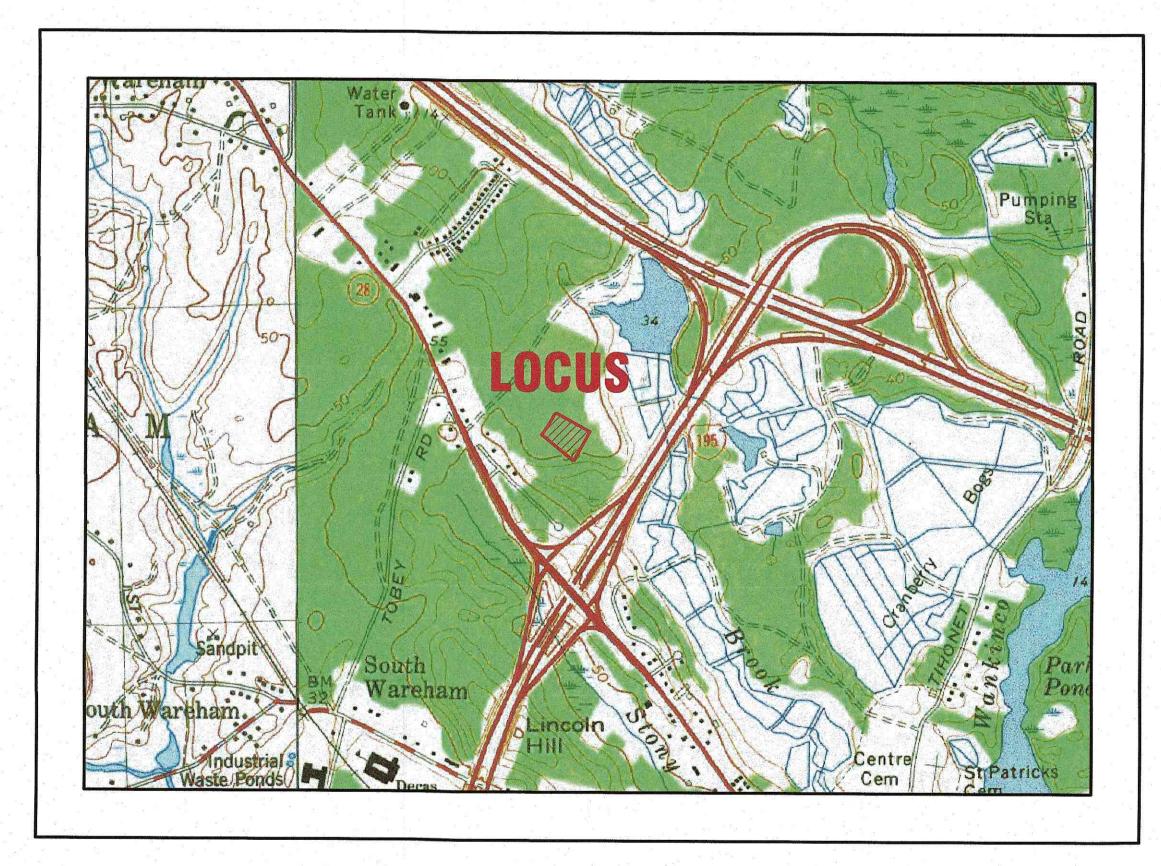
# 3 KENDRICK ROAD, LLC

SITE IMPROVEMENTS PLAN 3 KENDRICK ROAD WAREHAM, MASSACHUSETTS

OWNER: 3 KENDRICK ROAD, LLC

P.O. BOX 1135 **MARION, MA 02758** 



- U.S.G.S. LOCUS PLAN -

SCALE: 1"=1000'

## SITE DATA

ZONING DISTRICT: INDUSTRIAL ASSESSOR'S MAP: 108 ASSESSOR'S LOT: 1006.C REQUIRED LOT AREA: 30,000 S.F. REQUIRED ROAD FRONTAGE: 150' FRONT SETBACK: 20' SIDE & REAR SETBACK: 10' MAX. PRINCIPAL BUILDING HEIGHT: 50' MAX. BUILDING COVERAGE: 50% MAX. LOT COVERAGE: 70% WATER SUPPLY: TOWN WATER SANITARY SEWER: TOWN SEWER LANDSCAPE BUFFER: 10'

## **ZONING DATA**

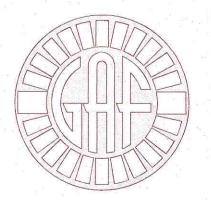
ZONING TABLE	ALLOWED	EXISTING	PROVIDED	
LOT AREA:	30,000 S.F.	120,294± S.F.	SAME AS EXISTING	
FRONT SETBACK:	20'	48.9	SAME AS EXISTING	
SIDE SETBACK:	10'	49.6	SAME AS EXISTING	
REAR SETBACK:	10'	225.2	125.3'	
MAX. BUILDING COVERAGE:	50%	13.9%	22.0%	
MAX. LOT COVERAGE:	70%	38.7%	50.1%	

## PARKING DATA:

REQUIRED: 1 SPACE PER 250 S.F. G.F.A. (OFFICE) 5,500 S.F./250 S.F.= 22 SPACES
REQUIRED: 1 SPACE PER 1.5 EMPLOYEES ON LARGEST
SHIFT PLUS 1 PER VEHICLE STORED ON PREMISES. PROPOSED NUMBER OF EMPLOYEES=20 NUMBER OF PARKING SPACES REQUIRED=14

