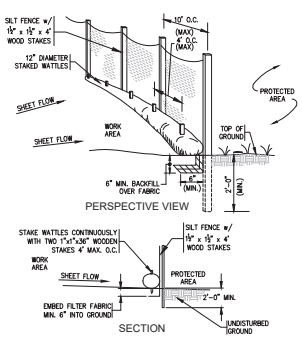
SITE LEGEND

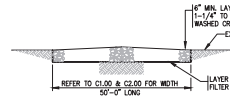
EXISTING	NEW	DESCRIPTION
D	D	STORM DRAIN
E	E	ELECTRIC (UNDERGROUND)
F	F	FIRE SERVICE
FD	FD	FOOTING DRAIN
RD	RD	ROOF DRAIN
DS	DS	DOWNSPOUT DRAIN
G	G	GAS
OHW	OHW	OVERHEAD WIRE
PL	PL	PROPERTY LINE
S	S	SANITARY SEWER
GW	GW	GARAGE WASTE
W	W	WATER
	ES	UNDERGROUND ELECTRIC SECONDARY SERVICE
	T	UNDERGROUND TELEPHONE SERVICE
	CTV/F	UNDERGROUND CABLE TV & FIBER OPTIC
	SL	UNDERGROUND SITE LIGHTING SERVICE
	FA	UNDERGROUND FIRE ALARM SERVICE
64	64	CONTOUR
	BCC	BITUMINOUS CONC. CURB
	CCB	CAPE COD BERM
	PCC	PRECAST CONC. CURB
	SGC	SLOPED GRANITE CURB
	VGC	VERTICAL GRANITE CURB
x64.0	x64.75	SPOT GRADE
		CHAINLINK FENCE
		CONSTRUCTION CHAINLINK FENCING
	DMH	DRAIN MANHOLE
FES	FES	FLARED END STRUCTURE
	SMH	SEWER MANHOLE
		CATCH BASIN
	CB(DG)	DOUBLE GRATE CATCH BASIN
		WATER SERVICE
	PIV	POST INDICATOR VALVE
		UTILITY POLE
CTB	CTB	CONCRETE THRUST BLOCK
		FIRE HYDRANT
GV	GV	GATE VALVE AND CURB BOX
		HANDICAP SYMBOL (PRKG. SPACE)
		HEADWALL
		ELECTRIC MANHOLE
		TELEPHONE MANHOLE
	PB	ELECTRIC PULL BOX
		SIGHT LIGHT POLE
	FDC	FIRE DEPARTMENT CONNECTION
		WETLAND
		BORING LOCATION
TP	TP	TEST PIT LOCATION
	C.T.E.	POINT OF CONNECTION TO EXISTING
	E.T.R.	EXISTING TO REMAIN
F.F.E.	F.F.E.	FINISH FLOOR ELEVATION (FIRST FLOOR)
	F&I	FURNISH AND INSTALL
	GCO	GROUND CLEANOUT
INV.	INV.	INVERT ELEVATION
	N.T.S.	NOT TO SCALE
	WQS	WATER QUALITY STRUCTURE
	V.I.F.	VERIFY IN FIELD
		TRAFFIC FLOW DIRECTION
	R&D	REMOVE & DISPOSE
	R&R	REMOVE & REPLACE
		REMOVE & DISPOSE
		ABANDON EXIST'G. UTILITY IN PLACE
		REMOVE & DISPOSE OF EXIST'G. UTILITY
	CLDI	CEMENT LINED DUCTILE IRON
	HDPE	HIGH DENSITY POLYETHYLENE
	PVC	POLYVINYL CHLORIDE
	RCP	REINFORCED CONCRETE PIPE
VC		VITRIFIED CLAY PIPE
AC		ASBESTOS CONCRETE PIPE



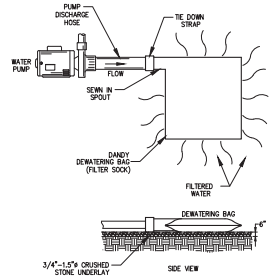
1 CO.1 COMPOST WATTLE FILTER SOCK & FABRIC DETAIL
N.T.S.
NOTES:
1. FILTER SOCK SHALL BE 12" DIAMETER STRAW WATTLE BY NORTH AMERICAN GREEN OR APPROVED EQUAL.
2. SOCKS TO BE FILLED WITH COMPACTED STRAW OR APPROVED EQUAL.

GENERAL NOTES

1. EXISTING CONDITIONS SHOWN WERE TAKEN FROM EXISTING CONDITIONS PLAN PREPARED BY BSC GROUP, INC. FOR RAYMOND DESIGN ASSOCIATES, INC. DATED SEPTEMBER 7, 2020.
2. CONTRACTOR SHALL RETAIN THE SERVICES OF A REGISTERED LAND SURVEYOR TO LAYOUT ON THE GROUND ALL NEW ELEMENTS OF WORK. THE NEW WORK IS TO BE COMPLETED, MARKED, AND LAID OUT ON THE GROUND, REVIEWED AND APPROVED BY THE ARCHITECT PRIOR TO INSTALLATION. IF ANY WORK IS INSTALLED PRIOR TO THE ABOVE REQUIREMENT BEING MET, AND IF THE WORK IS NOT SATISFACTORY IN LAYOUT TO THE ARCHITECT, CONTRACTOR SHALL REPLACE THE WORK AT NO COST.
3. PRIOR TO ANY EXCAVATION, IN ADDITION TO "DIG SAFE", NOTIFY APPROPRIATE UTILITY COMPANY OR AUTHORITY TO VERIFY EXACT DEPTH AND LOCATION OF EXISTING UNDERGROUND UTILITIES. LOCATIONS AND DEPTHS OF EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY AND THE CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE AND PROTECT UTILITIES IN THE FIELD WHETHER OR NOT SHOWN ON THE DRAWINGS.
4. THE DOCUMENTS MAY INDICATE RESULTS OF BORINGS AND/OR TEST PITS. THESE INVESTIGATIONS AND RESULTANT INTERPRETATIONS WERE MADE FOR THE SOLE PURPOSE OF PROVIDING DESIGN DATA FOR THE USE OF THE DESIGN TEAM ONLY. INTERPRETATION OF THE DATA FOR PURPOSES OF CONSTRUCTION IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. DURING THE COURSE OF CONSTRUCTION, ALL INTERPRETATIONS OF SOIL SUITABILITY SHALL BE MADE BY THE ARCHITECT. THE DECISION OF THE ARCHITECT SHALL BE FINAL AND BINDING ON THE CONTRACTOR.
5. REFER TO THE SPECIFICATIONS. IN ADDITION TO THOSE REQUIREMENTS, SITE PREPARATION SHALL ALSO INCLUDE THE FOLLOWING:
   A. IN THE COURSE OF INSTALLING THE UNDERGROUND UTILITIES, REMOVE ANY ABANDONED FOUNDATION, UTILITY STRUCTURES, ETC., ENCOUNTERED WHICH INTERFERE WITH THE UTILITY WORK. ALL SUCH STRUCTURES SHALL BE COMPLETELY REMOVED AND SHALL BE BACKFILLED WITH GRAVEL COMPACTED IN 9" LIFTS TO 95% COMPACTION TO 6" BELOW THE BOTTOM OF THE PIPE AND UTILITY.
   B. IF DURING EXCAVATION THE TRENCH WIDTH EXCEEDS THE SUM OF THE PIPE O.D. PLUS 2'-0", PLACE AND COMPACT THE FILL TO 12" ABOVE THE PIPE AND RE-EXCAVATE TO REQUIRED GRADES.
   C. AT THE POINT WHERE BULK EARTH MOVING HAS BEEN COMPLETED TO THE SUBGRADE LEVEL AND PRIOR TO PLACING UTILITIES, CURBING, OR PAVING, PROOF ROLL THE ENTIRE AREA IN THE PRESENCE AND UNDER THE SUPERVISION OF THE SOILS LABORATORY. PROOF- ROLLING SHALL CONSIST OF MAKING NOT LESS THAN (5) PASSES OVER THE AREA WITH A VIBRATOR DRUM ROLLER WEIGHING AT LEAST 10,000 lbs. THE SOILS LAB WILL CONDUCT FIELD DENSITY TESTS AND WILL DETERMINE CORRECTIVE MEASURES TO BE DONE, IF ANY, BASED ON THE PROOF-ROLLING.
6. ALL UTILITY WORK SHALL BE PERFORMED IN ACCORDANCE WITH LOCAL TOWN SPECIFICATIONS.
7. WATER AND FIRE SERVICE PIPING SHALL BE CLASS 52 DOUBLE CEMENT LINED DUCTILE IRON WITH TYTON JOINTS. FITTINGS SHALL BE 350 LB. GREY IRON CASTINGS WITH MECHANICAL JOINT ENDS. ALL BENDS, TEES, ETC., SHALL BE JOINT RESTRAINED BY THE USE OF CONCRETE THRUST BLOCKS.
8. GATE VALVES SHALL BE CAST IRON BODY BRONZE MOUNTED, 200 PSI, COMPLETE WITH ROAD BOX AND CONFORMING IN EVERY RESPECT TO LOCAL SPECIFICATIONS.
9. STORM DRAINS 12" AND OVER SHALL BE ADS N-12 WATER TIGHT (WT) HDPE PIPE (H-20) WITH WATER TIGHT RUBBER GASKET JOINT UNLESS NOTED OTHERWISE. JOINTS SHALL MEET OR EXCEED ASTM D3212 LAB TEST AND ASTM D969 WATERTIGHT EXFILTRATION FIELD TEST.
10. SEWER PIPING AND STORM DRAINS 10" AND UNDER SHALL BE SANVALLE ASTM D-3034 SDR-35 P.V.C. SEWER PIPE WITH PUSH-ON RUBBER RING JOINTS. JOINTS SHALL MEET OR EXCEED ASTM F1417 WATERTIGHT FIELD TEST.
11. CONTRACTOR SHALL REFER TO SPECIFICATIONS AND DRAWINGS FOR PHASING OF PROJECT.
12. SEWER LINES SHALL BE INSTALLED AT MINIMUM 10 FOOT HORIZONTAL SEPARATION FROM ANY PROPOSED OR EXISTING WATER LINES.
13. WHENEVER SEWER LINES MUST CROSS WATER LINES THE SEWER SHALL BE INSTALLED SO THAT THE TOP OF THE SEWER IS AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN. WHERE 18 INCH VERTICAL SEPARATION & 10 FEET HORIZONTAL SEPARATION CAN NOT BE MET AT WATER AND SEWER CROSSINGS, BOTH THE WATER AND SEWER PIPE SHALL BE CONSTRUCTED OF MECHANICAL JOINT CEMENT-LINED DUCTILE IRON PIPE FOR A DISTANCE OF 10 FEET ON EACH SIDE OF CROSSING. BOTH PIPES SHALL BE PRESSURE TESTED BY AN APPROVED METHOD TO ASSURE WATERTIGHTNESS.
14. WHENEVER NEW SEWER LINES CONNECT INTO EXISTING SEWER MANHOLES THE CONTRACTOR SHALL REBUILD THE SEWER MANHOLE CHANNEL TO ACCOMMODATE THE NEW CONNECTION.
15. WHENEVER UTILITIES OR STRUCTURES ARE TO BE INSTALLED WITHIN CITY/TOWN PUBLIC OR PRIVATE LAYOUT, THE EXCAVATION SHALL BE BACKFILLED WITH FLOWABLE FILL. ALL AREAS OF ROADWAY PAVEMENT & WALKWAYS DISTURBED DURING CONSTRUCTION SHALL BE RE-PAVED PER LOCAL DPW STANDARDS.
16. WHENEVER ELECTRIC DUCT BANKS/CONDUITS MUST CROSS ANY UTILITY LINE SERVICE THE ELECTRIC DUCT BANKS/CONDUITS SHALL BE INSTALLED SO THAT THE BOTTOM OF THE ELECTRIC DUCT BANKS/CONDUITS ARE AT LEAST 12" ABOVE THE TOP OF THE UTILITY SERVICE. WHERE 12 INCH VERTICAL SEPARATION CAN NOT BE MET ABOVE THE TOP OF THE UTILITY SERVICE, THE ELECTRIC DUCT BANKS/CONDUITS SHALL BE RUN 12" BELOW THE BOTTOM OF THE UTILITY SERVICE.
17. CONTRACTOR SHALL MAKE PROVISIONS TO PROVIDE EXCAVATION AND BACKFILL SERVICES TO THE LOCAL GAS COMPANY FOR THE INSTALLATION OF NEW GAS SERVICE AND/OR THE THE REMOVAL OF EXISTING GAS SERVICES. COORDINATE ALL INSTALLATIONS AND REMOVAL OF GAS SERVICES WITH LOCAL GAS CO.
18. CONTRACTOR SHALL PREPARE AND SUBMIT THE EPA NOTICE OF INTENT (N.O.I.) FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER THE EPA NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEMS (NPDES) GENERAL PERMIT. CONTRACTOR SHALL DEVELOP AND IMPLEMENT A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) PER THE REQUIREMENTS OF THE EPA GENERAL PERMIT. AT PROJECT COMPLETION CONTRACTOR SHALL SUBMIT A NOTICE OF TERMINATION (N.O.T.) TO THE EPA.
19. IN THE EVENT THE CONTRACTOR IS TO INSTALL TOP COURSE OF PAVEMENT 60 OR MORE DAYS AFTER INSTALLATION OF BINDER COURSE, THE CONTRACTOR SHALL INSTALL ALL CATCH BASIN GRATES AND MANHOLE COVERS AT GRADE WITH BINDER COURSE AND SHALL BE RESPONSIBLE FOR RAISING STRUCTURES TO FINISHED GRADE.



