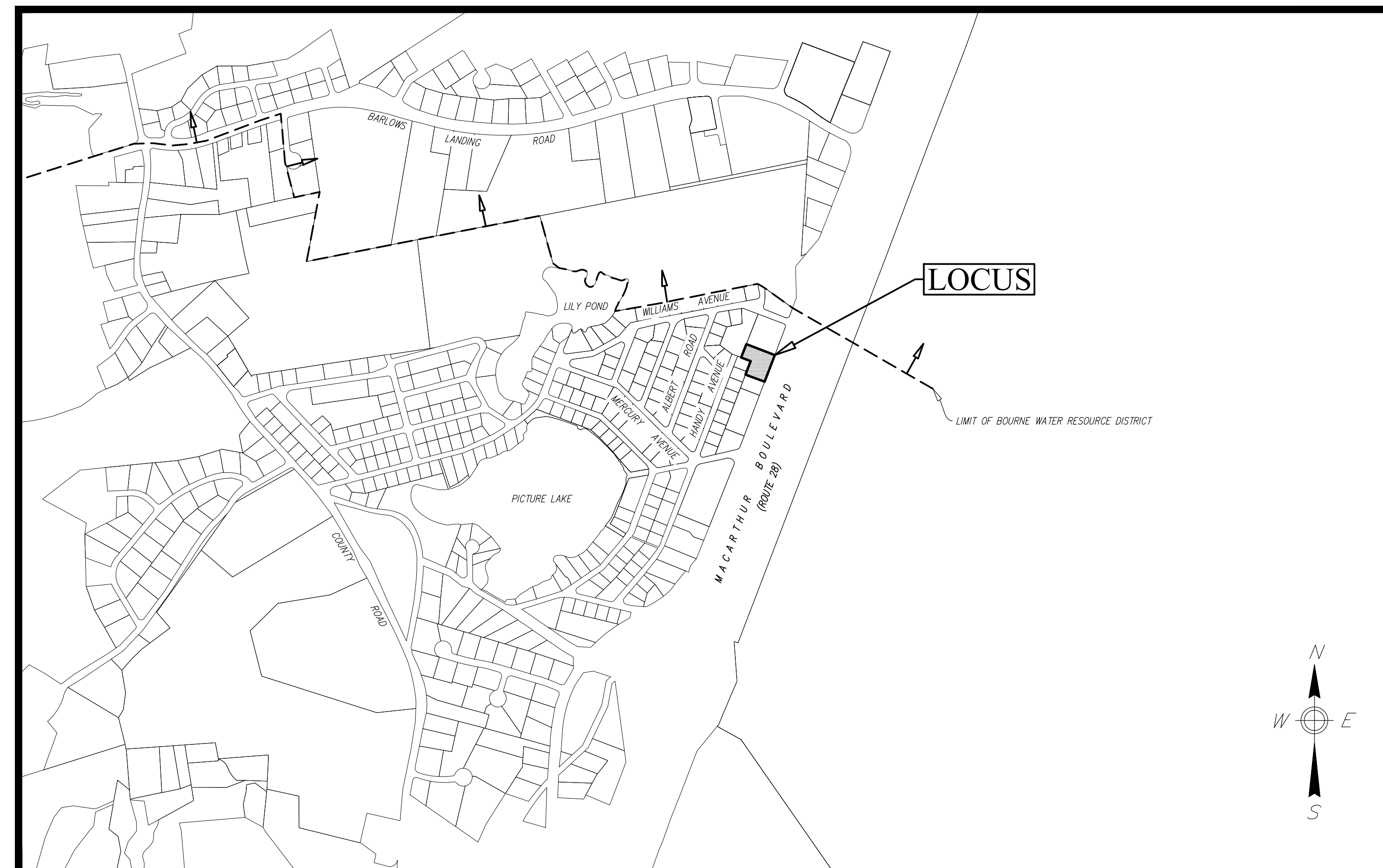


PROPOSED SITE IMPROVEMENT AT 724 MACARTHUR BOULEVARD BOURNE, MASSACHUSETTS

FEBRUARY 12, 2021

SHEET INDEX	REVISED DATES		△ CONSTRUCTION REVISIONS
1 TITLE SHEET	NO CHANGE	NO CHANGE	
2 CONSTRUCTION NOTES	NO CHANGE	NO CHANGE	
3 EXISTING CONDITIONS & EROSION CONTROL	NO CHANGE	NO CHANGE	
4 LAYOUT, ZONING and LANDSCAPING	6/30/21	1/13/22	
5 GRADING, DRAINAGE and UTILITIES	NO CHANGE	NO CHANGE	
6 LIGHTING PLAN	NO CHANGE	NO CHANGE	

- LOCUS: #724 MACARTHUR BOULEVARD
MAP 44.2 PARCEL 23
- OWNER: GULF COAST REALTY, LLC
735 WASHINGTON STREET
SOUTH EASTON, MA 02375
- DEED REF: Bk: 30391 Pg: 68
- PLAN REF: Bk: 600 Pg: 35 (LOT K)
- LOCUS DOES NOT FALL WITHIN A SPECIAL FLOOD HAZARD ZONE AS SHOWN ON FEMA FLOOD INSURANCE RATE MAP No. 25001C-0504-J dated 07/16/2014.
- LOCUS DOES NOT FALL WITHIN A ZONE II WELLHEAD PROTECTION ZONE OR A BOURNE WATER RESOURCE DISTRICT.
- LOCUS DOES NOT FALL WITHIN THE NATURAL HERITAGE and ENDANGERED SPECIES PROGRAM (NHESP) AREAS OF ESTIMATED HABITATS OF RARE WILDLIFE and PRIORITY HABITATS OF RARE SPECIES.
- THE WETLAND RESOURCE AREA WAS DELINEATED BY KATELYN M. GONYER, WETLAND SCIENTIST, ON MARCH 23, 2017.
- REFER TO ORDER OF CONDITIONS MassDEP File #SE7-1989 FOR APPROVED LIMIT OF CLEARING/WORK.
- THE LOCATION OF UNDERGROUND UTILITIES AS REPRESENTED ON THESE PLANS IS BASED UPON PLANS AND INFORMATION PROVIDED BY THE RESPECTIVE UTILITY COMPANIES OR MUNICIPAL DEPARTMENTS SUPPLEMENTED BY FIELD IDENTIFICATION WHEREVER POSSIBLE. NO WARRANTY IS MADE AS TO THE ACCURACY OF THESE LOCATIONS OR THAT ALL UNDERGROUND UTILITIES ARE SHOWN. THE CONTRACTOR SHALL CONTACT DIG SAFE AT LEAST 72 HOURS PRIOR TO THE START OF CONSTRUCTION. DIG SAFE TELEPHONE NUMBER IS 1-800-322-4844.



LOCUS MAP

Scale : 1" = 600'

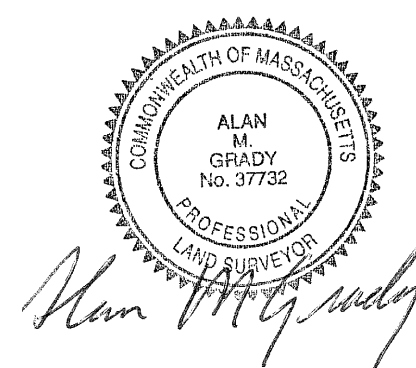
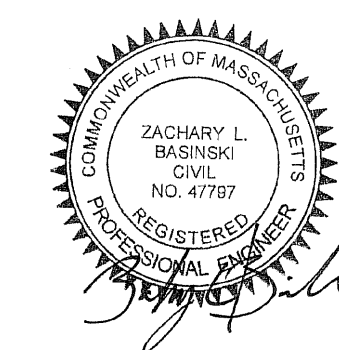
CIVIL ENGINEER / LAND SURVEYOR:

BRACKEN
ENGINEERING, INC.

49 HERRING POND ROAD BUZZARDS BAY, MA 02532
19 OLD SOUTH ROAD NANTUCKET, MA 02554
(Tel) 508.833.0070 (Tel) 508.325.0044
(Fax) 508.833.2282 www.brackeneng.com

OWNER / APPLICANT :

GULF COAST REALTY, LLC
735 WASHINGTON STREET
SOUTH EASTON, MA 02375



GENERAL CONSTRUCTION NOTES:

- ALL SITE PREPARATION NECESSARY TO COMPLETE THIS PROJECT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- ALL NECESSARY POLICE DETAIL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL COORDINATE WITH THE LOCAL POLICE DEPARTMENT.
- THE CONTRACTOR SHALL MAKE ALL NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN ALL NECESSARY CONSTRUCTION PERMITS, PAY ALL FEES INCLUDING POLICE DETAILS AND POST ALL BONDS, IF NECESSARY, ASSOCIATED WITH THE SAME, AND COORDINATE WITH THE OWNER AND THE ENGINEER.
- ALL EXISTING CONDITIONS SHOWN SHALL BE CONSIDERED APPROXIMATE AND ARE BASED ON THE BEST INFORMATION AVAILABLE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS DO NOT CONFLICT WITH ANY KNOWN EXISTING OR OTHER PROPOSED IMPROVEMENTS. IF ANY CONFLICTS ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE ENGINEER PRIOR TO INSTALLING ANY PORTION OF THE SITE WORK WHICH WOULD BE AFFECTED.
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF VARIOUS UTILITY COMPANIES, AND WHEREVER POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY IN THE TOWN, AND "DIGSAFE" (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK IN PREVIOUSLY UNALTERED AREAS TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RESOLVE CONFLICTS BETWEEN THE PROPOSED UTILITIES AND FIELD LOCATED UTILITIES AND SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED, INCOMPLETELY OR INACCURATELY SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ACCURATE RECORDS OF THE LOCATION AND ELEVATION OF ALL WORK INSTALLED AND EXISTING UTILITIES FOUND DURING CONSTRUCTION FOR THE PREPARATION OF THE AS-BUILT PLAN.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL EXISTING UTILITIES IN WORKING ORDER AND FREE FROM DAMAGE DURING THE ENTIRE DURATION OF THE PROJECT. ALL COST RELATED TO THE REPAIR OF UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. EXCAVATION REQUIRED WITHIN THE PROXIMITY OF EXISTING UTILITY LINES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT NO COST TO THE OWNER.
- THE CONTRACTOR SHALL UTILIZE ALL PRECAUTIONS AND MEASURES TO ENSURE THE SAFETY OF THE PUBLIC, ALL PERSONNEL, AND PROPERTY DURING CONSTRUCTION IN ACCORDANCE WITH OSHA STANDARDS, INCLUDING BARRICADES, SAFETY LIGHTING, CONES, POLICE DETAIL AND/OR FLAGMEN AS DETERMINED NECESSARY BY THE ENGINEER AND/OR TOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF POLICE DETAIL AND FOR COORDINATING WITH THE LOCAL OR STATE POLICE DEPARTMENT FOR ALL REQUIRED POLICE DETAIL.
- ALL TRENCHING WORK WITHIN A ROADWAY SHALL BE COORDINATED WITH THE PROPER LOCAL & STATE AGENCY. TRENCH SAFETY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR INCLUDING ANY LOCAL AND/OR STATE PERMITS REQUIRED FOR THE TRENCHWORK. THIS WORK MAY BE REQUIRED TO TAKE PLACE OUTSIDE OF NORMAL HOURS OF OPERATION FOR THE FACILITY. THE CONTRACTOR SHALL PLAN ACCORDINGLY.
- ALL TRENCH WORK WITHIN EXISTING PAVEMENT SHALL BE SAWCUT PER THE APPLICABLE DETAILS. TRENCHWORK BACKFILL AND COMPACTION SHALL HAVE MAX 8-INCH LIFTS. CONTRACTOR SHALL BE REQUIRED TO REMOVE PATCH AND REPAVE AFTER ONE COMPLETE 12-MONTH CYCLE IF SETTLEMENT OCCURS DUE TO INADEQUATE COMPACTION AS DETERMINED BY THE ENGINEER WITHIN THE WARRANTY PERIOD. THE CONTRACTOR SHALL MAKE ALL CONNECTION ARRANGEMENTS WITH UTILITY COMPANIES, AS REQUIRED.
- ALL IMPORTED MATERIAL, IF REQUIRED, SHALL BE CLEAN. NO MATERIAL WILL BE ACCEPTED FROM AN EXISTING OR FORMER 21E SITE AS DEFINED BY THE MASSACHUSETTS CONTINGENCY PLAN 310 CMR 40.0000.
- SITE LAYOUT SURVEY REQUIRED FOR CONSTRUCTION WILL BE PROVIDED BY THE CONTRACTOR AND SHALL BE CONDUCTED BY A MASSACHUSETTS REGISTERED PROFESSIONAL LAND SURVEYOR. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE SURVEYOR FOR ALL SITE SURVEY WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL CONTROL POINTS AND BENCHMARKS DURING CONSTRUCTION INCLUDING BENCHMARK LOCATIONS AND ELEVATIONS AT CRITICAL AREAS. THE LOCATION OF ALL CONTROL POINTS AND BENCHMARKS SHALL BE COORDINATED WITH THE ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL GRADE STAKES SET BY THE SURVEYOR. GRADE STAKES SHALL REMAIN UNTIL A FINAL INSPECTION OF THE ITEM HAS BEEN COMPLETED BY THE ENGINEER. ANY RE-STAKING OF PREVIOUSLY SURVEYED SITE FEATURES SHALL BE THE RESPONSIBILITY (INCLUDING COSTS) OF THE CONTRACTOR.
- UNLESS OTHERWISE SPECIFIED ON THE PLANS AND DETAILS/SPECIFICATIONS, ALL SITE CONSTRUCTION MATERIALS AND METHODOLOGIES ARE TO CONFORM TO THE MOST RECENT VERSION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS (THE MASSACHUSETTS HIGHWAY DEPARTMENT 2020 STANDARD SPECIFICATION FOR HIGHWAYS AND BRIDGES, THE 2020 SUPPLEMENTAL SPECIFICATIONS.
- CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE LAWS AND REGULATIONS REGARDING NOISE, VIBRATION, DUST, SEDIMENTATION CONTAINMENT, AND TRENCH WORK.
- SOLID WASTES SHALL BE COLLECTED AND STORED IN A SECURED DUMPSTER. THE DUMPSTER SHALL MEET ALL LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS.
- THE CONTRACTOR SHALL RESTORE ALL SURFACES EQUAL TO THEIR ORIGINAL CONDITION AFTER CONSTRUCTION IS COMPLETE. AREAS NOT DISTURBED BY CONSTRUCTION SHALL BE LEFT NATURAL. THE CONTRACTOR SHALL TAKE CARE TO PREVENT DAMAGE TO SHRUBS, TREES, OTHER LANDSCAPING, AND/OR NATURAL FEATURES. WHEREAS THE PLANS DO NOT SHOW ALL LANDSCAPE FEATURES, EXISTING CONDITIONS MUST BE VERIFIED BY THE CONTRACTOR IN ADVANCE OF THE WORK.
- ALL UNPAVED AREAS DISTURBED BY THE WORK SHALL HAVE A MINIMUM OF 4-INCHES OF LOAM INSTALLED AND BE SEEDED WITH GRASS SEED AS SHOWN ON THE PLAN AND/OR DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING ANY LOAM AND SEEDS UNTIL LAWN GROWTH IS ESTABLISHED AND APPROVED BY THE ENGINEER AND/OR OWNER.
- ALL PROPOSED STRUCTURES SHALL BE DESIGNED BY THEIR MANUFACTURERS FOR AASHTO H-20 LOADING. PRECAST CONCRETE SHALL HAVE A MINIMUM 28-DAY STRENGTH OF 4000 PSI UNLESS OTHERWISE NOTED HEREIN.
- ALL WHEELCHAIR RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MASSACHUSETTS ARCHITECTURAL ACCESS BOARD (AAB).
- LEDGE OR BOULDER EXCAVATION IS NOT ANTICIPATED FOR THIS SITE. HOWEVER, THE CONTRACTOR SHALL PROVIDE A UNIT PRICE COST IN CUBIC YARD MEASURE FOR LEDGE AND/OR BOULDER REMOVAL. LEDGE AND/OR BOULDERS LESS THAN 1 CUBIC YARD IN SIZE BASED ON THE AVERAGE DIMENSIONS WILL NOT BE CONSIDERED PAYABLE ROCK. UNIT PRICE SHALL BE GIVEN FOR BOTH ON AND OFF SITE DISPOSAL. COST OF REPLACEMENT MATERIAL SHALL BE INCLUDED IF ADDITIONAL FILL MATERIAL IS REQUIRED.
- THE CONTRACTOR SHALL REGULARLY INSPECT THE PERIMETER OF THE PROPERTY TO CLEAN UP AND REMOVE LOOSE CONSTRUCTION DEBRIS BEFORE IT LEAVES THE SITE. ALL DEMOLITION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE SITE TO AN APPROVED DUMP SITE. ALL TRUCKS LEAVING THE SITE SHALL BE COVERED.
- CONCRETE TRUCKS SHALL NOT BE WASHED ONSITE. ANY CEMENT OR CONCRETE DEBRIS LEFT IN THE DISTURBED AREA SHALL BE REMOVED BY HAND AT THE CONTRACTOR'S EXPENSE.
- BURIAL OF ANY STUMPS, SOLID DEBRIS, AND/OR STONES/BOULDERS ONSITE IS PROHIBITED. NO ROAD SALT OR OTHER DE-ICING CHEMICALS SHALL BE USED ON THE ACCESS ROADWAY.
- IF ANY DEVIATION OR ALTERATION OF THE WORK PROPOSED ON THESE DRAWINGS IS REQUIRED, THE CONTRACTOR IS TO IMMEDIATELY CONTACT AND COORDINATE WITH THE ENGINEER AND OWNER.
- AT THE END OF CONSTRUCTION, THE CONTRACTOR SHALL REMOVE ALL CONSTRUCTION DEBRIS AND SURPLUS MATERIALS FROM THE SITE. A THOROUGH INSPECTION OF ALL THE WORK PERIMETER IS TO BE MADE AND ALL DISCARDED MATERIALS, BLOWN OR WATER CARRIED DEBRIS, SHALL BE COLLECTED AND REMOVED FROM THE SITE.
- THIS ENGINEERING FIRM MAKES NO DETERMINATION AND ASSUMES NO LIABILITY REGARDING THE STATUS OF THE PROPOSED SITE IMPROVEMENTS WITH REGARDS TO APPLICABLE FEMA STANDARDS, THE MASSACHUSETTS STATE BUILDING CODE, OR OTHER APPLICABLE STANDARDS, RULES, OR REGULATIONS REGARDING CONSTRUCTION IN THE FEMA DESIGNATED SPECIAL FLOOD HAZARD ZONE.

