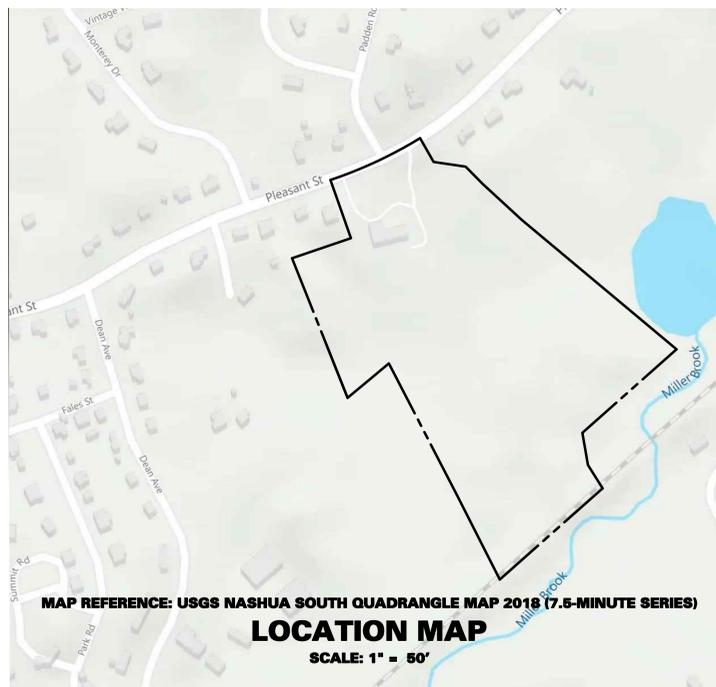


237 PLEASANT STREET

TOWN OF FRANKLIN, NORFOLK COUNTY, MASSACHUSETTS

CIVIL DRAWING INDEX			
SHEET NUMBER	DRAWING TITLE	DATE	LAST REVISED
CS001	SITE COVER SHEET	09-10-2022	
CS002	MASTER LEGEND & NOTES	09-10-2022	
SHEET 1	EXISTING CONDITIONS SURVEY	09-10-2022	
CS100	SITE PLAN	09-10-2022	
CS501	SITE DETAILS I	09-10-2022	
CS502	SITE DETAILS II	09-10-2022	
CG100	GRADING & DRAINAGE PLAN	09-10-2022	
CG501	GRADING & DRAINAGE DETAILS I	09-10-2022	
CG502	GRADING & DRAINAGE DETAILS II	09-10-2022	
CU100	UTILITY PLAN	09-10-2022	
CU501	UTILITY DETAIL I	09-10-2022	
CU502	UTILITY DETAIL II	09-10-2022	
CE100	SOIL EROSION & SEDIMENT CONTROL PLAN	09-10-2022	
CE501	SOIL EROSION & SEDIMENT CONTROL DETAILS I	09-10-2022	
CD100	DEMOLITION PLAN	09-10-2022	
TM100	TURNING MOVEMENTS PLAN	09-10-2022	
LL100	LIGHTING PLAN	09-10-2022	
LL501	LIGHTING DETAILS	09-10-2022	
TP100	PLANTING PLAN	09-10-2022	
TP501	PLANTING DETAILS	09-10-2022	



RELEASE DATES	
DATE	ISSUED FOR
09-10-2022	DESIGN REVIEW AND PRICING

OWNER
ST JOHNS EPISCOPAL CHURCH
237 PLEASANT ST
FRANKLIN, MA 02038

APPLICANT
THE COMMUNITY BUILDERS INC.
C/O JOHN HARDING
185 DARTMOUTH ST, 9TH FLOOR
BOSTON, MA 02116
(617) 695-9595

ARCHITECT
DBVW ARCHITECTS
C/O KARISSA KUHN
111 CHESTNUT ST
PROVIDENCE, RI 02903
(401) 831-1240

**CIVIL ENGINEER, LAND SURVEY, TRAFFIC ENGINEER,
ENVIRONMENTAL ENGINEER, GEOTECHNICAL ENGINEER &
LANDSCAPE ARCHITECT**
LANGAN ENGINEERING & ENVIRONMENTAL SERVICES, INC
C/O FRANK HOLMES
100 CAMBRIDGE STREET
BOSTON, MA 02114
(617) 824-9100

STRUCTURAL ENGINEER
RSE ASSOCIATES INC.
63 PLEASANT STREET, SUITE 300
WATERTOWN, MA 02472
(617) 926-9300

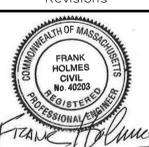
MEP ENGINEER
ENGINEERING DESIGN SERVICES
141 INDUSTRIAL DRIVE
SLATERVILLE, RI 02876
(401) 765-7659

NOT FOR CONSTRUCTION

Date	Description	No.
Revisions		
 FRANK HOLMES CIVIL ENGINEER No. 40203		
 LANGAN Langan Engineering and Environmental Services, Inc. 100 Cambridge Street, Suite 1310 Boston, MA 02114 T: 617.824.9100 F: 617.824.9101 www.langan.com		
Project		
237 PLEASANT STREET CONCEPT PLANS		
NORFOLK COUNTY FRANKLIN MASSACHUSETTS		
Drawing Title		
COVER SHEET		
Project No.	Drawing No.	
151019602	CS001	
Date		
09/10/2022		
Drawn By		
Checked By		

<p>GENERAL CIVIL NOTES</p> <ol style="list-style-type: none"> PLANIMETRIC AND TOPOGRAPHIC INFORMATION SHOWN HEREON HAS BEEN OBTAINED FROM GROUND SURVEYS BY PRECISION LAND SURVEYING, INC. THE EXISTING CONDITIONS SHOWN HERE ARE FROM SURVEY DATA UPDATED THROUGH 5/26/2021. PROPOSED SITE WORK IMPROVEMENTS SHALL CONFORM TO THE STANDARD DETAILS AND SPECIFICATIONS OF THE TOWN OF FRANKLIN. IN THE ABSENCE OF LOCAL STANDARDS, SITE WORK SHALL CONFORM TO THE REQUIREMENTS OF MASSACHUSETTS DOT STANDARD DETAILS. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING DIG SAFE (WWW.DIGSAFE.COM), EXCAVATION TEST HOLES, PERFORMING TEST BORINGS, AND PERFORMING WHATEVER ADDITIONAL INVESTIGATION NECESSARY TO PROTECT AND MAINTAIN ALL EXISTING UTILITIES TO REMAIN THROUGHOUT THE CONSTRUCTION PERIOD. ANY CONFLICTS BETWEEN EXISTING UTILITIES AND PROPOSED UTILITIES DISCOVERED DURING CONSTRUCTION SHALL BE PROMPTLY REPORTED TO THE PROJECT ENGINEER. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR LOCATIONS, DIMENSIONS AND DETAILS OF ALL DOORS, RAMPS, SIDEWALKS AND WALLS ASSOCIATED WITH THE BUILDING. ALL IMPROVEMENTS CONSTRUCTED IN THE TOWN PUBLIC RIGHT-OF-WAY SHALL CONFORM TO TOWN OF FRANKLIN STANDARD DETAILS. IN THE ABSENCE OF LOCAL DETAILS & REQUIREMENTS AND WORK IN THE STATE RIGHT-OF-WAY SHALL COMPLY WITH THE STATE OF MASSACHUSETTS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, THE COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS (2021 EDITION) AND THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION SUPPLEMENTAL SPECIFICATIONS (DATED SEPTEMBER 30, 2021). FOR AREAS OUTSIDE THE PROPERTY LINES, REPAIR AND/OR REPLACE ALL DAMAGE DONE TO EXISTING ELEMENTS (SIDEWALKS, PAVING, LANDSCAPING, ETC) AS REQUIRED BY OWNER AND/OR GOVERNING AUTHORITY. ALL SIGNS AND PAVEMENT MARKINGS SHALL CONFORM TO THE LATEST EDITION OF THE MUTCD AND MASSACHUSETTS DEPARTMENT OF TRANSPORTATION REGULATIONS. ABBREVIATIONS: ARCH. = ARCHITECTURAL AD = AREA DRAIN BC = BOTTOM OF CURB BW = BOTTOM OF WALL CB = CATCH BASIN CLDI = CONCRETE LINED DUCTILE IRON CO = CLEAN OUT CONC. = CONCRETE DCB = DOUBLE CATCH BASIN DMH = DRAIN MANHOLE EMH = ELECTRIC MANHOLE EX. = EXISTING FES = FLAIED END SECTION FFE = FINISHED FLOOR ELEVATION GR = GRADE HDPE = HIGH DENSITY POLYETHYLENE PIPE HH = HANDHOLE HP = HIGHPOINT INV = INVERT LA = LANDSCAPED AREA LF = LINEAR FEET LP = LOW POINT MH = MANHOLE NTS = NOT TO SCALE OCS = OUTLET CONTROL STRUCTURE PR. = PROPOSED PVC = POLYVINYL CHLORIDE PIPE (SDR-35) RCP = REINFORCED CONCRETE PIPE RET. = RETAINING RL = ROOF LEADER R.O.W = RIGHT OF WAY R&D = REMOVE & DISPOSE R&R = REMOVE & REPLACE R&S = REMOVE & SALVAGE SSMH = SANITARY SEWER MANHOLE TF = TOP OF FRAME TC = TOP OF CURB TW = TOP OF WALL TYP. = TYPICAL VIF = VERIFY IN FIELD WQS = WATER QUALITY STRUCTURE 	<p>SITE PREP, DEMO & EROSION NOTES</p> <ol style="list-style-type: none"> CLEAR AND GRUB ALL EXISTING PLANTED AREAS WITHIN THE LIMITS OF GRADING STOCKPILE TOPSOIL FOR REUSE. SOIL AND SEDIMENT CONTROL PRACTICES MUST BE INSTALLED IN ACCORDANCE WITH THE LOCAL GOVERNING AUTHORITY, THE MASSACHUSETTS EROSION AND SEDIMENT CONTROL GUIDELINES AND THE MASSACHUSETTS STORMWATER STANDARDS. CONTRACTOR SHALL PREVENT DUST, SEDIMENT AND DEBRIS FROM EXITING THE SITE AND SHALL BE RESPONSIBLE FOR CLEANUP, REPAIRS AND CORRECTIVE ACTION IF SUCH OCCURS. ADJOINING STREETS AND PROPERTIES TO BE KEPT FREE OF DEBRIS RESULTING FROM DEMOLITION AND SHALL BE CLEANED ON A DAILY BASIS OR AS NEEDED. CONTRACTOR SHALL MAINTAIN THE INFILTRATION CAPACITY OF SUBGRADE WITHIN THE FOOTPRINT OF THE INFILTRATION FACILITIES. CONTRACTOR SHALL PREVENT EXCESSIVE SILT AND SEDIMENT BUILDUP AND EXCESSIVE LOADING IN THESE AREAS. IF THE INFILTRATION CAPACITY OF THESE AREAS IS COMPROMISED, THE CONTRACTOR SHALL AMEND OR MODIFY THE SUBGRADE TO RESTORE CAPACITY. EXISTING TREES TO REMAIN WITHIN THE LIMIT OF WORK ARE TO BE PROTECTED. TREE PROTECTION FENCING TO BE 6" TALL CHAIN LINK FENCE AND TO BE SET UP AT DRIP LINE OF EXISTING TREES OR EXTENT OF CRITICAL ROOT ZONE, WHICHEVER IS GREATER. EXISTING TREES AND SHRUBS TO REMAIN SHALL NOT BE ALTERED UNDER ANY CIRCUMSTANCES UNLESS REVIEWED BY THE LANDSCAPE ARCHITECT AND MUST REMAIN IN THE SAME CONDITION AS OBSERVED PRIOR TO CONSTRUCTION. TREE AND SHRUB REMOVAL SHALL INCLUDE THE FELLING, CUTTING, GRUBBING OUT OF ROOTS, AND SATISFACTORY OFF-SITE DISPOSAL OF ALL STUMPS AND VEGETATIVE AND EXTRANEOUS DEBRIS PRODUCED THROUGH THE REMOVAL OPERATIONS. NO HEAVY MACHINERY IS TO BE USED WITHIN THE CRITICAL ROOT ZONES OF EXISTING TREES. EXCAVATION WITHIN CRITICAL ROOT ZONE IS TO BE PERFORMED BY HAND. REVIEW ALL WORK PROPOSED WITHIN THE CRITICAL ROOT ZONE WITH THE LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION. ALL EXISTING UTILITIES NOT IDENTIFIED AS TO BE REMOVED ARE TO BE PROTECTED. ALL VALVE BOXES, FRAMES, GRATES AND COVERS SHALL BE ADJUSTED TO FINISHED GRADE AS REQUIRED. DUST CONTROL TREATMENTS SHALL BE APPLIED AS NECESSARY TO CONTROL AND REDUCE THE AMOUNT OF DUST WHICH MAY CAUSE OFF-SITE DAMAGE, BE A HEALTH HAZARD TO HUMANS, WILDLIFE AND PLANT LIFE, OR POSE A HAZARD TO TRAFFIC SAFETY. EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSTALLED PRIOR TO START OF DEMOLITION AND CONSTRUCTION AND DISTURBANCE OF SITE CONTRIBUTORY DRAINAGE AREAS. THE OWNER OR ITS CONTRACTOR SHALL INSPECT, REPAIR AND REMOVE ALL SEDIMENT AND EROSION CONTROL DEVICES, AS INDICATED HEREIN. ALL EARTH CHANGES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED IN SUCH A MANNER SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST POSSIBLE PERIOD OF TIME. DISPOSAL OF COLLECTED SEDIMENT SHALL BE MADE TO AREA DESIGNATED BY THE OWNER'S SOIL ENGINEER. FILTER FABRIC/SILT FENCE WILL BE INSTALLED ALONG THE TOE OF ALL CRITICAL CUT AND FILL SLOPES. ALL TOPSOIL NOT TO BE USED FOR FINAL GRADING/LANDSCAPED AREAS SHALL BE REMOVED FROM THE SITE IMMEDIATELY, IN ACCORDANCE WITH APPLICABLE STATE AND LOCAL LAW. ALL TOPSOIL TO BE USED IN LANDSCAPED AREAS SHALL BE STORED/STOCKPILED IN ACCORDANCE WITH APPLICABLE STATE AND LOCAL LAW STANDARDS. ALL STORM DRAINAGE OUTLETS MUST BE STABILIZED, AS REQUIRED, BEFORE THE DISCHARGE POINTS BECOME OPERATIONAL. SILT FENCES AND BARRIERS MUST BE CLEANED OR REPLACED PERIODICALLY TO REMOVE BUILT-UP SILT. ALL EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSPECTED ON A DAILY BASIS AND CLEANED IMMEDIATELY AFTER EACH STORM. ANY TEMPORARY OR PERMANENT FACILITY DESIGNED FOR THE CONVEYANCE OF WATER AROUND, THROUGH, OR FROM THE EARTH CHANGE AREA SHALL BE DESIGNED TO LIMIT THE WATER FLOW TO A NON-EROSIVE VELOCITY. THE CONTRACTOR SHALL CORRECT ANY OMISSIONS, ERRORS, OR FIELD OPERATIONS IMMEDIATELY AND IN ACCORDANCE WITH THE GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL. SEDIMENT DISPOSAL AREAS AND TOPSOIL STOCKPILES NOT SCHEDULED FOR CONSTRUCTION ACTIVITIES WITHIN THIRTY (30) DAYS OF DISTURBANCE SHALL BE STABILIZED AS FOLLOWS: <ol style="list-style-type: none"> SOIL AMENDMENTS AS NECESSARY. ANNUAL RYE GRASS SEEDING APPLIED AT A RATE OF NOT LESS THAN 1 LB. PER 1,000 SF. MULCH ALL NEWLY SEEDED AREAS WITHIN 80 LBS. OF SALT HAY OR SMALL GRAIN STRAW PER 1,000 SF. WHEN DISTURBED AREAS ARE SCHEDULED FOR IMMEDIATE LANDSCAPING THEY MAY BE MULCHED AND SEEDED PER ITEM C ABOVE. 	<p>STORM DRAINAGE NOTES</p> <ol style="list-style-type: none"> ALL STORM DRAINAGE WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS AND SPECIFICATIONS/DETAILS OF THE TOWN OF FRANKLIN AND IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL ORDINANCES/REQUIREMENTS GOVERNING THE PROPOSED WORK. THE LOCATION OF EXISTING UNDERGROUND STORM DRAINAGE INFRASTRUCTURE SHOWN HEREON IS TAKEN FROM DESIGN PLANS, AS-BUILT SKETCHES, LIMITED PHYSICAL EXPLORATION AND OTHER SOURCES OF INFORMATION AND IS NOT TO BE CONSTRUED AS AN ACCURATE "AS-BUILT" SURVEY AND IS SUBJECT TO SUCH CORRECTIONS THAT A MORE ACCURATE SURVEY MAY DISCLOSE. THE EXISTING STORM DRAINAGE INDICATED HEREON MAY NOT BE LOCATED AS SHOWN. ANY DISCREPANCIES DISCOVERED DURING THE COURSE OF CONSTRUCTION SHALL BE PROMPTLY REPORTED TO THE PROJECT ENGINEER. RESET ALL EXISTING STORM DRAINAGE STRUCTURES TO MASSACHUSETTS STATE STANDARDS AND AS REQUIRED BY REPAIRING, MILLING OR OVERLAYING ALL PROPOSED STORM DRAINAGE PIPING TO UTILIZE WATER-TIGHT JOINTS. CLEANOUTS SHALL BE PROVIDED FLUSH TO GRADE AT ALL LOCATIONS OF ROOF DRAIN INTERSECTIONS, BENDS AND UPSTREAM ENDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SIZING ALL DRAINAGE STRUCTURES AND SUBMITTING SHOP DRAWINGS TO ENGINEER FOR REVIEW. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PAVEMENT REPAIRS REQUIRED AS A RESULT OF ANY STORMWATER WORK. 	<p>UTILITIES NOTES</p> <ol style="list-style-type: none"> ALL UTILITY WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS AND SPECIFICATIONS/DETAILS OF THE UTILITY COMPANY HAVING AUTHORITY OVER THE PROPOSED WORK. ALL PROPOSED UTILITY WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL ORDINANCES/REQUIREMENTS GOVERNING THE PROPOSED WORK. THE LOCATION OF EXISTING UNDERGROUND UTILITIES SHOWN HEREON IS TAKEN FROM DESIGN PLANS, AS-BUILT SKETCHES, EXISTING UTILITY COMPANY RECORDS, AND OTHER SOURCES OF INFORMATION AND IS NOT TO BE CONSTRUED AS AN ACCURATE "AS-BUILT" SURVEY AND IS SUBJECT TO SUCH CORRECTIONS THAT A MORE ACCURATE SURVEY MAY DISCLOSE. THE EXISTING UTILITIES INDICATED HEREON MAY NOT BE LOCATED AS SHOWN. IN ADDITION, OTHER UTILITIES NOT SHOWN HEREON MAY BE PRESENT. ANY DISCREPANCIES DISCOVERED DURING THE COURSE OF CONSTRUCTION SHALL BE PROMPTLY REPORTED TO THE PROJECT ENGINEER. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. ANY DISCREPANCIES DISCOVERED DURING THE COURSE OF CONSTRUCTION SHALL BE PROMPTLY REPORTED TO THE PROJECT ENGINEER. ANY UTILITY EASEMENTS REQUIRED BY ANY OF THE VARIOUS UTILITY COMPANIES SHALL BE OBTAINED, EXECUTED, AND RECORDED PRIOR TO ANY OF THE AFFECTED UTILITY WORK BEING PERFORMED. ALL PROPOSED UTILITIES WILL BE LOCATED UNDERGROUND UNLESS OTHERWISE NOTED. RESET ALL EXISTING UTILITY INFRASTRUCTURE, INCLUDING SANITARY MANHOLE STRUCTURES, VALVE BOXES AND VAULTS, TO PROPOSED FINISHED GRADE IN ACCORDANCE WITH MASSACHUSETTS STATE STANDARDS AND AS REQUIRED BY IMPROVEMENTS, REPAIRING, MILLING OR OVERLAYING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PAVEMENT REPAIRS REQUIRED AS A RESULT OF ANY UTILITY WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF THE DOMESTIC AND FIRE SERVICE LINE CONNECTIONS TO EXISTING MAINS. TEST PITS ARE TO BE PERFORMED PRIOR TO INSTALLATION OF DOMESTIC AND FIRE SERVICE LINE CONNECTIONS TO CONFIRM THE SIZE AND MATERIAL OF THE MAIN. TAPPING SLEEVES AND GATE VALVE ASSEMBLIES SHALL BE INSTALLED AT EACH DOMESTIC AND FIRE SERVICE LINE CONNECTION AND SHALL BE MANUFACTURED BY CLOW VALVE CO., MUELLER CO., OR AMERICAN VALVE AND HYDRANT. SCHEDULING OF ALL DOMESTIC AND FIRE SERVICE LINE CONNECTION WORK SHALL BE COORDINATED WITH THE TOWN OF FRANKLIN WATER DIVISION TO ALLOW FOR A REPRESENTATIVE FROM THE AGENCY TO BE ONSITE TO OVERSEE THE CONNECTIONS AND PERFORM A WATER SHUTDOWN AS NEEDED. WATER METERS AND ASSOCIATED ENCODER RECEIVER TRANSMITTER EQUIPMENT SHALL BE COMPATIBLE WITH THE TOWN'S EXISTING METER READING SYSTEM. ALL WATER MAINS AND SERVICES SHALL HAVE A MINIMUM OF 5'-0" OF COVER. INSULATION SHALL BE USED FOR ANY MAINS AND SERVICES RECEIVING LESS THAN 5'-0" OF COVER. INSULATION SHALL BE 2-INCHES THICK, "FOAMGLASS" STYLE WITH JACKETING AS MANUFACTURED BY PITTSBURGH CORNING CORP IN ACCORDANCE WITH AWWA C552. ALL WATER MAINS AND SERVICES SHALL MAINTAIN A MINIMUM VERTICAL SEPARATION OF 18-INCHES FROM OTHER UTILITIES WITH STRICT ADHERENCE TO THIS SEPARATION FOR SEWER AND DRAIN LINES IN ACCORDANCE WITH MASSDEP'S GUIDELINES AND POLICIES FOR PUBLIC WATER SYSTEMS. IF ADEQUATE SEPARATION IS NOT MAINTAINED, PIPELINES SHALL BE SLEEVED OR ENCASED IN FLOWABLE AND EXCAVATABLE CONCRETE. IN ADDITION, NO WATER MAINS OR SERVICES SHALL BE INSTALLED WITHIN THE SAME TRENCH AS OTHER UTILITIES. A MINIMUM OF 10- FEET OF HORIZONTAL SEPARATION FROM SEWER OR DRAIN LINES SHALL BE MAINTAINED. VALVE BOXES SHALL BE CAST IRON, ADJUSTABLE SLIDING HEAVY PATTERN TYPE WITH FLANGE ON THE TOP OF THE SECTION, BE STAMPED "WATER" ON THE TOP COVER, BE DIRT-TIGHT, AND FULLY ENCLOSE THE VALVE OPERATING NUT AND STUFFING BOX. ALL FIRE HYDRANTS SHALL MEET TOWN OF FRANKLIN DESIGN STANDARDS. 	<p>LEGEND</p> <table border="1"> <thead> <tr> <th></th> <th>EXISTING</th> <th>PROPOSED</th> </tr> </thead> <tbody> <tr> <td>PROPERTY LINE</td> <td>---</td> <td>---</td> </tr> <tr> <td>LIMIT OF DISTURBANCE</td> <td>---</td> <td>---</td> </tr> <tr> <td>100' WETLAND BUFFER ZONE</td> <td>---</td> <td>---</td> </tr> <tr> <td>WETLANDS LIMITS</td> <td>---</td> <td>---</td> </tr> <tr> <td>CONSTRUCTION FENCING</td> <td>X-X-X-X-X</td> <td>X-X-X-X-X</td> </tr> <tr> <td>COMPOST FILTER TUBE & SILT FENCE</td> <td>○-○-○-○-○</td> <td>○-○-○-○-○</td> </tr> <tr> <td>R&D STRUCTURE AND FOUNDATIONS</td> <td> </td> <td> </td> </tr> <tr> <td>DEMOLISH EXISTING PAVEMENT</td> <td> </td> <td> </td> </tr> <tr> <td>MILL EXISTING PAVEMENT</td> <td> </td> <td> </td> </tr> <tr> <td>STABILIZED CONSTRUCTION ENTRANCE</td> <td> </td> <td> </td> </tr> <tr> <td>UTILITY REMOVAL</td> <td> </td> <td> </td> </tr> <tr> <td>WALL REMOVAL</td> <td> </td> <td> </td> </tr> <tr> <td>RIP RAP OUTLET PROTECTION</td> <td> </td> <td> </td> </tr> <tr> <td>MILL AND OVERLAY PAVEMENT</td> <td> </td> <td> </td> </tr> <tr> <td>UNDERGROUND ELECTRIC CONDUIT</td> <td>UE</td> <td>UE</td> </tr> <tr> <td>UNDERGROUND TELE/COM CONDUIT</td> <td>UT</td> <td>UT</td> </tr> <tr> <td>NATURAL GAS PIPING</td> <td>G</td> <td>G</td> </tr> <tr> <td>WATER SERVICE LINES</td> <td>W</td> <td>W</td> </tr> <tr> <td>SANITARY SEWER PIPE</td> <td>---</td> <td>---</td> </tr> <tr> <td>STORM SEWER PIPE</td> <td>---</td> <td>---</td> </tr> <tr> <td>TRENCH DRAIN</td> <td>---</td> <td>---</td> </tr> <tr> <td>STORM CATCH BASIN</td> <td>■</td> <td>■</td> </tr> <tr> <td>STORM AREA DRAIN</td> <td>■</td> <td>■</td> </tr> <tr> <td>BMP INSPECTION PORT</td> <td>●</td> <td>●</td> </tr> <tr> <td>STORM MANHOLE</td> <td>○</td> <td>○</td> </tr> <tr> <td>CATCH BASIN</td> <td>■</td> <td>■</td> </tr> <tr> <td>TELE/COM AND ELECTRIC HAND HOLES</td> <td>■</td> <td>■</td> </tr> <tr> <td>SANITARY SEWER MANHOLE</td> <td>○</td> <td>○</td> </tr> <tr> <td>GATE VALVE</td> <td>⊗</td> <td>⊗</td> </tr> <tr> <td>FIRE HYDRANT</td> <td>⊗</td> <td>⊗</td> </tr> <tr> <td>TREE REMOVAL</td> <td>⊗</td> <td>⊗</td> </tr> <tr> <td>INLET PROTECTION</td> <td>■</td> <td>■</td> </tr> <tr> <td>R&D LIGHT POLE AND FIXTURE</td> <td>⊗</td> <td>⊗</td> </tr> <tr> <td>R&S LIGHT BOLLARD</td> <td>⊗</td> <td>⊗</td> </tr> <tr> <td>R&D DRAINAGE STRUCTURE</td> <td>■</td> <td>■</td> </tr> </tbody> </table>		EXISTING	PROPOSED	PROPERTY LINE	---	---	LIMIT OF DISTURBANCE	---	---	100' WETLAND BUFFER ZONE	---	---	WETLANDS LIMITS	---	---	CONSTRUCTION FENCING	X-X-X-X-X	X-X-X-X-X	COMPOST FILTER TUBE & SILT FENCE	○-○-○-○-○	○-○-○-○-○	R&D STRUCTURE AND FOUNDATIONS			DEMOLISH EXISTING PAVEMENT			MILL EXISTING PAVEMENT			STABILIZED CONSTRUCTION ENTRANCE			UTILITY REMOVAL			WALL REMOVAL			RIP RAP OUTLET PROTECTION			MILL AND OVERLAY PAVEMENT			UNDERGROUND ELECTRIC CONDUIT	UE	UE	UNDERGROUND TELE/COM CONDUIT	UT	UT	NATURAL GAS PIPING	G	G	WATER SERVICE LINES	W	W	SANITARY SEWER PIPE	---	---	STORM SEWER PIPE	---	---	TRENCH DRAIN	---	---	STORM CATCH BASIN	■	■	STORM AREA DRAIN	■	■	BMP INSPECTION PORT	●	●	STORM MANHOLE	○	○	CATCH BASIN	■	■	TELE/COM AND ELECTRIC HAND HOLES	■	■	SANITARY SEWER MANHOLE	○	○	GATE VALVE	⊗	⊗	FIRE HYDRANT	⊗	⊗	TREE REMOVAL	⊗	⊗	INLET PROTECTION	■	■	R&D LIGHT POLE AND FIXTURE	⊗	⊗	R&S LIGHT BOLLARD	⊗	⊗	R&D DRAINAGE STRUCTURE	■	■
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SANITARY SEWER MANHOLE	○	○																																																																																																														
GATE VALVE	⊗	⊗																																																																																																														
FIRE HYDRANT	⊗	⊗																																																																																																														
TREE REMOVAL	⊗	⊗																																																																																																														
INLET PROTECTION	■	■																																																																																																														
R&D LIGHT POLE AND FIXTURE	⊗	⊗																																																																																																														
R&S LIGHT BOLLARD	⊗	⊗																																																																																																														
R&D DRAINAGE STRUCTURE	■	■																																																																																																														

