

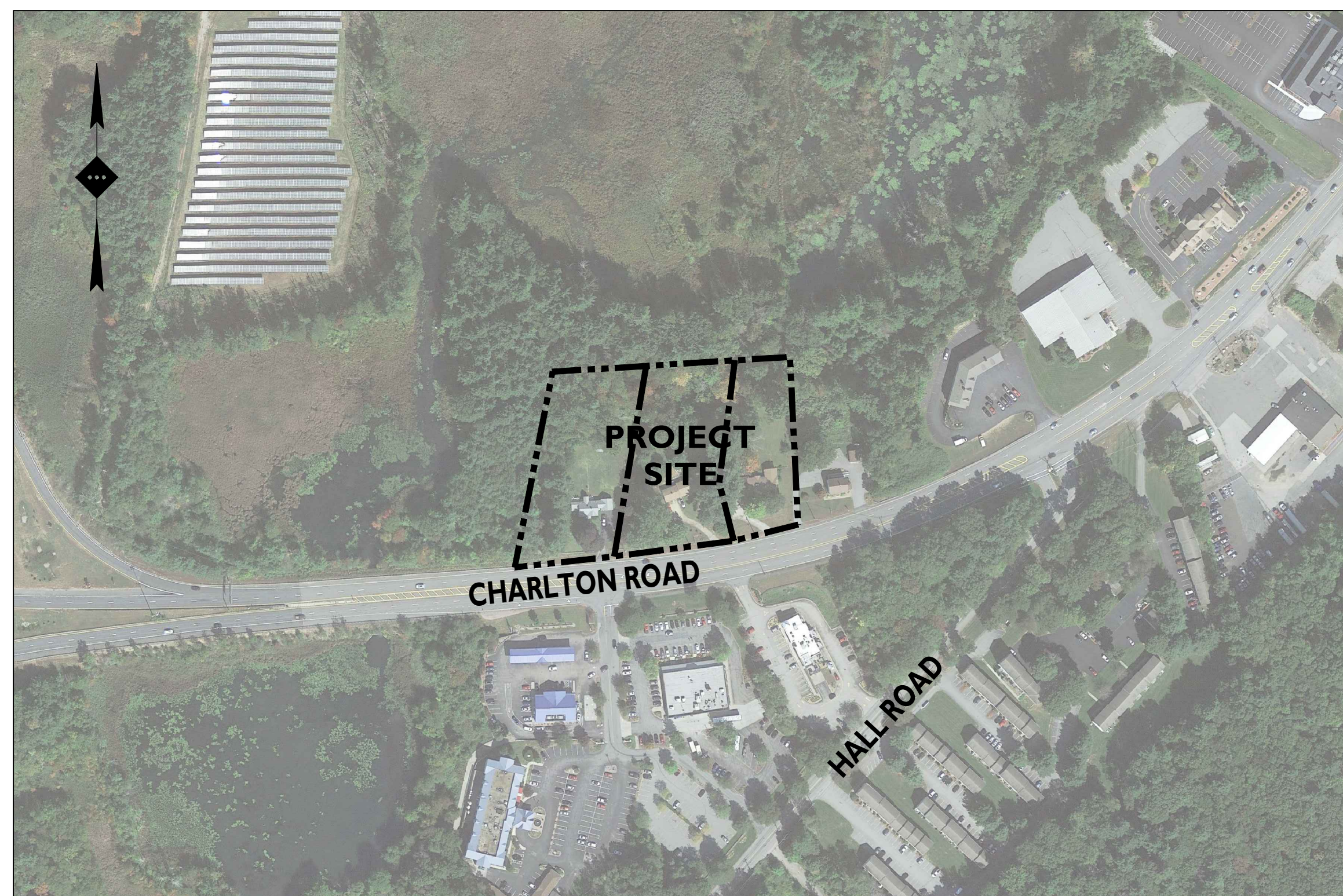
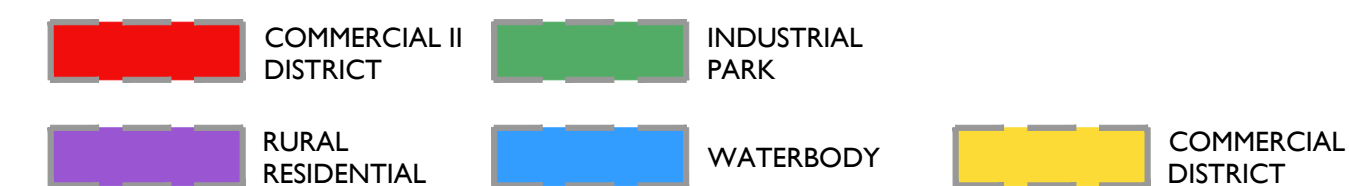
SOURCE: USGS QUADRANGLE MAPS 7.5 SERIES: STURBRIDGE, MASSACHUSETTS, 2021

LOCUS MAP
SCALE: 1" = 1000'±

SITE PLANS FOR ALRIG USA PROPOSED MULTI-TENANT DEVELOPMENT

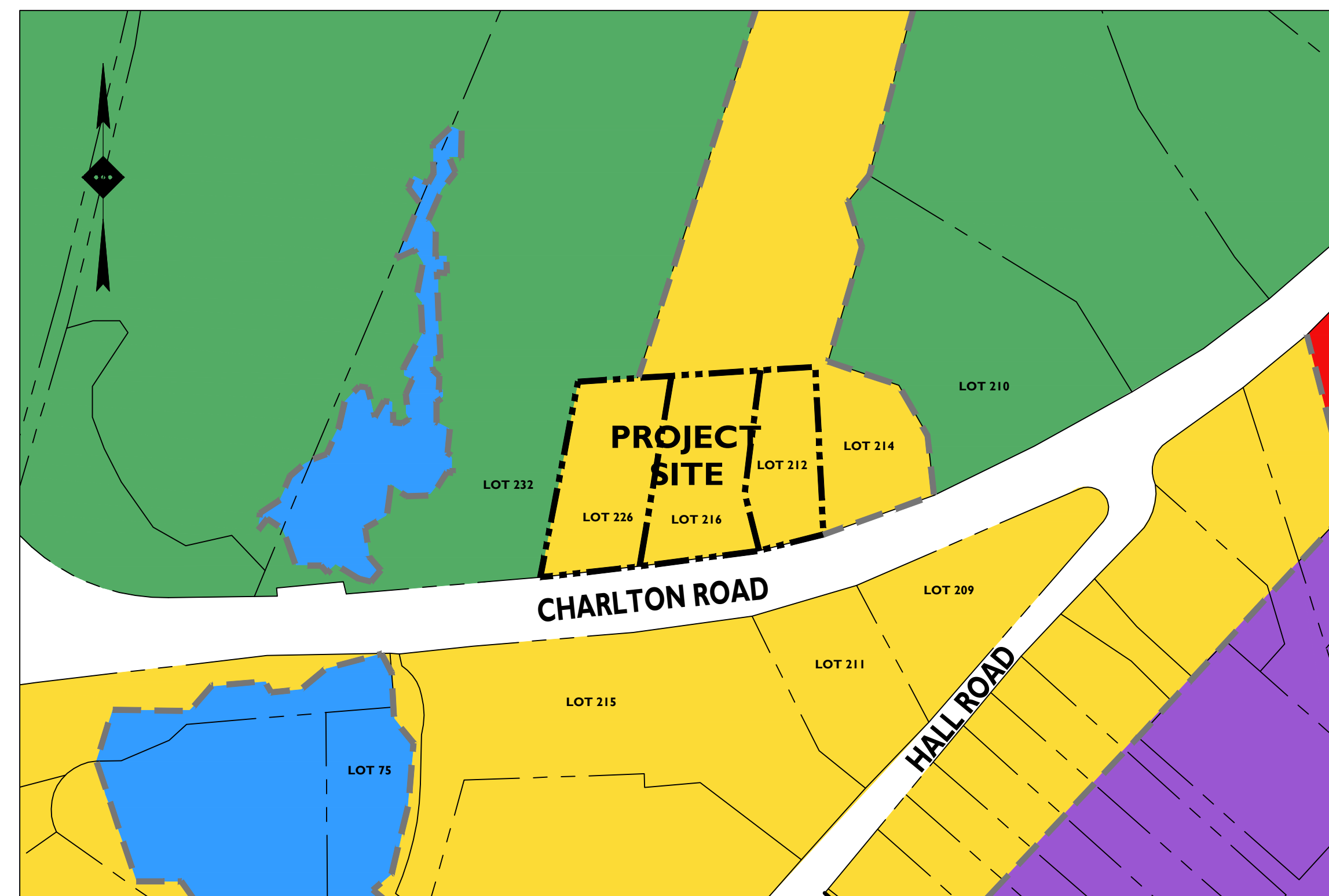
MAP: 208 LOT: 226, 216, & 212
212, 216 & 226 CHARLTON ROAD
TOWN OF STURBRIDGE, WORCESTER COUNTY, MASSACHUSETTS

ZONING LEGEND



SOURCE: GOOGLE EARTH PRO, RETRIEVED ON SEPTEMBER 16, 2021

AERIAL MAP
SCALE: 1" = 200'±



SOURCE: ZONING MAP OBTAINED FROM THE TOWN OF STURBRIDGE DATED JUNE 4, 2013 & TAX MAP OBTAINED FROM TOWN OF STURBRIDGE GIS RETRIEVED ON AUGUST 22, 2022

TAX / ZONING MAP
SCALE: 1" = 200'±

PLANS PREPARED BY:



Rutherford, NJ · New York, NY · Boston, MA
Princeton, NJ · Tampa, FL · Detroit, MI
www.stonefieldeng.com

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

PLAN REFERENCE MATERIALS:

- THIS PLAN SET REFERENCES THE FOLLOWING DOCUMENTS INCLUDING, BUT NOT LIMITED TO:
 - ALTAIR'S LAND TITLE SURVEY PREPARED BY LEVESQUE GEOMATICS INC. DATED FEBRUARY 9, 2022.
 - AERIAL MAP OBTAINED FROM GOOGLE EARTH PRO, RETRIEVED ON SEPTEMBER 16, 2021.
 - ZONING MAP OBTAINED FROM THE TOWN OF STURBRIDGE DATED JUNE 4, 2013.
 - TAX MAP OBTAINED FROM THE TOWN OF STURBRIDGE GIS, RETRIEVED ON AUGUST 22, 2022.
 - ARCHITECTURAL FLOOR PLANS PREPARED BY DETROIT ARCHITECTURAL GROUP, DATED MAY 14, 2023.
 - ARCHITECTURAL FLOOR PLAN PREPARED BY KEVIN CORREIA ARCHITECTURE, DATED AUGUST 8, 2022.
 - GEOTECHNICAL REPORT OBTAINED FROM JOHN TURNER CONSULTING, INC. DATED AUGUST 8, 2022.
 - LOCATION MAP OBTAINED FROM UNITED STATES GEOLOGICAL SURVEY RETRIEVED ON AUGUST 22, 2022.
- 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.

SHEET INDEX

DRAWING TITLE	SHEET #
COVER SHEET	C-1
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DEMOLITION PLAN	C-3
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GRADING PLAN	C-5
STORMWATER MANAGEMENT PLAN	C-6
UTILITY PLAN	C-7
LIGHTING PLAN	C-8
SOIL EROSION & SEDIMENT CONTROL PLAN	C-9
LANDSCAPING PLAN	C-10 - C-11
CONSTRUCTION DETAILS	C-12 - C-14

BLOCK	LOT	OWNER	OWNER'S ADDRESS
315	75	STURBRIDGE DHC LLC	C/O DAWN HOMES CAPITAL LLC, ALBANY, NY 12211
208	209	GENTILI RENATO	77 BRUCE LANE, SOUTHBRIDGE, MA 01550
208	210	BRUNELLE STEPHEN F & MARYELLE N	PO BOX 520, EAST BROOKFIELD, MA 01515
208	211	BALTAS JOHN C & OLGA J	1 DAVE THOMAS BOULEVARD, DUBLIN, OH 43017
208	214	SWEETHAN DAVID L TRUSTEE	435 BALDWIN DRIVE, SMYRNA, DELAWARE 19777 1503
208	215	COLONIAL MOTEL INC.	132 WINGFOOT DRIVE, CUMMAQUID, MA 02637
208	232	TOWN OF STURBRIDGE	308 MAIN STREET, STURBRIDGE, MA 01566



Know what's below
Call before you dig.

APPLICANT

STURBRIDGE RETAIL MANAGEMENT, LLC
30200 TELEGRAPH ROAD,
BINGHAM FARMS, MICHIGAN 48205
248-646-9999
JORDAN@ALRIGUSA.COM

OWNER

JCT MANAGEMENT GROUP, LLC
CHRISTINE E. LENA, STEVEN J & THERESA L.

ATTORNEY

MARK DONAHUE
370 MAIN STREET | 12TH FLOOR
WORCESTER, MASSACHUSETTS 01608
508 - 459 - 8029
MDONAHUE@FLETCHERTILTON.COM

ISSUE	DATE	BY	DESCRIPTION
5	05/16/2023	KO	FOR MUNICIPAL SUBMISSION
4	04/06/2023	JR	REVISED PER NEW BUILDING ELEVATIONS
3	01/31/2023	JR	FOR CONSERVATION COMMISSION SUBMISSION
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ALRIG USA
DEVELOPMENTS
PROPOSED MULTI-TENANT
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MAP: 208 LOTS: 236, 216, & 212
212, 216 & 226 CHARLTON ROAD
TOWN OF STURBRIDGE
WORCESTER COUNTY, MASSACHUSETTS

JAKE MODESTOW, P.E.
MASSACHUSETTS LICENSE NO. 55253
LICENSED PROFESSIONAL ENGINEER



SCALE: AS SHOWN PROJECT ID: BOS-210035

TITLE:
COVER SHEET

DRAWING:
C-1

CODE SECTION	REQUIRED	PROPOSED
§ 300-16.11 B.	MINIMUM PARKING REQUIRED: MEDICAL FACILITY 1 PER 300 SF OF FLOOR AREA. (5,079 SF) / (300 SF) = 17 SPACES RESTAURANT 1 SPACE FOR EVERY 3 SEATS AND 1 SPACE FOR EVERY EMPLOYEE ON LARGEST SHIFT (54 SEATS) / 3 = (18 SPACES) + (8 EMPLOYEES) = 26 SPACES TOTAL: 17 + 26 = 43 SPACES	68 SPACES
§ 300-16.14 C.(1)	DRIVE-THRU AISLES SHALL HAVE A MINIMUM 10 FT INTERIOR RADIUS AT CURVES AND A MINIMUM 12 FT WIDTH.	20' R 12 FT WIDTH
§ 300-16.4 A.(1)	MINIMUM DRIVE AISLE WIDTH: TWO WAY: 24 FT	24 FT
§ 300-16.4 A.(2)	MINIMUM ANGLED DRIVE AISLE WIDTH: ONE WAY: 18 FT	24 FT
§ 300-16.9 A.(1)	PARKING SPACES, DRIVEWAYS, BUILDINGS, STRUCTURES AND STORAGE MATERIALS SHALL NOT BE ALLOWED WITHIN THE FRONT SETBACK, AND THE AREA OF THE FRONT SETBACK SHALL BE A BUFFER AND LANDSCAPED AS SUCH. BUFFER SHALL ALLOW FOR NECESSARY ACCESS TO SITE, BUT DRIVEWAYS SHALL OTHERWISE NOT BE ALLOWED IN THE BUFFER.	COMPLIES
§ 300-26.3 A.(1)	MINIMUM PARKING SPACE WIDTH: 10 FT MINIMUM PARKING SPACE DEPTH: 20 FT	10 FT 20 FT

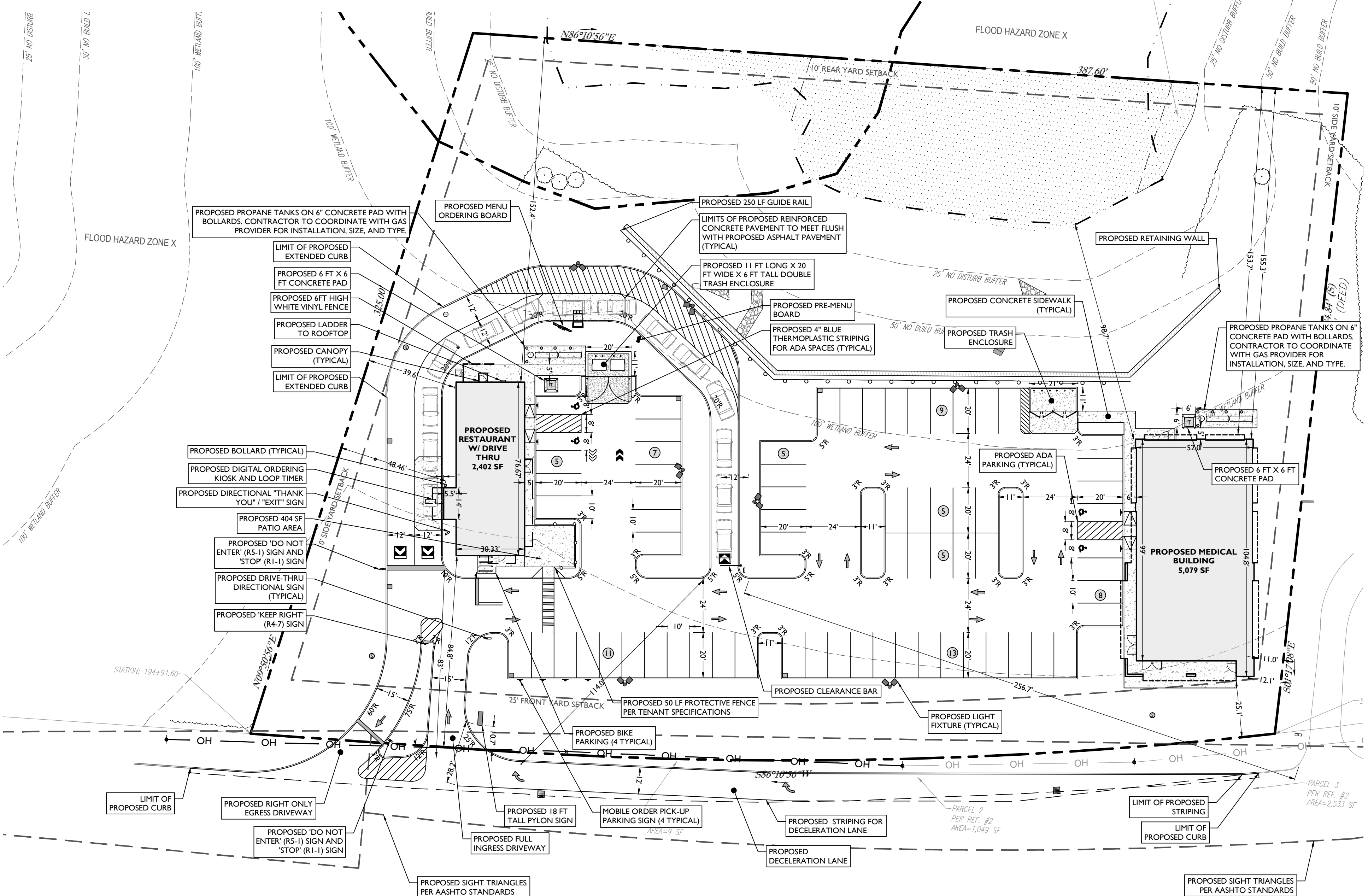
CODE SECTION	REQUIRED	PROPOSED
§ 300-17.3 E	SIGNS INDICATING "ENTRANCE," "EXIT," AND "PARKING" NOT TO EXCEED 5 SF	5 SF COMPLIES
§ 300-17.5 A(3)	LIGHTING OF A SIGN MAY ONLY BE BY WHITE LIGHT OF REASONABLE INTENSITY SOLELY DIRECTED AT THE SIGN	COMPLIES
§ 300-17.5 A(4)	SIGNS WILL NOT OBSTRUCT THE VIEW OF TRAFFIC ENTERING OR LEAVING THE PREMISES. THE SIGN WILL NOT EXTEND MORE THAN 3.5 FT ABOVE ESTABLISHED STREET GRADE AND WILL BE PLACED 25 FT AWAY FROM POINT OF INTERSECTION OF THE MEASURED INTERSECTING STREET LINE	28.3 FT SIGN IS LOCATED OUTSIDE OF SIGHT TRIANGLES
§ 300-17.5 A(6)	NO FREESTANDING SIGN SHALL EXCEED 18 FT IN HEIGHT ABOVE THE NATURAL GRADE, OR PROJECT ABOVE THE RIDGE LINE OF THE PRIMARY BUILDING	18 FT COMPLIES
§ 300-17.5 A(7)A	SIGNS PARALLEL TO OR AGAINST THE FACE OF A BUILDING SHALL NOT EXTEND MORE THAN 15" FROM SAID FACE.	1.25 FT COMPLIES
§ 300-17.5 A(7)B	SIGNS PERPENDICULAR TO THE FACE OR WALL OF A BUILDING SHALL EXTEND NO MORE THAN 54" FROM SUCH BUILDING LINE	4.5 FT COMPLIES
§ 300-17.5 C	SIGN WILL BE SET BACK 10 FT FROM THE PROPERTY LINE	10 FT COMPLIES
§ 300-17.7 A(1)	NO MORE THAN 4 SIGNS SHALL BE MAINTAINED BY EACH COMMERCIAL OR INDUSTRIAL USE, OF WHICH NO MORE THAN 2 SIGNS MAY BE LOCATED ON THE PROPERTY ITSELF, ONLY ONE OF THE TWO SIGNS ON THE PROPERTY MAY BE FREESTANDING	1 FREESTANDING SIGN
§ 300-17.7 A(2)	FREESTANDING SIGNS SHALL NOT EXCEED THE HEIGHT OF THE PRINCIPAL BUILDING OR 18 FT IN HEIGHT, WHICHEVER IS LESS	18 FT
§ 300-17.7 B	21.0 FT > 18 FT MAXIMUM BUSINESS, BUILDING MOUNTED AND/OR FREESTANDING SIGN - 30 SF MAXIMUM MULTI-TENANT SIGN FOR BUSINESS SIGN - 50 SF	50 SF

LAND USE AND ZONING			
PARCEL ID: 208-02528-212, 208-02528-216, 208-02528-226			
COMMERCIAL DISTRICT (C)			
PROPOSED USE	PERMITTED USE	PERMITTED USE	
FAST FOOD ESTABLISHMENT WITH DRIVE-THRU MEDICAL FACILITY			
ZONING REQUIREMENT	REQUIRED	EXISTING	PROPOSED
MINIMUM LOT AREA	1 AC	2.95 AC (128,728 SF)	2.95 AC (128,728 SF)
MINIMUM LOT WIDTH*	150 FT	387.6 FT	387.6 FT
MINIMUM LOT FRONTAGE	150 FT	452.9 FT	452.9 FT
MAXIMUM IMPERVIOUS COVERAGE	70%	12.1% (15,661 SF)	38.1% (49,096 SF)
MAXIMUM LOT COVERAGE	30%	4.8% (6,233 SF)	5.8% (7,481 SF)
MAXIMUM HEIGHT	35 FT	< 35 FT (2 STORIES)	RESTAURANT: 21.0 FT URGENT CARE: 35 FT
MINIMUM FRONT YARD SETBACK	25 FT	65.3 FT	25.1 FT
MINIMUM SIDE YARD SETBACK	10 FT	20.3 FT	11.0 FT
MINIMUM REAR YARD SETBACK	10 FT	181.8 FT	152.4 FT

DRIVE-THRU REQUIREMENTS		
CODE SECTION	REQUIRED	PROPOSED
§ 300-16.14 C.(1)	DRIVE-THRU AISLES SHALL HAVE A MINIMUM 10 FT INTERIOR RADIUS AT CURVES AND A MINIMUM 12 FT WIDTH	20' R 12 FT COMPLIES
§ 300-16.14 C.(2)	DRIVE-THRU ENTRANCES/EXITS SHALL BE AT LEAST 50 FT FROM AN INTERSECTION OF PUBLIC RIGHTS-OF-WAY AND AT LEAST 25 FT FROM THE CURB-CUT OF AN ADJACENT PROPERTY	106.5 FT 251.4 FT COMPLIES
§ 300-16.14 C.(3)	ENTRANCE TO A DRIVE-THRU SHALL BE CLEARLY DESIGNATED BY SIGNS AND PAVEMENT MARKINGS	COMPLIES
§ 300-16.14 D.(2)	DRIVE-THRU WINDOWS SHALL PROVIDE 180 FEET OF STACKING SPACE	274 FT
§ 300-16.14 E.(1)	A 5 FT WIDE PLANTER OR OTHER SUITABLE LANDSCAPE AREA BETWEEN THE DRIVE-THRU AISLE AND THE PARKING AREA THAT INCLUDES SHADE TREES CONSISTENT WITH THOSE USED IN THE PARKING AREA	COMPLIES

