



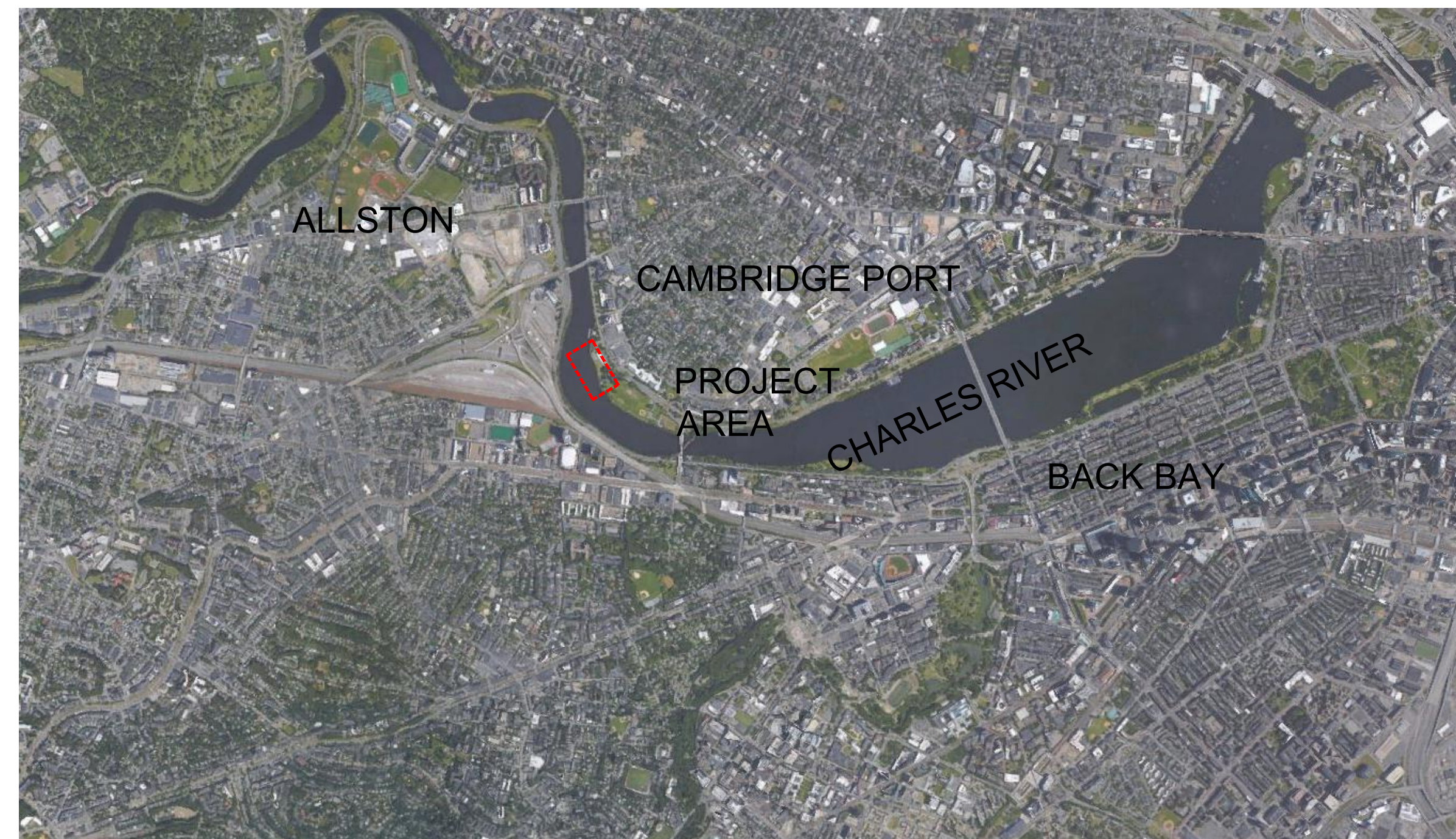
DEPARTMENT OF CONSERVATION AND RECREATION
10 PARK PLAZA
BOSTON, MA 02116

COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION BUREAU OF DESIGN AND PROJECT MANAGEMENT

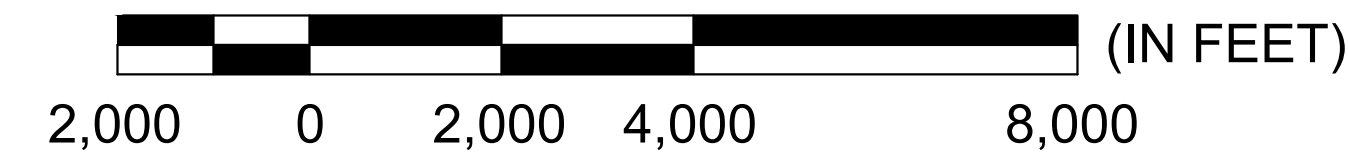
MAGAZINE BEACH IN THE CITY OF CAMBRIDGE, MASSACHUSETTS MIDDLESEX COUNTY **MAGAZINE BEACH IMPROVEMENTS** **PHASE 2.2 GRASSY BEACH** DCR CONTRACT NO. P25-3586-C5A

PREPARED BY:

STANTEC
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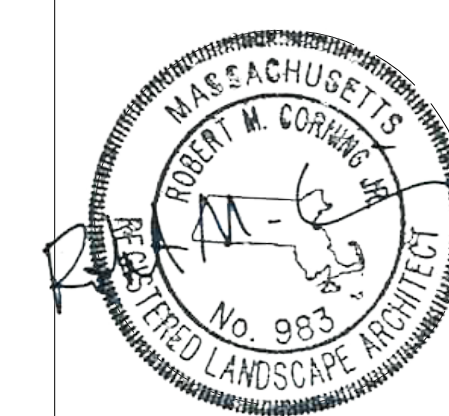
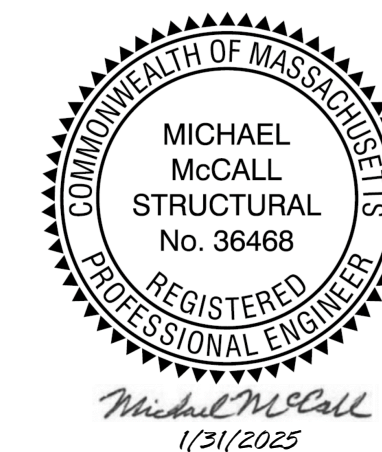


LOCUS MAP
SCALE: 1"=2,000'



BID DOCUMENTS
FEBRUARY 5, 2025

MAURA HEALEY,	GOVERNOR
KIM DRISCOLL,	LIEUTENANT GOVERNOR
REBECCA TEPPER,	SECRETARY, EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS
BRIAN ARRIGO,	COMMISSIONER, DEPARTMENT OF CONSERVATION & RECREATION



REV.	DATE:	DESCRIPTION:	BY:

COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION			
MAGAZINE BEACH IMPROVEMENTS PHASE 2.2 GRASSY BEACH			
CHARLES RIVER RESERVATION CAMBRIDGE, MA			
DESIGNED: DC, TB	TITLE SHEET		DRAWING NO.
CHECKED: DC	CONT. P25-3586-C5A	SCALE: N.T.S.	G.1
DRAWN: TB, SB, CM	ACC. 104649 x	DATE: 02-05-2025	1 OF 21
CHECKED: SL			

GENERAL NOTES:

- BASE DRAWING HAS BEEN UPDATED TO REFLECT EXISTING CONDITIONS CREATED AFTER LATEST SURVEY WORK WAS COMPLETE. CONTRACTOR SHALL REVIEW AND VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING WORK
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETING WORK CALLED FOR ON THE DRAWINGS AND IN THE SPECIFICATIONS WHETHER OR NOT EACH WORK ELEMENT IS NOTED IN THE LEGEND.
- ANY AREA OUTSIDE THE LIMIT OF WORK THAT IS DISTURBED SHALL BE RESTORED TO ITS ORIGINAL CONDITION PROMPTLY BY CONTRACTOR AT NO EXTRA COST TO THE OWNER.
- IF AUTHORIZED BY RESIDENT ENGINEER, STAGING AND STORAGE AREAS FOR CONTRACTOR'S EQUIPMENT SHALL BE ON PAVED AREAS ONLY.
- CONTRACTOR SHALL VERIFY CONDITIONS IN THE FIELD AND REPORT ANY DISCREPANCIES THAT WILL AFFECT THE INSTALLATION OF SITE IMPROVEMENTS TO THE LANDSCAPE ARCHITECT / RESIDENT ENGINEER.
- EXISTING UTILITY LINES ARE FROM AVAILABLE INFORMATION AND ARE APPROXIMATE LOCATIONS ONLY. PRIOR TO COMMENCING ANY EXCAVATION WORK, THE CONTRACTOR SHALL CONTACT AND NOTIFY ALL UTILITY COMPANIES OR RESPECTIVE UTILITY COMPANIES TO VERIFY ALL UTILITY LOCATIONS IN ACCORDANCE WITH THE "DIG SAFE" NOTIFICATION PROCEDURES PROMOTED BY RESPECTIVE UTILITY COMPANIES. THE "DIG SAFE" TELEPHONE NUMBER FOR MASSACHUSETTS IS 1-888-344-7233.
- CONTRACTOR SHALL LOCATE AND VERIFY ALL EXISTING UTILITY LINES PRIOR TO EXCAVATION, INCLUDING BUT NOT LIMITED TO PLANTING AND SHALL REPORT ANY CONFLICTS TO THE LANDSCAPE ARCHITECT / RESIDENT ENGINEER. EXCAVATION REQUIRED WITHIN PROXIMITY OF UTILITY LINES OR STRUCTURES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT NO COST TO THE OWNER.
- ALL WALLS AND CURBS THAT ABUT EXISTING ELEMENTS TO REMAIN, SUCH AS CURBS, WALLS OR WALKWAYS, SHALL BE FINISHED FLUSH AND ALIGNED TO EXISTING ELEMENT.
- ALL TREES TO REMAIN SHALL BE PROTECTED AT ALL TIMES. SEE DEMOLITION AND SITE PREPARATION PLANS.
- PROJECT SIGNAGE SHALL BE POSTED AT TWO LOCATIONS FOR INFORMATION AND SAFETY.
- CONTRACTOR SHALL INCORPORATE ALL ASPECTS OF THE CITY OF CAMBRIDGE AND CAMBRIDGE CONSERVATION COMMISSION ORDER OF CONDITIONS AS APPENDED TO THE CONTRACT, WHETHER OR NOT THE SPECIFIC REQUIREMENTS ARE SHOWN WITHIN THE DRAWINGS.
- CONTRACTOR SHALL INCORPORATE ALL ASPECTS OF MWRA 8M PERMIT AND COORDINATE WORK WITH MWRA.
- "VIF" SHALL MEAN VERIFY IN THE FIELD AND APPROVE W/ LANDSCAPE ARCHITECT / RESIDENT ENGINEER.

DEMOLITION AND SITE PREPARATION NOTES

- SEE GENERAL NOTES.
- CONTRACTOR SHALL ATTEND A PRE-BID MEETING ON SITE.
- ALL ITEMS REQUIRING REMOVAL SHALL BE REMOVED TO FULL DEPTH INCLUDING FRAMES, BASE MATERIAL AND FOOTINGS OR FOUNDATIONS AS APPLICABLE, UNLESS OTHERWISE NOTED. ALL PAVEMENT TO BE REMOVED SHALL BE SAW CUT ADJACENT TO EXISTING PAVEMENT TO REMAIN.
- ALL MATERIALS TO BE REMOVED SHALL BE LEGALLY DISPOSED OF OR RECYCLED OFF-SITE BY THE CONTRACTOR OR TRANSPORTED AND STOCKPILED PER DIRECTION OF THE OWNER.
- ALL MATERIALS TO REMAIN AND BE REUSED ON SITE SHALL BE AT CONTRACTOR'S DISCRETION AND SHALL MEET ALL SPECIFICATION REQUIREMENTS.
- IF UTILIZED, CONTRACTOR SHALL KEEP CONSTRUCTION SITE AND MATERIALS STORAGE AREAS FENCED OFF TO THE PUBLIC AT ALL TIMES AND SHALL BE RESPONSIBLE FOR SECURING THE SITE AT NIGHT AND WHEN THERE ARE NO AUTHORIZED PERSONNEL PRESENT. PROVIDE SIGNAGE ON CONSTRUCTION FENCING.
- CONTRACTOR SHALL INSTALL STORMWATER POLLUTION PROTECTION FENCING AND OTHER METHODS AS PER CITY OF CAMBRIDGE AND CAMBRIDGE CONSERVATION COMMISSION REQUIREMENTS. SEE DEMOLITION AND SITE PREPARATION PLAN AND DETAIL AND CIVIL DRAWINGS.
- PAVEMENT REPAIRS SHALL BE SAWCUT TO WIDTH REQUIRED FOR ACCESS, LOCATION APPROX. VIF AND PLANS FOR EXTENT AND LOCATION, TYP.

LANDSCAPE MATERIALS, LAYOUT AND PLANTING NOTES

- LAYOUT OF PATHWAYS, PARKING, PLANTINGS AND OTHER SITE IMPROVEMENTS ARE TO BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO EXECUTION OF WORK. CONTRACTOR IS TO STAKE LAYOUT FOR LANDSCAPE ARCHITECT'S APPROVAL FOR ALL SITE IMPROVEMENTS PRIOR TO EXECUTION OF WORK. ELECTRONIC FILE SHALL BE PROVIDED TO CONTRACTOR UPON REQUEST
- ALL LINES & DIMENSIONS ARE PARALLEL OR PERPENDICULAR TO THE LINES FROM WHICH THEY ARE MEASURED UNLESS OTHERWISE INDICATED.
- ALL PLANT MATERIAL SHALL CONFORM TO THE MINIMUM GUIDELINES ESTABLISHED BY THE AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC.
- ALL PLANTS TO BE BALLED AND BURLAPPED UNLESS OTHERWISE NOTED ON PLANT LIST.
- THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIAL IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTING SHOWN ON THE DRAWING.
- ALL PLANTS SHALL BE TAGGED AND APPROVED BY THE LANDSCAPE ARCHITECT AT THE NURSERY PRIOR TO DIGGING OR DELIVERY TO THE SITE UNLESS OTHERWISE DIRECTED BY THE LANDSCAPE ARCHITECT.
- STAKE LOCATION OF ALL PROPOSED PLANTING FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO THE COMMENCEMENT OF PLANTING.
- NO TREES SHALL BE PLANTED BEFORE ACCEPTANCE OF ROUGH GRADING. TREES SHALL BEAR SAME RELATIONSHIP TO FINISH GRADE AS THEY BORE TO GRADE IN THE NURSERY.
- ONE OR TWO DAYS BEFORE THE ARRIVAL OF THE PLANT MATERIAL, CONTRACTOR SHALL HARROW OR LOOSEN THE PLANTING SOIL MIX THOROUGHLY.

LANDSCAPE GRADING NOTES:

- CONTRACTOR SHALL VERIFY ALL EXISTING GRADES IN THE FIELD AND NOTIFY LANDSCAPE ARCHITECT / RESIDENT ENGINEER OF ANY CONFLICTS. CONTRACTOR SHALL MODIFY GRADES IF NECESSARY AS DIRECTED BY THE LANDSCAPE ARCHITECT / RESIDENT ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
- EXCAVATION REQUIRED WITHIN PROXIMITY OF UTILITY LINES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES INCURRED DURING CONSTRUCTION OPERATIONS AT NO EXTRA COST TO THE OWNER.
- EXCAVATION REQUIRED WITHIN PROXIMITY OF EXISTING TREES SHALL BE DONE BY HAND AND AIR SPADE UNDER SUPERVISION OF CERTIFIED ARBORIST.
- CONTRACTOR SHALL STAKE PROPOSED GRADES FOR LANDSCAPE ARCHITECT / RESIDENT ENGINEER'S APPROVAL PRIOR TO BEGINNING WORK.
- CONTRACTOR SHALL MAINTAIN INTEGRITY OF EXISTING DRAINAGE SYSTEM THROUGHOUT WORK.
- CONTRACTOR SHALL MEET EXISTING GRADE AT WORK LIMIT LINE WITHOUT SIGNIFICANTLY DISTURBING ABUTTING DRAINAGE CONDITIONS OR GROUND ELEVATIONS.
- CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY INTO EXISTING, PROVIDING VERTICAL CURVES OR ROUNDING AT ALL TOP AND BOTTOM OF SLOPES.
- PITCH EVENLY BETWEEN SPOT GRADES. ALL PAVED AREAS MUST PITCH TO DRAIN AT A MINIMUM SLOPE OF ONE-EIGHTH INCH (1/8") PER FOOT. ANY DISCREPANCIES NOT ALLOWING THIS TO OCCUR SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT / RESIDENT ENGINEER PRIOR TO CONTINUING WORK.
- CROSS-SLOPE OF PATHS AND SIDEWALKS SHALL NOT EXCEED 2%.
- LONGITUDINAL SLOPE OF PATHS AND SIDEWALKS SHALL NOT EXCEED 5%.

SURVEY NOTES:

- THE TOPOGRAPHY, SITE DETAIL & SURFACE IMPROVEMENTS DEPICTED HEREON WERE OBTAINED FROM AN INSTRUMENT SURVEY CONDUCTED ON THE GROUND BY MERIDIAN ASSOCIATES, INC. ON MARCH 30-APRIL 4, 2007, JUNE 6-29, 2016 AND AUGUST 1ST, 2018.
- THE SUBJECT PROPERTY IS DEPICTED AS LOT 1G ON CITY OF CAMBRIDGE ASSESSOR'S MAP 274.
- THE LOCATION OF ALL UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE AND ARE BASED UPON FIELD OBSERVATIONS, GIS DATABASES AND COMPILATION OF PLANS OF RECORD. MERIDIAN ASSOCIATES, INC. DOES NOT WARRANT NOR GUARANTEE THE LOCATION OF ALL UTILITIES DEPICTED OR NOT DEPICTED. THE CONTRACTOR, PRIOR TO COMMENCEMENT OF CONSTRUCTION, SHALL VERIFY THE LOCATION OF ALL UTILITIES AND CONTACT DIG SAFE AT 1-888-344-7233.
- THIS PLAN DOES NOT SHOW ANY UNRECORDED OR UNWRITTEN EASEMENTS WHICH MAY EXIST. A REASONABLE AND DILIGENT ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPARENT, VISIBLE USES OF THE LAND, HOWEVER, THIS DOES NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.
- THE ELEVATIONS DEPICTED HEREON WERE BASED ON THE NORTH AMERICAN VERTICAL DATUM (NAVD 88) OF 1988.
- THE SUBJECT PROPERTY IS LOCATED IN THE FOLLOWING FLOOD ZONES PER FEMA FLOOD INSURANCE RATE MAP NUMBER 25017C0576E DATED JUNE 4 2010.
 - FLOOD ZONE X (UNSHADED), AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN
 - FLOOD ZONE ZONE AE, AREAS DETERMINED TO HAVE A BASE FLOOD ELEVATION. (ELEVATION=4 (NAVD88))
- RESULTS OF HYDROGRAPHIC SURVEY BY CLE ENGINEERING, INC. (CLE) ON JUNE 30, 2018.
- ELEVATIONS AND SOUNDINGS ARE IN FEET AND TENTHS, AND REFER TO THE NAVD88 DATUM.
- SOUNDINGS REFER TO DEPTHS BELOW THE VERTICAL REFERENCE PLANE (NAVD88).
- THE SOUNDING INFORMATION DEPICTED ON THIS PLAN REPRESENTS THE SHOALEST SOUNDINGS OBTAINED FROM HYDROGRAPHIC SURVEYS CONDUCTED DURING JUNE 30, 2018.
- HIGH WATER AND LOW WATER ELEVATIONS FOR THE CHARLES RIVER WERE BASED ON THE MOST RECENT USGS ANNUAL WATER DATA REPORT DATED 2013 FOR THE CHARLES RIVER DAM, BOSTON, MA. CONVERSIONS TO NAVD88 FROM THE GAUGE DATUM BASED ON REPORTED OFFSET OF 105.62 TO NGVD1929. CALCULATION TO ESTABLISH ELEVATIONS RELATIVE TO NAVD88 WAS BASED ON VDATUM OUTPUT FOR THE PROJECT SITE LOCATION.
- COORDINATES ARE BASED ON NAD83 MASSACHUSETTS MAINLAND STATE PLANE GRID SYSTEM.
- PROJECT BENCHMARK IS "TBM 1" X IN HYDRANT BOLT EL. +6.235' NAVD88 AS PROVIDED BY MERIDIAN ASSOCIATES.
- PROJECT SITE IS IN FEMA ZONE AE (EL. +4 NAVD88) IN ACCORDANCE TO FEMA FIRM #25017C 0576E, EFFECTIVE DATE JUNE 4, 2010
- ORTHOIMAGERY IS FROM MASS GIS AND SHALL BE USED AS A GENERAL REFERENCE ONLY.
- THE INFORMATION DEPICTED ON THIS PLAN REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES SHOWN, AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS AT THAT TIME. INTERPOLATED INFORMATION FROM BETWEEN SOUNDING RUNS IS NOT GUARANTEED. SHOALS, OBSTRUCTIONS OR OTHER DIFFERING CONDITIONS MAY EXIST BETWEEN THESE RUNS. CONSULT WITH MERIDIAN ASSOCIATES FOR MORE DETAILED INFORMATION.
- POSSESSION AND USE OF THE MATERIAL CONTAINED ON THESE DRAWINGS IS GRANTED ONLY IN CONNECTION WITH ITS USE AS IT RELATES TO THE TITLED PROJECT, ANY OTHER USE, REPRODUCTION OR DISCLOSURE OF THE INFORMATION CONTAINED HEREON IS EXPRESSLY PROHIBITED WITHOUT THE WRITTEN CONSENT OF MERIDIAN ASSOCIATES.

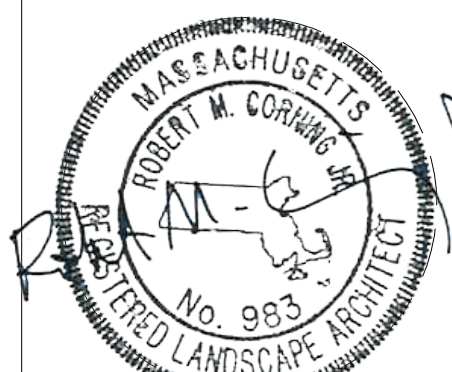
SHEET LIST

NUMBER	TITLE	DESCRIPTION
Bid Docs		
1	G.1	TITLE SHEET
2	G.2	SHEET LIST AND NOTES
3	C1.0	EXISTING CONDITIONS PLAN
4	C0.1	CIVIL SITE LEGEND & NOTES
5	C0.2	CIVIL SITE DETAILS
6	C1.1	SITE PREPARATION & DEMOLITION PLAN
7	LP.1	MATERIALS PLANTING AND LAYOUT PLAN
8	LP.2	GRADING PLAN
9	LP.4.1	PLANTING ENLARGEMENT PLAN
10	LP.4.2	PLANTING ENLARGEMENT PLAN
11	LD.1.1	LANDSCAPE PLANTING DETAILS
12	LD.1.2	LANDSCAPE PAVING & FURNISHING DETAILS
13	LD.1.3	DOCK AND DECKING DETAILS
14	LD.1.4	WEST OVERLOOK DECK DETAILS
15	LD.1.5	LANDSCAPE SITE DETAILS
16	SD1	DOCK PLAN
17	SD2	DOCK SECTION
18	SD3	WEST OBSERVATION DECK PLAN & SECTION
19	SD4	SECTIONS & DETAILS
20	E0.1	ELECTRICAL SYMBOL LIST & SPECIFICATION
21	E0.2	ELECTRICAL SITE PLAN

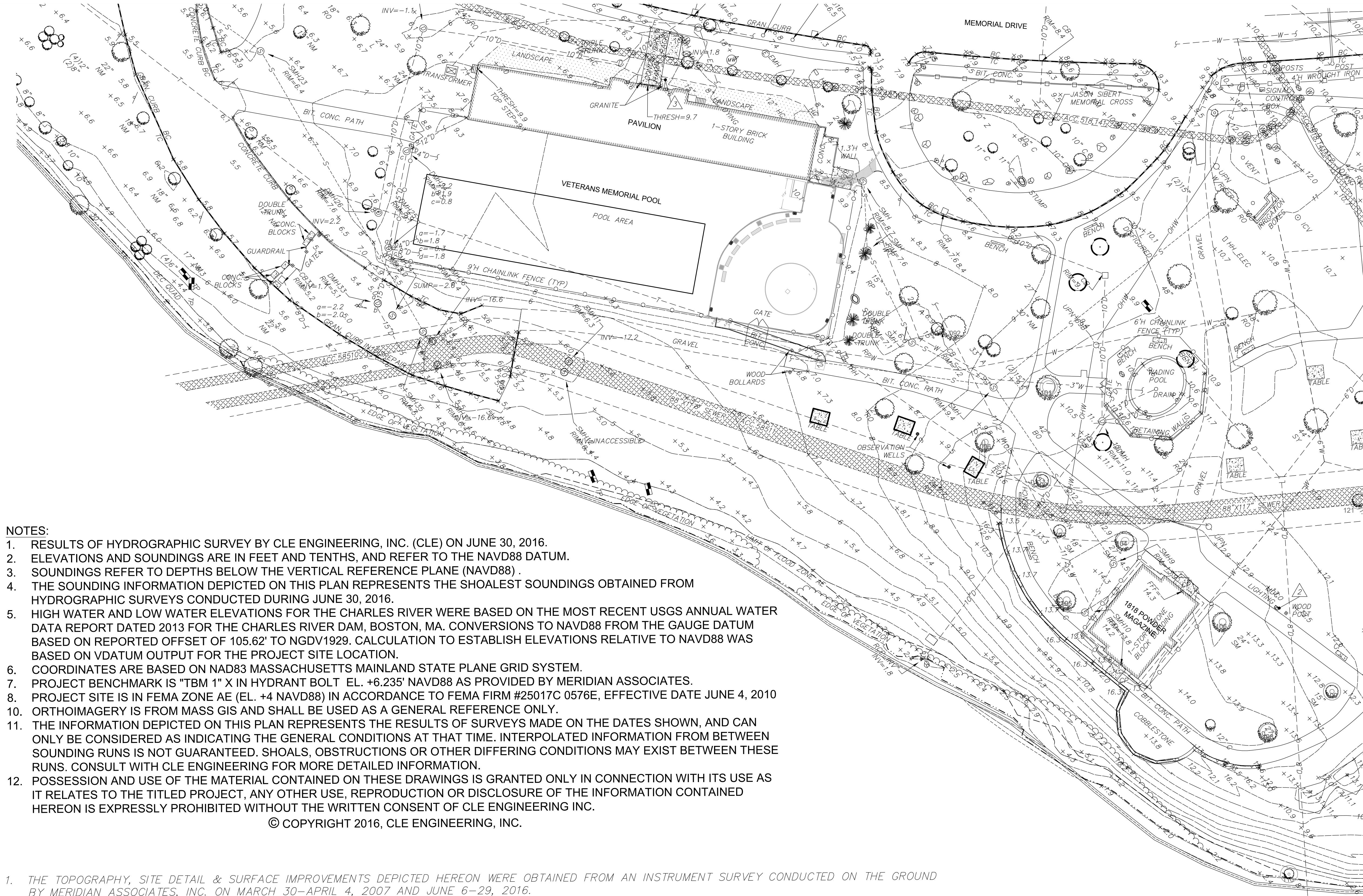
MASTER PLANT LIST & QUANTITIES

TREES				
SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE/SPACING	QUANTITY
AR	Acer rubrum	Red Maple	2.5-3" Cal, AS SHOWN	5
AL	Amelanchier laevis	Allegheny Serviceberry	10' HT, AS SHOWN	5
NS	Nyssa sylvatica	Tupelo	2.5-3" Cal, AS SHOWN	3
SN	Salix nigra	Black Willow	2" Cal.	1
BEACH EDGE PLANTING				
SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE/SPACING	QUANTITY
cc	Carex crinita var. crinata	Fringed Sedge	Plug, 1' OC	1792
cs	Carex stricta	Tussock Sedge	Plug, 1' OC	1986
jc	Juncus canadensis	Canada Rush	Plug, 1' OC	930
je	Juncus effusus	Soft Rush	Plug, 1' OC	1730
RIVER EDGE EMERGENT				
SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE/SPACING	QUANTITY
iv	Iris versicolor	Blue Flag Iris	Plug, 1' OC	1000
pc	Pontederia cordata	Pickereelweed	Plug, 1' OC	1500
ORNAMENTAL GRASSES				
SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE/SPACING	QUANTITY
pv	Panicum virgatum	Switchgrass	1 GAL, 2.5' OC	474

REV:	DATE:	DESCRIPTION:	BY:



COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION		
MAGAZINE BEACH IMPROVEMENTS PHASE 2.2 GRASSY BEACH		
CHARLES RIVER RESERVATION CAMBRIDGE, MA		
DESIGNED: DC, TB	SHEET LIST AND NOTES	DRAWING NO.
CHECKED: DC		G.2
DRAWN: TB, SB, CM	CONT. P25-3586-C5A	SCALE: N.T.S.
CHECKED: SL	ACC. 104650 x	DATE: 02-05-2025
		2 OF 21



EXISTING CONDITIONS PLAN

SYMBOL	DESCRIPTION	DETAIL
4	ONE FOOT CONTOUR	
5	FIVE FOOT CONTOUR	
+ 7.1	SPOT ELEVATION	
-T-	COMPILED PHONE LINE	
-E-	COMPILED ELECTRIC LINE	
-D-	COMPILED DRAIN LINE	
-S-	COMPILED SEWER LINE	
-W-	COMPILED WATER LINE	
-OHW-	OVERHEAD WIRES	
[Symbol]	GRANITE CURB	
[Symbol]	CONCRETE CURB	
[Symbol]	CONCRETE	
[Symbol]	BRICK	
[Symbol]	GRAVEL	
[Symbol]	RETAINING WALL	
[Symbol]	CHAINLINK FENCE	
[Symbol]	WROUGHT IRON FENCE ON CONCRETE FOOTING	
[Symbol]	IRON FENCE	
[Symbol]	TERMINUS UNKNOWN	
[Symbol]	ELECTRIC MANHOLE	
[Symbol]	ELECTRIC METER	
[Symbol]	STREET LIGHT	
[Symbol]	TRANSFORMER	
[Symbol]	UTILITY POLE	
[Symbol]	ELECTRIC HANDHOLE	
[Symbol]	IRRIGATION CONTROL VALVE HANDHOLE	
[Symbol]	WATER MANHOLE	
[Symbol]	WATER GATE	
[Symbol]	HYDRANT	
[Symbol]	CATCH BASIN	
[Symbol]	DRAIN MANHOLE	
[Symbol]	END OF PIPE	
[Symbol]	SEWER MANHOLE	
[Symbol]	CLEANOUT	
[Symbol]	BOLLARD	
[Symbol]	DECIDUOUS TREE	
[Symbol]	CONIFEROUS TREE	
[Symbol]	SIGN	
A.G.	ABOVE GROUND	
BIT.	BITUMINOUS	
CONC.	CONCRETE	
TYP.	TYPICAL	
BC	BOTTOM CURB	
TC	TOP CURB	
CP	CONCRETE PAD	
[Symbol]	BOULDER	
DIA	DIAMETER	
ACC.	MWRA ASCENSION NUMBER	

TREE LEGEND:

SO	- SCARLET OAK
BC	- BLACK CHERRY
BO	- BLACK OAK
RP	- RED PINE
RO	- RED OAK
C	- CHERRY
A	- ASH
MB	- MULBERRY
PA	- PLATANUS
L	- LINDEN
NM	- NORWAY MAPLE
SM	- SILVER MAPLE
RM	- RED MAPLE
Z	- ZELKOVA
SY	- SYCAMORE
HC	- HORSE CHESTNUT

- NOTES:
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- © COPYRIGHT 2016, CLE ENGINEERING, INC.

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 - FLOOD ZONE ZONE AE, AREAS DETERMINED TO HAVE A BASE FLOOD ELEVATION. (ELEVATION=4 (NAVD88))

- NOTES:
- EXISTING CONDITIONS IN THIS AREA HAVE BEEN MODIFIED FROM WHAT IS SHOWN ON THE SURVEY. CONTRACTOR TO FIELD VERIFY CONDITIONS PRIOR TO BID.



REV.	DATE:	DESCRIPTION:	BY:

Below the table is a circular professional seal for Robert M. Corwin, No. 983, Registered Landscape Architect, State of Massachusetts.

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION

MAGAZINE BEACH IMPROVEMENTS
PHASE 2.2 GRASSY BEACH

CHARLES RIVER RESERVATION
CAMBRIDGE, MA

DESIGNED: DC, TB	EXISTING CONDITIONS PLAN	DRAWING NO.
CHECKED: DC		C1.0
DRAWN: TB, SB, CM	CONT. P25-3586-CSA	SCALE: 1"=30'-0"
CHECKED: SL	ACC. 104651 x	DATE: 02-05-2025

3 OF 21

SITE LEGEND

EXISTING	NEW	DESCRIPTION
D	D	STORM DRAIN
E	E	ELECTRIC (UNDERGROUND)
G	G	GAS
OHW	OHW	OVERHEAD WIRE
PL	PL	PROPERTY LINE
S	S	SANITARY SEWER
W	W	WATER
	EP	UNDERGROUND ELECTRIC PRIMARY SERVICE
	ES	UNDERGROUND ELECTRIC SECONDARY SERVICE
	T	UNDERGROUND TELEPHONE SERVICE
	SL	UNDERGROUND SITE LIGHTING SERVICE
64	64	CONTOUR
BCC	BCC	BITUMINOUS CONC. CURB
CCB	CCB	CAPE COD BERM
PCC	PCC	PRECAST CONC. CURB
SGC	SGC	SLOPED GRANITE CURB
VGC	VGC	VERTICAL GRANITE CURB
x64.0	x64.75	SPOT GRADE
		CHAINLINK FENCE
	X X X X	CONSTRUCTION CHAINLINK FENCING
	DMH	DRAIN MANHOLE
	FES	FLARED END STRUCTURE
	SMH	SEWER MANHOLE
	CB	CATCH BASIN
	WS	WATER SERVICE
	UP	UTILITY POLE
	CTB	CONCRETE THRUST BLOCK
	FH	FIRE HYDRANT
	M	GATE VALVE AND CURB BOX
	GV	ELECTRIC MANHOLE
	TM	TELEPHONE MANHOLE
	PB	ELECTRIC PULL BOX
	SLP	SIGHT LIGHT POLE
	W	WETLAND
	C.T.E.	POINT OF CONNECTION TO EXISTING
	E.T.R.	EXISTING TO REMAIN
F.F.E.	F.F.E.	FINISH FLOOR ELEVATION (FIRST FLOOR)
	F&I	FURNISH AND INSTALL
	GCO	GROUND CLEANOUT
INV.	INV.	INVERT ELEVATION
	N.T.S.	NOT TO SCALE
	V.I.F.	VERIFY IN FIELD

EROSION & SEDIMENT CONTROL NARRATIVE

- EROSION CONTROL MEASURES SHOWN HEREIN ARE A MINIMUM. CONTRACTOR SHALL FURNISH THE SERVICES OF AN INDEPENDENT PROFESSIONAL ENGINEER OR A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL TO PREPARE A STORMWATER POLLUTION PREVENTION PLAN (SWPPP). PRIOR TO COMMENCEMENT OF ANY WORK, INCLUDING DEMOLITION, SITE PREPARATION, OR EARTHWORK SAID PLAN SHALL BE IMPLEMENTED. THE INITIAL METHOD OUTLINED IS INTENDED TO ROUTE ALL PRACTICABLE SURFACE WATER FROM THE EXCAVATION AREA INTO EROSION CONTROL FACILITIES. THE CONTRACTOR SHALL INSTALL ANY ADDITIONAL PROTECTIVE MEASURES AS MAY BE REQUIRED TO CONTROL EROSION AND SEDIMENT RUNOFF FROM THE SITE DURING CONSTRUCTION.
- STAKE THE LIMIT OF WORK TO ENSURE THAT ALL WORK WILL BE INSIDE THE EROSION CONTROL FACILITY. THE LIMIT OF WORK WILL BE INDICATED BY ORANGE CONSTRUCTION MESH. THE MESH WILL INCLUDE BUILDINGS, PARKING FACILITIES, ACCESS ROADS, DETENTION/RETENTION BASINS, EQUIPMENT STAGING AREAS AND ALL MATERIAL STOCKPILE AND HANDLING AREAS.
- AFTER INSTALLATION OF EROSION CONTROL MEASURES, BUT PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES ON SITE, A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD ON SITE TO ESTABLISH SUPERVISORY AND INSPECTION PROCEDURES FOR SEDIMENT AND EROSION CONTROL MEASURES. THIS MEETING SHALL BE ATTENDED BY THE CONTRACTOR, APPLICANT/OWNER, ARCHITECT/ENGINEER AND THE LOCAL CONSERVATION AGENT.
- THE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR PROTECTION OF ANY LANDS OR PROPERTIES AS MAY BE SUBJECT TO ANY AFFECT OR BY-PRODUCT OF THEIR DEMOLITION/CONSTRUCTION EFFORT. SPECIAL CARE SHALL BE TAKEN TO AVOID EROSION OF FILL OR CUT SLOPES ONTO ADJACENT PROPERTIES OR DOWNSTREAM SILTATION OF DIVERSION OF EXISTING DRAINAGE. ANY DAMAGE IS TO BE CORRECTED IMMEDIATELY BY THE CONTRACTOR AT NO COST TO THE OWNER.
- GENERAL SEQUENCE SHALL BE AS FOLLOWS:
 - ESTABLISH HAYBALE/SILT BARRIER & CONSTRUCTION FENCE PRIOR TO ANY EARTHWORK
 - INSTALL SITE ENTRANCE MATS AT SITE CONSTRUCTION ENTRANCES AS DETAILED.
 - CONSTRUCT TEMPORARY SETTLING BASINS AND INSTALL EROSION CONTROL DEVICES.
 - CLEAN AND GRUB VEGETATION AS REQUIRED. REMOVE AND DISPOSE OF ALL STUMPS FROM SITE.
- PERFORM MASS EARTHWORK AND ROCK EXCAVATION FOR THE SITE. PROTECT ALL EXISTING AND PROPOSED DRAINAGE STRUCTURES FROM SEDIMENT BY THE USE OF SEDIMENT CONTROL BAGS AT CATCH BASIN AS DETAILED.
- AT NO TIME SHALL SILT LADEN WATER BE ALLOWED TO ENTER ENVIRONMENTALLY SENSITIVE AREAS AND EXISTING OR NEW DRAINAGE SYSTEMS. RUNOFF FROM DISTURBED SURFACES SHALL BE DIRECTED THROUGH SETTLING BASINS AND EROSION CONTROL MEASURES PRIOR TO ENTERING ANY ENVIRONMENTALLY SENSITIVE AREAS OR THE DRAINAGE SYSTEM.
- DEWATER ALL EXCAVATIONS AND TRENCHES, AS REQUIRED, WITH DEWATERING BAGS AND OUTFALLS AT CONTROLLED TEMPORARY SETTLING BASINS.
- INSTALL STONE REINFORCED SILT BARRIER AROUND STOCKPILE AREAS, TRUCK WASH DOWN AREAS AND VEHICLE FUELING AREAS.
- INSTALL TEMPORARY SEED OR MULCH AND EROSION CONTROL BLANKETS (ECB) TO ALL AREAS IMMEDIATELY UPON FORMATION OF GRADES.
- SURFACE STABILIZATION MUST BE IMPLEMENTED WITHIN 14 DAYS AFTER CONSTRUCTION ACTIVITY IN A PORTION OF THE SITE THAT HAS CEASED OR IS TEMPORARILY HALTED.
- TRUCK WASH DOWN AREA SHALL BE 20'(L)x20'(W) AT A MINIMUM SURROUNDED BY STONE REINFORCED SILT BARRIER. ACCUMULATED CONCRETE SHALL BE EITHER RECYCLED ON SITE OR DISPOSED OF AT AN APPROVED OFF-SITE LOCATION.
- CONTRACTOR REFUELING AREA SHALL BE 20'(L)x20'(W) AT A MINIMUM SURROUNDED BY STONE REINFORCED SILT BARRIER. AREA SHALL BE SCRAPED AND REDRESSED MONTHLY. THE DEPTH SHALL BE DETERMINED IN THE FIELD. SCRAPED MATERIAL SHALL BE REMOVED AND DISPOSED OF AT AN APPROVED OFF-SITE LOCATION.
- AS SOON AS PAVING OF DRIVES IS COMPLETED, ALL DRAINAGE STRUCTURES SHALL BE CLEANED OF ANY ACCUMULATED SEDIMENT. THEREAFTER, CLEAN UP SHOULD FOLLOW LONG TERM MAINTENANCE PLAN.
- CONTINUALLY MONITOR ALL SILT BARRIER AND EROSION CONTROL DEVICES ON A WEEKLY BASIS AND AFTER ALL RAIN EVENTS RESULTING IN MORE THAN 0.25 INCHES OF RAIN OVER A 24 HOUR PERIOD. REPAIR ANY DAMAGED AREAS IMMEDIATELY. THE CONTRACTOR SHALL MAINTAIN LOGS ON SITE AT ALL TIMES FOR REVIEW BY THE CONSERVATION COMMISSION, ENGINEER & OWNER. REMOVE ALL CAPTURED SEDIMENT AS REQUIRED AND DISPOSE OF. INSTALL ADDITIONAL MEASURES AS DIRECTED BY THE OWNER, LOCAL DPW, CONSERVATION OFFICER AND THE ENGINEER.
- CONTRACTOR SHALL REDUCE SURFACE AND AIR MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES AS REQUIRED BY CONSTRUCTION ACTIVITIES. CONSTRUCTION ACTIVITIES SHALL BE SO SCHEDULED SO THAT THE LEAST AREA OF DISTURBED SOIL IS EXPOSED AT ONE TIME. IN DISTURBED AREAS NOT SUBJECT TO TRAFFIC, CONTRACTOR SHALL USE TEMPORARY SEEDING AND MULCHING OPERATIONS. IN DISTURBED AREAS SUBJECT TO TRAFFIC, CONTRACTOR SHALL SPRINKLE SURFACE WITH WATER TO MINIMIZE DUST. DUST CONTROL MEASURES SHALL BE MAINTAINED THROUGH DRY WEATHER PERIODS UNTIL ALL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED. CONTRACTOR TO SWEEP PAVEMENT AND ADJACENT ROADWAYS ON A WEEKLY BASIS DURING CONSTRUCTION. COORDINATE WITH PRAT IV, SPECIAL PROVISIONS. WRITTEN REPORTS SHALL BE SUBMITTED MONTHLY DETAILING DAY AND TIME OF SWEEPING AND LOCATION OF SWEEPING TO THE CONSERVATION COMMISSION'S OFFICE.
- REMOVE CONSTRUCTION FENCE, SILT BARRIER AND EROSION CONTROL MEASURES ONLY AFTER ESTABLISHMENT OF PERMANENT VEGETATION.
- NO UNTREATED CONSTRUCTION RUNOFF SHALL BE ROUTED DIRECTLY INTO ANY WETLANDS RESOURCE AREA, SURFACE WATER, OR STORM DRAIN. RUNOFF AND OTHER DISCHARGES FROM THE CONSTRUCTION AREA SHALL BE ROUTED TO SEDIMENTATION/EROSION CONTROL STRUCTURES OR ALLOWED TO FLOW OVER LAND IN A DIRECTION AWAY FROM WETLANDS RESOURCE AREAS AT ALL TIMES DURING CONSTRUCTION.
- ALL DRAINAGE STRUCTURES CONSTRUCTED SHALL BE INSPECTED AND MAINTAINED AS DESCRIBED IN THE APPLICANT'S APPROVED OPERATION & MAINTENANCE PLAN, EXCEPT AS OUTLINED IN THE ORDER OF CONDITIONS.
- ALL SOIL STOCKPILING SHALL OCCUR OUTSIDE OF RESOURCE AREAS, AND REFUELING AND MAINTENANCE ACTIVITIES DURING CONSTRUCTION SHALL OCCUR WITHIN A DEFINED AREA OUTSIDE OF WETLANDS RESOURCE AND THEIR BUFFER ZONES.
- TRUCKS ENTERING OR LEAVING THE SITE SHALL HAVE THEIR LOADS COMPLETELY COVERED IN COMPLIANCE WITH MGL CH. 85 SECTION 36. NO VEHICLE SHALL IDLE FOR LONGER THAN 5 MINUTES IN COMPLIANCE WITH MGL CH. 90 SECTION 16A.

GENERAL NOTES

- EXISTING CONDITIONS SHOWN WERE TAKEN FROM EXISTING CONDITIONS PLAN PREPARED BY MERIDIAN ASSOCIATES, INC. FOR CROSBY | SCHLESINGER | SMALLRIDGE, LLC.
- CONTRACTOR SHALL RETAIN THE SERVICES OF A REGISTERED LAND SURVEYOR TO LAYOUT ON THE GROUND ALL NEW ELEMENTS OF WORK. THE NEW WORK IS TO BE COMPLETED, MARKED, AND LAID OUT ON THE GROUND, REVIEWED AND APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. IF ANY WORK IS INSTALLED PRIOR TO THE ABOVE REQUIREMENT BEING MET, AND IF THE WORK IS NOT SATISFACTORY IN LAYOUT TO THE LANDSCAPE ARCHITECT, CONTRACTOR SHALL REPLACE THE WORK AT NO COST.
- PRIOR TO ANY EXCAVATION, IN ADDITION TO "DIG SAFE", NOTIFY APPROPRIATE UTILITY COMPANY OR AUTHORITY TO VERIFY EXACT DEPTH AND LOCATION OF EXISTING UNDERGROUND UTILITIES. LOCATIONS AND DEPTHS OF EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY AND THE CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE AND PROTECT UTILITIES IN THE FIELD WHETHER OR NOT SHOWN ON THE DRAWINGS.
- THE DOCUMENTS MAY INDICATE RESULTS OF BORINGS AND/OR TEST PITS. THESE INVESTIGATIONS AND RESULTANT INTERPRETATIONS WERE MADE FOR THE SOLE PURPOSE OF PROVIDING DESIGN DATA FOR THE USE OF THE DESIGN TEAM ONLY. INTERPRETATION OF THE DATA FOR PURPOSES OF CONSTRUCTION IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. DURING THE COURSE OF CONSTRUCTION, ALL INTERPRETATIONS OF SOIL SUITABILITY SHALL BE MADE BY THE LANDSCAPE ARCHITECT. THE DECISION OF THE LANDSCAPE ARCHITECT SHALL BE FINAL AND BINDING ON THE CONTRACTOR.
- REFER TO THE SPECIFICATIONS. IN ADDITION TO THOSE REQUIREMENTS, SITE PREPARATION SHALL ALSO INCLUDE THE FOLLOWING:
 - IN THE COURSE OF INSTALLING THE UNDERGROUND UTILITIES, REMOVE ANY ABANDONED FOUNDATION, UTILITY STRUCTURES, ETC., ENCOUNTERED WHICH INTERFERE WITH THE UTILITY WORK. ALL SUCH STRUCTURES SHALL BE COMPLETELY REMOVED AND SHALL BE BACKFILLED WITH GRAVEL COMPACTED IN 9" LIFTS TO 95% COMPACTION TO 6" BELOW THE BOTTOM OF THE PIPE AND UTILITY.
 - IF DURING EXCAVATION THE TRENCH WIDTH EXCEEDS THE SUM OF THE PIPE O.D. PLUS 2'-0", PLACE AND COMPACT THE FILL TO 12" ABOVE THE PIPE AND RE-EXCAVATE TO REQUIRED GRADES.
 - AT THE POINT WHERE BULK EARTH MOVING HAS BEEN COMPLETED TO THE SUBGRADE LEVEL AND PRIOR TO PLACING UTILITIES, CURBING, OR PAVING, PROOF ROLL THE ENTIRE AREA IN THE PRESENCE AND UNDER THE SUPERVISION OF THE SOILS LABORATORY. PROOF-ROLLING SHALL CONSIST OF MAKING NOT LESS THAN (5) PASSES OVER THE AREA WITH A VIBRATOR DRUM ROLLER WEIGHING AT LEAST 10,000 LBS. THE SOILS LAB WILL CONDUCT FIELD DENSITY TESTS AND WILL DETERMINE CORRECTIVE MEASURES TO BE DONE, IF ANY, BASED ON THE PROOF-ROLLING.
- ALL UTILITY WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF CAMBRIDGE SPECIFICATIONS AND MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION STANDARDS.
- SEWER PIPING AND STORM DRAINS 10" AND UNDER SHALL BE MANVILLE ASTM D-3034 SDR-35 P.V.C. SEWER PIPE WITH PUSH-ON RUBBER RING JOINTS. JOINTS SHALL MEET OR EXCEED ASTM F1417 WATERTIGHT FIELD TEST.
- WHENEVER ELECTRIC DUCT BANKS/CONDUITS MUST CROSS ANY UTILITY LINE SERVICE THE ELECTRIC DUCT BANKS/CONDUITS SHALL BE INSTALLED SO THAT THE BOTTOM OF THE ELECTRIC DUCT BANKS/CONDUITS ARE AT LEAST 12" ABOVE THE TOP OF THE UTILITY SERVICE. WHERE 12 INCH VERTICAL SEPARATION CAN NOT BE MET ABOVE THE TOP OF THE UTILITY SERVICE, THE ELECTRIC DUCT BANKS/CONDUITS SHALL BE RUN 12" BELOW THE BOTTOM OF THE UTILITY SERVICE.
- 20 DAYS PRIOR TO COMMENCING CONSTRUCTION WORK ON SITE, THE CONTRACTOR SHALL PREPARE AND SUBMIT THE EPA NOTICE OF INTENT (N.O.I.) FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER THE EPA NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEMS (NPDES) GENERAL PERMIT. CONTRACTOR SHALL DEVELOP AND IMPLEMENT A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) PER THE REQUIREMENTS OF THE EPA GENERAL PERMIT. AT PROJECT COMPLETION CONTRACTOR SHALL SUBMIT A NOTICE OF TERMINATION (N.O.T.) TO THE EPA.
- DURING PROJECT CONSTRUCTION AND OPERATIONS, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN FREE AND SAFE PASSAGE BY PEDESTRIANS AND BICYCLISTS ALONG THE ROADS OR WALKWAYS ADJACENT TO THE SITE.