GENERAL GRADING & DRAINAGE NOTES:

- ALL CUT AND FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE NOTED.
- EXISTING GRADE CONTOUR INTERVALS SHOWN AT 2 FOOT.
- PROPOSED GRADE CONTOUR INTERVALS SHOWN AT 2 FOOT.
- CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
- CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
- CONTRACTOR SHALL REFER TO ARCHITECTURAL PLAN AND SPECIFICATIONS FOR EARTHWORK AND COMPACTION REQUIREMENTS FOR ALL SLABS AND BUILDING FOUNDATIONS.
- PROPOSED ELEVATIONS ARE SHOWN TO FINISH PAVEMENT OR GRADE UNLESS NOTED OTHERWISE.
- ALL EARTHWORK AND SITE PREPARATION SHALL BE DONE IN STRICT ACCORDANCE WITH THE RECOMMENDATIONS OF ANY SUBSURFACE INVESTIGATION OR GEOTECHNICAL REPORTS PREPARED FOR THIS SITE.
- PARKING AREAS ARE NOT TO BE PAVED UNTIL THE ENTIRE PERMANENT DRAINAGE SYSTEM HAS BEEN INSTALLED AND ALL PIPE CONNECTIONS COMPLETE.
- DRAINAGE PIPING SHALL BE HIGH DENSITY POLYETHYLENE PIPE AND CONFORM TO AASHTO M284 CORRUGATED POLYETHYLENE PIPE. PIPE SHALL BE INSTALLED AT THE LOCATIONS INDICATED ON THE PLAN. MINIMUM CLEARANCE BETWEEN PROPOSED DRAINAGE PIPING AND OTHER UTILITIES/STRUCTURES SHALL BE 18" VERTICALLY AND 4'-FT HORIZONTALLY. CPP SHALL BE CAREFULLY BACKFILLED IN ACCORDANCE WITH THE LATEST MASSACHUSETTS HIGHWAY DEPARTMENT STAND SPECIFICATIONS. THE MINIMUM COVER FOR HDPE PIPES IS 1'-0" FOR H-20 TRAFFIC LOADS IF INSTALLED IN ACCORDANCE WITH AASHTO SECTION 30. THIS IS BASED ON EMPIRICAL CALCULATION OF LOAD RESPONSE, MANUFACTURER'S TESTING, AND FIELD EXPERIENCE WITH THE PIPE. AASHTO SPECIFICATIONS SECTION 18.4.1.5 DEFINES THE MINIMUM COVER AS 10/8 BUT NOT LESS THAN 12 INCHES. THIS COVER IS MEASURED FROM THE PIPE TO THE TOP OF A RIGID (CONCRETE) PAVEMENT OR THE BOTTOM OF A FLEXIBLE (BITUMINOUS) PAVEMENT, BOTH AASHTO AND ASTM AS WELL AS MOST MANUFACTURERS, REQUIRE ADDITIONAL (TEMPORARY) COVER FOR CONSTRUCTION LOADS GREATER THAN H=20. GENERALLY, AN ADDITIONAL 2' OF TEMPORARY COVER, MOUNDED OVER THE PIPE AND REMOVED FOR FINAL GRADING AND PAVING IS SUFFICIENT FOR LARGE CONSTRUCTION VEHICLE LOADS.
- BACKFILL ADJACENT TO PIPES AND STRUCTURES SHALL BE OF THE TYPE AND QUALITY CONFORMING TO THAT SPECIFIED FOR THE ADJOINING FILL MATERIAL. BACKFILL SHALL BE PLACED IN HORIZONTAL LAYERS NOT TO EXCEED SIX INCHES IN THICKNESS AND COMPACTED TO A DENSITY OF 95% OF MAXIMUM DRY DENSITY WITH A MOISTURE CONTENT WITHIN +/-2% OF OPTIMUM. ALL COMPACTION IS TO BE DETERMINED BY AASHTO METHOD T-99. TESTING OF BACKFILL MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

BASIC CONSTRUCTION SEQUENCE:

THE FOLLOWING CONSTRUCTION SEQUENCE IS TO BE USED AS A GENERAL GUIDELINE. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER AND ENGINEER AND SUBMIT A PROPOSED CONSTRUCTION SEQUENCE FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.

- SURVEY AND STAKE THE PROPOSED LIMIT OF DISTURBANCE AND LIMIT OF SEDIMENTATION BARRIERS.
- PLACE SEDIMENTATION BARRIERS (SILT SACKS, STRAWBALES, SILT FENCE, ETC.) AS SHOWN ON THE PLANS AND STAKED OUT IN THE FIELD. IN NO CASE IS THE LIMIT OF WORK TO EXTEND BEYOND THE SEDIMENTATION BARRIERS/LIMIT OF DISTURBANCE AS SHOWN ON THE PROJECT PLANS.
- INSTALL TEMPORARY CONSTRUCTION ENTRANCES IN LOCATIONS SHOWN ON PLANS. NO OTHER ENTRANCES SHALL BE USED TO GAIN ACCESS TO THE SITE BY ANY CONSTRUCTION OR DELIVERY VEHICLES.
- BEGIN CLEARING THE SITE AND DEMOLITION AS REQUIRED.
- SURVEY AND STAKE CENTERLINE OF THE PROPOSED DRAINAGE SYSTEMS AND DRAINAGE LINES.
- EXCAVATE AND ROUGH GRADE THE PROPOSED STORMWATER MANAGEMENT AREAS (SWMA) AND ANY ADDITIONAL TEMPORARY BASINS NECESSARY TO CONTROL SITE RUNOFF AND SEDIMENTS. PERMANENT SWMA SEEDING AND PLANTING SHALL BE COMPLETED AFTER THE CONTRIBUTING AREA TO THE BASIN HAS REACHED A MINIMUM OF 80% STABILIZATION AND IS NO LONGER REQUIRED TO BE USED AS A CONSTRUCTION SEDIMENTATION BASIN.
- BEGIN CLEARING AND DEMOLITION IN AREAS OF PARKING LOTS AND STORMWATER MANAGEMENT AREAS. TOPSOIL IS TO BE STRIPPED FROM THE AREA OF THE PROPOSED PARKING AND SWMA AND STOCKPILED IN APPROVED LOCATIONS. TOPSOIL STOCKPILES ARE TO BE PROTECTED BY A SEDIMENT BARRIER.
- INSTALL TEMPORARY CONVEYANCE DEVICES (SWALES, CHECK DAMS, PIPES, ETC.) AS NECESSARY TO CONVEY RUNOFF TO TREATMENT AREAS.
- BEGIN ROUGH GRADING AREAS FOR PARKING AND BUILDINGS. BRING ROUGH GRADING TO PROPER ELEVATIONS AS SOON AS PRACTICABLE. WORK SHALL PROGRESS DILIGENTLY TO MINIMIZE TIME SOILS ARE UN-STABILIZED.
- BEGIN BUILDING AND UTILITY CONSTRUCTION. CONTRACTOR SHALL BE FREE TO INSTALL UTILITIES IN ANY ORDER HE/SHE CHOOSES. ANY EROSION CONTROL DEVICE DISTURBED DURING THE UNDERGROUND UTILITY CONSTRUCTION SHALL BE IMMEDIATELY REPAIRED OR REPLACED IN KIND AND STABILIZED. MODIFY TEMPORARY CONVEYANCE DEVICES AS NECESSARY TO CONVEY RUNOFF TO TREATMENT AREAS.
- INSTALL DRAINAGE PIPES, DRAINAGE MANHOLES AND UNDERGROUND DRAINAGE STRUCTURES. WORK SHALL BEGIN AT THE SWMA(S) AND PROGRESS UP-GRADE/IN, PROTECT DISCHARGE OUTLETS WITH RIP-RAP APRONS. THE SWMA(S) AND DRAINAGE NETWORK ARE TO BE PROTECTED FROM SEDIMENTATION WITH SILT FENCE AND STRAWBALES UNTIL ALL UN-STABILIZED AREAS ARE STABILIZED WITH STONE SUB-BASE OR VEGETATION. INSTALL SEDIMENT BARRIERS AT ALL POINTS OF ENTRY INTO THE DRAINAGE NETWORK. PARTICULAR CARE SHALL BE TAKEN TO PROTECT THE UNDERGROUND SWMA(S) FROM SEDIMENT.
- PERMANENTLY SEED ALL DISTURBED AREAS OUTSIDE OF THE AREA TO BE PAVED OR GRAVELED.
- ONCE ALL UNDERGROUND UTILITIES HAVE BEEN CONSTRUCTED, PLACE COMPACTED GRAVEL FOUNDATION AND ROUGH GRADE THE PARKING AREAS IN ACCORDANCE WITH THE SITE PLANS AND IN ACCORDANCE WITH APPLICABLE STATE AND LOCAL REGULATIONS AS SOON AS POSSIBLE.
- BEGIN PARKING CONSTRUCTION PER SITE PLANS AND IN ACCORDANCE WITH APPLICABLE STATE AND LOCAL REGULATIONS. PARKING AREAS ARE NOT TO BE PAVED UNTIL THE ENTIRE PERMANENT DRAINAGE SYSTEM HAS BEEN INSTALLED AND ALL PIPE CONNECTIONS COMPLETE.
- FINISH PERMANENT STABILIZATION. SWEEP THE ROADWAY TO REMOVE ALL SEDIMENTS. REPAIR DRAINAGE OUTLETS AND SWMA(S) AS REQUIRED. THE CONTRACTOR SHALL CLEAN AND FLUSH THE DRAINAGE STRUCTURES AND PIPES AT THE END OF CONSTRUCTION AND ALL ACCUMULATED SEDIMENTS IN THE SWMA(S) SHALL BE REMOVED. CONTRACTOR SHALL INSPECT THE DRAINAGE NETWORK AND REPAIR ANY DAMAGE IMMEDIATELY.
- COMPLETE ALL REMAINING PLANTING AND SEEDING.
- REMOVAL OF ALL TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES FOLLOWING VEGETATIVE ESTABLISHMENT OF ALL DISTURBED AREAS SHALL BE APPROVED BY THE ENGINEER AND WHEN THE CONTRIBUTING AREA HAS REACHED A MINIMUM OF 80% STABILIZATION.

EROSION & SEDIMENT CONTROL NOTES:

- THE SITE CONSTRUCTION FOREMAN SHALL BE DESIGNATED AS THE ON-SITE PERSONNEL RESPONSIBLE FOR THE DAILY INSPECTION AND MAINTENANCE OF ALL SEDIMENT AND EROSION CONTROLS AND SHALL IMPLEMENT ALL NECESSARY MEASURES TO CONTROL EROSION AND PREVENT SEDIMENT FROM LEAVING THE SITE.
- THE CONTRACTOR SHALL INSTALL ALL EROSION AND SEDIMENT CONTROL (ESC) MEASURES AS SHOWN ON THE SIGNED PLANS IN CONSULTATION WITH THE TOWN, AND AS DETERMINED NECESSARY IN THE FIELD BY THE ENGINEER BEFORE ANY CONSTRUCTION ACTIVITIES ARE TO BEGIN. THESE MEASURES SHALL BE CHECKED, MAINTAINED, REPLACED AS NECESSARY DURING THE ENTIRE CONSTRUCTION PERIOD OF THE PROJECT, SUCH MEASURES SHALL REPRESENT THE LIMIT OF WORK. WORKERS SHALL BE INFORMED THAT NO CONSTRUCTION ACTIVITY IS TO OCCUR BEYOND THE LIMIT OF WORK AT ANY TIME THROUGH THE CONSTRUCTION PERIOD.
- A MINIMUM SURPLUS OF 50 FEET OF EROSION CONTROL BARRIER (SILT FENCE, STRAWBALE AND/OR SILT SOCK) SHALL BE STOCKPILED ONSITE AT ALL TIMES.
- THE CONTRACTOR SHALL PROTECT THE ADJACENT PROPERTIES FROM SEDIMENTATION DURING PROJECT CONSTRUCTION UNTIL ACCEPTANCE BY THE OWNER.
- A CONSTRUCTION EXIT SHALL BE CONSTRUCTED (IF REQUIRED BASED ON SITE CONDITIONS) AS SHOWN IN THE DETAILS TO SHED DIRT FROM CONSTRUCTION VEHICLE TIRES. THE CRUSHED STONE PAD WILL BE REPLACE/CLEANED AS NEEDED TO MAINTAIN ITS EFFECTIVENESS.
- THE LIMIT OF ALL CLEARING, GRADING AND DISTURBANCES SHALL BE KEPT TO A MINIMUM WITHIN THE PROPOSED AREA OF CONSTRUCTION. THE CONTRACTOR SHALL PHASE THE SITE WORK IN A MANNER TO MINIMIZE AREAS OF EXPOSED SOIL. IF TREES ARE TO BE CUT ON THE ENTIRE SITE, ONLY THOSE AREAS WHICH ARE ACTIVELY UNDER CONSTRUCTION SHALL BE GRUBBED. THE REQUIRED SEDIMENTATION CONTROL FACILITIES MUST BE PROPERLY ESTABLISHED, CLEARLY VISIBLE AND IN OPERATION PRIOR TO INITIATING ANY LAND CLEARING ACTIVITY AND/OR OTHER CONSTRUCTION RELATED WORK.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO MONITOR LOCAL WEATHER REPORTS DURING CONSTRUCTION AND PRIOR TO SCHEDULING EARTHMOVING OR OTHER CONSTRUCTION ACTIVITIES WHICH WILL LEAVE LARGE DISTURBED AREAS UN-STABILIZED. IF INCIDENT WEATHER IS PREDICTED, THE CONTRACTOR SHALL USE THEIR BEST PROFESSIONAL JUDGMENT WHEN SCHEDULING CONSTRUCTION ACTIVITIES AND SHALL BE RESPONSIBLE FOR ENSURING THE NECESSARY EROSION CONTROL DEVICES ARE INSTALLED AND FUNCTIONING PROPERTY TO MINIMIZE EROSION FROM ANY IMPENDING WEATHER EVENTS.
- ESC MEASURES SHALL BE INSPECTED AND MAINTAINED ON A WEEKLY BASIS AND AFTER EACH RAINFALL EVENT OF 0.50 INCH OR GREATER DURING CONSTRUCTION TO ENSURE THAT THE EROSION AND SEDIMENTATION CONTROL MEASURES ARE INTACT AND FUNCTIONING PROPERLY. IDENTIFIED DEFICIENCIES SHALL BE CORRECTED IMMEDIATELY NO LATER THAN 24 HOURS AFTER IDENTIFICATION.
- SOIL STOCKPILES LEFT OVERNIGHT SHALL BE SURROUNDED ON THEIR PERIMETERS WITH SILT SOCK, SILT FENCE, STRAWBALES OR A COMBINATION OF SILT FENCE WITH STRAWBALE, AS DETERMINED NECESSARY.
- DISTURBED AREAS AND SLOPES SHALL NOT BE LEFT UNATTENDED OR EXPOSED FOR EXCESSIVE PERIODS OF TIME SUCH AS THE INACTIVE WINTER SEASON. THE CONTRACTOR SHOULD PROVIDE APPROPRIATE STABILIZATION PRACTICES ON ALL DISTURBED AREAS AS SOON AS POSSIBLE BUT NOT MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY OR PERMANENTLY CEASED. TEMPORARY AREAS HAVING A SLOPE GREATER THAN 3:1 SHALL BE REINFORCED WITH EROSION BLANKETS OR APPROVED EQUAL UNTIL THE SITE IS PROPERTY STABILIZED.
- THE CONTRACTOR SHALL ALSO INSTALL A SILT SACK OR APPROVED EQUIVALENT IN EACH EXISTING CATCH BASIN RECEIVING RUNOFF FROM THE SITE. UPON THE INSTALLATION OF EACH CATCH BASIN, THE CONTRACTOR SHALL INSTALL A SILT SACK OR APPROVED EQUIVALENT. THESE ARE TO BE INSPECTED AFTER EACH SIGNIFICANT STORM EVENT AND REMOVED AND EMPTIED AS NEEDED DURING THE ENTIRE CONSTRUCTION PERIOD.
- SMALL, TEMPORARY, SEDIMENTATION BASINS MAY BE CONSTRUCTED ON AN AS-NEEDED BASIS DURING CONSTRUCTION TO AND IN THE CAPTURE OF SITE RUNOFF AND SEDIMENT. IT WILL BE THE RESPONSIBILITY OF THE SITE CONTRACTOR, IN CONSULTATION WITH THE ENGINEER, TO SIZE AND CREATE THESE BASINS IN APPROPRIATE LOCATIONS.
- THE CONTRACTOR SHALL CONTAIN ALL SEDIMENT ONSITE. ALL EXITS FROM THE SITE WILL BE SWEEP AS NECESSARY INCLUDING ANY SEDIMENT TRACKING. PAVED AREAS SHALL BE SWEEP AS NEEDED TO REMOVE SEDIMENT AND POTENTIAL POLLUTANTS WHICH MAY ACCUMULATE DURING SITE WORK.
- ACCUMULATED SEDIMENT SHALL BE REMOVED FROM ALL TEMPORARY PRACTICES AND DISPOSED OF IN A PRE-APPROVED LOCATION BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL PROVIDE ONSITE OR MAKE READILY AVAILABLE THE NECESSARY EQUIPMENT AND SITE PERSONNEL DURING CONSTRUCTION HOURS FOR THE DURATION OF THE PROJECT TO ENSURE ALL ESC DEVICES ARE PROPERLY MAINTAINED AND REPAIRED IN A TIMELY AND RESPONSIBLE MANNER IF THE WORK IS SUSPENDED DURING THE WINTER MONTHS. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE PERSONNEL AND EQUIPMENT EITHER ONSITE OR MAKE READILY AVAILABLE TO ENSURE ALL ESC DEVICES ARE PROPERLY MAINTAINED AND REPAIRED IN A TIMELY AND RESPONSIBLE MANNER.
- PROPER MEASURES SHALL BE IMPLEMENTED BY THE CONTRACTOR IF DEWATERING IS NECESSARY DURING CONSTRUCTION. THESE MEASURES SHALL INCLUDE DEWATERING BAGS, TEMPORARY STRAWBALES, SILT FENCES, SILT SOCKS, AND/OR OTHER APPROVED DEVICES. THE DEWATERING SET UP SHALL BE APPROVED BY THE ENGINEER.
- ALL SEDIMENT COLLECTED IN THE TEMPORARY PARTIALLY CONSTRUCTED BIOTRETENTION AREAS WILL BE REMOVED AND DISPOSED OF PROPERLY PRIOR TO FILTER FABRIC AND/OR MEDIA INSTALLATION WITHIN THE BIOTRETENTION AREAS, PARTIALLY CONSTRUCTED BIOTRETENTION AREAS WILL HAVE A SURFACE ELEVATION AT A MINIMUM OF 1-FOOT ABOVE THE BOTTOM OF MEDIA ELEVATION AS SHOWN ON THE BIOTRETENTION SCHEDULE. THIS WILL ALLOW AN OVER-DIG OF THE COLLECTED SEDIMENT FROM WITHIN THE BIOTRETENTION AREA PRIOR TO MEDIA/FABRIC INSTALLATION.
- DUST SHALL BE CONTROLLED BY WATERING OR OTHER APPROVED METHODS AS NECESSARY, OR AS DIRECTED BY THE ENGINEER AT NO EXTRA COST TO THE OWNER.
- THE CONTRACTOR IS RESPONSIBLE FOR THE INSPECTION AND MAINTENANCE DURING CONSTRUCTION OF ALL STORMWATER FACILITIES INSTALLED OR AFFECTED BY THE PROJECT. ANY SEDIMENT OR DEBRIS COLLECTED WITHIN THESE FACILITIES FROM THE PROJECT WORK SHALL BE REMOVED PRIOR TO THE OWNER'S ACCEPTANCE.

STORMWATER FACILITY OPERATION & MAINTENANCE:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSPECTION AND MAINTENANCE OF ALL STORMWATER FACILITIES UNTIL SUCH TIME THAT THE PARKING LOT, BUILDING, AND ASSOCIATED UTILITIES ARE ACCEPTED BY THE OWNER AND THE ENGINEER.
- THE CONTRACTOR SHALL INSPECT AND RESTORE/CLEAN ALL FACILITIES (INLETS, MANHOLES, INFILTRATION BASINS, ETC.) OF SEDIMENT AND DEBRIS PRIOR TO THE OWNER'S ACCEPTANCE.

- ALL SEDIMENT AND DEBRIS SHALL BE DISPOSED OF PROPERLY IN A PRE-APPROVED LOCATION.
- THE CONTRACTOR SHOULD REFER TO THE OPERATION & MAINTENANCE PLAN FOR ADDITIONAL INFORMATION PERTAINING TO STORMWATER FACILITY OPERATION AND MAINTENANCE REQUIREMENTS AND SHALL MAINTAIN A WORKING COPY ON SITE AT ALL TIMES.
- ALL STORMWATER FACILITIES SHALL BE INSPECTED BY THE CONTRACTOR AFTER EVERY MAJOR RAINFALL EVENT FOR THE ENTIRE DURATION OF THE CONSTRUCTION PROJECT AND THE FIRST 3 MONTHS AFTER CONSTRUCTION TO ENSURE PROPER STABILIZATION AND CONSTRUCTION.
- SPECIFIC ANNUAL MAINTENANCE SHALL BE AS FOLLOWS:
 - DRAINAGE STRUCTURES (INLETS, MANHOLES & CATCH BASINS):** ALL DRAINAGE STRUCTURES WILL BE INSPECTED ANNUALLY TO MONITOR FOR PROPER OPERATION, COLLECTION OF LITTER OR TRASH, AND STRUCTURAL DETERIORATION. THE SWALES WILL BE CLEANED OF SEDIMENT AS NECESSARY, AND REPAIRED WHEN REQUIRED.
 - INFILTRATION CHAMBERS:** THE CHAMBERS WILL BE INSPECTED ANNUALLY TO ENSURE THAT DESIGN INFILTRATION RATES ARE BEING MET. IF SEDIMENT OR ORGANIC BUILD-UP HAS LIMITED THE INFILTRATION CAPABILITIES AND BUILT UP WITHIN THE CHAMBERS THE SYSTEM SHALL BE CLEANED IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS.
 - ROUTINE MAINTENANCE:** OTHER ROUTINE MAINTENANCE WILL INCLUDE REMOVAL OF TRASH AND LITTER FROM PAVED AND PERIMETER AREAS, AND ANNUAL STREET AND PARKING LOT SWEEPING AFTER THE SPRING THAW TO AVOID EXCESSIVE ACCUMULATION OF SEDIMENT IN THE DRAINAGE SYSTEM. THE PIPES DRAINING THE PROJECT WILL BE INSPECTED ANNUALLY FOR PROPER FLOW.

NOTE: OPERATION AND MAINTENANCE CHECKLIST AVAILABLE UPON REQUEST

WATER & SEWER/SEPTIC INSTALLATION NOTES:

- SEWER AND WATER MAINS SHALL BE INSTALLED ACCORDING TO THE FOLLOWING GUIDELINES TO PREVENT FREEZING OF THE MAIN OR SEWER.

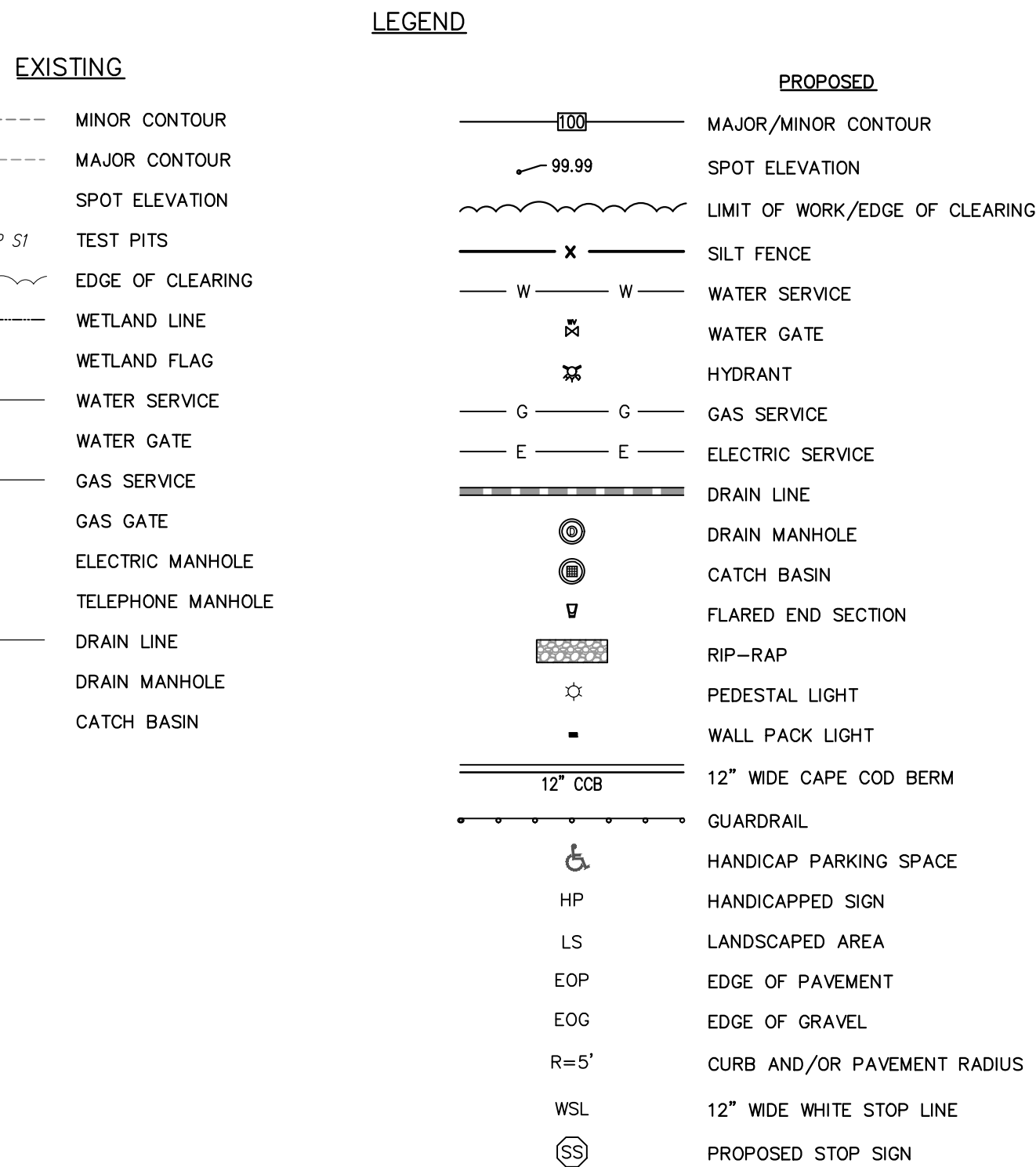
UTILITY TYPE	MINIMUM COVER OVER TOP OF PIPE	MINIMUM HORIZONTAL DISTANCE TO DRAIN STRUCTURE
WATER MAIN	5'	2'
- DEAD END WATER LINES SHALL BE INSULATED WHERE SOIL COVER OR HORIZONTAL SEPARATION TO PRECAST STRUCTURES IS LESS THAN THE DISTANCE SPECIFIED ABOVE AND/OR WHERE SHOWN ON PLANS.
- INSULATION SHALL BE 2" THICK POLYURETHANE INSULATION WITH PVC JACKET PLACED AROUND PIPE OR DESIGNER APPROVED EQUAL.
- WATER AND SEWER/SEPTIC SEPARATION SHALL TYPICALLY BE 10-FEET MINIMUM HORIZONTAL AND 18-INCHES VERTICAL WITH SEWER/SEPTIC MAINS BELOW THE WATER MAINS (SEE DETAIL). IF SITE CONDITIONS REQUIRE LESS, THEN THE UTILITIES SHALL BE INSTALLED AS SHOWN IN THE CONSTRUCTION DETAILS.

WATER SYSTEM NOTES:

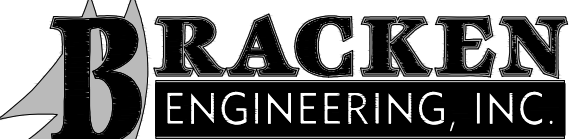
- THE CONTRACTOR SHALL CONSTRUCT THE WATER LINE AND ITS APPURTENANCE IN ACCORDANCE WITH THE LOCAL WATER DEPARTMENT'S STANDARDS AND SPECIFICATIONS AND PAY FOR ALL ASSOCIATED FEES AS REQUIRED BY THE WATER DEPARTMENT.
- THE CONTRACTOR SHALL SUPPLY TWO COPIES OF SWORN CERTIFICATES TO PROVE THAT ALL PIPES AND FITTINGS ARE INSPECTED AND TESTED AS REQUIRED BY THE STANDARD SPECIFICATIONS TO WHICH THE MATERIAL IS MANUFACTURED.
- ALL NEWLY INSTALLED WATER SYSTEM COMPONENTS SHALL BE CLEARED OF ALL FOREIGN MATERIALS SUCH AS DIRT AND MISCELLANEOUS DEBRIS PRIOR TO SYSTEM TESTING AND SHALL BE WITNESSED BY THE LOCAL WATER DEPARTMENT. NOT TESTING IS ALLOWED WITHOUT REMOVAL OF ALL FOREIGN MATERIALS.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO INSTALL AND REMOVE ALL NECESSARY BLOW-OFFS REQUIRED FOR THIS PROJECT AT NO EXTRA COST TO THE OWNER.

WATER SYSTEM INSTALLATION INSPECTION NOTES:

- THE CONTRACTOR SHALL SUPPLY TO THE ENGINEER TWO COPIES OF SWORN CERTIFICATES TO PROVE THAT ALL PIPE AND FITTINGS ARE INSPECTED AND TESTED AS REQUIRED BY THE STANDARD SPECIFICATIONS TO WHICH THE MATERIAL IS MANUFACTURED.
- A PRESSURE TEST AND DISINFECTION TEST OF ALL WATER LINES SHALL BE CONDUCTED BY THE CONTRACTOR AND WITNESSED BY THE APPROVED INSPECTOR OF THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A MINIMUM OF 48-HOUR ADVANCE NOTICE TO THE LOCAL WATER DEPARTMENT PRIOR TO THE PRESSURE AND DISINFECTION TESTS. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL NECESSARY EQUIPMENT AND CHEMICALS TO PROPERLY CONDUCT THE TESTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO COLLECT ALL BACTERIOLOGICAL SAMPLES AND PAY FOR ALL RELATED LABORATORY FEES.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN UP-TO-DATE AS-BUILT DRAWINGS AND NOTES INDICATE THE HORIZONTAL AND VERTICAL LOCATION WITHIN TWO TIES OFF ALL SYSTEM COMPONENTS INSTALLED. THESE AS-BUILT DRAWINGS AND NOTES WILL BE UTILIZED BY THE ENGINEER FOR THE PREPARATION OF RECORD PLANS.



