PROJECT TEAM

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CONSTRUCTION MANAGER DPR CONSTRUCTION 950 WINTER STREET

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66 MAIN STREET NORTH EASTON, MA 02356 TEL: (508) 230-0260

GENERAL NOTES

- 1. THIS PORTION OF THE PARCEL LIES WITHIN A ZONE "X" (UNSHADED), AN AREA OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOOD, AS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (F.E.M.A) FLOOD INSURANCE RATE MAP (F.I.R.M.) FOR WORCESTER COUNTY, MASSACHUSETTS, MAP NUMBER 25027C0616E, CITY OF WORCESTER COMMUNITY NUMBER 250349, PANEL NUMBER 0616E, HAVING AN EFFECTIVE DATE OF JULY 4, 2011.
- 2. ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
- 3. 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 EXACT UTILITY LOCATION IS NOT GUARANTEED BY THIS SURVEY. THE ACTUAL LOCATION OF THE SUBSURFACE UTILITIES SHALL BE DETERMINED PRIOR TO BEGINING CONSTRUCTION.
- 4. CONTRACTOR SHALL CALL THE DIG SAFE CALL CENTER 72 HOURS PRIOR TO BEGINNING CONSTRUCTION. DIAL 811 OR CALL1-888-344-7233 FOR LOCATION OF UNDERGROUND UTILITIES.
- 5. CONTRACTOR SHALL COORDINATE ALL UTILITY CONNECTIONS, RELOCATIONS, NEW SERVICES, AND TEMPORARY SERVICES WITH THE UTILITY OWNER PRIOR TO BEGINNING WORK.

PROJECT EUROPA

100 NEW BOND STREET CITY OF WORCESTER, MA

April 12, 2024



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SITE DATA:

PARCEL ID: ZONED: OVERLAY DISTRICTS: FRONT SETBACK: SIDE SETBACK: REAR SETBACKS: FRONT LANDSCAPE BUFFER: **EXISTING USE:** PROPOSED USE: PARCEL SIZE:

TOTAL DISTURBED AREA: EXISTING IMPERVIOUS AREA: EXISTING PERVIOUS AREA: PROPOSED IMPERVIOUS AREA: 94,525 SF = 2.17 AC PROPOSED PERVIOUS AREA: EXISTING BUILDING AREA: PROPOSED BUILDING AREA: PROPOSED BUILDING HEIGHT: NO. OF STORIES: PARKING REQUIREMENTS:

OFFICE BUILDING 28.43 ACRE 130,117 SF = 2.99 AC 117,612 SF = 2.70 AC 13,068 SF = 0.30 AC 35,719 SF = 0.82 AC

100 NEW BOND STREET

MG-1.0 (MANUFACTURING, GENERAL)

13-035-00001

PARKING LOT

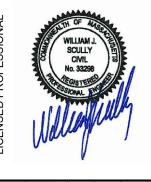
21,434 SF

1 SPACE PER 300 SF GROSS FLOOR SPACE (UTILITY, ENERGY, CORRIDOR, STAIRWAY, RESTROOM, AND BUILDING MAINTENANCE AREA ARE EXEMPT FROM SPACE ASSIGNMENT)

PROPOSED BUILDING GROSS FLOOR AREA: MECHANICAL, RESTROOMS AND CIRCULATION: MINIMUM PARKING REQUIRED: **EXISTING PARKING TO REMAIN:** PROPOSED PARKING: TOTAL PARKING PROVIDED:

43,000 SF 9,500 SF 33500 SF/300 = 112 SPACES 27 SPACES 96 SPACES 123 SPACES

NOTICE OF INTENT WORCESTER CONSERVATION COMMISSION MAY 6, 2024



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GENERAL CONSTRUCTION NOTES

- THE CONTRACTOR AND SUBCONTRACTORS SHOULD BE FAMILIAR WITH ALL STATE AND LOCAL REQUIREMENTS RELATED TO SITE CONSTRUCTION ACTIVITIES PRIOR TO COMMENCING WORK. ALL WORK SHALL CONFORM AS APPLICABLE TO THESE GOVERNING STANDARDS AND SPECIFICATIONS.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL MATERIAL AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN THE CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH THE APPROPRIATE APPROVING AUTHORITIES, SPECIFICATIONS AND REQUIREMENTS. CONTRACTOR SHALL CLEAR AND GRUB ALL AREAS UNLESS OTHERWISE INDICATED, REMOVING TREES, STUMPS, ROOTS, MUCK, EXISTING PAVEMENT AND ALL OTHER DELETERIOUS MATERIAL.
- 3. EXISTING UTILITIES SHOWN ARE LOCATED ACCORDING TO THE INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF THE TOPOGRAPHIC SURVEY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE ENGINEER. GUARANTEE IS NOT MADE THAT ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN OR THAT THE LOCATION OF THOSE SHOWN ARE ENTIRELY ACCURATE. FINDING THE ACTUAL LOCATION OF ANY EXISTING UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE DONE BEFORE COMMENCING ANY WORK IN THE VICINITY. FURTHERMORE, THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL UNDERGROUND UTILITIES. THE OWNER OR ENGINEER WILL ASSUME NO LIABILITY FOR ANY DAMAGES SUSTAINED OR COST INCURRED BECAUSE OF THE OPERATIONS IN THE VICINITY OF EXISTING UTILITIES OR STRUCTURES, NOR FOR TEMPORARY BRACING AND SHORING OF SAME. IF IT IS NECESSARY TO SHORE, BRACE, SWING OR RELOCATE A UTILITY, THE UTILITY COMPANY OR DEPARTMENT AFFECTED SHALL BE CONTACTED AND THEIR PERMISSION OBTAINED REGARDING THE METHOD TO USE FOR SUCH WORK.
- 4. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED CONSTRUCTION PERMITS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE COPY OF THE CONSTRUCTION DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, GEOTECHNICAL REPORT AND SPECIAL CONDITIONS AND COPIES OF ANY REQUIRED CONSTRUCTION PERMITS.
- 6. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND NOTIFICATION TO THE ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING AND MAINTAINING AS-BUILT INFORMATION WHICH SHALL BE RECORDED AS CONSTRUCTION PROGRESSES OR AT THE COMPLETION OF APPROPRIATE CONSTRUCTION INTERVALS AND SHALL BE RESPONSIBLE FOR PROVIDING AS-BUILT DRAWINGS TO THE OWNER FOR THE PURPOSE OF CERTIFICATION TO JURISDICTIONAL AGENCIES AS REQUIRED. ALL AS-BUILT DATA SHALL BE COLLECTED BY A STATE OF MASSACHUSETTS PROFESSIONAL LAND SURVEYOR WHOSE SERVICES ARE ENGAGED BY THE CONTRACTOR
- 8. ANY WELL DISCOVERED DURING EARTH MOVING OR EXCAVATION SHALL BE REPORTED TO THE OWNER WITHIN 24 HOURS AFTER DISCOVERY IS MADE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS DO NOT CONFLICT WITH ANY KNOWN EXISTING OR OTHER PROPOSED IMPROVEMENTS. IF ANY CONFLICTS ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE OWNER PRIOR TO INSTALLATION OF ANY PORTION OF THE SITE WORK THAT WOULD BE AFFECTED. FAILURE TO NOTIFY OWNER OF AN IDENTIFIABLE CONFLICT PRIOR TO PROCEEDING WITH INSTALLATION RELIEVES OWNER OF ANY OBLIGATION TO PAY FOR A RELATED CHANGE ORDER.
- 10. ANY EXISTING UTILITY, WHICH IS TO BE EXTENDED, WHICH IS THE CONNECTION POINT FOR NEW UNDERGROUND UTILITIES, OR WHICH NEW FACILITIES CROSS, SHALL BE EXPOSED BY THE CONTRACTOR PRIOR TO PLACEMENT OF THE NEW UTILITIES. COST OF SUCH EXCAVATION AND SUBSEQUENT BACKFILL SHALL BE INCLUDED IN THE PRICES PAID FOR THE VARIOUS ITEMS OF WORK. THE ELEVATIONS AND LOCATIONS OF THE EXISTING FACILITIES WILL BE CHECKED BY THE PUBLIC WORKS INSPECTOR AND THE ENGINEER. IF IN THE OPINION OF THE INSPECTOR A CONFLICT EXISTS, THEN THE ENGINEER SHALL MAKE ANY NEEDED GRADE AND/ OR ALIGNMENT ADJUSTMENTS AND REVISE THE PLANS ACCORDINGLY. ALL GRAVITY FLOW PIPELINES TO BE LAID UPGRADE FROM THE LOWEST POINT STARTING AT THE END OF EXISTING IMPROVEMENTS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 24 HOURS PRIOR TO BACKFILLING OF ANY PIPE WHICH STUBS TO A FUTURE PHASE OF CONSTRUCTION FOR INVERT VERIFICATION. TOLERANCE SHALL BE IN ACCORDANCE WITH CITY STANDARD SPECIFICATIONS.
- 11. WORK OF THIS CONTRACT IS TO INCLUDE, BUT NOT LIMITED TO, DEMOLITION OF EXISTING BUILDING FOUNDATIONS AND OLD UTILITY SYSTEMS, SITE IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO, UTILITIES, UTILITY STRUCTURES, ASPHALT AND CONCRETE PAVEMENT. CONCRETE PAVERS. CONCRETE AND GRANITE CURBING, DRIVEWAY APRONS, CONCRETE AND ASPHALT RAMPS, SIDEWALKS. FENCING, RAILINGS, SIGNAGE, SITE LIGHTING, RETAINING WALLS AND MISCELLANEOUS STRUCTURES.
- 12. HOURS OF CONSTRUCTION ACTIVITY MUST COMPLY WITH THE CITY OF WORCESTER CODE.
- 13. PRIOR TO STARTING CONSTRUCTION ALL ACTIVE UTILITIES SHOULD BE IDENTIFIED, MARKED OUT IN THE FIELD. AND SECURED AS NECESSARY.
- 16. CONTRACTOR IS ALSO TO FAMILIARIZE HIMSELF WITH THE SUBSURFACE EXPLORATIONS AND GEOTECHNICAL REPORTS APPLICABLE TO THE PROJECT. ASSUMED PROVIDED BY OTHERS.
- 17. INFORMATION GIVEN IN THE SUBSURFACE EXPLORATIONS AND GEOTECHNICAL ENGINEERING REPORTS WAS OBTAINED FOR USE BY THE OWNER IN EXECUTION OF DESIGN. THE SUBSURFACE CONDITIONS DESCRIBED IN THE REPORTS ARE NOT INTENDED AS REPRESENTATIONS OR WARRANTIES OF ACCURACY. THE SUBSURFACE STRATIGRAPHY SHOWN IN THE REPORTS ARE BASED ON NECESSARY INTERPOLATIONS BETWEEN BORINGS AND MAY OR MAY NOT REPRESENT ACTUAL SUBSURFACE CONDITIONS. THE OWNER WILL NOT BE RESPONSIBLE FOR INTERPRETATIONS OR CONCLUSIONS MADE FROM THE DATA IN THE REPORTS BY THE CONTRACTOR
- 18. CONDUCT A PRE-CONSTRUCTION CONFERENCE AT THE PROJECT SITE A MINIMUM OF SEVENTY-TWO (72) HOURS PRIOR TO COMMENCING ANY WORK OF THIS CONTRACT. THE MEETING WILL BE ARRANGED BY THE OWNER UPON NOTIFICATION OF THE CONTRACTOR AND IS TO BE ATTENDED BY REPRESENTATIVES OF THE CONTRACTOR, OWNER, CONSTRUCTION MANAGER, GEOTECHNICAL ENGINEER, SITE/CIVIL ENGINEER AND REPRESENTATIVES OF THE CITY OF WORCESTER
- 19. ADJOINING PROPERTY OWNERS WILL CONTINUE TO OCCUPY THEIR FACILITIES IMMEDIATELY ADJACENT TO THE PROJECT SITE AND DEMOLITION AREAS. THUS, THE CONTRACTOR MUST CONDUCT HIS OPERATIONS IN SUCH A MANNER AND MAKE ANY ARRANGEMENTS NECESSARY SO THAT THE ADJOINING PROPERTY OWNER'S USE OF THEIR FACILITIES WILL NOT BE DISRUPTED DURING THE COURSE OF THE WORK.
- 20. PROVIDE NOT LESS THAN SEVENTY-TWO (72) HOURS' NOTICE TO THE OWNER AND ADJACENT PROPERTY OWNERS OF ACTIVITIES THAT WILL AFFECT THEIR RESPECTIVE USE OF THEIR
- 21. MAINTAIN ACCESS TO EXISTING WALKWAYS, EXITS, AND OTHER ADJACENT OCCUPIED OR USED
- FACILITIES.

 22. DO NOT CLOSE OR OBSTRUCT WALKWAYS, EXITS, OR OTHER OCCUPIED OR USED FACILITIES WITHOUT WRITTEN PERMISSION FROM AUTHORITIES HAVING JURISDICTION OR THE AFFECTED
- 23. IT IS NOT EXPECTED THAT HAZARDOUS MATERIALS WILL BE ENCOUNTERED IN THE CONDUCT OF THE WORK. HOWEVER, IF MATERIALS SUSPECTED OF CONTAINING HAZARDOUS MATERIALS ARE ENCOUNTERED. DO NOT DISTURB AND IMMEDIATELY NOTIFY THE OWNER AND CONSTRUCTION MANAGER. HAZARDOUS MATERIALS WILL BE REMOVED BY THE OWNER AND/OR CONTRACTOR UNDER A SEPARATE CONTRACT.
- 24. REVIEW PROJECT RECORD DOCUMENTS OF EXISTING CONSTRUCTION PROVIDED BY OWNER. OWNER DOES NOT GUARANTEE THAT EXISTING CONDITIONS ARE SAME AS THOSE INDICATED IN PROJECT RECORD DOCUMENTS.
- 25. THE CONTRACTOR IS RESPONSIBLE FOR ENGAGING A PROFESSIONAL ENGINEER TO PERFORM AN ENGINEERING SURVEY OF THE CONDITION OF ANY REMAINING BUILDING STRUCTURE OR FOUNDATION SYSTEM TO DETERMINE WHETHER REMOVING ANY ELEMENT MIGHT RESULT IN A STRUCTURAL DEFICIENCY OR UNPLANNED COLLAPSE OF ANY PORTION OF THAT STRUCTURE OR ADJACENT STRUCTURES DURING DEMOLITION OPERATIONS.
- 26. PROVIDE AND MAINTAIN INTERIOR AND EXTERIOR SHORING, BRACING, OR STRUCTURAL SUPPORT TO PRESERVE STABILITY AND PREVENT UNEXPECTED MOVEMENT OR COLLAPSE OF CONSTRUCTION BEING DEMOLISHED.
- 27. EXISTING UTILITIES: MAINTAIN ACTIVE UTILITY SERVICES INDICATED TO REMAIN AND PROTECT THEM AGAINST DAMAGE DURING DEMOLITION OPERATIONS.
- 28. DO NOT INTERRUPT EXISTING UTILITIES SERVING BOTH ON SITE AND OFF SITE ADJACENT OCCUPIED OR OPERATING FACILITIES UNLESS AUTHORIZED IN WRITING BY OWNER AND AUTHORITIES HAVING JURISDICTION.
- 29. PROVIDE TEMPORARY SERVICES DURING INTERRUPTIONS TO EXISTING UTILITIES, AS ACCEPTABLE TO OWNER AND TO AUTHORITIES HAVING JURISDICTION.
- 30. PROVIDE AT LEAST SEVENTY-TWO (72) HOURS' NOTICE TO OWNER IF SHUTDOWN OF SERVICE IS REQUIRED DURING CHANGEOVER.
- 31. TEMPORARY PROTECTION: ERECT TEMPORARY PROTECTION, SUCH AS WALKS, FENCES, RAILINGS, CANOPIES, AND COVERED PASSAGEWAYS, WHERE REQUIRED BY AUTHORITIES HAVING JURISDICTION AND AS INDICATED.
- 32. PROTECT EXISTING SITE IMPROVEMENTS, APPURTENANCES, AND LANDSCAPING TO REMAIN.
- 33. PROVIDE TEMPORARY BARRICADES AND OTHER PROTECTION REQUIRED TO PREVENT INJURY TO PEOPLE AND DAMAGE TO ADJACENT BUILDINGS AND FACILITIES TO REMAIN.

- 4. PROVIDE PROTECTION TO ENSURE SAFE PASSAGE OF PEOPLE AROUND BUILDING DEMOLITION AREA AND TO AND FROM OCCUPIED PORTIONS OF ADJACENT BUILDINGS AND STRUCTURES.
- 35. PROTECT WALLS, WINDOWS, ROOFS, AND OTHER ADJACENT EXTERIOR CONSTRUCTION THAT ARE TO REMAIN AND THAT ARE EXPOSED TO BUILDING DEMOLITION OPERATIONS OR OTHER CONSTRUCTION ACTIVITY.
- 36. GENERAL: DEMOLISH ALL ITEMS, AS EITHER INDICATED ON THE PLANS OR ENCOUNTERED IN THE FIELD DURING THE WORK, COMPLETELY. USE METHODS REQUIRED TO COMPLETE THE WORK WITHIN LIMITATIONS OF GOVERNING REGULATIONS AND AS FOLLOWS:
- 37. DO NOT USE CUTTING TORCHES UNTIL WORK AREA IS CLEARED OF FLAMMABLE MATERIALS.

 MAINTAIN FIRE WATCH AND PORTABLE FIRE-SUPPRESSION DEVICES DURING FLAME-CUTTING
- B. MAINTAIN ADEQUATE VENTILATION WHEN USING CUTTING TORCHES.
- 39. LOCATE DEMOLITION EQUIPMENT AND REMOVE DEBRIS AND OTHER MATERIALS SO AS NOT TO IMPOSE EXCESSIVE LOADS ON SUPPORTING WALLS, FLOORS, OR FRAMING OF ADJOINING
- 40. ENGINEERING SURVEYS: PERFORM SURVEYS AS THE WORK PROGRESSES TO DETECT HAZARDS THAT MAY RESULT FROM BUILDING DEMOLITION ACTIVITIES.
- 41. SITE ACCESS AND TEMPORARY CONTROLS: CONDUCT DEMOLITION AND DEBRIS-REMOVAL OPERATIONS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, WALKWAYS, AND OTHER ADJACENT OCCUPIED AND USED FACILITIES.
- 42. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, WALKWAYS. OR OTHER ADJACENT OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM OWNER AND AUTHORITIES HAVING JURISDICTION. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS IF REQUIRED BY AUTHORITIES HAVING JURISDICTION.
- 43. USE WATER MIST AND OTHER SUITABLE METHODS TO LIMIT SPREAD OF DUST AND DIRT. COMPLY WITH GOVERNING ENVIRONMENTAL-PROTECTION REGULATIONS. DO NOT USE WATER WHEN IT MAY DAMAGE ADJACENT CONSTRUCTION OR CREATE HAZARDOUS OR OBJECTIONABLE CONDITIONS, SUCH AS ICE. FLOODING. AND POLLUTION.
- 44. REMOVE STRUCTURES AND OTHER SITE IMPROVEMENTS INTACT WHEN PERMITTED BY AUTHORITIES HAVING JURISDICTION.
- 45. CONCRETE: CUT CONCRETE FULL DEPTH AT JUNCTURES WITH CONSTRUCTION INDICATED TO REMAIN, USING POWER-DRIVEN SAW, THEN REMOVE CONCRETE BETWEEN SAW CUTS.
- 46. MASONRY: CUT MASONRY AT JUNCTURES WITH CONSTRUCTION INDICATED TO REMAIN, USING POWER-DRIVEN SAW. THEN REMOVE MASONRY BETWEEN SAW CUTS
- 47. CONCRETE SLABS-ON-GRADE: SAW-CUT PERIMETER OF AREA TO BE DEMOLISHED AT JUNCTURES WITH CONSTRUCTION INDICATED TO REMAIN, THEN BREAK UP AND REMOVE.
- 48. EQUIPMENT: DISCONNECT EQUIPMENT AT NEAREST FITTING CONNECTION TO SERVICES,
- 49. BELOW-GRADE CONSTRUCTION: DEMOLISH EXISTING FOUNDATIONS AND FOOTINGS, FOUNDATION WALLS, WALLS, SLABS AND OTHER BELOW-GRADE CONSTRUCTION THAT IS WITHIN TEN (10) FEET OUTSIDE OF FOOTPRINT INDICATED FOR NEW CONSTRUCTION. ABANDON BELOW-GRADE CONSTRUCTION OUTSIDE THIS AREA.

COMPLETE WITH SERVICE VALVES. REMOVE AS WHOLE UNITS, COMPLETE WITH CONTROLS.

- 50. REMOVE BELOW-GRADE CONSTRUCTION TO DEPTHS INDICATED ON THE PLANS.
- 51. EXISTING BELOW GRADE CONSTRUCTION SHOULD BE REMOVED ENTIRELY FROM BELOW PROPOSED FOUNDATIONS AND THEIR ZONES OF INFLUENCE (IF DETERMINED BY LINES EXTENDING AT LEAST ONE (1) FOOT LATERALLY BEYOND FOOTING EDGES FOR EACH VERTICAL FOOT OF DEPTH) AND EXCAVATED TO AT LEAST TWO {2} FEET BELOW PROPOSED CONSTRUCTION SUBGRADE LEVELS ELSEWHERE.
- 52. FOUNDATION AND SLABS MAY REMAIN IN PLACE BELOW THESE DEPTHS BELOW GROUND SUPPORTED SLABS, PAVEMENTS AND LANDSCAPED AREAS, PROVIDED THEY ARE APPROVED BY THE GEOTECHNICAL ENGINEER AND DO NOT INTERFERE WITH FUTURE CONSTRUCTION (INCLUDING UTILITIES); HOWEVER, IF EXISTING SLAB OR STRUCTURE TO REMAIN SHOULD BE THOROUGHLY BROKEN TO ALLOW VERTICAL DRAINAGE OF INFILTRATING WATER.
- 53. EXISTING UTILITIES: ABANDON EXISTING UTILITIES AND BELOW-GRADE UTILITY STRUCTURES. CUT UTILITIES FLUSH WITH GRADE.
- 54. EXISTING UTILITIES: DEMOLISH EXISTING UTILITIES AND BELOW-GRADE UTILITY STRUCTURES THAT ARE WITHIN TEN (10) FEET OUTSIDE OF FOOTPRINT INDICATED FOR NEW CONSTRUCTION. ABANDON UTILITIES OUTSIDE THIS AREA.
- 55. FILL ABANDONED UTILITY STRUCTURES AND PIPING WITH EITHER LEAN CONCRETE OR SATISFACTORY SOIL MATERIALS APPROVED BY THE OWNER OR GEOTECHNICAL ENGINEER.
- 56. EXISTING UTILITIES: DEMOLISH AND REMOVE EXISTING UTILITIES AND BELOW-GRADE UTILITY STRUCTURES.
- 57. SITE DRAINAGE: SITE SOILS MAY SOFTEN WHEN EXPOSED TO WATER, EVERY EFFORT MUST BE MADE TO MAINTAIN DRAINAGE OF SURFACE WATER RUNOFF AWAY FROM CONSTRUCTION AREAS AND OPEN EXCAVATIONS BY GRADING AND LIMITING THE EXPOSURE OF EXCAVATIONS AND PREPARED SUBGRADES TO RAINFALL.
- 58. BELOW-GRADE AREAS: COMPLETELY FILL BELOW-GRADE AREAS AND VOIDS RESULTING FROM BUILDING DEMOLITION OPERATIONS WITH SATISFACTORY SOIL MATERIALS APPROVED BY THE OWNER AND/OR GEOTECHNICAL ENGINEER.
- 59. SITE GRADING: UNIFORMLY ROUGH GRADE AREA OF DEMOLISHED CONSTRUCTION TO A SMOOTH SURFACE, FREE FROM IRREGULAR SURFACE CHANGES. PROVIDE A SMOOTH TRANSITION BETWEEN ADJACENT EXISTING GRADES AND NEW GRADES.
- SEPARATE RECYCLABLE DEMOLISHED MATERIALS FROM OTHER DEMOLISHED MATERIALS TO THE MAXIMUM EXTENT POSSIBLE. SEPARATE RECYCLABLE MATERIALS BY TYPE.