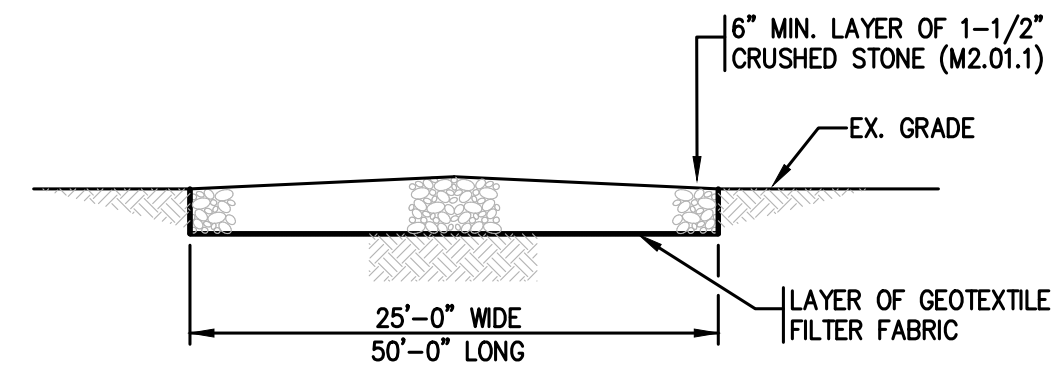
SITE OPERATIONAL PROCEDURES

OPERATION PROCEDURES DURING CONSTRUCTION SHALL BE BY THE CONTRACTOR. AFTER PROJECT COMPLETION OPERATION PROCEDURES SHALL BE THE RESPONSIBILITY OF THE OWNER AND ARE AS FOLLOWS:

- GOOD HOUSE KEEPING AND MATERIAL MANAGEMENT REDUCES THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORMWATER RUNOFF. A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE DEVELOPED BY THE CONTRACTOR WHICH SHALL INCLUDE THE FOLLOWING AT A MINIMUM:
 - ALL MATERIALS STORED ON-SITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
 - PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.
 - SUBSTANCES SHOULD NOT BE MIXED WITH ONE ANOTHER, UNLESS RECOMMENDED BY THE MANUFACTURER.
 - WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF A CONTAINER.
 - THE CONTRACTOR SHALL INSPECT THE SITE DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS ON-SITE, DURING ALL CONSTRUCTION PHASES
 - ORIGINAL MATERIALS LABELS AND MATERIAL SAFETY DATA SHEETS SHALL BE KEPT; THEY RETAIN IMPORTANT INFORMATION.
 - PETROLEUM PRODUCTS:
 - ALL ON-SITE VEHICLES AND PARKING AREAS SHALL BE REGULARLY MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO PREVENT LEAKAGE
 - PETROLEUM PRODUCTS SHALL BE STORED UNDER COVER AND SHALL BE IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED.
 - PAINTS, SOLVENTS.
 - ALL PAINTS AND SOLVENTS SHALL BE STORED IN ORIGINAL MANUFACTURER'S CONTAINERS IN A COVERED LOCATION.
 - THE USE OF PAINTS AND SOLVENTS SHALL, WHENEVER POSSIBLE, BE LIMITED TO SERVICE OR STORAGE BAYS. WHERE NOT POSSIBLE, THE WORK AREA SHALL BE PROTECTED WITH IMPERMEABLE DROP CLOTHES OR TARPS. AT NO POINT SHALL PAINT AND SOLVENTS BE USED IN PARKING OR ACCESS WAYS THAT ARE TRIBUTARY TO THE DRAINAGE SYSTEM.
- SPILL CONTROL PRACTICES:
 - MANUFACTURER'S RECOMMENDED METHODS SHALL BE CLEARLY POSTED FOR SPILL CLEAN-UP AND SITE PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES AND THE LOCATIONS OF CLEAN-UP INFORMATION AND SUPPLIES.
 - MATERIAL AND EQUIPMENT NECESSARY FOR SPILL CLEAN-UP WILL BE KEPT ON-SITE IN A DESIGNATED MATERIAL STORAGE AREA. EQUIPMENT WILL INCLUDE, BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, ABSORBENT MATERIALS (SPEEDI DRY OR EQUIVALENT), SAND, SAWDUST AND PLASTIC & METAL TRASH CONTAINERS SPECIFICALLY KEPT AND LABELED FOR THIS PURPOSE.
 - ALL SPILLS WILL BE CLEANED-UP IMMEDIATELY AFTER DISCOVERY AND THE CAMBRIDGE CONSERVATION COMMISSION NOTIFIED.
 - SPILLS OF TOXIC OR HAZARDOUS MATERIAL OR NATURE WILL BE REPORTED TO THE APPROPRIATE STATE, LOCAL OR FEDERAL AGENCY, AS REQUIRED BY-LAW.
 - THE SPILL PREVENTION PLAN WILL INCLUDE PROVISIONS TO ADAPT THE PLAN TO ENSURE THAT SPILLS WILL NOT REOCCUR, AND HOW TO CLEANUP THE SPILL IF THERE IS ANOTHER ONE.
- SITE OPERATIONS AND DAILY USE SHALL CONSIDER THE ULTIMATE DISPOSITION OF STORMWATER AND OTHER SITE-GENERATED FORMS OF RUNOFF. THE WASHING OF VEHICLES SHALL BE LIMITED TO AREAS WITHIN THE BUILDING, AS THEY ARE SERVED BY THE FLOOR DRAIN SYSTEM. WASH WATER WITH ITS COMBINATION OF SOLVENTS, DETERGENTS AND OIL/GREASES SHOULD NOT BE ALLOWED TO ENTER ANY PART OF THE ON-SITE DRAINAGE SYSTEM.
- SNOW PLOWING- SNOW PLOWING OPERATIONS SHALL STOCKPILE SNOW, ICE AND ACCUMULATED MATERIALS IN AREAS WHERE SNOW MELT WILL FLOW INTO THE ON-SITE DRAINAGE SYSTEMS, INCLUDING DRAINAGE BASINS. NO PLOWING OR STORAGE OF SNOW INTO WETLANDS OR BIO-RETENTION AREAS.
- SALT USE- NO SODIUM DE-ICING AGENTS ARE ALLOWED TO BE USED ON THE SITE.
- SITE CLEANLINESS- NO CONSTRUCTION MATERIAL DEBRIS, OTHER DEBRIS OR REFUSE FROM CONSTRUCTION WORKERS SHALL BE ALLOWED TO ENTER OR REMAIN IN ANY RESOURCE AREA. ANY DEBRIS ENTERING THESE AREAS MUST BE REMOVED IMMEDIATELY BY HAND.

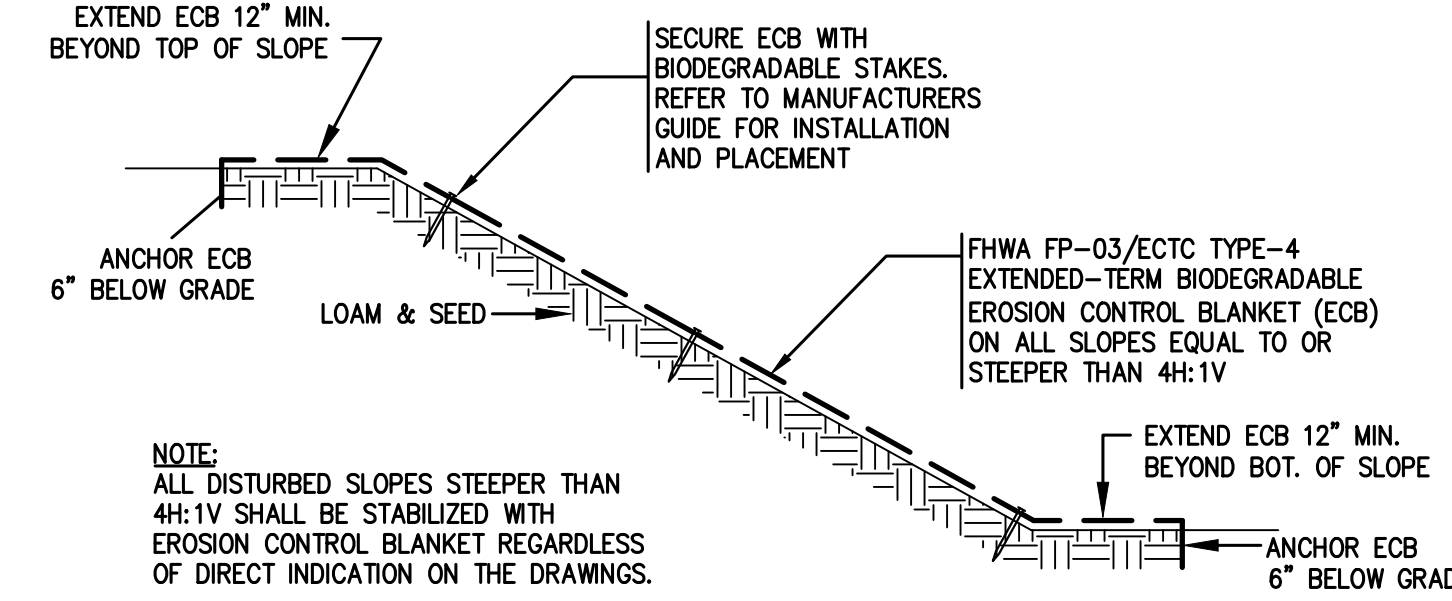
REV:	DATE:	DESCRIPTION:	BY:

		COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION	
		MAGAZINE BEACH IMPROVEMENTS PHASE 2.2- GRASSY BEACH CHARLES RIVER RESERVATION CAMBRIDGE, MA	
DESIGNED: NCK	CIVIL SITE LEGEND & NOTES	DRAWING NO. C0.1	
CHECKED: CMG	CONT. P25-3586-C5A	SCALE: AS NOTED	4 OF 21
DRAWN: NCK	ACC. 104652 x	DATE: 02-05-2025	
CHECKED: CMG			



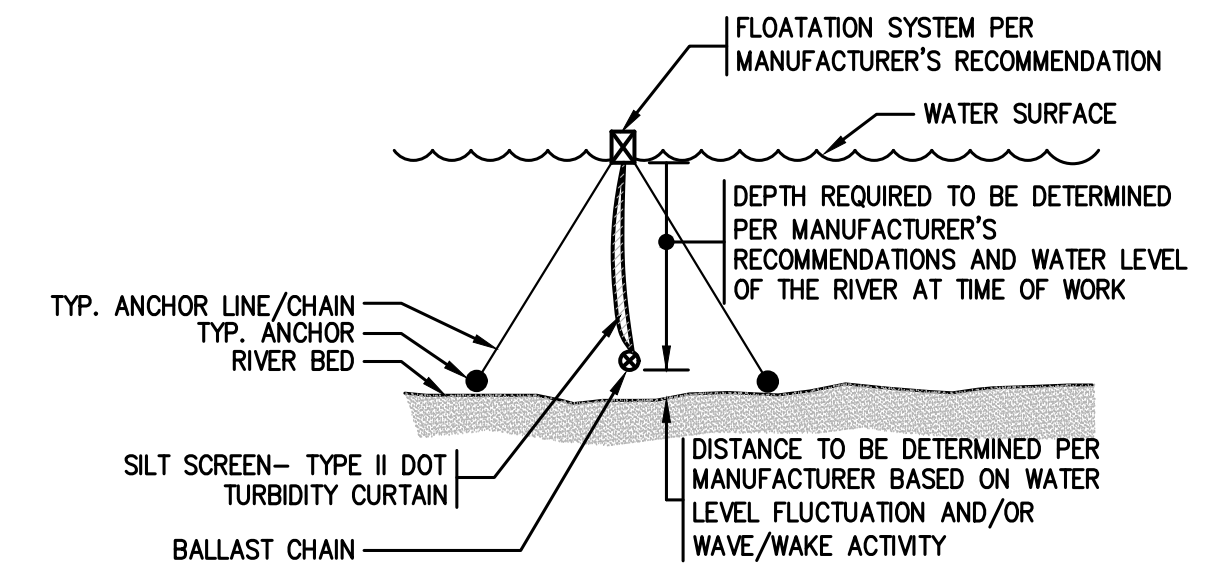
1 SITE ENTRANCE MAT DETAIL

N.T.S.
NOTE:
THE LOCATION OF ENTRANCE MATS ON SITE SHALL BE PLACED IN A MANNER TO MAINTAIN PEDESTRIAN AND BICYCLIST TRAFFIC ALONG ROADS AND WALKWAYS ADJACENT TO SITE.



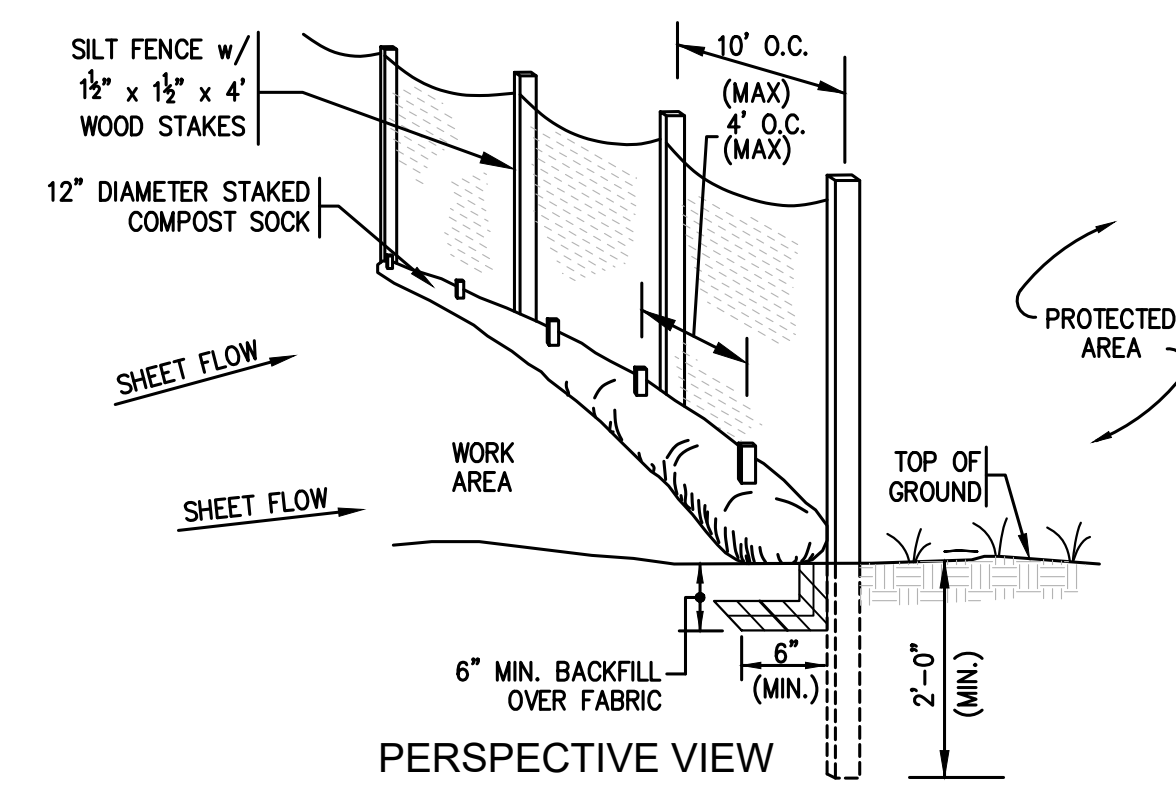
4 SLOPE PROTECTION TREATMENT DETAIL

N.T.S.

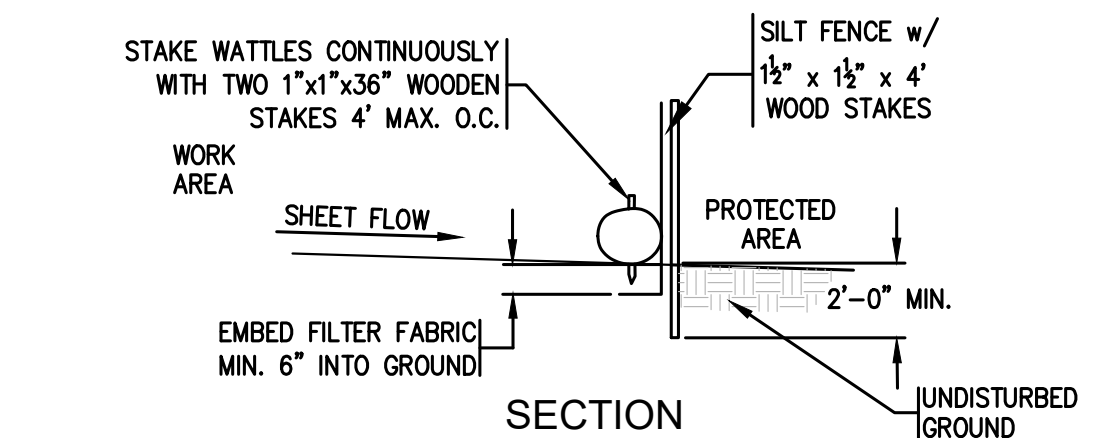


7 TYP. FLOATING TURBIDITY BARRIER INSTALLATION DETAIL

N.T.S.



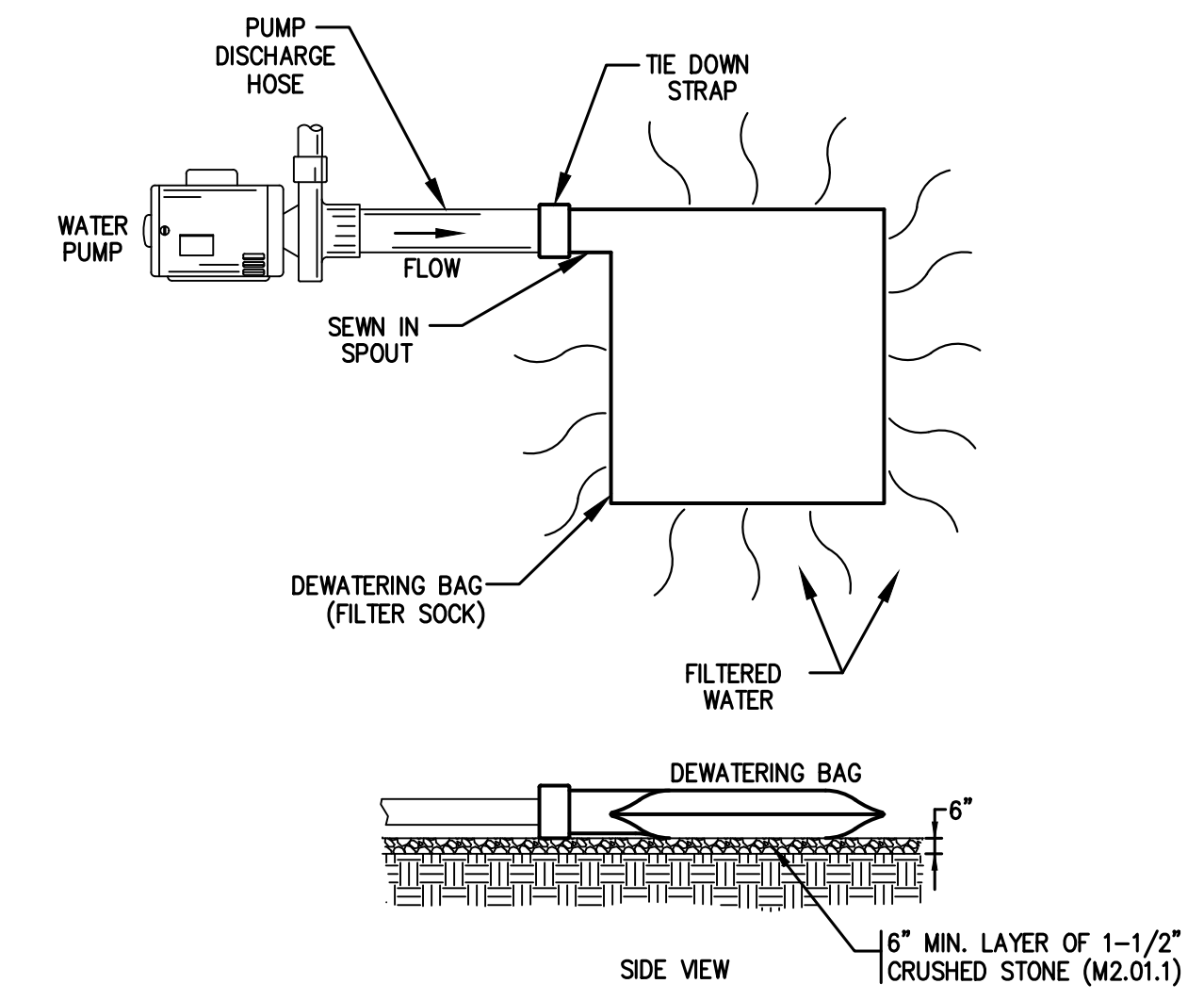
PERSPECTIVE VIEW



SECTION

2 COMPOST FILTER SOCK & FABRIC DETAIL

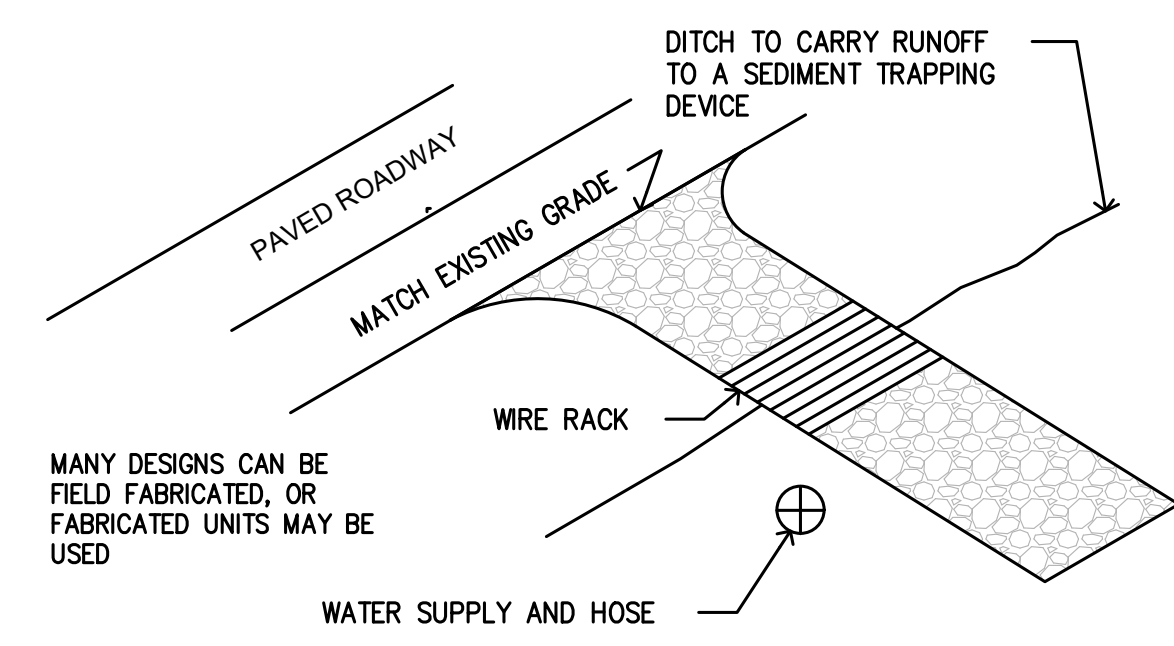
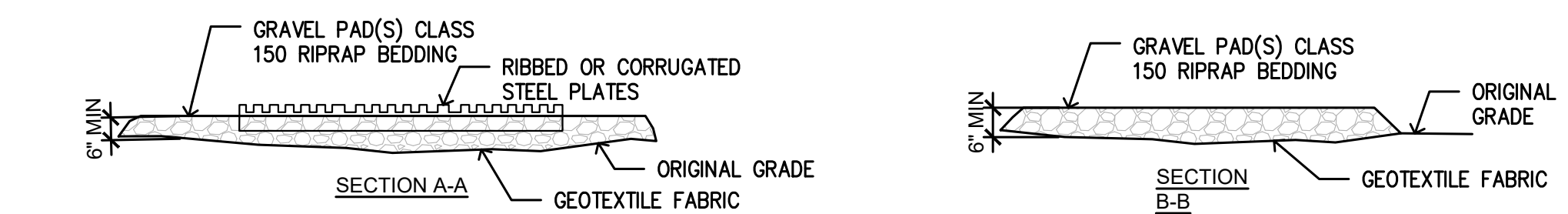
N.T.S.
NOTE:
1. COMPOST SOCK SHALL BE 12" DIAMETER BY NORTH AMERICAN GREEN OR APPROVED EQUAL.
2. SOCKS TO BE FILLED WITH SEED-FREE COMPACTED MATERIAL.
3. COMPOST SOCK SHALL BE FULLY BIODEGRADABLE.



SIDE VIEW

5 DETAIL OF DEWATERING BAG

SCALE: N.T.S.

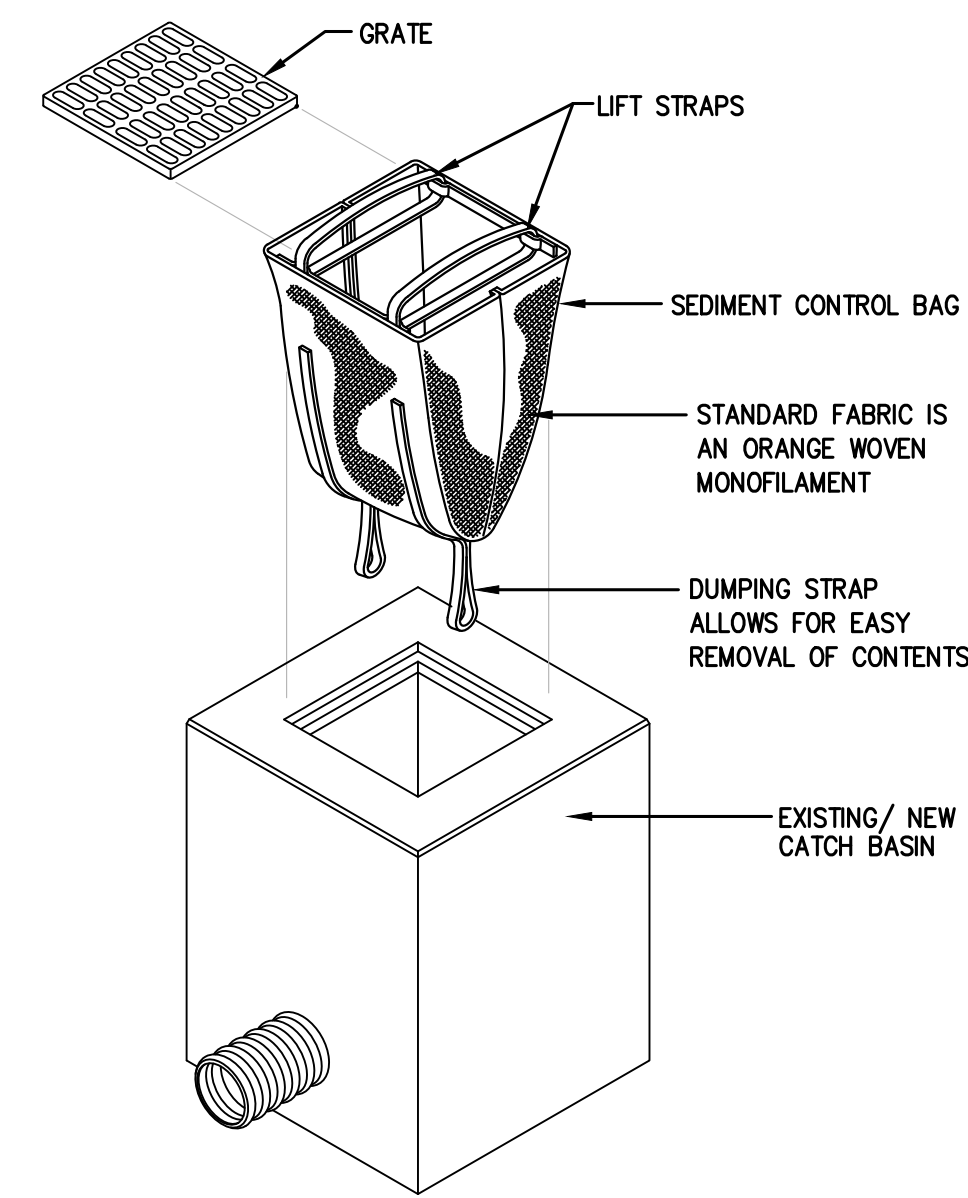


8 TRUCK WASHDOWN STATION

SCALE: N.T.S.

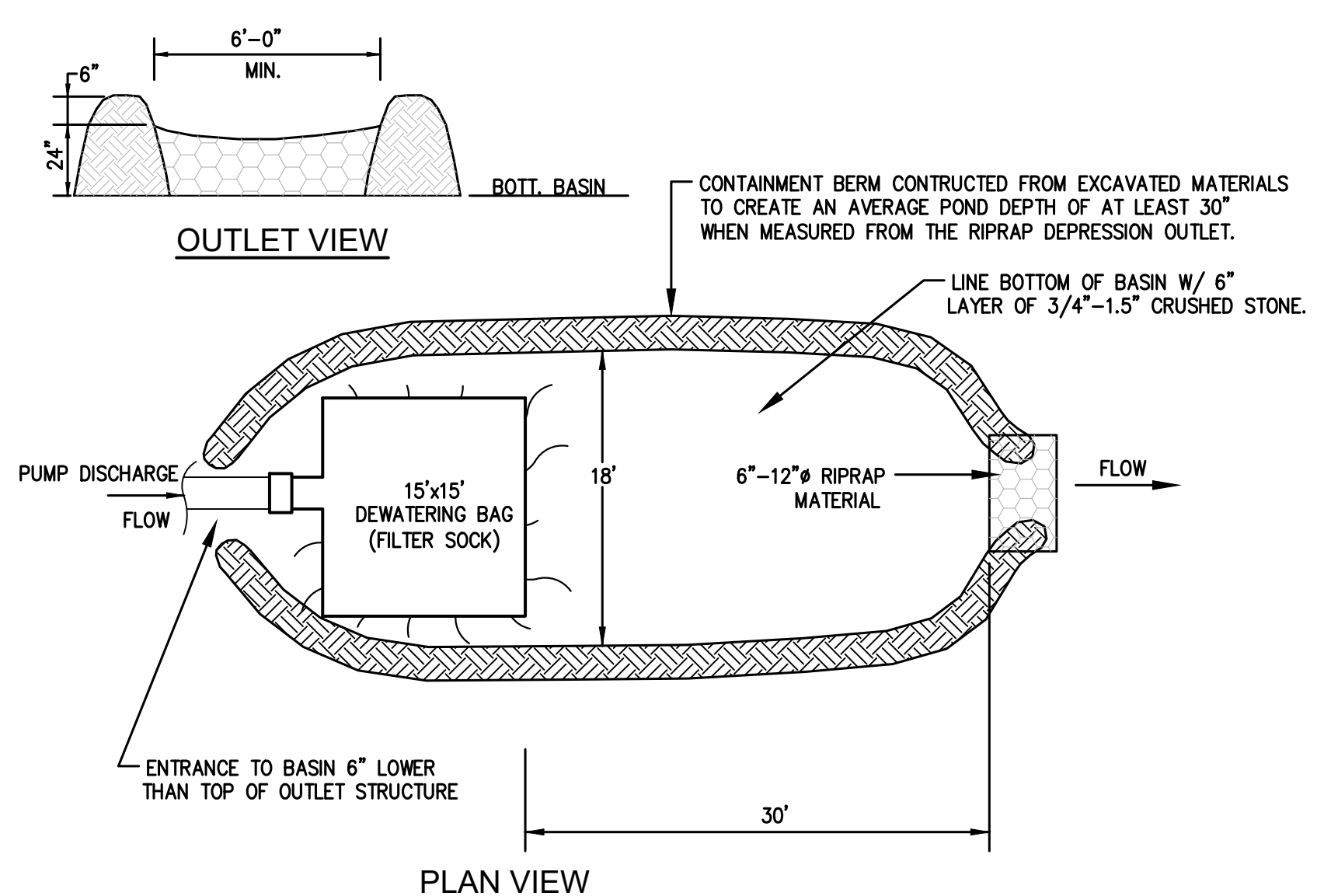
NOTES:
1. REQUIRES A SUPPLY OF WASH WATER. POTENTIAL SOURCES INCLUDE EXISTING WATER SERVICES CONNECTIONS IF AVAILABLE, FIRE HYDRANTS, OR TEMPORARY WATER STORAGE TANKS. THE CONTRACTOR SHALL VERIFY THAT THE USE OF ANY MUNICIPAL OR OTHER EXISTING WATER SERVICES IS ALLOWABLE WITH THE APPROPRIATE AGENCY.
2. REQUIRES A TURNOUT OR DOUBLEWIDE EXIT TO AVOID HAVING ENTERING VEHICLES DRIVE THROUGH THE WASH AREA.
3. THIS BMP SHOULD BE USED IN COMBINATION WITH A STABILIZED CONSTRUCTION ENTRANCE/EXIT.
4. CONSTRUCT ON LEVEL GROUND WHEN POSSIBLE, ON A PAD OF COARSE AGGREGATE. A GEOTEXTILE FABRIC SHALL BE PLACED BELOW THE AGGREGATE.
5. THE WASH RACK MUST BE DESIGNED FOR ANTICIPATED TRAFFIC LOADS.
6. PROVIDE A DRAINAGE DITCH THAT WILL CONVEY THE RUNOFF FROM THE WASH AREA TO A SEDIMENT TRAPPING DEVICE. THE DRAINAGE DITCH SHALL BE OF SUFFICIENT GRADE, WIDTH AND DEPTH AND ADEQUATELY STABILIZED TO SAFELY CARRY THE WASH RUNOFF.
7. REMOVE ACCUMULATED SEDIMENT FROM WASH RACK AND SEDIMENT TRAP ONCE THEY HAVE REACHED 24% OF DESIGN CAPACITY.

PRACTICE: ENTRANCE/OUTLET TIRE WASH. CONSTRUCTION ON GROUND LEVEL WHEN POSSIBLE PROVIDE DRAINAGE DITCH TO CONVEY RUNOFF TO A SEDIMENT TRAP. REMOVE ACCUMULATED SEDIMENT TO MAINTAIN PERFORMANCE. INSPECT FOR DAMAGE AND REPAIR TO MAINTAIN PERFORMANCE.



3 SEDIMENT CONTROL BAG

N.T.S.



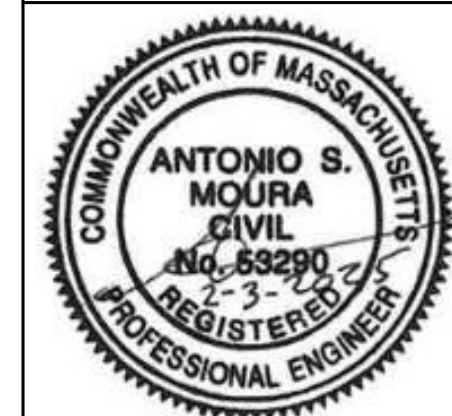
PLAN VIEW

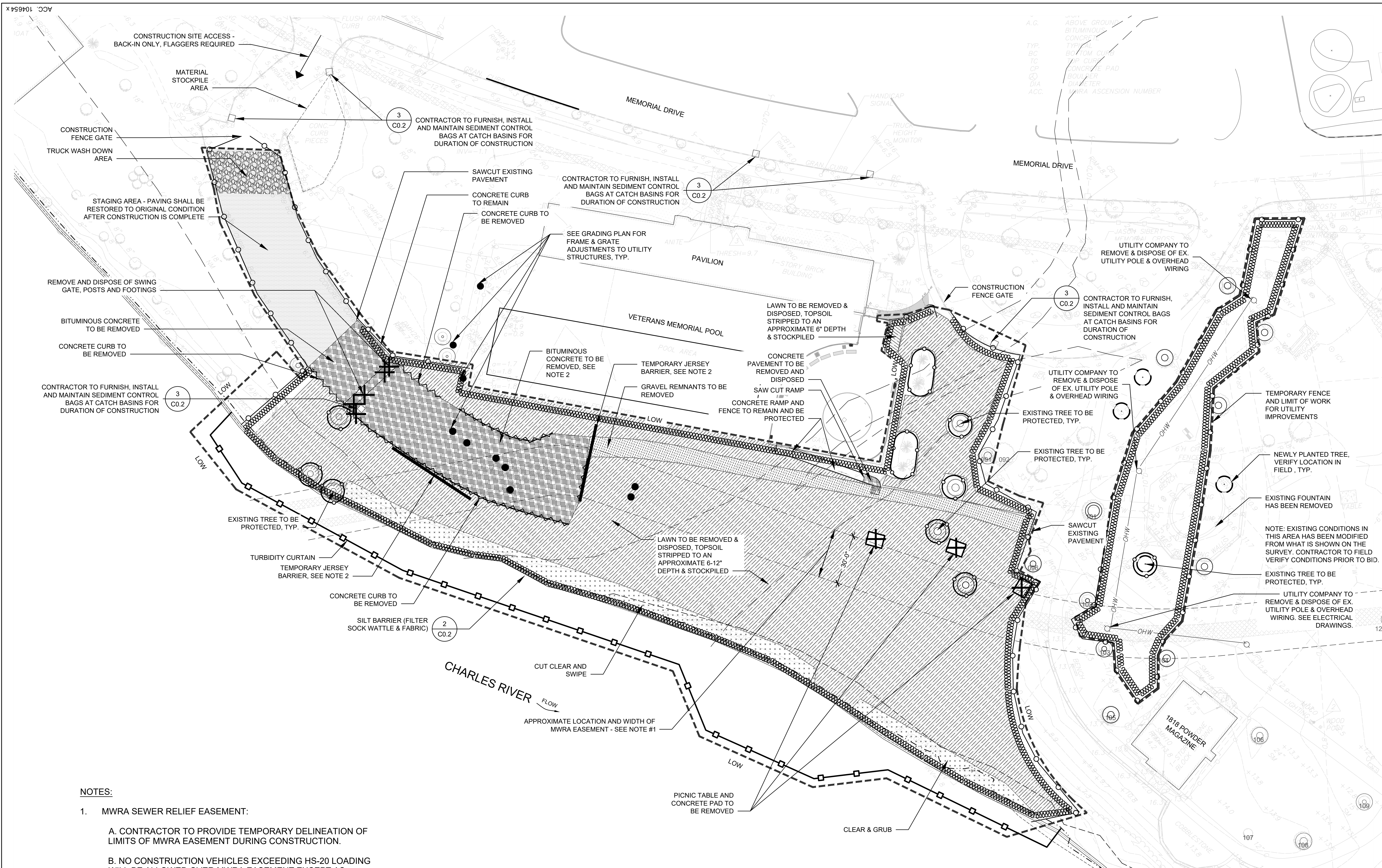
6 DETAIL OF DEWATERING BASIN

SCALE: N.T.S.

REV.	DATE:	DESCRIPTION:	BY:

COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION			
MAGAZINE BEACH IMPROVEMENTS PHASE 2.2- GRASSY BEACH			
CHARLES RIVER RESERVATION CAMBRIDGE, MA			
DESIGNED: NCK	CIVIL SITE DETAILS		DRAWING NO.
CHECKED: CMG			C0.2
DRAWN: NCK	CONT. P25-3586-C5A	SCALE: AS NOTED	5 OF 21
CHECKED: CMG	ACC. 104653 x	DATE: 02-05-2025	





DEMOLITION AND SITE PREPARATION LEGEND

SYMBOL	DESCRIPTION	DETAIL
	SILT BARRIER (FILTER SOCK WATTLE & FABRIC)	2 C0.2
	6 FT CONSTRUCTION FENCING (CHAIN LINK, TO FOLLOW LIMIT OF WORK)	7 C0.2
	TURBIDITY CURTAIN	5 LD.1.1
	TREE PROTECTION FENCE REQUIRED	
	STAGING	
	LAWN TO BE REMOVED AND DISPOSED, TOPSOIL TO BE STRIPPED AND STOCKPILED. SEE SPECIFICATIONS	
	GRAVEL REMNANTS TO BE REMOVED	
	CLEAR & GRUB	
	MISC ELEMENT TO BE REMOVED AND DISPOSED, SEE ANNOTATION	
	BITUMINOUS CONCRETE PAVING AND BASE TO BE REMOVED AND DISPOSED	
	CONCRETE CURB TO BE REMOVED AND DISPOSED	
	LIMIT OF WORK	
	TEMPORARY FENCE AND LIMIT OF WORK FOR UTILITY IMPROVEMENTS	

NOTES:

- MWRA SEWER RELIEF EASEMENT:
 - CONTRACTOR TO PROVIDE TEMPORARY DELINEATION OF LIMITS OF MWRA EASEMENT DURING CONSTRUCTION.
 - NO CONSTRUCTION VEHICLES EXCEEDING HS-20 LOADING WILL BE ALLOWED OVER MWRA EASEMENT EXCEPT AS NOTED IN NOTE 2 BELOW.
 - NO STOCKPILING OF MATERIALS TO OCCUR OVER EXISTING MWRA EASEMENT.
- MAINTAIN EXISTING PAVING AS REQUIRED TO PROVIDE ACCESS FOR PILE DRIVING CRANE OVER EXISTING MWRA EASEMENT. PROVIDE TEMPORARY JERSEY BARRIERS TO RESTRICT CONSTRUCTION VEHICLE ACCESS AS NOTED. PAVEMENT TO BE REMOVED ONLY AFTER DOCK WORK IS COMPLETE.



