CIVIL SYMBOLS

	ASPHALT		
	CATCH BASIN		
©©	COMMUNICATION VAULT / HANDHOLE	UE	UNDERGROUND ELECTRIC LINE
С	COMMUNICATION PULLBOX	W	WATER LINE
	CONCRETE	S	SANITARY SEWER LINE
50	CONTOUR INTERVAL	SD	STORM DRAIN
	DRAIN MANHOLE / CLEANOUT	SD ???	STORM DRAIN (LOCATION UNCLEAR)
D	DRAINAGE LINE	——— DATA ———	UNDERGROUND DATA CONDUIT
	EDGE OF VEGETATION	S	SEWER MANHOLE
E	ELECTRICAL VAULT / HANDHOLE	D	
[] [] []	ELECTRICAL PULLBOX		CATCH BASIN CATCH BASIN
9 770	FIRE HYDRANT		IRRIGATION CONTROL VALVE
— F —	FIRE SERVICE	¢	SITE LIGHTING
GM	GAS METER	Ø	SITE LIGHTING W/ CONCRETE BASE
G	GAS MAIN	B-1	TEST BORING
wv M	GATE VALVE	_	
. .	GUARD RAIL	83	DECIDUOUS TREE
۷	LOAM AND SEED		CONIFEROUS TREE
	LOAM, SEED, AND IRRIGATION	(🌐)	TREE WITH DRIP LINE
	SEWER MANHOLE	\sim	
s	SEWER LINE	(<u>`</u>)	SHRUB
SF	SILT FENCE	00000	ROCK RETAINING WALL
50.00	SPOT GRADE	107	EXISTING CONTOUR
-0000	STEEL FENCING	X 107.2	SPOT ELEVATION
	TREE LINE		
	TRANSFORMER		BUILDING
——— UGC ———	UNDERGROUND COMMUNICATIONS LINES		
UGE	UNDERGROUND ELECTRIC		PAVED SURFACE
W	WATER MAIN		
-0000	WOOD FENCING		CONCRETE SURFACE
0	YARD DRAIN		
	WETLAND BOUNDARY		PLANTING BED
	TWO-WAY TRAFFIC		

CIVIL ABBREVIATIONS

ONE-WAY TRAFFIC

BM	BENCHMARK	FF ELEV	FINISH FLOOR ELEVATION
BIT.	BITUMINOUS	H.C.	HANDICAPPED
BC	BOTTOM OF CURB	HDPE	HIGH DENSITY POLYETHYLENE PIPE
BND	BOUND	INV	INVERT
TV	CABLE TELEVISION	LT.	LEFT
CI	CAST IRON	LF	LINEAR FEET
СВ	CATCH BASIN	L.P.	
CLDI	CEMENT-LINED DUCTILE IRON	MH	MANHOLE
COMM.	COMMUNICATIONS	PE	POLYETHYLENE
CMH	COMMUNICATIONS MANHOLE	PVI	POINT OF VERTICAL INTERSECTION
CONC.	CONCRETE	PVC	POLYVINYL CHLORIDE
C.C.S.	CONCRETE CURB STOP	R	RADIUS
CMP	CORRUGATED METAL PIPE	RCP	REINFORCED CONCRETE PIPE
CPP	CORRUGATED PLASTIC PIPE	RT.	RIGHT
D	DIAMETER OR DRAIN	SMH	SEWER MANHOLE
DMH	DRAIN MANHOLE	S	SLOPE
DS	DOOR SILL	SF	SQUARE FEET
DH	DRILL HOLE	STA	STATION
DI	DUCTILE IRON	STMH	STEAM MANHOLE
E	ELECTRIC	TEL	TELEPHONE
EMH	ELECTRIC MANHOLE	TC	TOP OF CURB
ELEV	ELEVATION	TW	TOP OF WALL
EXIST.	EXISTING	TRANS.	TRANSFORMER
FT.	FEET	TYP.	TYPICAL
		U. POLE	UTILITY POLE
		WV	WATER VALVE
		W/	WITH
		VC	VERTICAL CURVE
		V.G.C.	VERTICAL GRANITE CURB

WF

Lawrence Academy

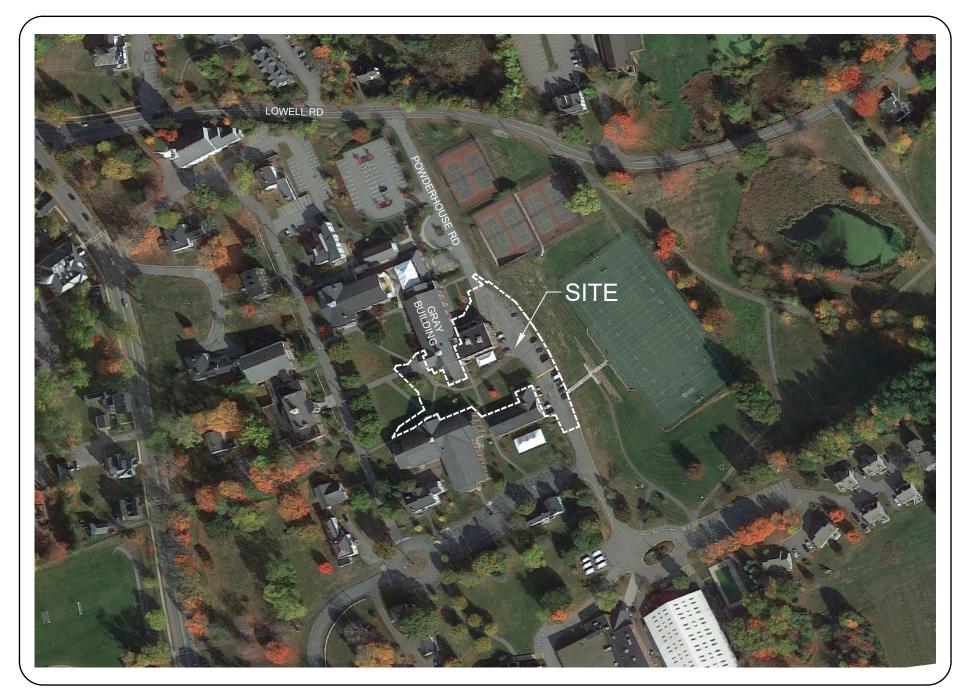
Community Commons Addition & Gray Building Renovation

> 26 POWDER HOUSE ROAD GROTON, MA 01450

FLANSBURGH 77 NORTH WASHINGTON STREET BOSTON, MA 02114-1910 FLANSBURGH.COM

WETLAND FLAG

Consultants Rist-Frost- Shumway Eng. P. C .: NH: 71 Water St | Laconia, NH 03246 P: 603.524.4647 MA: 24 Federal St, 3rd Floor | Boston, MA 02110 P: 617.494.1464 ME: 82 Hanover St, Suite 2 | Portland, ME 04101 P: 207.761.4647 www.fsenging.enjing.com www.rfsengineering.com RFS Project #: 9686.002 Brown Sardina, Inc.: Landscape Architect 24 Roland Street Boston, MA 02129



AERIAL VIEW SCALE: 1" = 200'±

C-1	
C-2	
C-3	
C-4	
C-5	
C-6	
C-7	
C 8	

Key Plan Crabtree McGrath: Food Service 161 West Main Street NO. DATE NOTE NO. DATE NOTE 1380 Soldiers Field Rd REVISIONS ISSUE Boston, MA 02135

Georgetown, MA 01833 Le Messurier: Envelop Consultant

CIVIL TRADE NOTES

GENERAL NOTES APPLY TO ALL DRAWINGS FOR THE TOTAL PROJECT. DRAWING NOTES APPLY ONLY TO THOSE DRAWINGS ON WHICH THEY APPEAR.

THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION SCHEDULE WITH THE VARIOUS AFFECTED UTILITIES IN ORDER TO PREVENT UNNECESSARY DELAY OF WORK OR INTERRUPTION OF SERVICES.

EXISTING UTILITIES AND UNDERGROUND STRUCTURES SHOWN ON THE DRAWINGS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MARKING OF ALL UNDERGROUND UTILITIES THROUGH THE DIG-SAFE PROGRAM AND/OR A PRIVATE UTILITY MARKING COMPANY SUCH THAT ALL UTILITIES ARE LOCATED AND MARKED IN THE FIELD PRIOR TO THE START OF CONSTRUCTION. NEITHER THE ENGINEER NOR THE OWNER WARRANTS OR GUARANTEES THE CONDITIONS SHOWN ON THE DRAWINGS.

THE CONTRACTOR SHALL MAINTAIN TRAFFIC IN A SAFE MANNER AT ALL TIMES DURING CONSTRUCTION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING PAVEMENT AND ROADWAYS, AND SHALL REPAIR SUCH DAMAGE AT NO ADDITIONAL COST TO THE OWNER.

ANY AREAS BEYOND THE "PROJECT LIMITS" AS SHOWN ON THESE PLANS WHICH ARE DISTURBED BY THE CONTRACTOR SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.

THE CONTRACTOR SHALL DIG TEST PITS AS REQUIRED TO LOCATE / VERIFY EXISTING UTILITIES AND OTHER UNDERGROUND ITEMS. FAILURE TO PERFORM TEST PITS MAY RESULT IN UNNECESSARY DELAYS AND CONFLICTS FOR WHICH THE CONTRACTOR MAY BE HELD RESPONSIBLE. TEST PITS ARE TO BE COORDINATED WITH THE ENGINEER AND SHALL INCLUDE INFORMATION AS TO THE SIZE AND CONFIGURATION OF THE PIPES FOUND, AS WELL AS INVERT ELEVATIONS.

C-8 THE CONTRACTOR SHALL PROVIDE EROSION AND SEDIMENTATION CONTROLS AS REQUIRED IN SPECIFICATION SECTION 312500, AS SHOWN ON THE PLANS, AND AS REQUIRED BY LOCAL AND STATE REGULATIONS THROUGHOUT THE DURATION OF ALL CONSTRUCTION OPERATIONS.

GENERAL NOTES

THE FOLLOWING GENERAL NOTES APPLY TO ALL RIST-FROST-SHUMWAY ENGINEERING, P.C., DRAWINGS AND TRADES ASSOCIATED WITH THOSE DRAWINGS INVOLVED ON THIS PROJECT:

G-1 RIST-FROST-SHUMWAY ENGINEERING, P.C., WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS. SPECIFICATIONS, AND/OR THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHERS' FAILURE TO OBTAIN AND/OR FOLLOW THE GUIDANCE OF RIST-FROST-SHUMWAY ENGINEERING, P.C., WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS WHICH ARE DISCOVERED OR ALLEGED.

G-2 ALL WORK SHALL CONFORM TO ALL FEDERAL, STATE, AND LOCAL CODES AND STANDARDS INCLUDING, BUT NOT LIMITED TO: NFPA, BOCA, UL, SMACNA, OSHA, AND NEC.

G-3 THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL PROTECT THE WORK SITE, SURROUNDING AREAS AND OCCUPANTS FROM DAMAGE AND INJURY.

G-4 ALL DRAWINGS ARE INTENDED TO SHOW THE GENERAL ARRANGEMENT, DESIGN INTENT, AND EXTENT OF THE WORK. AS SUCH, THEY SHALL BE CONSIDERED PARTLY DIAGRAMMATIC. THEY ARE NOT INTENDED TO BE SCALED FOR ROUGHING-IN MEASUREMENTS OR TO SERVE AS SHOP DRAWINGS.

G-5 DETAILS SHOWN ON ANY DRAWING ARE TO BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS, UNLESS OTHERWISE INDICATED.

G-6 INFORMATION ON THESE DRAWINGS PERTAINING TO AS-BUILT CONSTRUCTION AND OTHER EXISTING CONDITIONS HAS BEEN OBTAINED FROM ENGINEERING DRAWINGS OR BY FIELD INVESTIGATION. THIS INFORMATION IS PROVIDED FOR THE CONTRACTOR'S BENEFIT IN PERFORMANCE OF THE WORK.

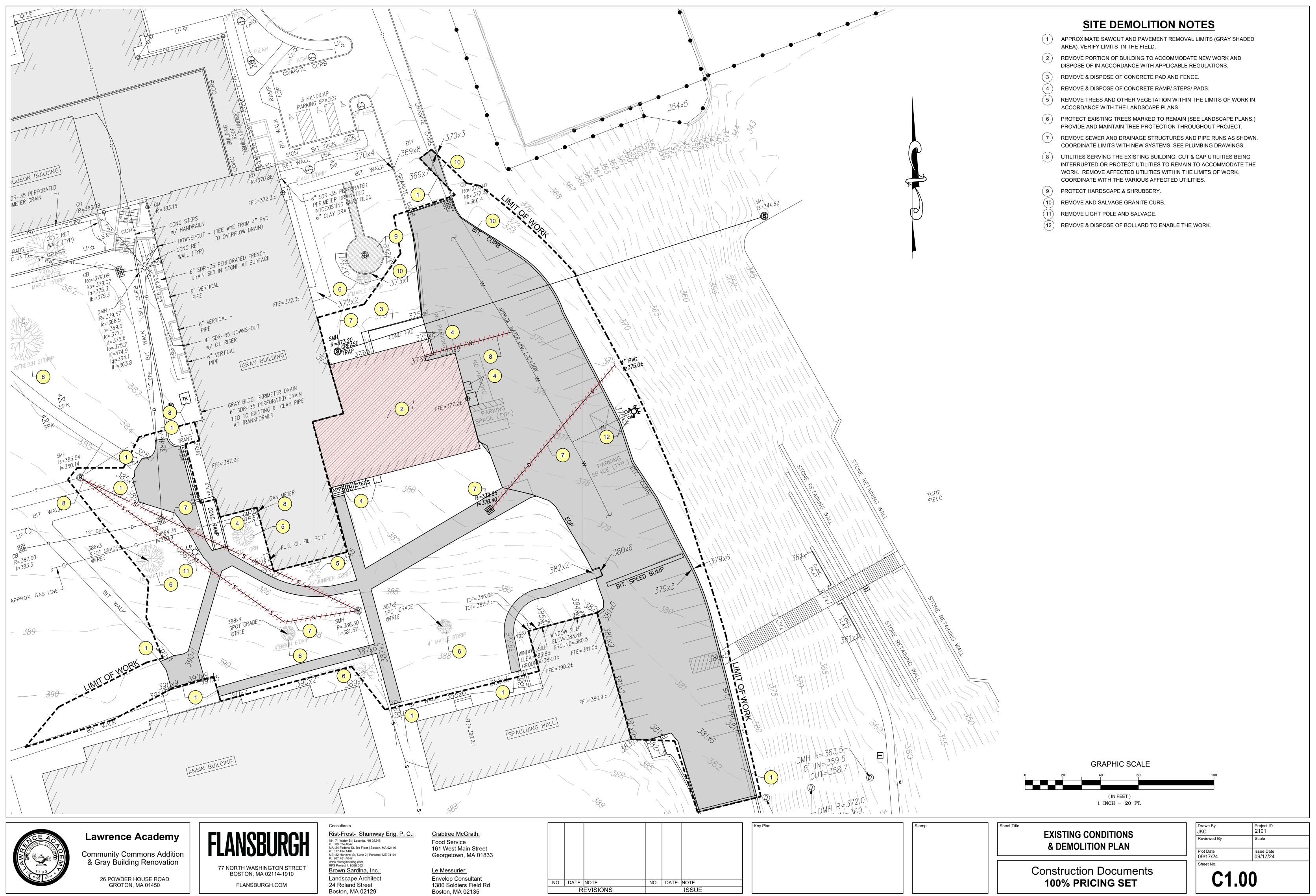
G-7 IN THE EVENT THE CONTRACTOR ENCOUNTERS MATERIAL REASONABLY BELIEVED TO BE HAZARDOUS WHICH HAS NOT BEEN RENDERED HARMLESS, THE CONTRACTOR SHALL IMMEDIATELY STOP WORK IN THE AREA AFFECTED AND REPORT THE CONDITION TO THE OWNER AND ARCHITECT/ENGINEER IN WRITING. THE WORK IN THE AFFECTED AREA SHALL NOT BE RESUMED UNTIL WRITTEN VERIFICATION BY THE OWNER IS RECEIVED THAT THE MATERIAL HAS BEEN REMOVED OR OTHERWISE BEEN RENDERED HARMLESS.

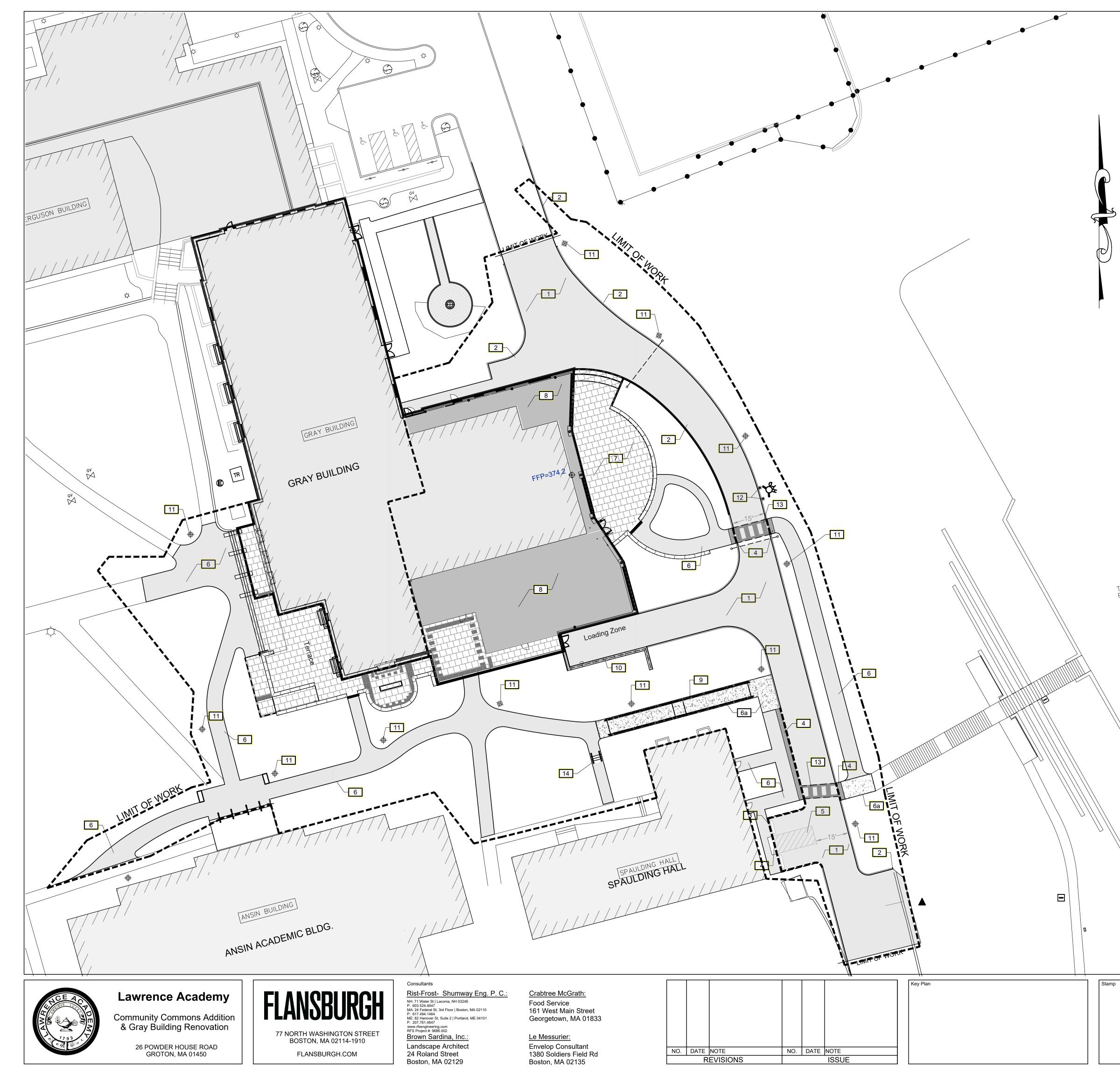
PLAN NOTES

1. THIS PROJECT IS A RENOVATION AND ADDITION TO THE GRAY BUILDING ON THE LAWRENCE ACADEMY CAMPUS.

2. THIS PLAN DEPICTS EXISTING CONDITIONS AT THE SITE AS OF JULY 2022, AS PROVIDED ON A PLAN BY DILLIS & ROY CIVIL DESIGN GROUP DATED 1-31-2022 WITH A REVISION DATE OF 7-14-2022, TITLED "EXISTING CONDITIONS, POWDERHOUSE ROAD, GROTON, MA."

Stamp	Sheet Title CIVIL NOTES, LEGENDS,	Drawn By JKC	Project ID 2101
	& ABBREVIATIONS	Reviewed By	Scale
		Plot Date 09/17/24	Issue Date 09/17/24
	Construction Documents 100% PRICING SET	Sheet No.	00

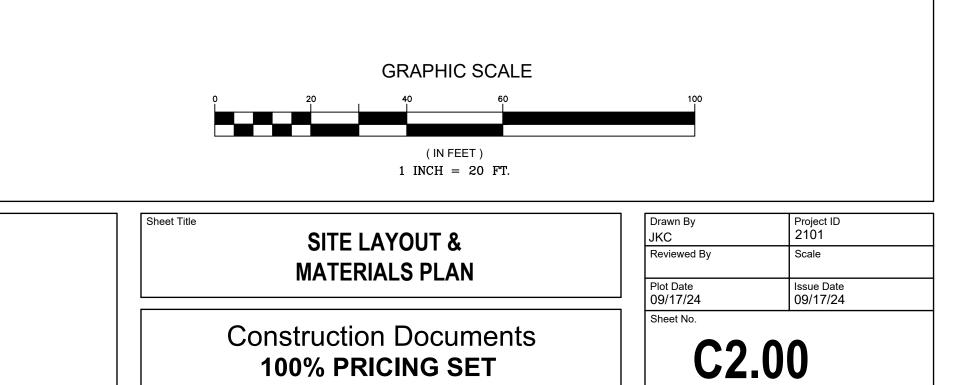


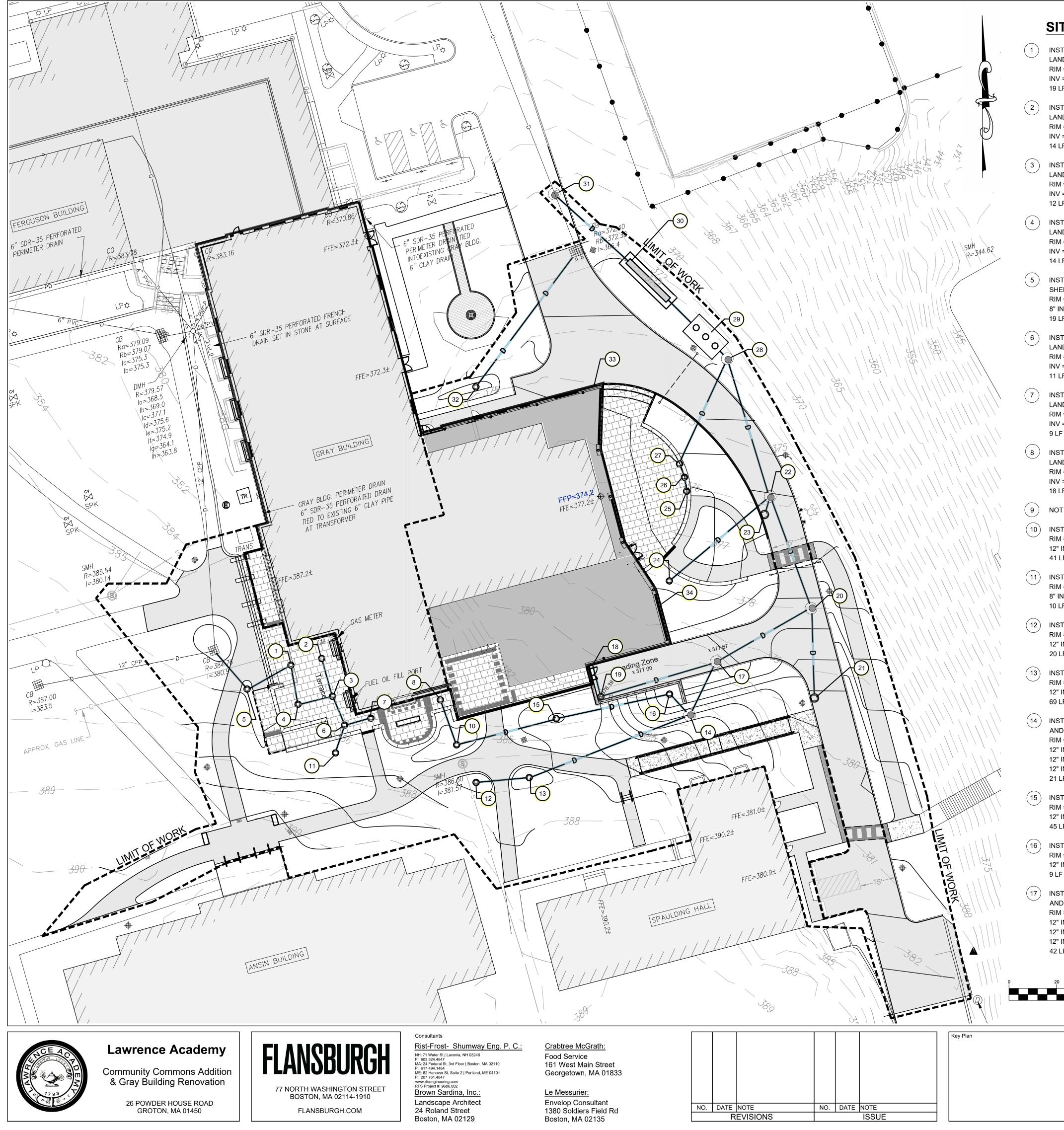


SITE MATERIALS NOTES

- 1 CONSTRUCT NEW ASPHALT DRIVE AS SHOWN. SEE SHEET C6.00 FOR DETAIL.
- 2 INSTALL VERTICAL GRANITE CURBING. SEE SHEET C6.00 FOR DETAIL.
- 3 INSTALL FLUSH GRANITE CURBING. SEE SHEET C6.00 FOR DETAIL.
- 4 INSTALL CONCRETE SLAB AND TIP DOWN. SEE SHEET C6.00 FOR DETAIL.
- 5 INSTALL PAVEMENT MARKINGS AS SHOWN. SEE SHEET C6.00 FOR DETAIL.
- 6 CONSTRUCT ASPHALT WALKWAY. SEE SEE SHEET C6.00 FOR DETAIL.
- 6a CONSTRUCT CONCRETE WALKWAY. SEE SEE SHEET C6.00 FOR DETAIL.
- 7 CONSTRUCT PEDESTRIAN PLAZA AS DETAILED ON THE LANDSCAPE DRAWINGS.
- 8 COORDINATE EXCAVATION & BACKFILL FOR NEW BUILDING CONSTRUCTION WITH STRUCTURAL & ARCHITECTURAL DRAWINGS AND GEOTECHNICAL REPORT.
- 9 ADA RAMP WITH HANDRAILS. SEE LANDSCAPE DRAWINGS.
- 10 CONSTRUCT NEW RETAINING WALL AS SHOWN. SEE STRUCTURAL DRAWINGS.
- 11 NEW SITE LIGHT. SEE LANDSCAPE DRAWINGS.
- 12 INSTALL NEW BOLLARDS FOR HYDRANT PROTECTION. SEE SHEET C6.00 FOR DETAIL.
- 13 PAINT CROSSWALK AS SHOWN. SEE DETAIL ON SHEET C6.03.
- 14 SEE LANDSCAPE DRAWINGS FOR STAIR DETAILS.







