

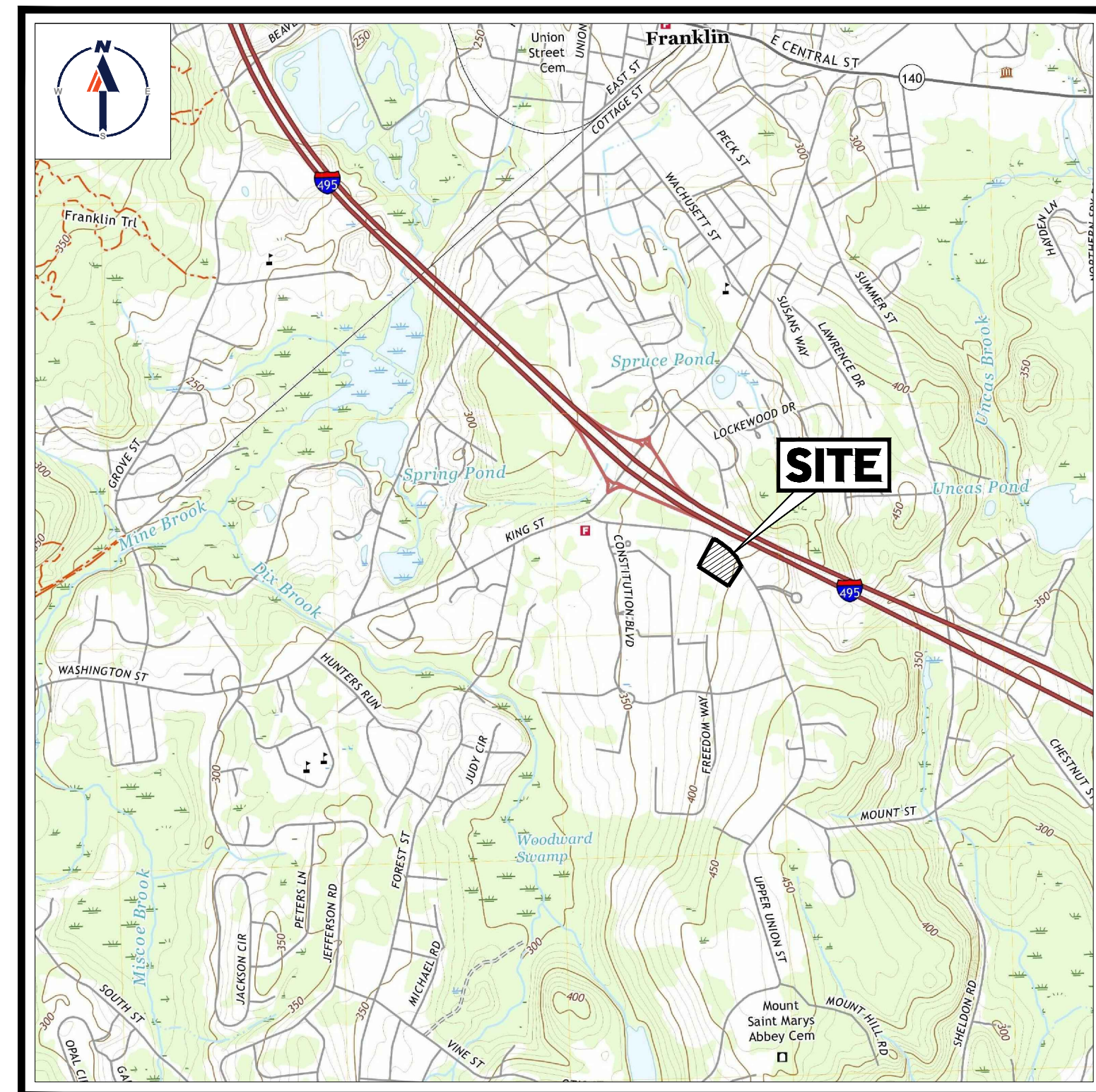
PROPOSED SITE PLAN DOCUMENTS

FOR

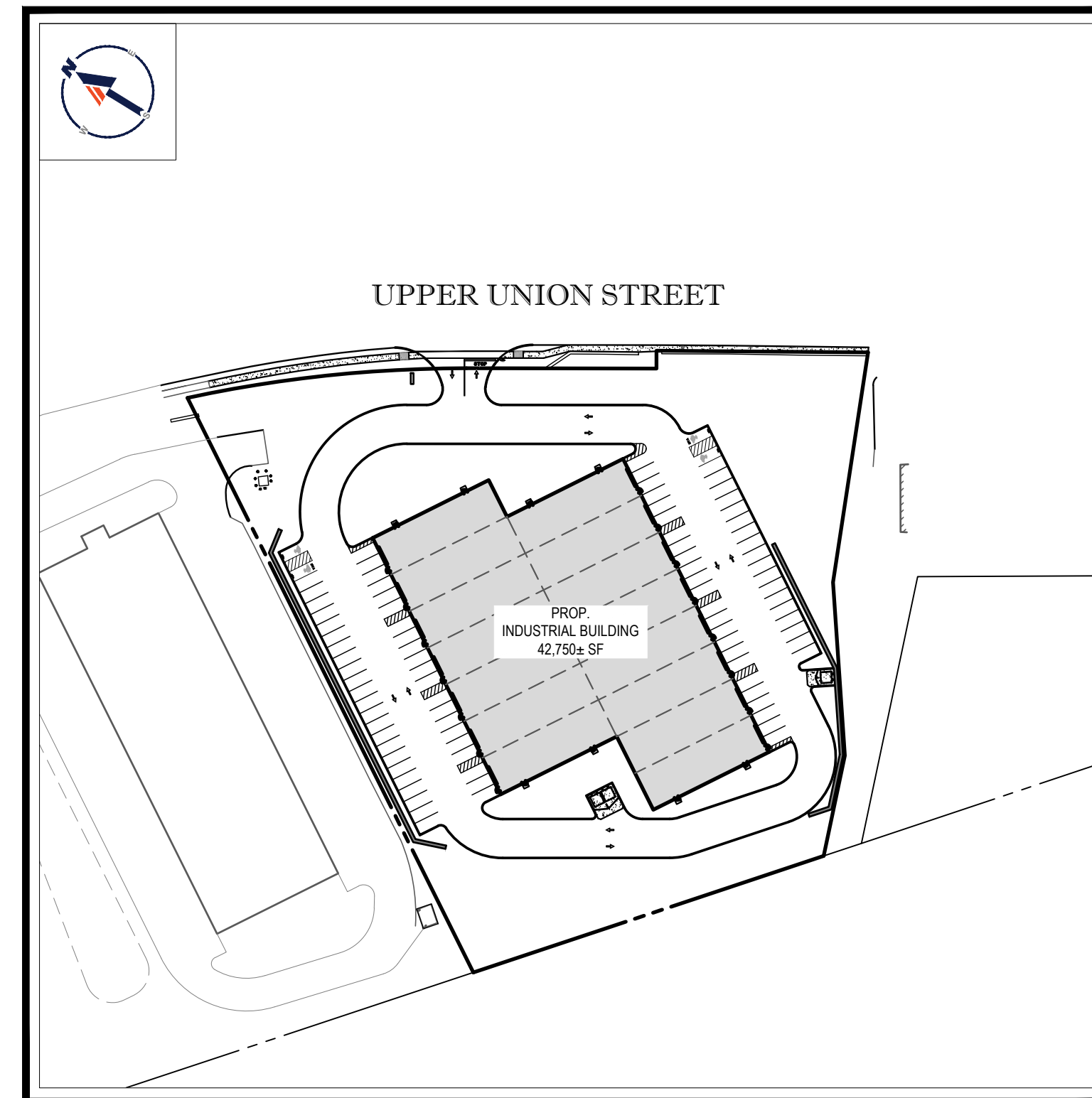
TMC HOLDINGS & DEVELOPMENT 2, LLC

PROPOSED INDUSTRIAL DEVELOPMENT UNION STREET BUSINESS PARK II

LOCATION OF SITE:
839 UPPER UNION STREET, CITY OF FRANKLIN
NORFOLK COUNTY, MASSACHUSETTS
MAP #314, BLOCK #20, LOT #1



USGS MAP
SCALE: 1" = 2,000'
SOURCE: USGS



SITE MAP
SCALE: 1" = 100'

DRAWING SHEET INDEX

| SHEET TITLE | SHEET NUMBER |
|--|--------------|
| COVER SHEET | C-101 |
| GENERAL NOTES SHEET | C-102 |
| DEMOLITION PLAN | C-201 |
| SITE LAYOUT PLAN | C-301 |
| GRADING PLAN | C-401 |
| DRAINAGE PLAN | C-501 |
| UTILITY PLAN | C-502 |
| EROSION AND SEDIMENT CONTROL PLAN | C-601 |
| EROSION AND SEDIMENT CONTROL NOTES AND DETAILS | C-602 |
| LANDSCAPE PLAN | C-701 |
| LANDSCAPE NOTES AND DETAILS | C-702 |
| LIGHTING PLAN | C-703 |
| DETAIL SHEET | C-901 |
| DETAIL SHEET | C-902 |
| DETAIL SHEET | C-903 |
| DETAIL SHEET | C-904 |
| ALTA/NSPS LAND TITLE SURVEY (BY OTHERS) | 1 SHEET |
| BOUNDARY & TOPOGRAPHIC SURVEY (BY OTHERS) | 1 SHEET |

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

| REV | DATE | COMMENT | CHECKED BY | DRAWN BY |
|-----|----------|---------------------------------|------------|----------|
| 1 | 03/23/22 | NOTICE OF INTENT SUBMISSION | NPD | RMM |
| 2 | 05/06/22 | PER TOWN / PEER REVIEW COMMENTS | NPD | RMM |
| 3 | 05/17/22 | PER PEER REVIEW COMMENTS | NPD | RMM |



Know what's below.
Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

PERMIT SET

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: W211057
DRAWN BY: NPD
CHECKED BY: RMM
DATE: 02/01/2022
CAD ID: W211057-CVL-3

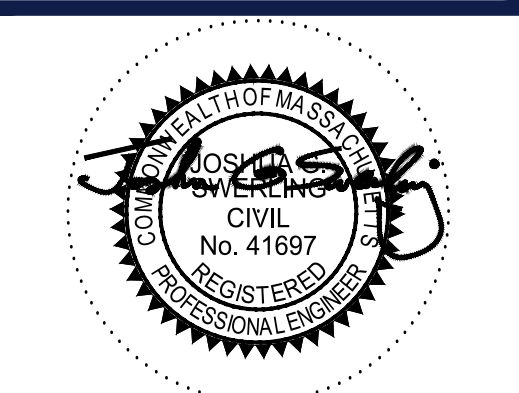
PROJECT:

PROPOSED SITE PLAN DOCUMENTS

FOR
TMC HOLDINGS & DEVELOPMENT 2, LLC

PROPOSED INDUSTRIAL DEVELOPMENT
UNION STREET BUSINESS PARK II
MAP #314, BLOCK #20, LOT #1
839 UPPER UNION STREET
CITY OF FRANKLIN
NORFOLK COUNTY, MA

BOHLER
352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9900
www.BohlerEngineering.com



SHEET TITLE:

COVER SHEET

SHEET NUMBER:

C-101

REVISION 3 - 05/17/22

PREPARED BY

I:\BOHLER\NET\SHARES\MA\PROJECTS\211057\DRAWINGS\PLAN SETS\REV\W211057\CVL-3\...LAYOUT: C-101-COVER

GENERAL NOTES

CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH THE NOTES AND SPECIFICATIONS CONTAINED HEREIN. CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL SUBCONTRACTORS FULLY AND COMPLETELY CONFORM TO AND COMPLY WITH THESE REQUIREMENTS.

1. THE FOLLOWING DOCUMENTS ARE INCORPORATED BY REFERENCE AS PART OF THIS SITE PLAN:
 - * "BOUNDARY & TOPOGRAPHIC SURVEY" PREPARED BY CONTROL POINT ASSOCIATED, INC., DATED 03/23/21.
 - * "LANDSCAPE LAND TITLE SURVEY" PREPARED BY CONTROL POINT ASSOCIATED, INC., DATED 05/14/21.
 - * "GEO-TECHNICAL EVALUATION" PREPARED BY VERDANTAS LLC, DATED 03/22/21.

* TO THE START OF CONSTRUCTION, THE CONTRACTOR MUST NOTIFY THAT HESHE HAS THE LATEST EDITION OF THE DOCUMENTS REFERENCED ABOVE. THIS IS CONTRACTOR'S RESPONSIBILITY.

2. ALL ACCESSIBLE (AKA ADA) PARKING SPACES MUST BE CONSTRUCTED TO MEET, AT A MINIMUM, THE MORE STRINGENT OF THE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT" (ADA CODE 42 U.S.C. § 12101 et seq. AND 42 U.S.C. § 4151 et seq.) OR THE REQUIREMENTS OF THE JURISDICTION WHERE THE PROJECT IS TO BE CONSTRUCTED, AND ANY AND ALL AMENDMENTS TO BOTH WHICH ARE IN EFFECT WHEN THESE PLANS ARE COMPLETED.

3. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED THE COMMENTS AND APPROVALS FOR ALL ASNS AND OTHER DOCUMENTS REVIEWED AND APPROVED BY THE PERMITTING AUTHORITIES AND CONFIRMED THAT ALL NECESSARY OR REQUIRED PERMITS HAVE BEEN OBTAINED. CONTRACTOR MUST HAVE COPIES OF ALL PERMITS AND APPROVALS ON SITE AT ALL TIMES.

4. THE OWNER/CONTRACTOR MUST BE FAMILIAR WITH AND RESPONSIBLE FOR THE PROCUREMENT OF ANY AND ALL CERTIFICATIONS REQUIRED FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

5. ALL WORK MUST BE PERFORMED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS AND CONDITIONS OF APPROVAL, AND ALL APPLICABLE REQUIREMENTS, RULES, REGULATIONS, STATUTORY REQUIREMENTS, CODES, LAWS AND STANDARDS OF ALL GOVERNMENTAL ENTITIES WITH JURISDICTION OVER THIS PROJECT.

6. THE GEOTECHNICAL REPORT AND RECOMMENDATIONS SET FORTH HEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND, IN CASE OF CONFLICT, DISCREPANCY OR AMBIGUITY, THE MORE STRINGENT REQUIREMENTS AND/OR RECOMMENDATIONS CONTAINED IN THE PLANS AND THE GEOTECHNICAL REPORT AND RECOMMENDATIONS SHALL TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR MUST NOTIFY THE ENGINEER, IN WRITING, OF ANY SUCH CONFLICT, DISCREPANCY OR AMBIGUITY BETWEEN THE GEOTECHNICAL REPORTS AND PLANS AND SPECIFICATIONS PRIOR TO PROCEEDING WITH ANY FURTHER WORK.

7. THESE PLANS ARE BASED ON INFORMATION PROVIDED TO BOHLER ENGINEERING BY THE OWNER AND OTHERS PRIOR TO THE TIME OF PLAN PREPARATION. CONTRACTOR MUST FIELD VERIFY EXISTING CONDITIONS AND NOTIFY BOHLER ENGINEERING, IN WRITING, IMMEDIATELY IF ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLAN, OR IF THE PROPOSED WORK CONFLICTS WITH ANY OTHER SITE FEATURES.

8. ALL DIMENSIONS SHOWN ON THE PLANS MUST BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR MUST NOTIFY ENGINEER, IN WRITING, IF ANY DIMENSIONS, DISCREPANCIES OR AMBIGUITIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR WORK WHICH WAS TO BE REDONE OR REPAIRED DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS PRIOR TO CONTRACTOR GIVING ENGINEER WRITTEN NOTIFICATION OF SAME AND ENGINEER, THEREAFTER, PROVIDING CONTRACTOR WITH WRITTEN AUTHORIZATION TO PROCEED WITH SUCH ADDITIONAL WORK.

9. CONTRACTOR MUST REFER TO THE ARCHITECTURAL/BUILDING PLANS "OF RECORD" FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY/EXIT POINTS, ELEVATIONS, PRECISE BUILDING DIMENSIONS AND UTILITY LOCATIONS.

10. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR MUST COORDINATE THE BUILDING LAYOUT BY CAREFUL REVIEW OF THE ENTIRE SITE PLAN AND THE LATEST ARCHITECTURAL PLANS INCLUDING, BUT NOT LIMITED TO, STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SUPPRESSION PLAN, WHERE APPLICABLE. CONTRACTOR MUST IMMEDIATELY NOTIFY OWNER, ARCHITECT AND SITE ENGINEER, IN WRITING, OF ANY CONFLICTS, DISCREPANCIES OR AMBIGUITIES WHICH EXIST.

11. DEBRIS MUST NOT BE BURIED ON THE SUBJECT SITE AND ALL UNSUITABLE EXCAVATED MATERIAL AND DEBRIS (SOLID WASTE) MUST BE DISPOSED OF IN ACCORDANCE WITH THE REQUIREMENTS OF ANY AND ALL GOVERNMENTAL AUTHORITIES WHICH HAVE JURISDICTION OVER THIS PROJECT OR OVER CONTRACTOR.

12. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING WHEN SHORING IS REQUIRED AND FOR INSTALLING ALL SHORING REQUIRED DURING EXCAVATION TO BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS) AND ANY ADDITIONAL PRECAUTIONS TO BE TAKEN TO ASSURE THE STABILITY OF ADJACENT, NEARBY AND CONTIGUOUS STRUCTURES AND PROPERTIES.

13. THE CONTRACTOR IS TO EXERCISE EXTREME CARE WHEN PERFORMING ANY WORK ACTIVITIES ADJACENT TO PAVEMENT, STRUCTURES, ETC. WHICH ARE TO REMAIN EITHER FOR AN INITIAL PHASE OF THE PROJECT OR AS PART OF THE FINAL CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR TAKING ALL APPROPRIATE PRECAUTIONS REQUIRED TO ENSURE THE STRUCTURAL STABILITY OF SIDEWALKS AND PAVEMENT, UTILITIES, BUILDINGS, AND INFRASTRUCTURE WHICH ARE TO REMAIN, AND TO PROVIDE A SAFE WORK AREA FOR THIRD PARTIES, PEDESTRIANS AND ANYONE INVOLVED WITH THE PROJECT.

14. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE DONE TO ANY NEW OR EXISTING CONSTRUCTION OR PROPERTY DURING THE COURSE OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURBS, ETC. AND SHALL BEAR ALL COSTS ASSOCIATED WITH SAME TO INCLUDE, BUT NOT LIMITED TO, THE COST OF REPAIR AND RESTORATION. CONTRACTOR SHALL BE RESPONSIBLE FOR AND MUST MAINTAIN ALL SIGNAL INTERSECTION CABLE, WIRING CONDUITS, AND ANY UNDERGROUND ACCESSORY EQUIPMENT DAMAGED DURING CONSTRUCTION AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE REPAIR OF ANY SUCH NEW OR EXISTING CONSTRUCTION OR PROPERTY MUST RESTORE SUCH CONSTRUCTION OR PROPERTY TO A CONDITION EQUAL TO OR BETTER THAN THE CONDITION PRIOR TO CONSTRUCTION, AND IN CONFORMANCE WITH ALL APPLICABLE CODES, LAWS, RULES, REGULATIONS, STATUTORY REQUIREMENTS AND STATUTES. CONTRACTOR MUST BEAR ALL COSTS ASSOCIATED WITH SAME. CONTRACTOR IS RESPONSIBLE TO DOCUMENT ALL EXISTING DAMAGE AND TO NOTIFY THE OWNER AND THE CONSTRUCTION MANAGER PRIOR TO THE START OF CONSTRUCTION.

15. ALL CONCRETE MUST BE AIR ENTRACTED AND HAVE THE MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS UNLESS OTHERWISE NOTED ON THE PLANS, DETAILS AND/OR GEOTECHNICAL REPORT.

16. THE ENGINEER IS NOT RESPONSIBLE FOR CONSTRUCTION METHODS, MEANS, TECHNIQUES OR PROCEDURES, GENERALLY OR FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES OR PROCEDURES FOR COMPLETION OF THE WORK DEPICTED BOTH ON THESE PLANS, AND FOR ANY CONFLICTS/SCOPE REVISIONS WHICH RESULT FROM SAME. CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE METHODS/MEANS FOR COMPLETION OF THE WORK PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

17. THE ENGINEER OF RECORD IS NOT RESPONSIBLE FOR JOB SITE SAFETY. THE ENGINEER OF RECORD HAS NOT BEEN RETAINED TO PERFORM OR BE RESPONSIBLE FOR JOB SITE SAFETY, SAME BEING WHOLLY OUTSIDE OF ENGINEER'S SERVICES AS RELATED TO THE PROJECT. THE ENGINEER OF RECORD IS NOT RESPONSIBLE TO IDENTIFY OR REPORT ANY JOB SITE SAFETY ISSUES, AT ANY TIME.

18. ALL CONTRACTORS MUST CARRY THE SPECIFIED STATUTORY WORKERS' COMPENSATION INSURANCE, EMPLOYERS' LIABILITY INSURANCE AND LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE (COI). ALL CONTRACTORS MUST HAVE THEIR COI POLICIES ENDORSED TO NAME BOHLER ENGINEERING, AND ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AS ADDITIONAL NAME INSURED AND TO PROVIDE CONTRACTOR LIABILITY COVERAGE. CONTRACTORS MUST HOLD HARMLESS AND HOLD HARMLESS ENGINEERING AND CONTRACTOR'S LIABILITY INSURANCE. CONTRACTORS MUST FURNISH BOHLER ENGINEERING WITH CERTIFICATIONS OF INSURANCE AS EVIDENCE OF THE REQUIRED INSURANCE PRIOR TO COMMENCING WORK AND UPON RENEWAL OF EACH POLICY DURING THE ENTIRE PERIOD OF CONSTRUCTION AND FOR ONE YEAR AFTER THE COMPLETION OF CONSTRUCTION. IN ADDITION, ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, INDEMNIFY, DEFEND AND HOLD HARMLESS BOHLER ENGINEERING AND ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS FROM AND AGAINST ANY DAMAGES, INJURIES, CLAIMS, ACTIONS, LOSSES, PUNITIVE DAMAGES, TORT DAMAGES, STATUTORY CAUSES OF ACTION, LOSSES, COSTS, DAMAGES, AND ALL OTHER DAMAGES, ACTIONS, LIABILITIES OR COSTS, INCLUDING, BUT NOT LIMITED TO, REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH OR RESULTING FROM THE CONSTRUCTION OF THIS PROJECT, INCLUDING THE CONTRACTORS' NEGLIGENCE AND NEGLIGENCE ATTRIBUTED TO THE PROJECT. CONTRACTOR MUST NOTIFY ENGINEER, IN WRITING, AT LATEST THIRTY (30) DAYS PRIOR TO ANY TERMINATION, SUSPENSION OR CHANGE OF ITS INSURANCE HEREUNDER.

19. BOHLER ENGINEERING WILL REVIEW OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR SUBMITTALS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF CHECKING FOR CONFORMANCE WITH THE DESIGN INTENT AND THE INFORMATION CONTAINED IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONSTRUCTION MEANS AND/OR METHODS AND/OR TECHNIQUES OR PROCEDURES, COORDINATION OF THE WORK WITH OTHER TRADES, AND CONSTRUCTION SAFETY PRECAUTIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND BOHLER HAS NO LIABILITY FOR SAME HEREUNDER. BOHLER ENGINEERING'S SHOP DRAWING REVIEW WILL BE CONDUCTED WITH REASONABLE PROMPTNESS, WHILE A REASONABLE PROMPTNESS REVIEW OF A SPECIFIC SUBMITTAL WILL BE CONDUCTED TO INDICATE THAT BOHLER ENGINEERING HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. BOHLER ENGINEERING WILL NOT BE RESPONSIBLE FOR ANY DELAYS FROM THE CONSTRUCTION DOCUMENTS NOT PROMPTLY AND IMMEDIATELY BROUGHT TO ITS ATTENTION, IN WRITING, BY THE CONTRACTOR. BOHLER ENGINEERING WILL NOT BE REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.

20. NEITHER THE PROFESSIONAL ACTIVITIES OF BOHLER ENGINEERING, NOR THE PRESENCE OF BOHLER ENGINEERING AND/OR ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AT A CONSTRUCTION PROJECT SITE, SHALL RELIEVE THE GENERAL CONTRACTOR OF ITS OBLIGATIONS, DUTIES AND RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, OVERSICING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND COMPLIANCE WITH ANY HEALTH OR SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES WITH JURISDICTION OVER THE PROJECT AND/OR PROPERTY. BOHLER ENGINEERING AND ITS PERSONNEL HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES IN CONNECTION WITH THEIR WORK OR ANY HEALTH OR SAFETY PROGRAMS OR PROCEDURES. THE GENERAL CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY. BOHLER ENGINEERING SHALL BE INDEMNIFIED BY THE GENERAL CONTRACTOR AND MUST BE NAMED AN ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE AS DESCRIBED ABOVE IN NOTE 19 FOR JOB SITE SAFETY.

21. IF THE CONTRACTOR DEVIATES FROM THE PLANS AND SPECIFICATIONS, INCLUDING THE NOTES CONTAINED HEREIN, WITHOUT FIRST OBTAINING THE PRIOR WRITTEN AUTHORIZATION OF THE ENGINEER FOR SUCH DEVIATIONS, THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PAYMENT OF ALL COSTS INCURRED IN CORRECTING ANY WORK DONE WHICH DEVIATES FROM THE PLANS, ALL FINES AND/OR PENALTIES ASSESSED WITH RESPECT THEREOF AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM AND, FURTHER, SHALL DEFEND, INDEMNIFY AND HOLD HARMLESS THE ENGINEER, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, IN ACCORDANCE WITH PARAGRAPH 19 HEREIN, FOR AND FROM ALL FEES, ATTORNEYS' FEES, DAMAGES, COSTS, JUDGMENTS, PENALTIES AND THE LIKE RELATED TO SAME.

22. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AND PROTECTION OF TRAFFIC PLAN FOR ALL WORK THAT AFFECTS PUBLIC TRAFFIC EITHER IN THE R.O.W. OR ON SITE. THE COST FOR THIS ITEM MUST BE INCLUDED IN THE CONTRACTOR'S PRICE.

23. ALL SIGNING AND PAVEMENT STRIPING MUST CONFORM TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES OR LOCALLY APPROVED SUPPLEMENT.

24. ENGINEER IS NOT RESPONSIBLE FOR ANY INJURY OR DAMAGES RESULTING FROM CONTRACTOR'S FAILURE TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH THE APPROVED PLANS. IF CONTRACTOR AND/OR OWNER FAIL TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH APPROVED PLANS, THEY AGREE TO JOINTLY AND SEVERALLY INDEMNIFY AND HOLD ENGINEER HARMLESS FOR ALL INJURIES AND DAMAGES THAT ENGINEER SUFFERS AND COSTS THAT ENGINEER INCURS.

25. OWNER MUST MAINTAIN AND PRESERVE ALL PHYSICAL SITE FEATURES AND DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS, IN STRICT ACCORDANCE WITH THE APPROVED PLANS) AND DESIGN AND, FURTHER ENGINEER IS NOT RESPONSIBLE FOR ANY FAILURE TO SO MAINTAIN OR PRESERVE SITE AND/OR DESIGN FEATURES. IF OWNER FAILS TO MAINTAIN AND/OR PRESERVE ALL PHYSICAL SITE FEATURES AND/OR DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS, OWNER AGREES TO INDEMNIFY AND HOLD ENGINEER HARMLESS FOR ALL INJURIES AND DAMAGES THAT ENGINEER SUFFERS AND COSTS THAT ENGINEER INCURS AS A RESULT OF SAID FAILURE.

26. ALL DIMENSIONS MUST BE TO FACE OF CURB, EDGE OF PAVEMENT, OR EDGE OF BUILDING, UNLESS NOTED OTHERWISE.

27. ALL CONSTRUCTION AND MATERIALS MUST COMPLY WITH AND CONFORM TO APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, LAWS, ORDINANCES, RULES AND CODES, AND ALL APPLICABLE OSHA REQUIREMENTS.

28. CONTRACTOR AND OWNER MUST INSTALL ALL ELEMENTS AND COMPONENTS IN STRICT COMPLIANCE WITH AND ACCORDANCE WITH MANUFACTURERS' STANDARDS AND RECOMMENDED INSTALLATION CRITERIA AND SPECIFICATIONS. IF CONTRACTOR AND/OR OWNER FAIL TO DO SO, THEY AGREE TO JOINTLY AND SEVERALLY INDEMNIFY AND HOLD ENGINEER HARMLESS FOR ALL INJURIES AND DAMAGES THAT ENGINEER SUFFERS AND COSTS THAT ENGINEER INCURS AS A RESULT OF SAID FAILURE.

29. CONTRACTOR IS RESPONSIBLE TO MAINTAIN ON-SITE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN COMPLIANCE WITH EPA REQUIREMENTS FOR SITES WHERE ONE (1) ACRE OR MORE (UNLESS THE LOCAL JURISDICTION REQUIRES FEWER) IS DISTURBED BY CONSTRUCTION ACTIVITIES. CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL ACTIVITIES, INCLUDING THOSE OF SUBCONTRACTORS, ARE IN COMPLIANCE WITH THE SWPPP, INCLUDING BUT NOT LIMITED TO LOGGING ACTIVITIES (MINIMUM ONE PER WEEK AND AFTER MAJOR EVENTS) AND CORRECTIVE MEASURES, AS APPROPRIATE.

30. AS CONTAINED IN THESE DRAWINGS AND ASSOCIATED APPLICATION DOCUMENTS PREPARED BY THE SIGNATORY PROFESSIONAL ENGINEER, THE USE OF THE WORDS "CERTIFY" OR "CERTIFICATION" CONSTITUTES AN EXPRESSION OF PROFESSIONAL OPINION REGARDING THE INFORMATION WHICH IS THE SUBJECT OF THE UNDERSIGNED PROFESSIONAL'S KNOWLEDGE OR BELIEF AND IN ACCORDANCE WITH COMMON ACCEPTED PROCEDURE CONSISTENT WITH THE APPLICABLE STANDARDS OF PRACTICE, AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE, EITHER EXPRESSED OR IMPLIED.

GENERAL GRADING & UTILITY PLAN NOTES

1. LOCATIONS OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE AND MUST BE INDEPENDENTLY CONFIRMED WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. SANITARY SEWER AND ALL OTHER UTILITY SERVICE CONNECTION POINTS MUST BE INDEPENDENTLY CONFIRMED BY THE CONTRACTOR IN THE FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ALL DISCREPANCIES MUST IMMEDIATELY BE REPORTED, IN WRITING, TO THE ENGINEER. CONSTRUCTION MUST COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. PROPOSED INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.

2. CONTRACTOR MUST VERTICALLY AND HORIZONTALLY LOCATE ALL UTILITIES AND SERVICES INCLUDING, BUT NOT LIMITED TO, GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN THE LIMITS OF DISTURBANCE OR WORK SPACE, WHICHEVER IS GREATER. THE CONTRACTOR MUST USE, REFER TO, AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL DAMAGE TO ANY EXISTING UTILITIES DURING CONSTRUCTION, AT NO COST TO THE OWNER. CONTRACTOR SHALL BEAR ALL COSTS ASSOCIATED WITH DAMAGE TO ANY EXISTING UTILITIES DURING CONSTRUCTION.

3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL CONSTRUCTION CONTRACT DOCUMENTS INCLUDING, BUT NOT LIMITED TO, ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE PRIOR TO THE INITIATION AND COMMENCEMENT OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT AND/OR DISCREPANCY BETWEEN THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR TO THE APPLICABLE CODES, REGULATIONS, LAWS, RULES, STATUTES AND/OR ORDINANCES, IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD, IN WRITING, OF SAID CONFLICT AND/OR DISCREPANCY PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR'S FAILURE TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE CONTRACTOR'S FULL AND COMPLETE ACCEPTANCE OF ALL RESPONSIBILITY TO THE SCOPE OF WORK AS DEFINED BY THE DRAWINGS AND IN FULL COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS, LAWS, STATUTES, ORDINANCES AND CODES AND, FURTHER, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH SAME.

4. THE CONTRACTOR MUST LOCATE AND CLEARLY AND UNAMBIGUOUSLY DEFINE VERTICALLY AND HORIZONTALLY ALL ACTIVE AND INACTIVE UTILITY AND/OR SERVICE SYSTEMS THAT ARE TO BE REMOVED. THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN ALL ACTIVE AND INACTIVE SYSTEMS THAT ARE NOT BEING REMOVED/RELOCATED DURING SITE ACTIVITY.

5. THE CONTRACTOR MUST FAMILIARIZE ITSELF WITH THE APPLICABLE UTILITY SERVICE PROVIDER REQUIREMENTS AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION AS IDENTIFIED OR REQUIRED FOR THE PROJECT. THE CONTRACTOR MUST PROVIDE THE OWNER WITH WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH THE JURISDICTION AND UTILITY COMPANY REQUIREMENTS AND ALL OTHER APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES.

6. THE CONTRACTOR MUST INSTALL ALL STORM SEWER AND SANITARY SEWER COMPONENTS WHICH FUNCTION BY GRAVITY PRIOR TO THE INSTALLATION OF ALL OTHER UTILITIES.

7. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF SITE PLAN DOCUMENTS AND ARCHITECTURAL DESIGN FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS, GREASE TRAP REQUIREMENTS/DETAILS, DOOR ACCESS, AND EXTERIOR GRADING. THE ARCHITECT WILL DETERMINE THE UTILITY SERVICE SIZES. THE CONTRACTOR MUST COORDINATE INSTALLATION OF ALL UTILITIES SERVICES WITH THE ARCHITECT TO ENSURE THAT ALL UTILITIES SERVICES ARE ACHIEVED. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT INSTALLATION OF ALL IMPROVEMENTS COMPLIES WITH ALL UTILITY REQUIREMENTS WITH JURISDICTION AND/OR CONTROL OF THE SITE, AND ALL OTHER APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES AND, FURTHER, IS RESPONSIBLE FOR COORDINATING THE UTILITY TIE-IN/CONNECTIONS PRIOR TO CONNECTING TO THE EXISTING UTILITY SERVICES. WHERE CONFLICTS EXIST BETWEEN THESE SITE PLANS AND THE ARCHITECTURAL PLANS, OR WHERE ARCHITECTURAL PLAN UTILITY CONNECTION POINTS DIFFER, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER, IN WRITING, AND PRIOR TO CONSTRUCTION, RESOLVE SAME.

8. WATER SERVICE MATERIALS, BURIAL DEPTH, AND COVER REQUIREMENTS MUST BE SPECIFIED BY THE LOCAL UTILITY COMPANY. CONTRACTOR'S PRICE FOR WATER SERVICE MUST INCLUDE ALL FEES, COSTS AND APPURTENANCES REQUIRED BY THE UTILITY TO PROVIDE FULL AND COMPLETE WORKING SERVICE. CONTRACTOR MUST CONTACT THE APPLICABLE MUNICIPALITY TO CONFIRM THE PROPER WATER METER AND VAULT, PRIOR TO COMMENCING CONSTRUCTION.

9. ALL NEW UTILITIES/SERVICES, INCLUDING ELECTRIC, TELEPHONE, CABLE, TV, ETC. ARE TO BE INSTALLED UNDERGROUND. ALL NEW UTILITIES/SERVICES MUST BE INSTALLED IN ACCORDANCE WITH THE UTILITY SERVICE PROVIDER'S REQUIREMENTS.

10. SITE GRADING MUST BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT REFERENCED IN THIS PLAN SET. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING AND REPLACING UNSUITABLE MATERIALS WITH SUITABLE MATERIALS AS SPECIFIED IN THE GEOTECHNICAL REPORT. ALL EXCAVATED OR FILLED AREAS MUST BE COMPACTED AS OUTLINED IN THE GEOTECHNICAL REPORT. MOISTURE CONTENT AT TIME OF PLACEMENT MUST BE SUBMITTED IN A COMPACTION REPORT PREPARED BY A QUALIFIED GEOTECHNICAL ENGINEER, REGISTERED WITH THE STATE WHERE THE WORK IS PERFORMED, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT AND ALL APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES. SUBBASE MATERIAL FOR PAVEMENT CONSTRUCTION SHALL BE FINE GRADATION, UNLESS OTHERWISE SPECIFIED. SUBBASE IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL COMPACTED AS DIRECTED BY THE GEOTECHNICAL REPORT. EARTHWORK ACTIVITIES INCLUDING, BUT NOT LIMITED TO, EXCAVATION, BACKFILL, AND COMPACTING MUST COMPLY WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT AND ALL APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES. EARTHWORK ACTIVITIES MUST COMPLY WITH THE STANDARD STATE DOT SPECIFICATIONS FOR ROADWAY CONSTRUCTION (LATEST EDITION) AND ANY AMENDMENTS OR REVISIONS THERE TO.

11. ALL FILL, COMPACTION, AND BACKFILL MATERIALS REQUIRED FOR UTILITY INSTALLATION MUST BE AS PER THE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT AND MUST BE COORDINATED WITH THE APPLICABLE UTILITY COMPANY SPECIFICATIONS, WHEN THE PROJECT DOES NOT HAVE GEOTECHNICAL RECOMMENDATIONS, FILL AND COMPACTION MUST, AT A MINIMUM, COMPLY WITH THE STATE DOT REQUIREMENTS AND SPECIFICATIONS AND CONSULTANT SHALL HAVE NO LIABILITY OR RESPONSIBILITY FOR OR AS RELATED TO FILL, COMPACTION AND BACKFILL. FURTHER, CONTRACTOR IS FULLY RESPONSIBLE FOR EARTHWORK BALANCE.

12. THE CONTRACTOR MUST COMPLY TO THE FULLEST EXTENT, WITH THE LATEST OSHA STANDARDS AND REGULATIONS, AND/OR ANY OTHER AGENCY WITH JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE "MEANS AND METHODS" REQUIRED TO MEET THE INTENT AND PERFORMANCE CRITERIA OF ALL APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES. THE CONTRACTOR'S METHODS AND CONSULTANT SHALL HAVE NO RESPONSIBILITY FOR OR AS RELATED FOR OR AS RELATED TO EXCAVATION AND TRENCHING PROCEDURES.

13. PAVEMENT MUST BE SAW CUT IN STRAIGHT LINES, AND EXCEPT FOR EDGE OF JOINT BUTTS, MUST EXTEND TO THE FULL DEPTH OF THE EXISTING PAVEMENT. ALL DEBRIS FROM REMOVAL OPERATIONS MUST BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS WILL NOT BE PERMITTED.

14. THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, AND SANITARY CLEANOUT TOPS MUST BE ADJUSTED, AS NECESSARY, TO MATCH PROPOSED GRADES IN ACCORDANCE WITH ALL APPLICABLE STANDARDS, REGULATIONS, RULES, STATUTES, LAWS, ORDINANCES AND CODES.

15. DURING THE INSTALLATION OF SANITARY SEWER, STORM SEWER, AND ALL UTILITIES, THE CONTRACTOR MUST MAINTAIN A CONTEMPORANEOUS AND THOROUGH RECORD OF CONSTRUCTION TO IDENTIFY THE AS-INSTALLED LOCATIONS OF ALL UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR MUST CAREFULLY NOTE ANY INSTALLATIONS THAT DEVIATE FROM THE INFORMATION CONTAINED IN THE UTILITY PLAN. THIS RECORD MUST BE KEPT ON A CLEAN COPY OF THE DRAINAGE OR UTILITY PLAN, WHICH CONTRACTOR MUST PROMPTLY PROVIDE TO THE OWNER AT THE COMPLETION OF WORK.

16. WHEN THE SITE IMPROVEMENT PLANS INVOLVE MULTIPLE BUILDINGS, SOME OF WHICH MAY BE BUILT AT A LATER DATE, THE CONTRACTOR MUST EXTEND ALL LINES, INCLUDING BUT NOT LIMITED TO STORM SEWER, SANITARY SEWER, UTILITIES, AND IRRIGATION LINE, TO A POINT AT LEAST FIVE (5) FEET BEYOND THE PAVED AREAS FOR WHICH THE CONTRACTOR IS RESPONSIBLE. CONTRACTOR MUST CAP AND MARK LOCATIONS WITH A 2x4, AND MUST NOTE THE LOCATION OF ALL OF THE ABOVE ON A CLEAN COPY OF THE DRAINAGE OR UTILITY PLAN, WHICH CONTRACTOR MUST PROMPTLY PROVIDE TO THE OWNER UPON COMPLETION OF THE WORK.

17. THE CONTRACTOR IS FULLY RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHY INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCING ANY CONSTRUCTION. CONTRACTOR MUST CONFIRM AND ENSURE 0.75% MINIMUM SLOPE AGAINST ALL ISLANDS, GUTTERS, AND CURBS, 1.0% ON ALL CONCRETE SURFACES, AND 1.5% MINIMUM ON ASPHALT (EXCEPT WHERE ADA REQUIREMENTS OR EXISTING TOPOGRAPHY LIMIT GRADIES), TO PREVENT ponding. CONTRACTOR MUST IMMEDIATELY NOTIFY, IN WRITING, TO THE ENGINEER, ANY DISCREPANCIES THAT MAY OR COULD AFFECT THE PUBLIC SAFETY, HEALTH OR GENERAL WELFARE, OR PROJECT COST. IF CONTRACTOR PROCEEDS WITH CONSTRUCTION WITHOUT PROVIDING PROPER NOTIFICATION, MUST BE AT THE CONTRACTOR'S OWN RISK AND, FURTHER, CONTRACTOR SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS THE DESIGN ENGINEER FOR ANY DAMAGES, COSTS, INJURIES, ATTORNEYS' FEES AND THE LIKE WHICH RESULT FROM SAME.

18. PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 1' ABOVE EXISTING LOCAL ASPHALT GRADES UNLESS OTHERWISE NOTED. FIELD ADJUST TO CREATE A MINIMUM OF 0.75% GUTTER GRADE ALONG CURB FACE. IT IS CONTRACTOR'S OBLIGATION TO ENSURE THAT DESIGN ENGINEER APPROVES FINAL CURBING CUT SHEETS PRIOR TO INSTALLATION OF SAME.

19. IN THE EVENT OF DISCREPANCIES AND/OR CONFLICTS BETWEEN PLANS OR RELATIVE TO OTHER PLANS, THE SITE PLAN WILL TAKE PRECEDENCE AND CONTROL. CONTRACTOR MUST IMMEDIATELY NOTIFY THE DESIGN ENGINEER, IN WRITING, OF ANY DISCREPANCIES AND/OR CONFLICTS.

20. CONTRACTOR IS REQUIRED TO SECURE ALL NECESSARY AND/OR REQUIRED PERMITS AND APPROVALS FOR ALL OFF-SITE MATERIAL SOURCES AND DISPOSAL FACILITIES. CONTRACTOR MUST SUPPLY A COPY OF APPROVALS TO ENGINEER AND OWNER PRIOR TO INITIATING ANY WORK.

21. WHERE RETAINING WALLS (WHETHER OR NOT THEY MEET THE JURISDICTIONAL DEFINITION) ARE IDENTIFIED ON PLANS, ELEVATIONS IDENTIFIED ARE FOR THE EXPOSED PORTION OF THE WALL. WALL FOOTINGS/FOUNDATION ELEVATIONS ARE NOT IDENTIFIED HEREIN AND ARE TO BE DETERMINED BY THE CONTRACTOR BASED ON FINAL STRUCTURAL DESIGN SHOP DRAWINGS PREPARED BY THE APPROPRIATE PROFESSIONAL LICENSED IN THE STATE WHERE THE CONSTRUCTION OCCURS.

22. STORM DRAINAGE PIPE UNLESS INDICATED OTHERWISE, ALL STORM SEWER PIPE MUST BE REINFORCED CONCRETE PIPE (RCP) CLASS III WITH SILT TIGHT JOINTS. WHEN HIGH-DENSITY POLYETHYLENE PIPE (HDPE) IS CALLED FOR ON THE PLANS, IT MUST CONFORM TO AASHTO M80 AND TYPE 5 SMOOTH INTERIOR WITH ANGULAR CORRUGATIONS WITH GASKET FOR SILT TIGHT JOINT. PVC PIPE FOR STORM DRAIN CONNECTION MUST BE SDR 26 OR SCHEDULE 40 UNLESS INDICATED OTHERWISE.

23. UNLESS INDICATED OTHERWISE ON THE DRAWINGS, SANITARY SEWER PIPE SHALL BE AS FOLLOWS:

- FOR PIPES LESS THAN 12 FT. DEEP: POLYVINYL CHLORIDE (PVC) SDR 35 PER ASTM D3034
- FOR PIPES MORE THAN 12 FT. DEEP: POLYVINYL CHLORIDE (PVC) SDR 26 PER ASTM D2034
- FOR PIPE WITH 19 FT. OR BUILDING PIPE MATERIAL SHALL COMPLY WITH APPLICABLE BUILDING AND PLUMBING CODES. CONTRACTOR TO VERIFY WITH LOCAL OFFICIALS.

24. STORM AND SANITARY SEWER PIPE LENGTHS INDICATED ARE NOMINAL AND MEASURED CENTER OF INLET AND/OR MANHOLES STRUCTURE TO CENTER OF STRUCTURE.

25. STORMWATER ROOF DRAIN LOCATIONS ARE BASED ON PRELIMINARY ARCHITECTURAL PLANS. CONTRACTOR IS RESPONSIBLE TO AND FOR VERIFYING LOCATIONS OF SAME BASED ON FINAL ARCHITECTURAL PLANS.