REV.	DATE:	DESCRIPTION:	BY:

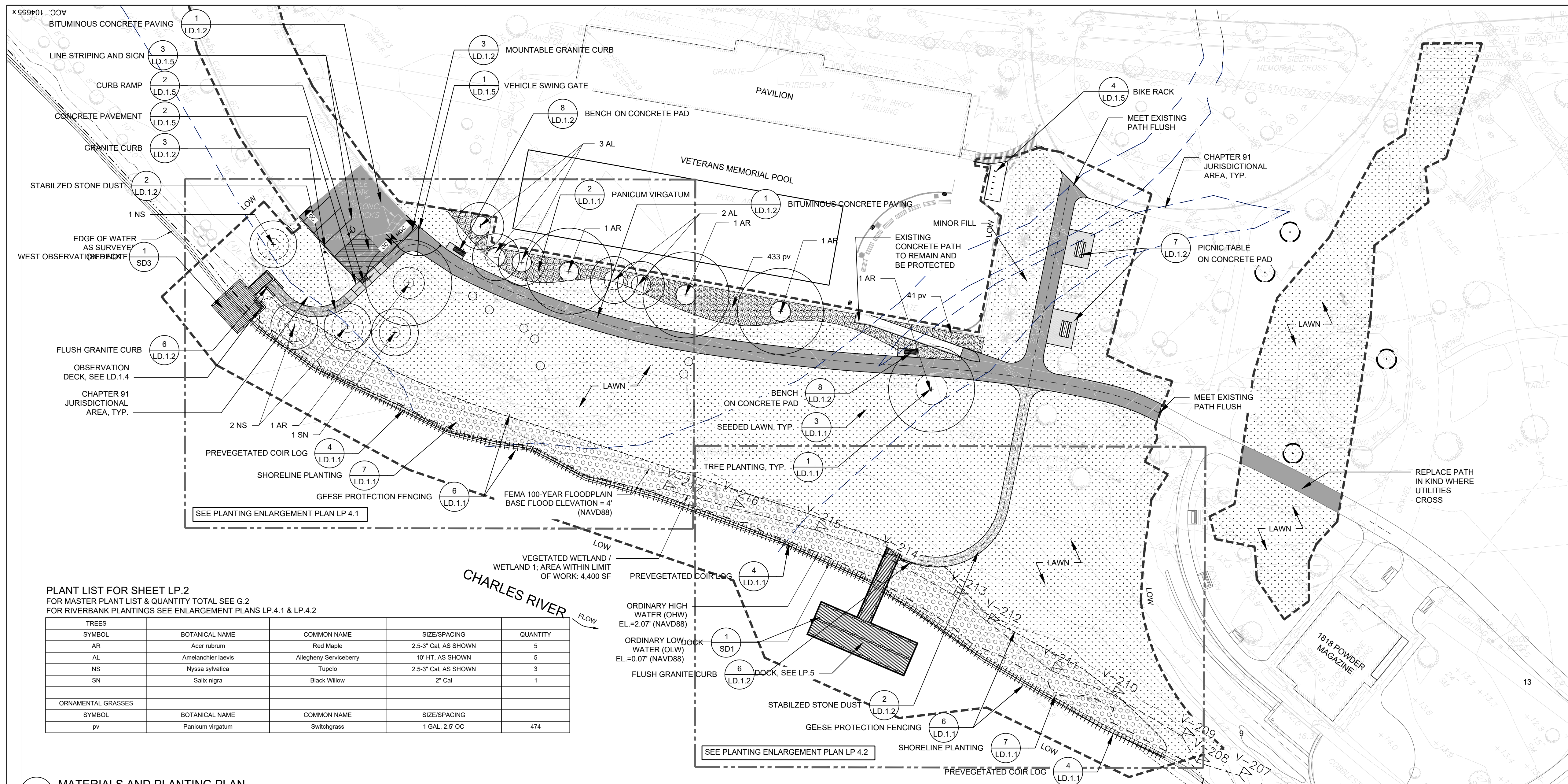
COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION

MAGAZINE BEACH IMPROVEMENTS
PHASE 2.2 GRASSY BEACH

CHARLES RIVER RESERVATION
CAMBRIDGE, MA

DESIGNED: DC, TB	SITE PREPARATION & DEMOLITION PLAN	DRAWING NO.
CHECKED: DC		C1.1
DRAWN: TB, SB, CM	CONT. P25-3586-C5A	SCALE: 1"=30'-0"
CHECKED: SL	ACC. 104654 x	DATE: 02-05-2025

6 OF 21



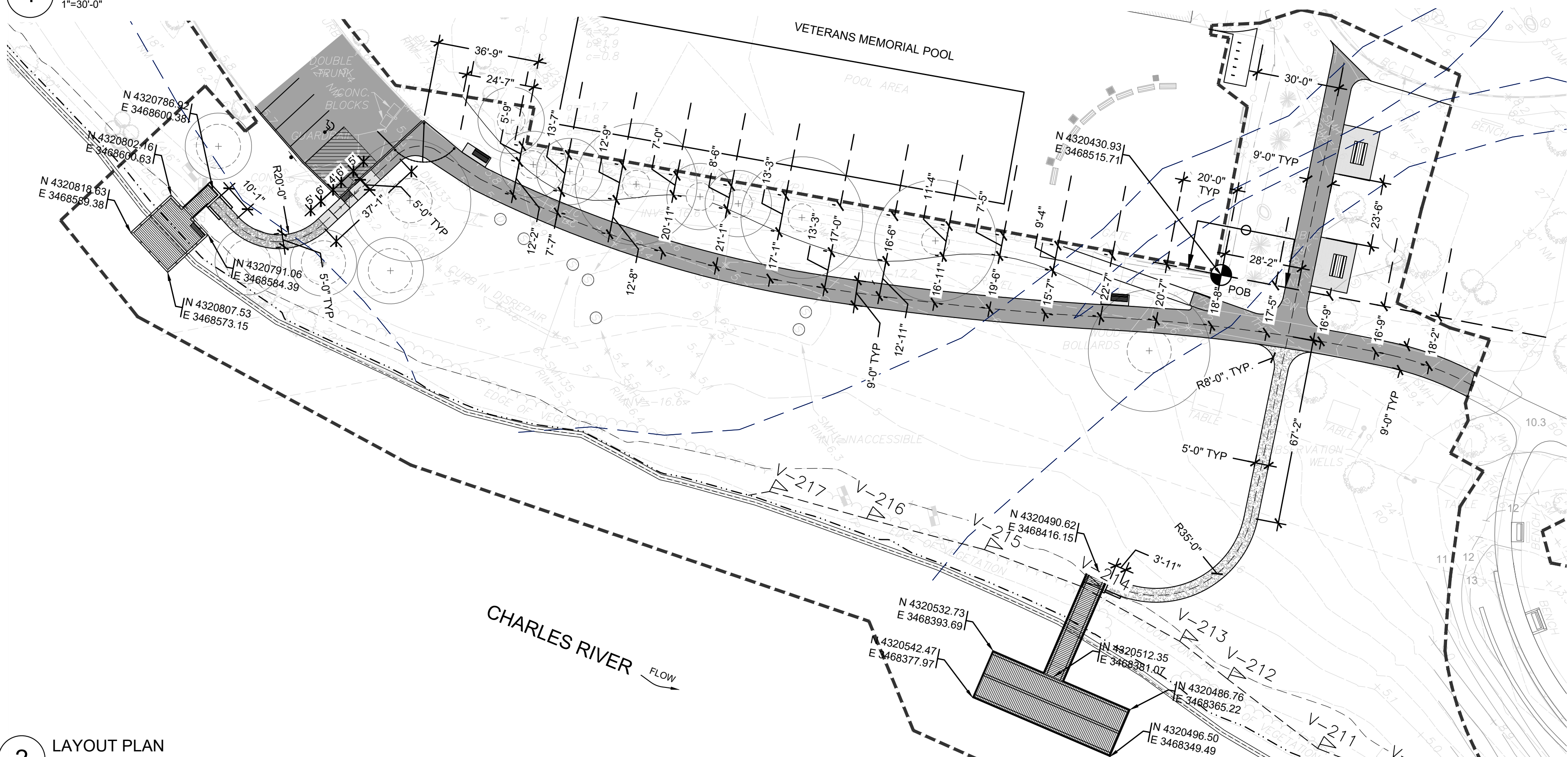
PLANT LIST FOR SHEET LP.2
 FOR MASTER PLANT LIST & QUANTITY TOTAL SEE G.2
 FOR RIVERBANK PLANTINGS SEE ENLARGEMENT PLANS LP.4.1 & LP.4.2

TREES	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE/SPACING	QUANTITY
	AR	Acer rubrum	Red Maple	2.5-3" Cal. AS SHOWN	5
	AL	Amelanchier laevis	Allegheny Serviceberry	10' HT. AS SHOWN	5
	NS	Nyssa sylvatica	Tupelo	2.5-3" Cal. AS SHOWN	3
	SN	Salix nigra	Black Willow	2" Cal	1
ORNAMENTAL GRASSES	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE/SPACING	QUANTITY
	pv	Panicum virgatum	Switchgrass	1 GAL. 2.5' OC	474

MATERIALS LEGEND		
SYMBOL	DESCRIPTION	DETAIL
---	LIMIT OF WORK	
[Hatched]	CONCRETE	5 LD.1.2
[Hatched]	BITUMINOUS CONCRETE	1 LD.1.2
[Hatched]	STABILIZED STONEDUST PATH	2 LD.1.2
[Hatched]	PICNIC TABLE ON CONCRETE PAD	7 LD.1.2
[Hatched]	BENCH ON CONCRETE PAD	8 LD.1.2
[Hatched]	GRANITE CURB	3 LD.1.2
[Hatched]	MOUNTABLE GRANITE CURB	3 LD.1.2
[Hatched]	SEEDED LAWN	3 LD.1.1
[Hatched]	ORNAMENTAL TREE PLANTING	1 LD.1.1
[Hatched]	DECIDUOUS TREE PLANTING	1 LD.1.1
[Hatched]	PANICUM VIRGATUM	2 LD.1.1
[Hatched]	SHORELINE PLANTING	7 LD.1.1, 4 LD.1.1
[Hatched]	GEESE PROTECTION FENCING	6 LD.1.1
[Hatched]	PREVEGETATED COIR LOG	4 LD.1.1
[Hatched]	CHAPTER 91 JURISDICTIONAL AREA	

LAYOUT LEGEND		
SYMBOL	DESCRIPTION	DETAIL
[Symbol]	POINT OF BEGINNING	
[Symbol]	ALIGN	
[Symbol]	LINEAR DIMENSION	
[Symbol]	RADIUS DIMENSION	
[Symbol]	NORTHING / EASTING LOCATION	

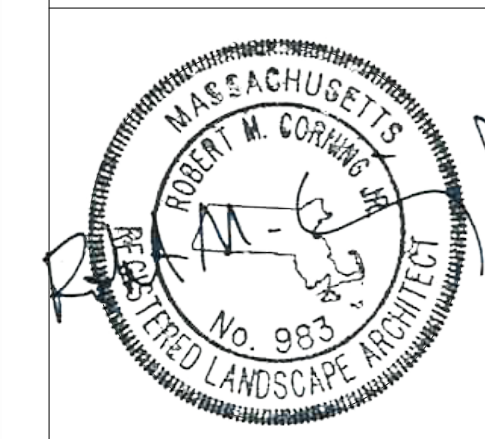
1 MATERIALS AND PLANTING PLAN
 1"=30'-0"



2 LAYOUT PLAN
 1"=30'-0"



REV.	DATE:	DESCRIPTION:	BY:



COMMONWEALTH OF MASSACHUSETTS
 DEPARTMENT OF CONSERVATION AND RECREATION

MAGAZINE BEACH IMPROVEMENTS
 PHASE 2.2 GRASSY BEACH

CHARLES RIVER RESERVATION
 CAMBRIDGE, MA

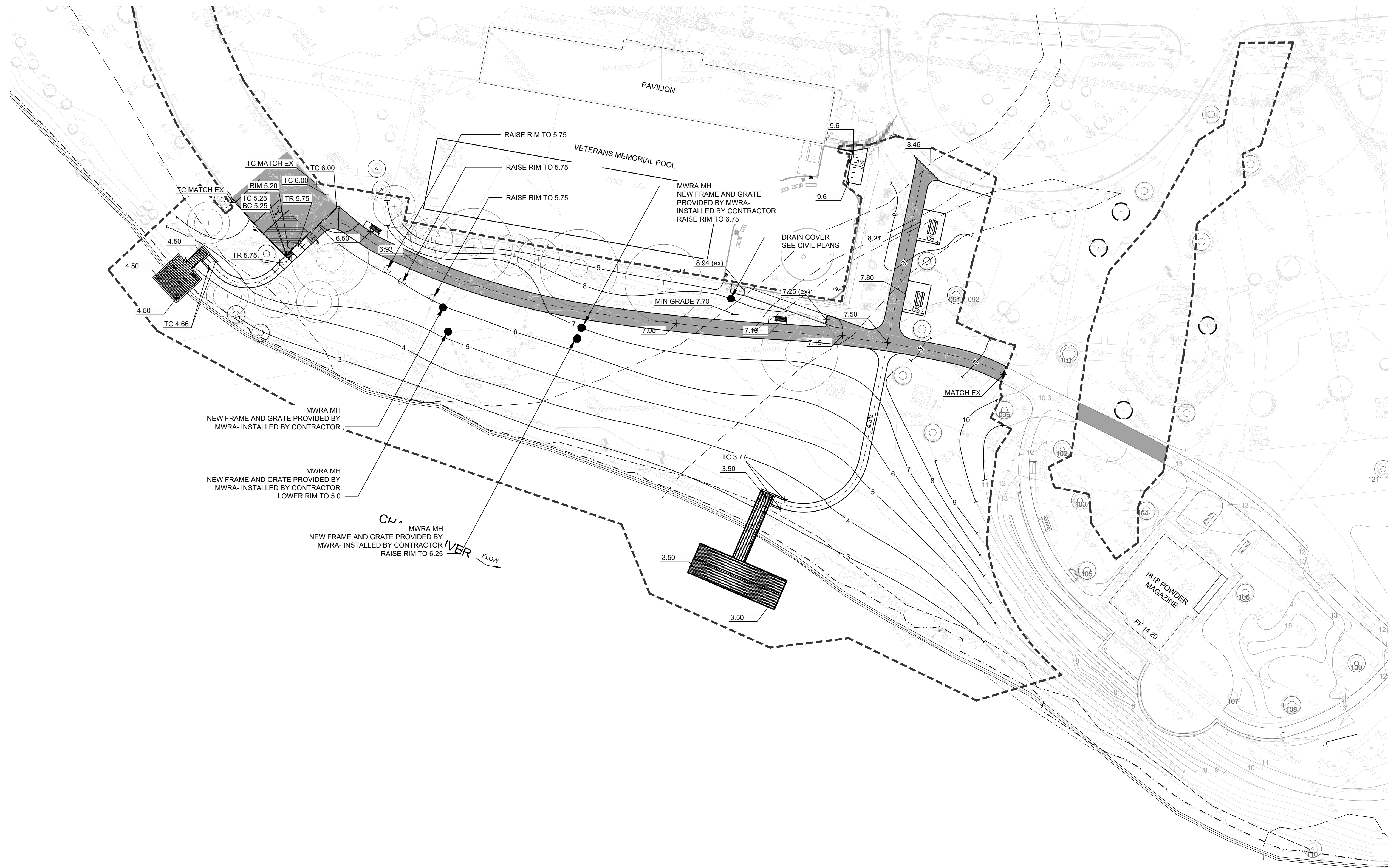
DESIGNED: DC, TB
 CHECKED: DC
 DRAWN: TB, SB, CM
 CHECKED: SL

MATERIALS PLANTING
 AND LAYOUT PLAN

CONT. P25-3586-C5A
 ACC. 104655 x

SCALE: 1"=30'-0"
 DATE: 02-05-2025

DRAWING NO.
 LP.1
 7 OF 21



RAISE RIM TO 5.75

RAISE RIM TO 5.75

RAISE RIM TO 5.75

MWRA MH NEW FRAME AND GRATE PROVIDED BY MWRA- INSTALLED BY CONTRACTOR RAISE RIM TO 6.75

DRAIN COVER SEE CIVIL PLANS

MIN GRADE 7.70

MWRA MH NEW FRAME AND GRATE PROVIDED BY MWRA- INSTALLED BY CONTRACTOR

MWRA MH NEW FRAME AND GRATE PROVIDED BY MWRA- INSTALLED BY CONTRACTOR LOWER RIM TO 5.0

MWRA MH NEW FRAME AND GRATE PROVIDED BY MWRA- INSTALLED BY CONTRACTOR RAISE RIM TO 6.25

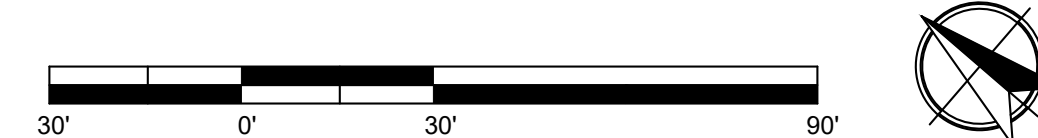
CL

VER FLOW

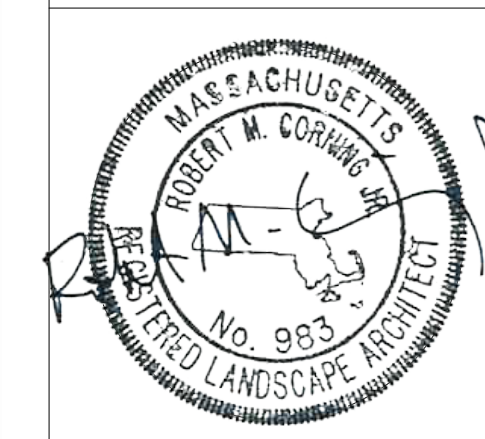
GRADING PLAN LEGEND

+ TW XX.XX	SPOT GRADE TOP WALL	+ BW XX.XX	SPOT GRADE BOTTOM WALL
+ TC XX.XX	SPOT GRADE TOP CURB	+ BC XX.XX	SPOT GRADE BOTTOM CURB
+ LP XX.XX	SPOT GRADE LOW POINT	+ HP XX.XX	SPOT GRADE HIGH POINT
FF XX.XX	SPOT GRADE FINISH FLOOR	RIM XX.XX	SPOT GRADE TOP RIM OF UTILITY STRUCTURE
6			PROPOSED CONTOUR

SEE SHEET G.2 FOR NOTES



REV.	DATE:	DESCRIPTION:	BY:

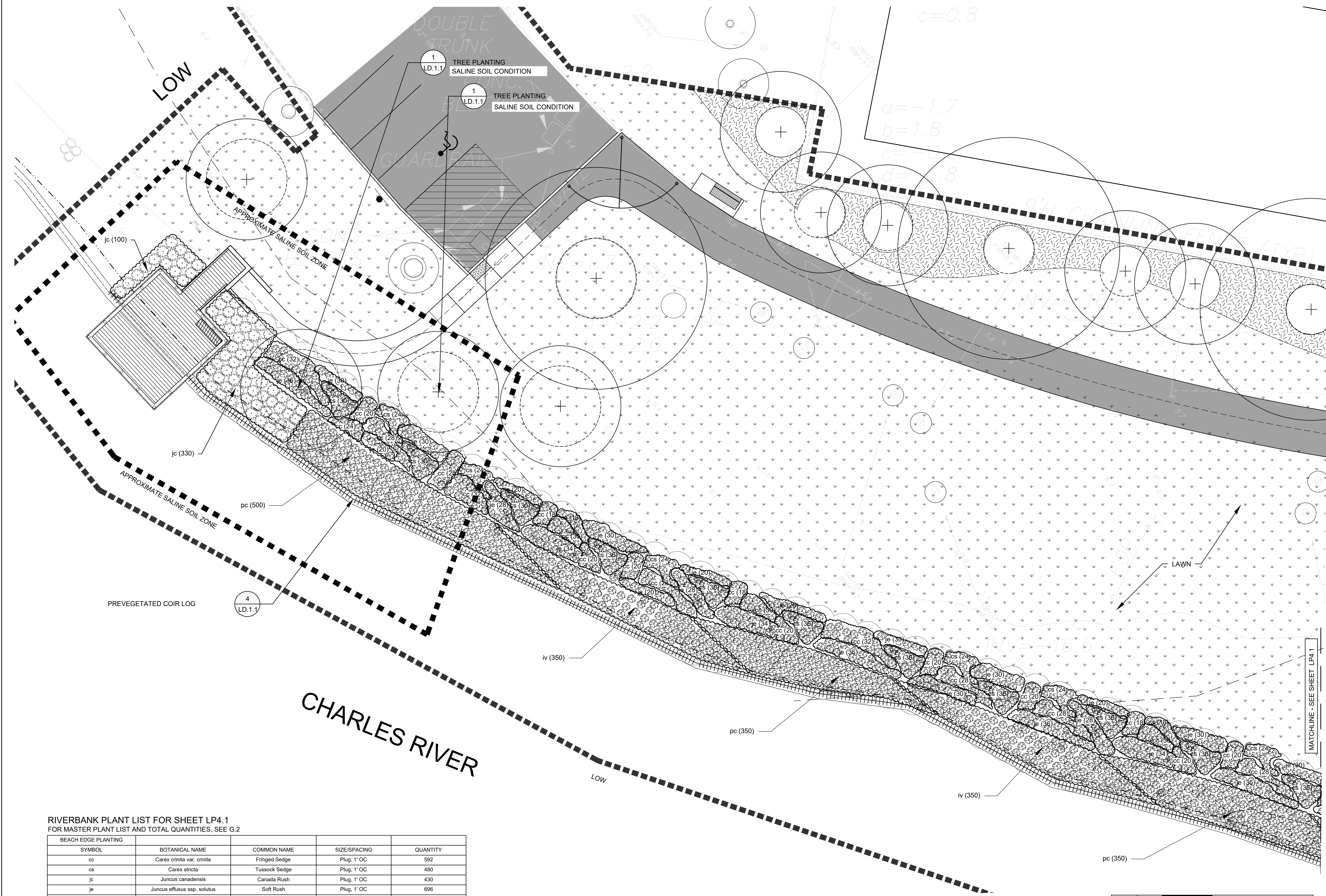


COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION

MAGAZINE BEACH IMPROVEMENTS
PHASE 2.2 GRASSY BEACH

CHARLES RIVER RESERVATION
CAMBRIDGE, MA

DESIGNED: DC, TB	<p>GRADING PLAN</p> <p>CONT. P25-3586-C5A</p> <p>ACC. 104656 x</p>	<p>SCALE: 1"=30'-0"</p> <p>DATE: 02-05-2025</p>	DRAWING NO.
CHECKED: DC			LP.2
DRAWN: TB, SB, CM			8 OF 21
CHECKED: SL			

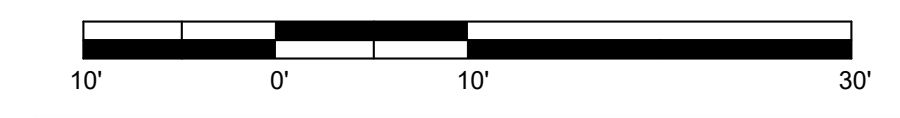


PLANTING LEGEND		
SYMBOL	DESCRIPTION	DETAIL
	SEEDED LAWN	3 LD.1.1
	TREE PLANTING	1 LD.1.1
	PANICUM VIRGATUM	2 LD.1.1
	SHORELINE PLANTING	7 LD.1.1
	PREVEGETATED COIR LOG	4 LD.1.1
	LIMIT OF WORK	

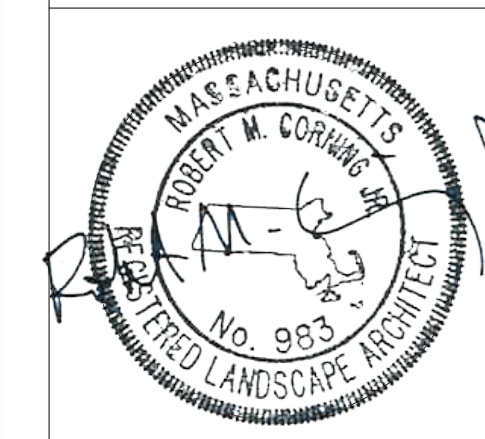
RIVERBANK PLANT LIST FOR SHEET LP4.1
FOR MASTER PLANT LIST AND TOTAL QUANTITIES, SEE G.2

BEACH EDGE PLANTING				
SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE/SPACING	QUANTITY
cc	Carex crinita var. crinita	Fringed Sedge	Plug, 1' OC	592
cs	Carex stricta	Tussock Sedge	Plug, 1' OC	480
jc	Juncus canadensis	Canada Rush	Plug, 1' OC	430
je	Juncus effusus ssp. solutus	Soft Rush	Plug, 1' OC	696
RIVER EDGE EMERGENT				
SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE/SPACING	QUANTITY
iv	Iris versicolor	Blue Flag Iris	Plug, 1' OC	700
pc	Pontederia cordata	Pickerselweed	Plug, 1' OC	1200

NOTE: LAYOUT IS DIAGRAMMATIC, FINAL LAYOUT SHALL BE APPROVED BY LANDSCAPE ARCHITECT IN THE FIELD.



REV.	DATE:	DESCRIPTION:	BY:



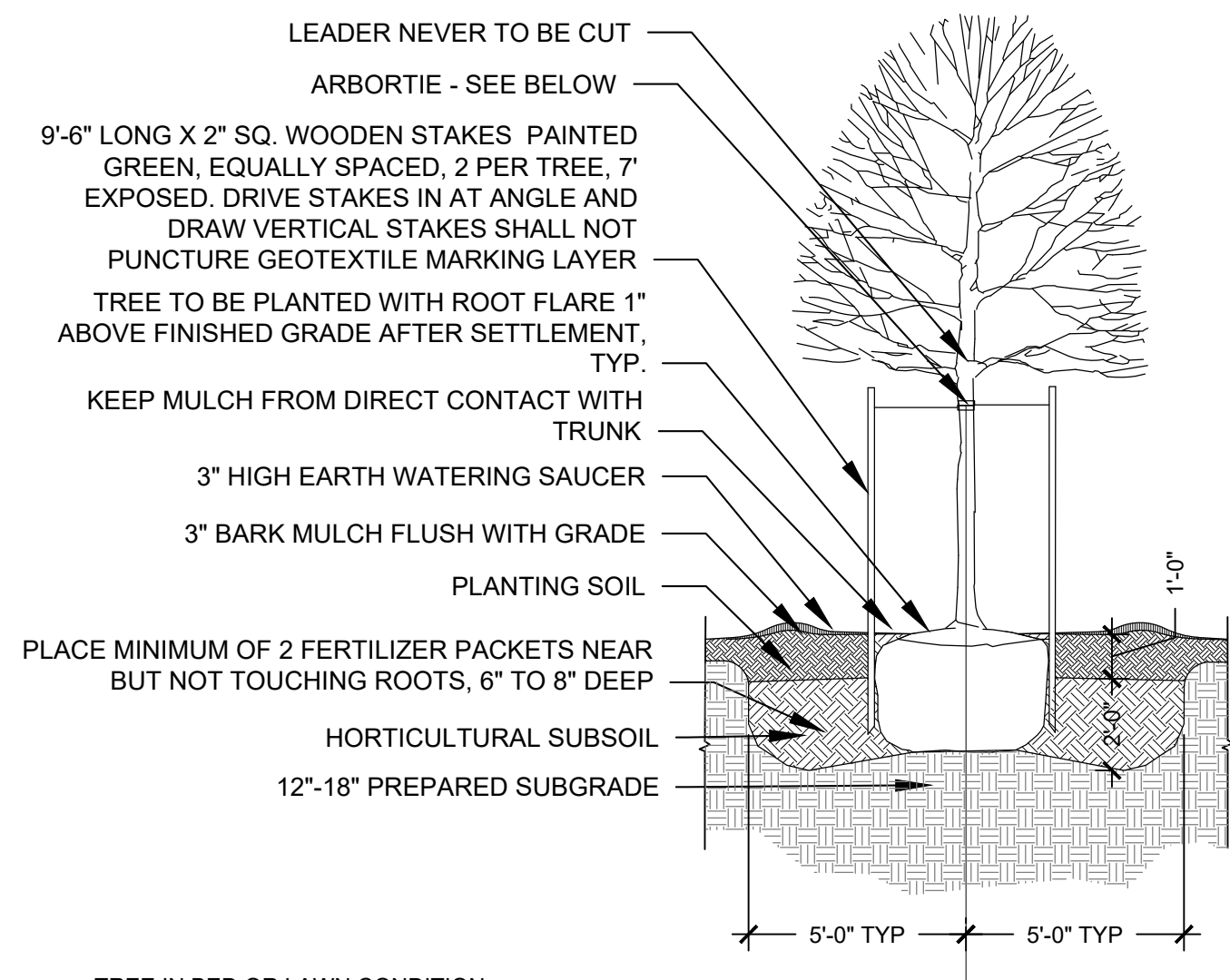
COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION

MAGAZINE BEACH IMPROVEMENTS
PHASE 2.2 GRASSY BEACH

CHARLES RIVER RESERVATION
CAMBRIDGE, MA

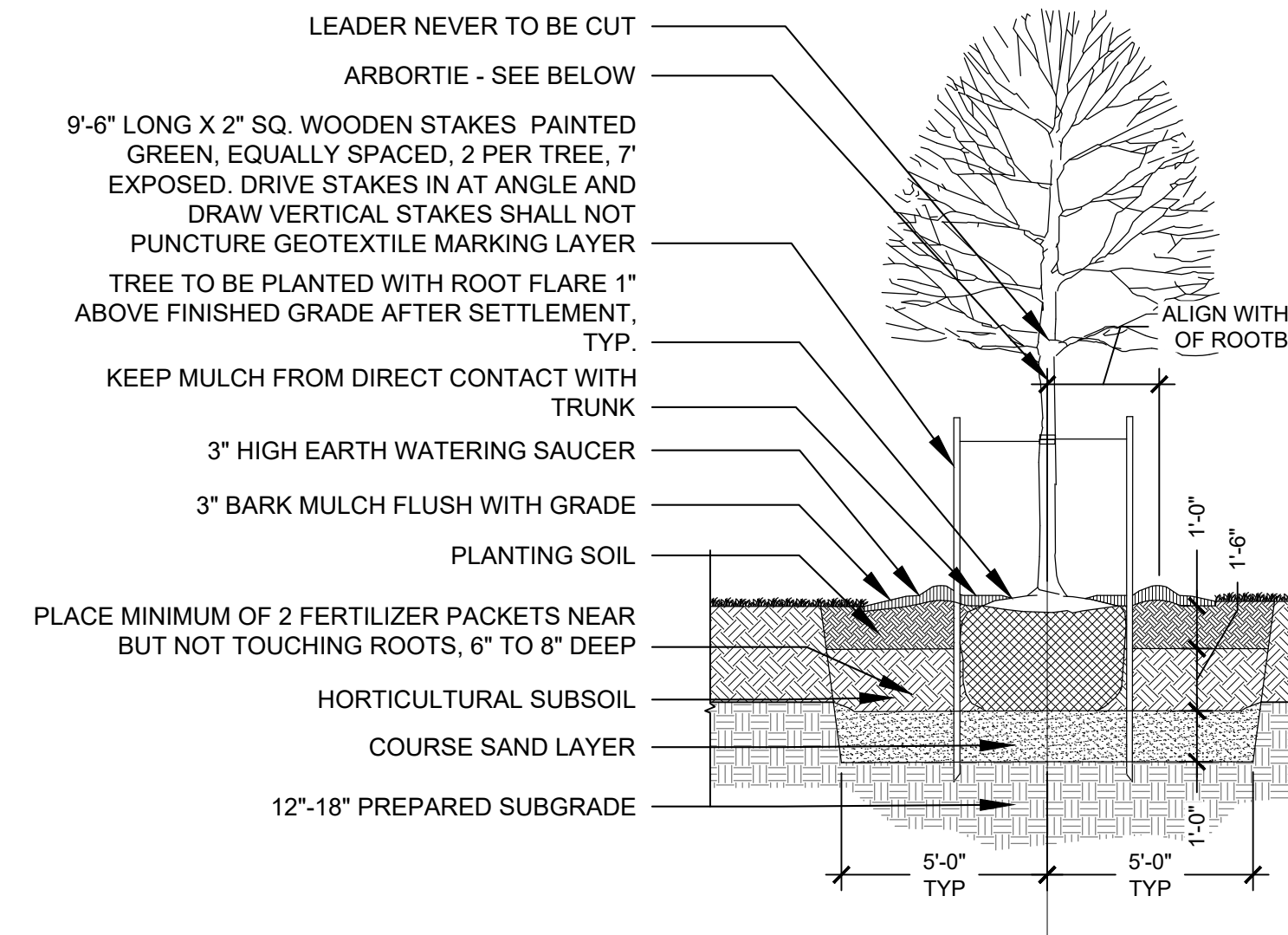
DESIGNED: DC, TB	PLANTING ENLARGEMENT PLAN	DRAWING NO. LP.4.1
CHECKED: DC		
DRAWN: TB, SB, CM	CONT. P25-3586-C5A	SCALE: 1"=10'-0"
CHECKED: SL	ACC. 104657 x	DATE: 02-05-2025

9 OF 21



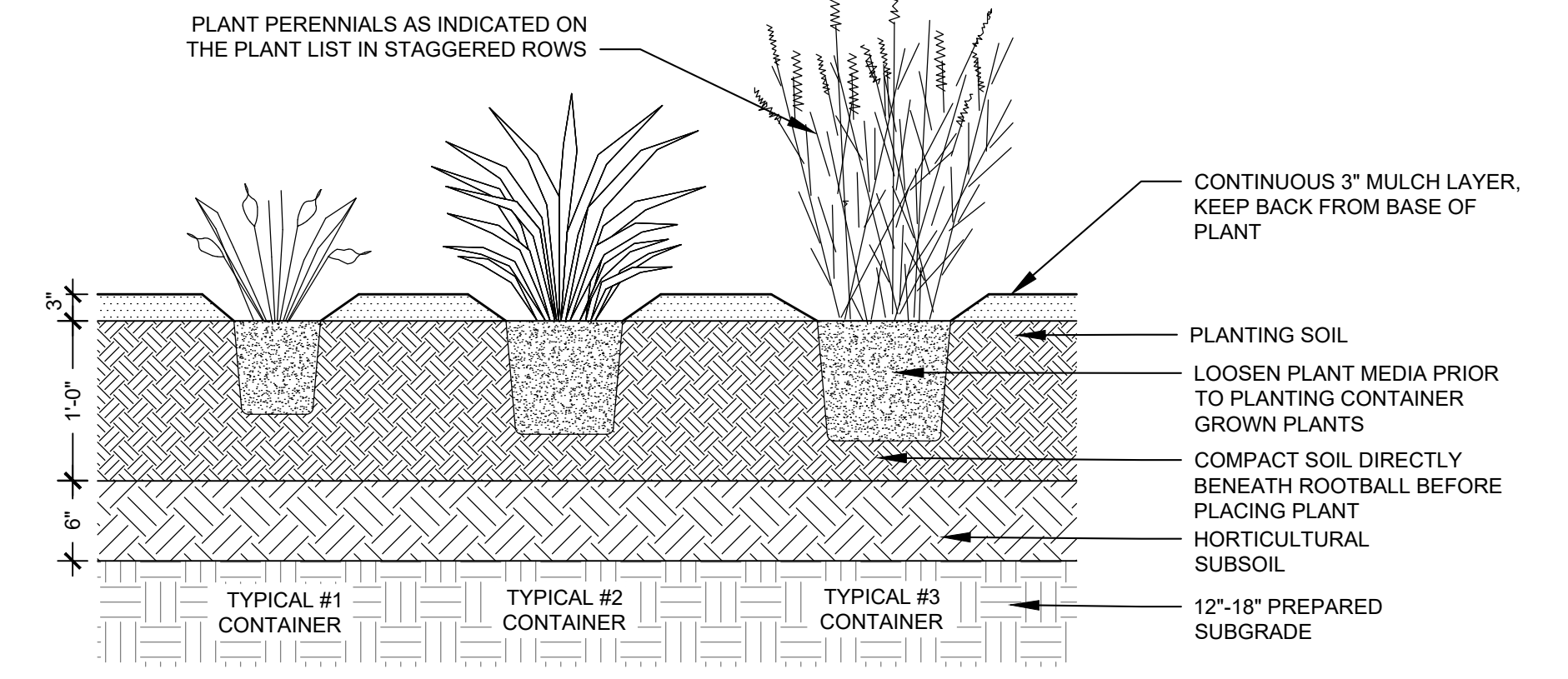
- NOTE:**
- CONTRACTOR SHALL PERFORM PERCOLATION TEST ON SUBGRADE PRIOR TO PLANTING. IF TEST IS NOT PASSING, CONTRACTOR SHALL LOOSEN FILLS AND BORROW TO LEVELS AS DETERMINED BY THE RESIDENT ENGINEER.
 - REMOVE ROPE, WIRE AND BURLAP ENTIRELY. DISPOSE OF DEBRIS LEGALLY OFF-SITE.
 - CONTRACTOR SHALL WATER TREE COMPLETELY WHEN TREE IS HALF BACKFILLED, AGAIN WHEN COMPLETELY BACKFILLED, AND AGAIN WITHIN 24 HOURS AFTER PLANTING.
 - SEALS SHALL BE LEFT ON TREES & PLANTS UNTIL END OF GUARANTEE PERIOD.

TREE IN BED OR LAWN CONDITION



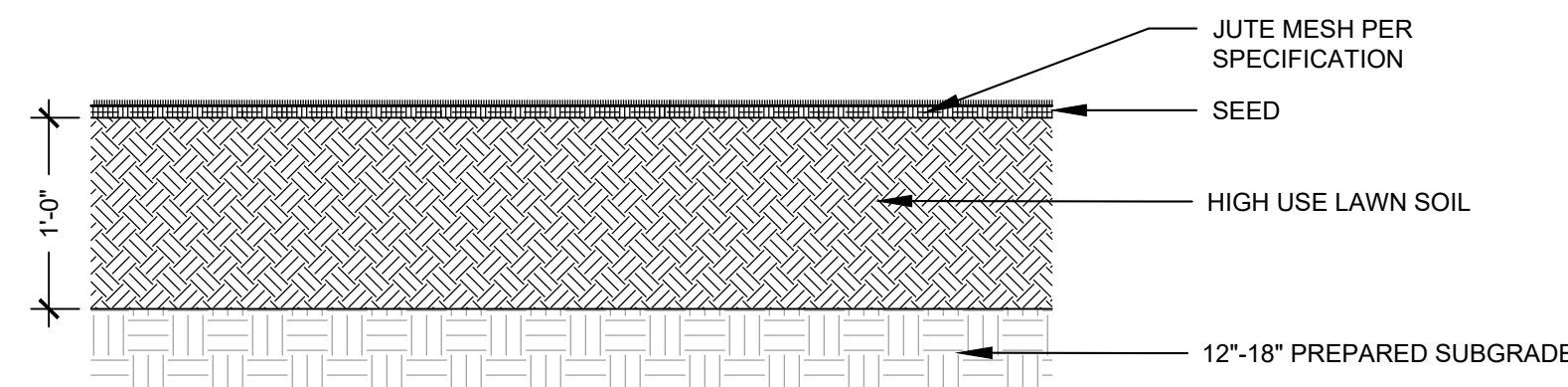
- NOTE:**
- CONTRACTOR SHALL PERFORM PERCOLATION TEST ON SUBGRADE PRIOR TO PLANTING. IF TEST IS NOT PASSING, CONTRACTOR SHALL LOOSEN FILLS AND BORROW TO LEVELS AS DETERMINED BY THE RESIDENT ENGINEER.
 - REMOVE ROPE, WIRE AND BURLAP ENTIRELY. DISPOSE OF DEBRIS LEGALLY OFF-SITE.
 - CONTRACTOR SHALL WATER TREE COMPLETELY WHEN TREE IS HALF BACKFILLED, AGAIN WHEN COMPLETELY BACKFILLED, AND AGAIN WITHIN 24 HOURS AFTER PLANTING.
 - SEALS SHALL BE LEFT ON TREES & PLANTS UNTIL END OF GUARANTEE PERIOD.

TREE IN SALINE CONDITION



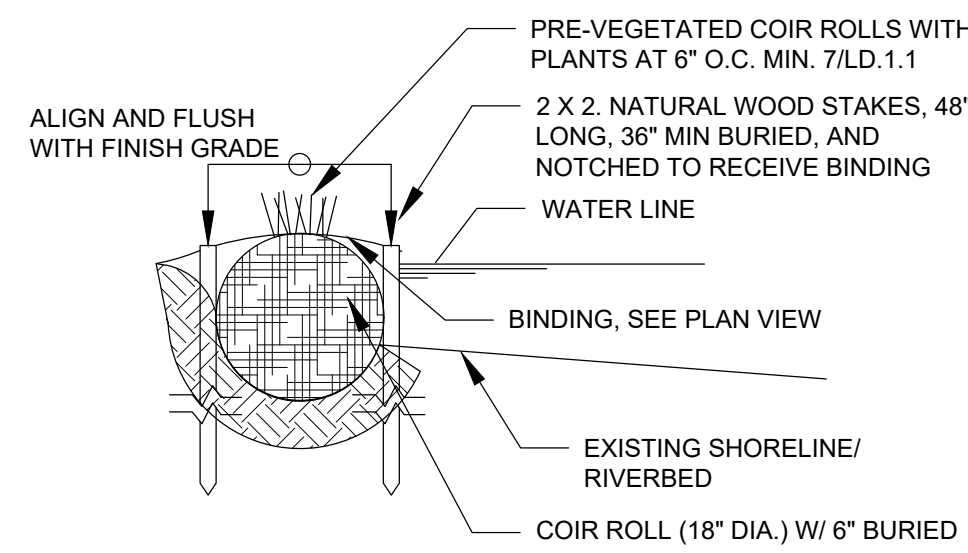
2 PANICUM VIRGATUM
1" = 1'-0"

1 TREE PLANTING
1/4" = 1'-0"

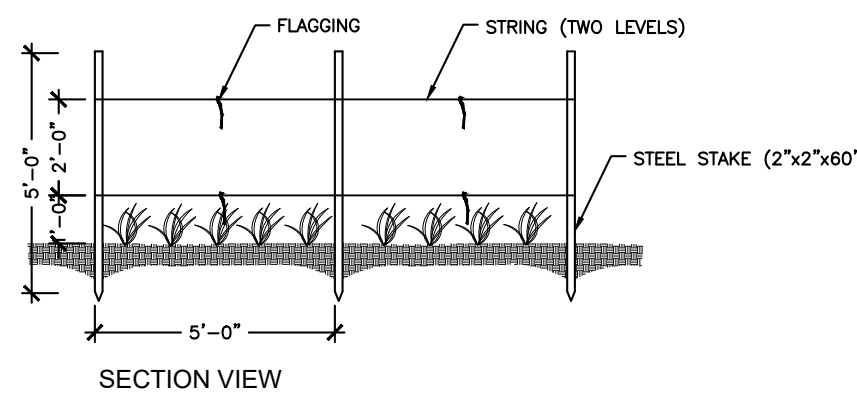
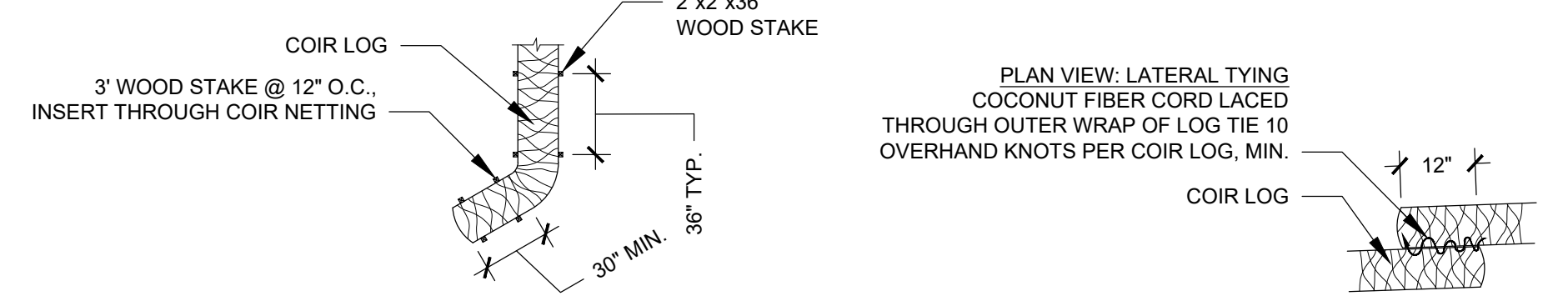
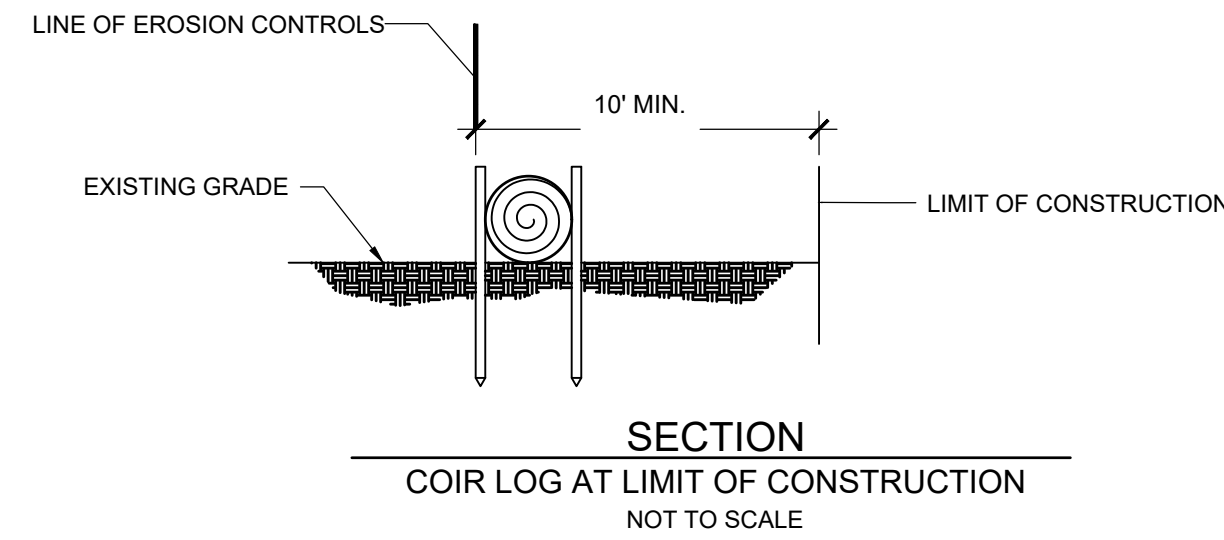


- NOTES:**
- SEE PLANS FOR SEED TYPE. TYPE IS LAWN UNLESS OTHERWISE SPECIFIED.
 - SOIL SHALL BE DELIVERED PER CONSTRUCTION SCHEDULE OUTLINED BY CONTRACTOR AND RESIDENT ENGINEER ON AS-NEEDED BASIS AND SHALL NOT BE STOCKPILED ON-SITE IN CASE OF FLOODING

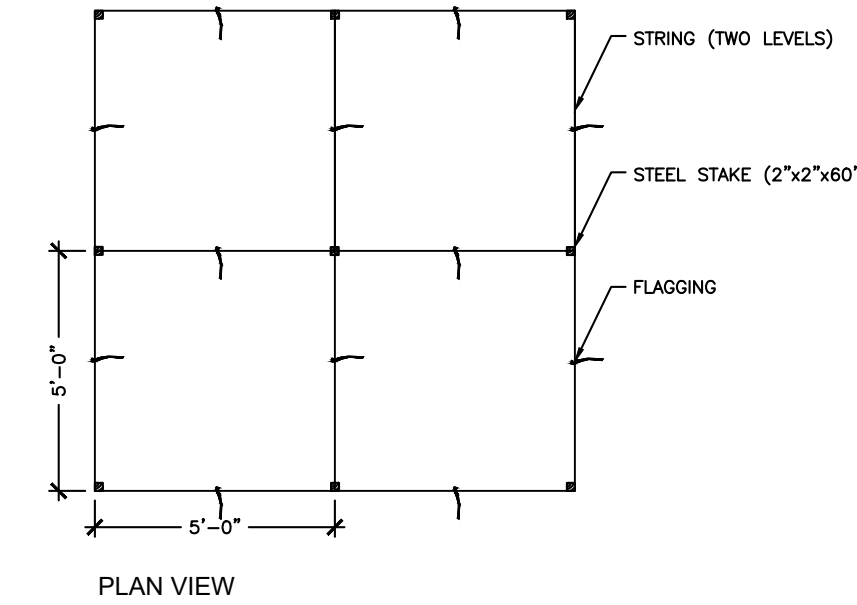
3 SEEDED LAWN
1" = 1'-0"



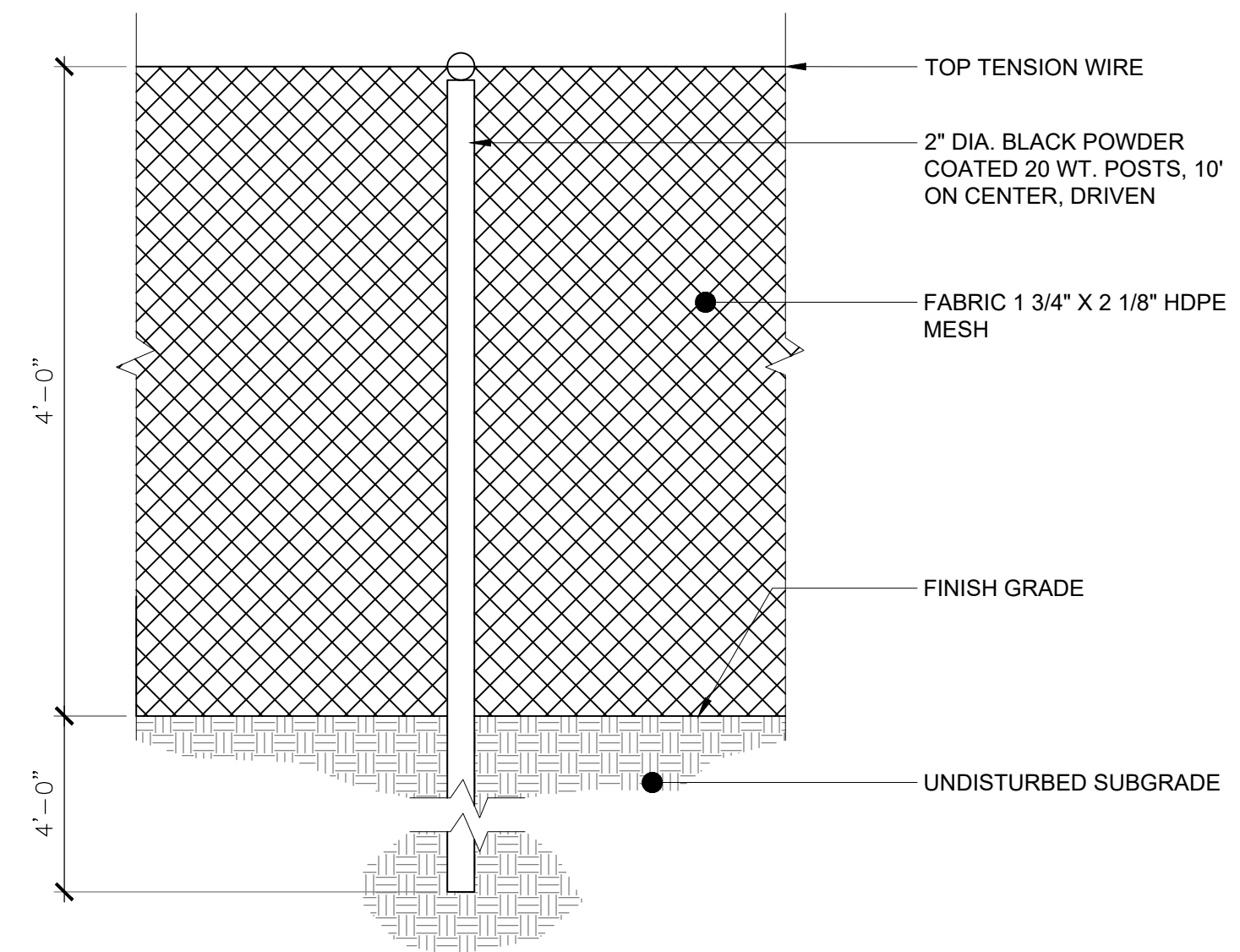
4 PREVEGETATED COIR LOG
3/4" = 1'-0"



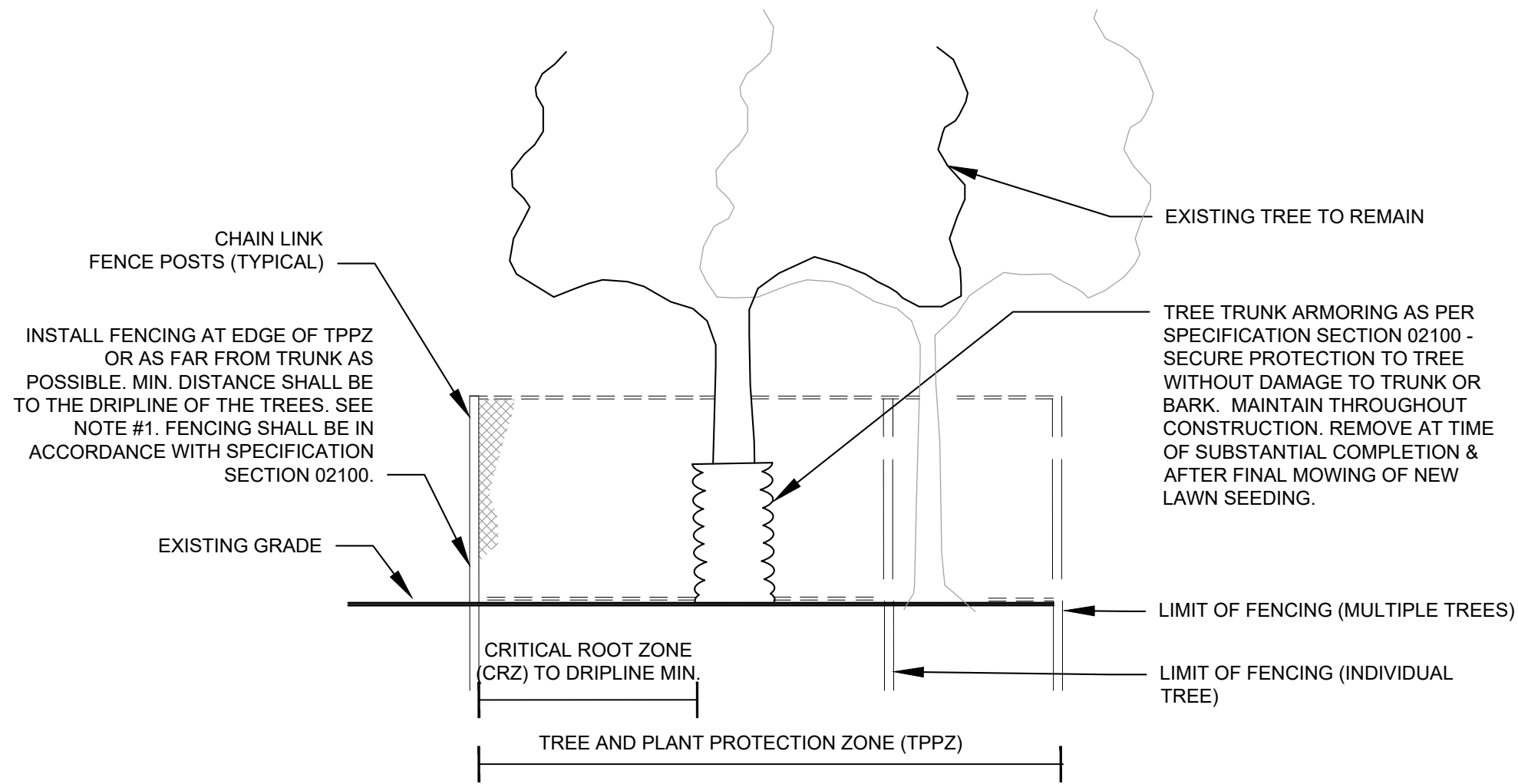
NOTE: Perimeter of areas to be protected shall be staked with steel stakes and protected with 1" wire mesh secured to steel stakes



6 GEESE PROTECTION FENCING
NTS

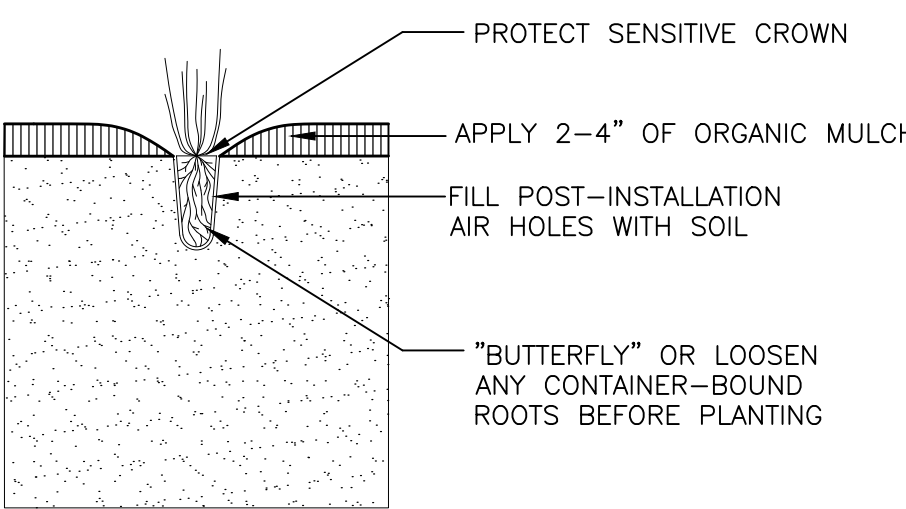


8 LONG TERM PLANT ESTABLISHMENT FENCE
1" = 1'-0"



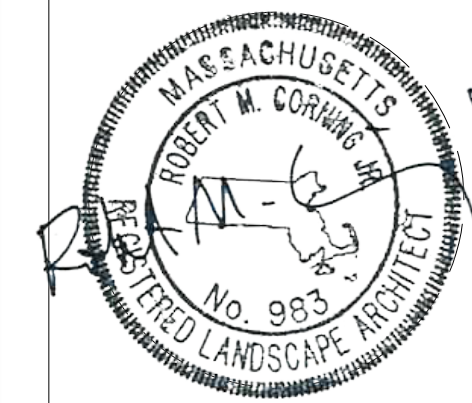
- NOTES:**
- FENCING SHALL BE LOCATED AT THE EDGE OF THE TREE & PLANT PROTECTION ZONE (TPPZ), OR AS INDICATED ON PLANS AND IN ACCORDANCE WITH SPECIFICATION SECTION 02100. GROUP TREES WITHIN FENCE WHERE PROJECT WORK ALLOWS.
 - ALL FENCING LAYOUT SHALL BE APPROVED IN FIELD BY LANDSCAPE ARCHITECT.
 - WHERE WORK WILL OCCUR WITHIN THE TPPZ, CONTRACTOR MAY USE RE-LOCATABLE CHAIN LINK FENCE ON CONCRETE BLOCKS.
 - WHEN TRENCHING FOR SITE IMPROVEMENTS SUCH AS PAVING, FOOTINGS, OR EDGING; OR IN THE EVENT OF OTHER IMPACTS TO TPPZ, CONTRACTOR SHALL HAND EXCAVATE OR AIR EXCAVATE UNDER SUPERVISION OF THE ARBORIST IN ACCORDANCE WITH SPECIFICATION SECTION 02100.

