ABBREVIATIONS

ABAN	ABANDON
ACCMP	ASPHALT COATED CORRUGATED METAL PIPE
ADJ	ADJUST
APPROX	APPROXIMATE
BB	BOTTOM OF BERM
BC	BOTTOM OF CURB
BD	BOUND
BESW	BACK EDGE OF SIDEWALK
BIT CONC	BITUMINOUS CONCRETE
BLDG	BUILDING
BM	BENCHMARK
BO	BY OTHERS
BVC	BEGINNING OF VERTICAL CURVE
BVW	BORDERING VEGETATED WETLAND
BW	BOTTOM OF WALL
CATV	CABLE TELEVISION
CB	CATCH BASIN
CBCI	CATCH BASIN WITH CURB INLET
CB/DH	CONCRETE BOUND/DRILL HOLE
CCB	CAPE COD BERM
CEM CONC	CEMENT CONCRETE
CI	CURB INLET
CIP	CAST IRON PIPE
CLR	CLEARANCE
CLF	CHAIN LINK FENCE
CLDI	CEMENT LINED DUCTILE IRON
CMP	CORRUGATED METAL PIPE
CPP	CORRUGATED PLASTIC PIPE
CO, CTY	COUNTY
CO LO	COUNTY LAYOUT
COND	CONDUIT
CSP	CORRUGATED STEEL PIPE
CULV	CULVERT
D	DRAIN
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DMH	DRAIN MANHOLE
DR	DRIVEWAY
E	ELECTRIC
ELEV,EL	ELEVATION
EMH	ELECTRIC MANHOLE
EOP	EDGE OF PAVEMENT
EVC	END OF VERTICAL CURVE
EX	EXISTING
F.B.E.	FINISH BASEMENT ELEVATION
FDN	FOUNDATION
FE	FLARED END
F.F.E.	FINISH FLOOR ELEVATION
FND	FOUND
G	GAS
GG,GV	GAS GATE,GAS VALVE
GIP	GALVANIZED IRON PIPE
GRAN	GRANITE
GRAV	GRAVITY
GRND	GROUND
HDPE	HIGH DENSITY POLYETHYLENE
HSE	HOUSE
HYD	HYDRANT
ID	INSIDE DIAMETER
INV	INVERT
ILSF	ISOLATED LAND SUBJECT TO FLOODING
MAX	MAXIMUM
MB	MAILBOX
MIN	MINIMUM
MHB	MASSACHUSETTS HIGHWAY BOUND
MHD	MASSACHUSETTS HIGHWAY DEPARTMENT
MON	MONUMENT
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
NGVD	NATIONAL GEODETIC VERTICAL DATUM
N/F	NOW OR FORMALLY
OD	OUTSIDE DIAMETER
OHW	OVERHEAD WIRE
PC	POINT OF CURVATURE
PROP	PROPOSED
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
PVC	POLYVINYL CHLORIDE PIPE
PVMT	PAVEMENT
PWW	PAVED WATERWAY
R	RADIUS
R & D	REMOVE AND DISPOSE
R & R	REMOVE AND RESET
R & S	REMOVE AND STACK
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT OF WAY
RR	RAILROAD
RD	ROAD
S	SEWER
SB	STONE BOUND
SB/DH	STONE BOUND/DRILL HOLE
SMH	SEWER MANHOLE
STA	STATION
ST	STREET
SW	SIDEWALK
T	TANGENT
TEL	TELEPHONE
TBM	TEMPORARY BENCHMARK
TC	TOP OF CURB
TMH	TELEPHONE MANHOLE
T.O.F.	TOP OF FOUNDATION
TS	TOP OF SLOPE
TP	TEST PIT
TYP	TYPICAL
TW	TOP OF WALL
UP	UTILITY POLE
USGS	US GEOLOGICAL SURVEY
VCP	VITRIFIED CLAY PIPE
W	WATER
WCR	WHEELCHAIR RAMP
WG,WV	WATER GATE, WATER VALVE

NOTE: ALL ABBREVIATIONS MAY NOT APPEAR IN DRAWING

BOARD OF HEALTH NOTE:

1. NO LOT IS TO BE BUILT UPON WITHOUT PRIOR APPROVAL FROM THE TOWN OF MARION BOARD OF HEALTH.
2. THE MINIMUM DISTANCE FROM ANY WATER SERVICE TO A SEWER SERVICE SHALL BE 10'.
3. THE MINIMUM DISTANCE FROM PROPOSED SEWER PUMP PITS TO THE BUILDING SHALL BE 10'.