26. SEWERS CROSSING STREAMS AND/OR LOCATION WITHIN 10 FEET OF THE STREAM EMBANKMENT, OR WHERE SITE CONDITIONS SO INDICATE, MUST BE CONSTRUCTED OF STEEL, REINFORCED CONCRETE, DUCTILE IRON OR OTHER SUITABLE MATERIAL. SEWERS CONVEYING SANITARY FLOW COMBINED SANITARY AND STORMWATER FLOW OR INDUSTRIAL FLOW MUST BE SEPARATED FROM WATER MAINS BY A DISTANCE OF AT LEAST 10 FEET HORIZONTALLY. IF SUCH LATERAL SEPARATION IS NOT POSSIBLE, THE PIPES MUST BE IN SEPARATE TRENCHES WITH THE SEWER AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN, OR SUCH OTHER SEPARATION AS APPROVED BY THE GOVERNMENT AGENCY WITH JURISDICTION OVER SAME.

27. WHERE APPROPRIATE SEPARATION FROM A WATER MAIN IS NOT POSSIBLE, THE SEWER MUST BE ENCASED IN CONCRETE, OR CONSTRUCTED OF DUCTILE IRON PIPE USING MECHANICAL OR SLP-ON JOINTS FOR A DISTANCE OF AT LEAST 10 FEET ON EITHER SIDE OF THE CROSSING. IN ADDITION, ONE FULL LENGTH OF SEWER PIPE SHOULD BE LOCATED SO BOTH JOINTS WILL BE AS FAR FROM THE WATER LINE AS POSSIBLE. WHERE A WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT FOR THE SEWER MUST BE PROVIDED.

28. WATER MAIN PIPING MUST BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS AND SPECIFICATIONS OF THE LOCAL WATER PURVEYOR. IN THE ABSENCE OF SUCH REQUIREMENTS, WATER MAIN PIPING MUST BE CEMENT-LINED DUCTILE IRON (DIP) MINIMUM CLASS 52 THICKNESS, ALL PIPE AND APPURTENANCES MUST COMPLY WITH THE APPLICABLE AWWA STANDARDS IN EFFECT AT THE TIME OF APPLICATION.

29. CONTRACTOR MUST ENSURE THAT ALL UTILITY TRENCHES LOCATED IN EXISTING PAVED ROADWAYS INCLUDING SEWER, WATER AND STORM SYSTEMS, MUST BE REPAIRED IN ACCORDANCE WITH REFERENCED MUNICIPAL, COUNTY AND/OR DOT DETAILS AS APPLICABLE. CONTRACTOR MUST COORDINATE INSPECTION AND APPROVAL OF COMPLETED WORK WITH THE AGENCY WITH JURISDICTION OVER SAME.

30. LOCATION OF PROPOSED UTILITY POLE RELIEF LOCATION IS AT THE SOLE DISCRETION OF UTILITY COMPANY.

31. CONSULTANT IS NEITHER LIABLE NOR RESPONSIBLE FOR ANY SUBSURFACE CONDITIONS AND FURTHER, SHALL HAVE NO LIABILITY FOR ANY HAZARDOUS MATERIALS, HAZARDOUS SUBSTANCES, OR POLLUTANTS ON, ABOUT OR UNDER THE PROPERTY.

GENERAL DEMOLITION NOTES

1. THIS PLAN REFERENCES DOCUMENTS AND INFORMATION BY:

- "BOUNDARY & TOPOGRAPHIC SURVEY" PREPARED BY CONTROL POINT ASSOCIATED, INC., DATED 03/23/21.
- "LANDSCAPE LAND TITLE SURVEY" PREPARED BY CONTROL POINT ASSOCIATED, INC., DATED 05/14/21.
- "GEO-TECHNICAL EVALUATION" PREPARED BY VERDANTAS LLC, DATED 03/22/21.

2. CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, (29 U.S.C. 651 et seq.), AS AMENDED AND ANY MODIFICATIONS, AMENDMENTS OR REVISIONS TO SAME.

3. BOHLER ENGINEERING HAS NO CONTRACTUAL, LEGAL, OR OTHER RESPONSIBILITY FOR JOB SITE SAFETY OR JOB SITE SUPERVISION, OR ANYTHING RELATED TO SAME.

4. THE DEMOLITION PLAN IS INTENDED TO PROVIDE GENERAL INFORMATION ONLY. REGARDING ITEMS TO BE DEMOLISHED AND/OR REMOVED, THE CONTRACTOR MUST ALSO REVIEW THE OTHER SITE PLAN DRAWINGS AND INCLUDE IN DEMOLITION ACTIVITIES ALL INCIDENTAL WORK NECESSARY FOR THE CONSTRUCTION OF THE NEW SITE IMPROVEMENTS.

5. CONTRACTOR MUST RAISE ANY QUESTIONS CONCERNING THE ACCURACY OR INTENT OF THESE PLANS OR SPECIFICATIONS, CONCERNS REGARDING THE APPLICABLE SAFETY STANDARDS, OR THE SAFETY OF THE CONTRACTOR OR THIRD PARTIES IN PERFORMING THE WORK ON THIS PROJECT, WITH BOHLER ENGINEERING, IN WRITING, AND RESPONDED TO BY BOHLER, IN WRITING, PRIOR TO THE INITIATION OF ANY SITE ACTIVITY AND ANY DEMOLITION ACTIVITY. ALL DEMOLITION ACTIVITIES MUST BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS AND ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, RULES, REQUIREMENTS, STATUTES, ORDINANCES AND CODES.

6. PRIOR TO STARTING ANY DEMOLITION, CONTRACTOR IS RESPONSIBLE FOR TO:

A. OBTAINING ALL REQUIRED PERMITS AND MAINTAINING THE SAME ON SITE FOR REVIEW BY THE ENGINEER AND OTHER PUBLIC AGENCIES WITH JURISDICTION THROUGHOUT THE DURATION OF THE PROJECT, SITE WORK, AND DEMOLITION WORK.

B. NOTIFYING, AT A MINIMUM, THE MUNICIPAL ENGINEER, DESIGN ENGINEER, AND LOCAL SOIL CONSERVATION DISTRICT, 72 HOURS PRIOR TO THE START OF WORK.

C. INSTALLING THE REQUIRED SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO SITE DISTURBANCE.

D. IN ACCORDANCE WITH STATE LAW, THE CONTRACTOR MUST CALL THE STATE ONE-CALL DAMAGE PROTECTION SYSTEM FOR UTILITY MARKOUT, IN ADVANCE OF ANY EXCAVATION.

E. LOCATING AND PROTECTING ALL UTILITIES AND SERVICES, INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC, ETC. WITHIN THE LIMITS OF DISTURBANCE OR WORK SPACE, WHICHEVER IS GREATER. THE CONTRACTOR MUST USE AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES.

F. PROTECTING AND MAINTAINING IN OPERATION, ALL ACTIVE UTILITIES AND SYSTEMS THAT ARE NOT BEING REMOVED DURING ALL DEMOLITION ACTIVITIES.

G. ARRANGING FOR AND COORDINATING WITH THE APPLICABLE UTILITY SERVICE PROVIDER(S) FOR THE TEMPORARY OR PERMANENT TERMINATION OF SERVICE REQUIRED BY THE PROJECT PLANS AND SPECIFICATIONS. THE CONTRACTOR MUST PROVIDE THE UTILITY ENGINEER AND OWNER WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED IN ACCORDANCE WITH JURISDICTIONAL AND UTILITY COMPANY REQUIREMENTS.

H. COORDINATION WITH UTILITY COMPANIES REGARDING WORKING "OFF-PEAK" HOURS OR ON WEEKENDS AS MAY BE REQUIRED TO MINIMIZE THE IMPACT ON THE AFFECTED PARTIES. WORK REQUIRED TO BE DONE "OFF-PEAK" IS TO BE DONE AT NO ADDITIONAL COST TO THE OWNER.

I. IN THE EVENT THE CONTRACTOR DISCOVERS ANY HAZARDOUS MATERIAL, THE REMOVAL OF WHICH IS NOT ADDRESSED IN THE PROJECT PLANS AND SPECIFICATIONS, THE CONTRACTOR MUST IMMEDIATELY CEASE ALL WORK AND IMMEDIATELY NOTIFY THE OWNER AND ENGINEER OF THE DISCOVERY OF SUCH MATERIALS.

J. THE FIRM OR ENGINEER OF RECORD IS NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION. CONTRACTOR MUST PROCEED WITH THE DEMOLITION IN A SYSTEMATIC AND SAFE MANNER, FOLLOWING ALL THE OSHA REQUIREMENTS, TO ENSURE PUBLIC AND CONTRACTOR SAFETY.

K. THE CONTRACTOR MUST PROVIDE ALL "MEANS AND METHODS" NECESSARY TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES, AND ANY OTHER ADJACENT STRUCTURES THAT RELY ON OR OFF SITE. THE CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS OF DAMAGE TO ALL ITEMS THAT ARE TO REMAIN. CONTRACTOR MUST USE REPAIR MATERIAL FOR ALL REPAIRS. CONTRACTOR'S REPAIRS MUST INCLUDE THE REPAIR OF ANY ITEMS REPAIRED TO THE PRE-DEMOLITION CONDITION, OR BETTER. CONTRACTOR SHALL PERFORM ALL REPAIRS AT THE CONTRACTOR'S SOLE EXPENSE.

L. THE CONTRACTOR MUST NOT PERFORM ANY EARTH MOVEMENT ACTIVITIES, DEMOLITION OR REMOVAL OF FOUNDATION WALLS, FOOTINGS, OR OTHER MATERIALS WITHIN THE LIMITS OF DISTURBANCE UNLESS SAME IS IN STRICT ACCORDANCE AND CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS, AND/OR UNDER THE WRITTEN DIRECTION OF THE OWNER'S STRUCTURAL OR GEOTECHNICAL ENGINEER.

M. CONTRACTOR MUST BACKFILL ALL EXCAVATION RESULTING FROM, OR INCIDENTAL TO, DEMOLITION ACTIVITIES. BACKFILL MUST BE ACCOMPLISHED WITH APPROVED BACKFILL MATERIALS, AND MUST BE SUFFICIENTLY COMPACTED TO SUPPORT NEW IMPROVEMENTS AND PERFORMED IN COMPLIANCE WITH THE RECOMMENDATIONS AND GUIDANCE IN THE GEOTECHNICAL REPORT. BACKFILLING MUST OCCUR IMMEDIATELY AFTER DEMOLITION ACTIVITIES, AND MUST BE DONE SO AS TO PREVENT WATER ENTERING THE EXCAVATION. FINISHED SURFACES MUST BE GRADED TO PROMOTE POSITIVE DRAINAGE.

N. EXPLOSIVES MUST NOT BE USED WITHOUT PRIOR WRITTEN CONSENT OF BOTH THE OWNER AND ALL APPLICABLE GOVERNMENTAL AUTHORITIES. ALL THE REQUIRED PERMITS AND EXPLOSIVE CONTROL MEASURES THAT ARE REQUIRED BY THE FEDERAL, STATE, AND LOCAL GOVERNMENTS MUST BE IN PLACE PRIOR TO CONTRACTOR STARTING AN EXPLOSIVE PROGRAM AND/OR DEMOLITION. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ALL INSPECTION AND SEISMIC VIBRATION TESTING THAT IS REQUIRED TO MONITOR THE EFFECTS ON ALL LOCAL STRUCTURES.

O. CONTRACTOR MUST PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH THE CURRENT FHWA "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), AND THE FEDERAL, STATE, AND LOCAL REGULATIONS WHEN DEMOLITION RELATED ACTIVITIES IMPACT ROADWAYS AND/OR ROADWAY RIGHT-OF-WAY.

P. CONTRACTOR MUST CONDUCT DEMOLITION ACTIVITIES IN SUCH A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, SIDEWALKS, WALKWAYS, AND OTHER ADJACENT FACILITIES. STREET CLOSURE PERMITS MUST BE RECEIVED FROM THE APPROPRIATE GOVERNMENTAL AUTHORITY PRIOR TO THE COMMENCEMENT OF ANY ROAD OPENING OR DEMOLITION ACTIVITIES IN OR ADJACENT TO THE RIGHT-OF-WAY.

Q. DEMOLITION ACTIVITIES AND EQUIPMENT MUST NOT USE AREAS OUTSIDE THE DEFINED PROJECT LIMIT LINE, WITHOUT WRITTEN PERMISSION OF THE OWNER AND ALL GOVERNMENTAL AGENCIES WITH JURISDICTION.

R. THE CONTRACTOR MUST USE DUST CONTROL MEASURES TO LIMIT AIRBORNE DUST AND DIRT RISING AND SCATTERING IN THE AIR IN ACCORDANCE WITH FEDERAL, STATE AND/OR LOCAL STANDARDS. AFTER THE DEMOLITION IS COMPLETE, CONTRACTOR MUST CLEAN ALL ADJACENT STRUCTURES AND IMPROVEMENTS TO REMOVE ALL DUST AND DEBRIS CAUSED BY THE DEMOLITION OPERATIONS. THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO THEIR "PRE-DEMOLITION" CONDITION.

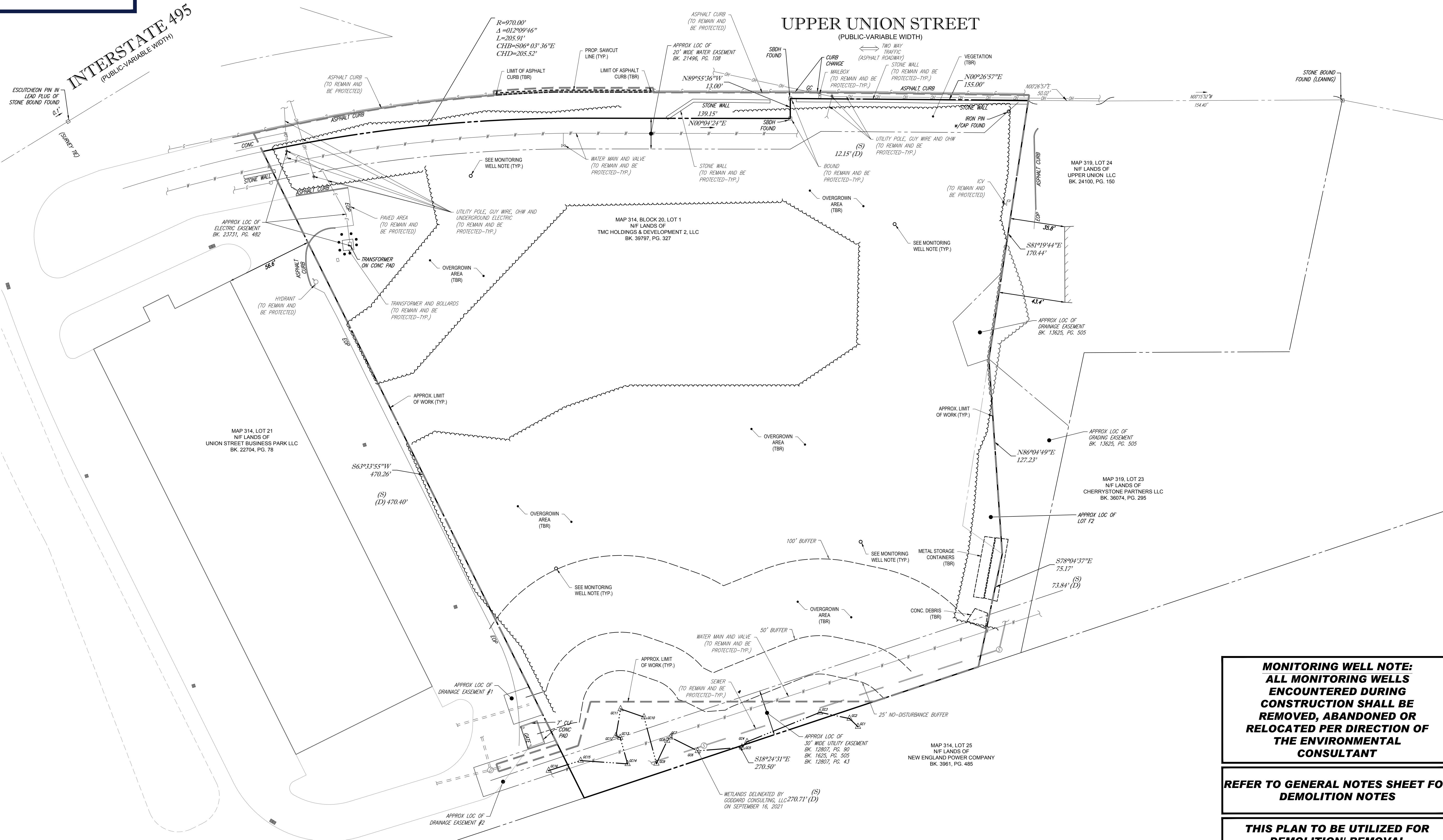
S. CONTRACTOR IS RESPONSIBLE TO SAFEGUARD THE SITE AS NECESSARY TO PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE ENTRY OF UNAUTHORIZED PERSONS AT ANY TIME.

T. CONTRACTOR IS RESPONSIBLE FOR JOB SITE SAFETY, WHICH MUST INCLUDE, BUT NOT BE LIMITED TO, THE INSTALLATION AND MAINTENANCE OF BARRIERS, FENCING AND OTHER APPROPRIATE SAFETY ITEMS NECESSARY TO PRO



INTERSTATE 495
(PUBLIC-VARIABLE WIDTH)

UPPER UNION STREET
(PUBLIC-VARIABLE WIDTH)



BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

| REV | DATE | COMMENT | DRAWN BY | CHECKED BY |
|-----|----------|---------------------------------|----------|------------|
| 1 | 03/23/22 | NOTICE OF INTENT SUBMISSION | NPD | RMM |
| 2 | 05/09/22 | PER TOWN / PEER REVIEW COMMENTS | NPD | RMM |
| 3 | 05/17/22 | PER PEER REVIEW COMMENTS | NPD | RMM |

811
Know what's below.
Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

PERMIT SET

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: W211057
DRAWN BY: NPD
CHECKED BY: RMM
DATE: 02/01/2022
CAD ID: W211057-CVL-3

PROPOSED SITE PLAN DOCUMENTS

FOR

TMC HOLDINGS & DEVELOPMENT 2, LLC

PROPOSED INDUSTRIAL DEVELOPMENT
UNION STREET BUSINESS PARK II
MAP #314, BLOCK #20, LOT #1
839 UPPER UNION STREET
CITY OF FRANKLIN
NORFOLK COUNTY, MA

BOHLER

352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9900
www.BohlerEngineering.com



MONITORING WELL NOTE:
ALL MONITORING WELLS ENCOUNTERED DURING CONSTRUCTION SHALL BE REMOVED, ABANDONED OR RELOCATED PER DIRECTION OF THE ENVIRONMENTAL CONSULTANT

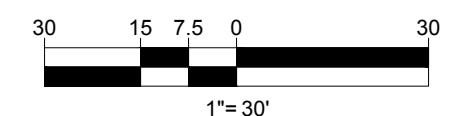
REFER TO GENERAL NOTES SHEET FOR DEMOLITION NOTES

THIS PLAN TO BE UTILIZED FOR DEMOLITION/ REMOVAL PURPOSES ONLY

SHEET TITLE:
DEMOLITION PLAN

SHEET NUMBER:
C-201

REVISION 3 - 05/17/22

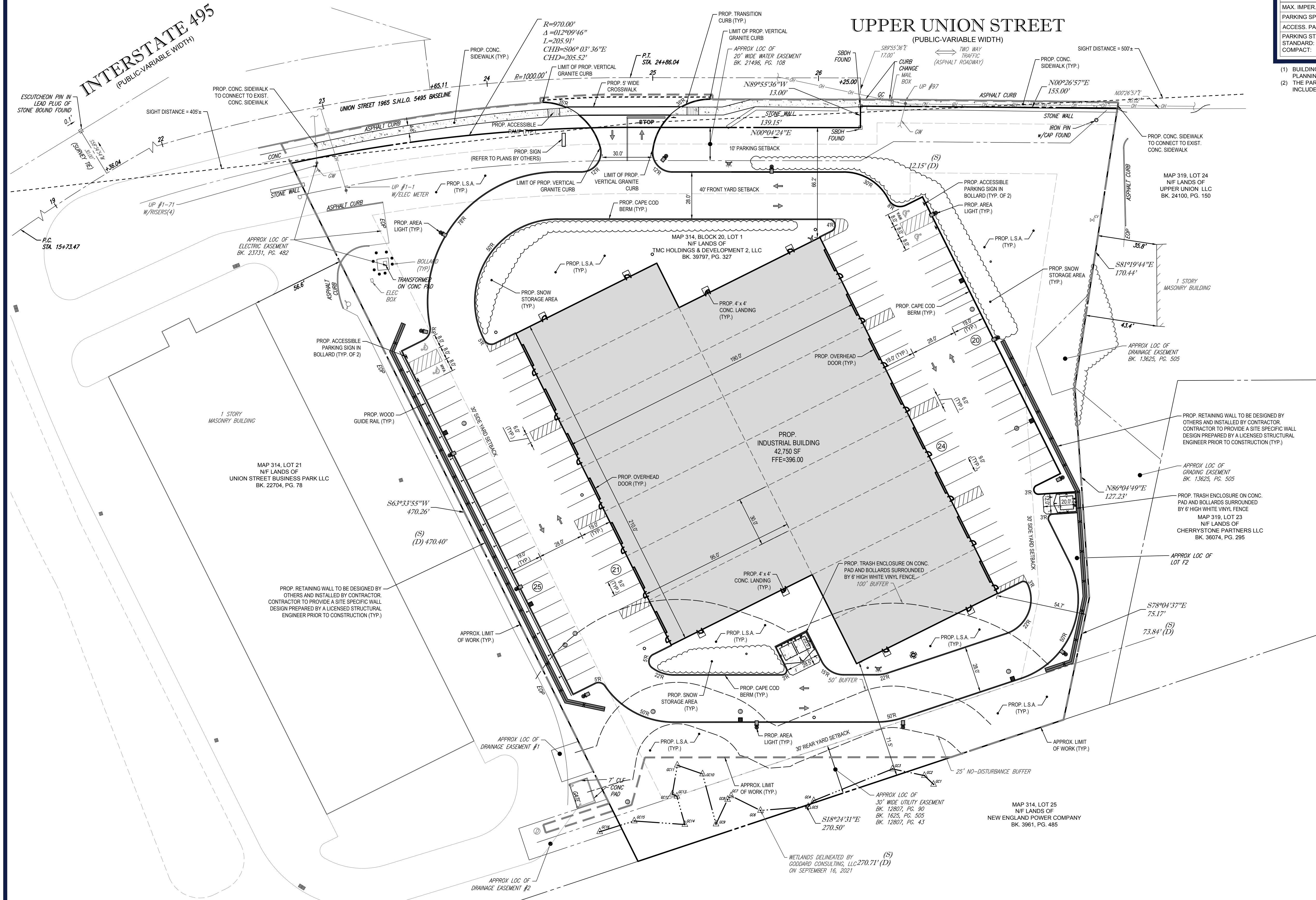


I:\BOHLER\ENG\NET\ISHARES\MA\PROJECT\21\W211057\DRAWINGS\PLAN SET\REV\W211057-CVL-3-LAYOUT.CAD: C-201.DEMO



INTERSTATE 495
(PUBLIC-VARIABLE WIDTH)

UPPER UNION STREET
(PUBLIC-VARIABLE WIDTH)



| ZONING ANALYSIS TABLE | | | |
|-------------------------|---|-----------------------|-------------|
| ZONING DISTRICT | INDUSTRIAL (I) | | |
| OVERLAY DISTRICT | N/A | | |
| REQUIRED PERMIT | SITE PLAN REVIEW | | |
| ZONE CRITERIA | REQUIRED | EXISTING | PROPOSED |
| MIN. LOT AREA | 40,000 SF | 156,645 SF (3.60 AC.) | NO CHANGE |
| MIN. LOT FRONTAGE | 175 FT | 513.06 FT | NO CHANGE |
| MIN. LOT DEPTH | 200 FT | 470.26 FT | NO CHANGE |
| MIN. LOT WIDTH | 157.5 FT | 270.50 FT | NO CHANGE |
| MAX. BLDG. LOT COVERAGE | 70% | 0.0% | 27.3% |
| MIN. FRONT SETBACK | 40 FT | N/A | 66.2 FT |
| MIN. SIDE SETBACK | 30 FT | N/A | 54.7 FT |
| MIN. REAR SETBACK | 30 FT | N/A | 71.5 FT |
| MIN. PARKING SETBACK | N/S | N/A | 12.5 FT |
| MAX. BUILDING HEIGHT | 3 STORIES (1) | N/A | < 3 STORIES |
| MAX. IMPER. COVERAGE | 80% | 0.1% | 55.6% |
| PARKING SPACES | 43 | N/A | 45 (2) |
| ACCESS. PARKING SPACES | 4 | N/A | 4 |
| PARKING STALL CRITERIA | USE/CATEGORY: WAREHOUSE | | |
| STANDARD: 9 FT x 19 FT | REQUIRED PARKING: 1 SPACE PER 1,000 SF GROSS FLOOR AREA | | |
| COMPACT: 8 FT x 16 FT | CALCULATION: 42,750 SF / 1,000 SF = 42.75 OR 43 SPACES REQUIRED | | |

(1) BUILDINGS UP TO 80 FEET IN HEIGHT MAY BE PERMITTED BY A SPECIAL PERMIT FROM THE PLANNING BOARD.
(2) THE PARKING SPACES IMMEDIATELY IN FRONT OF THE BUILDING GARAGE DOORS HAVE NOT BEEN INCLUDED.

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

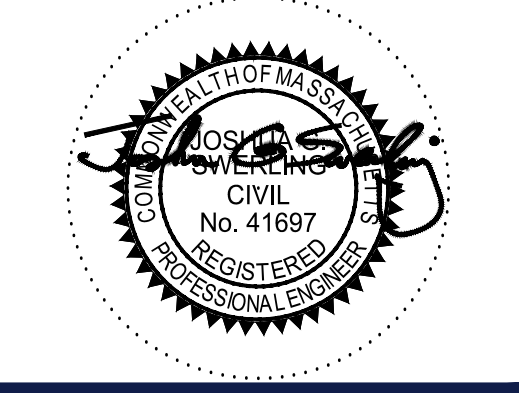
| REVISIONS | | | | |
|-----------|----------|---------------------------------|------------|----------|
| REV | DATE | COMMENT | CHECKED BY | DRAWN BY |
| 1 | 03/23/22 | NOTICE OF INTENT SUBMISSION | NPD | RMM |
| 2 | 05/06/22 | PER TOWN / PEER REVIEW COMMENTS | NPD | RMM |
| 3 | 05/17/22 | PER PEER REVIEW COMMENTS | NPD | RMM |

811
Know what's below. Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

PERMIT SET
THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.
PROJECT No.: W211057
DRAWN BY: NPD
CHECKED BY: RMM
DATE: 02/01/2022
CAD ID: W211057-CVL-3

PROPOSED SITE PLAN DOCUMENTS
FOR
TMC HOLDINGS & DEVELOPMENT 2, LLC
PROPOSED INDUSTRIAL DEVELOPMENT
UNION STREET BUSINESS PARK II
MAP #314, BLOCK #20, LOT #1
839 UPPER UNION STREET
CITY OF FRANKLIN
NORFOLK COUNTY, MA

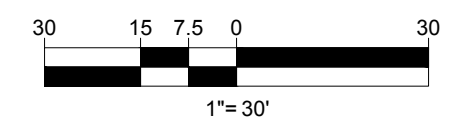
BOHLER
352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9900
www.BohlerEngineering.com



SHEET TITLE:
SITE LAYOUT PLAN
SHEET NUMBER:
C-301
REVISION 3 - 05/17/22

GENERAL CONTRACTOR TO PROVIDE A SITE SPECIFIC WALL DESIGN AND CALCULATIONS THROUGH THE GENERAL CONTRACTOR'S SELECTED WALL MANUFACTURER'S LICENSED PROFESSIONAL STRUCTURAL ENGINEER.

THIS PLAN TO BE UTILIZED FOR SITE LAYOUT PURPOSES ONLY. REFER TO GENERAL NOTES SHEET FOR ADDITIONAL NOTES



I:\BOHLER\NET\SHARES\MA\PROJECTS\21\W211057\DRAWINGS\PLAN SET\REV\W211057-CVL-3.dwg - LAYOUT: C-301-817E



INTERSTATE 495
(PUBLIC-VARIABLE WIDTH)

UPPER UNION STREET
(PUBLIC-VARIABLE WIDTH)

ESCUTCHEON PIN IN
LEAD PLUG OF
STONE BOUND FOUND
0.1'
(CHURCH T&E)



BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

| REV | DATE | COMMENT | DRAWN BY |
|-----|----------|---------------------------------|----------|
| 1 | 03/23/22 | NOTICE OF INTENT SUBMISSION | NPD |
| 2 | 05/09/22 | PER TOWN / PEER REVIEW COMMENTS | RMM |
| 3 | 05/17/22 | PER PEER REVIEW COMMENTS | NPD |

811
Know what's below.
Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

PERMIT SET

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: W211057
DRAWN BY: NPD
CHECKED BY: RMM
DATE: 02/01/2022
CAD ID: W211057-CV1-3

PROPOSED SITE PLAN DOCUMENTS

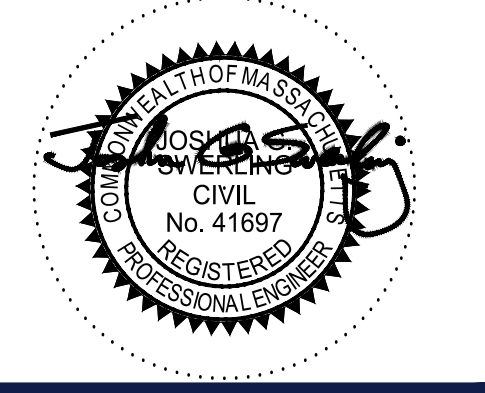
FOR

TMC HOLDINGS & DEVELOPMENT 2, LLC

PROPOSED INDUSTRIAL DEVELOPMENT
UNION STREET BUSINESS PARK II
MAP #314, BLOCK #20, LOT #1
839 UPPER UNION STREET
CITY OF FRANKLIN
NORFOLK COUNTY, MA

BOHLER

352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9900
www.BohlerEngineering.com



SHEET TITLE:
GRADING PLAN

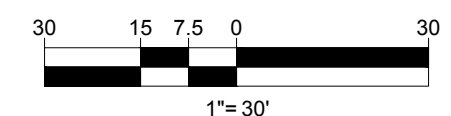
SHEET NUMBER:
C-401

REVISION 3 - 05/17/22

GENERAL CONTRACTOR TO PROVIDE A SITE SPECIFIC WALL DESIGN AND CALCULATIONS THROUGH THE GENERAL CONTRACTOR'S SELECTED WALL MANUFACTURER'S LICENSED PROFESSIONAL STRUCTURAL ENGINEER.

THIS PLAN TO BE UTILIZED FOR SITE GRADING PURPOSES ONLY. REFER TO GENERAL NOTES SHEET FOR ADDITIONAL GRADING & UTILITY NOTES

PROPOSED GRADING RESULTS IN AN APPROXIMATE FILL OF 5,250 CY



\\BOHLER\ENGIN\NET\SHARES\BMA\PROJECTS\21\21057\DRAWINGS\PLAN SET\REV\21057\21057-CV1-3.dwg - LAYOUT: C-401-GRAD



INTERSTATE 495
(PUBLIC-VARIABLE WIDTH)

UPPER UNION STREET
(PUBLIC-VARIABLE WIDTH)

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

| REV | DATE | COMMENT | DRAWN BY | CHECKED BY |
|-----|----------|---------------------------------|----------|------------|
| 1 | 03/23/22 | NOTICE OF INTENT SUBMISSION | NPD | RMM |
| 2 | 05/09/22 | PER TOWN / PEER REVIEW COMMENTS | NPD | RMM |
| 3 | 05/17/22 | PER PEER REVIEW COMMENTS | NPD | RMM |

811
Know what's below.
Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

PERMIT SET

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: W211057
DRAWN BY: NPD
CHECKED BY: RMM
DATE: 02/01/2022
CAD ID: W211057-CV1-3

PROPOSED SITE PLAN DOCUMENTS

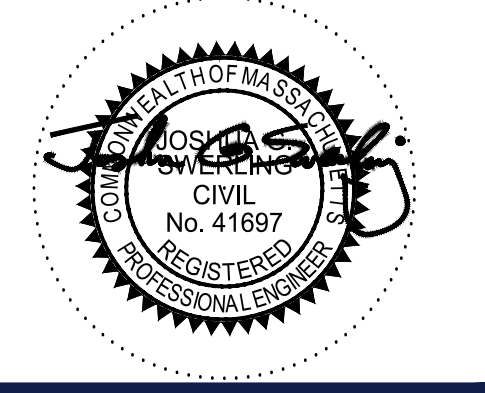
FOR

TMC HOLDINGS & DEVELOPMENT 2, LLC

PROPOSED INDUSTRIAL DEVELOPMENT
UNION STREET BUSINESS PARK II
MAP #314, BLOCK #20, LOT #1
839 UPPER UNION STREET
CITY OF FRANKLIN
NORFOLK COUNTY, MA

BOHLER

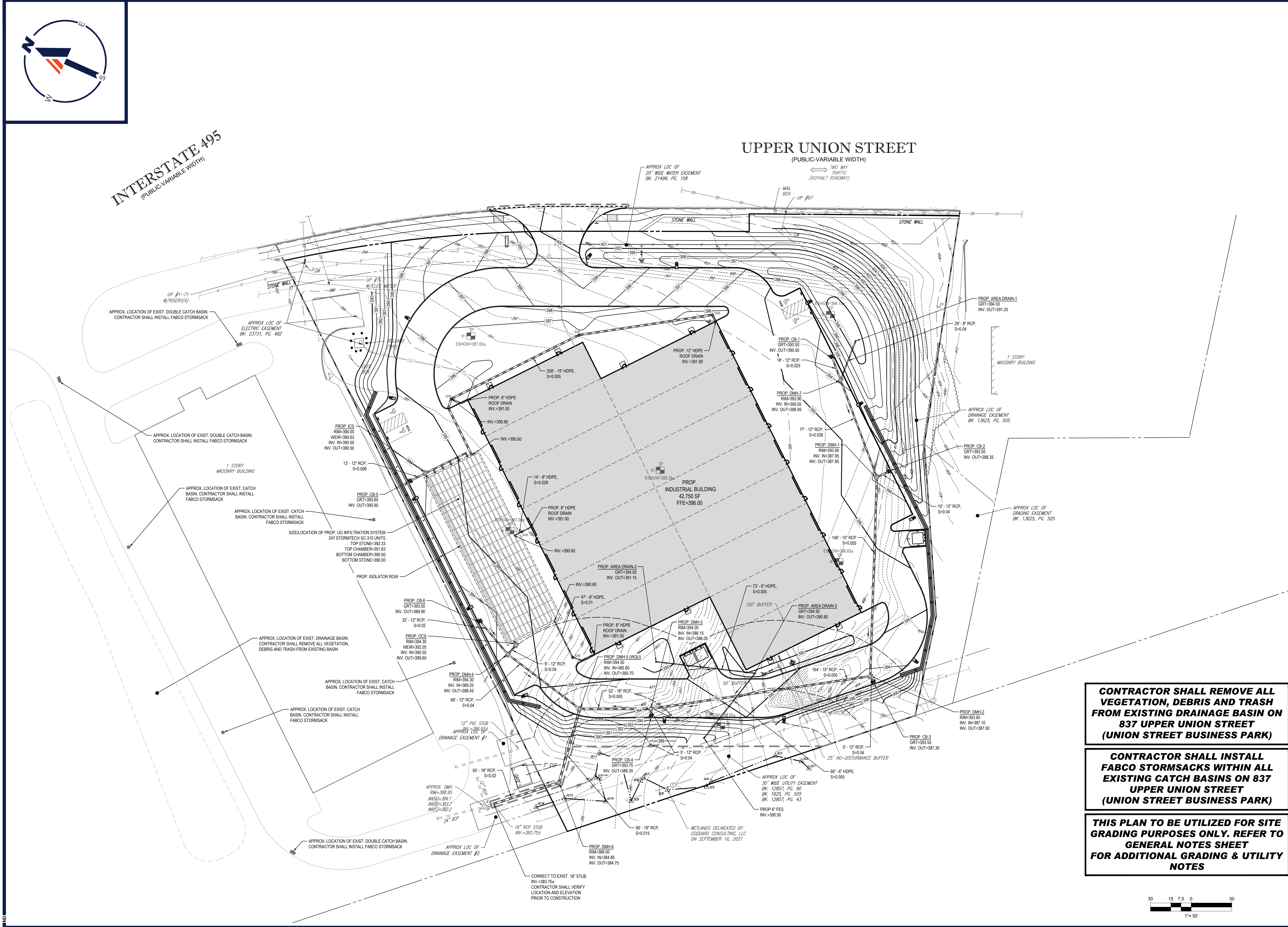
352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9900
www.BohlerEngineering.com



SHEET TITLE:
DRAINAGE PLAN

SHEET NUMBER:
C-501

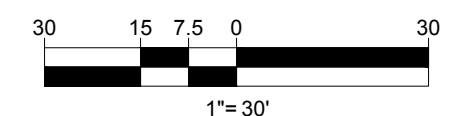
REVISION 3 - 05/17/22



CONTRACTOR SHALL REMOVE ALL VEGETATION, DEBRIS AND TRASH FROM EXISTING DRAINAGE BASIN ON 837 UPPER UNION STREET (UNION STREET BUSINESS PARK)

CONTRACTOR SHALL INSTALL FABCO STORMSACKS WITHIN ALL EXISTING CATCH BASINS ON 837 UPPER UNION STREET (UNION STREET BUSINESS PARK)

THIS PLAN TO BE UTILIZED FOR SITE GRADING PURPOSES ONLY. REFER TO GENERAL NOTES SHEET FOR ADDITIONAL GRADING & UTILITY NOTES

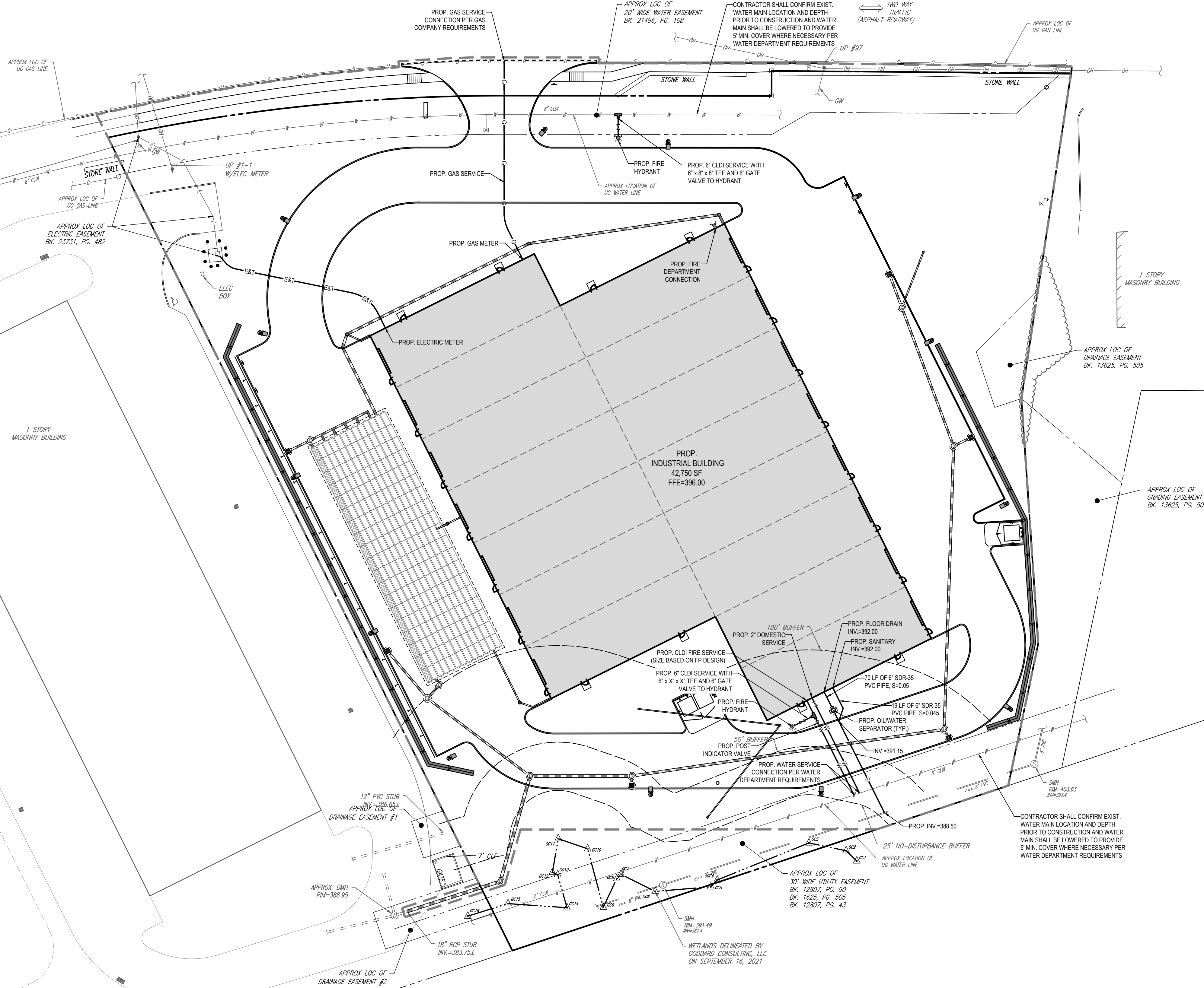


I:\BOHLER\NET\ISHARES\MA\PROJECTS\211057\DRAWINGS\PLAN SETS\REV\W211057\CV1-3.dwg - LAYOUT: C-501.DWG

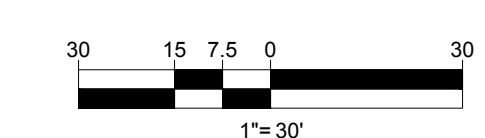


INTERSTATE 495
(PUBLIC-VARIABLE WIDTH)

UPPER UNION STREET
(PUBLIC-VARIABLE WIDTH)



THIS PLAN TO BE UTILIZED FOR UTILITIES PURPOSES ONLY. REFER TO GENERAL NOTES SHEET FOR ADDITIONAL GRADING & UTILITY NOTES



BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
TRANSPORTATION SERVICES

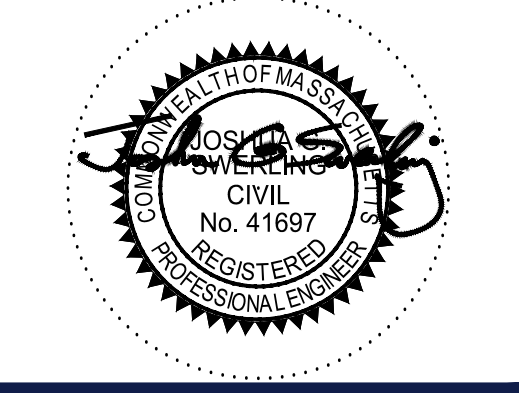
| REVISIONS | | | | |
|-----------|----------|---------------------------------|-----|------------|
| REV | DATE | COMMENT | BY | CHECKED BY |
| 1 | 03/23/22 | NOTICE OF INTENT SUBMISSION | NPD | RMM |
| 2 | 05/09/22 | PER TOWN / PEER REVIEW COMMENTS | NPD | RMM |
| 3 | 05/17/22 | PER PEER REVIEW COMMENTS | NPD | RMM |

811
Know what's below.
Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

PERMIT SET
THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.
PROJECT No.: W211057
DRAWN BY: NPD
DATE: 02/01/2022
CAD ID: W211057-CVL-3

PROPOSED SITE PLAN DOCUMENTS
FOR
TMC HOLDINGS & DEVELOPMENT 2, LLC
PROPOSED INDUSTRIAL DEVELOPMENT
UNION STREET BUSINESS PARK II
MAP #314, BLOCK #20, LOT #1
839 UPPER UNION STREET
CITY OF FRANKLIN
NORFOLK COUNTY, MA

BOHLER
352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9900
www.BohlerEngineering.com



SHEET TITLE:
UTILITY PLAN

SHEET NUMBER:
C-502

REVISION 3 - 05/17/22

I:\BOHLER\NETLANDS\MA\PROJECTS\21021\21021\DRAWINGS\PLAN SETS\REV\W211057\1007.CML...LAYOUT: C-502-UTIL



INTERSTATE 495
(PUBLIC-VARIABLE WIDTH)

UPPER UNION STREET
(PUBLIC-VARIABLE WIDTH)

TWO WAY TRAFFIC
(ASPHALT ROADWAY)



WETLANDS DELINEATED BY
GODDARD CONSULTING, LLC
ON SEPTEMBER 16, 2021

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

| REV | DATE | COMMENT | CHECKED BY |
|-----|----------|---------------------------------|------------|
| 1 | 03/23/22 | NOTICE OF INTENT SUBMISSION | NPD RMM |
| 2 | 05/09/22 | PER TOWN / PEER REVIEW COMMENTS | NPD RMM |
| 3 | 05/17/22 | PER PEER REVIEW COMMENTS | NPD RMM |

811
Know what's below.
Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

PERMIT SET

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: W211057
DRAWN BY: NPD
CHECKED BY: RMM
DATE: 02/01/2022
CAD ID: W211057-CVL-3

PROPOSED SITE PLAN DOCUMENTS

FOR

TMC HOLDINGS & DEVELOPMENT 2, LLC

PROPOSED INDUSTRIAL DEVELOPMENT
UNION STREET BUSINESS PARK II
MAP #314, BLOCK #20, LOT #1
839 UPPER UNION STREET
CITY OF FRANKLIN
NORFOLK COUNTY, MA

BOHLER

352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9900
www.BohlerEngineering.com

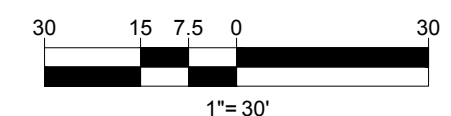


THIS PLAN TO BE UTILIZED FOR SITE SOIL AND EROSION CONTROL PURPOSES ONLY

REFER TO SOIL EROSION CONTROL NOTES & DETAIL SHEET FOR EROSION NOTES AND DETAILS

SHEET TITLE:
SOIL EROSION & SEDIMENT CONTROL PLAN

SHEET NUMBER:
C-601



REVISION 3 - 05/17/22

I:\BOHLER\NET\SHARES\MA\PROJECTS\21\W211057\DRAWINGS\PLAN SET\REV\W211057-CVL-3-LAYOUT.CAD-601-ER03

EROSION & SEDIMENT CONTROL NOTES

- ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE DONE AS SET FORTH IN THE MOST CURRENT STATE SEDIMENT AND EROSION CONTROL MANUAL.
- THOSE AREAS UNDERGOING ACTUAL CONSTRUCTION WILL BE LEFT IN AN UNTREATED OR UNVEGETATED CONDITION FOR A MINIMUM TIME. AREAS SHALL BE PERMANENTLY STABILIZED WITHIN 15 DAYS OF FINAL GRADING AND TEMPORARILY STABILIZED WITHIN 30 DAYS OF INITIAL DISTURBANCE OF THE SOIL. IF THE DISTURBANCE IS WITHIN 100 FEET OF A STREAM OR POND, THE AREA SHALL BE STABILIZED WITHIN 7 DAYS OR PRIOR TO ANY STORM EVENT (THIS WOULD INCLUDE WETLANDS).
- SEDIMENT BARRIERS (SILT FENCE, STRAW BARRIERS, ETC.) SHOULD BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES GREATER THAN 15% AFTER OCTOBER 1ST THE SAME APPLIES FOR ALL SLOPES GREATER THAN 8%.
- INSTALL SILTATION BARRIER AT TOE OF SLOPE TO FILTER SILT FROM RUNOFF. SEE SILTATION BARRIER DETAILS FOR PROPER INSTALLATION. SILTATION BARRIER WILL REMAIN IN PLACE PER NOTE #5.
- ALL EROSION CONTROL STRUCTURES WILL BE INSPECTED, REPLACED AND/OR REPAIRED EVERY 7 DAYS AND IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL OR SNOW MELT OR WHEN NO LONGER SERVICEABLE DUE TO SEDIMENT ACCUMULATION OR DECOMPOSITION. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER. SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL AREAS UPSLOPE ARE STABILIZED BY TURF.
- NO SLOPES, EITHER PERMANENT OR TEMPORARY, SHALL BE STEEPER THAN TWO TO ONE (2:1).
- IF FINAL SEEDING OF THE DISTURBED AREAS IS NOT COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST, USE TEMPORARY MULCH (DORMANT SEEDING MAY BE ATTEMPTED AS WELL) TO PROTECT THE SITE AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.
- TEMPORARY SEEDING OF DISTURBED AREAS THAT HAVE NOT BEEN FINAL GRADED SHALL BE COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST TO PROTECT FROM SPRING RUNOFF PROBLEMS.
- DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT WILL BE RETURNED TO THE SITE AND REGRADED ONTO OPEN AREAS.
- REVEGETATION MEASURES WILL COMMENCE UPON COMPLETION OF CONSTRUCTION EXCEPT AS NOTED ABOVE. ALL DISTURBED AREAS NOT OTHERWISE STABILIZED WILL BE GRADED, SMOOTHED, AND PREPARED FOR FINAL SEEDING AS FOLLOWS:
 - SIX INCHES OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM SURFACE.
 - APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 800 LB PER ACRE OR 18 LB PER 1,000 SF USING 10-20-20 OR EQUIVALENT. APPLY GROUND LIMESTONE (EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACRE (138 LB PER 1,000 SF).
 - FOLLOWING SEED BED PREPARATION, DITCHES AND BACK SLOPES WILL BE SEED TO A MIXTURE OF 47% CREEPING RED FESCUE, 5% REDTOP, AND 48% TALL FESCUE. THE LAWN AREAS WILL BE SEED TO A PREMIUM TURF MIXTURE OF 44% KENTUCKY BLUEGRASS, 44% CREEPING RED FESCUE, AND 12% PERENNIAL RYEGRASS. SEEDING RATE IS 1.03 LBS PER 1,000 SF LAWN QUALITY SOO MAY BE SUBSTITUTED FOR SEED.
 - STRAW MULCH AT THE RATE OF 70-90 LBS PER 1,000 SF. A HYDRO-APPLICATION OF WOOD OR PAPER FIBER SHALL BE APPLIED FOLLOWING SEEDING. A SUITABLE BINDER SUCH AS CURASOL, OR RMB PLUS WILL BE USED ON STRAW MULCH FOR WIND CONTROL.
- ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE THE SITE IS STABILIZED.
- WETLANDS WILL BE PROTECTED W/ STRAW, COMPOST, AND/OR SILT FENCE BARRIERS INSTALLED AT THE EDGE OF THE WETLAND OR THE BOUNDARY OF WETLAND DISTURBANCE.
- ALL AREAS WITHIN 100 FEET OF A FLAGGED WETLAND OR STREAM SHALL HAVE AN EXPOSURE WINDOW OF NOT MORE THAN 7 DAYS.
- ALL AREAS WITHIN 100 FEET OF A FLAGGED WETLAND OR STREAM SHALL FOLLOW APPROPRIATE EROSION CONTROL MEASURES PRIOR TO EACH STORM IF NOT BEING ACTIVELY WORKED.
- THE USE OF STRAW HAY BALES IS PROHIBITED.

| LOCATION | MULCH | RATE (1000 SF) |
|--|---|----------------|
| PROTECT AREA | JUTE MESH OR EXCELSIOR MAT | AS REQUIRE |
| WINDY AREA | JUTE MESH OR EXCELSIOR MAT | AS REQUIRE |
| MODERATE TO HIGH VELOCITY AREAS OR STEEP SLOPES GREATER THAN 3:1 | JUTE MESH OR EXCELSIOR MAT | AS REQUIRED |
| GREATER THAN 3:1 | (REFER TO GEOTECHNICAL REPORT FOR FINAL DESIGN REQUIREMENT) | |

* A HYDRO-APPLICATION OF WOOD, OR PAPER FIBER MAY BE APPLIED FOLLOWING SEEDING. A SUITABLE BINDER SUCH AS CURASOL OR RMB PLUS SHALL BE USED ON STRAW MULCH FOR WIND CONTROL.