Date	Description	No.
Revisions		



LANGAN
Langan Engineering and Environmental Services, Inc.
100 Cambridge Street, Suite 1310
Boston, MA 02114
T: 617.824.9100 F: 617.824.9101 www.langan.com

Project
**237 PLEASANT STREET
CONCEPT PLANS**

NORFOLK COUNTY FRANKLIN MASSACHUSETTS
Drawing Title

NOTES & LEGENDS

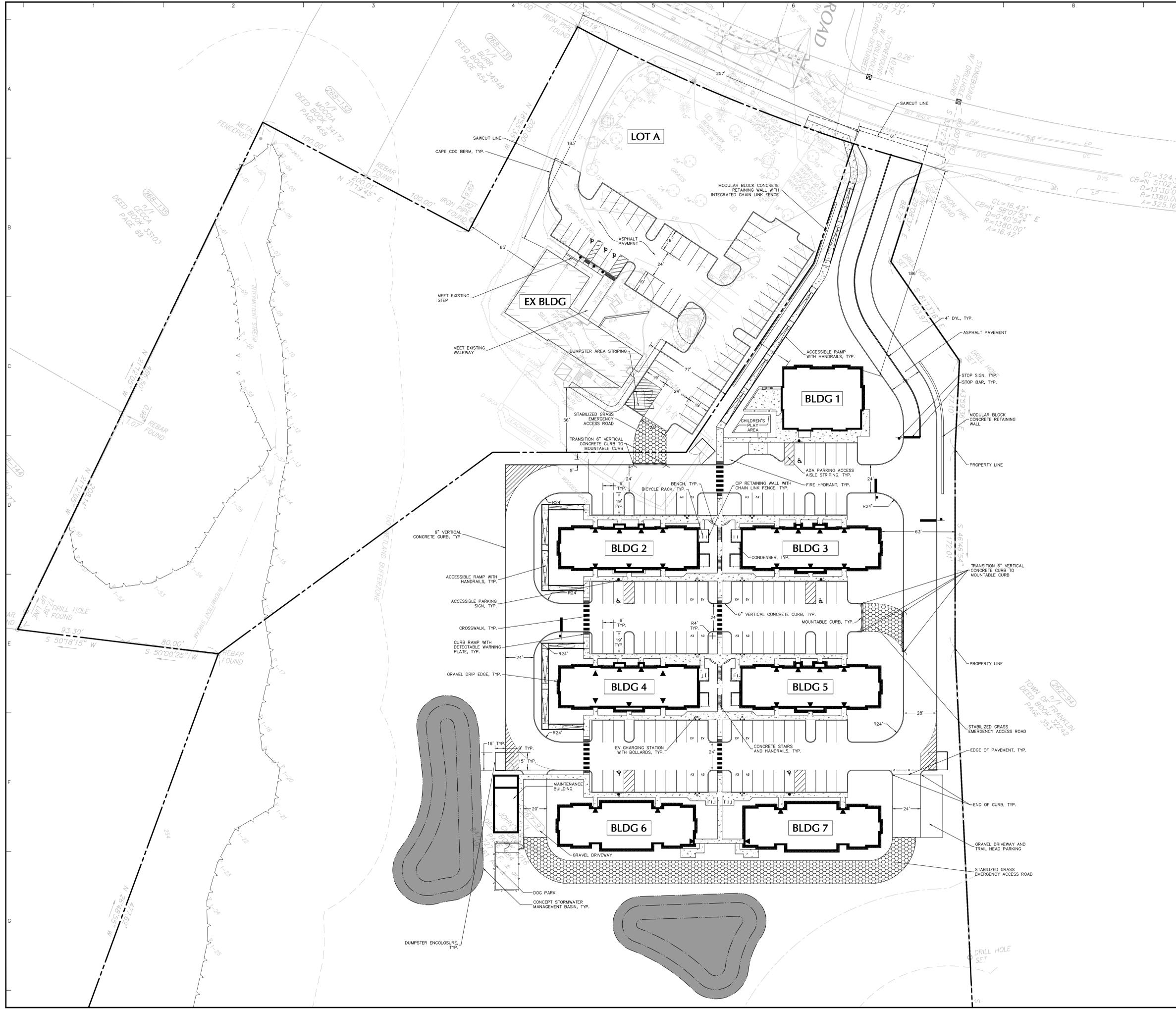
Project No.	Drawing No.
151019602	CS002
Date	
09/10/2022	
Drawn By	
Checked By	

ZONING TABLE
 ZONE: SINGLE-FAMILY RESIDENTIAL III
 USE: MULTIFAMILY OR APARTMENT (6.1)

	REQUIRED	PROPOSED LOT A	PROPOSED LOT B
MIN. LOT AREA	20,000 SF	±188,550 SF	±659,200 SF
MIN. LOT FRONTAGE	125 FT	±257 FT	±61 FT
MIN. LOT DEPTH	160 FT	>160 FT	>160 FT
MIN. LOT WIDTH	112.50 FT	>112.5 FT	±61 FT
MIN. FRONT YARD	40 FT	±177 FT	±186 FT
MIN. SIDE YARD	25 FT	±65 FT	±27 FT
MIN. REAR YARD	30 FT	±62 FT	±442 FT
MAX BLDG. HEIGHT	35 FT	N/A	33.5 FT
MAX BLDG. STORIES	3	N/A	3
MAX BLDG. AREA	25%	±2.8%	±4.8%
MAX BLDG. + PAVEMENT AREA	35%	±13.1%	±15.7%

OFF-STREET PARKING	2 PER DWELLING UNIT	53 SPACES	102 SPACES [1.5 PER DWELLING UNIT (96) + 1 PER 500 GSA OF COMMUNITY BUILDING (6)]
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PARKING SPACE DIM.	9 FT X 19 FT	9 FT X 19 FT	9 FT X 19 FT
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Date	Description	No.
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Revisions



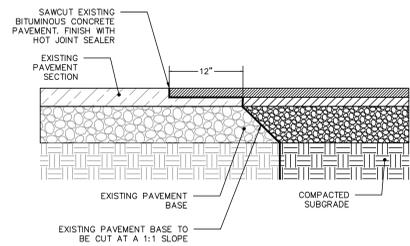
LANGAN
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Project
**237 PLEASANT STREET
 CONCEPT PLANS**

FRANKLIN MASSACHUSETTS
 Drawing Title

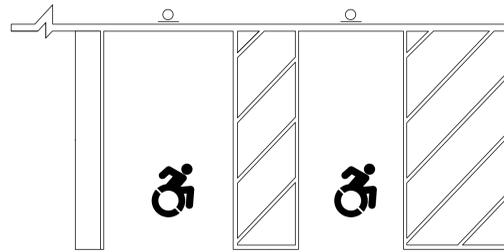
SITE PLAN

Project No. 151019602	Drawing No. CS100
Date 09/10/2022	
Drawn By KH	
Checked By PH	



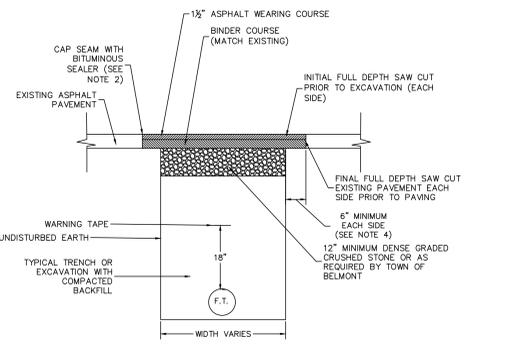
NOTES:
1. CONTRACTOR TO INSTALL TACK COAT ON ALL BUTT EDGES OF EXISTING PAVEMENT

1 SAWCUT PAVEMENT SECTION
N.T.S.



NOTES:
1. ALL PAINT SHALL BE FAST DRYING TRAFFIC PAINT, MEETING THE REQUIREMENTS OF AASHTO M248 TYPE F. PAINT SHALL BE APPLIED AS SPECIFIED BY THE MANUFACTURER.
2. SYMBOLS & PARKING STALLS SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICAN DISABILITIES ACT (ADA) AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
3. APPLY TWO COATS OF TRAFFIC PAINT. ALLOW FOR A MINIMUM CURE TIME OF 24 HOURS BETWEEN APPLICATIONS.

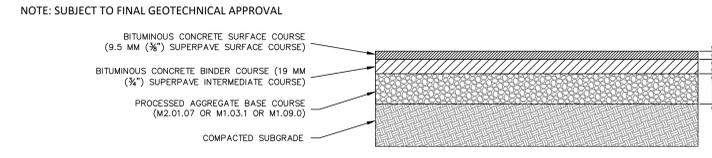
4 ADA PARKING STALL STRIPING
N.T.S.



NOTES:
1. EXISTING PAVEMENT IS TO BE SAW CUT FULL DEPTH TO OBTAIN A STRAIGHT AND NEAT EDGE FOR PAVING. SAW CUT IS TO BE MADE AFTER BACKFILLING THE TRENCH AT BOTTOM OF NEW PAVEMENT SECTION.
2. ALL SEAMS BETWEEN EXISTING AND NEW SURFACES ARE TO BE SEALED WITH AN ASPHALT EMULSION.
3. PAVEMENT SECTION TO BE CONFIRMED WITH THE TOWN OF BELMONT.
4. 6 INCH MINIMUM TO BE FROM EDGE OF UNDISTURBED EARTH, EACH SIDE OF TRENCH.

8 PAVEMENT TRENCH RESTORATION
N.T.S.

ASPHALT SECTION	SURFACE COURSE - "X"	BINDER COURSE - "Y"	SUBBASE - "Z"
DRIVEWAYS AND PARKING LOTS	1.5 INCHES	2.0 INCHES	6 INCHES

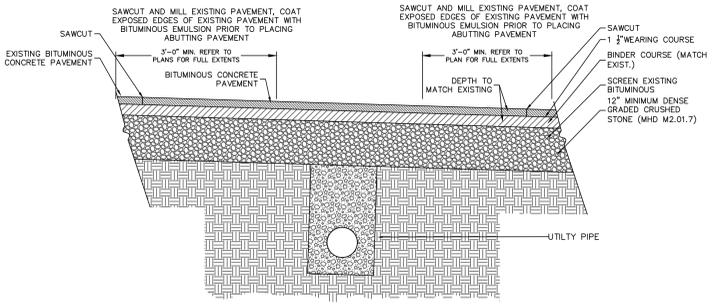


NOTE: SUBJECT TO FINAL GEOTECHNICAL APPROVAL

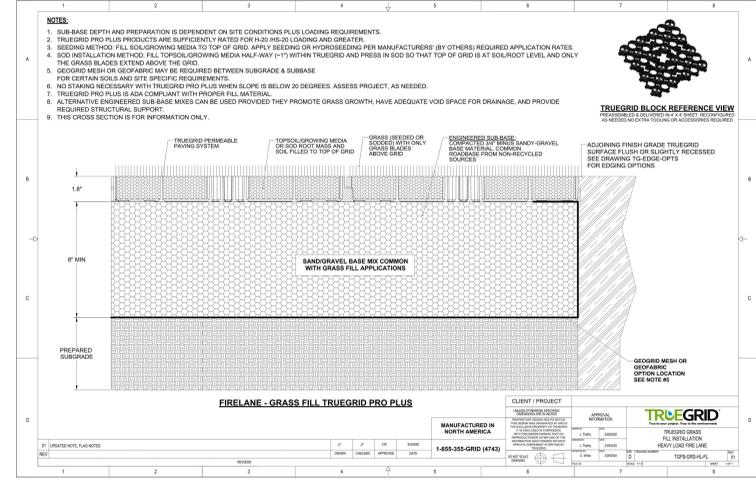
BITUMINOUS CONCRETE SURFACE COURSE (9.5 MM (3/8") SUPERPAVE SURFACE COURSE)
BITUMINOUS CONCRETE BINDER COURSE (19 MM (3/4") SUPERPAVE INTERMEDIATE COURSE)
PROCESSED AGGREGATE BASE COURSE (M2.01.07 OR M1.03.1 OR M1.09.0)
COMPACTED SUBGRADE

NOTES:
1. PAVING COURSES SHALL BE CONSTRUCTED IN LAYERS NOT LESS THAN 1.5 INCHES THICK PER LIFT.
2. ALL AREAS TO BE PAVED SHALL BE PROOFROLLED WITH AT LEAST 4 PASSES OF A SMOOTH ROLLER HAVING A MINIMUM STATIC DRUM WEIGHT OF 10 TONS. ANY SOFT AREAS SHALL BE REMOVED AND REPLACED WITH CLEAN, GRANULAR, FREE-DRAINING SOIL FILL SHALL BE PLACED IN LOOSE LIFTS NOT TO EXCEED 12-INCHES AND SHALL BE COMPACTED TO AT LEAST 95% OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY THE GEOTECHNICAL REPORT.
3. PAVEMENT CLASSES REFER TO MASSACHUSETTS, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION (MDO T S) M3.11.03. PRESSED AGGREGATE SHALL REFER TO M2.01.07 OR M1.03.1.

