TRILOGY APARTMENT COMPLEX CONSTRUCTION DOCUMENTS

IN LEE'S SUMMIT, JACKSON COUNTY, MO



PROJECT TEAM:

OWNER SUMMIT SQUARE RESIDENCE III, LLC. 3313 N OAK TRAFFICWAY KANSAS CITY, MO 64116

<u>DEVELOPER</u> NORTHPOINT DEVELOPMENT 3313 N OAK TRAFFICWAY KANSAS CITY, MO 64116 CONTACT: BRIAN BENJAMIN PHONE: 816.888.7380 EMAIL: BBENJAMIN@NORTHPOINTKC.COM

ENGINEER SITEPOINT, LLC 3313 N OAK TRAFFICWAY KANSAS CITY, MO 64116 CONTACT: NEIL W. HAAS, P.E. PHONE: 816.888.7380 EMAIL: NHAAS@NORTHPOINTKC.COM

SURVEYOR
ANDERSON ENGINEERING, INC 4240 PHILIPS FARM ROAD, SUITE 101 COLUMBIA, MO 65201 CONTACT: JOHN HUSS, P.E. PHONE: 573.397.5476

ARCHITECT NSPJ ARCHITECTS 3515 W. 75TH STREET, SUIT 201 PRAIRIE VILLAGE, KS 66208 CONTACT: SARA WELLS PHONE: 913.8311415

UTILITY CONTACT LIST:

PHONE:816.969.1800

PHONE:888.471.52.75 DOMESTIC GAS SPIRE

PHONE:816.756.5252 WATER SERVICE CITY OF LEE'S SUMMIT PHONE:816.969.1900



3515 W. 75TH STREET, SUITE 201

PRAIRIE VILLAGE, KS 66208 P. 913.831.1415 F. 913.831.1563 NSPJARCH.COM



PROPERTY DESCRIPTION:

AN 11.830 ACRE PORTION OF LOT 10, SUMMIT FAIR, SECOND PLAT, LOTS 8, 10-14 AND TRACT C, A SUBDIVISION IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, BEING MORE PARTICULARLY DESCRIBED AS

BEGINNING AT A POINT ON THE WEST LINE OF SAID LOT 10 BEING NORTH 3° 08' 10" EAST, A DISTANCE OF 457.59 FEET FROM A 1/2" IRON BAR FOUND AT THE SOUTHEAST CORNER THEREOF; THENCE NORTH 3° 08' 10" EAST, A DISTANCE OF 1025.00 FEET ALONG SAID WEST LINE;

THENCE, DEPARTING SAID LINE AT RIGHT ANGLES, SOUTH 86° 51' 50" EAST, A DISTANCE OF 587.85 FEET TO THE EAST LINE OF SAID LOT 10;

THENCE SOUTHERLY ALONG THE EAST LINE OF LOT 10, ON A CURVE TO THE RIGHT 848.89 FEET, SAID CURVE HAVING A RADIUS OF 1514.91 FEET, CENTRAL ANGLE OF 32° 06' 23" AND A CHORD BEARING SOUTH 15° 21' 15" WEST FOR 837.83 FEET;

THENCE SOUTH 31° 24' 27" WEST ALONG THE EAST LINE OF LOT 10, A DISTANCE OF 132.80 FEET TO A POINT OF CURVATURE; THENCE SOUTHERLY ALONG THE EAST LINE OF LOT 10, ON A CURVE TO THE LEFT 98.13 FEET, SAID CURVE HAVING A RADIUS OF 760.00 FEET, CENTRAL ANGLE OF 7° 23' 53" AND A CHORD BEARING SOUTH 27° 42'

THENCE, DEPARTING SAID EAST LINE, NORTH 86° 51' 50" WEST, A DISTANCE OF 306.85 FEET TO THE POINT OF BEGINNING.

NOTE: ALL BEARINGS HEREIN ARE BASED ON MISSOURI STATE PLANE GRID NORTH, WEST ZONE, NAD 83 (NSRS 2011) AS OBSERVED BY TOBIN ROBERTS, MORLS 2001015269 IN JANUARY OF 2022 AT WHICH POINT 5/8" IRON BARS WITH ID CAPS WERE SET AT ALL CORNERS.

PROJECT CONTROL:

CP 1 CP 4 N:1006085.33 N:1005856.64 E:2819227.33 E:2818546.66 ELEVATION:1010.39 ELEVATION:991.98 1-1/2" REBAR W/CAP 1/2" REBAR W/ SITEPOINT CAP

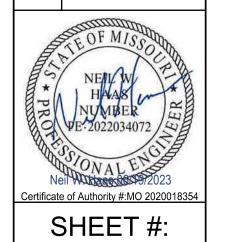
CP 2 CP 1000 N:1005467.89 N:1004637.63 E:2819172.83 E:2818559.79 ELEVATION:1006.37 ELEVATION:997.21 1-1/2" REBAR W/CAP FOUND 1/2" REBAR CP 3 CP 1001

N:1004895.44 N:1007156.13 E:2818846.42 E:2818697.32 ELEVATION:1002.66 ELEVATION:976.80 CHISELED "X" FOUND CHISELED "+"

	Sheet List Table
Sheet Number	Sheet Title
C-0001	COVER SHEET
C-0010	GENERAL NOTES
C-0100	EXISTING CONDITIONS PLAN
C-0200	SITE PLAN
C-0210	DIMENSION PLAN
C-0211	DIMENSION PLAN
C-0212	DIMENSION PLAN
C-0300	EROSION CONTROL PLAN - PHASE
C-0310	EROSION CONTROL PLAN - PHASE
C-0320	EROSION CONTROL PLAN - PHASE
C-0400	GRADING PLAN
C-0420	SPOT ELEVATION PLAN
C-0421	SPOT ELEVATION PLAN
C-0422	SPOT ELEVATION PLAN
C-0423	SPOT ELEVATION PLAN
C-0430	RETAINING WALL PLAN
C-0500	STORM SEWER GENERAL LAYOUT
C-0501	STORM SEWER GENERAL LAYOUT
C-0510	STORM SEWER PLAN AND PROFILE
C-0511	STORM SEWER PLAN AND PROFILE
C-0512	STORM SEWER PLAN AND PROFILE
C-0513	STORM SEWER PLAN AND PROFILE
C-0520	ROOF DRAIN PLAN
C-0530	DRAINAGE PLAN
C-0540	DRAINAGE TABLES
C-0601	SANITARY SEWER PLAN & PROFILE
C-0700	WATER MAIN PLAN & PROFILE
C-0701	WATER MAIN PLAN & PROFILE
C-0702	WATER MAIN PLAN & PROFILE
C-0900	UTILITY PLAN
C-2000	DETAIL SHEET
C-2001	DETAIL SHEET
C-2002	DETAIL SHEET
C-2003	DETAIL SHEET
C-2004	DETAIL SHEET



NO.: REVISIONS/APPROVALS:	BUILDING PERMIT	CITY COMMENTS	REVISED PER CITY COMMENTS				
::ON		_	2				
DATE:	2023.03.15	2023.04.11	2023.04.28	:			
REVIEWED BY:	M.G.D	DESIGNED BY: N.W.H	DRAFTED BY:	D.A.H	SP PROJECT #: 4024	NEIL W. HAAS, P.E.	2022034072



1. THE DESIGNS REPRESENTED IN THESE PLANS ARE IN ACCORDANCE WITH ESTABLISHED PRACTICES OF CIVIL ENGINEERING FOR THE DESIGN FUNCTIONS AND USES INTENDED BY THE OWNER AT THIS TIME. HOWEVER, NEITHER THE ENGINEER NOR ITS PERSONNEL CAN OR DO WARRANT THESE DESIGNS OR PLANS AS CONSTRUCTED EXCEPT IN THE SPECIFIC CASES WHERE THE ENGINEER INSPECTS AND CONTROLS THE PHYSICAL CONSTRUCTION ON A CONTEMPORARY BASIS AT THE SITE.

1. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES, WHETHER PUBLIC OR PRIVATE, PRIOR TO EXCAVATION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCY BETWEEN LOCATED UTILITIES AND UTILITIES SHOWN ON THE PLANS. THE OWNER, DEVELOPER, CIVIL ENGINEER, AND GOVERNMENT ENTITIES SHALL NOT BE HELD RESPONSIBLE FOR ACCURACY OR COMPLETENESS OF ANY SUCH INFORMATION. CONTRACTOR SHALL HAVE FULL RESPONSIBILITY FOR CHECKING ALL SUCH INFORMATION, LOCATING

ALL UNDERGROUND FACILITIES, COORDINATING WITH THE FACILITY OWNERS, AND ANY DAMAGE THERETO RESULTING FROM THE WORK. THIS SHALL BE CONSIDERED A SUBSIDIARY ITEM OF THE WORK, THE COST OF WHICH SHALL BE INCLUDED IN THE CONTRACTOR'S BID FOR THE WORK.

2. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE DETAILS AND SPECIFICATIONS SHOWN OR REFERENCED IN THESE PLANS. FOR WORK WITHIN CITY, COUNTY OR STATE RIGHT OF WAY, THE RESPECTIVE CITY, COUNTY OR STATE DEPARTMENT OF TRANSPORTATION (DOT) STANDARD DETAILS AND SPECIFICATIONS SHALL TAKE PRECEDENCE. 3. CONTRACTOR SHALL NOTIFY ANY AFFECTED OWNERS (UTILITY COMPANIES OR AGENCIES) IN WRITING AT LEAST 48 HOURS PRIOR TO CONSTRUCTION. NOTIFY MO ONE CALL OR DIG

SAFE SERVICE TO LOCATE EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION ACTIVITIES. 4. CONTRACTOR SHALL VERIFY AND ACCEPT ALL TOPOGRAPHY, SURVEY MONUMENTS, CONTROL POINTS, AND BENCHMARKS SHOWN HEREIN. CONTRACTOR SHALL NOTIFY THE

ENGINEER IF ANY DISCREPANCIES ARE FOUND PRIOR TO ANY CONSTRUCTION ACTIVITIES. DIMENSIONS AND COORDINATES ARE PROVIDED TO INDICATE THE DESIGN INTENT OF THE ENGINEER. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY

INCONSISTENCIES OR DISCREPANCIES FOUND DURING CONSTRUCTION. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND COORDINATES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

6. ALL CONSTRUCTION SHALL CONFORM TO LOCAL DESIGN AND CONSTRUCTION MANUALS APPLICABLE TO PRIVATE DEVELOPMENTS. WHERE DISCREPANCIES BETWEEN THESE PLANS AND LOCAL DESIGN AND CONSTRUCTION MANUALS EXIST THE LOCAL DESIGN AND CONSTRUCTION MANUALS SHALL GOVERN. 7. CONTRACTOR WILL BE RESPONSIBLE FOR SECURING ALL BONDS, INSURANCE, AND PERMITS REQUIRED BY THE CONTRACT DOCUMENTS, ALL GOVERNING AGENCIES HAVING

JURISDICTION OVER THE WORK PROPOSED BY THESE DOCUMENTS, THE OWNER, AND THE DEVELOPER. THE COST FOR ALL BONDS AND INSURANCE SHALL BE INCLUDED IN THE CONTRACTOR'S BID FOR THE WORK. 8. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND DISPOSING OF ALL WASTE FROM THE PROPOSED PROJECT SITE. WASTE INCLUDES ALL DEMOLITION DEBRIS, UNSUITABLE

FILL MATERIALS, TRASH, OR OTHERWISE USELESS OR DEFECTIVE MATERIALS THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS. WASTE SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE JURISDICTIONAL AUTHORITY REQUIREMENTS. 9. CONTRACTOR SHALL PERFORM A FINAL CLEAN-UP OF ALL WORK IN THESE DOCUMENTS PRIOR TO ACCEPTANCE BY THE OWNER OR DEVELOPER. THE SITE SHALL BE CLEAN AND

ORDERLY TO THE SATISFACTION OF THE OWNER OR DEVELOPER. 10. BUILDING INFORMATION, INCLUDING BUT NOT LIMITED TO BUILDING DIMENSIONS, DOOR LOCATIONS, GARAGE LOCATIONS, DOWNSPOUTS LOCATIONS, AND UTILITY CONNECTIONS, IS

SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL REFER TO ARCHITECTURAL, MEP, AND OTHER BUILDING SPECIFIC PLANS FOR SUCH INFORMATION. CONTRACTOR SHALL VERIFY THAT THERE ARE NO DISCREPANCIES BETWEEN THOSE PLANS AND THESE PLANS PRIOR TO CONSTRUCTION. 11. THERE MAY BE OTHER PROJECTS UNDER CONSTRUCTION, OR SCHEDULED TO SOON BEGIN CONSTRUCTION, IN THE IMMEDIATE VICINITY OF THIS PROJECT. CONTRACTOR SHALL

COORDINATE THEIR PROPOSED CONSTRUCTION ACTIVITIES WITH THOSE OF THE OTHER CONTRACTORS. 12. BY USE OF THE DOCUMENTS, THE CONTRACTOR HEREBY ACCEPTS TO HOLD THE OWNER, DEVELOPER, AND ENGINEER HARMLESS FOR ANY AND ALL INJURIES, CLAIMS, LOSSES OR DAMAGES RELATED TO THE PROJECT.

13. ALL PAVEMENT SECTIONS IN THE PLANS ARE AT THE RECOMMENDATION OF THE GEOTECHNICAL ENGINEER. THE OWNER, DEVELOPER, AND CONTRACTOR SHALL HOLD THE CIVIL ENGINEER HARMLESS FOR ANY PAVEMENT SECTION DEFICIENCIES.

14. ALL QUANTITIES LISTED IN THESE PLANS ARE PROVIDED FOR REFERENCE ONLY. 15. CONTRACTOR SHALL VERIFY ALL QUANTITIES. IF THE CONTRACTOR USES QUANTITIES IN THESE PLANS, THE CONTRACTOR ACCEPTS THEM AS THEIR OWN AND AGREES TO HOLD THE CIVIL ENGINEER, OWNER, AND DEVELOPER HARMLESS FOR ANY ERRORS OR OMISSIONS IN THE QUANTITIES.

16. CONTRACTOR IS RESPONSIBLE FOR RESTORATION OF THE RIGHT OF WAY AND REPLACEMENT OF CURB, DRIVEWAYS, IRRIGATION SYSTEMS, SIDEWALKS, TRAFFIC SIGNALS, AND ANY OTHER IMPROVEMENTS WITHIN THE RIGHT OF WAY WHICH ARE DAMAGED DURING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING ANY IMPROVEMENTS WITHIN THE RIGHT OF WAY THAT ARE NOT CONSTRUCTED TO THE REGULATORY AUTHORITY'S SPECIFICATIONS PRIOR TO ANY CONSTRUCTION ACTIVITIES.

17. CONTRACTOR SHALL PROTECT ALL PROPERTY CORNERS AND SURVEY MONUMENTS. IF ANY ARE DISTURBED OR DAMAGED THEY SHALL BE RESET BY A PROFESSIONAL SURVEYOR LICENSED IN THE STATE OF MO AT THE CONTRACTOR'S EXPENSE. CONTRACTOR SHALL HOLD THE OWNER, DEVELOPER, GOVERNMENT AND CIVIL ENGINEER HARMLESS FOR THIS EXPENSE OR ANY EXPENSE RESULTING FROM DISTURBING A PROPERTY CORNER OR SURVEY MONUMENT

18. PRIOR TO ORDERING PRECAST STRUCTURES, SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL 19. CONTRACTOR SHALL REPAIR ALL INFRASTRUCTURE TO REMAIN AND AREAS TO REMAIN UNDISTURBED THAT ARE DAMAGED BY CONSTRUCTION ACTIVITIES. CONTRACTOR REPAIR SHALL BE BETTER OR EQUAL TO THE PRECONSTRUCTION CONDITION.

20. CONTRACTOR SHALL MAINTAIN ONE SET OF AS-BUILT DRAWINGS ON SITE AND DISTRIBUTE THOSE DRAWINGS TO THE ENGINEER UPON COMPLETION. 21. CONTRACTOR SHALL COORDINATE WITH THE OWNER AND/OR DEVELOPER'S TESTING AGENCY FOR TESTING AND SPECIAL INSPECTIONS. COORDINATION WILL INCLUDE SCHEDULING,

OBTAINING SAMPLES, AND NOTIFYING THE TESTING AGENCY. ANY RETESTING OR REINSPECTION AS A RESULT OF NONCOMPLIANCE WILL BE AT THE EXPENSE OF THE CONTRACTOR. 22. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION STAKING.

23. CONTRACTOR SHALL PROTECT ALL TREES TO REMAIN. CONTRACTOR SHALL NOT OPERATE EQUIPMENT OR STORE MATERIALS UNDER THE DRIPLINES OF TREES TO REMAIN.

24. ALL PAINT ON ASPHALT OR CONCRETE PAVEMENT SHALL BE FAST DRY TRAFFIC MARKING PAINT. CONTRACTOR SHALL APPLY 2 COATS. 25. IF LIVESTOCK OR OTHER DOMESTICATED ANIMALS ARE PRESENT ON SITE, CONTRACTOR SHALL COORDINATE WITH THE OWNER AND DEVELOPER TO PROVIDE TEMPORARY FENCING

26. CONTRACTOR IS RESPONSIBLE FOR PERFORMING ALL WORK IN COMPLIANCE WITH OSHA REGULATIONS.

27. CONTRACTOR SHALL SUPPLY THE OWNER/DEVELOPER WITH A LIST OF ALL SUBCONTRACTORS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION.

1. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADEQUATE PROTECTION FOR ANY EXISTING UTILITIES THAT ARE TO REMAIN. 2. FOR ANY UTILITIES REMOVED, CONTRACTOR SHALL PROVIDE TEMPORARY SERVICE TO THE SATISFACTION OF THE OWNER OR DEVELOPER.

3. FOR ANY UTILITIES REMOVED, CONTRACTOR SHALL LEAVE A GOOD CONNECTION POINT AND MARK THE TERMINATION POINT WITH A 4' METAL STAKE PAINTED WITH THE UTILITY'S CORRESPONDING APWA UNIFIED COLOR CODE FOR MARKING OF UNDERGROUND UTILITIES.

4. CONTRACTOR IS RESPONSIBLE FOR PRESERVING ANY IRRIGATION SYSTEMS NOT INDICATED TO BE REMOVED IN THE DEMOLITION PLANS.

REPLACED FENCE SHALL BE OF THE SAME MATERIAL AND OF EQUAL OR GREATER CONDITION THAN PRIOR TO CONSTRUCTION.

5. CONTRACTOR SHALL PROVIDE CONTINUOUS ACCESS FOR THE SURROUNDING PROPERTIES AT ALL TIMES. 6. ANY EXCAVATION CONDUCTED AS PART OF DEMOLITION SHALL BE BACKFILLED WITH SUITABLE MATERIAL IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S REPORT. ANY FENCES REMOVED TO FACILITATE CONSTRUCTION SHALL BE REPLACED AT THE EXISTING LOCATION OR THE PROPOSED LOCATION AS DIRECTED BY THE ENGINEER. ALL

SITE PLAN NOTES

1. PARKING STRIPES SHALL BE 4-INCH WHITE PAINT HANDICAP STALL MARKINGS AND SIGNAGE SHALL BE CONSTRUCTED AT LOCATIONS SHOWN ON THE PLANS.

3. ALL PAVING DIMENSIONS ARE MEASURED FROM THE BACK OF CURB. WHERE NO CURB IN PROPOSED DIMENSIONS ARE MEASURED FROM THE EDGE OF PAVEMENT.

4. ALL DIMENSIONS SHOWN TO BUILDING ARE TO FACE OF BUILDING. REFER TO ARCHITECTURAL PLANS FOR BUILDING DIMENSIONS. 5. ALL STRIPING SHALL BE INCLUDED IN PAVING CONTRACTOR'S SCOPE OF WORK.

6. TRAFFIC CONTROL SIGNAGE SHALL BE FABRICATED AND INSTALLED PER THE NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) 7. CURB RETURN RADII ARE 4' UNLESS OTHERWISE NOTED.

EROSION CONTROL NOTES:

1. ALL CONSTRUCTION ACTIVITIES DISTURBING ONE ACRE OR MORE MUST OBTAIN STORM WATER DISCHARGE AUTHORIZATION FROM THE MISSOURI DEPARTMENT OF NATURAL RESOURCES. THE PRIMARY CONSTRUCTION SITE OPERATOR(S) MUST PREPARE AND IMPLEMENT A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) THROUGHOUT CONSTRUCTION WHICH INCLUDES THE EROSION CONTROL PLAN AND OTHER BEST MANAGEMENT PRACTICES (BMPS) SPECIFIED IN THESE PLANS.

2. LARGE CONSTRUCTION ACTIVITIES DISTURBING 5 ACRES OR MORE SHALL SUBMIT NOTICE OF INTENT (NOI) TO MDNR AND POST THE NOI ON SITE AT LEAST SEVEN (7) DAYS PRIOR TO BEGINNING CONSTRUCTION. POSTED NOTICES SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. 3. CONTRACTOR SHALL REVISE THE SWPPP WHENEVER CHANGING SITE CONDITIONS OR A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE HAS SIGNIFICANT EFFECT

ON THE DISCHARGE OF POLLUTANTS NOT PREVIOUSLY ADDRESSED; OR WHEN RESULTS OF INSPECTIONS BY SITE OPERATORS OR AUTHORITIES HAVING JURISDICTION INDICATE THE SWPPP IS PROVING INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANTS IN DISCHARGES FROM THE SITE. 4. A SWPPP MUST BE WRITTEN BY A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF MO OR CERTIFIED PROFESSIONAL IN EROSION & SEDIMENT CONTROL (CPESC)

5. ONLY AN INDIVIDUAL WITH THE CERTIFICATION OR LICENSURE REQUIRED BY THE LOCAL JURISDICTION MAY COMPLETE A STORM WATER EROSION CONTROL INSPECTION

6. CONTRACTOR TO IMPLEMENT EROSION CONTROL MEASURES ACCORDING TO THE SWPPP. 7. CONTRACTOR TO KEEP A COPY OF THE SWPPP AND A COPY OF THESE PLANS ON SITE AT ALL TIMES.