2 CO.1 SITE ENTRANCE MAT DETAIL
N.T.S.
NOTE: IN THE EVENT THE CONTRACTOR IS TO INCLUDE ADDITIONAL SITE ENTRANCES ONTO THE PROJECT SITE, THE CONTRACTOR SHALL FURNISH & INSTALL AT NO ADDITIONAL COST TO THE OWNER AND SHALL CONFORM WITH THE SITE ENTRANCE MAT DETAIL.



3 CO.1 DETAIL OF DEWATERING BAG
SCALE: N.T.S.

STORMWATER SYSTEM MAINTENANCE NOTES

THE DRAINAGE SYSTEMS ARE TO BE MONITORED THROUGHOUT THE ENTIRE CONSTRUCTION PERIOD BY THE CONTRACTOR. UPON COMPLETION OF THE PROJECT THE CONTRACTOR SHALL DO A FULL MAINTENANCE OF THE STORMWATER SYSTEM AND SITE. UPON COMPLETION OF THE CONTRACTORS FINAL MAINTENANCE CLEAN UP THE PROJECT MONITORING SHALL BE THE RESPONSIBILITY OF THE NEWTON COMMONWEALTH GOLF COURSE, HEREAFTER REFERRED TO AS THE OWNER. DURING CONSTRUCTION THE CONTRACTOR SHALL BE REQUIRED TO KEEP AND SUBMIT A WEEKLY LOG OF ALL INSPECTIONS AND REQUIRED MAINTENANCE. THIS LOG SHALL BE MADE AVAILABLE TO THE NEWTON CITY ENGINEER, ARCHITECT & DESIGN ENGINEER AT ALL TIMES.

UPON SUBSTANTIAL COMPLETION OF THE PROJECT. THE OWNER SHALL DESIGNATE A QUALIFIED PROFESSIONAL ENTITY OR INDIVIDUAL TO PERFORM ALL MONITORING. THE NAME, ADDRESS AND TELEPHONE NUMBER OF THE ENTITY OR INDIVIDUAL SHALL BE PROVIDED TO THE NEWBURY CONSERVATION COMMISSION, PLANNING BOARD, DPW & BOH. THE OWNER'S REPRESENTATIVE SHALL BE REQUIRED TO KEEP A LOG OF ALL REQUIRED INSPECTIONS AND MAINTENANCE REQUIRED. THE LOG SHALL BE MADE AVAILABLE TO THE NEWTON CITY ENGINEER.

THE DRAINAGE SYSTEMS INCLUDE DEEP-SUMP CATCH BASINS, DOWNSPOUTS, AND SUBSURFACE INFILTRATION BEDS. THESE FACILITIES PROVIDE PARTIAL TREATMENT OF STORMWATER RUNOFF PRIOR TO DISCHARGE AND/OR INFILTRATION TO GROUNDWATER.

PRIOR TO THE COMMENCEMENT OF EARTHWORK ACTIVITIES, FURNISH ALL LABOR, EQUIPMENT AND TOOLS REQUIRED TO INSPECT AND CLEAN ALL EXISTING CATCH BASINS, DRAIN INLETS, DRAIN MANHOLES, OUTLETS AND INTERCONNECTING PIPE WITHIN THE LIMITS OF THE PROPERTY. FURNISH A REPORT OUTLINING INSPECTION AND CLEANING RESULTS TO THE TRE ARCHITECT.

CONSTRUCTION MONITORING/MAINTENANCE PROCEDURES SHALL BE AS FOLLOWS: (RESPONSIBILITY OF CONTRACTOR)

1. SILT BARRIER:
   MONITOR SILT BARRIER ON A WEEKLY BASIS AND AFTER EVERY RAIN STORM. REPAIR ANY DAMAGED AREAS IMMEDIATELY. REMOVE AND DISPOSE OF ALL CAPTURED SEDIMENT.
2. PAVED AREAS:
   PARKING LOT, ROAD AND ALL ACCESS WAYS AND GUTTERS SHALL BE SWEPT CLEAN OF ALL DEBRIS. SWEEPING SHALL BE PERFORMED ON A WEEKLY BASIS.
3. DRAIN INLETS:
   ALL DRAIN INLETS SHALL BE INSTALLED AS DETAILED AND INSPECTED AFTER EVERY RAIN STORM. SHOULD CATCH BASIN SUMPS BECOME FILLED WITH SEDIMENT TO HALF ITS DEPTH (2') OR (1') FOR DRAIN MANHOLES THEY SHALL BE CLEANED IMMEDIATELY.
4. CATCH BASINS AND DRAIN MANHOLES:
   ALL CATCH BASINS AND DRAIN MANHOLES SHALL BE INSTALLED AS DETAILED AND INSPECTED AFTER EVERY RAIN STORM. SHOULD CATCH BASIN SUMPS BECOME FILLED WITH SEDIMENT TO HALF ITS DEPTH (2') OR (1') FOR DRAIN MANHOLES THEY SHALL BE CLEANED IMMEDIATELY.
5. SUBSURFACE DRAINAGE BEDS:
   SUBSURFACE DRAINAGE BEDS SHALL BE INSPECTED AFTER EVERY RAIN STORM. CARE SHALL BE TAKEN TO PREVENT SILTATION OF THE BEDS AFTER INSTALLATION. PRETREATMENT BMP'S (CATCH BASINS AND WATER QUALITY STRUCTURES) MUST BE MAINTAINED AND CLEANED PER THE AFOREMENTIONED PROCEDURES TO ENSURE PROPER FUNCTIONING. BEDS SHALL BE MONITORED FOR ANY PONDING AND SEDIMENT/DEBRIS. SEDIMENT AND DEBRIS SHALL BE REMOVED BY A VAC-TRUCK.