Prepared By:



49 HERRING POND ROAD
BUZZARDS BAY, MA 02532
(tel) 508.833.0070
(fax) 508.833.2282

19 OLD SOUTH ROAD
NANTUCKET, MA 02554
(tel) 508.325.0044
www.brackeneng.com

Sheet Title:

CONSTRUCTION NOTES

Project:

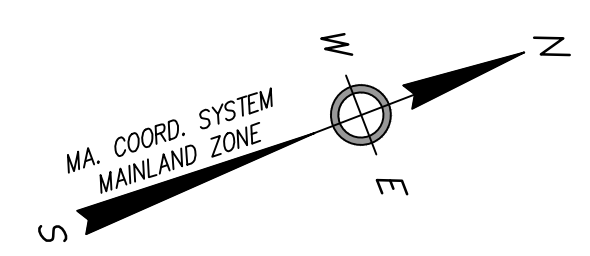
**PROPOSED SITE IMPROVEMENT PLAN
IN BOURNE, MASSACHUSETTS**
Prepared For:
GULF COAST REALTY, LLC
#724 MACARTHUR BOULEVARD
MAP 44.2 PARCEL 23

No.	Date	Revision/Description	By
2	1/13/22	REVISE PLANTINGS per CONSERVATION	JPH
1	6/30/21	ADD REVISED PLANTING PLAN	JPH

Date: FEBRUARY 12, 2021 Drawn: RED/RMB/BB Checked: ZLB/AMG Sheet: 2 of 6

TP NO. 1 GRD. EL. 57.4 GW. EL. NONE to 47.4	TP NO. 2 GRD. EL. 57.5 GW. EL. NONE to 47.5
0" 57.4 9" 56.8 32" 54.7	0" 57.5 9" 56.9 32" 54.8
FILL 10YR 3/3 Bw SANDY LOAM 10YR 5/8 C1 VERY COARSE SAND 2.5Y 7/6	FILL 10YR 3/3 Bw SANDY LOAM 10YR 5/8 C1 VERY COARSE SAND 2.5Y 7/6
120" NO WATER NO MOTTLES	120" NO WATER NO MOTTLES
TP NO. 3 GRD. EL. 57.8 GW. EL. NONE to 47.8	TP NO. 4 GRD. EL. 58.5 GW. EL. NONE to 48.5
0" 57.8 20" 56.1 58" 53.0 120" 47.8	0" 58.5 20" 56.8 58" 53.7 120" 48.5
FILL 10YR 3/3 Bw SANDY LOAM 10YR 5/8 C1 VERY COARSE SAND 2.5Y 7/6	FILL 10YR 3/3 Bw SANDY LOAM 10YR 5/8 C1 VERY COARSE SAND 2.5Y 7/6
NO WATER NO MOTTLES	NO WATER NO MOTTLES

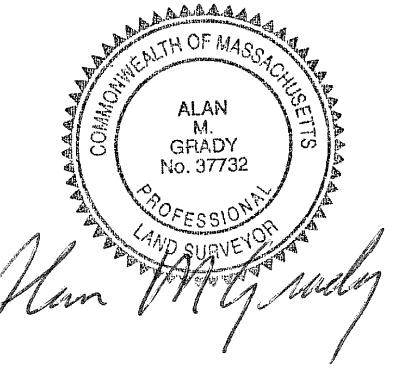
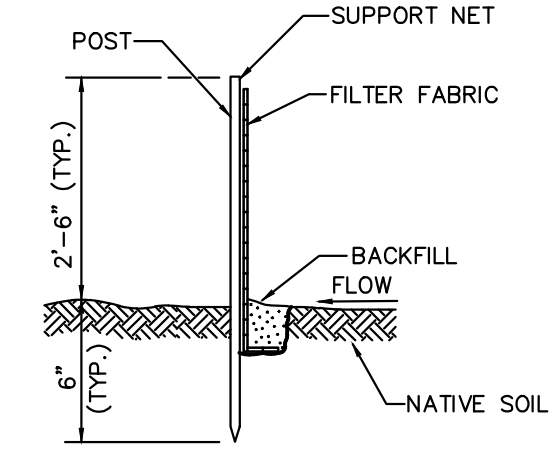
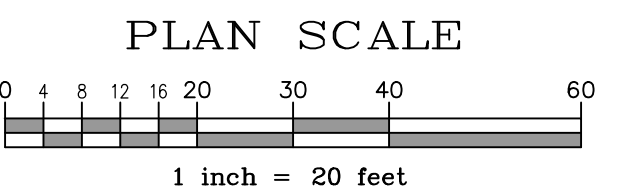
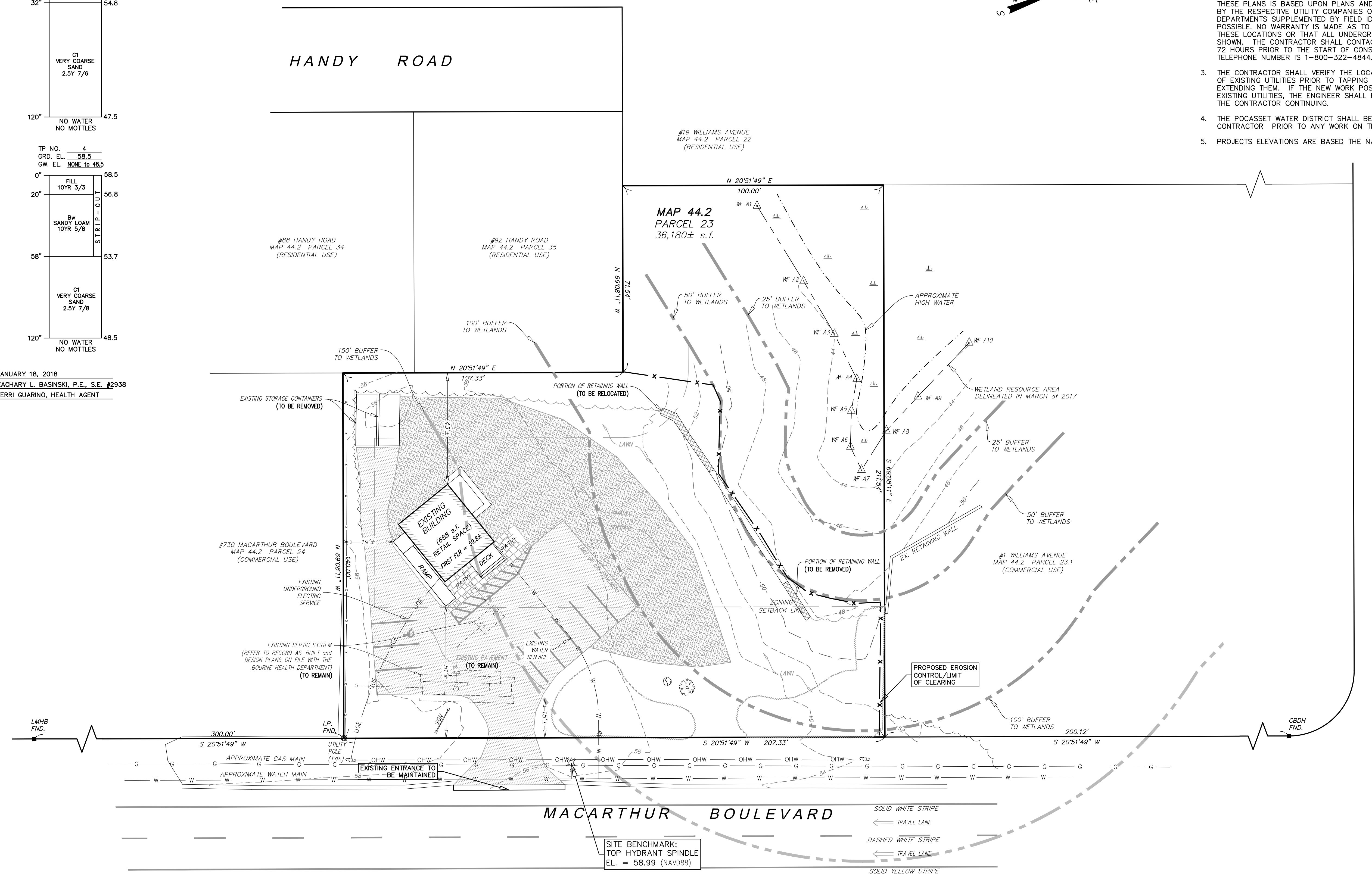
DATE PERFORMED: JANUARY 18, 2018
 SOIL EVALUATOR: ZACHARY L. BASINSKI, P.E., S.E. #2938
 WITNESSED BY: TERRI GUARINO, HEALTH AGENT



PROJECT NOTES:

1. THE CONTRACTOR SHALL REPORT TO THE OWNER AND ENGINEER OF ANY SIGNIFICANT VARIATIONS IN EXISTING SITE CONDITIONS FROM THOSE SHOWN ON THESE PLANS. ANY PROPOSED REVISIONS TO THE WORK, IF REQUIRED BY THESE SITE CONDITIONS SHALL NOT BE UNDERTAKEN UNTIL REVIEWED AND APPROVED BY THE OWNER AND THE ENGINEER.
2. THE LOCATION OF UNDERGROUND UTILITIES AS REPRESENTED ON THESE PLANS IS BASED UPON PLANS AND INFORMATION PROVIDED BY THE RESPECTIVE UTILITY COMPANIES OR MUNICIPAL DEPARTMENTS SUPPLEMENTED BY FIELD IDENTIFICATION WHEREVER POSSIBLE. NO WARRANTY IS MADE AS TO THE ACCURACY OF THESE LOCATIONS OR THAT ALL UNDERGROUND UTILITIES ARE SHOWN. THE CONTRACTOR SHALL CONTACT DIG SAFE AT LEAST 72 HOURS PRIOR TO THE START OF CONSTRUCTION. DIG SAFE TELEPHONE NUMBER IS 1-800-322-4844.
3. THE CONTRACTOR SHALL VERIFY THE LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES PRIOR TO TAPPING INTO, CROSSING OR EXTENDING THEM. IF THE NEW WORK POSES A CONFLICT WITH EXISTING UTILITIES, THE ENGINEER SHALL BE NOTIFIED PRIOR TO THE CONTRACTOR CONTINUING.
4. THE POCASSET WATER DISTRICT SHALL BE NOTIFIED BY THE CONTRACTOR PRIOR TO ANY WORK ON THE WATER SYSTEM.
5. PROJECTS ELEVATIONS ARE BASED THE NAVD88 DATUM.

- Notes**
1. LOCUS: #724 MACARTHUR BOULEVARD MAP 44.2 PARCEL 23
 2. OWNER: GULF COAST REALTY, LLC 735 WASHINGTON STREET SOUTH EASTON, MA 02375
 3. DEED REF: Bk: 30391 Pg: 68
 4. PLAN REF: Bk: 600 Pg: 35 (LOT K)
 5. LOCUS DOES NOT FALL WITHIN A SPECIAL FLOOD HAZARD ZONE AS SHOWN ON FEMA FLOOD INSURANCE RATE MAP No. 25001C-0504-J dated 07/16/2014.
 6. LOCUS DOES NOT FALL WITHIN THE NATURAL HERITAGE and ENDANGERED SPECIES PROGRAM (NHESP) AREAS OF ESTIMATED HABITATS OF RARE WILDLIFE and PRIORITY HABITATS OF RARE SPECIES.
 7. THE WETLAND RESOURCE AREA WAS DELINEATED BY KATELYN M. GONYER, WETLAND SCIENTIST, ON MARCH 23, 2017.
 8. ALL DISTURBED AREAS ARE TO BE STABILIZED WITH LOAM AND SEED.
 9. REFER TO ORDER OF CONDITIONS MassDEP File #SE7-1989 FOR APPROVED LIMIT OF CLEARING/WORK.
 10. LOCUS DOES NOT FALL WITHIN THE TOWN OF BOURNE WATER RESOURCE DISTRICT.
 11. EXISTING BUILDING WAS CONSTRUCTED IN 1986.



Prepared By:
BRACKEN ENGINEERING, INC.
 49 HERRING POND ROAD BUZZARDS BAY, MA 02532
 (tel) 508.833.0070 (fax) 508.833.2282
 19 OLD SOUTH ROAD NANTUCKET, MA 02554
 (tel) 508.325.0044 (fax) 508.325.0044 www.brackeneng.com

Sheet Title:
EXISTING CONDITIONS & EROSION CONTROL

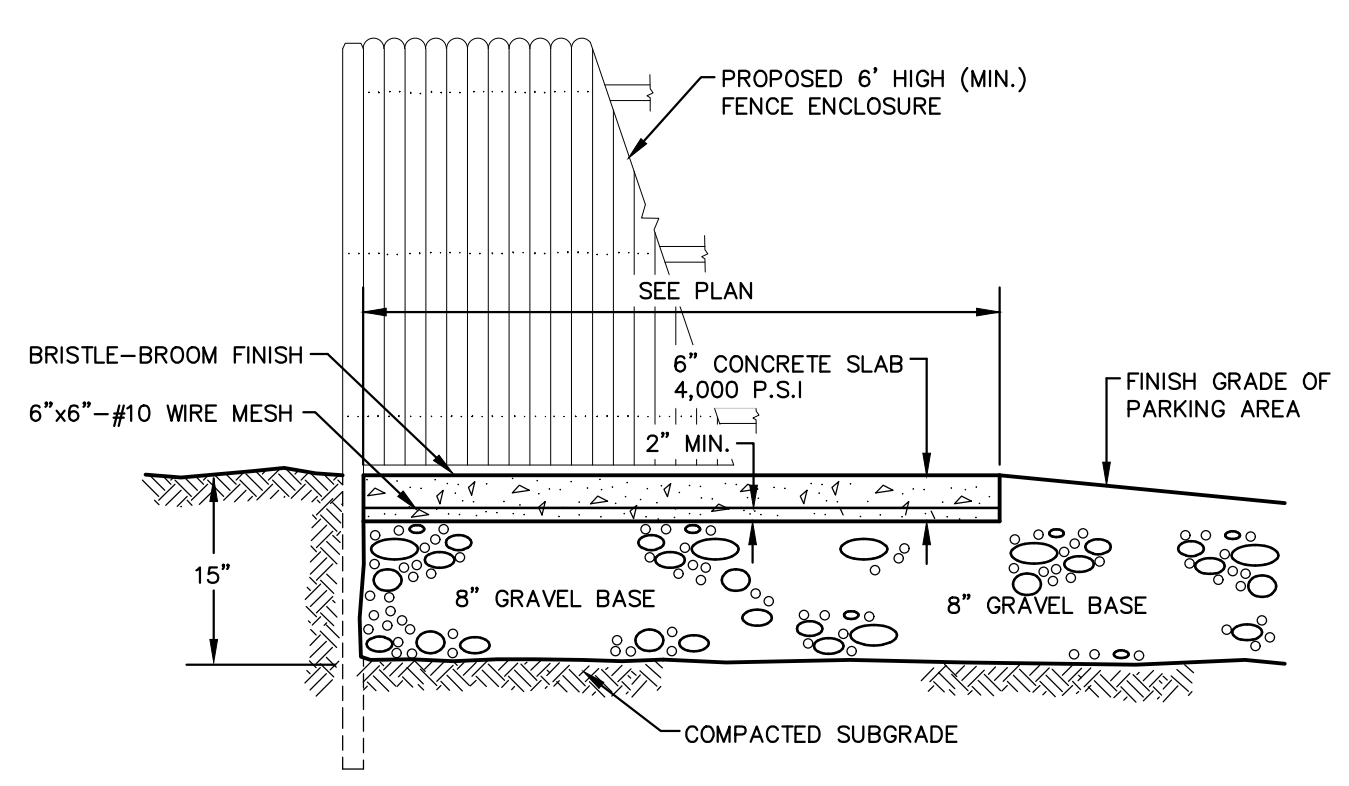
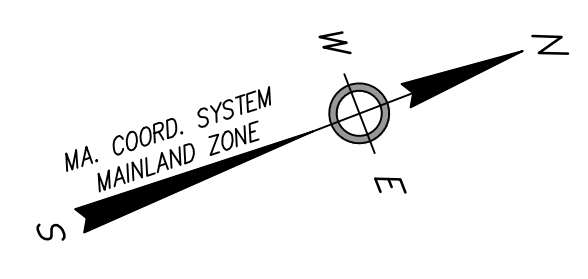
PROPOSED SITE IMPROVEMENT PLAN IN BOURNE, MASSACHUSETTS
 Prepared For:
GULF COAST REALTY, LLC
 #724 MACARTHUR BOULEVARD MAP 44.2 PARCEL 23