8. CONTRACTOR SHALL INCLUDE ALL REQUIRED INSPECTIONS, MONITORING, AND RECORDINGS OF SWPPP MANAGEMENT

9. CONTRACTOR SHALL MAINTAIN EROSION CONTROL MEASURES TO THE SATISFACTION OF THE OWNER, DEVELOPER, ENGINEER, AND AUTHORITY HAVING JURISDICTION. CONTRACTOR SHALL INSPECT ALL EROSION CONTROL DEVICES IMMEDIATELY AFTER EACH HEAVY RAINSTORM AND AT LEAST DAILY DURING PROLONGED RAINFALL.

10. PRIOR TO COMMENCING SITE CLEARING, CONTRACTOR SHALL IMPLEMENT ALL PHASE 1 EROSION CONTROL MEASURES.

11. SITE SHALL BE CLEARED TO REMOVE ANY ORGANIC MATERIAL, EXISTING VEGETATION, AND GROWTH SUCH AS SHRUBS, STUMPS, BUSHES, UNDERBRUSH AND TREES UNLESS NOTED TO REMAIN. ALL SUCH MATERIALS ARE TO BE REMOVED FROM THE SITE OR BURNED ONLY AS PERMITTED BY THE LOCAL AUTHORITIES HAVING JURISDICTION. 12. DISTURBED AREAS WHERE CONSTRUCTION ACTIVITIES HAVE CEASED FOR 14 OR MORE DAYS SHALL BE TEMPORARILY SEEDED AND WATERED UNLESS CONSTRUCTION ACTIVITIES

WILL RESUME WITHIN 21 DAYS IN THE AREA. 13. CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF EROSION AND SILTATION DURING ALL PHASES OF CONSTRUCTION.

14. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ANY ADDITIONAL EROSION CONTROL MEASURES REQUIRED TO COMPLY WITH THE SWPPP OR MDNR STORM WATER POLLUTION

15. CONTRACTOR SHALL NOT REMOVE EROSION CONTROL MEASURES UNTIL ACCEPTABLE VEGETATION IS ESTABLISHED AS DEFINED BY THE GENERAL PERMIT. 16. CONTRACTOR SHALL WATER THE SEEDED AND SODDED AREAS UNTIL 95% OF VEGETATION IS ESTABLISHED.

17. IRRIGATION SYSTEMS MUST BE INSTALLED AND REPAIRED BY A LICENSED IRRIGATION CONTRACTOR. CONTRACTOR SHALL INSTALL ANY REQUIRED IRRIGATION SYSTEMS PRIOR TO SODDING OR HYDROSEEDING. 18. CONTRACTOR SHALL FILE NOTICE OF TERMINATION WITHIN 30 DAYS OF FINAL STABILIZATION. NOTICE CANNOT BE FILED UNTIL LOCAL JURISDICTION APPROVAL IS GRANTED.

19. THE INTENT OF THIS EROSION CONTROL PLAN IS TO ASSIST THE CONTRACTOR IN HIS RESPONSIBILITY TO PROVIDE ALL MATERIALS, TOOLS, EQUIPMENT AND LABOR NECESSARY TO CONTROL EROSION, SILTATION AND DISCHARGES OF SOIL MATERIAL INTO DOWNSTREAM SYSTEMS OR RECEIVING CHANNELS. IF ANY METHOD OF CONTROL FAILS, THE CONTRACTOR

SHALL NOTIFY THE OWNER OR ENGINEER IMMEDIATELY, SO THE OWNER OR HIS AGENT CAN REVIEW THE CONTRACTOR'S PROPOSED METHOD OF REPAIR.

20. THIS PLAN INDICATES THE CRITICAL AREA(S) OF CONCERN AND THESE AREA(S) WILL BE CONTROLLED AT A MINIMUM. THE CONTROL MAY CONSIST OF TEMPORARY CONTROL MEASURES AS SHOWN ON THE PLANS OR ORDERED BY THE OWNER/DEVELOPER DURING THE LIFE OF THE CONTRACT TO CONTROL EROSION OR WATER POLLUTION.

21. THE OWNER OR DEVELOPER HAS THE AUTHORITY TO LIMIT THE SURFACE AREA OF ERODIBLE EARTH MATERIAL EXPOSED BY THE CONSTRUCTION OPERATION AND TO DIRECT THE CONTRACTOR TO PROVIDE CONSTRUCTION OPERATIONS AND TO DIRECT THE CONTRACTOR TO PROVIDE IMMEDIATE PERMANENT OR TEMPORARY POLLUTION CONTROL MEASURE TO PREVENT CONTAMINATION OF ADJACENT WATERS OR CONVEYANCES.

EARTHWORK AND GRADING NOTES: 1. ALL SITE PREPARATION, GRADING, EXCAVATION AND EMBANKMENT SHALL CONFORM TO THE GEOTECHNICAL ENGINEER'S REPORT AND RECOMMENDATIONS.

2. ALL GRADED AREAS SHOULD BE STRIPPED OF TOPSOIL, VEGETATION, ROOTS, STUMPS, DEBRIS, AND OTHER ORGANIC MATERIALS. 3. CONTRACTOR IS RESPONSIBLE FOR DEWATERING AND IT SHALL BE PERFORMED AT HIS EXPENSE.

4. MEDIANS, LANDSCAPE AREAS, AND CURB ISLANDS SHOULD BE GRADED TO DRAIN WATER OVER THE CURB OR ADJACENT PAVEMENT TO PREVENT PONDING UNLESS NOTED

5. CONTRACTOR SHALL PROVIDE THE ENGINEER WITH THEIR ESTIMATE OF EARTHWORK QUANTITIES PRIOR TO THE START OF CONSTRUCTION SO THAT ANY NECESSARY SITE

MODIFICATION CAN BE ADDRESSED PRIOR TO CONSTRUCTION. 6. CONTRACTOR SHALL INCLUDE ALL ROCK EXCAVATION QUANTITIES WHERE NECESSARY TO MEET DESIGN GRADE. CONTRACTOR TO SPECIFY METHOD FOR SUCH EXCAVATION

7. SUBGRADE SOIL SHALL BE PREPARED IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS. 8. CONTRACTOR SHALL GRADE LANDSCAPED AREAS TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS. HOLD DOWN SUBGRADE AS NEEDED FOR TOPSOIL AND MULCH

9. SPOT ELEVATIONS SHOWN HEREIN SHALL GOVERN OVER CONTOURS.

10. STOCKPILE AND HAUL ROAD LOCATIONS SHALL BE APPROVED BY THE ENGINEER, AUTHORITY HAVING JURISDICTION, AND OWNER. 11. CONTRACTOR SHALL BACKFILL ALL CURBS WITHIN 72 HOURS OF PLACEMENT.

12. ALL AREAS TO BE STABILIZED WITH VEGETATION OR MULCH SHALL HAVE A MINIMUM OF SIX (6) INCHES OF TOPSOIL, UNLESS OTHERWISE SPECIFIED ON THE LANDSCAPING PLAN. 13. PRIOR TO FINAL ACCEPTANCE OF THE PROJECT, ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED SMOOTH, TOPSOIL APPLIED, AND VEGETATION ESTABLISHED AS REQUIRED BY THE LOCAL JURISDICTION AND OWNER.

. CONTRACTOR SHALL MATCH EXISTING ELEVATIONS AT PAVEMENT CONNECTIONS, PROVIDE POSITIVE DRAINAGE TO PREVENT PONDING, AND PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING AND PROPOSED IMPROVEMENTS.

2. CONTRACTOR SHALL PROVIDE A FULL DEPTH SAW-CUT AND SMOOTH TRANSITION AT CONNECTION TO EXISTING PAVEMENT AND CURB. 3. CONTRACTOR SHALL NOT DAMAGE OR DISTURB EXISTING REINFORCING STEEL FOR SITE WORK. ALL REINFORCING SHALL BE INSTALLED WITH CHAIRS PER THE

PLANS AND SPECIFICATIONS. 4. SUBGRADE SHALL BE MAINTAINED TO WITHIN THE SPECIFIED REQUIREMENTS OF MOISTURE AND DENSITY UNTIL PAVING IS PLACED. PRIOR TO PLACING

PAVEMENT. THE CONTRACTOR SHALL RE—TEST THE AREAS SELECTED BY THE CONSTRUCTION MATERIALS TESTING LAB PERSONNEL AT THE CONTRACTOR'S EXPENSE IF THE SUBGRADE HAS BEEN PLACED AND ACCEPTED FOR LONGER THAN TEN DAYS AND NO PAVEMENT HAS BEEN PLACED. 5. PAVING CONTRACTOR TO VERIFY AND COORDINATE THE INSTALLATION OF ALL SLEEVES AND CONDUIT UNDER PAVEMENT FOR THE IRRIGATION SYSTEM,

IRRIGATION CONTROLS, ELECTRICAL, SITE LIGHTING AND SIGNAGE, COMMUNICATION, AND LOW VOLTAGE WIRING PRIOR TO THE PLACEMENT OF PAVEMENT. ALL CONDUIT SHALL BE INSTALLED ACCORDING TO THE STANDARDS AND SPECIFICATION OF THE UTILITY AND/OR SHALL BE 4" SCHEDULE 40 PVC UNLESS OTHERWISE NOTED. 6. CONTRACTOR SHALL AVOID CONSTRUCTING NON-SQUARE SHAPED PANELS, PANELS WITH SHARP ANGLES, AND PANELS WITH LENGTH TO WIDTH RATIOS

GREATER THAN 3:1. 7. ALL JOINTS ARE TO CONTINUE THROUGH THE CURB. 8. ALL EXPANSION JOINTS SHALL CONFORM TO THE STANDARDS AND SPECIFICATION OF THE LOCAL JURISDICTION. IF LOCAL STANDARDS ARE NOT AVAILABLE THEY SHALL CONFORM TO MO DOT STANDARDS.

1. ALL ACCESSIBLE ROUTE CONSTRUCTION SHALL CONFORM TO THE LATEST VERSION OF THE AMERICANS WITH DISABILITIES ACT (ADA) STANDARDS FOR ACCESSIBLE DESIGN PUBLISHED BY THE DEPARTMENT OF JUSTICE (DOJ) AND THE PROPOSED ACCESSIBILITY GUIDELINES FOR PEDESTRIAN FACILITIES IN THE PUBLIC RIGHT OF WAY PUBLISHED BY THE UNITED STATES ACCESSIBILITY BOARD.

2. OTHER THAN RAMPS AND RAMP RUNS, WALKING SURFACES MUST HAVE A RUNNING SLOPE NOT STEEPER THAN 1:20 (V:H). 3. THE CROSS SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 2%.

4. THE MINIMUM WIDTH FOR A LINEAR SEGMENT OF ACCESSIBLE ROUTE SHALL BE 36 INCHES. 5. WHERE THE ACCESSIBLE ROUTE MAKES A 180 DEGREE TURN AROUND AN ELEMENT WHICH IS LESS THAN 48 INCHES WIDE, CLEAR WIDTH SHALL BE 42 INCHES MINIMUM APPROACHING THE TURN. 48 INCHES MINIMUM AT THE TURN AND 42 INCHES LEAVING THE TURN. 6. AN ACCESSIBLE ROUTE WITH A CLEAR WIDTH LESS THAN 60 INCHES SHALL PROVIDE PASSING SPACES AT INTERVALS OF 200 FEET MAXIMUM. PASSING SPACES

SHALL BE 60 INCH BY 60 INCH MINIMUM. 7. RAMP RUNS SHALL HAVE A RUNNING SLOPE NOT STEEPER THAN 1:12 (V:H)

8. RAMP RUNS WITH A RISE GREATER THAN 6 INCHES SHALL HAVE HANDRAILS. 9. RAMP LANDINGS WITH A MAXIMUM SLOPE OF 1:48 (V:H) SHALL BE PROVIDED BEFORE AND AFTER RAMP RUNS.

10. THE MAXIMUM RISE OF A RAMP RUN SHALL BE 30 INCHES. 11. THE MAXIMUM COUNTER SLOPE BETWEEN PAVEMENT AND THE CURB AT A CURB RAMP SHALL BE 1:20.

12. CURB RAMP LANDINGS WITH A MAXIMUM SLOPE OF 1:48 SHALL BE PROVIDED AT THE TOP OF CURB RAMPS WITH A CLEAR WIDTH OF 60 INCHES. 13. DETECTABLE WARNING SURFACES COMPLYING WITH THE LATEST ADA STANDARDS SHALL BE PROVIDED AT PEDESTRIAN STREET CROSSINGS AND REFUGE

14. PASSENGER LOADING ZONES SHALL BE PROVIDED ADJACENT TO ANY ADA ACCESSIBLE STALL AND HAVE A 2% MAXIMUM SLOPE IN ALL DIRECTIONS. 15. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL SIDEWALKS, RAMPS, ACCESSIBLE PATHS, AND ACCESSIBLE PARKING AREAS COMPLY WITH THE ADA.

. CONTRACTOR SHALL INSTALL UTILITIES TO AVOID CONFLICTS WITH OTHER UTILITIES AND STRUCTURES. PRIOR TO INSTALLATION OF ANY PROPOSED UTILITY, CONTRACTOR SHALL EXCAVATE, VERIFY AND CALCULATE ALL CROSSINGS WITH EXISTING UTILITIES AND STRUCTURES. THE ENGINEER WILL BE HELD HARMLESS IN THE EVENT THE ENGINEER IS NOT NOTIFIED OF CONFLICTS WITH EXISTING UTILITIES.

. CONTRACTOR SHALL PLACE 3/4" WASHED ROCK TO 6" BELOW AND 6" ABOVE THE UTILITY LINE IF GROUNDWATER IS ENCOUNTERED DURING INSTALLATION. . CONTRACTOR SHALL COORDINATE WITH AND ADHERE TO THE REQUIREMENTS OF OWNERS AND AUTHORITIES HAVING JURISDICTION WHEN MAKING CONNECTIONS TO EXISTING UTILITIES. 4. CONTRACTOR SHALL ADJUST ALL HYDRANTS, VALVE BOXES, CLEAN OUTS AND MANHOLE RIMS TO FINAL GRADE.

5. CONTRACTOR SHALL COORDINATE THE FINAL LOCATION OF ELECTRIC, TELEPHONE, AND GAS SERVICE WITH EACH RESPECTIVE UTILITY COMPANY, AND SHALL INCLUDE ALL ASSOCIATED COSTS IN THE BID. 6. CONTRACTOR SHALL REMOVE OR RELOCATE ONSITE UTILITY POLES AS REQUIRED TO COMPLETE THE WORK. CONTRACTOR SHALL ALSO PROVIDE TEMPORARY

SERVICE IF REMOVAL WILL IMPACT SERVICE. 7. CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN WORKING ADJACENT TO EXISTING UTILITIES. 8. IN THE EVENT EXISTING UTILITIES TO REMAIN ARE DAMAGED, CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER OF THE RESPECTIVE UTILITY. IF THERE IS

AN IMMEDIATE THREAT OF DANGER TO THE GENERAL PUBLIC, CONTRACTOR SHALL IMMEDIATELY NOTIFY LOCAL EMERGENCY PERSONNEL. CONTRACTOR IS RESPONSIBLE FOR REPLACING OR REPAIRING ANY DAMAGE. 9. CONTRACTOR SHALL ACHIEVE COMPACTION TO 95% STANDARD PROCTOR IN AREAS EXCAVATED AT THE BUILDING FOR UTILITY CONNECTION.

10. UTILITIES SHOULD BE INSTALLED AS SHOWN ON THE PLANS. HOWEVER, FIELD ADJUSTMENTS APPROVED BY THE ENGINEER MAY BE MADE TO PROTECT TREES, STRUCTURES, EXISTING INFRASTRUCTURE, OR TO ACCOMMODATE OTHER ENVIRONMENT OR ECONOMIC CONSTRAINTS ENCOUNTERED DURING CONSTRUCTION. 11. CONTRACTOR SHALL MAKE APPLICATION WITH THE APPROPRIATE UTILITY COMPANIES FOR ALL NECESSARY METERS.

. CONTRACTOR SHALL INSTALL STORM SEWER LINES TO AVOID CONFLICTS WITH OTHER UTILITIES AND STRUCTURES. PRIOR TO INSTALLATION, CONTRACTOR SHALL EXCAVATE, VERIFY AND CALCULATE ALL CROSSINGS WITH EXISTING UTILITIES AND STRUCTURES. THE ENGINEER WILL BE HELD HARMLESS IN THE EVENT THE ENGINEER IS NOT NOTIFIED OF CONFLICTS WITH EXISTING UTILITIES.

2. CONTRACTOR SHALL MAINTAIN MINIMUM SEPARATION REQUIREMENTS FROM OTHER UTILITIES AS REQUIRED AUTHORITIES HAVING JURISDICTION. IF THERE ARE MULTIPLE SEPARATION REQUIREMENTS THE MOST STRINGENT SHALL GOVERN. FIX NUMBERING BELOW.

. ALL PIPES SHALL BE GROUTED AT THE CONNECTION TO THE STORM SEWER STRUCTURE. CONNECTIONS SHALL BE WATERTIGHT

4. ALL STRUCTURE COORDINATES ARE THE CENTER OF THE STRUCTURE 5. PIPE LENGTHS PROVIDED ON PLANS ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.

6. ALL PIPES SHALL BE INSTALLED ACCORDING TO THE MANUFACTURERS SPECIFICATIONS. 7. HDPE PIPE SHALL CONFORM TO AASHTO M294, TYPE S OR AASHTO M252, TYPE S, AS APPLICABLE TO THE RESPECTIVE PIPE'S SIZE.

8. RCP SHALL BE MANUFACTURED IN ACCORDANCE WITH THE PROVISIONS OF ASTM C-76. 9. RCP CLASS, WALL THICKNESS, AND BEDDING MATERIAL SHALL BE SELECTED IN ACCORDANCE WITH ASCE 15-17 AND ADEQUATE FOR AASHTO HS25 LOADING.

10. ALL STORM SEWER MANHOLE COVERS IN PAVED AREAS SHALL BE RATED FOR HS25 LOADING AND FLUSH WITH THE PAVEMENT. 11. CONTRACTOR SHALL ADJUST ALL STRUCTURE LIDS SO THEY ARE FLUSH WITH THE PAVEMENT OR 6" ABOVE FINISHED GRADE.

12. CONTRACTOR SHALL FILL AND COMPACT TO A MINIMUM OF 18" ABOVE THE TOP OF PIPE BEFORE TRENCHING FOR INSTALLATION OF STORM SEWERS. 13. PUBLIC STORM SEWER SHALL BE PER THE STANDARDS AND SPECIFICATIONS OF THE LOCAL GOVERNING AGENCY.

1. CONTRACTOR SHALL INSTALL SANITARY SEWER LINES TO AVOID CONFLICTS WITH OTHER UTILITIES AND STRUCTURES. PRIOR TO INSTALLATION, CONTRACTOR SHALL EXCAVATE, VERIFY AND CALCULATE ALL CROSSINGS WITH EXISTING UTILITIES AND STRUCTURES. THE ENGINEER WILL BE HELD HARMLESS IN THE EVENT THE ENGINEER IS NOT NOTIFIED OF CONFLICTS WITH EXISTING UTILITIES.

2. CONTRACTOR SHALL MAINTAIN MINIMUM SEPARATION REQUIREMENTS FROM OTHER UTILITIES AS REQUIRED AUTHORITIES HAVING JURISDICTION. IF THERE ARE MULTIPLE SEPARATION REQUIREMENTS THE MOST STRINGENT SHALL GOVERN. 3. CONTRACTOR IS RESPONSIBLE FOR PERFORMING ANY TESTING AS REQUIRED BY THE AUTHORITY HAVING JURISDICTION. THIS TESTING SHALL BE DONE AT NO

ADDITIONAL COST TO THE OWNER. 4. PRIVATE SANITARY SEWER SHALL BE SDR-35 PVC AND SDR-26 WHERE DEPTHS EXCEED 12'. ALL SANITARY SEWER PIPE FITTING SHALL CONFORM TO ASTM

5. TRENCH BACKFILL COMPACTION SHALL BE TESTED AS REQUIRED BY THE GEOTECHNICAL ENGINEER. IF NO RECOMMENDATIONS ARE PROVIDED BY THE GEOTECHNICAL ENGINEER TESTING SHOULD BE CONDUCTED PER EVERY 12 INCH LIFT (LOOSE) AND AT LEAST 1 TEST PER EVERY 100 LF OF SEWER. TESTING SHOULD BE STAGGERED SO TESTING IS NOT DONE OVER TESTING IN A PREVIOUS LIFT.

6. CONTRACTOR SHALL FILL AND COMPACT TO A MINIMUM OF 18" ABOVE THE TOP OF PIPE BEFORE TRENCHING FOR INSTALLATION OF SANITARY SEWERS. 7. PUBLIC SANITARY SEWER SHALL SHALL BE PER THE STANDARDS AND SPECIFICATIONS OF THE LOCAL GOVERNING AGENCY.

I. CONTRACTOR SHALL COORDINATE WITH THE LOCAL GOVERNING AGENCY FOR CONNECTION TO EXISTING WATER. 2. UNLESS NOTED OTHERWISE, PRIVATE WATER LINES 4" OR LARGER IN DIAMETER SHALL BE C900 DR-19 PVC MINIMUM CLASS 150, WITH NSF SEAL, PRESSURE TESTED AND DISINFECTED IN ACCORDANCE WITH THE CITY OF LEE'S SUMMIT STANDARD SPECIFICATIONS. SERVICE LINE CONNECTORS SHALL BE COMPRESSION TYPE WITH STAINLESS STEEL TUBE LINERS.

3. CORPORATION STOPS SHOULD BE TESTED FOR LEAKAGE AND FULL FLOW WHEN SYSTEM IS PRESSURE TESTED. 4. CONTRACTOR SHALL BE REQUIRED FOR DISINFECTION, CHLORINATION, AND FLUSHING REQUIREMENTS. THIS INCLUDES PROVIDING TEMPORARY ISOLATION VALVES. PLUGS, INJECTION PORTS, FLUSHING VALVES, TOOLS, AND EQUIPMENT NECESSARY TO COMPLETE THE TASK. THE CONTRACTOR SHALL CONTACT THE WATER UTILITY 48 HOURS PRIOR TO FLUSHING WATERLINES. 5. ALL WATERLINE FITTINGS SHALL BE DUCTILE IRON MECHANICAL JOINTS

6. CONTRACTOR SHALL INSTALL HORIZONTAL BLOCKING IN ACCORDANCE WITH APPLICABLE CITY DETAILS, EVEN IF NO BLOCKING IS SHOWN ON THE PLANS. CONCRETE BLOCKING SHALL BE PLACED AT ALL VALVES, BENDS, TEES, AND PLUGS. CONTRACTOR SHALL KEEP BELLS AND FLANGES CLEAN OF CONCRETE. 7. CONTRACTOR SHALL REMOVE ANY BLOCKING OR RESTRAINTS THAT PROHIBIT THE CONTRACTOR FROM PERFORMING THEIR WORK. CONTRACTOR SHALL REPLACE ANY REMOVED BLOCKING OR RESTRAINTS AT HIS EXPENSE IF REQUIRED BY THE AUTHORITY HAVING JURISDICTION.

