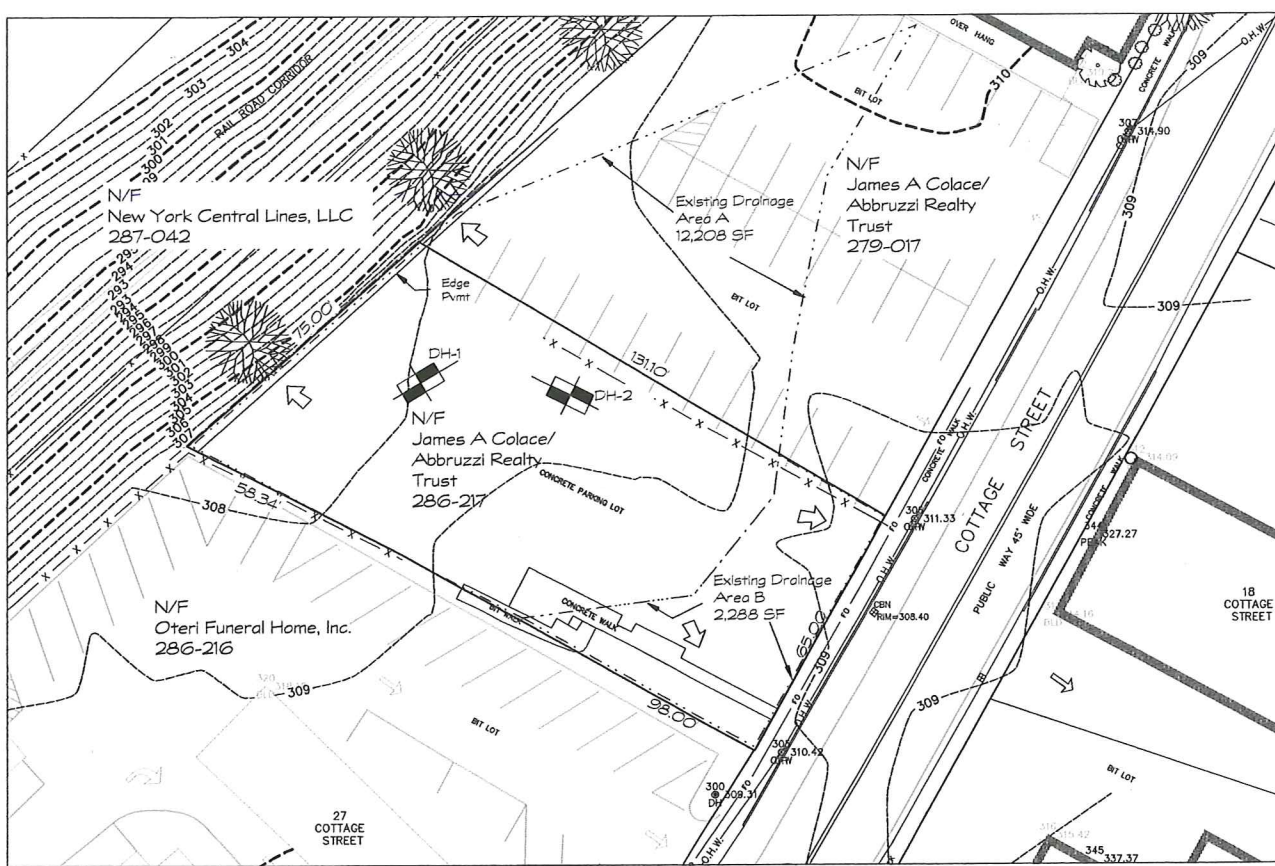
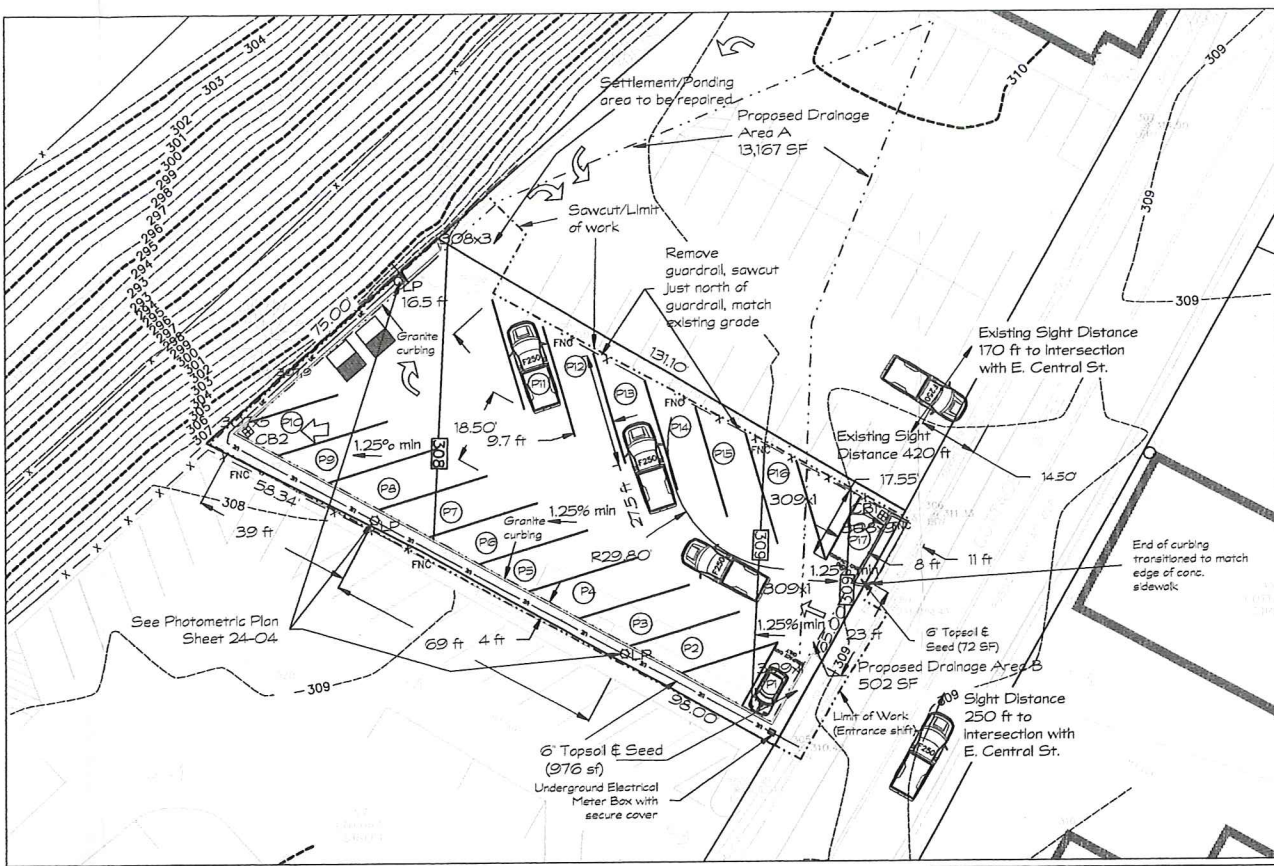


