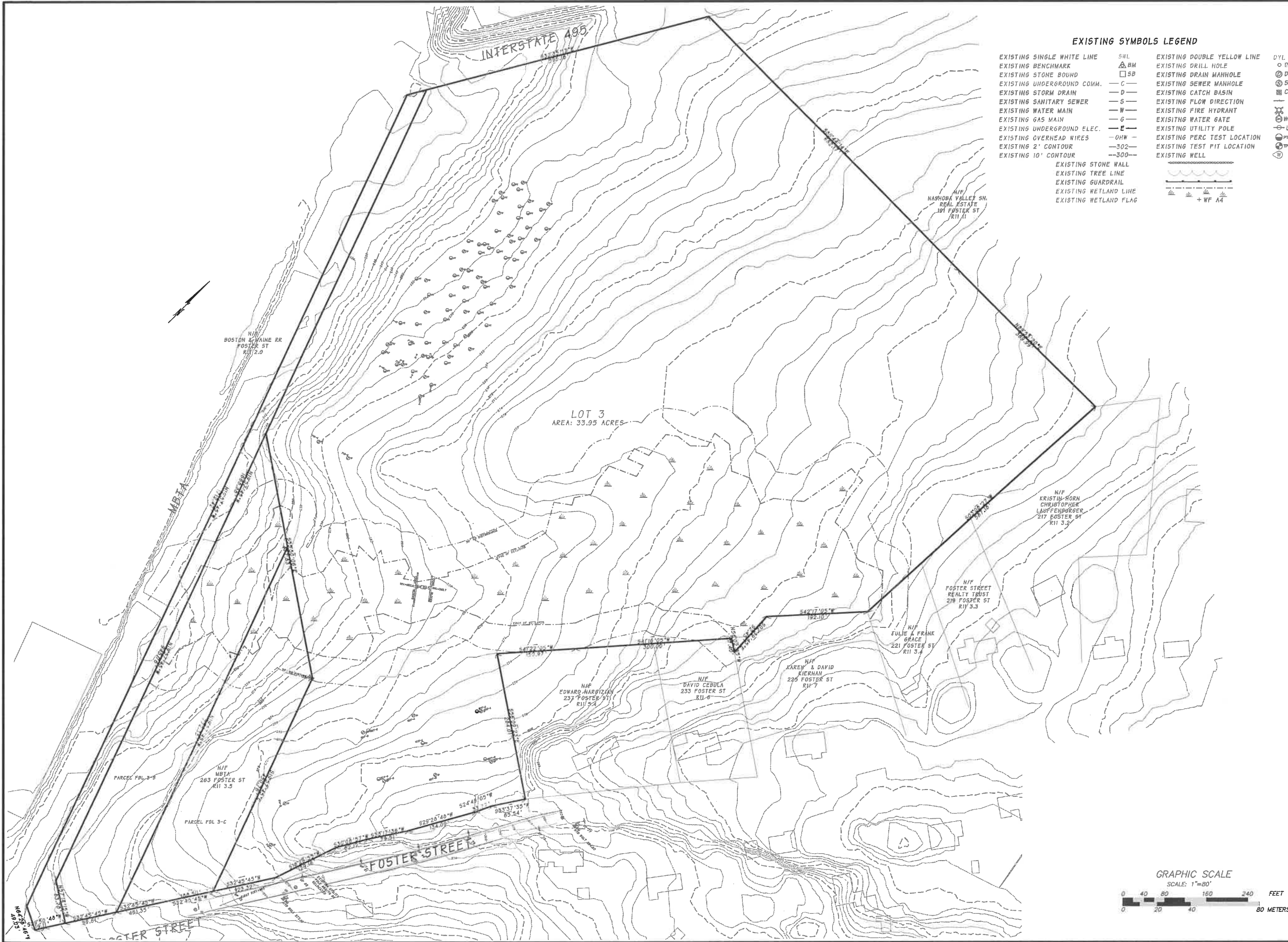




EXISTING SYMBOLS LEGEND			
EXISTING SINGLE WHITE LINE	SWL	EXISTING DOUBLE YELLOW LINE	DYL
EXISTING BENCHMARK	BM	EXISTING DRILL HOLE	DH
EXISTING STONE BOUND	SB	EXISTING DRAIN MANHOLE	DMH
EXISTING UNDERGROUND COMM.	C	EXISTING SEWER MANHOLE	SMH
EXISTING STORM DRAIN	D	EXISTING CATCH BASIN	CB
EXISTING SANITARY SEWER	S	EXISTING FLOW DIRECTION	
EXISTING WATER MAIN	W	EXISTING FIRE HYDRANT	
EXISTING GAS MAIN	G	EXISTING WATER GATE	
EXISTING UNDERGROUND ELEC.	E	EXISTING UTILITY POLE	
EXISTING OVERHEAD WIRES	OHW	EXISTING PERC TEST LOCATION	
EXISTING 2' CONTOUR	-302-	EXISTING TEST PIT LOCATION	