No.	Date	Revision Description	By
2	1/13/22	REVISE PLANTINGS per CONSERVATION AGENT COMMENTS	JPH
1	6/30/21	ADD REVISED PLANTING PLAN	JPH

Date: FEBRUARY 12, 2021 Drawn: RED/RMM/BEI Checked: ZLB/AMG Sheet: 3 of 6

PLANTING SCHEDULE					
SYMB.	BOTANICAL NAME	COMMON NAME	SIZE	COMMENTS	QNTY.
GENERAL SITE SHRUBS					
VD	VIBURNUM DENTATUM	ARROWWOOD VIBURNUM	3'-4" HT	B & B 4' O/C	9
HMBN	HYDRANGEA MACROPHYLLA 'NIKKO BLUE'	NIKKO BLUE HYDRANGEA	24"-30" HT	5 GAL. 5' O/C	10
HMES	HYDRANGEA MACROPHYLLA 'ENDLESS SUMMER'	PINK LARGE LEAF HYDRANGEA	24"-30" HT	3 GAL. 5' O/C	6
JCOG	JUNIPERUS CHINENSIS 'OLD GOLD'	OLD GOLD SPREADING JUNIPER	18"-24" SPR	3 GAL. 5' O/C	15
MP	MYRICA PENNSYLVANICA	NORTHERN BAYBERRY	18"-24" SPR	3 GAL. 5' O/C	5
TOS	THUJA OCCIDENTALIS 'SMARAGD'	EMERALD GREEN ARBORVITAE	6'-7" HT	B & B 4' O/C	4
AC	AMELANCHIER CANADENSIS	SHADBUSH	5'-6" HT	B & B 8' O/C	4
CA	CLETHRA ALNIFOLIA	SWEET PEPPERBUSH	18"-24" HT	3 GAL. 5' O/C	7
CS	CORNUS STOLONIFERA	REDOSEIER DOGWOOD	18"-24" HT	3 GAL. 5' O/C	9
HHR	HEMEROCALIS HAPPY RETURNS	DWARF LEMON YELLOW DAYLILY	15"-18" HT	1 GAL. 52 O/C	120
GENERAL SITE TREES					
ARB	ACER RUBRUM 'BOWHALL'	BOWHALL COLUMNAR RED MAPLE	3" CAL.	B & B	3
PCC	PURUS CALLERYANA 'CHANTICLEER'	CLEVELAND SELECT CALLERY PEAR	3" CAL.	B & B	1
HERBACEOUS LAYER IN RAIN GARDEN					
IV	IRIS VERSICOLOR	BLUE FLAG IRIS	36" HT	1 qt. - 24" O/C	25
NEWS	NEW ENGLAND WETLAND SEED MIX	NEW ENGLAND WETLAND SEED MIX		1 lb. per 1,000 S.F.	
SHRUBS AT RAIN GARDEN					
CA	CLETHRA ALNIFOLIA 'HUMMINGBIRD'	HUMMINGBIRD SWEET PEPPERBUSH	18"-24" HT	3 GAL. 5' O/C	3
JHW	JUNIPERUS HORIZONTALIS 'WILTONI'	WILTONI GROUND JUNIPER	18"-24" SPR	3 GAL. 4' O/C	20

PLANTING SUMMARY			
USE	REQUIRED	REQUIRED	PROVIDED
TREES	PLANTING AREA LENGTH / 30 = 6		6
SHRUBS	PLANTING AREA LENGTH / 3 = 69		89



CONCRETE PAD and FENCE FOR TRASH CONTAINER
NOT TO SCALE

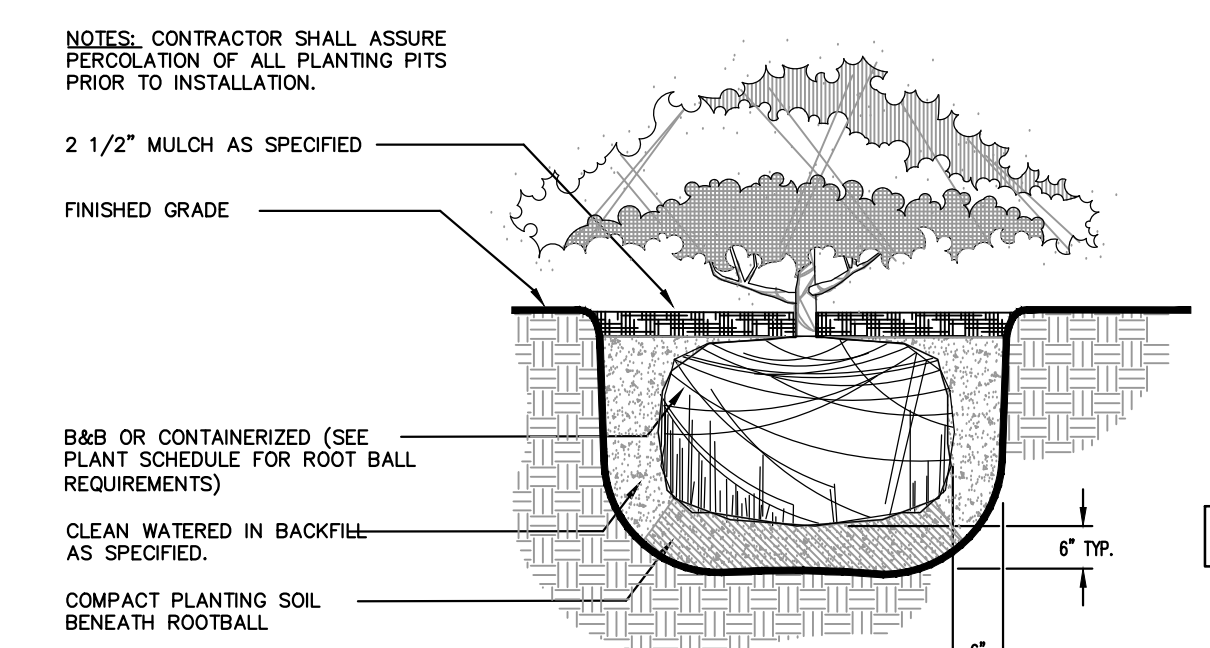
ZONING SUMMARY			
ZONING DISTRICT: B-2	REQUIRED	EXISTING	PROPOSED
MINIMUM LOT AREA	20,000 S.F.	36,180 S.F.	36,180 S.F.
PRIMARY FRONT YARD	30'(MIN.)	51'±	51'±
PRIMARY SIDE YARD	12'(MIN.)	19'±	19'±
PRIMARY REAR YARD	12'(MIN.)	43'±	25'±
MAXIMUM LOT COVERAGE	50% (MAX.)	2.6%	5.9%
MAXIMUM HEIGHT	35' (MAX.)	<35'	<35'

PARKING SUMMARY	
per \$2853	
REQUIRED PARKING:	
1 SPACES PER 180 S.F. (OFFICE & RETAIL STORES)	
1,444 S.F. TOTAL = 8 SPACES REQUIRED	
9 SPACES PROVIDED	

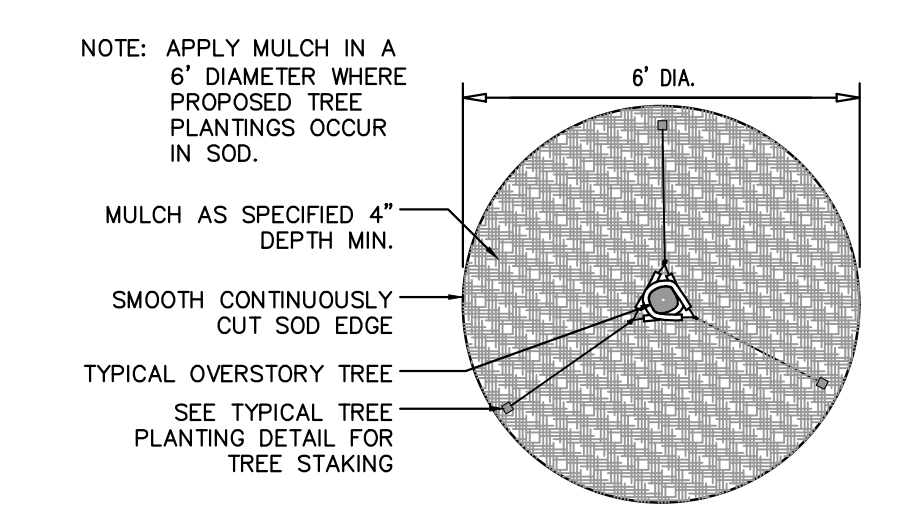
ADA PARKING SUMMARY	
per \$821 CMR 23.2.1	
REQUIRED:	
TOTAL PARKING SPACES = 9	
MIN. ACCESSIBLE SPACES REQUIRED = 1 (MIN. of 1 VAN ACCESSIBLE)	
PROVIDED:	
(1) ACCESSIBLE SPACES TOTAL	
(1) VAN ACCESSIBLE SPACE	

- GENERAL NOTES**
- LOCUS: #724 MACARTHUR BOULEVARD MAP 44.2 PARCEL 23
 - OWNER: GULF COAST REALTY, LLC 736 WASHINGTON STREET SOUTH EASTON, MA 02375
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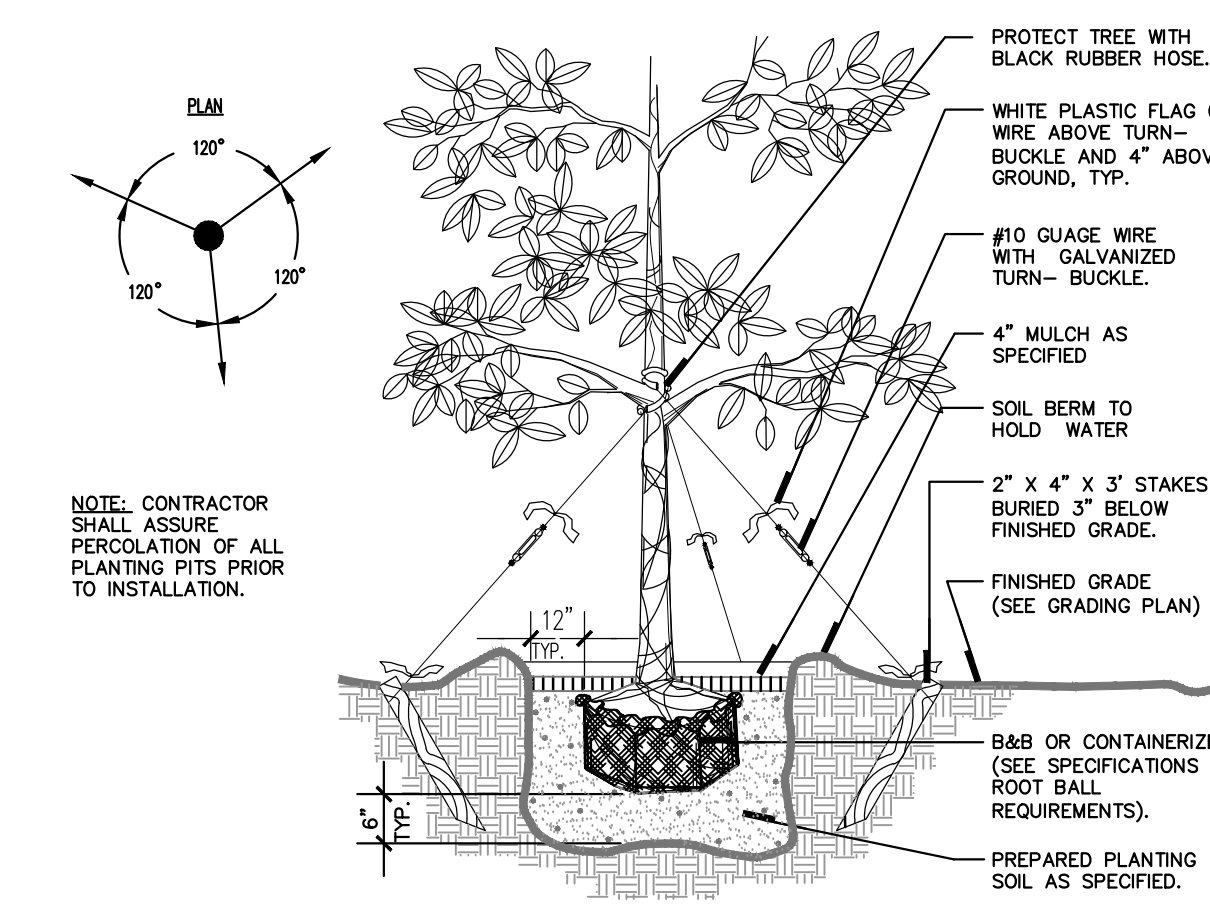
LANDSCAPE PLAN PROVIDED BY:
ED FULLER
LANDSCAPE ARCHITECT
24 SCOTT DRIVE
PLYMOUTH MA, 02360



