



MASSWILDLIFE

DIVISION OF FISHERIES & WILDLIFE

1 Rabbit Hill Road, Westborough, MA 01581

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MASS.GOV/MASSWILDLIFE

January 25, 2023

Town of Reading
16 Lowell Street
Reading MA 01867

RE: Applicant: Town of Reading
 Project Location: Grove Street, Lot 5, Middlesex Registry of Deeds Book 79449, Page 492
 Project Description: Gravel parking lot and walking path
 NHESP File No.: **21-40434 (Lot 5)**

Dear Applicant:

The Natural Heritage & Endangered Species Program of the Massachusetts Division of Fisheries & Wildlife (Division) previously received the MESA Project Review Checklist with plans and other required materials for review pursuant to the Massachusetts Endangered Species Act (MESA) (MGL c.131A) and its implementing regulations (321 CMR 10.00). Revised plans were subsequently submitted for the property and are the Plans of Record or "Plan", as referenced herein:

- TOWN OF READING, MASSACHUSETTS GROVE STREET, LOT 5 PARKING LOT READING, MASSACHUSETTS 01867, (dated January 23, 2023, sheets C001, C100, CD100, C101, C102, C500, C501; prepared by Weston and Sampson); Attached.

The MESA is administered by the Division, and prohibits the Take of state-listed species. The Take of state-listed species is defined as "in reference to animals...harm...kill...disrupt the nesting, breeding, feeding or migratory activity...and in reference to plants...collect, pick, kill, transplant, cut or process...Disruption of nesting, breeding, feeding, or migratory activity may result from, but is not limited to, the modification, degradation, or destruction of Habitat" of state-listed species (321 CMR 10.02). The Division determined that this Project, as currently proposed, will occur within the actual habitat of the Blue-spotted Salamander (*Ambystoma laterale* pop. 1), a species of Special Concern. This species and their habitats are protected in accordance with the MESA.

As proposed, the project will occur on a 0.20 acres of a 0.52 acres lot. The Town revised the initial concept plan to minimize impacts to forested habitats and allow connectivity of habitat through this lot to the protected portion ("Conservation Restriction Easement Area") of the adjacent Lot 4 reviewed under NHESP 21-40434. As proposed by the town, the project will construct a gravel parking lot with seventeen (17) parking spaces, including two (2) handicapped-accessible spaces. A walking path is proposed to connect the gravel parking lot to walking trails on abutting town conservation property associated with the Reading Town Forest. The area of Lot 5 located outside the limit of work ('PROP LIMIT OF WORK') in the Plan will be protected for conservation and open space.

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MASSWILDLIFE

nesting, breeding, feeding, or migratory activity may result from, but is not limited to, the modification, degradation, or destruction of Habitat” of state-listed species (321 CMR 10.02).

Based on the information provided and the information contained in our database, the Division finds that a portion of this project, as currently proposed, **must be conditioned** in order to avoid a prohibited Take of state-listed species (321 CMR 10.18(2)(a)). To avoid a prohibited Take of state-listed species, the following conditions must be met:

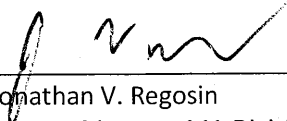
- 1) Limit of Work. All work shall conform to the Plan, which excludes any work outside the limit of work (“PROP LIMIT OF WORK”). Any changes to the proposed project or any additional work or trail development beyond that shown on the Plan shall require additional review and written approval from the Division.
- 2) Vegetation/Trail Maintenance. If any vegetation or soil alteration will occur outside the limit of work, the town shall submit a management plan for Division review and approval. As discussed with the town, a plan for this lot or the larger trail network in Priority Habitat can be submitted in a single review by the Division and may qualify for review pursuant to 321 CMR 10.14.
- 3) Recordation. *Prior to the start of Work*, the Applicant shall record both of the following in the Registry of Deeds so as to become a record part of the chain of title:
 - a. this determination letter, and
 - b. the Plan.
- 4) Authorization Duration. This authorization is valid for 5 years from the date of issuance of this letter. Work shall be completed by the expiration of this authorization.
- 5) Compliance Report: Within thirty (30) days of the completion of Work or as otherwise approved by the Division, the Applicant shall submit written confirmation to the Division documenting compliance with the conditions outlined herein.

Provided the above-noted conditions are fully implemented and there are no changes to the project plans, this project will not result in a Take of state-listed species. We note that all work is subject to the anti-segmentation provisions (321 CMR 10.16) of the MESA. Any future projects or activities proposed on the Property which are (a) located outside of the approval of the limit of Work shown on the site plan, (b) not exempt from review pursuant to 321 CMR 10.14, and (c) located within mapped Priority Habitat as indicated in the Massachusetts Natural Heritage Atlas, will require review by the Division pursuant to MESA. Furthermore, 321 CMR 10.16 provides that projects shall not be segmented or phased to evade or defer the review requirements under MESA. If the Division determines, based on the considerations provided for in 321 CMR 10.16, that a future project or activity proposed on the Property is part of a larger common project or scheme, it may evaluate the cumulative impacts of the existing and proposed segments of the common project when reviewing the future proposed project or activity pursuant to MESA.

This determination is a final decision of the Division of Fisheries and Wildlife pursuant to 321 CMR 10.18. Any changes to the proposed project or any additional work beyond that shown on the site plans may require an additional filing with the Division pursuant to the MESA. This project may be subject to further review if no physical work is commenced within five years from the date of issuance of this determination, or if there is a change to the project.

Please note that this determination addresses only the matter of state-listed species and their habitats. If you have any questions regarding this letter, please contact Misty-Anne R. Marold, Senior Endangered Species Review Biologist, at (508) 389-6356 (misty-anne.marold@mass.gov).

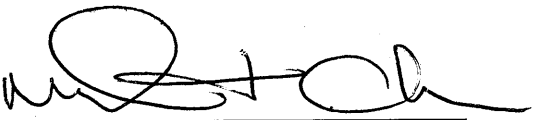
Sincerely,


Jonathan V. Regosin
Deputy Director, MA Division of Fisheries & Wildlife

On this 25th day of January, 2023, before me, the undersigned notary public, personally appeared Jonathan V Regosin, Deputy Director, proved to me through satisfactory evidence of identification, which was personal knowledge, to be the person whose name is signed on the preceding or attached document, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of his knowledge and belief.



MELANY CHEESEMAN
Notary Public
Commonwealth of Massachusetts
My Commission Expires
January 24, 2025

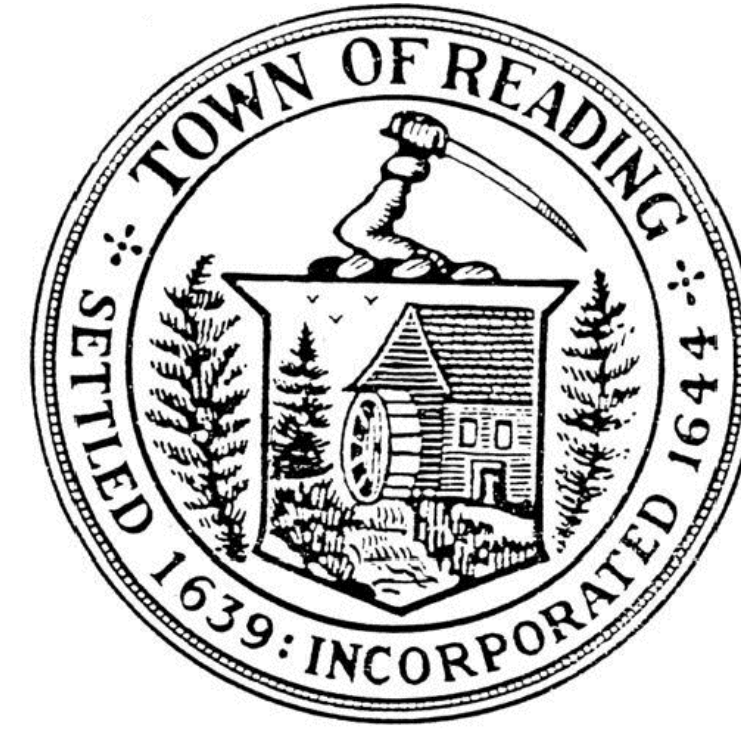


Melany Cheeseman, Notary Public
My Commission Expires: January 24, 2025

cc: Reading Conservation Commission
Megan Kearns, Weston & Sampson Engineers, Inc.
Fidel Maltez
Charles Tirone
Mel Higgins