AS NOTED

GENERAL SPECIFICATIONS

1. GENERAL
THE STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, 1955 ED. WITH SUBSEQUENT MODIFICATIONS, ADDITIONS AND DELETIONS OF THE COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF HIGHWAYS, REFERRED TO HEREIN AS THE STANDARD SPECIFICATIONS"ARE INCORPORATED INTO THESE TECHNICAL SPECIFICATIONS. WHERE THERE IS A QUESTION OF INTERPRETATION OR INTENT OF THESE SPECIFICATIONS, THE STANDARD SPECIFICATIONS SHALL GOVERN.

2. SCOPE OF WORK
THE CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR AND EQUIPMENT TO PERFORM ALL WORK SHOWN ON THE PLANS.

3. LINE AND GRADE
THE CONTRACTOR IS RESPONSIBLE FOR LINE AND GRADE FOR THE PROJECT. THE CONTRACTOR SHALL ESTABLISH SUITABLE BASELINES AND SHALL TIE ALL WORK TO THESE BASELINES. BOTH HORIZONTAL AND VERTICAL CONTROL POINTS SHALL BE ESTABLISHED AND HELD.

4. DISPOSAL OF MATERIALS
ALL EXCAVATED MATERIAL, WHETHER SURPLUS OR UNSUITABLE, SHALL BE LOADED, HAULED AND PROPERLY DISPOSED OF AT NO ADDITIONAL COST TO THE OWNER. ALL ROCK, BOULDER, ASPHALT, CONCRETE AND DRAINAGE STRUCTURES SHALL BE RECYCLED AT NO ADDITIONAL COST TO THE OWNER.

5. GRAVEL
GRAVEL FOR BASE MATERIAL SHALL BE IN CONFORMANCE WITH SECTION M1.03.0, GRAVEL BORROW, TYPE C OF THE STANDARD SPECIFICATIONS. MAXIMUM STONE SIZE SHALL BE 2 INCHES LARGEST DIMENSION.

6. DENSE-GRADED CRUSHED STONE
MATERIAL SHALL BE IN CONFORMANCE WITH SECTION M2.01.7, DENSE-GRADED CRUSH STONE OF THE STANDARD SPECIFICATIONS. MAXIMUM STONE SIZE SHALL BE 1 ½ INCHES LARGEST DIMENSION.

7. CRUSHED STONE
CRUSHED STONE FOR MANHOLE INSTALLATION BEDDING SHALL CONFORM TO SECTION M2.01.0 OF THE STANDARD SPECIFICATION. MAXIMUM STONE SIZE SHALL BE 1½ INCHES LARGEST DIMENSION.

8. CEMENT MORTAR
CEMENT MORTAR SHALL BE COMPOSED OF ONE (1) PART PORTLAND CEMENT AND TWO (2) PARTS OF SAND BY VOLUME WITH SUFFICIENT WATER TO FORM A WORKABLE MIXTURE. IT SHALL CONFORM TO SECTION M4.02.15 OF THE STANDARD SPECIFICATION. CEMENT, SAND AND WATER SHALL CONFORM TO SECTION M4.01.0, M4.02.02B AND M4.02.04 RESPECTIVELY.