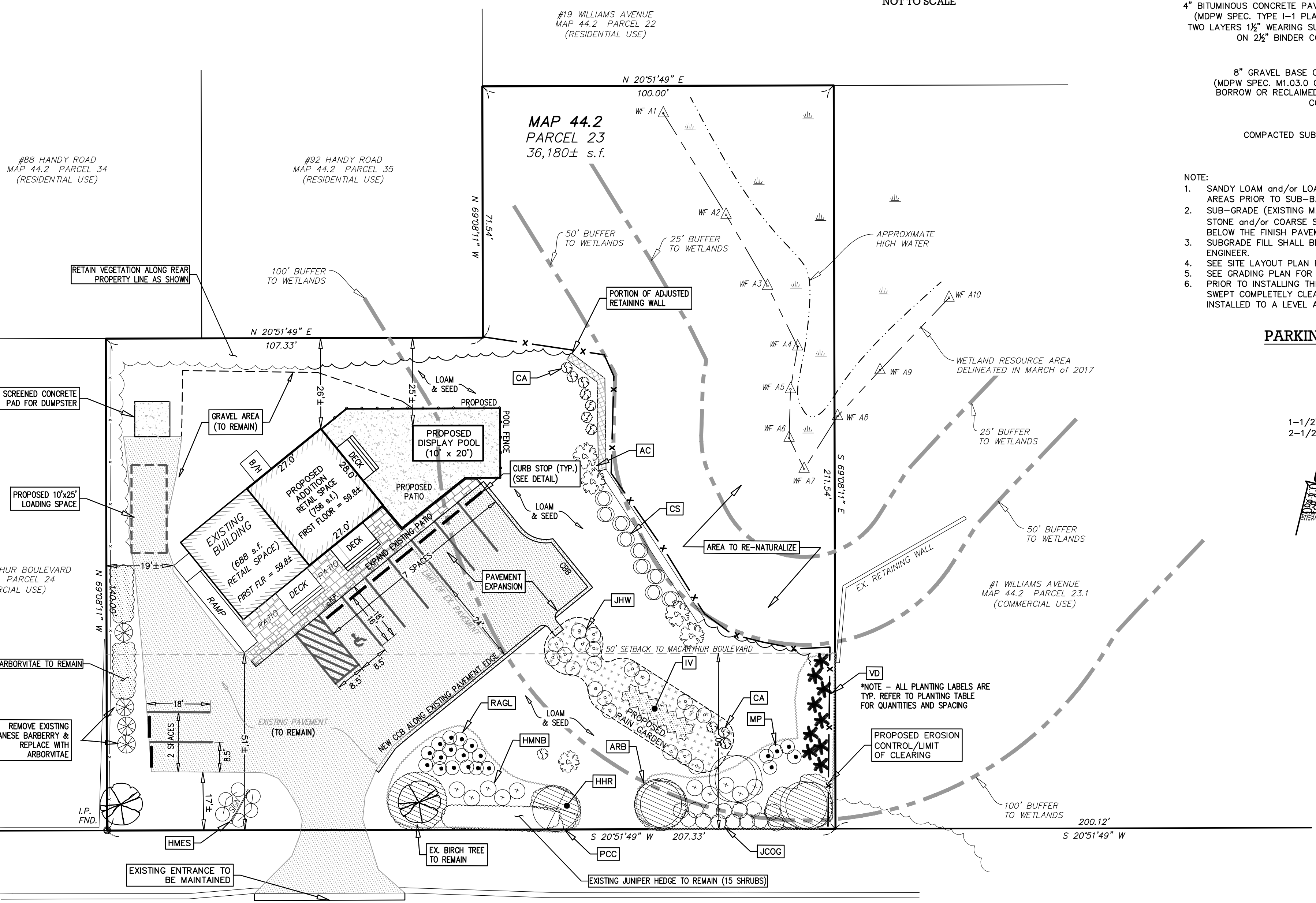
SHRUB PLANTING DETAIL
NOT TO SCALE



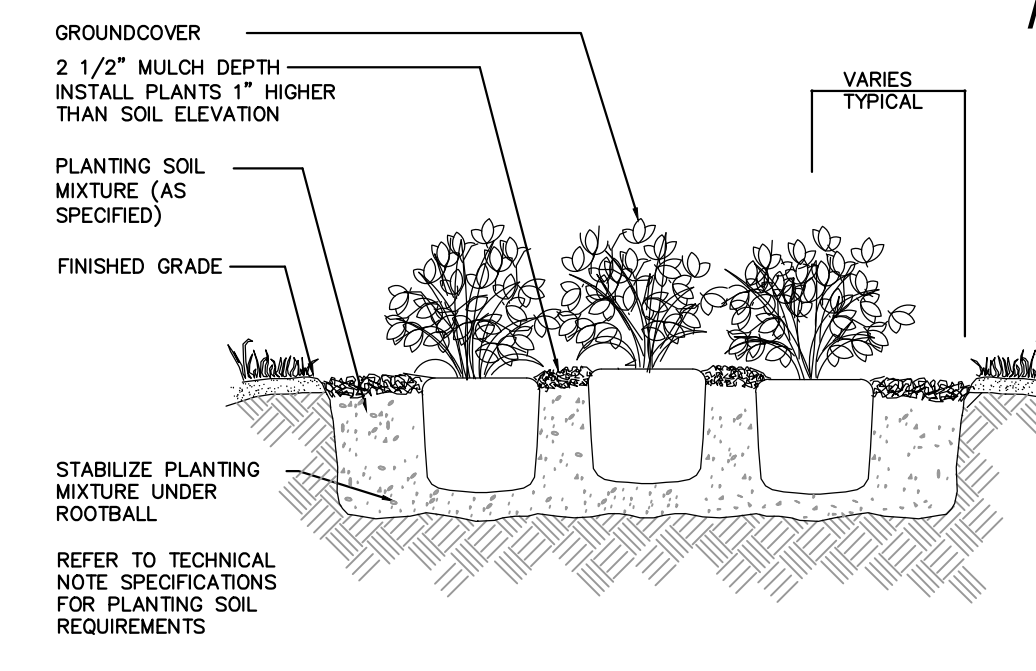
MULCH RING IN SOD AREA DETAIL
NOT TO SCALE



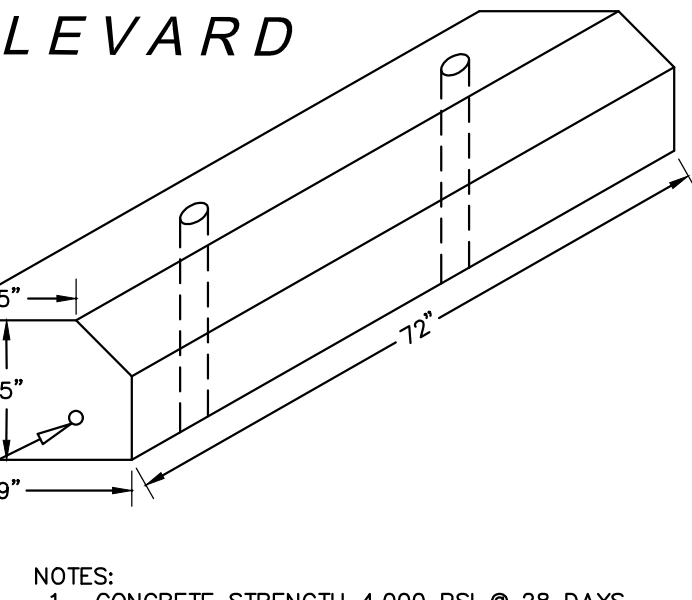
LARGE TREE PLANTING DETAIL
NOT TO SCALE



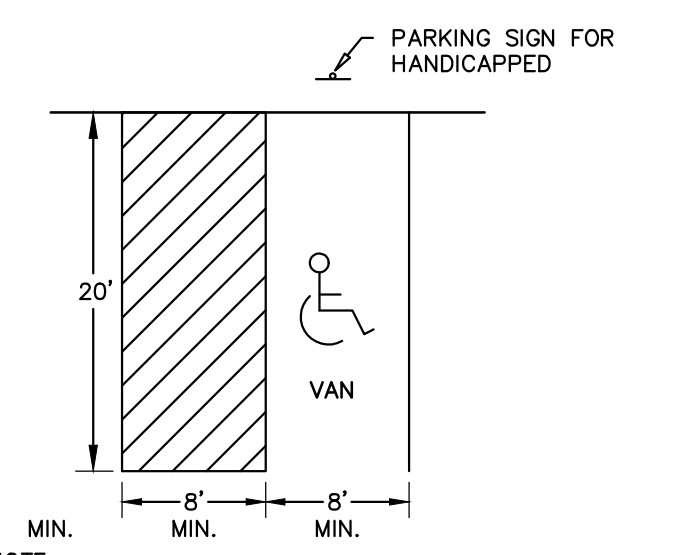
MACARTHUR BOULEVARD



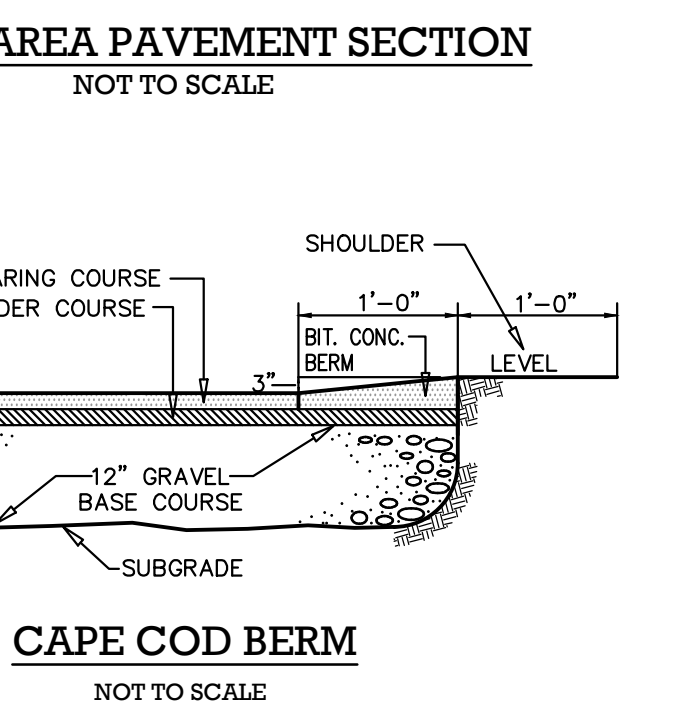
GROUNDCOVER PLANTING DETAIL
NOT TO SCALE



CURB STOP DETAIL
NOT TO SCALE

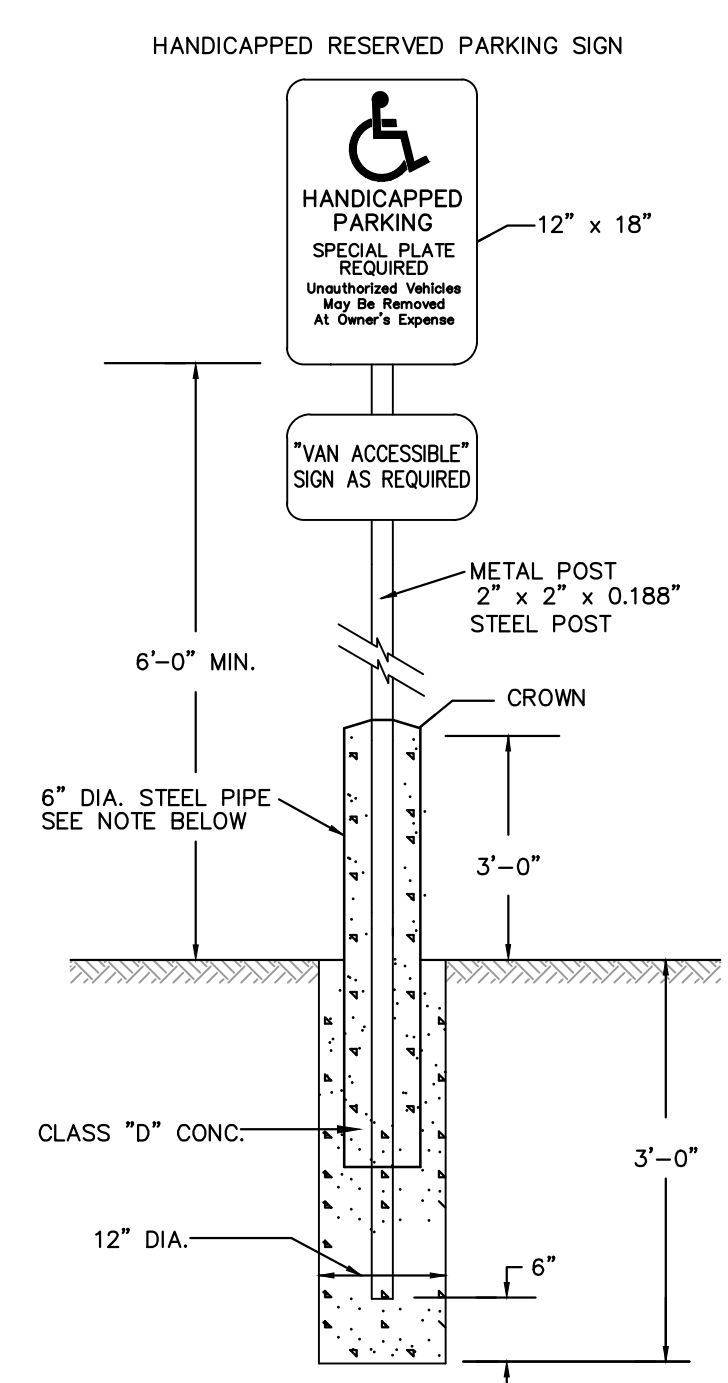


HANDICAP PARKING DETAIL
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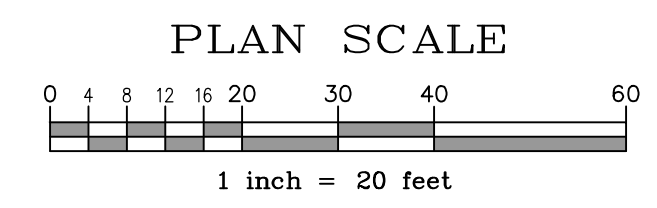


PARKING AREA PAVEMENT SECTION
NOT TO SCALE

CAPE COD BERM
NOT TO SCALE



HANDICAP PARKING SIGN
NOT TO SCALE



- LANDSCAPING NOTES**
- ALL PLANT STOCK SHALL CONFORM TO ANSI Z660.1 NURSERY STOCK, LATEST EDITION (AMERICAN ASSOCIATION OF NURSERYMEN, INC.)
 - 4" AGED PINEBARK MULCH SHALL BE APPLIED TO ALL SHRUB & GROUNDCOVER BEDS.
 - PLANT PIT BACKFILL SHALL BE MIXED AT A RATE OF 7 PARTS OF TOPSOIL TO 1 PART OF DEHYDRATED COW MANURE. USE EXISTING ON SITE TOPSOIL AS PART OF BACKFILL WHEN AVAILABLE.
 - ALL LANDSCAPED AREAS NOT PLANTED WITH TREES, SHRUBS OR GROUNDCOVER SHALL BE RESTORED WITH SEEDING OR SODDING AS INDICATED ON PLANS.
 - ALL SOD, SEED, SHRUB AND TREE AREAS SHALL RECEIVE 6" H TOPSOIL TO 1 PART OF DEHYDRATED COW MANURE. USE EXISTING ON SITE TOPSOIL AS PART OF BACKFILL WHEN AVAILABLE.
 - APPLICATION OF GRASS SEED, FERTILIZERS, LIME AND MULCH SHALL BE ACCOMPLISHED BY BROADCAST SEEDING OR SODDING AT THE RATES OUTLINED.
 - NEWLY GRADED AREAS REQUIRING SLOPE PROTECTION OUTSIDE OF NORMAL SEEDING SEASON SHALL RECEIVE HAY MULCH AT THE APPROXIMATE RATE OF NO MORE THAN 3 TONS PER ACRE.
 - ANY CHANGES IN PLANT LOCATIONS OR TYPE SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
 - CLEAR AND GRUB (TO LIMITS SHOWN ON GRADING PLAN) TO REMOVE TREES, ROCKS, DEBRIS, ROOTS, ETC. STUMPS SHALL BE REMOVED AND DISPOSED OF OFF SITE IN ACCORDANCE WITH STATE REGULATIONS. AFTER CLEARING, ROTOTILL, STRIP AND STOCKPILE ALL ON-SITE TOPSOIL FOR REUSE TO THE MAXIMUM EXTENT POSSIBLE.
 - FOR SEED AND SOD AREAS G.C. TO USE EXISTING TOPSOIL IF AVAILABLE, FOR A 4" DEPTH AND TOP DRESS WITH 2" OF SCREENED TOPSOIL, UNLESS OTHERWISE NOTED ON PLAN.
 - ALL TREES, SHRUBS AND SOD SHALL BE GUARANTEED BY THE CONTRACTOR FOR ONE YEAR AFTER ACCEPTANCE.

Professional Engineer Seal for Alan M. Gray and Zachary L. Bracken, State of Massachusetts.

Prepared By: **BRACKEN ENGINEERING, INC.**
49 HERRING POND ROAD BUZZARDS BAY, MA 02532
(tel) 508.833.0070 (fax) 508.833.2282

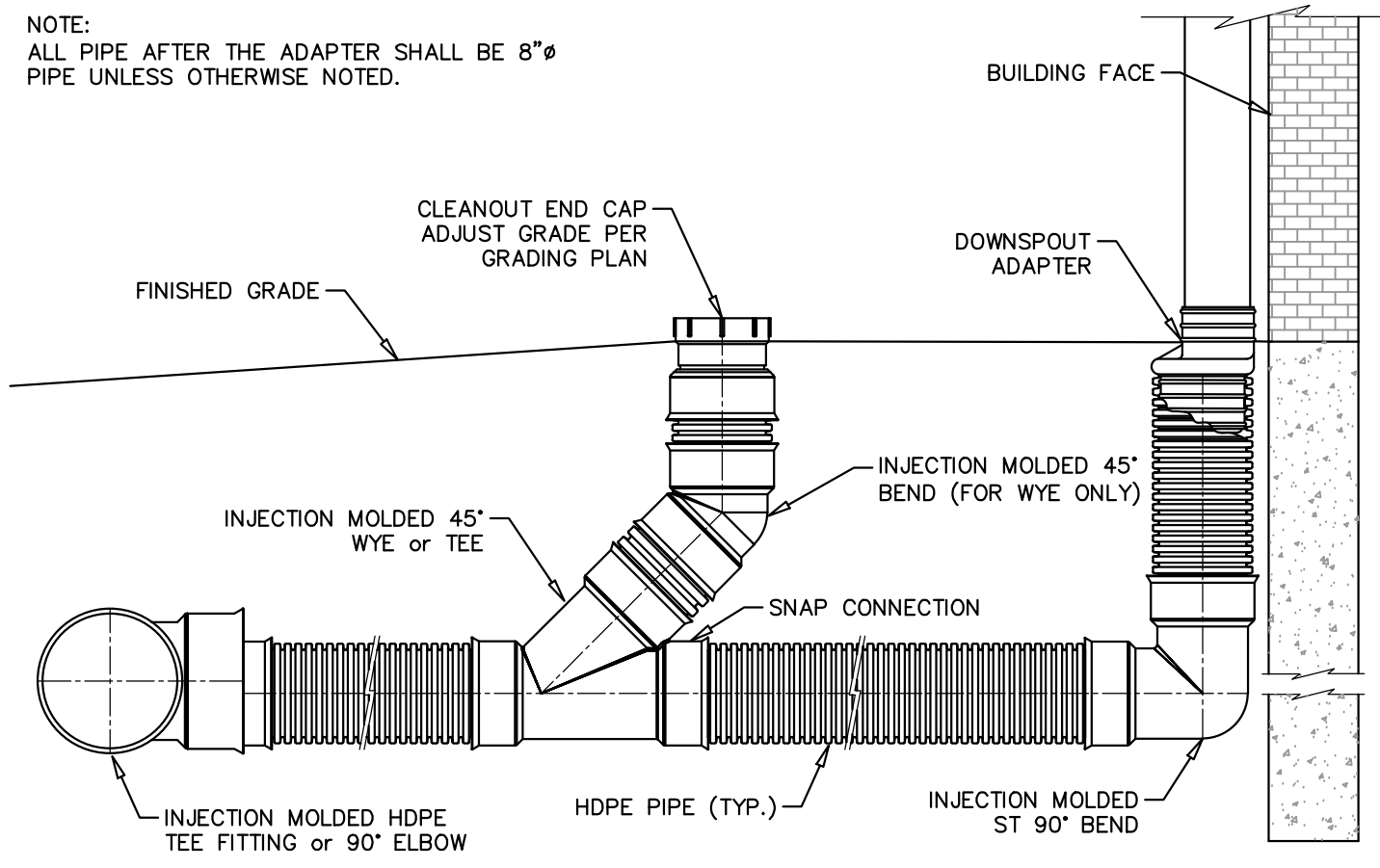
LAYOUT, ZONING and LANDSCAPING

PROPOSED SITE IMPROVEMENT PLAN IN BOURNE, MASSACHUSETTS
Prepared For: **GULF COAST REALTY, LLC**
#724 MACARTHUR BOULEVARD MAP 44.2 PARCEL 23

