

March 8, 2021

Via Email

Jessica Malcolm, Manager of Planning and Programs
Massachusetts Housing Finance Agency
One Beacon Street
Boston, Massachusetts 02108

Re: Thorndike Place, Arlington (MassHousing ID #778/#779)
Notice of Project Revision Under 760 CMR 56.04(5)

Dear Jessica:

On behalf of the Applicant, Arlington Land Realty LLC, and in accordance with 760 CMR 56.04(5), we are notifying MassHousing, as the Subsidizing Agency, of the desire of the Applicant to change certain aspects of its respective project known as Thorndike Place. As more fully described herein, the revisions come about in light of feedback from the Zoning Board and others within the public hearings on the Applicant's Comprehensive Permit Application.

Original Proposal and Permitting Process Background:

The Applicant was granted a Project Eligibility Letter ("PEL") from MassHousing for Thorndike Place on December 4, 2015. At that time, the Thorndike Place project proposal included a total of 219 dwelling units, twelve (12) of which were townhouse homeownership units together with 207 units of rental housing situated on a triangular parcel consisting of 17.8+/- acres of land (5.6 +/- buildable acres), located on Dorothy Road, in Arlington, Massachusetts. The described project included six (6) duplex-style townhouses (2.5 stories/32 feet) and one (1) multifamily apartment building (4 stories/53 feet). The project's unit mix included 104 one-bedroom units, 92 two-bedroom units and 23 three-bedroom units.

The project locus is within the Planned Unit Development ("PUD") zoning district under the Arlington Zoning Bylaw, for which duplex homes are allowed as of right and multifamily housing is conditionally allowed. In the PUD district, the maximum building height is 85 feet and residential housing is limited to five (5) floors. As described in the Project Eligibility application, the developed portion of the site would be along Dorothy Road and would extend along the length of Dorothy Road, including surface parking and the easternmost third of the four-story apartment building located behind six lots on Dorothy Road. Off-street parking for the apartment building was proposed both via surface parking (102 spaces) and parking under the apartment building (178 spaces). As an amenity, not just to the Thorndike Place community but to the Town itself, the Applicant proposed to set aside approximately 10+ acres of the site as open space.

The original project design included eight driveway entrances off Dorothy Road, seven of which were associated with the townhouse duplexes and a main access drive near the intersection of Littlejohn Street and Dorothy Road, leading to the surface and garage parking associated with the multifamily building. In addition, the original Project included a secondary access drive at the intersection of Burch Street and Edith Street at the eastern boundary of the site.

Mass Housing's PEL was issued on December 4, 2015. On September 1, 2016, the Applicant filed a Comprehensive Permit application with the Arlington Zoning Board of Appeals ("ZBA"). On September 27, 2016, the ZBA opened the public hearing on the Application and by letter dated October 6, 2016, the ZBA notified the Applicant that the ZBA sought protection under the General

Land Area Minimum Safe Harbor, asserting its belief that the Town had 1.5% or more of its General Land Area dedicated to Subsidized Housing Inventory (“SHI”) eligible housing. The Applicant submitted a challenge to the DHCD pursuant to 760 CMR 56.03(8), noting that the Town had double discounted land area associated by water bodies, thereby inaccurately calculating the general land area in performing its calculations. On November 21, 2016, DHCD issued its written determination finding that the ZBA had not achieved safe harbor status. In December 2016, the ZBA filed an interlocutory appeal with the Housing Appeals Committee (“HAC”). The HAC decision was issued on October 15, 2019,¹ again determining that the Town did not establish qualifying for the safe harbor.

Project Revisions

Subsequent to the HAC’s Decision on the interlocutory appeal, the Application was remanded to the ZBA in late fall 2019. Due to Covid19, the ZBA did not conduct public hearings for a number of months and it was not until late September 2020 that public hearings, via Zoom, were reestablished on the application. With input from the ZBA as to the size, scale and location of buildings near or within resource areas, the Applicant presented revised plans to the ZBA in November 2020. The revised plans, reduced the density by removing the standalone duplex buildings and shifting the multifamily building to the north, away from resource areas as defined in the Massachusetts Wetlands Protection Act and the Arlington Wetlands Bylaw.

Since that time, the Applicant and the ZBA have conducted continued public hearings in November, December, January and February together with multiple work sessions with the Applicant’s professional team, the ZBA’s peer review professionals, the Conservation Commission, the Transportation Advisory Committee (“TAC”) and Town staff. As a result of the feedback provided to the Applicant by the ZBA, the Town Planner, Town Engineer, the Conservation Commission and its agent, the ZBA’s Peer Review professionals from BETA Group as well as the public, the current proposal is as follows:

- One multifamily building, which consists of 172 dwelling units, consisting of 88 one-bedroom units, 55 two-bedroom units, 18 three-bedroom units and 11 studios.
- The six 2.5 story duplex-style townhouses, and the associated seven access drives to enter the private garages off Dorothy Road, are no longer included in the project.²

¹ In large part, the length of time (nearly three years) for a decision in the HAC interlocutory appeal was attributable to the ZBA’s request to stay the appeal and subsequent pursuit of a separate civil lawsuit brought by the ZBA against the DHCD, Department of Mental Health and Department of Developmental Services, seeking confidential address information as to special needs housing. Ultimately, the ZBA never sought to use this information within the underlying HAC appeal.

² In other projects, MassHousing has concluded that a change in tenure does not justify revisiting a PEL. For instance, with respect to the Abbyville Commons 40B proposal in Norfolk, subsequent to obtaining site approval for a 48-unit rental project, the Developer notified MassHousing that due to input from the community, the proposal was changed from a rental project located in two buildings to 88 duplex-style condominiums. In response to the Section 56.04(5) notice, MassHousing affirmed that no new project eligibility letter was required, stating, “[i]t is MassHousing’s interpretation of the Comprehensive Permit Regulations that Subsidizing Agencies should normally not update Project Eligibility Letters as a project develops but should rather, consider whether the initial proposal is eligible for a subsidy project at the project eligibility stage and then consider with the final approval is eligible directly before the construction at the Final Approval state. Any other approach could interfere with a Chapter 40B’s goal of expedited permitting. It is for this reason that a Project Eligibility Letter issued pursuant to the comprehensive permit regulations shall, pursuant to 760 CMR 56.04(6) be conclusive evidence that the project and the applicant have satisfied the project eligibility requirements.” A copy of the MassHousing letter is attached as Attachment C (Emphasis added).

- The developed portion of the site is largely confined to an approximately 5.15-acre limit of work, with the balance of the site to remain as open space/conservation land. This is largely consistent with the original proposal, but it is noted that by condensing the overall length of the apartment building and adjusting its location further to the north on the site, the building and all infrastructure are outside of vegetated wetland areas to the east and south, with only limited impacts to the wetland buffer for a small portion of the subsurface garage under the southwest courtyard, grading, stormwater management systems and a portion of the permeable emergency access road around the back of the building.
- Garage parking under the multifamily building for 179 vehicles plus 176 secured bicycle parking spaces. (The original proposal as set out in the Project Eligibility application included garaged parking for 178 vehicles in the multifamily building garage).
- The building adheres to the PUD zoning district use and dimensional regulations; in particular multifamily use is allowed by special permit in the PUD district, the project is far below the maximum height in the PUD district (which maximum height is set at 85 feet/5 floors for residential uses), the project meets or exceeds the setbacks of the PUD district and it is below the allowable FAR for the site (.80 FAR).

Attached hereto, please find the updated site drawings prepared by BSC Group, revised November 3, 2020 and January 21, 2021 (Attachments A.1 and A.2) and updated architectural elevations and perspective drawings by Oaktree/Bruce Hamilton Architects, as presented to the ZBA at the February 16, 2021 hearing (Attachment B).

The present building design retains the four-story apartment building, but has revised its layout such that there is a central building spine set back approximately 90+ feet from Dorothy Road. Extending northerly (toward Dorothy Road) are three separate wings, or building tabs, the width of each approximate the width of the townhomes on the opposite side of Dorothy Road. These front portions of the building will be two stories tall (approximately 25 feet in height) and set back 25 feet from Dorothy Road.³ In between the building's northerly wings are two large courtyards, one which provides access to the building entry and allows temporary parking/drop offs and the other to be landscaped open space. The courtyards further create a less crowded/more open feel along Dorothy Road. The building graduates to three floors and thereafter to four floors along the central building spine and the building wings to the south of the site, substantially removed from Dorothy Road and any abutting property.

As opposed to the eight driveway curb cuts proposed on Dorothy Road under the original proposal, the revised design streamlines the access off Dorothy Road to one main driveway which provides access to the surface parking lot to the west and to the garaged parking under the building.

³ It is noted that the height of the currently revised building wings (25 feet) closest to Dorothy Road are actually lower than the height of the previously proposed townhouses, which were 2.5 stories/32 feet in height. By the use of low, two-story front wings of the building set back 25 feet off Dorothy Road, the architecture of the building is consistent with the setbacks, width and heights of the surrounding townhomes on the opposite side of Dorothy Road and to the east of the site. The revised design has incorporated the municipal input with respect to massing, scale, topography and environmental resources.

For short-term or drop-off/deliveries, there is a second semi-circular access drive located closer to the center of the building at the location of the building's lobby entrance.

Further, in response to requests by the ZBA and the TAC for a reduction in parking, the revised design incorporates a reduced number of parking spaces and corresponding commitments to a number of transportation demand management (TDM) measures, further enhancing the transit-oriented nature of the Project. Representative TDM measures include: a 23-dock Bluebikes station, a transit-screen display in the building entrance lobby, first month MBTA passes to new residents, a designated transportation coordinator as part of building management staff; secured parking for up to 176 bicycles and a bicycle repair area within the garage; and transportation information packages to be provided to all residents.

The revised design not only reduces impervious access drives and parking areas, but also avoids direct impact to wetland areas and limits permanent project improvements to the outer edges of the 100-foot buffer. Further, the revised proposal significantly limits the amount of work within the floodplain as compared to the original application. Impacts to floodplain are limited to two shallow fingers of the floodplain with the revised plans providing for the creation of compensatory storage at a ratio of 2:1, as consistent with the Arlington Wetlands Regulations.

The ZBA has expressed interest in having MassHousing's clarification concerning the process through which these project changes may be handled. In accordance with 760 CMR 56.04(5), the Applicant provides written notification to the Subsidizing Agency of these project changes. As stated in Section 56.04(5), only changes affecting project eligibility requirements as set forth in Section 56.04(1) are to be assessed.⁴ These described changes do not impact the Applicant's qualification as a limited dividend entity under Section 56.04(1)(a). Similarly, as the proposed changes address density, scale and environmental concerns that had been raised within the public review process, the changes are specifically responsive to otherwise enhance the project and its consistency with the existing environmental resources and topography and do not adversely impact the project or its fundability in accordance with Section 56.04(1)(b). Lastly, there has been no change to site control as Applicant continues to own the site. *See* Section 56.04(1)(c).

⁴ The limits of MassHousing's review under 760 CMR 56.04(5) is similarly described in prior requests submitted to the agency directly on behalf of a Zoning Board. For instance, with respect to the Goodridge Brook Estate's 40B proposal in Lancaster (PEL-963) in which the ownership portion of the proposed development (120 apartments/40 duplexes) was revised by developer (from 40 duplexes to 62 four-bedroom homes), the Lancaster ZBA Chair requested MassHousing to review the changes. By letter dated October 29, 2018, MassHousing reaffirmed the conclusiveness of its prior project eligibility determination in writing to the Lancaster ZBA Chair, stating "[s]ince the changes outlined in your letter have been proposed prior to issuance or denial of a Comprehensive Permit, 760 CMR 56.04(5) narrowly limits the Subsidizing Agency's review to changes which affect the project eligibility requirements set forth in Section 56.04(1)." *See* Attachment D (Emphasis supplied).

SMOLAK & VAUGHAN LLP

Jessica Malcolm, Manager
Comprehensive Permit Programs

We thank you for your review of this matter and request that MassHousing reaffirm its prior PEL. Please feel free to contact me should you have any additional questions. Thank you.

Sincerely,

/s/ Stephanie A. Kiefer

Stephanie A. Kiefer

sak/

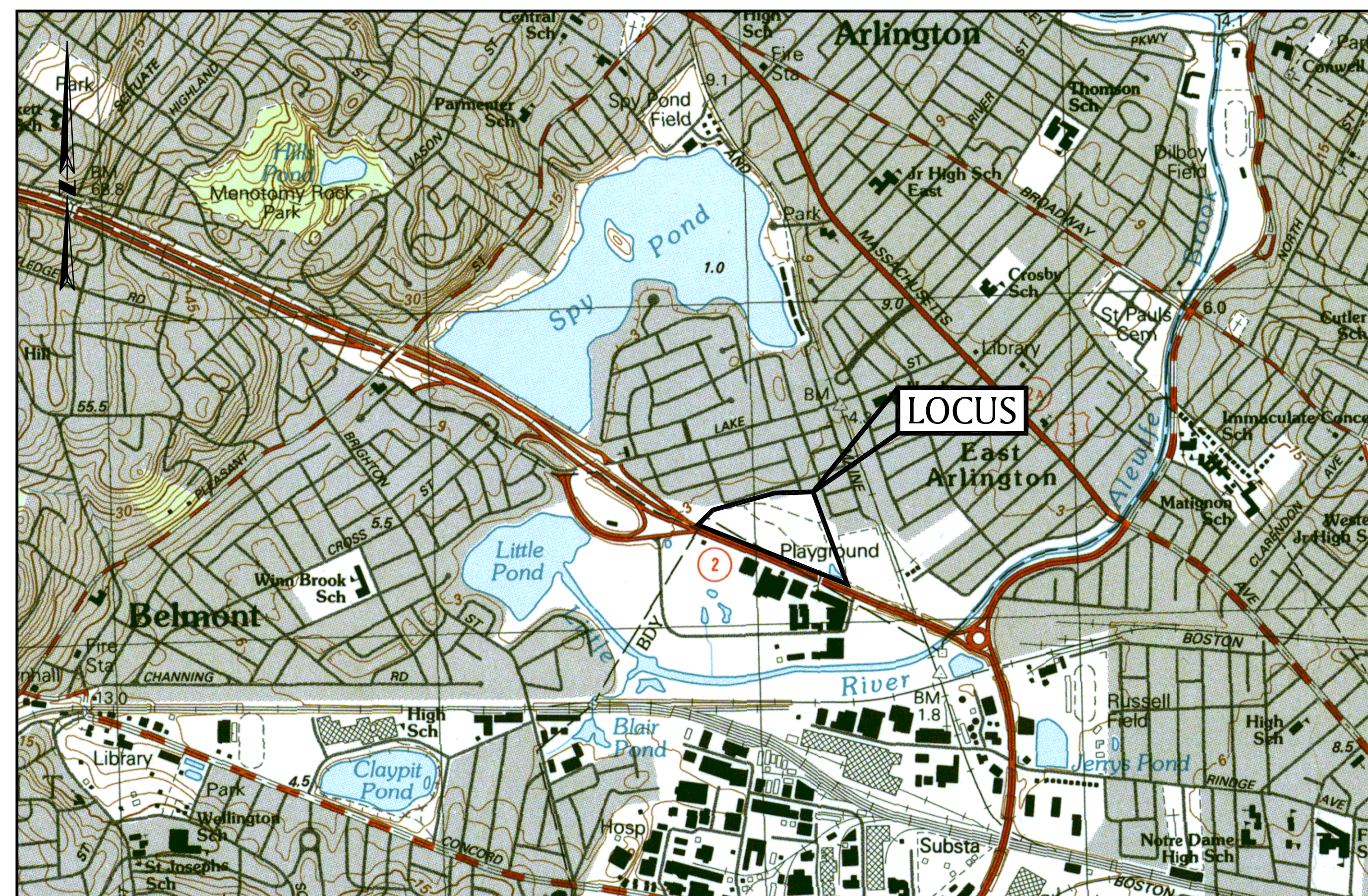
Encl.

cc: Peter Mugar, Arlington Land Realty LLC
Gwen Noyes/Arthur Klipfel, Oaktree Development
Robert Engler, SEB Housing Consultants
Christian Klein, Chairman, Arlington Zoning Board of Appeals (via email)
John V. Hurd, Chairman, Arlington Board of Selectmen (via first class mail)
Jennifer Maddox, Undersecretary for Housing and Community Development (via first class mail)

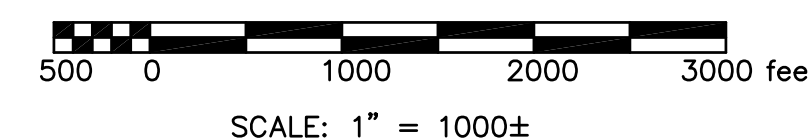
THORNDIKE PLACE COMPREHENSIVE PERMIT DOROTHY ROAD ARLINGTON, MASSACHUSETTS

MARCH 13, 2020

REVISED: NOVEMBER 3, 2020



LOCUS MAP



PREPARED FOR:

ARLINGTON LAND REALTY, LLC
84 SHERMAN STREET, 2ND FLOOR
CAMBRIDGE, MA 02140

PREPARED BY:



BSC GROUP
803 Summer Street
Boston, Massachusetts
02127
617 896 4300

ISSUED FOR PERMITTING
NOT FOR CONSTRUCTION

INDEX OF DRAWINGS

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- G-101 GENERAL NOTES & LEGEND
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- C-200-203 CIVIL & LANDSCAPE DETAILS

1. EXISTING CONDITIONS SURVEY INFORMATION WAS PREPARED BY BSC GROUP, INC. SURVEY IS BASED ON AN ON-THE-GROUND SURVEY CONDUCTED BY BSC GROUP IN DECEMBER 2019-FEBRUARY 2020.
2. REVIEW ALL EXISTING CONDITIONS IN THE FIELD AND REPORT ANY DISCREPANCIES BETWEEN PLANS AND ACTUAL CONDITIONS TO THE OWNER'S REPRESENTATIVE PRIOR TO STARTING WORK.
3. THE LOCATIONS OF UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED ON THE SURVEY REFERENCED ABOVE. THE CONTRACTOR SHALL CONTACT DISAGE AND THE PROPER LOCAL AUTHORITIES OR RESPECTIVE UTILITY COMPANIES TO CONFIRM THE LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. ANY DAMAGE DUE TO FAILURE OF THE CONTRACTOR TO CONTACT THE PROPER AUTHORITIES SHALL BE BORNE BY THE CONTRACTOR.
4. ANY DISCREPANCIES BETWEEN DRAWINGS, SPECIFICATIONS, AND SITE CONDITIONS SHALL BE REPORTED IMMEDIATELY TO THE CONTRACTOR/ENGINEER FOR CLARIFICATION AND RESOLUTION PRIOR TO BIDDING OR CONSTRUCTION.

1. AREAS DESIGNATED FOR CLEARING SHALL BE CLEARED ONLY.
2. THE SUBCONTRACTOR(S) IS/ARE RESPONSIBLE FOR ANY DAMAGE TO EXISTING CONDITIONS TO REMAIN THAT ARE DUE TO SUBCONTRACTOR(S) OPERATIONS.
3. ITEMS TO BE REMOVED THAT ARE NOT STOCKPILED FOR LATER REUSE ON THE PROJECT OR DELIVERED TO THE OWNER SHALL BE LEGALLY DISPOSED OF OFF SITE BY THE SUBCONTRACTOR(S).
4. THE SUBCONTRACTOR(S) SHALL BE RESPONSIBLE FOR COORDINATING THEIR EFFORTS WITH ALL TRADES.
5. THE CONTRACTOR SHALL COORDINATE ALL ADJUSTMENT OR ABANDONMENT OF UTILITIES WITH THE RESPECTIVE UTILITY COMPANY.
6. THE SUBCONTRACTOR(S) SHALL MAINTAIN OR ADJUST TO NEW FINISH GRADE AS NECESSARY ALL UTILITY AND SITE STRUCTURES SUCH AS LIGHT POLES, SIGN POLES, MAN HOLES, CATCH BASINS, HAND HOLES, WATER AND GAS GATES, HYDRANTS, ETC., FROM MAINTAINED UTILITY AND SITE SYSTEMS UNLESS OTHERWISE NOTED OR DIRECTED BY THE CONTRACTOR/ENGINEER.
7. TEMPORARY CONSTRUCTION Haul ROADS (IF REQUIRED) SHALL BE EXCAVATED AND THE SUB-BASE COMPACTED TO 95% SPMD. THE USE OF SEPARATION FABRICS MAY BE USED TO FACILITATE FUTURE REMOVAL AND RECOVERY OF GRANULAR MATERIALS. Haul ROAD SHALL HAVE AT LEAST 9" OF 6-INCH MINUS STONE AND SHALL BE MAINTAINED DURING CONSTRUCTION.

1. EROSION CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH THE SEQUENCE OF STAGED CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT A DETAILED EROSION CONTROL PLAN INCLUDING SCHEDULE FOR APPROVAL BY THE TOWN OF ARLINGTON. A COPY OF THE APPROVED NPDES – EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE.
2. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY SITE EXCAVATION OR DISTURBANCE AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS. THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED AT ANY ONE TIME.
3. SEDIMENT TRAPS SHALL BE INSTALLED AT DRAINAGE STRUCTURES IN PUBLIC STREET IN THE PROJECT AREA. STRAW BALE BARRIERS AND SILTATION FENCES ARE TO BE MAINTAINED AND CLEANED UNTIL ALL SLOPES HAVE BEEN STABILIZED.
4. SEDIMENT BARRIERS SHALL BE INSPECTED AND APPROVED BY THE TOWN OF ARLINGTON BEFORE CONSTRUCTION CAN START.
5. STRAW BALES AND MULCH SHALL BE MOWINGS OF ACCEPTABLE HERBACEOUS GROWTH, FREE OF NOXIOUS WEEDS OR WOODY STEMS, AND SHALL BE DRY WHEN INSTALLED.
6. THE UNDERSIDE OF STRAW BALES SHOULD BE KEPT IN CLOSE CONTACT (TRENCHED IN 3-INCHES MINIMUM) WITH THE EARTH AND RESET AS NECESSARY.
7. DISTURBED AREAS SHALL BE BLANKETED OR SEEDED AND MULCHED AS SOON AS PRACTICAL AFTER CONSTRUCTION ACTIVITIES IN THAT AREA HAVE CONCLUDED. ALL ERODABLE/BARE AREAS SHALL BE BLANKETED OR SEEDED AND MULCHED WITHIN 7 DAYS WITH TEMPORARY EROSION CONTROL SEEDING.
8. STABILIZE SLOPES GREATER THAN 3:1 (HORIZONTAL:VERTICAL) WITH SEED, SECURED GEOTEXTILE FABRIC, SPRAYED COMPOST BLANKET, OR RIP-RAP AS REQUIRED TO PREVENT EROSION DURING CONSTRUCTION.
9. SEDIMENT BARRIERS SHALL BE CONSTRUCTED AROUND ALL SOIL STOCKPILE AREAS.
10. CLEAN OUT DRAINAGE FEATURES AND STRUCTURES AFTER COMPLETION OF CONSTRUCTION.
11. SEDIMENT COLLECTED DURING CONSTRUCTION BY THE VARIOUS TEMPORARY EROSION CONTROL SYSTEMS SHALL BE DISPOSED OF ON THE SITE ON A REGULAR BASIS. SEDIMENT SHALL BE REMOVED FROM EROSION CONTROL SYSTEMS WHEN THE HEIGHT OF THE SEDIMENT EXCEEDS ONE-HALF OF THE HEIGHT OF THE SEDIMENT CONTROL MEASURE.
12. AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED, THE SUBCONTRACTOR(S) SHALL REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AT THE CONTRACTOR/ENGINEER DIRECTION.
13. AFTER THE REMOVAL OF TEMPORARY EROSION CONTROL MEASURES, THE SUBCONTRACTOR(S) SHALL GRADE AND SEED AREA OF TEMPORARY EROSION CONTROL MEASURE.
14. DAMAGED OR DETERIORATED ITEMS WILL BE REPAIRED IMMEDIATELY AFTER IDENTIFICATION OR AS DIRECTED BY THE CONTRACTOR/ENGINEER.
15. THE CONTRACTOR'S SITE SUPERINTENDENT WILL BE RESPONSIBLE FOR DAILY INSPECTIONS, MAINTENANCE, AND REPAIR ACTIVITIES. THE CONTRACTOR SHALL INSPECT EROSION CONTROL MEASURES EVERY SEVEN (7) CALENDAR DAYS OR ONCE EVERY FOURTEEN (14) DAYS AND WITHIN 24 HOURS OF ANY STORM EXCEEDING 1/2 INCH PRECIPITATION. DAMAGED AND INEFFECTIVE EROSION CONTROL MEASURES SHALL BE REPAIRED OR REPLACED WITHIN 48 HOURS.
16. PIPE OUTLETS (IF ANY) SHALL BE STABILIZED WITH STONE.
17. TEMPORARY SEEDING SHALL BE AT A RATE OF 45 LBS PER ACRE. ERODABLE AREAS OUTSIDE AND DOWN SLOPE FROM THE CONSTRUCTION LIMITS SHALL BE SIMILARLY SEEDED.
18. WATER PUMPED OR OTHERWISE DISCHARGED FROM THE SITE DURING CONSTRUCTION DEWATERING SHALL BE FILTERED. DEWATERING PLAN SHALL BE SUBMITTED FOR APPROVAL BY THE ENGINEER.
19. WHEN TEMPORARY DRAINAGE IS ESTABLISHED, EROSION/SEDIMENTATION CONTROL MEASURES MAY BE REQUIRED BY CONTRACTOR/ENGINEER.
20. GRAVEL CONSTRUCTION ROADS AND CONSTRUCTION PARKING AREAS OF SUFFICIENT WIDTH AND LENGTH, AND VEHICLE WASH DOWN FACILITIES, SHALL BE PROVIDED TO PREVENT SOIL FROM BEING TRACKED ONTO PUBLIC OR PRIVATE ROADWAYS. ANY SOIL REACHING A PUBLIC OR PRIVATE ROADWAY SHALL BE REMOVED BEFORE THE END OF EACH WORKDAY AND AS NEEDED.
21. NECESSARY MEASURES SHALL BE TAKEN TO CONTAIN ANY FUEL OR POLLUTION RUNOFF. LEAKING EQUIPMENT OR SUPPLIES SHALL BE IMMEDIATELY REPAIRED OR REMOVED FROM THE SITE.
22. THE COST OF REPAIRING OR REMOVING SEDIMENT FROM EROSION CONTROL SYSTEMS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE APPLICABLE EROSION CONTROL ITEM.
23. ALL EROSION CONTROL MEASURES SHALL BE KEPT OPERATIONAL AND MAINTAINED CONTINUOUSLY THROUGHOUT THE PERIOD OF LAND DISTURBANCE UNTIL PERMANENT SEDIMENT AND EROSION CONTROL MEASURES ARE OPERATIONAL. CONTRACTOR SHALL PROVIDE TO THE CONSERVATION COMMISSION MEASURES (EROSION AND SEDIMENTATION CONTROL) FOR WORK DURING WINTER CONDITIONS.
24. CONTRACTOR SHALL SPRAY WATER FROM A WATER TRUCK ON DRY AND WINDY DAYS TO PREVENT DUST FROM FORMING.
25. EROSION CONTROL MEASURES AS SHOWN ON THESE DRAWINGS IS INTENDED TO CONVEY MINIMUM REQUIREMENTS. THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL MEASURES AS NECESSARY TO PREVENT SOIL EROSION AND TO COMPLY WITH THE PROJECT'S STORMWATER POLLUTION PREVENTION PLAN.
26. SOILS ON SLOPES THAT ARE 3:1 OR STEEPER SHOULD BE ROUGHENED PER THE EPA'S NPDES SOIL ROUGHENING FACT SHEET IF THEY ARE TO BE SEEDED WITHIN 2 WEEKS OF DISTURBANCE. IF NOT, EROSION

1. THE FOLLOWING LAYOUT CRITERIA SHALL CONTROL UNLESS OTHERWISE NOTED ON THE PLAN:
 - a. ALL TIES TO PROPERTY LINES ARE PERPENDICULAR TO THE PROPERTY LINE UNLESS OTHERWISE NOTED.
 - b. DISTANCES AND DIMENSIONS ARE IN DECIMAL FEET.
2. SCREENED IMAGES SHOW EXISTING CONDITIONS. WHERE EXISTING CONDITIONS LIE UNDER OR ARE IMPINGED UPON BY PROPOSED BUILDINGS AND/OR SITE ELEMENTS, THE EXISTING CONDITION WILL BE REMOVED, ABANDONED AND/OR CAPPED OR DEMOLISHED AS REQUIRED. AMBIGUITIES IN THE PLANS SHALL BE CLARIFIED BY THE ENGINEER OR SITE SUPERINTENDENT.

1. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE APPLICANT. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ALL UNDERGROUND UTILITIES.
2. THE PROJECT APPLICANT SHALL OBTAIN ALL NECESSARY STREET-OPENING PERMITS, WATER AND SEWER CONNECTION PERMITS AND PAY REQUIRED FEES PRIOR TO COMMENCING WORK ON THESE UTILITIES.
3. 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 COORDINATION WITH THE TOWN OF ARLINGTON.
4. ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF ALL GAS, ELECTRIC, TELEPHONE, AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES SHALL BE MADE BY THE PROJECT APPLICANT.
5. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.
6. WHERE PROPOSED GRADES MEET EXISTING GRADES, SUBCONTRACTOR(S) SHALL BLEND GRADES TO PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING AND NEW WORK. PONDING AT TRANSITION AREAS WILL NOT BE ALLOWED.
7. POSITIVE DRAINAGE SHALL BE MAINTAINED AWAY FROM ALL STRUCTURES.
8. SUBCONTRACTOR(S) SHALL VERIFY EXISTING GRADES AND NOTIFY THE CONTRACTOR/ENGINEER OF ANY DISCREPANCIES.
9. PRIOR TO ANY WORK OVER EXISTING TOWN-OWNED UTILITIES, CONTRACTOR TO EVALUATE CONDITION OF SUBSURFACE UTILITIES PRIOR TO CONSTRUCTION. A POST-CONSTRUCTION EVALUATION SHALL ALSO BE PERFORMED TO IDENTIFY ANY DAMAGE CAUSED DURING CONSTRUCTION.
10. ANY INSTALLATION OF UTILITY POLES OR UNDERGROUND CONDUIT WITHIN THE PUBLIC RIGHT-OF-WAY WILL REQUIRE A GRANT OF LOCATION FROM THE BOARD OF SELECTION.

1. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER PLANTING AND WILL CONTINUE UNTIL FINAL WRITTEN ACCEPTANCE OF PLANT MATERIAL.
2. MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL BUILDING FOUNDATIONS AND STRUCTURES.
3. MAXIMUM SLOPE WITHIN DISTURBED AREAS SHALL NOT EXCEED 3:1, UNLESS OTHERWISE NOTED.
4. THE LANDSCAPE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE PLANTINGS SHOWN ON THE DRAWINGS.
5. MATERIALS SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.
6. PLANTS SHALL BEAR THE SAME RELATIONSHIP TO FINISH GRADE AS TO ORIGINAL GRADES BEFORE DIGGING.
7. PLANTS TO BE BALLED IN BURLAP OR CONTAINERIZED.
8. AREAS PLANTED WITH EVERGREEN TREES SHALL BE COVERED WITH A MINIMUM 3" OF MULCH. MULCH FOR PLANTED AREAS TO BE AGED PINE BARK; PARTIALLY DECOMPOSED, DARK BROWN IN COLOR AND FREE OF WOOD CHIPS THICKER THAN 1/4" INCH.
9. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIALS FOR ONE (1) FULL YEAR FROM DATE OF ACCEPTANCE.
10. PLANT MATERIALS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT, AT THE NURSERY, AND AT THE SITE.
11. PLANT SPECIES AS INDICATED IN THE PLANT LIST ARE SUGGESTIONS ONLY. FINAL SELECTION OF SPECIES SHALL OCCUR AT THE TIME OF PLANT PURCHASE, DEPENDING ON AVAILABILITY. PLANT SIZE AND QUANTITY SHALL NOT CHANGE WITHOUT APPROVAL OF CONTRACTOR/LANDSCAPE ARCHITECT.