EXISTING 10' CONTOUR	-300-	EXISTING WELL	
EXISTING STONE WALL			
EXISTING TREE LINE			
EXISTING GUARDRAIL			
EXISTING WETLAND LINE			
EXISTING WETLAND FLAG			

DATE

REVISION

COMMENT

#

DATE

REVISION

COMMENT

EXISTING CONDITIONS

PLAN

245 FOSTER STREET

LITTLETON, MASSACHUSETTS

GS HOLDINGS

256 GREAT ROAD SUITE 11

LITTLETON, MASSACHUSETTS

380 MASSACHUSETTS AVE SUITE 202

ACTON, MASSACHUSETTS 01720

P(978) 264-4600 F(978) 263-0447

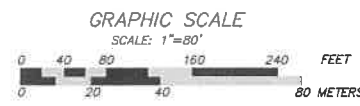
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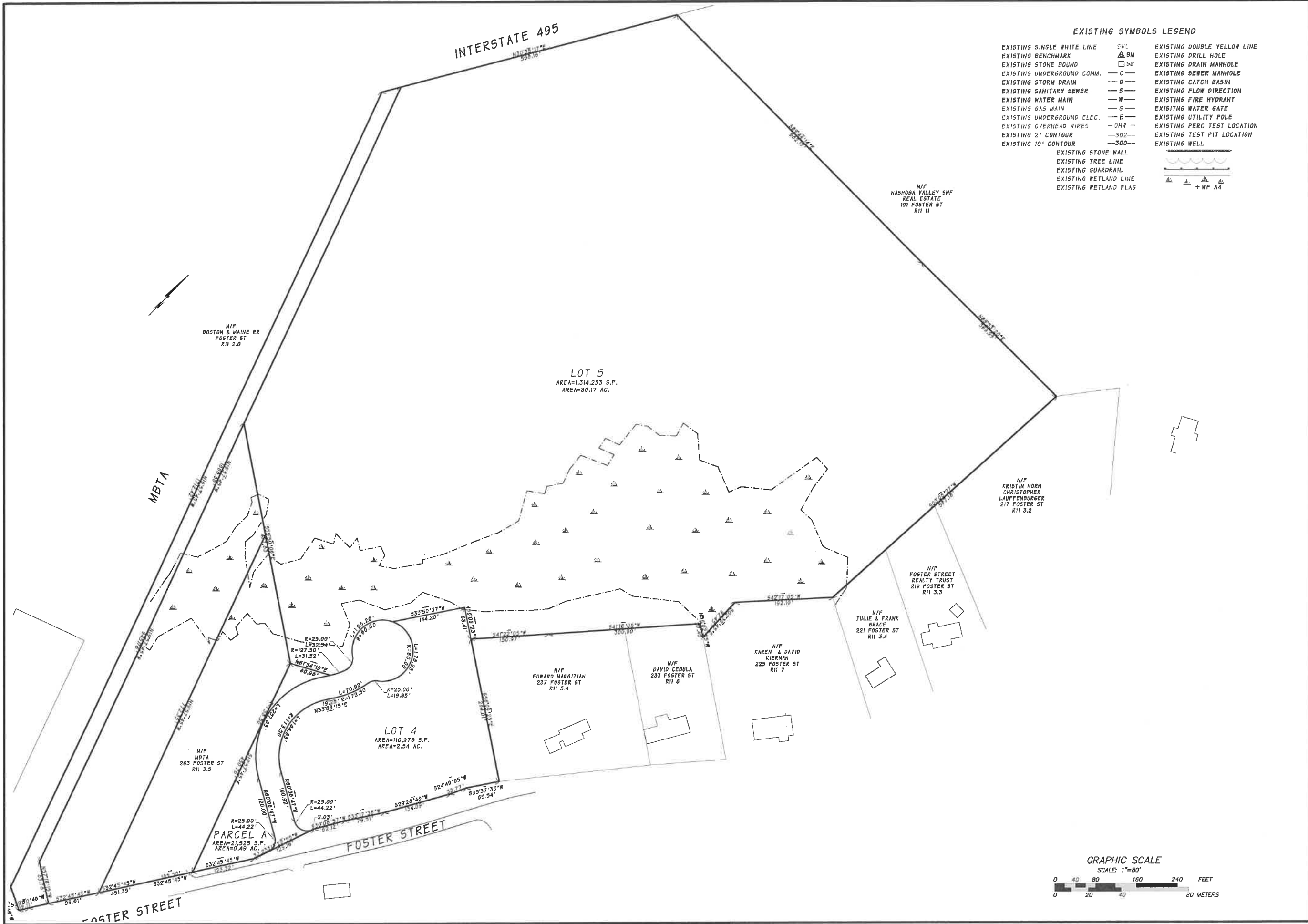
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CIVIL ENGINEERING