8. CONTRACTOR SHALL MAINTAIN 42 INCHES OF MINIMUM COVER OVER ALL WATER LINES (INCLUDING FIRE LINES). 9. CONTRACTOR SHALL MAINTAIN ALL DEFLECTION AND JOINT STRESSES WITHIN MANUFACTURER RECOMMENDATIONS.

10. IN THE EVENT OF A CONFLICT WITH A UTILITY, THE CONTRACTOR SHALL ADJUST THE WATERLINE DOWNWARD UNDER THE CONFLICTING UTILITY. 11. ALL VALVES AT THE END OF A LINE SHALL BE PLUGGED AND BLOCKED.

12. PUBLIC WATER LINES SHALL BE PER THE STANDARDS AND SPECIFICATIONS OF THE LOCAL GOVERNING AGENCY.

1. FIRE APPARATUS ACCESS ROADS AND FIRE LANES SHALL BE MARKED WITH RED PAINTED LINES, 6 INCHES IN WIDTH, TO DELINEATE THE BOUNDARY OF THE

2. THE WORDS "NO PARKING FIRE LANE" SHALL BE PAINTED IN 4 INCH WHITE LETTERS EVERY 25 FEET ON THE BORDER OF THE FIRE LANE OR ON THE FACE OF CURB WHERE AVAILABLE.

3. THE FACE OF THE CURB SHALL BE PAINTED RED WHERE THE CURB IS THE BOUNDARY OF THE FIRE LANE. 4. ALL FIRE PROTECTION WORK MUST BE PERMITTED AND APPROVED BY THE APPLICABLE FIRE MARSHAL HAVING JURISDICTION

5. CONTRACTOR SHALL PRESSURE TEST ALL FIRE PROTECTION LINES TO THE SATISFACTION OF THE OWNER AND THE CITY'S FIRE MARSHAL 6. ALL FIRE HYDRANTS SHALL BE LOCATED IN ACCORDANCE WITH CURRENTLY PUBLISHED CITY DESIGN STANDARDS.

. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TRAFFIC CONTROL AS REQUIRED BY THE LOCAL GOVERNING AGENCY.

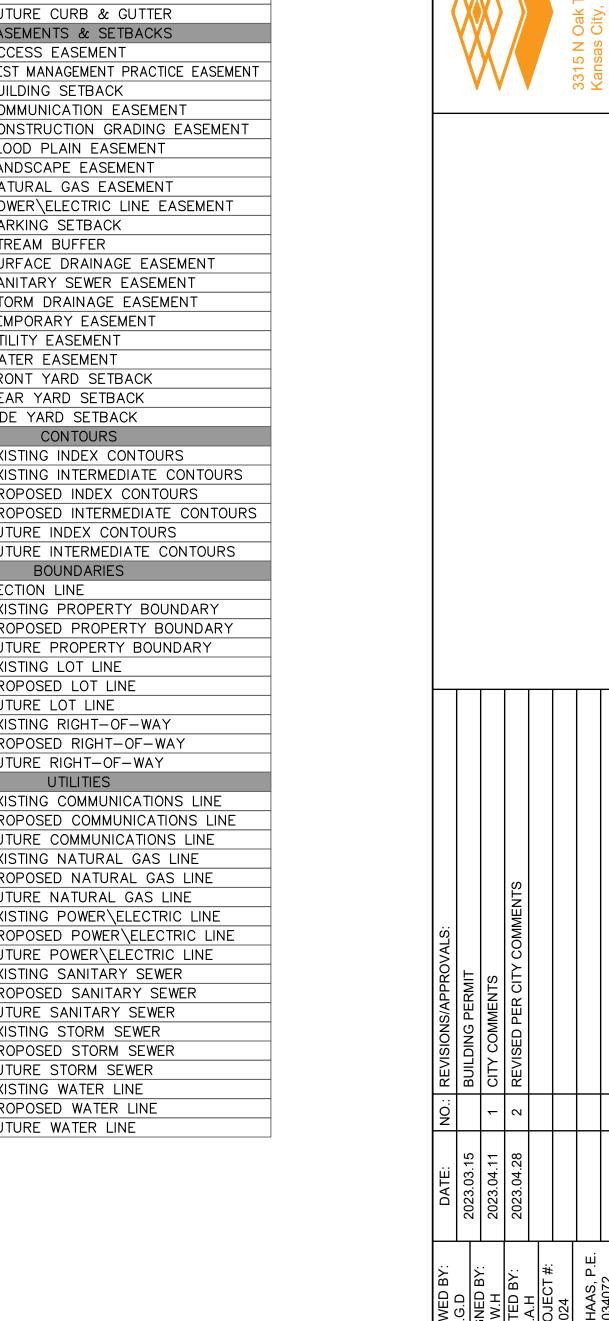
2. CONTRACTOR SHALL PREPARE, FURNISH, MAINTAIN, ALL TRAFFIC CONTROL DEVICES THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL REMOVE TRAFFIC CONTROL DEVICES UPON COMPLETION. 3. CONTRACTOR IS RESPONSIBLE FOR PROVIDING A TRAFFIC CONTROL AND SEQUENCING PLAN AND OBTAINING A TRAFFIC CONTROL PERMIT IF REQUIRED BY THE

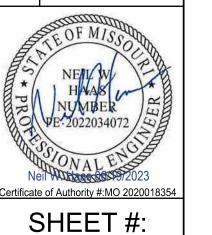
LOCAL GOVERNING AGENCY. 4. CONTRACTOR SHALL COORDINATE WITH ADJACENT PROPERTY OWNERS AND AUTHORITIES HAVING JURISDICTION FOR ROAD OR DRIVEWAY CLOSURES.

. CONTRACTOR SHALL NOT PERFORM WORK IN ANY FLOOD ZONE WITHOUT OBTAINING PERMITS FROM AUTHORITIES HAVING JURISDICTION. CONTRACTOR SHALL HOLD THE OWNER, DEVELOPER, LOCAL GOVERNMENT AND ENGINEER HARMLESS AGAINST SUCH VIOLATION. ANY DEVELOPMENT, EXCAVATION, CONSTRUCTION OR FILLING IN A U.S. CORPS OF ENGINEERS DESIGNATED WETLAND IS SUBJECT TO LOCAL, STATE AND

FEDERAL APPROVALS. CONTRACTOR SHALL COMPLY WITH ALL PERMIT REQUIREMENTS AND/OR RESTRICTIONS AND ANY VIOLATION WILL BE SUBJECT TO FEDERAL PENALTY. CONTRACTOR SHALL HOLD THE OWNER, DEVELOPER, LOCAL GOVERNMENT AND ENGINEER HARMLESS AGAINST SUCH VIOLATION.

~~~	GENERAL EXISTING TREELINE
~~~	PROPOSED TREELINE
	EXISTING SIDEWALK
	PROPOSED SIDEWALK
	FUTURE SIDEWALK
	EXISTING BUILDINGS
	PROPOSED BUILDINGS
	FUTURE BUILDINGS
	EXISTING EDGE OF PAVEMENT PROPOSED EDGE OF PAVEMENT
	FUTURE EDGE OF PAVEMENT
	EXISTING ROADWAY CENTER LINE
	PROPOSED ROADWAY CENTER LINE
	FUTURE ROADWAY CENTER LINE
	EXISTING CURB & GUTTER
	PROPOSED CURB & GUTTER
	FUTURE CURB & GUTTER
A.E.	EASEMENTS & SETBACKS ACCESS EASEMENT
B.M.P.	BEST MANAGEMENT PRACTICE EASEME
B.L.	BUILDING SETBACK
COMM. E.	COMMUNICATION EASEMENT
C.G.E.	CONSTRUCTION GRADING EASEMEN
F.P.E.	FLOOD PLAIN EASEMENT
L.S.	LANDSCAPE EASEMENT
G.E.	NATURAL GAS EASEMENT
P.L.E.	POWER\ELECTRIC LINE EASEMENT PARKING SETBACK
P.S. S.B.	STREAM BUFFER
S.D.E.	SURFACE DRAINAGE EASEMENT
S.E.	SANITARY SEWER EASEMENT
D.E.	STORM DRAINAGE EASEMENT
TEMP. ESMT.	TEMPORARY EASEMENT
U.E.	UTILITY EASEMENT
W.E.	WATER EASEMENT
F.Y.S R.Y.S.	FRONT YARD SETBACK REAR YARD SETBACK
S.Y.S.	SIDE YARD SETBACK
3.1.3.	CONTOURS
- 100 -	EXISTING INDEX CONTOURS
400	EXISTING INTERMEDIATE CONTOURS
- 100 -	
	PROPOSED INDEX CONTOURS
-100 -100	PROPOSED INDEX CONTOURS PROPOSED INTERMEDIATE CONTOUR
—100 —100 —100	PROPOSED INDEX CONTOURS PROPOSED INTERMEDIATE CONTOUR FUTURE INDEX CONTOURS
-100 -100	PROPOSED INDEX CONTOURS PROPOSED INTERMEDIATE CONTOUR FUTURE INDEX CONTOURS FUTURE INTERMEDIATE CONTOURS
—100 —100 —100	PROPOSED INDEX CONTOURS PROPOSED INTERMEDIATE CONTOUR FUTURE INDEX CONTOURS
—100 —100 —100	PROPOSED INDEX CONTOURS PROPOSED INTERMEDIATE CONTOUR FUTURE INDEX CONTOURS FUTURE INTERMEDIATE CONTOURS BOUNDARIES
100 100 100 100	PROPOSED INDEX CONTOURS PROPOSED INTERMEDIATE CONTOUR FUTURE INDEX CONTOURS FUTURE INTERMEDIATE CONTOURS BOUNDARIES SECTION LINE EXISTING PROPERTY BOUNDARY PROPOSED PROPERTY BOUNDARY
-100 -100 -100 -100 	PROPOSED INDEX CONTOURS PROPOSED INTERMEDIATE CONTOUR FUTURE INDEX CONTOURS FUTURE INTERMEDIATE CONTOURS BOUNDARIES SECTION LINE EXISTING PROPERTY BOUNDARY PROPOSED PROPERTY BOUNDARY FUTURE PROPERTY BOUNDARY
100 100 100 100 100	PROPOSED INDEX CONTOURS PROPOSED INTERMEDIATE CONTOUR FUTURE INDEX CONTOURS FUTURE INTERMEDIATE CONTOURS BOUNDARIES SECTION LINE EXISTING PROPERTY BOUNDARY PROPOSED PROPERTY BOUNDARY FUTURE PROPERTY BOUNDARY EXISTING LOT LINE
-100 -100 -100 -100 	PROPOSED INDEX CONTOURS PROPOSED INTERMEDIATE CONTOUR FUTURE INDEX CONTOURS FUTURE INTERMEDIATE CONTOURS BOUNDARIES SECTION LINE EXISTING PROPERTY BOUNDARY PROPOSED PROPERTY BOUNDARY FUTURE PROPERTY BOUNDARY EXISTING LOT LINE PROPOSED LOT LINE
-100 -100 -100 -100 	PROPOSED INDEX CONTOURS PROPOSED INTERMEDIATE CONTOUR FUTURE INDEX CONTOURS FUTURE INTERMEDIATE CONTOURS BOUNDARIES SECTION LINE EXISTING PROPERTY BOUNDARY PROPOSED PROPERTY BOUNDARY FUTURE PROPERTY BOUNDARY EXISTING LOT LINE
100 100 100 100 PL PL PL PL PL PL	PROPOSED INDEX CONTOURS PROPOSED INTERMEDIATE CONTOUR FUTURE INDEX CONTOURS FUTURE INTERMEDIATE CONTOURS BOUNDARIES SECTION LINE EXISTING PROPERTY BOUNDARY PROPOSED PROPERTY BOUNDARY FUTURE PROPERTY BOUNDARY EXISTING LOT LINE PROPOSED LOT LINE FUTURE LOT LINE
100 100 100 100 100 PL PL PL PL PL PL PL PL PL PL PL PL PL	PROPOSED INDEX CONTOURS PROPOSED INTERMEDIATE CONTOUR FUTURE INDEX CONTOURS FUTURE INTERMEDIATE CONTOURS BOUNDARIES SECTION LINE EXISTING PROPERTY BOUNDARY PROPOSED PROPERTY BOUNDARY FUTURE PROPERTY BOUNDARY EXISTING LOT LINE PROPOSED LOT LINE FUTURE LOT LINE EXISTING RIGHT—OF—WAY PROPOSED RIGHT—OF—WAY
-100 -100 -100 -100 	PROPOSED INDEX CONTOURS PROPOSED INTERMEDIATE CONTOUR FUTURE INDEX CONTOURS FUTURE INTERMEDIATE CONTOURS BOUNDARIES SECTION LINE EXISTING PROPERTY BOUNDARY PROPOSED PROPERTY BOUNDARY FUTURE PROPERTY BOUNDARY EXISTING LOT LINE PROPOSED LOT LINE FUTURE LOT LINE EXISTING RIGHT—OF—WAY PROPOSED RIGHT—OF—WAY FUTURE RIGHT—OF—WAY
-100 -100 -100 -100 	PROPOSED INDEX CONTOURS PROPOSED INTERMEDIATE CONTOUR FUTURE INDEX CONTOURS FUTURE INTERMEDIATE CONTOURS BOUNDARIES SECTION LINE EXISTING PROPERTY BOUNDARY PROPOSED PROPERTY BOUNDARY FUTURE PROPERTY BOUNDARY EXISTING LOT LINE PROPOSED LOT LINE FUTURE LOT LINE EXISTING RIGHT-OF-WAY PROPOSED RIGHT-OF-WAY FUTURE RIGHT-OF-WAY UTILITIES EXISTING COMMUNICATIONS LINE
-100 -100 -100 -100 	PROPOSED INDEX CONTOURS PROPOSED INTERMEDIATE CONTOUR FUTURE INDEX CONTOURS FUTURE INTERMEDIATE CONTOURS BOUNDARIES SECTION LINE EXISTING PROPERTY BOUNDARY PROPOSED PROPERTY BOUNDARY FUTURE PROPERTY BOUNDARY EXISTING LOT LINE PROPOSED LOT LINE FUTURE LOT LINE EXISTING RIGHT—OF—WAY PROPOSED RIGHT—OF—WAY UTILITIES EXISTING COMMUNICATIONS LINE PROPOSED COMMUNICATIONS LINE
-100 -100 -100 -100 	PROPOSED INDEX CONTOURS PROPOSED INTERMEDIATE CONTOUR FUTURE INDEX CONTOURS FUTURE INTERMEDIATE CONTOURS BOUNDARIES SECTION LINE EXISTING PROPERTY BOUNDARY PROPOSED PROPERTY BOUNDARY FUTURE PROPERTY BOUNDARY EXISTING LOT LINE PROPOSED LOT LINE FUTURE LOT LINE EXISTING RIGHT—OF—WAY PROPOSED RIGHT—OF—WAY FUTURE RIGHT—OF—WAY FUTURE RIGHT—OF—WAY UTILITIES EXISTING COMMUNICATIONS LINE FUTURE COMMUNICATIONS LINE
-100 -100 -100 -100 	PROPOSED INDEX CONTOURS PROPOSED INTERMEDIATE CONTOUR FUTURE INDEX CONTOURS FUTURE INTERMEDIATE CONTOURS BOUNDARIES SECTION LINE EXISTING PROPERTY BOUNDARY PROPOSED PROPERTY BOUNDARY FUTURE PROPERTY BOUNDARY EXISTING LOT LINE PROPOSED LOT LINE FUTURE LOT LINE EXISTING RIGHT—OF—WAY PROPOSED RIGHT—OF—WAY FUTURE RIGHT—OF—WAY FUTURE RIGHT—OF—WAY UTILITIES EXISTING COMMUNICATIONS LINE FUTURE COMMUNICATIONS LINE FUTURE COMMUNICATIONS LINE EXISTING NATURAL GAS LINE
-100 -100 -100 -100 	PROPOSED INDEX CONTOURS PROPOSED INTERMEDIATE CONTOUR FUTURE INDEX CONTOURS FUTURE INTERMEDIATE CONTOURS BOUNDARIES SECTION LINE EXISTING PROPERTY BOUNDARY PROPOSED PROPERTY BOUNDARY FUTURE PROPERTY BOUNDARY EXISTING LOT LINE PROPOSED LOT LINE FUTURE LOT LINE EXISTING RIGHT—OF—WAY PROPOSED RIGHT—OF—WAY FUTURE RIGHT—OF—WAY FUTURE RIGHT—OF—WAY EXISTING COMMUNICATIONS LINE PROPOSED COMMUNICATIONS LINE FUTURE COMMUNICATIONS LINE EXISTING NATURAL GAS LINE PROPOSED NATURAL GAS LINE
-100 -100 -100 -100 	PROPOSED INDEX CONTOURS PROPOSED INTERMEDIATE CONTOUR FUTURE INDEX CONTOURS FUTURE INTERMEDIATE CONTOURS BOUNDARIES SECTION LINE EXISTING PROPERTY BOUNDARY PROPOSED PROPERTY BOUNDARY FUTURE PROPERTY BOUNDARY EXISTING LOT LINE PROPOSED LOT LINE FUTURE LOT LINE EXISTING RIGHT—OF—WAY PROPOSED RIGHT—OF—WAY FUTURE RIGHT—OF—WAY FUTURE RIGHT—OF—WAY UTILITIES EXISTING COMMUNICATIONS LINE FUTURE COMMUNICATIONS LINE FUTURE COMMUNICATIONS LINE EXISTING NATURAL GAS LINE
-100 -100 -100 -100 	PROPOSED INDEX CONTOURS PROPOSED INTERMEDIATE CONTOUR FUTURE INDEX CONTOURS FUTURE INTERMEDIATE CONTOURS BOUNDARIES SECTION LINE EXISTING PROPERTY BOUNDARY PROPOSED PROPERTY BOUNDARY FUTURE PROPERTY BOUNDARY EXISTING LOT LINE PROPOSED LOT LINE FUTURE LOT LINE EXISTING RIGHT-OF-WAY PROPOSED RIGHT-OF-WAY FUTURE RIGHT-OF-WAY FUTURE RIGHT-OF-WAY FUTURE RIGHT-OF-WAY UTILITIES EXISTING COMMUNICATIONS LINE PROPOSED COMMUNICATIONS LINE FUTURE COMMUNICATIONS LINE EXISTING NATURAL GAS LINE PROPOSED NATURAL GAS LINE
-100 -100 -100 -100 	PROPOSED INDEX CONTOURS PROPOSED INTERMEDIATE CONTOUR FUTURE INDEX CONTOURS FUTURE INTERMEDIATE CONTOURS BOUNDARIES SECTION LINE EXISTING PROPERTY BOUNDARY PROPOSED PROPERTY BOUNDARY FUTURE PROPERTY BOUNDARY EXISTING LOT LINE PROPOSED LOT LINE FUTURE LOT LINE EXISTING RIGHT-OF-WAY PROPOSED RIGHT-OF-WAY FUTURE RIGHT-OF-WAY UTILITIES EXISTING COMMUNICATIONS LINE PROPOSED COMMUNICATIONS LINE FUTURE COMMUNICATIONS LINE EXISTING NATURAL GAS LINE PROPOSED NATURAL GAS LINE FUTURE NATURAL GAS LINE EXISTING POWER\ELECTRIC LINE PROPOSED POWER\ELECTRIC LINE
-100 -100 -100 -100 	PROPOSED INDEX CONTOURS PROPOSED INTERMEDIATE CONTOUR FUTURE INDEX CONTOURS FUTURE INTERMEDIATE CONTOURS BOUNDARIES SECTION LINE EXISTING PROPERTY BOUNDARY PROPOSED PROPERTY BOUNDARY FUTURE PROPERTY BOUNDARY EXISTING LOT LINE PROPOSED LOT LINE PROPOSED LOT LINE FUTURE LOT LINE EXISTING RIGHT—OF—WAY PROPOSED RIGHT—OF—WAY FUTURE RIGHT—OF—WAY UTILITIES EXISTING COMMUNICATIONS LINE PROPOSED COMMUNICATIONS LINE FUTURE COMMUNICATIONS LINE EXISTING NATURAL GAS LINE FUTURE NATURAL GAS LINE FUTURE NATURAL GAS LINE FUTURE NATURAL GAS LINE EXISTING POWER\ELECTRIC LINE PROPOSED POWER\ELECTRIC LINE FUTURE POWER\ELECTRIC LINE EXISTING SANITARY SEWER
-100 -100 -100 -100 	PROPOSED INDEX CONTOURS PROPOSED INTERMEDIATE CONTOUR FUTURE INDEX CONTOURS FUTURE INTERMEDIATE CONTOURS BOUNDARIES SECTION LINE EXISTING PROPERTY BOUNDARY PROPOSED PROPERTY BOUNDARY FUTURE PROPERTY BOUNDARY EXISTING LOT LINE PROPOSED LOT LINE FUTURE LOT LINE EXISTING RIGHT—OF—WAY PROPOSED RIGHT—OF—WAY FUTURE RIGHT—OF—WAY FUTURE RIGHT—OF—WAY FUTURE RIGHT—OF—WAY FUTURE COMMUNICATIONS LINE PROPOSED COMMUNICATIONS LINE FUTURE COMMUNICATIONS LINE EXISTING NATURAL GAS LINE FUTURE NATURAL GAS LINE FUTURE NATURAL GAS LINE FUTURE NATURAL GAS LINE FUTURE NATURAL GAS LINE EXISTING POWER\ELECTRIC LINE PROPOSED POWER\ELECTRIC LINE FUTURE POWER\ELECTRIC LINE FUTURE POWER\ELECTRIC LINE EXISTING SANITARY SEWER
-100 -100 -100 -100 	PROPOSED INDEX CONTOURS PROPOSED INTERMEDIATE CONTOUR FUTURE INDEX CONTOURS FUTURE INTERMEDIATE CONTOURS BOUNDARIES SECTION LINE EXISTING PROPERTY BOUNDARY PROPOSED PROPERTY BOUNDARY FUTURE PROPERTY BOUNDARY EXISTING LOT LINE PROPOSED LOT LINE FUTURE LOT LINE EXISTING RIGHT—OF—WAY PROPOSED RIGHT—OF—WAY FUTURE RIGHT—OF—WAY FUTURE RIGHT—OF—WAY FUTURE RIGHT—OF—WAY FUTURE COMMUNICATIONS LINE PROPOSED COMMUNICATIONS LINE EXISTING NATURAL GAS LINE FUTURE COMMUNICATIONS LINE EXISTING NATURAL GAS LINE FUTURE NATURAL GAS LINE FUTURE NATURAL GAS LINE FUTURE POWER\ELECTRIC LINE PROPOSED POWER\ELECTRIC LINE FUTURE POWER\ELECTRIC LINE EXISTING SANITARY SEWER PROPOSED SANITARY SEWER
-100 -100 -100 -100 	PROPOSED INDEX CONTOURS PROPOSED INTERMEDIATE CONTOUR FUTURE INDEX CONTOURS FUTURE INTERMEDIATE CONTOURS BOUNDARIES SECTION LINE EXISTING PROPERTY BOUNDARY PROPOSED PROPERTY BOUNDARY FUTURE PROPERTY BOUNDARY EXISTING LOT LINE PROPOSED LOT LINE FUTURE LOT LINE EXISTING RIGHT—OF—WAY PROPOSED RIGHT—OF—WAY FUTURE RIGHT—OF—WAY FUTURE RIGHT—OF—WAY FUTURE COMMUNICATIONS LINE PROPOSED COMMUNICATIONS LINE EXISTING NATURAL GAS LINE FUTURE COMMUNICATIONS LINE EXISTING NATURAL GAS LINE FUTURE NATURAL GAS LINE FUTURE NATURAL GAS LINE FUTURE POWER\ELECTRIC LINE PROPOSED POWER\ELECTRIC LINE FUTURE POWER\ELECTRIC LINE EXISTING SANITARY SEWER FUTURE SANITARY SEWER EXISTING STORM SEWER
-100 -100 -100 -100 	PROPOSED INDEX CONTOURS PROPOSED INTERMEDIATE CONTOUR FUTURE INDEX CONTOURS FUTURE INTERMEDIATE CONTOURS BOUNDARIES SECTION LINE EXISTING PROPERTY BOUNDARY PROPOSED PROPERTY BOUNDARY FUTURE PROPERTY BOUNDARY EXISTING LOT LINE PROPOSED LOT LINE FUTURE LOT LINE EXISTING RIGHT—OF—WAY PROPOSED RIGHT—OF—WAY FUTURE RIGHT—OF—WAY FUTURE RIGHT—OF—WAY FUTURE RIGHT—OF—WAY FUTURE COMMUNICATIONS LINE PROPOSED COMMUNICATIONS LINE EXISTING NATURAL GAS LINE FUTURE COMMUNICATIONS LINE EXISTING NATURAL GAS LINE FUTURE NATURAL GAS LINE FUTURE NATURAL GAS LINE FUTURE NATURAL GAS LINE EXISTING POWER\ELECTRIC LINE FUTURE POWER\ELECTRIC LINE FUTURE POWER\ELECTRIC LINE FUTURE SANITARY SEWER PROPOSED SANITARY SEWER EXISTING STORM SEWER
-100 -100 -100 -100 	PROPOSED INDEX CONTOURS PROPOSED INTERMEDIATE CONTOUR FUTURE INDEX CONTOURS FUTURE INTERMEDIATE CONTOURS BOUNDARIES SECTION LINE EXISTING PROPERTY BOUNDARY PROPOSED PROPERTY BOUNDARY FUTURE PROPERTY BOUNDARY EXISTING LOT LINE PROPOSED LOT LINE FUTURE LOT LINE EXISTING RIGHT—OF—WAY PROPOSED RIGHT—OF—WAY FUTURE RIGHT—OF—WAY FUTURE RIGHT—OF—WAY FUTURE RIGHT—OF—WAY FUTURE COMMUNICATIONS LINE PROPOSED COMMUNICATIONS LINE FUTURE COMMUNICATIONS LINE EXISTING NATURAL GAS LINE FUTURE NATURAL GAS LINE FUTURE NATURAL GAS LINE FUTURE NATURAL GAS LINE FUTURE POWER\ELECTRIC LINE FUTURE POWER\ELECTRIC LINE FUTURE POWER\ELECTRIC LINE FUTURE SANITARY SEWER FUTURE SANITARY SEWER FUTURE STORM SEWER FUTURE STORM SEWER
-100 -100 -100 -100 	PROPOSED INDEX CONTOURS PROPOSED INTERMEDIATE CONTOUR FUTURE INDEX CONTOURS FUTURE INTERMEDIATE CONTOURS BOUNDARIES SECTION LINE EXISTING PROPERTY BOUNDARY PROPOSED PROPERTY BOUNDARY FUTURE PROPERTY BOUNDARY FUTURE PROPERTY BOUNDARY EXISTING LOT LINE PROPOSED LOT LINE FUTURE LOT LINE EXISTING RIGHT—OF—WAY PROPOSED RIGHT—OF—WAY FUTURE RIGHT—OF—WAY UTILITIES EXISTING COMMUNICATIONS LINE PROPOSED COMMUNICATIONS LINE FUTURE COMMUNICATIONS LINE EXISTING NATURAL GAS LINE FUTURE NATURAL GAS LINE FUTURE NATURAL GAS LINE FUTURE NATURAL GAS LINE EXISTING POWER\ELECTRIC LINE FUTURE POWER\ELECTRIC LINE FUTURE POWER\ELECTRIC LINE FUTURE SANITARY SEWER FUTURE SANITARY SEWER EXISTING STORM SEWER FUTURE STORM SEWER EXISTING WATER LINE
-100 -100 -100 -100 	PROPOSED INDEX CONTOURS PROPOSED INTERMEDIATE CONTOUR FUTURE INDEX CONTOURS FUTURE INTERMEDIATE CONTOURS BOUNDARIES SECTION LINE EXISTING PROPERTY BOUNDARY PROPOSED PROPERTY BOUNDARY FUTURE PROPERTY BOUNDARY EXISTING LOT LINE PROPOSED LOT LINE FUTURE LOT LINE EXISTING RIGHT—OF—WAY PROPOSED RIGHT—OF—WAY FUTURE RIGHT—OF—WAY FUTURE RIGHT—OF—WAY FUTURE RIGHT—OF—WAY FUTURE COMMUNICATIONS LINE PROPOSED COMMUNICATIONS LINE FUTURE COMMUNICATIONS LINE EXISTING NATURAL GAS LINE FUTURE NATURAL GAS LINE FUTURE NATURAL GAS LINE FUTURE NATURAL GAS LINE FUTURE POWER\ELECTRIC LINE FUTURE POWER\ELECTRIC LINE FUTURE POWER\ELECTRIC LINE FUTURE SANITARY SEWER FUTURE SANITARY SEWER FUTURE STORM SEWER FUTURE STORM SEWER
-100 -100 -100 -100 	PROPOSED INDEX CONTOURS PROPOSED INTERMEDIATE CONTOUR FUTURE INDEX CONTOURS FUTURE INTERMEDIATE CONTOURS BOUNDARIES SECTION LINE EXISTING PROPERTY BOUNDARY PROPOSED PROPERTY BOUNDARY FUTURE PROPERTY BOUNDARY FUTURE PROPERTY BOUNDARY EXISTING LOT LINE PROPOSED LOT LINE FUTURE LOT LINE EXISTING RIGHT—OF—WAY PROPOSED RIGHT—OF—WAY FUTURE RIGHT—OF—WAY FUTURE RIGHT—OF—WAY FUTURE COMMUNICATIONS LINE PROPOSED COMMUNICATIONS LINE EXISTING NATURAL GAS LINE FUTURE COMMUNICATIONS LINE EXISTING NATURAL GAS LINE FUTURE NATURAL GAS LINE FUTURE NATURAL GAS LINE FUTURE NATURAL GAS LINE FUTURE POWER\ELECTRIC LINE FUTURE POWER\ELECTRIC LINE FUTURE POWER\ELECTRIC LINE EXISTING SANITARY SEWER PROPOSED SANITARY SEWER FUTURE SANITARY SEWER FUTURE STORM SEWER FUTURE STORM SEWER FUTURE STORM SEWER EXISTING WATER LINE PROPOSED WATER LINE