5 TREE PROTECTION
1/8" = 1'-0"

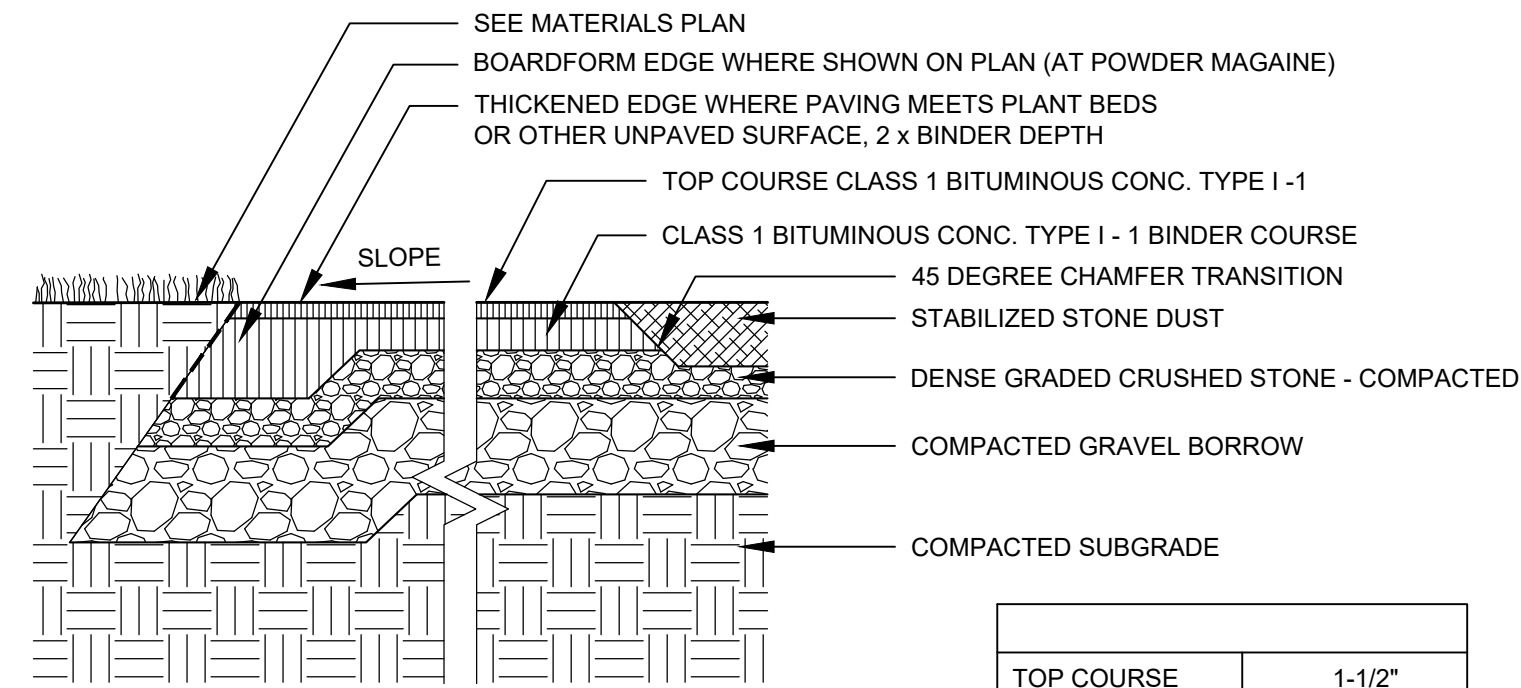


7 SHORELINE PLANTING
1" = 1'-0"

REV.	DATE:	DESCRIPTION:	BY:



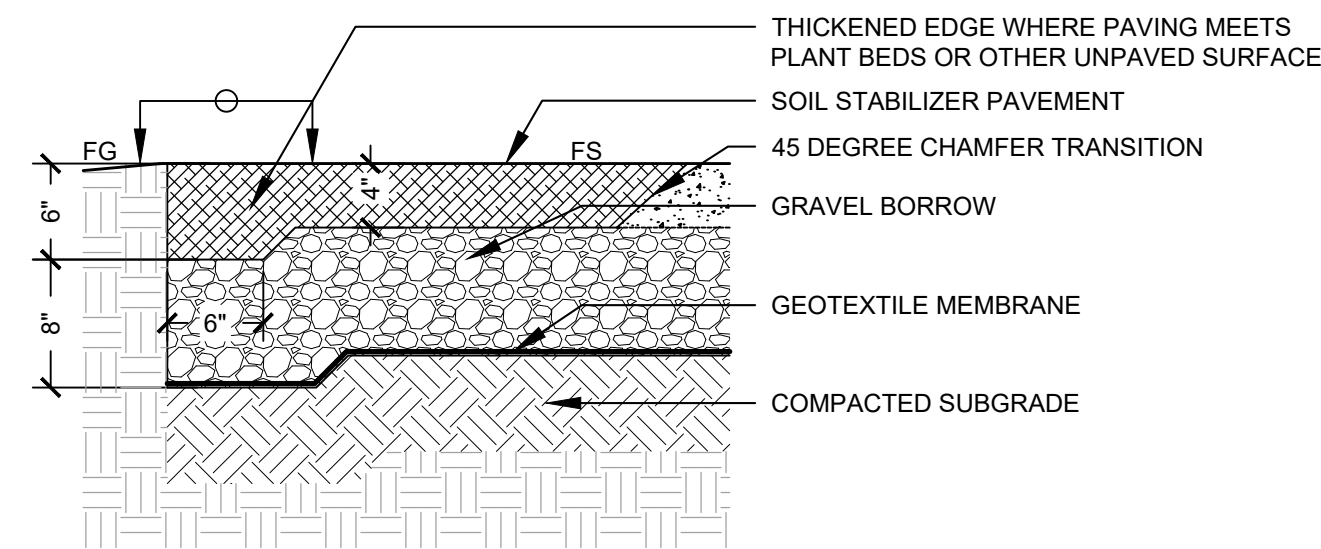
COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION		
MAGAZINE BEACH IMPROVEMENTS PHASE 2.2 - GRASSY BEACH		
CHARLES RIVER RESERVATION CAMBRIDGE, MA		
DESIGNED: SL	LANDSCAPE PLANTING DETAILS	DRAWING NO. LD.1.1
CHECKED: BC	CONT. P25-3586-C5A	SCALE: AS NOTED
DRAWN: SL, LG	ACC. 104659 x	DATE: 02-05-2025
CHECKED: BC, SL		11 OF 21



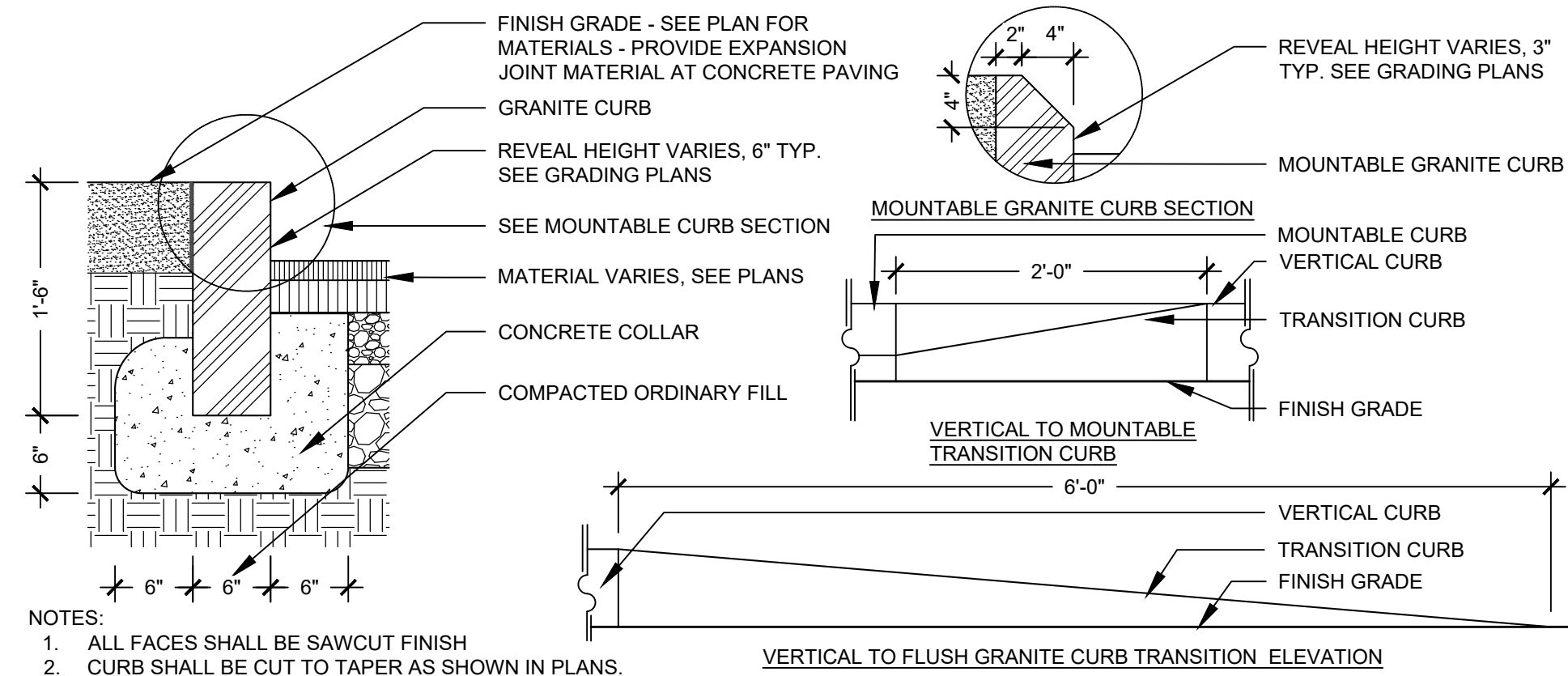
NOTES:
1. ALL PAVING SHALL SLOPE TO DRAIN, SEE GRADING PLANS

TOP COURSE	1-1/2"
BINDER COURSE	3"
DENSE GRADED	3"
GRAVEL BORROW	8"

1 BITUMINOUS CONCRETE PAVING
1" = 1'-0"



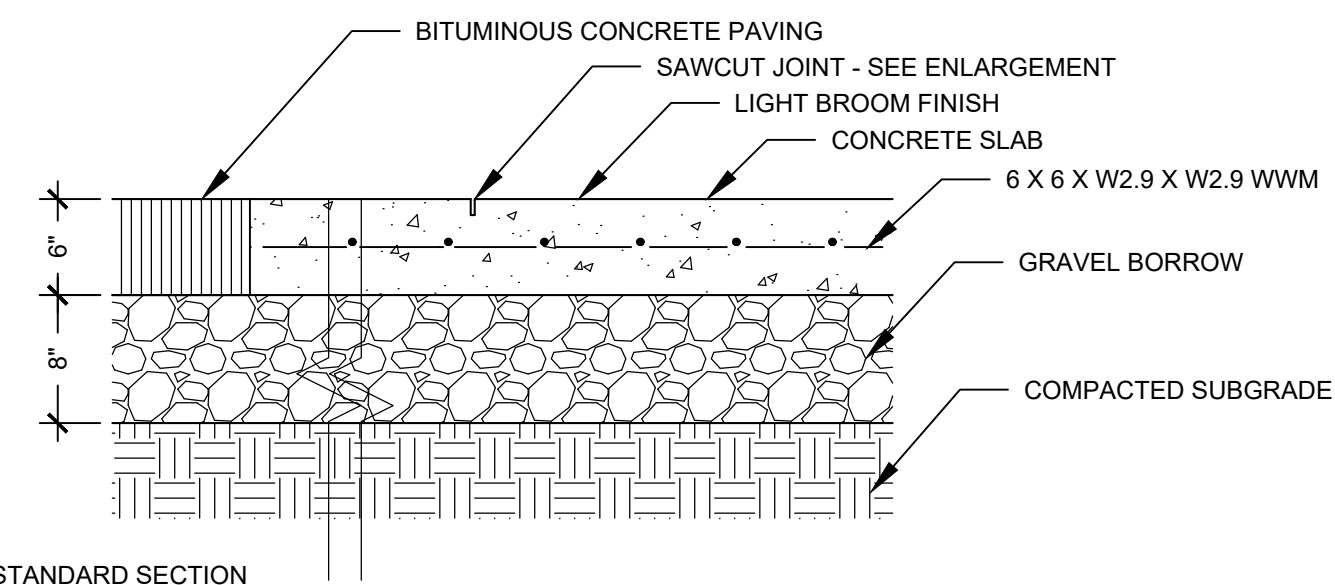
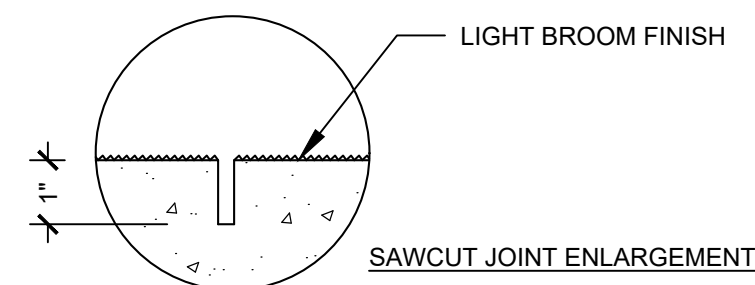
2 STABILIZED STONE DUST
1" = 1'-0"



NOTES:
1. ALL FACES SHALL BE SAWCUT FINISH
2. CURB SHALL BE CUT TO TAPER AS SHOWN IN PLANS.
3. SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION

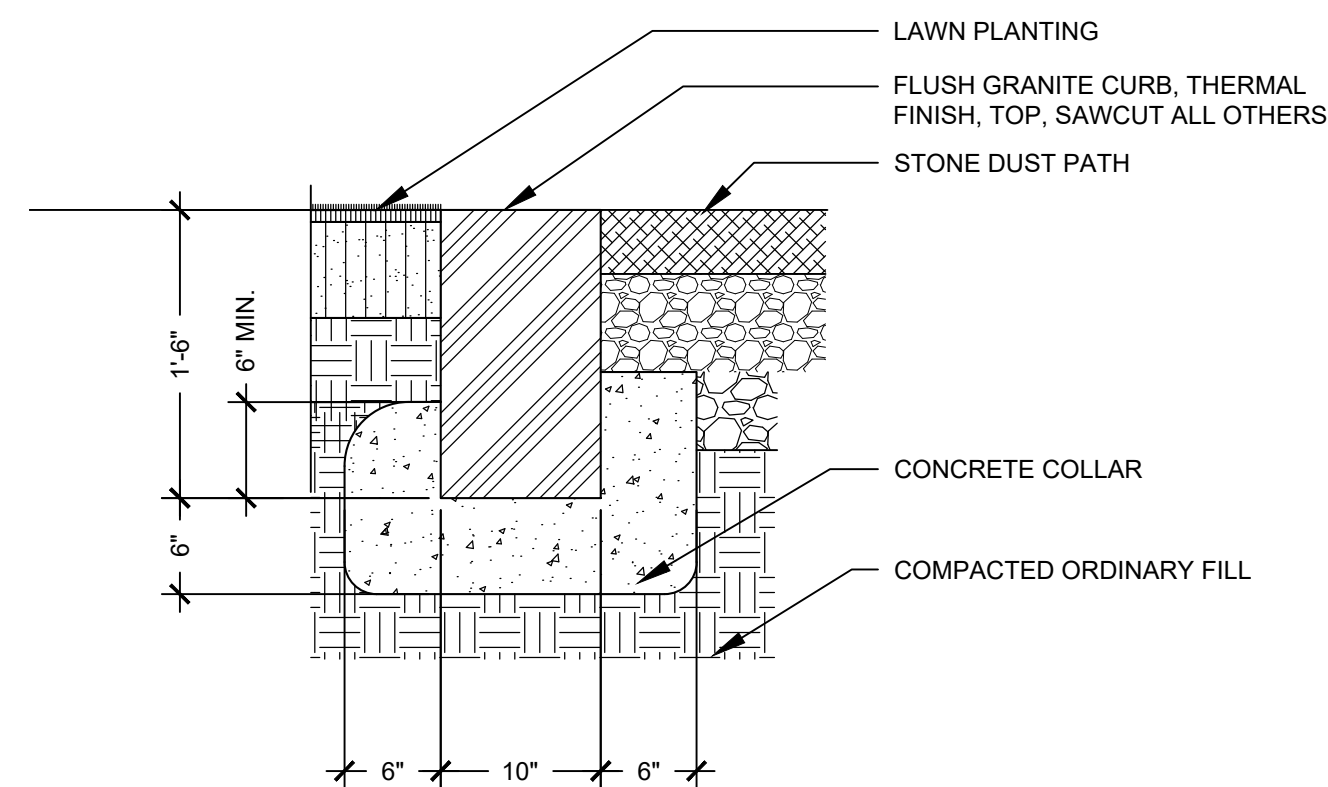
3 GRANITE CURB
1" = 1'-0"

4 NOT USED



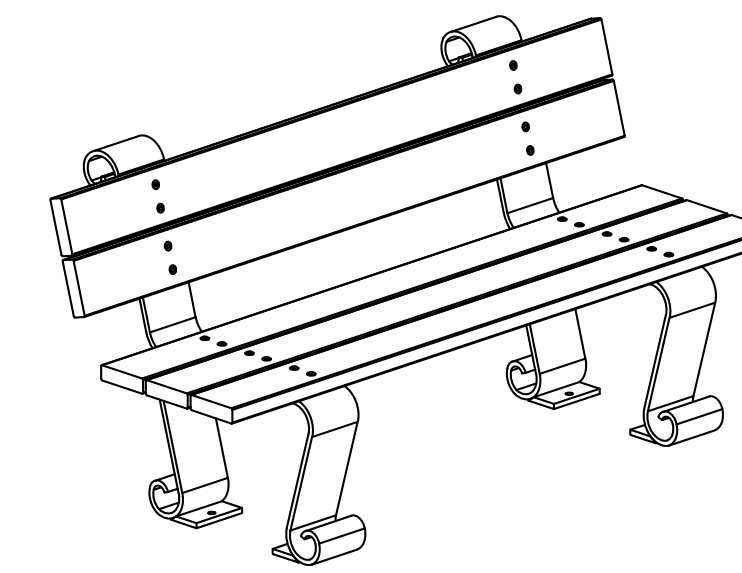
STANDARD SECTION

5 CONCRETE PAVEMENT
1" = 1'-0"

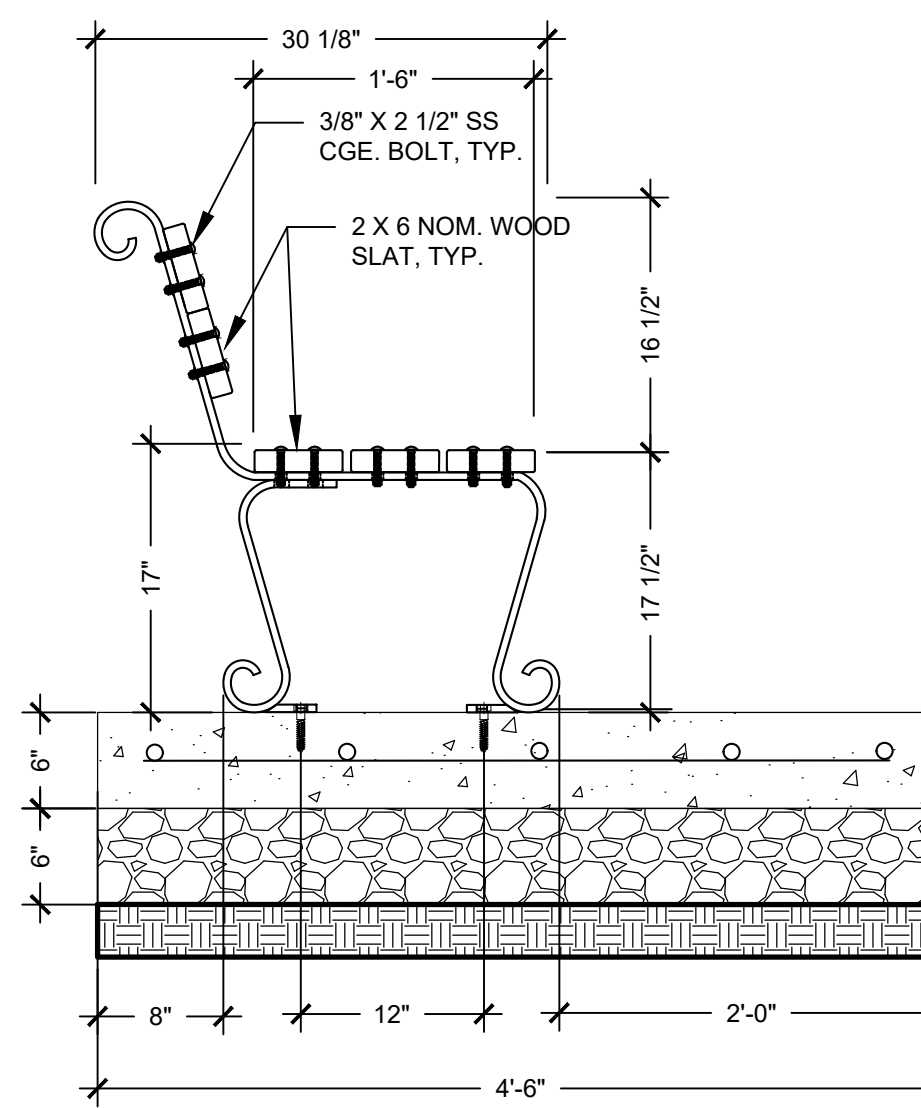


NOTES:
1. SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION

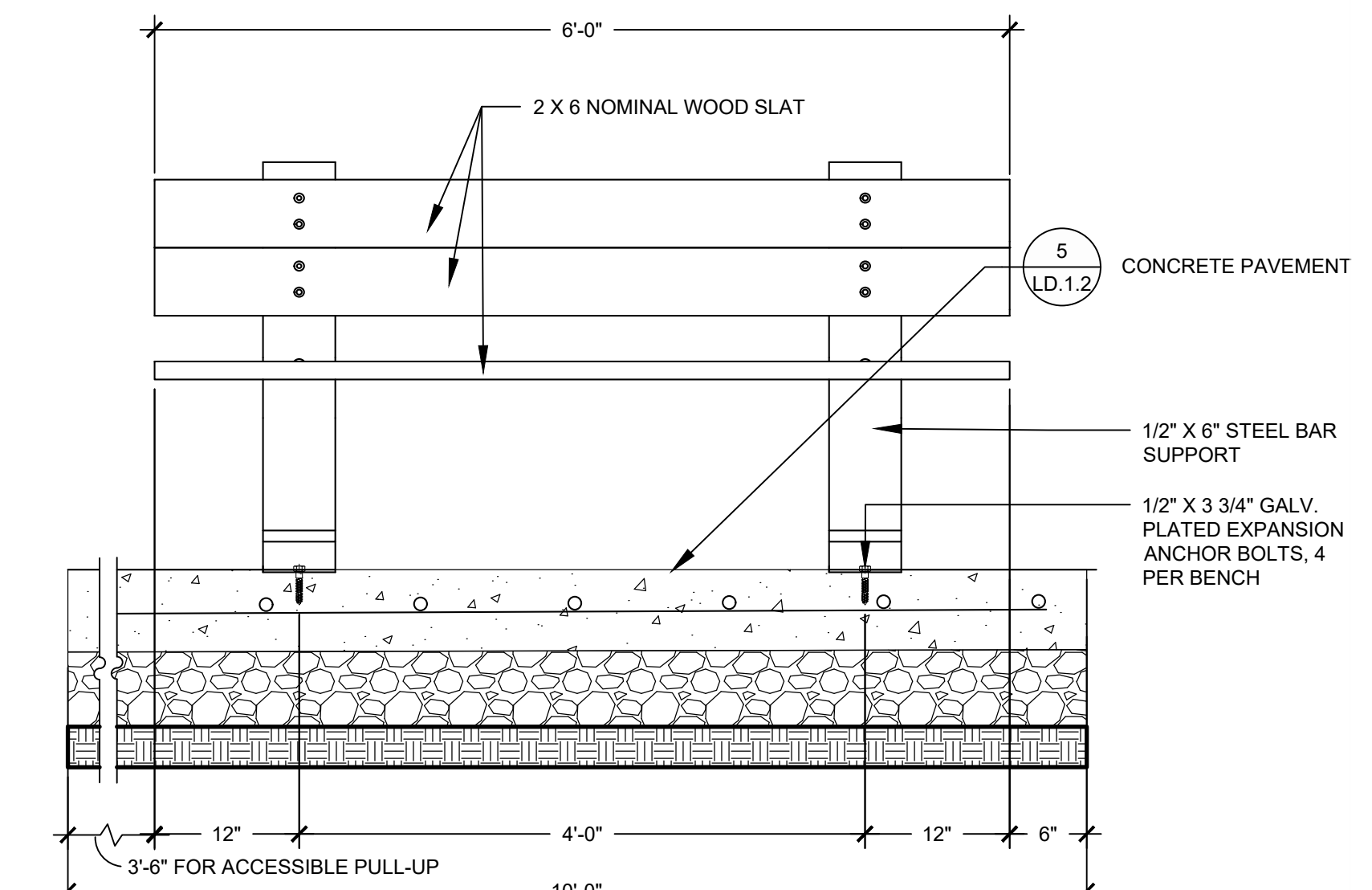
6 FLUSH GRANITE CURB
1" = 1'-0"



ILLUSTRATIVE IMAGE - NTS



SIDE SECTION/ELEVATION

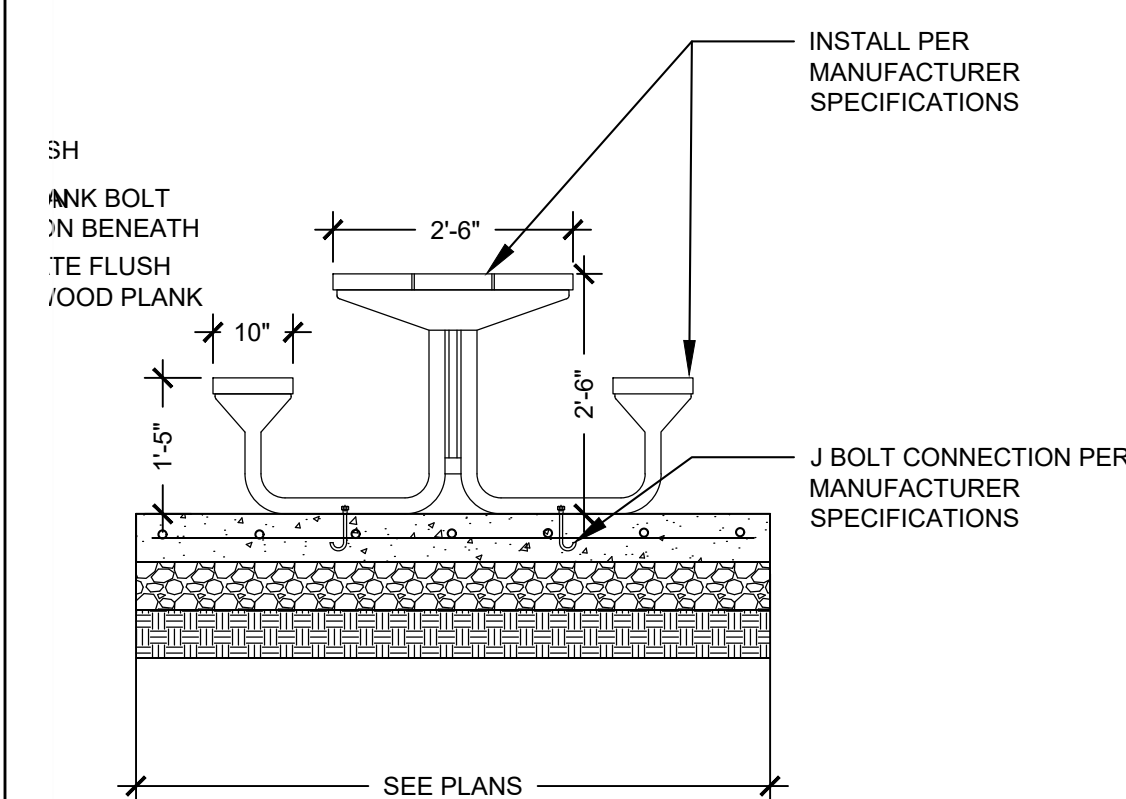


FRONT SECTION/ELEVATION

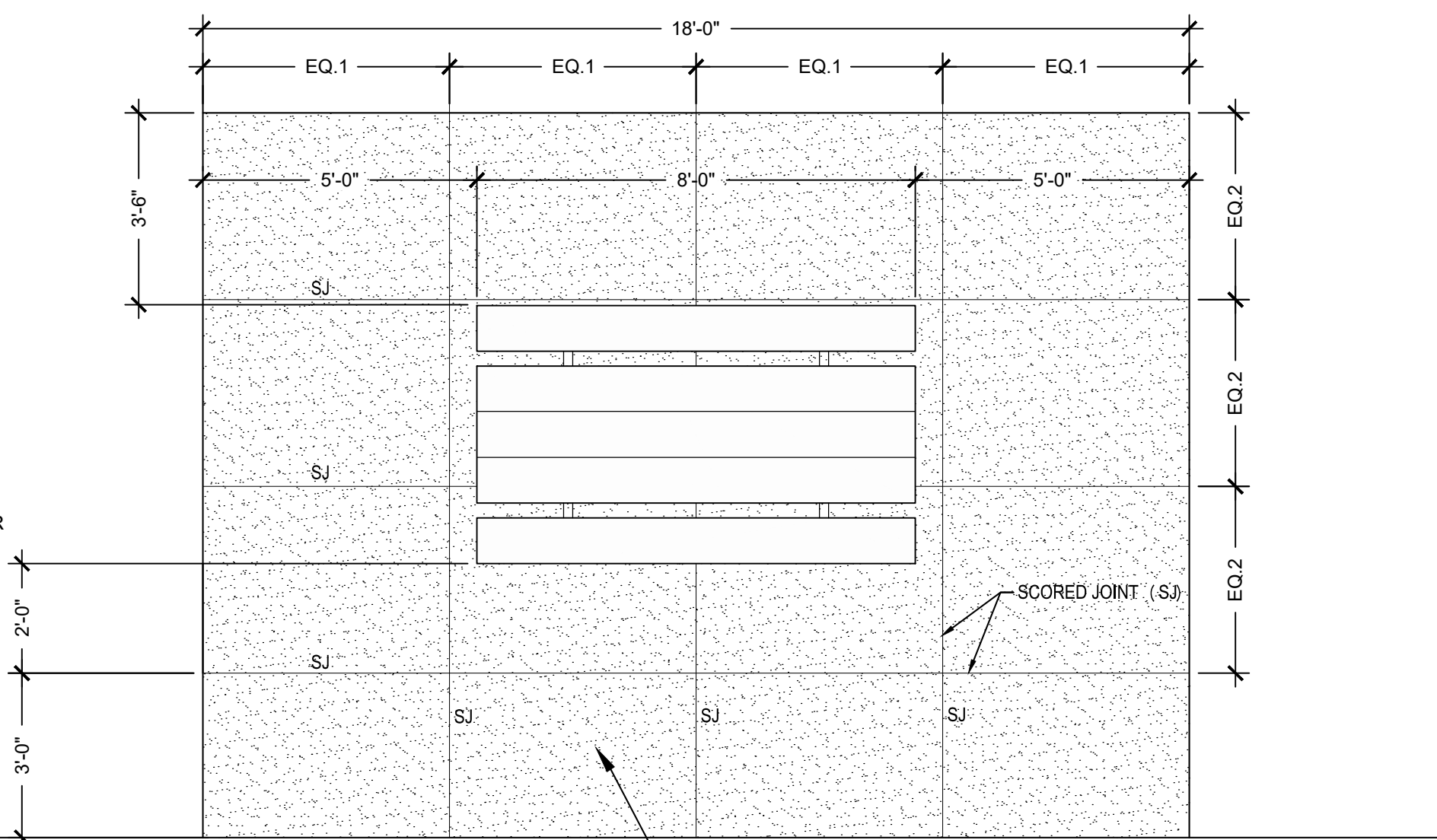
NOTES:
1. ALL HARDWARE FOR BENCH SHALL BE STAINLESS STEEL.
2. ALL STEEL PARTS OF BENCHES SHALL BE HOT DIPPED GALVANIZED, PRIMED AND PAINTED HUNTER GREEN TO MATCH EXISTING BENCHES IN VICINITY AND ACCORDING TO SPECIFICATIONS.
3. SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION

8 BENCH
1" = 1'-0"

NOTE:
1. ALL HARDWARE FOR PICNIC TABLES SHALL BE STAINLESS STEEL.
2. ALL STEEL SUPPORTS AND HARDWARE SHALL BE HOT DIPPED GALVANIZED, PRIMED AND PAINTED DCR GREEN TO MATCH EXISTING FURNISHINGS ACCORDING TO SPECIFICATIONS.
3. SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION

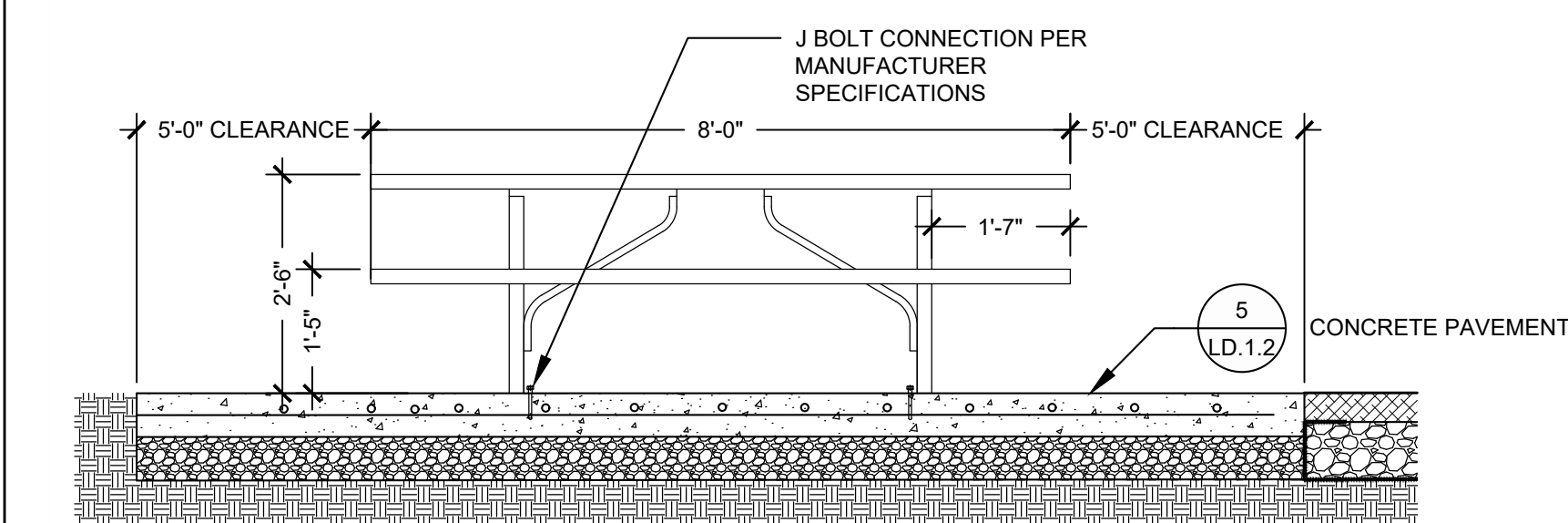


END ELEVATION



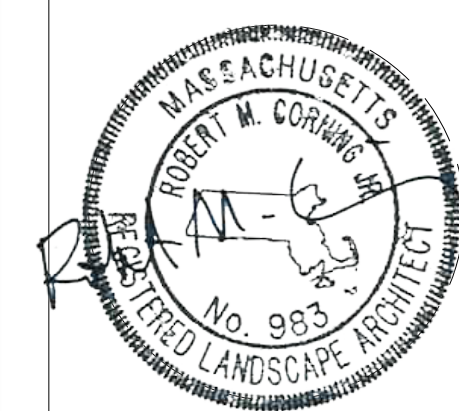
PICNIC AREA LAYOUT - 3/8" = 1'-0"

5 LD.1.2 CONCRETE PAVEMENT

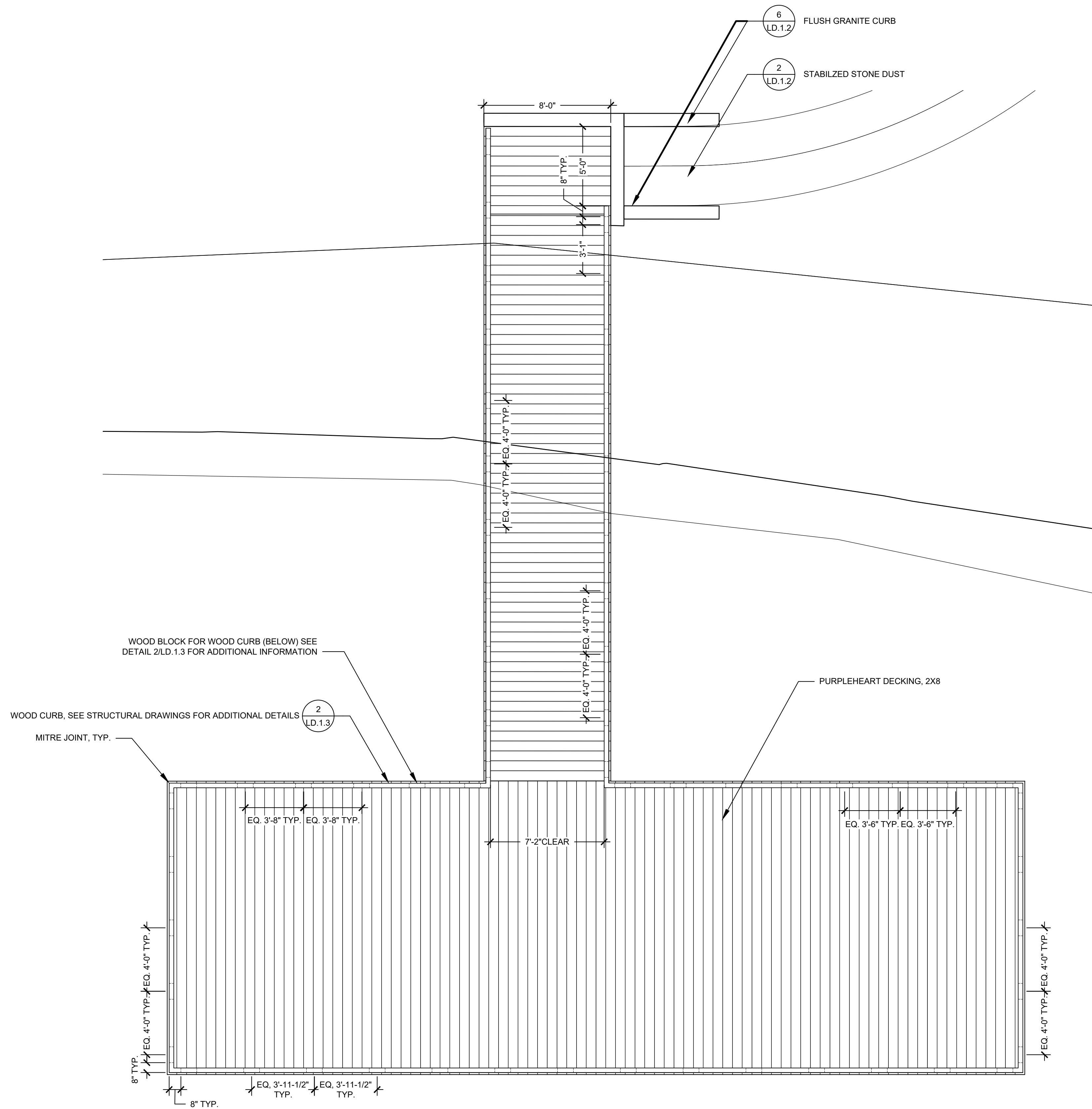


7 PICNIC TABLE
1/2" = 1'-0" OR AS SHOWN

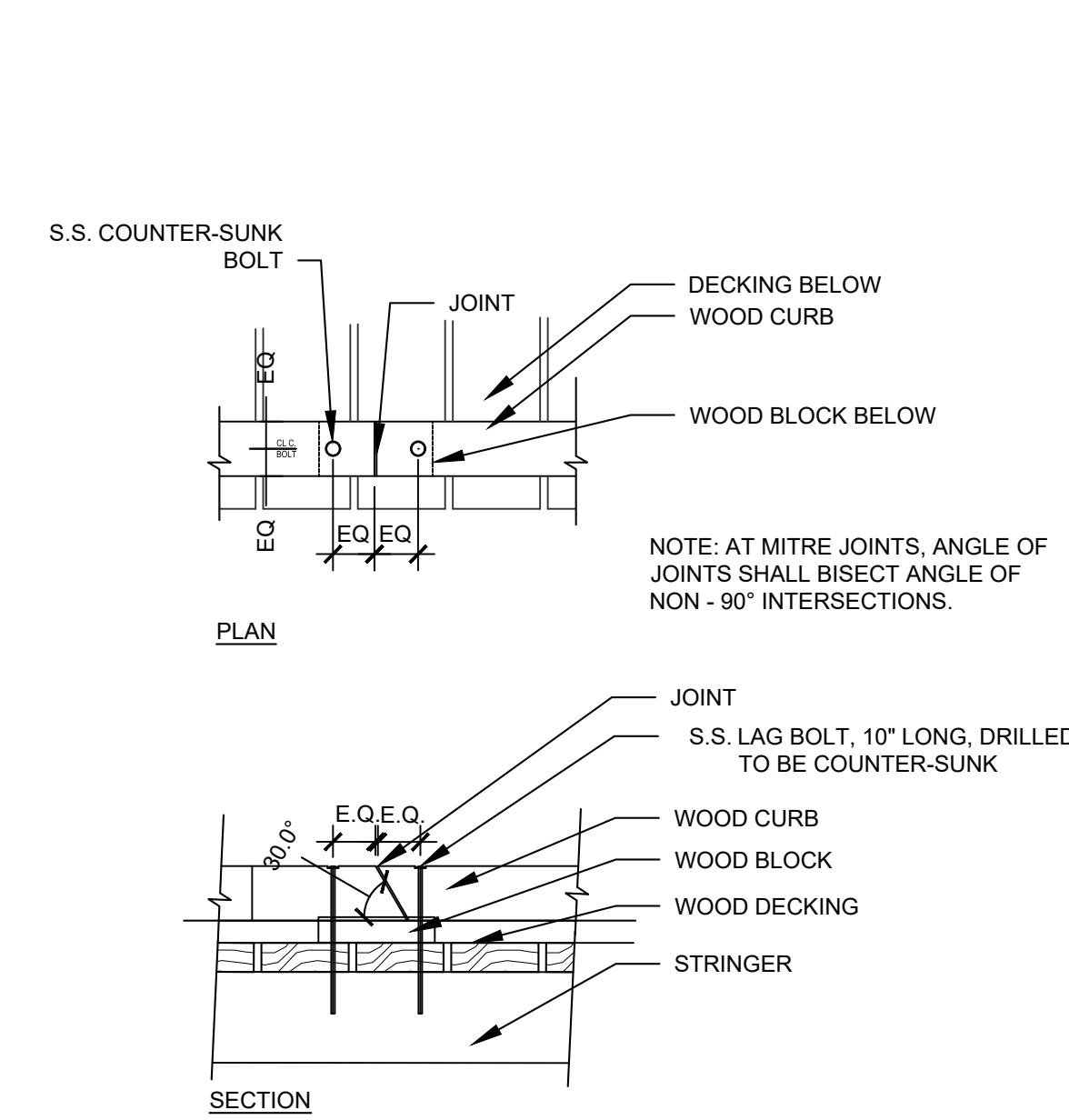
REV.	DATE:	DESCRIPTION:	BY:



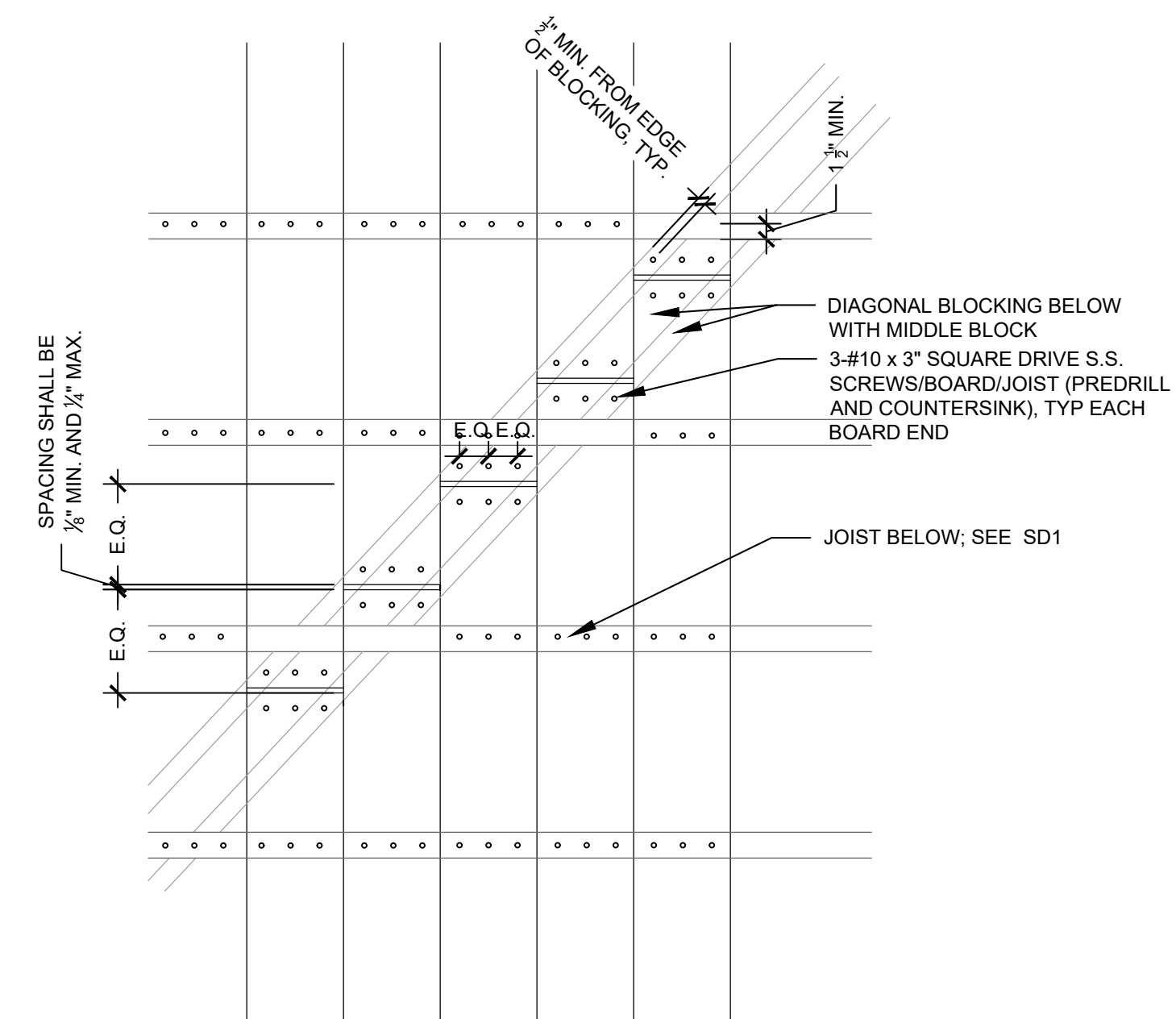
COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION		
MAGAZINE BEACH IMPROVEMENTS PHASE 2.2 - GRASSY BEACH		
CHARLES RIVER RESERVATION CAMBRIDGE, MA		
DESIGNED: SL	LANDSCAPE PAVING & FURNISHING DETAILS	DRAWING NO.
CHECKED: BC		LD.1.2
DRAWN: SL, LG		SCALE: AS NOTED
CHECKED: BC, SL		DATE: 02-05-2025
ACC: 104660 x		12 OF 21



1 DOCK ENLARGEMENT PLAN
1/4" = 1'-0"

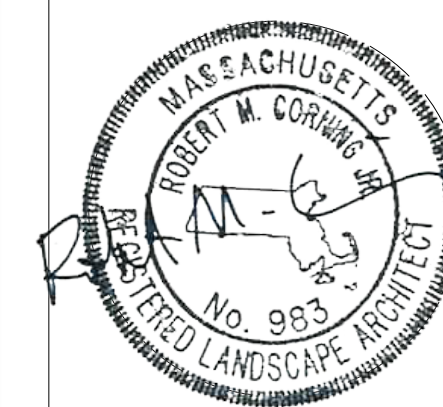


2 WOOD CURB
1" = 1'-0"

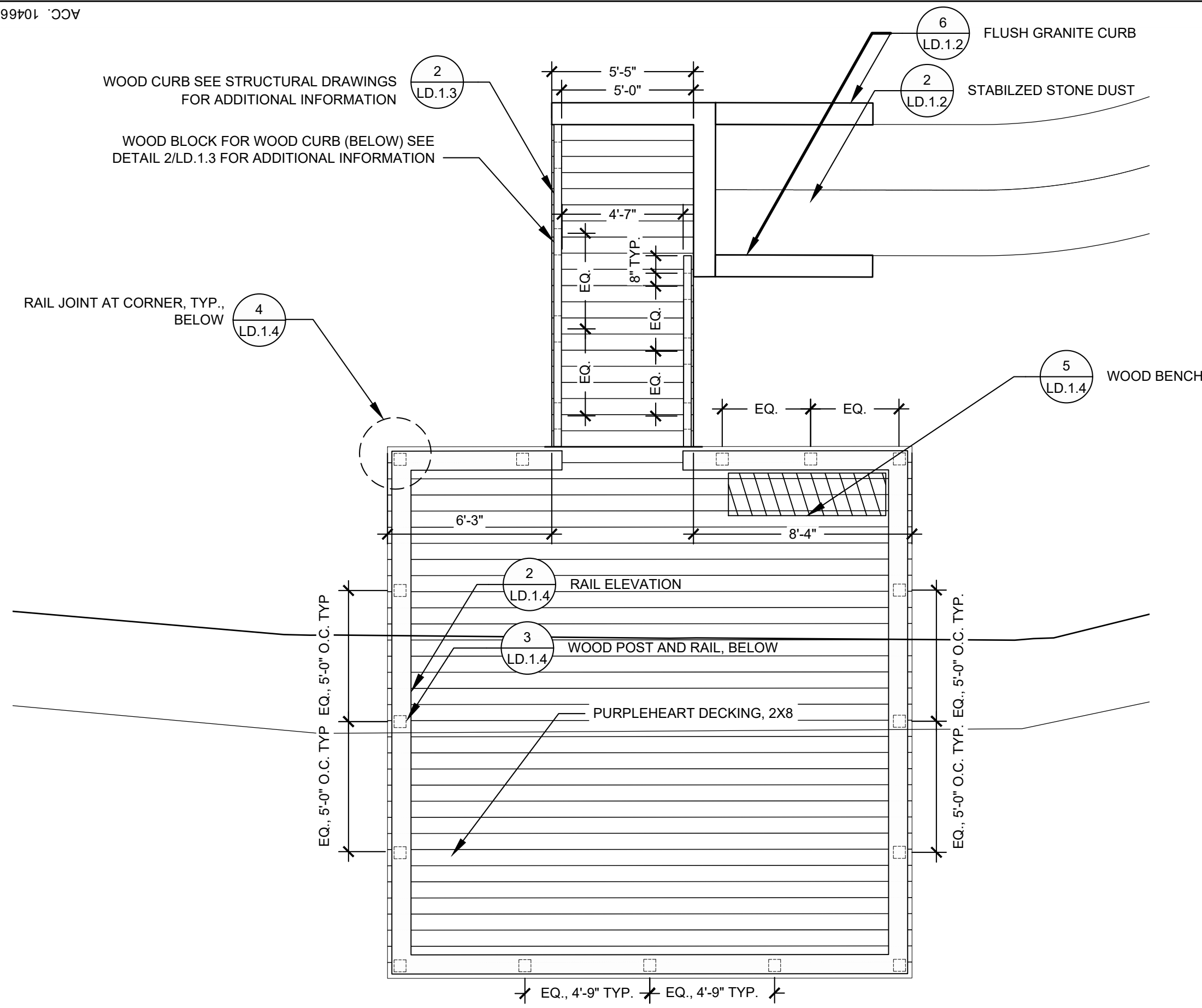


4 WOOD DECKING JOINT ENLARGEMENT
1" = 1'-0"

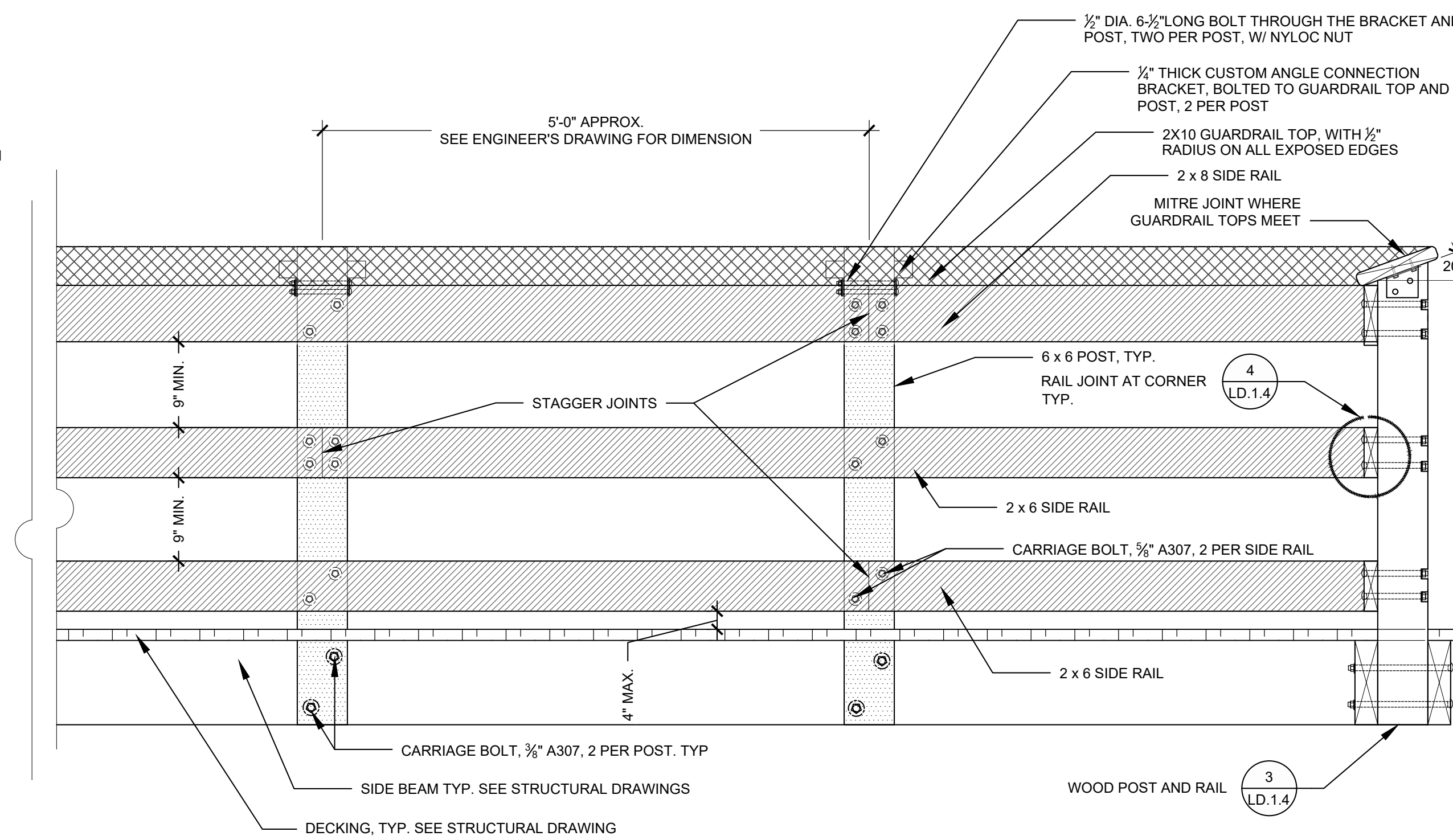
REV.	DATE:	DESCRIPTION:	BY:



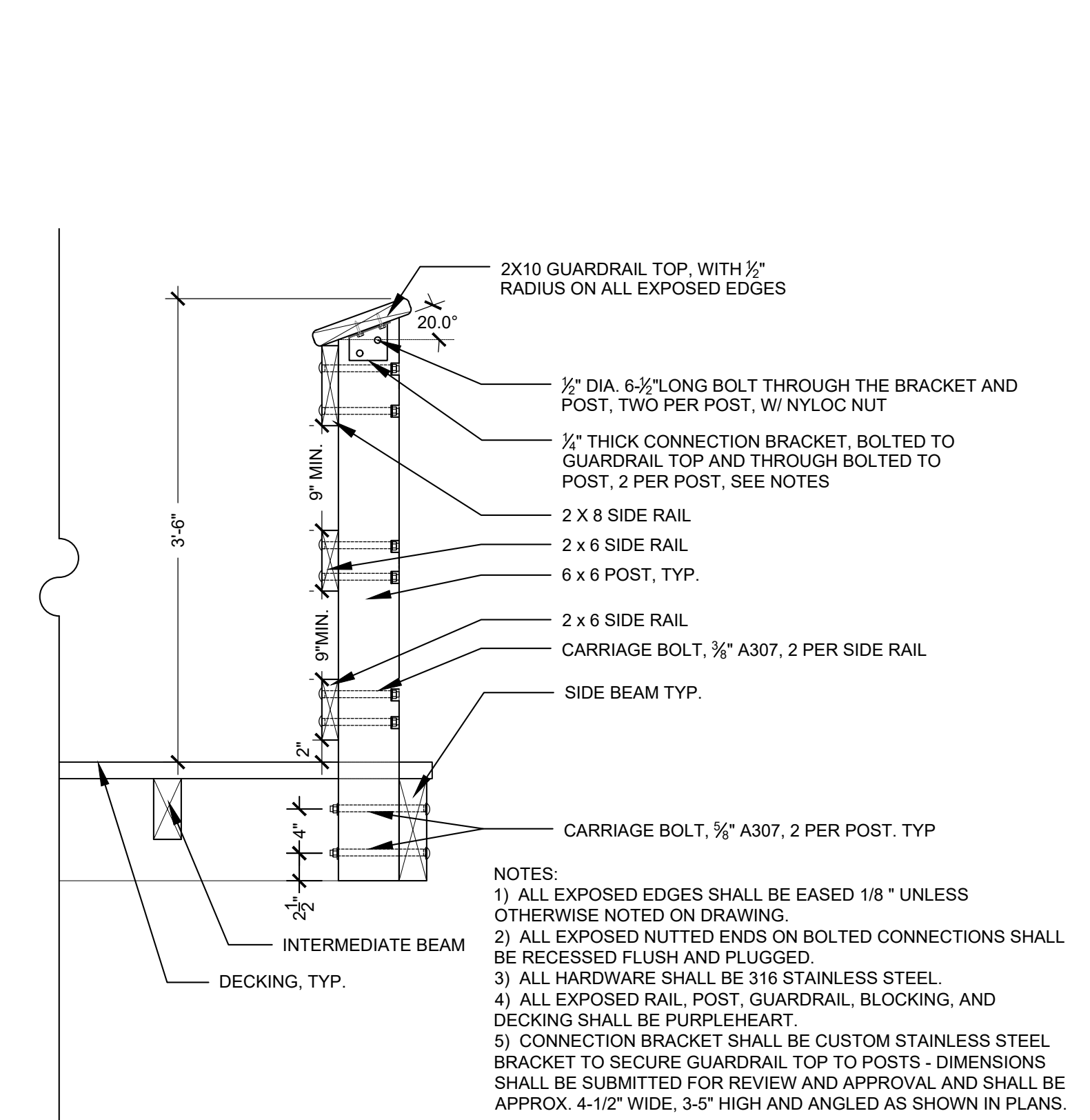
COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION			
MAGAZINE BEACH IMPROVEMENTS PHASE 2.2 - GRASSY BEACH			
CHARLES RIVER RESERVATION CAMBRIDGE, MA			
DESIGNED: SL	DOCK AND DECKING DETAILS		DRAWING NO. LD.1.3
CHECKED: BC	CONT. P25-3586-C5A	SCALE: AS NOTED	13 OF 21
DRAWN: SL, LG	ACC. 104661 x	DATE: 02-05-2025	
CHECKED: BC, SL			



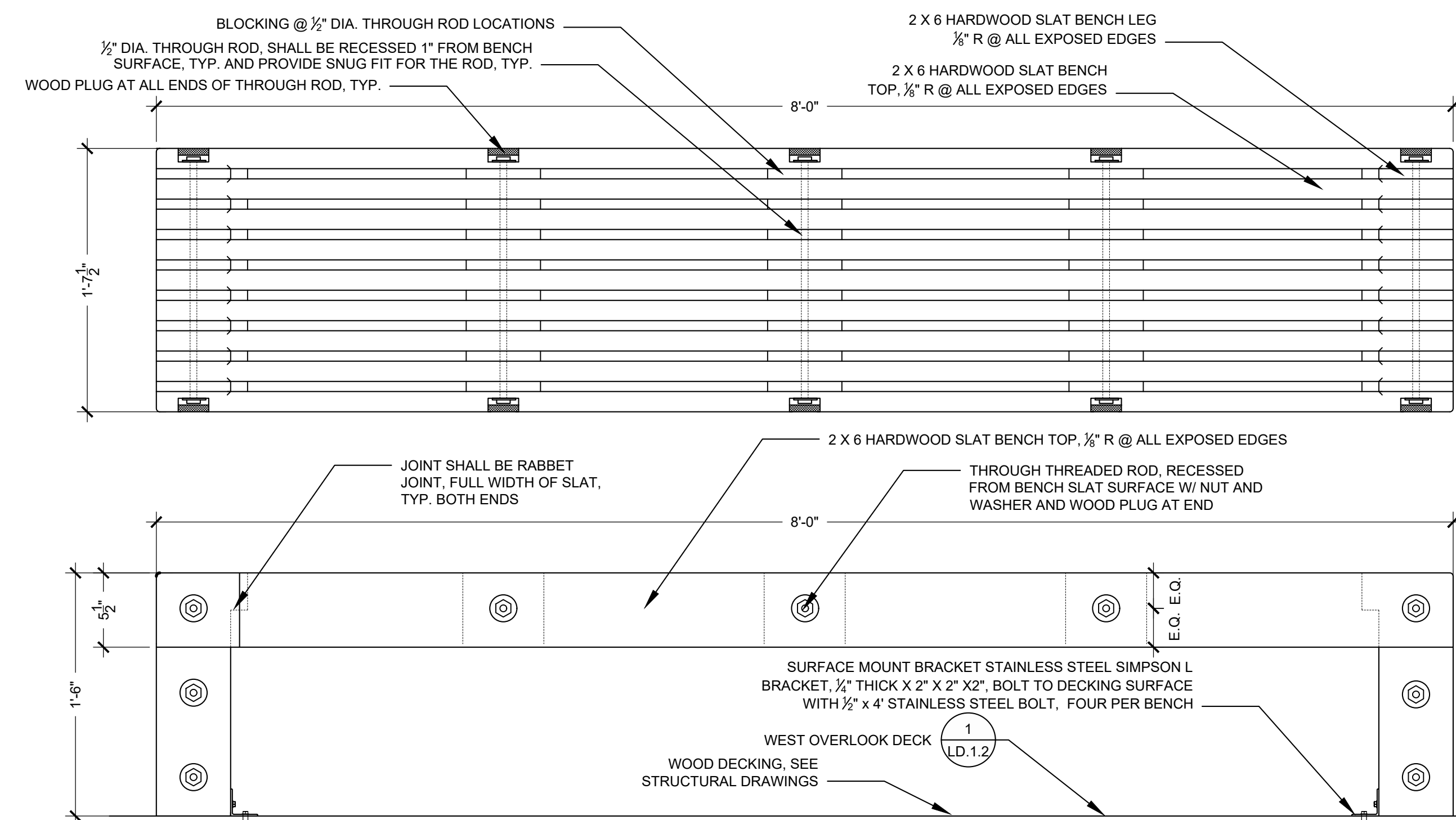
1 WEST OVERLOOK DECK
1/4" = 1'-0"



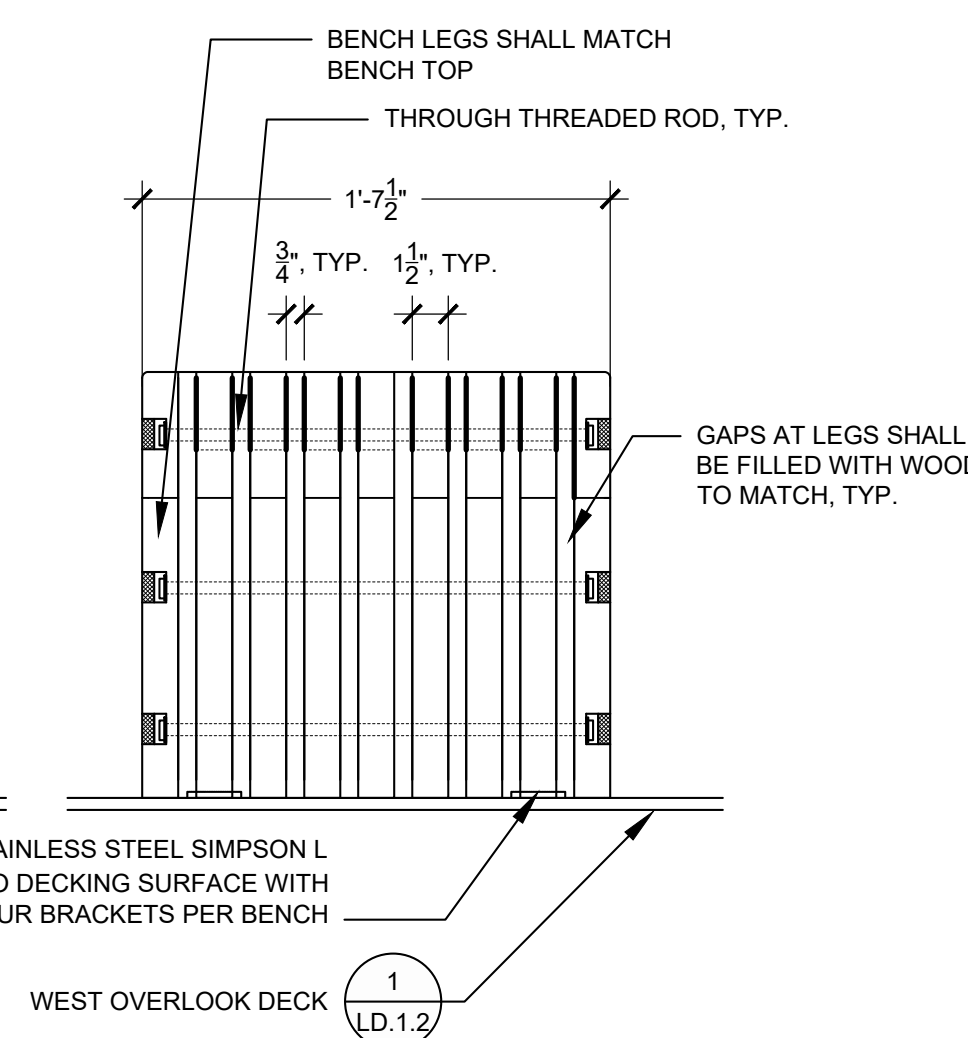
2 RAIL ELEVATION
1" = 1'-0"



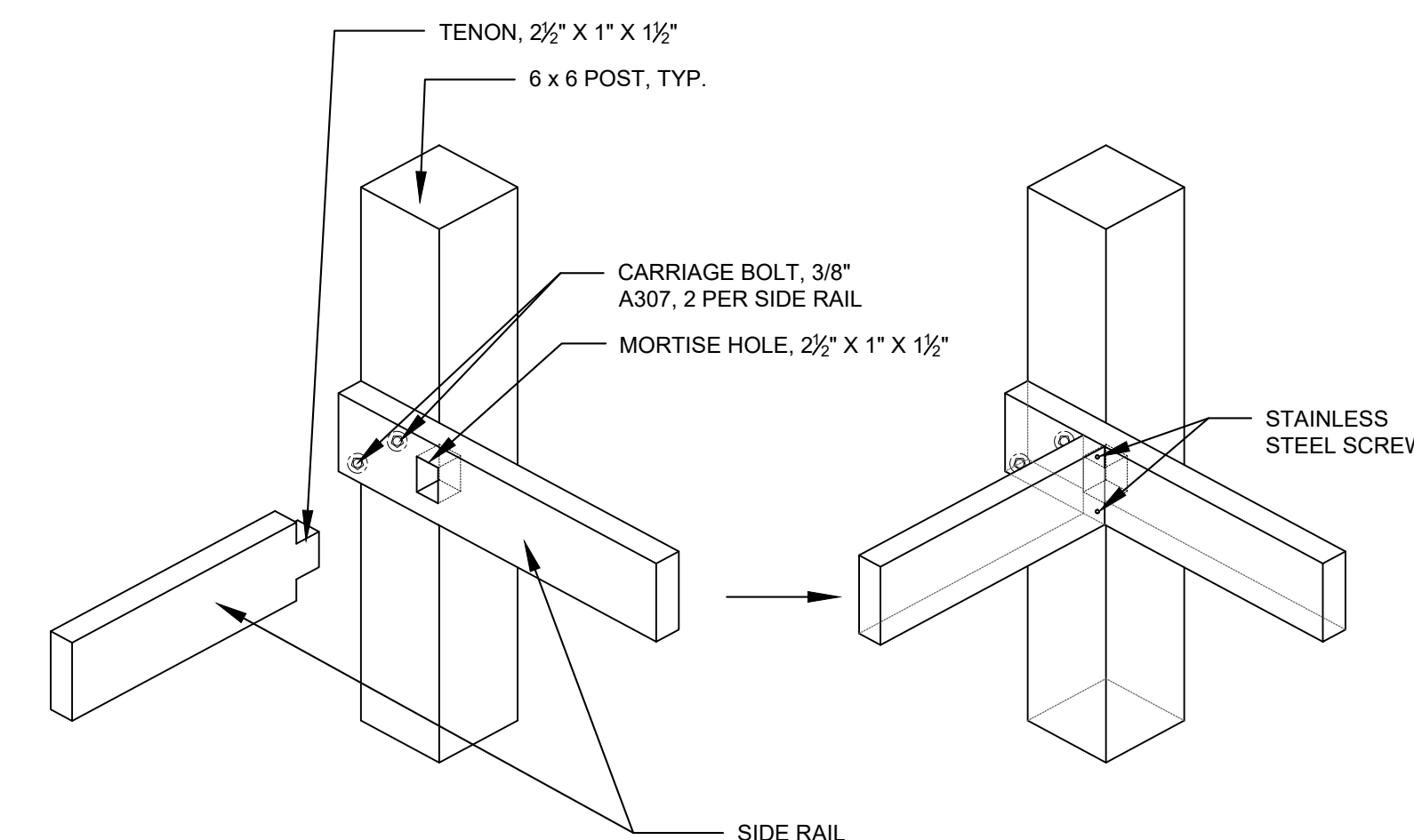
3 WOOD POST AND RAIL
1" = 1'-0"



NOTE:
ALL WOOD ELEMENTS INCLUDING BUT NOT LIMITED TO SLATS, LEGS, BLOCKING, AND PLUGS SHALL BE PURPLEHEART OR APPROVED EQUAL.



5 WOOD BENCH
1-1/2" = 1'-0"



4 RAIL JOINT AT CORNER
1" = 1'-0"

REV.	DATE:	DESCRIPTION:	BY:

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION

MAGAZINE BEACH IMPROVEMENTS
PHASE 2.2 - GRASSY BEACH

CHARLES RIVER RESERVATION
CAMBRIDGE, MA

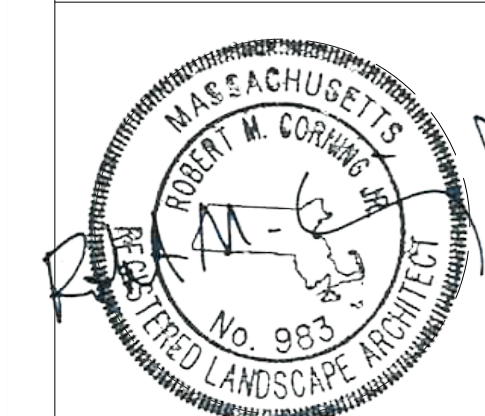
DESIGNED: SL
CHECKED: BC
DRAWN: SL, LG
CHECKED: BC, SL