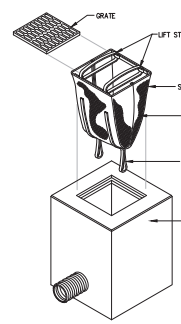
DISPOSAL OF THE ACCUMULATED SEDIMENT MUST BE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL GUIDELINES AND REGULATIONS.

POST CONSTRUCTION MONITORING/MAINTENANCE PROCEDURES SHALL BE AS FOLLOWS: (RESPONSIBILTY OF THE OWNER)

1. PAVED AREAS:
   PARKING LOT, ROAD AND ALL ACCESS WAYS AND GUTTERS SHALL BE SWEPT CLEAN OF ALL DEBRIS. SWEEPING SHALL BE PERFORMED TWICE ANNUALLY USING A MECHANICAL SWEEPER SCHEDULED IN SPRING AND FALL.
2. CATCH BASINS:
   ALL CATCH BASINS SHALL BE INSPECTED TO ENSURE THEY HAVE ADEQUATE SUMP CAPACITY, OIL/GREASE HOODS ARE IN PLACE, FRAMES AND GRATES ARE NOT DAMAGED. CATCH BASINS SHALL BE INSPECTED EVERY THREE MONTHS SCHEDULED IN SPRING, SUMMER, FALL AND WINTER AND AT THE END OF THE FOLIAGE AND SNOW REMOVAL SEASONS. CATCH BASIN SUMPS SHALL BE CLEANED ANNUALLY OR WHEN THE CATCH BASIN SUMPS BECOME FILLED WITH SEDIMENT TO HALF ITS DEPTH (2').
3. DRAIN MANHOLES:
   ALL DRAIN MANHOLES SHALL BE INSPECTED TO ENSURE COVERS AND GRATES ARE NOT DAMAGED AND ARE DRAINING FREELY ON A MONTHLY BASIS. MANHOLES SHALL BE CLEANED SEMIANNUALLY AT THE END OF FOLIAGE AND SNOW REMOVAL SEASONS.
4. SUBSURFACE DRAINAGE BEDS:
   SUBSURFACE DRAINAGE BEDS SHALL BE INSPECTED SEMIANNUALLY AT THE END OF FOLIAGE AND SNOW REMOVAL SEASONS, AND AFTER EVERY MAJOR STORM EVENT (1" OR GREATER RAINFALL OVER A 24 HOUR PERIOD). BEDS SHALL BE MONITORED FOR ANY PONDING AND SEDIMENTATION/DEBRIS. SEDIMENT AND DEBRIS SHALL BE REMOVED BY A VAC-TRUCK. AFTER THE MAJOR STORM EVENT THE SYSTEM SHALL BE MONITORED FOR A 72 HOUR PERIOD. IF SYSTEM FAILS TO DRAIN WITHIN A 72 HOUR PERIOD THE OWNER SHALL RETAIN A QUALIFIED PROFESSIONAL ENGINEER TO ASSESS WHETHER THE INFILTRATION BED HAS FAILED AND RECOMMENDED ANY CORRECTIVE ACTION THAT IS REQUIRED.
5. RIP-RAP SPILLWAYS, CURB CUT INLETS & LEVEL SPREADERS:
   INSPECT ALL RIP-RAP SPILLWAYS, CURB CUT INLETS AND LEVEL SPREADERS TWICE A YEAR, AND AFTER EVERY MAJOR STORM EVENT (1" RAINFALL OVER A 24-HOUR PERIOD). INSPECT IF RIP-RAP HAS BEEN DAMAGED AND NOTE ANY EROSION.

DISPOSAL OF THE ACCUMULATED SEDIMENT MUST BE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL GUIDELINES AND REGULATIONS. IF ANY STRUCTURE OR OUTFALL INDICATES THE PRESENCE OF PETROLEUM IT SHALL BE REMOVED AND DISPOSED OF IMMEDIATELY IN ACCORDANCE WITH APPLICABLE REGULATIONS.

THE RESULTS OF THE INSPECTIONS, ALONG WITH THE DETERMINATION OF ANY REMEDIAL WORK THAT MAY BE FOUND TO BE NECESSARY AS A RESULT OF THE INSPECTION, SHALL BE SUBMITTED TO THE NEWTON CITY ENGINEER WITHIN (30) DAYS OF THE INSPECTION. PROVISIONS FOR INSPECTIONS AND ANY REMEDIAL REPAIRS DEEMED NECESSARY SHALL BE THE RESPONSIBILITY OF THE OWNER.



4 CO.1 SEDIMENT CONTROL BAG
N.T.S.

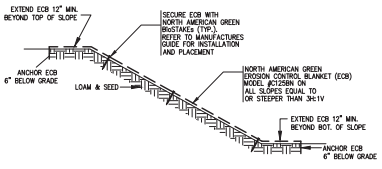
EROSION & SEDIMENT CONTROL NARRATIVE

1. EROSION CONTROL MEASURES SHOWN HEREIN ARE A MINIMUM. CONTRACTOR SHALL FURNISH THE SERVICES OF AN INDEPENDENT PROFESSIONAL ENGINEER OR A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL TO PREPARE A STORMWATER POLLUTION PREVENTION PLAN (SWPPP). PRIOR TO COMMENCEMENT OF DEMOLITION SITE PREPARATION OR EARTHWORK SAID PLAN SHALL BE IMPLEMENTED. THE INITIAL METHOD OUTLINED IS INTENDED TO ROUTE ALL PRACTICABLE SURFACE WATER FROM THE EXCAVATION AREA INTO EROSION CONTROL FACILITIES. THE CONTRACTOR SHALL INSTALL ANY ADDITIONAL PROTECTIVE MEASURES AS MAY BE REQUIRED TO CONTROL EROSION AND SEDIMENT RUNOFF FROM THE SITE DURING CONSTRUCTION.
2. STAKE THE LIMIT OF WORK TO ENSURE THAT ALL WORK WILL BE INSIDE THE EROSION CONTROL FACILITY. THE LIMIT OF WORK WILL BE INDICATED BY ORANGE CONSTRUCTION MESH. THE MESH WILL INCLUDE BUILDINGS, PARKING FACILITIES, ACCESS ROADS, DETENTION/RETENTION BASINS, EQUIPMENT STAGING AREAS AND ALL MATERIAL STOCKPILE AND HANDLING AREAS.
3. PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES ON SITE, A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD ON SITE TO ESTABLISH SUPERVISORY AND INSPECTION PROCEDURES FOR SEDIMENT AND EROSION CONTROL MEASURES. THIS MEETING SHALL BE ATTENDED BY THE CONTRACTOR, APPLICANT/OWNER, ARCHITECT/ENGINEER AND THE LOCAL CONSERVATION AGENT.
4. THE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR PROTECTION OF ANY LANDS OR PROPERTIES AS MAY BE SUBJECT TO ANY AFFECT OR BY-PRODUCT OF HIS DEMOLITION/CONSTRUCTION EFFORT. SPECIAL CARE SHALL BE TAKEN TO AVOID EROSION OF FILL OR CUT SLOPES ONTO ADJACENT PROPERTIES OR DOWNSTREAM SILTATION OF DIVERSION OF EXISTING DRAINAGE. ANY DAMAGE IS TO BE CORRECTED IMMEDIATELY BY THE CONTRACTOR AT NO COST TO THE OWNER.
5. THE WORK IS TO BE PHASED. CONSTRUCT THE PROJECT IN PHASES AS DIRECTED BY THE ARCHITECT/ENGINEER TO SUIT THE PROJECT SCHEDULE.
6. GENERAL SEQUENCE SHALL BE AS FOLLOWS:
   A. ESTABLISH HAYBALE/SILT BARRIER & CONSTRUCTION FENCE PRIOR TO ANY EARTHWORK
   B. INSTALL SITE ENTRANCE MATS AT SITE CONSTRUCTION ENTRANCES AS DETAILED.
   C. CONSTRUCT TEMPORARY SETTLING BASINS AND INSTALL EROSION CONTROL DEVICES.
   D. CLEAN AND GRUB VEGETATION AS REQUIRED. REMOVE AND DISPOSE OF ALL STUMPS FROM SITE.
   E. PERFORM MASS EARTHWORK AND ROCK EXCAVATION FOR THE SITE.
   F. PROTECT ALL EXISTING AND PROPOSED DRAINAGE STRUCTURES FROM SEDIMENT BY THE USE OF DANDY BAGS AND HAY BALES AT CATCH BASIN AS DETAILED.
7. AT NO TIME SHALL SLT LADEN WATER BE ALLOWED TO ENTER ENVIRONMENTALLY SENSITIVE AREAS AND EXISTING OR NEW DRAINAGE SYSTEMS. RUNOFF FROM DISTURBED SURFACES SHALL BE DIRECTED THROUGH SETTLING BASINS AND EROSION CONTROL MEASURES PRIOR TO ENTERING ANY ENVIRONMENTALLY SENSITIVE AREAS OR THE DRAINAGE SYSTEM.
8. DEWATER ALL EXCAVATIONS AND TRENCHES, AS REQUIRED, WITH DEWATERING BAGS AND OUTFALLS AT CONTROLLED TEMPORARY SETTLING BASINS.
9. INSTALL STONE REINFORCED SILT BARRIER AROUND STOCKPILE AREAS, TRUCK WASH DOWN AREAS AND VEHICLE FUELING AREAS.
10. INSTALL TEMPORARY SEED OR MULCH AND EROSION CONTROL BLANKETS (ECB) TO ALL AREAS IMMEDIATELY UPON FORMATION OF GRADES.
11. SURFACE STABILIZATION MUST BE IMPLEMENTED WITHIN 14 DAYS AFTER CONSTRUCTION ACTIVITY IN A PORTION OF THE SITE THAT HAS CEASED OR IS TEMPORARILY HALTED.
12. TRUCK WASH DOWN AREA SHALL BE 20'(L)X20'(W) AT A MINIMUM SURROUNDED BY STONE REINFORCED SILT BARRIER. ACCUMULATED CONCRETE SHALL BE EITHER RECYCLED ON SITE OR DISPOSED OF AT AN APPROVED OFF-SITE LOCATION.
13. CONTRACTOR REFUELING AREA SHALL BE 20'(L)X20'(W) AT A MINIMUM SURROUNDED BY STONE REINFORCED SILT BARRIER. AREA SHALL BE SCRAPED AND REPRESSED MONTHLY. THE DEPTH SHALL BE DETERMINED IN THE FIELD. SCRAPED MATERIAL SHALL BE REMOVED AND DISPOSED OF AT AN APPROVED OFF-SITE LOCATION.
14. AS SOON AS PAVING OF DRIVES IS COMPLETED, ALL DRAINAGE STRUCTURES SHALL BE CLEANED OF ANY ACCUMULATED SEDIMENT. THEREAFTER, CLEAN UP SHOULD FOLLOW LONG TERM MAINTENANCE PLAN.
15. CONTINUALLY MONITOR ALL SILT BARRIER AND EROSION CONTROL DEVICES ON A WEEKLY BASIS, REPAIR ANY DAMAGED AREAS IMMEDIATELY. REMOVE ALL CAPTURED SEDIMENT AS REQUIRED AND DISPOSE OF. INSTALL ADDITIONAL MEASURES AS DIRECTED BY THE OWNER, LOCAL DPW, CONSERVATION OFFICER AND THE ARCHITECT/ENGINEER.
16. CONTRACTOR SHALL REDUCE SURFACE AND AIR MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES AS REQUIRED BY CONSTRUCTION ACTIVITIES. CONSTRUCTION ACTIVITIES SHALL BE SO SCHEDULED SO THAT THE LEAST AREA OF DISTURBED SOIL IS EXPOSED AT ONE TIME. IN DISTURBED AREAS NOT SUBJECT TO TRAFFIC, CONTRACTOR SHALL USE TEMPORARY SEEDING AND MULCHING OPERATIONS. IN DISTURBED AREAS SUBJECT TO TRAFFIC, CONTRACTOR SHALL SPRINKLE SURFACE WITH WATER TO MINIMIZE DUST. DUST CONTROL MEASURES SHALL BE MAINTAINED THROUGH DRY WEATHER PERIODS UNTIL ALL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED.
17. REMOVE CONSTRUCTION FENCE, SILT BARRIER AND EROSION CONTROL MEASURES ONLY AFTER ESTABLISHMENT OF PERMANENT VEGETATION.