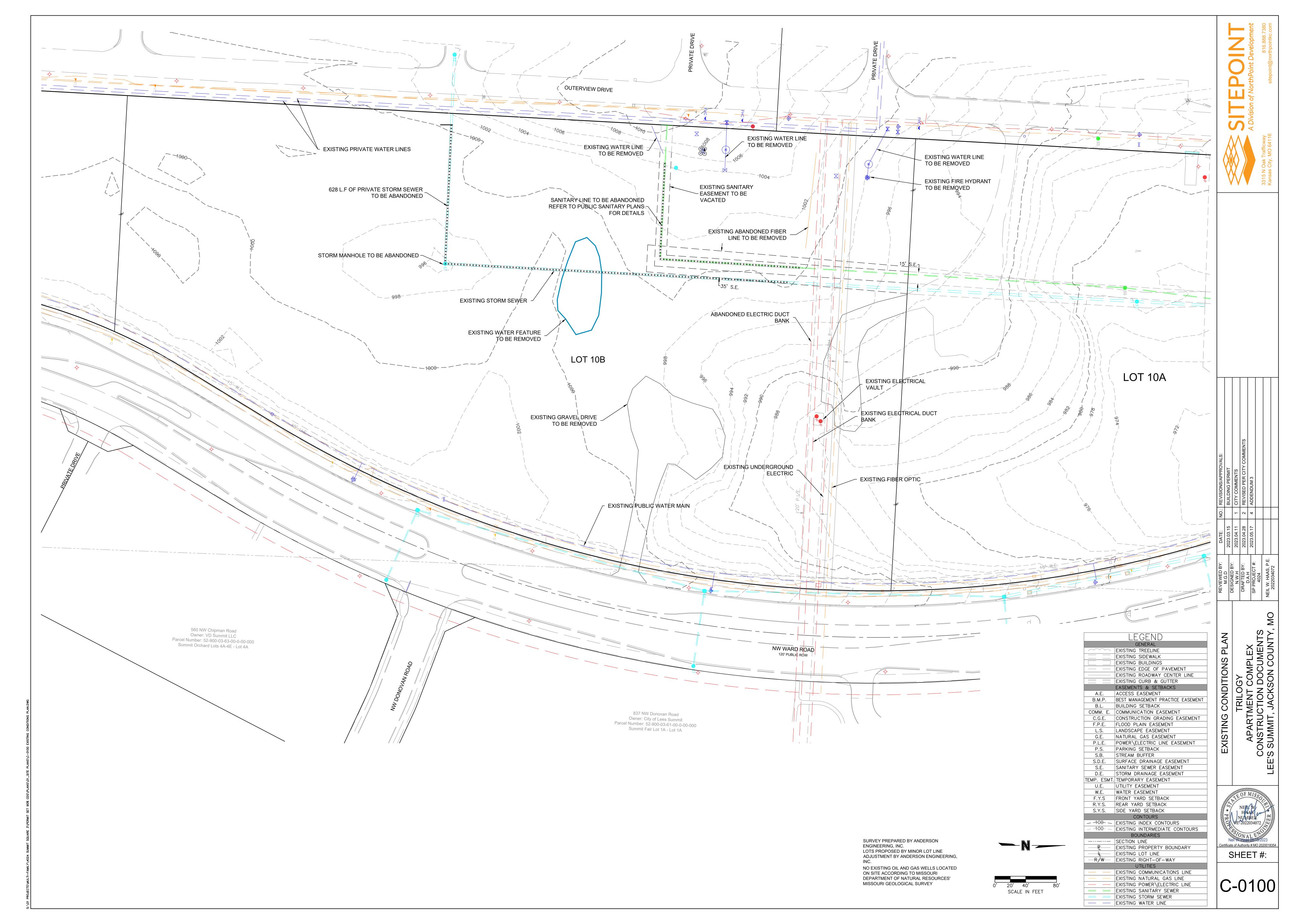


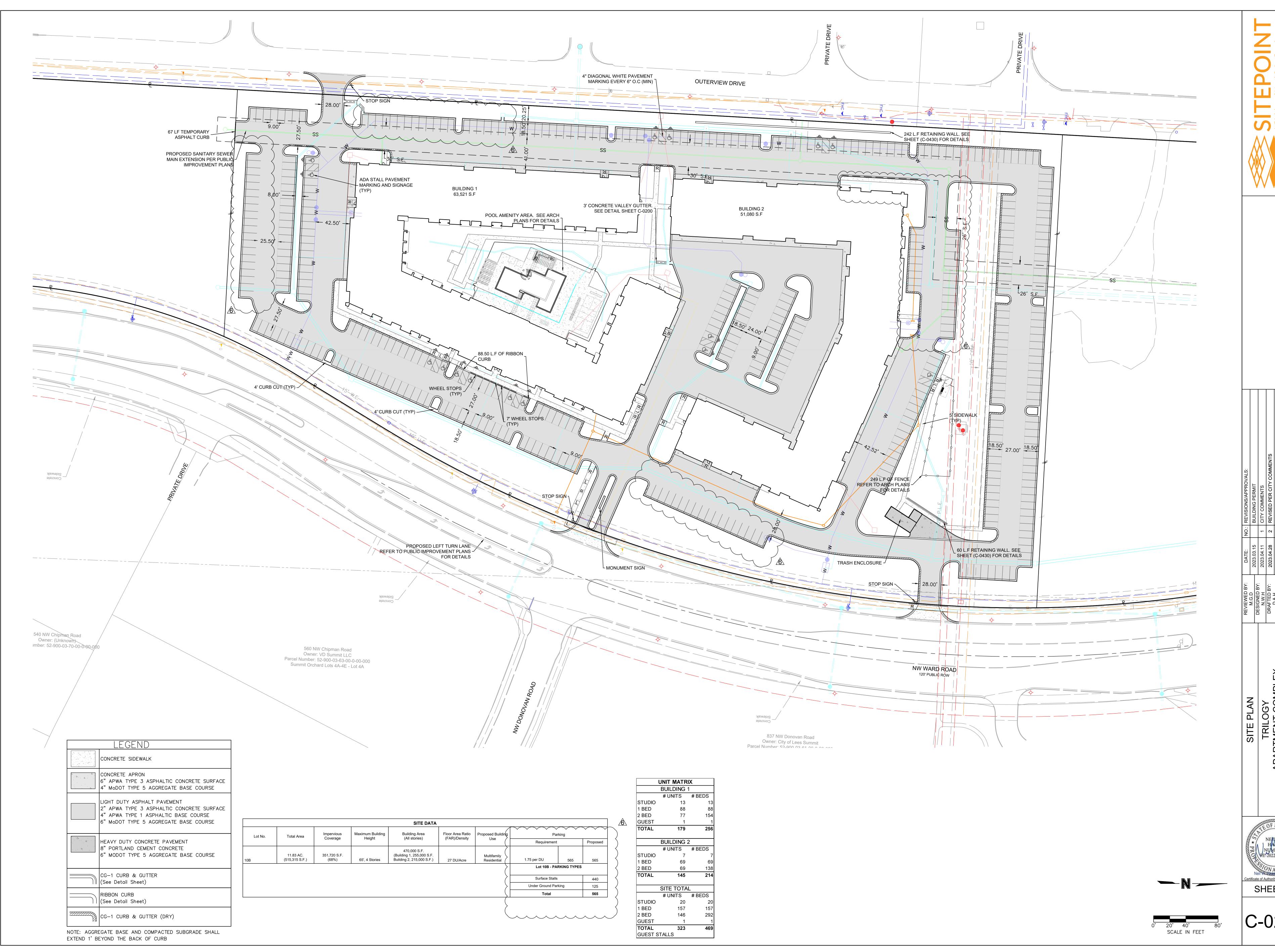


NOTES
COMPLEX
DOCUMENT

TRIL MEN CTION

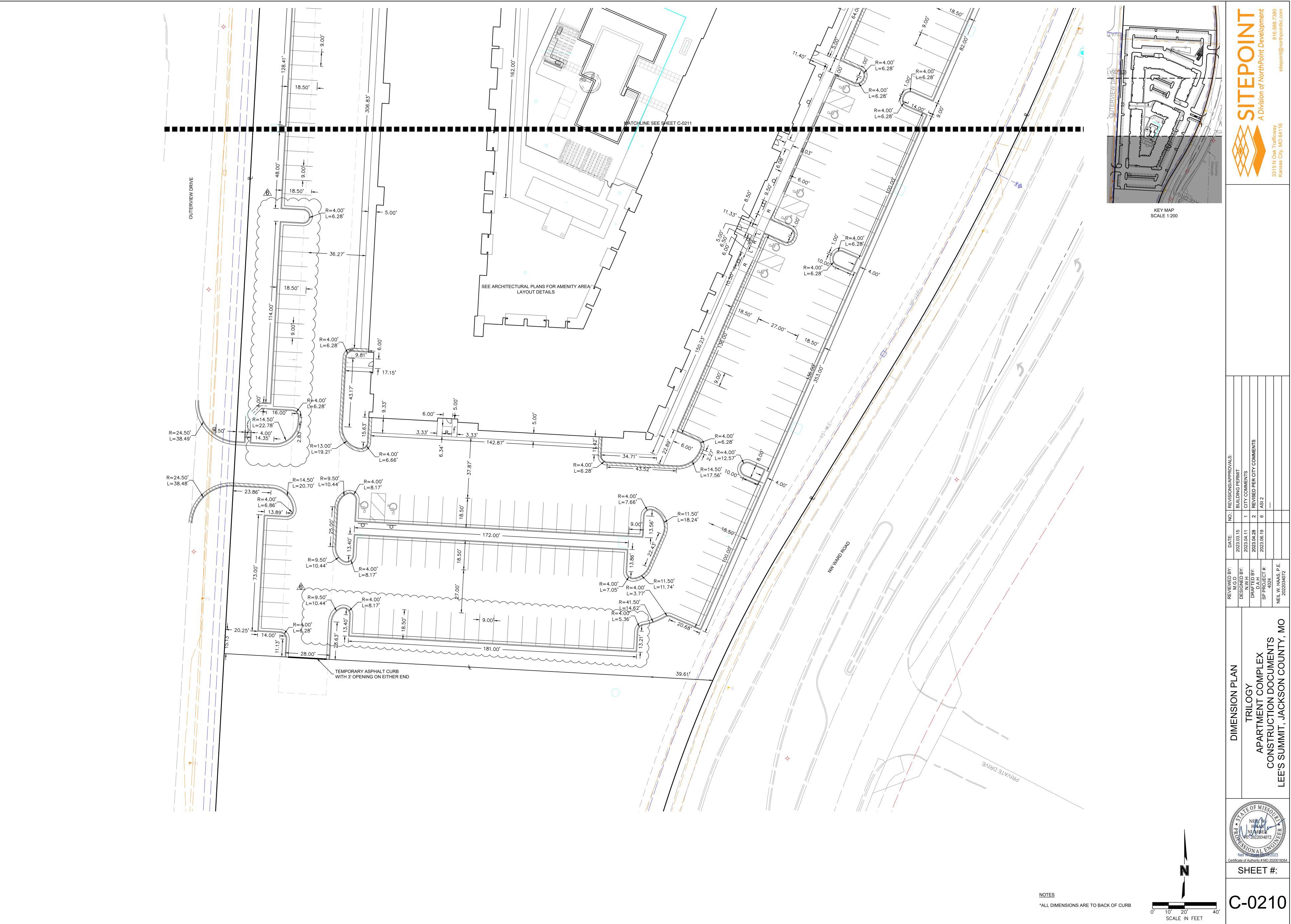
 \circ

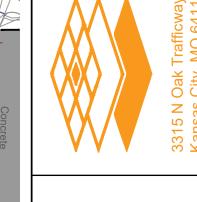


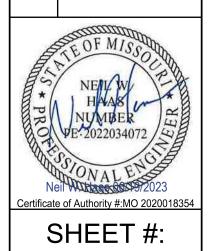


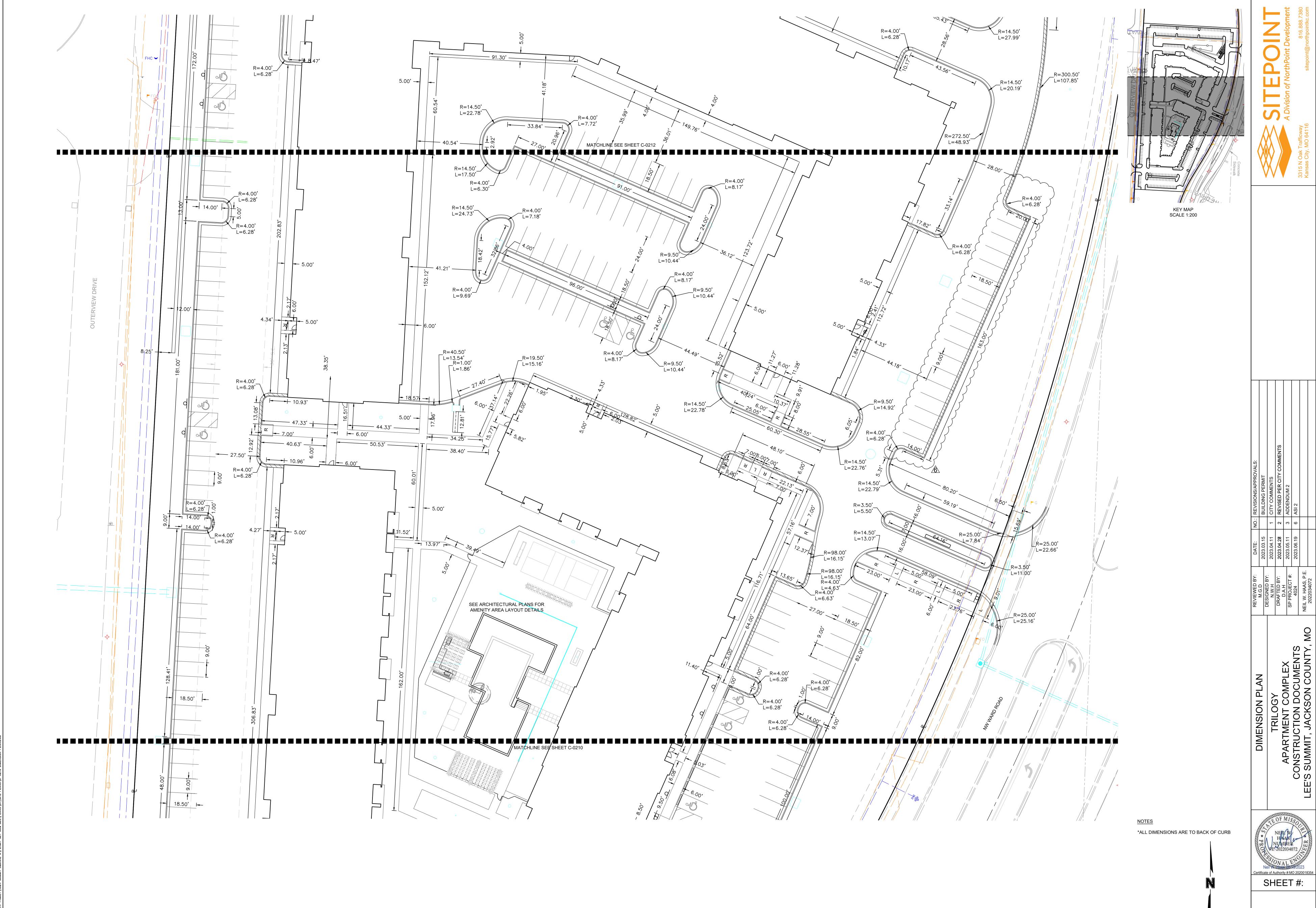


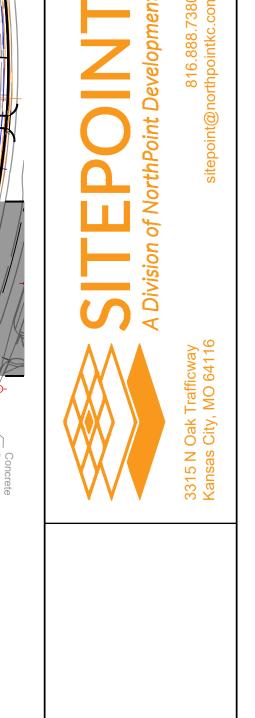
Certificate of Authority #:MO 2020018354 SHEET #:



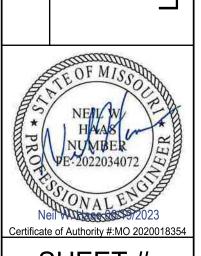




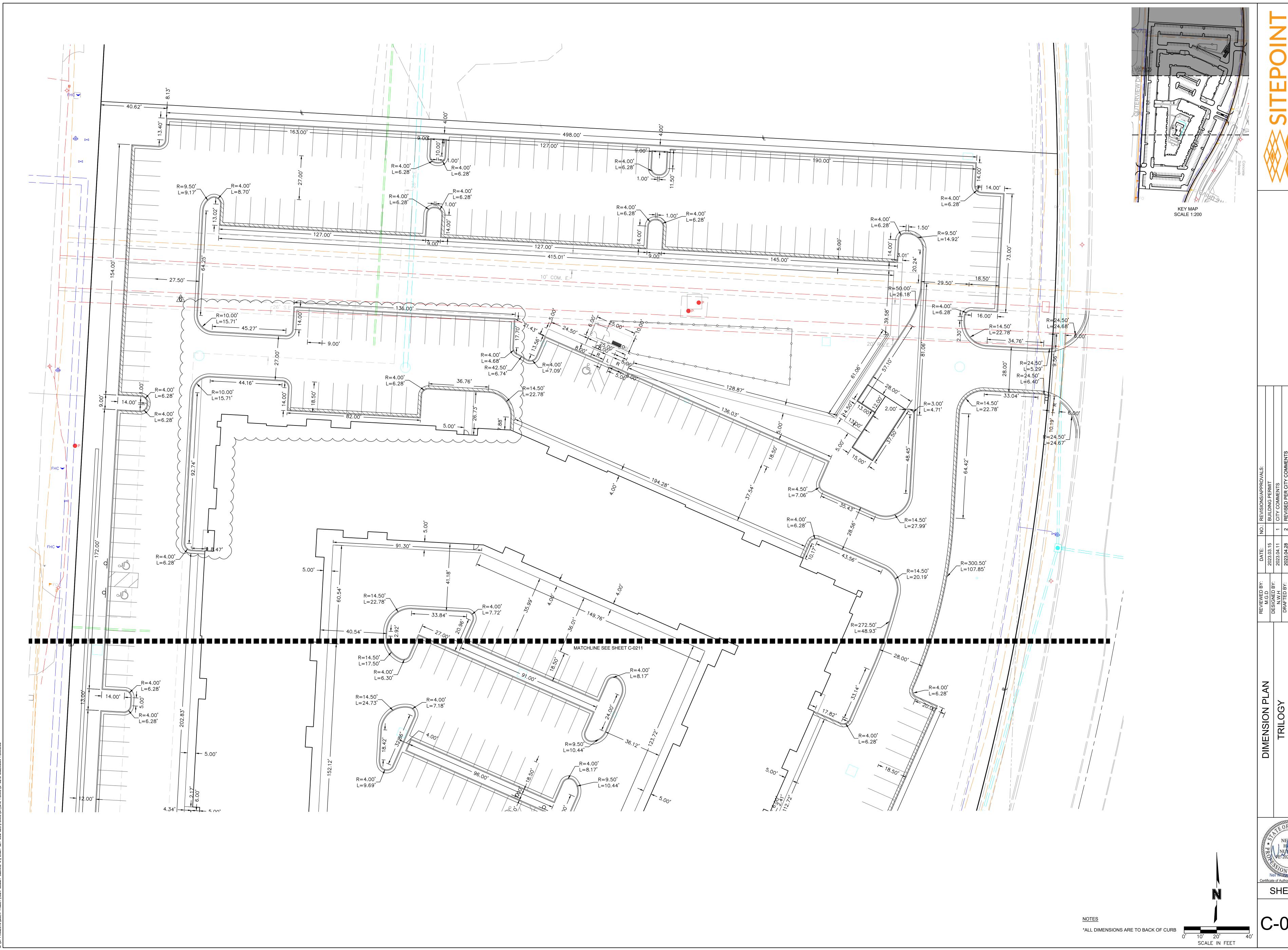


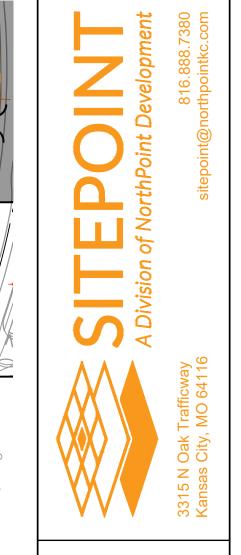


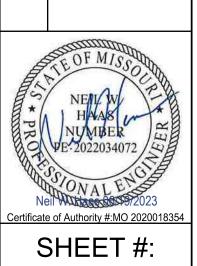
	REVIEWED BY:	DATE:	NO.:	NO.: REVISIONS/APPROVALS:
	M.G.D	2023 03 15		BI III DING DEBMIT
	DESIGNED BV.	2023.03.13		DOILDING F CINIII
TDII OCV	N.W.H	2023.04.11	1	CITY COMMENTS
	DRAFTED BY:	2023.04.28	2	2 REVISED PER CITY COM
	D.A.H	10000	,	
	SP PROJECT #:	2023.05.11	3	3 ADDENDUM 2
CONSTRUCTION DOCUMENTS	4024	2023.06.19	9	6 ASI 2
	NEIL W. HAAS, P.E.			
	2022034072			