BC	BOTTOM OF CURB
BIT CONC	BITUMINOUS CONCRETE
BWV	BORDERING VEGETATED WETLANDS
CB	CATCH BASIN
CB/DH	CONC. BOUND/DRILL HOLE
CLF	CHAIN LINK FENCE
DIP	DUCTILE IRON PIPE
DMH	DRAIN MANHOLE
ECB	EROSION CONTROL BARRIER
FES	FLARED END SECTION
FH	FIRE HYDRANT
FOC	FACE OF CURB
FD	FOUND
GG	GAS GATE
HW	HEADWALL
ILSF	ISOLATED LAND SUBJECT TO FLOODING
IP	IRON PIPE
ISW	ISOLATED WETLANDS
LA	LANDSCAPED AREA
LOW	LIMIT OF WORK
N/F	NOW OR FORMERLY
NTS	NOT TO SCALE
OCS	OUTLET CONTROL STRUCTURE
PCC	PRECAST CONCRETE CURB
RW	RETAINING WALL
RCP	REINFORCED CONCRETE PIPE
SLC	STREET LIGHT CIRCUIT
SMH	SEWER MANHOLE
TC	TOP OF CURB
TEL	TELEPHONE CABLE
VGC	VERTICAL GRANITE CURB
WG	WATER GATE

	STONE BOUND W/DRILL HOLE		WATER VALVE
	STONE BOUND W/ESCUTCHEON PIN		CATCH BASIN
	CONCRETE BOUND		FIRE HYDRANT
	SEWER MANHOLE		TREE FILTER
	DRAIN MANHOLE		# OF PARKING SPACES
	WATER MANHOLE		SEWER MANHOLE
	ELECTRIC MANHOLE		
	TELEPHONE MANHOLE		
	CABLE MANHOLE		
	MANHOLE		
	CATCH BASIN		
	HYDRANT		
	WATER GATE		FENCE LINE
	GAS GATE		PROPERTY LINE
	UTILITY POLE		WETLAND LINE/FLAG
	UTILITY POLE W/LIGHT		
	UTILITY POLE W/TRANSFORMER		(E) MAJOR CONTOUR
	LIGHT POLE		(E) MINOR CONTOUR
	ELECTRIC HANDHOLE		PROPOSED MAJOR CONTOUR
	HANDHOLE		PROPOSED MINOR CONTOUR
	SIGN		100' WETLAND BUFFER ZONE
	WETLANDS FLAG		25' NO DISTURB ZONE
	BIT		
	CONC		WATER QUALITY UNIT/INLET
	EP		WATER QUALITY UNIT
	GC		
	WC		
	INVERT		
	RECORD INFORMATION		
	SEWER LINE		
	DRAIN LINE		
	WATER LINE		
	GAS LINE		
	OVERHEAD WIRE		
	CHAIN LINK FENCE		
	STOCKADE FENCE		
	STEEL GUARDRAIL		
	TREELINE		
	BRUSHLINE		
	SURVEYED BUILDING LOCATION		
	GIS BUILDING LOCATION		



ISSUED FOR PERMITTING
NOT FOR CONSTRUCTION



PROFESSIONAL ENGINEER _____ DATE _____

THORNDIKE PLACE

DOROTHY ROAD

IN
ARLINGTON
MASSACHUSETTS
(MIDDLESEX COUNTY)

GENERAL NOTES AND LEGEND

MARCH 13, 2020

NO.	DATE	DESC.
1	11/03/20	REVISED BUILDING

PREPARED FOR:
ARLINGTON LAND REALTY, LLC
84 SHERMAN STREET, 2ND FLOOR
CAMBRIDGE, MA 02140



803 Summer Street
Boston, Massachusetts
02127

617 896 4300

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SCALE: NONE

FILE: 2340700\C\D\2340700-LN

DWG.:	SHEET G-101
JOB. NO: 23407.00	

PLAN REFERENCES

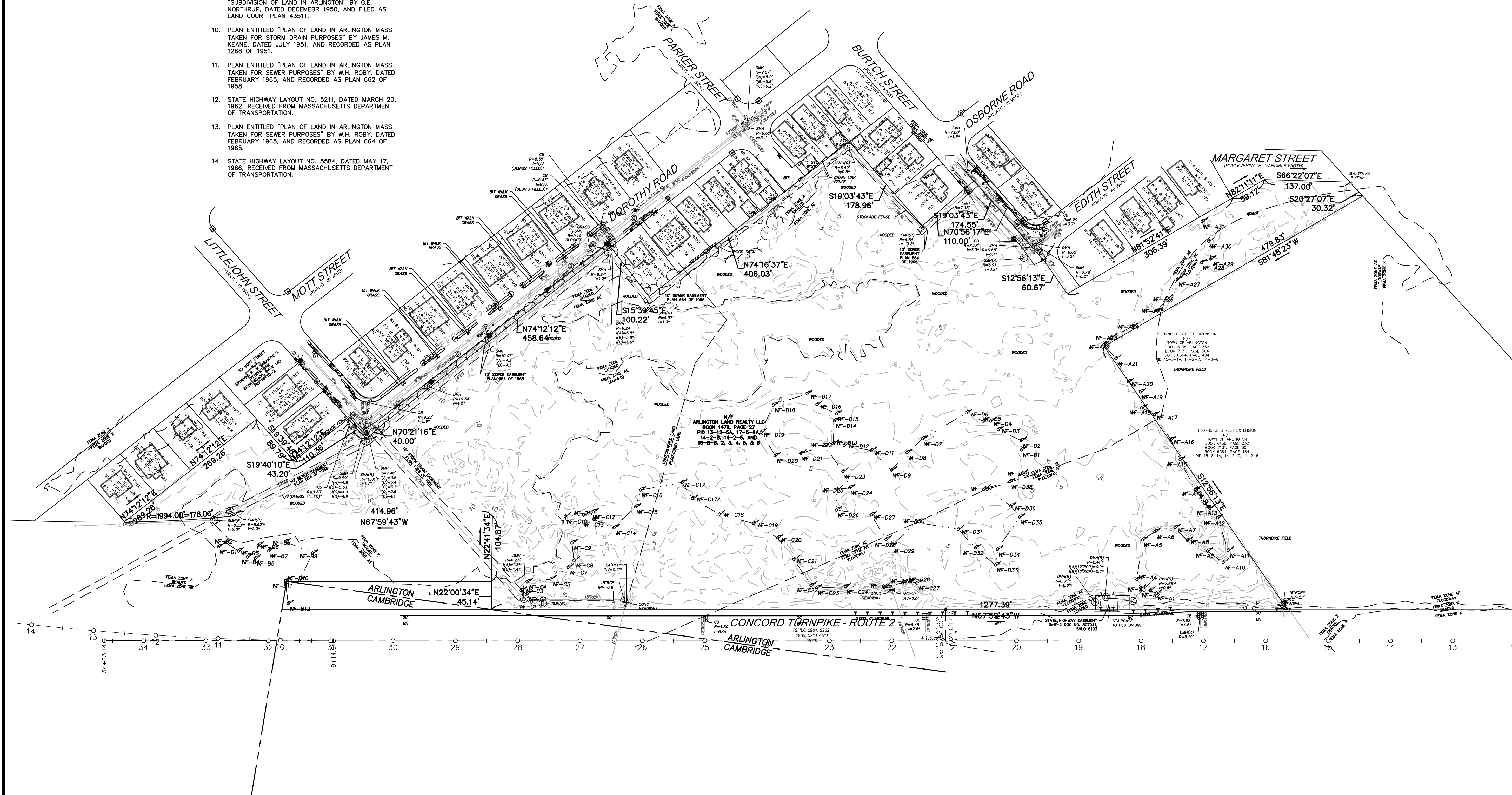
1. PLAN ENTITLED "PLAN AND PROFILE OF LITTLEJOHN STREET" BY FRANK AND DANIEL WYMAN, DATED DECEMBER 1926, AND RECEIVED FROM THE TOWN OF ARLINGTON.
2. PLAN ENTITLED "SUBDIVISION OF LAND IN ARLINGTON" BY BREMER W. POND, DATED APRIL 28, 1927, AND FILED AS LAND COURT PLAN 4351C.
3. PLAN ENTITLED "SUBDIVISION OF LAND SHOWN ON PLAN 4351A" BY J.M. KEANE, DATED OCTOBER 20, 1930, AND FILED AS LAND COURT PLAN 4351G.
4. PLAN ENTITLED "SUBDIVISION OF LAND SHOWN ON PLAN 4351A" BY J.M. KEANE, DATED APRIL 14, 1931, AND FILED AS LAND COURT PLAN 4351H.
5. STATE HIGHWAY LAYOUT NO. 2981, DATED JANUARY 17, 1933, RECEIVED FROM MASSACHUSETTS DEPARTMENT OF TRANSPORTATION.
6. STATE HIGHWAY LAYOUT NO. 2983, DATED JANUARY 17, 1933, RECEIVED FROM MASSACHUSETTS DEPARTMENT OF TRANSPORTATION.
7. PLAN ENTITLED "PLAN OF LAND IN ARLINGTON, MASS" BY C. H. GANNETT CO. CIVIL ENGINEERS, DATED APRIL 30, 1941, AND FILED AS LAND COURT PLAN 18030A.
8. PLAN ENTITLED "SUBDIVISION OF LAND IN ARLINGTON MASS" BY G.E. NORTHRUP, DATED DECEMBER 1948, AND RECORDED AS PLAN 1784 OF 1948.
9. PLAN ENTITLED "SUBDIVISION OF LAND IN ARLINGTON" BY G.E. NORTHRUP, DATED DECEMBER 1950, AND FILED AS LAND COURT PLAN 4351I. PLAN ENTITLED "SUBDIVISION OF LAND IN ARLINGTON" BY G.E. NORTHRUP, DATED DECEMBER 1950, AND FILED AS LAND COURT PLAN 4351J.
10. PLAN ENTITLED "PLAN OF LAND IN ARLINGTON MASS TAKEN FOR STORM DRAIN PURPOSES" BY JAMES M. KEANE, DATED JULY 1951, AND RECORDED AS PLAN 1268 OF 1951.
11. PLAN ENTITLED "PLAN OF LAND IN ARLINGTON MASS TAKEN FOR SEWER PURPOSES" BY W.H. ROBY, DATED FEBRUARY 1965, AND RECORDED AS PLAN 662 OF 1965.
12. STATE HIGHWAY LAYOUT NO. 5211, DATED MARCH 20, 1962, RECEIVED FROM MASSACHUSETTS DEPARTMENT OF TRANSPORTATION.
13. PLAN ENTITLED "PLAN OF LAND IN ARLINGTON MASS TAKEN FOR SEWER PURPOSES" BY W.H. ROBY, DATED FEBRUARY 1965, AND RECORDED AS PLAN 664 OF 1965.
14. STATE HIGHWAY LAYOUT NO. 5584, DATED MAY 17, 1966, RECEIVED FROM MASSACHUSETTS DEPARTMENT OF TRANSPORTATION.

GENERAL NOTES

1. THIS PLAN IS BASED UPON AN ON-THE-GROUND SURVEY PERFORMED BY BSC GROUP, INC. IN DECEMBER, 2019 AND JANUARY, 2020.
2. HORIZONTAL DATUM IS BASED UPON NAD '83 (12B) AS DERIVED VIA GPS OBSERVATIONS PERFORMED BY BSC GROUP, INC. IN DECEMBER 2019.
3. VERTICAL DATUM IS BASED UPON NAVD '88 AS DERIVED VIA GPS OBSERVATIONS PERFORMED BY BSC GROUP, INC. IN DECEMBER, 2019.
TBM 18-1 ELEV=9.13'
DESC: BACK LEFT BOLT ON HYDRANT ON OSBORNE
TBM 18-2 ELEV=11.61'
DESC: FRONT BOLT ON HYDRANT ACROSS FROM UTILITY POLE # 8
TBM 18-3 ELEV=11.71'
DESC: BACK LEFT BOLT ON HYDRANT BETWEEN UNITS
4. LOCUS IS LOCATED WITHIN ZONES ZONES AE, AE FLOODWAY, X AND X SHADED AS GRAPHICALLY DEPICTED ON FLOOD INSURANCE RATE MAP NUMBER 25017C0419E, EFFECTIVE DATE JUNE 4, 2010.
5. WETLAND RESOURCE AREAS SHOWN HEREON WERE DELINEATED BY BSC GROUP, INC. IN JANUARY AND OCTOBER 2020.
6. UTILITY RECORDS HEREON DENOTED WITH "*" ARE FROM EXISTING CONDITIONS SURVEY PREPARED BY PRECISION LAND SURVEYING OF SOUTHBOROUGH, MA IN 2009.
7. CONTOURS SHOWN WITHIN WOODED AREAS ARE BASED UPON AERIAL LIDAR COLLECTED UNDER USGS CONTRACT DURING 2013-2014. DATA MEETS OR EXCEEDS Q12 USGS SPECIFICATIONS. BSC GROUP FOUND A MEAN ERROR OF 0.20(OBSERVED) & 0.16(UNOBSERVED) ACROSS 15 LOCATIONS SAMPLED DURING THE ON-THE-GROUND SURVEY IN DECEMBER 2019.
8. TOWN LINE LOCATIONS ESTABLISHED FROM MASSACHUSETTS STATE HIGHWAY LAYOUTS 2981, 2982, 2983, 5211 AND 5579.
9. ABUTTING BOUNDARY LINES ARE APPROXIMATE.
10. RECORD UTILITY INFORMATION WAS NOT RECEIVED FROM VERIZON, TENNESSEE GAS AND MCI.

UTILITY NOTE

EXISTING UTILITIES, WHERE SHOWN HEREON, ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY LOCATING AND COORDINATING ANY ON-SITE ACTIVITY WITH DIG-SAFE AND THE APPROPRIATE UTILITY COMPANY AND MAINTAINING EXISTING UTILITY SYSTEM SERVICE. DIG-SAFE SHALL BE NOTIFIED PER THE COMMONWEALTH OF MASSACHUSETTS STATUTE CHAPTER 82, SECTION 40, AT 1-888-344-7233. NO GUARANTEE IS IMPLIED OR INTENDED AS TO THE ACCURACY, LOCATION OR THAT ALL UTILITIES AND/OR SUBSURFACE STRUCTURES ARE SHOWN. THE CONTRACTOR SHALL VERIFY SIZE, LOCATION AND INVERTS OR UTILITIES AND STRUCTURES AS REQUIRED PRIOR TO THE START OF CONSTRUCTION.



THORNDIKE PLACE

DOROTHY ROAD
IN
ARLINGTON
MASSACHUSETTS
(MIDDLESEX COUNTY)

EXISTING
CONDITIONS

MARCH 13, 2020

REVISIONS:		
NO.	DATE	DESC.
1	10/22/20	WETLAND DELINEATION

PREPARED FOR:
ARLINGTON LAND REALTY, LLC
84 SHERMAN STREET, 2ND FLOOR
CAMBRIDGE, MA 02140

BSC GROUP
803 Summer Street
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02127
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SCALE: 1" = 80'
0 40 80 160 FEET
FILE: \Civil_Drawings\2340700-EC-COPY
DWG: SHEET V-100
JOB. NO: 23407.00



PROFESSIONAL ENGINEER DATE

THORNDIKE PLACE

DOROTHY ROAD
IN
ARLINGTON
MASSACHUSETTS
(MIDDLESEX COUNTY)

EXISTING
ENVIRONMENTAL
RESOURCES PLAN
MARCH 13, 2020

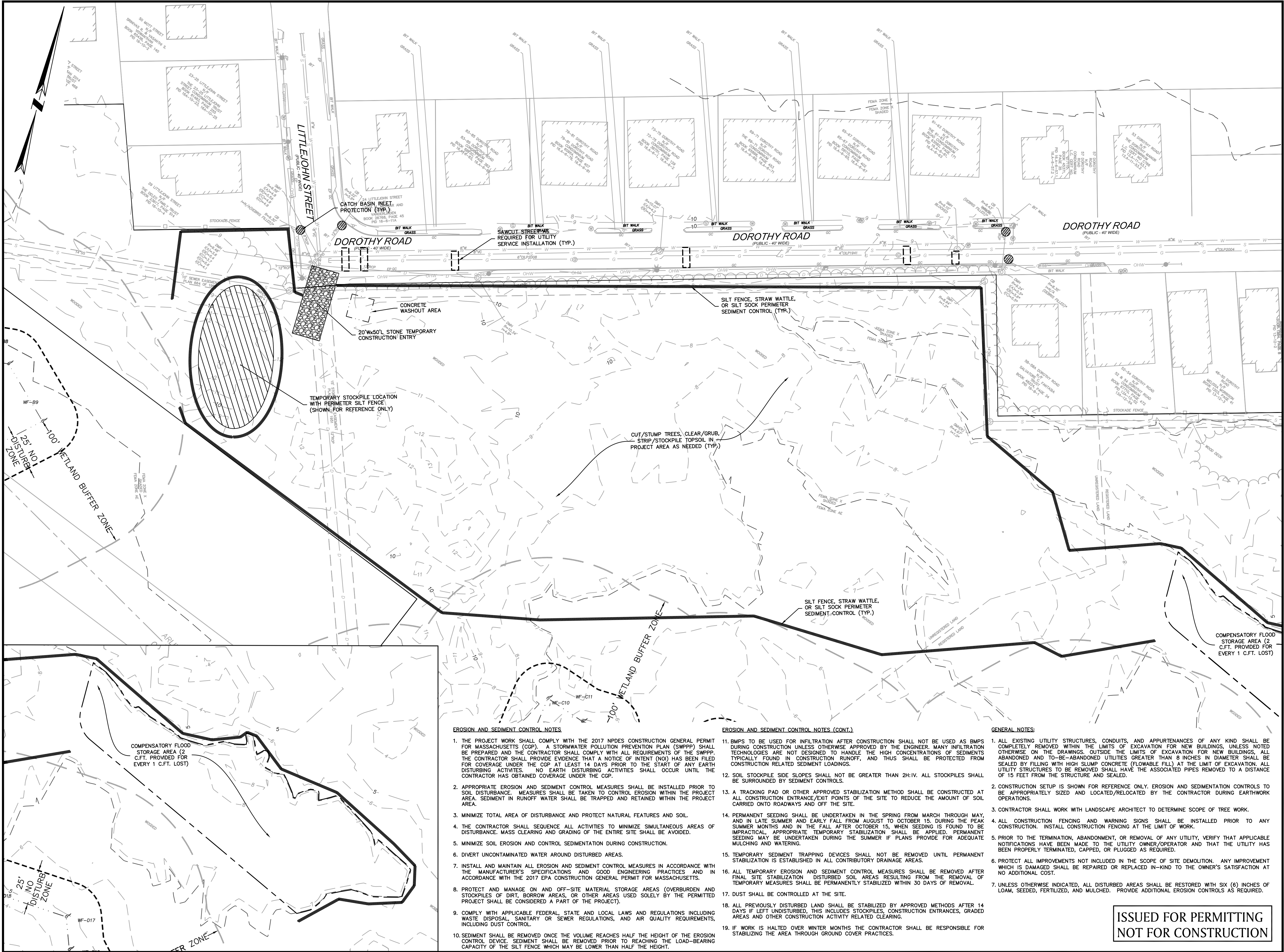
REVISIONS:		
NO.	DATE	DESC.
1	10/22/20	WETLAND DELINEATION

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SCALE: 1" = 50'
0 25 50 100 FEET
FILE: \\Civil_Drawgs\\2340700-CONSTRAINTS
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DATE
PROFESSIONAL ENGINEER

THORNDIKE PLACE

DOROTHY ROAD
IN
ARLINGTON
MASSACHUSETTS
(MIDDLESEX COUNTY)

SITE PREPARATION PLAN

MARCH 13, 2020

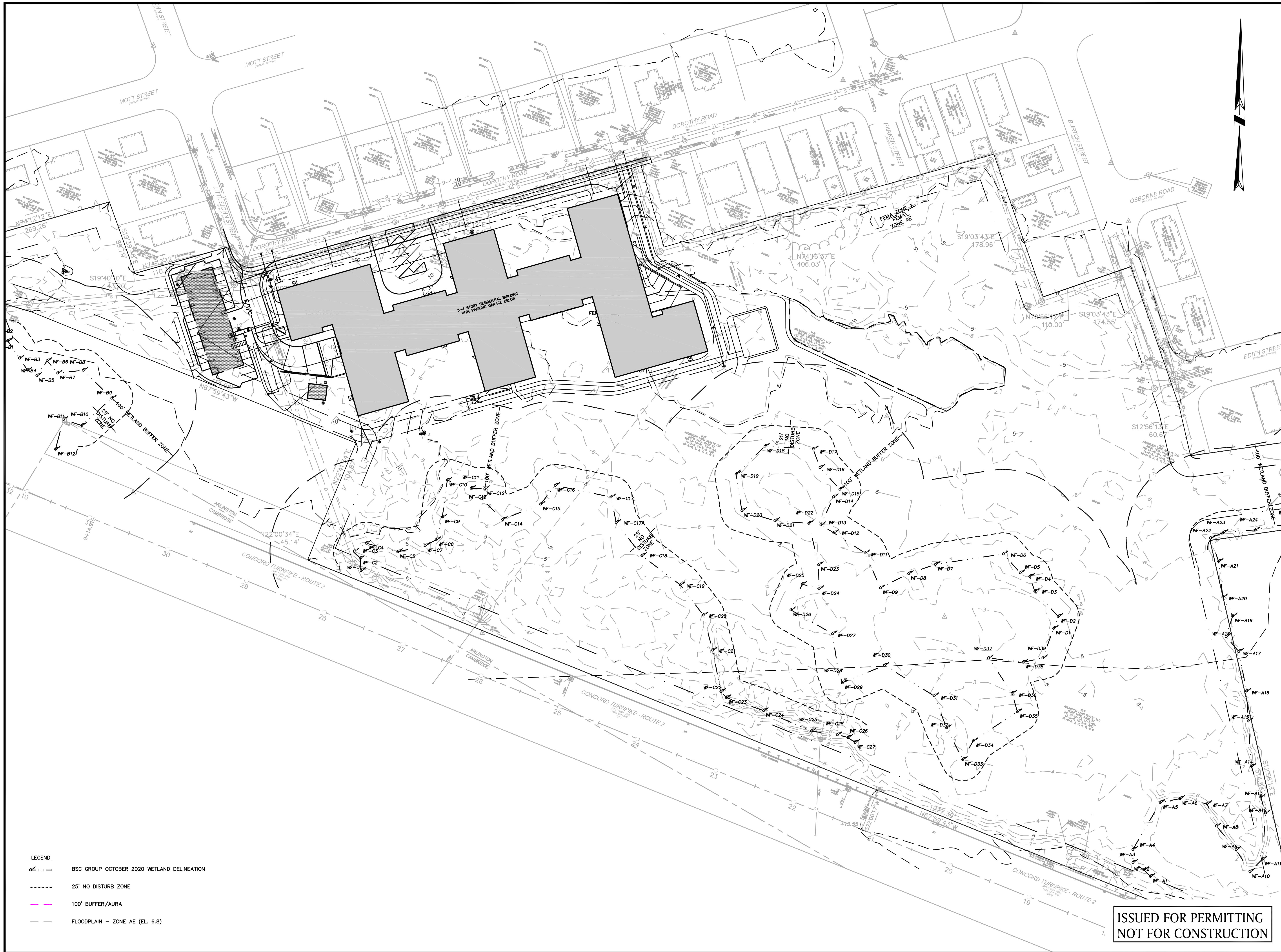
REVISIONS:		
NO.	DATE	DESC.
1	11/03/20	REVISED BUILDING

PREPARED FOR:
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THORNDIKE PLACE

DOROTHY ROAD
IN
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MASSACHUSETTS
(MIDDLESEX COUNTY)

OVERALL SITE PLAN

MARCH 13, 2020

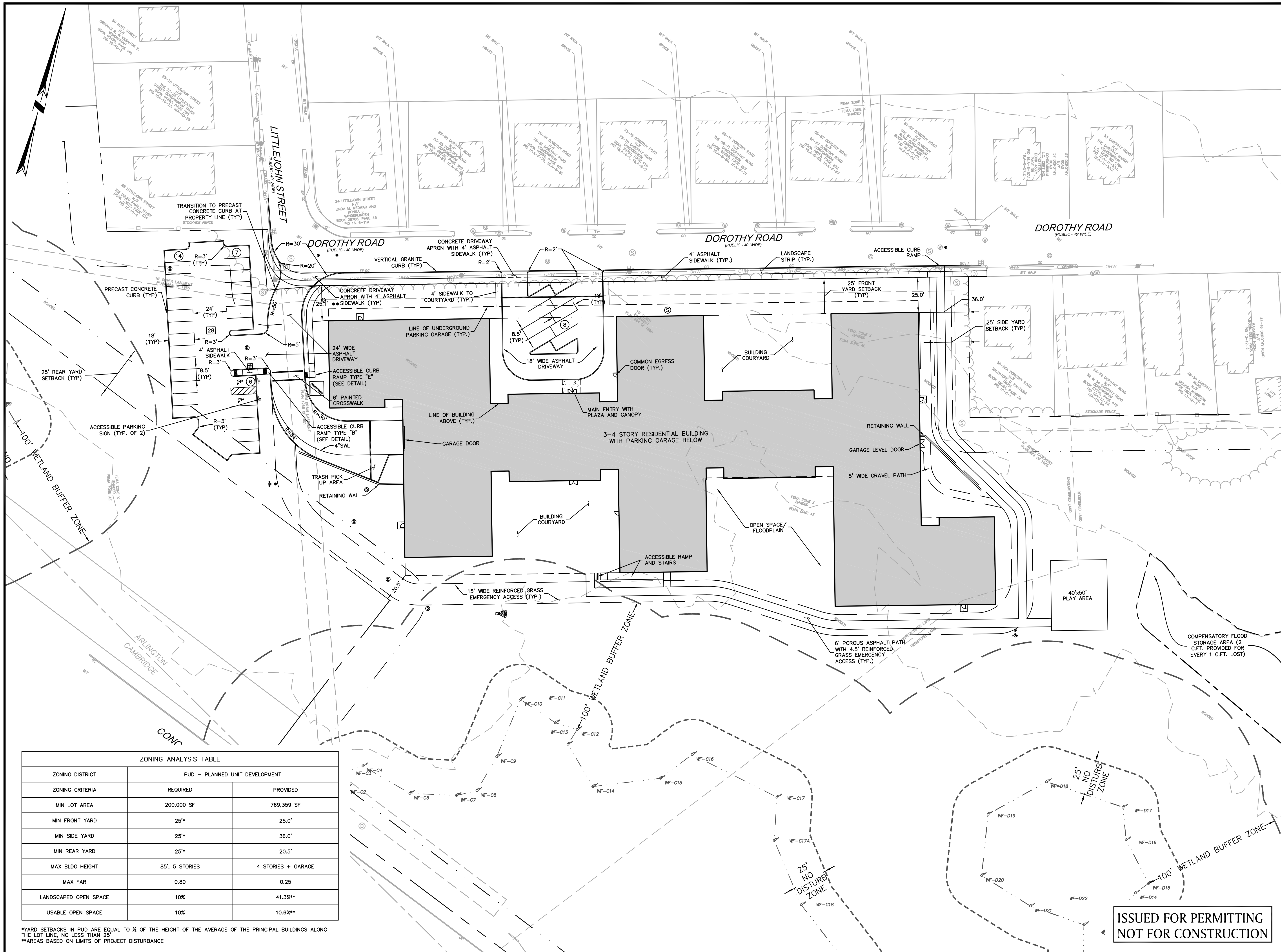
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NO.	DATE	DESC.
1	9/18/20	NEW BUILDING FOOTPRINT
2	10/22/20	WETLAND DELINEATION
3	11/03/20	REVISED BUILDING

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ZONING ANALYSIS TABLE		
ZONING DISTRICT	PUD - PLANNED UNIT DEVELOPMENT	
ZONING CRITERIA	REQUIRED	PROVIDED
MIN LOT AREA	200,000 SF	769,359 SF
MIN FRONT YARD	25'*	25.0'
MIN SIDE YARD	25'*	36.0'
MIN REAR YARD	25'*	20.5'
MAX BLDG HEIGHT	85', 5 STORIES	4 STORIES + GARAGE
MAX FAR	0.80	0.25
LANDSCAPED OPEN SPACE	10%	41.3%**
USABLE OPEN SPACE	10%	10.6%**

*YARD SETBACKS IN PUD ARE EQUAL TO 1/4 OF THE HEIGHT OF THE AVERAGE OF THE PRINCIPAL BUILDINGS ALONG THE LOT LINE, NO LESS THAN 25'

**AREAS BASED ON LIMITS OF PROJECT DISTURBANCE



DATE
PROFESSIONAL ENGINEER

THORNDIKE PLACE

DOROTHY ROAD
IN
ARLINGTON
MASSACHUSETTS
(MIDDLESEX COUNTY)

LAYOUT & MATERIALS
PLAN

MARCH 13, 2020

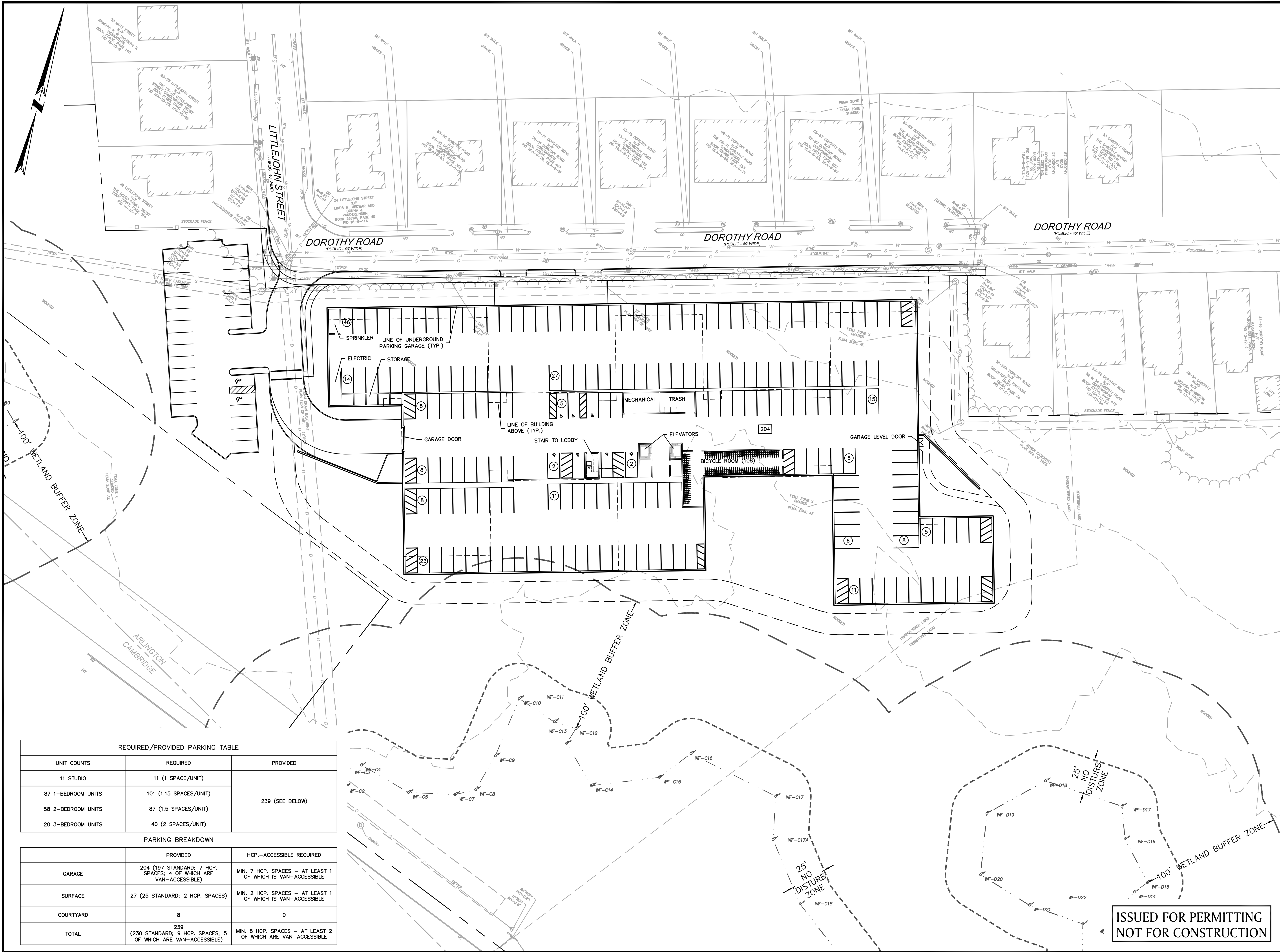
REVISIONS:		
NO.	DATE	DESC.
1	9/18/20	NEW BUILDING FOOTPRINT
2	10/22/20	WETLAND DELINEATION
3	11/03/20	REVISED BUILDING