PROVIDE CONTAINERS OR OTHER STORAGE METHOD APPROVED BY ARCHITECT FOR CONTROLLING

- RECYCLABLE MATERIALS UNTIL THEY ARE REMOVED FROM PROJECT SITE.

 62. STOCKPILE PROCESSED MATERIALS ON-SITE WITHOUT INTERMIXING WITH OTHER MATERIALS.
- PLACE, GRADE, AND SHAPE STOCKPILES TO DRAIN SURFACE WATER. COVER TO PREVENT WINDBLOWN DUST.
- 63. STOCKPILE MATERIALS IN DESIGNATED AREAS SHOWN ON THE PLANS OR AS APPROVED IN THE FIELD BY THE OWNER OR CONSTRUCTION MANAGER.
- 64. IF RECYCLABLE MATERIAL CANNOT BE USED ON-SITE, THE CONTRACTOR SHALL TRANSPORT THE RECYCLABLE MATERIALS OFF OWNER'S PROPERTY AND LEGALLY DISPOSE OF THEM AT NO ADDITIONAL COST TO THE OWNER IN ACCORDANCE WITH THE SWP.
- 65. DEMOLITION MATERIAL. FREE OF ENVIRONMENTAL CONCERNS, MAY BE USED AS FILL MATERIAL. PROVIDED THE MATERIAL IS PROPERLY SEGREGATED AND PROCESSED AS FOLLOWS AND APPROVED FOR REUSE ON THE SITE BY THE GEOTECHNICAL ENGINEER.
- MAXIMUM SIZE OF THREE (3) INCHES IN DIAMETER, PER EARTHWORK SPECIFICATIONS.
- 67. MILLED OR RECYCLED ASPHALT PAVEMENT (RAP) MAY BE REUSED AS GRANULAR BASE MATERIAL FOR PAVEMENTS PROVIDED THAT THE RAP PARTICLE SIZE MEETS THE MASSACHUSETTS STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR GRANULAR BASE AND NO MORE THAN FIFTY (50) PERCENT OF THE PAVEMENT GRANULAR BASE CONTAINS RAP.
- 68. OTHER ASPHALTIC MATERIALS AND DELETERIOUS BUILDING MATERIALS SUCH AS WOOD, INSULATION, METAL, SHINGLES, ETC. SHOULD NOT BE USED AS GENERAL STRUCTURAL FILL MATERIAL.
- 69. EXCEPT FOR ITEMS OR MATERIALS INDICATED TO BE RECYCLED, REUSED, SALVAGED, REINSTALLED, OR OTHERWISE INDICATED TO REMAIN OWNER'S PROPERTY, REMOVE DEMOLISHED MATERIALS FROM PROJECT SITE AND LEGALLY DISPOSE OF THEM IN AN EPA-APPROVED LANDFILL.
- 70. REMOVE AND TRANSPORT DEBRIS IN A MANNER THAT WILL PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS.
- 88. DISPOSAL: TRANSPORT DEMOLISHED MATERIALS OFF OWNER'S PROPERTY AND PROVIDE FOR THE LEGAL OFF SITE DISPOSAL OF THE MATERIAL IN ACCORDANCE WITH THE SMP.

BURNING: ON SITE BURNING OF RUBBISH AND OTHER DEMOLITION DEBRIS WILL NOT BE PERMITTED.

- 89. CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF DUST, DIRT, AND DEBRIS CAUSED BY BUILDING DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITION EXISTING BEFORE BUILDING DEMOLITION OPERATIONS BEGAN.
- 90. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE OWNER WITH A SURVEY PREPARED BY A LICENSED LAND SURVEYOR SHOWING THE LOCATION AND THE ELEVATIONS TO WHICH THE DEMARCATION BARRIER IS INSTALLED.
- 91. THE CONTRACTOR IS TO NOTE THAT THE WORK OF THIS CONTRACT WILL INCLUDE WORK BY OTHERS AND THE CONTRACTOR SHALL COORDINATE HIS WORK AND MAKE EVERY REASONABLE EFFORT TO PERMIT THE EXECUTION OF SUCH WORK BY OTHERS WITHOUT DELAY.
- 92. IF TEMPORARY UTILITY SERVICES ARE REQUIRED THE CONTRACTOR SHALL SEE TO IT THAT THEY ARE PROVIDED AT NO ADDITIONAL COST TO THE OWNER AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN SUCH TEMPORARY FACILITIES FOR THE DURATION OF THEIR WORK.
- 93. ALL WORK OF THIS CONTRACT SHALL CONFORM TO THESE CONTRACT DRAWINGS AND

- SPECIFICATIONS AS WELL AS TO THE APPLICABLE REQUIREMENTS OF THE JURISDICTION HAVING AUTHORITY BUILDING, PUBLIC WORKS, FIRE DEPARTMENTS, AND PUBLIC UTILITY COMPANIES.
- 94. ALL WORK SHALL COMPLY WITH THE BUILDING CODE OF MASSACHUSETTS STATE AND ALL OTHER APPLICABLE FEDERAL, STATE, AND LOCAL RULES, LAWS, AND REGULATIONS.
- 95. ALL PROJECT RELATED LINES AND GRADES ARE TO BE ESTABLISHED BY A LICENSED SURVEYOR REGISTERED TO PRACTICE IN THE STATE OF MASSACHUSETTS.
- 96. SIZES OF EXISTING UTILITY LINES ARE TO BE VERIFIED IN THE FIELD BY CAREFUL TEST EXCAVATIONS BY THE CONTRACTOR PRIOR TO STARTING THE WORK ANY SUBSTANTIVE VARIATIONS FROM THE SURVEY DATA PROVIDED ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT OR ENGINEER SO THAT APPROPRIATE DESIGN MODIFICATIONS MAY BE MADE.
- 97. THE CONTRACTOR SHALL TAKE CARE NOT TO DAMAGE EXISTING DRAINAGE OR UTILITY SYSTEMS WITHIN OR ADJACENT TO THE WORK SHOWN ON THESE DRAWINGS. ANY DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL IMMEDIATELY BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE AND TO THE SATISFACTION OF THE OWNER OR UTILITY COMPANY INVOLVED.
- 98. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF ALL TRADES REQUIRED BY THE CONTRACT WORK AND SHALL OBTAIN AUTHORIZATION. REQUIRED BONDS, PERMITS, ETC. REQUIRED FOR THE EXECUTION OF THE WORK AND CONFORM THE WORK WITH ALL APPLICABLE CODES, RULES AND REGULATIONS OF THE GOVERNING AGENCIES. THE CONTRACTOR IN ACCORDANCE WITH MASSACHUSETTS STATE LAW (CODE RULE 53) SHALL BE RESPONSIBLE FOR NOTIFYING THE APPROPRIATE UTILITY COMPANY OR AGENCY PRIOR TO COMMENCING ANY EXCAVATION WORK AND SHALL NOTIFY THE "CALL BEFORE YOU DIG" HOTLINE @ 1-888-344-7233 72 HOURS PRIOR TO COMMENCING ANY CONSTRUCTION ACTIVITIES.
- 99. SAFE AND ADEQUATE PEDESTRIAN AND VEHICULAR TRAFFIC FLOW SHALL BE MAINTAINED AT ALL TIMES TO THE ADJACENT BUILDINGS WHILE THE WORK IS PROGRESSING. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL OF THE OWNER A CONSTRUCTION SEQUENCE SCHEDULE AND PLAN FOR PEDESTRIAN AND VEHICULAR TRAFFIC FLOW.
- 100. ALL UNPAVED AREAS WITHIN THE WORK AREAS AND ALL AREAS DISTURBED DURING CONSTRUCTION ARE TO BE STABILIZED IN ACCORDANCE WITH THE CITY OF WORCESTER STANDARDS. UNLESS OTHERWISE DIRECTED BY THE OWNER, TURFED AREAS, DISTURBED BY REGRADING AND OTHER WORK OF CONTRACTOR, SHALL BE BROUGHT TO THE PROPER SUBGRADE ELEVATION, TOPSOIL TO A MINIMUM DEPTH OF 4 INCHES SHALL BE PLACED AND, LIMING, FERTILIZING AND SEEDING ACCOMPLISHED, AS SPECIFIED. THE CONTRACTOR SHALL WATER AND MAINTAIN THE SEEDED AREAS UNTIL THEY HAVE BECOME WELL ESTABLISHED.
- 101. EXISTING PAVEMENT WHICH IS TO REMAIN AND WHICH IS REMOVED OR DAMAGED DURING THE CONSTRUCTION WORK OF THIS CONTRACT IS TO BE RESTORED TO ITS ORIGINAL CONDITION.
- 102. UNLESS OTHERWISE SHOWN HEREON OR DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL MATCH THE MATERIALS, TYPES, THICKNESS AND QUALITY OF EXISTING BITUMINOUS CONCRETE PAVEMENTS, WALKWAYS AND CURBS WITHIN THE PUBLIC RIGHT-OF-WAY WHICH ARE TO BE REPLACED.
- 103. AT NO TIME, SHALL ANY EXCAVATED AREAS BE LEFT UNATTENDED UNLESS APPROPRIATE MARKING AND BARRICADING IS EMPLOYED.
- 104. WITH REGARD TO EXISTING UTILITIES TO REMAIN, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING ALL EXISTING UTILITY VALVES, MANHOLE FRAMES, COVERS, RIMS, INVERTS AND HYDRANTS TO MEET NEW FINISH GRADE OR AS OTHERWISE REQUIRED TO FUNCTION PROPERLY.
- 105. CONTRACTOR SHALL LIMIT ACTIVITIES IN AREAS OF DEVELOPMENT THAT ARE OCCUPIED.

PAVING, GRADING AND DRAINAGE NOTES

- CONTRACTOR SHALL MAINTAIN GRADES AT ENTRANCES TO PHASE 2 CONSTRUCTION.
- 2. ALL PAVING, CONSTRUCTION, MATERIALS, AND WORKMANSHIP WITHIN JURISDICTION'S RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH LOCAL OR COUNTY SPECIFICATIONS AND STANDARDS (LATEST EDITION) OR MASSACHUSETTS STATE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS AND STANDARDS (LATEST EDITION) IF NOT COVERED BY LOCAL OR COUNTY
- 3. ALL UNPAVED AREAS IN EXISTING RIGHTS-OF-WAY DISTURBED BY CONSTRUCTION SHALL BE REGRADED AND REPAIRED TO EXISTING CONDITION OR BETTER.
- REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (U.S. DOT/FHA) AND THE REQUIREMENTS OF THE STATE AND ANY LOCAL AGENCY HAVING JURISDICTION. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.

TRAFFIC CONTROL ON ALL MASSDOT, LOCAL AND COUNTY RIGHTS-OF-WAY SHALL MEET THE

- 5. THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATED AND SHALL REGRADE WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL AN ADEQUATE STABILIZATION OCCURS.
- ALL OPEN AREAS WITHIN THE PROJECT SITE SHALL BE COVERED WITH TOPSOIL AND SEED AS INDICATED ON THE LANDSCAPE PLAN.
- 7. ALL AREAS INDICATED AS PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AS INDICATED ON THE DRAWINGS.

 3. WHERE EXISTING PAVEMENT IS INDICATED TO BE REMOVED AND REPLACED THE CONTRACTOR.

SHALL SAW CUT A MINIMUM 2" DEEP FOR A SMOOTH AND STRAIGHT JOINT AND REPLACE THE

- 9. WHERE NEW PAVEMENT MEETS THE EXISTING PAVEMENT, THE CONTRACTOR SHALL SAW CUT THE EXISTING PAVEMENT A MINIMUM 2" DEEP FOR A SMOOTH AND STRAIGHT JOINT AND MATCH THE
- EXISTING PAVEMENT ELEVATION WITH THE PROPOSED PAVEMENT UNLESS OTHERWISE INDICATED.

 10. THE CONTRACTOR SHALL INSTALL FILTER FABRIC OVER ALL DRAINAGE STRUCTURES FOR THE DURATION OF CONSTRUCTION AND UNTIL ACCEPTANCE OF THE PROJECT BY THE OWNER. ALL DRAINAGE STRUCTURES SHALL BE CLEANED OF DEBRIS AS REQUIRED DURING AND AT THE END OF
- 11. DEWATERING DISCHARGE WILL NOT BE PERMITTED TO DISCHARGE ONTO OPEN GROUND. IT SHALL BE TREATED AND DISCHARGED INTO THE COUNTY SEWER. PERMIT TO BE COORDINATED BY THE

CONSTRUCTION TO PROVIDE POSITIVE DRAINAGE FLOWS.

- 12. STRIP TOPSOIL AND ORGANIC MATTER FROM ALL AREAS OF THE SITE AS REQUIRED. IN SOME CASES TOPSOIL MAY BE STOCKPILED ON SITE FOR PLACEMENT WITHIN LANDSCAPED AREAS BUT ONLY AS DIRECTED BY THE OWNER.
- 13. FIELD DENSITY TESTS SHALL BE TAKEN AT INTERVALS IN ACCORDANCE WITH THE AUTHORITY
- 14. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED AS PER PLANS. THE AREAS SHALL THEN BE STABILIZED BY MEANS AND METHODS APPROVED BY THE AUTHORITY HAVING JURISDICTION. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE JOB SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. ALL EARTHEN AREAS WILL BE COVERED WITH ROCK OR MULCHED AS SHOWN ON THE
- CONCRETE MASONRY MATERIALS SHOULD BE CRUSHED TO A WELL GRADED BLEND WITH A 15. ALL CUT OR FILL SLOPES SHALL BE 3 (HORIZONTAL):1 (VERTICAL) OR FLATTER UNLESS OTHERWISE
 - 16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
 - 17. THE CONTRACTOR SHALL TAKE ALL REQUIRED MEASURES TO CONTROL TURBIDITY, INCLUDING BUT NOT LIMITED TO THE INSTALLATION OF TURBIDITY BARRIERS AT ALL LOCATIONS WHERE THE POSSIBILITY OF TRANSFERRING SUSPENDED SOLIDS INTO THE RECEIVING WATER BODY EXISTS DUE TO THE PROPOSED WORK. TURBIDITY BARRIERS MUST BE MAINTAINED IN EFFECTIVE CONDITION AT ALL LOCATIONS UNTIL CONSTRUCTION IS COMPLETED AND DISTURBED SOIL AREAS ARE STABILIZED. THEREAFTER, THE CONTRACTOR MUST REMOVE THE BARRIERS. AT NO TIME SHALL THERE BE ANY OFF-SITE DISCHARGE WHICH VIOLATES THE WATER QUALITY STANDARDS OF THE GOVERNING CODE.
 - 18. EXPOSED SLOPES SHOULD BE STABILIZED WITHIN 48 HOURS OF COMPLETING FINAL GRADING, AND AT ANY OTHER TIME AS NECESSARY, TO PREVENT EROSION, SEDIMENTATION OR TURBID DISCHARGES
 - THE CONTRACTOR MUST REVIEW AND MAINTAIN A COPY OF THE REQUIRED PERMITS COMPLETE WITH ALL CONDITIONS, ATTACHMENTS, EXHIBITS, AND PERMIT MODIFICATIONS IN GOOD CONDITION AT THE CONSTRUCTION SITE. THE COMPLETE PERMIT MUST BE AVAILABLE FOR REVIEW UPON REQUEST BY GOVERNING JURISDICTIONS.
 - 20. THE CONTRACTOR SHALL ENSURE THAT ISLAND PLANTING AREAS AND OTHER PLANTING AREAS ARE NOT COMPACTED AND DO NOT CONTAIN ROAD BASE MATERIALS. THE CONTRACTOR SHALL ALSO EXCAVATE AND REMOVE ALL UNDESIRABLE MATERIAL FROM ALL AREAS ON THE SITE TO BE PLANTED AND PROPERLY DISPOSED OF IN A LEGAL MANNER.
 - 21. THE CONTRACTOR SHALL INSTALL ALL UNDERGROUND STORM WATER PIPING PER MANUFACTURER'S RECOMMENDATIONS.

MAINTENANCE

ACCORDANCE WITH THE FOLLOWING:

ALL MEASURES STATED ON THE EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES MAY BE CHECKED BY A QUALIFIED PERSON ON A SCHEDULE THAT MEETS OR EXCEEDS THE GOVERNING REQUIREMENTS, AND CLEANED AND REPAIRED IN

- 1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETERIORATION.
- ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED.
 AREAS SHOULD BE FERTILIZED, WATERED AND RESEEDED AS NEEDED.
- SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT
- 4. THE CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.
- 5. ALL MAINTENANCE OPERATIONS SHALL BE DONE IN A TIMELY MANNER.

WATER AND SEWER UTILITY NOTES

- THE CONTRACTOR SHALL CONSTRUCT GRAVITY SEWER LATERALS, CLEANOUTS, GRAVITY SEWER LINES, AND DOMESTIC WATER AND FIRE PROTECTION SYSTEM AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL FURNISH ALL NECESSARY MATERIALS, EQUIPMENT, MACHINERY, TOOLS, MEANS OF TRANSPORTATION AND LABOR NECESSARY TO COMPLETE THE WORK IN FULL AND COMPLETE ACCORDANCE WITH THE SHOWN, DESCRIBED AND REASONABLY INTENDED REQUIREMENTS OF THE CONTRACT DOCUMENTS AND JURISDICTIONAL AGENCY REQUIREMENTS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT. THE MOST STRINGENT SHALL GOVERN.
- 2. ALL EXISTING UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS FOR UTILITY LOCATION AND COORDINATION IN ACCORDANCE WITH THE NOTES CONTAINED IN THE GENERAL CONSTRUCTION SECTION OF THIS SHEET. THE CONTRACTOR SHALL ALSO SCOPE THE SEWER LINES ON SITE AND RECORD A DVD.
- 3. THE CONTRACTOR SHALL RESTORE ALL DISTURBED VEGETATION IN KIND, UNLESS SHOWN
- 4. DEFLECTION OF PIPE JOINTS AND CURVATURE OF PIPE SHALL NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS. SECURELY CLOSE ALL OPEN ENDS OF PIPE AND FITTINGS WITH A WATERTIGHT PLUG WHEN WORK IS NOT IN PROGRESS. THE INTERIOR OF ALL PIPES SHALL BE CLEAN AND JOINT SURFACES WIPED CLEAN AND DRY AFTER THE PIPE HAS BEEN LOWERED INTO THE TRENCH. VALVES SHALL BE PLUMB AND LOCATED ACCORDING TO THE PLANS.
- ALL PHASES OF INSTALLATION, INCLUDING UNLOADING, TRENCHING, LAYING AND BACK FILLING, SHALL BE DONE IN A FIRST CLASS WORKMANLIKE MANNER. ALL PIPE AND FITTINGS SHALL BE CAREFULLY STORED FOLLOWING MANUFACTURER'S RECOMMENDATIONS. CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE COATING OR LINING IN ANY D.I. PIPE FITTINGS. ANY PIPE OR FITTING WHICH IS DAMAGED OR WHICH HAS FLAWS OR IMPERFECTIONS WHICH, IN THE OPINION OF THE ENGINEER OR OWNER, RENDERS IT UNFIT FOR USE, SHALL NOT BE USED. ANY PIPE NOT SATISFACTORY FOR USE SHALL BE CLEARLY MARKED AND IMMEDIATELY REMOVED FROM THE JOB SITE, AND SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- 6. WATER FOR FIRE FIGHTING SHALL BE AVAILABLE FOR USE PRIOR TO COMBUSTIBLES BEING BROUGHT ON SITE.
- 7. ALL UTILITY AND STORM DRAIN TRENCHES LOCATED UNDER AREAS TO RECEIVE PAVING SHALL BE COMPLETELY BACK FILLED IN ACCORDANCE WITH THE GOVERNING JURISDICTIONAL AGENCY'S SPECIFICATIONS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
- 8. CONTRACTOR SHALL PERFORM, AT HIS OWN EXPENSE, ANY AND ALL TESTS REQUIRED BY THE SPECIFICATIONS AND/OR ANY AGENCY HAVING JURISDICTION. THESE TESTS MAY INCLUDE, BUT MAY NOT BE LIMITED TO, INFILTRATION AND EXFILTRATION, TELEVISION INSPECTION AND A MANDREL TEST ON GRAVITY SEWER. A COPY OF THE TEST RESULTS SHALL BE PROVIDED TO THE UTILITY PROVIDER, OWNER AND JURISDICTIONAL AGENCY AS REQUIRED.

RECORD DRAWINGS

OTHERWISE.

WHERE LOCAL JURISDICTIONS REQUIRE RECORD DRAWINGS, THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER AND OWNER COPIES OF A PAVING, GRADING AND DRAINAGE RECORD DRAWING AND A SEPARATE UTILITY RECORD DRAWING, BOTH PREPARED BY A MASSACHUSETTS REGISTERED SURVEYOR. THE RECORD DRAWINGS SHALL VERIFY ALL DESIGN INFORMATION INCLUDED ON THE DESIGN PLANS OF THE SAME NAME.

PROJECT CLOSEOUT

 CONTRACTOR SHALL PROVIDE THE NECESSARY ITEMS INCLUDING ANY TESTING, REPORTS, OR CERTIFICATION DOCUMENTS REQUIRED BY THE GOVERNING JURISDICTIONS TO PROPERLY CLOSEOUT THE PROJECT BEFORE IT CAN BE DEEMED COMPLETE.

