

## **PRELIMINARY CIVIL** ENGINEERING PLAN SET



## PROPOSED **MULTI-FAMILY DEVELOPMENT**

LOCATION OF SITE: 981, 989, & 1015 EAST STREET, TOWN OF WALPOLE, NORFOLK COUNTY, MASSACHUSETTS

SITE MAP SCALE: 1" = 100'



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| REV DATE COMMENT   |
| 1         08/30/2023         ZBA         ED/JAK           2         09/29/2023         PER PEER REVIEW         CMC   |
| COMMENTS ED/JAK  |
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| Know what's below.   |
| <b>Call</b> before you dig.  |
| ALWAYS CALL 811<br>It's fast. It's free. It's the law.   |
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| FOR ENTITLEMENT  |
| PURPOSES ONLY  |
| THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY<br>REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION<br>DOCUMENT UNLESS INDICATED OTHERWISE.            |
| PROJECT No.: W211263   |
| DRAWN BY: CMC/LC<br>CHECKED BY: ED/JAK   |
| DATE:         05/31/2023           CAD I.D.:         W211263-SPPD-2C.DWG   |
| PROJECT:   |
| PRELIMINARY CIVIL  |
| ENGINEERING  |
| <b>PLAN SET</b>  |
|  |
| KIG SILVERSTRAND   |
| WALPOLE, LLC   |
| PROPOSED   |
| MULTI-FAMILY DEVELOPMENT   |
| MAP 25, BLOCK 164, 165 & 166<br>981, 989 & 1015 EAST STREET  |
| TOWN OF WALPOLE<br>NORFOLK COUNTY,   |
| MASSACHUSETTS  |
|  |
| <b>BOHLER</b>  |
| 352 TURNPIKE ROAD  |
| SOUTHBOROUGH, MA 01772<br>Phone: (508) 480-9900  |
| www.BohlerEngineering.com  |
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| C KUCICH   |
| PRAFESSIONAPINGINEER   |
| MASS PUSEPTS IFE ASBY 41530  |
| NEW HALCENSE LICENSE TO. 15476<br>CONNECTION FLOCENSE No. 26177  |
| NEW HANDSOURE LICENSE NO. 15476  |
| NEW HARCSPARE LICENSE 10. 15476<br>CONNECTING PLACEMENNO. 26177<br>RHODE ISLAND LICENSE No. 9616   |
| NEW HALSSAFE LICENSE 10. 15476<br>CONNECTINE HELENSE No. 26177<br>RHODE ISLAND LICENSE No. 2616<br>MAINE LICENSE No. 12553<br>SHEET TITLE:                           |
| NEW HAR SPACE LICENSING 15476<br>CONNECTION FOR END OF 15476<br>CONNECTION FOR END 26177<br>RHODE ISLAND LICENSE NO. 9616<br>MAINE LICENSE NO. 12553<br>SHEET TITLE: |
| NEW HALSSAFE LICENSE 10. 15476<br>CONNECTINE HELENSE No. 26177<br>RHODE ISLAND LICENSE No. 2616<br>MAINE LICENSE No. 12553<br>SHEET TITLE:                           |
| NEW HAR SPACE LICENSING 15476<br>CONNECTION OF CONTRACTOR<br>HODE ISLAND LICENSE No. 9616<br>MAINE LICENSE No. 12553<br>SHEET TITLE:<br>COVER<br>SHEET               |
| NEW HAR SPACE LICENSING, 15476<br>CONNECTION CENTRAL CONTRACTOR<br>HODE ISLANDUICENSE No. 9616<br>MAINE LICENSE No. 12553<br>SHEET TITLE:<br>COVER<br>SHEET NUMBER:  |
| NEW HAR SPACE LICENSING 15476<br>CONNECTION OF CONTRACTOR<br>HODE ISLAND LICENSE No. 9616<br>MAINE LICENSE No. 12553<br>SHEET TITLE:<br>COVER<br>SHEET               |

**REVISION 2 - 09/29/2023** 

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#### GENERAL NOTES

- THESE PLANS ARE SOLELY BASED ON INFORMATION THE OWNER AND OTHERS PROVIDED TO BOHLER ENGINEERING MA, LLC (HEREIN "BOHLER") PRIOR TO THE DATE ON WHICH THE PROFESSIONAL OF RECORD AND BOHLER PREPARED THESE PLANS. THE CONTRACTOR MUST FIELD VERIFY ALL EXISTING CONDITIONS AND IMMEDIATELY NOTIFY BOHLER . IN WRITING, IF ANY ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THESE PLANS, OR IF THE PROPOSED WORK CONFLICTS WITH ANY OTHER SITE FEATURES.
- THE CONTRACTOR MUST STRICTLY COMPLY WITH THESE NOTES AND ALL SPECIFICATIONS/REPORTS CONTAINED HEREIN. THE CONTRACTOR MUST ENSURE THAT ALL SUBCONTRACTORS FULLY AND COMPLETELY CONFORM TO AND COMPLY WITH THESE REQUIREMENTS, THESE NOTES, AND THE REQUIREMENTS ARTICULATED IN THE NOTES CONTAINED IN ALL THE OTHER DRAWINGS THAT COMPRISE THE PLAN SET OF DRAWINGS. ADDITIONAL NOTES AND SPECIFIC PLAN NOTES MAY BE FOUND ON THE INDIVIDUAL PLANS. THESE GENERAL NOTES APPLY TO THIS ENTIRE DOCUMENT PACKAGE 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. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR MUST CONFIRM WITH THE PROFESSIONAL OF RECORD AND BOHLER THAT THE LATEST EDITION OF THE DOCUMENTS AND/OR REPORTS REFERENCED WITHIN THE PLAN REFERENCES ARE BEING USED FOR CONSTRUCTION. THIS IS THE CONTRACTOR'S SOLE AND COMPLETE RESPONSIBILITY. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR MUST ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN
- OBTAINED. NO CONSTRUCTION OR FABRICATION IS TO BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED THE CONDITIONS OF APPROVAL TO ALL PLANS AND OTHER DOCUMENTS REVIEWED AND APPROVED BY THE PERMITTING AUTHORITIES AND HAS ALSO CONFIRMED THAT ALL NECESSARY AND REQUIRED PERMITS HAVE BEEN OBTAINED. THE CONTRACTOR MUST HAVE COPIES OF ALL PERMITS AND APPROVALS ON SITE AT ALL TIMES THE CONTRACTOR MUST ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS/REPORTS 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. AND ALL PROVISIONS IN AND CONDITIONS OF THE
- CONSTRUCTION CONTRACT WITH THE OWNER/DEVELOPER INCLUDING ALL EXHIBITS, ATTACHMENTS AND ADDENDA TO SAME. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST COORDINATE THE BUILDING LAYOUT BY CAREFULLY REVIEWING THE MOST CURRENT ARCHITECTURAL, CIVIL AND STRUCTURAL CONSTRUCTION DOCUMENTS (INCLUDING, BUT NOT LIMITED TO, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SUPPRESSION PLANS, WHERE APPLICABLE). THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE OWNER ARCHITECT AND PROFESSIONAL OF RECORD AND BOHLER. IN WRITING, OF ANY CONFLICTS, DISCREPANCIES OR AMBIGUITIES WHICH EXIST
- BETWEEN THESE PLANS AND ANY OTHER PLANS THAT COMPRISE THE CONSTRUCTION DOCUMENTS. CONTRACTOR MUST REFER TO AND ENSURE COMPLIANCE WITH THE APPROVED ARCHITECTURAL/BUILDING PLANS OF RECORD FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY/EXIT POINTS, ELEVATIONS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY LOCATIONS THE CONTRACTOR MUST FIELD VERIFY ALL DIMENSIONS AND MEASUREMENTS SHOWN ON THESE PLANS, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION THE CONTRACTOR MUST IMMEDIATELY NOTICY THE PROFESSIONAL OF RECORD AND BOHLER. IN WRITING, IF ANY CONFLICTS DISCREPANCIES, OR AMBIGUITIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION, NO EXTRA COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR WORK WHICH HAS TO BE RE-DONE OR REPAIRED DUE TO DIMENSIONS. MEASUREMENTS OR GRADES SHOWN INCORRECTLY ON THESE PLANS PRIOR TO BOTH (A) THE CONTRACTOR GIVING THE PROFESSIONAL OF RECORD AND BOHLER WRITTEN NOTIFICATION OF SAME AND (B) PROFESSIONAL OF RECORD AND BOHLER, THEREAFTER, PROVIDING THE CONTRACTOR WITH WRITTEN AUTHORIZATION TO PROCEED WITH SUCH ADDITIONAL WORK. THE CONTRACTOR MUST VERIEVAL DIMENSIONS AND MEASUREMENTS INCLUDED ON DESIGN DOCUMENTS HEREIN AND MUST NOT SCALE OFF THE
- DRAWINGS DUE TO POTENTIAL PRINTING INACCURACIES ALL DIMENSIONS AND MEASUREMENTS ARE TO BE CHECKED AND CONFIRMED BY THE GENERAL CONTRACTOR PRIOR TO PREPARATION OF SHOP DRAWINGS, FABRICATION/ORDERING OF PARTS AND MATERIALS AND COMMENCEMENT OF SITE WORK. SITE PLAN DRAWINGS ARE NOT INTENDED AS SURVEY DOCUMENTS. DIMENSIONS SUPERSEDE GRAPHICAL REPRESENTATIONS. THE CONTRACTOR MUST MAKE CONTRACTOR'S OWN MEASUREMENTS FOR LAYOUT OF IMPROVEMENTS THE OWNER AND CONTRACTOR MUST BE FAMILIAR WITH AND RESPONSIBLE FOR THE PROCUREMENT OF ANY AND ALL CERTIFICATIONS REQUIRED FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY
- WHEN INCLUDED AS ONE OF THE REFERENCED DOCUMENTS. THE GEOTECHNICAL REPORT, SPECIFICATIONS AND RECOMMENDATIONS SET FORTH THEREIN 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: (A) THE PLANS; AND (B) THE GEOTECHNICAL REPORT AND RECOMMENDATIONS, MUST TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR MUST NOTIFY THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, OF ANY SUCH CONFLICT, DISCREPANCY OR AMBIGUITY BETWEEN THE GEOTECHNICAL REPORT AND PLANS AND SPECIFICATIONS. PRIOR TO PROCEEDING WITH ANY FURTHER WORK. IF A GEOTECHNICAL REPORT WAS NOT CREATED. THEN THE CONTRACTOR MUST FOLLOW AND COMPLY WITH ALL OF THE REQUIREMENTS OF ANY AND ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE SPECIFICATIONS WHICH HAVE JURISDICTION OVER THIS PROJECT. THE PROFESSIONAL OF RECORD AND BOHLER ARE NEITHER LIABLE NOR RESPONSIBLE FOR ANY SUBSURFACE CONDITIONS AND FURTHER, HAS NO
- IABILITY FOR ANY HAZARDOUS MATERIALS, HAZARDOUS SUBSTANCES, OR POLLUTANTS ON, ABOUT OR UNDER THE PROPERTY THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING WHEN AND WHERE 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, ALL OF THIS WORK IS TO BE PERFORMED AT CONTRACTOR'S SOLE COST AND EXPENSE THE CONTRACTOR MUST EXERCISE EXTREME CAUTION 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 CONDITION. THE CONTRACTOR IS RESPONSIBLE FOR TAKING ALL APPROPRIATE MEASURES 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 DEBRIS MUST NOT BE BURIED ON THE SUBJECT SITE. ALL DEMOLITION AND CONSTRUCTION WASTES, UNSUITABLE EXCAVATED MATERIAL, EXCESS SOIL AND DEBRIS (SOLID WASTE) MUST BE DISPOSED OF IN ACCORDANCE WITH THE REQUIREMENTS OF ANY AND ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE CODES WHICH HAVE JURISDICTION OVER THIS PROJECT OR OVER THE CONTRACTOR. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO MAINTAIN RECORDS TO DEMONSTRATE PROPER AND FULLY COMPLIANT DISPOSAL ACTIVITIES,
- TO BE PROMPTLY PROVIDED TO THE OWNER UPON REQUEST. THE CONTRACTOR MUST REPAIR, AT CONTRACTOR'S SOLE COST, ALL DAMAGE DONE TO ANY NEW OR EXISTING CONSTRUCTION OR PROPERTY DURING THE COURSE OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME TO INCLUDE, BUT NOT BE LIMITED TO, REDESIGN, RE-SURVEY, RE-PERMITTING AND CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR AND MUST REPLACE ALL SIGNAL INTERCONNECTION 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 EQUIVALENT TO OR BETTER THAN THE CONDITIONS PRIOR TO COMMENCEMENT OF THE CONSTRUCTION, AND IN CONFORMANCE WITH APPLICABLE CODES, LAWS, RULES, REGULATIONS, STATUTORY REQUIREMENTS AND STATUTES. THE CONTRACTOR MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE CONTRACTOR
- MUST, PROMPTLY, DOCUMENT ALL EXISTING DAMAGE AND NOTIFY, IN WRITING, THE OWNER AND THE CONSTRUCTION MANAGER PRIOR TO THE START OF CONSTRUCTION THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR AND HAVE NO CONTRACTUAL LEGAL OR OTHER RESPONSIBILITIES FOR JOB SITE SAFETY JOB SITE SUPERVISION. OR ANYTHING RELATED TO SAME. THE PROFESSIONAL OF RECORD AND BOHLER HAVE NOT BEEN RETAINED TO PERFORM OR TO BE RESPONSIBLE FOR JOB SITE SAFETY, SAME BEING WHOLLY OUTSIDE OF THE PROFESSIONAL OF RECORD'S AND BOHLER SERVICES AS RELATED TO THE PROJECT. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE TO IDENTIFY OR REPORT ANY JOB SITE SAFETY ISSUES OR ANY JOB SITE CONDITIONS, AT ANY TIME THE CONTRACTOR MUST IMMEDIATELY IDENTIFY IN WRITING, TO THE PROFESSIONAL OF RECORD AND BOHLER, ANY DISCREPANCIES THAT MAY OR
- COULD AFFECT THE PUBLIC SAFETY, HEALTH OR GENERAL WELFARE, OR PROJECT COST, IF THE CONTRACTOR PROCEEDS WITH CONSTRUCTION WITHOUT PROVIDING PROPER WRITTEN NOTIFICATION AS DESCRIBED ABOVE IT WILL BE AT THE CONTRACTOR'S OWN RISK AND FURTHER. THE CONTRACTOR MUST INDEMNIFY, DEFEND AND HOLD HARMLESS THE PROFESSIONAL OF RECORD AND BOHLER FOR ANY AND ALL DAMAGES, COSTS, INJURIES, ATTORNEY'S FEES AND THE LIKE WHICH RESULT FROM OR ARE IN ANY WAY RELATED TO SAME INCLUDING, BUT NOT LIMITED TO, ANY THIRD PARTY AND FIRST PARTY CLAIMS THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR ANY INJURY OR DAMAGES RESULTING FROM THE CONTRACTOR'S FAILURE TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH THE APPROVED PLANS, AND CURRENT CODES, RULES, STATUTES AND THE LIKE, IF

THE CONTRACTOR AND/OR OWNER FAIL TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH APPROVED PLANS. RULES. STATUTES. CODES AND

- THE LIKE, THE CONTRACTOR AND/OR OWNER AGREE TO AND MUST JOINTLY, INDEPENDENTLY, SEPARATELY, AND SEVERALLY INDEMNIFY AND HOLD THE PROFESSIONAL OF RECORD AND BOHLER HARMLESS FOR AND FROM ALL INJURIES, CLAIMS AND DAMAGES THAT THE PROFESSIONAL OF RECORD AND BOHLER SUFFER AND ANY AND ALL COSTS THAT THE PROFESSIONAL OF RECORD AND BOHLER INCUR AS RELATED TO SAME ALL CONTRACTORS MUST CARRY AT LEAST THE MINIMUM AMOUNT OF THE SPECIFIED AND COMMERCIALLY REASONABLE STATUTORY WORKER'S COMPENSATION INSURANCE, EMPLOYER'S LIABILITY INSURANCE AND COMMERCIAL GENERAL LIABILITY INSURANCE (CGL) INCLUDING ALSO ALL IMBRELLA COVERAGES, ALL CONTRACTORS MUST HAVE THEIR CGL POLICIES ENDORSED TO NAME BOHLER. AND ITS PAST, PRESENT AND EUT )WNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AS ADDITIONAL NAMED INSUREDS AND TO PROVIDE CONTRACTUAL LIABILITY COVERAGE SUFFICIENT TO INSURE (DEFEND, IF APPLICABLE) AND HOLD HARMLESS AND INDEMNITY OBLIGATIONS ASSUMED AND AGREED TO BY THE CONTRACTOR HEREIN. ALL CONTRACTORS MUST FURNISH BOHLER WITH CERTIFICATIONS OF INSURANCE OR CERTIFICATES OF INSURANCE AS EVIDENCE OF THE REQUIRED INSURANCE COVERAGES PRIOR TO COMMENCING ANY WORK AND UPON RENEWAL OF EACH POLICY DURING THE ENTIRE PERIOD OF CONSTRUCTION AND FOR TWO YEARS AFTER THE COMPLETION OF CONSTRUCTION AND AFTER ALL PERMITS ARE ISSUED, WHICHEVER DATE IS LATER. IN ADDITION, ALL CONTRACTORS AGREE THAT THEY WILL, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, INDEMNIEY, DEFEND AND HOLD HARMI ESS BOHLER 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, PENALTIES EXPENSES PUNITIVE DAMAGES TORT DAMAGES STATUTORY CLAIMS STATUTORY CAUSES OF ACTION LOSSES CAUSES OF ACTION LIABILITIES OR COSTS, INCLUDING, BUT NOT LIMITED TO, REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH OR TO THE PROJECT, INCLUDING ALL CLAIMS BY EMPLOYEES OF THE CONTRACTOR(S), ALL CLAIMS BY THIRD PARTIES AND ALL
- THE PROFESSIONAL OF RECORD AND BOHLER ARE 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 IN SCOPE AND REVISIONS THAT RESULT FROM SAME. THE CONTRACTOR IS FULLY AND SOLELY RESPONSIBLE FOR DETERMINING THE MEANS AND METHODS FOR COMPLETION OF THE WORK, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. NEITHER THE PROFESSIONAL ACTIVITIES OF BOHLER, NOR THE PRESENCE OF BOHLER 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 (HEREIN "BOHLER PARTIES"). RELIEVES OR WILL RELIEVE THE CONTRACTOR OF AND FROM CONSTRUCTION MEANS. METHODS. SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, OVERSEEING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND COMPLIANCE WITH ALL HEALTH AND SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES WITH JURISDICTION OVER THE PROJECT AND/OR PROPERTY. BOHLER PARTIES HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER (OR ANY RESPONSIBILITY FOR) ANY CONSTRUCTION, THE CONTRACTOR OR ITS EMPLOYEES RELATING TO THEIR WORK AND ANY AND ALL HEALTH AND SAFETY PROGRAMS OR PROCEDURES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY. THE CONTRACTOR MUST INDEMNIFY. DEFEND. PROTECT AND HOLD HARMLESS BOHLER PARTIES FOR AND FROM ANY LIABILITY TO BOHLER PARTIES RESULTING FROM THE CONTRACTOR'S WORK, SERVICES AND/OR VIOLATIONS OF THIS NOTE, THESE NOTES OR ANY NOTES IN THE PLAN SET AND, FURTHER, THE CONTRACTOR MUST NAME BOHLER AS AN ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE

CLAIMS RELATED TO THE PROJECT. THE CONTRACTOR MUST NOTIFY THE PROFESSIONAL OF RECORD, IN WRITING, AT LEAST THIRTY (30) DAYS

PRIOR TO ANY TERMINATION, SUSPENSION OR CHANGE OF ITS INSURANCE HEREUNDER.

- AS DESCRIBED ABOVE WHEN IT IS CLEARLY AND SPECIFICALLY WITHIN BOHLER'S SCOPE OF SERVICES CONTRACT WITH THE OWNER/DEVELOPER. BOHLER 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 EVALUATING CONFORMANCE WITH THE DESIGN INTENT AND THE INFORMATION SHOWN IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONSTRUCTION MEANS AND 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 RESPONSIBILITY OR LIABILITY FOR SAME. BOHLER WILL PERFORM ITS SHOP DRAWING REVIEW WITH REASONABLE PROMPTNESS, AS CONDITIONS PERMIT. ANY DOCUMENT, DOCUMENTING BOHLER'S REVIEW OF A SPECIFIC ITEM OR LIMITED SCOPE, MUST NOT INDICATE THAT BOHLER HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT, BOHLER IS NOT RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR MUST. IN WRITING, PROMPTLY AND IMMEDIATELY BRING ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS TO BOHLER'S ATTENTION. BOHLER IS NOT REQUIRED TO REVIEW PARTIAL
- SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED. IF THE CONTRACTOR DEVIATES FROM THESE PLANS AND/OR SPECIFICATIONS, INCLUDING THE NOTES CONTAINED HEREIN, WITHOUT FIRST OBTAINING THE PRIOR WRITTEN AUTHORIZATION OF THE PROFESSIONAL OF RECORD AND BOHLER FOR ALL DEVIATIONS WITHIN THE PROFESSIONAL OF RECORD'S AND BOHLER SCOPE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PAYMENT OF ALL COSTS INCURRED IN CORRECTING ANY WORK PERFORMED WHICH DEVIATES FROM THE PLANS. ALL FINES AND/OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM AND, FURTHER, MUST DEFEND, INDEMNIFY, PROTECT, AND HOLD HARMLESS THE PROFESSIONAL OF RECORD AND BOHLER PARTIES TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, FOR AND FROM ALL FEES, ATTORNEYS'
- FEES, DAMAGES, COSTS, JUDGMENTS, CLAIMS, INJURIES, PENALTIES AND THE LIKE RELATED TO SAME. THE CONTRACTOR IS RESPONSIBLE FOR A MAINTAINING AND PROTECTING THE TRAFFIC CONTROL PLAN AND ELEMENTS IN ACCORDANCE WITH FEDERAL. STATE, AND LOCAL REQUIREMENTS. FOR ALL WORK THAT AFFECTS PUBLIC TRAVEL EITHER IN THE RIGHT OF WAY OR ON SITE. THE COST FOR THIS ITEM MUST BE INCLUDED IN THE CONTRACTOR'S PRICE AND IS THE CONTRACTOR'S SOLE RESPONSIBILITY 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 PLAN(S) AND DESIGN; AND, FURTHER, THE PROFESSIONAL OF RECORD AND BOHLER ARE 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 THE PROFESSIONAL OF RECORD AND BOHLER PARTIES, HARMLESS FOR ALL INJURIES, DAMAGES AND COSTS THAT THE PROFESSIONAL OF RECORD AND BOHLER INCUR AS A RESULT OF SAID FAILURE OR FAILURE TO PRESERVE.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION ACTIVITIES AND MATERIALS COMPLY WITH AND CONFORM TO APPLICABLE FEDERAL, STATE AND LOCAL RULES AND REGULATIONS, LAWS, ORDINANCES, AND CODES, AND ALL APPLICABLE 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 THE CONTRACTOR MUST STRICTLY COMPLY WITH THE LATEST AND CURRENT OSHA STANDARDS AND REGULATIONS. AND/OR ANY OTHER AGENCY WITH JURISDICTION OVER EXCAVATION AND TRENCHING PROCEDURES. THE PROFESSIONAL OF RECORD AND BOHLER HAS NO RESPONSIBILITY FOR
- OR AS RELATED TO EXCAVATION AND TRENCHING PROCEDURES AND WORK THE CONTRACTOR AND THE OWNER MUST INSTALL ALL ELEMENTS AND COMPONENTS IN STRICT COMPLIANCE WITH AND IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDED INSTALLATION CRITERIA AND SPECIFICATIONS. IF THE CONTRACTOR AND/OR OWNER FAIL TO DO SO THEY AGREE TO JOINTLY INDEPENDENTLY SEPARATELY COLLECTIVELY AND SEVERALLY INDEMNIFY DEFEND PROTECT AND HOLD THE PROFESSIONAL OF RECORD AND BOHLER PARTIES HARMLESS FOR ALL INJURIES AND DAMAGES THAT PROFESSIONAL OF RECORD SUFFERS AND COSTS THAT THE PROFESSIONAL OF RECORD INCURS AS A RESULT OF SAID FAILURE. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN AN ON-SITE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN COMPLIANCE WITH THE ENVIRONMENTAL PROTECTION AGENCY (EPA) REQUIREMENTS OR LOCAL GOVERNING AGENCY FOR SITES WHERE ONE (1) ACRE OR MORE IS DISTURBED BY CONSTRUCTION ACTIVITIES (UNLESS THE LOCAL JURISDICTION REQUIRES A DIFFERENT THRESHOLD). THE CONTRACTOR MUST
- ENSURE THAT ALL ACTIVITIES. INCLUDING THOSE OF ALL SUBCONTRACTORS. ARE IN COMPLIANCE WITH THE SWPPP. INCLUDING BUT NOT LIMITED TO LOGGING ACTIVITIES (MINIMUM ONCE PER WEEK AND AFTER RAINFALL EVENTS) AND CORRECTIVE MEASURES, AS APPROPRIATE AND FURTHER, THE CONTRACTOR IS SOLELY AND COMPLETELY RESPONSIBLE FOR FAILING TO DO SO AS CONTAINED IN THESE DRAWINGS AND ASSOCIATED DOCUMENTS PREPARED BY THE PROFESSIONAL OF RECORD AND BOHLER, THE USE OF THE VORDS 'CERTIFY' OR 'CERTIFICATION' CONSTITUTE(S) AN EXPRESSION ONLY OF PROFESSIONAL OPINION REGARDING THE INFORMATION WHICH IS THE SUBJECT OF THE PROFESSIONAL OF RECORD'S AND BOHLER KNOWLEDGE OR BELIEF AND IN ACCORDANCE WITH COMMON AND ACCEPTED PROCEDURE CONSISTENT WITH THE APPLICABLE STANDARDS OF PRACTICE, AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE OF ANY

NATURE OR TYPE FITHER EXPRESSED OR IMPLIED LINDER ANY CIRCUMSTANCES

#### **GENERAL DEMOLITION NOTES**

(REV. 1/2023)

- THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES. THE CONTRACTOR MUST CONDUCT DEMOLITION/REMOVALS ACTIVITIES IN SUCH A MANNER AS TO ENSURE MINIMUM INTERFERENCE WITH ROADS. STREETS, SIDEWALKS, WALKWAYS, AND ALL OTHER ADJACENT FACILITIES. THE CONTRACTOR MUST OBTAIN ALL APPLICABLE PERMITS FROM THE APPROPRIATE GOVERNMENTAL AUTHORITY (IES) PRIOR TO THE COMMENCEMENT OF ANY ROAD OPENING OR DEMOLITION ACTIVITIES IN OR
- ADJACENT TO THE RIGHT-OF-WAY. WHEN DEMOLITION-RELATED ACTIVITIES IMPACT ROADWAYS AND/OR ROADWAY RIGHT-OF-WAY. THE CONTRACTOR MUST PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH THE CURRENT FEDERAL HIGHWAY ADMINISTRATION "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), AND THE FEDERAL, STATE, AND LOCAL REGULATIONS
- THE DEMOLITION (AND/OR REMOVALS) PLAN IS INTENDED TO PROVIDE GENERAL INFORMATION AND TO IDENTIFY ONLY CONDITIONS REGARDING ITEMS TO BE DEMOLISHED, REMOVED, AND/OR TO REMAIN. THE CONTRACTOR MUST ALSO REVIEW ALL CONSTRUCTION DOCUMENTS AND INCLUDE WITHIN THE DEMOLITION ACTIVITIES ALL INCIDENTAL WORK NECESSARY FOR THE CONSTRUCTION OF THE NEW SITE IMPROVEMENTS THIS PLAN IS NOT INTENDED TO AND DOES NOT PROVIDE DIRECTION REGARDING THE MEANS, METHODS, SEQUENCING, TECHNIQUES AND
- PROCEDURES TO BE EMPLOYED TO ACCOMPLISH THE WORK. ALL MEANS, METHODS, SEQUENCING, TECHNIQUES AND PROCEDURES TO BE USED MUST BE IN STRICT ACCORDANCE AND CONFORMANCE WITH ALL STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR MUST COMPLY WITH ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE FOR THE CONTRACTOR AND THE PUBLIC.
- THE CONTRACTOR MUST PROVIDE ALL "METHODS AND MEANS" NECESSARY TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES, AND ANY OTHER IMPROVEMENTS THAT ARE REMAINING ON OR OFF SITE. THE CONTRACTOR, AT THE CONTRACTOR'S SOLE COST MUST REPAIR ALL DAMAGE TO ALL ITEMS AND FEATURES THAT ARE TO REMAIN. CONTRACTOR MUST USE NEW MATERIAL FOR ALL REPAIRS.
- ONTRACTOR'S REPAIRS MUST INCLUDE THE RESTORATION OF ALL ITEMS AND FEATURES REPAIRED TO THEIR PRE-DEMOLITION CONDITION, OR BETTER. CONTRACTOR MUST PERFORM ALL REPAIRS AT THE CONTRACTOR'S SOLE EXPENSE. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION. THE CONTRACTOR MUST PROCEED WITH THE DEMOLITION IN A SYSTEMATIC AND SAFE MANNER. COMPLYING WITH ALL OSHA REQUIREMENTS. TO ENSURE PUBLIC AND CONTRACTOR SAFETY AND SAFETY TO ALL PROPERTY ON THE SITE OR ADJACENT OR NEAR TO THE SAME.
- THE CONTRACTOR IS RESPONSIBLE FOR JOB SITE SAFETY, WHICH MUST INCLUDE, BUT IS NOT LIMITED TO. THE INSTALLATION AND MAINTENANCE OF BARRIERS, FENCING, OTHER APPROPRIATE AND/OR NECESSARY SAFETY FEATURES AND ITEMS NECESSARY TO PROTECT THE PUBLIC FROM AREAS OF CONSTRUCTION AND CONSTRUCTION ACTIVITIES. THE CONTRACTOR MUST SAFEGUARD THE SITE AS NECESSARY TO PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE ENTRY OF ALL UNAUTHORIZED PERSONS AT ANY TIME. TO OR NEAR THE DEMOLITION AREA. . PRIOR TO THE COMMENCEMENT OF ANY SITE ACTIVITY AND ANY DEMOLITION ACTIVITY. THE CONTRACTOR MUST, IN WRITING, RAISE ANY QUESTIONS CONCERNING THE ACCURACY OR INTENT OF THESE PLANS AND/OR SPECIFICATIONS, ALL CONCERNS OR QUESTIONS REGARDING THE APPLICABLE SAFETY STANDARDS, AND/OR THE SAFETY OF THE CONTRACTOR AND/OR THIRD PARTIES IN PERFORMING THE WORK ON THIS PROJECT.
- NY SUCH CONCERNS MUST BE CONVEYED TO THE PROFESSIONAL OF RECORD AND BOHLER. IN WRITING AND MUST ADDRESS ALL ISSUES AND TEMS RESPONDED TO, BY THE PROFESSIONAL OF RECORD AND BY BOHLER, IN WRITING. 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.
- STATUTES LAWS ORDINANCES AND CODES 2. PRIOR TO COMMENCING ANY DEMOLITION. THE CONTRACTOR MUST: OBTAIN ALL REQUIRED PERMITS AND MAINTAIN THE SAME ON SITE FOR REVIEW BY THE PROFESSIONAL OF RECORD AND ALL PUBLIC AGENCIES WITH JURISDICTION THROUGHOUT THE DURATION OF THE PROJECT, SITE WORK, AND DEMOLITION WORK
- . NOTIFY, AT A MINIMUM, THE MUNICIPAL ENGINEER, DESIGN ENGINEER, AND LOCAL SOIL CONSERVATION JURISDICTION, AT LEAST 72 BUSINESS HOURS PRIOR TO THE COMMENCEMENT OF WORK 15. INSTALL THE REQUIRED SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO SITE DISTURBANCE, AND MAINTAIN SAID CONTROLS UNTIL SITE IS STABILIZED 6. IN ACCORDANCE WITH STATE LAW, THE CONTRACTOR MUST CALL THE STATE ONE-CALL DAMAGE PROTECTION SYSTEM FOR UTILITY MARK OUT, IN ADVANCE OF ANY EXCAVATION.
- COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL UNDERGROUND UTILITIES
- ABANDONED IN ACCORDANCE WITH JURISDICTIONAL AND UTILITY COMPANY REQUIREMENTS ). ARRANGE FOR AND COORDINATE WITH THE APPLICABLE UTILITY SERVICE PROVIDER(S) REGARDING WORKING "OFF-PEAK" HOURS OR ON WEEKENDS AS NECESSARY OR AS REQUIRED TO MINIMIZE THE IMPACT ON, OF, AND TO THE AFFECTED PARTIES. WORK REQUIRED TO BE PERFORMED OFF-PEAK" IS TO BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER
- SUCH MATERIALS TO PURSUE PROPER AND COMPLIANT REMOVAL OF SAME. . THE CONTRACTOR MUST NOT PERFORM ANY EARTH MOVEMENT ACTIVITIES, DEMOLITION OR REMOVAL OF FOUNDATION WALLS, FOOTINGS, OR
- WRITTEN PERMISSION AND AUTHORITY OF AND FROM THE OWNER AND ALL GOVERNMENTAL AGENCIES WITH JURISDICTION. 24. THE 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 ALL NEW IMPROVEMENTS AND MUST
- SUCH REPORTS AND RESULTS TO THE PROFESSIONAL OF RECORD AND THE OWNER. GOVERNMENTAL AUTHORITIES. PRIOR TO COMMENCING ANY EXPLOSIVE PROGRAM AND/OR ANY DEMOLITION ACTIVITIES, THE CONTRACTOR MUST FESTING THAT IS REQUIRED TO MONITOR THE EFFECTS ON ALL LOCAL STRUCTURES AND THE LIKE. DUST AND DIRT RISING AND SCATTERING IN THE AIR. AFTER THE DEMOLITION IS COMPLETE, THE CONTRACTOR MUST CLEAN ALL ADJACENT STRUCTURES AND IMPROVEMENTS TO REMOVE ALL DUST AND DEBRIS WHICH THE DEMOLITION OPERATIONS CAUSE. THE CONTRACTOR IS
- RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO THEIR "PRE-DEMOLITION" CONDITION AT CONTRACTOR'S SOLE COST RIGHT-OF-WAY 28. THE CONTRACTOR MUST MAINTAIN A RECORD SET OF PLANS WHICH INDICATES THE LOCATION OF EXISTING UTILITIES THAT ARE CAPPED, ABANDONED IN PLACE, OR RELOCATED DUE TO DEMOLITION ACTIVITIES. THIS RECORD DOCUMENT MUST BE PREPARED IN A NEAT AND WORKMAN-LIKE MANNER AND TURNED OVER TO THE OWNER/DEVELOPER UPON COMPLETION OF THE WORK. ALL OF WHICH IS AT THE
- CONTRACTOR'S SOLE COST. 29. THE CONTRACTOR MUST EMPTY, CLEAN AND REMOVE FROM THE SITE ALL UNDERGROUND STORAGE TANKS IF ENCOUNTERED IN ACCORDANCE WITH FEDERAL STATE COUNTY AND LOCAL REQUIR EMPTYING, CLEANING AND REMOVAL ARE AT THE CONTRACTOR'S SOLE COST 30. THE CONTRACTOR MUST LOCATE AND CLEARLY DEFINE VERTICALLY AND HORIZONTALLY ALL ACTIVE AND INACTIVE UTILITY AND/OR SERVICE
- REMOVED/RELOCATED DURING SITE ACTIVITY FINAL LOCATION OF ALL PROPOSED IMPROVEMENTS. 2. CONTRACTOR SHALL INSPECT ALL EXISTING UTILITY STRUCTURES THAT ARE TO REMAIN FOR THE PROJECTS RE-USE TO VERIFY SUITABILITY FOR SAME. IF STRUCTURES CAN NOT BE REUSED THEN THE CONTRACTOR SHALL PROVIDE A NEW STRUCTURE. THE CONTRACTOR SHALL COORDINATE
- SUCH WORK WITH THE APPLICABLE UTILITY PROVIDER. IMPEDE THE WORK SHOWN ON THESE PLANS.
- TELECOM AND ELECTRIC. 5 THE CONTRACTOR SHALL MAINTAIN. ADJUST OR ABANDON EXISTING MONITORING WELLS IN ACCORDANCE WITH THE DIRECTION OF THE ENVIRONMENTAL CONSULTANT (TYP.) D THESE FEATURES FOR GRAPHICAL CLARITY
- 2. EXISTING TREES TO REMAIN ARE TO BE PROTECTED DURING CONSTRUCTION UNLESS CLEARLY INDICATED OTHERWISE, REASONABLE CARE AND CAUTION SHALL BE TAKEN DURING CONSTRUCTION TO PREVENT DAMAGE AND SELECTIVE PRUNING MAY BE REQUIRED TO ENSURE THAT TREES DO NOT CONFLICT WITH THE DEVELOPMENT 38. CONTRACTOR SHALL REPAIR/REPLACE ANY TRAFFIC LOOP DETECTORS THAT ARE DAMAGED DURING CONSTRUCTION WITHIN EXISTING OR
- LOOPS OR OTHER SIGNAL EQUIPMENT SHALL BE REPAIRED IMMEDIATELY AFTER THE WORK IS COMPLETE. THE SIGNAL CONTRACTOR SHALL BE AVAILABLE TO MAKE ANY TEMPORARY SIGNAL CHANGES IF REQUESTED BY DOT AND/OR THE MUNICIPALITY. PIT TO DETERMINE THE EXACT SIZE, DEPTH AND LOCATION, PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- SERVICES ARE TO BE TERMINATED IN ACCORDANCE WITH MUNICIPAL / STATE TRANSPORTATION DEPARTMENT REQUIREMENTS

### **GENERAL SITE NOTES**

- SPECIFIC NOTES.
- WASHING ONTO ADJACENT PROPERTIES OR THE RIGHT OF WAY.
- AND THE LIKE
- THE ENTITY WITH JURISDICTION OVER THE PROJECT. ALL DIMENSIONS SHOWN ARE TO BOTTOM FACE OF CURB, EDGE OF PAVEMENT, OR EDGE OF BUILDING, EXCEPT WHEN DIMENSION IS TO A
- UNLESS NOTED CLEARLY OTHERWISE. WHEN APPLICABLE, OWNER/ OPERATOR MUST FILE THE NOLFOR NPDES PERMITS AT APPROPRIATE AND/OR REQUIRED TIMEFRAMES BASED UPON THE DESIRED START OF CONSTRUCTION, LAND DISTURBING ACTIVITIES MUST NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED
- APPROVED SWPPP PLAN DURING CONSTRUCTION OPERATIONS (IF PROVIDED). ALL CONCRETE MUST BE AIR ENTRAINED AND INCLUDE THE MINIMUM COMPRESSIVE STRENGTH OF JURISDICTIONAL STANDARD PSI AT 28 DAYS (OR 4,000 PSI) UNLESS OTHERWISE NOTED ON THE PLANS, DETAILS AND/OR GEOTECHNICAL REPORT. THE CONTRACTOR MUST FILE SITE SIGNAGE APPLICATION OR PERMIT UNDER SEPARATE APPLICATION UNLESS DONE SO AS PART OF JURISDICTIONAL PERMITTING PROCEDURES. THE CONTRACTOR MUST REPAIR OR REPLACE, AT THE CONTRACTOR'S SOLE COST AND EXPENSE, ALL SIDEWALKS, CURBS, PAVEMENT MARKINGS,
- AND PAVEMENT DAMAGED BY CONSTRUCTION ACTIVITIES WHETHER SPECIFIED ON THIS PLAN OR NOT 0. WORK WITHIN THE RIGHT-OF-WAY MUST BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE REQUIREMENTS AND STANDARDS OF THE DEPARTMENT OF PUBLIC WORKS, ENGINEERING DEPARTMENT, HIGHWAY DIVISION, AND/OR STATE DOT HIGHWAY DEPARTMENT. 1. WHERE RETAINING WALLS ARE IDENTIFIED ON THE PLANS. TOP AND BOTTOM OF WALL WIDTHS DO NOT REPRESENT THE ACTUAL WIDTH OF THE IDENTIFIED HEREIN AND ARE TO BE SET/DETERMINED BY THE CONTRACTOR OR WALL DESIGNER, AND MUST BE SET BASED UPON FINAL
- TO CONSTRUCTION, REFER TO GRADING NOTES REGARDING RETAINING WALL DESIGN. CONTRACTOR IS CAUTIONED OF EXISTING UTILITY SERVICES TO REMAIN IN PROXIMITY TO PROPOSED BOLLARDS AND SIGNS. CONTRACTOR SHALL PROVIDE FIELD MODIFICATION LOCATIONS OF BOLLARDS AND BOLLARDS WITH SIGNAGE AS NEEDED TO AVOID CONFLICTS WITH EXISTING UTILITY SERVICES TO REMAIN

#### GENERAL NOTES ARE REFERENCED HEREIN. AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES. IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES. SITE GRADING MUST BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT AS REFERENCED IN THIS PLAN SET. IF NO GEOTECHNICAL REPORT HAS BEEN REFERENCED, THE CONTRACTOR MUST HAVE A GEOTECHNICAL ENGINEER PROVIDE WRITTEN SPECIFICATIONS AND RECOMMENDATIONS PRIOR TO THE CONTRACTOR COMMENCING THE GRADING WORK. THE CONTRACTOR MUST FOLLOW THE REQUIREMENTS OF ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS, WHICH HAVE IURISDICTION OVER THIS PROJECT THE CONTRACTOR IS REQUIRED TO SECURE ALL NECESSARY AND/OR REQUIRED PERMITS AND APPROVALS FOR ALL OFF-SITE MATERIAL SOURCES AND DISPOSAL FACILITIES. THE CONTRACTOR MUST SUPPLY A COPY OF APPROVALS TO THE PROFESSIONAL OF RECORD, BOHLER AND THE OWNER PRIOR TO THE CONTRACTOR COMMENCING ANY WORK THE CONTRACTOR IS FULLY RESPONSIBLE FOR VERIFYING EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCING ANY CONSTRUCTION. SHOULD DISCREPANCIES BETWEEN THE PLANS AND INFORMATION OBTAINED THROUGH FIELD VERIFICATIONS BE IDENTIFIED OR EXIST. THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROFESSIONAL OF RECORD AND BOHLER. IN WRITING THE CONTRACTOR IS RESPONSIBLE FOR REMOVING AND REPLACING ALL UNSUITABLE MATERIALS WITH SUITABLE MATERIALS AS SPECIFIED IN THE GEOTECHNICAL REPORT. THE CONTRACTOR MUST COMPACT ALL EXCAVATED OR FILLED AREAS IN STRICT ACCORDANCE WITH THE GEOTECHNICAL REPORT'S GUIDANCE. 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. THIS REPORT MUST VERIFY 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 WHICH ARE IN EFFECT AND WHICH ARE APPLICABLE TO THE PROJECT, SUBBASE MATERIAL FOR SIDEWALKS, CURB, OR ASPHALT MUST BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS, SHOULD SUBBASE BE DEEMED UNSUITABLE BY OWNER/DEVELOPER, OR OWNER/DEVELOPER'S REPRESENTATIVE, SUBBASE MUST BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL COMPACTED AS THE GEOTECHNICAL REPORT DIRECTS. 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 THERETO. IN THE EVENT OF A DISCREPANCY(IES) AND/OR A CONFLICT(S) BETWEEN PLANS, OR RELATIVE TO OTHER PLANS, THE GRADING PLAN TAKES PRECEDENCE AND CONTROLS. THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, OF ANY DISCREPANCY(IES) AND/OR CONFLICT(S). THE CONTRACTOR IS RESPONSIBLE TO IMPORT FILL OR EXPORT EXCESS MATERIAL AS NECESSARY TO CONFORM TO THE PROPOSED GRADING, AND TO BACKFILL EXCAVATIONS FOR THE INSTALLATION OF UNDERGROUND IMPROVEMENTS. PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 6" ABOVE PAVEMENT GRADE UNLESS OTHERWISE NOTED. THE CONTRACTOR MUST CONFIRM AND ENSURE THAT AS CONSTRUCTED IMPROVEMENTS CREATE THE FOLLOWING MINIMUM SLOPES (EXCEPT WHERE ADA REQUIREMENTS LIMIT THEM): 1.0% ON ALL CONCRETE SURFACES, 1.5% ON ASPHALT SURFACES, 1.5% IN LANDSCAPED AREAS AND 0.75% SLOPE AGAINST ALL ISLANDS, GUTTERS, AND CURBS TO PROVIDE POSITIVE DRAINAGE

**GENERAL GRADING NOTES** 

(REV. 1/2023)

THE CONTRACTOR MUST BECOME FAMILIAR WITH THE APPLICABLE UTILITY SERVICE PROVIDER REQUIREMENTS AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION AND/OR DISCONNECTION AS IDENTIFIED OR REQUIRED FOR THE PROJECT. THE CONTRACTOR /UST PROVIDE THE OWNER WITH WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED. REMOVED AND/OR ABANDONED IN ACCORDANCE WITH THE JURISDICTION AND UTILITY COMPANY REQUIREMENTS AND ALL OTHER APPLICABLE REQUIREMENTS, RULES,

LOCATE AND PROTECT ALL UTILITIES AND SERVICES, INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN AND ADJACENT TO THE LIMITS OF PROJECT ACTIVITIES. THE CONTRACTOR MUST USE AND 18. PROTECT AND MAINTAIN IN OPERATION, ALL ACTIVE UTILITIES AND SYSTEMS THAT ARE NOT BEING REMOVED DURING ANY DEMOLITION ACTIVITIES ARRANGE FOR AND COORDINATE WITH THE APPLICABLE UTILITY SERVICE PROVIDER(S) FOR THE TEMPORARY OR PERMANENT TERMINATION OF SERVICE REQUIRED BY THE PROJECT PLANS AND SPECIFICATIONS REGARDING THE METHODS AND MEANS TO CONSTRUCT SAME. THESE ARE NOT THE PROFESSIONAL OF RECORD'S OR BOHLER RESPONSIBILITY. IN THE EVENT OF ABANDONMENT, THE CONTRACTOR MUST PROVIDE THE UTILITY ENGINEER AND OWNER WITH IMMEDIATE WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND

1. IN THE EVENT THE CONTRACTOR DISCOVERS ANY HAZARDOUS MATERIAL, THE REMOVAL OF WHICH IS NOT ADDRESSED IN THE PROJECT PLANS AND SPECIFICATIONS OR THE CONTRACT WITH THE OWNER/DEVELOPER, THE CONTRACTOR MUST IMMEDIATELY CEASE ALL WORK IN THE AREA OF DISCOVERY, AND IMMEDIATELY NOTIFY, IN WRITING AND VERBALLY, THE OWNER, PROFESSIONAL OF RECORD AND BOHLER, THE DISCOVERY OF

THER MATERIALS WITHIN THE LIMITS OF DISTURBANCE, UNLESS SAME IS IN STRICT ACCORDANCE AND CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS, OR PURSUANT TO THE WRITTEN DIRECTION OF THE OWNER'S STRUCTURAL OR GEOTECHNICAL ENGINEER. DEMOLITION ACTIVITIES AND EQUIPMENT MUST NOT USE OR INCLUDE AREAS OUTSIDE THE DEFINED PROJECT LIMIT LINE. WITHOUT SPECIFIC

BE PERFORMED IN COMPLIANCE WITH THE RECOMMENDATIONS AND GUIDANCE ARTICULATED IN THE GEOTECHNICAL REPORT. BACKFILLING MUST OCCUR IMMEDIATELY AFTER DEMOLITION ACTIVITIES AND MUST BE PERFORMED SO AS TO PREVENT WATER ENTERING THE EXCAVATION. FINISHED SURFACES MUST BE GRADED TO PROMOTE POSITIVE DRAINAGE. THE CONTRACTOR IS RESPONSIBLE FOR COMPACTION TESTING AND MUST SUBMIT 25. EXPLOSIVES MUST NOT BE USED WITHOUT PRIOR WRITTEN CONSENT FROM BOTH THE OWNER AND ALL APPLICABLE, NECESSARY AND REQUIRED

ENSURE AND OVERSEE THE INSTALLATION OF ALL OF THE REQUIRED PERMIT AND EXPLOSIVE CONTROL MEASURES THAT THE FEDERAL, STATE, AND LOCAL GOVERNMENTS REQUIRE. THE CONTRACTOR IS ALSO RESPONSIBLE TO CONDUCT AND PERFORM ALL INSPECTION AND SEISMIC VIBRATION 26. IN ACCORDANCE WITH FEDERAL, STATE, AND/OR LOCAL STANDARDS, THE CONTRACTOR MUST USE DUST CONTROL MEASURES TO LIMIT AIRBORNE

2. PAVEMENT MUST BE SAW CUT IN STRAIGHT LINES, ALL DEBRIS FROM REMOVAL OPERATIONS MUST BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS OUTSIDE OF APPROVED AREAS WILL NOT BE PERMITTED. INCLUDING BUT NOT LIMITED TO. THE PUBLIC

SYSTEMS THAT ARE TO BE REMOVED. THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN ALL ACTIVE SYSTEMS THAT ARE NOT BEING

CONTRACTOR SHALL FIELD LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION AND IF REQUIRED DIG EXPLORATORY TEST PITS TO CONFIRM EXACT LOCATION AND DEPTH OF UTILITIES. CONTRACTOR SHALL NOTIFY DESIGN ENGINEER WITH ANY CONFLICTS AS NEEDED TO COORDINATE

3. CONTRACTOR TO REMOVE ANY BUILDING FOUNDATION REMAINS OR ASSOCIATED IMPROVEMENTS, DELETERIOUS MATERIALS, AND/OR DEBRIS THAT 34. THE CONTRACTOR SHALL REVIEW THE PLANS VERSUS THE LOCATION OF EXISTING STRUCTURES, UTILITIES AND APPURTENANCES IN THE FIELD TO CONFIRM ACCURACY OF SAME AND VERIFY ITEMS TO BE REMOVED. THE CONTRACTOR SHALL CARRY COSTS FOR REMOVAL OF ANY EXISTING STRUCTURES, APPURTENANCES, AND UNDERGROUND UTILITIES, INCLUDING BUT NOT LIMITED TO, DRAIN, WATER, SEWER, STEAM, IRRIGATION, GAS,

36. WHERE THE LIMIT OF WORK COINCIDES WITH PROPERTY LINE, TREE LINE, PROPOSED SAWCUT OR COMBINATION THEREOF IT IS SHOWN ADJACENT

PROPOSED RIGHTS OF WAYS. ANY SUCH WORK SHALL BE PERFORMED BY A LICENSED / DOT APPROVED SIGNAL CONTRACTOR. ANY DAMAGED

39. THE CONTRACTOR MUST FIELD VERIFY THE LOCATIONS WHERE PROPOSED UTILITIES CROSS EXISTING UNDERGROUND UTILITIES BY USING A TEST 40. CONTRACTOR SHALL LOCATE ANY EXISTING UTILITY SERVICES THAT ARE TO BE TERMINATED AT THE EXISTING MAIN AND/OR PROPERTY LINE. THESE

THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES. IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' PRIOR TO THE COMMENCEMENT OF GENERAL CONSTRUCTION, THE CONTRACTOR MUST INSTALL SOIL EROSION CONTROL AND ANY STORMWATER POLLUTION PREVENTION PLAN (SWPPP) MEASURES NECESSARY, AS INDICATED ON THE APPROVED SOIL EROSION AND SEDIMENT CONTROL PLAN AND IN ACCORDANCE WITH APPLICABLE AND/OR APPROPRIATE AGENCIES' GUIDELINES TO PREVENT SEDIMENT AND/OR LOOSE DEBRIS FROM ALL DIRECTIONAL/TRAFFIC SIGNING AND PAVEMENT STRIPING MUST CONFORM TO THE LATEST STANDARDS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND ANY APPLICABLE STATE OR LOCALLY APPROVED SUPPLEMENTS, GUIDELINES, RULES, REGULATIONS, STANDARDS THE LOCATIONS OF PROPOSED UTILITY POLES AND TRAFFIC SIGNS SHOWN ON THE PLANS ARE SCHEMATIC AND PRELIMINARY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR FIELD-VERIFYING THEIR LOCATION. THE CONTRACTOR MUST COORDINATE THE RELOCATION OF TRAFFIC SIGNS WITH PROPERTY LINE, STAKE OUT OF LOCATIONS OF INLETS, LIGHT POLES, ETC. MUST BE PERFORMED IN STRICT ACCORDANCE WITH THE DETAILS,

(REV. 1/2020)

FROM GOVERNING AUTHORITIES (INCLUDING STORMWATER POLLUTION PREVENTION PLAN). THE CONTRACTOR MUST STRICTLY ADHERE TO THE

PROPOSED WALL, RATHER THEY ARE AN ASSUMPTION BASED ON WALL TYPE AND WALL HEIGHT, WALL FOOTINGS AND /OR FOUNDATIONS ARE NOT STRUCTURAL DESIGN SHOP DRAWINGS PREPARED BY THE APPROPRIATE PROFESSIONAL LICENSED IN THE STATE WHERE THE CONSTRUCTION ICCURS. THE CONTRACTOR MUST ENSURE THAT AN APPROPRIATELY LICENSED PROFESSIONAL DESIGNS ALL WALLS SHOWN HEREON AND PRIOR