SYMBOL	DESCRIPTION
---	PROPERTY LINE
---	SETBACK LINE
---	SAWCUT LINE
---	PROPOSED CURB
---	PROPOSED DEPRESSED CURB
---	PROPOSED FLUSH CURB
---	PROPOSED MOUNTABLE CURB
---	PROPOSED EXTENDED CURB
○	PROPOSED SIGNS / BOLLARDS
■	PROPOSED BUILDING
□	PROPOSED CONCRETE
□	PROPOSED AREA LIGHT
---	PROPOSED RETAINING WALL
○	PROPOSED HANDRAIL
---	PROPOSED CHAINLINK FENCE
---	PROPOSED BOARD-ON-BOARD FENCE
---	PROPOSED GUIDELINE
---	PROPOSED BUILDING DOORS

- GENERAL NOTES**
- THE CONTRACTOR SHALL VERIFY AND FAMILIARIZE THEMSELVES WITH THE EXISTING SITE CONDITIONS AND THE PROPOSED SCOPE OF WORK (INCLUDING DIMENSIONS, LAYOUT, ETC.) PRIOR TO INITIATING THE IMPROVEMENTS IDENTIFIED WITHIN THESE DOCUMENTS. SHOULD ANY DISCREPANCY BE FOUND BETWEEN THE EXISTING SITE CONDITIONS AND THE PROPOSED WORK, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC PRIOR TO THE START OF CONSTRUCTION.
 - THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND ENSURE THAT ALL REQUIRED APPROVALS HAVE BEEN OBTAINED PRIOR TO THE START OF CONSTRUCTION. COPIES OF ALL REQUIRED PERMITS AND APPROVALS SHALL BE KEPT ON SITE AT ALL TIMES DURING CONSTRUCTION.
 - ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD HARMLESS STONEFIELD ENGINEERING & DESIGN, LLC, AND ITS SUB-CONSULTANTS FROM AND AGAINST ANY DAMAGES AND LIABILITIES INCLUDING ATTORNEY'S FEES ARISING OUT OF CLAIMS BY EMPLOYEES OF THE CONTRACTOR IN ADDITION TO CLAIMS CONNECTED TO THE PROJECT AS A RESULT OF NOT CARRYING THE PROPER INSURANCE FOR WORKERS COMPENSATION, LIABILITY INSURANCE, AND LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE.
 - THE CONTRACTOR SHALL NOT DEVIATE FROM THE PROPOSED IMPROVEMENTS IDENTIFIED WITHIN THIS PLAN SET UNLESS APPROVAL IS PROVIDED IN WRITING BY STONEFIELD ENGINEERING & DESIGN, LLC.
 - THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND METHODS OF CONSTRUCTION.
 - THE CONTRACTOR SHALL NOT PERFORM ANY WORK OR CAUSE DISTURBANCE ON A PRIVATE PROPERTY NOT CONTROLLED BY THE PERSON OR ENTITY WHO HAS AUTHORIZED THE WORK WITHOUT PRIOR WRITTEN CONSENT FROM THE OWNER OF THE PRIVATE PROPERTY.
 - THE CONTRACTOR IS RESPONSIBLE TO RESTORE ANY DAMAGED OR UNDERMINED STRUCTURE OR SITE FEATURE THAT IS IDENTIFIED TO REMAIN ON THE PLAN SET. ALL REPAIRS SHALL USE NEW MATERIALS TO RESTORE THE FEATURE TO ITS EXISTING CONDITION AT THE CONTRACTOR'S EXPENSE.
 - CONTRACTOR IS RESPONSIBLE TO PROVIDE THE APPROPRIATE SHOP DRAWINGS, PRODUCT DATA, AND OTHER REQUIRED SUBMITTALS FOR REVIEW. STONEFIELD ENGINEERING & DESIGN, LLC, WILL REVIEW THE SUBMITTALS IN ACCORDANCE WITH THE DESIGN INTENT AS REFLECTED WITHIN THE PLAN SET.
 - THE CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
 - THE CONTRACTOR IS REQUIRED TO PERFORM ALL WORK IN THE PUBLIC RIGHT-OF-WAY IN ACCORDANCE WITH THE APPROPRIATE GOVERNING AUTHORITY AND SHALL BE RESPONSIBLE FOR THE PROCUREMENT OF STREET OPENING PERMITS.
 - THE CONTRACTOR IS REQUIRED TO RETAIN AN OSHA CERTIFIED SAFETY INSPECTOR TO BE PRESENT ON SITE AT ALL TIMES DURING CONSTRUCTION & DEMOLITION ACTIVITIES.
 - SHOULD AN EMPLOYEE OF STONEFIELD ENGINEERING & DESIGN, LLC, BE PRESENT ON SITE AT ANY TIME DURING CONSTRUCTION, IT DOES NOT RELIEVE THE CONTRACTOR OF ANY OF THE RESPONSIBILITIES AND REQUIREMENTS LISTED IN THE NOTES WITHIN THIS PLAN SET.



CHARLTON ROAD
(PUBLIC - 1961 STATE HIGHWAY ALTERATION - WIDTH VARIES)

FOR MUNICIPAL SUBMISSION	5/16/2023	KO	BY
REVISED PER NEW BUILDING ELEVATIONS	6/6/2023	JR	
FOR CONSERVATION COMMISSION SUBMISSION	01/31/2023	JR	
FOR DOT SUBMISSION	01/06/2023	JR	
FOR DOT SUBMISSION	11/02/2023	JR	
ISSUE	DATE	BY	

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ALRIG USA

SITE PLANS
ALRIG USA
DEVELOPMENTS
PROPOSED MULTI-TENANT
DEVELOPMENT

MAP: 208 LOTS: 236, 216, & 212
212, 216 & 226 CHARLTON ROAD
TOWN OF STURBRIDGE
WORCESTER COUNTY, MASSACHUSETTS

JAKE MODESTOW, P.E.
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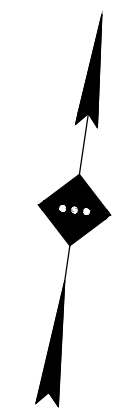
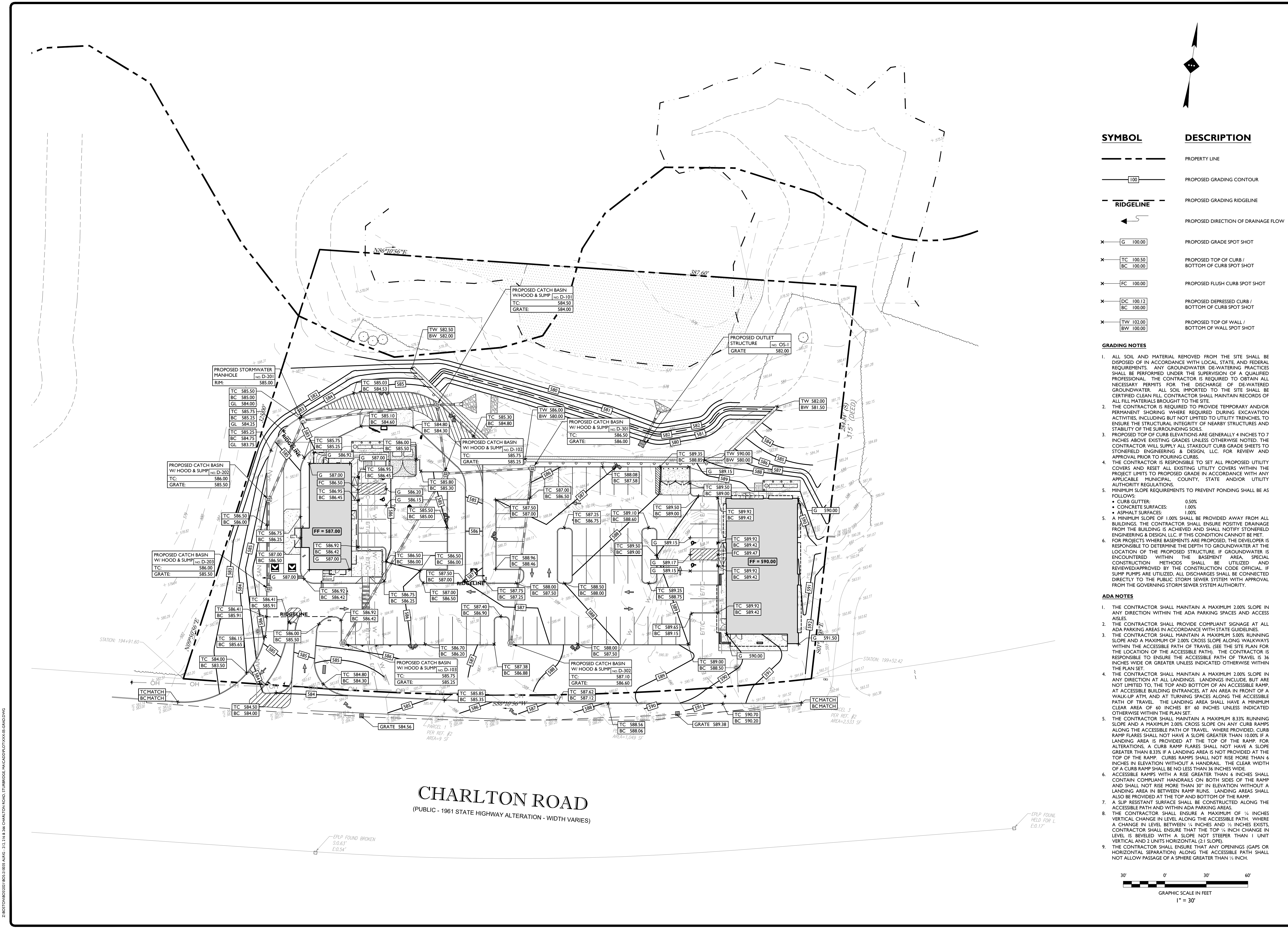
STONEFIELD
engineering & design

SCALE: 1" = 30' PROJECT ID: BOS-210035

TITLE: **SITE PLAN**

DRAWING: **C-4**

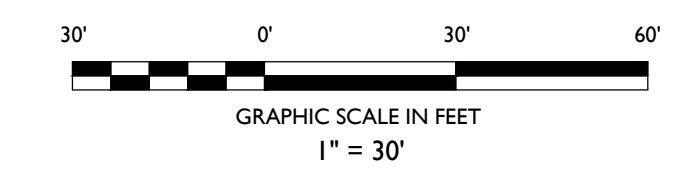
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SYMBOL	DESCRIPTION
---	PROPERTY LINE
---	PROPOSED GRADING CONTOUR
---	PROPOSED GRADING RIDGELINE
---	PROPOSED DIRECTION OF DRAINAGE FLOW
X G 100.00	PROPOSED GRADE SPOT SHOT
X TC 100.50 BC 100.00	PROPOSED TOP OF CURB / BOTTOM OF CURB SPOT SHOT
X FC 100.00	PROPOSED FLUSH CURB SPOT SHOT
X DC 100.12 BC 100.00	PROPOSED DEPRESSED CURB / BOTTOM OF CURB SPOT SHOT
X TW 102.00 BW 100.00	PROPOSED TOP OF WALL / BOTTOM OF WALL SPOT SHOT

- GRADING NOTES**
- 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 DEWATERED GROUNDWATER. ALL SOIL IMPORTED TO THE SITE SHALL BE CERTIFIED CLEAN FILL. CONTRACTOR SHALL MAINTAIN RECORDS OF ALL FILL MATERIALS BROUGHT TO THE SITE.
 - THE CONTRACTOR IS REQUIRED TO PROVIDE TEMPORARY AND/OR PERMANENT SHORING WHERE REQUIRED DURING EXCAVATION ACTIVITIES INCLUDING BUT NOT LIMITED TO UTILITY TRENCHES TO ENSURE THE STRUCTURAL INTEGRITY OF NEARBY STRUCTURES AND STABILITY OF THE SURROUNDING SOILS.
 - PROPOSED TOP OF CURB ELEVATIONS 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.
 - 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 REGULATIONS.
 - MINIMUM SLOPE REQUIREMENTS TO PREVENT PONDING SHALL BE AS FOLLOWS:
 - CURB GUTTER: 0.50%
 - CONCRETE SURFACES: 1.00%
 - ASPHALT SURFACES: 1.00%
 - A MINIMUM SLOPE OF 1.00% SHALL BE PROVIDED AWAY FROM ALL BUILDINGS. THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE FROM THE BUILDING IS ACHIEVED AND SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IF THIS CONDITION 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. IF GROUNDWATER IS ENCOUNTERED WITHIN THE BASEMENT AREA, SPECIAL CONSTRUCTION METHODS SHALL BE UTILIZED AND REVIEWED/APPROVED BY THE CONSTRUCTION CODE OFFICIAL. IF SUMP PUMPS ARE UTILIZED, ALL DISCHARGES SHALL BE CONNECTED DIRECTLY TO THE PUBLIC STORM SEWER SYSTEM WITH APPROVAL FROM THE GOVERNING STORM SEWER SYSTEM AUTHORITY.

- ADA NOTES**
- THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 2.00% SLOPE IN ANY DIRECTION WITHIN THE ADA PARKING SPACES AND ACCESS AISLES.
 - THE CONTRACTOR SHALL PROVIDE COMPLIANT SIGNAGE AT ALL ADA PARKING AREAS IN ACCORDANCE WITH STATE GUIDELINES.
 - 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.
 - THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 2.00% SLOPE IN ANY DIRECTION AT ALL LANDINGS. LANDINGS INCLUDE, BUT ARE NOT LIMITED TO, THE TOP AND BOTTOM OF AN 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 LANDING AREA SHALL HAVE A MINIMUM CLEAR AREA OF 60 INCHES BY 60 INCHES UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
 - 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 PROVIDED, CURB RAMP FLARES SHALL NOT HAVE A SLOPE GREATER THAN 10.00% IF A LANDING AREA IS PROVIDED AT THE TOP OF THE RAMP. FOR ALTERATIONS, A CURB RAMP FLARE SHALL NOT HAVE A SLOPE GREATER THAN 8.33% IF A LANDING AREA IS NOT PROVIDED AT THE TOP OF THE RAMP. CURBS RAMPS SHALL NOT RISE MORE THAN 6 INCHES IN ELEVATION WITHOUT A HANDRAIL. THE CLEAR WIDTH OF A CURB RAMP SHALL BE NO LESS THAN 36 INCHES WIDE.
 - ACCESSIBLE RAMPS WITH A RISE GREATER THAN 1/4 INCHES SHALL CONTAIN COMPLIANT HANDRAILS ON BOTH SIDES OF THE RAMP AND SHALL NOT RISE MORE THAN 30" IN ELEVATION WITHOUT A LANDING AREA IN BETWEEN RAMP RUNS. LANDING AREAS SHALL ALSO BE PROVIDED AT THE TOP AND BOTTOM OF THE RAMP.
 - A SLIP RESISTANT SURFACE SHALL BE CONSTRUCTED ALONG THE ACCESSIBLE PATH AND WITHIN ADA PARKING AREAS.
 - THE CONTRACTOR SHALL ENSURE A MAXIMUM OF 1/4 INCHES VERTICAL CHANGE IN LEVEL ALONG THE ACCESSIBLE PATH. WHERE A CHANGE IN LEVEL BETWEEN 1/4 INCHES AND 1/2 INCHES EXISTS, CONTRACTOR SHALL ENSURE THAT THE TOP 1/4 INCH CHANGE IN LEVEL IS BEVELED WITH A SLOPE NOT STEEPER THAN 1 UNIT VERTICAL AND 2 UNITS HORIZONTAL (2:1 SLOPE).
 - THE CONTRACTOR SHALL ENSURE THAT ANY OPENINGS (GAPS OR HORIZONTAL SEPARATION) ALONG THE ACCESSIBLE PATH SHALL NOT ALLOW PASSAGE OF A SPHERE GREATER THAN 1/4 INCH.



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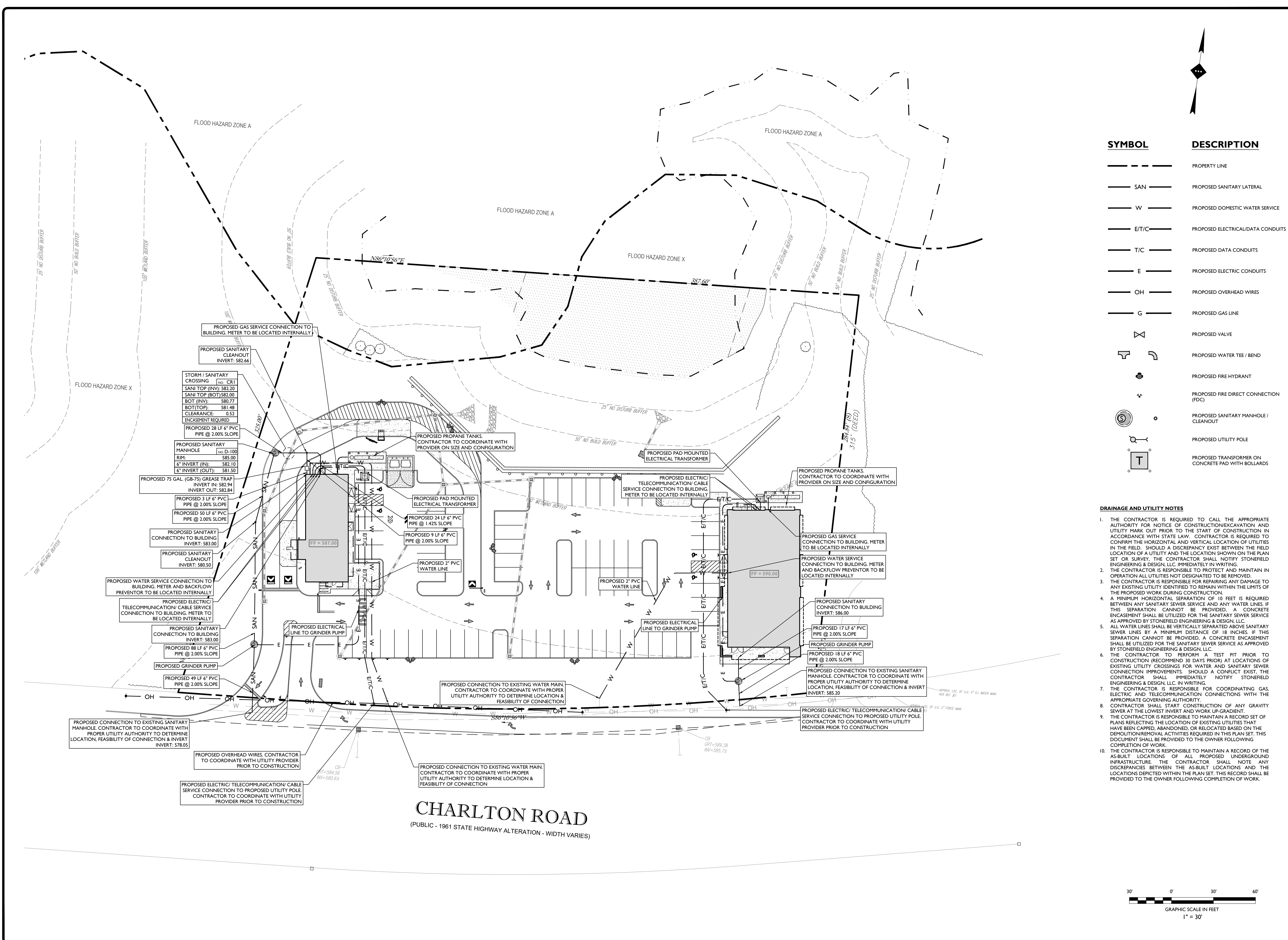
SCALE: 1" = 30' PROJECT ID: BOS-210035

TITLE:
GRADING PLAN

DRAWING:

C-5

Z:\PROJECTS\BOS210035\BOS-210035-ALRIG-212-216-226-CHARLTON-ROAD-TURNING-GEOMETRIC-DESIGN-GRADING



SYMBOL	DESCRIPTION
---	PROPERTY LINE
SAN	PROPOSED SANITARY LATERAL
W	PROPOSED DOMESTIC WATER SERVICE
E/T/C	PROPOSED ELECTRICAL/DATA CONDUITS
T/C	PROPOSED DATA CONDUITS
E	PROPOSED ELECTRIC CONDUITS
OH	PROPOSED OVERHEAD WIRES
G	PROPOSED GAS LINE
∩	PROPOSED VALVE
T	PROPOSED WATER TEE / BEND
⊕	PROPOSED FIRE HYDRANT
+	PROPOSED FIRE DIRECT CONNECTION (FDC)
⊙	PROPOSED SANITARY MANHOLE / CLEANOUT
⊙	PROPOSED UTILITY POLE
T	PROPOSED TRANSFORMER ON CONCRETE PAD WITH BOLLARDS

- DRAINAGE AND UTILITY NOTES**
- THE CONTRACTOR IS REQUIRED TO CALL THE APPROPRIATE AUTHORITY FOR NOTICE OF CONSTRUCTION EXCAVATION AND UTILITY MARK OUT PRIOR TO THE START OF CONSTRUCTION IN ACCORDANCE WITH STATE LAW. CONTRACTOR IS REQUIRED TO CONFIRM THE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES IN THE FIELD. SHOULD A DISCREPANCY EXIST BETWEEN THE FIELD LOCATION OF A UTILITY AND THE LOCATION SHOWN ON THE PLAN SET OR SURVEY, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IMMEDIATELY IN WRITING.
 - THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN IN OPERATION ALL UTILITIES NOT DESIGNATED TO BE REMOVED.
 - THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO ANY EXISTING UTILITY IDENTIFIED TO REMAIN WITHIN THE LIMITS OF THE PROPOSED WORK DURING CONSTRUCTION.
 - A MINIMUM HORIZONTAL SEPARATION OF 10 FEET IS REQUIRED BETWEEN ANY SANITARY SEWER SERVICE AND ANY WATER LINES. IF THIS SEPARATION CANNOT BE PROVIDED, A CONCRETE ENCASUREMENT SHALL BE UTILIZED FOR THE SANITARY SEWER SERVICE AS APPROVED BY STONEFIELD ENGINEERING & DESIGN, LLC.
 - ALL WATER LINES SHALL BE VERTICALLY SEPARATED ABOVE SANITARY SEWER LINES BY A MINIMUM DISTANCE OF 18 INCHES. IF THIS SEPARATION CANNOT BE PROVIDED, A CONCRETE ENCASUREMENT SHALL BE UTILIZED FOR THE SANITARY SEWER SERVICE AS APPROVED BY STONEFIELD ENGINEERING & DESIGN, LLC.
 - THE CONTRACTOR TO PERFORM A TEST PIT PRIOR TO CONSTRUCTION (RECOMMEND 30 DAYS PRIOR) AT LOCATIONS OF EXISTING UTILITY CROSSINGS FOR WATER AND SANITARY SEWER CONNECTION IMPROVEMENTS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IN WRITING.
 - THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING GAS, ELECTRIC AND TELECOMMUNICATION CONNECTIONS WITH THE APPROPRIATE GOVERNING AUTHORITY.
 - CONTRACTOR SHALL START CONSTRUCTION OF ANY GRAVITY SEWER AT THE LOWEST INVERT AND WORK UP GRADIENT.
 - THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD SET OF PLANS REFLECTING THE LOCATION OF EXISTING UTILITIES THAT HAVE BEEN CAPPED, ABANDONED, OR RELOCATED BASED ON THE DEMOLITION/REMOVAL ACTIVITIES REQUIRED IN THIS PLAN SET. THIS DOCUMENT SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.
 - THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD OF THE AS-BUILT LOCATIONS OF ALL PROPOSED UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR SHALL NOTE ANY DISCREPANCIES BETWEEN THE AS-BUILT LOCATIONS AND THE LOCATIONS DEPICTED WITHIN THE PLAN SET. THIS RECORD SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.