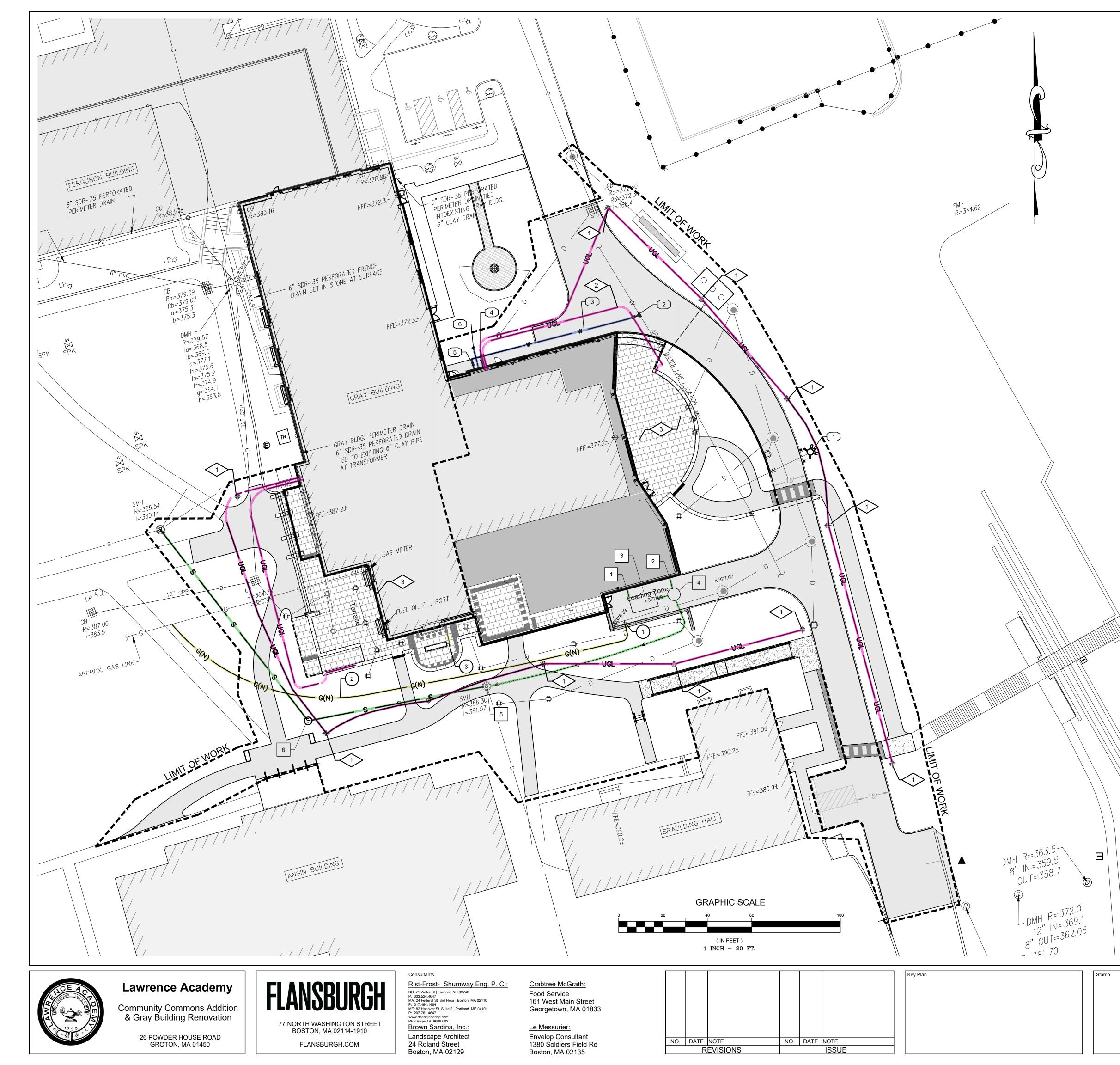
SITE GRADING AND DRAINAGE NOTES

- LANDSCAPE DRAWINGS & DETAIL ON C6.02. RIM = 387.02 INV = 383.51 19 LF 6" HDPE @ S = 0.0800'/' (TO NOTE 5)
- LANDSCAPE DRAWINGS & DETAIL ON C6.02. RIM = 387.02 INV = 384.27 14 LF 6" HDPE @ S = 0.0100'/' (TO NOTE 3)
- LANDSCAPE DRAWINGS & DETAIL ON C6.02. RIM = 387.02 INV = 384.13
- 12 LF 6" HDPE @ S = 0.0400'/' (TO NOTE 4)
- LANDSCAPE DRAWINGS & DETAIL ON C6.02. RIM = 387.02 INV = 383.65 14 LF 6" HDPE @ S = 0.0100'/' (TO NOTE 1)
- SHEET C6.01 FOR DETAIL. RIM = 385.0
- 8" INV = 382.00
- 19 LF 8" HDPE @ S = 0.0579'/' (TO EXISTING) LANDSCAPE DRAWINGS & DETAIL ON C6.02. RIM = 387.11 INV = 384.28
- 11 LF 6" HDPE @ S = 0.0136'/' (TO NOTE 3)
- LANDSCAPE DRAWINGS & DETAIL ON C6.02. RIM = 387.11 INV = 384.19
- 9 LF 6" HDPE @ S = 0.0100'/' (TO NOTE 6)
- LANDSCAPE DRAWINGS & DETAIL ON C6.02. RIM = 387.11 INV = 384.19
- 18 LF 6" HDPE @ S = 0.0500'/' (TO NOTE 10)
- (9) NOT USED.
- RIM = 386.5 12" INV = 383.29 41 LF 8" HDPE @ S = 0.0756'/' (TO NOTE 15)
- RIM = 386.5 8" INV = 384.33
- 10 LF 8" HDPE @ S = 0.0050'/' (TO NOTE 6) RIM = 386.5
- 12" INV = 383.70 20 LF 12" HDPE @ S = 0.0100'/' (TO NOTE 13)
- RIM = 386.5 12" INV = 383.50 69 LF 8" HDPE @ S = 0.0580'/' (TO NOTE 14)
- AND COVER. SEE SHEET C6.01 FOR DETAIL. RIM = 382.0 12" INV IN (FROM 16) = 377.0 12" INV IN (FROM 13) = 379.15 12" INV OUT = 375.50
- 21 LF 12" HDPE @ S = 0.0750'/' (TO NOTE 17)
- RIM = 385.75 12" INV = 380.75 45 LF 12" HDPE @ S = 0.0650'/' (TO NOTE 16)
- RIM = 379.5 12" INV = 377.80 9 LF 12" HDPE @ S = 0.08890'/' (TO NOTE 14)
- AND COVER. RIM = 377.6 12" INV IN (FROM 19) = 370.86 12" INV IN (FROM 14) = 373.92 12" INV OUT = 370.76 42 LF 12" HDPE @ S = 0.0100'/' (TO NOTE 20)
- **GRAPHIC SCALE**
 - (IN FEET) 1 INCH = 20 FT.

13 LF 6" HDPE @ S = 0.0100'/' (TO NOTE 19) (19) INSTALL 24" YARD DRAIN WITH 2' SUMP AND 12" FRAME & GRATE. INSTALL 9" SQUARE AREA DRAIN WITH PVC BASIN (NYLOPLAST OR EQUAL). SEE RIM = 376.39 8" INV IN = 371.33 12" INV OUT= 371.33 47 LF 12" HDPE @ S = 0.0100'/' (TO NOTE 17) (20) INSTALL 48" DIA. CONCRETE DRAIN MANHOLE WITH 30" DIA. CAST IRON FRAME INSTALL 9" SQUARE AREA DRAIN WITH PVC BASIN (NYLOPLAST OR EQUAL). SEE AND COVER. RIM = 377.2 12" INV IN (FROM 21) = 373.40 12" INV IN (FROM 17) = 370.34 12" INV OUT = 370.24 46 LF 12" HDPE @ S = 0.0100'/' (TO NOTE 22) INSTALL 9" SQUARE AREA DRAIN WITH PVC BASIN (NYLOPLAST OR EQUAL). SEE (21) INSTALL 48" CATCH BASIN WITH 24" SQUARE CAST IRON FRAME & GRATE. SEE SHEET C6.01 FOR DETAIL. RIM = 380.2 12" INV = 373.74 34 LF 12" HDPE @ S = 0.0100'/' (TO NOTE 20) INSTALL 9" SQUARE AREA DRAIN WITH PVC BASIN (NYLOPLAST OR EQUAL). SEE (22) INSTALL 48" DIA. CONCRETE DRAIN MANHOLE WITH 30" DIA. CAST IRON FRAME AND COVER. RIM = 375.0 12" INV IN (FROM 24) = 370.00 12" INV IN (FROM 23) = 371.50 INSTALL 24" CONCRETE YARD DRAIN WITH 2' SUMP AND 12" FRAME & GRATE. SEE 12" INV IN (FROM 20) = 369.78 12" INV OUT = 369.68 56 LF 12" HDPE @ S = 0.0120'/' (TO NOTE 28) (23) INSTALL 48" CATCH BASIN WITH 24" SQUARE CAST IRON FRAME & GRATE. SEE SHEET C6.00 FOR DETAIL. INSTALL 9" SQUARE AREA DRAIN WITH PVC BASIN (NYLOPLAST OR EQUAL). SEE RIM = 375.1 12" INV = 372.73 4 LF 8" HDPE @ S = 0.0100'/' (TO NOTE 22) (24) INSTALL 24" CONCRETE YARD DRAIN WITH 2' SUMP AND 12" FRAME & GRATE. RIM = 375.47 INSTALL 9" SQUARE AREA DRAIN WITH PVC BASIN (NYLOPLAST OR EQUAL). SEE 12" INV = 372.50 52 LF 12" HDPE @ S = 0.0481'/' (TO 22) (25) INSTALL 9" SQUARE AREA DRAIN WITH PVC BASIN (NYLOPLAST OR EQUAL). SEE LANDSCAPE DRAWINGS & DETAIL ON C6.02. RIM = 373.71 INSTALL 9" SQUARE AREA DRAIN WITH PVC BASIN (NYLOPLAST OR EQUAL). SEE INV = 371.36 4 LF 8" HDPE @ S = 0.0500'/' (TO 26) (26) INSTALL 9" SQUARE AREA DRAIN WITH PVC BASIN (NYLOPLAST OR EQUAL). SEE LANDSCAPE DRAWINGS & DETAIL ON C6.02. RIM = 373.31 INV = 371.16 (10) INSTALL 24" CONCRETE YARD DRAIN WITH 2' SUMP AND 12" FRAME & GRATE. 4 LF 8" HDPE @ S = 0.0500'/' (TO 27) (27) INSTALL 9" SQUARE AREA DRAIN WITH PVC BASIN (NYLOPLAST OR EQUAL). SEE LANDSCAPE DRAWINGS & DETAIL ON C6.02. RIM = 373.31 INV = 370.96 (11) INSTALL 24" CONCRETE YARD DRAIN WITH 2' SUMP AND 12" FRAME & GRATE. 45 LF 8" HDPE @ S = 0.0213'/' (TO 28) (28) INSTALL 48" DIA. CONCRETE DRAIN MANHOLE WITH 30" DIA. CAST IRON FRAME AND COVER. RIM = 373.3 (12) INSTALL 24" CONCRETE YARD DRAIN WITH 2' SUMP AND 12" FRAME & GRATE. 12" IN IN (FROM 27) = 370.00 12" INV IN (FROM 22) = 369.00 12" INV OUT = 368.90 3 LF 12" HDPE @ S = 0.0330'/' (TO NOTE 29) INSTALL 24" CONCRETE YARD DRAIN WITH 2' SUMP AND 12" FRAME & GRATE. (29) INSTALL 5000-GALLON CONCRETE WATER QUALITY INLET BY SHEA CONCRETE OR EQUAL. SEE SHEET C6.01 FOR DETAIL. 12" INV IN = 368.80 12" INV OUT = 368.70 13 LF 12" HDPE @ S = 0.0100'/' (TO NOTE 30) INSTALL 48" DIA. CONCRETE DRAIN MANHOLE WITH 30" DIA. CAST IRON FRAME (30) INSTALL 20 ACF R-TANK HD MODULES (DOUBLE + MINI) IN TWO ROWS OF 10 UNITS EACH, SURROUNDED BY STONE AND WRAPPED IN NON-WOVEN FILTER FABRIC. SEE SHEET C6.02 FOR DETAIL. TOP OF R-TANKS = 370.54 BOTTOM OF R-TANKS = 367.0 12" INV IN = 368.57 18" INV OUT = 368.00 (TO NOTE 31) INSTALL 24" CONCRETE YARD DRAIN WITH 2' SUMP AND 12" FRAME & GRATE. BOTTOM OF STONE = 366.50 UNIT HEIGHT = 42.5" (31) INSTALL 48" DIA. CONCRETE DRAIN MANHOLE WITH 30" DIA. CAST IRON FRAME AND COVER OVER EXISTING DRAIN LINE AND CONNECT EXISTING PIPES AND NEW (16) INSTALL 24" CONCRETE YARD DRAIN WITH 2' SUMP AND 12" FRAME & GRATE. 18" HDPE FROM NOTE 30. VERIFY EXISTING PIPE INVERT AT CONNECTION IN FIELD. RIM = 370.2 (MATCH EXISTING GRADE) 18" INV IN = 367.0 INV IN (EXISTING) = 366.3 (MATCH EXISTING) INV OUT (EXISTING) = 366.3 (MATCH EXISTING) INSTALL 48" DIA. CONCRETE DRAIN MANHOLE WITH 30" DIA. CAST IRON FRAME (32) INSTALL 24" CONCRETE YARD DRAIN WITH 2' SUMP AND 12" FRAME & GRATE. RIM = 372.80 8" INV = 369.70 66 LF 8" HDPE @ S = 0.0500'/' (TO EXISTING) (33) RECONNECT ROOF DRAIN LEADERS FROM BUILDING AS NEEDED (LOCATIONS TO BE DETERMINED). COORDINATE INSTALLATION WITH PLUMBING CONTRACTOR. (34) INSTALL 4" PERFORATED PVC, STONE, AND FABRIC PERIMETER FOUNDATION DRAIN WITH CLEANOUTS. (VERIFY ELEVATION WITH FOOTING). INSTALL 4" SOLID PVC PIPE FROM BUILDING / WALL TO DAYLIGHT (LOCATIONS TO BE DETERMINED). SEE SHEET C6.01 FOR DETAIL. Sheet Title Drawn By JKC Proiect ID Stamp 2101 SITE GRADING & Reviewed By Scale DRAINAGE PLAN Plot Date 09/17/24 Issue Date 09/17/24 Sheet No. Construction Documents **C3.00** 100% PRICING SET

(18) ROOF DRAIN EXIT.

6" INV AT BUILDING = 371.46



WATER SYSTEM NOTES

- 1 RESET EXISTING HYDRANT TO ACCOMMODATE NEW GRADES AS NEEDED.
- 2 INSTALL TAPPING SLEEVE & 6" VALVE. SIZE OF EXISTING WATER MAIN UNKNOWN. SEE SHEET C6.03 FOR WATER VALVE BOX DETAIL.
- 3 INSTALL 6" DI WATER SERVICE TO BUILDING. SEE SHEET C6.00 FOR TRENCHING DETAIL.
- 4 INSTALL 6"X4" TEE, 4" GATE VALVE, AND 4" DI DOMESTIC SERVICE TO BUILDING. SEE PLUMBING PLANS.
- 5 INSTALL 6" 90° ELBOW, 6" GATE VALVE, AND 6" DI FIRE SERVICE TO BUILDING. SEE PLUMBING DRAWINGS. SEE SHEET C6.03 FOR WATER ENTRANCE DETAIL.
- 6 COORDINATE WITH IRRIGATION CONTRACTOR FOR IRRIGATION FEED TO BUILDING FROM EXISTING SYSTEM.

SEWER SYSTEM NOTES

- 1INSTALL 4" DI KITCHEN WASTE LINE TO GREASE INTERCEPTOR. SEE SHEET C6.00 FOR TRENCHING DETAIL.4" INV AT BUILDING = 370.825 LF @ S = 0.0200'/' (TO NOTE 3)
- 2 INSTALL 4" DI SEWER LINE TO SEWAGE PUMP STATION. 4" INV AT BUILDING = 367.25
- 5 LF @ S = 0.0200'/' (TO NOTE 4)
- 3 COORDINATE INSTALLATION OF GREASE INTERCEPTOR WITH PLUMBING CONTRACTOR. SEE PLUMBING DRAWINGS FOR DETAILS. INV IN = 370.72 INV OUT = 370.47

6 LF 4" DI @ S = 0.0200'/' (TO NOTE 4)

4 SEWAGE PUMP STATION

FURNISH AND INSTALL SEWAGE PUMP STATION IN LOCATION AS SHOWN ON THE PLANS. STATION SHALL INCLUDE BUT NOT BE LIMITED TO A CONCRETE WET WELL, LEVEL CONTROL, STAINLESS STEEL GUIDE RAILS, STAINLESS STEEL LIFT CHAIN, SOLIDS HANDLING SEWAGE PUMP, WIRING, WET WELL PIPING, A CONCRETE TOP AND ACCESS HATCH DESIGNED TO ACCOMMODATE AN H-20 WHEEL LOAD, AND DUPLEX CONTROL PANEL FOR AUTOMATIC OPERATION OF PUMPS. EACH PUMP TO HAVE A CAPACITY OF 75 GALLONS PER MINUTE AGAINST A TDH OF 20 FEET.

WET WELL

PUMP CHAMBER TO BE A 6-FOOT DIAMETER PRECAST CONCRETE TANK. ACCESS COVER SHALL BE A 48" X 30" HATCH. WET WELL AND COVER SHALL BE DESIGNED TO ACCOMMODATE AN H-20 WHEEL LOADING. WET WELL SHALL BE SEALED AND GROUTED.

<u>PIPING</u>

THE DISCHARGE PIPE SHALL BE THREE INCH IN DIAMETER. PIPING WITHIN WET WELL TO BE SCHEDULE 80, OR EQUIVALENT. FORCE MAIN PIPING TO BE SDR-21, OR EQUIVALENT. VALVING TO BE PLACED IN SEPARATE CHAMBER.

LEVEL CONTROL

THE LEVEL CONTROL SHALL BE SUBMERSIBLE TRANSDUCER/MERCURY FREE MECHANICAL FLOAT SWITCHES SET TO HEIGHTS AS INDICATED ON PLAN PAGE.

DUPLEX CONTROL PANEL

DUPLEX CONTROL PANEL SHALL BE MOUNTED INDOORS, WITH MEANS OF SERVICE POWER DISCONNECT ON BUILDING EXTERIOR IN LINE OF SIGHT FROM PUMP STATION TO ENSURE MAINTENANCE OPERATOR SAFETY DURING SERVICE. CONTROL PANEL TO CONSIST OF THREE CIRCUIT BREAKERS WITH THROUGH-DOOR OPERATING HANDLES (ONE FOR CONTROL POWER AND INDIVIDUAL BREAKERS FOR EACH PUMP), TWO FULL VOLTAGE NON-REVERSING MAGNETIC STARTERS WITH DOOR MOUNTED RESETTABLE OVERLOADS, PUMP RUN INDICATION LIGHTS, LIGHTENING ARRESTOR, PUMP FAULT ALARMS, ALTERNATING RELAY, CYCLE COUNTERS AND ELAPSED TIME METERS, HAND-OFF-AUTO SELECTOR SWITCHES FOR EACH PANEL, ALARM SILENCE BUTTON, ALARM LIGHT WITH CONTACTS TO ALLOW FOR REMOTE MOUNTING OF SECONDARY ALARM LIGHT IN OBVIOUS LOCATION. ALARM LIGHT TO HAVE AMBER COLORED GLOBE. CONTROL TO AUTOMATICALLY PERFORM DUPLEXING AND ALTERNATION.

CONTROL PANEL TO BE EQUIPPED WITH AUTOMATIC ALARM DIALER FOR NOTIFICATION OF MAINTENANCE PERSONNEL IN EVENT OF AN ALARM OUTSIDE NORMAL OPERATING HOURS.

PUMP STATION RIM= 377.3 INV IN (FROM BUILDING) = 367.15 INV IN (FROM GREASE INTERCEPTOR) = 370.35 BOTTOM OF BASIN= 364.5± 105 LF 3" PVC PUMP LINE TO NOTE 5

5 CORE EXISTING SEWER MANHOLE AND CONNECT NEW 2" PUMP LINE. RIM= 387.06 (ADJUSTED FROM EXISTING)

INV IN = 381.67 (MATCH EXISTING) INV OUT = 381.57 78 LF 6" PVC @ S = 0.0075'/' (TO NOTE 6)

6 INSTALL 4' DIA. SEWER MANHOLE. SEE SHEET C6.03 FOR DETAIL. RIM= 389.5 INV = 380.98 105 LF 6" PVC @ S = 0.0080'/' (TO EXISTING)

ELECTRICAL SYSTEM NOTES

- 1 INSTALL NEW SITE LIGHT POLE TO MATCH CAMPUS STANDARD. SEE ELECTRICAL DRAWINGS FOR FIXTURE INFORMATION.
- 2 INSTALL SITE LIGHTING CIRCUIT. SEE ELECTRICAL DRAWINGS FOR CONDUIT & CIRCUIT SIZING. SEE SHEET C6.00 FOR TRENCHING DETAIL.
- 3 INSTALL NEW ELECTRICAL OUTLETS AT TERRACE.

GAS NOTES

- 1 NEW GAS ENTRANCE. SEE PLUMBING DRAWINGS.
- 2 COORDINATE WITH GAS COMPANY TO INSTALL NEW GAS SERVICE. SEE PLUMBING DRAWINGS AND SHEET C6.00 FOR TRENCHING DETAIL.
- (3) NEW 1" GAS LINE FOR OUTDOOR FIREPLACE. COORDINATE WITH GAS COMPANY AND SEE PLUMBING DRAWINGS.

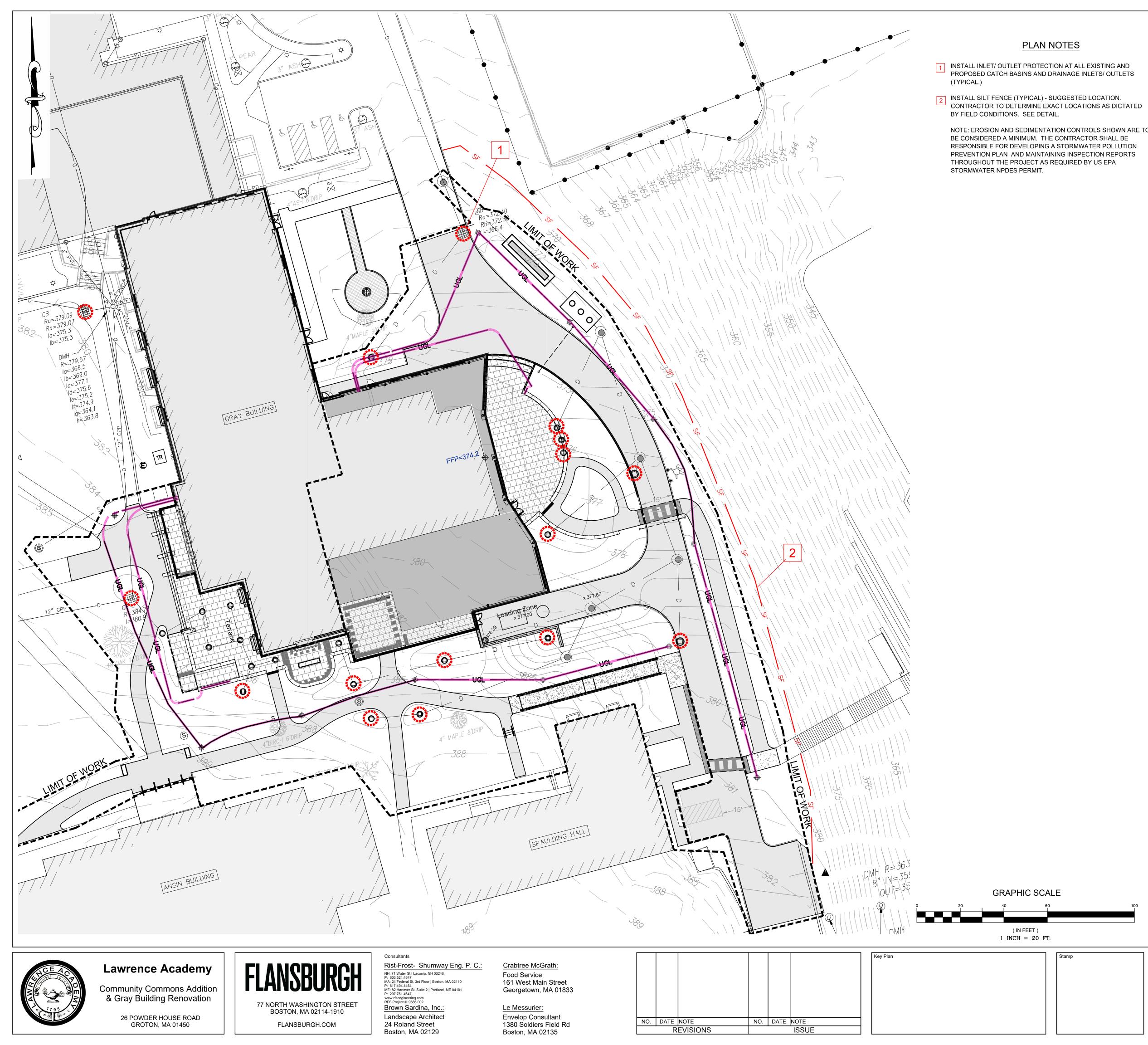
Sheet Title

SITE UTILITIES PLAN

Drawn By	Project ID
JKC	2101
Reviewed By	Scale
Plot Date	Issue Date
09/17/24	09/17/24
Chart Na	