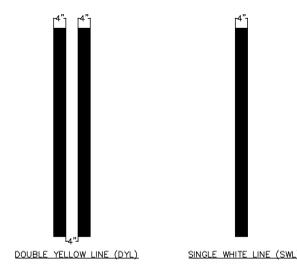
2 ASPHALT PAVEMENT
N.T.S.



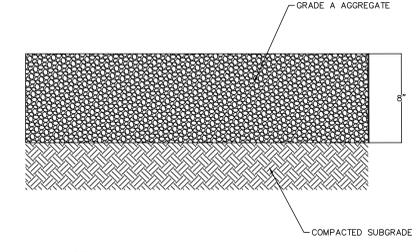
5 ASPHALT PATCHING
N.T.S.



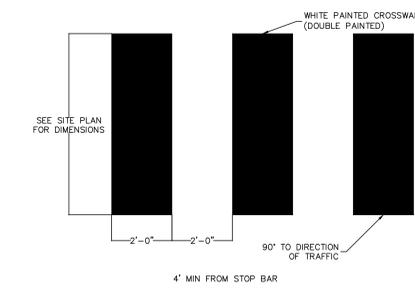
3 STABILIZED GRASS PAVEMENT
N.T.S.



6 ROAD STRIPING
N.T.S.

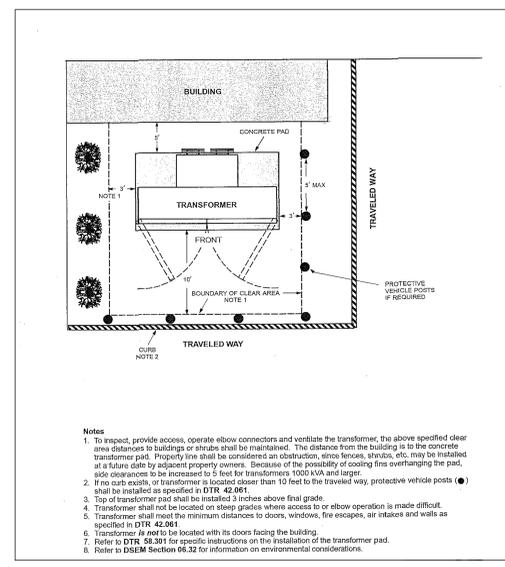


7 GRAVEL ROAD
N.T.S.



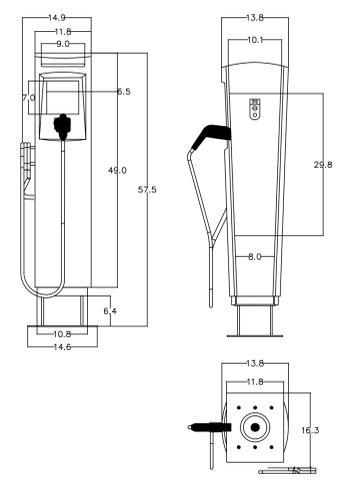
NOTES:
TWO COATS OF EPOXY RESIN PAVEMENT MARKING PAINT SHALL BE APPLIED TO ALL PROPOSED PAVEMENT MARKINGS.

9 CROSSWALK
N.T.S.



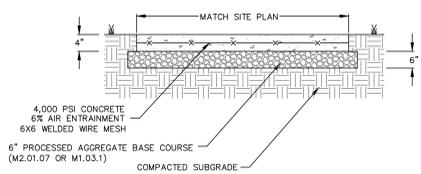
Notes:
1. To inspect, provide access, operate elbow connectors and ventilate the transformer, the above specified clear area distances to buildings or structures shall be maintained. The distance from the building to the concrete transformer pad. Property line shall be considered an obstruction, since fences, drives, etc. may be installed at a future date by adjacent property owners. Because of the possibility of cooling fins overhanging the pad, side clearance to be maintained to be 5 feet for transformers 1000 kVA and larger.
2. If no curb exists, or transformer is located closer than 10 feet to the traveled way, protective vehicle posts (●) shall be installed as specified in DTR 42.061.
3. Top of transformer pad shall be installed 3 inches above final grade.
4. Transformer shall not be located on steep grades where access to or egress operation is made difficult.
5. Transformer shall meet the minimum distances to doors, windows, fire escapes, air intakes and walls as specified in DTR 42.061.
6. Transformer pad to be located with its doors facing the building.
7. Refer to DTR 58.201 for specific instructions on the installation of the transformer pad.
8. Refer to DSEEM Section 66.32 for information on environmental considerations.

10 TRANSFORMER PAD
N.T.S.



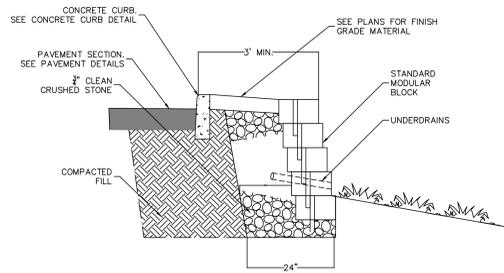
11 ELECTRIC CHARGING STATION
N.T.S.

Date	Description	No.
Revisions		
LANGAN Langan Engineering and Environmental Services, Inc. 100 Cambridge Street, Suite 1310 Boston, MA 02114 T: 617.824.9100 F: 617.824.9101 www.langan.com		
Project		
237 PLEASANT STREET CONCEPT PLANS		
FRANKLIN NORFOLK COUNTY MASSACHUSETTS		
Drawing Title		
SITE DETAILS I		
Project No.	Drawing No.	
151019602	CS501	
Date	09/10/2022	
Drawn By		
Checked By		



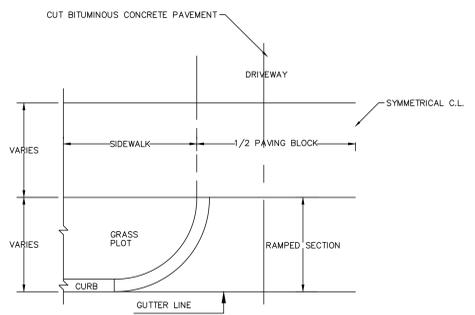
- NOTES:
1. ALL CONTROL JOINTS TO BE SAWCUT TO 1/4 THE DEPTH OF SLAB.
 2. SIDEWALKS TO COMPLY WITH CITY STANDARDS WHERE APPLICABLE.
 3. EXPANSION AND CONTROL JOINTS SHALL BE INSTALLED PER LAYOUT AND DIMENSIONING PLANS. IF NOT SPECIFICALLY DETAILED MAXIMUM SPACING OF JOINTS SHALL BE AS FOLLOWS:
EXPANSION - 30 FT. O.C.
CONTROL - 10 FT. O.C.
 4. CONTRACTION JOINTS SHALL BE SPACED EQUAL TO THE WIDTH BUT SHALL NOT EXCEED 10 FT. CARE SHALL BE TAKEN TO ASSURE UNIFORM GRADE, FREE OF SAGS AND SHORT GRADE CHANGES.
 5. SURFACE TEXTURE SHALL BE A MEDIUM BROOM FINISH, TRANSVERSE TO THE LENGTH OF THE WALK.

1 CONCRETE SIDEWALK
N.T.S.

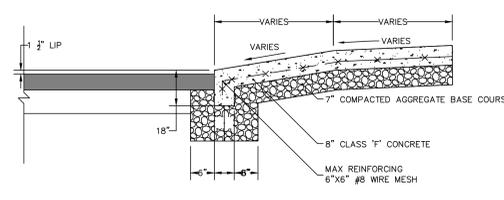


- NOTES:
1. DETAIL IS SHOWN FOR GENERAL CONCEPT OF A GEGRID REINFORCED MODULAR BLOCK RETAINING WALL. CONTRACTOR MAY SUBMIT ALTERNATE WALL CONCEPTS FOR OWNER'S AND ENGINEER'S APPROVAL.

2 MODULAR BLOCK RETAINING WALL
N.T.S.

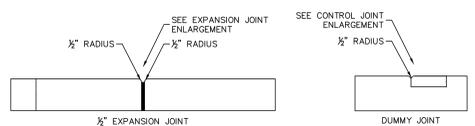


HALF PLAN



CROSS SECTION

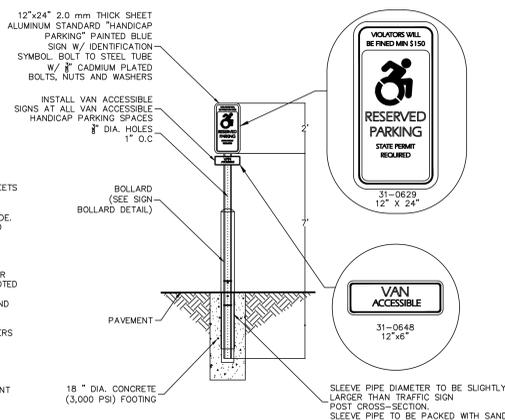
3 CONCRETE DRIVEWAY APRON
N.T.S.



T = 5\"/>

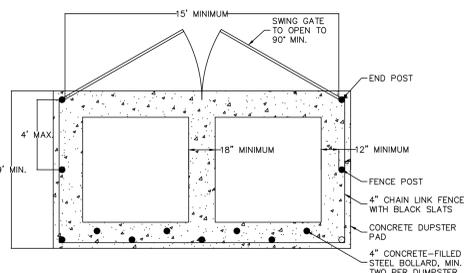
- NOTES:
1. TRANSVERSE EXPANSION JOINTS ARE TO BE SET IN ALL CONCRETE CURBS AND CONCRETE SIDEWALKS AT 16' INTERVALS, BETWEEN A CONCRETE DRIVE-WAY RAMP AND ABUTTING CONCRETE CURB OR CONCRETE SIDEWALK, AND IN ANY LOCATION DEEMED NECESSARY BY THE TOWN ENGINEER OR THE SUPERINTENDENT OF PUBLIC WORKS.
 2. TRANSVERSE DUMMY JOINTS FOR ALL SECTIONS OF CONCRETE SIDEWALK AND CONCRETE DRIVEWAY RAMP, ARE TO BE EVENLY SPACED AT AN INTERVAL WHICH BEST APPROXIMATES 4' ON CENTER.
 3. LONGITUDINAL EXPANSION JOINTS ARE TO BE SET BETWEEN ALL ABUTTING CONCRETE CURBS AND CONCRETE SIDEWALKS, ON STREET LINE IF A PRIVATE CONCRETE SIDEWALK, CONCRETE DRIVEWAY RAMP OR WALL ABUTS, AND IN ANY LOCATION DEEMED NECESSARY BY THE TOWN ENGINEER OF THE SUPERINTENDENT OF PUBLIC WORKS.

4 CONCRETE JOINTS
N.T.S.

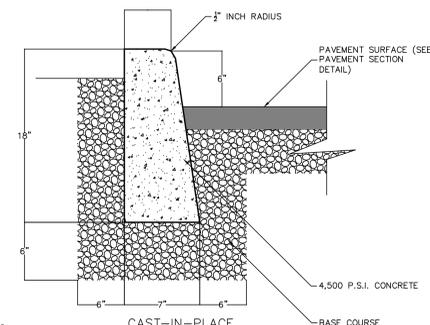


- NOTES:
1. ALL POSTS SHALL BE OF ADEQUATE LENGTH TO MEET THE REQUIREMENTS FOR ERECTION AS STATED IN THE CURRENT "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS".
 2. ALL POSTS SHALL BE EMBEDDED 4'-6\"/>

5 ADA PARKING SIGN
N.T.S.

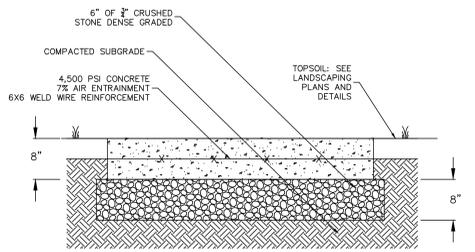


6 DUMPSTER ENCLOSURE
N.T.S.



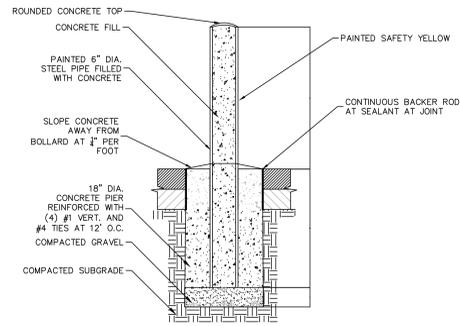
- NOTES:
1. CONCRETE TO TEST 4,500 P.S.I. MINIMUM ON 28 DAY TEST. AIR ENTRAINMENT 4% TO 7%, SLUMP TO BE 3\"/>

7 VERTICAL CONCRETE CURB
N.T.S.



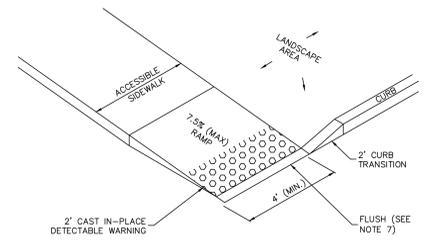
- NOTES:
1. SURFACE TEXTURE SHALL BE A LIGHT BROOMING, CARE SHALL BE TAKEN TO ASSURE UNIFORM GRADE, FREE OF SAGS AND SHORT GRADE CHANGES.
 2. SEE DRAWING CS101 FOR LOCATION AND DIMENSIONS

8 CONCRETE PAD
N.T.S.



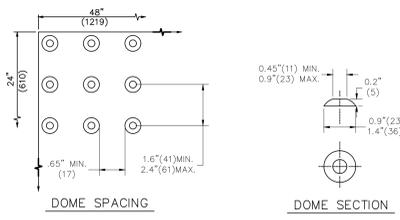
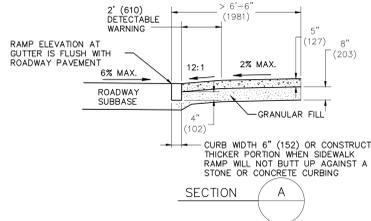
- NOTES:
1. COLOR TO BE SAFETY YELLOW WITH REFLECTIVE STRIPES.

9 BOLLARD
N.T.S.



- NOTES:
1. THE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL NOT EXCEED 1.5 (1 1/2 MIN.).
 2. THE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL NOT EXCEED 5%.
 3. THE SLOPE OF ACCESSIBLE ROUTE CURB RAMPS SHALL NOT EXCEED 7.5%.
 4. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
 5. RAMP, CURB AND ADJACENT PAVEMENTS SHALL BE GRADED TO PREVENT PONDING.
 6. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5' x 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
 7. ELIMINATE CURBING (OTHER THAN VERTICAL CURBING, WHICH SHALL BE SET FLUSH) WHERE IT ABUTS ROADWAY.

10 DEPRESSED CURB RAMP W/ DETECTABLE WARNING STRIP
N.T.S.



- NOTES:
1. SHALL BE PLACED AT THE END OF ALL BIKEPATHS WHICH INTERSECT WITH A TRAVELED WAY.

11 TRAFFIC SIGN (STOP SIGN)
N.T.S.

Date	Description	No.
Revisions		
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Project	
237 PLEASANT STREET CONCEPT PLANS	
FRANKLIN MASSACHUSETTS	
Drawing Title	
SITE PLAN DETAILS II	
Project No.	Drawing No.
151019602	CS502
Date	
09/10/2022	
Drawn By	
KBL	Checked By
KH	

MBE-0510-00010 **500 SERIES**
Legacy # MLB510-M



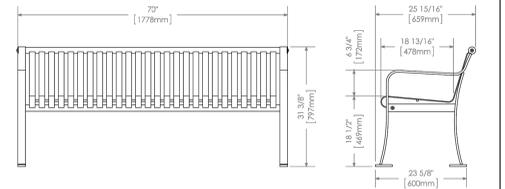
MATERIALS: Bench ends and seat are made from solid steel flat bar and H.S. steel tube.

FINISH: All steel components are protected with E-Coat rust proofing. The Maglin Powdercoat System provides a durable finish on all metal surfaces.

INSTALLATION: The bench is delivered pre-assembled. Holes (0.5") are provided in each foot for securing to base.

TO SPECIFY: Select MBE-0510-00010
Choose:
- Powdercoat Color

HEIGHT: 31.38" (79.7cm) LENGTH: 70" (177.8cm) DEPTH: 25.94" (65.9cm) WEIGHT: 152.8lbs (69.3kg)



MAGLIN
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F 877 390 4993
www.maglin.com
sales@maglin.com

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BENCH AT BASIN
N.T.S.

Bola Bike Rack **landscape forms**
Product Data Sheet



An artful solution for bicycle storage and security that meets Association of Pedestrian and Bicycle Professionals (APBP) recommendations. Bola's understated design doesn't conflict with other site elements. An artful solution for bicycle storage and security that meets Association of Pedestrian and Bicycle Professionals (APBP) recommendations. Bola's understated design doesn't conflict with other site elements.

Bike Rack

- Capacity: 2 bikes
- Bike racks made of 1.5" o.d., 120" wall stainless steel tubing, with a #4 satin electropolish finish on bare stainless steel.
- Bola is also available in powdercoated steel.
- Bola must be embedded.
- Bola can secure two bicycles parked parallel to the rack.
- The bicycles can be headed in opposite directions, or in the same direction. The rack provides two-point contact to prevent the bicycle from tipping over.
- A standard D-shaped bike lock can secure both a wheel and the frame.

Style	Depth	Width	Height	Weight
	1.5'	18.25"	32"	13 lbs

Finishes

- All metal parts are finished with Landscape Forms' proprietary Pargard 80 polyester powdercoat, a hard yet flexible finish that resists rusting, chipping, peeling and fading.
- Call for standard color chart.

To Specify

- Select bike rack style. Specify powdercoat color or stainless steel.

Designed by Brian Kane, IDSA

Visit landscapeforms.com for more information. Specifications are subject to change without notice. Landscape Forms supports the Landscape Architecture Foundation at the Second Century level.
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BICYCLE RACK
N.T.S.

OGM1900-BC1-SCR7 **OGDEN**



MATERIALS: The seat pan is constructed from steel. The seat employs lye wood, HDPE (plastic), or HDPC (paper composite) slats. Thickness: lye 1", HDPE 1", HDPC 3/4"

FINISH: All steel components are protected with E-Coat rust proofing. The Maglin Powdercoat System provides a durable finish on all metal surfaces.

INSTALLATION: The seat sections come pre-assembled with boards. Mount options come as a separate component. Reference: INSTALLATION-INST_OGM1900 document for onsite assembly and installation instructions.

TO SPECIFY: Please contact your Maglin Site Furniture Representative.

SQUARE LEG - MS1

FRONT TO BACK SLATS (FB)

PEDESTAL LEG - MS2

LEFT TO RIGHT SLATS (LR)

CANTILEVER - MS3

WALLMOUNT - MS4

DIMENSION	RANGE (IN)	RANGE (MM)
R-1	18.5" - 27.0"	468.4 - 685.8
R-2	16" - 25.0"	406.4 - 635.0
A	27.5" - 35.5"	700.0 - 901.8
B	43.5" - 44.5" (C)	1104.0 - 1143.0
C	22.5" - 23.5"	571.5 - 596.7

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CURVED BENCH
N.T.S.

800.364.7681 **DOGIPOT** **www.DOGIPOT.com**
The Smart Solution to Dog Pollution.