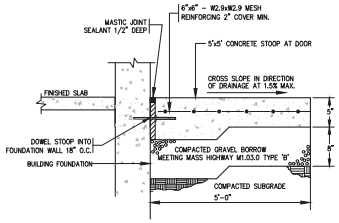
SITE OPERATIONAL PROCEDURES

OPERATION PROCEDURES DURING CONSTRUCTION SHALL BE BY THE CONTRACTOR. AFTER PROJECT COMPLETION OPERATION PROCEDURES SHALL BE THE RESPONSIBILITY OF THE OWNER AND ARE AS FOLLOWS:

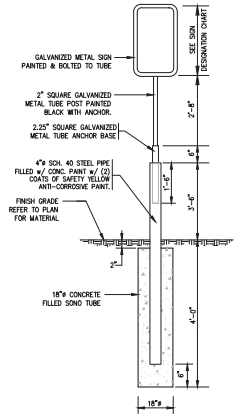
1. GOOD HOUSE KEEPING AND MATERIAL MANAGEMENT REDUCES THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORMWATER RUNOFF. A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE DEVELOPED BY THE CONTRACTOR WHICH SHALL INCLUDE THE FOLLOWING AT A MINIMUM:
   A. ALL MATERIALS STORED ON-SITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
   B. PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.
   C. SUBSTANCES SHOULD NOT BE MIXED WITH ONE ANOTHER, UNLESS RECOMMENDED BY THE MANUFACTURER.
   D. WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF A CONTAINER.
   E. THE SYSTEM'S MANAGER SHALL INSPECT THE SITE DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS ON-SITE, DURING ALL CONSTRUCTION PHASES
   F. ORIGINAL MATERIALS LABELS AND MATERIAL SAFETY DATA SHEETS SHALL BE KEPT; THEY RETAIN IMPORTANT INFORMATION.
   G. PETROLEUM PRODUCTS:
      1. ALL ON-SITE VEHICLES AND PARKING AREAS SHALL BE REGULARLY MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO PREVENT LEAKAGE
      2. PETROLEUM PRODUCTS SHALL BE STORED UNDER COVER AND SHALL BE IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED.
   H. FERTILIZERS:
      1. FERTILIZERS SHALL ONLY BE USED IN THE MINIMUM AMOUNTS AS RECOMMENDED BY THE MANUFACTURER.
      2. THE CONTENTS OF ANY UN-USED FERTILIZER SHALL BE TRANSFERRED TO A CLEARLY LABELED, SEALABLE PLASTIC BIN, TO AVOID SPILLAGE.
   I. PAINTS, SOLVENTS.
      1. ALL PAINTS AND SOLVENTS SHALL BE STORED IN ORIGINAL MANUFACTURER'S CONTAINERS IN A COVERED LOCATION.
      2. THE USE OF PAINTS AND SOLVENTS SHALL, WHENEVER POSSIBLE, BE LIMITED TO SERVICE OR STORAGE BAYS. WHERE NOT POSSIBLE, THE WORK AREA SHALL BE PROTECTED WITH IMPERMEABLE DROP CLOTHES OR TARPS. AT NO POINT SHALL PAINT AND SOLVENTS BE USED IN PARKING OR ACCESS WAYS THAT ARE TRIBUTARY TO THE DRAINAGE SYSTEM.
2. SPILL CONTROL PRACTICES:
   A. MANUFACTURER'S RECOMMENDED METHODS SHALL BE CLEARLY POSTED FOR SPILL CLEAN-UP AND SITE PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES AND THE LOCATIONS OF CLEAN-UP INFORMATION AND SUPPLIES.
   B. MATERIAL AND EQUIPMENT NECESSARY FOR SPILL CLEAN-UP WILL BE KEPT ON-SITE IN A DESIGNATED MATERIAL STORAGE AREA. EQUIPMENT WILL INCLUDE, BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, ABSORBENT MATERIALS, SAND, SANDDUST AND PLASTIC & METAL TRASH CONTAINERS SPECIFICALLY KEPT AND LABELED FOR THIS PURPOSE.
   C. ALL SPILLS WILL BE CLEANED-UP IMMEDIATELY AFTER DISCOVERY.
   D. SPILLS OF TOXIC OR HAZARDOUS MATERIAL OR NATURE WILL BE REPORTED TO THE AP



1 C0.2 SLOPE PROTECTION TREATMENT DETAIL
N.T.S.

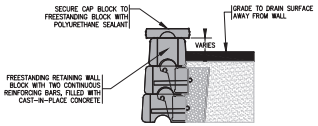


5 C0.2 CONCRETE STOOP DETAIL @ DOORS
NTS

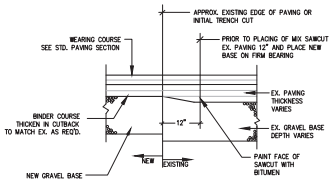


SIGN DESIGNATION CHART			
SIGN DESIGNATION	HEIGHT	WIDTH	SIGN
R1-1 (STOP)	30"	30"	STOP
R7-8 (ACCESSIBLE PARKING)	18"	12"	RESERVED PARKING
R7-8b (VAN ACCESSIBLE)	6"	12"	VAN ACCESSIBLE

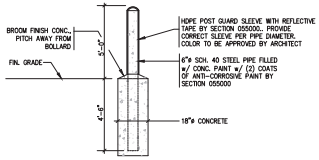
9 C0.2 SITE SIGNAGE POST, DESIGNATION & DIMENSION SCHEDULE
N.T.S.
NOTES:
1. ALL TRAFFIC CONTROL AND WARNING SIGNS SHALL MEET THE MATERIAL REQUIREMENTS OF "ALUMINUM TYPE A" AS DEFINED IN SECTION 828 "TRAFFIC SIGNS" OF THE MASSACHUSETTS HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, LATEST EDITION.
2. ALL SIGNS SHALL CONSIST OF A WHITE BACKGROUND WITH HIGH CONTRAST BLACK LETTERS UNLESS OTHERWISE NOTED.
3. SIGN DESIGNATIONS TAKEN FROM THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION).