DOCUMENT USE

- 1. THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY KIMLEY-HORN ENGINEERING AND LANDSCAPE ARCHITECTURE OF MASSACHUSETTS, P.C. SHALL BE WITHOUT LIABILITY TO KIMLEY-HORN ENGINEERING AND LANDSCAPE ARCHITECTURE OF MASSACHUSETTS, P.C.
- 2. CONTRACTOR SHALL NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS, BUT SHALL VERIFY LOCATION OF PROJECT FEATURES IN ACCORDANCE WITH THE PAPER COPIES OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS. SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY

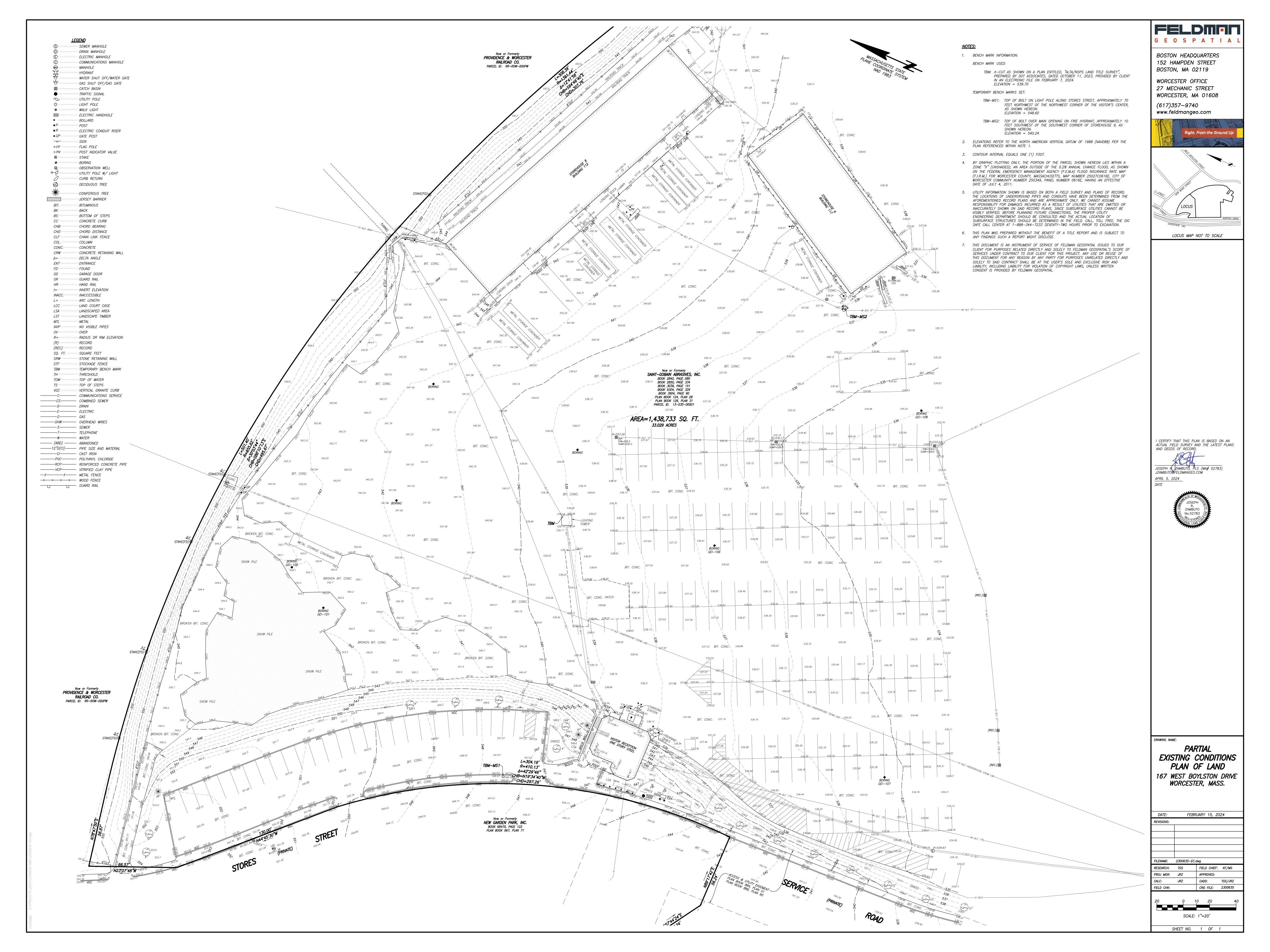
SCALED TO THEIR ACTUAL DIMENSIONS OR LOCATIONS ON THE DRAWINGS.

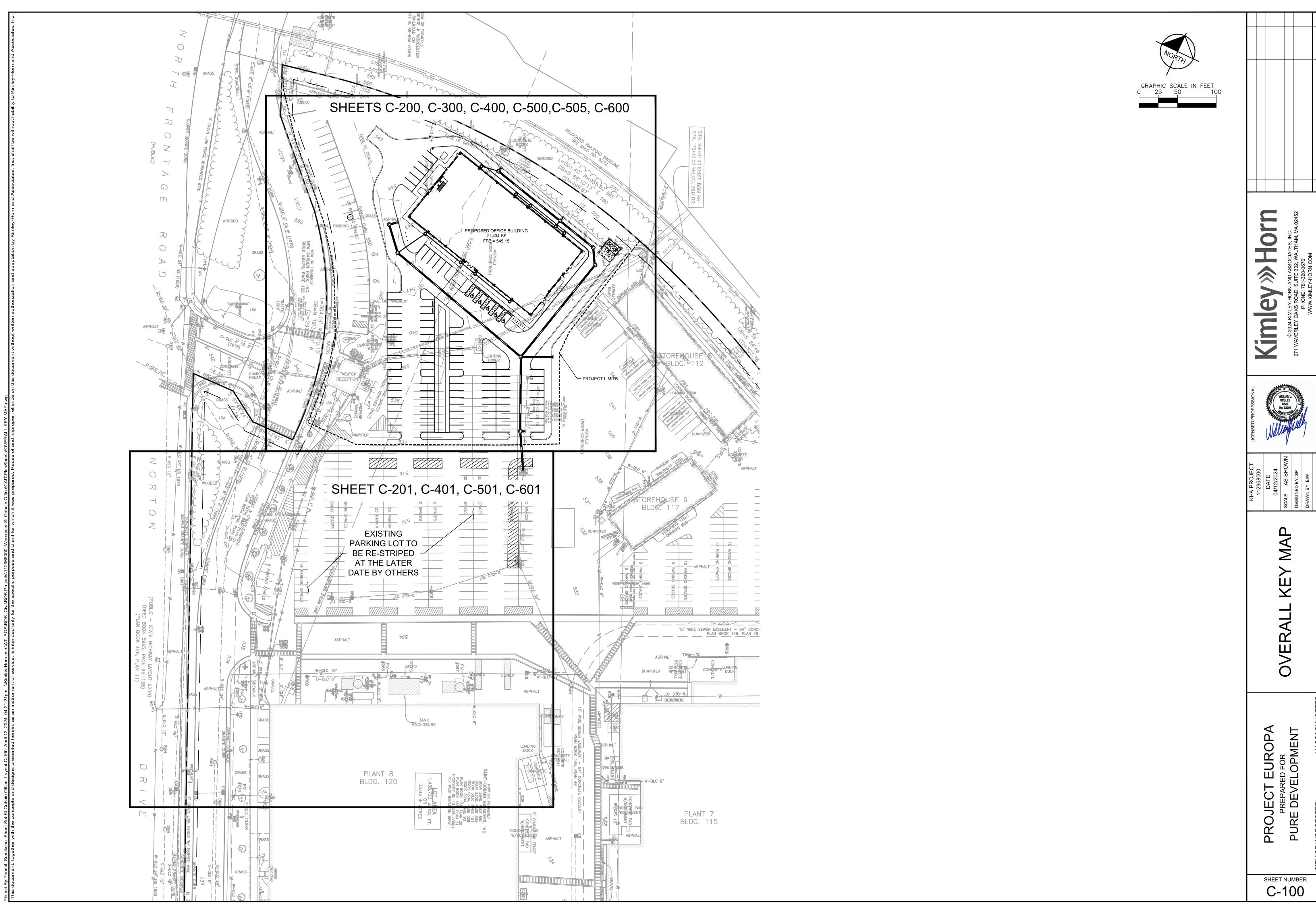
© 2024 KIMLEY-HORN AND ASSOCIATES, INC 271 WAVERLEY OAKS ROAD, SUITE 302, WALTHAM, M PHONE: 781-328-0676

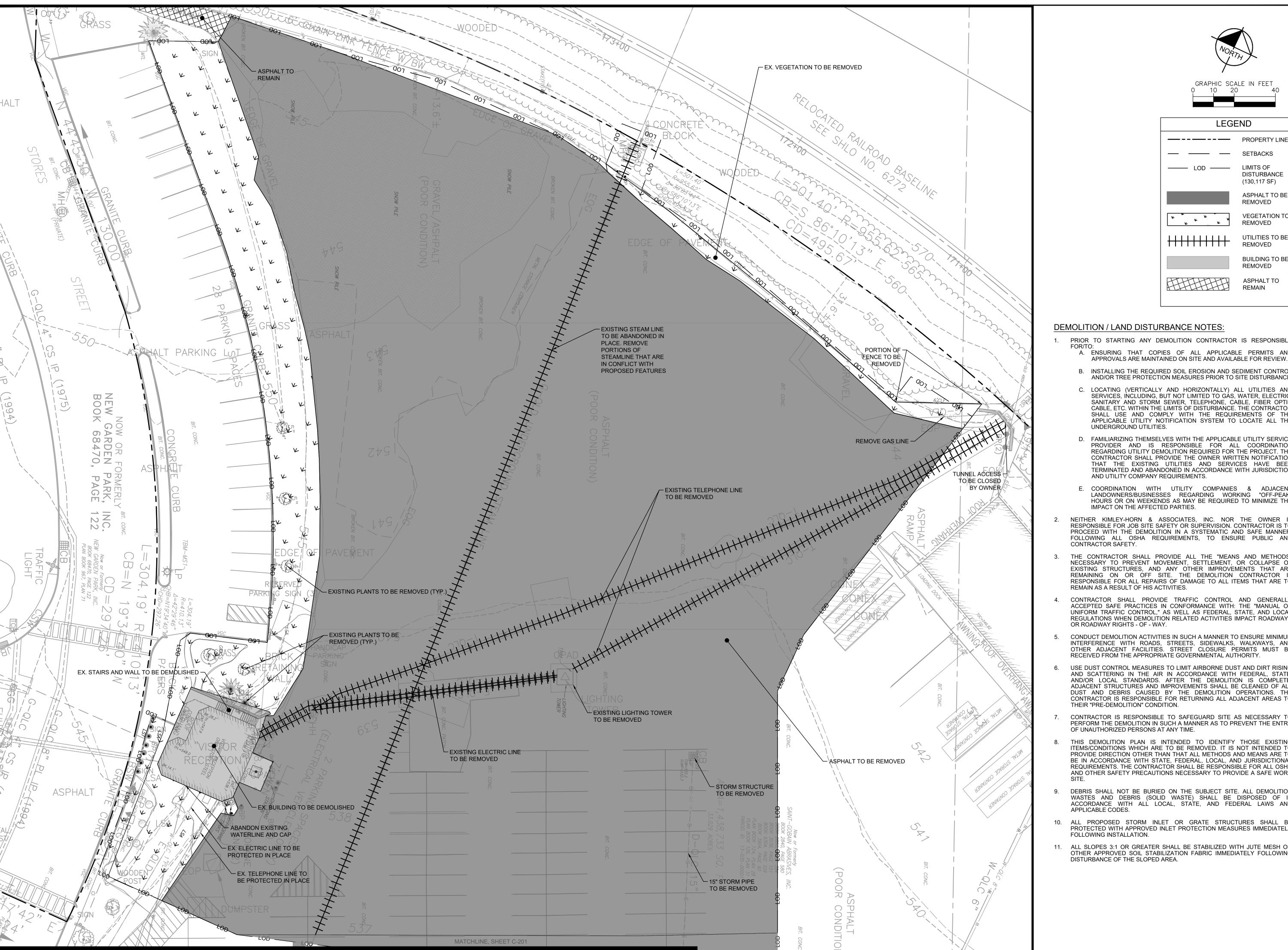


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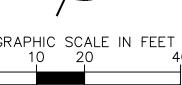
NERAL NOTES











LEGEND

— - - — PROPERTY LINE LIMITS OF

> DISTURBANCE (130,117 SF)

ASPHALT TO BE REMOVED **VEGETATION TO BE**

REMOVED UTILITIES TO BE REMOVED

> **BUILDING TO BE** REMOVED

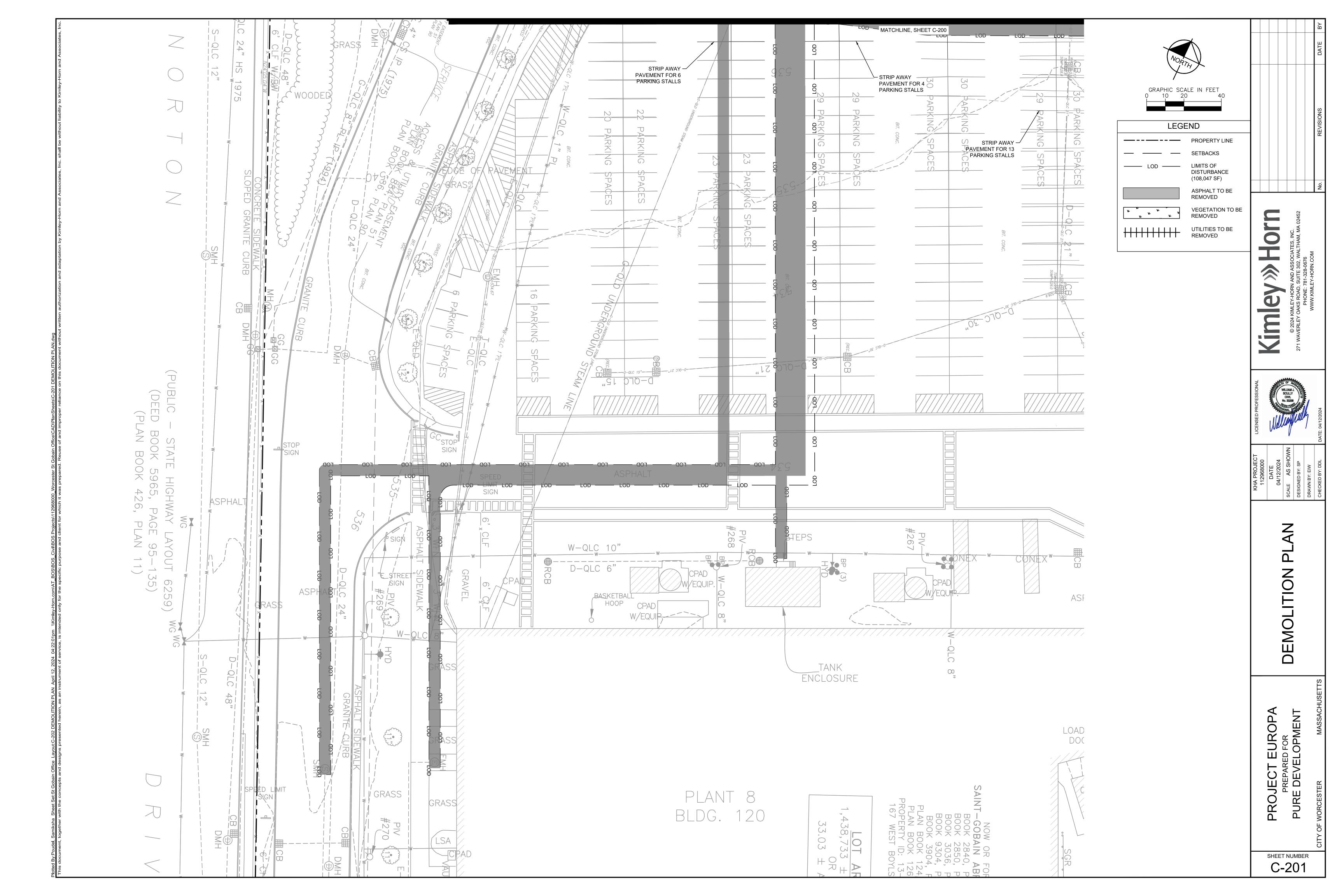
DEMOLITION / LAND DISTURBANCE NOTES:

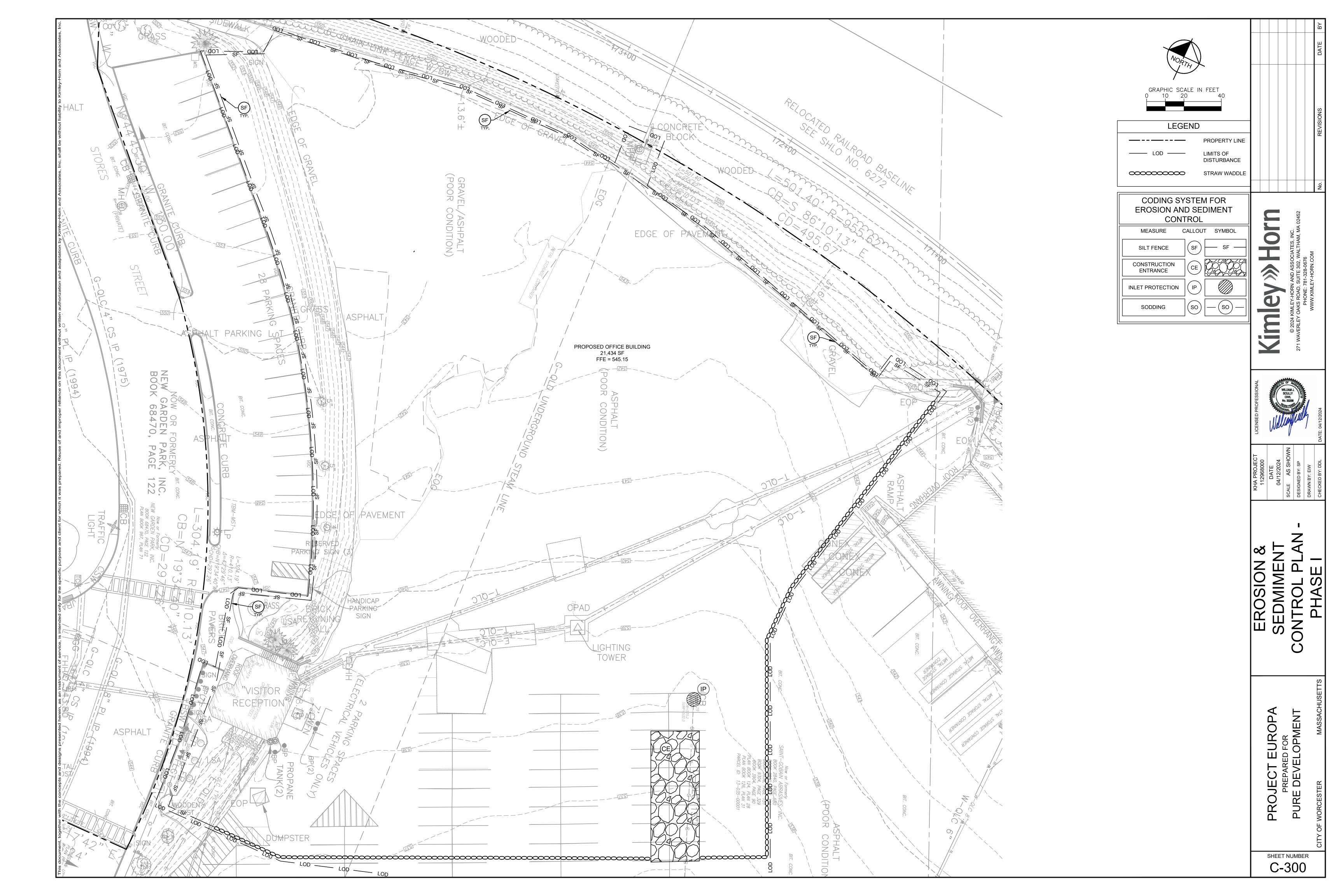
- 1. PRIOR TO STARTING ANY DEMOLITION CONTRACTOR IS RESPONSIBLE A. ENSURING THAT COPIES OF ALL APPLICABLE PERMITS AND
 - B. INSTALLING THE REQUIRED SOIL EROSION AND SEDIMENT CONTROL AND/OR TREE PROTECTION MEASURES PRIOR TO SITE DISTURBANCE.
 - C. LOCATING (VERTICALLY AND HORIZONTALLY) ALL UTILITIES AND SERVICES, INCLUDING, BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN THE LIMITS OF DISTURBANCE. THE CONTRACTOR SHALL USE AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES.
 - D. FAMILIARIZING THEMSELVES WITH THE APPLICABLE UTILITY SERVICE PROVIDER AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION REQUIRED FOR THE PROJECT. THE CONTRACTOR SHALL PROVIDE THE OWNER WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTION AND UTILITY COMPANY REQUIREMENTS.
 - E. COORDINATION WITH UTILITY COMPANIES & ADJACENT LANDOWNERS/BUSINESSES REGARDING WORKING "OFF-PEAK" HOURS OR ON WEEKENDS AS MAY BE REQUIRED TO MINIMIZE THE IMPACT ON THE AFFECTED PARTIES.
- NEITHER KIMLEY-HORN & ASSOCIATES, INC. NOR THE OWNER IS RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION. CONTRACTOR IS TO PROCEED WITH THE DEMOLITION IN A SYSTEMATIC AND SAFE MANNER, FOLLOWING ALL OSHA REQUIREMENTS, TO ENSURE PUBLIC AND
- THE CONTRACTOR SHALL PROVIDE ALL THE "MEANS AND METHODS" NECESSARY TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES, AND ANY OTHER IMPROVEMENTS THAT ARE REMAINING ON OR OFF SITE. THE DEMOLITION CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS OF DAMAGE TO ALL ITEMS THAT ARE TO
- CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH: THE "MANUAL ON UNIFORM TRAFFIC CONTROL," AS WELL AS FEDERAL, STATE, AND LOCAL REGULATIONS WHEN DEMOLITION RELATED ACTIVITIES IMPACT ROADWAYS
- CONDUCT DEMOLITION ACTIVITIES IN SUCH A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, SIDEWALKS, WALKWAYS, AND OTHER ADJACENT FACILITIES. STREET CLOSURE PERMITS MUST BE RECEIVED FROM THE APPROPRIATE GOVERNMENTAL AUTHORITY.
- USE DUST CONTROL MEASURES TO LIMIT AIRBORNE DUST AND DIRT RISING AND SCATTERING IN THE AIR IN ACCORDANCE WITH FEDERAL, STATE, AND/OR LOCAL STANDARDS. AFTER THE DEMOLITION IS COMPLETE, ADJACENT STRUCTURES AND IMPROVEMENTS SHALL BE CLEANED OF ALL DUST AND DEBRIS CAUSED BY THE DEMOLITION OPERATIONS. THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO THEIR "PRE-DEMOLITION" CONDITION.
- CONTRACTOR IS RESPONSIBLE TO SAFEGUARD SITE AS NECESSARY TO PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE ENTRY OF UNAUTHORIZED PERSONS AT ANY TIME.
- THIS DEMOLITION PLAN IS INTENDED TO IDENTIFY THOSE EXISTING ITEMS/CONDITIONS WHICH ARE TO BE REMOVED. IT IS NOT INTENDED TO PROVIDE DIRECTION OTHER THAN THAT ALL METHODS AND MEANS ARE TO BE IN ACCORDANCE WITH STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK
- DEBRIS SHALL NOT BE BURIED ON THE SUBJECT SITE. ALL DEMOLITION WASTES AND DEBRIS (SOLID WASTE) SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL LAWS AND APPLICABLE CODES.
- 10. ALL PROPOSED STORM INLET OR GRATE STRUCTURES SHALL BE PROTECTED WITH APPROVED INLET PROTECTION MEASURES IMMEDIATELY FOLLOWING INSTALLATION.
- 11. ALL SLOPES 3:1 OR GREATER SHALL BE STABILIZED WITH JUTE MESH OR OTHER APPROVED SOIL STABILIZATION FABRIC IMMEDIATELY FOLLOWING DISTURBANCE OF THE SLOPED AREA.