NO.	DATE	ISSUE	BY	DESCRIPTION
1	11/02/2023	FOR DOT SUBMISSION	JR	
2	01/06/2023	FOR DOT SUBMISSION	JR	
3	01/13/2023	FOR CONSERVATION COMMISSION SUBMISSION	JR	
4	04/06/2023	REVISED PER NEW BUILDING ELEVATIONS	JR	
5	05/16/2023	FOR MUNICIPAL SUBMISSION	KO	

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SITE PLANS

ALRIG USA

DEVELOPMENTS

PROPOSED MULTI-TENANT

DEVELOPMENT

MAP: 208 LOTS: 236, 216, & 212
212, 216 & 226 CHARLTON ROAD
TOWN OF STURBRIDGE
WORCESTER COUNTY, MASSACHUSETTS

JAKE MODESTOW, P.E.
MASSACHUSETTS LICENSE No. 55253
LICENSED PROFESSIONAL ENGINEER

STONEFIELD
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SCALE: 1" = 30' PROJECT ID: BOS-210035

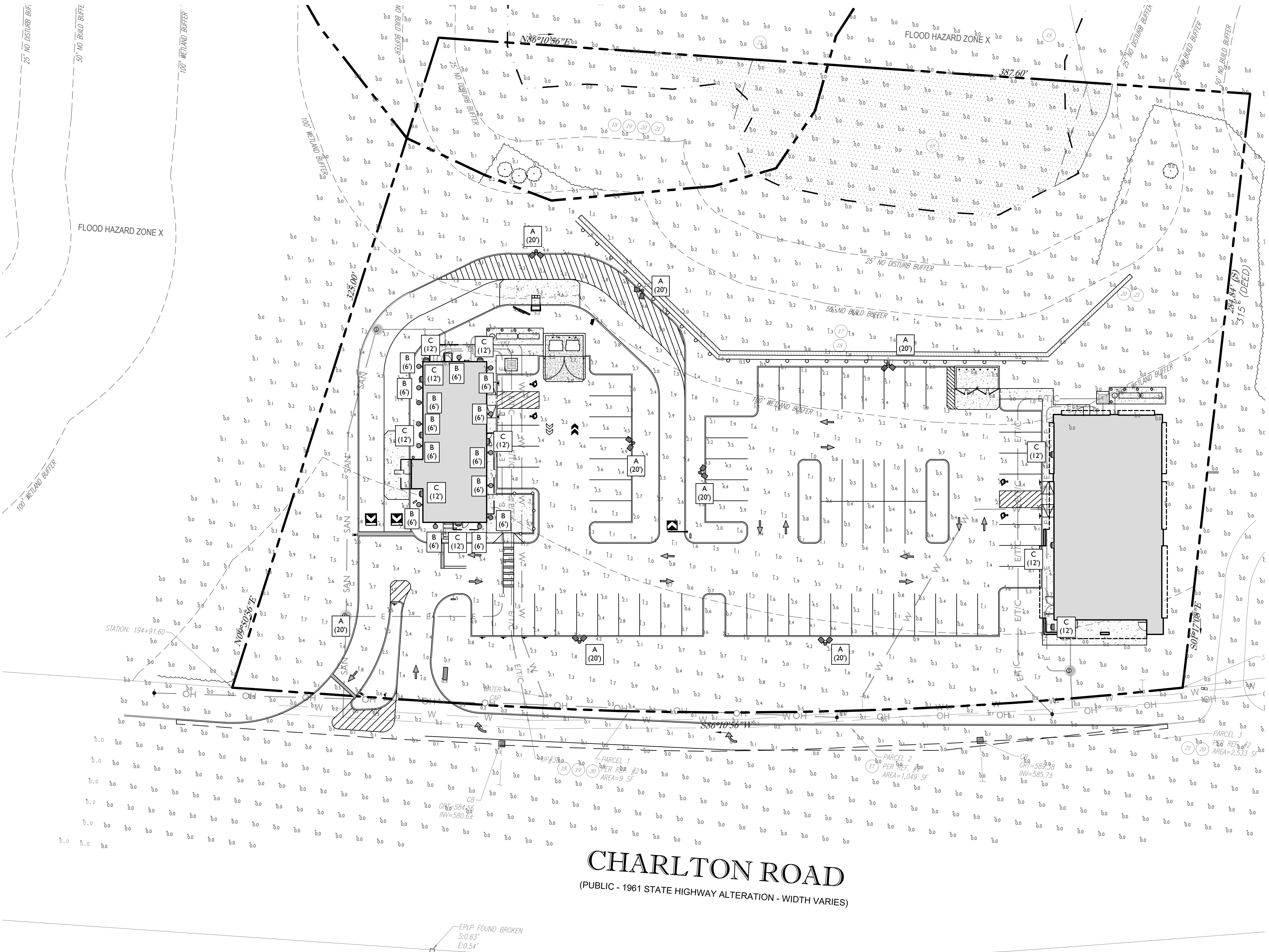
TITLE:
UTILITY PLAN

DRAWING:
C-7

Z:\PROJECTS\2023\BOS210035\ALRIG - 212, 216 & 226 CHARLTON ROAD - UTILITY PLAN - 11/02/2023.dwg

PROPOSED LUMINAIRE SCHEDULE							
SYMBOL	LABEL	QUANTITY	SECURITY LIGHTING	DISTRIBUTION	LLF	MANUFACTURER	IES FILE
	A	8	OSQ OUTDOOR LED AREA LIGHT-DOUBLE 90	TYPE IV	0.9	CREE LIGHTING	OSQM-8-9L-40K7-4M-LX-XX-XX-Q9 W_OSQ-BLSMFIES
	B	14	LED UP & DOWN WALL SCNCE	--	0.9	Y TECH	I0364358SCH1-004 TECH LIGHTING 700CWAST14ZLED930 MERGED.IES
	C	10	EDGE SERIES - OUTDOOR LED WALLPACK	TYPE V	0.9	CREE LIGHTING	ARE-EDG-4M-XX-06-E-UL-XX-525- XXXX-40K.IES

LIGHTING REQUIREMENTS		
CODE SECTION	REQUIRED	PROPOSED
§ 300-10.6	LIGHTING SHALL BE LIMITED TO THAT REQUIRED FOR SAFETY AND OPERATIONAL PURPOSES, AND SHALL NOT BE INTRUSIVE IN ANY WAY ON ADJUTING PROPERTIES	COMPLIES
§ 300-6.6-M(2)	EXTERIOR LIGHTING SHALL BE PART OF THE ARCHITECTURAL CONCEPT	COMPLIES



CHARLTON ROAD
(PUBLIC - 1961 STATE HIGHWAY ALTERATION - WIDTH VARIES)

SYMBOL	DESCRIPTION
	PROPOSED CALCULATION AREA
	PROPOSED ISOMETRIC LINE
	PROPOSED LIGHTING FIXTURE (MOUNTING HEIGHT)
	PROPOSED LIGHTING INTENSITY (FOOTCANDLES)
	PROPOSED AREA LIGHT
	PROPOSED BUILDING MOUNTED LIGHT



FIXTURES 'A'



FIXTURE 'B'



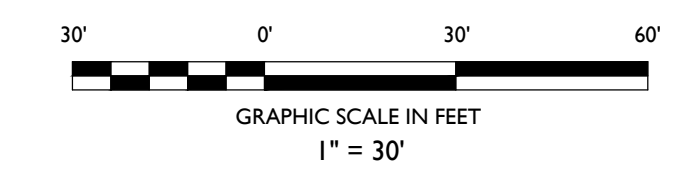
FIXTURE 'C'

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 FIXTURE MAY VARY DUE TO UNCONTROLLABLE VARIABLES SUCH AS WEATHER, VOLTAGE SUPPLY, LAMP TOLERANCE, EQUIPMENT SERVICE LIFE AND OTHER VARIABLE FIELD CONDITIONS.
2. 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.
3. 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
4. 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:

1. 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. THE LIGHTING DESIGN IS SUBJECT TO CHANGE IF THE EXISTING LIGHT FIXTURES ARE NOT GREATER THAN OR EQUAL TO THE FOLLOWING WATTAGE:
 - FIXTURE 'A' = MINIMUM X WATTS
2. 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.
3. 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.
4. 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.
5. 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.
6. 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.
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 PHOTOCEL 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 DESIGNED TO COMPLY WITH ALL APPLICABLE ATM AND SAFETY LIGHTING REQUIREMENTS INDEPENDENT OF ANY UNCONTROLLED LIGHT FIXTURES.



FOR MUNICIPAL SUBMISSION		DATE	BY	DESCRIPTION
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4	04/06/2023	JR	JR	
FOR CONSERVATION COMMISSION SUBMISSION		DATE	BY	DESCRIPTION
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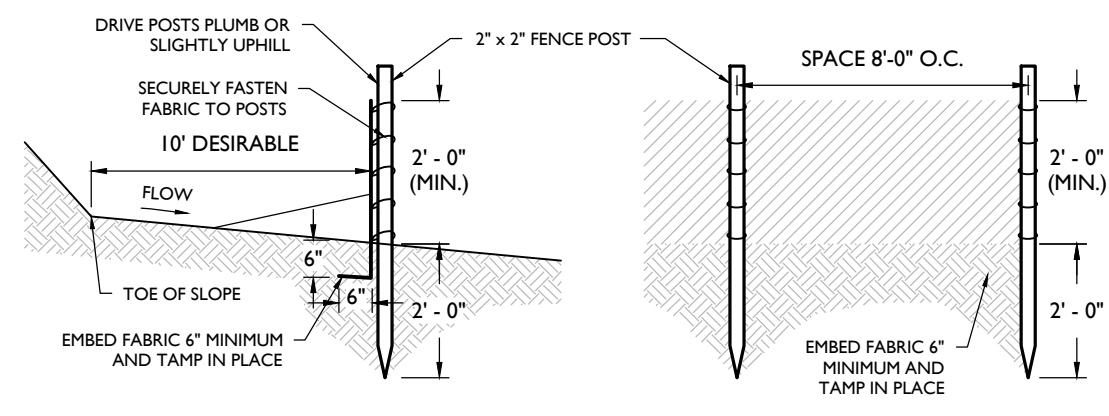
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SCALE: 1" = 30' PROJECT ID: BOS-210035

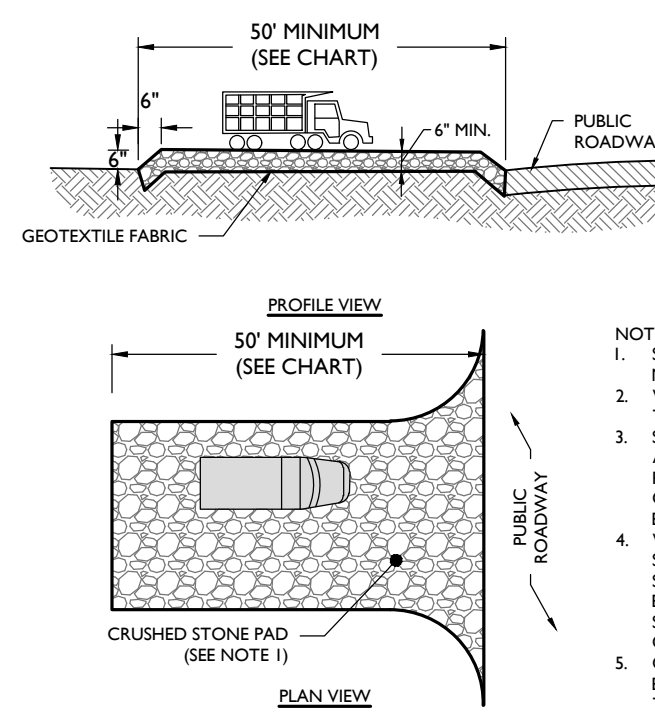
TITLE:
LIGHTING PLAN

DRAWING:
C-8



- 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 4" (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. SPACING OF INDIVIDUAL ROLLS SHALL NOT OCCUR AT LOW POINTS.
 4. SET SILT FENCE WITHIN PROJECT LIMITS. 10'-0" IS DESIRABLE.

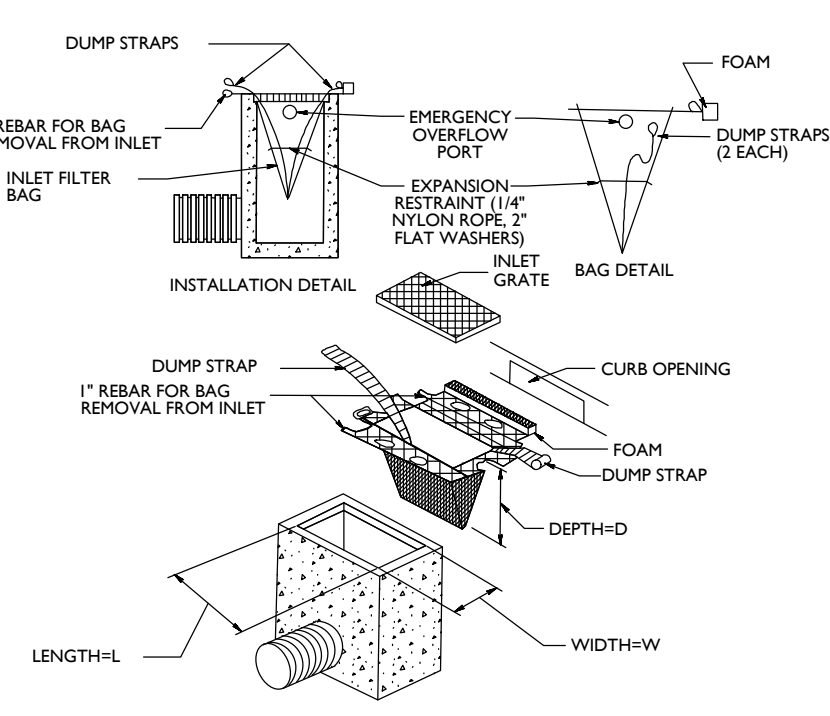
SILT FENCE DETAIL



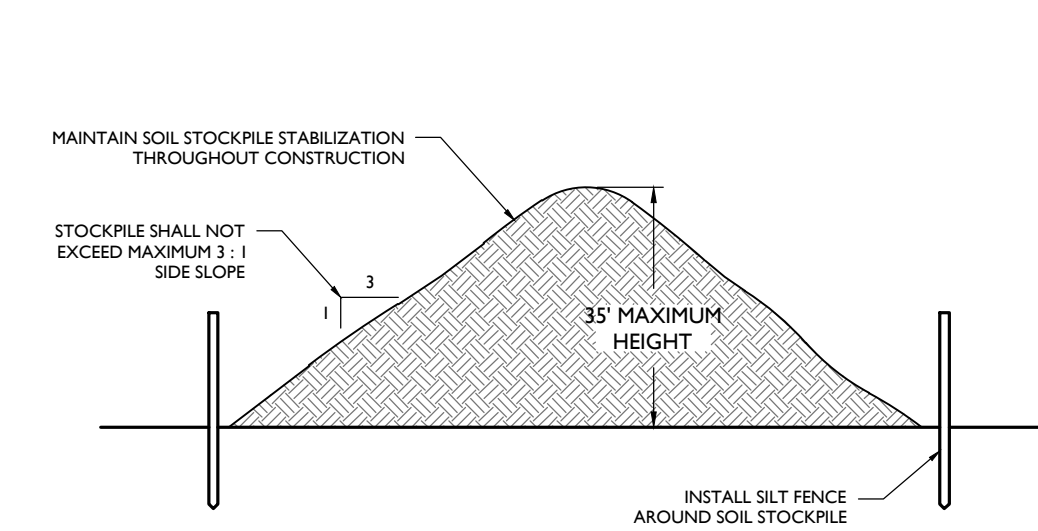
SLOPE OF PUBLIC ROADWAY	LENGTH OF STONE REQ'D
0% TO 2%	50 FEET
2% TO 5%	100 FEET
> 5%	SEE NOTE 4

- NOTES:
1. STONE SHALL BE ASTM C-33, SIZE No. 3 (2.5" TO 1.5") OR No. 3 (2" TO 1") CLEAN CRUSHED ANGULAR STONE.
 2. WIDTH SHALL BE 15" MINIMUM OR THE FULL WIDTH OF THE ACCESS POINT, WHICHEVER IS GREATER.
 3. STORMWATER FROM UP-SLOPE AREAS SHALL BE DIVERTED AWAY FROM THE STABILIZED PAD, WHERE POSSIBLE. AT POORLY DRAINED LOCATIONS, SUBSURFACE DRAINAGE GRAVEL FILTER OR GEOTEXTILE SHALL BE INSTALLED BEFORE THE STABILIZED CONSTRUCTION ENTRANCE.
 4. WHERE THE SLOPE OF THE ROADWAY EXCEEDS 5%, A STABILIZED BASE OF HOT MIX ASPHALT BASE COURSE SHALL BE INSTALLED. THE TYPE AND THICKNESS OF THE BASE COURSE AND USE OF DENSE GRADED AGGREGATE SUB-BASE SHALL BE AS PRESCRIBED BY LOCAL MUNICIPAL ORDINANCE OR GOVERNING AUTHORITY.
 5. CONTRACTOR SHALL PROVIDE A SMOOTH TRANSITION BETWEEN THE STABILIZED CONSTRUCTION ACCESS AND THE PUBLIC ROADWAY.

STABILIZED CONSTRUCTION ACCESS DETAIL



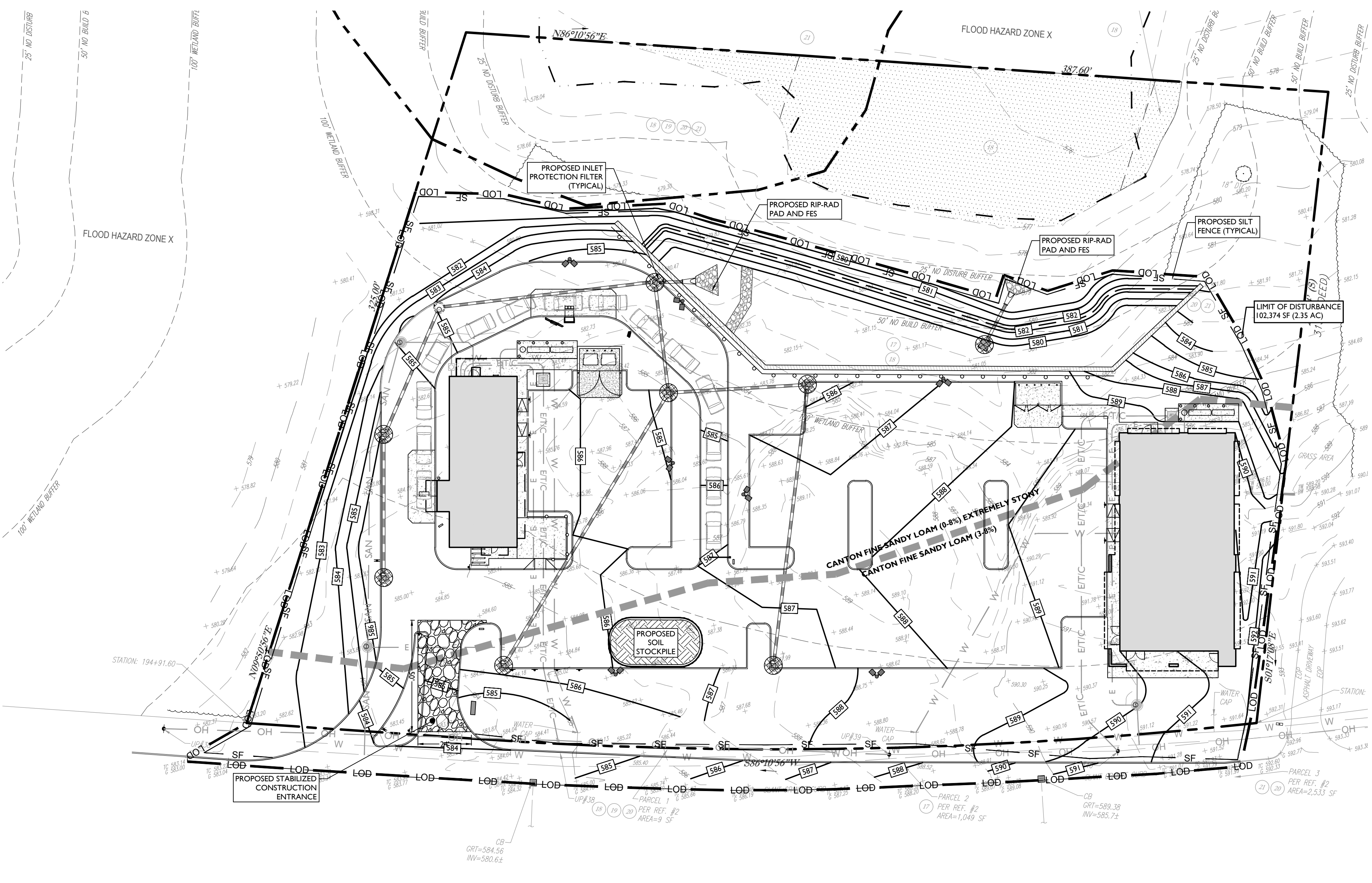
INLET FILTER BAG DETAIL



SOIL STOCKPILE DETAIL

- NOTES:
1. STOCKPILES SHALL BE SITUATED SO AS NOT TO OBSTRUCT NATURAL DRAINAGE OR CAUSE OFF-SITE ENVIRONMENTAL DAMAGE.
 2. STOCKPILES SHALL BE STABILIZED IN ACCORDANCE WITH THE STANDARDS FOR PERMANENT OR TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION AS APPROPRIATE (SEE SOIL EROSION NOTES).

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



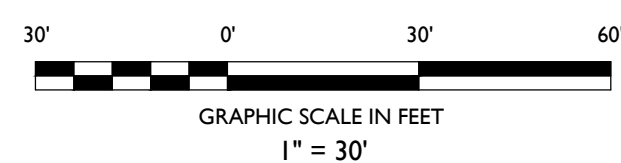
- DUST CONTROL NOTES**
1. MULCHES - SEE STANDARD OF STABILIZATION WITH MULCHES ONLY, PG. 511
 2. VEGETATIVE COVER - SEE STANDARD FOR: TEMPORARY VEGETATIVE COVER, PG. 7-1; PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION PG. 4-1 AND PERMANENT STABILIZATION WITH SOD, PG. 4-1
 3. SPRAY-ON ADHESIVES - ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS), KEEP TRAFFIC OFF THESE AREAS.
 4. TILLAGE - TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS A TEMPORARY EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART AND SPRING-TOOTHED HARROWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.
 5. SPRINKLING - SITE IS SPRINKLED UNTIL THE SURFACE IS WET.
 6. BARRIERS - SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING.
 7. CALCIUM CHLORIDE - SHALL BE IN THE FORM OF LOOSE, DRY GRANULES OR FLAKES FINE ENOUGH TO FEED THROUGH COMMONLY USED SPREADERS AT A RATE THAT WILL KEEP SURFACE MOIST BUT NOT CAUSE POLLUTION OR PLANT DAMAGE IF USED ON STEEPER SLOPES. THEN USE OTHER PRACTICES TO PREVENT WASHING INTO STREAMS OR ACCUMULATION AROUND PLANTS.
 8. STONE - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.

- SEQUENCE OF CONSTRUCTION**
1. INSTALL CONSTRUCTION ENTRANCE AND SILT FENCE (2 DAYS).
 2. DEMOLISH EXISTING STRUCTURES, PAVEMENT, AND GRAVEL (7 DAYS).
 3. ROUGH GRADING AND TEMPORARY SEEDING (21 DAYS).
 4. BUILDING CONSTRUCTION AND SITE IMPROVEMENTS (120 DAYS).
 5. LANDSCAPING IMPROVEMENTS AND FINAL SEEDING (7 DAYS).
 6. REMOVE SOIL EROSION MEASURES (1 DAY).
- TOTAL ESTIMATED TIME = 8 MONTHS
- NOTE: TIME DURATIONS ARE APPROXIMATE AND ARE INTENDED TO ACT AS A GENERAL GUIDE TO THE CONSTRUCTION TIMELINE. ALL DURATIONS ARE SUBJECT TO CHANGE BY CONTRACTOR. CONTRACTOR SHALL SUBMIT CONSTRUCTION SCHEDULE TO TOWNSHIP AND ENGINEER. CONTRACTOR SHALL PHASE CONSTRUCTION ACCORDINGLY.

- STABILIZATION SPECIFICATIONS:**
- I.A. TEMPORARY SEEDING AND MULCHING:
GROUND LIMESTONE - APPLIED UNIFORMLY ACCORDING TO SOIL TEST RECOMMENDATIONS.
FERTILIZER - APPLY 11 LBS./1,000 SF OF 10-20-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN (UNLESS A SOIL TEST INDICATES OTHERWISE) WORKED INTO THE SOIL A MINIMUM OF 4".
SEED - PERENNIAL RYEGRASS 100 LBS./ACRE (2.3 LBS./1,000 SF) OR OTHER APPROVED SEEDS; PLANT BETWEEN MARCH 1 AND MAY 15 OR BETWEEN AUGUST 15 AND OCTOBER 1.
MULCH - UNROTATED STRAW OR HAY AT A RATE OF 70 TO 90 LBS./1,000 SF APPLIED TO ACHIEVE 95% SOIL SURFACE COVERAGE. MULCH SHALL BE ANCHORED BY APPROVED METHODS (I.E. PEG AND TWINE, MULCH NETTING, OR LIQUID MULCH BINDER).
- I.B. PERMANENT SEEDING AND MULCHING:
TOPSOIL - UNIFORM APPLICATION TO A DEPTH OF 5" (UNSETTLED).
GROUND LIMESTONE - APPLIED UNIFORMLY ACCORDING TO SOIL TEST RECOMMENDATIONS.
FERTILIZER - APPLY 11 LBS./1,000 SF OF 10-10-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN (UNLESS A SOIL TEST INDICATES OTHERWISE) WORKED INTO THE SOIL A MINIMUM OF 4".
SEED - TURF TYPE TALL FESCUE (BLEND OF 3 CULTIVARS) 350 LBS./ACRE (8 LBS./1,000 SF) OR OTHER APPROVED SEEDS; PLANT BETWEEN MARCH 1 AND OCTOBER 1 (SUMMER SEEDINGS REQUIRE IRRIGATION).
MULCH - UNROTATED STRAW OR HAY AT A RATE OF 70 TO 90 LBS./1,000 SF APPLIED TO ACHIEVE 95% SOIL SURFACE COVERAGE. MULCH SHALL BE ANCHORED BY APPROVED METHODS (I.E. PEG AND TWINE, MULCH NETTING, OR LIQUID MULCH BINDER).

