CONDITIONS PLAN

MARBLEHEAD, MA

PREPARED FOR

THE TOWN OF MARBLEHEAD

SCALE: 1" = 20' OCTOBER 29, 2002



S-000

HSA HANCOCK SURVEY ASSOCIATES, INC.
235 NEWBURY STREET, DANVERS, MASSACHUSETTS 01923
VOICE 978-777-3050 FAX 978-774-7816
www.hancockassociates.com

CALC. BY:	CHECKED
MMM	WCJ

9996

GENERAL NOTES

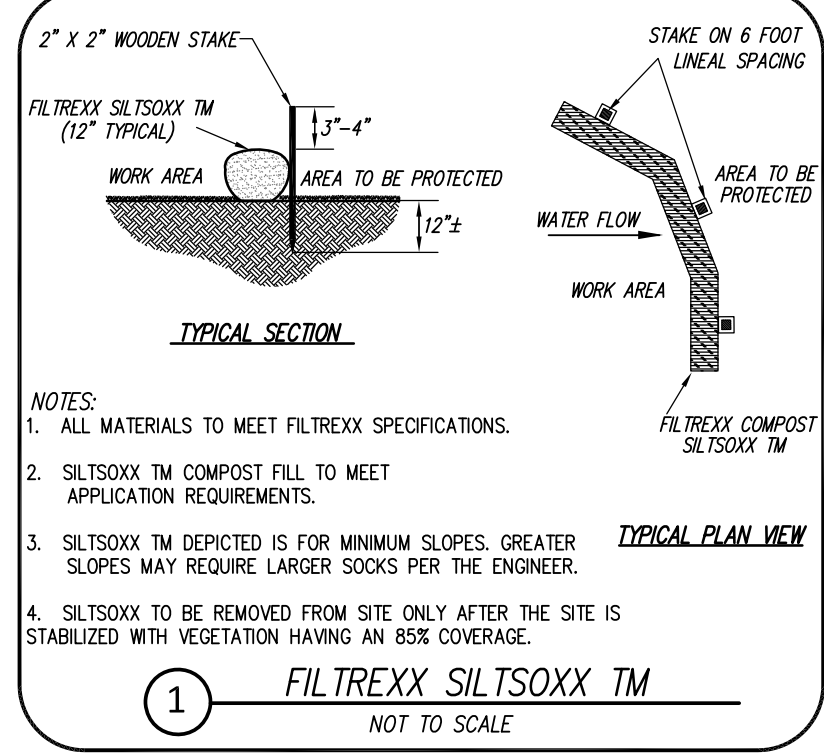
- Existing conditions and topography are from Hancock Survey Associates, Inc. 235 Newbury Street, Danvers, MA 01923 on October 29, 2002.
- Contractor shall verify location of any existing utilities and services and provide protection during construction. Utilities damaged during construction shall be repaired at contractors expense.
- Project Permit (Marblehead Conservation Commission Order of Conditions and land disturbance - MASS DEP 40-1424) was issued on January 15, 2020. Refer to specification section 010101 - Order of Conditions 40-1424 for Order of Conditions document for additional information and requirements. No additional permits required at the time of bidding. Permit fees shall be waived.
- Contractor shall leave site clean and orderly during construction process. Remove from site all excess materials, soil, debris and equipment. Store materials only in an approved location.

SITE LOGISTICS AND DEMOLITION NOTES

- Contractor shall verify all existing conditions in the field and report any discrepancies between plans and actual conditions to Landscape Architect before beginning work.
- Building, structure and paving removal shall include the disconnection and capping of any utilities, footings, slabs, associated base material and satisfactory off-site disposal of all debris produced through the removal operations.
- Tree and shrub removal shall include the felling, cutting, grubbing out of roots and satisfactory off-site disposal of all stumps vegetative and extraneous debris produced through the removal operations.
- Existing trees and shrubs to remain shall not be altered under any circumstances and must remain in the same condition as observed prior to construction.
- No heavy machinery is to be used within the root system of existing trees. Excavation within root system zones is to be performed by hand.
- Any items scheduled to remain which are damaged by Contractor's operations shall be at Contractor's expense.
- Any items scheduled to be stockpiled on site which are damaged by Contractor's operations shall be at Contractor's expense.

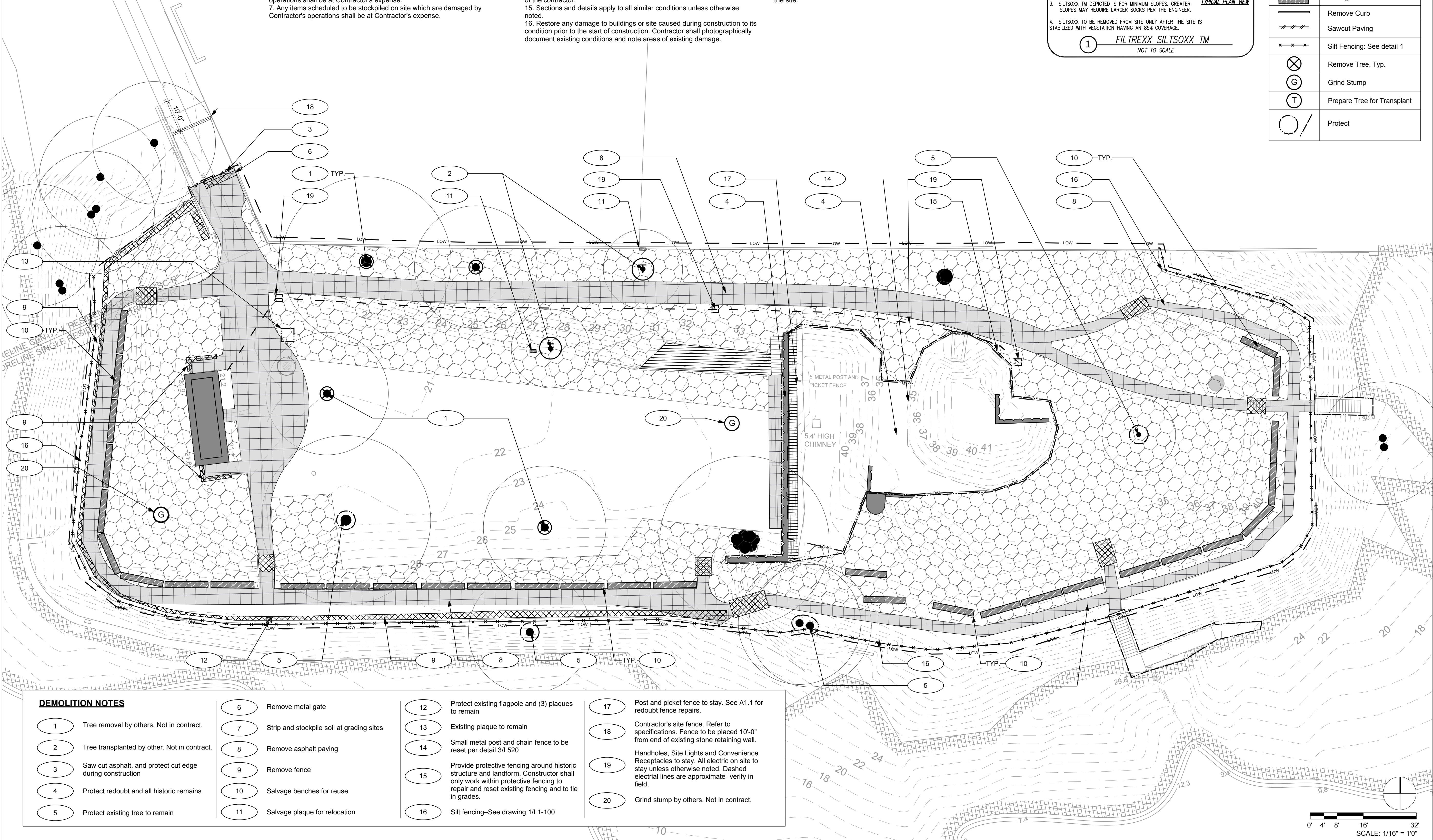
- Area for stockpiled items shall be located by Landscape Architect and approved by owner prior to removal operations.
- Contractor shall leave work site free of any debris at the end of each day's operations.
- The contractor shall visit the site and thoroughly examine and become familiar with existing conditions including delivery and removal of materials to and from the site.
- The contractor shall protect adjoining property, public rights-of-way, and the public from dust and construction hazards during the project. The contractor shall provide, install and maintain protection barriers to ensure public safety. The contractor shall clean up any dust which impacts adjoining properties or public ways.
- Site construction sign to be provided by the Town of Marblehead. Contractor to supply and install MASS DEP proctet sign. Refer to specifications, Section 010101-Order of Conditions, 40-1424.
- Work described in either drawings or specification shall be considered part of this contract.
- Field dimensions and dimensional coordination shall be the responsibility of the contractor.
- Sections and details apply to all similar conditions unless otherwise noted.
- Restore any damage to buildings or site caused during construction to its condition prior to the start of construction. Contractor shall photographically document existing conditions and note areas of existing damage.

- Control noise, this site is directly adjacent to residences. Contain all dust and legally dispose of all construction debris.
- Do not scale the drawings. If critical dimensions are missing from the drawings contact the architect for clarification.
- Contractor shall carefully review site conditions and submit plan for security and site access for review by owner.
- Work hours will be 7am-5pm, Monday through Friday, 8am-4pm on Saturday when scheduled in advance with owner. No work on Sunday or major holidays.
- A limited number of construction vehicles to park on site, to be coordinated with Town of Marblehead and architect. Personal vehicles to park off site.
- Separate from this project, a building repair project will be taking place concurrently on the site (That project includes selective masonry repairs to the interior of the redoubt rooms, and selective masonry repairs to the exterior of the north entrance and powder magazine entrance.) The contractor for the redoubt project will have permission to bring (2) vehicles on site. All construction activities to be coordinated with other contractor and Town of Marblehead.
- The contractor shall visit the site and thoroughly examine and become familiar with existing conditions including delivery and removal of materials to and from the site.



SITE PREP AND DEMO LEGEND

SYM.	DESCRIPTION
---	Limit of Work
[Symbol]	Strip and Stockpile Topsoil
[Symbol]	Remove Pavement
[Symbol]	Remove Structure
[Symbol]	Remove Vegetation
[Symbol]	Salvage Structure
[Symbol]	Remove Curb
[Symbol]	Sawcut Paving
[Symbol]	Silt Fencing: See detail 1
[Symbol]	Remove Tree, Typ.
[Symbol]	Grind Stump
[Symbol]	Prepare Tree for Transplant
[Symbol]	Protect



DEMOLITION NOTES

- Tree removal by others. Not in contract.
- Tree transplanted by other. Not in contract.
- Saw cut asphalt, and protect cut edge during construction
- Protect redoubt and all historic remains
- Protect existing tree to remain

- Remove metal gate
- Strip and stockpile soil at grading sites
- Remove asphalt paving
- Remove fence
- Salvage benches for reuse
- Salvage plaque for relocation

- Protect existing flagpole and (3) plaques to remain
- Existing plaque to remain
- Small metal post and chain fence to be reset per detail 3/L.520
- Provide protective fencing around historic structure and landform. Constructor shall only work within protective fencing to repair and reset existing fencing and to tie in grades.
- Silt fencing-See drawing 1/L-100

- Post and picket fence to stay. See A.1.1 for redoubt fence repairs.
- Contractor's site fence. Refer to specifications. Fence to be placed 10'-0" from end of existing stone retaining wall.
- Handholes, Site Lights and Convenience Receptacles to stay. All electric on site to stay unless otherwise noted. Dashed electrical lines are approximate- verify in field.
- Grind stump by others. Not in contract.



Fort Sewall
Fort Restoration - Phase IIB -
Site and Accessibility Improvements
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Marblehead, MA 01945

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Date: 02/07/20
Drawn By: CU
Reviewed By: NC
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617.338.8400
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SITE
DEMOLITION
PLAN

L-100

GENERAL NOTES

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- Project Permit (Marblehead Conservation Commission Order of Conditions and land disturbance - MASS DEP 40-1424) was issued on January 15, 2020. Refer to specification section 010101 - Order of Conditions 40-1424 for Order of Conditions document for additional information and requirements. No additional permits required at the time of bidding. Permit fees shall be waived.
- Contractor shall leave site clean and orderly during construction process. Remove from site all excess materials, soil, debris and equipment. Store materials only in an approved location.

LAYOUT NOTES

- Do not scale drawings.
- Contractor shall verify all existing conditions and layout dimensions in the field. Report any discrepancies to the Landscape Architect for design prior to commencing construction.
- Stake or otherwise flag all design elements and features in the field. Obtain Landscape Architect's approval prior to commencing construction.
- All dimensions from structure are from face of finish of exterior wall unless otherwise stated.
- All angles are assumed to be 90 degrees unless otherwise stated.
- See planting plans for location of trees and shrubs, planting beds and extent of sodding and seeding.
- See architectural drawings for all building dimensions.
- Dimensions at curbs of pavement edging are given from outside face of curb to outside face of curb unless otherwise stated.
- Any changes proposed to dimensions shown on this drawing shall be approved by the Landscape Architect prior to construction.

MATERIALS LEGEND

KEY NOTE	SYM.	DESCRIPTION	DETAIL
P PAVING			
P-AS1		Asphalt Paving	1/L500
P-CP		Concrete Paving	2/L500
P-SS1		Stonedust Paving-Pedestrian	3/L500
P-SS2		Stonedust Paving-Vehicular	4/L500
S SITE STRUCTURES			
S-GS1		Granite Step with Handrail 1	5/L500
S-GS2		Granite Step with Handrail 2	6/L500
S-GS3		Granite Step with Handrail 3	7/L500
S-HS		Reset Historic Stair	8/L500
S-GS4		Granite Step with Handrail 4 (Add Alt #2)	9/L500
S-HR		Painted Metal Handrail	1/L510
S-RW1		Fieldstone Wall	4/L510
S-RW2		Stone Retaining Wall at Redoubt	5/L510
S-FN1		Split Rail Fence	2/L510
S-FN2		Repair Existing Redoubt Fence	1/A1.1
S-FN3		Reset Post and Chain Fence	7/L520
S-RB		Removeable Bollard	3/L510
S-DW		Dry Well	6/L520
F FURNISHING			
L-FP		Flag Pole (Add Alt #3)	6/L520
L-RP		Relocated Plaque	8/L520
P-CG		Cannon - Granite Inlay (Add Alt #1)	1/A1.2
P-CS		Cannon - Statue (Not in Contract)	-
S-BN		Bench - Modified and Reset	5/L520

MATERIALS NOTES

- Redoubt fence to be repaired. Refer to A1.1.
- Refer to A1.2 for information regarding Alternate #1--Granite Cannon Silhouettes.