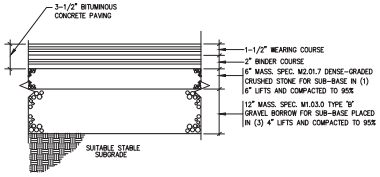
12 C0.2 FREESTANDING RETAINING WALL SECTION
N.T.S.
NOTE:
1. DESIGN BASED ON REDI-ROCK REINFORCED SEGMENTAL WALL.
2. REFER TO DETAILS 10 AND 11 ON SHEET C0.2 FOR BASED OF RETAINING WALLS.



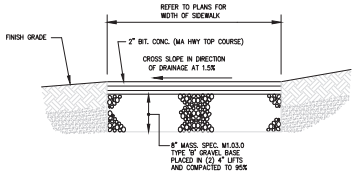
2 C0.2 DETAIL OF PAVING ADDITION AT EXISTING AREAS
N.T.S.



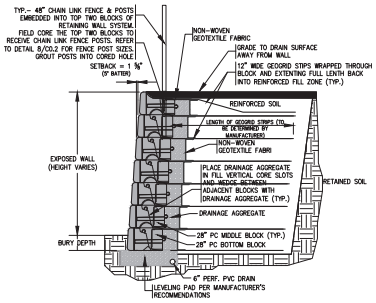
6 C0.2 PROTECTIVE BOLLARD DETAIL
N.T.S.
NOTE:
1. BOLLARD, GALVANIZED & PRIME COATED AND COVER BY SECTION 055000.
2. HDPE POST GUARDS TO BE FITTED TO THE DIAMETER OF THE POSTS. TWO REFLECTIVE SAFETY STRIPES ON EACH BOLLARD.
3. HDPE POST GUARDS SHALL BE STANDARD BUMPER POST BY STOR-QUIP SYSTEMS, INC., BOLLARDGARD BY INNOPLAST, POST GUARD BY ENCORE COMMERCIAL PRODUCTS, INC. OR APPROVED EQUAL.



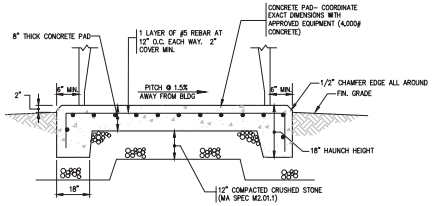
3 C0.2 STANDARD PAVING SECTION
N.T.S.



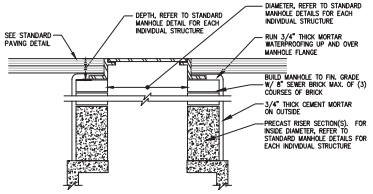
7 C0.2 BITUMINOUS CONCRETE WALK DETAIL
N.T.S.



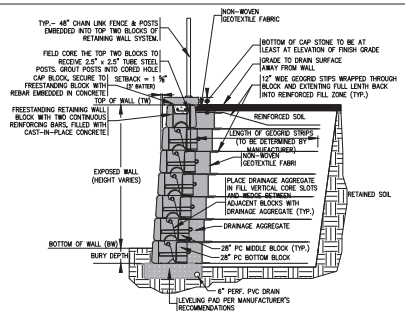
10 C0.2 TYPICAL RETAINING WALL SECTION
N.T.S.
NOTE:
DESIGN BASED ON REDI-ROCK REINFORCED SEGMENTAL WALL.



4 C0.2 CONCRETE EQUIPMENT PAD DETAIL
N.T.S.
NOTE:
1. CONTRACTOR TO FURNISH & INSTALL ALL REQUIRED MATERIALS FOR CAST-IN-PLACE PADS WITH THE FOLLOWING DIMENSIONS:
   PAD 1: 7.0'W x 23.0'L (FUEL TANKS)
   PAD 2: 9.0'W x 11.0'L (CHEMICAL STORAGE BUILDING)
   PAD 3: 7.0'W x 17.5'L (FUTURE WASHDOWN SYSTEM)
2. EXACT DIMENSIONS TO BE COORDINATED WITH THE APPROVED EQUIPMENT DIMENSIONS.



8 C0.2 MANHOLE RISER DETAIL
N.T.S.



11 C0.2 RETAINING WALL SECTION AT NORTH DRIVEWAY
N.T.S.
NOTE:
DESIGN BASED ON REDI-ROCK REINFORCED SEGMENTAL WALL.

RDA

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Rockland MA, 02370

FOR SITE PLAN APPROVAL

NEWTON COMMONWEALTH GOLF COURSE
Maintenance Facilities Improvements & Renovations
212 Kenrick Street, Newton, MA 02458

SITE DETAILS

Revisions:

No.	Date	Description

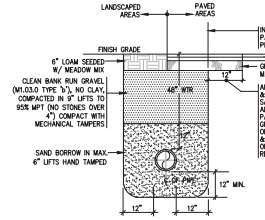
Drawn By: NCK
Checked By: CMG
Approved By: CMG

Drawing Scale: AS NOTED

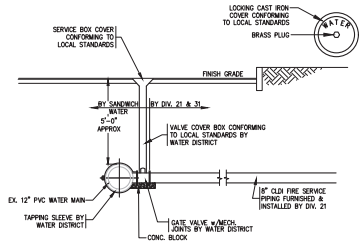
Date: SEPTEMBER 15, 2021

C0.2

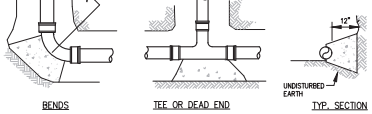
139-22



(1) 03.3 TYP. TRENCH SECTION FOR WATER
N.T.S.
NOTE:
THE FIRE PROTECTION CONTRACTOR SHALL FURNISH AND INSTALL ALL TAPPING SLEEVES, GATE VALVES, ROAD BOXES, PIPING AND THRUST BLOCKS REQUIRED TO COMPLETE THE WORK UNDER SECTION 210000. THE SITE CONTRACTOR SHALL FURNISH ALL LABOR, EQUIPMENT AND EARTH MATERIALS TO EXCAVATE, BED AND BACKFILL THE WORK OF DIV. 21 UNDER SECTION 312000.



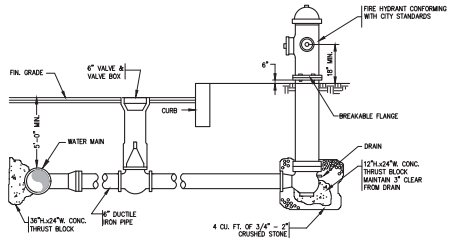
(2) 03.3 WATER SERVICE TAPPING SCHEMATIC DETAIL
N.T.S.
NOTE:
THE FIRE PROTECTION CONTRACTOR SHALL FURNISH AND INSTALL ALL TAPPING SLEEVES, GATE VALVES, ROAD BOXES, PIPING AND THRUST BLOCKS REQUIRED TO COMPLETE THE WORK UNDER SECTION 210000. THE SITE CONTRACTOR SHALL FURNISH ALL LABOR, EQUIPMENT AND EARTH MATERIALS TO EXCAVATE, BED AND BACKFILL THE WORK OF DIV. 21 UNDER SECTION 312000.



(3) 03.3 PRECAST CONCRETE THRUST BLOCK DETAIL
N.T.S.
-CONCRETE SHALL BE 4,000 PSI TYPE PLACED AGAINST UNDISTURBED EARTH
-ALL BLOCKS SHALL BE MIN. 1'-0" HIGH

TABLE OF BEARING AREAS (s.f.)

SIZE OF MAIN (in.)	TEES & PLUGS	VALVES	BENDS			
			90°	45°	22-1/2°	11-1/4°
≤ 4"	2	1	2	1	1	1
6"	3	2	3	2	2	2
8"	4	3	5	3	2	2
≥ 10"	9	4	10	6	4	3

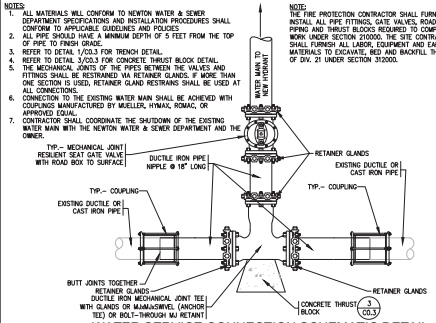


THE INSTALLATION OF THE FIRE HYDRANT, PIPING AND FITTINGS SHALL BE FURNISHED & INSTALLED BY DIV. 21. EXCAVATION, BEDDING AND DRAINAGE STONE SHALL BE FURNISHED & INSTALLED BY DIV. 31.

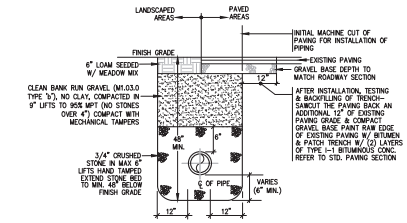
(4) 03.3 FIRE HYDRANT DETAIL
N.T.S.

