



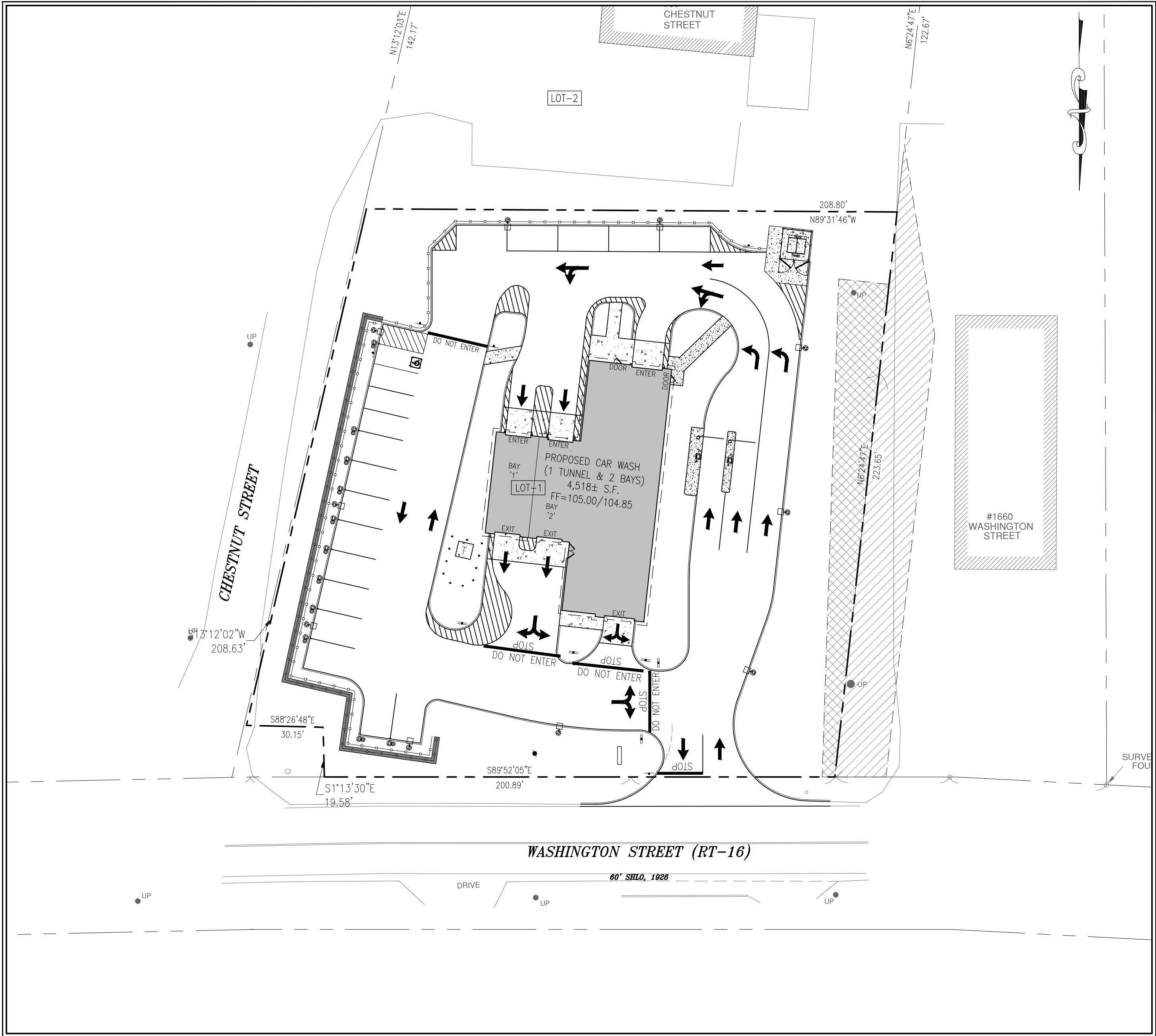
LOCUS PLAN
SCALE: 1"=250'±

DATE	DATE REVISED	SHEET NUMBER	SHEET DESCRIPTION
07/14/2023	11/10/2023	1	COVER SHEET
04/13/2023	11/08/2023	2	EXISTING CONDITIONS SURVEY
07/14/2023	11/10/2023	3	DEMOLITION & EROSION CONTROL PLAN
07/14/2023	11/10/2023	4	SITE PLAN
07/14/2023	11/10/2023	5	GRADING & DRAINAGE PLAN
07/14/2023	11/10/2023	6	UTILITY PLAN
07/14/2023	11/10/2023	7	CONSTRUCTION DETAILS
07/14/2023	11/10/2023	8	CONSTRUCTION DETAILS
07/14/2023	11/10/2023	9	CONSTRUCTION DETAILS
07/14/2023	11/10/2023	10	CONSTRUCTION DETAILS
07/14/2023	11/10/2023	11	CONSTRUCTION DETAILS
07/14/2023	11/10/2023	12	LANDSCAPE PLAN
07/14/2023	11/10/2023	13	LANDSCAPE DETAILS
08/08/2023	-	-	LIGHTING PLAN
11/09/2023	-	-	CAR WASH SIGN DETAILS
07/13/2023	-	-	APPROVAL NOT REQUIRED PLAN
08/22/2023	-	T0.01	COVER PAGE (ARCHITECTURALS)
07/18/2023	-	A0.01	ARCHITECTURAL SITE PLAN
07/18/2023	-	A1.01	FLOOR PLANS
07/18/2023	-	A1.02	FLOOR PLANS
07/18/2023	-	A1.03	EXTERIOR ELEVATIONS
07/18/2023	-	A1.04	EXTERIOR ELEVATIONS

SUBMITTED UNDER SEPARATE COVER

DATE	DATE REVISED	SHEET NUMBER	SHEET DESCRIPTION
06/12/2023	-	1-2	SUBSURFACE SEWERAGE DISPOSAL SYSTEM

SITE PLAN SET
FOR A
PROPOSED CAR WASH
1650 WASHINGTON STREET
HOLLISTON, MA 01746



OVERALL LAYOUT PLAN
SCALE: 1"=30'

CERTIFICATION OF ACTION
TOWN OF HOLLISTON PLANNING BOARD
I ATTEST THAT THE PLANNING BOARD VOTED
TO TO APPROVE THIS
SPECIAL PERMIT/SITE PLAN ON
(DATE).
SIGNATURE OF PLANNING BOARD MEMBER

PREPARED BY:

CIVIL DESIGN
GROUP, LLC

21 HIGH STREET SUITE 207
NORTH ANDOVER, MA 01845
www.cdgengineering.com
p: 978-794-5400
f: 978-965-3971
CONTACT: PHILIP HENRY, P.E.

PREPARED FOR:

1650 WASHINGTON STREET, LLC
3 MICHAUD DRIVE
FRAMINGHAM, MA 01701

PROPERTY:
1650 WASHINGTON STREET (RT-16)
HOLLISTON, MA 01746

PORTIONS OF
ASSESSORS MAP 5, LOT 4-28.1 (1650
WASHINGTON ST)
ASSESSORS MAP 5, LOT 4-28.2 (35
CHESTNUT ST)

OWNER OF RECORD:
1650 WASHINGTON STREET
1650 REALTY NOMINEE TRUST
11 SAWIN STREET
SHERBORN, MA 01770

35 CHESTNUT STREET
CHESTNUT STREET NOMINEE TRUST
11 SAWIN STREET
SHERBORN, MA 01770

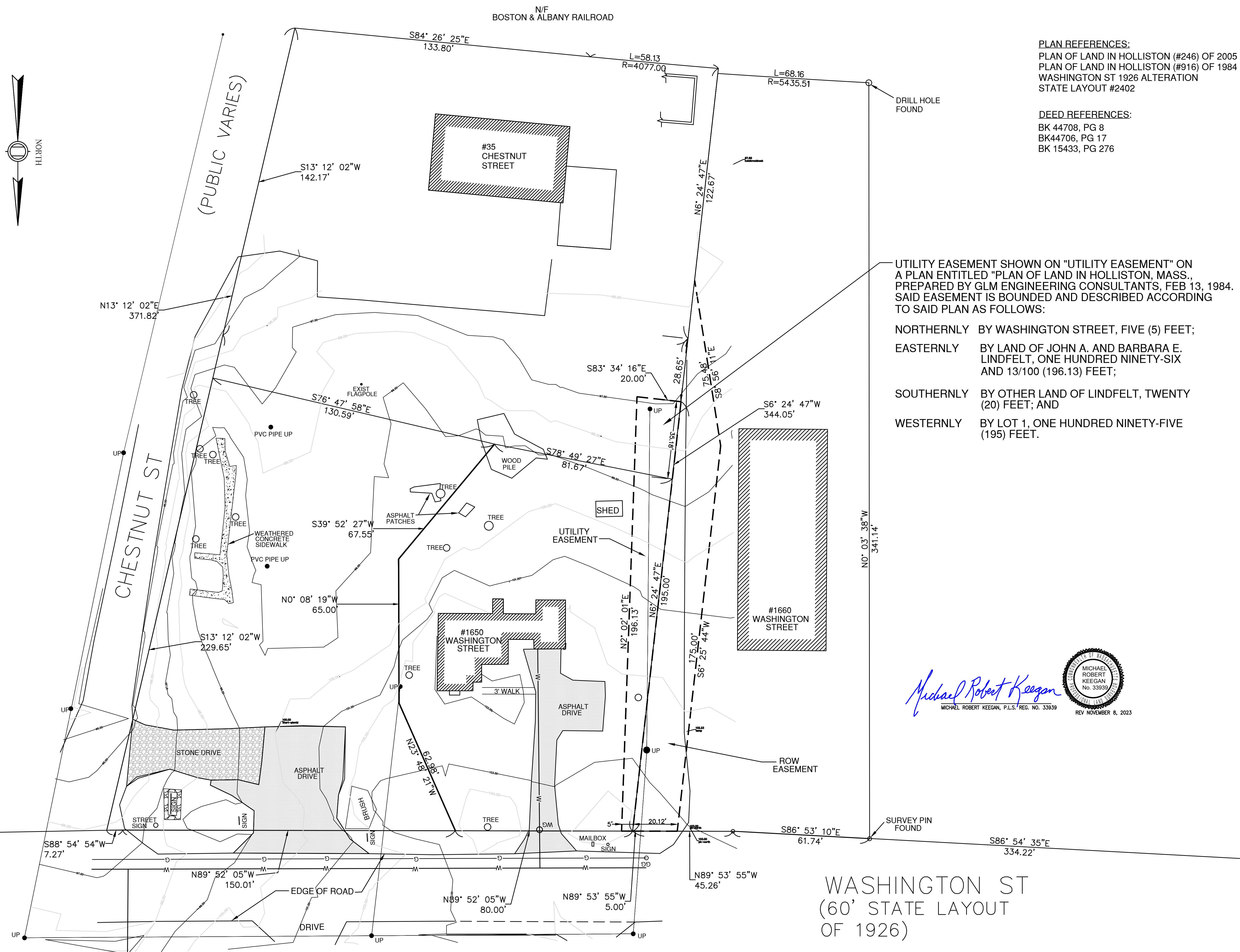
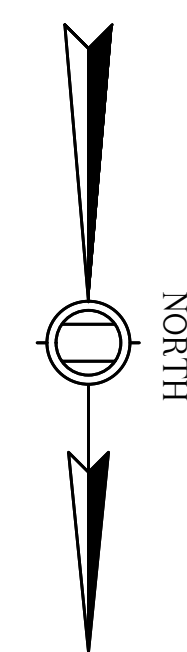
NOT FOR CONSTRUCTION

ISSUED:
TOWN OF HOLLISTON

SEAL:
COMMONWEALTH OF MASSACHUSETTS
PHILIP R. HENRY
CIVIL
No. 48547
REG. STATE
PROFESSIONAL ENGINEER
PHILIP R. HENRY, P.E.

SHEET:
COVER SHEET

1



PLAN REFERENCES:
PLAN OF LAND IN HOLLISTON (#246) OF 2005
PLAN OF LAND IN HOLLISTON (#916) OF 1984
WASHINGTON ST 1926 ALTERATION
STATE LAYOUT #2402

DEED REFERENCES:
BK 44708, PG 8
BK44706, PG 17
BK 15433, PG 276

UTILITY EASEMENT SHOWN ON "UTILITY EASEMENT" ON
A PLAN ENTITLED "PLAN OF LAND IN HOLLISTON, MASS.,
PREPARED BY GLM ENGINEERING CONSULTANTS, FEB 13, 1984.
SAID EASEMENT IS BOUNDED AND DESCRIBED ACCORDING
TO SAID PLAN AS FOLLOWS:

NORTHERNLY BY WASHINGTON STREET, FIVE (5) FEET;

EASTERLY BY LAND OF JOHN A. AND BARBARA E. LINDFELT, ONE HUNDRED NINETY-SIX AND 13/100 (196.13) FEET;

SOUTHERNLY BY OTHER LAND OF LINDFELT, TWENTY (20) FEET; AND

WESTERNLY BY LOT 1, ONE HUNDRED NINETY-FIVE (195) FEET.



J2M CONSULTING, LLC
CIVIL ENGINEERING, SURVEYING, AND SAFETY

GENERAL NOTES:

EXISTING CONDITIONS SURVEY AS SHOWN
HEREON WAS DERIVED FROM ACTUAL FIELD
LOCATION BY J2M CONSULTING ASSOC.
IN DECEMBER, 2022.

OWNER
1650 WASHINGTON
STREET, LLC

No.	Revision/Issue	Date

Drawing Title:

EXISTING CONDITIONS PLAN

1650 WASHINGTON
STREET

Date: 4/13/23	Scale: 1"=20'
Drawn By: JRR	Chk'd By:

Dwg No.:

SOIL EROSION AND SEDIMENTATION CONTROL NOTES

- THIS SITE IS SUBJECT TO THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PROGRAM OF THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY. SITE OPERATORS SHALL CONFORM TO MEET THE CRITERIA FOR A NPDES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES.
- ADAPTATION TO ACTUAL FIELD CONDITIONS MAY WARRANT VARIATIONS FROM WHAT IS SHOWN ON THESE PLANS FOR EROSION CONTROLS IN ORDER TO MAXIMIZE THE EFFECTIVENESS OF THE CONTROLS.
- THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING ALL CONSTRUCTION RELATED CONDITIONS OUTLINED IN THE APPROVALS IN ADDITION TO THE ITEMS OUTLINED IN THESE CONSTRUCTION DOCUMENTS. THE PLANS INCLUDED HEREIN ARE PROVIDED AS A GUIDANCE DOCUMENT TO ASSIST IN THE IMPLEMENTATION OF EROSION/SEDIMENTATION CONTROLS AND STABILIZATION OF THE SITE. ADAPTATION TO ACTUAL FIELD CONDITIONS MAY WARRANT VARIATIONS FROM WHAT IS SHOWN ON THESE PLANS TO MAXIMIZE THE EFFECTIVENESS OF THE CONTROLS.
- THE CONTRACTOR SHALL ADHERE TO PROCEDURES OUTLINED IN THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN ACCORDANCE WITH THE EPA NPDES CONSTRUCTION GENERAL PERMIT REQUIREMENTS.
- IN ACCORDANCE WITH THE NPDES CONSTRUCTION GENERAL PERMIT AND ASSOCIATED STORMWATER POLLUTION PREVENTION PLAN (SWPPP), EROSION CONTROL MEASURES SHALL BE INSPECTED AT LEAST EVERY 14 DAYS AND WITHIN 24 HOURS OF A 0.25" STORM. REPORTS DOCUMENTING THE RESULTS OF EACH INSPECTION AND ANY CORRECTIVE ACTIONS SHALL BE KEPT ON-FILE WITH THE SWPPP.
- PROPOSED EROSION AND SEDIMENTATION CONTROL MEASURES WILL INCLUDE SILT SOCKS, CRUSHED STONE, RIPRAP, LOAM/SEED, HYDROSEEDING, MULCHING, EROSION CONTROL MATTING, DIVERSION BERMS, AND SEDIMENTATION BASINS AS FURTHER DESCRIBED HEREIN.
- SILT SOCKS WILL BE USED FOR THE PERIMETER EROSION CONTROL BARRIER AS SHOWN ON THIS PLAN AND ELSEWHERE AS CONDITIONS WARRANT. SILT SACKS WILL BE USED TO PROTECT OFFLINE CATCH BASINS (PRIOR TO BINDER) AND ELSEWHERE AS CONDITIONS WARRANT. THE CONTRACTOR WILL BE REQUIRED TO KEEP A REASONABLE STOCK OF SILT SOCKS ON SITE TO BE ABLE TO SUPPLEMENT OR MAKE REPAIRS AS NECESSARY.
- LOAMING AND SEEDING OR HYDROSEEDING WILL BE USED AS A PERMANENT STABILIZATION MEASURE FOR ALL REVEGETATED AREAS OF THE SITE.
- ALL PROPOSED SLOPES 3:1 AND STEEPER SHALL BE STABILIZED WITH AN EROSION CONTROL MATTING AND SHALL BE HYDROSEEDED.
- MULCHING MAY BE USED TO REINFORCE SEEDED AREAS WHERE EROSION CONTROL MATTING IS NOT REQUIRED OR WARRANTED, BUT WHERE SOME PROTECTION IS WARRANTED. MULCHING MAY ALSO BE USED TO STABILIZE AREAS WHERE CONSTRUCTION ACTIVITIES WILL TEMPORARILY CEASE FOR MORE THAN 14 DAYS.
- SEDIMENTATION BASINS SHALL BE USED THROUGHOUT THE SITE TO TREAT RUNOFF. DIVERSION BERMS SHALL BE UTILIZED TO DIVERT UNTREATED STORMWATER TO THE SEDIMENTATION BASINS. SEDIMENTATION BASINS AND DIVERSION BERMS SHALL BE ADDED, REMOVED, AND ADJUSTED AS THE SITE EVOLVES THROUGHOUT THE CONSTRUCTION PROCESS.
- UPON CONVERTING ANY TEMPORARY SEDIMENTATION BASINS TO PERMANENT DETENTION/INFILTRATION BASINS, THE BASINS SHALL BE CLEANED OF ALL ACCUMULATED SEDIMENT TO ENSURE THAT THE VOLUMETRIC AND INFILTRATION DESIGN CAPACITIES ARE MAINTAINED.
- STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, IN ACCORDANCE WITH THE NPDES CONSTRUCTION GENERAL PERMIT. STABILIZATION MEASURES SHALL BE IMPLEMENTED NOT MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED, UNLESS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS IN WHICH CASE STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE. WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
- EROSION AND SEDIMENTATION CONTROLS WILL BE REQUIRED TO BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT TO ENSURE THAT THEY FUNCTION AS INTENDED. DEFICIENCIES WILL BE CORRECTED BY CLEANING, REPAIRING, OR REPLACING THE AFFECTED CONTROL(S) OR PORTION(S) THEREOF TO REESTABLISH PROPER FUNCTIONING AS QUICKLY AS POSSIBLE. SEDIMENTATION CONTROLS WILL BE REQUIRED TO BE CLEANED OR REPLACED WHEN THE ACCUMULATED SEDIMENT EXCEEDS 50 PERCENT OF THE DESIGN CAPACITY OF THE CONTROL. ANY OFF-SITE ACCUMULATIONS OF SEDIMENT WILL BE REQUIRED TO BE REMOVED AS QUICKLY AS POSSIBLE IN A MANNER THAT MINIMIZES ADDITIONAL DISTURBANCE.
- EROSION CONTROL BARRIER (WHERE SHOWN) REPRESENTS THE LIMIT OF WORK, WHERE NO EROSION CONTROL BARRIER IS REQUIRED (SUCH AS UPSLOPE AREAS), A LIMIT OF WORK LINE HAS BEEN SHOWN. WHERE NO EROSION CONTROL BARRIER IS REQUIRED, THE LIMIT OF WORK SHALL BE DELINEATED IN THE FIELD BY A VISUAL BARRIER SUCH AS TEMPORARY CONSTRUCTION FENCING IN ORDER TO KEEP CONSTRUCTION ACTIVITIES OUT OF THOSE AREAS.
- THE PROPOSED ONSITE DRAINAGE SYSTEM SHALL BE INSTALLED AS SOON AS PRACTICABLE. ALL EXISTING AND PROPOSED CATCH BASIN INLETS SHALL BE PROTECTED WITH A SILT SACK (SEE DETAIL).
- DEWATERING OPERATIONS MUST DISCHARGE DIRECTLY INTO A SEDIMENT BASIN OR OTHER SETTLING AREA TO ALLOW FOR SUFFICIENT SETTLING PRIOR TO DISCHARGE.
- DUST SHALL BE CONTROLLED BY AN APPROVED METHOD ACCORDING TO LOCAL, STATE AND FEDERAL STANDARDS.
- ABUTTING PROPERTIES SHALL BE PROTECTED FROM EXCAVATION AND FILLING OPERATIONS FROM THIS PROJECT AT ALL TIMES. WORK ON ABUTTING PROPERTY SHALL REQUIRE WRITTEN AUTHORIZATION FROM THE OWNER PRIOR TO ANY LAND DISTURBANCE.
- THE EROSION CONTROL MEASURES ILLUSTRATED IN THIS PLAN SET SHALL BE THE MINIMUM REQUIRED CONTROLS IMPLEMENTED.
- STOCKPILING LOCATIONS SHALL BE FIELD DETERMINED AND SHALL NOT LIE WITHIN THE 100-FOOT WETLAND BUFFER. DIVERSION BERMS AND EROSION CONTROL BARRIERS SHALL BE INSTALLED DOWNGRADIENT OF STOCKPILES IN

SITE & DEMOLITION NOTES

- THE LOCATION AND ELEVATION OF EXISTING UTILITIES AND STRUCTURES SHOWN ON THESE PLANS ARE BASED ON MEASUREMENTS TAKEN IN THE FIELD AND DISCOVERED RECORDS FROM VARIOUS UTILITY COMPANIES AND/OR FROM THE MUNICIPALITY. THIS INFORMATION SHALL NOT BE CONSIDERED EXACT AND THE CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITY LOCATIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL NOTIFY "DIG SAFE" (811) AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION TO REQUEST EXISTING UTILITY MARK OUT LOCATIONS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF EXISTING UTILITY LOCATIONS CONFLICT WITH THE PROPOSED DEVELOPMENT PROGRAM SO THAT A REMEDIAL ACTION CAN TAKE PLACE PRIOR TO ANY WORK. THE CONTRACTOR IS RESPONSIBLE FOR RELOCATING ALL EXISTING UTILITIES AS A RESULT OF THE PROPOSED DEVELOPMENT.
- EXISTING BASE INFORMATION INCLUDING PROPERTY LINE, STRUCTURES, UTILITIES AND TOPOGRAPHY ARE TAKEN FROM EXISTING CONDITIONS PLAN, PREPARED BY J2M CONSULTING ASSOCIATES, LLC.
- ELEVATIONS SHOWN ARE BASED ON THE DATUM REFERENCED ON THE EXISTING CONDITIONS PLAN.
- EXISTING STRUCTURES MAY BE UNDER A DEMO DELAY, THEREFORE, THESE STRUCTURES SHALL NOT BE RAZED ON OR BEFORE THE END OF THE DEMO DELAY DATE.
- ALL WORK MUST BE INSPECTED PER TOWN REQUIREMENTS. CONTRACTOR SHALL CONTACT THE TOWN BUILDING DEPARTMENT PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING ALL CONSTRUCTION RELATED CONDITIONS OUTLINED IN THE APPROVALS IN ADDITION TO THE ITEMS OUTLINED IN THESE CONSTRUCTION DOCUMENTS.
- THE LIMIT OF WORK FOR THIS PROJECT SHALL BE SHOWN ON THE PLANS AS SAWCUT LINES, EROSION CONTROL BARRIER LINES, AND/OR LIMIT OF WORK LINES AND SHALL BE MARKED IN THE FIELD PRIOR TO CONSTRUCTION. EXISTING FEATURES OUTSIDE LIMIT OF WORK LINE ARE TO REMAIN UNLESS OTHERWISE SPECIFIED AND THE EXISTING FEATURES WITHIN LIMIT OF WORK LINE SHALL BE REMOVED UNLESS OTHERWISE SPECIFIED.
- THE CONTRACTOR SHALL ARRANGE A PRE-CONSTRUCTION MEETING WITH THE ENGINEER PRIOR TO THE START OF CONSTRUCTION.
- ALL DISTURBED OFF-SITE AREAS SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITION.
- A STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED PER THE DETAIL WHEREVER CONSTRUCTION ACCESS EXISTS. PAVED AREAS SHALL BE KEPT CLEAN AT ALL TIMES.
- PEDESTRIAN AND VEHICULAR ACCESS WITHIN THE PUBLIC RIGHT-OF-WAY AND SHARED ACCESS DRIVE SHALL BE KEPT IN GOOD CONDITION THROUGHOUT CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL PERMITS AND UTILITY CONNECTION FEES RELATED TO THE PROJECT. CONTRACTOR SHALL NOTIFY AND COORDINATE ALL UTILITY WORK WITH THE APPLICABLE UTILITY COMPANIES AND/OR LOCAL DEPARTMENTS. ALL PERMITS SHALL BE KEPT WITHIN THE TRAILER AND CLEARLY VISIBLE.
- THE OFFSITE DISPOSAL OF ALL DEMOLISHED MATERIALS SHALL COMPLY WITH THE APPLICABLE LOCAL, STATE AND FEDERAL GUIDELINES.
- FILL MATERIAL(S) SHALL NOT CONTAIN HAZARDOUS MATERIALS.
- CONSTRUCTION DUMPSTERS SHALL BE LOCATED ON A STABLE SURFACE, PROPERLY MAINTAINED, AND EMPTIED ON A REGULAR BASIS.
- THE CONTRACTOR IS RESPONSIBLE FOR THE GENERAL UPKEEP OF THE SITE DURING THE CONSTRUCTION PROCESS.
- ALL WALLS GREATER THAN 4 FEET EXPOSED HEIGHT SHALL BE DESIGNED BY A STRUCTURAL ENGINEER, IF APPLICABLE.
- CONTRACTOR SHALL PERFORM CONSTRUCTION SEQUENCING SUCH THAT EARTH MATERIALS ARE EXPOSED FOR A MINIMUM AMOUNT OF TIME BEFORE THEY ARE COVERED, SEEDED, OR OTHERWISE STABILIZED TO PREVENT EROSION.
- REFUELING WILL BE DONE VIA FUEL TRUCK AND ANY WORK ASSOCIATED WITH THE MAINTENANCE OF CONSTRUCTION EQUIPMENT TO BE PERFORMED OFFSITE.
- THE AREAS OF CONSTRUCTION SHALL REMAIN IN A STABLE CONDITION AT THE CLOSE OF EACH CONSTRUCTION DAY. EROSION CONTROLS SHALL BE CHECKED

AT THIS TIME AND MAINTAINED OR REINFORCED IF NECESSARY.

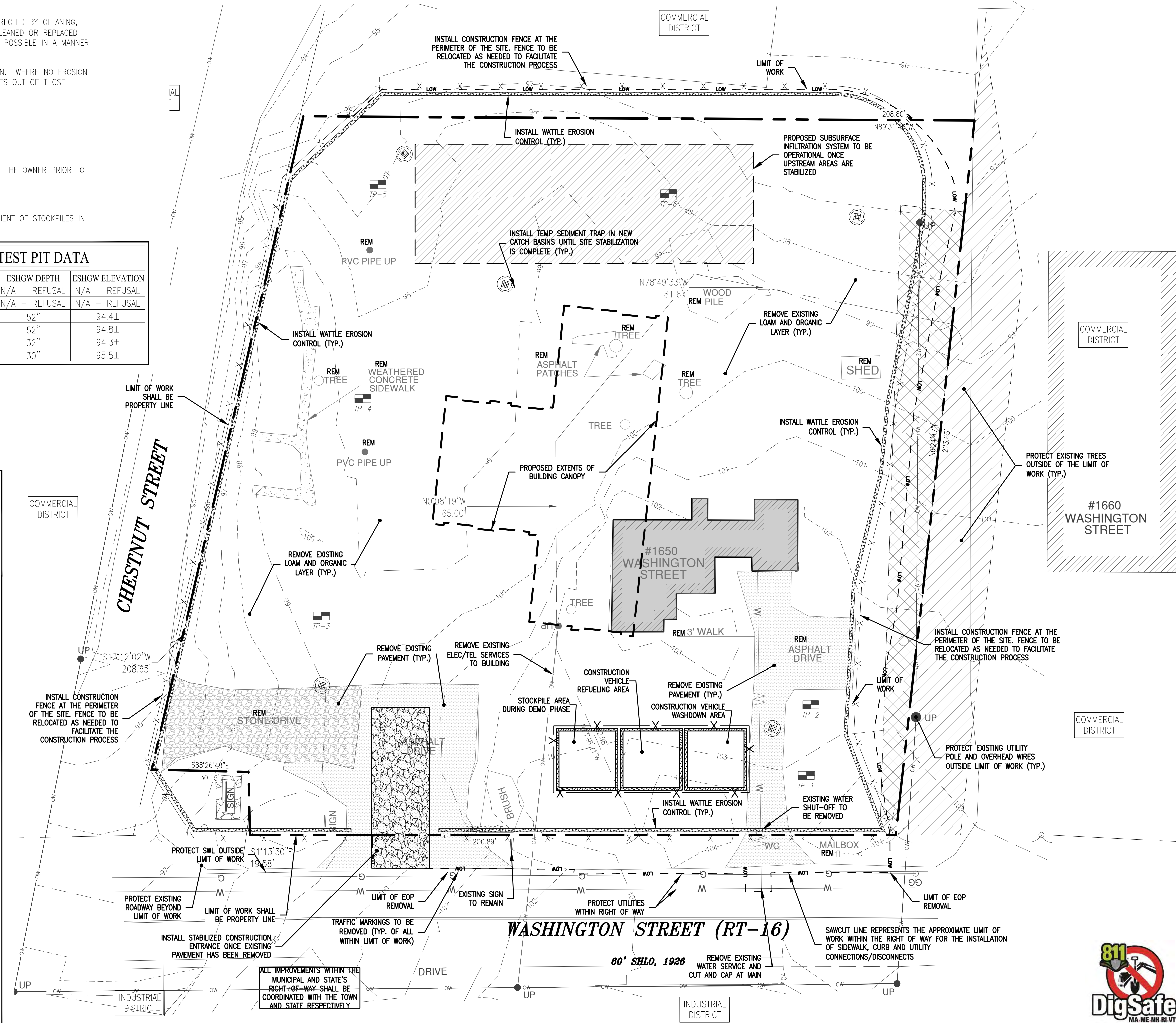
GENERAL ABBREVIATIONS

ASSESSOR'S PARCEL
BOTTOM OF CURB
BITUMINOUS CONCRETE CURB
BITUMINOUS CONCRETE
BOTTOM OF WALL
CATCH BASIN
CHAIN LINK FENCE
CLEANOUT
CONCRETE SURFACE
DRILL HOLE FOUND
DRAIN MANHOLE
DOUBLE WALL FIBER GLASS
DASHED WHITE LINE
DOUBLE YELLOW CENTERLINE
EDGE OF PAVEMENT
EXTRUDED CONCRETE CURB
ELECTRIC HANDHOLE
FINISHED FLOOR ELEVATION
FRONT YARD
VERTICAL GRANITE CURB
GAS METER
HIGH DENSITY
POLYETHYLENE PIPE
INVERT ELEVATION
LINEAL FEET
LANDSCAPED AREA
MONOLITHIC CONCRETE CURB
MATCH EXISTING
INVERT NOT AVAILABLE
NOW OR FORMERLY
ON CENTER
FINISH ELEVATION
ROOF DRAIN
REMOVE
REAR YARD
SEWER FORCE MAIN
SOLID WHITE EDGE LINE
SOLID WHITE LINE
SIDE YARD
TOP OF CURB
TOP OF WALL
UTILITY POLE
VITRIFIED CLAY
WATER GATE
WATER SHUT-OFF

LEGEND		
EXISTING	PROPOSED	DESCRIPTION
		PROPERTY LINE
		DRAIN MANHOLE
		CATCH BASIN
		SEWER MANHOLE
		DRAIN PIPE
		GAS LINE
		OVERHEAD WIRES
		WATER LINE
		SEWER LINE
		HYDRANT
		SIGN
		SITE LIGHT
		UTILITY POLE
		INDEX CONTOUR
		MINOR CONTOUR
		TREE LINE
		CONCRETE SIDEWALK
		IRON PIPE/IRON PIN
		EXISTING BUILDINGS & APPURTENANCES TO BE DEMOLISHED
		CONSTRUCTION FENCE
		WATTLES
		PROPOSED BUILDING PAD
		PAVEMENT TO BE RECLAIMED (IF SUITABLE)
		STABILIZED CONSTRUCTION ENTRANCE
		BORING LOCATION

TEST PIT DATA		
TEST PIT	ESHOW DEPTH	ESHOW ELEVATION
TP-1	N/A - REFUSAL	N/A - REFUSAL
TP-2	N/A - REFUSAL	N/A - REFUSAL
TP-3	52"	94.4±
TP-4	52"	94.8±
TP-5	32"	94.3±
TP-6	30"	95.5±






- CONTRACTOR SHALL COORDINATE THE LOCATION OF STAGING AREAS AND JOB TRAILER WITH THE ENGINEER AND OWNER PRIOR TO MOBILIZATION OF ANY EQUIPMENT ON THE SITE.
- CONTRACTOR SHALL NOT STOCKPILE OR LOCATE DUMPSTERS WITHIN WETLAND RESOURCE AREA BUFFER ZONES IF PRESENT ON SITE.
- CONTRACTOR SHALL REMOVE ALL EXCESS MATERIAL, DEBRIS, AND EQUIPMENT AND RESTORE OR REPAIR ANY DAMAGE THAT OCCURS TO THE SITE RESULTING FROM CONSTRUCTION ACTIVITY.
- DISPOSE OF ANY AND ALL DEMOLISHED BUILDING MATERIALS, STORAGE TANKS, PAVEMENT, BITUMINOUS CURBING, CONCRETE, VEGETATION, SURPLUS MATERIAL, AND SITE RUBBLE OFF-SITE, IN ACCORDANCE WITH LOCAL ORDINANCES, THE MASSACHUSETTS WETLAND PROTECTION ACT, CHAPTER 131 SECTION 40, G.L., AND ALL APPLICABLE STATE AND FEDERAL ENVIRONMENTAL REGULATIONS.
- CONTRACTOR SHALL ADHERE TO APPLICABLE PRE-BLASTING & BLASTING PROTOCOLS, INCLUDING DOT REGULATIONS IF ROCK IS ENCOUNTERED DURING CONSTRUCTION.



1. ZONING INFORMATION OBTAINED FROM THE TOWN OF HOLLISTON ZONING BYLAW AS AMENDED THROUGH MAY 2022.
2. THE PROJECT SITE INCLUDES ASSESSOR PARCELS 5-4-28.1 AND 5-4-28.2, EACH TOTALING 0.4+ ACRES AND 1.34+ ACRES, CORRESPONDING TO 1650 WASHINGTON STREET AND 35 CHESTNUT STREET, RESPECTIVELY.
3. THE PROJECT LIES WITHIN THE COMMERCIAL DISTRICT (C-1) AND DOES NOT APPEAR TO LIE WITHIN AN OVERLAY DISTRICT.
4. MODIFICATIONS TO THIS PLAN MAY OCCUR AS UNFORESEEN CONDITIONS ARISE. ALL CHANGES SHALL BE APPROVED BY THE ENGINEER & MUNICIPALITY.
5. ALTERNATIVE METHODS AND PRODUCTS OTHER THAN THOSE SPECIFIED MAY BE USED IF REVIEWED AND APPROVED BY THE OWNER, SITE ENGINEER, AND APPROPRIATE REGULATORY AGENCY PRIOR TO INSTALLATION.
6. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL PRODUCTS, MATERIALS, AND PLANT SPECIFICATIONS TO THE OWNER AND SITE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVERY TO THE SITE. ALLOW A MINIMUM OF 14 WORKING DAYS FOR REVIEW.
7. THE CONTRACTOR SHALL PROVIDE AS-BUILT RECORDS OF ALL CONSTRUCTION (INCLUDING UNDERGROUND UTILITIES) TO THE OWNER AT THE END OF THE CONSTRUCTION.
8. THE SITE DOES NOT APPEAR TO INCLUDE A NHESP AREA, AN ACEC OR A WETLAND RESOURCE AREA.
9. THE PROPERTY IS LOCATED WITHIN THE ZONE X FLOOD ZONE, AS SHOWN ON THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 2501950637E WHICH BEARS AN EFFECTIVE DATE OF JUNE 4, 2010.

1. THE BUILDING OUTLINE SHOWN ON THIS PLAN DEPICTS THE FINISH TO FINISH EXTENTS OF THE BUILDING. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL DRAWINGS FOR FOUNDATION PLANS FOR THE PURPOSE OF STAKING OUT THE BUILDING. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS AND EXTERIOR FEATURES INCLUDING UTILITY METERS, BOLLARDS, DOORS, PILASTERS, RAMPS, ETC.
2. BUILDING SIDEWALK DIMENSIONS ARE MEASURED FROM EXTERIOR FINISH MATERIAL OF STRUCTURE.
3. ALL LIMITS OF PAVEMENT SHALL BE CURBED, UNLESS OTHERWISE NOTED.
4. ALL ONSITE CURB SHALL BE BITUMINOUS CONCRETE UNLESS OTHERWISE SPECIFIED.
5. PARALLEL PARKING SPACE DIMENSIONS AS SHOWN ON THE PLAN ARE 20' LONG, PERPENDICULAR VEHICLE SPACE DIMENSIONS AS SHOWN ON THE PLAN ARE 12' WIDE X 18' LONG.
6. ALL PAVEMENT MARKINGS SHALL BE APPLIED WITH USE OF PAINTING MACHINES AND/OR STENCILS. ALL PAINTMENT FOR PAVEMENT MARKING SHALL MEET THE REQUIREMENTS OF SOLVENTBORNE APPLICATION RECOMMENDATIONS (LATEX TRAFFIC PAINT BY BENJAMIN MOORE #D58 LOW VOC). PARKING STRIP AND ISLAND STRIPING SHALL BE 4" WIDE AND SHALL BE STRAIGHT WITH A CLEAN EDGE. ALL DIRECTIONAL ARROWS, STOP BARS, ETC. SHALL CONFORM WITH MUTCD.
7. PAVEMENT LETTERS SHALL BE 2" WIDE X 2' LONG.
8. STOP BARS SHALL BE 12" WIDE AND SOLID LINES SHALL BE 4" IN WIDTH (SEE SITE PLAN FOR LENGTH & COLOR).
9. ACCESSIBLE PARKING SPACES SHALL CONFORM TO THE LATEST EDITION OF THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA) AND ACCESSIBLE TRAVELING ACCESS BOARD (ABE) AS SHOWN ON THE SITE LAYOUT PLAN.
10. ACCESSIBLE PARKING AISLE STRIPING SHALL CONSIST OF 4' SOLID LINE OF LATEX TRAFFIC PAINT BY BENJAMIN MOORE #D58 LOW VOC, ADA BLUE COLOR ORIENTED AT A 45 DEGREE ANGLE AND SPACED 3' ON CENTER.
11. DIRECTIONAL AND ACCESSIBLE SIGNS SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR COLOR AND SIZE.
12. ALL FLAT WORK WITHIN THE RIGHT OF WAY SHALL CONFORM TO MUNICIPAL/STATE STANDARDS.
13. REPLACEMENT/PAVEMENT AS A RESULT OF UTILITY AND DRAINAGE TRENCHING WITHIN THE RIGHT-OF-WAY SHALL MATCH EXISTING PAVEMENT THICKNESS.
14. SNOW SHALL NOT BE STORED IN ANY LANDSCAPED AREAS, EXCEPT FOR DESIGNATED SNOW STORAGE AREAS, AND SHALL NOT BE STORED IN AN MANNER WHICH AFFECTS VISIBILITY FOR PEDESTRIANS AND VEHICLES. THE CLEARING OF SNOW MUST COMMENCE WHEN STOCKPILED SNOW EITHER IMPEDES THE SIDEWALK OR PARKING SPACE AREA, AT WHICH TIME THE APPLICANT WOULD BE EXPECTED TO REMOVE THE SNOW WITHIN 24 HOURS.
15. SITE LIGHTS TO BE INSTALLED PER DETAIL. CONTRACTOR SHALL NOTIFY THE ENGINEER IF THIS DISTANCE CANNOT BE ACHIEVED DUE TO DRAINAGE OR UTILITY CONFLICTS. REFER TO DETAILS FOR SITE LIGHT POLE BASE DETAILS AND SPECIFICATIONS.
16. THE TRUCK DEPICTED ON THIS PLAN IS A SINGLE UNIT 30' TRUCK.