SOIL CHARACTERISTICS CHART

TYPE OF SOIL	CANTON FINE SANDY LOAM (0-8%) EXTREMELY STONY	CANTON FINE SANDY LOAM (3-8%)
PERCENT OF SITE COVERAGE	73.40%	26.60%
HYDROLOGIC SOIL GROUP	B	B
DEPTH TO RESTRICTIVE LAYER	19 - 39 INCHES	19 - 39 INCHES
SOIL PERMEABILITY	0.14 - 14.17 INCH/HOUR	0.14 - 14.17 INCH/HOUR
DEPTH TO WATER TABLE	>80 INCHES	>80 INCHES



Z:\PROJECTS\2025\20251003_AJL\25-12-14-146 CHARLTON ROAD - TUBBERIDGE - MA\CDR\FIG\25-10-25-01.DWG

CHARLTON ROAD
(PUBLIC - 1961 STATE HIGHWAY ALTERATION - WIDTH VARIES)

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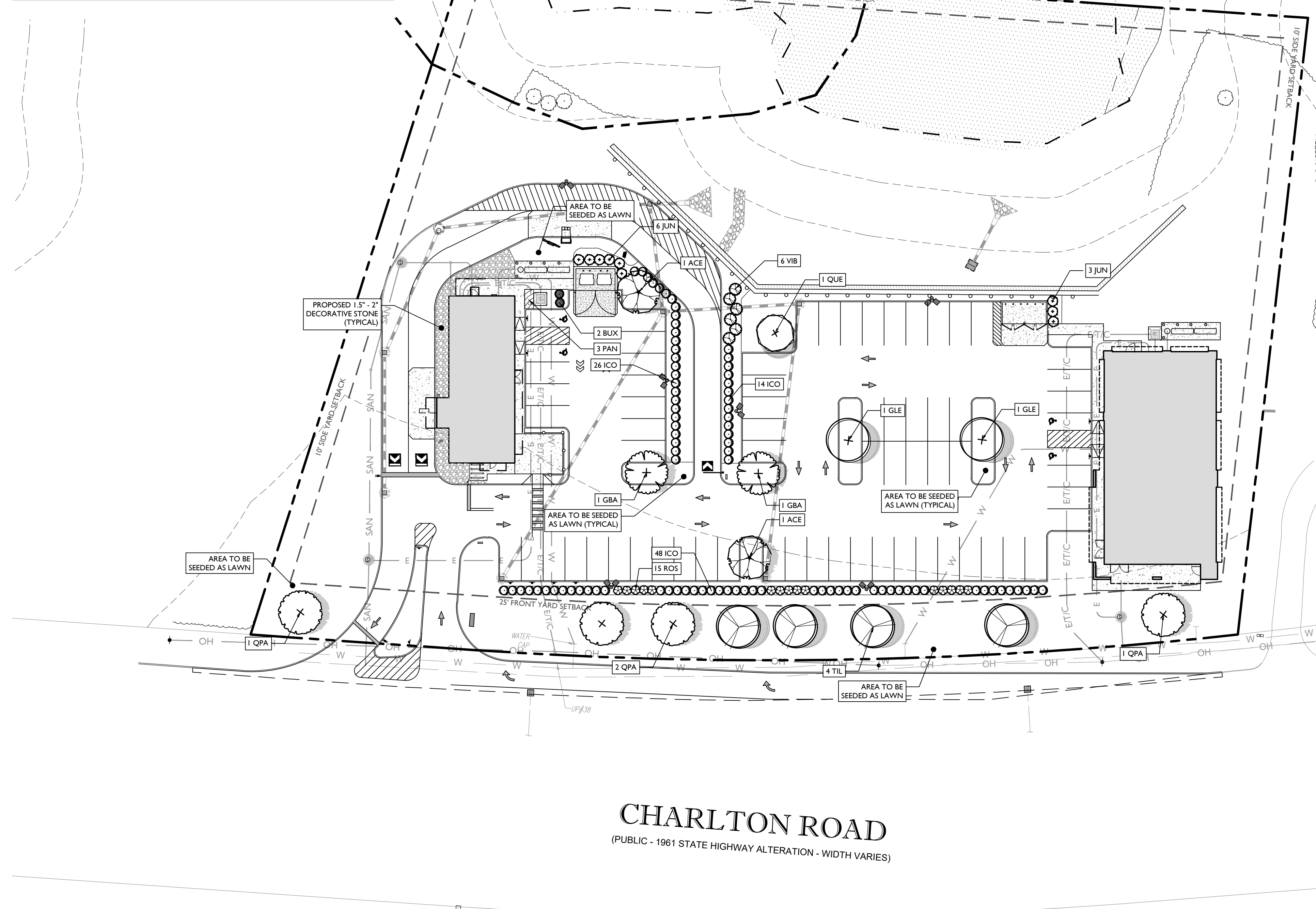
SCALE: 1" = 30' PROJECT ID: BOS-210035

TITLE:
SOIL EROSION & SEDIMENT CONTROL PLAN

DRAWING:

C-9

CODE SECTION	REQUIRED	PROPOSED
§ 300-16.9.A.	SCREENING REQUIREMENTS	COMPLIES
	BUFFERING, PARKING SPACES, DRIVEWAYS, BUILDINGS, STRUCTURES AND STORAGE MATERIALS SHALL NOT BE ALLOWED WITHIN THE FRONT SETBACK, AND THE AREA OF THE FRONT SETBACK SHALL BE A BUFFER, AND LANDSCAPED AS SUCH.	COMPLIES
	LANDSCAPING OF THE FRONTAGE BUFFER SHALL CONSIDER THE NEED FOR PROPOSED OR FUTURE SIDEWALK INSTALLATIONS.	COMPLIES
§ 300-16.9.B.	THE BUFFER SHALL ALLOW FOR NECESSARY ACCESS TO THE SITE, BUT DRIVEWAYS SHALL OTHERWISE NOT BE ALLOWED IN THE BUFFER.	COMPLIES
	INTERIOR PARKING LOT LANDSCAPING:	
§ 300-16.9.B.1	LOTS EQUAL TO OVER 20 SPACES: 68 PROPOSED SPACES 5% OF PARKING LOT AREA TO BE LANDSCAPED (0.05) * (37,177 SF) = 1,858 SF	21% (7,952 SF)
§ 300-16.9.B.2	ONE SHADE TREE IS REQUIRED FOR EVERY 10 PARKING SPACES: (68 PARKING SPACES) / (10) = 7 TREES	7 TREES
	NO LANDSCAPING ISLAND SHALL BE LESS THAN 10 FEET WIDE.	COMPLIES
§ 300-16.9.B.3	NO LANDSCAPING STRIP SEPARATING PARKING BAYS SHALL BE LESS THAN EIGHT FEET WIDE.	9.0 FT
	IN NO CASE SHALL A TREE BE SET BACK LESS THAN FOUR FEET FROM PAVED AREAS.	COMPLIES
§ 300-16.9.J.(1)(d)	PARKING ROWS SHOULD GENERALLY NOT EXCEED 10 SPACES, BUT IN NO CASE SHOULD THEY EXCEED 15 SPACES.	13 SPACES
	STREET TREES:	
§ 300-16.9.J.(2)(a)	1 TREE PER 50 LF (386 LF) / (50) = 8 TREES	8 TREES
	TREES MUST BE LOCATED WITHIN 20 FT OF RIGHT-OR-WAY LINE	COMPLIES
	TREE SIZE SHALL BE MINIMUM 2" - 2.5"	COMPLIES



PLANT SCHEDULE						
DECIDUOUS TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
	ACE	2	ACER RUBRUM	RED MAPLE	2" - 2.5" CAL	B&B
	GBA	2	GINKGO BILOBA 'AUTUMN GOLD'	AUTUMN GOLD MAIDENHAIR TREE	2" - 2.5" CAL	B&B
	GLE	2	GLEDITSIA TRIACANTHOS	HONEY LOCUST	2" - 2.5" CAL	B&B
	QUE	1	QUERCUS BICOLOR	SWAMP WHITE OAK	2" - 2.5" CAL	B&B
	QPA	4	QUERCUS PALLISTRIS	PIN OAK	2" - 2.5" CAL	B&B
	TIL	4	TILIA AMERICANA	AMERICAN LINDEN	2" - 2.5" CAL	B&B
SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
	BUX	2	BUXUS MICROPHYLLA 'WINTER GEM'	GLOBE WINTER GEM BOXWOOD	18" - 24"	POT
	ICO	88	ILEX GLABRA 'COMPACTA'	COMPACT INKBERRY	18" - 24"	POT
	JUN	9	JUNIPERUS CHINENSIS 'SPARTAN'	SPARTAN JUNIPER	36" - 42"	B&B
	ROS	15	ROSA X 'DOUBLE KNOCKOUT'	ROSE	18" - 24"	POT
	VIB	6	VIBURNUM DENTATUM	VIBURNUM	18" - 24"	POT
SHRUB AREAS	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
	PAN	3	PANICUM VIRGATUM	SWITCH GRASS	1 GAL	POT, 48" o.c.

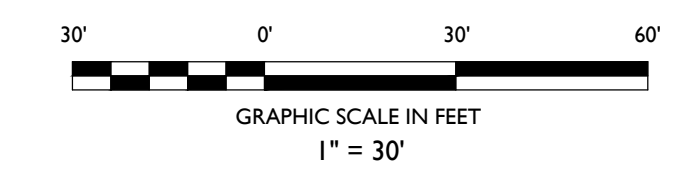
NOTE: IF ANY DISCREPANCIES OCCUR BETWEEN AMOUNTS SHOWN ON THE LANDSCAPE PLAN AND WITHIN THE PLANT LIST, THE PLAN SHALL DICTATE.

IRRIGATION NOTE:
IRRIGATION CONTRACTOR TO PROVIDE A DESIGN FOR AN IRRIGATION SYSTEM SEPARATING PLANTING BEDS FROM LAWN AREA. PRIOR TO CONSTRUCTION, DESIGN IS TO BE SUBMITTED TO THE PROJECT LANDSCAPE DESIGNER FOR REVIEW AND APPROVAL. WHERE POSSIBLE, DRIP IRRIGATION AND OTHER WATER CONSERVATION TECHNIQUES SUCH AS RAIN SENSORS SHALL BE IMPLEMENTED. CONTRACTOR TO VERIFY MAXIMUM ON SITE DYNAMIC WATER PRESSURE AVAILABLE MEASURED IN PSI. PRESSURE REDUCING DEVICES OR BOOSTER PUMPS SHALL BE PROVIDED TO MEET SYSTEM PRESSURE REQUIREMENTS. DESIGN TO SHOW ALL VALVES, PIPING, HEADS, BACKFLOW PREVENTION, METERS, CONTROLLERS, AND SLEEVES WITHIN HARDSCAPE AREAS.

- LANDSCAPING NOTES**
- THE CONTRACTOR SHALL RESTORE ALL DISTURBED GRASS AND LANDSCAPED AREAS TO MATCH EXISTING CONDITIONS UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
 - THE CONTRACTOR SHALL RESTORE ALL DISTURBED LAWN AREAS WITH A MINIMUM 4 INCH LAYER OF TOPSOIL AND SEED.
 - THE CONTRACTOR SHALL RESTORE MULCH AREAS WITH A MINIMUM 3 INCH LAYER OF MULCH.
 - THE MAXIMUM SLOPE ALLOWABLE IN LANDSCAPE RESTORATION AREAS SHALL BE 3 FEET HORIZONTAL TO 1 FOOT VERTICAL (3:1 SLOPE) UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
 - THE CONTRACTOR IS REQUIRED TO LOCATE ALL SPRINKLER HEADS IN AREA OF LANDSCAPING DISTURBANCE PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL RELOCATE SPRINKLER HEADS AND LINES IN ACCORDANCE WITH OWNER'S DIRECTION WITHIN AREAS OF DISTURBANCE.
 - THE CONTRACTOR SHALL ENSURE THAT ALL DISTURBED LANDSCAPED AREAS ARE GRADED TO MEET FLUSH AT THE ELEVATION OF WALKWAYS AND TOP OF CURB ELEVATIONS EXCEPT UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET. NO ABRUPT CHANGES IN GRADE ARE PERMITTED IN DISTURBED LANDSCAPING AREAS.



Know what's below
Call before you dig.



ISSUE	DATE	BY	DESCRIPTION
5	05/16/2023	KO	FOR MUNICIPAL SUBMISSION
4	04/06/2023	JR	REVISED PER NEW BUILDING ELEVATIONS
3	01/31/2023	JR	FOR CONSERVATION COMMISSION SUBMISSION
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ALRIG USA

DEVELOPMENTS
PROPOSED MULTI-TENANT
DEVELOPMENT

MAP: 208 LOTS: 236, 216, & 212
212, 216 & 226 CHARLTON ROAD
TOWN OF STURBRIDGE
WORCESTER COUNTY, MASSACHUSETTS

JAKE MODESTOW, P.E.
MASSACHUSETTS LICENSE NO. 55253
LICENSED PROFESSIONAL ENGINEER

STONEFIELD
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SCALE: 1" = 30' PROJECT ID: BOS-210035

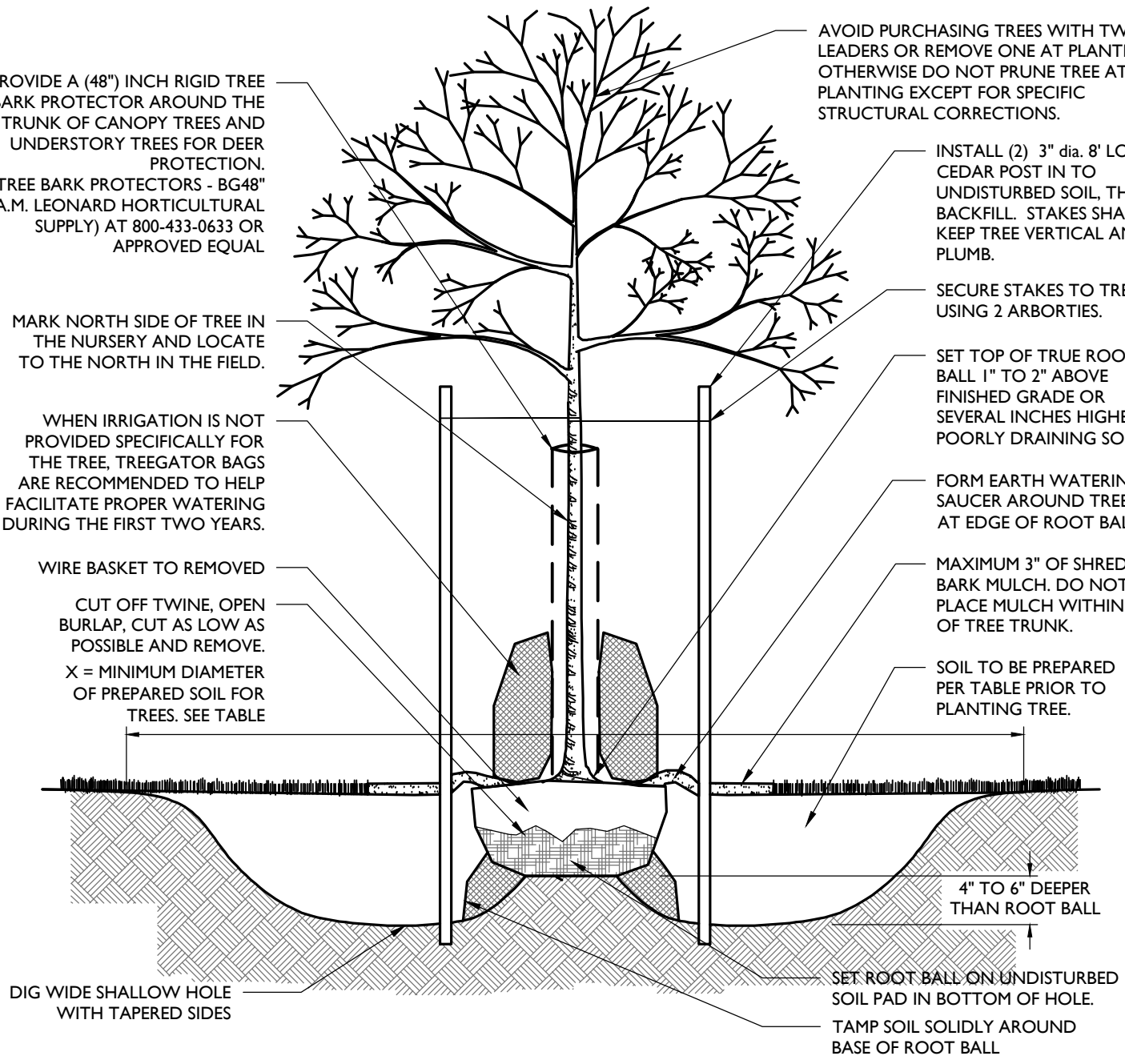
TITLE:
LANDSCAPING PLAN

DRAWING:
C-10

2:R07010402020100210035_A1000_112_114_104 CHARLTON ROAD, STURBRIDGE, MA CADD/PHOTO/PLAN/LANDSCAPING

NOTES:

- 1. FOR CONTAINER-GROWN TREES, USE FINGERS OR SMALL HAND TOOLS TO PULL THE ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL...

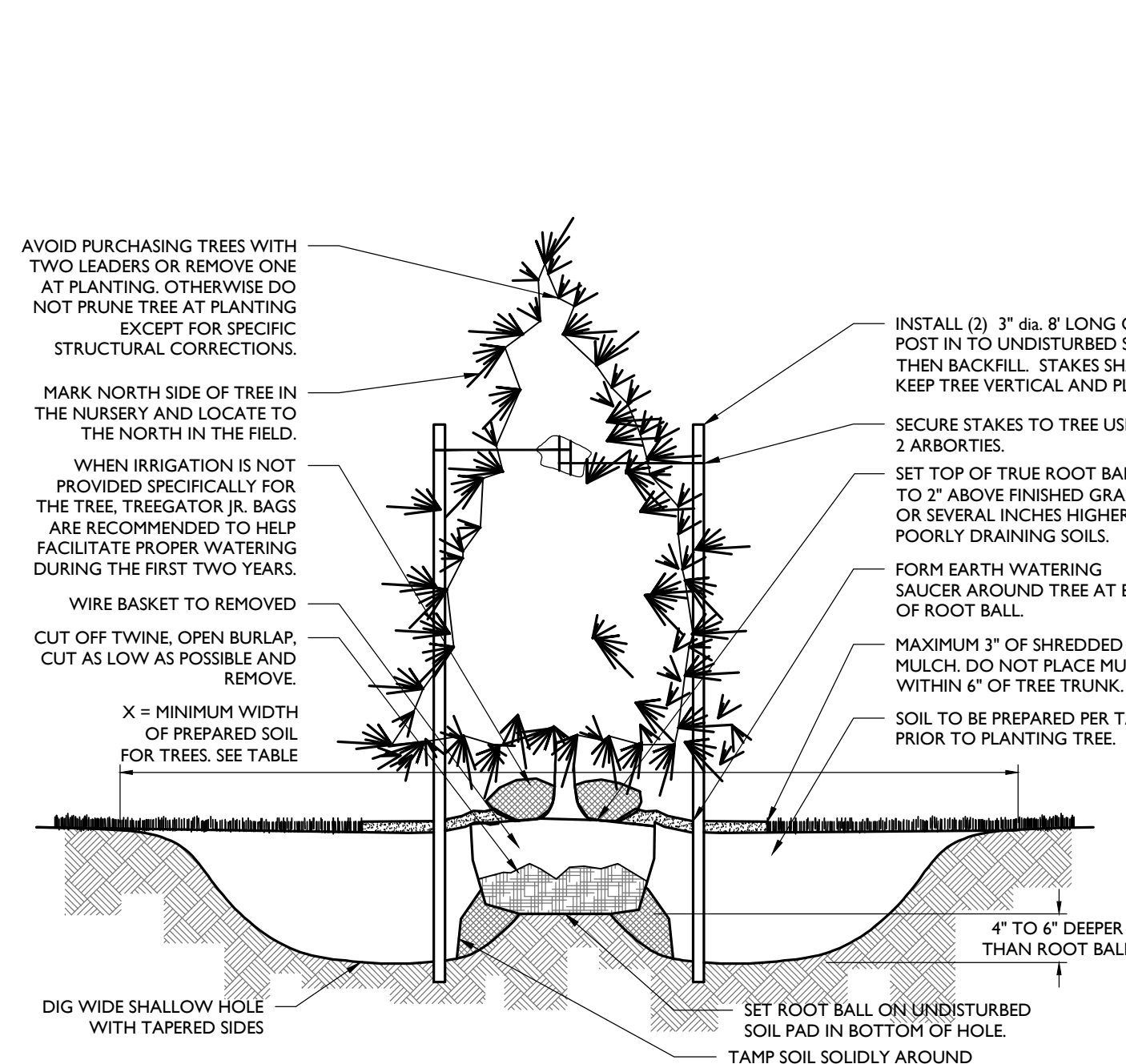


DECIDUOUS TREE PLANTING DETAIL

NOT TO SCALE

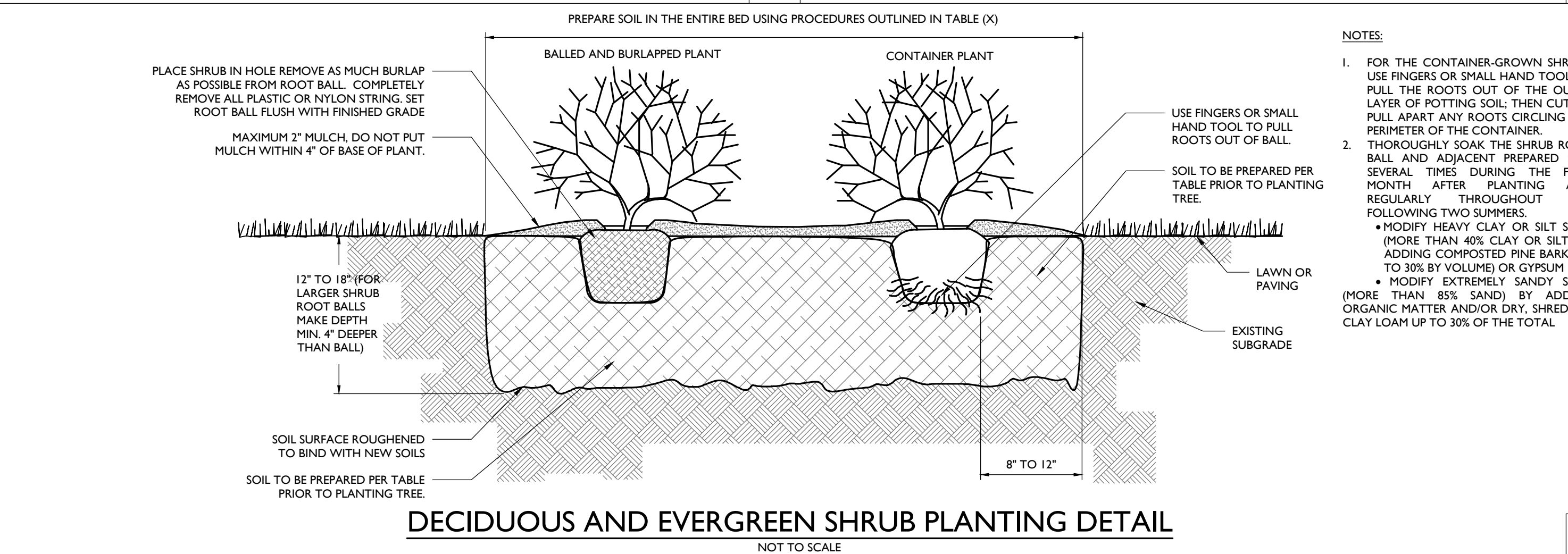
NOTES:

- 1. FOR CONTAINER-GROWN TREES, USE FINGERS OR SMALL HAND TOOLS TO PULL THE ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL...