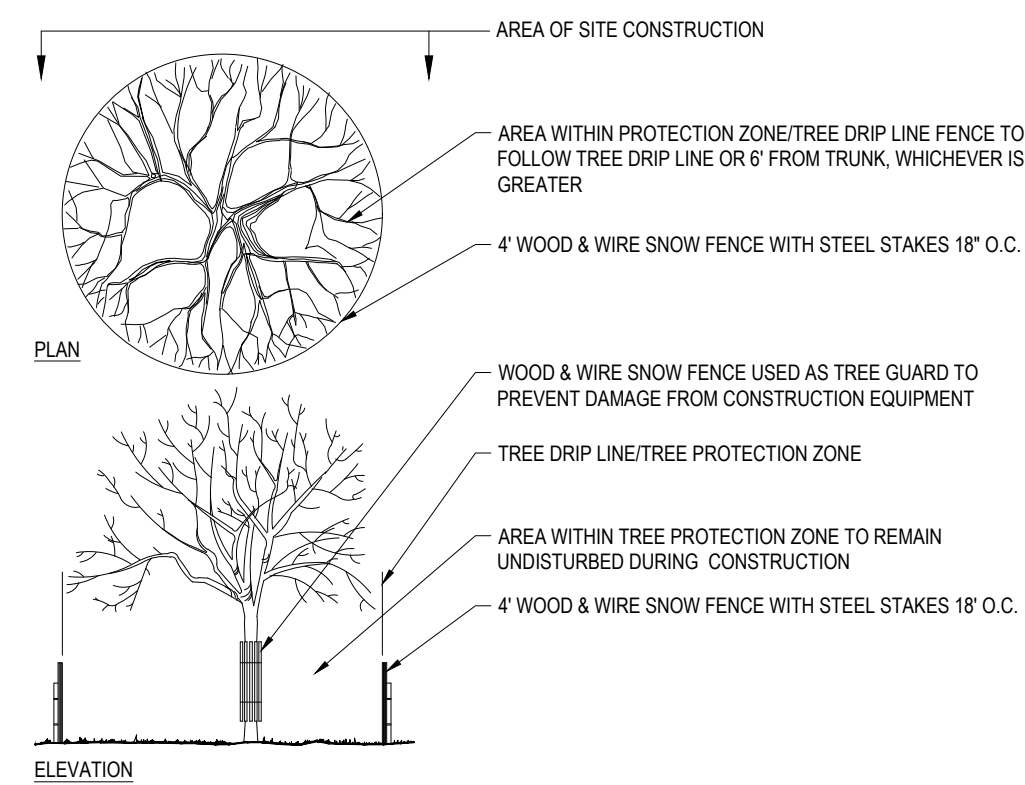
MULCH ANCHORING:
ANCHOR MULCH WITH PEG AND TWINE (1 SQ. YD/BLOCK); MULCH NETTING (AS PER MANUFACTURER); WOOD CELLULOSE FIBER (750 LBS/ACRE); CHEMICAL TACK (AS PER MANUFACTURER'S SPECIFICATIONS); USE OF A SERRATED STRAIGHT DISK. WETTING FOR SMALL AREAS AND ROAD DITCHES MAY BE PERMITTED.

EROSION CONTROL NOTES DURING WINTER CONSTRUCTION

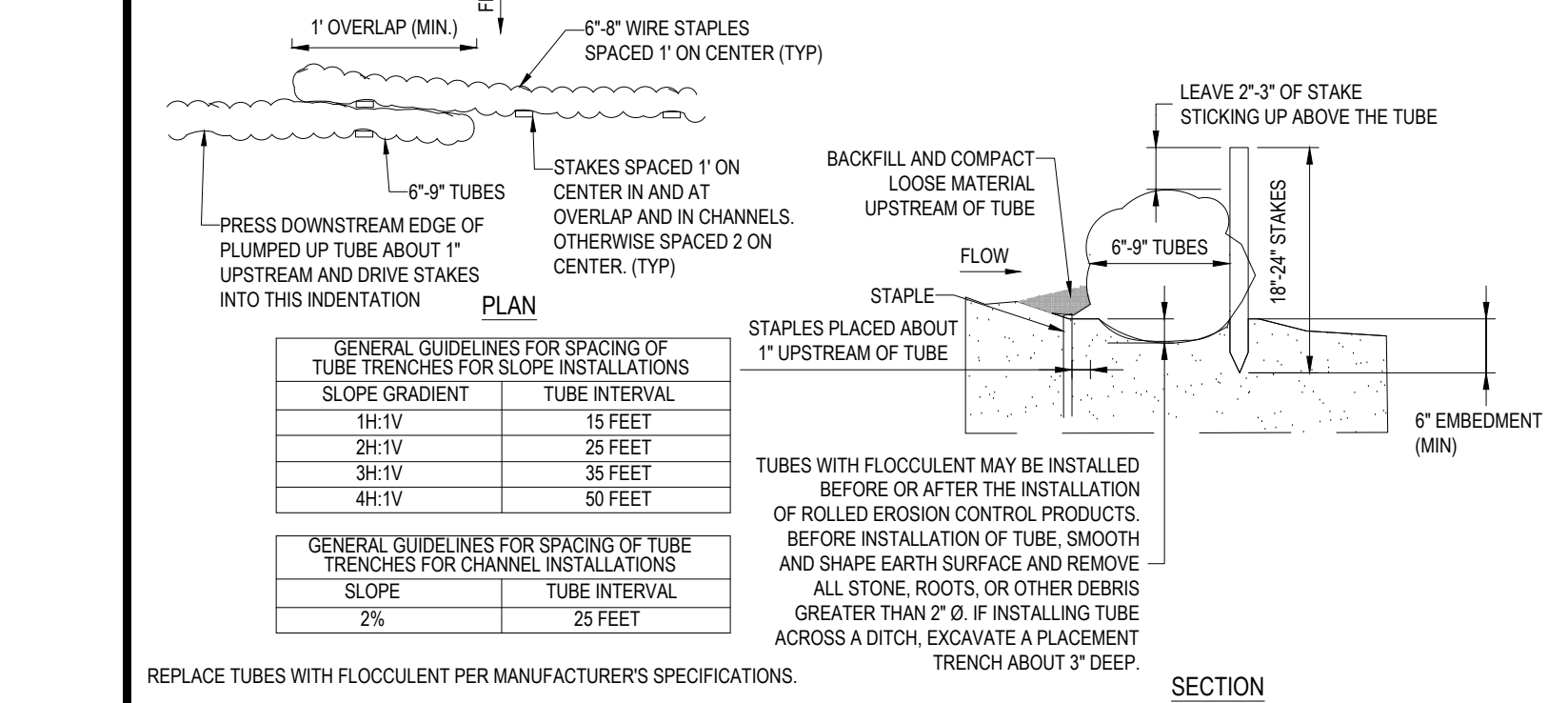
- WINTER CONSTRUCTION PERIOD: NOVEMBER 1 THROUGH APRIL 15.
- WINTER EXCAVATION AND EARTHWORK SHALL BE DONE SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.
- EXPOSED AREA SHOULD BE LIMITED TO THAT WHICH CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT.
- CONTINUATION OF EARTHWORK OPERATION ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED SUCH THAT NO LARGER AREA OF THE SITE IS WITHOUT EROSION CONTROL PROTECTION AS LISTED IN ITEM 2 ABOVE.
- AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR $\frac{1}{2}$ " AT A RATE OF 100 LB. PER 1,000 SQUARE FEET (WITH OR WITHOUT SEEDING) OR DORMANT SEEDING, MULCHED AND ADEQUATELY ANCHORED BY AN APPROVED ANCHORING TECHNIQUE.
- BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1ST, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES THE SLOPES SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1ST AND IF THE EXPOSED AREA HAS BEEN LOADED, FINAL GRADED AND IS SMOOTH, THEN THE AREA MAY BE DORMANT SEEDING AT A RATE OF 200 - 300% HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. IF CONSTRUCTION CONTINUES DURING FREEZING WEATHER, ALL EXPOSED AREAS SHALL BE CONTINUOUSLY GRADED BEFORE FREEZING AND THE SURFACE TEMPORARILY PROTECTED FROM EROSION BY THE APPLICATION OF MULCH. SLOPES SHALL NOT BE LEFT UNEXPOSED OVER THE WINTER OR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS TREATED IN THE ABOVE MANNER. UNTIL SUCH TIME AS WEATHER CONDITIONS ALLOW DITCHES TO BE FINISHED WITH THE PERMANENT SURFACE TREATMENT, EROSION SHALL BE CONTROLLED BY THE INSTALLATION OF BALES OF STRAW OR STONE CHECK DAMS IN ACCORDANCE WITH THE STANDARD DETAILS.
- MULCHING REQUIREMENTS:
 - BETWEEN THE DATES OF NOVEMBER 1ST AND APRIL 15TH ALL MULCH SHALL BE ANCHORED BY EITHER PEG LINE, MULCH NETTING OR WOOD CELLULOSE FIBER.
 - MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 3% FOR SLOPE EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 8%.
 - MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES GREATER THAN 15% AFTER OCTOBER 1ST THE SAME APPLIES FOR ALL SLOPES GREATER THAN 8%.
- AFTER NOVEMBER 1ST THE CONTRACTOR SHALL APPLY DORMANT SEEDING OR MULCH AND ANCHORING ON ALL BARE EARTH AT THE END OF EACH WORKING DAY.
- DURING THE WINTER CONSTRUCTION PERIOD ALL SNOW SHALL BE REMOVED FROM AREAS OF SEEDING AND MULCHING PRIOR TO PLACEMENT.
- STOCKPILING OF MATERIALS (DIRT, WOOD, CONSTRUCTION MATERIALS, ETC.) MUST REMAIN COVERED AT ALL TIMES TO MINIMIZE ANY DUST PROBLEMS THAT MAY OCCUR WITH ADJACENT PROPERTIES AND TO PROVIDE MAXIMUM PROTECTION AGAINST EROSION RUNOFF.
- EXISTING CATCH BASIN STRUCTURES SHALL BE PROTECTED UNTIL SUCH TIME AS THEY ARE REMOVED.

CONSTRUCTION SEQUENCE

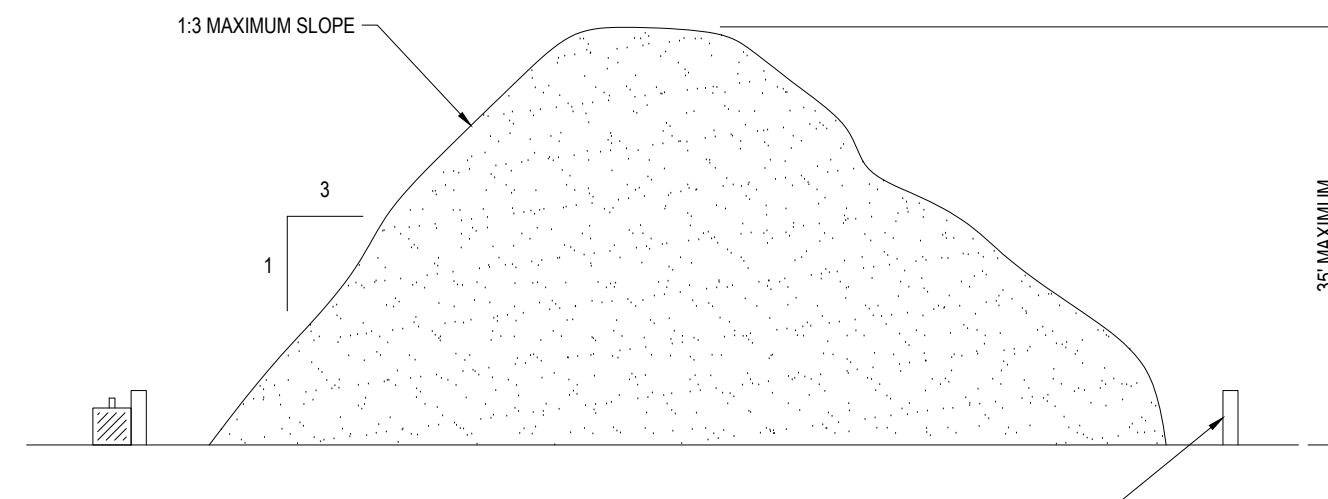
- THE FOLLOWING CONSTRUCTION SEQUENCE IS RECOMMENDED:
- INSTALLATION OF STABILIZED CONSTRUCTION ENTRANCE/EXIT (AS SHOWN)
 - INSTALLATION OF EROSION CONTROL BARRIER (SILT FENCE) (AS SHOWN)
 - DEMOLITION OF EXISTING SITE PAVEMENT AND AMENITIES (SEE DEMOLITION PLAN)
 - CLEARING AND GRUBBING
 - EARTHWORK AND EXCAVATION/FILLING AS NECESSARY
 - CONSTRUCTION OF UTILITIES
 - INSTALLATION OF BINDER COURSE PAVEMENT
 - INSTALLATION OF INLET PROTECTION OF ON-SITE UTILITIES (AS SHOWN)
 - STABILIZE PERMANENT LAWN AREAS AND SLOPES WITH TEMPORARY SEEDING
 - CONSTRUCTION OF BUILDINGS
 - CONSTRUCTION OF ALL CURBING AND LANDSCAPE ISLANDS AS INDICATED ON THE PLANS
 - SPREAD TOPSOIL ON SLOPED AREAS AND SEED AND MULCH
 - FINAL GRADING OF ALL SLOPED AREAS
 - PLACE 6" TOPSOIL ON SLOPES AFTER FINAL GRADING COMPLETED. FERTILIZE, SEED, AND MULCH SEED MIXTURE TO BE INSTALLED AS REQUIRED.
 - INSTALLATION OF TOP COURSE PAVEMENT
 - LANDSCAPING PER LANDSCAPING PLAN
 - REMOVE EROSION CONTROL MEASURES AS DISTURBED AREAS BECOME STABILIZED TO 70% STABILIZATION OR GREATER.



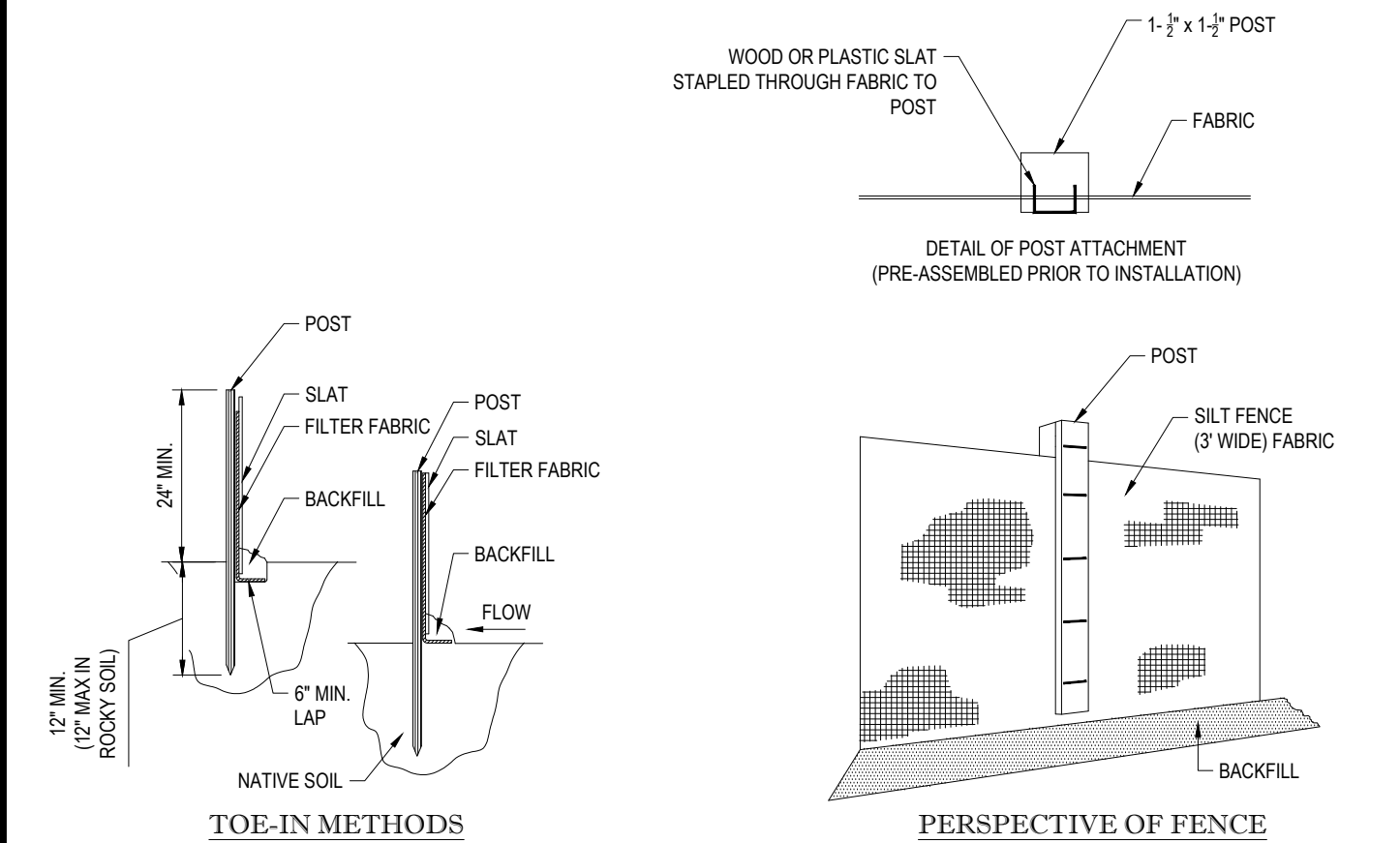
TREE PROTECTION DURING CONSTRUCTION



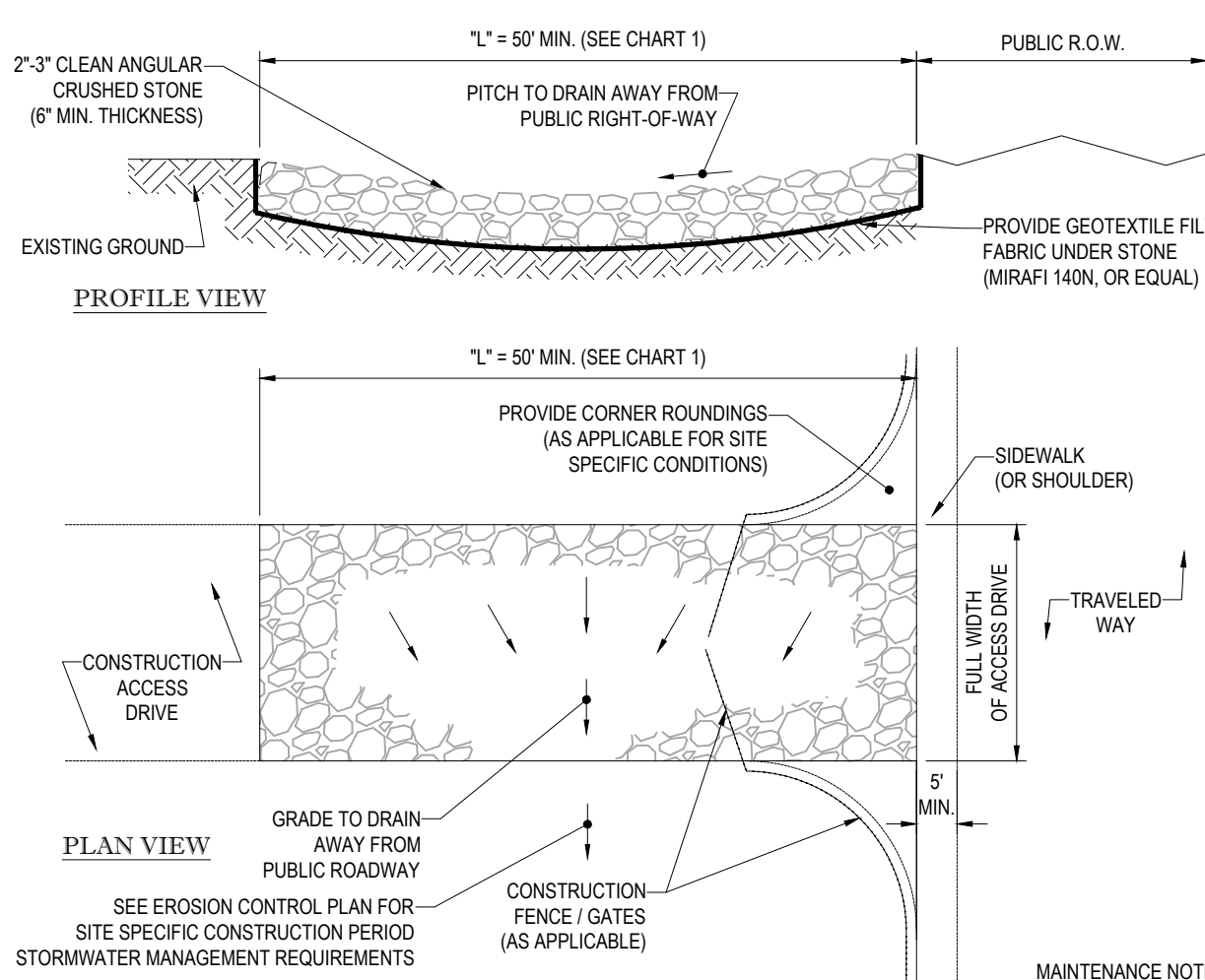
FIBER FLOCCULENT TUBE



TEMPORARY STOCKPILE



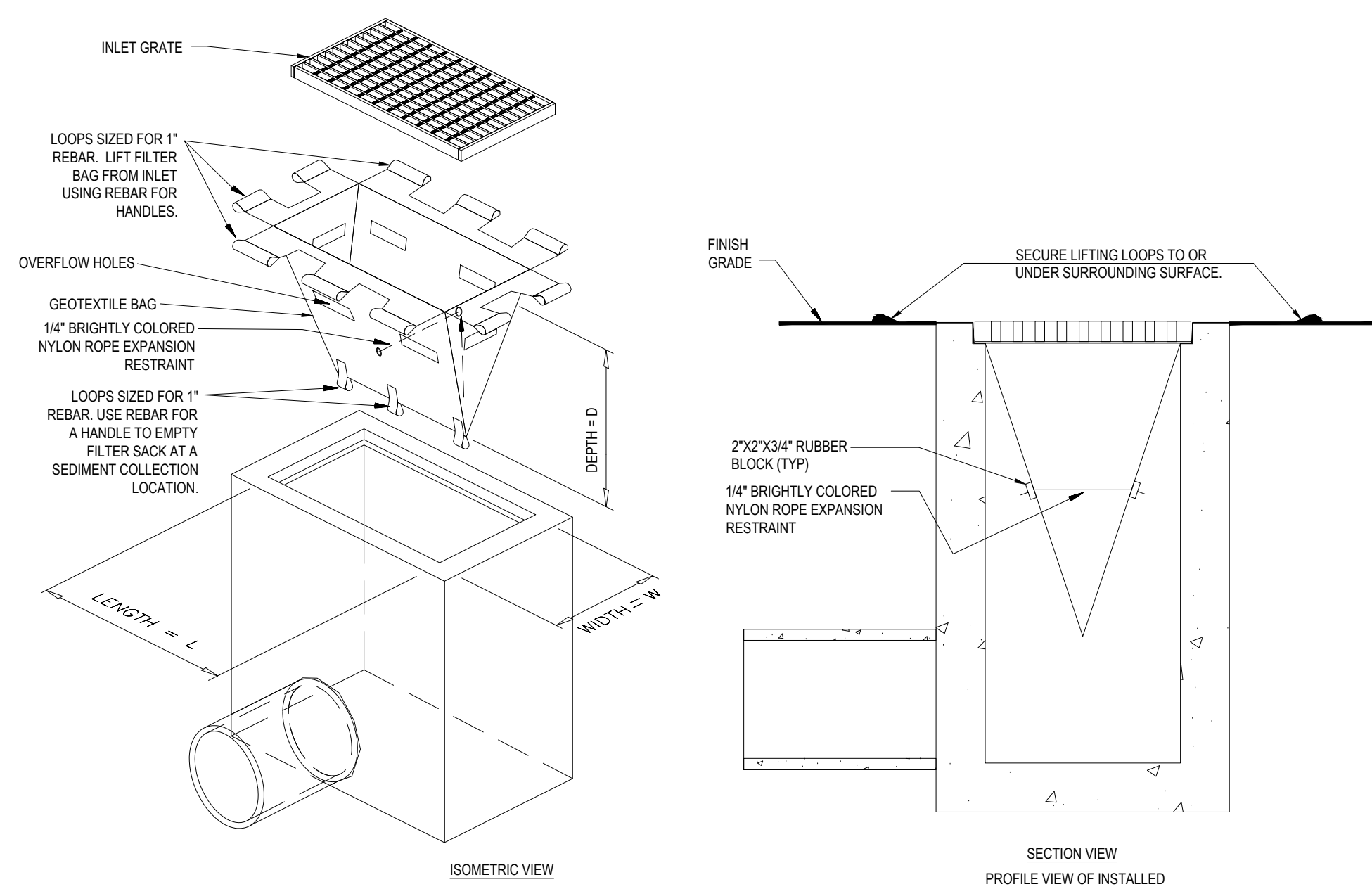
SILTATION FENCE



| PERCENT SLOPE OF ROADWAY | LENGTH OF STONE REQUIRED | |
|--------------------------|--|--------------------|
| | COARSE GRAINED SOILS | FINE GRAINED SOILS |
| 0 TO 2% | 50 FT | 100 FT |
| 2% TO 5% | 100 FT | 200 FT |
| >5% | ENTIRE ENTRANCE STABILIZED WITH FABC BASE COURSE (1) | |

(1) AS PRESCRIBED BY LOCAL ORDINANCE OR OTHER GOVERNING AUTHORITY.

STABILIZED CONSTRUCTION EXIT



FILTER SACKS (GRATED INLETS)

| LOW TO MODERATE FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE | | |
|--|-------------|------------------|
| PROPERTIES | TEST METHOD | UNITS |
| GRAB TENSILE STRENGTH | ASTM D-4632 | 300 LBS |
| GRAB TENSILE ELONGATION | ASTM D-4632 | 20 % |
| PUNCTURE | ASTM D-4833 | 120 LBS |
| MULLEN BURST | ASTM D-3786 | 800 PSI |
| TRAPEZOID TEAR | ASTM D-4533 | 120 LBS |
| UV RESISTANCE | ASTM D-4355 | 80 % |
| APPARENT OPENING SIZE | ASTM D-4751 | 40 US SIEVE |
| FLOW RATE | ASTM D-4491 | 40 GAL/MIN/SQ FT |
| PERMITTIVITY | ASTM D-4491 | 0.55 SEC -1 |

| MODERATE TO HIGH FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE | | |
|---|-------------|-------------------|
| PROPERTIES | TEST METHOD | UNITS |
| GRAB TENSILE STRENGTH | ASTM D-4632 | 255 LBS |
| GRAB TENSILE ELONGATION | ASTM D-4632 | 20 % |
| PUNCTURE | ASTM D-4833 | 135 LBS |
| MULLEN BURST | ASTM D-3786 | 420 PSI |
| TRAPEZOID TEAR | ASTM D-4533 | 45 LBS |
| UV RESISTANCE | ASTM D-4355 | 90 % |
| APPARENT OPENING SIZE | ASTM D-4751 | 20 US SIEVE |
| FLOW RATE | ASTM D-4491 | 200 GAL/MIN/SQ FT |
| PERMITTIVITY | ASTM D-4491 | 1.5 SEC -1 |

- REMOVE TRAPPED SEDIMENT WHEN BRIGHTLY COLORED EXPANSION RESTRAINT CAN NO LONGER BE SEEN.
- GEOTEXTILE SHALL BE A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS REQUIREMENTS IN THE SPECIFICATIONS TABLE.
- PLACE AN OIL ADSORBENT PAD OR PILLOW OVER INLET GRATE WHEN OIL SPILLS ARE A CONCERN.
- INSPECT PER REGULATORY REQUIREMENTS.
- THE WIDTH, "W", OF THE FILTER SACK SHALL MATCH THE INSIDE WIDTH OF THE GRATED INLET BOX.
- THE DEPTH, "D", OF THE FILTER SACK SHALL BE BETWEEN 18 INCHES AND 36 INCHES.
- THE LENGTH, "L", OF THE FILTER SACK SHALL MATCH THE INSIDE LENGTH OF THE GRATED INLET BOX.

DO NOT USE IN PAVED AREAS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.
TO BE USED IN EXISTING RIGHT OF WAY

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

| REV | DATE | COMMENT | CHECKED BY |
|-----|----------|---------------------------------|------------|
| 1 | 03/23/22 | NOTICE OF INTENT SUBMISSION | NPD RMM |
| 2 | 05/09/22 | PER TOWN / PEER REVIEW COMMENTS | NPD RMM |
| 3 | 05/17/22 | PER PEER REVIEW COMMENTS | NPD RMM |

811
Know what's below.
Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

PERMIT SET

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

| | |
|--------------|---------------|
| PROJECT No.: | W211057 |
| DRAWN BY: | NPD RMM |
| DATE: | 02/01/2022 |
| CAD ID.: | W211057-CV1-3 |

PROJECT:

PROPOSED SITE PLAN DOCUMENTS

FOR
TMC HOLDINGS & DEVELOPMENT 2, LLC

PROPOSED
INDUSTRIAL DEVELOPMENT
UNION STREET BUSINESS PARK II
MAP #314, BLOCK #20, LOT #1
839 UPPER UNION STREET
CITY OF FRANKLIN
NORFOLK COUNTY, MA

BOHLER
352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9900
www.BohlerEngineering.com

SHEET TITLE: EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

SHEET NUMBER:
C-602

REVISION 3 - 05/17/22

BOHLER ENGINEERING, INC. PROJECT: W211057-INDUSTRIAL DEVELOPMENT (PLAN SET) REV: W211057-INDUSTRIAL DEVELOPMENT (PLAN SET) - LAYOUT: C-602-ENOTE



INTERSTATE 495
(PUBLIC-VARIABLE WIDTH)

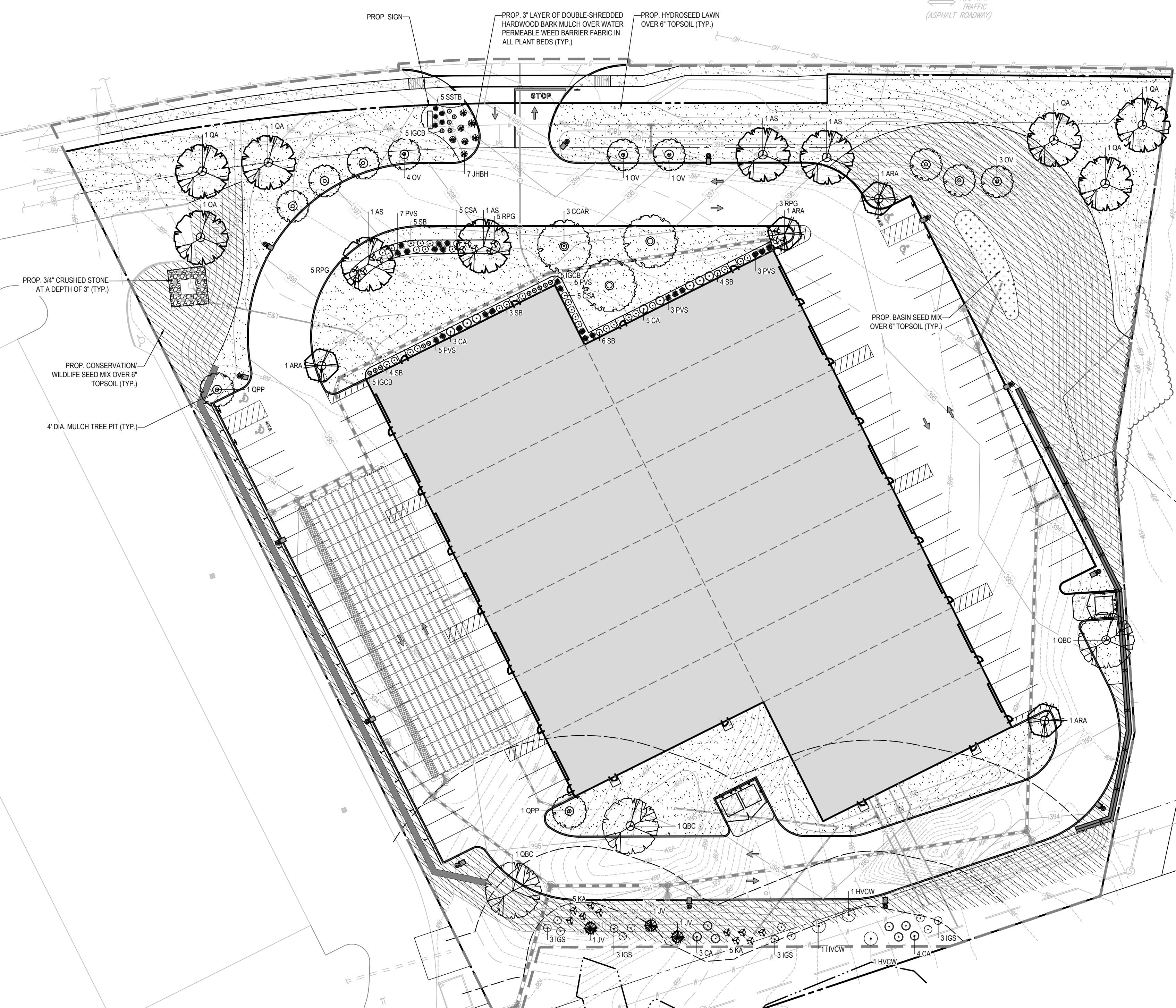
UPPER UNION STREET
(PUBLIC-VARIABLE WIDTH)

SEED MIX KEY

| | |
|--|---|
| | PROPOSED HYDROSEED |
| | PROPOSED CONSERVATION/WILDLIFE SEED MIX |
| | PROPOSED BASIN SEED MIX |

**TOWN OF FRANKLIN, MA
LANDSCAPE REQUIREMENTS**

| SECTION | REQUIREMENTS | CALCULATIONS/PROPOSED |
|--|--|--|
| ARTICLE V: SPECIAL REGULATIONS - SECTION 185-20: SIGNS | 4. DIMENSIONAL REQUIREMENTS B) FREESTANDING SIGNS FREESTANDING SIGNS ARE REQUIRED TO BE LANDSCAPED WITH SELECTED FLORA, NO MORE THAN TWO FEET ABOVE THE AVERAGE FINISHED GRADE OF ADJOINING GROUND. THIS REQUIREMENT MAY BE WAIVED IF THE LANDSCAPING IS DETERMINED TO BE A SAFETY HAZARD BASED UPON THE BUILDING COMMISSIONER DETERMINATION IN CONSULTATION WITH THE POLICE CHIEF. THE CRITERIA TO BE CONSIDERED WITH REGARD TO FREESTANDING SIGN LANDSCAPING SHALL INCLUDE BUT ARE NOT LIMITED TO WHETHER THE LANDSCAPING BLOCKS THE VIEW OF ONCOMING VEHICLES OR PEDESTRIANS. | PROVIDED - LANDSCAPING PROVIDED AROUND FREESTANDING SIGN |
| ARTICLE V: SPECIAL REGULATIONS - SECTION 185-21: PARKING LOADING AND DRIVEWAY REQUIREMENTS | C. PARKING AREA DESIGN AND LOCATION (4) LOADING AREAS AND PARKING AREAS FOR 10 OR MORE CARS SHALL PROVIDE SCREENING IN ACCORDANCE WITH § 185-35. (5) PARKING LOTS FOR 20 OR MORE CARS SHALL CONTAIN OR BE BORDERED WITHIN FIVE FEET BY AT LEAST ONE TREE PER 10 PARKING SPACES. TREES TO BE TWO-INCH CALIPER OR LARGER, WITH NOT LESS THAN 40 SQUARE FEET OF UNPAVED SOIL AREA PER TREE. SOIL PLOTS SHALL BE LOCATED SO AS TO ASSURE SAFE INTERNAL CIRCULATION. | REQUIRED: 90 SPACES / 10 = 9 TREES PROVIDED: 9 TREES A MINIMUM OF TWO TREES PER PARKING AREA ARE PLACED WITHIN 5' OF ADJACENT PARKING SPACES REQUIRED: 513.06 FT / 30 FT = 17.1 TREES PROVIDED: 18 TREES |
| ARTICLE V: SPECIAL REGULATIONS - SECTION 185-30: TREE PLANTING | ANY LOT ADJUTING A RIGHT-OF-WAY OF 75 FEET OR MORE IN WHICH A BUILDING IS CONSTRUCTED WITHIN 150 FEET OF THE RIGHT-OF-WAY MUST HAVE TREES PLANTED AT LEAST EVERY 30 FEET IN A ROW BETWEEN 30 AND 50 FEET BACK FROM THE RIGHT-OF-WAY, UNLESS A SUFFICIENT NUMBER OF TREES ALREADY EXISTS. TREES MUST BE OF TWO-INCH CALIPER AND APPROVED BY THE TREE WARDEN. IF ANY OF THE TREES DO NOT LIVE THROUGH THE FIRST WINTER, THEY MUST BE REPLACED. | REQUIRED: 18 TREES |
| ARTICLE V: SPECIAL USE REGULATIONS - SECTION 185-31: SITE PLAN AND DESIGN REVIEW | 3. DRAWING REQUIREMENTS (K) A LANDSCAPING PLAN SHOWING EXISTING VEGETATION, PROPOSED VEGETATION AND THE DISTINCTION BETWEEN PROPOSED AND RETAINED VEGETATION. A NOTE SHALL BE PLACED ON THE PLAN THAT ALL PLANTINGS SHALL COME FROM THE BEST DEVELOPMENT PRACTICES GUIDEBOOK. | PROVIDED - ALL PLANTINGS SELECTED FROM THE BEST DEVELOPMENT PRACTICES GUIDEBOOK |
| ARTICLE V: SPECIAL REGULATIONS - SECTION 185-35: SCREENING | A. THE FOLLOWING SHALL BE SCREENED, EXCEPT WITHIN 10 FEET OF THE STREET LINE, FROM ANY ADJACENT RESIDENTIAL DISTRICT OR USE FROM WHICH THEY WOULD OTHERWISE BE VISIBLE: 7) OUTDOOR PARKING FOR 10 OR MORE CARS. B. "SCREENING" IN THIS CONTEXT, SHALL MEAN AN AREA FOUR FEET WIDE DENSELY PLANTED WITH EVERGREEN TREES OR SHRUBS THREE FEET OR MORE IN HEIGHT WHEN PLANTED, OR A WALL, FENCE OR EARTH BERM 12 INCHES OR MORE IN HEIGHT OR EQUIVALENT VISUAL SCREENING BY NATURAL VEGETATION OR DIFFERENCE IN ELEVATION BETWEEN POTENTIAL VIEWERS AND THE SCREENED AREAS. | SCREENING FOR OUTDOOR PARKING AREAS IS PROVIDED |



LANDSCAPE SCHEDULE

| KEY | QTY. | BOTANICAL NAME | COMMON NAME | SIZE | CONT. |
|---------------------------|------|-------------------------------------|------------------------------|----------------|-----------|
| SHADE TREES | | | | | |
| ARA | 4 | ACER RUBRUM 'ARMSTRONG' | ARMSTRONG COLUMNAR RED MAPLE | 2 1/2" 3" CAL. | 8-B |
| AS | 4 | ACER SACCHARUM | SUGAR MAPLE | 2 1/2" 3" CAL. | 8-B |
| CCAR | 3 | CARPINUS CAROLINIANA | AMERICAN HORNBEAM | 2 1/2" 3" CAL. | 8-B |
| QA | 6 | QUERCUS ALBA | WHITE OAK | 2 1/2" 3" CAL. | 8-B |
| QBC | 3 | QUERCUS BICOLOR | SWAMP WHITE OAK | 2 1/2" 3" CAL. | 8-B |
| QPP | 2 | QUERCUS PALUSTRIS 'PINGREEN' | GREEN PILLAR PIN OAK | 2 1/2" 3" CAL. | 8-B |
| SUBTOTAL: | 22 | | | | |
| ORNAMENTAL TREES | | | | | |
| OV | 9 | OSTRYA VIRGINIANA | AMERICAN HOPHORNBEAM | 8-10' | 8-B |
| SUBTOTAL: | 9 | | | | |
| EVERGREEN TREES | | | | | |
| JV | 3 | JUNIPERUS VIRGINIANA | EASTERN RED CEDAR | 8-10' | 8-B |
| SUBTOTAL: | 3 | | | | |
| DECIDUOUS SHRUBS | | | | | |
| CA | 15 | CLETHRA ALNIFOLIA | SUMMERSWEET CLETHRA | 24-30" | CONTAINER |
| SB | 22 | SPIRAEA BETULIFOLIA | WHITE SPIRAEA | 18-24" | CONTAINER |
| CSA | 10 | CORNUS STOLONIFERA 'ARCTIC FIRE' | COMPACT RED TWIG DOGWOOD | 18-24" | 8-B |
| HVCW | 3 | HAMAMELIS VIRGINIANA | COMMON WITCHHAZEL | 3-4' | 8-B |
| SUBTOTAL: | 50 | | | | |
| EVERGREEN SHRUBS | | | | | |
| IGCB | 15 | ILEX GLABRA 'GEM BOX' | DWARF INKBERRY HOLLY | 18-24" | CONTAINER |
| IGS | 12 | ILEX GLABRA 'SHAMROCK' | SHAMROCK INKBERRY HOLLY | 24-30" | 8-B |
| KA | 10 | KALMA ANGUSTIFOLIA | SHEEP LAUREL | 18-24" | 8-B |
| RPG | 13 | RHOODODENDRON 'PURPLE GEM' | PURPLE GEM RHOODODENDRON | 24-30" | CONTAINER |
| SUBTOTAL: | 50 | | | | |
| GROUND COVERS | | | | | |
| JHB | 7 | JUNIPERUS HORIZONTALIS 'BAR HARBOR' | BAR HARBOR CREEPING JUNIPER | 15-18" SPRD. | CONTAINER |
| SUBTOTAL: | 7 | | | | |
| ORNAMENTAL GRASSES | | | | | |
| PVS | 23 | PANICUM VIRGATUM 'SHENANDOAH' | SHENANDOAH SWITCH GRASS | 2 GAL. | CONTAINER |
| SSTB | 5 | SCHIZACHYRIUM SCOPARUM 'THE BLUES' | LITTLE BLUE STEM | 2 GAL. | CONTAINER |
| SUBTOTAL: | 28 | | | | |

OWNER MAINTENANCE RESPONSIBILITIES

UPON OWNERS (OR OWNER CONTRACTORS) COMPLETION OF LANDSCAPING WORK, THE OWNER IS FULLY RESPONSIBLE FOR ALL FUTURE MAINTENANCE, CARE, UPKEEP, WATERING, AND TRIMMING OF ALL INSTALLED VEGETATION, PLANTS, TREE BUSHES, SHRUBS, GRASSES, ORNAMENTAL PLANTS AND FLOWERS, FLOWERS, FLOWERS, GROUND COVER, AND LANDSCAPING, INCLUDING ALL LANDSCAPE ISLANDS AND AREAS ADJACENT OR PART OF THE LANDSCAPED AREAS. THIS RESPONSIBILITY INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING:

- TREES ADJACENT TO WALKWAYS AND AREAS OF PEDESTRIAN TRAFFIC MUST BE MAINTAINED TO ASSURE THAT ANY BRANCHES MUST BE LIMBED UP TO A CLEARANCE HEIGHT OF 7 FT. (FROM ALL PEDESTRIAN SURFACES) OR PRUNED BACK TO AVOID ANY INTERFERENCE WITH THE TYPICAL PATH OF TRAVEL.
- TREES WITHIN VEHICULAR SIGHT LINES, AS ILLUSTRATED ON THE LANDSCAPE PLAN, ARE TO BE TRIMMED TO A CLEARANCE HEIGHT OF 7 FT. (FROM ALL PAVED, TRAVELED SURFACES), OR AS OTHERWISE INDICATED ON THE PLANS.
- VEGETATIVE GROUND COVER, SHRUBS AND ORNAMENTAL PLANTS AND GRASSES MUST BE TRIMMED SO THAT NO PORTION OF THE PLANT EXCEEDS 30 INCHES ABOVE GRADE (OF ALL PAVED, TRAVELED SURFACES) ALONG AND WITHIN THE SIGHT LINES OF PARKING LOTS AND INGRESS-EGRESS WAYS.
- FALLEN PLANT FLOWERS, FRUIT, SEEDS AND DEBRIS DROPPINGS ARE TO BE REMOVED IMMEDIATELY FROM VEHICULAR AND PEDESTRIAN TRAFFIC AREAS TO PREVENT TRIPPING, SLIPPING OR ANY OTHER HAZARDS.