PARKING & LOADING INFORMATION		
USE	REQUIRED	PROVIDED
PARKING: CAR WASH: SECTION HIL D, 6 – PERSONAL SERVICE ESTABLISHMENT	SECTION V.C.J – OTHER USES: NUMBER OF SPACES TO BE DETERMINED BY PLANNING BOARD (ASSUME 5 EMPL)	8 SPACES + 10 VACUUMS SPACES

MUTCD REFERENCE	SIGN
R1-1 30"x30"	
R7-8 12"x18"	
R7-8a 12"x6"	
R5-1 24"x24"	
R6-1L 8"x24"	

GENERAL ABBREVIATIONS	
ASSESSORS PARCEL	A.P.
BOTTOM OF CURB	BC
BITUMINOUS CONCRETE CURB	BCC
BITUMINOUS CONCRETE	BT. CONC
BOTTOM OF WALL	BW
CATCH BASIN	CB
CAPE CORD BERM	CCB
CHAIN LINK FENCE	C.L.F.
CLEANOUT	CO
CONCRETE SURFACE	CONC
DRAIN MANHOLE	DMH
DOUBLE WALL FIBER GLASS	DWFG
DASHED WHITE LINE	DYCL
DOUBLE YELLOW CENTERLINE	DYCL
EDGE OF CURB	EC
EDGE OF PAVEMENT	EOP
EXTRUDED CONCRETE CURB	EC
FINISHED FLOOR ELEVATION	FF
FRONT YARD	FY
VERTICAL GRANITE CURB	GC
SLOPED GRANITE CURB	SGC
GAS METER	GM
HIGH DENSITY	HD
POLYETHYLENE PIPE	PE
INVERT ELEVATION	I=
LINEAL FEET	LF
LANDSCAPED AREA	LA
MONOLITHIC CONCRETE CURB	MCC
MATCH EXISTING	ME
INVERT NOT AVAILABLE	N/A
NOW OR FORMERLY	N/F
ON CENTER	OC
PRECAST CONCRETE CURB	PCC
RIM ELEVATION	R=
ROOF DRAIN	RD
REMOVE	REM
REAR YARD	RY
SOLID WHITE EDGE LINE	SWEL
SOLID WHITE LINE	SWL
SIDE YARD	SY
SOLID YELLOW LINE	SYL
TOP OF CURB	TC
TOP OF WALL	TW
UTILITY POLE	UP



CDG PROJECT #:		2.3011
REVISIONS:		
REV	DATE	COMMENT
1	11/09/23	REV PER PEER REVIEW COMMENTS
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CIVIL DESIGN
GROUP, LLC

PREPARED FOR:

3 MICHAUD DRIVE
FRAMINGHAM, MA 01701

PROPOSED CAR WASH DEVELOPMENT

SCALE:

20 0 10 20 40

GRAPHIC SCALE IN FEET

SITE PLAN

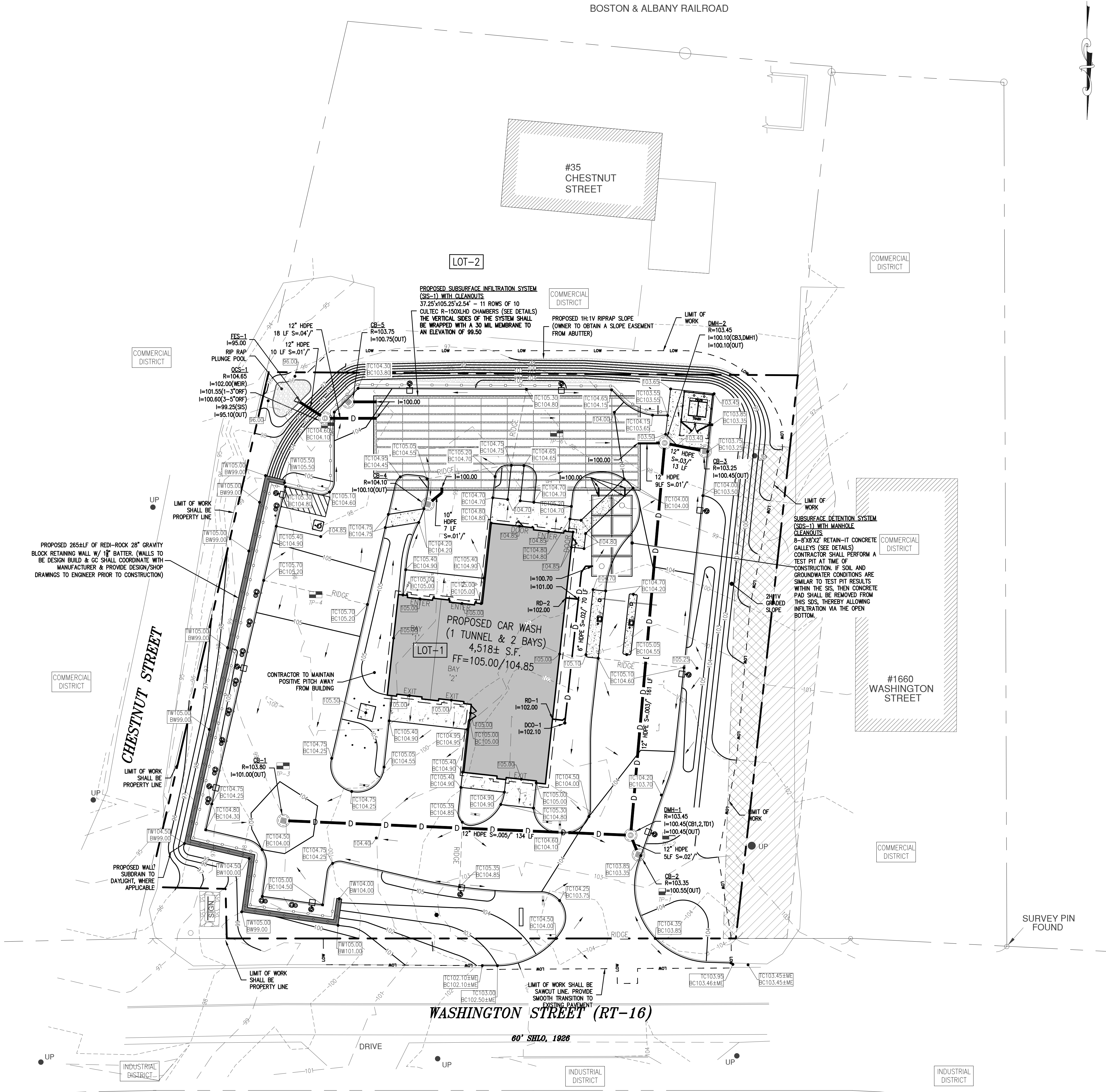
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DATE: 07/14/2023

GRADING & DRAINAGE NOTES

1. THE ELEVATIONS SHOWN ON THIS PLAN ARE BASED ON THE DATUM REFERENCE ON THE EXISTING CONDITIONS PLAN.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL CONTROL POINTS AND ELEVATION BENCHMARKS THROUGHOUT CONSTRUCTION.
3. EXTERIOR ELEVATIONS ALONG EACH BUILDING SIDE MAY VARY IN ORDER TO ACHIEVE GRADE IN CERTAIN AREAS. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM THE PROPOSED BUILDING.
4. NEW SIDEWALKS SHALL HAVE A MAXIMUM CROSS SLOPE OF 2.0% AND A MAXIMUM RUNNING SLOPE OF 5.0% UNLESS AN ADA COMPLIANT RAMP IS PROVIDED. RAMPS SHALL NOT EXCEED AN 8.0% RUNNING SLOPE AND SHALL NOT EXCEED A 6" RISE UNLESS A HANDRAIL IS PROVIDED. FURTHERMORE, ACCESSIBLE PARKING SPACES AND PROXIMATE ACCESS AISLES SHALL BE SLOPED AT A MAXIMUM OF 2.0% IN ALL DIRECTIONS. SHOULD ANY DISCREPANCIES WITH THESE REQUIREMENTS ARISE DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY SO THAT AN ACCEPTABLE SOLUTION CAN BE DETERMINED.
5. CONTRACTOR SHALL NOTIFY ENGINEER IF THE ILLUSTRATED GRADES CANNOT BE ACHIEVED WITHIN ACCESSIBLE AREAS, INCLUDING PARKING SPACES, ROUTES AND RAMPS.
6. UNLESS OTHERWISE SPECIFIED, THE CONTRACTOR SHALL PROVIDE AS-BUILT RECORDS OF ALL CONSTRUCTION (INCLUDING UNDERGROUND UTILITIES) TO THE OWNER AT THE END OF THE CONSTRUCTION.
7. CURB SHALL TRANSITION FROM FLUSH TO FULL DEPTH REVEAL WITHIN 6 FEET.
8. PROPOSED BOTTOM OF CURB ELEVATIONS ALONG EXISTING STREETS ARE BASED ON EXISTING CONDITIONS INFORMATION AND SHALL BE CONSIDERED APPROXIMATE. CONTRACTOR SHALL MATCH EXISTING EDGE OF PAVEMENT GRADE.
9. EXISTING DRAINAGE AND UTILITY RIM ELEVATIONS LOCATED WITHIN THE LIMIT OF WORK TO REMAIN SHALL BE ADJUSTED BY THE CONTRACTOR TO MATCH NEW FINISHED GRADE.
10. ALL FLAT WORK WITHIN THE RIGHT OF WAY SHALL CONFORM TO MUNICIPAL/STATE STANDARDS.
11. EXISTING TREES OUTSIDE OF THE LIMIT OF WORK SHALL BE PROTECTED DURING CONSTRUCTION.
12. ALL DISTURBED AREAS OUTSIDE THE LIMIT OF WORK SHALL BE RESTORED IN KIND.
13. NEW DRAINAGE PIPE SHALL BE DUAL WALL CORRUGATED HDPE (ADS N-12 OR APPROVED EQUAL), UNLESS OTHERWISE SPECIFIED.
14. ROOF DRAIN LEADERS SHALL BE 6" HDPE PIPE, UNLESS OTHERWISE SPECIFIED.
15. ELEVATION OF LANDSCAPED AREAS ARE GIVEN AT PLANTED/SOD GRADE.
16. THE AREA BELOW THE SUBSURFACE INFILTRATION AREA SHALL BE LEFT UNCOMPACTED.
17. ANY DISTURBED AREAS THAT WILL NOT BE STABILIZED BY PAVEMENT OR BUILDING BASE COURSES SHALL BE SODDED OR SEEDED & MULCHED. MULCHING SHALL BE USED TO STABILIZE DISTURBED AREAS.
18. ALL BACK FILL SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER. BACK FILL SHALL BE NON-PLASTIC IN NATURE, FREE FROM ROOTS, VEGETATIVE MATTER, WASTE, CONSTRUCTION MATERIALS, OR OTHER OBJECTIONABLE MATERIAL. BACK FILL MATERIALS SHALL BE CAPABLE OF BEING COMPACTED BY MECHANICAL MEANS AND THE MATERIAL SHALL HAVE NO TENDENCY TO FLOW OR BEHAVE IN A PLASTIC MANNER UNDER TAMPING BLOWS OR PROOF ROLLING. ALL BACK FILL MATERIAL SHALL BE PLACED IN LOOSE 6-IN. LIFTS AND COMPACTED BY MECHANICAL MEANS, AS SPECIFIED BY THE GEOTECHNICAL ENGINEER.
19. ALL BUILDINGS, SIDEWALK, AND PAVEMENT SUB-GRADES SHALL BE COMPACTED TO 98% OF ASTM D698 TO A DEPTH OF 12-IN. AND TO 95% OF ASTM D698 BELOW 12-IN DEPTHS. ALL OTHER NON-STRUCTURAL AREAS SHALL BE COMPACTED TO 90% OF ASTM D698.
20. PROPOSED CATCH BASINS SHALL INCLUDE ELIMINATOR HOODS AS SPECIFIED IN THE DETAILS.
21. PROVIDE A SMOOTH, FLUSH TRANSITION BETWEEN ALL NEW AND EXISTING PAVEMENTS.

LEGEND		
EXISTING	PROPOSED	DESCRIPTION
		DRAIN MANHOLE
		CATCH BASIN
		DRAIN PIPE
		INDEX CONTOUR
		MINOR CONTOUR
		TOP/BOTTOM CURB ELEVATION
		SPOT ELEVATION
		ACCESSIBLE PAVEMENT MARKINGS
		RAMP UPSLOPE DIRECTION
		LIGHT
		UTILITY POLE
		CONCRETE SIDEWALK/PAD
		BIT. CONC. SIDEWALK
		IRON PIPE/IRON PIN
GENERAL ABBREVIATIONS		
ASSESSOR'S PARCEL		
BOTTOM OF CURB		
BITUMINOUS CONCRETE CURB		
BITUMINOUS CONCRETE		
BOTTOM OF WALL		
CATCH BASIN		
CHAIN LINK FENCE		
DRAINAGE CLEANOUT		
CONCRETE SURFACE		
DRAIN MANHOLE		
DOUBLE WALL FIBER GLASS		
DASHED WHITE LINE		
DOUBLE YELLOW CENTERLINE		
EDGE OF PAVEMENT		
EXTRUDED CONCRETE CURB		
ELECTRIC HANDHOLE		
FINISHED FLOOR ELEVATION		
FRONT YARD		
VERTICAL GRANITE CURB		
GAS METER		
HIGH DENSITY POLYETHYLENE PIPE		
INVERT ELEVATION		
LINEAL FEET		
LANDSCAPED AREA		
MONOLITHIC CONCRETE CURB		
MATCH EXISTING		
INVERT NOT AVAILABLE		
NOW OR FORMERLY		
ON CENTER		
RIM ELEVATION		
ROOF DRAIN		
REMOVE		
REAR YARD		
SEWER FORCE MAIN		
SOLID WHITE EDGE LINE		
SOLID WHITE LINE		
SIDE YARD		
TOP OF CURB		
TOP OF WALL		
UTILITY POLE		
VITRIFIED CLAY		
WATER GATE		
WATER SHUT-OFF		
A.P.		
BC		
BCC		
BIT.		
CONC		
BW		
CB		
C.L.F.		
DCO		
CONC		
DH (F)		
DMH		
DWFG		
DYCL		
EOP		
ECC		
EHH		
FF=		
FY		
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GM		
HDPE		
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SEAL:

COMM. SEAL OF MASSACHUSETTS

PHILIP R. HENRY
CIVIL
No. 48547
REGISTERED ENGINEER

PHILIP R. HENRY, P.E.

PLANNING BOARD:

CIVIL ENGINEER:

CIVIL DESIGN GROUP, LLC

21 HIGH STREET, SUITE 207
NORTH ANDOVER, MA 01845
www.cdgenengineering.com
p: 978-794-5400 f: 978-965-3971

PREPARED FOR:

1650 WASHINGTON STREET, LLC

3 MICHAUD DRIVE
FRAMINGHAM, MA 01701

PROJECT:

PROPOSED CAR WASH DEVELOPMENT

1650 WASHINGTON STREET (RT-16)
HOLLISTON, MA 01746

SCALE:

20 0 10 20 40

GRAPHIC SCALE IN FEET

SHEET:

GRADING & DRAINAGE PLAN

5

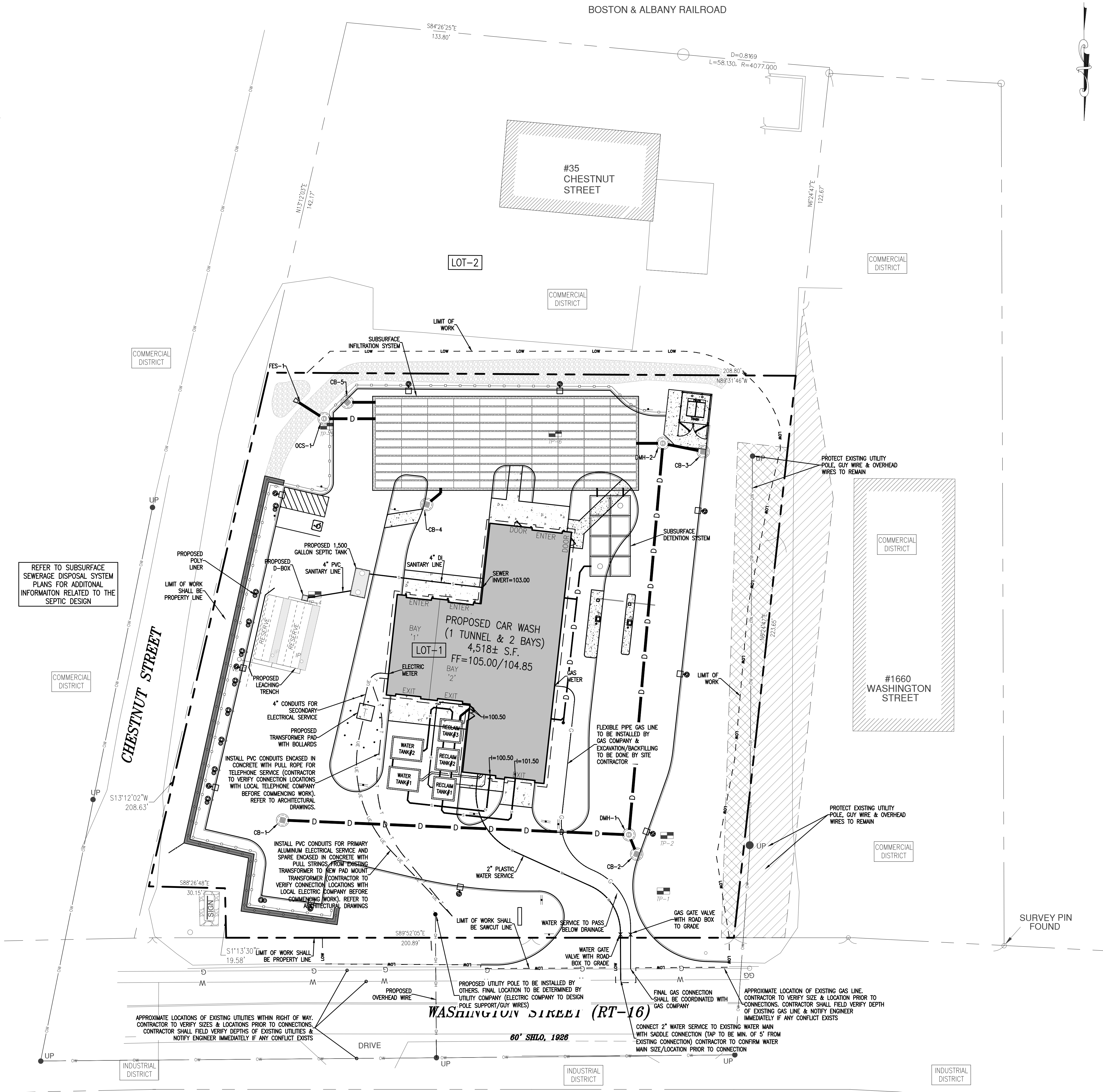
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07/14/2023

UTILITY NOTES

1. ALL WATER SERVICES SHALL BE INSTALLED WITH A MINIMUM 5' AND A MAXIMUM OF 6' OF COVER EXCEPT AS NOTED OR DETAILED OTHERWISE. GREATER DEPTHS ARE PERMITTED WHERE REQUIRED TO AVOID CONFLICTS WITH OTHER UTILITIES.
2. ALL WATER SERVICE INSTALLATION METHODS AND TESTING REQUIREMENTS SHALL MEET OR EXCEED ALL LOCAL MUNICIPAL REQUIREMENTS.
3. WATER, ELECTRICAL, TELEPHONE AND GAS MAINS DEPICTED IN THE RIGHT OF WAY ARE BASED ON RECORD DRAWINGS. CONTRACTOR SHALL VERIFY SIZE AND LOCATION OF ALL UTILITIES PRIOR TO CONNECTION.
4. PROPOSED GAS SERVICE LOCATION IS APPROXIMATE ONLY. THE CONTRACTOR SHALL CONFIRM WITH THE GAS COMPANY THAT GAS LINE INSTALLATION SHALL BE BY THE LOCAL GAS COMPANY. THE CONTRACTOR SHALL GIVE THE GAS COMPANY ADVANCE NOTICE OF WHEN THE GAS LINE CAN BE INSTALLED. THE CONTRACTOR IS RESPONSIBLE FOR ALL EXCAVATION, BACKFILL AND COMPACTION FOR THE GAS LINE.
5. DUE TO THE SCALE OF THE SITEWORK DRAWINGS, THE EXACT LOCATION OF UTILITY SERVICES TO THE BUILDING SHALL BE VERIFIED WITH THE BUILDING DRAWINGS.
6. ALL UTILITIES, PIPE MATERIALS, STRUCTURES, AND INSTALLATION METHODS SHALL CONFORM TO MUNICIPALITY STANDARDS AND REQUIREMENTS.
7. SUITABLE, TEMPORARY PLUGS SHALL BE INSTALLED IN THE OPEN ENDS OF UTILITY SERVICES TO THE BUILDING PRIOR TO BACKFILLING. STUB LOCATIONS SHALL BE MARKED IN THE FIELD SO THAT THEY MAY BE EASILY LOCATED.
8. WATER SERVICES TO BE CUT & CAPPED AT MAIN AND SERVICE LINES SHALL BE ABANDONED IN PLACE, UNLESS OTHERWISE SPECIFIED.
9. GAS SERVICES TO BE CUT & CAPPED AT PROPERTY LINE AND ABANDONED IN PLACE, UNLESS OTHERWISE SPECIFIED.
10. WATER SERVICE CONNECTIONS SHALL BE INSPECTED BY THE MUNICIPAL WATER & SEWER DEPARTMENT.
11. ALL SITE DRAINAGE, WATER, AND SEWER WORK OUTSIDE THE BUILDING FOOTPRINT SHALL BE PERFORMED BY A LICENSED DRAIN LAYER.
12. EXISTING DRAINAGE AND UTILITY RIM ELEVATIONS LOCATED WITHIN THE LIMIT OF WORK TO REMAIN SHALL BE ADJUSTED BY THE CONTRACTOR TO MATCH NEW FINISHED GRADE.
13. CONTRACTOR TO FIELD VERIFY DEPTH OF EXISTING UTILITIES ALONG THE PATH OF THE PROPOSED UTILITY CONNECTIONS AND NOTIFY ENGINEER IMMEDIATELY IF A CONFLICT EXISTS.
14. EXCAVATION, CONDUIT INSTALLATION AND BACKFILLING FOR ELECTRICAL AND TELEPHONE SERVICES TO BE PERFORMED BY SITE CONTRACTOR.
15. ALL UTILITIES ARE TO BE LOCATED UNDERGROUND UNLESS OTHERWISE NOTED.
16. WASTEWATER FROM THE PROJECT WILL BE DIRECTED VIA GRAVITY SEWER PIPES TO INDIVIDUAL LOT SEWAGE DISPOSAL SYSTEMS. THE SEWERAGE DISPOSAL SYSTEMS WILL BE DESIGNED FINALIZED UNDER SEPARATE COVER.
17. SEWER SHALL NOT BE PLACED WITHIN 10' (HORIZONTALLY) OF A WATER LINE AND THE SEWER MUST BE 18" BELOW THE WATER LINE AT NECESSARY CROSSINGS.
18. THE ONSITE SEPTIC SYSTEMS HAVE BEEN DESIGNED BY OTHERS UNDER SEPARATE COVER. CONTRACTOR SHALL REFER TO THE SEPTIC DESIGN PLANS FOR ADDITIONAL INFORMATION AND DETAILS.
19. THE CONTRACTOR, ON BEHALF OF THE DEVELOPER, SHALL SUBMIT UTILITY AS-BUILT PLANS IN PAPER AND PDF FORMAT INCLUDING SWING TIES FOR SEWER AND WATER TO THE TOWN ENGINEERING DEPARTMENT.
20. THE CONTRACTOR SHALL COORDINATE ALL PROPOSED GAS, ELECTRIC, TELEPHONE, AND CABLE UTILITY WORK WITH THE RESPECTIVE UTILITY COMPANIES. THE PROPOSED CONNECTION LOCATIONS AND DETAILS PROVIDED HEREIN ARE FOR REPRESENTATION PURPOSES ONLY. FINAL CONNECTION POINTS AND DETAILS SHALL BE AS DETERMINED AND REQUIRED BY THE UTILITY COMPANIES.
21. TRANSFORMERS AND ASSOCIATED PROTECTIVE BOLLARDS SHALL BE PAINTED YELLOW, UNLESS OTHERWISE SPECIFIED BY THE OWNER OR UTILITY COMPANY.
22. GUY WIRES SHALL BE INSTALLED AS REQUIRED/DESIGNED BY THE UTILITY COMPANY.

CAR WASH EXTERIOR STRUCTURE INFORMATION		
STRUCTURE	RIM ELEVATION	INVERT ELEVATION
RECLAIM TANK #1	104.45±	100.20(2" 4" 6"IN), 99.70(6"OUT)
RECLAIM TANK #2	104.60±	99.70(6"IN)x2, 99.70(6"OUT)x2
RECLAIM TANK #3	104.90±	99.70(6"IN)x2, 100.70(10"OUT), 99.45(6"OUT)
WATER TANK #1	104.50±	99.15(2"IN), 92.00(6"EQ).
WATER TANK #2	104.75±	99.15(6"IN), 92.00(6"EQ).



NOT FOR CONSTRUCTION

CDG PROJECT #:23011

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SEAL:

PHILIP R. HENRY, P.E.

PLANNING BOARD:

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Civil Design Group, LLC

21 HIGH STREET, SUITE 207
NORTH ANDOVER, MA 01845
www.cdgeengineering.com
p: 978-794-5400 f: 978-965-3971

1650 WASHINGTON STREET, LLC

3 MICHAUD DRIVE
FRAMINGHAM, MA 01701

PROJECT:

PROPOSED CAR WASH DEVELOPMENT

1650 WASHINGTON STREET (RT-16)
HOLLISTON, MA 01746

SCALE:

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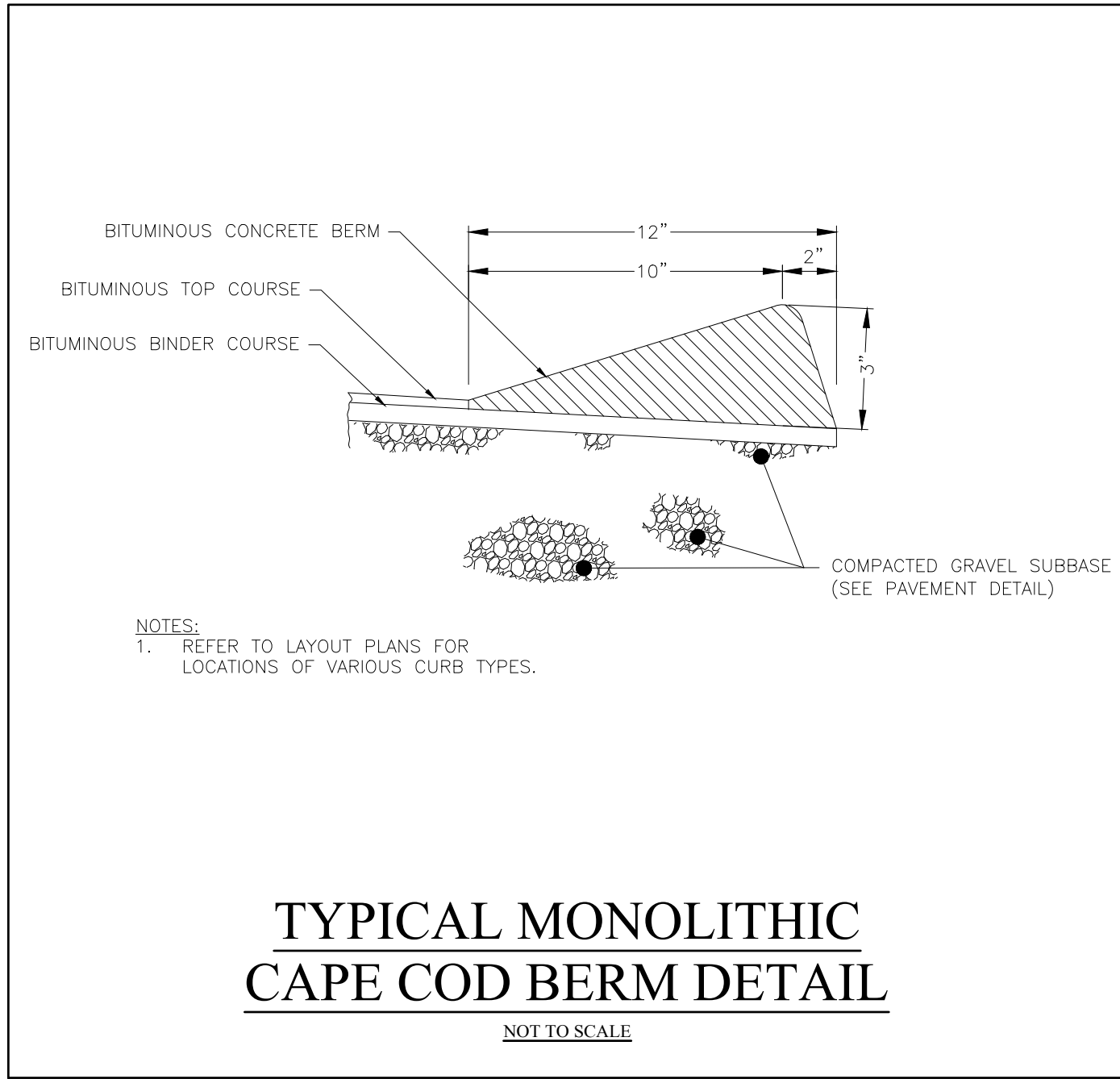
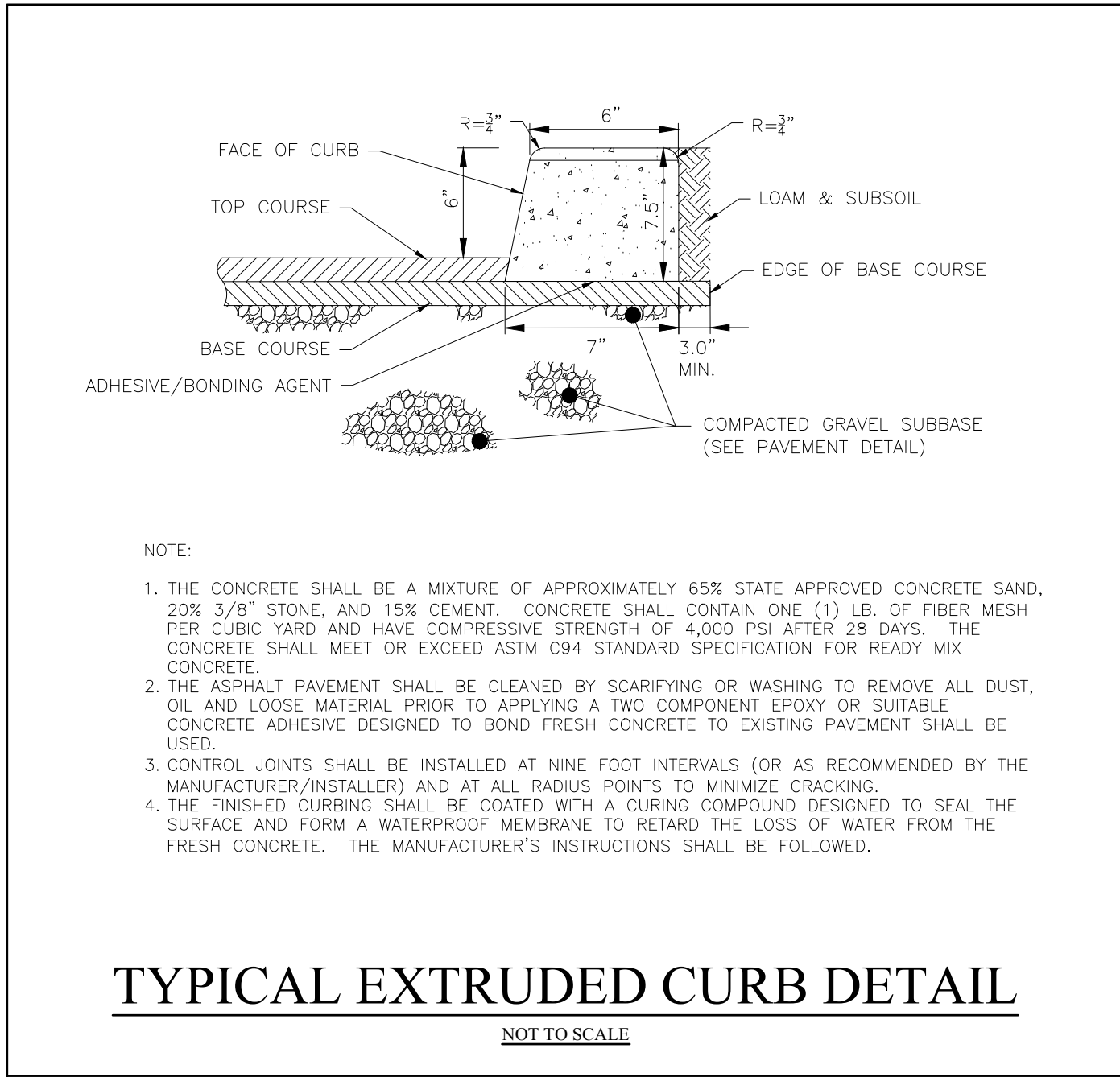
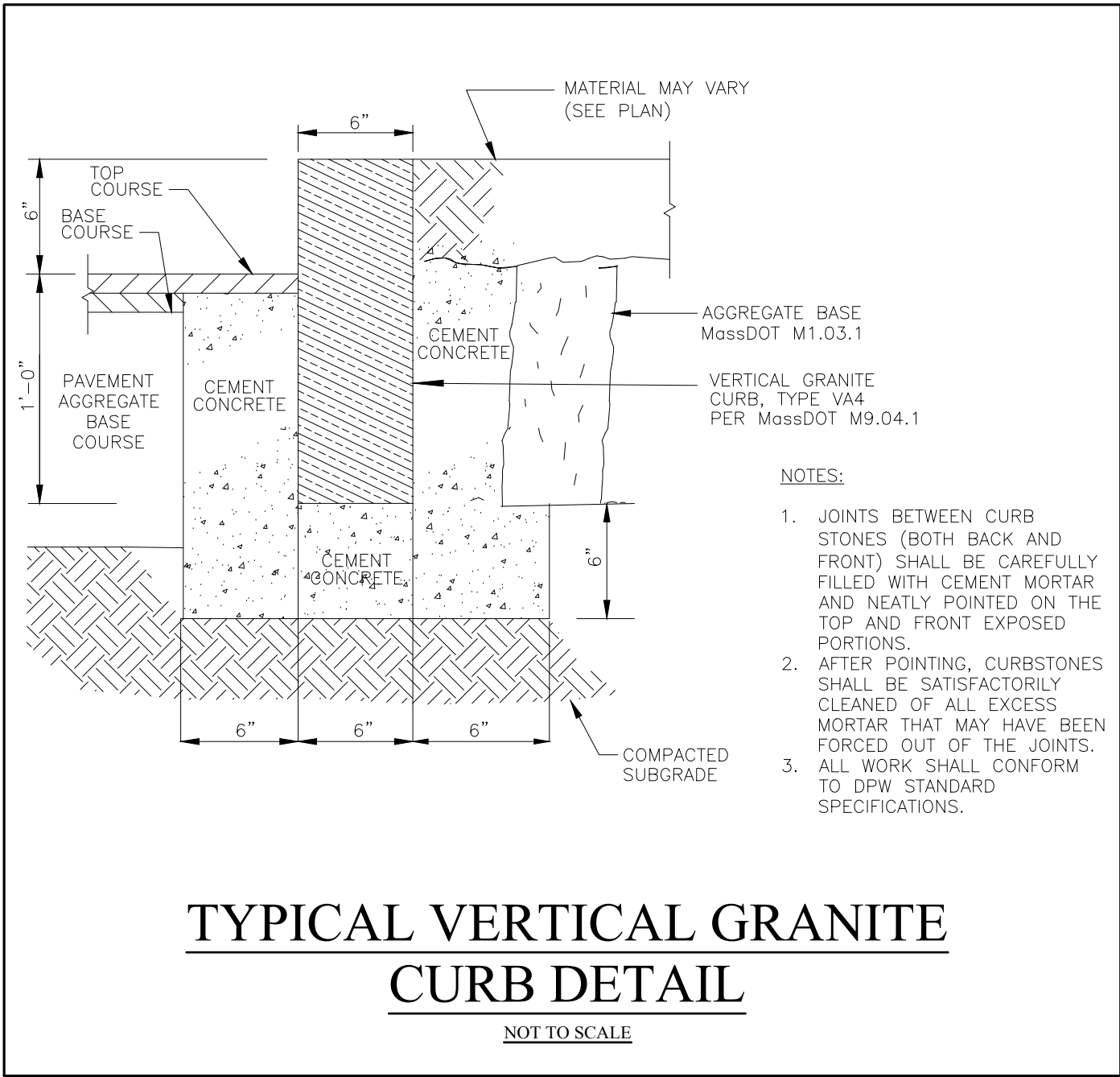
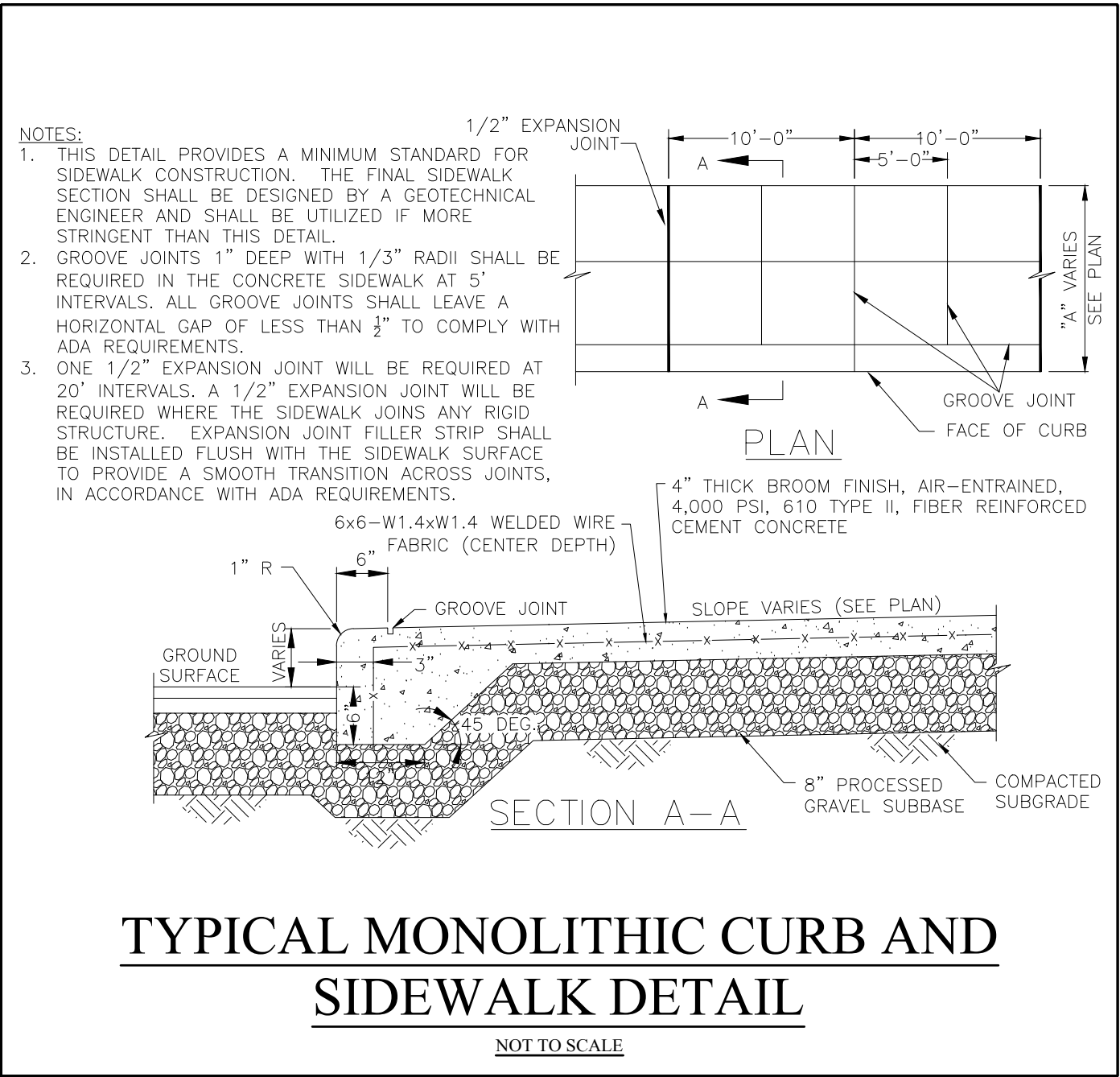
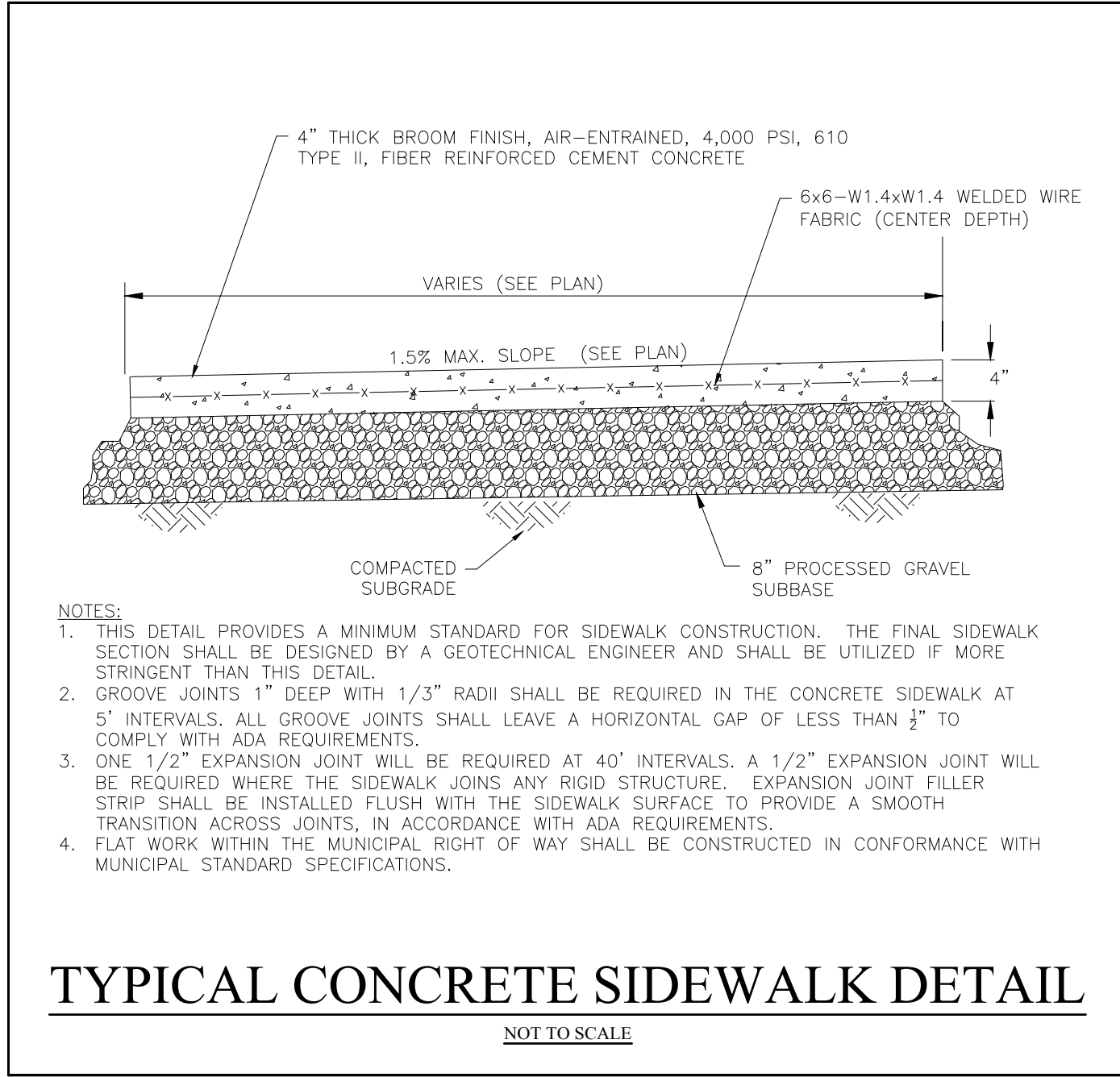
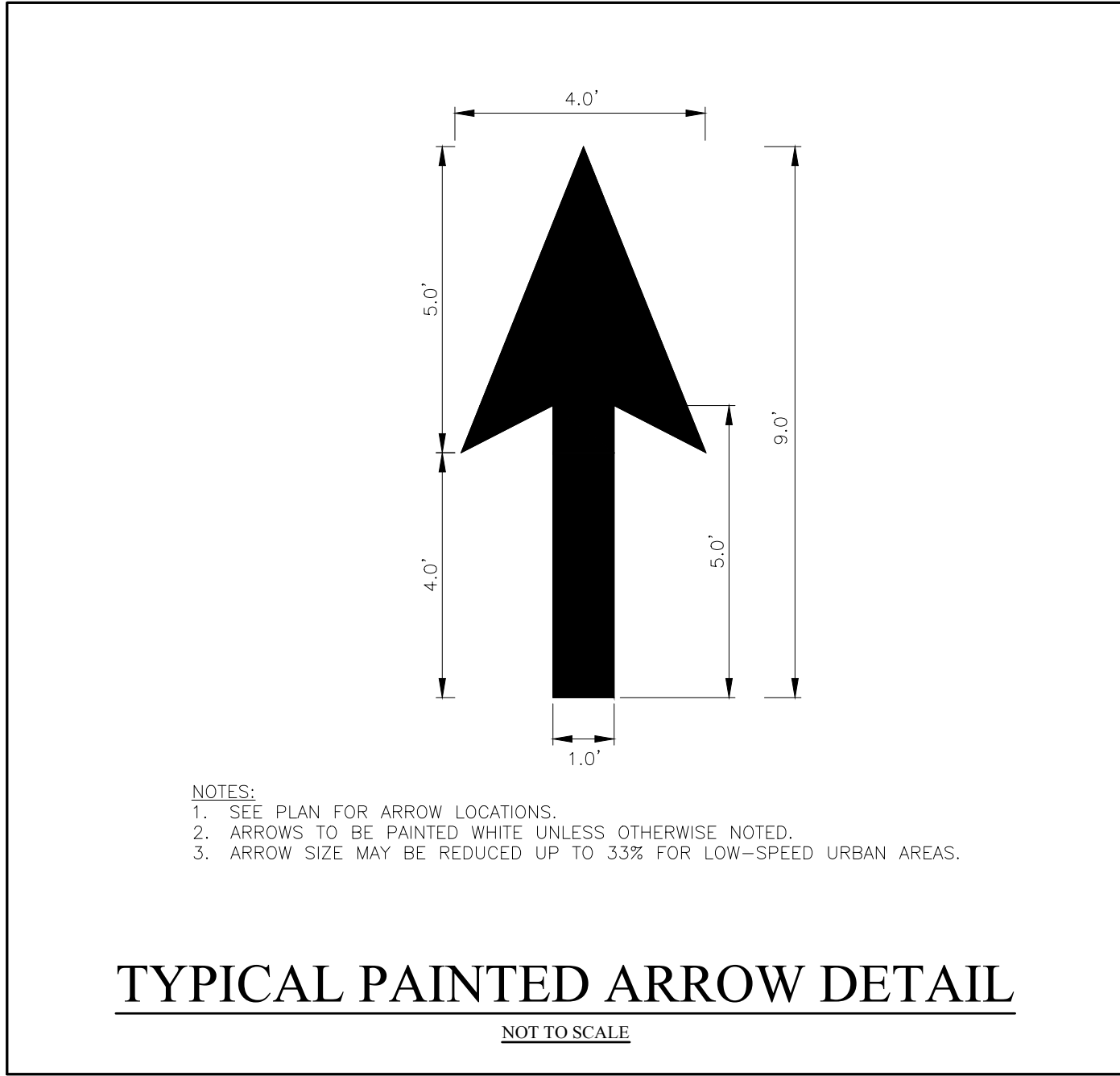
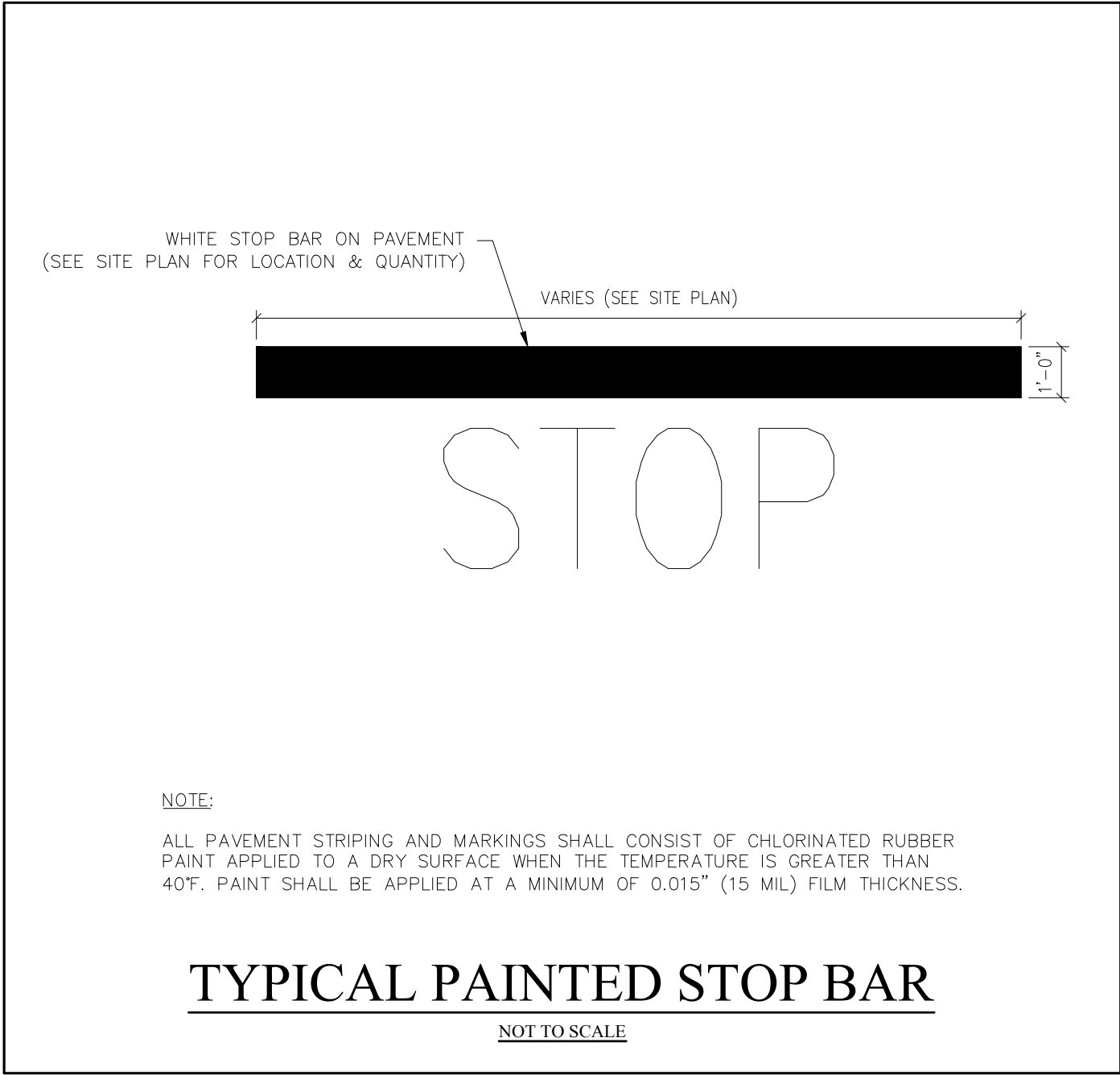
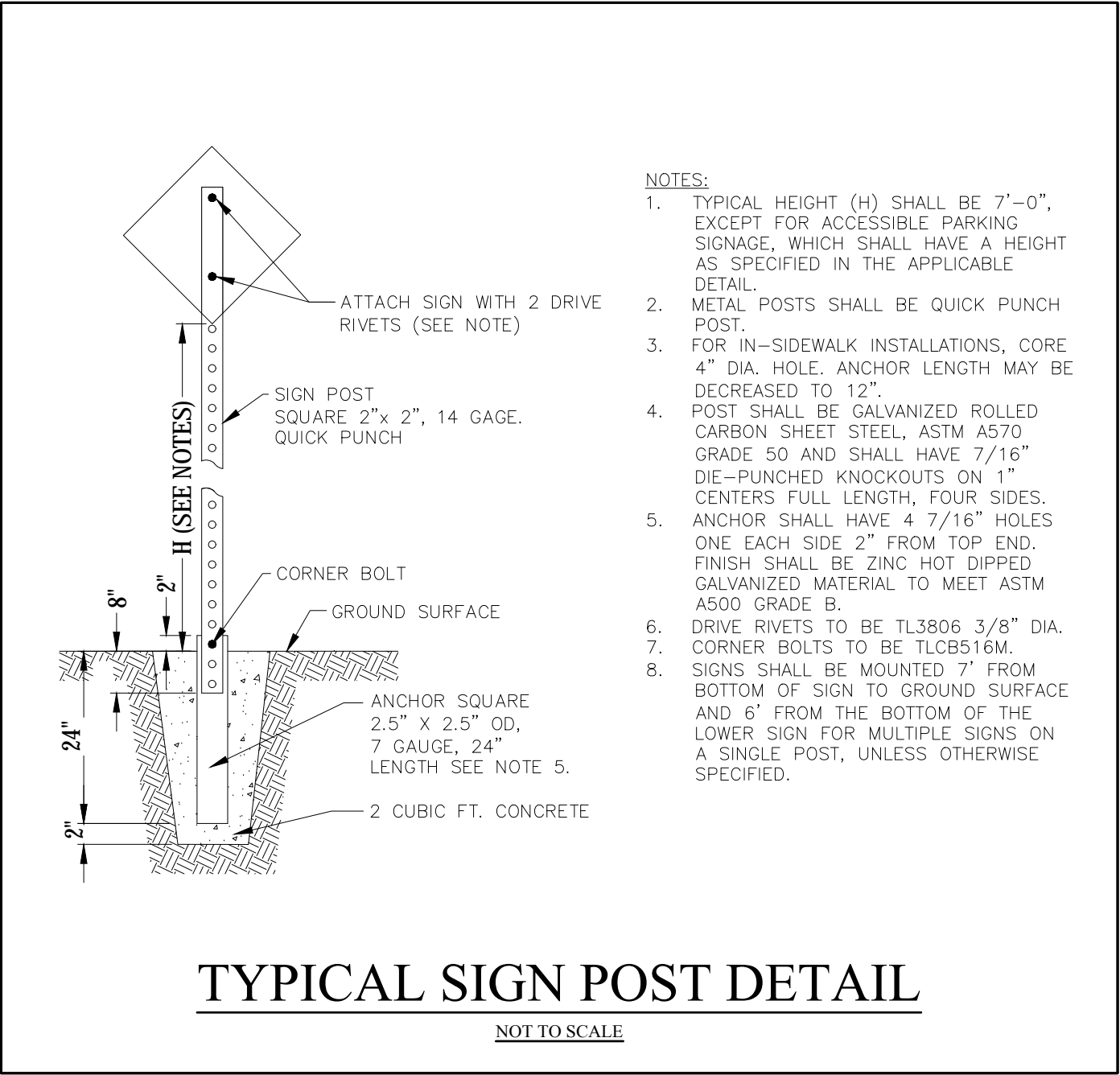
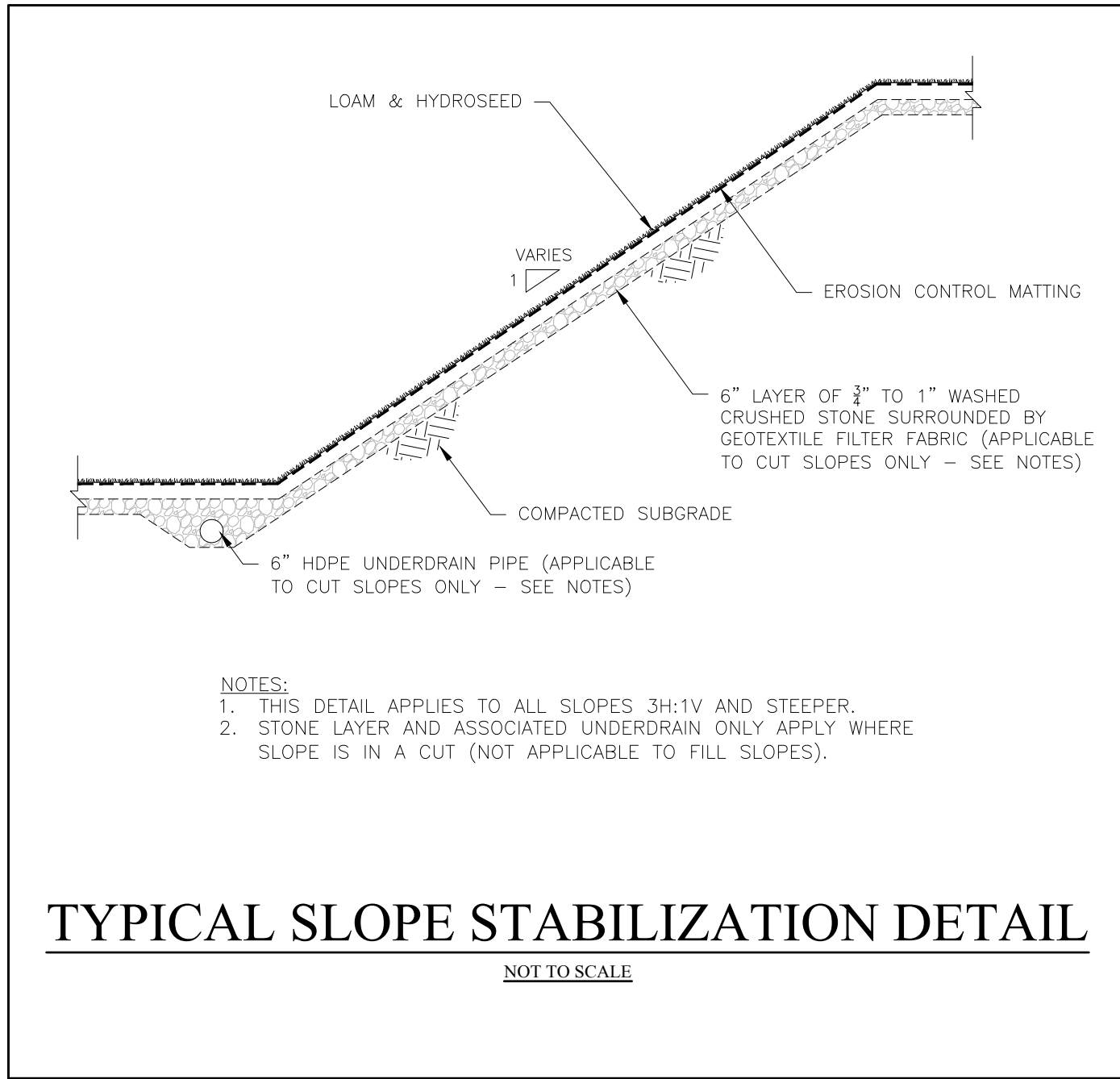
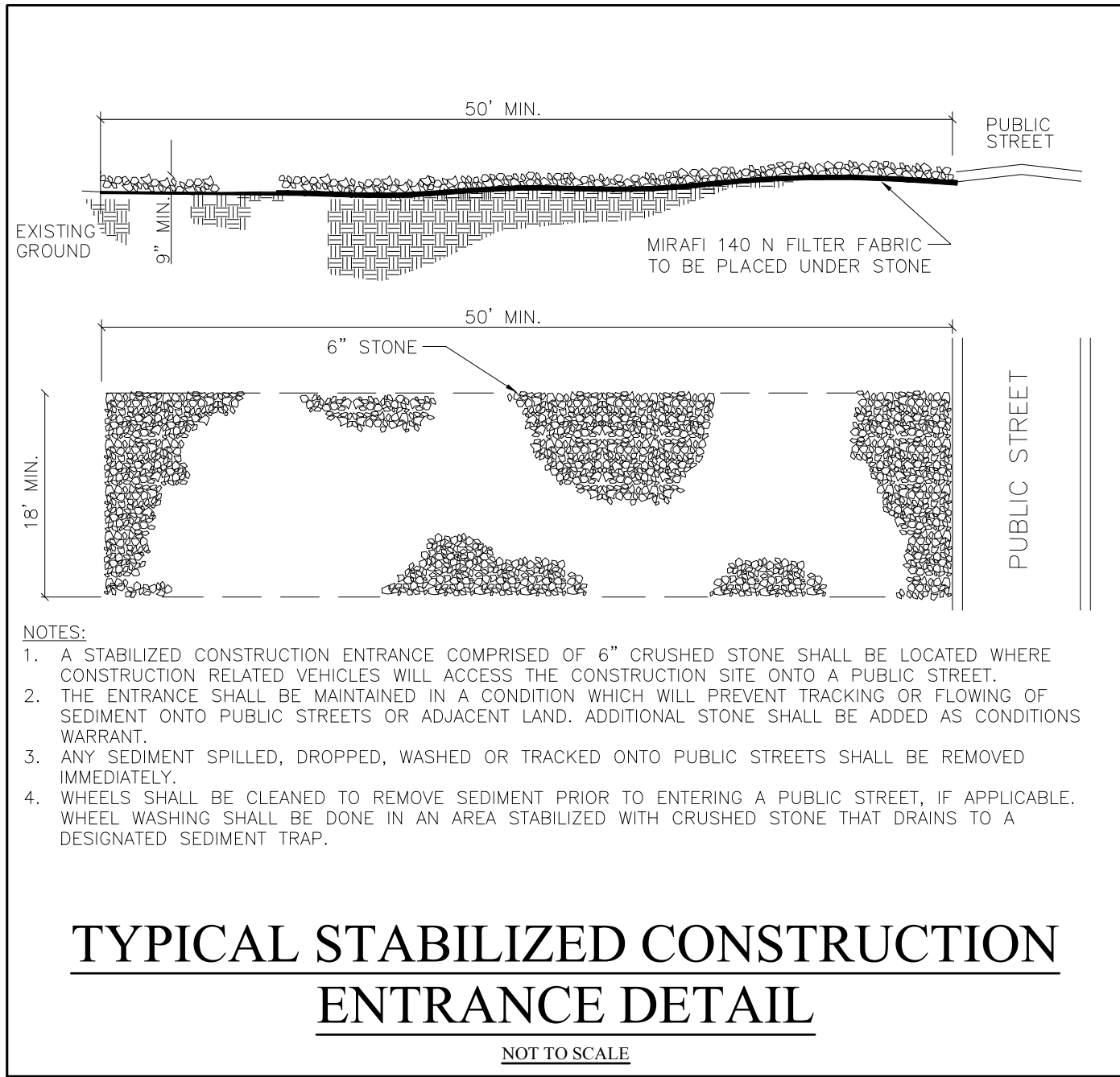
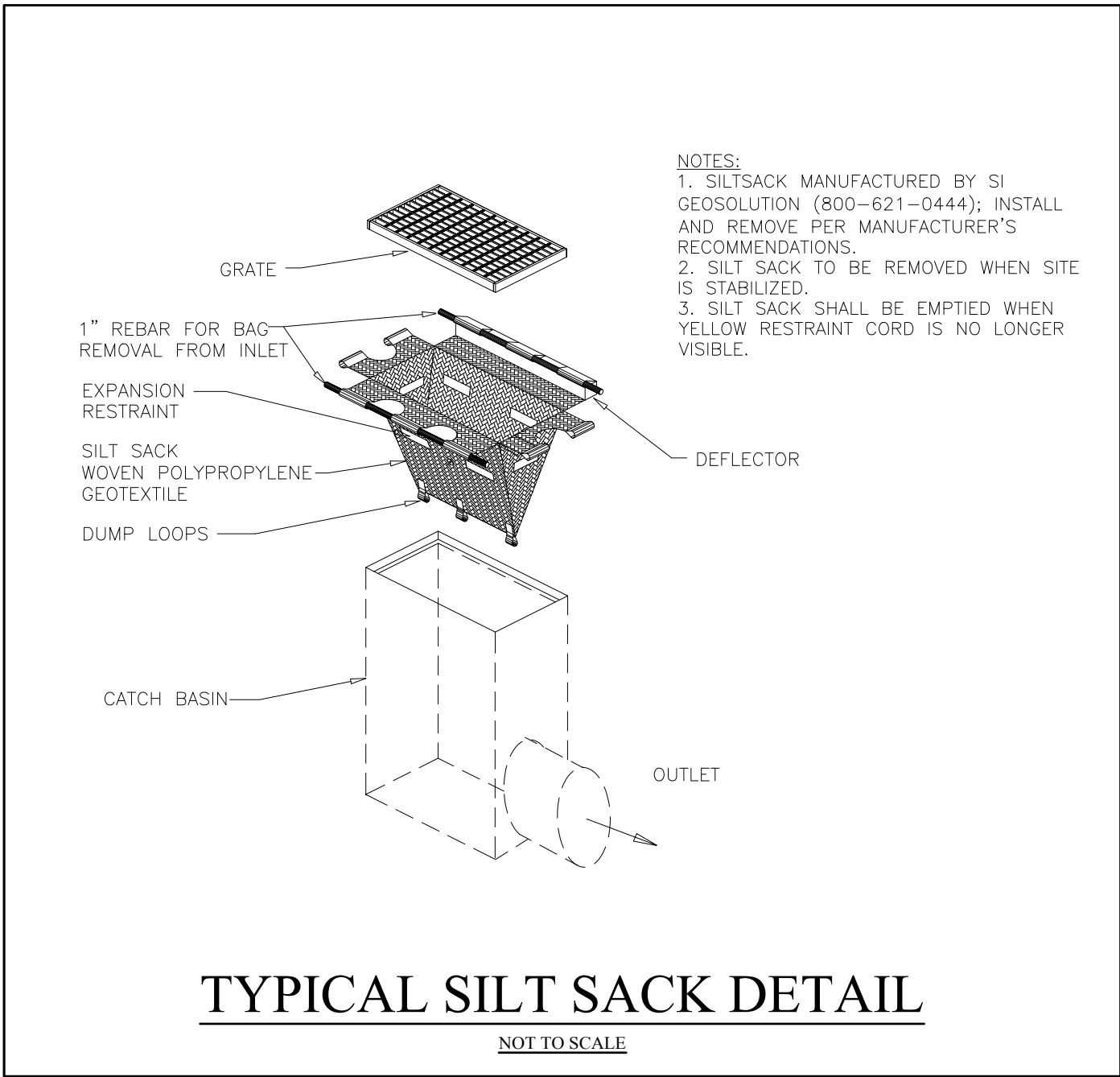
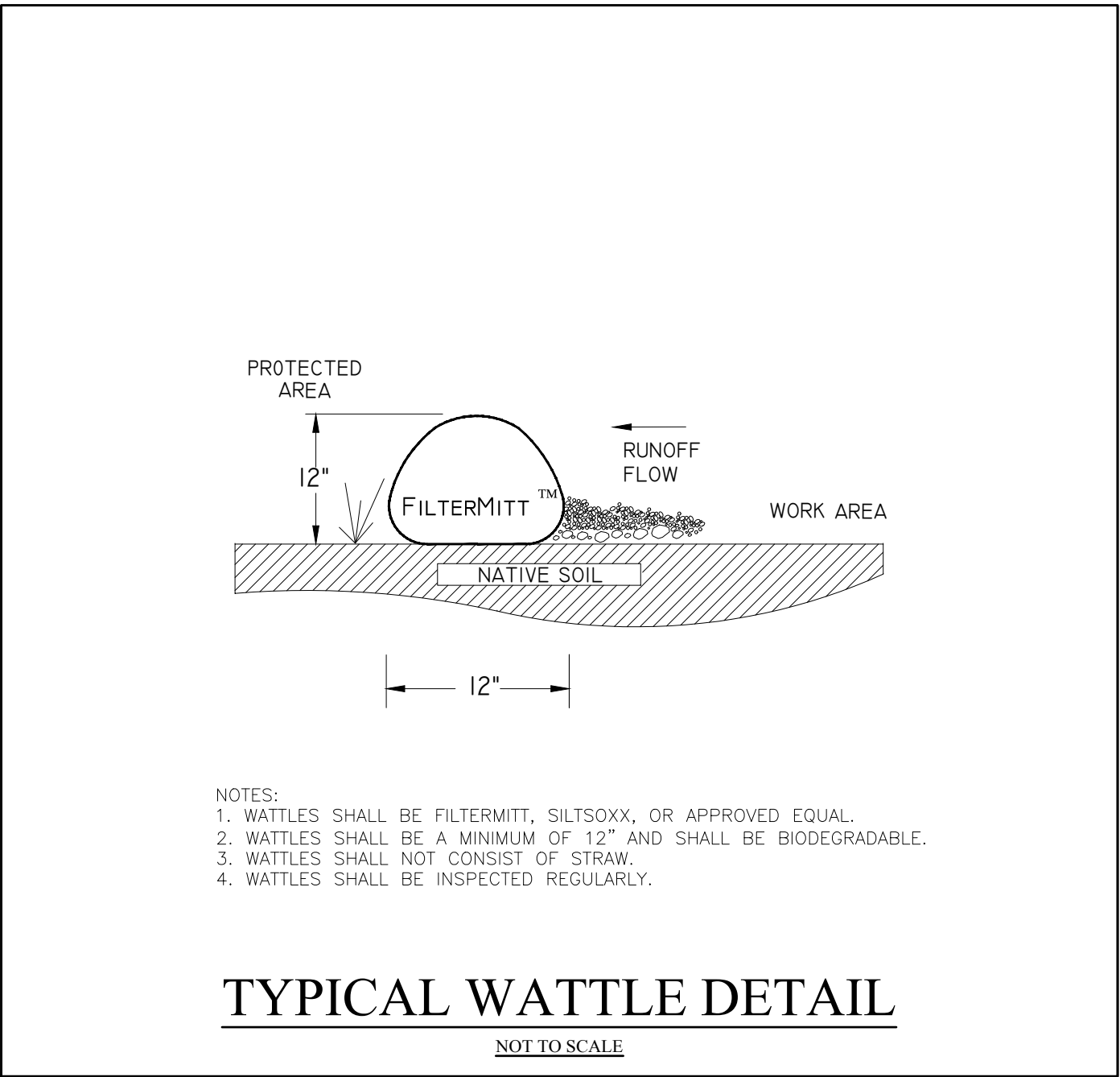
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UTILITY PLAN

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DATE:07/14/2023



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PROPOSED CAR WASH DEVELOPMENT

1650 WASHINGTON STREET (RT-16)
HOLLISTON, MA 01746

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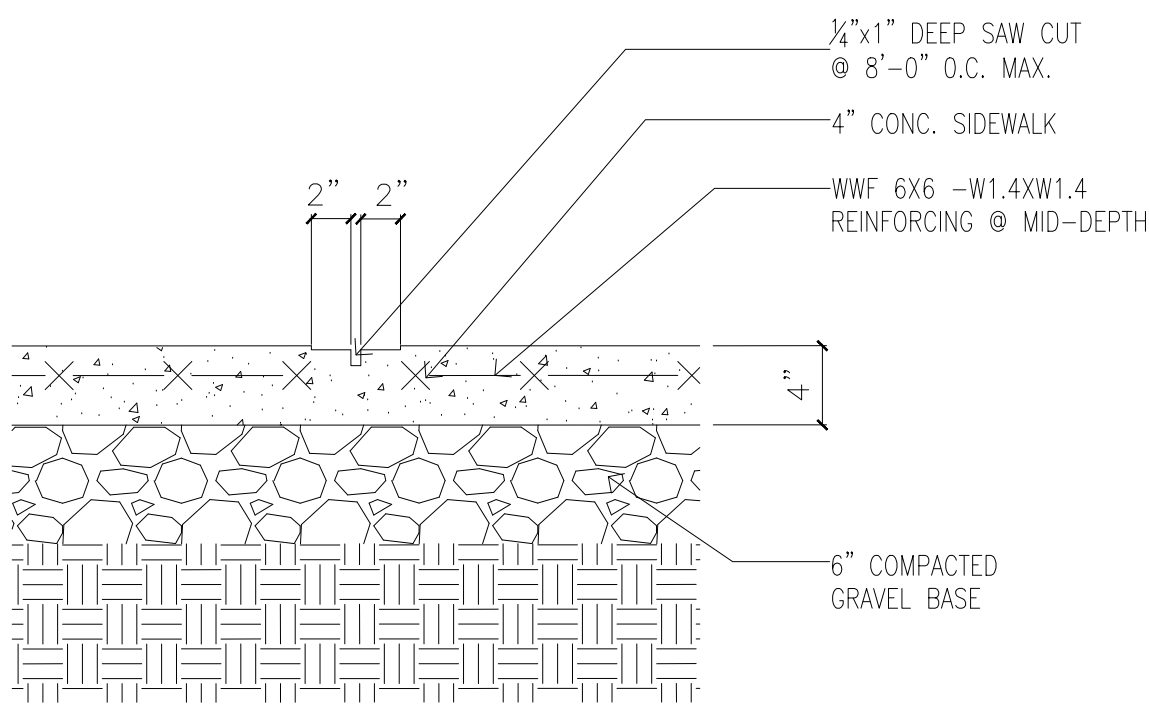
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CONSTRUCTION DETAILS

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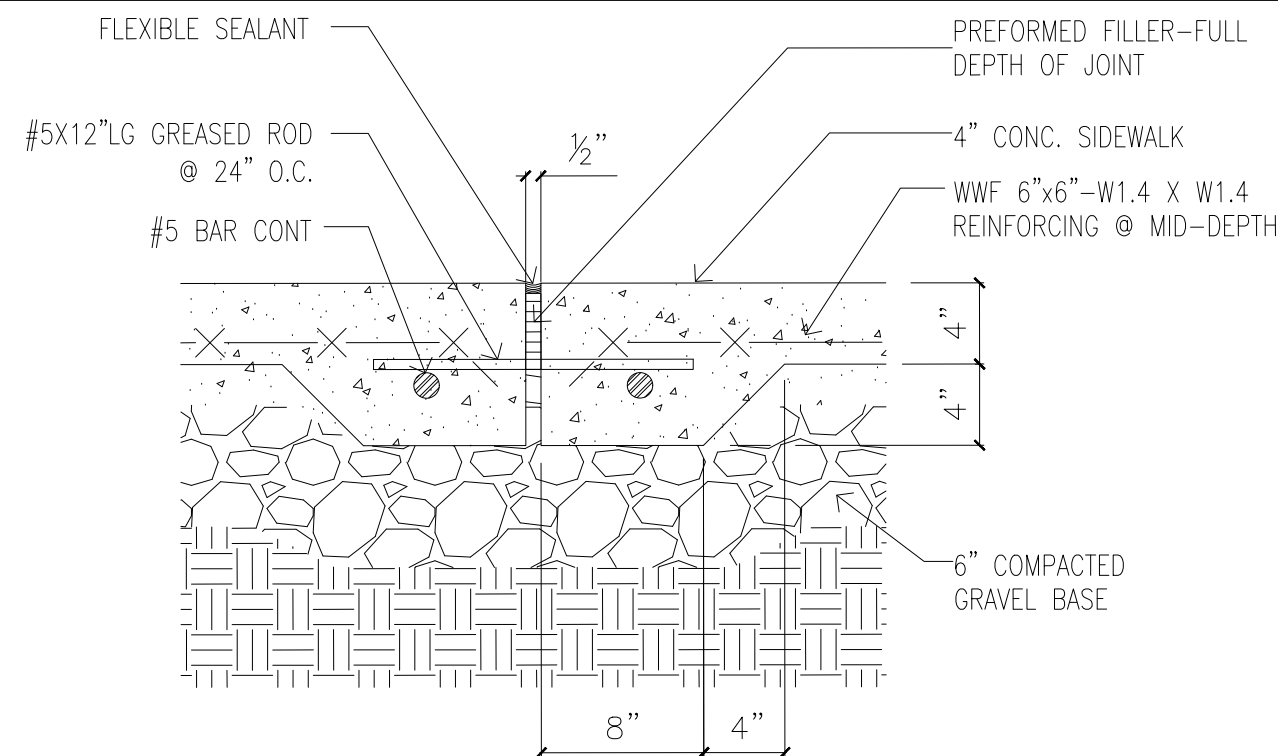
DATE: 07/14/2023



NOTE:
- TOOL JOINT SPACING REFER TO PLAN
- BROOM FINISH WITH TWO COATS SEALING/CURING COMPOUND.