CONIFEROUS TREE PLANTING DETAIL

NOT TO SCALE

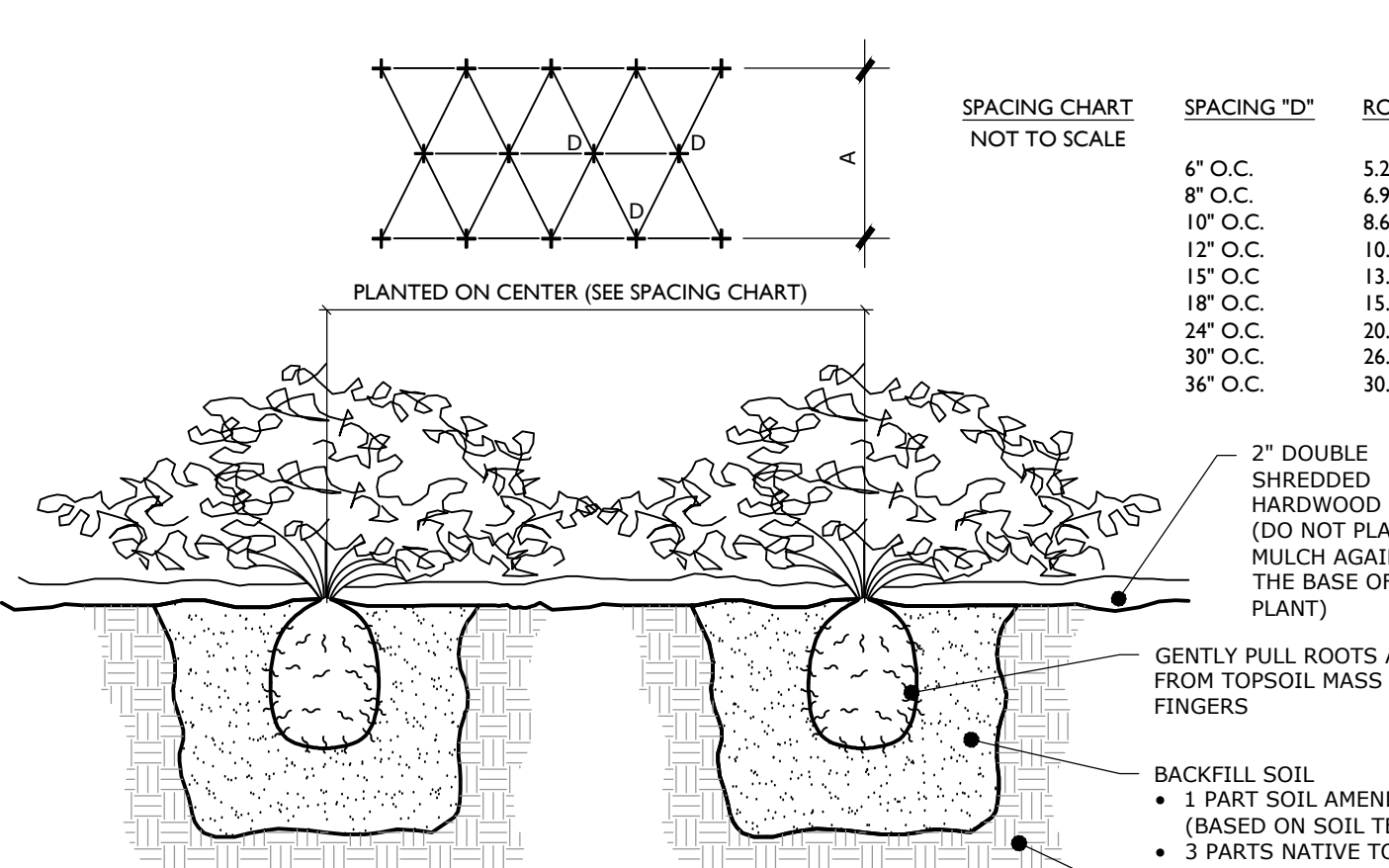


DECIDUOUS AND EVERGREEN SHRUB PLANTING DETAIL

NOT TO SCALE

NOTES:

- 1. THOROUGHLY SOAK THE GROUND COVER ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING...

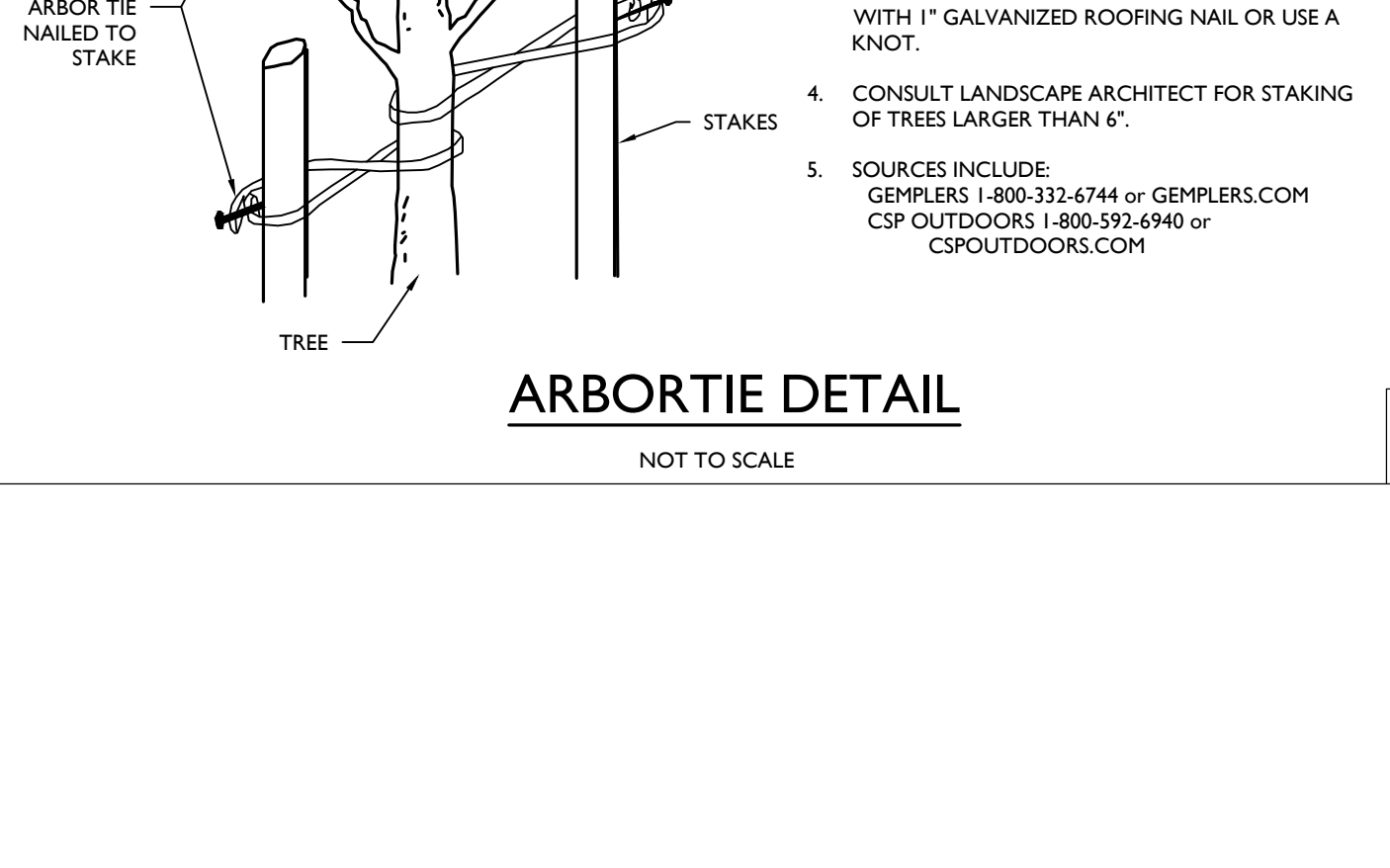


GROUND COVER/PERENNIAL/ANNUAL PLANTING DETAIL

NOT TO SCALE

NOTES:

- 1. THOROUGHLY SOAK THE GROUND COVER ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING...



ARBORTIE DETAIL

NOT TO SCALE

GENERAL LANDSCAPING NOTES:

- 1. THE LANDSCAPE CONTRACTOR SHALL FURNISH ALL MATERIALS AND PERFORM ALL WORK IN ACCORDANCE WITH THESE SPECIFICATIONS, APPROVED OR FINAL DRAWINGS, AND INSTRUCTIONS PROVIDED BY THE PROJECT LANDSCAPE DESIGNER...

PROTECTION OF EXISTING VEGETATION NOTES:

- 1. BEFORE COMMENCING WORK, ALL EXISTING VEGETATION WHICH COULD BE IMPACTED AS A RESULT OF THE PROPOSED CONSTRUCTION ACTIVITIES MUST BE PROTECTED FROM DAMAGE BY THE INSTALLATION OF TREE PROTECTION FENCING...

SOIL PREPARATION AND MULCH NOTES:

- 1. LANDSCAPE CONTRACTOR SHALL OBTAIN A SOIL TEST OF THE IN-SITU TOPSOIL BY A CERTIFIED SOIL LABORATORY PRIOR TO PLANTING...

MYCORRHOZAL FUNGI - A DRY GRANULAR MYCORRHIZAL FUNGI INOCULANT THAT IS MIXED IN THE BACKFILL WHEN PLANTING TREES AND SHRUBS...

HEALTHY START MACRO TABS 12-8-8 - FERTILIZER TABLETS ARE PLACED IN THE UPPER 4 INCHES OF BACKFILL SOIL WHEN PLANTING TREES AND SHRUBS...

IRRIGATION DURING ESTABLISHMENT table with columns for size at planting, irrigation for vitality, and irrigation for survival.

- 1. AT EACH IRRIGATION APPLY TWO TO THREE GALLONS PER INCH TRUNK CALIPER TO THE ROOT BALL SURFACE...

PLANT MATERIAL AND HANDLING NOTES:

- 1. ALL PLANT MATERIAL SHALL CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2004) OR LATEST REVISION AS PUBLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION...

- 17. IF A PROPOSED PLANT IS UNOBTAINABLE OR ON THE FINAL DIGGING HAZARD LIST, AN EQUIVALENT SPECIES OF THE SAME SIZE MAY BE REQUESTED FOR SUBSTITUTION OF THE ORIGINAL PLANT...

PLANT MATERIAL GUARANTEE NOTES:

- 1. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR (1 YR) FROM APPROVAL OF LANDSCAPE INSTALLATION...

LAWN (SEED OR SOD) NOTES:

- 1. SEED MIXTURE SHALL BE FRESH, CLEAN, NEW CROP SEED. SOD SHALL BE STRONGLY ROOTED, UNIFORM IN THICKNESS, AND FREE OF WEEDS, DISEASE, AND PESTS...

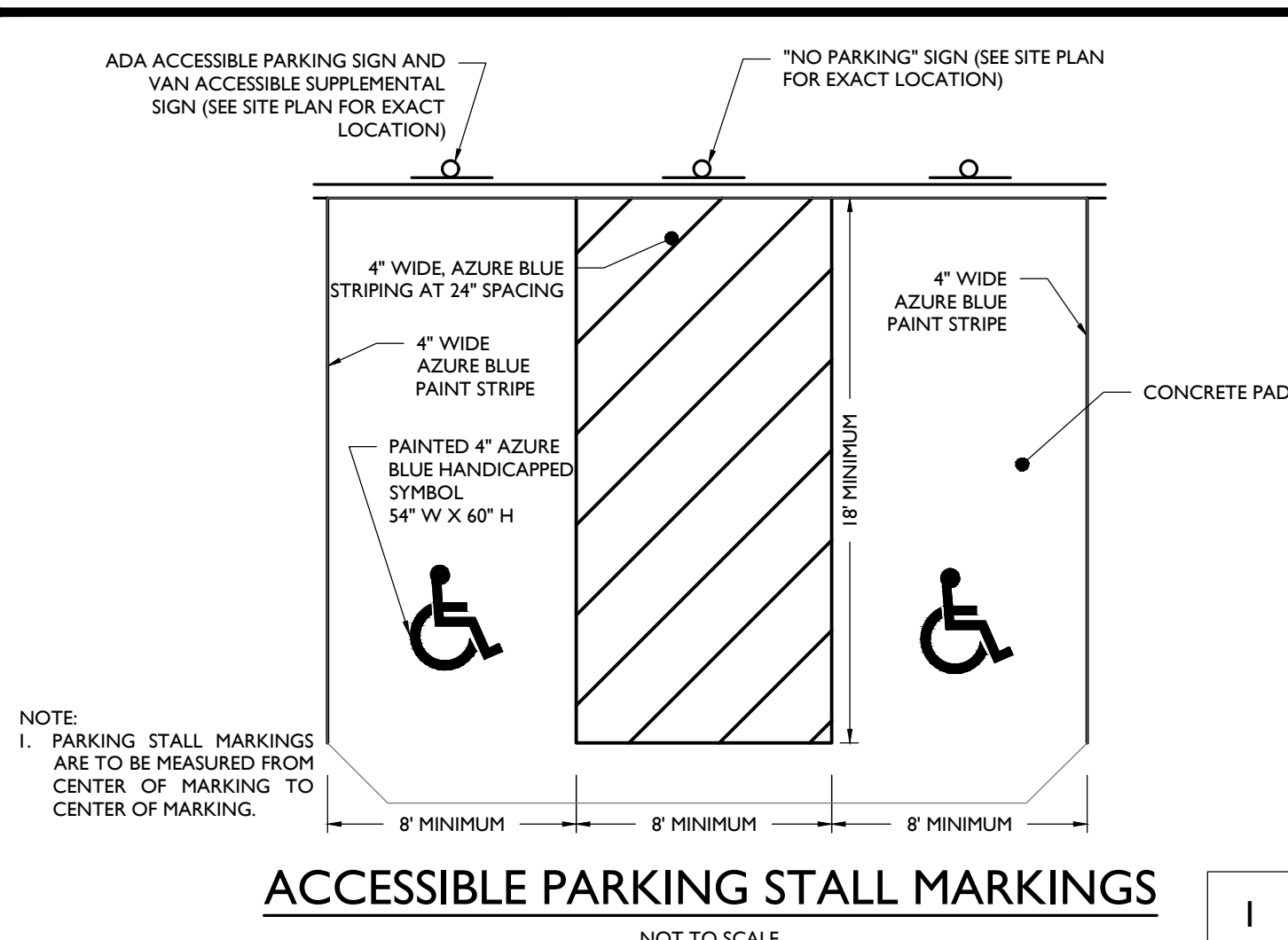
Revision table with columns for issue, date, and description.

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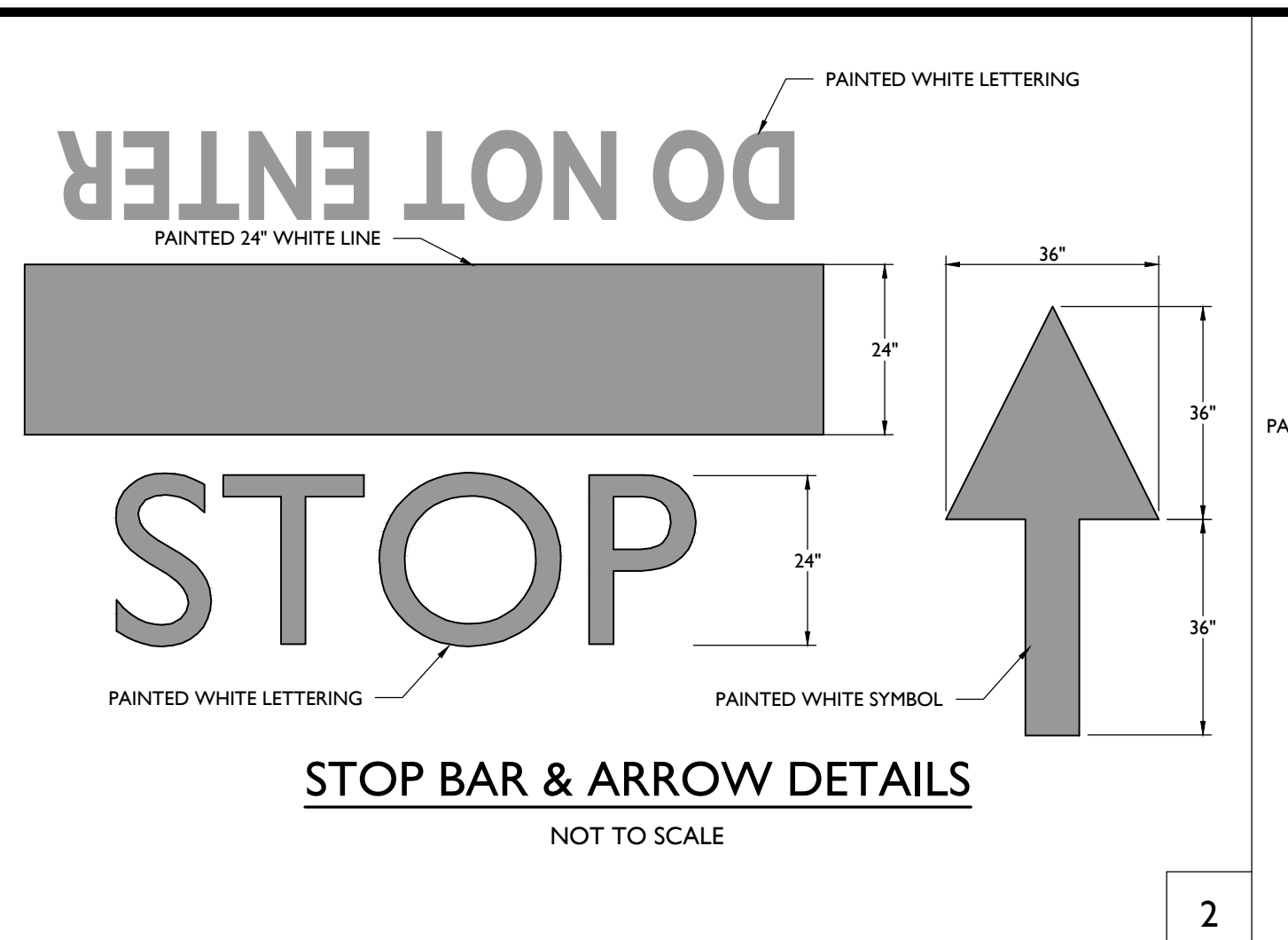
STONEFIELD engineering & design logo and contact information for Rutherford, NJ, New York, NY, Boston, MA, Princeton, NJ, Tampa, FL, and Detroit, MI.

ALRIG USA DEVELOPMENTS PROPOSED MULTI-TENANT DEVELOPMENT logo and project information for 216 & 212 CHARLTON ROAD, WORCESTER COUNTY, MASSACHUSETTS.

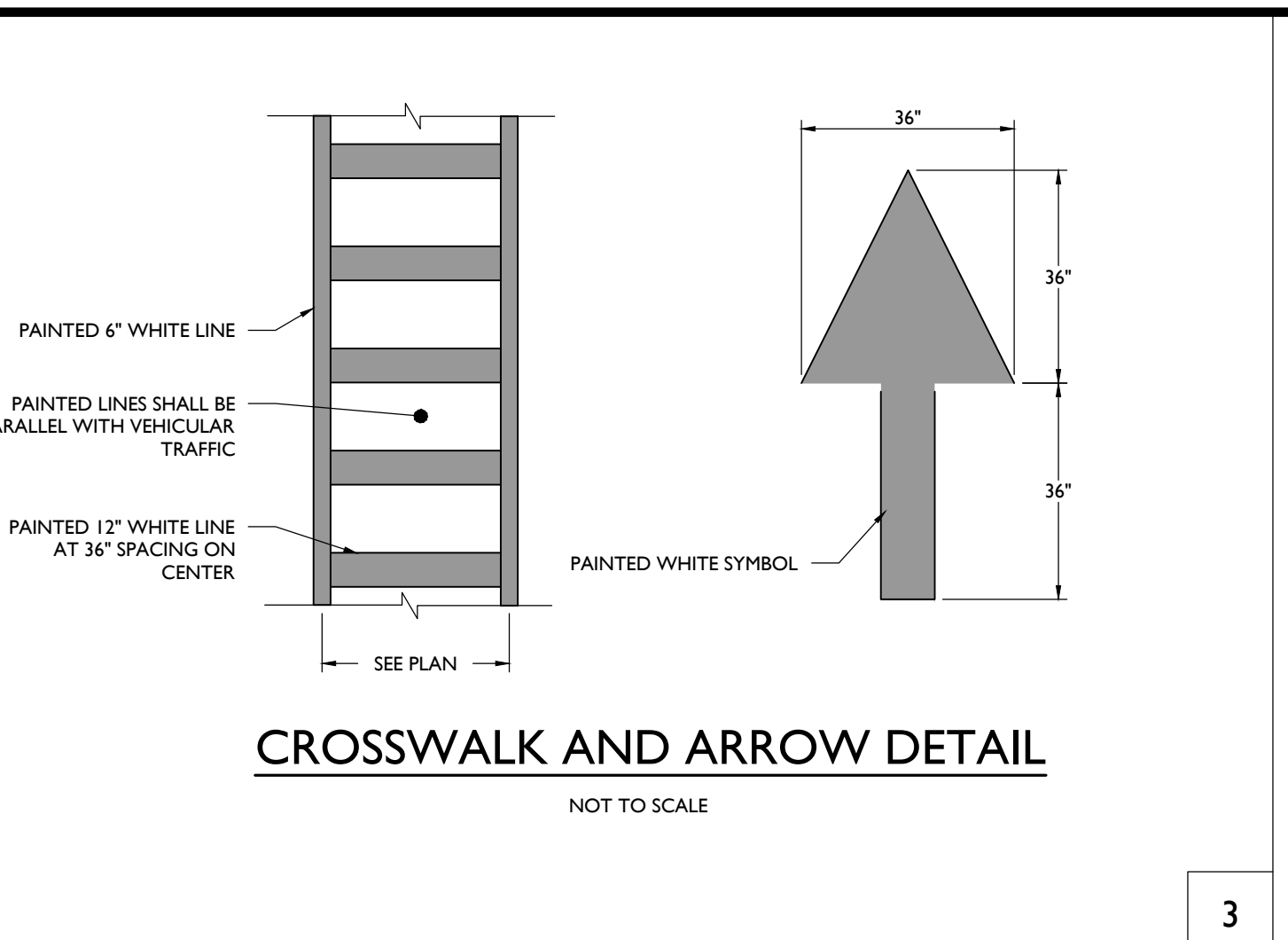
STONEFIELD engineering & design logo and project details including scale, title, and drawing number C-11.