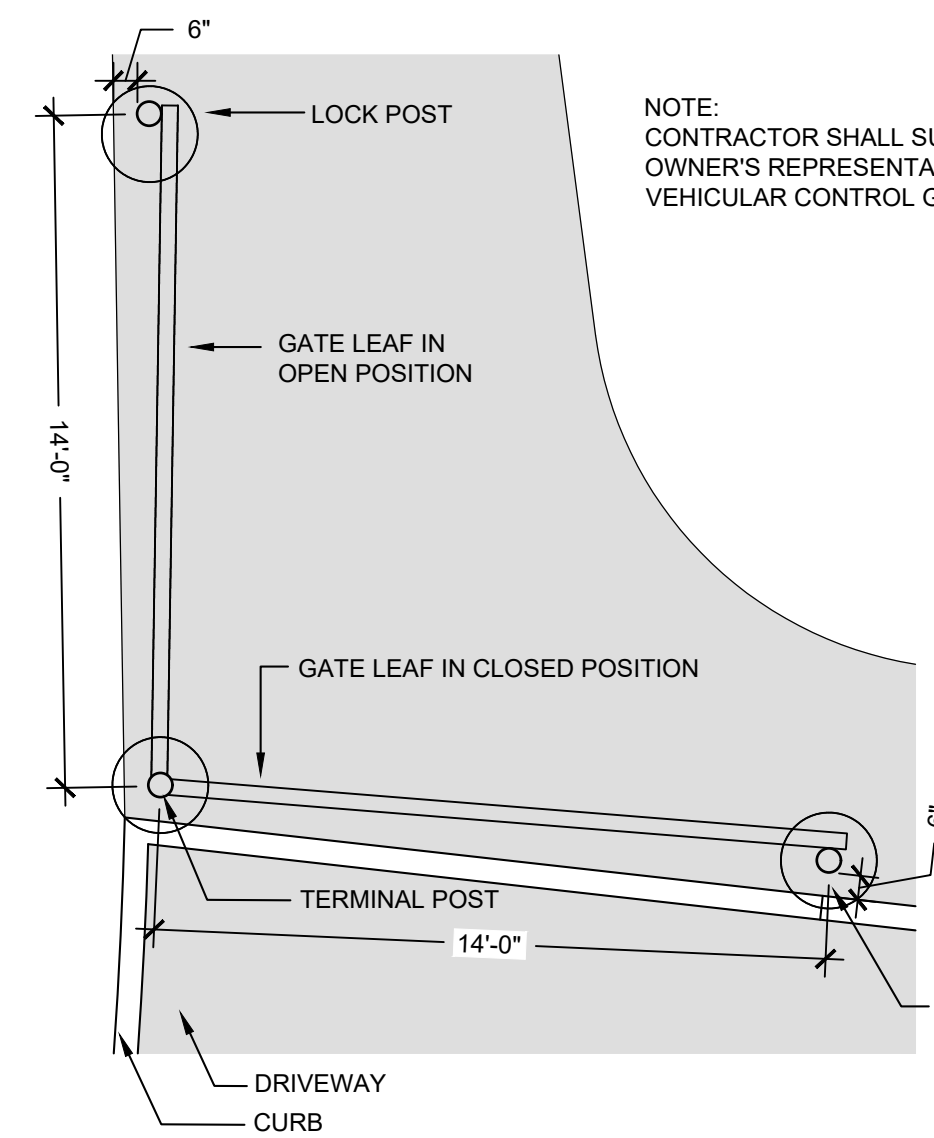
WEST OVERLOOK DECK
DETAILS

CONT. P25-3586-C5A
ACC. 104662 x

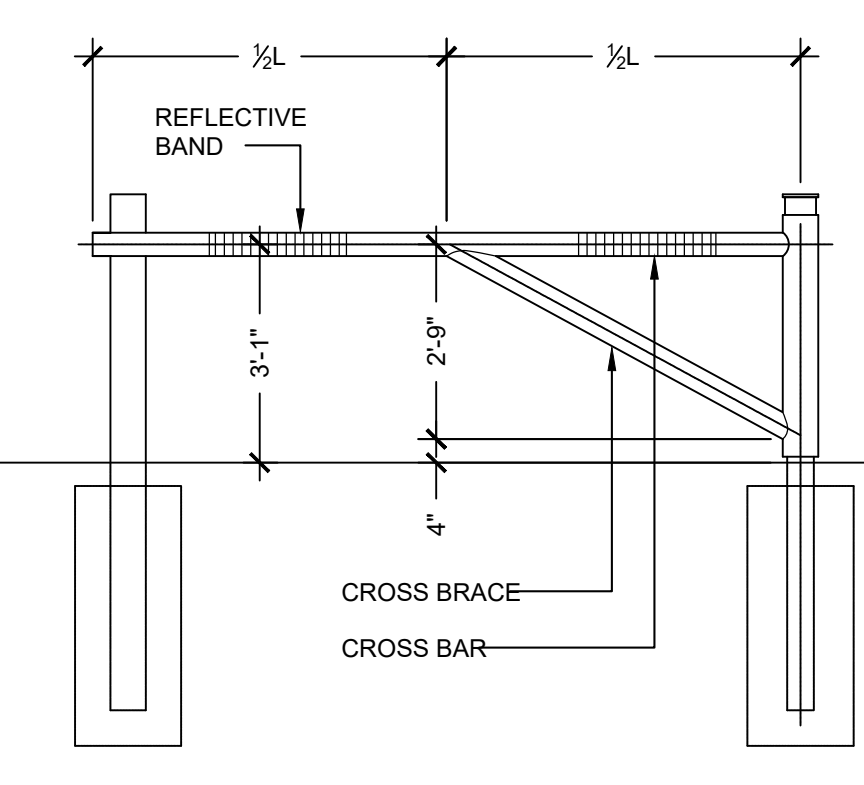
SCALE: AS NOTED
DATE: 02-05-2025

DRAWING NO.
LD.1.4
14 OF 21

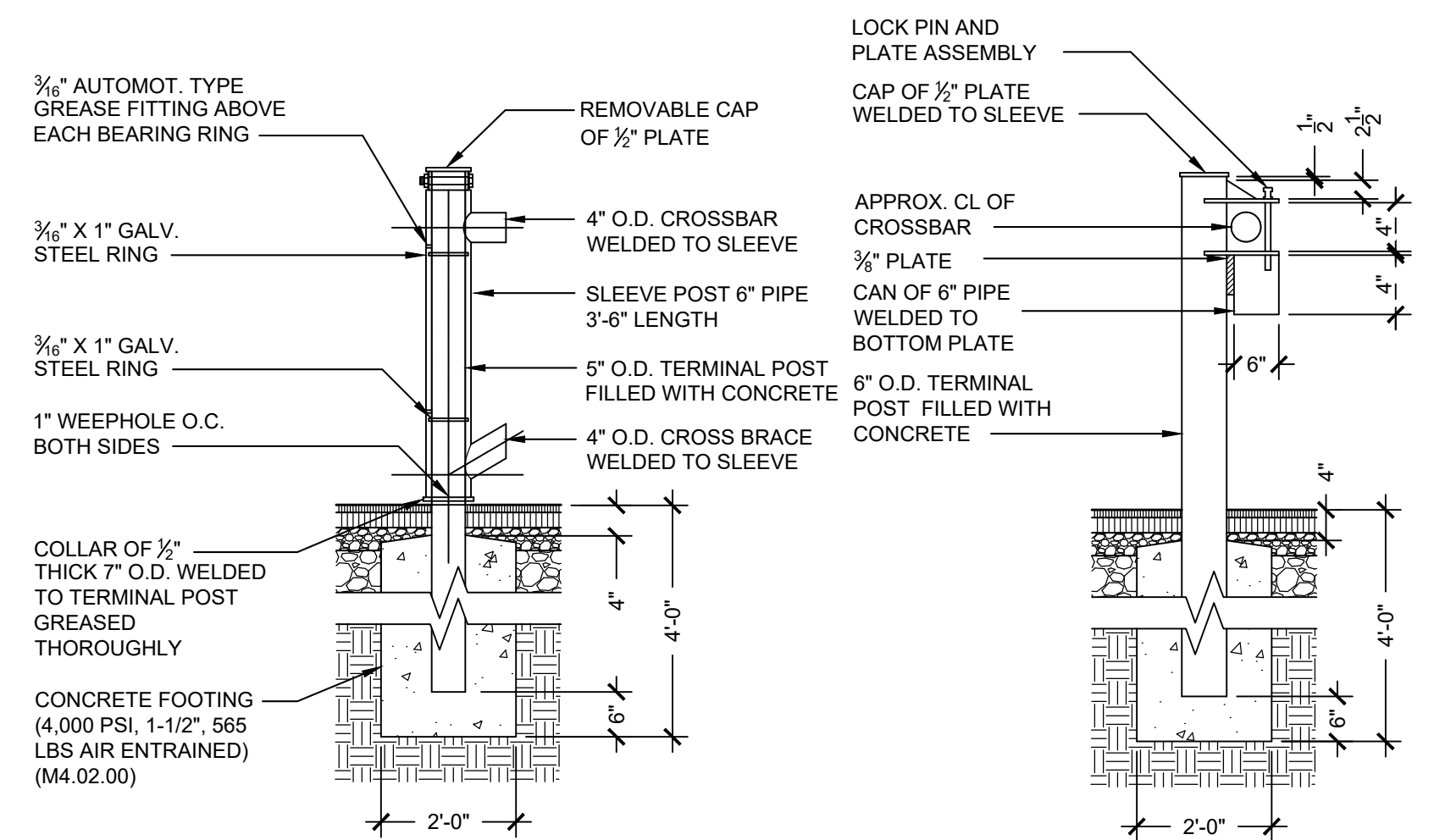




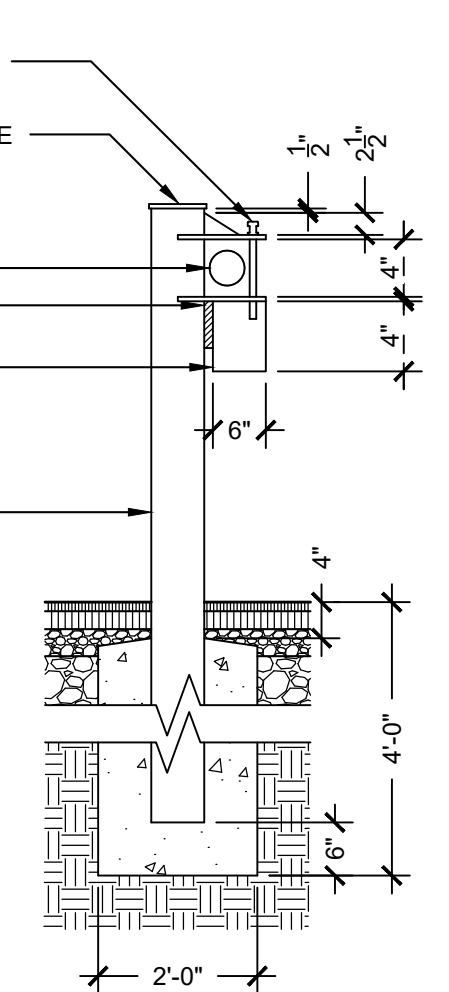
PLAN



ELEVATION

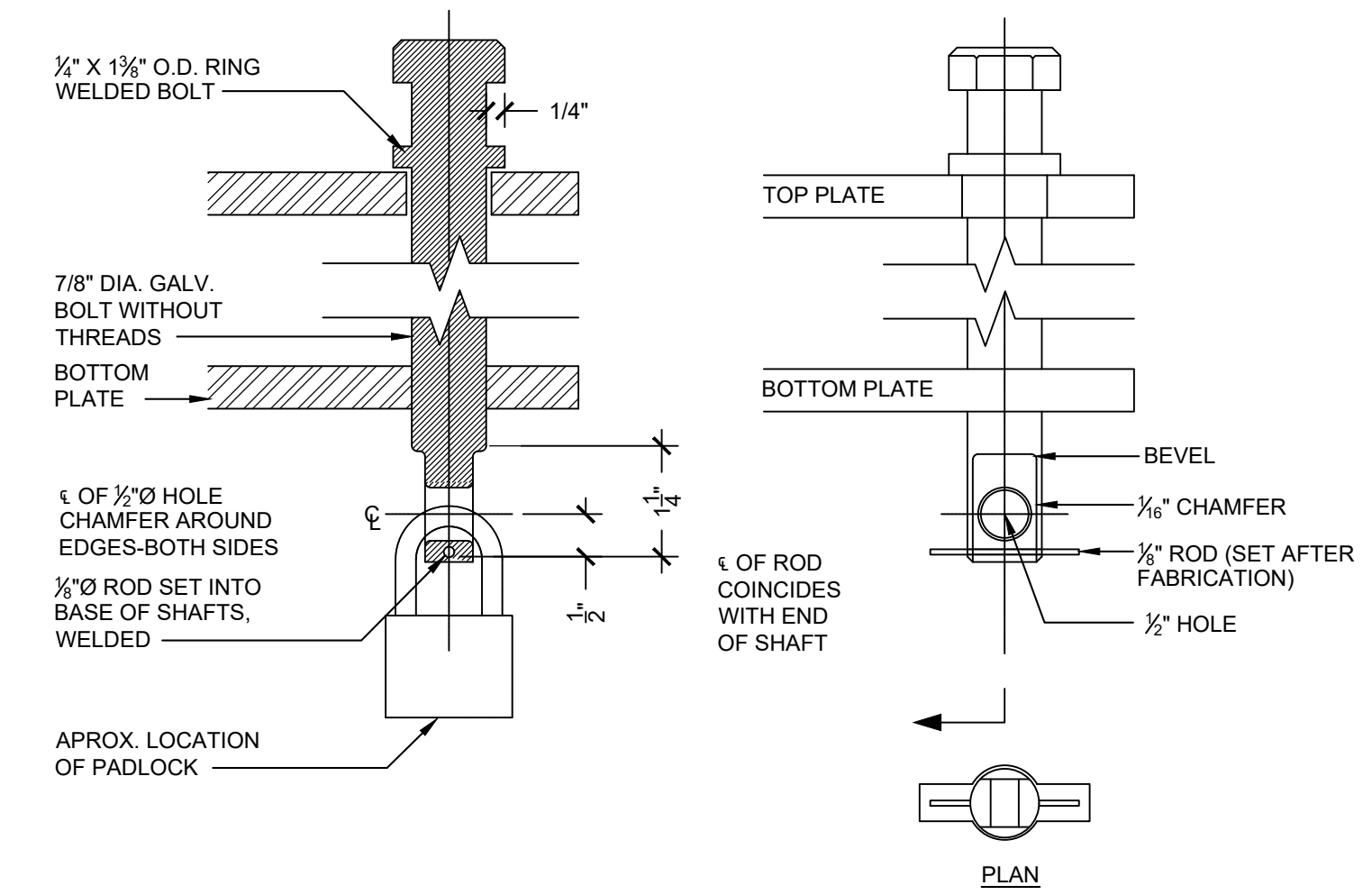


TERMINAL POST
NOT TO SCALE

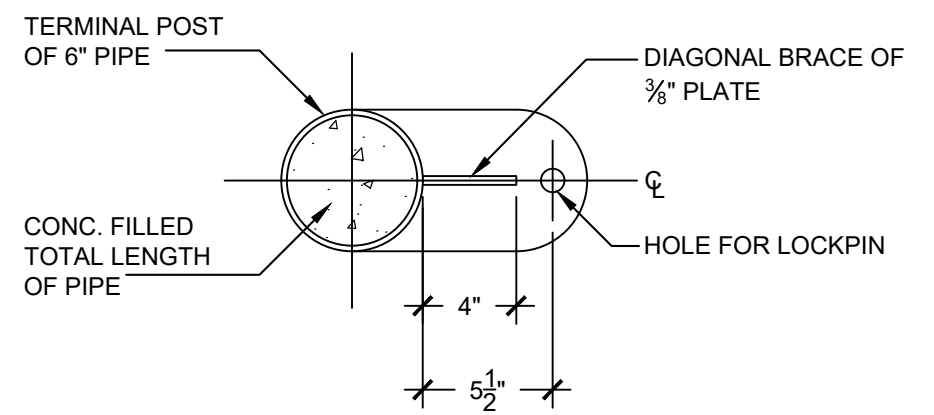


LOCK POST
NOT TO SCALE

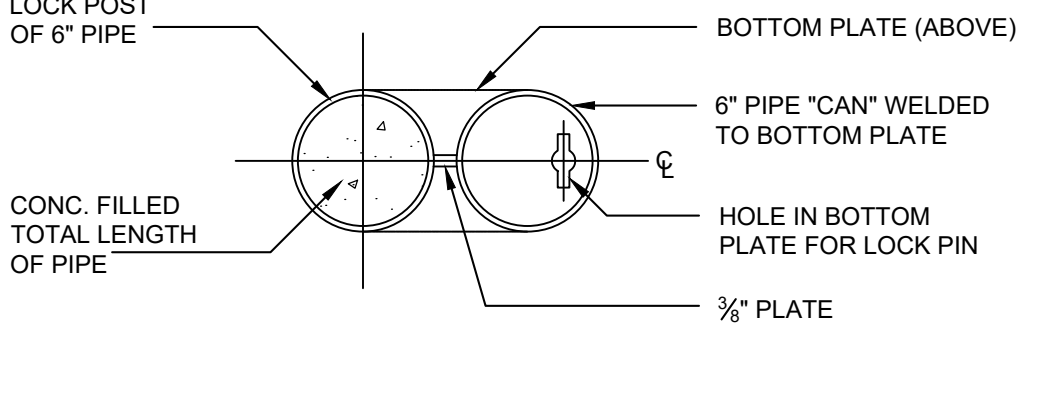
VEHICULAR CONTROL GATE
NOT TO SCALE



LOCK PIN AND PLATE DETAIL
NOT TO SCALE

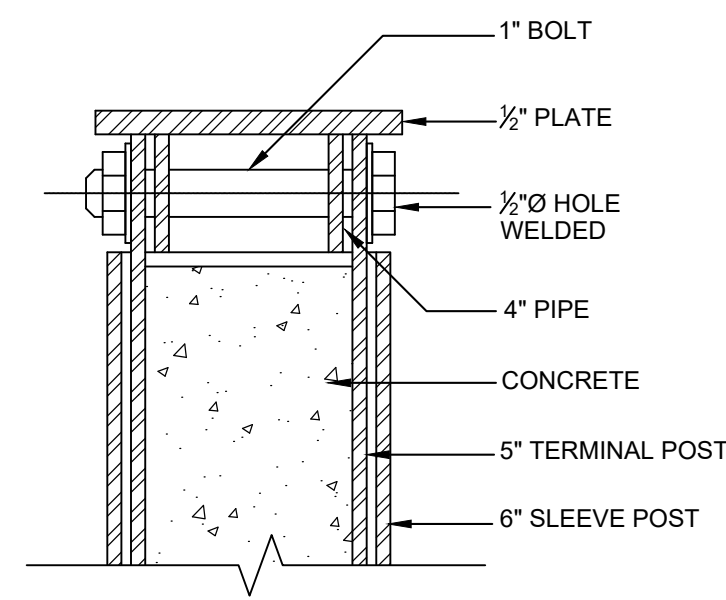


TOP PLATE - SECTION
NOT TO SCALE

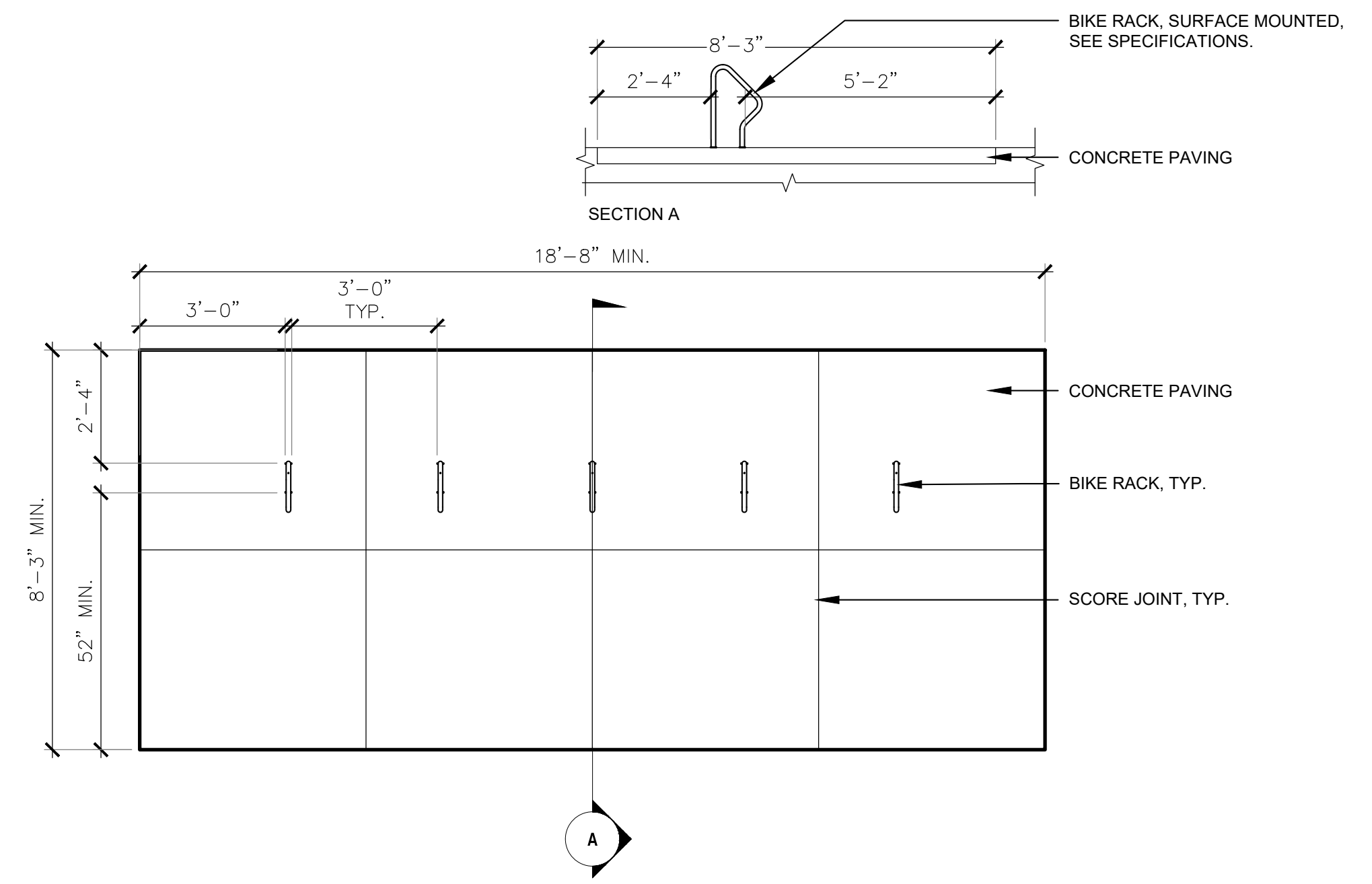


BOTTOM PLATE - SECTION
NOT TO SCALE

CAN AT LOCK POST - SECTION
NOT TO SCALE

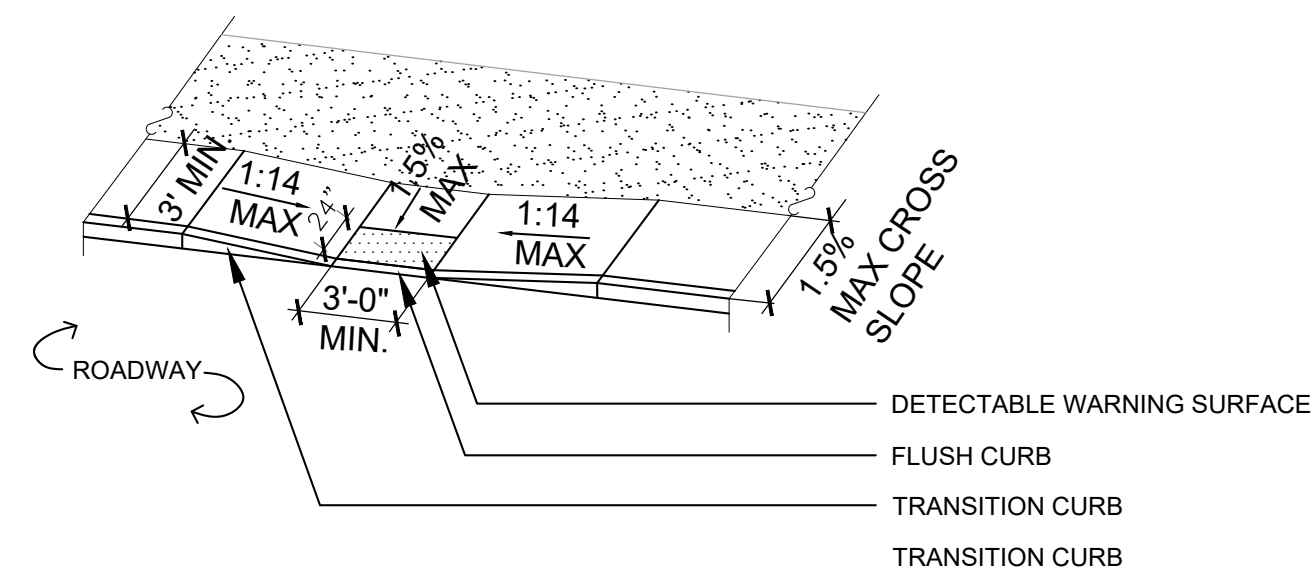


REMOVABLE CAP DETAIL
NOT TO SCALE



4 BIKE RACK

1 VEHICLE SWING GATE

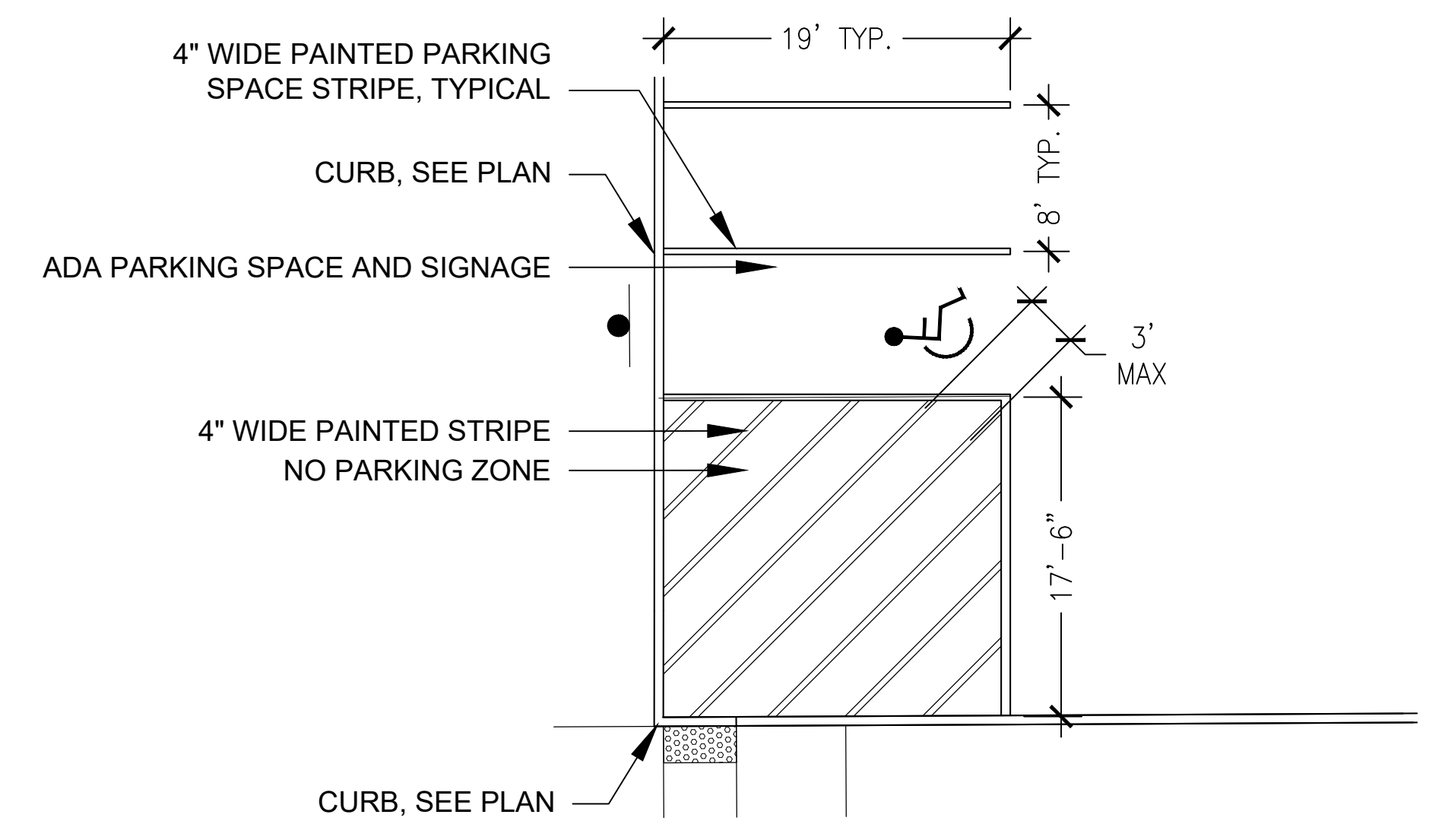


- NOTES:
- RAMP CROSS SECTION TO BE THE SAME AS ADJACENT SIDEWALK; I.E. DEPTH OF SURFACE AND FOUNDATION.
 - DIMENSIONS ARE SUBJECT TO CHANGE IN FIELD. ALL SLOPES AND DIMENSIONS TO COMPLY WITH A.D.A. AND MAAB REQUIREMENTS.
 - PROVIDE EXPANSION JOINT AT TOPS OF RAMP AND AT BACK OF WALK AT INTERFACE OF CURB.
 - PROVIDE HEAVY BROOM FINISH ON RAMP AND SIDE SLOPES PERPENDICULAR TO FLOW OF TRAFFIC.
 - MINIMUM WALK DIMENSIONS ARE FROM BACK OF CURB.
 - TRANSITION CURB LENGTH AS REQUIRED TO MEET CODE.
 - FIXED OBJECTS (I.E. UTILITY POLES, HYDRANTS ETC.) MUST NOT ENCR OACH ON ANY PART OF A WHEELCHAIR RAMP, INCLUDING TRANSITION SLOPES.
 - AT NO TIME IS ANY PART OF THE WHEELCHAIR RAMP, EXCLUDING CURB TRANSITIONS, TO BE LOCATED OUTSIDE OF THE CROSSWALK.

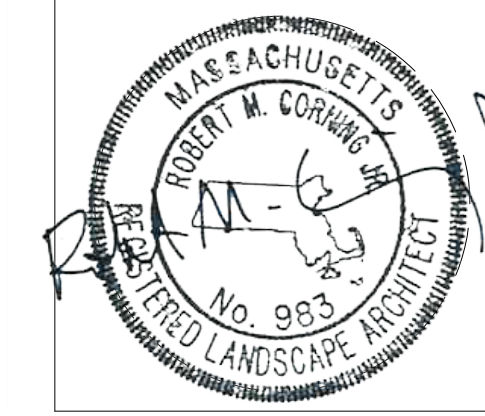
2 CURB RAMP

3

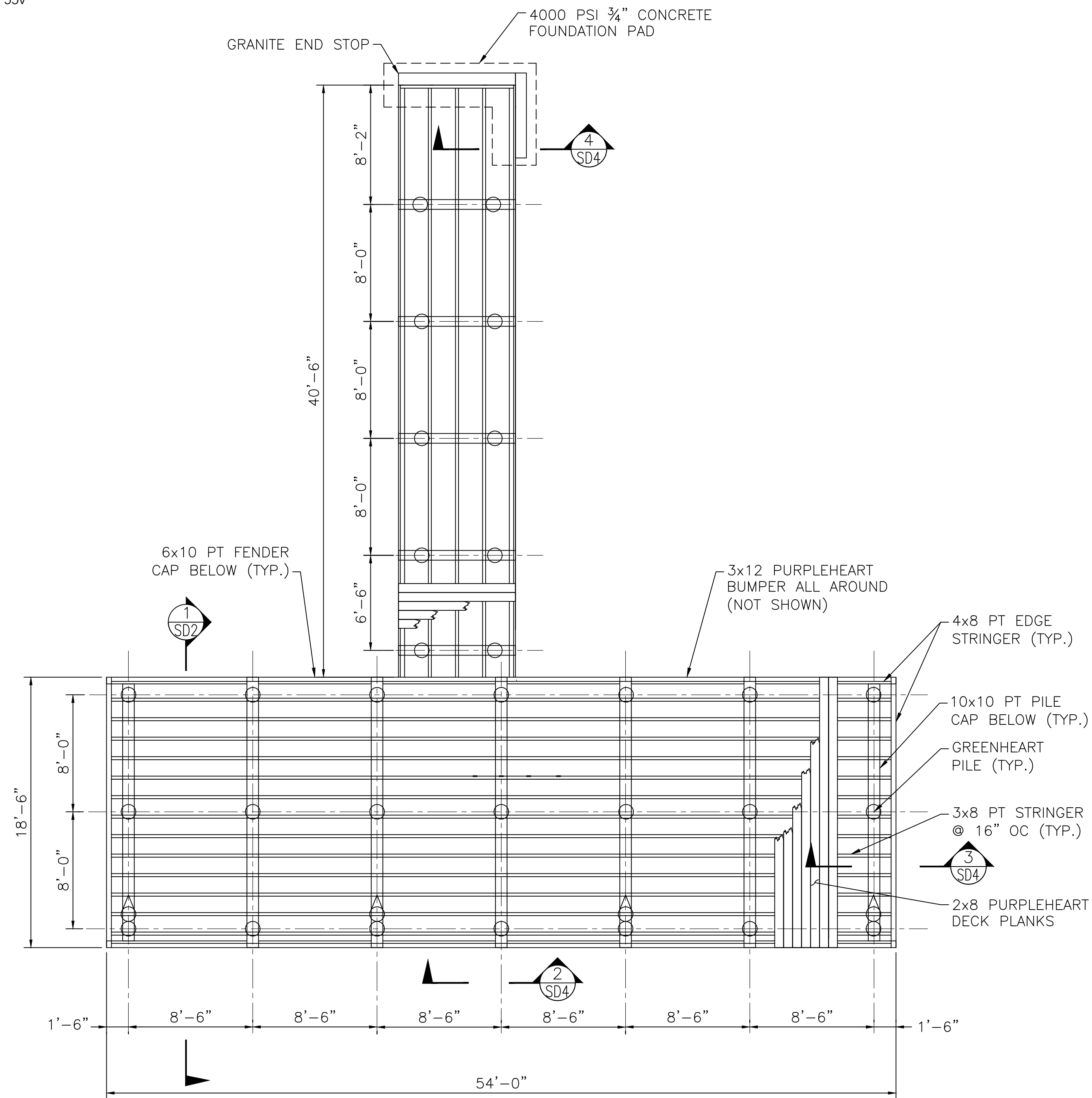
LINE-STRIPING
NTS



REV.	DATE:	DESCRIPTION:	BY:



COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION	
MAGAZINE BEACH IMPROVEMENTS PHASE 2.2 - GRASSY BEACH	
CHARLES RIVER RESERVATION CAMBRIDGE, MA	
DESIGNED: SL	LANDSCAPE SITE DETAILS
CHECKED: BC	DRAWING NO. LD.1.5
DRAWN: SL, LG	CONT. P25-3586-C5A
CHECKED: BC, SL	ACC. 104663 x
SCALE: AS NOTED	DATE: 02-05-2025
	15 OF 21

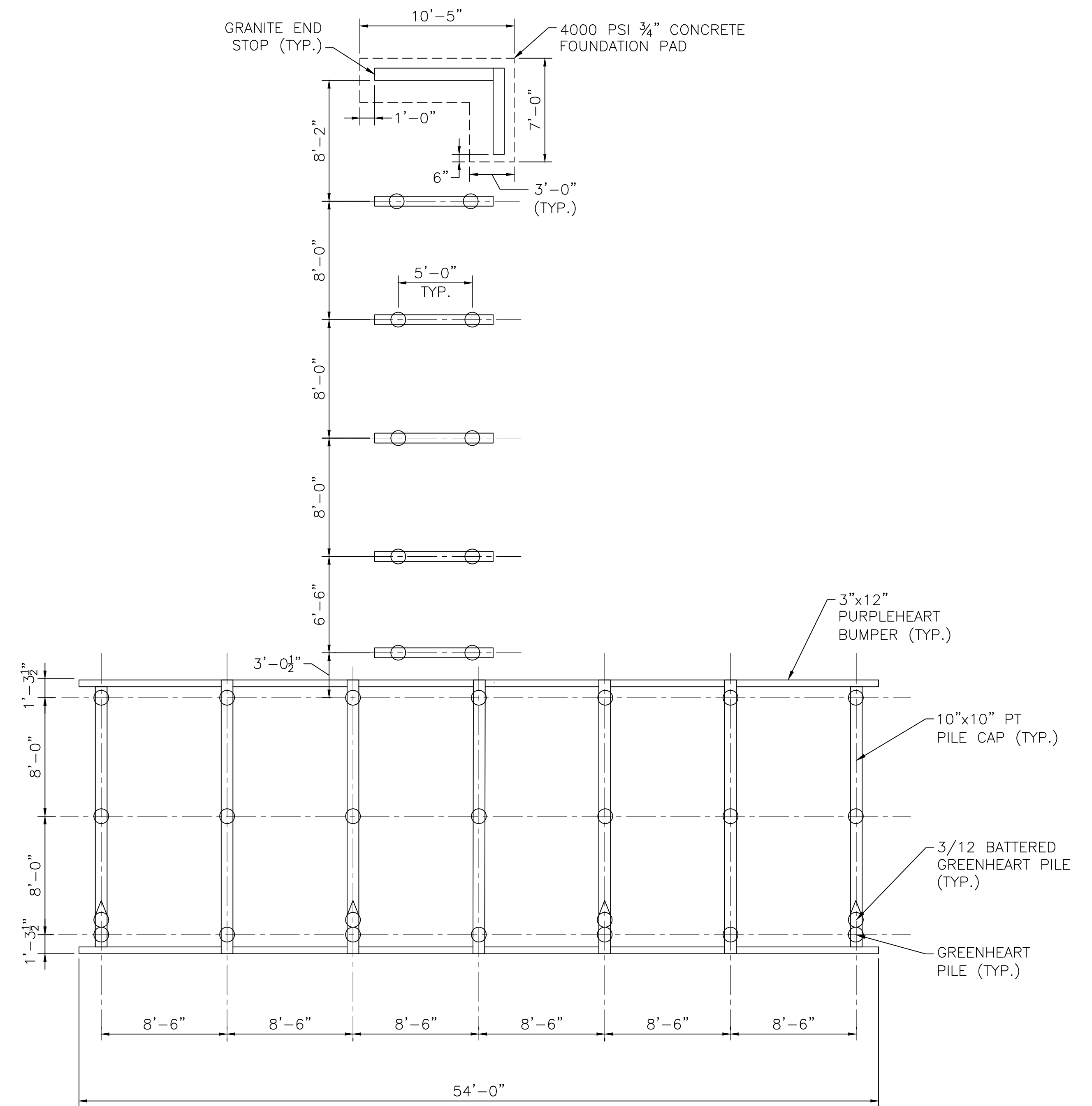


DOCK - FRAMING PLAN

SCALE: 3/16" = 1'-0"

GENERAL NOTES:

- DESIGN IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION, AASHTO LRFD 2009 GUIDE SPECIFICATION FOR THE DESIGN OF PEDESTRIAN BRIDGES AND AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION.
- DESIGN LOADING:
LIVE LOAD = 100 PSF
DEAD LOAD = 15 PSF
- GREENHEART TIMBER PILES: SEE SPECIFICATIONS.
- FRAMING LUMBER: FRAMING LUMBER CONSISTING OF 3x8, 4x8, 6x10 AND 10x10 SHALL BE NO. 1 DENSE SELECT, SOUTHERN YELLOW PINE LUMBER, TREATED WITH WATERBORNE PRESERVATIVES IN ACCORDANCE WITH AWPA STANDARD U1, COMMODITY SPECIFICATION A, TO THE REQUIREMENTS OF USE CATEGORY 2 (UC2). ALL LUMBER SHALL BE PROTECTED FROM DAMAGE DURING STORAGE, HANDLING AND INSTALLATION. FRAMING MEMBERS SHALL BE INSTALLED WITH THE CROWN UP AND ATTACHED AS SHOWN ON THE CONTRACT DRAWINGS. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
- ALL CONNECTIONS BETWEEN TIMBERS AND CONNECTORS SHALL BE MADE WITH TYPE 304 STAINLESS STEEL BOLTS.
- PURPLEHEART DECKING: DECKING SHALL BE AIR DRIED TO 19%MC AND PLANED SMOOTH BOTH SIDES WITH 4 EASED EDGES. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
- BRIDGING/ BLOCKING NOT SHOWN FOR CLARITY. PROVIDE BRIDGING/ BLOCKING ACCORDING TO SPECIFICATIONS AND DRAWING NOS. SD3 AND SD4.



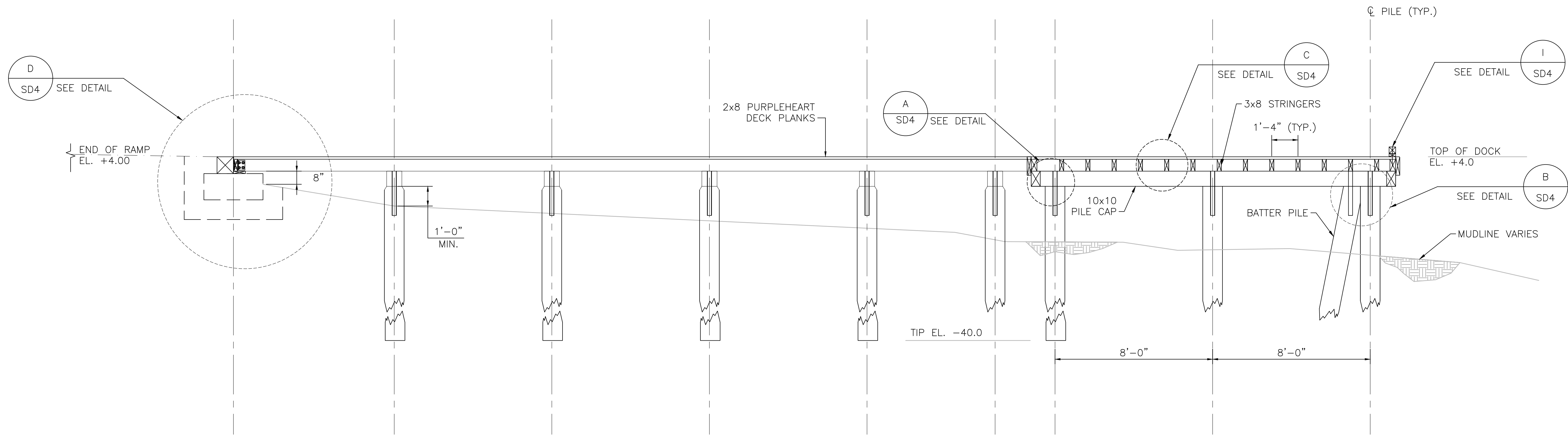
DOCK - PILE & PILECAP PLAN

SCALE: 3/16" = 1'-0"

REV.	DATE:	DESCRIPTION:	BY:

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COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION									
MAGAZINE BEACH IMPROVEMENTS PHASE 2.2 - GRASSY BEACH									
CHARLES RIVER RESERVATION CAMBRIDGE, MA									
DESIGNED: RH, NG CHECKED: RH DRAWN: NG CHECKED: RH	<table border="1"> <tr> <td colspan="2" style="text-align: center;">DOCK PLAN</td> <td>DRAWING NO.</td> </tr> <tr> <td>CONT. P25-3586-C5A</td> <td>SCALE: AS NOTED</td> <td rowspan="2" style="text-align: center; vertical-align: middle;">SD1</td> </tr> <tr> <td>ACC. 104664 x</td> <td>DATE: 02-05-2025</td> </tr> </table>	DOCK PLAN		DRAWING NO.	CONT. P25-3586-C5A	SCALE: AS NOTED	SD1	ACC. 104664 x	DATE: 02-05-2025
DOCK PLAN		DRAWING NO.							
CONT. P25-3586-C5A	SCALE: AS NOTED	SD1							
ACC. 104664 x	DATE: 02-05-2025								
16 OF 21									

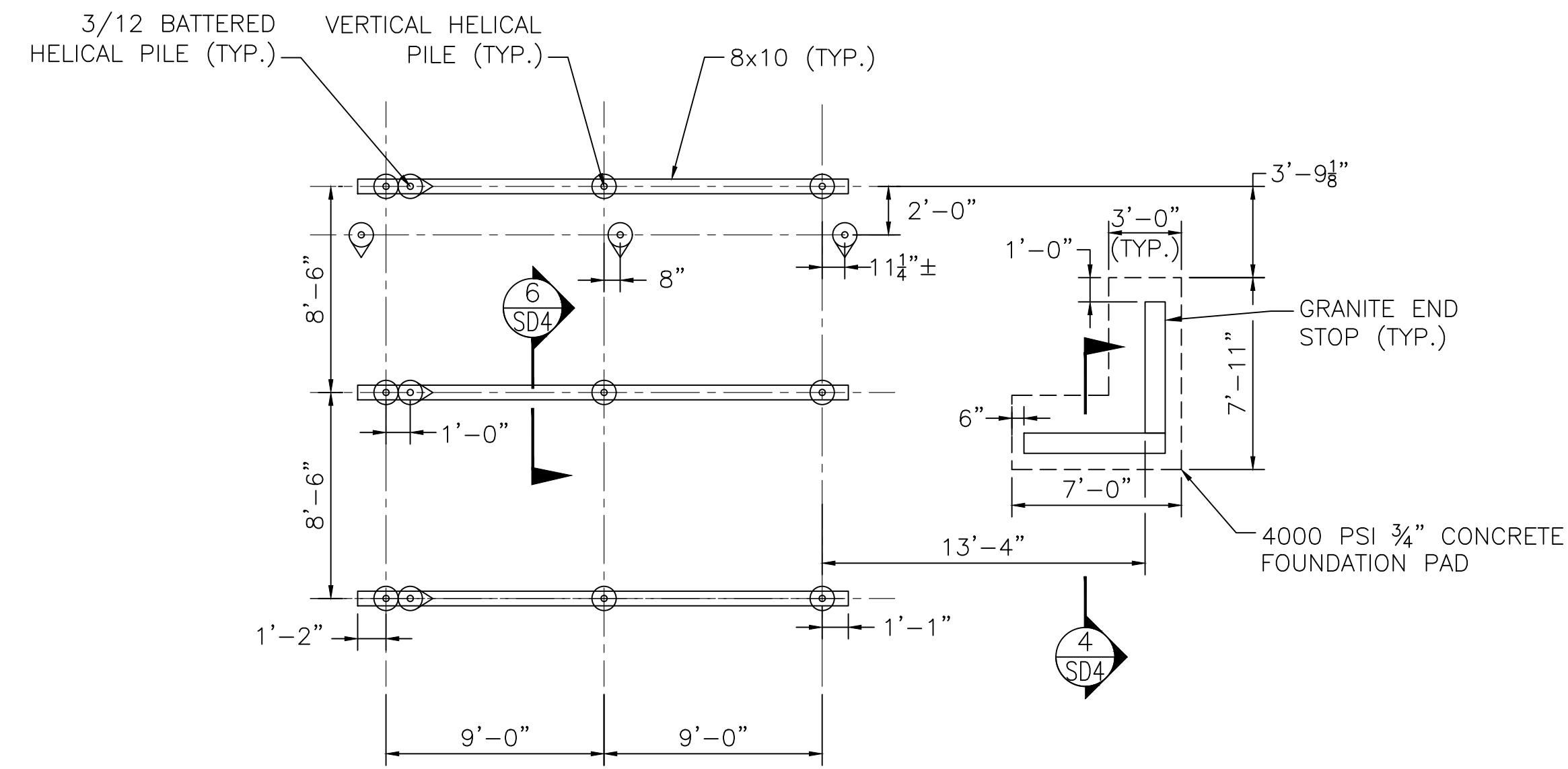


DOCK - SECTION 1
 SCALE: 3/8" = 1'-0" SD1

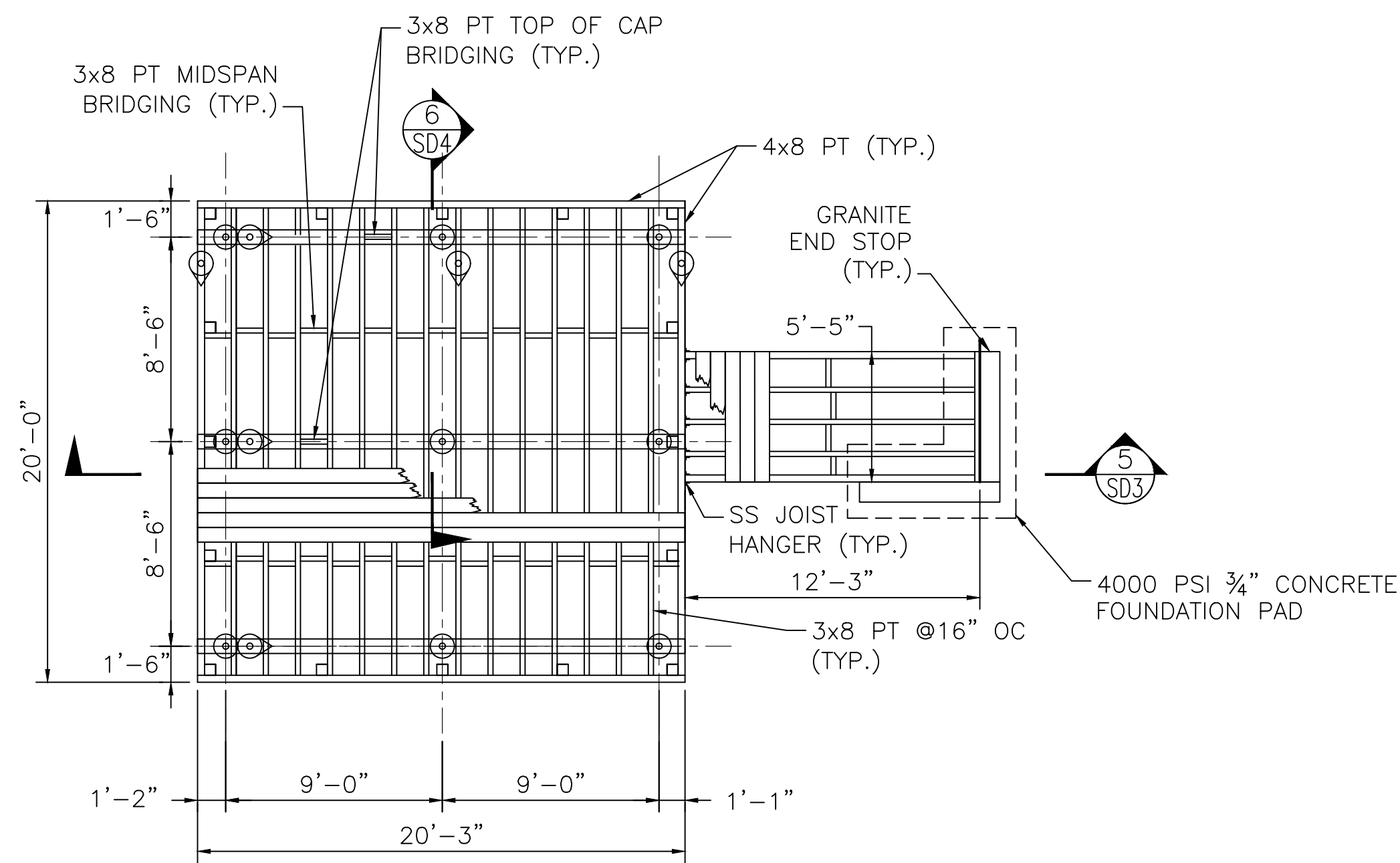
REV.	DATE	DESCRIPTION	BY:

	DESIGNED: RH, NG	DOCK SECTION CONT. P25-3586-C5A ACC. 104665 x	DRAWING NO. SD2 17 OF 21
	CHECKED: RH		
	DRAWN: NG		
	CHECKED: RH		

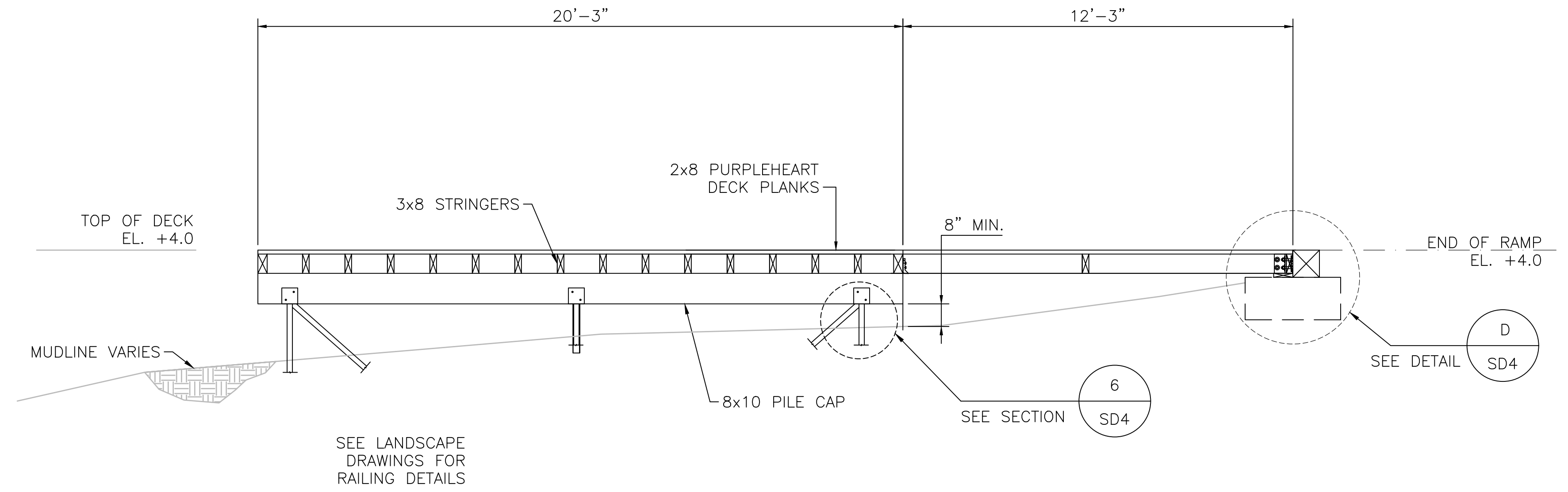
COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION	
MAGAZINE BEACH IMPROVEMENTS PHASE 2.2 - GRASSY BEACH	
CHARLES RIVER RESERVATION CAMBRIDGE, MA	
DESIGNED: RH, NG CHECKED: RH DRAWN: NG CHECKED: RH	SCALE: AS NOTED DATE: 02-05-2025



WEST OBSERVATION DECK PILE & PILE CAP PLAN
SCALE: 3/16"=1'-0"



WEST OBSERVATION DECK - PLAN VIEW
SCALE: 3/16"=1'-0"



TYPICAL CROSS SECTION
SCALE: 3/8"=1'-0"

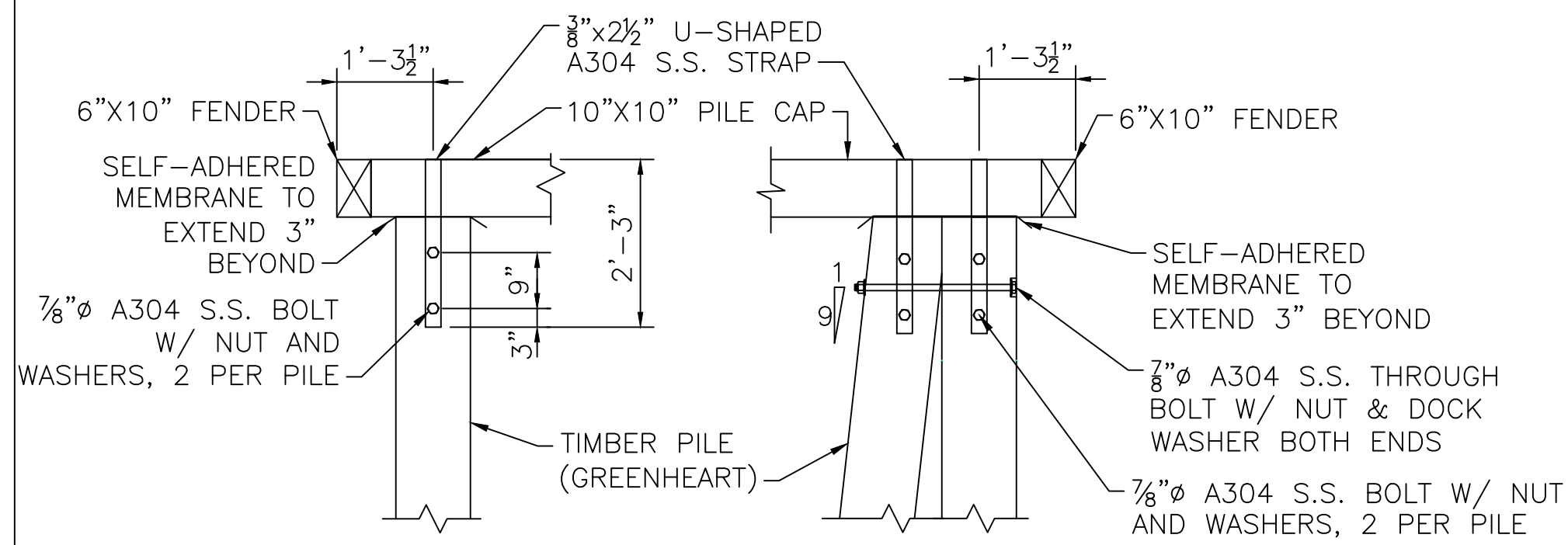
GENERAL NOTES:

- DESIGN IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION, AASHTO LRFD 2009 GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES AND AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION.
- DESIGN LOADING:
LIVE LOAD = 100 PSF
DEAD LOAD = 15 PSF
- HELICAL PILES: SEE SPECIFICATIONS.
- FRAMING LUMBER: FRAMING LUMBER CONSISTING OF 3x8, 4x8 AND 8x10 SHALL BE NO. 1 DENSE SELECT, SOUTHERN YELLOW PINE LUMBER, TREATED WITH WATERBORNE PRESERVATIVES IN ACCORDANCE WITH AWPA STANDARD U1, COMMODITY SPECIFICATION A, TO THE REQUIREMENTS OF USE CATEGORY 2 (UC2). ALL LUMBER SHALL BE PROTECTED FROM DAMAGE DURING STORAGE, HANDLING AND INSTALLATION. FRAMING MEMBERS SHALL BE INSTALLED WITH THE CROWN UP AND ATTACHED AS SHOWN ON THE CONTRACT DRAWINGS. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
- JOIST HANGERS: JOIST HANGERS SHALL BE SIMPSON STRONG TIE LUS 38SS AND 48SS TYPE 316 STAINLESS STEEL FOR ALL PERPENDICULAR CONNECTIONS BETWEEN THE 3x8 JOIST & 4x8 EDGE JOIST AS SHOWN ON THE PLANS. ALL CONNECTIONS BETWEEN TIMBERS AND CONNECTORS SHALL BE MADE WITH TYPE 316 STAINLESS STEEL NAILS PER THE MANUFACTURERS' RECOMMENDATIONS.
- PURPLEHEART DECKING: DECKING SHALL BE AIR DRIED TO 19%MC AND PLANED SMOOTH BOTH SIDES WITH 4 EASED EDGES. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

REV.	DATE:	DESCRIPTION:	BY:

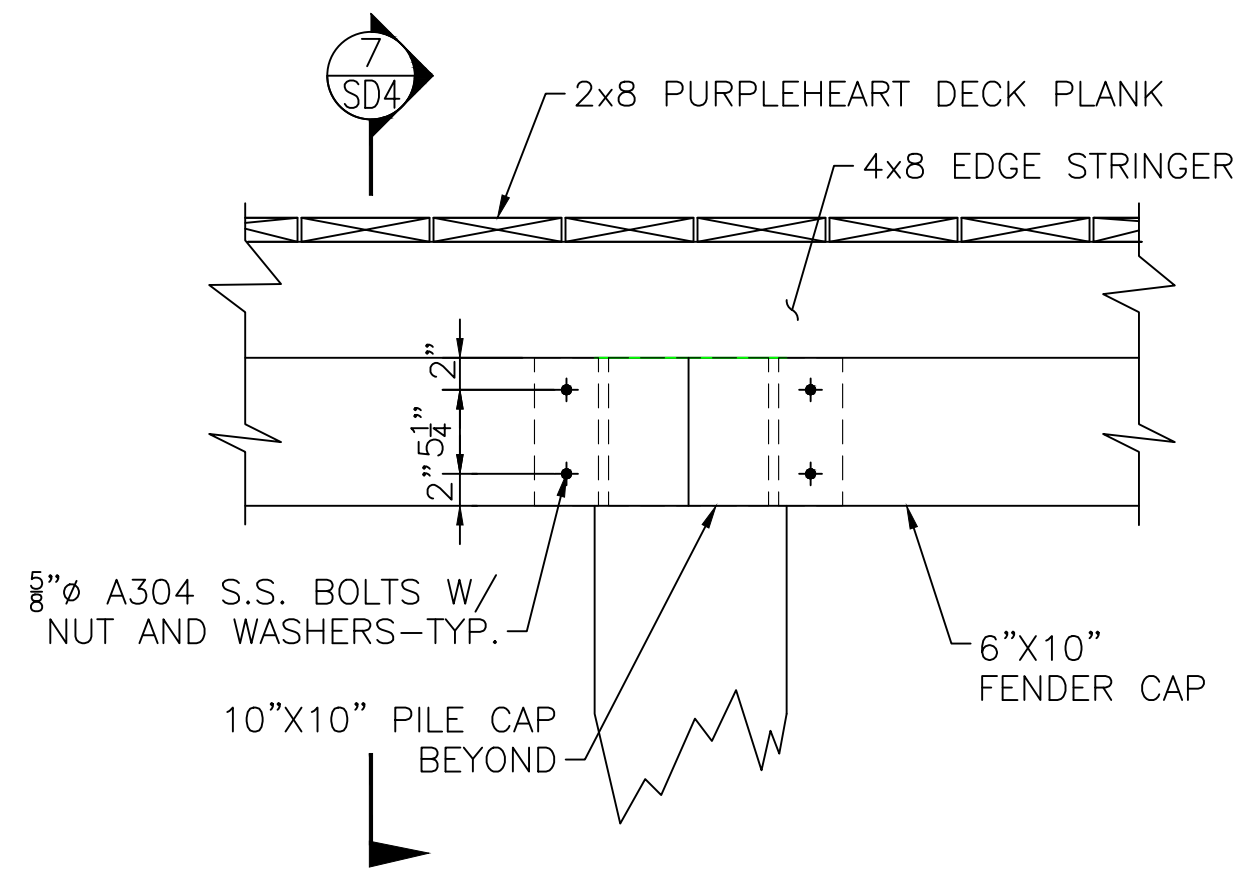
		DESIGNED: RH, NG	WEST OBSERVATION DECK PLAN & SECTION SCALE: AS NOTED	DRAWING NO. SD3
		CHECKED: RH		
DRAWN: NG	CONT. P25-3586-C5A			
CHECKED: RH	ACC. 104666 x			

COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION	
MAGAZINE BEACH IMPROVEMENTS PHASE 2.2 - GRASSY BEACH	
CHARLES RIVER RESERVATION CAMBRIDGE, MA	
DATE: 02-05-2025	18 OF 21