THESE REQUIREMENTS DO NOT AFFECT THE PLANT LIFE GUARANTEES THE LANDSCAPE CONTRACTOR IS REQUIRED TO PROVIDE.

**THIS PLAN TO BE UTILIZED FOR
LANDSCAPE PURPOSES ONLY**

**REFER LANDSCAPE NOTES &
DETAILS SHEET FOR LANDSCAPE
NOTES AND DETAILS**

30 15 7.5 0 30
1" = 30'

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

| REV | DATE | COMMENT | DRAWN BY |
|-----|----------|---------------------------------|----------|
| 1 | 03/23/22 | NOTICE OF INTENT SUBMISSION | NPD |
| 2 | 05/09/22 | PER TOWN / PEER REVIEW COMMENTS | RMM |
| 3 | 05/17/22 | PER PEER REVIEW COMMENTS | RMM |

811
Know what's below.
Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

PERMIT SET

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: W211057
DRAWN BY: NPD
CHECKED BY: RMM
DATE: 02/01/2022
CAD ID.: W211057-LND-3

**PROPOSED SITE
PLAN DOCUMENTS**

FOR

**TMC HOLDINGS &
DEVELOPMENT 2, LLC**

PROPOSED
INDUSTRIAL DEVELOPMENT
UNION STREET BUSINESS PARK II
MAP #314, BLOCK #20, LOT #1
839 UPPER UNION STREET
CITY OF FRANKLIN
NORFOLK COUNTY, MA

BOHLER
352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9900
www.BohlerEngineering.com

BOHLER
SHEET TITLE:
**LANDSCAPE
PLAN**
SHEET NUMBER:
C-701
REVISION 3 - 05/17/22

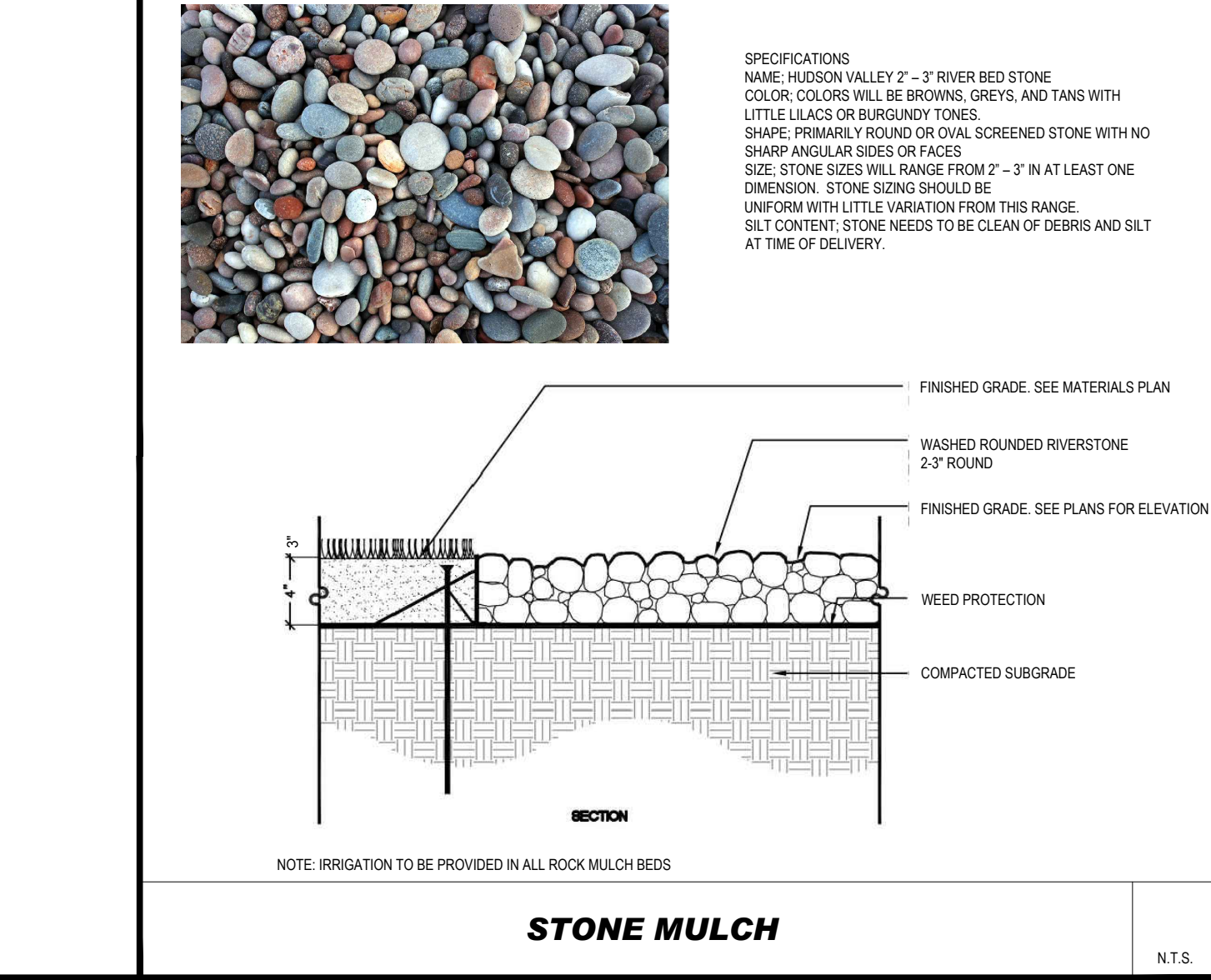
I:\BOHLER\NET\ISHARES\MAP\PROJECT\21\W211057\DRAWINGS\PLAN\SET\REV\W211057-LND-3.dwg - LAYOUT: C-701-LAND

LANDSCAPE SPECIFICATIONS

- SCOPE OF WORK
 - THE LANDSCAPE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL CLEARING, FINISHED GRADING, SOIL PREPARATION, PERMANENT SEEDING OR SOODING, PLANTING AND MULCHING INCLUDING ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY FOR THE COMPLETION OF THIS PROJECT, UNLESS OTHERWISE CONTRACTED BY THE GENERAL CONTRACTOR.
- MATERIALS
 - GENERAL - ALL HARDSCAPE MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE STATE DEPARTMENT OF TRANSPORTATIONS SPECIFICATIONS.
 - TOPSOIL - NATURAL, FRIABLE, LOAMY SILT SOIL HAVING AN ORGANIC CONTENT NOT LESS THAN 5%, A PH RANGE BETWEEN 4.5-7.0. IT SHALL BE FREE OF DEBRIS, ROCKS LARGER THAN ONE INCH (1") WOOD, ROOTS, VEGETABLE MATTER AND CLAY CLODS.
 - LAWN - ALL DISTURBED AREAS ARE TO BE TREATED WITH A MINIMUM 2" THICK LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, AND SEEDED OR SOODIED IN ACCORDANCE WITH THE PERMANENT STABILIZATION METHODS INDICATED ON THE LANDSCAPE PLAN.
 - LAWN SEED MIXTURE SHALL BE FRESH, CLEAN NEW CROP SEED.
 - SOD SHALL BE STRONGLY ROOTED, WEED AND DISEASE/PEST FREE WITH A UNIFORM THICKNESS. SOD INSTALLED ON SLOPES GREATER THAN 4:1 SHALL BE PEGGED TO HOLD SOD IN PLACE.
 - MULCH - ALL PLANTING BEDS SHALL BE MULCHED WITH A 2" THICK LAYER OF DOUBLE SHREDDED HARDWOOD BARK MULCH, UNLESS OTHERWISE STATED ON THE LANDSCAPE PLAN AND/OR LANDSCAPE PLAN NOTES/DETAILS.
 - FERTILIZER
 - FERTILIZER SHALL BE DELIVERED TO THE SITE MIXED AS SPECIFIED IN THE ORIGINAL UNOPENED STANDARD BAGS SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER. FERTILIZER SHALL BE STORED IN A WEATHERPROOF PLACE SO THAT IT CAN BE KEPT DRY PRIOR TO USE.
 - FOR THE PURPOSE OF BIDDING, ASSUME THAT FERTILIZER SHALL BE 10% NITROGEN, 6% PHOSPHORUS AND 4% POTASSIUM BY WEIGHT. A FERTILIZER SHOULD NOT BE SELECTED WITHOUT A SOIL TEST PERFORMED BY A CERTIFIED SOIL LABORATORY.
 - PLANT MATERIAL
 - ALL PLANTS SHALL IN ALL CASES CONFORM TO THE REQUIREMENTS OF THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1), LATEST EDITION, AS PUBLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION (FORMERLY THE AMERICAN ASSOCIATION OF NURSERYMEN).
 - IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES FOR ANY AND ALL PLANT MATERIAL.
 - PLANTS SHALL BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE. TAGS ARE TO REMAIN ON AT LEAST ONE PLANT OF EACH SPECIES FOR VERIFICATION PURPOSES DURING THE FINAL INSPECTION.
 - TREES WITH ABRASION OF THE BARK, SUN SCALDS, DISFIGURATION OR FRESH CUTS OF LIMBS OVER 1/4", WHICH HAVE NOT BEEN COMPLETELY CALLED, SHALL BE REJECTED. PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES.
 - ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH - WELL DEVELOPED BRANCHES, DENSELY FOLIATED, VIGOROUS ROOT SYSTEMS AND BE FREE OF DISEASE, INSECTS, PESTS, EGGS OR LARVAE.
 - CALIPER MEASUREMENTS OF NURSERY GROWN TREES SHALL BE TAKEN AT A POINT ON THE TRUNK SIX INCHES (6") ABOVE THE NATURAL GRADE FOR TREES UP TO AND INCLUDING A FOUR INCH (4") CALIPER SIZE. IF THE CALIPER AT SIX INCHES (6") ABOVE THE GROUND EXCEEDS FOUR INCHES (4") IN CALIPER, THE CALIPER SHOULD BE MEASURED AT A POINT 12" ABOVE THE NATURAL GRADE.
 - SHRUBS SHALL BE MEASURED TO THE AVERAGE HEIGHT OR SPREAD OF THE SHRUB, AND NOT TO THE LONGEST BRANCH.
 - TREES AND SHRUBS SHALL BE HANDLED WITH CARE BY THE ROOT BALL.
- GENERAL WORK PROCEDURES
 - CONTRACTOR TO UTILIZE WORKMANLIKE INDUSTRY STANDARDS IN PERFORMING ALL LANDSCAPE CONSTRUCTION. THE SITE IS TO BE LEFT IN A CLEAN STATE AT THE END OF EACH WORKDAY. ALL DEBRIS, MATERIALS AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR DISPOSED OF.
 - WASTE MATERIALS AND DEBRIS SHALL BE COMPLETELY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. DEBRIS SHALL NOT BE BURIED, INCLUDING ORGANIC MATERIALS, BUT SHALL BE REMOVED COMPLETELY FROM THE SITE.
- SITE PREPARATIONS
 - BEFORE AND DURING PRELIMINARY GRADING AND FINISHED GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES OUTLINED HEREIN.
 - ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES. THE ENTIRE LIMB OF ANY DAMAGED BRANCH SHALL BE CUT OFF AT THE BRANCH COLLAR. CONTRACTOR SHALL ENSURE THAT CUTS ARE STRAIGHT. ANY EXPOSED ROOTS SHALL BE CUT BACK WITH CLEAN, SHARP TOOLS AND TOPSOIL SHALL BE PLACED AROUND THE REMAINDER OF THE ROOTS. EXISTING TREES SHALL BE MONITORED ON A REGULAR BASIS FOR ADDITIONAL ROOT OR BRANCH DAMAGE AS A RESULT OF CONSTRUCTION. ROOTS SHALL NOT BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR SHALL WATER EXISTING TREES AS NEEDED TO PREVENT SHOCK OR DECLINE.
 - CONTRACTOR SHALL ARRANGE TO HAVE A UTILITY LOCATING TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY LANDSCAPE MATERIAL. UTILITY COMPANIES SHALL BE CONTACTED THREE (3) DAYS PRIOR TO THE BEGINNING OF WORK.
- TREE PROTECTION
 - CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES TO REMAIN. A TREE PROTECTION ZONE SHALL BE ESTABLISHED AT THE DRIP LINE OR AT THE LIMIT OF CONSTRUCTION DISTURBANCE, WHICHEVER IS GREATER. LOCAL STANDARDS THAT MAY REQUIRE A MORE STRICT TREE PROTECTION ZONE SHALL BE HONORED.
 - A FORTY-EIGHT INCH (48") HIGH WOODEN SNOW FENCE OR ORANGE COLORED HIGH-DENSITY "VIS-FENCE," OR APPROVED EQUAL, MOUNTED ON STEEL POSTS SHALL BE INSTALLED ALONG THE BOUNDARY OF THE TREE PROTECTION ZONE. POSTS SHALL BE LOCATED AT A MAXIMUM OF EIGHT FEET (8') ON CENTER OR AS INDICATED WITHIN THE TREE PROTECTION DETAIL.
 - WHEN THE TREE PROTECTION FENCING HAS BEEN INSTALLED, IT SHALL BE INSPECTED BY THE APPROVING AGENCY PRIOR TO DEMOLITION, GRADING, TREE CLEARING OR ANY OTHER CONSTRUCTION. THE FENCING ALONG THE TREE PROTECTION ZONE SHALL BE REGULARLY INSPECTED BY THE LANDSCAPE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITY HAS BEEN COMPLETED.
 - AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE PROTECTION ZONE.
- SOIL MODIFICATIONS
 - CONTRACTOR SHALL ATTAIN A SOIL TEST FOR ALL AREAS OF THE SITE PRIOR TO CONDUCTING ANY PLANTING. SOIL TESTS SHALL BE PERFORMED BY A CERTIFIED SOIL LABORATORY.
 - LANDSCAPE CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL. SOIL MODIFICATIONS, AS SPECIFIED HEREIN, MAY NEED TO BE CONDUCTED BY THE LANDSCAPE CONTRACTOR DEPENDING ON SITE CONDITIONS.
 - THE FOLLOWING AMENDMENTS AND QUANTITIES ARE APPROXIMATE AND ARE FOR BIDDING PURPOSES ONLY. COMPOSITION OF AMENDMENTS SHOULD BE REVISED DEPENDING ON THE OUTCOME OF A TOPSOIL ANALYSIS PERFORMED BY A CERTIFIED SOIL LABORATORY.
 - TO INCREASE A SANDY SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS, THOROUGHLY TILL ORGANIC MATTER INTO THE TOP 6"-12" USE COMPOSTED BARK, COMPOSTED LEAF MULCH OR PEAT MOSS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A PH HIGHER THAN 7.5.
 - TO INCREASE DRAINAGE, MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) AND/OR AGRICULTURAL GYPSUM. COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO BRING THE SAND CONTENT TO MORE THAN 60% OF THE TOTAL MIX. SUBSURFACE DRAINAGE LINES MAY NEED TO BE ADDED TO INCREASE DRAINAGE.
 - MODIFY EXTREMELY SANDY SOILS (MORE THAN 85% BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.
- FINISHED GRADING
 - UNLESS OTHERWISE CONTRACTED, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE GRADING WITHIN THE DISTURBANCE AREA OF THE SITE.
 - LANDSCAPE CONTRACTOR SHALL VERIFY THAT SUBGRADE FOR INSTALLATION OF TOPSOIL HAS BEEN ESTABLISHED. THE SUBGRADE OF THE SITE MUST MEET THE FINISHED GRADE LESS THE REQUIRED TOPSOIL THICKNESS (1").
 - ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE AS DEPICTED WITHIN THIS SET OF CONSTRUCTION PLANS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER OR LANDSCAPE ARCHITECT.
 - ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER IN AND AROUND THE PLANTING BEDS. STANDING WATER SHALL NOT BE PERMITTED IN PLANTING BEDS.
- TOPSOLLING
 - CONTRACTOR SHALL PROVIDE A 2" THICK MINIMUM LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, IN ALL PLANTING AREAS. TOPSOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS.
 - ON-SITE TOPSOIL MAY BE USED TO SUPPLEMENT THE TOTAL AMOUNT REQUIRED. TOPSOIL FROM THE SITE MAY BE REJECTED IF IT HAS NOT BEEN PROPERLY REMOVED, STORED AND PROTECTED PRIOR TO CONSTRUCTION.
 - CONTRACTOR SHALL FURNISH TO THE APPROVING AGENCY AN ANALYSIS OF BOTH IMPORTED AND ON-SITE TOPSOIL TO BE UTILIZED IN ALL PLANTING AREAS. THE PH AND NUTRIENT LEVELS MAY NEED TO BE ADJUSTED THROUGH SOIL MODIFICATIONS AS NEEDED TO ACHIEVE THE REQUIRED LEVELS AS SPECIFIED IN THE MATERIALS SECTION ABOVE.
 - ALL LAWN AREAS ARE TO BE CULTIVATED TO A DEPTH OF SIX INCHES (6"). ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES SECTION ABOVE. THE FOLLOWING SHALL BE TILLED INTO THE TOP FOUR INCHES (4") IN TWO DIRECTIONS (QUANTITIES BASED ON 1,000 SQUARE FOOT AREA - FOR BID PURPOSES ONLY (SEE SPECIFICATION 6.3)):
 - 20 POUNDS GRO-POWER® OR APPROVED SOIL CONDITIONER/FERTILIZER
 - 20 POUNDS NITRO-FORM (COURSE) 38-0-0 BLUE CHIP® OR APPROVED NITROGEN FERTILIZER
 - THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN CONDITIONS.
- PLANTING
 - INSO FAR THAT IT IS FEASIBLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE, LANDSCAPE CONTRACTOR SHALL PROTECT UNPLANTED PLANTS FROM WEATHER AND PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. PLANTS THAT WILL NOT BE PLANTED FOR A PERIOD OF TIME GREATER THAN THREE DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH TO HELP PRESERVE ROOT MOISTURE.
 - PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR FROZEN CONDITION.
 - ANY INJURED ROOTS OR BRANCHES SHALL BE PRUNED TO MAKE CLEAN-CUT ENDS PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY INJURED OR DISEASED BRANCHING SHALL BE REMOVED.
 - ALL PLANTING CONTAINERS, BASKETS AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED FROM ROOT BALLS DURING PLANTING. NATURAL FIBER BURLAP MUST BE CUT FROM AROUND THE TRUNK OF THE TREE AND FOLDED DOWN AGAINST THE ROOT BALL PRIOR TO BACKFILLING.
 - POSITION TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATING PITS, MAKING NECESSARY ADJUSTMENTS AS DIRECTED.
 - PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, THE PROPOSED LANDSCAPE, AS SHOWN ON THE APPROVED LANDSCAPE PLAN, MUST BE INSTALLED, INSPECTED AND APPROVED BY THE APPROVING AGENCY. THE APPROVING AGENCY SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD AS FOLLOWS: THE PLANTING OF TREES, SHRUBS, VINES OR GROUND COVER SHALL OCCUR DURING THE FOLLOWING PLANTING SEASONS:
 - PLANTS: MARCH 15 TO DECEMBER 15
 - LAWN: MARCH 15 TO JUNE 15 OR SEPT. 1 TO DECEMBER 1
 - PLANTINGS REQUIRED FOR A CERTIFICATE OF OCCUPANCY SHALL BE PROVIDED DURING THE NEXT APPROPRIATE SEASON AT THE MUNICIPALITY'S DISCRETION. CONTRACTOR SHOULD CONTACT APPROVING AGENCY FOR POTENTIAL SUBSTITUTIONS.
 - FURTHERMORE, THE FOLLOWING TREE VARIETIES ARE UNUSUALLY SUSCEPTIBLE TO WINTER DAMAGE. WITH TRANSPLANT SHOCK AND THE SEASONAL LACK OF NITROGEN AVAILABILITY, THE RISK OF PLANT DEATH IS GREATLY INCREASED. IT IS NOT RECOMMENDED THAT THESE SPECIES BE PLANTED DURING THE FALL PLANTING SEASON:

| | |
|-------------------------|-----------------------|
| ACER VARIETIES | PLATANUS X ACERIFOLIA |
| BETULA VARIETIES | POPULUS VARIETIES |
| CARPINUS VARIETIES | PRUNUS VARIETIES |
| CRATAEGUS VARIETIES | PYRUS VARIETIES |
| KOELREUTERA | QUERCUS VARIETIES |
| LIQUIDAMBAR STRACIFLUA | TILIA TOMENTOSA |
| LIRIODENDRON TULIPIFERA | ZELKOVA VARIETIES |

- PLANTING PITS SHALL BE DUG WITH LEVEL BOTTOMS, WITH THE WIDTH TWICE THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED GRADE. EACH PLANT PIT SHALL BE BACKFILLED IN LAYERS WITH THE FOLLOWING PREPARED SOIL MIXED THOROUGHLY.
 - 1 PART PEAT MOSS
 - 1 PART COMPOSTED COW MANURE BY VOLUME
 - 3 PARTS TOPSOIL BY VOLUME
 - 21 GRAMS NIGRIFORM PLANTING TABLETS (OR APPROVED EQUAL) AS FOLLOWS:
 - 2 TABLETS PER 1 GALLON PLANT
 - 3 TABLETS PER 5 GALLON PLANT
 - 4 TABLETS PER 15 GALLON PLANT
 - LARGER PLANTS: 2 TABLETS PER 1/2" CALIPER OF TRUNK
- FILL PREPARED SOIL AROUND BALL OF PLANT HALF-WAY AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND WATER THOROUGHLY.
- ALL PLANTS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT BALL, THE POINT AT WHICH THE ROOT FLARE BEGINS, IS SET AT GROUND LEVEL AND IN THE CENTER OF THE PLANT PIT. NO SOIL IS TO BE PLACED DIRECTLY ON TOP OF THE ROOT BALL.
- ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS OR DRIVEWAYS SHALL BE PRUNED AND MAINTAINED TO A MINIMUM BRANCHING HEIGHT OF 7' FROM GROUND.
- GROUND COVER AREAS SHALL RECEIVE A 1/4" LAYER OF HUMUS RAKED INTO THE TOP 1" OF PREPARED SOIL PRIOR TO PLANTING. ALL GROUND COVER AREAS SHALL BE WEDED AND TREATED WITH A PRE-EMERGENT CHEMICAL AS PER MANUFACTURER'S RECOMMENDATION.
- NO PLANT, EXCEPT GROUND COVERS, GRASSES OR VINES, SHALL BE PLANTED LESS THAN TWO FEET (2') FROM EXISTING STRUCTURES AND SIDEWALKS.
- ALL PLANTING AREAS AND PLANTING PITS SHALL BE MULCHED AS SPECIFIED HEREIN TO FILL THE ENTIRE BED AREA OR SAUCER. NO MULCH IS TO TOUCH THE TRUNK OF THE TREE OR SHRUB.
- ALL PLANTING AREAS SHALL BE WATERED IMMEDIATELY UPON INSTALLATION IN ACCORDANCE WITH THE WATERING SPECIFICATIONS AS LISTED HEREIN.
- TRANSPLANTING (WHEN REQUIRED)
 - ALL TRANSPLANTS SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT.
 - IF PLANTS ARE TO BE STOCKPILED BEFORE REPLANTING, THEY SHALL BE HEALED IN WITH MULCH OR SOIL ADEQUATELY WATERED AND PROTECTED FROM EXTREME HEAT, SUN AND WIND.
 - PLANTS SHALL NOT BE DUG FOR TRANSPLANTING BETWEEN APRIL 10 AND JUNE 30.
 - UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE.
 - TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN.
 - F TRANSPLANTS DIE, SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES GREATER THAN SIX INCHES (6") DBH MAY BE REQUIRED TO BE REPLACED IN ACCORDANCE WITH THE MUNICIPALITY'S TREE REPLACEMENT GUIDELINES.
- WATERING
 - NEW PLANTINGS OR LAWN AREAS SHALL BE ADEQUATELY IRRIGATED BEGINNING IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED TO EACH TREE AND SHRUB IN SUCH MANNER AS NOT TO DISTURB BACKFILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED. WATERING SHALL CONTINUE AT LEAST UNTIL PLANTS ARE ESTABLISHED.
 - SITE OWNER SHALL PROVIDE WATER IF AVAILABLE ON SITE AT TIME OF PLANTING. IF WATER IS NOT AVAILABLE ON SITE, CONTRACTOR SHALL SUPPLY ALL NECESSARY WATER. THE USE OF WATERING BAGS IS RECOMMENDED FOR ALL NEWLY PLANTED TREES.
 - IF AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE, IT SHALL BE USED TO WATER PROPOSED PLANT MATERIAL, BUT ANY FAILURE OF THE SYSTEM DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY OF MAINTAINING THE DESIRED MOISTURE LEVEL FOR VIGOROUS, HEALTHY GROWTH.
- GUARANTEE
 - THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF 1 YEAR FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE APPROVING AGENCY. CONTRACTOR SHALL SUPPLY THE OWNER WITH A MAINTENANCE BOND FOR TEN PERCENT (10%) OF THE VALUE OF THE LANDSCAPE INSTALLATION WHICH WILL BE RELEASED AT THE CONCLUSION OF THE GUARANTEE PERIOD AND WHEN A FINAL INSPECTOR HAS BEEN COMPLETED AND APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.
 - ANY DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GUARANTEE PERIOD. REPLACEMENT OF PLANT MATERIAL SHALL BE CONDUCTED AT THE FIRST SUCCEEDING PLANTING SEASON. ANY DEBRIS SHALL BE DISPOSED OF OFF-SITE, WITHOUT EXCEPTION.
 - TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND THROUGHOUT THE 90 DAY MAINTENANCE PERIOD AS SPECIFIED HEREIN. CULTIVATION, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS SHALL BE PERFORMED AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE.
 - LAWNS SHALL BE MAINTAINED THROUGH WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING, REGARDING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS.
- CLEANUP
 - UPON THE COMPLETION OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL UNUSED MATERIALS, EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED AREAS ARE TO BE CLEANED.
 - THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.
- MAINTENANCE (ALTERNATIVE BID)
 - A 90 DAY MAINTENANCE PERIOD SHALL COMMENCE AT THE END OF ALL LANDSCAPE INSTALLATION OPERATIONS. THE 90 DAY MAINTENANCE PERIOD ENSURES TO THE OWNER/OPERATOR THAT THE NEWLY INSTALLED LANDSCAPING HAS BEEN MAINTAINED AS SPECIFIED ON THE APPROVED LANDSCAPE PLAN. ONCE THE INITIAL 90 DAY MAINTENANCE PERIOD HAS EXPIRED, THE OWNER/OPERATOR MAY REQUEST THAT BIDDERS SUBMIT AN ALTERNATE MAINTENANCE BID FOR A MONTHLY MAINTENANCE CONTRACT. THE ALTERNATE MAINTENANCE CONTRACT WILL ENCOMPASS ANY WORK THAT IS CONSIDERED APPROPRIATE TO ENSURE THAT PLANT AND LAWN AREAS ARE HEALTHY AND MANICURED TO THE APPROVAL OF THE OWNER/OPERATOR.



"NEW ENGLAND CONSERVATION WILDLIFE SEED MIX" AS PREPARED BY:
NEW ENGLAND WETLAND PLANTS, INC.
800 WEST STREET, AMHERST, MA 01002
PHONE: 413-548-8000
EMAIL: INFO@NEWEP.COM
WEBSITE: WWW.NEWEP.COM

APPLICATION RATE: 25LB/525ACRE | 1750 SQ FT/LB
MINIMUM ORDER: 2 LBS

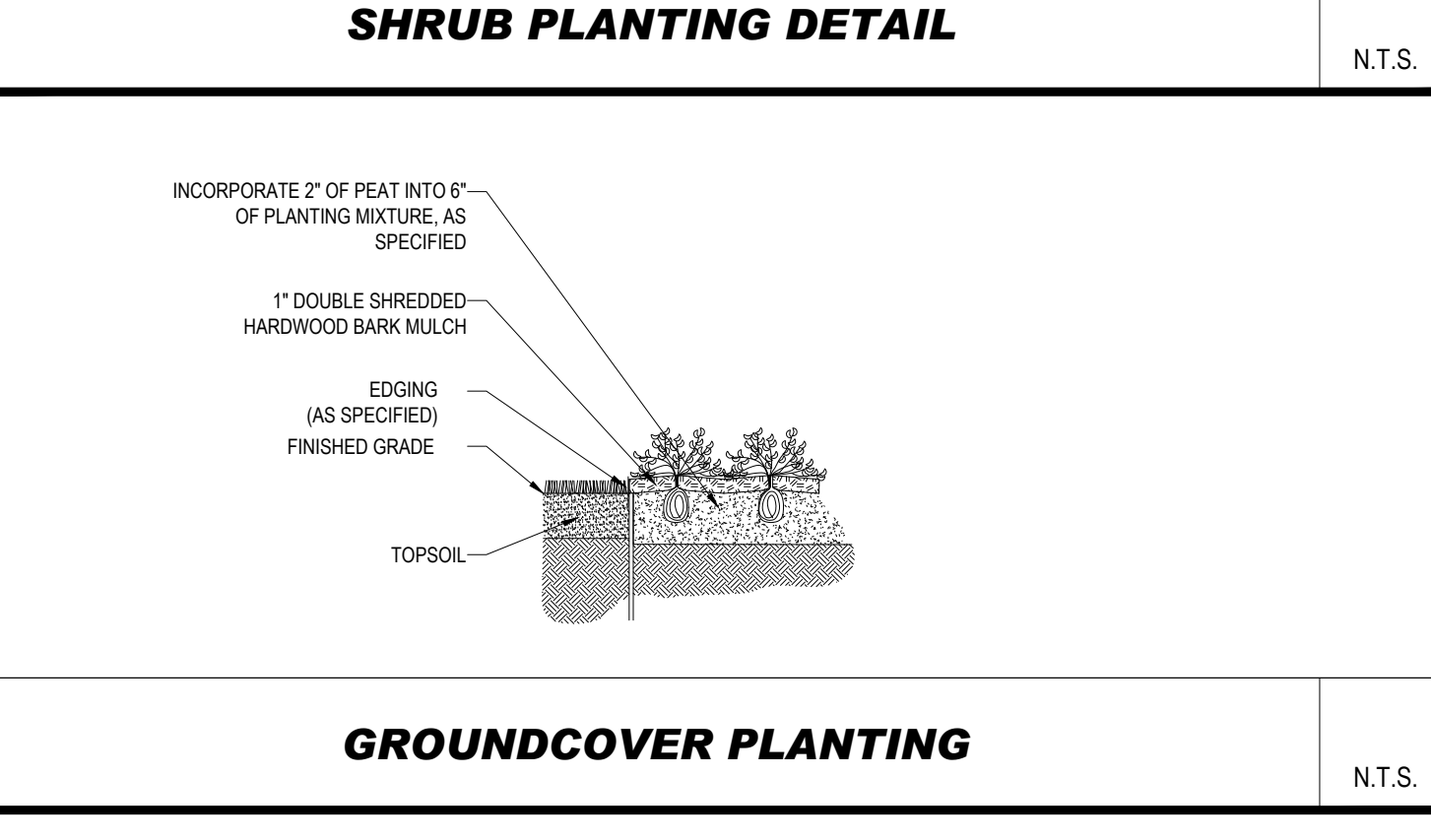
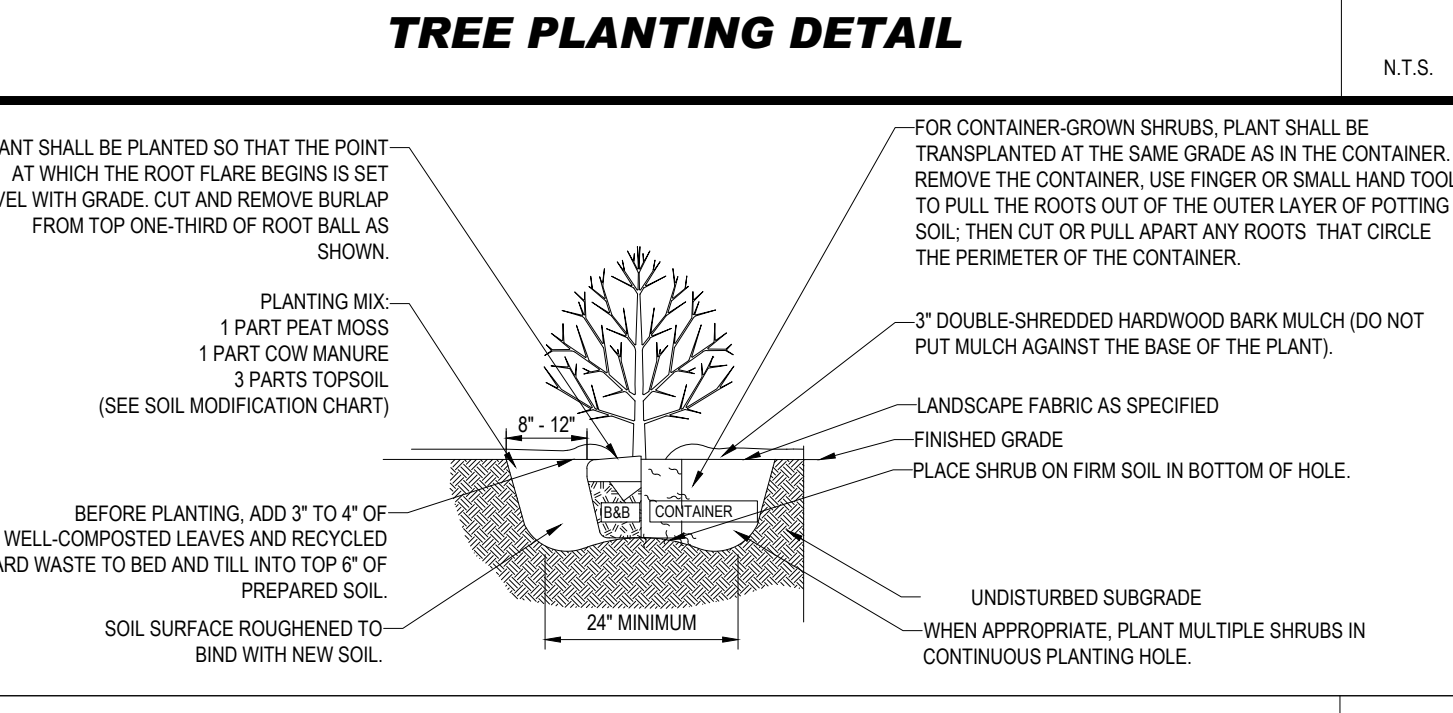
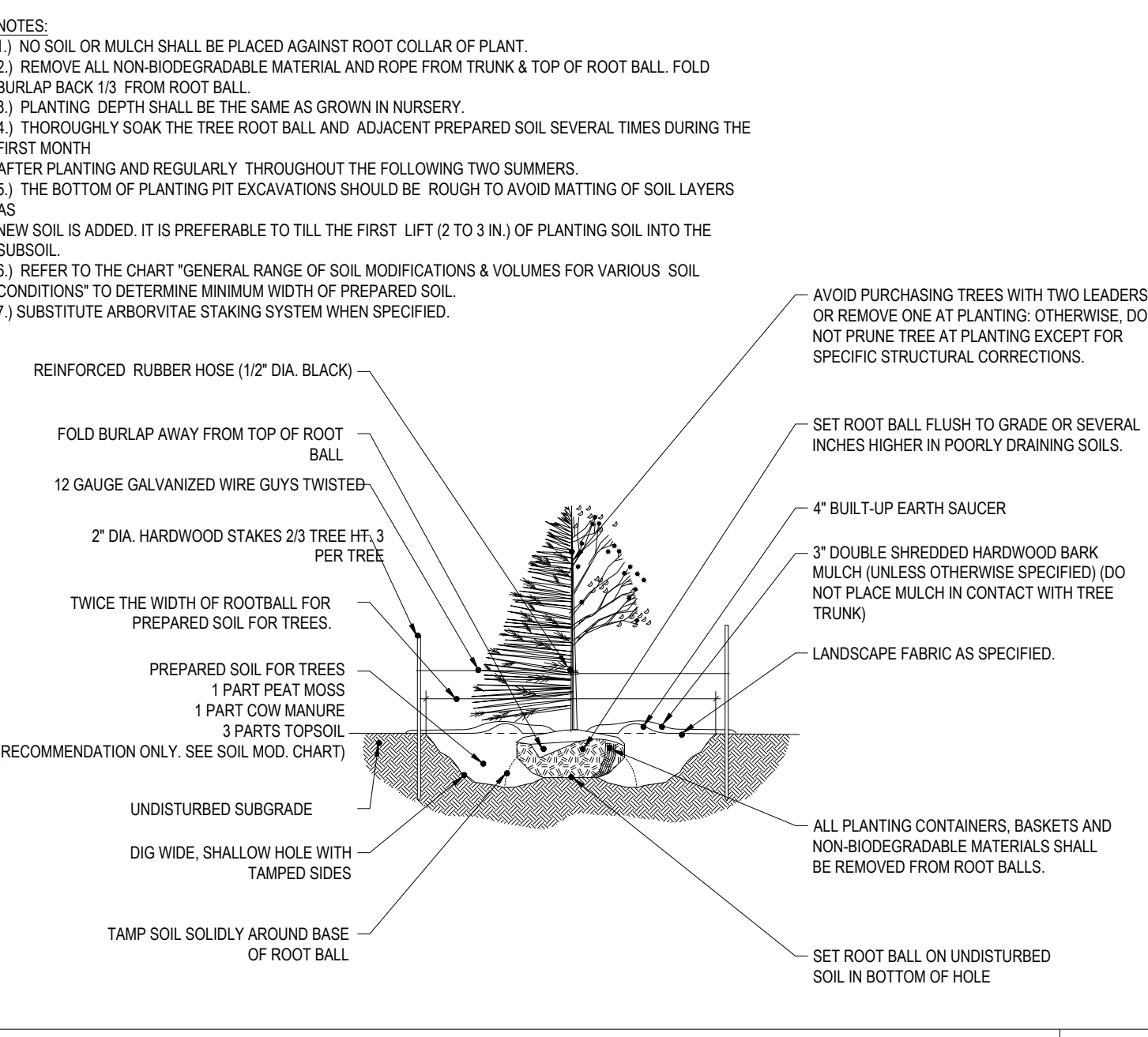
SPECIES: VIRGINIA WILD RYE (ELYMUS VIRGINICUS), LITTLE BLUESTEM (SCHIZACHYRUM SCOPARIUM), BIG BLUESTEM (ANDROPOGON GERARDII), RED FESCUE (FESTUCA RUBRA), SWITCH GRASS (PANICUM VIRGATUM), PARTIDRICE PEA CHAMAECRISTA FASCICULATA), PANICLED LEAF TICK TREEFOOT (DESMODIUM PANICULATUM), INDIAN GRASS (SORGHASTRUM NUTANS), BLUE GERARDIA (VERBENA HASTATA), BUTTERFLY MILKWEED (ASCLEPIAS TUBEROSA), BLACK EYED SUSAN (RUDEBECKIA HIRT), COMMON SNEEZEWEED (HELENIUM AUTUNNALE), HEATH ASTER (ASTER) POLYSPICUM (NYCTOTRICHUM PILOSUM), EARLY GOLDENROD (SOLIDAGO JUNCEA), UPLAND BENTGRASS (AGROSTIS PERENNANS).