9. CLAY BRICK
CLAY BRICK FOR SHIMMING CASTINGS SHALL CONFORM TO THE REQUIREMENTS OF SECTION M4.05.2, CLAY BRICK OF THE STANDARD SPECIFICATION AND SHALL BE 7-3/4' X 3-3/4" X 2-1/4" NOMINAL DIMENSION. COMPRESSIVE STRENGTH SHALL NOT BE LESS THAN 2500 POUNDS PER SQUARE INCH. RISERS EXCEEDING EIGHT (8) INCHES IN HEIGHT MAY BE CONSTRUCTED FROM CEMENT CONCRETE BARREL LOCK OR MAY BE PRECAST UNITS, OF 24" INSIDE DIAMETER WITH HS-20 LOADING DESIGN.

10. BITUMINOUS CONCRETE FOR DRIVEWAYS/ROADWAYS
SHALL BE CLASS I, TYPE I-1 BITUMINOUS CONCRETE BASE COURSE AND WEARING COURSE. BITUMINOUS CONCRETE FOR BASE COURSE (BINDER) SHALL CONFORM TO THE REQUIREMENTS OF SUBSECTION M3.11.0 OF DIVISION III, MATERIALS AND THE FOLLOWING SUBSECTIONS:

MINERAL AGGREGATE	M3.11.04
MINERAL FILLER	M3.11.05
BITUMINOUS MATERIALS	M3.11.06

COMPOSITION OF BINDER COURSE MIXTURE (SEE TABLE "A") M3.11.02

BITUMINOUS CONCRETE FOR WEARING COURSE SHALL CONFORM TO THE REQUIREMENTS OF SUBSECTION M3.11.0 OF DIVISION III, MATERIALS AND THE FOLLOWING SUBSECTIONS:

MINERAL AGGREGATE	M3.11.04
MINERAL FILLER	M3.11.05
BITUMINOUS MATERIALS	M3.11.06

COMPOSITION OF WEARING COURSE MIXTURE SHALL BE FOR TOP COURSE (SEE TABLE "A") SECTION M3.11.02.

11. PAVEMENT STRIPING PAINT
PAINT FOR PAVEMENT STRIPING SHALL BE AS SPECIFIED IN SECTION M7.01 OF THE STANDARD SPECIFICATION.