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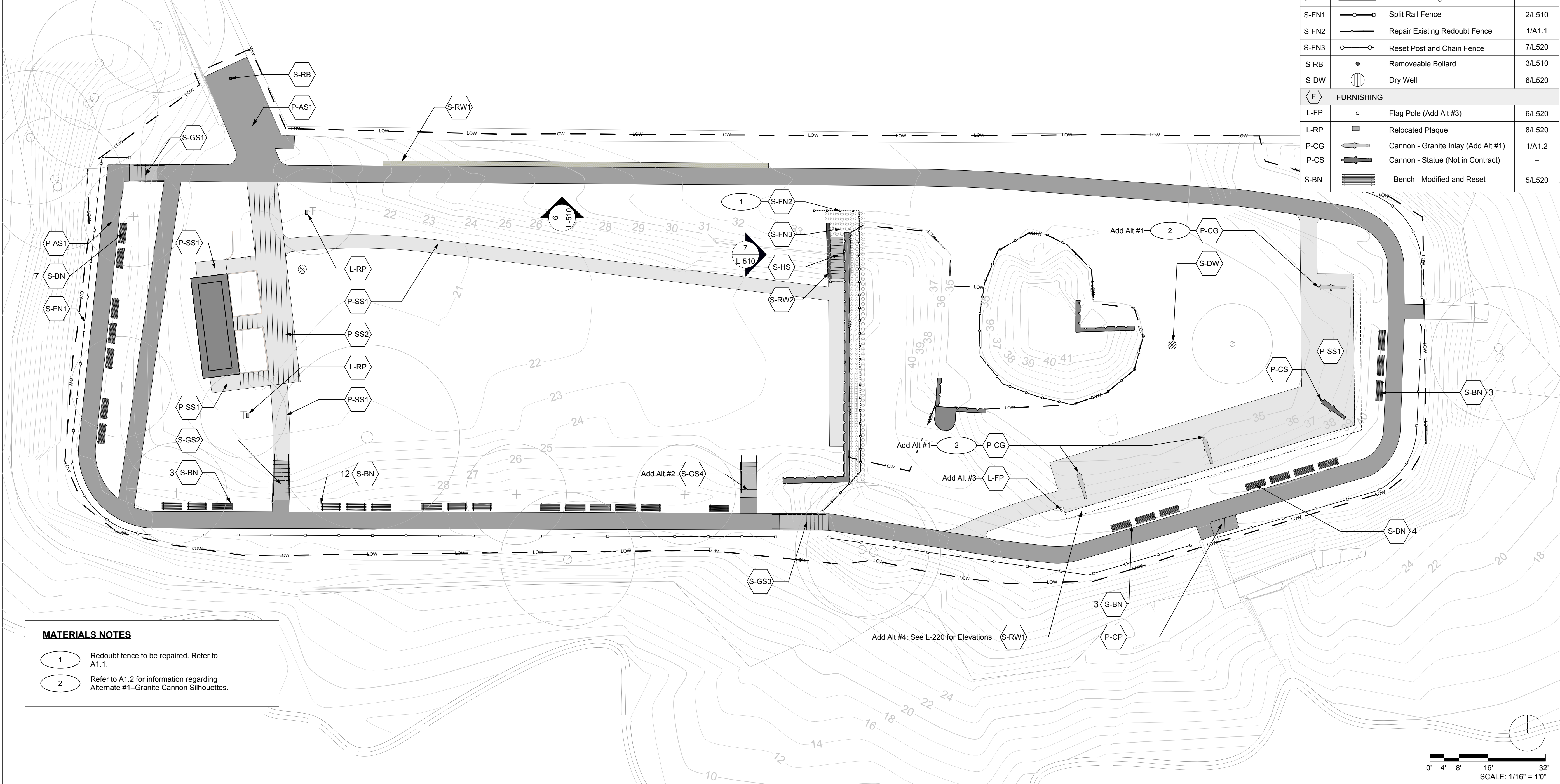
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SITE
MATERIALS
PLAN

L-200

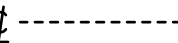

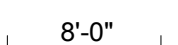



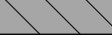







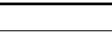

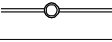



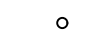
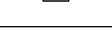





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LAYOUT NOTES

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2. Contractor shall verify all existing conditions and layout dimensions in the field. Report any discrepancies to the Landscape Architect for design prior to commencing construction.
3. Stake or otherwise flag all design elements and features in the field. Obtain Landscape Architect's approval prior to commencing construction.
4. All dimensions from structure are from face of finish of exterior wall unless otherwise stated.
5. All angles are assumed to be 90 degrees unless otherwise stated.
6. See planting plans for location of trees and shrubs, planting beds and extent of sodding and seeding.
7. See architectural drawings for all building dimensions.
8. Dimensions at curbs of pavement edging are given from outside face of curb to outside face of curb unless otherwise stated.
9. Any changes proposed to dimensions shown on this drawing shall be approved by the Landscape Architect prior to construction.

LAYOUT LEGEND	
SYM.	DESCRIPTION
	Centerline
	Align
	Dimension

MATERIALS LEGEND	
SYM.	DESCRIPTION
PAVING	
	Asphalt Paving
	Asphalt Paving at Binocular Platform
	Stonedust Paving-Pedestrian
	Stonedust Paving-Vehicular
SITE STRUCTURES	
	Granite Step with Handrail 1
	Granite Step with Handrail 2
	Granite Step with Handrail 3
	Reset Historic Stair
	Granite Step with Handrail 4 (Add Alt #2)
	Painted Metal Handrail
	Fieldstone Wall
	Stone Retaining Wall at Redoubt
	Split Rail Fence
	Repair Existing Redoubt Fence
	Reset Post and Chain Fence
	Removeable Bollard
	Dry Well
FURNISHING	
	Flag Pole (Add Alt #3)
	Relocated Plaque
	Cannon - Granite Inlay (Add Alt #1)
	Cannon - Statue (Not in Contract)
	Bench - Modified and Reset



Fort Sewall
Fort Restoration - Phase IIB -
Site and Accessibility Improvements

Fort Sewall Lane
Marblehead, MA 01945

BID SET

Date: 02/07/20
Drawn By: CU
Reviewed By: NC
Project No: 1698.03



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Boston MA 02109
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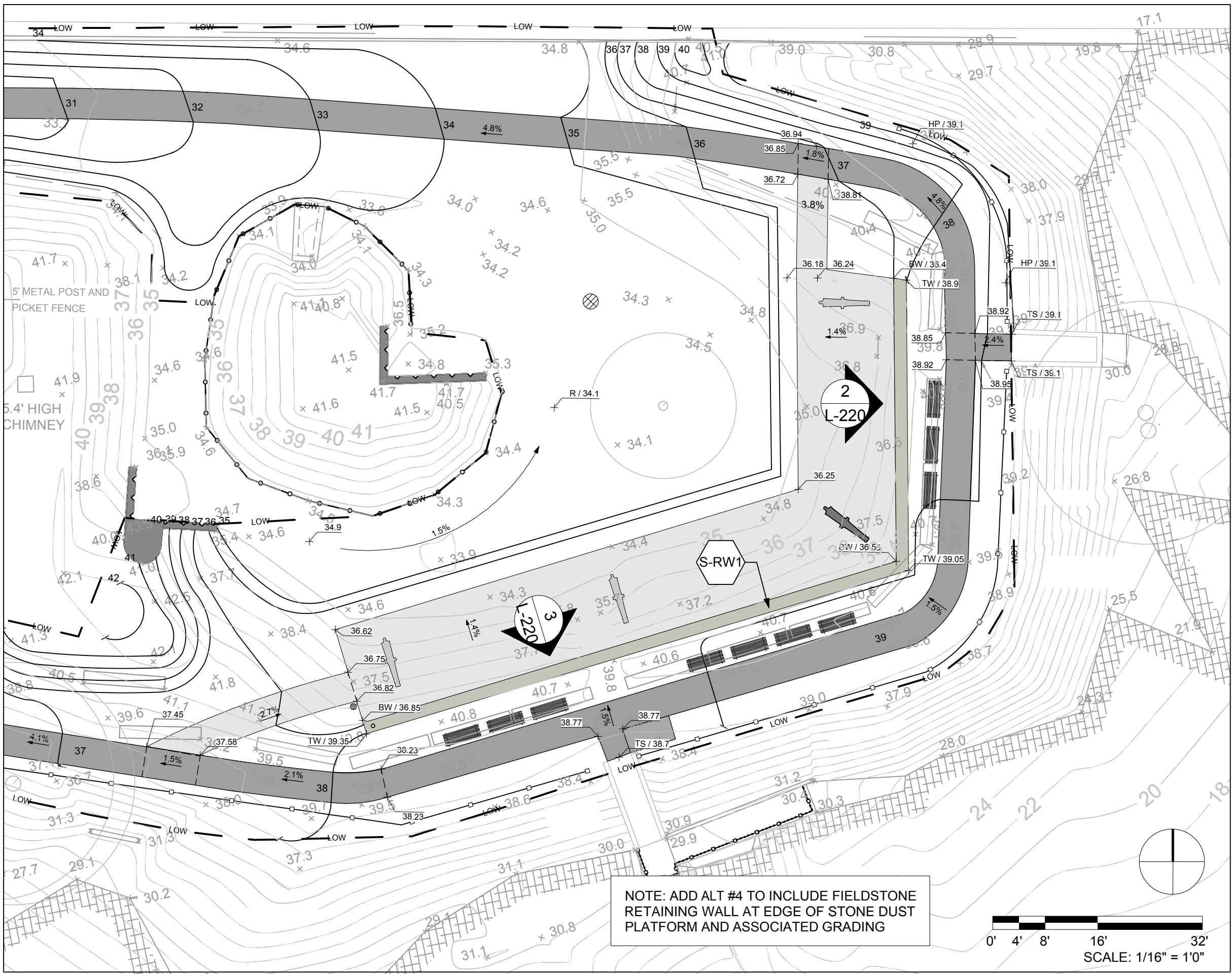
SITE LAYOUT
PLAN

L-210

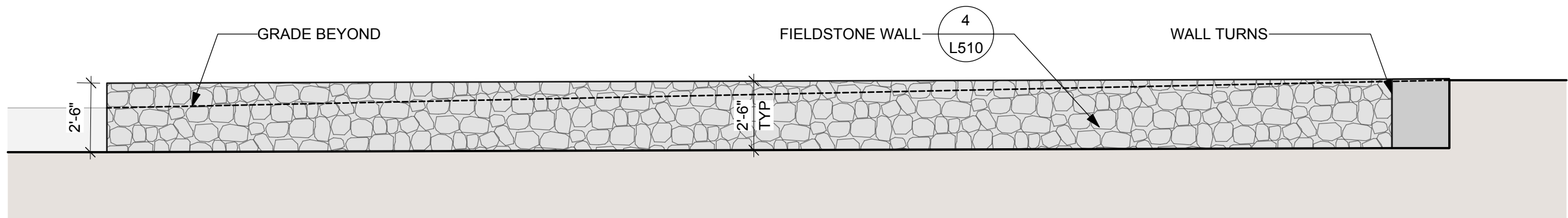
LAYOUT NOTES

- 1 Redoubt fence to be repaired. Refer to A1.1.
- 2 Refer to A1.2 for information regarding Alternate #1--Granite Cannon Silhouettes.
- 3 Final location of modified and reset benches to be determined in field.
- 4 Final location of split rail fence to be determined in field.

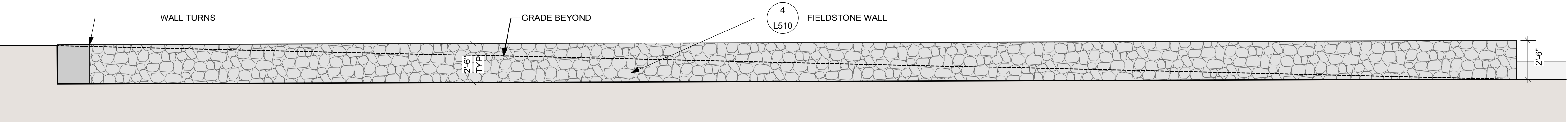
0' 4' 8' 16' 32'
SCALE: 1/16" = 1'0"



1 PLAN-WALL AT GUN PLATFORM (ADD ALT #4)
Scale: 1/16" = 1'-0"



2 ELEVATION A-WALL AT GUN PLATFORM (ADD ALT #4)
Scale: 1/4" = 1'-0"



3 ELEVATION B-WALL AT GUN PLATFORM (ADD ALT #4)
Scale: 1/4" = 1'-0"

GENERAL NOTES

- Existing conditions and topography are from Hancock Survey Associates, Inc. 235 Newbury Street, Danvers, MA 01923 on October 29, 2002.
- Contractor shall verify location of any existing utilities and services and provide protection during construction. Utilities damaged during construction shall be repaired at contractors expense.
- Project Permit (Marblehead Conservation Commission Order of Conditions and land disturbance - MASS DEP 40-1424) was issued on January 15, 2020. Refer to specification section 010101 - Order of Conditions 40-1424 for Order of Conditions document for additional information and requirements. No additional permits required at the time of bidding. Permit fees shall be waived.
- Contractor shall leave site clean and orderly during construction process. Remove from site all excess materials, soil, debris and equipment. Store materials only in an approved location.

LAYOUT NOTES

- Do not scale drawings.
- Contractor shall verify all existing conditions and layout dimensions in the field. Report any discrepancies to the Landscape Architect for design prior to commencing construction.
- Stake or otherwise flag all design elements and features in the field. Obtain Landscape Architect's approval prior to commencing construction.
- All dimensions from structure are from face of finish of exterior wall unless otherwise stated.
- All angles are assumed to be 90 degrees unless otherwise stated.
- See planting plans for location of trees and shrubs, planting beds and extent of sodding and seeding.
- See architectural drawings for all building dimensions.
- Dimensions at curbs of pavement edging are given from outside face of curb to outside face of curb unless otherwise stated.
- Any changes proposed to dimensions shown on this drawing shall be approved by the Landscape Architect prior to construction.