TOTAL PARKING SPACES REQUIRED=36

TOTAL PROVIDED=40



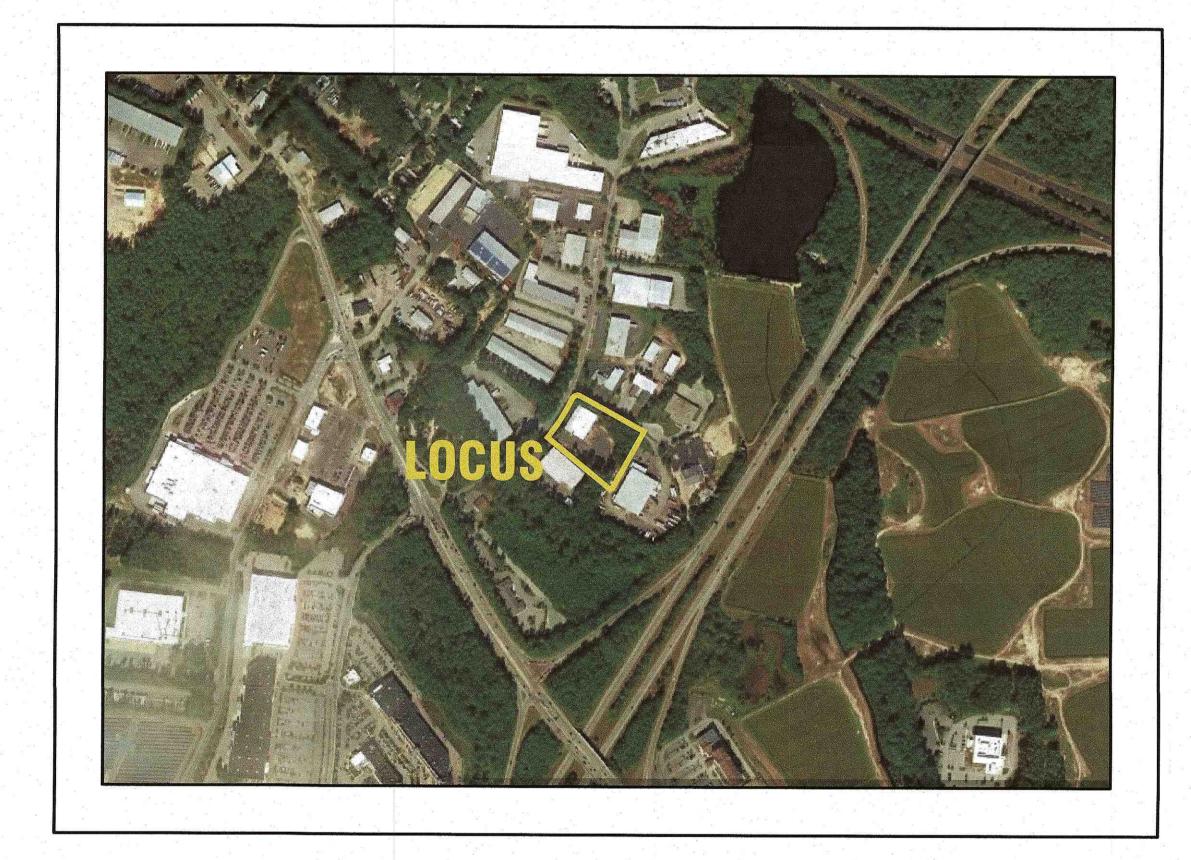
## G.A.F. ENGINEERING, INC. PROFESSIONAL ENGINEERS & LAND SURVEYORS

266 MAIN STREET, WAREHAM, MA 02571 TEL: (508) 295-6600 FAX: (508) 295-6634 E-MAIL: info@gafenginc.com

FEBRUARY 10, 2022

APPLICANT: 3 KENDRICK ROAD, LLC

P.O. BOX 1135 **MARION, MA 02758** 



- AERIAL OVERVIEW -SCALE: 1"=500'

## PLAN INDEX:

HEET NO.	DESCRIPTION:
. 1. 1	COVER SHEET
2	GENERAL NOTES & LEGEND
3	EX. CONDITIONS & DEMOLITION PLAN
4	LAYOUT & UTILITIES
5	GRADING & DRAINAGE
6	EROSION CONTROL PLAN
7	LANDSCAPING PLAN
8	DETAIL SHEET 1
9	DETAIL SHEET 2
10	DETAIL SHEET 3
A-1	ARCHITECTURAL ELEVATIONS

FLOOD ZONE DATA: THE PROJECT IS WITHIN FLOOD ZONE X.
REFER TO THE F.E.M.A. FLOOD INSURANCE
RATE MAP PANEL NUMBER 25023C0488K, DATED: JULY 6, 2021.

JOB NO.: DWG. **PERMIT SET** 1 OF 10 (NOT FOR CONSTRUCTION)

21-9731

KENDRICK

## H:\GAF DRAWNGS\2021 DRAWNGS\21-9731 (HENRY DEJESUS)\9731\dwg\9731\_SITE PLAN\_ALT-2.dwg

## **GENERAL NOTES:**

- ALL UNDERGROUND UTILITIES SHOWN OR NOT SHOWN WERE COMPILED ACCORDING TO AVAILABLE RECORD PLANS AND IN PART FROM FIELD SURVEY AND ARE APPROXIMATE ONLY. ACTUAL LOCATIONS MUST BE DETERMINED IN THE FIELD. BEFORE EXCAVATING, BLASTING, INSTALLING, BACKFILLING, GRADING, PAVEMENT RESTORATION. OR REPAIRING. ALL UTILITY COMPANIES, PUBLIC AND PRIVATE, MUST BE CONTACTED INCLUDING THOSE IN CONTROL OF UTILITIES NOT SHOWN ON THIS PLAN. SEE MGL CHAPTER 370, ACTS OF 1963. CONTRACTORS MUST CALL DIG-SAFE AT (1-888-DIG-SAFE OR 811) G.A.F. ENGINEERING, INC. ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN.
- EXISTING CONDITIONS INFORMATION IS BASED ON ACTUAL FIELD SURVEY, PRIVATE UTILITY PLANS, AND OTHER AVAILABLE SOURCES. ACTUAL FIELD SURVEY WAS PERFORMED BY G.A.F. ENGINEERING, INC. ON VARIOUS DATES AND MOST RECENTLY IN JULY OF 2021.
- THE CONTRACTOR SHALL COORDINATE AND OBTAIN ALL REQUIRED PERMITS, GIVE ALL NOTICES, COMPLY WITH ALL LAWS AND REGULATIONS, AND PAY ALL FEES ASSOCIATED WITH THE INSTALLATION OF THIS WORK.
- THE CONTRACTOR SHALL FIELD VERIFY, PRIOR TO CONSTRUCTION ALL EXISTING UNDERGROUND UTILITY LOCATIONS AND POINTS OF INTERCONNECTION.
- 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.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND OWNER OF ANY CONFLICTS DISCOVERED IN THE FIELD.
- ANY CHANGES TO THESE PLANS THAT ARE MADE IN THE FIELD DURING CONSTRUCTION SHALL BE RECORDED BY THE CONTRACTOR ON RECORD DOCUMENTS AND REPORTED TO THE OWNER AND ENGINEER.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AN EXCAVATION AND TRENCH PERMIT PURSUANT TO 520 CMR 14.00 AS APPLICABLE PRIOR TO THE START OF CONSTRUCTION.

## **CONSTRUCTION NOTES:**

- IN GENERAL, THE PLANS ARE DIAGRAMMATIC AND ARE NOT INTENDED TO SHOW EVERY FITTING, CHANGE IN DIRECTION OR DETAIL OF CONSTRUCTION.
- THE LOCATION OF UTILITIES WERE OBTAINED FROM VARIOUS SOURCES OF INFORMATION. THE EXACT LOCATION AND COMPLETENESS IS NOT GUARANTEED. THE CONTRACTOR MUST NOTIFY DIG SAFE PRIOR TO THE START OF CONSTRUCTION (1-888-DIG-SAFE OR 811). G.A.F. ENGINEERING, INC. ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN.
- 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.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF CONSTRUCTION REQUIRED FOR THE INSTALLATION OF THIS WORK.
- 5. ALL MATERIALS SHALL BE NEW AND FREE FROM DEFECTS AND OF GOOD QUALITY.
- 6. THE CONTRACTOR SHALL KEEP THE PREMISES FREE FROM THE ACCUMULATION OF WASTE MATERIAL AND OTHER DEBRIS RESULTING FROM THIS WORK.
- 7. ALL PAVEMENT MARKINGS DISTURBED BY CONSTRUCTION SHALL BE RESTORED AS PART OF THIS WORK.
- 8. 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.
- 9. ELEVATIONS ARE IN FEET AND TENTHS AND ARE BASED ON THE DATUM OF NAVD-88.
- 10. SIDE SLOPE GRADING SHALL BE AS NOTED ON THE SITE PLANS.
- 11. ALL SIDE SLOPES SHALL BE DRESSED WITH 4 INCHES OF TOPSOIL. WHERE SIDE SLOPES EXCEED 3:1, PROVIDE AN EROSION CONTROL BLANKET OVER THE PLANTED SEED BED. SEE PLAN FOR LOCATIONS.
- 12. 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 CREEPING RED FESCUE 30-35% PERENNIAL RYEGRASS 20-25% KENTUCKY BLUEGRASS

10-15% ANNUAL RYEGRASS 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

- 13. ALL SEWER AND PLUMBING WORK SHALL CONFORM WITH 248 CMR 10.00 UNIFORM STATE PLUMBING CODE AND THE TOWN OF WAREHAM SEWER DEPARTMENTS SPECIFICATIONS.
- 14. ALL METHODS AND MATERIALS SHALL CONFORM WITH MassDOT STANDARDS AND SPECIFICATIONS, AND THE REQUIREMENTS OF THE TOWN OF WAREHAM MUNICIPAL MAINTENANCE DEPARTMENT.
- 15. ALL UTILITY INSTALLATIONS SHALL BE IN CONFORMANCE WITH ALL APPLICABLE TOWN, STATE AND FEDERAL REQUIREMENTS & REGULATIONS.
- 16. DEWATERING IF REQUIRED SHALL BE DIRECTED TO A 5' MIN. DIAMETER RING OF HAYBALES OR A DIRTBAG. CONTRACTOR SHALL SIZE, PROVIDE AND MAINTAIN DEWATERING EQUIPMENT FOR THE CONTROL. COLLECTION AND DISPOSAL OF GROUND AND SURFACE WATER WHERE NECESSARY TO COMPLETE THE WORK.