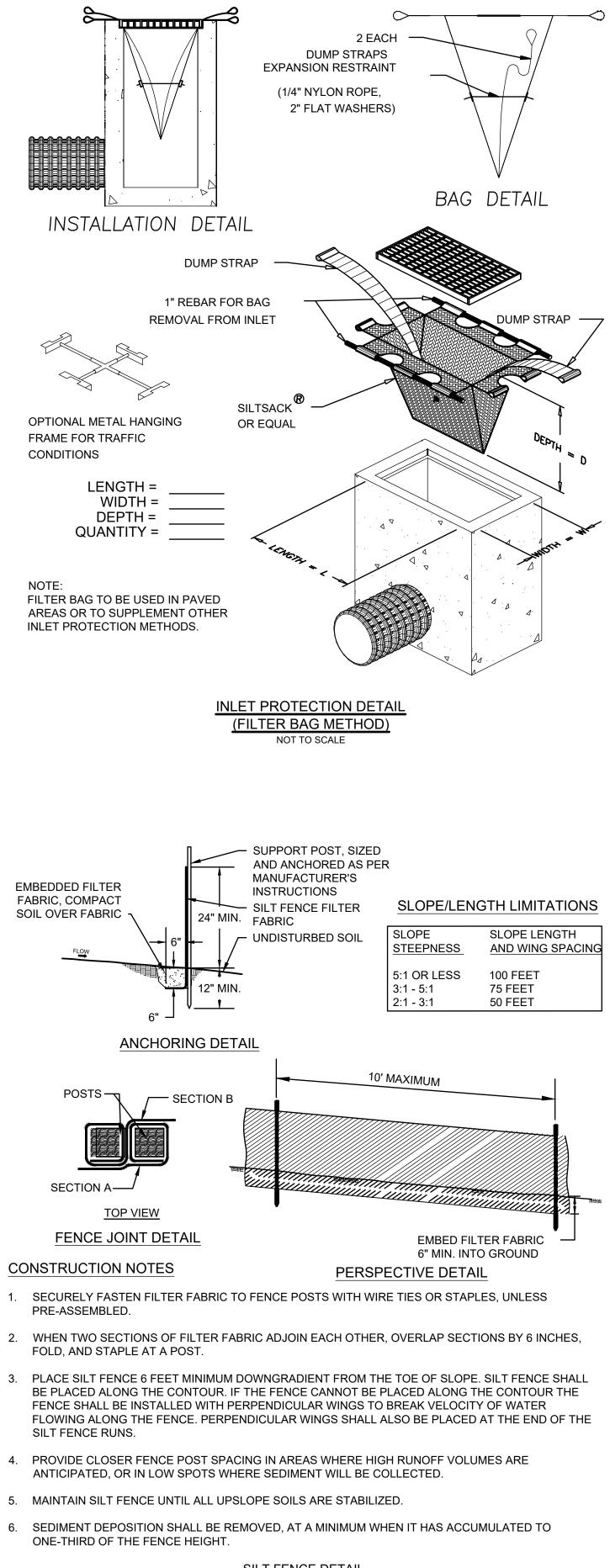
C4.00

Construction Documents 100% PRICING SET

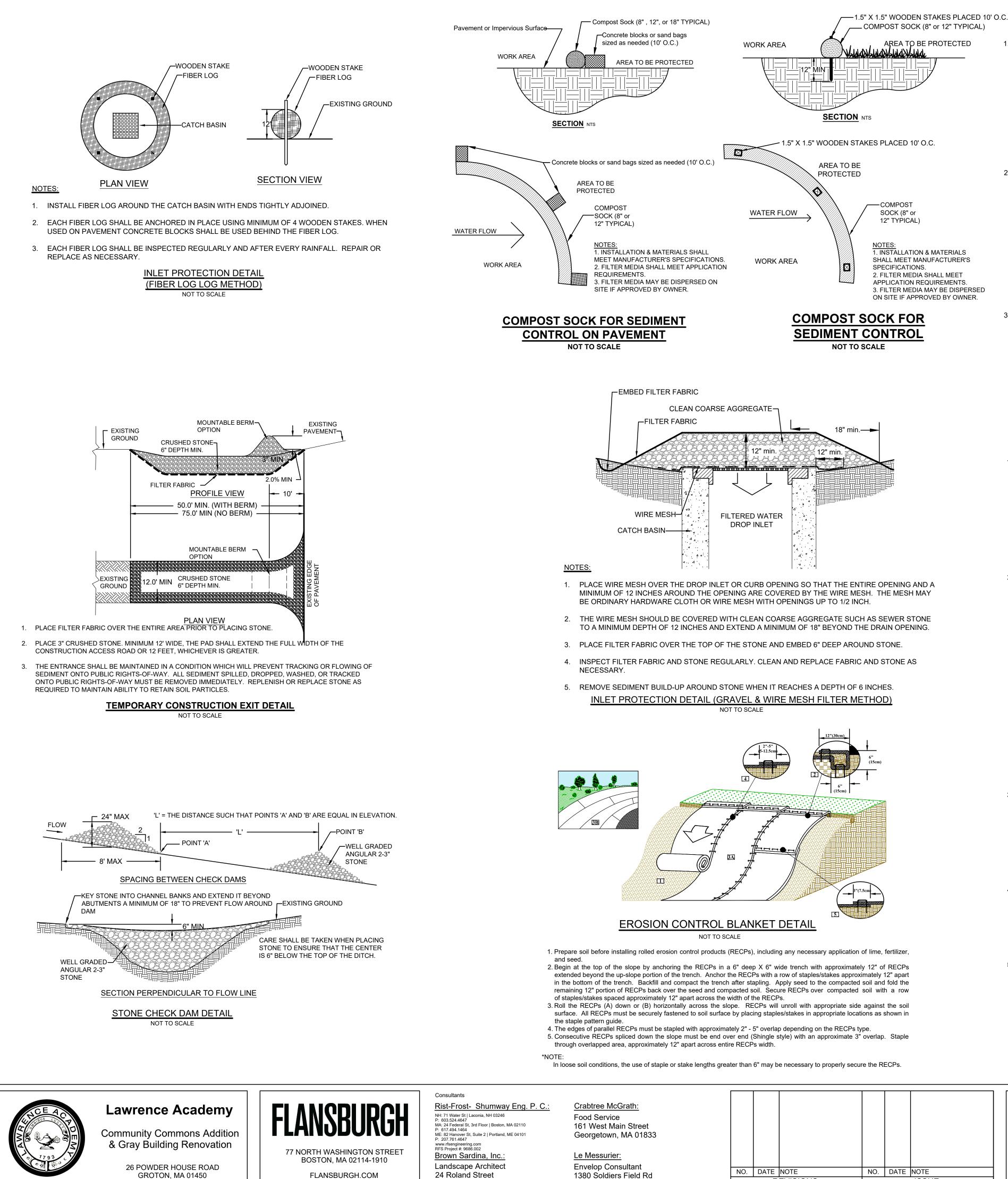


PLAN NOTES

- NOTE: EROSION AND SEDIMENTATION CONTROLS SHOWN ARE TO



		Construction Documents 100% PRICING SET		Sheet No.	5.00	
				Plot Date 09/17/24	Issue Date 09/17/24	
		EROSION CONTROL PLAN		Reviewed By	Scale	
	Stamp	Sheet Title	JK	Drawn By C	Project ID 2101	
Т.						
50 	100 J					
AL	E					
		SILT FENCE DETA NOT TO SCALE	<u>AIL</u>			



Boston, MA 02129

TEMPORARY AND PERMANENT MULCHING:

- a. HAY AND STRAW MULCHES SHALL BE ANCHORED WITH MULCH NETTING, TACKIFIER, SO THAT THEY ARE NOT BLOWN AWAY BY WIND OR WASHED AWAY BY FLOWING WATER. MULCH MATERIALS SHALL BE SELECTED BASED UPON SOILS, SLOPE, FLOW CONDITIONS,
- AND TIME OF YEAR; ALL MULCH MATERIALS SHALL BE APPROVED BY ENGINEER. c. HAY OR STRAW MULCH SHALL BE APPLIED AT A RATE OF 1.5 TO 2 TONS PER ACRE OR 70 TO 90 LBS PER 1000 SQUARE FEET.
- d. WOOD CHIPS OR GROUND BARK SHALL BE APPLIED AT 2 TO 6 INCHES DEEP AT A RATE OF 10 TO 20 TONS PER ACRES OR 460 TO 920 LBS PER 1000 SQUARE FEET.
- e. JUTE AND FIBROUS MATS AND WOOD EXCELSIOR SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- f. EROSION CONTROL MIX SHALL BE PLACED AT A MINIMUM THICKNESS OF 2 INCHES. 2. VEGETATION:
 - a. STONES AND TRASH SHALL BE REMOVED SO AS NOT TO INTERFERE WITH SEEDING AREA b. ON SLOPES 4:1 OR STEEPER THE FINAL PREPARATION SHALL INCLUDE TRACKING TO CREATE HORIZONTAL GROOVES PERPENDICULAR TO THE SLOPE TO CATCH SEED AND REDUCE RUNOFF EROSION POTENTIAL
 - c. FERTILIZER AND ORGANIC SOIL AMENDMENTS SHALL BE APPLIED DURING THE GROWING SEASON AS PER SPECIFICATIONS.
 - d. RUNOFF SHALL BE DIVERTED FROM THE SEEDED AREA.
 - e. SEEDING SHALL OCCUR PRIOR SEPTEMBER 15TH.
- AREAS SEEDED BETWEEN MAY 15TH TO AUGUST 15TH SHALL BE COVERED WITH HAY OR STRAW MULCH AS INDICATED ABOVE
- VEGETATED GROWTH COVERING AT LEAST 85% OF THE DISTURBED AREA SHALL BE ACHIEVED PRIOR TO OCTOBER 15TH
- TEMPORARY EROSION CONTROL BLANKETS:
- a. BLANKETS SHALL BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS.
- b. BLANKETS SHALL BE PLACED WITHIN 24 HOURS AFTER SOWING SEED IN THAT AREA.
- BLANKETS SHALL BE ANCHORED AT THE TOP OF THE SLOPE IN A TRENCH PER MANUFACTURER'S INSTRUCTIONS.
- d. BLANKETS SHALL BE UNROLLED IN THE DIRECTION OF THE WATER FLOW, OVERLAPPING EDGES AND STAPLING PER MANUFACTURER'S INSTRUCTIONS.
- e. BLANKETS SHALL BE LAID LOOSELY OVER THE SOILS, MAINTAINING CONTACT WITH THE SOIL. AND NOT STRETCHED.

SEDIMENT CONTROL METHODS

- 1. SILT FENCES:
- a. FENCES SHALL BE USED IN AREAS WHERE EROSION WILL OCCUR ONLY IN THE FORM OF SHEET EROSION AND THERE IS NO CONCENTRATION OF WATER IN A CHANNEL OR DRAINAGE WAY ABOVE THE FENCE.
- b. THE MAXIMUM CONTRIBUTING DRAINAGE AREA ABOVE THE FENCE SHALL BE LESS THAN 1/4 ACRE PER 100 LINEAR FEET OF FENCE.
- c. THE MAXIMUM LENGTH OF SLOPE ABOVE THE FENCE SHALL BE 100 FEET.
- d. THE MAXIMUM SLOPE ABOVE THE FENCE SHALL BE 2:1
- e. FENCES SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAIL f. FENCES SHALL BE INSPECTED AND MAINTAINED IN ACCORDANCE WITH THE DETAIL.
- EROSION CONTROL BERM MIX:
- a. BERMS SHALL BE USED IN AREAS WHERE EROSION WILL ONLY OCCUR IN THE FORM OF SHEET EROSION AND THERE IS NO CONCENTRATION OF WATER IN A CHANNEL OR DRAINAGE WAY ABOVE THE BERM.
- b. THE BERM SHALL BE INSTALLED FOLLOWING THE CONTOUR OF THE LAND AS CLOSE AS POSSIBLE
- c. THE BERMS SHALL NO BE USED UNLESS THE AREA UPSLOPE OF THE BERM HAS A SLOPE OF LESS THAN 5%.
- d. THE MIX SHALL HAVE AN ORGANIC PORTION BETWEEN 25% AND 65%. DRY WEIGHT BASIS. AND BE FIBROUS AND ELONGATED SUCH AS FROM SHREDDED BARK, STUMP GRINDINGS, COMPOSTED BARK, OR EQUIVALENT MANUFACTURED PRODUCTS.
- e. WOOD AND BARK CHIPS, GROUND CONSTRUCTION DEBRIS, OR REPROCESSED WOOD PRODUCTS SHALL NOT BE USED AS ORGANIC MATERIAL.
- f. THE MIX SHALL NOT CONTAIN SILTS, CLAYS, OR FINE SANDS.
- g. THE MIX HALL HAVE A PARTICLE SIZE BY WEIGHT OF

SIEVE SIZE	% PASSING
3" SCREEN	100%
1" SCREEN	90-100%
3/4" SCREEN	70-100%
1/4" SCREEN	30-75%

- h. THE MIX SHALL HAVE A PH BETWEEN 5.0 AND 8.0. i. THE BERM SHALL BE AT LEAST 12" HIGH AND 24" WIDE.
- STRAW OR HAY BALE BARRIERS:
- a. THE BARRIERS SHALL BE USED IN AREAS WHERE EROSION WILL OCCUR ONLY IN THE FORM OF SHEET EROSION AND THERE IS NO CONCENTRATION OF WATER IN A CHANNEL OR DRAINAGE WAY ABOVE THE BARRIER.
- b. THE MAXIMUM LENGTH OF SLOPE ABOVE THE FENCE SHALL BE 100 FEET.
- c. THE MAXIMUM SLOPE ABOVE THE FENCE SHALL BE 2:1.
- d. THE BARRIERS SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAIL
- 4. TEMPORARY STONE CHECK DAMS:
- a. THE MAXIMUM CONTRIBUTING DRAINAGE AREA ABOVE THE CHECK DAM SHALL BE LESS THAN 1ACRE.
- b. THE CHECK DAMS SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAIL ON THIS SHEET.
- c. THE CHECK DAMS SHALL NOT BE USED IN FLOWING STREAMS
- TEMPORARY CATCH BASIN INLET PROTECTION:
- a. THE MAXIMUM CONTRIBUTING DRAINAGE AREA TO THE CATCH BASIN SHALL BE LESS THAN 1ACRF b. ACCEPTABLE METHODS OF INLET PROTECTION ARE GRAVEL AND WIRE MESH FILTER, FILTER
- BAG, OR FIBER LOG.
- c. THE INLET PROTECTION METHOD SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS ON THIS SHEET
- d. THE INLET PROTECTION METHOD SHALL BE INSPECTED AND MAINTAINED IN ACCORDANCE WITH THE DETAIL.

abtree McGrath:
od Service 1 West Main Street orgetown, MA 01833

Boston, MA 02135

	-					
						Key F
NO.	DATE	NOTE	NO.	DATE	NOTE	
	R	EVISIONS			ISSUE	

	Key Plan

EROSION CONTROL METHODS

- f. THE BARRIERS SHALL BE INSPECTED AND MAINTAINED IN ACCORDANCE WITH THE DETAIL.
- d. THE BARRIERS SHALL BE INSPECTED AND MAINTAINED IN ACCORDANCE WITH THE DETAIL.

SEDIMENT CONTROL METHODS (continued)

6. TEMPORARY CONSTRUCTION EXIT:

WITH THE DETAIL.

- a. THE TEMPORARY CONSTRUCTION EXIT(S) SHALL BE INSTALLED IN ALL AREAS WHERE TRACKING OF SEDIMENT OFF THE CONSTRUCTION SITE IS POSSIBLE.
- b. THE TEMPORARY CONSTRUCTION EXIT SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS ON THIS SHEET.
- THE TEMPORARY CONSTRUCTION EXIT SHALL BE INSPECTED AND MAINTAINED IN
- ACCORDANCE WITH THE DETAIL ON THIS SHEET.
- 7. TEMPORARY SEDIMENT TRAP: a. THE TRAP SHALL BE INSTALLED AS CLOSE TO THE DISTURBED AREA OR SOURCE OF
- SEDIMENT AS POSSIBLE. b. THE MAXIMUM CONTRIBUTING DRAINAGE AREA TO THE CATCH BASIN SHALL BE LESS THAN 5
- ACRES
- c. THE TEMPORARY SEDIMENT TRAP SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS. d. THE TEMPORARY SEDIMENT TRAP SHALL BE INSPECTED AND MAINTAINED IN ACCORDANCE

CONSTRUCTION SEQUENCE

- INSTALL SEDIMENTATION CONTROL (DEVICES) IN LOCATIONS SHOWN ON PLANS AND ANY OTHER LOCATION DEEMED NECESSARY PRIOR TO ANY EARTH MOVING OR BLASTING OPERATION
- REMOVE TOPSOIL AND STOCKPILE AWAY FROM ANY WETLAND. STABILIZE STOCKPILE IMMEDIATELY BY SEEDING OR COVERING. STOCKPILE SHALL BE ENCLOSED WITH SILT FENCE OR OTHER SUITABLE EROSION CONTROL DEVICE.
- REMOVE EXISTING STRUCTURES AND IMPROVEMENTS NECESSARY TO PERMIT CONSTRUCTION AND SITE WORK AS SHOWN ON THE PLANS.
- ROUGH GRADE THE SITE. ALL CUT AND FILL SLOPES SHALL BE STABILIZED UPON COMPLETION OF ROUGH GRADING PER THE EROSION CONTROL NOTES.
- INSTALL DRAINAGE PIPES AND STRUCTURES. STABILIZE IMMEDIATELY PER THE EROSION CONTROL NOTES. RUNOFF SHALL NOT BE DIRECTED TOWARDS PERMANENT EROSION CONTROL STRUCTURES UNTIL THEY HAVE BEEN STABILIZED.
- INSTALL SEDIMENTATION CONTROL AT NEW CATCH BASINS ACCORDING TO DETAIL HEREON INSPECT AND MAINTAIN EROSION CONTROL MEASURES ON A DAILY BASIS AND AFTER ANY STORMS
- DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, CULVERT, DITCHES, SILT FENCES, SEDIMENT TRAPS, ETC. MULCH AND SEED AS REQUIRED. 8. CONSTRUCT SITE IMPROVEMENTS.
- FINISH GRADE THE SITE TO PREPARE FOR PAVING AND LOAMING. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 72 HOURS AFTER FINAL GRADING.
- 10. PERFORM FINISH PAVING. PERMANENT SEEDING SHALL BE PERFORMED UPON COMPLETION OF PAVING PER EROSION CONTROL NOTES.
- 11. TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE ALL DISTURBED AREAS HAVE BEEN STABILIZED.

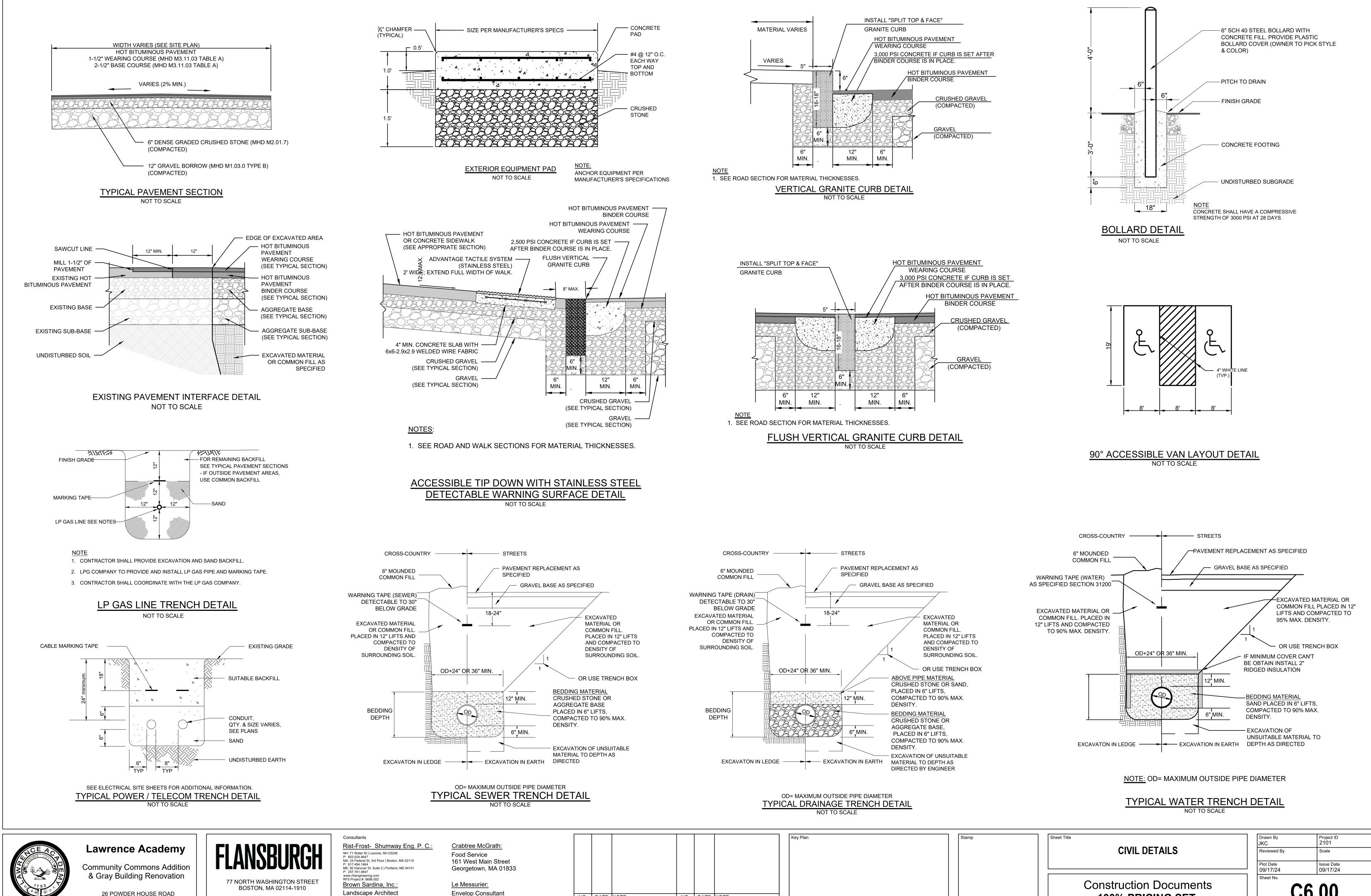
EROSION & SEDIMENTATION CONTROL NOTES

- EROSION AND SEDIMENTATION CONTROL DEVICES SHALL BE INSTALLED AS SHOWN ON THE CONSTRUCTION DOCUMENTS OR AS MODIFIED BY THE STORMWATER POLLUTION PREVENTION PLAN.
- EROSION AND SEDIMENTATION CONTROL METHODS EMPLOYED SHALL BE IN ACCORDANCE NITH ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS.
- EROSION AND SEDIMENTATION CONTROL METHODS SHALL BE INSPECTED WEEKLY OR WITHIN 24 HOURS OF ANY 0.5" OR GREATER RAINFALL EVENT.
- WEEKLY INSPECTION LOGS SHALL BE MAINTAINED ON SITE AND SHALL BE MADE AVAILABLE TO
- FEDERAL, STATE, OR LOCAL OFFICIALS. THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED AT ANY ONE TIME. ALL STURBED AREAS (CLEARED FOR CONSTRUCTION BUT N UNDERGOING CONSTRUCTION) SHALL BE STABILIZED WITHIN 14 DAYS OF DISTURBANCE. MAXIMUM EXPOSED AREA AT ÁNY TIME SHALL BE LIMITED TO 5 ACRES OR LESS.
- DISTURBED SLOPES SHALL BE PROTECTED WITH JUTE MATTING UNTIL STABILIZED.
- THE CONTRACTOR SHALL LIMIT THE AREAS OF EXPOSURE TO 45 DAYS MAXIMUM WITHOUT FINAL STABILIZATION.
- 8. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURED: BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED.
 - A MINIMUM OF 85 % VEGETATED GROWTH HAS BEEN ESTABLISHED. A MINIMUM OF 3 INCHES OF NON-EROSION MATERIAL SUCH AS STONE OR RIP-RAP HAS REEN INSTALLED
 - EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED. D.
- PERMANENT SEEDING AND LOAMING SHALL CONFORM TO THE PROJECT SPECIFICATIONS MANUAI
- 10. ALL EROSION CONTROL DEVICES SHOWN ON THESE PLANS ARE THE MINIMUM RECOMMENDED THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING ADDITIONAL EROSION CONTROL DEVICES AS DEEMED NECESSARY

COLD WEATHER STABILIZATION MEASURES

- 1. COLD WEATHER STABILIZATION TECHNIQUES APPLY FROM NOVEMBER 30 THROUGH MAY 1.
- 2. THE AREA OF EXPOSED, UNSTABILIZED SOIL SHALL BE LIMITED TO ONE ACRE AND SHALL BI PROTECTED AGAINST EROSION BY METHODS INDICATED ON THE PLANS PRIOR TO TO ANY THAW OR SPRING MELT EVENT.
- 3. ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF LESS THAN 15% WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY NOVEMBER 30. OR WHICH ARE DISTURBED AFTER NOVEMBER 30, SHALL BE SEEDED AND COVERED WITH 3 TO 4 TONS OF HAY OR STRAW MULCH PER ACRE SECURED WITH ANCHORED NETTING OR TACKIFIER, OR WITH A MINIMUM OF 2 INCHES OF EROSION CONTROL MIX.
- ALL PROPOSED VEGETATED AREAS HAVING A SLOPE GREATER THAN 15% WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY NOVEMBER 30, OR WHICH ARE DISTURBED AFTER NOVEMBER 30, SHALL BE SEEDED AND COVERED WITH A PROPERLY INSTALLED AND ANCHORED EROSION CONTROL BLANKET OR WITH A MINIMUM OF 4 INCHES OF EROSION CONTROL MIX
- INSTALLATION OF ANCHORED HAY MULCH OR EROSION CONTROL MIX SHALL NOT OCCUR OVER SNOW OF GREATER THAN ONE INCH IN DEPTH.
- 6. INSTALLATION OF EROSION CONTROL BLANKETS SHALL NOT OCCUR OVER SNOW OF GREATER THAN ONE INCH IN DEPTH OR ON FROZEN GROUND.
- 7. ALL PROPOSED STABILIZATION IN ACCORDANCE WITH 3 AND 4 ABOVE. SHALL BE COMPLETED WITHIN A DAY OF ESTABLISHING THE GRADE THAT IS FINAL OR THE OTHERWISE WILL EXIST FOR MORE THAN 5 DAYS.
- ALL DITCHES AND SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY NOVEMBER 30. OR WHICH ARE DISTURBED AFTER NOVEMBER 30. SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS, AS DETERMINED BY THE DESIGN ENGINEER.
- AFTER NOVEMBER 30, INCOMPLETE ROAD OR PARKING AREAS WHERE ACTIVE CONSTRUCTION HAS STOPPED FOR THE WINTER SEASON SHALL BE PROTECTED WITH A MINIMUM 3 INCH LAYER OF BASE COURSE GRAVELS MEETING NHDOT ITEM NO. 304.1 OR 304.2.