CAP UNIT OR FOOTING). WALL FOOTINGS/FOUNDATION ELEVATIONS ARE NOT IDENTIFIED HEREIN AND ARE TO BE SET/DETERMINED BY THE CONTRACTOR OR WALL DESIGNER, AND MUST BE SET BASED UPON FINAL STRUCTURAL DESIGN SHOP DRAWINGS PREPARED BY THE APPROPRIATE PROFESSIONAL LICENSED IN THE STATE WHERE THE CONSTRUCTION OCCURS. THE CONTRACTOR MUST ENSURE THAT THERE ARE NO UTILITIES ON THE PASSIVE SIDE OF THE RETAINING WALL. NO EXCAVATION MAY BE PERFORMED ON THE PASSIVE SIDE OF THE RETAINING WALL WITHOUT APPROPRIATELY AND SAFELY SUPPORTING THE WALL IN ACCORDANCE WITH THE STANDARD OF CARE AND ALL APPLICABLE RULES, REGULATIONS CODES, ORDINANCES, LAWS AND STATUTES. MSE OR GRAVITY BLOCK WALLS SHALL BE CONSTRUCTED SUCH THAT UPON COMPLETION OF CONSTRUCTION THERE IS NO UNFINISHED SURFACE OR LIFTING RINGS VISIBLE (E.G. USE OF FINISHED TOP BLOCK OR CAP STONES) STORMWATER RUNOFF WITHIN PROPERTY MUST BE COLLECTED ON-SITE WITH NO OVERLAND RUNOFF ONTO THE RIGHT-OF-WAY OR ADJACENT PROPERTIES TO THE MAXIMUM EXTENT POSSIBLE OR IN THE MANNER SHOWN ON THE CONSTRUCTION DRAWINGS. STORMWATER RUNOFF ONTO ADJACENT PROPERTIES SHALL BE CONTROLLED AS TO NOT ADVERSELY IMPACT SAID PROPERTIES. BEFORE COMMENCING GRADING WORK, CONTRACTOR SHALL SUBMIT SAMPLES OF ALL NATIVE AND IMPORTED MATERIALS WITH THEIR INTENDED

1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE

FOR STRUCTURAL USES TO THE GEOTECHNICAL ENGINEER OF RECORD. REFER TO GENERAL NOTES SHEET FOR ADDITIONAL ADA GUIDELINES AND REQUIREMENTS. 15. FOR ALL RETAINING WALLS 4 FEET OR GREATER IN HEIGHT

15.1. THE OWNER OR THE OWNER'S CONTRACTOR IS TO PROVIDE A SITE-SPECIFIC RETAINING WALL DESIGN PREPARED BY THE APPROPRIATE PROFESSIONAL LICENSED (E.G. STRUCTURAL ENGINEER) IN THE STATE WHERE THE CONSTRUCTION OCCURS. SOIL TYPES, WATER TABLE ELEVATION. EXISTING & PROPOSED SURROUNDING IMPROVEMENTS/CONDITIONS (INCLUDING BUT NOT LIMITED TO SLOPES, DRIVE AISLES ROADS, FENCING, GUIDERAILS, UTILITIES, DRAINAGE FACILITIES, STRUCTURES, FOUNDATIONS), LIVE LOADS AND OTHER SITE AMENITIES THAT COULD HAVE AN INFLUENCE OR IMPACT ON THE RETAINING WALL(S) CONSTRUCTABILITY AND/OR LONGEVITY SHALL BE CONSIDERED AND INCORPORATED INTO THE RETAINING WALL DESIGN AS WELL AS THE GLOBAL STABILITY ANALYSIS. 15.2. PEER REVIEW AND GLOBAL STABILITY ANALYSIS OF THE RETAINING WALL DESIGN MUST BE COMPLETED BY THE OWNER'S GEOTECHNICAL

ENGINEER TO CERTIFY THE DESIGN MEETS INDUSTRY STANDARDS FOR FACTOR OF SAFETY SOIL TYPES WATER TABLE FLEVATION AND DESIGN PROPERTIES AS NOTED ABOVE SHALL BE FIELD CONFIRMED AND APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO WALL CONSTRUCTION. CONTRACTOR SHALL INSTALL CONCRETE CURB ALONG FACE OF BUILDING / WALL AS SHOWN TO PROVIDE CONSISTENT WIDTH ALONG LENGTH OF

PROPOSED ACCESSIBLE RAMP AND RAMP LANDING TO MEET ADA/AAB REQUIREMENTS. 17. CONTRACTOR SHALL REVIEW RETAINING WALL LOCATIONS VERSUS APPLICABLE STATE AND LOCAL CODES AND PROVIDE FALL PROTECTION (E.G. FENCING OR RAILING) IN ACCORDANCE WITH SAID CODE . CONTRACTOR SHALL COORDINATE WITH OWNER/OPERATOR TO REVIEW EXISTING DEPRESSIONS WITHIN EXISTING PAVEMENT AREAS TO REMAIN

AND SHALL CONFIRM THAT THE SCOPE OF WORK SHALL PROVIDE POSITIVE DRAINAGE BY FIXING ANY EXISTING AREAS OF PONDING. BEFORE COMMENCING GRADING WORK, CONTRACTOR SHALL SUBMIT SAMPLES OF ALL NATIVE AND IMPORTED MATERIALS WITH THEIR INTENDED FOR STRUCTURAL USES TO THE GEOTECHNICAL ENGINEER OF RECORD.

#### **GENERAL DRAINAGE & UTILITY NOTES**

THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES. IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES LOCATIONS OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE, AND THE CONTRACTOR MUST INDEPENDENTLY VERIFY AND CONFIRM THOSE LOCATIONS AND SERVICES WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCING ANY CONSTRUCTION OR EXCAVATION. THE

- CONTRACTOR MUST INDEPENDENTLY VERIFY AND CONFIRM ALL SANITARY CONNECTION POINTS AND ALL OTHER UTILITY SERVICE CONNECTION POINTS IN THE FIELD, PRIOR TO COMMENCING ANY CONSTRUCTION. THE CONTRACTOR MUST REPORT ALL DISCREPANCIES, ERRORS AND OMISSIONS IN WRITING. TO THE PROFESSIONAL OF RECORD AND BOHLER. THE CONTRACTOR MUST VERTICALLY AND HORIZONTALLY LOCATE ALL UTILITIES AND SERVICES INCLUDING, BUT NOT LIMITED TO, GAS, WATER, ELECTRIC, SANITARY AND STORM, 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 OF THE UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL DAMAGE TO ANY
- EXISTING UTILITIES WHICH OCCUR DURING CONSTRUCTION, AT NO COST TO THE OWNER AND AT CONTRACTOR'S SOLE COST AND EXPENSE. THE CONTRACTOR MUST BEAR ALL COSTS ASSOCIATED WITH DAMAGE TO ANY EXISTING UTILITIES WHICH OCCURS DURING CONSTRUCTION. THE CONTRACTOR MUST FIELD VERIFY THE PROPOSED INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES BY USING A TEST PIT TO CONFIRM EXACT DEPTH, PRIOR TO COMMENCEMENT OF CONSTRUCTION. STORMWATER ROOF DRAIN LOCATIONS ARE BASED ON ARCHITECTURAL PLANS. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATIONS OF
- SAME BASED UPON FINAL ARCHITECTURAL PLANS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING SITE PLAN DOCUMENTS AND ARCHITECTURAL PLANS FOR EXACT BUILDING UTILIT CONNECTION LOCATIONS: GREASE TRAP REQUIREMENTS: AND DETAILS, DOOR ACCESS, AND EXTERIOR GRADING. THE ARCHITECT WILL DETERMINE THE UTILITY SERVICE SIZES. THE CONTRACTOR MUST COORDINATE INSTALLATION OF UTILITY SERVICES WITH THE INDIVIDUAL COMPANIES TO AVOID CONFLICTS AND TO ENSURE THAT PROPER DEPTHS ARE ACHIEVED. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT INSTALLATION OF ALL IMPROVEMENTS COMPLIES WITH ALL UTILITY REQUIREMENTS OF THE APPLICABLE JURISDICTION AND REGULATORY AGENCIES AND ALL OTHER
- APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES AND, FURTHER, IS RESPONSIBLE FOR COORDINATING THE UTILITY TIF-INS/CONNECTIONS PRIOR TO CONNECTING TO THE EXISTING UTILITY/SERVICE. WHERE A CONFLICT(S) EXISTS BETWEEN THESE DOCUMENTS AND THE ARCHITECTURAL PLANS, OR WHERE ARCHITECTURAL PLAN UTILITY CONNECTION POINTS DIFFER. THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROFESSIONAL OF RECORD AND BOHLER. IN WRITING, AND PRIOR TO CONSTRUCTION, MUST RESOLVE SAME. ALL FILL, COMPACTION, AND BACKFILL MATERIALS REQUIRED FOR UTILITY INSTALLATION MUST BE EXACTLY AS PER THE RECOMMENDATIONS ROVIDED IN THE GEOTECHNICAL REPORT AND THE CONTRACTOR MUST COORDINATE SAME WITH THE APPLICABLE UTILITY COMPANY
- SPECIFICATIONS, WHEN THE PROJECT DOES NOT HAVE GEOTECHNICAL RECOMMENDATIONS, FILL AND COMPACTION MUST COMPLY WITH APPLICABLE REQUIREMENTS AND SPECIFICATIONS. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR DESIGN OF TRENCH BACKFILL OR FOR COMPACTION REQUIREMENTS DURING THE INSTALLATION OF SANITARY, STORM, 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, IN ANY RESPECT, FROM THE INFORMATION CONTAINED IN THESE PLANS. THIS RECORD MUST BE KEPT ON A CLEAN COPY OF THE APPROPRIATE PLAN(S), WHICH THE CONTRACTOR MUST PROMPTLY PROVIDE TO THE OWNER IMMEDIATELY UPON THE COMPLETION OF WORK. THE CONTRACTOR MUST ENSURE THAT ALL UTILITY TRENCHES LOCATED IN EXISTING PAVED ROADWAYS INCLUDING SANITARY, WATER AND STORM SYSTEMS, ARE REPAIRED IN ACCORDANCE WITH REFERENCED MUNICIPAL, COUNTY AND OR STATE DOT DETAILS AS APPLICABLE. THE CONTRACTOR
- MUST COORDINATE INSPECTION AND APPROVAL OF COMPLETED WORK WITH THE AGENCY WITH JURISDICTION OVER SAM FINAL LOCATIONS OF PROPOSED UTILITY POLES, AND/ OR POLES TO BE RELOCATED ARE AT THE SOLE DISCRETION OF THE RESPECTIVE UTILITY COMPANY, REGARDLESS OF WHAT THIS PLAN DEPICTS. 11 WATER SERVICE MATERIALS BURIAL DEPTH AND COVER REQUIREMENTS MUST BE SPECIFIED BY THE LOCAL UTILITY COMPANY THE CONTRACTOR MUST CONTACT THE APPLICABLE MUNICIPALITY TO CONFIRM THE PROPER WATER METER AND VAULT, PRIOR TO COMMENCING CONSTRUCTION. THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, AND SANITARY CLEANOUT MUST BE ADJUSTED, AS NECESSARY, TO MATCH PROPOSED
- FINISHED GRADES WITH NO TRIPPING OR SAFETY HAZARD IN ACCORDANCE WITH ALL APPLICABLE STANDARDS, REQUIREMENTS, RULES, STATUTES, LAWS ORDINANCES AND CODES THE CONTRACTOR'S PRICE FOR WATER AND SEWER SERVICE INSTALLATIONS MUST INCLUDE ALL FEES, COSTS, AND APPLIRTENANCES REQUIRED BY THE UTILITY PROVIDER (AND OTHER AGENCIES HAVING JURISDICTION OVER THE WORK) TO PROVIDE FULL AND COMPLETE WORKING SERVICE. INCLUDING (BUT NOT LIMITED TO) NECESSARY FEES. TESTING, DISINFECTING, INSPECTIONS, ROAD OPENING & BACKFILL REQUIREMENTS, TRAFFIC CONTROL AND SURETY BONDS AS DEFINED BY THE PROVIDER (AND OTHER AGENCIES HAVING JURISDICTION OVER THE WORK) 14. ALL WORK ASSOCIATED WITH UTILITY POLES, OVERHEAD WIRES AND ANY/ALL APPURTENANCES SHALL BE COORDINATED BY THE GC WITH THE
- LOCAL UTILITY COMPANIES PRIOR TO THE ORDERING OF ANY MATERIALS. THIS MAY INCLUDE BUT IS NOT LIMITED TO THE REMOVAL, INSTALLATION, RELOCATION OR PROTECTION OF ANY BRACING, GUY WIRES, OVERHEAD WIRES, ETC, AS MAY BE REQUIRED TO ACCOMMODATE THE PROJECT. 15. SEWERS CONVEYING SANITARY 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, AT A MINIMUM, BE IN SEPARATE TRENCHES WITH THE AT LEAS 18 INCHES OF VERTICAL SEPARATION FROM THE BOTTOM OF THE WATER MAIN TO THE TOP OF THE SEWER LINE. 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 SLIP-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 SANITARY SEWER, ADEQUATE STRUCTURAL SUPPORT FOR THE SANITARY SEWER MUST BE PROVIDED. ALL CROSSINGS SHALL BE IN ACCORDANCE WITH JURISDICTIONAL PERMITTING/UTILITY AUTHORITIES REGULATIONS . WHEN THESE PLANS INVOLVE MULTIPLE BUILDINGS, SOME OF WHICH MAY BE BUILT AT A LATER DATE, THE CONTRACTOR MUST EXTEND ALL UTILITY SERVICES, INCLUDING BUT NOT LIMITED TO STORM, SANITARY, UTILITIES, AND IRRIGATION LINES, TO A POINT AT LEAST FIVE (5) FEET BEYOND THE
- PAVED AREAS FOR WHICH THE CONTRACTOR IS RESPONSIBLE. THE CONTRACTOR MUST CAP ENDS OF INSTALLED UTILITIES AS APPROPRIATE, MARK UTILITY ENDS WITH MAGNETIC TRACER TAPE. MARK TERMINUS LOCATIONS WITH A 2X4 STAKE, AND MUST NOTE THE LOCATION OF ALL UTILITY. STUBS ON A CLEAN COPY OF THE PLAN. THIS RECORD DOCUMENT MUST BE PREPARED IN A NEAT AND WORKMAN-LIKE MANNER AND TURNED OVER TO THE OWNER/DEVELOPER UPON COMPLETION OF THE WORK, ALL OF WHICH IS AT THE CONTRACTOR'S SOLE COST. STORM AND SANITARY PIPE LENGTHS INDICATED ARE NOMINAL AND ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE UNLESS INDICATED ON THE PLANS OTHERWISE
- 18. UNLESS INDICATED OTHERWISE, ALL NEW UTILITIES/SERVICES, INCLUDING ELECTRIC, TELEPHONE, CABLE TV, ETC., MUST BE INSTALLED UNDERGROUND. ALL NEW UTILITY SERVICES MUST BE INSTALLED IN ACCORDANCE WITH THE UTILITY SERVICE PROVIDER INSTALLATION SPECIFICATIONS AND STANDARDS SANITARY PIPE MUST BE POLYVINYL CHLORIDE (PVC) SDR 35 EXCEPT WHERE CLEARLY INDICATED OTHERWISE. SANITARY LATERAL(S) MUST BE PVC SDR 26 UNLESS CLEARLY INDICATED OTHERWISI
- 20. UNLESS CLEARLY INDICATED OTHERWISE, ALL STORM PIPE MUST BE REINFORCED CONCRETE PIPE (RCP) CLASS III WITH SILT/SOIL TIGHT JOINTS. WHEN HIGH-DENSITY POLYETHYLENE PIPE (HDPE) IS CALLED FOR ON THE PLANS, IT MUST CONFORM TO AASHTO M252 FOR PIPES 4" TO 10" AND TO AASHTO M294 FOR PIPES 12" TO 60" AND TYPE S (SMOOTH INTERIOR WITH ANGULAR CORRUGATIONS) WITH GASKET FOR SILT/SOIL TIGHT JOINT. PIPE FOR ROOF DRAIN CONNECTION MUST BE SDR 26 PVC OR SCHEDULE 40 UNLESS INDICATED OTHERWISE. HDPE PIPE JOINT GASKETS MUST BE PROVIDED AND CONFORM TO ASTM F477. DRAIN PIPE INSTALLED WITH OVER TEN (10) FEET OVER COVER AND/OR IN HIGH GROUNDWATER CONDITIONS SHALL BE SANITITE HP POLYPROPYLENE PIPE (PP). OR APPROVED EQUIVALENT
- 21. UNLESS CLEARLY INDICATED OTHERWISE ALL SANITARY PIPE MUST BE: 21.1. FOR PIPES LESS THAN 12 FEET DEEP: POLYVINYL CHLORIDE (PVC) SDR 35 PER ASTM D3034 21.2. FOR PIPES GREATER THAN 12 FEET DEEP: POLYVINYL CHLORIDE (PVC) SDR 26 PER ASTM D3034.
- 21.3. UNLESS LOCAL OR STATE BUILDING / PLUMBING CODE CLEARLY SPECIFIES DIFFERENTLY, SANITARY LATERALS MUST BE PVC SDR 26. 21.4. FOR ALL UTILITY PIPING (INCLUDING DRAIN) WITHIN 10 FT OF A BUILDING, PIPE MATERIAL SHALL COMPLY WITH APPLICABLE LOCAL OR STATE BUILDING AND PLUMBING CODES. CONTRACTOR SHALL REFER TO PLUMBING ENGINEERING PLANS AND VERIFY PIPE MATERIAL WITH LOCAL OFFICIAL PRIOR TO ORDERING OF MATERIALS. 21.5. CONTRACTOR SHALL VERIFY THE CONNECTION OF EXTERIOR PIPING TO ANY FIXTURES (SUCH AS AN EXTERIOR GREASE INTERCEPTOR) OR
- OTHER DRAINAGE SYSTEMS WITH LOCAL OFFICIALS FOR COMPLIANCE WITH APPLICABLE LOCAL OR STATE BUILDING AND PLUMBING CODES PRIOR TO ORDERING OF MATERIALS. WATER MAIN PIPING MUST BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS AND SPECIFICATIONS OF THE LOCAL WATER COMPANY. 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. . GAS METERS MUST BE PROTECTED AS REQUIRED BY THE JURISDICTIONAL GAS PROVIDER.

# WHERE RETAINING WALLS ARE IDENTIFIED ON THE PLANS, TOP AND BOTTOM OF WALL ELEVATIONS (TW & BW) REPRESENT THE PROPOSED FINISHED GRADE AT THE FACE OF THE TOP AND BOTTOM OF THE WALL AND DO NOT REPRESENT THE ELEVATION OF THE PROPOSED WALL (INCLUDING THE

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WORK

#### ADA INSTRUCTIONS TO CONTRACTOR

INDUSTRY GUIDELINES

1 ALL ACCESSIBLE (A K A ADA) COMPONENTS AND ACCESSIBLE ROLITES MUST BE CONSTRUCTED TO MEET AT A MINIMUM. THE MORE STRINGENT OF (A) 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.); AND (B) ANY APPLICABLE LOCAL AND STATE GUIDELINES, AND ANY AND ALL AMENDMENTS TO BOTH, WHICH ARE IN EFFECT WHEN THESE PLANS WERE COMPLETED THE CONTRACTOR MUST REVIEW ALL DOCUMENTS REFERENCED IN THESE NOTES FOR ACCURACY, COMPLIANCE AND CONSISTENCY WITH

THE CONTRACTOR MUST EXERCISE APPROPRIATE CARE AND PRECISION IN CONSTRUCTION OF ACCESSIBLE (ADA) COMPONENTS AND ACCESSIBLE ROUTES FOR THE SITE. FINISHED SURFACES ALONG THE ACCESSIBLE ROUTE OF TRAVEL FROM PARKING SPACES, PUBLIC TRANSPORTATION, PEDESTRIAN ACCESS, AND INTER-BUILDING ACCESS, TO POINTS OF ACCESSIBLE BUILDING ENTRANCE/EXIT, MUST COMPLY WITH THE ACCESSIBLE GUIDELINES AND REQUIREMENTS WHICH INCLUDE. BUT ARE NOT LIMITED TO THE FOLLOWING ACCESSIBLE PARKING SPACES AND ACCESS AISLES SLOPES MUST NOT EXCEED 1:50 (2.0%) IN ANY DIRECTION.

PATH OF TRAVEL ALONG ACCESSIBLE ROUTE MUST PROVIDE A 36-INCHES MINIMUM WIDTH (48-INCHES PREFERRED), OR AS SPECIFIED BY THE SOVERNING AGENCY. UNOBSTRUCTED WIDTH OF TRAVEL (CAR OVERHANGS AND/OR HANDRAILS) MUST NOT REDUCE THIS MINIMUM WIDTH. THE SLOPE MUST NOT EXCEED 1:20 (5.0%) IN THE DIRECTION OF TRAVEL AND MUST NOT EXCEED 1:50 (2.0%) IN CROSS SLOPE. WHERE ACCESSIBLE PATH OF TRAVEL IS GREATER THAN 1:20 (5.0%) AN ACCESSIBLE RAMP MUST BE PROVIDED. ALONG THE ACCESSIBLE PATH OF TRAVEL OPENINGS MUST NOT EXCEED 1/2-INCH IN WIDTH. VERTICAL CHANGES OF UP TO 1/2-INCH ARE PERMITTED ONLY IF THEY INCLUDES A 1/4-INCH BEVEL AT A SLOPE NOT STEEPER THAN 1:2. NO VERTICAL CHANGES OVER 1/4-INCH ARE PERMITTED. ACCESSIBLE RAMPS MUST NOT EXCEED A SLOPE OF 1:12 (8.3%) AND A RISE OF 30-INCHES, LEVEL LANDINGS MUST BE PROVIDED AT EACH END OF ACCESSIBLE RAMPS. LANDING MUST PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES, AND MUST NOT EXCEED 1:50 (2.0%) SLOPE IN ANY DIRECTION, RAMPS THAT CHANGE DIRECTION BETWEEN RUNS AT LANDINGS MUST HAVE A CLEAR LANDING OF A MINIMUM OF 60-INCHES BY

60-INCHES. HAND RAILS ON BOTH SIDES OF THE RAMP MUST BE PROVIDED ON AN ACCESSIBLE RAMP WITH A RISE GREATER THAN 6-INCHES.

(ADA) CODE AND STATE BUILDING CODE AS IT RELATES TO ANY ACCESSIBLE IMPROVEMENTS BEING CONSTRUCTED PRIOR TO COMMENCING THE

ACCESSIBLE CURB RAMPS MUST NOT EXCEED A SLOPE OF 1:12 (8.3%) WHERE FLARED SIDES ARE PROVIDED. THEY MUST NOT EXCEED 1:10 (10%) SLOPE. LEVEL LANDING MUST BE PROVIDED AT RAMPS TOP AT A MINIMUM OF 36-INCHES LONG (48-INCHES PREFERRED). IN ALTERATIONS, WHEN THERE IS NO LANDING AT THE TOP, FLARE SIDES SLOPES MUST NOT EXCEED A SLOPE OF 1:12 (8.3%). DOORWAY LANDINGS AREAS MUST BE PROVIDED ON THE EXTERIOR SIDE OF ANY DOOR LEADING TO AN ACCESSIBLE PATH OF TRAVEL. THIS LANDING MUST BE SLOPED AWAY FROM THE DOOR NO MORE THAN 1:50 (2.0%) FOR POSITIVE DRAINAGE. THIS LANDING AREA MUST BE NO FEWER THAN 60-INCHES (5 FEET) LONG. EXCEPT WHERE OTHERWISE CLEARLY PERMITTED BY ACCESSIBLE STANDARDS FOR ALTERNATIVE DOORWAY OPENING CONDITIONS. (SEE ICC/ANSI A117.1-2009 AND OTHER REFERENCES INCORPORATED BY CODE). 9. WHEN THE PROPOSED CONSTRUCTION INVOLVES RECONSTRUCTION, MODIFICATION, REVISION OR EXTENSION OF OR TO ACCESSIBLE

COMPONENTS FROM EXISTING DOORWAYS OR SURFACES, THE CONTRACTOR MUST VERIFY ALL EXISTING ELEVATIONS SHOWN ON THE PLAN. NOTE THAT TABLE 405.2 OF THE DEPARTMENT OF JUSTICE'S ADA STANDARDS FOR ACCESSIBLE DESIGN ALLOWS FOR STEEPER RAMP SLOPES, IN RARE CIRCUMSTANCES THE CONTRACTOR MUST IMMEDIATELY NOTICY THE PROFESSIONAL OF RECORD AND BOHLER. IN WRITING, OF ANY DISCREPANCIES AND/OR FIELD CONDITIONS THAT DIFFER IN ANY WAY OR IN ANY RESPECT FROM WHAT IS SHOWN ON THE PLANS BEFORE COMMENCING ANY WORK. CONSTRUCTED IMPROVEMENTS MUST FALL WITHIN THE MAXIMUM AND MINIMUM LIMITATIONS IMPOSED BY THE BARRIER FREE REGULATIONS AND THE ACCESSIBLE GUIDELINES THE CONTRACTOR MUST VERIFY ALL OF THE SLOPES OF THE CONTRACTOR'S FORMS PRIOR TO POURING CONCRETE. IF ANY NON-CONFORMANCE EXISTS OR IS OBSERVED OR DISCOVERED, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, PRIOR TO POURING CONCRETE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL COSTS TO REMOVE, REPAIR AND/OR REPLACE

NON-CONFORMING CONCRETE AND/OR PAVEMENT SURFACES 11. IT IS STRONGLY RECOMMENDED THAT THE CONTRACTOR REVIEW THE INTENDED CONSTRUCTION TO ENSURE SAME IS CONSISTENT WITH THE LOCAL BUILDING CODE PRIOR TO COMMENCING CONSTRUCTION. IN ADDITION TO THE ABOVE, THE CONTRACTOR MUST ALSO ENSURE THAT ALL ACCESSIBLE COMPONENTS AND ACCESSIBLE ROUTES ARE CONSTRUCTED IN STRICT ACCORDANCE WITH THE MASSACHUSETTS ARCHITECTURAL ACCESS BOARD REGULATIONS 521 CMR. THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER OF RECORD. IN WRITING, OF ANY DISCREPANCIES BETWEEN THE "AMERICANS WITH DISABILITIES ACT"