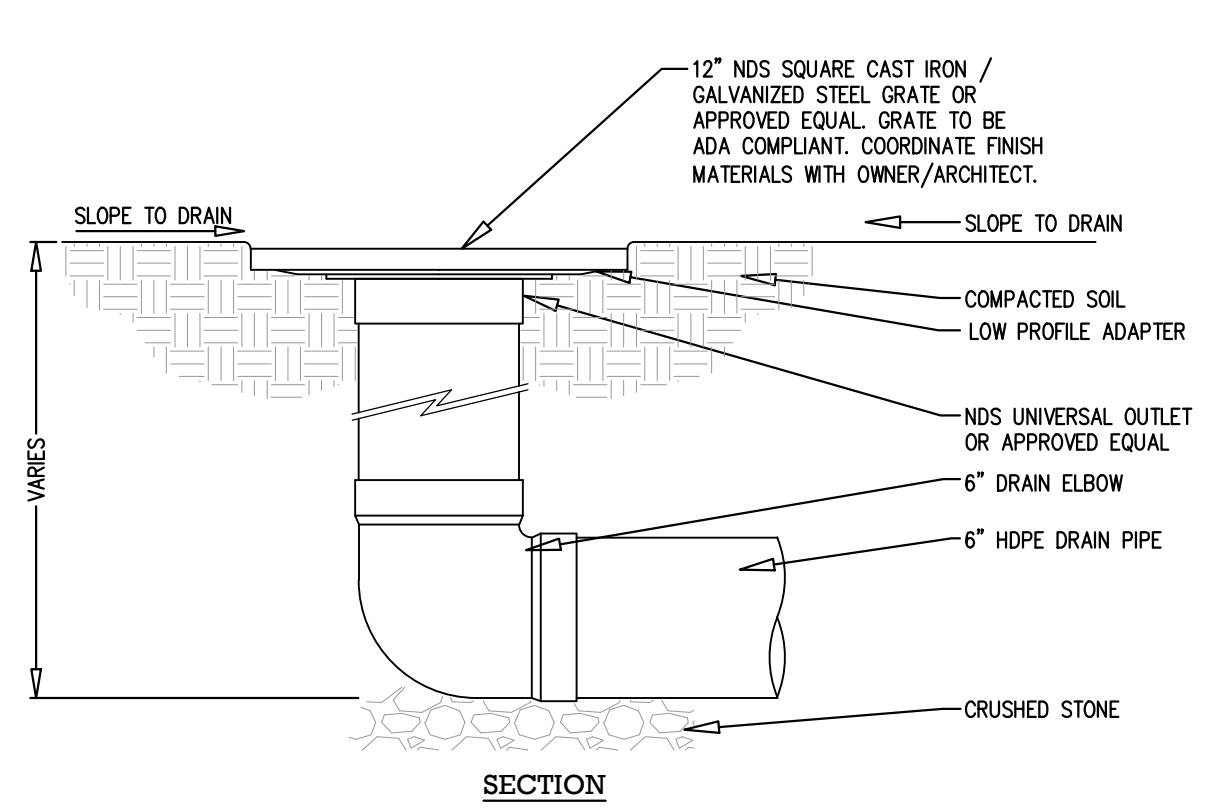
No.	Date	Revision Description	By
2	1/13/22	REVISE PLANTINGS per CONSERVATION AGENT COMMENTS	JPH
1	6/30/21	ADD REVISED PLANTING PLAN	JPH

Date: FEBRUARY 12, 2021 Drawn: RED/RMM/BEI Checked: ZLB/AMG Sheet: 4 of 6

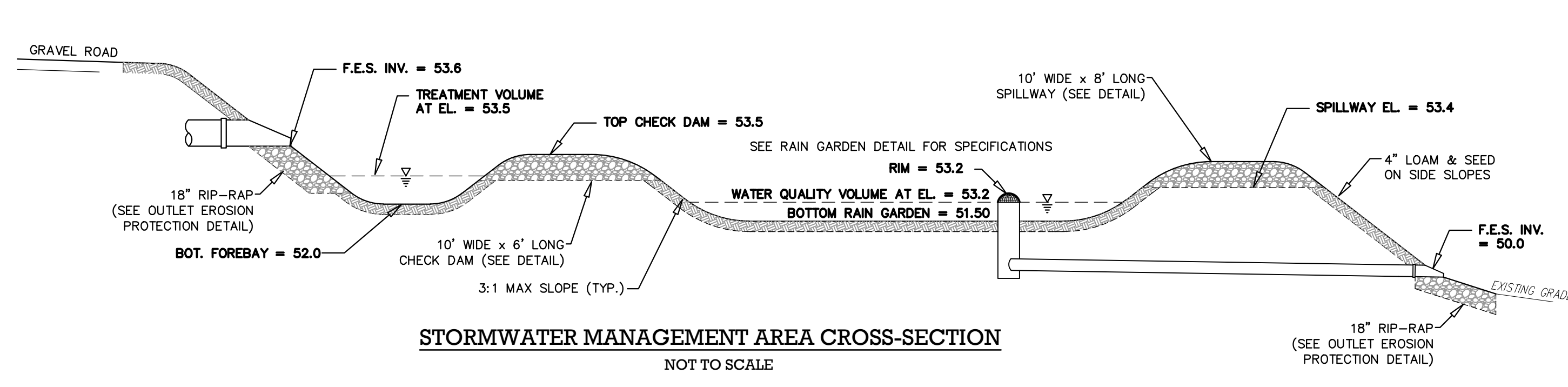
NOTE:
ALL PIPE AFTER THE ADAPTER SHALL BE 8" PIPE UNLESS OTHERWISE NOTED.



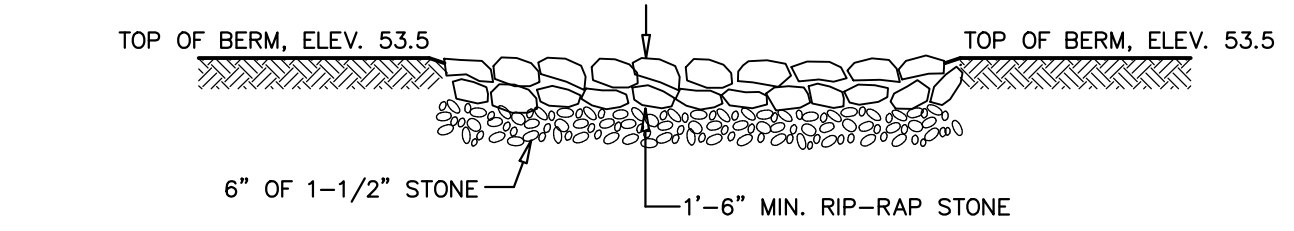
TYPICAL ROOF DRAIN DETAIL
NOT TO SCALE



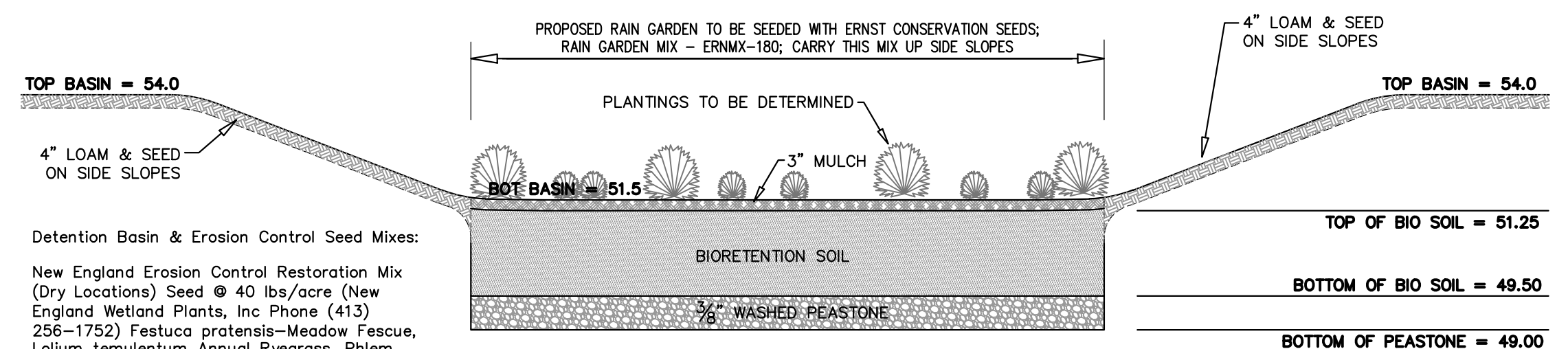
NDS LOW PROFILE ADAPTER AND ELBOW
NOT TO SCALE



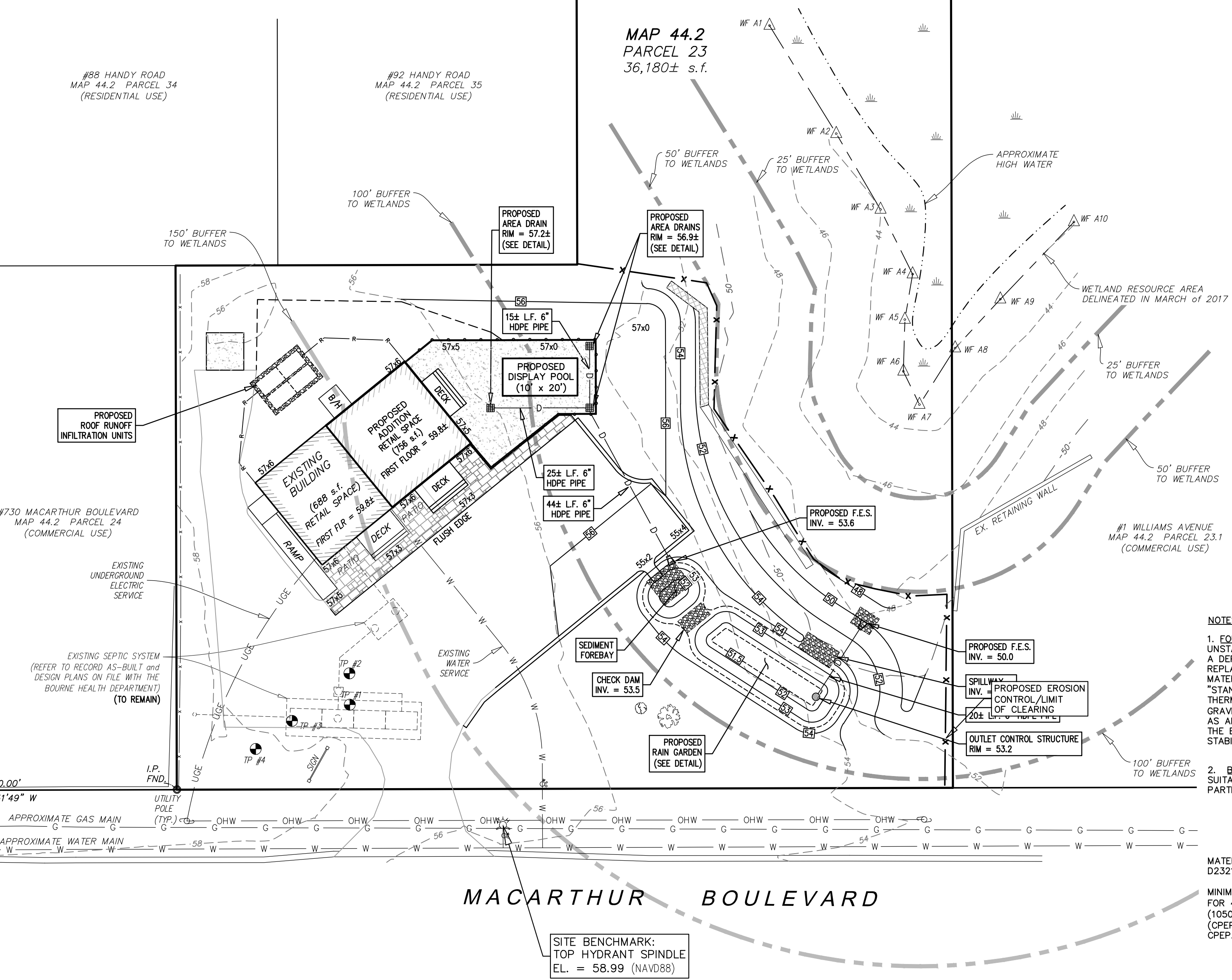
STORMWATER MANAGEMENT AREA CROSS-SECTION
NOT TO SCALE



CHECK DAM CROSS-SECTION
NOT TO SCALE



RAIN GARDEN CROSS-SECTION
NOT TO SCALE



NOTES:

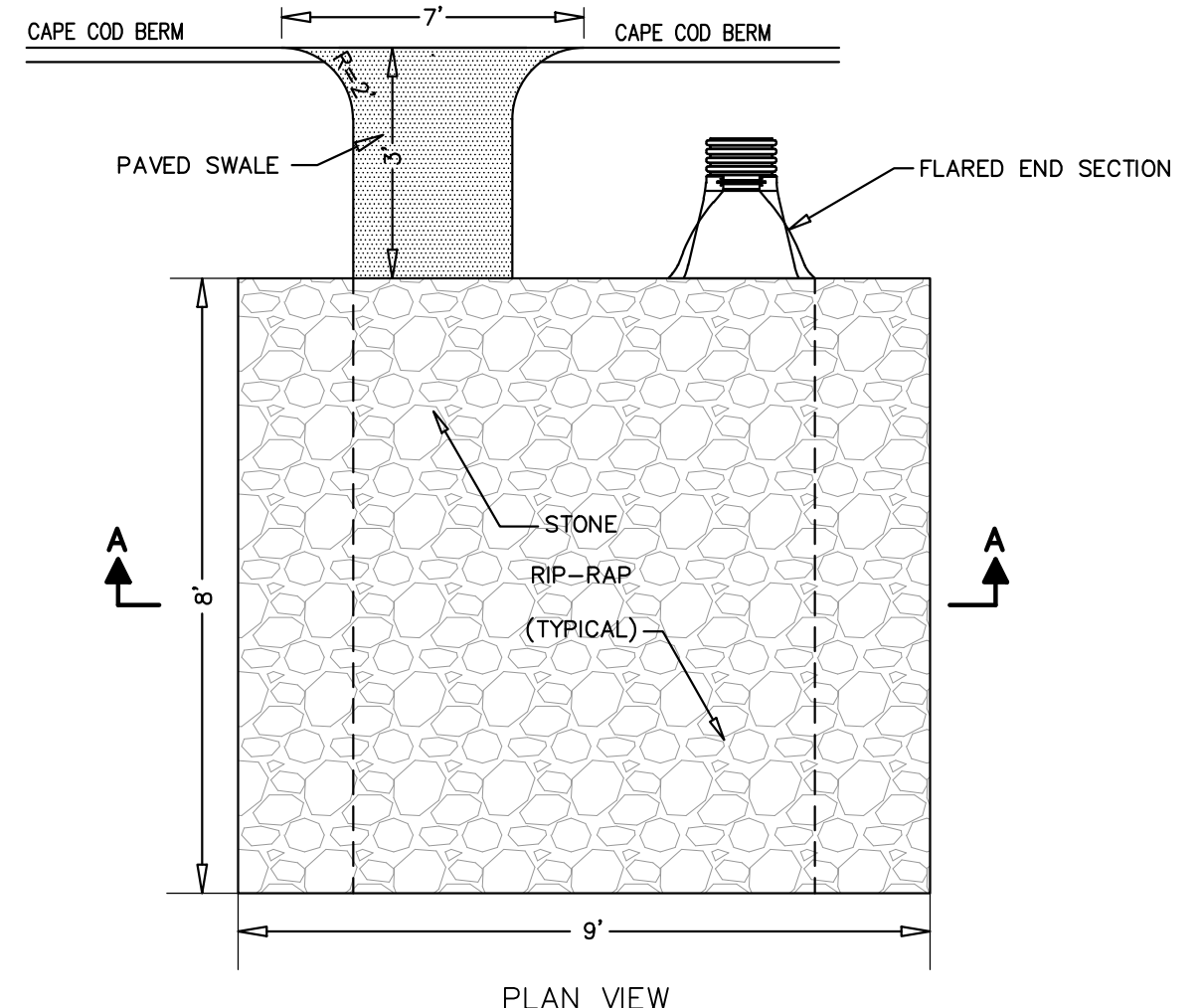
- FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH A FOUNDATION OF CLASS I OR II MATERIAL AS DEFINED IN ASTM D2321.
- BEDDING, HAUNCHING & INITIAL BACKFILL: SUITABLE MATERIAL SHALL CONSIST OF CLEAN, HARD, PARTICLES OF GRAVEL MEETING THE FOLLOWING:

SIEVE SIZES	PASSING
NO. 4	85-95%
NO. 8	5-15%
	0-2%
- MINIMUM BEDDING THICKNESS SHALL BE 4" (100MM) FOR 4"-24" (100-600MM) AND 42"-48" (1050-1200MM) CORRUGATED POLYETHYLENE PIPE (CPEP); 6" (150MM) FOR 30"-36" (750-900MM) CPEP.
- MINIMUM TRENCH WIDTHS SHALL BE AS FOLLOWS:

NOMINAL Ø in (mm)	MIN. RECOMMENDED TRENCH WIDTH, in (mm)
8 (200)	25 (630)
10 (250)	28 (710)
12 (300)	31 (790)
15 (375)	34 (860)
18 (450)	39 (990)
- MINIMUM COVER: MINIMUM RECOMMENDED DEPTHS OF COVER FOR VARIOUS LIVE LOADING CONDITIONS ARE SUMMARIZED IN THE FOLLOWING TABLE. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE TAKEN FROM THE TOP OF PIPE TO THE GROUND SURFACE.