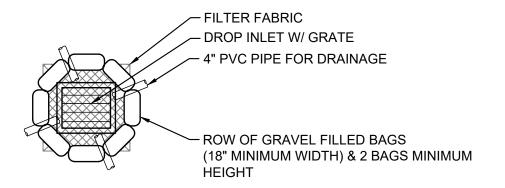
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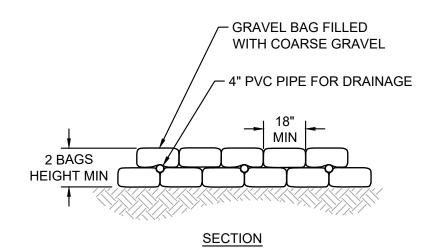
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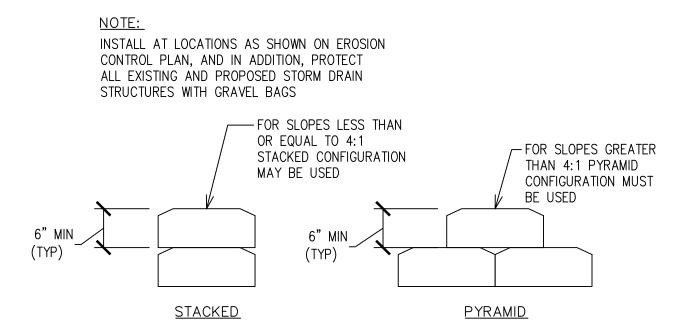




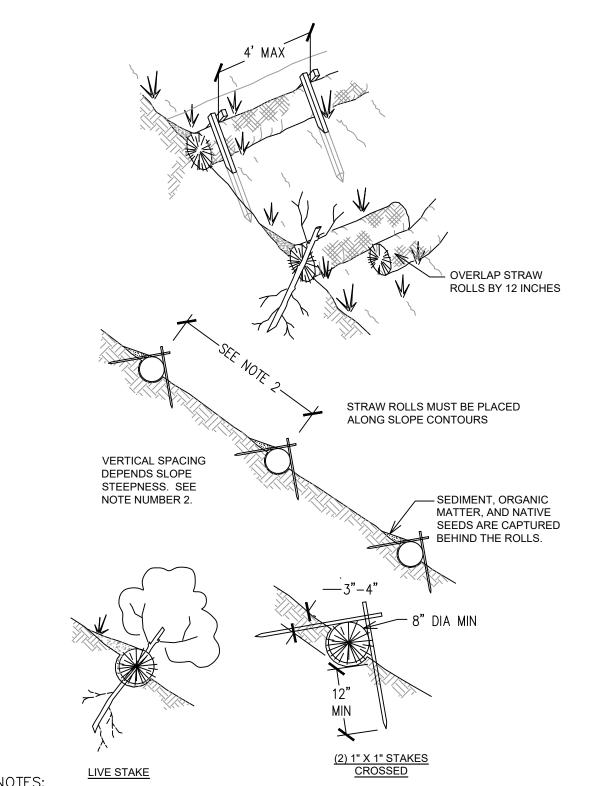
- 1. GRAVEL BAG MATERIAL: POLYPROPYLENE, POLYETHYLENE OR POLYMIDE WOVEN FABRIC, MINIMUM UNIT WEIGHT 4 OUNCES PER SQUARE YARD, MULLEN BURST STRENGTH EXCEEDING 300 PSI AND ULTRAVIOLET STABILITY EXCEEDING 70%
- 2. GRAVEL BAG SHALL BE FILLED WITH 3/4" ROCK OR 1/4" PEA GRAVEL.
- 3. PLACE SEVERAL LAYERS OF SAND BAGS (12" MINIMUM HIGH) OVERLAPPING THE BAGS AND PACKING THEM TIGHTLY TOGETHER.
- 4. LEAVE GAP OF ONE BAG ON THE TOP ROW TO SERVE AS A SPILLWAY.
- 5. PLACE WIRE MESH OVER AND 1' (MINIMUM) BEYOND THE INLET STRUCTURE.
- 6. PLACE FILTER FABRIC OVER WIRE MESH. FILTER FABRIC SHALL BE MANUFACTURED FROM UV RESISTANT POLYPROPYLENE, NYLON, POLYESTER, OR ETHYLENE FABRIC WITH AN EQUIVALENT OPENING SIZE NOT GREATER THAN 20 SIEVE AND WITH A MINIMUM FLOW RATE OF 40 GALLONS/MINUTE/SQ. FT.
- 7. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT.

DROP INLET SEDIMENT BARRIER





GRAVEL BAG BERM (SE-6) N.T.S.



1. STRAW ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3" TO 4" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL.

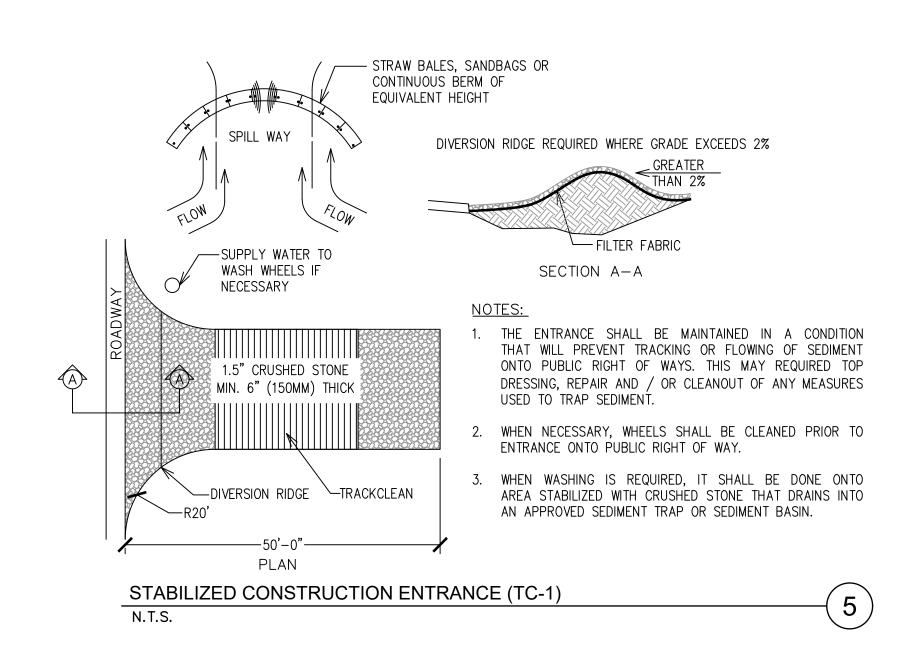
2. VERTICAL SPACING FOR SLOPE INSTALLATIONS: SLOPE OF 2:1 OR GREATER = 10 FEET APART SLOPE BETWEEN 4:1 AND 2:1 = 15 FEET APART SLOPE OF 4:1 OR FLATTER = 20 FEET APART

3. INSPECT AND REPAIR STRAW ROLLS AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN

4. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

STRAW WADDLE DETAIL N.T.S.





SEDIMENT DETAILS S

PREPARED FOR DEVELOPMENT EUROPA **PROJECT** PURE

GENERAL STANDARD EROSION AND SEDIMENT CONTROL NOTES

FROM THE PROJECT SITE.

- 1. THE CONTRACTOR SHALL APPLY PERMANENT OR TEMPORARY SOIL STABILIZATION TO ALL DENUDED OR DISTURBED AREAS WITHIN 7 DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. SOIL STABILIZATION MUST ALSO BE APPLIED TO DENUDED OR DISTURBED AREAS WHICH MAY NOT BE AT FINAL GRADE BUT WHICH WILL REMAIN UNDISTURBED FOR LONGER THAN 30 DAYS. SOIL STABILIZATION MEASURES INCLUDE VEGETATIVE ESTABLISHMENT, MULCHING, AND THE EARLY APPLICATION OF GRAVEL BASE MATERIAL ON AREAS TO BE PAVED.
- 2. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN LAND DISTURBANCE. THE EROSION CONTROLS WITHIN 100 FEET OF ANY WETLAND RESOURCE SHALL BE INSPECTED AND APPROVED IN WRITING BY THE XX CONSERVATION AGENT BEFORE ANY OTHER SITE WORK IS INITIATED.
- 3. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES AND CLEANUP OF SEDIMENTATION ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE MADE IMMEDIATELY.
- 5. THE CONTRACTOR SHALL LIMIT SITE ACCESS BY CONSTRUCTION VEHICLES TO ENTRANCES PROTECTED BY AN EXISTING PAVEMENT OR STONE STABILIZED CONSTRUCTION ENTRANCE OR AN APPROVED COMPARABLE CONTROL MEASURE. SEDIMENT SHALL BE REMOVED FROM PAVED AREAS ON A DAILY BASIS.
- 6. STOCKPILES OF SOIL AND OTHER ERODIBLE MATERIALS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION FOR STOCKPILES ON SITE AS WELL AS FOR MATERIALS TRANSPORTED
- 7. THE CONTRACTOR SHALL MONITOR AND TAKE PRECAUTIONS TO CONTROL DUST, INCLUDING (BUT NOT LIMITED TO) USE OF WATER, MULCH, OR CHEMICAL DUST ADHESIVES AND CONTROL OF CONSTRUCTION SITE TRAFFIC.
- 8. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT ADJACENT PROPERTIES, WETLANDS, WATERWAYS OR THE STORM DRAINAGE SYSTEM.
- 9. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION AND MAINTENANCE OF ANY ADDITIONAL CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED NECESSARY BY THE PLAN APPROVING AUTHORITY.
- 10. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES ARE NOT TO BE REMOVED UNTIL ALL DISTURBED AREAS ARE STABILIZED. AFTER STABILIZATION IS COMPLETE, ALL MEASURES SHALL BE REMOVED WITHIN 30 DAYS. TRAPPED SEDIMENT SHALL BE SPREAD AND SEEDED.
- 11. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL PROPOSED EROSION AND SEDIMENT CONTROL PRACTICES DURING CONSTRUCTION SUCH THAT THE CONDITION OF SAID CONTROL CONTINUES THE INTENDED FORM AND FUNCTION AS OUTLINED IN THESE PLANS.
- 12. ALL E&SC MEASURES SHALL BE INSTALLED AND MAINTAINED PER MASSACHUSETTS STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT

MANAGEMENT STRATEGIES AND SEQUENCE OF EROSION CONTROL MEASURES

UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MINIMUM STANDARDS AND SPECIFICATIONS OUTLINED IN THESE PLANS AND ACCORDING TO THE MASSACHUSETTS HIGHWAY DEPT. DRAINAGE MANUAL.

THE FOLLOWING SEQUENCE OF EVENTS AND EROSION CONTROL MEASURES SHALL BE INCORPORATED INTO THE CONSTRUCTION SCHEDULE FOR THIS PROJECT AND SHALL APPLY TO ALL CONSTRUCTION ACTIVITIES WITHIN PROJECT LIMITS:

- 1. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN LAND DISTURBANCE.
- 2. WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PAVED PUBLIC ROAD SURFACE, THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. THIS PROVISION SHALL APPLY TO INDIVIDUAL SUBDIVISION LOTS AS WELL AS LARGER LAND DISTURBING ACTIVITIES.
- 3. CONSTRUCTION TRAFFIC SHALL BE LIMITED TO ACCESS ROADS. ALL TRAFFIC IS PROHIBITED FROM CROSSING DRAINAGE SWALES AND STREAMS EXCEPT WHERE ABSOLUTELY NECESSARY.
- 4. SEDIMENT BARRIERS, CONSTRUCTION ENTRANCES, AND EROSION CONTROL STONE ARE TO BE PLACED PRIOR TO CLEARING AND GRUBBING AND PRIOR TO THE FIRST PHASE OF CONSTRUCTION.
- 5. ALL PERMANENT STORM WATER MANAGEMENT FACILITIES INCLUDING EROSION CONTROL MEASURES ARE TO BE BE INSTALLED AND MADE OPERATIONAL AT THE START OF CLEARING OPERATIONS INCLUDING APPROVED SEDIMENT BASINS.
- 6. THE CONTRACTOR SHALL COMPLETE DRAINAGE FACILITIES WITHIN THIRTY (30) DAYS FOLLOWING COMPLETION OF ROUGH GRADING AT ANY POINT WITHIN
- 7. CONSTRUCTION WILL BE SEQUENCED SO THAT GRADING OPERATIONS CAN BEGIN AND END AS QUICKLY AS POSSIBLE.
- 8. AREAS WHICH ARE NOT TO BE DISTURBED WILL BE CLEARLY MARKED BY FENCING, FLAGS, SIGNS, ETC.
- 9. A. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN (7) DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT (UNDISTURBED) FOR LONGER THAN THIRTY (30) DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE (1) YEAR.

B. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE

C. PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT IN THE OPINION OF THE LOCAL PROGRAM ADMINISTRATOR OR HIS DESIGNATED AGENT, IS UNIFORM AND MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION. VEGETATIVE COVER SHALL BE ESTABLISHED ACCORDING TO THE SEEDING SCHEDULE. (HYDROSEEDING MAY BE USED IN PLACE OF MULCHING ON AREAS OTHER THAN DITCH BANKS.) STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIVERSIONS, AND DITCH OR WATERCOURSE BEDS AND BANKS IMMEDIATELY AFTER INSTALLATION.

- 10. ALL STORM SEWER INLETS THAT ARE TO BE USED FOR DRAINAGE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT. B. BEFORE NEWLY CONSTRUCTED CONVEYANCE CHANNELS ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND RECEIVING CHANNEL.
- 11. A. CUT AND FILL SLOPES SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SLOPES THAT ARE FOUND TO BE ERODING EXCESSIVELY WITHIN ONE (1) YEAR OF PERMANENT STABILIZATION SHALL BE PROVIDED WITH ADDITIONAL SLOPE STABILIZATION MEASURES UNTIL THE PROBLEM IS CORRECTED.

B. CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME, OR SLOPE DRAIN STRUCTURE.

- 12. THE CONTRACTOR SHALL LIMIT SITE ACCESS BY CONSTRUCTION VEHICLES TO ENTRANCES PROTECTED BY A STONE CONSTRUCTION ENTRANCE OR AN APPROVED COMPARABLE CONTROL MEASURE. SEDIMENT SHALL BE REMOVED FROM PAVED AREAS ON A DAILY BASIS.
- 13. THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE (1) WEEK PRIOR TO THE PRECONSTRUCTION CONFERENCE, ONE (1) WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE (1) WEEK PRIOR TO THE FINAL INSPECTION.
- 14. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE LOCAL PROGRAM ADMINISTRATOR. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.
- 15. EFFLUENT FROM DE-WATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, SEDIMENTATION TANK OR STRAW BALE/SILT FENC PIT, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT ADJACENT PROPERTIES, WETLANDS, WATERWAYS OR THE STORM DRAINAGE SYSTEM. CONTRACTOR IS RESPONSIBLE FOR SIZING TANK OR PITS BASED ON PROPOSED FLOWS FROM DEWATERING OPERATIONS. THIS INCLUDES THE USE OF MULTIPLE FACILITIES, IF NECESSARY. GRAVITY BAG FILTERS MAY BE USED IN LIEU OF SEDIMENTATION TANKS OR STRAW BALE/SILT FENCE PITS FOR MINOR DEWATERING OPERATIONS. THESE METHODS MUST BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION AND USE.
- 16. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION AND MAINTENANCE OF ANY ADDITIONAL CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED NECESSARY BY THE PLAN APPROVING AUTHORITY.
- 17. THE CONTRACTOR SHALL USE JUTE MESH OR APPROVED EQUIVALENT BETWEEN THE BACK OF CURB AND RIGHT-OF-WAY ALONG ALL ROADWAYS AND SIDE SLOPES OF 4:1 OR GREATER.
- 18. FAILURE OF THE CONTRACTOR TO PROVIDE THE ABOVE MENTIONED E & S MEASURES IS A BREECH OF CONTRACT.

CONSTRUCTION SEQUENCE

- 1. MOBILIZATION
- 2. INSTALL STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE AND INLET PROTECTION ON EXISTING STORM STRUCTURES.
- 3. PARKING LOT, PAVEMENT, AND PORTIONS OF EXISTING BUILDINGS REMOVAL, SITE CLEARING.
- 4. ROUGH GRADING.
- 5. INSTALL UTILITIES INCLUDING STORM DRAINAGE, SANITARY SEWER, WATER LINES, TELECOM, ELECTRIC AND GAS LINES. INSTALL INLET PROTECTION ON NEW STORM STRUCTURES.
- 6. EXISTING BUILDING RENOVATIONS, CONSTRUCT BUILDING ADDITIONS, BASE PAVEMENT AND CURBING.
- 7. INSTALL TREES. SHRUBS AND PERMANENT SOIL STABILIZATION MEASURES.
- 8. REMOVE CONSTRUCTION ENTRANCE ONCE AREAS ARE STABILIZED WITH STONE AND PRIOR TO INSTALLATION OF BASE COURSE.
- 9. COLLECT SILT AND SEDIMENT AND PLACE ON SITE. PRIOR TO REMOVAL OF SILT FENCE: SEED OR STABILIZE ANY RESULTING BARE AREAS PER THE DESIGN PLANS. ALL REMAINING PERMANENT EROSION CONTROL DEVICES, SUCH AS BUT NOT LIMITED TO, VELOCITY DISSIPATERS, LEVEL SPREADERS, SHOULD NOW BE INSTALLED.
- 10. INSTALL FINAL PAVEMENT AND STRIPING.
- 11. REMOVE SILT FENCE AND INLET PROTECTION

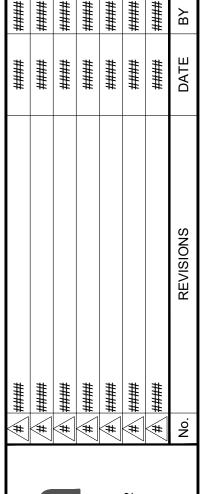
MAINTENANCE

IN GENERAL, ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED AFTER EACH RAINFALL, OR WEEKLY, WHICHEVER IS MOST FREQUENT, AND SHOULD BE CLEANED AND REPAIRED ACCORDING TO THE FOLLOWING SCHEDULE.

- 1. EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED REGULARLY FOR UNDERMINING OR DETERIORATION AND BUILD-UP OR CLOGGING WITH SEDIMENT. CORRECTIVE ACTION WILL BE TAKEN IMMEDIATELY.
- 2. EROSION AND SEDIMENT CONTROL MEASURES WHICH HAVE FAILED AND ARE BEYOND REPAIR SHALL BE REMOVED AND REPLACED BY CONTRACTOR.
- 3. ALL SEEDED AREAS WILL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED AND RE-SEEDED AS NECESSARY.
- 4. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE DISPOSED OF WITHIN THIRTY (30) DAYS AFTER FINAL INSPECTION AND APPROVAL BY TOWN/COUNTY.
- 5. STOCK PILES OF SOIL AND OTHER ERODIBLE MATERIALS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION FOR STOCKPILES ON SITE AS WELL AS FOR MATERIALS TRANSPORTED FROM THE PROJECT SITE.

NOTES:

THE SEQUENCE OF CONSTRUCTION SHOWN ABOVE IS A GENERAL OVERVIEW AND IS INTENDED TO CONVEY THE GENERAL CONCEPTS OF THE EROSION CONTROL DESIGN AND SHOULD NOT BE RELIED UPON FOR CONSTRUCTION PURPOSES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETAILED PHASING AND CONSTRUCTION SEQUENCING NECESSARY TO CONSTRUCT THE PROPOSED IMPROVEMENTS INCLUDED IN THESE PLANS. THE CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING IMMEDIATELY, PRIOR TO AND/OR DURING CONSTRUCTION IF ANY ADDITIONAL INFORMATION ON THE CONSTRUCTION SEQUENCE IS NECESSARY. CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPLYING WITH THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION AND ALL OTHER APPLICABLE LAWS.



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WWW.KIMLEY-HORN.COM

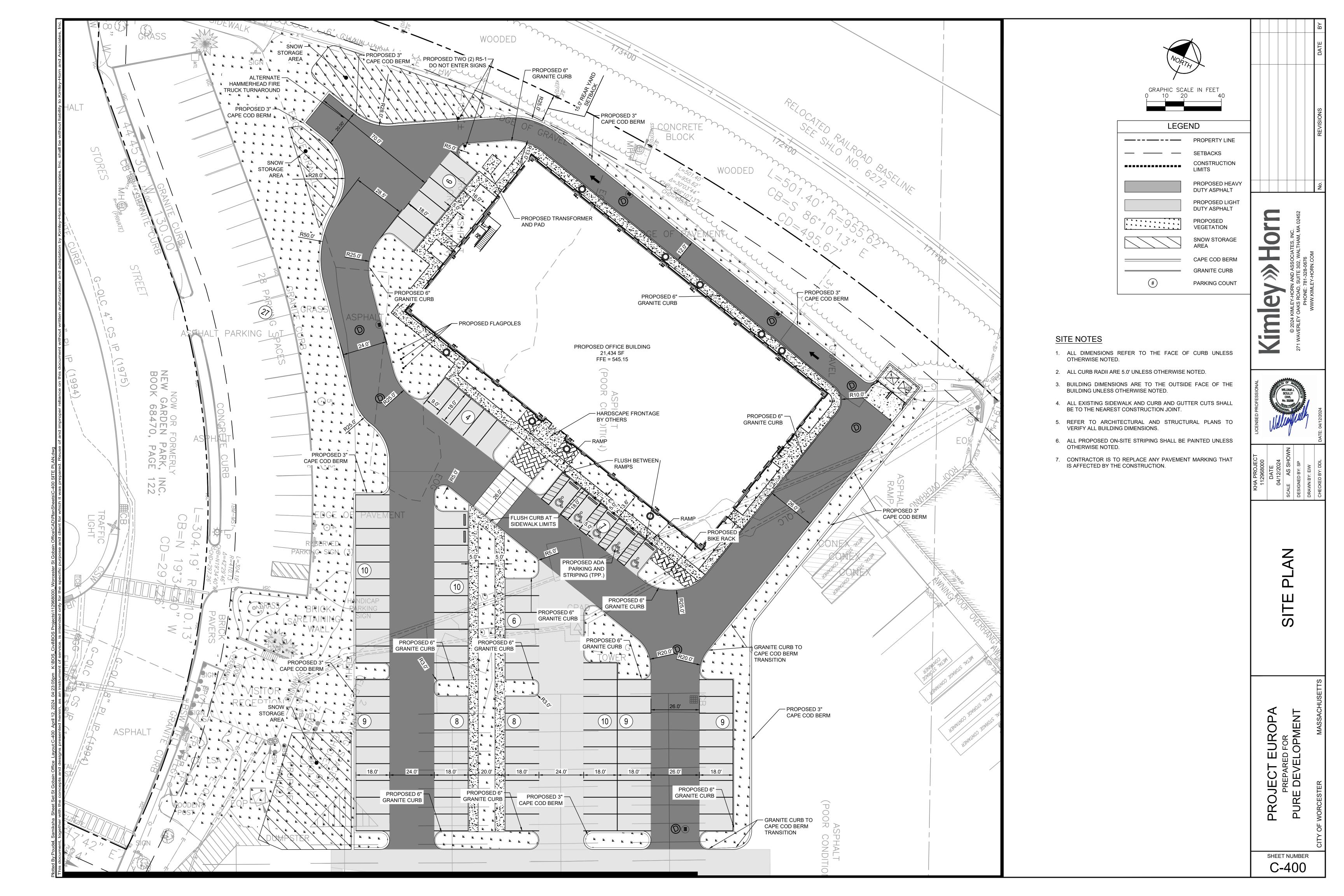


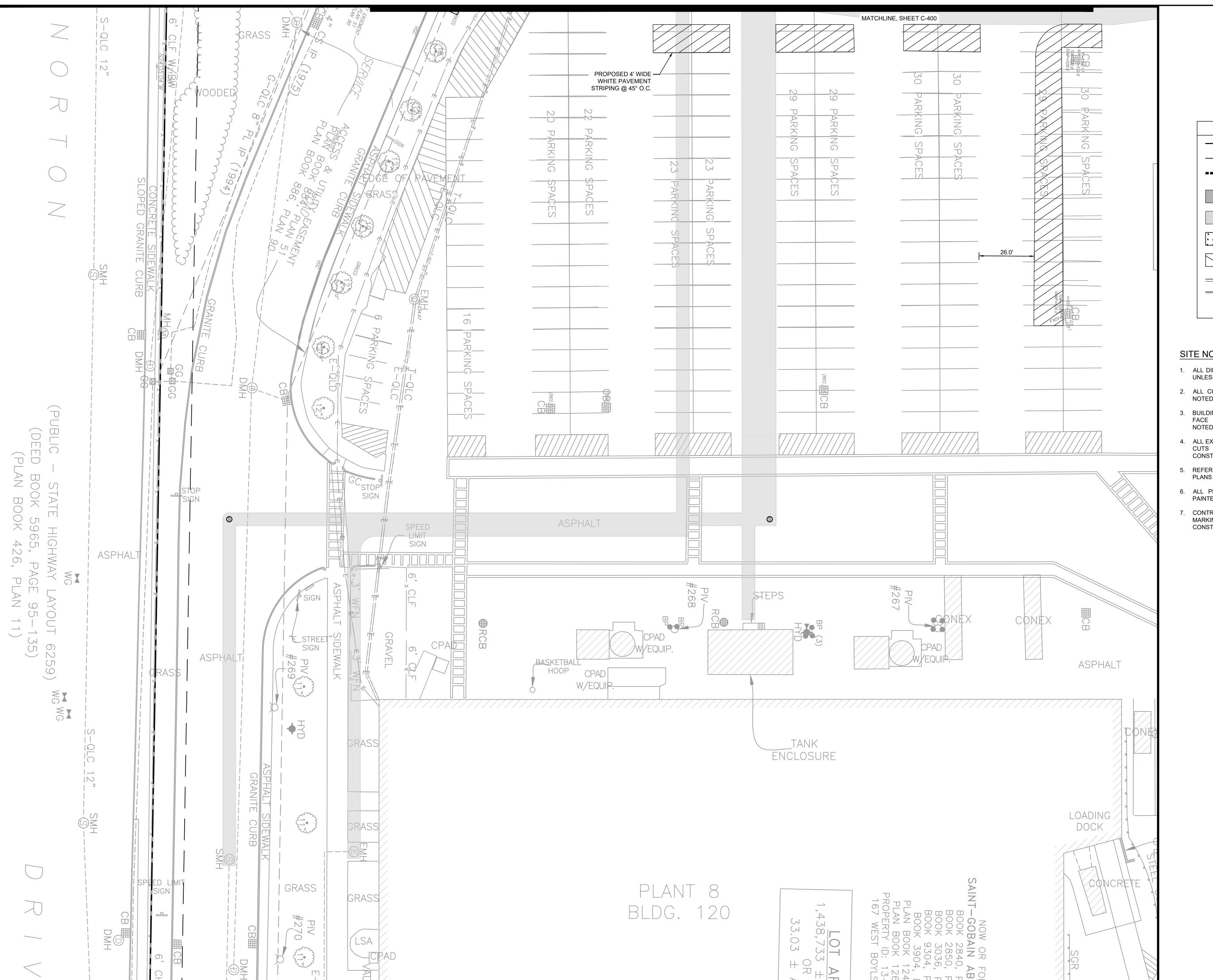
04/12/2024
SCALE AS SHOWN
DESIGNED BY: SP