CONSTRUCTION NOTES

1. IN GENERAL, THE PLANS ARE DIAGRAMMATIC AND ARE NOT INTENDED TO SHOW EVERY FITTING, CHANGE IN DIRECTION OR DETAIL OF CONSTRUCTION.
2. THE LOCATION OF UTILITIES AND EXISTING ON-SITE SEPTIC SYSTEMS WERE OBTAINED FROM VARIOUS SOURCES OF INFORMATION. THE EXACT LOCATION AND COMPLETENESS IS NOT GUARANTEED.
3. THE CONTRACTOR SHALL NOTIFY DIG SAFE PRIOR TO THE START OF ANY EXCAVATION. (1-888-DIG-SAFE)
4. THE CONTRACTOR SHALL GIVE ALL NOTICES, COMPLY WITH ALL LAWS AND REGULATIONS, AND PAY ALL FEES ASSOCIATED WITH THE INSTALLATION OF THIS WORK.
5. THE CONTRACTOR SHALL FIELD VERIFY, PRIOR TO CONSTRUCTION ALL EXISTING UNDERGROUND UTILITY LOCATIONS AND POINTS OF INTERCONNECTION.
6. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR, SUPERVISION, TOOLS, EQUIPMENT, FUEL, POWER, SANITARY FACILITIES AND INCIDENTALS NECESSARY FOR THE FURNISHING, PERFORMANCE, TESTING, START-UP AND COMPLETION OF THIS WORK.
7. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE SAFETY OF PERSONNEL AND PROTECTION OF PROPERTY AT THE SITE OR ADJACENT THERETO INCLUDING TREES, SHRUBS, LAWNS, PAVEMENTS, ROADWAYS, STRUCTURES AND UNDERGROUND UTILITIES NOT DESIGNED FOR REMOVAL, RELOCATION, OR REPLACEMENT.
8. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF CONSTRUCTION REQUIRED FOR THE INSTALLATION OF THIS WORK.
9. ALL MATERIALS SHALL BE NEW AND FREE FROM DEFECTS AND OF GOOD QUALITY.
10. THE CONTRACTOR SHALL KEEP THE PREMISES FREE FROM THE ACCUMULATION OF WASTE MATERIAL AND OTHER DEBRIS RESULTING FROM THIS WORK.
11. ALL PAVEMENT MARKINGS DISTURBED BY CONSTRUCTION SHALL BE RESTORED AS PART OF THIS WORK.
12. THE CONTRACTOR SHALL INSTITUTE ALL SAFETY MEASURES NECESSARY TO PROTECT THE PUBLIC SAFETY, THIS SHALL INCLUDE, BUT NOT LIMITED TO, BARRICADES, SIGNS, LIGHTING, FENCES, POLICE DETAILS, AND ANY OTHER MEANS AS DIRECTED. NO TRENCHES ARE TO REMAIN OPEN OVERNIGHT.
13. ALL ELEVATIONS ARE BASED ON THE DATUM OF N.G.V.D.
14. SIDE SLOPES SHALL NOT EXCEED 3:1, EXCEPT WHERE NOTED. EXPOSED SIDE SLOPES SHALL BE DRESSED WITH 6 INCHES OF TOPSOIL IN ONE OPERATION. WHERE SIDE SLOPES EXCEED 3:1, PROVIDE AN EROSION CONTROL BLANKET OVER THE PLANTED SEED BED.
15. PERMANENT SEEDED VEGETATED COVER SHALL BE ESTABLISHED ON ALL DISTURBED SOIL SURFACES WITHIN 48 HOURS AFTER FINAL CONSTRUCTION AND CLEANUP.
16. SEED BED SHALL BE 6" OF SOIL WORKED INTO SUBBASE PER DETAIL SHOWN.
17. MAXIMUM SIDE SLOPES IN ALL CUTS & FILLS FACING DOWN SLOPE OFFSITE SHALL BE FINISHED GRADED TO SLOPES OF NOT MORE THAN 3:1.
18. PERMANENT SEEDING (BEFORE SEPTEMBER 15)
LIME TO PH OF 6.5 ACCORDING TO SOIL TEST OR APPLY AT THE RATE OF 100 TO 150 LBS. PER 1,000 SQUARE FEET. APPLY 10-20-20 FERTILIZER AT 1,000 LBS. PER ACRE. INCORPORATE LIME AND FERTILIZER IN TOP 4 INCHES OF SOIL. SEED 100 LBS. PER ACRE OF THE FOLLOWING SEED MIX.

PURE PERCENT	SEED MIX
30-35%	CREEPING RED FESCUE
30-35%	PERENNIAL RYEGRASS
20-25%	KENTUCKY BLUEGRASS
10-15%	ANNUAL RYEGRASS

12. CAST-IN-PLACE CONCRETE
CAST-IN-PLACE CONCRETE SHALL CONFORM TO THE PROVISIONS OF SECTION M4.02.00 CEMENT CONCRETE OF THE STANDARD SPECIFICATIONS.

13. LOAM
LOAM BORROW SHALL CONFORM TO THE PROVISIONS OF SECTION M1.05.0 LOAM BORROW OF THE STANDARD SPECIFICATIONS.

14. SEED
SEED FOR SLOPES AND SHOULDERS SHALL CONFORM TO THE PROVISION OF SECTION M6.03.0 SEED (FOR SLOPES AND SHOULDERS) OF THE STANDARD SPECIFICATIONS. SEED FOR LAWNS SHALL CONFORM TO THE PROVISIONS OF SECTION M6.06.0 (FOR GRASSPLOTS AND ISLANDS) OF THE STANDARD SPECIFICATIONS. FERTILIZER SHALL CONFORM TO SECTION M6.02.0 FERTILIZER OF THE STANDARD SPECIFICATIONS.