EROSION CONTROL PLAN	Drawn By JKC	Project ID 2101
EROSION CONTROL PLAN	Reviewed By	Scale
	Plot Date 09/17/24	Issue Date 09/17/24
Construction Documents 100% PRICING SET	Sheet No.	;5.01



26 POWDER HOUSE ROAD GROTON, MA 01450

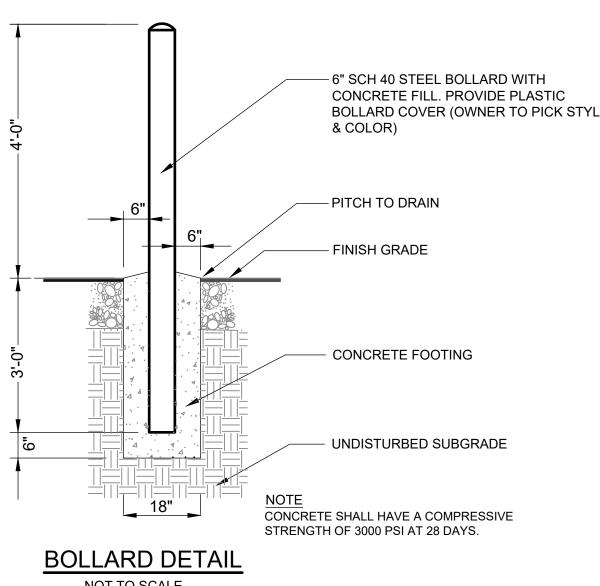
FLANSBURGH.COM

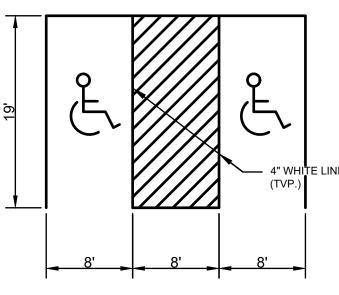
1380 Bost

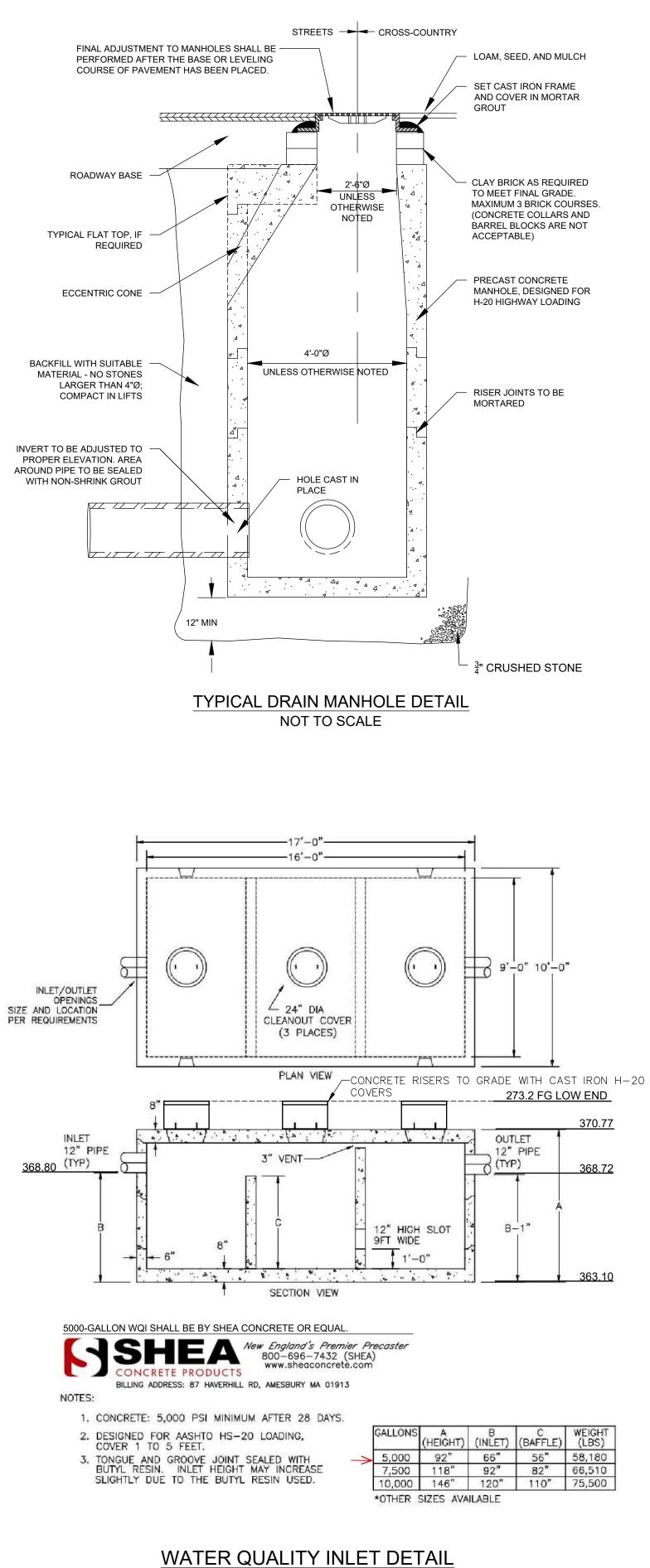
24 Roland Street

Boston, MA 02129

otree McGrath:				Key Plan	Stamp	Sheet Title	Drawn By JKC	Project ID 2101
d Service West Main Street						CIVIL DETAILS	Reviewed By	Scale
orgetown, MA 01833							Plot Date 09/17/24	Issue Date 09/17/24
<u>Messurier:</u> elop Consultant						Construction Documents	Sheet No.	C6.00
0 Soldiers Field Rd ton, MA 02135	NO. DATE NOT	re SIONS	NO. DATE NOTE			100% PRICING SET		







NOT TO SCALE



Lawrence Academy

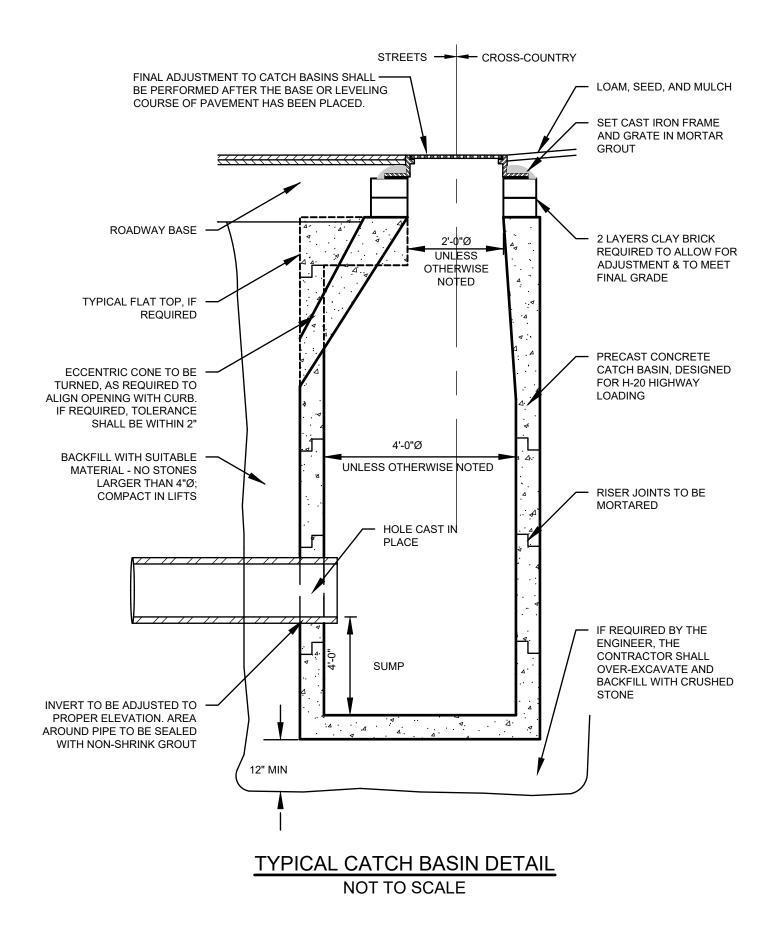
Community Commons Addition & Gray Building Renovation

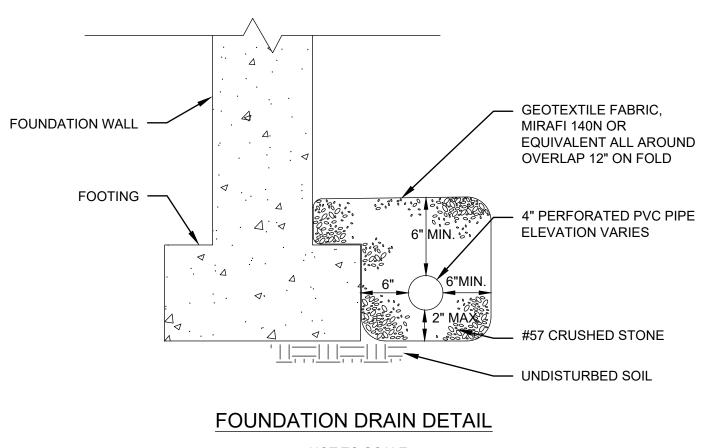
> 26 POWDER HOUSE ROAD GROTON, MA 01450

77 NORTH WASHINGTON STREET BOSTON, MA 02114-1910 FLANSBURGH.COM Consultants Rist-Frost- Shumway Eng. P. C.: NH: 71 Water St | Laconia, NH 03246 P: 603 524.4647 MA: 24 Federal St, 3rd Floor | Boston, MA 02110 P: 617.494.1464 ME: 82 Hanover St, Suite 2 | Portland, ME 04101 P: 207.761.4647 www.rfsengineering.com RFS Project #: 9866.002 Brown Sardina, Inc.: Landscape Architect 24 Roland Street Boston, MA 02129

<u>Crab</u> Food 161 Geor

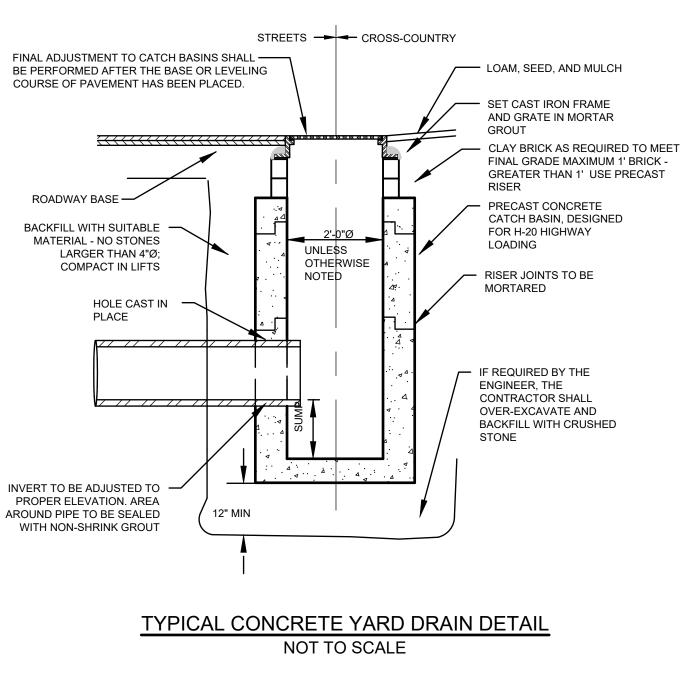
<u>Le M</u> Enve 1380 Bosto

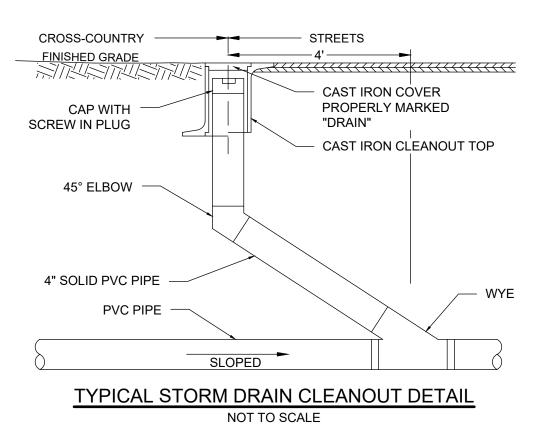


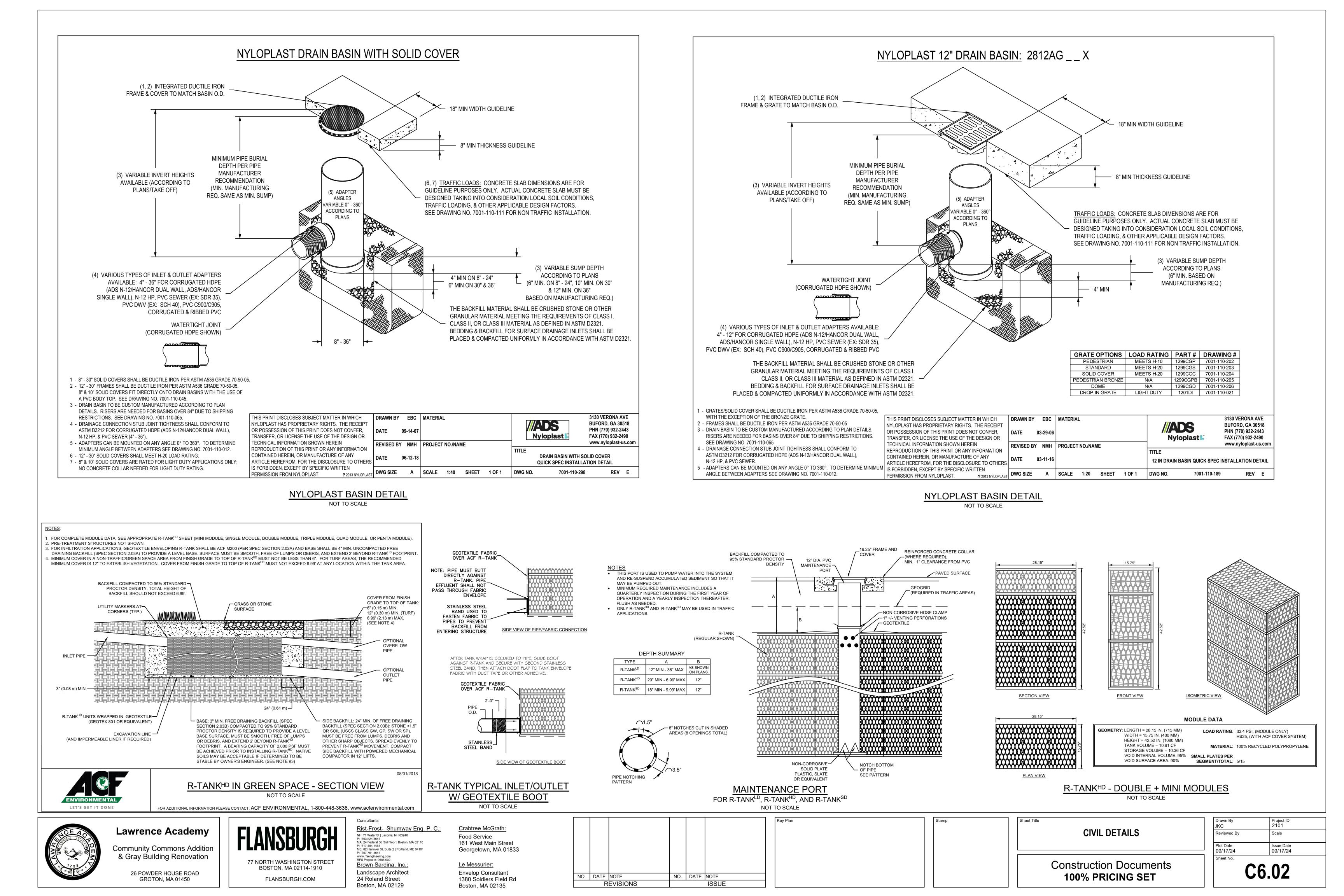


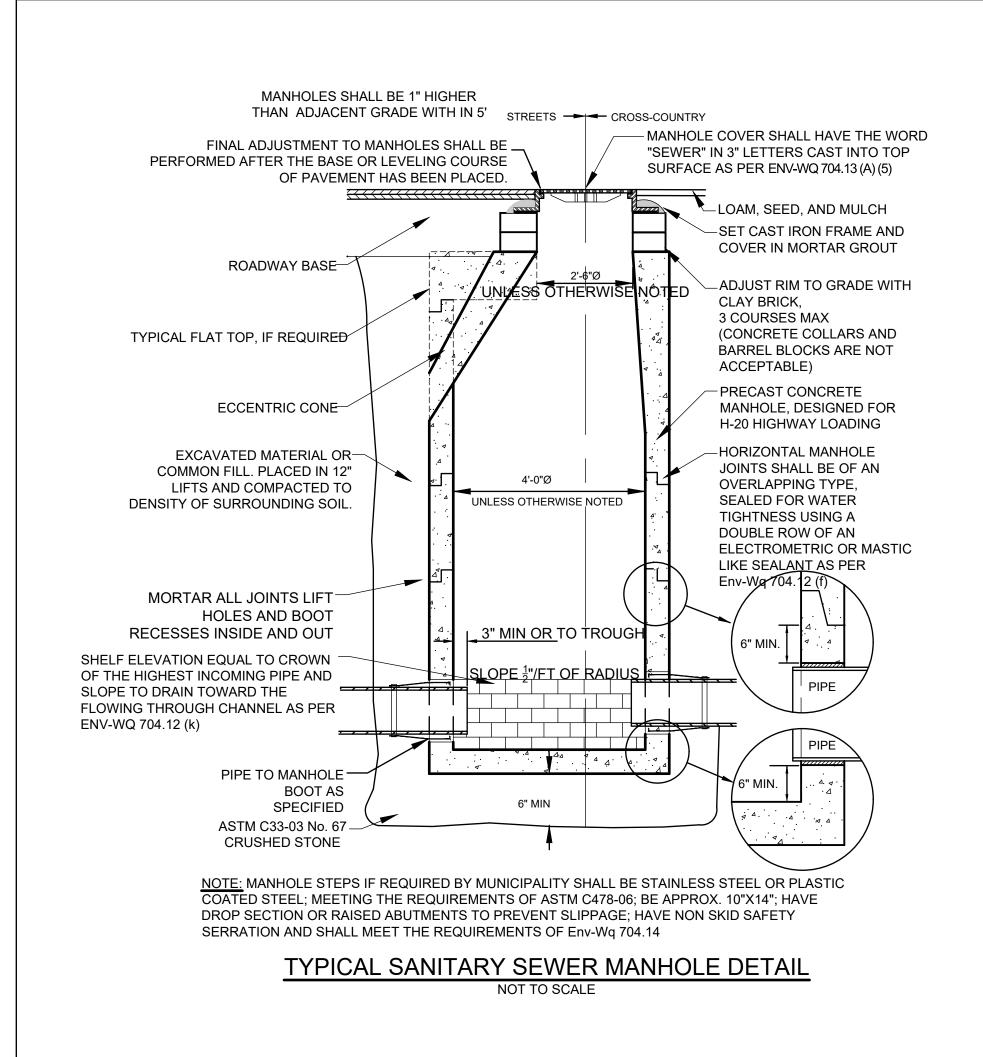
NOT TO SCALE

				Key Plan	Stamp	Sheet Title	Drawn By	Project ID 2101
<u>:Grath:</u>						CIVIL DETAILS	Reviewed By	Scale
e ain Street								
, MA 01833							Plot Date 09/17/24	Issue Date 09/17/24
							Sheet No.	09/17/24
<u>.</u>						Construction Documents		
sultant								6.01
s Field Rd	NO. DATE NOTE	NO.	DATE NOTE			100% PRICING SET		
02135	REVISIONS		ISSUE					











Community Commons Addition & Gray Building Renovation

> 26 POWDER HOUSE ROAD GROTON, MA 01450



 Rist-Frost Shumway Eng. P. C.:

 NH: 71 Water St | Laconia, NH 03246
 P:

 P: 603.524.4647
 MA: 24 Federal St, 3rd Floor | Boston, MA 02110

 P: 617.494.1464
 ME: 82 Hanover St, Suite 2 | Portland, ME 04101

 P: 207.761.4647
 Www.rfsengineering.com

 RFS Project #: 9686.002
 Brown Sardina, Inc.:

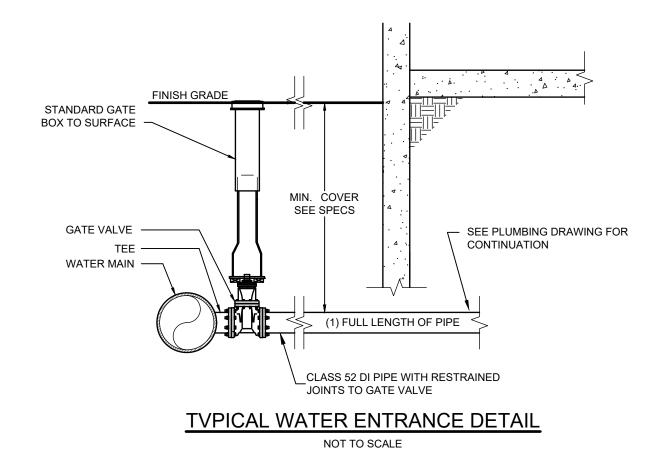
 Landscape Architect
 24 Roland Street

 Boston, MA 02129
 P

Consultants

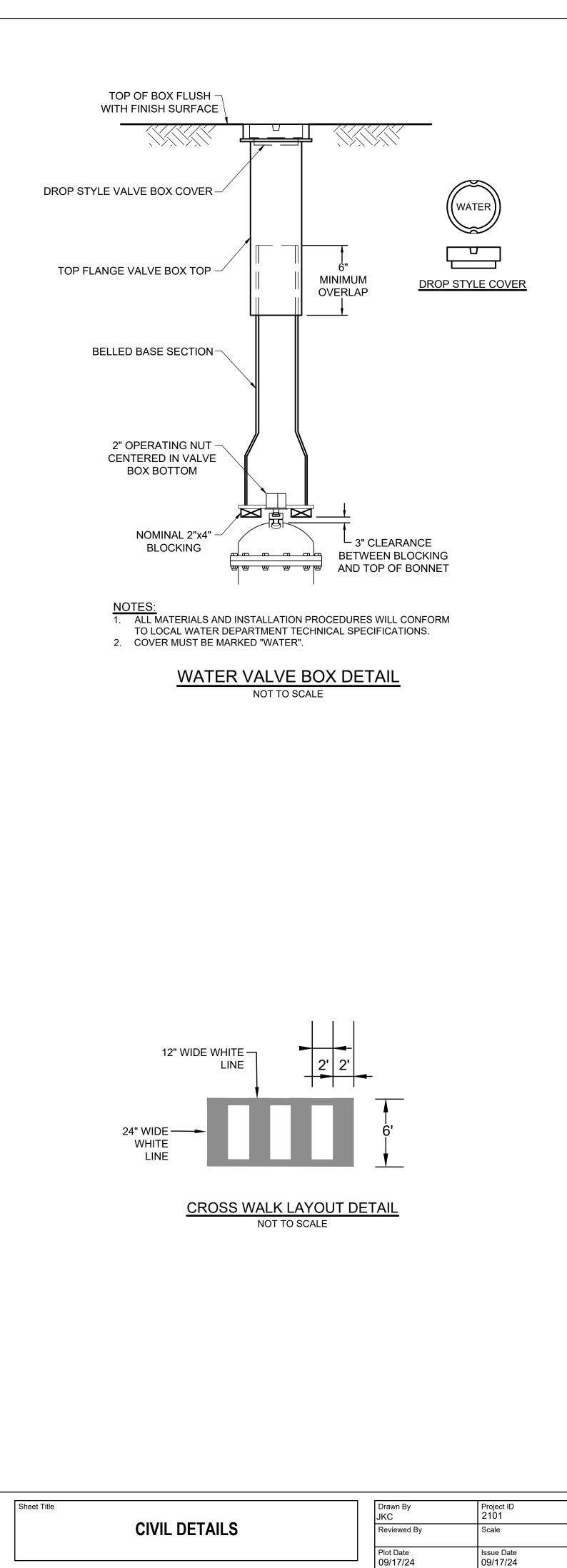
<u>Crabtre</u> Food S 161 We George

<u>Le Mes</u> Envelo 1380 S Boston



] [Key Plan
ee McGrath:								
Service								
est Main Street								
etown, MA 01833								
surier:								
p Consultant								
oldiers Field Rd	NO.	DATE	NOTE	NO.	DATE	NOTE		
, MA 02135		R	EVISIONS			ISSUE		

9

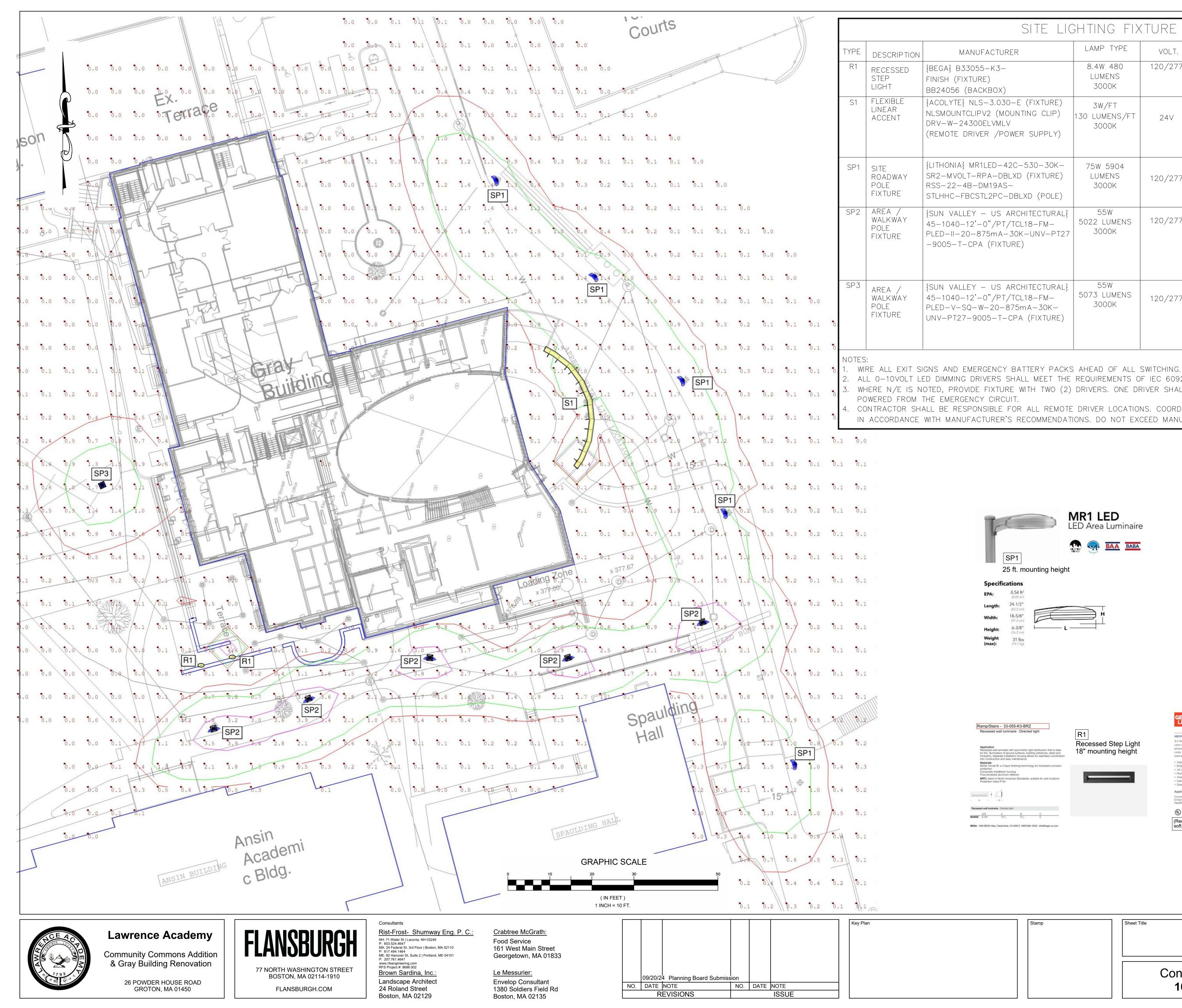


Construction Documents 100% PRICING SET

Stamp

C6.03

Sheet No.



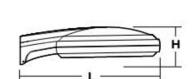
SITE LIG	Ghting fix	TURE S	SCHED	ULE
	LAMP TYPE	VOLT.	WATTS/ FIXT.	REMARKS
	8.4W 480 LUMENS 3000K	120/277	11	COMPOSITE HOUSING, ANODIZED ALUMINUM REFLECTOR, WET LOCATION, IP65, MULTI-VOLTAGE INPUT, LOW TEMP RATED, ELV DIMMABLE, L70=60,000 HOURS, FINISH BY ARCHITECT
(FIXTURE) TING CLIP) R SUPPLY)	3W/FT 130 LUMENS/FT 3000K	24V	3/ FT	SIDE-BENDING FLEXIBLE SILICONE, MOLDED END CAPS, END FEED, MOUNTING CLIPS, WET LOCATION, IP67, ELV DIMMABLE, LOW OPERATING TEMP, STATIC WHITE, 3000K, 300 WATT ELV/MLV DIMMABLE REMOTE DRIVER DIMMABLE TO 1%, REMOTE DRIVER TO BE DAMP RATED IP67 WITH OVERLOAD AND SHORT CIRCUIT PROTECTION
-530-30K- (FIXTURE) .XD (POLE)	75W 5904 LUMENS 3000K	120/277	75	ALUMINUM HOUSING, IMPACT-RESISTANT GLASS LENS, GASKETED DOOR FRAME, TYPE 2 OPTICAL DISTRIBUTION, 3000K, MULTI-VOLT INPUT, THD <20%, ROUND POLE MOUNTING, 22FT POLE WITH STEEL HANDHOLE AND BASECOVER, BLACK FINISHES
HITECTURAL} _18-FM- (-UNV-PT27)	55W 5022 LUMENS 3000K	120/277	55	TRADITIONAL COACH LANTERN SERIES, CAST ALUMINUM HOUSING, HINGED TOP, GASKETING, CLEAR PATTERNED ACRYLIC LENS PANELS, TYPE 2 DISTRIBUTION WITH PLED OPTICS, UL WET LOCATION, MULTI-VOLTAGE INPUT, 3000K, CRI 70+, LOW OPERATING TEMP, FM FINIAL, 4" STAIGHT ALUMINUM POLE, ONE PIECE CAST ALUMINUM BASE WITH HANDHOLD AND COVER, BLACK FINISHES
HITECTURAL} _18-FM- mA-30K- (FIXTURE)	55W 5073 LUMENS 3000K	120/277	55	TRADITIONAL COACH LANTERN SERIES, CAST ALUMINUM HOUSING, HINGED TOP, GASKETING, CLEAR PATTERNED ACRYLIC LENS PANELS, TYPE 5 DISTRIBUTION WITH PLED OPTICS, UL WET LOCATION, MULTI-VOLTAGE INPUT, 3000K, CRI 70+, LOW OPERATING TEMP, FM FINIAL, 4" STAIGHT ALUMINUM POLE, ONE PIECE CAST ALUMINUM BASE WITH HANDHOLD AND COVER, BLACK FINISHES

ALL 0-10VOLT LED DIMMING DRIVERS SHALL MEET THE REQUIREMENTS OF IEC 60929 AND SHALL HAVE AN ISOLATED 0-10VDC CONTROL CIRCUIT. WHERE N/E IS NOTED, PROVIDE FIXTURE WITH TWO (2) DRIVERS. ONE DRIVER SHALL BE POWERED FROM THE NORMAL CIRCUIT AND ONE SHALL BE

CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REMOTE DRIVER LOCATIONS. COORDINATE DRIVER LOCATIONS WITH THE ARCHITECT. PROVIDE WIRE SIZE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. DO NOT EXCEED MANUFACTURER'S RECOMMENDATIONS FOR DISTANCE.