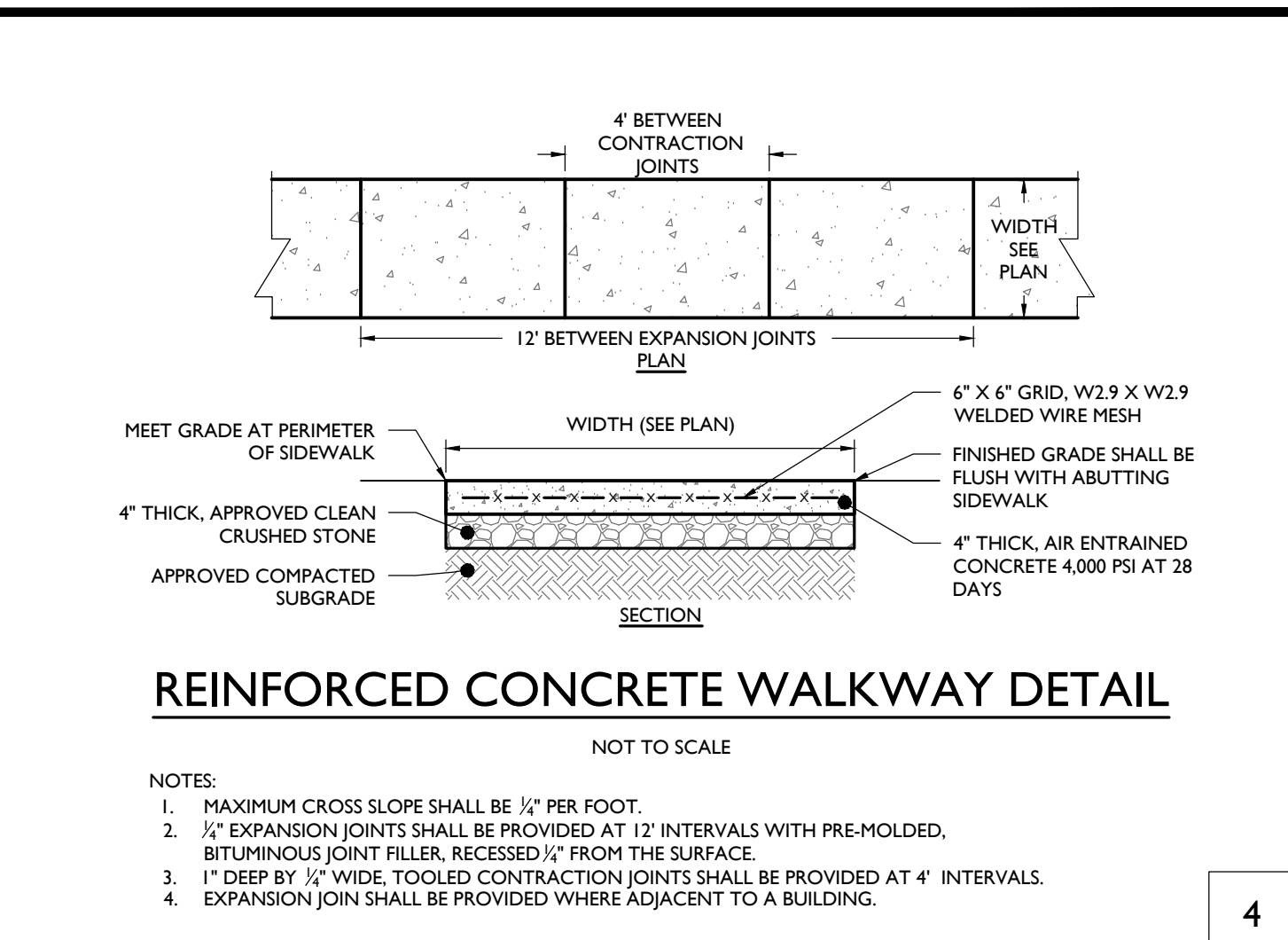
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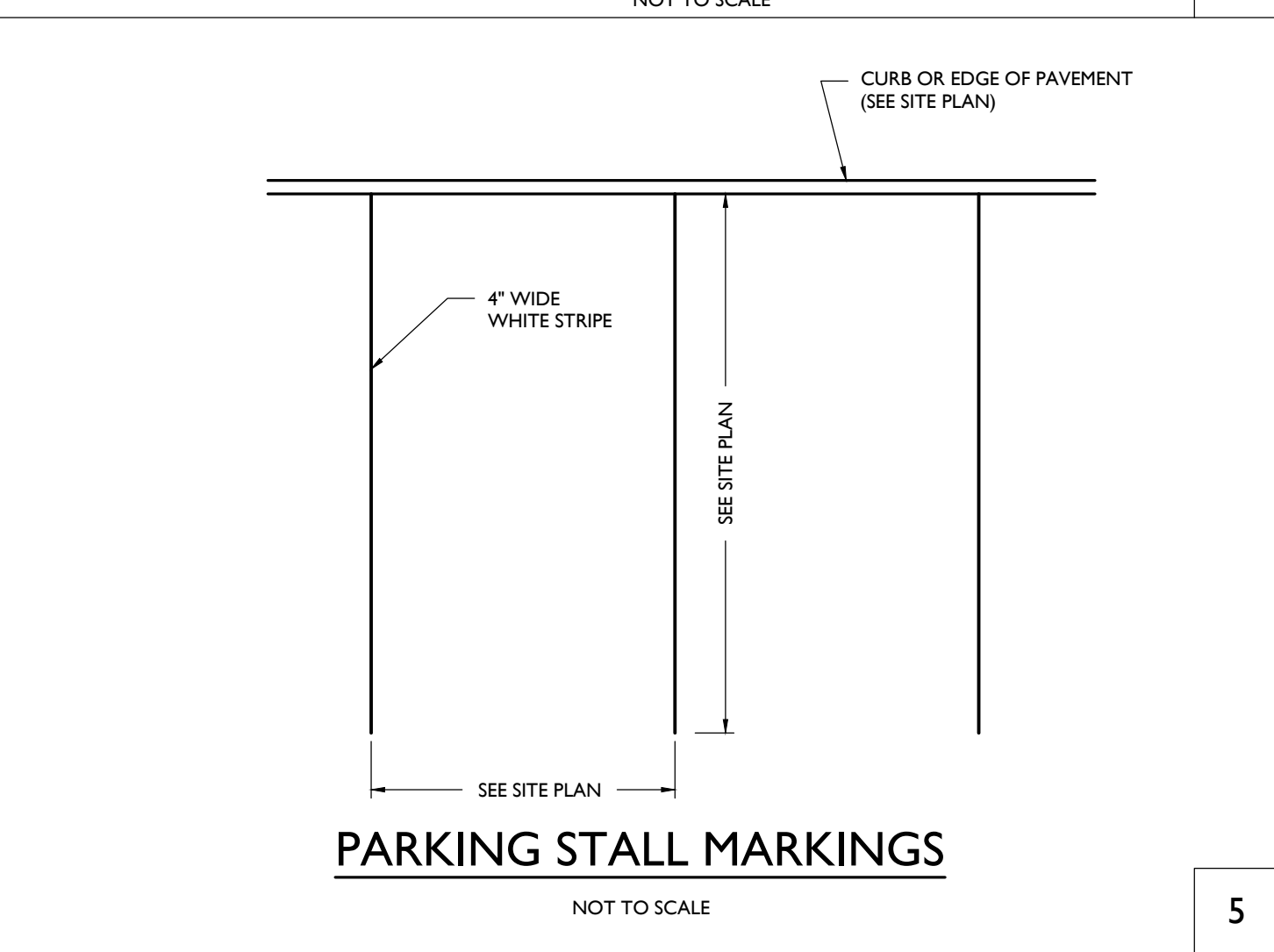
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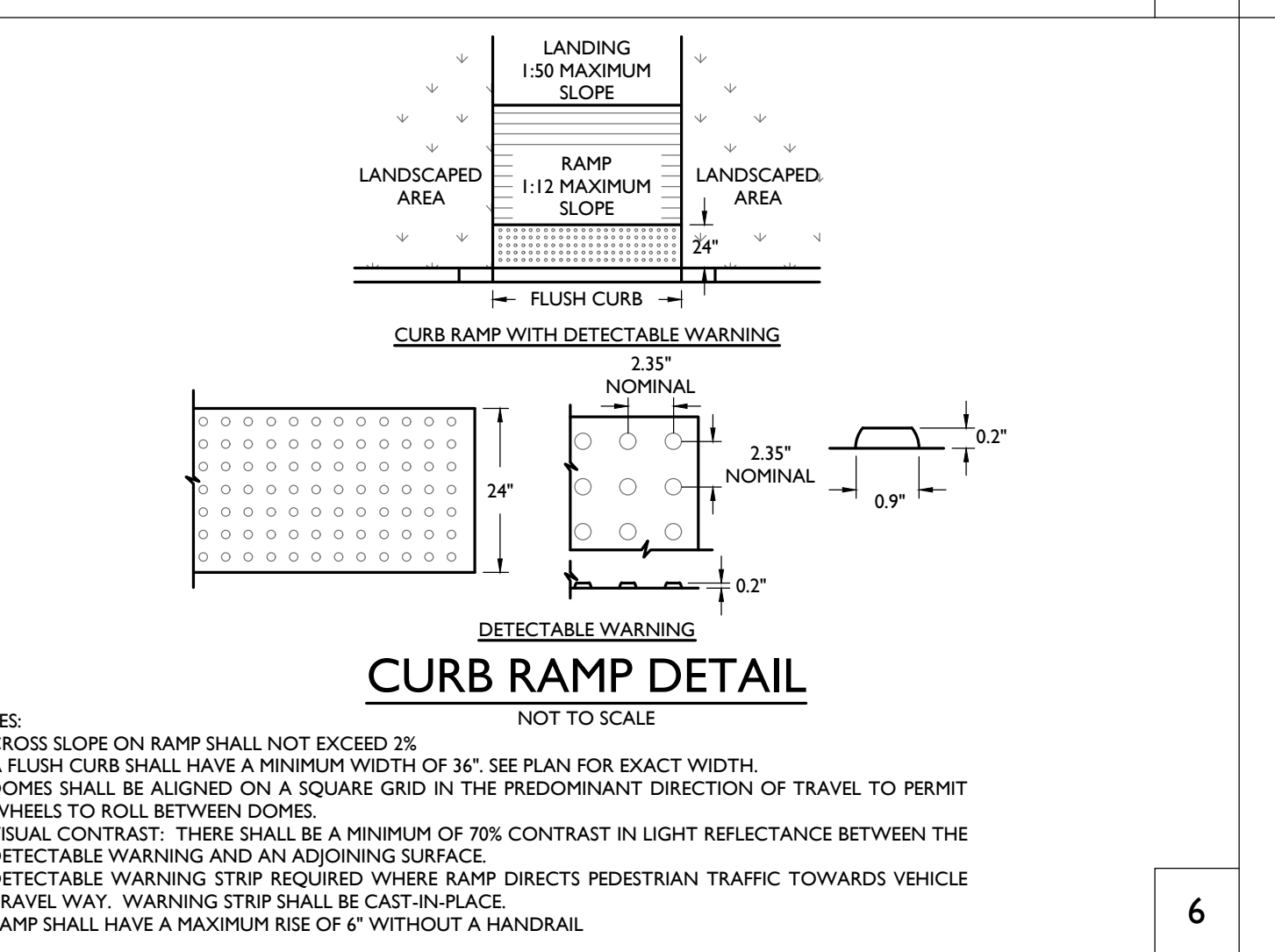
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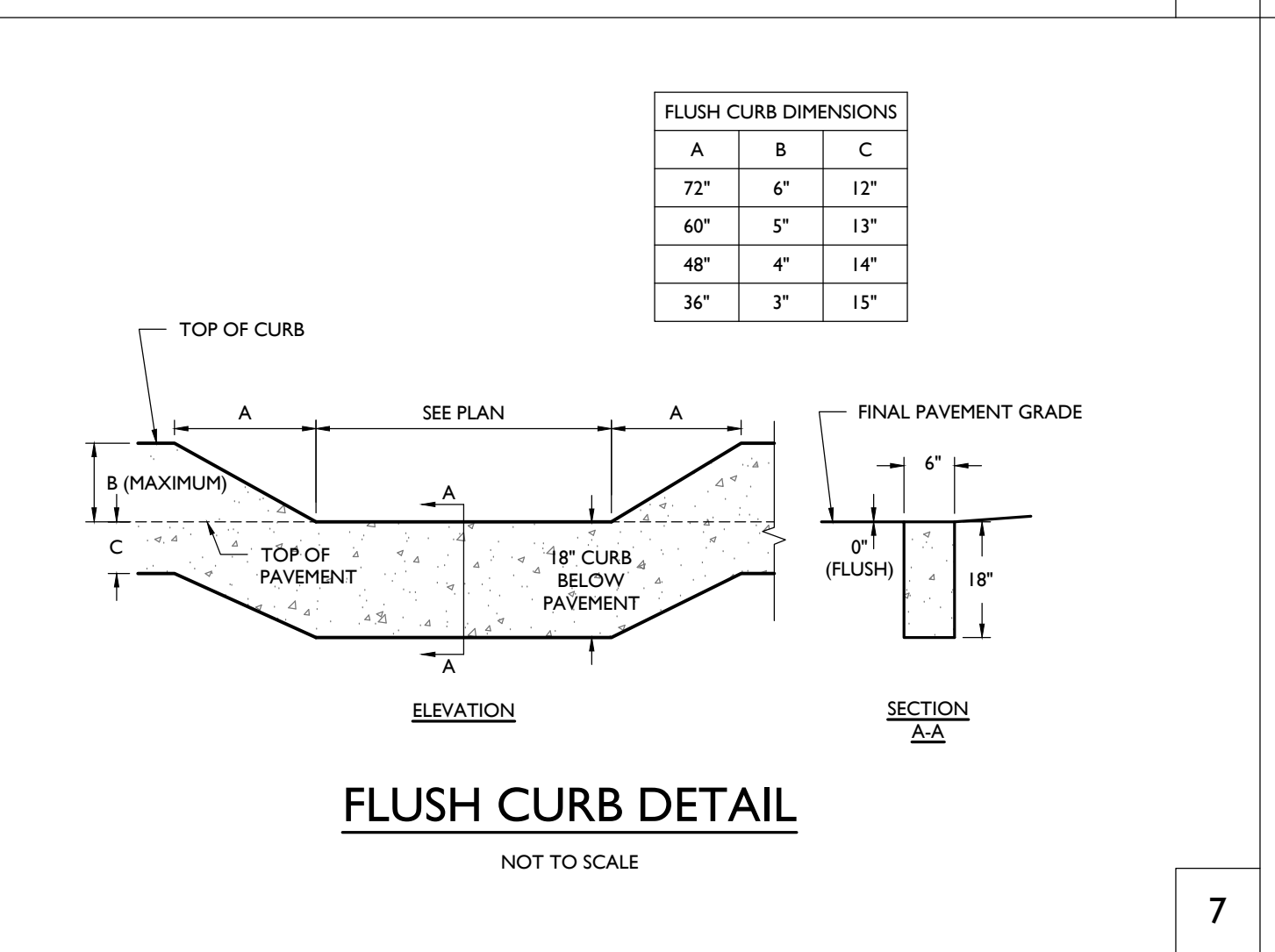
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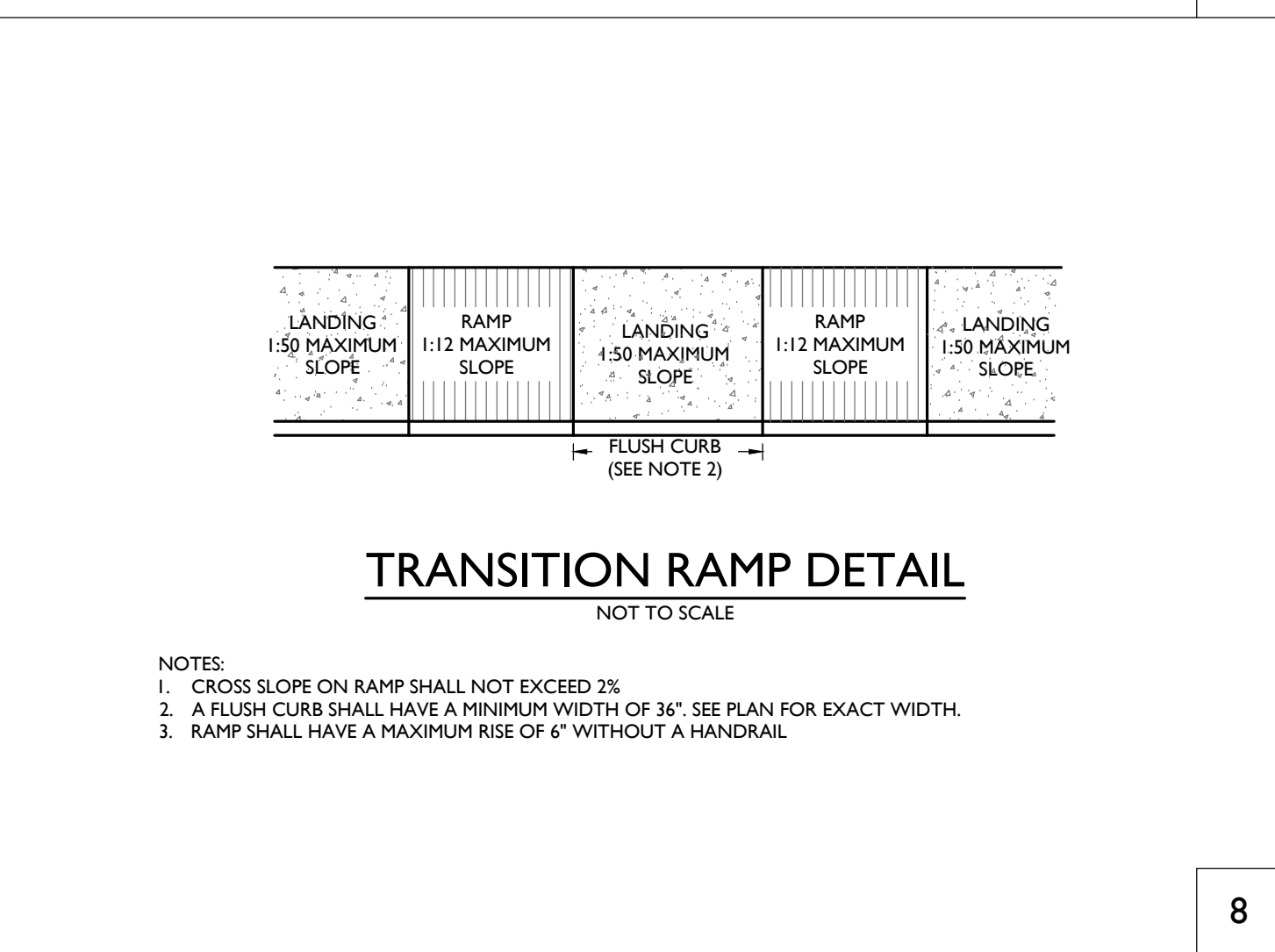
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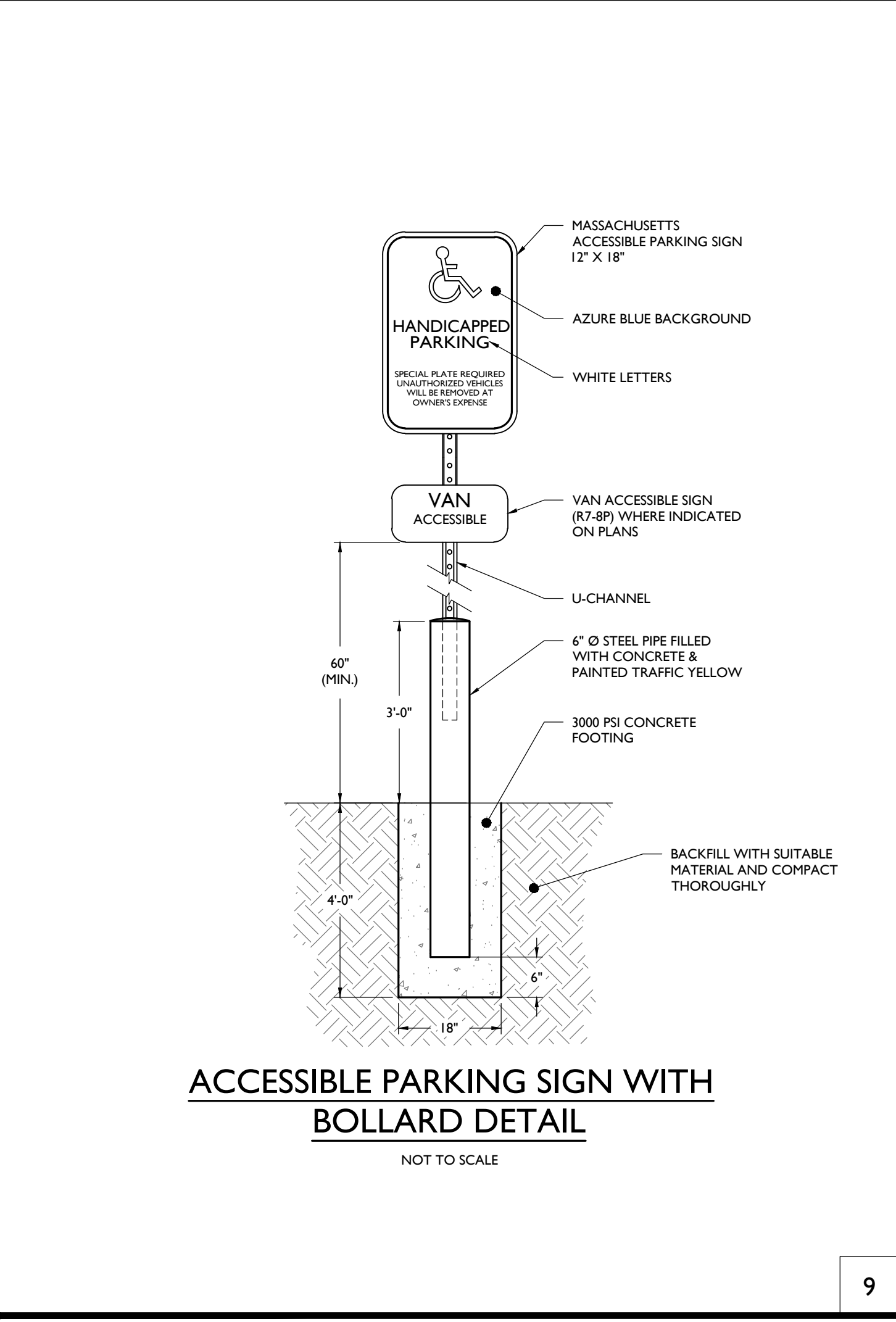
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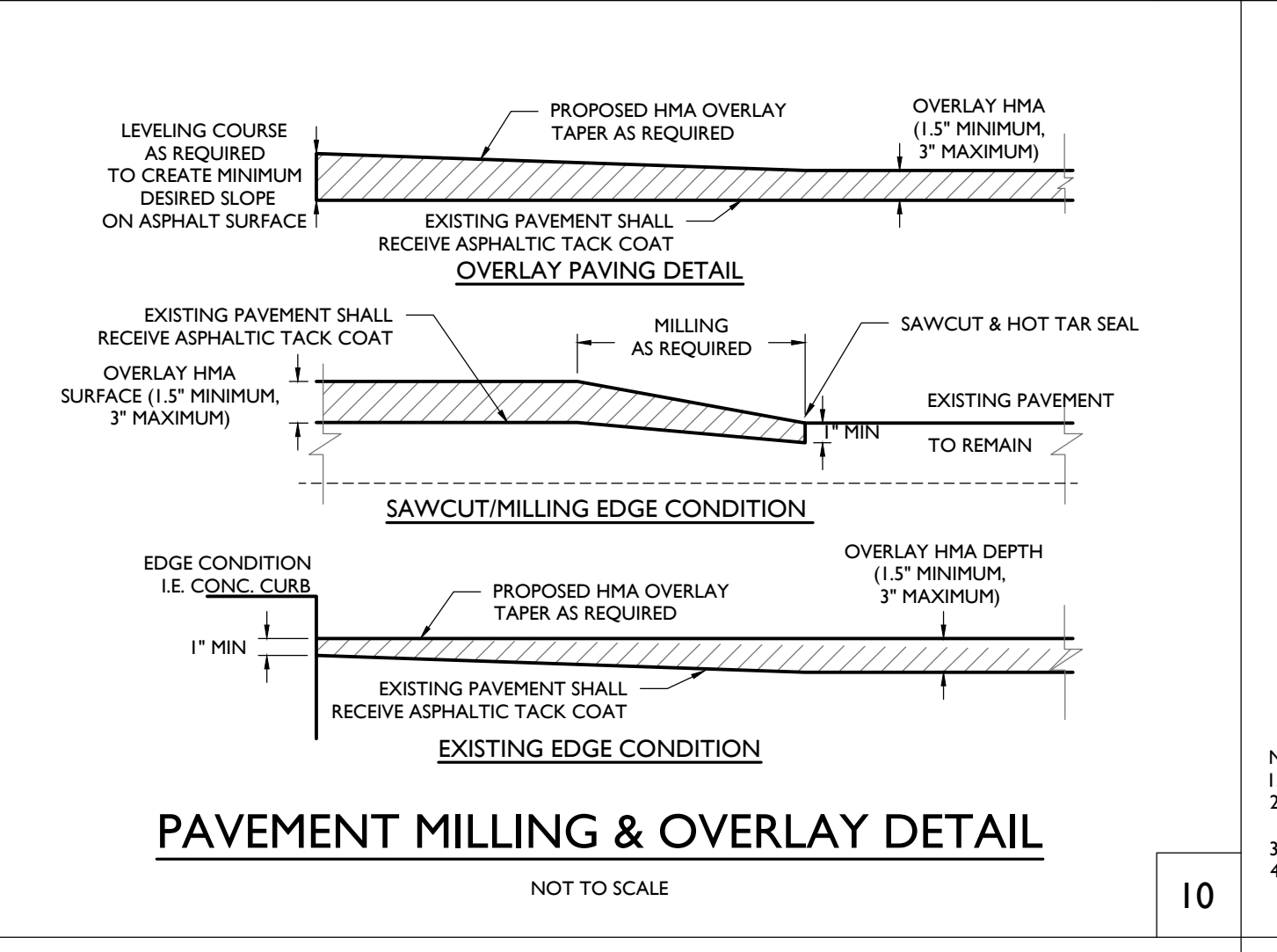
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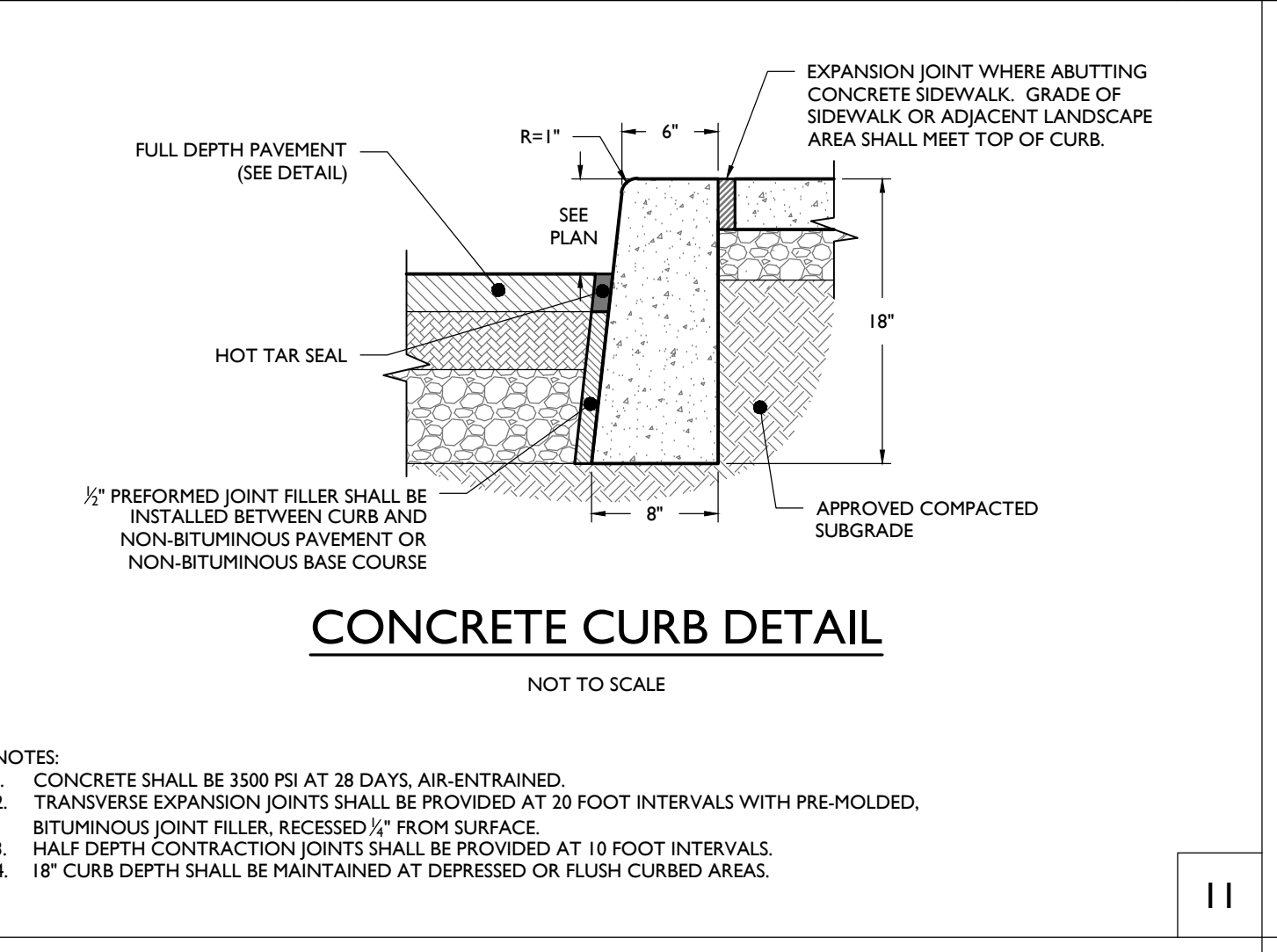
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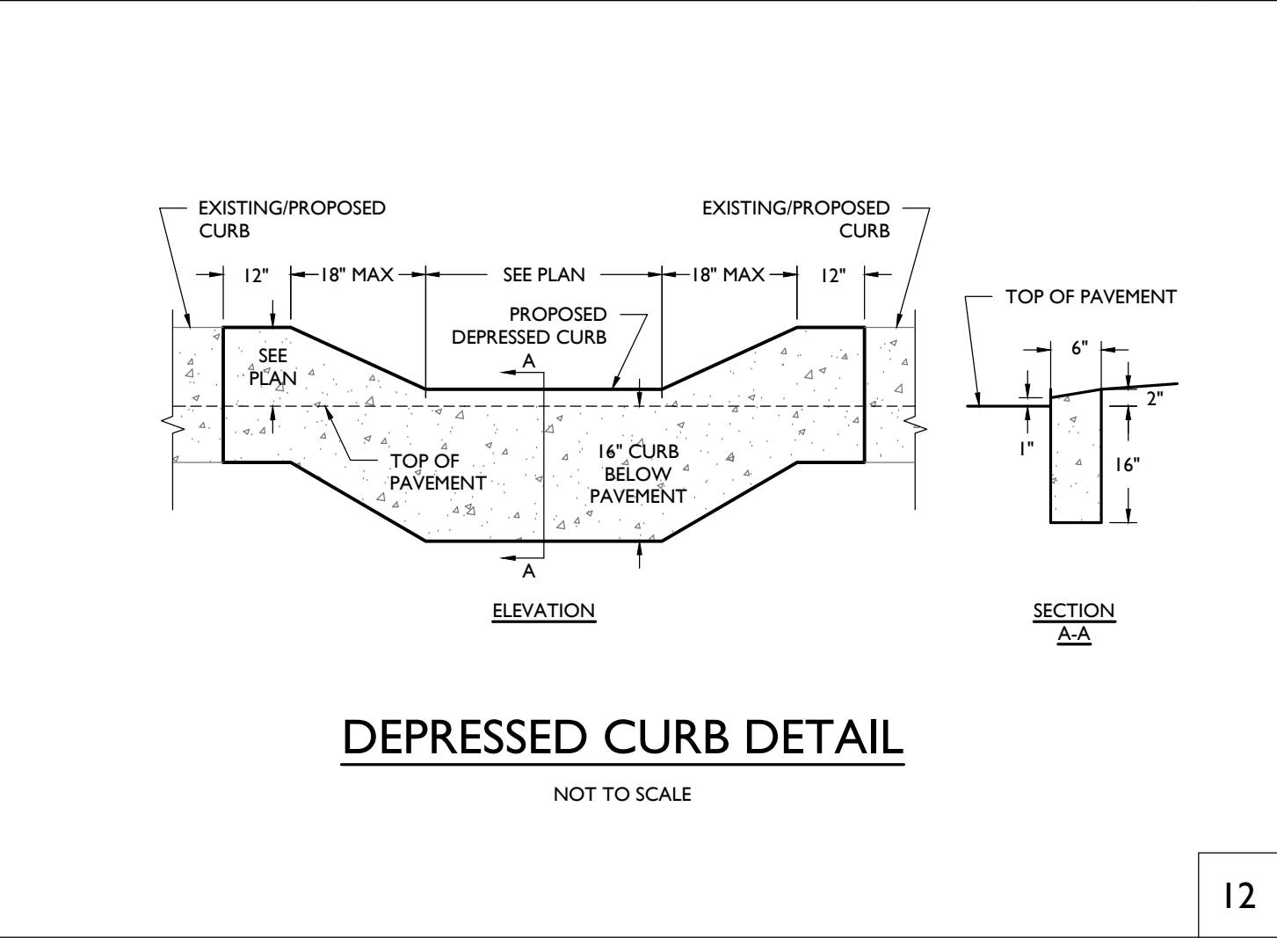
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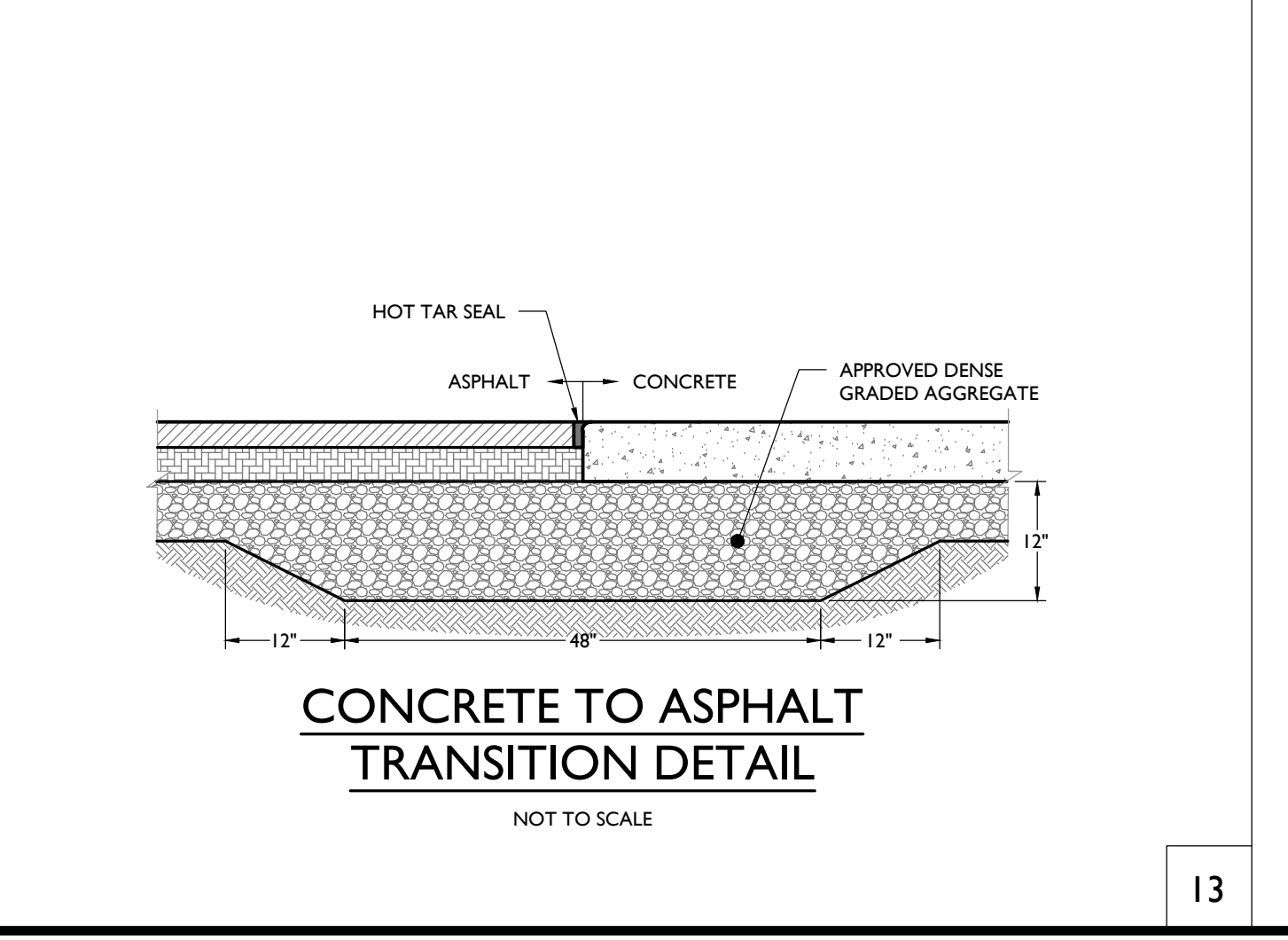
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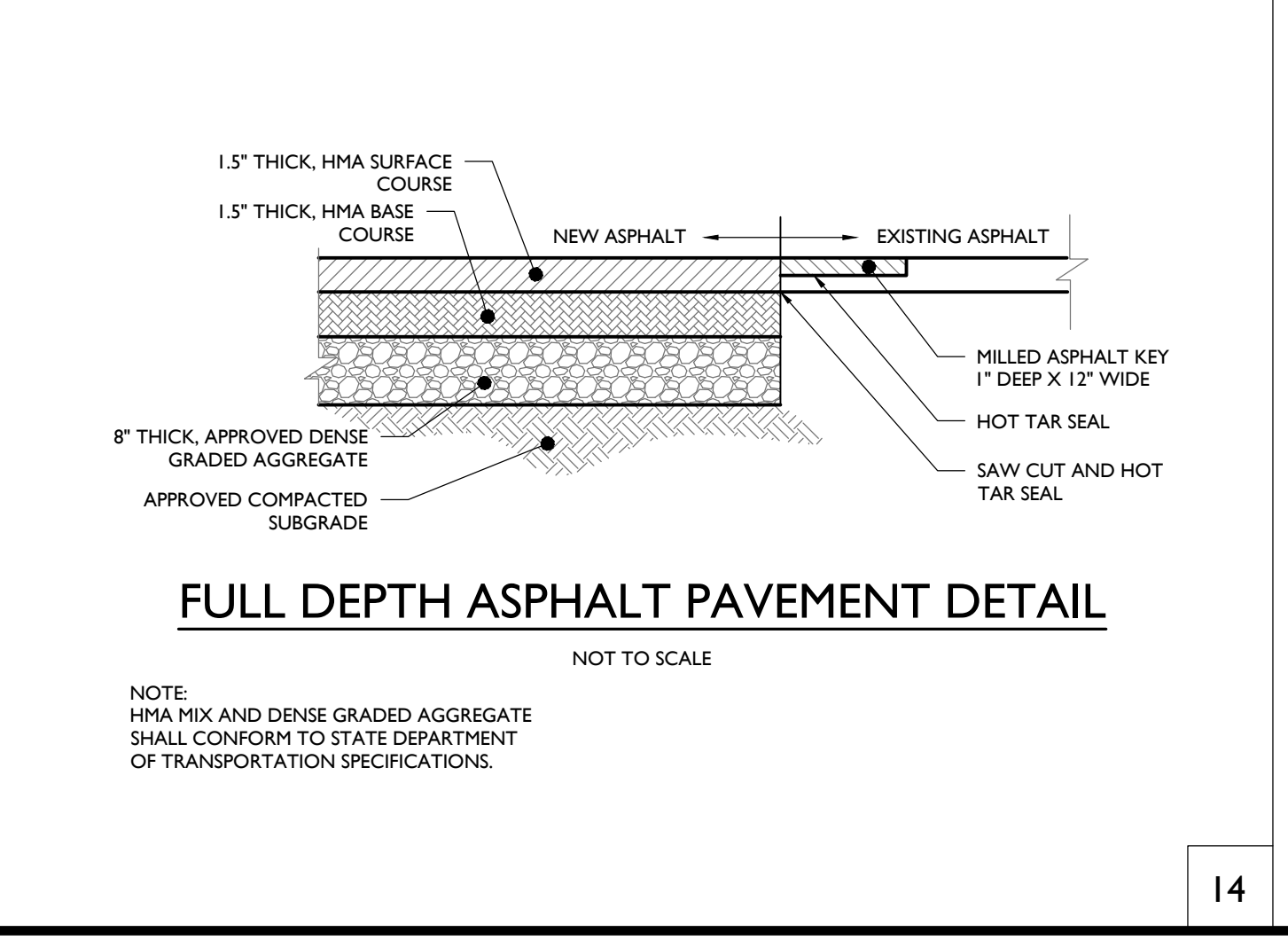
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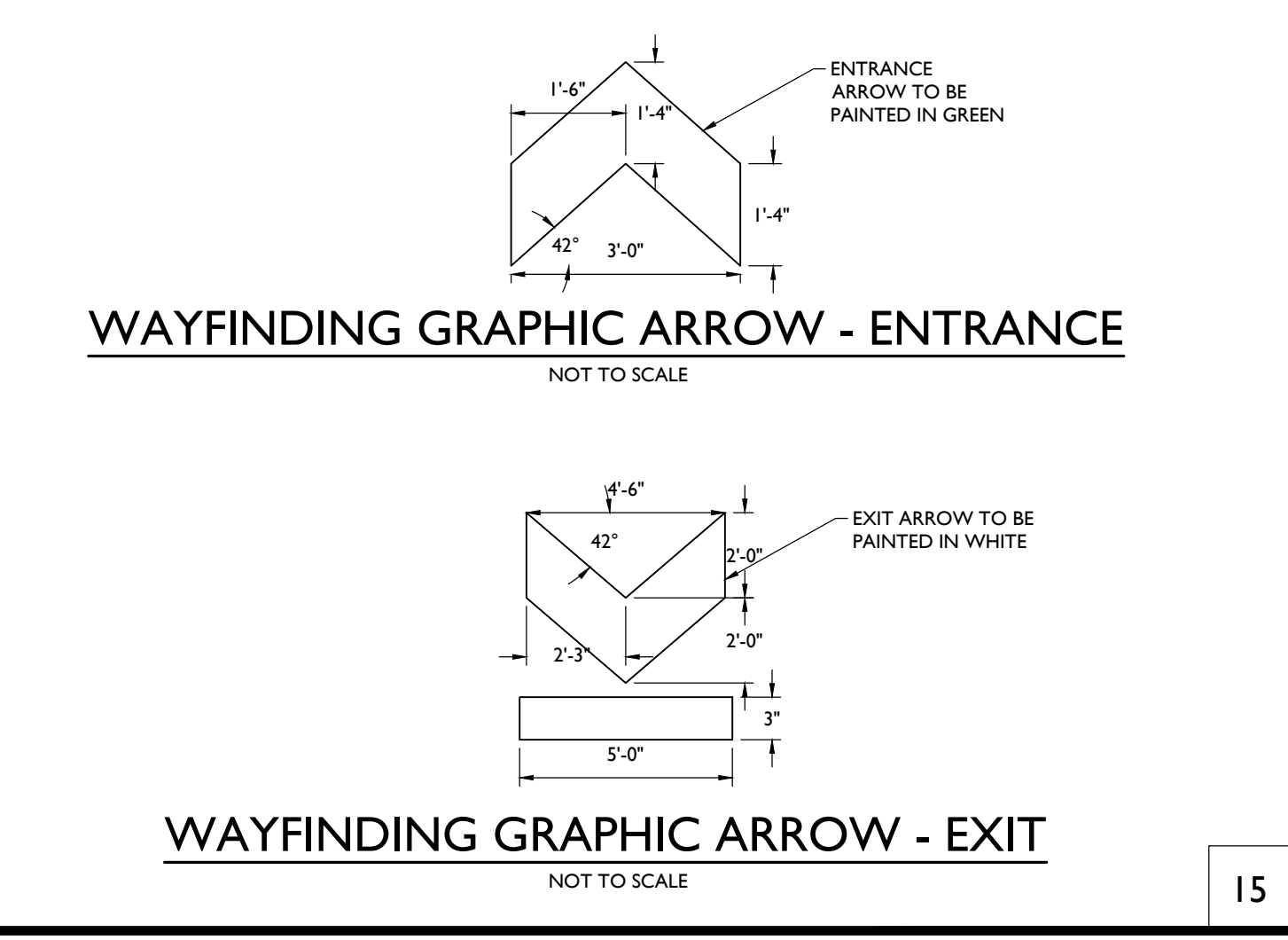
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13