## **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 UNFORESEEN CONDITIONS OR ACCIDENTS.
- 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.
- 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.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH ANY FINES LEVIED AGAINST THE SITE FOR VIOLATIONS OF EROSION CONTROL REGULATIONS. 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 SUPPRESSERS TO MINIMIZE DUST AT THE CONSTRUCTION SITE. MAINTAIN DUST CONTROL MEASURES UNTIL ALL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED

## PERMIT SET (NOT FOR CONSTRUCTION

## DRAINAGE OPERATION AND MAINTENANCE SCHEDULE:

THE OPERATION AND MAINTENANCE (O&M) SCHEDULE DURING THE CONSTRUCTION PERIOD IS THE RESPONSIBILITY OF THE CONTRACTOR. THE OUTLINE BELOW SHALL BE FOLLOWED TO ENSURE THE PROPER CONSTRUCTION AND FUNCTION OF THE DRAINAGE FACILITIES.

- IN CONJUNCTION WITH THE SITE CONSTRUCTION, ALL DRAINAGE STRUCTURES SHALL BE INSTALLED AND THE AFFECTED AREAS STABILIZED (LOAM AND SEED, HYDROSEED, PLANTED, RIP-RAP, ETC.). PERMANENT STABILIZATION OF THESE AREAS SHALL BE STARTED AS SOON AS POSSIBLE.
- EROSION CONTROL SHALL BE PLACED ALONG THE LIMITS OF WORK WHERE SHOWN ON THE PLAN.
- ALL EXISTING CATCH BASINS SHALL HAVE A TEMPORARY SILT SACK INSTALLED IN THEM PRIOR TO CONSTRUCTION. ALL PROPOSED CATCH BASINS SHALL HAVE TEMPORARY SILT SACK INSTALLED IN THEM AS SOON AS THE STRUCTURE IS SET. CONTRACTOR SHALL REMOVE AND DISPOSE OF THEM AT THE COMPLETION OF CONSTRUCTION. ALL EXISTINTG AND PROPOSED CATCH BASINS SHALL BE INSPECTED WEEKLY DURING CONSTRUCTION. IF THERE IS ANY SEDIMENT BUILDUP, THE AFFECTED STRUCTURES SHALL BE CLEANED IMMEDIATELY, AND ALL MATERIAL REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REQUIREMENTS.
- ALL RAIN GUARDIAN STRUCTURES SHALL BE INSPECTED WEEKLY DURING CONSTRUCTION. IF THERE IS ANY SEDIMENT BUILDUP, THE AFFECTED STRUCTURES SHALL BE CLEANED IMMEDIATELY, AND ALL MATERIAL REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REQUIREMENTS.
- 5. THE DRAINAGE BASIN SHALL BE INSPECTED WEEKLY DURING CONSTRUCTION. IF THERE IS ANY SEDIMENT BUILDUP, THE AFFECTED STRUCTURES SHALL BE CLEANED IMMEDIATELY, AND ALL MATERIAL REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REQUIREMENTS.
- 6. STONE FILLED TRENCHES SHALL BE COVERED WITH AN ADDITIONAL TEMPORARY LAYER OF FILTER FABRIC UNTIL THE ABOVE GRADIENT SLOPE IS STABILIZED. IF THERE IS ANY EVIDENCE OF SEDIMENT ENTERING THE TRENCHES, THE AFFECTED AREA OF THE TRENCH SHALL BE FULLY RECONSTRUCTED INCLUDING THE FILTER FABRIC.
- ALL AREAS SHALL BE INSPECTED WEEKLY, AND AFTER LARGE STORMS. IF THERE IS EVIDENCE OF EROSION, THE ERODED AREA SHALL BE RE-STABILIZED, AND MEASURES SHALL BE TAKEN TO PREVENT REOCCURRENCE. THIS SCHEDULE MUST BE ADHERED TO BY THE CONTRACTOR UNTIL THE PROJECT IS ACCEPTED BY THE OWNER.

#### POST-CONSTRUCTION OPERATION AND MAINTENANCE PLAN:

UPON THE COMPLETION OF CONSTRUCTION, MAINTENANCE SHALL BE CONDUCTED BY THE OWNER OR OWNER'S AGENT ON THE SITE. THE FOLLOWING SHALL BE CARRIED OUT BY THE RESPONSIBLE PARTY AND SHALL BE ADHERED TO ENSURE THE PROPER OPERATION OF THE DRAINAGE FACILITIES.

- PARKING LOT SWEEPING IS AN EFFECTIVE NONSTRUCTURAL SOURCE CONTROL THAT WILL REMOVE SEDIMENT FROM PAVED SURFACES. PARKING LOT SWEEPING SHOULD BE DONE BY THE USE OF A HIGH EFFICIENCY VACUUM SWEEPER OR REGENERATIVE AIR SWEEPER. PARKING LOT SWEEPING SHALL BE DONE TWICE PER YEAR. ONCE REMOVED FROM PAVED SURFACES, THE SWEEPINGS MUST BE HANDLED AND DISPOSED OF PROPERLY IN ONE OF THE WAYS APPROVED BY MASSDEP (SEE POLICY # BAW-18-001: REUSE & DISPOSAL OF STREET SWEEPINGS).
- RAIN GUARDIAN STRUCTURES SHALL BE INSPECTED AFTER EVERY MAJOR STORM EVENT IN THE FIRST FEW MONTHS AFTER CONSTRUCTION TO ENSURE PROPER STABILIZATION AND FUNCTION. THEREAFTER, RAIN GUARDIAN STRUCTURES SHALL BE CLEANED AT LEAST FOUR TIMES PER YEAR AND INSPECTED MONTHLY. REMOVE ALL SEDIMENT AND DEBRIS FROM THE TOP GRATE, WITHIN THE CHAMBER, AND ON THE VERTICAL DROP-IN FILTER WALL. THE FILTER WALL SHALL BE CLEANED MANUALLY WITH A STIFF BRISTLED BROOM OR RINSE CLEAN WITH PRESSURIZED WATER. ALL SEDIMENTS AND HYDROCARBAONS SHOULD BE HANDLED PROPERLY AND DISPOSED IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL GUIDELINES AND REGULATIONS.
- DRAINAGE BASIN AREAS SHALL BE INSPECTED AT LEAST FOUR TIMES PER YEAR TO ENSURE THE BASINS ARE OPERATING AS INTENDED. ALSO INSPECT THE BASINS DURING AND AFTER MAJOR STORM EVENTS TO DETERMINE IF THE BASINS ARE MEETING THE EXPECTED DETENTION TIMES. POTENTIAL PROBLEMS THAT SHALL BE CHECKED INCLUDE: SUBSIDENCE, EROSION, CRACKING OR TREE GROWTH ON THE EMBANKMENT, SEDIMENT ACCUMULATION AROUND THE STONE FILLED TRENCH, DAMAGE TO THE EMERGENCY SPILLWAY, SEDIMENT ACCUMULATION AROUND THE OUTLET AND EROSION WITHIN THE BASIN AND BANKS. MAKE ANY NECESSARY REPAIRS IMMEDIATELY. MOW THE UPPER-STAGE, SIDE SLOPES AND EMBANKMENTS AT LEAST TWICE PER YEAR. REMOVE SEDIMENT AS NECESSARY, BUT AT LEAST ONCE EVERY FIVE YEARS. SEDIMENT SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
- NYLOPLAST DRAIN MANHOLES SHALL INSPECTED MONTHLY, AND SHALL BE CLEANED AT LEAST FOUR TIMES PER YEAR AND AT THE END OF THE FOLIAGE AND SNOW-REMOVAL SEASONS. ALL DEBRIS, SEDIMENTS AND H YDROCARBONS SHOULD BE HANDLED PROPERLY AND DISPOSED IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL GUIDELINES AND REGULATIONS. IF THERE IS EVIDENCE THAT THEY HAVE BEEN CONTAMINATED BY A SPILL OR OTHER MEANS, THE CLEANINGS MUST BE EVALUATED IN ACCORDANCE WITH THE MASSDEP HAZARDOUS WASTE REGULATIONS, 310 CMR 30.000 AND HANDLED AS HAZARDOUS WASTE
- CRUSHED STONE SPLASH PADS SHALL BE CLEANED FOUR TIMES PER YEAR AND INSPECTED MONTHLY, ALL SEDIMENTS AND HYDROCARBONS SHOULD BE REMOVED AND DISPOSED IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS. REMOVE AND REPALCE STONE & FILTER FABRIC AS NEEDED.
- STONE FILLED TRENCHES SHALL BE INSPECTED DURING AND 24 HOURS AFTER ALL MAJOR STORM EVENTS TO LOOK FOR PONDED WATER. IF THERE IS EVIDENCE OF PONDED WATER AT THE SURFACE OF THE TRENCH, IT IS LIKELY THAT THE TRENCH IS CLOGGED. REMOVE AND REPLACE THE FIRST LAYER OF STONE AGGREGATE AND FILTER FABRIC. IF WATER IS PONDED INSIDE THE TRENCH THEN THE TRENCH HAS FAILED. IN THIS CASE REMOVE ALL ACCUMULATED SEDIMENT, STONE AND FILTER FABRIC, THE BOTTOM OF THE TRENCH MUST BE SCARIFIED AND TILLED TO INDUCE INFILTRATION AND REPLACE WITH NEW STONE AND FILTER FABRIC. INSPECT STONE TRENCHES EVERY 6 MONTHS AND ROUTINELY REMOVE DEBRIS, TRASH, LEAVES, AND ANY SEDIMENT FROM THE SURFACE OF THE TRENCH, ADD STONE IF NECESSARY.
- INSPECT POP-UP DRAINAGE EMITTERS DURING AND 24 HOURS AFTER ALL MAJOR STORM EVENTS. KEEP POP-UP DRAINAGE EMITTERS FREE AND CLEAR FROM BUILD UP OF DEBRIS ON THE LID. REMOVE SNOW WHEN REQUIRED. INSPECT THE POP-UP DRAINAGE EMITTER LID MONTHLY. REPAIR OR REPLACE AS NEEDED.