ALL ALUMINUM DOGIPOT® PET STATION (ITEM #1003A-L)
SPECIFICATION, INSTALLATION AND OPERATION SHEET

YOUR ALL ALUMINUM DOGIPOT® PET STATION INCLUDES:

- Aluminum DOGIPOT® Pet Sign, with mounting hardware (two (2) 2 1/4" x 1/4" tap bolts, washers and locknuts)
- Aluminum DOGIPOT® JUNIOR Bag Dispenser (ITEM #1002-2), with mounting hardware (two (2) 2 1/4" x 1/4" bolts, washers and locknuts)
- Two (2) keys for Dispenser bottom locking access panel
- Two (2) rolls of DOGIPOT® Smart Liner Pick Up Bags™ (ITEM #1402) (200 count per roll), installed in DOGIPOT® JUNIOR Bag Dispenser
- 10 Gallon Aluminum Trash Receptacle (ITEM #1206A-L) with attached hinged lid and trash liner bag retainer bands, with mounting hardware (one (1) 2 1/2" x 1/4" and (1) 2 3/4" x 1/4" bolts, washers and locknuts)
- One (1) box DOGIPOT® Smart Liner Trash Bags™ (ITEM #1404) (50 count)

SEPARATE SHIPPING BOX

- 2" x 2" x 4" - 8' Galvanized Steel Telescopic Mounting Post, with installation hardware (two (2) carriage bolts (2 1/2" x 5 1/8"), washers and locknuts)

PLEASE CHECK THE ABOVE INVENTORY AND CALL YOUR DISTRIBUTOR IF ANY PARTS ARE MISSING.

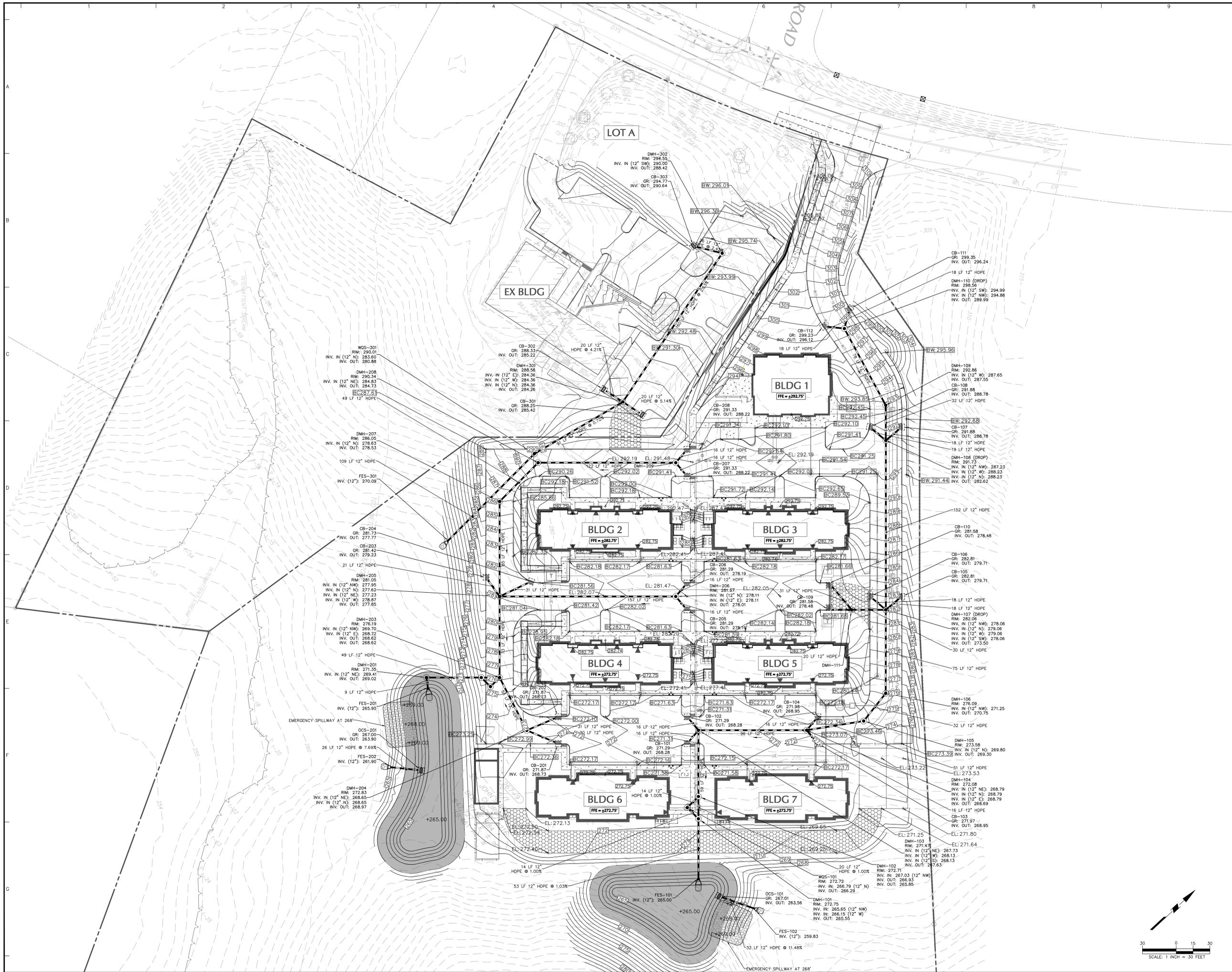
INSTALLATION AND OPERATION INSTRUCTIONS

- Select a good visible spot in your community or park where you want to install the All Aluminum DOGIPOT® Pet Station.
- Prior to installation, remove the 1 1/4" x 1 1/4" x 4" portion of the mounting post from the 2" x 2" x 4" portion of the mounting post before cementing. **Insert the larger portion of the mounting post (2" x 2" x 4") approximately 14" into an 18" deep by 8" diameter hole filled with a 40 lb. bag of "ready to use" concrete mix.** To stabilize the post while cementing, place a rod, bolt or other device through the two bottom holes, prior to inserting into the ground and cementing. Level the post in a straight vertical position and let concrete dry for at least 12 hours.
- After the concrete is dry, insert the smaller portion of the post (1 1/4" x 1 1/4" x 4") into the larger cemented portion of the post (2" x 2" x 4") until the first 4 holes are lined up between the two posts. Use two (2) carriage bolts, washers and locknuts to fix the telescopic post in position, the upper bolt in the top overlapping hole, pointing from right to left and the lower bolt in the bottom overlapping hole, pointing from front to back. The total height above ground with both post parts should now be approximately 4' 8".
- Start by installing the DOGIPOT® Pet Sign on top of the 1 1/4" post, with the upper hole matching the most upper hole in the square post using the enclosed 2 1/4" bolts, washers and locknuts. Continue installing the Aluminum DOGIPOT® JUNIOR Bag Dispenser according to the mounting instructions enclosed with the Dispenser, ensuring that the upper edge of the Dispenser is approximately 1" below the lower edge of the DOGIPOT® Pet Sign.
- Install the Aluminum DOGIPOT® Trash Receptacle through the pre-drilled top oval holes in the back wall of the receptacle and through the square post with the remaining bolts, washers and locknuts, using the 2 1/2" bolt on top and the 2 3/4" bolt below. **The upper edge of the trash receptacle must be approximately 12 1/4" below the lower end of your Aluminum DOGIPOT® JUNIOR Bag Dispenser so that the lid may completely open.** The upper back wall of the trash receptacle is supposed to touch the head of the lower post carriage bolt, which creates some space between the post and the receptacle, allowing the receptacle lid to open from left to right, without touching the post.
- Insert one of the enclosed DOGIPOT® Smart Liner Trash Bags™ into the trash receptacle, folding it over the interior retainer bands. Proper installation and general maintenance will help extend the life of the trash receptacle and dispenser unit. DOGIPOT® offers Product Maintenance Paint to help cover any paint chips which may occur in the powder coating during the life of the product.
- ENJOY WATCHING PET OWNERS PICK UP AFTER THEIR DOGS!**

DOGIPOT PET STATION
N.T.S.

4

Date	Description	No.
Revisions		
 FRANK HOLMES CIVIL No. 40203 REGISTERED PROFESSIONAL ENGINEER		
LANGAN Langan Engineering and Environmental Services, Inc. 100 Cambridge Street, Suite 1310 Boston, MA 02114 T: 617.824.9100 F: 617.824.9101 www.langan.com		
Project		
237 PLEASANT STREET CONCEPT PLANS		
NORFOLK COUNTY FRANKLIN MASSACHUSETTS		
Drawing Title		
SITE PLAN DETAILS III		
Project No.	Drawing No.	
151019602	CS503	
Date		
Drawn By		
Checked By		



Date	Description	No.
Revisions		



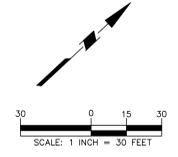
LANGAN
 Langan Engineering and Environmental Services, Inc.
 100 Cambridge Street, Suite 1310
 Boston, MA 02114
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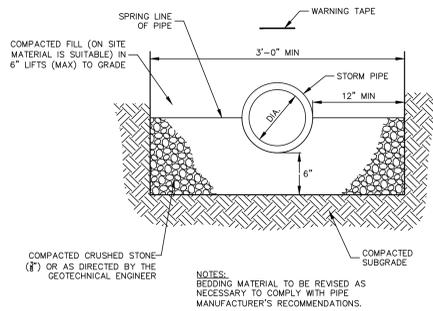
**237 PLEASANT STREET
 CONCEPT PLANS**

NORFOLK COUNTY FRANKLIN MASSACHUSETTS

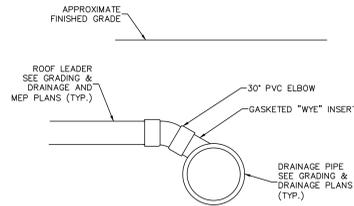
**GRADING &
 DRAINAGE PLAN**

Project No.	Drawing No.
151019602	CG100
Date	Drawn By
09/10/2022	KH
Checked By	FH

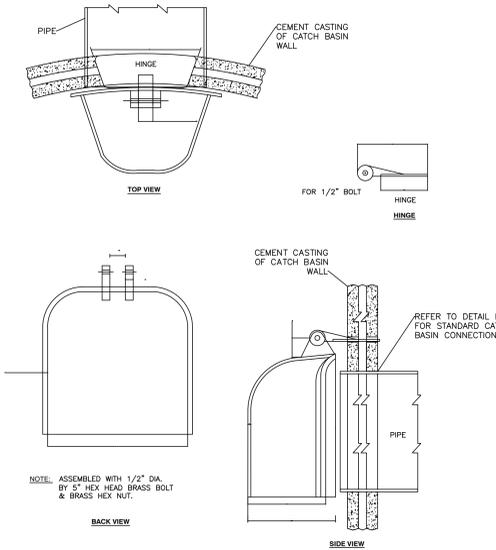




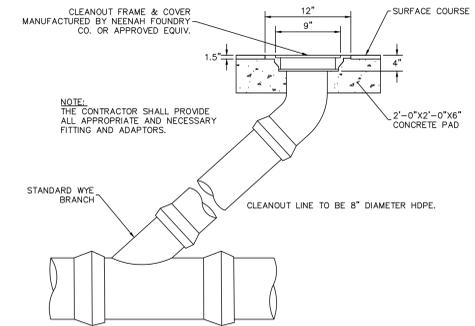
1 STORMWATER TRENCH / BEDDING
N.T.S.



2 ROOF DRAIN CONNECTION TO MAIN
N.T.S.



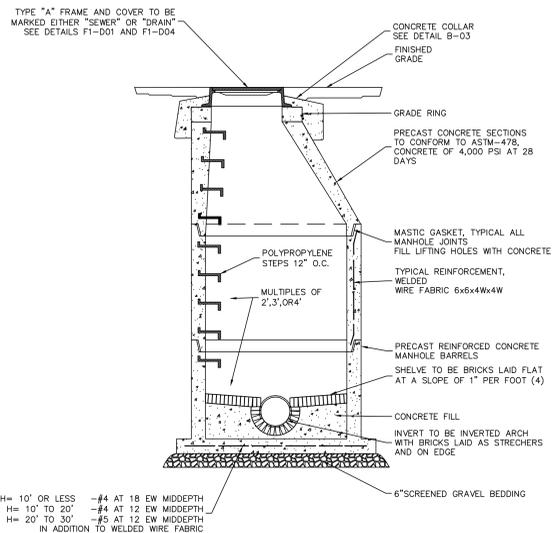
3 CATCH BASIN HOOD
N.T.S.



4 CLEANOUT
N.T.S.

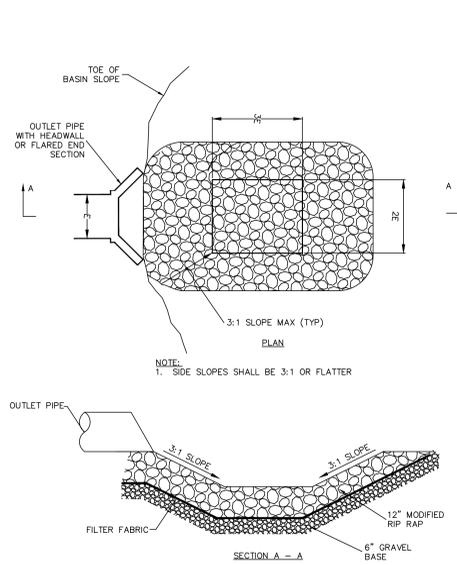
- NOTES:**
1. ALL CAST IN PLACE CONCRETE TO HAVE A MINIMUM 28 DAY STRENGTH OF 3000 LBS PER SQ. INCH, USING 3/4" MAXIMUM SIZE AGGREGATE
 2. REINFORCING STEEL BARS ARE DEFORMED BARS OF BILLET STEEL ASTM A615 GRADE 60
 3. WELDED WIRE FABRIC CONFORMS TO ASTM A185
 4. CAST IRON FRAME, TYPE "A" AND COVER TYPE "A" FOR DETAILS SEE DETAILS NOS. F1-D01, F1-D04 AND F1-D05 COVERS TO BE MARKED EITHER "SEWER" OR "DRAIN".
 5. DESIGN LIVE LOAD - HS 20 - 44
 6. MINIMUM COVER FOR REINFORCING IN WALLS OR SLABS POURED AGAINST EARTH SHALL BE 3 INCHES. ALL OTHERS SHALL BE 2 INCHES UNLESS OTHERWISE NOTED
 7. USE 2'-0" LENGTHS OF PIPE STUBS AT ALL MANHOLES FOR VC OR AC PIPE. USE 4'-0" MAX. LENGTHS OF PIPE STUBS AT ALL MANHOLES FOR RC, DI OR PVC.
 8. ALL MANHOLES SHALL BE CONSTRUCTED OF REINFORCED CONCRETE SHOP DRAWINGS SUBMITTALS SHALL SHOW ALL REINFORCING DETAILS

- NOTES:**
1. 5'-0" DIAMETER FOR ALL MANHOLE DEPTHS GREATER THAN 20 FEET OR WHEN ORDERED BY THE ENGINEER
 2. 6" MIN. WALL THICKNESS AND 7 INCH MIN. BASE THICKNESS WITH 5'-0" DIAMETER MANHOLES
 3. 6 INCH LIP OPTIONAL UNLESS OTHERWISE NOTED
 4. CONCRETE INVERT AND SHELF MAY BE SUBSTITUTED IN STORM DRAIN MANHOLES AS DIRECTED BY THE ENGINEER
 5. ALL CAST IN PLACE CONCRETE TO HAVE A MINIMUM 28 DAY STRENGTH OF 3000 LBS PER SQ. INCH, USING 3/4" MAXIMUM SIZE AGGREGATE
 6. REINFORCING STEEL BARS ARE DEFORMED BARS OF BILLET STEEL ASTM A615 GRADE 60
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 12. ALL MANHOLES SHALL BE CONSTRUCTED OF REINFORCED CONCRETE SHOP DRAWINGS SUBMITTALS SHALL SHOW ALL REINFORCING DETAILS

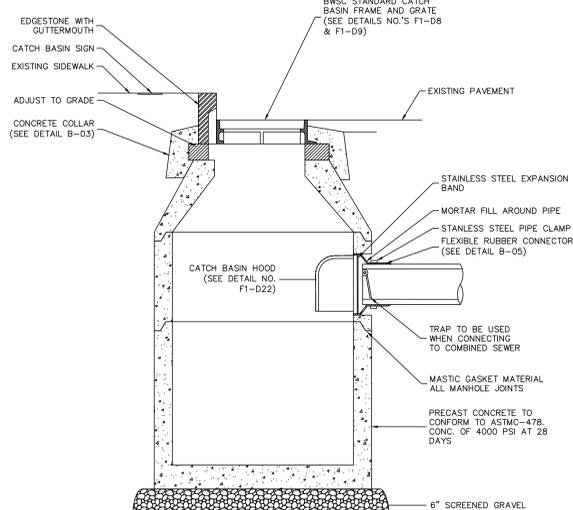


- NOTES:**
1. GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.2
 2. FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
 3. DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS
 4. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER.
 5. ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°.

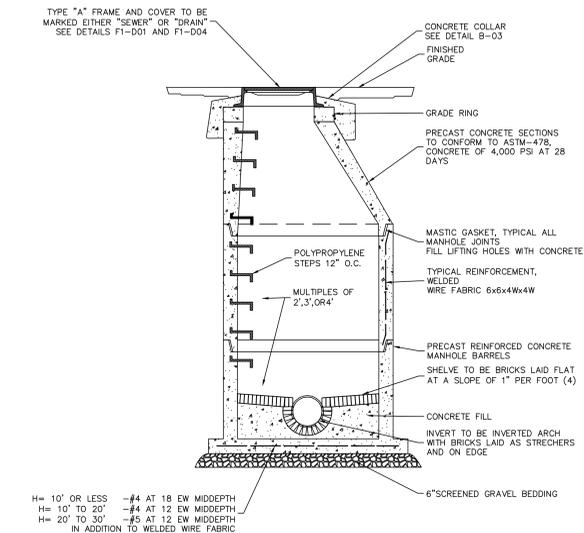
5 AREA DRAIN IN PLANTING
N.T.S.



6 RIPRAP PROTECTION & SCOUR HOLE
N.T.S.

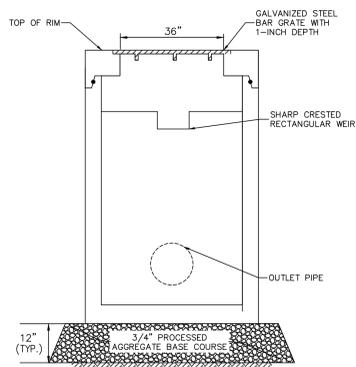
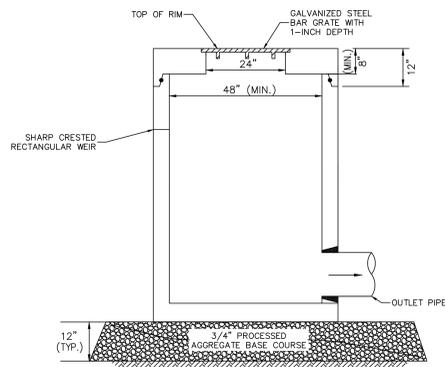


7 CATCH BASIN
N.T.S.

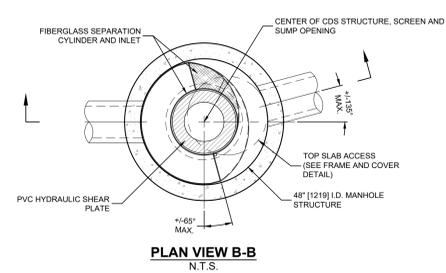


8 STORMWATER MANHOLE
N.T.S.

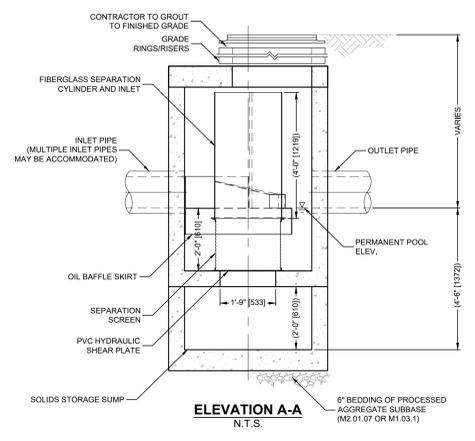
Date	Description	No.
Revisions		
LANGAN Langan Engineering and Environmental Services, Inc. 100 Cambridge Street, Suite 1310 Boston, MA 02114 T: 617.824.9100 F: 617.824.9101 www.langan.com		
Project		
237 PLEASANT STREET CONCEPT PLANS		
NORFOLK COUNTY FRANKLIN MASSACHUSETTS		
Drawing Title		
GRADING & DRAINAGE DETAILS I		
Project No.		Drawing No.
151019602		CG501
Date		
09/10/2022		
Drawn By		Checked By



1 **OUTLET CONTROL STRUCTURES**
N.T.S.



