

SCALE: 1" = 1000'±



SCALE: 1" = 150'±

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**PROPOSED BANK WITH
DRIVE-THRU ATM**

MAP: 14 LOT: 13
165 NEWBURYPORT TURNPIKE (US ROUTE 1)
TOWN OF ROWLEY
ESSEX COUNTY, MASSACHUSETTS

STONEFIELD
engineering & design

TITLE:

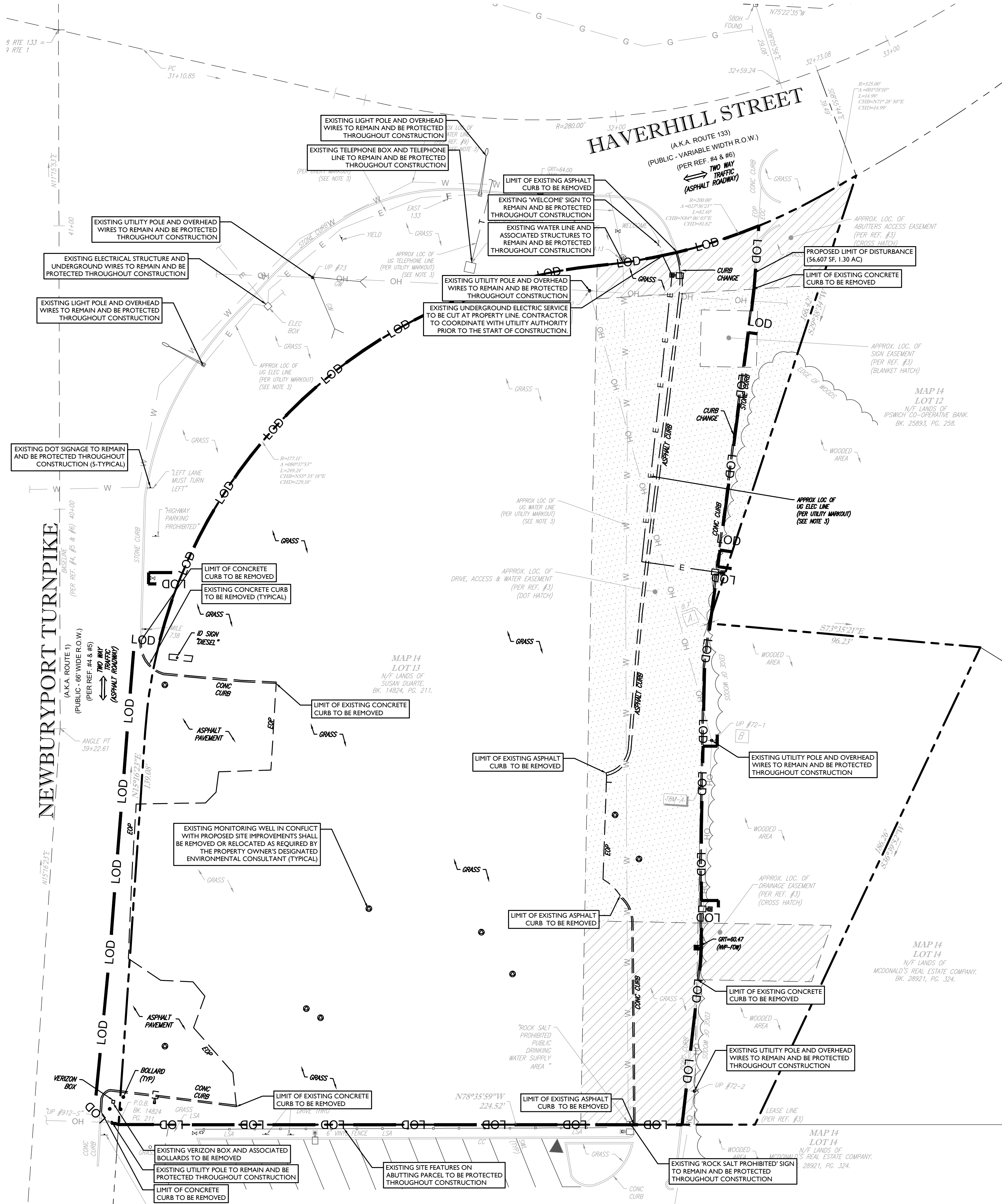
C-1

1. THIS PLAN SET REFERENCES THE FOLLOWING DOCUMENTS INCLUDING, BUT NOT LIMITED TO:
- BOUNDARY, TOPOGRAPHIC & UTILITY SURVEY BY CONTROL POINT ASSOCIATES, INC. DATED 02/19/2024
 - FEMA MAP OBTAINED FROM FLOOD INSURANCE RATE MAPS, NANTUCKET COUNTY, MASSACHUSETTS, 25090C0258C DATED 02/20/2023
 - AERIAL MAP OBTAINED FROM GOOGLE EARTH PRO, DATED 10/1/21
 - KEY MAP OBTAINED FROM USGS QUADRANGLE MAP 7.5 MINUTE SERIES, GEORGETOWN, MA, DATED 2021
 - TAX MAP OBTAINED FROM TOWN OF ROWLEY, DATED 06/14/2023
 - ZONING MAP OBTAINED FROM ZONE MAP OF ROWLEY, DATED 06/1/2011
 - ROWLEY PROTECTIVE ZONING BYLAW, DATED 05/02/2022
 - ROWLEY PLANNING BOARD RULES AND REGULATIONS, DATED APRIL 2005
 - REPORT OF GEOTECHNICAL INVESTIGATION BY WHITESTONE ASSOCIATES, INC. DATED 11/16/2023
 - ARCHITECTURAL PLAN BY CORE STATES GROUP, DATED 01/15/2024
 - WETLAND REPORT BY DEROSA ENVIRONMENTAL CONSULTING INC. DATED 02/08/2024
 - IMMEDIATE RESPONSE ACTION CONSTRUCTION SITE PLAN PREPARED BY FUSS & O'NEILL DATED 03/28/2013
 - SKETCH PLAN OF LAND PREPARED BY MERIDIAN ASSOCIATES DATED 10/28/2009
2. ALL REFERENCE MATERIAL LISTED ABOVE SHALL BE CONSIDERED A PART OF THIS PLAN SET AND ALL INFORMATION CONTAINED WITHIN THESE MATERIALS SHALL BE UTILIZED IN CONJUNCTION WITH THIS PLAN SET. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN A COPY OF EACH REFERENCE AND REVIEW IT THOROUGHLY PRIOR TO THE START OF CONSTRUCTION.

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OUTLYING DISTRICT

DRAWING TITLE	SHEET #
COVER SHEET	C-1
EXISTING CONDITIONS PLAN	C-2
DEMOLITION PLAN	C-3
SITE PLAN	C-4
GRADING PLAN	C-5
DRAINAGE AND UTILITY PLAN	C-6
LIGHTING PLAN	C-7 & C-7.1
SOIL EROSION & SEDIMENT CONTROL PLAN	C-8
LANDSCAPING PLAN	C-9 & C-10
CONSTRUCTION DETAILS	C-11 - C-15



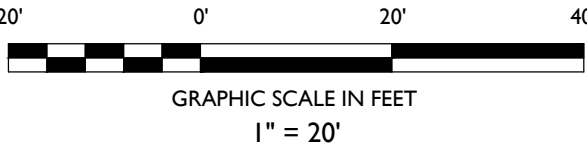
SYMBOL	DESCRIPTION
---	FEATURE TO BE REMOVED / DEMOLISHED
— LOD —	LIMIT OF DISTURBANCE

ALL SITE FEATURES WITHIN THE LIMIT OF DISTURBANCE INDICATED ON THIS PLAN ARE TO BE REMOVED / DEMOLISHED UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IF SIGNIFICANT DISCREPANCIES ARE DISCOVERED BETWEEN THIS PLAN AND FIELD CONDITIONS

- DEMOLITION NOTES**
1. THE WORK REFLECTED ON THE DEMOLITION PLAN IS TO PROVIDE GENERAL INFORMATION TOWARDS THE EXISTING ITEMS TO BE DEMOLISHED AND/OR REMOVED. THE CONTRACTOR IS RESPONSIBLE TO REVIEW THE ENTIRE PLAN SET AND ASSOCIATED REPORTS/REFERENCE DOCUMENTS INCLUDING ALL DEMOLITION ACTIVITIES AND INCIDENTAL TASKS NECESSARY TO COMPLETE THE SITE IMPROVEMENTS.
 2. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND METHODS OF DEMOLITION ACTIVITIES.
 3. EXPLOSIVES SHALL NOT BE USED UNLESS WRITTEN CONSENT FROM BOTH THE OWNER AND ANY APPLICABLE GOVERNING AGENCY IS OBTAINED. BEFORE THE START OF ANY EXPLOSIVE PROGRAM, THE CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL LOCAL, STATE AND FEDERAL PERMITS. ADDITIONALLY, THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL SEISMIC TESTING AS REQUIRED AND ANY DAMAGES AS THE RESULT OF SAID DEMOLITION PRACTICES.
 4. ALL DEMOLITION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL CODES. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL UTILITIES ARE DISCONNECTED IN ACCORDANCE WITH THE UTILITY AUTHORITY'S REQUIREMENTS PRIOR TO STARTING THE DEMOLITION OF ANY STRUCTURE. ALL EXCAVATIONS ASSOCIATED WITH DEMOLISHED STRUCTURES OR REMOVED TANKS SHALL BE BACKFILLED WITH SUITABLE MATERIAL AND COMPACTED TO SUPPORT SITE AND BUILDING IMPROVEMENTS. A GEOTECHNICAL ENGINEER SHOULD BE PRESENT DURING BACKFILLING ACTIVITIES TO OBSERVE AND CERTIFY THAT BACKFILL MATERIAL WAS COMPACTED TO A SUITABLE CONDITION.
 5. DEMOLISHED DEBRIS SHALL NOT BE BURIED ON SITE. ALL WASTE/DEBRIS GENERATED FROM DEMOLITION ACTIVITIES SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN ALL RECORDS OF THE DISPOSAL TO DEMONSTRATE COMPLIANCE WITH THE ABOVE REGULATIONS.



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DATE	BY	DESCRIPTION
02/27/2024	JV	FOR MUNICIPAL REVIEW
01	DATE	ISSUE

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SITE PLAN

PROPOSED BANK WITH
DRIVE-THRU ATM

JOSHUA H. KLINE, P.E.
MASSACHUSETTS LICENSE No. 53936
LICENSED PROFESSIONAL ENGINEER

SCALE: 1" = 20'

PROJECT ID: BOS-230034

TITLE:
DEMOLITION PLAN

DRAWING:
C-3

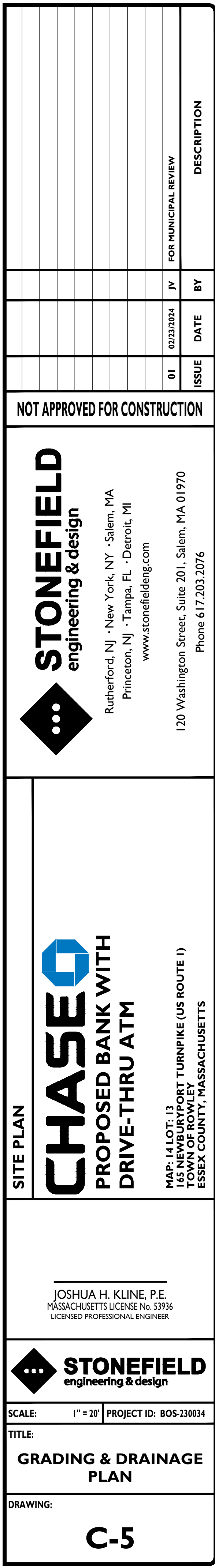
PRIOR TO THE START OF CONSTRUCTION (RECOMMENDED 30 DAYS PRIOR) THE CONTRACTOR SHALL PERFORM EXPLORATORY TEST PITS AT LOCATIONS OF UTILITY / DRAINAGE CROSSINGS OR CONNECTIONS WITH EXISTING UTILITY OR STORMWATER INFRASTRUCTURE. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN ANY NECESSARY ROAD OPENING PERMITS TO PERFORM SAID EXPLORATORY WORK. SHOULD A CONFLICT BE DISCOVERED WITH THE INFORMATION CONTAINED WITHIN THESE PLANS THE CONTRACTOR SHALL IMMEDIATELY NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IN WRITING.

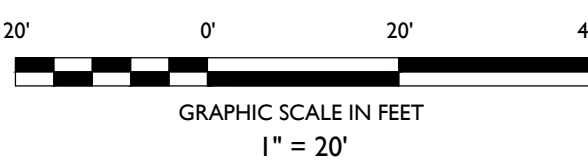
GRADING NOTES

1. ALL SOIL AND MATERIAL REMOVED FROM THE SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS. ANY GROUNDWATER DEWATERING PRACTICES SHALL BE PERFORMED UNDER THE SUPERVISION OF A QUALIFIED PROFESSIONAL. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY PERMITS FOR THE DISCHARGE OF EXCESS GROUNDWATER TO THE SITE. THE CONTRACTOR SHALL BE CERTIFIED CLEFELLY FILL. CONTRACTOR SHALL MAINTAIN RECORDS OF ALL FILL MATERIALS BROUGHT TO THE SITE. THE CONTRACTOR IS REQUIRED TO PROVIDE TEMPORARY AND/OR PERMANENT SHORING TO MAINTAINED EXISTING EXCAVATION, INCLUDING BUT NOT LIMITED TO EXCAVATION TRENCHES, TO ENSURE THE STRUCTURAL INTEGRITY OF NEARBY STRUCTURES AND STABILITY OF THE SURROUNDING SOILS.
2. THE TOP OF EXISTING GRADES ARE GENERALLY 4 INCHES TO 7 INCHES ABOVE EXISTING GRADES UNLESS OTHERWISE NOTED. THE CONTRACTOR WILL SUPPLY ALL STAKEOUT CURB GRADE SHEETS TO STONEFIELD ENGINEERING & DESIGN, LLC. FOR REVIEW AND APPROVAL PRIOR TO POURING CURBS.
3. THE CONTRACTOR IS RESPONSIBLE TO SET ALL PROPOSED UTILITY COVERS AND RESET ALL EXISTING UTILITY COVERS WITHIN THE PROJECT LIMITS TO PROPOSED GRADE IN ACCORDANCE WITH ANY APPLICABLE MUNICIPAL, COUNTY, STATE AND/OR UTILITY AUTHORITY REQUIREMENTS.
5. MINIMUM SLOPE REQUIREMENTS TO PREVENT PONDING SHALL BE AS FOLLOWS:

a. CURB CUTTERS:	0.50%
b. CONCRETE SURFACES:	1.00%
c. ASPHALT SURFACES:	1.00%
6. A MINIMUM SLOPE OF 1.00% SHALL BE PROVIDED AROUND FROM ALL BUILDINGS. THE CONTRACTOR SHALL ENSURE PROPER DRAINAGE FROM THE BUILDING IS ACHIEVED AFTER CONSTRUCTION OF THE FOUNDATION AND BASEMENT. IF THE FOUNDATION CANNOT BE MET, FOR PROJECTS WHERE BASEMENTS ARE PROPOSED, THE DEVELOPER IS RESPONSIBLE TO DETERMINE THE DEPTH TO GROUNDWATER AT THE LOCATION OF THE PROPOSED STRUCTURE. GROUNDWATER DRAINAGE SHALL BE BASED ON THE RESULTS OF THE GROUNDWATER MONITORING METHODS SHALL BE UTILIZED AND REVIEWED/APPROVED BY THE CONSTRUCTION CODE OFFICIAL. IF PUMP PUMPS ARE UTILIZED, ALL DISCHARGES SHALL BE CONNECTED DIRECTLY TO THE STORM SEWER SYSTEM WITH APPROVAL FROM THE GOVERNING STORM SEWER SYSTEM AUTHORITY.