PREPARED FOR:
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CAMBRIDGE, MA 02140

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REQUIRED/PROVIDED PARKING TABLE		
UNIT COUNTS	REQUIRED	PROVIDED
11 STUDIO	11 (1 SPACE/UNIT)	239 (SEE BELOW)
87 1-BEDROOM UNITS	101 (1.15 SPACES/UNIT)	
58 2-BEDROOM UNITS	87 (1.5 SPACES/UNIT)	
20 3-BEDROOM UNITS	40 (2 SPACES/UNIT)	

PARKING BREAKDOWN		
	PROVIDED	HCP.--ACCESSIBLE REQUIRED
GARAGE	204 (197 STANDARD; 7 HCP. SPACES; 4 OF WHICH ARE VAN-ACCESSIBLE)	MIN. 7 HCP. SPACES -- AT LEAST 1 OF WHICH IS VAN-ACCESSIBLE
SURFACE	27 (25 STANDARD; 2 HCP. SPACES)	MIN. 2 HCP. SPACES -- AT LEAST 1 OF WHICH IS VAN-ACCESSIBLE
COURTYARD	8	0
TOTAL	239 (230 STANDARD; 9 HCP. SPACES; 5 OF WHICH ARE VAN-ACCESSIBLE)	MIN. 8 HCP. SPACES -- AT LEAST 2 OF WHICH ARE VAN-ACCESSIBLE



PROFESSIONAL ENGINEER

THORNDIKE PLACE

DOROTHY ROAD
IN
ARLINGTON
MASSACHUSETTS
(MIDDLESEX COUNTY)

GARAGE LEVEL PLAN

MARCH 13, 2020

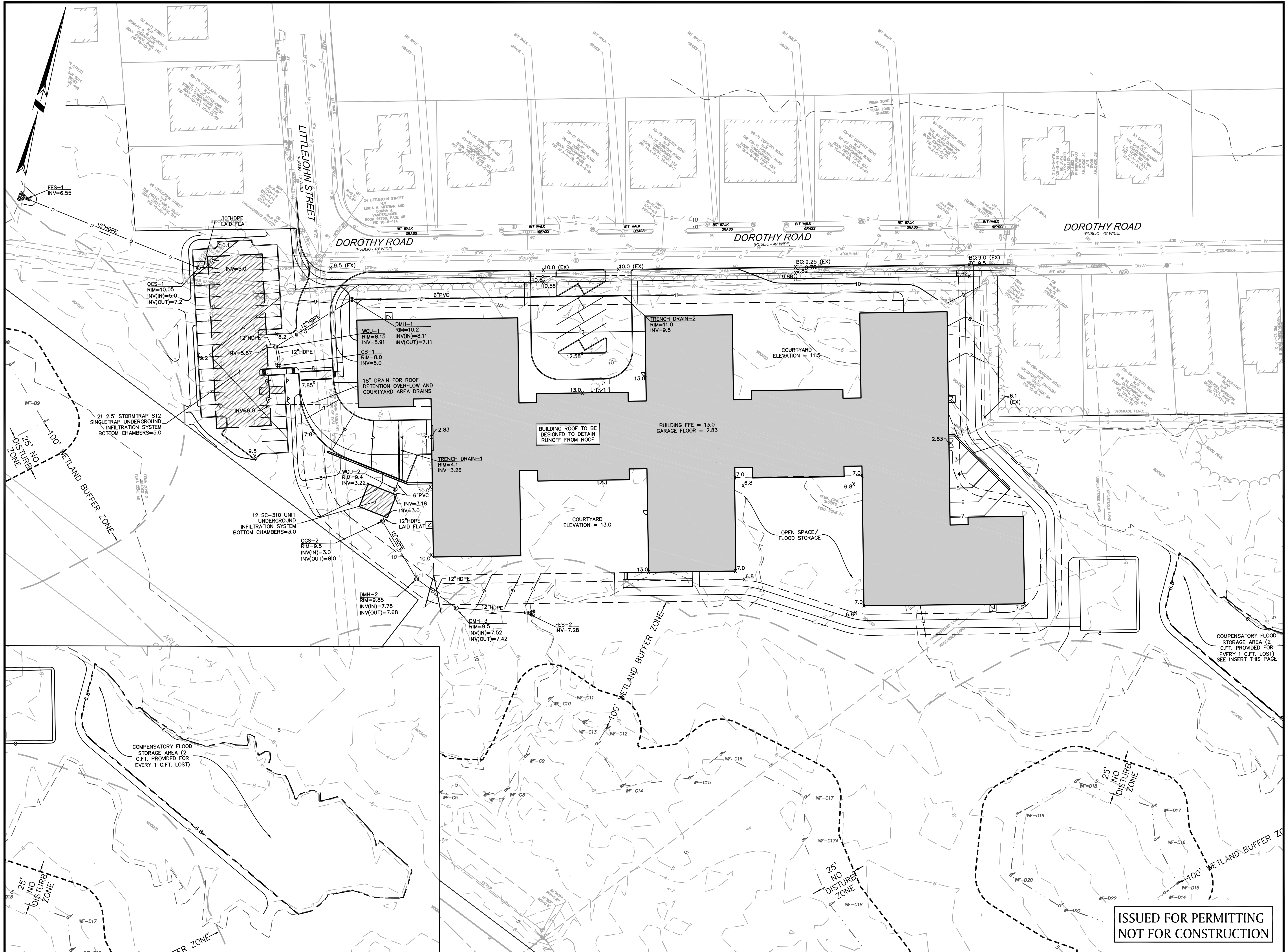
REVISIONS:		
NO.	DATE	DESC.
1	11/03/20	REVISED BUILDING

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FILE: \\Civil_Drawings\\2340700--GARAGE
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PROFESSIONAL ENGINEER DATE

THORNDIKE PLACE

DOROTHY ROAD
IN
ARLINGTON
MASSACHUSETTS
(MIDDLESEX COUNTY)

GRADING &
DRAINAGE PLAN

MARCH 13, 2020

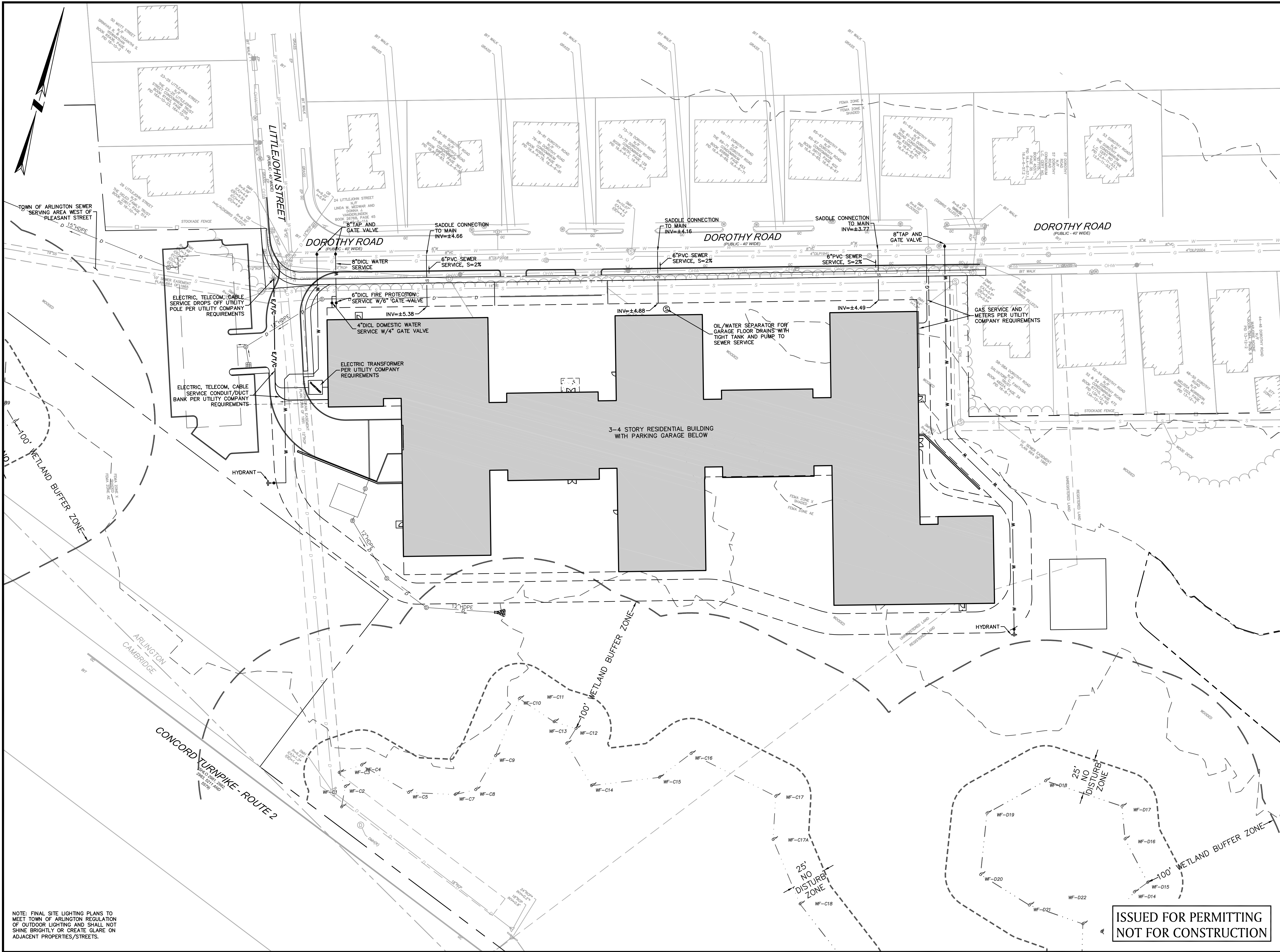
REVISIONS:		
NO.	DATE	DESC.
1	9/18/20	NEW BUILDING FOOTPRINT
2	10/22/20	WETLAND DELINEATION
3	11/03/20	REVISED BUILDING

PREPARED FOR:
ARLINGTON LAND REALTY, LLC
84 SHERMAN STREET, 2ND FLOOR
CAMBRIDGE, MA 02140

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SCALE: 1" = 30'
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NOTE: FINAL SITE LIGHTING PLANS TO MEET TOWN OF ARLINGTON REGULATION OF OUTDOOR LIGHTING AND SHALL NOT SHINE BRIGHTLY OR CREATE GLARE ON ADJACENT PROPERTIES/STREETS.



DATE
PROFESSIONAL ENGINEER

THORNDIKE PLACE

DOROTHY ROAD
IN
ARLINGTON
MASSACHUSETTS
(MIDDLESEX COUNTY)

UTILITY PLAN

MARCH 13, 2020

REVISIONS:		
NO.	DATE	DESC.
1	9/18/20	NEW BUILDING FOOTPRINT
2	10/22/20	WETLAND DELINEATION
3	11/03/20	REVISED BUILDING

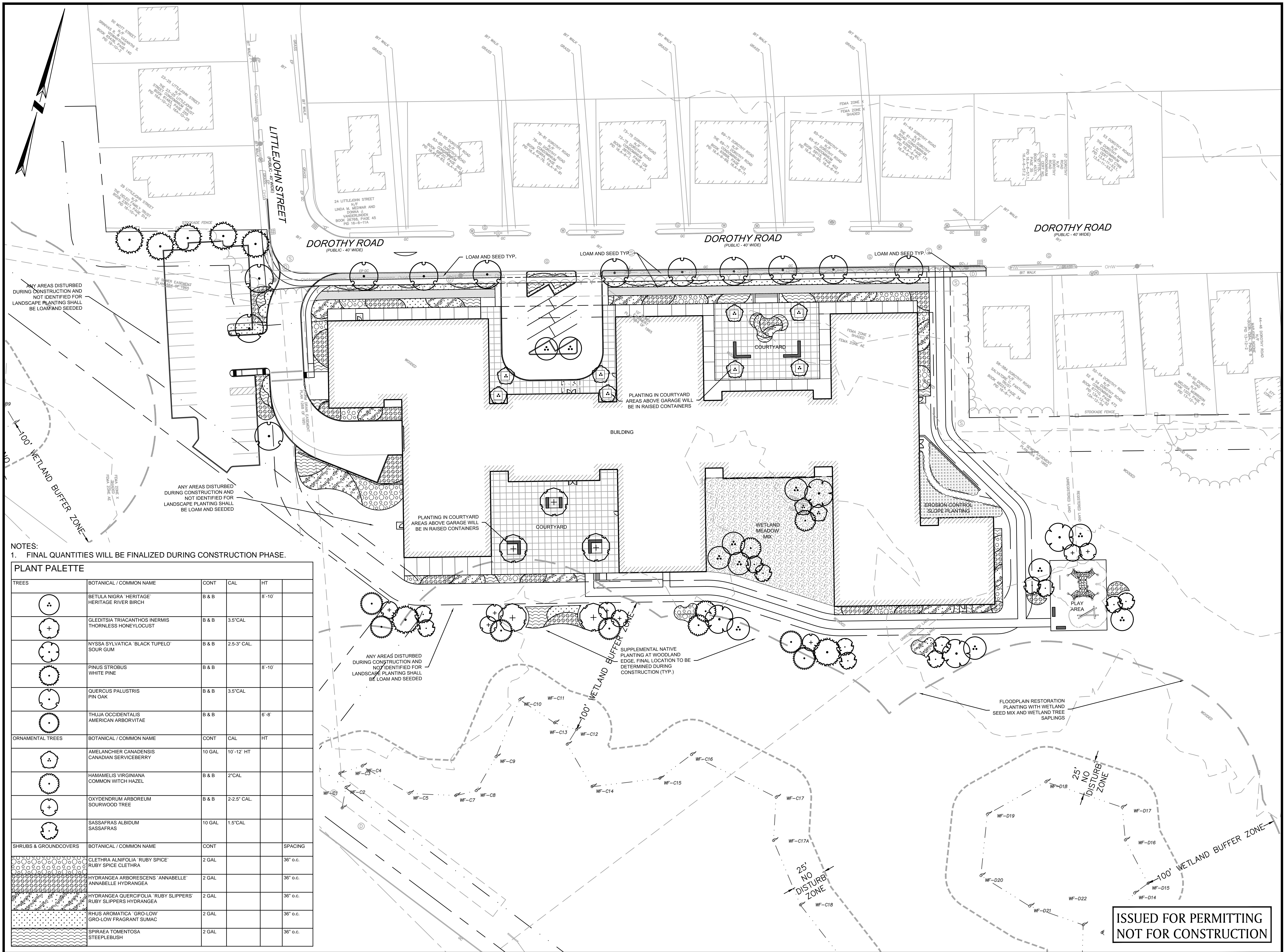
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0 15 30 60 FEET

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DWG: C104
JOB: NO: 23407.00
SHEET C-106

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NOTES:
1. FINAL QUANTITIES WILL BE FINALIZED DURING CONSTRUCTION PHASE.

PLANT PALETTE

TREES	BOTANICAL / COMMON NAME	CONT	CAL	HT	
	BETULA NIGRA 'HERITAGE' HERITAGE RIVER BIRCH	B & B		8'-10'	
	GLEITSIA TRIACANTHOS INERMIS THORNLESS HONEYLOCUST	B & B	3.5" CAL		
	NYSSA SYLVATICA 'BLACK TUPELO' SOUR GUM	B & B	2.5-3" CAL		
	PINUS STROBUS WHITE PINE	B & B		8'-10'	
	QUERCUS PALUSTRIS PIN OAK	B & B	3.5" CAL		
	THUJA OCCIDENTALIS AMERICAN ARBORVITAE	B & B		6'-8'	
ORNAMENTAL TREES	BOTANICAL / COMMON NAME	CONT	CAL	HT	
	AMELANCHIER CANADENSIS CANADIAN SERVICEBERRY	10 GAL	10'-12' HT		
	HAMAMELIS VIRGINIANA COMMON WITCH HAZEL	B & B	2" CAL		
	OXYDENDRUM ARBOREUM SOURWOOD TREE	B & B	2-2.5" CAL		
	SASSAFRAS ALBIDUM SASSAFRAS	10 GAL	1.5" CAL		
SHRUBS & GROUNDCOVERS	BOTANICAL / COMMON NAME	CONT			SPACING
	CLETHRA ALNIFOLIA 'RUBY SPICE' RUBY SPICE CLETHRA	2 GAL			36" o.c.
	HYDRANGEA ARBORESCENS 'ANNABELLE' ANNABELLE HYDRANGEA	2 GAL			36" o.c.
	HYDRANGEA QUERCIFOLIA 'RUBY SLIPPERS' RUBY SLIPPERS HYDRANGEA	2 GAL			36" o.c.
	RHUS AROMATICA 'GRO-LOW' GRO-LOW FRAGRANT SUMAC	2 GAL			36" o.c.
	SPIRAEA TOMENTOSA STEEPLEBUSH	2 GAL			36" o.c.



REGISTERED LANDSCAPE ARCHITECT
DATE 2020/11/03

THORNDIKE PLACE

DOROTHY ROAD
IN
ARLINGTON
MASSACHUSETTS
(MIDDLESEX COUNTY)