TYPICAL SIDEWALK CONTROL JOINT DETAIL

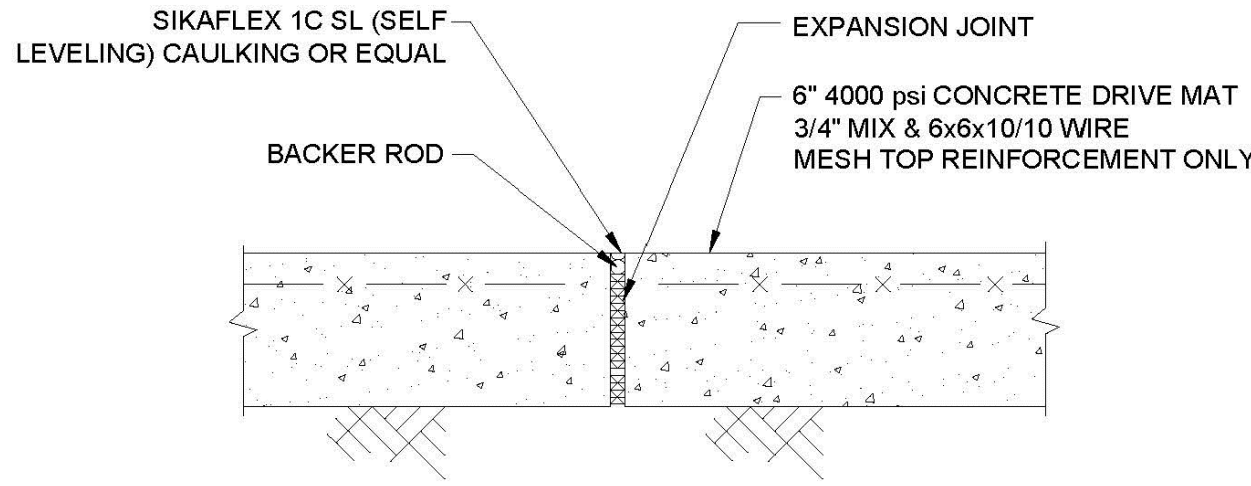
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NOTE:
- CONTROL JOINTS @ 20'-0" O.C. MAX. REFER TO PLAN
- BROOM FINISH WITH TWO COATS SEALING/CURING COMPOUND.

TYPICAL SIDEWALK EXPANSION JOINT DETAIL

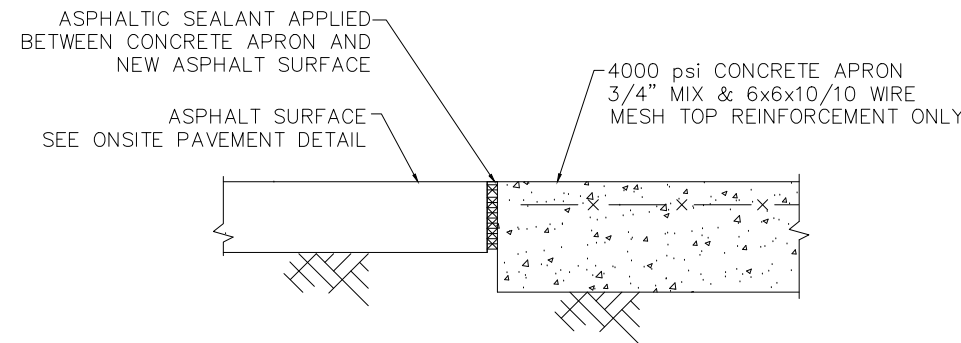
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CONCRETE SPECIFICATIONS:
-SOIL BEARING CAPACITY REQ'D: AS PER GEOTECHNICAL REPORT
-CONC. STRENGTH: 4000psi @ 28 DAYS 3% TO 7% AIR, TROWELLED SMOOTH FINISH WITH TWO COATS SEALING/CURING COMPOUND.

TYPICAL EXPANSION JOINT DETAIL

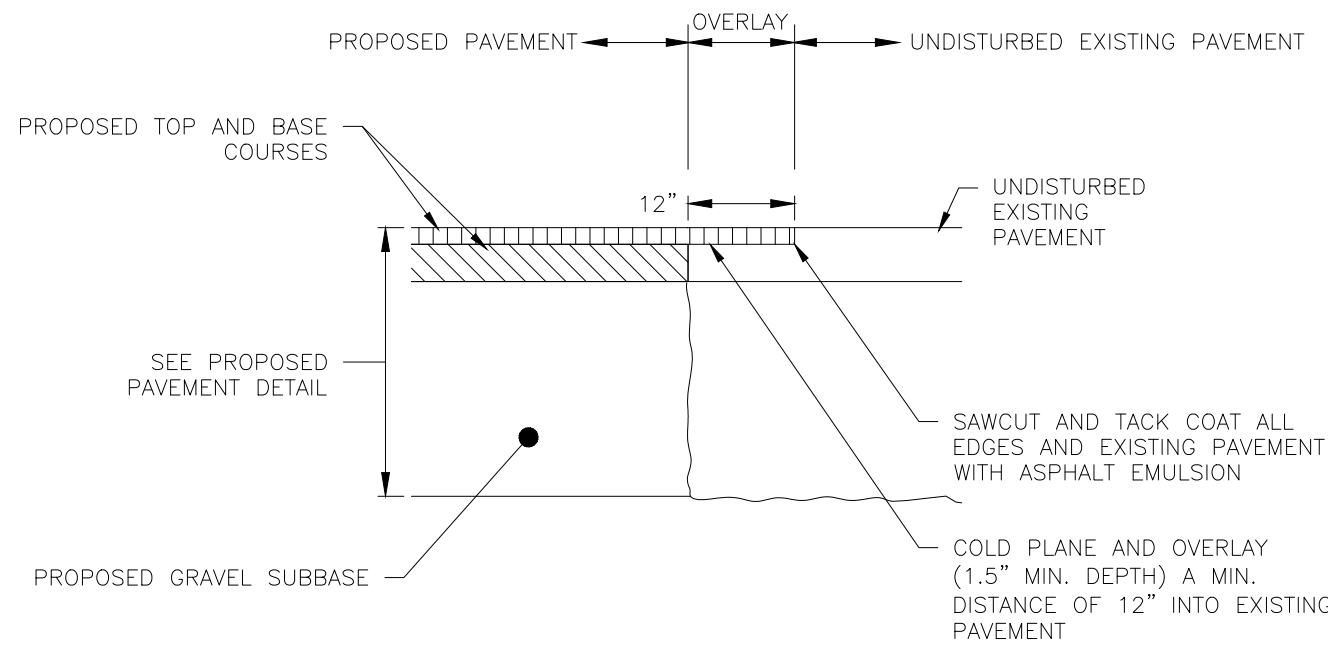
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NOTE:
- 6" CONC. APRON @ CANOPY
- 8" CONC. APRON @ TANK

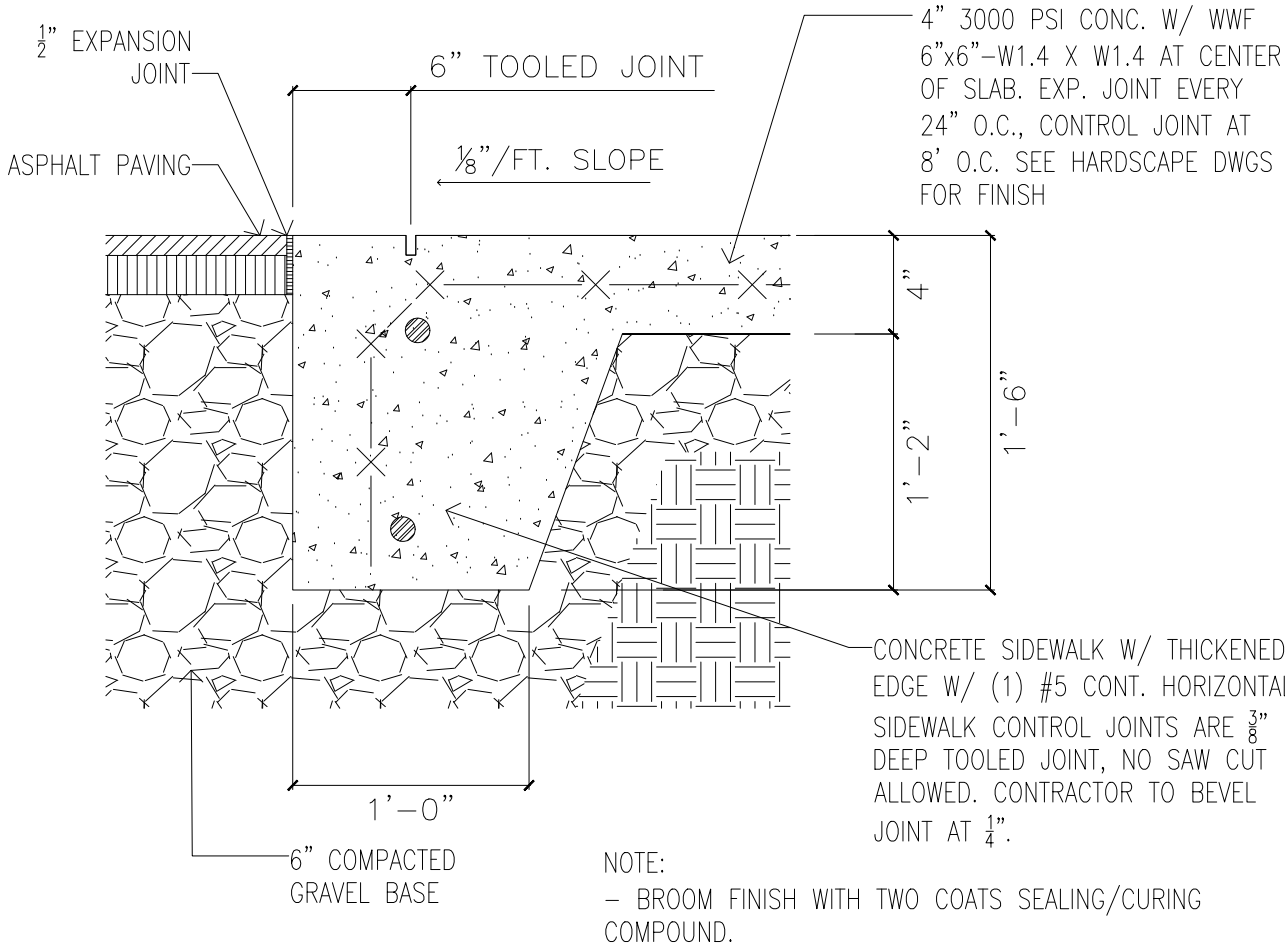
TYPICAL ASPHALT /CONCRETE TRANSITION DETAIL

NOT TO SCALE



PAVEMENT TIE-IN DETAIL

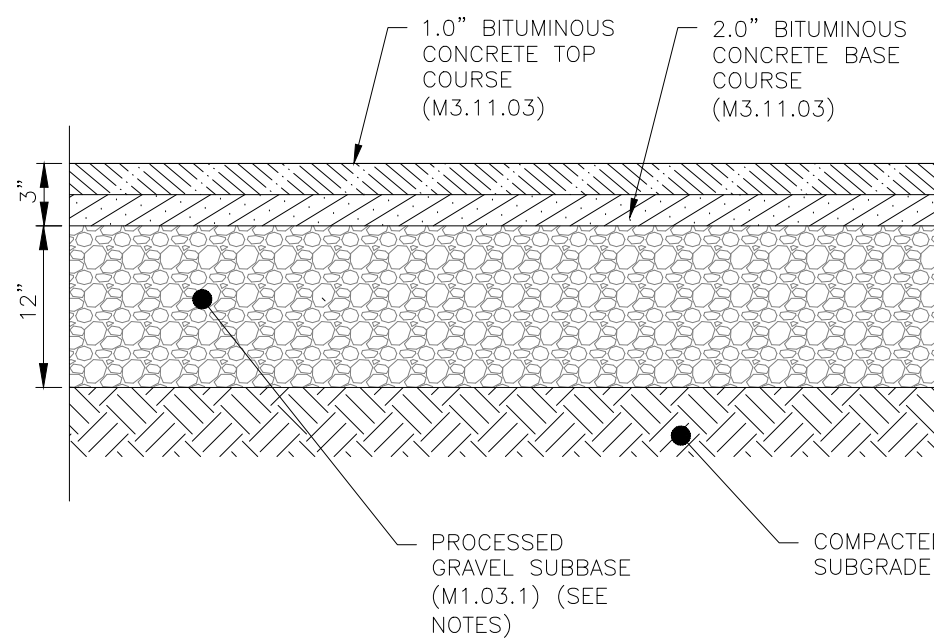
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NOTE:
- BROOM FINISH WITH TWO COATS SEALING/CURING COMPOUND.

FLUSH CONCRETE SIDEWALK/PARKING DETAIL

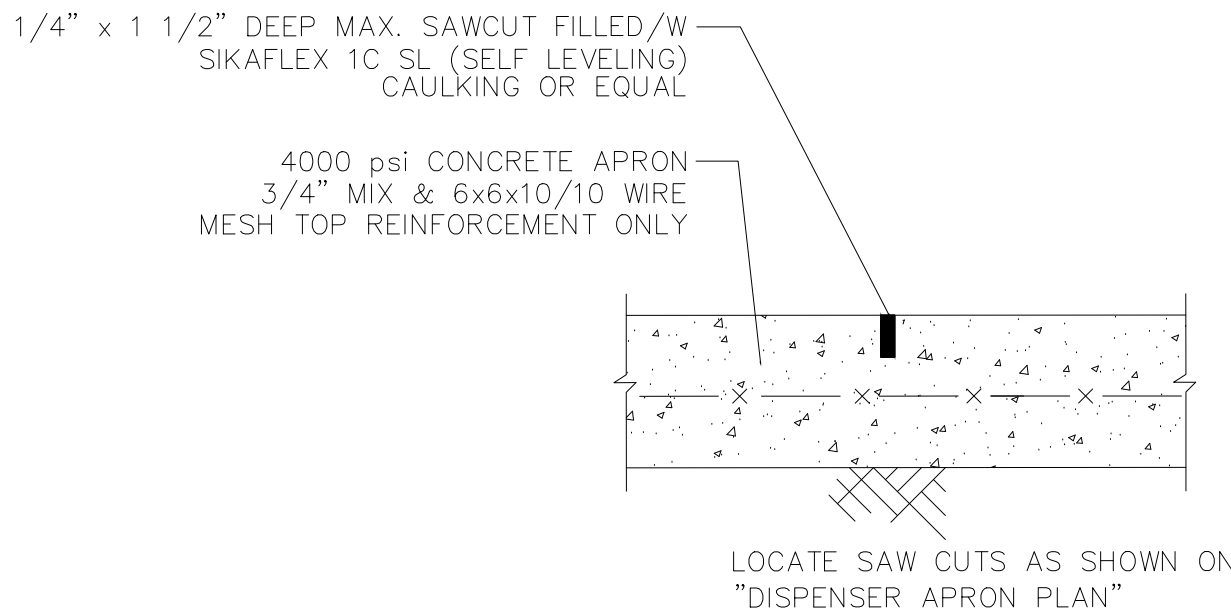
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NOTES:
1. THIS DETAIL PROVIDES A MINIMUM STANDARD FOR PAVEMENT CONSTRUCTION BASED ON THE AASHTO GUIDE FOR DESIGN OF PAVEMENT STRUCTURES. THE FINAL PAVEMENT SECTION SHALL BE DESIGNED BY A GEOTECHNICAL ENGINEER AND SHALL BE UTILIZED IF MORE STRINGENT THAN THIS DETAIL.
2. MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MassDOT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES.
3. THE SOIL MUST HAVE A MOISTURE CONTENT DRY OF OPTIMUM AS DETERMINED BY THE MOISTURE-DENSITY RELATIONSHIP TEST METHOD ASTM D1557.
4. THE SOIL CAN BE COMPACTED TO 98% OF THE MAXIMUM STANDARD PROCTOR DENSITY AS DETERMINED BY THE MOISTURE-DENSITY RELATIONSHIP TEST METHOD ASTM D698.
5. THE SOIL SHALL NOT BE USED IF THE MATERIAL CONTAINS ORGANIC MATTER, RUBBLE, DEBRIS OR ANY OTHER DELETERIOUS MATERIAL.

TYPICAL BITUMINOUS PAVEMENT DETAIL

NOT TO SCALE

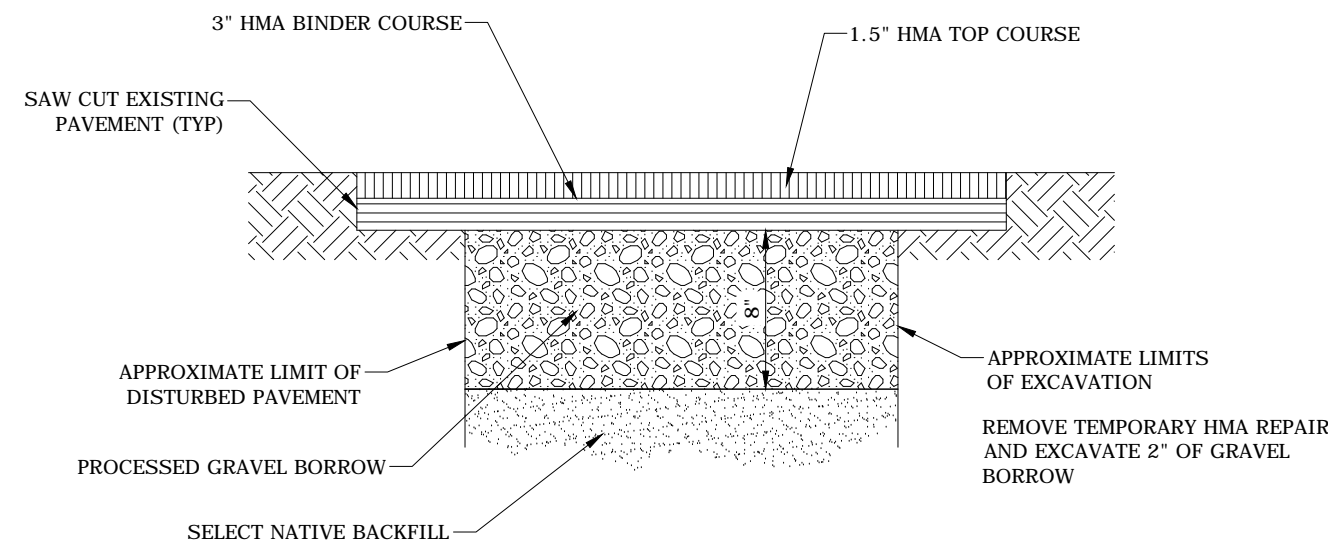


NOTE:
- 6" CONC. APRON @ CANOPY
- 8" CONC. APRON @ TANK

CONCRETE SPECIFICATIONS:
- SOIL BEARING CAPACITY REQ'D: AS PER GEOTECHNICAL REPORT
- CONC. STRENGTH: 4000psi @ 28 DAYS 3% TO 7% AIR, TROWELLED SMOOTH FINISH WITH TWO COATS SEALING/CURING COMPOUND.

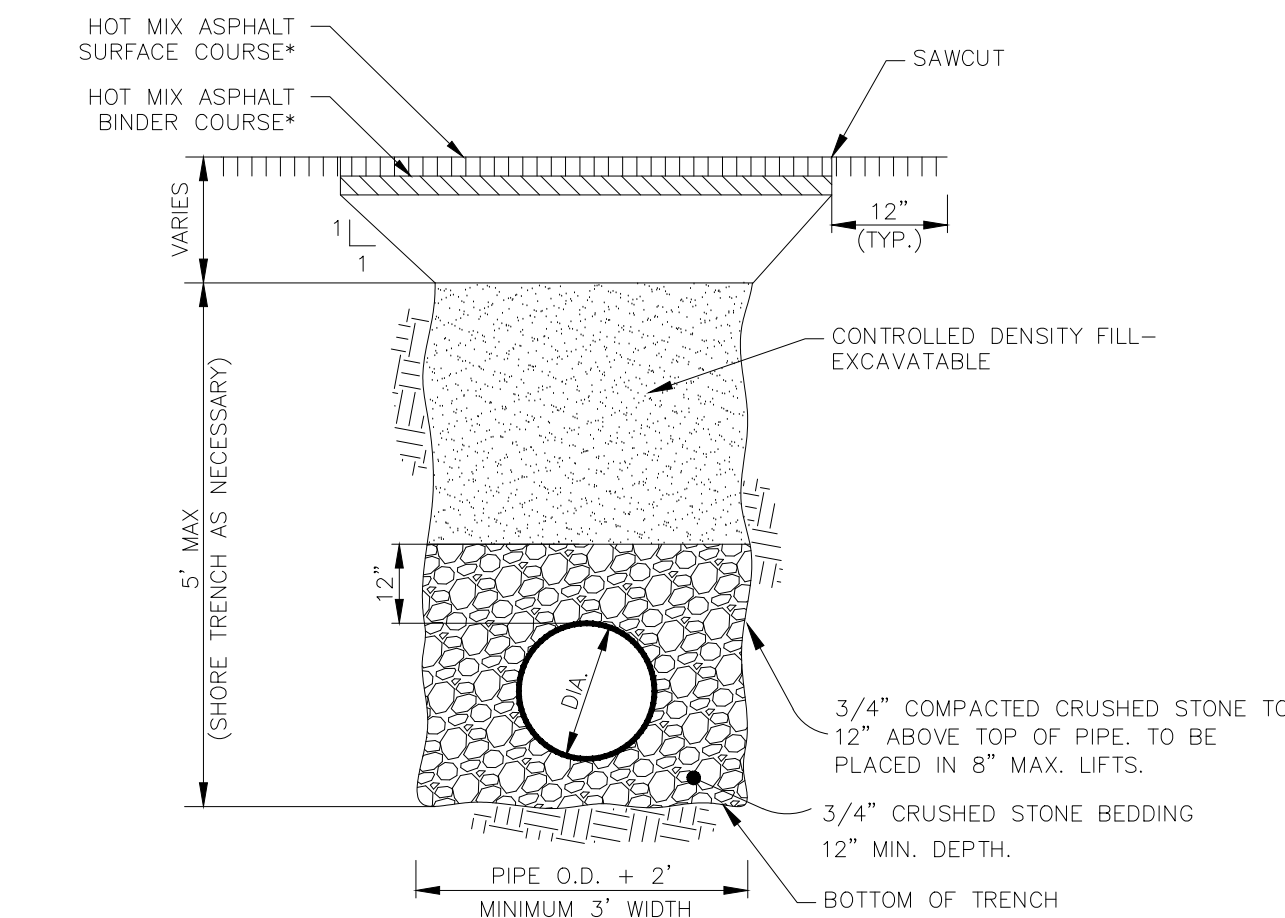
TYPICAL SAWCUT DETAIL

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TYPICAL PERMANENT ROADWAY TRENCH REPAIR DETAIL

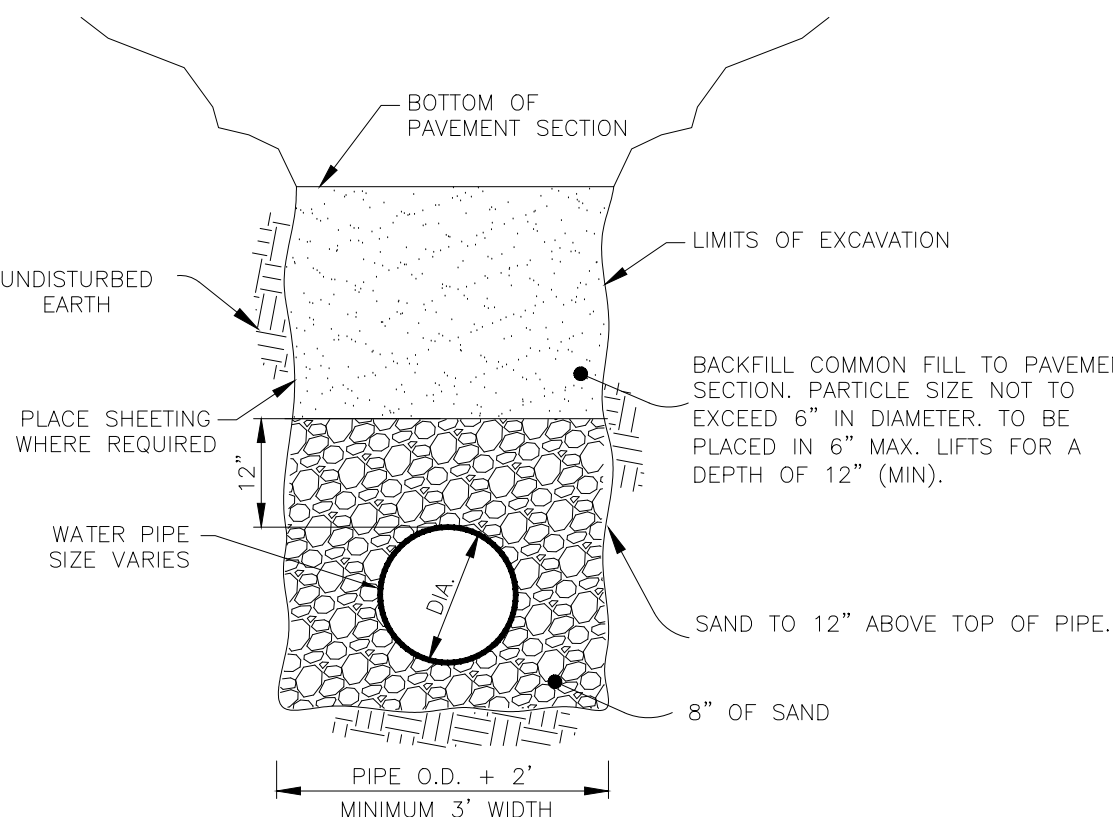
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* PAVEMENT TO BE IN ACCORDANCE WITH MUNICIPAL/STATE STREET STANDARDS

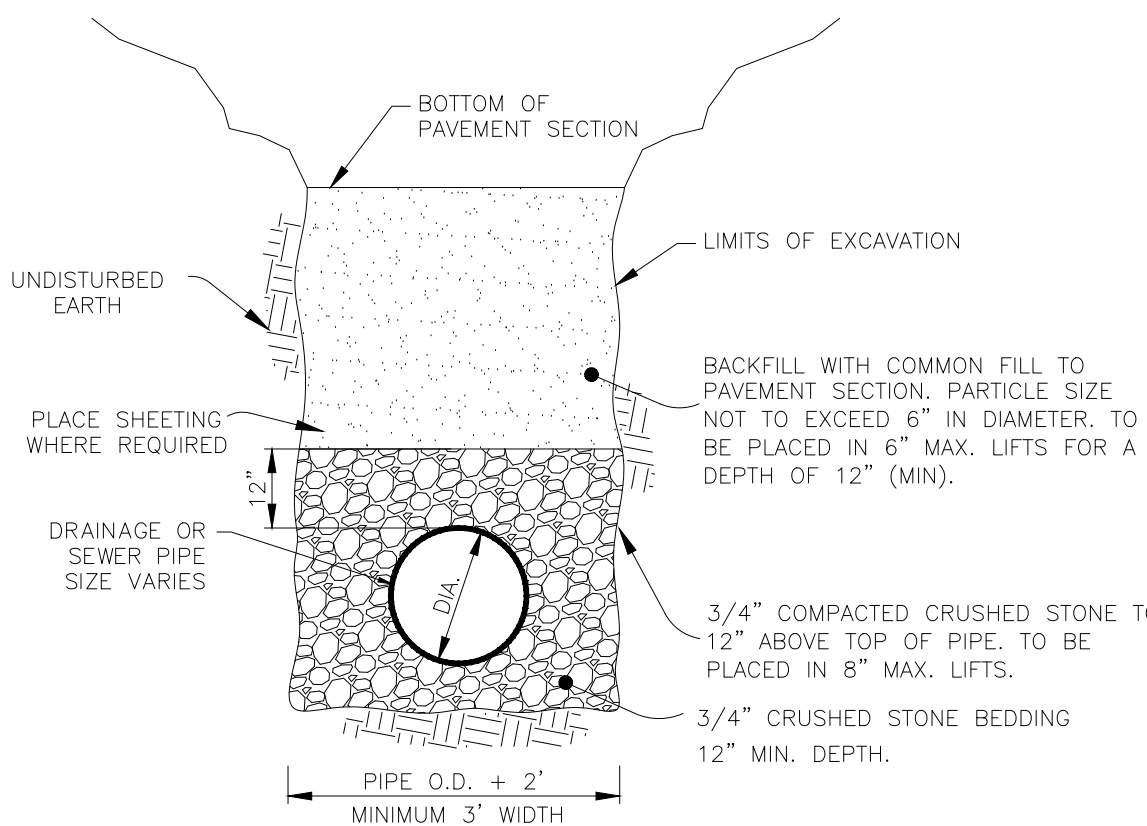
UTILITY TRENCH DETAIL IN EXISTING PAVEMENT TO REMAIN

NOT TO SCALE



TYPICAL WATER TRENCH DETAIL

NOT TO SCALE



TYPICAL DRAIN & SEWER TRENCH DETAIL

NOT TO SCALE

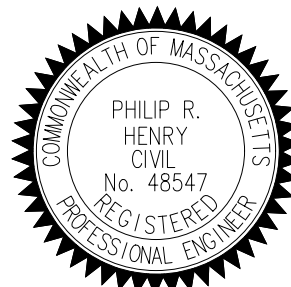
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SCALE:

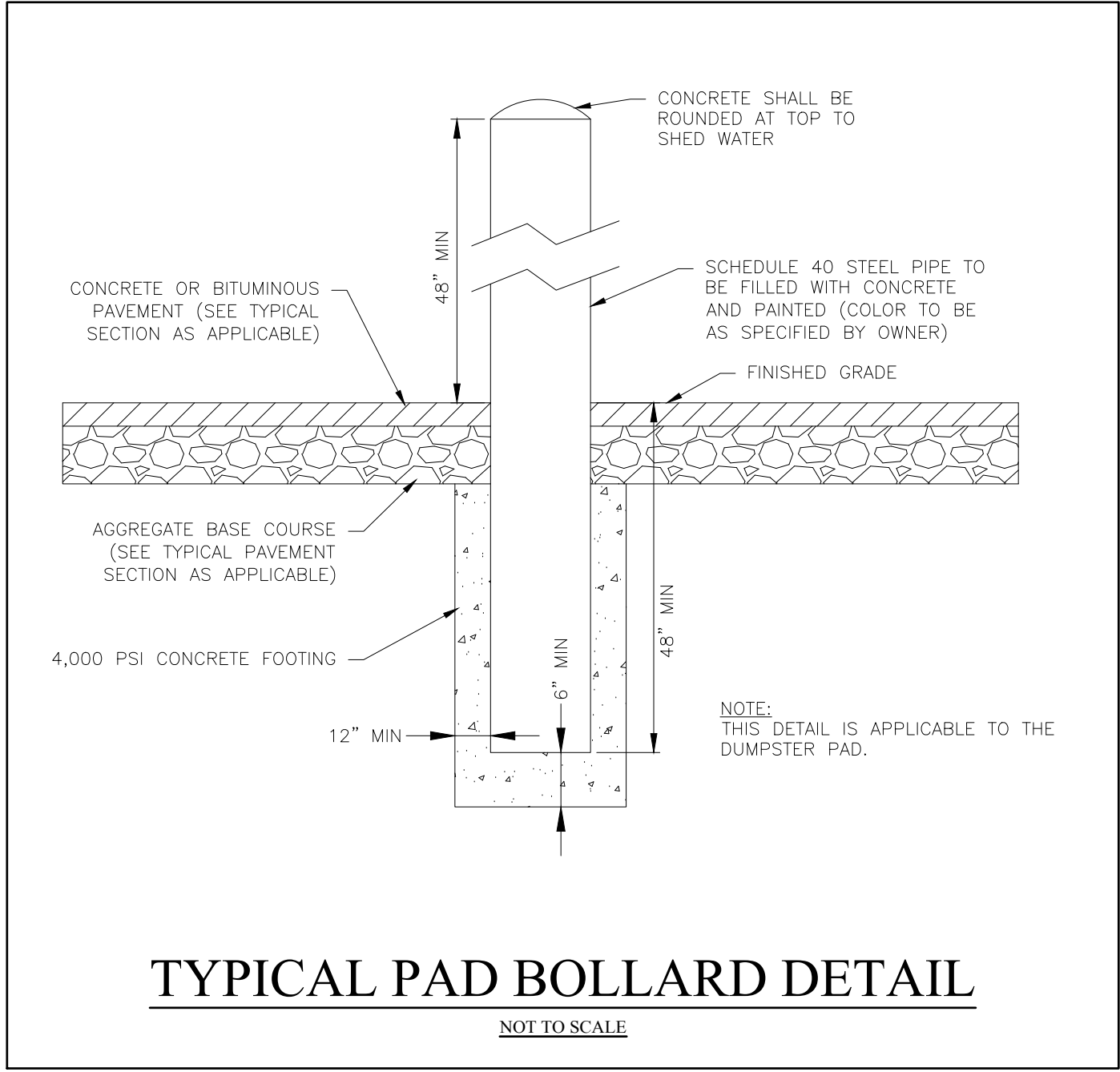
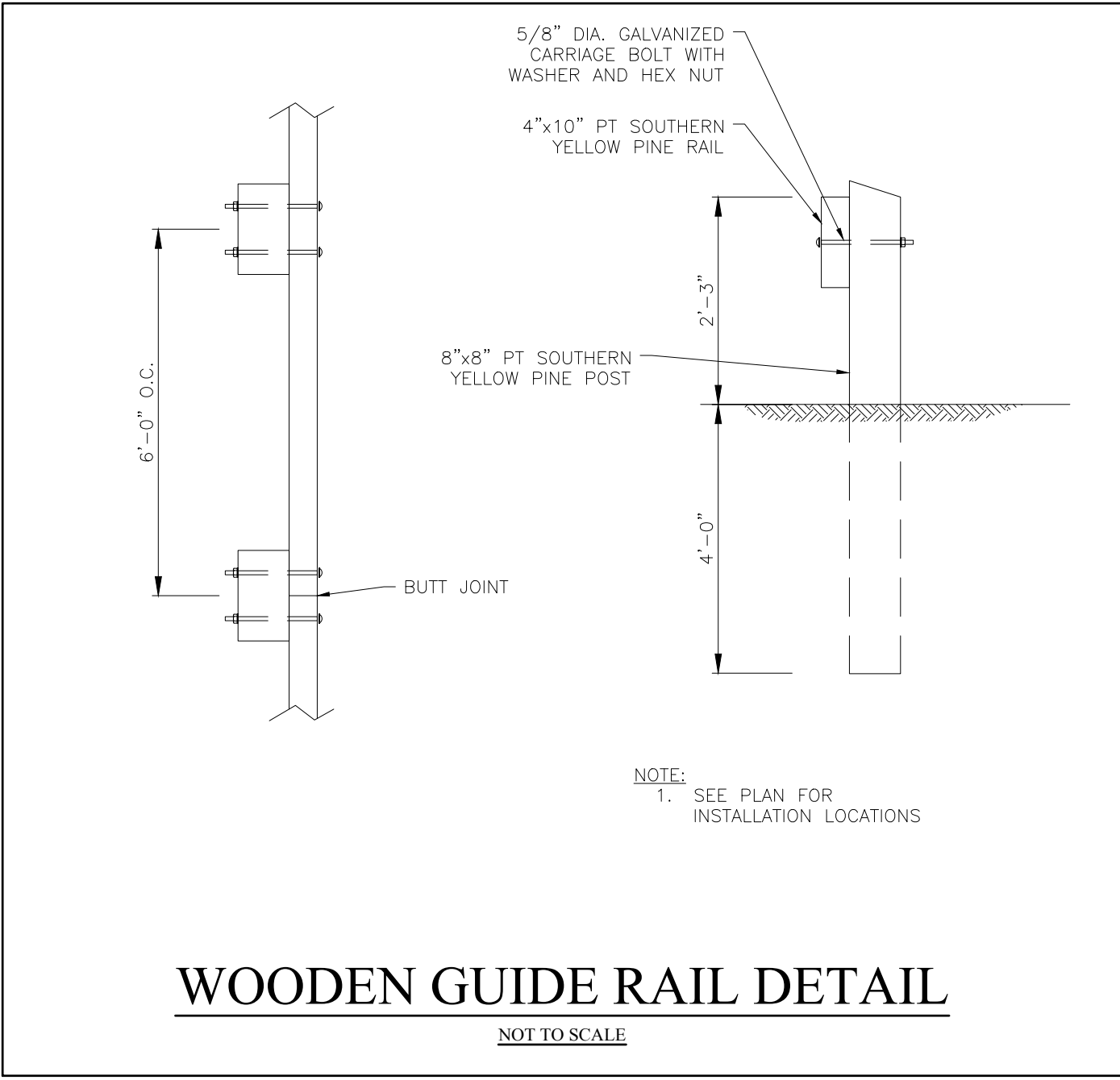
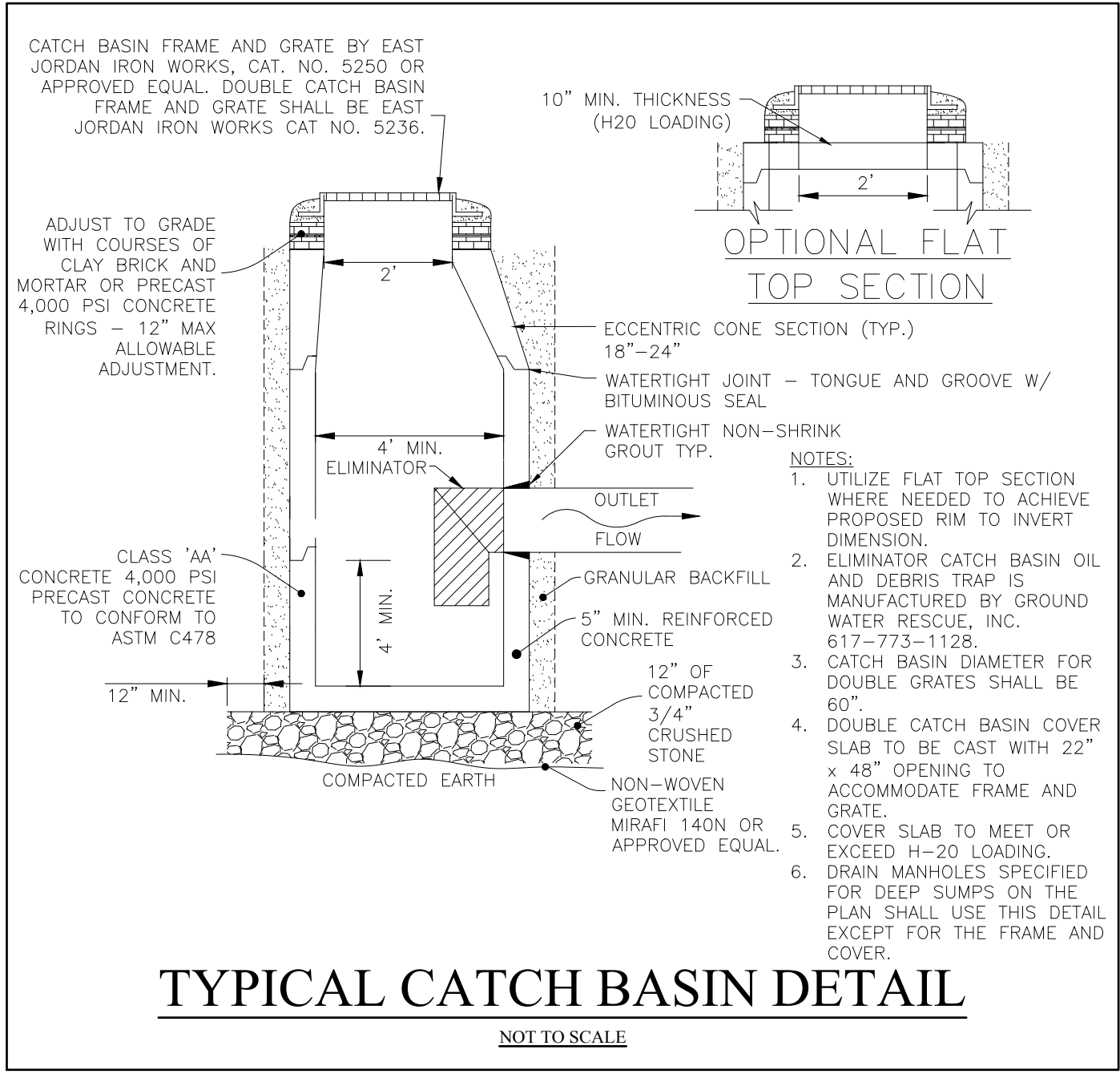
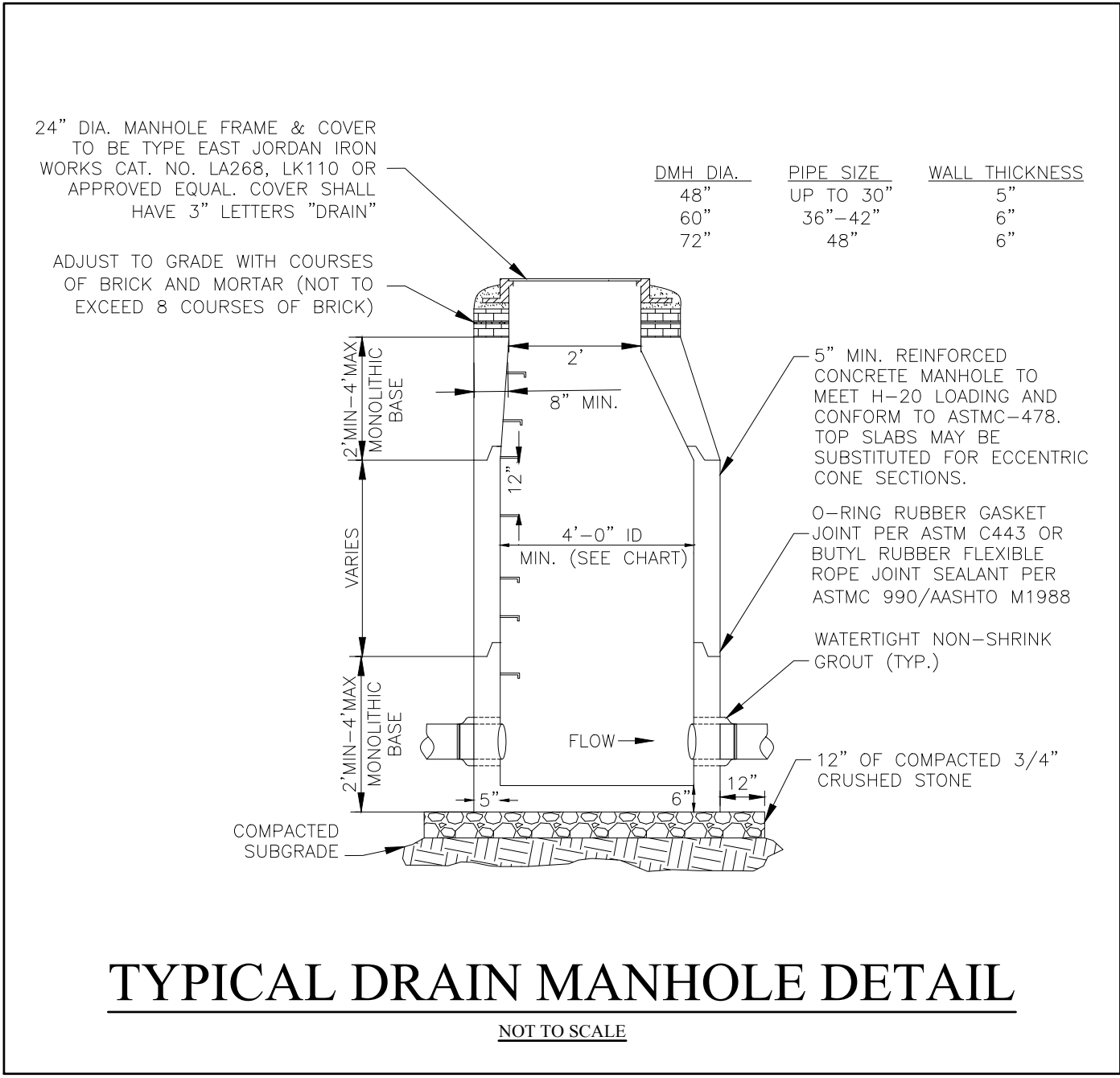
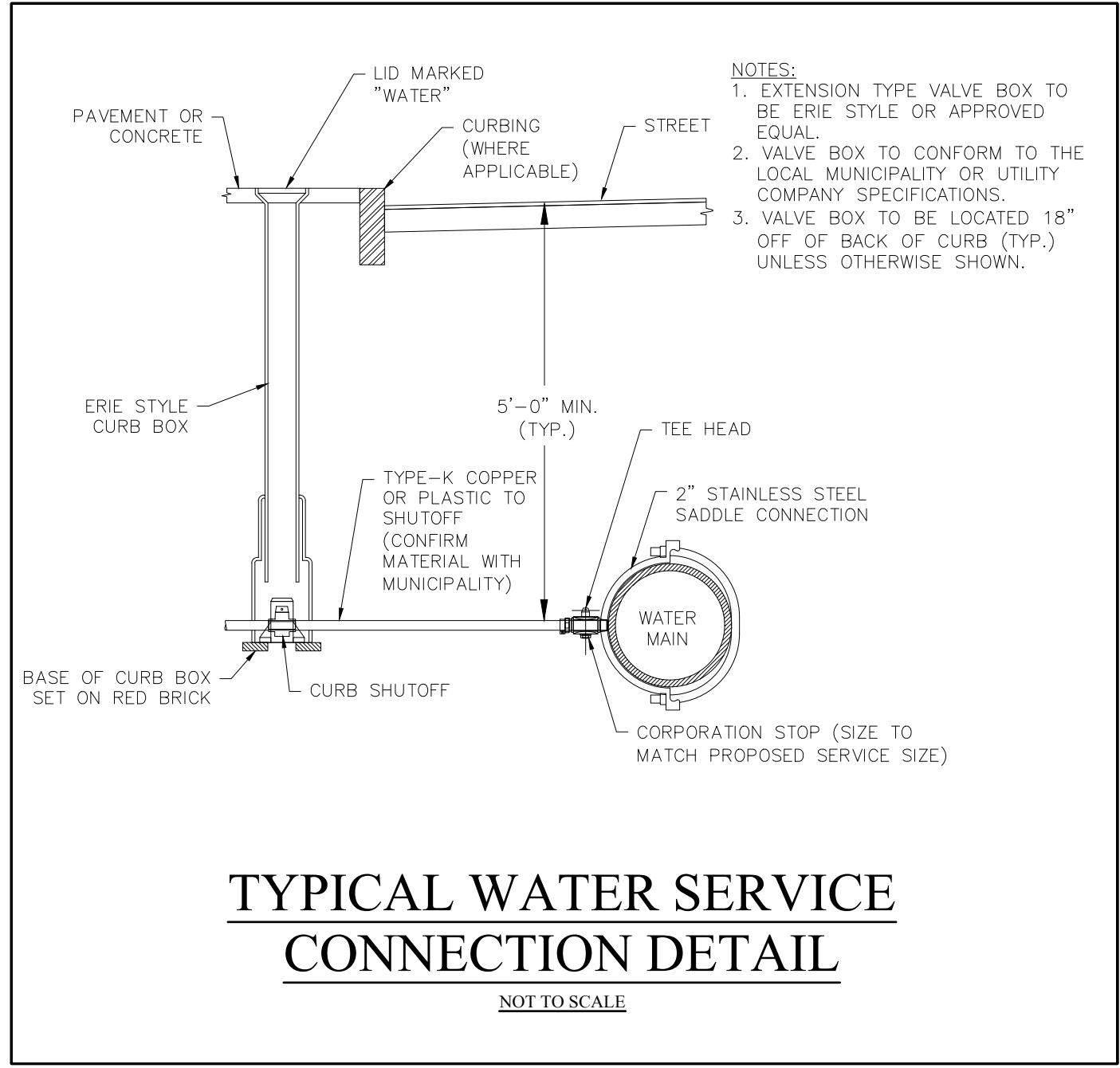
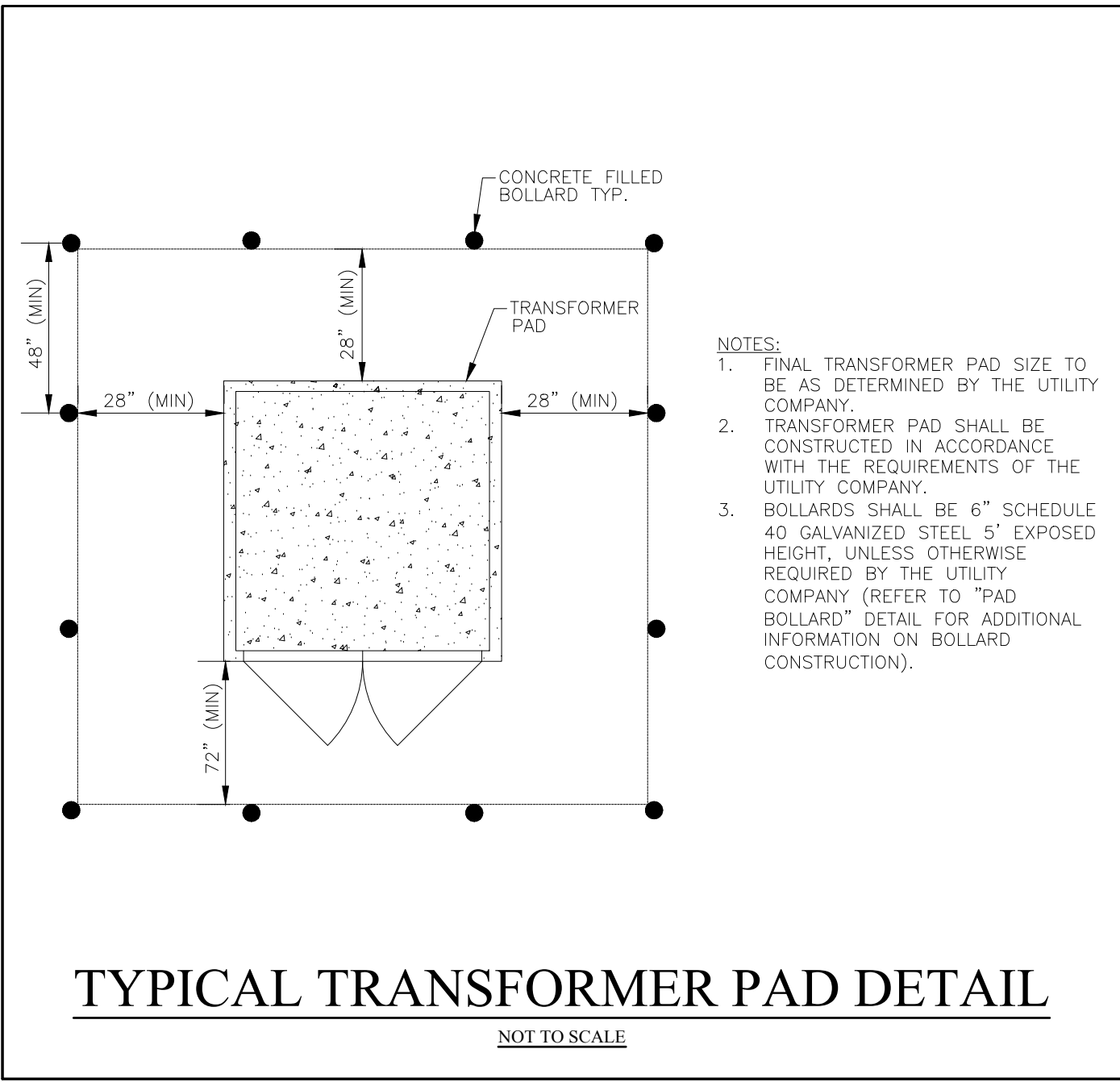
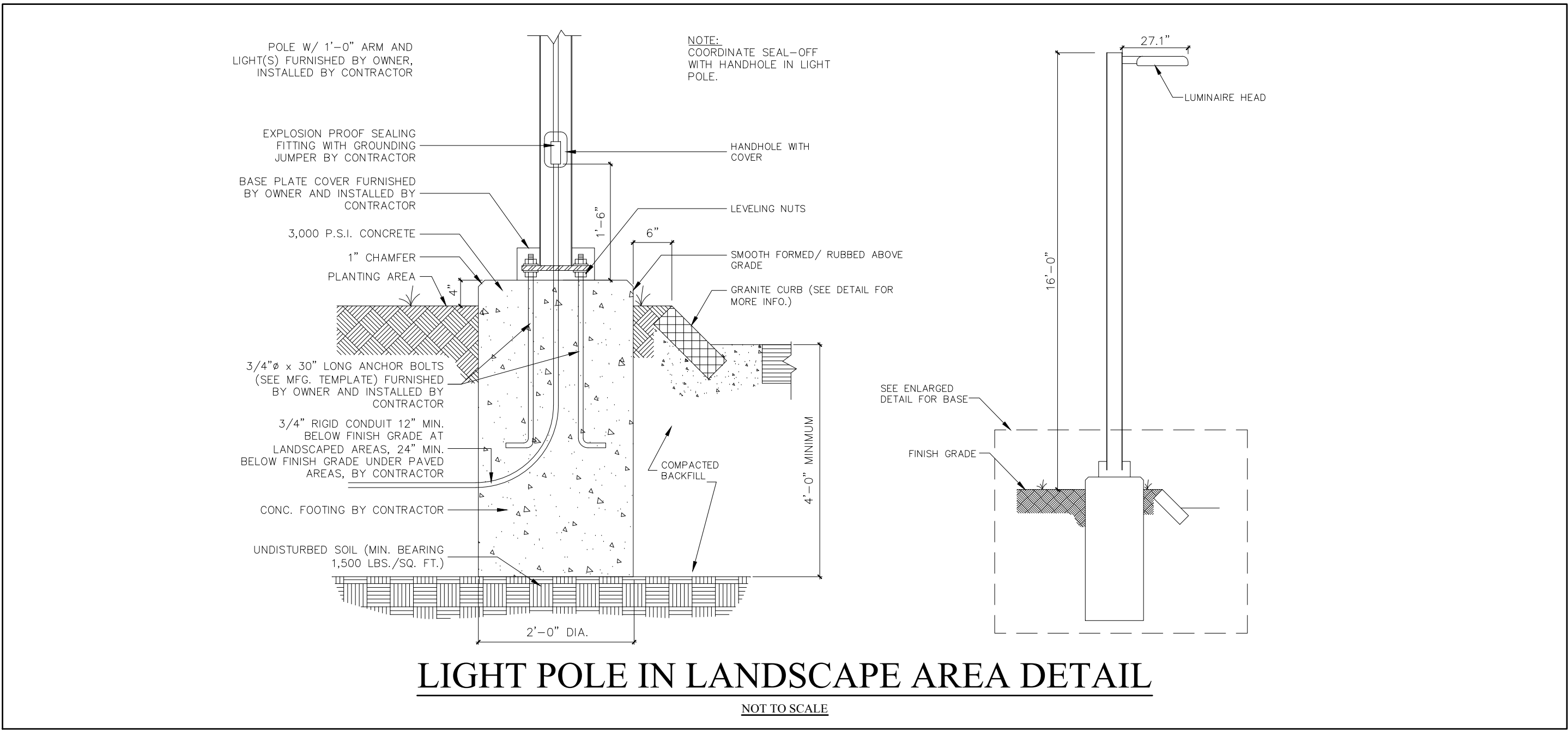
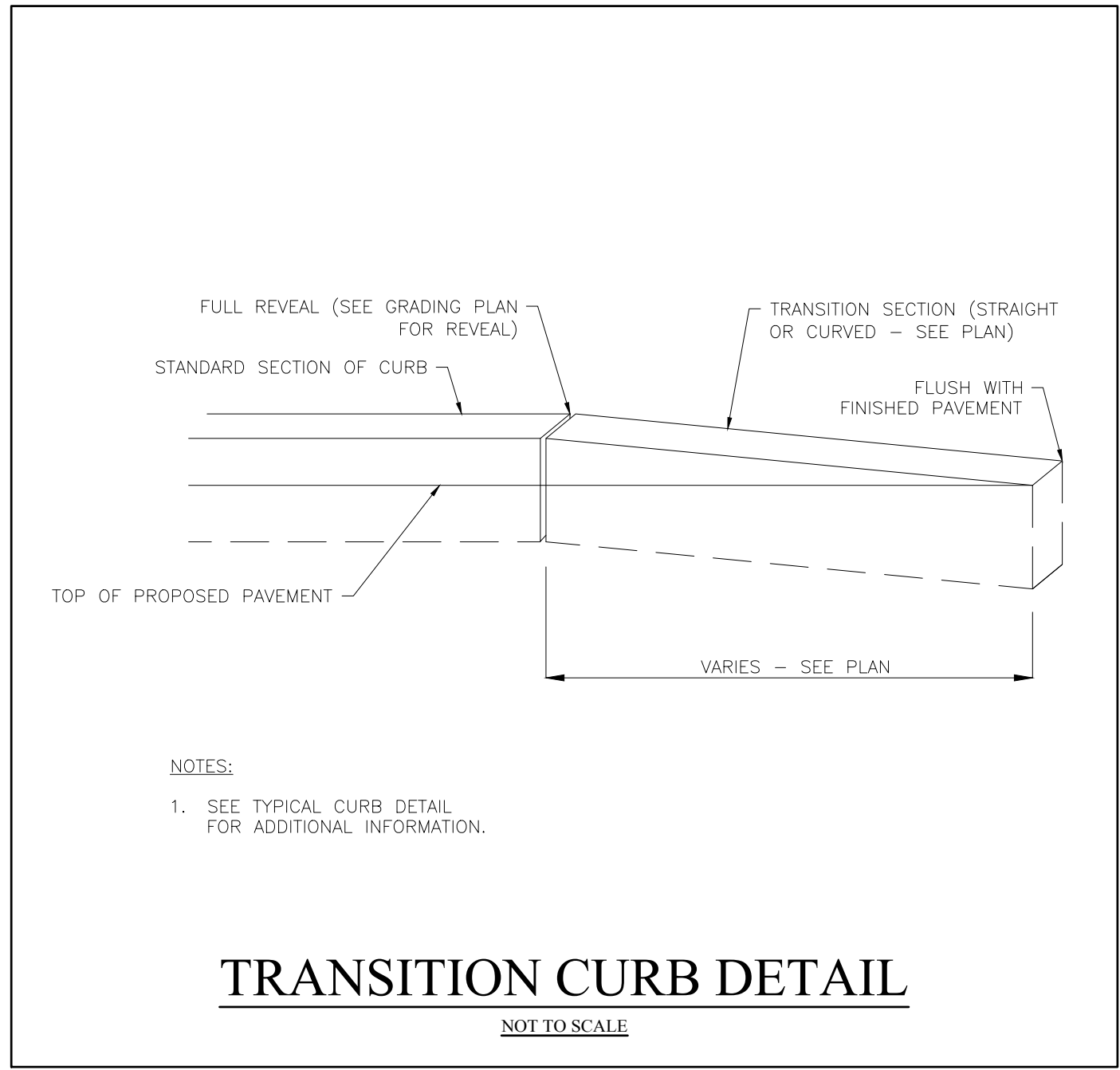
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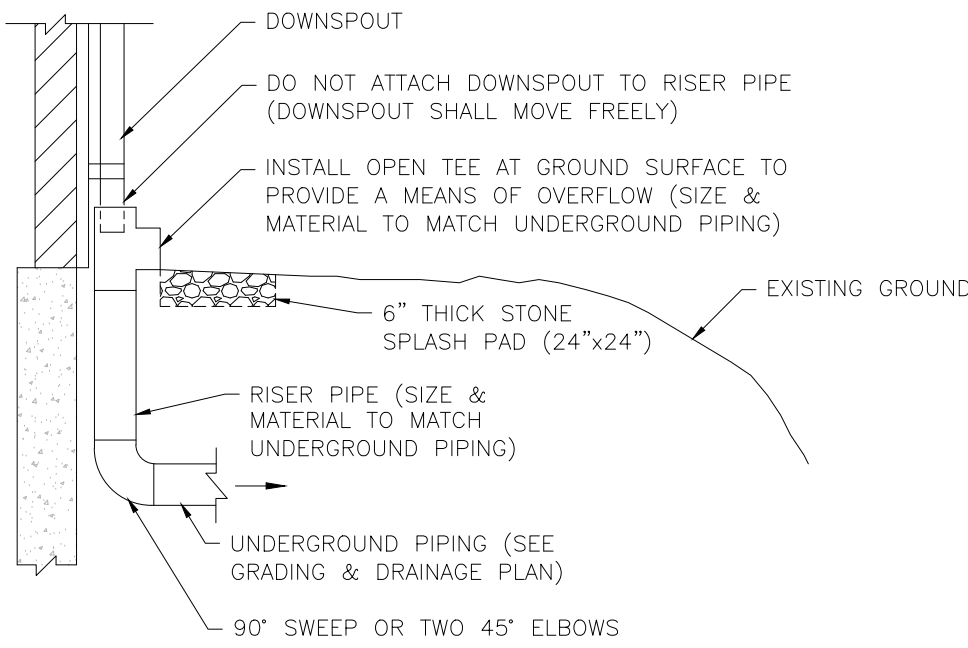
SHEET:

**CONSTRUCTION
DETAILS**

8

DATE: 07/14/2023

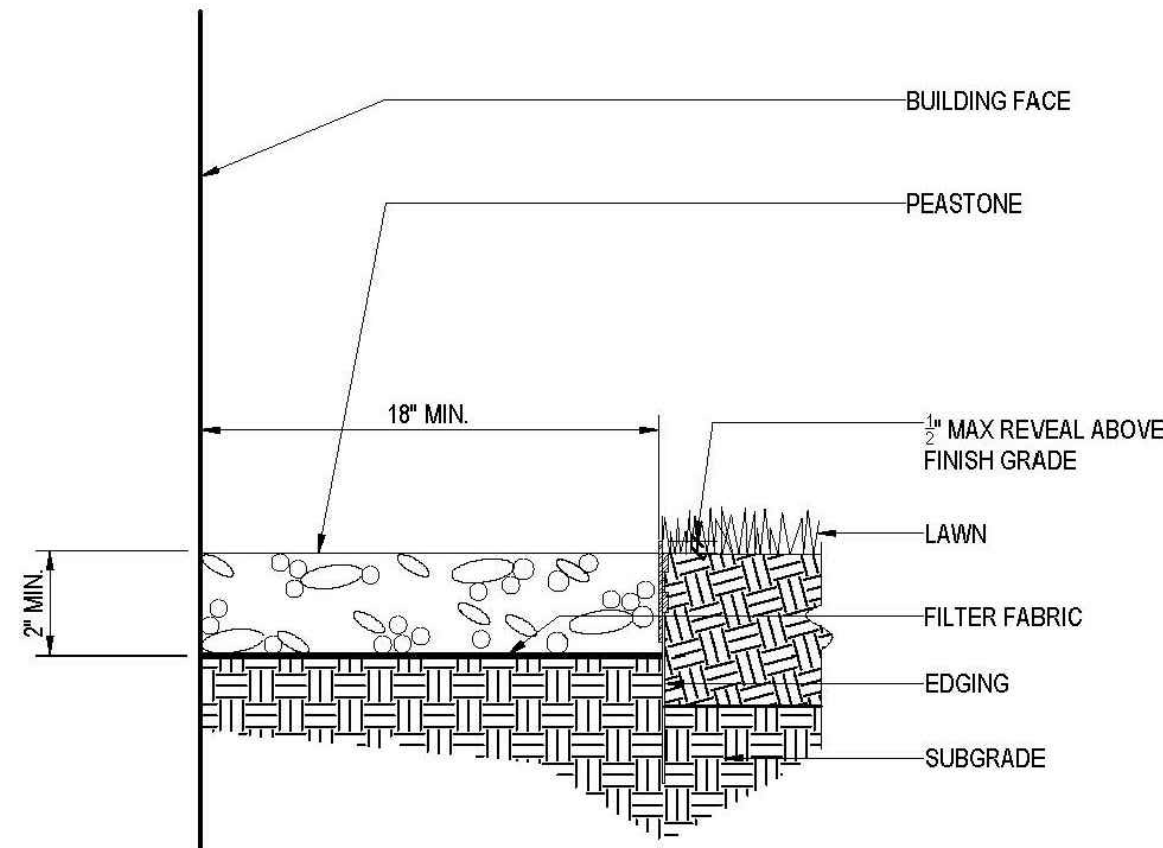




- NOTES:
1. EACH BUILDING OR UNIT SHALL HAVE A MINIMUM OF ONE GUTTER DOWNSPOUT OVERFLOW ON EACH INDEPENDENT PIPE NETWORK. THE OVERFLOW SHALL BE INSTALLED ON THE DOWNSPOUT LOCATED AT THE LOWEST GROUND ELEVATION ALONG THE BUILDING WITHIN EACH PIPE NETWORK.
 2. FOR GUTTER SYSTEMS THAT TIE INTO DRYWELLS, EACH DOWNSPOUT SHALL INCLUDE AN OVERFLOW.

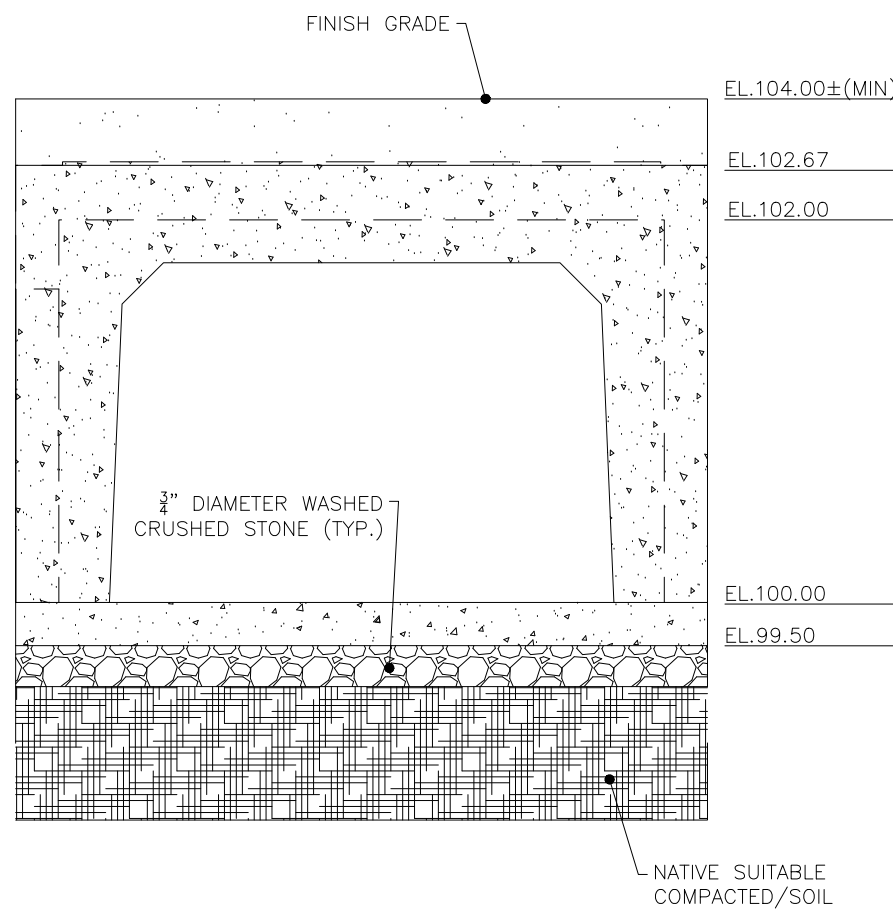
GUTTER DOWNSPOUT DETAIL

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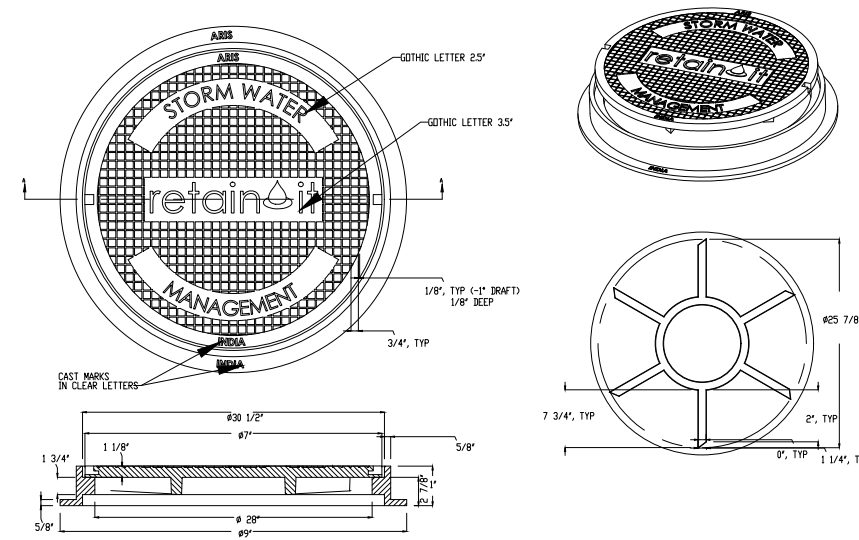
PEASTONE FOUNDATION STRIP DETAIL

NOT TO SCALE



5' HIGH GALLEY DETAIL SECTION

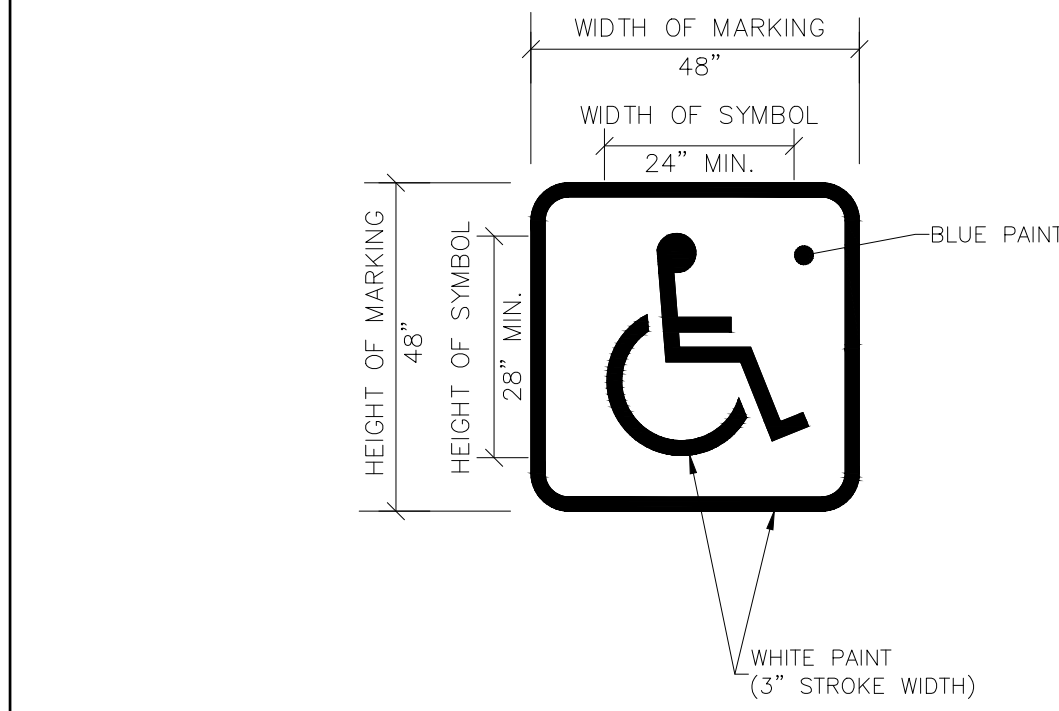
- NOTES:
1. SUBSURFACE DETENTION SYSTEM #1 SHALL BE SET LEVEL AND IS COMPRISED OF 8 8'x8' CONCRETE STRUCTURES AS MANUFACTURED BY RETAIN-IT STORMWATER MANAGEMENT SYSTEMS.
 2. ALL GALLEYS ARE PROPOSED TO BE 2' (INSIDE HEIGHT) TALL.
 3. CONCRETE, 5,000 PSI MINIMUM AFTER 28 DAYS.
 4. H-20 DESIGN LOADING FOR AASHTO HS-20-44.
 5. SIDE UNITS DO NOT HAVE FLOW THROUGH OPENINGS.
 6. SEE PLANS FOR FINAL MANHOLE COUNT.



- NOTES:
1. MANUFACTURED BY RETAIN-IT STORMWATER MANAGEMENT SYSTEMS IN ISO 9002 PLANTS.
 2. CONFORMS TO ASTM A44.
 3. CLASS 308 OR 358 SPECS.
 4. LOAD RATING FOR AASHTO HS-20-44 HIGHWAY LOADING.
 5. TENSILE STRENGTH: 30,000 OR 35,000 PSI

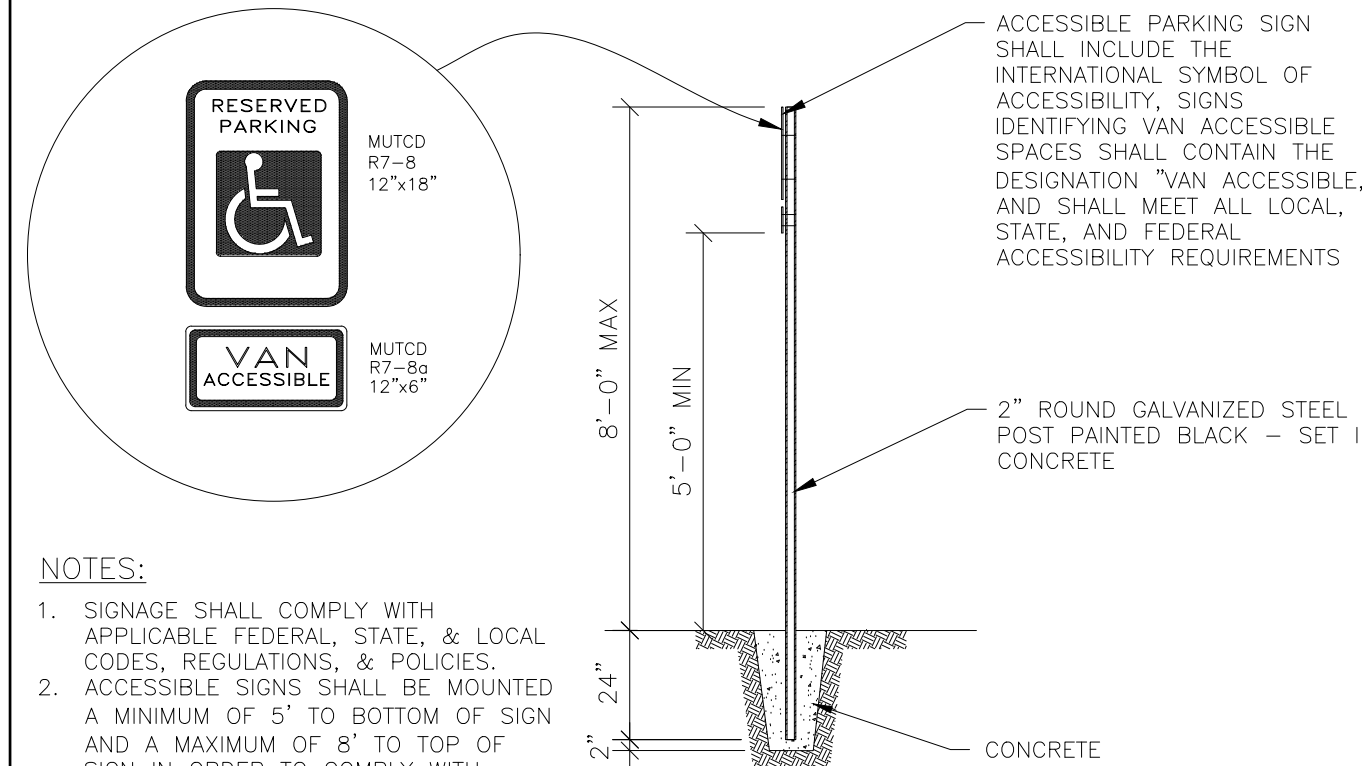
SUBSURFACE DETENTION SYSTEM (SDS-1) DETAIL

NOT TO SCALE



TYPICAL ACCESSIBLE PARKING SPACE MARKING DETAIL

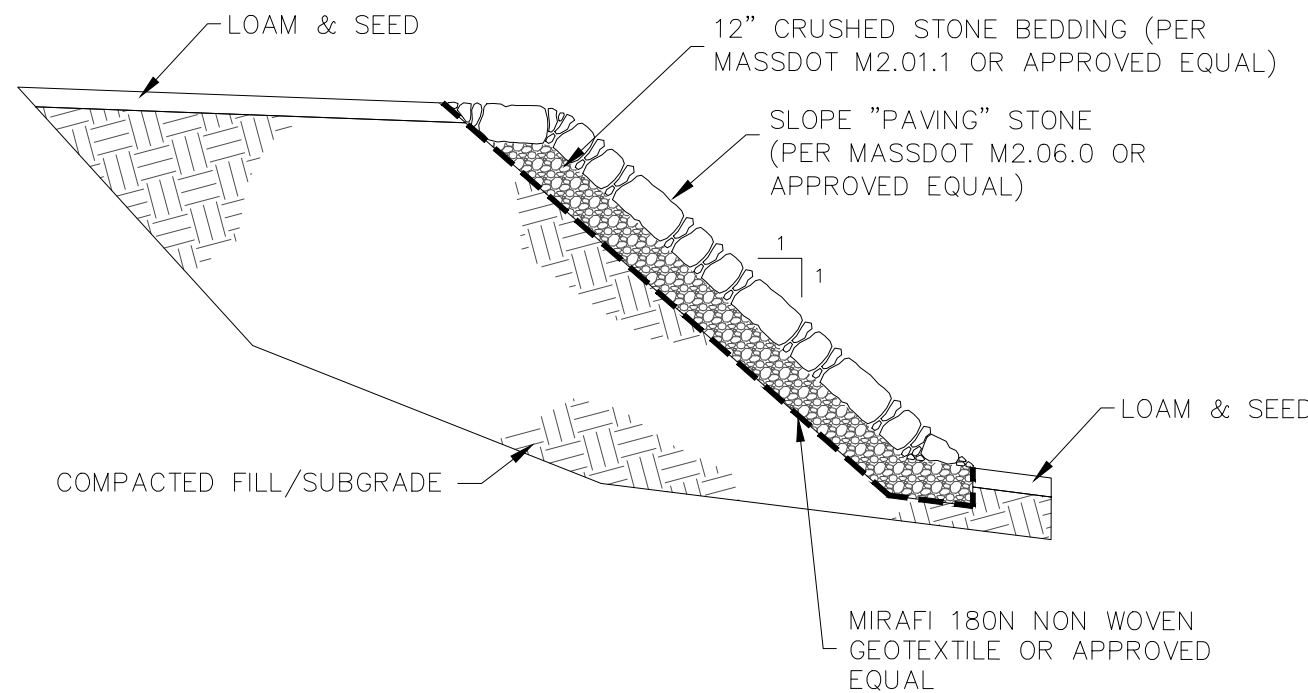
NOT TO SCALE



- NOTES:
1. SIGNAGE SHALL COMPLY WITH APPLICABLE FEDERAL, STATE, & LOCAL CODES, REGULATIONS, & POLICIES.
 2. ACCESSIBLE SIGNS SHALL BE MOUNTED A MINIMUM OF 5' TO BOTTOM OF SIGN AND A MAXIMUM OF 8' TO TOP OF SIGN IN ORDER TO COMPLY WITH APPLICABLE ADA AND AAB REQUIREMENTS.
 3. VAN ACCESSIBLE SIGN SHALL BE USED ON ONE PARKING SPACE PER BUILDING, SUCH THAT THE STRIPED ACCESSIBLE AISLE IS ON THE PASSENGER SIDE OF THE VAN SPACE.