NOTES:
1. ALL MATERIALS WILL CONFORM TO NEWTON WATER & SEWER DEPARTMENT SPECIFICATIONS AND INSTALLATION PROCEDURES SHALL CONFORM TO APPLICABLE GUIDELINES AND POLICIES
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5 FEET FROM THE TOP OF PIPE TO FINISH GRADE.
3. REFER TO DETAIL 1/03.3 FOR TRENCH DETAIL.
4. REFER TO DETAIL 3/03.3 FOR CONCRETE THRUST BLOCK DETAIL.
5. THE MECHANICAL JOINTS OF THE PIPES BETWEEN THE VALVES AND FITTINGS SHALL BE RESTRAINED VIA RETAINER GLANDS. IF MORE THAN ONE SECTION IS USED, RETAINER GLAND RESTRAINS SHALL BE USED AT ALL CONNECTIONS.
6. CONNECTION TO THE EXISTING WATER MAIN SHALL BE ACHIEVED WITH COUPLINGS MANUFACTURED BY MUELLER, HYMAX, ROMAC, OR APPROVED EQUAL.
7. CONTRACTOR SHALL COORDINATE THE SHUTDOWN OF THE EXISTING WATER MAIN WITH THE NEWTON WATER & SEWER DEPARTMENT AND THE OWNER.

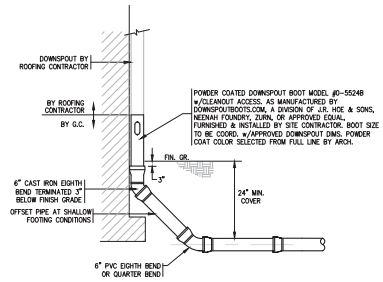
NOTE:
THE FIRE PROTECTION CONTRACTOR SHALL FURNISH AND INSTALL ALL PIPE FITTINGS, GATE VALVES, ROAD BOXES, PIPING AND THRUST BLOCKS REQUIRED TO COMPLETE THE WORK UNDER SECTION 210000. THE SITE CONTRACTOR SHALL FURNISH ALL LABOR, EQUIPMENT AND EARTH MATERIALS TO EXCAVATE, BED AND BACKFILL THE WORK OF DIV. 21 UNDER SECTION 312000.



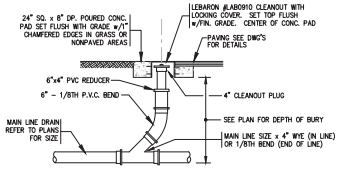
(5) 03.3 WATER SERVICE CONNECTION SCHEMATIC DETAIL
N.T.S.



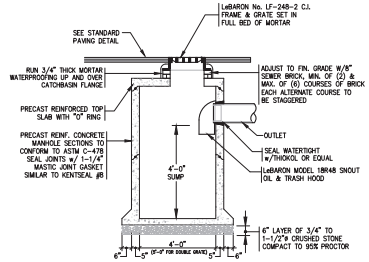
(6) 03.3 TYPICAL TRENCH SECTION FOR DRAINAGE & SEWER
N.T.S.



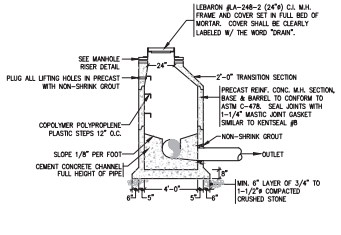
(7) 03.3 DOWNSPOUT CONNECTION AT GRADE DETAIL
N.T.S.
NOTE:
REFER TO DRAIN PIPE TRENCH SECTION DETAIL FOR PIPE BEDDING REQUIREMENTS



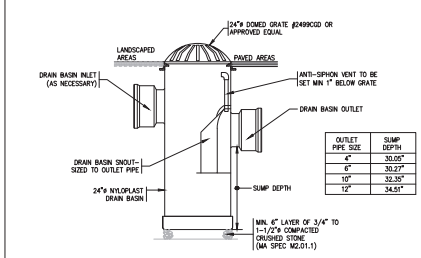
(8) 03.3 GROUND CLEANOUT DETAIL
N.T.S.



(9) 03.3 CATCH BASIN DETAIL
N.T.S.

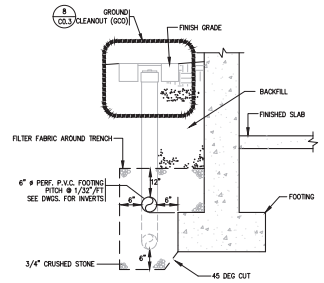


(10) 03.3 STANDARD DRAIN MANHOLE DETAIL
N.T.S.

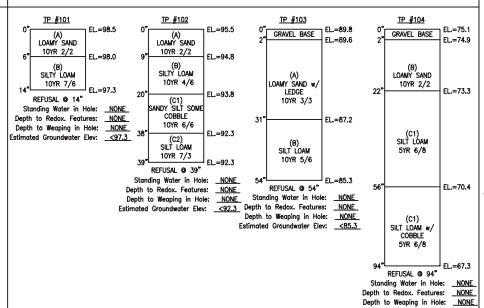


OUTLET PIPE SIZE	SUMP DEPTH
4"	30.00"
6"	30.27"
10"	32.35"
12"	34.51"

(13) 03.3 PLASTIC YARD DRAIN INLET DETAIL
N.T.S.
NOTE:
1. ALTERNATE MANUFACTURERS SHALL INCLUDE HARCO AND ADS PIPE.
2. ALL GRATES SHALL BE PEDESTRIAN GRADE AND MEET THE REQUIREMENTS OF MAAB/ADA.
3. FURNISH & INSTALL SEDIMENT CONTROL BAGS IN ALL DRAIN INLET STRUCTURES. INSPECT & MAINTAIN ALL STRUCTURES ON A WEEKLY BASIS UNTIL SITE IS ENTIRELY STABILIZED.



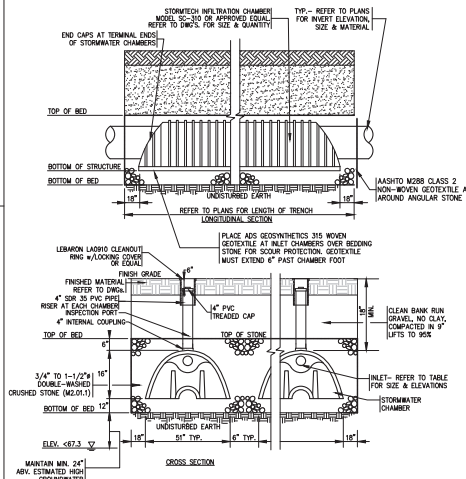
(11) 03.3 FOOTING DRAIN DETAIL
N.T.S.
NOTE:
FURNISH & INSTALL GROUND CLEANOUTS AT START OF RUN, CHANGES IN DIRECTION GREATER THAN 45 DEGREES AND AT SOFT INTERVALS SEE GROUND CLEANOUT DETAIL.



(12) 03.3 STORMWATER SYSTEM SOIL LOGS
NOTES:
1. TEST PITS #101 THROUGH #104 WERE PERFORMED ON SEPTEMBER 3, 2020 BY NATHAN C. KETCHEL (SE#12894).

SUBSURFACE INFILTRATION BED ELEVATIONS

STRUCTURE #	MIN. FIN. GRADE	INV. IN ELEV.	INV. OUT ELEV.	BOTTOM OF BED	BOTTOM OF STRUCTURE	TOP OF BED	DETAIL
SIB #1	73.8±	70.50 (6" PVC)	70.50 (6" PVC)	69.30	70.30	72.13	14/C0.3



(14) 03.3 SUBSURFACE INFILTRATION CHAMBER BED SYSTEM DETAIL
N.T.S.
NOTES:
1. REFER TO PLAN 1/C2.1 FOR LOCATIONS OF INSPECTION PORTS. CONTRACTOR TO FURNISH ALL MATERIAL AND LABOR TO CONNECT 6" PVC INSPECTION RISERS TO CHAMBERS
2. REFER TO PLAN 1/C2.1 FOR CHAMBER CONFIGURATIONS AND VOLUME REQUIREMENTS.

RDA
Raymond Design Associates, Inc.
Architects & Planners
60 Ledgewood Place
Rockland MA, 02370

FOR SITE PLAN APPROVAL

NEWTON COMMONWEALTH GOLF COURSE
Maintenance Facilities Improvements & Renovations
212 Kenrick Street, Newton, MA 02458