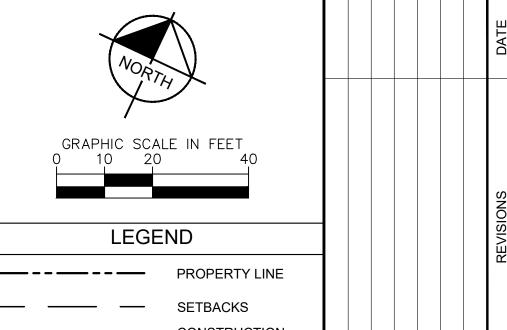
OSION & SEDIMEN CONTROL NOTES

PREPARED FOR

RE DEVELOPMENT







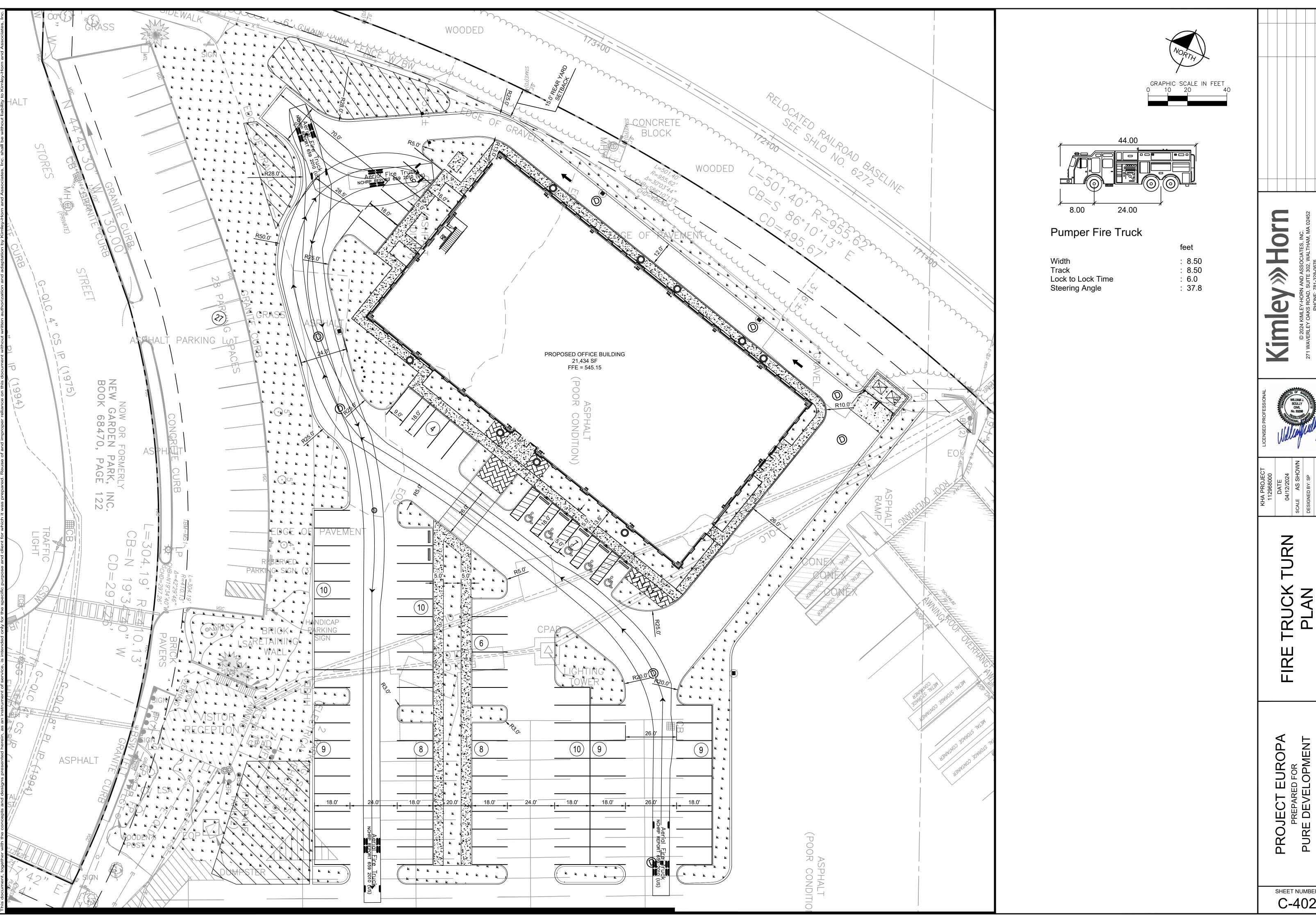
— -- — PROPERTY LINE — — SETBACKS -----LIMITS PROPOSED HEAVY DUTY ASPHALT PROPOSED LIGHT DUTY ASPHALT * * * * * * * * * * * * * PROPOSED VEGETATION SNOW STORAGE CAPE COD BERM GRANITE CURB PARKING COUNT

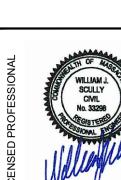
SITE NOTES

- 1. ALL DIMENSIONS REFER TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
- 2. ALL CURB RADII ARE 5.0' UNLESS OTHERWISE
- 3. BUILDING DIMENSIONS ARE TO THE OUTSIDE FACE OF THE BUILDING UNLESS OTHERWISE
- 4. ALL EXISTING SIDEWALK AND CURB AND GUTTER CUTS SHALL BE TO THE NEAREST CONSTRUCTION JOINT.
- 5. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS TO VERIFY ALL BUILDING DIMENSIONS.
- 6. ALL PROPOSED ON-SITE STRIPING SHALL BE PAINTED UNLESS OTHERWISE NOTED.
- CONTRACTOR IS TO REPLACE ANY PAVEMENT MARKING THAT IS AFFECTED BY THE CONSTRUCTION.

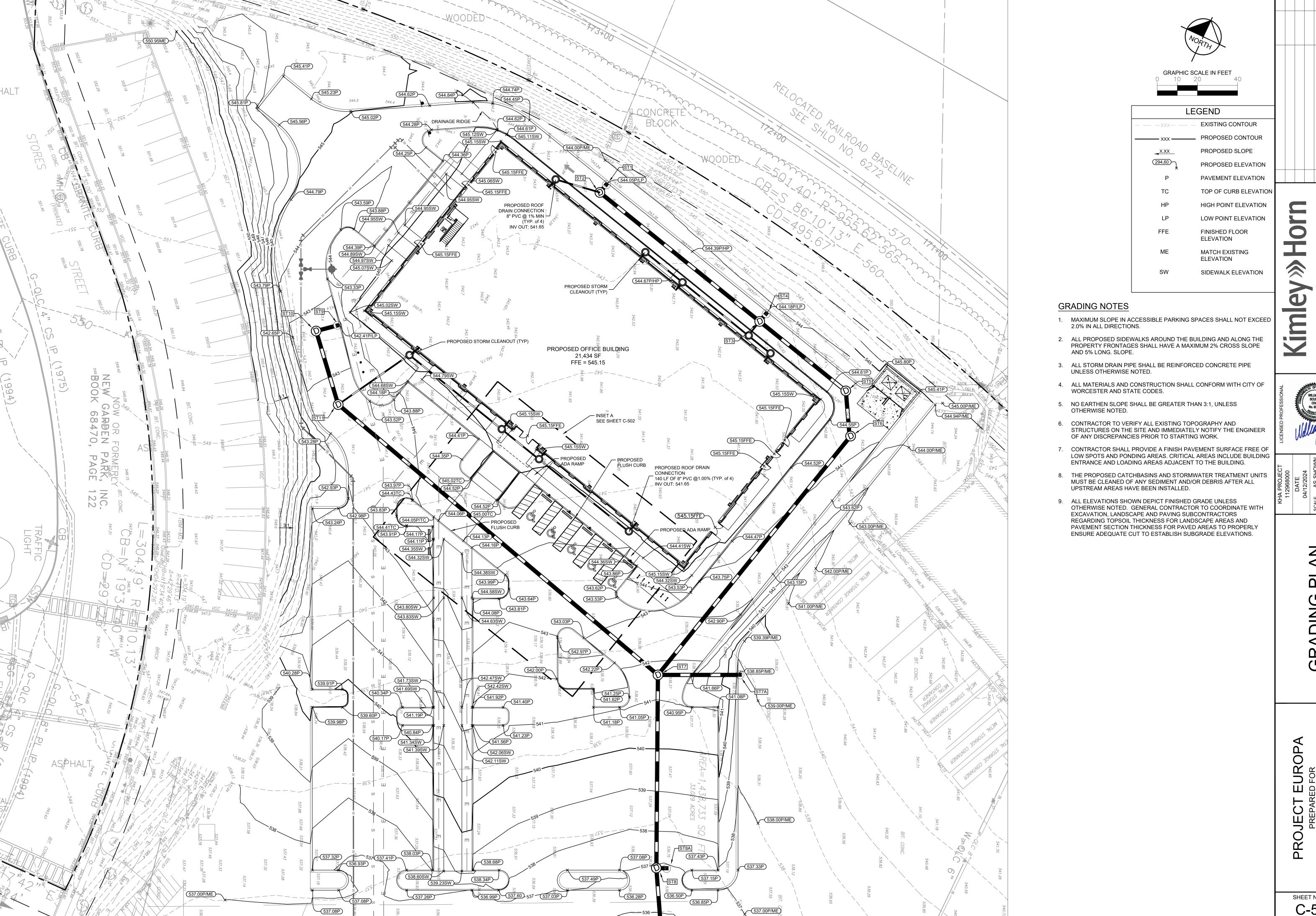


PROJECT EUROPA
PREPARED FOR
PURE DEVELOPMENT

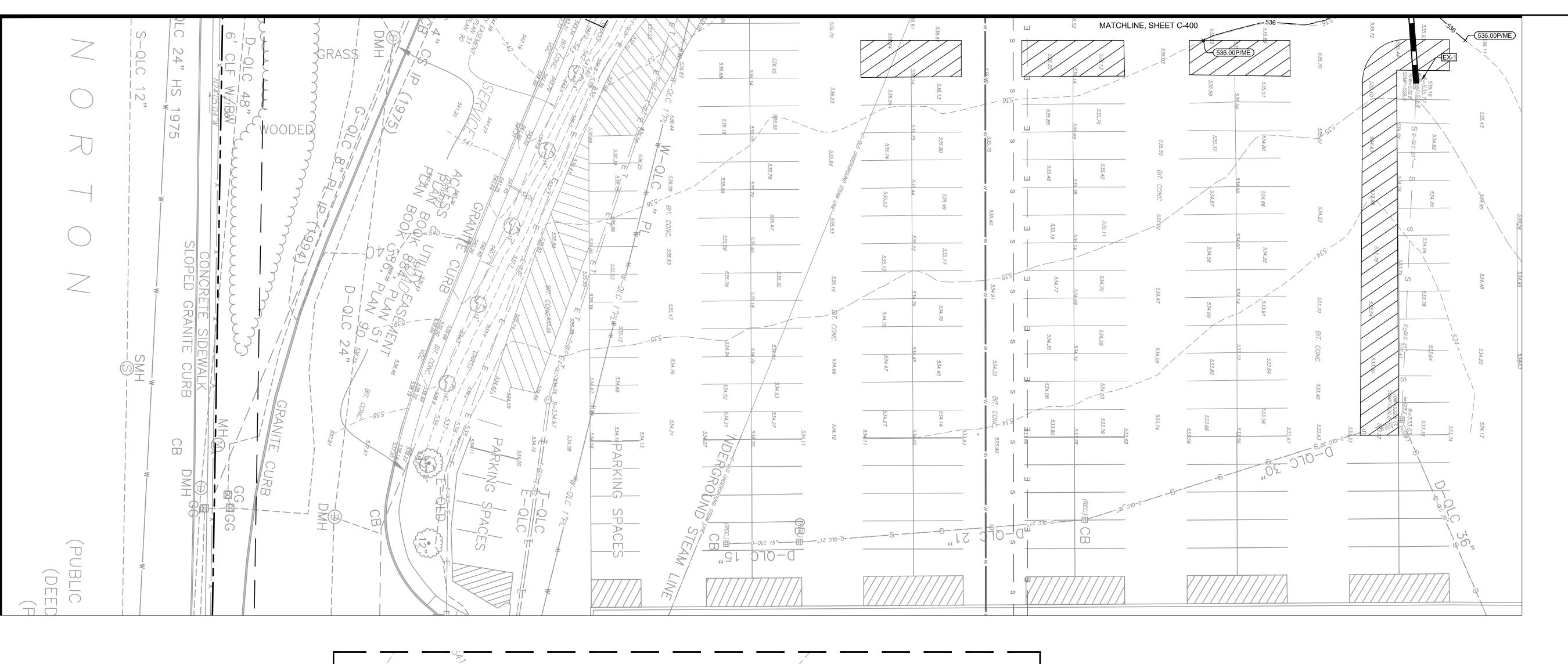


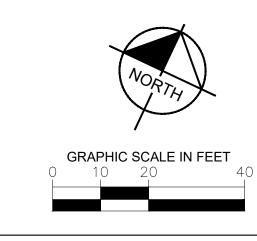


TRUCK PLAN



PREPARED FOR DEVELOPMENT





LEGEND

EXISTING CONTOUR — PROPOSED CONTOUR

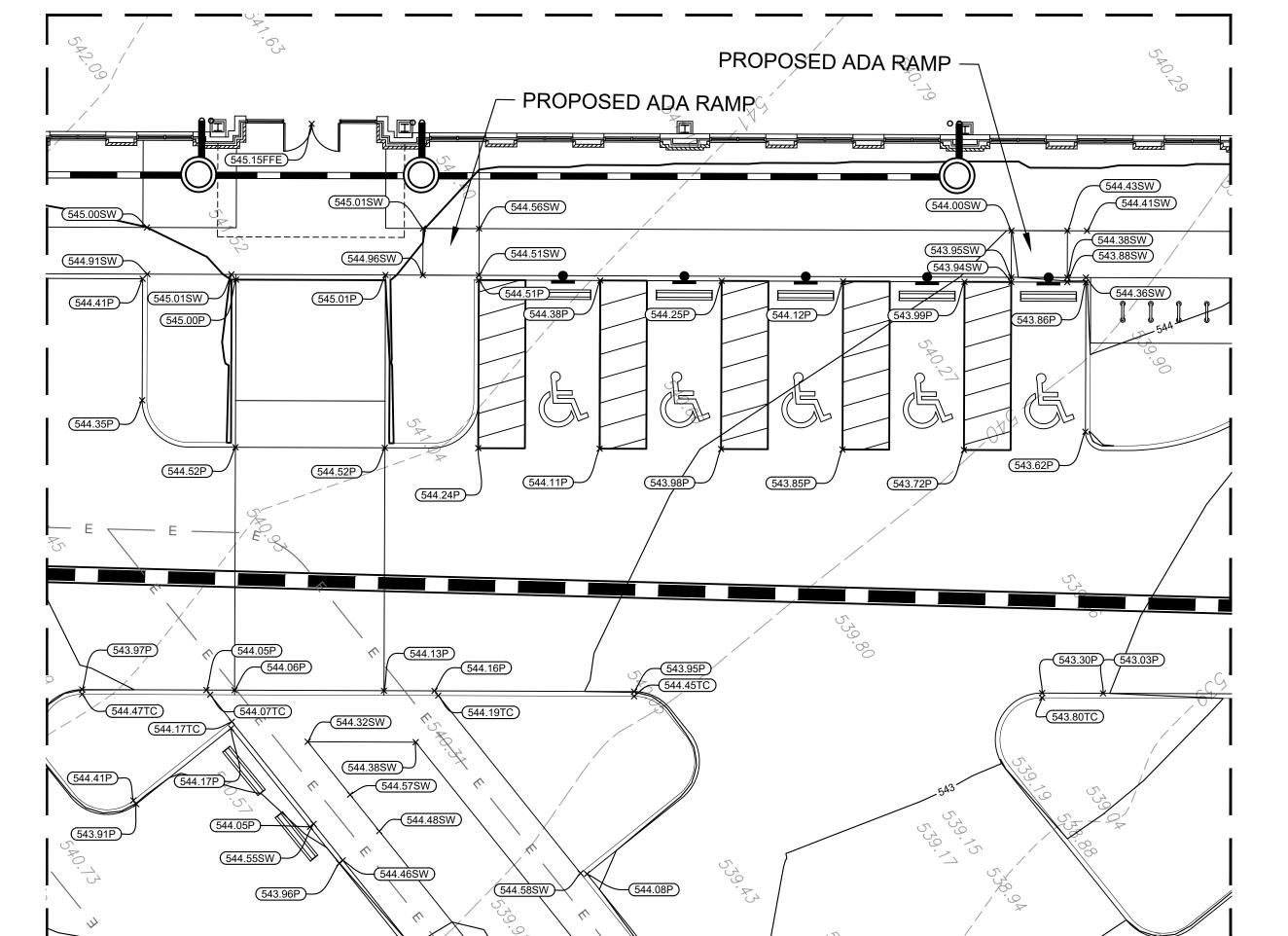
PROPOSED SLOPE **▼**X.XX PROPOSED ELEVATION

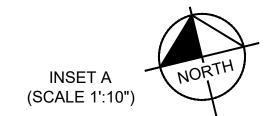
PAVEMENT ELEVATION TOP OF CURB ELEVATION HIGH POINT ELEVATION

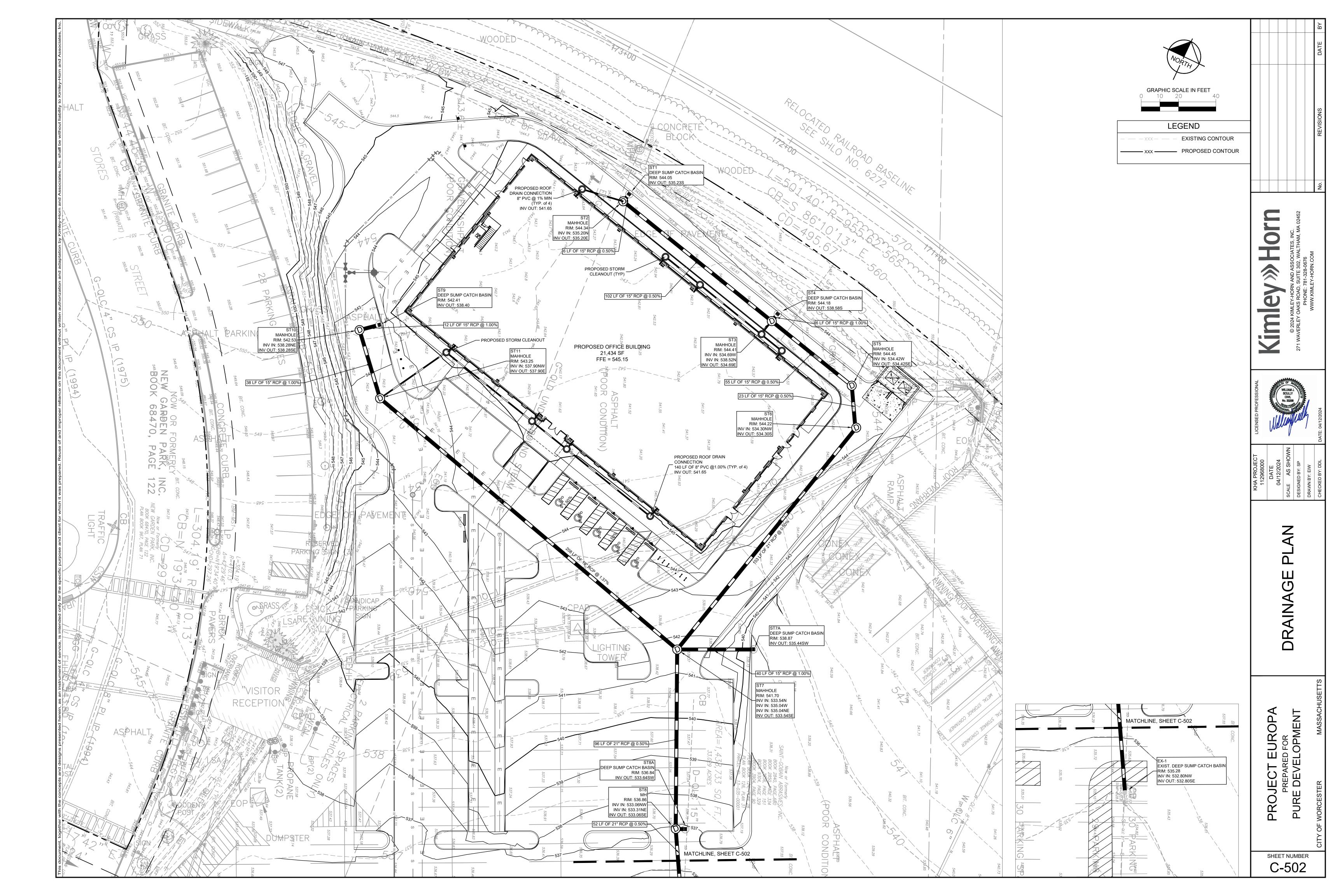
LOW POINT ELEVATION FINISHED FLOOR ELEVATION