TOWN OF FRANKLIN
TOWN CLERK
2024 MAR 18 PM 12:02
RECEIVED



EXISTING
Scale: 1 in = 20 feet



PROPOSED
Scale: 1 in = 20 feet

PARKING LEGEND

② Proposed parking space

17 New parking spaces created:
15 Spaces 9.6 ft x 27.8 ft (P2-P16)
2 Spaces 6 ft x 8 ft (P1 & P17, compact cars only)

19 COTTAGE STREET - ZONING DISTRICT DOWNTOWN COMMERCIAL

| AREA | REQUIRED | EXISTING | PROPOSED |
|----------------|----------|-----------|-----------|
| FRONTAGE | 50 ft | 65 ft | 65 ft |
| FRONT YARD | 5 ft | N/A | N/A |
| SIDE YARD | 0 ft | N/A | N/A |
| REAR YARD | 15 ft | N/A | N/A |
| LOT WIDTH | 45 ft | 65 ft | 65 ft |
| LOT DEPTH | 50 ft | 131.10 ft | 131.10 ft |
| HEIGHT | 40 ft | N/A | N/A |
| STRUCT. COV. | 80% | 0% | 0% |
| STRUCT. & PAV. | 90% | 90% | 89.8% |

Notes:
N/A - Requirement not applicable, no structures remain on this property.

SITE DATA

Assessor's Parcel ID: 285-217
Property Owner:
James A. Colace/Abbruzzi Realty Trust
55 Coutu Street
Franklin, MA 02038

Deed Reference: Book 32674 Page 212

Site Elevations based on NAVD88 datum.

Test Pit Logs

Deep Hole 1 (DH-1) Surface Elevation: 308.1

| Horizon | Depth | Soil | Color | Description |
|-----------|---------|---------------|------------|--|
| Pvmt/Fill | 0-8' | Gravel | N/A | |
| B | 8-40' | SAND w/Gravel | 7.5 YR 5/6 | Fine-Medium SAND w/ 5-10% Gravel |
| C | 40-114' | Gravelly SAND | 2.5 Y 6/2 | Med-Course SAND w/30-40% Gravel and 5-10% Cobblestones |

Mottles: None
Water: None
Percolation Depth: 58 in.
Percolation Rate: < 2 min/inch

Deep Hole 2 (DH-2) Surface Elevation: 308.5

| Horizon | Depth | Soil | Color | Description |
|-----------|---------|---------------|------------|--|
| Pvmt/Fill | 0-8' | Gravel | N/A | |
| B | 8-45' | SAND w/Gravel | 7.5 YR 5/6 | Fine-Medium SAND w/ 5-10% Gravel |
| C | 45-108' | Gravelly SAND | 2.5 Y 6/2 | Med-Course SAND w/30-40% Gravel and 5-10% Cobblestones |

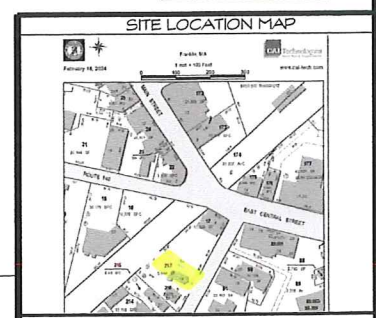
Mottles: None
Water: None
Percolation Depth: 63 in.
Percolation Rate: < 2 min/inch

- NOTES**
- Parcel ID 286-217-000, Quitclaim Deed recorded 8/7/2008 (Bk 25965 p572) referencing Lots 3 & 4 on 'Plan of House Lots, Cottage Street, Franklin, Property of Jennie L. Greene, March 1923, D.L. Chilson, Eng.', recorded with the Norfolk County Registry of Deeds as Plan No. 370 of 1946 in Bk 2601, p423. Parcel 'A' portion of Lot 4 sold via Quitclaim Deed recorded 11/5/2014 (Bk 32674 p212) with the Norfolk County Registry of Deeds referencing Plan Bk 635 p21.
 - Property is located in Zone X (area of minimal flood hazard) on Norfolk county Flood Insurance Rate Map panel 25021C0309E (i.e., not Zone II or Interim Wellhead Protection Area or public water supply).
 - Property is located in the Downtown Commercial District.
 - Property survey performed by Moran Surveying Inc., 14 William Avenue, Pembroke, MA 02359, (781) 293-5601.
 - All underground utility locations shown are based on field evidence and records provided. The locations should be considered approximate. Other utilities may exist which are not evident or for which record information was not found. The contractor must contact all utility companies and 'Dig Safe' before excavation begins. Dunbar Engineering and Management assumes no responsibility for damages incurred as a result of utilities omitted or inaccurately shown.
 - It is the responsibility of the contractor to review all of the drawings and specifications associated with this project prior to the initiation of construction.
 - Should the contractor identify a conflict within the documents relative to the specifications or applicable codes, it is the contractor's responsibility to notify the design engineer in writing prior to the start of construction. Failure by the contractor to notify the project engineer shall constitute acceptance of full responsibility by the contractor to complete the scope of work as defined by the drawings and in full conformance with local regulations and codes.
 - All work shall conform to Town of Franklin requirements and Massachusetts Highway Department construction standards as applicable. All work shall be performed in conformance with all applicable Local and State building codes.
 - All materials installed shall follow Buy American requirements. Material substitutions must be approved by the design engineer.
 - All erosion mitigation measures shall be in place prior to major construction or soil disturbance commencing on the site.
 - The contractor shall limit on site storage of materials to that needed to maintain construction progress and shall clean the site of any loose debris at the end of each work day. In the event that debris is carried onto any public way, the Contractor shall clean up that debris within 24 hrs of notification. Failure to meet this requirement after formal notification by the Planning Board may result in suspension of construction.
 - Special Permit conditions certified by the Franklin Planning Board on XX/XX/XXXX are as follows:
 - Condition 1
 - No alteration of the Special Permit and the plans associated with it shall be made or affected other than by an affirmative vote of the members of the Planning Board at a duly posted meeting and upon the issuance of a written amended decision.