"NATIVE DETENTION AREA MIX" AS PREPARED BY:
ERNST CONSERVATION SEEDS, INC.
8884 MERCER PIKE, MEADVILLE, PA 16335
PHONE: 800-873-3211 | 814-336-2004
EMAIL: SALES@ERNSTSEED.COM
WEBSITE: WWW.ERNSTSEED.COM

APPLICATION RATE: 1/2 LB / 1000 SQ. FT. (20 LBS / ACRE)

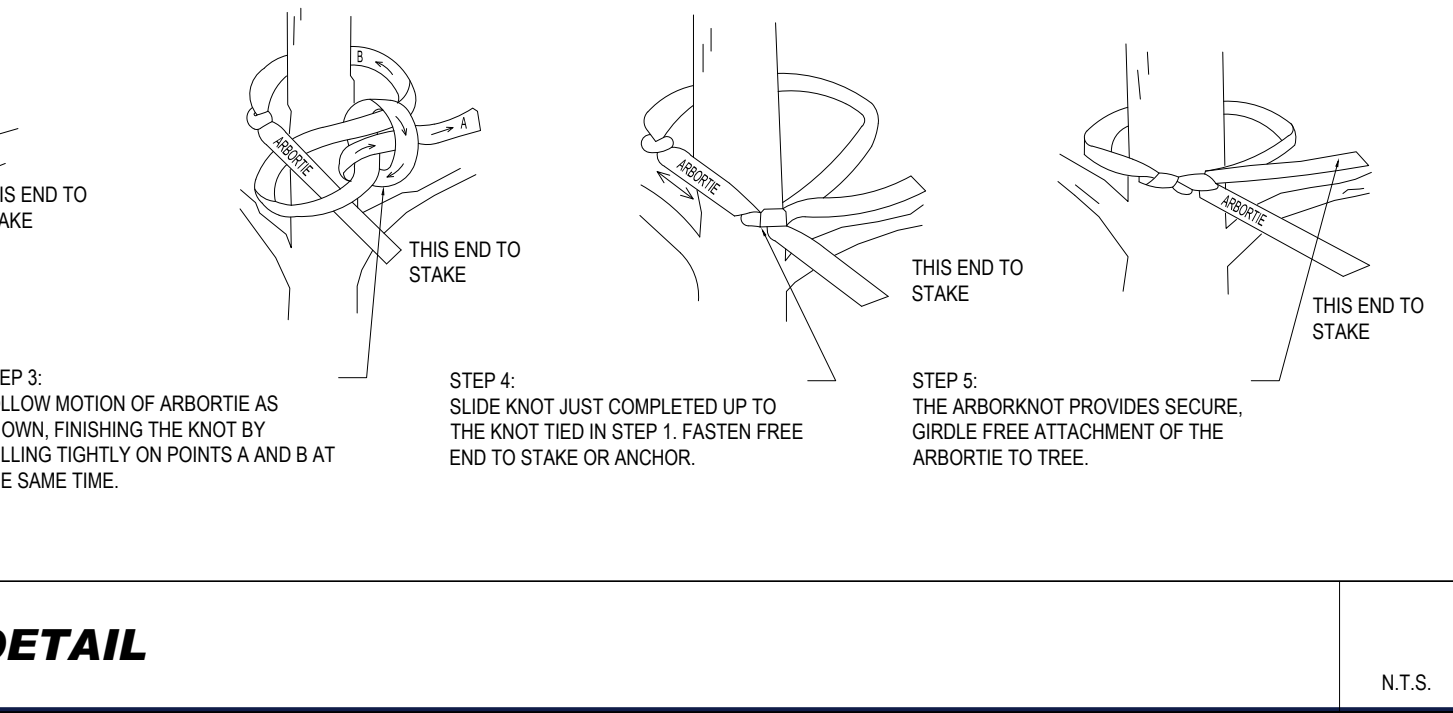
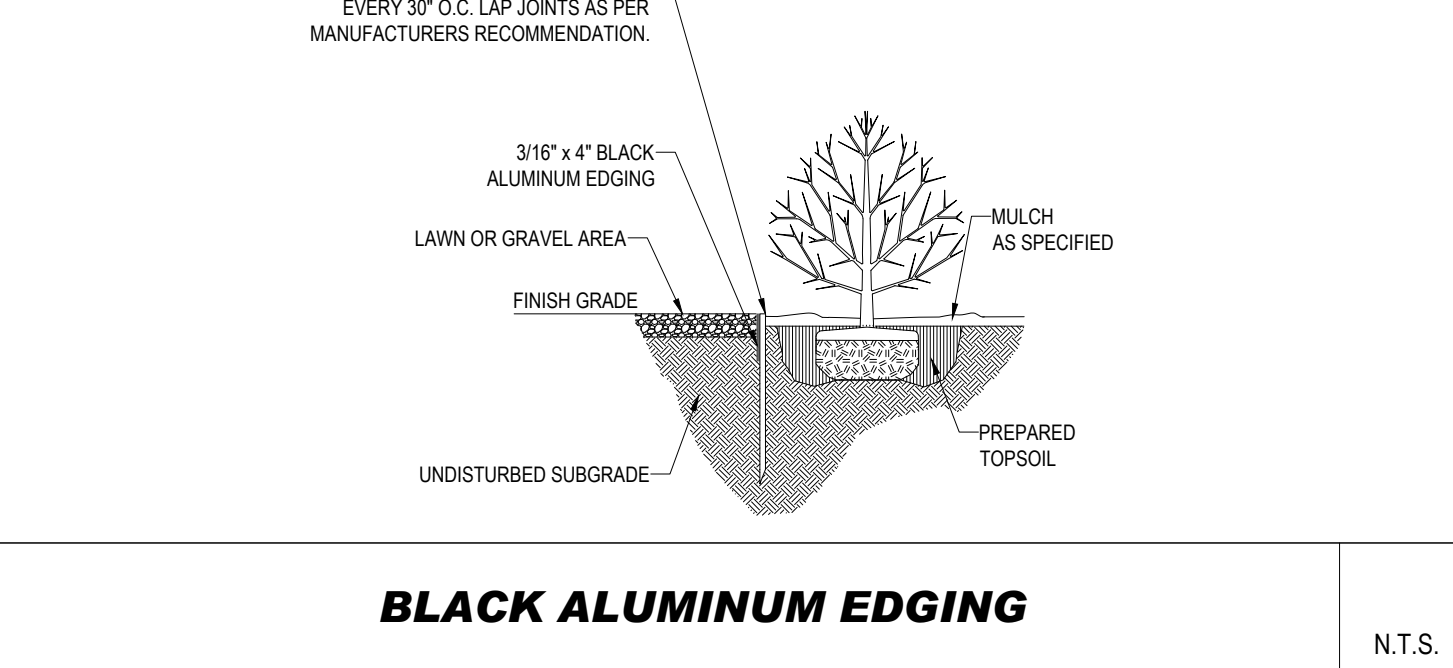
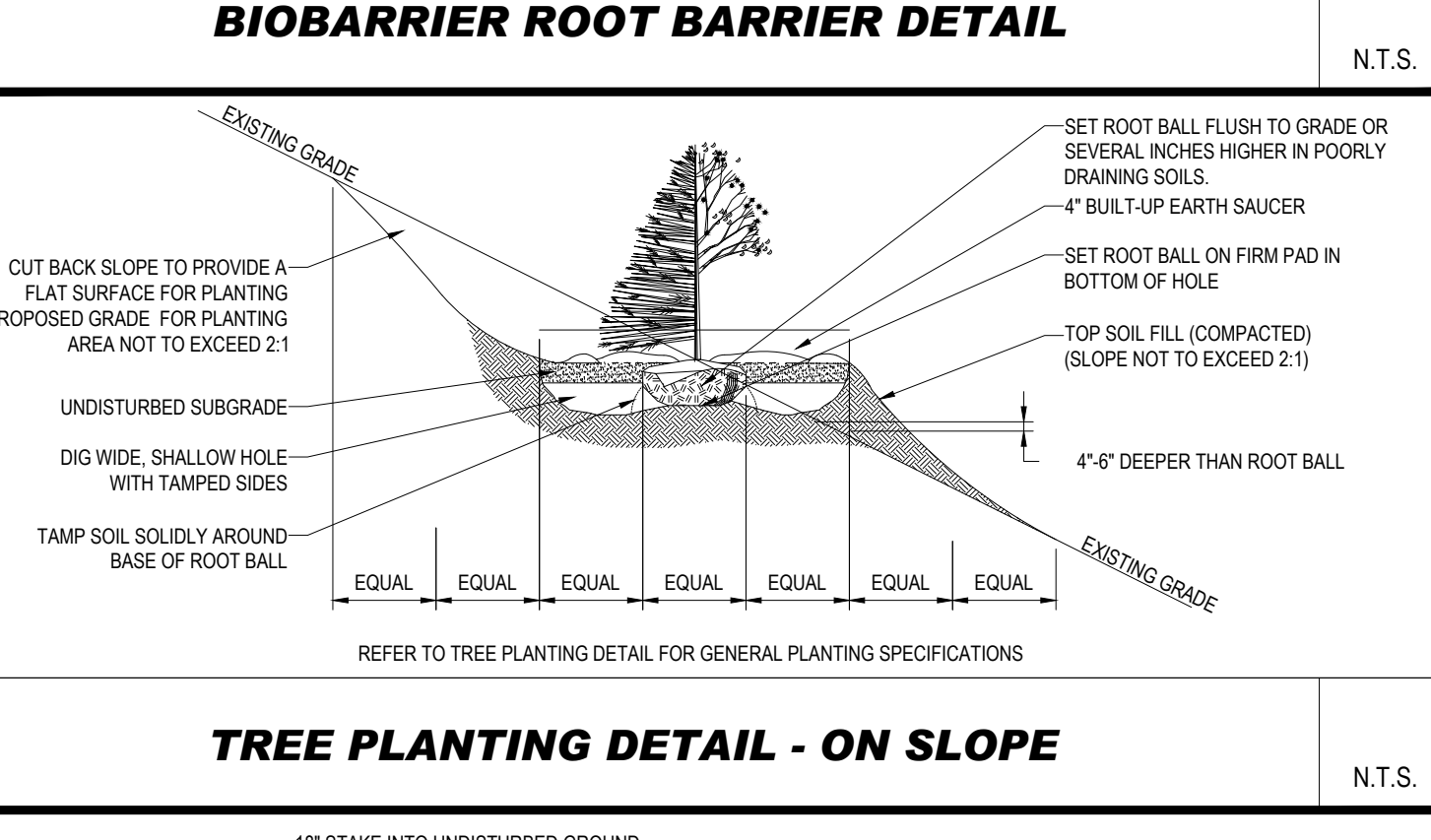
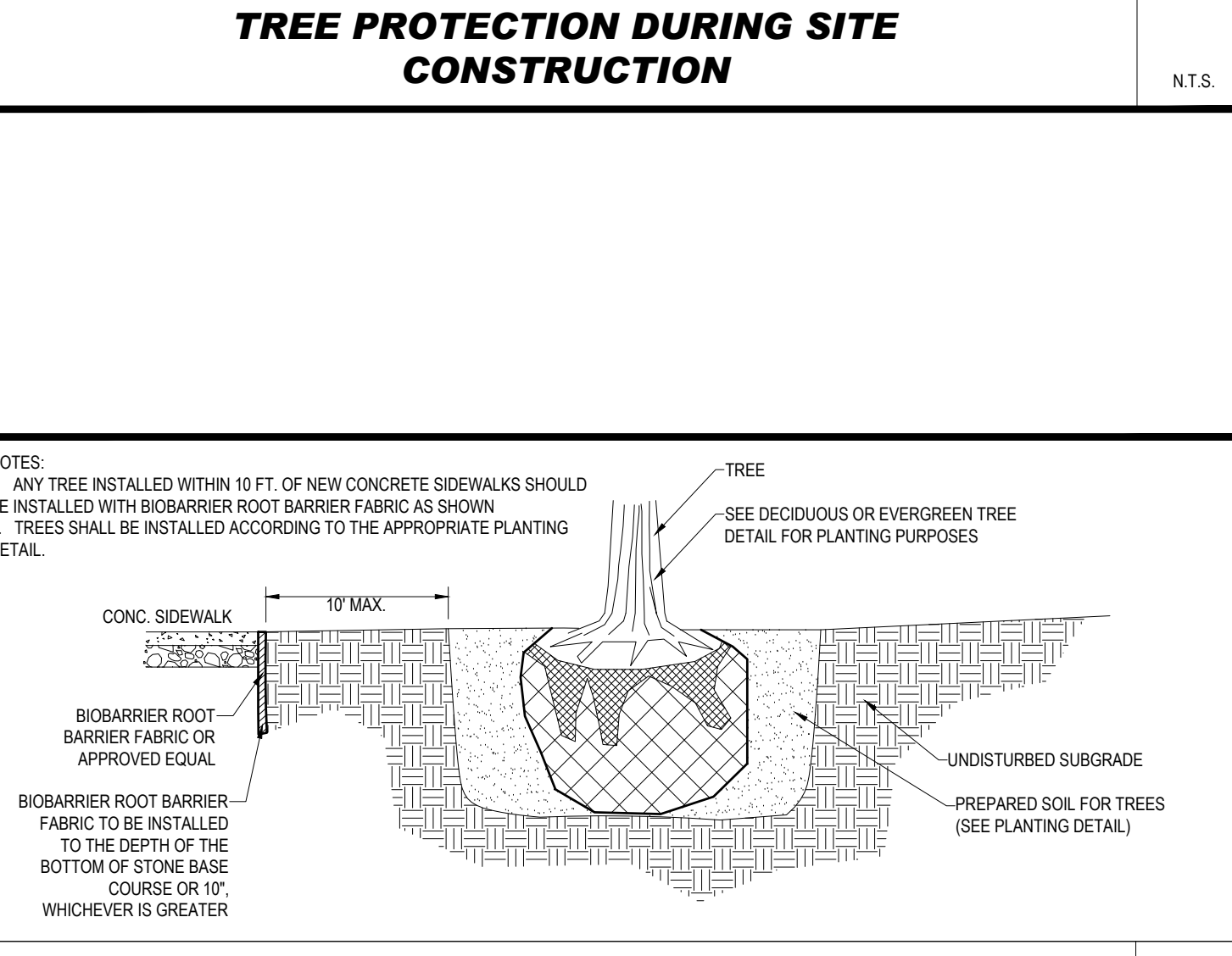
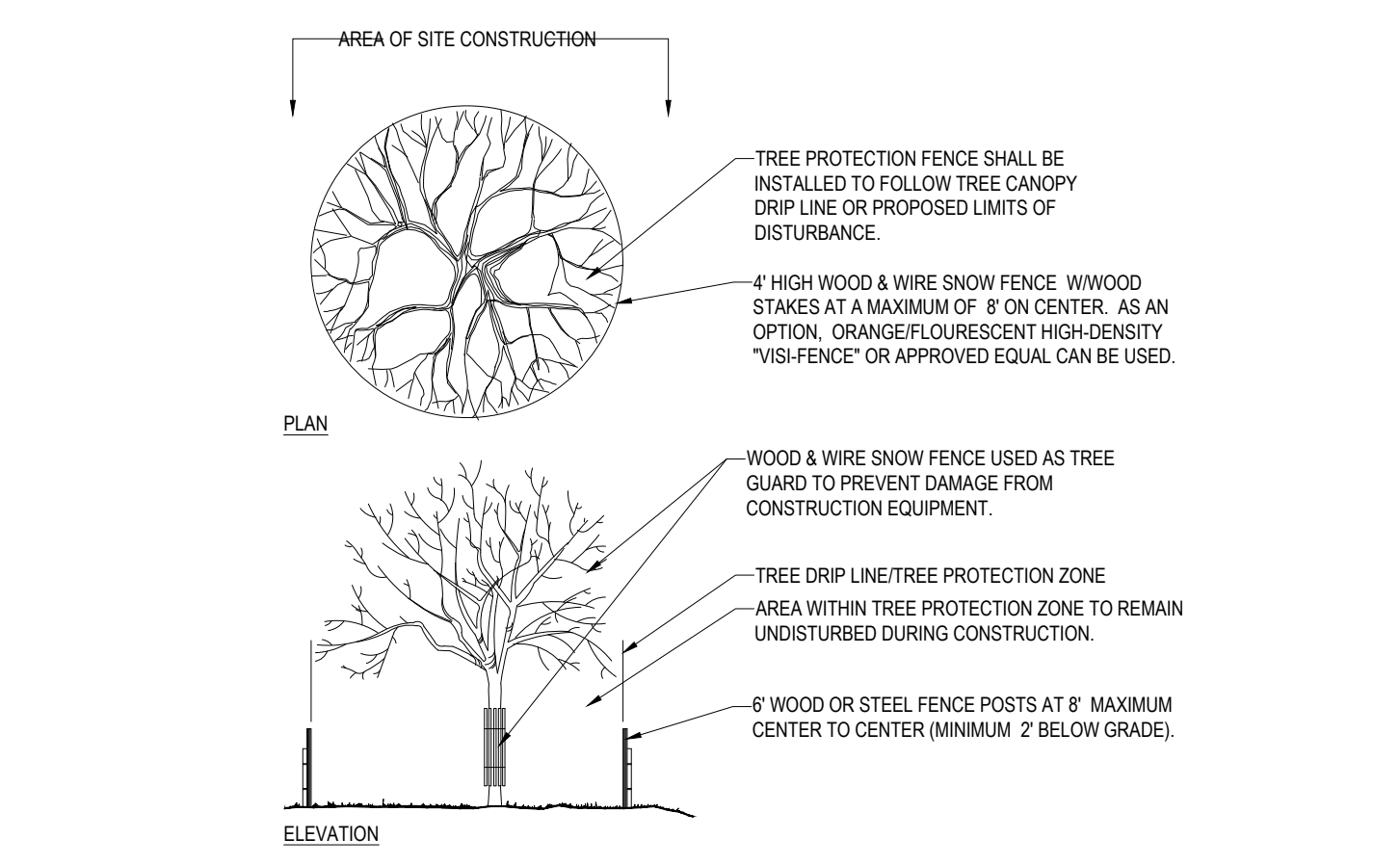
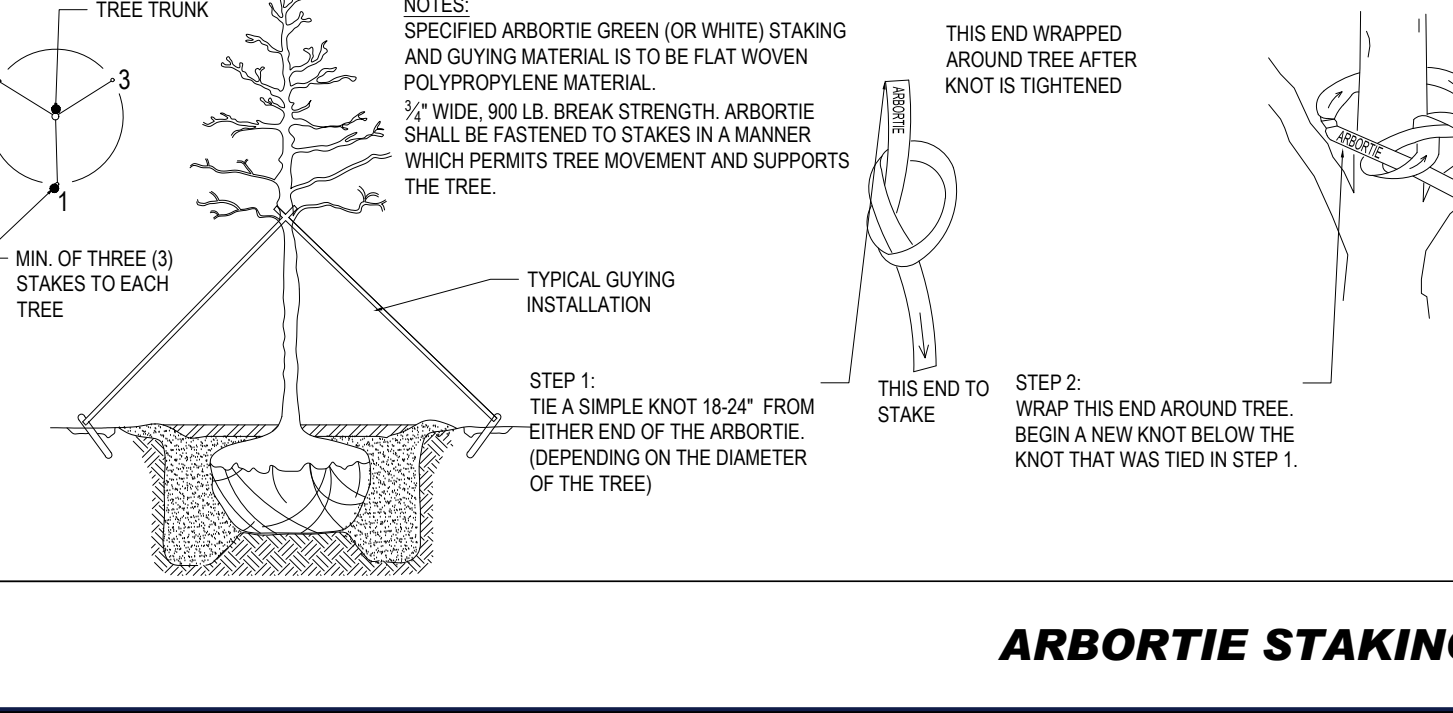
MIX COMPOSITION:
25.0% PANICUM VIRGATUM, 'SHELTER' (SWITCHGRASS, 'SHELTER')
24.0% PANICUM CLANDESTINUM, 'TODD' (BERTONKUE, 'TODD')
22.0% CAREX VULPIDOIDEA, PA ECOTYPE (FOX SEDGE, PA ECOTYPE)
21.0% ELYMUS VIRGINICUS, PA ECOTYPE (VIRGINIA WILDRYE, PA ECOTYPE)
6.0% AGROSTIS PERENNANS, ALBANY PINE BUSH-NE ECOTYPE (AUTUMN BENTGRASS, ALBANY PINE BUSH-NE ECOTYPE)
1.0% JUNCUS EFFUSUS (SOFT RUSH)
1.0% PANICUM RIGIDULUM, PA ECOTYPE (REDTOP PANICGRASS, PA ECOTYPE)

BASIN SEED MIX SPECIFICATIONS



- HYDROSEED SPECIFICATIONS**
- PRIOR TO SEEDING, AREA IS TO BE TOPSOILED, FINE GRADED, AND RAKED OF ALL DEBRIS LARGER THAN 2" DIAMETER.
 - PRIOR TO SEEDING, CONSULT MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS.
 - SEEDING RATES:

| | |
|-----------------------|-------------------|
| PERENNIAL RYEGRASS | 1/2 LB/1000 SQ FT |
| KENTUCKY BLUEGRASS | 1 LB/1000 SQ FT |
| RED FESCUE | 1/2 LB/1000 SQ FT |
| SPREADING FESCUE | 1/2 LB/1000 SQ FT |
| FERTILIZER (16-32-16) | 2 LB/1000 SQ FT |
| LIQUID LIME | 1 GAL/800 GAL |
| TANK TACKIFIER | 35 LB/800 GAL |
| TANK FIBER MULCH | 30 LB/1000 SQ FT |
 - GERMINATION RATES WILL VARY AS A TIME OF YEAR FOR SOWING. CONTRACTOR TO IRRIGATE SEEDED AREA UNTIL AN ACCEPTABLE STAND OF COVER IS ESTABLISHED BY FENDER.



BOHLER

SITE CIVIL AND CONSULTING ENGINEERING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

| REV | DATE | COMMENT | DRAWN BY | CHECKED BY |
|-----|----------|---------------------------------|----------|------------|
| 1 | 03/23/22 | NOTICE OF INTENT SUBMISSION | NPD | RMM |
| 2 | 05/09/22 | PER TOWN / P/ER REVIEW COMMENTS | NPD | RMM |
| 3 | 05/17/22 | PER P/ER REVIEW COMMENTS | NPD | RMM |

811

Know what's below.
Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

PERMIT SET

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROPOSED SITE PLAN DOCUMENTS

FOR

TMC HOLDINGS & DEVELOPMENT 2, LLC

PROPOSED INDUSTRIAL DEVELOPMENT
UNION STREET BUSINESS PARK II
MAP #314, BLOCK #20, LOT #1
839 UPPER UNION STREET
CITY OF FRANKLIN
NORFOLK COUNTY, MA

BOHLER

352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9900
www.BohlerEngineering.com

PROFESSIONAL SEAL
MASSACHUSETTS REGISTERED PROFESSIONAL ENGINEER
No. 0171
BOHLER, JOHN P.

SHEET TITLE:
LANDSCAPE NOTES AND DETAILS

SHEET NUMBER:
C-702

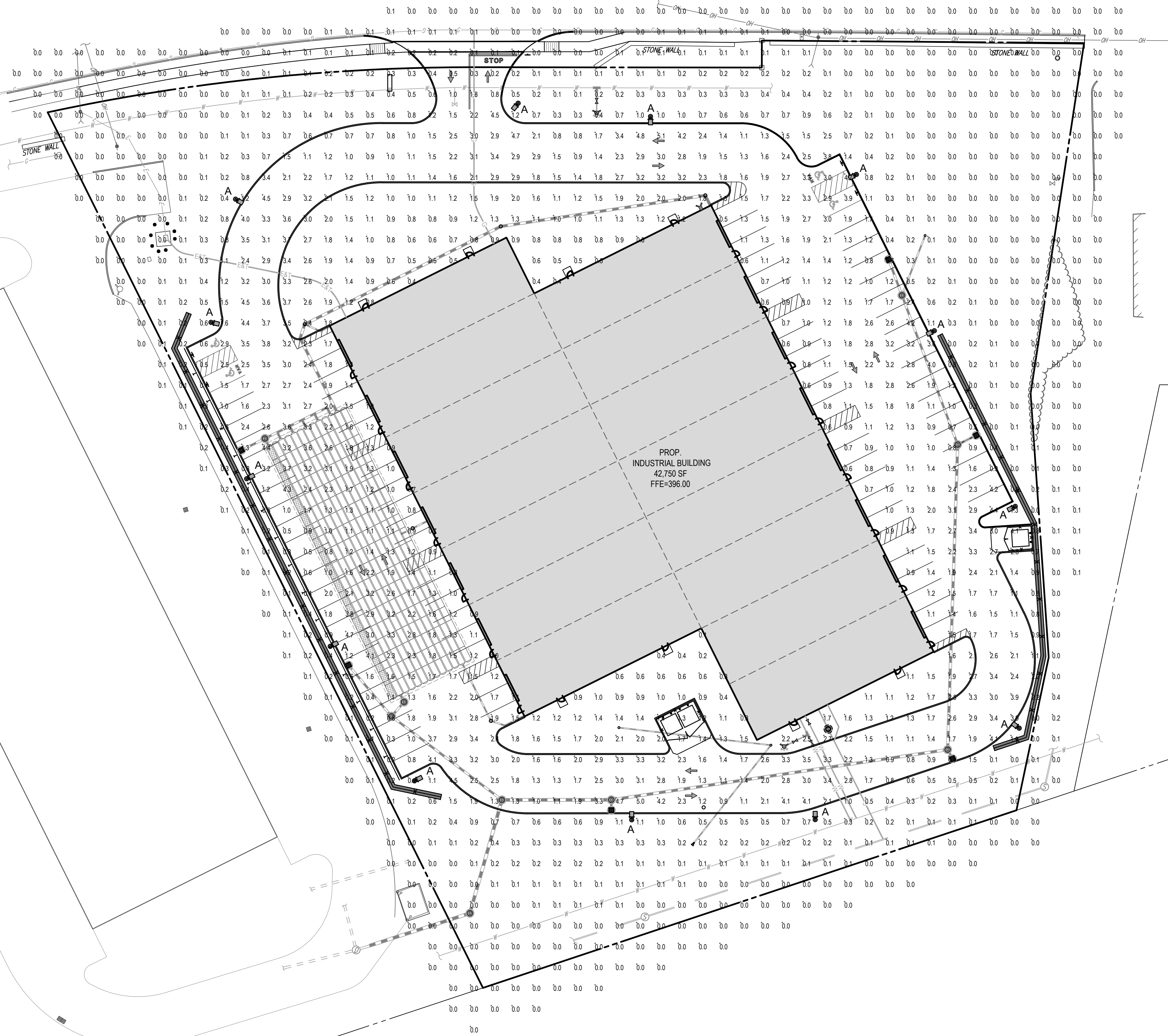
REVISION 3 - 05/17/22

BOHLERENGINEERING.COM\PROJECTS\2021\1907\DRAWINGS\PLAN SETS\REV\W211097-LAND-314-01-01-01-LA-01-01-C-702-LAND-01



UPPER UNION STREET (PUBLIC-VARIABLE WIDTH)

TWO WAY TRAFFIC
(ASPHALT ROADWAY)



LIGHTING NOTES

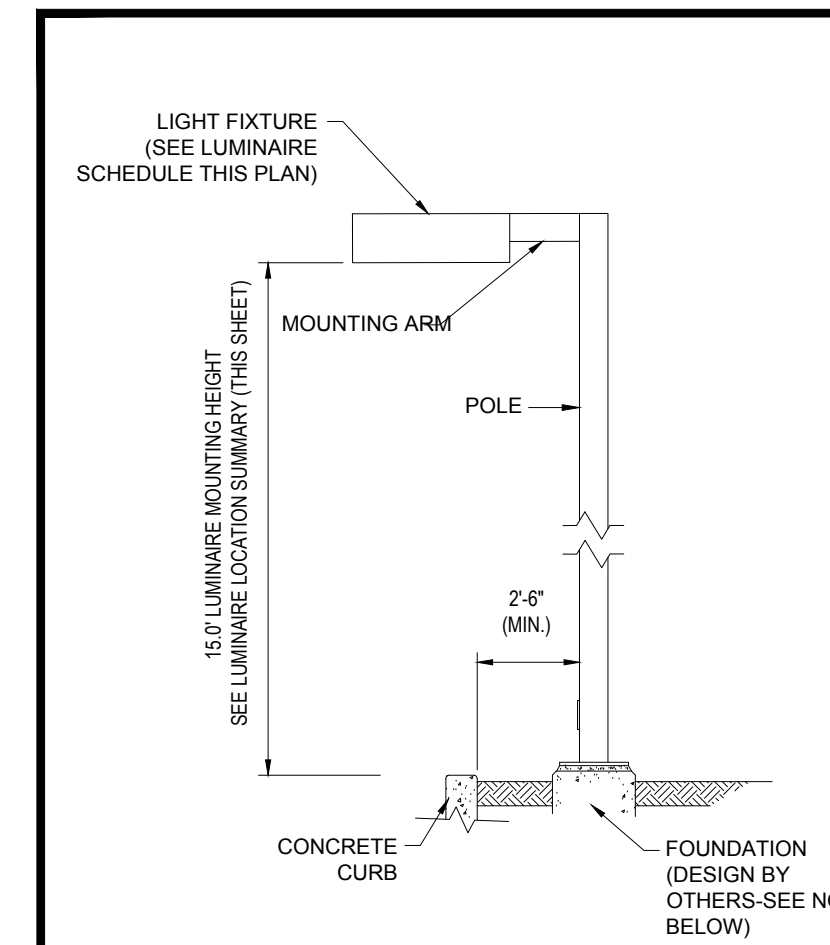
- THIS LIGHTING PLAN DEPICTS PROPOSED SUSTAINED ILLUMINATION LEVELS CALCULATED USING DATA PROVIDED BY THE NOTED MANUFACTURER(S). ACTUAL SUSTAINED SITE ILLUMINATION LEVELS AND PERFORMANCE OF LUMINAIRES MAY VARY DUE TO VARIATIONS IN WEATHER, ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, THE SERVICE LIFE OF EQUIPMENT AND LUMINAIRES AND OTHER RELATED VARIABLE FIELD CONDITIONS.
- THE LIGHT LOSS FACTORS USED IN THESE LIGHTING CALCULATIONS ARE 0.90 FOR ALL LED LUMINAIRES, 0.80 FOR ALL HIGH PRESSURE SODIUM LUMINAIRES OR 0.72 FOR ALL METAL HALIDE LUMINAIRES UNLESS OTHERWISE SPECIFIED. THESE FACTORS ARE INDICATIVE OF TYPICAL LIGHTING INDUSTRY MODELING STANDARDS.
- THE LIGHTING VALUES AND CALCULATION POINTS DEPICTED ON THIS PLAN ARE ALL ANALYZED ON A HORIZONTAL GEOMETRIC PLANE AT ELEVATION ZERO (GROUND LEVEL) UNLESS OTHERWISE NOTED. THE VALUES DEPICTED ON THIS PLAN ARE IN FOOT-CANDLES.
- THE LUMINAIRES, LAMPS AND LENSES MUST BE REGULARLY INSPECTED/MAINTAINED TO ENSURE THAT THEY FUNCTION PROPERLY. THIS WORK SHOULD INCLUDE, BUT NOT BE LIMITED TO, FREQUENT VISUAL INSPECTIONS, CLEANING OF LENSES, AND RELAMPING IF NECESSARY AT LEAST ONCE EVERY SIX (6) MONTHS. FAILURE TO FOLLOW THE ABOVE STEPS COULD CAUSE THE LUMINAIRES, LAMPS AND LENSES TO FAIL PROPERLY TO FUNCTION.
- WHERE APPLICABLE, THE EXISTING CONDITION LIGHT LEVELS ILLUSTRATED ARE REPRESENTATIVE OF AN APPROXIMATION UTILIZING LABORATORY DATA FOR SIMILAR FIXTURES, UNLESS ACTUAL FIELD MEASUREMENTS ARE TAKEN WITH A LIGHT METER AND ARE, CONSEQUENTLY, APPROXIMATIONS ONLY. DUE TO FACTORS SUCH AS FIXTURE MAINTENANCE, EQUIPMENT TOLERANCES, WEATHER CONDITIONS, ETC., ACTUAL LIGHT LEVELS MAY DIFFER. EXISTING LIGHT LEVELS DEPICTED ON THIS PLAN SHOULD BE CONSIDERED APPROXIMATE.
- THIS LIGHTING PLAN IS INTENDED TO SHOW THE LOCATIONS AND TYPE OF LUMINAIRES ONLY. POWER SYSTEM, CONDUITS, WIRING, VOLTAGES AND OTHER ELECTRICAL COMPONENTS ARE THE RESPONSIBILITY OF THE ARCHITECT, MEP AND/OR LIGHTING CONTRACTOR, AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. THESE ITEMS MUST BE INSTALLED AS REQUIRED BY STATE AND LOCAL REGULATIONS. LIGHT POLE BASES ARE THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER, AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONTRACTOR IS RESPONSIBLE FOR INSTALLING LIGHTING FIXTURES AND APPURTENANCES IN ACCORDANCE WITH ALL APPLICABLE BUILDING AND ELECTRICAL CODES AND ALL OTHER APPLICABLE RULES, REGULATIONS, LAWS AND STATUTES.
- CONTRACTOR MUST BRING TO DESIGNER'S ATTENTION, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, ANY LIGHT LOCATIONS THAT CONFLICT WITH DRAINAGE, UTILITIES, OR OTHER STRUCTURES.
- IT IS THE LIGHTING CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE PROJECT ARCHITECT OR OWNER REGARDING THE POWER SOURCE(S) FROM WITHIN THE BUILDING, AND TIMING DEVICES NECESSARY TO MEET THE DESIGN INTENT.
- THE LIGHTING CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CONTRACTOR REQUIREMENTS INDICATED IN THE SITE PLAN, INCLUDING BUT NOT LIMITED TO, GENERAL NOTES, GRADING AND UTILITY NOTES, SITE SAFETY, AND ALL GOVERNMENTAL RULES, LAWS, ORDINANCES, REGULATIONS AND THE LIKE.
- THE CONTRACTOR MUST VERIFY THAT INSTALLATION OF LIGHTING FIXTURES COMPLIES WITH THE REQUIREMENTS FOR SEPARATION FROM OVERHEAD ELECTRICAL WIRES PER STATE REGULATIONS.
- UPON OWNER'S ACCEPTANCE OF THE COMPLETED PROJECT, THE OWNER SHALL BE RESPONSIBLE FOR ALL MAINTENANCE, SERVICING, REPAIR AND INSPECTION OF THE LIGHTING SYSTEM AND ALL OF ITS COMPONENTS AND RELATED SYSTEMS, TO ENSURE ADEQUATE LIGHTING LEVELS ARE PRESENT AND FUNCTIONING AT ALL TIMES.

NUMERIC SUMMARY

| LABEL | CALCTYPE | UNITS | AVG | MAX | MIN | AVG/MIN | MAX/MIN |
|---------------|-------------|-------|------|-----|-----|---------|---------|
| FRONT PARKING | ILLUMINANCE | FC | 1.81 | 5.1 | 0.1 | 18.10 | 51.00 |

LUMINAIRE SCHEDULE

| SYMBOL | QTY | ARRANGEMENT | LUMENS | LLF | DESCRIPTION |
|--------|-----|-------------|--------|------|---|
| □ A | 13 | SINGLE | 17230 | 0.90 | LSI LIGHTING FORWARD THROW LED AREA LIGHT WITH SHIELD MOUNTED @ 25° XGBM-FT-LED-SS-NW-HSS |



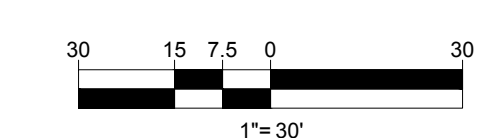
AREA LIGHT DETAIL

N.T.S.

NOTE: THIS DETAIL IS FOR BID AND BUDGETARY PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING A FOUNDATION DESIGN PREPARED BY A QUALIFIED STRUCTURAL ENGINEER CONSIDERING LIGHTING MANUFACTURER REQUIREMENTS, LOCAL WIND LOADS AND SITE SPECIFIC SOIL PARAMETERS.

- SOME SITE CONDITIONS AND/OR LOCATIONS MAY REQUIRE VIBRATION DAMPENING MEASURES AS DETERMINED BY A STRUCTURAL ENGINEER.
- THE STRUCTURAL ENGINEER SHALL BE NOTIFIED OF THE INTENT TO MOUNT ANYTHING TO THE POLE, ASIDE FROM THE LIGHT FIXTURES, INCLUDING BUT NOT LIMITED TO CAMERAS, BANNERS, FLAGS, SIGNAGE, ETC. AS IT WILL IMPACT THE POLE AND FOUNDATION DESIGN.

THIS PLAN TO BE UTILIZED FOR LIGHTING PURPOSES ONLY



BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
TRANSPORTATION SERVICES

REVISIONS

| REV | DATE | COMMENT | DRAWN BY |
|-----|----------|---------------------------------|----------|
| 1 | 03/23/22 | NOTICE OF INTENT SUBMISSION | NPD |
| 2 | 05/09/22 | PER TOWN / PEER REVIEW COMMENTS | RMM |
| 3 | 05/17/22 | PER PEER REVIEW COMMENTS | RMM |

811
Know what's below.
Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

PERMIT SET

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: W211057
DRAWN BY: NPD
CHECKED BY: RMM
DATE: 02/01/2022
CAD ID: W211057-CVL-3

PROPOSED SITE PLAN DOCUMENTS

FOR

TMC HOLDINGS & DEVELOPMENT 2, LLC

PROPOSED INDUSTRIAL DEVELOPMENT
UNION STREET BUSINESS PARK II
MAP #314, BLOCK #20, LOT #1
839 UPPER UNION STREET
CITY OF FRANKLIN
NORFOLK COUNTY, MA

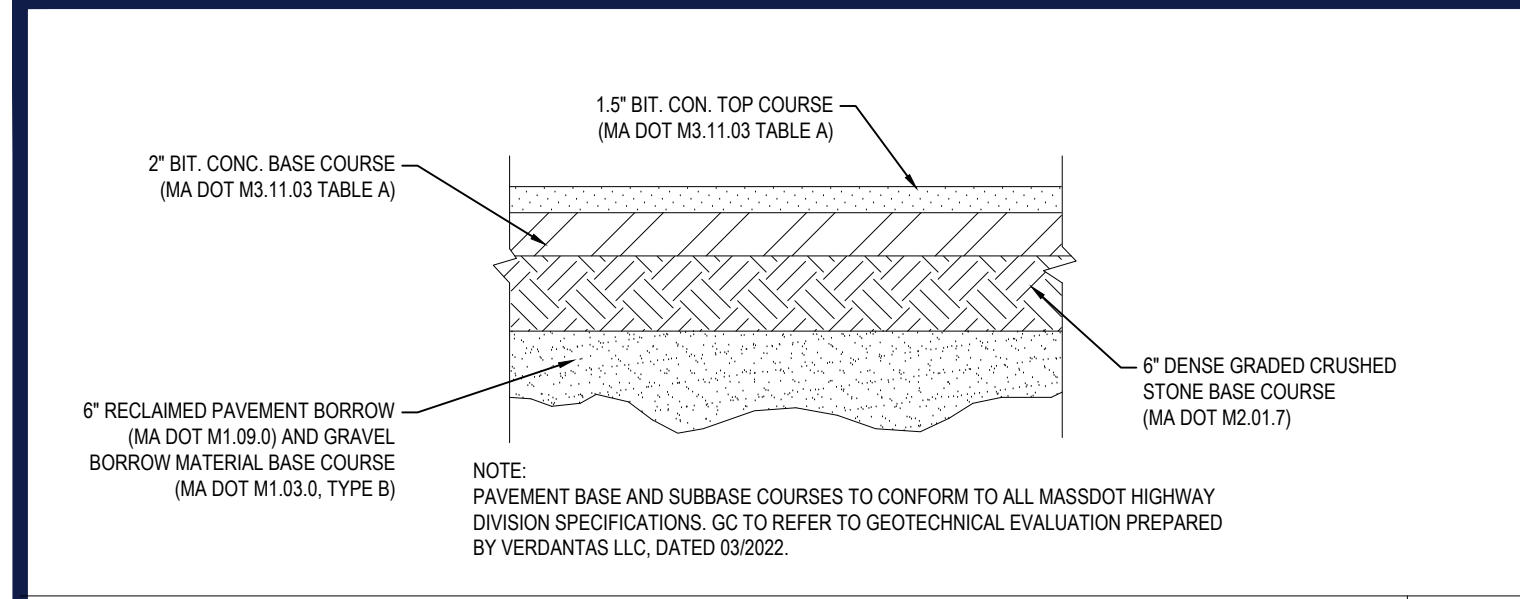
BOHLER
352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9900
www.BohlerEngineering.com

SHEET TITLE:
LIGHTING PLAN

SHEET NUMBER:
C-703

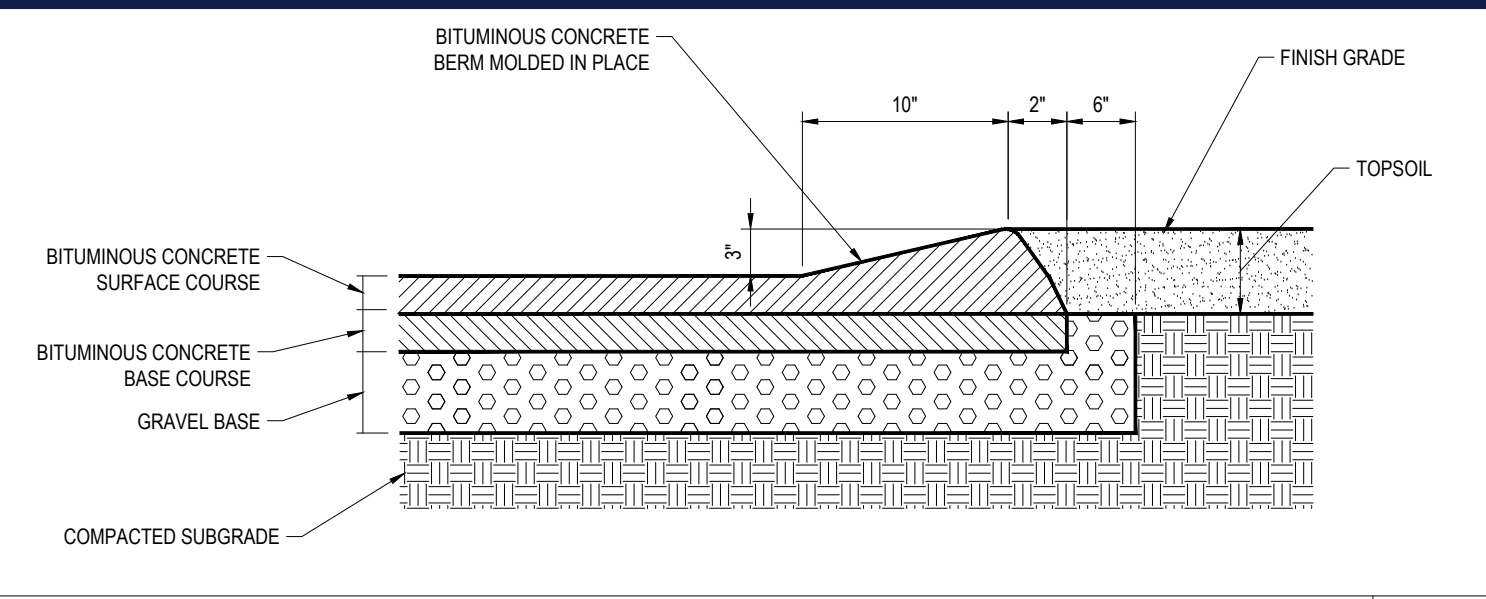
REVISION 3 - 05/17/22

I:\BOHLER\NET\SHARES\MA\PROJECTS\21\W211057\DRAWINGS\PLAN SET\REV\W211057-CVL-3.dwg - LAYOUT: C-703.LOFT



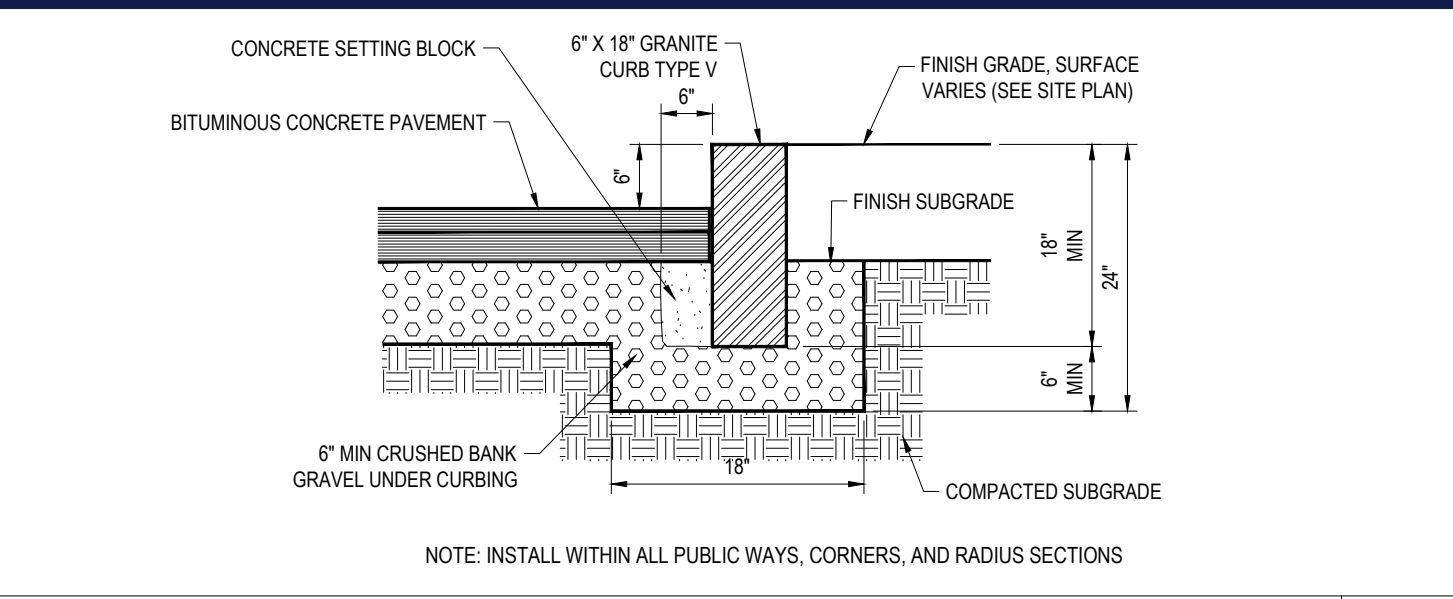
TYPICAL PAVEMENT SECTION FOR PASSENGER CAR PARKING AREA

N.T.S.