MATERIALS LEGEND

KEY NOTE	SYM.	DESCRIPTION	DETAIL
PAVING			
P-AS1		Asphalt Paving	1/L500
P-CP		Concrete Paving	2/L500
P-SS1		Stonedust Paving-Pedestrian	3/L500
P-SS2		Stonedust Paving-Vehicular	4/L500
SITE STRUCTURES			
S-GS1		Granite Step with Handrail 1	5/L500
S-GS2		Granite Step with Handrail 2	6/L500
S-GS3		Granite Step with Handrail 3	7/L500
S-HS		Reset Historic Stair	8/L500
S-GS4		Granite Step with Handrail 4 (Add Alt #2)	9/L500
S-HR		Painted Metal Handrail	1/L510
S-RW1		Fieldstone Wall	4/L510
S-RW2		Stone Retaining Wall at Redoubt	5/L510
S-FN1		Split Rail Fence	2/L510
S-FN2		Repair Existing Redoubt Fence	1/A1.1
S-FN3		Reset Post and Chain Fence	7/L520
S-RB		Removeable Bollard	3/L510
S-DW		Dry Well	6/L520
FURNISHING			
L-FP		Flag Pole (Add Alt #3)	6/L520
L-RP		Relocated Plaque	8/L520
P-CG		Cannon - Granite Inlay (Add Alt #1)	1/A1.2
P-CS		Cannon - Statue (Not in Contract)	-
S-BN		Bench - Modified and Reset	5/L520

GRADING LEGEND

SYM.	DESCRIPTION
149	Proposed Minor Contour
150	Proposed Major Contour
29	Existing Contour
---	Grade Break
+ 37.2	Proposed Spot Elevation
x 34.2	Existing Spot Elevation
2%	Slope
↔	Flush
+HP	High Point
+LP	Low Point



Fort Sewall Fort Restoration - Phase IIB - Site and Accessibility Improvements

Fort Sewall Lane
Marblehead, MA 01945

BID SET

Date: 02/07/20
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ADD ALT #4 STONE WALL AT GUN PLATFORM

L-220

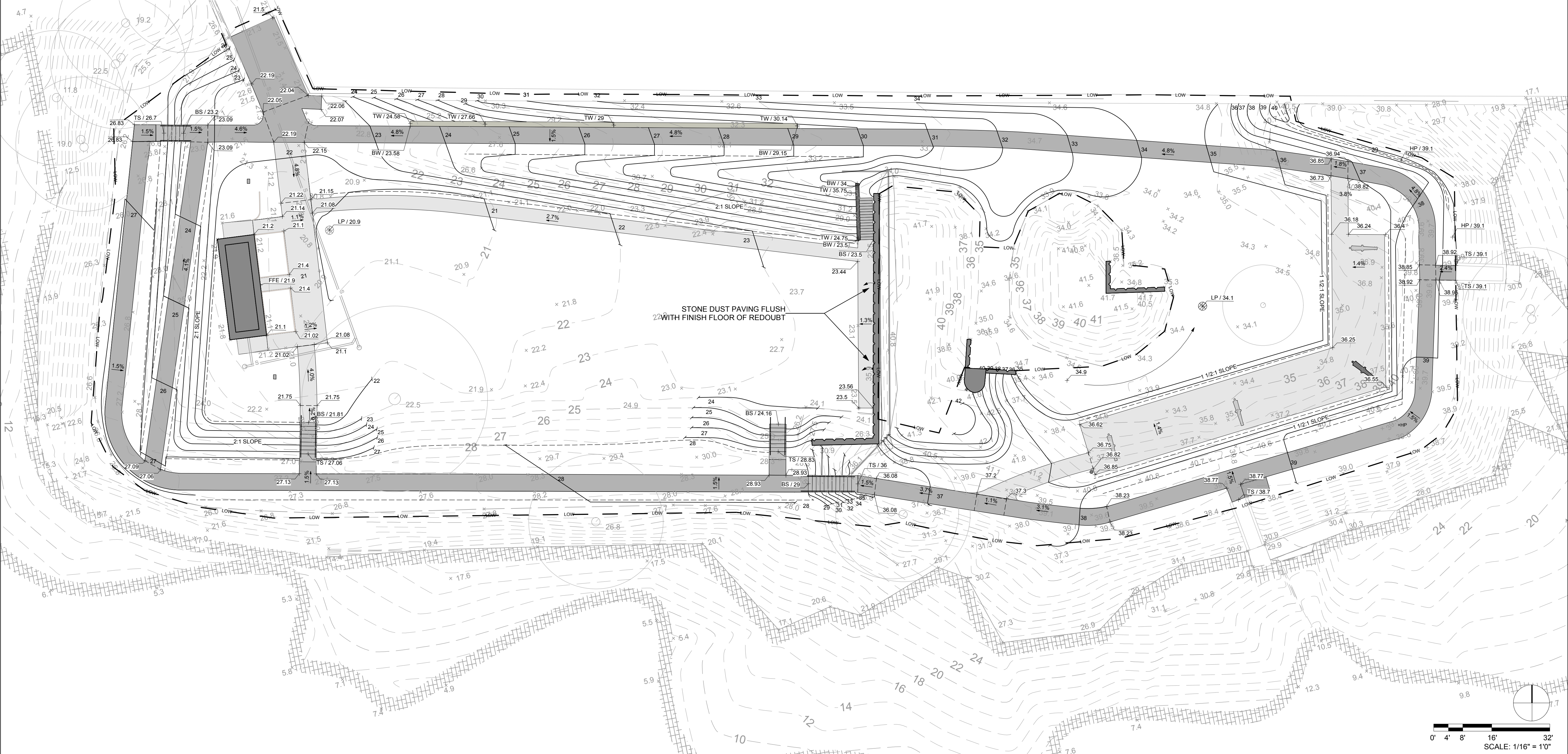
GENERAL NOTES

- Existing conditions and topography are from Hancock Survey Associates, Inc. 235 Newbury Street, Danvers, MA 01923 on October 29, 2002.
- Contractor shall verify location of any existing utilities and services and provide protection during construction. Utilities damaged during construction shall be repaired at contractors expense.
- Project Permit (Marblehead Conservation Commission Order of Conditions and land disturbance - MASS DEP 40-1424) was issued on January 15, 2020. Refer to specification section 010101 - Order of Conditions 40-1424 for Order of Conditions document for additional information and requirements. No additional permits required at the time of bidding. Permit fees shall be waived.
- Contractor shall leave site clean and orderly during construction process. Remove from site all excess materials, soil, debris and equipment. Store materials only in an approved location.

GRADING NOTES

- Contractor shall verify all existing grades in the field and report any discrepancies immediately to the landscape architect.
- Stake proposed finish grade and cut/fills of existing grade in the field. Obtain Landscape Architect's approval prior to commencing construction.
- Slope away from all buildings.
- Provide vertical curves or roundings at abrupt changes in grade unless otherwise noted. Blend new earthwork smoothly into existing grades.
- Maintain existing grades at existing plant material to remain
- Grade surfaces to assure positive drainage from all structures and to prevent ponding of surface drainage.
- All fill material is subject to approval by Landscape Architect.
- Pitch evenly between spot grades. All paved areas must pitch to drain at a minimum of 1/8" per foot. Any discrepancies not allowing this to occur shall be reported to the Landscape Architect prior to continuing work.
- Once grading operations are completed, all disturbed areas within or outside of the limits of work shall be stabilized by fine grading and seeding or mulching as directed by the Landscape Architect.
- All erosion control measures are to be constructed to meet field conditions at the time of construction and prior to any grading or disturbance of existing material on balance of site.

GRADING LEGEND	
SYM.	DESCRIPTION
	Proposed Minor Contour
	Proposed Major Contour
	Existing Contour
	Grade Break
	Proposed Spot Elevation
	Existing Spot Elevation
	Slope
	Flush
+HP	High Point
+LP	Low Point



Fort Sewall
Fort Restoration - Phase IIB -
Site and Accessibility Improvements

Fort Sewall Lane
Marblehead, MA 01945

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GRADING PLAN

L-300

GENERAL NOTES

1. Existing conditions and topography are from Hancock Survey Associates, Inc. 235 Newbury Street, Danvers, MA 01923 on October 29, 2002.
2. Contractor shall verify location of any existing utilities and services and provide protection during construction. Utilities damaged during construction shall be repaired at contractors expense.
3. Project Permit (Marblehead Conservation Commission Order of Conditions and land disturbance - MASS DEP 40-1424) was issued on January 15, 2020. Refer to specification section 010101 - Order of Conditions 40-1424 for Order of Conditions document for additional information and requirements. No additional permits required at the time of bidding. Permit fees shall be waived.
4. Contractor shall leave site clean and orderly during construction process. Remove from site all excess materials, soil, debris and equipment. Store materials only in an approved location.

PLANTING NOTES

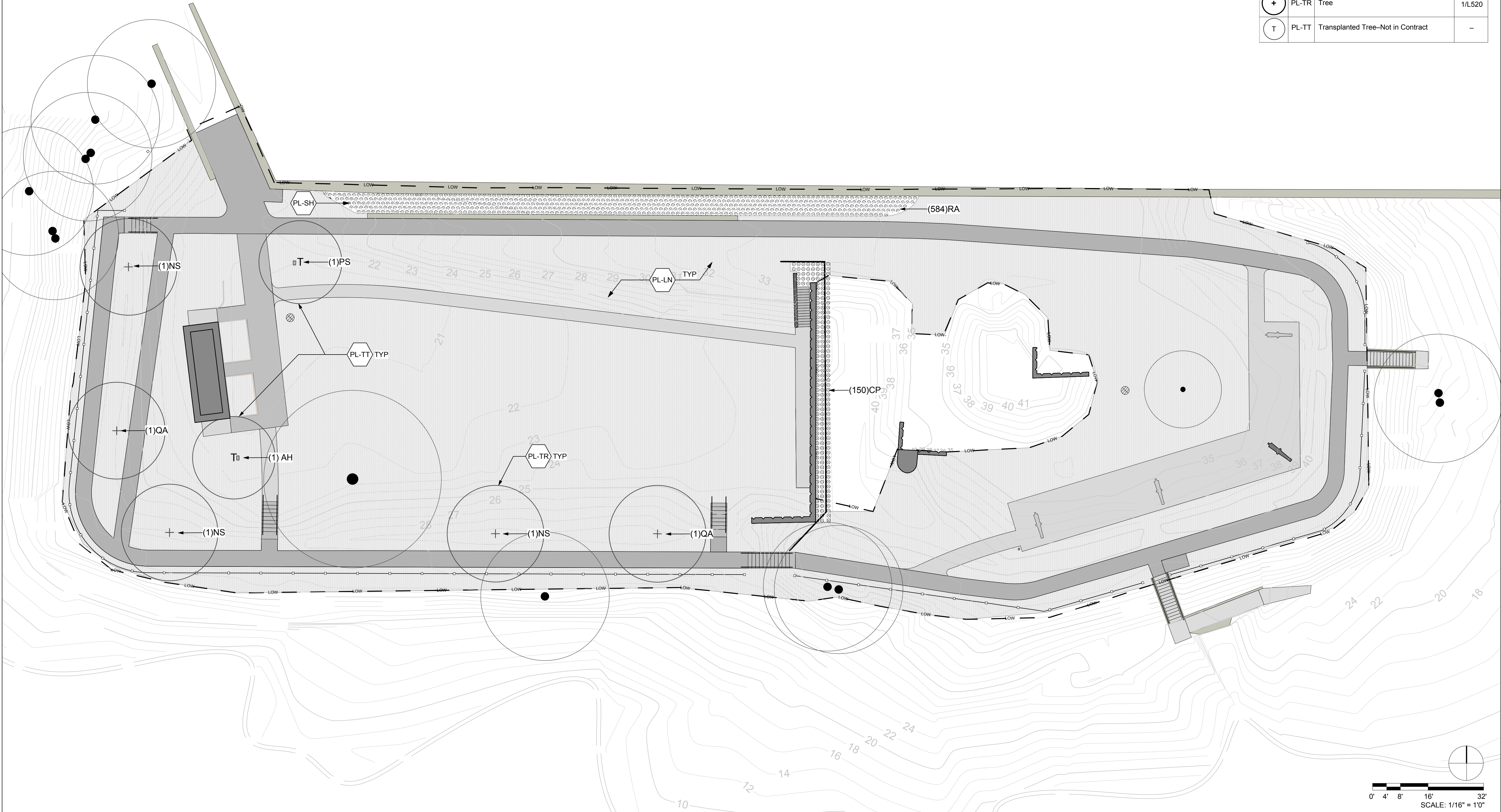
1. The Contractor shall supply all plant material in quantities sufficient to complete the planting shown on all drawings.
2. Contractor shall verify all existing conditions in the field. Report any discrepancies to the Landscape Architect for design prior to commencing planting.
3. All plant material shall conform to the guidelines established by "The American Standard for Nursery Stock" published by the American Nursery and Landscape Association, latest edition.
4. All plants shall be balled and burlap unless otherwise noted on the plant list.
5. All plants shall be approved by Landscape Architect prior to their installation at the site.
6. Contractor shall stake all plant locations in the field. Obtain approval of Landscape Architect before starting plant installations.
7. Plants to be transplanted shall be flagged and exact planting locations staked in the field.
8. All areas disturbed by construction activities are to be fine graded and seeded.

PLANT LIST - L400

ID	QTY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
TREES					
NS	3	Nyssa sylvatica	Tupelo Tree	4-5" cal.	B&B
QA	2	Quercus alba	White Oak	4-5" cal.	B&B
SHRUBS					
RA	585	Rhus aromatica 'low grow'	Low Grow Aromatic Sumac	1 Gal.	18" o.c.
CP	185	Comptonia peregrina	Sweet Fern	1 Gal.	18" o.c.