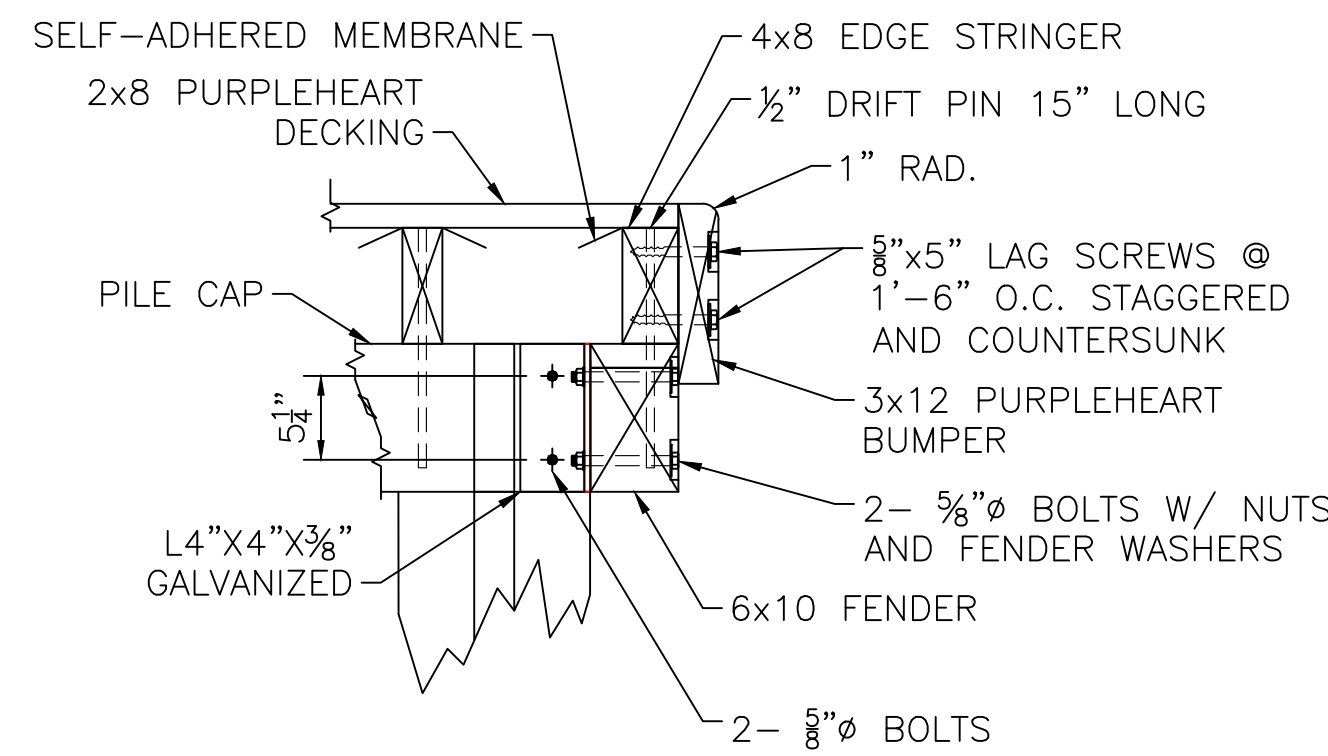


PILE - DETAIL A
SCALE: 1/2"=1'-0"
SD2

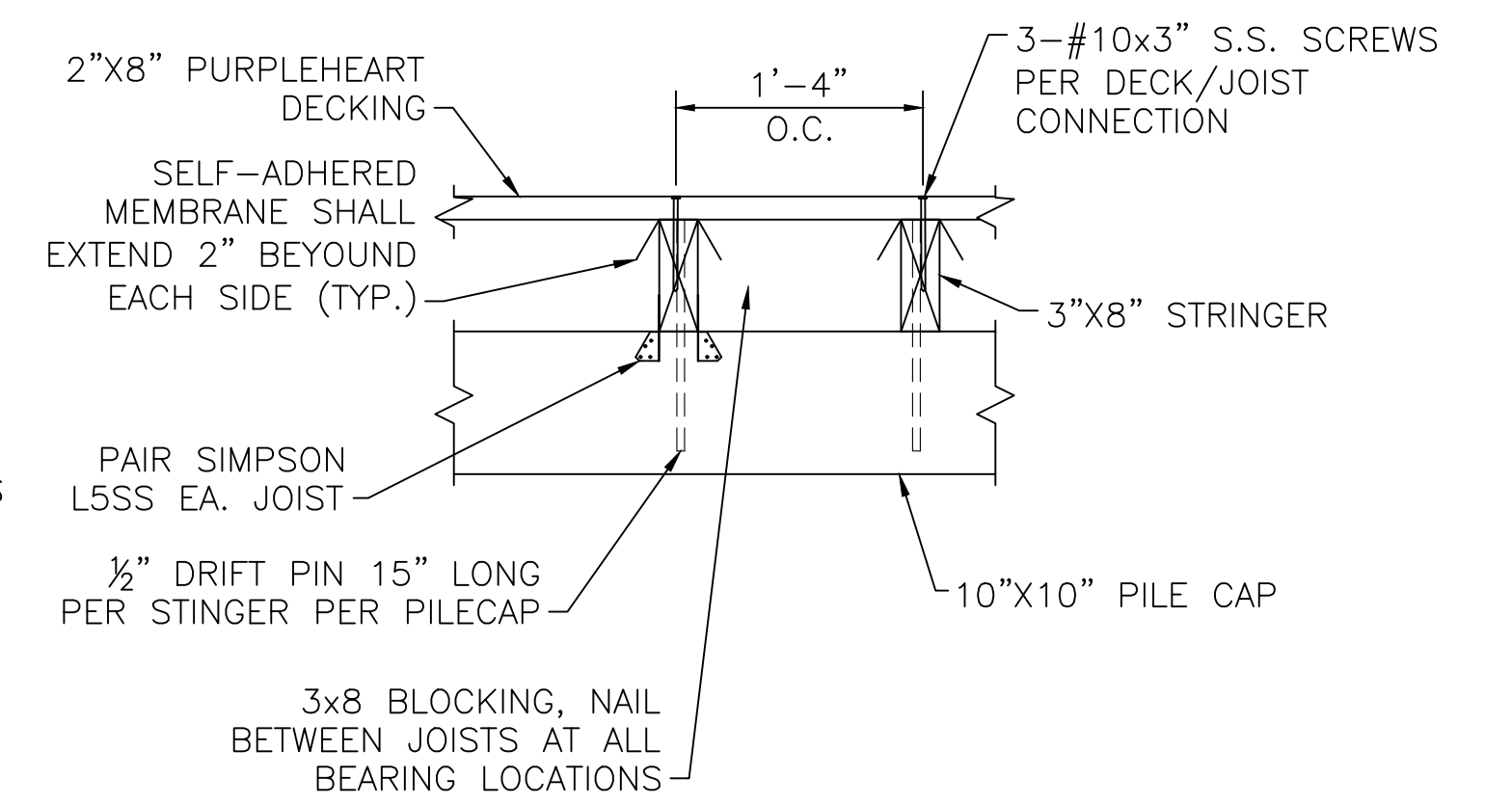
BATTER PILE - DETAIL B
SCALE: 1/2"=1'-0"
SD2



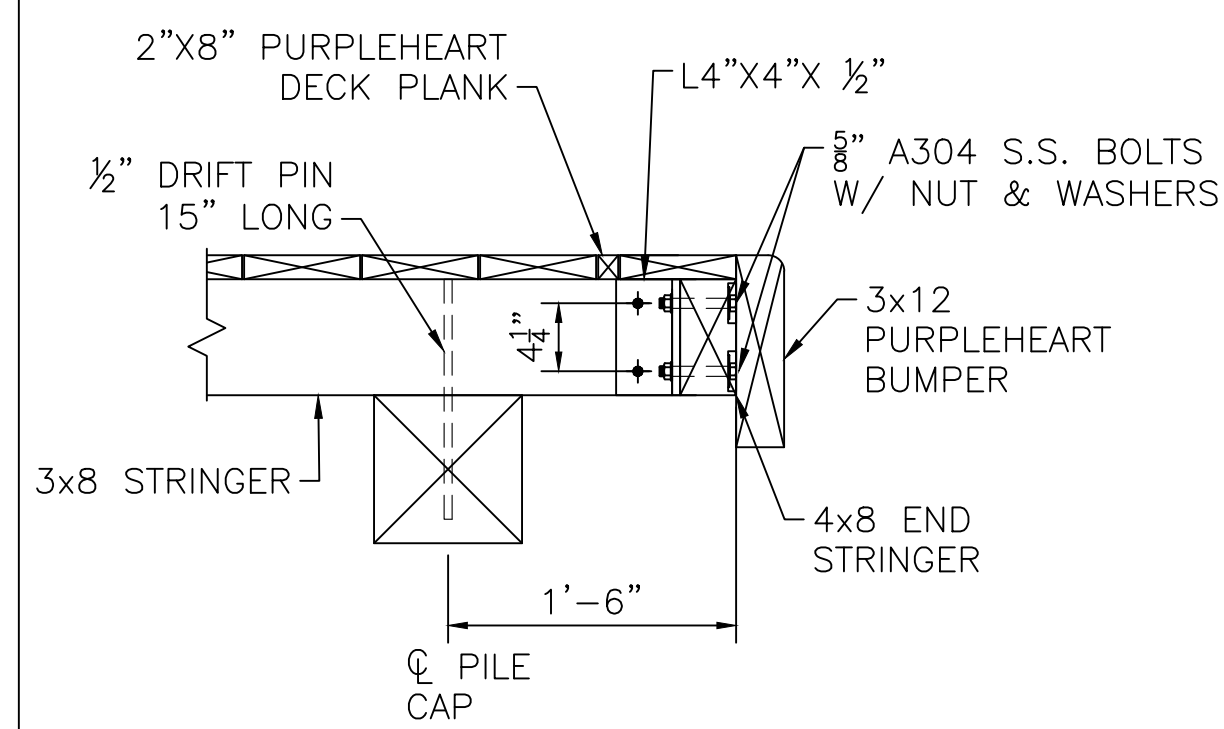
FENDER CAP SPLICE - SECTION 2
SCALE: 1"=1'-0"
SD1



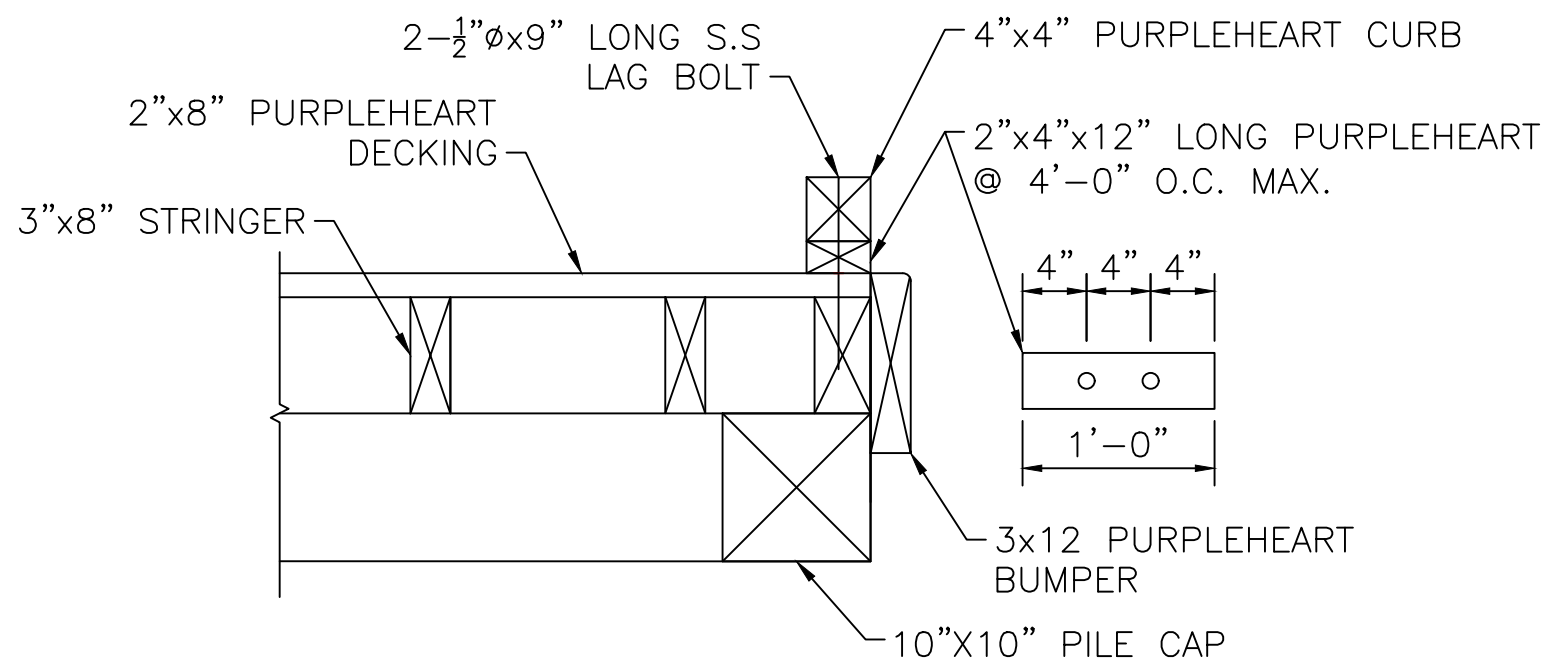
SECTION 7
SCALE: 1"=1'-0"
SD4



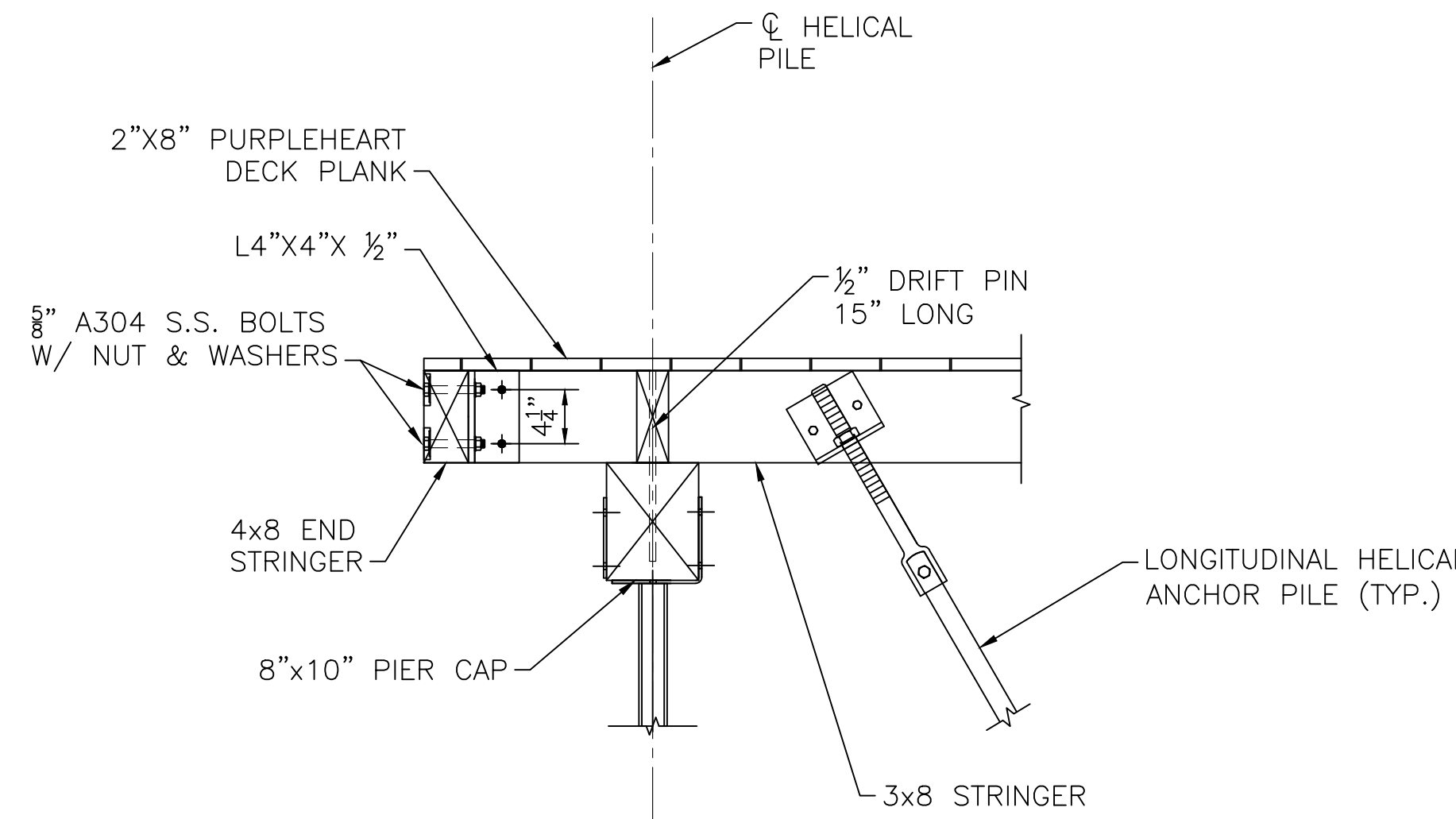
DECK/STRINGER CONNECTION-DETAIL C
SCALE: 1"=1'-0"
SD2



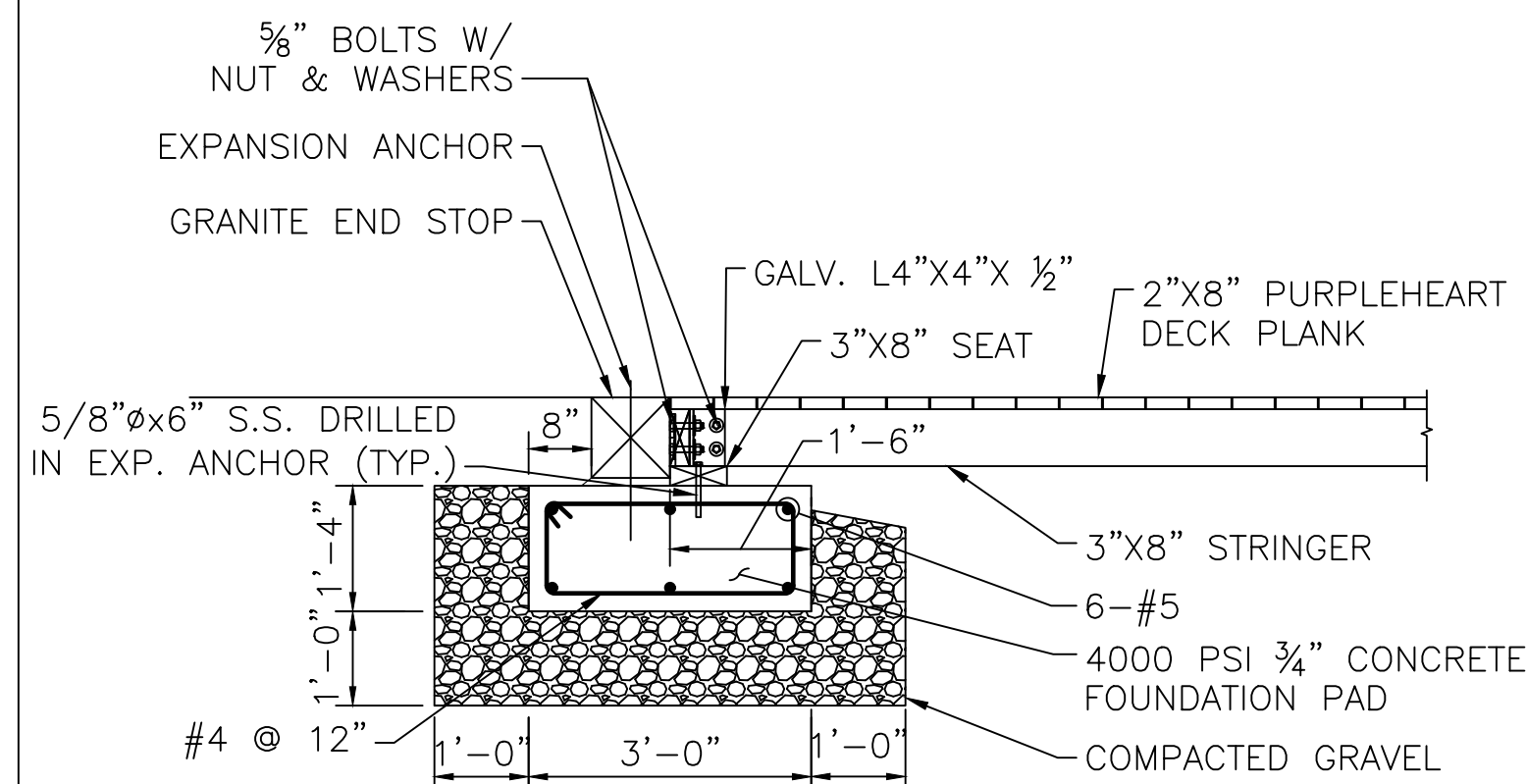
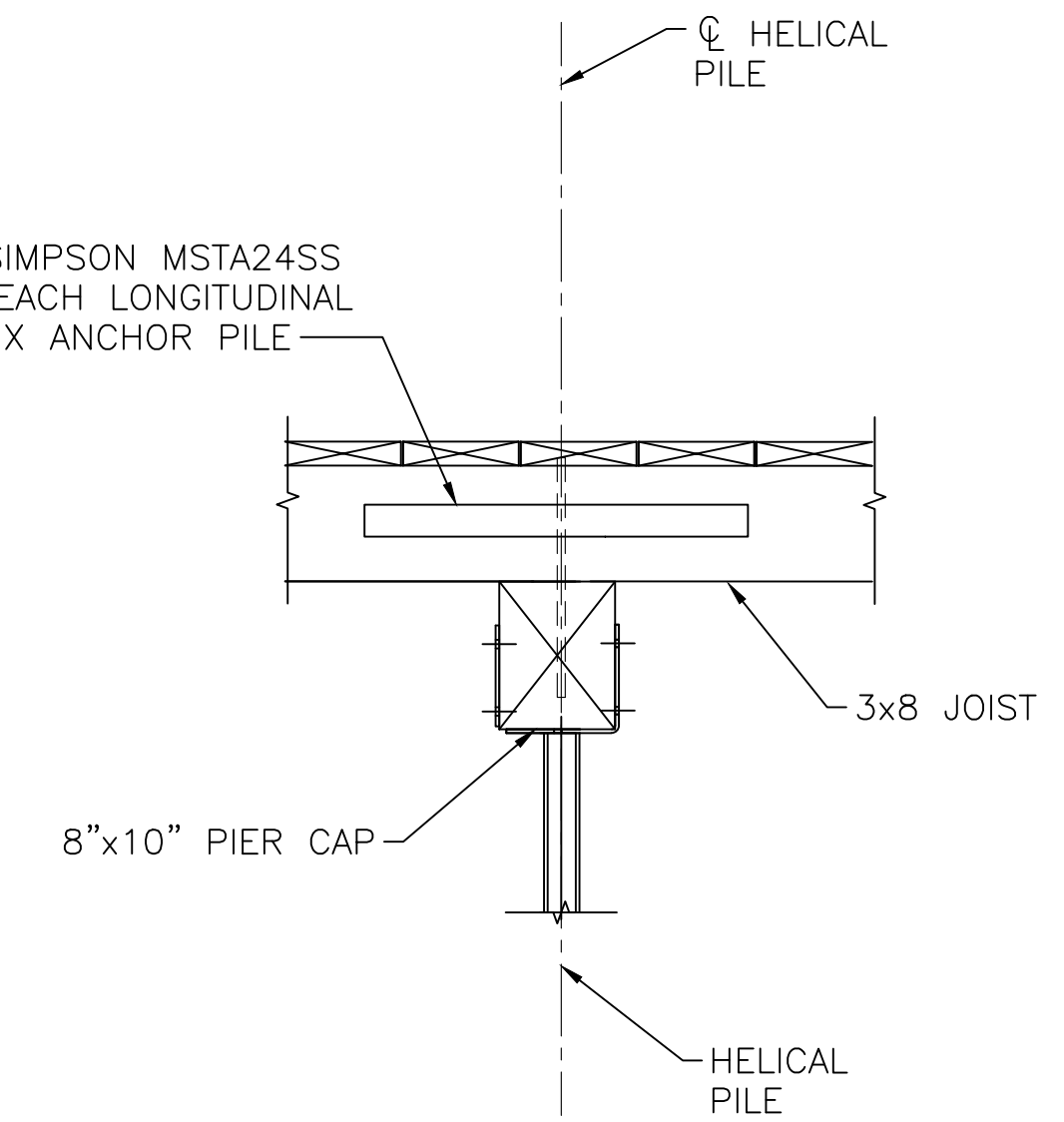
SECTION 3
SCALE: 1"=1'-0"
SD1



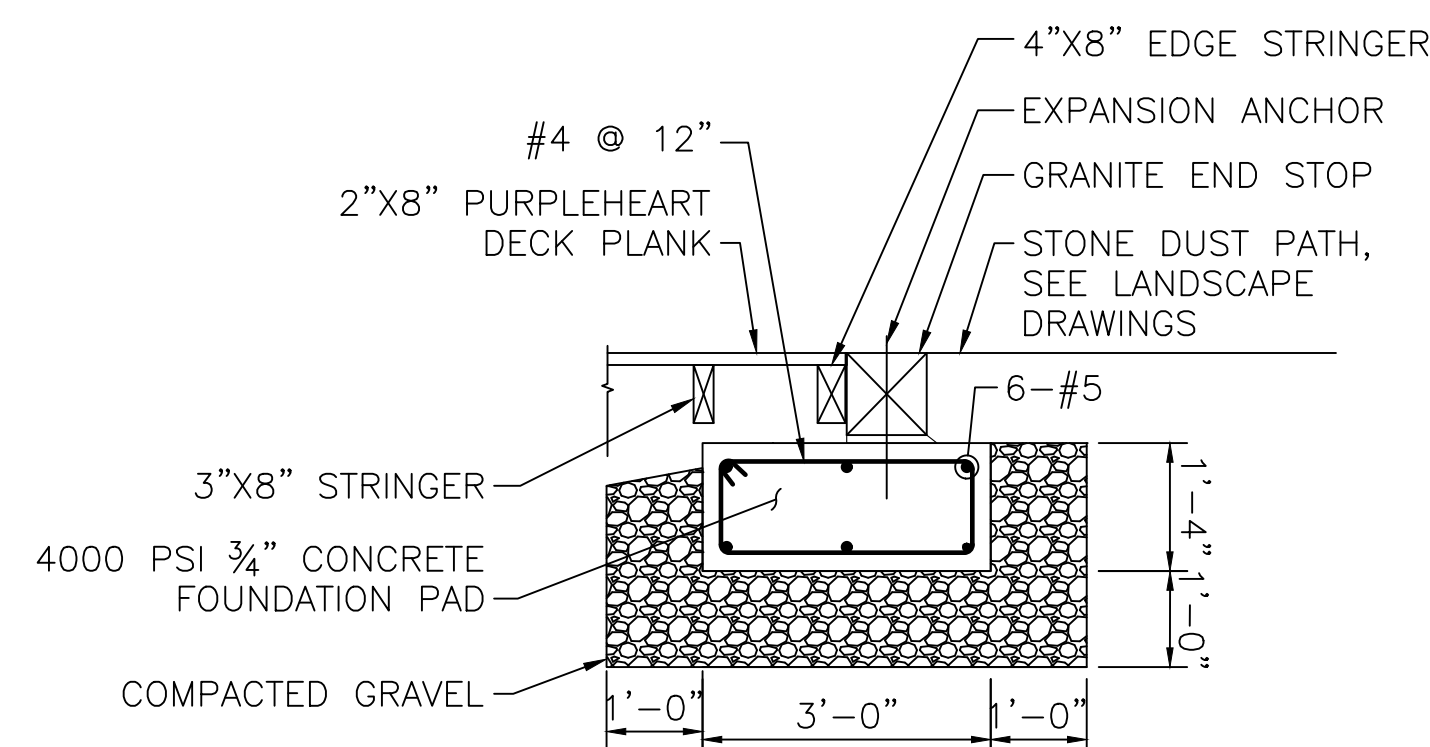
CURBING - DETAIL 1
SCALE: 1"=1'-0"
SD2



SECTION 6
SCALE: 1"=1'-0"
SD3

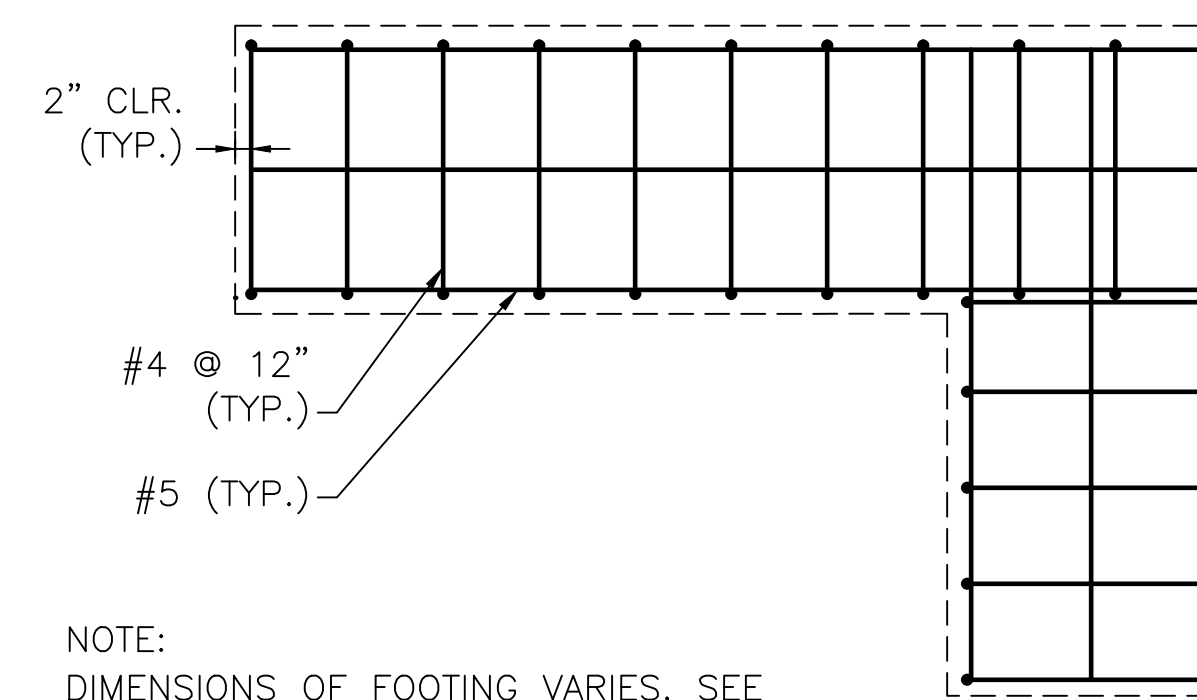


DETAIL D
SCALE: 1/2"=1'-0"
SD3



NOTE:
BRIDGING/ BLOCKING NOT SHOWN FOR CLARITY.

SECTION 4
SCALE: 1/2"=1'-0"
SD3

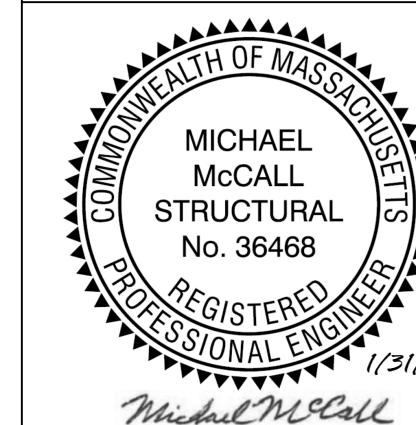


PLAN - FOOTING REBAR
SCALE: 1/2"=1'-0"

NOTE:
DIMENSIONS OF FOOTING VARIES, SEE DRAWING NOS. SD1 AND SD3.

NOTE:
SEE SPECIFICATIONS FOR INFORMATION ON SELF-ADHERED MEMBRANE.

REV.	DATE:	DESCRIPTION:	BY:



COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION			
MAGAZINE BEACH IMPROVEMENTS PHASE 2.2 - GRASSY BEACH			
CHARLES RIVER RESERVATION CAMBRIDGE, MA			
DESIGNED: RH, NG	SECTIONS & DETAILS		DRAWING NO.
CHECKED: RH			SD4
DRAWN: NG	CONT. P25-3586-C5A	SCALE: AS NOTED	
CHECKED: RH	ACC. 104667 x	DATE: 02-05-2025	19 OF 21

SPECIFICATIONS

- CONTRACTOR SHALL PROVIDE A COMPLETE ELECTRICAL SYSTEM, INCLUDING THE FOLLOWING, BUT NOT LIMITED TO:
 - PROVIDE UNDERGROUND CONDUIT & MANHOLES TO MOVE OVERHEAD SERVICES UNDERGROUND
 - CAPTURE AND EXTEND EXISTING SECONDARY SERVICES TO POWER HOUSE BUILDING THROUGH NEW UNDERGROUND DUCT BANKS
 - REMOVAL OF EXISTING OVERHEAD SECONDARY
 - ALL CONDUIT FITTINGS, OUTLET BOXES, FLOOR BOXES, WIRING DEVICES, HANGER SUPPORTS, DISCONNECTS, SWITCHES, FUSES AND OTHER ITEMS REQUIRED INCIDENTAL FOR THE COMPLETION OF THE INSTALLATION.
 - CUTTING AND PATCHING SHALL BE PROVIDED WHERE REQUIRED BY GENERAL CONTRACTOR.
- COORDINATE WORK WITH THAT OF ALL OTHER TRADES AFFECTING OR AFFECTED BY WORK OF THIS SECTION. COOPERATE WITH SUCH TRADES TO ASSURE A STEADY PROGRESS OF ALL WORK UNDER CONTRACT
- PROVIDE ALL CUTTING AND HOLE CORING. GENERAL CONTRACTOR WILL PROVIDE ALL PATCHING AND FINISH PAINTING.
- ALL MATERIAL AND WORK PROVIDED SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND NATIONAL CODES AND STANDARDS.
- BE RESPONSIBLE FOR FILING ALL DOCUMENTS, PAYMENT OF ALL PERMITS AND FEES, AND SECURING OF ALL INSPECTIONS AND APPROVALS NECESSARY
- MAINTAIN ON THE SITE ONE SET OF BLACK LINE PRINTS OF THE ELECTRICAL WORK ON WHICH SHALL BE CLEARLY, NEATLY, AND ACCURATELY NOTED IN COLORED PENCIL ALL ARCHITECTURAL AND ELECTRICAL CHANGES, REVISIONS, AND ADDITIONS TO THE WORK. WHEREVER WORK IS INSTALLED OTHERWISE THAN AS SHOWN ON THE CONTRACT DRAWINGS, SUCH CHANGES SHALL BE NOTED.
- SUBMIT COMPLETE SHOP DRAWINGS IN ACCORDANCE WITH THE REQUIREMENTS OF THE GENERAL CONDITIONS AND SUPPLEMENTARY GENERAL CONDITIONS FOR WIRING DEVICES, BREAKERS, TRANSFORMER, DISCONNECT SWITCHES, PANELBOARDS, FIRE ALARM DEVICES, ETC.
- ATTENTION IS DIRECTED TO PROVISIONS OF THE GENERAL CONDITIONS AND SUPPLEMENTARY GENERAL CONDITIONS REGARDING GUARANTEES AND WARRANTIES FOR WORK UNDER THIS CONTRACT. KEEP ENTIRE PORTION OF THE WORK IN REPAIR WITHOUT EXPENSE TO THE OWNER AS FAR AS CONCERNS DEFECTS IN WORKMANSHIP OR MATERIALS FOR A PERIOD OF NOT LESS THAN ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION.
- MINIMUM SIZE CONDUIT SHALL BE 3/4 INCH. GALVANIZED RIGID STEEL CONDUIT SHALL BE INSTALLED WHERE RACEWAYS ARE SUBJECT TO DAMAGE. PROVIDE INSULATED BUSHINGS ON ALL CONDUITS LARGER THAN 3/4 INCH. COUPLINGS FOR EMT SHALL BE COMPRESSION TYPE OR SET SCREW TYPE. CABLE IS ALLOWED FOR BRANCH CIRCUITS AND FIRE ALARM WHERE CONCEALED AND ALLOWED BY CODE.
- FURNISH AND INSTALL ALL SUPPLEMENTARY STEEL CHANNELS, AND SUPPORTS REQUIRED FOR THE PROPER INSTALLATION, MOUNTING, AND SUPPORT OF ALL EQUIPMENT.
- ALL CONDUCTORS SHALL BE MINIMUM SIZE #12 AWG, EXCEPT FOR CONTROL WIRING, AND FIRE ALARM WIRING WHERE #14 AWG MAY BE USED AS INDICATED ON THE FLOOR PLANS. 120 VOLT BRANCH CIRCUIT HOMERUNS WHERE THE DISTANCE BETWEEN THE PANELBOARD AND FIRST OUTLET EXCEEDS 80' FOR 120 VOLTS AND 150' FOR 277 VOLTS SHALL BE #10 AWG. ALL FEEDERS AND BRANCH CIRCUIT WIRING SHALL BE COLOR CODED AS FOLLOWS:

240/120V	PHASE A	BLACK
240/120V	PHASE B	RED
240/120V	PHASE C	BLUE
GROUNDING NEUTRAL (240/120V)	WHITE	
EQUIPMENT GROUND (240/120V)	GREEN	
ISOLATED GROUND (240/120V)	GREEN/W STRIP	

 ALL CONDUCTORS SHALL BE COPPER INSULATED FOR 600 VOLTS WITH XHHW INSULATION. CONDUCTORS SHALL BE SOLID IN SIZES #10 AWG AND BELOW, OTHERWISE STRANDED.
- COVERPLATES FOR ALL JUNCTION BOXES SHALL BE IDENTIFIED AS TO SYSTEM AND FUNCTION BY MEANS OF FIBRE PEN FOR CONCEALED BOXES, OR DYMO LABELS FOR EXPOSED BOXES.
- THE ELECTRICAL CONTRACTOR SHALL VISIT THE SITE TO DETERMINE FOR HIMSELF THE EXISTING CONDITIONS THAT WILL EFFECT HIS BID.
- THE CONTRACTOR SHALL PROVIDE ALL GROUNDING IN ACCORDANCE WITH NATIONAL ELECTRIC CODE REQUIREMENTS.
- ALL ELECTRICAL WORK SHALL BE CARRIED OUT IN SUCH A MANNER AS TO PREVENT ANY INTERFERENCE WITH THE OWNER'S NORMAL OPERATION.

NOTIFY THE OWNER'S REPRESENTATIVE AND GENERAL CONTRACTOR AT LEAST 72 HOURS IN ADVANCE OF THE DESIRE TO CONNECT, DISCONNECT, TURN ON, OR TURN OFF ANY ELECTRIC OR OTHER SERVICES FROM THE OWNER'S SUPPLY SYSTEMS, AND THE ACTUAL OPERATION SHALL BE WITNESSED BY AUTHORIZED TECHNICIANS FROM THE OWNER'S STAFF.

IF ANY OF THE INTERRUPTIONS OF THE ELECTRICAL SERVICES INTERFERE WITH THE OWNER'S NORMAL OPERATION, THESE INTERRUPTIONS SHALL BE PERFORMED AFTER NORMAL WORKING HOURS.
- GENERAL RACEWAY INSTALLATION:
 - INSTALL THE VARIOUS TYPES OF RACEWAYS IN PERMITTED LOCATIONS AS PREVIOUSLY SPECIFIED. ALL RACEWAYS SHALL BE RUN CONCEALED. CONSULT ARCHITECT FOR INSTRUCTION FOR RACEWAYS WHICH MUST BE EXPOSED IN PUBLIC SPACES.
 - RACEWAYS FOR NORMAL EMERGENCY OR EMERGENCY ONLY WIRING CANNOT CONTAIN OTHER CONDUCTORS.
 - RACEWAYS SHALL BE PROPERLY ALIGNED, GROUPED, AND SUPPORTED IN ACCORDANCE WITH CODE. EXPOSED RACEWAYS SHALL BE INSTALLED AT RIGHT ANGLES TO OR PARALLEL WITH STRUCTURAL MEMBERS. CONCEALED RACEWAYS MAY TAKE MOST DIRECT ROUTE BETWEEN OUTLETS.
 - RACEWAYS SHALL BE CONTINUOUS AND SHALL ENTER AND BE SECURED TO ALL BOXES IN SUCH A MANNER THAT EACH SYSTEM SHALL BE ELECTRICALLY CONTINUOUS FROM SERVICE TO ALL OUTLETS. PROVIDE GROUNDING BUSHINGS AND BONDING JUMPERS WHERE RACEWAYS ATTACH TO PAINTED ENCLOSURES OR TERMINATE BELOW EQUIPMENT.
 - WHERE RACEWAYS ENTER BOXES, CABINETS, TAP BOXES, OTHER THAN THOSE HAVING THREADED HUBS, A STANDARD LOCKNUT SHALL BE USED ON THE OUTSIDE AND LOCKWIT AND BUSHING ON THE INSIDE.
 - ALL EMPTY RACEWAYS SHALL BE PROVIDED WITH A PULL WIRE.
 - ALL RACEWAY SLEEVES, STUB, UPS, OR STUB, OUTS, WHERE NOT CONNECTED TO A BOX OR CABINET, SHALL BE TERMINATED WITH A BUSHING.
 - ALL RACEWAY JOINTS SHALL BE MADE UP TIGHT AND NO RUNNING THREADS WILL BE PERMITTED.
 - WHERE RACEWAYS ARE CUT, THE INSIDE EDGE SHALL BE REAMED SMOOTH TO PREVENT INJURY TO CONDUCTORS.
 - RACEWAYS SHALL NOT BE INSTALLED IN CONCRETE SLABS ABOVE GRADE OR BELOW WATERPROOFED SLABS.
 - RACEWAYS SHALL BE INSTALLED IN SUCH A MANNER AS TO PREVENT COLLECTION OF TRAPPED CONDENSATES, AND ALL RUNS SHALL BE ARRANGED TO DRAIN.
 - EACH EXTERIOR RACEWAY OR ASSEMBLY IN A DUCTBANK SHALL BE PROVIDED WITH CONTINUOUS WARNING TAPE INSTALLED 12 INCHES ABOVE RACEWAY OR DUCTBANK.
 - UNDERGROUND RIGID NON METALLIC RACEWAYS WHERE ALLOWED AND RUN AS A DUCTBANK ENCASED IN CONCRETE SHALL BE INSTALLED WITH PLASTIC SPACERS TO ENSURE A SEPARATION OF 3 INCHES BETWEEN RACEWAYS. TOP OF DUCTBANKS SHALL BE 30 INCHES BELOW GRADE, UNLESS OTHERWISE DETAILED.

- UNDERGROUND NON-METALLIC RACEWAYS SHALL BE FULLY SURROUNDED BY A SELECTED BACKFILL TO PREVENT MORE THAN THE DESIRED DEFLECTION AND, IN POWER RACEWAYS IS NEEDED TO PROVIDE ROOM FOR HEAT DISSIPATION AND GOOD COMPACTION OF BACKFILL. SEPARATION BETWEEN DIRECT-BURIED, NON-ENCASED DUCTS: 3 INCHES MINIMUM FOR LIKE SERVICES, AND 12 INCHES MINIMUM BETWEEN POWER AND SIGNAL DUCTS, UNLESS SHOWN OTHERWISE ON THE DRAWINGS. RACEWAYS FORMATION FOR NON-ENCASED DUCTS SHALL BE BUILT UP LAYER BY LAYER. AFTER EACH LAYER IS PLACED, THE SELECTED BACKFILL SHALL BE PLACED OVER IT TO THE SPECIFIED DEPTH. THIS FILL SHOULD BE SPREAD EVENLY AND COMPACTED TO PROVIDE CONTINUOUS SUPPORT FOR THE NEXT TIER OF RACEWAYS. ANY TEMPORARY SPACERS USED SHOULD BE REMOVED FROM EACH LAYER OF RACEWAY AS SOON AS BACKFILL IS COMPLETED IN THAT LAYER. A MAXIMUM OF 9 CONDUITS SHALL BE GROUPED IN THE SAME TRENCH UNLESS OTHERWISE NOTED ON THE DRAWINGS.
 - COMPLY WITH NECA 1 FOR INSTALLATION REQUIREMENTS APPLICABLE TO PRODUCTS SPECIFIED IN PART 2 EXCEPT WHERE REQUIREMENTS ON DRAWINGS OR IN THIS ARTICLE ARE STRICTER.
 - FORM BENDS IN CONDUIT BY MEANS OF A CONDUIT BENDING MACHINE OR BY AN APPROVED HICKEY. TO FASTEN CONDUIT TO OUTLET BOXES, CABINETS, USE LOCKNUTS AND INSULATED THROAT BUSHINGS OF COMPATIBLE MATERIAL.
 - CUT CONDUIT ENDS SQUARE, THREAD CONDUIT, AND REAM TO REMOVE BURRS AND SHARP EDGES. FIELD THREADS SHALL BE OF THE SAME TYPE AND HAVE THE SAME EFFECTIVE LENGTH AS FACTORY CUT THREADS. TURNS, WHEREVER REQUIRED IN EXPOSED CONDUIT RUNS, SHALL BE MADE BY THE USE OF FACTORY-MADE BENDS, OR FIELD-MADE BENDS THAT MEET THE REQUIREMENTS OF THE NATIONAL ELECTRIC CODE. IN THE EVENT OF A MULTIPLICITY OF CONDUITS MAKING THE SAME TURN, A STEEL JUNCTION BOX WITH A REMOVABLE STEEL COVER MAY BE USED. OFFSETS AND BENDS FOR CHANGES IN ELEVATION OF EXPOSED CONDUIT RUNS SHALL BE MADE AT WALLS OR BEAMS AND NOT IN OPEN SPACES BETWEEN WALLS OR BEAMS. ROUT CONDUITS REQUIRED TO AVOID INTERFERE WITH THE OPERATION OR MAINTENANCE OF EQUIPMENT.
 - PULL OR CAP CONDUIT ENDS AS SOON AS CONDUIT IS INSTALLED, TO PREVENT ENTRANCE OF MOISTURE OR OTHER DEBRIS DURING CONSTRUCTION. DO NOT PULL WIRE INTO ANY CONDUIT UNTIL THE CONDUIT SYSTEM IS COMPLETE.
 - DRAWINGS, IN RELATION TO THE ROUTING OF CONDUITS, ARE DIAGRAMMATIC. EXCEPT WHERE ADDITIONAL CONDUITS MAY BE REQUIRED TO AVOID DERATING OF BRANCH CIRCUITS, ELSEWHERE WITHIN THIS SECTION, THE NUMBER AND SIZE OF CONDUITS AND WIRE SHALL BE FURNISHED AND INSTALLED AS INDICATED BY THE DRAWINGS. COORDINATE ROUTING OF CONDUITS IN THE FIELD WITH THE BUILDING STRUCTURE. RUN CONDUIT IN STRAIGHT LINES PARALLEL AND PERPENDICULAR TO WALLS, BEAMS, AND COLUMNS AND WITH RIGHT ANGLE BENDS AND THREADED CONDUIT FITTINGS. MAINTAIN 12 INCHES CLEARANCE BETWEEN CONDUIT AND SURFACE WITH TEMPERATURES EXCEEDING 104 DEGREES F.
 - WHERE RIGID METAL CONDUIT IS THREADED IN THE FIELD, USE A STANDARD CONDUIT CUTTING DIE PROVIDING 3/4 INCH TAPER PER FOOT.
 - CONDUIT AND EMT RUNS SHALL BE MECHANICALLY AND ELECTRICALLY CONTINUOUS FROM SERVICE ENTRANCE TO OUTLETS. SECURE CONDUIT TO CABINET, JUNCTION BOX, PULL BOX OR OUTLET BOX WITH LOCKNUT OUTSIDE AND BUSHING INSIDE, OR WITH LIQUID-TIGHT, THREADED, SELF-LOCKING, OR SET SCREW TYPE LOCKS AND BUSHINGS OR SELF-LOCKING ADAPTERS WILL NOT BE REQUIRED WHERE CONDUITS ARE SCREWED INTO TAPPED CONNECTIONS. BEFORE INSTALLING CONDUCTIONS, PROTECT VERTICAL CONDUIT RUNS THAT TERMINATE IN BOTTOMS OF WALL BOXES OR CABINETS FROM ENTRANCE OF FOREIGN MATERIAL.
 - SIZE RIGID STEEL CONDUIT, EMT AND FLEXIBLE METALLIC CONDUIT REQUIRED BY THE REFERENCED ELECTRICAL CODE, EXCEPT AS OTHERWISE SPECIFIED OR SHOWN ON THE DRAWINGS. CHECK RACEWAY SIZES TO DETERMINE THAT EQUIPMENT GROUNDING CONDUCTOR FITS IN SAME RACEWAY WITH PHASE AND NEUTRAL CONDUCTORS TO MEET MASSACHUSETTS ELECTRICAL CODE PERCENTAGE OF FILL REQUIREMENTS.
 - INSTALL SEALING FITTINGS AT FOLLOWING POINTS, AND ELSEWHERE AS SHOWN:
 - WHERE CONDUITS ENTER OR LEAVE HAZARDOUS AREAS EQUIPPED WITH EXPLOSION PROOF LIGHTING FIXTURES, SWITCHES, RECEPTACLES, AND OTHER ELECTRICAL DEVICES.
 - WHERE CONDUITS PASS FROM WARM TO COLD LOCATIONS.
 - PULL CORDS: IN EACH EMPTY RACEWAY, PROVIDE NYLON FISHING LINE HAVING TENSILE STRENGTH NOT LESS THAN 200 LBS, OR PROVIDE NO. 14 AWG STEEL WIRE. LABEL EACH END OF EACH LINE OR WIRE WITH A SECURELY ATTACHED TAG WHICH INDICATES THE LOCATION OF THE OTHER END.
 - THREADED CONDUIT JOINTS, EXPOSED TO WET, DAMP, CORROSIVE, OR OUTDOOR CONDITIONS: APPLY LISTED COMPOUND TO THREADS OF RACEWAY AND FITTINGS BEFORE MAKING UP JOINTS. FOLLOW COMPOUND MANUFACTURER'S WRITTEN INSTRUCTIONS.
- CONDUCTOR INSTALLATION:
 - NO CONDUCTORS SHALL BE PULLED INTO INDIVIDUAL RACEWAYS UNTIL SUCH RACEWAY SYSTEM IS COMPLETE AND FREE OF DEBRIS. NO HARMFUL LUBRICANTS SHALL BE USED TO EASE PULLING.
 - ALL CONDUCTORS SHALL BE WIRED SO THAT GROUNDED CONDUCTOR IS UNBROKEN; SWITCHES IN ALL CASES BEING CONNECTED IN UNGROUNDED CONDUCTOR.
 - CONNECTIONS THROUGHOUT THE ENTIRE JOB SHALL BE MADE WITH SOLDERLESS TYPE DEVICES OF APPROVED DESIGN SATISFACTORY TO INSPECTOR OF WIRES.
 - ALL TAPS AND SPLICES SHALL BE INSULATED EQUAL TO THAT OF CONDUCTOR INSULATION.
 - ALL CONDUCTORS OF EACH FEEDER IN PULL BOXES AND WIREWAYS, SHALL BE GROUPED, TIED TOGETHER, SUPPORTED, AND IDENTIFIED.
 - ALL CONDUCTORS IN PANELBOARDS AND OTHER WIRING ENCLOSURES SHALL BE NEATLY FORMED AND GROUPED.
 - ALL CONDUCTORS OF EMERGENCY ONLY AND/OR NORMAL/EMERGENCY SHALL BE RUN IN SEPARATE RACEWAY SYSTEMS TO FINAL OUTLET BOX.
 - PROVIDE SUPPORT FOR CONDUCTORS IN VERTICAL RACEWAYS IN ACCORDANCE WITH ARTICLE 300.19.
 - STRIP INSULATION FROM CONDUCTORS WITH APPROVED TOOLS AND ONLY OF SUFFICIENT LENGTH FOR PROPER TERMINATION. CUTTING OF CONDUCTOR STRANDING IS UNACCEPTABLE.
 - TAPS FROM PARALLELED CONDUCTORS SHALL BE OF A TYPE WHICH TAP EACH CONDUCTOR, SUCH AS ILSCO "PTA" SERIES.
 - GROUNDING CONDUCTORS ARE TO BE IDENTIFIED AS TO ASSOCIATED POWER CIRCUITS.
 - TEMPORARY LIGHT AND POWER - CONTRACTOR SHALL MAKE ALL NECESSARY PROVISIONS FOR TEMPORARY LIGHT AND POWER.
 - ANY EQUIPMENT OR DEVICES SCHEDULED TO REMAIN SHALL BE REFEED FOR A COMPLETE AND OPERATING SYSTEM.
 - DEMOLITION
 - PARTICULAR CARE SHALL BE TAKEN TO AVOID CREATING HAZARDS ON THE PROJECT OR CAUSING DISRUPTION OF SERVICES REMAINING.
 - ALL EXISTING EQUIPMENT INDICATED TO BE REMOVED SHALL BE DONE IN A NEAT AND WORKMANLIKE MANNER. ALL EXISTING EQUIPMENT INDICATED TO BE REMOVED SHALL BE BY THE ELECTRICAL CONTRACTOR AND REMOVED FROM THE SITE, REMOVED FROM THE SITE.
 - REMOVE ALL ABANDONED CONDUCTORS AND EQUIPMENT NOT BUILT INTO THE BUILDING CONSTRUCTION. WHERE CEILING OR WALLS ARE REMOVED, ABANDONED WIRING SHALL BE REMOVED AND ENDS OF LIVE SERVICES TO BE DISCONNECTED AND CUT-OFF.
 - PHASING
 - COORDINATE PHASING REQUIREMENTS OF PROJECT WITH GENERAL CONTRACTOR. PROVIDE ALL REQUIRED TEMPORARY SERVICES TO ACCOMMODATE PHASING.
 - MEASUREMENT AND PAYMENT
 - "ELECTRICAL WORK" WILL BE MEASURED AND PAID AS A "LUMP SUM" WHICH PRICE BID SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT, MATERIALS FOR ALL ELECTRICAL WORK INDICATED ON THE CONTRACT DRAWINGS, INCLUDING HANDHOLES, GROUND RODS, HANDHOLE FRAME AND COVER BONDING, ELECTRICAL AND COMMUNICATIONS DUCT BANKS, CONDUIT, WIRE, FITTINGS, SAUC, DUCT SPACERS, WARNING TAPE, EXCAVATION, BACKFILL, SURFACE RESTORATION TO EXISTING CONDITION, COORDINATION WITH UTILITIES FOR MINIMIZATION OF SERVICE INTERRUPTIONS, ALL UTILITY CHARGES INCLUDING VERIZON AND EVERSOURCE WORK ORDERS AND ASSOCIATED SERVICE FEES, UTILITY POLE REMOVAL AND DISPOSAL, COORDINATION WITH DCR AND UTILITIES, AND ALL INCIDENTAL EXPENSES NECESSARY FOR THE PROPER COMPLETION OF THE WORK SPECIFIED HEREIN, SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER, COMPLETE IN PLACE.