PLANTING PLAN

MARCH 13, 2020

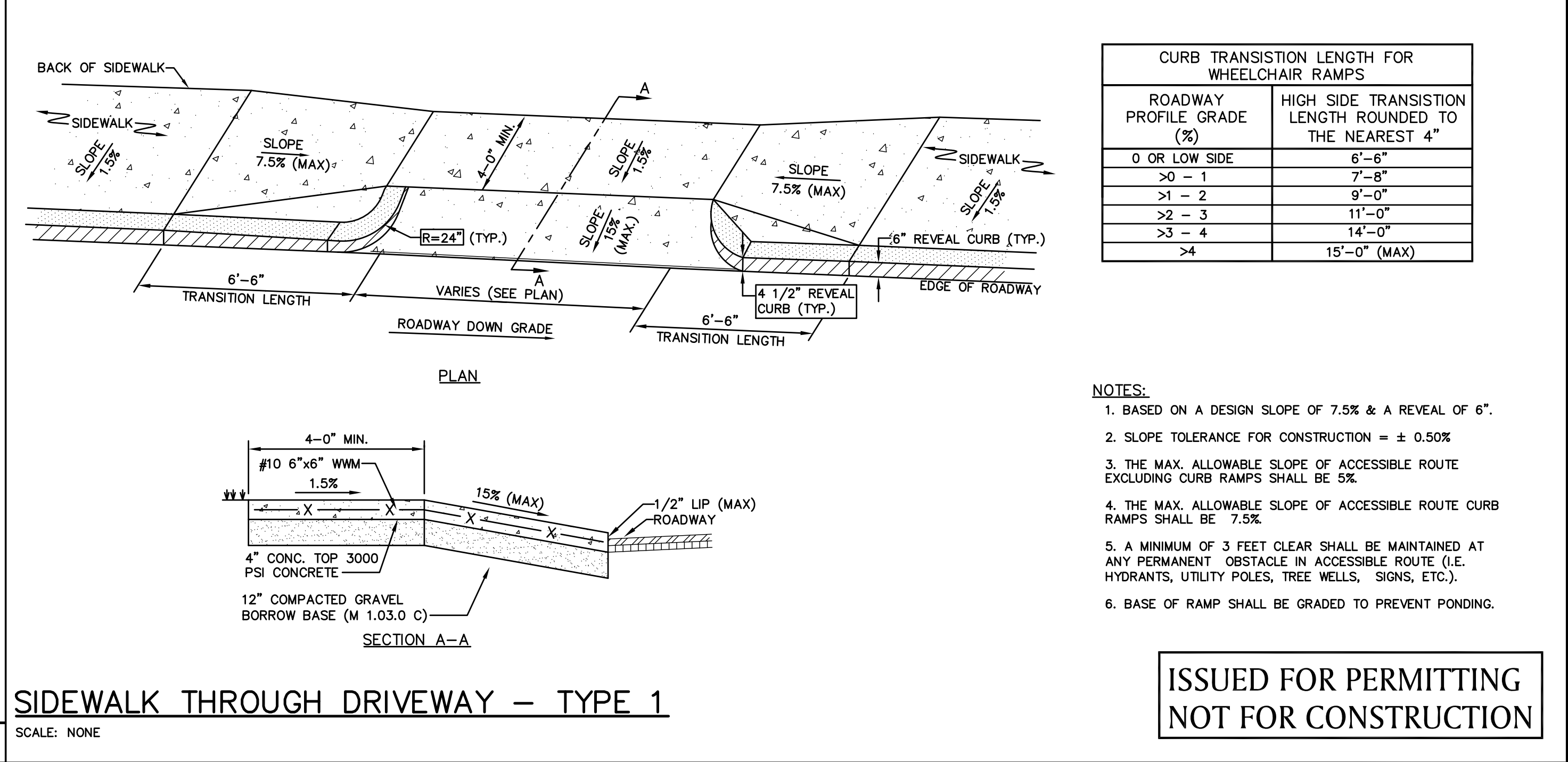
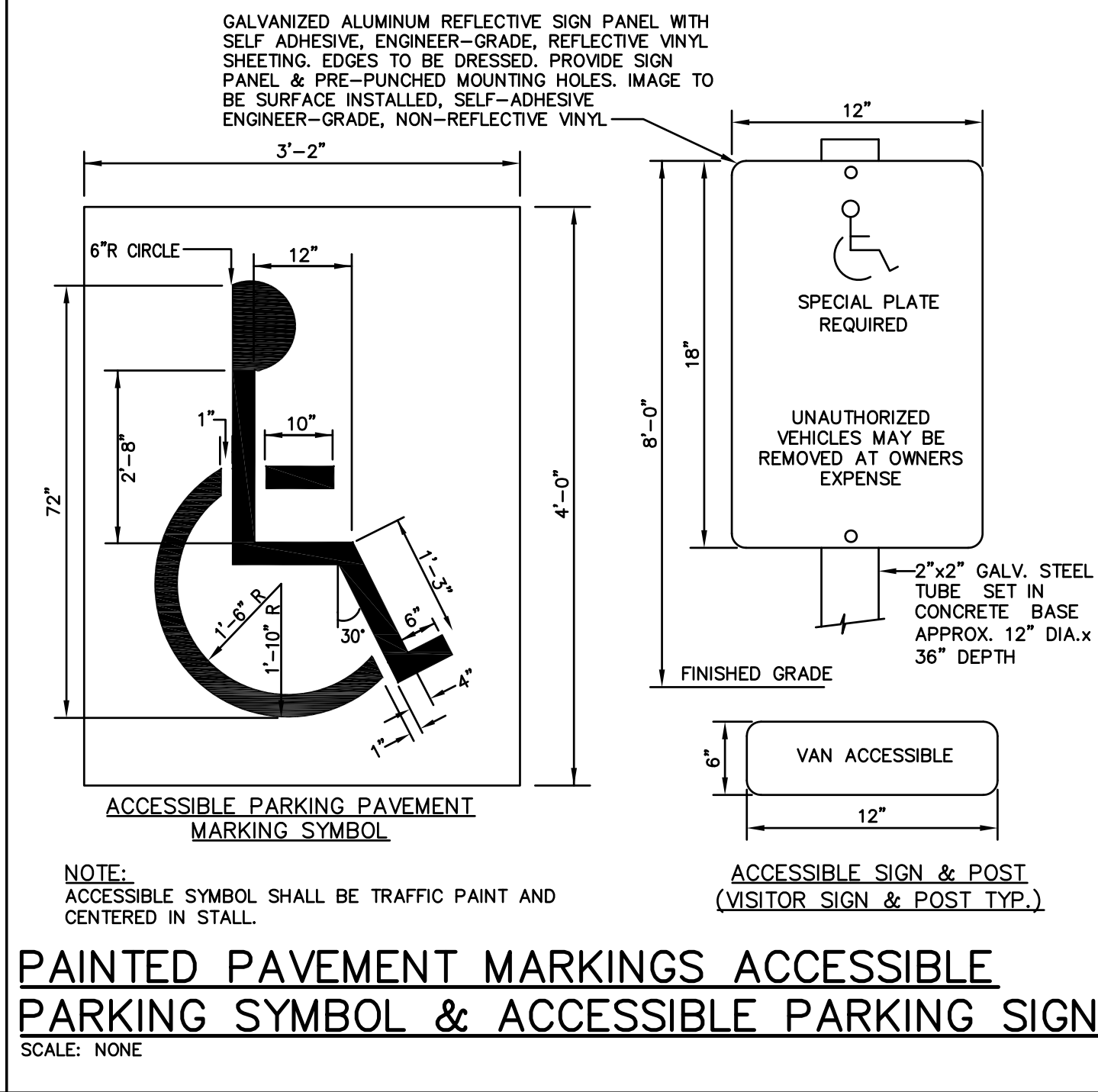
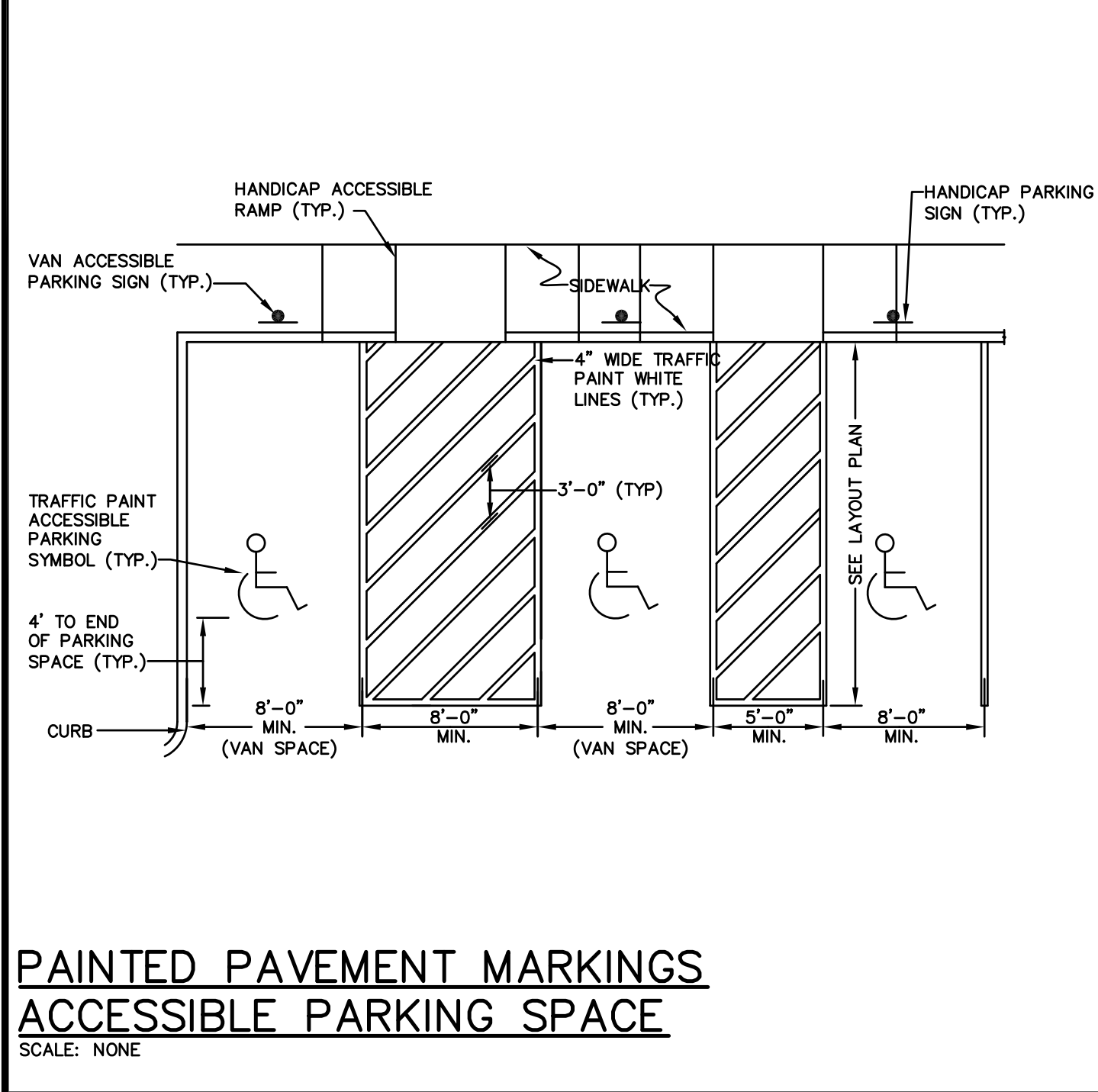
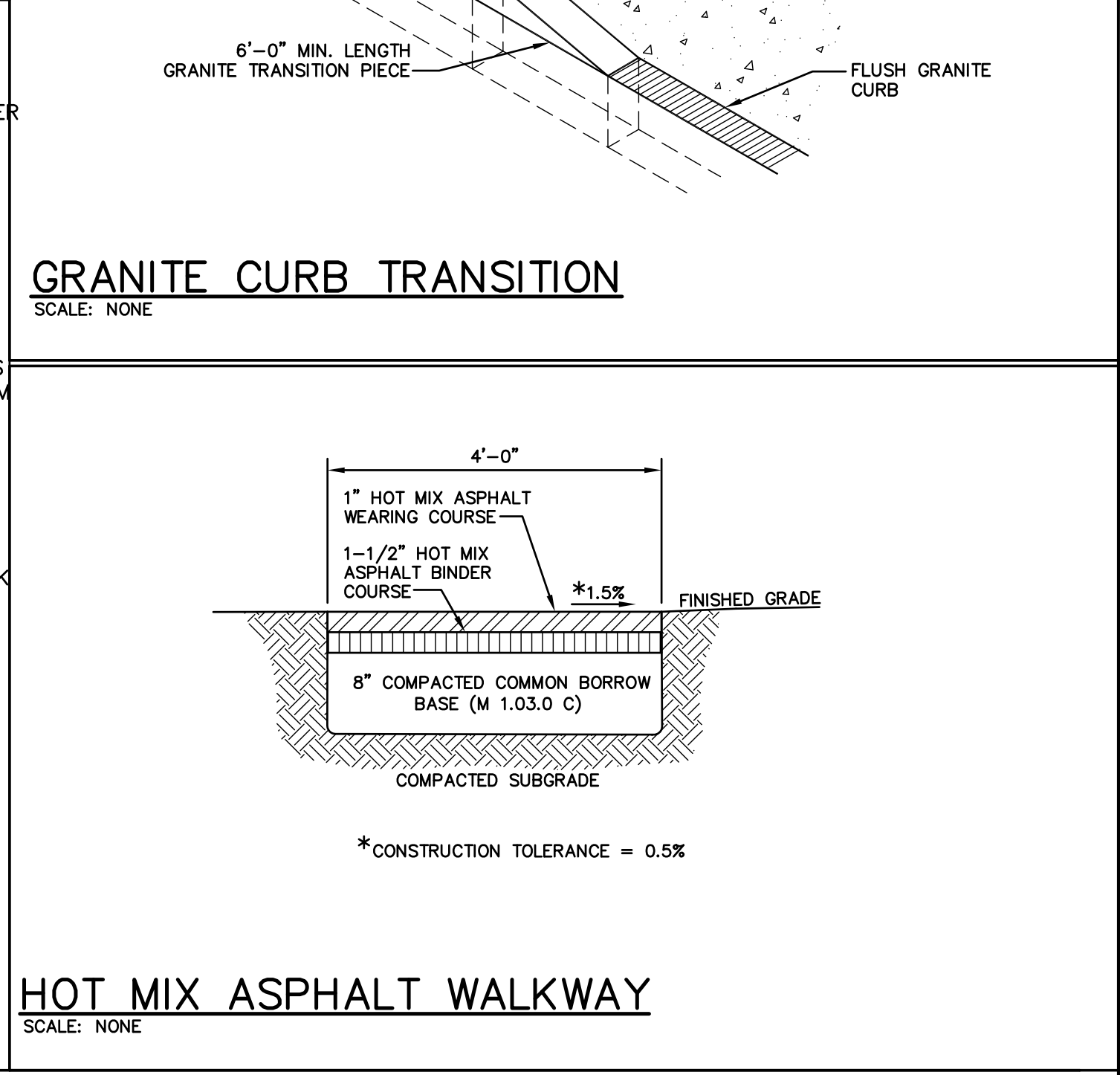
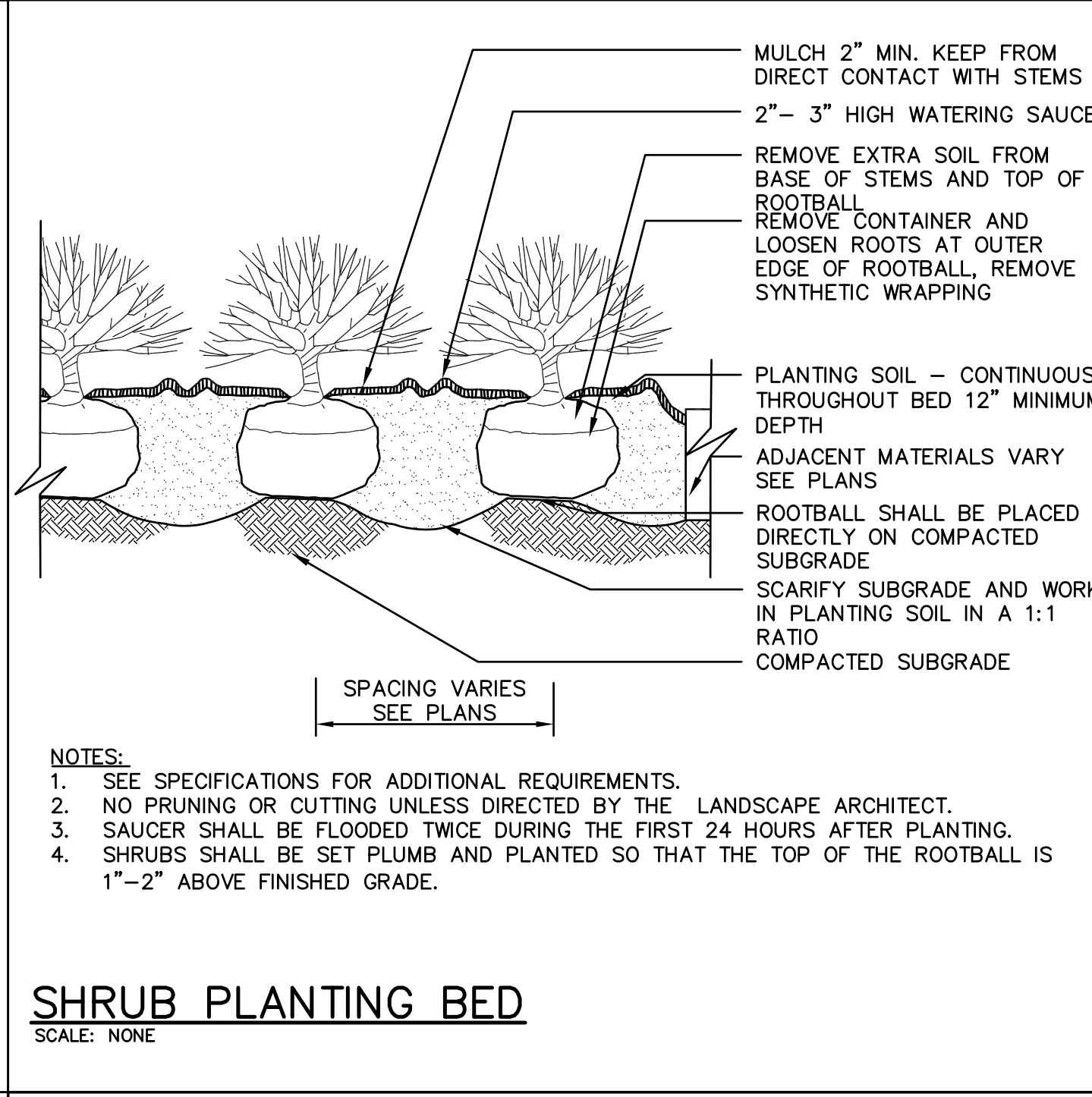
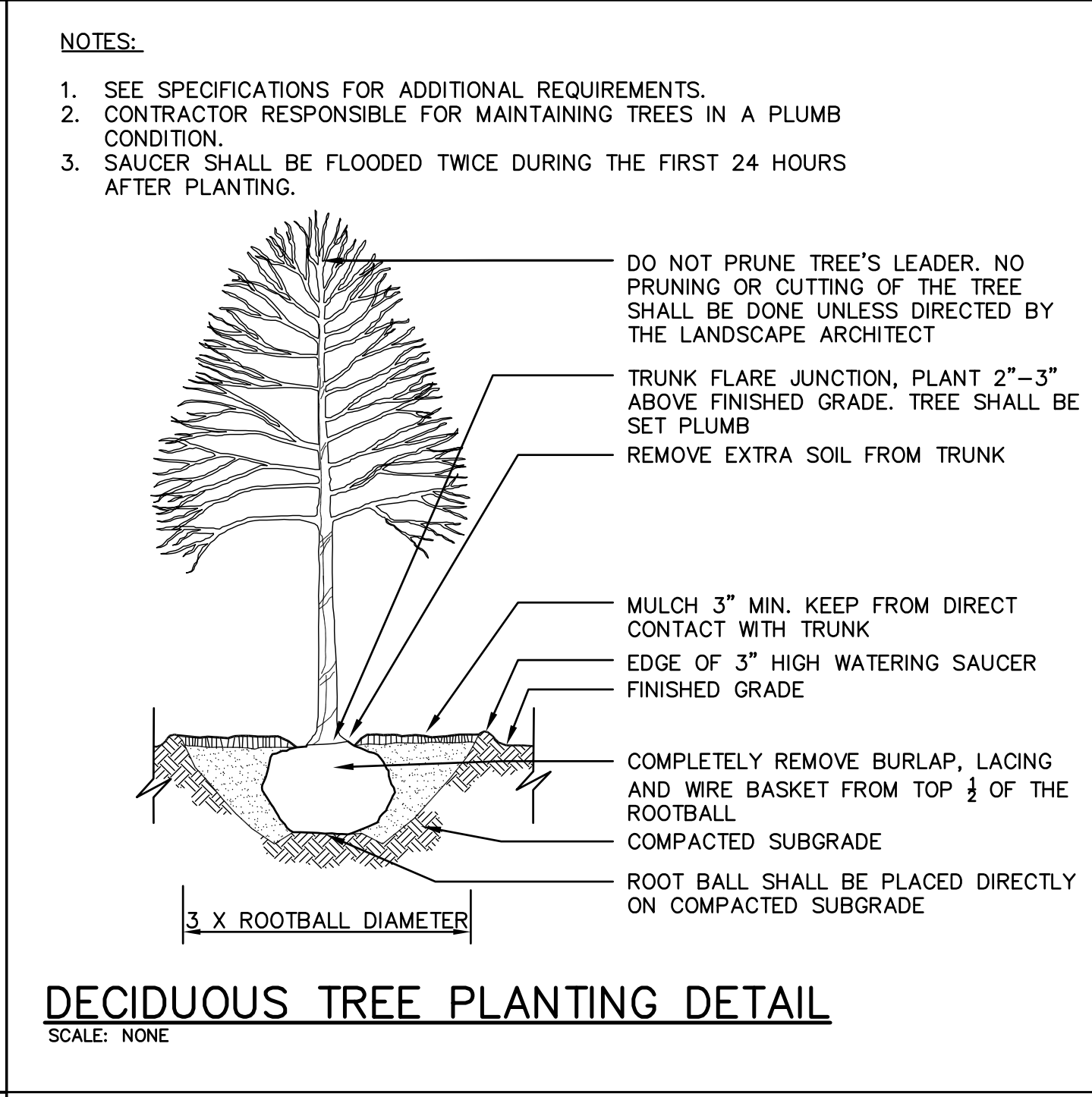
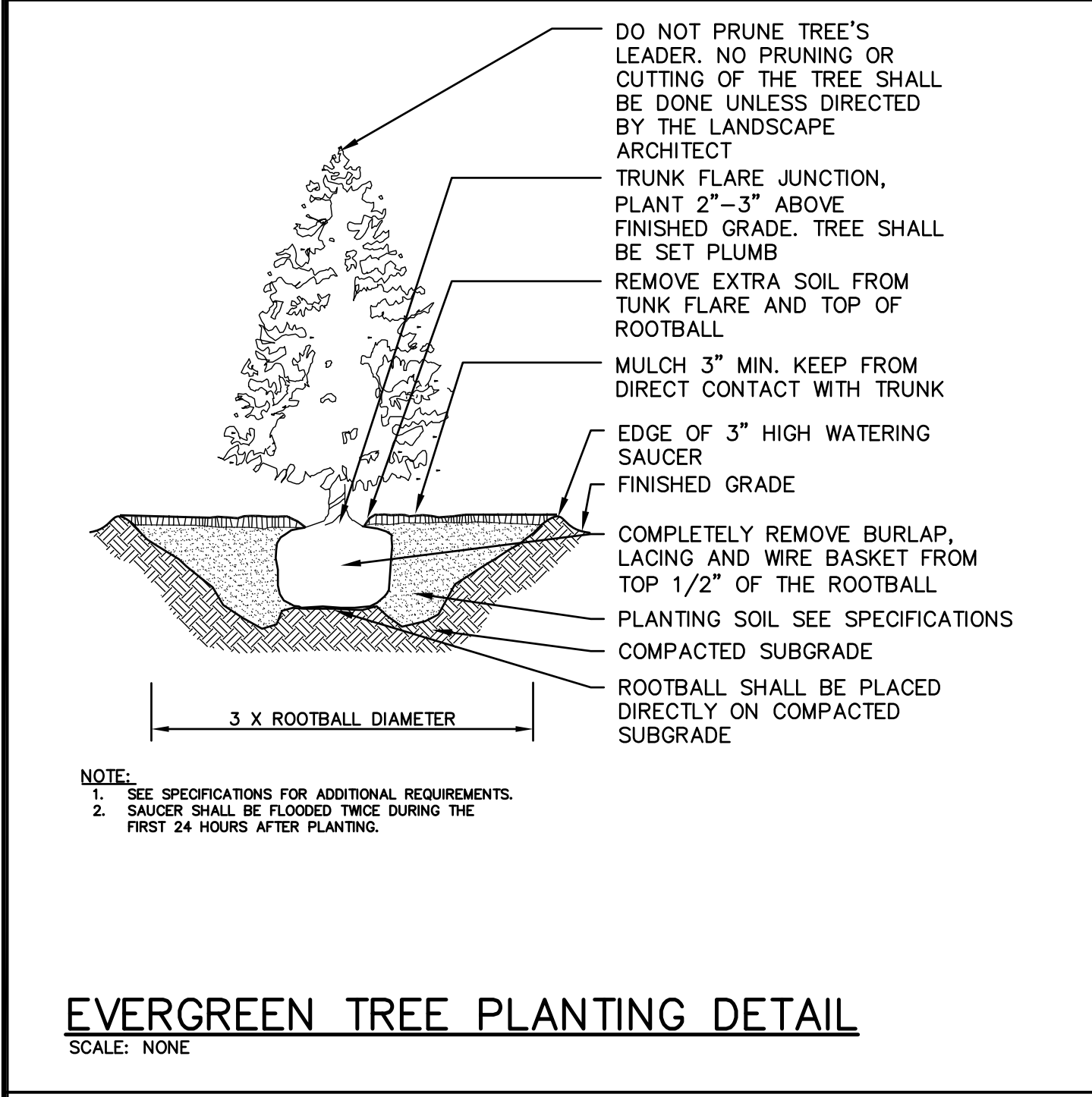
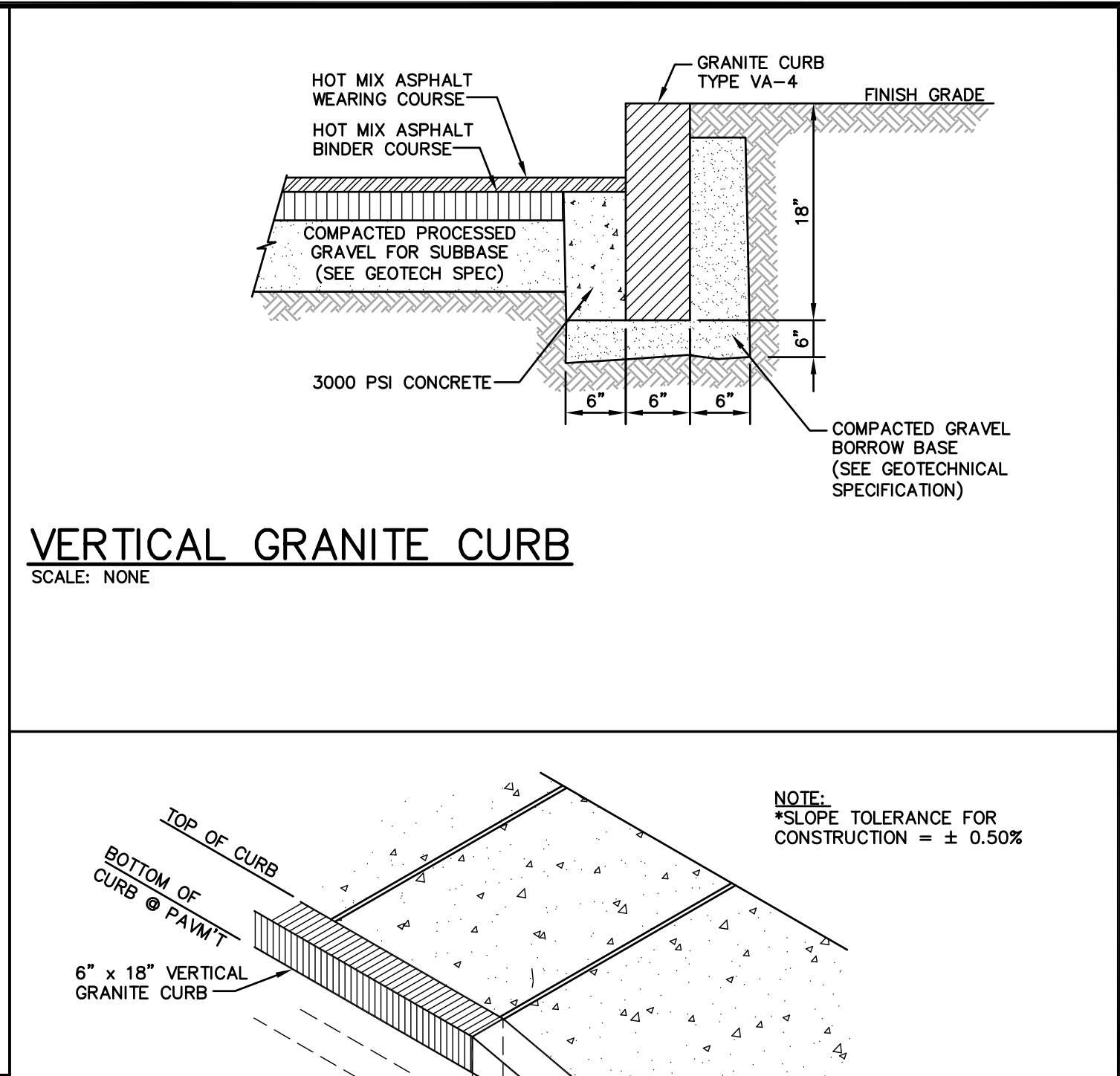
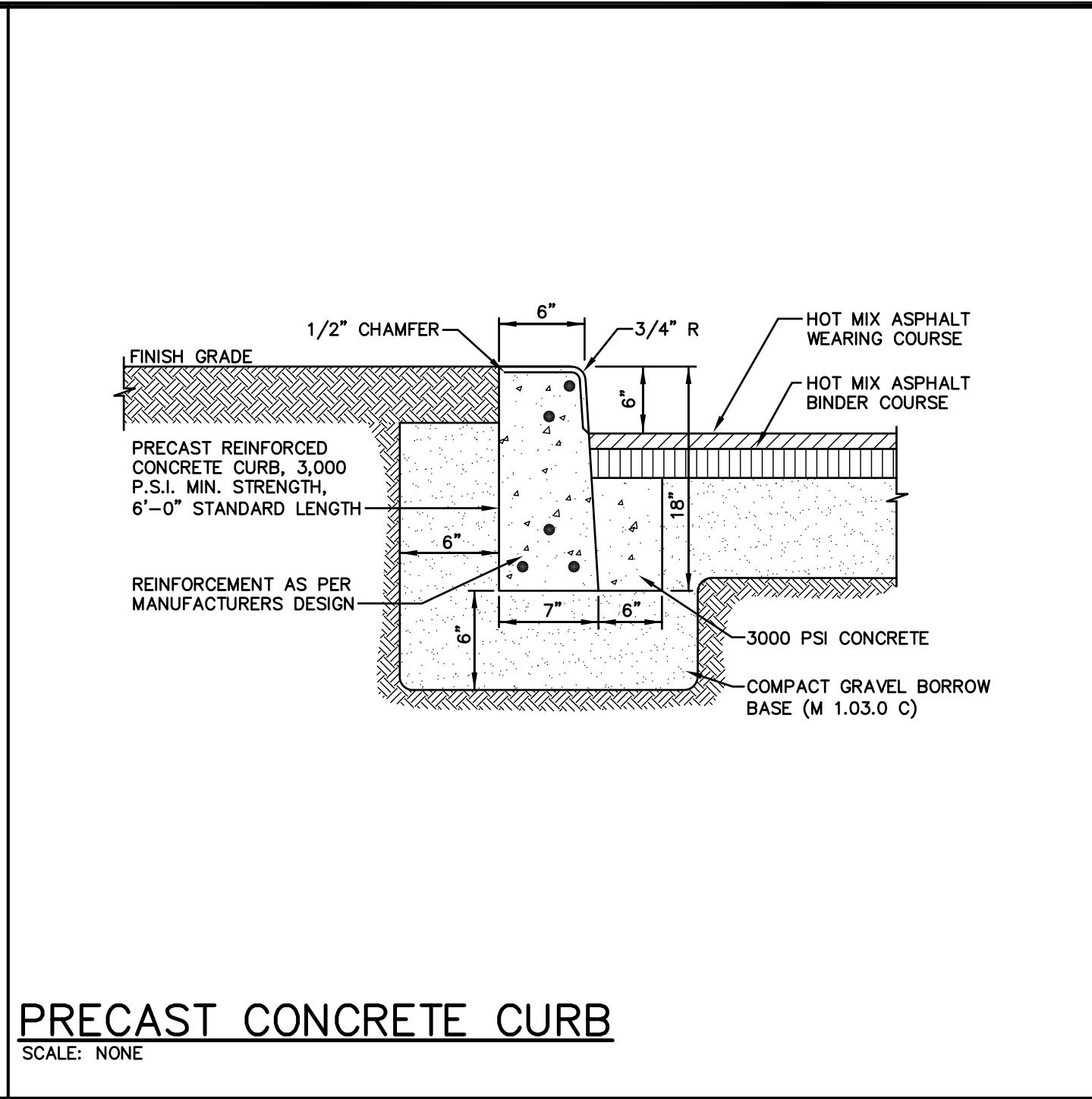
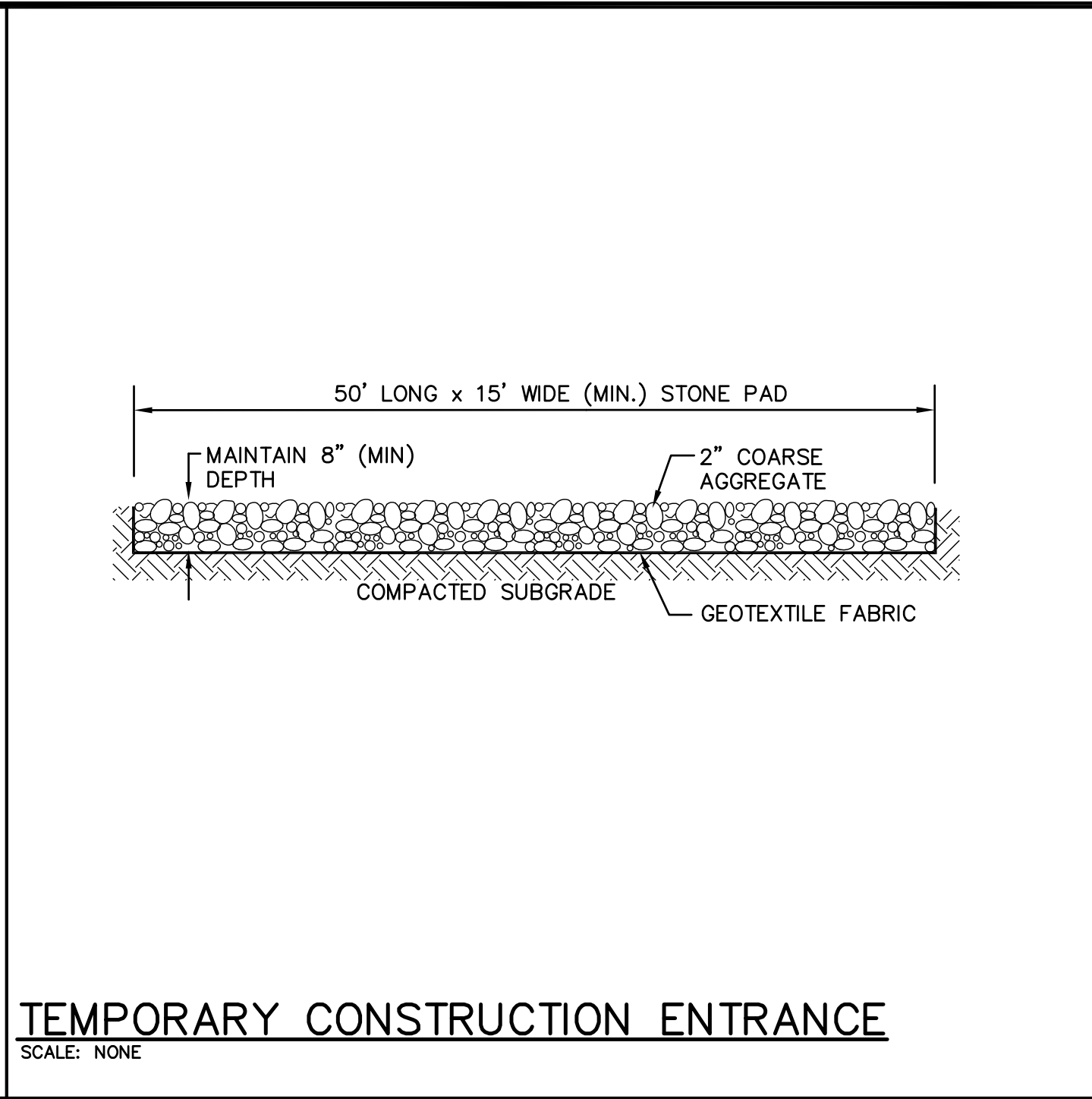
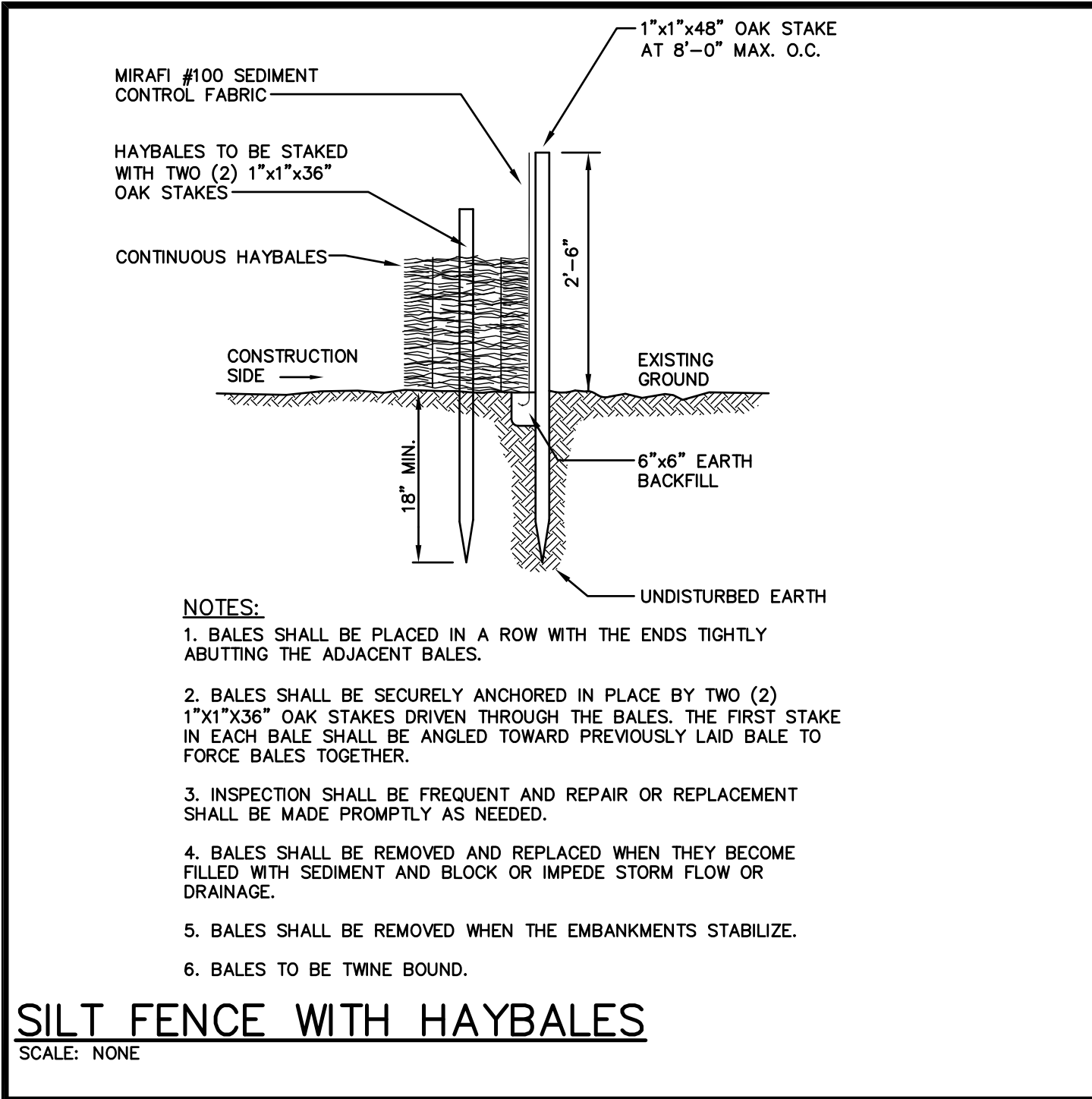
REVISIONS:		
NO.	DATE	DESC.

PREPARED FOR:
ARLINGTON LAND REALTY, LLC
84 SHERMAN STREET, 2ND FLOOR
CAMBRIDGE, MA 02140

BSC GROUP
803 Summer Street
Boston, Massachusetts
02127
617 896 4300

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SCALE: 1" = 30'
FILE: \Civil\Drawings\2340700-LM
DWG: SHEET L-100
JOB: NO: 23407.00

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DATE
PROFESSIONAL ENGINEER

THORNDIKE PLACE

DOROTHY ROAD
IN
ARLINGTON
MASSACHUSETTS
(MIDDLESEX COUNTY)

CIVIL & LANDSCAPE
DETAILS

MARCH 13, 2020

REVISIONS:		
NO.	DATE	DESC.
1	9/18/20	NEW BUILDING FOOTPRINT
2	11/03/20	REVISED BUILDING

PREPARED FOR:
ARLINGTON LAND REALTY, LLC
84 SHERMAN STREET, 2ND FLOOR
CAMBRIDGE, MA 02140

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SCALE: AS NOTED

FILE: 2340700\CD\2340700-DET
DWG.:
JOB. NO: 23407.00
SHEET C-200

NOTES:

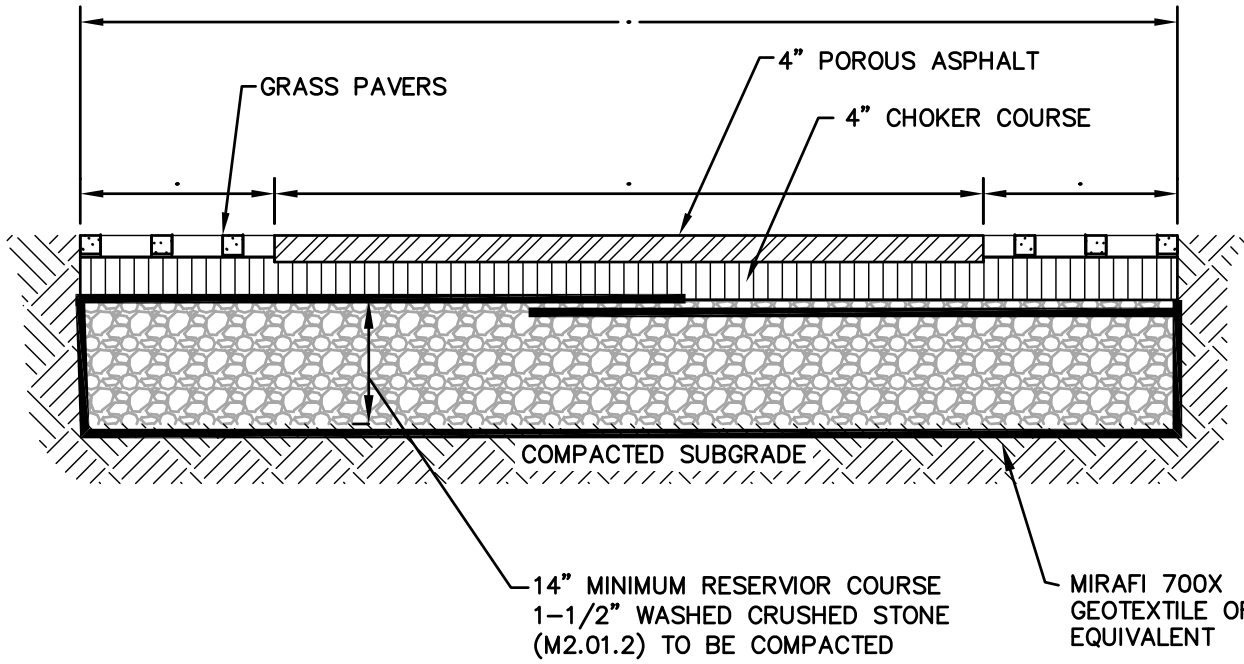
1. POROUS ASPHALT AND CHOKER COURSES SHALL MEET THE FOLLOWING REQUIREMENTS:

4" POROUS ASPHALT - SHALL BE POST-BLENDED PG 64-28 SBR WITH 5 POUNDS OF FIBER PER TON OF ASPHALT MIX.