14



15

NO.	DATE	ISSUE	BY	DESCRIPTION
5	05/16/2023	KO		FOR MUNICIPAL SUBMISSION
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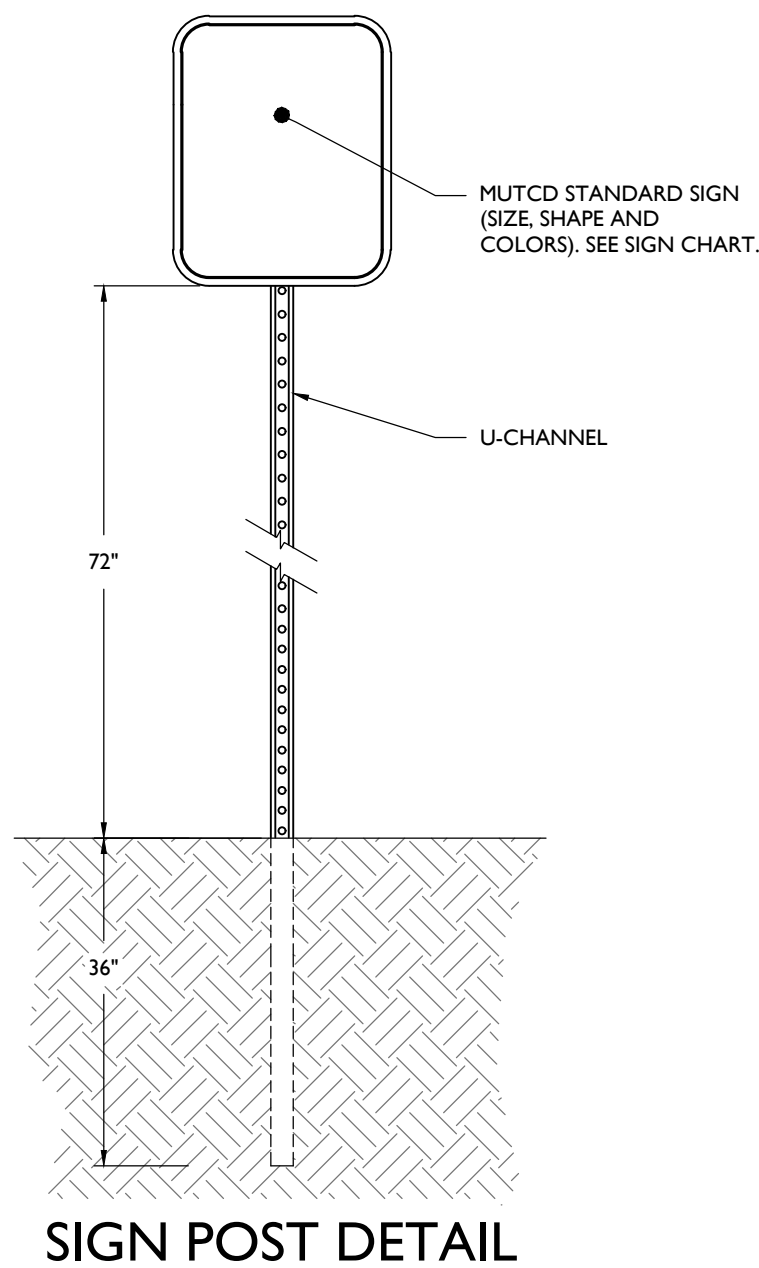
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212, 216 & 226 CHARLTON ROAD
TOWN OF STURBRIDGE
WORCESTER COUNTY, MASSACHUSETTS

JAKE MODESTOW, P.E.
MASSACHUSETTS LICENSE NO. 55253
LICENSED PROFESSIONAL ENGINEER

STONEFIELD
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SCALE: 1" = 30' PROJECT ID: BOS-210035
TITLE: CONSTRUCTION DETAILS
DRAWING: C-12

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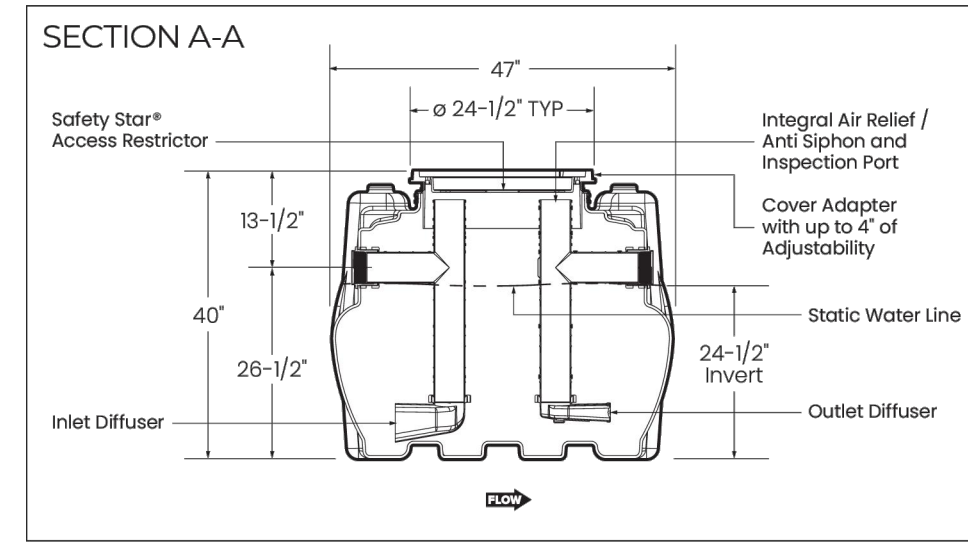
NOT TO SCALE

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

SIGN DATA TABLE

NOT TO SCALE

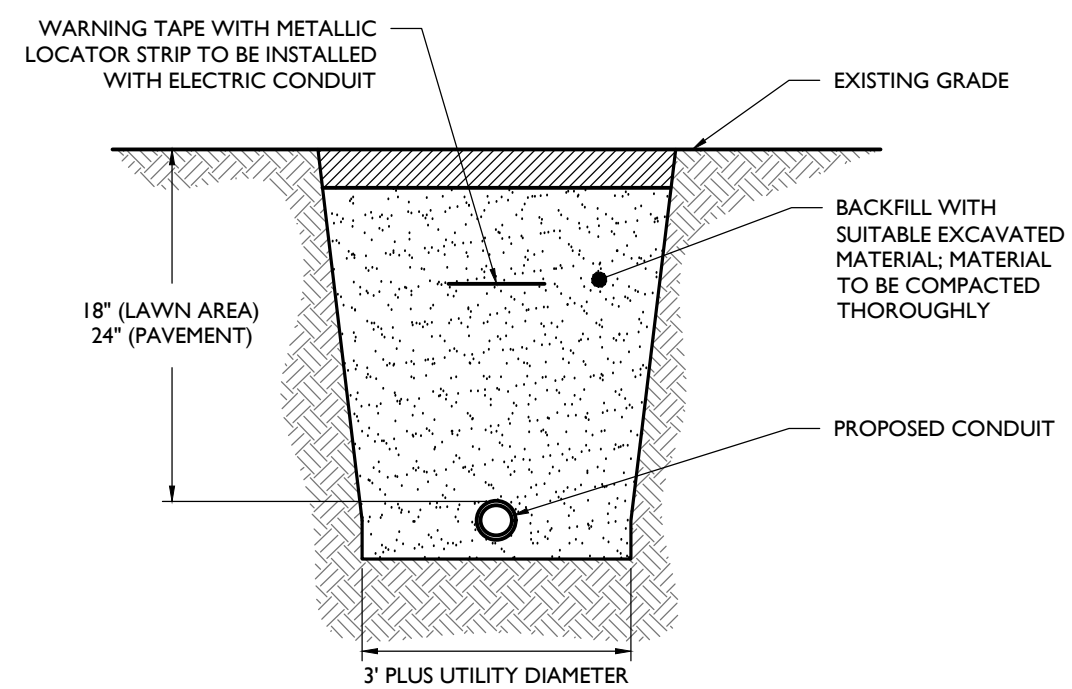
NOTE:
1. ALL SIGNS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), EXCEPT AS NOTED.
2. ALL SIGNS SHALL BE MOUNTED AS TO NOT OBSTRUCT THE SHAPE OF "STOP" (R1-1) AND "YIELD" (R1-2) SIGNS.