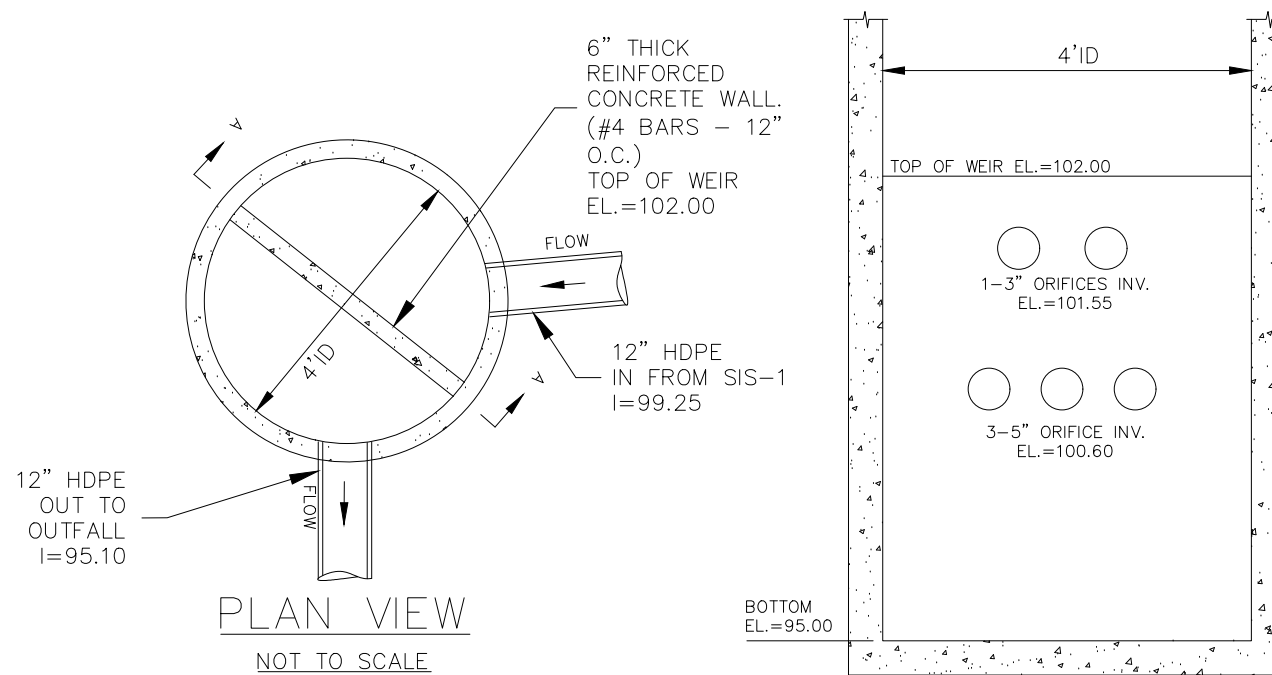
ACCESSIBLE PARKING SIGNAGE DETAIL

NOT TO SCALE



TYPICAL ARMORED SLOPE DETAIL

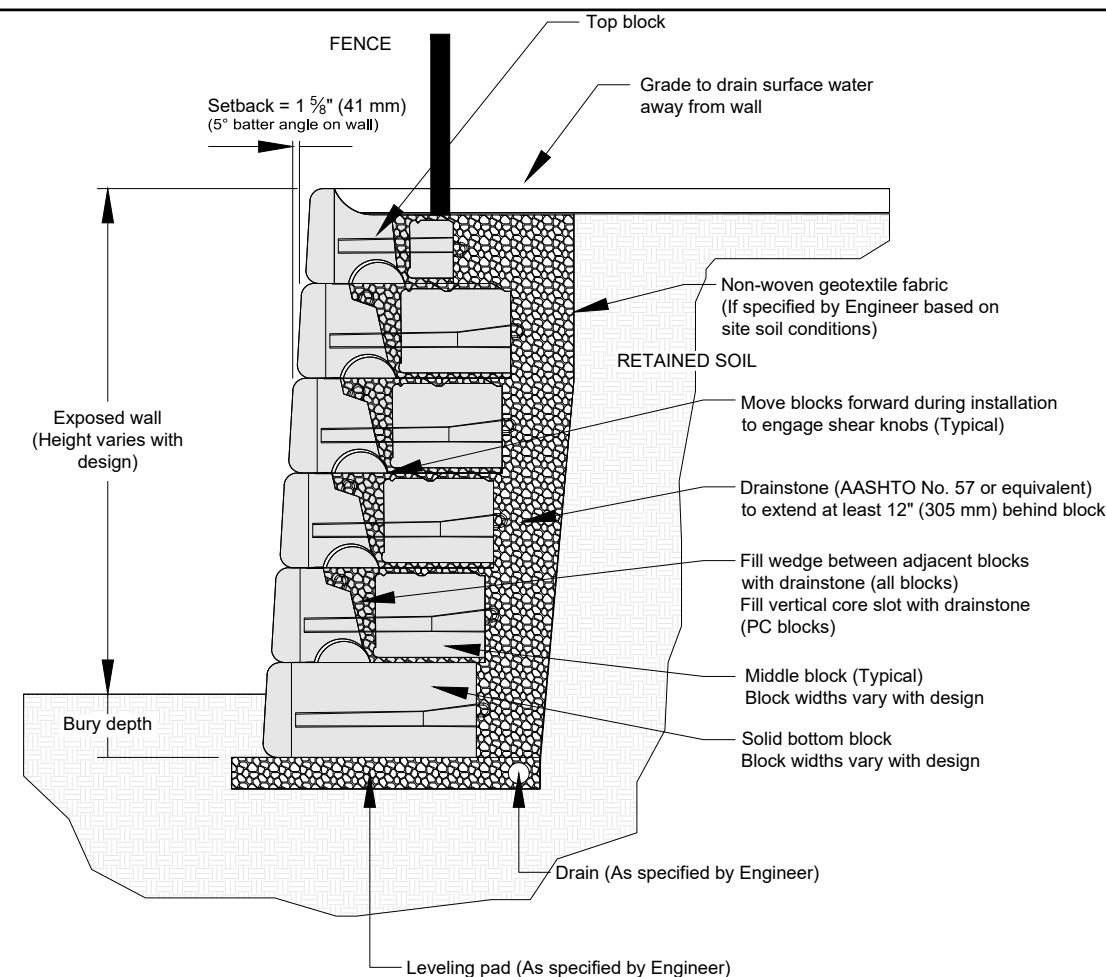
NOT TO SCALE



- NOTES:
1. OUTLET CONTROL PRECAST STRUCTURE SHALL CONFORM TO THE TYPICAL DRAIN MANHOLE DETAIL.
 2. INVERT ELEVATIONS SHALL BE VERIFIED BY THE CONTRACTOR.

OUTLET CONTROL STRUCTURE (OCS-1) DETAIL

NOT TO SCALE



- NOTES:
1. TOP AND BOTTOM OF WALL ELEVATIONS SHOWN ON GRADING & DRAINAGE PLANS REPRESENT THE EXPOSED PORTION OF THE WALL.
 2. ALL WALLS WITH GREATER THAN 4 FEET EXPOSED HEIGHT SHALL BE DESIGNED BY A STRUCTURAL ENGINEER.

TYPICAL GRAVITY WALL DETAIL

NOT TO SCALE

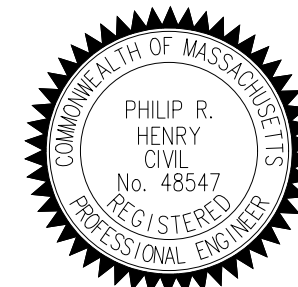
NOT FOR CONSTRUCTION

CDG PROJECT #: 23011

REVISIONS:

REV	DATE	COMMENT
1	11/09/23	REV PER PEER REVIEW COMMENTS
2		
3		
4		
5		
6		
7		
8		
9		

SEAL:



PHILIP R. HENRY, P.E.

PLANNING BOARD:

CIVIL ENGINEER:

**CIVIL DESIGN
GROUP, LLC**

21 HIGH STREET, SUITE 207
NORTH ANDOVER, MA 01845
www.cdgenengineering.com
p: 978-794-5400 f: 978-965-3971

PREPARED FOR:

**1650 WASHINGTON
STREET, LLC**

3 MICHAUD DRIVE
FRAMINGHAM, MA 01701

PROJECT:

**PROPOSED CAR WASH
DEVELOPMENT**

1650 WASHINGTON STREET (RT-16)
HOLLISTON, MA 01746

SCALE:

AS NOTED

SHEET:

**CONSTRUCTION
DETAILS**

10

DATE: 07/14/2023

CULTEC RECHARGER® 150XLHD SPECIFICATIONS

GENERAL
CULTEC RECHARGER® 150XLHD CHAMBERS ARE DESIGNED FOR UNDERGROUND STORMWATER MANAGEMENT. THE CHAMBERS MAY BE USED FOR RETENTION, RECHARGING, DETENTION OR CONTROLLING THE FLOW OF ON-SITE STORMWATER RUNOFF.

CHAMBER PARAMETERS
1. THE CHAMBERS SHALL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
2. THE CHAMBER SHALL BE VACUUM THERMOFORMED OF HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HDPE) WITH A BLACK INTERIOR AND BLUE EXTERIOR
3. THE CHAMBER SHALL BE ARCHED IN SHAPE.
4. THE CHAMBER SHALL BE OPEN-BOTTOMED.

5. THE CHAMBER SHALL BE JOINED USING AN INTERLOCKING OVERLAPPING RIB METHOD. CONNECTIONS MUST BE FULLY SHOULDERED OVERLAPPING RIBS, HAVING NO SEPARATE COUPLINGS OR SEPARATE END WALLS.

6. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC RECHARGER 150XLHD SHALL BE 18.5 INCHES (470 mm) TALL, 33 INCHES (838 mm) WIDE AND 11 FEET (3.35 m) LONG. THE INSTALLED LENGTH OF A JOINED RECHARGER 150XLHD SHALL BE 10.25 FEET (3.12 m).
7. MAXIMUM INLET OPENING ON THE CHAMBER ENDWALL IS 12 INCHES (300 mm) HDPE OR 15" (375 mm) SMOOTH-WALL PVC.

8. THE CHAMBER SHALL HAVE TWO SIDE PORTALS TO ACCEPT CULTEC HVLV® FC-24 FEED CONNECTORS TO CREATE AN INTERNAL MANIFOLD. THE NOMINAL INSIDE DIMENSIONS OF EACH SIDE PORTAL SHALL BE 4.5 INCHES (114 mm) HIGH BY 12 INCHES (304 mm) WIDE. MAXIMUM ALLOWABLE OUTER DIAMETER (O.D.) PIPE SIZE IN THE SIDE PORTAL IS 10.25 INCHES (260 mm).

9. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV® FC-24 FEED CONNECTOR SHALL BE 12 INCHES (300 mm) TALL, 18 INCHES (457 mm) WIDE AND 24.2 INCHES (615 mm) LONG.

10. THE NOMINAL STORAGE VOLUME OF THE RECHARGER 150XLHD CHAMBER SHALL BE 2.860 FT³/FT (0.248 m³/m) - WITHOUT STONE. THE NOMINAL STORAGE VOLUME OF A JOINED RECHARGER 150XLHD SHALL BE 27.16 FT³/UNIT (0.77 m³/UNIT) - WITHOUT STONE.

11. THE NOMINAL STORAGE VOLUME OF THE HVLV® FC-24 FEED CONNECTOR SHALL BE 0.915 FT³/FT (0.085 m³/m) - WITHOUT STONE.

12. THE RECHARGER 150XLHD CHAMBER SHALL HAVE THIRTY DISCHARGE HOLES BORED INTO THE SIDEWALLS OF THE UNIT'S CORE TO PROMOTE LATERAL CONVEYANCE OF WATER.

13. THE RECHARGER 150XLHD CHAMBER SHALL HAVE 20 CORRUGATIONS.

14. THE ENDWALL OF THE CHAMBER, WHEN PRESENT, SHALL BE AN INTEGRAL PART OF THE CONTINUOUSLY FORMED UNIT. SEPARATE END PLATES CANNOT BE USED WITH THIS UNIT.

15. THE RECHARGER 150XLHD STAND ALONE UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO FULLY FORMED INTEGRAL ENDWALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE ENDWALLS.

16. THE RECHARGER 150XLHD STARTER UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY FORMED INTEGRAL ENDWALL AND ONE FULLY OPEN END WALL AND HAVING NO SEPARATE END PLATES OR SEPARATE ENDWALLS.

17. THE RECHARGER 150XLHD INTERMEDIATE UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY OPEN ENDWALL AND ONE PARTIALLY FORMED INTEGRAL ENDWALL WITH A LOWER TRANSFER OPENING OF 10 INCHES (254 mm) HIGH X 20.5 INCHES (521 mm) WIDE.

18. THE RECHARGER 150XLHD END UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY FORMED INTEGRAL ENDWALL AND ONE FULLY OPEN END WALL AND HAVING NO SEPARATE END PLATES OR SEPARATE ENDWALLS.

19. THE HVLV® FC-24 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE ENDWALLS. THE UNIT SHALL FIT INTO THE SIDE PORTALS OF THE RECHARGER 150XLHD AND ACT AS CROSS FLEX CONNECTIONS.

20. CHAMBERS MUST HAVE HORIZONTAL STIFFENING FLEX REDUCTION STEPS BETWEEN THE RIBS.

21. THE CHAMBER SHALL HAVE A RAISED INTEGRAL CAP AT THE TOP OF THE ARCH IN THE CENTER OF EACH UNIT TO BE USED AS AN OPTIONAL INSPECTION PORT OR CLEAN-OUT.

22. THE UNITS MAY BE TRIMMED TO CUSTOM LENGTHS BY CUTTING BACK TO ANY CORRUGATION.

23. THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2008 CERTIFIED FACILITY.

24. THE CHAMBER SHALL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.

25. THE CHAMBER SHALL BE DESIGNED AND MANUFACTURED TO MEET THE MATERIAL AND STRUCTURAL REQUIREMENTS OF ASTM PS 63-2019, INCLUDING RESISTANCE TO ASHTO H-10 AND H-20 HIGHWAY LIVE LOADS, WHEN INSTALLED IN ACCORDANCE WITH CULTEC'S INSTALLATION INSTRUCTIONS.

26. THE CHAMBER SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH THE SPECIFICATION OF NSAI IRISH AGREEMENT BOARD CERTIFICATE FOR CULTEC ATTENUATION AND NUTRITION.

27. MAXIMUM ALLOWED COVER OVER TOP OF UNIT SHALL BE 12 FEET (3.66 m).

CULTEC HVLV® FC-24 FEED CONNECTOR PRODUCT SPECIFICATIONS

GENERAL
CULTEC HVLV® FC-24 FEED CONNECTORS ARE DESIGNED TO CREATE AN INTERNAL MANIFOLD FOR CULTEC RECHARGER® 150XLHD STORMWATER CHAMBERS.

CHAMBER PARAMETERS
1. THE CHAMBERS SHALL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)

2. THE CHAMBER SHALL BE VACUUM THERMOFORMED OF HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HDPE) WITH A BLACK INTERIOR AND BLUE EXTERIOR.

3. THE CHAMBER SHALL BE ARCHED IN SHAPE.
4. THE CHAMBER SHALL BE OPEN-BOTTOMED.

5. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV® FC-24 FEED CONNECTOR SHALL BE 12 INCHES (300 mm) TALL, 18 INCHES (457 mm) WIDE AND 24.2 INCHES (615 mm) LONG.

6. THE HVLV® FC-24 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE ENDWALLS. THE UNIT SHALL FIT INTO THE SIDE PORTALS OF THE CULTEC RECHARGER 150XLHD CHAMBER AND ACT AS CROSS FLEX CONNECTIONS TO AN INTERNAL MANIFOLD.

7. THE CHAMBER SHALL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.

8. THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2008 CERTIFIED FACILITY.

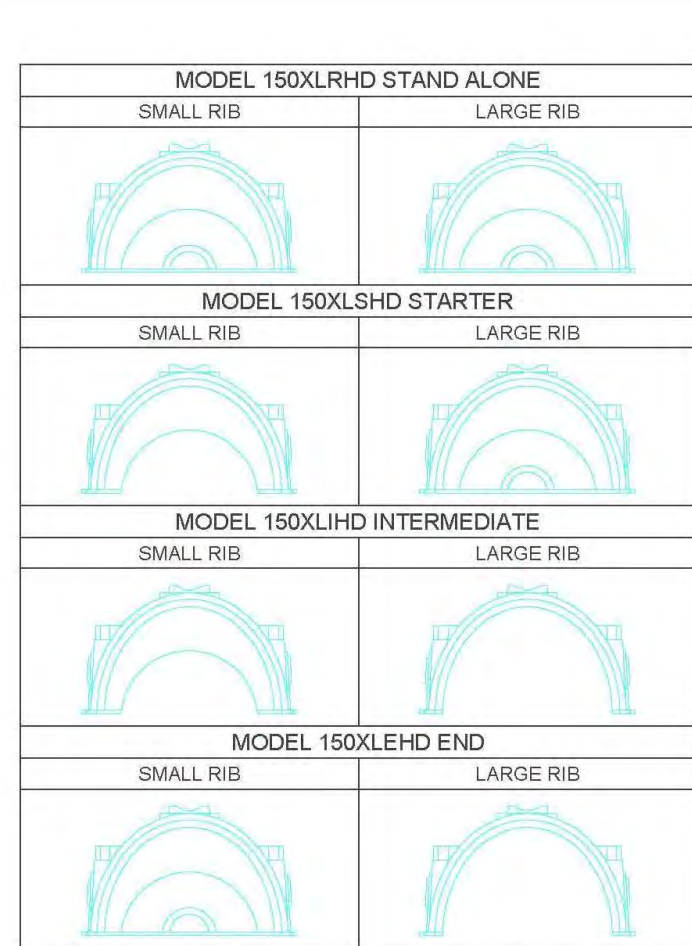
CULTEC NO. 410™ NON-WOVEN GEOTEXTILE
CULTEC NO. 410™ NON-WOVEN GEOTEXTILE MAY BE USED WITH CULTEC CONTACTOR® AND RECHARGER® STORMWATER INSTALLATIONS TO PROVIDE A BARRIER THAT PREVENTS SOIL INTRUSION INTO THE STONE.

GEOTEXTILE PARAMETERS
1. THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
2. THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE.
3. THE GEOTEXTILE SHALL HAVE A TYPICAL WEIGHT OF 4.5 OZ/SY (142 G/M²).
4. THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH VALUE OF 120 LBS (533 N) PER ASTM D4632 TESTING METHOD.
5. THE GEOTEXTILE SHALL HAVE AN ELONGATION @ BREAK VALUE OF 50% PER ASTM D4632 TESTING METHOD.
6. THE GEOTEXTILE SHALL HAVE A HULLER BURST VALUE OF 225 PSI (155 KPA) PER ASTM D595 TESTING METHOD.
7. THE GEOTEXTILE SHALL HAVE A PUNCTURE STRENGTH VALUE OF 65 LBS (289 N) PER ASTM D4633 TESTING METHOD.
8. THE GEOTEXTILE SHALL HAVE A CBR PUNCTURE VALUE OF 340 LBS (1513 N) PER ASTM D6241 TESTING METHOD.
9. THE GEOTEXTILE SHALL HAVE A TRAPEZOIDAL TEAR VALUE OF 50 LBS (222 N) PER ASTM D4533 TESTING METHOD.
10. THE GEOTEXTILE SHALL HAVE A ALLOW VALUE OF 70 U.S. SEVE (0.31 mm) PER ASTM D4751 TESTING METHOD.
11. THE GEOTEXTILE SHALL HAVE A PERMITTIVITY VALUE OF 1.7 SEC-1 PER ASTM D4491 TESTING METHOD.
12. THE GEOTEXTILE SHALL HAVE A WATER FLOW RATE VALUE OF 135 GAL/IN/PS (5300 LPH/IN/PS) PER ASTM D4491 TESTING METHOD.
13. THE GEOTEXTILE SHALL HAVE A UV STABILITY @ 500 HOURS VALUE OF 70% PER ASTM D4355 TESTING METHOD.

CULTEC NO. 4800™ WOVEN GEOTEXTILE
CULTEC NO. 4800™ WOVEN GEOTEXTILE IS DESIGNED AS A UNDERLAYMENT TO PREVENT SCOURING CAUSED BY WATER MOVEMENT WITHIN. THE CULTEC CHAMBERS AND FEED CONNECTORS UTILIZING THE CULTEC MANIFOLD FEATURE. IT MAY ALSO BE USED AS A COMPONENT OF THE CULTEC SEPARATOR ROW TO ACT AS A BARRIER TO PREVENT SOIL/CONTAMINANT INTRUSION INTO THE STONE WHILE ALLOWING FOR MAINTENANCE.

GEOTEXTILE PARAMETERS
1. THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
2. THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE.
3. THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH OF 550 X 550 LBS (2,448 X 2,448 N) PER ASTM D4632 TESTING METHOD.
4. THE GEOTEXTILE SHALL HAVE A ELONGATION @ BREAK RESISTANCE OF 20 X 20% PER ASTM D4632 TESTING METHOD.
5. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE OF 5,070 X 5,070 LBS/FT (74 X 74 KN/M) PER ASTM D4595 TESTING METHOD.
6. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 2% STRAIN OF 960 X 1,096 LBS/FT (14 X 16 KN/M) PER ASTM D4595 TESTING METHOD.
7. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 5% STRAIN OF 2,740 X 2,740 LBS/FT (40 X 40 KN/M) PER ASTM D4595 TESTING METHOD.
8. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 10% STRAIN OF 4,800 X 4,800 LBS/FT (70 X 70 KN/M) PER ASTM D4595 TESTING METHOD.
9. THE GEOTEXTILE SHALL HAVE A CBR PUNCTURE RESISTANCE OF 1,700 LBS (7,560 N) PER ASTM D6241 TESTING METHOD.
10. THE GEOTEXTILE SHALL HAVE A TRAPEZOIDAL TEAR RESISTANCE OF 380 X 380 LBS (801 X 801 N) PER ASTM D4533 TESTING METHOD.
11. THE GEOTEXTILE SHALL HAVE AN APPARENT OPENING SIZE OF 40 US STD. SIEVE (0.425 mm) PER ASTM D4751 TESTING METHOD.
12. THE GEOTEXTILE SHALL HAVE A PERMITTIVITY RATING OF 0.15 SEC-1 PER ASTM D4491 TESTING METHOD.
13. THE GEOTEXTILE SHALL HAVE A WATER FLOW RATING OF 11.5 GPM/FT² (470 LPH/M²) PER ASTM D4491 TESTING METHOD.
14. THE GEOTEXTILE SHALL HAVE A UV RESISTANCE OF 80% @ 500 HRS. PER ASTM D4355 TESTING METHOD.

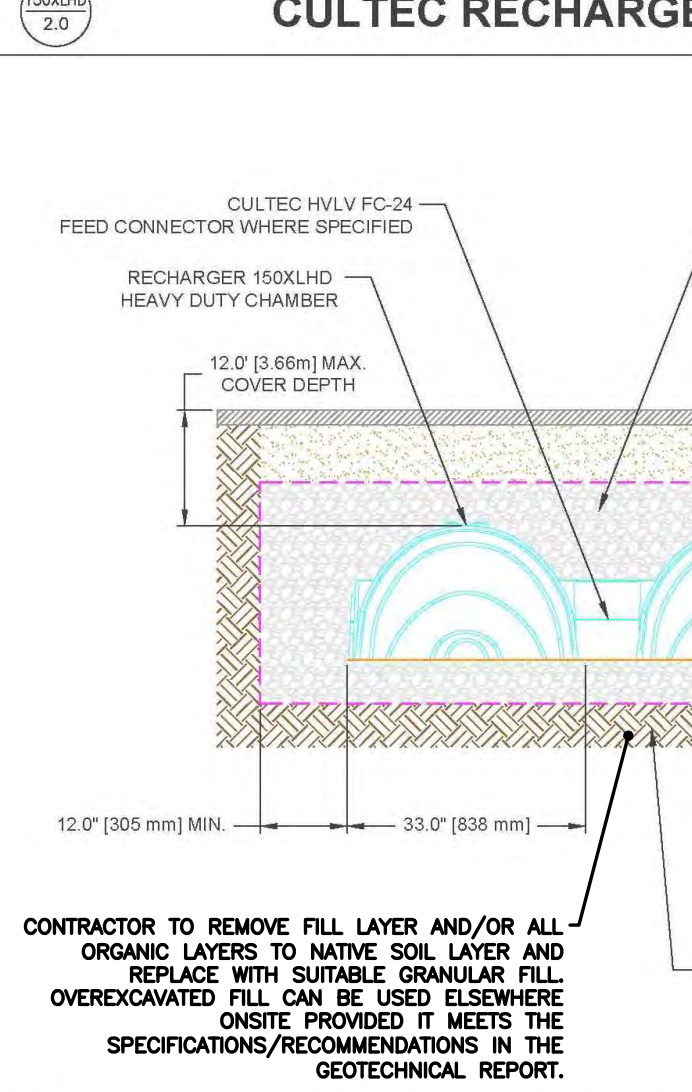
GENERAL NOTES
1. THE CHAMBER SHALL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.
2. THE CHAMBER SHALL BE DESIGNED AND MANUFACTURED TO MEET THE MATERIAL AND STRUCTURAL REQUIREMENTS OF ASTM PS 63-2019, INCLUDING RESISTANCE TO ASHTO H-10 AND H-20 HIGHWAY LIVE LOADS, WHEN INSTALLED IN ACCORDANCE WITH CULTEC'S INSTALLATION INSTRUCTIONS.
3. THE CHAMBER SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH THE SPECIFICATION OF NSAI IRISH AGREEMENT BOARD CERTIFICATE FOR CULTEC ATTENUATION AND NUTRITION.
4. MAXIMUM ALLOWED COVER OVER TOP OF UNIT SHALL BE 12 FEET (3.66 m).



CULTEC RECHARGER 150XLHD CHAMBER STORAGE = 2.85 CF/FT [0.248 m³/m]
INSTALLED LENGTH ADJUSTMENT = 0.75' [0.23 m]

150XLHD 2.0

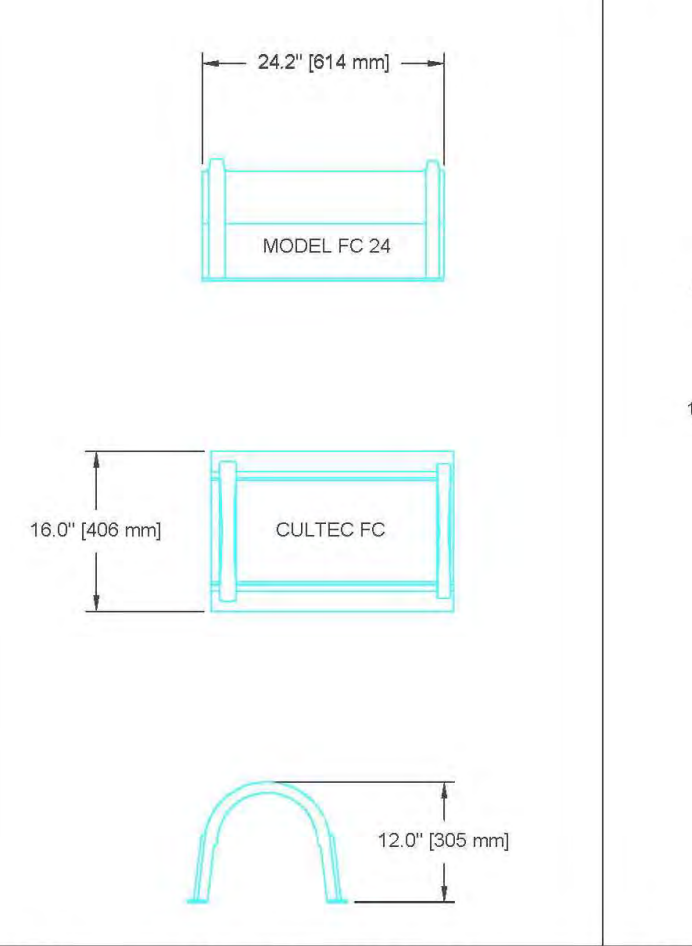
CULTEC RECHARGER 150XLHD HEAVY DUTY THREE VIEW



CONTRACTOR TO REMOVE FILL LAYER AND/OR ALL ORGANIC LAYERS TO NATIVE SOIL LAYER AND REPLACE WITH SUITABLE GRANULAR FILL. OVEREXCAVATED FILL CAN BE USED ELSEWHERE ON SITE PROVIDED IT MEETS THE SPECIFICATIONS/RECOMMENDATIONS OF THE GEOTECHNICAL REPORT.

150XLHD 3.0

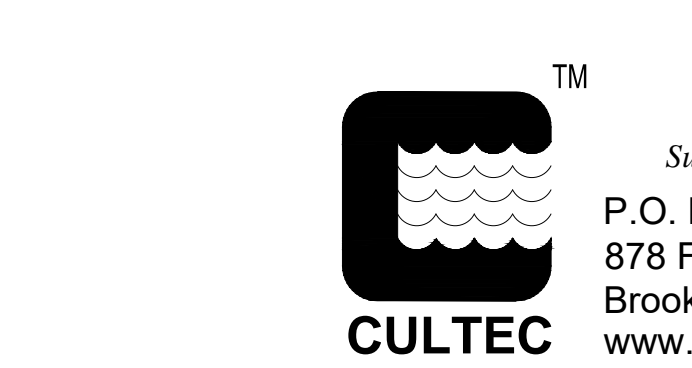
CULTEC RECHARGER 150XLHD HEAVY DUTY CROSS SECTION