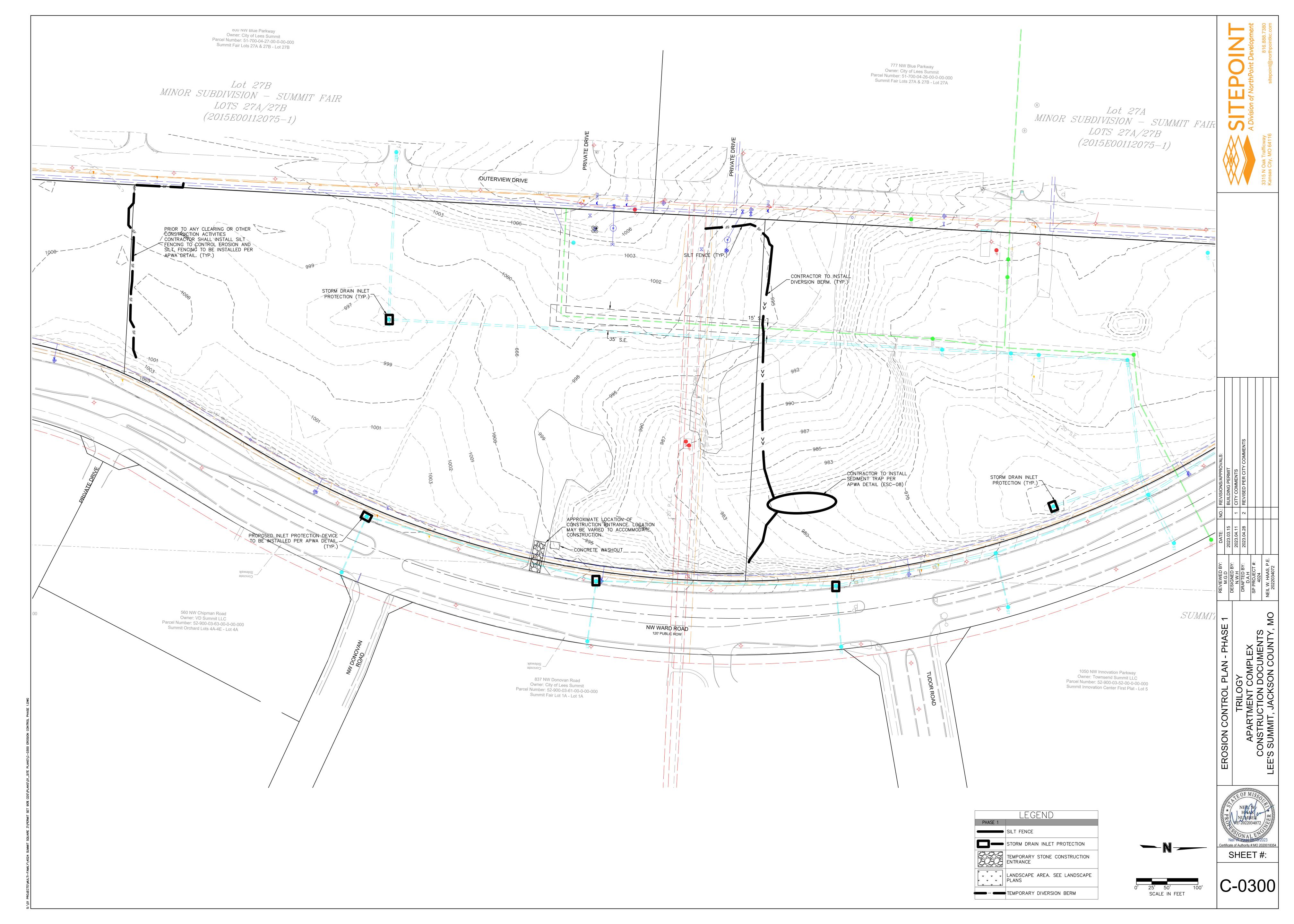


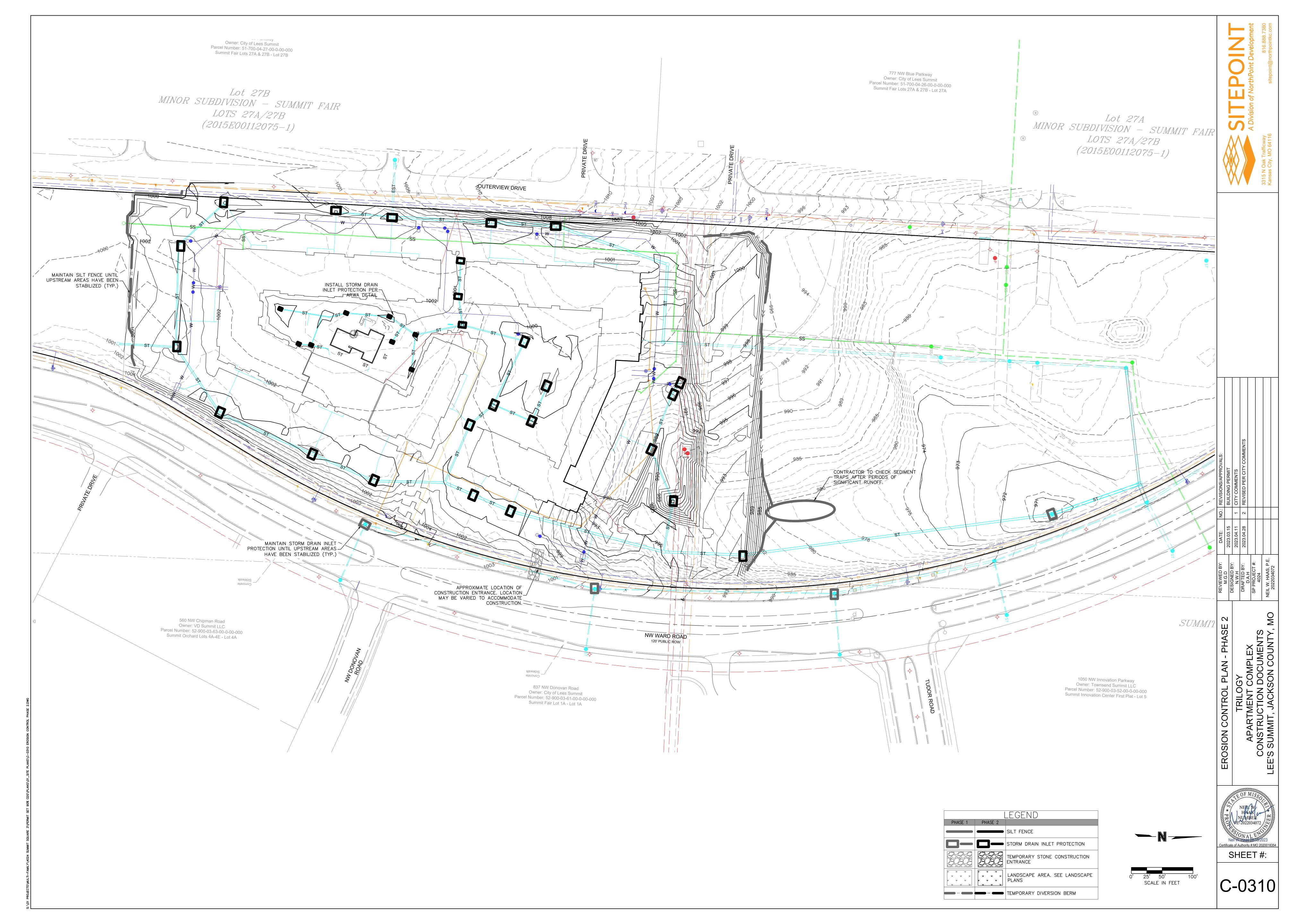
0' 10' 20' 40' SCALE IN FEET

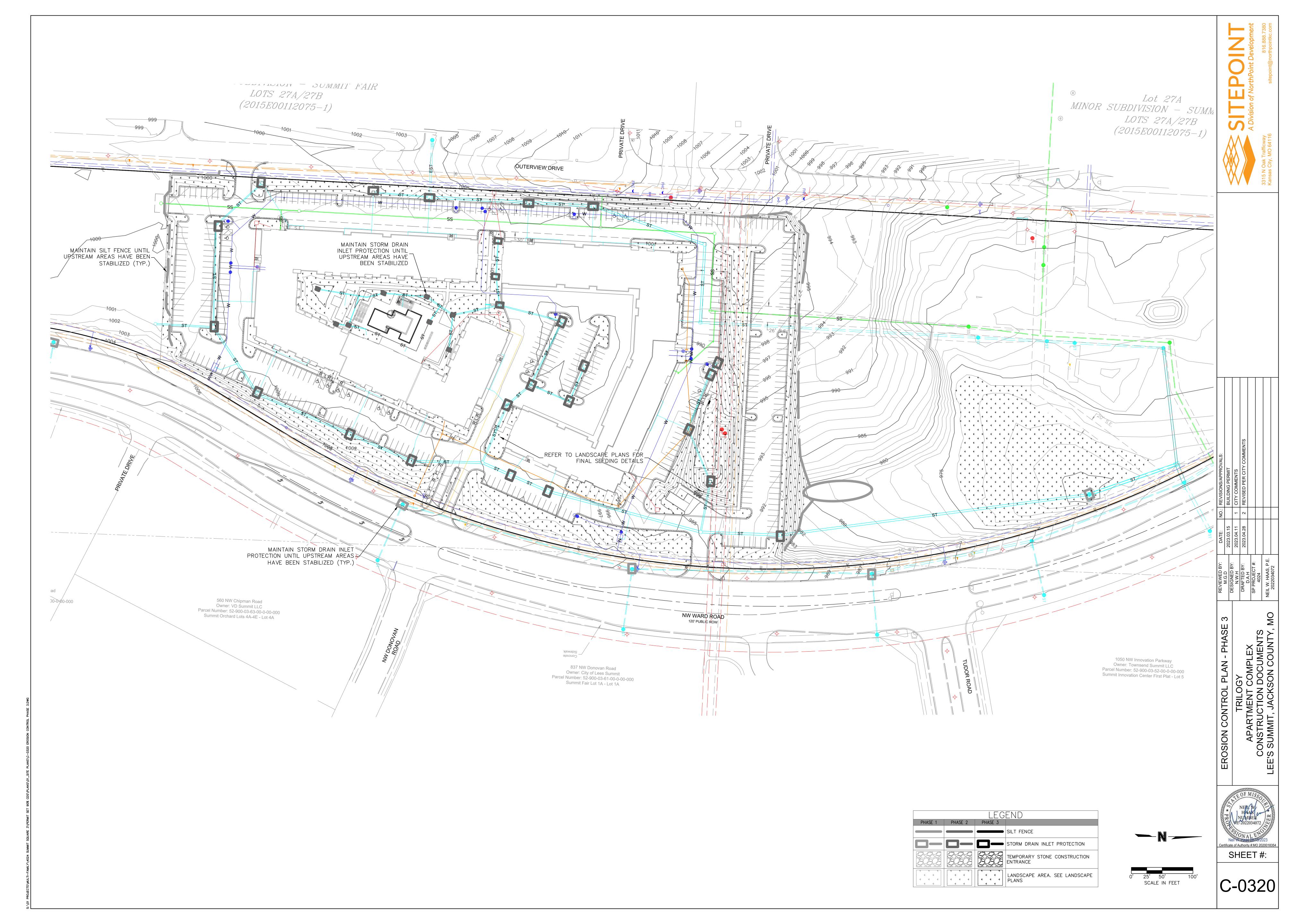


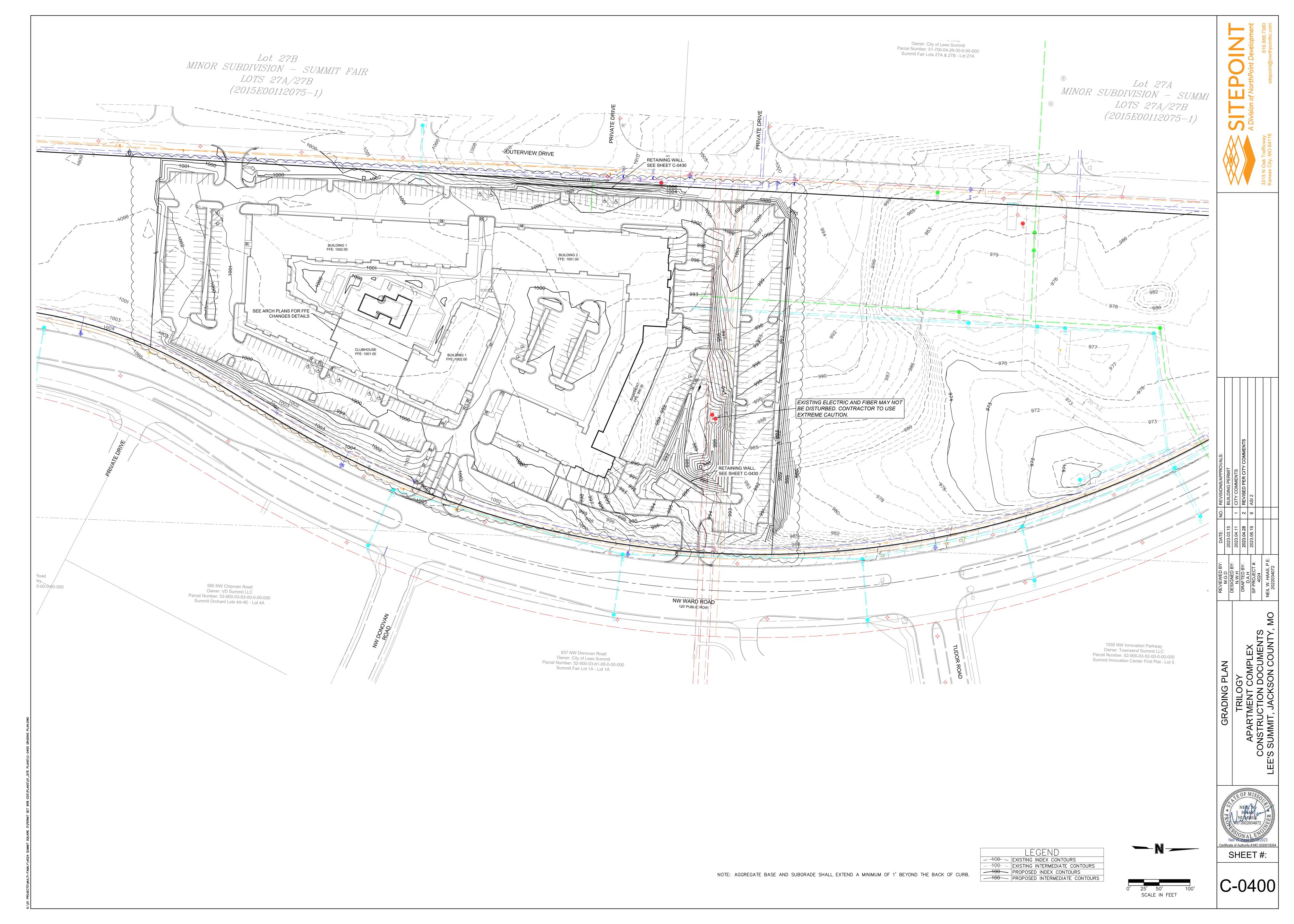


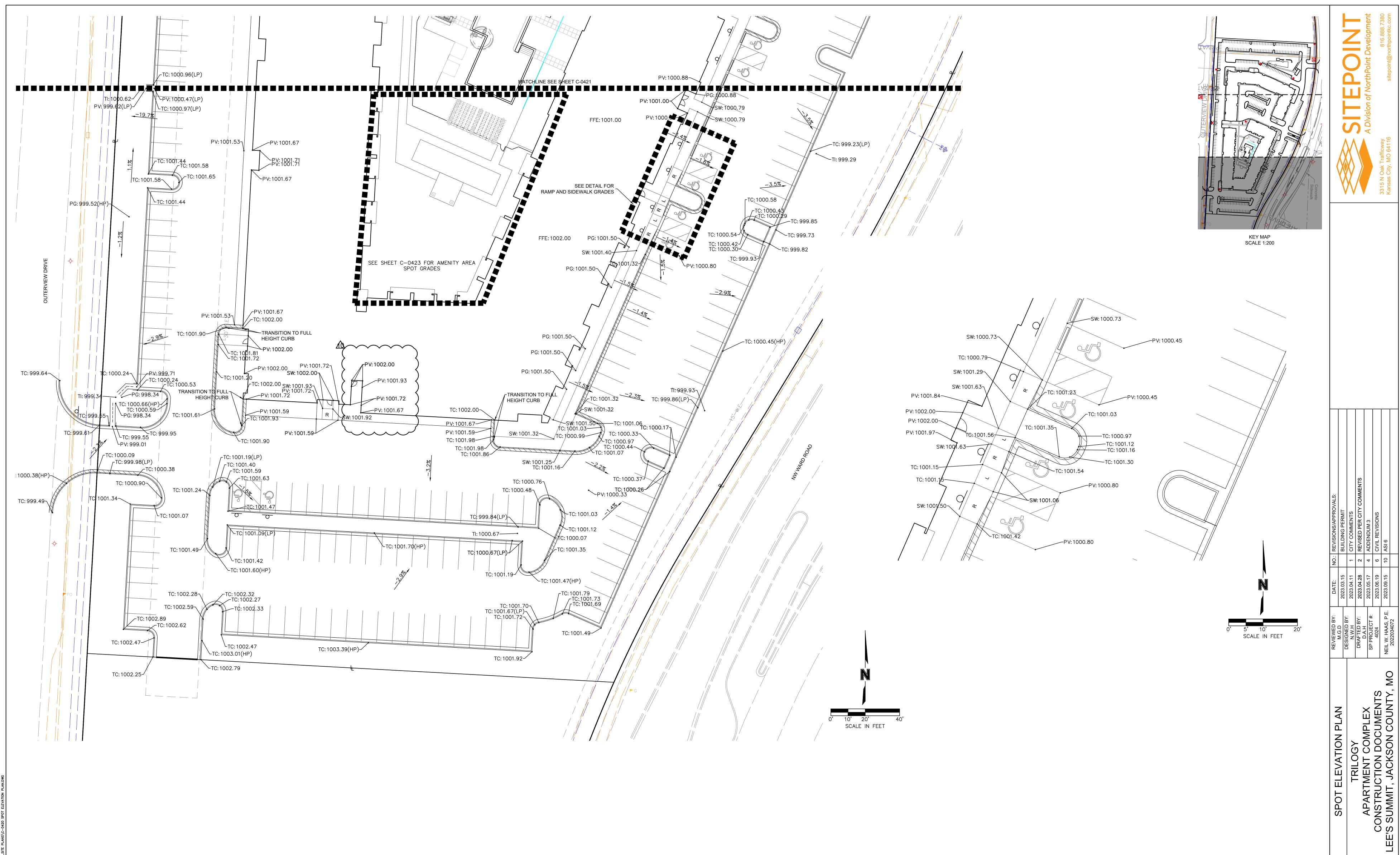


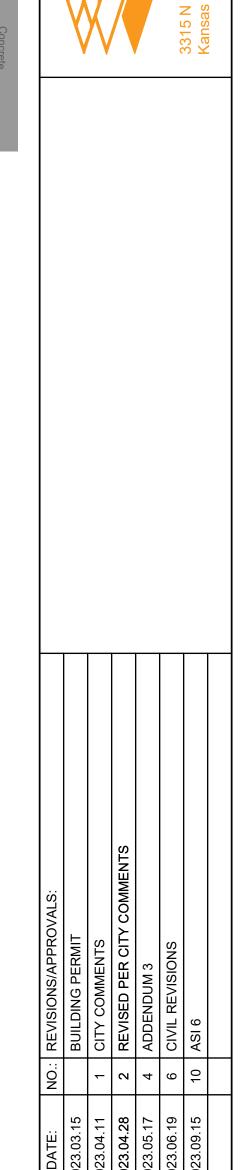


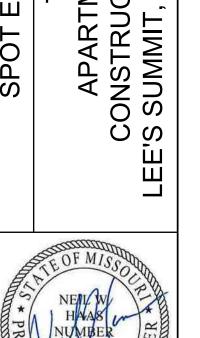








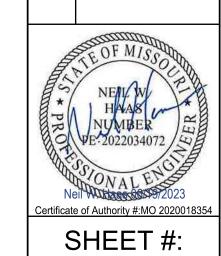


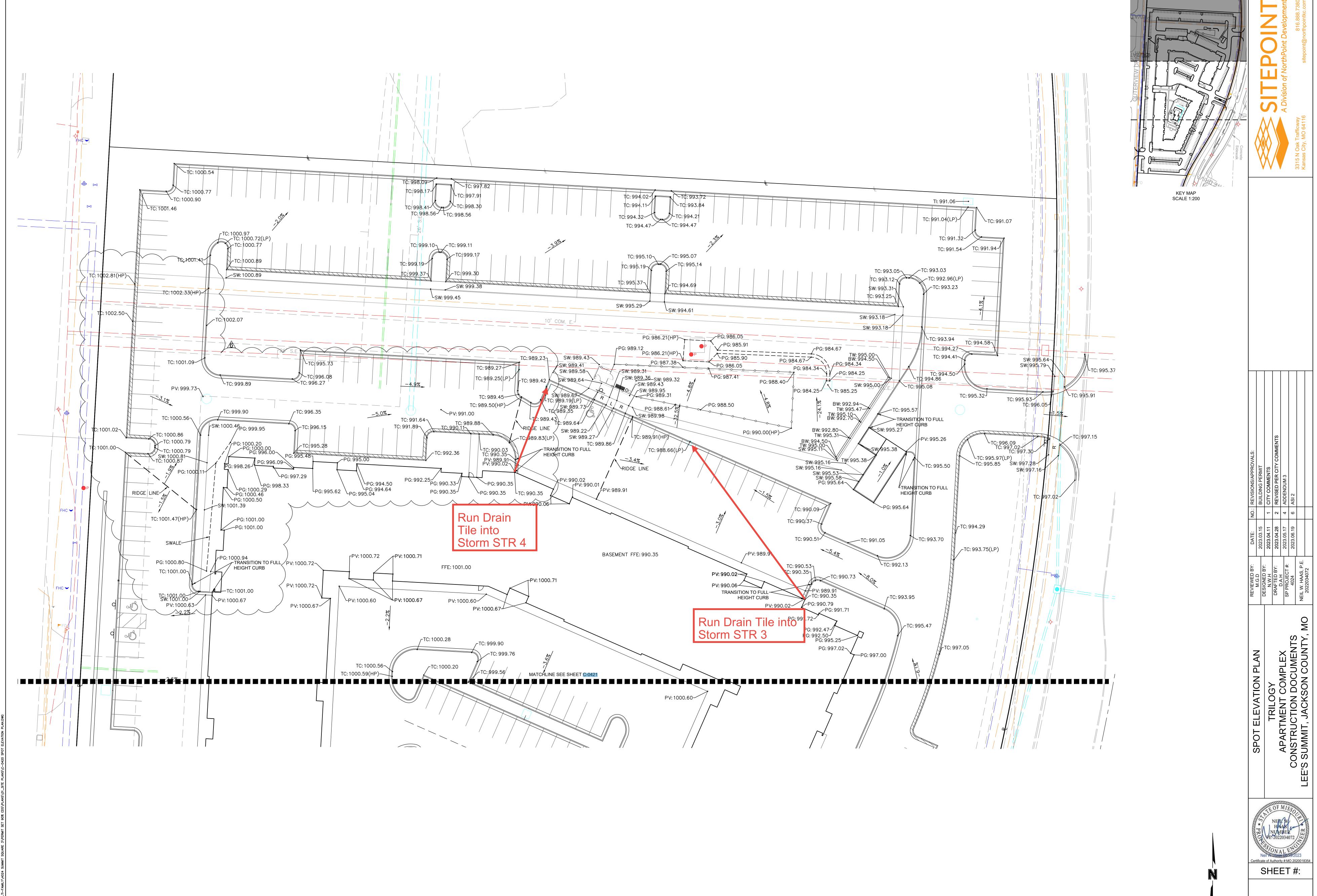




SHEET #:



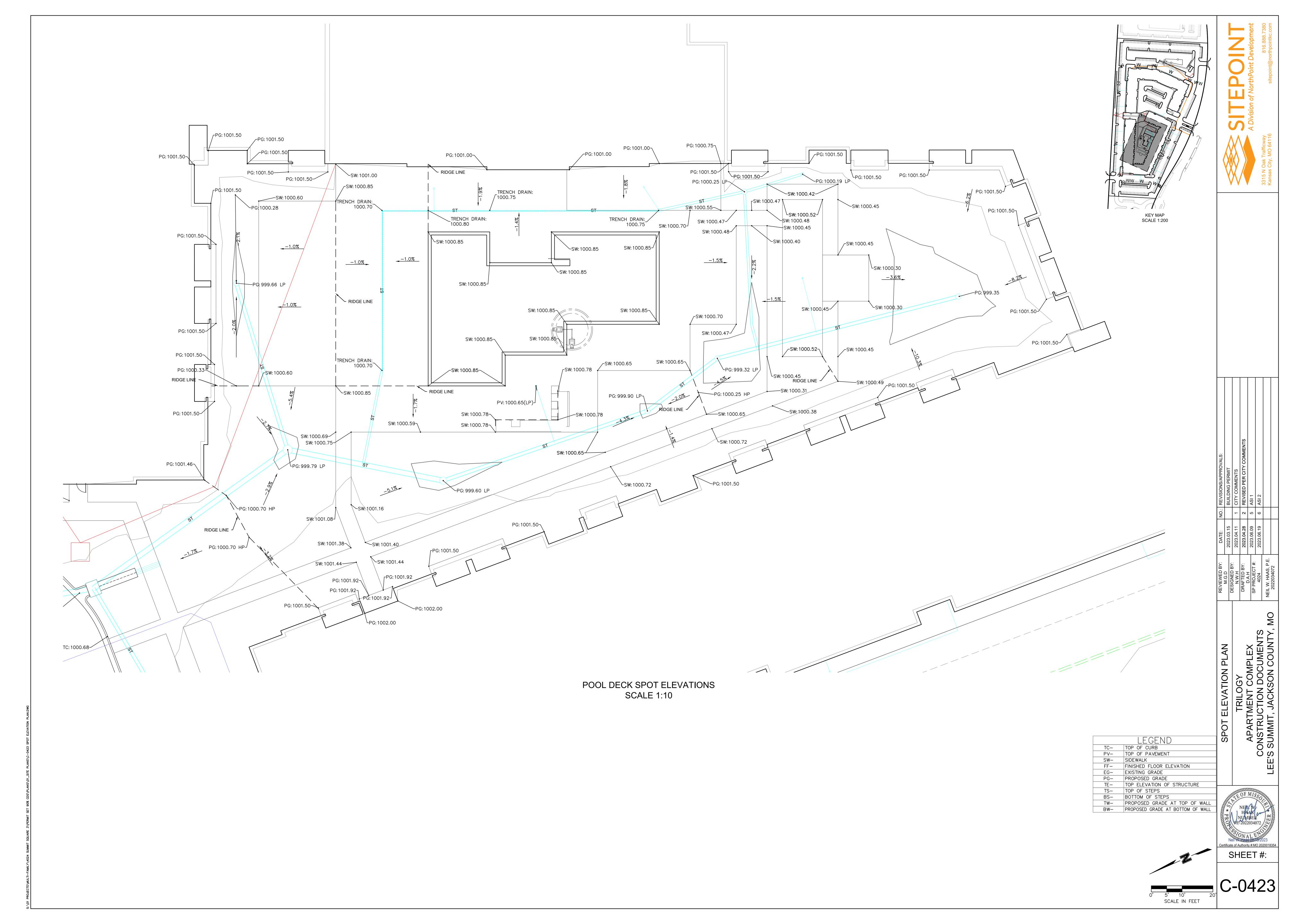


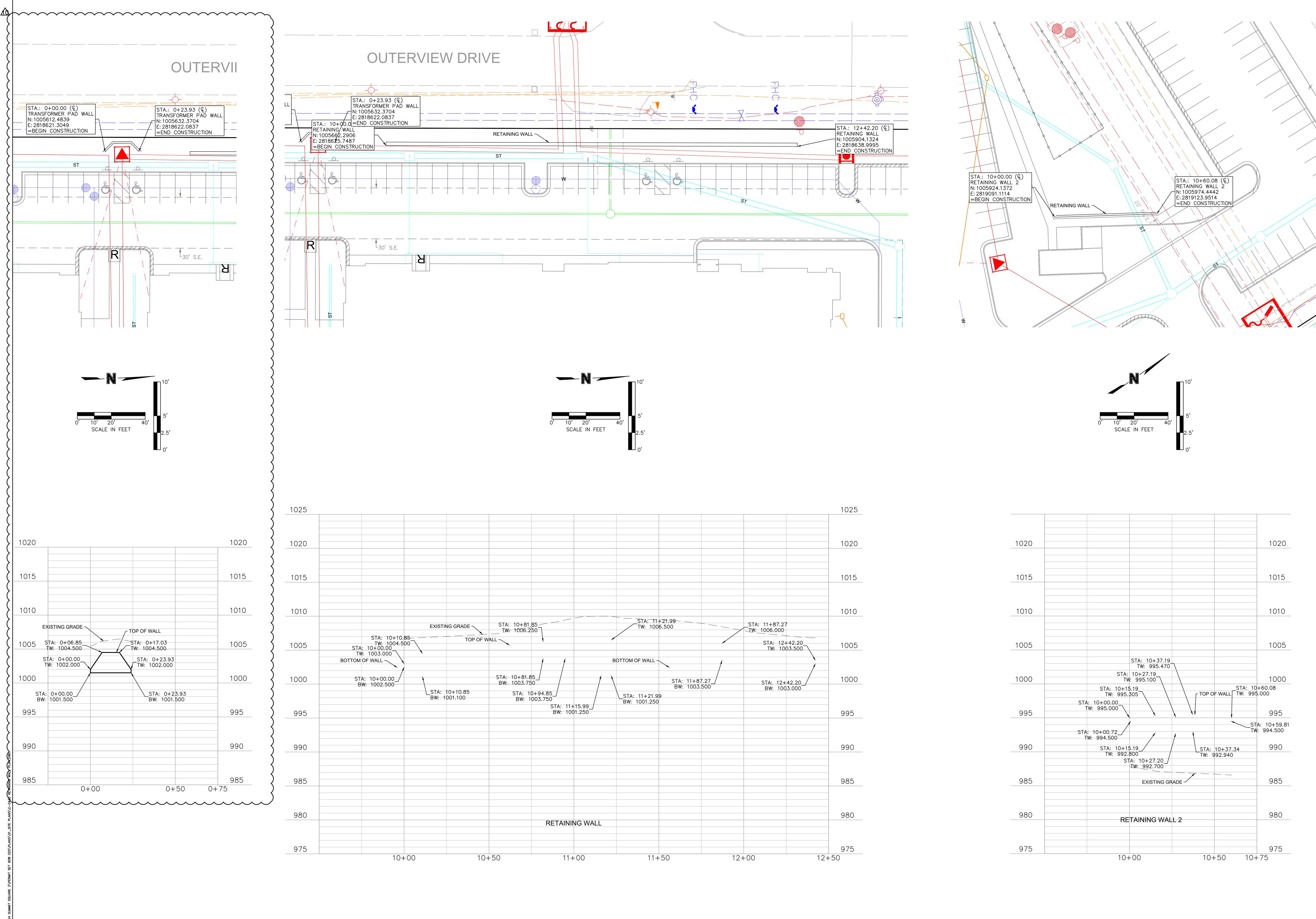




	REVIEWED BY:	DATE:	NO.:	NO.: REVISIONS/APPROVALS:
	M.G.D	2023 03 15		BI III DING PERMIT
	DESIGNED BV.	2020.03.13		DOILDING F CINNII
V20 II Q	N.W.H	2023.04.11	1	CITY COMMENTS
	DRAFTED BY:	2023.04.28	2	2 REVISED PER CITY COMMI
	D.A.n	0000	,	
	SP PROJECT #:	2023.05.17	4	4 ADDENDOM 3
FION DOCUMENTS	4024	2023.06.19	9	6 ASI 2
ON VENIOR MORNON	NEIL W. HAAS, P.E.			
	2022034072			