PLANTING LEGEND

SYM.	KEY NOTE	DESCRIPTION	DETAIL/ SHEET
	PL	PLANTING	
	PL-LN	Lawn - Seeded	3/L520
	PL-SH	Shrub	2/L520
	PL-TR	Tree	1/L520
	PL-TT	Transplanted Tree--Not in Contract	-



Fort Sewall
Fort Restoration - Phase IIB -
Site and Accessibility Improvements

Fort Sewall Lane
Marblehead, MA 01945

BID SET

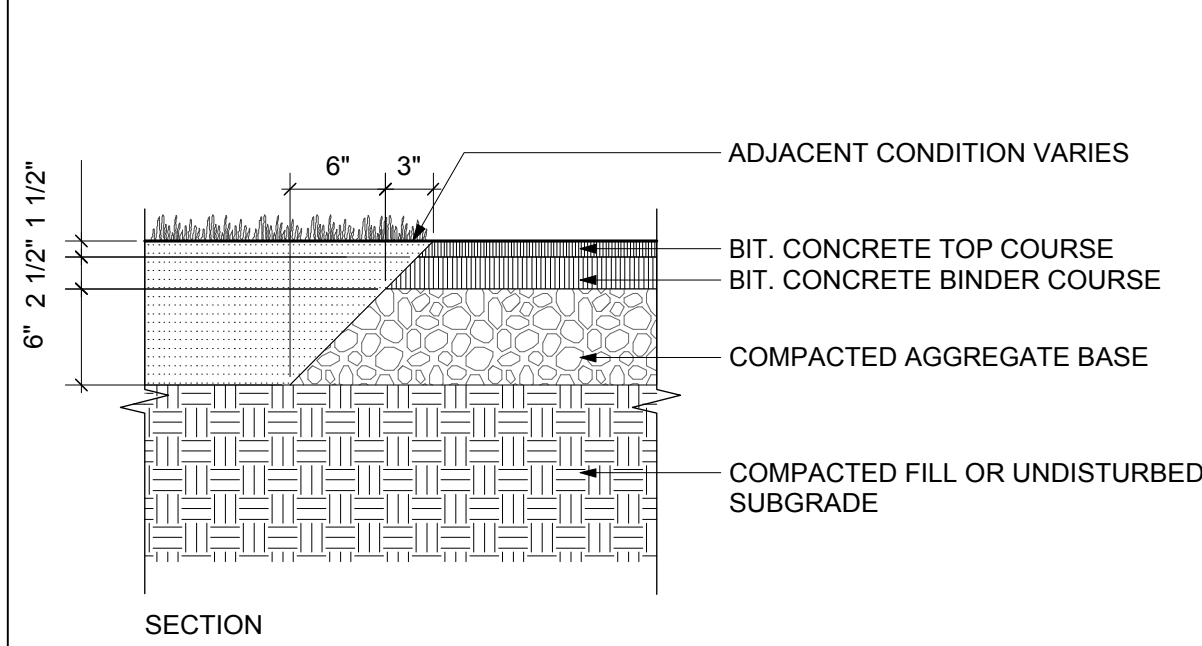
Date: 02/07/20
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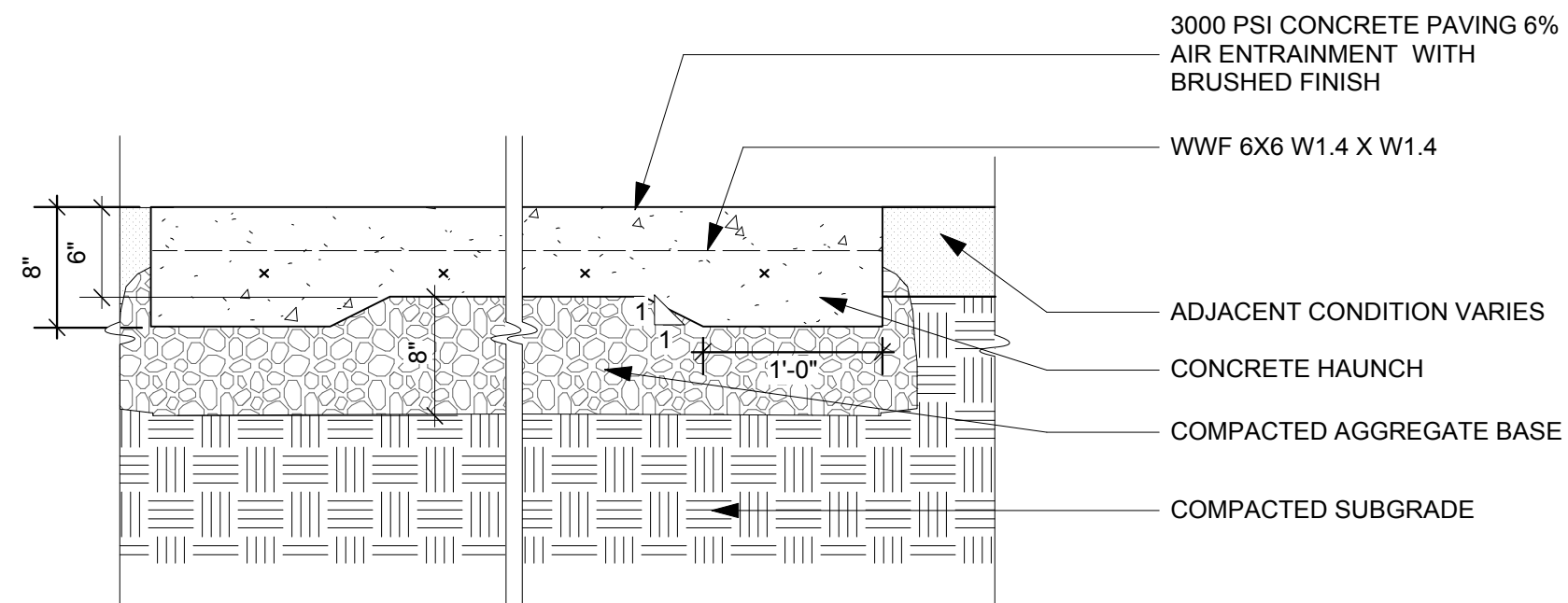
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PLANTING
PLAN

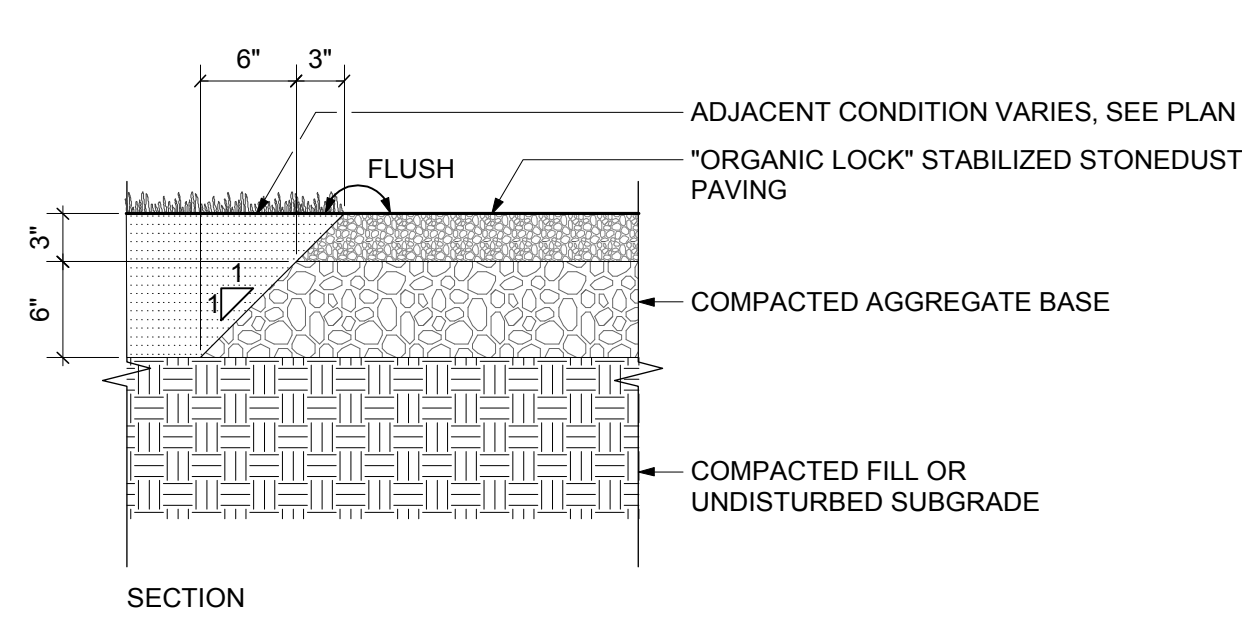
L-400



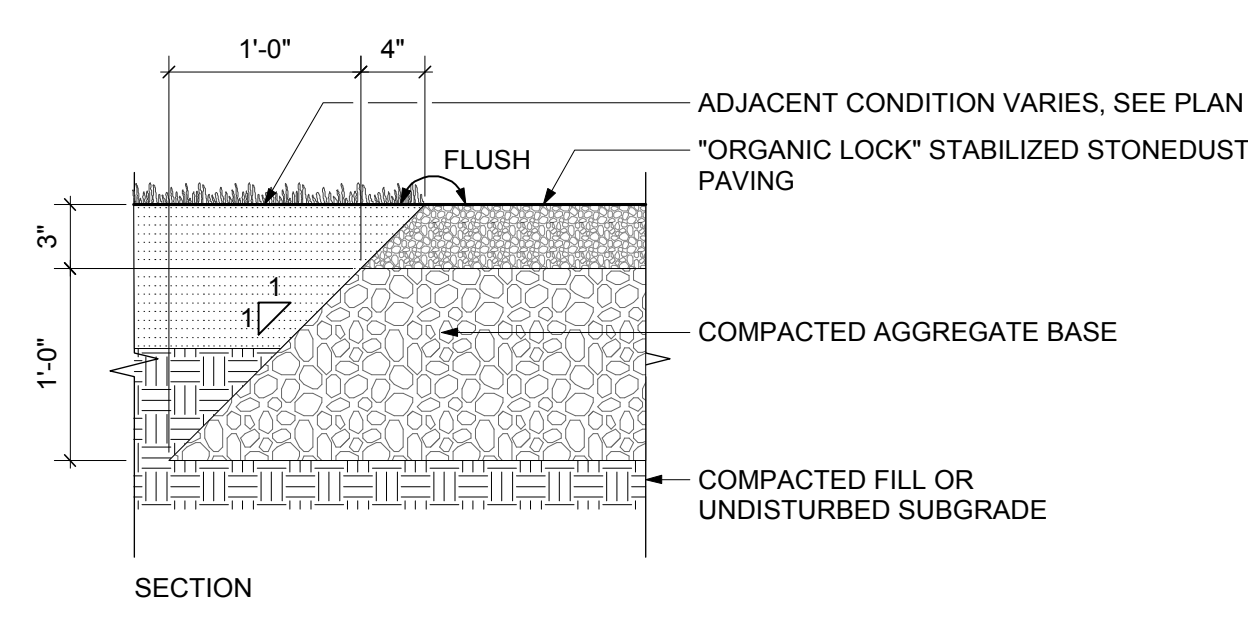
1 (P-AS1) ASPHALT PAVING
Scale: 1" = 1'-0"



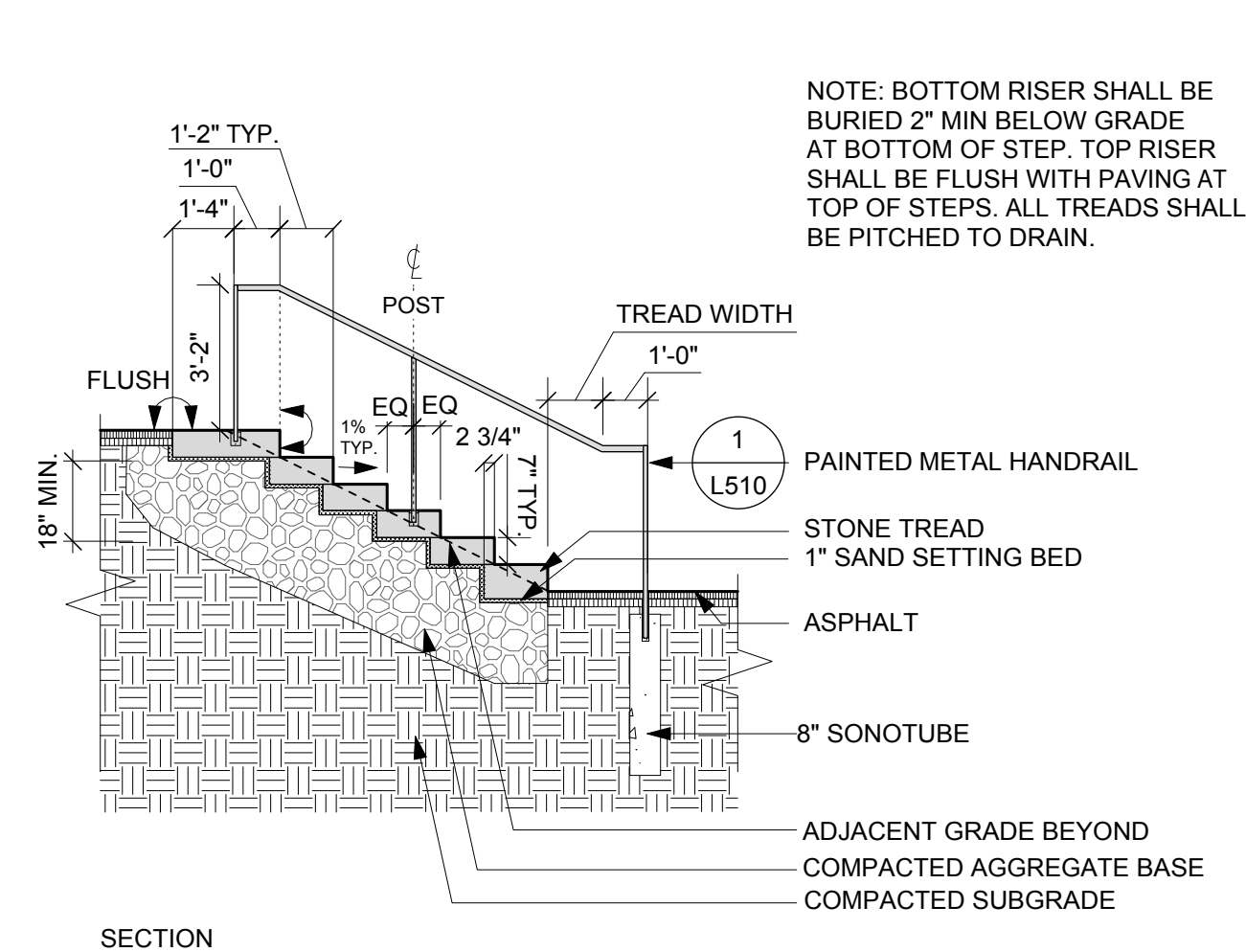
2 (P-CP) CONCRETE PAVING
Scale: 1" = 1'-0"