#### ABBREVIATIONS

| _       |      |      | -      |
|---------|------|------|--------|
| TYPICAL | LINE | TYPE | LEGEND |

EXISTING

(REV. 1/2023)

|                | DESCRIPTION                                  |
|----------------|--|
| AG / ABVG      | ABOVE GROUND                                 |
| ARCH           | ARCHITECT                                    |
| BC             | BACK OF CURB                                 |
| BCC<br>BM      | BITUMINOUS CONCRETE CURB<br>BENCHMARK        |
| BOC            | BOTTOM OF CURB                               |
| BW             | BOTTOM OF WALL                               |
| BLDG           | BUILDING                                     |
| CC             | CONCRETE CURB                                |
| CCB            | CAPE COD BERM                                |
| CONC.<br>DEC   | CONCRETE<br>DECORATIVE                       |
| °              | DEGREE                                       |
| DEP            | DEPRESSED                                    |
| Ø / DIA        | DIAMETER                                     |
| DMH            | DRAIN MANHOLE                                |
| DIP            | DUCTILE IRON PIPE                            |
| ECC            | EXTRUDED CONCRETE CURB                       |
| EOP<br>ELEV    | EDGE OF PAVEMENT<br>ELEVATION                |
| EXIST.         | EXISTING                                     |
| FF             | FINISH FLOOR                                 |
| FFE            | FINISH FLOOR ELEVATION                       |
| GC             | GENERAL CONTRACTOR                           |
| GRT            |  |
| HDPE<br>HP     | HIGH DENSITY POLYETHYLENE PIPE<br>HIGH POINT |
| INT            | INTERSECTION                                 |
| INV            | INVERT                                       |
| L.S.A.         | LANDSCAPE AREA                               |
| LOD            | LIMIT OF DISTURBANCE                         |
| LOW            | LIMIT OF WORK                                |
| LF             | LINEAR FOOT / FEET                           |
| LP<br>MAX      | LOW POINT<br>MAXIMUM                         |
|                | MECHANICAL, ELECTRICAL,                      |
| MEP            | PLUMBING                                     |
| ME             | MEET OR MATCH EXISTING                       |
| MIN<br>No. / # |  |
| ±              | NUMBER<br>PLUS OR MINUS                      |
| <u>–</u><br>РС | POINT OF CURVATURE                           |
| PI             | POINT OF INTERSECTION                        |
| PT             | POINT OF TANGENCY                            |
| PVI            | POINT OF VERTICAL INTERSECTION               |
| PVC            | POLYVINYL CHLORIDE PIPE                      |
| PROP.<br>R     | PROPOSED<br>RADIUS OR RADII                  |
| RCP            | REINFORCED CONCRETE PIPE                     |
| R.O.W.         | RIGHT-OF-WAY                                 |
| SAN            | SANITARY                                     |
| SMH            | SEWER MANHOLE                                |
| S              | SLOPE  |
| SF             |  |
| SGC<br>STA     | SLOPED GRANITE CURB<br>STATION               |
| STM            | STORM  |
| TBR            | TO BE REMOVED                                |
| TBR/R          | TO BE REMOVED AND REPLACED                   |
| ТС             | TOP OF CURB                                  |
| TW             | TOP OF WALL                                  |
| TPF            | TREE PROTECTION FENCE<br>TRANSITION          |
| TRANS<br>TYP.  | TYPICAL                                      |
|                | UNDERGROUND                                  |
| V.I.F.         | VERIFY IN FIELD                              |
| VGC            | VERTICAL GRANITE CURB                        |
| W              | WIDTH  |
| ••             |  |

| PROPERTY LINE  | PROPOSED   |  |   |
|--|--|--|---|
|  | FXISTING   |  |   |
| ADJACENT PROPERTY LINE   | PROPOSED   |  |   |
|  | EXISTING   |  |   |
| RIGHT-OF-WAY LINE  | PROPOSED   |  |   |
|  | EXISTING   |  |   |
| SETBACK OR BUFFER  | PROPOSED   |  |   |
| EASEMENT LINE  | EXISTING   |  |   |
| EASEMENT LINE  | PROPOSED   |  |   |
| WETLAND BOUNDARY   | EXISTING   |  |   |
| WEILAND BOUNDART   | PROPOSED   |  |   |
| WETLAND BUFFER   | EXISTING   |  |   |
| WETLAND DOLLEN   | PROPOSED   |  |   |
| WATER WAY BOUNDARY   | EXISTING   |  | ••••  |
|  | PROPOSED   |  |   |
| WATERWAY BUFFER  | EXISTING   | · · · _  | · · ·   |
|  | PROPOSED   |  |   |
| WETLAND OR WATERWAY  | EXISTING   | ∧ <del>–</del>   |   |
| FLAG   |  | <u>/o</u>  |   |
| RIGHT-OF-WAY CENTER OR   |  |  |   |
| BASE LINE  | PROPOSED   |  |   |
| APPROX. LIMIT OF WORK  | EXISTING   |  |   |
| OR DISTURBANCE   | PROPOSED   |  |   |
| APPROX. SAWCUT LINE  | EXISTING   |  |   |
|  | PROPOSED   |  |   |
| TREE LINE  | EXISTING   | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~                                      |   |
|  | PROPOSED   | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~                                      |   |
| SURFACE OR SUBSURFACE<br>BASIN   | PROPOSED   |  |   |
| DAGIN  | EXISTING   |  |   |
| OVERHEAD WIRES   | PROPOSED   |  | OH OH   |
|  | EXISTING   | 011  | 01-01-  |
| CURBING  | PROPOSED 3   |  |   |
|  |  | CC/BCC MONOLITHIC VGC  | SGC TRANS/FLUSH CCB   |
| FENCE OR RAILING   | EXISTING   | v  |   |
|  | PROPOSED   | CHAIN LINK STO   | CKADE RAILING   |
| RETAINING WALL   | EXISTING   |  |   |
|  |  |  |   |
|  | PROPOSED   |  | X   |
|  | EXISTING   |  |   |
| CONTOURS   | EXISTING<br>PROPOSED   | 49   |   |
|  | EXISTING<br>PROPOSED<br>EXISTING   |  |   |
| CONTOURS   | EXISTING<br>PROPOSED<br>EXISTING<br>PROPOSED   | 49<br>   |   |
| CONTOURS   | EXISTING<br>PROPOSED<br>EXISTING<br>PROPOSED<br>EXISTING   | 49<br>   |   |
| CONTOURS<br>SWALE  | EXISTING<br>PROPOSED<br>EXISTING<br>PROPOSED<br>EXISTING<br>PROPOSED   | 49<br>>  |   |
| CONTOURS<br>SWALE  | EXISTING<br>PROPOSED<br>EXISTING<br>PROPOSED<br>EXISTING<br>PROPOSED<br>EXISTING   |  |   |
| CONTOURS<br>SWALE<br>BERM  | EXISTING<br>PROPOSED<br>EXISTING<br>PROPOSED<br>EXISTING<br>PROPOSED<br>EXISTING<br>PROPOSED   |  |   |
| CONTOURS<br>SWALE<br>BERM  | EXISTING<br>PROPOSED<br>EXISTING<br>PROPOSED<br>EXISTING<br>PROPOSED<br>EXISTING<br>PROPOSED<br>EXISTING   |  |   |
| CONTOURS<br>SWALE<br>BERM<br>RIDGE<br>DRAIN PIPE   | EXISTING<br>PROPOSED<br>EXISTING<br>PROPOSED<br>EXISTING<br>PROPOSED<br>EXISTING<br>PROPOSED   |  |   |
| CONTOURS<br>SWALE<br>BERM<br>RIDGE   | EXISTING<br>PROPOSED<br>EXISTING<br>PROPOSED<br>EXISTING<br>PROPOSED<br>EXISTING<br>PROPOSED<br>EXISTING<br>PROPOSED   |  |   |
| CONTOURS<br>SWALE<br>BERM<br>RIDGE<br>DRAIN PIPE<br>SEWER PIPE   | EXISTING<br>PROPOSED<br>EXISTING<br>PROPOSED<br>EXISTING<br>PROPOSED<br>EXISTING<br>PROPOSED<br>EXISTING<br>PROPOSED<br>EXISTING   |  | = = - 0 - 0a - 0a - 0a - 0a - 0a - 0a -   |
| CONTOURS<br>SWALE<br>BERM<br>RIDGE<br>DRAIN PIPE   | EXISTING<br>PROPOSED<br>EXISTING<br>PROPOSED<br>EXISTING<br>PROPOSED<br>EXISTING<br>PROPOSED<br>EXISTING<br>PROPOSED<br>EXISTING<br>PROPOSED   |  | = = D - Qa  |
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#### REFER ZONING ANALYSIS TABLE AND LAN USE / ZONING INFORMATION & NOT

REFER TO EROSION AND SEDIMEN **CONTROL NOTES & DETAILS SHEE** FOR TYPICAL EROSION NOTES AN DETAILS

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

|             | 811   |
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|             | Know what's <b>below.</b><br><b>Call</b> before you dig.  |
|             | ALWAYS CALL 811<br>It's fast. It's free. It's the law.  |
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|             | FOR   |
|             | KIG SILVERSTRAND<br>WALPOLE, LLC  |
|             | PROPOSED<br>MULTI-FAMILY DEVELOPMENT  |
|             | MOLTI-FAMILY DEVELOPMENT<br>MAP 25, BLOCK 164, 165 & 166  |
| · —         | 981, 989 & 1015 EAST STREET<br>TOWN OF WALPOLE  |
|             | NORFOLK COUNTY,<br>MASSACHUSETTS  |
|             | <b>BOHLER</b> //  |
|             | 352 TURNPIKE ROAD   |
|             | <b>SOUTHBOROUGH, MA 01772</b><br>Phone: (508) 480-9900  |
|             | www.BohlerEngineering.com   |
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**REVISION 2 - 09/29/2023** 

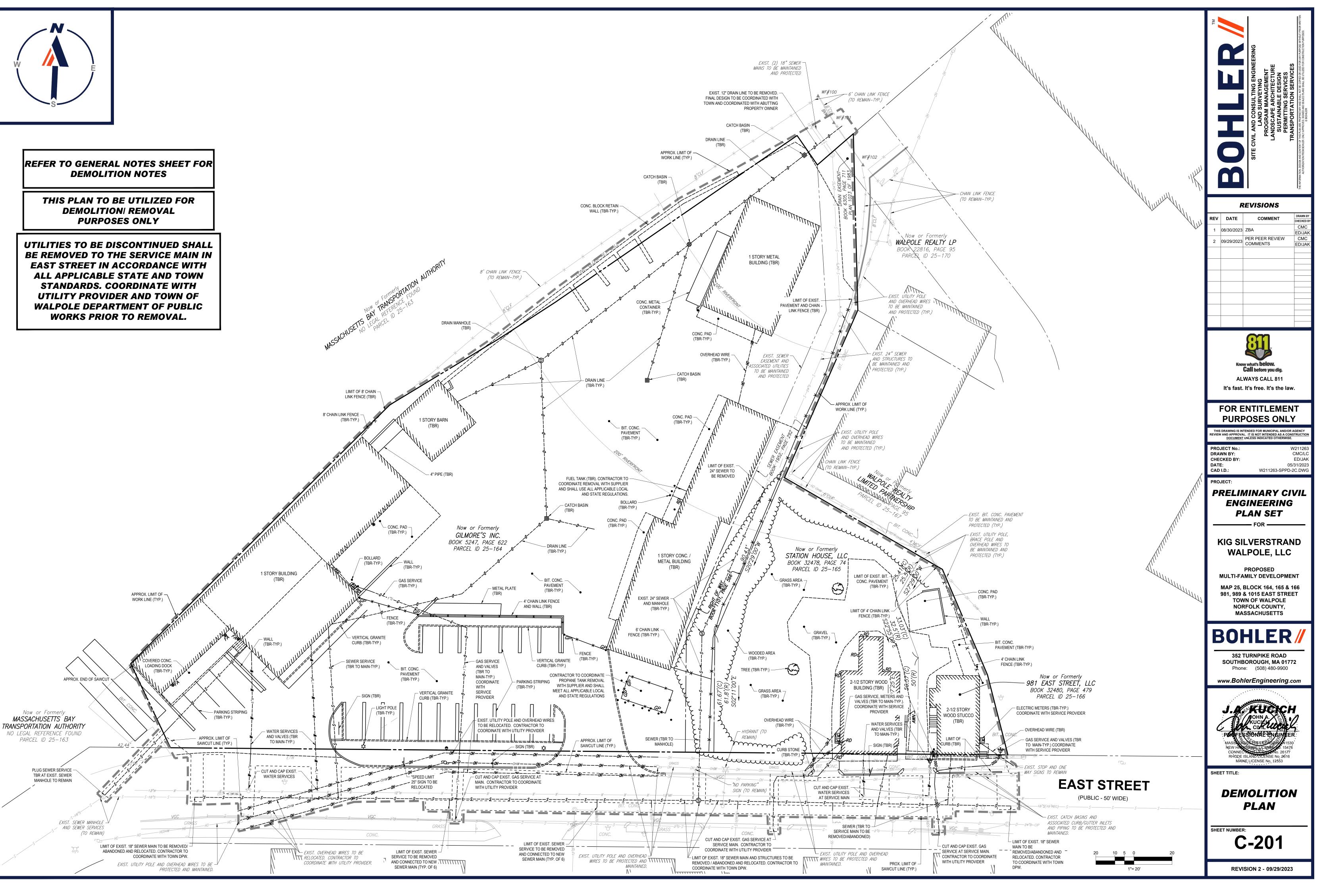


**DEMOLITION NOTES** 

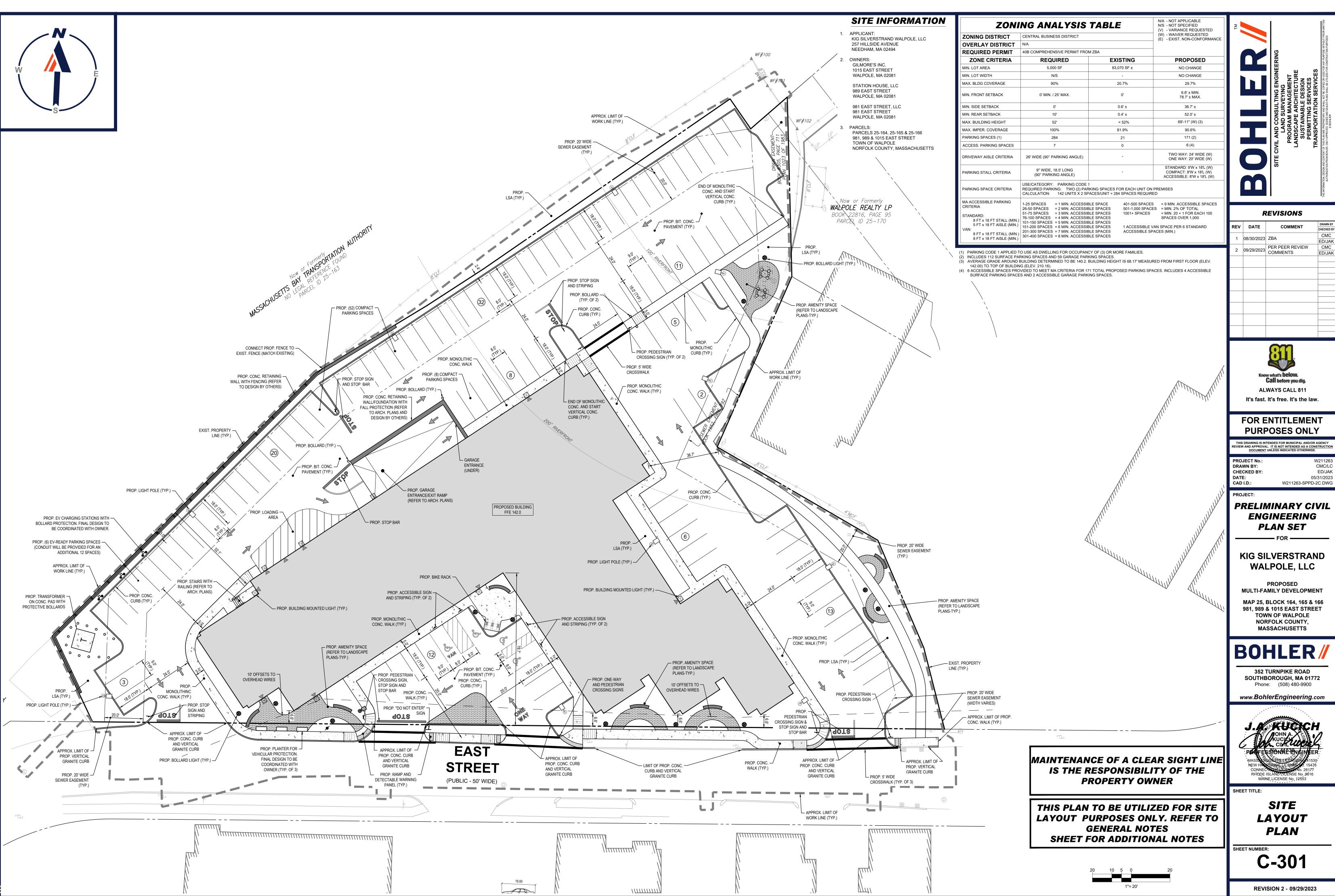
DEMOLITION/ REMOVAL

EAST STREET IN ACCORDANCE WITH ALL APPLICABLE STATE AND TOWN STANDARDS. COORDINATE WITH UTILITY PROVIDER AND TOWN OF WALPOLE DEPARTMENT OF PUBLIC

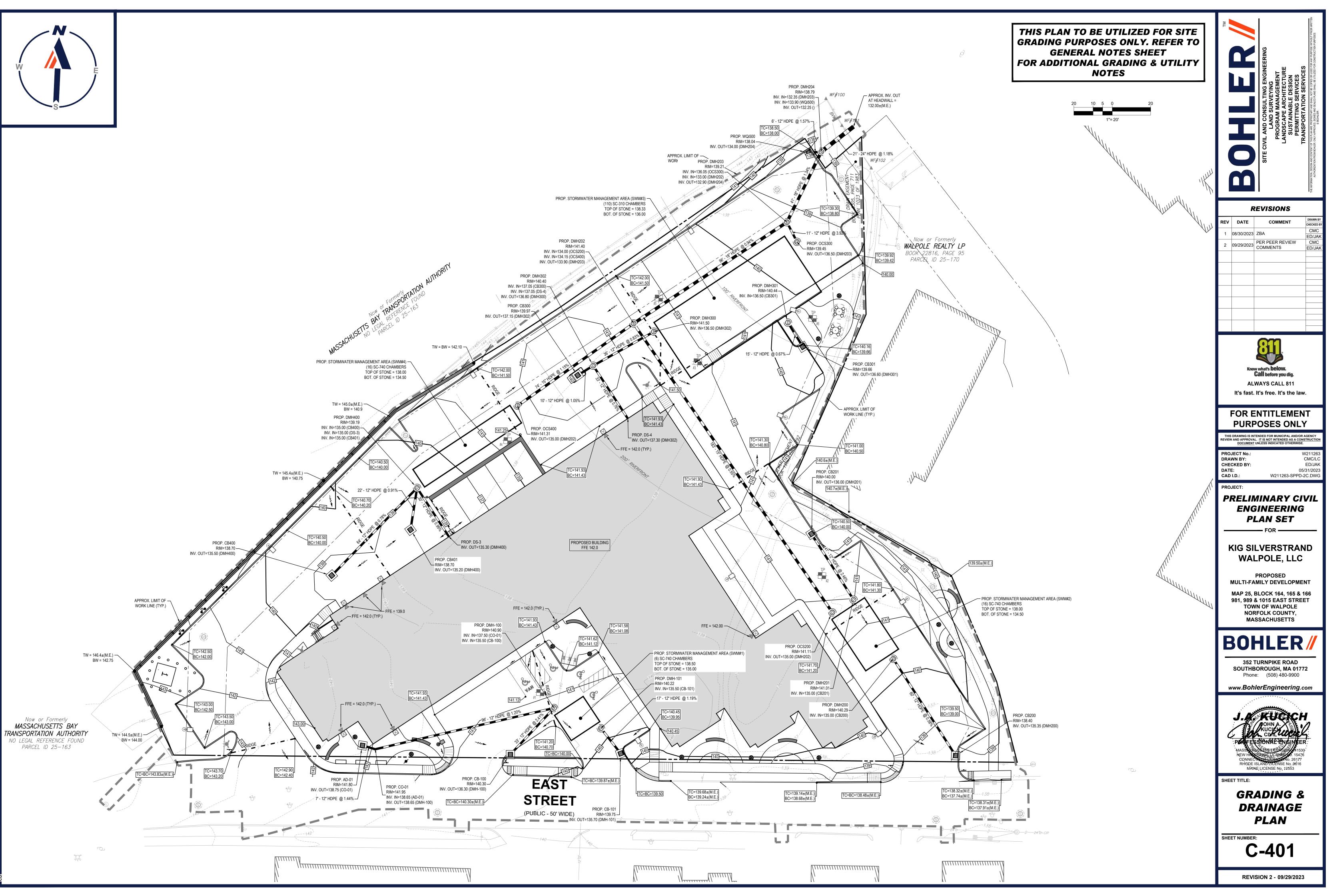




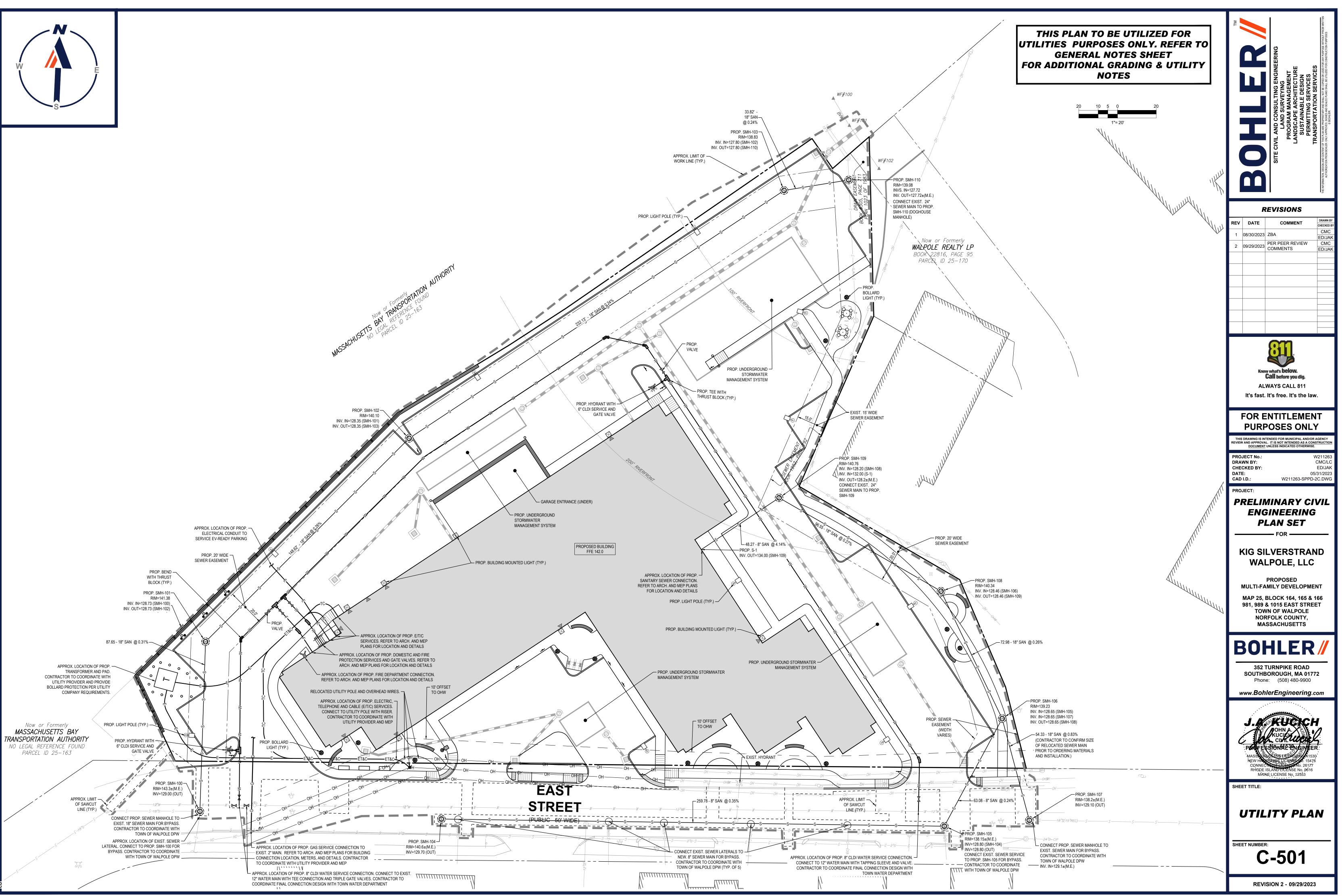




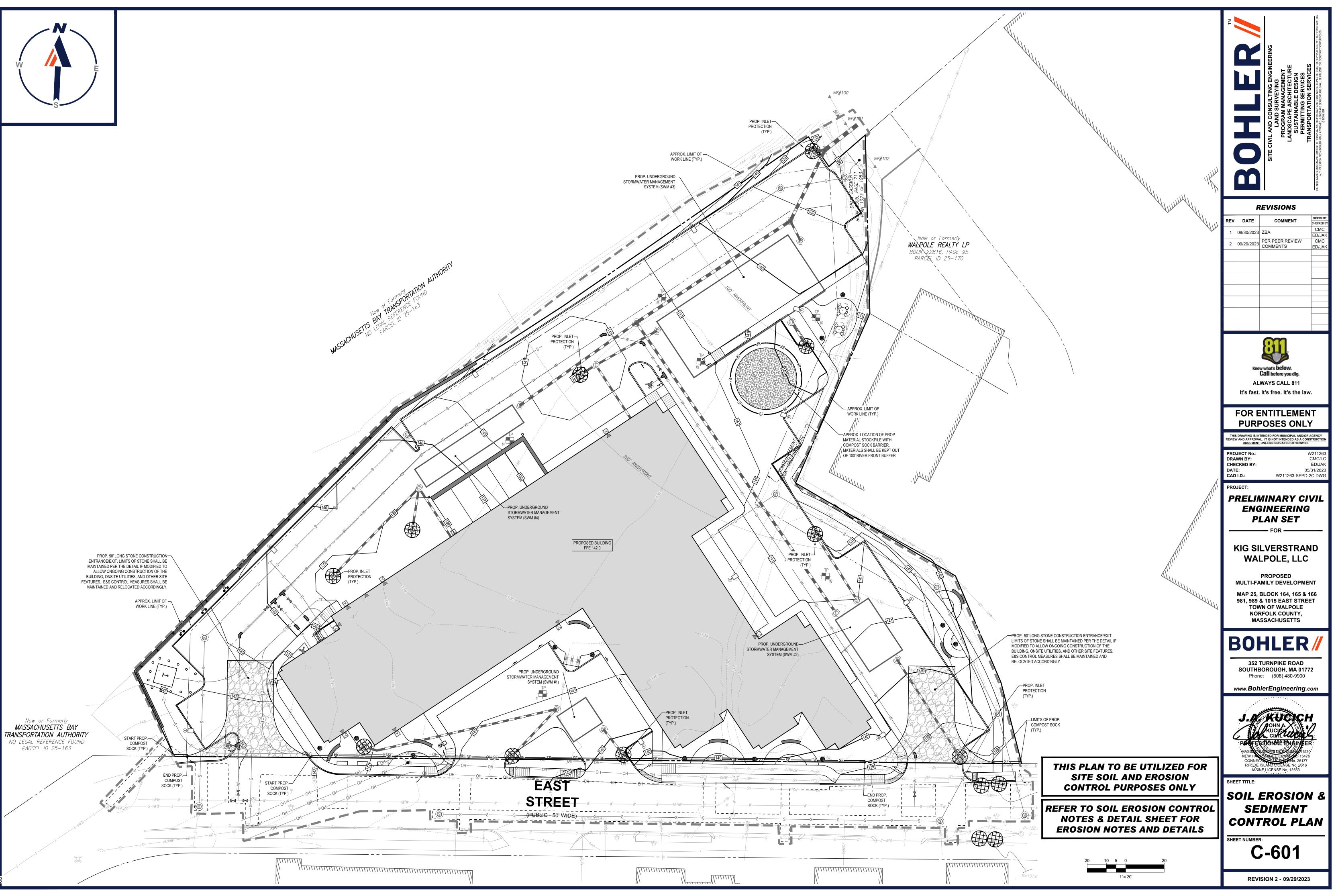












#### **EROSION AND SEDIMENT CONTROL NOTES**

- 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 IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS. AT A MINIMUM, AREAS SHALL BE PERMANENTLY STABILIZED ACCORDING TO THE CURRENT EDITION OF THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP), OR IN THE ABSENCE OF A SWPPP, THEY SHALL BE PERMANENTLY STABILIZED WITHIN 14 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 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 PERMANENTLY STABILIZED. FOR SEDIMENT CONTROL DEVICES THAT ARE WITHIN AREAS SUBJECT TO CONSERVATION COMMISSION JURISDICTION, THE DEVICES SHALL REMAIN IN PLACE AND BE REMOVED IN ACCORDANCE WITH THE ORDER OF CONDITIONS
- NO SLOPES, EITHER PERMANENT OR TEMPORARY, SHALL BE STEEPER THAN TWO TO ONE (2:1) UNLESS OTHERWISE INDICATED ON THE PLANS. SLOPE PROTECTION FOR SLOPES GREATER THAN 2:1 SHALL BE DESIGNED BY A GEOTECHNICAL ENGINEER. 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 SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH
- LOCAL, STATE, AND FEDERAL STANDARDS. 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:
- 10.1. SIX INCHES, OR DEPTH SPECIFIED ON THE LANDSCAPE PLAN, OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM SURFACE.
- 10.2. 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 18.4 LB PER 1,000 SF 13. THE CONTRACTOR MUST PROTECT ALL EXISTING TREES AND SHRUBS 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 PER1,000 SF)
- 10.3. FOLLOWING SEED BED PREPARATION, DITCHES AND BACK SLOPES WILL BE SEEDED TO A MIXTURE OF 47% CREEPING RED FESCUE, 5% REDTOP, AND 48% TALL FESCUE. THE LAWN AREAS WILL BE SEEDED TO A PREMIUM TURF MIXTURE OF 44% KENTUCKY BLUE-GRASS. 44% CREEPING RED FESCUE, AND 12% PERENNIAL RYEGRASS: SEEDING RATE IS 1.03 LBS PER 1,000 SF LAWN. QUALITY SOD MAY BE SUBSTITUTED FOR SEED WHERE SLOPES DO NOT EXCEED 2:1, SOD ON SLOPES STEEPER THAN 3:1 SHOULD BE PEGGED.
- 10.4. 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 NON-TOXIC BINDER WILL BE USED ON STRAW MULCH FOR WIND CONTROL. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE THE SITE IS 70% STABILIZED. FOR EROSION CONTROL
- MEASURES THAT ARE WITHIN AREAS SUBJECT TO CONSERVATION COMMISSION JURISDICTION, THE MEASURES SHALL REMAIN IN PLACE AND BE REMOVED IN ACCORDANCE WITH THE ORDER OF CONDITIONS.
- WETLANDS WILL BE PROTECTED WITH BARRIERS CONSISTING OF STRAW BALES, COMPOST TUBES, SILT FENCE OR A COMBINATION THEREOF
- ALL AREAS WITHIN 100 FEET OF A FLAGGED WETLAND OR STREAM SHALL HAVE AN EXPOSURE WINDOW OF NOT MORE THAN 7 DAYS 14. 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:

| LOCATION<br>PROTECTED AREA                                    | MULCH<br>STRAW                                      | MULCH RATE (1000 SF)<br>100 POUNDS |
|---|---|------------------------------------|
| WINDY AREA  | SHREDDED OR CHOPPED CORNSTALKS<br>STRAW (ANCHORED)* | 185-275 POUNDS<br>100 POUNDS       |
| MODERATE TO HIGH<br>VELOCITY AREAS OR<br>STEEP SLOPES GREATER | JUTE MESH OR EXCELSIOR MAT                          | AS REQUIRED                        |

(REFER TO GEOTECHNICAL REPORT FOR FINAL DESIGN REQUIREMENT) **GREATER THAN 3:1** 

\* A HYDRO-APPLICATION OF WOOD OR PAPER FIBER MAY BE APPLIED FOLLOWING SEEDING. A SUITABLE NON-TOXIC BINDER SHALI BE USED TO ADDITIONAL 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.

- SED LOCATIONS OF SUBFACE STORMWATER MANAGEMENT BASINS CAN BE LITH IZED AS A TEMPORARY SEDIMENT TRAD DURING CONSTRUCTION.SEDIMENT TRAPS SHALL BE SIZED AND CONSTRUCTED IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REQUIREMENTS.
- 15.1. TEMPORARY SEDIMENT TRAPS SHALL BE SIZED PER THE CURRENT EDITION OF THE "MASSACHUSETTS EROSION AND SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS" AND PROVIDE A MINIMUM OF 1,800 CF PER ACRE OF TRIBUTARY AREA WITH A MAXIMUM TRIBUTARY AREA OF 5 ACRES. MAINTAIN A 2:11 ENGTH TO WIDTH RATIO, AND NOT EXCEPT 5 FT IN HEIGHT, UPON SITE STABILIZATION, ACCUMULATED SEDIMENT SHALL BE REMOVED AND THE TEMPORARY SEDIMENT TRAP EXCAVATED TO 1 FOOT BELOW THE TRAP. THE AREA SHALL THEN BE SCARIFIED TO PREVENT COMPACTION AND PROMOTE INFILTRATION, AND GRADED AND STABILIZED IN ACCORDANCE WITH THE GRADING AND LANDSCAPE PLANS.
- 16. 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
- 17. EXISTING CATCH BASIN STRUCTURES SHALL BE PROTECTED UNTIL SUCH TIME AS THEY ARE REMOVED.
- THE CONTRACTOR MUST PERFORM DEWATERING (IF REQUIRED). IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN AND PAY FOR THE COSTS ASSOCIATED WITH ANY AND ALL NECESSARY DISCHARGE PERMITS ASSOCIATED WITH SAME
- THE CONTRACTOR MUST LOCATE CONSTRUCTION WASTE MATERIAL STORAGE AREAS TO MINIMIZE EXPOSURE TO STORMWATER. THE CONTRACTOR MUST IMMEDIATELY PLACE CONSTRUCTION WASTE IN ON-SITE STORAGE CONTAINERS UNTIL THAT CONSTRUCTION WASTE IS READY FOR OFF-SITE DISPOSAL. THE CONTRACTOR MUST MAINTAIN SPILL PREVENTION AND RESPONSE EQUIPMENT AND MAKE SAME CONTINUOUSLY AVAILABLE ON-SITE FOR USE BY THE CONTRACTOR'S EMPLOYEES WHO MUST BE PROPERLY TRAINED IN THE APPLICATION OF SPILL PREVENTION AND RESPONSE PROCEDURES.
- 20. EROSION CONTROL NOTES DURING WINTER CONSTRUCTION 21. WINTER CONSTRUCTION PERIOD: NOVEMBER 1 THROUGH APRIL 15.
- 22. WINTER EXCAVATION AND EARTHWORK SHALL BE DONE SUCH THAT THE AMOUNT OF AREA OPEN AT ONE TIME IS MINIMIZED TO THE MAXIMUM EXTENT PRACTICABLE AND IN CONFORMANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN SUCH THAT ADEQUATE PROVISIONS ARE EMPLOYED TO CONTROL STORMWATER RUNOFF.
- 23. 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.
- 24. AN AREA SHALL BE CONSIDERED TO HAVE BEEN TEMPORARILY STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR STRAW AT A RATE OF 100 LB. PER 1,000 SQUARE FEET (WITH OR WITHOUT SEEDING) OR DORMANT SEEDED, MULCHED AND ADEQUATELY ANCHORED BY AN APPROVED ANCHORING TECHNIQUE.
- FOR AREAS WHERE CONSTRUCTION ACTIVITIES HAVE CEASED FOR A PERIOD EXCEEDING 14 DAYS BETWEEN THE DATES OF NOVEMBER 1ST AND APRIL 1ST, LOAM OR SEED WILL NOT BE REQUIRED. THE SLOPES SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED. IF THE EXPOSED AREA HAS BEEN LOAMED, FINAL GRADED AND IS SMOOTH. THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 200-300% HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED AS APPLICABLE. SLOPES SHALL NOT BE LEFT UNSTABILIZED OVER THE WINTER OR IN AREAS WHERE WORK HAS CEASED FOR MORE THAN 14 DAYS 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 SEDIMENT BARRIERS OR STONE CHECK DAMS IN ACCORDANCE WITH THE STANDARD DETAILS.
- MULCHING REQUIREMENTS:

**THAN 3:1** 

- 26.1. BETWEEN THE DATES OF NOVEMBER 1ST AND APRIL 15TH ALL MULCH SHALL BE ANCHORED BY EITHER PEG LINE, MULCH NETTING OR WOOD CELLULOSE FIBER. 26.2. 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%. 26.3. 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%.
- ALL DISTURBED AREAS SHALL BE STABILIZED IN ACCORDANCE WITH THE STORMWATER PREVENTION PLAN.
- 28. DURING THE WINTER CONSTRUCTION PERIOD ALL SNOW SHALL BE REMOVED FROM AREAS OF SEEDING AND MULCHING PRIOR TO PLACEMENT

#### **GENERAL EROSION AND SEDIMENT CONTROL NOTES**

- THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES.
- EROSION CONTROL MEASURES MUST CONFORM TO THE STATE, LOCAL, AND FEDERAL GUIDELINES FOR URBAN EROSION AND SEDIMENT CONTROL UNLES OTHERWISE NOTED. OR UNLESS THE PROFESSIONAL OF RECORD CLEAF CONTROL, CLEARING, AND SITE WORK MUST BE PERFORMED EXACT
- 3. THE DISTURBED LAND AREA OF THIS SITE IS APPROXIMATELY XXX.XX 4. THE FOLLOWING EROSION CONTROL MEASURES ARE PROPOSED FO
- A. STABILIZED CONSTRUCTION ENTRANCE/ EXIT A TEMPORARY GRA LOCATION SHOWN ON THE PLAN. THIS AREA MUST BE GRADED SO THAT
- B. SEDIMENT FENCE INSTALL SILT FENCE(S) AND/OR SILT SOCK AROU STOCKPILES.

C. INSTALL FILTER FABRIC DROP INLET PROTECTION AROUND FACH D OF SEDIMENT. INSTALL TEMPORARY INLET PROTECTION ON INLETS DOW AREA.

- 5. INSTALLATION OF EROSION CONTROL DEVICES MUST BE IN ACCORD 6. THE CONTRACTOR MUST INSPECT EROSION CONTROL MEASURES W
- OR HALF THE EROSION CONTROL BARRIER'S HEIGHT COLLECTED ON SILT FROM DROP INLET PROTECTION. 7. THE CONTRACTOR MUST APPLY TEMPORARY SEED AND MULCH TO
- VEGETATED WITHIN 7 DAYS. WHEN AREAS ARE DISTURBED AFTER TH FABRIC AND MAINTAIN SAME IN STRICT ACCORDANCE WITH BEST N 8. THE CONTRACTOR MUST INSTALL ADDITIONAL EROSION CONTROL I
- INCLUDING THE INCIDENTAL, DISCHARGE OF SILT-LADEN RUNOFF FF 9. THE CONTRACTOR MUST BE RESPONSIBLE FOR INSPECTING AND MA AND TURF/LANDSCAPING IS ESTABLISHED. THE COSTS OF INSTALLIN BID PRICE FOR THE SITE WORK AND THE CONTRACTOR IS RESPONSIE
- 10. THE CONTRACTOR MUST CONTINUE TO MAINTAIN ALL EROSION CO ESTABLISHMENT OF VEGETATION. 11. THE CONTRACTOR MUST REMOVE EROSION CONTROL MEASURES.
- INSTALLING A DIFFERENT, SPECIFIED METHOD OF STABILIZATION.
- 12 THIS PLAN REPRESENTS THE MINIMUM LEVEL OF IMPLEMENTATION STRUCTURES, ADDITIONAL FACILITIES, MEASURES AND STRUCTURES AND STANDARDS AND/OR TO PREVENT ANY, INCLUDING THE INCIDE
- FOR TREE PROTECTION, FENCE LOCATIONS AND DETAILS.
- 14. THE CONTRACTOR MUST REFER TO GRADING PLANS FOR ADDITION
- 15. THE CONTRACTOR MUST CLEAN EXISTING AND PROPOSED DRAINAG AGENCY REQUIRES, BOTH AT THE TIME OF SITE STABILIZATION AND
- 16. SOIL EROSION CONTROL MEASURES MUST BE ADJUSTED OR RELOCA MAINTAIN THE COMPLETE EFFECTIVENESS OF ALL CONTROL MEASU
- 17. THE CONTRACTOR MUST IDENTIFY, ON THE PLAN, THE LOCATION OF OTHER LOCATIONS WHERE HAZARDOUS MATERIALS ARE STORED.
- 1:3 MAXIMUM SLOPE CONSTRUCT SILT FENCE AROUND PERI TEMPORAR

#### NOTES:

- EXCAVATE A 6"x6" TRENCH ALONG THE LINE OF EROSION CONTROL OF THE SITE UNROLE SILTATION FENCE AND POSITION
- THE POSTS AGAINST THE BACK (DOWNSTREAM) WALL OF THE TRENCH (NET SIDE AWAY FROM FLOW (12" MAX. DIRECTION) IN ROCKY
- DRIVE THE POST INTO THE GROUND UNTIL THE NETTING IS LAYING ACROSS THE TRENCH BOTTOM. LAY THE TOE-IN FLAP OF THE FABRIC ONTO THE UNDISTURBED BOTTOM OF
- THE TRENCH, BACKFILL ALSO BE ACCOMPLISHED BY LAYING FABRIC FLAP ON UNDISTURBED GROUND AND PILING & TAMPING FILL AT THE BASE.

TYP. SILTA

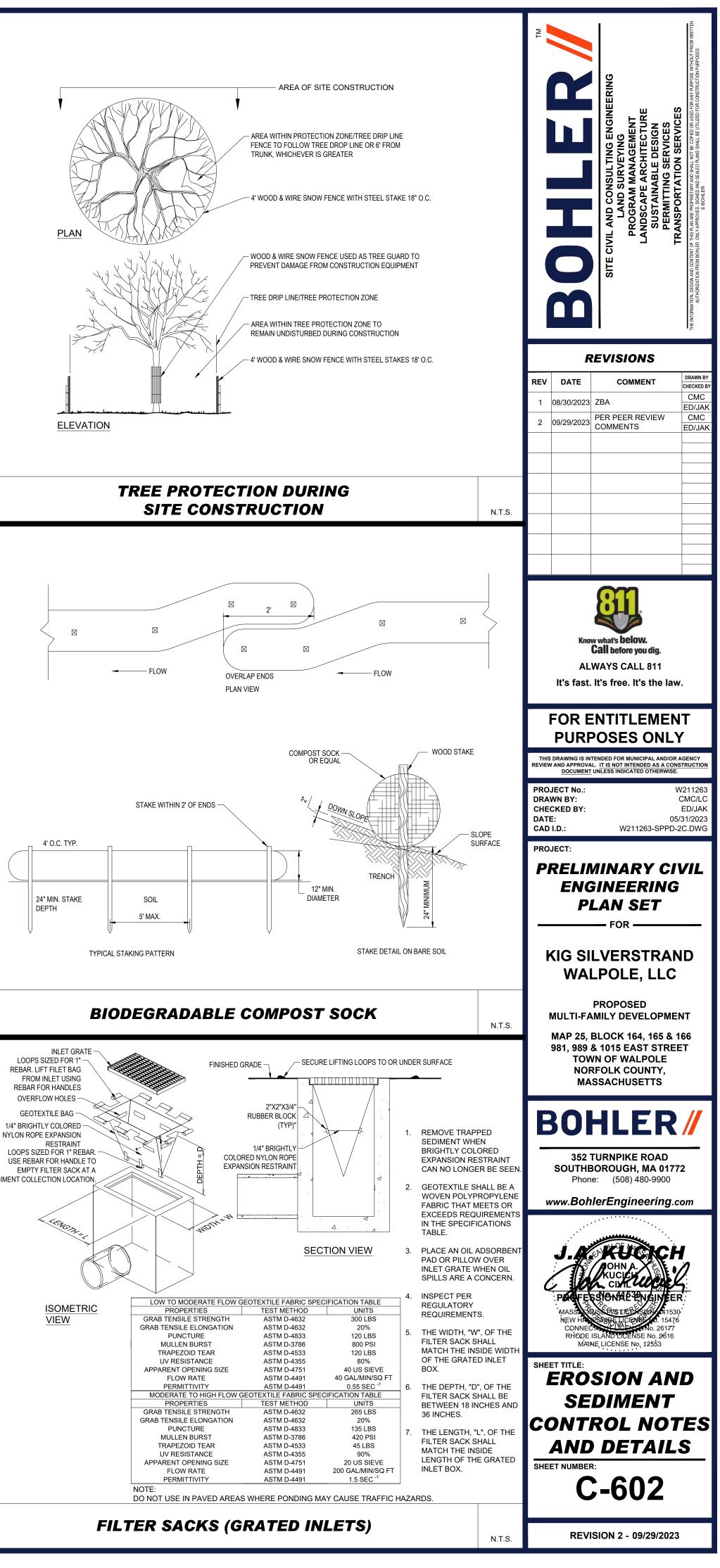
12" MIN. –

SOIL.)

| ILY AS INDICATED IN THE EROSION CONTROL CONSTRUCTION NOTES.<br>( ACRES.<br>IP THIS SITE:<br>VEL CONSTRUCTION ENTRANCE/EXIT IS TO BE INSTALLED AT THE DESIGNATED<br>IP UNOFF WATTER WILL BE RETAINED ON-SITE.<br>UND ALL OF THE DOWNSLOPE PERIMETERS OF THE SITE, TEMPORARY FILL AND SOIL<br>IP AND ALL OF THE DOWNSLOPE PERIMETERS OF THE SITE, TEMPORARY FILL AND SOIL<br>IP AND ALL OF THE DOWNSLOPE PERIMETERS OF THE SITE, TEMPORARY FILL AND SOIL<br>IP AND ALL OF THE DOWNSLOPE PERIMETERS OF THE SITE, TEMPORARY FILL AND SOIL<br>IP AND ALL OF THE MANUFACTURES ARE INSTALLED TO REDUCE THE QUANTITY<br>VISLOPE FROM DISTURBANCE, WHICH MAY BE BEYOND THE LIMITS OF DISTURBED<br>NANCE WITH ALL OF THE MANUFACTURER'S RECOMMENDATIONS.<br>////////////////////////////////////   | <ul> <li>-INSTALLATION OF EROSION CONTROL BARRIER (STRAW BALES AND SILT FENCE) (AS SHOWN)</li> <li>-INSTALLATION OF INLET PROTECTION IN STREET (AS SHOWN)</li> <li>-DEMOLITION OF EXISTING SITE STRUCTURES (SEE DEMOLITION PLAN)</li> <li>-DEMOLITION OF EXISTING SITE PAVEMENT AND AMENITIES (SEE DEMOLITION PLAN)</li> <li>-CLEARING AND GRUBBING</li> <li>-INSTALLATION OF TEMPORARY SWALES AND SEDIMENT BASINS</li> <li>-EARTHWORK AND EXCAVATION/FILLING AS NECESSARY</li> <li>-CONSTRUCTION OF UTILITIES</li> <li>-STABILIZE PERMANENT LAWN AREAS AND SLOPES WITH TEMPORARY SEEDING</li> <li>-INSTALLATION OF INLET PROTECTION OF ON-SITE UTILITIES (AS SHOWN)</li> <li>-CONSTRUCTION OF BUILDINGS</li> <li>-CONSTRUCTION OF ALL CURBING AND LANDSCAPE ISLANDS AS INDICATED ON THE PLANS</li> <li>-SPREAD TOPSOIL ON SLOPED AREAS</li> <li>-PLACE 6" TOPSOIL ON SLOPES AFTER FINAL GRADING COMPLETED. FERTILIZE, SEED, AND MULCH SEED MIXTURE TO BE INSTALLED AS REQUIRED.</li> <li>-REMOVAL OF THE TEMPORARY SEDIMENT BASINS</li> <li>-PAVE PARKING LOT</li> <li>-LANDSCAPING PER LANDSCAPING PLAN</li> <li>-REMOVE EROSION CONTROLS AS DISTURBED AREAS BECOME STABILIZED TO 70% STABILIZATION OR GREATER</li> </ul> |     |
|--|---|-----|
| Σ  | RECOMMENDED CONSTRUCTION SEQUENCE   | s.  |
| METER OF STOCKPILE<br>STOCKPILE<br>N.T.S.<br>WOOD OR PLASTIC SLAT STAPLED<br>1-1/2" x 1-1/2" POST  | 2-1/2" CLEAN STONE<br>PROFILE<br>PROFILE<br>PROFILE<br>PROFILE<br>PROFILE<br>PROVIDE APPROPRIATE<br>TRANSITION BETWEEN STABILIZED<br>CONSTRUCTION ENTRANCE AND<br>SEE CHART 1<br>PUBLIC R.O.W.<br>25'R<br>PUBLIC<br>RIGHT OF<br>WAY   |     |
| POST<br>FILTER<br>FABRIC<br>POST<br>FILTER<br>FABRIC<br>POST<br>FABRIC<br>POST<br>FABRIC<br>POST<br>FILTER<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC<br>FABRIC | PLAN VIEW          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       200FT         >5%       ENTIRE ENTRANCE STABILIZED WITH FABC BASE COURSE (1)  |     |
| TOE-IN METHODS<br>PERSPECTIVE OF FENCE<br>TION FENCE<br>N.T.S.   | (1) AS PRESCRIBED BY LOCAL ORDINANCE OR OTHER GOVERNING AUTHORITY.<br><u>CHART 1</u><br><b>STABILIZED CONSTRUCTION ENTRANCE</b> N.T   |     |
|  |   | EĽ  |
|  |   |     |
|  |   |     |
| USED N.T.S.  | NOT USED  | .S. |

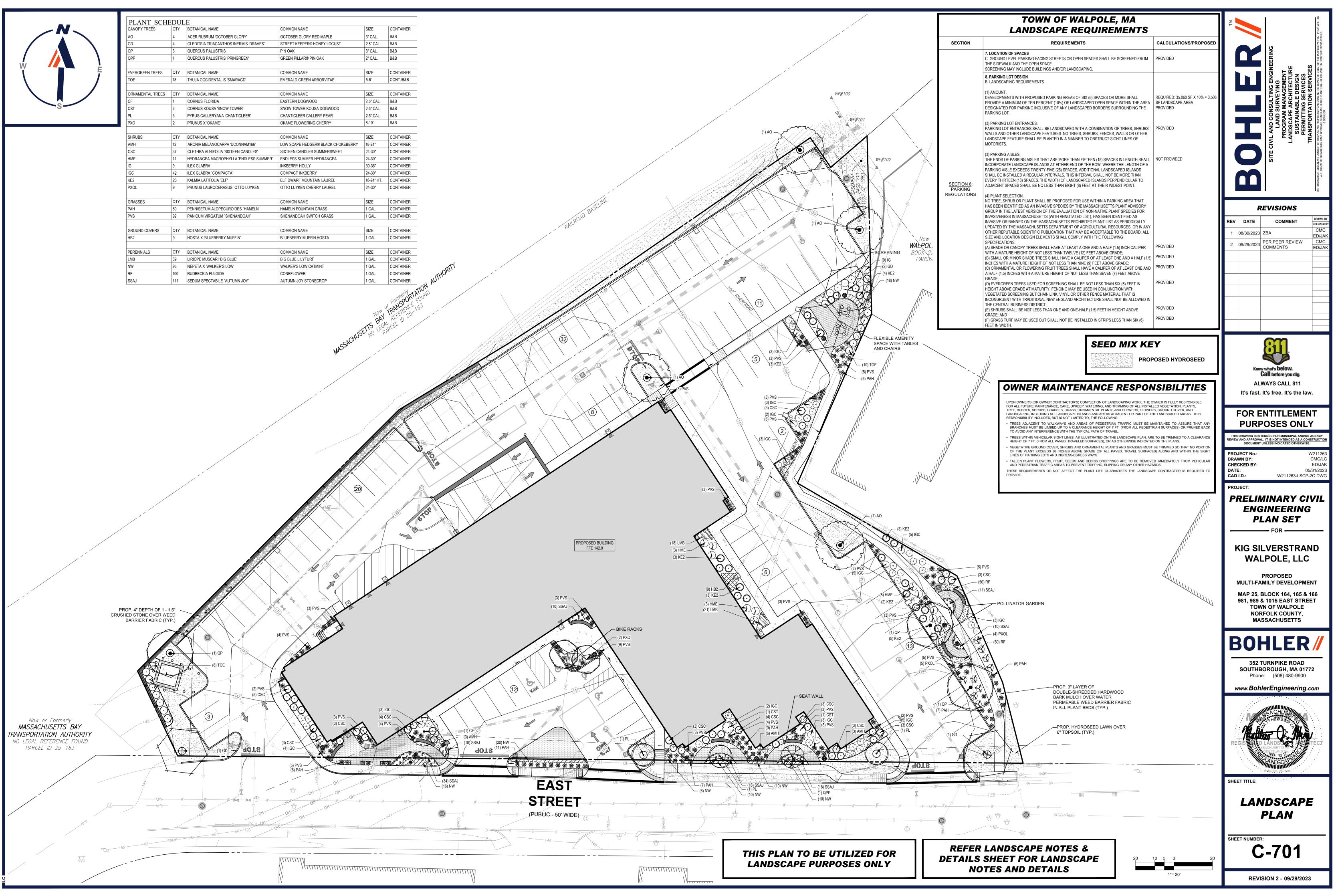
THE FOLLOWING CONSTRUCTION SEQUENCE IS RECOMMENDED:

-INSTALLATION OF STABILIZED CONSTRUCTION ENTRANCE/EXIT (AS SHOWN)





| PLANT SCH        | EDUI | LE                                     |                                    |            |           |
|------------------|------|--|------------------------------------|------------|-----------|
| CANOPY TREES     | QTY  | BOTANICAL NAME                         | COMMON NAME                        | SIZE       | CONTAINER |
| AO               | 4    | ACER RUBRUM 'OCTOBER GLORY'            | OCTOBER GLORY RED MAPLE            | 3" CAL.    | B&B       |
| GD               | 4    | GLEDITSIA TRIACANTHOS INERMIS 'DRAVES' | STREET KEEPER® HONEY LOCUST        | 2.5" CAL.  | B&B       |
| QP               | 3    | QUERCUS PALUSTRIS                      | PIN OAK                            | 3" CAL.    | B&B       |
| QPP              | 1    | QUERCUS PALUSTRIS 'PRINGREEN'          | GREEN PILLAR® PIN OAK              | 2" CAL.    | B&B       |
| EVERGREEN TREES  | QTY  | BOTANICAL NAME                         | COMMON NAME                        | SIZE       | CONTAINER |
| TOE              | 18   | THUJA OCCIDENTALIS 'SMARAGD'           | EMERALD GREEN ARBORVITAE           | 5-6`       | CONT./B&B |
| ORNAMENTAL TREES | QTY  | BOTANICAL NAME                         | COMMON NAME                        | SIZE       | CONTAINER |
| CF               | 1    | CORNUS FLORIDA                         | EASTERN DOGWOOD                    | 2.5" CAL.  | B&B       |
| CST              | 3    | CORNUS KOUSA 'SNOW TOWER'              | SNOW TOWER KOUSA DOGWOOD           | 2.5" CAL.  | B&B       |
| PL               | 3    | PYRUS CALLERYANA 'CHANTICLEER'         | CHANTICLEER CALLERY PEAR           | 2.5" CAL.  | B&B       |
| PXO              | 2    | PRUNUS X 'OKAME'                       | OKAME FLOWERING CHERRY             | 8-10`      | B&B       |
| SHRUBS           | QTY  | BOTANICAL NAME                         | COMMON NAME                        | SIZE       | CONTAINER |
| AMH              | 12   | ARONIA MELANOCARPA 'UCONNAM166'        | LOW SCAPE HEDGER® BLACK CHOKEBERRY | 18-24"     | CONTAINER |
| CSC              | 37   | CLETHRA ALNIFOLIA 'SIXTEEN CANDLES'    | SIXTEEN CANDLES SUMMERSWEET        | 24-30"     | CONTAINER |
| HME              | 11   | HYDRANGEA MACROPHYLLA 'ENDLESS SUMMER' | ENDLESS SUMMER HYDRANGEA           | 24-30"     | CONTAINER |
| IG               | 9    | ILEX GLABRA                            | INKBERRY HOLLY                     | 30-36"     | CONTAINER |
| IGC              | 42   | ILEX GLABRA `COMPACTA`                 | COMPACT INKBERRY                   | 24-30"     | CONTAINER |
| KE2              | 23   | KALMIA LATIFOLIA 'ELF'                 | ELF DWARF MOUNTAIN LAUREL          | 18-24" HT. | CONTAINER |
| PXOL             | 9    | PRUNUS LAUROCERASUS `OTTO LUYKEN`      | OTTO LUYKEN CHERRY LAUREL          | 24-30"     | CONTAINER |
| GRASSES          | QTY  | BOTANICAL NAME                         | COMMON NAME                        | SIZE       | CONTAINER |
| РАН              | 50   | PENNISETUM ALOPECUROIDES `HAMELN`      | HAMELN FOUNTAIN GRASS              | 1 GAL.     | CONTAINER |
| PVS              | 92   | PANICUM VIRGATUM 'SHENANDOAH'          | SHENANDOAH SWITCH GRASS            | 1 GAL.     | CONTAINER |
| GROUND COVERS    | QTY  | BOTANICAL NAME                         | COMMON NAME                        | SIZE       | CONTAINER |
| HB2              | 9    | HOSTA X 'BLUEBERRY MUFFIN'             | BLUEBERRY MUFFIN HOSTA             | 1 GAL.     | CONTAINER |
| PERENNIALS       | QTY  | BOTANICAL NAME                         | COMMON NAME                        | SIZE       | CONTAINER |
| LMB              | 39   | LIRIOPE MUSCARI 'BIG BLUE'             | BIG BLUE LILYTURF                  | 1 GAL.     | CONTAINER |
| NW               | 95   | NEPETA X 'WALKER'S LOW'                | WALKER'S LOW CATMINT               | 1 GAL.     | CONTAINER |
| RF               | 100  | RUDBECKIA FULGIDA                      | CONEFLOWER                         | 1 GAL.     | CONTAINER |
| SSAJ             | 111  | SEDUM SPECTABILE `AUTUMN JOY`          | AUTUMN JOY STONECROP               | 1 GAL.     | CONTAINER |



#### LANDSCAPE SPECIFICATIONS

| 1. <u>SCOPE OF WORK:</u><br>1.1. THE LANDSCAPE CONTRACTOR SHALL BE REQUIRED TO PERFORMALL CLEARING, FINISHED GRADING, SOIL PREPARATION   | 9.3. ANY INJURED ROOTS OR BRANCHES SHALL BE PRUNED TO MAKE CLEAN-CUT ENDS PRIOR TO PLANTING UTILIZING CLEAN,<br>SHARP TOOLS. ONLY INJURED OR DISEASED BRANCHING SHALL BE REMOVED.  |
|--|--|
| 1.1. THE LANDSCAPE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL CLEARING, FINISHED GRADING, SOIL PREPARATION,<br>PERMANENT SEEDING OR SODDING, PLANTING AND MULCHING INCLUDING ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT<br>NECESSARY FOR THE COMPLETION OF THIS PROJECT, UNLESS OTHERWISE CONTRACTED BY THE GENERAL CONTRACTOR. 2. MATERIALS   | 9.4. ALL PLANTING CONTAINERS, BASKETS AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED FROM ROOT BALLS DURING<br>PLANTING. NATURAL FIBER BURLAP MUST BE CUT FROM AROUND THE TRUNK OF THE TREE AND FOLDED DOWN AGAINST THE<br>ROOT BALL PRIOR TO BACKFILLING.   |
| <u>MATERIALS</u> <u>2.1. GENERAL - ALL HARDSCAPE MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE STATE DEPARTMENT     OF TRANSPORTATION'S SPECIFICATIONS </u>   | 9.5. 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.   |
| OF TRANSPORTATION'S SPECIFICATIONS.<br>2.2. TOPSOIL - NATURAL, FRIABLE, LOAMY SILT SOIL HAVING AN ORGANIC CONTENT NOT LESS THAN 5%, A PH RANGE BETWEEN<br>4.5-7.0. IT SHALL BE FREE OF DEBRIS, ROCKS LARGER THAN ONE INCH (1"), WOOD, ROOTS, VEGETABLE MATTER AND CLAY<br>CLODS.   | 9.6. 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,                       |
| 2.3. LAWN - ALL DISTURBED AREAS ARE TO BE TREATED WITH A MINIMUM <u>6"</u> THICK LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, AND SEEDED OR SODDED IN ACCORDANCE WITH THE PERMANENT STABILIZATION METHODS INDICATED <u>ON THE LANDSCAPE PLAN</u>   | <ul> <li>VINES OR GROUND COVER SHALL OCCUR ONLY DURING THE FOLLOWING PLANTING SEASONS:</li> <li>9.6.1. PLANTS: MARCH 15 TO DECEMBER 15</li> <li>9.6.2. LAWN: MARCH 15 TO JUNE 15 OR SEPT. 1 TO DECEMBER 1</li> </ul>   |
| <ul><li>2.3.1. LAWN SEED MIXTURE SHALL BE FRESH, CLEAN NEW CROP SEED.</li><li>2.3.2. SOD SHALL BE STRONGLY ROOTED, WEED AND DISEASE/PEST FREE WITH A UNIFORM THICKNESS. SOD INSTALLED ON</li></ul>   | 9.6.3. PLANTINGS REQUIRED FOR A CERTIFICATE OF OCCUPANCY SHALL BE PROVIDED DURING THE NEXT APPROPRIATE<br>SEASON AT THE MUNICIPALITY'S DISCRETION. CONTRACTOR SHOULD CONTACT APPROVING AGENCY FOR POTENTIAL<br>SUBSTITUTIONS.  |
| SLOPES GREATER THAN 4:1 SHALL BE PEGGED TO HOLD SOD IN PLACE.<br>2.4. MULCH - ALL PLANTING BEDS SHALL BE MULCHED WITH A <u>3"</u> THICK LAYER OF DOUBLE SHREDDED HARDWOOD BARK MULCH,<br>UNLESS OTHERWISE STATED ON THE LANDSCAPE PLAN AND/OR LANDSCAPE PLAN NOTES /DETAILS.   | 9.7. FURTHERMORE, THE FOLLOWING TREE VARIETIES ARE UNUSUALLY SUSCEPTIBLE TO WINTER DAMAGE. WITH TRANSPLANT<br>SHOCK AND THE SEASONAL LACK OF NITROGEN AVAILABILITY, THE RISK OF PLANT DEATH IS GREATLY INCREASED. IT IS NOT<br>RECOMMENDED THAT THESE SPECIES BE PLANTED DURING THE FALL PLANTING SEASON:  |
| <ul> <li>2.5. FERTILIZER</li> <li>2.5.1. FERTILIZER SHALL BE DELIVERED TO THE SITE MIXED AS SPECIFIED IN THE ORIGINAL UNOPENED STANDARD BAGS<br/>SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER. FERTILIZER SHALL BE STORED IN A WEATHERPROOF PLACE</li> </ul>  | ACER RUBRUMPLATANUS X ACERIFOLIABETULA VARIETIESPOPULUS VARIETIESCARPINUS VARIETIESPRUNUS VARIETIES  |
| SO THAT IT CAN BE KEPT DRY PRIOR TO USE.<br>2.5.2. FOR THE PURPOSE OF BIDDING, ASSUME THAT FERTILIZER SHALL BE 10% NITROGEN, 6% PHOSPHORUS AND 4%<br>POTASSIUM BY WEIGHT. A FERTILIZER SHOULD NOT BE SELECTED WITHOUT A SOIL TEST PERFORMED BY A CERTIFIED<br>SOIL LABORATORY.   | CRATAEGUS VARIETIES PYRUS VARIETIES<br>KOELREUTERIA QUERCUS VARIETIES<br>LIQUIDAMBAR STYRACIFLUA TILIA TOMENTOSA<br>LIRIODENDRON TULIPIFERA ZELKOVA VARIETIES  |
| <ul> <li>2.6. PLANT MATERIAL</li> <li>2.6.1. 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 &amp; LANDSCAPE ASSOCIATION (COMMERLY THE AMERICAN ASSOCIATION OF NURSERYMEN)</li> </ul>  | 9.8. PLANTING PITS SHALL BE DUG WITH LEVEL BOTTOMS, WITH THE WIDTH TWICE THE DIAMETER OF ROOT BALL. THE ROOT BALL<br>SHALL REST ON UNDISTURBED GRADE. EACH PLANT PIT SHALL BE BACKFILLED IN LAYERS WITH THE FOLLOWING PREPARED<br>SOIL MIXED THOROUGHLY:   |
| (FORMERLY THE AMERICAN ASSOCIATION OF NURSERYMEN).<br>2.6.2. IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES FOR ANY AND ALL PLANT MATERIAL.   | 9.8.1.1 PART PEAT MOSS9.8.2.1 PART COMPOSTED COW MANURE BY VOLUME  |
| 2.6.3. PLANTS SHALL BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE. TAGS ARE TO REMAIN ON AT LEAST ONE PLANT<br>OF EACH SPECIES FOR VERIFICATION PURPOSES DURING THE FINAL INSPECTION.  | <ul><li>9.8.3. 3 PARTS TOPSOIL BY VOLUME</li><li>9.8.4. 21 GRAMS 'AGRIFORM' PLANTING TABLETS (OR APPROVED EQUAL) AS FOLLOWS:</li></ul>   |
| 2.6.4. TREES WITH ABRASION OF THE BARK, SUN SCALDS, DISFIGURATION OR FRESH CUTS OF LIMBS OVER 1¼", WHICH HAVE<br>NOT BEEN COMPLETELY CALLUSED, SHALL BE REJECTED. PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY<br>TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES.   | 9.8.4.1.       2 TABLETS PER 1 GALLON PLANT         9.8.4.2.       3 TABLETS PER 5 GALLON PLANT         0.8.4.2.       4 TABLETS PER 15 CALLON PLANT   |
| 2.6.5. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH: WELL<br>DEVELOPED BRANCHES, DENSELY FOLIATED, VIGOROUS ROOT SYSTEMS AND BE FREE OF DISEASE, INSECTS, PESTS,<br>EGGS OR LARVAE.   | <ul> <li>9.8.4.3. 4 TABLETS PER 15 GALLON PLANT</li> <li>9.8.4.4. LARGER PLANTS: 2 TABLETS PER ½" CALIPER OF TRUNK</li> <li>9.9. FILL PREPARED SOIL AROUND BALL OF PLANT HALF-WAY AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND WATER</li> </ul>   |
| 2.6.6. CALIPER MEASUREMENTS OF NURSERY GROWN TREES SHALL BE TAKEN AT A POINT ON THE TRUNK SIX INCHES (6")<br>ABOVE THE NATURAL GRADE FOR TREES UP TO AND INCLUDING A FOUR INCH (4") CALIPER SIZE. IF THE CALIPER AT SIX  | THOROUGHLY.<br>9.10. ALL PLANTS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT BALL, THE POINT AT WHICH THE ROOT FLARE BEGINS, IS SET  |
| INCHES (6") ABOVE THE GROUND EXCEEDS FOUR INCHES (4") IN CALIPER, THE CALIPER SHOULD BE MEASURED AT A POINT<br>12" ABOVE THE NATURAL GRADE.  | AT GROUND LEVEL AND IN THE CENTER OF THE PIT. NO SOIL IS TO BE PLACED DIRECTLY ON TOP OF THE ROOT BALL.<br>9.11. ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS OR DRIVEWAYS SHALL BE PRUNED AND MAINTAINED TO A<br>MINIMUM BRANCHING HEIGHT OF 7' FROM GRADE.   |
| <ul> <li>2.6.7. SHRUBS SHALL BE MEASURED TO THE AVERAGE HEIGHT OR SPREAD OF THE SHRUB, AND NOT TO THE LONGEST BRANCH.</li> <li>2.6.8. TREES AND SHRUBS SHALL BE HANDLED WITH CARE BY THE ROOT BALL.</li> </ul>   | MINIMUM BRANCHING HEIGHT OF 7' FROM GRADE.<br>9.12. GROUND COVER AREAS SHALL RECEIVE A ¼" LAYER OF HUMUS RAKED INTO THE TOP 1" OF PREPARED SOIL PRIOR TO<br>PLANTING. ALL GROUND COVER AREAS SHALL BE WEEDED AND TREATED WITH A PRE-EMERGENT CHEMICAL AS PER   |
| <ol> <li><u>GENERAL WORK PROCEDURES</u></li> <li>CONTRACTOR TO UTILIZE WORKMANLIKE INDUSTRY STANDARDS IN PERFORMING ALL LANDSCAPE CONSTRUCTION. THE SITE<br/>IS TO BE LEET IN A CLEAN STATE AT THE END OF EACH WORKDAY. ALL DEPRIS MATERIALS AND TOOLS SHALL BE PROPERLY.</li> </ol>   | MANUFACTURER'S RECOMMENDATION.<br>9.13. NO PLANT, EXCEPT GROUND COVERS, GRASSES OR VINES, SHALL BE PLANTED LESS THAN TWO FEET (2') FROM EXISTING   |
| IS TO BE LEFT IN A CLEAN STATE AT THE END OF EACH WORKDAY. ALL DEBRIS, MATERIALS AND TOOLS SHALL BE PROPERLY<br>STORED, STOCKPILED OR DISPOSED OF.<br>3.2. WASTE MATERIALS AND DEBRIS SHALL BE COMPLETELY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. DEBRIS SHALL NOT  | STRUCTURES AND SIDEWALKS.<br>9.14. ALL PLANTING AREAS AND PLANTING PITS SHALL BE MULCHED AS SPECIFIED HEREIN TO FILL THE ENTIRE BED AREA OR<br>SALICED NO MULCH IS TO TOUCH THE TRUNK OF THE TREE OR SHRUP.  |
| <ul> <li>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.</li> <li><u>SITE PREPARATIONS</u></li> </ul>  | SAUCER. NO MULCH IS TO TOUCH THE TRUNK OF THE TREE OR SHRUB.<br>9.15. ALL PLANTING AREAS SHALL BE WATERED IMMEDIATELY UPON INSTALLATION IN ACCORDANCE WITH THE WATERING<br>SPECIFICATIONS AS LISTED HEREIN.  |
| 4.1. BEFORE AND DURING PRELIMINARY GRADING AND FINISHED GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE<br>ROOTS AND DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES OUTLINED HEREIN.  | 10. <u>TRANSPLANTING (WHEN REQUIRED)</u><br>10.1. ALL TRANSPLANTS SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT.   |
| 4.2. ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES. THE ENTIRE LIMB OF ANY<br>DAMAGED BRANCH SHALL BE CUT OFF AT THE BRANCH COLLAR. CONTRACTOR SHALL ENSURE THAT CUTS ARE SMOOTH AND<br>STRAIGHT. ANY EXPOSED ROOTS SHALL BE CUT BACK WITH CLEAN, SHARP TOOLS AND TOPSOIL SHALL BE PLACED AROUND   | <ol> <li>ALL TRANSPLANTS SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT.</li> <li>IF PLANTS ARE TO BE STOCKPILED BEFORE REPLANTING, THEY SHALL BE HEALED IN WITH MULCH OR SOIL, ADEQUATELY<br/>WATERED AND PROTECTED FROM EXTREME HEAT, SUN AND WIND.</li> </ol>  |
| 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.  | 10.3. PLANTS SHALL NOT BE DUG FOR TRANSPLANTING BETWEEN APRIL 10 AND JUNE 30.  |
| <ul> <li>CONTRACTOR SHALL WATER EXISTING TREES AS NEEDED TO PREVENT SHOCK OR DECLINE.</li> <li>CONTRACTOR SHALL ARRANGE TO HAVE A UTILITY STAKE-OUT TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO<br/>INSTALLATION OF ANY LANDSCAPE MATERIAL. UTILITY COMPANIES SHALL BE CONTACTED THREE (3) DAYS PRIOR TO THE<br/>BEGINNING OF WORK.</li> </ul>  | <ul> <li>10.4. UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE.</li> <li>10.5. TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN.</li> <li>10.6. F TRANSPLANTS DIE, SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES GREATER</li> </ul> |
| 5. TREE PROTECTION   | THAN SIX INCHES (6") DBH MAY BE REQUIRED TO BE REPLACED IN ACCORDANCE WITH THE MUNICIPALITY'S TREE<br>REPLACEMENT GUIDELINES.  |
| 5.1. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES TO REMAIN. A TREE PROTECTION ZONE<br>SHALL BE ESTABLISHED AT THE DRIP LINE OR AT THE LIMIT OF CONSTRUCTION DISTURBANCE, WHICHEVER IS GREATER.<br>LOCAL STANDARDS THAT MAY REQUIRE A MORE STRICT TREE PROTECTION ZONE SHALL BE HONORED.   | <ol> <li><u>WATERING</u></li> <li>11.1. NEW PLANTINGS OR LAWN AREAS SHALL BE ADEQUATELY IRRIGATED BEGINNING IMMEDIATELY AFTER PLANTING. WATER<br/>SHALL BE APPLIED TO EACH TREE AND SHRUB IN SUCH MANNER AS NOT TO DISTURB BACKFILL AND TO THE EXTENT THAT ALL</li> </ol>  |
| 5.2. A FORTY-EIGHT INCH (48") HIGH WOODEN SNOW FENCE OR ORANGE COLORED HIGH-DENSITY 'VISI-FENCE', OR APPROVED<br>EQUAL, MOUNTED ON STEEL POSTS SHALL BE PLACED ALONG THE BOUNDARY OF THE TREE PROTECTION ZONE. POSTS<br>SHALL BE LOCATED AT A MAXIMUM OF FIGHT FEET (2) ON CENTER OF AS INDICATED WITHIN THE TREE PROTECTION DETAIL  | 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.   |
| <ul> <li>SHALL BE LOCATED AT A MAXIMUM OF EIGHT FEET (8') ON CENTER OR AS INDICATED WITHIN THE TREE PROTECTION DETAIL.</li> <li>5.3. 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</li> </ul> | 11.2. SITE OWNER SHALL PROVIDE WATER IF AVAILABLE ON SITE AT TIME OF PLANTING. IF WATER IS NOT AVAILABLE ON SITE,<br>CONTRACTOR SHALL SUPPLY ALL NECESSARY WATER. THE USE OF WATERING BAGS IS RECOMMENDED FOR ALL NEWLY<br>PLANTED TREES.  |
| <ul> <li>SHALL BE REGULARLY INSPECTED BY THE LANDSCAPE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITY HAS BEEN COMPLETED.</li> <li>5.4. AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE PROTECTION ZONE.</li> </ul>  | 11.3. IF AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE, IT SHALL BE USED TO WATER PROPOSED PLANT MATERIAL, BUT<br>ANY FAILURE OF THE SYSTEM DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY OF MAINTAINING THE DESIRED<br>MOISTURE LEVEL FOR VIGOROUS, HEALTHY GROWTH.  |
| <ol> <li>6. <u>SOIL MODIFICATIONS</u></li> <li>6.1. CONTRACTOR SHALL ATTAIN A SOIL TEST FOR ALL AREAS OF THE SITE PRIOR TO CONDUCTING ANY PLANTING. SOIL TESTS</li> </ol>  | <ol> <li><u>GUARANTEE</u></li> <li>12.1. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF 1 YEAR FROM APPROVAL OF LANDSCAPE<br/>INSTALLATION BY THE APPROVING AGENCY. CONTRACTOR SHALL SUPPLY THE OWNER WITH A MAINTENANCE BOND FOR TEN</li> </ol>  |
| <ul> <li>6.1. 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.</li> <li>6.2. 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</li> </ul>  | PERCENT (10%) OF THE VALUE OF THE LANDSCAPE INSTALLATION WHICH WILL BE RELEASED AT THE CONCLUSION OF THE GUARANTEE PERIOD AND WHEN A FINAL INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.   |
| <ul> <li>CONTRACTOR DEPENDING ON SITE CONDITIONS.</li> <li>6.3. 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</li> </ul>  | 12.2. 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.  |
| SOIL LABORATORY.<br>6.3.1. TO INCREASE A SANDY SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS, THOROUGHLY TILL ORGANIC MATTER INTO THE<br>TOP 6-12". USE COMPOSTED BARK, COMPOSTED LEAF MULCH OR PEAT MOSS. ALL PRODUCTS SHOULD BE COMPOSTED   | 12.3. TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND THROUGHOUT THE 90 DAY<br>MAINTENANCE PERIOD AS SPECIFIED HEREIN. CULTIVATION, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS<br>SHALL BE PERFORMED AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE.                    |
| TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A PH<br>HIGHER THAN 7.5.   | 12.4. LAWNS SHALL BE MAINTAINED THROUGH WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING AND OTHER OPERATIONS<br>SUCH AS ROLLING, REGARDING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF<br>ERODED OR BARE AREAS.  |
| 6.3.2. TO INCREASE DRAINAGE, MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE<br>BARK (UP TO 30% BY VOLUME) AND/OR AGRICULTURAL GYPSUM. COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO<br>BRING THE SAND CONTENT TO MORE THAN 60% OF THE TOTAL MIX. SUBSURFACE DRAINAGE LINES MAY NEED TO BE<br>ADDED TO INCREASE DRAINAGE.  | <ul> <li>ERODED OR BARE AREAS.</li> <li>13. <u>CLEANUP</u></li> <li>13.1. UPON THE COMPLETION OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE, THE CONTRACTOR SHALL<br/>REMOVE ALL UNUSED MATERIALS. EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED AREAS ARE TO BE CLEANED.</li> </ul>   |
| 6.3.3. MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.  | <ul> <li>REMOVE ALL UNUSED MATERIALS, EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED AREAS ARE TO BE CLEANED.</li> <li>13.2. THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER OR<br/>AUTHORIZED REPRESENTATIVE.</li> </ul>  |
| <ol> <li><u>FINISHED GRADING</u></li> <li>UNLESS OTHERWISE CONTRACTED, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF<br/>TOPSOIL AND THE ESTABLISHMENT OF FINE GRADING WITHIN THE DISTURBANCE AREA OF THE SITE</li> </ol>  | 14. MAINTENANCE (ALTERNATIVE BID):<br>14.1. A 90 DAY MAINTENANCE PERIOD SHALL COMMENCE AT THE END OF ALL LANDSCAPE INSTALLATION OPERATIONS. THE 90 DAY   |
| TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING WITHIN THE DISTURBANCE AREA OF THE SITE.<br>7.2. LANDSCAPE CONTRACTOR SHALL VERIFY THAT SUBGRADE FOR INSTALLATION OF TOPSOIL HAS BEEN ESTABLISHED. THE<br>SUBGRADE OF THE SITE MUST MEET THE FINISHED GRADE LESS THE REQUIRED TOPSOIL THICKNESS (1"±).   | MAINTENANCE PERIOD ENSURES TO THE OWNER/OPERATOR THAT THE NEWLY INSTALLED LANDSCAPING HAS BEEN<br>MAINTAINED AS SPECIFIED ON THE APPROVED LANDSCAPE PLAN. ONCE THE INITIAL 90 DAY MAINTENANCE PERIOD HAS<br>EXPIRED, THE OWNER/OPERATOR MAY REQUEST THAT BIDDERS SUBMIT AN ALTERNATE MAINTENANCE BID FOR A MONTHLY                                   |
| <ul> <li>7.3. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF<br/>SURFACE AS DEPICTED WITHIN THIS SET OF CONSTRUCTION PLANS, UNLESS OTHERWISE DIRECTED BY THE PROJECT<br/>ENGINEER OR LANDSCAPE ARCHITECT.</li> </ul>   | MAINTENANCE CONTRACT. THE ALTERNATE MAINTENANCE CONTRACT WILL ENCOMPASS ANY WORK THAT IS CONSIDERED<br>APPROPRIATE TO ENSURE THAT PLANT AND LAWN AREAS ARE HEALTHY AND MANICURED TO THE APPROVAL OF THE<br>OWNER/OPERATOR.   |
| 7.4. 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.  | SPECIFICATIONS<br>NAME; 1" – 1.5" CRUSHED BLUESTONE GRAVEL   |
| <ol> <li><u>TOPSOILING</u></li> <li>CONTRACTOR SHALL PROVIDE A <u>6"</u> THICK MINIMUM LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR<br/>CLIENT, IN ALL PLANTING AREAS. TOPSOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO<br/>ACHIEVE THE DESIRED COMPACTED THICKNESS.</li> </ol>  | COLOR; COLORS WILL BE GREYS WITH BLUISH TONES<br>SIZE; STONE SIZES WILL RANGE FROM 1" – 1.5" IN AT LEAST ONE DIMENSION. STONE<br>SIZING SHOULD BE UNIFORM WITH LITTLE VARIATION FROM THIS RANGE.<br>SILT CONTENT; STONE NEEDS TO BE CLEAN OF DEBRIS AND SILT AT TIME OF DELIVERY.  |
| ACHIEVE THE DESIRED COMPACTED THICKNESS.<br>8.2. ON-SITE TOPSOIL MAY BE USED TO SUPPLEMENT THE TOTAL AMOUNT REQUIRED. TOPSOIL FROM THE SITE MAY BE REJECTED<br>IF IT HAS NOT BEEN PROPERLY REMOVED, STORED AND PROTECTED PRIOR TO CONSTRUCTION.  |  |
| 8.3. 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.<br>8.4. ALL LAWN AREAS ARE TO BE CULTIVATED TO A DEPTH OF SIX INCHES (6"). ALL DEBRIS EXPOSED FROM EXCAVATION AND<br>CULTIVATION SHALL BE DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES SECTION ABOVE. THE<br>FOLLOWING SHALL BE TILLED INTO THE TOP FOUR INCHES (4") IN TWO DIRECTIONS (QUANTITIES BASED ON A 1,000 SQUARE   | FINISHED GRADE. SEE MATERIALS PLAN<br>CRUSHED STONE  |
| FOOT AREA - FOR BID PURPOSES ONLY [SEE SPECIFICATION 6.A.]):8.4.1.20 POUNDS 'GRO-POWER' OR APPROVED SOIL CONDITIONER/FERTILIZER  | FINISHED GRADE. SEE PLANS FOR ELEVATION  |
| <ul><li>8.4.2. 20 POUNDS NITRO-FORM (COURSE) 38-0-0 BLUE CHIP OR APPROVED NITROGEN FERTILIZER</li><li>8.5. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN CONDITIONS.</li></ul>   | FINISHED GRADE. SEE PLANS FOR ELEVATION  |
| 9. <u>PLANTING</u><br>9.1. INSOFAR 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 UNINSTALLED PLANT MATERIAL. PLANTS SHALL NOT REMAIN<br>UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. PLANTS THAT WILL NOT BE PLANTED FOR A PERIOD<br>OF TIME GREATER THAN THREE DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH TO HELP PRESERVE ROOT MOISTURE.  | 1/8" x 4" STEEL EDGE WITH STAKES EVERY 2'  |
| 9.2. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL<br>CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN<br>TOPSOIL THAT IS IN A MUDDY OR EPOZEN CONDITION.   |  |

TOPSOIL THAT IS IN A MUDDY OR FROZEN CONDITION.