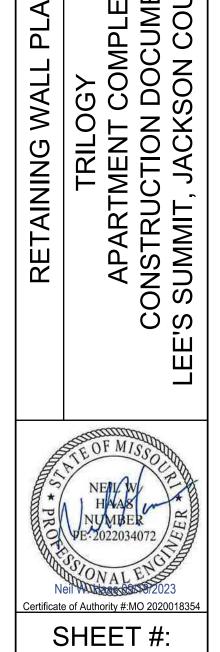


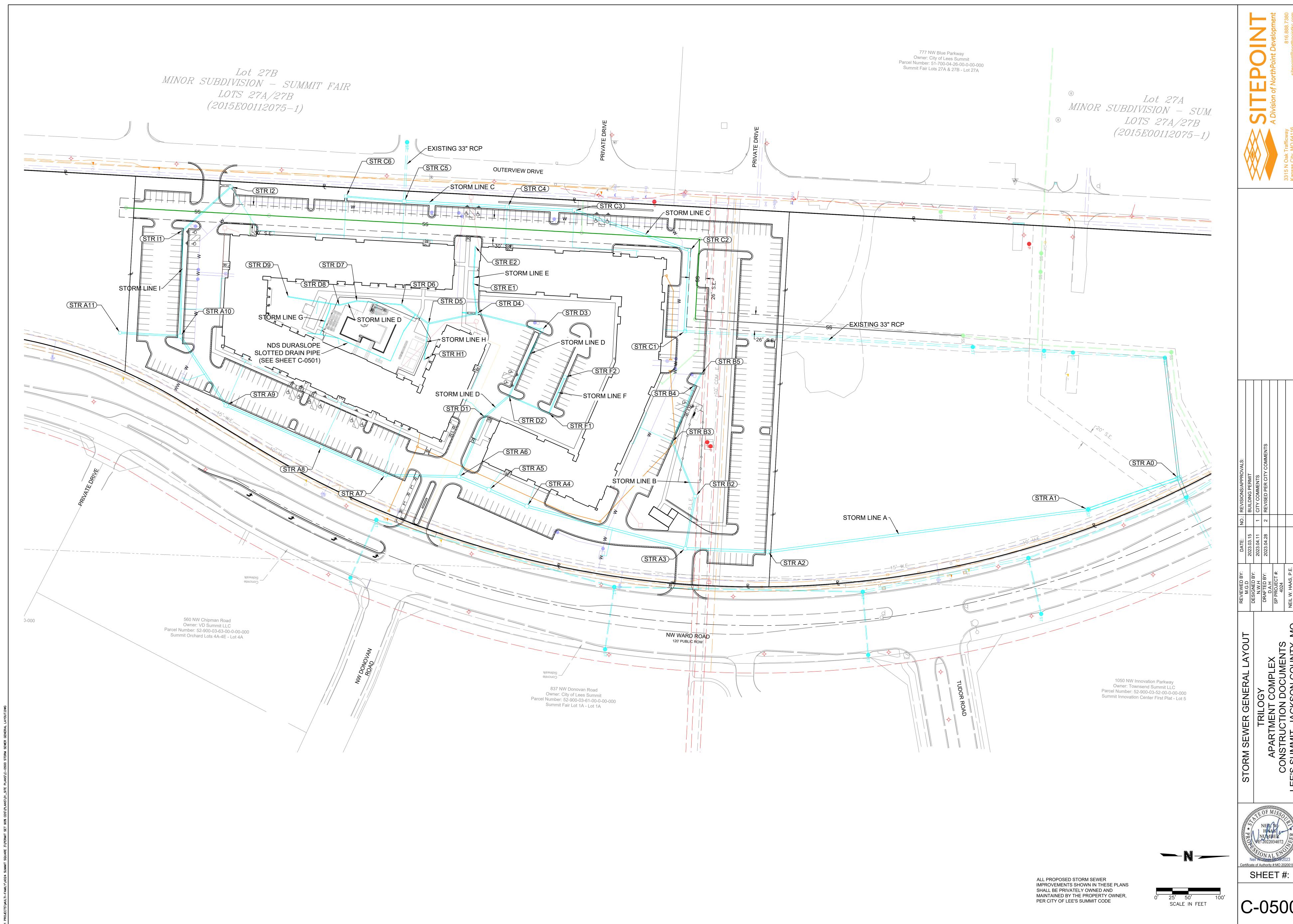


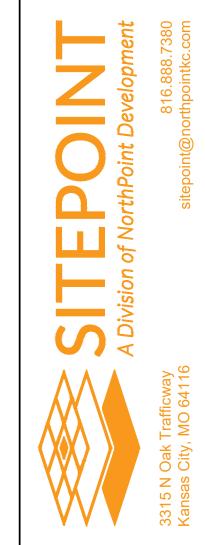


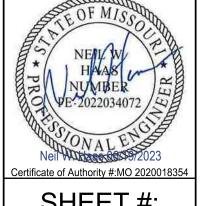


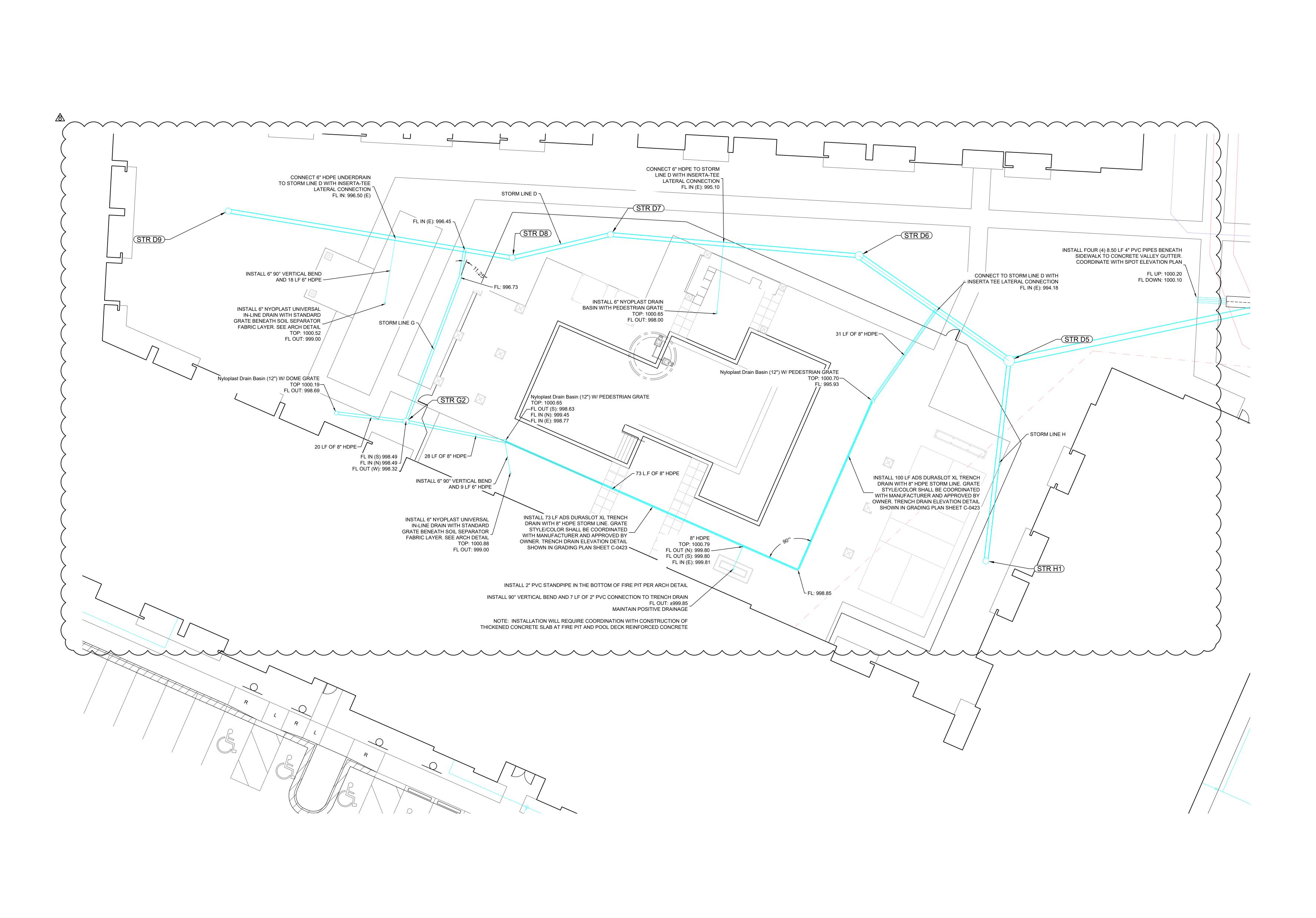
LAN LEX MENTS OUNTY, MO	REVIEWED BY: M.G.D DESIGNED BY: N.W.H DRAFTED BY: D.A.H SP PROJECT #: 4024 NEIL W. HAAS, P.E. 2022034072	DATE: 2023.03.15 2023.04.11 2023.04.28 2023.06.09 2023.09.15	NO 1 2 2 1 10 10	 NO.: REVISIONS/APPROVALS: BUILDING PERMIT 1 CITY COMMENTS 2 REVISED PER CITY COMMENTS 5 ASI 1 10 ASI 6 	
----------------------------------	--	--	------------------	---	--

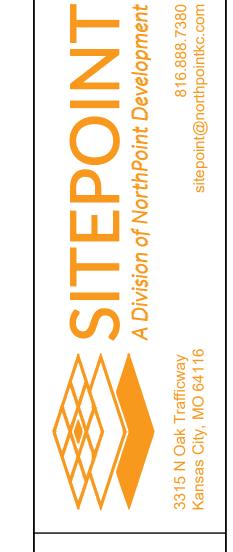










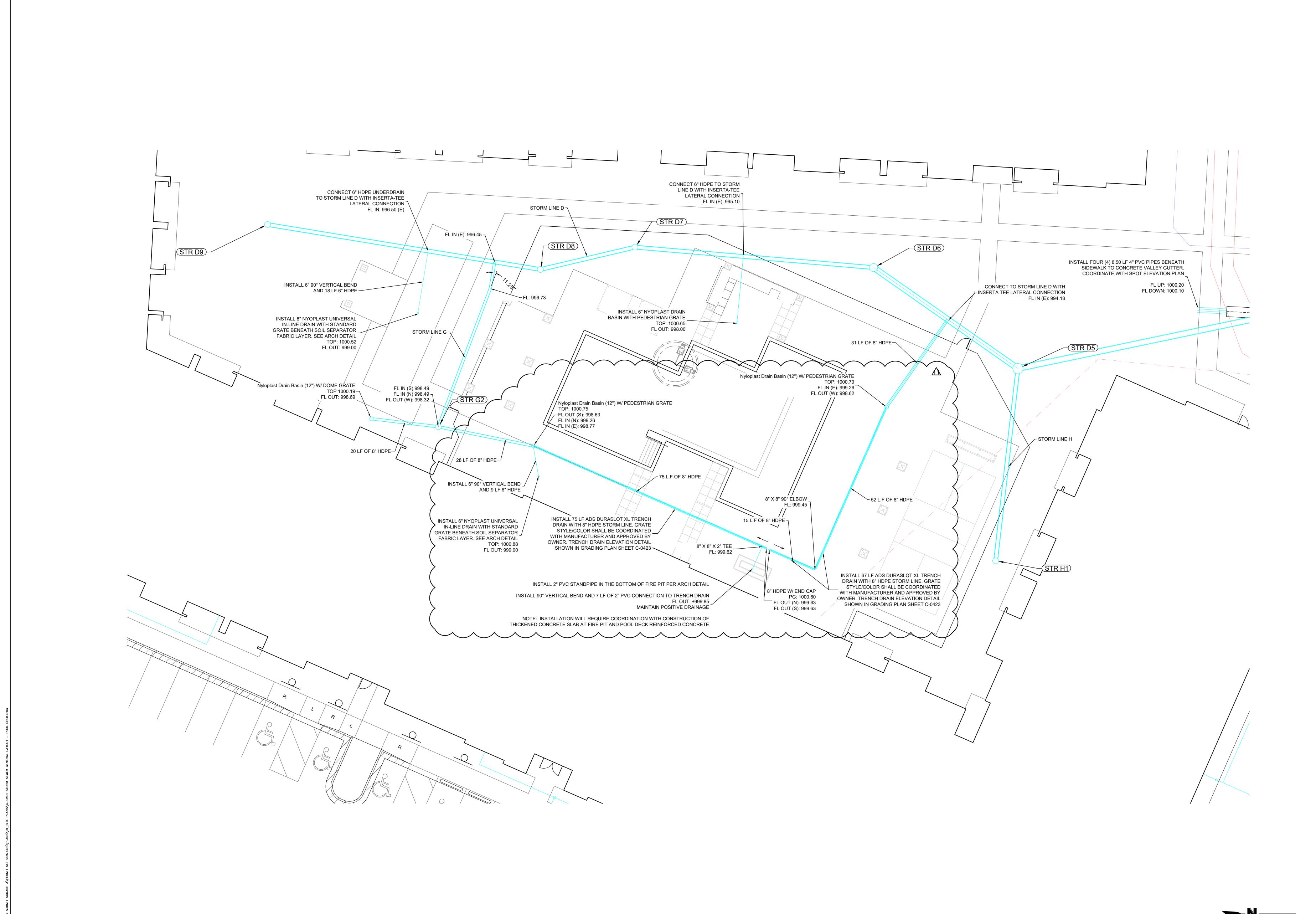


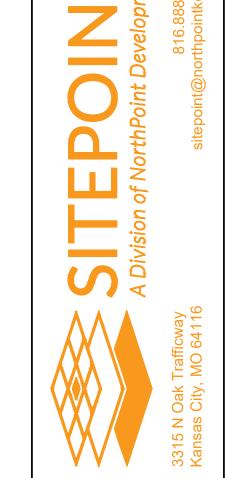
SHEET #:

SCALE IN FEET

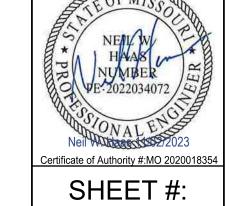
ALL PROPOSED STORM SEWER
IMPROVEMENTS SHOWN IN THESE PLANS
SHALL BE PRIVATELY OWNED AND
MAINTAINED BY THE PROPERTY OWNER,

PER CITY OF LEE'S SUMMIT CODE



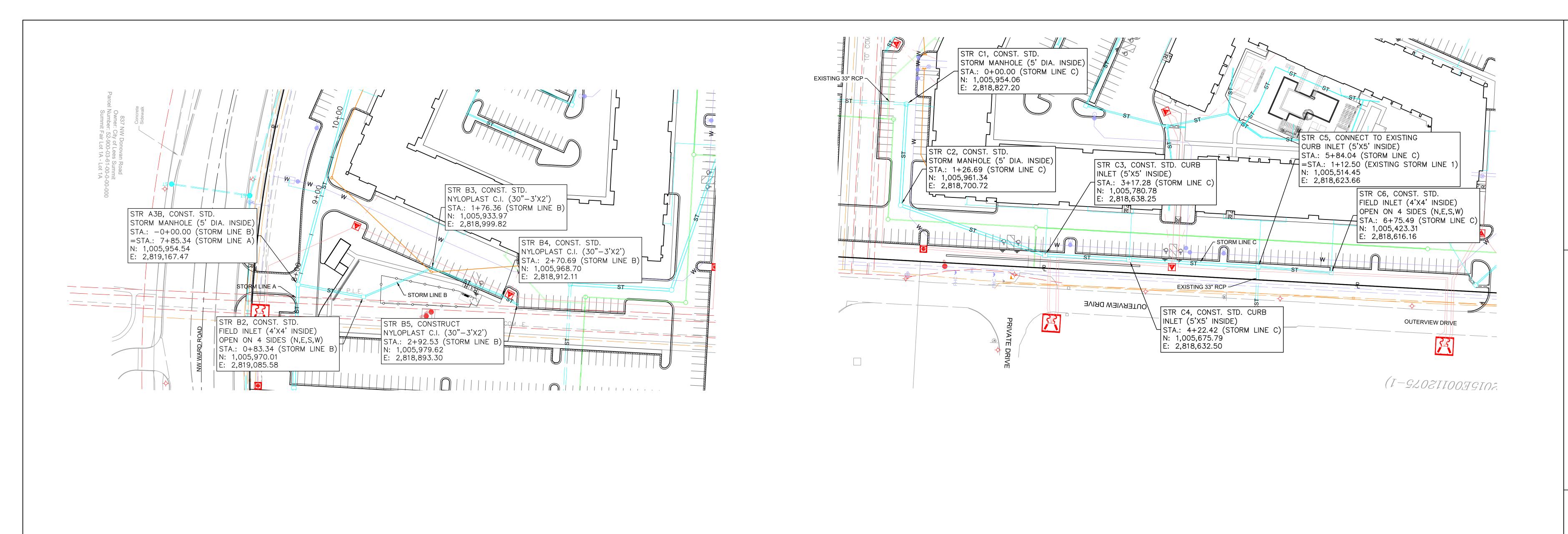


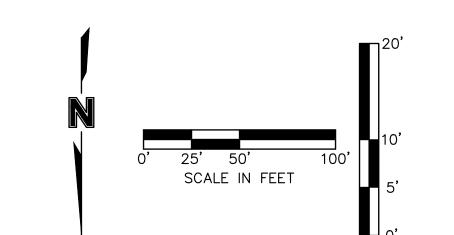
	REVIEWED BY: DATE:	NO.: REV	NO.: REVISIONS/APPROVALS:	
SIONIM SEWER GENERAL LATOOI RESIGNED BY: 2023.03.15 E		BUIL	BUILDING PERMIT	
2023.04.11 1		1	CHTY COMMENTS	
DRAFTED BY: 2023.04.28 2			REVISED PER CITY COMMENTS	
APARIMENT COMPLEX SP PROJECT # 2023.05.17 4 4		4	ADDENDUM 3	
2023.06.09 5		5 ASI 1		
NEIL W. HAAS, P.E. 2023.08.11 8		8 ASI 4		
0 0 0 0 0 0 0 0 0 0		11 ASI 7		



SCALE IN FEET

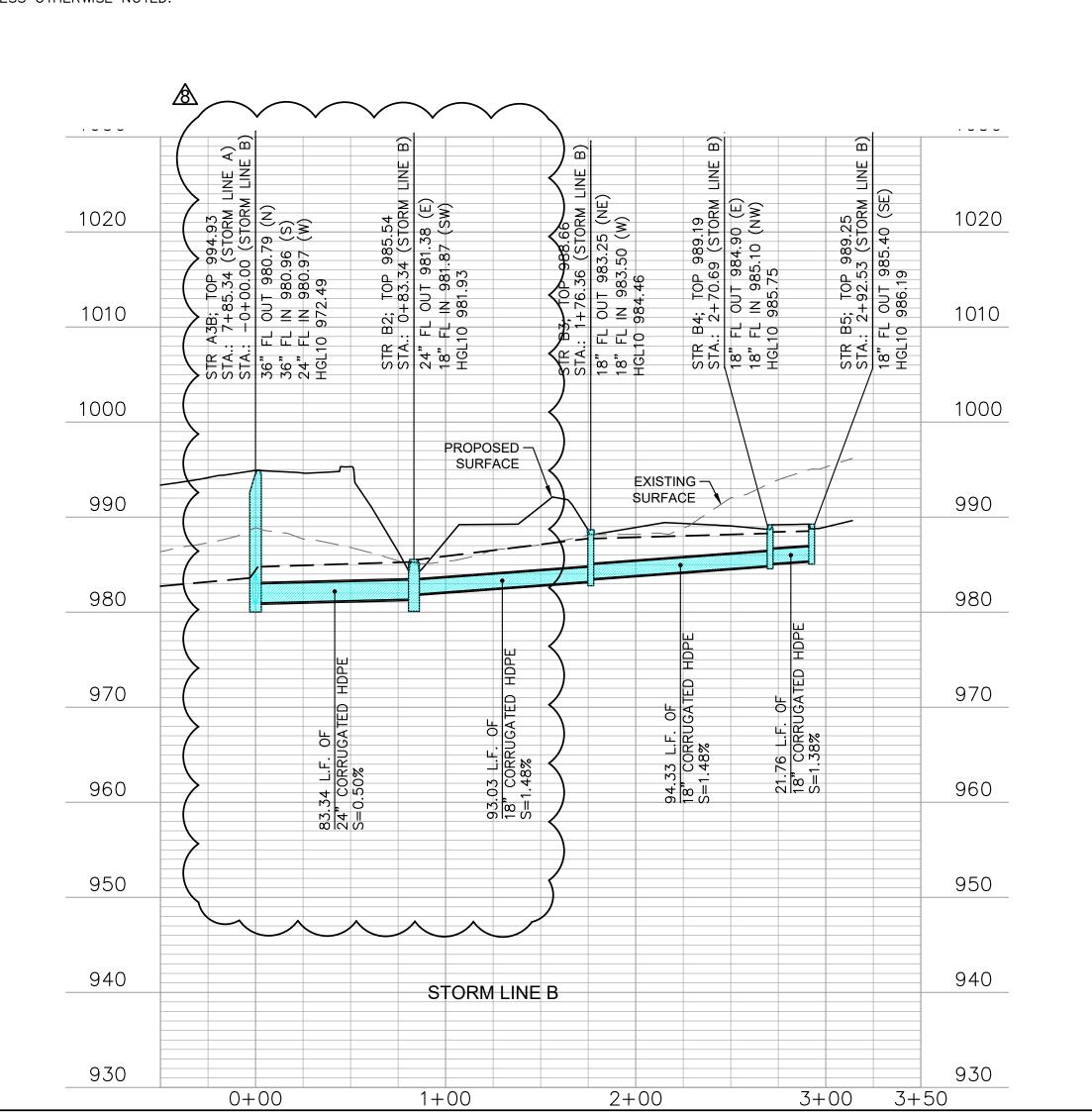
ALL PROPOSED STORM SEWER
IMPROVEMENTS SHOWN IN THESE PLANS
SHALL BE PRIVATELY OWNED AND
MAINTAINED BY THE PROPERTY OWNER, PER CITY OF LEE'S SUMMIT CODE

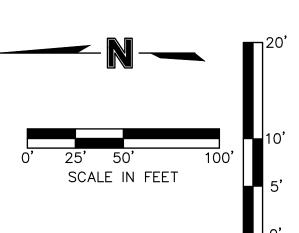


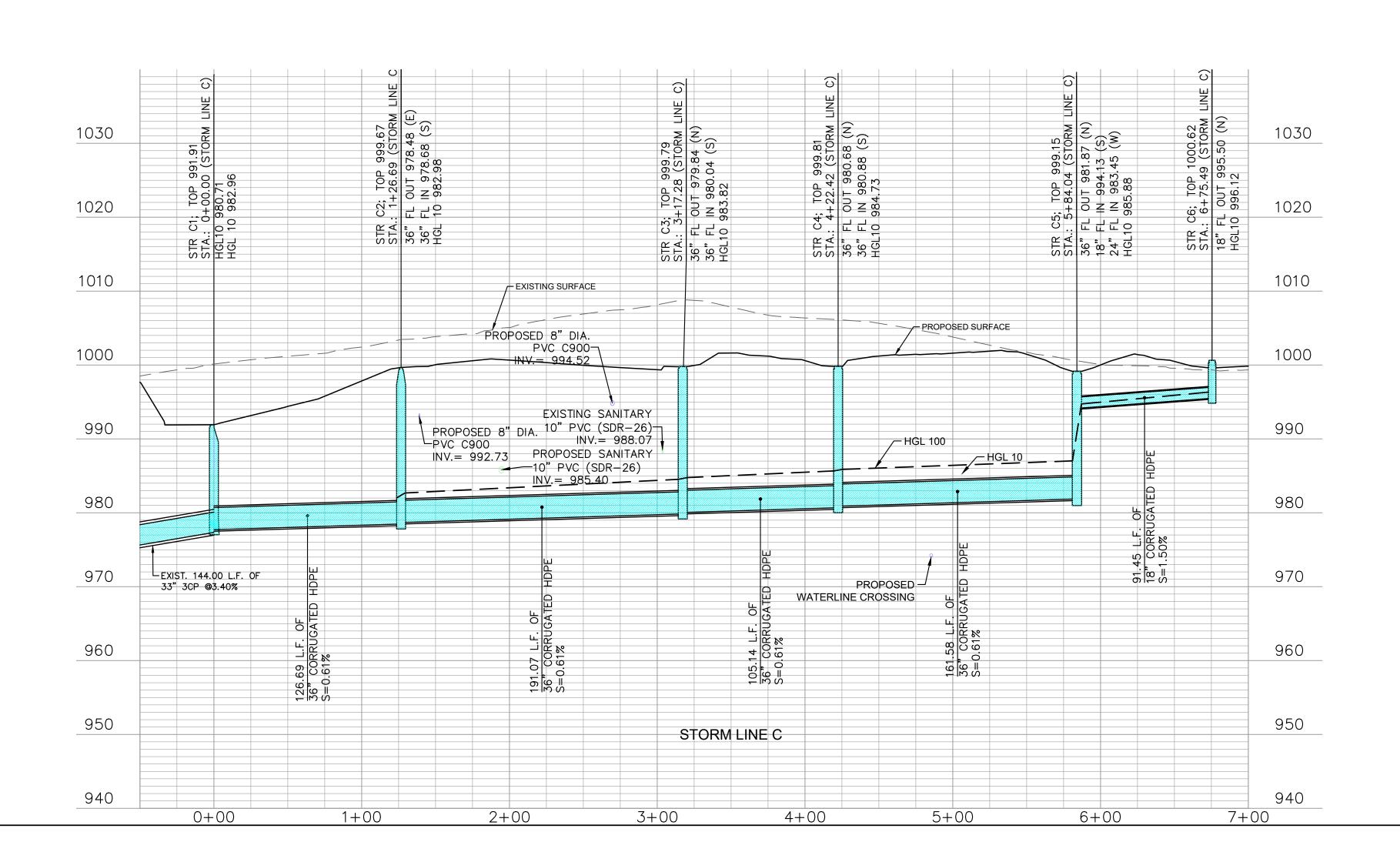


COMPACTED FILL SHALL BE PLACED TO A MINIMUM 18"
ABOVE THE TOP OF PIPE AFTER INSTALLATION IN HATCHED AREAS.

ALL STORM LINES ARE PRIVATE UNLESS OTHERWISE NOTED.