Attachment: TOWN OF READING, MASSACHUSETTS GROVE STREET, LOT 5 PARKING LOT READING, MASSACHUSETTS 01867, (dated January 23, 2023, sheets C001, C100, CD100, C101, C102, C500, C501; prepared by Weston and Sampson)

TOWN OF READING, MASSACHUSETTS



GROVE STREET, LOT 5 PARKING LOT READING, MASSACHUSETTS 01867

DRAWING INDEX

SHEET	TITLE
C001	ABBREVIATIONS, NOTES & LEGEND
C100	EXISTING CONDITIONS PLAN
CD100	SITE PREPARATION & EROSION CONTROL PLAN
C101	LAYOUT & MATERIALS PLAN
C102	GRADING PLAN
C500	CONSTRUCTION DETAILS
C501	CONSTRUCTION DETAILS

ZONING INFORMATION

PARCEL ID:	044.0-0000-0024.0
ADDRESS:	0 GROVE STREET
OWNER:	TOWN OF READING 16 LOWELL STREET READING, MA 00867
ZONING DISTRICTS:	S20
EXISTING USE:	UNDEVELOPED
PROPOSED USE:	OUTDOOR RECREATION / CONSERVANCY



LOCUS MAP
SCALE : 1"=200'



Weston & Sampson Engineers, Inc.
55 Walkers Brook Drive, Suite 100
Reading, MA 01867
978.532.1900 800.SAMPSON
www.westonandsampson.com

Issued Date:

JANUARY 23, 2023



Know what's below.
Call before you dig.

Issued For:

PERMITTING - NOT FOR CONSTRUCTION

Consultants:

No.	Date	Description
1	01/23/23	REV PER COMMENTS

Revisions:

No.	Date	Description
1	01/23/23	REV PER COMMENTS

COA:
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Seal:

Issued For:
PERMITTING - NOT FOR CONSTRUCTION

Scale: AS SHOWN

Date: DECEMBER 23, 2022
Drawn By: AKG
Reviewed By: JIP
Approved By: JIP
W&S Project No.: ENG22-0527
W&S File No.:

Drawing Title:
ABBREVIATIONS, NOTES & LEGEND
Sheet Number:
C001

ABBREVIATIONS

GENERAL NOTES

- EXISTING CONDITIONS INFORMATION BASED UPON AN ON THE GROUND SURVEY PERFORMED BY CONTROL POINT ASSOCIATES, INC. IN MAY OF 2022.
- WETLANDS WERE DELINEATED AND LOCATED BY WESTON & SAMPSON IN JULY OF 2022.
- PLAN BEARINGS ARE BASED UPON THE MASSACHUSETTS STATE PLANE COORDINATE SYSTEM - MAINLAND ZONE (NAD83) PER GPS OBSERVATIONS.
- PLAN ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) PER GPS OBSERVATIONS.
- ALL BIDDERS ARE REQUIRED TO INSPECT THE PROJECT SITE IN ITS ENTIRETY PRIOR TO SUBMITTING THEIR BID, AND BECOME FAMILIAR WITH ALL CONDITIONS AS THEY MAY AFFECT THEIR BID. CONTRACTOR AND SUB-CONTRACTOR SHALL BE FAMILIAR WITH ALL DRAWINGS AND SPECIFICATIONS PRIOR TO COMMENCING THE CONSTRUCTION.
- LOCATIONS OF ANY UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF SUCH UTILITIES, PROTECTING ALL EXISTING UTILITIES AND REPAIRING ANY DAMAGE DONE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE COORDINATION WITH UTILITY COMPANIES AND PUBLIC AGENCIES AND FOR OBTAINING ALL REQUIRED PERMITS AND PAYING ALL REQUIRED FEES.
- WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.
- THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY OWNER AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING ALL DRAWINGS AND SPECIFICATIONS TO DETERMINE THE EXTENT OF EXCAVATION AND DEMOLITION REQUIRED TO RECEIVE SITE IMPROVEMENTS.
- ANY DISCREPANCIES OR CONFLICTS BETWEEN THE DRAWINGS AND EXISTING CONDITIONS, EXISTING CONDITIONS TO REMAIN, TEMPORARY CONSTRUCTION, PERMANENT CONSTRUCTION AND WORK OF ADJACENT CONTRACTS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER BEFORE PROCEEDING. ITEMS ENCOUNTERED IN AREAS OF EXCAVATION THAT ARE NOT INDICATED ON THE DRAWINGS, BUT ARE VISIBLE ON SURFACE, SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE REMOVED AT NO ADDITIONAL COST TO THE OWNER.
- ANY ALTERATIONS TO THESE DRAWINGS MADE IN THE FIELD DURING CONSTRUCTION SHALL BE RECORDED BY THE GENERAL CONTRACTOR ON "AS-BUILT" DRAWINGS.
- ALL AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS OUTSIDE THE PROJECT LIMITS, SHALL BE RESTORED TO THE ORIGINAL CONDITION BY THE CONTRACTOR AT NO ADDITIONAL COST AND TO THE SATISFACTION OF THE OWNER.
- ALL WORK SHOWN ON THE PLANS AS BOLD SHALL REPRESENT PROPOSED WORK. THE TERM "PROPOSED (PROP)" INDICATES WORK TO BE CONSTRUCTED USING NEW MATERIALS OR, WHERE APPLICABLE, RE-USING EXISTING MATERIALS IDENTIFIED AS "REMOVE AND RESET (R&R)", OR REMOVE, RELOCATE, RESET, (R,R&R).
- ALL KNOWN EXISTING STATE, COUNTY AND CITY LOCATION LINES AND PRIVATE PROPERTY LINES HAVE BEEN ESTABLISHED FROM AVAILABLE INFORMATION AND ARE INDICATED ON THE PLANS.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT HIS EMPLOYEES, AS WELL AS PUBLIC USERS FROM INJURY DURING THE ENTIRE CONSTRUCTION PERIOD USING ALL NECESSARY SAFEGUARDS, INCLUDING BUT NOT LIMITED TO, THE ERECTION OF TEMPORARY WALKS, STRUCTURES, PROTECTIVE BARRIERS, COVERING, OR FENCES AS NEEDED.
- THE CONTRACTOR SHALL SUPPLY THE OWNER WITH THE NAME OF THE OSHA "COMPETENT PERSON" PRIOR TO CONSTRUCTION.
- EXISTING TREES TO REMAIN SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITIES. NO STOCKPILING OF MATERIAL, EQUIPMENT OR VEHICULAR TRAFFIC SHALL BE ALLOWED WITHIN THE DRIP LINE OF TREES TO REMAIN. NO GUYS SHALL BE ATTACHED TO ANY TREE TO REMAIN. WHEN NECESSARY OR AS DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL ERECT TEMPORARY BARRIERS FOR THE PROTECTION OF EXISTING TREES DURING CONSTRUCTION.
- THE CONTRACTOR SHALL CALL DIGSAFE AT 811 AT LEAST 72 HOURS, SATURDAYS, AND HOLIDAYS EXCLUDED, PRIOR TO EXCAVATING AT ANY LOCATION. A COPY OF THE DIGSAFE PROJECT REFERENCE NUMBER(S) SHALL BE GIVEN TO THE OWNER PRIOR TO EXCAVATION.
- CONTRACTOR IS RESPONSIBLE FOR STAKING CONSTRUCTION BASELINES, STRUCTURES, ETC WITH A LICENSED SURVEYOR IN FIELD. NO CONSTRUCTION WILL BE PERFORMED WITHOUT THE PROPOSED BASELINES AND LAYOUTS APPROVED BY THE ENGINEER.
- NO FILL SHALL CONTAIN HAZARDOUS MATERIALS.
- CONTRACTOR SHALL PROVIDE TEMPORARY FENCING AROUND PERIMETER OF WORK AREA (LIMIT OF WORK). FENCE SHALL NOT IMPEDE TRAVEL WAYS.
- ANY QUANTITIES SHOWN ON PLANS ARE FOR COMPARATIVE BIDDING PURPOSES ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE PROJECT SITE TO VERIFY ALL QUANTITIES AND CONDITIONS PRIOR TO SUBMITTING BID.
- ALL EXISTING DRAINAGE FACILITIES TO REMAIN SHALL BE MAINTAINED FREE OF DEBRIS, SOIL, SEDIMENT, AND FOREIGN MATERIAL AND OPERATIONAL THROUGHOUT THE LIFE OF THE CONTRACT. REMOVE ALL SOIL, SEDIMENT, DEBRIS AND FOREIGN MATERIAL FROM ALL DRAINAGE STRUCTURES, INCLUDING BUT NOT LIMITED TO, DRAINAGE INLETS, MANHOLES AND CATCH BASINS WITHIN THE LIMIT OF WORK AND DRAINAGE STRUCTURES OUTSIDE THE LIMIT OF WORK THAT ARE IMPACTED BY THE WORK FOR THE ENTIRE DURATION OF CONSTRUCTION.
- CONTRACTOR'S STAGING AREA MUST BE WITHIN THE CONTRACT LIMIT LINE (LIMIT OF WORK AS IDENTIFIED ON THE PLANS).
- THE CONTRACTOR SHALL KEEP ALL STREETS THAT ARE NOT RESTRICTED FROM PUBLIC USE DURING CONSTRUCTION BROOM CLEAN AT ALL TIMES. THE CONTRACTOR SHALL USE ACCEPTABLE METHODS AND MATERIALS TO MAINTAIN ADEQUATE DUST CONTROL THROUGHOUT CONSTRUCTION.
- CONTRACTOR SHALL COORDINATE ALL WORK WITH THE OWNER.
- THE LIMIT OF WORK SHALL BE DELINEATED IN THE FIELD PRIOR TO THE START OF SITE CLEARING OR CONSTRUCTION.
- HAULING OF EARTH MATERIALS TO AND FROM THE SITE SHALL BE RESTRICTED TO THE HOURS OF 7:00 AM TO 5:00 PM MONDAY THROUGH FRIDAY. HAULING SHALL ALSO BE PROHIBITED ON STATE AND FEDERAL HOLIDAYS.
- ANY BOULDERS 3 CY OR SMALLER SHALL BE CONSIDERED UNDOCUMENTED FILL AND SHALL BE DISPOSED OF AT NO ADDITIONAL COST TO THE OWNER.
- WORK ON SATURDAYS SHALL ONLY BE CONDUCTED IF PRIOR WRITTEN PERMISSION IS PROVIDED BY THE OWNER.