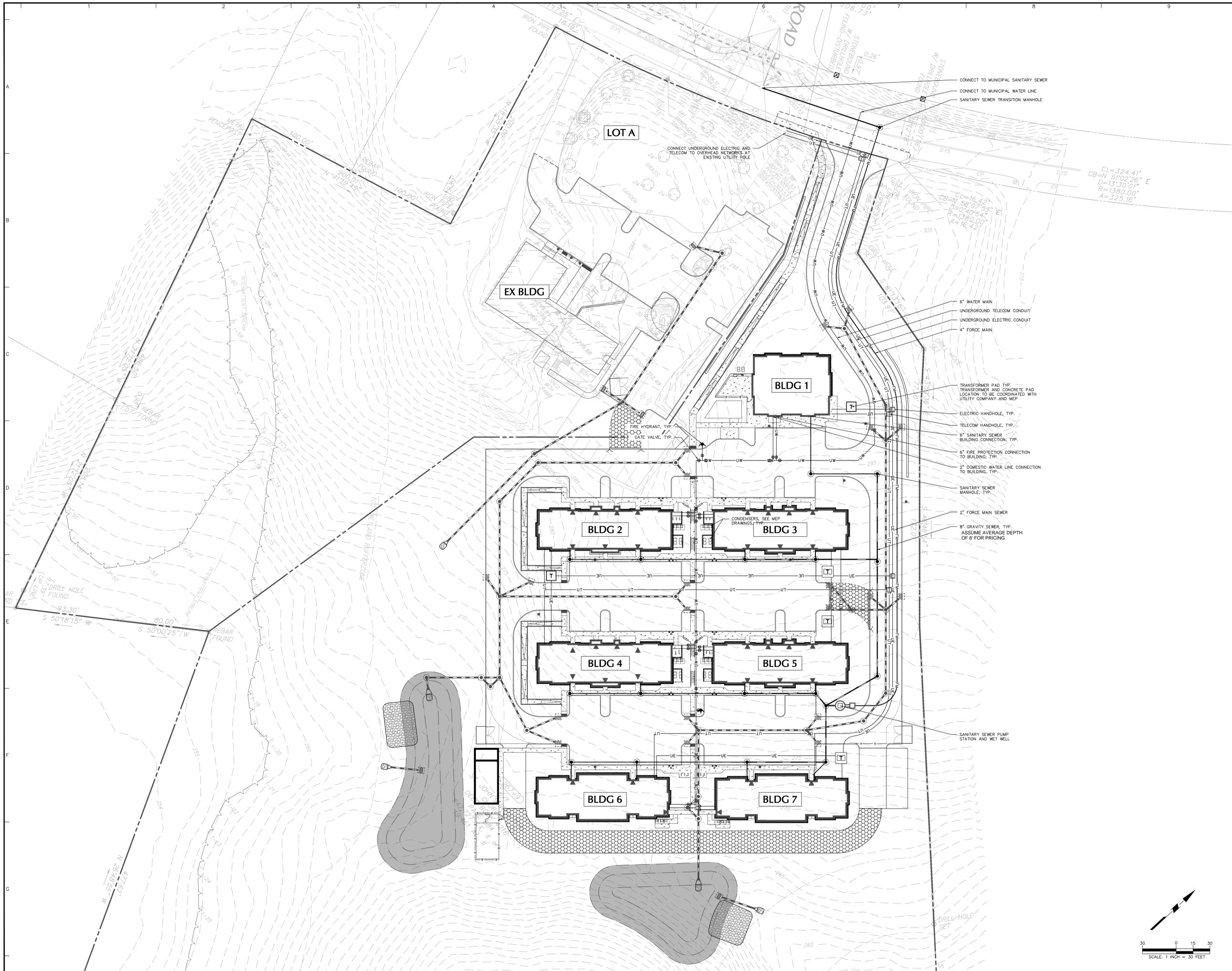
SITE SPECIFIC DATA REQUIREMENTS			
STRUCTURE ID			
WATER QUALITY FLOW RATE (CFS OR L/s)			
PEAK FLOW RATE (CFS OR L/s)			
RETURN PERIOD OF PEAK FLOW (YRS)			
SCREEN APERTURE (2400 OR 4700)			
PIPE DATA:	I.E.	MATERIAL	DIAMETER
INLET PIPE 1			
INLET PIPE 2			
OUTLET PIPE			
RIM ELEVATION			
ANTI-FLOTATION BALLAST	WIDTH	HEIGHT	
NOTES/SPECIAL REQUIREMENTS:			
* PER ENGINEER OF RECORD			



- GENERAL NOTES**
- CDS MODEL SHOWN HERE FOR PRICING, SIZE AND CONFIGURATION OF STRUCTURE TO BE CONFIRMED BY CONTECH.
 - CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
 - FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
 - CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
 - STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' 2" AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M506 AND BE CAST WITH THE CONTECH LOGO.
 - IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.
 - CDS STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.
- INSTALLATION NOTES**
- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
 - CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE.
 - CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
 - CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
 - CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

2 **WATER QUALITY UNIT - CONTECH CDS UNIT**
N.T.S.

Date	Description	No.
Revisions		
LANGAN Langan Engineering and Environmental Services, Inc. 100 Cambridge Street, Suite 1310 Boston, MA 02114 T: 617.824.9100 F: 617.824.9101 www.langan.com		
Project		
237 PLEASANT STREET CONCEPT PLANS		
FRANKLIN MASSACHUSETTS		
Drawing Title		
GRADING & DRAINAGE DETAILS II		
Project No.	Drawing No.	
151019602	CG502	
Date		
09/10/2022		
Drawn By		
Checked By		



CONNECT TO MUNICIPAL SANITARY SEWER
 CONNECT TO MUNICIPAL WATER LINE
 SANITARY SEWER TRANSITION MANHOLE

6" WATER MAIN
 UNDERGROUND TELECOM CONDUIT
 UNDERGROUND ELECTRIC CONDUIT
 4" FORCE MAIN

TRANSFORMER PAD TYP.
 TRANSFORMER AND CONCRETE PAD
 LOCATION TO BE COORDINATED WITH
 UTILITY COMPANY AND MEP
 ELECTRIC HANDHOLE, TYP.
 TELECOM HANDHOLE, TYP.
 6" SANITARY SEWER
 BUILDING CONNECTION, TYP.
 6" FIRE PROTECTION CONNECTION
 TO BUILDING, TYP.
 2" DOMESTIC WATER LINE CONNECTION
 TO BUILDING, TYP.
 SANITARY SEWER
 MANHOLE, TYP.
 2" FORCE MAIN SEWER
 8" GRAVITY SEWER, TYP.
 ASSUME AVERAGE DEPTH
 OF 8' FOR PRICING

SANITARY SEWER PUMP
 STATION AND WET WELL

Date	Description	No.
Revisions		



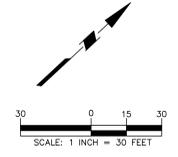
LANGAN
 Langan Engineering and
 Environmental Services, Inc.
 100 Cambridge Street, Suite 1310
 Boston, MA 02114
 T: 617.824.9100 F: 617.824.9101 www.langan.com

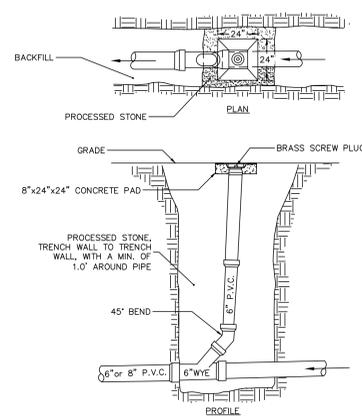
Project
**237 PLEASANT STREET
 CONCEPT PLANS**

NORFOLK COUNTY FRANKLIN MASSACHUSETTS
 Drawing Title

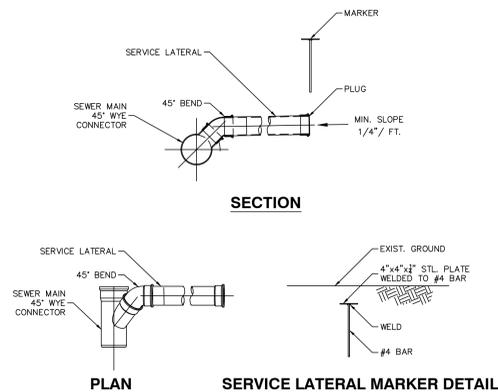
UTILITY PLAN

Project No. 151019602	Drawing No. CU100
Date 09/10/2022	
Drawn By KH	
Checked By PH	

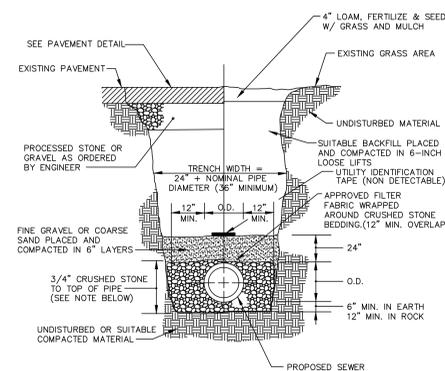




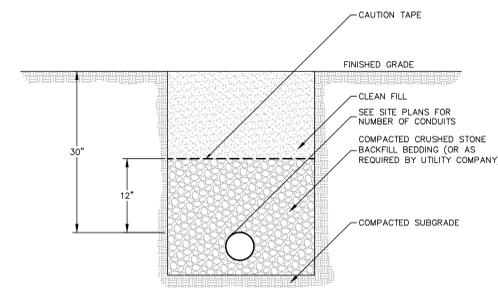
1 SANITARY SEWER CLEANOUT
N.T.S.



2 SANITARY SEWER MAIN CONNECTION
N.T.S.

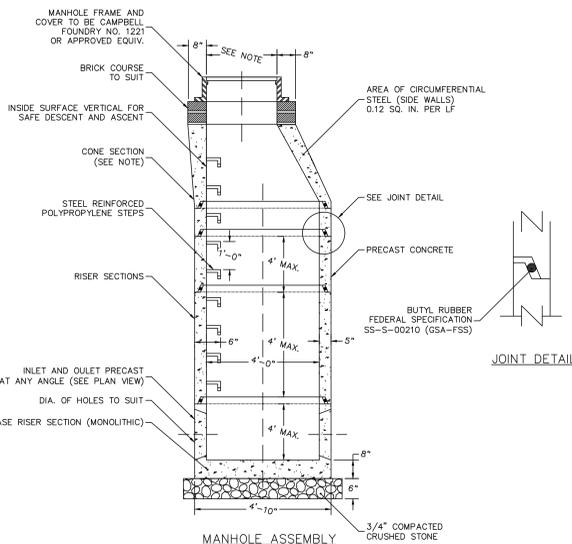


3 TRENCH - SANITARY SEWER
N.T.S.

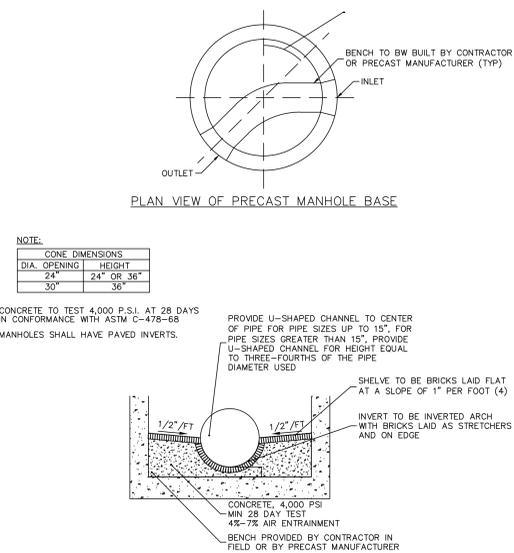


4 TRENCH - TELECOM UTILITY
N.T.S.

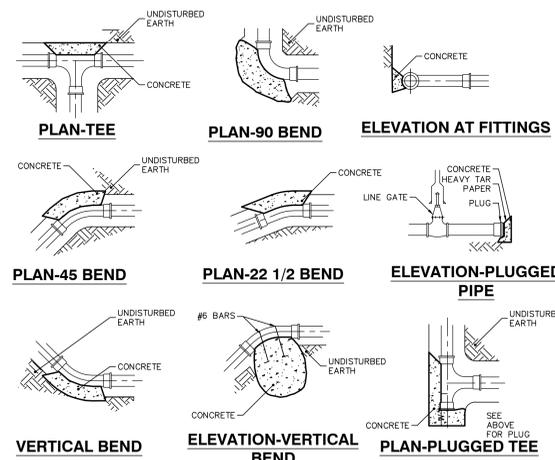
NOTES:
1. TRENCHES IN STABLE SOIL OVER 5 FT DEEP SHALL BE REINFORCED BY APPROVED OSHA METHODS.
2. TRENCHES SHALL BE COMPACTED.



5 SANITARY SEWER MANHOLE
N.T.S.



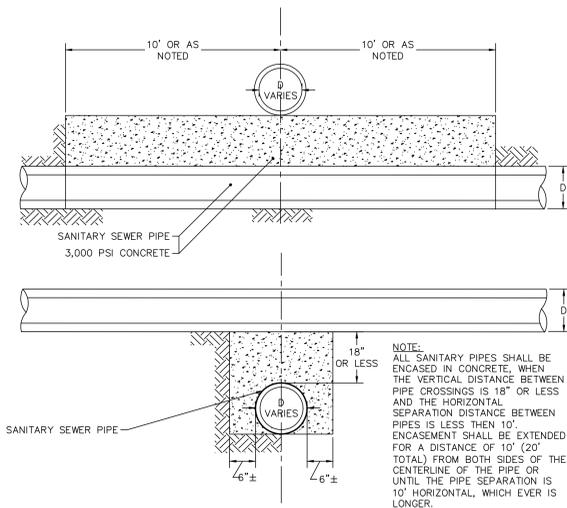
5 SANITARY SEWER MANHOLE
N.T.S.



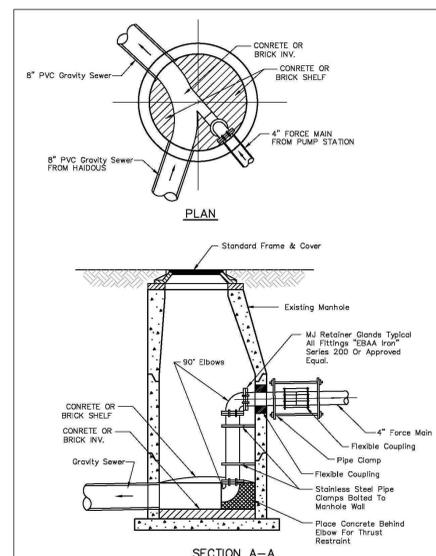
6 THRUST BLOCKS
N.T.S.

THRUST BLOCK SCHEDULE									
PIPE SIZE	TEE	22 1/2	45	90	W				
6"	18"	15"	12"	15"	21"				
8"	2'	18"	12"	18"	2'				
12"	3'	2'	12"	2'	28"				
16"	4'	2.5'	12"	2.33'	31"				
20"	5.25'	3'	18"	3'	33"				
24"	7.5'	3'	18"	4'	3'				

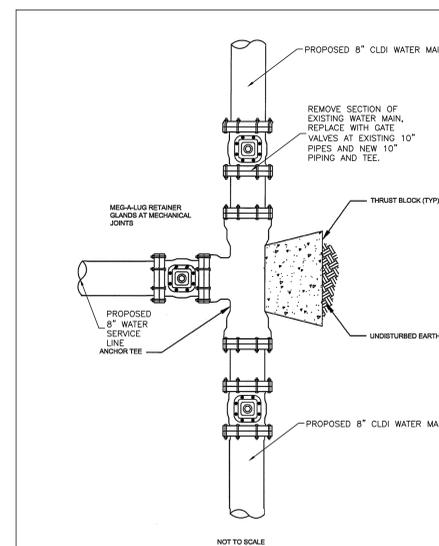
NOTE:
1. IF SOFT MATERIALS ARE ENCOUNTERED, THE THRUST BLOCKS SIZES SHALL BE ADJUSTED ACCORDINGLY.
2. CONCRETE TO BE 3000 PSI.



7 CONCRETE ENCASUREMENT FOR SANITARY SEWER
N.T.S.

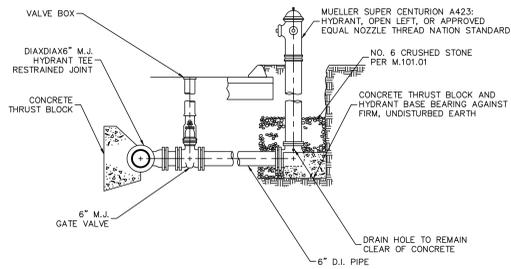


8 FORCE MAIN TERMINAL MANHOLE
N.T.S.

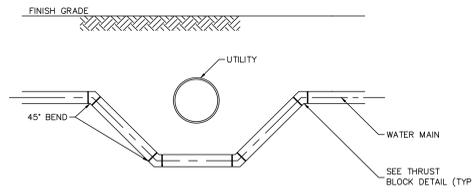


9 WATER SERVICE CONNECTION
N.T.S.

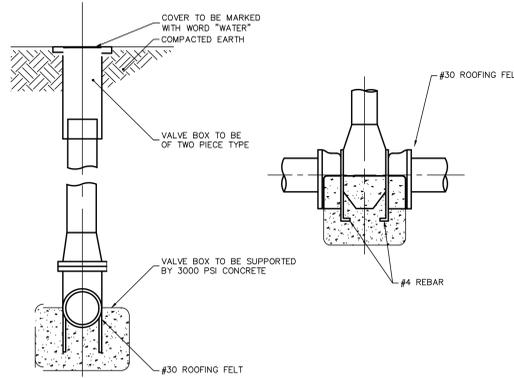
Date	Description	No.
Revisions		
LANGAN Langan Engineering and Environmental Services, Inc. 100 Cambridge Street, Suite 1310 Boston, MA 02114 T: 617.824.9100 F: 617.824.9101 www.langan.com		
Project		
237 PLEASANT STREET CONCEPT PLANS		
FRANKLIN MASSACHUSETTS		
Drawing Title		
UTILITY DETAILS I		
Project No.		Drawing No.
151019602		CU501
Date	09/10/2022	
Drawn By		
Checked By		



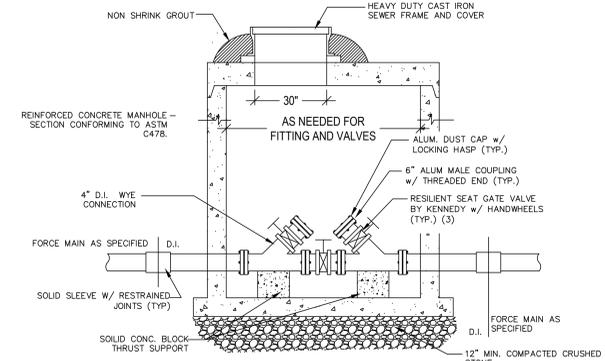
1 FIRE HYDRANT
N.T.S.



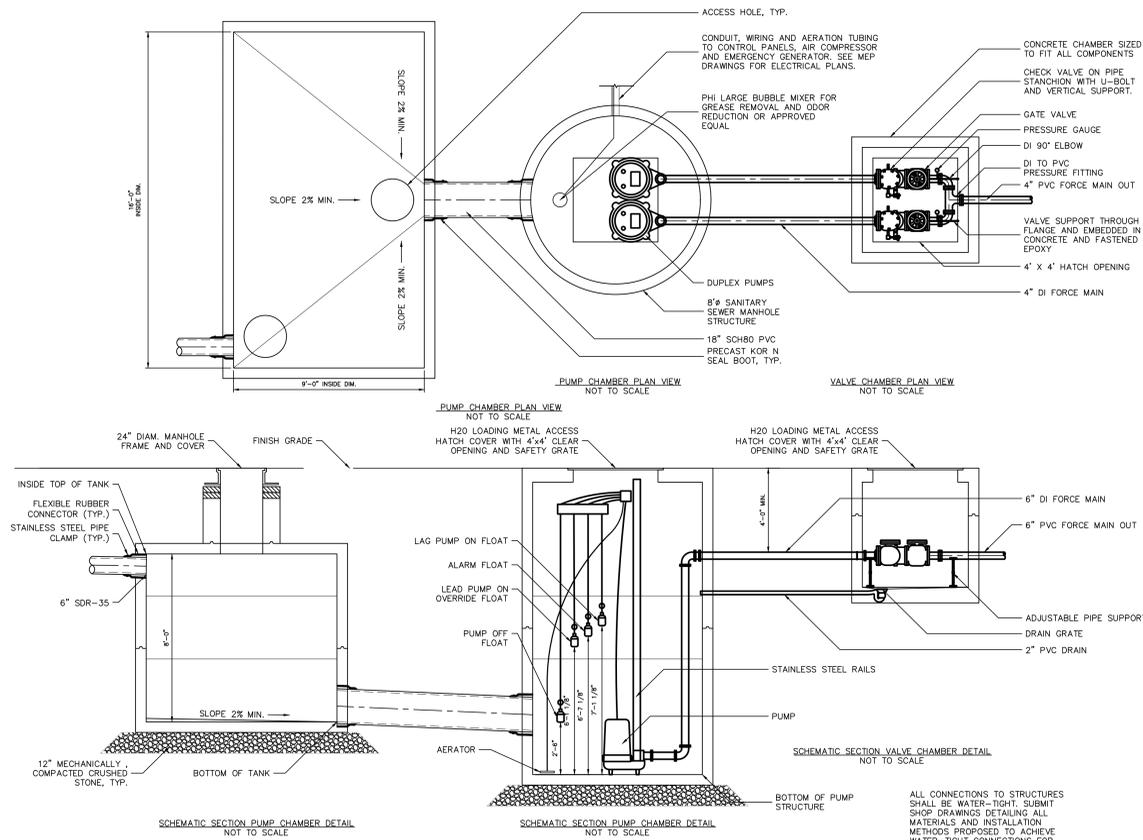
2 WATER MAIN DROP
N.T.S.