15. SITE PREPARATION
SITE PREPARATION SHALL INCLUDE THE CLEARING AND REMOVAL OF ALL TREES, STUMPS, BRUSH, STONES AND BOULDERS TO THE LINES AND GRADES AS SHOWN ON THE PLANS. CLEARING AND GRUBBING SHALL BE IN CONFORMANCE WITH SECTION 101 OF THE STANDARD SPECIFICATIONS.

16. WATER MAIN & SERVICES
THE WATER MAIN SHALL BE 8" DIAM. AWWA C-900 PVC. FITTINGS SHALL BE CEMENT LINED DUCTILE IRON MECHANICAL JOINT. PIPE RESTRAINTS AT FITTINGS AND VALVES SHALL BE MECHANICAL JOINT RESTRAINT GLAND TYPE MANUFACTURED OF DUCTILE IRON. RESTRAINT HARNESSES SHALL BE USED AT PIPE JOINTS AND SHALL BE MANUFACTURED FROM DUCTILE IRON. THE WATER MAIN INSTALLATION SHALL BE IN STRICT CONFORMANCE WITH THE TOWN OF MARION WATER DEPARTMENT STANDARDS. HYDROSTATIC PRESSURE TESTING, DISINFECTION AND FLUSHING SHALL BE PERFORMED IN ACCORDANCE WITH MARION WATER DEPARTMENT STANDARDS. ANY INSTALLATION, TESTING, DISINFECTION, ANALYSIS OR MATERIAL SPECIFICATIONS NOT COVERED BY THE TOWN OF MARION WATER DEPARTMENT REQUIREMENTS SHALL REFER TO SECTION 301 OF THE STANDARD SPECIFICATIONS. THE WATER MAIN, SERVICES AND ALL APPURTENANCES SHALL BE INSTALLED PER THE LINES AND LOCATIONS AS SHOWN ON THE PLANS.

17. SANITARY SEWER FORCE MAIN
SEWER MAIN AND ALL APPURTENANCES SHALL BE SCHEDULE 40 P.V.C. FORCE MAIN CONFORMING TO SECTION M5.03.8 OF THE STANDARD SPECIFICATIONS. THE SIZE OF THE FORCE MAINS AND ALL APPURTENANCES SHALL BE AS NOTED ON THE PLANS, SHALL CONFORM TO SECTION M5.03.8 OF THE STANDARD SPECIFICATIONS AND SHALL BE IN CONFORMANCE WITH ALL REQUIREMENTS OF THE TOWN OF MARION SEWER AND HEALTH DEPARTMENTS AS WELL AS TITLE 5 OF THE MASSACHUSETTS ENVIRONMENTAL CODE, AS APPLICABLE.

18. FLUSHING CONNECTION MANHOLE
INTERMEDIATE FLUSHING CONNECTION SEWER MANHOLES SHALL BE PER THE LOCATIONS AS SHOWN ON THE PLANS AND SHALL BE PER THE SPECIFICATIONS OF THE TOWN OF MARION SEWER DEPARTMENT. WHEN NOT SPECIFIED BY THE MARION SEWER DEPARTMENT, INTERMEDIATE FLUSHING SEWER MANHOLES SHALL BE EXTERIOR WATERPROOFED PRECAST CONCRETE STRUCTURES INSTALLED PER THE PLANS AND IN ACCORDANCE WITH SECTION 200 OF THE STANDARD SPECIFICATIONS.

19. GRINDER PUMP STATIONS
SEWER PUMP STATION INSTALLATION AND MATERIALS SHALL BE PER THE LOCATIONS SHOWN ON THE PLANS AND IN CONFORMANCE WITH THE MATERIAL AND INSTALLATION REQUIREMENTS OF THE TOWN OF MARION SEWER DEPARTMENT. SEWER PUMP STATION SHALL BE ENVIRONMENT ONE 2000 SERIES MODEL GP2010 WITH SIMPLEX GRINDER PUMP. GRINDER PUMP TANK SHALL BE HIGH DENSITY POLYETHYLENE. PUMP SYSTEM SHALL INCLUDE BUT NOT BE LIMITED TO AN AT-GRADE ACCESS COVER, ELECTRICAL QUICK DISCONNECT, POWER & ALARM CABLE, ALARM PANEL WITH NEMA 4X ENCLOSURE, CONCRETE CHAMBER ANCHOR AND ALL MANUFACTURER SUPPLIED VALVES, BENDS, APPURTENANCES AND ASSOCIATED ITEMS. ALARM PANEL SHALL BE ENVIRONMENT ONE SENTRY ALARM PANEL. A TOTAL OF THREE GRINDER PUMP STATIONS SHALL BE REQUIRED.