EROSION AND SEDIMENT CONTROL NOTES

- ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE PUT INTO PLACE BY G.C. PRIOR TO BEGINNING ANY CONSTRUCTION OR DEMOLITION. REFER TO PLAN FOR APPROXIMATE LOCATION OF EROSION AND SEDIMENT CONTROL. REFER TO SPECS AND DETAILS FOR TYPE OF EROSION AND SEDIMENT CONTROL.
- THE G.C. SHALL BE RESPONSIBLE FOR THE CONTINUAL MAINTENANCE OF ALL CONTROL DEVICES THROUGHOUT THE DURATION OF THE PROJECT.
- CONTRACTOR SHALL MEET ALL OF THE STATE OF MASSACHUSETTS D.E.P. WETLAND ORDINANCE REGULATIONS FOR SEDIMENT AND EROSION CONTROL.
- EXCAVATED MATERIAL STOCKPILED ON THE SITE SHALL BE SURROUNDED BY A RING OF UNBROKEN SEDIMENT AND EROSION CONTROL FENCE. THE LIMITS OF ALL GRADING AND DISTURBANCE SHALL BE KEPT TO A MINIMUM WITHIN THE APPROVED AREA OF CONSTRUCTION. ALL AREAS OUTSIDE OF THE LIMIT OF CONTRACT SHALL REMAIN TOTALLY UNDISTURBED UNLESS OTHERWISE APPROVED BY OWNER'S REPRESENTATIVE.
- ALL CATCH BASINS AND DRAIN GRATES WITHIN LIMIT OF CONTRACT SHALL BE PROTECTED WITH FILTER FABRIC DURING THE ENTIRE DURATION OF CONSTRUCTION.
- EROSION CONTROL BARRIERS TO BE INSTALLED AT THE TOE OF SLOPES. SEE SITE PREPARATION PLAN, NOTES, DETAILS AND SPECIFICATIONS.
- ANY AREA OUTSIDE THE PROJECT LIMIT THAT IS DISTURBED SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT NO COST TO THE CLIENT.
- THE CONTRACTOR SHALL PROVIDE DUST CONTROL FOR CONSTRUCTION OPERATIONS AS APPROVED BY THE CLIENT.
- ALL POINTS OF CONSTRUCTION EGRESS OR INGRESS SHALL BE MAINTAINED TO PREVENT TRACKING OR FLOWING OF SEDIMENT ON TO PUBLIC/Private ROADS.

SITE PREPARATION NOTES

- THE CONTRACTOR SHALL INCLUDE IN THE BID THE COST OF REMOVING ANY EXISTING SITE FEATURES AND APPURTENANCES NECESSARY TO ACCOMPLISH THE CONSTRUCTION OF THE PROPOSED SITE IMPROVEMENTS. THE CONTRACTOR SHALL ALSO INCLUDE IN THE BID THE COST NECESSARY TO RESTORE SUCH ITEMS IF THEY ARE SCHEDULED TO REMAIN AS PART OF THE FINAL SITE IMPROVEMENTS. REFER TO PLANS TO DETERMINE EXCAVATION, DEMOLITION AND TO DETERMINE THE LOCATION OF THE PROPOSED SITE IMPROVEMENTS.
- THE OWNER RESERVES THE RIGHT TO REVIEW ALL MATERIALS DESIGNATED FOR REMOVAL AND TO RETAIN OWNERSHIP OF SUCH MATERIALS. IF THE OWNER RETAINS ANY MATERIAL THE CONTRACTOR SHALL ALLOW ARRANGEMENTS WITH THE OWNER TO HAVE THOSE MATERIALS REMOVED OFF SITE AT NO ADDITIONAL COST.
- UNLESS SPECIFICALLY NOTED TO BE SAVED / STOCKPILED (R&S) OR REUSED / RELOCATED (R&R), ALL SITE FEATURES CALLED FOR REMOVAL (REM) SHALL BE REMOVED WITH THEIR FOOTINGS, ATTACHMENTS, BASE MATERIAL, ETC., TRANSPORTED FROM THE SITE TO BE DISPOSED OF IN A LAWFUL MANNER AT AN ACCEPTABLE DISPOSAL SITE AND AT NO COST TO THE OWNER.
- ALL EXISTING SITE FEATURES TO REMAIN SHALL BE PROTECTED THROUGHOUT THE CONSTRUCTION PERIOD. ANY FEATURES DAMAGED DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE CLIENT'S REPRESENTATIVE AT NO ADDITIONAL COST.
- DURING EARTHWORK OPERATIONS, CONTRACTOR SHALL TAKE CARE TO NOT DISTURB EXISTING MATERIALS TO REMAIN, OUTSIDE THE LIMITS OF EXCAVATION AND BACKFILL AND SHALL TAKE WHATEVER MEASURES NECESSARY, AT THE CONTRACTOR'S EXPENSE, TO PREVENT ANY EXCAVATED MATERIAL FROM COLLAPSING. ALL BACKFILL MATERIALS SHALL BE PLACED AND COMPACTED AS SPECIFIED TO THE SUBGRADE REQUIRED FOR THE INSTALLATION OF THE REMAINDER OF THE CONTRACT WORK.
- ALL ITEMS CALLED FOR REMOVAL SHALL BE REMOVED TO FULL DEPTH INCLUDING ALL FOOTINGS, FOUNDATIONS, AND OTHER APPURTENANCES, EXCEPT AS SPECIFICALLY NOTED OTHERWISE.
- THE STORAGE OF MATERIALS AND EQUIPMENT WILL BE PERMITTED AT LOCATIONS DESIGNATED BY THE CLIENT OR THE CLIENT'S REPRESENTATIVE. PROTECTION OF STORED MATERIALS AND EQUIPMENT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

GRADING NOTES

- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GRADES ON THE GROUND AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE CLIENT.
- CONTRACTOR SHALL ENSURE ALL AREAS ARE PROPERLY PITCHED TO DRAIN, WITH NO SURFACE WATER PONDING OR PUDDLING.
- EXCAVATION REQUIRED WITHIN PROXIMITY OF KNOWN EXISTING UTILITY LINES 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 CLIENT.
- WHERE NEW EARTHWORK MEETS EXISTING EARTHWORK, CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY INTO EXISTING, PROVIDING VERTICAL CURVES OR ROUNDS AT ALL TOP AND BOTTOM OF SLOPES.
- ALL FILL SHALL BE PLACED IN LIFTS & COMPACTED IN ACCORDANCE WITH THE EARTH WORK SPEC.
- WHERE A SPECIFIC LIMIT OF WORK LINE IS NOT OBVIOUS OR IMPLIED, BLEND GRADES TO EXISTING CONDITIONS WITHIN 5 FEET OF PROPOSED CONTOURS.
- RESTORE ALL DISTURBED AREAS AND LIMITS OF ALL REMOVALS TO LOAM AND SEED (L&S) UNLESS OTHERWISE NOTED.
- SEE EARTHWORK SECTION OF SPECIFICATIONS FOR SPECIFIC EXCAVATION AND FILLING PROCEDURES.