3 GATE VALVE
N.T.S.



4 FORCE MAIN CLEANOUT
N.T.S.



5 SEWER PUMP STATION PLAN AND SECTION
N.T.S.

STRUCTURE NOTES:

1. THE HOLDING TANK, PUMP CHAMBER AND VALVE CHAMBER STRUCTURES SHALL CONFORM TO THE LATEST ASTM SPECIFICATION C478. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 5,000 POUNDS PER SQUARE INCH AT 28 DAYS. STEEL REINFORCING SHALL BE IN ACCORDANCE WITH ASTM A615-75, GRADE 60, 2-INCH MINIMUM COVER. THE STRUCTURE SHALL BE DESIGNED TO WITHSTAND VERTICAL AND HORIZONTAL SOIL LOADS. INTERNAL BRACING MAY BE USED PROVIDED THAT IT DOES NOT PREVENT OR PROHIBIT INTERNAL FLOW OF SEWAGE. THE STRUCTURE SHALL HAVE A MINIMUM WALL THICKNESS OF 6 INCHES AND DESIGNED FOR H=20 LOADING. THE STRUCTURE SHALL BE CAST IN A MAXIMUM OF TWO (2) PIECES COMPRISING OF A BASE SECTION AND TOP SECTION. TUNNEL TANKS WILL NOT BE ACCEPTED. THE SHOP DRAWING FOR THE WET WELL SHALL BE STAMPED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN MASSACHUSETTS.
2. THE HOLDING TANK, PUMP CHAMBER AND VALVE CHAMBER STRUCTURES SHALL BE DESIGNED TO BE NON-BUOYANT. THE CONTRACTOR SHALL PROVIDE BUOYANCY CALCULATIONS WITH SHOP DRAWINGS. CONTRACTOR SHALL PROVIDE ADEQUATE TIE-DOWNS, THICKER STRUCTURE FLOOR/WALLS OR FOUNDATION TO PREVENT BUOYANCY AS NECESSARY.
3. PRECAST UNITS SHALL BE DESIGNED FOR THE FOLLOWING LOADS AND POSSIBLE COMBINATIONS THEREOF:
 - 3.1. H=20 LOADING, MANHOLE RISER WITH FRAME AND CONES, PLUS THE WEIGHT OF SOIL ABOVE.
 - 3.2. WEIGHT OF PRECAST CONCRETE STRUCTURE.
 - 3.3. INITIAL HANDLING AND ERECTION LOADINGS.
4. JOINTS BETWEEN CONCRETE STRUCTURES SHALL BE SEALED WITH KENT SEAL NO. 2 BUTYL RUBBER JOINT SEALANT CONFORMING TO MANUFACTURER'S INSTRUCTIONS. ALL JOINTS AND OPENINGS ARE TO BE WATER TIGHT.
5. THE HOLDING TANK, PUMP CHAMBER AND VALVE CHAMBER STRUCTURES ARE TO BE PROVIDED WITH CO-POLYMER POLYPROPYLENE STEEL REINFORCED MANHOLE STEPS, CONFORMING TO ASTM 2146-68. STEPS SHALL BE INSTALLED 12 INCHES ON CENTER.
6. ACCESS:
 - 6.1. HATCHES
 - 6.1.1. EXTERIOR ACCESS HATCHES SHALL BE OF ALUMINUM CONSTRUCTION. UNIT SHALL BE SUPPLIED WITH HINGED SAFETY GRATE TO PROVIDE PROTECTION AGAINST FALL THROUGH. HATCH FRAME SHALL BE DESIGNED TO MINIMIZE WATER ENTERING THE WET WELL AND VALVE VAULT. ANGLE TYPE FRAMES WILL NOT BE ACCEPTED. LEAVES SHALL BE MADE FROM DIAMOND PATTERNED, ALUMINUM PLATES AND DESIGNED TO WITHSTAND H20 LOADING. LEAVES SHALL BE EQUIPPED WITH HEAVY-DUTY, CORROSION RESISTANT HINGES, SPRING, PISTON OR TORSION BAR OPERATORS FOR EASY OPERATION; AND AN AUTOMATIC HOLD OPEN ARM WITH RELEASE HANDLE. ALUMINUM SHALL HAVE A MILL FINISH WITH BITUMINOUS COATING APPLIED TO THE EXTERIOR OF THE FRAME. ALL HARDWARE SHALL BE STAINLESS STEEL. FOR SECURITY, THE ACCESS HATCHES SHALL BE EQUIPPED WITH A SLAM LOCK, REMOVABLE KEY WRENCH AND REMOVABLE PLUG AND A STAPLE FOR A PADLOCK. THE WET WELL HATCH FRAME SHALL BE EQUIPPED TO ACCEPT PUMP GUIDES, CABLE HOLDERS AND ALL OTHER COMPONENTS REQUIRED FOR A SUBMERSIBLE LIFT RAIL PUMPING STATION.
 - 6.1.2. ACCESS HATCHES SHALL BE CAST INTO THE WET WELL AND VALVE VAULT COVERS AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
 - 6.1.3. THE ACCESS HATCH DIMENSIONS SHALL BE AS SHOWN ON THE PLANS.
 - 6.1.4. HATCHES SHALL BE AS MANUFACTURED BY EAST JORDAN IRON WORKS, BILCO, CAMPBELL FOUNDRY, US FOUNDRY AND MANUFACTURING, OR EQUAL.
 - 6.2. MANHOLE RISER SECTION, MANHOLE STEPS, FRAMES AND COVERS SHALL BE PER SANITARY SEWER SPECIFICATIONS.
 - 6.3. ALARM FLOATS SHALL BE PROVIDED WITHIN THE WET WELL. FLOATS SHALL BE CONERY 2900 SERIES OR APPROVED EQUAL. FLOATS SHALL BE INSTALLED AS SHOWN ON THE CONTRACT DRAWINGS.
 - 6.4. VALVE SUPPORTS SHALL BE INSTALLED BY A QUALIFIED INSTALLER. THE BRACING SHOWN IS MINIMUM RECOMMENDED. STABILITY OF VALVE ASSEMBLY SHALL BE FIELD INSPECTED AND ADDITIONAL SUPPORTS SHALL BE USED AS NECESSARY TO PREVENT SAG AND HORIZONTAL MOVEMENT.
 - 6.5. ALL SUPPORTS, RODS, BOLTS AND NUTS SHALL BE STAINLESS STEEL.
 - 6.5.1. MINIMUM NUMBER OF VERTICAL SUPPORTS = 5
 - 6.5.2. MINIMUM NUMBER OF HORIZONTAL SUPPORTS = 4 (ONE ON TOP OF FLANGE, ONE ON BOTTOM OF FLANGE)

PUMPS & RELATED EQUIPMENT NOTES:

1. SEWER LECTOR PUMPS SHALL BE BARNES OR DEMING CHOPPER PUMPS OR APPROVED EQUAL, SHALL BE EXPLOSION-PROOF, SHALL BE SOLIDS HANDLING WASTEWATER PUMPS WITH A CUTTER BLADE, WITH A THREE-PHASE, 208V, 20 HP MOTOR OPERATING AT 1750 RPM OR APPROVED EQUAL.
2. PUMPS SHALL HAVE PRECESSED CAST IRON IMPELLERS AND SERRATED WEAR PLATE FOR SHREDDING OF SOLIDS OR OTHER METHOD, APPROVED BY THE ENGINEER, WHICH WILL PREVENT CLOGGING.
3. PUMPS SHALL BE CAPABLE OF PUMPING WASTEWATER AT 150 GALLONS PER MINUTE AGAINST 50 FEET OF TOTAL DYNAMIC HEAD THROUGH A 6" FORCE MAIN.
4. TWO (2) PUMPS SHALL BE SUPPLIED; PUMPS SHALL BE ON ALTERNATING CYCLES.
5. PUMPS SHALL BE INSTALLED ON STAINLESS STEEL GUIDE RAILS PER MANUFACTURER'S SPECIFICATION.
6. CONTROL PANELS SHALL BE SUPPLIED PER PUMP MANUFACTURER'S SPECIFICATIONS. AT MINIMUM THE FOLLOWING STANDARDS SHALL BE MET:
 - 6.1. ALL CONTROLS SHALL BE INTRINSICALLY SAFE.
 - 6.2. CONTROL PANEL ENCLOSURES SHALL BE FIBER GLASS AND SHALL HAVE A NEMA 4X RATING. THE PANEL SHALL INCLUDE A PUMP CIRCUIT BREAKER, CONTROL CIRCUIT FUSE, ALARM CIRCUIT FUSE, CONTROL CIRCUIT FUSE, I.E.C. RATED MOTOR STARTER WITH 3-POLE AMBIENT COMPENSATED BIMETAL OVERLOAD RELAY, PUMP HAND-OFF-AUTO SWITCH (MOMENTARY IN THE HAND POSITION), ALARM TEST SWITCH, PUMP RUN LIGHTS, SEAL LEAK LIGHTS, ALTERNATOR RELAY (SOLID STATE), OVERRIDE RELAY, CONTROL TRANSFORMER WITH PRIMARY FUSING, TERMINAL BLOCKS, GROUND LUGS, AND ALL NECESSARY WIRING AND BRACKETS. CONTROL PANEL SHALL CONFORM TO PUMP MANUFACTURER SPECIFICATIONS AND SHALL BE ADEQUATE FOR INDOOR AND OUTDOOR USE.
 - 6.3. THE CONTROL PANEL SHALL BE FITTED WITH AN AMBER COLORED POLYCARBONATE ALARM LIGHT. THE LIGHT SHALL BE APPROXIMATELY 3" HIGH BY 3-1/2" DIAMETER. THE BULB SHALL BE 40 WATT MINIMUM. THE ALARM SHALL HAVE A BRIGHT GLOW AND SHALL FLASH DURING HIGH WATER CONDITIONS. THE ALARM SHALL TURN OFF WHEN HIGH WATER LEVEL DROPS.
 - 6.4. THE CONTROL PANEL SHALL BE FITTED WITH AN AUDIBLE HORN ALARM THAT SOUNDS DURING HIGH WATER CONDITIONS. THE HORN SHALL TURN OFF WHEN HIGH WATER LEVEL DROPS. A SILENCE SWITCH SHALL BE PROVIDED FOR THE AUDIBLE ALARM.
 - 6.5. THE CONTRACTOR SHALL PROVIDE AN ELAPSED TIME METER FOR EACH PUMP INSTALLED. METER SHALL RECORD ACTUAL RUNNING TIME OF EACH PUMP. THE METER SHALL HAVE A MAXIMUM READING OF 99,999.99 HOURS.
 - 6.6. THE CONTRACTOR SHALL PROVIDE AN AUTO DIALER CAPABLE OF PROGRAMING AND CALLING AT LEAST THREE (3) PHONE NUMBERS.

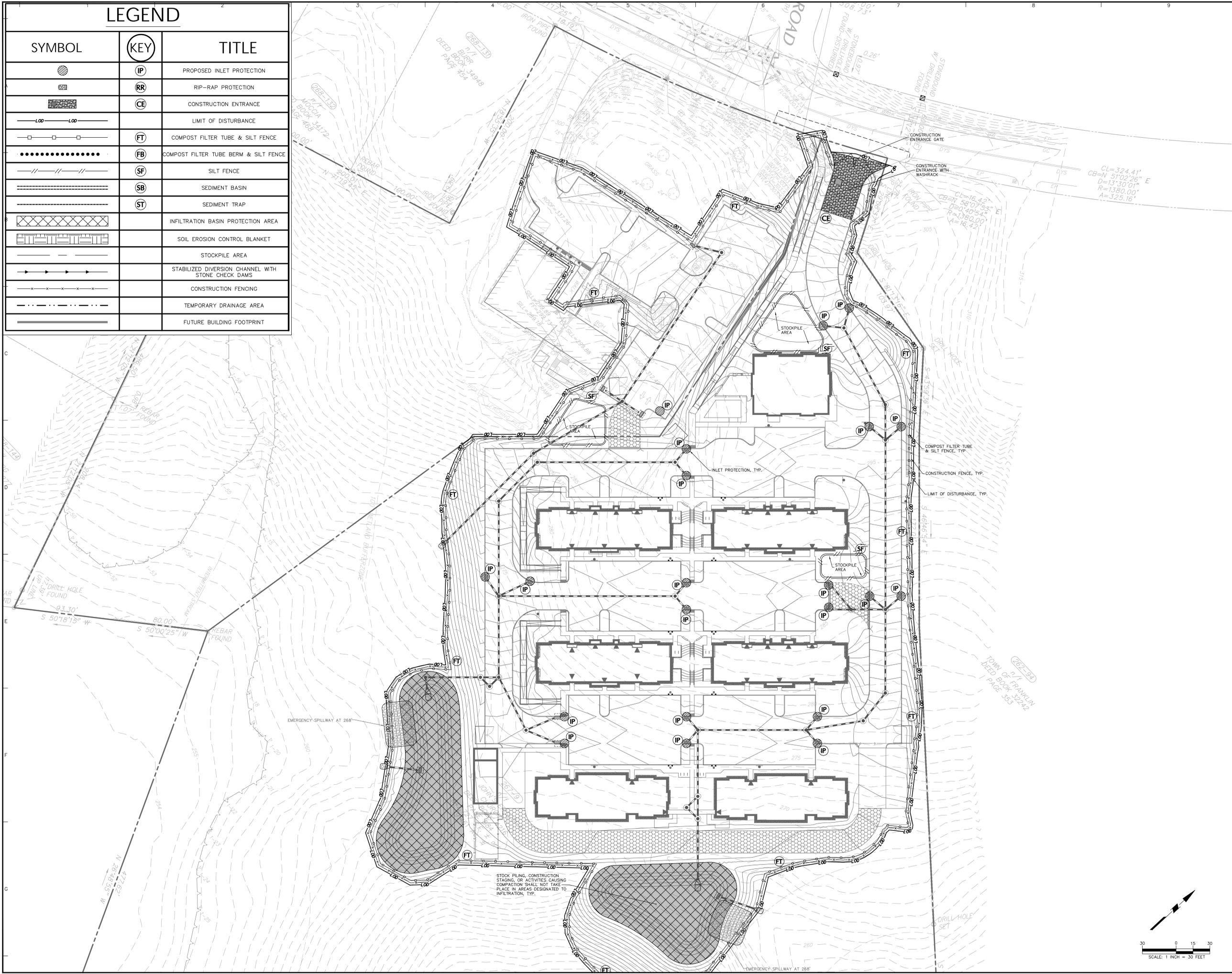
INSTALLATION NOTES:

1. ALL CONNECTIONS TO STRUCTURES SHALL BE WATER-TIGHT. SUBMIT SHOP DRAWINGS DETAILING ALL MATERIALS AND INSTALLATION METHODS PROPOSED TO ACHIEVE WATER-TIGHT CONNECTIONS FOR APPROVAL BY THE ENGINEER.
2. TESTING, INCLUDING LEAKAGE TESTING, AIR EXPIRATION TESTING, PRESSURE TESTING AND DEFLECTION TESTING, SHALL BE CONDUCTED IN ACCORDANCE WITH THE SPECIFICATIONS.
3. CLEAN AND FLUSH ALL STRUCTURES AND PIPING AFTER WORK COMPLETE.

Date	Description	No.
Revisions		
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Project		
237 PLEASANT STREET CONCEPT PLANS		
NORFOLK COUNTY FRANKLIN MASSACHUSETTS		
Drawing Title		
UTILITY DETAILS II		
Project No.	Drawing No.	
151019602	CU502	
Date		
09/10/2022		
Drawn By		
Checked By		

LEGEND

SYMBOL	KEY	TITLE
	IP	PROPOSED INLET PROTECTION
	RR	RIP-RAP PROTECTION
	CE	CONSTRUCTION ENTRANCE
		LIMIT OF DISTURBANCE
	FT	COMPOST FILTER TUBE & SILT FENCE
	FB	COMPOST FILTER TUBE BERM & SILT FENCE
	SF	SILT FENCE
	SB	SEDIMENT BASIN
	ST	SEDIMENT TRAP
		INFILTRATION BASIN PROTECTION AREA
		SOIL EROSION CONTROL BLANKET
		STOCKPILE AREA
		STABILIZED DIVERSION CHANNEL WITH STONE CHECK DAMS
		CONSTRUCTION FENCING
		TEMPORARY DRAINAGE AREA
		FUTURE BUILDING FOOTPRINT



Date	Description	No.
Revisions		



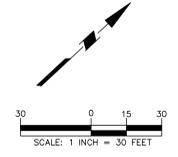
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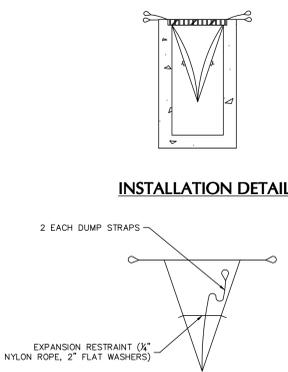
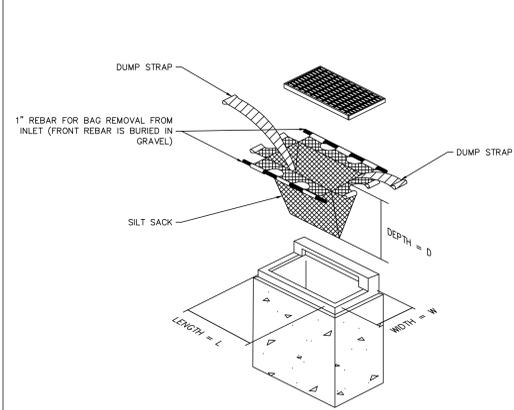
Project
237 PLEASANT STREET CONCEPT PLANS

NORFOLK COUNTY FRANKLIN MASSACHUSETTS
 Drawing Title

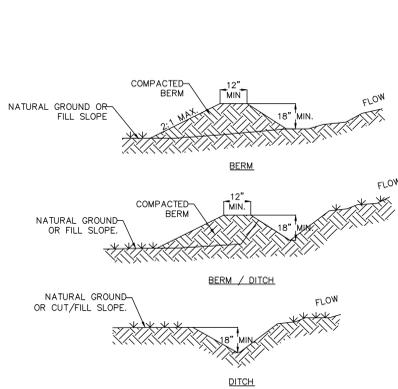
SOIL EROSION & SEDIMENT CONTROL PLAN

Project No. 151019602	Drawing No. CE100
Date 09/10/2022	
Drawn By KH	
Checked By PH	



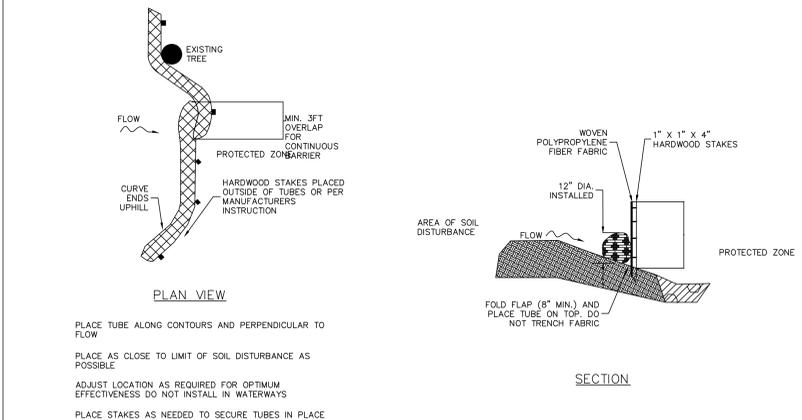


1 SILT SACK INLET PROTECTION
N.T.S.

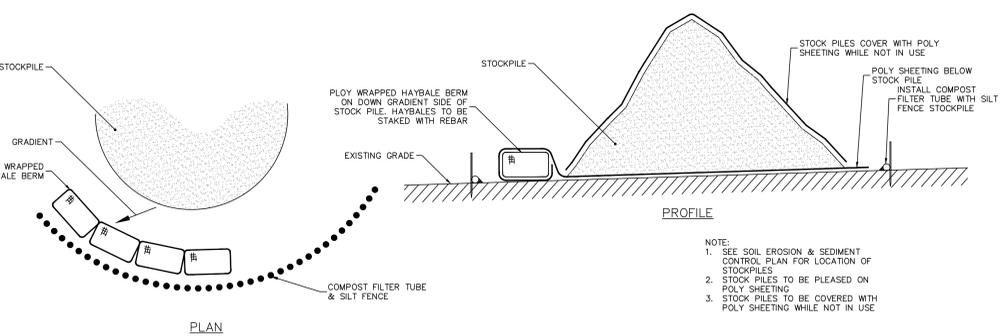


- NOTES:**
1. POSITIVE GRADE MUST BE PROVIDED TO ASSURE DRAINAGE. 2:1 MAX. SIDE SLOPE. IF SLOPE EXCEEDS 2% OR CHANNEL IS CONSTRUCTED IN FILL, PROVIDE CHANNEL LINER PER DETAIL, EC 5, TRY NOT TO EXCEED 2% (HIGH RUNOFF VELOCITIES RESULT). MAXIMUM DRAINAGE AREA IS 5.00 ACRES WITHOUT SUPPORTING CALCULATIONS FOR PERMANENT CHANNEL. DIVERSIONS AT THE TOPS OF SLOPES MUST EMPTY INTO AN APPROVED SLOPE DRAIN (SEE DETAILS). THE BERM/DITCH IS THE MOST COMMONLY USED DIVERSION.
 2. MACHINE COMPACTING OF ALL FILL IS REQUIRED.
 3. DIVERSIONS SUFFICIENT TO DIRECT ALL SEDIMENT-LADEN STORMWATER INTO SEDIMENT CONTROL DEVICE MUST BE INSTALLED PRIOR TO CLEARING AND GRUBBING OF AREA (OR IN CONJUNCTION WITH THIS OPERATION IF SEDIMENT CONTROLS AND DIVERSIONS ARE INSTALLED AT EACH CRITICAL POINT AS INDICATED).
 4. DIVERSIONS SHOULD BE LOCATED AS SHOWN ON THE PLANS AND TO MINIMIZE DAMAGES BY CONSTRUCTION OPERATIONS. DIVERSIONS SHOULD BE SEEDED AND LINED WITH STRAW MAT IF THEY ARE TO REMAIN IN PLACE OVER 14 DAYS.
 5. CHECK DIVERSIONS AFTER EACH RAIN, AND ONCE PER SEVEN CALENDAR DAYS OR MORE FREQUENTLY IF REQUIRED BY REGULATORY AGENCY. REPAIR AS NEEDED TO MAINTAIN FUNCTION.