## DRAINAGE INSTALLATION NOTES:

- ALL DRAINAGE PIPES, UNLESS OTHERWISE NOTED, ARE TO BE ADS N-12 PIPE WITH SOIL TIGHT JOINTS AND FITTINGS. REFER TO PLAN FOR LOCATION, SIZES AND SLOPES.
- ALL ROOF DRAIN PIPES, UNLESS OTHERWISE NOTED, ARE TO BE 6" ADS N-12 PIPE WITH SOIL TIGHT JOINTS AND FITTINGS. MINIMUM SLOPE TO BE 1.00%. REFER TO PLAN FOR LOCATIONS.
- MINIMUM COVER ON PIPES SHALL NOT BE LESS THAN 1.5 FEET.
- 4. ALL PERFORATED PIPE SHALL BE ADS HDPE PIPE WITH AASHTO CLASS II PERFORATION PATTERN.
- ALL WORK AND MATERIAL SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE TOWN OF WAREHAM MUNICIPAL MAINTENANCE DEPARTMENT.

## **DEMOLITION NOTES:**

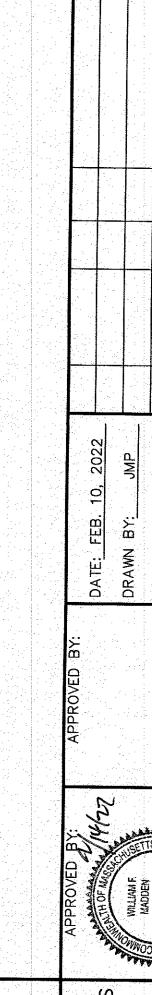
- IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE HIS/HER OWN DETERMINATION OF SUBSURFACE CONDITIONS, INCLUDING THE LOCATION OF ROCK AND THE ACTUAL LOCATION OF UTILITIES OR OTHER FEATURES WHICH MAY AFFECT HIS/HER WORK. ANY UNSUITABLE MATERIAL ENCOUNTERED DURING CONSTRUCTION WILL BE REPORTED TO THE ENGINEER OF RECORD FOR RESOLUTION AND CONSTRUCTION METHOD.
- THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND APPARATUS NECESSARY AND SHALL DO ALL WORK REQUIRED TO COMPLETE THE DEMOLITION, REMOVAL, AND ALTERATIONS OF EXISTING FACILITIES, INCLUDING PIPING SYSTEMS AND APPURTENANCES, DRAINAGE, PAVEMENT, LANDSCAPE AND SITE FEATURES ENCOUNTERED DURING THE INSTALLATION AS INDICATED ON THE DRAWINGS, AS HEREIN SPECIFIED, AND/OR AS DIRECTED BY THE DESIGN ENGINEER.
- ALL EQUIPMENT, PIPING, AND OTHER MATERIALS THAT ARE NOT TO BE RELOCATED OR TO BE RETURNED TO THE OWNER SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF BY HIM, AWAY FROM THE SITE OF THE WORK AND AT HIS OWN EXPENSE.
- ALL DEMOLITION OR REMOVAL OF EXISTING STRUCTURES, PAVEMENT, UTILITIES, EQUIPMENT, AND APPURTENANCES, LANDSCAPE AND SITE FEATURES SHALL BE ACCOMPLISHED WITHOUT DAMAGING THE INTEGRITY OF EXISTING STRUCTURES, EQUIPMENT, PAVEMENT, APPURTENANCES, AND TREES TO REMAIN.
- 5. SUCH ITEMS THAT ARE DAMAGED SHALL BE EITHER REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE TO A CONDITION AT LEAST EQUAL TO THAT WHICH EXISTED PRIOR TO THE START OF HIS WORK TO THE SATISFACTION OF THE DESIGN ENGINEER AND/OR THE OWNER.
- PROVIDE TWO (2) COPIES OF PROPOSED METHODS AND OPERATIONS OF DEMOLITION TO THE OWNER AND ENGINEER FOR REVIEW PRIOR TO THE START OF WORK. INCLUDE IN THE SCHEDULE THE COORDINATION FOR SHUTOFF, CAPPING AND CONTINUATION OF UTILITY SERVICES AS REQUIRED.
- PROVIDE A DETAILED SEQUENCE OF WORK TO THE DESIGN ENGINEER AND THE OWNER FOR DEMOLITION AND REMOVAL WORK TO ENSURE THE UNINTERRUPTED PROGRESS OF THE OWNER'S OPERATIONS.
- ENSURE THE SAFE PASSAGE OF PERSONS AROUND THE AREA OF DEMOLITION. CONDUCT OPERATIONS TO PREVENT INJURY TO ADJACENT BUILDINGS, STRUCTURES, OTHER FACILITIES AND PERSONS.
- PROVIDE INTERIOR AND EXTERIOR SHORING, BRACING, OR SUPPORT TO PREVENT MOVEMENT, SETTLEMENT OR COLLAPSE OF STRUCTURES TO BE DEMOLISHED AND ADJACENT FACILITIES TO REMAIN.
- 10. THE CONTRACTOR SHALL PROMPTLY REPAIR DAMAGES CAUSED BY DEMOLITION OPERATIONS TO ADJACENT FACILITIES AT NO COST TO THE OWNER.