- 3/4" = 100%
- 1/2" = 85-100%
- 3/8" = 55-75%
- #4 = 10-25%
- #8 = 5-10%
- #200 = 2-4%
- AIR VOID CONTENT = 16-22%

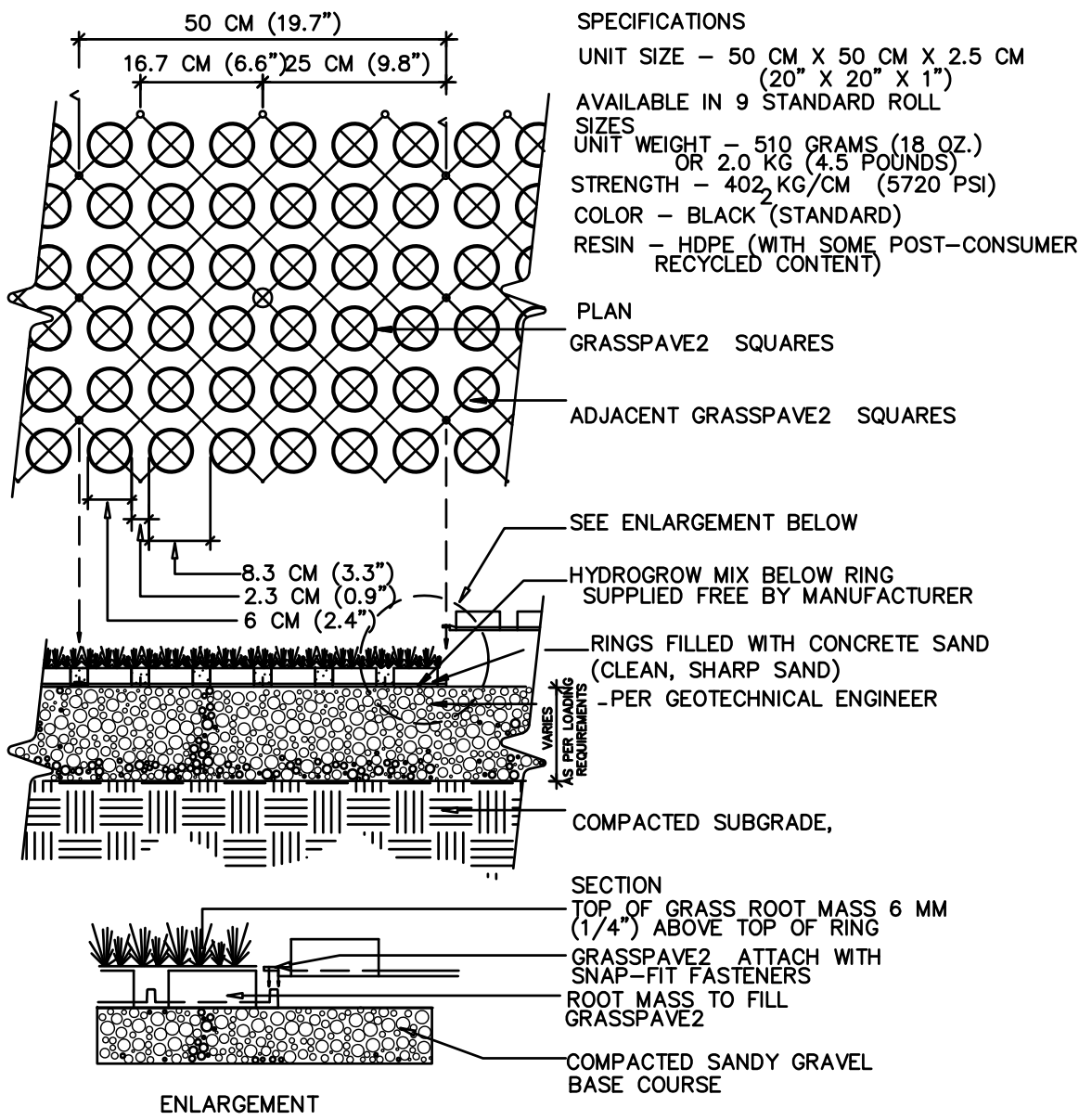
4" CHOKER COURSE SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS:

- 1-1/2" = 100%
- 1" = 95-100%
- 1/2" = 25-60%
- #4 = 0-10%
- #8 = 0-5%
- 95% COMPACTION



EMERGENCY ACCESS ROAD

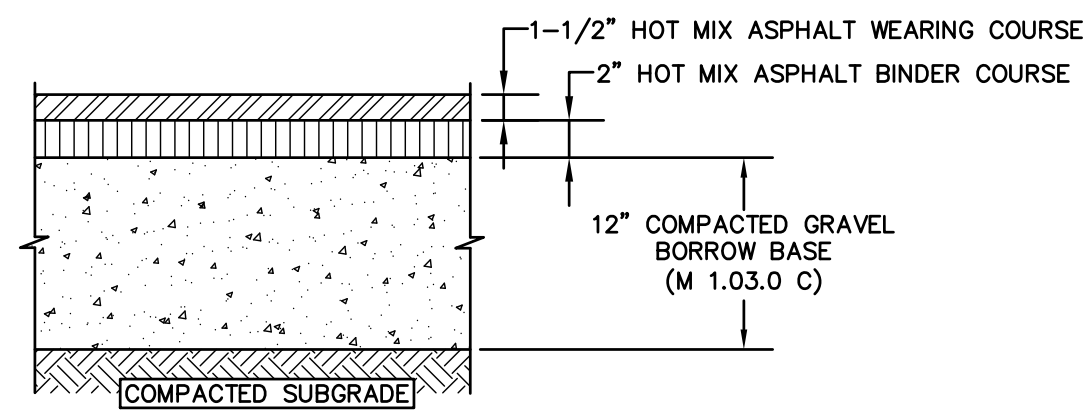
SCALE: NONE



NOTE: SEE LANDSCAPE PLANS FOR PLANT MIX

GRASSPAVE PRODUCT (OR APPROVED EQUAL)

SCALE: NONE

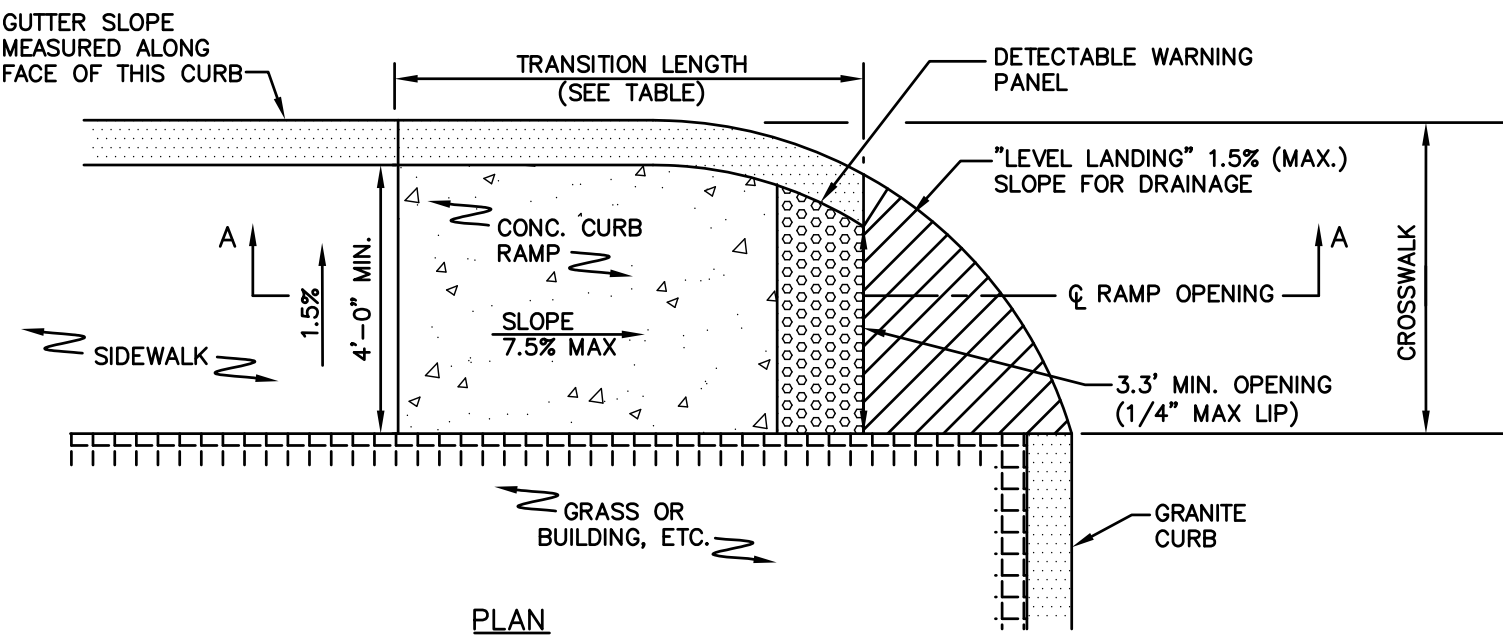


STANDARD DUTY FLEXIBLE PAVEMENT

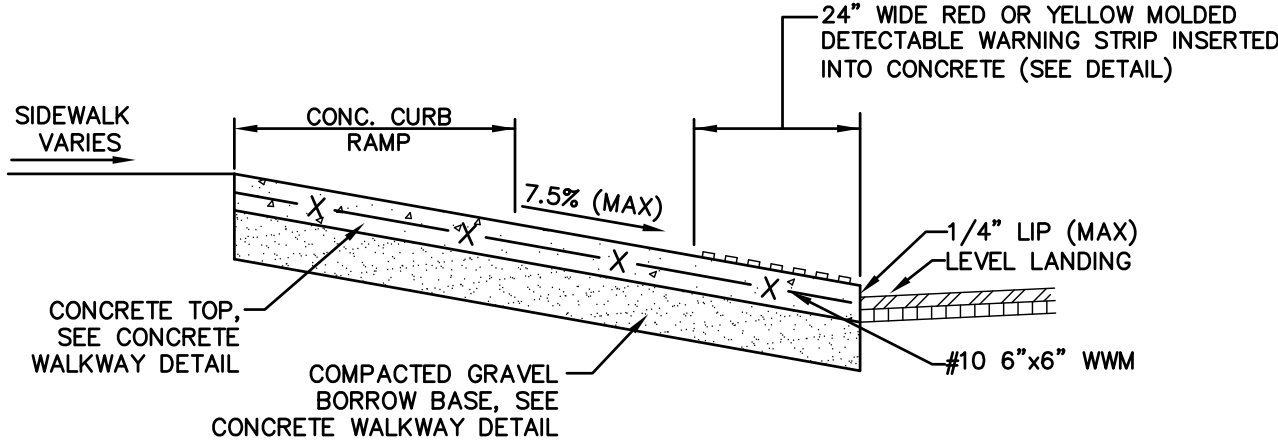
NOTE: PAVEMENT SECTIONS ARE SUBJECT TO CHANGE AND WILL BE BASED ON THE RESULTS OF GEOTECHNICAL INVESTIGATIONS

HOT MIX ASPHALT PAVEMENT SECTIONS

SCALE: NONE



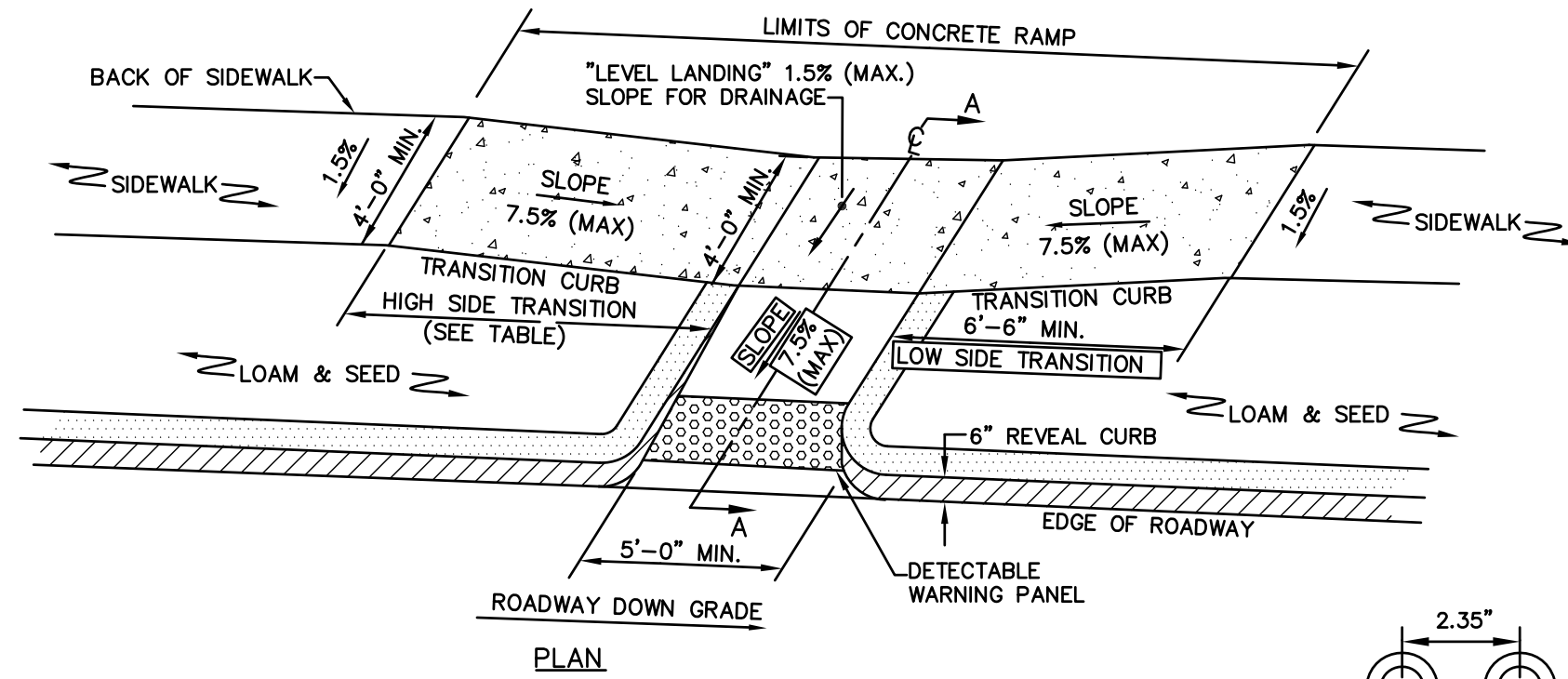
PLAN



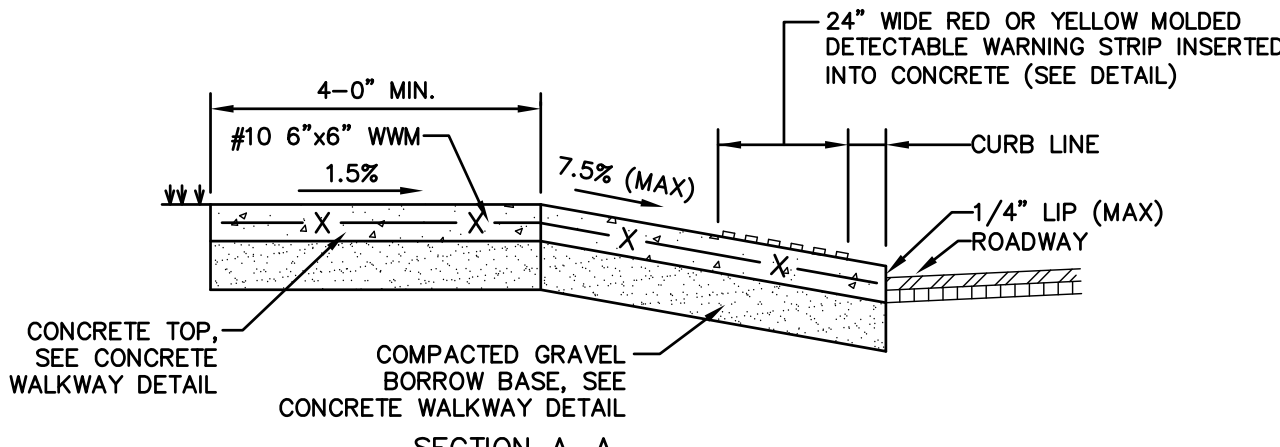
SECTION A-A

ACCESSIBLE CURB RAMP TYPE 'B' - SINGLE DIRECTION WITH LEVEL ENTRANCE

SCALE: NONE



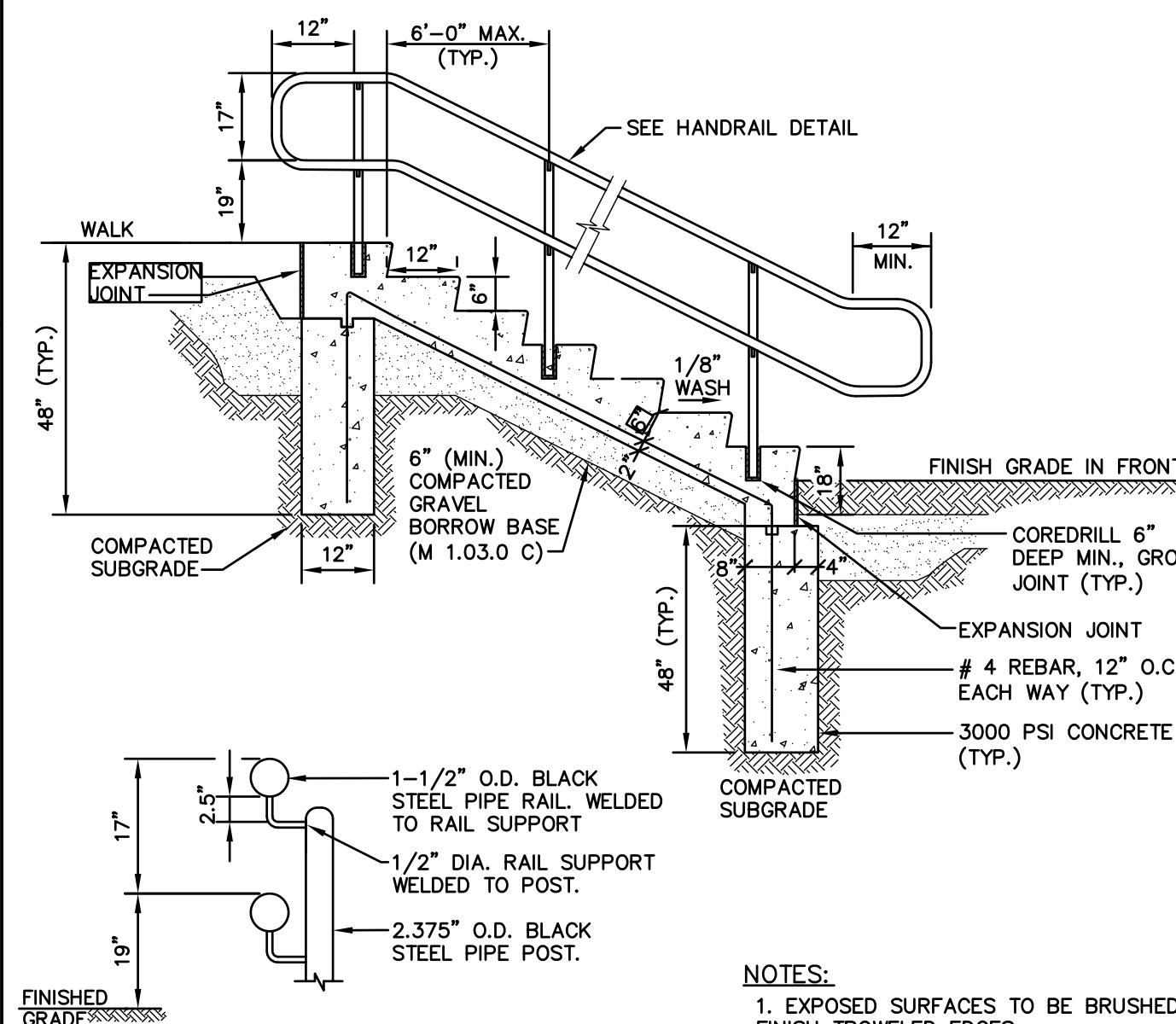
PLAN



SECTION A-A

ACCESSIBLE CURB RAMP TYPE 'E' - PARALLEL PERPENDICULAR WITH LANDSCAPING STRIP

SCALE: NONE



HANDRAIL DETAIL

CONCRETE STAIRS

SCALE: NONE

- NOTES:
1. EXPOSED SURFACES TO BE BRUSHED FINISH TROWELED EDGES.
 2. MINIMUM WIDTH TO BE 48" CLEAR HANDRAIL TO HANDRAIL.

CURB TRANSITION LENGTH FOR WHEELCHAIR RAMPS	
ROADWAY PROFILE GRADE (%)	TRANSITION LENGTH ROUNDED TO THE NEAREST 4"
0 OR LOW SIDE	6'-6"
>0 - 1	7'-8"
>1 - 2	9'-0"
>2 - 3	11'-0"
>3 - 4	14'-0"
>4	15'-0" (MAX)

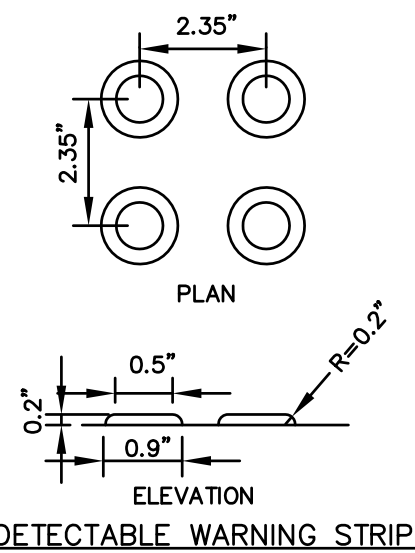
NOTES:

1. SLOPE TOLERANCE FOR RAMP AND SIDEWALK CONSTRUCTION = $\pm 0.50\%$
2. THE MAX. ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
3. THE MAX. ALLOWABLE SLOPE OF ACCESSIBLE ROUTE CURB RAMPS SHALL BE 7.5%.
4. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E. HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
5. BASE OF RAMP SHALL BE GRADED TO PREVENT PONDING.

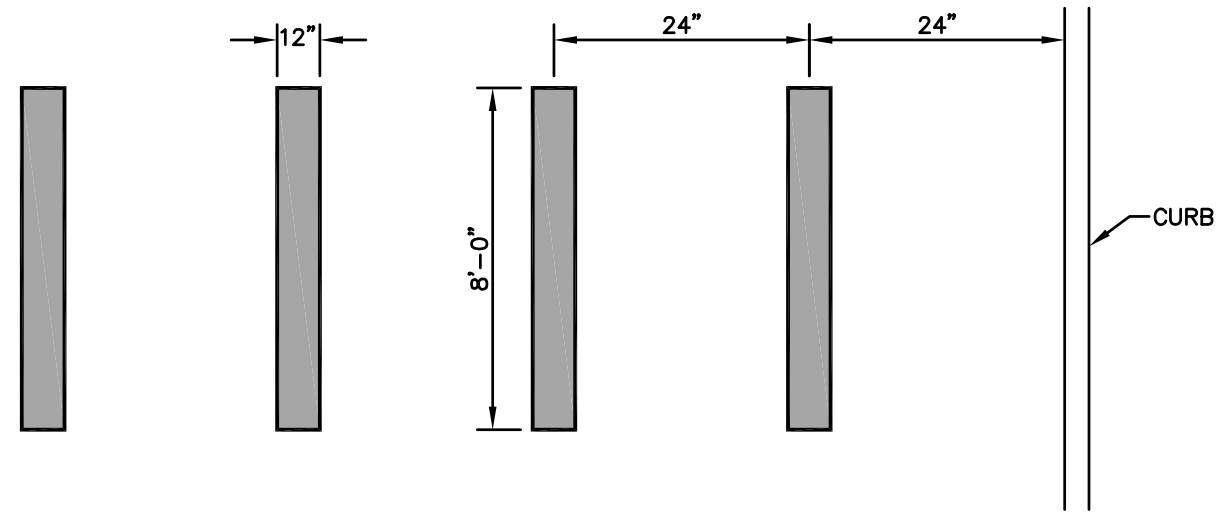
CURB TRANSITION LENGTH FOR WHEELCHAIR RAMPS	
ROADWAY PROFILE GRADE (%)	HIGH SIDE TRANSITION LENGTH ROUNDED TO THE NEAREST 4"
0 OR LOW SIDE	6'-6"
>0 - 1	7'-8"
>1 - 2	9'-0"
>2 - 3	11'-0"
>3 - 4	14'-0"
>4	15'-0" (MAX)

NOTES:

1. SLOPE TOLERANCE FOR RAMP AND SIDEWALK CONSTRUCTION = $\pm 0.50\%$
2. THE MAX. ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
3. THE MAX. ALLOWABLE SLOPE OF ACCESSIBLE ROUTE CURB RAMPS SHALL BE 7.5%.
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5. BASE OF RAMP SHALL BE GRADED TO PREVENT PONDING.



DETECTABLE WARNING STRIP

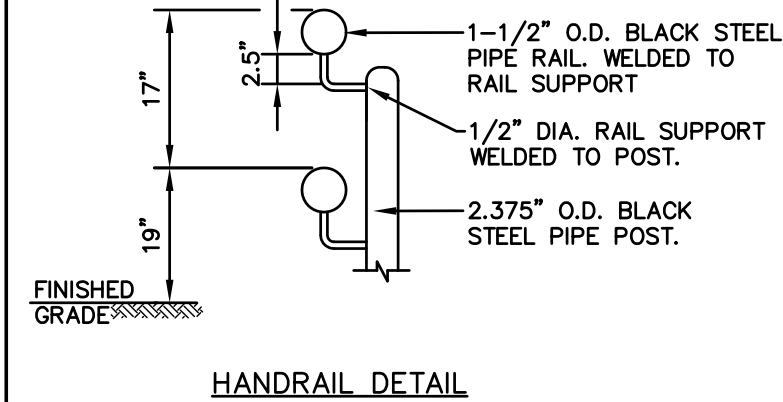
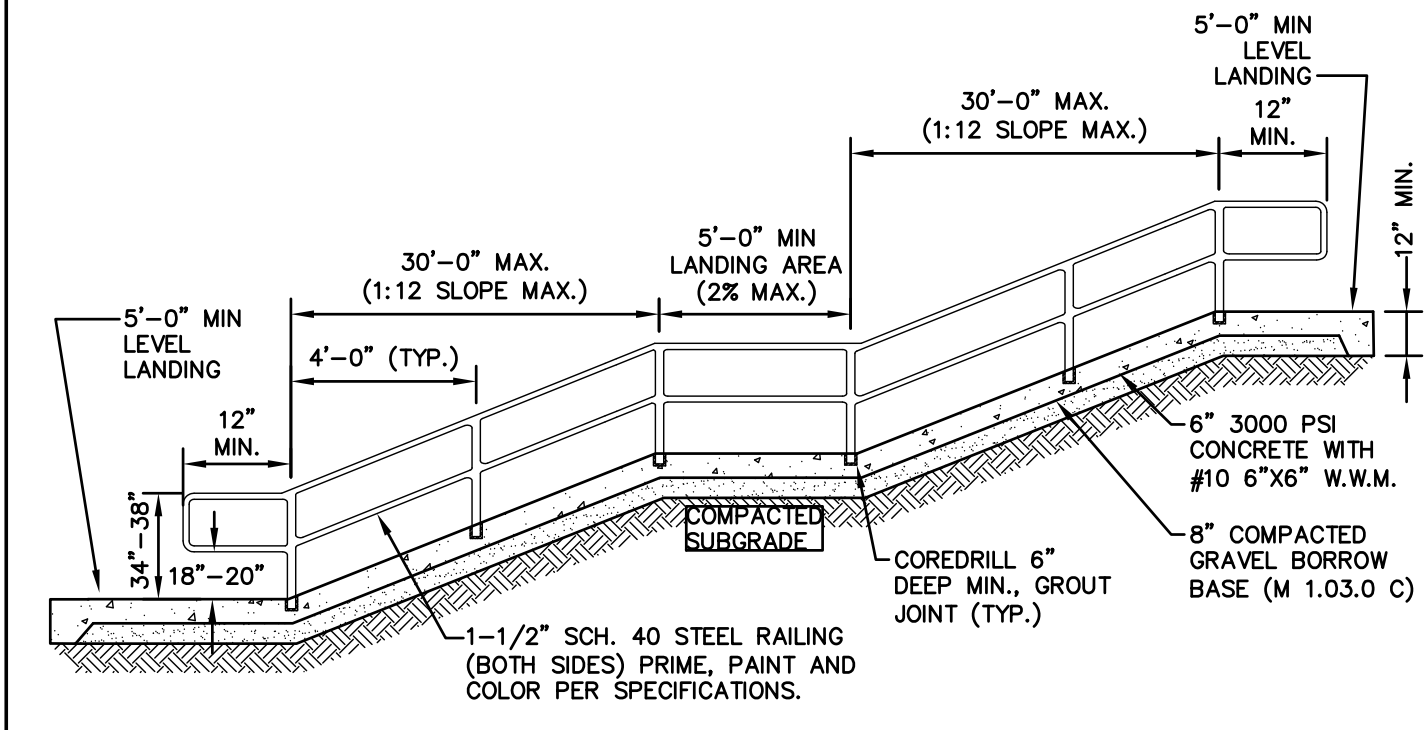


NOTES:

1. ALL TWELVE INCH (12") LINES SHALL BE APPLIED IN ONE APPLICATION, NO COMBINATION OF LINES (TWO - 6 INCH LINES) WILL BE ACCEPTED.
2. ALL PAVEMENT MARKING MATERIALS WHETHER THERMOPLASTIC OR WATERBORNE PAINT TO BE REFLECTORIZED WITH GLASS BEADS.
3. LONGITUDINAL CROSSWALK LINES TO BE PARALLEL TO CURBLINE.
4. ALL LONGITUDINAL CROSSWALK LINES TO BE THE SAME LENGTH AND PROPERLY DRESSED.
5. STRIPES TO BE SOLID WHITE.