CULTEC HVLV® FC-24 FEED CONNECTOR THREE VIEW

150XLHD 3.0

INSPECTION PORT - ZOOM DETAIL



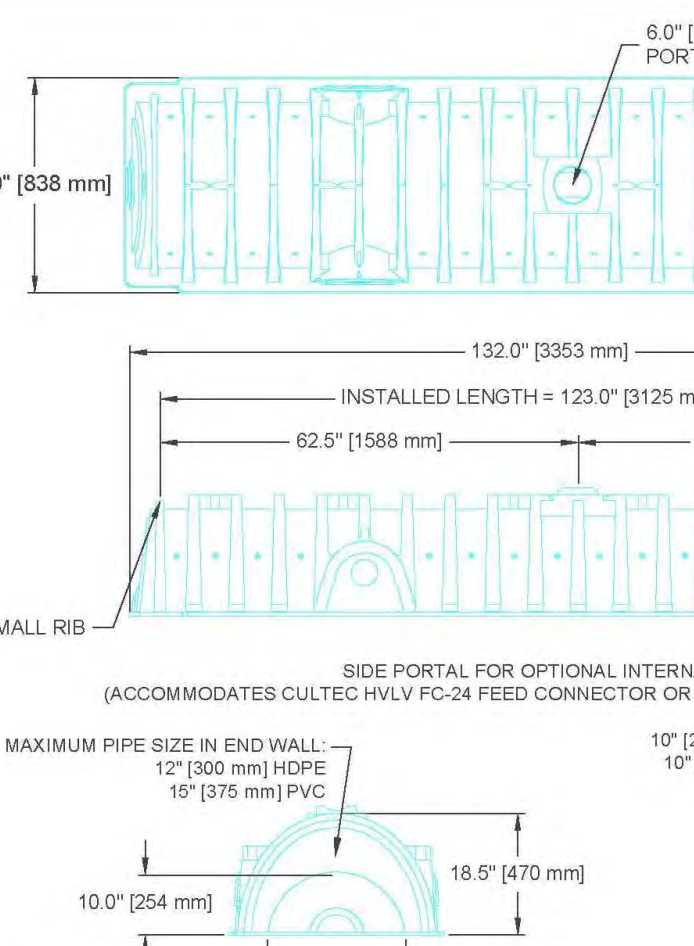
150XLHD 3.0

CULTEC INTERNAL MANIFOLD

150XLHD 10.0

INSPECTION PORT DETAIL

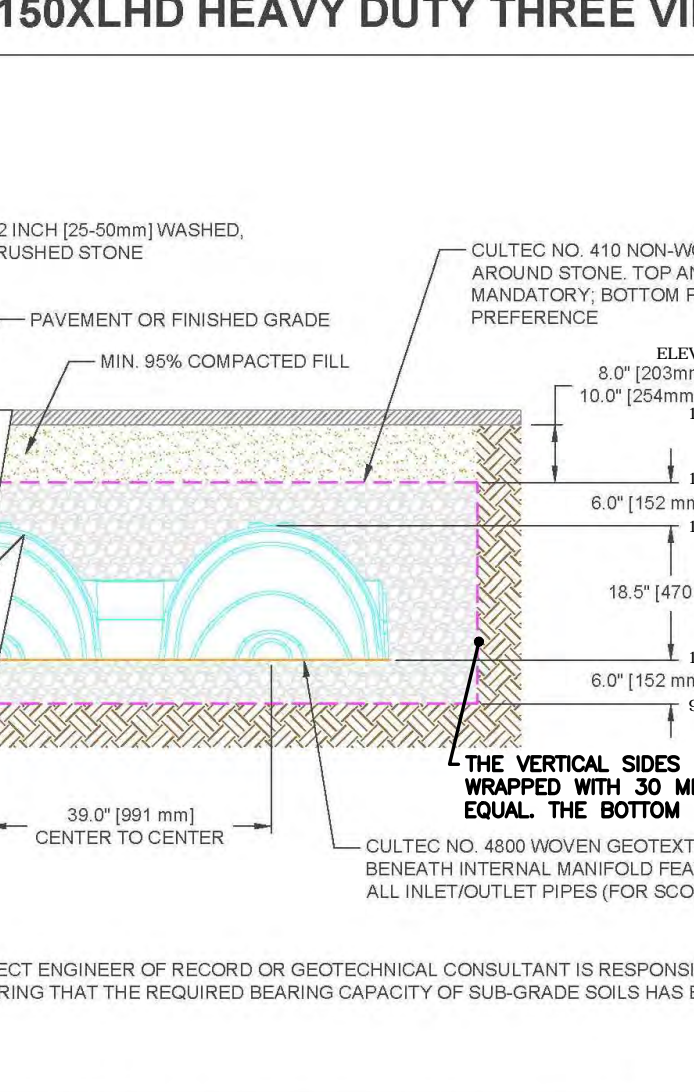
150XLHD 10.0



CULTEC RECHARGER 150XLHD HEAVY DUTY END DETAIL INFORMATION

150XLHD 3.0

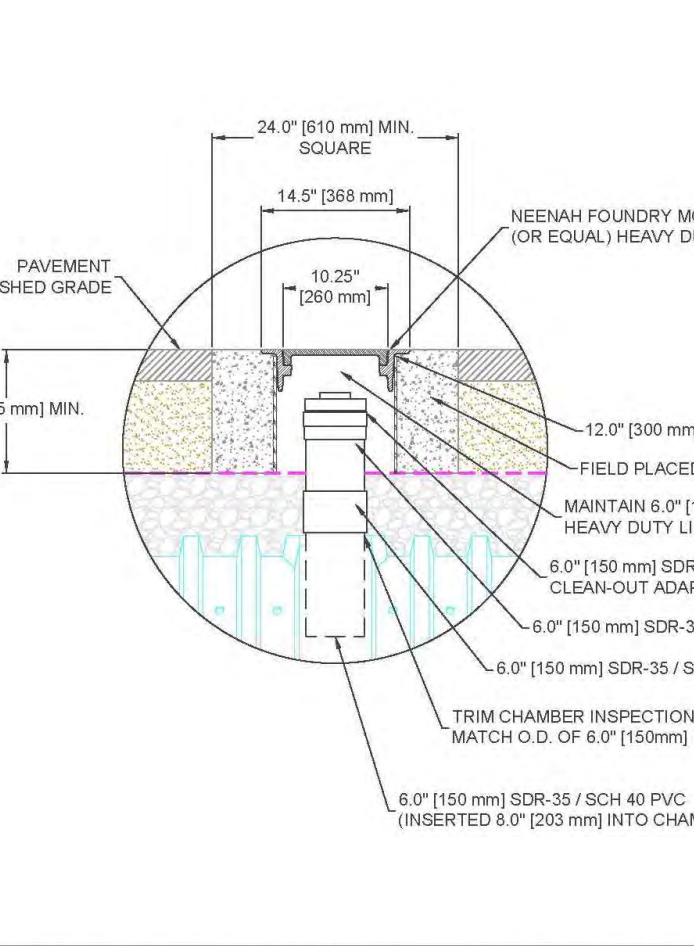
CULTEC RECHARGER 150XLHD HEAVY DUTY END DETAIL INFORMATION



CULTEC RECHARGER 150XLHD HEAVY DUTY END DETAIL INFORMATION

150XLHD 3.0

CULTEC RECHARGER 150XLHD HEAVY DUTY TYPICAL INTERLOCK



CULTEC RECHARGER 150XLHD HEAVY DUTY TYPICAL INTERLOCK

150XLHD 6.0

CULTEC INTERNAL MANIFOLD

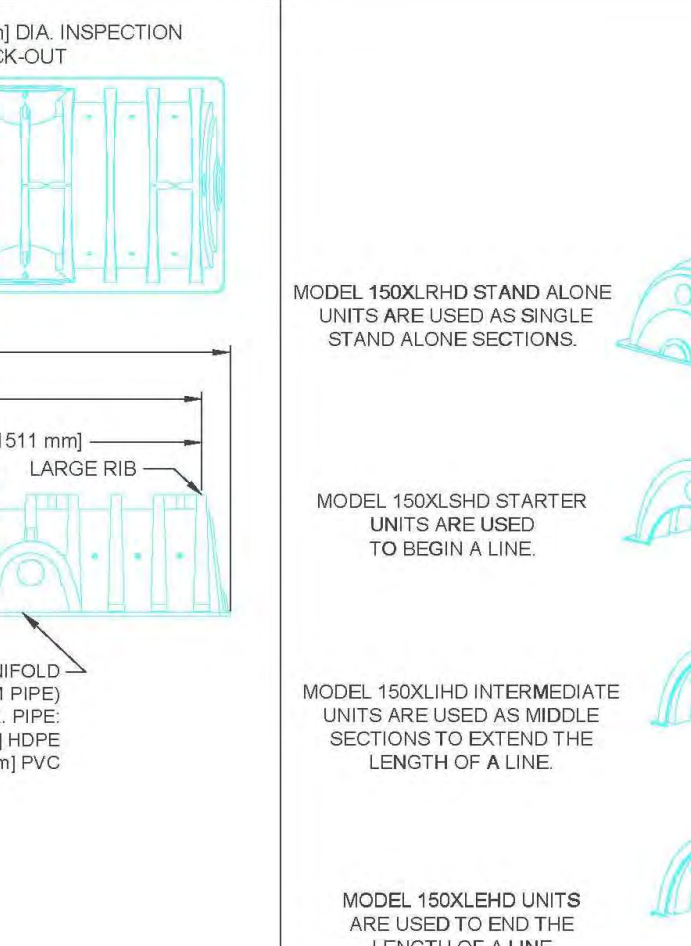


CULTEC RECHARGER 150XLHD HEAVY DUTY TYPICAL INTERLOCK

150XLHD 6.0

INSPECTION PORT DETAIL

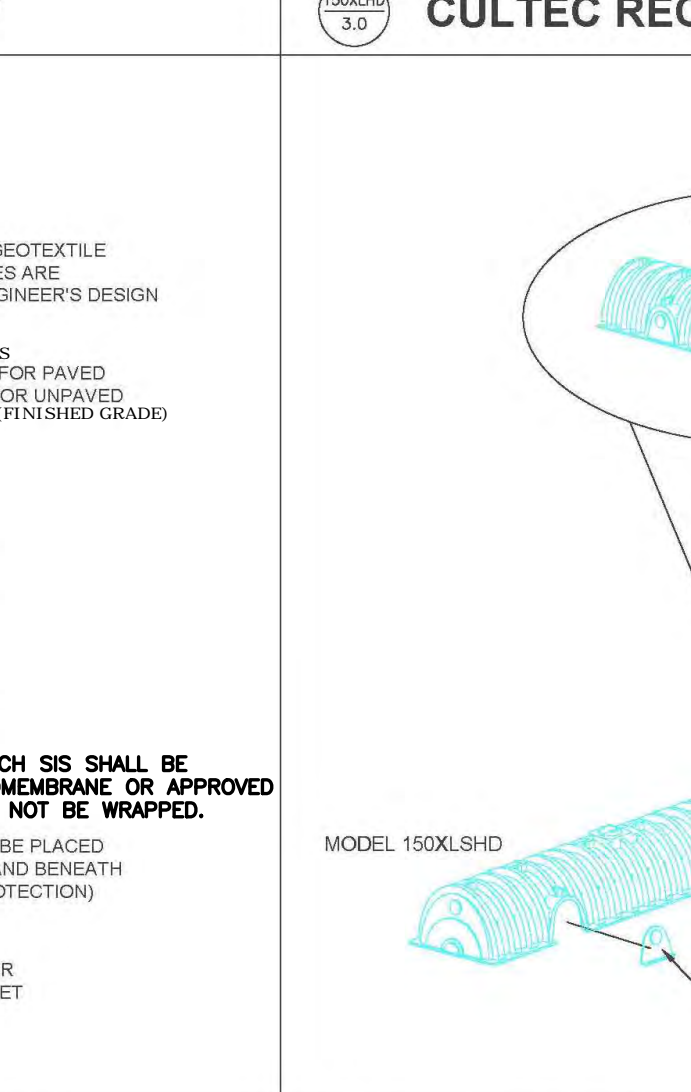
150XLHD 10.0



CULTEC RECHARGER 150XLHD HEAVY DUTY END DETAIL INFORMATION

150XLHD 3.0

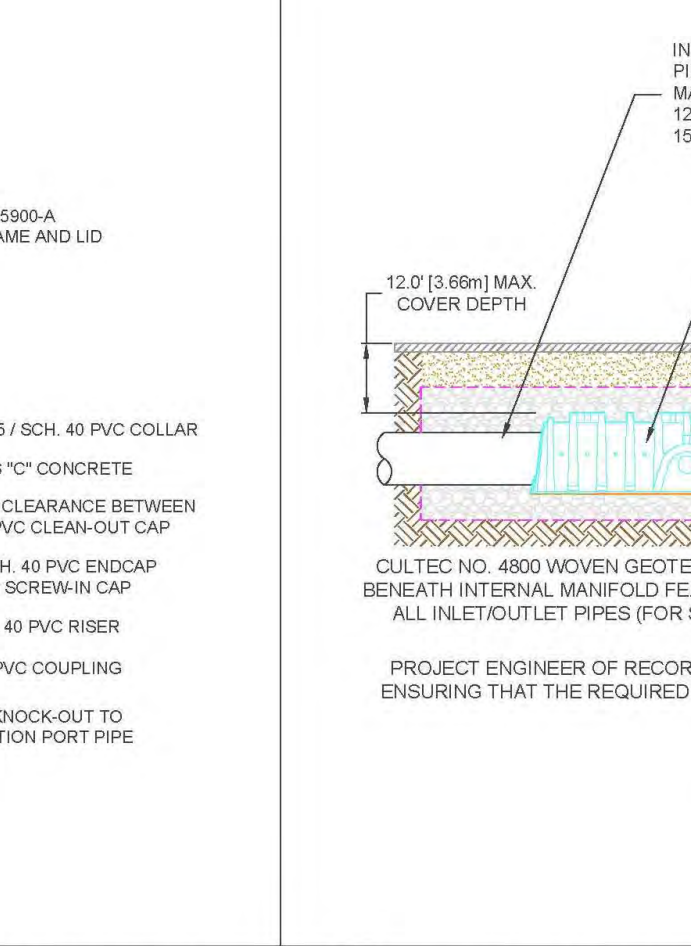
CULTEC RECHARGER 150XLHD HEAVY DUTY END DETAIL INFORMATION



CULTEC RECHARGER 150XLHD HEAVY DUTY END DETAIL INFORMATION

150XLHD 3.0

CULTEC RECHARGER 150XLHD HEAVY DUTY TYPICAL INTERLOCK



CULTEC RECHARGER 150XLHD HEAVY DUTY TYPICAL INTERLOCK

150XLHD 6.0

CULTEC INTERNAL MANIFOLD

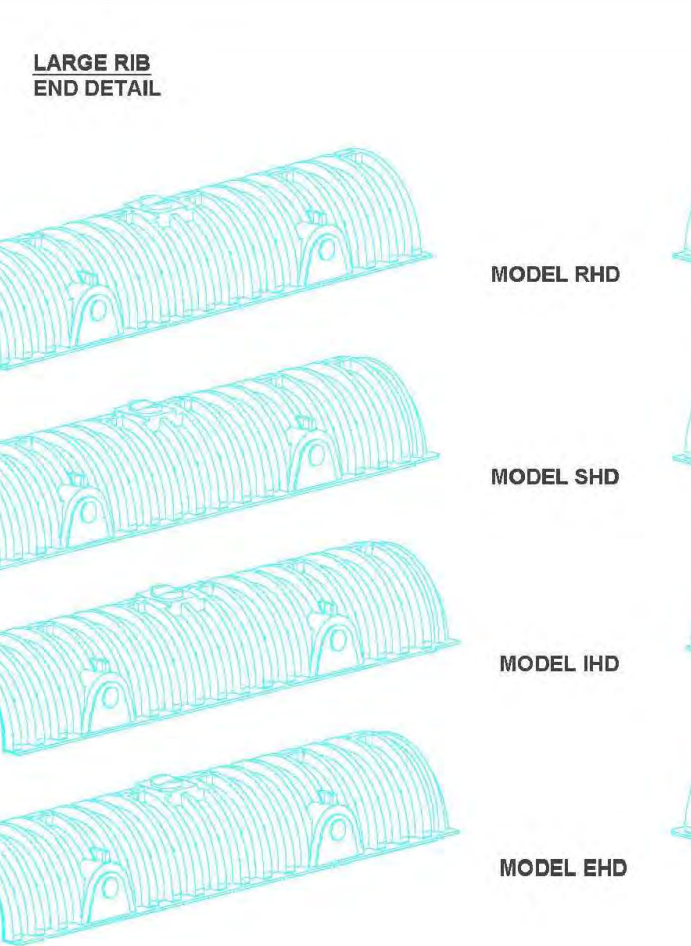


CULTEC RECHARGER 150XLHD HEAVY DUTY TYPICAL INTERLOCK

150XLHD 6.0

INSPECTION PORT DETAIL

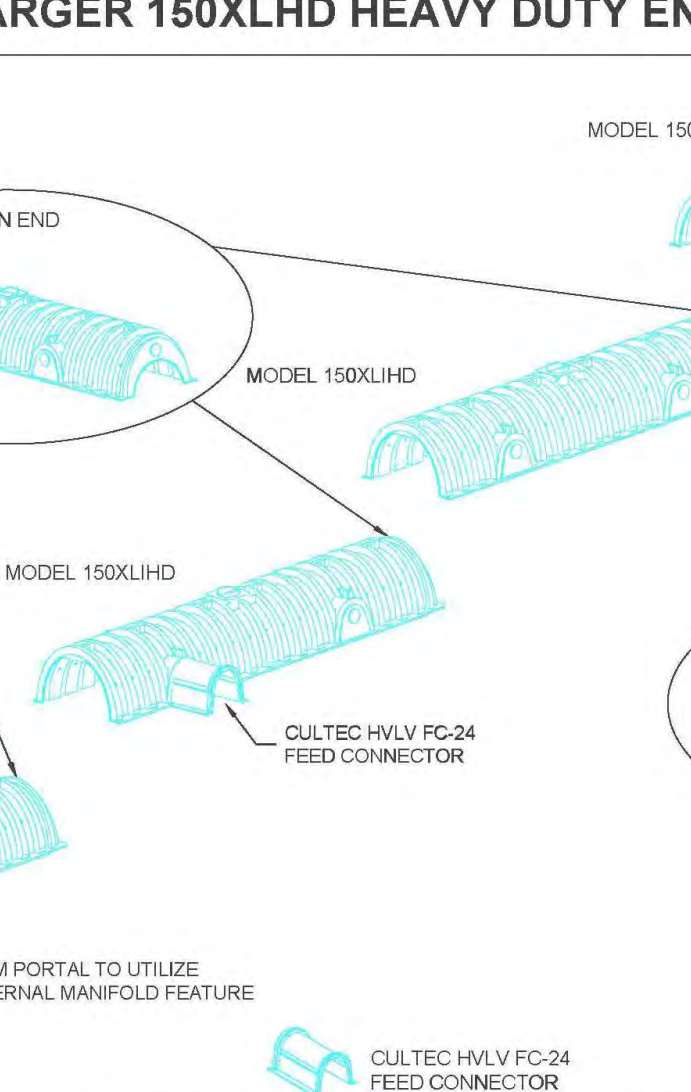
150XLHD 10.0



CULTEC RECHARGER 150XLHD HEAVY DUTY END DETAIL INFORMATION

150XLHD 3.0

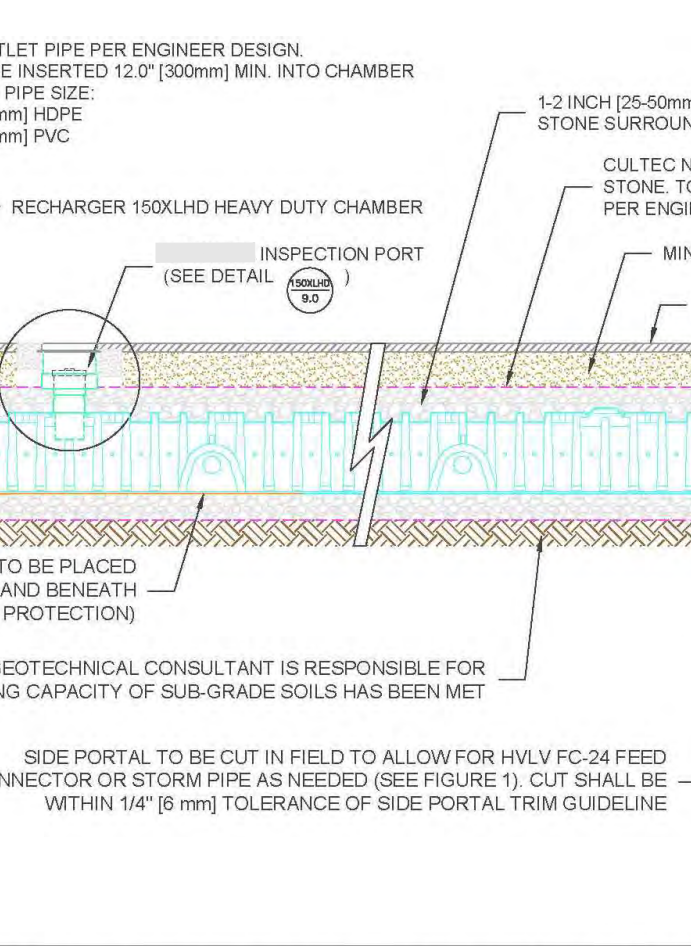
CULTEC RECHARGER 150XLHD HEAVY DUTY END DETAIL INFORMATION



CULTEC RECHARGER 150XLHD HEAVY DUTY END DETAIL INFORMATION

150XLHD 3.0

CULTEC RECHARGER 150XLHD HEAVY DUTY TYPICAL INTERLOCK



CULTEC RECHARGER 150XLHD HEAVY DUTY TYPICAL INTERLOCK

150XLHD 6.0

CULTEC INTERNAL MANIFOLD

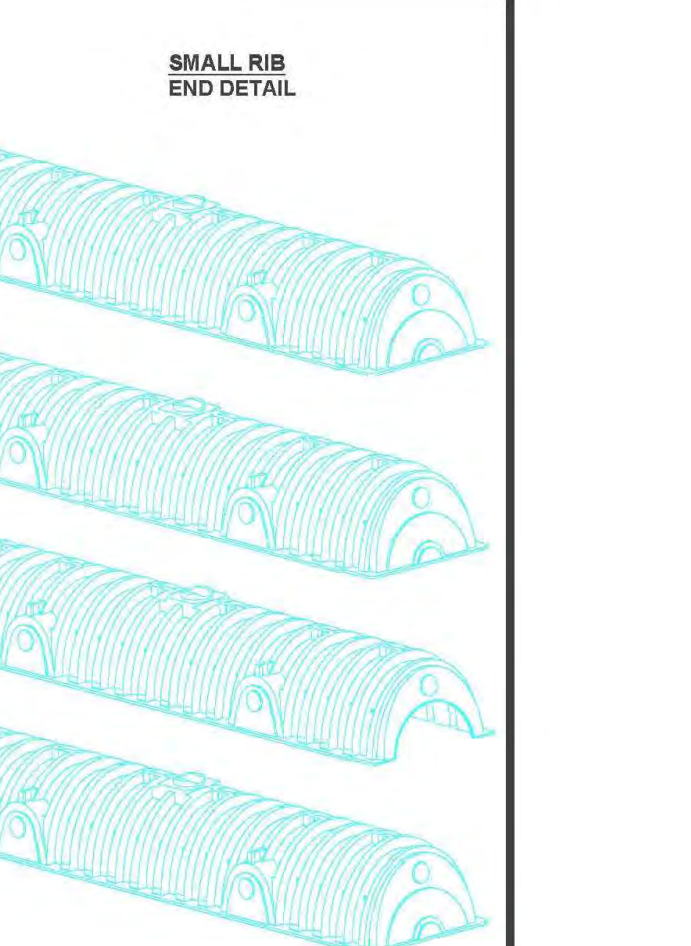


CULTEC RECHARGER 150XLHD HEAVY DUTY TYPICAL INTERLOCK

150XLHD 6.0

INSPECTION PORT DETAIL

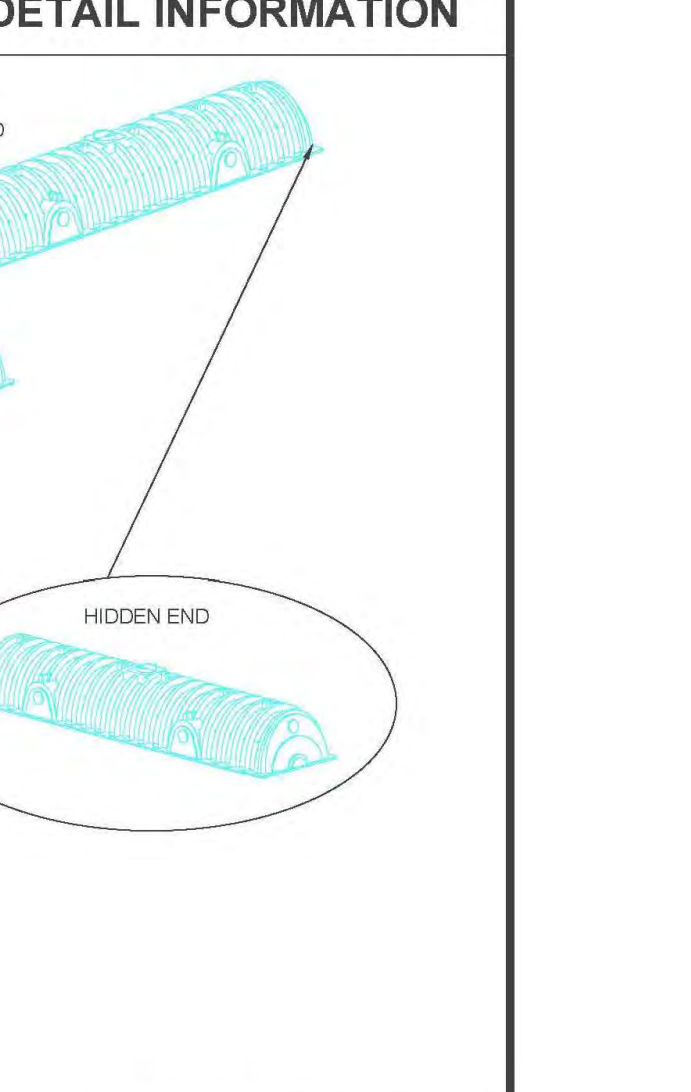
150XLHD 10.0



CULTEC RECHARGER 150XLHD HEAVY DUTY END DETAIL INFORMATION

150XLHD 3.0

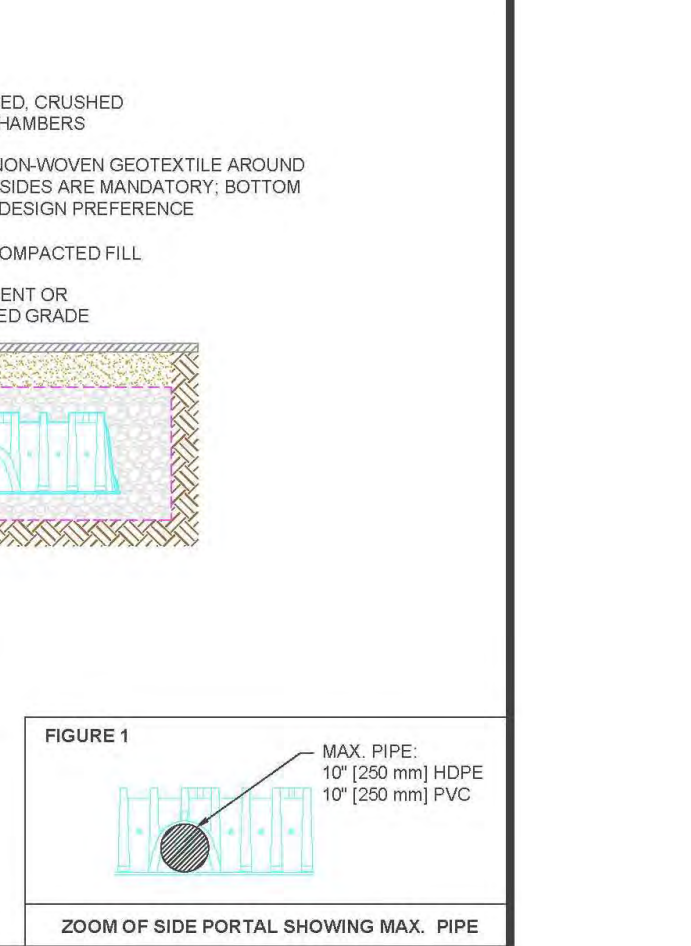
CULTEC RECHARGER 150XLHD HEAVY DUTY END DETAIL INFORMATION



CULTEC RECHARGER 150XLHD HEAVY DUTY END DETAIL INFORMATION

150XLHD 3.0

CULTEC RECHARGER 150XLHD HEAVY DUTY TYPICAL INTERLOCK



CULTEC RECHARGER 150XLHD HEAVY DUTY TYPICAL INTERLOCK

150XLHD 6.0

GENERAL NOTES

- ZONING INFORMATION OBTAINED FROM THE TOWN OF HOLLISTON ZONING BYLAW AS AMENDED THROUGH MAY 2022.
- THE PROJECT SITE INCLUDES ASSESSOR PARCELS 5-4-28.1 AND 5-4-28.2, EACH TOTALING 0.4± ACRES AND 0.34± ACRES, CORRESPONDING TO 1650 WASHINGTON STREET AND 35 CHESTNUT STREET, RESPECTIVELY.
- THE PROJECT LIES WITHIN THE COMMERCIAL DISTRICT (C-1) AND DOES NOT APPEAR TO LIE WITHIN AN OVERLAY DISTRICT.
- MODIFICATIONS TO THIS PLAN MAY OCCUR AS UNFORESEEN CONDITIONS ARISE. ALL CHANGES SHALL BE APPROVED BY THE ENGINEER & MUNICIPALITY.
- ALTERNATIVE METHODS AND PRODUCTS OTHER THAN THOSE SPECIFIED MAY BE USED IF REVIEWED AND APPROVED BY THE OWNER, SITE ENGINEER, AND APPROPRIATE REGULATORY AGENCY PRIOR TO INSTALLATION.
- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL PRODUCTS, MATERIALS, AND PLANT SPECIFICATIONS TO THE OWNER AND ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVERY TO THE SITE. ALLOW A MINIMUM OF 14 WORKING DAYS FOR REVIEW.
- THE CONTRACTOR SHALL PROVIDE AS-BUILT RECORDS OF ALL CONSTRUCTION (INCLUDING UNDERGROUND UTILITIES) TO THE OWNER AT THE END OF THE CONSTRUCTION.
- THE SITE DOES NOT APPEAR TO INCLUDE A NHESP AREA, AN ACEC OR A WETLAND RESOURCE AREA.
- THE PROPERTY IS LOCATED WITHIN THE ZONE X FLOOD ZONE, AS SHOWN ON THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 2501950637E, WHICH BEARS AN EFFECTIVE DATE OF JUNE 4, 2010.

SITE LAYOUT NOTES

- THE BUILDING OUTLINE SHOWN ON THIS PLAN DEPICTS THE FINISH TO FINISH EXTENTS OF THE BUILDING. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL DRAWINGS FOR FOUNDATION PLANS FOR THE PURPOSE OF STAKING OUT THE BUILDING. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS AND EXTERIOR FEATURES INCLUDING UTILITY METERS, BOLLARDS, DOORS, PILASTERS, RAMPS, ETC.
- BUILDING SIDEWALK DIMENSIONS ARE MEASURED FROM EXTERIOR FINISH MATERIAL OF STRUCTURE.
- ALL LIMITS OF PAVEMENT SHALL BE CURBED, UNLESS OTHERWISE NOTED.
- ALL ON-SITE CURB SHALL BE BITUMINOUS CONCRETE UNLESS OTHERWISE SPECIFIED.
- PARALLEL PARKING SPACE DIMENSIONS AS SHOWN ON THE PLAN ARE 10' WIDE X 20' LONG. PERPENDICULAR VACUUM SPACE DIMENSIONS AS SHOWN ON THE PLAN ARE 12' WIDE X 18' LONG.
- ALL PAVEMENT MARKINGS SHALL BE ACCOMPLISHED WITH USE OF PAINTING MACHINES AND/OR STENCILS. ALL PAINT FOR PAVEMENT MARKING SHALL MEET THE REQUIREMENTS OF SOLVENTBORNE APPLICATION RECOMMENDATIONS (LATEX TRAFFIC PAINT BY BENJAMIN MOORE #TDS8 LOW VOC). PARKING STALL AND ISLAND STRIPING SHALL BE 4" WIDE AND SHALL BE STRAIGHT WITH A CLEAN EDGE. ALL DIRECTIONAL ARROWS, STOP BARS, ETC. SHALL CONFORM WITH MUTCD.
- PAVEMENT LETTERS SHALL BE 2" WIDE X 2" LONG.
- STOP BARS SHALL BE 12" WIDE AND SOLID LINES SHALL BE 4" IN WIDTH (SEE SITE PLAN FOR LENGTH & COLOR).
- ACCESSIBLE PARKING SPACES SHALL CONFORM TO THE LATEST EDITION OF THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA) AND THE ARCHITECTURAL ACCESS BOARD (AAB) AS SHOWN ON THE SITE LAYOUT PLAN.
- ACCESSIBLE PARKING AISLE STRIPING SHALL CONSIST OF 4" SOLID LINES OF LATEX TRAFFIC PAINT BY BENJAMIN MOORE #TDS8 LOW VOC ADA BLUE COLOR ORIENTED AT A 45 DEGREE ANGLE AND SPACED 3' ON CENTER.
- DIRECTIONAL AND ACCESSIBLE SIGNS SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR COLOR AND SIZE.
- ALL FLAT WORK WITHIN THE RIGHT OF WAY SHALL CONFORM TO MUNICIPAL/STATE STANDARDS.
- REPLACEMENT PAVEMENT AS A RESULT OF UTILITY AND DRAINAGE TRENCHING WITHIN THE RIGHT-OF-WAY SHALL MATCH EXISTING PAVEMENT THICKNESS.
- SNOW SHALL NOT BE STORED IN ANY LANDSCAPED AREAS, EXCEPT FOR DESIGNATED SNOW STORAGE AREAS, AND SHALL NOT BE STORED IN ANY MANNER WHICH AFFECTS VISIBILITY FOR PEDESTRIANS AND VEHICLES. THE CLEARING OF SNOW MUST COMMENCE WHEN STOCKPILED SNOW EITHER IMPEDES THE SIDEWALK OR PARKING SPACE ACCESS. AT WHICH TIME, THE APPLICANT WOULD BE EXPECTED TO REMOVE THE SNOW WITHIN 24 HOURS.
- SITE LIGHTS TO BE INSTALLED PER DETAIL. CONTRACTOR SHALL NOTIFY THE ENGINEER IF THIS DISTANCE CANNOT BE ACHIEVED DUE TO DRAINAGE OR UTILITY CONFLICTS. REFER TO DETAILS FOR SITE LIGHT POLE BASE DETAILS AND SPECIFICATIONS.

ZONING INFORMATION

ZONING DISTRICT: COMMERCIAL DISTRICT (C-1)

REGULATION	REQUIRED	PROPOSED
MIN. LOT AREA	15,000 SF	48,972 SF±
MIN. LOT FRONTAGE	80'	200'±
MIN. LOT DEPTH	120'	233'±
MIN. FY SETBACK	10'	59.5'±
MIN. SY SETBACK	15'	68.2'±
MIN. RY SETBACK	20'	57.6'±
MAX. BUILDING HEIGHT	3 STORIES/40'	<40'
MAX. FLOOR AREA RATIO	0.5	0.09±
MAX. BUILDING COVERAGE	50%	9%±

PARKING & LOADING INFORMATION

USE	REQUIRED	PROVIDED
PARKING: CAR WASH: SECTION III D. 6 - PERSONAL SERVICE ESTABLISHMENT	SECTION V.C.J OTHER USES: NUMBER OF SPACES TO BE DETERMINED BY PLANNING BOARD (ASSUME 5 EMPL)	8 SPACES + 10 VACUUMS SPACES

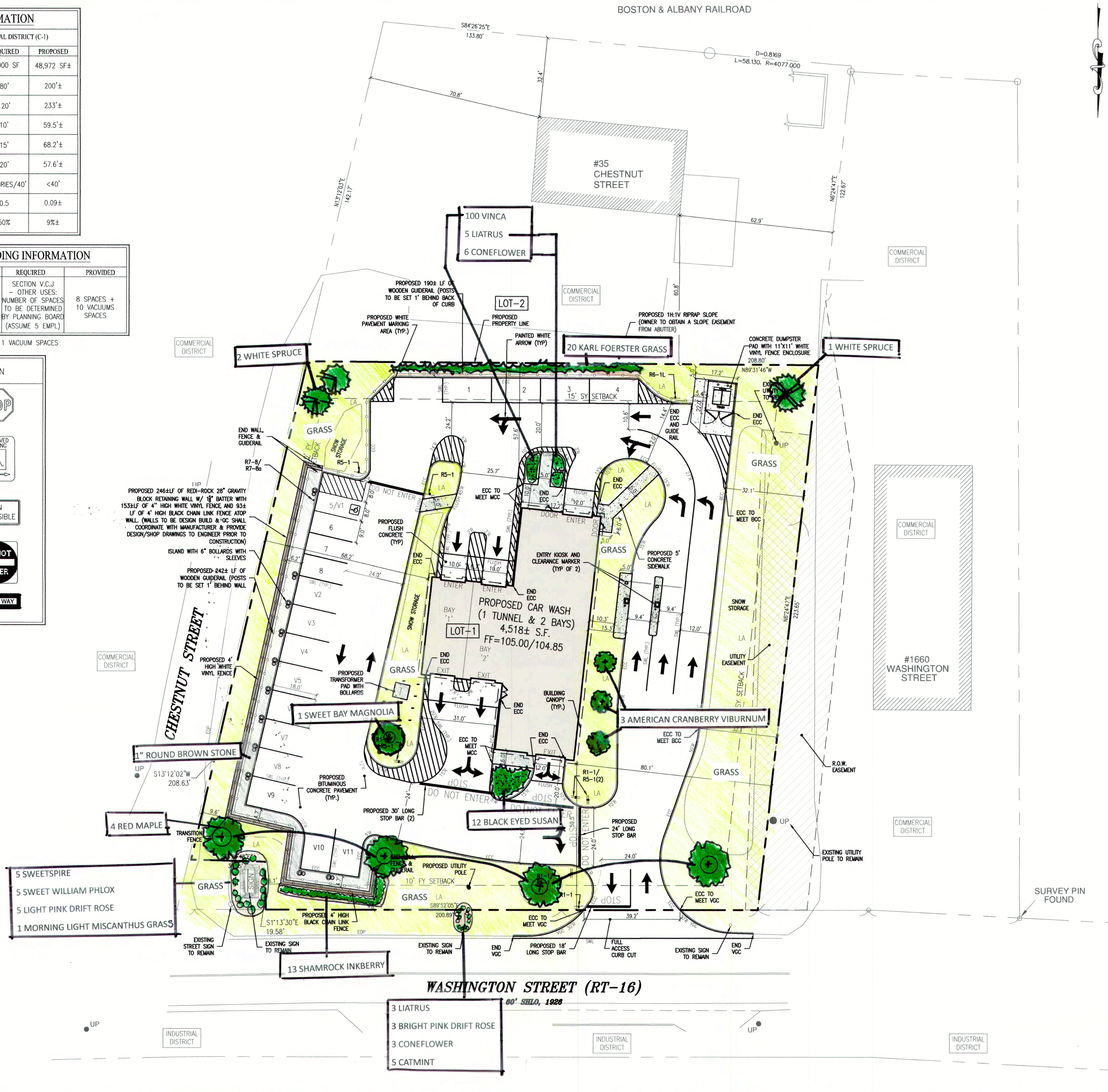
NOTE: THE PROJECT ALSO INCLUDES 11 VACUUM SPACES

MUTCD REFERENCE	SIGN
R1-1 30"x30"	
R7-8 12"x18"	
R7-8a 12"x6"	
R5-1 24"x24"	
R6-1L 8"x24"	

GENERAL ABBREVIATIONS

ASSESSOR'S PARCEL	A.P.
BOTTOM OF CURB	BC
BITUMINOUS CONCRETE CURB	BCC
BITUMINOUS CONCRETE	BIT. CONC
BOTTOM OF WALL	BW
CATCH BASIN	CB
CAPE COD BERM	CCB
CHAIN LINK FENCE	C.L.F.
CLEANOUT	CO
CONCRETE SURFACE	CONC
BRASS MANHOLE	DMH
DOUBLE WALL FIBER GLASS	DMFG
DASHED WHITE LINE	DWL
DOUBLE YELLOW CENTERLINE	DYCL
EDGE OF CONCRETE	ECC
EDGE OF PAVEMENT	EOP
EXTRUDED CONCRETE CURB	ECC
FINISHED FLOOR ELEVATION	FF
FRONT YARD	FY
VERTICAL GRANITE CURB	GC
SLOPED GRANITE CURB	GC
GAS METER	GM
HIGH DENSITY POLYETHYLENE PIPE	HDPE
INVERT ELEVATION	I=
LINEAL FEET	LF
LANDSCAPED AREA	LA
MONOLITHIC CONCRETE CURB	MCC
MATCH EXISTING	ME
INVERT NOT AVAILABLE	N/A
NOW OR FORMERLY	N/F
ON CENTER	OC
PRECAST CONCRETE CURB	PCC
RIM ELEVATION	R=
ROOF DRAIN	RD
REMOVE	REM
REAR YARD	RY
SOLID WHITE EDGE LINE	SWEL
SOLID WHITE LINE	SWL
SIDE YARD	SY
SOLID YELLOW LINE	SYL
TOP OF CURB	TC
TOP OF WALL	TW
UTILITY POLE	UP

EXISTING	PROPOSED	DESCRIPTION
	6	PROPERTY LINE
	2'R	BUILDING SETBACK/ BUFFER
		PARKING SPACES
		ACCESSIBLE PAVEMENT MARKINGS
		RAMP UPSLOPE DIRECTION
		SIGN
		LIGHT
		UTILITY POLE
		WOODEN GUIDE RAIL
		PAINTED ARROW
		DIRECTIONAL ARROW
		CONCRETE PAD/SIDEWALK
		ACCESSIBLE RAMP
		IRON PIPE/IRON PIN



NOT FOR CONSTRUCTION

CDG PROJECT #: 23011

REVISIONS:

REV	DATE	COMMENT
1	11/09/23	REV PER PEER REVIEW COMMENTS
2		
3		
4		
5		
6		
7		
8		
9		

SEAL:



PHILIP R. HENRY, P.E.

PLANNING BOARD:

LANDSCAPE DESIGNER:

CARIN GOSSELIN
CMG DESIGN
203 CROSS STREET
NORWELL, MA 02061
781-249-2211
CMGDESIGN@VERIZON.NET

PREPARED FOR:

1650 WASHINGTON
STREET, LLC

3 MICHAUD DRIVE
FRAMINGHAM, MA 01701

PROJECT:

PROPOSED CAR WASH
DEVELOPMENT

1650 WASHINGTON STREET (RT-16)
HOLLISTON, MA 01746

SCALE:
20 0 10 20 40
GRAPHIC SCALE IN FEET

SHEET: **LANDSCAPE
PLAN**

12

DATE: 07/14/2023

REV	DATE	COMMENT
1	11-8-23	6" TOPSOIL SPEC.
2		
3		
4		
5		
6		
7		
8		
9		



PHILIP R. HENRY, P.E.