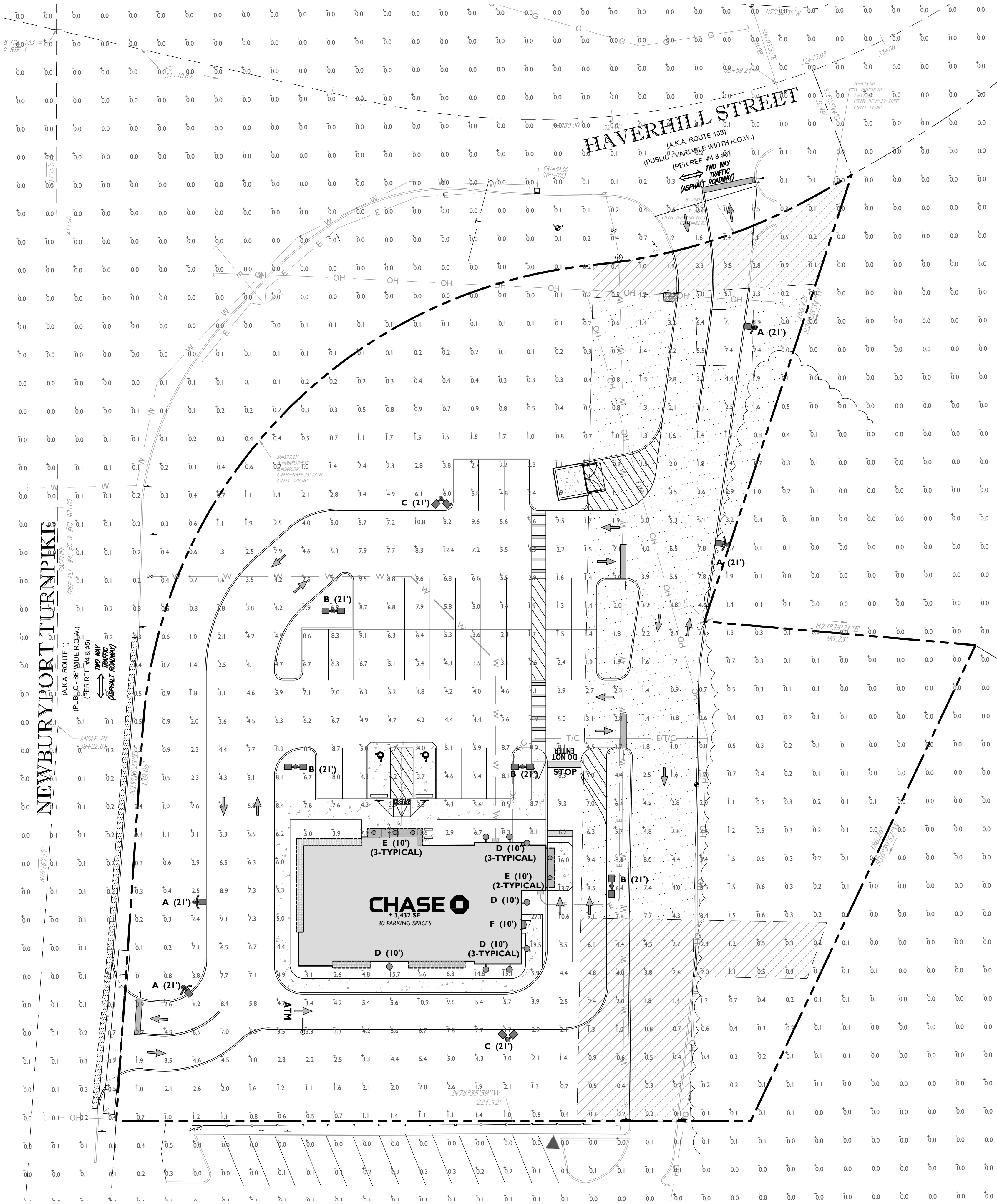
- ## ADA NOTES
1. THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 2.00% SLOPE IN ANY DIRECTION WITHIN THE ADA PARKING SPACES AND ACCESS AISLES.
 2. THE CONTRACTOR SHALL PROVIDE COMPLIANT SIGNAGE AT ALL ADA PARKING AREAS IN ACCORDANCE WITH STATE GUIDELINES.
 3. THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 5.00% RUNNING SLOPE AND A MAXIMUM OF 2.00% CROSS SLOPE ALONG WALKWAYS WITHIN THE ACCESSIBLE PATH OF TRAVEL (SEE THE SITE PLAN FOR THE LOCATION OF THE ACCESSIBLE PATH). THE CONTRACTOR IS RESPONSIBLE TO ENSURE THE ACCESSIBLE PATH OF TRAVEL IS 36 INCHES WIDE OR GREATER UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
 4. THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 2.00% SLOPE IN ANY DIRECTION AT ALL LANDSCAPED AREAS WITHIN THE PROJECT. THE CONTRACTOR SHALL MAINTAIN A MAXIMUM ACCESSIBLE RAMP AT ACCESSIBLE BUILDING ENTRANCES, AT AN AREA IN FRONT OF A WALK-UP ATM, AND AT TURNING SPACES ALONG THE ACCESSIBLE PATH OF TRAVEL. THE LANDSCAPE AREA SHALL HAVE A MINIMUM CLEAR AREA OF 60 INCHES BY 60 INCHES UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
 5. THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 8.33% RUNNING SLOPE AND A MAXIMUM 2.00% CROSS SLOPE ON ANY CURB RAMPS ALONG THE ACCESSIBLE PATH OF TRAVEL. WHERE A CURB RAMP IS REQUIRED, THE CURB RAMP SHALL BE GREATER THAN 10.00% IS A LANDSCAPED AREA IS PROVIDED AT THE TOP OF THE RAMP, FOR ALTERATIONS, A CURB RAMP FLARES SHALL NOT HAVE A SLOPE GREATER THAN 8.33%; IF A LANDING AREA IS NOT PROVIDED AT THE TOP OF THE RAMP, THE CURB RAMP SHALL BE GREATER THAN 10.00%. THE CURB RAMP SHALL BE A HANDRAIL. THE CLEAR WIDTH OF A CURB RAMP SHALL BE NO LESS THAN 36 INCHES WIDE.
 6. ACCESSIBLE RAMPS WITH A RISE GREATER THAN 6 INCHES SHALL CONTAIN COMPLIANT HANDRAILS ON BOTH SIDES OF THE RAMP AND SHALL NOT RISE MORE THAN 30" IN ELEVATION WITHIN A LANDING AREA. IN BETWEEN RAMP RUNS, LANDING AREAS SHALL ALSO BE PROVIDED AT THE TOP AND BOTTOM OF THE RAMP.
 7. A SLIP RESISTANT SURFACE SHALL BE CONSTRUCTED ALONG THE ACCESSIBLE PATH AND LANDSCAPED PARKING AREAS.
 8. THE CONTRACTOR SHALL ENSURE A MAXIMUM OF ¼ INCHES VERTICAL CHANGE IN LEVEL ALONG THE ACCESSIBLE PATH. WHERE A CHANGE IN LEVEL BETWEEN ¼ INCHES AND ½ INCHES IS REQUIRED, THE CONTRACTOR SHALL PROVIDE A SLOPE GRADIENT OF 1:12. ANY CHANGE IN LEVEL WITH A SLOPE NOT STEEPER THAN 1 UNIT VERTICAL AND 2 UNITS HORIZONTAL (2:1 SLOPE).
 9. THE CONTRACTOR SHALL ENSURE THAT ANY OPENINGS (GAPS OR HORIZONTAL SEPARATION) EXISTING IN THE ACCESSIBLE PATH SHALL NOT ALLOW PASSAGE OF A SPHERE GREATER THAN ¼ INCH.





- C-6**

Z:\012018\032103210304 CONESTATE - 165 NEWBURYPORT TURNPIKE ROWLEY MA\CAD\012018\032103210304 LIGHT.DWG



LIGHTING REQUIREMENTS		
CODE SECTION	REQUIRED	PROPOSED
§ 8.6.4.3	POLE LIGHT REQUIREMENTS: MAXIMUM MOUNTING HEIGHT: 30 FT	21 FT
§ 8.6.4.5	AVERAGE ILLUMINATION REQUIREMENTS: THE AVERAGE ILLUMINATION LEVEL SHALL NOT EXCEED THE ILLUMINATION LEVEL PUBLISHED FOR SUCH ACTIVITY BY THE IESNA HANDBOOK.	COMPLIES

PROPOSED LUMINAIRE SCHEDULE							
SYMBOL	LABEL	QUANTITY	LUMINAIRE	DISTRIBUTION	LLF	MANUFACTURER	IES FILE
	A	4	EVOLVE COMPACT (EACL) AREA LIGHT WITH SHIELD 122 WATTS, 4K	TYPE III	0.90	GE CURRENT	EACL01_F3AW740_-ELS-EAC-ABL-BLCK.IES
	B	4	EVOLVE COMPACT (EACL) AREA LIGHT 122 WATTS, 4K	TYPE IV	0.90	GE CURRENT	EACL01_F4AF740_.IES
	C	2	EVOLVE COMPACT (EACL) AREA LIGHT 122 WATTS, 4K	TYPE IV	0.90	GE CURRENT	EACL01_F4AF740_.IES
	D	8	LANTERNA 9004 LED, WALL MOUNTED CYLINDER	DOWNLIGHT	0.90	COOPER LIGHTING	9004-W1-(RW, RJ)-LED4080-W-WT-L1-UNV (1).IES
	E	5	BULLET OUTDOOR RECESSED FIXED DOWNLIGHT IP66	CANOPY	0.90	ILLUMINATION	5811-ISA720L8040W.IES
	F	1	LUMARK CROSSTOUR MAXX LED WALL PACK	FORWARD	0.90	EATON	XTOR68-W.IES

SYMBOL	DESCRIPTION
-----	PROPOSED CALCULATION AREA
-----	PROPOSED ISOMETRIC LINE
A (XX')	PROPOSED LIGHTING FIXTURE (MOUNTING HEIGHT)
+XX	PROPOSED LIGHTING INTENSITY (FOOT CANDLES)
	PROPOSED AREA LIGHT
	PROPOSED BUILDING MOUNTED LIGHT

- GENERAL LIGHTING NOTES**
- THE LIGHTING LEVELS DEPICTED WITHIN THE PLAN SET ARE CALCULATED UTILIZING DATA OBTAINED FROM THE LISTED MANUFACTURER. ACTUAL ILLUMINATION LEVELS AND PERFORMANCE OF ANY PROPOSED LIGHTING FIXTURE MAY VARY DUE TO UNCONTROLLABLE VARIABLES SUCH ARE WEATHER, VOLTAGE SUPPLY, LAMP TOLERANCE, EQUIPMENT SERVICE LIFE AND OTHER VARIABLE FIELD CONDITIONS.
 - WHERE APPLICABLE, THE EXISTING LIGHT LEVELS DEPICTED WITHIN THE PLAN SET SHALL BE CONSIDERED APPROXIMATE. THE EXISTING LIGHT LEVELS ARE BASED ON FIELD OBSERVATIONS AND THE MANUFACTURER'S DATA OF THE ASSUMED OR MOST SIMILAR LIGHTING FIXTURE MODEL.
 - UNLESS NOTED ELSEWHERE WITHIN THIS PLAN SET, THE LIGHT LOSS FACTORS USED IN THE LIGHTING ANALYSIS ARE AS FOLLOWS:
 - LIGHT EMITTING DIODES (LED): 0.90
 - HIGH PRESSURE SODIUM: 0.72
 - METAL HALIDE: 0.72
 - THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC, IN WRITING, PRIOR TO THE START OF CONSTRUCTION, OF ANY PROPOSED LIGHTING LOCATIONS THAT CONFLICT WITH EXISTING/ PROPOSED DRAINAGE UTILITY, OR OTHER IMPROVEMENTS.
 - THE CONTRACTOR IS RESPONSIBLE TO PREPARE A WIRING PLAN AND PROVIDE ELECTRIC SERVICE TO ALL PROPOSED LIGHTING FIXTURES. THE CONTRACTOR IS REQUIRED TO PREPARE AN AS-BUILT PLAN OF WIRING AND PROVIDE COPIES TO THE OWNER AND STONEFIELD ENGINEERING & DESIGN, LLC.

- ATM LIGHTING NOTES:**
- THE CONTRACTOR SHALL REPLACE LAMP COVERS, RE-LAMP AND RE-BALLAST EXISTING LIGHT FIXTURES AS INDICATED WITHIN THE PLAN SET. THE EXISTING FIXTURE HEIGHT SHALL BE MAINTAINED UNLESS INDICATED OTHERWISE.
 - PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC, IN WRITING IF THE EXISTING LIGHT FIXTURES ARE NOT THE MINIMUM WATTAGE SPECIFIED WITHIN THE PLAN SET.
 - THE CONTRACTOR IS RESPONSIBLE TO CONFIRM THAT ANY EXISTING LIGHT POLES IDENTIFIED FOR REUSE WITH A PROPOSED LIGHT FIXTURE(S) SHALL BE IN ACCEPTABLE WORKING CONDITION AND HAVE THE CAPACITY TO SUPPORT THE PROPOSED LIGHT FIXTURE(S). ANY MOUNTING EQUIPMENT REQUIRED TO ATTACH THE PROPOSED LIGHTING FIXTURE TO THE EXISTING LIGHT POLE SHALL BE PROVIDED BY THE CONTRACTOR.
 - THE CONTRACTOR SHALL CONFIRM THAT THE LOCATION OF ANY PROPOSED BUILDING MOUNTED LIGHTING FIXTURE WILL NOT CONFLICT WITH ANY EXISTING OR PROPOSED STRUCTURAL ELEMENT (E.G. CANOPY SUPPORT BEAMS). THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC, IN WRITING OF ANY FIXTURE CONFLICT PRIOR TO THE START OF CONSTRUCTION.
 - ALL EXISTING TREE LIMBS WITHIN THE 60 FOOT ATM RADIUS SHOWN IN THE PLAN SET SHALL BE TRIMMED TO A MINIMUM OF 6 FEET ABOVE GRADE. ALL SHRUBS WITHIN THE 60 FOOT ATM RADIUS SHALL BE TRIMMED TO A MINIMUM OF 36 INCHES ABOVE GRADE. ALL BRUSH SHALL BE REMOVED. THE CONTRACTOR SHALL CONSIDER ALL FUTURE GROWTH AND FULL BLOOM WHEN TRIMMING LANDSCAPING. EXISTING TREE LIMBS ADJACENT TO LIGHTING FIXTURES SHALL BE TRIMMED AS REQUIRED TO PREVENT LIGHT INTERFERENCE.
 - PRIOR TO BID, CONTRACTOR SHALL VERIFY EXISTING EXTERIOR LIGHTING CONDITIONS AFTER DUSK AND NOTIFY THE DEVELOPER/OWNER AND STONEFIELD ENGINEERING & DESIGN, LLC, OF DAMAGED OR INOPERABLE LIGHTS. THE CONTRACTOR SHALL REPAIR ALL INOPERABLE LIGHTS UNLESS OTHERWISE NOTED WITHIN THIS PLAN SET.
 - THE ILLUMINATION LEVELS DEPICTED WITHIN THE PLAN SET ARE BASED ON REGULATORY STATE STANDARDS FOR SAFETY LIGHTING AND ON CLIENT STANDARDS.
 - ALL LIGHTING FIXTURES, UNLESS OTHERWISE NOTED WITHIN THIS PLAN SET, HAVE THE PHOTOCELL OPTION ENABLED.
 - EXISTING LIGHTING FIXTURES CONTROLLED BY OUTSIDE ENTITIES (E.G. LANDLORD) HAVE BEEN EXCLUDED FROM THE LIGHTING ANALYSIS REFLECTED WITHIN THE PLAN SET. THE PROPOSED LIGHT LEVELS HAVE BEEN DESIGNED TO COMPLY WITH ALL APPLICABLE ATM AND SAFETY LIGHTING REQUIREMENTS INDEPENDENT OF ANY UNCONTROLLED LIGHT FIXTURES.



AREA LIGHT FIXTURE 'A' - 'C'



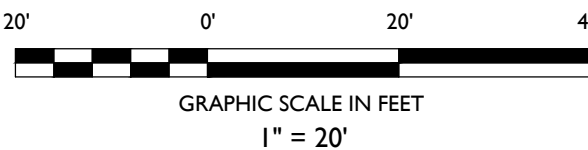
AREA LIGHT FIXTURE 'D'



AREA LIGHT FIXTURE 'E'



AREA LIGHT FIXTURE 'F'



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CHASE
PROPOSED BANK WITH
DRIVE-THRU ATM

MAP: 14 LOT: 13
165 NEWBURYPORT TURNPIKE (US ROUTE 1)
TOWN OF ROWLEY
ESSEX COUNTY, MASSACHUSETTS

JOSHUA H. KLINE, P.E.
MASSACHUSETTS LICENSE NO. 53936
LICENSED PROFESSIONAL ENGINEER

STONEFIELD
engineering & design







SCALE: 1" = 20' PROJECT ID: BOS-230034

TITLE:

LIGHTING PLAN

DRAWING:

C-7

PROPOSED LUMINAIRE SCHEDULE							
SYMBOL	LABEL	QUANTITY	LUMINAIRE	DISTRIBUTION	LLF	MANUFACTURER	IES FILE
	A	4	EVOLVE COMPACT (EACL) AREA LIGHT WITH SHIELD 122 WATTS, 4K	TYPE III	0.90	GE CURRENT	EACL01_F3AW740____.ELS-EAC-ABL-BLICKIES
	B	4	EVOLVE COMPACT (EACL) AREA LIGHT 122 WATTS, 4K	TYPE IV	0.90	GE CURRENT	EACL01_F4AF740____.IES
	C	2	EVOLVE COMPACT (EACL) AREA LIGHT 122 WATTS, 4K	TYPE IV	0.90	GE CURRENT	EACL01_F4AF740____.IES
	D	8	LANTERNA 9004 LED, WALL MOUNTED CYLINDER	DOWNLIGHT	0.90	COOPER LIGHTING	9004-W-I-(RW, RJ)-LED4080-W-WT-L1-UVW (1)IES
	E	5	BULLET OUTDOOR RECESSED FIXED DOWNLIGHT IP66	CANOPY	0.90	ILLUMINATION	S81 I-ISAT2L08040W.IES
	F	1	LUMARK CROSSTOUR MAXX LED WALL PACK	FORWARD	0.90	EATON	XTOR6B-W.IES

STANDARD CHASE BANK AM / AHD REQUIREMENTS	
REQUIRED	PROPOSED
MINIMUM 10 FOOT CANDLES AT FACE OF ATR EXTENDING 5 FEET OUTWARD IN ALL DIRECTIONS MEASURED 36" ABOVE GRADE	17.0 FC
MINIMUM 10 FOOT CANDLES AT FACE OF DOOR EXTENDING 5 FEET OUTWARD IN ALL DIRECTIONS MEASURED 36" ABOVE GRADE	16.0 FC
MINIMUM 2 FOOT CANDLES AT FACE OF ATR EXTENDING 5M FEET OUTWARD IN ALL DIRECTIONS MEASURED 36" ABOVE GRADE	2.4 FC

GENERAL LIGHTING NOTES

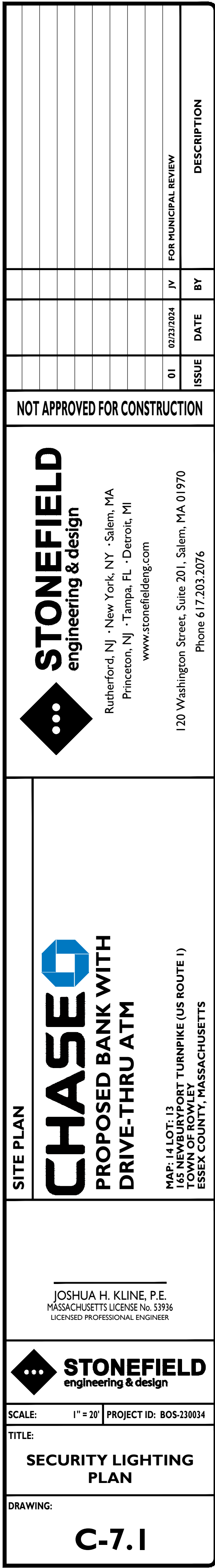
1. THE LIGHTING LEVELS DEPICTED WITHIN THE PLAN SET ARE CALCULATED UTILIZING DATA OBTAINED FROM THE LISTED MANUFACTURER. ACTUAL ILLUMINATION LEVELS AND PERFORMANCE OF ANY PROPOSED LIGHTING FIXTURES MAY VARY. THE CONTRACTOR SHALL VERIFY THE LIGHTING LEVELS, WEATHER, VOLTAGE SUPPLY, LAMP TOLERANCE, EQUIPMENT SERVICE LIFE AND OTHER VARIABLE FIELD CONDITIONS.
2. WHERE APPLICABLE, THE EXISTING LIGHTING LEVELS DEPICTED WITHIN THE PLAN SET SHALL BE CONSIDERED APPROXIMATE. THE EXISTING LIGHT LEVELS ARE BASED ON FIELD OBSERVATIONS AND THE MANUFACTURER'S DATA OF THE ASSUMED OR MOST SIMILAR LIGHTING FIXTURE MODEL.
3. UNLESS OTHERWISE NOTED, THE LIGHTING LOSS FACTORS USED IN THE LIGHTING ANALYSIS ARE AS FOLLOWS:
 - a. LIGHT EMITTING DIODES (LED): 0.90
 - b. HIGH PRESSURE SODIUM: 0.80
 - c. METAL HALIDE: 0.72