20. GRAVITY FLOW BUILDING SEWERS
ALL GRAVITY FLOW BUILDING SEWERS SHALL BE 4" DIAMETER SCHEDULE 80 P.V.C. PIPE IN CONFORMANCE WITH SECTION M5.03.7 OF THE STANDARD SPECIFICATIONS AND INSTALLED PER THE LOCATIONS AND DETAILS SHOWN ON THE PLANS AND THE REQUIREMENTS OF THE TOWN OF MARION SEWER AND HEALTH DEPARTMENTS AS WELL AS TITLE FIVE OF THE COMMONWEALTH OF MASSACHUSETTS ENVIRONMENTAL CODE. IF NO PORTION OF THE 4" DIAMETER BUILDING SEWER IS LOCATED UNDER A DRIVEWAY AREA OR OTHERWISE SUBJECTED TO POSSIBLE HS-20 LOADING, SCHEDULE 40 P.V.C. MAY BE USED IN LIEU OF SCHEDULE 80 P.V.C.

21. UTILITY DUCT BANK
UTILITY DUCT BANK SHALL BE A 4 CONDUIT DUCT BANK IN CONFORMANCE WITH THE SPECIFICATIONS AND REQUIREMENTS OF THE RESPECTIVE UTILITY COMPANIES. UTILITIES SHALL BE INSTALLED PER THE LOCATIONS SHOWN ON THE PLANS OR AS OTHERWISE INDICATED BY THE RESPECTIVE UTILITY COMPANIES. DUCT BANK SHALL BE ENCASED IN CONCRETE WHEN PASSING UNDER OR LOCATED IN ROADWAYS.

22. GENERAL FILL FOR FLOOD ZONE AROUND DWELLING LOCATIONS/RELOCATIONS (NOT IN THIS CONTRACT)
THE FILL TO BE USED FOR THE FLOOD ZONE FILLING AROUND THE EXISTING AND RELOCATED DWELLINGS SHALL BE ORDINARY BORROW IN CONFORMANCE WITH SECTION M1.01.0 OF THE STANDARD SPECIFICATIONS. THE FILL SHALL BE INSTALLED IN CONFORMANCE WITH SECTION 150.62 OF THE STANDARD SPECIFICATIONS.