CARIN GOSSELIN
CMG DESIGN
203 CROSS STREET
NORWELL, MA 02061
781-249-2211

1650 WASHINGTON
STREET, LLC

3 MICHAUD DRIVE
FRAMINGHAM, MA 01701

PROPOSED CAR WASH
DEVELOPMENT

1650 WASHINGTON STREET (RT-16)
HOLLISTON, MA 01746

AS NOTED

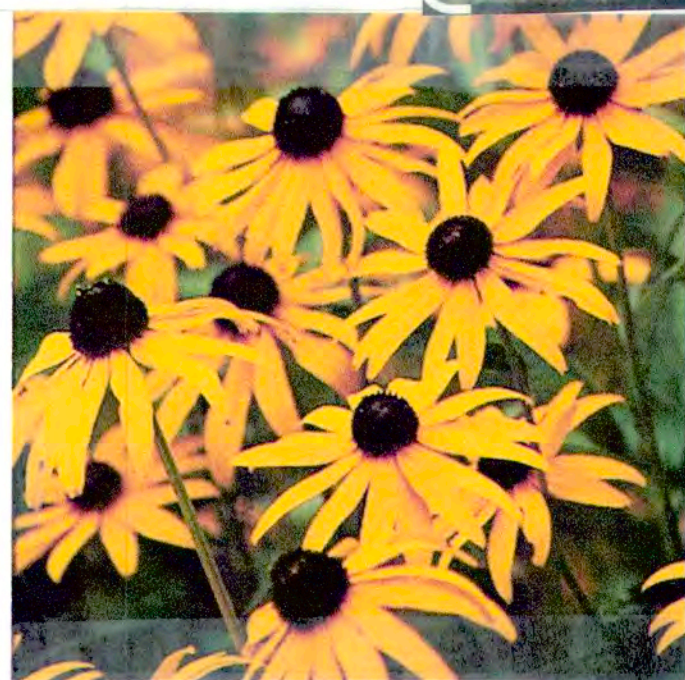
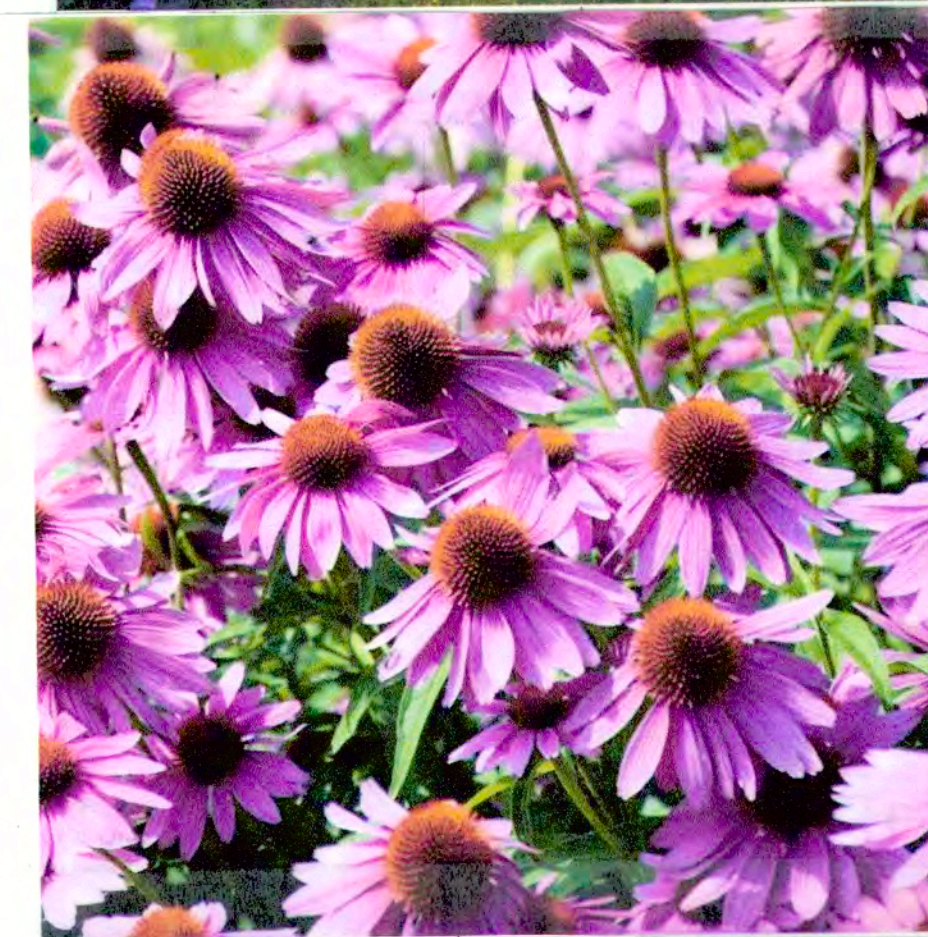
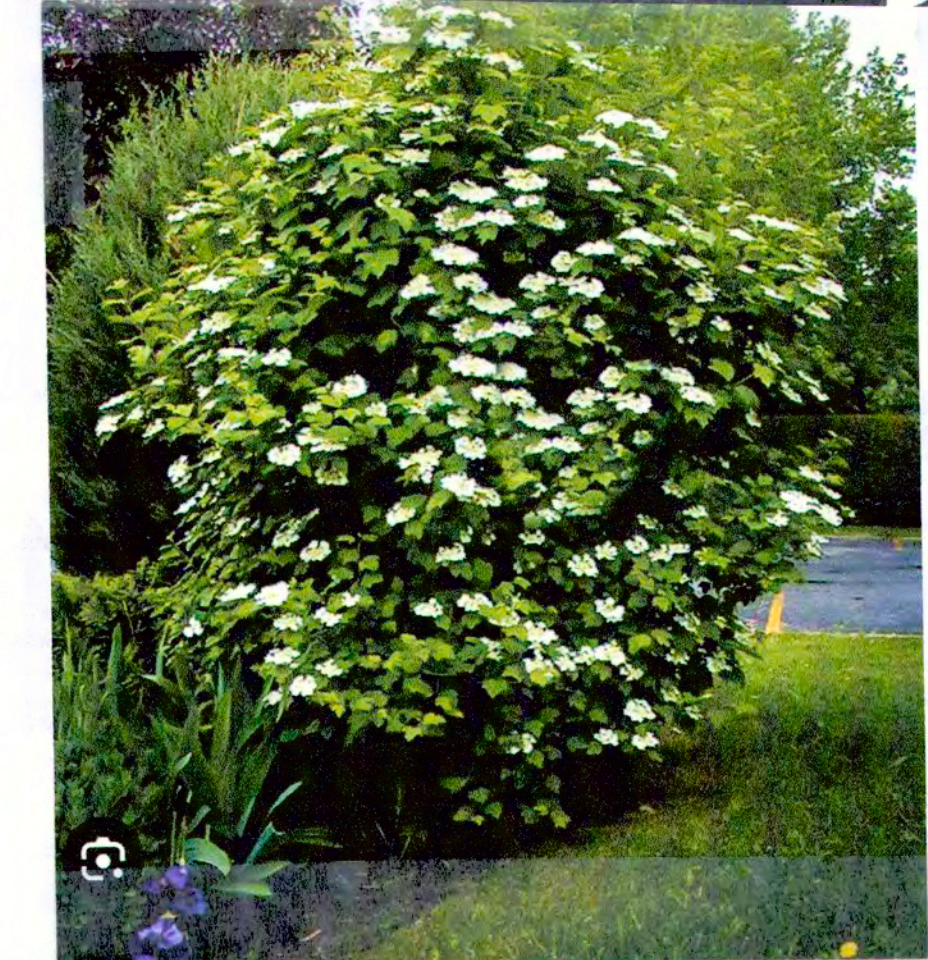
LANDSCAPE
DETAILS

13

07/14/2023

Plant Schedule

Qty.	Latin Name	Common Name	Size	Features
4	Acer rubrum 'October Glory'	October Glory Red Maple	B&B 2.5-3" c.	Red fall leaves, oval canopy, native, very tolerant
20	Calamagrostis Karl Foerster	Karl Foerster Feather Reed Grass	CONT 3 Gal.	Upright habit, 3'H, very neat, drought tolerant and hardy
6	Echinacea 'White Swan'	White Coneflower	CONT 1 Gal.	24-30"H, perennial, sun loving, June-frost, elegant
3	Echinacea	Purple Coneflower	CONT 1 Gal.	24"H, Native, drought tolerant, flowers until Frost
8	Liatris	Liatris	CONT 1 Gal.	2-3'H, spreading perennial, purple flowers July-Sept. Native
13	Ilex glabra 'Shamrock'	Dwarf Inkberry	CONT 3 Gal.	Native, rounded, hardy, evergreen hedge, no care, neat habit
5	Itea	Sweetpire	CONT 2 Gal.	Native, white drooping flowers, bright red fall leaves, hardy
1	Magnolia virginiana	Sweet Bay Magnolia	B&B 7-8"	White spring flowers, native, beautiful white spring flowers
1	Miscanthus sinensis Morning Light	Morning Light Miscanthus	CONT 2 Gal.	3-4' Variegated thin leaves, silvery arching grass, very hardy
5	Nepeta 'Cat's Meow'	Cat Mint	CONT 1 Gal.	12-18"H, Lavender flowers May-Sept., spreading, sun-semi
5	Phlox paniculata	Sweet William Phlox	CONT 1 Gal.	24-30"H, various colors, July-August, perennial, native
3	Picea glauca	White Spruce	B&B 7-8"	Evergreen, very tolerant, native, stays dense
3	Rosa Drift Bright Pink	Bright Pink Drift Rose	CONT 2 Gal.	Small shrub, pink double blossoms, easy care, hardy
5	Rosa Drift Light Pink	Light Pink Drift Rose	CONT 2 Gal.	Color from June until Frost, very hardy, likes full sun
12	Rudbeckia Goldstrum	Black Eyed Susan	CONT 1 Gal.	Yellow flowers, dark center, 24"H, sun, Aug-frost, native
3	Viburnum trilobum	Highbush Cranberry Viburnum	CONT 5 Gal.	8-10'H, white spring flowers, red fruit late summer, native
100	Vinca minor	Common Periwinkle	TRAY 25/tray	Evergreen groundcover, purple flowers, hardy, native



Planting Schedule:

Planting may commence as soon as the ground has thawed at the nursery, and at the site of planting, and weather conditions make it practicable to work both at the nursery and at the site.

Planting shall not occur any later than the following:

Deciduous Trees and Shrubs	July 15	Sept 1- Nov 1
Evergreen Trees and Shrubs	June 30	Sept 1- Nov 1

A minimum of six inches (6") of topsoil shall be placed on all disturbed surfaces which are proposed to be planted.

Mulch:

Mulch shall be 100% fine-shredded dark pine back of uniform size applied to a uniform depth of 3".

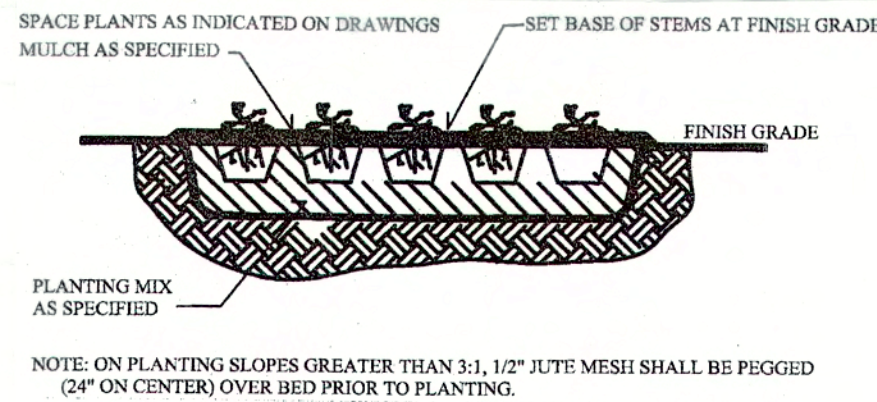
Seeding:

Seeding shall be hydroseeded.

Composed of the following varieties, mixed to the specified proportions.

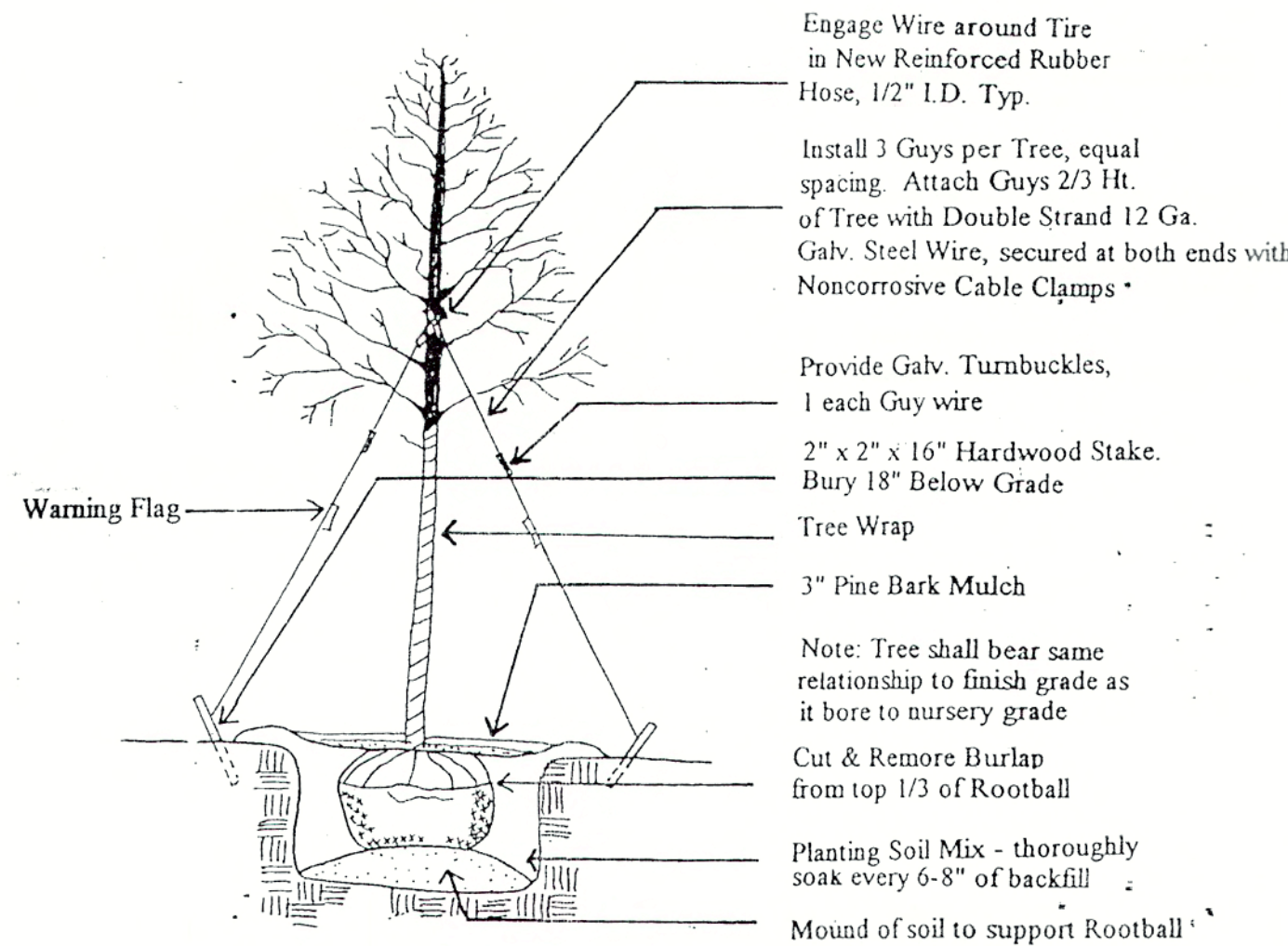
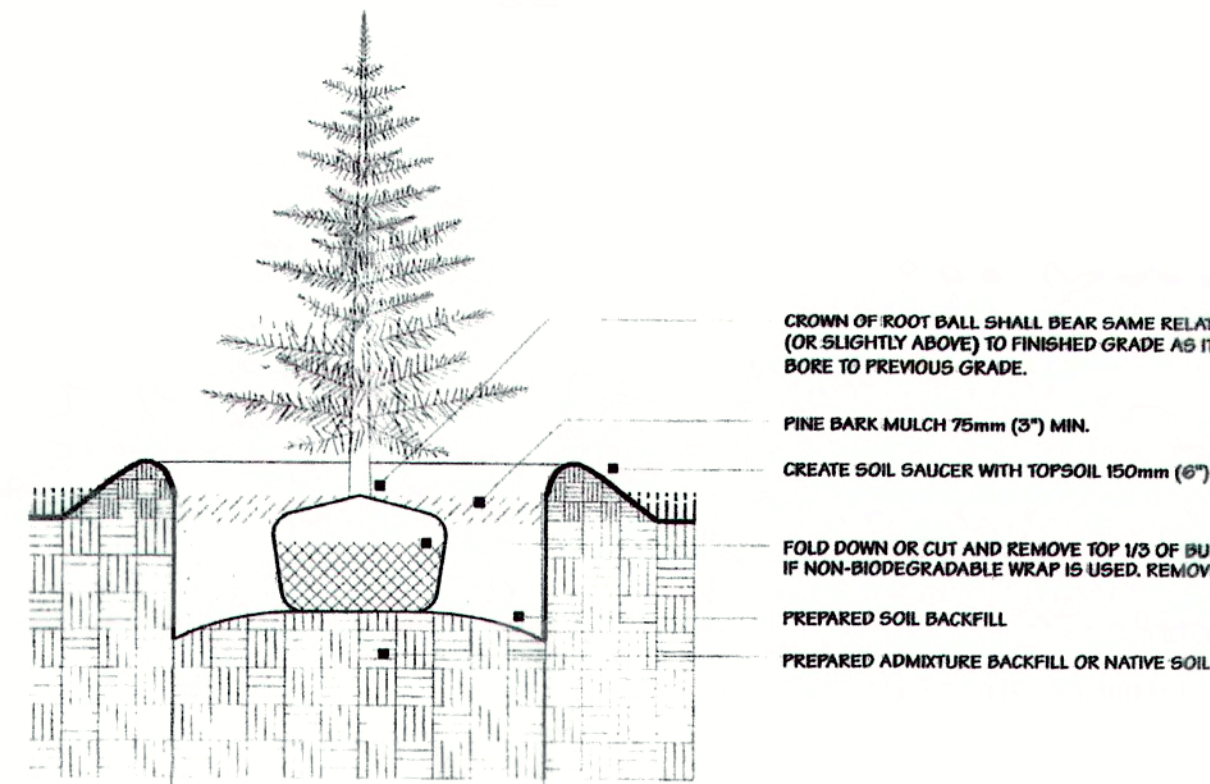
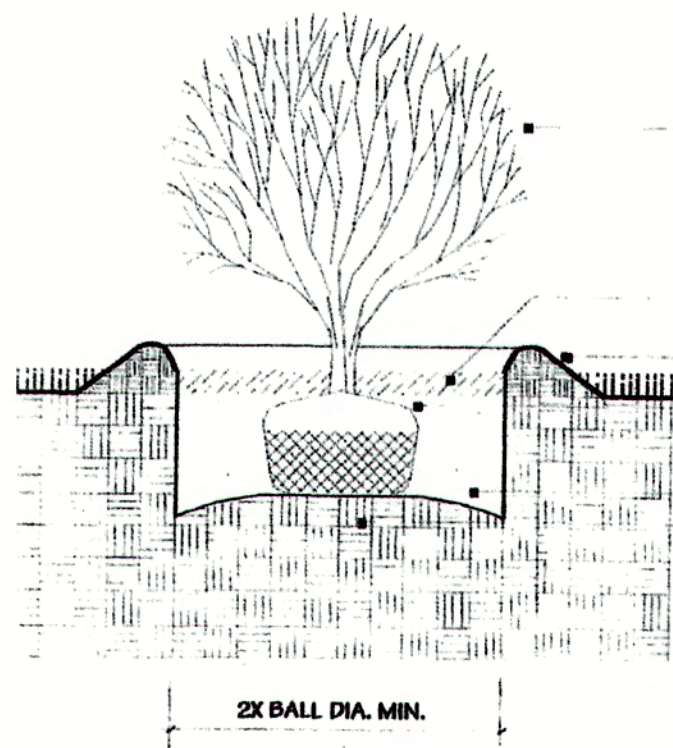
Kentucky Blue grass	70%
Chewings Fescue	15%
Creeping Red Rescue	15%

Seeding Rate 3 lbs/1000 sq ft.



GROUND COVER PLANTING

NOT TO SCALE

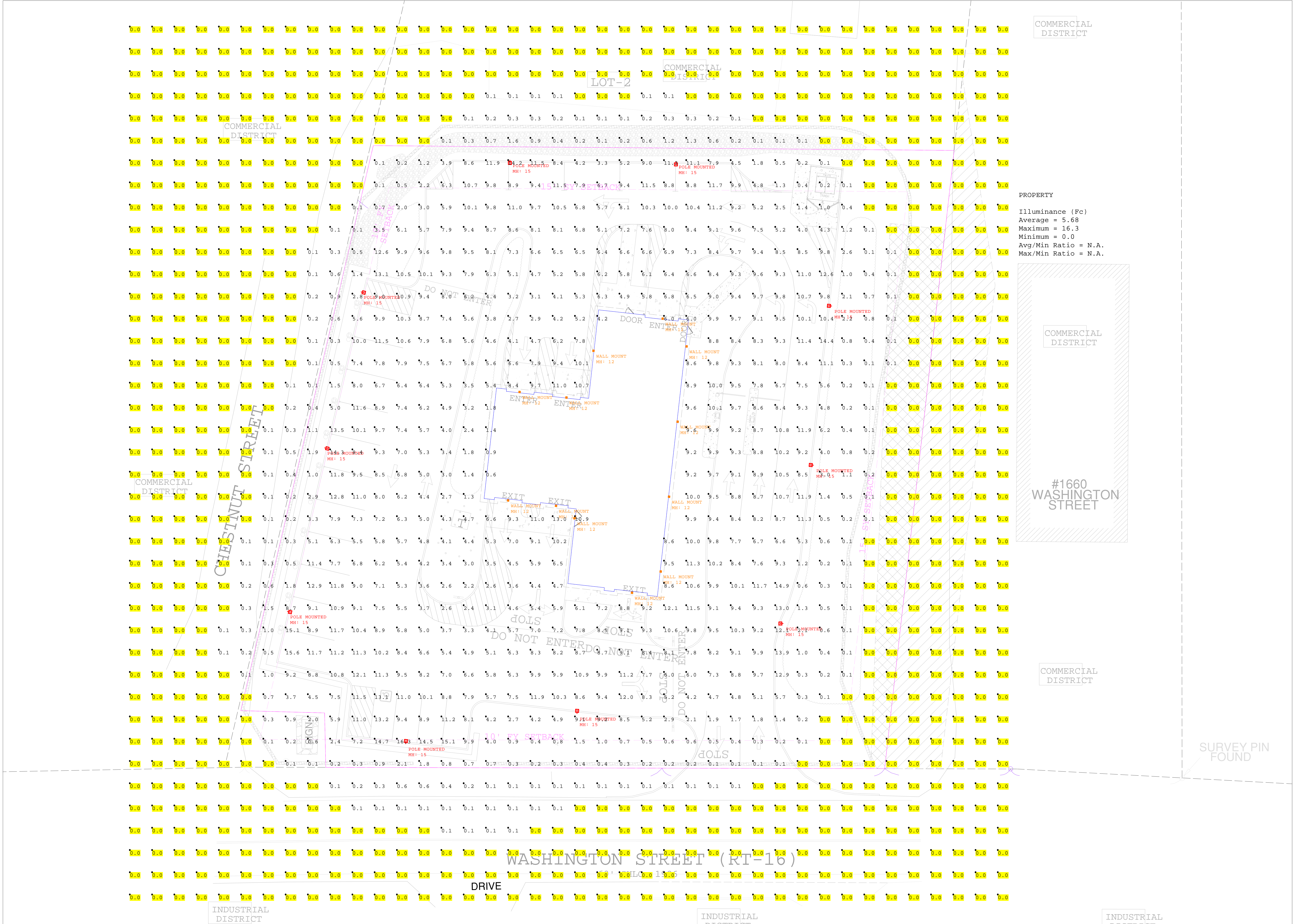


Deciduous Tree Planting & Guying

N.T.S.

Notes & Goals:

- To create a landscape that maximizes and retains open space.
- Using native and drought tolerant species of plants.
- To provide open areas for snow storage on site.
- To provide street trees, such as the Red Maple that are tolerant to many conditions such as salt/sand and plowing in the winter, drought tolerant, and easy to maintain. The Red Maple trees maintain a neat, oval canopy, not getting too large. Setting them back off the street will allow for open view points and keep back from the utility poles on site.
- The existing street signs will remain and be planted with a hardy, neat, colorful landscapes around them.
- Provide low growing plants near the exit and entrances to the car wash so all site lines are kept open for vehicles and pedestrians. This can be done with long time, low growing, native perennials.
- Provide seasonal color with evergreens, that also provide shelter for birds in the winter, and Spring, Summer and Fall flowers that will also be pollinators for birds, butterflies, bees, and hummingbirds. There will be plants that bloom early in the Spring right until Frost. With continual color throughout the seasons, this property will always provide a welcoming atmosphere.
- To provide a easy to maintain, drought tolerant, with a nice neat appearance so this property will always look tidy and appealing to the customers and pedestrian/vehicular traffic on Washington Street.



COMMERCIAL DISTRICT

COMMERCIAL DISTRICT

COMMERCIAL DISTRICT

COMMERCIAL DISTRICT

#1660 WASHINGTON STREET

COMMERCIAL DISTRICT

SURVEY PIN FOUND

INDUSTRIAL

Luminaire Schedule		Label	Description	Tag
Symbol	Qty			
	12	WALL MOUNT	MCGRAW EDISON: GWC-SA1A-760-U-T3-XX	
	10	POLE MOUNTED	MCGRAW EDISON: GALN-SA4D-760-U-T4FT-XX-HSS	

Calculation Summary						
Label	Units	Avg	Max	Min	Avg/Min	Max/Min
SITE	Fc	2.61	16.3	0.0	N.A.	N.A.
PROPERTY	Fc	5.68	16.3	0.0	N.A.	N.A.



www.reflexlighting.com

DISCLAIMER: CALCULATIONS SHOULD BE USED AS A GUIDE ONLY.
LIGHT LEVELS ARE SUBJECT TO CONDITIONS IN THE FIELD.

specifications@reflexlighting.com

Drawn By: AES
Date: 8/8/2023
Specifier:
Salesperson:
Scale: Not to Scale

1650 WASHINGTON STREET

CAR WASH



SCALE : 0' - 1/2" : 1'-0"

CARWASH SIGN -DETAILS

DATE : 11/09/2023

ZONING CHART

		LOT AREA	FRONTAGE	LOT DEPTH	SETBACKS			STORIES	BUILDING HEIGHT	LOT COVERAGE	FAR
					FRONT	SIDE	REAR				
REQUIRED		15,000 SF	80 LF	120 LF	10' MIN	15' MIN	20' MIN	3 MAX	40' MAX	50%	.5 MAX
EXISTING	LOT A	17,624 SF	80'	159.82'	63.19'	17.19'	63.92'	2	<40'	8%	
	LOT B	58,526 SF	371.82'	209.80'	71.16'	32.26'	62.91'	1	<40'	4%	
PROPOSED	LOT A1	48,971 SF	200.89'	229.61'	63.19'	39.65'	63.92'	2	<40'	3%	
	LOT B1	27,182 SF	371.82'	209.80'	71.16'	32.26'	62.91'	1	<40'	8%	

ENDORSEMENT OF THIS PLAN DOES NOT ASSURE COMPLIANCE WITH THE TOWN OF HOLLISTON ZONING BY-LAWS

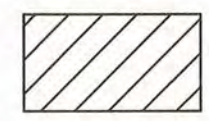

ZONING REQUIREMENTS
ZONED COMMERCIAL DISTRICT
MIN LOT AREA 15000 SF
MIN FRONTAGE 80 FT
MIN LOT DEPTH 120 FT
MIN LOT COVERAGE STRUCT 50%

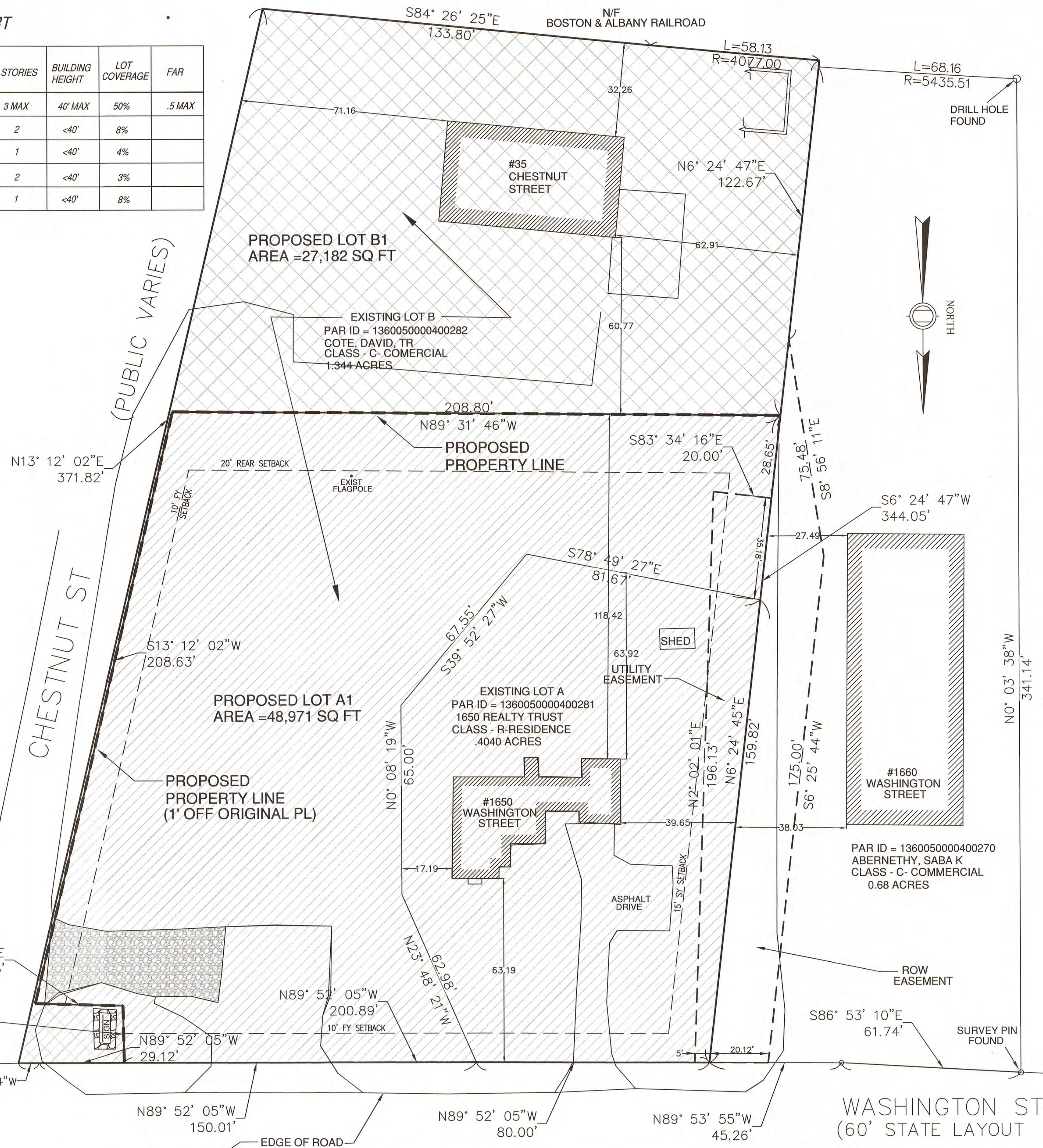
SETBACKS
FRONT 10'
SIDE 15'
REAR 20'

PLAN REFERENCES:
PLAN OF LAND IN HOLLISTON (#246) OF 2005
PLAN OF LAND IN HOLLISTON (#916) OF 1984
WASHINGTON ST 1926 ALTERATION
STATE LAYOUT #2402

DEED REFERENCES:
BK 44708, PG 8
BK44706, PG 17
BK 15433, PG 276

LEGEND

-  PROPOSED LOT A-1
-  PROPOSED LOT B-1



FOR REGISTRY USE ONLY



LOCUS MAP
NOT TO SCALE

APPROVAL UNDER THE SUBDIVISION
LAW NOT REQUIRED

HOLLISTON PLANNING BOARD

DATE _____

NO DETERMINATION AS TO COMPLIANCE WITH THE
BY-LAW REQUIREMENTS HAS BEEN MADE OR
INTENDED BY THE ABOVE ENDORSEMENT

I CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMITY
WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS
OF THE COMMONWEALTH OF MASSACHUSETTS.
THIS SURVEY AND PLAN WERE PREPARED IN ACCORDANCE WITH
THE PROCEDURAL AND TECHNICAL STANDARDS FOR THE PRACTICE
OF LAND SURVEYING IN THE COMMONWEALTH OF MASSACHUSETTS.



Michael Robert Kessman July 13, 2023
REGISTERED PROFESSIONAL LAND SURVEYOR DATE

				PROJ. MANAGER:	MBL
				CHIEF DESIGNER:	MBL
				REVIEWED BY:	DATE
No.	DATE	DESCRIPTION	BY		
REVISIONS					

PROJ. MANAGER: MBL
CHIEF DESIGNER: MBL
REVIEWED BY: DATE

SEAL

SEAL

PREPARED FOR
1650 WASHINGTON ST, LLC

HOLLISTON

MASSACHUSETTS

SCALE:
HORIZ.: 1"=20 FT
VERT.:
DATUM:
HORIZ.:
VERT.:
0 10 20 40
GRAPHIC SCALE

J2M CONSULTING ASSOCIATES, LLC
CIVIL ENGINEERING, SURVEYING, AND SAFETY
44 WOOD AVENUE
MANSFIELD, MASSACHUSETTS
508-962-7255

APPROVAL NOT REQUIRED PLAN
1650 WASHINGTON STREET
35 CHESTNUT STREET

HOLLISTON

MASSACHUSETTS

PROJ. No.:
DATE: DRWG DATE

ANR



Consultant:

Revision:

Architect of Record:

Drawn: Author

Checked: Checker

Scale:

Key Plan:

Project Name:

CAR WASH @
HOLLISTON

1650 WASHINGTON ST,
HOLLISTON

Sheet Name:

COVER PAGE

Project Number:

2023-002

Issue Date:

08/22/2023

Sheet Number:

T0.01

SHEET LIST					
SHEET NUMBER	SHEET NAME	SUBMISSION 01	SUBMISSION 02	SUBMISSION 03	SUBMISSION 04
T0.01	COVER PAGE				
A0.01	ARCHITECTURAL SITE PLAN				
A1.01	FLOOR PLANS				
A1.02	FLOOR PLANS				
A1.03	BUILDING ELEVATIONS				
A1.03.	EXTERIOR ELEVATIONS				
A1.04.	EXTERIOR ELEVATIONS				

Consultant:

Revision:

Architect of Record:

Drawn: VH

Checked: VH

Scale: 3/32" = 1'-0"

Key Plan:

Project Name:

**CAR WASH @
HOLLISTON**

1650 WASHINGTON ST,
HOLLISTON

Sheet Name:

**ARCHITECTURAL SITE
PLAN**

Project Number:

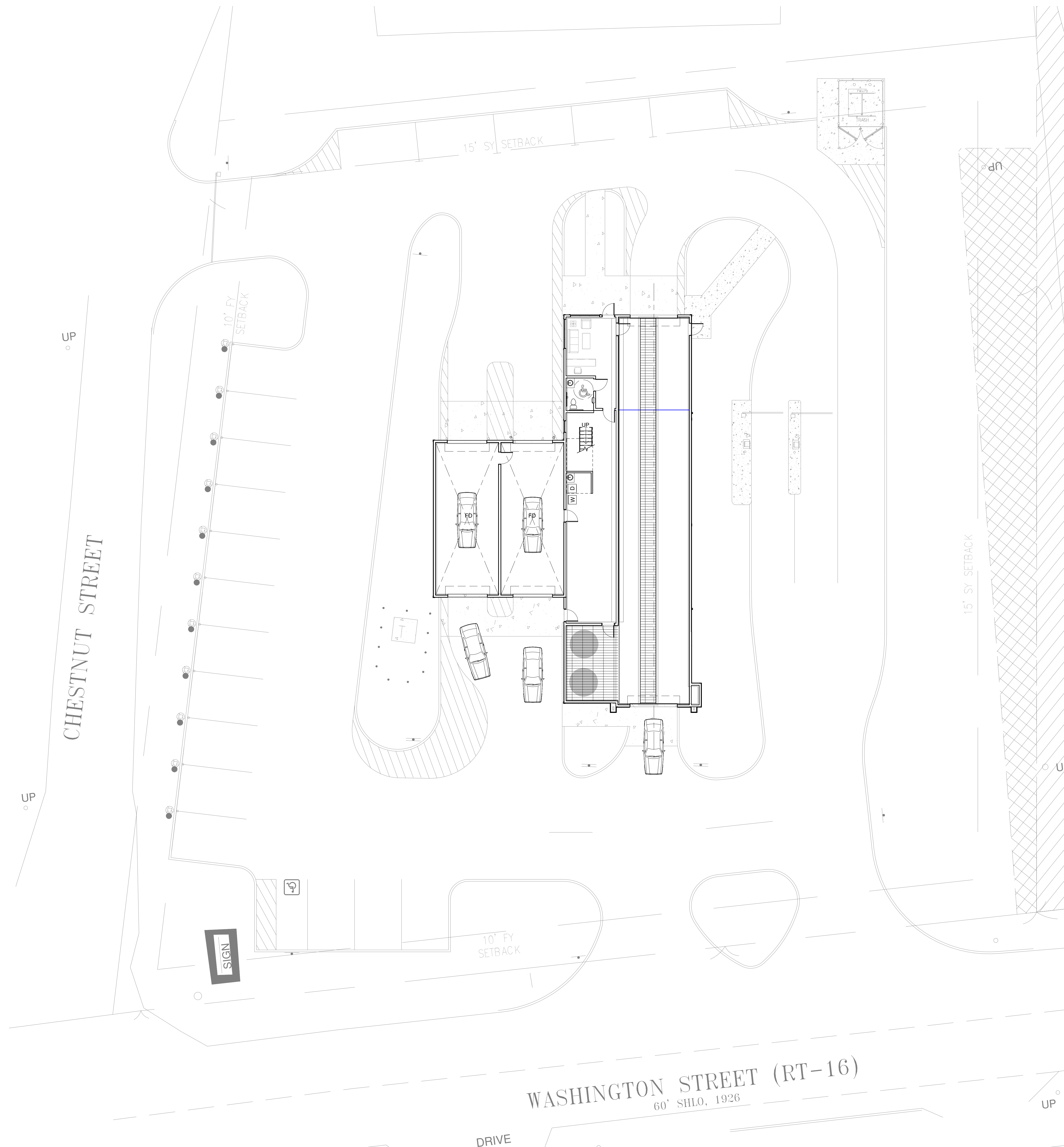
2023-002

Issue Date:

07/18/2023

Sheet Number:

A0.01



10 FOUNDATION PLAN
Scale: $3/16" = 1'-0"$

Consultant:

Revision:

Architect of Record:

Drawn: Author

Checked: Checker

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

Key Plan:

Project Name:

CAR WASH @
HOLLISTON

1650 WASHINGTON ST,
HOLLISTON

Sheet Name:

FLOOR PLANS

Project Number:

2023-002

Issue Date:

07/18/2023

Sheet Number:

A1.02

Consultant:

Revision:

Architect of Record:

Drawn: Author

Checked: Checker

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

Key Plan:

Project Name:

CAR WASH @
HOLLISTON

1650 WASHINGTON ST,
HOLLISTON

Sheet Name:

EXTERIOR ELEVATIONS

Project Number:

2023-002

Issue Date:

08/22/23

Sheet Number:

A1.03.



OVERALL FLOOR PLAN - LEVEL 7
31' - 0"

TRUSS BEARING
26' - 0"

TRUSS BEARING @ HIGH ROOF
22' - 6"

TOP OF CMU. (PARAPET WALL)
17' - 6"

MEZZANINE
13' - 6"

LEVEL 1
0' - 0"

FOOTING
-4' - 8"

11 SIDE ELEVATION - 01
Scale: 3/16" = 1'-0"



OVERALL FLOOR PLAN - LEVEL 7
31' - 0"

TRUSS BEARING
26' - 0"

TRUSS BEARING @ HIGH ROOF
22' - 6"

TOP OF CMU. (PARAPET WALL)
17' - 6"

MEZZANINE
13' - 6"

LEVEL 1
0' - 0"

FOOTING
-4' - 8"

10 FRONT ELEVATION
Scale: 3/16" = 1'-0"

Consultant:

Revision:

Architect of Record:

Drawn: Author

Checked: Checker

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

Key Plan:

Project Name:

CAR WASH @
HOLLISTON

1650 WASHINGTON ST,
HOLLISTON

Sheet Name:

EXTERIOR ELEVATIONS

Project Number:

2023-002

Issue Date:

08/22/23

Sheet Number:

A1.04.



11 REAR ELEVATION
Scale: 3/16" = 1'-0"



10 SIDE ELEVATION
Scale: 3/16" = 1'-0"