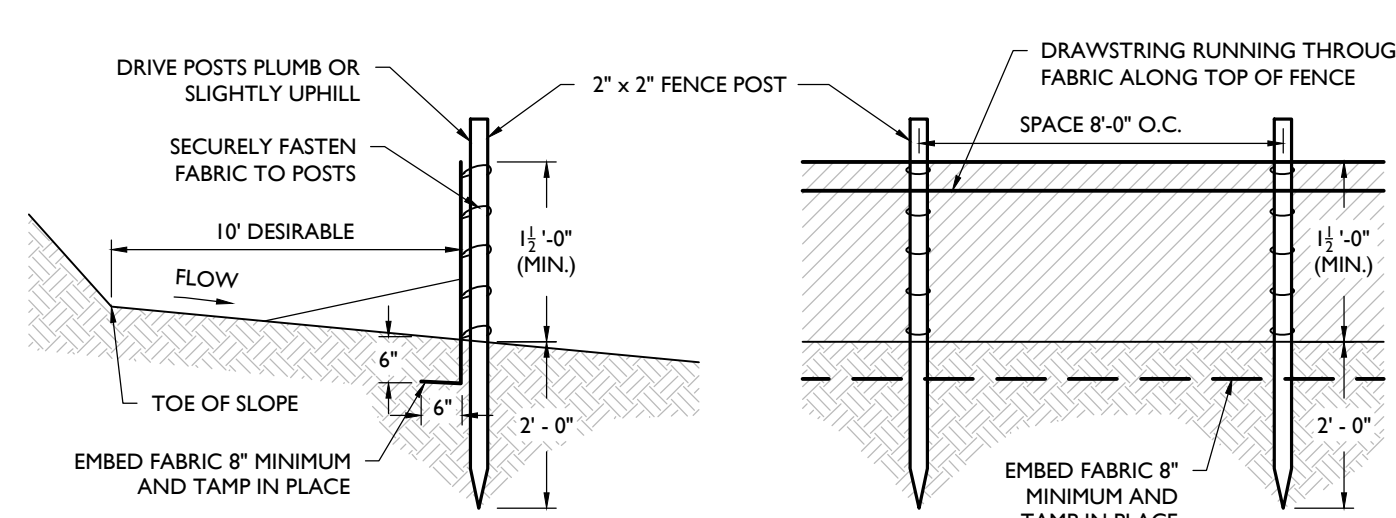
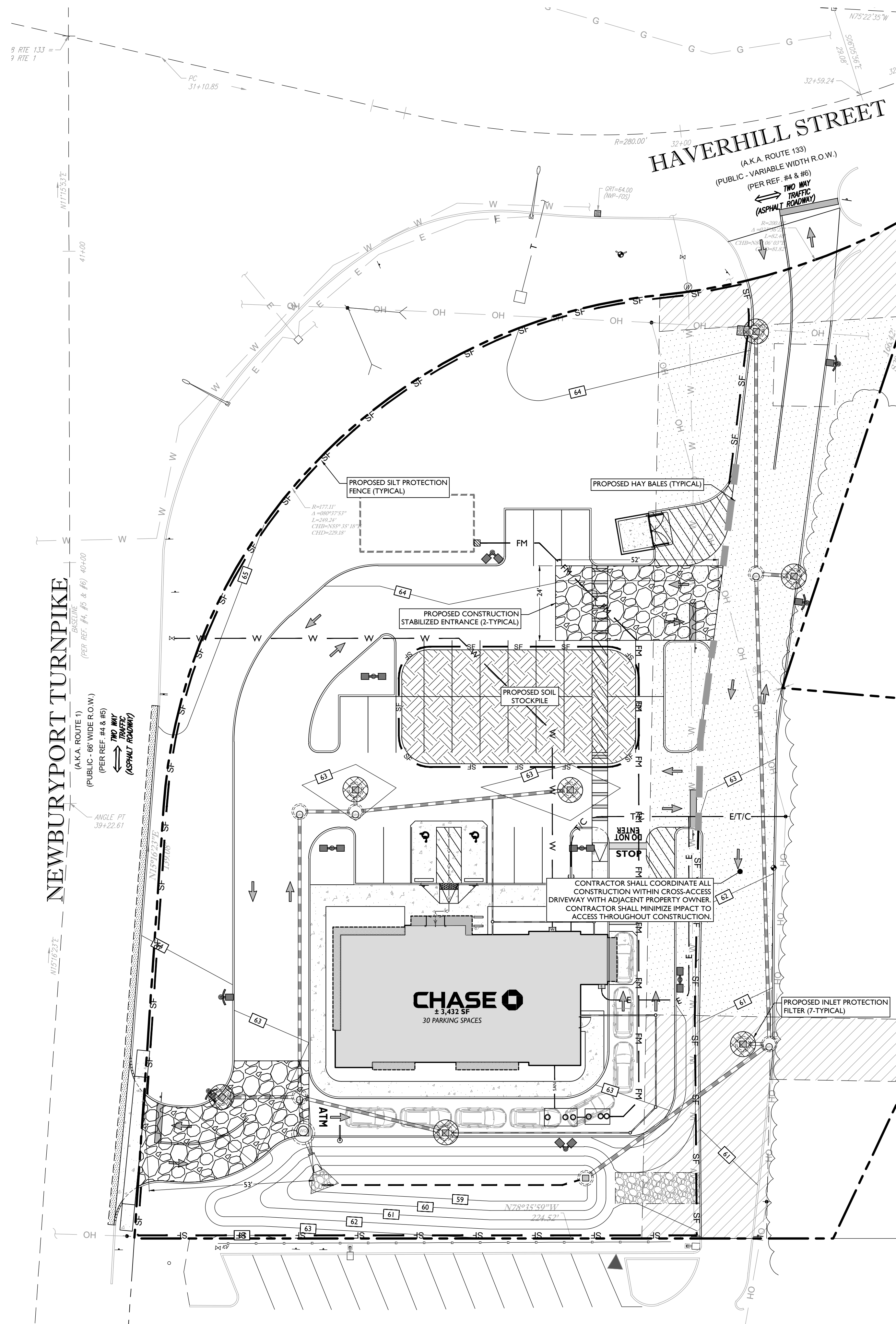
THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC, PRIOR TO THE START OF CONSTRUCTION, OF ANY PROPOSED LIGHTING LOCATIONS THAT CONFLICT WITH EXISTING/ PROPOSED DRAINAGE, UTILITY, OR OTHER IMPROVEMENTS.

THE CONTRACTOR IS RESPONSIBLE TO OBTAIN A WRITING PLAN AND ELECTRIC SERVICE TO THE PROPOSED LIGHTING FIXTURES. THE CONTRACTOR IS REQUIRED TO PREPARE AN AS-BUILT PLAN OF WIRING AND PROVIDE COPIES TO THE OWNER AND STONEFIELD ENGINEERING & DESIGN, LLC.

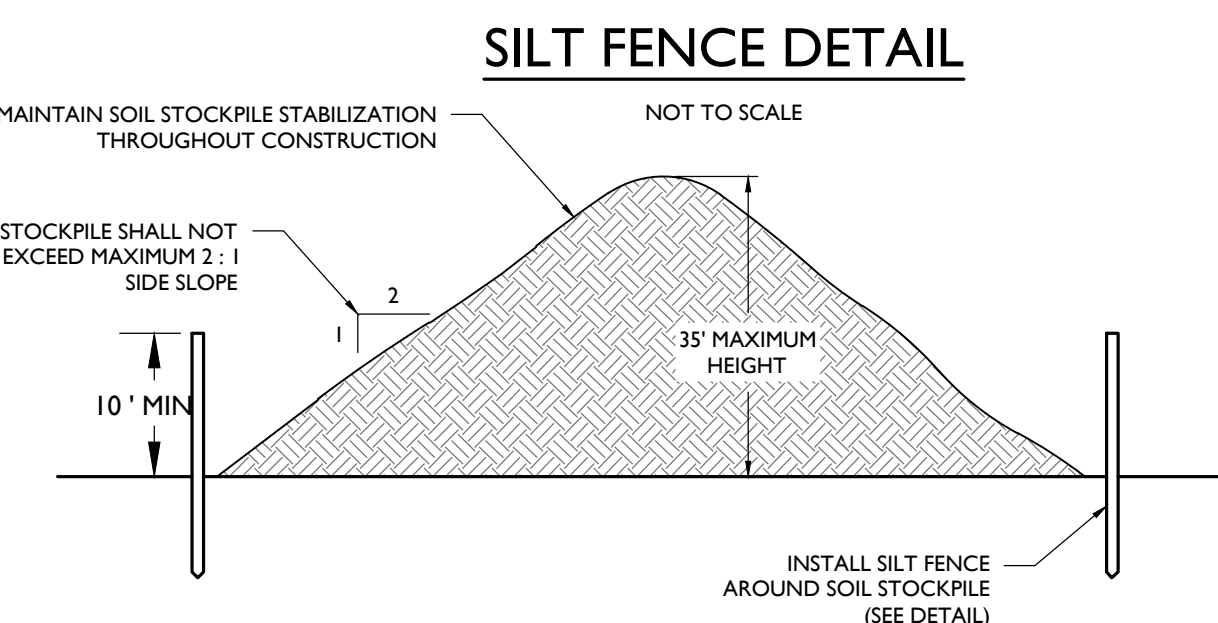
ATH LANDSCAPING NOTES:

1. THE CONTRACTOR SHALL REPLACE LAMP COVERS, RE-LAMP AND RE-BALBAST EXISTING LIGHT FIXTURES AS INDICATED WITHIN THE PLAN SET. EXISTING FIXTURE HEIGHT SHALL BE MAINTAINED UNLESS INDICATED OTHERWISE.
2. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC, OF ANY PROPOSED LIGHTING LOCATIONS THAT CONFLICT WITH EXISTING LIGHT FIXTURES ARE NOT THE MINIMUM WATTAGE SPECIFIED WITHIN THE PLAN SET.
3. THE CONTRACTOR IS RESPONSIBLE TO CONFIRM THAT ANY EXISTING LIGHTING FIXTURES ARE NOT CONFLICTING WITH EXISTING/ PROPOSED LIGHTING LOCATIONS THAT CONFLICT WITH ANY EXISTING OR PROPOSED STRUCTURAL ELEMENT (E.G. CANOPY SUPPORT BEAMS). THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC, PRIOR TO THE START OF CONSTRUCTION.
4. ALL EXISTING TREE LIMBS WITHIN THE 60 FOOT AT RADIUS SHOWN IN THE PLAN SET SHALL BE TRIMMED TO A MINIMUM OF 6 FEET ABOVE GRADE. ALL BRUSH SHALL BE TRIMMED TO A MINIMUM OF 3 FEET ABOVE GRADE. ALL BRUSH SHALL BE REMOVED. THE CONTRACTOR SHALL CONSIDER ALL FUTURE GROWTH AND FULL BLOOM PRIOR TO TRIMMING LANDSCAPING. EXISTING TREE LIMBS ADJACENT TO LIGHTING FIXTURES SHALL BE TRIMMED AS REQUIRED TO PREVENT LIGHT INTERFERENCE.
5. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY EXISTING EXTERIOR LIGHTING CONDITIONS AFTER DUSK AND NOTIFY THE DEVELOPER/ OWNER AND STONEFIELD ENGINEERING & DESIGN, LLC, OF DAMAGED OR INOPERABLE EXTERIOR LIGHTING CONDITIONS. THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC, OF ANY DAMAGED OR INOPERABLE LIGHTING CONDITIONS WITHIN THIS PLAN SET.
7. THE ILLUMINATION LEVELS DEPICTED WITHIN THE PLAN SET ARE BASED ON REGULATORY STATE STANDARDS FOR SAFETY LIGHTING AND ON CLIENT STANDARDS.
8. ALL LIGHTING FIXTURES, UNLESS OTHERWISE NOTED WITHIN THIS PLAN SET, HAVE THE PHOTOCELL OPTION ENABLED.
9. EXISTING LIGHTING FIXTURES CONTROLLED BY OUTSIDE ENTITIES (E.G. LANDLORD) HAVE BEEN EXCLUDED FROM THE LIGHTING ANALYSIS REFLECTED WITHIN THE PLAN SET. THE PROPOSED LIGHT LEVELS HAVE BEEN BASED ON THE COMINGLED LIGHTING FIXTURES. THE CONTRACTOR'S REQUIREMENTS INDEPENDENT OF ANY UNCONTROLLED LIGHT FIXTURES.





- NOTES:
1. SECURELY FASTEN GEOTEXTILE TO FENCE POST BY USE OF WIRE TIES, HOG RINGS, STAPLES OR POCKETS. FOUR TO SIX FASTENERS PER POST.
 2. GEOTEXTILE FABRIC TO BE EMBEDDED 8" (MIN.) AND TAMP IN PLACE.
 3. SECURELY FASTEN ENDS OF INDIVIDUAL ROLLS OF GEOTEXTILE TO A POST BY WRAPPING EACH END OF THE GEOTEXTILE AROUND THE POST TWICE AND ATTACHING AS SPECIFIED IN NOTE 1 ABOVE. SPLICING OF INDIVIDUAL ROLLS SHALL NOT OCCUR AT LOW POINTS.
 4. SET SILT FENCE WITHIN PROJECT LIMITS. 10'-0" IS DESIRABLE.



- NOTES:
1. LOCATE THE TOPSOIL STOCKPILE SO THAT IT DOES NOT INTERFERE WITH WORK ON THE SITE.
 2. SURROUND ALL TOPSOIL STOCKPILES WITH AN INTERCEPTOR DIKE WITH GRAVEL OUTLET AND SILT FENCE
 3. EITHER SEED OR COVER STOCKPILES WITH CLEAR PLASTIC OR OTHER MULCHING MATERIALS WITHIN 7 DAY OF THE FORMATION OF THE STOCKPILE.







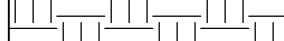




- NOTES:
1. THE FILTER BAG SHALL SAFELY PASS FLOWS GREATER THAN THE 1-YEAR 24-HOUR STORM EVENT.
 2. SEDIMENT REMOVAL AND MAINTENANCE SHALL BE PERFORMED FREQUENTLY AND AFTER EVERY STORM EVENT.



- NOTES:
1. STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE 1 TO 3-INCH STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT PLACED ON A STABLE FOUNDATION AS SPECIFIED IN THE PLAN.
 2. THE MINIMUM LENGTH OF STONE OR PAD SHALL BE 10 FEET. FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH MAY BE USED, THE WIDTH SHALL BE 10' MINIMUM OR THE FULL WIDTH OF THE ACCESS POINT, WHICHEVER IS GREATER.
 3. GEOTEXTILE FILTER FABRIC SHALL BE PLACED BETWEEN THE STONE FILL AND THE EARTH SURFACE BELOW THE PAD TO REDUCE THE MIGRATION OF SOIL PARTICLES FROM THE UNDERLYING SOIL INTO THE STONE AND VICE VERSA. FILTER CLOTH IS NOT REQUIRED FOR A 30' WASH AREA.
 4. IF THE SLOPE TOWARD THE ROAD EXCEEDS 2%, CONSTRUCT A RIDGE, 6 TO 8 INCHES HIGH WITH 3:1 SIDE SLOPES, ACROSS THE FOUNDATION APPROXIMATELY 15 FEET FROM THE ENTRANCE TO DIVERT RUNOFF AWAY FROM THE PUBLIC ROAD.
 5. ALL STORM WATER MUST BE DIVERTED TO THE DRAINAGE DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHOWS. IF THE ENTRANCE IS PIPING IS IMPRACTICAL, A BERM WITH 3:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
 6. WASHING, IF THE SITE CONDITIONS ARE SUCH THAT THE MAJORITY OF MUD IS NOT REMOVED FROM THE VEHICLE TIRES BY THE GRAVEL PAD, THEN THE TIRES SHOULD BE WASHED BEFORE THE VEHICLE ENTERS THE ROAD OR STREET. THE WASH AREA SHOULD BE A LEVEL, AREA 10 FEET WIDE WHICH MAY BE A COMMERCIAL WASH AREA. WASH WATER SHOULD BE DIRECTED INTO CONTAINMENT, A VEGETATED FILTER STRIP, OR OTHER APPROVED SEDIMENT TRAPPING DEVICE. SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY WATERCOURSES.
 7. A FILTER FABRIC FENCE SHOULD BE INSTALLED DOWN-GRADIENT FROM THE CONSTRUCTION ENTRANCE IN ORDER TO CONTAIN ANY SEDIMENT-LADEN RUNOFF FROM THE ENTRANCE.



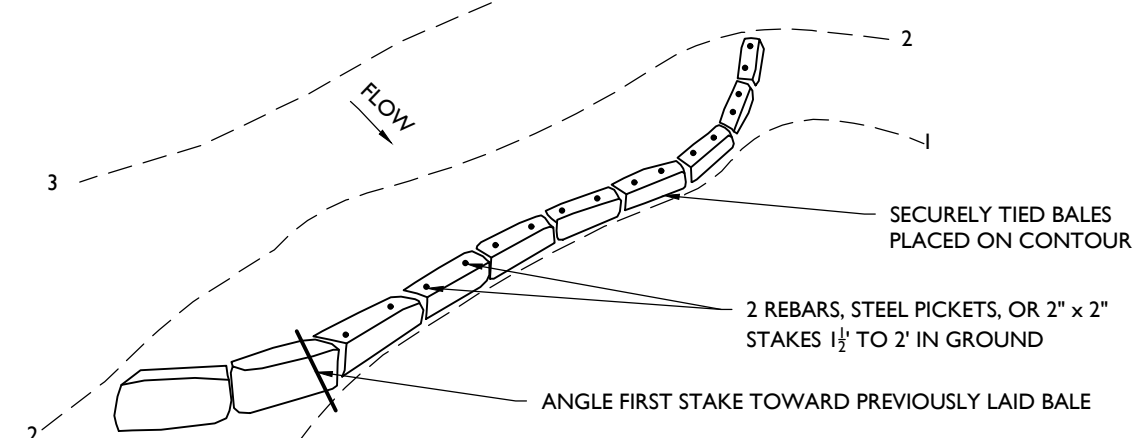
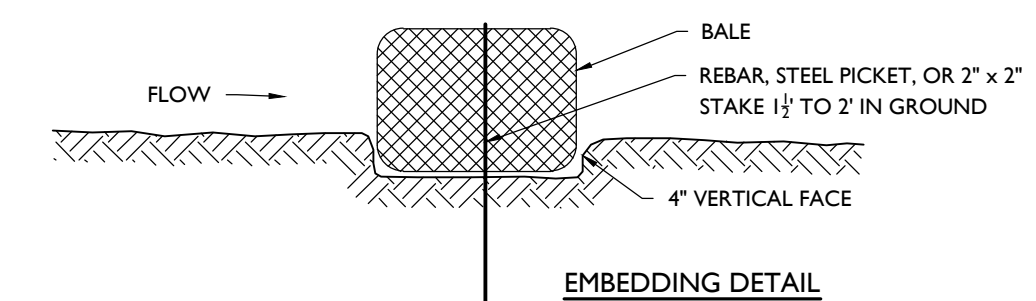
SYMBOL	DESCRIPTION
	PROPERTY BOUNDARY
	ADJACENT PROPERTY BOUNDARY
 LOD 	PROPOSED LIMIT OF DISTURBANCE
 SF 	PROPOSED SILT FENCE
	PROPOSED STOCKPILE & EQUIPMENT STORAGE
	PROPOSED STABILIZED CONSTRUCTION ENTRANCE
	PROPOSED INLET PROTECTION FILTER



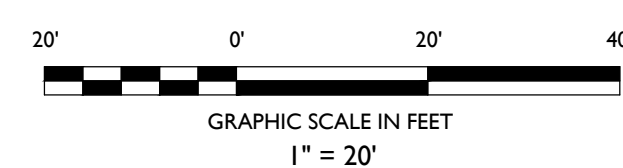
Know what's **below**
Call before you dig

SOIL EROSION AND SEDIMENT CONTROL NOTES

TYPE OF SOIL	WINDSOR LOAMY SAND, 3 TO 8% SLOPES
PERCENT OF SITE COVERAGE	100.0%
HYDROLOGIC SOIL GROUP	A
DEPTH TO RESTRICTIVE LAYER	> 80 INCHES
SOIL PERMEABILITY	1.42 TO 99.90 IN/HR
DEPTH TO WATER TABLE	> 80 INCHES