LEGEND

| | | | |
|--------|--------------------|---------|---------------------------|
| ⊗ | Deep Hole | NTS | NOT TO SCALE SIGN |
| ⊙ DMH | DRAIN MANHOLE | ⊙ DH | DRILL HOLE |
| ⊙ SMH | SEWER MANHOLE | ⊙ SB/DH | STONE BOUND W/DH |
| ⊙ CBN | CATCH BASIN | R/W | EDGE OF RIGHT OF WAY |
| ⊕ HYD | HYDRANT | SS | EXIST. CONTOUR |
| ⊕ WG | WATER GATE | --- | OVERHEAD WIRES |
| ⊕ WS | WATER SERVICE | ----- | STONE WALL |
| ⊕ UP | UTILITY POLE | ⊙ | EXISTING TREES AND SHRUBS |
| ⊕ LP | LIGHT | ~~~~~ | TREELINE/LANDSCAPE |
| ⊕ YD | YARD LIGHTING | --- | WETLAND BUFFER ZONE |
| ⊕ GV | GAS VALVE | --- | WETLAND LINE |
| ⊕ POST | POST | --- | GAS LINE BURIED |
| --- | UND. ELEC. CONDUIT | --- | FIBER OPTIC LINE BURIED |
| ⊕ | Runoff Direction | | |

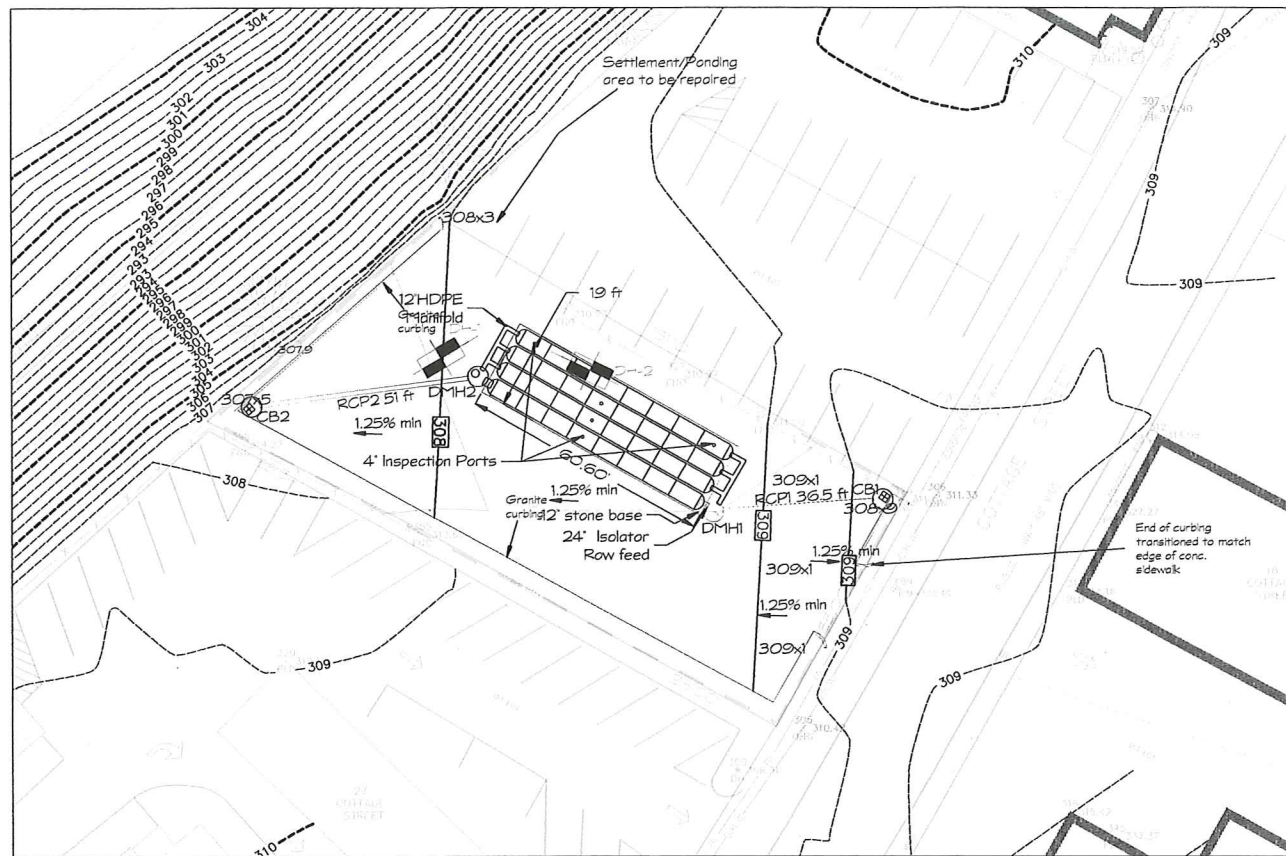
1 in. = 20 feet



PREPARED BY:
Dunbar
ENGINEERING & MANAGEMENT
stevedunbar@dunbarem.com (774) 737-4301

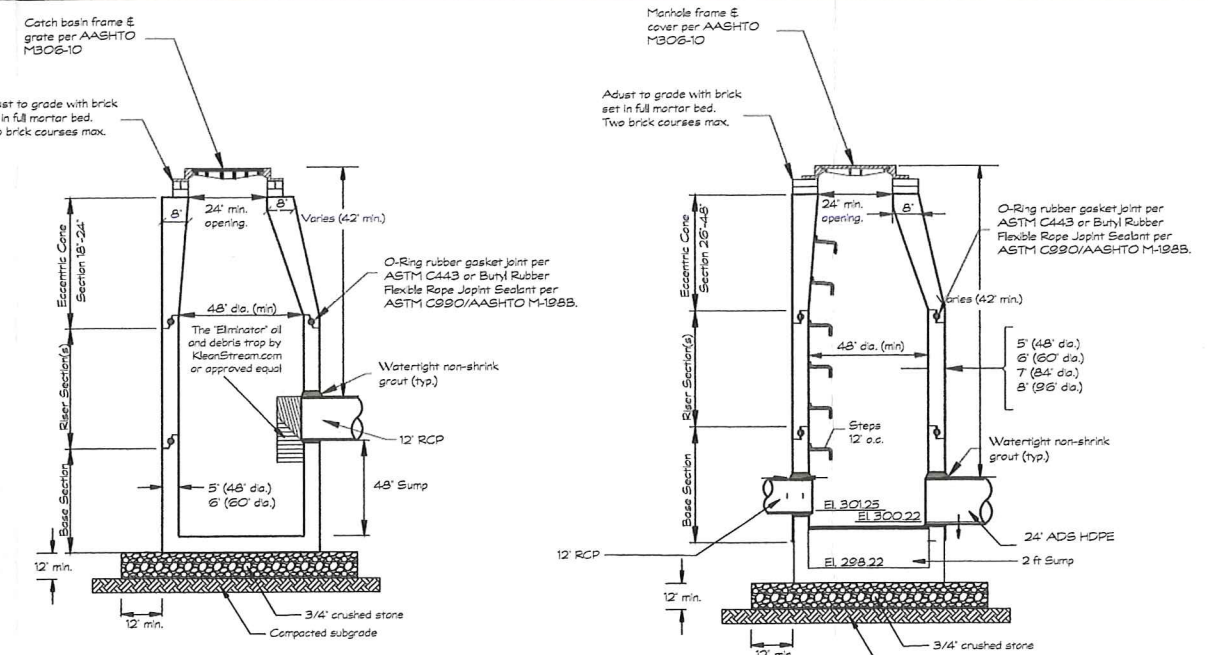
DEVELOPMENT PLAN
PROPOSED PARKING LOT
19 Cottage Street
FOR
James A. Colace/Abbruzzi Realty Trust
55 Coutu Street
Franklin, MA 02038