25 ft. mounting height





FIXTURE	FINIAL	A	В
TCL21	FM	21* (533mm)	41" (1041mm)
TCL21	FP	21* (533mm)	40" (1016mm)
TCL18	FM	18° (457mm)	37" (940mm)
TCL18	FP	18" (457mm)	35" (889mm)



Sheet Title SITE LIGHTING	Drawn By JKC	Project ID 2101
PHOTOMETRICS	Reviewed By	Scale
	Plot Date 09/23/2024	Issue Date
Construction Documents 100% PRICING SET	Sheet No.	6.04



Georgetown, MA 01833

	Construction Desig Progress Set	gn	Sheet No.	
			Reviewed By MS Plot Date 08.23.24	Issue Date 08.23.24
Sheet Title			Drawn By NB Reviewed By	Project ID 202101 Scale
ADEMASTER LOCUST	1x1 - 36 - 36 - 36 - 36 	STONE RETAINING WALL		
DROP-OFF	PLAT.			
(2) KOUSA DOGWOOD	36724		TURF FIELD	
RAMP WITH HANDRAILS	RETAINING WALL	STONE RETAINING WALL	TURF	
(1) SHADEMASTER LOCUST	STONE RETAIN	STONE RE		
GRANITE PAVERS				
BRICK VENEER SEAT	WALL			
	$\left(\left(\right) \right) \right) = \left(\left(\left(\right) \right) \right) \right)$	2		
1)		
3	54x5			
TENNIS COURT		TENNIS COURT		

DEMOLITION NOTES

- 1. REFER TO SPECIFICATION SECTIONS:
- 31 10 00 SITE PREPARATION FOR FURTHER INFORMATION ON DEMOLITION AND SITE PREPARATION.
- 31 20 00 EARTHWORK- FOR FURTHER INFORMATION ON SUBGRADE PREPARATION ON AREAS DISTURBED BY DEMOLITION. 14 31 25 00 - EROSION AND SEDIMENTATION CONTROL
- 2. THE EXISTING CONDITIONS PLAN SHOWN ARE AS SURVEYED; BY DILLS & ROY CIVIL DESIGN GROUP, 1 MAIN STREET, SUITE 1, LUNENBURG, MA. REFER TO SITE UTILITIES PLANS, AND STORM WATER DRAINAGE PLAN FOR FURTHER INFORMATION ON ANY DEMOLITION OR MODIFICATIONS TO EXISTING UNDERGROUND OR OVERHEAD UTILITIES.
- 3. COORDINATE SITE DEMOLITION WITH EROSION CONTROL AND STORM DRAINAGE REQUIREMENTS FOR THE DURATION OF 15. THE PROJECT.
- 4. THE WORK DESCRIBED ON THIS PLAN IS THE GENERAL INTENT. THE CONTRACTOR SHALL INCLUDE IN THEIR BID ALL DEMOLITION WORK NECESSARY FOR THE PROPOSED IMPROVEMENTS.
- 5. THIS PLAN INDICATES THE DEMOLITION OF FEATURES ON THE SURFACE OF THE SITE, INCLUDING FOOTING, FOUNDATION AND SUB-BASE MATERIALS.
- 6. THE CONTRACTOR IS RESPONSIBLE FOR VISITING THE SITE TO FAMILIARIZE HIM/HERSELF WITH THE FULL SCOPE OF THE DEMOLITION REQUIRED FOR THE EXECUTION OF THE PROJECT CONTRACT AND SHALL VERIFY ALL EXISTING CONDITIONS IN THE FIELD, REPORT ANY DISCREPANCIES BETWEEN THE EXISTING CONDITIONS PLAN, AND THE ACTUAL SITE CONDITIONS, TO THE ARCHITECT, PRIOR TO BEGINNING WORK.
- 7. IN GENERAL ALL EXISTING MATERIALS WITHIN THE CONSTRUCTION AREA / LIMIT OF WORK, AND WHERE NEW MATERIALS ARE SHOWN ON THE CONSTRUCTION DRAWINGS ARE TO BE REMOVED AND DISPOSED OF LEGALLY OFFSITE. EXISTING ITEMS TO BE DEMOLISHED INCLUDE, THOUGH ARE NOT LIMITED TO; CURBING, BITUMINOUS CONCRETE PAVEMENT, CONCRETE PAVEMENT, SUB-BASES, FOOTINGS, EXISTING BOULDER WALLS, SITE AMENITIES, SITE SIGNAGE, VEGETATION AND ROOT STRUCTURES UNLESS NOTED.
- 8. THE GENERAL CONTRACTOR SHALL COORDINATE THE SEQUENCE OF DEMOLITION AND ALL SITE IMPROVEMENTS TO PROVIDE UNINTERRUPTED ACCESS FOR THE ABUTTING PROPERTIES FOR THE DURATION OF THE PROJECT.
- 9. COORDINATE THE INSTALLATION OF ALL NEW TEMPORARY FENCING REQUIRED TO SECURE THE SITE AS REQUIRED DURING THE EXECUTION OF THE PROJECT CONTRACT.
- 10. ALL TREES, SHRUBS, GROUNDCOVER, STUMPS AND OVERBURDEN SHALL BE REMOVED IN THE EXECUTION OF THE PROPOSED SITE IMPROVEMENTS. REFER TO SPECIAL PROJECT CONDITIONS SPECIFICATION AND WORK REQUIRED HEREIN.
- 11. FOR ALL TREES TO BE REMOVED, AND OR EXISTING STUMPS ON THE SITE ALL STUMPS SHALL BE GROUND DOWN TO A MINIMUM OF 18 INCHES BELOW FINISH GRADE.
- 12. M ITEMS TO BE STORED, PROTECTED AND RELOCATED ON SITE BY THE CONTRACTOR PER OWNER / ARCHITECTS DIRECTIONS. \square " / I / A / \

			BIT WALK	
				12"
		/	CB R=387.00 I=383.5	12" CPP
	TREE TO REMAIN AND I BY TREE PROTECTION 28"MAPLE 24'D			SPOT GRADE ©TREE
	BITUMINOUS CO	NCRETE TO P	9	
	-3907 	DRIP		24 90
	REMOVE AND EXISTING GRAM	RELOCATE X M	390	
	REMOVE AND EXISTING GRAM	NITE BENCH		390 39175
			BIT WALK	
	EXISTING GRAVEL DRIP STRIP TO REMAIN $\overline{\mathbf{P}}$			
	EXISTING GRAVEL DRIP STRIP TO REMAIN $\overline{igoplus}$			
				SHEEDY
TREE PROTECTION NOTES		. 17		

IREE PROTECTION NOTES

- 1. IMMEDIATELY AFTER AWARD OF THE CONTRACT PROVIDE SUBMITTALS AS REQUIRED FOR EXISTING PLANTS TO REMAIN.
- 2. DO NOT DRIVE EQUIPMENT, PARK EQUIPMENT OR STORE MATERIALS WITHIN THE TREE PROTECTION FENCING AREA 3. DO NOT DISTURB THE AREA WITHIN THE TREE PROTECTION AREA UNTIL THE ARBORIST EVALUATES THE TREES AND PRESCRIBES CARE BEFORE CONSTRUCTION WITHIN THE TREE PROTECTION AREA. SEE SECTION 31 13 20 - EXISTING
- PLANTS TO REMAIN 4. AREAS FENCED OFF WITH TREE PROTECTION FENCE SHALL BE CONSIDERED TREE PROTECTION AREAS. THE PURPOSE OF THIS IS TO PREVENT DAMAGE TO EXISTING TREES, ROOT SYSTEM AND PREVENT COMPACTION OF EXISTING LAWN
- AREAS. EXISTING LAWNS SHALL BE REMOVED.

CIVIL NOTES

1. SEE CIVIL DWGS FOR ALL SITE UTILITY DEMOLITION.

DEMOLITION LEGEND

	LIMIT OF WORK (LOW)	\times	REMOVE AND DISPOSE	
	PROPERTY LINE	R	RELOCATE OFFSITE	
	BITUMINOUS CONCRETE TO BE REMOVED	Re	RECLAIM ONSITE	
	CONCRETE TO BE REMOVED	M	RELOCATE ONSITE	
×	SITE ELEMENT TO BE REMOVED (SEE NOTE)	P	PROTECT	
0	TREE TO REMAIN	\otimes	TREE TO BE REMOVED	
Ο	TREE TO REMAIN (NOT SHOWN ON SURVEY)		TREE PROTECTION FENCING	



Lawrence Academy

Community Commons Addition & Gray Building Renovation

26 POWDER HOUSE ROAD GROTON, MA 01450



FLANSBURGH.COM

Consultants Rist-Frost- Shumway Eng. P. C .: Civil, MEP, Structural 71 Water Street Laconia, NH 03246

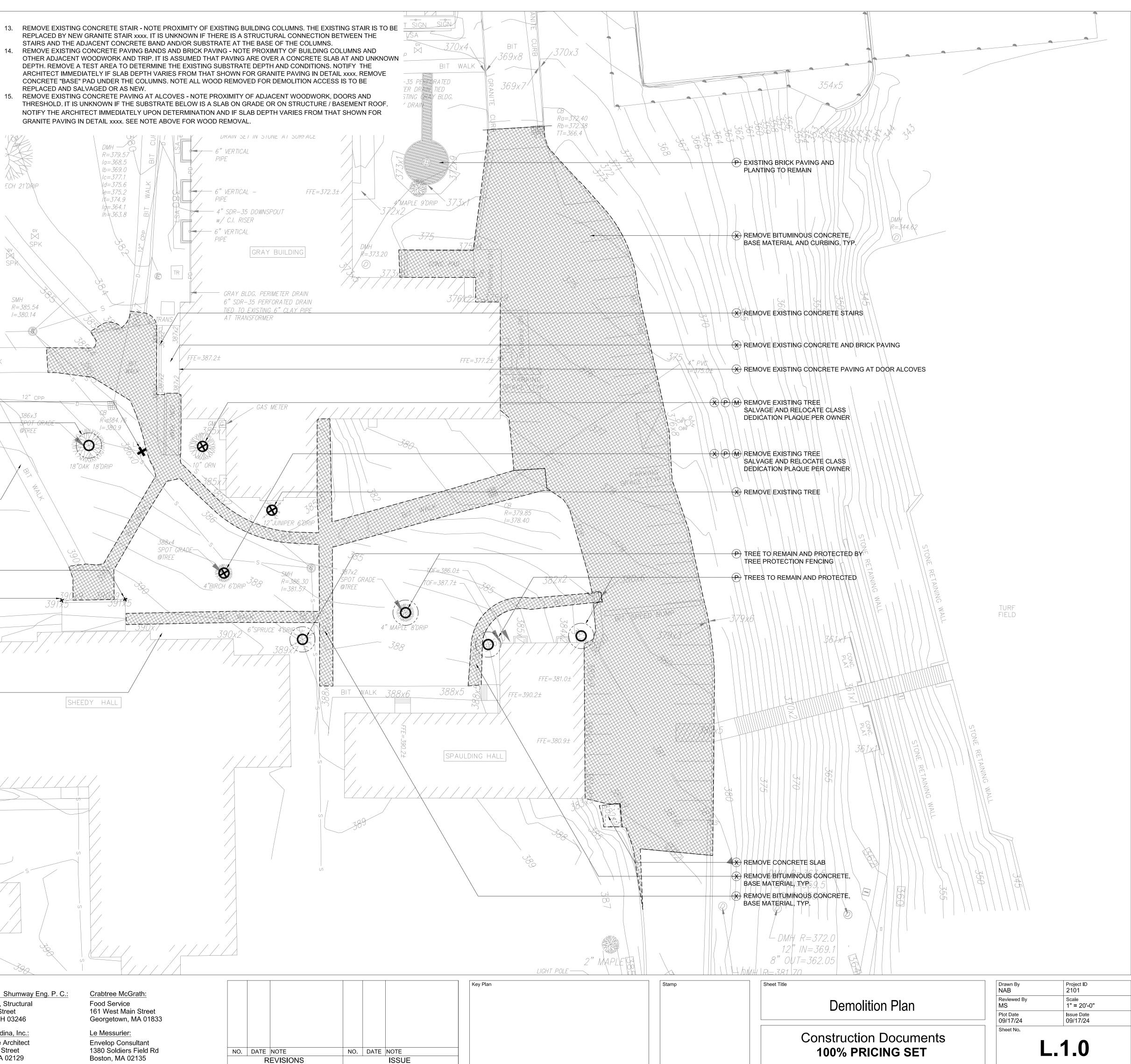
Brown Sardina, Inc.: Landscape Architect 24 Roland Street Boston, MA 02129

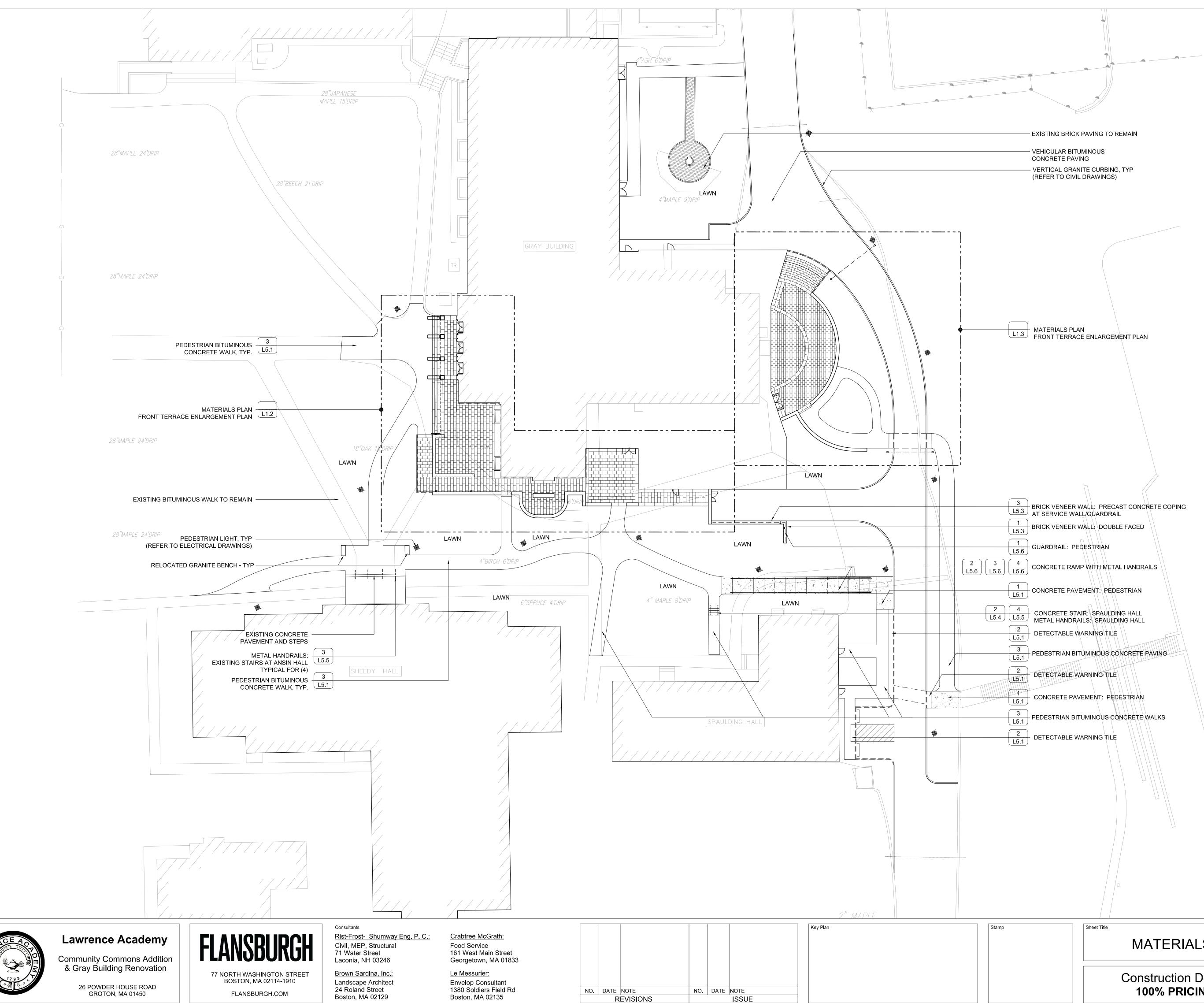
REPLACED AND SALVAGED OR AS NEW.

SPK

R = .385.54

|=380.14





MATERIAL	MATERIAL LEGEND				
ABBREVIATIO	NS				
HC	CURB CUT RAMP				
PL	PLANTING AREA				
EJ	EXPANSION JOINT				
SEJ	SUBBASE EXPANSION JOINT				
PED	PEDESTRIAN PAVEMENT				
VEH	VEHICULAR PAVEMENT				
SIM	SIMILAR				
VIF	VERIFY IN THE FIELD				

MATERIAL NOTES

1. REFER TO SPECIFICATIONS FOR FURTHER INFORMATION ON AND DEFINITIONS OF MATERIALS AND SITE IMPROVEMENTS SHOWN ON THIS PLAN. 2. REFER TO CIVIL DRAWINGS FOR:

- 2.1. VEHICULAR PAVING AND CURBING.
- 2.2. LINE PAINT AND LAYOUT OF CROSSWALKS, STOP LINES, PARKING SPACES, HANDICAPPED PARKING MARKINGS AND ALL OTHER PAVEMENT MARKINGS.
- 3. REFER TO ELECTRICAL DRAWINGS FOR FURTHER INFORMATION ON SITE LIGHTING. LIGHTING LOCATIONS SHOWN FOR CONTEXT ONLY.
- 4. WHERE BRICK SITE WALLS ARE REFERENCED, BRICK IS TO MATCH NEW BRICK AT BLDG.

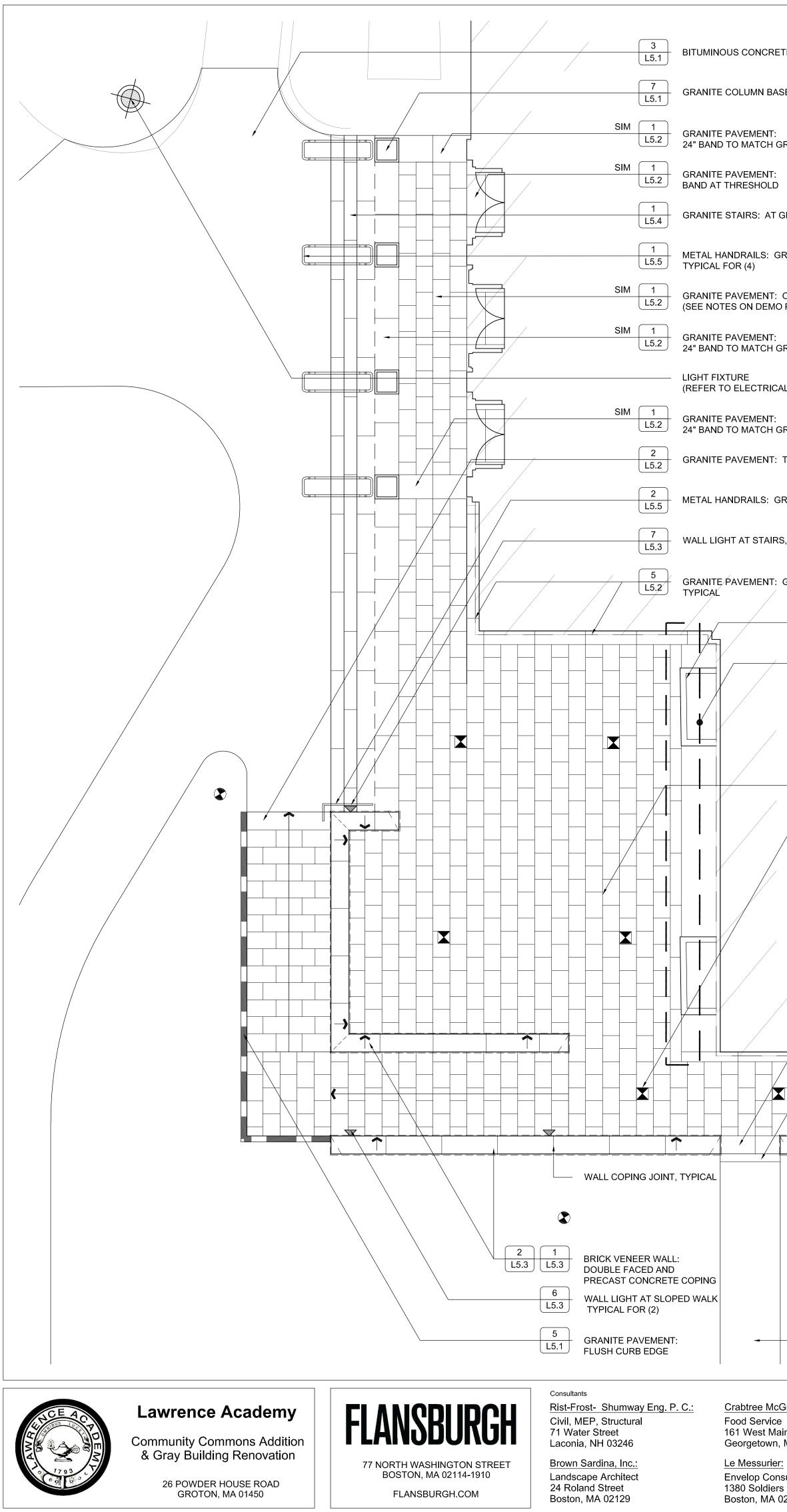
3 L5.3	BRICK VENEER WALL: PRECAST CONCRETE COPING
1 L5.3	BRICK VENEER WALL: DOUBLE FACED
1 L5.6	- GUARDRAIL: PEDESTRIAN
3 4 5 L5.6 L5.6	CONCRETE RAMP WITH METAL HANDRAILS
1 L5.1	
2 4 L5.4 L5.5	CONCRETE STAIR: SPAULDING HALL METAL HANDRAILS: SPAULDING HALL
2 L5.1	
3 L5.1	PEDESTRIAN BITUMINOUS CONCRETE PAVING
2	DETECTABLE WARNING TILE
L5.1	CONCRETE PAVEMENT: PEDESTRIAN
3 L5.1	PEDESTRIAN BITUMINOUS CONCRETE WALKS
2 L5.1	

TURF FIELD

ΜΑΤ	ERIA	IS	ΡI	ΔN
		LU		

Construction Documents 100% PRICING SET

Drawn By	Project ID
NAB	2101
Reviewed By	Scale
MS	1" = 20'-0"
Plot Date	Issue Date
09/17/24	09/17/24
Sheet No.	



BITUMINOUS CONCRETE PAVEMENT: PEDESTRIAN

GRANITE COLUMN BASE, TYPICAL FOR (4)

L5.2 GRAINTE PAVEIVILINT. 24" BAND TO MATCH GRANITE COLUMN BASE

GRANITE STAIRS: AT GRAY

METAL HANDRAILS: GRANITE STAIRS AT GRAY, DOUBLE RAIL TYPICAL FOR (4)

1GRANITE PAVEMENT: ON EXISTING SUBSTRATEL5.2(SEE NOTES ON DEMO PLAN L0.0)

L5.2GRANITE PAVEIVIENT.24" BAND TO MATCH GRANITE COLUMN BASE

(REFER TO ELECTRICAL DRAWINGS)

1GRANITE PAVEMENT:L5.224" BAND TO MATCH GRANITE COLUMN BASE

GRANITE PAVEMENT: TERMINUS AT SLOPED WALK

METAL HANDRAILS: GRANITE STAIRS AT GRAY, SINGLE RAIL

WALL LIGHT AT STAIRS, TYPICAL FOR (1)

GRANITE PAVEMENT: GRADE AT EXISTING WATERCOURSE

WINDOW WELL IMPROVEMENT NOTES:

Seatwall (typical for 1) between the window wells:

16 LF seatwall. 17" height from finish grade, CMU core, precast coping (DTL. 2/L5.3), metal cladding on vertical wall face to match building.

Screenwalls (typical for 2) infront of the wells: 7' wide screen wall, 40" height from finish grade, metal cladding on vertical frame to match building.

Frame - (3) 2" square posts, (2) 2" square rails (top and bottom)

Intermediate support TBD

Panels secured with self tapping screws.

Gates (typical for 2) at the gate meter and building corner: 3' wide gates, 40" height from finish grade, metal cladding on vertical frame to match building.

Frame - (2) 2" square posts, (2) 2" square rails (top and bottom) Intermediate support TBD

Footings:

14" diameter x 4' (typical for 6)

24" diameter x 5', reinforced - for the two gate hinge posts. Gate hinge post and a post from screenwall to share footing.

GENERAL NOTES: ALL GRANITE SHOWN ON DRAWING L1.2 SHALL BE COLOR <u>A</u>.