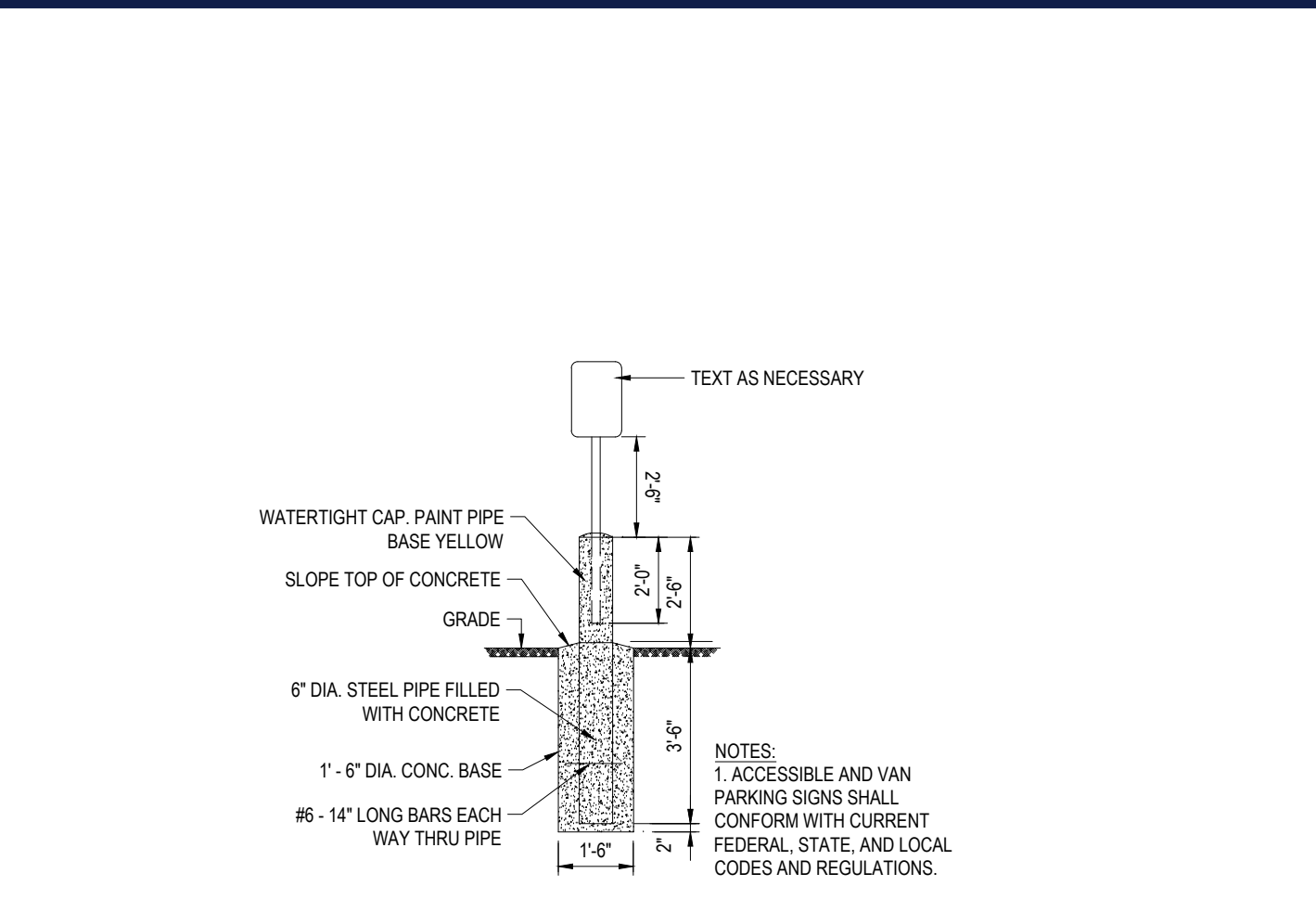
CAPE COD BERM

N.T.S.



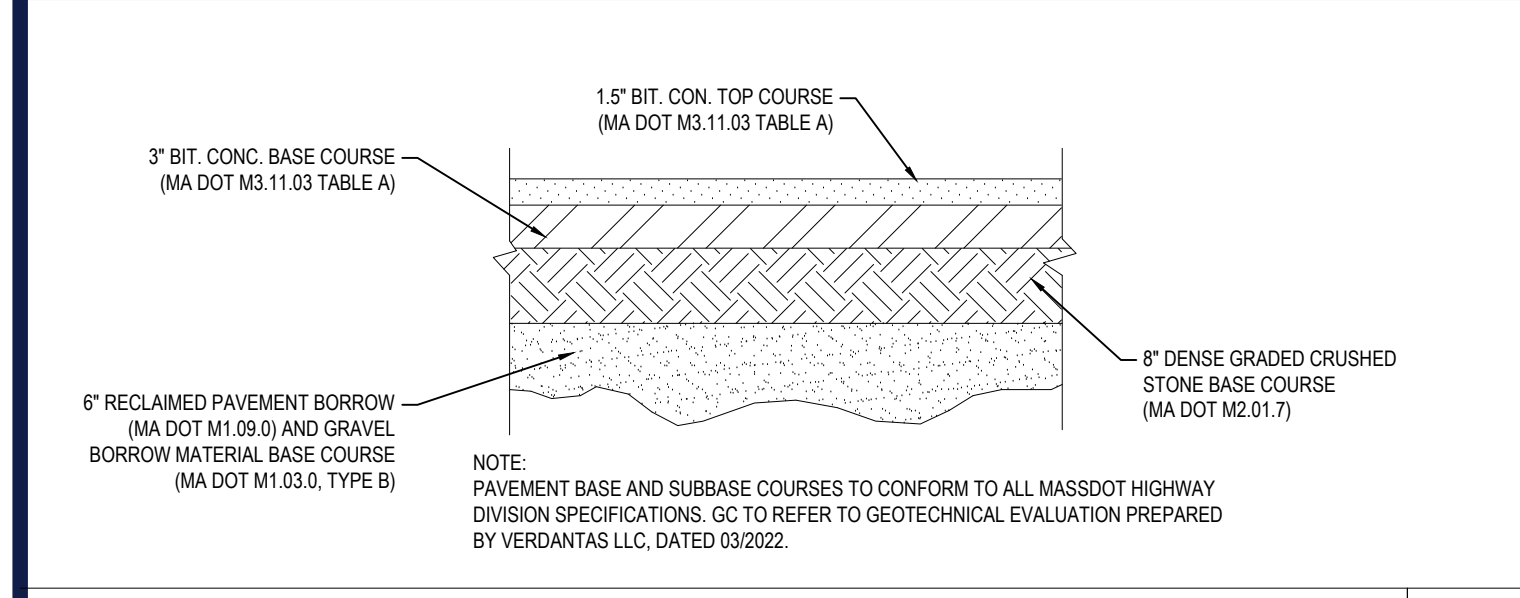
VERTICAL GRANITE CURB

N.T.S.



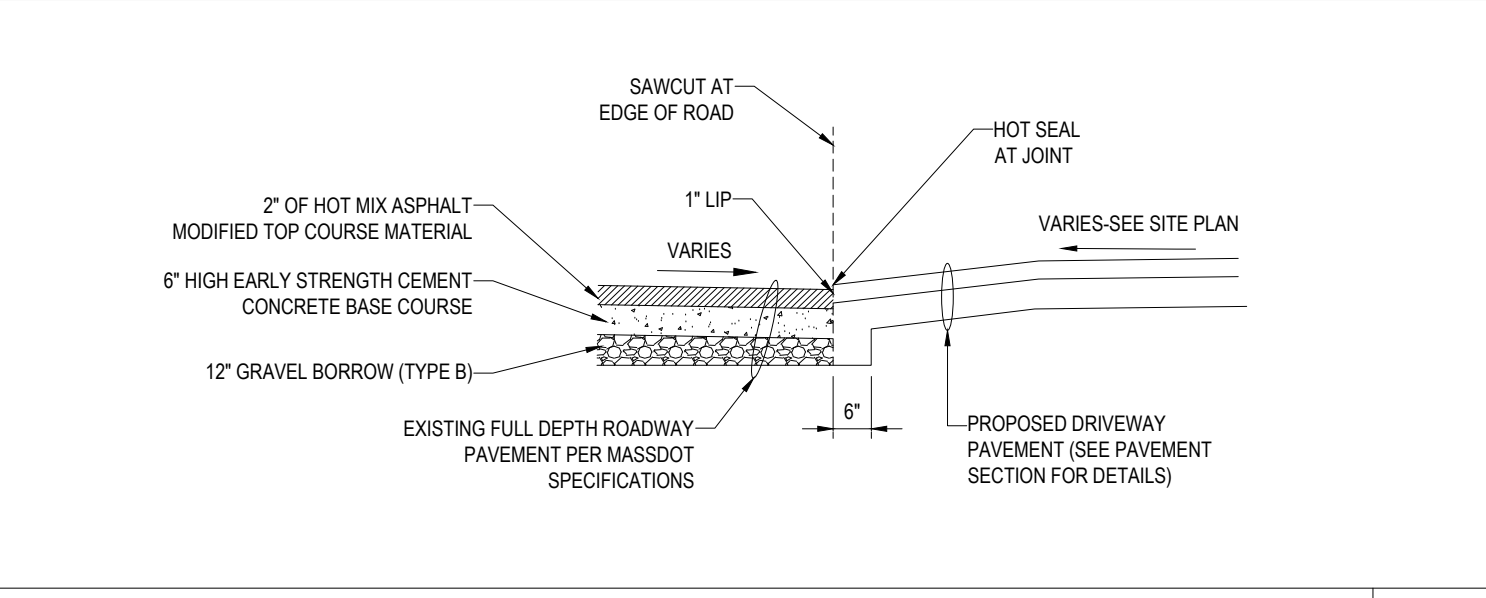
SIGN BOLLARD

N.T.S.



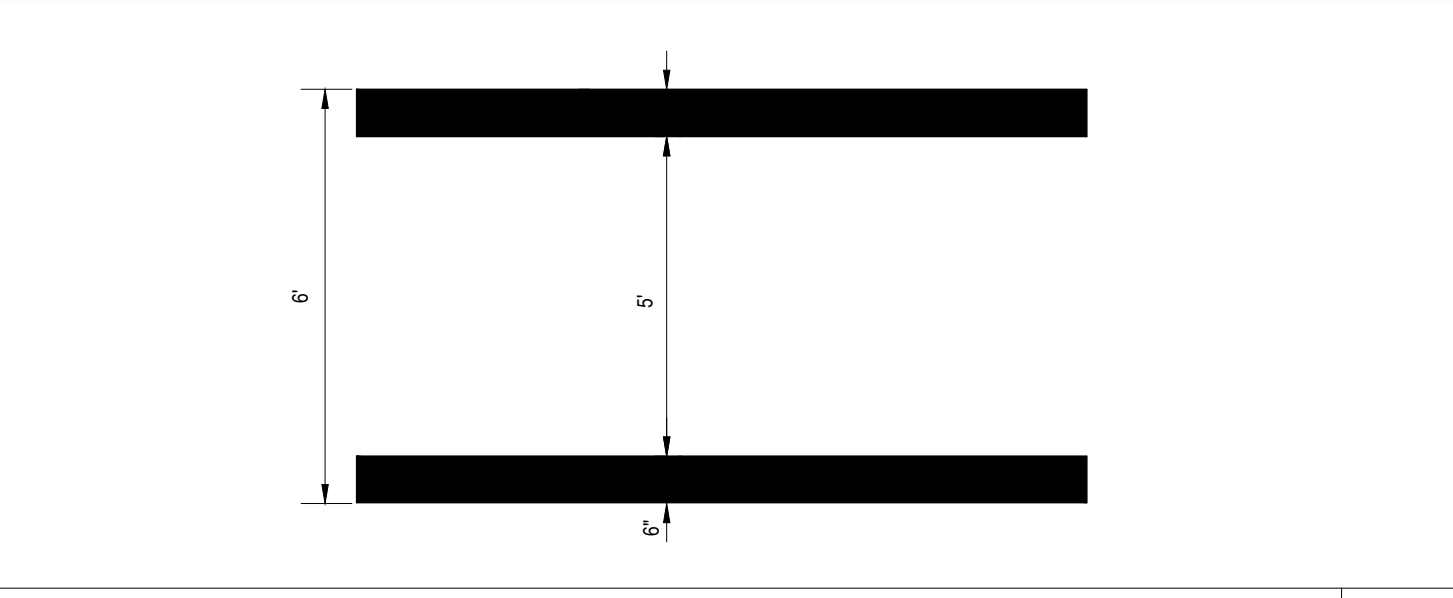
TYPICAL PAVEMENT SECTION FOR PRIMARY ENTRANCE DRIVES

N.T.S.



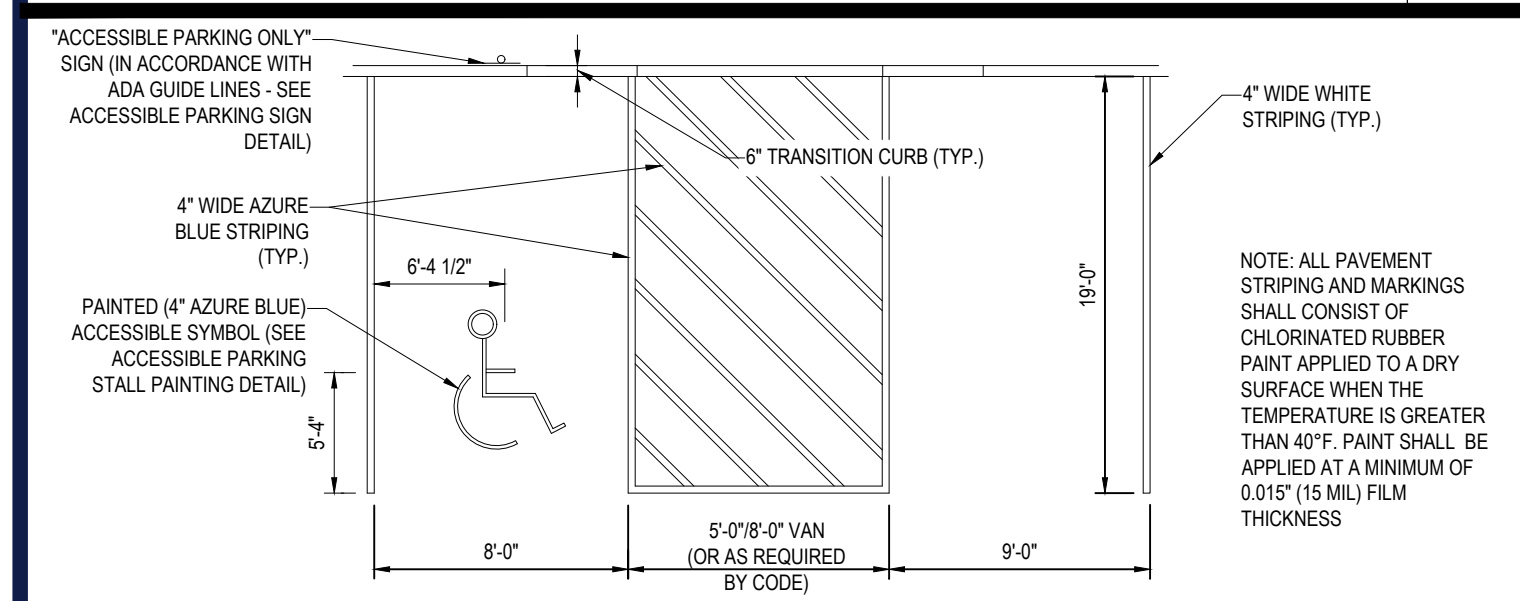
DRIVEWAY CONSTRUCTION

N.T.S.



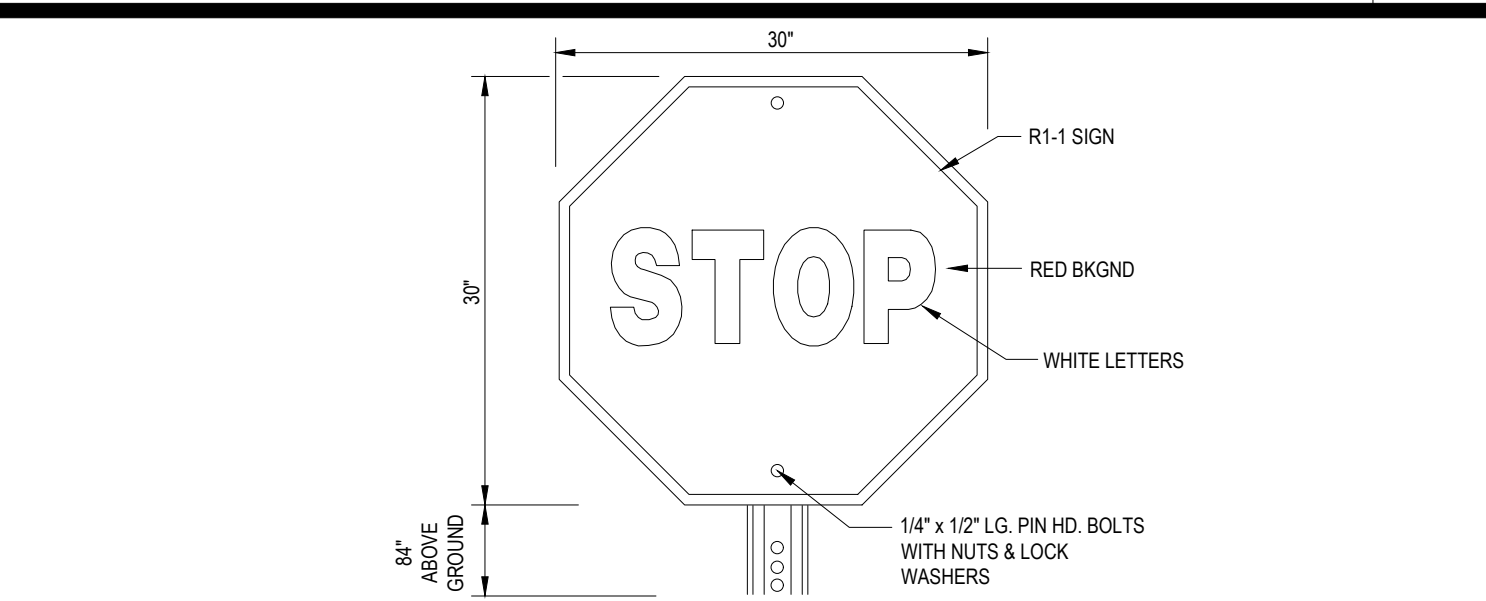
CROSSWALK

N.T.S.



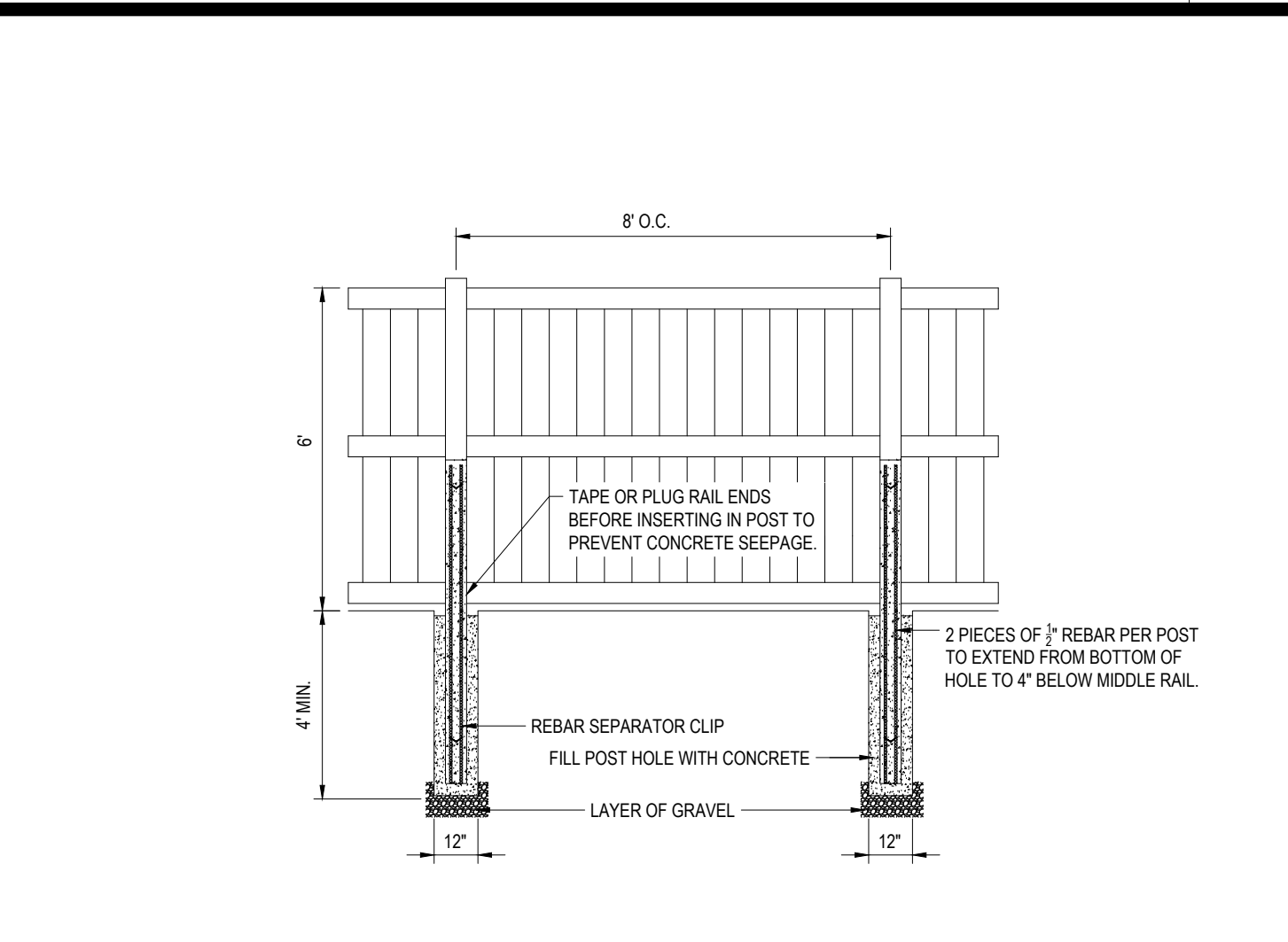
ACCESSIBLE STALL MARKINGS & PARKING LOT STRIPING

N.T.S.



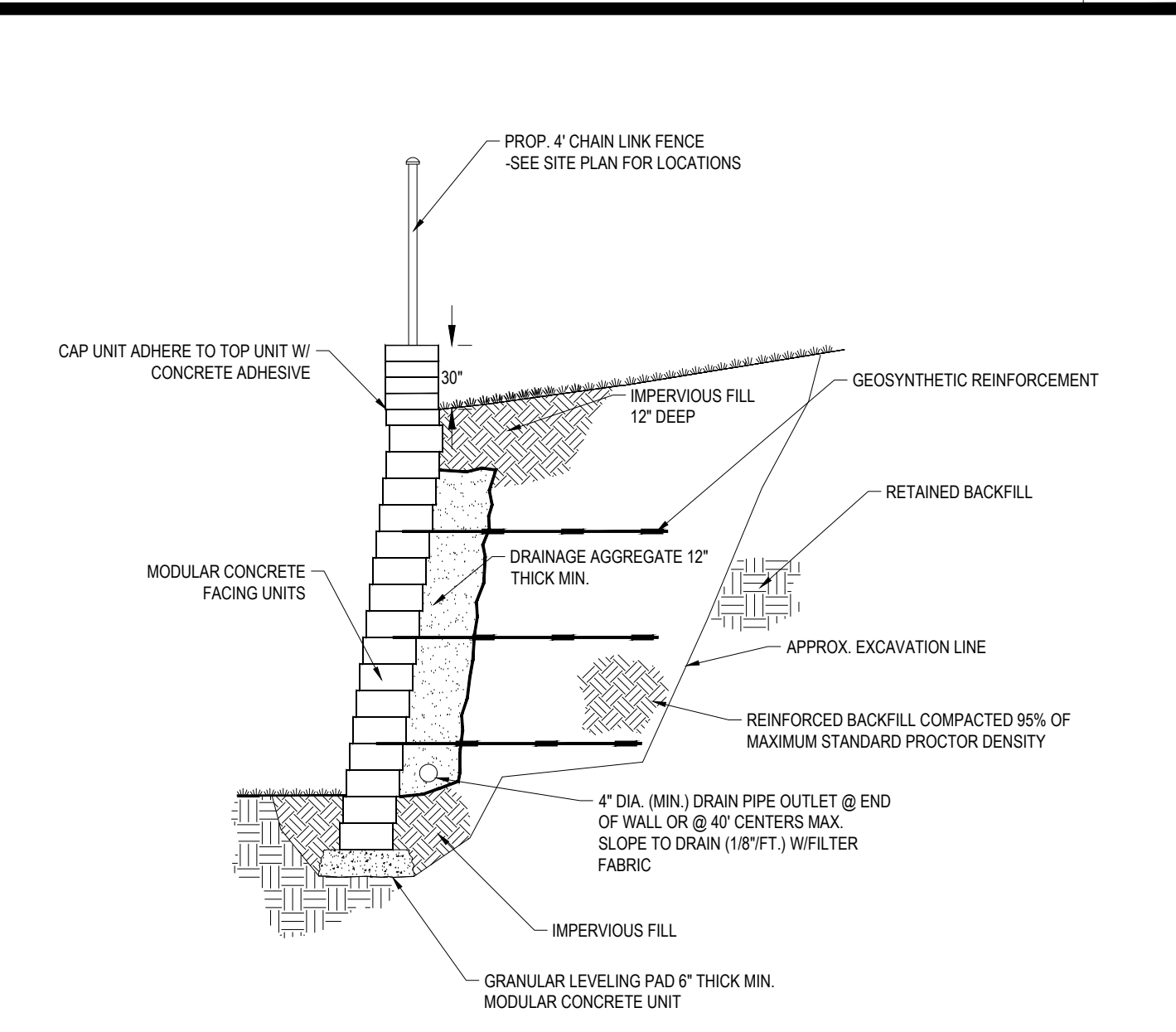
\"/>

N.T.S.



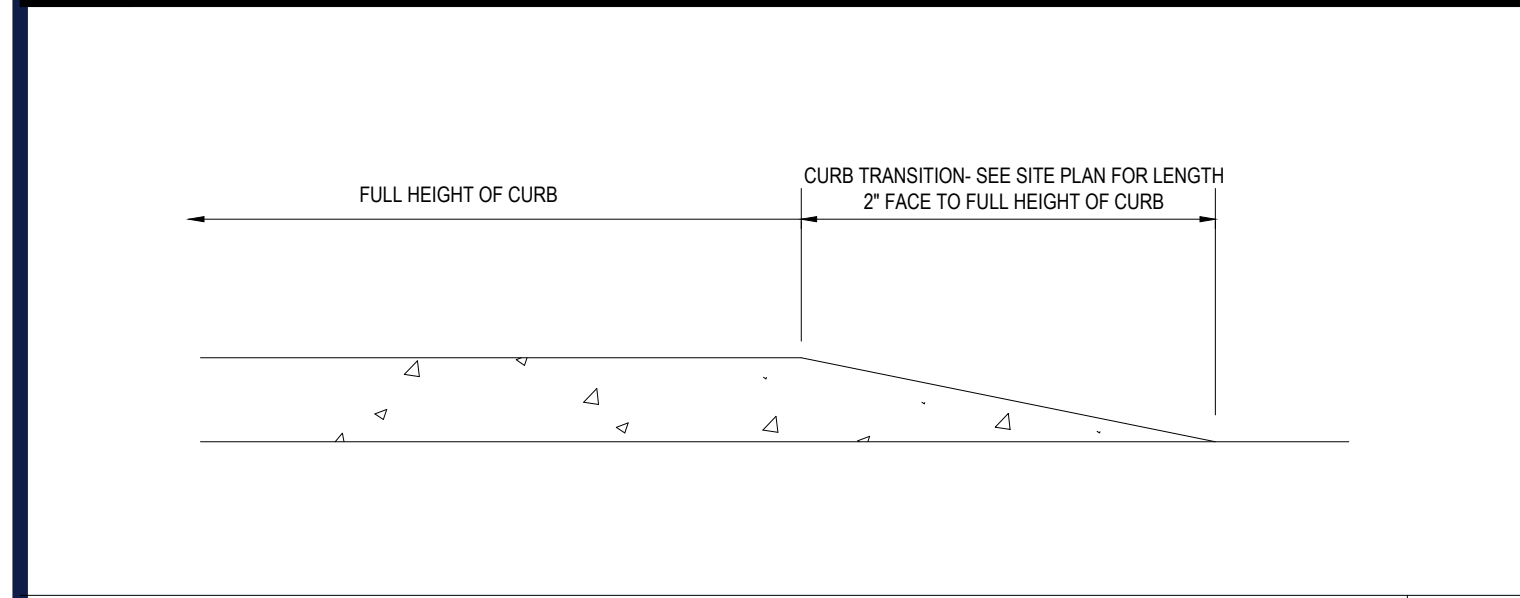
VINYL FENCE

N.T.S.



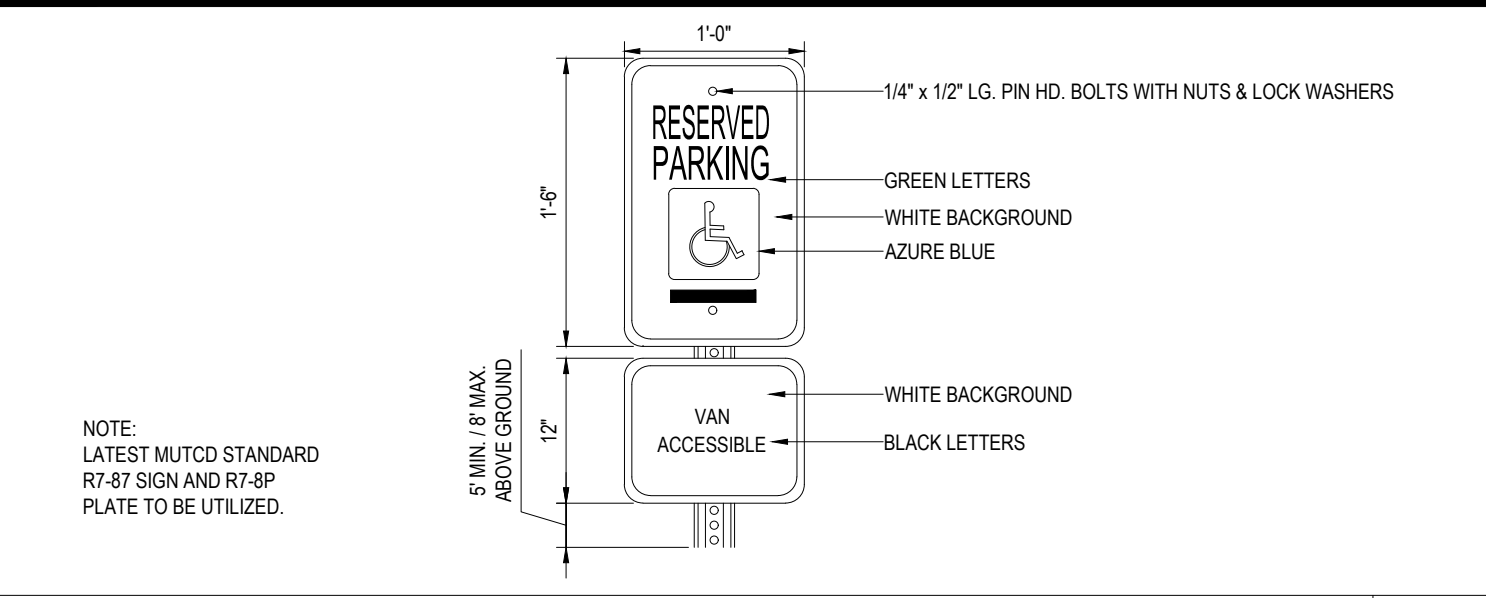
RETAINING WALL

N.T.S.



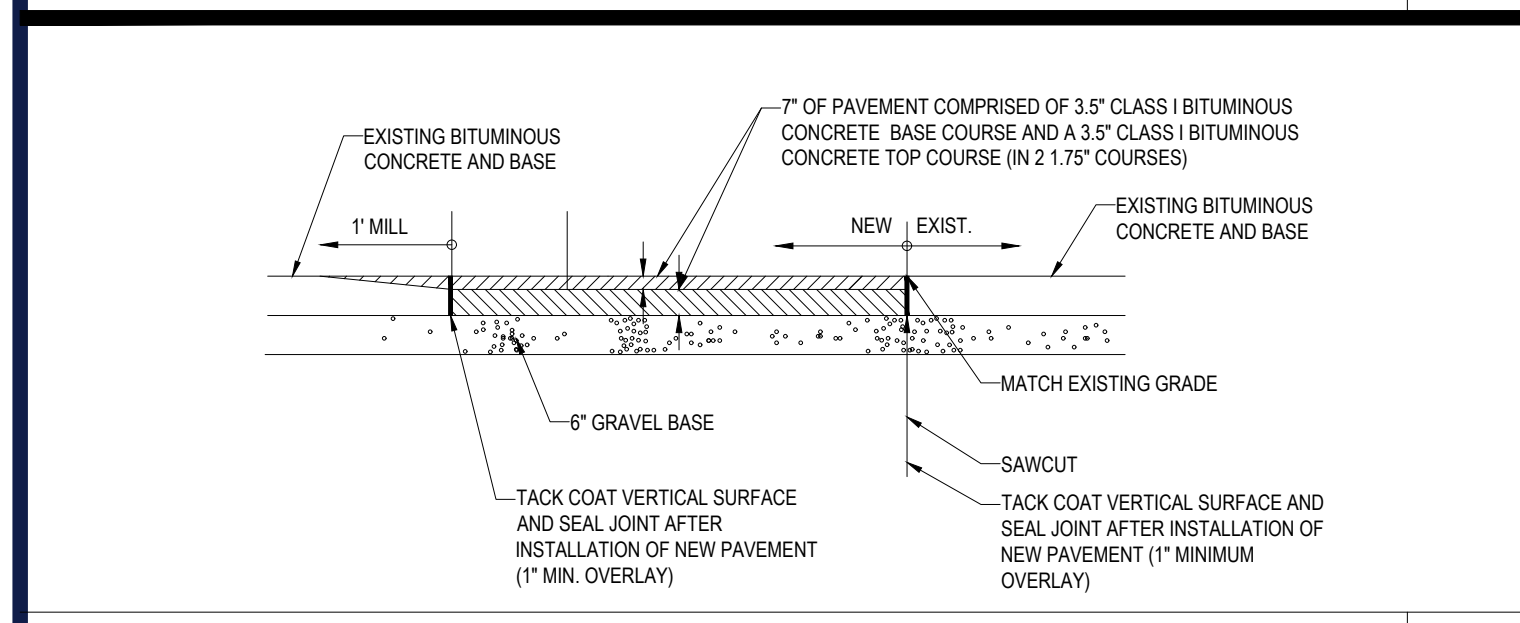
TRANSITION CURB

N.T.S.



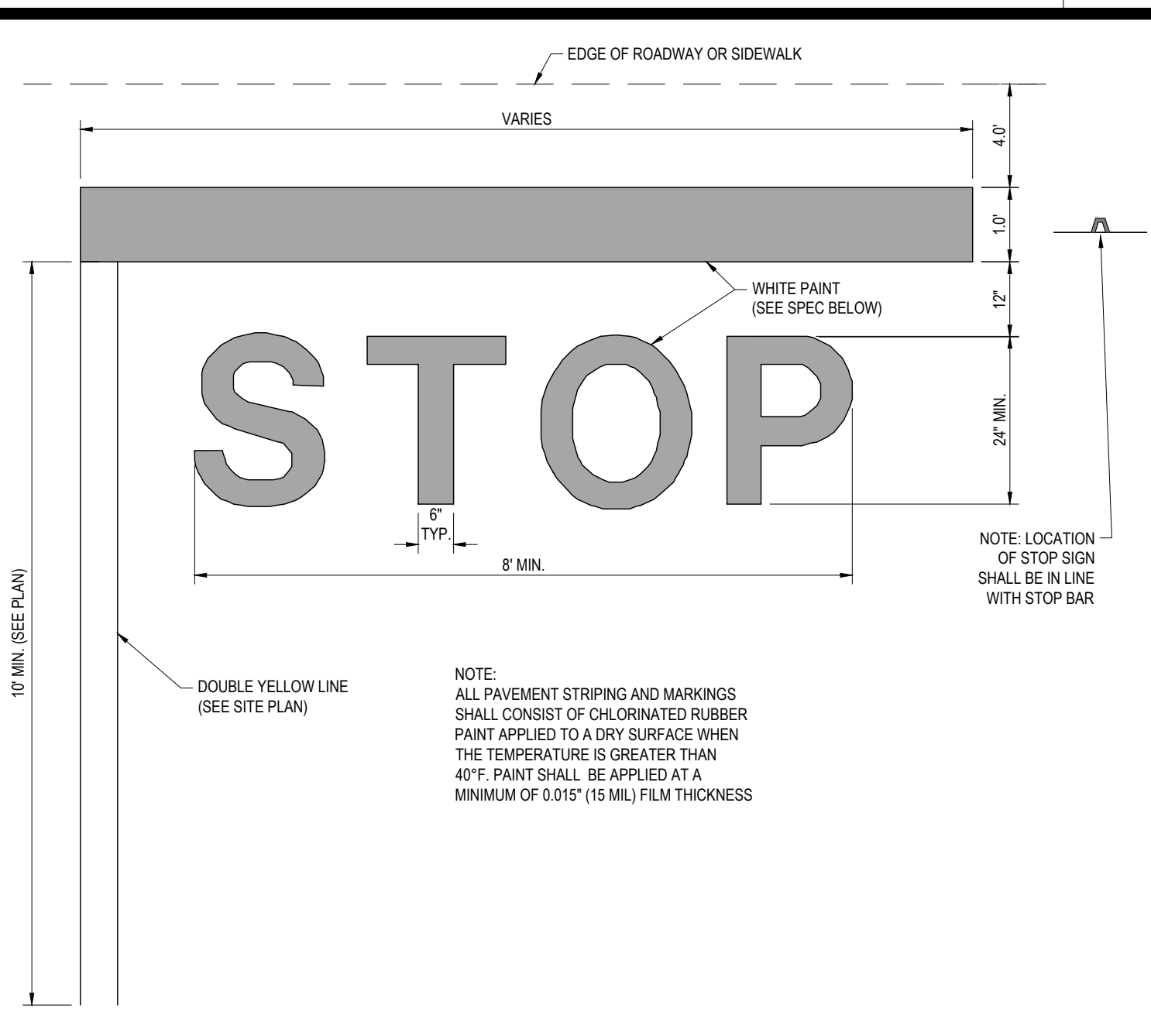
ACCESSIBLE PARKING SIGN

N.T.S.



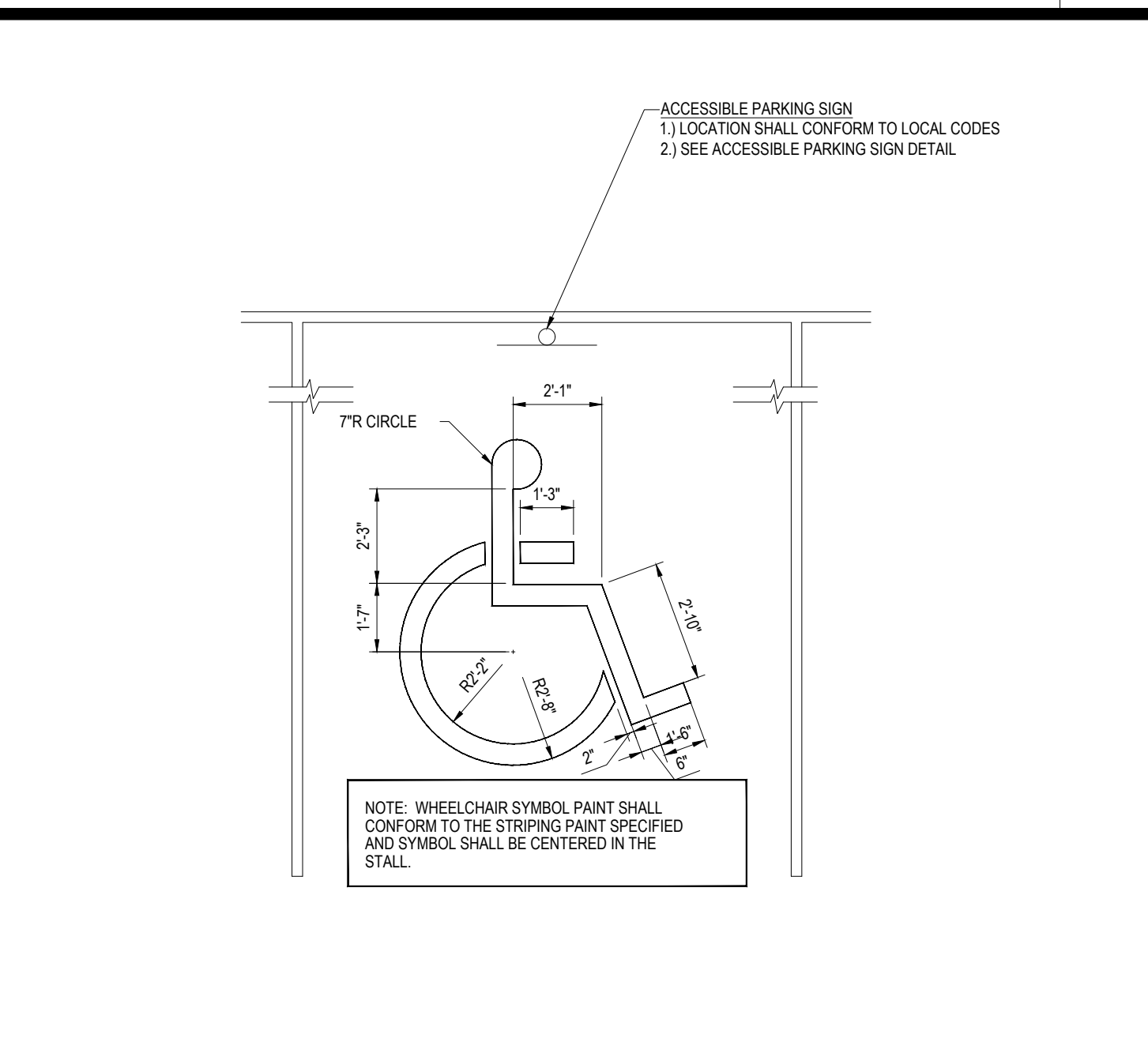
ROADWAY PATCHING

N.T.S.



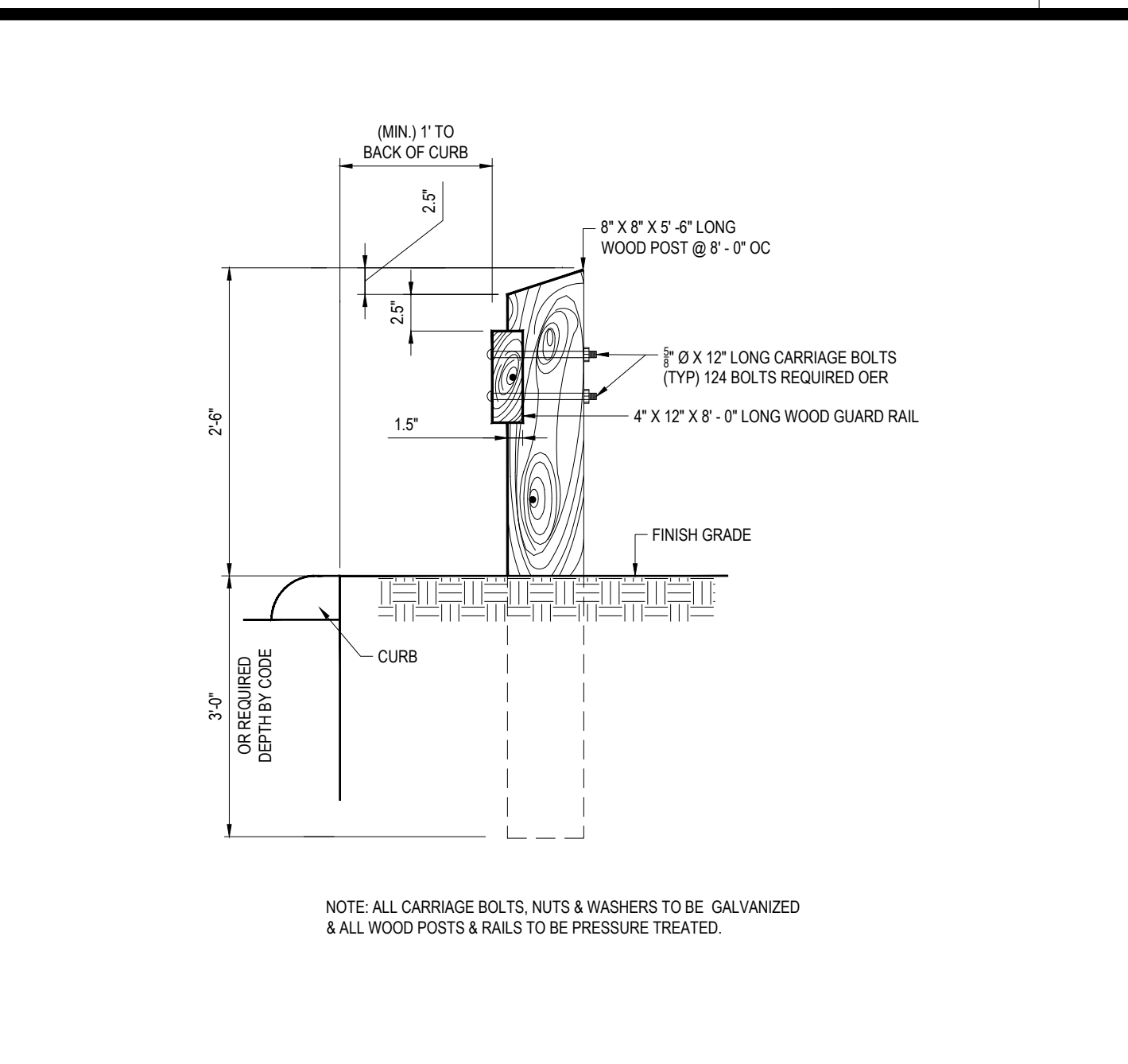
\"/>

N.T.S.