LAYOUT & MATERIALS NOTES

- REFER TO EXISTING CONDITIONS PLANS FOR SURVEY INFORMATION.
- COORDINATE ALL LAYOUT ACTIVITIES WITH THE SCOPE OF WORK CALLED FOR BY DEMOLITION, GRADING AND UTILITIES OPERATIONS ENCOMPASSED BY THIS CONTRACT. SET, PROTECT AND REPLACE REFERENCE STAKES AS NECESSARY OR AS REQUIRED BY THE CLIENT'S REPRESENTATIVE.
- ALL WORK SHALL BE PERFORMED BY CONTRACTOR UNLESS SPECIFICALLY INDICATED THAT THE WORK WILL BE PERFORMED "BY OTHERS".
- TO FACILITATE LAYOUT OF PROPOSED SITE FEATURES AND FACILITIES, LAYOUT INFORMATION FOR CERTAIN FUTURE WORK, WHICH IS NOT INCLUDED WITHIN THE SCOPE OF THIS CONTRACT HAS BEEN PROVIDED ON THE LAYOUT AND MATERIALS PLAN FOR INFORMATION ONLY. THE LAYOUT OF SITE AMENITIES AND FENCES MUST BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION. SOME ITEMS ARE "NOT IN CONTRACT (NIC)" AND SHOWN FOR REFERENCE ONLY.
- THE LAYOUT OF SITE AMENITIES AND FENCES MUST BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
- ALL PROPOSED SITE FEATURES SHALL BE LAID OUT AND STAKED FOR REVIEW AND APPROVAL BY THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF INSTALLATION. ANY REQUIRED ADJUSTMENTS TO THE LAYOUT SHALL BE UNDERTAKEN AS REQUIRED, AT NO ADDITIONAL COST TO THE OWNER.
- ALL PROPOSED PAVEMENTS SHALL MEET THE LINE AND GRADE OF EXISTING ADJACENT PAVEMENT SURFACES AND SHALL BE TREATED WITH AN RS-1 TACK COAT AT POINT OF CONNECTION.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GRADES ON THE GROUND AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE OWNER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD MEASUREMENT OF ALL PROPOSED FENCES AND GATES.
- ALL REFERENCES TO LOAM AND SEED (L&S) REFER TO HYDROMULCH SEEDED LAWN, UNLESS NOTED OTHERWISE.
- REFER TO DETAIL DRAWINGS FOR CONSTRUCTION DETAILS.
- CONTRACTOR SHALL PERFORM ALL EARTHWORK IN CONFORMANCE WITH PROJECT GEOTECHNICAL SPECIFICATIONS.
- EXCESS FILL MATERIAL SHALL BE REMOVED & DISPOSED OF BY THE CONTRACTOR AT NO ADDITIONAL COST.

GENERAL

PROP	PROPOSED
ADJ	ADJUST
BIT. CONC.	BITUMINOUS CONCRETE
CEM. CONC.	CEMENT CONCRETE
B	BASELINE
N.T.S.	NOT TO SCALE
B.M	BENCH MARK
ABAN	ABANDON
MB	MAIL BOX
GRAN. CURB	GRANITE CURB
EXIST. (OR EX.)	EXISTING
FDN	FOUNDATION
F.L. (OR F)	FLOW LINE
P	PROPERTY LINE
PAVMT	PAVEMENT
P.W.W.	PAVED WATERWAY
RC	REINFORCED CONCRETE
M.H.B.	MASSACHUSETTS HIGHWAY BOUND
REM	REMOVE
REMOD	REMODEL
RET	RETAIN
R.O.W.	RIGHT-OF-WAY
R&R	REMOVE AND RESET
R,R&R	REMOVE, RELOCATED AND RESET
R&S	REMOVE AND STACK
RSD	REMOVE AND DISPOSE
SB	STONE BOUND
NIC	NOT IN CONTRACT
H.C.	HANDICAP
WCR	WHEELCHAIR RAMP
FF	FINISHED FLOOR
HMA	HOT MIX ASPHALT
G.C.	GENERAL CONTRACTOR
E.C.	ELECTRICAL CONTRACTOR
P.C.	PLUMBING CONTRACTOR
SWEL	SOLID WHITE EDGE LINE
BWL	BROKEN WHITE LANE LINE
SYEL	SOLID YELLOW EDGE LINE
SB/DH	STONE BOUND/ DRILL HOLE
CLF	CHAIN LINK FENCE
TEMP.	TEMPORARY
TYP.	TYPICAL
EQ	EQUIPMENT
H.C.	HANDICAP
EOP	EDGE OF PAVEMENT
PROT	PROTECT
CTE	CONNECT TO EXISTING
R/L	RIGHT LEADER
L.O.W.	LIMIT OF WORK
VIF	VERIFY IN FIELD
APPROX.	APPROXIMATE
TBM	TEMPORARY BENCHMARK
ALT.	ALTERNATE
BWW	BORDERING VEGETATED WETLAND

UTILITIES

GICI	GUTTER INLET W/ CURB INLET
CB	CATCH BASIN W/ CURB INLET
C.I.T.	CHANGE IN TYPE
CTE	CONNECT TO EXISTING
F&G	FRAME AND GRATE
F&C	FRAME AND COVER
CI	CURB INLET
CIP	CAST IRON PIPE
CMP	CORRUGATED METAL PIPE
DI	DUCTILE IRON PIPE
GI	GUTTER INLET
ACCM PIPE	ASPHALT COATED CORRUGATED METAL PIPE
HYD	HYDRANT
INV. ELEV.	INVERT ELEVATION
UP	UTILITY POLE
SMH	SEWER MANHOLE
WG	WATER GATE
DS	DOWN SPOUT
HOPE	HIGH DENSITY POLYETHYLENE PIPE
PVC	POLYVINYL CHLORIDE
RCPC	REINFORCED CONCRETE PIPE
DMH	DRAIN MANHOLE
LB	LEACHING BASIN
LG	LEACHING GALLEY
CI	CAST IRON
OCS	OUTLET CONTROL STRUCTURE
O&T	OIL AND GRIT TRAP
VC	VITRIFIED CLAY PIPE
LP	LIGHT POLE
OHW	OVERHEAD WIRE
UPLP	UTILITY POLE WITH LIGHT
SWTU	STORM WATER TREATMENT UNIT
HH	HANDHOLE
GW	GARAGE WASTE
CO	CLEANOUT
LC	LEACHING CHAMBER
GV	GATE VALVE