GRAY BUILDING

EXISTIGN WINDOW WELL TYPICAL FOR (2)

AREA UNDER DEVELOPMENT (REFER TO WINDOW WELL IMPROVEMENTS NOTE BOX)

1 GRANITE PAVEMENT: ON GRADE L5.2

GRANITE PAVEMENT: AREA DRAIN TYPICAL

GRANITE PAVEMENT: ON GRADE 18" WIDE BAND

GRANITE PAVEMENT: TRENCH DRAIN AT BAND

9

L5.2

(1)

L5.2

6

L5.2

L5.2

2 1

BRICK VENEER WALL: DOUBLE FACED AND PRECAST CONCRETE COPING L5.3 L5.3 (1) GRANITE PAVEMENT: ON GRADE

FIRE P/T (REFÉR TO ARCH, DRAWINGS)/

 \rightarrow

ON GRADE ON STRUCTURE (SEE <u>DTL. X / L5.X</u>) | (REFER TO ARCH. DWGS)

DIRECTION OF COPING SLOPE, TYPICAL



Crabtree McGrath: Food Service 161 West Main Street Georgetown, MA 01833 Le Messurier

REVISIONS

NO. DATE NOTE

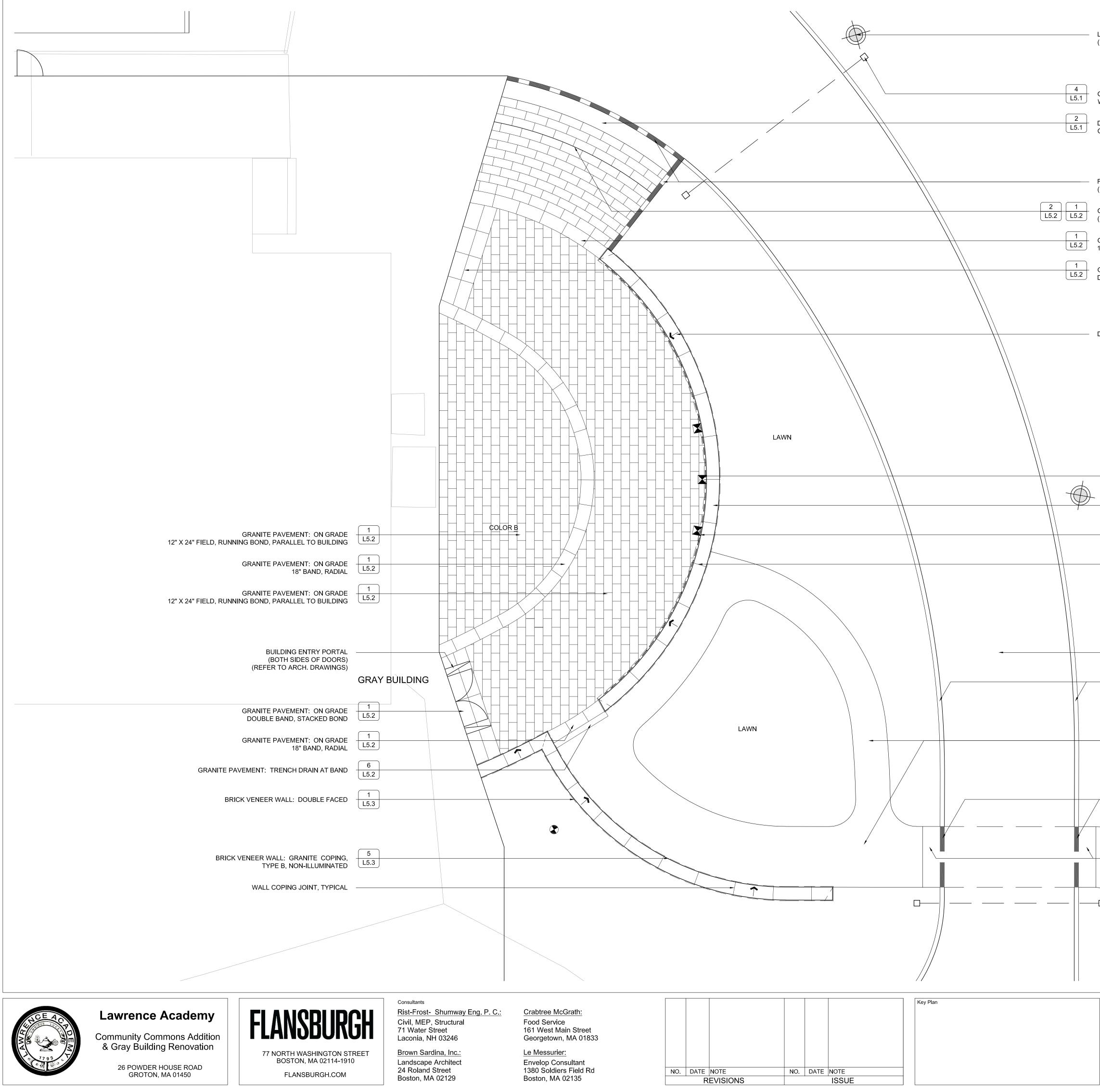
Envelop Consultant 1380 Soldiers Field Rd Boston, MA 02135

~

NO. DATE NOTE ISSUE Key Plan

 $\widehat{}$

	5 GRANITE PAVEMENT: GRADE AT EXISTING WATERO	COURSE	
	4 GRANITE PAVEMENT: STRUCTURE - AT EXISTING W	/ATERCOURSE	
	3 L5.2 GRANITE PAVEMENT: ON GRADE / ON STRUCTURE INTERFACE		
	7 GRANITE PAVEMENT: ON PEDESTALS		
	BRICK VENEER WALL: ON STRUCTURE (REFER TO ARCH. DRAWINGS)		
	8 GRANITE PAVEMENT: BAND ON STRUCTURE		
	3 L5.1 BITUMINOUS CONCRETE PAVEMENT PEDESTRIAN		
	BRICK VENEER WALL: ON STRUCTURE (REFER TO ARCH. DRAWINGS)		
	7 L5.2 GRANITE PAVEMENT: ON PEDESTALS		
	8 GRANITE PAVEMENT: BAND ON STRUCTURE		
		 BRICK VENEER WAL (REFER TO ARCH. D 	
	L5.3		
	L5.3	PRECAST CONCRET AT SERVICE WALL/C	TE COPING
	L5.1 YARD DRAIN: ON GRADE		
Stamp Sheet Title	MATERIALS PLAN	Drawn By NAB Reviewed By	Project ID 2101 Scale
Fro	nt Terrace Enlargement Plan		3/16" = 1'-0" Issue Date 09/17/24
	Construction Documents 100% PRICING SET		2



LIGHT FIXTURE (REFER TO ELECTRICAL DRAWINGS)

GRANITE POST, TYPICAL FOR (2) WITH CHAIN

2 L5.1 DETECTABLE / TACTILE WARNING TILES CAST IRON PLATES

— FLUSH GRANITE CURBING (REFER TO CIVIL DRAWINGS)

2 1 L5.2 L5.2 GRANITE PAVEMENT: ON GRADE (RADIAL PATTERN)

1GRANITE PAVEMENT: ON GRADEL5.218" BAND, RADIAL

1GRANITE PAVEMENT: ON GRADEL5.2DOUBLE BAND, STACKED BOND

DIRECTION OF COPING SLOPE, TYPICAL

9 L5.2 GRANITE PAVEMENT: AREA DRAIN TYPICAL
 1
 BRICK VENEER WALL: DOUBLE FACED

4 BRICK VENEER WALL: GRANITE COPING, TYPE A, ILLUMINATED

WALL COPING JOINT, TYPICAL

BITUMINOUS CONCRETE PAVEMENT VEHICULAR (REFER TO CIVIL DRAWINGS) VERTICAL GRANITE CURBING (REFER TO CIVIL DRAWINGS)

2 L5.1

BITUMINOUS CONCRETE PAVEMENT PEDESTRIAN

FLUSH GRANITE CURBING (REFER TO CIVIL DRAWINGS)

DETECTABLE / TACTILE WARNING TILES CAST IRON PLATES

4 L5.1 GRANITE POST, TYPICAL FOR (2) WITH CHAIN

3BITUMINOUS CONCRETE PAVEMENTL5.1PEDESTRIAN

Sheet Title

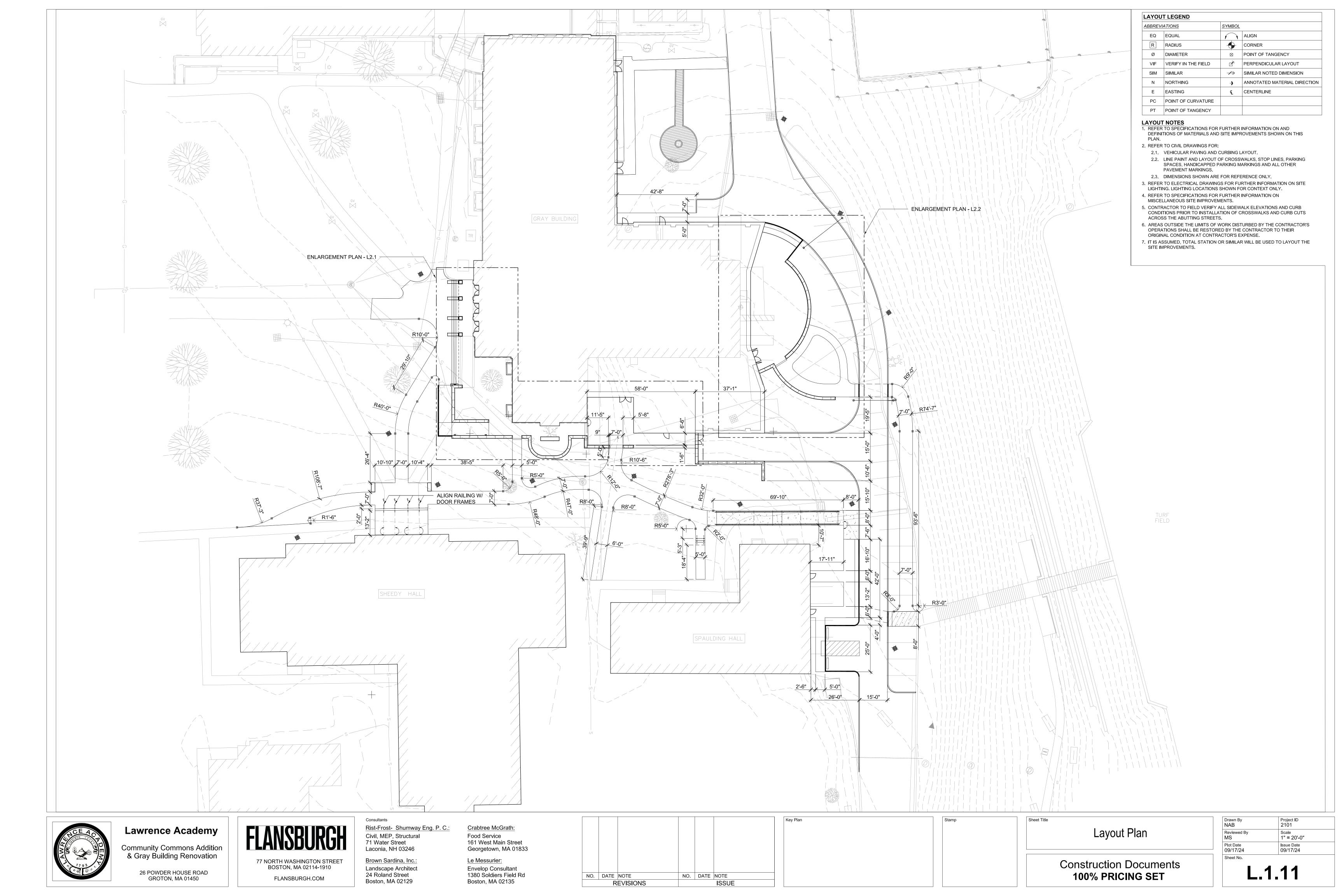
Stamp

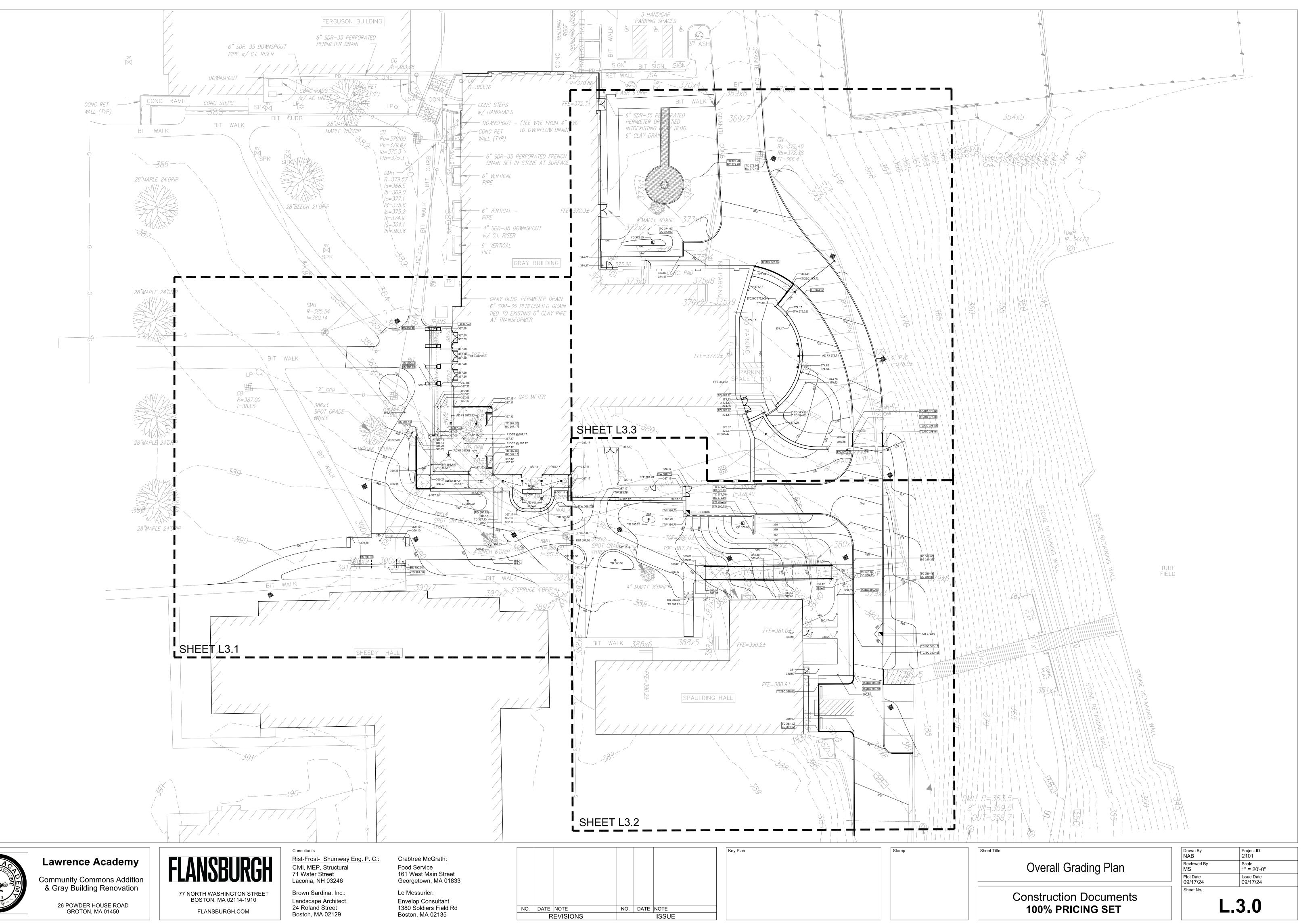
MATERIALS PLAN Rear Terrace Enlargement Plan

> **Construction Documents** 100% PRICING SET

Drawn By NAB Reviewed By MS Plot Date 09/17/24 Project ID 2101 Scale 3/16" = 1'-0" Issue Date 09/17/24 Sheet No.

L1.3





AT A CONTRACT OF A CONTRACT OF

GRADING LEGEND

ABBREVIATI	ONS	<u>SYMBOLS</u>	
FFE	FINSIHED FLOOR ELEVATION	50	PROPOSED CONTOUR (1 FOOT)
HP / LP	HIGH / LOW POINT	49.50	PROPOSED MID-CONTOUR (INTERVAL AS NOTED
TC / BC	TOP / BOTTOM OF CURB	49.85	RIDGE LINE
TW / BW	TOP / BOTTOM OF WALL	⁺ 49.85	PROPOSED SPOT GRADE
TS / BS	TOP / BOTTOM OF STAIR	⁺ (49.85)	EXISTING GRADE
TR / BR	TOP / BOTTOM OF RAMP	СВ	CATCH BASIN, SEE CIVIL DWGS.
MEG	MEET EXISTING GRADE	⊠ AD #1	6" CIRCLE AREA DRAIN - SEE SPEC 334140
FG	FINISH GRADE	⊠ AD #2	8" CIRCLE AREA DRAIN - SEE SPEC 334140
D-INV	FLAT DRAIN INVERT	X AD #3	8" SQUARE AREA DRAIN - SEE SPEC 334140
C-INV	COLLECTOR PIPE INVERT	© YD	YARD DRAIN - SEE SPEC 334140
		TD	TRENCH DRAIN
		CO / TM	CLEANOUT / TURF MANHOLE

GRADING NOTES

1. WALKWAY GRADES SHALL NOT HAVE SLOPES IN EXCESS OF 1:20 (5%) OR CROSS SLOPES IN EXCESS OF 1:50 (2%), UNLESS OTHERWISE NOTED.

2. WALK GRADIENTS AND CROSS SLOPES SHOWN ON THE GRADING PLANS ARE WITHIN, OR LESS THAN, THE REQUIREMENTS OF THE MASSACHUSETTS ARCHITECTURAL ACCESS BOARD'S (MAAB) REGULATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONSTRUCT THE WORK SO THAT IT IS COMPLIANT WITH ALL REQUIRED REGULATIONS. NOTE THAT THE MAXIMUM GRADIENTS WITHIN THE REGULATIONS DO NOT RECOGNIZE "CONSTRUCTION TOLERANCES." EXCEEDING THE MAXIMUM GRADIENTS IN THE REGULATIONS IS ENTIRELY AT THE CONTRACTOR'S RISK. THE CONTRACTOR SHALL VERIFY IN WRITING THAT ALL WALKS HAVE BEEN CONSTRUCTED IN COMPLIANCE WITH THE MAAB'S REGULATIONS.

3. REFER TO CIVIL DRAWINGS FOR INFORMATION ON ALL STORM DRAINAGE STRUCTURES, PIPING OF STORM DRAINAGE SYSTEM, AND ALL OTHER RELATED UTILITY STRUCTURES.

4. REFER TO SPEC SECTION 334140 LANDSCAPE DRAINAGE FOR YARD DRAINS AND AREA DRAINS.



Lawrence Academy

Community Commons Addition & Gray Building Renovation

> 26 POWDER HOUSE ROAD GROTON, MA 01450



Consultants

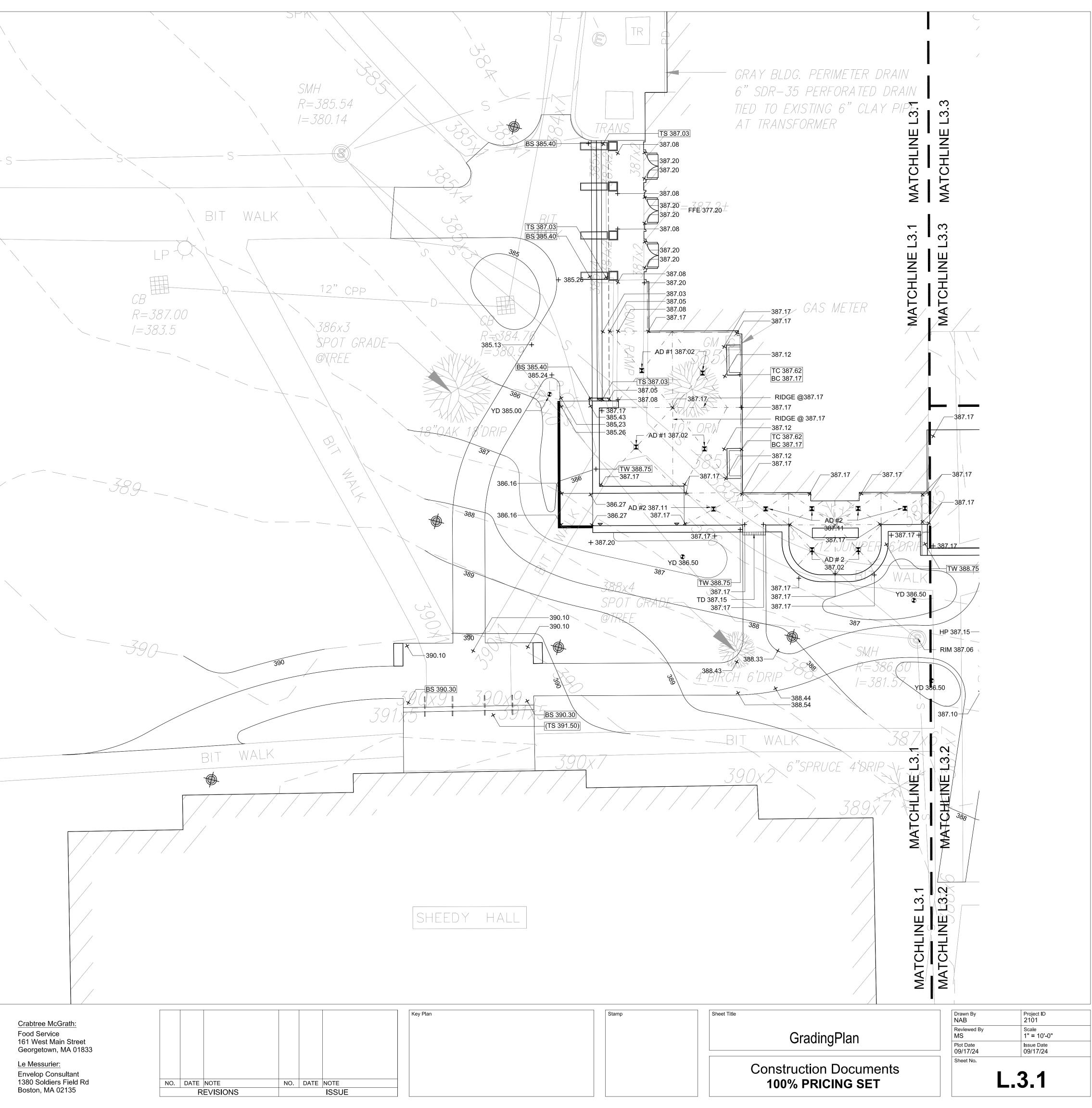
Rist-Frost- Shumway Eng. P. C.: Civil, MEP, Structural 71 Water Street Laconia, NH 03246

Brown Sardina, Inc.: Landscape Architect 24 Roland Street Boston, MA 02129

)RIP

'DRIP

DRIP



GRADING LEGEND

GINADING	LLGLND		
ABBREVIATI	ONS	SYMBOLS	
FFE	FINSIHED FLOOR ELEVATION	50	PROPOSED CONTOUR (1 FOOT)
HP / LP	HIGH / LOW POINT	49.50	PROPOSED MID-CONTOUR (INTERVAL AS NOTED
TC / BC	TOP / BOTTOM OF CURB	49.85	RIDGE LINE
TW / BW	TOP / BOTTOM OF WALL	⁺ 49.85	PROPOSED SPOT GRADE
TS / BS	TOP / BOTTOM OF STAIR	⁺ (49.85)	EXISTING GRADE
TR / BR	TOP / BOTTOM OF RAMP	СВ	CATCH BASIN, SEE CIVIL DWGS.
MEG	MEET EXISTING GRADE	X AD #1	6" CIRCLE AREA DRAIN - SEE SPEC 334140
FG	FINISH GRADE	X AD #2	8" CIRCLE AREA DRAIN - SEE SPEC 334140
D-INV	FLAT DRAIN INVERT	X AD #3	8" SQUARE AREA DRAIN - SEE SPEC 334140
C-INV	COLLECTOR PIPE INVERT	© YD	YARD DRAIN - SEE SPEC 334140
		TD	TRENCH DRAIN
		CO / TM	CLEANOUT / TURF MANHOLE

GRADING NOTES

1. WALKWAY GRADES SHALL NOT HAVE SLOPES IN EXCESS OF 1:20 (5%) OR CROSS SLOPES IN EXCESS OF 1:50 (2%), UNLESS OTHERWISE NOTED.

2. WALK GRADIENTS AND CROSS SLOPES SHOWN ON THE GRADING PLANS ARE WITHIN, OR LESS THAN, THE REQUIREMENTS OF THE MASSACHUSETTS ARCHITECTURAL ACCESS BOARD'S (MAAB) REGULATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONSTRUCT THE WORK SO THAT IT IS COMPLIANT WITH ALL REQUIRED REGULATIONS. NOTE THAT THE MAXIMUM GRADIENTS WITHIN THE REGULATIONS DO NOT RECOGNIZE "CONSTRUCTION TOLERANCES." EXCEEDING THE MAXIMUM GRADIENTS IN THE REGULATIONS IS ENTIRELY AT THE CONTRACTOR'S RISK. THE CONTRACTOR SHALL VERIFY IN WRITING THAT ALL WALKS HAVE BEEN CONSTRUCTED IN COMPLIANCE WITH THE MAAB'S REGULATIONS.

3. REFER TO CIVIL DRAWINGS FOR INFORMATION ON ALL STORM DRAINAGE STRUCTURES, PIPING OF STORM DRAINAGE SYSTEM AND ALL OTHER RELATED UTILITY STRUCTURES.



Lawrence Academy

Community Commons Addition & Gray Building Renovation

> 26 POWDER HOUSE ROAD GROTON, MA 01450



Consultants

Rist-Frost- Shumway Eng. P. C.: Civil, MEP, Structural 71 Water Street Laconia, NH 03246

7.17 /

41

17=

+2____

<u>0</u>2

/ /

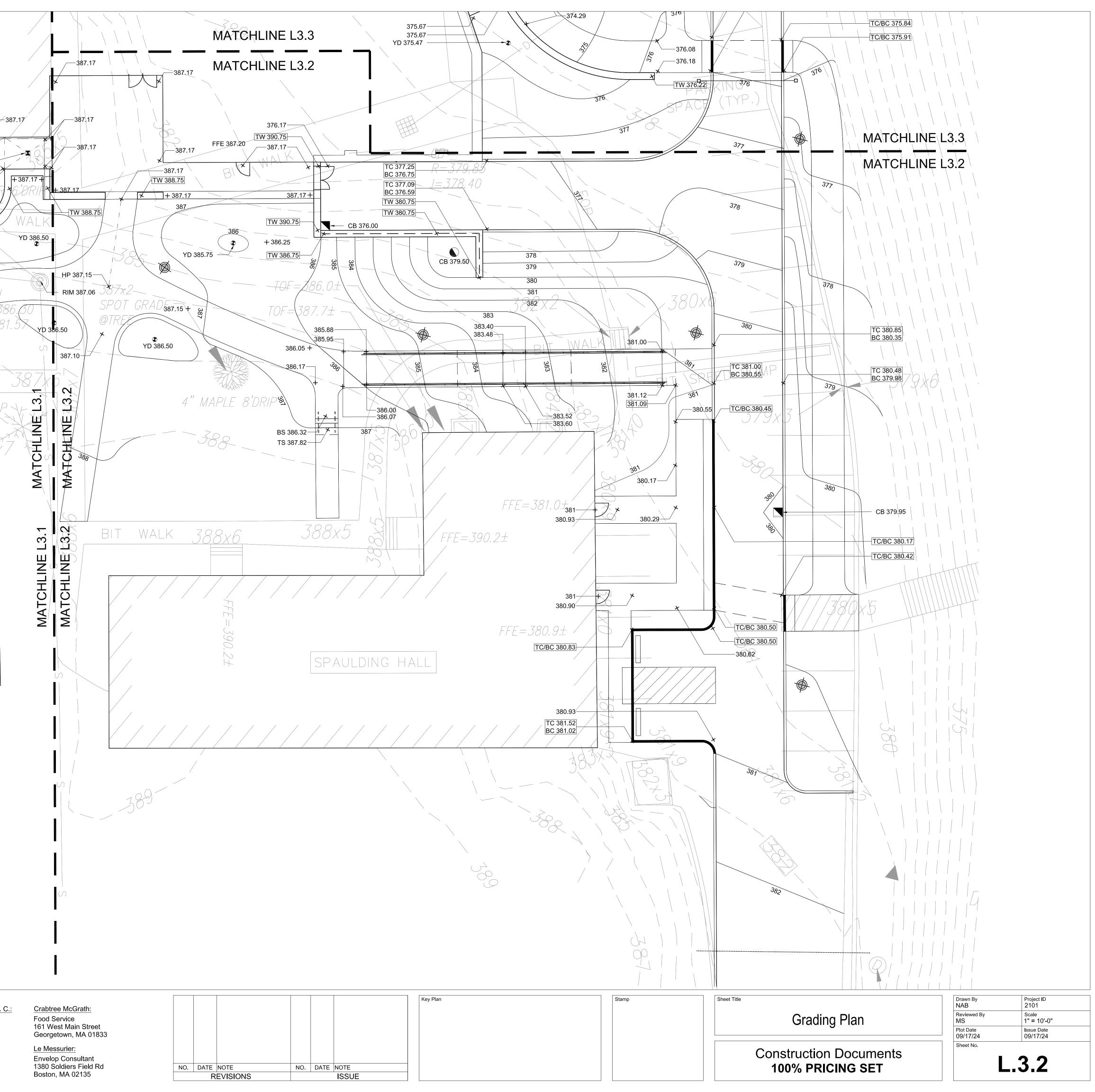
387

SAMH

4'DRIP

=381

Brown Sardina, Inc.: Landscape Architect 24 Roland Street Boston, MA 02129



GRADING LEGEND

ABBREVIATI	ONS	<u>SYMBOLS</u>	
FFE	FINSIHED FLOOR ELEVATION	50	PROPOSED CONTOUR (1 FOOT)
HP / LP	HIGH / LOW POINT	49.50	PROPOSED MID-CONTOUR (INTERVAL AS NOTED)
TC / BC	TOP / BOTTOM OF CURB	49.85	RIDGE LINE
TW / BW	TOP / BOTTOM OF WALL	⁺ 49.85	PROPOSED SPOT GRADE
TS / BS	TOP / BOTTOM OF STAIR	+(49.85)	EXISTING GRADE
TR / BR	TOP / BOTTOM OF RAMP	СВ	CATCH BASIN, SEE CIVIL DWGS.
MEG	MEET EXISTING GRADE	⊠ AD #1	6" CIRCLE AREA DRAIN - SEE SPEC 334140
FG	FINISH GRADE	⊠ AD #2	8" CIRCLE AREA DRAIN - SEE SPEC 334140
D-INV	FLAT DRAIN INVERT	⊠ AD #3	8" SQUARE AREA DRAIN - SEE SPEC 334140
C-INV	COLLECTOR PIPE INVERT	© YD	YARD DRAIN - SEE SPEC 334140
		TD	TRENCH DRAIN
		🔘 CO / TM	CLEANOUT / TURF MANHOLE

GRADING NOTES

1. WALKWAY GRADES SHALL NOT HAVE SLOPES IN EXCESS OF 1:20 (5%) OR CROSS SLOPES IN EXCESS OF 1:50 (2%), UNLESS OTHERWISE NOTED.