ELECTRICAL GENERAL NOTES

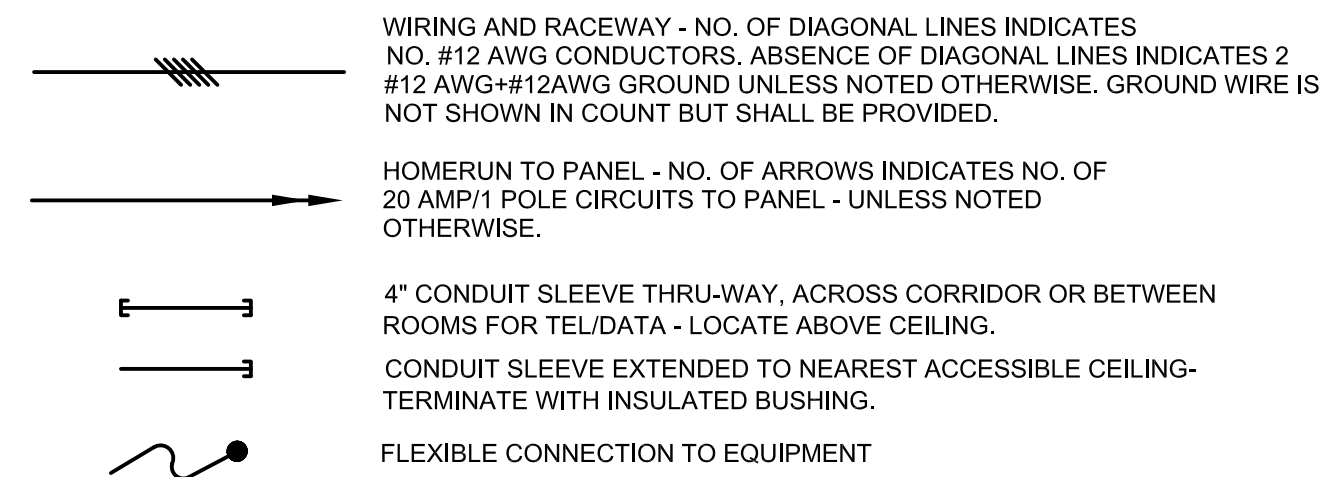
- THE SCOPE OF WORK SHALL INCLUDE PROVIDING ALL WORK INDICATED, AND COORDINATION WITH ALL TRADES. SCOPE OF WORK IS INDICATED ON THE CONTRACT DOCUMENTS INCLUDING THE DRAWINGS AND THE SPECIFICATIONS, WHICH ARE COMPLIMENTARY. WORK INDICATED IN ANY CONTRACT DOCUMENT SHALL BE CONSIDERED PART OF THE SCOPE OF WORK. IN GENERAL, WORK REQUIREMENTS ARE NOT INDICATED IN BOTH DOCUMENTS. WHERE DOCUMENTS CONFLICT WITH THEMSELVES OR WITH CODES AND REGULATIONS, PROVIDE THE HIGHER QUANTITY AND QUALITY AND FOLLOW THE STRICTER REQUIREMENTS.
- COORDINATE WITH THE GENERAL CONTRACTOR, OTHER TRADES AND OF MANUFACTURERS EQUIPMENT AND MAKE ALL FINAL CONNECTIONS AS REQUIRED, I.E., POWER, CONTROL, INTERLOCK, ETC.
- ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH OSHA, NFPA STANDARDS, THE ELECTRICAL CODE AND THE LOCAL GOVERNING AUTHORITIES. THE DRAWINGS AND SPECIFICATIONS DO NOT ATTEMPT TO INDICATE ALL WORK REQUIRED BY CODES AND AUTHORITIES.
- TEST ALL EQUIPMENT AND SYSTEMS INSTALLED TO CERTIFY COMPLIANCE WITH DRAWINGS, SPECIFICATIONS, CODES, LOCAL AUTHORITIES AND REGULATIONS. INCLUDE LABOR AND COSTS FOR TESTING, REVIEWS, APPROVALS AND CERTIFICATIONS.
- DRAWINGS ARE DIAGRAMMATIC ONLY. EXACT LOCATION, MOUNTING HEIGHTS OF EQUIPMENT AND ROUTING OF RACEWAYS SHALL BE COORDINATED WITH THE EQUIPMENT REQUIREMENTS AND FIELD CONDITIONS.
- FURNISH AND INSTALL ALL INCIDENTAL ACCESSORIES NECESSARY TO MAKE THE ELECTRICAL WORK COMPLETE AND READY FOR OPERATION.
- SUPPORT ALL WORK FROM THE BUILDING STRUCTURE.
- ALL MOUNTING HEIGHTS ARE TO CENTERLINE UNLESS OTHERWISE INDICATED.
- IF EXACT MOUNTING OR RACEWAY ROUTINGS ARE NOT INDICATED (LOCATION OR HEIGHT) REQUEST CLARIFICATION PRIOR TO ROUGHING, OR INSTALLATION.
- WIRE AND CONDUIT SIZES INDICATED ON HOMERUNS SHALL BE CONTINUOUS THROUGHOUT CIRCUIT.
- FURNISH AND INSTALL CODE REQUIRED DISCONNECTS WHICH ARE NOT FURNISHED BY THE HVAC OR PLUMBING CONTRACTORS.
- INSTALL A GREEN GROUNDING CONDUCTOR WITHIN EACH RACEWAY SIZED IN ACCORDANCE WITH THE ELECTRIC CODE.
- USE CAUTION TO AVOID DAMAGE TO EXISTING UTILITY LINES AND/OR HARM TO PERSONNEL WORKING IN THESE AREAS.
- ALL BRANCH CIRCUIT CONDUCTORS SHALL BE COPPER MINIMUM #12 AWG. SIZE UNLESS OTHERWISE INDICATED.
- PROVIDE A PULL LINE IN EVERY EMPTY CONDUIT PROVIDED UNDER THIS SECTION.
- WIRING IS INDICATED ON DRAWINGS ONLY FOR SPECIFIC ROUTES OR SPECIAL CONDITIONS.
- RACEWAYS SHALL BE LIMITED TO SIX CURRENT CARRYING CONDUCTORS (THREE PHASE AND THREE NEUTRALS) AND GROUNDING CONDUCTOR, UNLESS OTHERWISE INDICATED. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR EACH SINGLE PHASE RECEPTACLE CIRCUIT UNLESS AN OVERSIZED NEUTRAL IS SPECIFICALLY INDICATED.
- ALL HANDHOLE FRAMES AND COVERS SHALL BE BONDED TO GROUND.

SYMBOL LIST

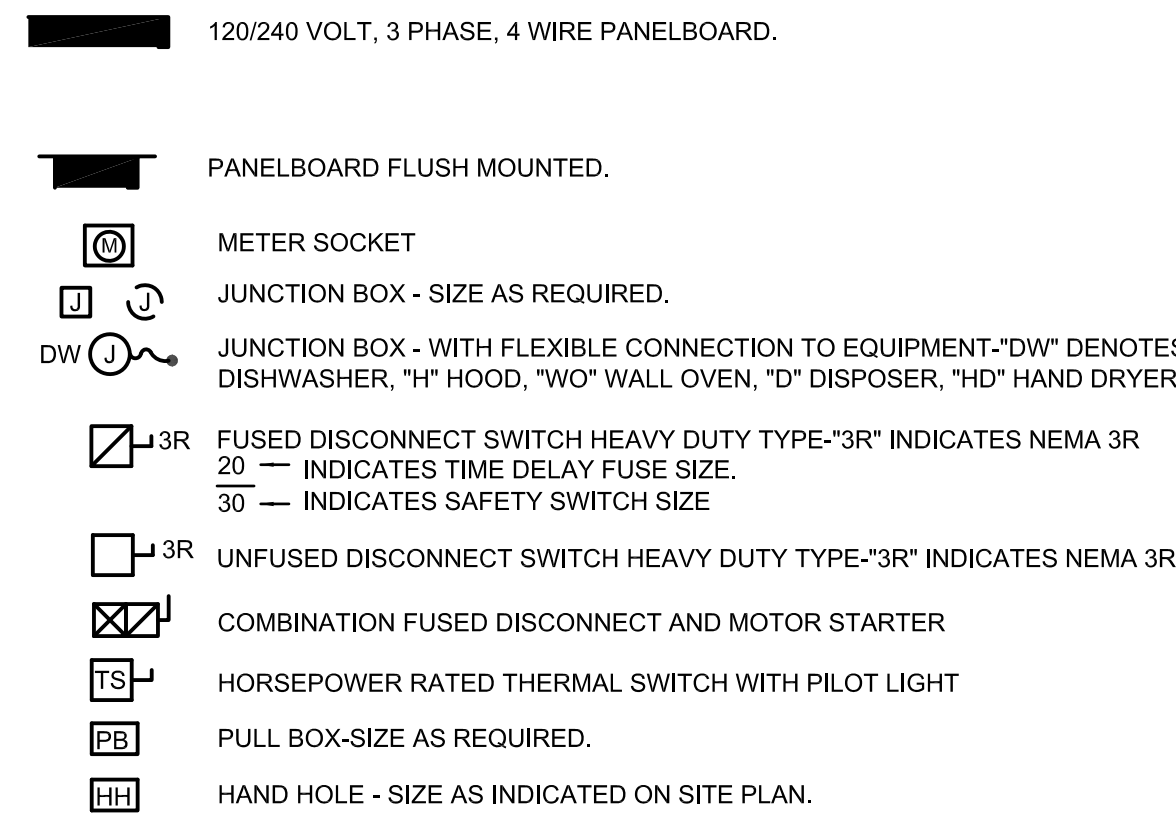
LEGEND NOTES:

- THIS SHEET IS A GENERAL LIST OF SYMBOLS AND ABBREVIATIONS AND SHALL BE USED AS A DICTIONARY TO DEFINE ITEMS INDICATED ON DRAWINGS. NOT ALL SYMBOLS OR ABBREVIATIONS ARE NECESSARILY USED ON THIS PROJECT.

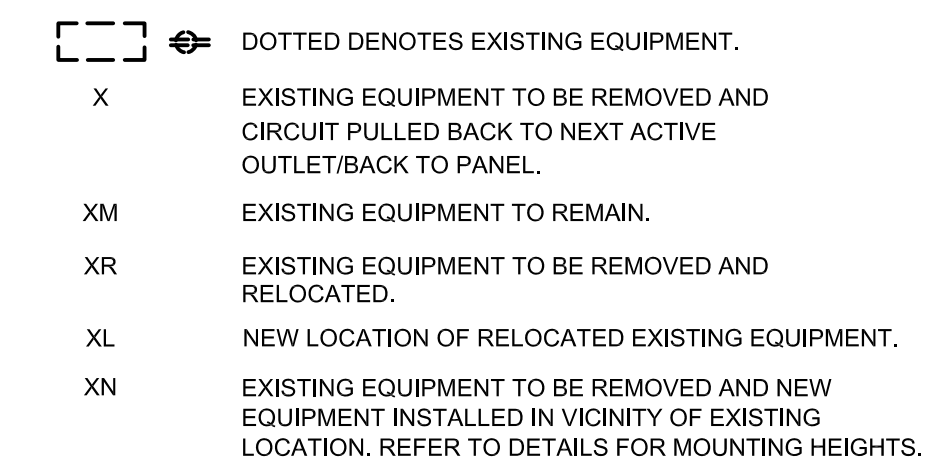
WIRE AND RACEWAYS



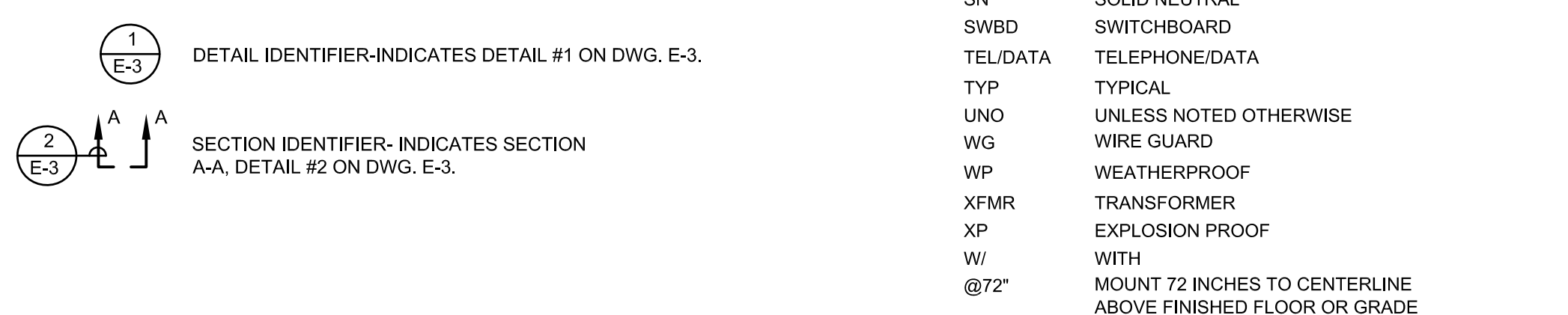
POWER



EXISTING EQUIPMENT



MISCELLANEOUS-DEVICES



ABBREVIATIONS

A	AMPERE
AL	ALUMINUM
AF	AMP. FRAME
AFB	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	INTERRUPTING CAPACITY
ALCS	
ARCH	ARCHITECT
AT	AMP TRIP
ATC	AUTO-TEMP CONTROL CONTRACTOR
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
C	CONDUIT (GENERIC TERM FOR RACEWAY. PROVIDE AS SPECIFIED)
CATV	CABLE TELEVISION
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CLG	CEILING
CU	COPPER
CL	CENTERLINE
DP	DEEP
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
EWC	ELECTRIC WATER COOLER
EMT	ELECTRIC METALLIC TUBING
FA	FIRE ALARM
FPC	FIRE PROTECTION SYSTEM CONTRACTOR
F&I	FURNISH(ED) AND INSTALL(ED)
G,GND	GROUND
GC	GENERAL CONDITIONS
GFI	GROUND FAULT INTERRUPTER
HVAC	HEATING, VENTILATING, AND AIR CONDITIONING CONTRACTOR
HP	HORSEPOWER
IG	ISOLATED GROUND
IMC	INTERMEDIATE METALLIC CONDUIT
IT	INFORMATION TECHNOLOGY CONTRACTOR
JB	JUNCTION BOX
KCMIL	THOUSAND CIRCULAR MILS
KES	KITCHEN EQUIPMENT SUPPLIER
KVA	KILO-VOLT AMPERE
KW	KILO-WATT
LTG	LIGHTING
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCM	THOUSAND CIRCULAR MILS
MDP	MAIN DISTRIBUTION PANEL
MH	MOUNTING HEIGHT
MLO	MAIN LUGS ONLY
MTD	MOUNTED
MTG	MOUNTING
MTS	MANUAL TRANSFER SWITCH
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NO.#	NUMBER
NRTL	NATIONALLY RECOGNIZED TESTING LABORATORY
NTS	NOT TO SCALE
OSHA	OCCUPATIONAL SAFETY AND HEALTH ASSOCIATION
P	POLE(S)
PB	PULL BOX
PC	PLUMBING CONTRACTOR
PH,Ø	PHASE
PVC	POLY-VINYL CHLORIDE CONDUIT
PWR	POWER
REF	REFRIGERATOR
RGS	RIGID GALVANIZED STEEL COODIT
SN	SOLID NEUTRAL
SWBD	SWITCHBOARD
TEL/DATA	TELEPHONE/DATA
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
WG	WIRE GUARD
WP	WEATHERPROOF
XFMR	TRANSFORMER
XP	EXPLOSION PROOF
W	WIT
@72"	MOUNT 72 INCHES TO CENTERLINE ABOVE FINISHED FLOOR OR GRADE

REV:	DATE:	DESCRIPTION:	BY:

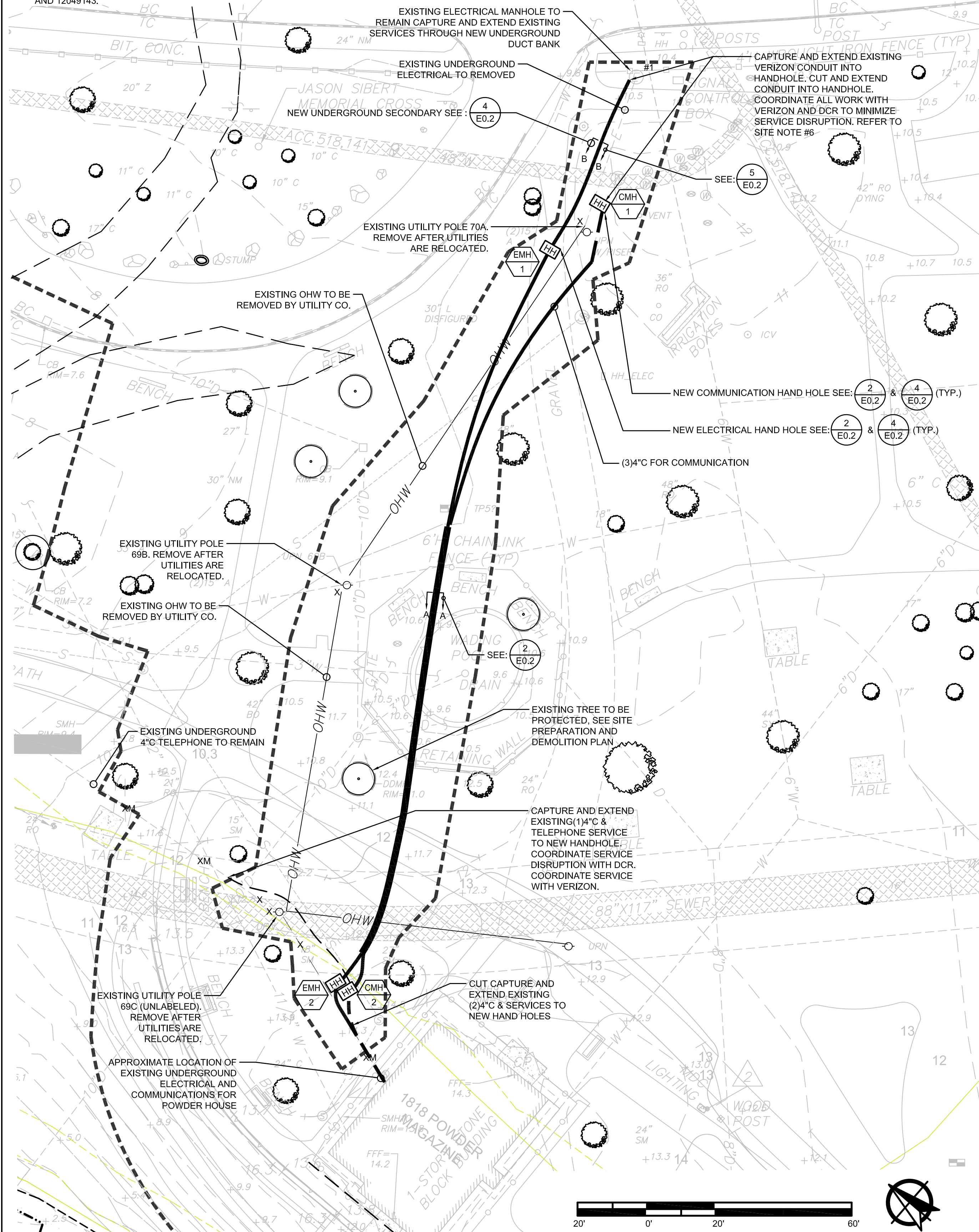
COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION		
MAGAZINE BEACH IMPROVEMENTS PHASE 2.2- GRASSY BEACH		
CHARLES RIVER RESERVATION CAMBRIDGE, MA		
DESIGNED: NCK	ELECTRICAL SYMBOL LIST & SPECIFICATION	DRAWING NO.
CHECKED: CMG		E0.1
DRAWN: NCK	CONT. P25-3586-C5A	SCALE: AS NOTED
CHECKED: CMG	ACC. 104668 x	DATE: 02-05-2025
		20 OF 21

SITE NOTES:

- DO NOT RUN ANY UNDERGROUND RACEWAYS WITHIN PLANTING AREAS OR LEACHING FIELDS. REFER TO DRAWINGS FOR LOCATIONS. COORDINATE ROUTING WITH LANDSCAPE ARCHITECT.
- REFER TO CIVIL DRAWINGS FOR EXACT ROUTING OF UTILITIES. REFER TO LANDSCAPE DRAWINGS FOR EXACT LOCATION OF 'SITE' FIXTURES.
- ALL SITE WIRING SHALL BE 2#8
G, 1" C MINIMUM UNLESS SHOWN OTHERWISE.
- REMOVE ALL SITE ELECTRICS WHEN NO LONGER REQUIRED.
- PROVIDE 17"x30"x18" D GROUND MOUNTED HEAVY DUTY PULL BOX (QUAZITE #PG1730BA18 WITH COVER #PG1730HH17 OR SAME BY CARSON, HIGHLINE, STRONGWELL, OR EQUAL.)
- E.C. TO PAY FOR ALL WORK ORDERS TO ALL UTILITIES, INCLUDING BUT NOT LIMITED TO EVERSOURCE, VERIZON, AND COMCAST FOR COORDINATION OF EXISTING SERVICES TO BE RELOCATED. VERIZON WORK ORDER NUMBER IS: 4A072MM. EVERSOURCE WORK ORDER NUMBERS ARE: 12048979 AND 12049143.

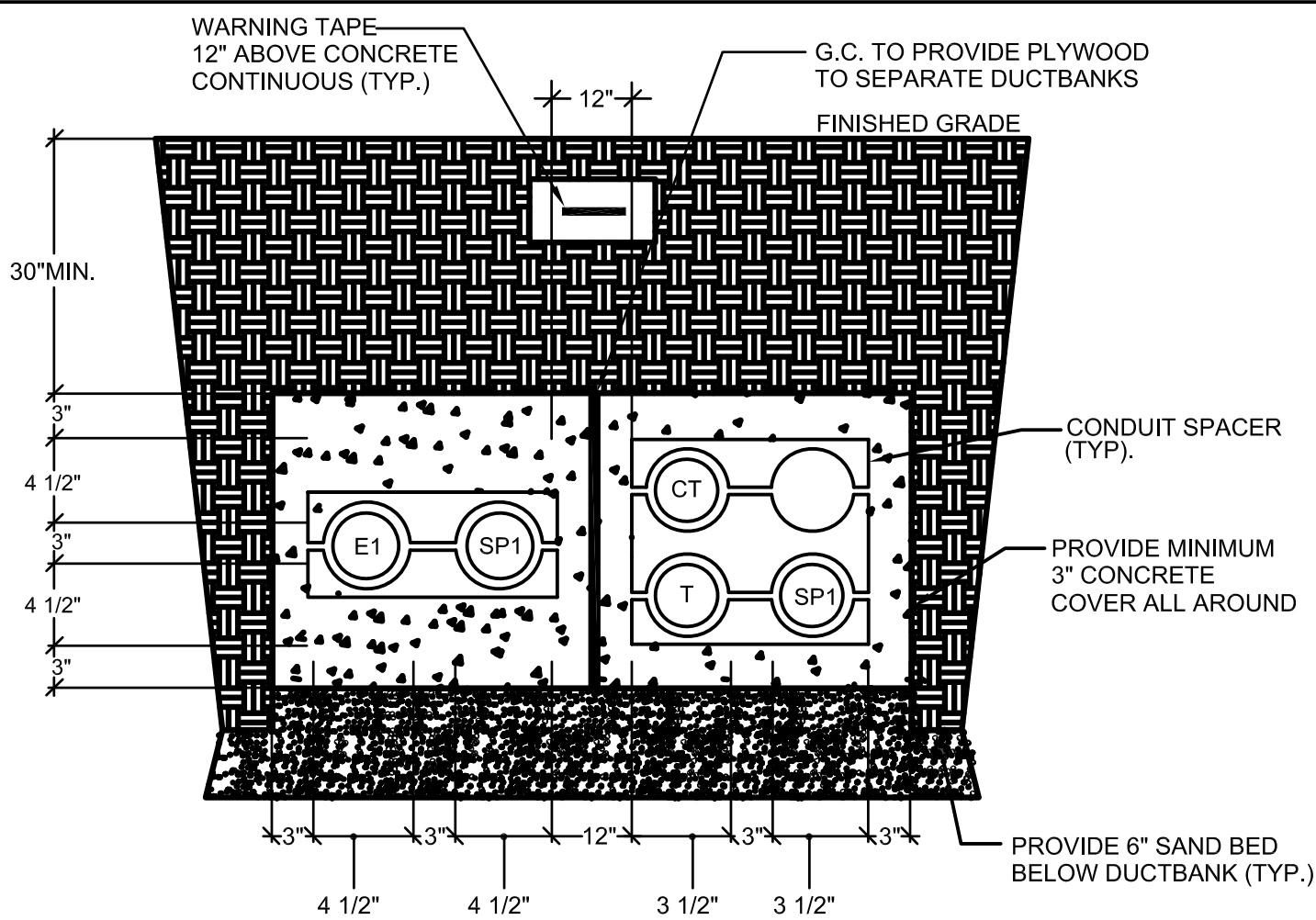
MEMORIAL DRIVE

MAGAZINE ST.



1 ELECTRICAL SITE PLAN

SCALE: 1"=20'-0"

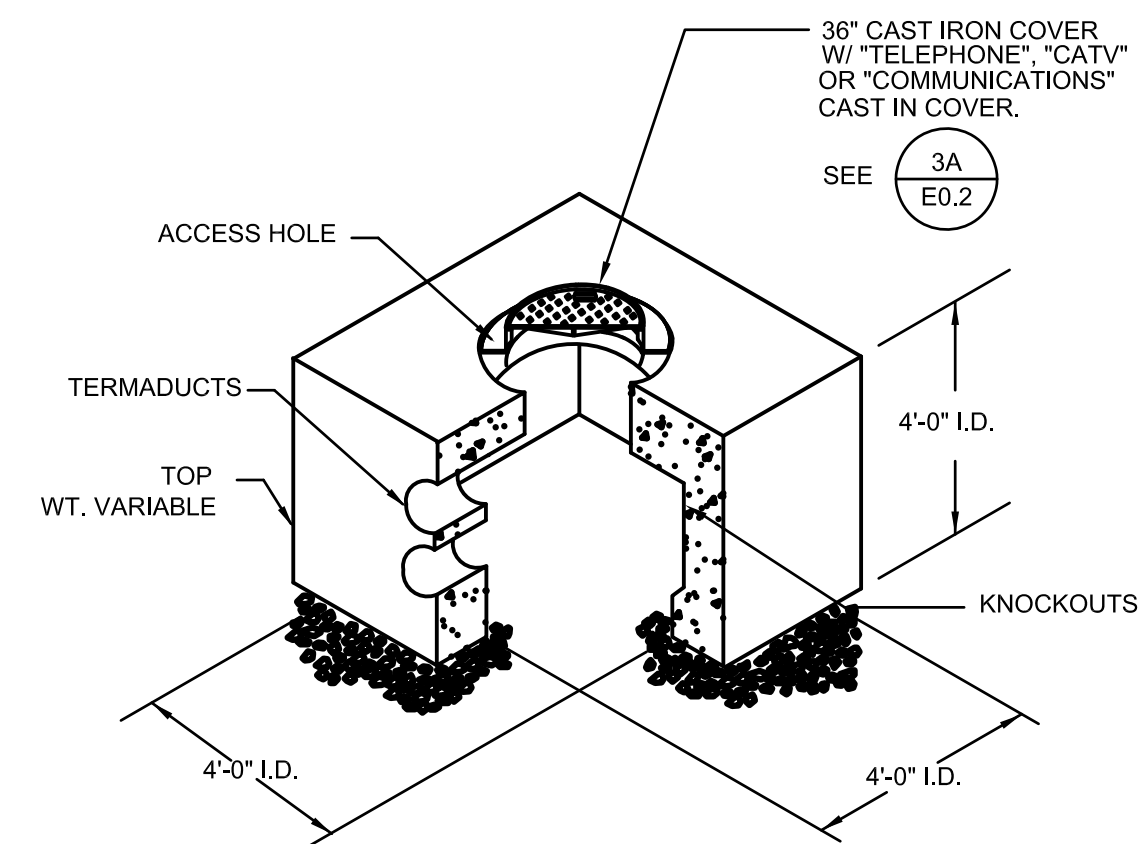
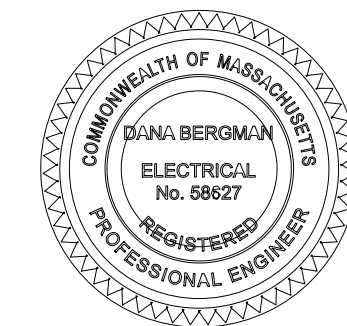


2 ELECTRICAL/COMMUNICATION DUCT BANK SECTION "A-A"

E0.2

SCALE: N.T.S.

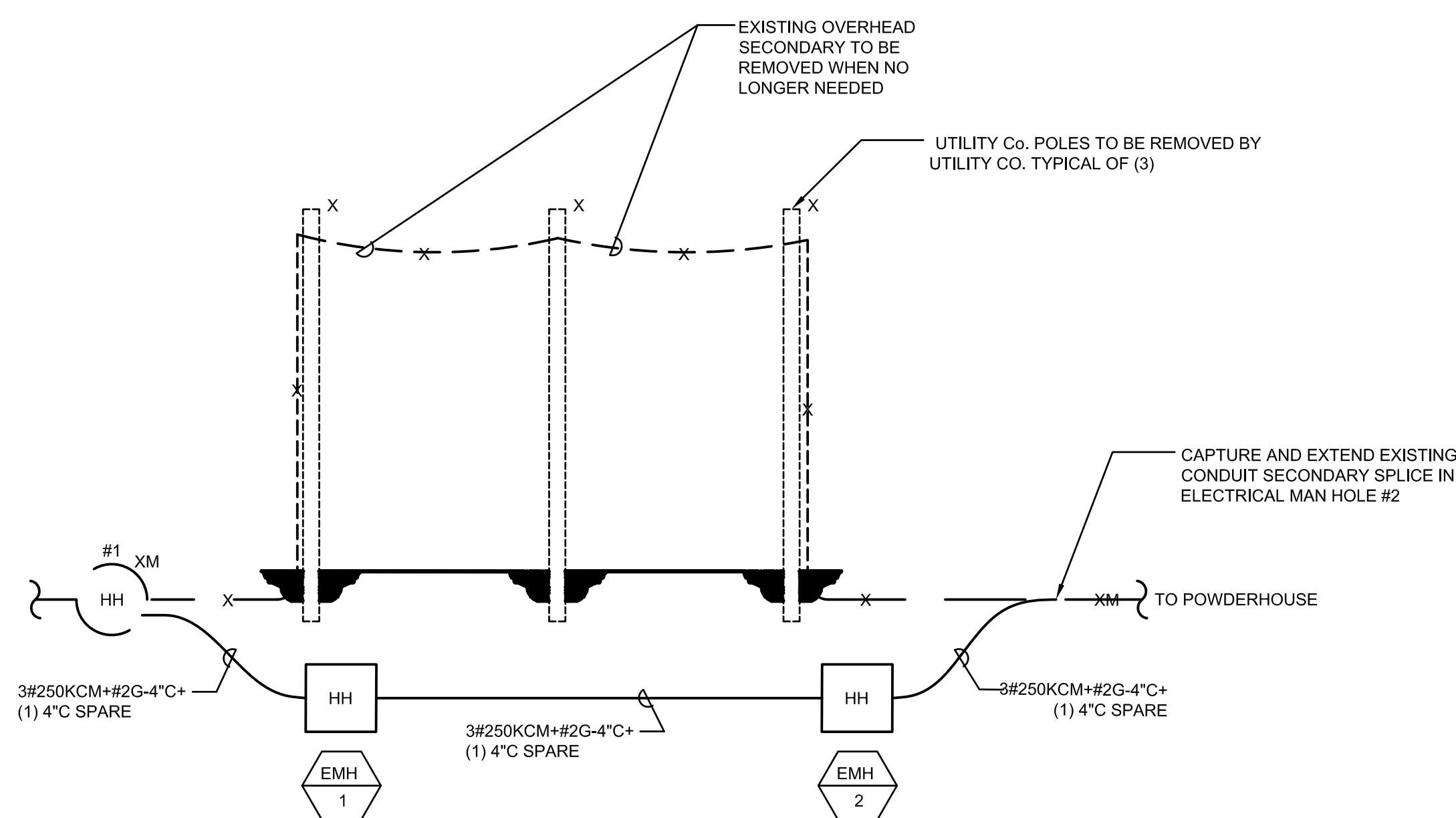
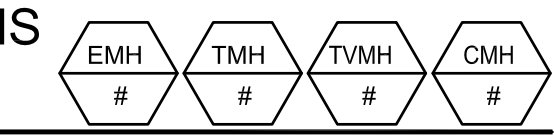
- E1** 4" SECONDARY - SCHEDULE 40 P.V.C. (PROVIDE PULL LINE)
- SP1** 4" SPARE - SCHEDULE 40 P.V.C. (PROVIDE PULL LINE)
- C** 4" TELEPHONE - SCHEDULE 40 P.V.C. PROVIDE PULL LINE IN CONDUIT.
- CT** 4" CATV - SCHEDULE 40 P.V.C. PROVIDE PULL LINE IN CONDUIT.



3 ELECTRICAL, TELEPHONE & C.A.T.V. & COMMUNICATIONS HANDHOLE

E0.2

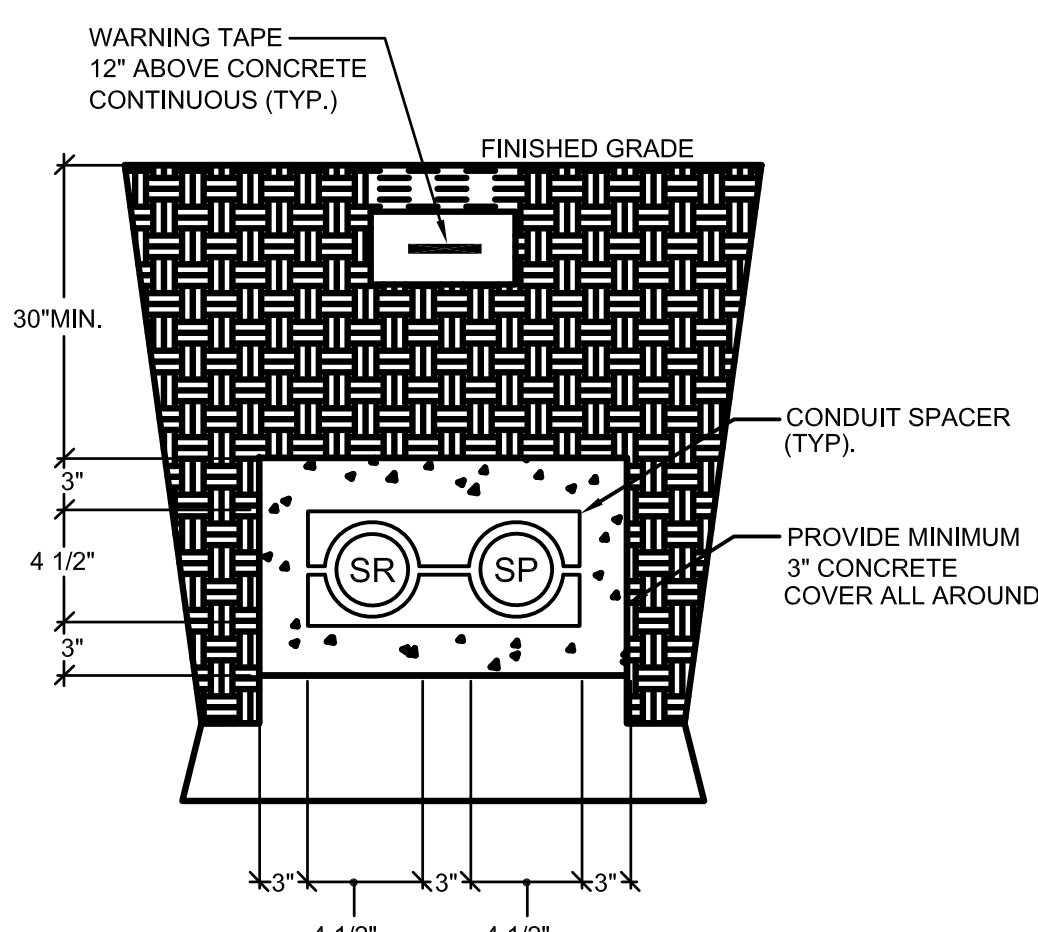
SCALE: N.T.S.



4 SECONDARY RISER

E0.2

SCALE: N.T.S.

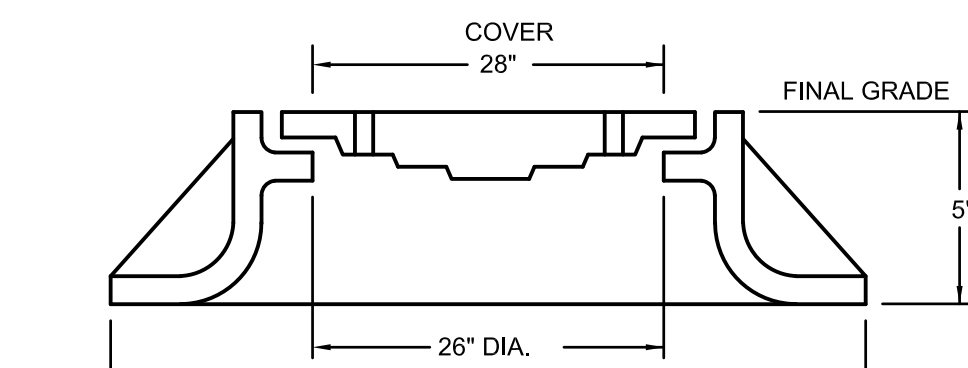
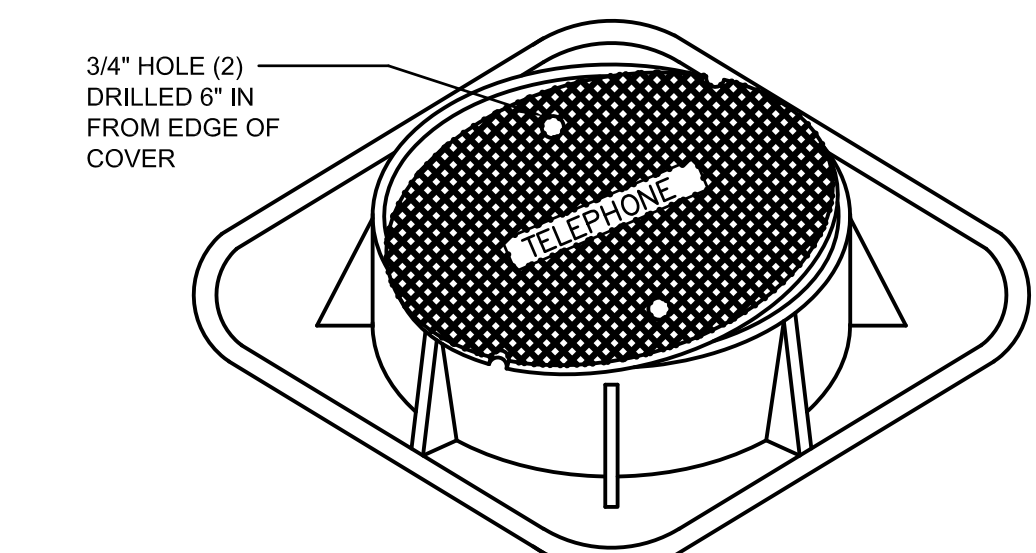


5 DUCT BANK SECTION "B-B"

E0.2

SCALE: N.T.S.

- E1** 4" SECONDARY - SCHEDULE 40 P.V.C. (PROVIDE PULL LINE)
- SP1** 4" SPARE - SCHEDULE 40 P.V.C. (PROVIDE PULL LINE)



- NOTES:**
- COVERS WILL HAVE "ELECTRIC", "TELEPHONE", OR "CATV" CAST IN THEM IN 3 INCH LETTERS.
 - FRAME AND COVER TO SUPPORT H2O WHEEL LOAD.
 - NO VAULT MANHOLE SHALL BE BURIED DEEPER THAN 18" BELOW FINISHED GRADE.
 - COVER SHALL BE FLUSH TO FINAL GRADE (CONCRETE, ASPHALT, GRAVEL, GRASS, ETC.)
 - PROVIDE COPPER CLAD STEEL 1/2" DIA X 8' LONG GROUND ROD IN EACH HANDHOLE. ALL FRAMES AND COVERS SHALL BE BONDED TO GROUND. PROVIDE THREADED SPLIT-BOLT CONNECTOR (SERVIT POST) FOR GROUND CONNECTIONS OR EQUIVALENT.

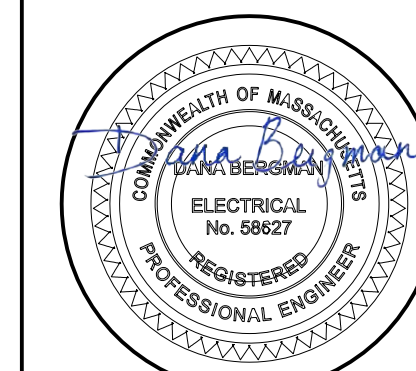
	SUPPLIER & CATALOG#	STOCK CODE
FRAME	NACIP AE 124 LEBARON LE-285L OR APPROVED EQUAL	07-29-229
COVER	NACIP LEBARON LE-28C5 ELECTRIC OR APPROVED EQUAL	07-15-530

3A FRAME AND COVER DETAIL

E0.2

SCALE: N.T.S.

REV:	DATE:	DESCRIPTION:	BY:



COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION		
MAGAZINE BEACH IMPROVEMENTS PHASE 2.2- GRASSY BEACH		
CHARLES RIVER RESERVATION CAMBRIDGE, MA		
DESIGNED: JMB	ELECTRICAL SITE PLAN	DRAWING NO.
CHECKED: DMP	CONT. P25-3586-C5A	E0.2
DRAWN: JMB	ACC. 104669 x	SCALE: AS NOTED
CHECKED: DMP	DATE: 02-05-2025	21 OF 21