SURFACE LIVE LOADING CONDITION	MINIMUM RECOMMENDED COVER, in (mm)
H25 (FLEXIBLE PAVEMENT)	12 (300)*
H25 (RIGID PAVEMENT)	12 (300)
E80 RAILWAY	24 (610)
HEAVY CONSTRUCTION	48 (1220)

TRENCH CROSS-SECTION & A.D.S. PIPE INSTALLATION DETAIL
NOT TO SCALE



OUTLET EROSION PROTECTION DETAIL
NOT TO SCALE

- GENERAL NOTES**
- BENCHMARK: ELEVATION = 58.99 (NAVD88) TOP OF HYDRANT SPINDLE
 - LOCUS: #724 MACARTHUR BOULEVARD MAP 44.2 PARCEL 23
 - OWNER: GULF COAST REALTY, LLC 736 WASHINGTON STREET SOUTH EASTON, MA 02375
 - DEED REF: Bk: 30391 Pg: 68
 - PLAN REF: Bk: 600 Pg: 35 (LOT K)
 - LOCUS DOES NOT FALL WITHIN A SPECIAL FLOOD HAZARD ZONE AS SHOWN ON FEMA FLOOD INSURANCE RATE MAP No. 25001C-0504-J dated 07/16/2014.
 - LOCUS DOES NOT FALL WITHIN THE NATURAL HERITAGE AND ENDANGERED SPECIES PROGRAM (NHESP) AREAS OF ESTIMATED HABITATS OF RARE WILDLIFE AND PRIORITY HABITATS OF RARE SPECIES.
 - THE WETLAND RESOURCE AREA WAS DELINEATED BY KATELYN M. GONVER, WETLAND SCIENTIST, ON MARCH 23, 2017.
 - REFER TO ORDER OF CONDITIONS MassDEP File #SE7-1989 FOR APPROVED LIMIT OF CLEARING/WORK.

Professional Engineer Seal for Alan M. Grady, No. 37732, State of Massachusetts.

Professional Engineer Seal for Zachary L. Bischoff, No. 47767, State of Massachusetts.

PLAN SCALE
1 inch = 20 feet

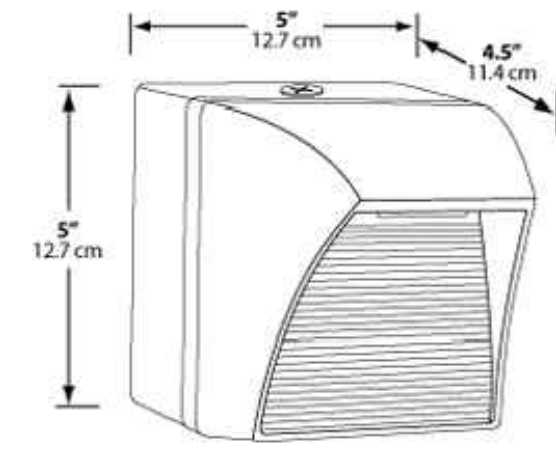
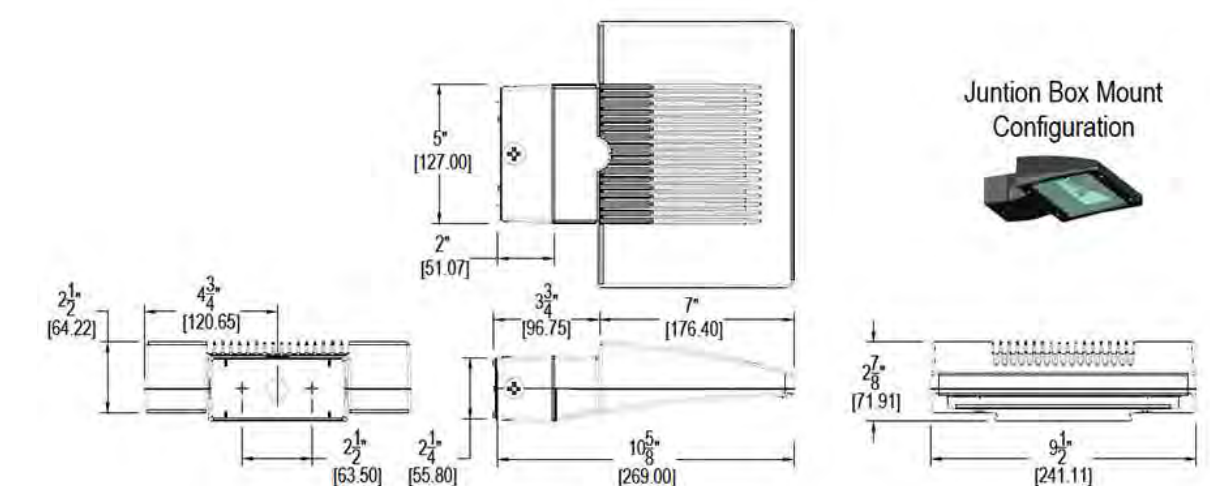
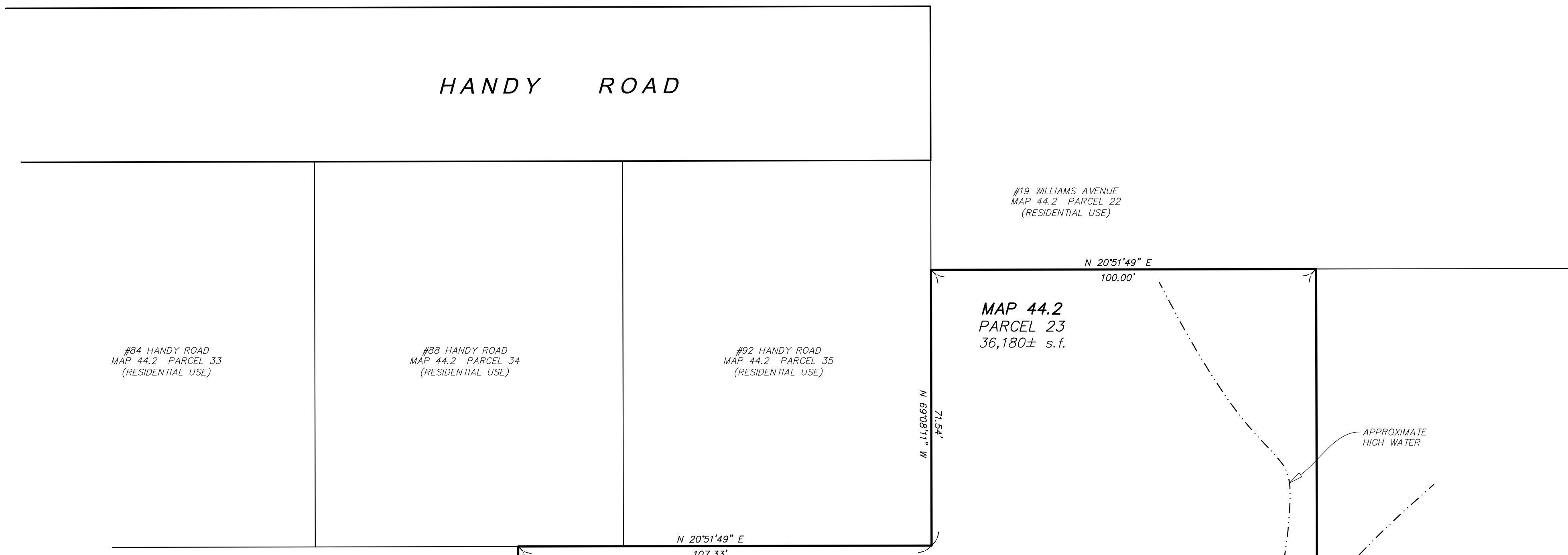
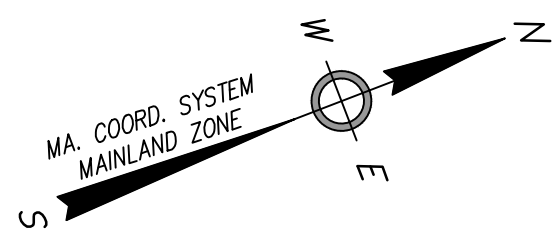
Prepared By: **BRACKEN ENGINEERING, INC.**
49 HERRING POND ROAD BUZZARDS BAY, MA 02532
19 OLD SOUTH ROAD NANTUCKET, MA 02554
(tel) 508.833.0070 (tel) 508.325.0044
(fax) 508.833.2282 (www.brackeneng.com)

Sheet Title: **GRADING, DRAINAGE & UTILITIES**

PROPOSED SITE IMPROVEMENT PLAN IN BOURNE, MASSACHUSETTS
Prepared For: **GULF COAST REALTY, LLC**
#724 MACARTHUR BOULEVARD MAP 44.2 PARCEL 23

No.	Date	Revision Description	By
2	1/13/22	REVISE PLANTINGS per CONSERVATION AGENT COMMENTS	JPH
1	6/30/21	ADD REVISED PLANTING PLAN	JPH

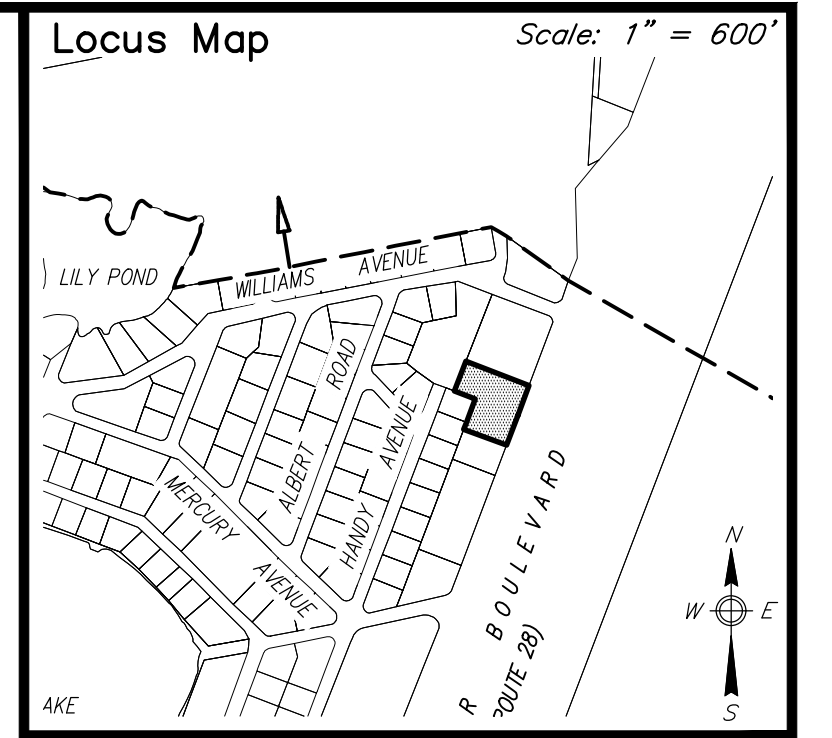
Date: FEBRUARY 12, 2021 Drawn: RED/RM/BEI Checked: ZLB/AMG Sheet: 5 of 6



LUMINAIRE SCHEDULE				
SYMBOL	QUANTITY	ARRANGEMENT	DESCRIPTION	MOUNT HEIGHT
WPLED5	2	WALL PACK	RAB LIGHTING LED 5 WATT WALLPACK - WHITE	10.0'
WPLED18	3	WALL PACK	RAB LIGHTING LED 18 WATT WALLPACK - WHITE	10.0'

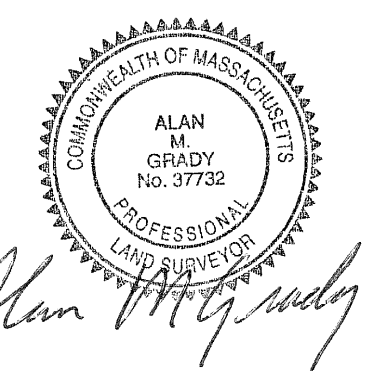
LIGHTING CONSTRUCTION NOTES

1. ALL LIGHT FIXTURES ARE TO BE DARK SKY COMPLIANT.
2. ALL FIXTURES ARE TO BE SITED SO AS TO PREVENT LIGHT INTRUSION ON TO ADJACENT PROPERTIES AND ADJACENT ROADWAYS.



GENERAL NOTES

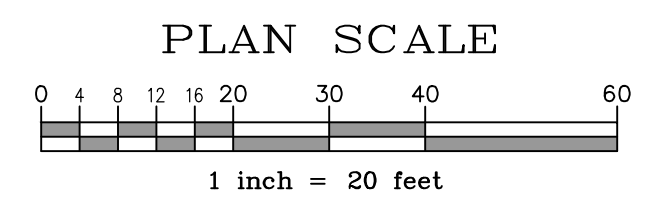
1. LOCUS: #724 MACARTHUR BOULEVARD MAP 44.2 PARCEL 23
2. OWNER: GULF COAST REALTY, LLC 736 WASHINGTON STREET SOUTH EASTON, MA 02375
3. DEED REF: Bk: 30391 Pg: 68
4. PLAN REF: Bk: 600 Pg: 35 (LOT K)
5. LOCUS DOES NOT FALL WITHIN A SPECIAL FLOOD HAZARD ZONE AS SHOWN ON FEMA FLOOD INSURANCE RATE MAP No. 25001C-0504-J dated 07/16/2014.
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7. THE WETLAND RESOURCE AREA WAS DELINEATED BY KATELYN M. GONYER, WETLAND SCIENTIST, ON MARCH 23, 2017.
8. REFER TO ORDER OF CONDITIONS MassDEP File #SE7-1989 FOR APPROVED LIMIT OF CLEARING/WORK.



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Sheet Title:
LIGHTING PLAN

PROPOSED SITE IMPROVEMENT PLAN IN BOURNE, MASSACHUSETTS
 Prepared For:
GULF COAST REALTY, LLC
 #724 MACARTHUR BOULEVARD MAP 44.2 PARCEL 23



No.	Date	Revision Description	By
2	1/13/22	REVISE PLANTINGS per CONSERVATION AGENT COMMENTS	JPH
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Date: FEBRUARY 12, 2021 Drawn: RED/RMM/BEI Checked: ZLB/AMG Sheet: 6 of 6