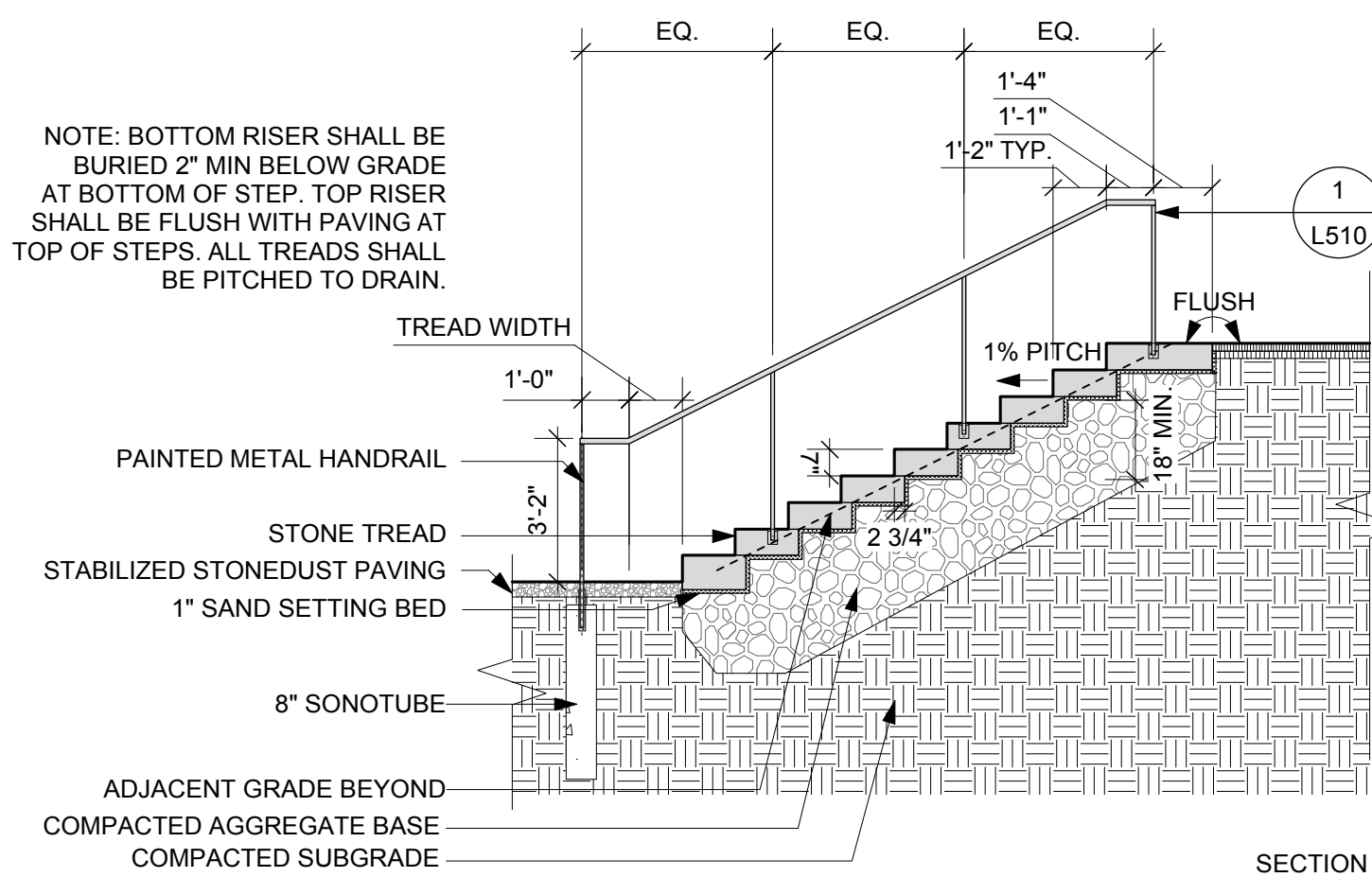
3 (P-SS1) STONE DUST PAVING-PEDESTRIAN
Scale: 1" = 1'-0"



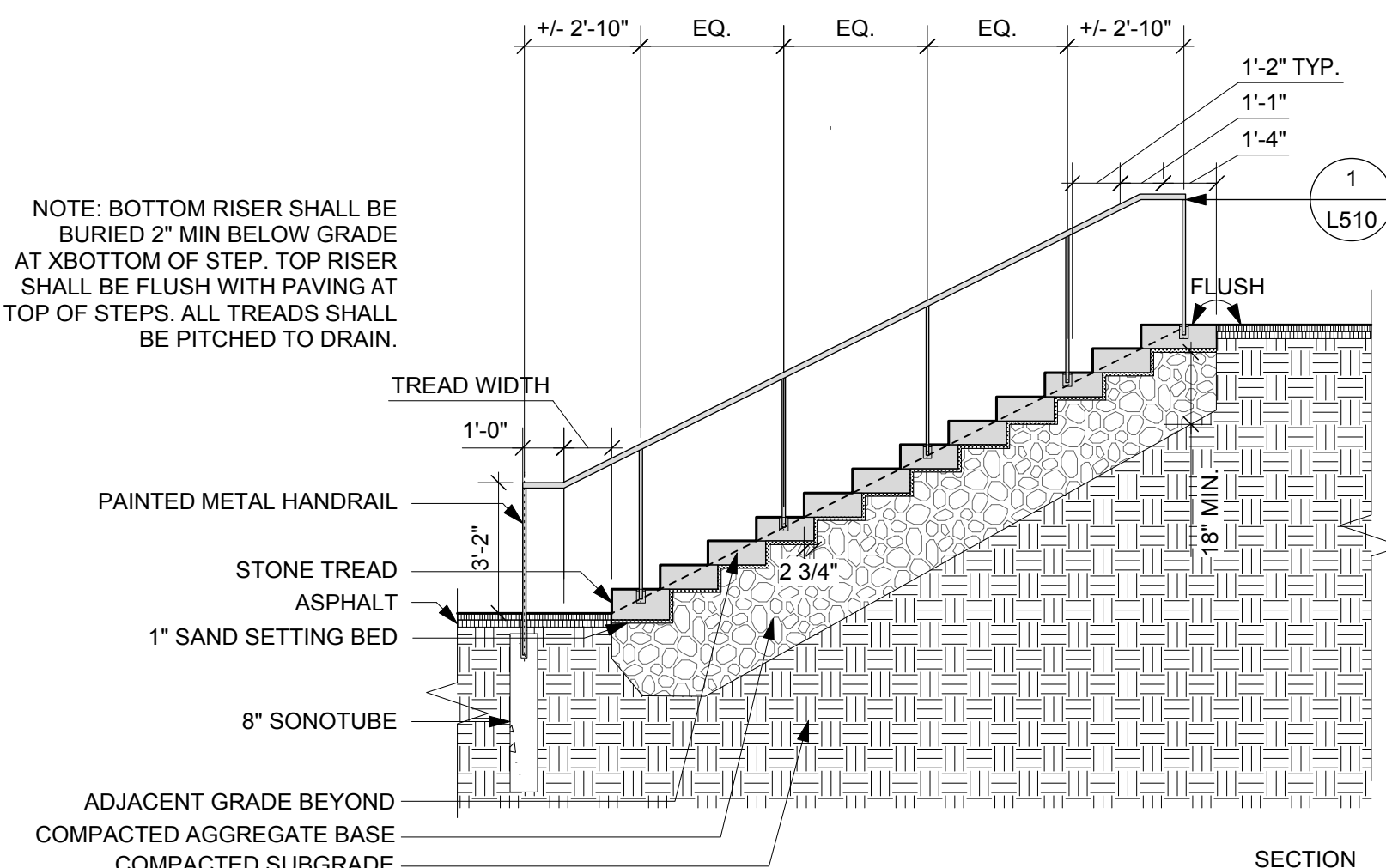
4 (P-SS2) STONE DUST PAVING-VEHICULAR
Scale: 1" = 1'-0"



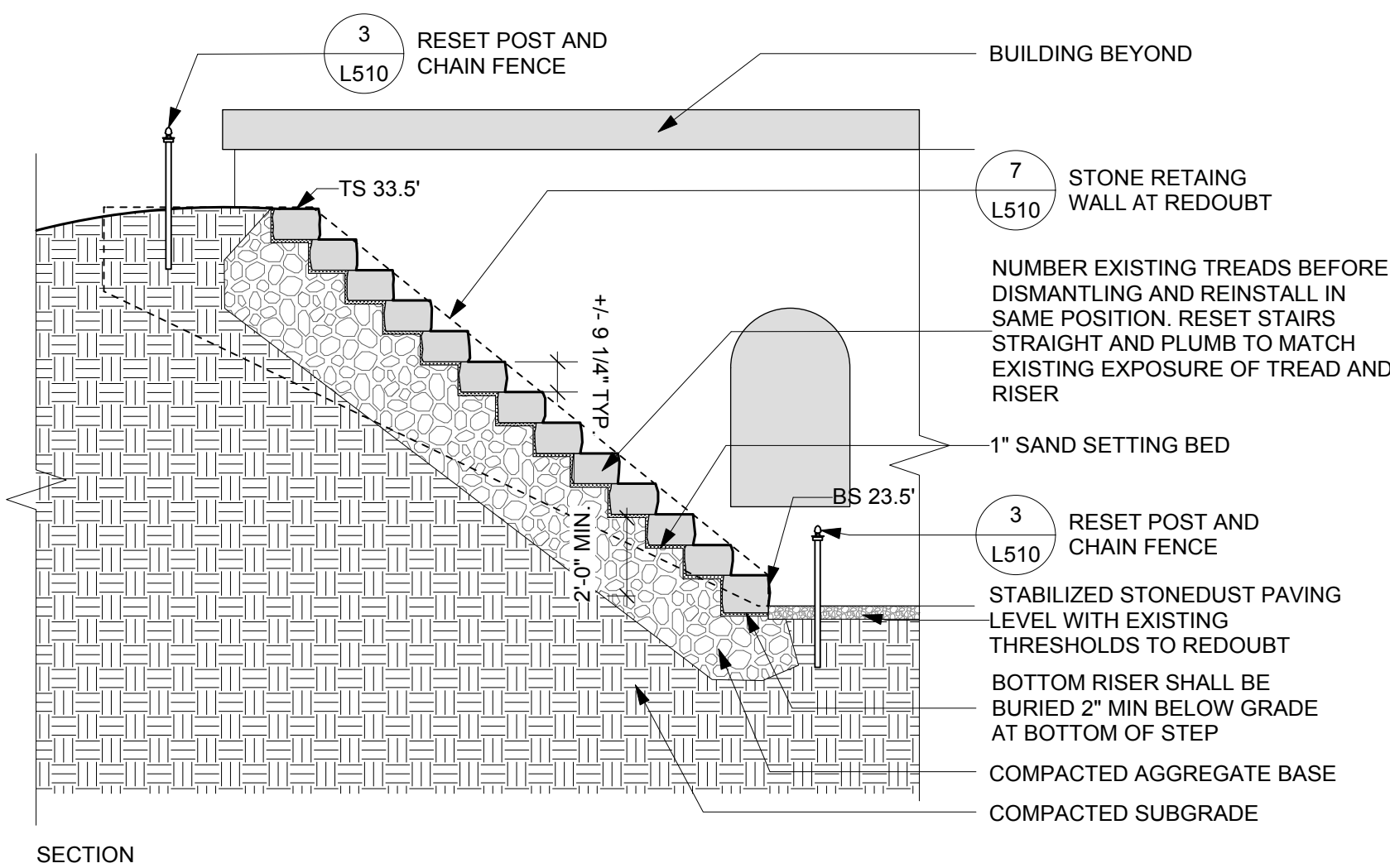
5 (S-GS1) GRANITE STAIR WITH HANDRAIL 1
Scale: 1/4" = 1'-0"



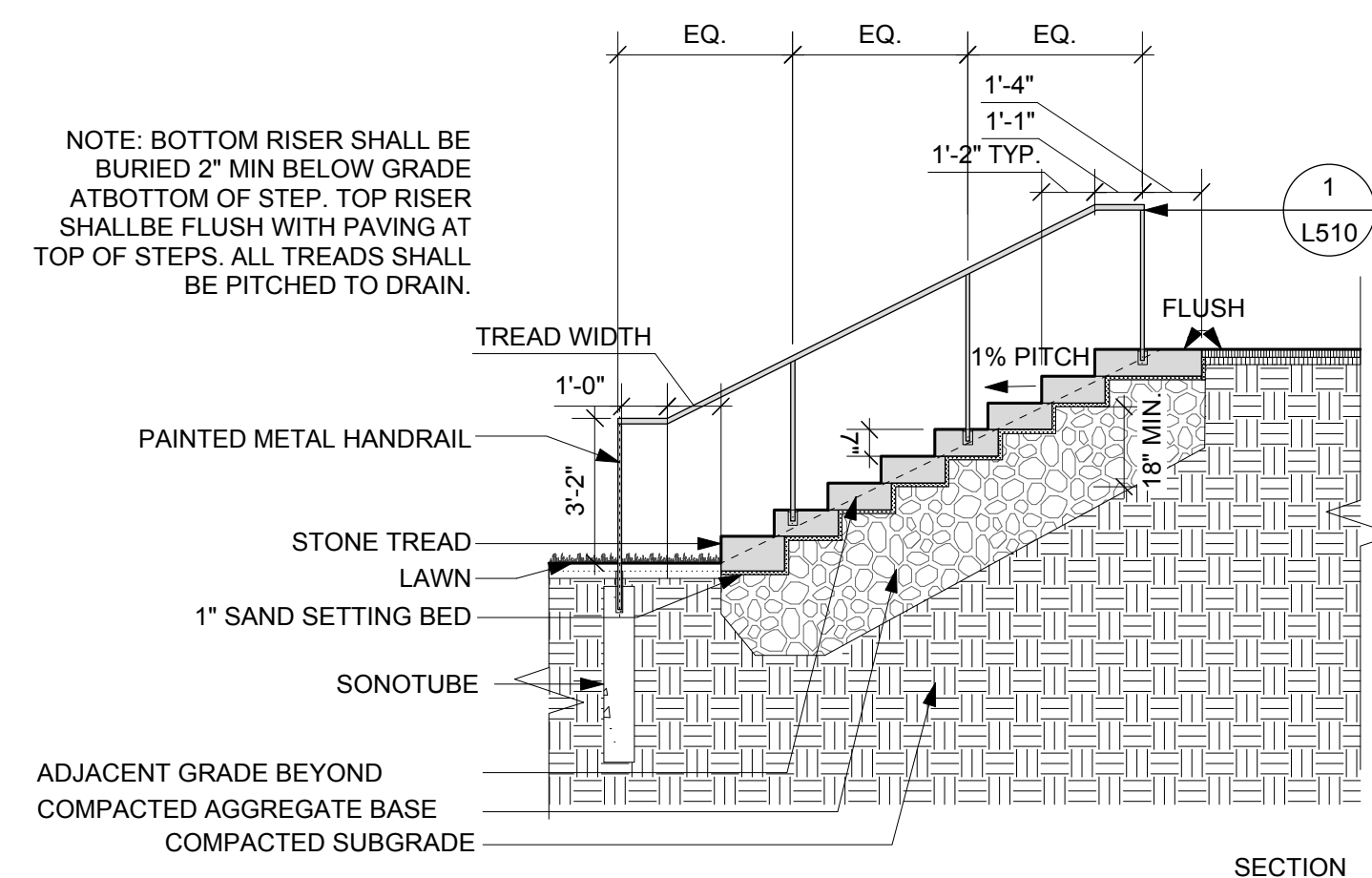
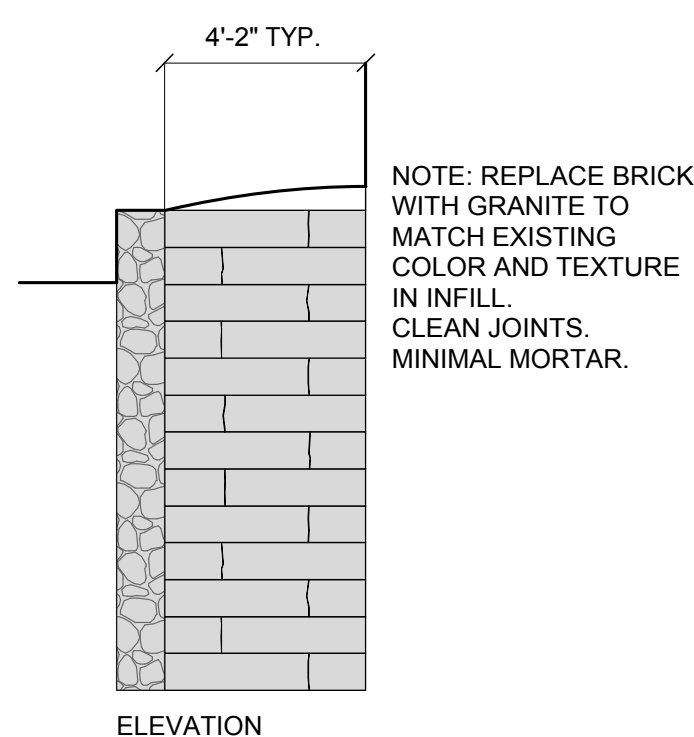
6 (S-GS2) GRANITE STAIR WITH HANDRAIL 2
Scale: 1/4" = 1'-0"