DATE: March 15, 2024
DRAWN BY: S. Dunbar
PLAN NO: 24-01



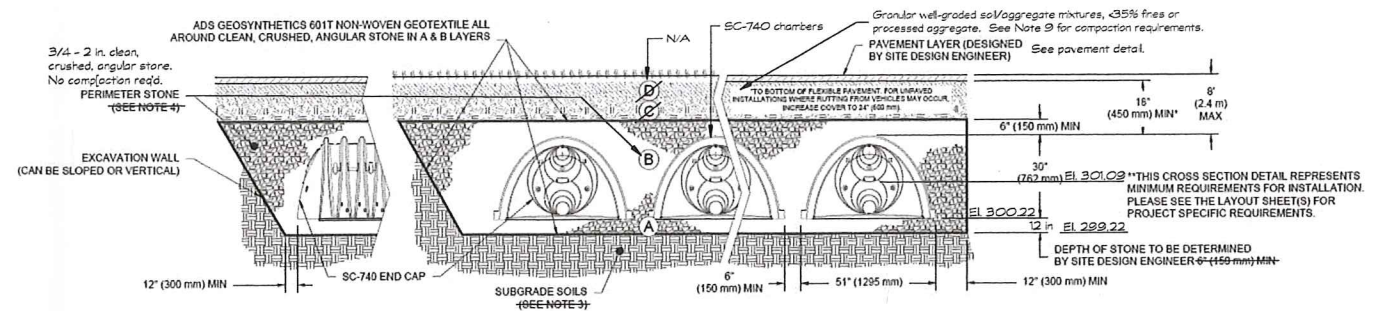
PROPOSED STORMWATER MANAGEMENT

Scale: 1 in = 20 feet



TYPICAL PRECAST CATCH BASIN
N.T.S.

TYPICAL PRECAST CONCRETE DRAIN MANHOLE (DMH)
N.T.S.



INFILTRATION SYSTEM CROSS SECTION (N.T.S.)

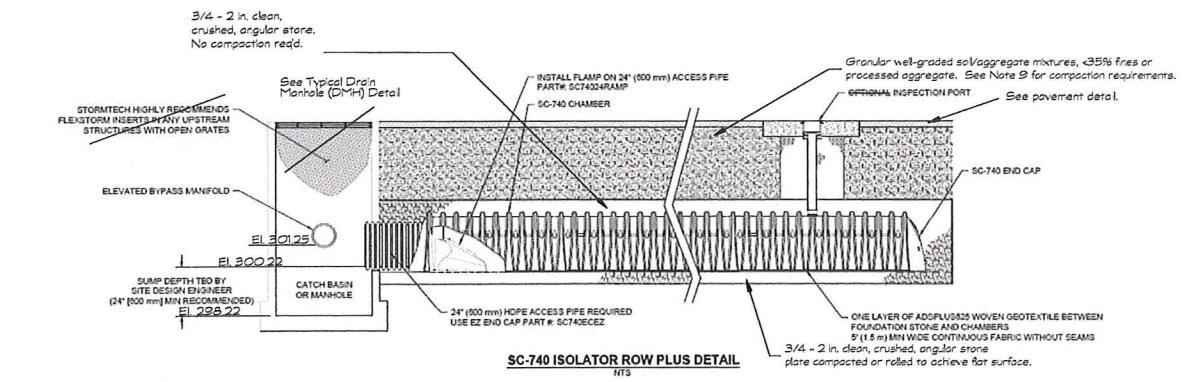
System with 3 rows of 8 Stormtech SC-740 chambers and 1 Isolator Row of 8 Stormtech SC-740 chambers 6 inches apart and centered within a 19 ft x 60.6 ft crushed stone field.

NOTES

- Drainage pipe between catch basins and drain manholes shall be reinforced concrete, with bell and spigot gasketed joints. The pipe shall be Class II in accordance with ASTM C-76. The gaskets shall be O-ring type in accordance with ASTM C-443. The minimum diameter shall be 12 inches. The pipe shall be laid in undisturbed trenches below the grade of pipes, starting with the downstream end on a firm bedding. All bells shall be facing upstream. Reference bench marks shall be clearly marked to enable the Department of Public Works Director to check the grade and invert elevations. The joints of all concrete pipes shall include a pre-molded neoprene continuous O-ring flexible compression gasket. No backfill of pipes or culverts shall be done until the installation has been inspected and approved by the Department of Public Works Director. Backfill shall be in layers not exceeding 12 inches, with each layer compacted by an appropriately sized plate vibrator, regardless of the method of final compaction at the subbase or gravel base level. The minimum cover is 42 inches above the top of the pipe.
- Catch basins and manholes shall be precast reinforced concrete per ASTM C478.
- All flows into a manhole shall be in the same direction (no reverse flows allowed), with a maximum angle between the man and any connecting line of 90°.
- Frames shall be at least 265 pounds. Covers or grates shall be no less than 210 pounds. The word 'drain' shall be cast into the solid cover in letters at least three inches in height.
- Manhole covers shall be set flush with the designed finish grade of the pavement. Catch basin grates shall be set one inch below the finished gutter grade and shall be of the eggbox variety (square openings). Manhole castings and catch basin grates shall not be raised until thirty days prior to final paving. If paving does not occur within said thirty days, they shall be lowered immediately. Ramping is prohibited.
- Chambers shall meet the requirements of ASTM F2418, 'standard specification for polypropylene (pp) corrugated wall stormwater collection chambers.'
- SC-740 chambers shall be designed in accordance with ASTM F2787 'standard practice for structural design of thermoplastic corrugated wall stormwater collection chambers.'
- Perimeter stone must be extended horizontally to the excavation wall for both vertical and sloped excavation walls.
- Begin compositions after 12' of material over the chambers is reached, compact additional layers in 6" max lifts to a min. 95% proctor density for well graded material and 95% relative density for processed aggregate materials. Roller gross vehicle weight not to exceed 12,000 lbs. dynamic force not to exceed 20,000 lbs.
- Chamber substitution is not permitted without approval by the site design engineer.
- Stormtech SC-740 chambers shall not be installed until the manufacturer's representative has completed a pre-construction meeting with the installer.
- Stormtech SC-740 chambers shall be installed in accordance with the 'stormtech SC-310/SC-740/SC-780 construction guide.'
- Chambers are not to be backfilled with a dozer or an excavator situated over the chambers. Stormtech recommends 3 backfill methods: 1) stone/rafter located off the chamber bed; 2) backfill as rows are built using an excavator on the foundation stone or subgrade; 3) backfill from outside the excavation using a long boom hoe or excavator.
- The foundation stone shall be leveled and compacted prior to placing chambers.
- Joints between chambers shall be properly sealed prior to placing stone.
- Maintain minimum = 6" spacing between the chamber rows.
- The contractor shall report any discrepancies with chamber foundation materials bearing capacities to the site design engineer.
- The contractor shall install 'Flexstorm Catch It' inserts or approved equal during construction for all inlets to protect the subsurface stormwater management system from construction site runoff.
- The use of construction equipment over SC-740 chambers is limited: 1) No equipment is allowed on bare chambers; 2) No rubber tired loaders, dump trucks, or excavators are allowed until proper fill depths are reached in accordance with the referenced Stormtech construction guide; 3) Weight limits for construction equipment can be found in the Stormtech construction guide.
- Full 3/8" (90 mm) of stabilized cover materials over the chambers is required for dump truck travel or dumping.
- Use of a dozer to push embedment stone between the rows of chambers may cause damage to the chambers and is not an acceptable backfill method. Any chambers damaged by the 'dump and push' method are not covered under the Stormtech standard warranty.
- Contact Stormtech at 1-888-892-2694 with any questions on installation requirements or weight limits for construction equipment.
- HydroCAD 3D 10.20-4b was used to model both pre- and post-construction conditions. Lot 217 is 9,644 sf but it receives runoff from adjacent Lot 17 for a total contributing area of 14,495 sf. A NSDC 10-yr storm (4.85"/24 hrs) and a pre-construction impervious area of 14,495 sf resulted in 0.128 acre-feet of runoff which currently flows into existing catch basins at Cottage Street, infiltrates through bare ground at the NW end of the lot, or overtops the berm along that edge and flows onto MBTA property. The proposed project reduces impervious area by 10% and captures the remaining runoff into the subsurface Stormtech chambers. On site perc tests indicated a rapid infiltration rate (2min/in). Using the same 10-yr storm and a conservative infiltration rate of 8.27 in/hr indicated a peak storage elevation in the chambers of 3.0188, slightly more than 1/2 ft. These results are supported by the fact that the exact sized system was installed on the adjacent Lot 216 in 2014 and there have been no issues reported.