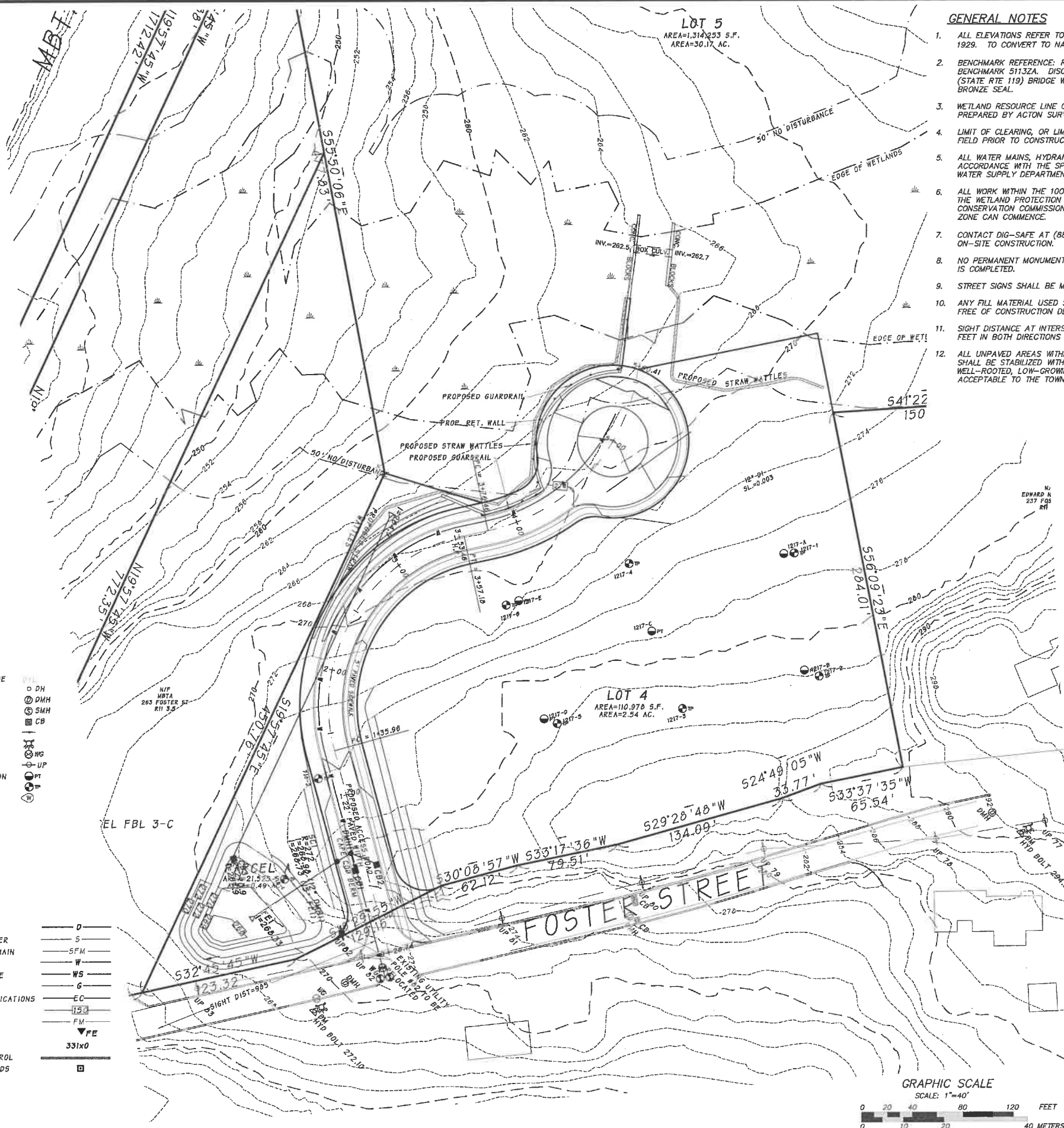
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SHEET 2 OF 7