HAY BALE DETAIL

[illegible]

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120 Washington Street, Suite 201, Salem, MA 01970
Phone 617.203.2076

SITE PLAN

CHASE
PROPOSED BANK WITH
DRIVE-THRU ATM

MAP: 14 LOT: 13
165 NEWBURYPORT TURNPIKE (US ROUTE 1)
TOWN OF ROWLEY
ESSEX COUNTY, MASSACHUSETTS

JOSHUA H. KLINE, P.E.
MASSACHUSETTS LICENSE No. 53936
LICENSED PROFESSIONAL ENGINEER



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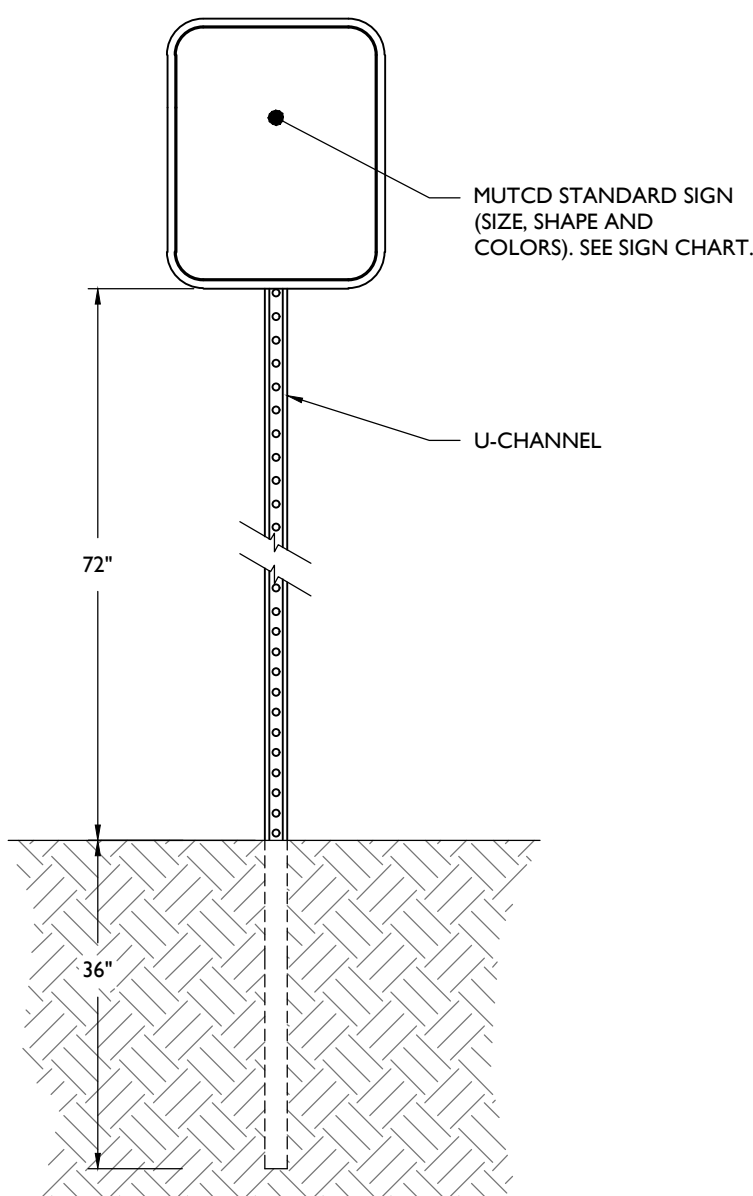
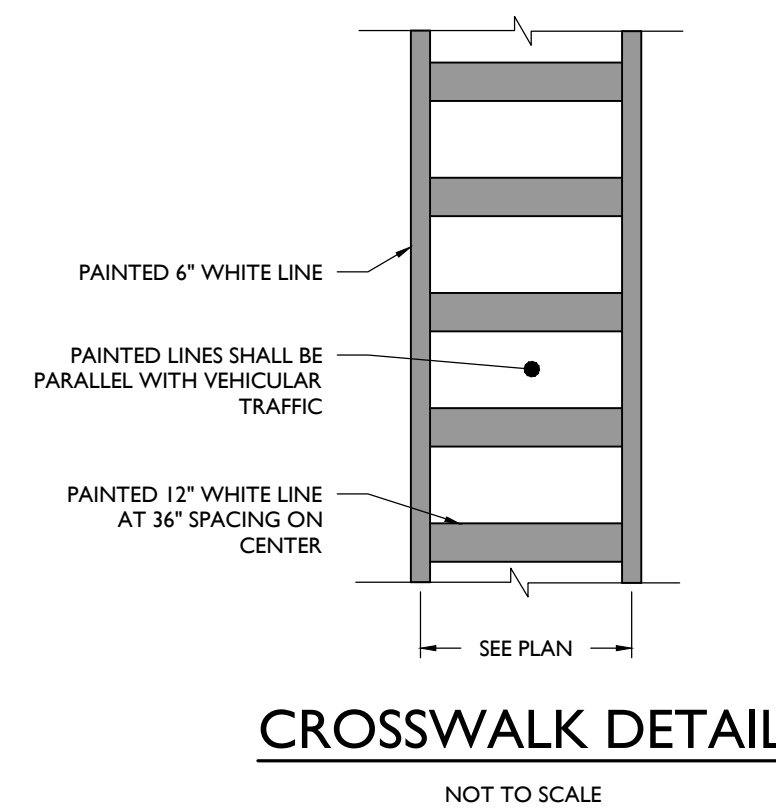
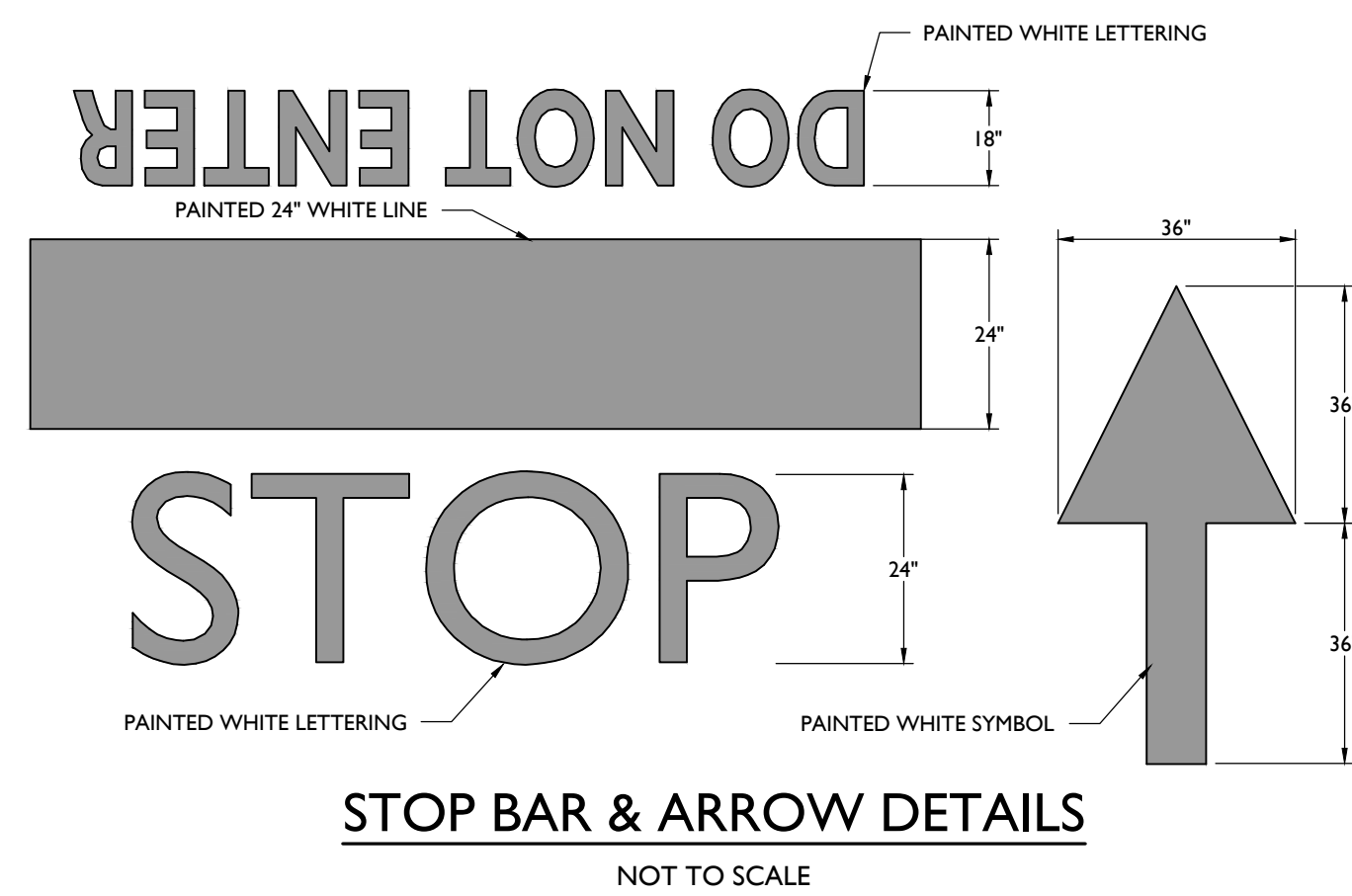
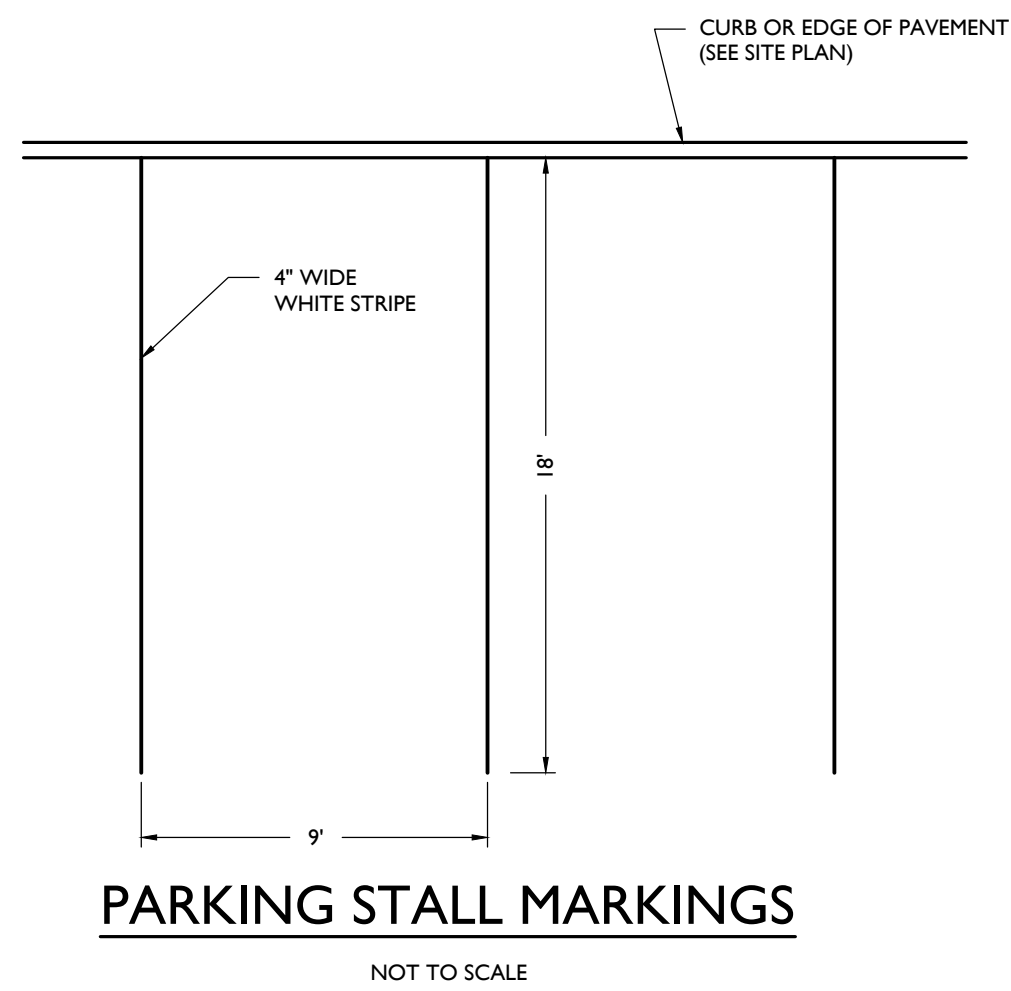
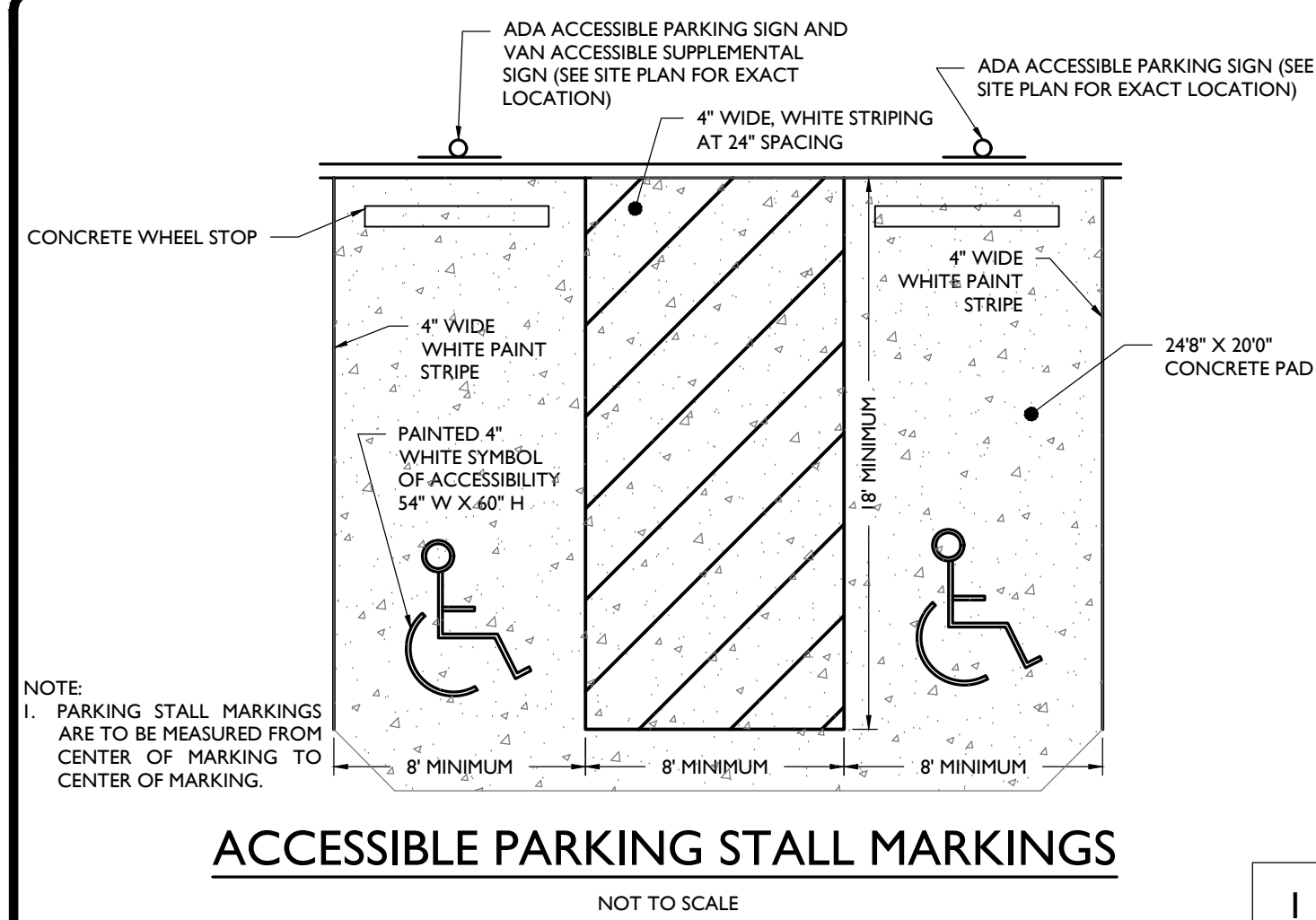
SCALE:	1" = 20'	PROJECT ID: BOS-230034
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TITLE:

**SOIL EROSION &
SEDIMENT CONTROL
PLAN**

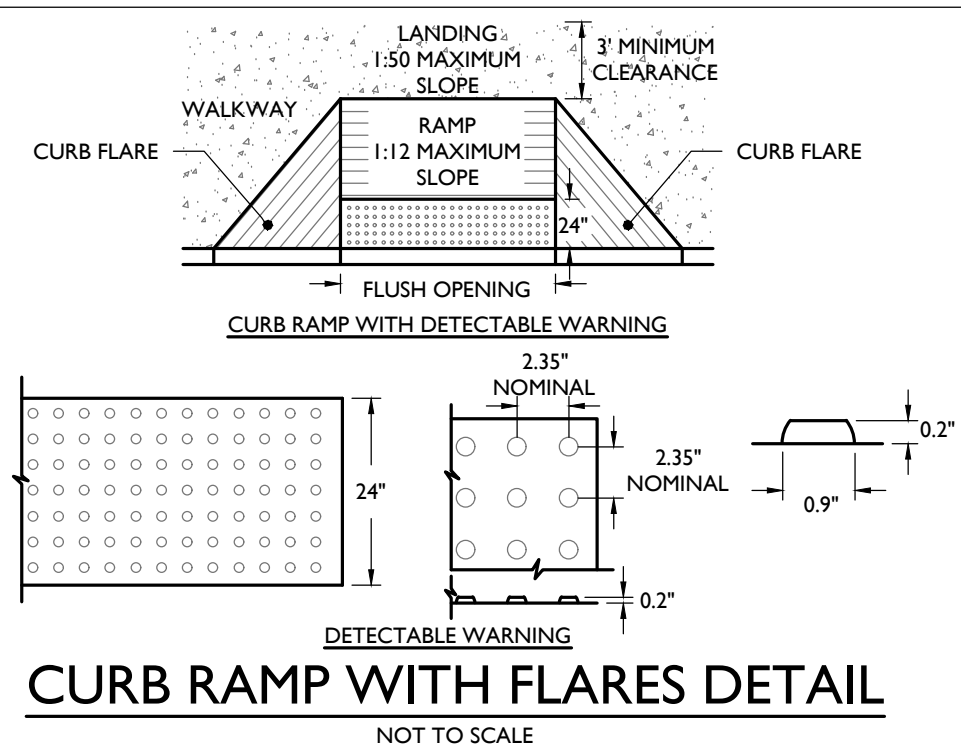
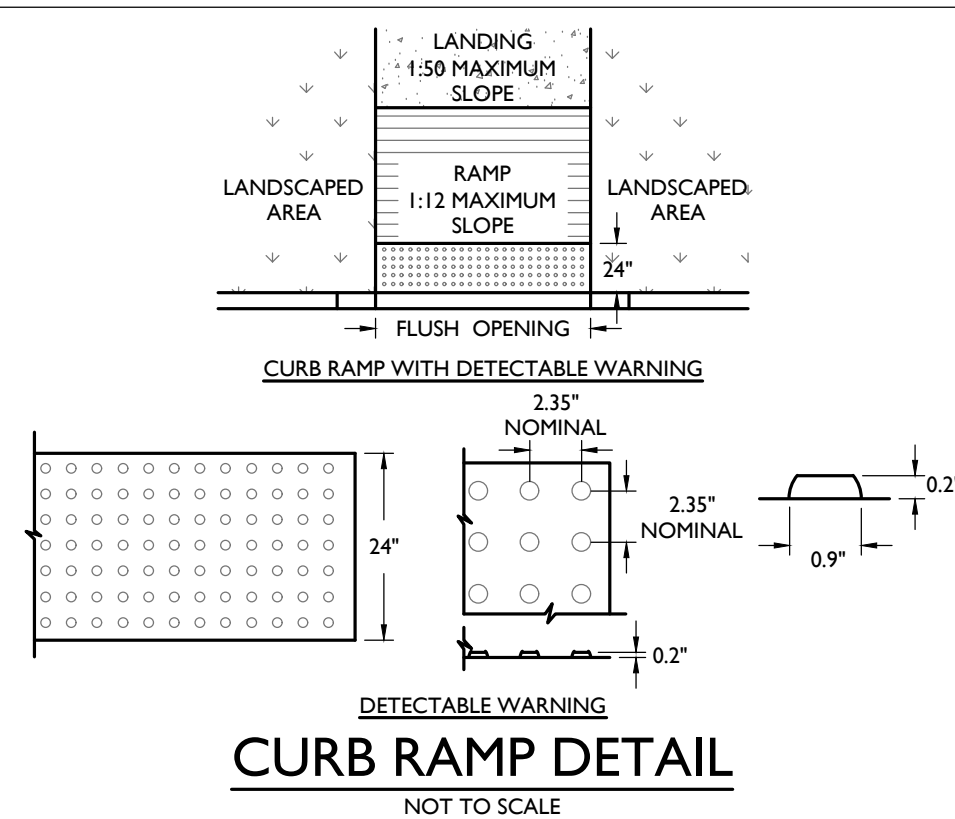
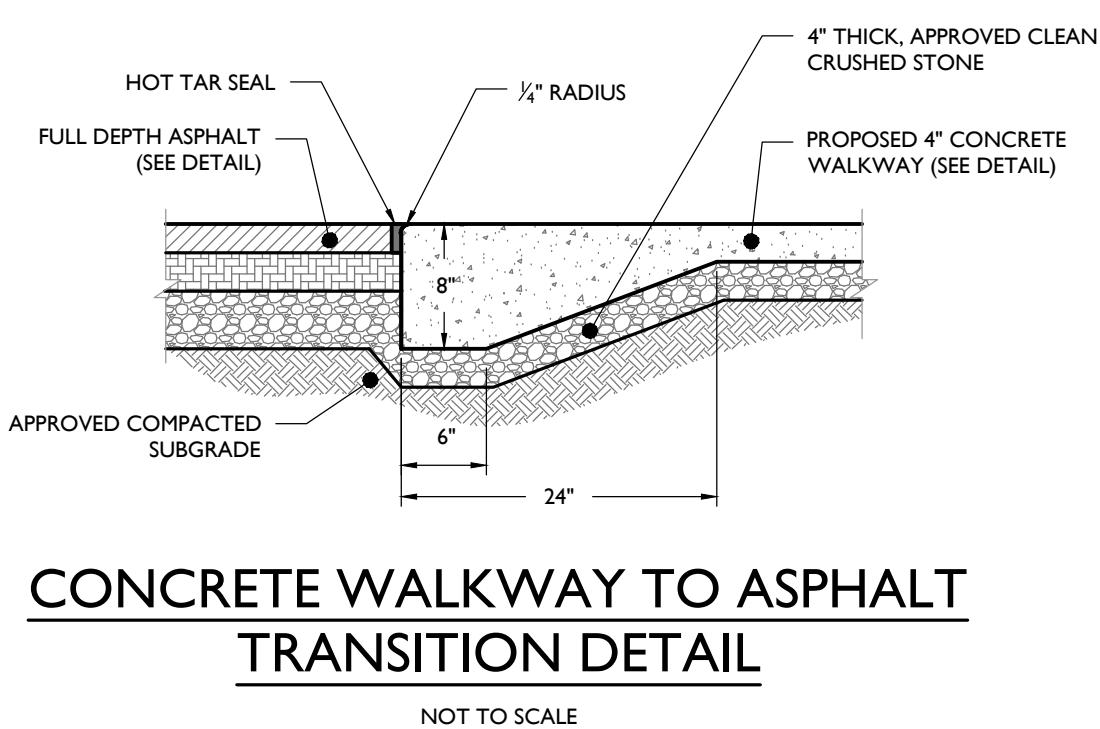
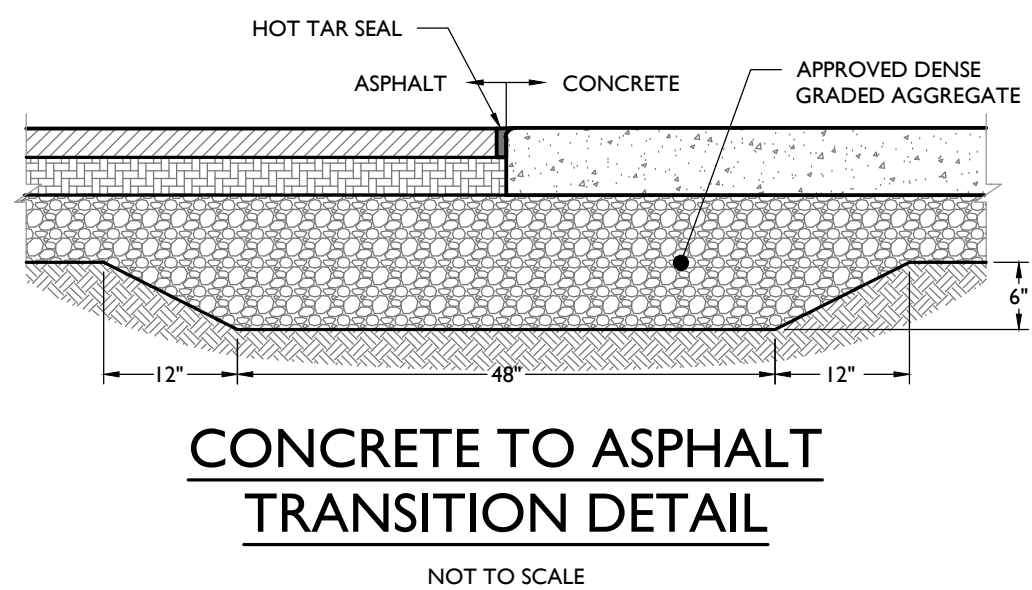
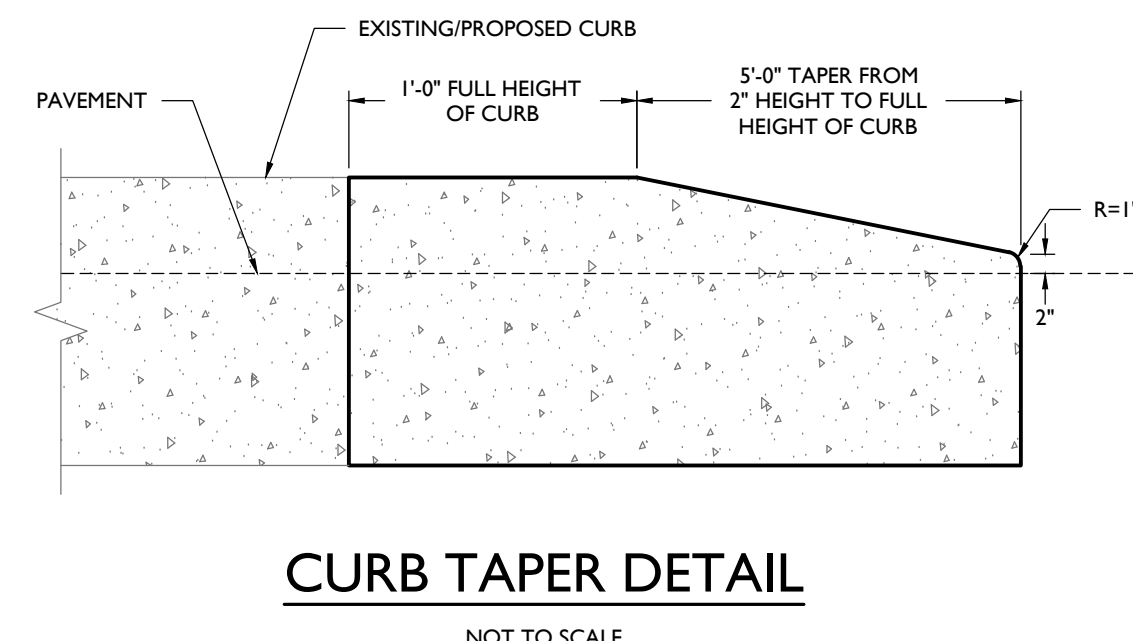
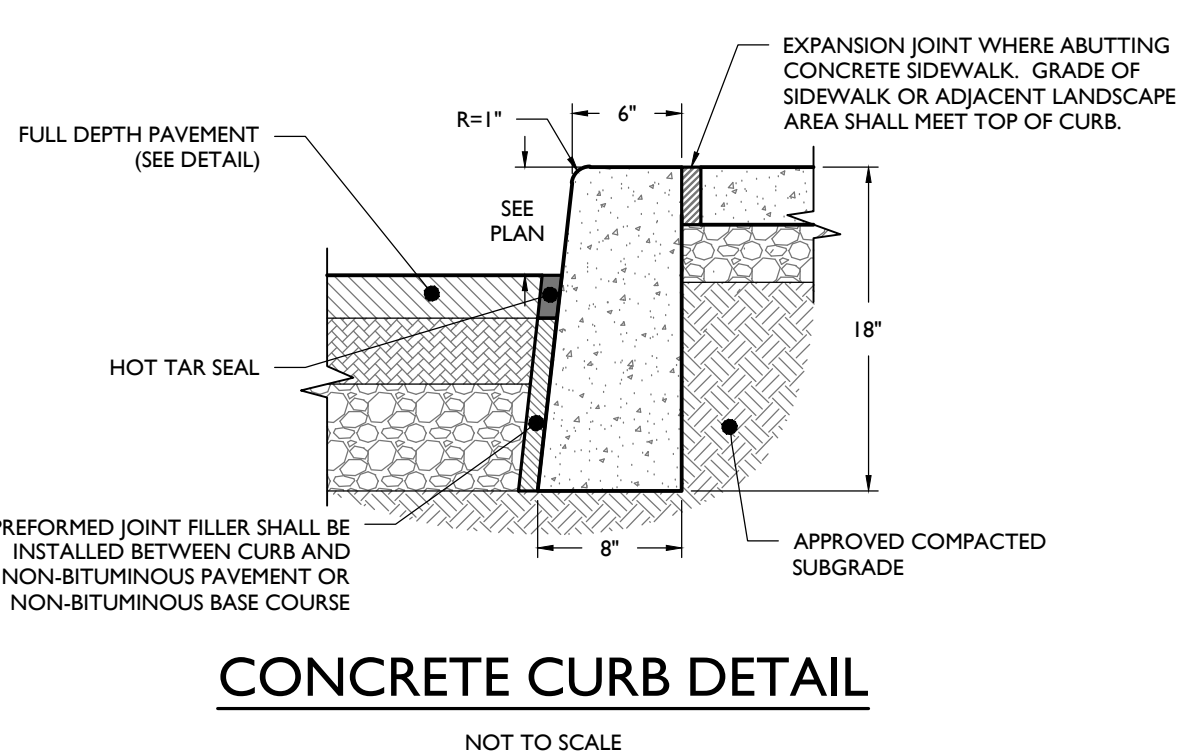
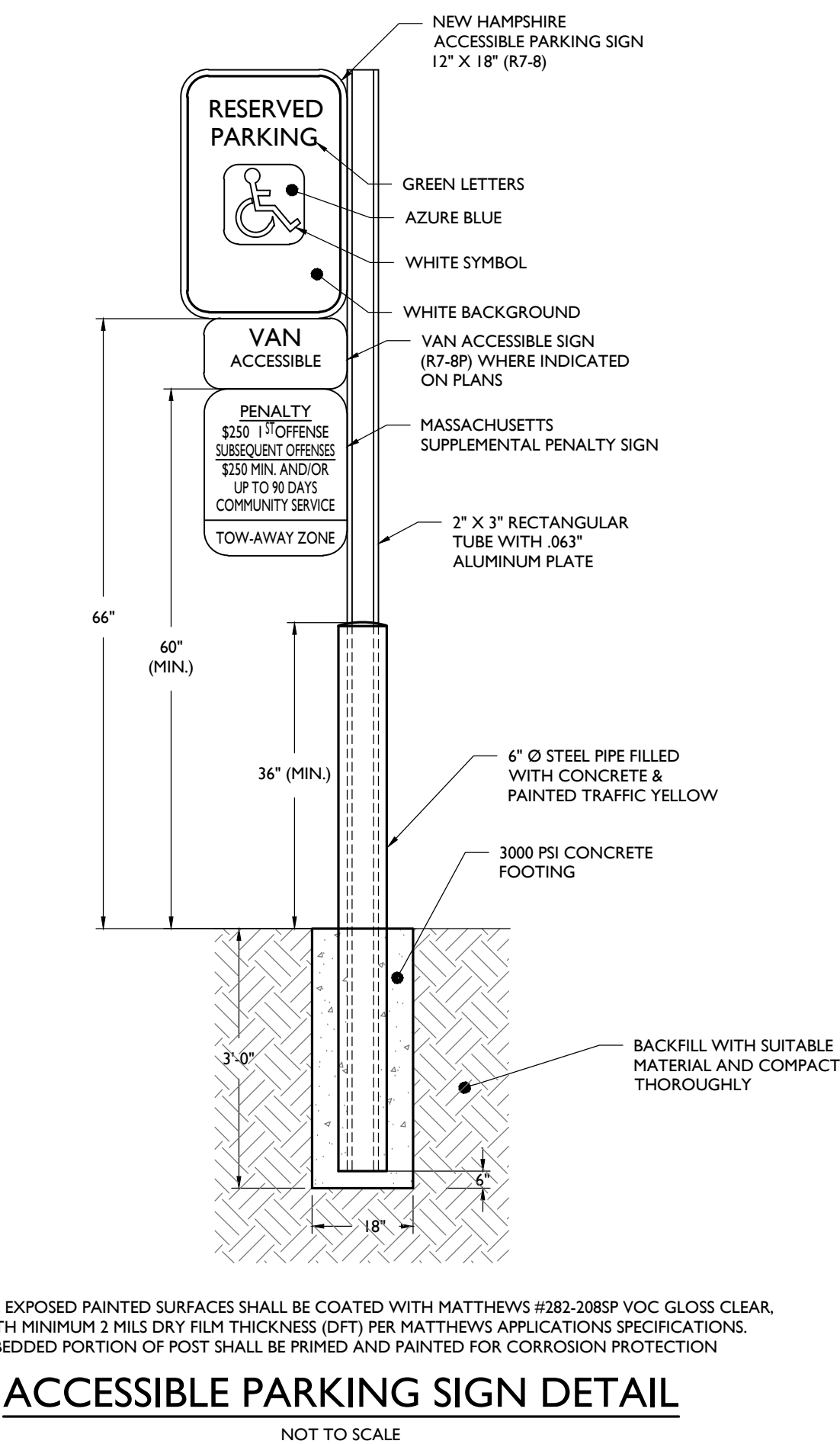
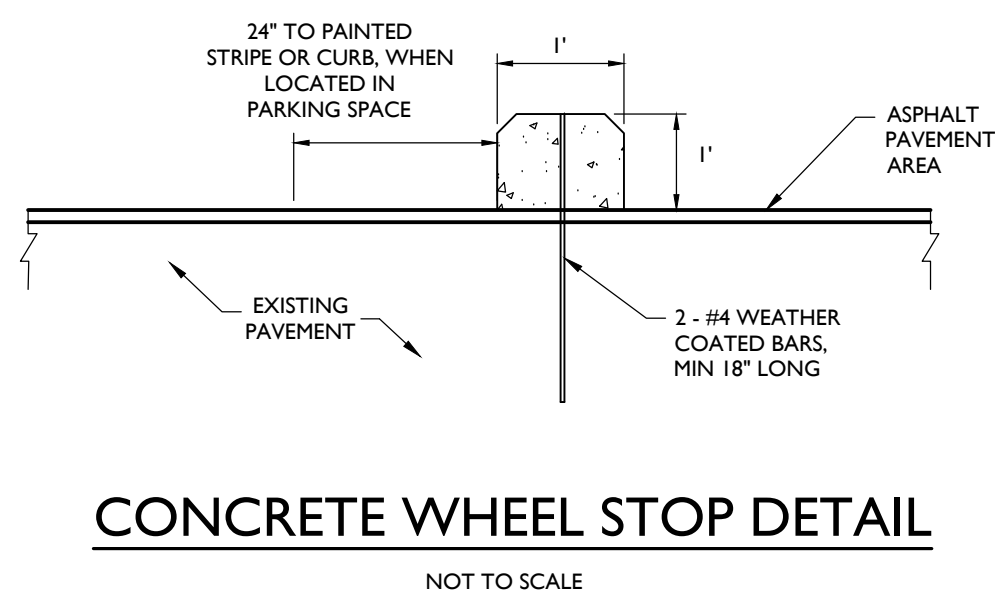
DRAWING:

C-8



M.U.T.C.D. NUMBER	TEXT	COLOR		SIZE OF SIGN (WIDTH X HEIGHT)	TYPE OF MOUNT
		LEGEND	BACKGROUND		
STOP SIGN (R1-1)		RED	WHITE	36"x36"	GROUND
DO NOT ENTER (R5-1)		RED	WHITE	30"x30"	GROUND