ALIGNMENT/GRADING

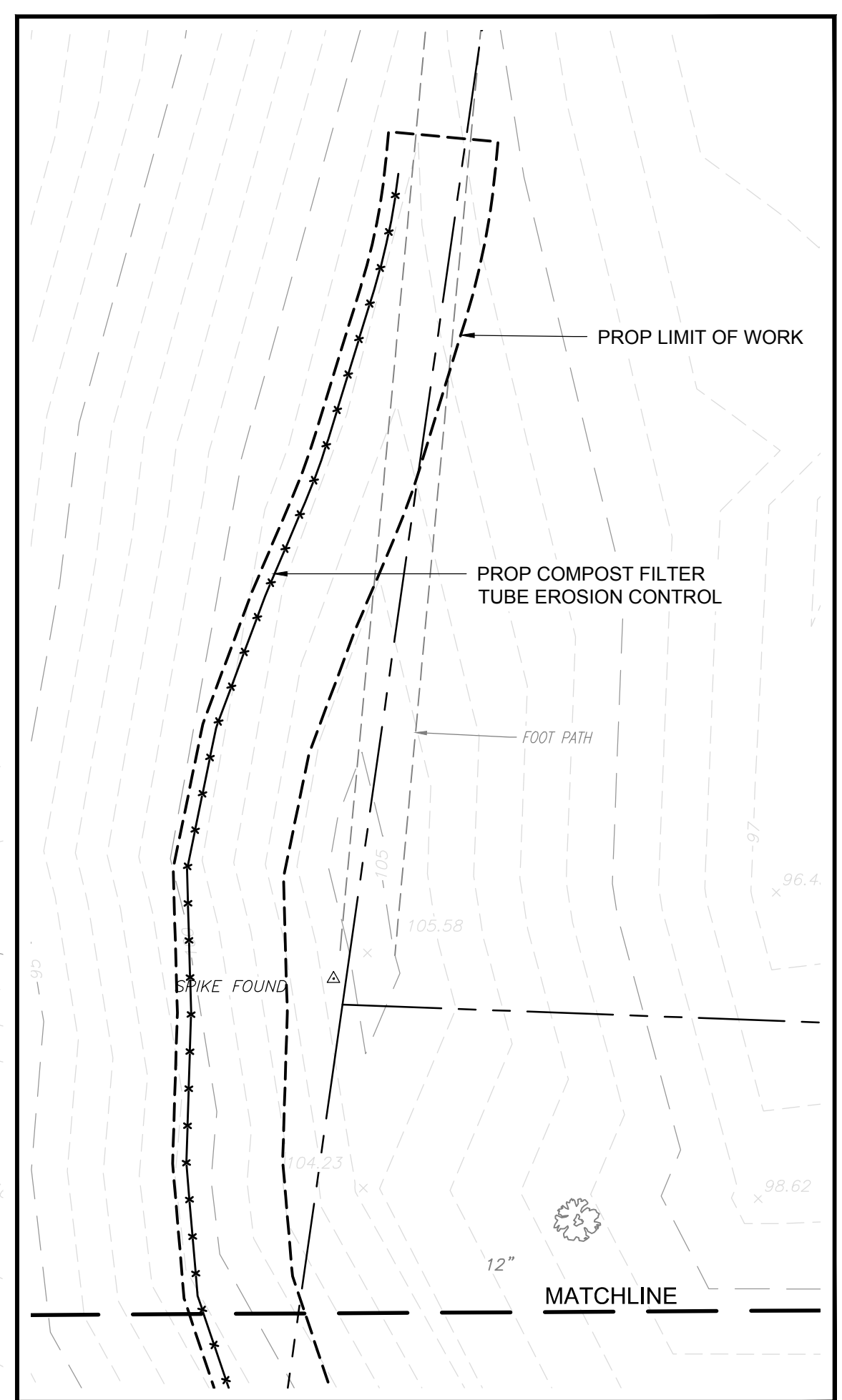
BW	BOTTOM OF WALL
BC	BOTTOM OF CURB
PI	POINT OF INTERSECTION
PC	POINT OF CURVATURE
PT	POINT OF TANGENCY
PRC	POINT OF REVERSE CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVC	POINT OF VERTICAL CURVATURE
PVT	POINT OF VERTICAL TANGENCY
ELEV	ELEVATION
CC	CENTER OF CURVE
H.P.	HIGH POINT
L.P.	LOW POINT
R	RADIUS OF CURVATURE
STA	STATION
S.S.D.	STOPPING SIGHT DISTANCE
TC	TOP OF CURB
TW	TOP OF WALL

EXISTING


	CB
	CIBC
	HH
	EMH
	TMH
	SMH
	DMH
	GG
	WG
	LWP
	D
	S
	E
	C
	G
	W
	OHW
	GUARD RAIL
	LABEL / DATE
	NAME
	12 000' 00' 00" E
	+57.59 PC
	M#-##
	TP-1
	B-1
	MON WELL (TYP)
	UP 8
	BW-A1

PROPOSED

	CATCH BASIN
	CATCH BASIN CURB INLET
	CURB (OR BERM)-TYPE NOTED
	EDGE OF ROAD
	HANDHOLE (NUMBER AS NOTED)
	ELECTRIC MANHOLE
	TELEPHONE MANHOLE
	SEWER MANHOLE
	DRAINAGE MANHOLE
	GAS GATE
	WATER GATE VALVE
	HYDRANT
	WELL
	LIGHTPOLE
	DRAIN PIPE
	SEWER MAIN
	SEWER MAIN BY P.C.
	ELECTRIC DUCT
	TELEPHONE/COMMUNICATIONS/FIRE ALARM
	GARAGE WASTE LINE
	GARAGE WASTE LINE BY P.C.
	VENTS BY P.C.
	GAS MAIN
	WATER MAIN
	OVERHEAD WIRES
	GUARD RAIL (SIZE AND TYPE NOTED)
	HIGHWAY / PROPERTY BOUND (TYPE NOTED)
	CITY OR CITY OR COUNTY LAYOUT LINE
	CITY,CITY OR COUNTY BOUNDARY
	BASE OR SURVEY LINE
	CENTERLINE OF CONSTRUCTION
	PROPERTY LINE
	WHEELCHAIR RAMP (WCR)
	TREE (SIZE AND TYPE NOTED)
	FENCE (SIZE AND TYPE NOTED)
	EASEMENT LINE/ FUTURE CITY PROPERTY LINE
	MASSHIGHWAY STANDARD SPECIFICATION REFERENCE NUMBER
	TEST PIT/BORINGS
	MONITORING WELL
	UTILITY POLE
	GUY POLE
	FLAG POLE
	SIGN
	TREE LINE
	BOLLARD
	BIKE RACK
	SAWCUT
	EROSION CONTROL (SPECIFIED ON PLANS)
	OBSERVATION WELL
	LIMIT OF WORK
	TEMPORARY FENCE
	SURVEY MONUMENTS
	TEMPORARY BENCHMARK (TBM)
	DI WATER REDUCER
	WETLAND FLAG



Project:
 TOWN OF READING
 16 LOWELL STREET
 READING, MA 01867



GROVE STREET
 LOT 5 PARKING LOT

Weston & Sampson
 Weston & Sampson Engineers, Inc.
 55 Walkers Brook Drive, Suite 100
 Reading, MA 01867
 978.532.1900 800.SAMPSON
 www.westonandsampson.com

Consultants:

Revisions:

No.	Date	Description
1	01/23/23	REV PER COMMENTS

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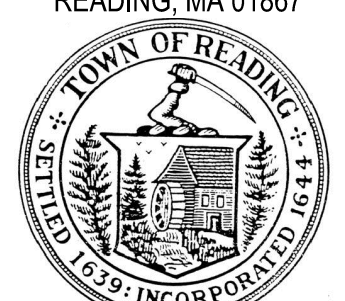
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 W&S File No.:

Drawing Title:
**SITE
 PREPARATION
 & EROSION
 CONTROL PLAN**

Sheet Number:
CD100



Project:
 TOWN OF READING
 16 LOWELL STREET
 READING, MA 01867



GROVE STREET
 LOT 5 PARKING LOT

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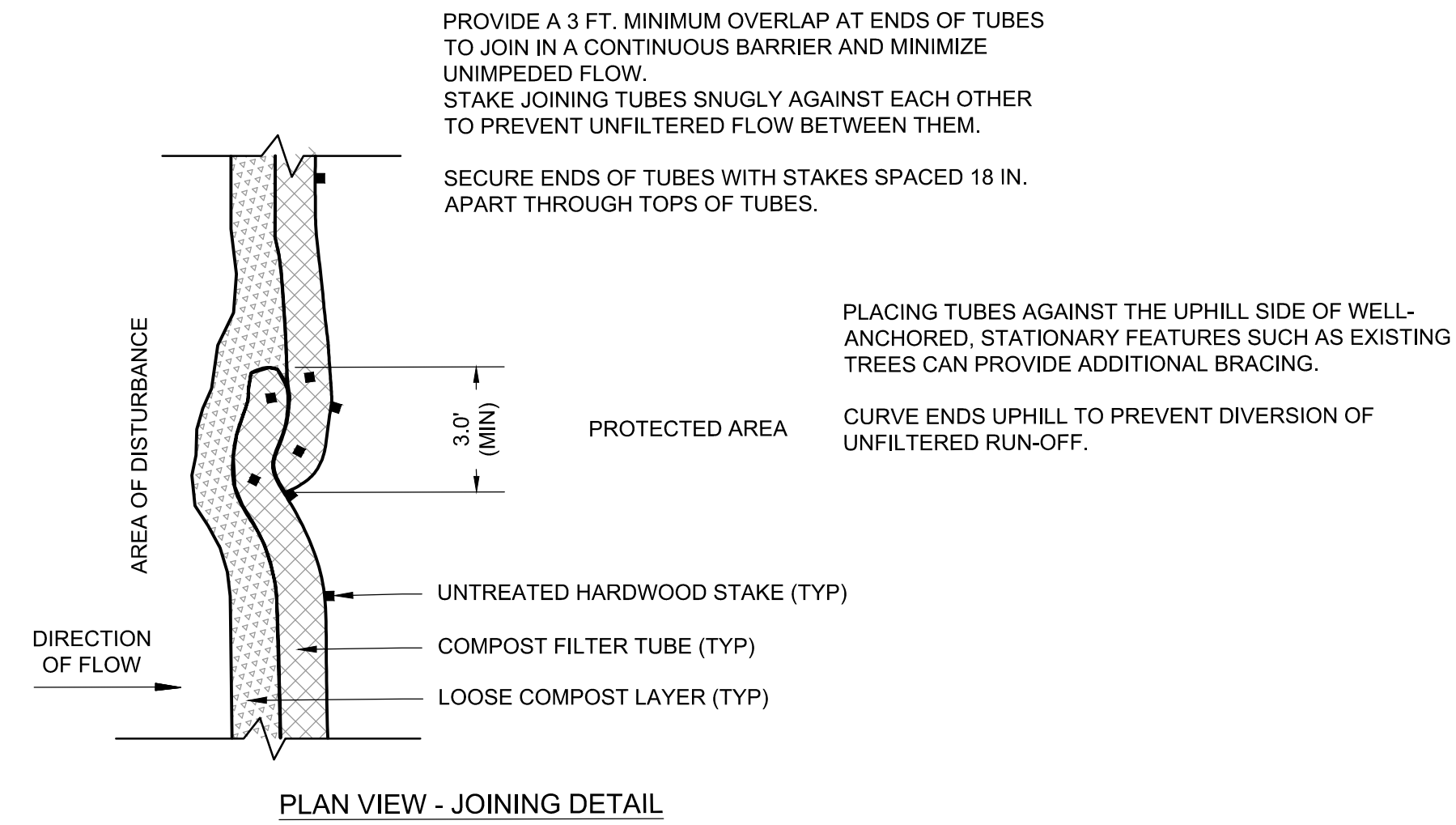
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Drawing Title:
GRADING PLAN