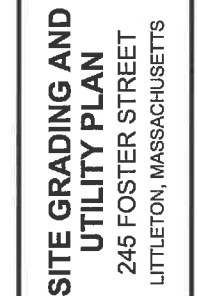




SUBDIVISION PLAN OF LAND	
LOT LAYOUT SHEET	
245 FOSTER STREET	
LITTLETON, MASSACHUSETTS	
CLIENT:	GS HOLDINGS
	256 GREAT ROAD SUITE 11
	LITTLETON, MASSACHUSETTS
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LOT	
SHEET 3 OF 7	



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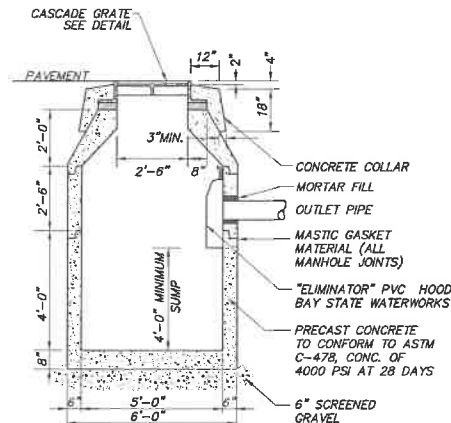


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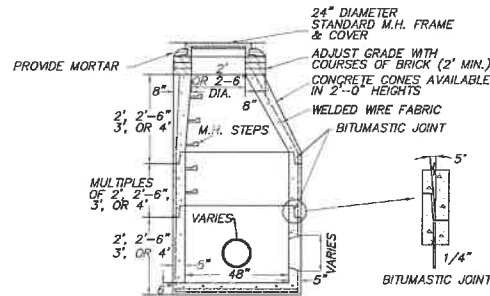
S1

SHEET 4 OF 7

SPECIFICATIONS:
CONCRETE STRENGTH
4000 P.S.I. AT 28 DAYS
REINFORCING STEEL CONFORMS TO ASTM A185-79
MANHOLE DESIGN SPECIFICATIONS
CONFORM TO ASTM C 487-84
ONE POUR MONOLITHIC BASE

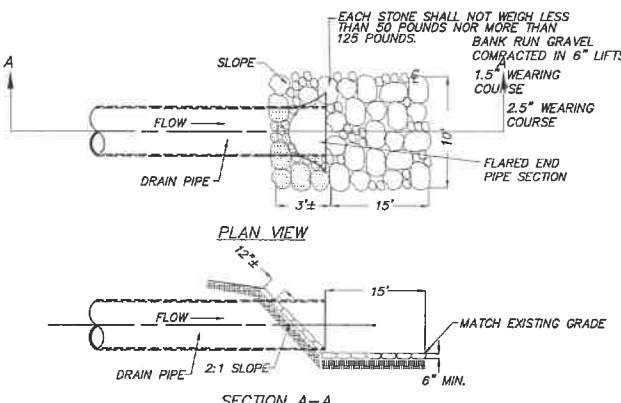


CATCH BASIN WITH OIL/GREASE TRAP
(NOT TO SCALE)