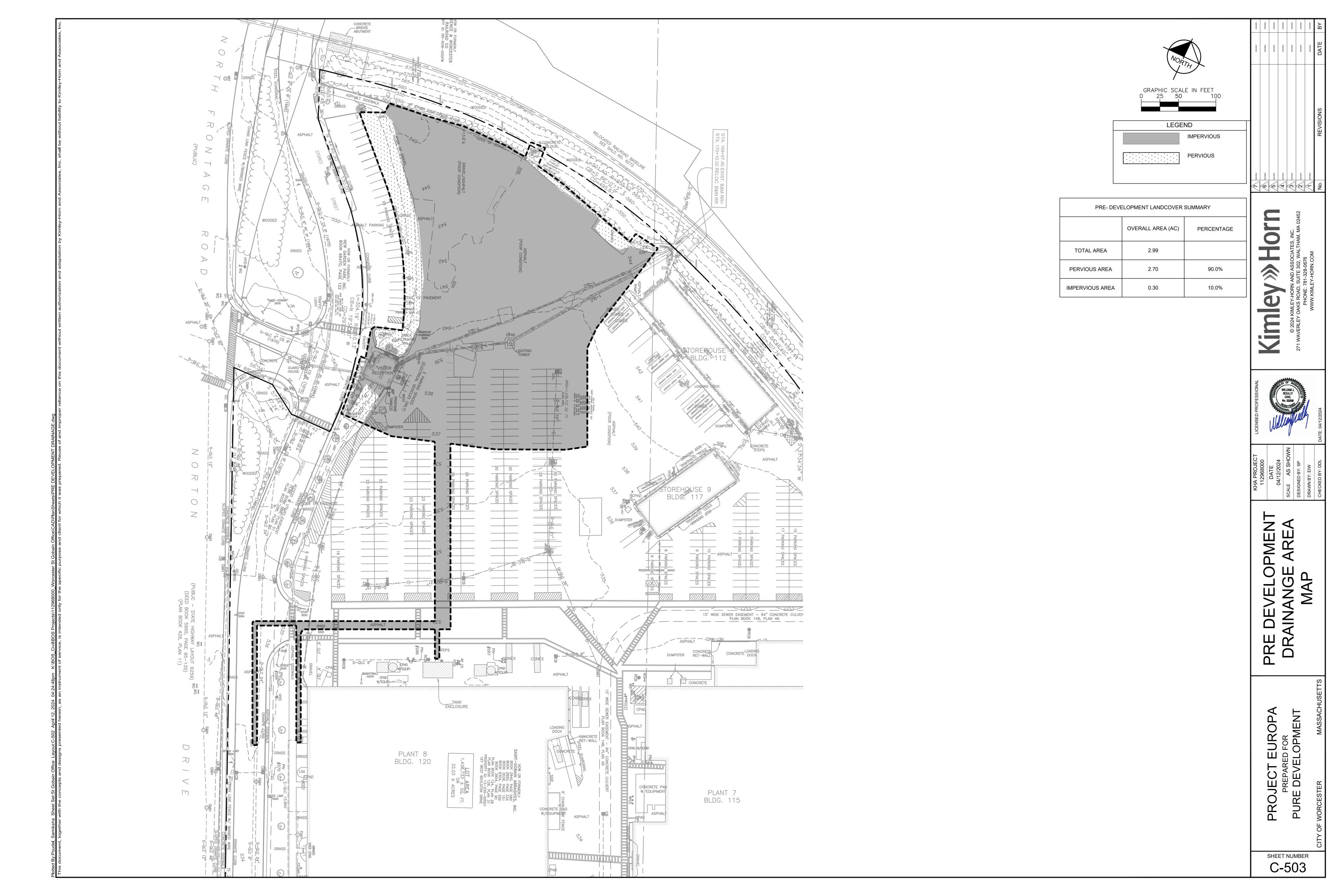
MATCH EXISTING ELEVATION SIDEWALK ELEVATION

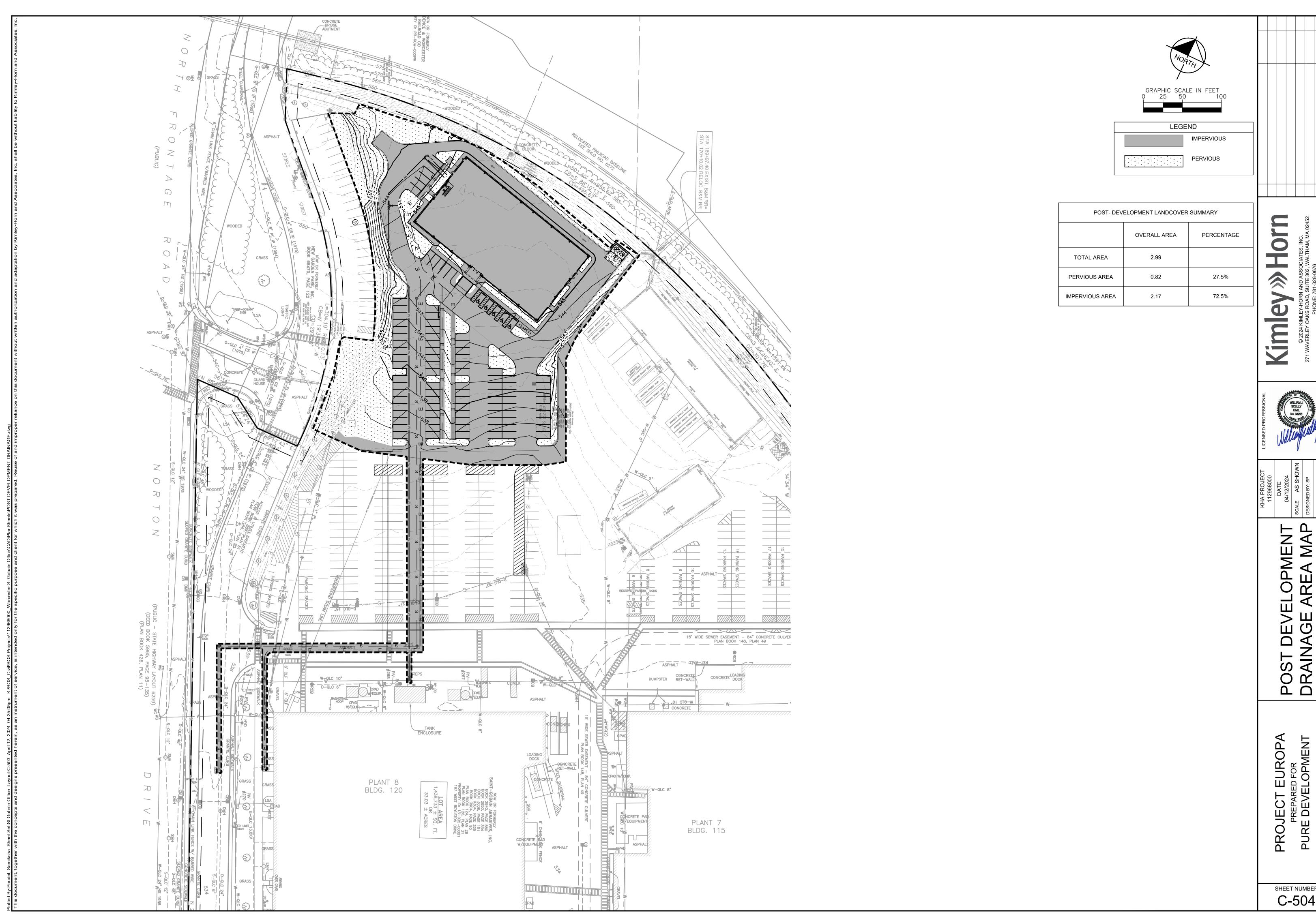
PREPARED FOR EDEVELOPMENT



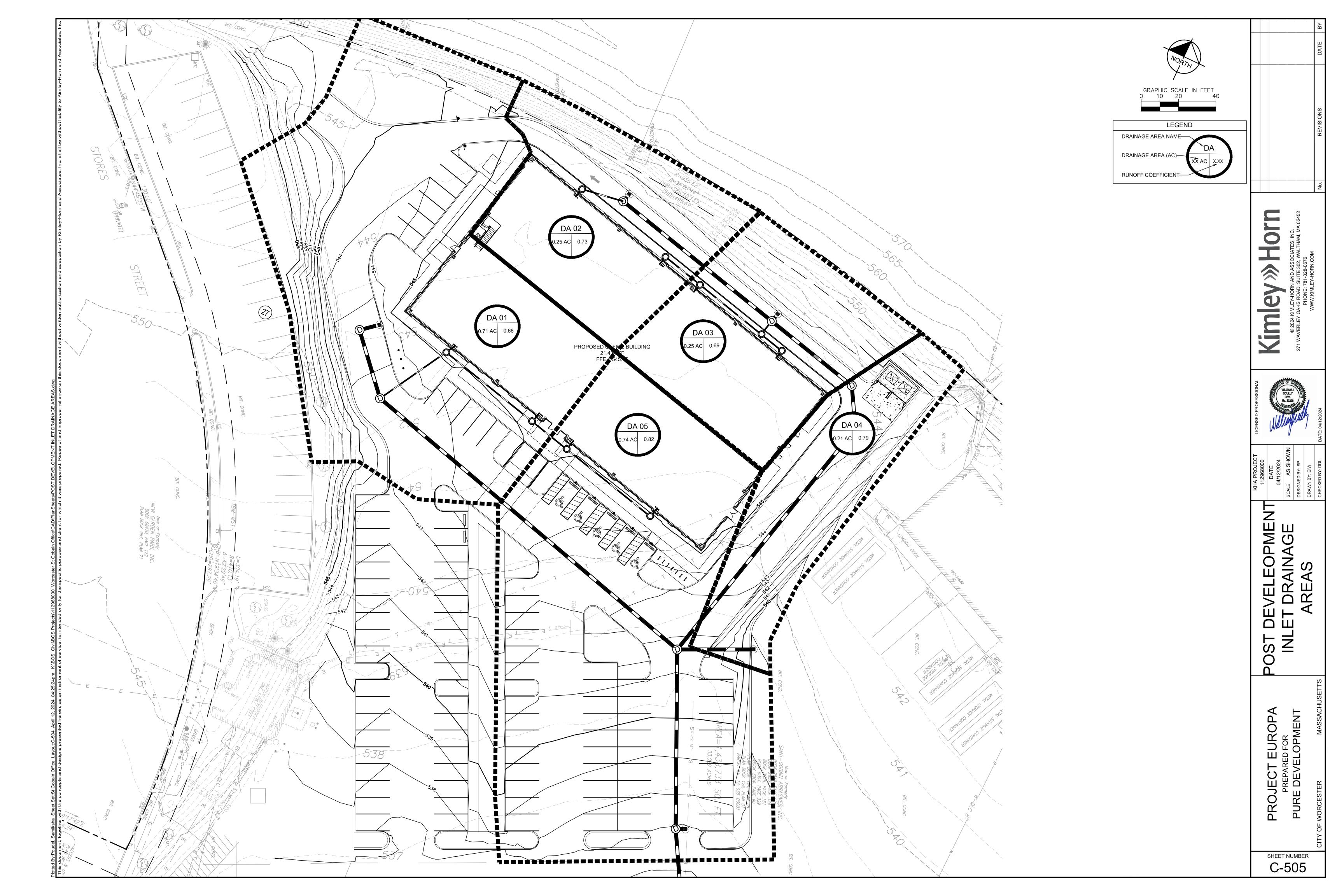


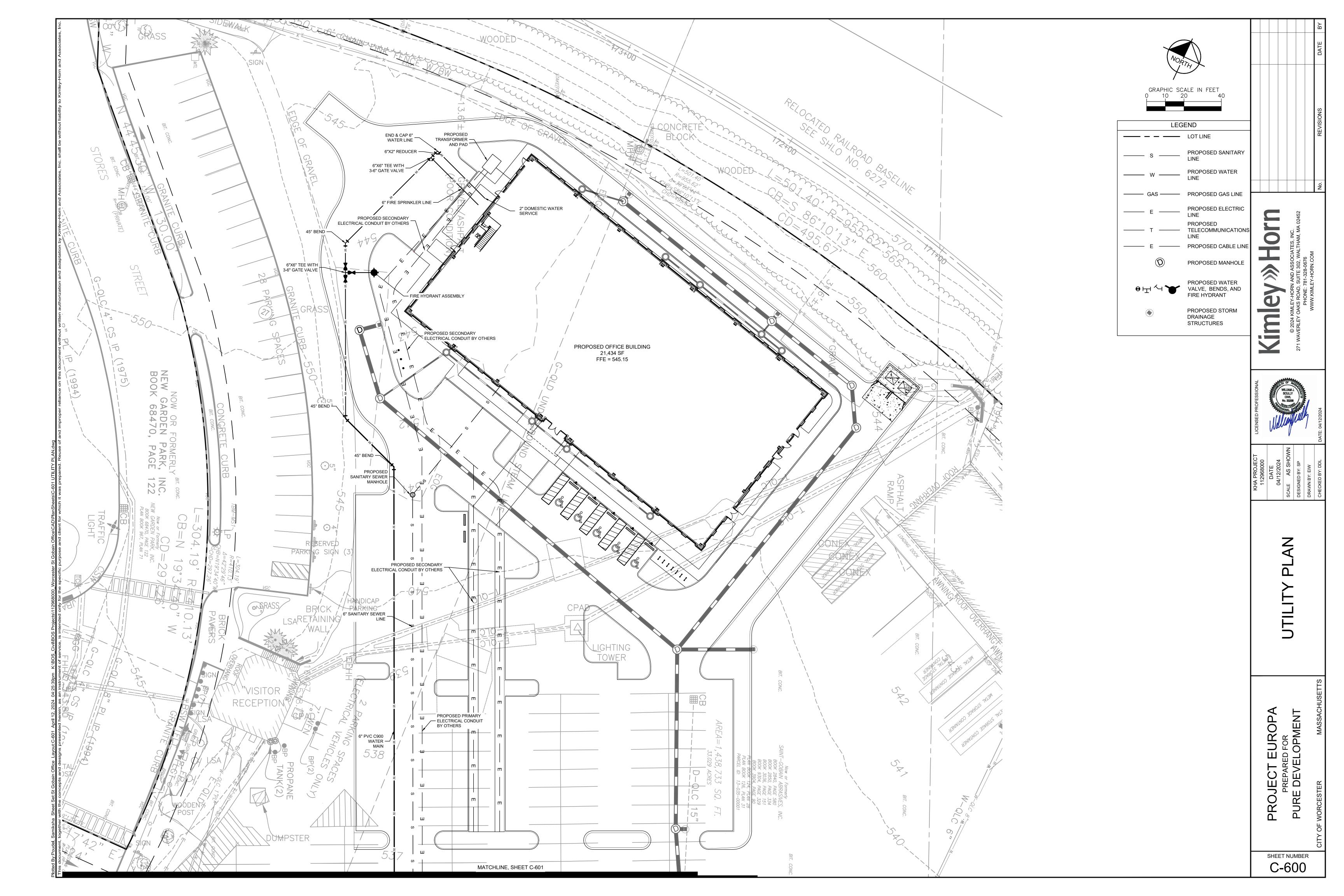


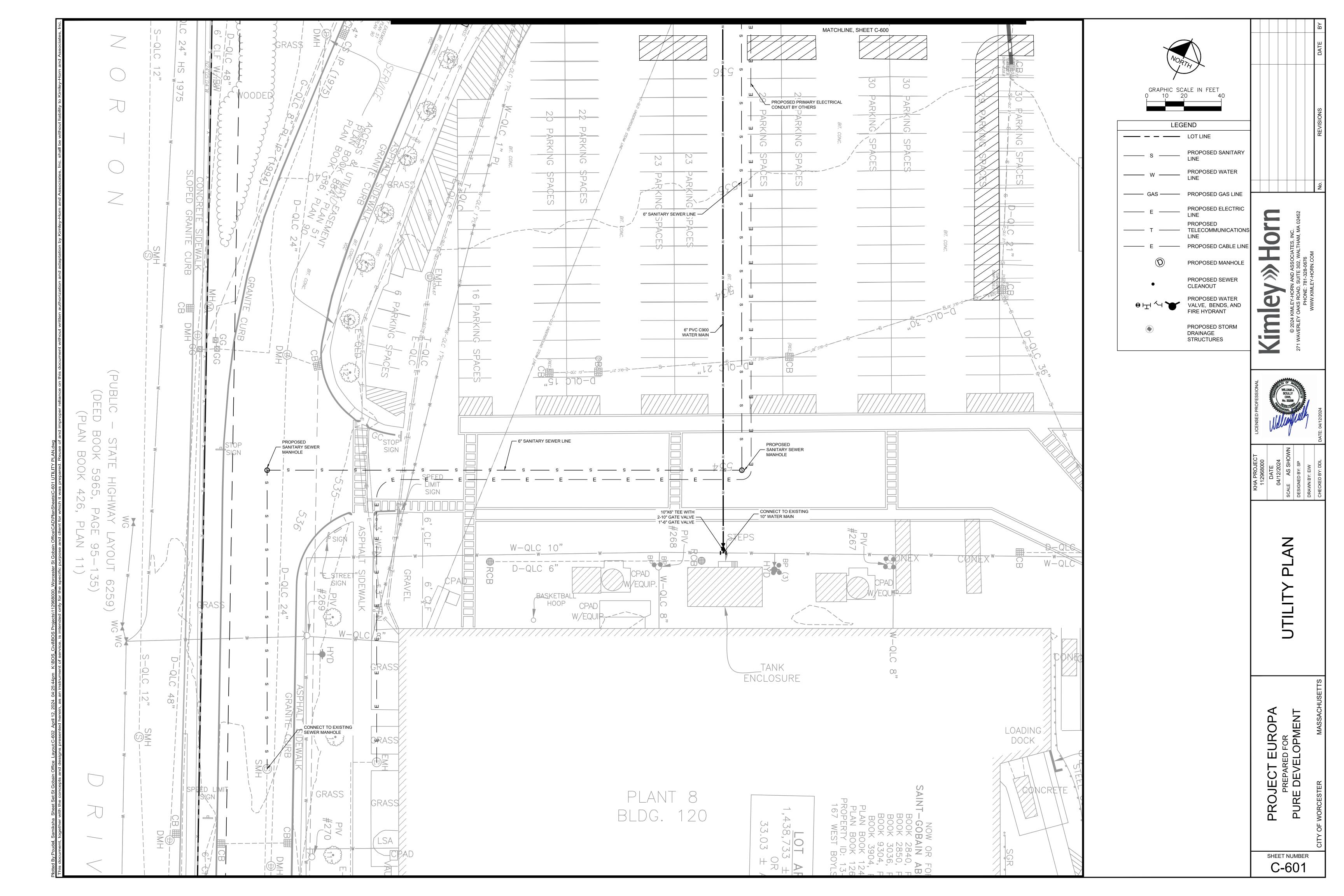


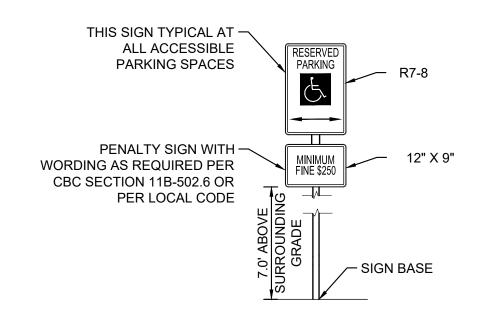


PREPARED FOR PURE DEVELOPMENT







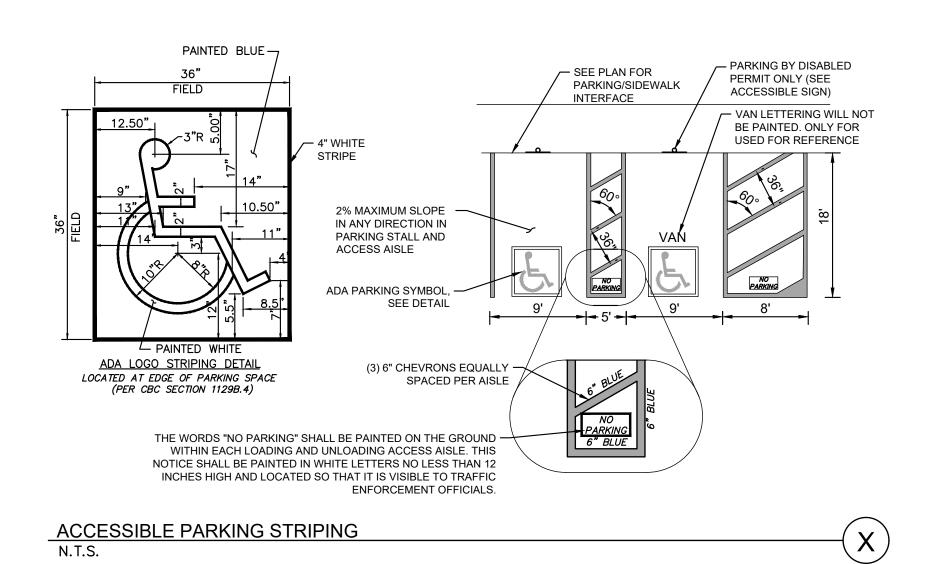


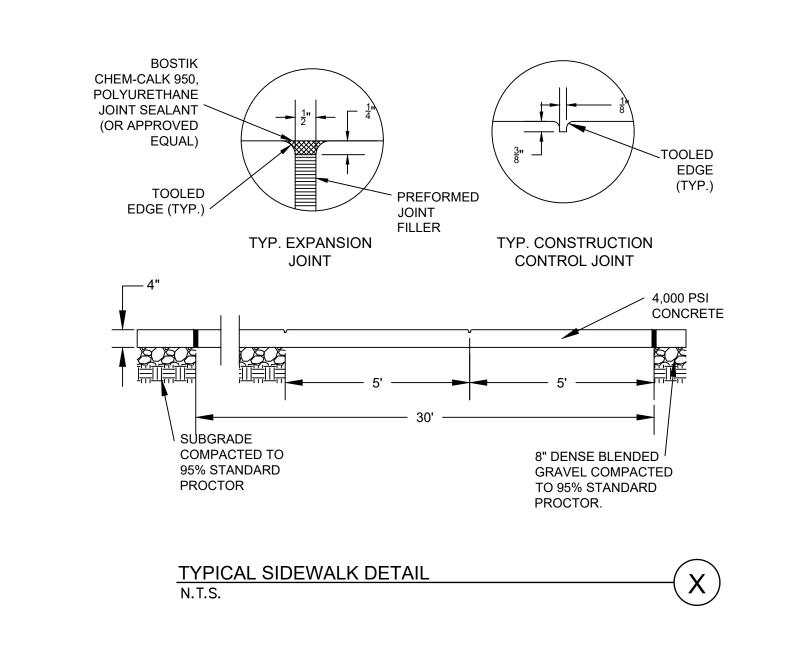
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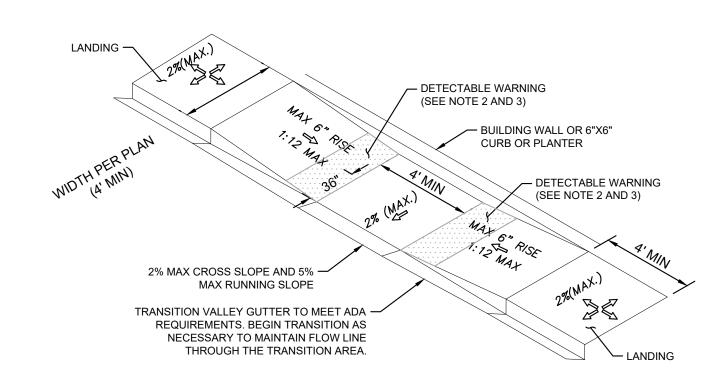
- SIGNS SHALL CONFORM WITH THE MOST CURRENT MASSACHUSETTS DOT STANDARDS.
- 2. SIGNS SHALL BE MOUNTED ON A POST.