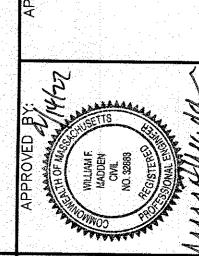
### WATER INSTALLATION NOTES:

- 1. ALL WATER MAINS, SERVICES, GATE VALVES/GATE BOX, CURB STOPS, HYDRANTS, FITTINGS, ETC. & METHOD OF INSTALLATION SHALL CONFORM TO THE TOWN OF WAREHAM FIRE DISTRICT RULES & REGULATIONS.
- WATER MAIN SHALL BE TESTED & DISINFECTED IN ACCORDANCE WITH THE TOWN OF WAREHAM FIRE DISTRICT REQUIREMENTS.
- CONTRACTOR TO COORDINATE WITH THE TOWN OF WAREHAM FIRE DISTRICT FOR THE INSPECTIONS OF THE WATER MAIN INSTALLATION.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS TO COMPLETE THE INSTALLATION OF THE WATER SERVICE.
- THE CONTRACTOR SHALL OBTAIN A COPY OF THE REGULATIONS FROM THE TOWN OF WAREHAM FIRE DISTRICT BEFORE PROCEEDING WITH THE INSTALLATION OF THE WATER

#### AC ADS ASBESTIC CONCRETE ADVANCED DRAINAGE SYSTEM APPROX. **APPROXIMATE** BC BIT. CONC. BOTTOM OF CURB BITUMINOUS CONCRETE **BLDRS** BOULDERS BOTTOM OF WALL BVW BORDERING VEGETATED WETLANDS CB CATCH BASIN CB/DH CONCRETE BOUND/DRILL HOLE CAPE COD BERM CEM. CEMENT C.I. CAST IRON CONC. CONCRETE C.O. CLEAN OUT C.L.D.I. CEMENT LINED DUCTILE IRON CMP CORRUGATED METAL PIPE CPP CORRUGATED PLASTIC PIPE DIA DIAMETER DMH DRAIN MANHOLE D.I. DUCTILE IRON DCS DRAINAGE CONTROL STRUCTURE ELECTRIC ELEV.,EL ELEVATION EOP EDGE OF PAVEMENT EX. EXISTING F.D.C. FIRE DEPARTMENT CONNECTION F.E.S. FLARED END SECTION F.F.E. FINISHED FLOOR ELEVATION FND. FOUND FP FIRE PROTECTION GAS GG,GV GAS GATE, GAS VALVE HANDICAP PARKING H.D.P.E. HIGH DENSITY POLYETHYLENE HYD **HYDRANT** INV. **INVERT** MAX **MAXIMUM** MED MEDIUM MIN. MINIMUM NOT TO SCALE N/F NOW OR FORMERLY OVERHEAD WIRE PCC PVC PRECAST CONCRETE CURBING POLYVINYL CHLORIDE PIPE PROP. PROPOSED RCP REINFORCED CONCRETE PIPING RADIUS REMOVE AND DISPOSE R&D R&S REMOVE AND STOCK SB/DH STONE BOUND/DRILL HOLE SEWER. SGC SMH SLOPED GRANITE CURBING SEWER MANHOLE STATION TOP OF CURB TW TOP OF WALL TYP. **TYPICAL** TOP OF FOUNDATION T/0/F UTILITY POLE UE UNDERGROUND ELECTRIC VGC VERTICAL GRANITE CURB WATER WATER GATE, WATER VALVE WATER QUALITY STRUCTURE WQ CB WATER QUALITY CAYCH BASIN

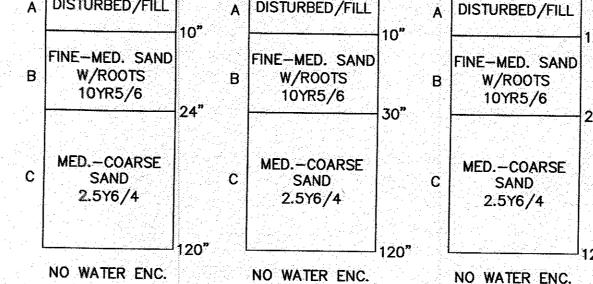
**ABBREVIATIONS** 





## TEST PIT DATA

DATE OF TESTING: DECEMBER 22, 2021 PERFORMED BY: BRIAN GRADY, G.A.F. ENGINEERING INC. REFER TO EXISTING CONDITIONS & DEMOLITION PLAN FOR TEST PIT LOCATIONS TP-1 EL.=48.5 TP-2 EL =48.7 TP-3 EL.=45.5 DISTURBED/FILL DISTURBED/FILL DISTURBED/FILL



DATE OF TESTING: DECEMBER 6, 2000 PERFORMED BY: CHARLES L. ROWLEY. CHARLES L. ROWLEY & ASSOCIATES REFER TO EXISTING CONDITIONS & DEMOLITION PLAN FOR TEST PIT LOCATION

TP-1 (CLR) EL.=47.3 WOODS LOAM SUBSOIL MED.-FINE NO WATER ENC.

**EXISTING** DESC. **PROPOSED** 55 <del>----</del>55---CONTOURS 53x5 52x5 SPOT GRADES √ 52x5 \_\_\_\_/ WETLANDS F.E.M.A. FLOOD ZONE \_\_\_\_\_D\_\_\_ DRAIN LINE PERFORATED DRAIN LINE ---D---------RD-----ROOF DRAIN LINE -----RD--CATCH BASIN (CB) DRAIN MANHOLE (DMH) 0 CLEAN OUT (C.O.) 0 **(E)** ELECTRIC MANHOLE (EMH) UNDERGROUND UTILITIES -----UE-----UE----OHW---OVERHEAD WIRES OHW--70 -O-UTILITY POLE -0 GUY POLE -0 WATER GATE VALVE WATER SHUTOFF/CURB STOP HYDRANT POST INDICATOR VALVE WATER LINE FIRE PROTECTION LINE ——-FP— (S) SEWER MANHOLE (SMH) SEWER LINE 1 Z & . ——-FM-----FORCE MAIN ——FM—— TREELINE www. ستستست ROVEN NOTE: Ø LIGHT POST GAS LINE -----G-R O GAS GATE/VALVE GAS SHUTOFF GAS METER SIGN --0-FENCE BOUND TEST PIT/PERC TEST SILT FENCE

GUARD RAIL

FLARED END SECTION

STONE WALL

0 0 0 0

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JOB NO.:

DWG.