| DRAINAGE PIPE SCHEDULE | | | | | | |
|------------------------|---------|--------------|-------------|-------|--------|-------------|
| Pipe | From | To | Length | Slope | Diom. | Description |
| RCP1 | CB-1 | DMH-1 | 36.5 ft | 1% | 12 in | RCP |
| RCP2 | CB-2 | DMH-2 | 51 ft | 1% | 12 in | RCP |
| Isolator Feed | DMH-1/2 | Infiltration | 2 ft | 0% | 24 in. | HDPE |
| Manifold | DMH-1/2 | Infiltration | 16 ft (max) | 1% | 12 in | HDPE |

| DRAINAGE STRUCTURE SCHEDULE | | | | | | | |
|-----------------------------|----------|------------|------------|--------|---------------|------------|--|
| Structure | Location | Rim | Inlet | | Outlet | | Description |
| | | | Pipe | Diom. | Pipe | Diom. | |
| CB-1 | See plan | 308.85 | RCP1 | 12 in. | RCP1 | 12 in. | Precast concrete catch basin |
| CB-2 | See plan | 307.45 | RCP2 | 12 in. | RCP2 | 12 in. | Precast concrete catch basin |
| DMH-1 | See plan | 308.80 | RCP1 | 12 in. | Isolator Feed | 24 in/2 in | Precast concrete drain manhole |
| DMH-2 | See plan | 308.20 | RCP2 | 12 in. | Isolator Feed | 24 in/2 in | Precast concrete drain manhole |
| Isolator Row | See plan | Isol. Feed | Isol. Feed | 24 in. | Isolator Row | 24 in/2 in | Stormtech Infiltration chambers (Isolator Row) |
| Rows 2-4 | See plan | Manifold | Manifold | 12 in. | Isolator Row | 24 in/2 in | Stormtech Infiltration chambers |



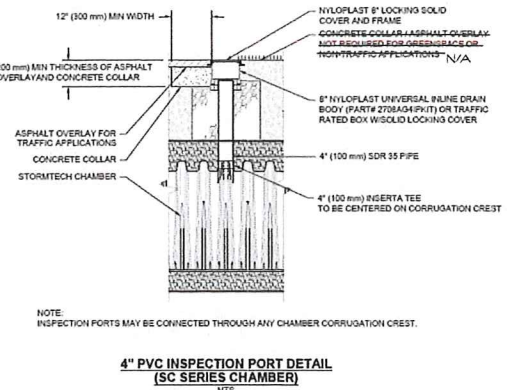
SC-740 ISOLATOR ROW PLUS DETAIL
N.T.S.

INSPECTION & MAINTENANCE

- STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- INSPECTION PORTS (IF PRESENT)
 - REMOVE COVER ON INLET/OUTLET INLINE DRAIN
 - REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
 - USING A FLASHLIGHT AND STADIUM ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
 - LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
 - IF SEDIMENT IS AT, OR ABOVE, 3" (75 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
- REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
 - USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
 - INVERTS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
 - FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
 - IF SEDIMENT IS AT, OR ABOVE, 3" (75 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- ATTACH JETVAC CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
 - APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
 - VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LOGS, RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

- INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
- CONDUCT JETTING AND VACUUMING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.
- Parking area should be cleaned annually to reduce sediment runoff into storage system.
- Sump catch basins should be inspected 4 times per year and cleaned as necessary to maintain clear 48 in. sump depth. Sump cleaning via vacuum truck is preferred.