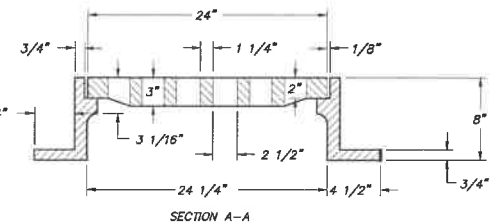
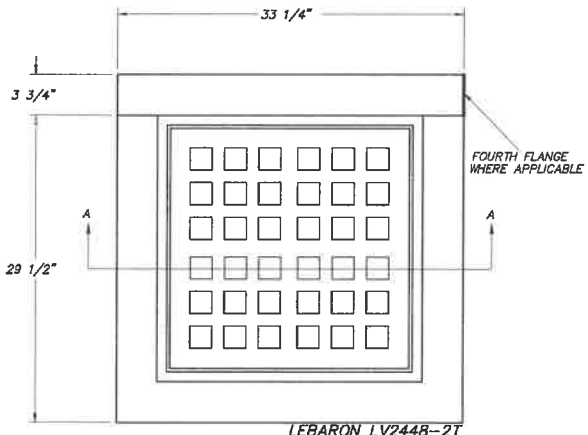


- NOTES:
1. MANHOLE DESIGN TO LATEST ASTM C478.
 2. REINFORCING STEEL CONFORMS TO LATEST ASTM A 185.
 3. CONCRETE COMPRESSIVE STRENGTH - 4,000 PSI @ 28 DAYS.
 4. BITUMASTIC BUTYL RUBBER FOR JOINTS CONFORM TO LATEST ASTM C443 AND 5. ONE POUR MONOLITHIC BASE.
 6. WHEN SPECIFIED, MANHOLES WATERPROOF COATED.
 7. STEPS - STEEL REINFORCED COPOLYMER POLYPROPYLENE PLASTICS FED SS-S-201A SPEC.

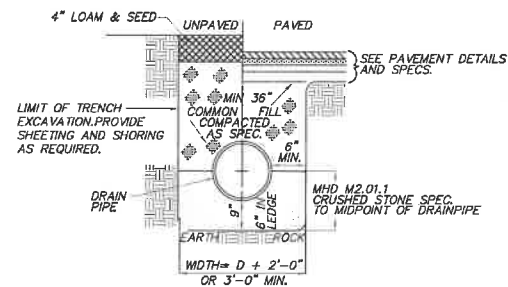
DRAIN MANHOLE DETAIL
(NOT TO SCALE)



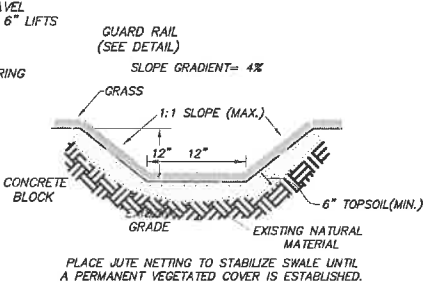
STONE RIPRAP DETAIL
(NOT TO SCALE)



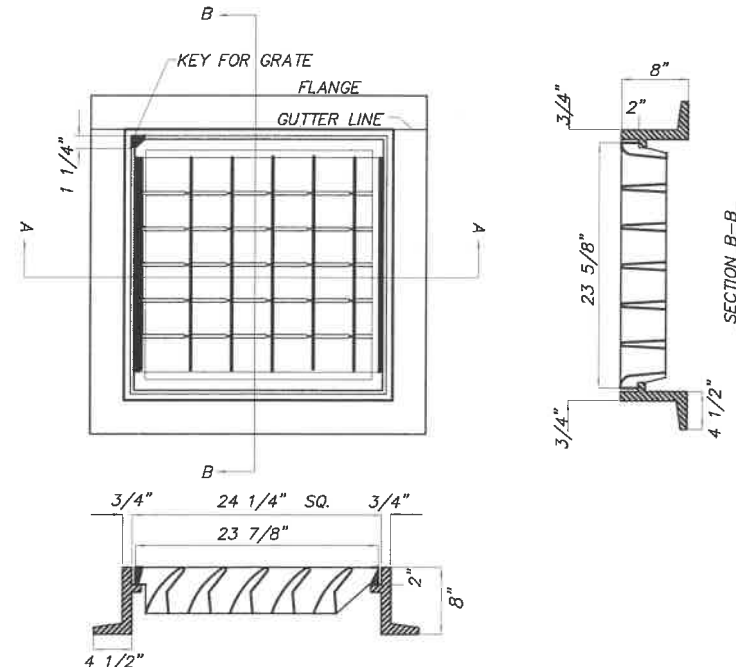
SQUARE CATCH BASIN FRAME AND GRATE
(NOT TO SCALE)