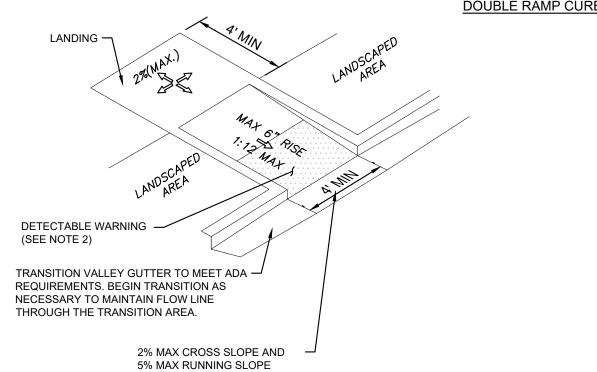
ACCESSIBLE PARKING STRIPING

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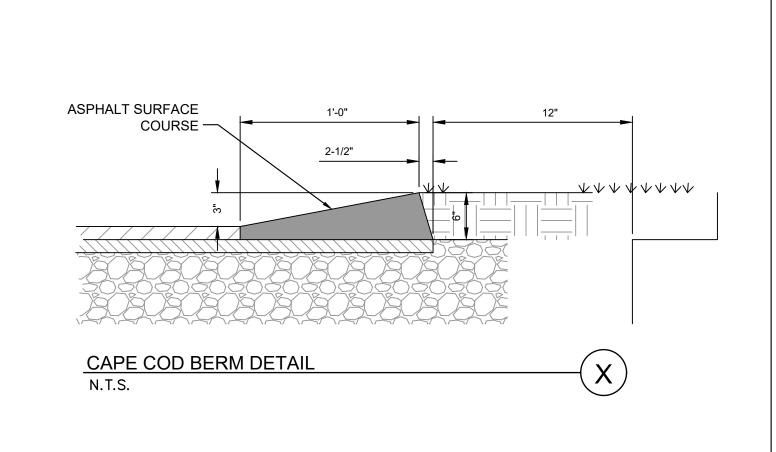
IN-LINE CURB RAMP

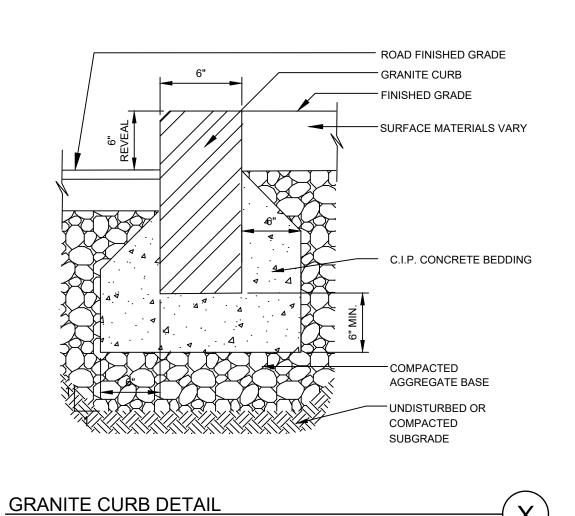
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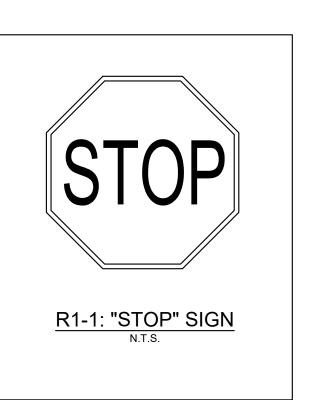
- 1. ALL ACCESSIBLE COMPONENTS CONSTRUCTED AS PART OF THESE PLANS SHALL COMPLY WITH THE LOCAL, STATE, AND FEDERAL REGULATIONS WHICHEVER ARE MORE STRINGENT.
- 2. CURB RAMPS SHALL HAVE A DETECTABLE WARNING EXTENDING THE FULL WIDTH OF THE CURB RAMP AND 3' DEEP. GROOVED SURFACES ON OUTDOOR CURB RAMPS ARE NOT PERMITTED. VERIFY LOCAL REQUIREMENTS WITH THE BUILDING DEPARTMENT. REFER TO TRUNCATED DOMES DETAIL AND REQUIREMENTS IN THE CALIFORNIA BUILDING CODE.
- 3. PARALLEL CURB RAMPS SHALL HAVE A DETECTABLE WARNING EXTENDING 36" DEEP ALONG THE FLUSH TRANSITION BETWEEN STREET AND SIDEWALK. REFER TO TRUNCATED DOMES DETAIL.
- 4. PUBLIC SIDEWALK CURB RAMPS CONSTRUCTED WITHIN A PUBLIC RIGHT- OF -WAY, IN ABSENCE OF LOCAL ROADWAY GUIDELINES, SHALL MEET OR EXCEED LOCAL REGULATIONS.
- CURB RAMP SURFACES (FLARES AND RAMP) SHALL HAVE A DIFFERENT TEXTURE FROM THE SURROUNDING PAVEMENT.
- 6. CURB RAMPS SHALL BE CONCRETE WITH STRENGTH OF 2500 PSI.
- . INSTALL 1/4" EXPANSION JOINT FILLER MATERIAL BETWEEN A NEW CURB RAMP AND THE EXISTING SIDEWALKS.
- 8. WATER PONDING WITHIN THE CURB RAMP LIMITS IS NOT ALLOWED.9. NO GRADE BREAK IS ALLOWED ALONG THE RAMP SURFACE.
- 10. CROSS SLOPE OF THE CURB RAMP SURFACE SHALL BE LESS THAN 2%.
- 11. TRANSITION CHANGE IN ELEVATION IS NOT TO EXCEED 1/2" WITHIN AN ACCESSIBLE ROUTE.
- 12. DIAGONAL CURB RAMP SIDE SLOPE VARIES UNIFORMLY FROM A MAXIMUM OF UP TO 10% AT CURB TO CONFORM WITH LONGITUDINAL SIDEWALK SLOPE ADJACENT TO TOP OF THE RAMP.

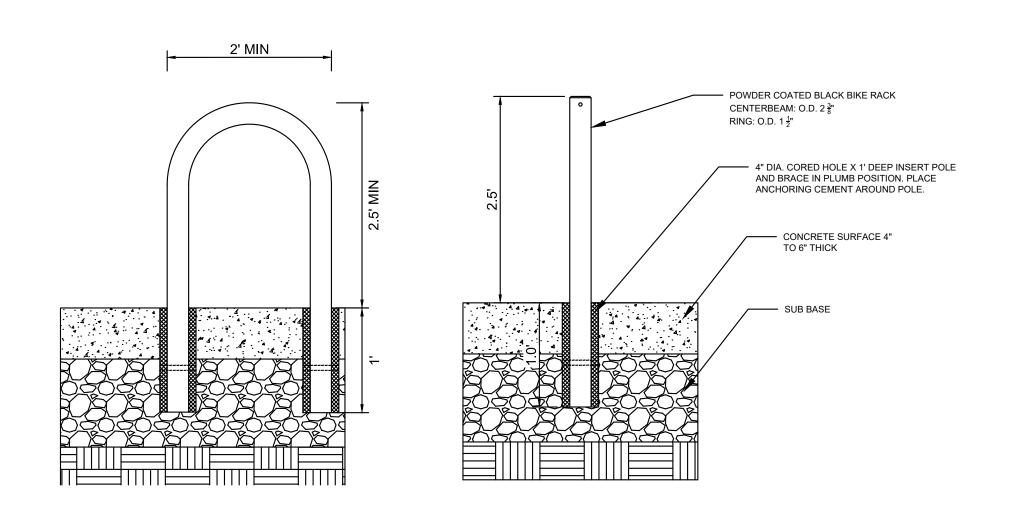
ACCESSIBLE RAMP DETAIL

N.T.S.







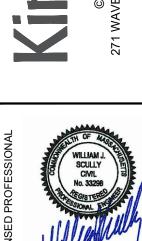


NOTES

- 1. BICYCLE RACKS SHALL BE INSTALLED AT LEAST 3 FEET FROM ANY OBSTRUCTIONS AND AT LEASE 2 FEET FROM THE BACK OF CURB, AND ORIENTED PARALLEL TO THE ROADWAY.
- 2. CORE HOLES FOR CONCRETE FOOTINGS SHALL BE NO LESS THAN 4 INCHES IN DIAMETER AND NO LESS THAN 12 INCHES DEEP INTO THE GROUND.

BIKE RACK

N.T.S.



CALE AS SHOWN
ESIGNED BY: SP
RAWN BY: EW

DATE

04/12/20;

SCALE AS S

DESIGNED BY: S

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VELOPMENT

PROJECT EUROI PREPARED FOR PURE DEVELOPME

<u>Dimensions for Blocks behind Bends –</u> <u>Horizontal Thrust</u>

		1/4 (90°)	1/8 (45°)	1/16 (22 1/2°)	1/32 (11	
		Bend	Bend	Bend	1/4°) Bend	
6"	J	1' 0"	1' 0"	1' 0"	1' 0"	
	K	2' 0"	1' 0"	1' 0"	1' 0"	
	L	2' 0"	2' 0"	1' 0"	1' 0"	
	М	1' 0"	1' 0"	1' 0"	1' 0"	
Volume (cu yd)		0.07	0.04	0.03	0.03	
o"	J	1' 0"	1' 0"	1' 0"	1' 0"	
	K	2' 6"	1' 6"	1' 0"	1' 0"	
8"	L	3' 0"	2' 6"	2' 0"	1' 0"	
	M	1' 0"	1' 0"	1' 0"	1' 0"	
Volume (cu yd)		0.13	0.07	0.05	0.03	
	J	1' 3"	1' 3"	1' 3"	1' 3"	
40"	K	3' 6"	2' 6"	2' 0"	1' 0"	
12"	L	3' 0"	3' 0"	2' 0"	2' 0"	
	М	1' 0"	1' 0"	1' 0"	1' 0"	
Volum	Volume (cu yd)		0.12	0.11	0.07	
	J	1' 6"	1' 6"	1' 6"	1' 6"	
16"	K	4' 6"	3' 0"	2' 6"	1' 6"	
16"	L	5' 0"	4' 0"	3' 0"	2' 6"	
	M	1' 3"	1' 3"	1' 3"	1' 6"	
Volum	Volume (cu yd)		0.35	0.23	0.16	
	J	2' 0"	2' 0"	2' 0"	2' 0"	
0 4"	K	7' 0"	4' 6"	3' 5"	2' 6"	
24"	L	7' 0"	6' 0"	4' 0"	3' 0"	
	M	1' 6"	1' 6"	1' 6"	1' 6"	
Volum	e (cu yd)	1.58	1.0	0.58	0.45	

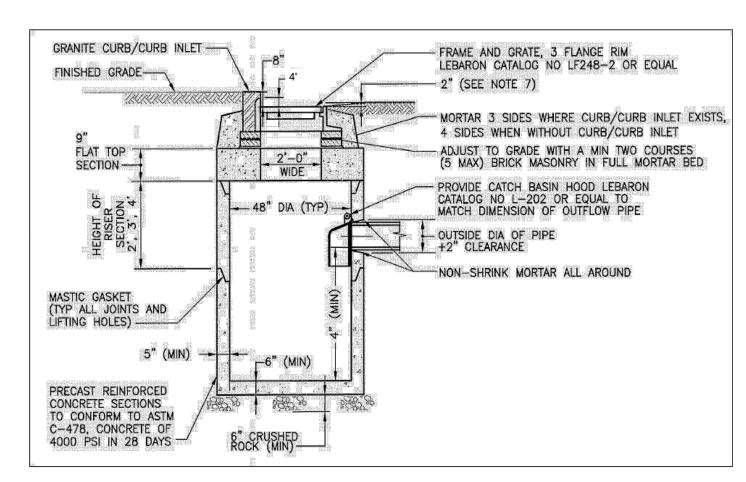
Worcester 3/1/2023

<u>Dimensions for Blocks behind Tees and</u> <u>Plugs – Horizontal Thrust</u>

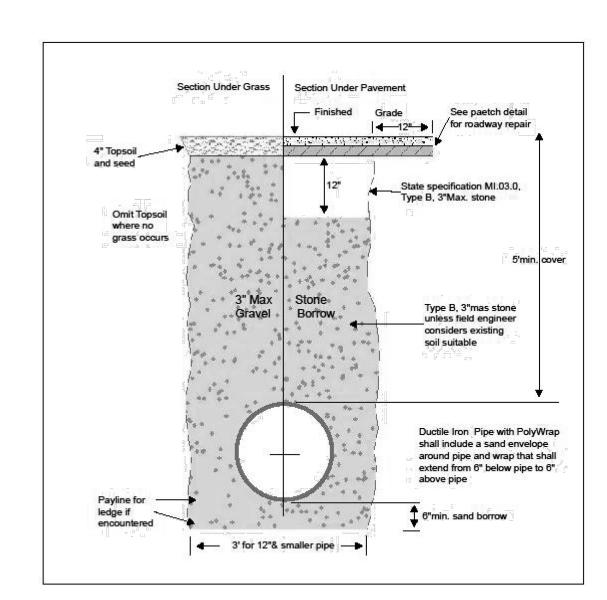
3-40

	E	F	G	Н	Volume (CU. YD.)
6"	1' 0"	1' 6"	2' 0"	1' 0"	0.06
8"	1' 0"	2' 0"	2' 6"	1' 0"	0.09
12"	1' 0"	3' 0"	3' 6"	1' 3"	0.20
16"	1' 3"	4' 0"	4' 0"	1' 6"	0.40
24"	1' 6"	7' 0"	5' 0"	2' 0"	1.2

3-39



DEEP SUMP CATCH BASIN adapted from the University of New Hampshire



Trench Detail	Rev. No.	By	Date
Typical	1	M.F.J	1/24/79
	2	A.V.C.	4/13/93
City of Worcester	3	A.C.M.	4/1/05
DPW&P	Drawn B	Drawn By: R.H.	
Water Operations	Checked	Checked By: M.E.D.	
		Last update 2/3/2020	

3'-9" FROM BUILDING FACE. 2'-0"
FROM EDGE OF PAVEMENT, OR EDGE OF
PARKING STALL (UNLESS OTHERWISE
SPECIFIED)

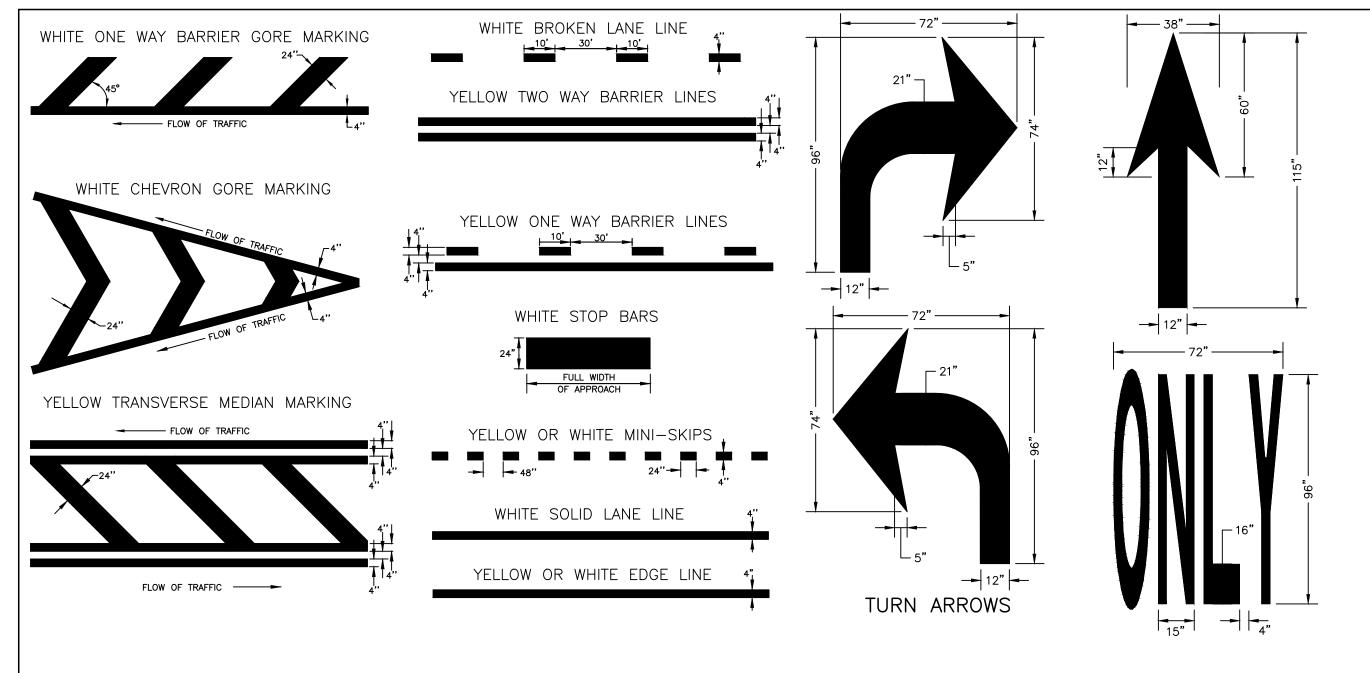
PRECAST CONCRETE
WHEELSTOP LENGTH PER
LOCAL CODES
PAVEMENT
SURFACE

4" TO 6"

PAVEMENT
SURFACE

PAVEMENT, MIN. 18"

PRECAST CONCRETE
WHEELSTOP
N.T.S.