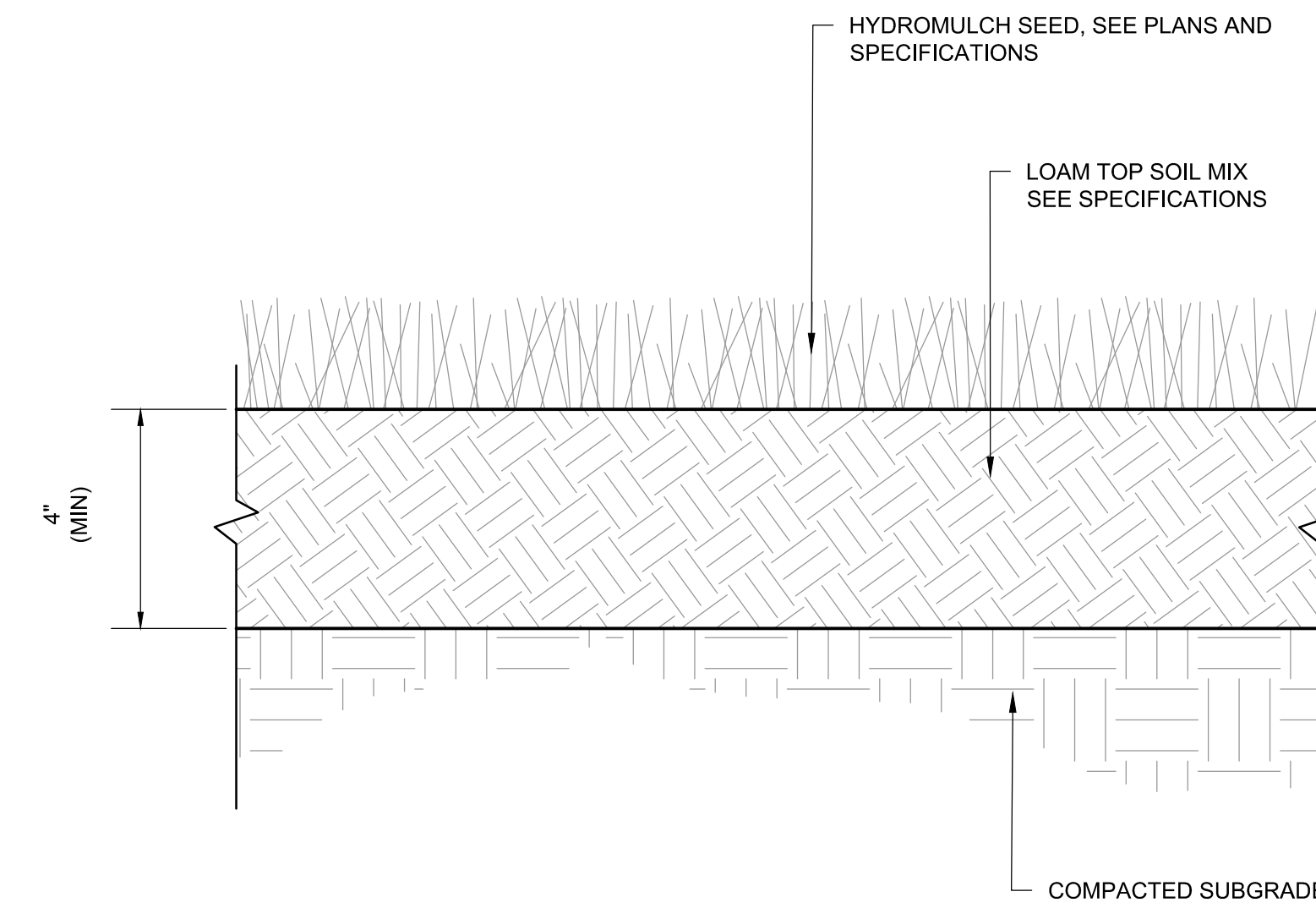
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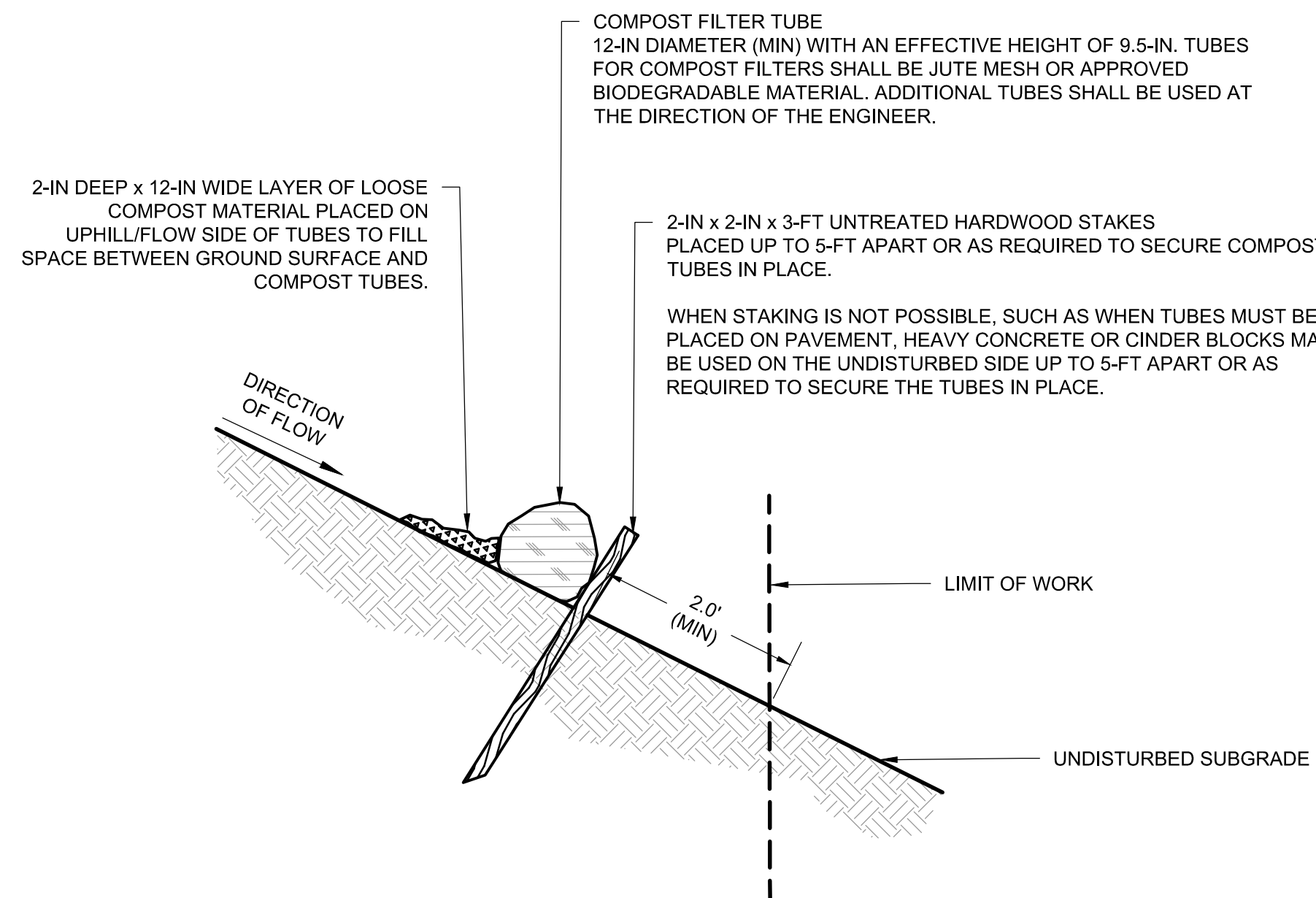
1. PROVIDE A MINIMUM TUBE DIAMETER OF 12 INCHES FOR SLOPES UP TO 50 FEET IN LENGTH WITH A SLOPE RATIO OF 3H:1V OR STEEPER. LONGER SLOPES OF 3H:1V MAY REQUIRE LARGER TUBE DIAMETER OR ADDITIONAL COURSING OF FILTER TUBES TO CREATE A FILTER BERM. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR SITUATIONS WITH LONGER OR STEEPER SLOPES.
2. INSTALL TUBES ALONG CONTOURS AND PERPENDICULAR TO SHEET OR CONCENTRATED FLOW.
3. DO NOT INSTALL IN PERENNIAL, EPHEMERAL OR INTERMITTENT STREAMS.
4. CONFIGURE TUBES AROUND EXISTING SITE FEATURES TO MINIMIZE SITE DISTURBANCE AND MAXIMIZE CAPTURE AREA OF STORMWATER RUN-OFF.
5. MULCH MATERIAL FOR THE FILTER TUBES SHALL BE WEED-FREE STRAW, WOOD EXCELSIOR, COMPOST, OR WOOD CHIPS, OR COIR. STRAW SHALL BE WEED FREE AND DERIVED FROM THRESHING OF GRAIN CROP.