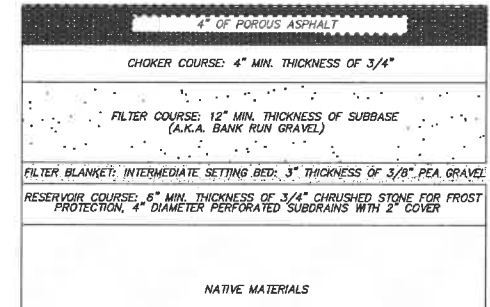
STORM DRAIN TRENCH DETAIL
(NOT TO SCALE)



GRASS LINED SWALE
(NOT TO SCALE)



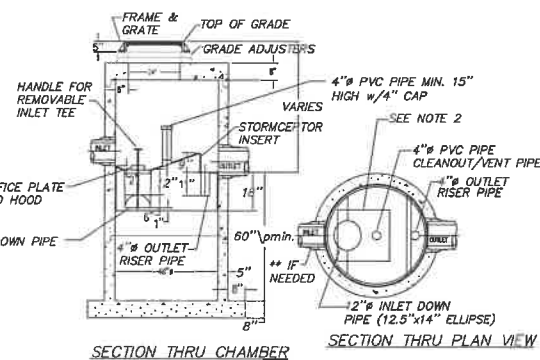
CASCADE CATCH BASIN FRAME AND GRATE
(NOT TO SCALE)



- NOTES
1. NO COMPACTED FILL SHOULD BE USED ON NATIVE MATERIAL.
 2. MAXIMUM SURFACE GRADE 5%.
 3. POST SIGNS IDENTIFYING POROUS PAVEMENT AREAS.
 4. MINIMIZE SALT USE DURING WINTER MONTHS.
 5. NO WINTER SANDING IS ALLOWED.
 6. KEEP LANDSCAPED AREAS WELL MAINTAINED TO PREVENT SOIL FROM BEING TRANSPORTED ONTO THE PAVEMENT.
 7. CLEAN THE SURFACE USING VACUUM SWEEPING MACHINES MONTHLY.
 8. REGULARLY MONITOR THE PAVING SURFACE TO MAKE SURE IT DRAINS PROPERLY AFTER STORMS.
 9. NEVER RESEAL OR REPAVE WITH IMPERMEABLE MATERIALS.
 10. INSPECT THE SURFACE ANNUALLY FOR DETRIORATION OR SPALLING.

POROUS PAVING PARKING CONSTRUCTED ON FILL-FILL TO CONSIST OF CRUSHED STONE ONLY-SEE RESERVOIR COURSE AND PLACED ON NATURAL OCCURRING SOILS AFTER TOP AND SUB SOILS ARE REMOVED. THESE SOILS SHALL BE TERRACED VARYING IN DEPTH FROM A LEVEL DIRECTLY BELOW TOP AND SUB TO A MAXIMUM OF 3- FEET. TERRACED BY NATURAL ANGLE OF REPOSE. NO COMPACTION.

SITE PLAN REVIEW AND SPECIAL PERMIT
FOR MAJOR COMMERCIAL USE
LITTLETON PLANNING BOARD



- NOTE:
1. THE USE OF FLEXIBLE CONNECTIONS IS RECOMMENDED AT THE OUTLET WHERE APPLICABLE.
 2. THE COVER SHOULD BE POSITIONED OVER THE 4\"/>

STORMCEPTOR 450
(NOT TO SCALE)