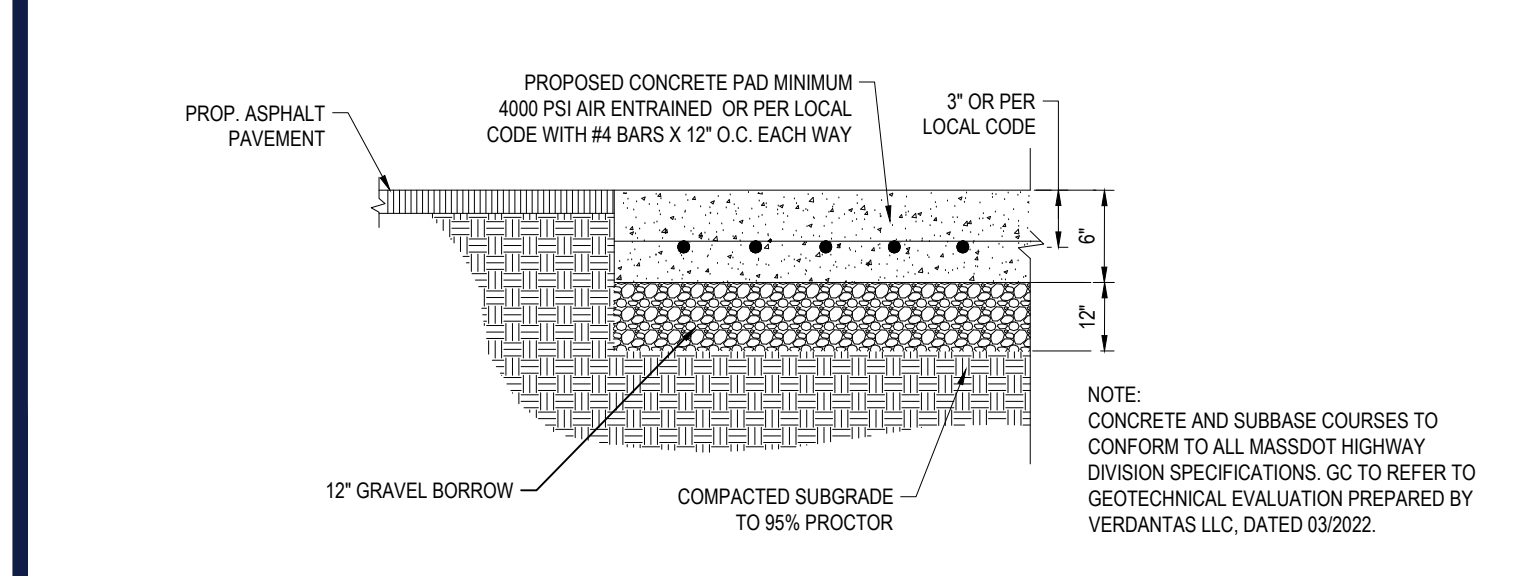
ACCESSIBLE PARKING STALL PAINTING

N.T.S.



WOOD GUIDERAIL

N.T.S.



CONCRETE PAD

N.T.S.

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

| REV | DATE | COMMENT | CHECKED BY |
|-----|----------|---------------------------------|------------|
| 1 | 03/23/22 | NOTICE OF INTENT SUBMISSION | NPD RMM |
| 2 | 05/06/22 | PER TOWN / PEER REVIEW COMMENTS | NPD RMM |
| 3 | 05/17/22 | PER PEER REVIEW COMMENTS | NPD RMM |

811
Know what's below.
Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

PERMIT SET

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: W211057
DRAWN BY: NPD
CHECKED BY: RMM
DATE: 02/01/2022
CAD ID: W211057-CVL-3

PROPOSED SITE PLAN DOCUMENTS

FOR

TMC HOLDINGS & DEVELOPMENT 2, LLC

PROPOSED INDUSTRIAL DEVELOPMENT
UNION STREET BUSINESS PARK II
MAP #314, BLOCK #20, LOT #1
839 UPPER UNION STREET
CITY OF FRANKLIN
NORFOLK COUNTY, MA

BOHLER
352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9900
www.BohlerEngineering.com

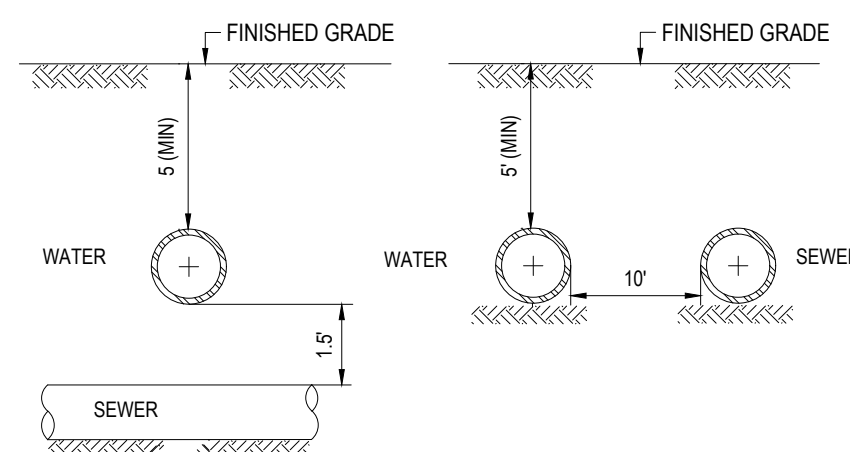
JOSEPH M. BOHLER
CIVIL ENGINEER
No. 41697
REGISTERED PROFESSIONAL ENGINEER

SHEET TITLE:
DETAIL SHEET

SHEET NUMBER:
C-901

REVISION 3 - 05/17/22

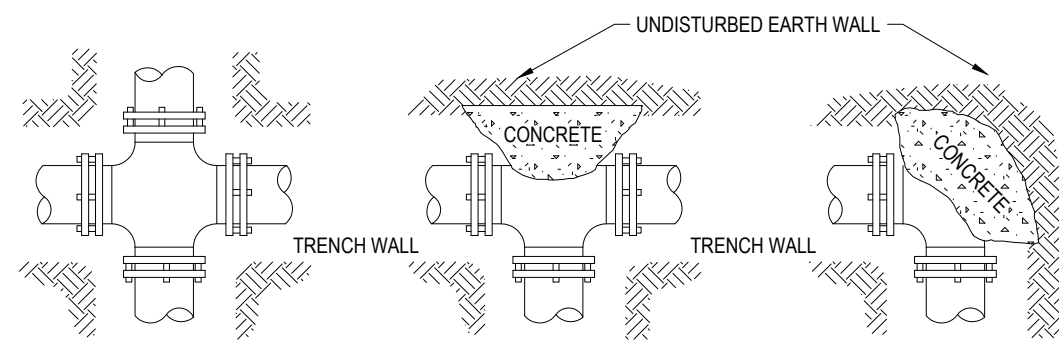
I:\BOHLER\ENG\NET\ISHARE\BMAP\PROJECT\B21\W211057\DRAWINGS\PLAN SET\REV\W211057-CVL-3.dwg - LAYOUT: C-901-DETL



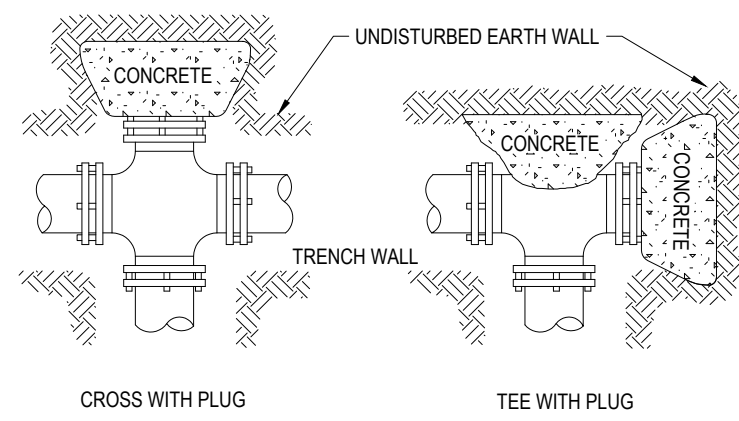
NOTE:
10' HORIZONTAL SEPARATION AND 1.5' VERTICAL SEPARATION SHALL BE PROVIDED BETWEEN WATER AND SEWER AS DEPICTED IN THIS DETAIL OR SEWER SHALL BE ENCASED IN CONCRETE (SEE "CONCRETE ENCASEMENT DETAIL AT UTILITY CROSSING" DETAIL THIS SHEET) IN SECTIONS WHERE SEPARATIONS SHALL NOT BE ACHIEVED.

WATER / SEWER CROSSING

N.T.S.



CROSS TEE 90° BEND (ALL BENDS SIMILAR)



CROSS WITH PLUG TEE WITH PLUG

HORIZONTAL THRUST BLOCKING
(BLOCKING HEIGHT GREATER THAN PIPE O.D.)
(BLOCKING WIDTH BETWEEN 1 & 2 TIMES HEIGHT)

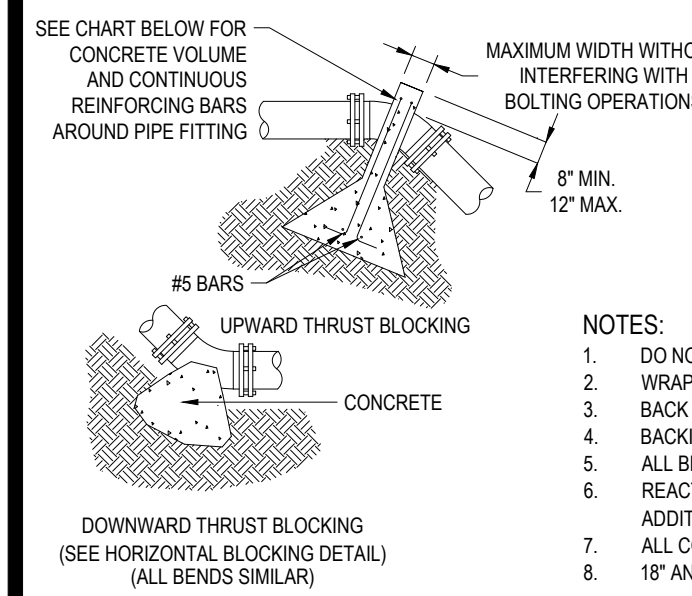
REQUIRED SQ. FT. OF UNDISTURBED EARTH WALL FOR REACTION BACKING

| PIPE SIZE | TEE & PLUG | BENDS | | | |
|-----------|------------|-------|-----|---------|---------|
| | | 90° | 45° | 22 1/2° | 11 1/4° |
| 3" | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 4" | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 6" | 1.5 | 2.0 | 1.0 | 1.0 | 1.0 |
| 8" | 2.5 | 3.5 | 1.8 | 1.0 | 1.0 |
| 10" | 4.0 | 5.5 | 2.8 | 1.5 | 1.0 |
| 12" | 6.0 | 8.0 | 4.0 | 2.0 | 1.5 |

- NOTE:
1. DO NOT COVER BELLS OR FLANGES WITH CONCRETE
2. WRAP ALL FITTINGS WITH VISQUEEN
3. BACK ALL TEES ACCORDING TO SIZE OF BRANCH
4. BACKING FUTURE LINE EXTENSIONS SHALL BE SUCH THAT LATER REMOVAL IS POSSIBLE.
5. ALL BENDS WHERE FITTINGS ARE USED, BOTH HORIZONTAL OR VERTICAL SHALL BE BACKED.
6. REACTION BACKING TABLE IS BASED ON 100 P.S.I. AND SOIL BEARING PRESSURE OF 2000 LB./SQ. FT. ADDITIONAL BACKING MAY BE REQUIRED IN SOME AREAS AS DIRECTED BY ENGINEERS.
7. ALL CONCRETE SHALL BE 2500 P.S.I.
8. 18" AND LARGER REQUIRES SPECIFIC ANTI-THRUST DESIGN.

HORIZONTAL THRUST BLOCKING

N.T.S.



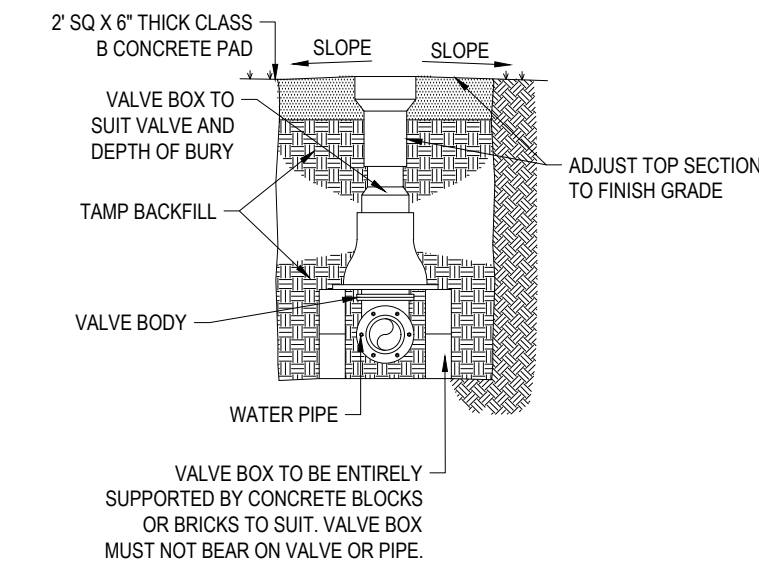
SEE CHART BELOW FOR CONCRETE VOLUME AND CONTINUOUS REINFORCING BARS AROUND PIPE FITTING

| PIPE SIZE | 90° BEND | | | | 45° BEND | | | | 22 1/2° BEND | | | | 11 1/4° BEND | | | |
|-----------|------------|-------------|------|------------|-------------|------|------------|-------------|--------------|------------|-------------|------|--------------|-------------|------|--|
| | CONC. C.Y. | REINF. QTY. | SIZE | CONC. C.Y. | REINF. QTY. | SIZE | CONC. C.Y. | REINF. QTY. | SIZE | CONC. C.Y. | REINF. QTY. | SIZE | CONC. C.Y. | REINF. QTY. | SIZE | |
| 6" | 1.5 | 3 | 5 | 1.5 | 3 | 5 | 1.25 | 2 | 5 | 1.25 | 2 | 5 | 1.5 | 2 | 5 | |
| 8" | 2 | 3 | 5 | 2 | 3 | 5 | 1.5 | 2 | 5 | 1.5 | 2 | 5 | 2 | 3 | 5 | |
| 10" | 2.5 | 3 | 5 | 2.5 | 3 | 5 | 2 | 3 | 5 | 2 | 3 | 5 | 2 | 3 | 5 | |
| 12" | 3 | 3 | 5 | 3 | 3 | 5 | 2.5 | 3 | 5 | 2.5 | 3 | 5 | 3 | 5 | 5 | |

- NOTES:
1. DO NOT COVER BELLS OR FLANGES WITH CONCRETE
2. WRAP ALL FITTINGS WITH VISQUEEN
3. BACK ALL TEES ACCORDING TO SIZE OF BRANCH
4. BACKING FUTURE LINE EXTENSIONS SHALL BE SUCH THAT LATER REMOVAL IS POSSIBLE.
5. ALL BENDS WHERE FITTINGS ARE USED, BOTH HORIZONTAL OR VERTICAL SHALL BE BACKED.
6. REACTION BACKING TABLE IS BASED ON 100 P.S.I. AND SOIL BEARING PRESSURE OF 2000 LB./SQ. FT. ADDITIONAL BACKING MAY BE REQUIRED IN SOME AREAS AS DIRECTED BY ENGINEERS.
7. ALL CONCRETE SHALL BE 2500 P.S.I.
8. 18" AND LARGER REQUIRES SPECIFIC ANTI-THRUST DESIGN.

VERTICAL THRUST BLOCKING

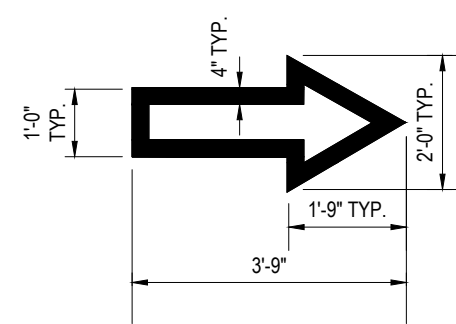
N.T.S.



2" SQ X 6" THICK CLASS B CONCRETE PAD
SLOPE SLOPE
VALVE BOX TO SUIT VALVE AND DEPTH OF BURY
TAMP BACKFILL
VALVE BODY
WATER PIPE
VALVE BOX TO BE ENTIRELY SUPPORTED BY CONCRETE BLOCKS OR BRICKS TO SUIT. VALVE BOX MUST NOT BEAR ON VALVE OR PIPE.
ADJUST TOP SECTION TO FINISH GRADE

GATE VALVE

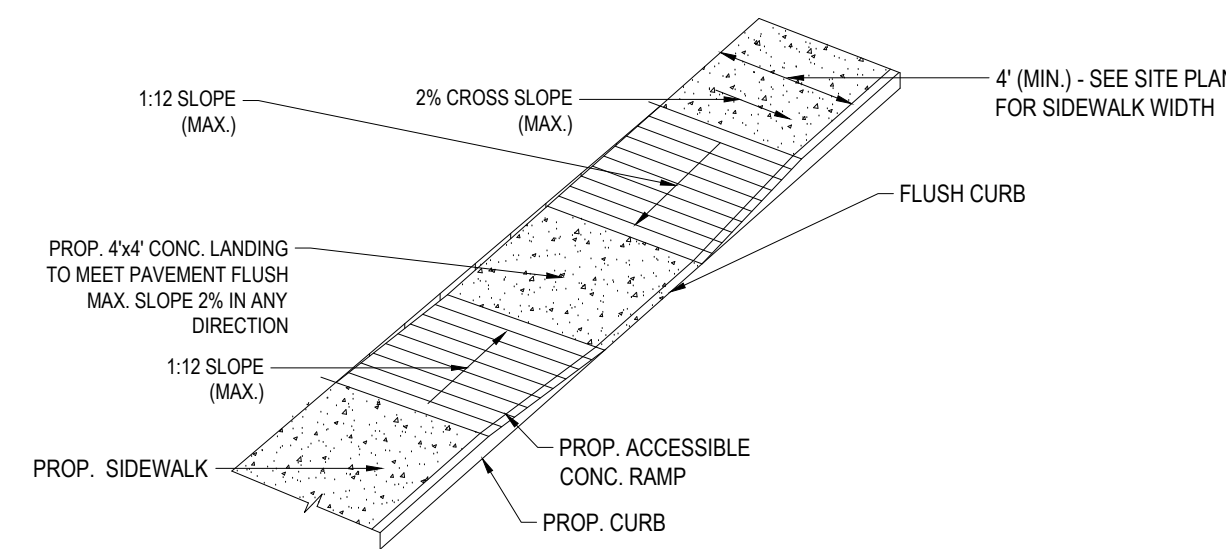
N.T.S.



NOTE: ALL TRAFFIC FLOW ARROWS TO BE REFLECTIVE WHITE PAINT PER SPECS.

TRAFFIC FLOW ARROW

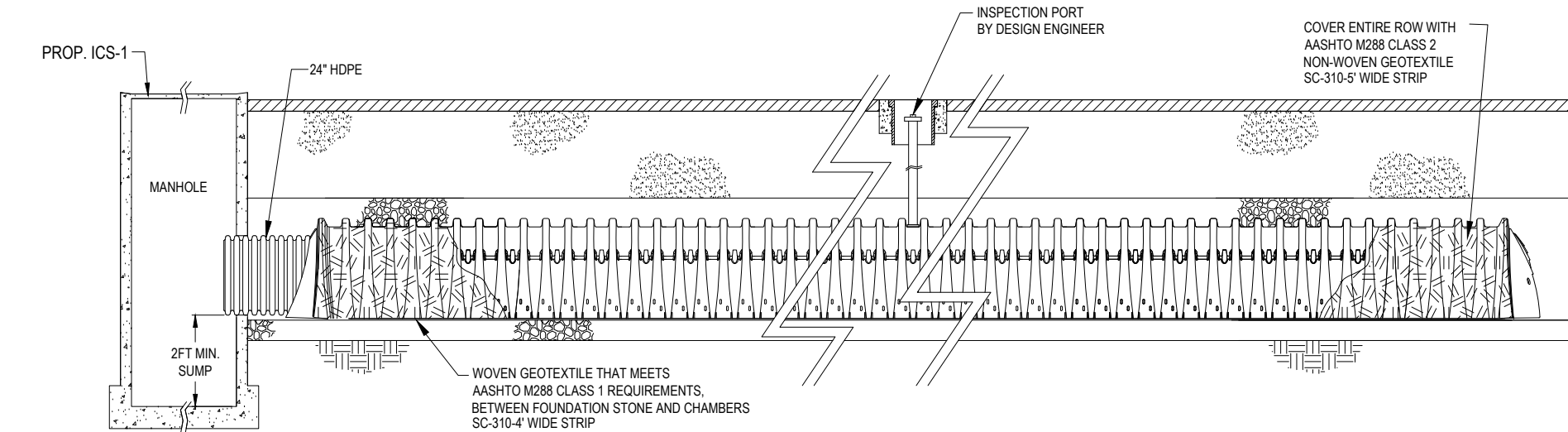
N.T.S.



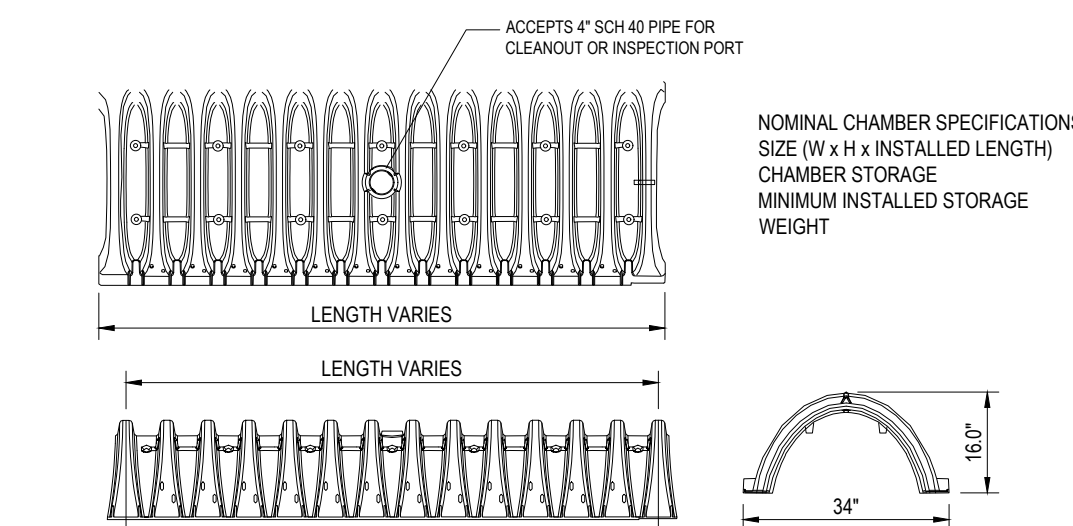
1:12 SLOPE (MAX.)
2% CROSS SLOPE (MAX.)
4" (MIN.) - SEE SITE PLAN FOR SIDEWALK WIDTH
FLUSH CURB
PROP. 4"x4" CONC. LANDING TO MEET PAVEMENT FLUSH MAX. SLOPE 2% IN ANY DIRECTION
1:12 SLOPE (MAX.)
PROP. SIDEWALK
PROP. ACCESSIBLE CONC. RAMP
PROP. CURB

ACCESSIBLE RAMP

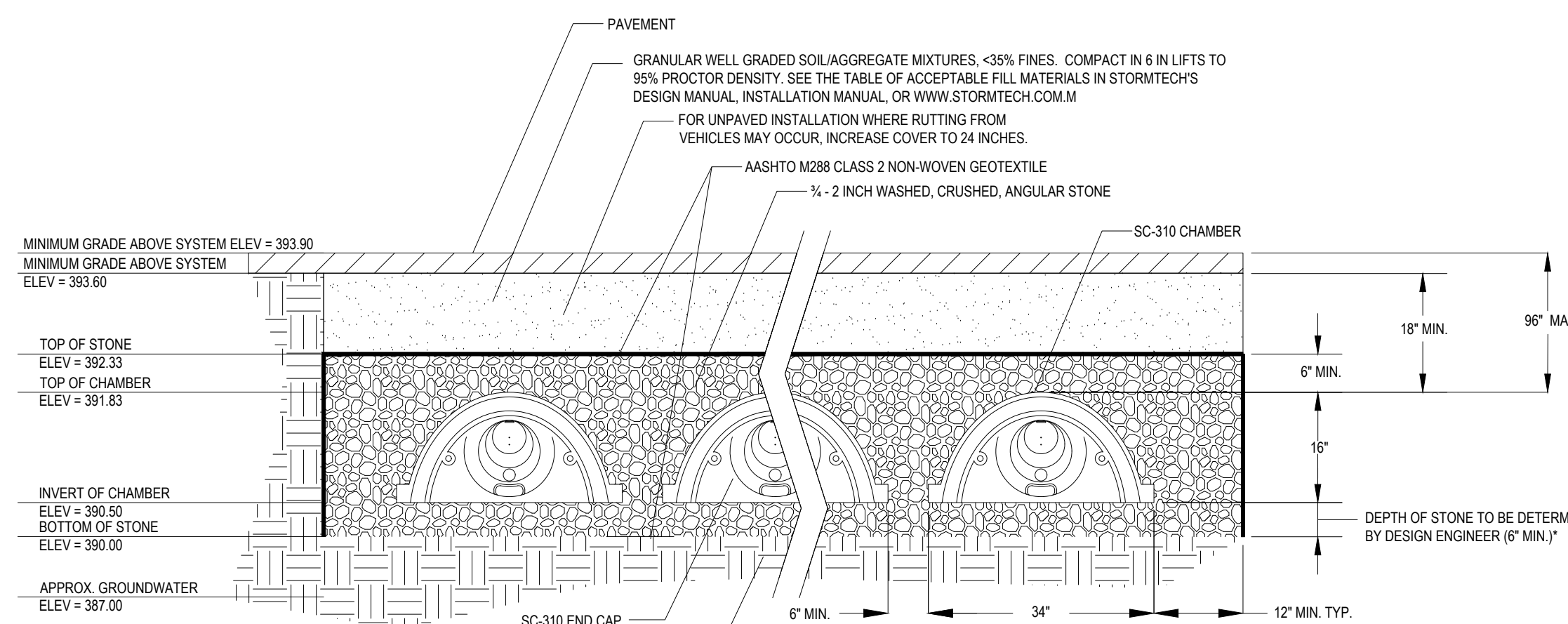
N.T.S.



STORMTECH SC-310 ISOLATOR ROW DETAIL



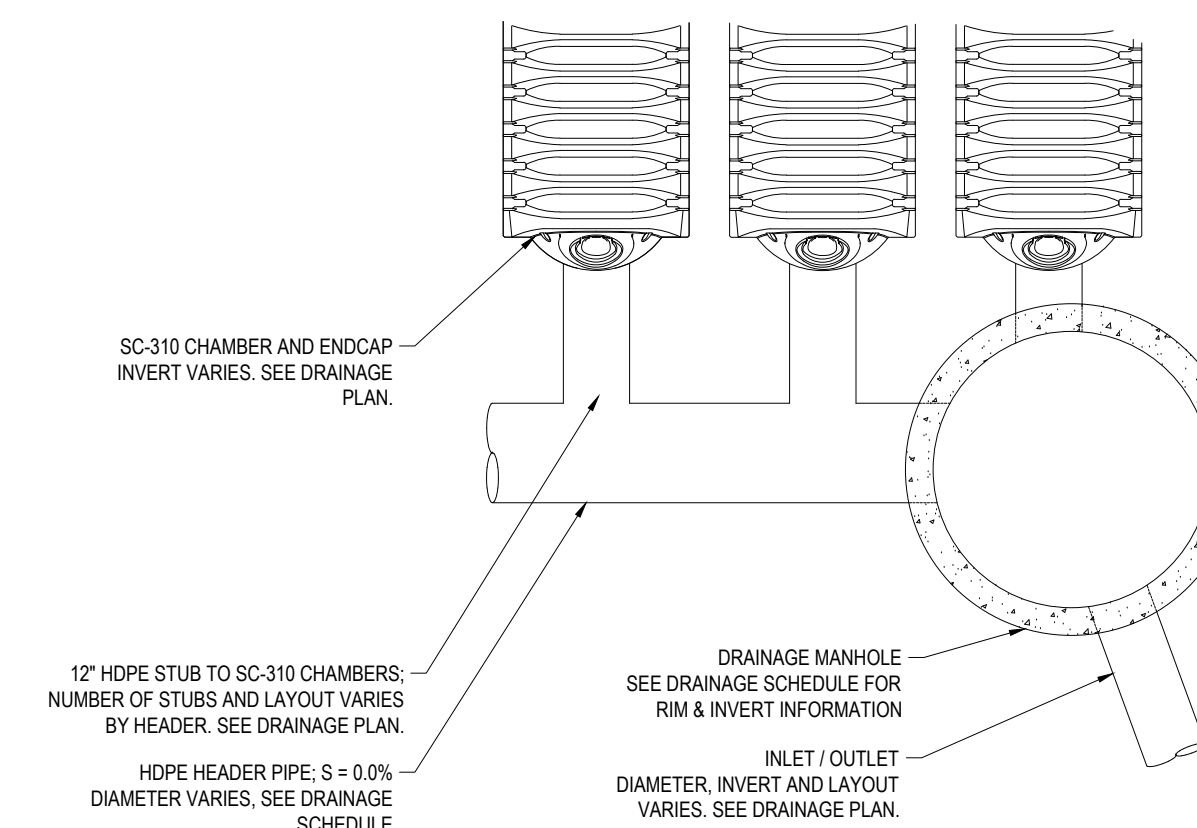
STORMTECH SC-310 CHAMBER SYSTEM INDIVIDUAL UNIT DETAIL



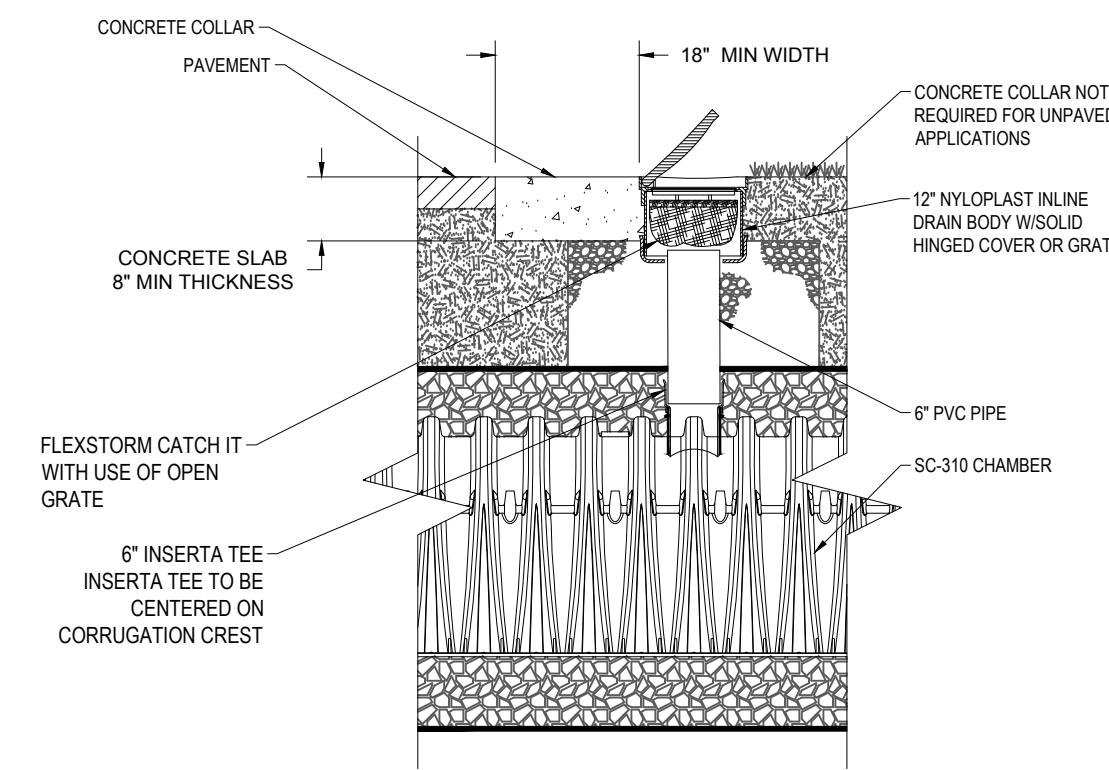
DESIGN ENGINEER IS RESPONSIBLE FOR ENSURING SUITABILITY OF SUBGRADE SOILS*

NOTE: GC SHALL COORDINATE FINAL DESIGN WITH STORMTECH

STORMTECH SC-310 UNDERGROUND INFILTRATION SYSTEM



TYPICAL HEADER PIPE DETAIL



STORMTECH SC-310 CHAMBER SYSTEM INSPECTION PORT DETAIL

N.T.S.

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

| REV | DATE | COMMENT | DRAWN BY | CHECKED BY |
|-----|----------|---------------------------------|----------|------------|
| 1 | 03/23/22 | NOTICE OF INTENT SUBMISSION | NPD | RMM |
| 2 | 05/09/22 | PER TOWN / PEER REVIEW COMMENTS | NPD | RMM |
| 3 | 05/17/22 | PER PEER REVIEW COMMENTS | NPD | RMM |

811
Know what's below.
Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

PERMIT SET

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: W211057
DRAWN BY: NPD
CHECKED BY: RMM
DATE: 02/01/2022
CAD LD.: W211057-CVL-3

PROPOSED SITE PLAN DOCUMENTS

FOR

TMC HOLDINGS & DEVELOPMENT 2, LLC

PROPOSED INDUSTRIAL DEVELOPMENT
UNION STREET BUSINESS PARK II
MAP #314, BLOCK #20, LOT #1
839 UPPER UNION STREET
CITY OF FRANKLIN
NORFOLK COUNTY, MA

BOHLER

352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9900
www.BohlerEngineering.com

REGISTERED PROFESSIONAL ENGINEER
CIVIL
No. 41697

SHEET TITLE:
DETAIL SHEET

SHEET NUMBER:
C-903

REVISION 3 - 05/17/22

I:\BOHLER\ENG\NET\SHARES\MA\PROJECTS\21\W211057\DRAWINGS\PLAN SET\REV\W211057-CVL-3.dwg - LAYOUT: C-903.DETL

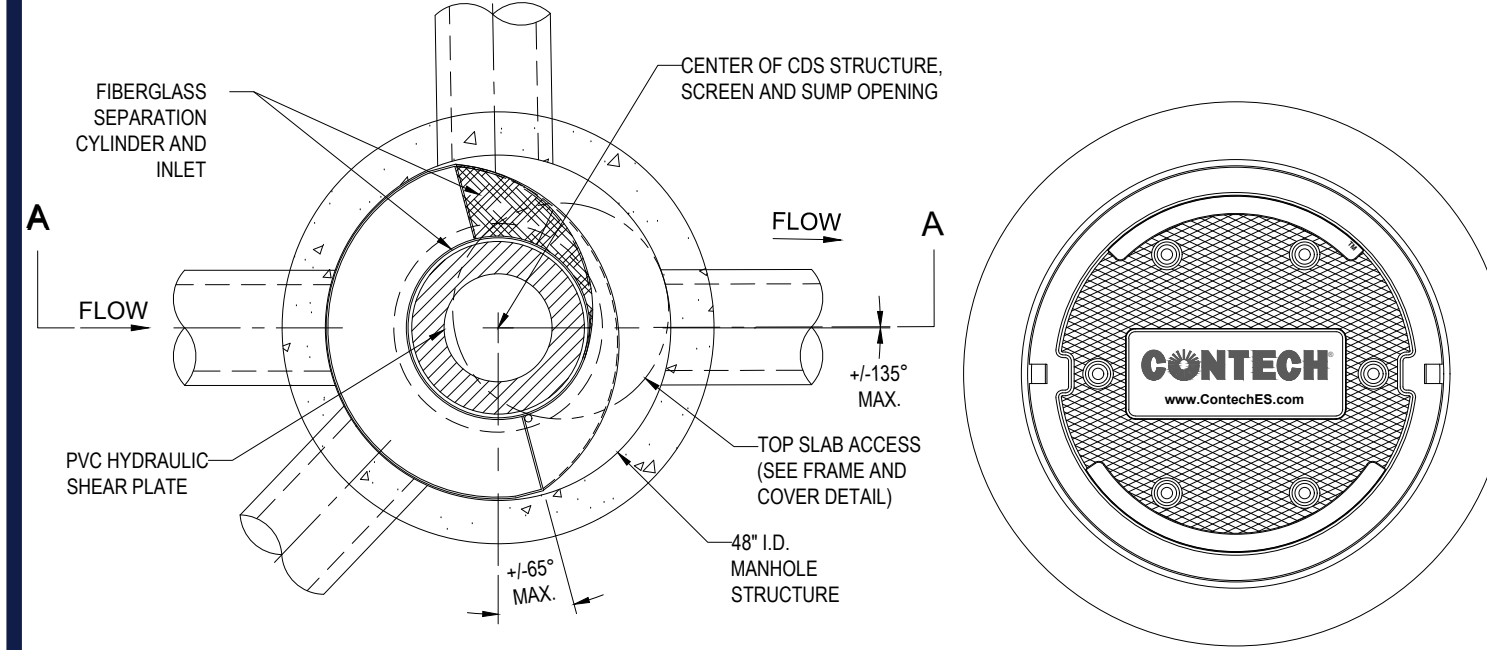
CDS2015-4-C DESIGN NOTES

CDS2015-4-C RATED TREATMENT CAPACITY IS 1.4 CFS, OR PER LOCAL REGULATIONS. MAXIMUM HYDRAULIC INTERNAL BYPASS CAPACITY IS 10.0 CFS. IF THE SITE CONDITIONS EXCEED 10.0 CFS, AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.

THE STANDARD CDS2015-4-C CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

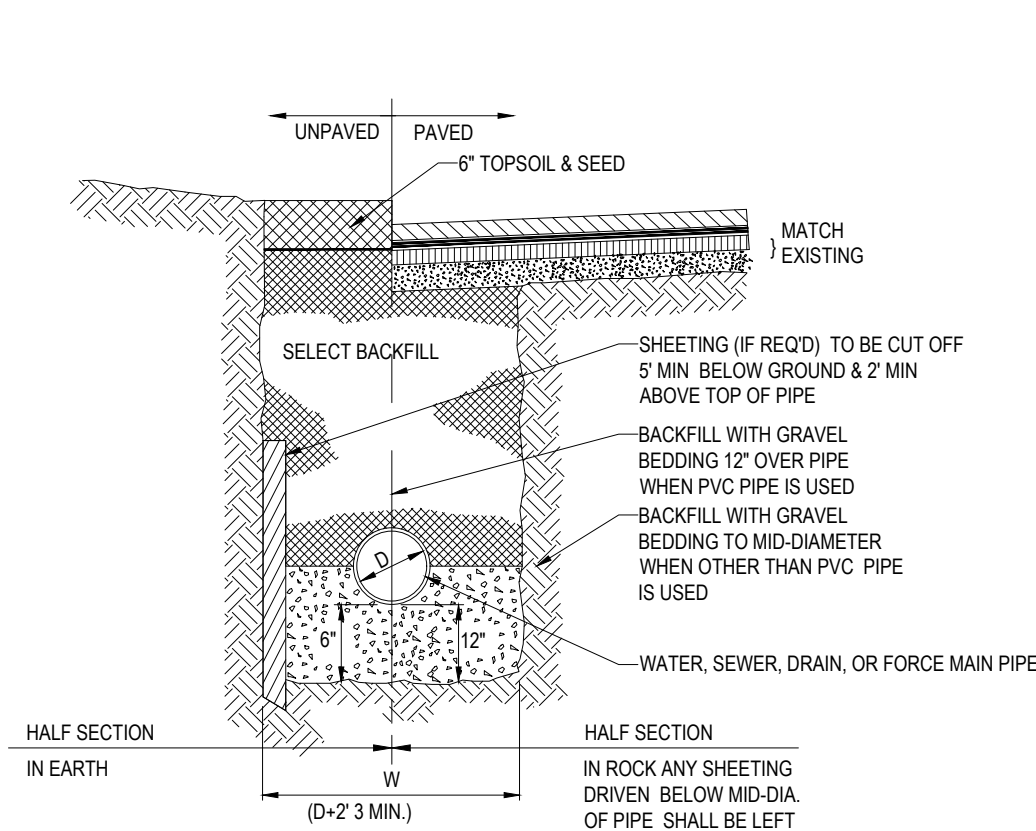
CONFIGURATION DESCRIPTION

- GRATED INLET ONLY (NO INLET PIPE)
- GRATED INLET WITH INLET PIPE OR PIPES
- CURB INLET ONLY (NO INLET PIPE)
- CURB INLET WITH INLET PIPE OR PIPES
- SEPARATE OIL BAFFLE (SINGLE INLET PIPE REQUIRED FOR THIS CONFIGURATION)
- SEDIMENT WEIR FOR NJDEP / NACAT CONFORMING UNITS



PLAN VIEW B-B
N.T.S.

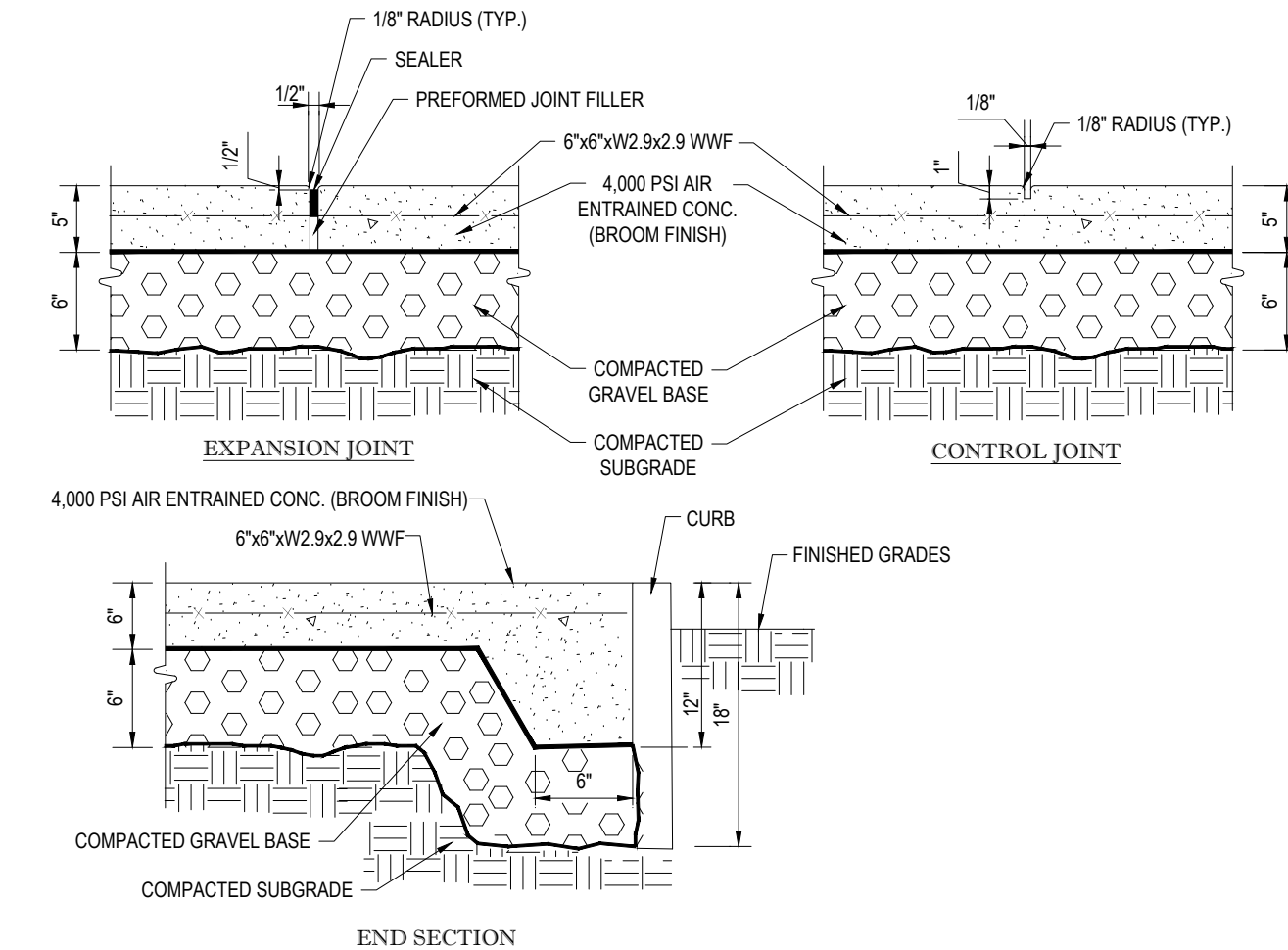
FRAME AND COVER
(DIAMETER VARIES)
N.T.S.