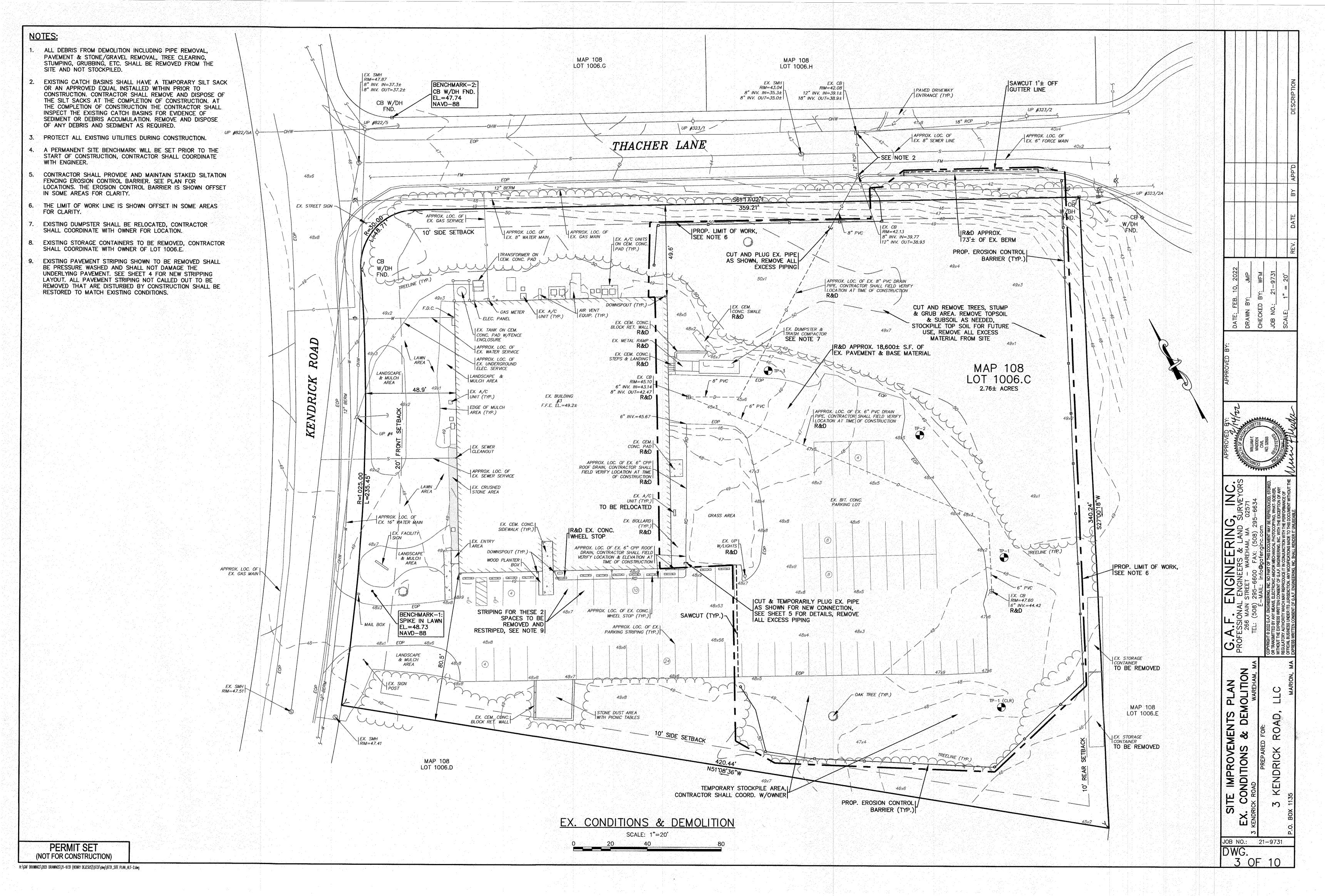
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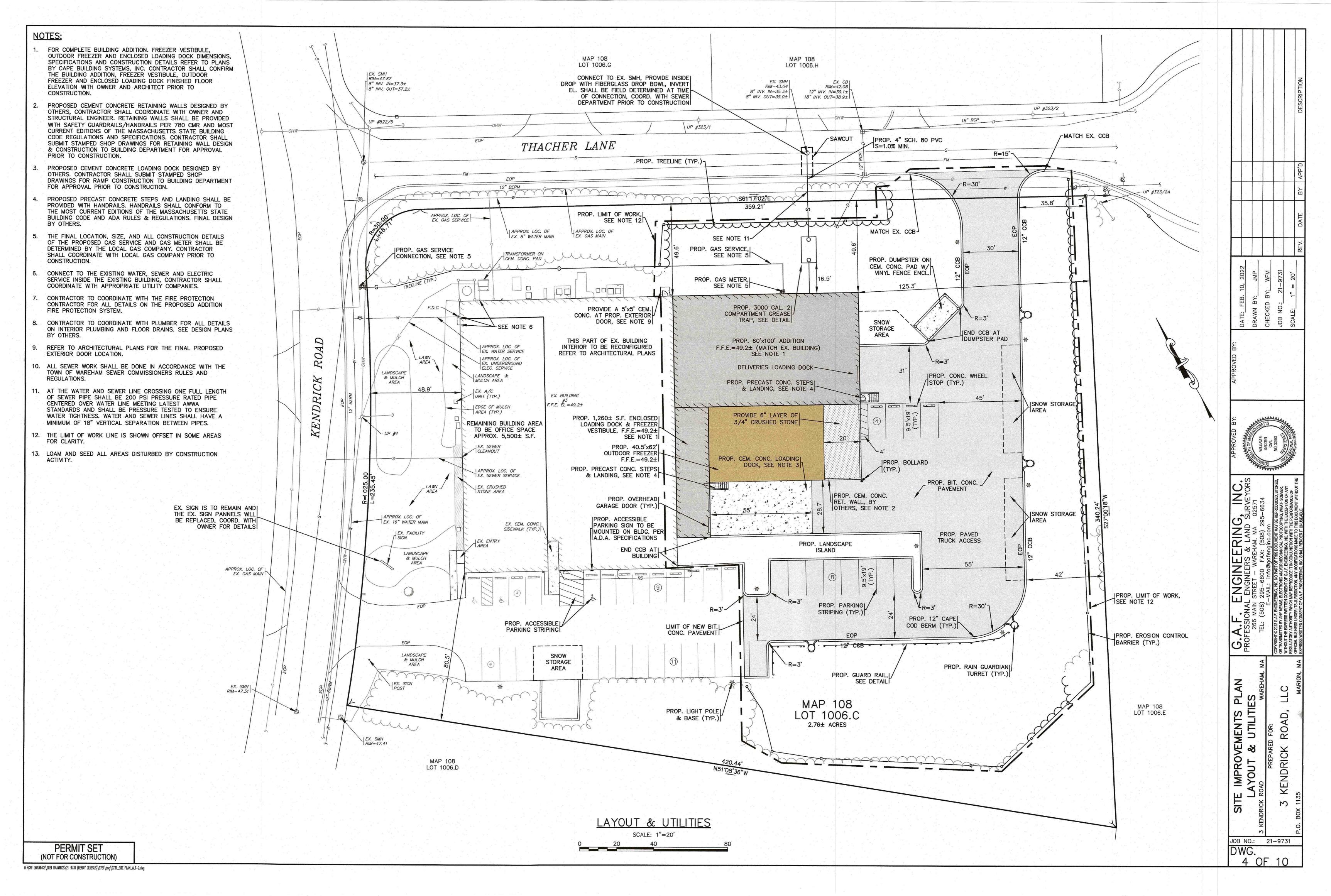
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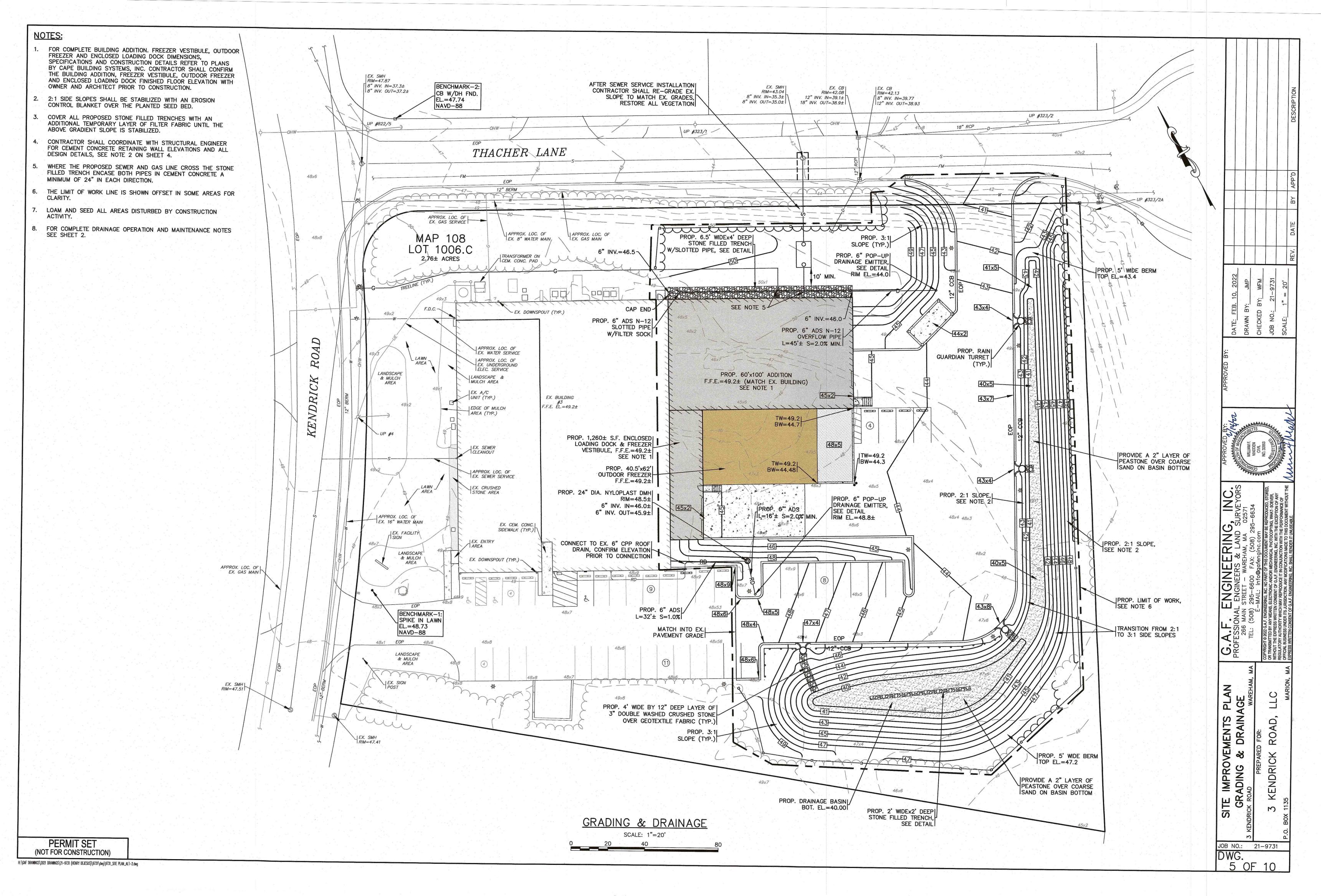
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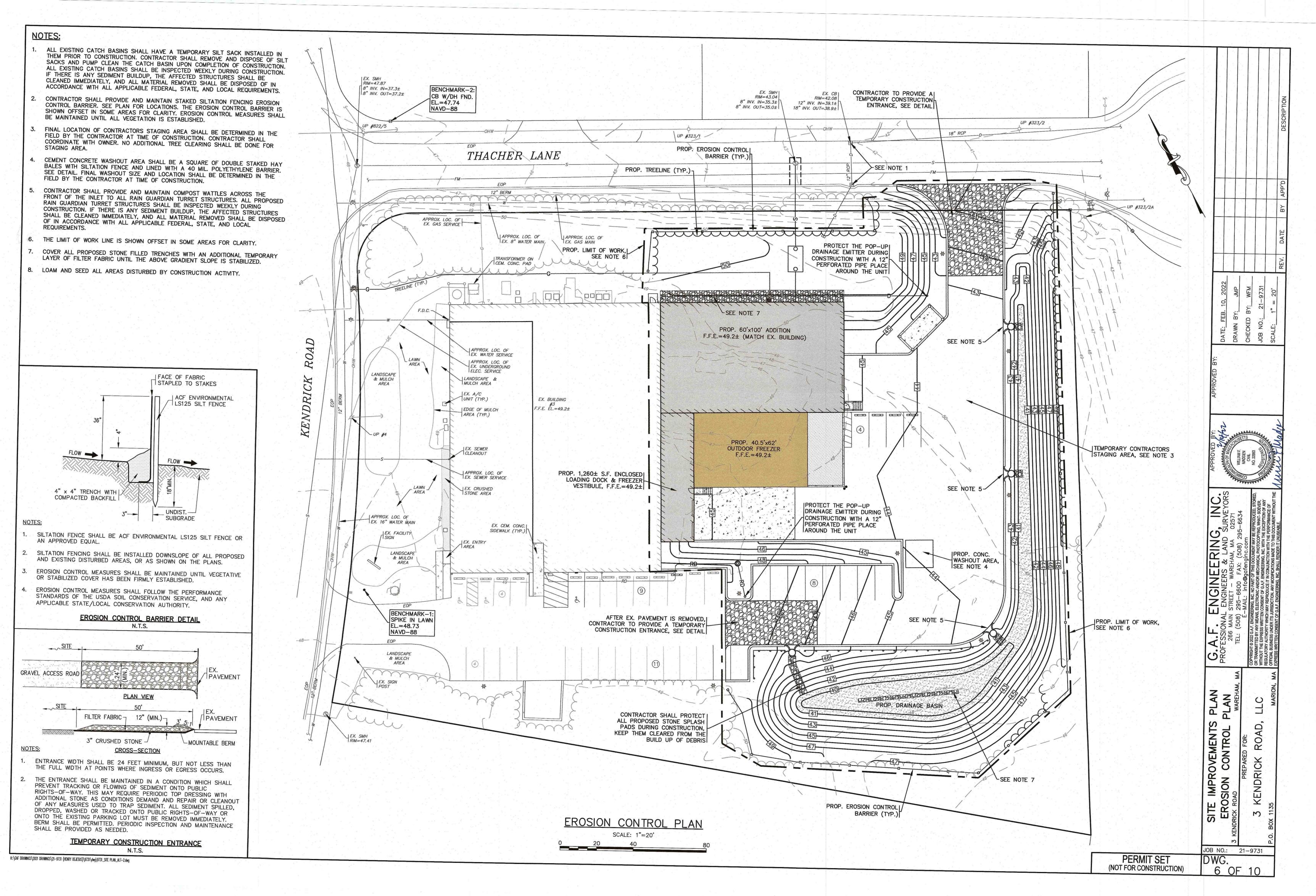
**LEGEND** 