7 (S-GS3) GRANITE STAIR WITH HANDRAIL 3
Scale: 1/4" = 1'-0"



8 (S-HS) RESET HISTORIC STAIR
Scale: 1/4" = 1'-0"



9 (S-GS4) GRANITE STAIR WITH HANDRAIL 4 (ADD ALT #2)
Scale: 1/4" = 1'-0"



Fort Sewall
Fort Restoration - Phase IIB -
Site and Accessibility Improvements
Fort Sewall Lane
Marblehead, MA 01945

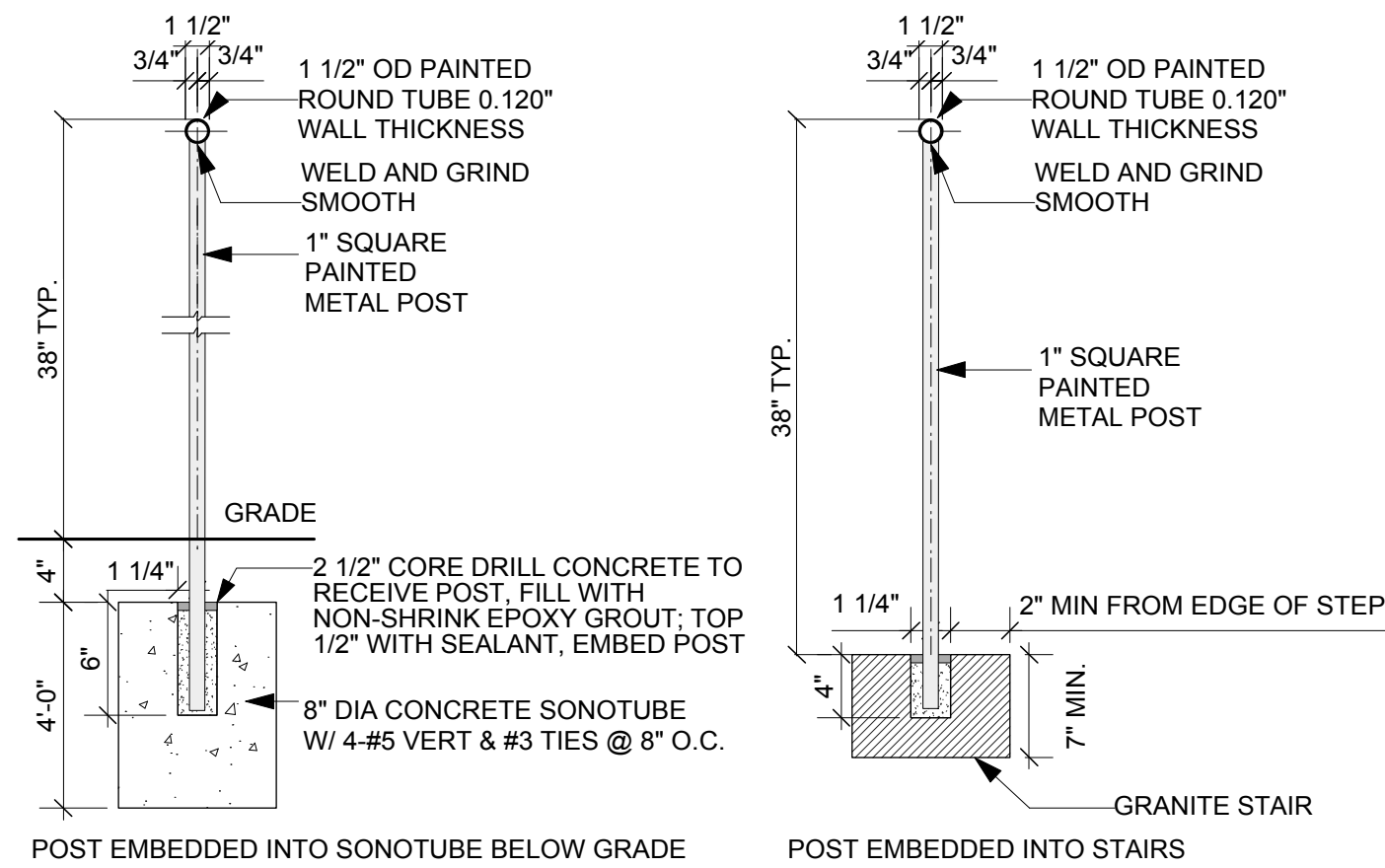
BID SET

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Project No: 1698.03

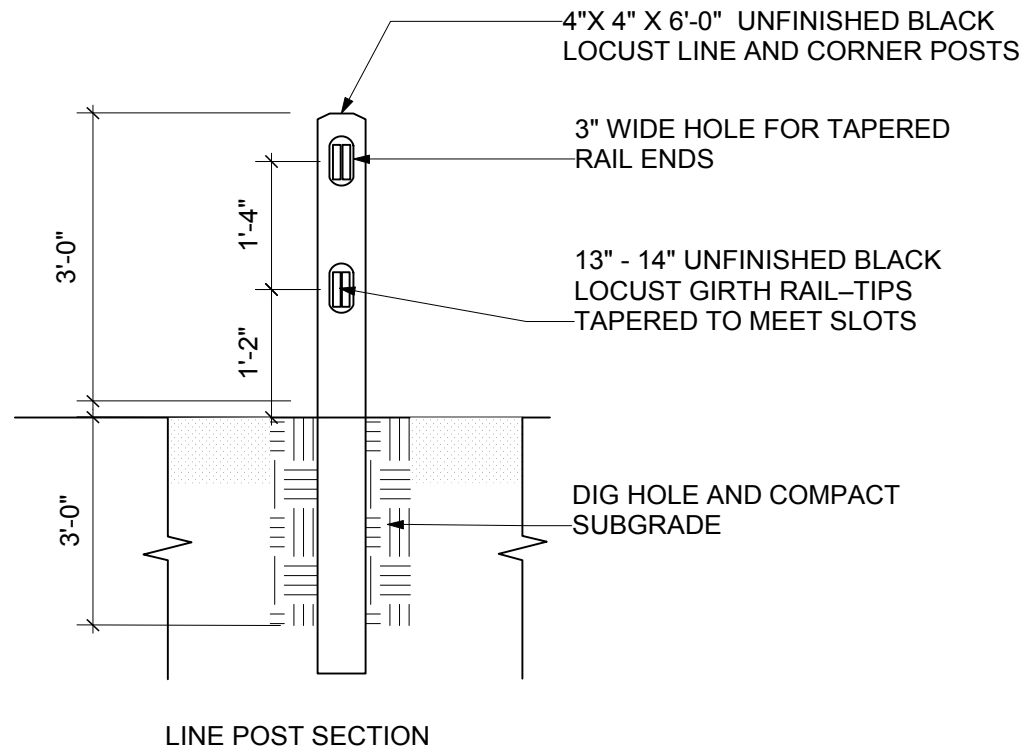
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Boston MA 02109
617.338.8400
www.crowleycottrell.com

PAVING AND
STAIR DETAILS

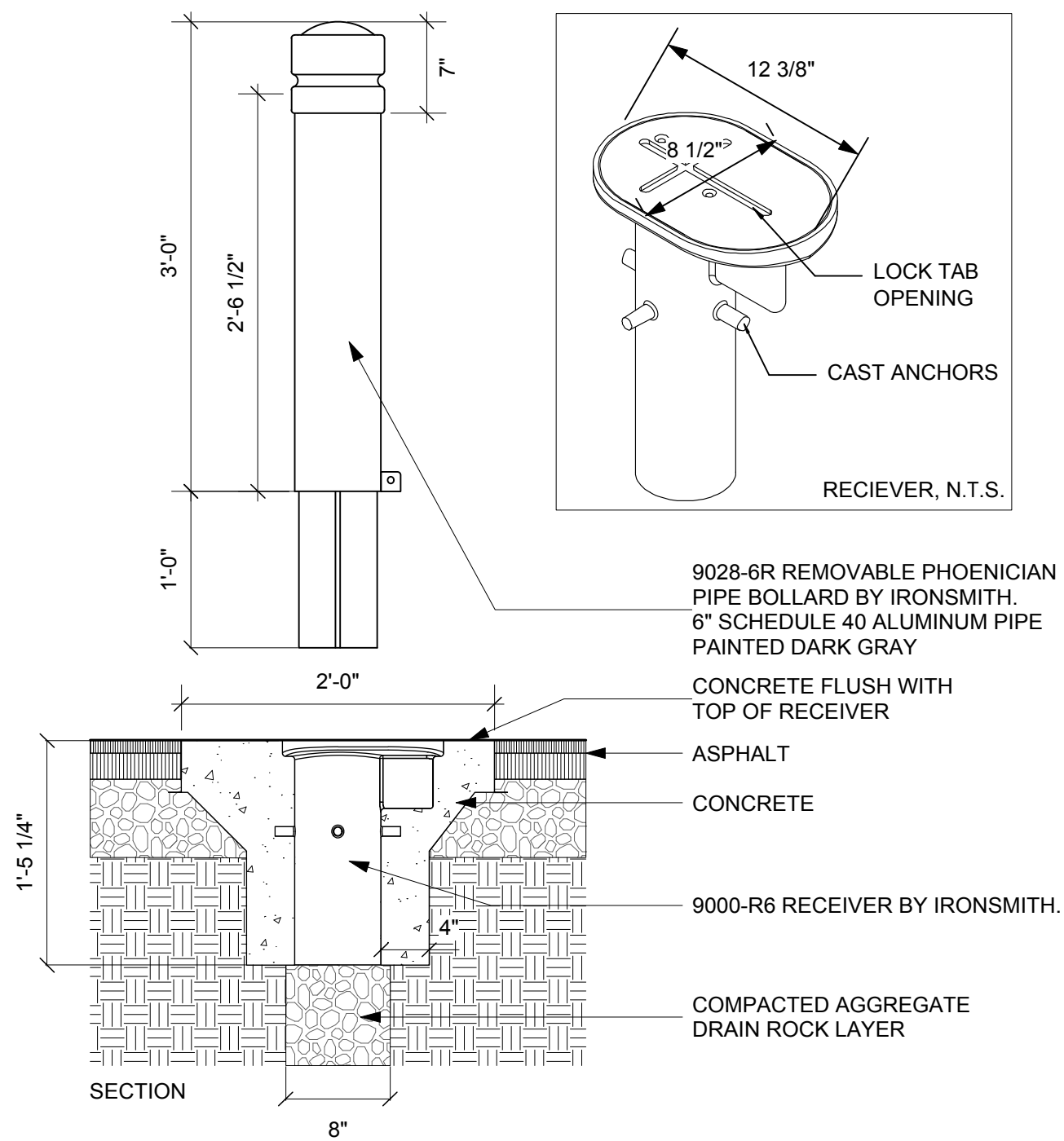
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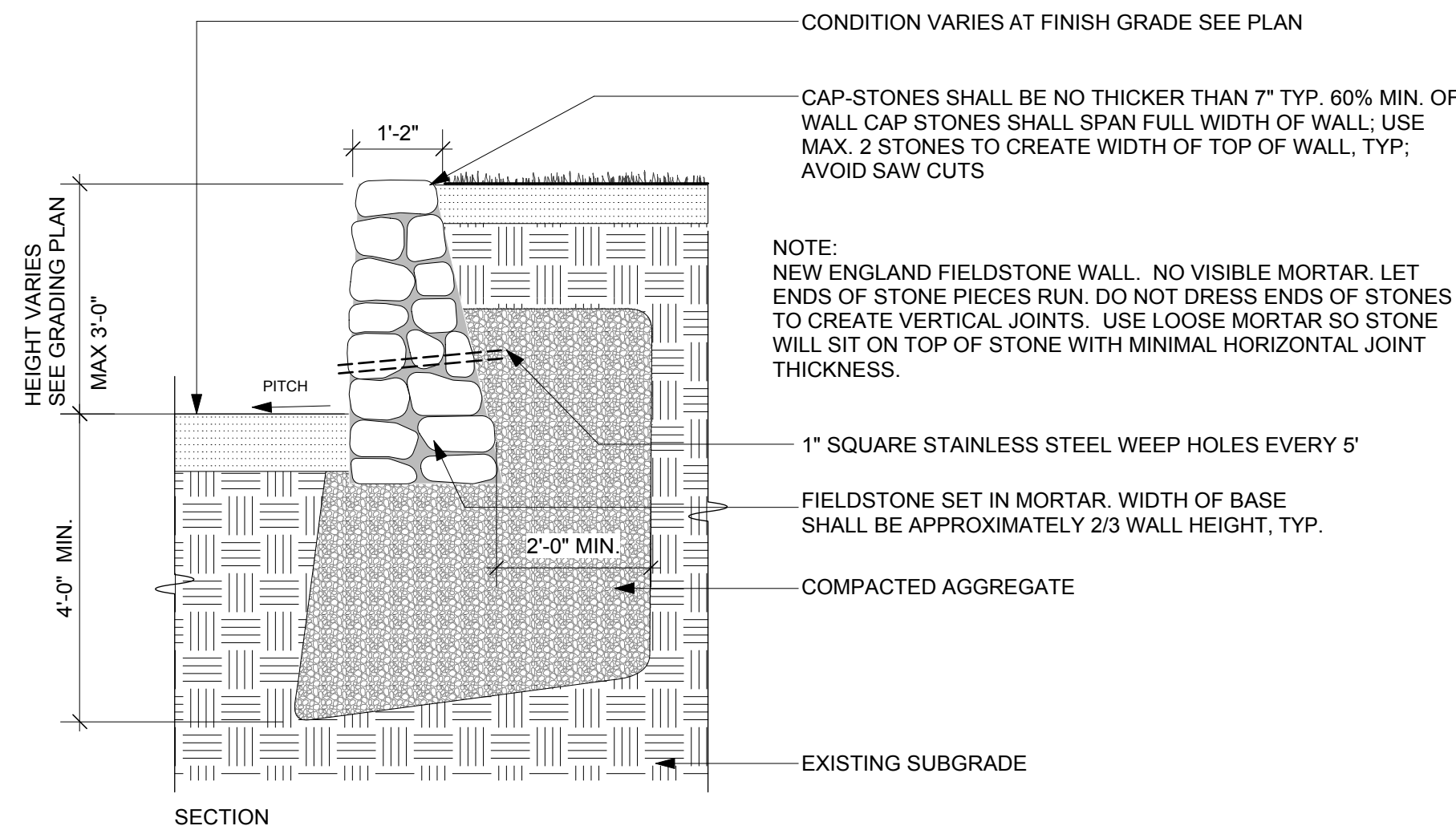
1 (S-HR) PAINTED METAL HANDRAIL
Scale: 1" = 1'-0"