SITE DETAILS

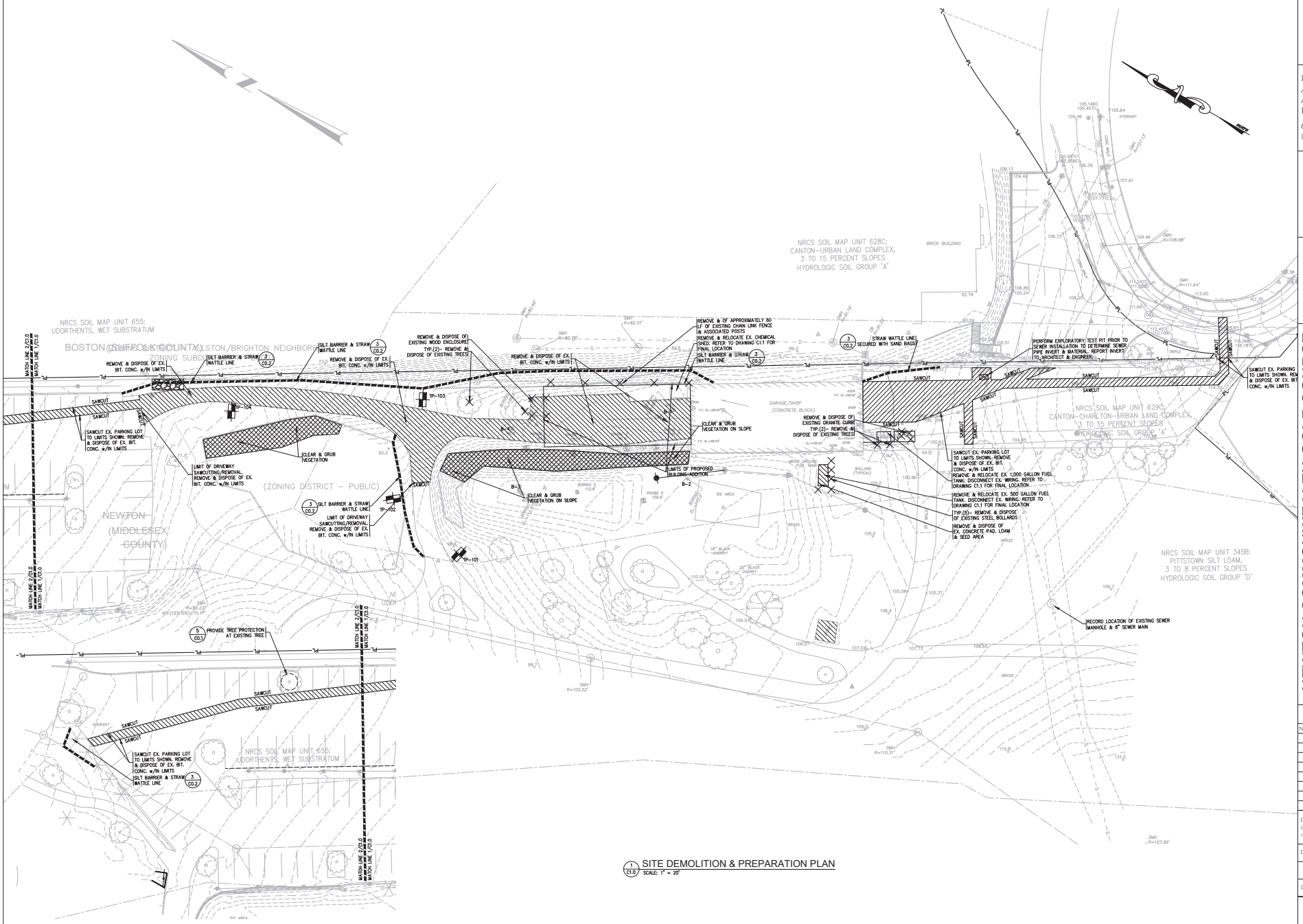
Revisions:

No.	Date	Description

Drawn By: NCK
Checked By: CMG
Approved By: CMG
Drawing Scale: AS NOTED
Date: SEPTEMBER 15, 2021

C0.3

139-22



1 C1.0 SITE DEMOLITION & PREPARATION PLAN
SCALE: 1" = 20'

2 C1.0 PARTIAL SITE DEMOLITION & PREPARATION PLAN
SCALE: 1" = 20'

RDA

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SITE DEMOLITION & PREPARATION PLAN

Revisions:

No.	Date	Description

Drawn By: NCK
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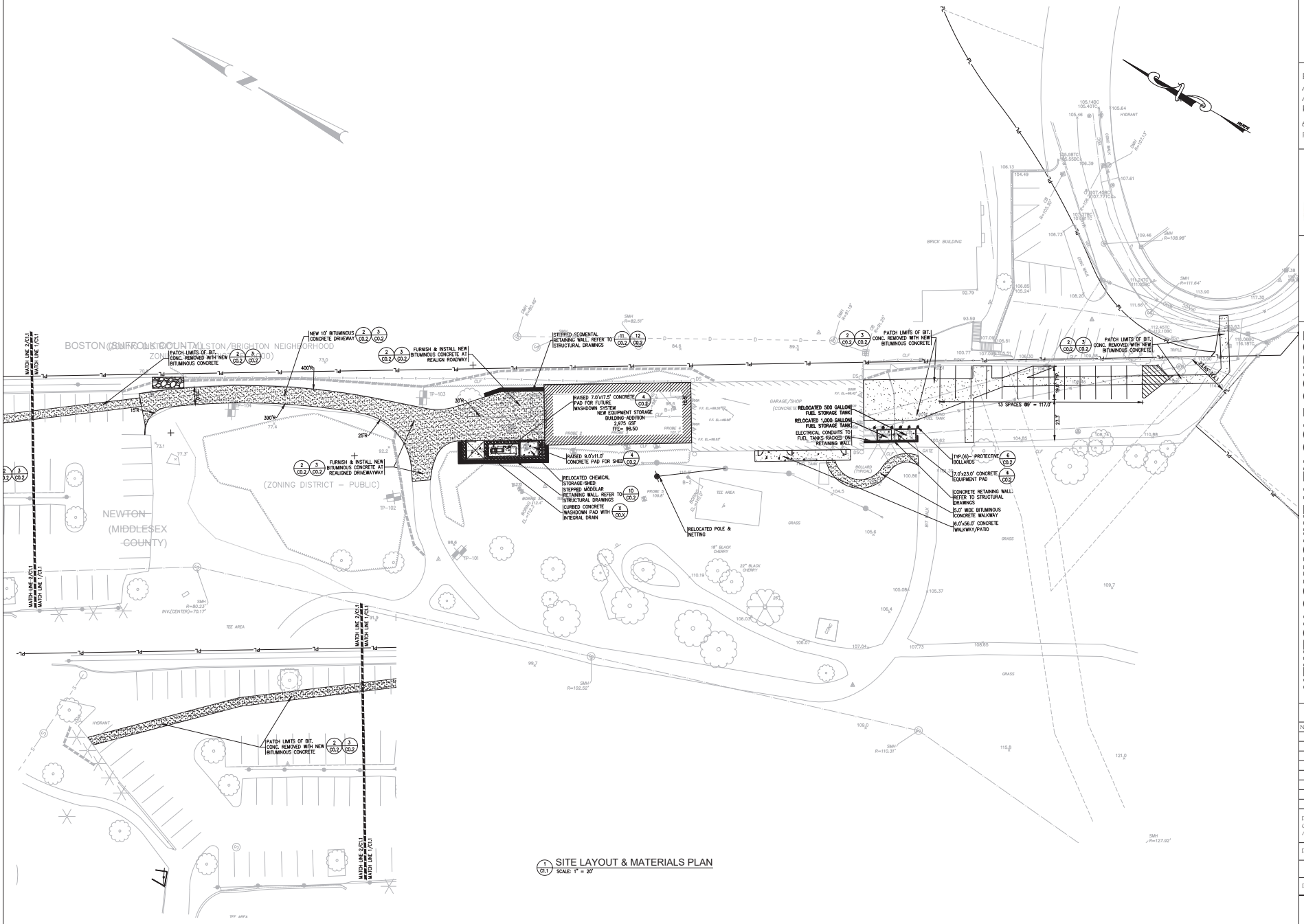
Approved By: CMG

Drawing Scale: 1" = 20'

Date: SEPTEMBER 15, 2021

C1.0



1 C1.1 SITE LAYOUT & MATERIALS PLAN
SCALE: 1" = 20'

2 C1.1 PARTIAL SITE LAYOUT & MATERIALS PLAN
SCALE: 1" = 20'

GRAPHIC SCALE
20 0 10 20 40 60
(IN FEET)
1 inch = 20 ft.

RDA

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Architects & Planners
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SEPTEMBER 20, 2021
FOR SITE PLAN APPROVAL

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Maintenance Facilities Improvements & Renovations
212 Kenrick Street, Newton, MA 02458

SITE LAYOUT & MATERIALS PLAN

Revisions:

No.	Date	Description
	9/23/2020	REVISED FOOTPRINT

Drawn By: NCK
Checked By: CMG
Approved By: CMG

Drawing Scale: 1" = 20'

Date: SEPTEMBER 15, 2021

C1.1

139-22

DOWNSPOUTS				
STRUCTURE #	FINISH GRADE	INV. OUT ELEV.	DOWNSPOUT DETAIL	REMARK
DS #1	96.10	92.52	7/C0.3	N/A
DS #2	94.50	90.45	7/C0.3	N/A
DS #3	94.10	88.30	7/C0.3	N/A
DS #4	109.10	105.90	7/C0.3	N/A
DS #5	108.70	105.15	7/C0.3	N/A
DS #6	108.25	104.35	7/C0.3	N/A
XDS #1	109.00	105.90	7/C0.3	N/A
XDS #2	96.50	92.70	7/C0.3	N/A