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#### **PLANTING STANDARDS:** THE LANDSCAPE CONTRACTOR SHALL FURNISH AND INSTALL AND/OR DIG, BALL, BURLAP, AND EX. SMH RIM=47.87 TRANSPLANT ALL PLANT MATERIALS LISTED ON THE PLANT SCHEDULE. BARE-ROOT IS TYPICALLY NOT AFTER SEWER SERVICE INSTALLATION! EX. SMH | RIM=43.04 8" INV. IN=37.3± EX. CB | RIM=42.08 PERMITTED FOR ANY TREE. CONTRACTOR SHALL RE-GRADE EX. 8" INV. OUT=37.2± SLOPE TO MATCH EX. GRADES, 8" INV. IN=35.3± 12" INV. IN=39.1± 2. PLANT MATERIALS SHALL CONFORM TO THE REQUIREMENTS DESCRIBED IN THE LATEST EDITION OF 8" INV. OUT=35.0± 18" INV. OUT=38.9± RESTORE ALL VEGETATION AMERICAN STANDARD FOR NURSERY STOCK, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN. PLANTS SHALL BE NURSERY GROWN. PLANTS SHALL CONFORM TO THE MEASUREMENTS SPECIFIED IN THE PLANT SCHEDULE. UP #822/5 18" RCP A) CALIPER MEASUREMENTS SHALL BE TAKEN SIX (6) INCHES ABOVE GRADE FOR TREES UNDER FOUR (4) UP #323/1 INCHES IN DIAMETER AND TWELVE (12) INCHES ABOVE GRADE FOR TREES FOUR (4) INCHES IN DIAMETER THACHER LANE AND LARGER. EX. VEGETATION TO MINIMUM BRANCHING HEIGHT FOR ALL SHADE TREES SHALL BE SIX (6) FEET. REMAIN AS A BUFFER MINIMUM SIZE FOR SHADE TREES SHALL BE TWO AND ONE HALF (2.5) INCHES IN DIAMETER AND TWELVE (12) FEET IN HEIGHT. MINIMUM SIZE FOR EVERGREEN TREES SHALL BE BETWEEN SIX (6) AND EIGHT (8) FEET IN HEIGHT MINIMUM SIZE FOR SHRUBS SHALL BE THREE (3) FEET IN HEIGHT 4. A PROFESSIONAL HORTICULTURIST/NURSERYMAN SHALL BE CONSULTED TO DETERMINE THE PROPER TIME TO MOVE AND INSTALL PLANT MATERIAL SO THAT DISTRESS TO THE PLANT IS MINIMIZED. PLANTING OF DECIDUOUS MATERIAL MAY BE CONTINUED DURING WINTER MONTHS PROVIDED THERE IS NO FROST IN THE GROUND AND FROST-FREE TOPSOIL PLANTING MIXTURES ARE USED. APPROX. LOC. OF EX. GAS SERVICE 5. A LANDSCAPE CONTRACTOR SHALL EXCAVATE ALL PLANT PITS, VINE PITS, HEDGE TRENCHES, AND SHRUB The state of the s BEDS AS FOLLOWS: A) ALL PITS SHALL BE GENERALLY CIRCULAR IN OUTLINE, WITH VERTICAL SIDES. THE TREE PIT SHALL BE APPROX. LOC. OF APPROX. LOC. OF TEX. 8" WATER MAIN, TEX. GAS MAIN DEEP ENOUGH TO ALLOW ONE-EIGHTH (1/8) OF THE BALL TO BE ABOVE THE EXISTING GRADE. PLANTS SHALL REST ON UNDISTURBED EXISTING SOIL OR WELL COMPACTED BACKFILL ON EVERY SIDE, THE TREE PROP. LIMIT OF WORK, PITS MUST BE A MINIMUM OF 2 TIMES THE ROOT BALL DIAMETER. SEE NOTE 3 TRANSFORMER ON B) IF AREAS ARE DESIGNATED AS SHRUB BEDS OR HEDGE TRENCHES, THEY SHALL BE CULTIVATED TO AT CEM. CONC. PAD LEAST EIGHTEEN (18) INCHES IN DEPTH. AREAS DESIGNATED FOR GROUND COVERS AND VINES SHALL BE CULTIVATED TO AT LEAST TWELVE (12) INCHES IN DEPTH. 6. EACH TREE, SHRUB, OR VINE SHALL BE PRUNED IN AN APPROPRIATE MANNER IN ACCORDANCE WITH ACCEPTED STANDARD PRACTICE. ALL TRENCHES AND SHRUB BEDS SHALL BE EDGED AND CULTIVATED TO THE LINES SHOWN ON THE DRAWING. THE AREAS AROUND ISOLATED PLANTS SHALL BE EDGED AND CULTIVATED TO THE FULL DIAMETER OF THE PIT. SOD THAT HAS BEEN REMOVED AND STACKED SHALL BE USED TO TRIM THE EDGES OF ALL EXCAVATED AREAS TO THE NEAT LINES OF THE PLANT PIT SAUCERS, THE EDGE OF SHRUB VIEX. VEGETATION TO PROP. 60'x100' ADDITION AREAS, HEDGE TRENCHES AND VINE POCKETS. REMAIN AS A BUFFER F.F.E.=49.2± (MATCH EX. BUILDING) 8. AFTER CULTIVATION, ALL PLANT MATERIALS SHALL BE MULCHED WITH A LAYER BETWEEN TWO (2) AND THREE (3) INCHES DEEP OF HEMLOCK / SPRUCE MULCH OVER THE ENTIRE AREA OF THE BED OR APPROX. LOC. OF EX. WATER SERVICE AREA APPROX. LOC. OF EX. UNDERGROUND 9. A TWO (2) YEAR GUARANTEE SHALL BE PROVIDED ON ALL NEW PLANT MATERIAL. IF ANY TREE OR SHRUB DIES WITHIN THIS PERIOD OF TIME, IT SHALL BE REPLACED. ELEC. SERVICE LANDSCAPE LANDSCAPE & & MULCH MULCH AREA 10. ALL AREAS THAT ARE NOT LANDSCAPED SHALL BE LOAMED AND SEEDED UNLESS OTHERWISE NOTED. 11. EXISTING TREES & VEGETATION SHALL REMAIN TO THE GREATEST EXTENT POSSIBLE. UNIT (TYP.) EX. BUILDING #3 F.F.E. EL.=49.2± EDGE OF MULCH NOTES: AREA (TYP.) REMOVE ANY GRASS OVERGROWTH, 1. LANDSCAPE DESIGN BY E.A. FULLER, LANDSCAPE ARCHITECT, 24 SCOTT DRIVE, PLYMOUTH, MA, 02360. REPLACE ANY VEGETATION AS NEEDED, MULCH AREA 2. THE LIMIT OF WORK LINE IS SHOWN OFFSET IN SOME AREAS FOR CLARITY. EX. VEGETATION TO REMAIN AS A BUFFER PROP. 40.5'x62' OUTDOOR FREEZER EX. SEWER 3. LOAM AND SEED ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITY. CLEANOUT F.F.E.=49.2± PROP. 1,260± S.F. ENCLOSEDI LOADING DOCK & FREEZER VESTIBULE, F.F.E.=49.2± APPROX. LOC. OF TEX. SEWER SERVICE STONE AREA PROP. TREELINE (TYP.) 1-ARB (TYP.) EX. 16" WATER MAIN EX. CEM. CONC. SIDEWALK (TYP.) ROA EX. FACILITY AREA LANDSCAPE & MULCH 1-NS (TYP.) AREA KENDRICK RD RD REPLACE ANY VEGETATION AS PROP. GUARD RAIL, L SEE DETAIL NEEDED, MULCH AREA 48-LANDSCAPE & MULCH AREA DI ANT LICT