PEDESTRIAN CROSSWALK MARKINGS

SCALE: NONE

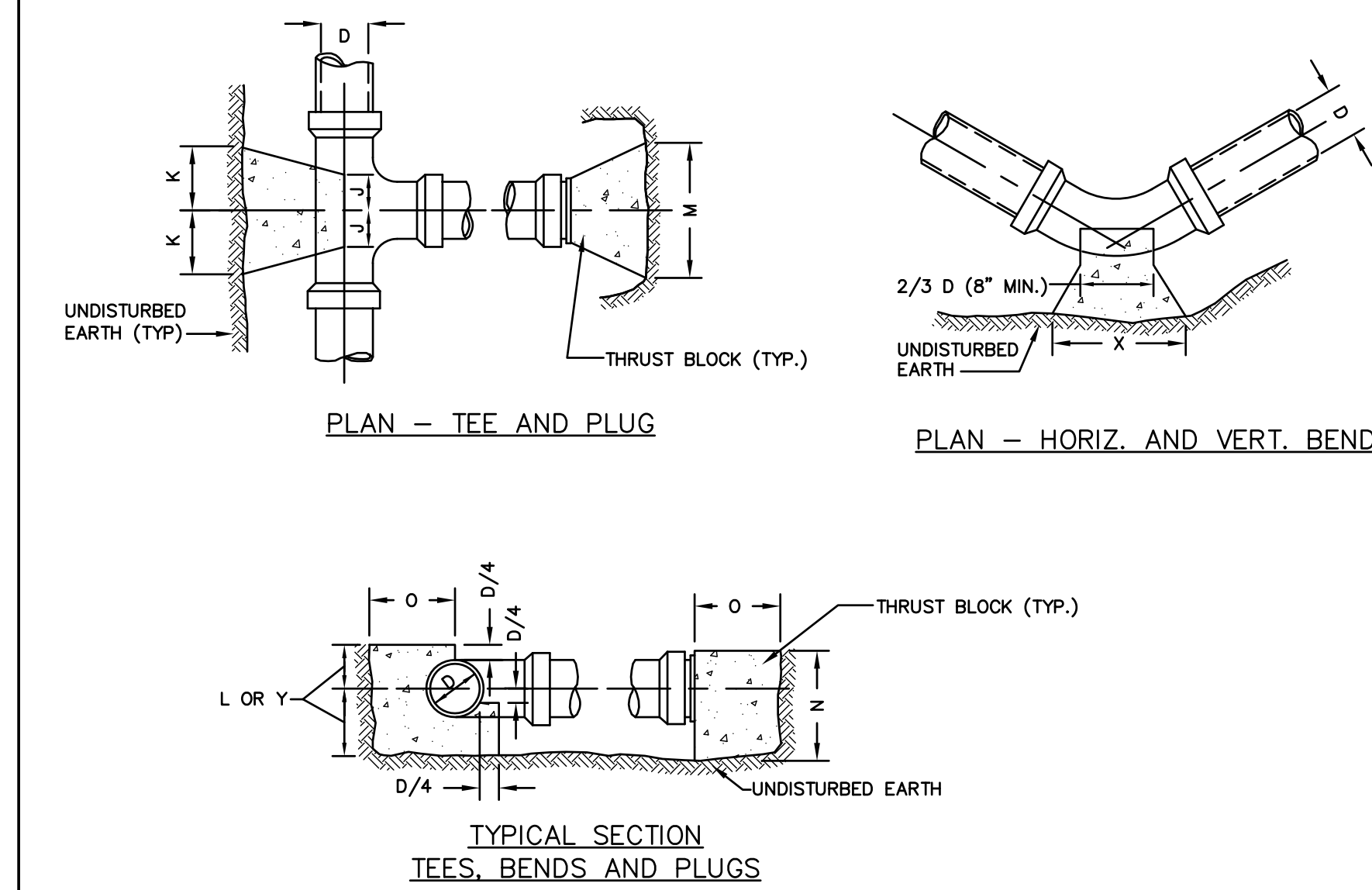


HANDRAIL DETAIL

MULTI-TIER RAMP

SCALE: NONE

- NOTES:
1. EXPOSED SURFACES TO BE BRUSHED FINISH TROWELED EDGES.
 2. MINIMUM WIDTH TO BE 48" CLEAR HANDRAIL TO HANDRAIL.



PLAN - TEE AND PLUG

PLAN - HORIZ. AND VERT. BEND

TYPICAL SECTION
TEES, BENDS AND PLUGS

SIZE OF BRANCH	J	K	L	M	N	O
4" THRU 8"	10"	10"	1'-0"	2'-0"	1'-6"	10"
10" THRU 16"	1'-0"	1'-6"	1'-8"	3'-10"	2'-10"	1'-8"
24"	1'-4"	2'-0"	2'-6"	5'-0"	3'-6"	1'-8"

TEES AND PLUGS

	90 & 45 BENDS	22 1/2 & 11 1/4
D	4"108"10"1016"	24"4"10"1016"
X	1'-8"	3'-4"
Y	1'-2"	1'-8"

BENDS

NOTES:

1. PROVIDE 3000 PSI CONCRETE THRUST BLOCKS AT ALL BENDS, DEAD ENDS, & TEES UNLESS OTHERWISE DIRECTED. CONCRETE FOR ALL THRUST BLOCKS TO BE PLACED AGAINST FIRM, UNDISTURBED SOIL. PROVIDE APPROVED ANCHOR HARNESS RODS & SOCKET CLAMPS AS SPECIFIED & IN ACCORDANCE WITH PIPE MANUFACTURERS RECOMMENDATIONS WHERE SOIL HAS BEEN DISTURBED OR THRUST BLOCKS CANNOT BE USED, AS DIRECTED BY THE ENGINEER.
2. ALL SOCKET CLAMP METAL SHALL BE COATED WITH BLACK ASPHALTUM OR OTHER WATER DEPARTMENT APPROVED COATINGS.
3. CONCRETE THRUST BLOCKS POURED BEHIND 3-WAY TEE & HYDRANT SHOE TO BE USED WITH SOCKET CLAMPS.
4. NO CONCRETE SHALL COVER PIPE JOINTS, FITTING JOINTS, BOLTS OR HYDRANT DRAINS.

ISSUED FOR PERMITTING
NOT FOR CONSTRUCTION



PROFESSIONAL ENGINEER DATE

THORNDIKE PLACE

DOROTHY ROAD

IN

ARLINGTON
MASSACHUSETTS
(MIDDLESEX COUNTY)

CIVIL & LANDSCAPE
DETAILS

MARCH 13, 2020

REVISIONS:

NO.	DATE	DESC.
1	9/18/20	NEW BUILDING FOOTPRINT
2	11/03/20	REVISED BUILDING

PREPARED FOR:

ARLINGTON LAND REALTY, LLC
84 SHERMAN STREET, 2ND FLOOR
CAMBRIDGE, MA 02140



803 Summer Street
Boston, Massachusetts
02127

617 896 4300

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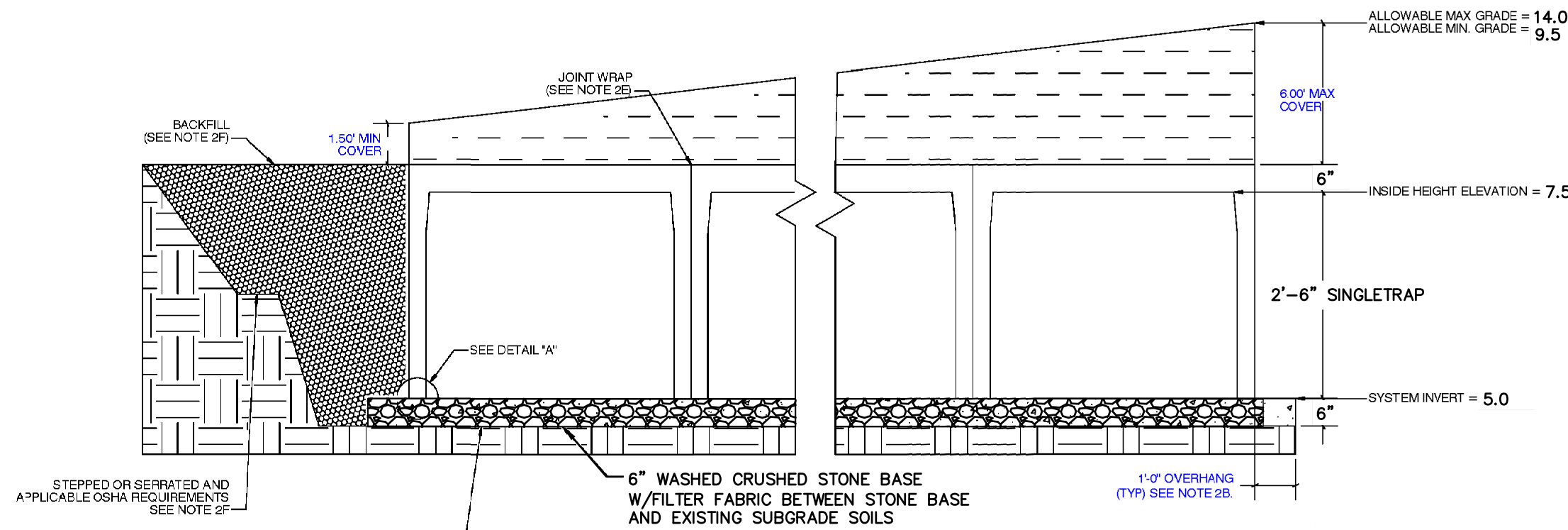
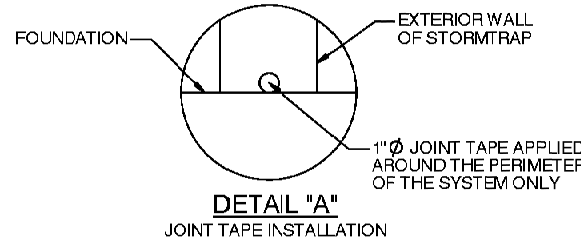
SCALE: AS NOTED

FILE: 2340700\c\2340700-DET

DWG.: SHEET C-201
JOB. NO: 23407.00

STORMTRAP INSTALLATION SPECIFICATION

- STORMTRAP MODULES SHALL BE MANUFACTURED ACCORDING TO SHOP DRAWINGS APPROVED BY THE INSTALLING CONTRACTOR AND ENGINEER. THE SHOP DRAWINGS SHALL INDICATE SIZE AND LOCATION OF INLET OPENINGS AND INLET/OUTLET PIPE OPENINGS.
- STORMTRAP SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C814-04 STANDARD PRACTICE FOR INSTALLATION OF AROUNDING THE JOINT CONCRETE UTILITY STRUCTURES. THE FOLLOWING ADDITIONAL REQUIREMENTS SHALL APPLY:
 - SPECIFICATIONS ON THE ENGINEERING DRAWINGS SHALL TAKE PRECEDENCE.
 - STORMTRAP MODULES SHALL BE PLACED ON LEVEL FOUNDATION (SEE SHEET 3.1) WITH A 1/2" OVERHANG ON ALL SIDES THAT SHALL BE FOUNDED IN PLACE BY INSTALLING CONTRACTOR.
 - THE STORMTRAP MODULES SHALL BE PLACED SUCH THAT THE MAXIMUM SPACE BETWEEN ADJACENT MODULES DOES NOT EXCEED 3/4". IF THE SPACE EXCEEDS 3/4", THE MODULES SHALL BE RESET WITH APPROPRIATE ADJUSTMENT MADE TO BRING THE SPACE INTO CONFORMANCE.
 - THE PERIMETER HORIZONTAL JOINT OF THE STORMTRAP MODULES SHALL BE SEALED TO THE FOUNDATION WITH PREFORMED MASTIC JOINT SEALER ACCORDING TO ASTM C891-06.8 AND 12. (SEE DETAIL "A").
 - ALL EXTERIOR JOINTS BETWEEN ADJACENT STORMTRAP MODULES SHALL BE SEALED WITH FIRE-RESISTANT, GULF-APPLIED, GULF-ADHESIVE ELASTOMERIC RESIN FORTIFIED TO A MODIFIED HIGHLY PLASTIC RESISTANT POLYMER WRAP CONFORMING TO ASTM C891-06 AND SHALL BE OF INTEGRATED FIBER REINFORCEMENT AS APPROVED BY STORMTRAP. THE ADHESIVE EXTERIOR JOINT WRAP SHALL BE INSTALLED ACCORDING TO THE FOLLOWING INSTALLATION INSTRUCTIONS:
 - USE A BRUSH OR WET CLOTH TO THOROUGHLY CLEAN THE OUTSIDE SURFACE AT THE POINT WHERE THE JOINT WRAP IS TO BE APPLIED.
 - A RELEASE PAPER PROTECTS THE ADHESIVE SIDE OF THE JOINT WRAP. PLACE THE ADHESIVE TAPE (OUTSIDE SIDE DOWN) AROUND THE STRUCTURE, REMOVING THE RELEASE PAPER AS YOU GO. PRESS THE JOINT WRAP FIRMLY AGAINST THE STORMTRAP MODULE SURFACE WHEN APPLYING.



STORMTRAP SINGLE TRAP (SECTION VIEW)

UNDERGROUND INFILTRATION (STORMTRAP SINGLE TRAP OR APPROVED EQUAL)

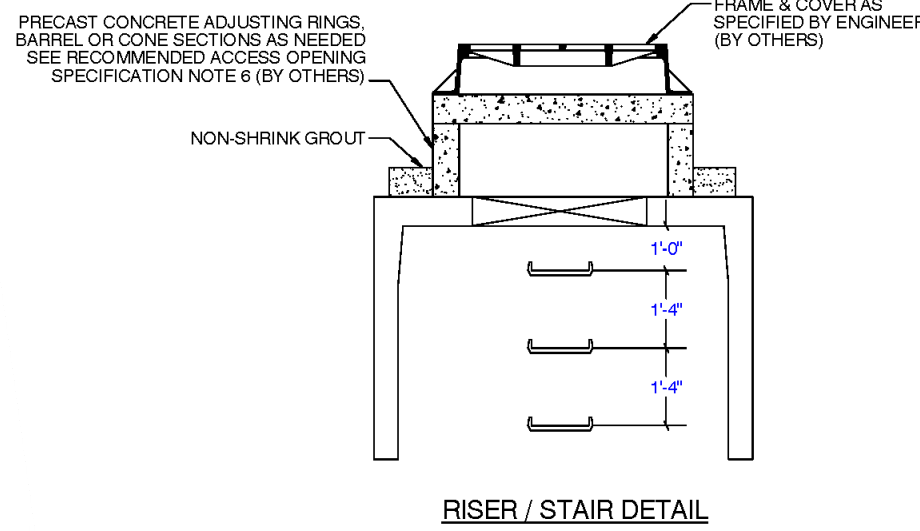
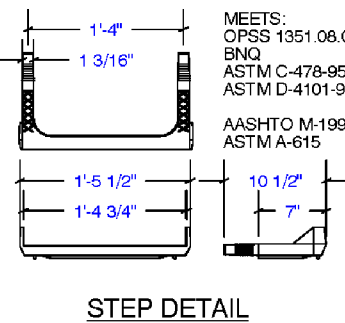
SCALE: NONE

RECOMMENDED PIPE OPENING SPECIFICATION

- PIPE OPENINGS SHALL MAINTAIN A MINIMUM 1/2" OF CLEARANCE FROM A VERTICAL EDGE OF THE STORMTRAP UNIT.
- MAXIMUM OPENING SIZE TO BE DETERMINED BY UNIT HEIGHT. PREFERRED OPENING SIZE 8" OR LESS. ANY OPENING NEEDED THAT DOES NOT FIT THIS CRITERIA SHALL BE BROUGHT TO THE ATTENTION OF STORMTRAP FOR REVIEW.
- CONNECTING PIPES SHALL BE INSTALLED WITH A 1/2" CONCRETE COLLAR AND A AGGREGATE CIRCLE FOR AT LEAST ONE PIPE LENGTH (AS SHOWN). A STRUCTURAL GRADE CONCRETE OR GROUT WITH A MINIMUM 1 DAY COMPRESSIVE STRENGTH OF 3000 PSI SHALL BE USED.
- THE ANULAR SPACE BETWEEN THE PIPE AND THE HOLE SHALL BE FILLED WITH NON-SHRINK GROUT.

RECOMMENDED PIPE INSTALLATION INSTRUCTIONS

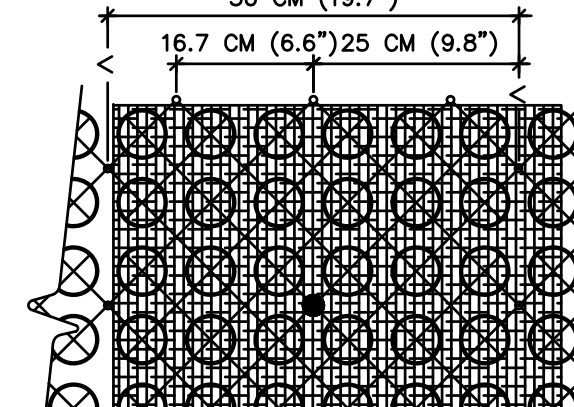
- CLEAN AND THOROUGHLY LUBRICATE ALL OF PIPE TO BE INSERTED INTO STORMTRAP.
- IF PIPE IS CUT, CARE SHOULD BE TAKEN TO ALLOW NO SHARP EDGES. BEVEL AND LUBRICATE LEAD END OF PIPE.
- AUXILIARY CENTER OF PIPE TO CORRECT ELEVATION AND INSERT INTO OPENING.



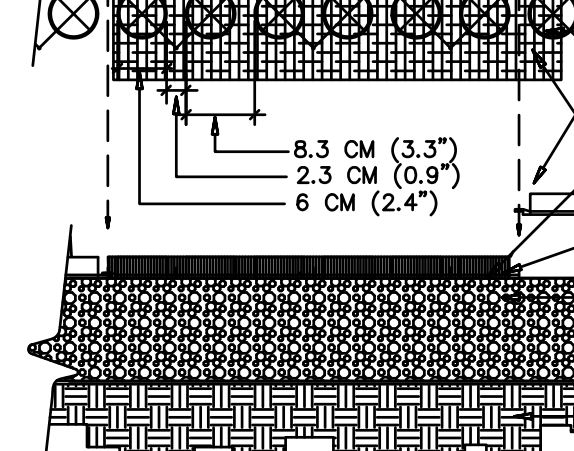
RECOMMENDED ACCESS OPENING SPECIFICATION

- TYPICAL ACCESS OPENINGS FOR THE STORMTRAP SYSTEM ARE 2'-0" IN DIAMETER. ACCESS OPENINGS LARGER THAN 2'-0" IN DIAMETER NEED TO BE APPROVED BY STORMTRAP. ALL OPENINGS MUST RETAIN AT LEAST 1/2" OF CLEARANCE IN ALL DIRECTIONS FROM THE EDGE OF THE STORMTRAP UNITS.
- PLANT TO LOCATED STEEL STEPS PRODUCED BY M.I. INDUSTRIES PART #FSP-100 (SEE DETAIL TO THE RIGHT) ARE PROVIDED INSIDE ANY UNIT WHERE NECESSARY. THE HIGHEST STEP IN THE UNIT MUST BE PLACED AT A MINIMUM OF 1/2" FROM THE INSIDE EDGE OF THE STORMTRAP UNITS. ALL ENLARGING STEPS SHALL BE PLACED WITH A MAXIMUM DISTANCE OF 4'-0" BETWEEN THEM. STEPS MAY BE MOVED OR ALTERED TO AVOID OPENINGS OR OTHER IRREGULARITIES IN THE UNIT.
- STORMTRAP LIFTING INSERTS MAY BE RELOCATED TO COINCIDE WITH THE ACCESS OPENING OR THE CENTER OF GRAVITY OF THE UNIT AS NEEDED.
- STORMTRAP ACCESS OPENINGS MAY BE RELOCATED TO AVOID INTERFERENCE WITH INLET AND/OR OUTLET PIPE OPENINGS SO PLACEMENT OF STEPS IS ATTAINABLE.
- ACCESS OPENINGS SHOULD BE LOCATED IN ORDER MEET THE APPROPRIATE MUNICIPAL REQUIREMENTS. STORMTRAP RECOMMENDS AT LEAST ONE ACCESS OPENING PER SYSTEM FOR ACCESS AND INSPECTION.
- USE PRECAST ADJUSTING RINGS AS NEEDED TO MEET GRADE. STORMTRAP RECOMMENDS FOR COVER OVER 2' TO USE PRECAST BARREL OR CONE SECTIONS. (BY OTHERS)

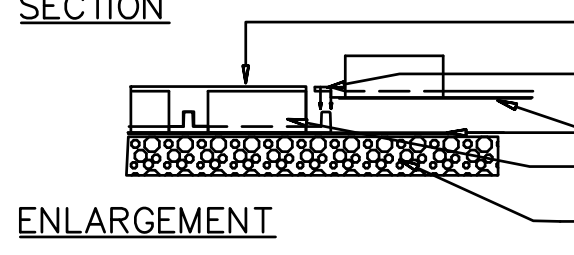
PLAN



SECTION



ENLARGEMENT



TYPICAL GRAVELPAVE2 DETAIL

NOT TO SCALE CHOOSE THIS PRODUCT FOR REINFORCING GRAVEL WEARING SURFACES

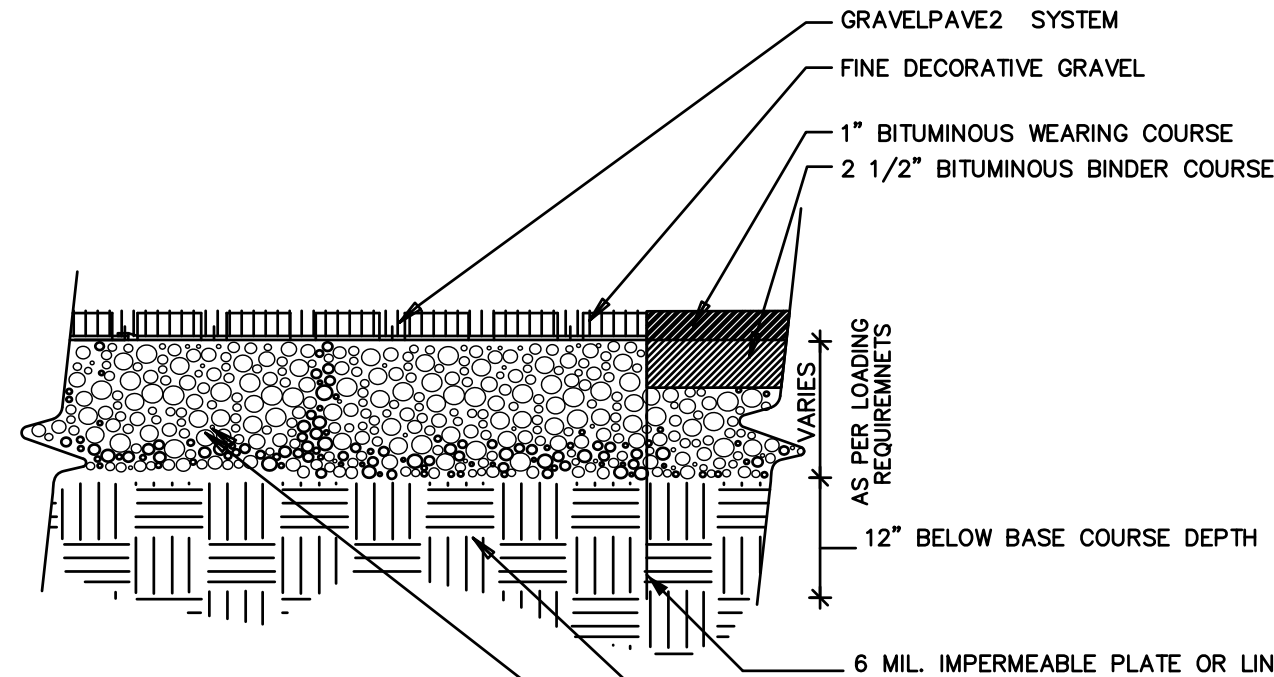
Invisible Structures, Inc.
Ordering

1600 Jackson Street, SUITE 310
GOLDEN, COLORADO 80401
800-333-1000 or 303-333-8263
Fax: 303-333-0883
Version 05/10

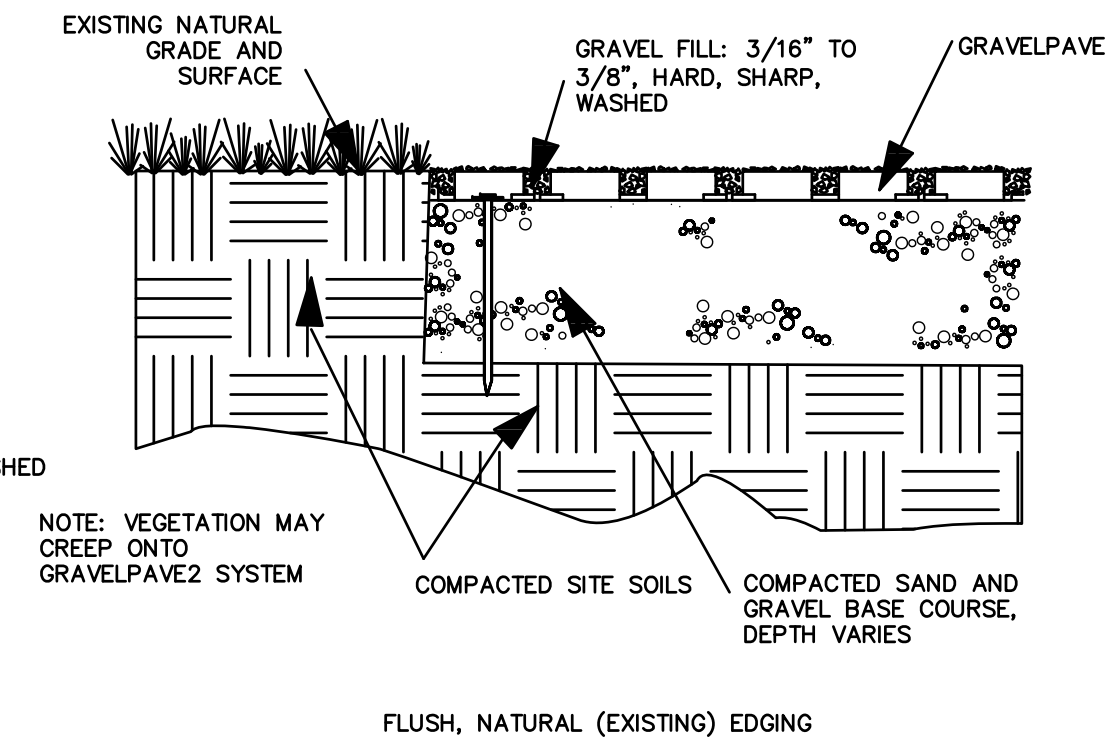
SPECIFICATIONS

UNITS
UNIT SIZE - 50 CM X 50 CM X 2.5 CM
(20" X 20" X 1")
AVAILABLE IN 9 STANDARD ROLL SIZES
UNIT WEIGHT - 538 GRAMS (19 OZ.)
OR 2.2 KG (4.8 POUNDS)
STRENGTH - 4024 KG/CM (5720 PSI)
COLOR - BLACK (STANDARD)
RESIN - 100% POST-CONSUMER
RECYCLED HDPE/LDPE
FABRIC WEIGHT - 3.5 OZ/SY (120 GM/M)
TENSILE - 120 LB/FT (585 KG/M)
FLOW - 275 GAL/MIN/IN (11,200 L/MIN/M)
OPTIONS - CUSTOM FABRIC TO 6 OZ AVAILABLE.

GRAVELPAVE2
ADJACENT GRAVELPAVE2
SEE ENLARGEMENT BELOW
FILTER FABRIC ATTACHED TO BOTTOM OF GRAVELPAVE2
GRAVELPAVE2 FILLED WITH 3/16" TO 3/8" ANGULAR GRAVEL, UNIFORM SIZE, WASHED
COMPACTED SANDY GRAVEL ROAD BASE - 95% MODIFIED PROCTOR DENSITY
COMPACTED SUBGRADE
TOP OF GRAVEL
GRAVELPAVE2 ATTACH WITH SNAP FIT FASTENERS
FILTER FABRIC - OVERLAPPING JOINTS
FILL RING SECTION WITH 3/16" TO 3/8" ANGULAR GRAVEL, UNIFORM SIZE, WASHED
COMPACTED SANDY GRAVEL BASE COURSE



NOTE: GRASS/PLANT TYPES SHALL BE SPECIFIED BY A LANDSCAPE ARCHITECT OR LANDSCAPE DESIGNER



FLUSH, NATURAL (EXISTING) EDGING



PROFESSIONAL ENGINEER DATE

THORNDIKE PLACE

DOROTHY ROAD
IN
ARLINGTON
MASSACHUSETTS
(MIDDLESEX COUNTY)

CIVIL & LANDSCAPE
DETAILS

MARCH 13, 2020

REVISIONS:

NO.	DATE	DESC.
1	9/18/20	NEW BUILDING FOOTPRINT
2	11/03/20	REVISED BUILDING

PREPARED FOR:
ARLINGTON LAND REALTY, LLC
84 SHERMAN STREET, 2ND FLOOR
CAMBRIDGE, MA 02140

BSC GROUP
803 Summer Street
Boston, Massachusetts
02127
617 896 4300

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SCALE: AS NOTED

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NOT FOR CONSTRUCTION

FILE: 2340700\CD\2340700-DET
DWG.: SHEET C-203
JOB. NO: 23407.00



- LEGEND
- BSC GROUP OCTOBER 2020 WETLAND DELINEATION
 - 25' NO DISTURB ZONE
 - 100' BUFFER/AURA
 - FLOODPLAIN - ZONE AE (EL. 6.8)

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DATE
PROFESSIONAL ENGINEER

THORNDIKE PLACE

DOROTHY ROAD
IN
ARLINGTON
MASSACHUSETTS
(MIDDLESEX COUNTY)

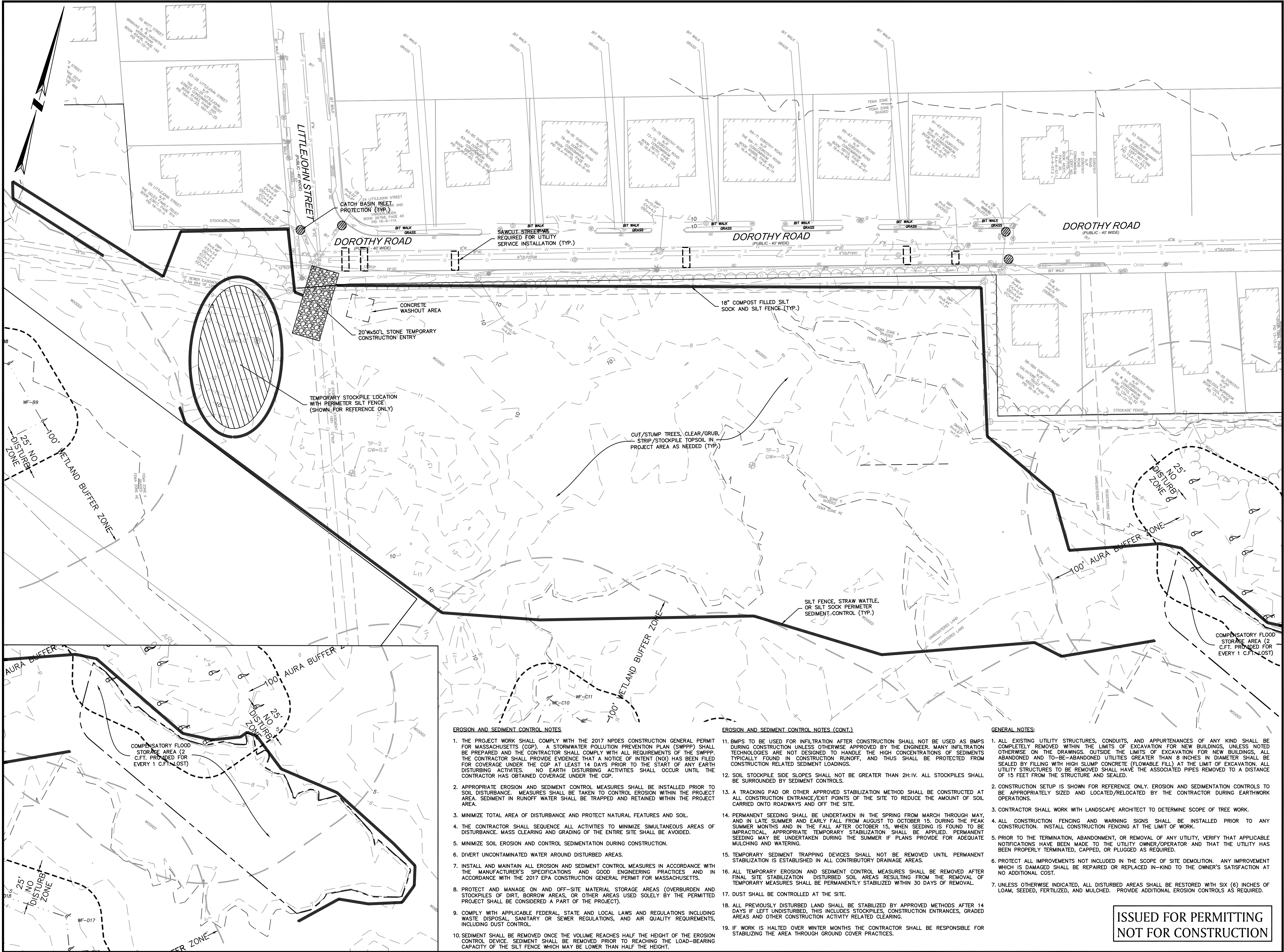
EXISTING
ENVIRONMENTAL
RESOURCES PLAN
MARCH 13, 2020