REVISION	COMMENT	DATE	#

DETAIL PLAN 1
245 FOSTER STREET
LITTLETON, MASSACHUSETTS

GS HOLDINGS
256 GREAT ROAD SUITE 11
LITTLETON, MASSACHUSETTS

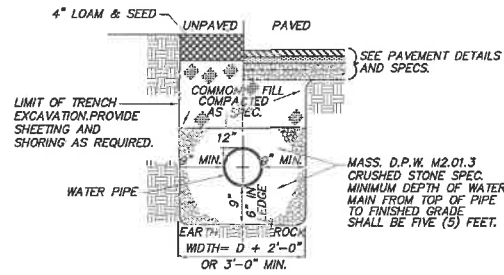
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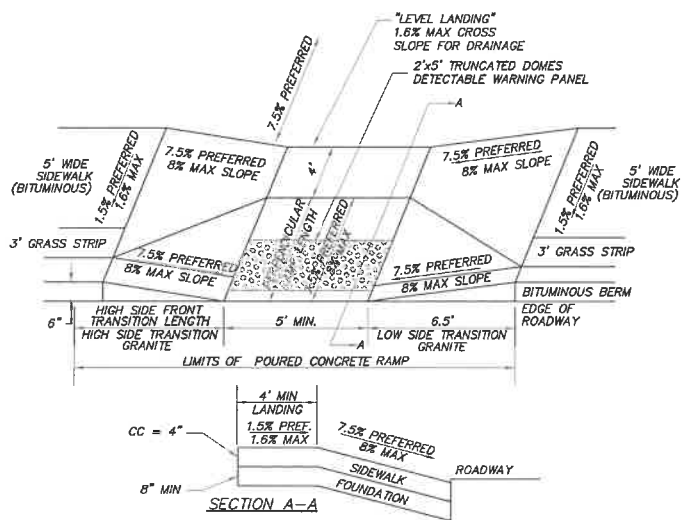
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SHEET 6 OF 7

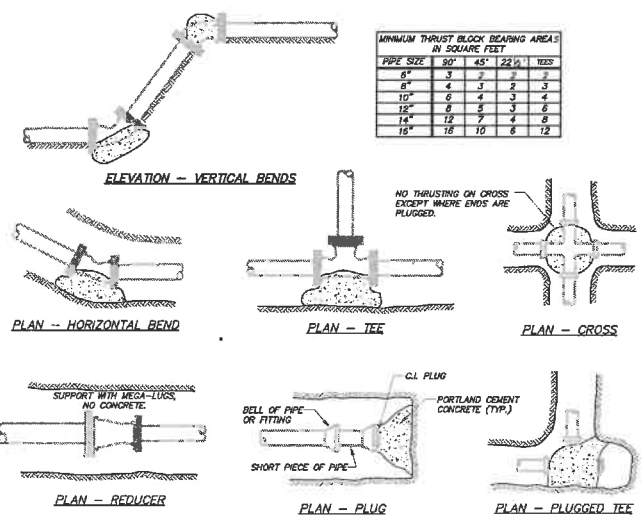
DATE: 9/18/18
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WATER TRENCH
(NOT TO SCALE)

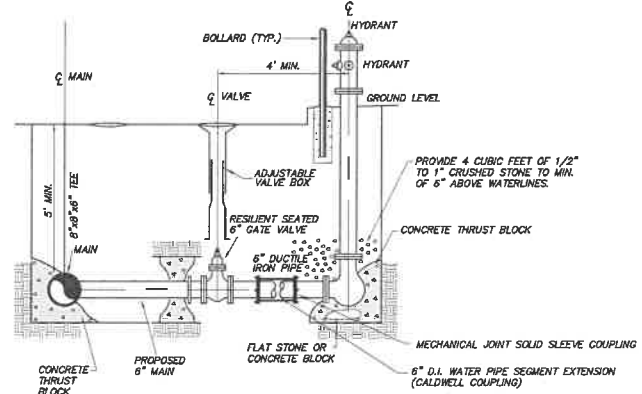


WHEELCHAIR RAMP DETAIL
(NOT TO SCALE)