KEY		QTY	BOTANICAL NAME COMMON NAME SIZE		SIZE	COMMENTS	REMARKS
		a <sup>pp</sup> =	SHRUBS		1. 3. 4.		
$\bigoplus$	JCOG	26	JUNIPERUS CHINENSIS 'OLD GOLD'	OLD GOLD PFITZER JUNIPER	24"-30" SPR.	5 GAL. OR B & B	PLANT 5' O.C.
	MD	8	MICROBIOTA DECUSSATA	SIBERIAN CARPET CYPRESS	18"-24" SPR.	3 GAL.	PLANT 3' O.C.
0	VTC	3	VIBURNUM TRILOBUM COMPACTUM	COMPACT AMERICAN CRANBERYYBUSH VIBURNUM	36" HT.	5 GAL. OR B & B	PLANT 5' O.C.
		Sł	HADE & ORNAMENTAL TRE	ES		* *** *	
*	ARB	3	ACER RUBRUM 'BOWHALL'	BOWHALL COLUMNAR RED MAPLE	3" CAL.	B & B	PLANT AS SHOWN
A Area	PA	7	PICEA ABIES	NORWAY SPRUCE	7'-8' HT.	В & В	PLANT 12' O.C.
8	PCC	2	PYRUS CALLERYANA 'CHANTICLEER'	CLEVELAND SELECT CALLERY PEAR	3" CAL.	В & В	PLANT AS SHOWN
$\mathfrak{D}$	NS	4	NYSSA SYLVATICA	BLACK TUPELO	3" CAL.	B & B	PLANT 40' O.C.
# # # # # # # # # # # # # # # # # # #	O	RNAI	MENTAL GRASSES & PEREN	INIALS			
	HHR	120	HEMEROCALIS 'HAPPY RETURNS'	HAPPY RETURNS DAYLILY	1 GAL.	18" HT.	PLANT 12" O.C.