GREASE TRAP

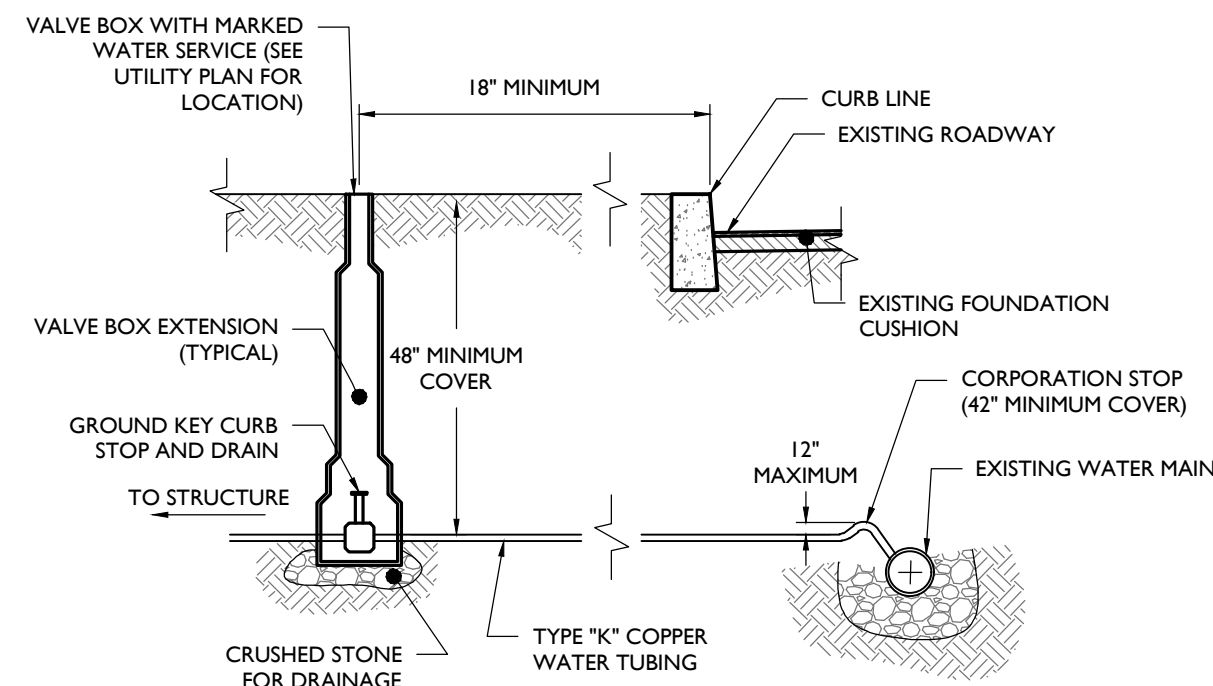
NOT TO SCALE

NOTE:
1. CONTRACTOR TO PROVIDE SUBMITTAL FOR THE GREASE TRAP OR APPROVED EQUIVALENT



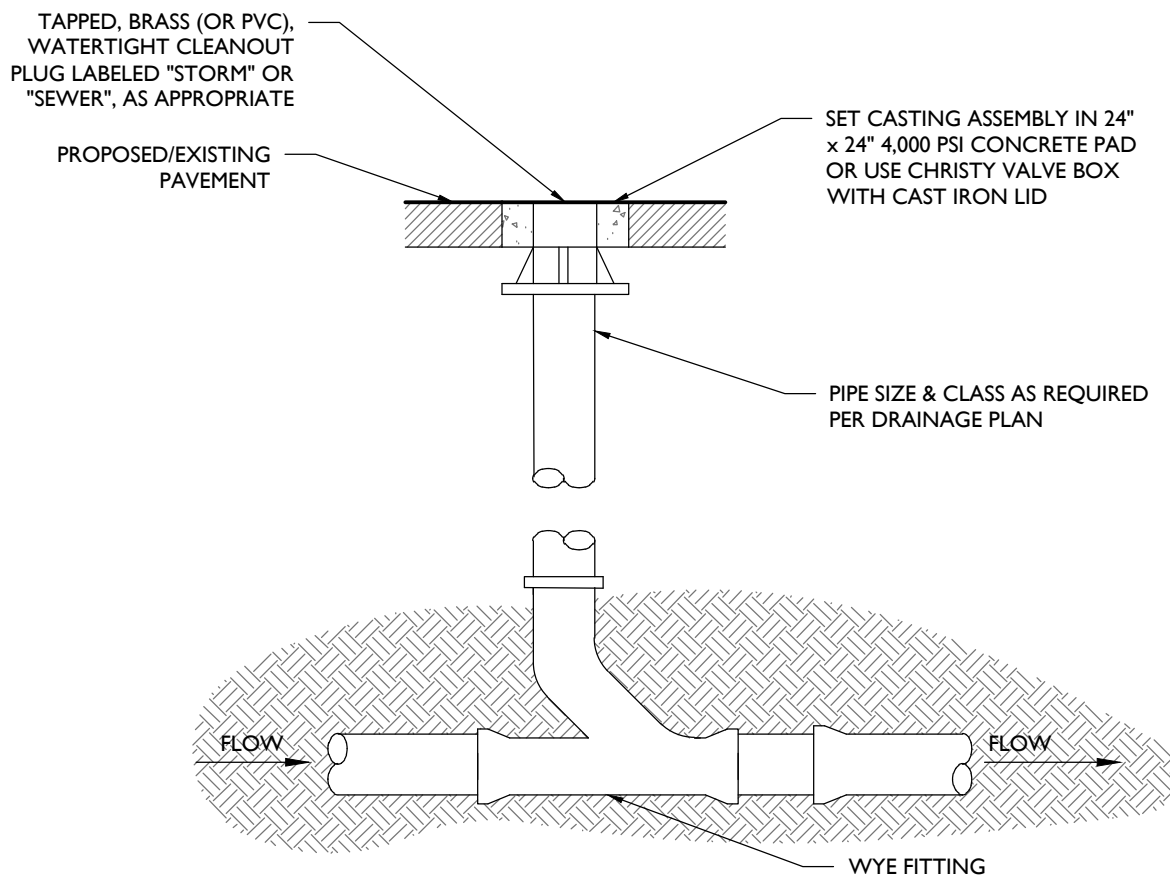
ELECTRICAL CONDUIT TRENCH DETAIL

5



WATER CONNECTION DETAIL

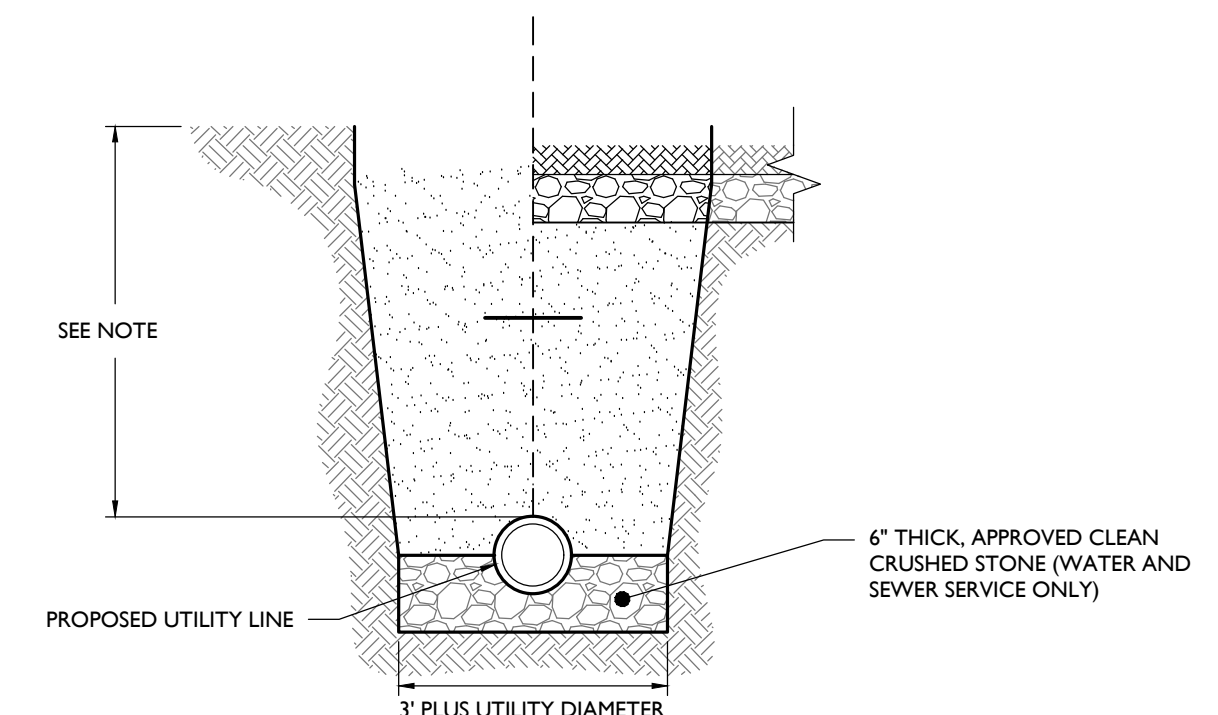
NOT TO SCALE



HARDSCAPE CLEAN-OUT

NOT TO SCALE

3

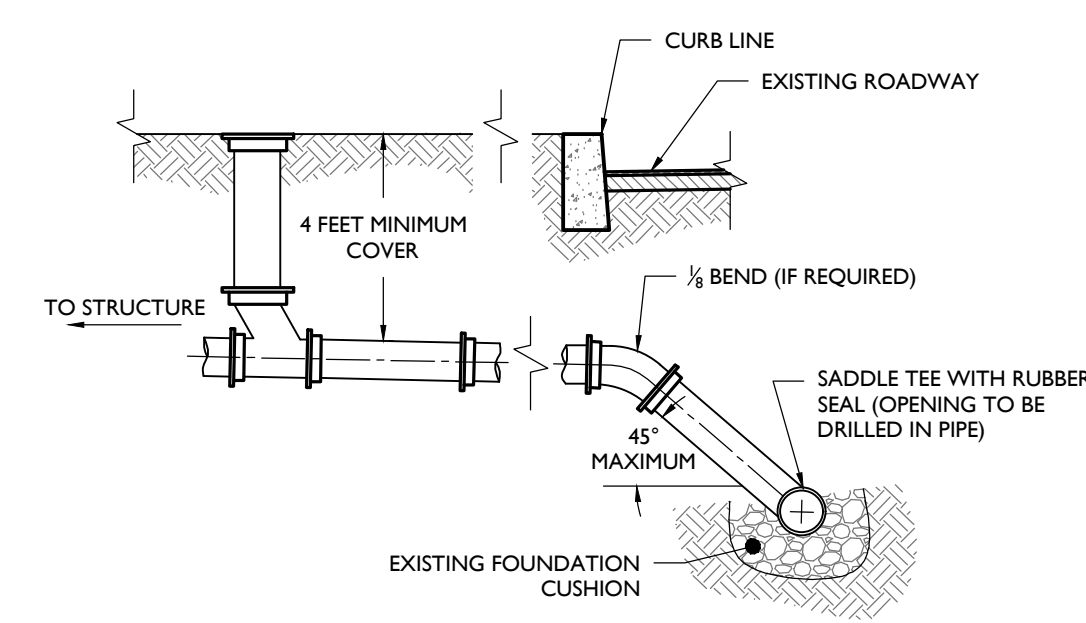


UTILITY TRENCH DETAIL

NOT TO SCALE

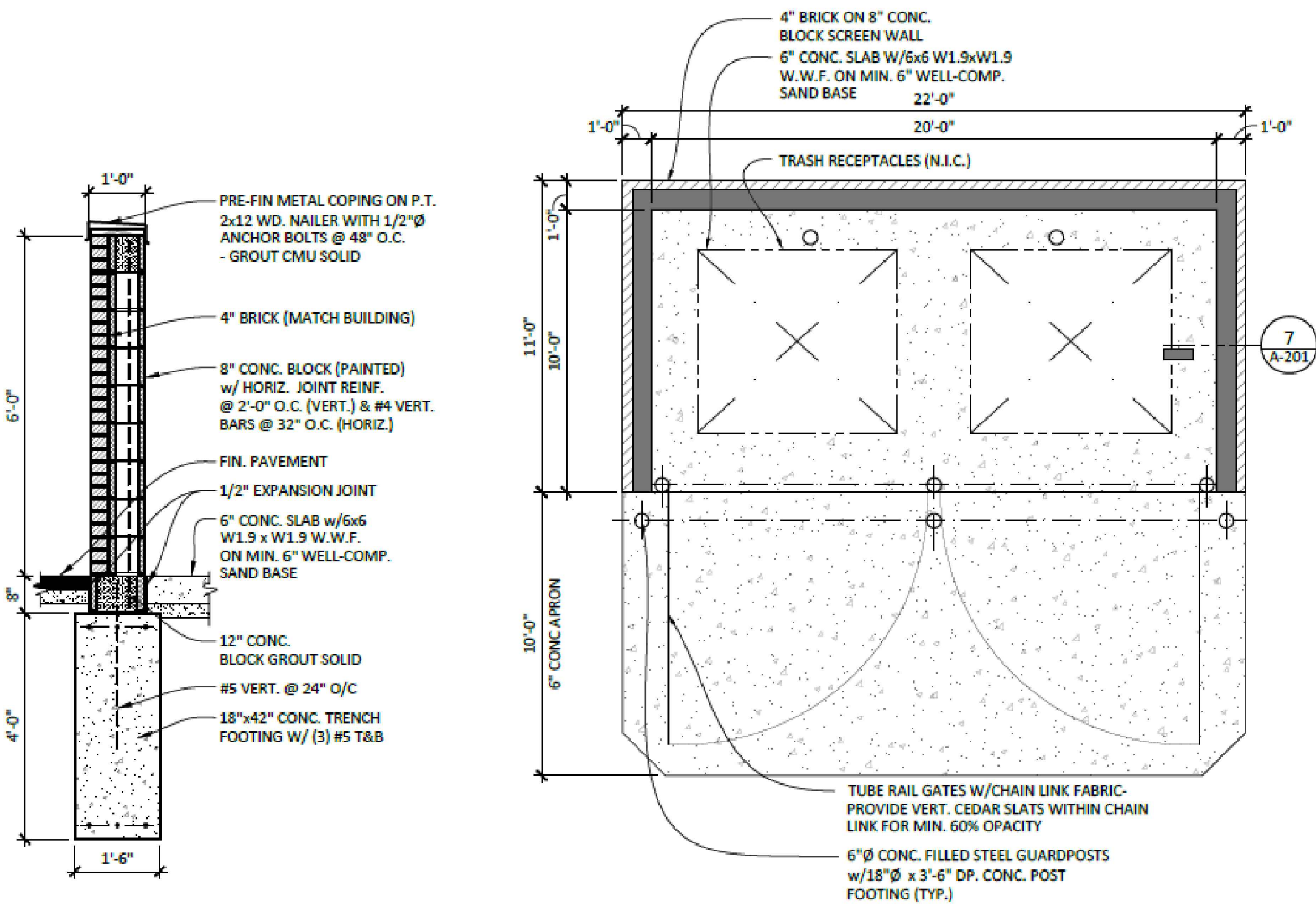
NOTE:
MINIMUM PIPE COVER SHALL BE AS FOLLOWS:
• ELECTRIC SERVICE - PER APPLICABLE UTILITY AUTHORITY
• GAS SERVICE - PER APPLICABLE UTILITY AUTHORITY
• SEWER SERVICE - 36" MINIMUM
• WATER SERVICE - 48" MINIMUM

4



SEWER CONNECTION DETAIL

7



TRASH ENCLOSURE SECTION

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

7

TRASH ENCLOSURE PLAN

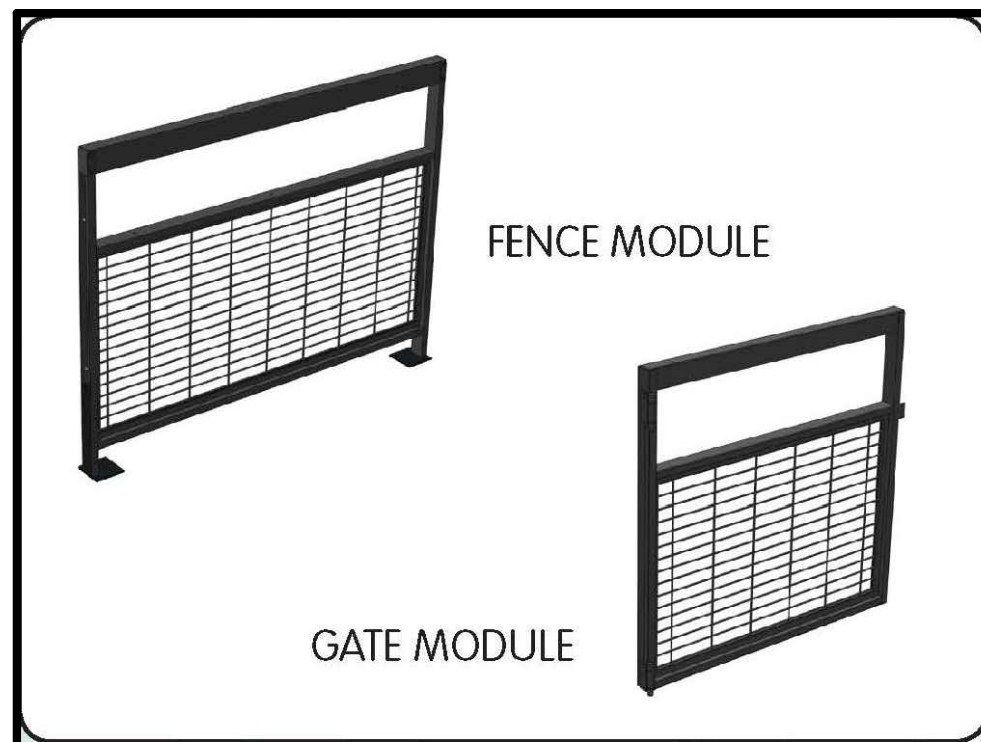
SCALE: 1/4" = 1'-0"

5

TRASH / RECYCLE ENCLOSURE DETAIL

NOT TO SCALE

8



Specs:

Materials:
• Aluminum Frame
• Steel Mesh and Feet

Finish:
• Powder Coated Starbucks Black, #RAL 7021

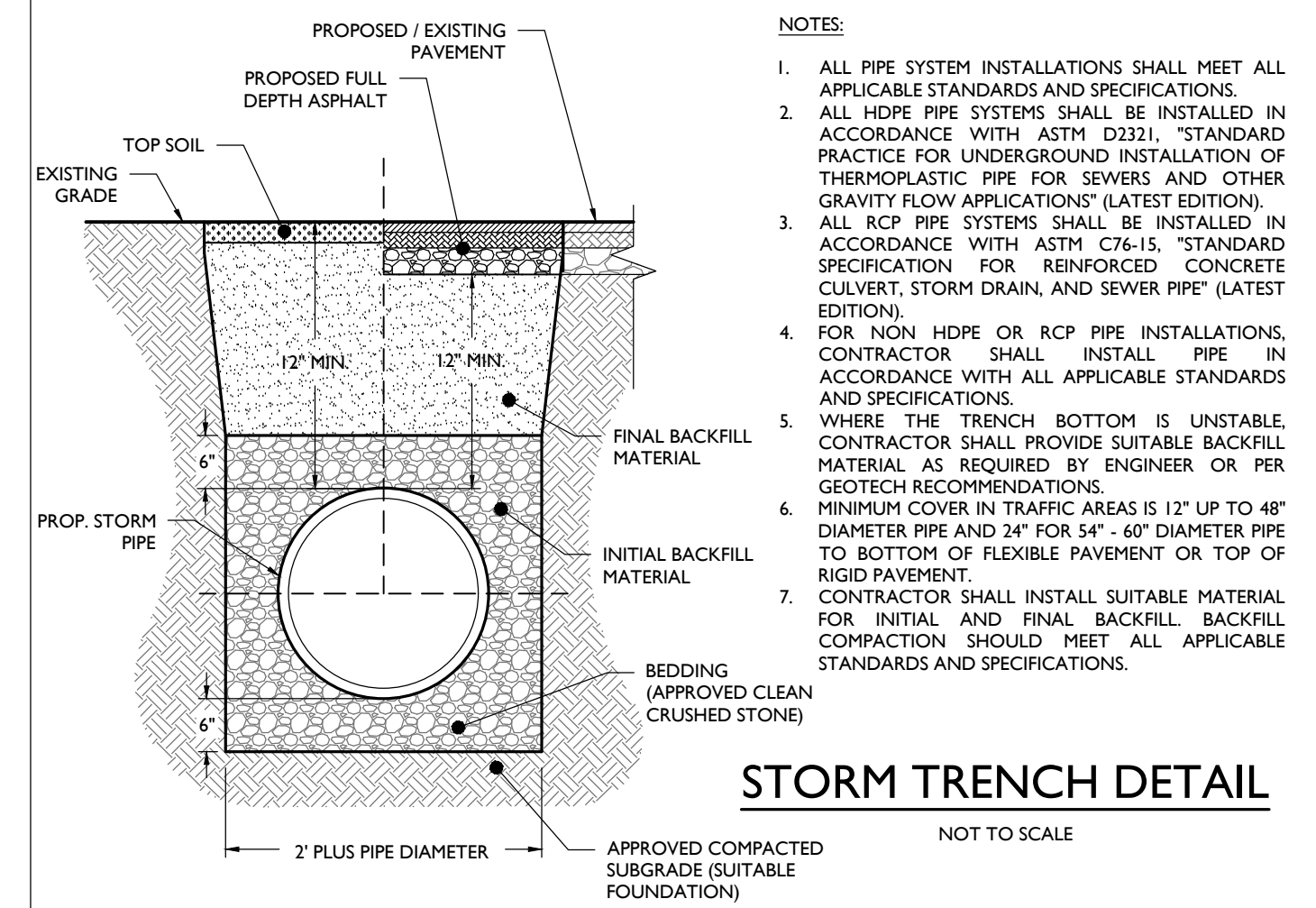
Size:
• Fence, 42" high x 54" wide x 2" thick
• 3" gap between modules
• 4" wide plate at foot
• Gate, 38-1/4" high x 38" wide x 2" thick.

Weight:
• 33 lbs per module

PATIO FENCE DETAIL

NOT TO SCALE

9



STORM TRENCH DETAIL

NOT TO SCALE

NOTES:
1. ALL PIPE SYSTEM INSTALLATIONS SHALL MEET ALL APPLICABLE STANDARDS AND SPECIFICATIONS.
2. 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).
3. ALL RCP PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE STANDARDS AND SPECIFICATIONS.
4. FOR NON HDPE OR RCP PIPE INSTALLATIONS, CONTRACTOR SHALL INSTALL PIPE IN ACCORDANCE WITH ALL APPLICABLE STANDARDS AND SPECIFICATIONS.
5. WHERE THE TRENCH BOTTOM IS UNSTABLE, CONTRACTOR SHALL PROVIDE SUITABLE BACKFILL MATERIAL AS REQUIRED BY ENGINEER OR PER GEOTECH RECOMMENDATIONS.
6. 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.
7. CONTRACTOR SHALL INSTALL SUITABLE MATERIAL FOR INITIAL AND FINAL BACKFILL. BACKFILL COMPACTION SHOULD MEET ALL APPLICABLE STANDARDS AND SPECIFICATIONS.

10

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SITE PLANS

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DEVELOPMENTS
PROPOSED MULTI-TENANT
DEVELOPMENT

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MAP: 208 LOTS: 236, 216, & 212
212, 216 & 226 CHARLTON ROAD
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SCALE: 1" = 30' PROJECT ID: BOS-210035

TITLE:

CONSTRUCTION
DETAILS

DRAWING:

C-13

Z:\PROJECTS\2025\BOS210035\ALRIG - 312-314-346 CHARLTON ROAD, STURBRIDGE, MA\CADD\FIG 01\FIG 01-1.DWG