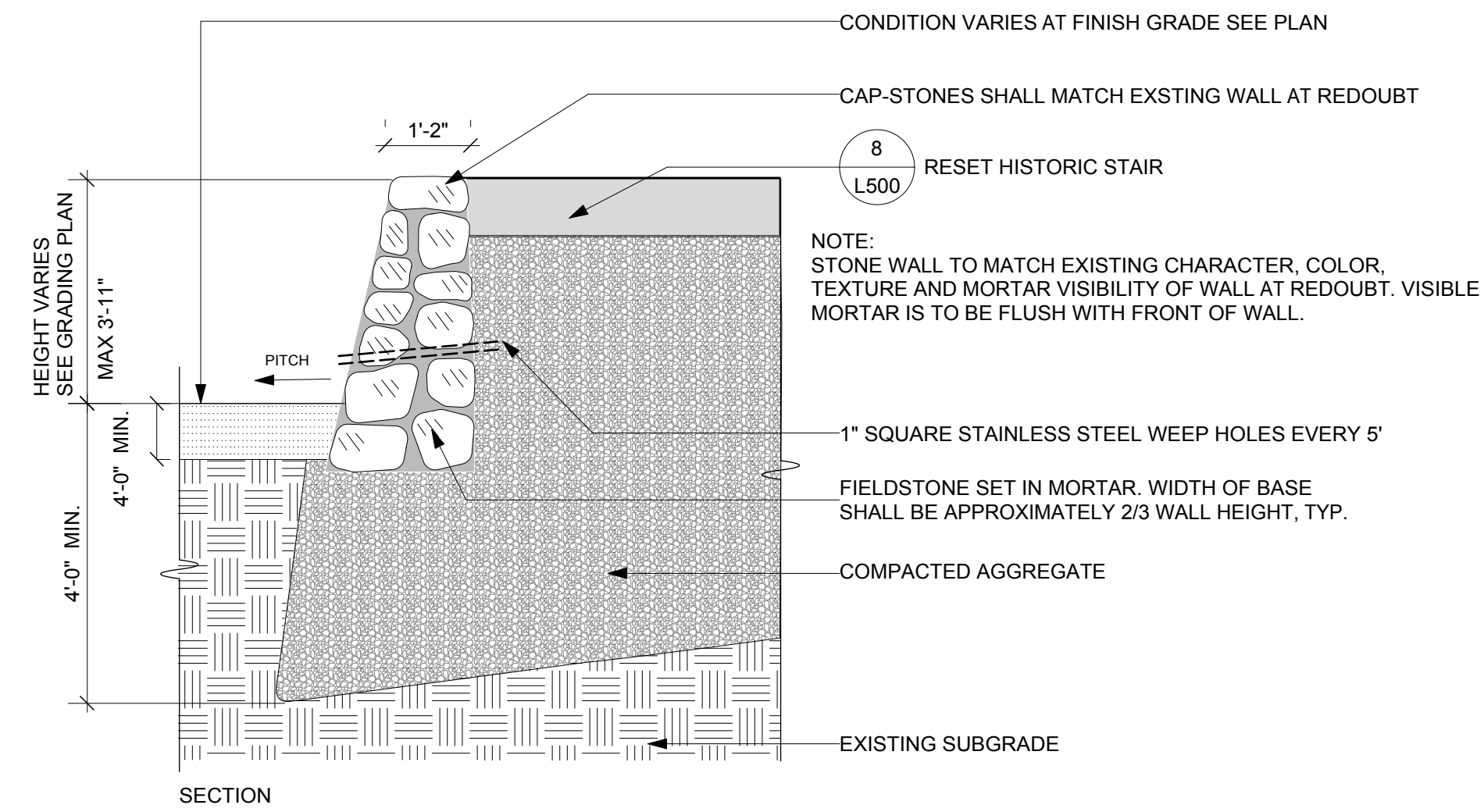
2 (S-FN1) SPLIT RAIL FENCE
Scale: 1/2" = 1'-0"



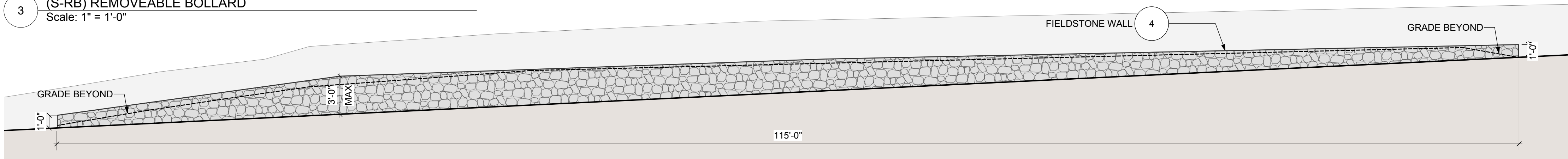
3 (S-RB) REMOVABLE BOLLARD
Scale: 1" = 1'-0"



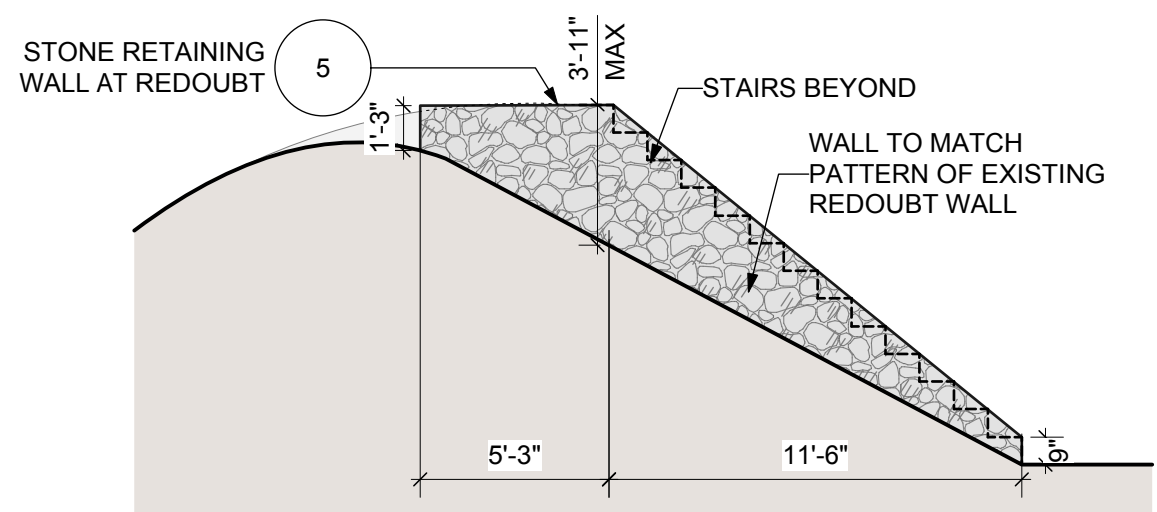
4 (S-RW1) FIELDSTONE WALL
Scale: 1/2" = 1'-0"



5 (S-RW2) STONE RETAINING WALL AT REDOUBT
Scale: 1/2" = 1'-0"



6 ELEVATION-FIELDSTONE RETAINING WALL AT PATH
Scale: 3/16" = 1'-0"



7 ELEVATION-STONE WALL AT REDOUBT
Scale: 3/16" = 1'-0"



Fort Sewall
Fort Restoration - Phase IIB -
Site and Accessibility Improvements
Fort Sewall Lane
Marblehead, MA 01945

BID SET

Date: 02/07/20
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Project No: 1698.03



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SITE DETAILS

L-510



Fort Sewall
Fort Restoration - Phase IIB -
Site and Accessibility Improvements

Fort Sewall Lane
Marblehead, MA 01945

BID SET

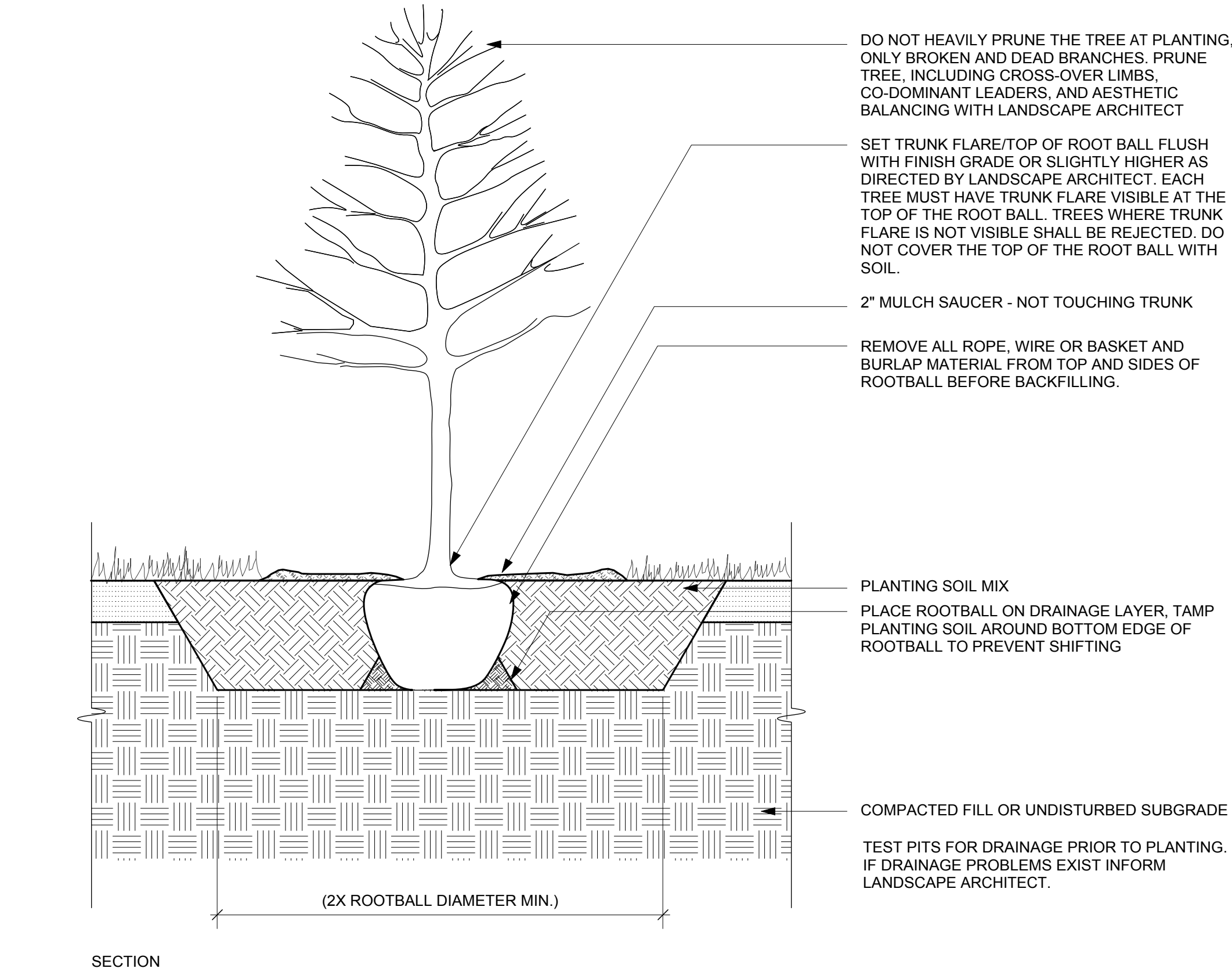
Date: 02/07/20
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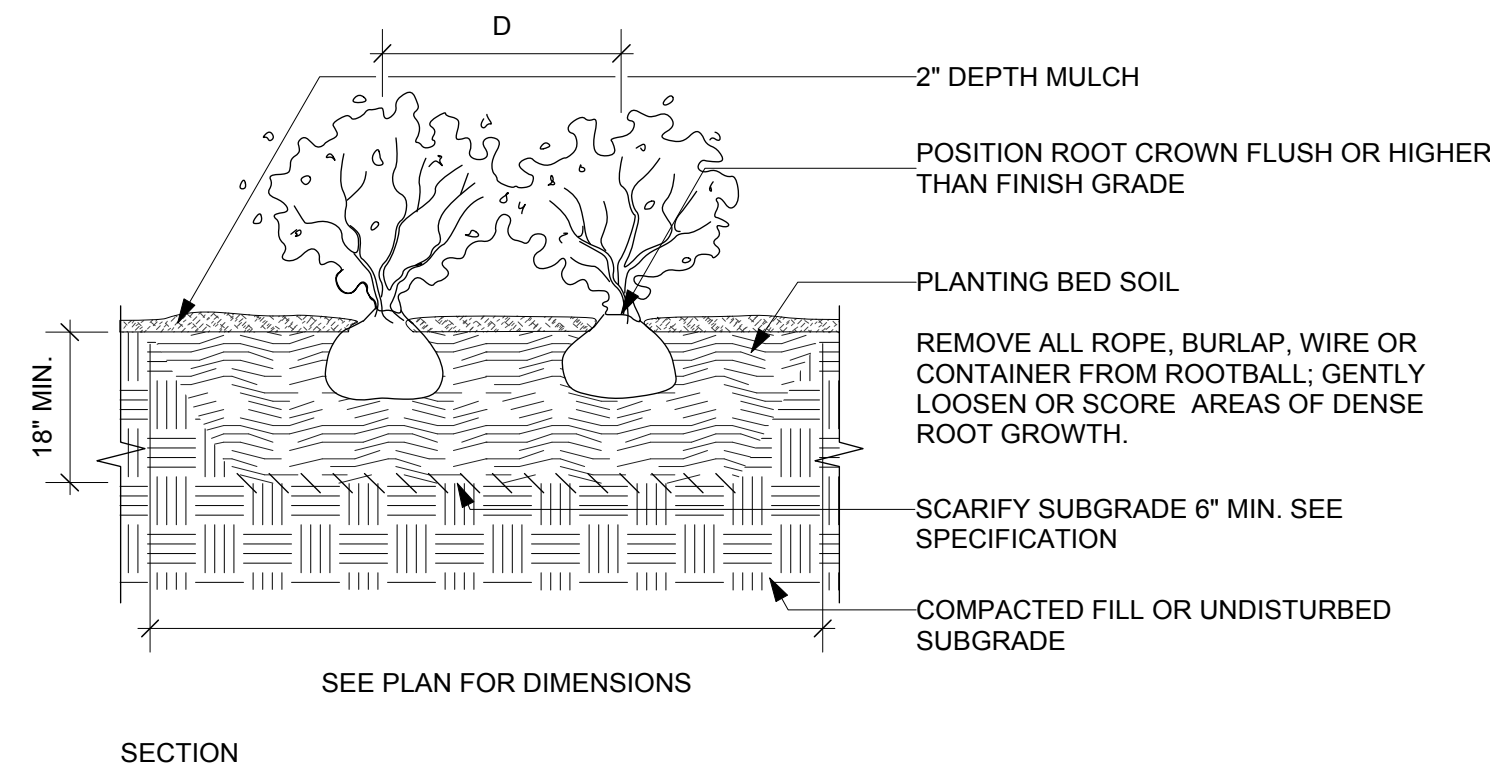
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PLANTING
DETAILS