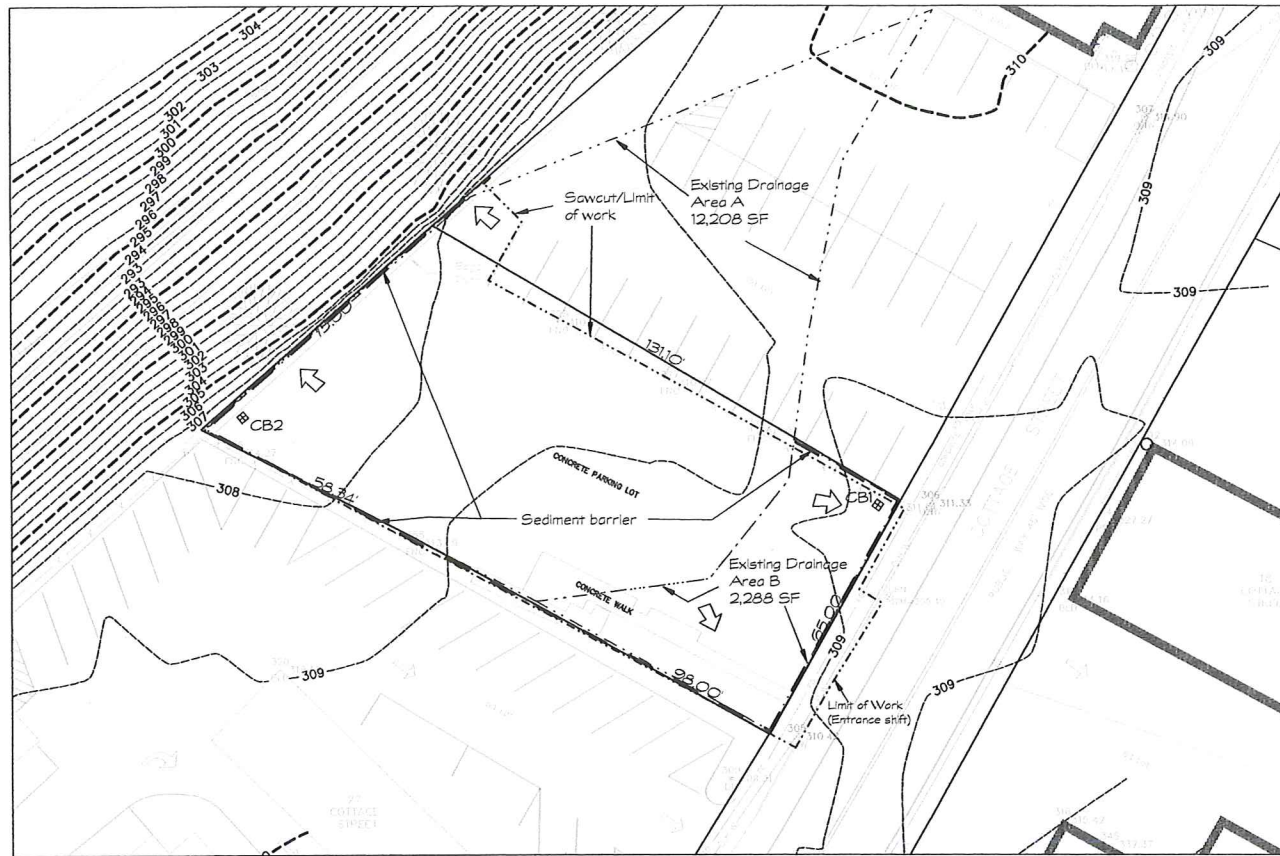


4" PVC INSPECTION PORT DETAIL
(SC SERIES CHAMBER)
N.T.S.

PREPARED BY:

 ENGINEERING & MANAGEMENT
 stevedunbar@dunbar.com (774) 737-4301
STORMWATER MANAGEMENT PLAN
PROPOSED PARKING LOT
19 Cottage Street
 FOR
 James A. Colace/Abbruzzi Realty Trust
 55 Court Street
 Franklin, MA 02038
 DATE: March 15, 2024
 DRAWN BY: S. Dunbar
 PLAN NO: 24-02



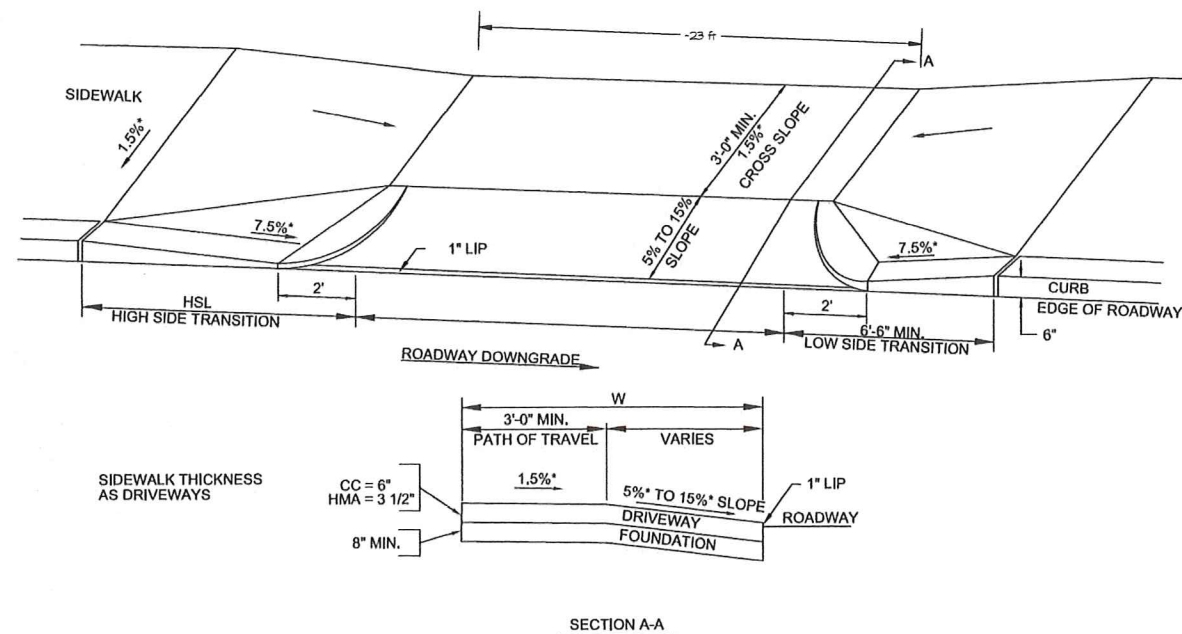
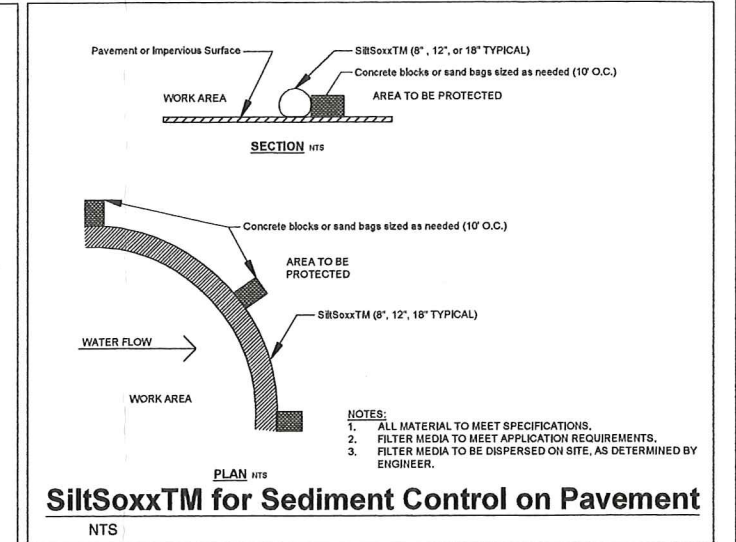
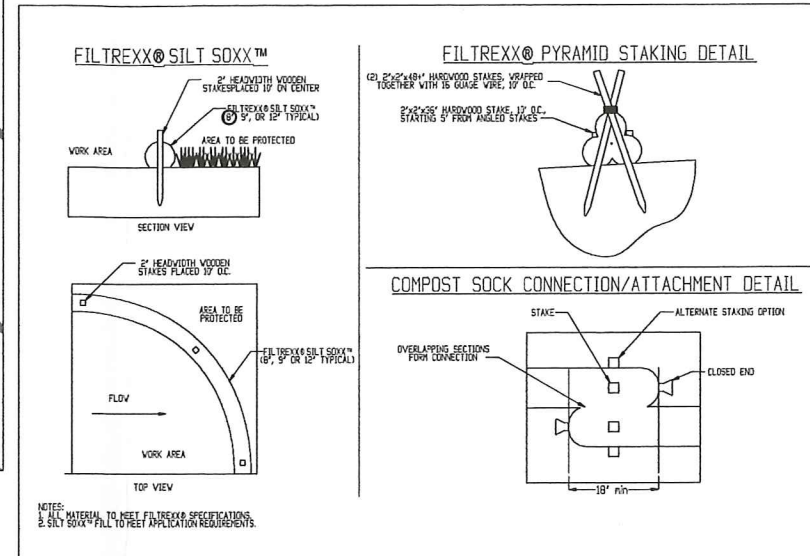