2. WALK GRADIENTS AND CROSS SLOPES SHOWN ON THE GRADING PLANS ARE WITHIN, OR LESS THAN, THE REQUIREMENTS OF THE MASSACHUSETTS ARCHITECTURAL ACCESS BOARD'S (MAAB) REGULATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONSTRUCT THE WORK SO THAT IT IS COMPLIANT WITH ALL REQUIRED REGULATIONS. NOTE THAT THE MAXIMUM GRADIENTS WITHIN THE REGULATIONS DO NOT RECOGNIZE "CONSTRUCTION TOLERANCES." EXCEEDING THE MAXIMUM GRADIENTS IN THE REGULATIONS IS ENTIRELY AT THE CONTRACTOR'S RISK. THE CONTRACTOR SHALL VERIFY IN WRITING THAT ALL WALKS HAVE BEEN CONSTRUCTED IN COMPLIANCE WITH THE MAAB'S REGULATIONS.

3. REFER TO CIVIL DRAWINGS FOR INFORMATION ON ALL STORM DRAINAGE STRUCTURES, PIPING OF STORM DRAINAGE SYSTEM AND ALL OTHER RELATED UTILITY STRUCTURES

ERFLOW DRAIN

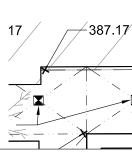
1*TED FRENCH* AT SURFACE

UT

3UILDING

eter drain RATED DRAIN CLAY

TER



Rist-Frost- Shumway Eng. P. C.: Civil, MEP, Structural 71 Water Street Laconia, NH 03246

Brown Sardina, Inc.: Landscape Architect 24 Roland Street Boston, MA 02129

Consultants

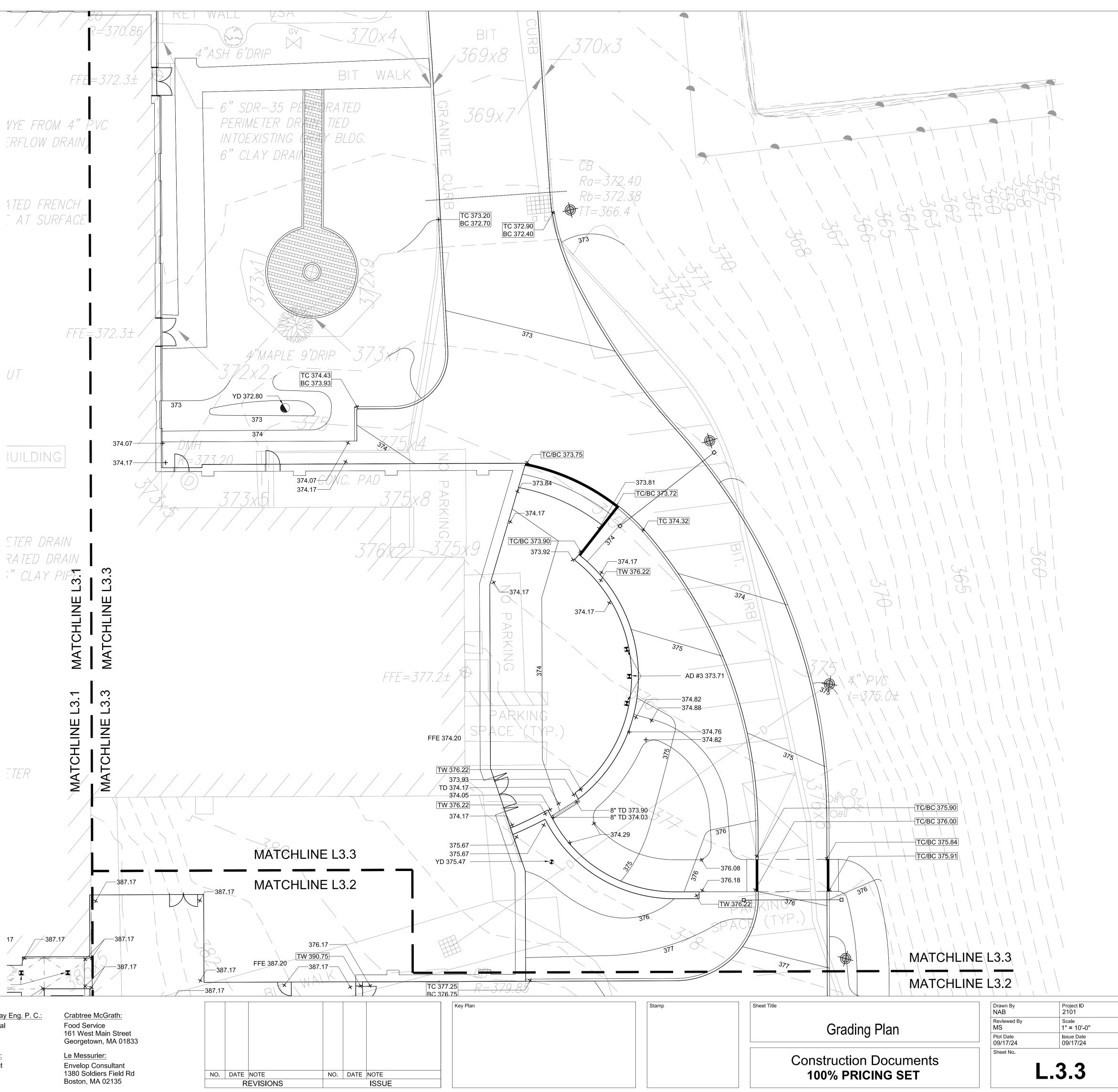


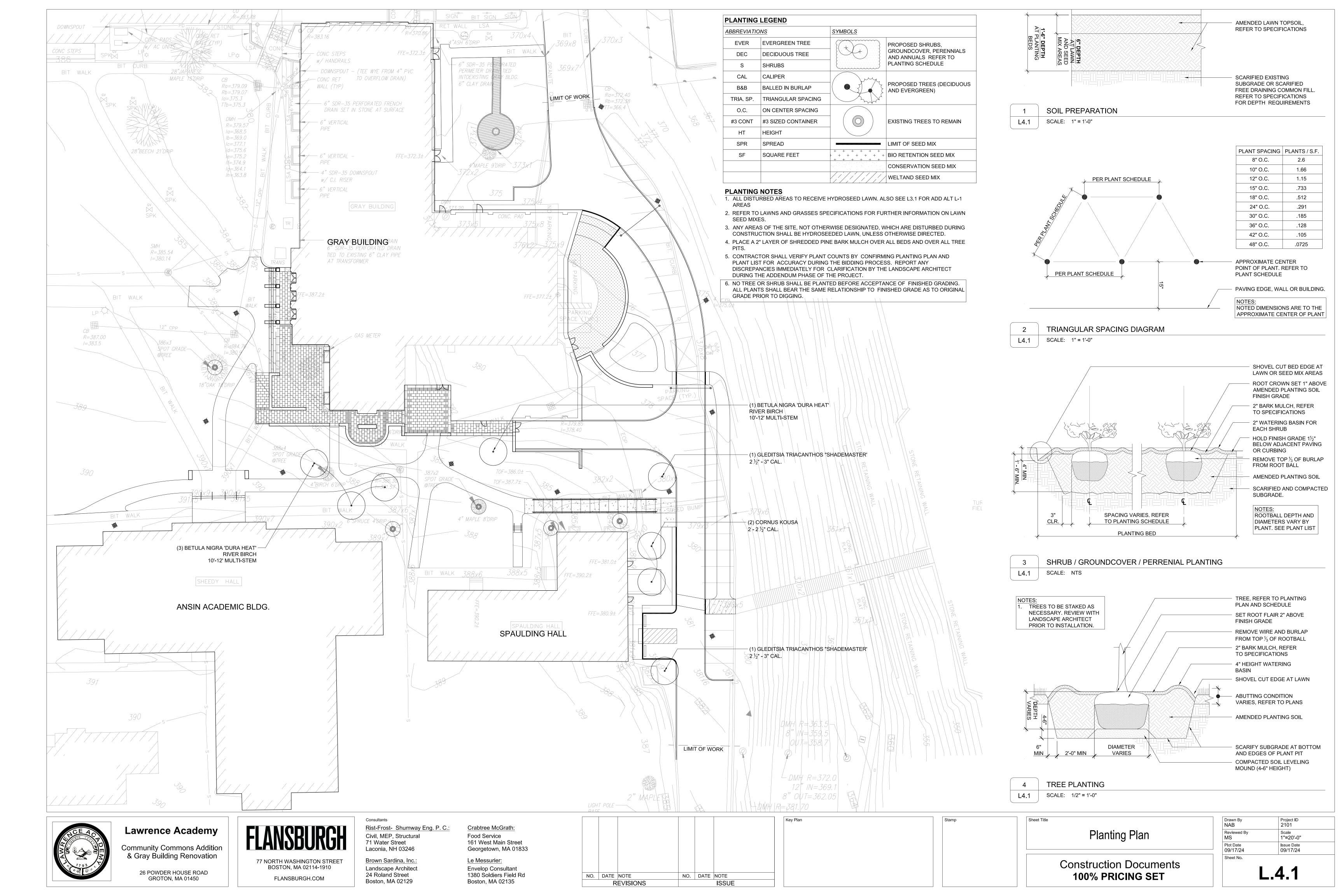
Lawrence Academy

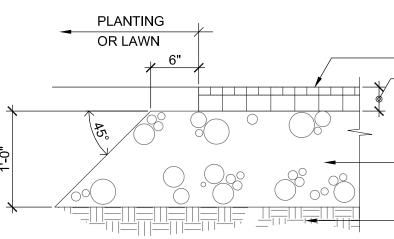
Community Commons Addition & Gray Building Renovation

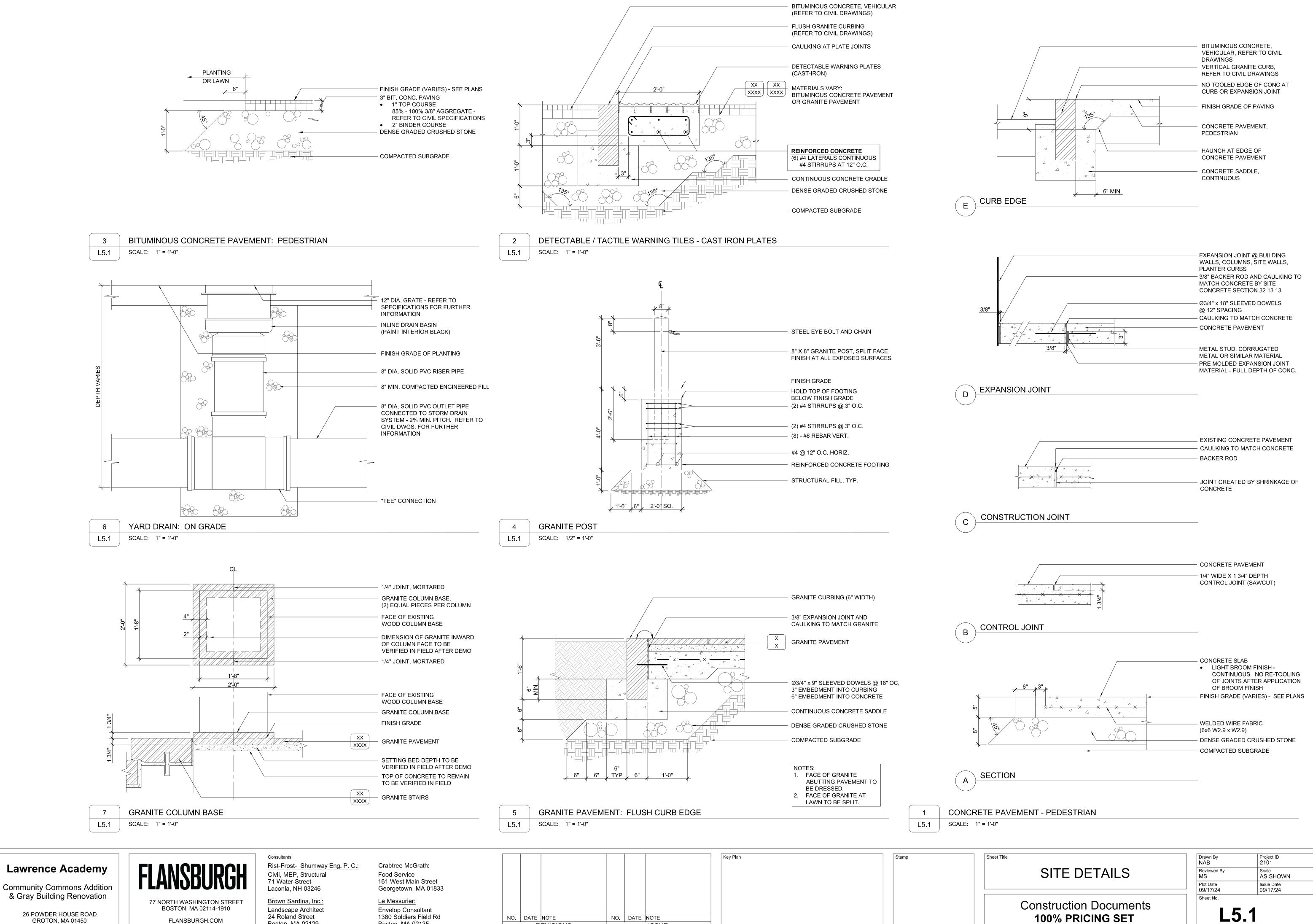
26 POWDER HOUSE ROAD GROTON, MA 01450











26 POWDER HOUSE ROAD GROTON, MA 01450

Y

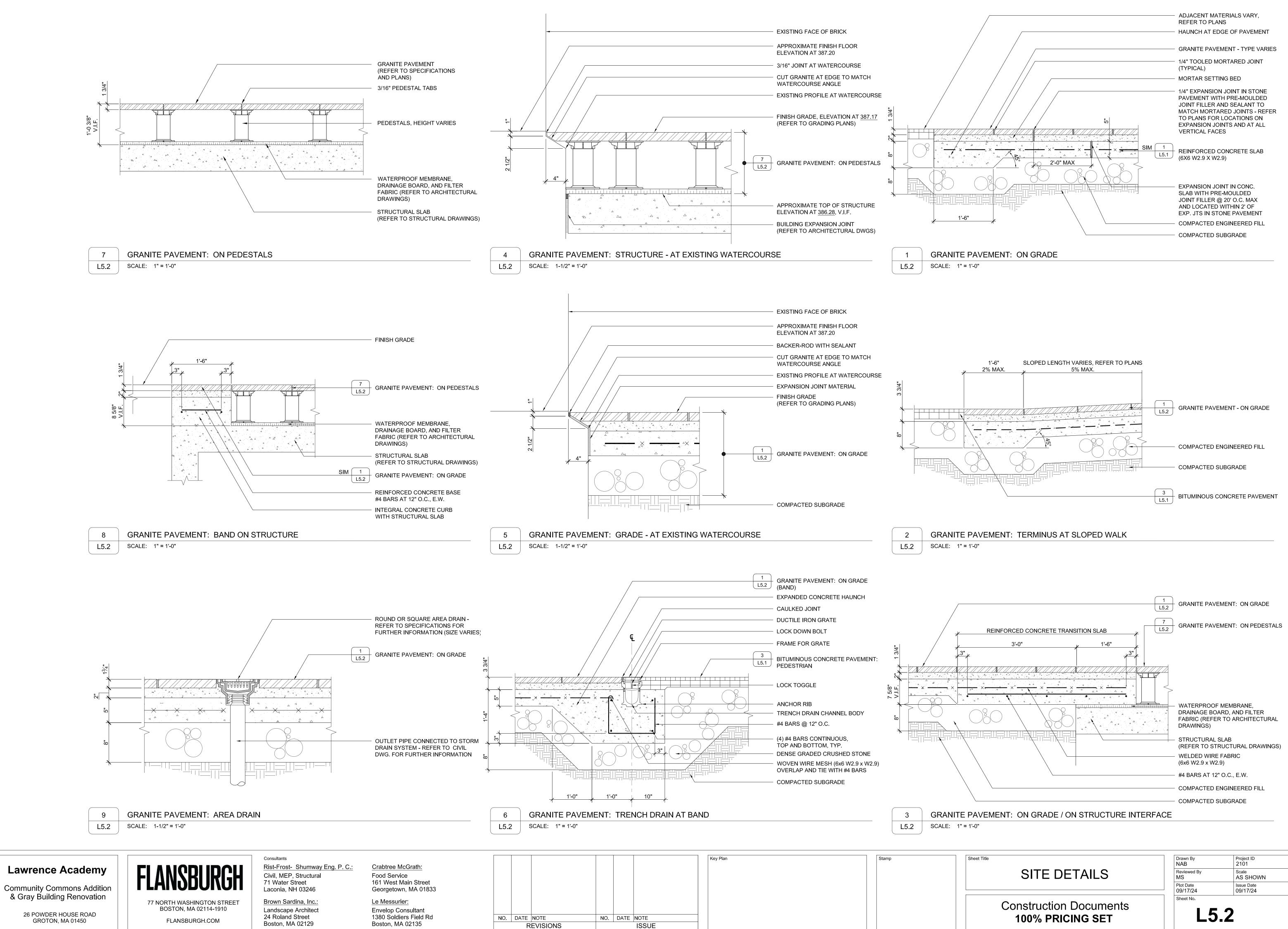
24 Roland Street Boston, MA 02129

1380 Soldiers Field Rd

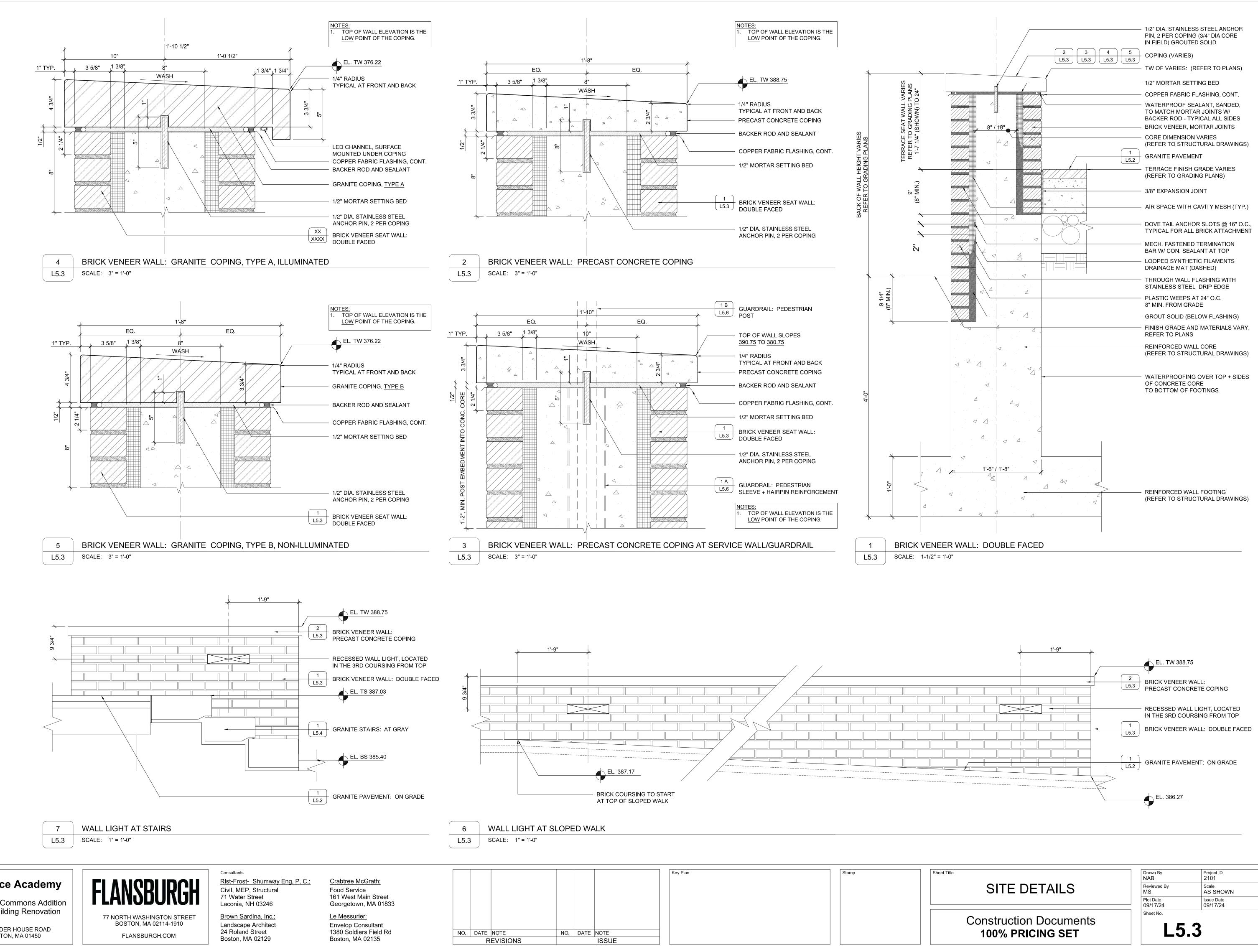
Boston, MA 02135

NO. | DATE |NOTE ISSUE

REVISIONS



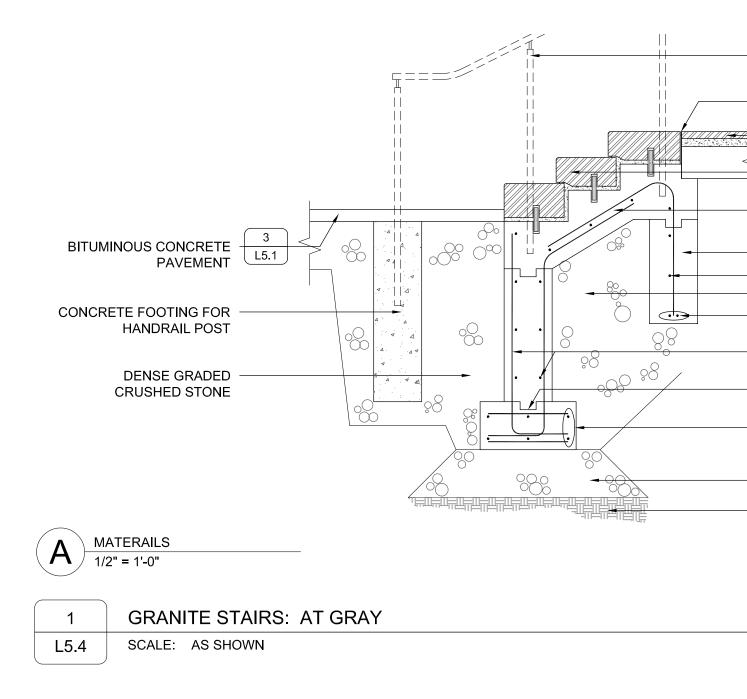






Community Commons Addition & Gray Building Renovation

26 POWDER HOUSE ROAD GROTON, MA 01450





Community Commons Addition & Gray Building Renovation

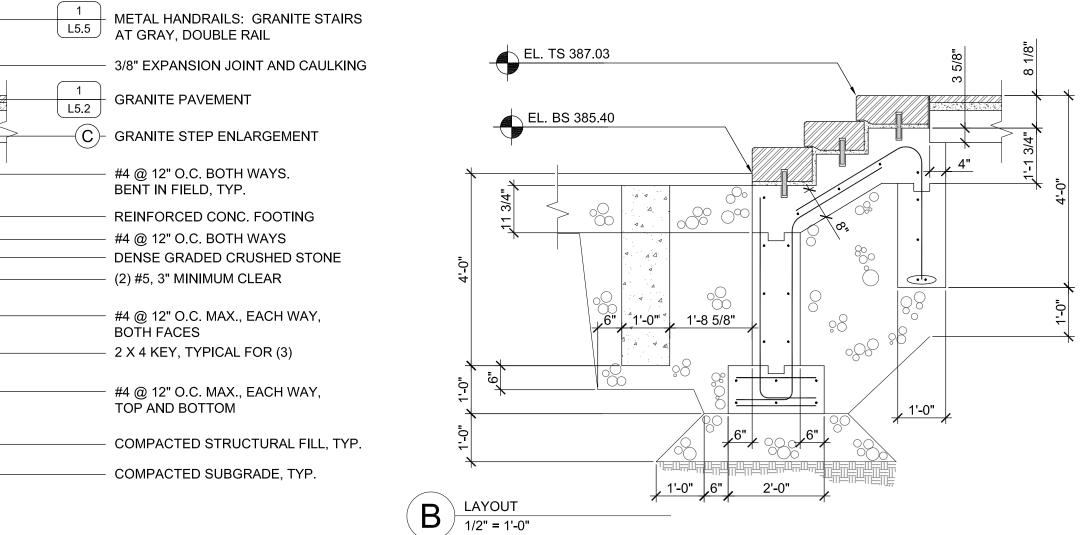
> 26 POWDER HOUSE ROAD GROTON, MA 01450

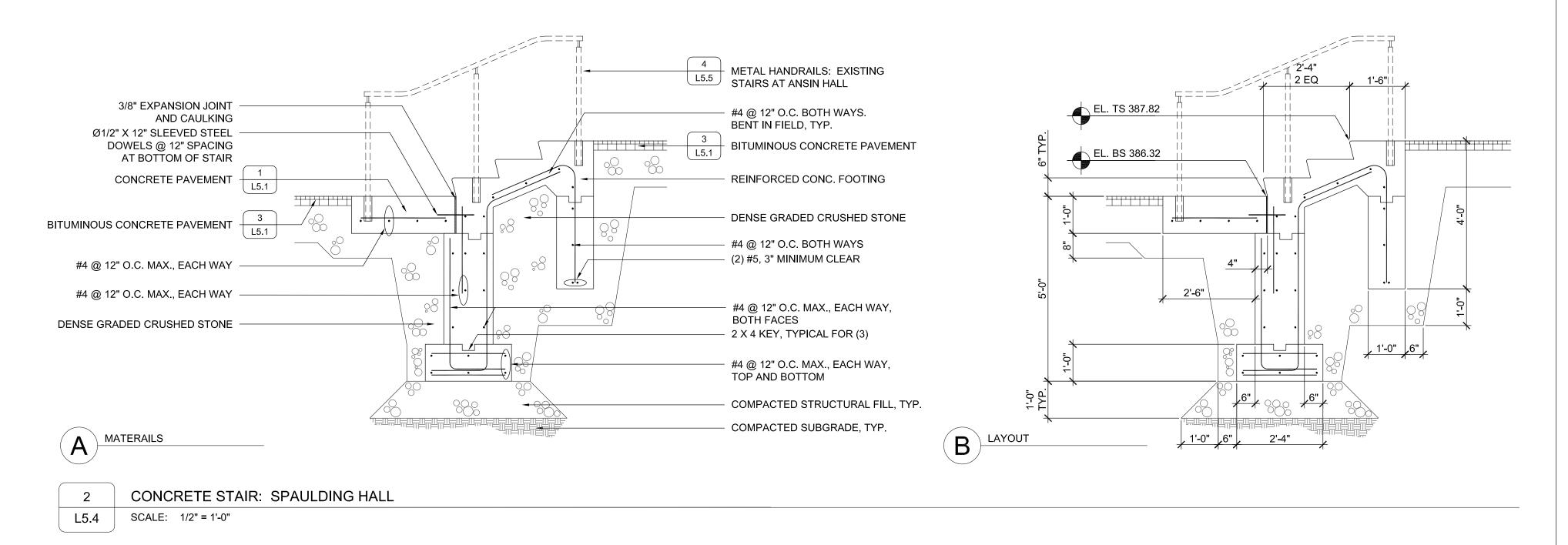


Consultants

Rist-Frost- Shumway Eng. P. C.: Civil, MEP, Structural 71 Water Street Laconia, NH 03246