SIGN POST DETAIL & SIGN DATA TABLE



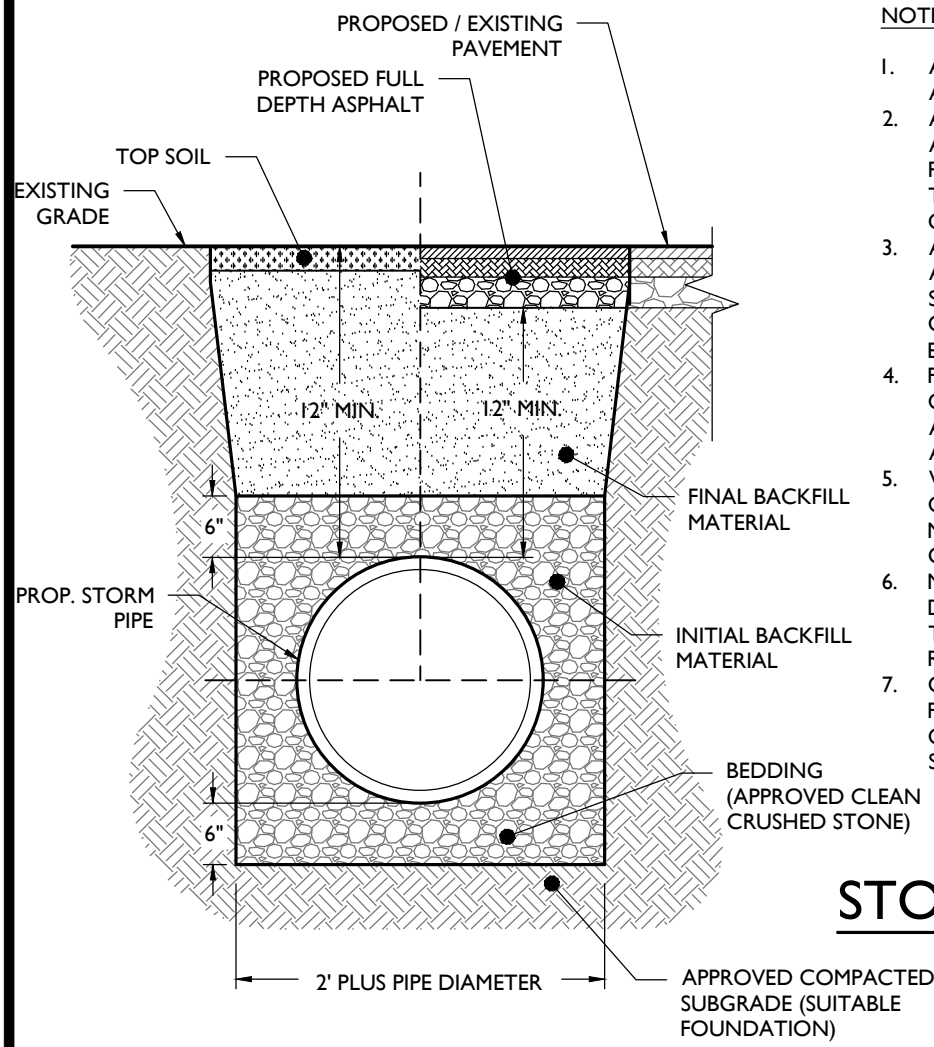
PAVEMENT STRIPING & MARKINGS NOTES:

1. ALL SIGNING AND STRIPING IN EXISTING CONDITION IN CONFLICT WITH THE PROPOSED DESIGN PLAN SHALL BE REMOVED.
2. ALL PROPOSED SIGNING AND STRIPING SHALL CONFORM TO THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION.
3. PAVEMENT STRIPING AND MARKINGS SHALL BE INSTALLED IN CONFORMANCE WITH ALL APPLICABLE LOCAL, COUNTY AND STATE REQUIREMENTS.
4. UNLESS OTHERWISE SPECIFIED, ALL STRIPING AND MARKINGS IN THE PUBLIC RIGHT-OF-WAY SHALL BE OF THERMOPLASTIC PAINT OR PREFORMED THERMOPLASTIC MARKINGS.
5. UNLESS OTHERWISE SPECIFIED, ALL ON SITE STRIPING AND MARKINGS SHALL BE OF THERMOPLASTIC PAINT OR PREFORMED THERMOPLASTIC MARKINGS.



CONTECH CDS1515 (WQ-1 & WQ-2) DETAIL

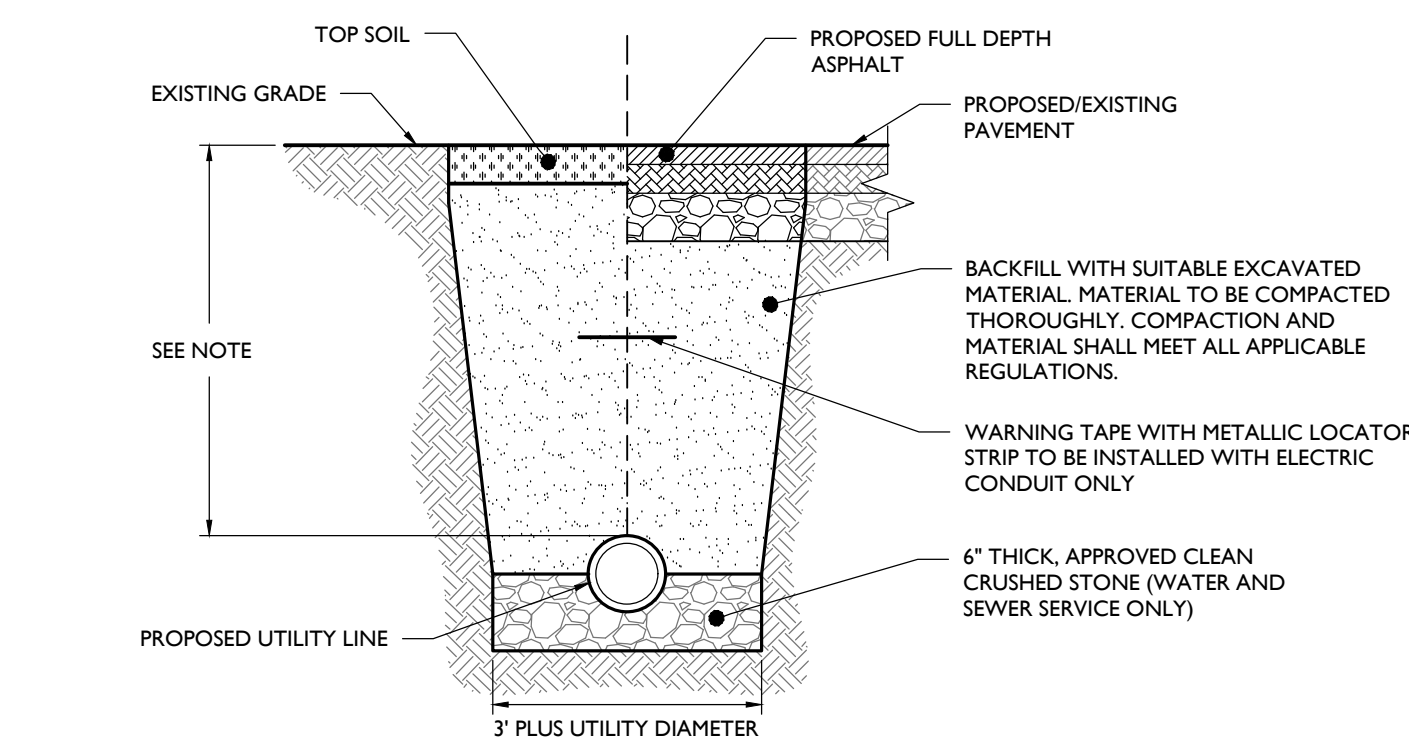
NOT TO SCALE



STORM TRENCH DETAIL

NOT TO SCALE

- NOTES:
- ALL PIPE SYSTEM INSTALLATIONS SHALL MEET ALL APPLICABLE STANDARDS AND SPECIFICATIONS.
 - ALL HDPE PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS" (LATEST EDITION).
 - ALL RCP PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C76-15, "STANDARD SPECIFICATION FOR REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE" (LATEST EDITION).
 - FOR NON HDPE OR RCP PIPE INSTALLATIONS, CONTRACTOR SHALL INSTALL PIPE IN ACCORDANCE WITH ALL APPLICABLE STANDARDS AND SPECIFICATIONS.
 - WHERE THE TRENCH BOTTOM IS UNSTABLE, CONTRACTOR SHALL PROVIDE SUITABLE BACKFILL MATERIAL AS REQUIRED BY ENGINEER OR PER GEOTECH RECOMMENDATIONS.
 - MINIMUM COVER IN TRAFFIC AREAS IS 12" UP TO 48" DIAMETER PIPE AND 24" FOR 54" - 60" DIAMETER PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TOP OF RIGID PAVEMENT.
 - CONTRACTOR SHALL INSTALL SUITABLE MATERIAL FOR INITIAL AND FINAL BACKFILL. BACKFILL COMPACTION SHOULD MEET ALL APPLICABLE STANDARDS AND SPECIFICATIONS.

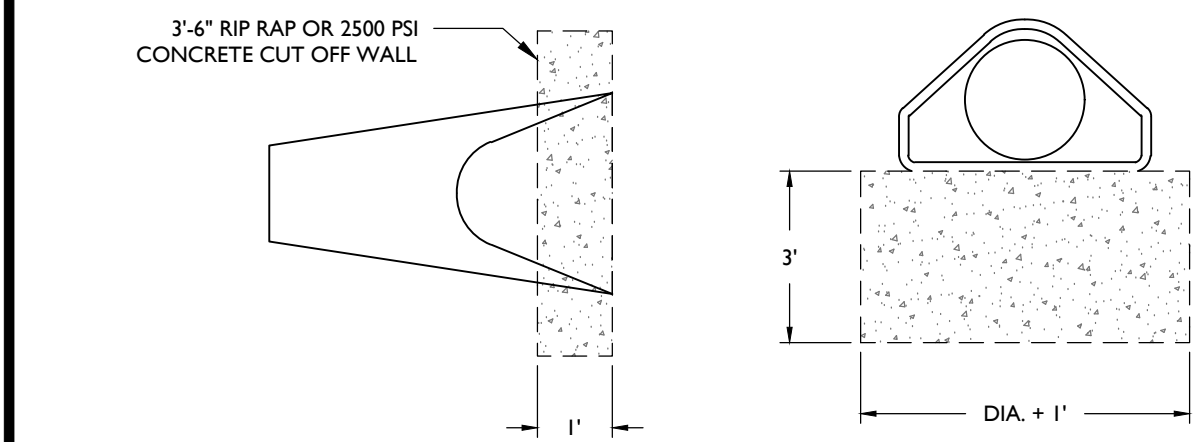


UTILITY TRENCH DETAIL

NOT TO SCALE

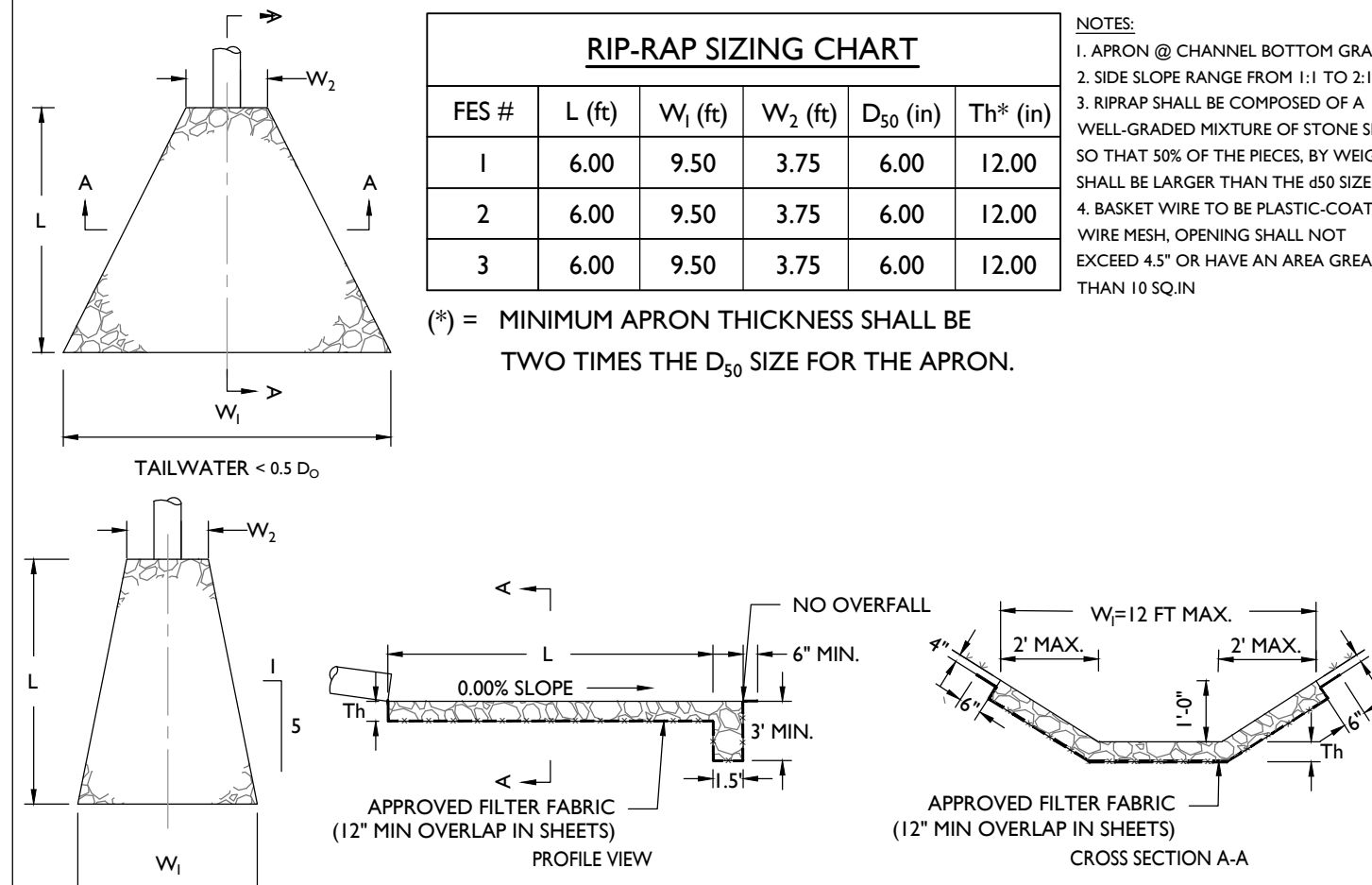
NOTE:

- MINIMUM PIPE COVER SHALL BE AS FOLLOW:
- ELECTRIC SERVICE - PER APPLICABLE UTILITY AUTHORITY
 - GAS SERVICE - PER APPLICABLE UTILITY AUTHORITY
 - SEWER SERVICE - 36" MINIMUM
 - WATER SERVICE - 48" MINIMUM



FLARED END SECTION (FES-1) DETAIL

NOT TO SCALE



RIP-RAP PAD

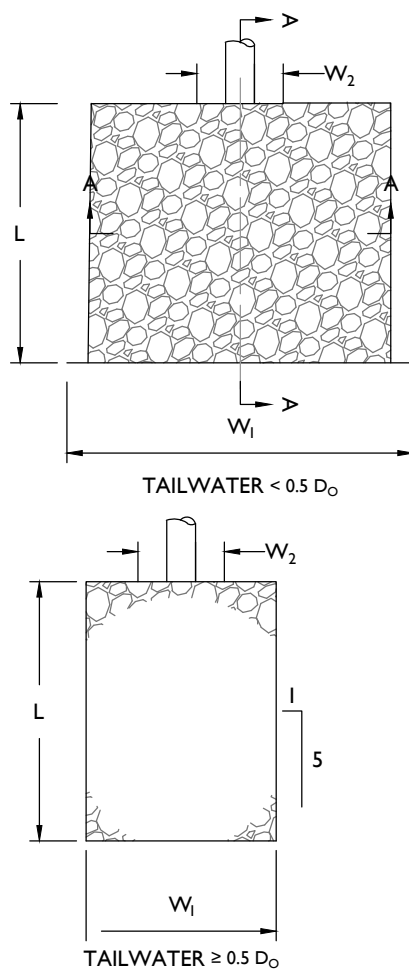
RIP-RAP PAD

NOT TO SCALE

- NOTES:
- APRON @ CHANNEL BOTTOM GRADE
 - SIDE SLOPE RANGE FROM 1:1 TO 2:1
 - RIPRAP SHALL BE COMPOSED OF A WELL-GRADED MIXTURE OF STONE SIZE SO THAT 50% OF THE PIECES, BY WEIGHT, SHALL BE LARGER THAN THE #50 SIZE.
 - BASKET WIRE TO BE GALVANIZED STEEL MESH OPENING SHALL NOT EXCEED 45" OR HAVE AN AREA GREATER THAN 10 SQ IN

FES #	L (ft)	W ₁ (ft)	W ₂ (ft)	D ₅₀ (in)	Th* (in)
1	6.00	9.50	3.75	6.00	12.00
2	6.00	9.50	3.75	6.00	12.00
3	6.00	9.50	3.75	6.00	12.00

(*) = MINIMUM APRON THICKNESS SHALL BE TWO TIMES THE D₅₀ SIZE FOR THE APRON.



RIP-RAP PAD DETAIL

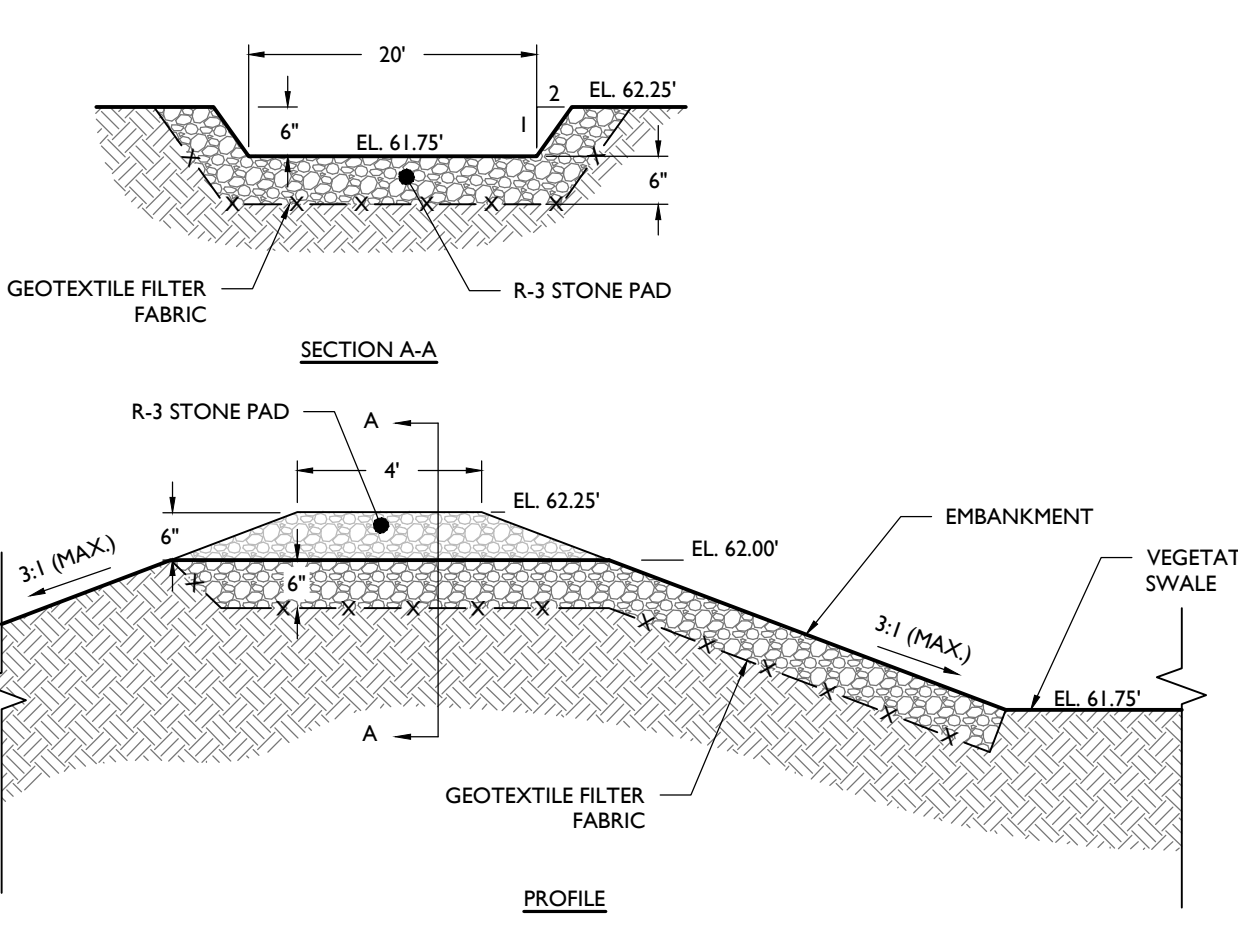
NOT TO SCALE

FES #	L (ft)	W ₁ (ft)	W ₂ (ft)	D ₅₀ (in)	Th* (in)
1	3.00	3.00	2.00	6.00	12.00
2	3.00	3.00	2.00	6.00	12.00
3	3.00	3.00	2.00	6.00	12.00

(*) = MINIMUM APRON THICKNESS SHALL BE TWO TIMES THE D₅₀ SIZE FOR THE APRON.