ROADWAY PAVEMENT MARKINGS

112968000
DATE
04/12/2024
SCALE AS SHOWN
DESIGNED BY: SP

CONSTRUCTION

PEVELOPMENT

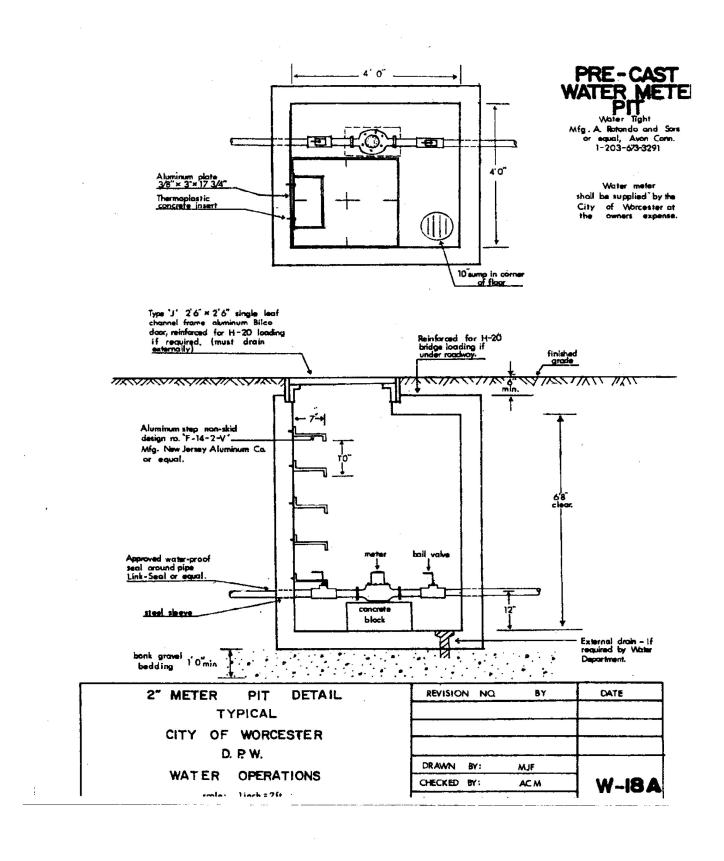
PROJECT EU
PREPARED FO

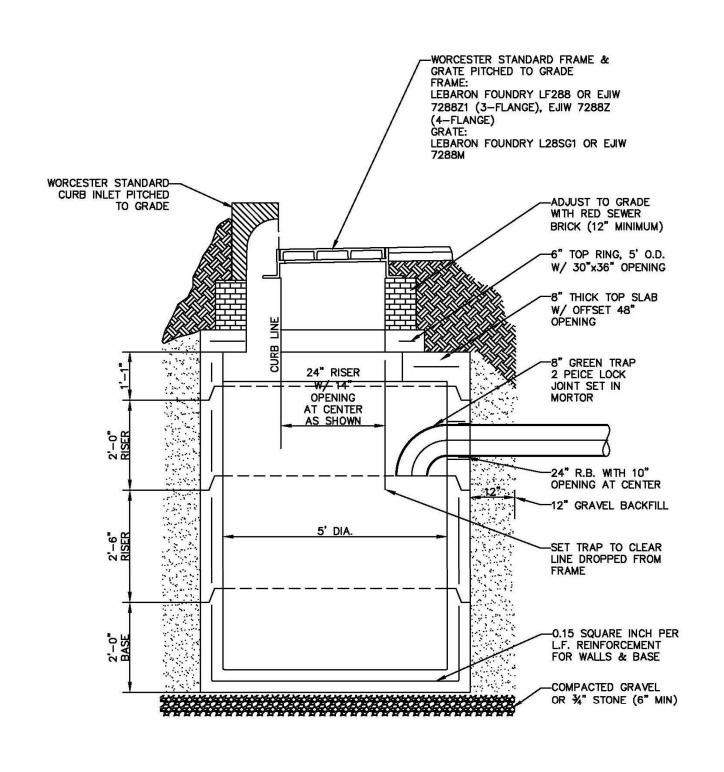
SHEET NUMBER
C-701

Worcester 3/1/2023

Worcester 3/1/2023

3-8





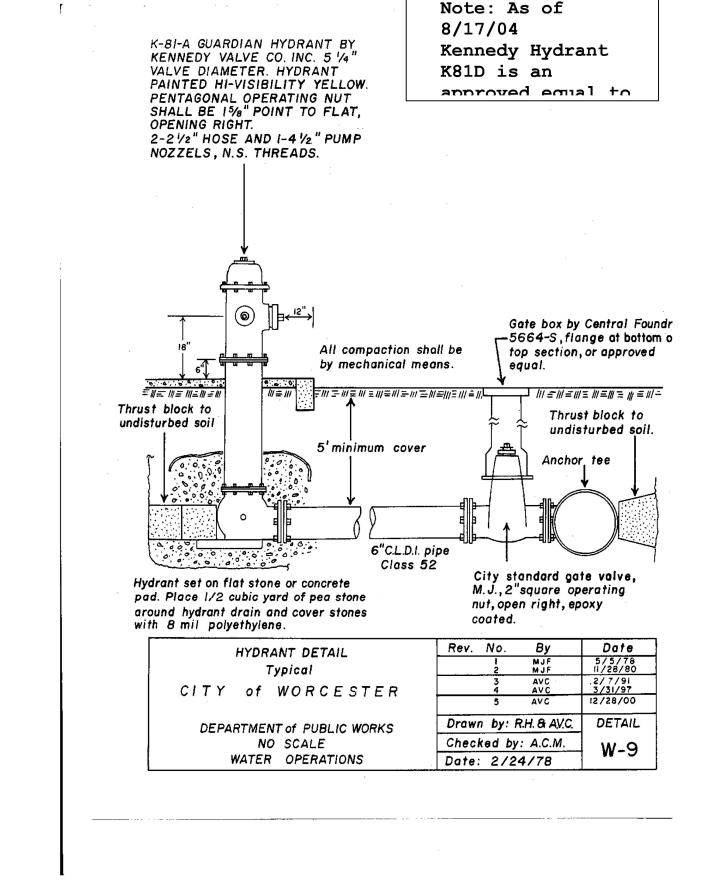
TYPICAL PRECAST CATCH BASIN

Worcester 3/1/2023

3-60

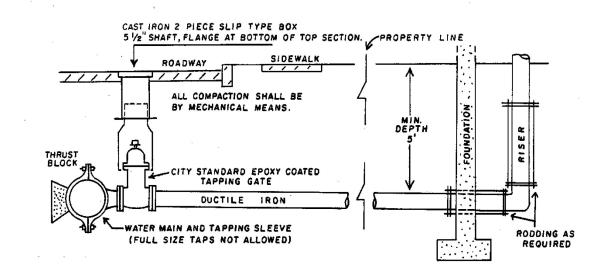
Worcester 3/1/2023

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Worcester 3/1/2023

3-29

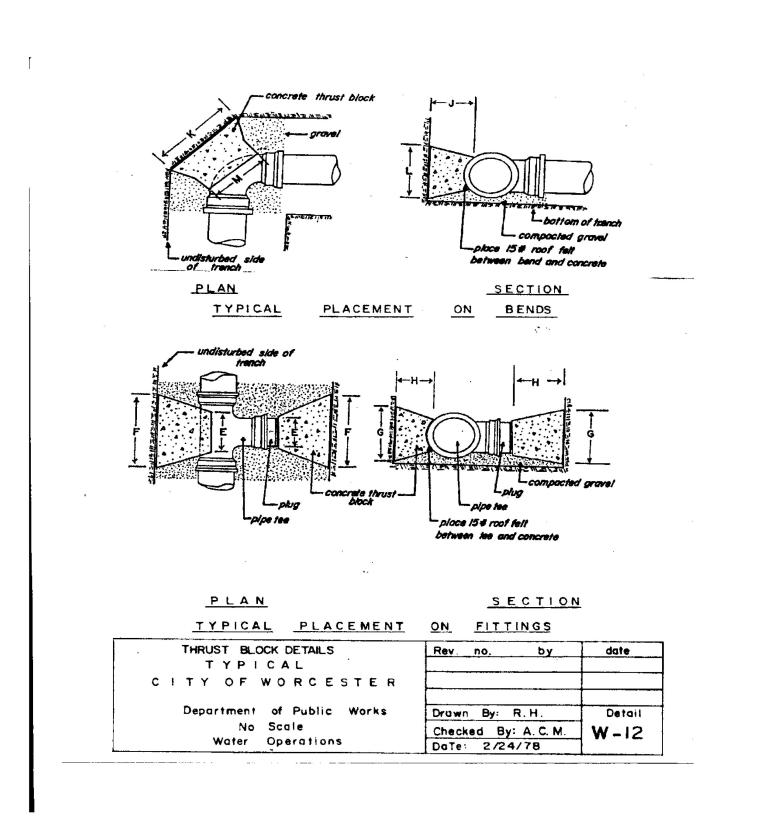


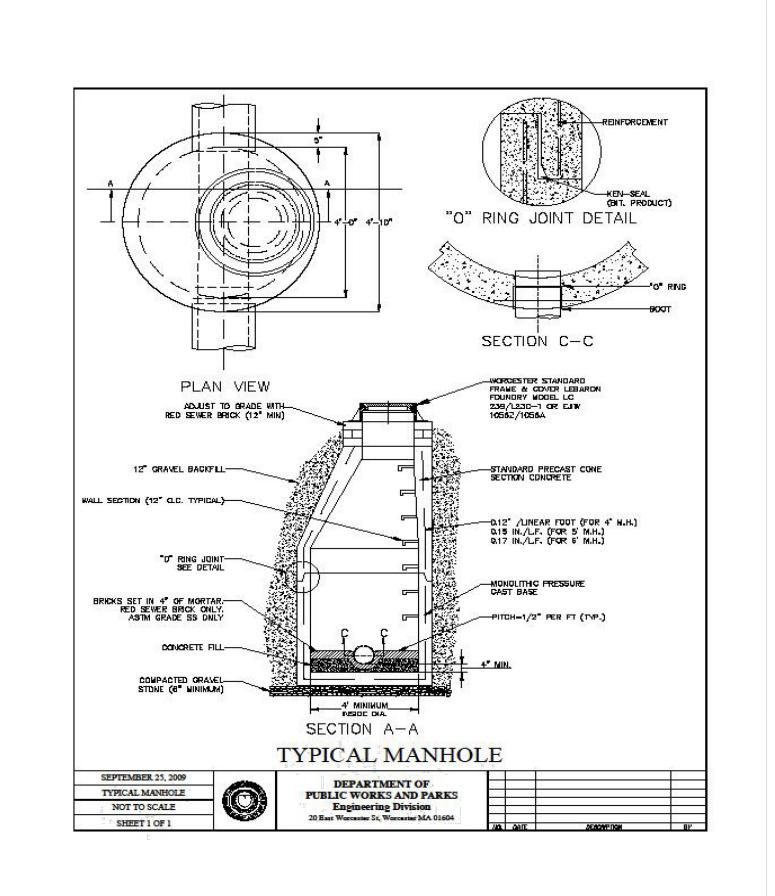
GENERAL NOTES

- 1. Tapping sleeve shall be cast or ductile iron mechanical joint type. Tapping gate to be City Standard Epoxy Coated. The operating nut shall be 2 inches square and shall open right.
- 2. If excavated material is not suitable for backfilling, then the Contractor shall backfill with Gravel Borrow. Material used for backfilling shall contain no stones larger than 3 inches in its greatest
- 3. Before any excavation is done, a Street Opening Permit shall be obtained from the Public Works office at 20 East Worcester Street. All paving shall conform to City of Worcester D.P.W. standards.
- 4. Main line valves are to be operated by the City only. Costs incurred in shutting down mains due to the negligence of the Contractor as determined by the Field Inspector shall be paid by the Contractor. All tapping sleeves and tapping valve assemblies shall be hydrostatically pressure tested prior to tapping. The test shall be at 1-1/2 times the working pressure of the existing main or a minimum of 150 psi and shall be maintained for two hours, or as directed by the Field Engineer.
- 5. Upon installation of the gate box, the Contractor shall operate the tapping gate to the satisfaction of the Field Inspector prior to acceptance of the job.

S:\WATER\STANDARD\General Notes for Large Service Detail.DOC

LADOS OSDIOS DETAIL	REV NO. BY	DATE	
LARGE SERICE DETAIL	1 AVC	4/2/97	
TYPICAL			
CITY OF WORCESTER	RE-DRAWN BY: AVC	4/2/97	
D. P. W.	DRAWN BY: VJK	DETAIL	
WATER OPERATIONS	CHECKED BY: ACM	w-8c	
NO SCALE	DATE 2/24/78		





2-26

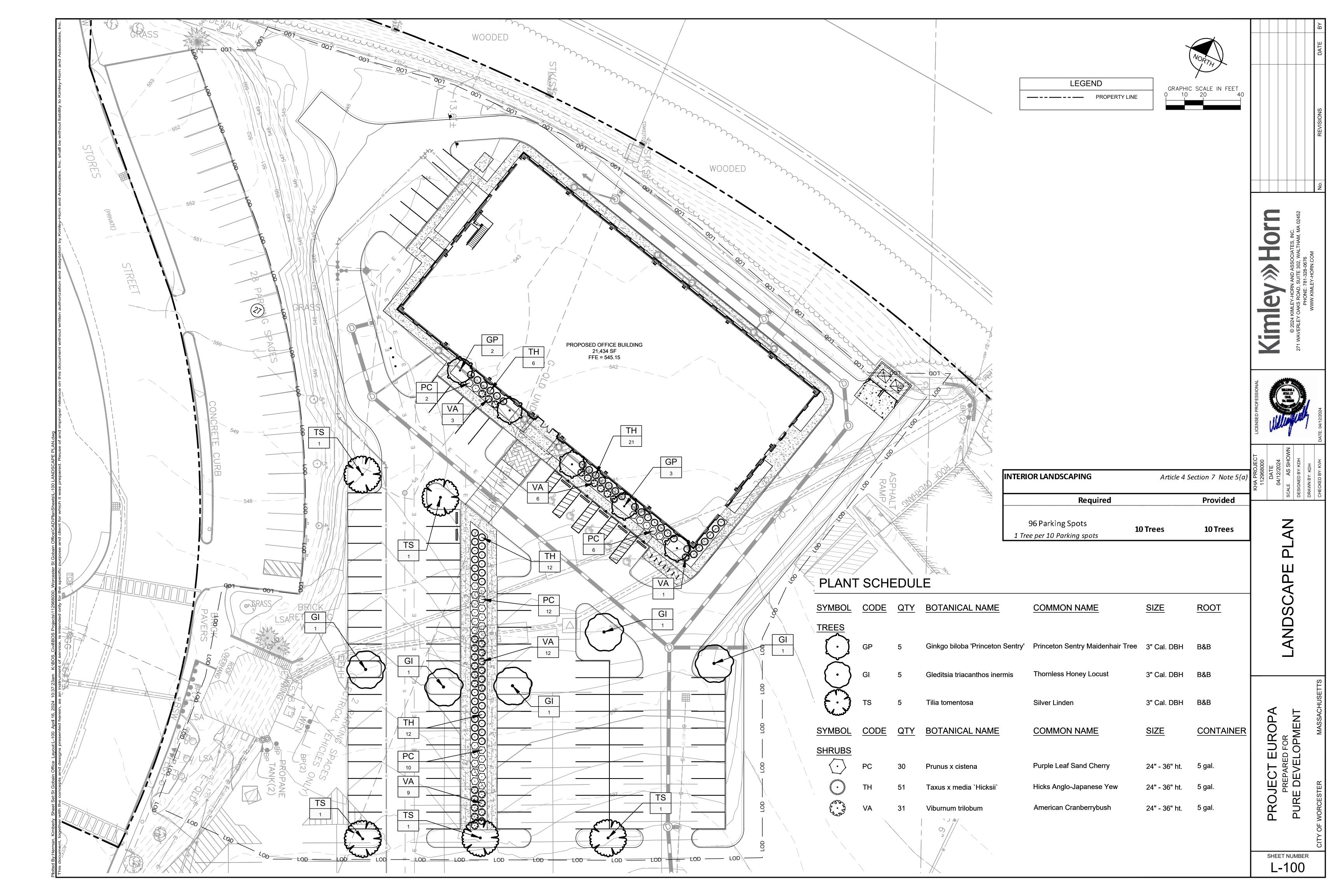
3-24 Worcester 3/1/2023

Worcester 3/1/2023

3-37

Worcester 3/1/2023

EUROPA DE



GENERAL NOTES

- 1. Plants shall be healthy, vigorous material, free of pests and diseases and are subject to approval/rejection of the
- Landscape Architect prior to, during and after installation. 2. Contractor shall identify all materials at growing location prior to purchase and submit digital photographs, and source list to the Landscape Architect for approval at a minimum of six (6) calendar weeks prior to installation. Plants not approved shall be resourced and resubmitted.

- 3. Planting beds and individual tree plantings shall be mulched continuously as specified. 4. Prior to construction the contractor shall be responsible for locating underground utilities and execute work in a H.Planting Mix
- manner that avoids damage to utilities during the course of work. Contractor shall be responsible or remedy of any

 1. 85% topsoil and 15% Compost damage to utilities, structures, site appurtenances that occur as a result of landscape related work.
- 5. Contractor is responsible for verifying quantities shown on documents. Field adjustments shall be approved by Landscape Architect prior to installation. Quantities indicated on drawings are for reference-it is the Contractor's responsibility to ensure full coverage of plants at the indicated spacing.
- 6. Contractor is responsible for maintenance of all plantings including, but not limited to watering, mowing, edging, spraying, mulching, fertilizing, of plantings and turf areas for one (1) calendar year from date of certificate of occupancy. Contractor is responsible for warranty of all plant material for a period of one (1) calendar year from date of certificate of occupancy. Warranty replacement planting shall meet or exceed the original specification identified on drawings. Replacement planting shall extend the same warranty as originally installed materials. Plantings and grass areas shall be flourishing and fully thriving at end of warranty period.
- 7. Plants identified for replacement by Owner, Landscape Architect shall be replaced immediately by the Contractor unless otherwise agreed upon. Plantings (trees, shrubs, groundcover) subject to replacement by warranty shall exhibit characteristics of 30% dead-per individual plant, non-contributing or disease compromised. Grass areas suitable for acceptance shall demonstrate 85% sustained/consistent and continuous, densely established coverage. Contractor shall perform a site review at end of warranty period and provide the Owner with written documentation
- of the site, including plant health, warranty replacement items, and conditions that may be influencing plant health. Contractor shall remove from plants and site, all staking and guying material at end of warranty period. 8. Contractor shall comply with all local, state and federal requirements, codes and regulations related to the work
- undertaken. 9. All material including planting operation appurtenances shall be of domestic origin manufacture and sourced within
- 100 miles of the project site. 10. Contractor is responsible for coordination among trades operating on site. Coordination and if necessary resulting modifications to schedules are responsibility of the Contractor.

PERFORMANCE SPECIFICATION

I. PLANTS

- 1. Live healthy plants free of dead branches and parts
- 2. Free of disease, insect, injury and damage
- 3. Unbroken, intact, dense and solid rootballs and containers, without cracks, flat sides or previously repaired damage.
- 4. Free of girdling roots or rootbound/circling container conditions
- 5. Plants of consistent in growth habit and healthy character 6. Free of compromising growth conditions such as weak crotch connections, crossed branches, snags and scars
- 7. Point of origin growing location within 100 miles of project site 8. Graded, standards, caliper, sizes and stock consistent with ANSI Z60.1, American Standard for Nursery Stock most
- current edition
- 9. Species identified consistent with:
- 9.1. <u>Hortus Third: Concise Dictionary of Plants Cultivated in the United States and Canada</u>, most current edition 9.2. Manual of Woody Plants: Their Identification, Ornamental Characteristics, Culture, Propagation and Uses,

10. All disturbed areas shall be grass seed unless otherwise identified on landscape plans

B. Trees:

1. Deciduous Single Trunk

a. Full, straight and upright with consistent symmetrical natural branching pattern throughout b. Branching Height-seven (7) feet to lowest branch in two years unless otherwise required by local jurisdiction

2. Deciduous Multi-Trunk

a. Full and upright with straight consistent symmetrical natural branching pattern throughout b. Canes evenly spaced and of similar growth habit

c. Free of suckers and extraneous branching

3. Evergreen Single-Trunk

a. Full and upright with continuous symmetrical dense natural habit

b. Clear branching height twelve (12) inches above top of rootball c. Free of suckers and extraneous branching

d. Do not shear or otherwise prune to shape plantings

C.Evergreen and Deciduous Shrubs

- 1. Full, dense and naturally symmetrical.
- 2. Consistent with container and/or balled and burlapped size 3. Free of suckers and extraneous branching
- 4. Do not shear or otherwise prune or shape plantings
- **D. Evergreen and Deciduous Groundcover**

1. Full and dense in pots or flats

E. Perennials and Seasonal Color 1. Full and dense in pots or flats

F. Turf Grass

1. Subgrade

- a. Soil Mix-10% Compost, 90% topsoil by volume
- b. Preparation-loosen subgrade to a minimum depth of four (4) inches. Remove all non-natural materials including litter, stones, sticks and all items greater than 3/4 inch in any dimension
- c. Preparation-spread soil mix at a depth of four (4) inches continuously to meet grade elevations shown on

drawings. Allow for thickness of sod when applicable

- 2. Grass Sod a. Install not longer than twenty-four (24) hours from harvest
- b. Grass bed not less than two (2) inches in continuous thickness c. 100% continuous live sod coverage after first growing season and at end of warranty period.
- d. Of uniform non-varying density and continuous texture quality capable of growth and development immediately
- upon installation. Weed and noxious plant free e. Stagger installation rows and place aligned parallel to contours
- f. Fill joints solidly with planting bed preparation soil g. Provide anchor pins at twenty-four (24) inches on center for slopes greater than 4:1

3. Grass Seed a. Mix approved by the Landscape Architect

- b. Provide first and new of year seed crops in mix free of weed seeds and deleterious matter
- c. Provide seed mix not greater than 15% annual or perennial rye
- d. Coverage 85% continuous coverage live stand after first growing season and at end of warranty e. Replacement or overseeding mixes consistent with original application/installation
- f. Provide erosion blankets or other slope retention methods as noted on drawings

II. Materials and Appurtenances

A.Testing 1. Materials testing information/certificates/dated labels shall be current to the project and performed/certified not greater than 120 calendar previous days from current date of submittal for review

B. Top Soil

1. Neutral Ph balance 5.5 -7.5. Friable and containing 2.0-5.0% organic matter by dry weight. Continuously free of

- non-soil items such as stones, debris, sticks, trash, and deleterious matter greater than 3/4 inch in any direction. Clay content shall not exceed 25%. Gravel content shall not exceed 10%. Silt shall not exceed 25% C.Use of Existing Topsoil
- 1. Existing topsoil on-site may be repurposed with prior Owner approval. Contractor shall provide soil testing and additive program that demonstrates consistent performance and characteristics and composition as identified herein. Owner shall approve soil testing and soil amendment/additive methods and procedures

D. Shredded Hardwood Mulch

1. 100% organic shredded first year hardwood free of deleterious matter, rock, gravel and weed seed. Neutral Ph balance 5.5-7.5

Balanced 5.0-8.5 mature, stable and weed free produced by natural aerobic decomposition. Free of visible contaminants and toxic substances. Not greater than 5% sand, silt, clay or rock by dry weight. Consistent with US-EPA CFR Title 40 Part 503 Standards for Class A biosolids

G.Compost Testing

1. Prior to delivery on-site, the following items are required for approval by Owner: Feedstock percentage in final compost product; statement that the products meets federal, state and local health safety requirements 2. Provide copy of lab analysis less than 120 calendar days old verifying that the product meets described physical requirements; chemical contaminants; Ph; physical contaminants; biological contaminants (including a statement that fecal coliform and salmonella testing and results comply with requirements of the US Composting Council Seal of Testing approval programs

1. Granular 10% nitrogen, 6% Phosphorous, 4% Potassium granular form with 50% Nitrogen in organic form. Product and Material Safety Data as approved by Owner

1. Product and Material Safety Data as approved by Owner

1. Potable only unless otherwise approved by Owner

1. 2 x 2 x 48 inch square of sound hardwood, painted flat black on all sides

M.Tree Ties

1. Villa Non-Abrasive Rubber Tree Ties or approved equal

N.Filter Fabric

1. Mirafi 140-N or approved equal

III. Execution

- **A.Site Conditions** 15. Inspect site and notify Owner in writing of acceptance with indication that project conditions are acceptable are
- suitable to proceed with work. Notify Owner of any existing damage and/or other conflicting conditions. 16.Do not proceed with work until unsatisfactory conditions have been satisfactorily remedied. Notify Owner of acceptance prior to commencement of work.
- 17. Notify Owner in writing of any conditions that may preclude successful completion of work including items such as coordination with other trades, incomplete work, drainage, soil temperature and/or composition, access to storage/work areas, damage to conditions, etc.
- 18. Notify Owner in writing immediately of any items that may influence work schedule, timing of tasks, materials delivery and/or installation and warranty responsibilities.
- 19. Coordinate and cooperate with other trades working in and adjacent to work areas. Examine drawings of other trades which show development of the entire project and become familiar with the scope of required work by others.

B. Planting Seasons

Recommended seasons are a general guide based on historical climatic data and typical performance of plantings, and which vary dependent on project-specific environmental conditions. Due to construction schedules, recommended planting seasons may/may not coincide with request(s) for certificate of occupancy for projects. Coordination of planting installation and seasons shall be reviewed with Owner on an individual project basis.

Deciduous and Evergreen Trees

- Do not install/plant the following trees between September 15 and March 15
- 1. Oaks (Quercus Sp., Such as Q. rubra, Q. alba, Q. phellos, Q. coccinnea)
- 2. Dogwood (Cornus Sp.) 3. Sweetgum (Liquidambar Sp.)
- 4. All Conifers and Evergreens except White Pine (Pinus strobus Sp.)

2. Deciduous and Evergreen Shrubs

3. Perennials a. Install/plant between March 15 and June 15 and/or September 15 and November 30

a. Install/plant between March 15 and June 15 and/or September 15 and November 30

4. Spring Flowering Bulbs a. Install/plant between September 15 and December 15

5. Seasonal Annuals a. Install/plant in season per approved schedule

6. Turf Grass

- a. Install/plant between March 15 and May 15 and/or September 15 and November 30
- b. Do not install/plant seed or sod turf grass areas when ambient air temperature is below forty (40) degrees Fahrenheit, or forecast for a twelve (12) hour period after completion of work

7. No Plant Installation

a. Do not install plantings or turf grass between June 15 and September 15, without approval by Owner

C.Positioning & Location of Plantings

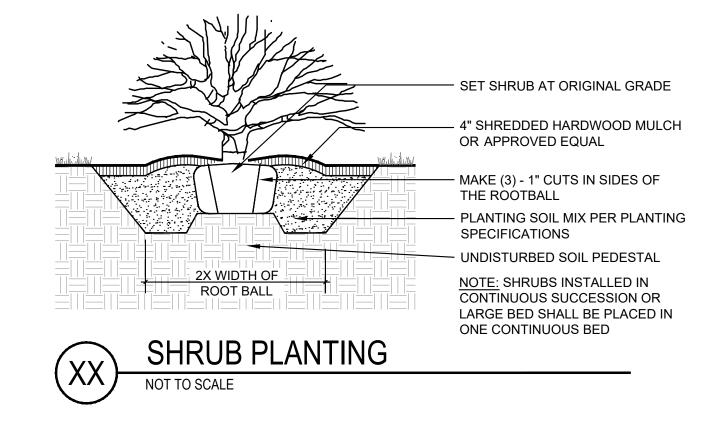
- 1. Position plants to show the most-prominent and well-formed face to most-public view
- 2. Field locate plants and location/spacing/dimension of planting beds on project site prior to beginning installation 3. Verify location of individual plants and plant beds prior to beginning installation. Do not proceed without Owner

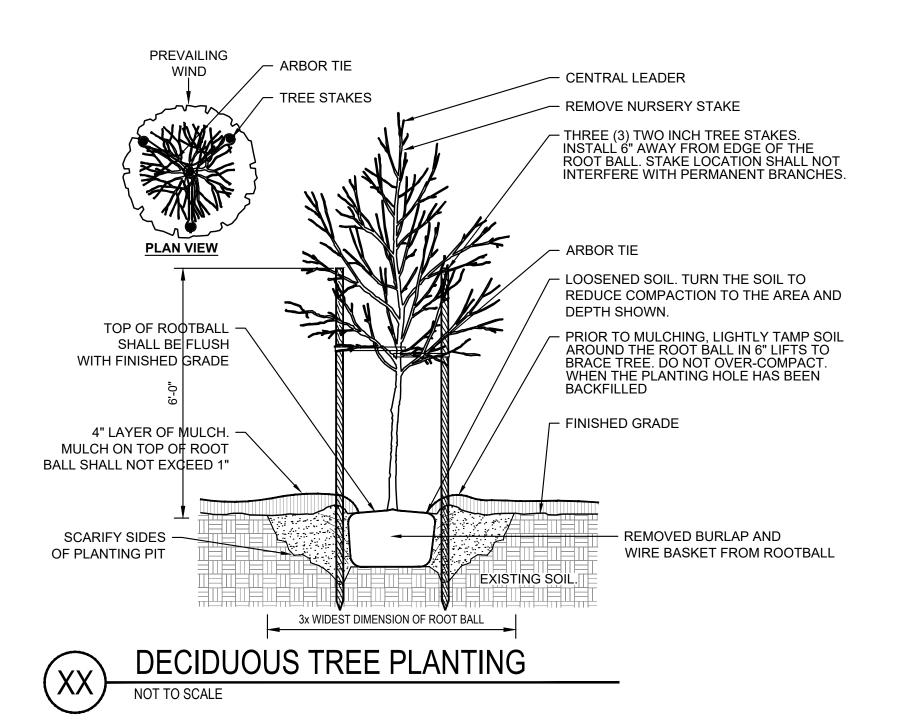
D.Implementation

- 1. Pursue work continuously without delay or interruption until completion unless notified otherwise by Owner
- 2. Provide project submittals ahead of commencement of work. Landscape Architect requires a minimum of ten (10) working days from date of receipt for review of submittals and response to Owner and Contractor. Plan accordingly for procurement of materials
- 3. Continuously update implementation schedule and notify Owner of progress. Delays related to material availability are not cause for non-completion of scheduled delivery of work
- 4. Report delays due to weather or site conditions immediately upon finding. Provide recommendation for remedy of schedule delays. Do not work, place or modify frozen soil
- 5. Report delays due to extraordinary natural or other conditions beyond control of Contractor

E. Clean Up

- 1. Remove trash, debris and work materials from site prior to request for substantial completion. Thoroughly clean surfaces impacted by work including building, parking areas, roadways, sidewalks, signs, lights, site furnishings,
- 2. Repair any damage to existing conditions that occurred during execution of work.
- 3. All clean-up and demobilization procedures shall be performed to satisfaction of the Owner and Landscape Architect.





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