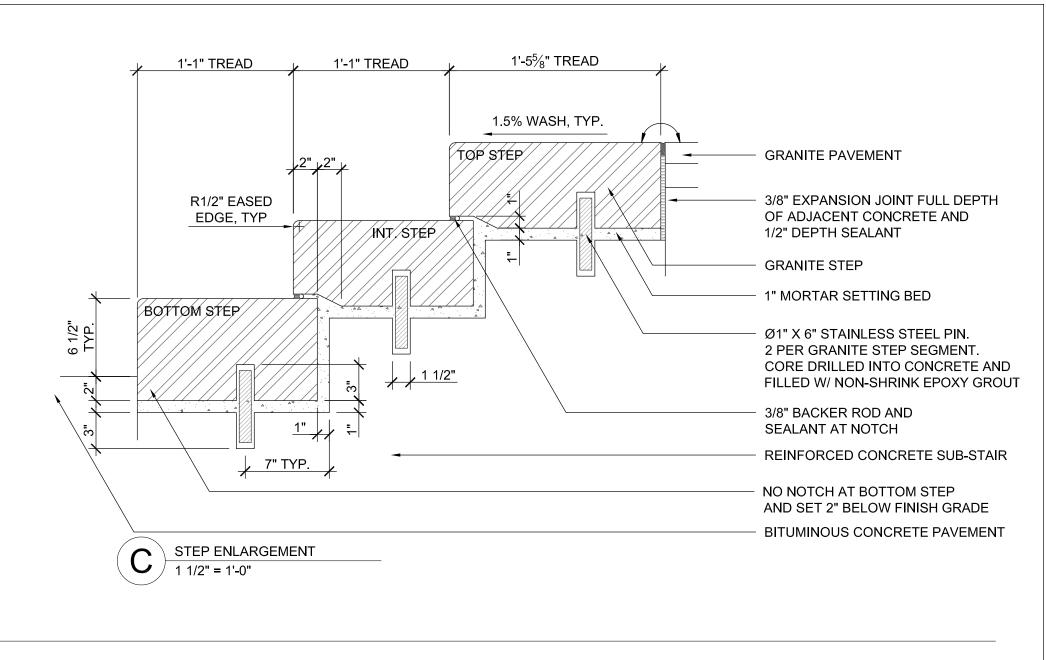
Brown Sardina, Inc.: Landscape Architect 24 Roland Street Boston, MA 02129



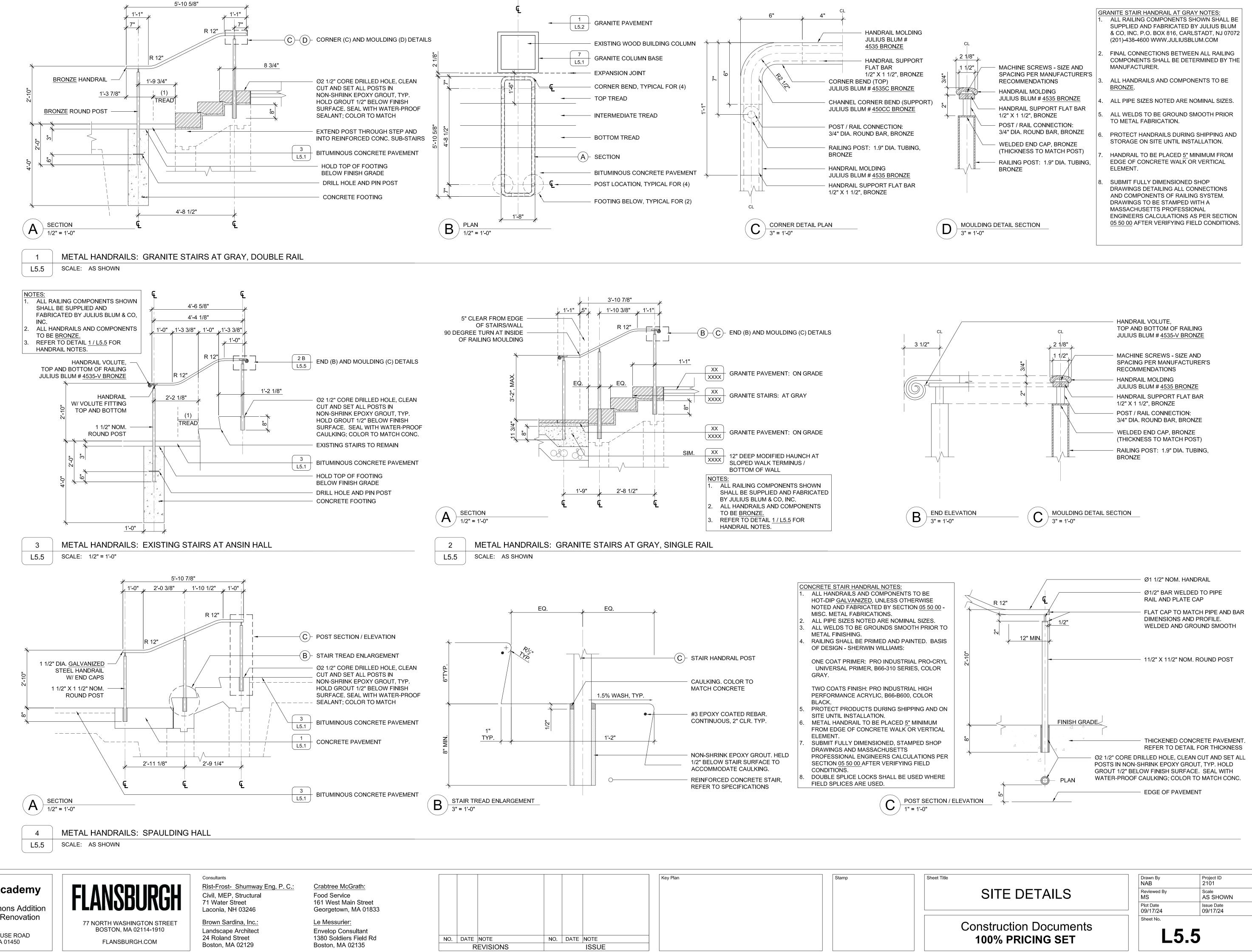


Stamp

							Key Plan
Crabtree McGrath:							
Food Service							
161 West Main Street							
Georgetown, MA 01833							
g,							
Le Messurier:							
Envelop Consultant							
1380 Soldiers Field Rd	NO.	DATE	NOTE	NO.	DATE	NOTE	
Boston, MA 02135	110.		EVISIONS				
		R	EVISIONS			ISSUE	



Sheet T	itle	Drawn By NAB	Project ID 2101
	SITE DETAILS	Reviewed By MS	Scale AS SHOWN
		Plot Date 09/17/24	Issue Date 09/17/24

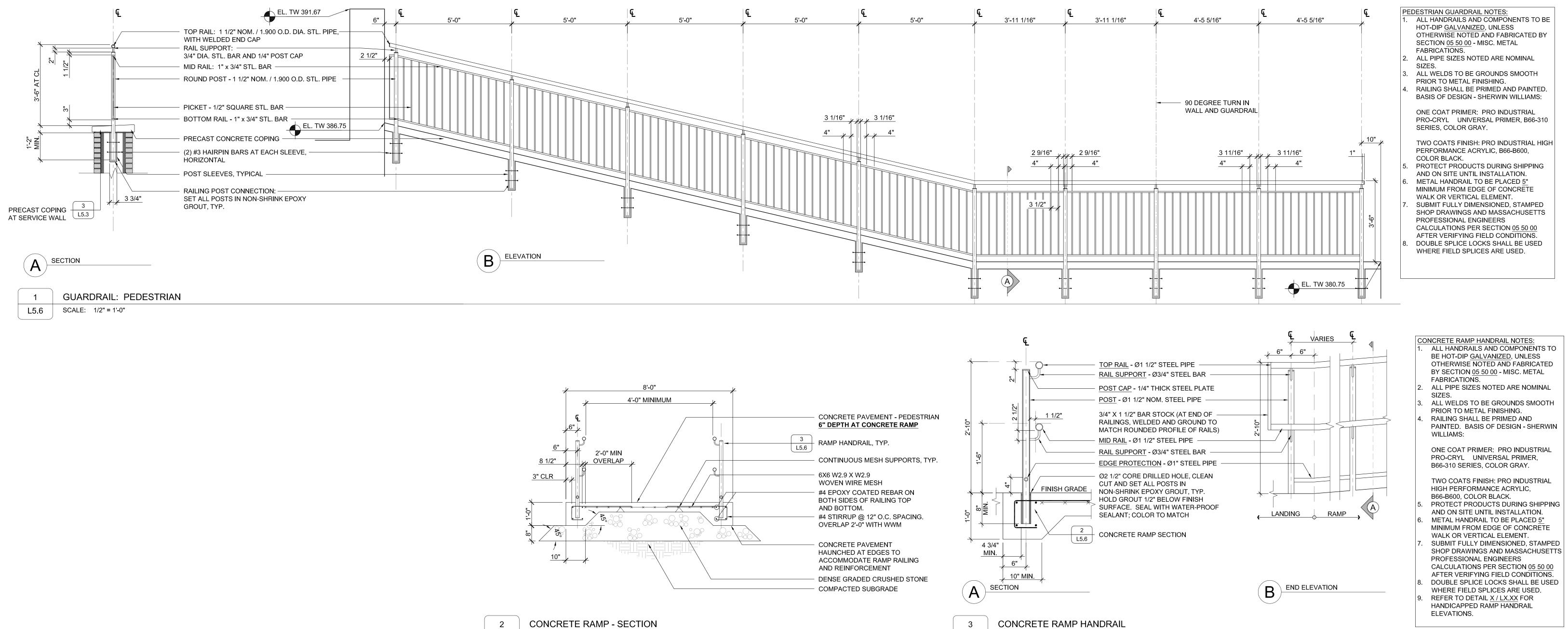




Community Commons Addition & Gray Building Renovation

26 POWDER HOUSE ROAD GROTON, MA 01450

Stamp	Sheet Title	Drawn By NAB	Project ID 2101
	SITE DETAILS	Reviewed By MS	Scale AS SHOWN
		Plot Date 09/17/24	Issue Date 09/17/24
	Construction Documents 100% PRICING SET	Sheet No.	.5



L5.6



Lawrence Academy

Community Commons Addition & Gray Building Renovation

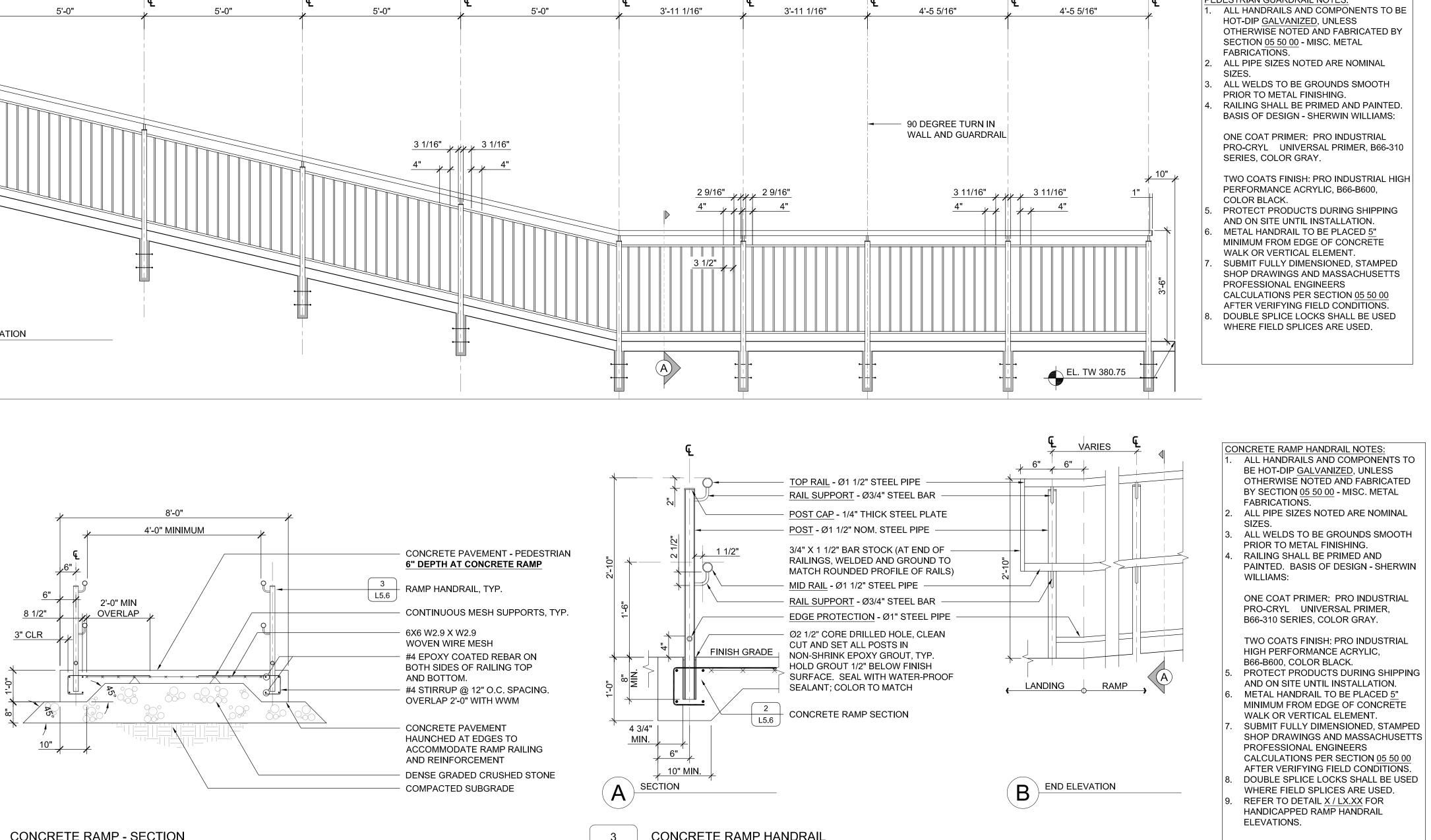
> 26 POWDER HOUSE ROAD GROTON, MA 01450



Consultants

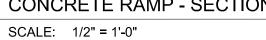
Rist-Frost- Shumway Eng. P. C .: Civil, MEP, Structural 71 Water Street Laconia, NH 03246

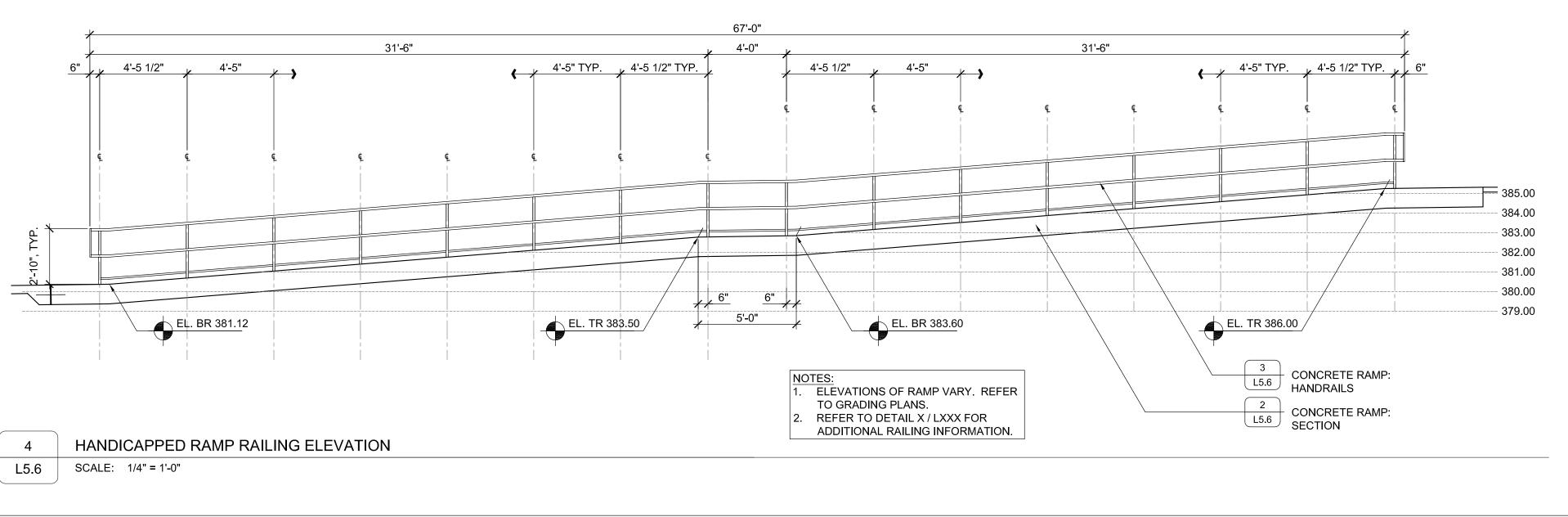
Brown Sardina, Inc.: Landscape Architect 24 Roland Street Boston, MA 02129

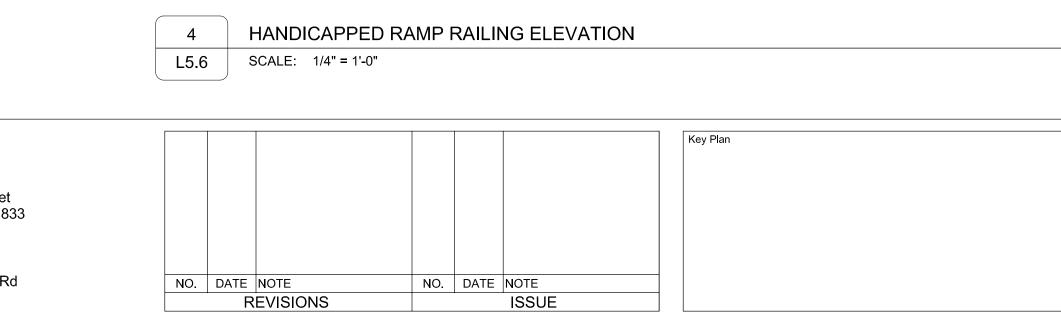


L5.6

SCALE: 1" = 1'-0"



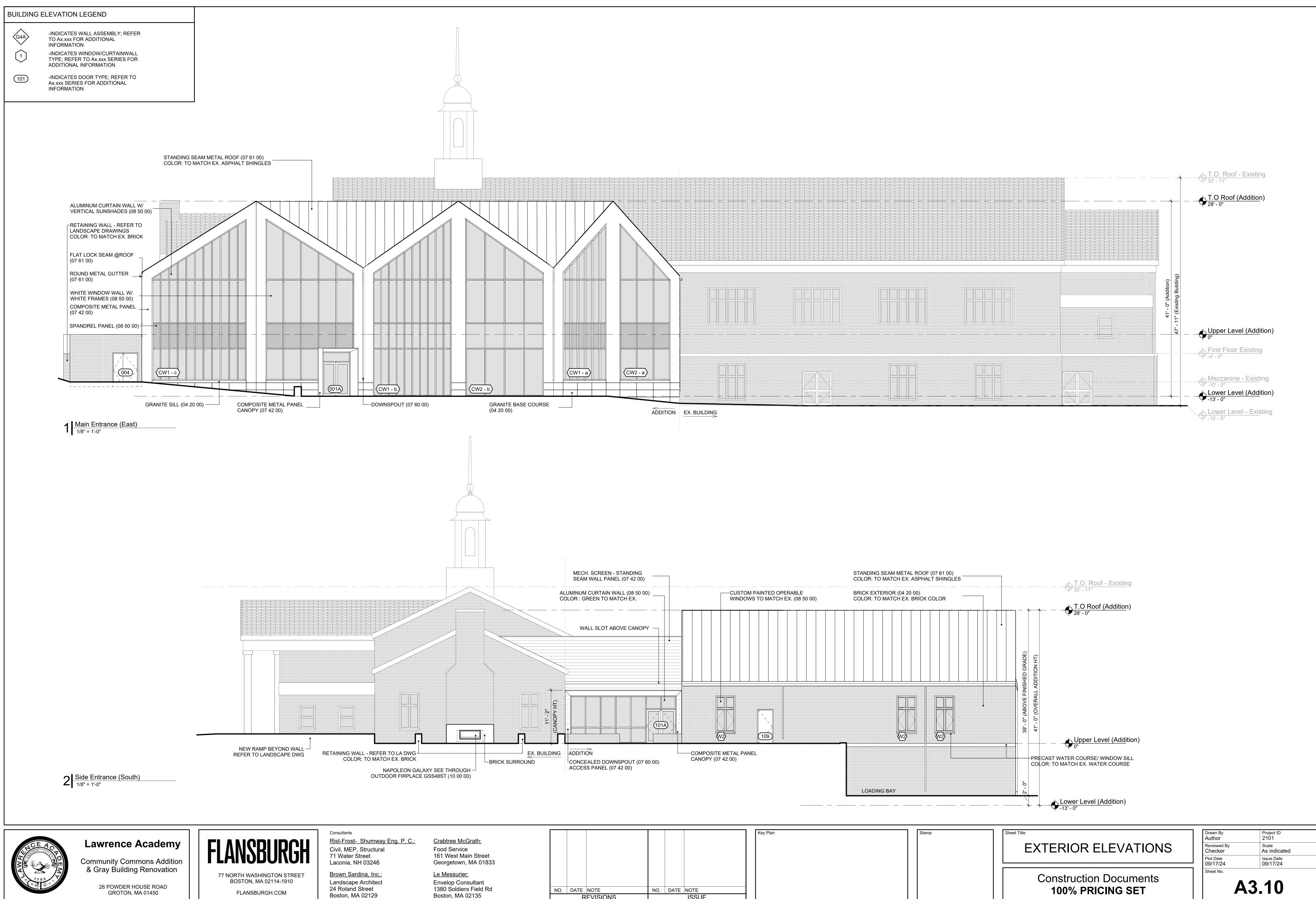




Crabtree McGrath: Food Service 161 West Main Street Georgetown, MA 01833 Le Messurier

Envelop Consultant 1380 Soldiers Field Rd Boston, MA 02135

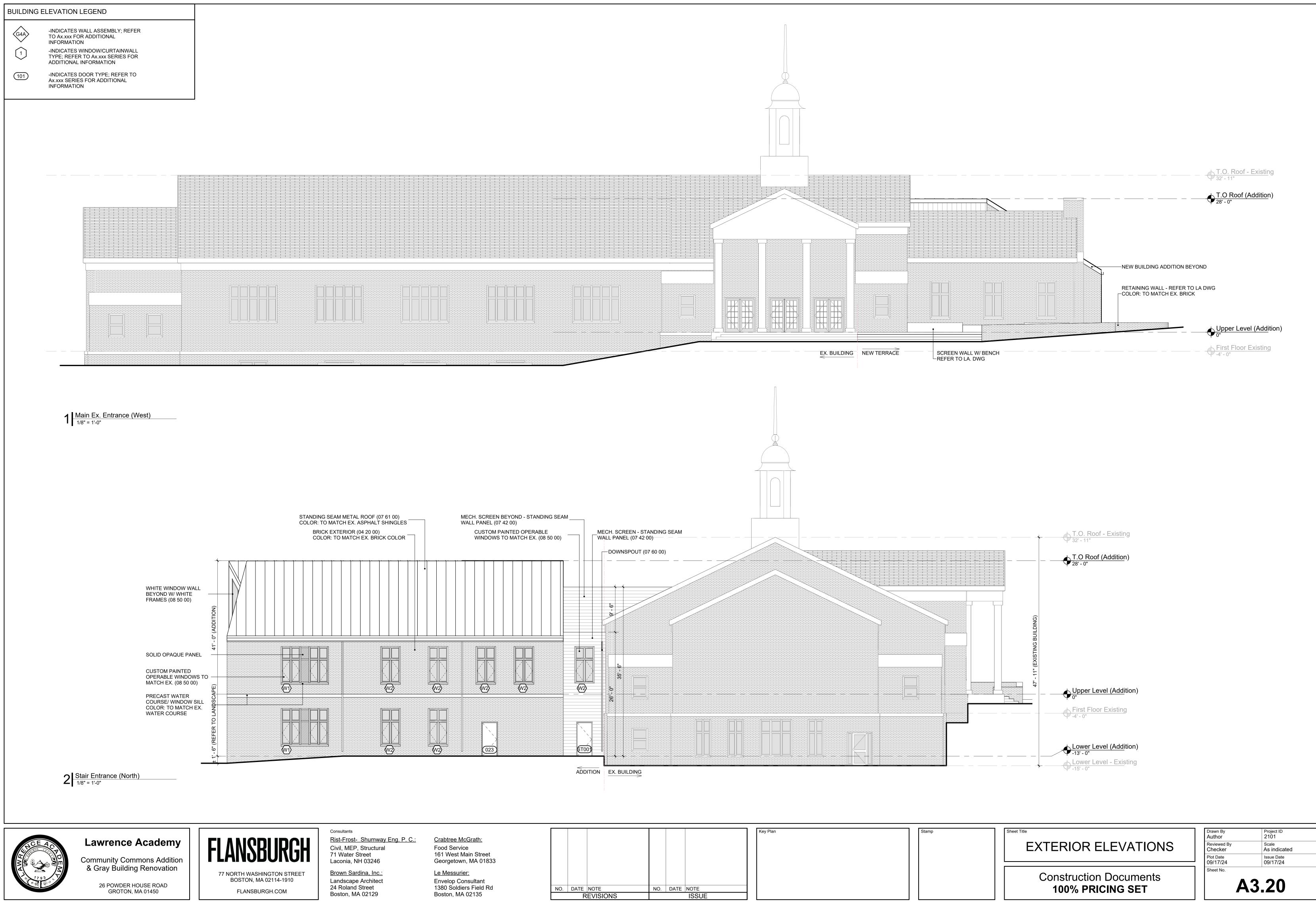
Stamp	Sheet Title	Drawn By NAB	Project ID 2101
	SITE DETAILS	Reviewed By MS	Scale AS SHOWN
		Plot Date 09/17/24	Issue Date 09/17/24
	Construction Documents 100% PRICING SET	Sheet No.	.6



Boston, MA 02135

NO. DATE NOTE

ISSUE



							1	Key Plan
Crabtree McGrath:								
Food Service 161 West Main Street Georgetown, MA 01833								
<u>Le Messurier:</u> Envelop Consultant 1280 Saldioro Field Bd								
1380 Soldiers Field Rd	NO.	DATE	NOTE	NO.	DATE			
Boston, MA 02135		R	EV/ISIONS			ISSUE	1	