18. (CONTINUED)
HYDRO SEEDING IS AN ALTERNATIVE FOR THIS APPLICATION. A MIXTURE OF SEED WATER AND MULCH IS SPRAYED ON THE SEED BED COMBINING THREE (3) SEPARATE ACTIONS INTO ONE (1) OPERATION.
19. TEMPORARY SEEDING (AFTER SEPTEMBER 15 BEFORE OCTOBER 15)
A. STEPS 5A-5C.
B. SEED 120lbs PER ACRE-100% PURE WINTER RYE.
C. STEP 5E.
D. AFTER OCTOBER 15, APPLY EXTRA HEAVY MULCH 150-200lbs PER 1000 S.F. OVER TEMPORARY SEED PER MULCH SPEC. RESEED & REMULCH IN THE SPRING. MULCH SPEC. RESEED & REMULCH IN THE SPRING.
20. TEMPORARY MULCH (OCTOBER 1-MAY 1)
A. HAY OR STRAW, 150-200lbs PER 1000 S.F., 4" DEEP ANCHOR WITH SYNTHETIC MULCH BINDER, JUTE NETTING OR TACK TO TOP SOIL.
B. BARK & COMPOST OR WOOD CHIPS: 500-900lbs PER 1000 S.F. 8" TO 12" DEEP, APPLIED WITH 10lbs NITROGEN FERTILIZER PER TON OF MULCH USED.
21. ALL CONSTRUCTION SHALL CONFORM WITH N.R.C.S. BEST MANAGEMENT PRACTICES.
22. ALL METHODS AND MATERIALS SHALL CONFORM WITH MASSACHUSETTS HIGHWAY DEPARTMENT STANDARDS, THE REQUIREMENTS OF THE TOWN OF MARION D.P.W., AND THE SUBDIVISION RULES AND REGULATIONS.
23. THE MINIMUM DISTANCE FROM PROPOSED SEWER PUMP PITS TO THE BUILDING SHALL BE 10'.
24. THE MINIMUM DISTANCE FROM ANY WATER SERVICE TO A SEWER SERVICE SHALL BE 10'.
25 ALL NEWLY CONSTRUCTED HOUSES SHALL HAVE THE GUTTER'S & DOWN SPOUTS CONNECTED TO AN UNDERGROUND INFILTRATION SYSTEM OR BIORETENTION AREA. ALL INFILTRATION UNITS OR BIORETENTION AREAS SHALL HAVE THE MINIMUM CAPACITY TO CONTAIN THE TOWN OF MARION WATER QUALITY VOLUME.
26. AFTER SEWER CONNECTION IS COMPLETE AND IN USE, CONTRACTOR SHALL ABANDON EXISTING ONSITE SEWAGE DISPOSAL SYSTEM IN ACCORDANCE WITH 310.CMR SECTION 15.354 OF THE MASSACHUSETTS ENVIRONMENTAL CODE AND ALL REQUIREMENTS OF THE MARION BOARD OF HEALTH. CONTRACTOR SHALL FOLLOW THIS REQUIREMENT ONLY FOR EACH DWELLING CONNECTED TO THE MUNICIPAL SEWER SYSTEM.
27. IN ANY LOCATIONS WHERE SEWER LINES CROSS WATER LINES, CONSTRUCTION OF THE TWO LINES SHALL CONFORM TO 310.CMR SECTION 15.211 (1) OF THE MASSACHUSETTS ENVIRONMENTAL CODE.
28. ALL COMPONENTS OF ENVIRONMENT ONE PUMP STATION AND SERVICE FORCE MAIN LINES SHALL BE INSTALLED IN ACCORDANCE WITH ALL MANUFACTURER'S SPECIFICATIONS, RECOMMENDATIONS AND PROCEDURAL REQUIREMENTS.

EROSION CONTROL NOTES:

1. THE SITE CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SUITABLE EROSION AND SEDIMENTATION CONTROL DEVICES ON SITE DURING CONSTRUCTION AS REQUIRED TO PREVENT SILT FROM LEAVING THE SITE. SILT WILL NOT BE ALLOWED BEYOND CONSTRUCTION LIMITS. ADDITIONAL PROTECTION: ON-SITE PROTECTION MUST BE PROVIDED THAT WILL NOT PERMIT SILT TO LEAVE THE PROJECT CONFINES DUE TO UNFORSEEN CONDITIONS OR ACCIDENTS.