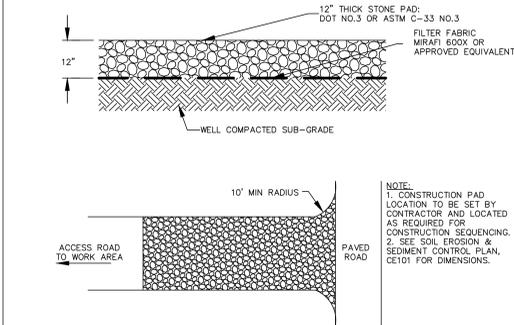
2 TEMPORARY DIVERSION
N.T.S.



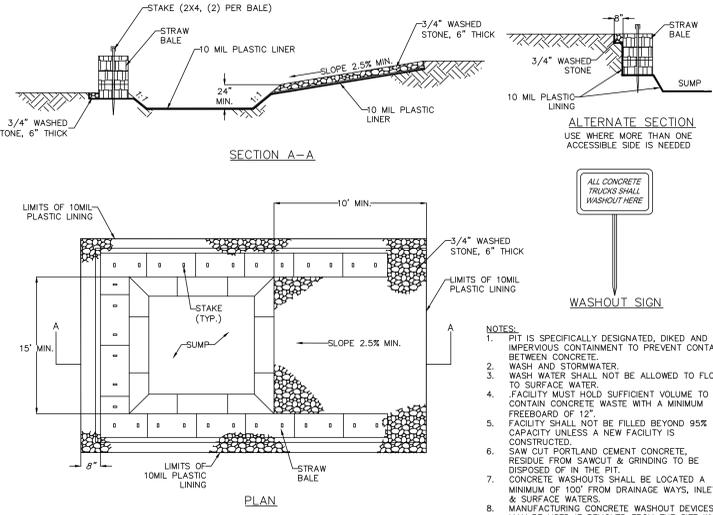
3 COMPOST FILTER TUBE & SILT FENCE
N.T.S.



4 TEMPORARY STOCKPILE
N.T.S.



5 STABILIZED CONSTRUCTION ENTRANCE
N.T.S.



6 CONCRETE WASHOUT AREA
N.T.S.

Date	Description	No.
Revisions		
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Project		
237 PLEASANT STREET CONCEPT PLANS		
FRANKLIN MASSACHUSETTS		
Drawing Title		
SOIL EROSION & SEDIMENT CONTROL DETAILS I		
Project No.	Drawing No.	
151019602	CE501	
Date		
09/10/2022		
Drawn By		
Checked By		



Date	Description	No.
Revisions		



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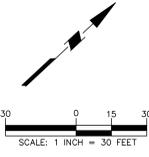
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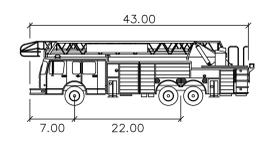
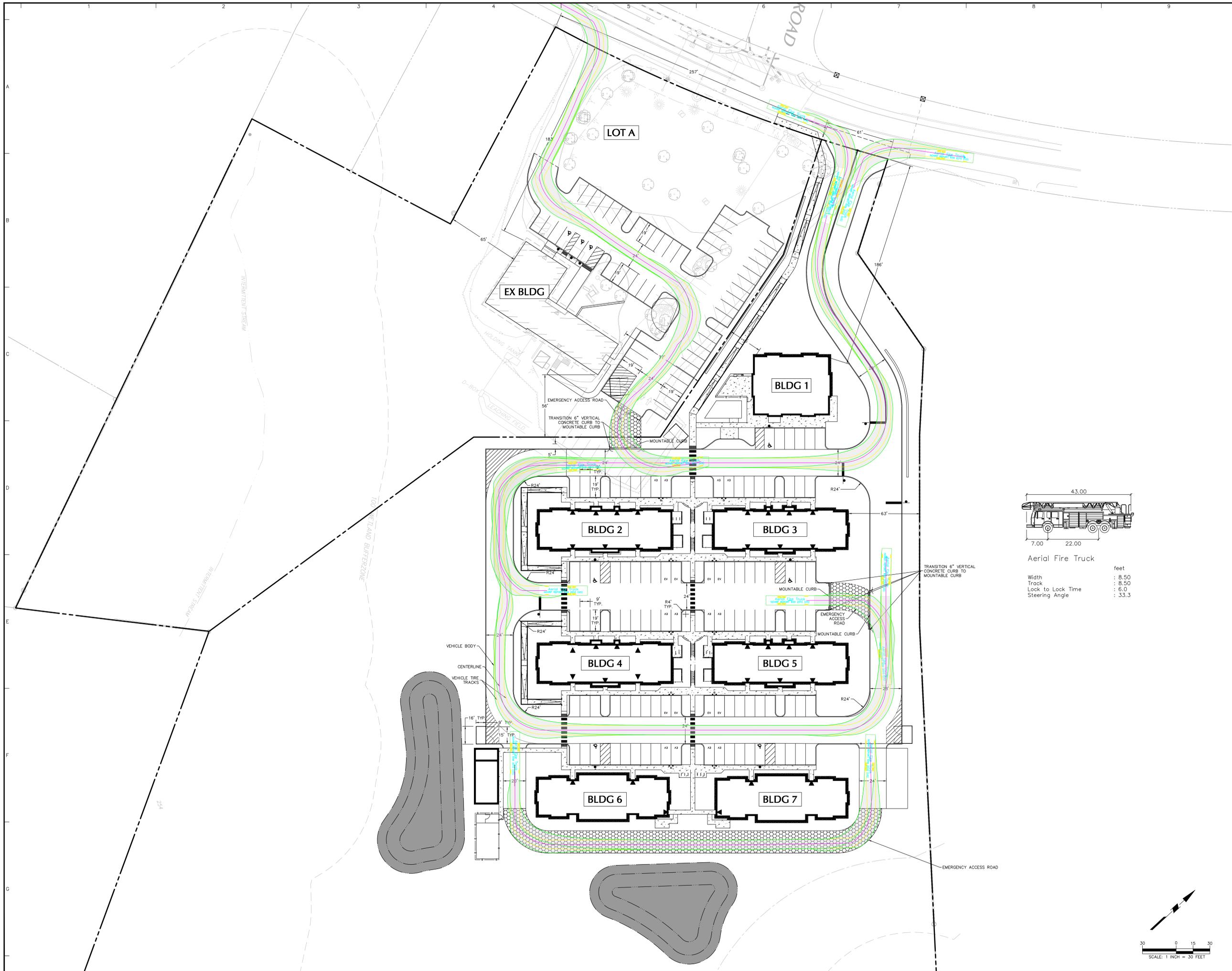
Project
**237 PLEASANT STREET
CONCEPT PLANS**

NORFOLK COUNTY FRANKLIN MASSACHUSETTS
Drawing Title

DEMOLITION PLAN

Project No. 151019602	Drawing No. CD100
Date 09/10/2022	
Drawn By KH	
Checked By FH	





Aerial Fire Truck

Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 33.3

Date	Description	No.
Revisions		



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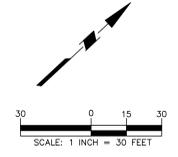
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Project
237 PLEASANT STREET CONCEPT PLANS

NORFOLK COUNTY FRANKLIN MASSACHUSETTS
Drawing Title

TURNING MOVEMENT PLAN

Project No. 151019602	Drawing No. TM100
Date 09/10/2022	
Drawn By KH	
Checked By FH	



SITE LIGHTING SCHEDULE

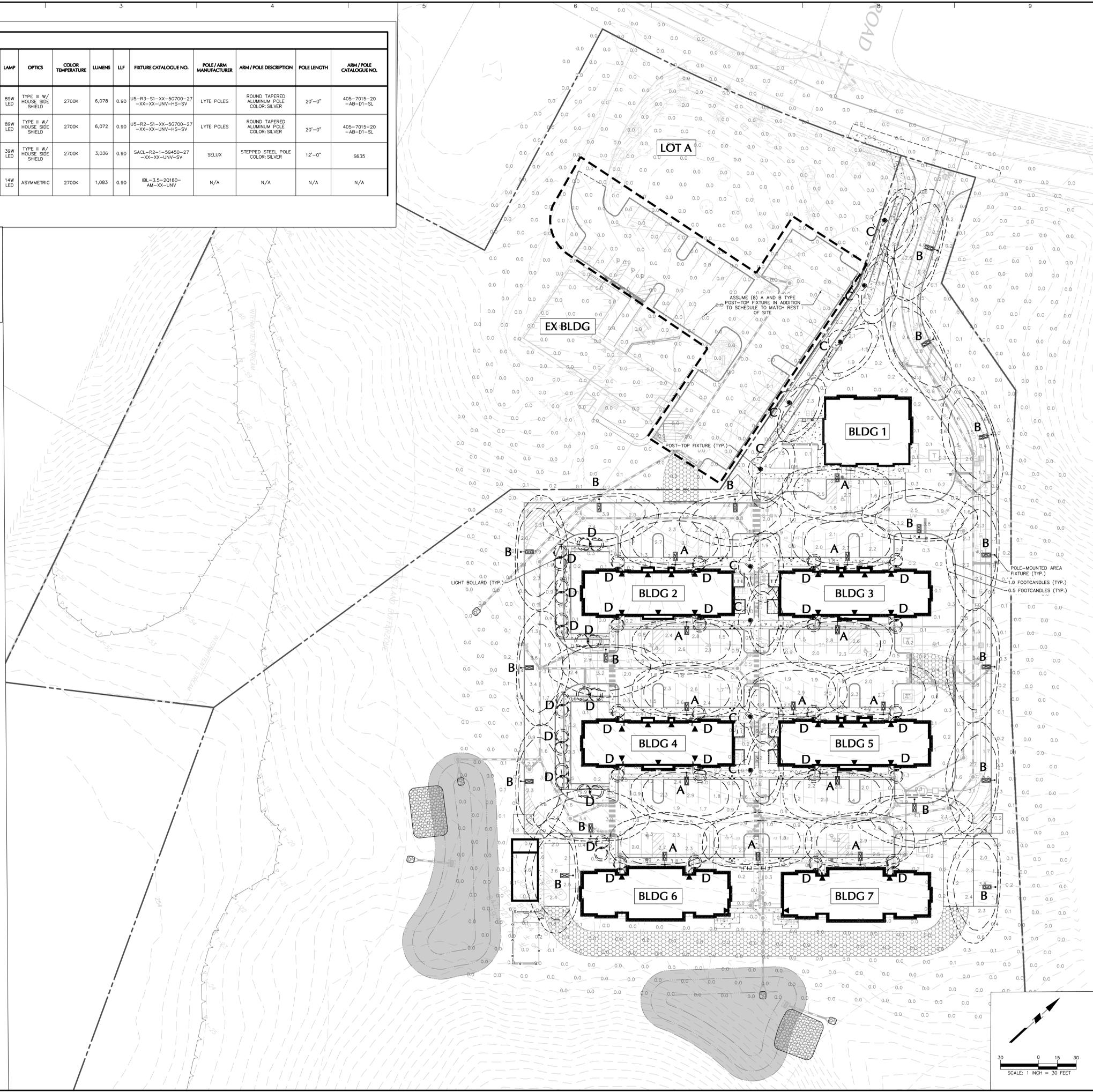
SYMBOL	KEY	QTY.	FIXTURE MANUFACTURER	FIXTURE MODEL	FIXTURE DESCRIPTION	FIXTURE MOUNTING HEIGHT	LAMP	OPTICS	COLOR TEMPERATURE	LUMENS	LLF	FIXTURE CATALOGUE NO.	POLE / ARM MANUFACTURER	ARM / POLE DESCRIPTION	POLE LENGTH	ARM / POLE CATALOGUE NO.
⌋	A	13	SELUX	OURAY 500	SINGLE POLE-MOUNTED AREA FIXTURE, COLOR: SILVER	20'-0"	69W LED	TYPE III W/ HOUSE SIDE SHIELD	2700K	6,078	0.90	U5-R3-S1-XX-56700-27-XX-XX-UNV-HS-SV	LYTE POLES	ROUND TAPERED ALUMINUM POLE, COLOR: SILVER	20'-0"	405-7015-20-AB-D1-SL
⌋	B	17	SELUX	OURAY 500	SINGLE POLE-MOUNTED AREA FIXTURE, COLOR: SILVER	20'-0"	89W LED	TYPE II W/ HOUSE SIDE SHIELD	2700K	6,072	0.90	U5-R2-S1-XX-56700-27-XX-XX-UNV-HS-SV	LYTE POLES	ROUND TAPERED ALUMINUM POLE, COLOR: SILVER	20'-0"	405-7015-20-AB-D1-SL
●	C	9	SELUX	SATURN CUTOFF LED	SINGLE POLE-MOUNTED AREA FIXTURE, COLOR: SILVER	12'-0"	39W LED	TYPE II W/ HOUSE SIDE SHIELD	2700K	3,036	0.90	SACL-R2-1-56450-27-XX-XX-UNV-SV	SELUX	STEPPED STEEL POLE, COLOR: SILVER	12'-0"	S635
•	D	31	SELUX	INULA BOLLARD	LIGHT BOLLARD, COLOR: SILVER	42"	14W LED	ASYMMETRIC	2700K	1,083	0.90	IBL-3.5-20180-AM-XX-UNV	N/A	N/A	N/A	N/A

NOTES:
1. REFER TO ELECTRICAL DRAWINGS FOR SITE LIGHTING VOLTAGES.

STATISTICS

DESCRIPTION	AVG.	MAX.	MIN.	MAX./MIN.	AVG./MIN.
CAR PARKING	1.8 FC	3.8 FC	0.5 FC	7.6:1	3.6:1
DRIVEWAY 1	1.9 FC	4.1 FC	0.7 FC	5.9 FC	2.7 FC
DRIVEWAY 2	2.2 FC	3.9 FC	0.7 FC	5.6 FC	3.2 FC
PEDESTRIAN	2.3 FC	6.8 FC	0.5 FC	13.6:1	4.5:1

NOTE: LIGHT PHOTOMETRY AND CALCULATIONS FOR EXISTING AND ADJACENT LIGHTING TO REMAIN ARE NOT INCLUDED IN THE ABOVE STATISTICS.



Date	Description	No.
Revisions		

Signature: *Michael G...* Date: _____

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Project: **237 PLEASANT STREET CONCEPT PLANS**

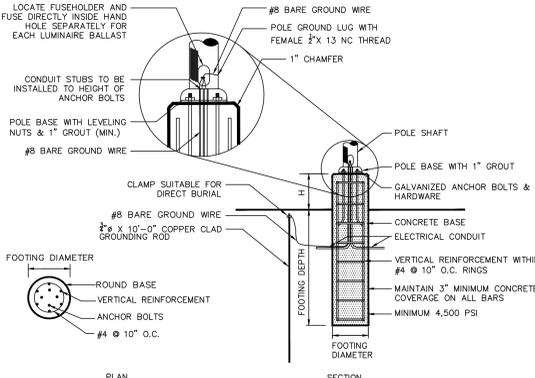
NORFOLK COUNTY FRANKLIN MASSACHUSETTS

Drawing Title: **LIGHTING PLAN**

Project No. 151019602
Date 09/10/2022
Drawing Title LL101
Checked By AS
MH1

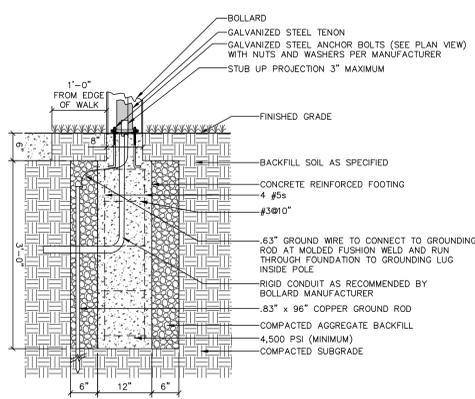
LIGHTING NOTES:

- POINT-BY-POINT CALCULATIONS PROVIDED WITHIN HAVE BEEN PREPARED IN ACCORDANCE TO IESNA STANDARDS AND IN CONSIDERATION OF THE VARIABLES WITHIN THESE NOTES AND SITE LIGHTING SCHEDULE. THE VALUES SHOWN ON THE PLANS ARE NOT AN INDICATION OF THE INITIAL LIGHT INTENSITIES OF THE LAMPS. THESE VALUES ARE AN APPROXIMATION OF THE MAINTAINED INTENSITIES DELIVERED TO THE GROUND PLANE USING INDUSTRY ACCEPTABLE LIGHT LOSS FACTORS (LLF) WHICH COVER LAMP DEGRADATION AND NATURAL BUILDUP ON THE FIXTURE LENS. THE LIGHTING PLAN IS DESIGNED WITH AN INDUSTRY ACCEPTABLE LLF TO ENSURE ADEQUATE LIGHT INTENSITIES OVER YEARS OF USE AND WEAR. MINOR VARIATIONS IN TOPOGRAPHY, PHYSICAL OBSTRUCTIONS, AMBIENT OR ADJACENT LIGHT SOURCES AND/OR OTHER POTENTIAL IMPACTS HAVE NOT BEEN INCLUDED IN THESE CALCULATIONS. THEREFORE, AS-BUILT LIGHT INTENSITIES MAY VARY, IN EITHER DIRECTION, FROM WHAT IS EXPLICITLY PORTRAYED WITHIN THESE DRAWINGS.
- PROVIDE A CONCRETE BASE FOR EACH LIGHT POLE AT THE LOCATIONS INDICATED ON THE CONSTRUCTION DRAWINGS AND IN ACCORDANCE WITH PROJECT PLANS AND SPECIFICATIONS RELATING DIRECTLY TO CAST-IN-PLACE CONCRETE.
- CONTRACTOR TO COORDINATE INSTALLATION OF UNDERGROUND FEEDER CABLE FOR EXTERIOR LIGHTING WITH EXISTING AND PROPOSED UTILITIES, SITE DRAINAGE SYSTEMS, AND PAVING. CONTRACTOR SHALL PROMPTLY NOTIFY THE OWNER'S REPRESENTATIVE SHOULD ANY UTILITIES, NOT SHOWN ON THE PLANS, BE FOUND DURING EXCAVATIONS.
- CONTRACTOR TO OPERATE EACH LUMINAIRE AFTER INSTALLATION AND CONNECTION. INSPECT FOR IMPROPER CONNECTIONS AND OPERATION.
- AIM AND ADJUST ALL LUMINAIRES TO PROVIDE ILLUMINATION LEVELS AND DISTRIBUTION AS INDICATED ON THE CONSTRUCTION DRAWINGS OR AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR OWNER.
- CONTRACTOR TO COORDINATE INSTALLATION OF ALL THE WALL MOUNTED FIXTURES AND ELECTRICAL CONNECTIONS TO SITE STRUCTURE(S) WITH BUILDING MEP, ARCHITECT, AND/OR OWNER.
- INSTALLATION OF ALL LIGHTING FIXTURES, POLES, FOOTINGS, AND FEEDER CABLE TO BE COORDINATED WITH ALL SITE WORK TRADES TO AVOID CONFLICT WITH FINISHED AND PROPOSED WORK.
- POINT SPACING ON PLACE OF CALCULATION IS 10 FT. LEFT TO RIGHT AND 10 FT. TOP TO BOTTOM.
- POINT-BY-POINT CALCULATIONS PROVIDED WITHIN HAVE BEEN PREPARED IN ACCORDANCE TO IESNA STANDARDS AND IN CONSIDERATION OF THE VARIABLES WITHIN THESE NOTES AND SITE LIGHTING SCHEDULE. THE VALUES REPRESENTED ON THE PLANS PRESENT AN APPROXIMATION OF THE MAINTAINED LIGHT LEVELS DELIVERED TO THE GROUND PLANE. MINOR VARIATIONS IN TOPOGRAPHY, PHYSICAL OBSTRUCTIONS, LAMP DEGRADATION, AMBIENT OR ADJACENT LIGHT SOURCES AND/OR OTHER POTENTIAL IMPACTS HAVE NOT BEEN INCLUDED IN THESE CALCULATIONS. GIVEN THIS, AS-BUILT VALUES MAY VARY, GREATER THAN OR LESS THAN, WHAT IS EXPLICITLY PORTRAYED WITHIN THESE DRAWINGS.
- ALL SITE LIGHTING RELATED WORK AND MATERIALS SHALL COMPLY WITH CITY, COUNTY, AND OTHER APPLICABLE GOVERNING AUTHORITY REQUIREMENTS.
- SITE ELECTRICAL CONTRACTOR TO COORDINATE LOCATION OF EASEMENTS, UNDERGROUND UTILITIES AND DRAINAGE BEFORE DRILLING POLE BASES.
- SITE ELECTRICAL CONTRACTOR TO COORDINATE POWER SOURCE WITH LIGHT FIXTURES TO INSURE ALL SITE LIGHTING IS OPERATING EFFECTIVELY, EFFICIENTLY AND SAFELY.
- SITE ELECTRICAL CONTRACTOR SHALL CONFIRM THAT LIGHT FIXTURES MATCH SPECIFICATIONS ON THE PLANS.
- REFER TO ELECTRIFICATION PLAN FOR PROVIDING ADEQUATE POWER FOR SITE LIGHTING.
- SITE ELECTRICAL CONTRACTOR SHALL EXAMINE AND VERIFY THAT SOIL CONDITIONS ARE SUITABLE TO SUPPORT LOADS EXERTED UPON THE FOUNDATIONS DURING EXCAVATION. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY UNSATISFACTORY CONDITIONS.
- POLE FOUNDATIONS SHALL NOT BE POURED IF FREE STANDING WATER IS PRESENT IN EXCAVATED AREA.
- ELECTRICIAN AND INSTALLATION OF WALL MOUNTED FIXTURES SHALL BE COORDINATED WITH THE ARCHITECTURAL, STRUCTURAL, AND SITE DRAWINGS FOR SAFETY AND TO PROVEN EXPOSED WIRING.
- LIGHTING SUBSTITUTION REQUIREMENTS:
 - ALL LIGHTING SUBSTITUTIONS MUST BE MADE WITHIN 14 DAYS PRIOR TO THE BID DATE TO PROVIDE AMPLE TIME FOR REVIEW AND TO ISSUE AN ADDENDUM INCORPORATING THE SUBSTITUTION WITH THE FOLLOWING REQUIREMENTS:
 - ANY SUBSTITUTION TO LIGHTING FIXTURES, POLES, ETC. MUST BE APPROVED BY THE OWNER, ENGINEER AND TENANTS. ANY COST ASSOCIATED WITH REVIEW AND/OR APPROVAL OF THE SUBSTITUTIONS SHALL BE ENTIRELY BORNE BY THE CONTRACTOR.
 - COMPUTER PREPARED PHOTOMETRIC LAYOUT OF THE PROPOSED LIGHTED AREA WHICH INDICATES, BY ISOFOTOCANDLE, THE SYSTEM'S PERFORMANCE.
 - A PHOTOMETRIC REPORT FROM A NATIONAL INDEPENDENT TESTING LABORATORY WITH REPORT NUMBER, DATE, FIXTURE CATALOG NUMBER, LUMINAIRE AND LAMP SPECIFICATIONS, IES CALCULATIONS, CANDLEPOWER TABULATIONS, ZONE LUMEN SUMMARY, ISOLUX PLOT, AND CATALOGUE CUTS. CATALOGUE CUTS MUST IDENTIFY, BUT NOT LIMITED TO, OPTICS, LAMP TYPE, DISTRIBUTION TYPE, REFLECTOR, LENS, BALLASTS, WATTAGE, VOLTAGE, FINISH AND HOUSING DESCRIPTION.
 - POLE MANUFACTURER AASHTO CALCULATIONS INDICATING THE POLE AND ANCHOR BOLTS BEING SUBMITTED ARE CAPABLE OF SUPPORTING THE POLE AND FIXTURE SYSTEMS BEING UTILIZED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
 - THE UNDERWRITERS LABORATORY LISTING AND FILE NUMBER FOR THE SPECIFIC FIXTURE(S) TO BE UTILIZED.
 - A COLOR PHOTOGRAPH THAT CLEARLY SHOWS THE REPLACEMENT FIXTURE POLE MOUNTED, THE FIXTURE'S COLOR, FINISH, AND PHYSICAL CHARACTERISTICS.



FIXTURE KEY	MOUNTING HEIGHT	FOOTING DEPTH	FOOTING DIAMETER	VERTICAL REINFORCEMENT	'H'
X	X	X	X	X	X

- NOTES:**
- SHAFT CAP, ARMS, BASE FLANGE, ANCHOR BOLTS, LEVELING NUTS, CONNECTION HARDWARE, BOLT COVERS, HANDHOLE COVER, AND BOLT CIRCLE TEMPLATE SHALL BE FURNISHED BY POLE MANUFACTURER.
 - EACH STANDARD TO BE PROTECTED AGAINST LIGHTNING WITH AN INTERCONNECTED GROUND ROD. THIS ROD SHALL BE BONDED PER SECTION NUMBER 250-86, N.E.C.
 - CONTRACTOR TO ENSURE CONCRETE POLE BASES ARE POURED / PLACED ABSOLUTELY VERTICAL & LEVEL.
 - POLE BASE SHALL BE ONE CONTINUOUS POUR. EXPOSED PORTION OF BASE SHALL BE HAND-RUBBED SMOOTH.
 - CONTRACTOR TO COMPACT SUBGRADE AROUND POLE BASE PER EARTHWORK SPECIFICATIONS / GEOTECH REPORT.
 - THE INFORMATION ILLUSTRATED IN THE LIGHT POLE FOUNDATION DETAIL HAS BEEN PROVIDED FOR GENERAL REFERENCE AND PRELIMINARY COST ESTIMATE PURPOSES. LIGHT POLE FOUNDATIONS SHOULD BE DESIGNED AND DETAILED BY A LICENSED STRUCTURAL ENGINEER BASED ON EXISTING SOIL CONDITIONS, LOCAL DESIGN STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.



- NOTES:**
- FOOTING SHOP DRAWINGS SIGNED AND SEALED BY A CONNECTICUT LICENSED STRUCTURAL ENGINEER TO BE SUBMITTED TO PROJECT LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

LIGHT BOLLARD BASE

Date: _____ Customer: **selux**

Project: _____

Type: _____ Qty: _____



Ouray 500

Order Code: **US**

Series	Height	Finish	Options
US Only 500			
Optics	R1 Type I R2 Type II R3 Type III R3W Type III (Wide) R4 Type IV R5R Type V (Round) R5S Type V (Square) R5Q Type V (Rectangular) PP Pole Propagator		
Fixed Mounting	S 80mm Slip Filter SA Single Pole Adapter S1 Single Short Arm S2 Double Short Arm L1 Single Long Arm L2 Double Long Arm W Wall Mount WD Dimensional Wall Box		*May be combined with adjustable mounting
Adjustable Mounting	AT Adjustable Tri AS Adjustable Swivel XX None		
Light Engine	50350 444W/220lm 50550 50W/250lm 50700 89W/460lm 50105 50W/250lm 50140 89W/460lm		140lm/W and H-CO options available on selected models. *Based on 0.8 distribution or 3000K CCT range.
CCT	27* 2700K 30* 3000K 35* 3500K 40 4000K 50* 5000K		*2700K and 3000K CRI Approved *Consult Factory for 6000K CRI
Power Cord Length	8 ft 10 ft 12 ft 14 ft 16 ft 18 ft XX 0K		*Add length of cable and height of pole to determine power length.
Finish	WH White BK Black BL Black Matte BZ Bronze SV Silver SP Specify Premium Color		
Voltage	DM* 120V 120* 120V 240* 240V 277* 277V 347* 347V 480 480V		*Specify for H-CO option
Options	DLR* Dimming (0-10V) HL30** H-Lux Switching Low Output 30% HL50** H-Lux Switching Low Output 50% COP* Comfort (See page 99 for order code) GL* Tempered Glass Lens TLR* Track Motion Sensor with Optional (See page 99 for order code) TLRP* Track Motion Sensor 3-Prk with Protocol IMS* Motion Sensor (See page 99 for order code)		*Track 0, 10, and 15 only **DLR, HL30, HL50, MS or MS only. Cannot be combined. ***MS, MS or MS only. Cannot be combined. ****MS, MS or MS only. Cannot be combined. *****MS, MS or MS only. Cannot be combined. *****MS, MS or MS only. Cannot be combined.

Product Modifications: _____ Approvals: _____

Date: _____

Date: _____ Customer: **selux**

Project: _____

Type: _____ Qty: _____



Saturn Cutoff LED

Order Code: **SACL**

Series	Height	Finish	Options
SACL			
Optics	R1 Type I R2 Type II R3 Type III R3W Type III (Wide) R4 Type IV R5R Type V (Round) R5S Type V (Square) R5Q Type V (Rectangular) PP Pole Propagator		
Mounting	1 Single 1A Double 2 Double W Wall Mount		
Light Engine	50450 37W/184lm 50700 50W/250lm 50105 50W/250lm		*DM based on 0.8 distribution or 3000K CCT
CCT	27* 2700K 30* 3000K 40 4000K		*DM based on 0.8 distribution or 3000K CCT
Power Cord Length	08 8 ft 10 10 ft 12 12 ft 14 14 ft 16 16 ft 18 18 ft XX 0K		*To 1 mounting use the pole height for 0.8 distribution on the pole height - 2
Finish	WH White BK Black BL Black Matte BZ Bronze SV Silver SP Specify Premium Color		
Voltage	UNV 120V 120 120V 240 240V 277 277V 347 347V 480 480V		*DM based on 0.8 distribution or 3000K CCT
Options	DM* Dimming (0-10V) HS* House Side Shield (SBS) HL30** H-Lux Switching Low Output 30% HL50** H-Lux Switching Low Output 50% DS No Light Protocol PC* Protocol MS** Motion Sensor with Optional Protocol (See page 5 for order code)		*DM based on 0.8 distribution or 3000K CCT **MS, MS or MS only. Cannot be combined. ***MS, MS or MS only. Cannot be combined. ****MS, MS or MS only. Cannot be combined.

Product Modifications: _____ Approvals: _____

Date: _____

Date: _____ Customer: **selux**

Project: _____

Type: _____ Qty: _____



Inula Bollard LED

Order Code: **IBL**

Series	Height	Light Engine	CCT	Finish	Voltage	Options
IBL Inula Bollard LED	1.5 1.5 ft 2 2 ft 2.5 2.5 ft 3 3 ft 3.5 3.5 ft 4 4 ft	1Q* 28W/137lm 2Q90 90W/460lm 2Q90MU 90W/460lm 2Q180 180W/912lm 3Q 200W/912lm 4G5 400W/1824lm 4GD 400W/1824lm	27* 2700K 30* 3000K 35* 3500K 40 4000K 50* 5000K	WH White BK Black BL Black Matte BZ Bronze SV Silver SP Specify Premium Color	UNV 120V 120 120V 208 208V 240 240V 277 277V 347 347V 480 480V	DM* Dimming (0-10V) HL30** H-Lux Switching Low Output 30% HL50** H-Lux Switching Low Output 50% DS No Light Protocol PC* Protocol MS** Motion Sensor with Optional Protocol (See page 5 for order code)

Product Modifications: _____ Approvals: _____

Date: _____

AREA LIGHT FIXTURE

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In a continuing effort to offer the best product possible, we reserve the right to change, without notice, specifications or materials that in our opinion will not alter the function of the product. Specification sheets found at www.selux.us are the most recent versions and supersede all other printed or electronic versions.

Page 1 of 11 (Rev. 09/2022) (SCL-LL501)

PEDESTRIAN LIGHT FIXTURE

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Page 1 of 11 (Rev. 09/2022) (SCL-LL501)

BOLLARD LIGHT FIXTURE

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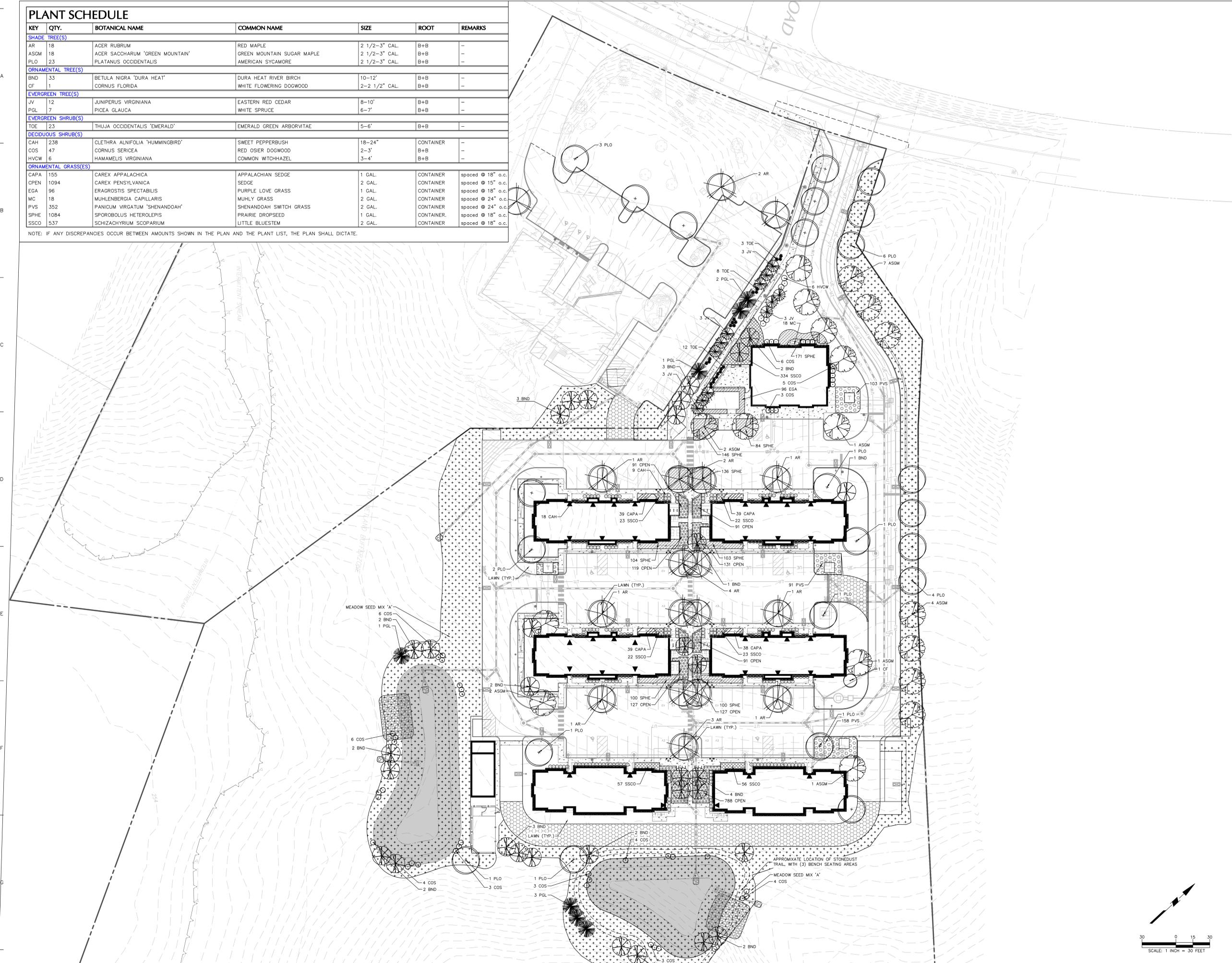
Page 1 of 8 (Rev. 09/2022) (SCL-LL501)

Date	Description	No.
Revisions		
		
		
237 PLEASANT STREET CONCEPT PLANS		
NORFOLK COUNTY FRANKLIN MASSACHUSETTS		
Drawing Title		
Project No.	151019602	LL501
Date	09/10/2022	
Drawn By	SD	
Checked By	MH	

PLANT SCHEDULE

KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	REMARKS
SHADE TREE(S)						
AR	18	ACER RUBRUM	RED MAPLE	2 1/2-3" CAL.	B+B	-
ASGM	18	ACER SACCHARUM 'GREEN MOUNTAIN'	GREEN MOUNTAIN SUGAR MAPLE	2 1/2-3" CAL.	B+B	-
PLO	23	PLATANUS OCCIDENTALIS	AMERICAN SYCAMORE	2 1/2-3" CAL.	B+B	-
ORNAMENTAL TREE(S)						
BND	33	BETULA NIGRA 'DURA HEAT'	DURA HEAT RIVER BIRCH	10-12"	B+B	-
CF	1	CORNUS FLORIDA	WHITE FLOWERING DOGWOOD	2-2 1/2" CAL.	B+B	-
EVERGREEN TREE(S)						
JV	12	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	8-10'	B+B	-
PGL	7	PICEA GLAUCA	WHITE SPRUCE	6-7'	B+B	-
EVERGREEN SHRUB(S)						
TOE	23	THUJA OCCIDENTALIS 'EMERALD'	EMERALD GREEN ARBORVITAE	5-6'	B+B	-
DECIDUOUS SHRUB(S)						
CAH	238	CLETHRA ALNIFOLIA 'HUMMINGBIRD'	SWEET PEPPERBUSH	18-24"	CONTAINER	-
COS	47	CORNUS SERICEA	RED OSIER DOGWOOD	2-3'	B+B	-
HVCW	6	HAMAMELIS VIRGINIANA	COMMON WITCHHAZEL	3-4'	B+B	-
ORNAMENTAL GRASS(ES)						
CAPA	155	CAREX APPALACHICA	APPALACHIAN SEDGE	1 GAL.	CONTAINER	spaced @ 18" o.c.
CPEN	1094	CAREX PENNSYLVANICA	SEDEGE	2 GAL.	CONTAINER	spaced @ 15" o.c.
EGA	96	ERAGROSTIS SPECTABILIS	PURPLE LOVE GRASS	1 GAL.	CONTAINER	spaced @ 18" o.c.
MC	18	MUHLENBERGIA CAPILLARIS	MUHLY GRASS	2 GAL.	CONTAINER	spaced @ 24" o.c.
PVS	352	PANICUM VIRGATUM 'SHENANDOAH'	SHENANDOAH SWITCH GRASS	2 GAL.	CONTAINER	spaced @ 24" o.c.
SPHE	1084	SPOROBOLUS HETEROLEPIS	PRAIRIE DROPSEED	1 GAL.	CONTAINER	spaced @ 18" o.c.
SSCO	537	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	2 GAL.	CONTAINER	spaced @ 18" o.c.

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



Date	Description	No.
Revisions		

Signature: *Michael Cap...*
 Date: _____

LANGAN
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 T: 617.824.9100 F: 617.824.9101 www.langan.com

Project
237 PLEASANT STREET CONCEPT PLANS

NORFOLK COUNTY FRANKLIN MASSACHUSETTS
 Drawing Title

PLANTING PLAN

Project No. 151019602	Drawing No. LP101
Date 09/10/2022	
Drawn By AS	
Checked By MH	