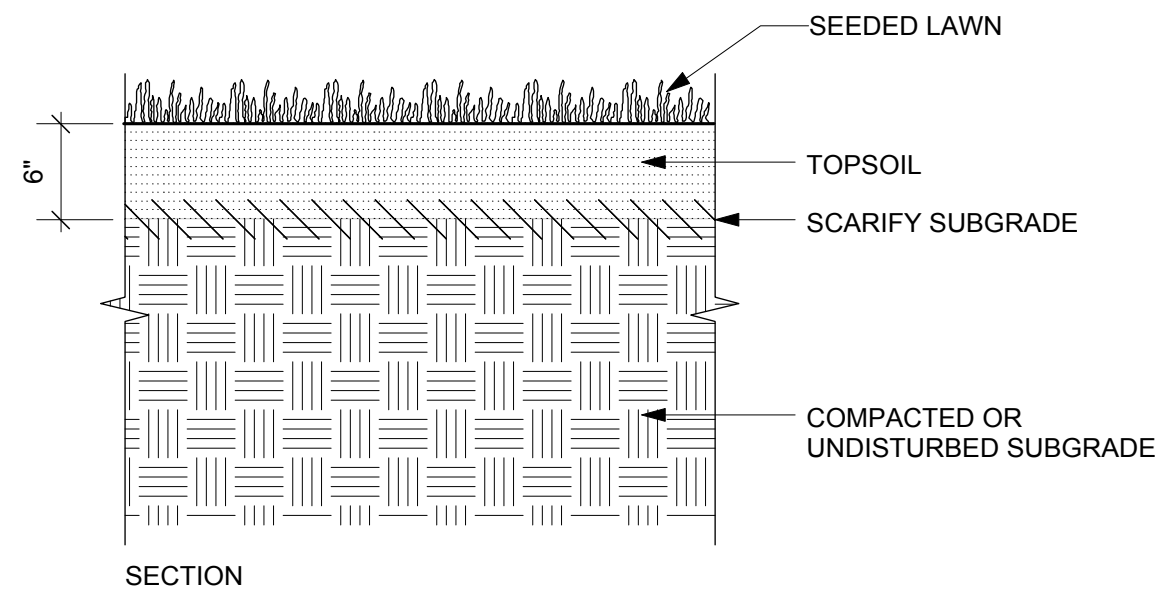
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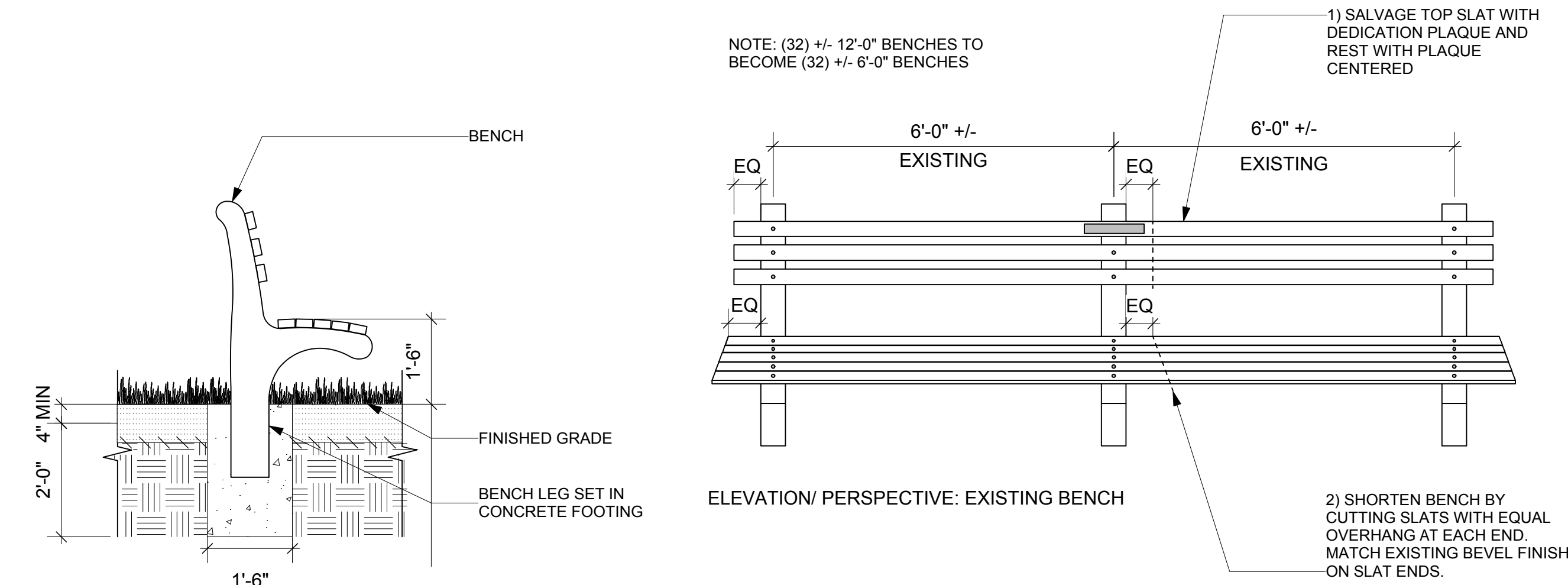
1 (PL-TR) TREE PLANTING
Scale: 1/2" = 1'-0"



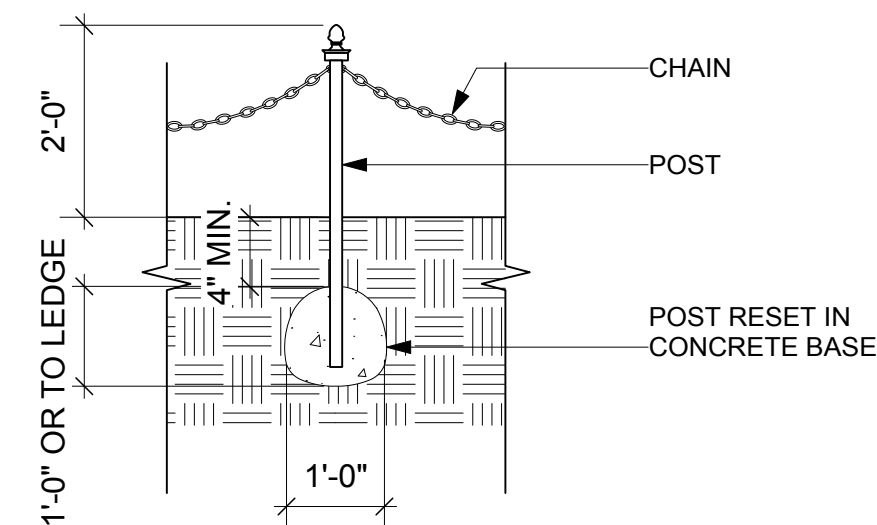
2 (PL-SH) SHRUB AND GROUNDCOVER PLANTING
Scale: 1/2" = 1'-0"



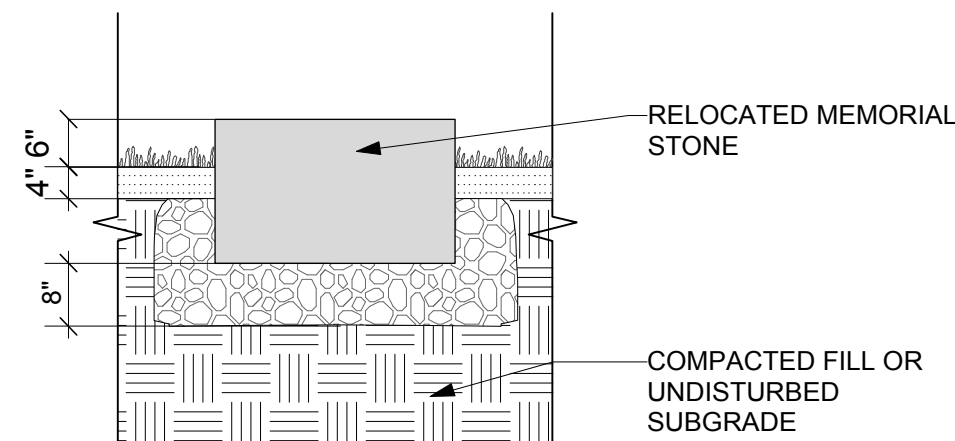
3 (PL-LN) SEEDED LAWN
Scale: 1" = 1'-0"



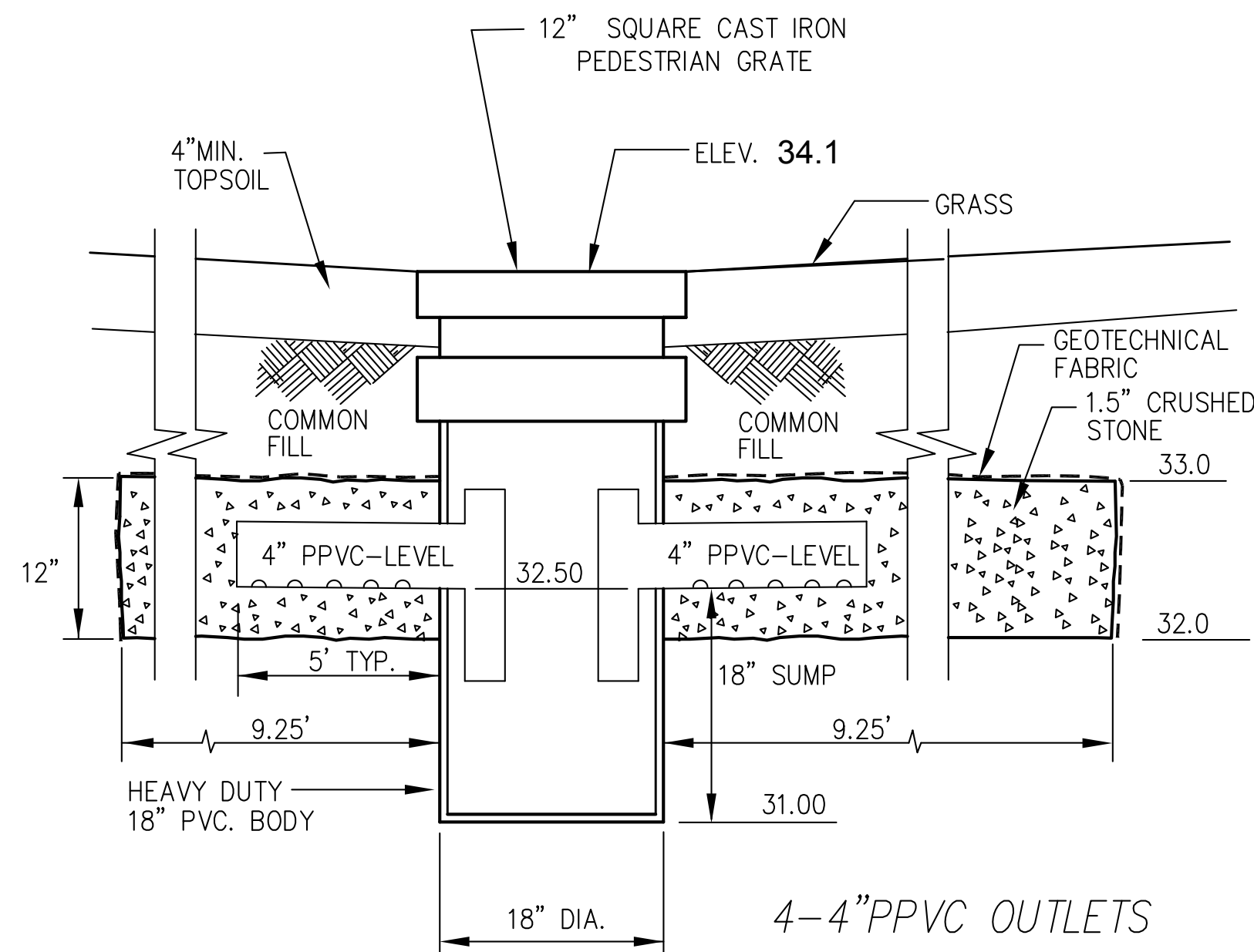
4 (S-BN) BENCH-MODIFIED AND RESET
Scale: 1/2" = 1'-0"



7 (S-FN3) RESET POST AND CHAIN FENCE
Scale: 1/2" = 1'-0"



8 (L-RP) RELOCATED PLAQUE
Scale: 1/2" = 1'-0"



6 (S-DW) DRYWELL
Scale: 1" = 1'-0"