REVISIONS:		
NO.	DATE	DESC.
1	10/22/20	WETLAND DELINEATION
2	1/21/21	VW DELINEATION

PREPARED FOR:
ARLINGTON LAND REALTY, LLC
84 SHERMAN STREET, 2ND FLOOR
CAMBRIDGE, MA 02140

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SCALE: 1" = 50'
0 25 50 100 FEET
FILE: \\Civil_Drawgs\\2340700-CONSTRAINTS
DWG.:
JOB. NO: 23407.00 SHEET C-100



DATE
PROFESSIONAL ENGINEER

THORNDIKE PLACE

DOROTHY ROAD
IN
ARLINGTON
MASSACHUSETTS
(MIDDLESEX COUNTY)

SITE PREPARATION PLAN

MARCH 13, 2020

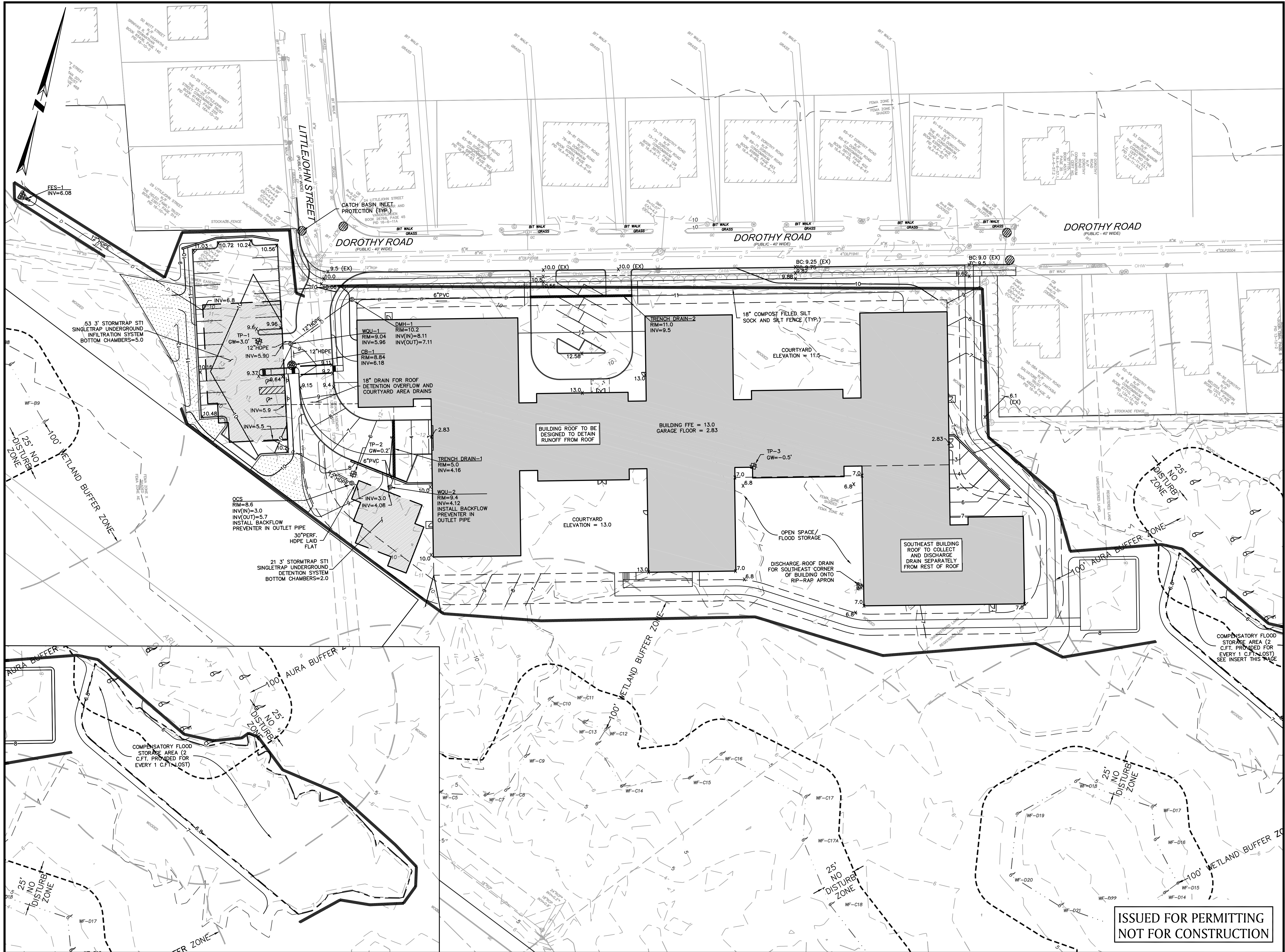
REVISIONS:		
NO.	DATE	DESC.
1	11/03/20	REVISED BUILDING
2	1/21/21	RESPONSE TO PEER REVIEW

PREPARED FOR:
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84 SHERMAN STREET, 2ND FLOOR
CAMBRIDGE, MA 02140

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SCALE: 1" = 30'
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FILE: \Civil\Drawings\2340700-DEM
DWG.:
JOB. NO: 23407.00
SHEET C-101

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DATE
PROFESSIONAL ENGINEER

THORNDIKE PLACE

DOROTHY ROAD
IN
ARLINGTON
MASSACHUSETTS
(MIDDLESEX COUNTY)

GRADING &
DRAINAGE PLAN

MARCH 13, 2020

REVISIONS:		
NO.	DATE	DESC.
1	9/18/20	NEW BUILDING FOOTPRINT
2	10/22/20	WETLAND DELINEATION
3	11/03/20	REVISED BUILDING
4	01/21/21	RESPONSE TO PEER REVIEW

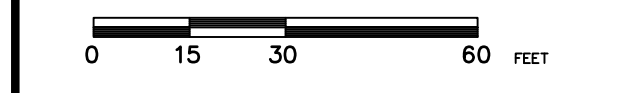
PREPARED FOR:
ARLINGTON LAND REALTY, LLC
84 SHERMAN STREET, 2ND FLOOR
CAMBRIDGE, MA 02140

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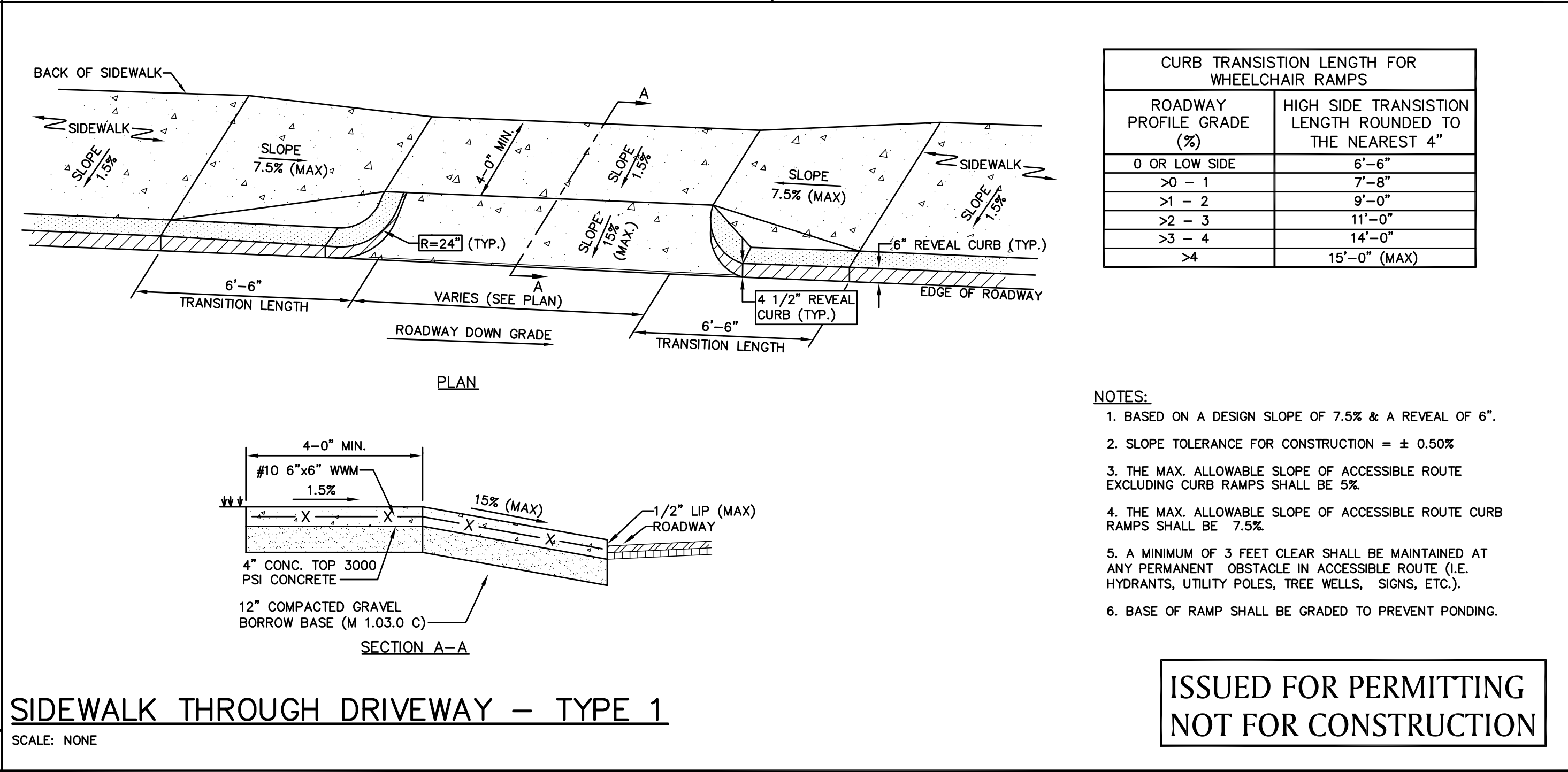
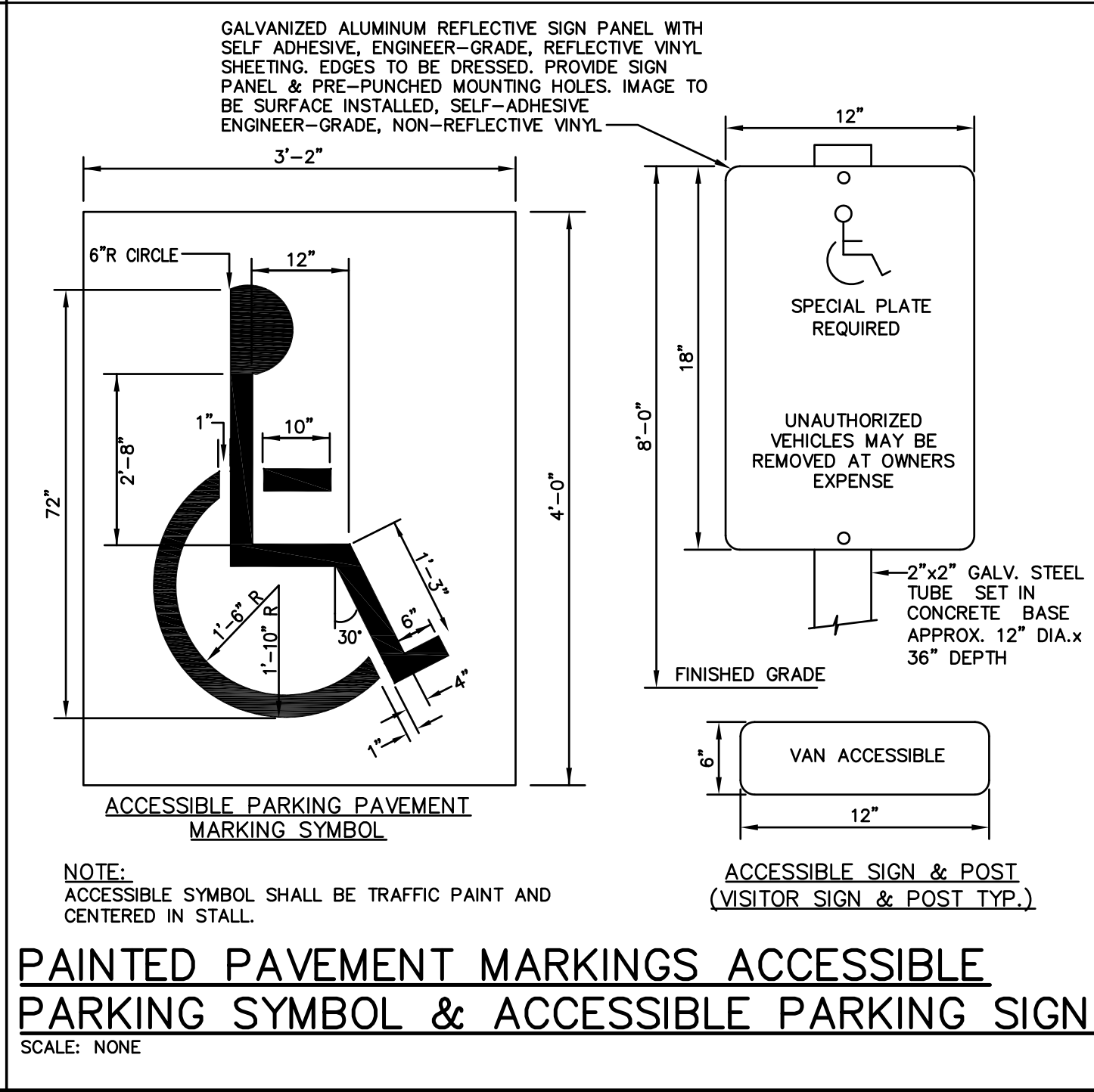
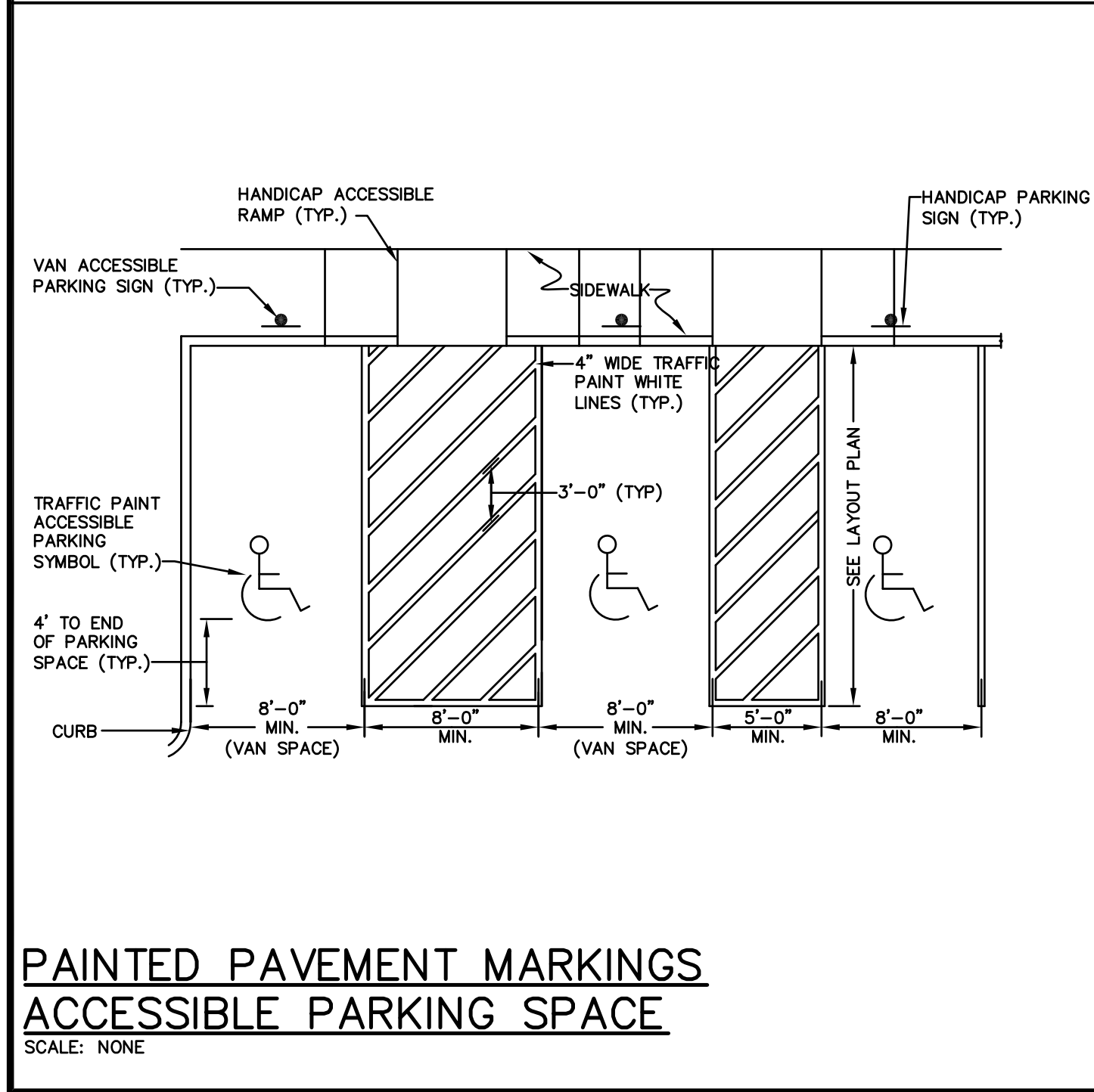
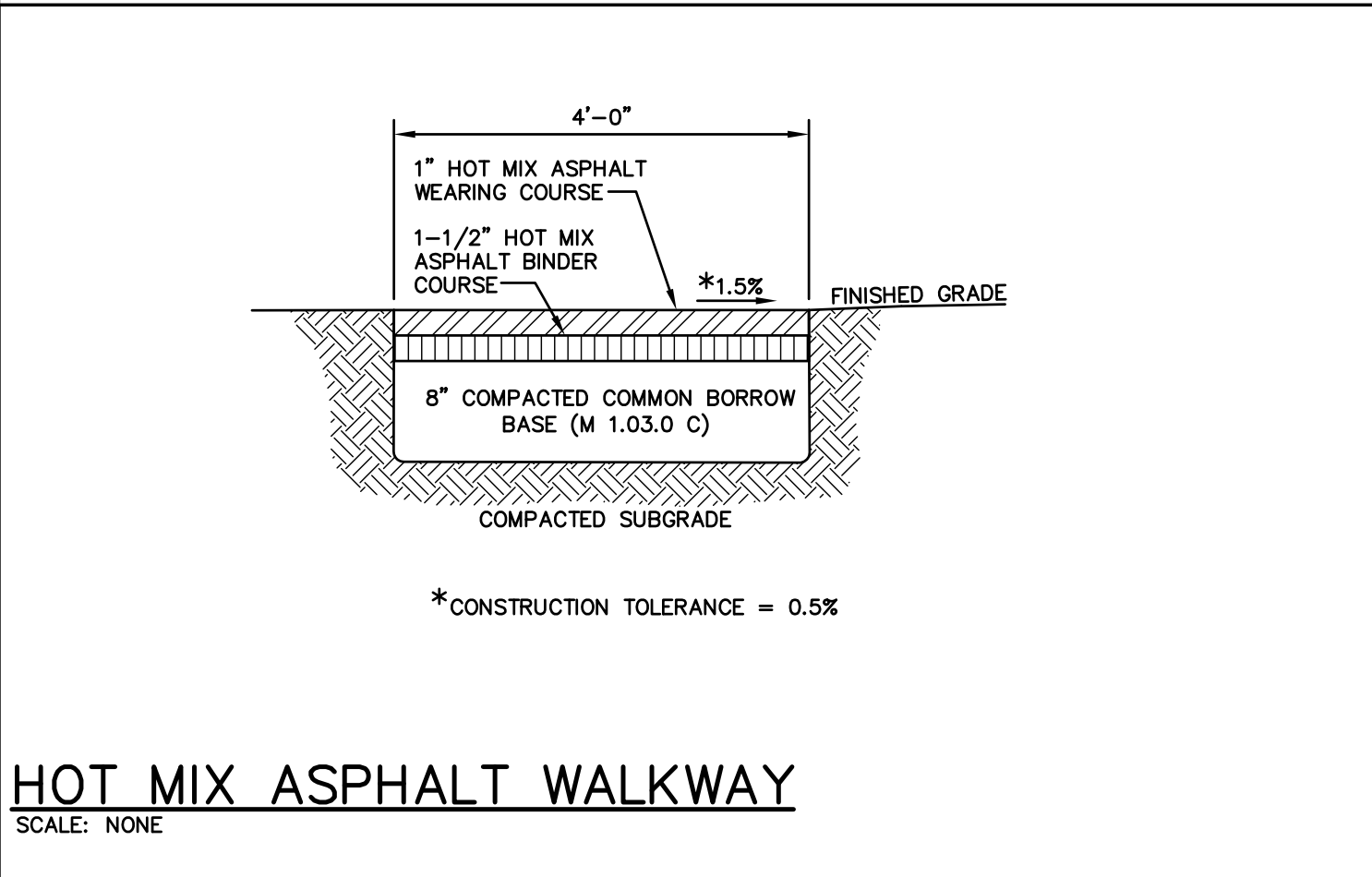
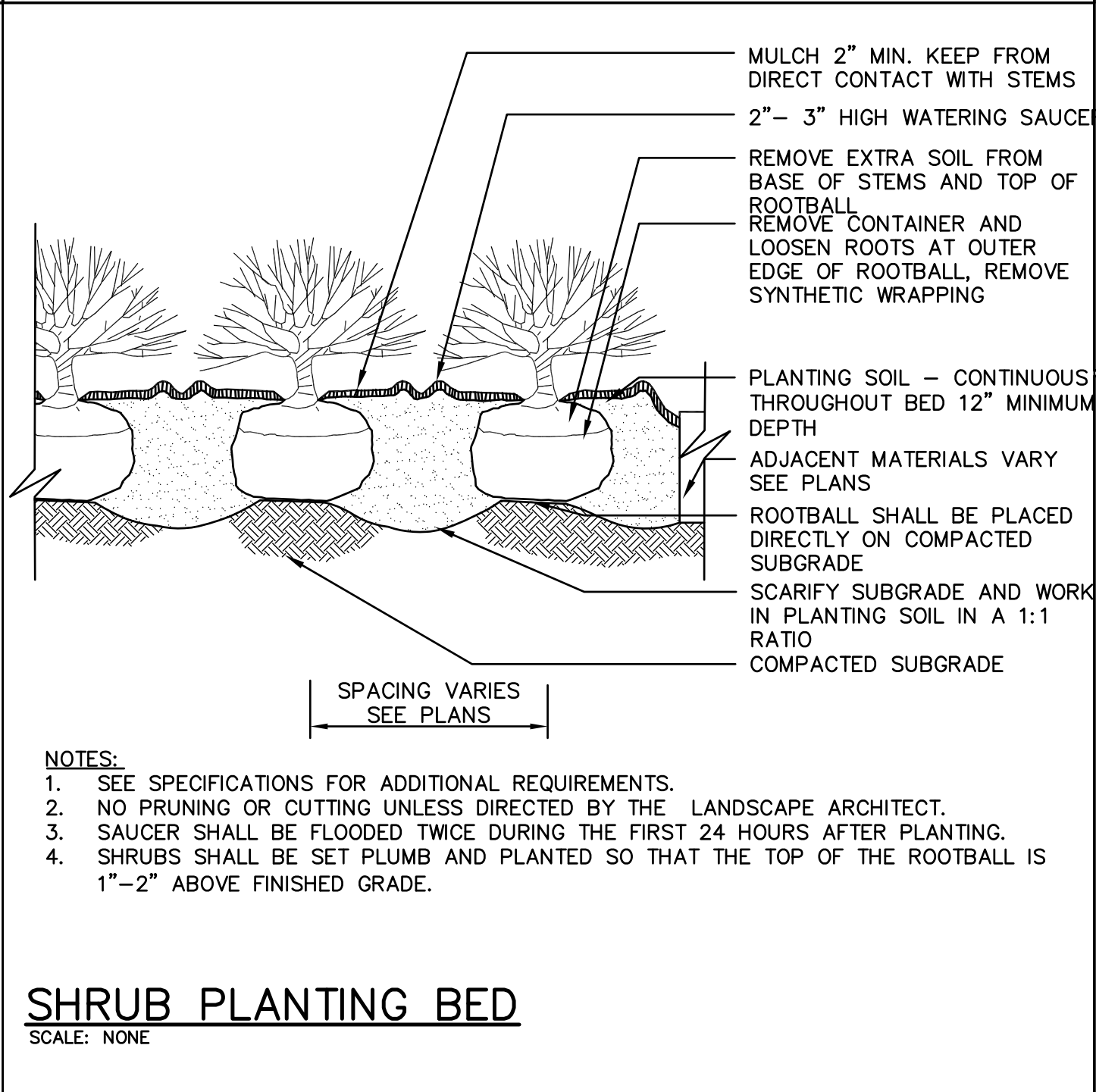
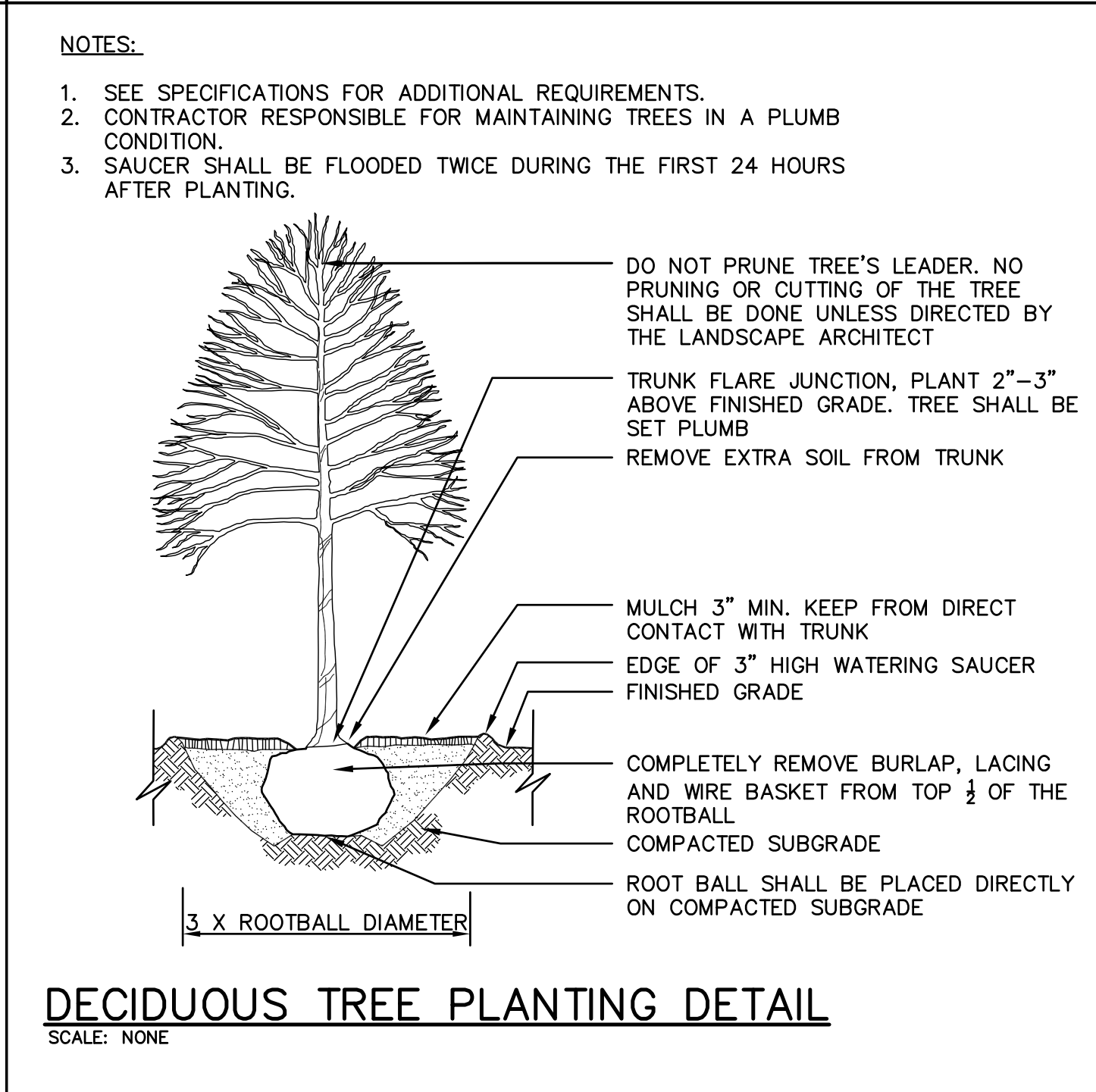
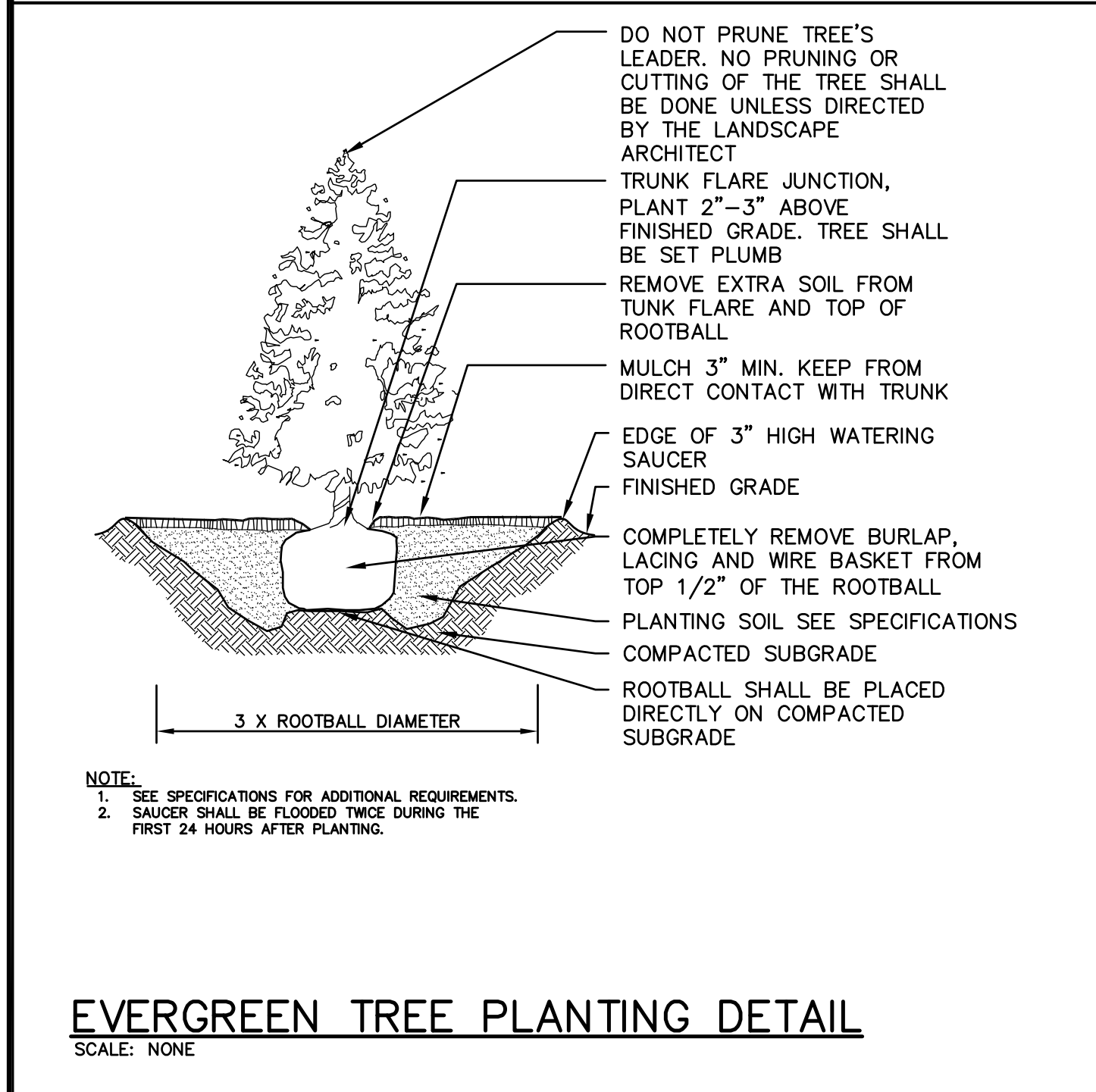
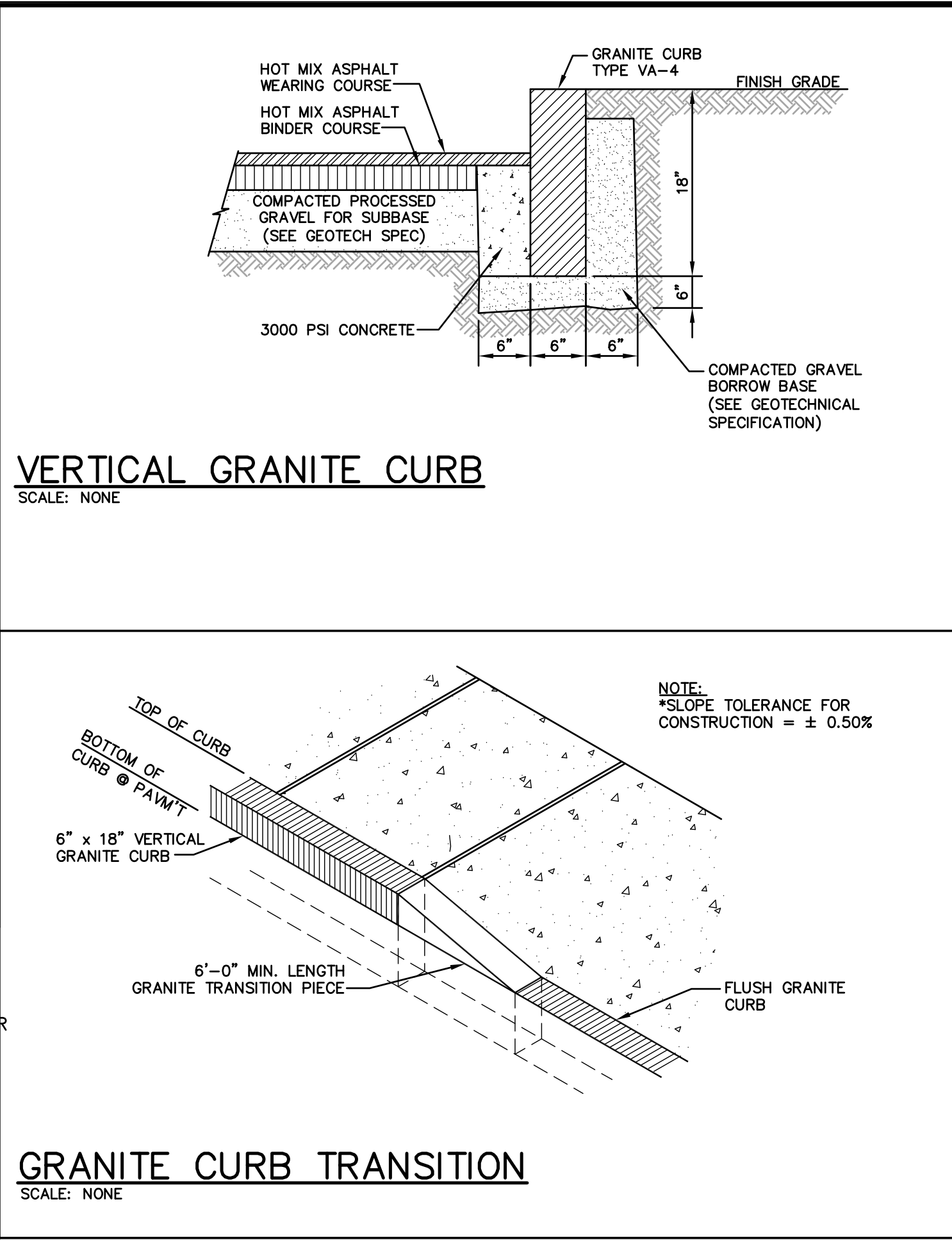
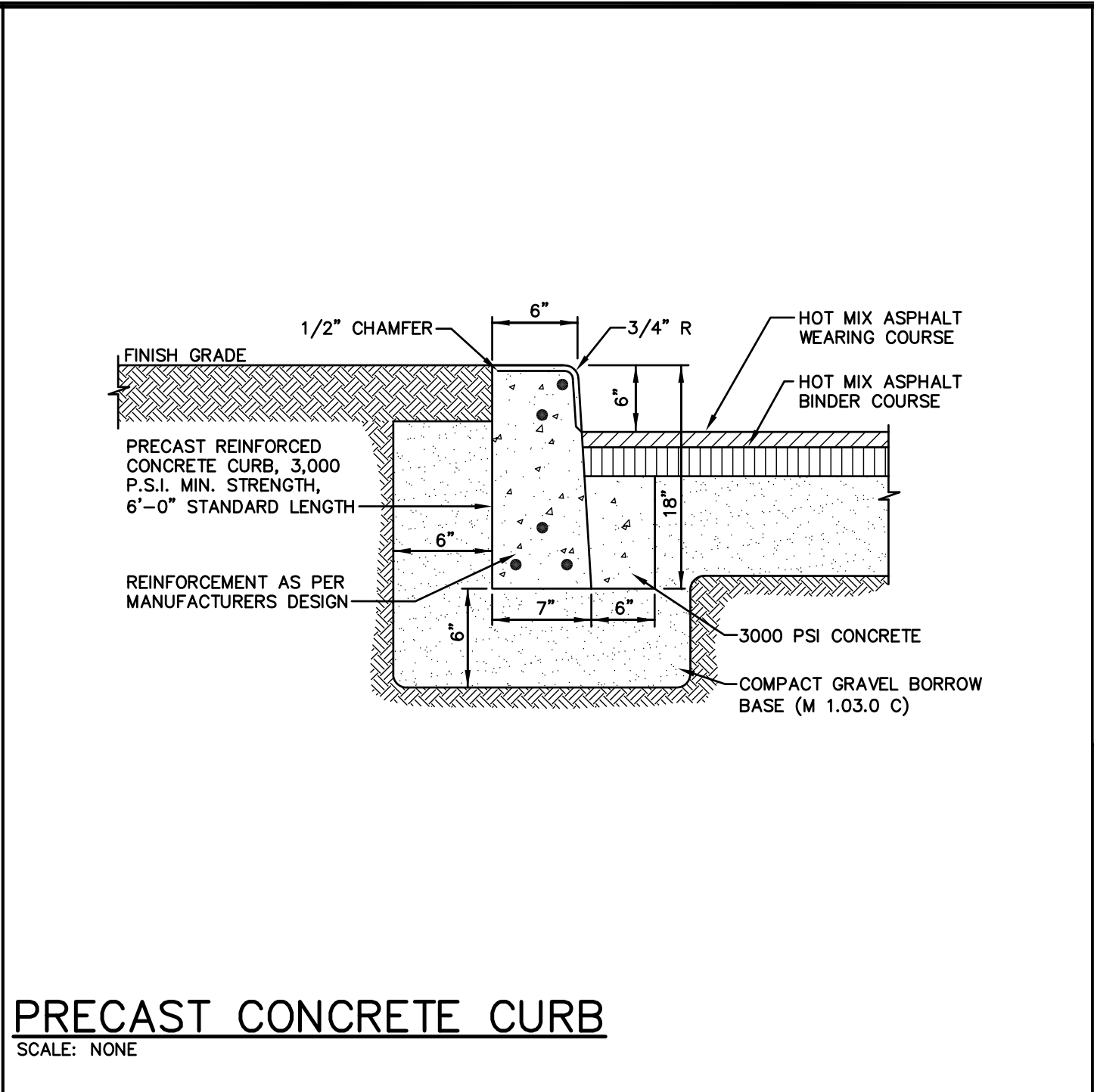
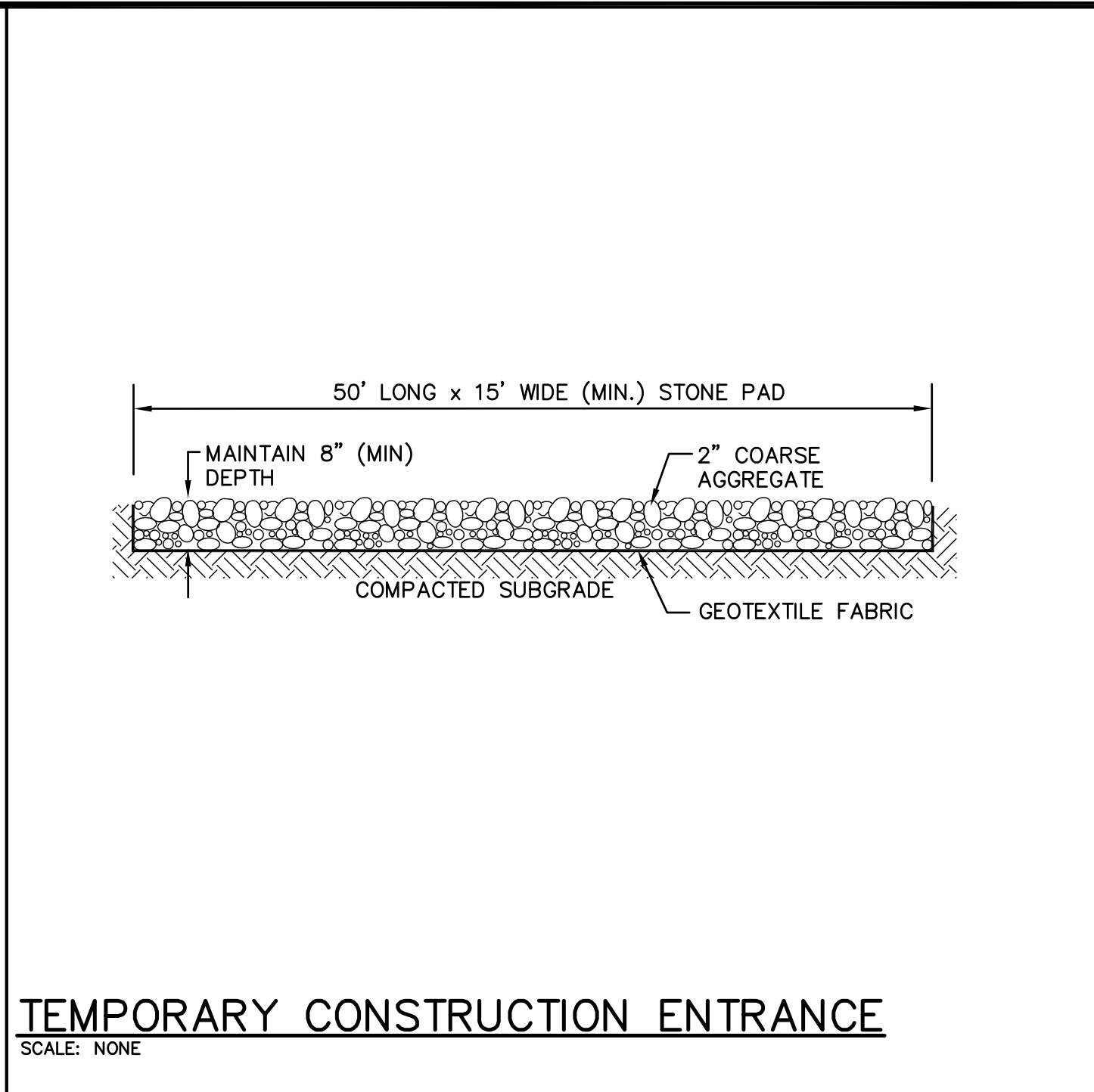
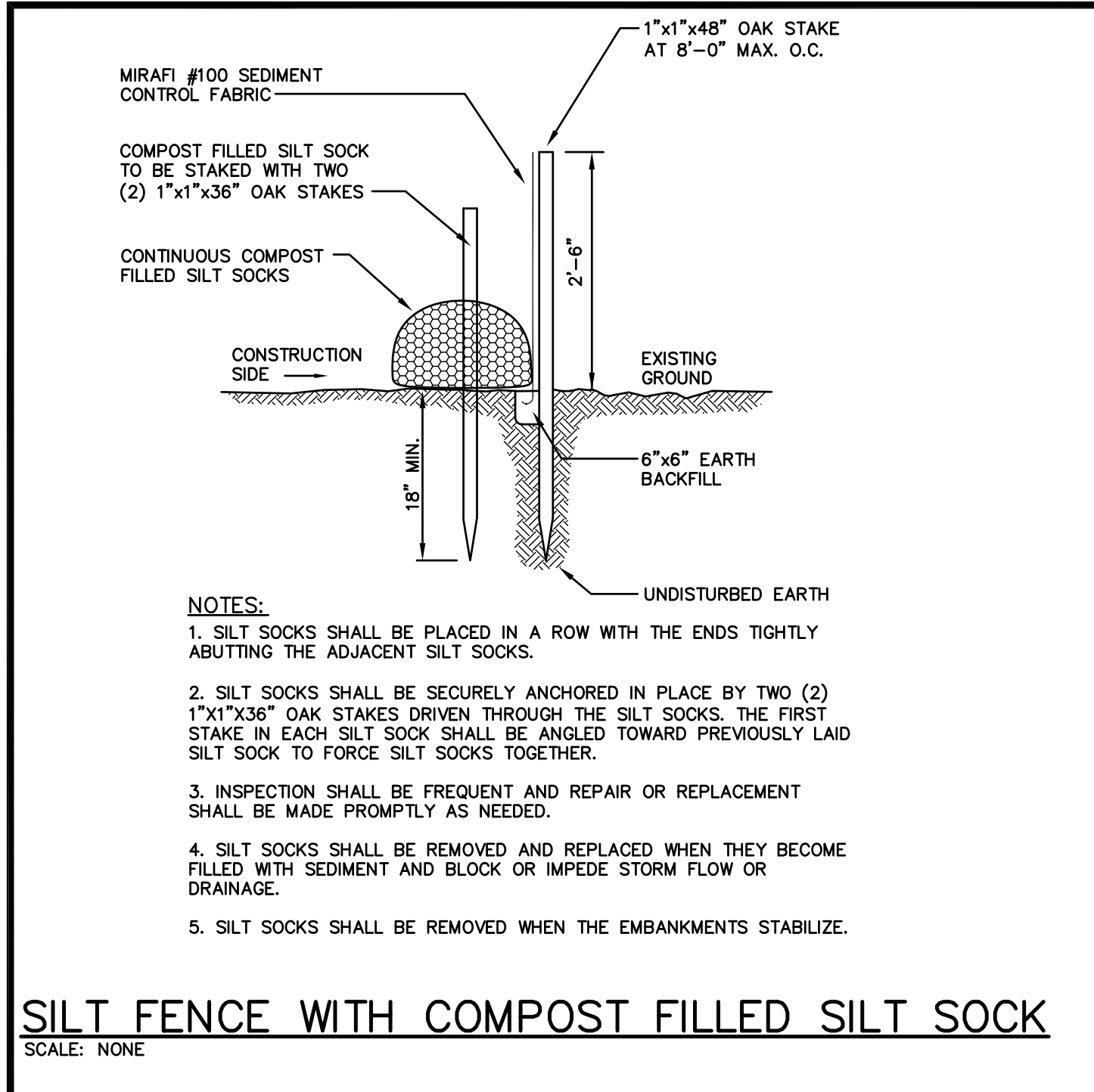
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FILE: \\Civil\\Drawings\\2340700-GR