NOTES:

- APRON @ CHANNEL BOTTOM GRADE
- SIDE SLOPE RANGE FROM 1:1 TO 2:1
- RIPRAP SHALL BE COMPOSED OF A WELL-GRADED MIXTURE OF STONE SIZE SO THAT 50% OF THE PIECES, BY WEIGHT, SHALL BE LARGER THAN THE #50 SIZE.
- BASKET WIRE TO BE GALVANIZED STEEL MESH OPENING SHALL NOT EXCEED 45" OR HAVE AN AREA GREATER THAN 10 SQ IN

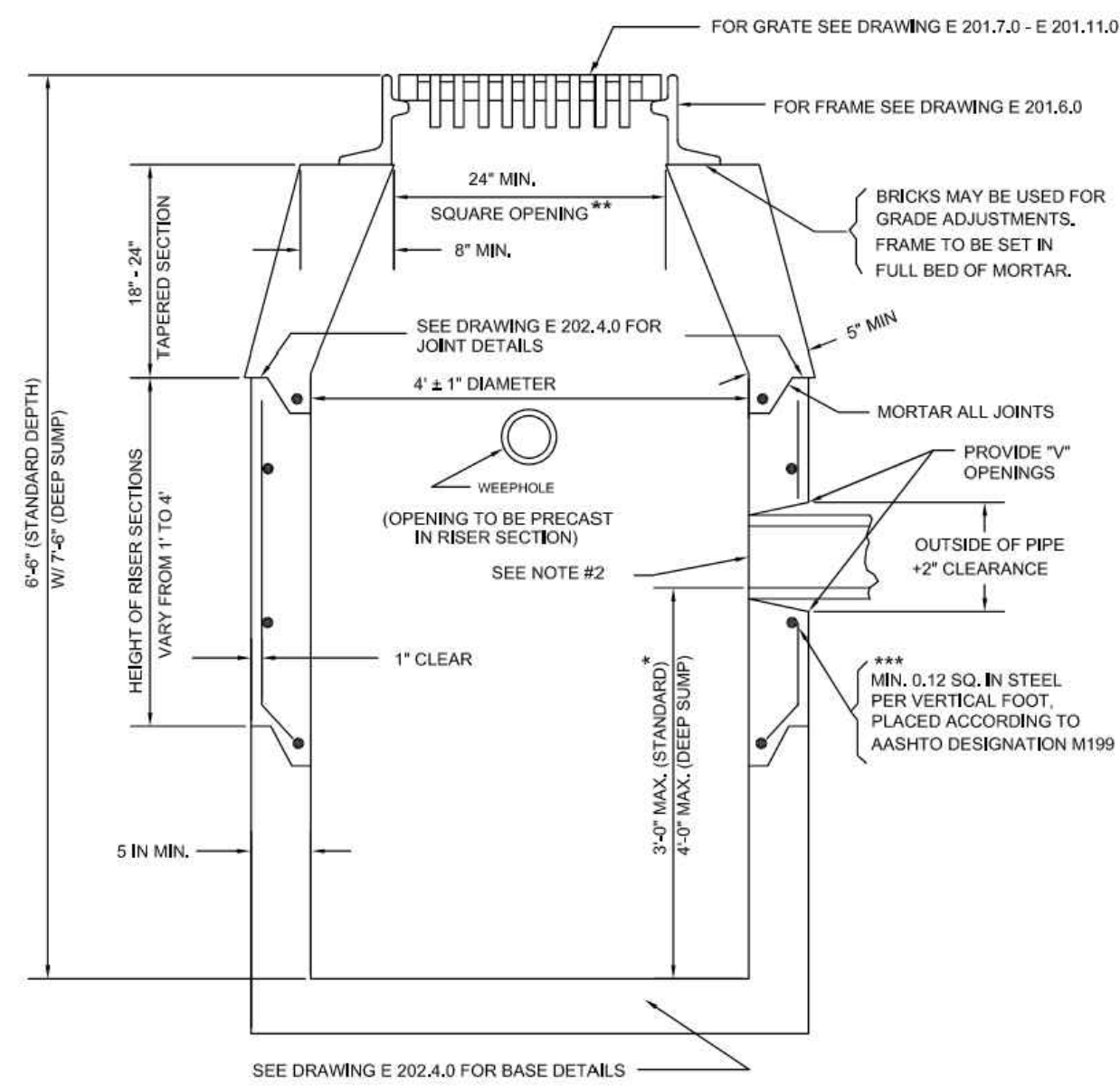


EMERGENCY SPILLWAY DETAIL

NOT TO SCALE

PRECAST CONCRETE CATCH BASIN DETAIL

NOT TO SCALE



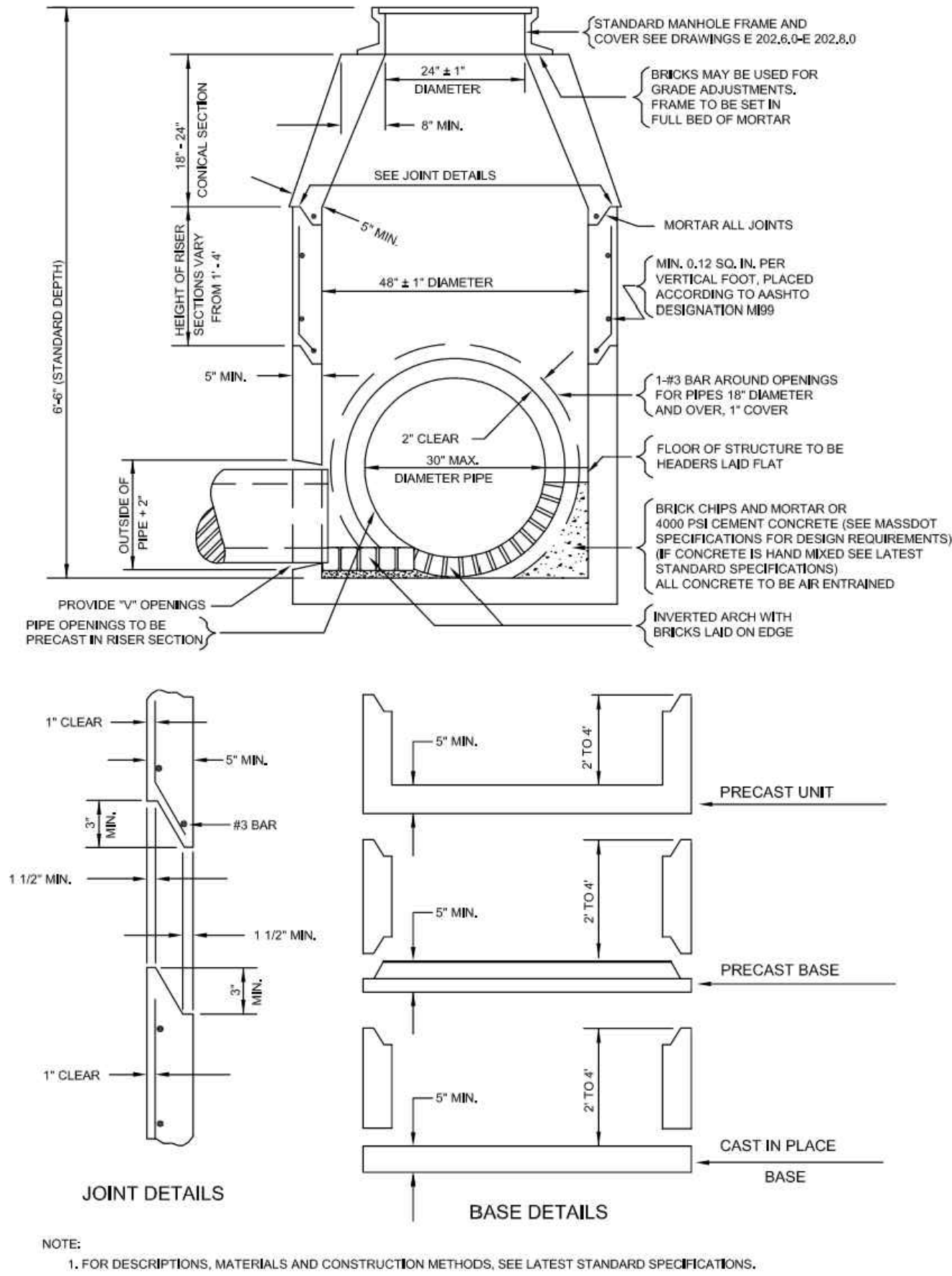
NOTES:

- DETAILS NOT INDICATED ABOVE ARE TO BE SIMILAR TO THOSE SHOWN ON E 201.3.0
- FACE OF PIPE FLUSH OR NOT TO PROJECT MORE THAN 4" FROM FACE OF WALL ALONG CENTERLINE OF PIPE.
- FOR DESCRIPTION, MATERIALS AND CONSTRUCTION METHOD, SEE STANDARD SPECIFICATIONS.
- ALL CONCRETE TO BE AIR ENTRAINED

- * MINIMUM DEPTH OF SUMP TO BE 2 FT
- ** WHEN A CURB INLET IS INSTALLED, THE OPENING IS TO BE 24"±1" X 27"±1"
- *** REINFORCING STEEL BASED ON A WALL THICKNESS OF 5".

PRECAST CONCRETE MANHOLE DETAIL

NOT TO SCALE

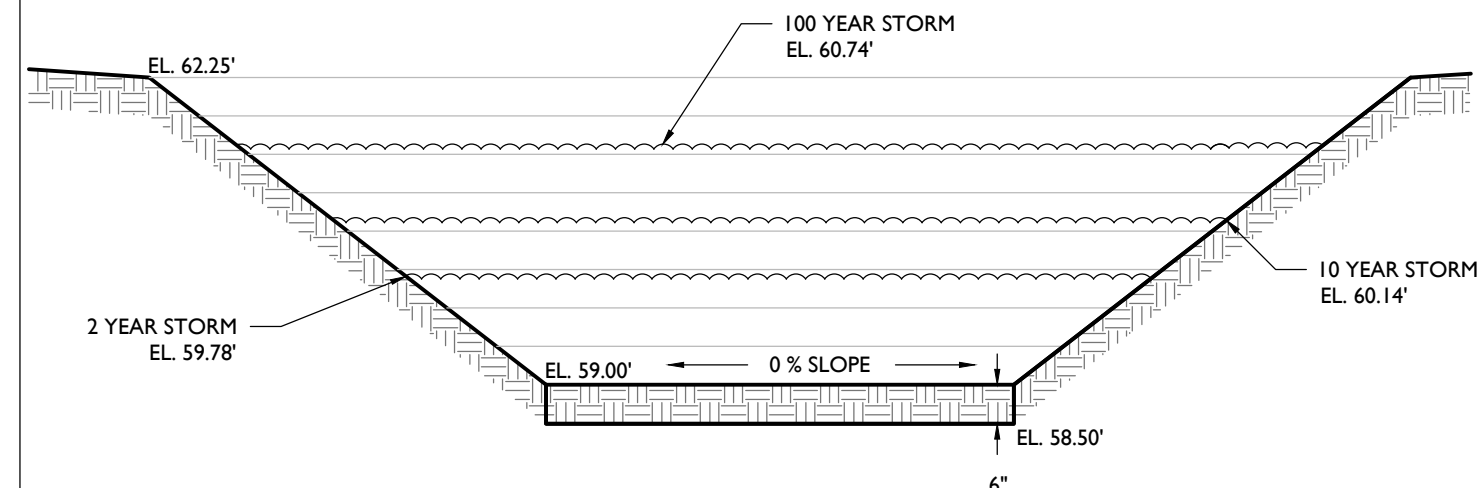


NOTE:

- FOR DESCRIPTIONS, MATERIALS AND CONSTRUCTION METHODS, SEE LATEST STANDARD SPECIFICATIONS.

ABOVEGROUND DETENTION BASIN DETAIL

NOT TO SCALE



SITE PLAN

CHASED
PROPOSED BANK WITH
DRIVE-THRU ATM

MAP: 14 LOT: 13
165 NEWBURYPORT TURNPIKE (US ROUTE 1)
TOWN OF ROWLEY
ESSEX COUNTY, MASSACHUSETTS

JOSHUA H. KLINE, P.E.
MASSACHUSETTS LICENSE No. 53936
LICENSED PROFESSIONAL ENGINEER

STONEFIELD
engineering & design

SCALE: AS SHOWN PROJECT ID: BOS-230034

TITLE:

**CONSTRUCTION
DETAILS**

DRAWING:

C-13

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120 Washington Street, Suite 201, Salem, MA 01970

Phone 617.203.2076

DESCRIPTION

BY

DATE

ISSUE

01

02/27/2024


JV

FOR MUNICIPAL REVIEW

- NOTES:
- ALL OVERDIMENSION OF STANDARD GUARDRAIL COMPONENTS, INCLUDING PANELS, POSTS, OFFSET BLOCKS, BOLTS, NUTS, WASHERS AND P-CLIPS, ARE BASED UPON THE ASSUMED COVEREDNESS OF THE ASPHALT/CONCRETE SURFACE. OVERDIMENSIONED DIMENSIONS MAY BE REQUIRED TO EXCEED FORCE 13 (FOOT) 1/8" DUE TO STAGGERING/SHOULDER CHANGES/PAVEMENTS.
 - ALL GUARDRAIL MATERIAL SHALL CONFORM TO THE MOST LENIENT OF THE FOLLOWING STANDARDS OR THEIR EQUIVALENTS OR BETTER:
 - APPROVAL OF THE DIMENSION IS REQUIRED WHEN A DIFFERING GUARDRAIL CONFIGURATION IS REQUIRED FOR CONSTRUCTIBILITY FOR THE OTHER OPTIONS.
 - THE BEAM OR END FIXATION LABELS SHOWN IN THIS STANDARD CORRESPOND TO THE DETAIL AND ANCHOR CALLOUTS SPECIFIED IN THE PLAN.
 - USE 12" NOMINAL LENGTH PANELS UNLESS OTHERWISE NOTICED IN THESE STANDARDS OR THE PLAN.
 - ALL LAP SPICES SHALL BE MINIMUM LENGTH OTHERWISE SHOWN.
 - LAP SPICES SHALL BE CONSTRUCTED WITH THE BEAM SIDE ORIENTED DOWNWARD ON THE PLAN. DIRECTION OF TRAFFIC IN THE NEAREST TRAVEL LANE, REPRESENTING LAP SPICES FOR TEMPORARY TRAFFIC CONTROL, IS NOT REQUIRED.
 - THE BEAM OR END FIXATION SHALL BE CONSTRUCTED WITH THE BEAM SIDE ORIENTED DOWNWARD ON THE PLAN. PARALLEL TO THE DIMENSIONS SHOWN IN 4.1, NOTES OF A SINGLE MATERIAL TYPE SHALL BE USED THROUGHOUT AN ENTIRE RUN OF GUARDRAIL. DIMENSIONS ARE ALLOWED ONLY WHEN SPECIFIC MATERIAL TYPES ARE REQUIRED FOR TRANSITION, END OR INTERSECTION.
 - DEPORT SHALL BE USED OR USED OTHERWISE IN THESE STANDARDS ON THE PLAN.
 - OFFSET BLOCKS, WHEN REQUIRED, SHALL BE TRAFFIC AND PARALLEL TO THE NORMAL, DIMENSION SHOWN IN 4.1.1. P-CLIP OR COMPPOSITE OFFSET BLOCKS OF THE SAME NOMINAL DIMENSIONS THAT ARE LISTED ON THE GUARDRAIL COMPONENTS MATERIAL MAY BE SUBSTITUTED, OFFSET BLOCKS OF A DIFFERENT MATERIAL MAY BE USED THROUGHOUT AN ENTIRE RUN OF GUARDRAIL, DIMENSIONS ARE ALLOWED ONLY WHEN SPECIFIC MATERIAL TYPES ARE REQUIRED FOR TRANSITION, END, AND INTERSECTION, AND/OR ANCHORAGE.
 - PAYMENT MATERIAL, WHEN CALLED FOR IN THE STANDARDS, SHALL CONFORM TO SECTION 705.
 - GUARDRAIL, GUARDRAILERS, CONNECTING TO SECTION 601: SHALL BE USED AT 20' INTERVALS WITHIN 10' AND AN END FIXATION OR TRAILER ANCHORAGE SHALL BE USED AT 10' INTERVALS IN ALL OTHER AREAS.
 - MINIMUM OFFSET DISTANCE FROM FACE OF WHEEL PAIR, TO A FIXED NON-BREAKAWAY CURB, SHALL BE 40' FOR 2' & 36" FOR 3'.