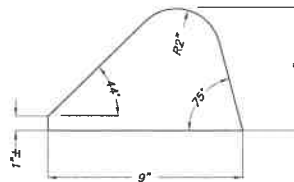
ANCHORAGE DETAILS
NOT TO SCALE

- NOTES:**
1. CONCRETE SHALL BE 2000 PSI MINIMUM AT 28 DAYS.
 2. THRUST BLOCKS SHALL BE PLACED AGAINST UNDISTURBED EARTH.
 3. ALL FITTINGS (EXCEPT AS INDICATED) SHALL BE SUPPORTED AND ANCHORED IN CONCRETE AND WITH "MEGALUG JOINT RESTRAINTS" OR APPROVED EQUAL.
 4. FOR FIRE HYDRANT THRUSTING SEE HYDRANT CONNECTION DETAIL.
 5. POURED CONCRETE SHALL BE KEPT 6" CLEAR OF MECHANICAL JOINTS TO ALLOW FOR FUTURE REPAIR OR REMOVAL.
 6. RETAINER GLANDS REQUIRED ON ALL BENDS.
 7. CLOW F-105B OR EQUAL RETAINER GLANDS USED WITH D.I.G.L. PIPE ONLY.



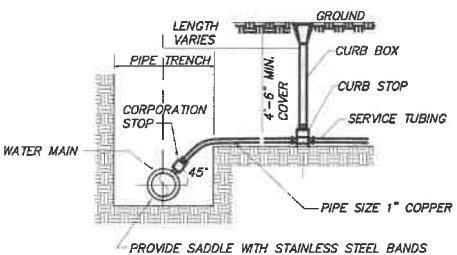
WATER MAIN, HYDRANT AND GATE VALVE DETAIL
(NOT TO SCALE)

NOTE: GATE VALVES SHALL BE AS REQUIRED BY THE TOWN OF LITTLETON WATER DEPARTMENT.

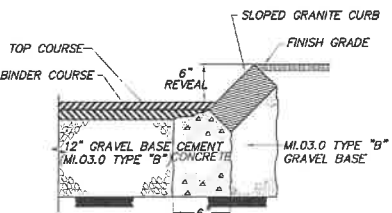


BITUMINOUS BERM DETAIL
(NOT TO SCALE)

BITUMINOUS CURBING SHALL BE PROVIDED ALONG ALL ROADWAY AND PARKING AREAS WITH THE EXCEPTION OF SLOPED GRANITE CURBING AT ROUNDINGS OF INTERSECTIONS

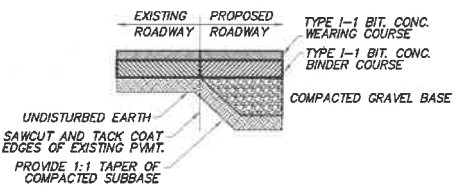


WATER SERVICE DETAIL
NO SCALE

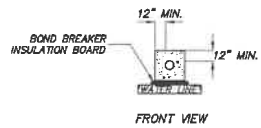


SLOPED GRANITE CURB
(NOT TO SCALE)

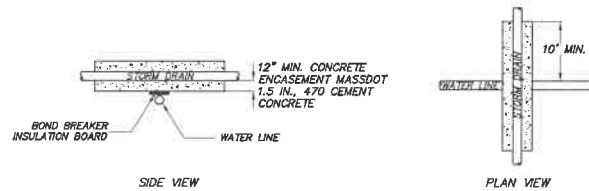
SLOPED GRANITE CURBING SHALL BE PROVIDED AT ROUNDINGS OF INTERSECTIONS



PAVEMENT JOINT DETAIL
(NOT TO SCALE)



FRONT VIEW



SIDE VIEW

PLAN VIEW

NOTE: REFER TO TOWN OF LITTLETON SUBDIVISION OF LAND REGULATIONS ARTICLE IV §249-B5E FOR ADDITIONAL INFORMATION.

TYPICAL CONCRETE ENCASEMENT OF STORMDRAINS
(NOT TO SCALE)

TO BE INSTALLED AT CROSS LOCATIONS FOR CB1, CB10, CB12, CB21, CB31, CB34, CB38, CB42, DMH43, DMH57, CB55, DMH53, CB50, CB61, DMH 81, DMH 82 AND ANYWHERE ELSE THAT THE SEPARATION DISTANCE IS LESS THAN 5'.

SITE PLAN REVIEW AND SPECIAL PERMIT FOR MAJOR COMMERCIAL USE
LITTLETON PLANNING BOARD

DATE _____

DETAIL PLAN 2
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LITTLETON, MASSACHUSETTS

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