LEGEND

EXISTING	DESC.	PROPOSED
-80-	CONTOURS	80 / 80x50 / 80.0
80.0	SPOT GRADE	
	EDGE OF BORDERING VEGETATED WETLAND (BVW) W/FLAGS	
	F.E.M.A. FLOOD ZONE DELINEATION	
	DITCH/SWALE	
D	DRAIN LINE	D
	CATCH BASIN (CB)	
	DRAINAGE MANHOLE (DMH)	
S	SEWER LINE	2" PVC FORCE MAIN
	SEWER MANHOLE (SMH)	
E	ELECTRIC LINE	E
	ELECTRIC MANHOLE (EMH)	
T	TELEPHONE LINE	T
	TELEPHONE MANHOLE (TMH)	
OHW	OVERHEAD WIRE	OHW
	UTILITY POLE	
	GUY POLE	
	GUY ANCHOR	
	WATER GATE/VALVE	
	WATER SHUTOFF/CURB STOP	
	HYDRANT	
	UNDERGROUND CABLE, TEL & ELECTRIC DUCT BANK	CATV/E/T
	SEWER STUB	
	GAS GATE/VALVE	
	GAS SHUTOFF	
	GAS METER	
W	WATER LINE	W
G	GAS LINE	G
	LIGHT POLE	
	SIGN	
	FENCE	
	SILT FENCE	
MB	MAILBOX	
CATV	CABLE TV	CATV
SB FND.	GRANITE BOUND	
CB FND.	CONCRETE BOUND	
	IRON PIN/ROD (I.P.)	
	DRILL HOLE	
	STONEWALL	
	TREE LINE	
PT	PERC TEST/TEST PIT	
	EROSION CONTROL BARRIER	

NOTE: SYMBOLS OR TEXT MAY NOT APPEAR IN DRAWING

EROSION CONTROL NOTES (CONTINUED)

2. EROSION CONTROL MEASURES SHALL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLANS DOES NOT PROVIDE SUFFICIENT EROSION AND SEDIMENT CONTROL, ADDITIONAL CONTROL MEASURES SHALL BE IMPLEMENTED. CONTRACTOR IS RESPONSIBLE FOR REPAIRING OR REPLACING EROSION CONTROL DEVICES WHICH BECOME INEFFECTIVE.
3. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR ALL GRADING AND OTHER LAND DISTURBING ACTIVITIES PRIOR TO CONSTRUCTION.
4. THE CONTRACTOR IS RESPONSIBLE FOR THE CLEANUP AND REMOVAL OF ANY BUILDUP OF SEDIMENT WHICH ESCAPES FROM THE SITE.
5. CONTRACTOR IS RESPONSIBLE FOR CLEANING SILT AND DEBRIS OUT OF ALL STORM DRAINAGE STRUCTURES UPON THE COMPLETION OF CONSTRUCTION.
6. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL TEMPORARY EROSION CONTROL MEASURES AFTER CONSTRUCTION IS COMPLETE AND ALL DISTURBED AREAS HAVE BEEN STABILIZED.
7. THE CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH ANY FINES LEVIED AGAINST THE SITE FOR VIOLATIONS OF EROSION CONTROL REGULATIONS.
8. CONTRACTOR SHALL PROVIDE TEMPORARY GROUND COVER FOR ALL AREAS WITH EXPOSED SOIL WHICH WILL NOT BE DISTURBED BY GRADING OPERATIONS FOR A PERIOD OF THIRTY DAYS OR MORE.
9. IF WORK ON THIS PROJECT IS SUSPENDED FOR ANY REASON, THE CONTRACTOR SHALL MAINTAIN THE SOIL EROSION AND SEDIMENTATION CONTROL FACILITIES IN GOOD CONDITION DURING THE SUSPENSION OF WORK.
10. SPRINKLE OR APPLY DUST SUPPRESSORS TO KEEP DUST WITHIN TOLERABLE LIMITS AT THE CONSTRUCTION SITE.
11. THE CONTRACTOR MUST COMPLY WITH ALL ORDERS OF CONDITIONS AND AMENDED ORDERS OF CONDITIONS ISSUED BY THE TOWN OF MARION CONSERVATION COMMISSION.

H:\GAF DRAWINGS\2000 DRAWINGS\00-5096(Coolidge)\00-5096\dwg\00-5096 Construction Drawings.dwg

REV.	DATE	BY	APP'D	DESCRIPTION

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"BLANKINSHIP'S LANDING"
WATERFRONT COMPOUND CIVIL DRAWINGS
ABBREVIATIONS, LEGEND, NOTES & SPECS
OFF POINT ROAD MARION, MA.

PREPARED FOR:
COOLMAR LIMITED PARTNERSHIP
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JOB NO.: 00-5096

DWG. 2 OF 6