NOTE: WATER AND SANITARY PIPES SHALL HAVE A MINIMUM DEPTH OF 4 FEET. WHEN 4-FOOT SANITARY DEPTH IS NOT ACHIEVED, SANITARY PIPE SHALL BE INSULATED PER TOWN ON ACTION DPW REQUIREMENTS.

TYPICAL UTILITY TRENCH

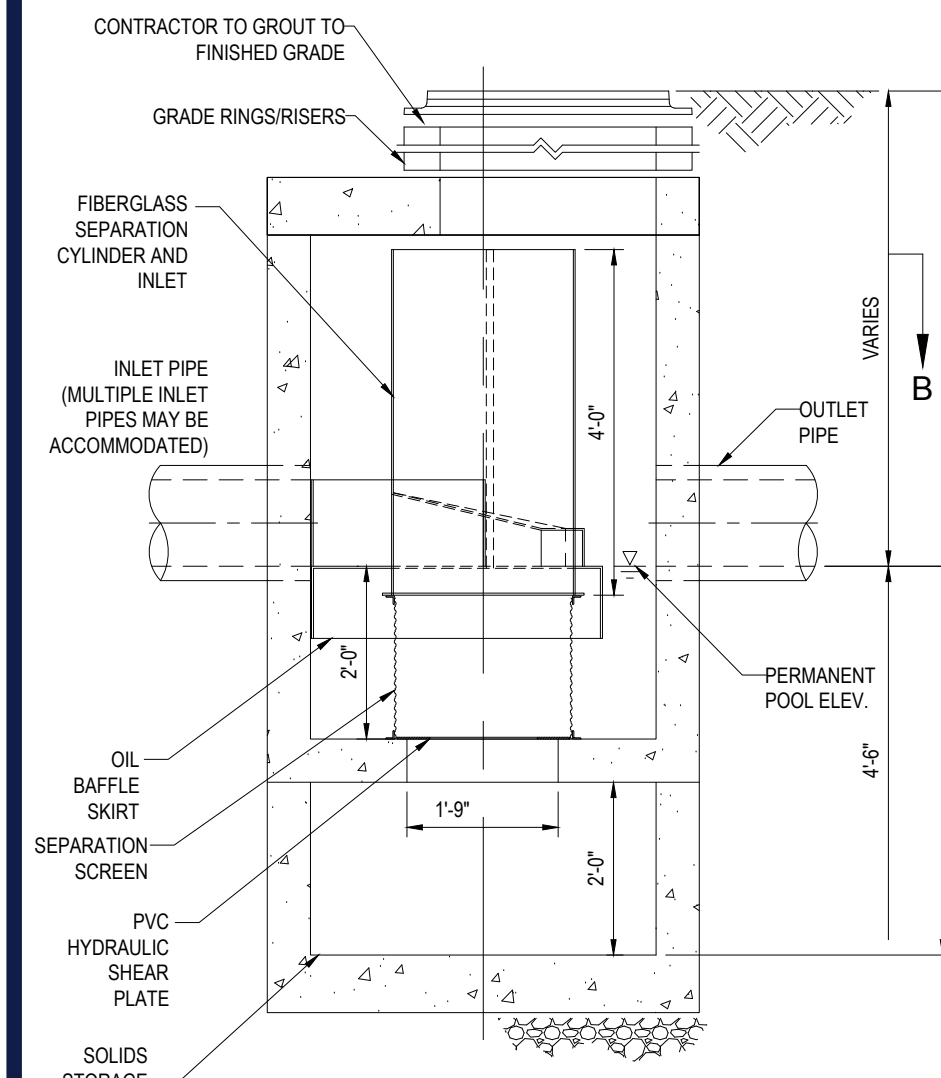
N.T.S.



NOTES: TO BE USED FOR BUILDING SURROUND AND OTHER CONCRETE WALKS. USE CHAIRS TO SUPPORT REINFORCING STEEL DURING POUR. VARIES SEE PLAN
1. SEE SITE PLAN FOR WIDTH AND GRADES
2. PROVIDE MINIMUM 1/8" FT. CROSS-SLOPE
3. PROVIDE CONTROL JOINTS 5'-0" O.C. MIN.
4. PROVIDE EXPANSION JOINTS 20'-0" O.C. MIN.

TYPICAL CONCRETE SIDEWALK

N.T.S.



ELEVATION A-A
N.T.S.

GENERAL NOTES:
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. DIMENSIONS MARKED WITH () ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE.
WWW.CONTECHES.COM
4. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
5. STRUCTURE SHALL MEET AASHTO H20 AND CASTINGS SHALL MEET H20 (AASHTO M 206) LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT OR BELOW THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEV.
6. PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

INSTALLATION NOTES:
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
C. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT. HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH CDS2015-4-C (WQU)

N.T.S.

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

| REV | DATE | COMMENT | CHECKED BY |
|-----|----------|---------------------------------|------------|
| 1 | 03/23/22 | NOTICE OF INTENT SUBMISSION | NPD RMM |
| 2 | 05/06/22 | PER TOWN / PEER REVIEW COMMENTS | NPD RMM |
| 3 | 05/17/22 | PER PEER REVIEW COMMENTS | NPD RMM |



ALWAYS CALL 811
It's fast. It's free. It's the law.

PERMIT SET

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: W211057
DRAWN BY: NPD
CHECKED BY: RMM
DATE: 02/01/2022
CAD ID: W211057-CVL-3

PROJECT:

PROPOSED SITE PLAN DOCUMENTS

FOR
TMC HOLDINGS & DEVELOPMENT 2, LLC

PROPOSED INDUSTRIAL DEVELOPMENT
UNION STREET BUSINESS PARK II
MAP #314, BLOCK #20, LOT #1
839 UPPER UNION STREET
CITY OF FRANKLIN
NORFOLK COUNTY, MA



352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
Phone: (508) 480-9900
www.BohlerEngineering.com



SHEET TITLE:

DETAIL SHEET

SHEET NUMBER:

C-904

REVISION 3 - 05/17/22

I:\BOHLER\ENG\NET\SHARES\MA\PROJECTS\21\W211057\DRAWINGS\PLAN SET\REV\W211057-CVL-3.dwg - LAYOUT: C-904-DET1

N.T.S.

N.T.S.

N.T.S.

N.T.S.

REFERENCES:

- THE TAX ASSESSOR'S MAP OF CITY OF FRANKLIN, NORFOLK COUNTY, MAP 314.
- MAP ENTITLED "NATIONAL FLOOD INSURANCE PROGRAM, FIRM, FLOOD INSURANCE RATE MAP, NORFOLK COUNTY, MASSACHUSETTS (ALL JURISDICTIONS), PANEL 317 OF 430," COMMUNITY-PANEL NUMBER 250240 0317 E, EFFECTIVE DATE: JULY 17, 2012.
- MAP ENTITLED "PLAN OF LAND, UNION STREET BUSINESS PARK, FRANKLIN, MA (NORFOLK COUNTY), PREPARED FOR UNION STREET BUSINESS PARK, LLC," PREPARED BY WELCH ASSOCIATES LAND SURVEYORS, INC. DATED DECEMBER 7, 2007, UNRECORDED PLAN.
- MAP ENTITLED "PLAN OF LAND IN FRANKLIN, MA (NORFOLK COUNTY)," PREPARED BY ENGINEERING DESIGN CONSULTANTS, INC. DATED APRIL 15, 1999, RECORDED WITH THE NORFOLK COUNTY REGISTRY OF DEEDS AS PLAN 463 OF 1999.
- MAP ENTITLED "EXISTING CONDITIONS PLAN, UNION STREET BUSINESS PARK, 837, 839 & 841 UPPER UNION STREET, FRANKLIN, MASSACHUSETTS, PREPARED FOR ABRAHAM PROPERTIES," PREPARED BY ENGINEERING DESIGN CONSULTANTS, INC., DATED APRIL 22, 2005, SHEET 1 OF 8.
- UNDERGROUND GAS FACILITY MAPPING PROVIDED BY EVERSOURCE GAS.
- MAP ENTITLED "PLAN OF ROAD IN THE TOWN OF FRANKLIN, NORFOLK COUNTY, LAID OUT AS A STATE HIGHWAY BY THE DEPARTMENT OF PUBLIC WORKS," PREPARED BY THE MASSACHUSETTS DEPARTMENT OF PUBLIC WORKS, DATED SEPTEMBER 29, 1965, LAYOUT NO. 5495, SHEETS 9 THROUGH 11 OF 16.

NOTES (CONT'D):

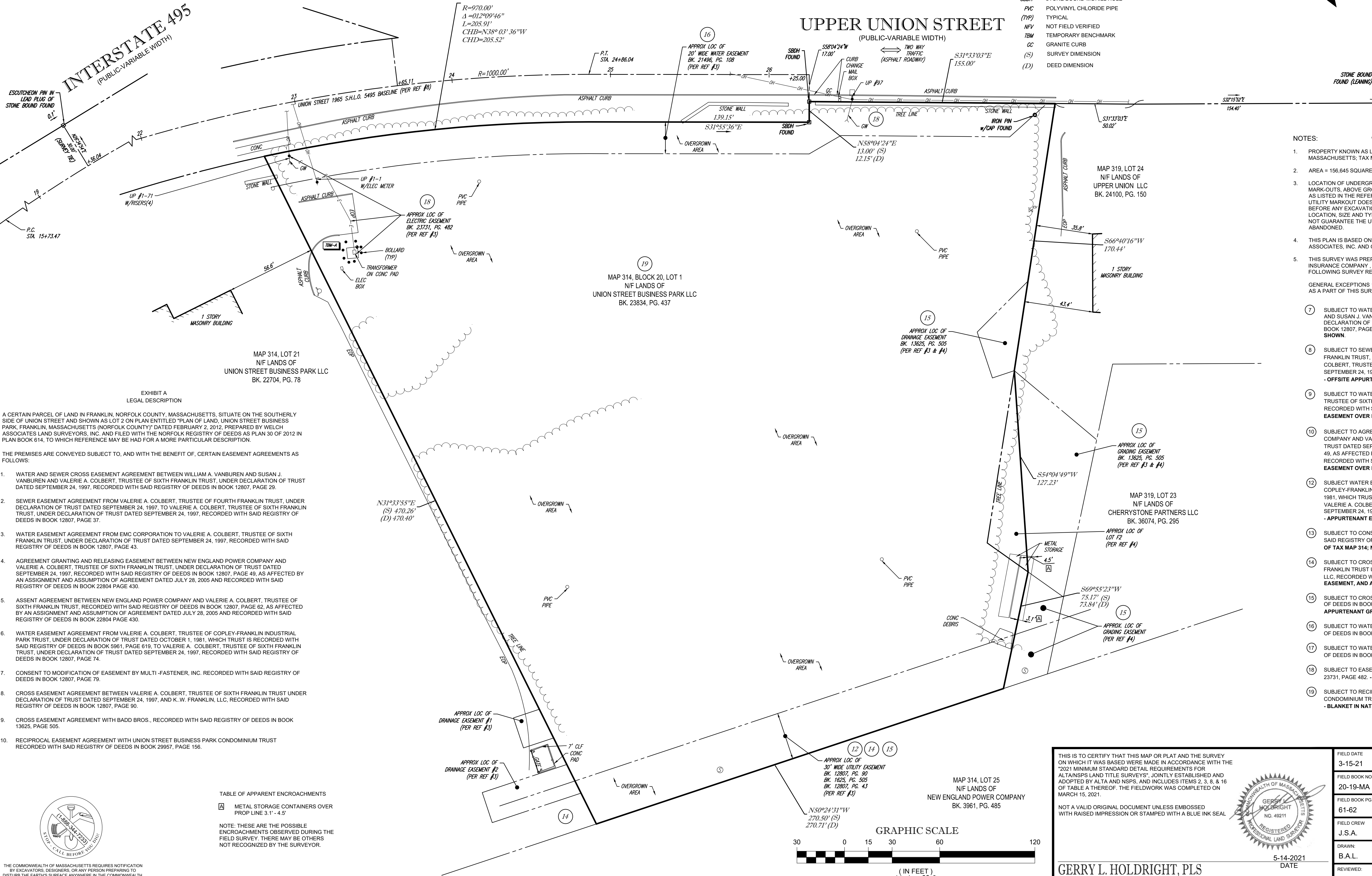
- PROPERTY IS LOCATED IN FLOOD HAZARD ZONE X-UNSHADED (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER REF. #2.
- ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), BASED ON GPS OBSERVATIONS UTILIZING THE KEYSTONE VRS NETWORK (KEYNETGPS) TAKEN AT THE TIME OF THE FIELD SURVEY.
- TEMPORARY BENCH MARKS SET: TBM-A: X-CUT ON CORNER OF TRANSFORMER CONCRETE PAD. ELEVATION = 389.82
- PRIOR TO CONSTRUCTION IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT THE BENCHMARKS ILLUSTRATED ON THIS SKETCH HAVE NOT BEEN DISTURBED AND THEIR ELEVATIONS HAVE BEEN CONFIRMED. ANY CONFLICTS MUST BE REPORTED PRIOR TO CONSTRUCTION.
- THE OFFSETS SHOWN ARE NOT TO BE USED FOR THE CONSTRUCTION OF ANY STRUCTURE, FENCE, PERMANENT ADDITION, ETC.
- THIS SURVEY DOES NOT SHOW THE EXISTENCE OF WETLANDS, IF ANY.
- THE EXISTENCE OF UNDERGROUND STORAGE TANKS, IF ANY, WAS NOT KNOWN AT THE TIME OF THE FIELD SURVEY.
- PROPERTY CURRENTLY DOES NOT HAVE DIRECT ACCESS TO UPPER UNION STREET.

LEGEND

- HYDRANT
- OVERHEAD WIRES
- APPROX. LOC. UNDERGROUND GAS LINE
- APPROX. LOC. UNDERGROUND ELECTRIC LINE
- APPROX. LOC. UNDERGROUND WATER LINE
- UTILITY POLE
- GUY WIRE
- AREA LIGHT
- MAIL BOX
- BOLLARD
- POST
- CONCRETE
- CHAIN LINK FENCE
- EDGE OF PAVEMENT
- SANITARY/SEWER MANHOLE
- DRILL HOLE FOUND
- STONE BOUND W/DRILL HOLE
- POLYVINYL CHLORIDE PIPE
- TYPICAL
- NOT FIELD VERIFIED
- TEMPORARY BENCHMARK
- GRANITE CURB
- SURVEY DIMENSION
- DEED DIMENSION



LOCUS MAP
© 2015 ESRI WORLD STREET MAPS
NOT TO SCALE



NOTES:

- PROPERTY KNOWN AS LOT 1 AS SHOWN ON THE CITY OF FRANKLIN, NORFOLK COUNTY, COMMONWEALTH OF MASSACHUSETTS; TAX MAP NO. 314.
- AREA = 156,645 SQUARE FEET OR 3.596 ACRES
- LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE LOCATIONS AND SIZES ARE BASED ON UTILITY MARK-OUTS, ABOVE GROUND STRUCTURES THAT WERE VISIBLE & ACCESSIBLE IN THE FIELD, AND THE MAPS AS LISTED IN THE REFERENCES AVAILABLE AT THE TIME OF THE SURVEY. AVAILABLE AS-BUILT PLANS AND UTILITY MARK-OUT DOES NOT ENSURE MAPPING OF ALL UNDERGROUND UTILITIES AND STRUCTURES. BEFORE ANY EXCAVATION IS TO BEGIN, ALL UNDERGROUND UTILITIES SHOULD BE VERIFIED AS TO THEIR LOCATION, SIZE AND TYPE BY THE PROPER UTILITY COMPANIES. CONTROL POINT ASSOCIATES, INC. DOES NOT GUARANTEE THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED.
- THIS PLAN IS BASED ON INFORMATION PROVIDED BY A SURVEY PREPARED IN THE FIELD BY CONTROL POINT ASSOCIATES, INC. AND OTHER REFERENCE MATERIAL AS LISTED HEREON.
- THIS SURVEY WAS PREPARED WITH REFERENCE TO A TITLE REPORT PREPARED BY WESTCOR LAND TITLE INSURANCE COMPANY, HAVING A COMMITMENT NO. -, WITH AN EFFECTIVE DATE OF -, WHERE THE FOLLOWING SURVEY RELATED EXCEPTIONS APPEAR IN SCHEDULE B - PART II:
GENERAL EXCEPTIONS 1 THRU 6, AND 11 ARE NOT SURVEY RELATED AND HAVE NOT BEEN COMMENTED ON AS A PART OF THIS SURVEY.
- SUBJECT TO WATER AND SEWER CROSS EASEMENT AGREEMENT BETWEEN WILLIAM A. VANBUREN AND SUSAN J. VANBUREN AND VALERIE A. COLBERT, TRUSTEE OF SIXTH FRANKLIN TRUST, UNDER DECLARATION OF TRUST DATED SEPTEMBER 24, 1997, RECORDED WITH SAID REGISTRY OF DEEDS IN BOOK 12807, PAGE 29. - OFFSITE APPURTENANT EASEMENT OVER LOT 24 OF TAX MAP 314; NOT SHOWN.
- SUBJECT TO SEWER EASEMENT AGREEMENT FROM VALERIE A. COLBERT, TRUSTEE OF FOURTH FRANKLIN TRUST, UNDER DECLARATION OF TRUST DATED SEPTEMBER 24, 1997, TO VALERIE A. COLBERT, TRUSTEE OF SIXTH FRANKLIN TRUST, UNDER DECLARATION OF TRUST DATED SEPTEMBER 24, 1997, RECORDED WITH SAID REGISTRY OF DEEDS IN BOOK 12807, PAGE 37. - OFFSITE APPURTENANT EASEMENT OVER LOT 58 OF TAX MAP 313; NOT SHOWN.
- SUBJECT TO WATER EASEMENT AGREEMENT FROM EMC CORPORATION TO VALERIE A. COLBERT, TRUSTEE OF SIXTH FRANKLIN TRUST, UNDER DECLARATION OF TRUST DATED SEPTEMBER 24, 1997, RECORDED WITH SAID REGISTRY OF DEEDS IN BOOK 12807, PAGE 43. - OFFSITE APPURTENANT EASEMENT OVER LOT 15 OF TAX MAP 313; NOT SHOWN.
- SUBJECT TO AGREEMENT GRANTING AND RELEASING EASEMENT BETWEEN NEW ENGLAND POWER COMPANY AND VALERIE A. COLBERT, TRUSTEE OF SIXTH FRANKLIN TRUST, UNDER DECLARATION OF TRUST DATED SEPTEMBER 24, 1997, RECORDED WITH SAID REGISTRY OF DEEDS IN BOOK 12807, PAGE 49, AS AFFECTED BY AN ASSIGNMENT AND ASSUMPTION OF AGREEMENT DATED JULY 28, 2005 AND RECORDED WITH SAID REGISTRY OF DEEDS IN BOOK 22804 PAGE 430. - OFFSITE APPURTENANT EASEMENT OVER LOT 25 OF TAX MAP 314; NOT SHOWN.
- SUBJECT TO WATER EASEMENT AGREEMENT FROM VALERIE A. COLBERT, TRUSTEE OF SIXTH FRANKLIN TRUST, UNDER DECLARATION OF TRUST DATED SEPTEMBER 24, 1997, WHICH TRUST IS RECORDED WITH SAID REGISTRY OF DEEDS IN BOOK 5961, PAGE 619, TO VALERIE A. COLBERT, TRUSTEE OF SIXTH FRANKLIN TRUST, UNDER DECLARATION OF TRUST DATED SEPTEMBER 24, 1997, RECORDED WITH SAID REGISTRY OF DEEDS IN BOOK 12807, PAGE 74. - APPURTENANT EASEMENT OVER LOT 23 OF TAX MAP 313; AS SHOWN.
- SUBJECT TO CONSENT TO MODIFICATION OF EASEMENT BY MULTI-FASTENER, INC. RECORDED WITH SAID REGISTRY OF DEEDS IN BOOK 12807, PAGE 79. - OFFSITE APPURTENANT EASEMENT OVER LOT 25 OF TAX MAP 314; NOT SHOWN.
- SUBJECT TO CROSS EASEMENT AGREEMENT BETWEEN VALERIE A. COLBERT, TRUSTEE OF SIXTH FRANKLIN TRUST UNDER DECLARATION OF TRUST DATED SEPTEMBER 24, 1997, AND K. W. FRANKLIN, LLC, RECORDED WITH SAID REGISTRY OF DEEDS IN BOOK 12807, PAGE 90. - 30' WIDE UTILITY EASEMENT, AND APPURTENANT EASEMENT OVER LOT 21 OF TAX MAP 314; AS SHOWN.
- SUBJECT TO CROSS EASEMENT AGREEMENT WITH BADD BROS., RECORDED WITH SAID REGISTRY OF DEEDS IN BOOK 13625, PAGE 505. - 30' WIDE UTILITY EASEMENT, DRAINAGE EASEMENT, AND APPURTENANT GRADING EASEMENT OVER LOT 24 OF TAX MAP 313; AS SHOWN.
- SUBJECT TO WATER EASEMENT AGREEMENT TO UNION PLACE LLC RECORDED WITH SAID REGISTRY OF DEEDS IN BOOK 21496, PAGE 114. - NOT LOCUS.
- SUBJECT TO EASEMENT TO MASS. ELECTRIC RECORDED WITH SAID REGISTRY OF DEEDS IN BOOK 23731, PAGE 482. - ELECTRIC LINE EASEMENT SHOWN.
- SUBJECT TO RECIPROCAL EASEMENT AGREEMENT WITH UNION STREET BUSINESS PARK CONDOMINIUM TRUST RECORDED WITH SAID REGISTRY OF DEEDS IN BOOK 29957, PAGE 156. - BLANKET IN NATURE

EXHIBIT A
LEGAL DESCRIPTION

A CERTAIN PARCEL OF LAND IN FRANKLIN, NORFOLK COUNTY, MASSACHUSETTS, SITUATE ON THE SOUTHERLY SIDE OF UNION STREET AND SHOWN AS LOT 2 ON PLAN ENTITLED "PLAN OF LAND, UNION STREET BUSINESS PARK, FRANKLIN, MASSACHUSETTS (NORFOLK COUNTY)" DATED FEBRUARY 2, 2012, PREPARED BY WELCH ASSOCIATES LAND SURVEYORS, INC. AND FILED WITH THE NORFOLK REGISTRY OF DEEDS AS PLAN 30 OF 2012 IN PLAN BOOK 614, TO WHICH REFERENCE MAY BE HAD FOR A MORE PARTICULAR DESCRIPTION.

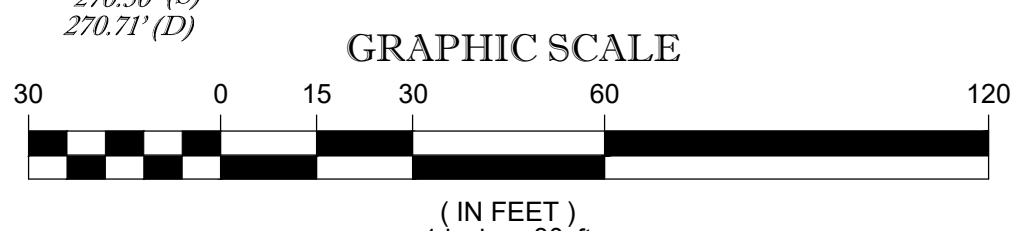
THE PREMISES ARE CONVEYED SUBJECT TO, AND WITH THE BENEFIT OF, CERTAIN EASEMENT AGREEMENTS AS FOLLOWS:

- WATER AND SEWER CROSS EASEMENT AGREEMENT BETWEEN WILLIAM A. VANBUREN AND SUSAN J. VANBUREN AND VALERIE A. COLBERT, TRUSTEE OF SIXTH FRANKLIN TRUST, UNDER DECLARATION OF TRUST DATED SEPTEMBER 24, 1997, RECORDED WITH SAID REGISTRY OF DEEDS IN BOOK 12807, PAGE 29.
- SEWER EASEMENT AGREEMENT FROM VALERIE A. COLBERT, TRUSTEE OF FOURTH FRANKLIN TRUST, UNDER DECLARATION OF TRUST DATED SEPTEMBER 24, 1997, TO VALERIE A. COLBERT, TRUSTEE OF SIXTH FRANKLIN TRUST, UNDER DECLARATION OF TRUST DATED SEPTEMBER 24, 1997, RECORDED WITH SAID REGISTRY OF DEEDS IN BOOK 12807, PAGE 37.
- WATER EASEMENT AGREEMENT FROM EMC CORPORATION TO VALERIE A. COLBERT, TRUSTEE OF SIXTH FRANKLIN TRUST, UNDER DECLARATION OF TRUST DATED SEPTEMBER 24, 1997, RECORDED WITH SAID REGISTRY OF DEEDS IN BOOK 12807, PAGE 43.
- AGREEMENT GRANTING AND RELEASING EASEMENT BETWEEN NEW ENGLAND POWER COMPANY AND VALERIE A. COLBERT, TRUSTEE OF SIXTH FRANKLIN TRUST, UNDER DECLARATION OF TRUST DATED SEPTEMBER 24, 1997, RECORDED WITH SAID REGISTRY OF DEEDS IN BOOK 12807, PAGE 49, AS AFFECTED BY AN ASSIGNMENT AND ASSUMPTION OF AGREEMENT DATED JULY 28, 2005 AND RECORDED WITH SAID REGISTRY OF DEEDS IN BOOK 22804 PAGE 430.
- ASSENT AGREEMENT BETWEEN NEW ENGLAND POWER COMPANY AND VALERIE A. COLBERT, TRUSTEE OF SIXTH FRANKLIN TRUST, RECORDED WITH SAID REGISTRY OF DEEDS IN BOOK 12807, PAGE 62, AS AFFECTED BY AN ASSIGNMENT AND ASSUMPTION OF AGREEMENT DATED JULY 28, 2005 AND RECORDED WITH SAID REGISTRY OF DEEDS IN BOOK 22804 PAGE 430.
- WATER EASEMENT AGREEMENT FROM VALERIE A. COLBERT, TRUSTEE OF COPLEY-FRANKLIN INDUSTRIAL PARK TRUST, UNDER DECLARATION OF TRUST DATED OCTOBER 1, 1981, WHICH TRUST IS RECORDED WITH SAID REGISTRY OF DEEDS IN BOOK 5961, PAGE 619, TO VALERIE A. COLBERT, TRUSTEE OF SIXTH FRANKLIN TRUST, UNDER DECLARATION OF TRUST DATED SEPTEMBER 24, 1997, RECORDED WITH SAID REGISTRY OF DEEDS IN BOOK 12807, PAGE 74.
- CONSENT TO MODIFICATION OF EASEMENT BY MULTI-FASTENER, INC. RECORDED WITH SAID REGISTRY OF DEEDS IN BOOK 12807, PAGE 79.
- CROSS EASEMENT AGREEMENT BETWEEN VALERIE A. COLBERT, TRUSTEE OF SIXTH FRANKLIN TRUST UNDER DECLARATION OF TRUST DATED SEPTEMBER 24, 1997, AND K. W. FRANKLIN, LLC, RECORDED WITH SAID REGISTRY OF DEEDS IN BOOK 12807, PAGE 90.
- CROSS EASEMENT AGREEMENT WITH BADD BROS., RECORDED WITH SAID REGISTRY OF DEEDS IN BOOK 13625, PAGE 505.
- RECIPROCAL EASEMENT AGREEMENT WITH UNION STREET BUSINESS PARK CONDOMINIUM TRUST RECORDED WITH SAID REGISTRY OF DEEDS IN BOOK 29957, PAGE 156.

TABLE OF APPARENT ENCROACHMENTS

| | |
|--|---|
| | METAL STORAGE CONTAINERS OVER PROP LINE 3.1' - 4.5' |
|--|---|

NOTE: THESE ARE THE POSSIBLE ENCROACHMENTS OBSERVED DURING THE FIELD SURVEY. THERE MAY BE OTHERS NOT RECOGNIZED BY THE SURVEYOR.



THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT WAS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 2, 3, 8, & 16 OF TABLE A THEREOF. THE FIELDWORK WAS COMPLETED ON MARCH 15, 2021.

NOT A VALID ORIGINAL DOCUMENT UNLESS EMBOSSED WITH RAISED IMPRESSION OR STAMPED WITH A BLUE INK SEAL

GERRY L. HOLDRIGHT, PLS
MASSACHUSETTS PROFESSIONAL LAND SURVEYOR #49211

5-14-2021
DATE

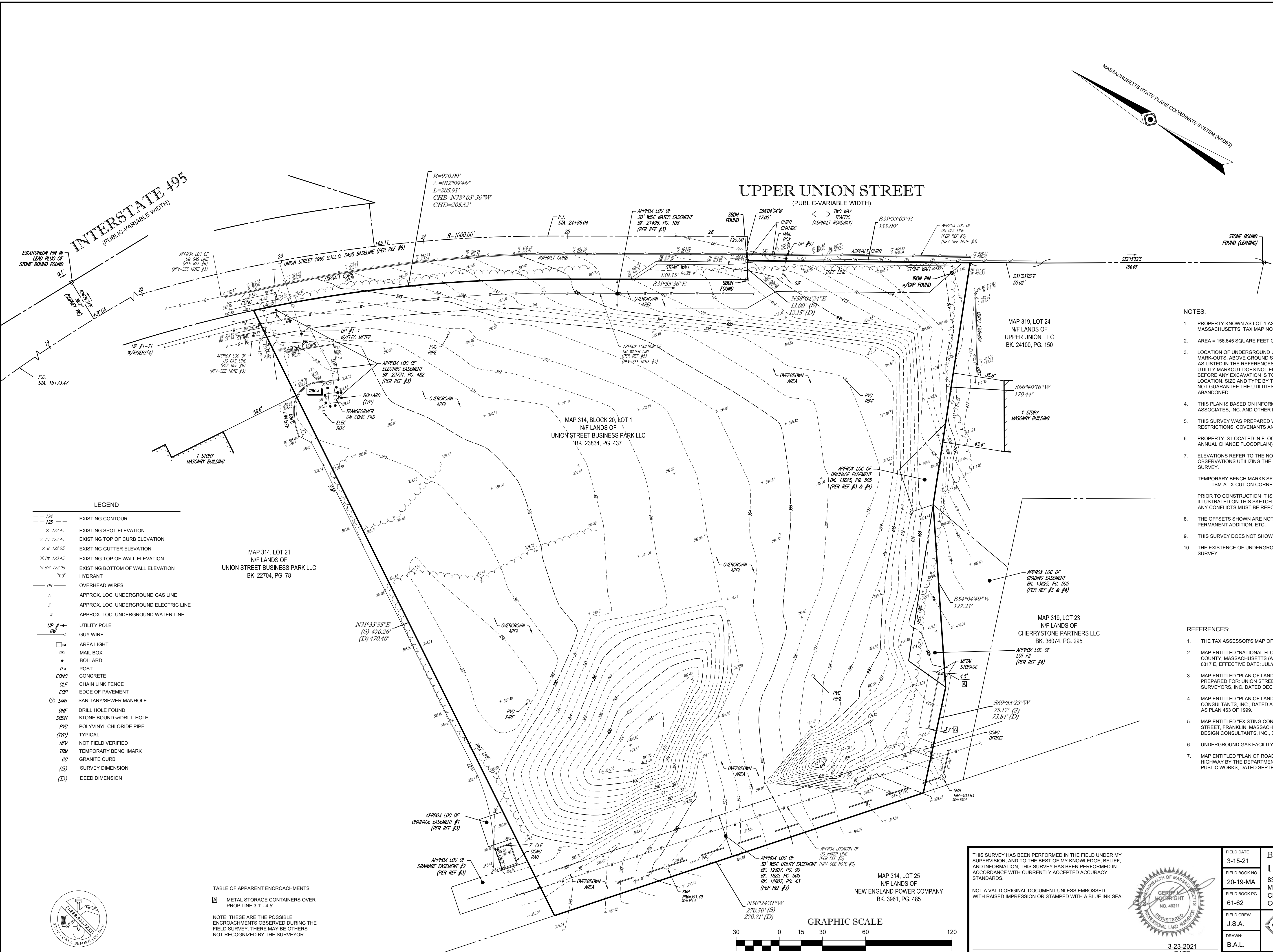
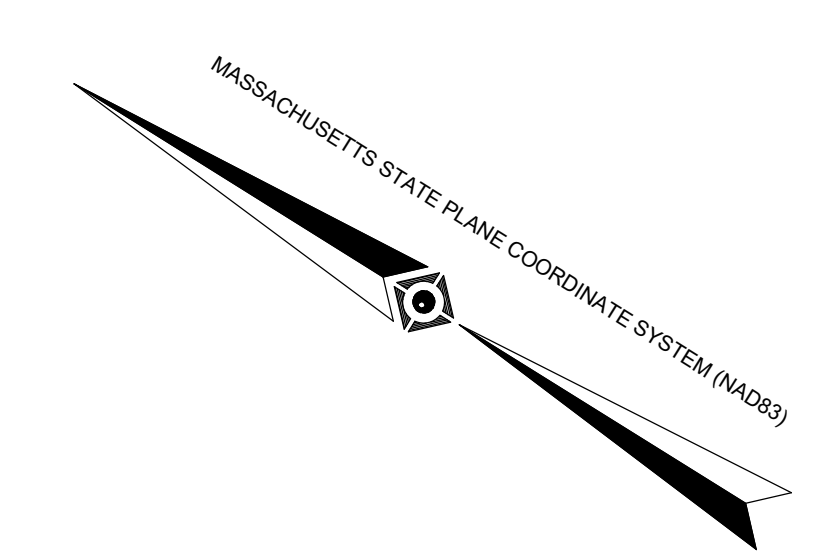
| | | |
|-----------------|-----------|--|
| FIELD DATE | 3-15-21 | ALTA/NSPS LAND TITLE SURVEY |
| FIELD BOOK NO. | 20-19-MA | UNION STREET BUSINESS PARK, LLC |
| FIELD BOOK PGS. | 61-62 | 837 UPPER UNION STREET MAP 314, BLOCK 20, LOT 1 CITY OF FRANKLIN, NORFOLK COUNTY COMMONWEALTH OF MASSACHUSETTS |
| FIELD CREW | J.S.A. | CONTROL POINT ASSOCIATES, INC. |
| DRAWN | B.A.L. | ALBANY, NY 518-217-5010 CHALFONT, PA 215-712-8600 HAUPPAUGE, NY 631-890-2645 MANHATTAN, NY 609-780-0411 SOUTH BOKROU, MA 01772 508-948-3000 - 508-948-3003 FAX WARREN, NJ 908-668-2999 |
| REVIEWED: | R.J.K. | APPROVED: G.L.H. |
| DATE | 5-14-2021 | SCALE |
| FILE NO. | 03-210095 | DWG. NO. |
| 1 OF 1 | | |

CONTROL POINT ASSOCIATES, INC. ALL RIGHTS RESERVED. ORIGINAL PROJECT OR THE PURPOSE ORIGINALLY INTENDED, WITHOUT THE WRITTEN PERMISSION OF CONTROL POINT ASSOCIATES, INC. IS PROHIBITED.

THE COMMONWEALTH OF MASSACHUSETTS REQUIRES NOTIFICATION BY EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE COMMONWEALTH.



LOCUS MAP
© 2013 ESRI WORLD STREET MAPS
NOT TO SCALE



- NOTES:
- PROPERTY KNOWN AS LOT 1 AS SHOWN ON THE CITY OF FRANKLIN, NORFOLK COUNTY, COMMONWEALTH OF MASSACHUSETTS; TAX MAP NO. 314.
 - AREA = 156,645 SQUARE FEET OR 3.596 ACRES
 - LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE. LOCATIONS AND SIZES ARE BASED ON UTILITY MARK-OUTS, ABOVE GROUND STRUCTURES THAT WERE VISIBLE IN THE FIELD, AND THE MAPS AS LISTED IN THE REFERENCES AVAILABLE AT THE TIME OF THE SURVEY. AVAILABLE AS-BUILT PLANS AND UTILITY MARKOUT DOES NOT ENSURE MAPPING OF ALL UNDERGROUND UTILITIES AND STRUCTURES. BEFORE ANY EXCAVATION IS TO BEGIN, ALL UNDERGROUND UTILITIES SHOULD BE VERIFIED AS TO THEIR LOCATION, SIZE AND TYPE BY THE PROPER UTILITY COMPANIES. CONTROL POINT ASSOCIATES, INC. DOES NOT GUARANTEE THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED.
 - THIS PLAN IS BASED ON INFORMATION PROVIDED BY A SURVEY PREPARED IN THE FIELD BY CONTROL POINT ASSOCIATES, INC. AND OTHER REFERENCE MATERIAL AS LISTED HEREON.
 - THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND IS SUBJECT TO THE RESTRICTIONS, COVENANTS AND/OR EASEMENTS THAT MAY BE CONTAINED THEREIN.
 - PROPERTY IS LOCATED IN FLOOD HAZARD ZONE X-UNSHADED (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER REF. #2
 - ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), BASED ON GPS OBSERVATIONS UTILIZING THE KEYSTONE VRS NETWORK (KEYNETGPS) TAKEN AT THE TIME OF THE FIELD SURVEY.
- TEMPORARY BENCH MARKS SET:
TBM-A: X-CUT ON CORNER OF TRANSFORMER CONCRETE PAD. ELEVATION = 389.82'
- PRIOR TO CONSTRUCTION IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT THE BENCHMARKS ILLUSTRATED ON THIS SKETCH HAVE NOT BEEN DISTURBED AND THEIR ELEVATIONS HAVE BEEN CONFIRMED. ANY CONFLICTS MUST BE REPORTED PRIOR TO CONSTRUCTION.
- THE OFFSETS SHOWN ARE NOT TO BE USED FOR THE CONSTRUCTION OF ANY STRUCTURE, FENCE, PERMANENT ADDITION, ETC.
 - THIS SURVEY DOES NOT SHOW THE EXISTENCE OF WETLANDS, IF ANY.
 - THE EXISTENCE OF UNDERGROUND STORAGE TANKS, IF ANY, WAS NOT KNOWN AT THE TIME OF THE FIELD SURVEY.

- REFERENCES:
- THE TAX ASSESSOR'S MAP OF CITY OF FRANKLIN, NORFOLK COUNTY, MAP 314.
 - MAP ENTITLED "NATIONAL FLOOD INSURANCE PROGRAM, FIRM, FLOOD INSURANCE RATE MAP, NORFOLK COUNTY, MASSACHUSETTS (ALL JURISDICTIONS), PANEL 317 OF 430," COMMUNITY-PANEL NUMBER 250240 0317 E, EFFECTIVE DATE: JULY 17, 2012.
 - MAP ENTITLED "PLAN OF LAND, UNION STREET BUSINESS PARK, FRANKLIN, MA (NORFOLK COUNTY), PREPARED FOR: UNION STREET BUSINESS PARK, LLC," PREPARED BY WELCH ASSOCIATES LAND SURVEYORS, INC. DATED DECEMBER 1, 2007. UNRECORDED PLAN.
 - MAP ENTITLED "PLAN OF LAND IN FRANKLIN, MA (NORFOLK COUNTY)," PREPARED BY ENGINEERING DESIGN CONSULTANTS, INC. DATED APRIL 15, 1999. RECORDED WITH THE NORFOLK COUNTY REGISTER OF DEEDS AS PLAN 463 OF 1999.
 - MAP ENTITLED "EXISTING CONDITIONS PLAN, UNION STREET BUSINESS PARK, 837, 839 & 841 UPPER UNION STREET, FRANKLIN, MASSACHUSETTS, PREPARED FOR: ABRAHAM PROPERTIES," PREPARED BY ENGINEERING DESIGN CONSULTANTS, INC. DATED APRIL 22, 2005. SHEET 1 OF 8.
 - UNDERGROUND GAS FACILITY MAPPING PROVIDED BY EVERSOURCE GAS.
 - MAP ENTITLED "PLAN OF ROAD IN THE TOWN OF FRANKLIN, NORFOLK COUNTY, LAID OUT AS A STATE HIGHWAY BY THE DEPARTMENT OF PUBLIC WORKS," PREPARED BY THE MASSACHUSETTS DEPARTMENT OF PUBLIC WORKS, DATED SEPTEMBER 29, 1965. LAYOUT NO. 5495, SHEETS 9 THROUGH 11 OF 16.

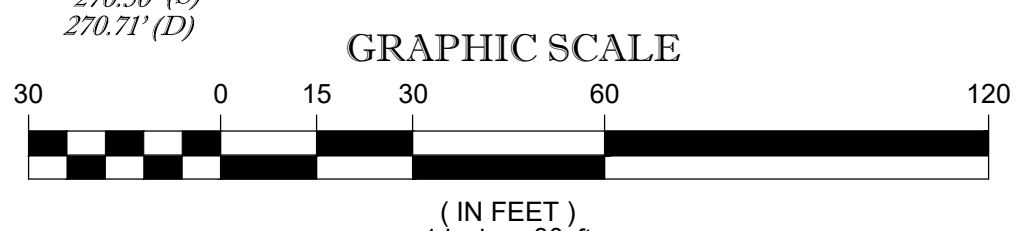
LEGEND

| | |
|------|--|
| --- | EXISTING CONTOUR |
| × | EXISTING SPOT ELEVATION |
| × TC | EXISTING TOP OF CURB ELEVATION |
| × G | EXISTING GUTTER ELEVATION |
| × TW | EXISTING TOP OF WALL ELEVATION |
| × BW | EXISTING BOTTOM OF WALL ELEVATION |
| ○ | HYDRANT |
| — OH | OVERHEAD WIRES |
| — G | APPROX. LOC. UNDERGROUND GAS LINE |
| — E | APPROX. LOC. UNDERGROUND ELECTRIC LINE |
| — W | APPROX. LOC. UNDERGROUND WATER LINE |
| UP # | UTILITY POLE |
| GW | GUY WIRE |
| □ | AREA LIGHT |
| ● | MAIL BOX |
| ○ | BOLLARD |
| P | POST |
| CONC | CONCRETE |
| CLF | CHAIN LINK FENCE |
| EDP | EDGE OF PAVEMENT |
| SMH | SANITARY/SEWER MANHOLE |
| DHF | DRILL HOLE FOUND |
| SBWH | STONE BOUND W/DRILL HOLE |
| PVC | POLYVINYL CHLORIDE PIPE |
| (TP) | TYPICAL |
| NFV | NOT FIELD VERIFIED |
| TBM | TEMPORARY BENCHMARK |
| GC | GRANITE CURB |
| (S) | SURVEY DIMENSION |
| (D) | DEED DIMENSION |

TABLE OF APPARENT ENCROACHMENTS

| | |
|---|---|
| □ | METAL STORAGE CONTAINERS OVER PROP LINE 3.1' - 4.5' |
|---|---|

NOTE: THESE ARE THE POSSIBLE ENCROACHMENTS OBSERVED DURING THE FIELD SURVEY. THERE MAY BE OTHERS NOT RECOGNIZED BY THE SURVEYOR.



THIS SURVEY HAS BEEN PERFORMED IN THE FIELD UNDER MY SUPERVISION, AND TO THE BEST OF MY KNOWLEDGE, BELIEF, AND INFORMATION, THIS SURVEY HAS BEEN PERFORMED IN ACCORDANCE WITH CURRENTLY ACCEPTED ACCURACY STANDARDS.

NOT A VALID ORIGINAL DOCUMENT UNLESS EMBOSSED WITH RAISED IMPRESSION OR STAMPED WITH A BLUE INK SEAL

GERRY L. HOLDRIGHT, PLS
MASSACHUSETTS PROFESSIONAL LAND SURVEYOR #49211

| | | | |
|-----------------|-----------|--|--------|
| FIELD DATE | 3-15-21 | BOUNDARY & TOPOGRAPHIC SURVEY | |
| FIELD BOOK NO. | 20-19-MA | UNION STREET BUSINESS PARK, LLC | |
| FIELD BOOK PGS. | 61-62 | 837 UPPER UNION STREET MAP 314, BLOCK 20, LOT 1 CITY OF FRANKLIN, NORFOLK COUNTY COMMONWEALTH OF MASSACHUSETTS | |
| FIELD CREW | J.S.A. | CONTROL POINT ASSOCIATES, INC. | |
| DRAWN | B.A.L. | ALBANY, NY 518-217-5010 CHALFONT, PA 215-712-8600 HAUPPAUGE, NY 631-850-2645 MANHATTAN, NY 646-780-0411 SOUTH BROOKFIELD, MA 01772 508.948.3000 - 508.948.3003 FAX MT LAUREL, NJ 609-857-2999 WARREN, NJ 908-668-0999 | |
| REVIEWED | R.J.K. | APPROVED: | G.L.H. |
| DATE | 3-23-2021 | SCALE | 1"=30' |
| FILE NO. | 03-210095 | DWG. NO. | 1 OF 1 |

CONTROL POINT ASSOCIATES, INC. ALL RIGHTS RESERVED. ORIGINAL PROJECT OR REVISIONS ARE THE PROPERTY OF CONTROL POINT ASSOCIATES, INC. NO REPRODUCTION OR TRANSMISSION OF ANY KIND IS PERMITTED WITHOUT THE WRITTEN PERMISSION OF CONTROL POINT ASSOCIATES, INC.

THE COMMONWEALTH OF MASSACHUSETTS REQUIRES NOTIFICATION BY EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE COMMONWEALTH.