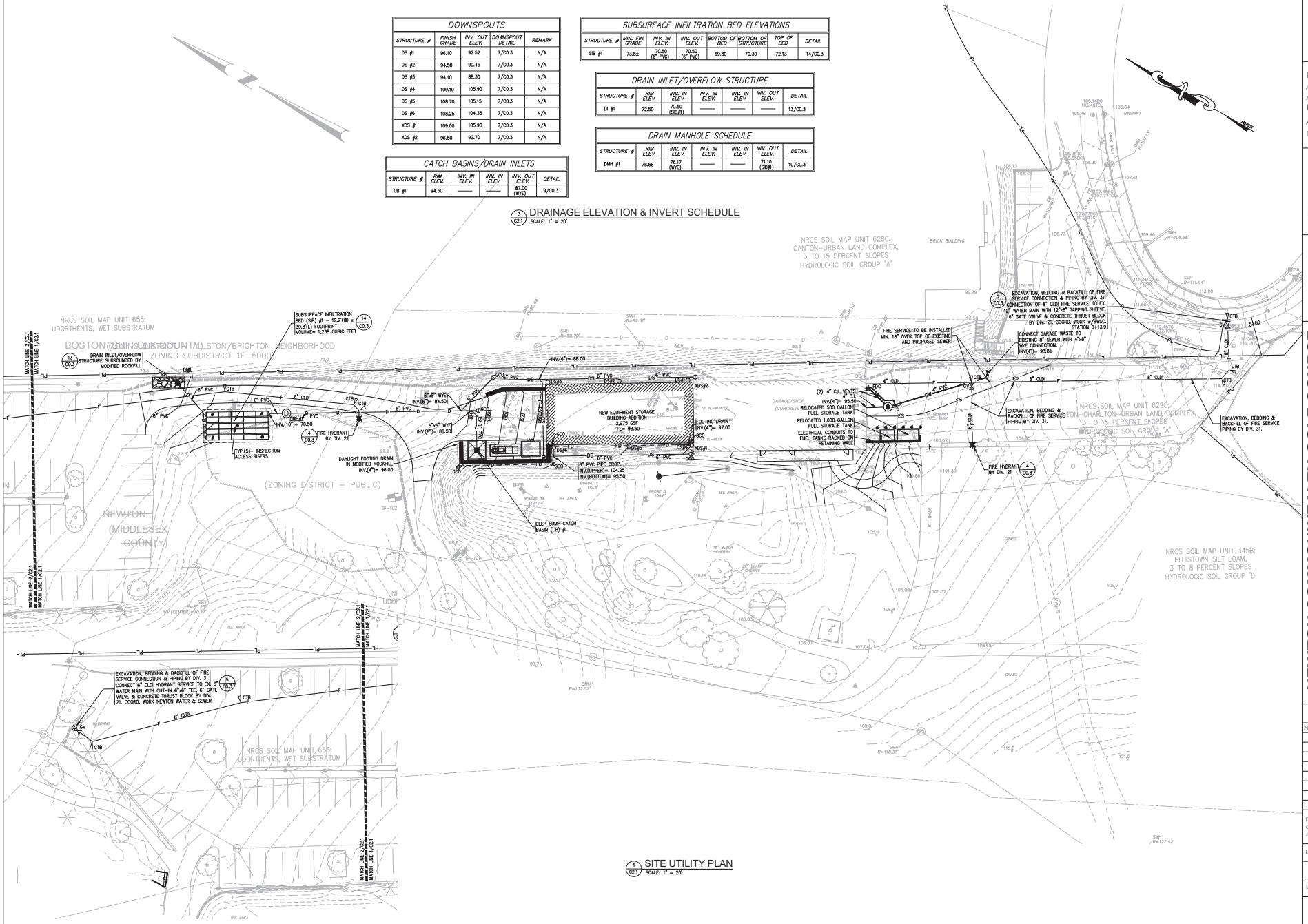
SUBSURFACE INFILTRATION BED ELEVATIONS						
STRUCTURE #	MIN. FIN. GRADE	INV. IN ELEV.	INV. OUT ELEV.	BOTTOM OF BED	BOTTOM OF STRUCTURE	TOP OF BED	DETAIL
SIB #1	73.8±	70.50 (6" PVC)	70.50 (6" PVC)	69.30	70.30	72.13	14/C0.3

DRAIN INLET/OVERFLOW STRUCTURE						
STRUCTURE #	RIM ELEV.	INV. IN ELEV.	INV. IN ELEV.	INV. IN ELEV.	INV. OUT ELEV.	DETAIL
DI #1	72.50	70.50 (SIB#1)	——	——	——	13/C0.3

DRAIN MANHOLE SCHEDULE						
STRUCTURE #	RIM ELEV.	INV. IN ELEV.	INV. IN ELEV.	INV. IN ELEV.	INV. OUT ELEV.	DETAIL
DMH #1	78.66	76.17 (WYE)	——	——	71.10 (SIB#1)	10/C0.3

CATCH BASINS/DRAIN INLETS					
STRUCTURE #	RIM ELEV.	INV. IN ELEV.	INV. IN ELEV.	INV. OUT ELEV.	DETAIL
CB #1	94.50	——	——	87.00 (WYE)	9/C0.3

3 C2.1 DRAINAGE ELEVATION & INVERT SCHEDULE
SCALE: 1" = 20'



1 C2.1 SITE UTILITY PLAN
SCALE: 1" = 20'

2 C2.1 PARTIAL SITE UTILITY PLAN
SCALE: 1" = 20'

GRAPHIC SCALE
20 0 10 20 40 60
(IN FEET)
1 inch = 20 ft.

RDA

Raymond Design Associates, Inc.
Architects & Planners
60 Ledgewood Place
Rockland MA, 02370

FOR SITE PLAN APPROVAL
SEPTEMBER 20, 2021

NEWTON COMMONWEALTH GOLF COURSE
Maintenance Facilities Improvements & Renovations
212 Kenrick Street, Newton, MA 02458

SITE UTILITY PLAN

Revisions:

No.	Date	Description

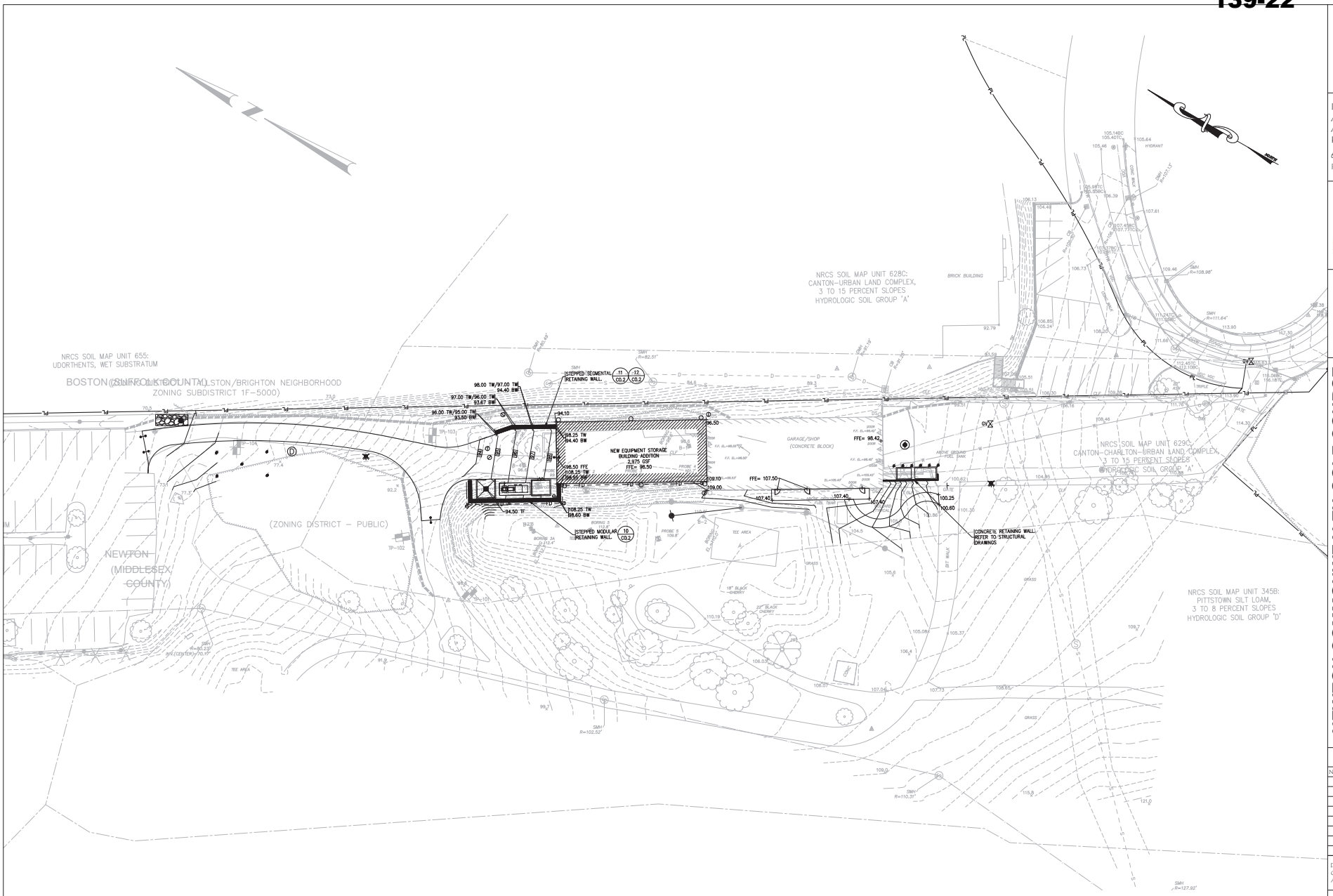
Drawn By: NCK
Checked By: CMG
Approved By: CMG

Drawing Scale: 1" = 20'

Date: SEPTEMBER 15, 2021

C2.1

139-22



1 C3.1 SITE GRADING PLAN
SCALE: 1" = 20'

GRAPHIC SCALE
20 0 10 20 40 60
(IN FEET)
1 inch = 20 ft.

RDA

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C3.1