CRUSHE

| D | ST | ONE | MUL | .CH |
|---|----|-----|-----|-----|

### **ARBORTIE STAKING DETAIL**

THIS END WRAPPED

AROUND TREE AFTER

KNOT IS TIGHTENED

STEP 2

WRAP THIS END AROUND

BELOW THE KNOT THAT

WAS TIED IN STEP 1.

TREE BEGIN A NEW KNO

THIS END

TO STAKE

AVOID PURCHASING TREES WITH TWO

PLANTING: OTHERWISE, DO NOT PRUNE

SPECIFIC STRUCTURAL CORRECTIONS

SET ROOT BALL FLUSH TO GRADE OR

SEVERAL INCHES HIGHER IN POORLY

3" DOUBLE SHREDDED HARDWOOD

BARK MULCH (UNLESS OTHERWISE

CONTACT WITH TREE TRUNK)

- ALL PLANTING CONTAINERS,

NON-BIODEGRADABLE MATERIALS

SHALL BE REMOVED FROM ROOT

UNDISTURBED SOIL IN BOTTOM

-FOR CONTAINER-GROWN SHRUBS, PLANT SHALL BE

TRANSPLANTED AT THE SAME GRADE AS IN THE

CONTAINER. REMOVE THE CONTAINER. USE

FINGER OR SMALL HAND TOOLS TO PULL THE

CIRCLE THE PERIMETER OF THE CONTAINER.

-LANDSCAPE FABRIC AS SPECIFIED

UNDISTURBED SUBGRADE

ROOTS OUT OF THE OUTER LAYER OF POTTING

SOIL: THEN CUT OR PULL APART ANY ROOTS THA

-3" DOUBLE-SHREDDED HARDWOOD BARK MULCH

(DO NOT PUT MULCH AGAINST THE BASE OF THE

-PLACE SHRUB ON FIRM SOIL IN BOTTOM OF HOLE

SHRUBS IN CONTINUOUS PLANTING HOLE.

N.T.S.

N.T.S.

BASKETS AND

- SET ROOT BALL ON

BALLS.

OF HOLE

PLANT)

-FINISHED GRADE

LANDSCAPE FABRIC AS SPECIFIED

SPECIFIED) (DO NOT PLACE MULCH IN

LEADERS OR REMOVE ONE AT

- 4" BUILT-UP EARTH SAUCER

DRAINING SOILS.

TREE AT PLANTING EXCEPT FOR

## -FINISHED GRADE. SEE MATERIALS PLAN

- -COMPACTED SUBGRADE
- -1/8" x 4" STEEL EDGE WITH STAKES EVERY 2'
- WEED BARRIER FABRIC

- SPECIFICATIONS NAME; 1" – 1.5" CRUSHED BLUESTONE GRAVEL
- MATERIALS, EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED AREAS ARE TO BE CLEANED. EANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER OR CE PERIOD SHALL COMMENCE AT THE END OF ALL LANDSCAPE INSTALLATION OPERATIONS. THE 90 DAY
- GARDING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ON OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE, THE CONTRACTOR SHALL
- AS SPECIFIED HEREIN. CULTIVATION, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE NTAINED THROUGH WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING AND OTHER OPERATIONS
- AND WHEN A FINAL INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE OWNER OR AUTHORIZED PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GUARANTEE PERIOD. REPLACEMENT OF LL BE CONDUCTED AT THE FIRST SUCCEEDING PLANTING SEASON. ANY DEBRIS SHALL BE DISPOSED OF
- TRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF 1 YEAR FROM APPROVAL OF LANDSCAPE APPROVING AGENCY. CONTRACTOR SHALL SUPPLY THE OWNER WITH A MAINTENANCE BOND FOR TEN EVALUE OF THE LANDSCAPE INSTALLATION WHICH WILL BE RELEASED AT THE CONCLUSION OF THE
- TEM HAS BEEN INSTALLED ON THE SITE, IT SHALL BE USED TO WATER PROPOSED PLANT MATERIAL, BUT SYSTEM DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY OF MAINTAINING THE DESIRED R VIGOROUS, HEALTHY GROWTH.

- ROVIDE WATER IF AVAILABLE ON SITE AT TIME OF PLANTING. IF WATER IS NOT AVAILABLE ON SITE. SUPPLY ALL NECESSARY WATER. THE USE OF WATERING BAGS IS RECOMMENDED FOR ALL NEWLY

- ANTING HOLE ARE THOROUGHLY SATURATED. WATERING SHALL CONTINUE AT LEAST UNTIL PLANTS ARE
- EACH TREE AND SHRUB IN SUCH MANNER AS NOT TO DISTURB BACKFILL AND TO THE EXTENT THAT AL
- AWN AREAS SHALL BE ADEQUATELY IRRIGATED BEGINNING IMMEDIATELY AFTER PLANTING. WATER
- SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES GREATER DBH MAY BE REQUIRED TO BE REPLACED IN ACCORDANCE WITH THE MUNICIPALITY'S TREE

- E DUG FOR TRANSPLANTING BETWEEN APRIL 10 AND JUNE 30. ACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE. BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN.
- ALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT. STOCKPILED BEFORE REPLANTING, THEY SHALL BE HEALED IN WITH MULCH OR SOIL, ADEQUATELY CTED FROM EXTREME HEAT. SUN AND WIND.
- S TO TOUCH THE TRUNK OF THE TREE OR SHRUB. SHALL BE WATERED IMMEDIATELY UPON INSTALLATION IN ACCORDANCE WITH THE WATERING
- ROUND COVERS, GRASSES OR VINES, SHALL BE PLANTED LESS THAN TWO FEET (2') FROM EXISTING AND PLANTING PITS SHALL BE MULCHED AS SPECIFIED HEREIN TO FILL THE ENTIRE BED AREA OR

- AS SHALL RECEIVE A 1/4" LAYER OF HUMUS RAKED INTO THE TOP 1" OF PREPARED SOIL PRIOR TO ND COVER AREAS SHALL BE WEEDED AND TREATED WITH A PRE-EMERGENT CHEMICAL AS PER

1.) NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.

3.) PLANTING DEPTH SHALL BE THE SAME AS GROWN IN NURSERY

7.) SUBSTITUTE ARBORVITAE STAKING SYSTEM WHEN SPECIFIED.

ROOT BALL. FOLD BURLAP BACK 1/3 FROM ROOT BALL

REINFORCED RUBBER HOSE (1/2" DIA.

FOLD BURLAP AWAY FROM TOP OF -

12 GAUGE GALVANIZED WIRE GUYS -

2" DIA. HARDWOOD STAKES 2/3 -

TWICE THE WIDTH OF ROOTBALL

FOR PREPARED SOIL FOR TREES.

(RECOMMENDATION ONLY. SEE SOIL MOD.

PLANT SHALL BE PLANTED SO THAT-

HE POINT AT WHICH THE ROOT FLARE

CUT AND REMOVE BURLAP FROM TOP

ONE-THIRD OF ROOT BALL AS SHOWN.

BEGINS IS SET LEVEL WITH GRADE.

(SEE SOIL MODIFICATION CHART)

BEFORE PLANTING, ADD 3" TO 4" OF-

WELL-COMPOSTED LEAVES AND

SOIL SURFACE ROUGHENED-

TO BIND WITH NEW SOIL.

INCORPORATE 2" OF PEAT

INTO 6" OF PLANTING

1" DOUBLE SHREDDED-

EDGING-

TOPSOIL

(AS SPECIFIED)

FINISHED GRADE-

DEBRIS LARGER THAN 2" DIAMETER.

INSTRUCTIONS.

PERENNIAL RYEGRASS

KENTUCKY BLUEGRASS

SPREADING FESCUE

FERTILIZER (16.32.16)

TANK FIBER MULCH

TANK TACKIFIER

3. SEEDING RATES:

RED FESCUE

LIQUID LIME

OWNER

11

SI II II IV

TREE.

TREE TRUNK

MIN. OF THREE (3)

STAKES TO EACH

TREE

HARDWOOD BARK MULCH

MIXTURE, AS SPECIFIED

RECYCLED YARD WASTE TO BED AND

TILL INTO TOP 6" OF PREPARED SOIL.

PREPARED SOIL FOR TREES

TREE HT. 3 PER TREE

1 PART PEAT MOSS

3 PARTS TOPSOIL

CHART)

TREE PLANTING DETAIL

24" MINIMUM

SHRUB PLANTING DETAIL

**GROUNDCOVER PLANTING** 

1/2 LB/1000 SQ FT

1/2 LB/1000 SQ FT

1/2 LB/1000 SQ FT

2 LB/1000 SQ FT

1 GAL/800 GAL

35 LB/800 GAL.

4. GERMINATION RATES WILL VARY AS TO TIME OF YEAR FOR SOWING. CONTRACTOR TO

SPECIFIED ARBORTIE GREEN (OR WHITE)

STAKING AND GUYING MATERIAL IS TO BE

FLAT WOVEN POLYPROPYLENE MATERIAL.

<sup>3</sup>/<sub>4</sub>" WIDE, 900 LB. BREAK STRENGTH.

TREE MOVEMENT AND SUPPORTS THE

INSTALLATION

TIE A SIMPLE KNOT 18-24"

FROM EITHER END OF THE

DIAMETER OF THE TREE)

(DEPENDING ON THE

ARBORTIE SHALL BE FASTENED TO STAKES IN A MANNER WHICH PERMITS

TYPICAL

GUYING

STEP 1

ARBORTIE.

30 LB/1000 SQ FT

IRRIGATE SEEDED AREA UNTIL AN ACCEPTABLE STAND OF COVER IS ESTABLISHED BY

HYDROSEED SPECIFICATIONS

1 LB/1000 SQ FT

1. PRIOR TO SEEDING, AREA IS TO BE TOPSOILED, FINE GRADED, AND RAKED OF ALL

2. PRIOR TO SEEDING, CONSULT MANUFACTURER'S RECOMMENDATIONS AND

1 PART COW MANURE

UNDISTURBED SUBGRADE -

DIG WIDE, SHALLOW HOLE -

TAMP SOIL SOLIDLY AROUND -

PLANTING MIX:-

1 PART PEAT MOSS

3 PARTS TOPSOIL

1 PART COW MANURE

WITH TAMPED SIDES

BASE OF ROOT BALL

TIMES DURING THE FIRST MONTH

OF SOIL LAYERS AS

SOIL INTO THE SUBSOIL

2.) REMOVE ALL NON-BIODEGRADABLE MATERIAL AND ROPE FROM TRUNK & TOP OF

AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS. 5.) THE BOTTOM OF PLANTING PIT EXCAVATIONS SHOULD BE ROUGH TO AVOID MATTING

4.) THOROUGHLY SOAK THE TREE ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL

NEW SOIL IS ADDED. IT IS PREFERABLE TO TILL THE FIRST LIFT (2 TO 3 IN.) OF PLANTING

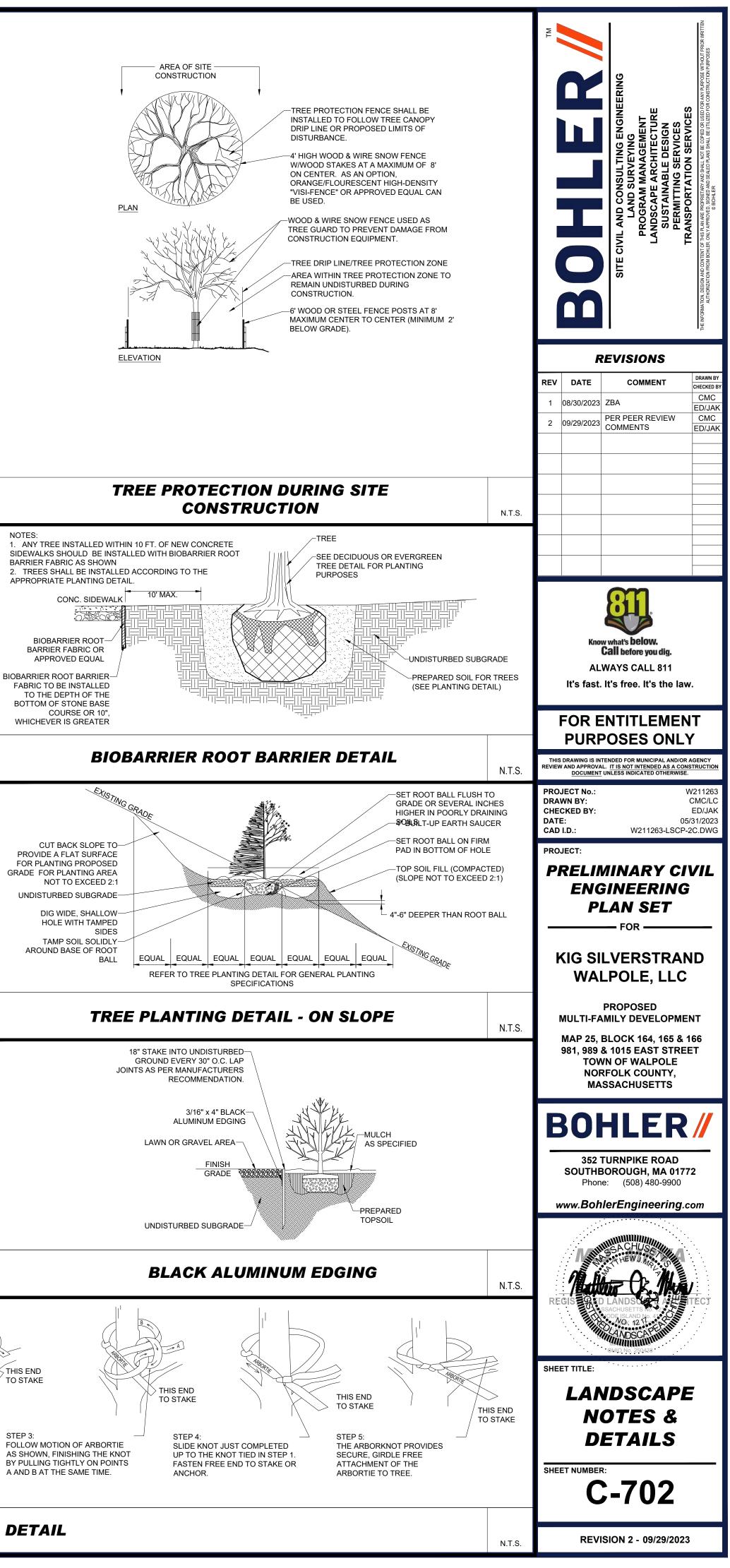
6.) REFER TO THE CHART "GENERAL RANGE OF SOIL MODIFICATIONS & VOLUMES FOR

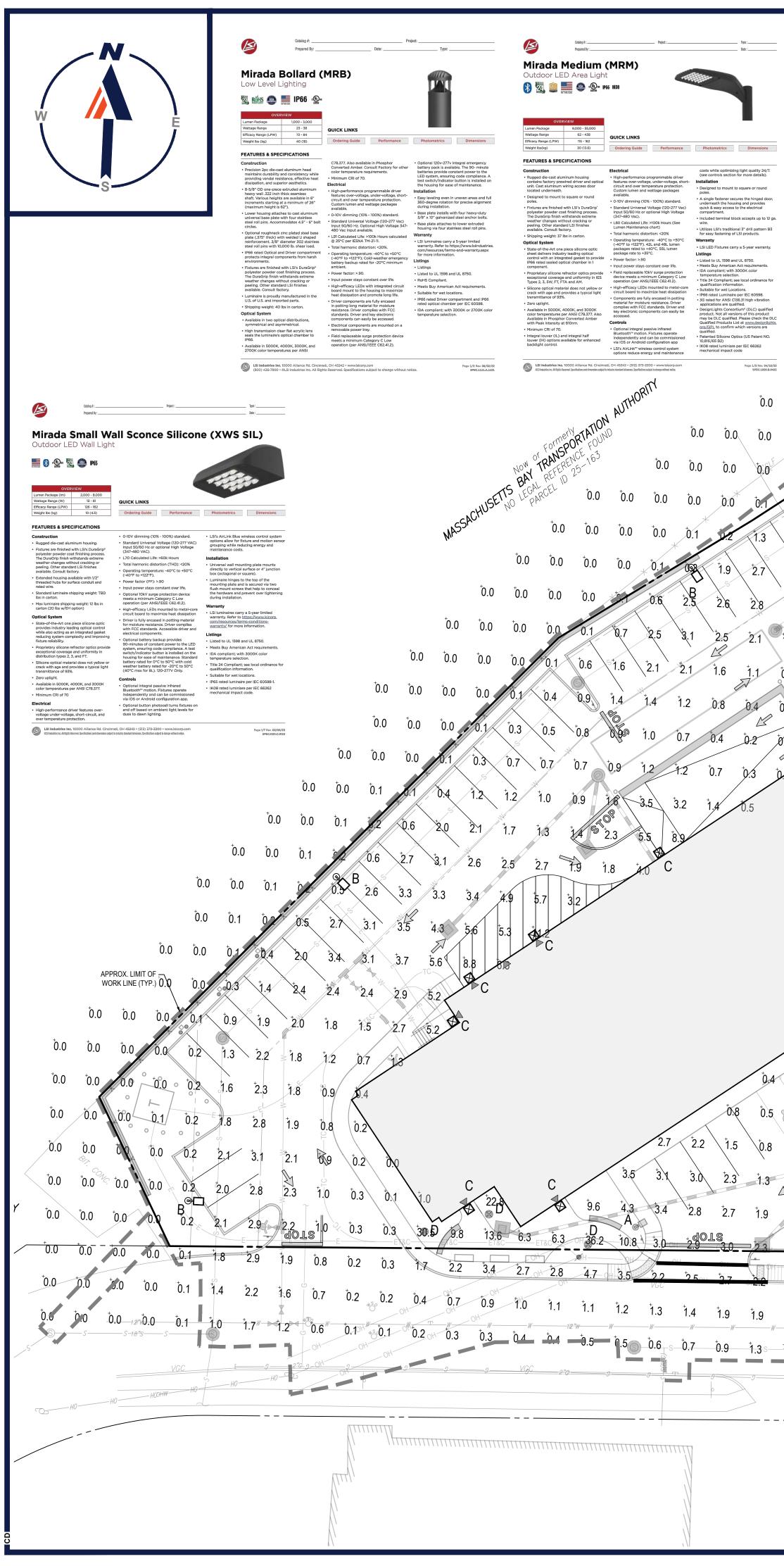
VARIOUS SOIL CONDITIONS" TO DETERMINE MINIMUM WIDTH OF PREPARED SOIL.

BLACK)