SEDIMENT & EROSION CONTROL PLAN

Scale: 1 in = 20 feet

EROSION & SEDIMENT CONTROL NOTES:

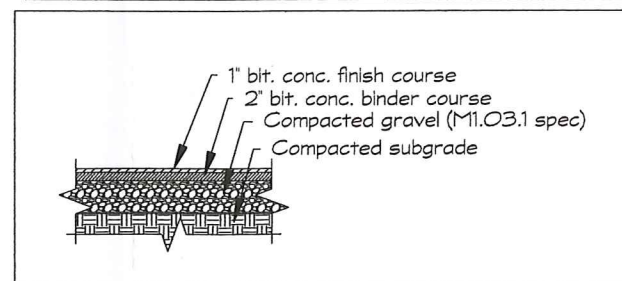
1. Sediment barrier shall be SiltsoxxTM by Filtrex or approved equal.
2. The contractor shall install UltraTech 9217 Ultra-Drain Guard[®] or approved equal in all catch basin/drain grates within and adjacent to the limit of work. Drain guards shall be inspected and maintained according to manufacturer's specifications.
3. The contractor and all sub-contractors are to be made aware that this project is subject to the requirements of the Franklin Best Development Practices Guidebook.
4. Sediment barriers are to be installed where shown on this plan. The contractor is responsible for the proper maintenance of the sediment barriers and to identify and correct all sources of erosion.
5. Extra sediment barrier materials are to be stored on site in order to quickly repair erosion prone areas. Periodic maintenance of the erosion control structures is required in order to insure the proper protection of the resource areas.
6. Rough grading and pavement construction are to be confined to areas as shown on these plans. Any stockpiled material that is subject to erosion shall be protected at its base on the down-slope side with a silt fence.
7. Temporary stabilization of disturbed areas is required to limit erosion toward abutting properties and public ways. All graded slopes are to be stabilized on a daily basis with special care taken to avoid routing rainfall through gullies toward the resource areas. Areas of erosion are to be repaired on a daily basis.
8. The contractor shall increase inspections and carefully monitor construction impacts during adverse weather conditions or periods of high groundwater. Inspection is required after more than 1/2" of rainfall in 24 hours.
9. All graded areas are to be loamed and seeded as soon as possible in order to insure the rapid stabilization of the erosion prone areas. A grass seed mixture of 20% Red Top, 60% Chewings Fescue and 20% Kentucky Bluegrass is recommended.
10. The sediment barriers shall remain in place until all upgradient areas have been stabilized.



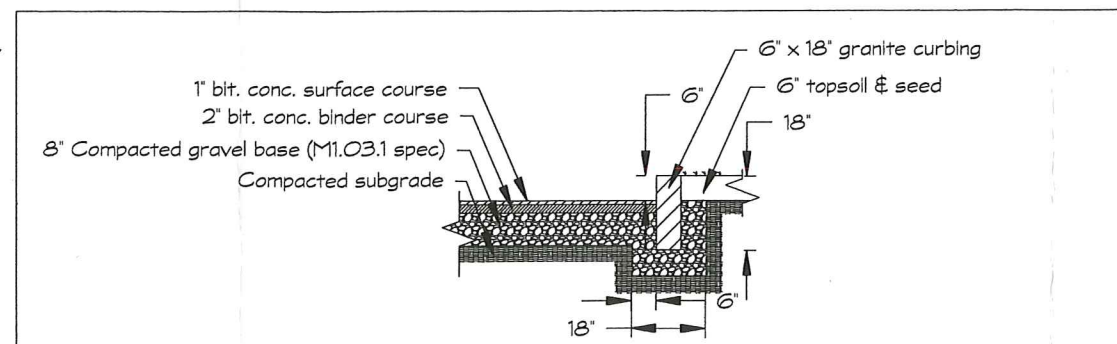
LEGEND

- HSL = HIGH SIDE TRANSITION LENGTH. SEE E 107.9.0
- W = SIDEWALK WIDTH
- * = TOLERANCE FOR CONSTRUCTION ±0.5%
- CC = CEMENT CONCRETE
- HMA = HOT MIX ASPHALT

MADOT E107.8.0 SIDEWALK THROUGH DRIVEWAY DETAIL



PAVEMENT DETAIL
NTS



GRANITE CURB DETAIL
NTS

NOTES

1. Vertical granite curbing shall be type W4 (Massachusetts Department of Public Works Specification M9.04.1) vertical granite, four-foot-minimum lengths, finished side facing the traveled way, with a reveal of six inches, installed in accordance with the specifications of the Massachusetts Department of Public Works (Section 50).