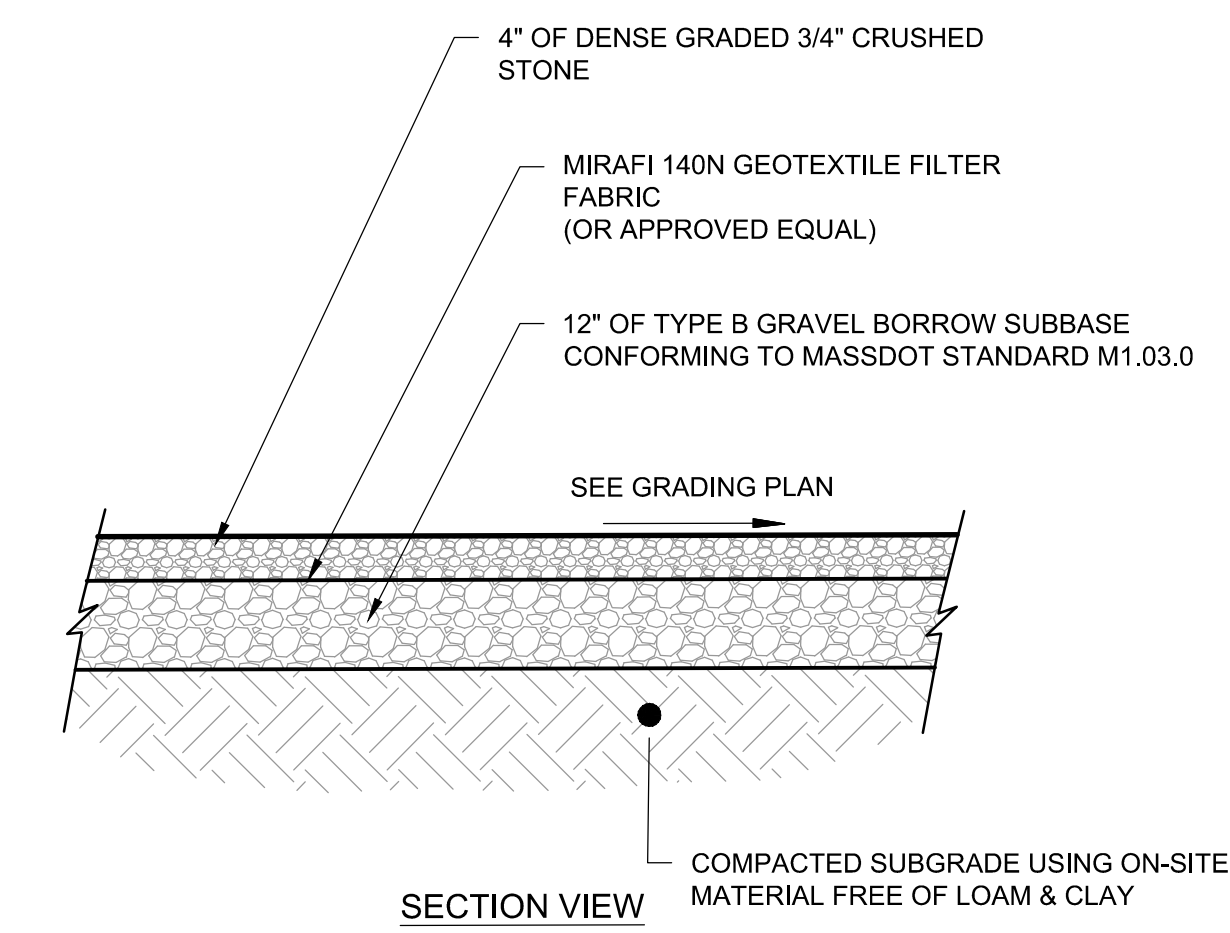
PLAN VIEW - JOINING DETAIL



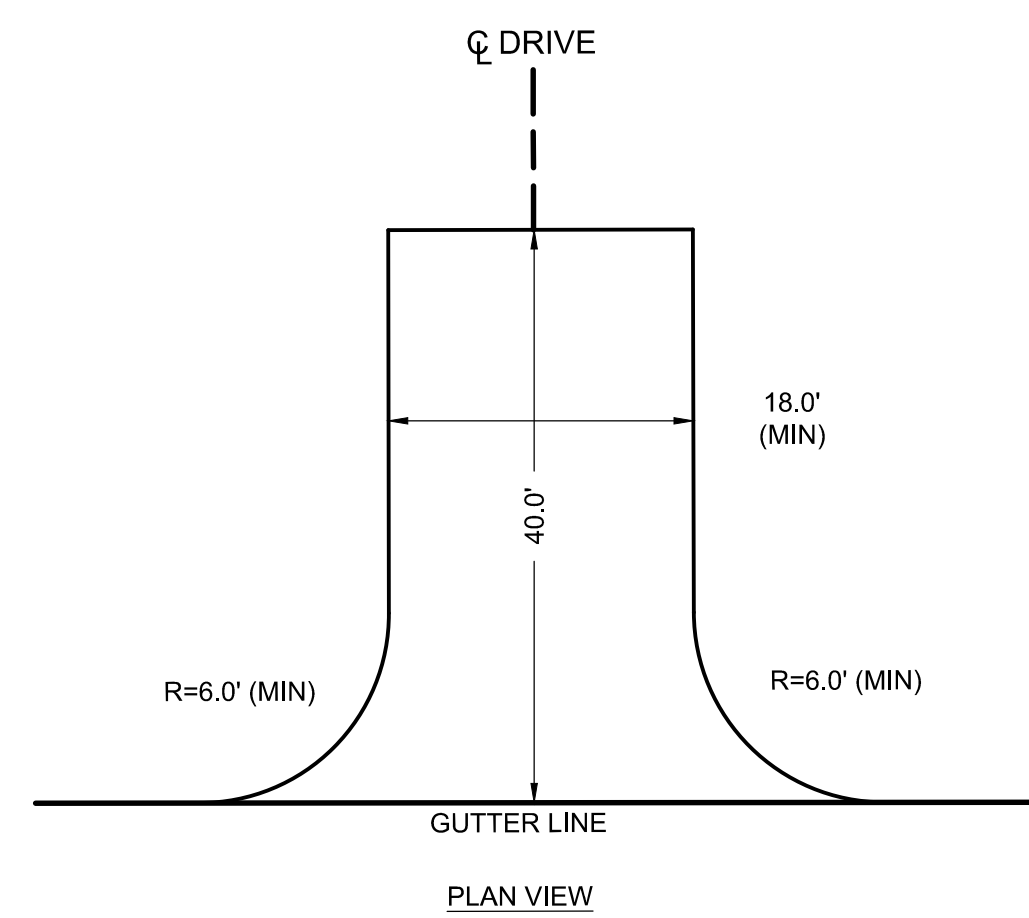
2 LOAM & SEED
SCALE: N.T.S.