ROOT BALL

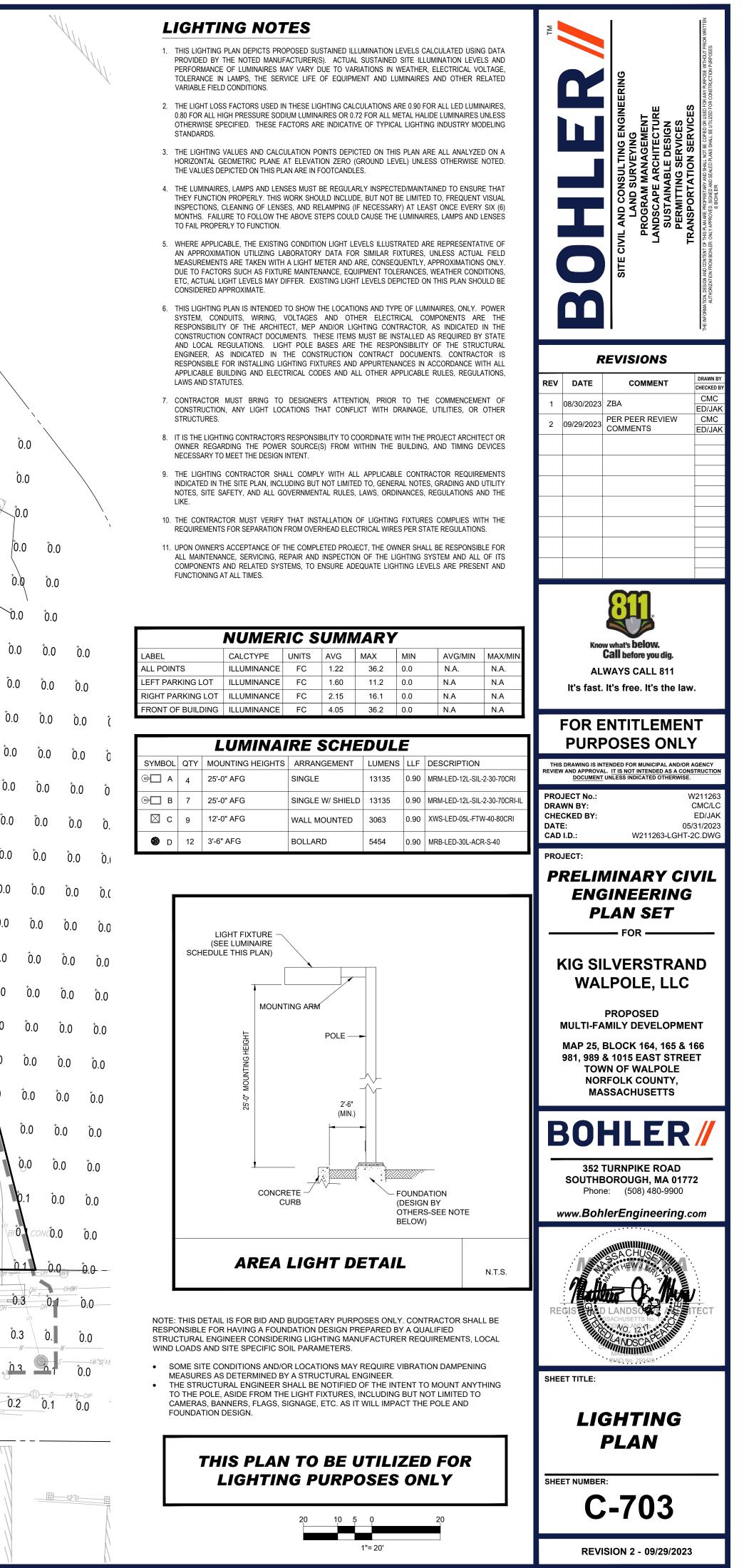
TWISTED

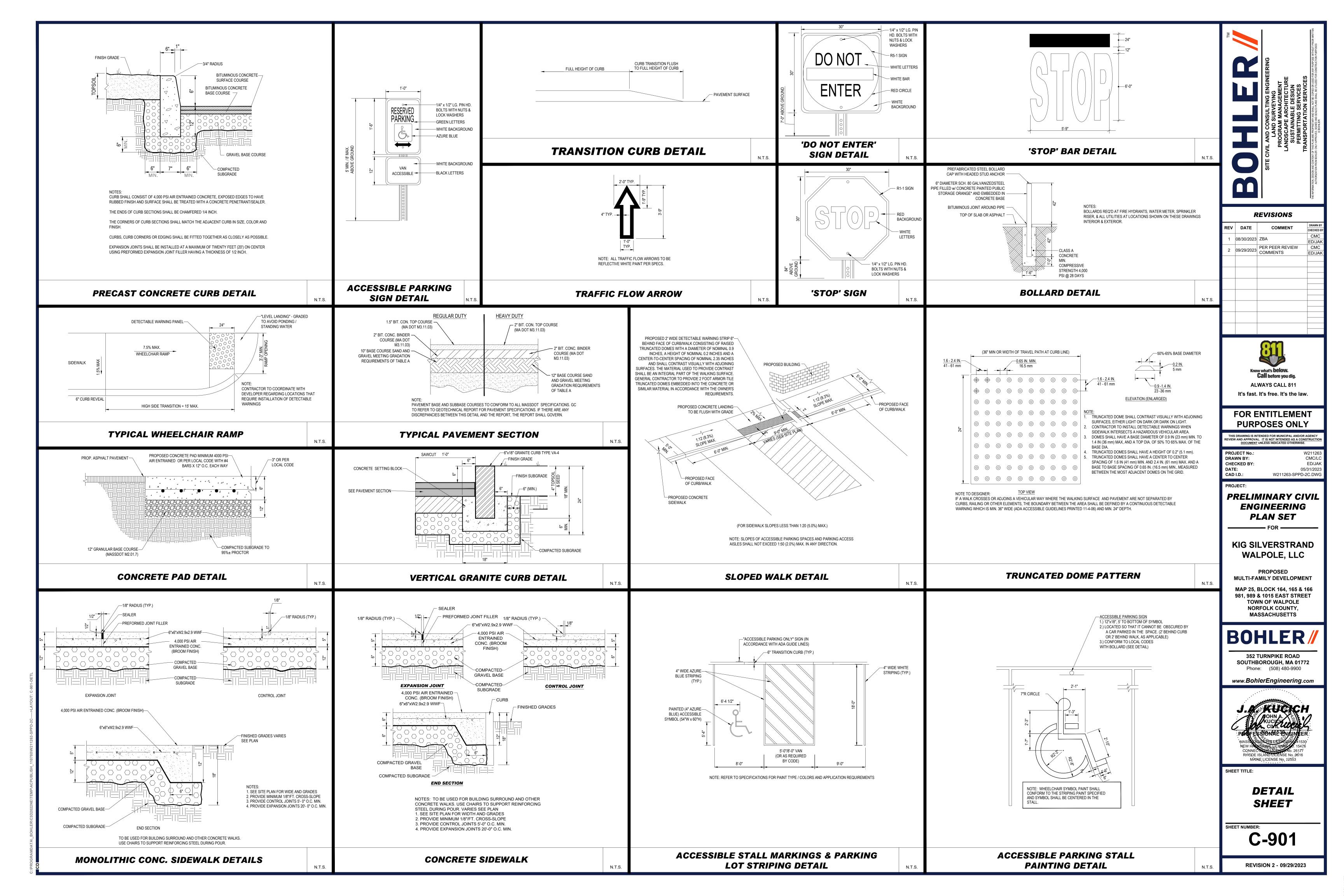


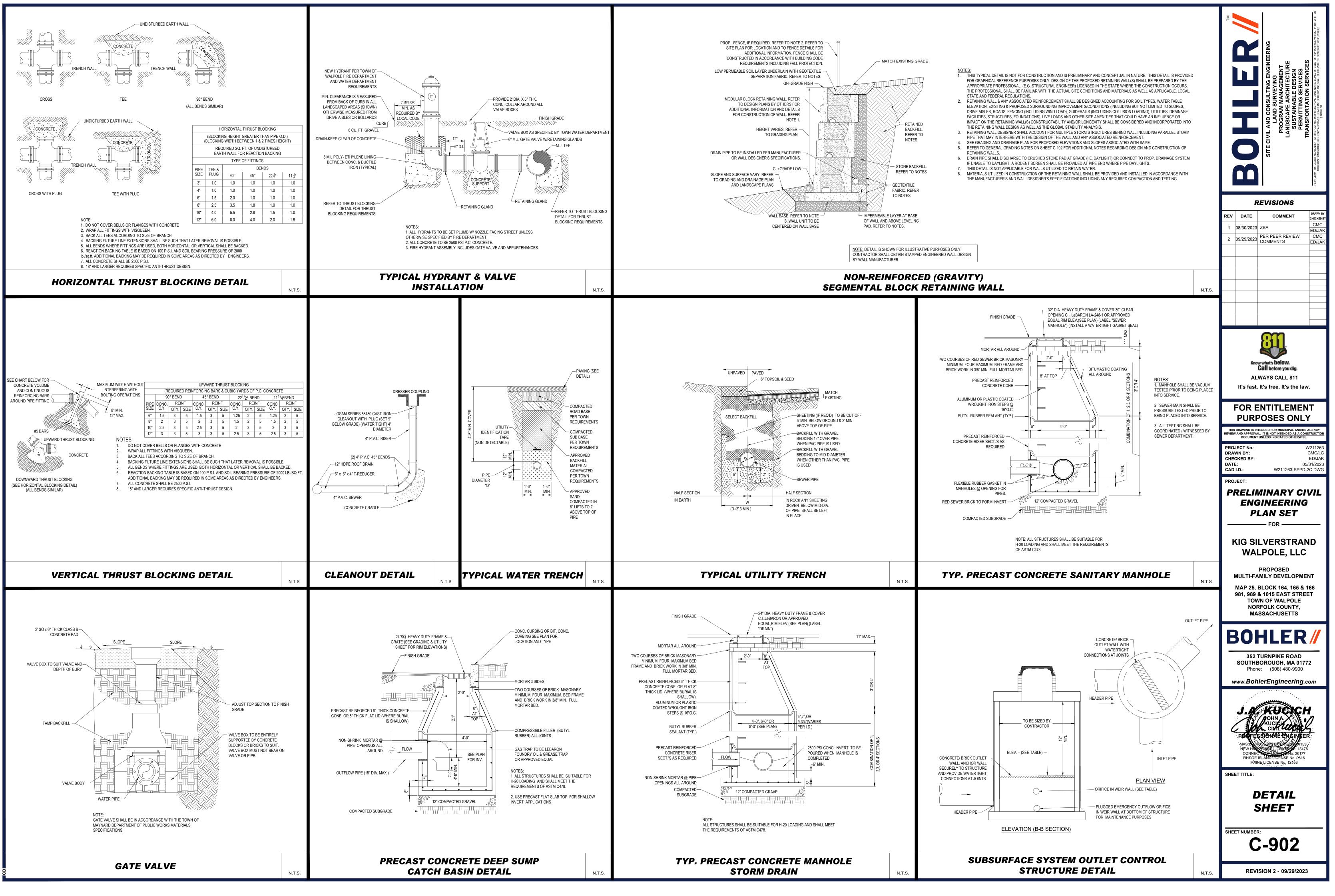


211263\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\W211263-LGHT-2C----->LAYOUT: C-703-LGHT

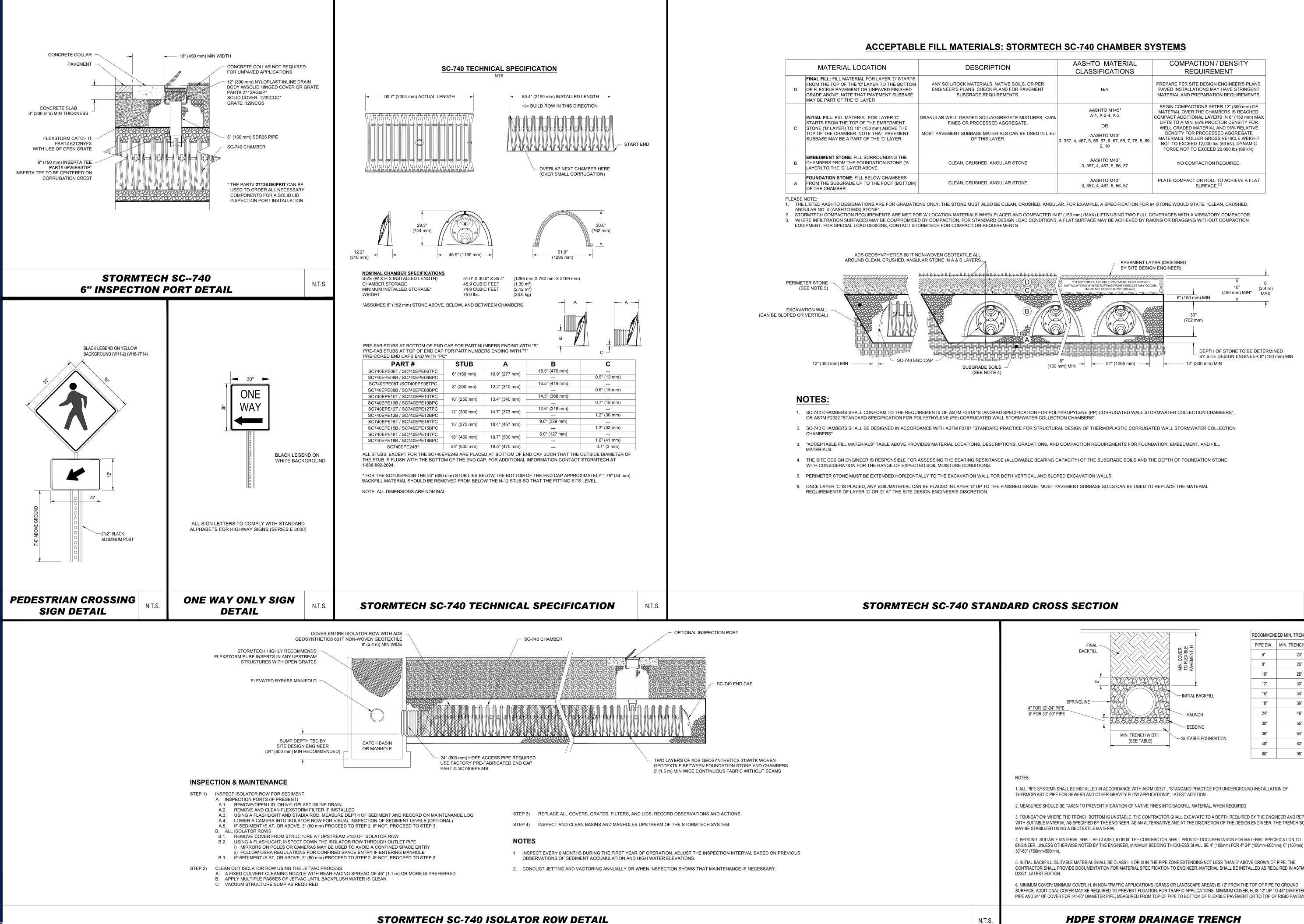
0.0 0.0 0.0 **Q**.0 0.0 0.0 0.0 0.0 0.0 0.0 `0w0#111\_0.0 0.0 0.0 <sup>⁺</sup>0.0 0.0 <sup>†</sup>0.0 0.0 0.0 APPROX. LIMIT OF WORK LINE (TYP.) 0.0 0.0 0.0 `Q.0 0.0 0.0 0.0 0 0.0 0.0 0.9 0.0 0.0 0.0 1.8 0:0 And or 0.0 rmerto.0 0.0 0.0 WALPOLE REALTY LP 2.2 ∖2.3 0.8 /<sup>†</sup>0.0∕ 0.0 <sup>BO</sup> \$ 0,025-10,0 <sup>†</sup>0.0 0.0 0.0 0.0 1.6 1.8 2.4 3.1 2.1 0.8 \$ 0.1 0.0 0.0 0.0 <sup>†</sup>0.0 <sup>†</sup>0.0 0.0 0.0  $\sqrt{31}$ 151 0.1 0.0 0.0 <sup>†</sup>0.0 <sup>†</sup>0.0 0.0 1.1 1.3 0.0 0.0 0.0 0.0 0.0 0.0 (5.2) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 🏷 3.2 ∖2.5 2.0 2.4 0.0 0.0 0.0 0.0 0.6 0.0 J.6‰\0.4 × 0.3 \_2.∖∖ <sup>‡</sup>2.6 <sup>‡</sup>2.3 <sup>‡</sup>2.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.4 1.8 2.3 <sup>\*</sup>2.9 <sup>\*</sup>2.7 / <sup>\*</sup>0.4 0.0 0.0 0.0 0.0 0.0 0.0 2.9 🔪 4.2 0.9 <sup>†</sup>0,2 <sup>†</sup>0.4 <sup>†</sup>0.9 <sup>†</sup>1.8 2.5 2.6 0.2 APPROX. LIMIT OF 0.0 0.0 0.0 0.0 0.0 WORK LINE (TYP.) 1Ja 0.3 0.9 1.9 <sup>‡</sup>2.9 0.6 0.0 0.3 0.0 \ 0.3 0.8 0.0 0.0 0.3 1.0 <sup>‡</sup>2.2 3.1 0.0 0.0 0.0 0.0 0.0 1.1 2.3 24 0.0 0.0 0.0 0.0 2.4] 1.7 0.5 0.0 0.0 0.0 0.0 2.3 1.5 0.8 <sup>†</sup>0.0 <sup>†</sup>0.0 <sup>†</sup>0.0 <sup>†</sup>0.0 <sup>†</sup>0.0 2.5 <sup>•</sup>0.0 <sup>•</sup>0.0 <sup>•</sup>0.0 <sup>•</sup>0.0 1.9 <sup>†</sup>2.6 2.9 24 0.5 PROPOSED BUILDING FFE 142.0 0.0 <sup>†</sup>0.0 <sup>+</sup>0.0 0.0 1.6 2.6 2.8 0.8 0.9 0.0 0.0 0.0 221.0 0.4 0.0 1.4 9.1 1.5 1.9 2.6 25.0 11.5 8.2 0.0 1.8 2.7 3.4 2.5 0.3 <sup>‡</sup>2.6 <sup>‡</sup>3.3 <sup>‡</sup>3.5 1.9 0.8 0.3 0.5 0.9 2.8 3.3 2.5 🔎 0.9 1.7 <sup>‡</sup>& 9 2.6 3.5 0.3  $\frac{1}{2}$ 2.7 <sup>‡</sup>3.0 <sup>‡</sup>2.2 2.9 он25.9 dols <u> 2.3 pH 2.4 P1 9 </u> 0.2 0.2 0.3 0.4 0.3 0.2 /60.5 ⊞







R0GRAMDATA\\_B0HLER\C3D2022NE\TEMP\ACPUBLISH\_110780\W211263-SPPD-2C----->LAYOUT: C-902-DE



| N   | AASHTO MATERIAL   | COMPACTION / DENSITY  |
|---|---|---|
| N   | CLASSIFICATIONS   | REQUIREMENT   |
| /E SOILS, OR PER<br>5 FOR PAVEMENT<br>ENTS. | N/A   | PREPARE PER SITE DESIGN ENGINEER'S PLANS.<br>PAVED INSTALLATIONS MAY HAVE STRINGENT<br>MATERIAL AND PREPARATION REQUIREMENTS.                                     |
| GATE MIXTURES, <35%                         | AASHTO M145 <sup>1</sup><br>A-1, A-2-4, A-3   | BEGIN COMPACTIONS AFTER 12" (300 mm) OF<br>MATERIAL OVER THE CHAMBERS IS REACHED.<br>COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX                                 |
| GREGATE.                                    | OR  | LIFTS TO A MIN. 95% PROCTOR DENSITY FOR<br>WELL GRADED MATERIAL AND 95% RELATIVE  |
| S CAN BE USED IN LIEU                       | AASHTO M43 <sup>1</sup><br>3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89,<br>9, 10 | DENSITY FOR PROCESSED AGGREGATE<br>MATERIALS. ROLLER GROSS VEHICLE WEIGHT<br>NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC<br>FORCE NOT TO EXCEED 20,000 lbs (89 kN). |
| R STONE                                     | AASHTO M43 <sup>1</sup><br>3, 357, 4, 467, 5, 56, 57                                    | NO COMPACTION REQUIRED.   |
| R STONE                                     | AASHTO M43 <sup>1</sup><br>3, 357, 4, 467, 5, 56, 57                                    | PLATE COMPACT OR ROLL TO ACHIEVE A FLAT<br>SURFACE. <sup>2,3</sup>  |

| RECOMMEN  | DED MIN. TRENCH WIDTH |  |
|-----------|-----------------------|--|
| PIPE DIA. | MIN. TRENCH WIDTH     |  |
| 6"        | 23"                   |  |
| 8"        | 26"                   |  |
| 10"       | 28"                   |  |
| 12"       | 30"                   |  |
| 15"       | 34"                   |  |
| 18"       | 39"                   |  |
| 24"       | 48"                   |  |
| 30"       | 56"                   |  |
| 36"       | 64"                   |  |
| 48"       | 80"                   |  |
|           |                       |  |

96"

N.T.S

3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM

ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR

5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM

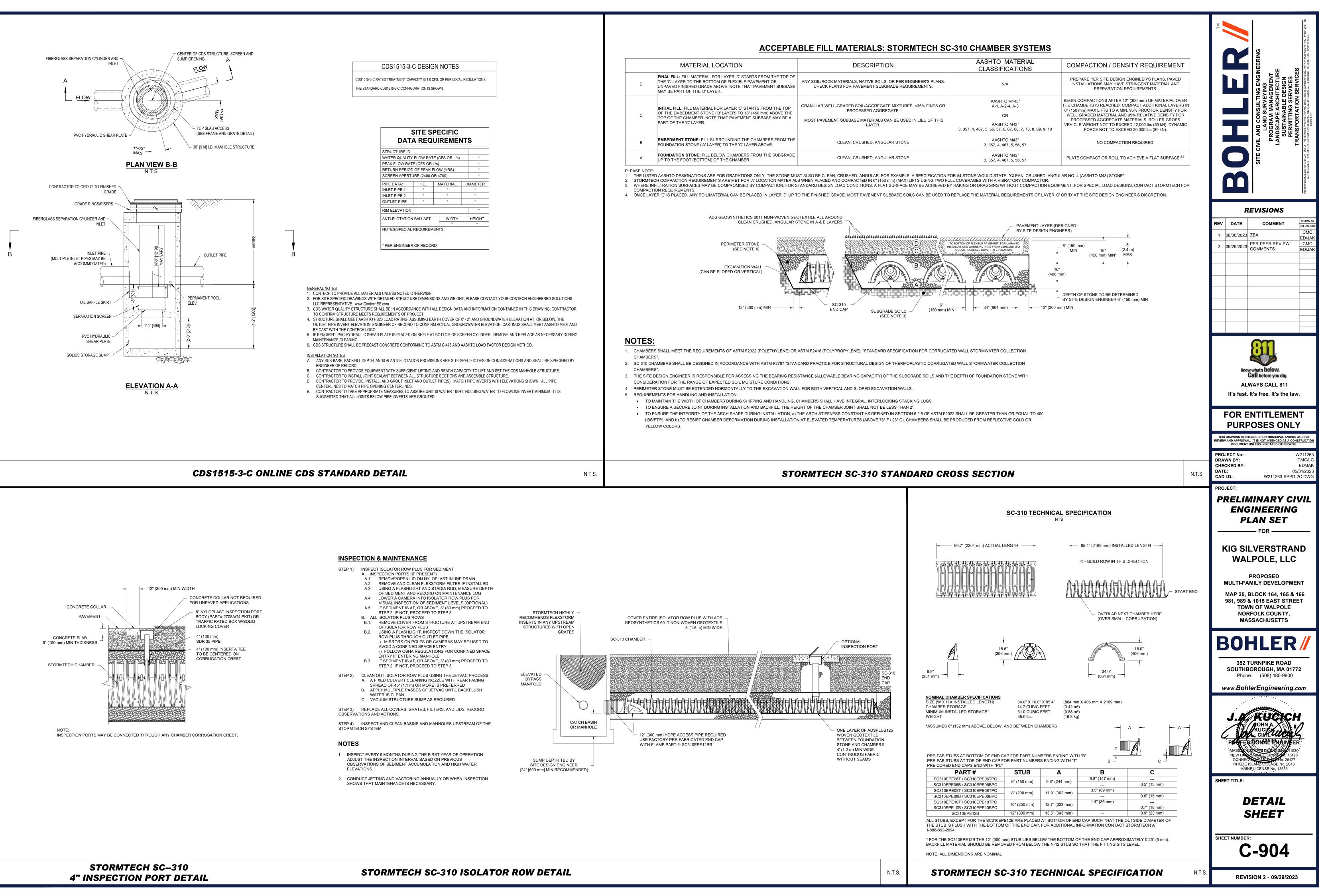
6. MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 54"-60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

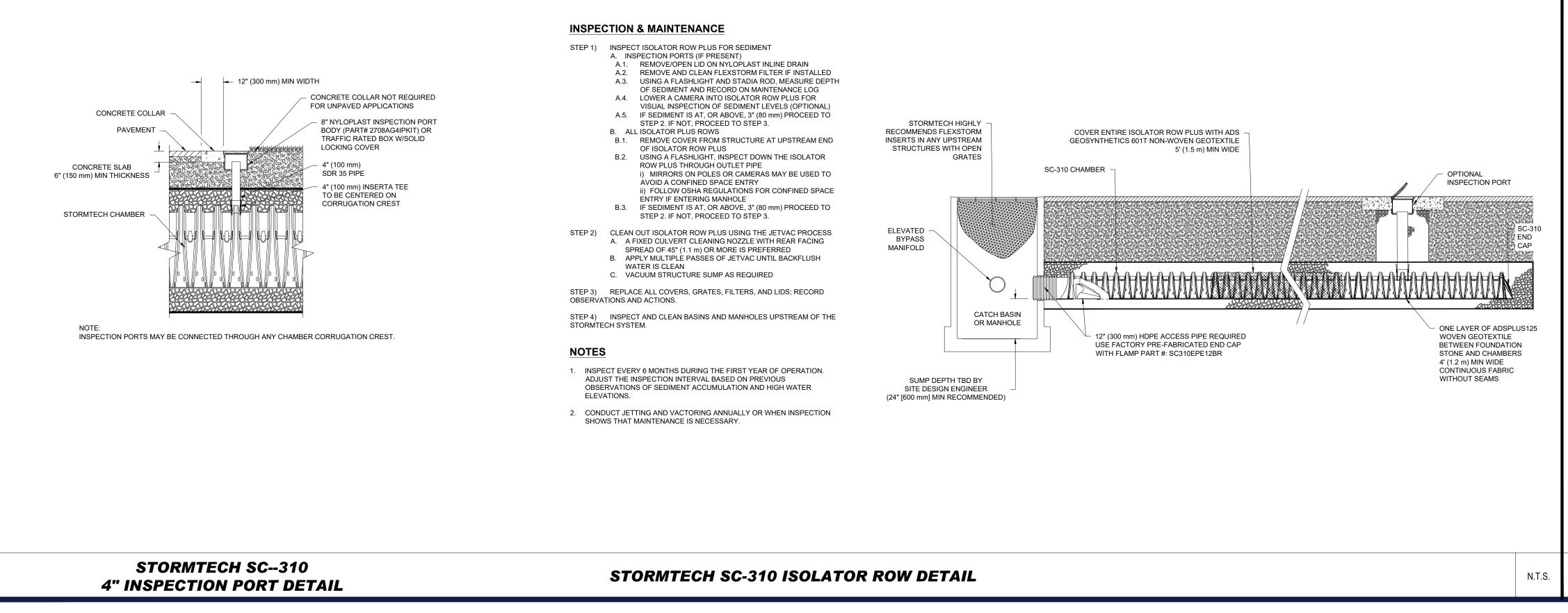
## REVISIONS REV DATE COMMENT 08/30/2023 ZBA PER PEER REVIEW 09/29/2023 COMMENTS Know what's below **Call** before you dig ALWAYS CALL 811 It's fast. It's free. It's the law. FOR ENTITLEMEN PURPOSES ONLY THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENC REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUC DOCUMENT UNLESS INDICATED OTHERWISE. PROJECT No.: W21126 DRAWN BY: CMC/LC CHECKED BY: ED/JAK DATE 05/31/20 CAD I.D.: W211263-SPPD-2C.DW PROJECT: **PRELIMINARY CIVIL** ENGINEERING PLAN SET - FOR -KIG SILVERSTRAND WALPOLE, LLC PROPOSED MULTI-FAMILY DEVELOPMENT N.T.S MAP 25, BLOCK 164, 165 & 166 981, 989 & 1015 EAST STREET TOWN OF WALPOLE NORFOLK COUNTY, MASSACHUSETTS **BOHLER** 352 TURNPIKE ROAD SOUTHBOROUGH, MA 01772 Phone: (508) 480-9900 www.BohlerEngineering.com RHODE ISLA ENSE No. 9616 MAINE LICENSE No. 12553 SHEET TITLE: DETAIL SHEET SHEET NUMBER

#### HDPE STORM DRAINAGE TRENCH

**REVISION 2 - 09/29/2023** 

**C-903** 





#### <u>NOTES:</u>

1. BENCH MARK INFORMATION:

BENCH MARK USED: ELEVATIONS WERE OBTAINED BY GPS OBSERVATIONS ON DECEMBER 29, 2021.

TEMPORARY BENCH MARKS SET:

TBM-1: X-CUT ON BOLT OVER MAIN HYDRANT LOCATED ON THE SOUTHERLY SIDE OF EAST STREET, 2.2' ABOVE GRADE, AS SHOWN HEREON. ELEVATION=146.30

TBM—2: NAIL SET IN FACE OF UPOLE, ON THE SOUTHERLY SIDE OF EAST STREET, 0.7' ABOVE GRADE, AS SHOWN HEREON. ELEVATION=143.30

TBM–3: X–CUT SET ON TRAFFIC SIGNAL BASE AT THE SOUTHWEST CORNER OF MAIN STREET AND EAST STREET. ELEVATION=139.37

- 2. ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
- 3. CONTOUR INTERVAL EQUALS ONE (1) FOOT.
- 4. BY GRAPHIC PLOTTING ONLY, THE PARCELS SHOWN HEREON LIE WITHIN A ZONE "X" (UNSHADED), AN AREA OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOOD AN AS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (F.E.M.A) FLOOD INSURANCE RATE MAP (F.I.R.M.) FOR NORFOLK COUNTY, MASSACHUSETTS, MAP NUMBER 25021C0169E, TOWN OF WALPOLE, COMMUNITY NUMBER 250254, PANEL NUMBER 0169E, HAVING AN EFFECTIVE DATE OF JULY 17, 2012.
- 5. THE F.E.M.A. FLOOD MAP INDICATES THERE IS A PORTION OF THE PROPERTY IN THE 0.2% ANNUAL CHANCE FLOOD THAT IS CONTAINED IN AN UNDERGROUND CULVERT WITHIN THE DRAINAGE EASEMENT ON THE NORTHEAST CORNER OF THE PROPERTY.
- 6. UTILITY INFORMATION SHOWN IS BASED ON BOTH A FIELD SURVEY AND PLANS OF RECORD. THE LOCATIONS OF UNDERGROUND PIPES AND CONDUITS HAVE BEEN DETERMINED FROM THE AFOREMENTIONED RECORD PLANS AND ARE APPROXIMATE ONLY. WE CANNOT ASSUME RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES THAT ARE OMITTED OR INACCURATELY SHOWN ON SAID RECORD PLANS, SINCE SUBSURFACE UTILITIES CANNOT BE VISIBLY VERIFIED. BEFORE PLANNING FUTURE CONNECTIONS, THE PROPER UTILITY ENGINEERING DEPARTMENT SHOULD BE CONSULTED AND THE ACTUAL LOCATION OF SUBSURFACE STRUCTURES SHOULD BE DETERMINED IN THE FIELD. CALL, TOLL FREE, THE DIG SAFE CALL CENTER AT 1–888–344–7233 SEVENTY–TWO HOURS PRIOR TO EXCAVATION.
- 7. THIS DOCUMENT IS AN INSTRUMENT OF SERVICE OF FELDMAN GEOSPATIAL ISSUED TO OUR CLIENT FOR PURPOSES RELATED DIRECTLY AND SOLELY TO FELDMAN GEOSPATIAL'S SCOPE OF SERVICES UNDER CONTRACT TO OUR CLIENT FOR THIS PROJECT. ANY USE OR REUSE OF THIS DOCUMENT FOR ANY REASON BY ANY PARTY FOR PURPOSES UNRELATED DIRECTLY AND SOLELY TO SAID CONTRACT SHALL BE AT THE USER'S SOLE AND EXCLUSIVE RISK AND LIABILITY, INCLUDING LIABILITY FOR VIOLATION OF COPYRIGHT LAWS, UNLESS WRITTEN CONSENT IS PROVIDED BY FELDMAN GEOSPATIAL.
- 8. WETLAND FLAGS SHOWN HEREON WERE DELINEATED BY GODDARD CONSULTING IN DECEMBER OF 2021 AND FIELD LOCATED BY FELDMAN GEOSPATIAL.

1 CONC

-15

EAST

CONC.

2 STOK

BIT. CONC.

<TBM-2

14.3.28

BIT. CONC.

142.32

1 STONC.

Now or Formerly MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

NO LEGAL REFERENCE FOUND PARCEL ID 25–163

> S <u>1=129.1 144.0</u> R=144.27

TBM-1