SCALE: 1 in. = 20 feet

PREPARED BY:
Dunbar
ENGINEERING & MANAGEMENT
stevedunbar@dunbare.com (774) 737-4301
SED. & EROSION CONTROL & DETAILS
PROPOSED PARKING LOT
19 Cottage Street
FOR
James A. Colace/Abbruzzi Realty Trust
55 Court Street
Franklin, MA 02038

DATE: March 15, 2024

DRAWN BY: S. Dunbar

PLAN NO: 24-03



NOTES

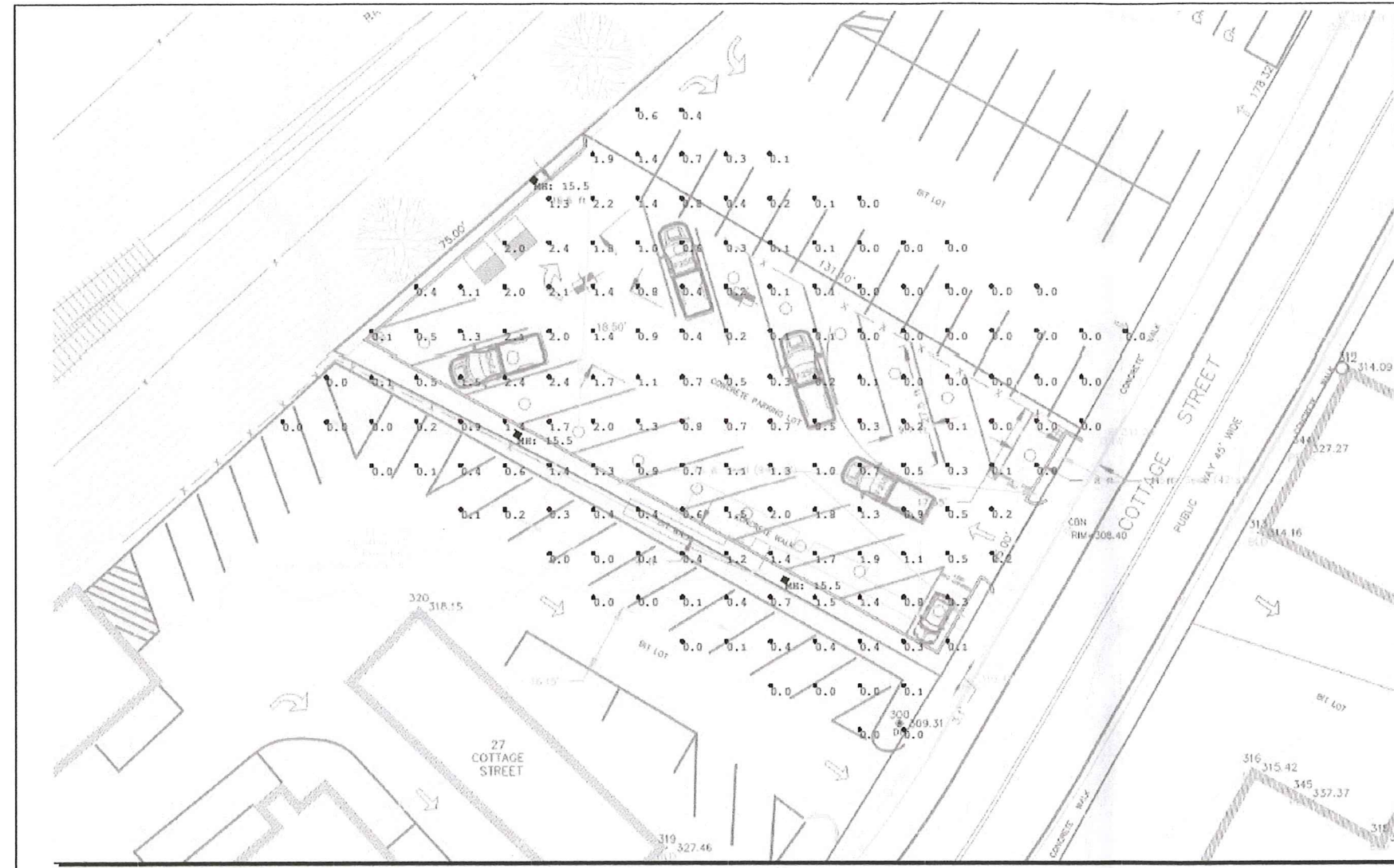
- Contractor shall provide 120V/15A service from existing power pole on Cottage Street to secure underground meter box then to 3 light poles via 2" conduit buried a minimum of 24 inches and marked with underground, detectable/metal core tape.
- Light post to be installed on concrete pedestal with anchor bolts according to manufacturer's recommendations.

EXPOSURE
— LIGHTING — CONTROLS — ELECTRICAL —

| # | Date | Comments |
|-----------|------|----------|
| Revisions | | |
| | | |
| | | |

Drawn By: CL
Checked By:
Date: 3.14.2024
Scale: NTS

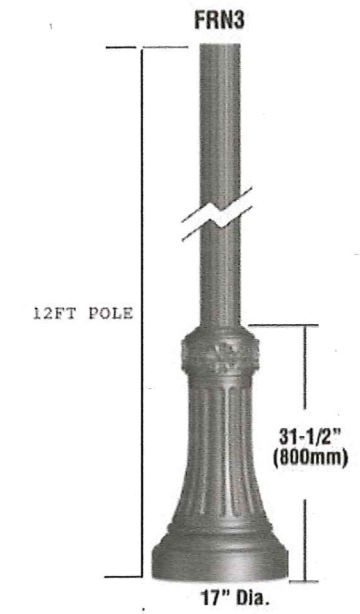
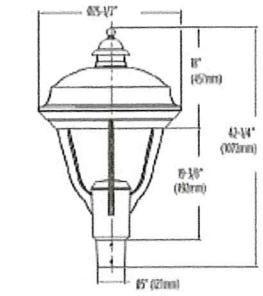
Colace Rome Parking Lot
Franklin, MA



Lexington (LXM4)

Have questions? Call us at (800) 436-7800

PRODUCT DIMENSIONS



| Luminaire Schedule | | | | | | | | | |
|--------------------|-----|--------------------|-------------|---|-------|------------------|-----------------|-------------|----------------------|
| Symbol | Qty | Label | Arrangement | Description | LLF | Luminaire Lumens | Luminaire Watts | Total Watts | [MANUFAC] |
| ☐ | 3 | Luminaire and Pole | Single | Luminaire: LXM4 PT FT LED 5L 50 UNV BRZ IMSBT1 IL / Pole: 4FRN3 (matl) 12' 4N BRZ | 0.900 | 3987 | 39 | 117 | LSI INDUSTRIES, INC. |

Ching Ling
Exposure Lighting
cling@exposure2lighting.com
(401)523-9623

PHOTOMETRIC PLAN
NTS



PREPARED BY:
Dunbar
ENGINEERS & MANAGEMENT
stevedunbar@dunbar.com (774) 737-4301

PHOTOMETRIC PLAN
PROPOSED PARKING LOT
19 Cottage Street
FOR
James A. Colace/Abbruzzi Realty Trust
55 Court Street
Franklin, MA 02038

DATE: March 15, 2024
DRAWN BY: S. Dunbar
PLAN NO: 24-04