MASSDOT GENERAL CONSTRUCTION NOTES

NOT TO SCALE



MASSDOT

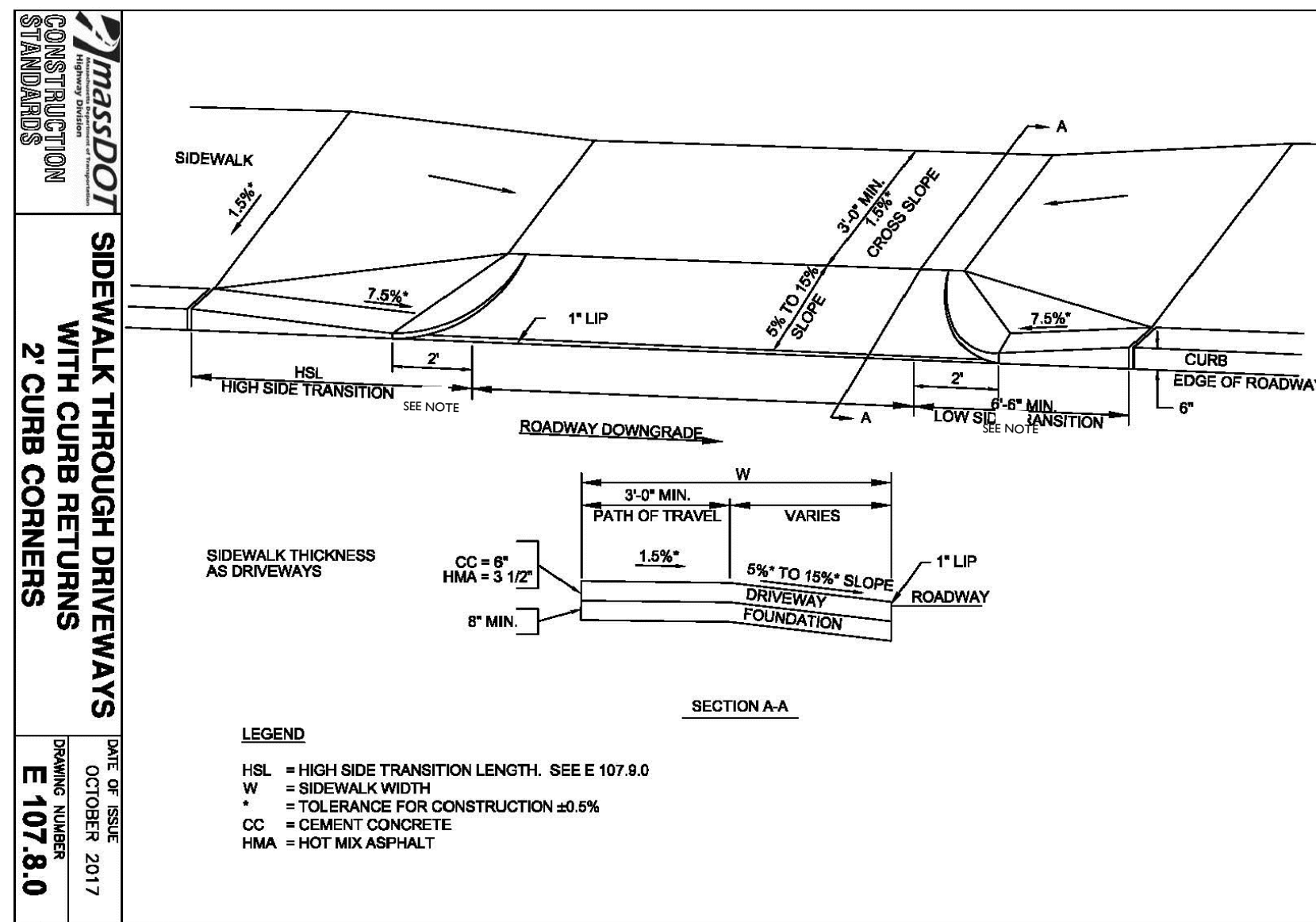
CONSTRUCTION

CURB TRANSITION LENGTH
FOR WHEELCHAIR RAMPS

ROADWAY PROFILE GRADE	* HIGH SIDE TRANSITION LENGTH
	ENGLISH UNITS
%	
±0%	6'-6"
>0% To 1%	7'-8"
>1% To 2%	9'-0"
>2% To 3%	11'-0"
>3% To 4%	14'-0"
>4% To 5%	15'-0" Max

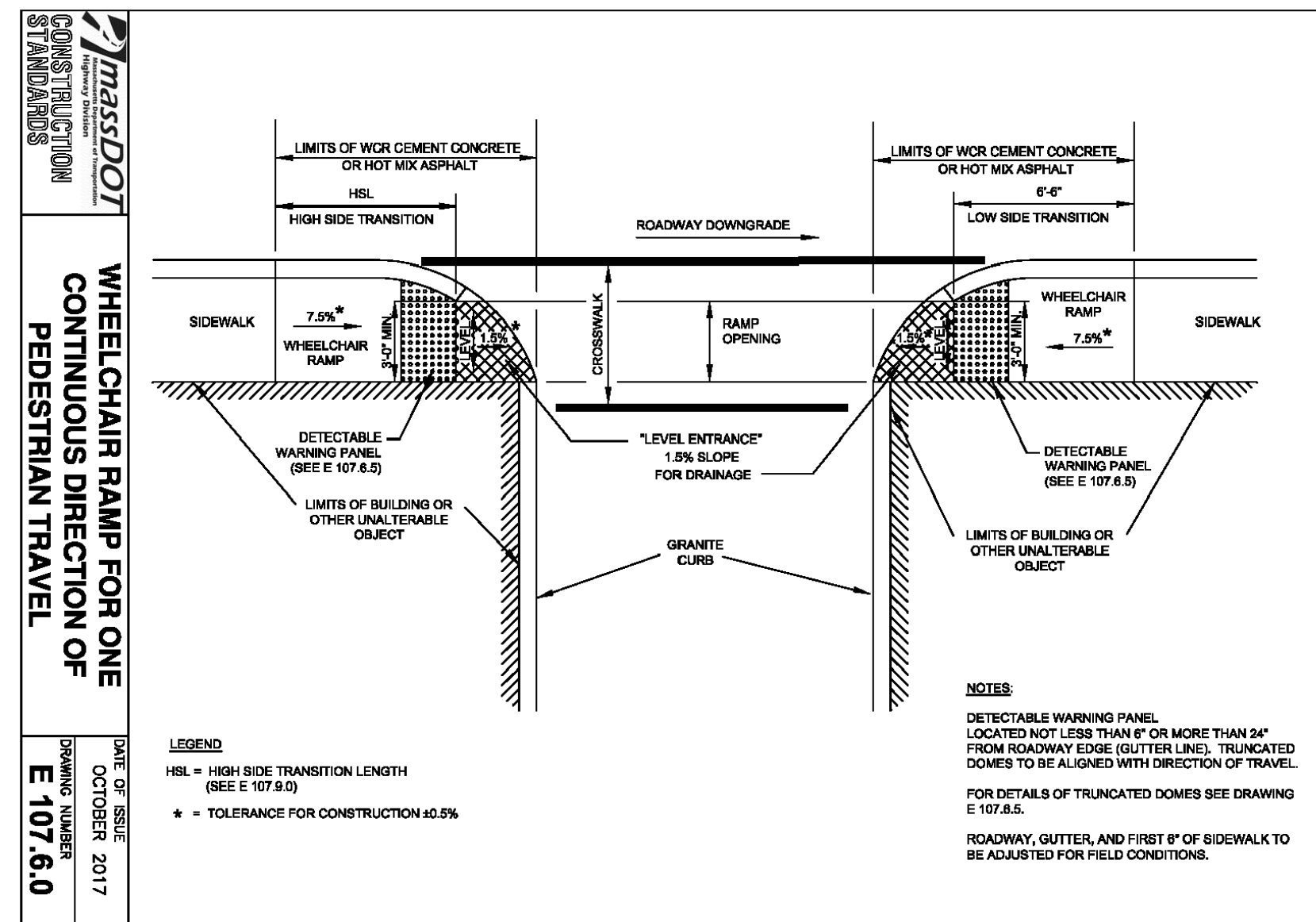
MASSDOT CURB TRANSITION LENGTH TABLE

NOT TO SCALE



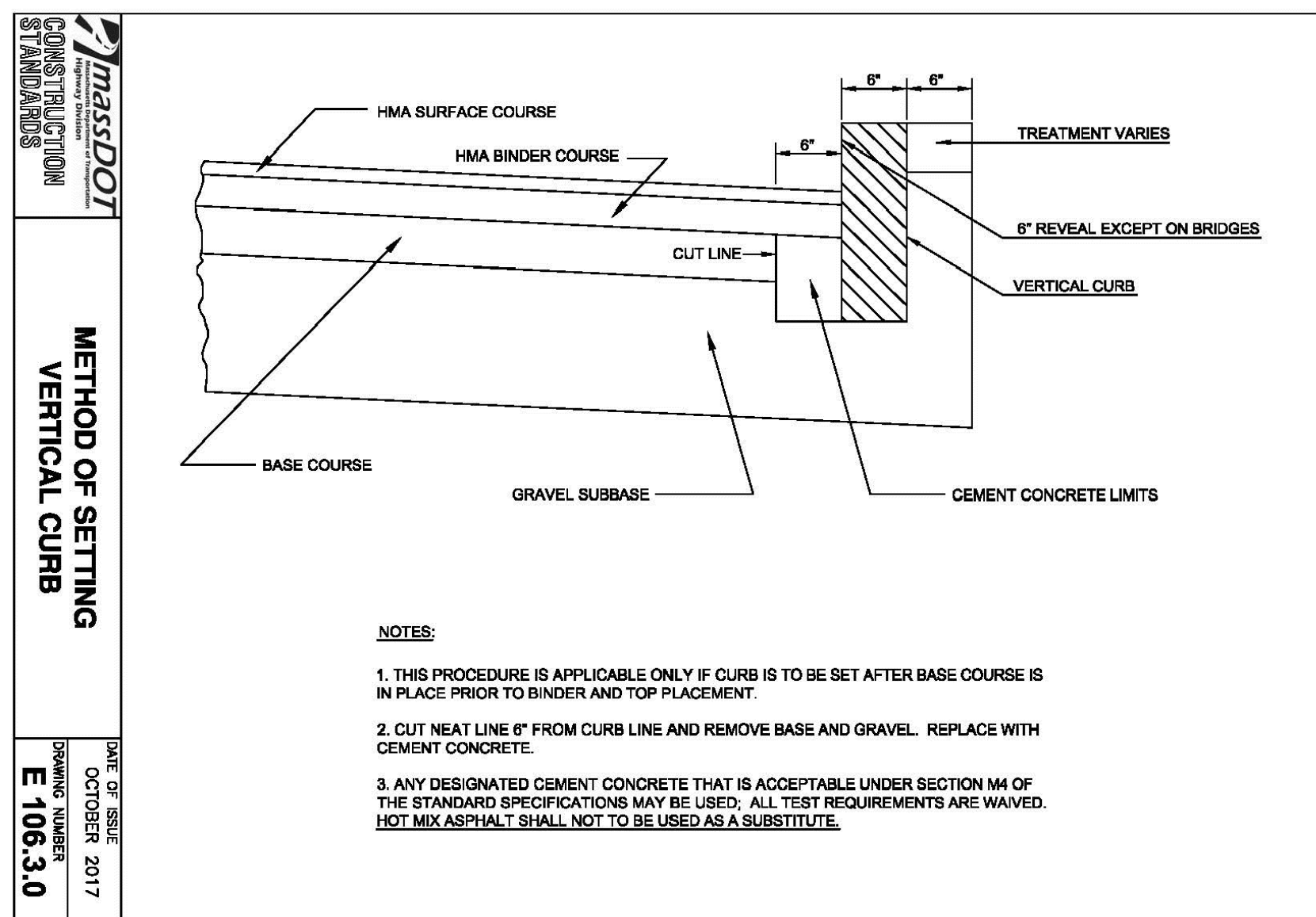
MASSDOT SIDEWALK THROUGH DRIVEWAY DETAIL

NOT TO SCALE



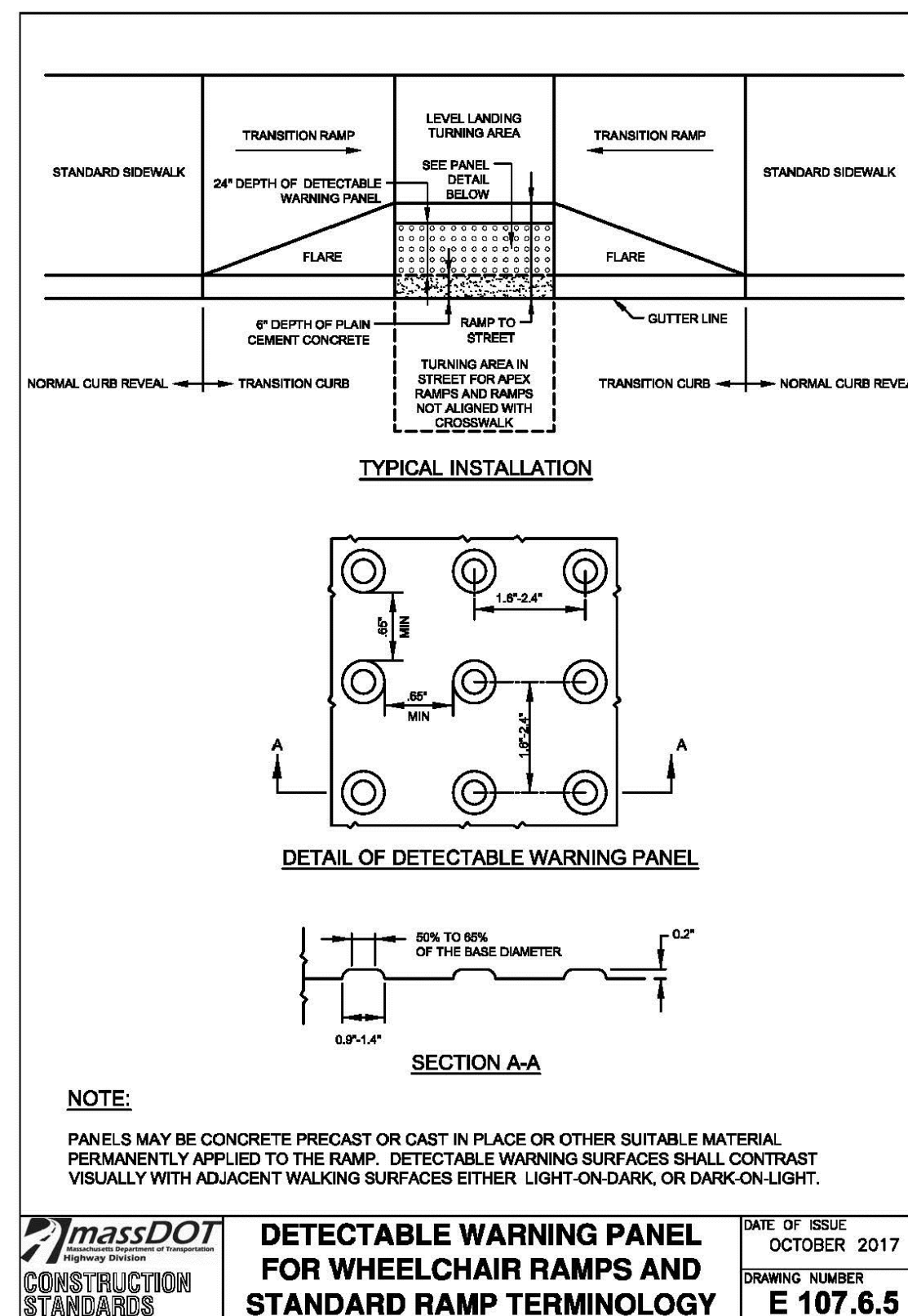
MASSDOT WHEELCHAIR RAMP DETAIL

NOT TO SCALE



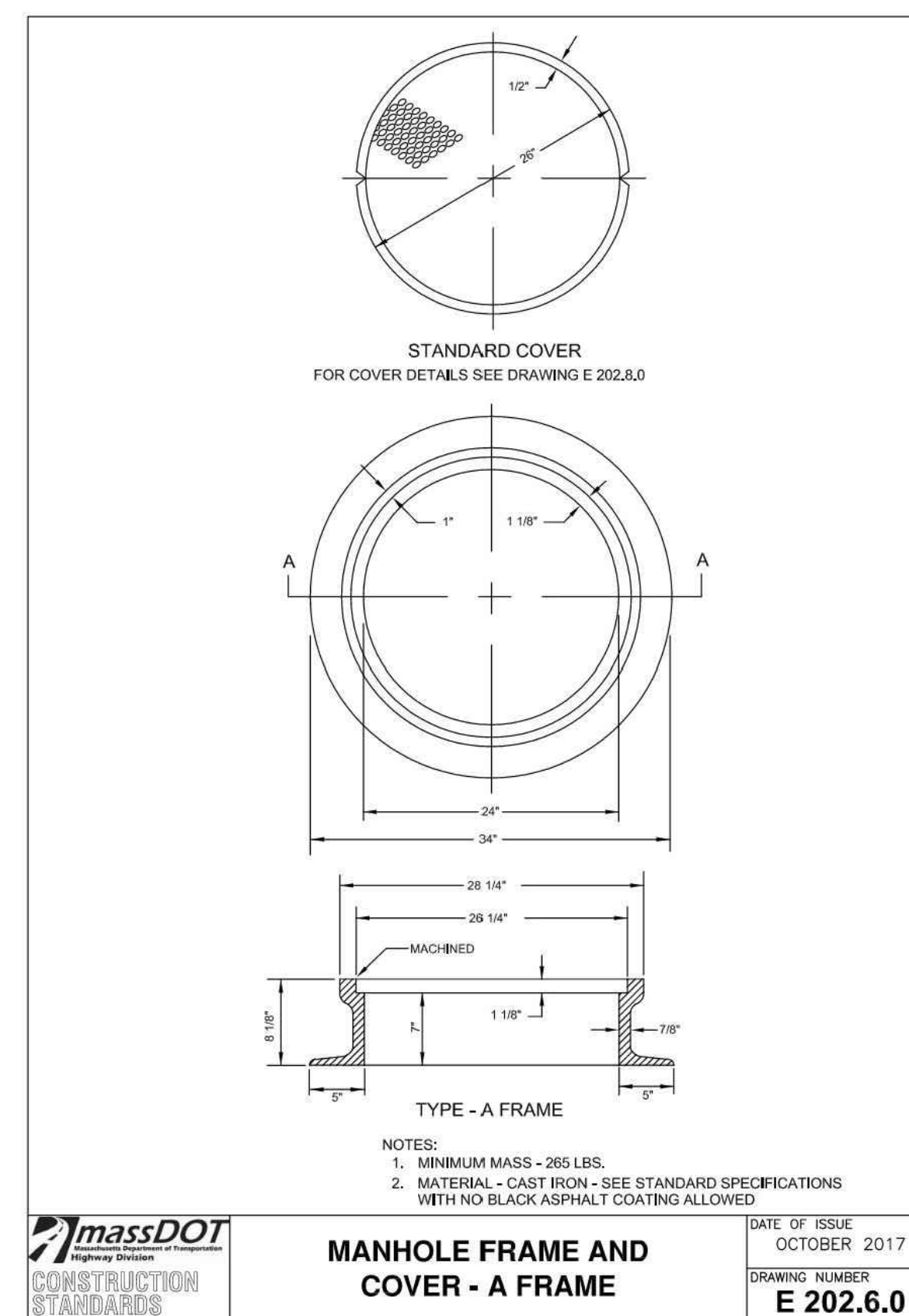
MASSDOT GENERAL VERTICAL CURBING DETAIL

NOT TO SCALE



MASSDOT DETECTABLE WARNING STRIP DETAIL

NOT TO SCALE



MASSDOT FRAME AND COVER DETAIL

NOT TO SCALE

[illegible]

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SITE PLAN

CHASE
PROPOSED BANK WITH
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MAP: 14 LOT: 13
165 NEWBURYPORT TURNPIKE (US ROUTE 1)
TOWN OF ROWLEY
ESSEX COUNTY, MASSACHUSETTS

JOSHUA H. KLINE, P.E.
MASSACHUSETTS LICENSE No. 53936
LICENSED PROFESSIONAL ENGINEER



STONEFIELD
engineering & design

SCALE: AS SHOWN	PROJECT ID: BOS-230034
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TITLE:

**CONSTRUCTION
DETAILS**

DRAWING

C-14