DWG.: SHEET C-105

JOB. NO: 23407.00

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DATE
PROFESSIONAL ENGINEER

THORNDIKE PLACE

DOROTHY ROAD
IN
ARLINGTON
MASSACHUSETTS
(MIDDLESEX COUNTY)

CIVIL & LANDSCAPE
DETAILS

MARCH 13, 2020

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2	11/03/20	REVISED BUILDING
3	1/21/21	RESPONSE TO PEER REVIEW

PREPARED FOR:
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84 SHERMAN STREET, 2ND FLOOR
CAMBRIDGE, MA 02140

BSC GROUP
803 Summer Street
Boston, Massachusetts
02127
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FILE: 2340700\CD\2340700-DET
DWG.:
JOB. NO: 23407.00
SHEET C-200



Massachusetts Housing Finance Agency
One Beacon Street, Boston, MA 02108

TEL: 617.854.1000
FAX: 617.854.1091 | www.masshousing.com
Videophone: 857.366.4157 or Relay: 711

January 30, 2019

Abbyville Residential, LLC
Abbyville Development, LLC
200 Stonewall Boulevard, Suite 4
Wrentham, MA 02903
Attn: Thomas DiPlacido, Manager

Re: The Preserve at Abbyville; MH ID No. 910
Abbyville Commons; MH ID No. 911
Project Change

Dear Mr. DiPlacido:

We have received your letter of January 16 (attached as Exhibit A) describing a proposed modification to the above-captioned proposed 40B developments located off Lawrence Street in Norfolk, Massachusetts, known as The Preserve at Abbyville and Abbyville Commons (the "Projects"). Both projects received a Determination of Project Eligibility (Site Approval) from MassHousing on March 8, 2018 and are currently under deliberation by the Norfolk Zoning Board of Appeals (the "Board of Appeals") following the filing of an application for a Comprehensive Permit pursuant to M.G.L Chapter 40B.

You have requested a determination as to whether the proposed modifications to each project, including a change in tenure for Abbyville Commons from rental to homeownership, would be considered a Substantial Change in accordance with 760 CMR 56.04 (5).

MassHousing has reviewed the revised plans included and has determined that the proposed changes are, in fact, substantial in accordance with 760 CMR 56.04 (5). MassHousing has also reviewed the revised Site Plan with attention to the project eligibility requirements set forth in 760 CMR 56.04(1). Since compliance with those requirements will not be affected by the proposed changes, MassHousing can confirm that a new Project Eligibility Letter is **not** required in this instance.

You have also inquired about the possibility of merging the two proposed projects (The Preserve at Abbyville and Abbyville Commons) into a single project, now that both projects are proposed to be homeownership. It is MassHousing's interpretation that both The Preserve at Abbyville and Abbyville Commons can be merged as a single project for review by the Town of Norfolk Zoning Board of Appeals as a consolidated project consisting of 176 residential homeownership units. Such combined project would fall below the Large Project provisions described under 760

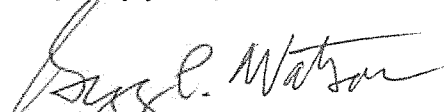
CMR 56.03(6) since the Town of Norfolk has between 2,500 and 5,000 housing units and, therefore, the number of units proposed under the combined project would be less than the 200-unit Large Project threshold.

It is MassHousing's interpretation of the Comprehensive Permit Regulations that Subsidizing Agencies should normally not update Project Eligibility Letters as a project develops but should, rather, consider whether the initial proposal is eligible for a subsidy program at the project eligibility stage and then consider whether the final proposal is eligible directly before construction at the Final Approval stage. Any other approach could interfere with Chapter 40B's goal of expedited permitting. It is for this reason that a Project Eligibility Letter issued pursuant to the comprehensive permit regulations shall, pursuant to 760 CMR 56.04(6), be conclusive evidence that the project and the applicant have satisfied the project eligibility requirements.

Please be assured that MassHousing will carefully review the approved plans once the Project comes back to us for Final Approval, and at that point will determine whether the approved plans still meet the requirements of the 40B regulations and guidelines.

If you have any further questions regarding this project, please contact Jessica Malcolm in this office at (617) 854-1201.

Very truly yours,



Gregory P. Watson
Manager, Planning and Programs

cc: Norfolk Zoning Board of Appeals (via e-mail)

**Abbyville Residential LLC
& Abbyville Development LLC
200 Stonewall Boulevard, Suite 4
Wrentham, Massachusetts, 02093**

January 16, 2019

Mr. Gregory Watson
Manager of Comprehensive Permit Programs
MassHousing
One Beacon Street
Boston, Massachusetts, 02108

Re: The Preserve at Abbyville (PEL ID#910) and Abbyville Commons, Norfolk (PEL ID# 911)

Greg,

At this time I would like to update you to the status of The Preserve at Abbyville, a Homeownership Comprehensive Project and Abbyville Commons, a Rental Comprehensive Project. Both are located within the same locus in the Town of Norfolk and both were granted Project Eligibility Letters from MassHousing on March 8, 2018. Both PELs are attached.

The Preserve at Abbyville

The Preserve at Abbyville, was granted a Project Eligibility Letter for 148 homes. This was comprised of 32 two-bedroom homes, 60 three-bedroom homes and 56 four-bedroom homes situated on approximately 190.67 acres of land. The project proposed to dedicate 140 acres of the 190.67 acres as Open Space for passive recreation.

The current proposal is 88 detached single family 4-bedroom homes on approximately 185 acres of land. The Open Space is now planned to be 131.60 acres which will still be dedicated for passive recreation.

The original proposal had single family homes sited on lots that averaged 10,000sf, but could be as small as 6,000sf. The average continuous frontage was 80 feet but at least one lot had only 20 feet of continuous feet. The homes were also only setback from the street a minimum of 20' in most instances while there were zero side yard setbacks for the 32 two bedroom homes.

The current proposal has 23,000sf average single family lot sizes with the minimum lot size being 15,000sf. The frontage for each lot averages 114 feet, but the minimum frontage would be 100 feet with a proposed minimum front yard setback of 40 feet and side yard setbacks of no less than 10 feet. This side yard setback would allow homes to be closer to one lot line thus allowing for side entry garages on the opposite lot line. The home plans are similar in style, but no longer offer 2 and 3 bedroom options. Please see Attachment "A," Floor Plans & Elevations for The Preserve at Abbyville to see the revised Architectural Styles.

There has also been a significant reduction of proposed public infrastructure from the initial submittal. The total public road length has been reduced from approximately 11,000 feet to 6,000 feet. This will significantly reduce impervious areas and enhance infiltration. Lastly, in lieu of individual septic systems on each lot, the 88 homes of the Preserve at Abbyville will be part of a Homeowners Association in conjunction with the Abbyville Commons Condominiums. Together they will operate a Wastewater Treatment Plant that will be constructed as part of the Project. This will provide additional treatment to protect the underlying Zone II Aquifer.

Abbyville Commons

Abbyville Commons was granted a Project Eligibility Letter to develop 48 rental units. This was comprised of 11 one-bedroom units, 32 two-bedroom units, 5 three-bedroom units and 2 buildings with 10 garages in each. These units were situated on 8.84 acres of land that included a large common green.

As a result of input from the community we were encouraged to eliminate the rental units and to develop the site with homeownership units. This has created a development of 88 three-bedroom duplex-style condominiums each with its own two-car attached garage. The total area of this developed site is now 14.6 acres with a similar common green that is approximately 1.25 acres. The total combined land area of The Preserve at Abbyville and Abbyville Commons is still approximately 200 acres and the land areas for each project have been modified slightly although the entire property area for the combined projects has not changed. Please see Attachment "B" Floor Plans & Elevations for Abbyville Commons to see the proposed Condominiums.

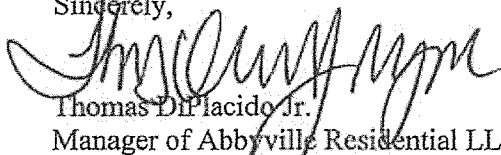
The Condominiums would be centrally located within the overall site to create an "inner core of development." This allows the larger lot sizes and homes of The Preserve at Abbyville to be a buffer around the perimeter of the property. Thereby blending more closely with the existing neighborhood and creating a buffer to the more densely developed condominiums. The distance between each duplex condominium building is no less than 10 feet and the setback line from any building to the property line is 20 feet. An enhanced landscape buffer is proposed along these property lines to create privacy between the Condominiums and the Single Family Homes. Please see Attachment "C" Revised Landscape Plans to review the new layout of both projects.

Lastly, the most significant revision of both projects is the significant reduction in earth removal. The project originally proposed significant cuts and fills which resulted in 1,482,000 cubic yards of removal. With significantly less road infrastructure and larger lots we have been able to reduce that amount by 832,000 cubic yards to 650,000 cubic yards. This is a reduction of over 68,500 truck trips in and out of the site. This reduces construction traffic, emissions, dust and noise significantly over the development of the project. Please see Addendum "D", The Preserve at Abbyville and Abbyville Commons Combined Progression/Analysis/Comparison 12/20/2018 Matrix. This chart summarizes the project from where it began to where it is currently and compares it to our other conventional developments in The Town of Norfolk.

For each of these revised projects, the Zoning Board of Appeals is asking for MassHousing clarification concerning the process by which the proposed changes for each project would be handled, and whether MassHousing can provide assurances that the proposed project modifications for each could be reviewed and adjusted at the final approval stage for each project as there may be questions about land value, adjustments to the pro forma, and other "process" questions. The Board of Appeals will likely want assurances that new PELs will not be required to be issued for each project, and that a conversion of the Abbyville Commons Project from rental to ownership is the type of change that can be accommodated that the final approval process stage. Based upon other projects you have reviewed having similar circumstances, I assume there may be other matters that might be appropriately addressed in such a letter.

If you have any questions or comments please feel free to contact me by email or mobile phone (508-726-9573)

Sincerely,

A handwritten signature in black ink, appearing to read 'Thomas DiPlacido Jr.', written over the printed name.

Thomas DiPlacido Jr.
Manager of Abbyville Residential LLC
Manager of Abbyville Development LLC



Massachusetts Housing Finance Agency
One Beacon Street, Boston, MA 02108

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Videophone: 857.366.4157 or Relay: 711

October 29, 2018

Matthew J. Mayo, Chairman
Zoning Board of Appeals
Lancaster Town Offices
701 Main Street
Lancaster, MA 01523

Re: Goodridge Brook Estates, PE-963

Dear Mr. Mayo:

Thank you for your email dated October 10, 2018 regarding proposed changes to the site plan for the homeownership portion of Goodridge Brook Estates (the "Project"). This letter is intended to reaffirm the findings made by MassHousing regarding the Determination of Project Eligibility (Site Approval) letter dated March 28, 2018 (the "Project Eligibility Letter").

In accordance with 760 CMR 56.04(5) MassHousing has reviewed preliminary information regarding the proposed changes to the Project and has determined that, while they are substantial, they do not alter any of the findings required to be made by MassHousing when it issued the Project Eligibility Letter.

Since the changes outlined in your letter have been proposed prior to the issuance or denial of a Comprehensive Permit, 760 CMR 56.04(5) narrowly limits the Subsidizing Agency's review to changes which affect the project eligibility requirements set forth at 760 CMR 56.04(1). Since compliance with those eligibility requirements will not be affected by the proposed changes, MassHousing is able to reaffirm the Project Eligibility Letter.

Please be assured that MassHousing will carefully review the plans approved by the ZBA once the applicant comes back to us for Final Approval, and at that point, will determine whether the approved plans still meet the requirements of the 40B regulations and guidelines.

If you have any further questions regarding this project, please contact me at 617-854-1880.

Very truly yours,

Gregory P. Watson
Manager, Planning and Programs

Charles D. Baker, Governor
Karyn E. Polito, Lt. Governor

Michael J. Dirrane, Chairman
Ping Yin Chai, Vice Chair

Chrystal Kornegay, Executive Director

From: Michael Busby
Sent: Thursday, October 25, 2018 9:55 AM
To: Matthew J. Mayo
Subject: RE: GBE Permit Application Lancaster MA

Yes, the Applicant sent us the proposed revisions to the homeownership portion of the development and are currently reviewing the plan.

From: Matthew J. Mayo
Sent: Thursday, October 25, 2018 9:50 AM
To: Michael Busby
Subject: RE: GBE Permit Application Lancaster MA

Thanks Mike,

Have you been provided any additional information from the application regarding the request below?

-M

Matthew J. Mayo, M.S.,

From: Michael Busby
Sent: Friday, October 12, 2018 11:18 AM
To: Matthew J. Mayo

Subject: RE: GBE Permit Application Lancaster MA

Hi Matt,

We will request from the Applicant the proposed changes to the original site plan and determine whether they are a substantial change from the original proposal as presented at the time of Site Eligibility in accordance with Regulation 760 CMR 56.04 (5) that covers making important changes to projects in the course of a Permit Hearing. Thank you.

Mike

From: Matthew J. Mayo
Sent: Wednesday, October 10, 2018 7:50 AM
To: Michael Busby
Cc: 'Orlando Pacheco'
Subject: GBE Permit Application Lancaster MA

Mike,

I have been asked to contact you on behalf of the Town of Lancaster ZBA to inquire about the home ownership portion of the project (see below). While they have decreased the number of units from the

original proposal, they have increased the number of building footprints. Could you review this situation and let us know if you feel this change would be deemed significant in the eyes of MassHousing.

Any information/advice you could provide will be helpful.

Regards,

Dear Matt,

The Applicant for Goodridge Brook has changed the home ownership portion of the project to a new proposal that is outside of MassHousing's Project Eligibility Letter dated March 28, 2018. I spoke about this on public record at the last Board of Appeals meeting held Thursday, September 27. A large number of Lancaster residents are very concerned about this switch. We are respectfully asking that the home ownership portion of the proposal remain within the eligibility parameters established in writing by MassHousing on March 28, 2018.

After you brought to light that the rental units were in excess of the 120 cap, MassHousing instructed the Applicant to go back to the submission MassHousing had reviewed – and they did. So we are now appropriately reviewing the 120 apartments (not 136) – right on the same page with MassHousing.

However, the home ownership portion is still a very different project from what MassHousing reviewed and issued preliminary eligibility for. MassHousing reviewed 40 duplexes – and notably that are set back from Sterling Road on an interior site road. The condos in the original application are 3 bedrooms, with a master bedroom on the ground floor.

What the Applicant has switched to is a different building type – 4 bedroom houses – and 62 footprints – instead of 40. Notably, the new proposal also calls for houses with direct driveway access to Sterling Road – so much greater visual impact and a significant traffic safety consequence with more curb cuts coming right on to Sterling Road (already a dangerous road). The 40 duplexes set back in to the site make much more sense for public safety.

IMPORTANT: Regulation 760 CMR 56.04 (5) that covers making important changes to projects in the course of a Permit Hearing is very clear. A developer can not simply change 40 duplexes to 62 4 bedroom houses without notifying MassHousing. We are currently reviewing a home ownership project that is outside of preliminary eligibility approval.

—
Matthew J. Mayo, M.S., GISP, CPG, P.G.

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