1 COMPOST FILTER TUBE
SCALE: N.T.S.



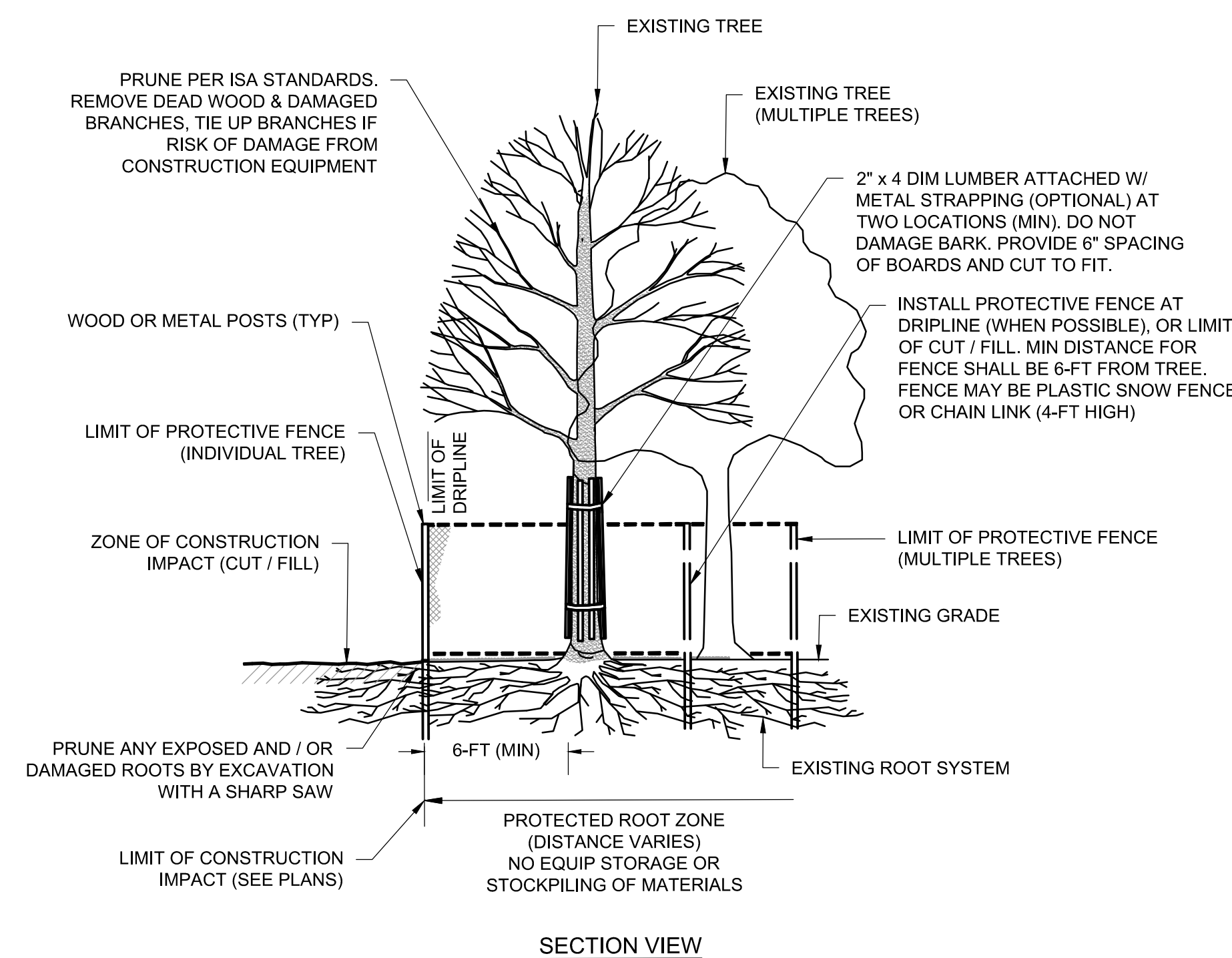
3 GRAVEL SURFACE TREATMENT
SCALE: N.T.S.



NOTES:

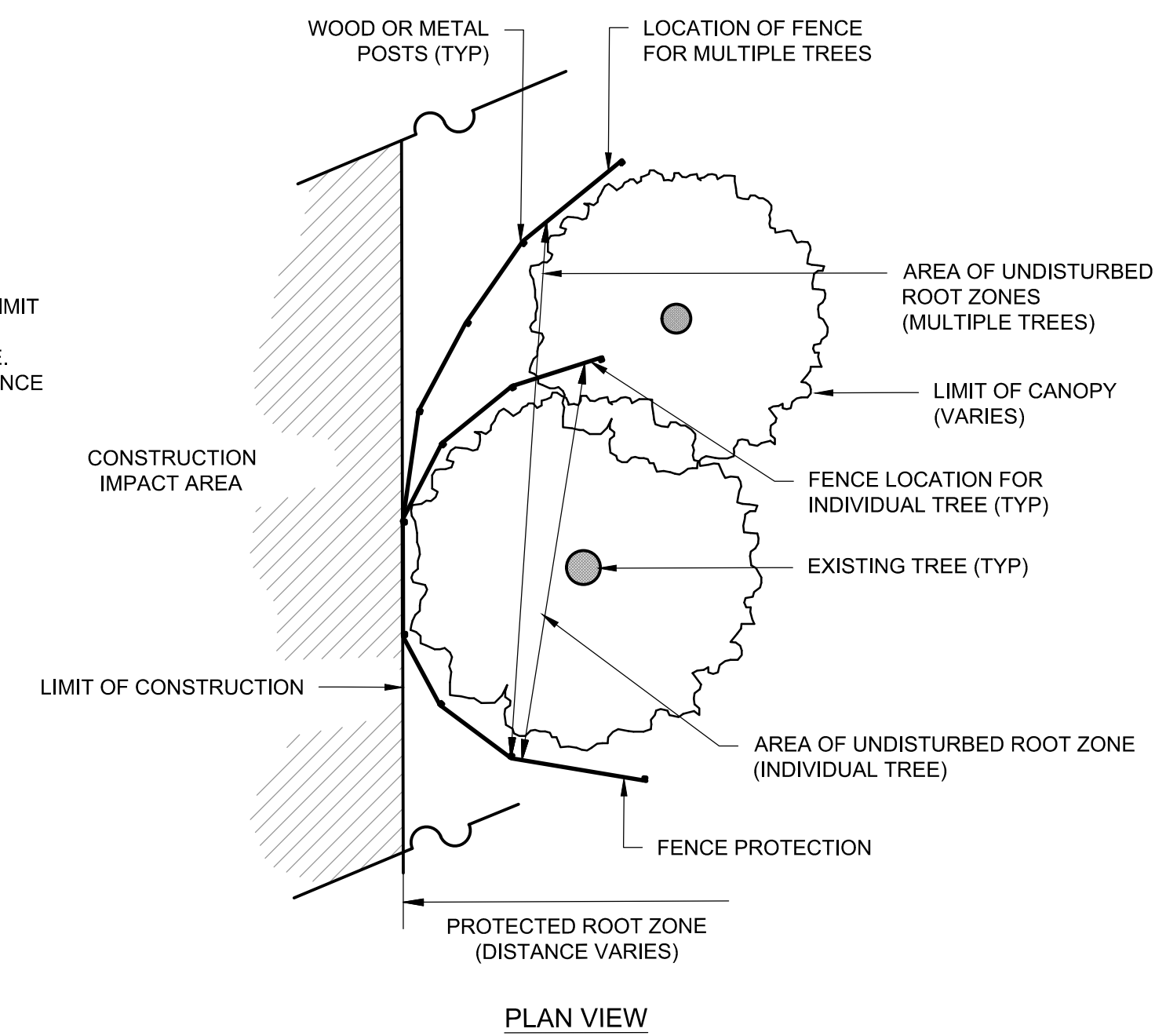
1. THE LOCATION OF THE CONSTRUCTION ENTRANCE SHALL BE APPROVED BY THE OWNER PRIOR TO PLACEMENT.
2. CONSTRUCTION ENTRANCE SHALL CONSIST OF 2\"/>

4 STABILIZED TEMPORARY CONSTRUCTION ENTRANCE
SCALE: N.T.S.



SECTION VIEW

5 TYPICAL TREE PROTECTION
SCALE: N.T.S.



PLAN VIEW

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W&S File No.:

Drawing Title:
CONSTRUCTION DETAILS

Sheet Number:
C500