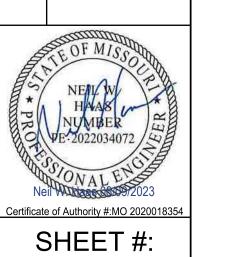


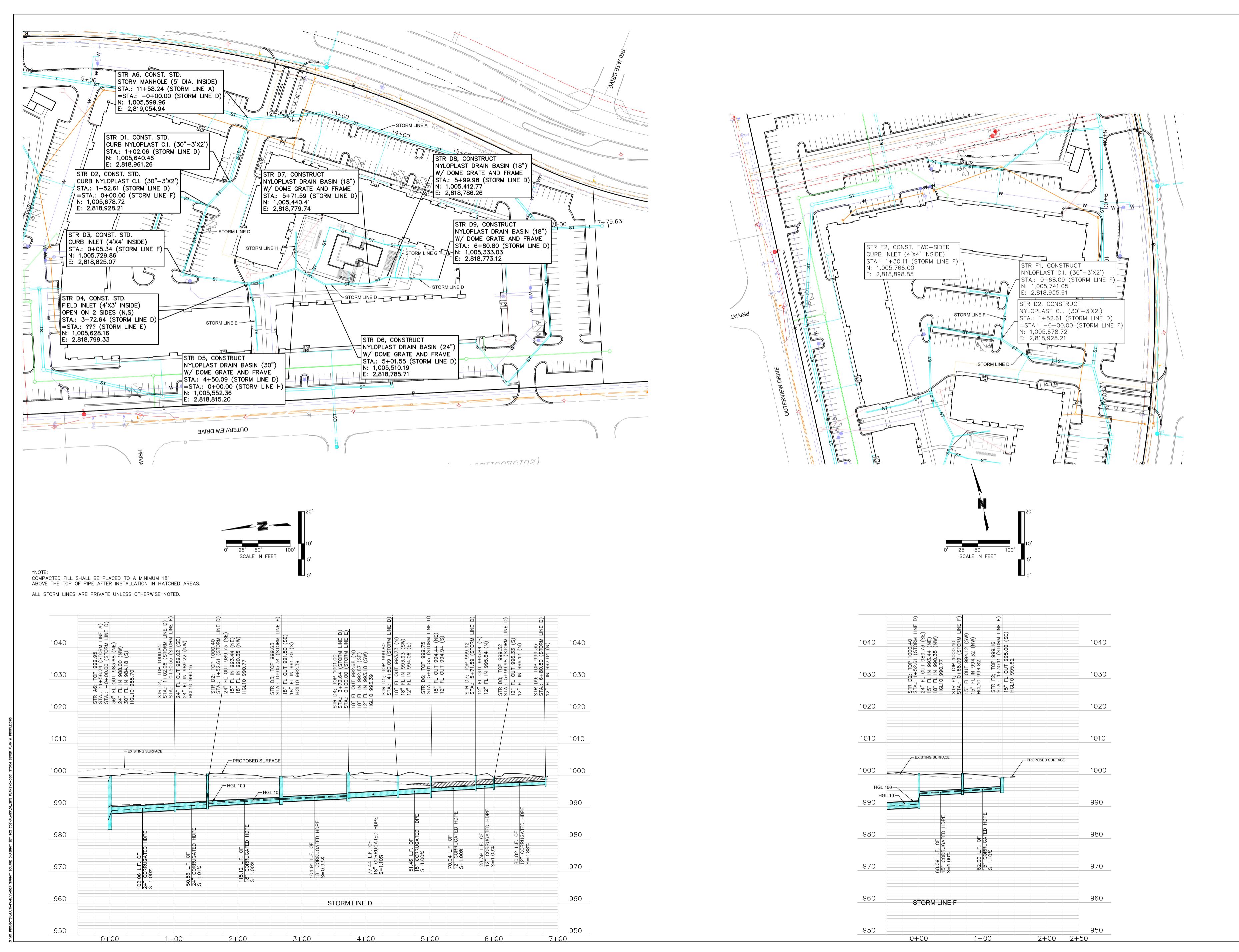




,	REVIEWED BY: DATE: NO.: REVISIONS/APPROVALS:	M.G.U 2023 03 15 BIIII DING PERMIT		N.W.H 2023.04.11 1 CITY COMMENTS	DRAFTED BY: 2023.04.28 2 REVISED PER CITY COMMENTS		SP PROJECT #: ZUZ3.U3.1/ 4 ADDENDUM 3	4024 2023.06.19 6 ASI 2	NEIL W. HAAS, P.E. 2023.08.11 8 ASI 4	2022034072
•			DE9			$\frac{1}{2}$)

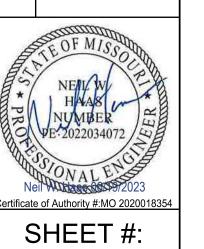
TRILOGY
APARTMENT COMPLEX
CONSTRUCTION DOCUMENTS
LEE'S SUMMIT, JACKSON COUNTY, MC

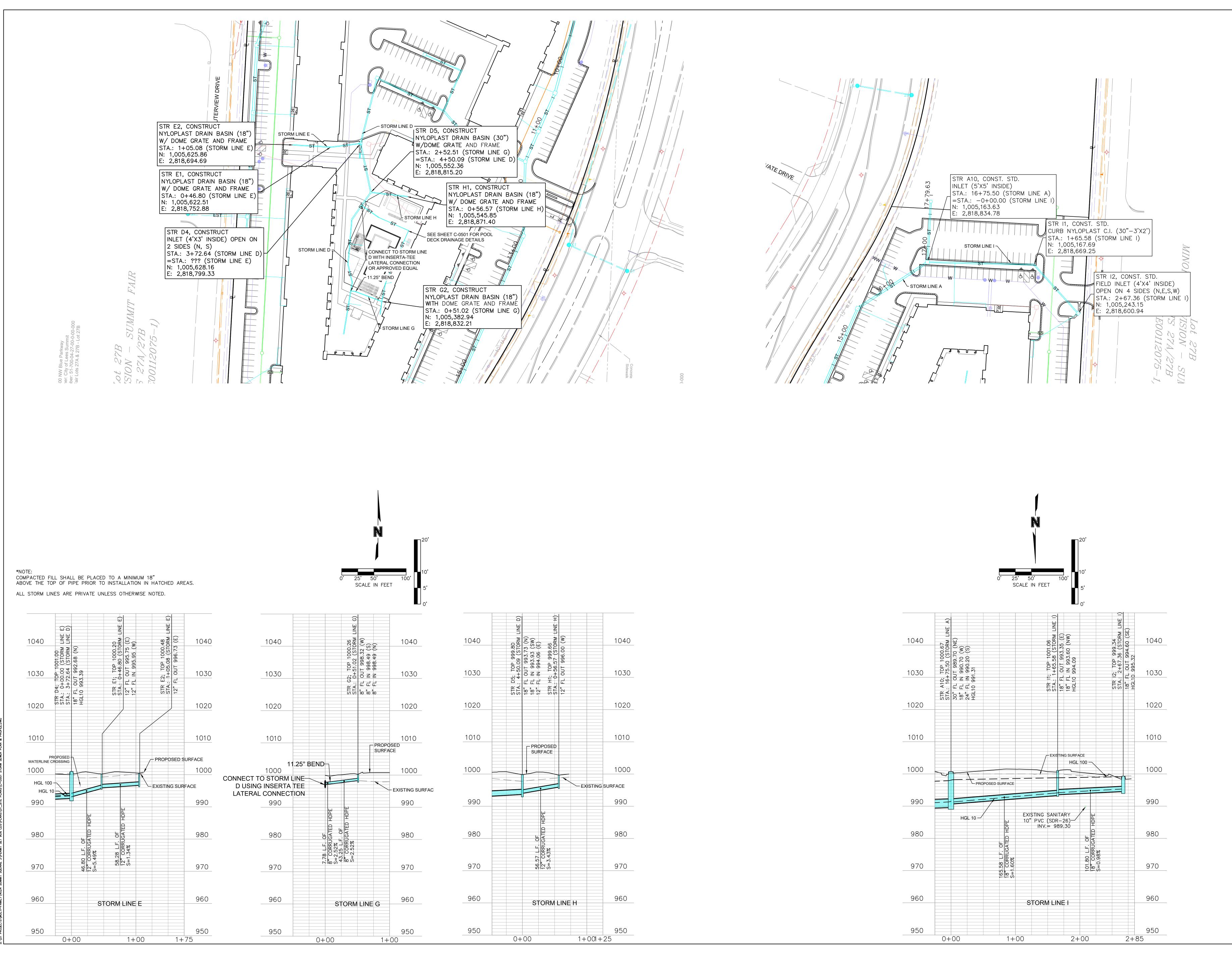


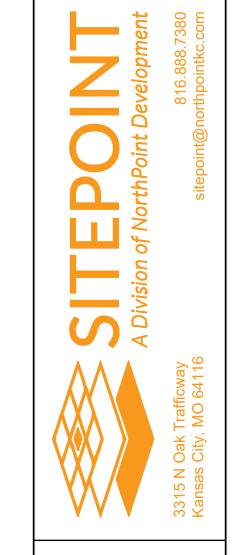




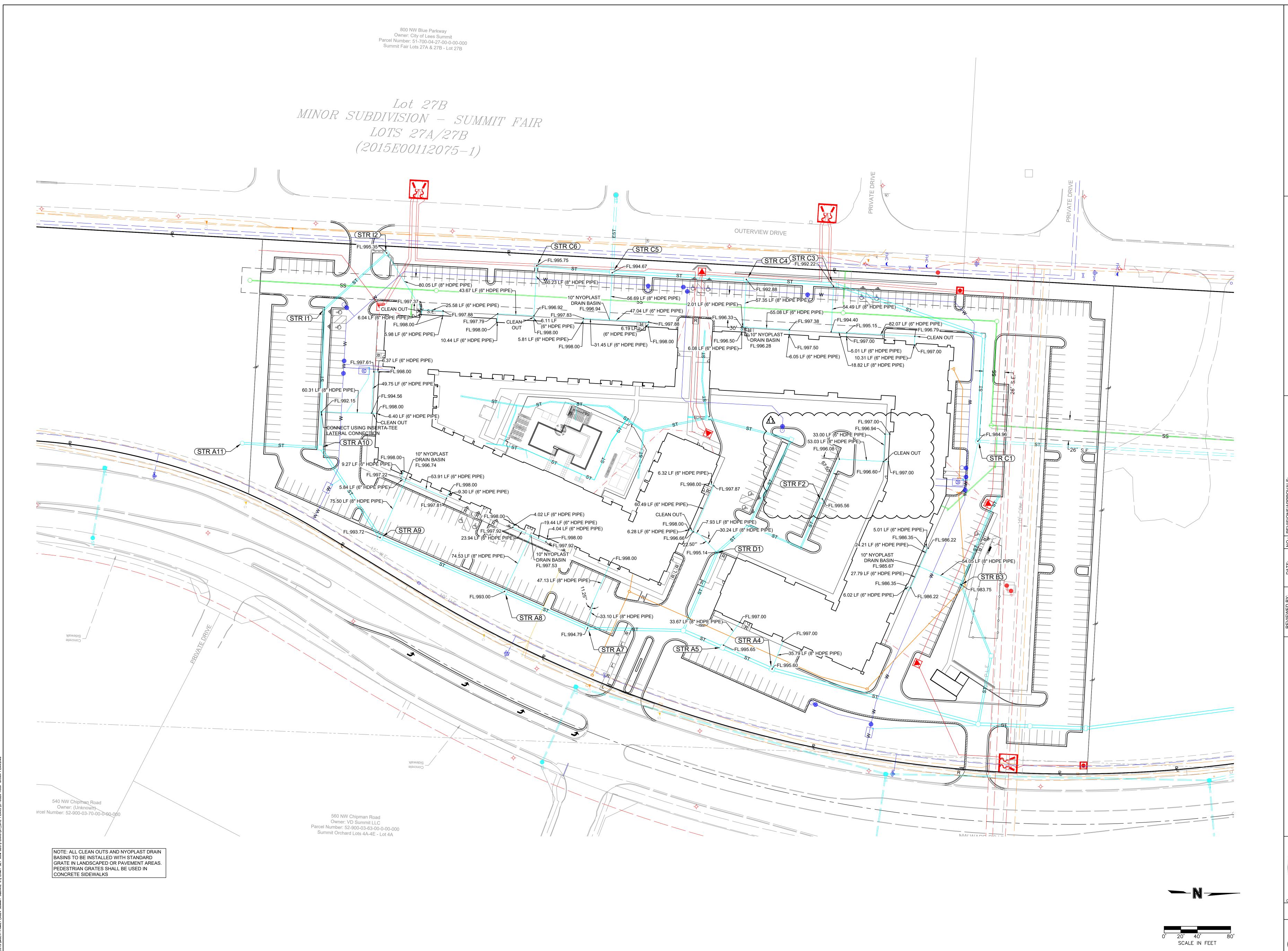
VALS:				/ COMMENTS					
NO.: REVISIONS/APPROVALS:	TIMAJA JNIU III IB	DOILDING F CINNII	1 CITY COMMENTS	REVISED PER CITY COMMENTS		4 ADDENDOM 3	6 CIVIL REVISIONS		
::ON			1	2	,	4	9		
DATE:	2023 03 15			77 70 0000	2023.05.17				
REVIEWED BY:	M.G.D	DESIGNED BV.	N.W.H	DRAFTED BY:	D.A.H	SP PROJECT #:	4024	NEIL W. HAAS, P.E.	2022034072
	_								

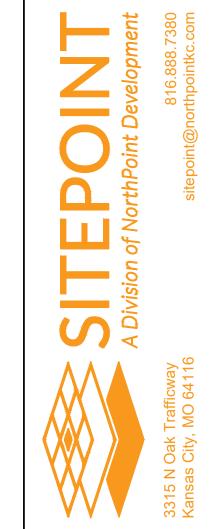






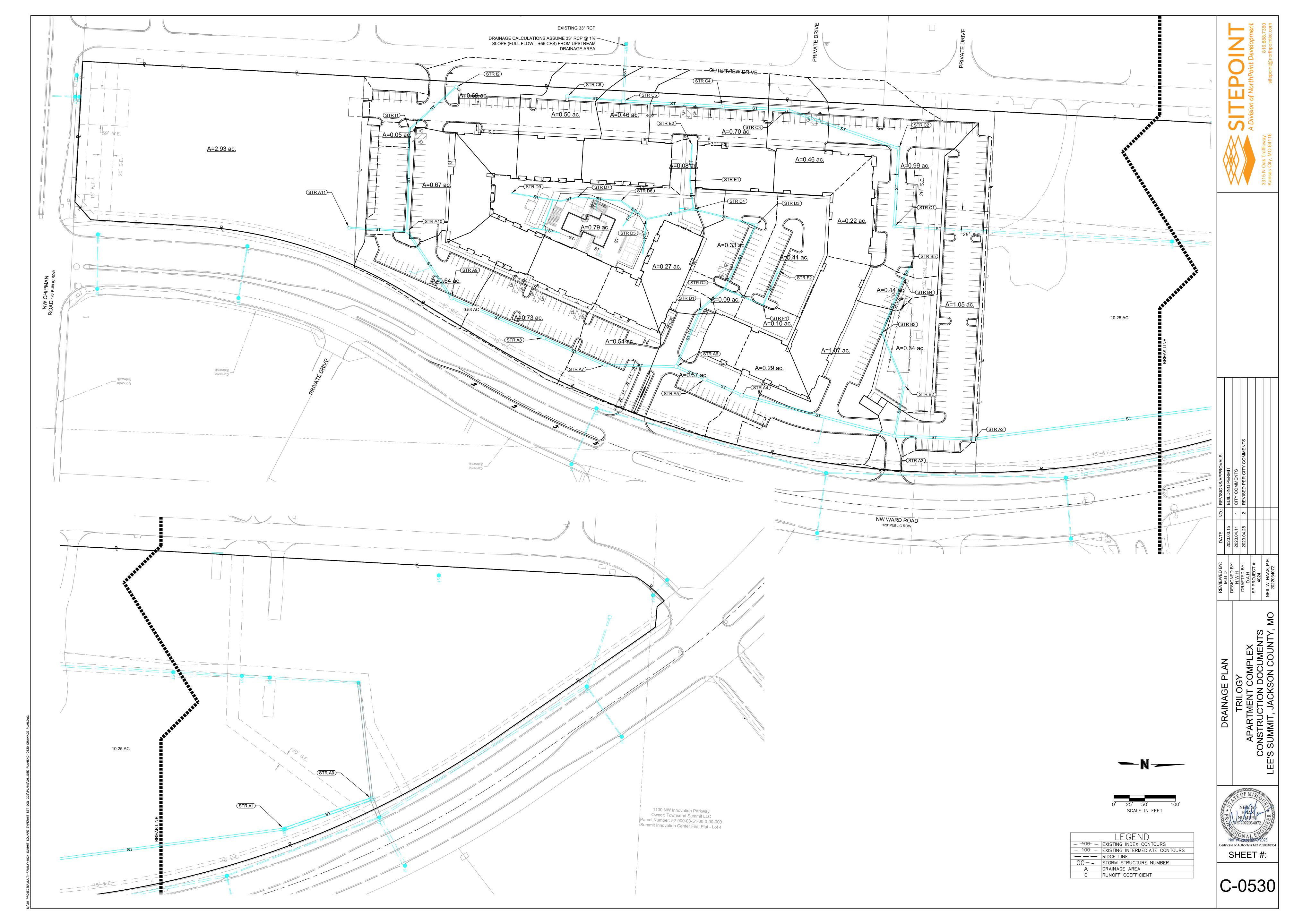
DATE: NO.: REVISIONS/APPROVALS:			2023.04.11 1 CITY COMMENTS	2023.04.28 2 REVISED PER CITY COMMENTS		2023.05.17 4 ADDENDOM 3	2023.06.09 5 ASI 1		
REVIEWED BY: M.G.D		DESIGNED BY.	N.W.H	DRAFTED BY:	E.A.D	SP PROJECT #:	4024	NEIL W. HAAS, P.E.	0000000
			VOO HOT				CONSTRUCTION DOCUMENTS		
Cer	* PROT	Ne		2022 ON A	20	34	072)23 20018	2
		S	H	E		: 7	_ #	# :	





 ROOF DRAIN PLAN
 REVIEWED BY: M.G.D DESIGNED BY: N.G.D DESIGNED BY: N.G.D DESIGNED BY: N.W.H DESIGNED BY: N.W.H DESIGNED BY: N.W.H DESIGNED BY: N.W.H SPROJECT #: DRAFTED BY: DRAFTED B





13.92

2.64

3.87

0.15 z

1001.12

996.12

18

1.5

0.012

995.5

994.13

STR C6

91.452

		<u></u>	_	<u></u>	1	T	PIPE DESIGN	TABLE (100-YEAR	R)	T	1	1				
Inlet ID	Pipe Length	Upstream Invert	Downstream Invert	Line Slope	Pipe Diameter	Manning's n	Pipe Capacity	Total Flow	Velocity	Junction Loss Coefficient	Upstream Rim Elevation	Upstream HGL	Drainage Area	C-Value	Time of Concentration	on i
	(ft)	(ft)	(ft)	(%)	(in)		(cfs)	(cfs)	(ft/s)		(ft)	(ft)	(ac)	(C)	(min)	(in/hr)
STR A1	150.16	964.42	962.08	1.56	48.00	0.012	194.26	128.38	10.22	0.15	971.70	969.27	10.25	0.3	11	10.57
STR A2	505.86	968.98	964.63	0.86	36.00	0.012	67.00	105.55	14.93	0.30	991.01	980.32	1.05	0.84	5	12.9
STR A3	129.32	970.18	969.08	0.85	36.00	0.012	66.64	95.85	13.56	0.40	994.79	983.63	0	0	0	0
STR A4	256.69	981.91	979.34	1.00	36.00	0.012	72.29	79.32	11.22	0.30	999.53	987.87	0.29	0.8	5	12.9
STR A5	64.94	982.76	982.11	1.00	36.00	0.012	72.28	76.85	10.87	0.15	999.16	989.20	0.57	0.67	5	12.9
STR A6	51.26	983.68	982.96	1.40	36.00	0.012	85.63	72.52	10.26	0.40	999.95	989.99	0	0	0	0
STR D1	102.06	989.02	988.00	1.00	24.00	0.012	24.50	18.42	5.86	0.40	1000.85	991.22	0.27	0.9	5	12.9
STR D2	50.56	989.73	989.22	1.01	24.00	0.012	24.61	15.50	5.07	0.40	1000.40	991.60	0.09	0.83	5	12.9
STR F1	68.09	994.12	993.44	1.00	15.00	0.012	6.99	5.33	5.41	1.00 z	1000.40	995.06	0.1	0.9	5	12.9
STR F2	62.00	995.00	994.32	1.10	15.00	0.012	7.33	4.23	4.88	0.40 z	999.16	995.83	0.41	0.8	5	12.9
STR A7	115.35	985.27	984.18	0.94	30.00	0.012	43.19	55.14	11.23	0.30	999.43	992.42	0.54	0.64	5	12.9
STR A8	109.00	986.56	985.47	1.00	30.00	0.012	44.43	51.30	10.45	0.15	999.29	994.46	0.73	0.67	5	12.9
STR A9	163.00	988.39	986.76	1.00	30.00	0.012	44.43	45.86	9.34	0.30	999.93	996.46	0.64	0.7	5	12.9
STR A10	130.10	989.70	988.59	0.85	30.00	0.012	41.04	40.76	8.30	0.30	1000.67	997.96	0.67	0.84	5	12.9
STR I1	165.58	993.35	990.70	1.60	18.00	0.012	14.39	6.70	3.79	1.00	1001.06	998.86	0.05	0.78	5	12.9
STR I2	101.80	994.60	993.60	0.98	18.00	0.012	11.28	6.32	3.58	0.15	999.02	999.39	0.69	0.71	5	12.9
STR D3	115.12	991.50	990.35	1.00	18.00	0.012	11.37	9.47	6.31	0.15 z	999.67	992.69 j	0.33	0.83	5	12.9
STR D4	104.91	992.68	991.70	0.93	18.00	0.012	11.00	6.11	5.15	0.40 z	1000.09	993.63 j	0.79	0.6	5	12.9
STR A11	94.13	990.92	990.20	0.76	24.00	0.012	21.43	28.52	9.08	0.15	1000.97	999.56	2.91	0.76	5	12.9
STR B2	83.34	980.76	980.09	0.80	24.00	0.012	21.97	19.03	6.06	0.40	984.91	985.28	0.34	0.35	5	12.9
STR B3	93.03	983.25	981.24	2.16	18.00	0.012	16.72	17.63	9.97	0.40	988.66	987.74	1.07	0.67	5	12.9
STR B4	94.33	984.90	983.50	1.48	18.00	0.012	13.86	8.62	4.88	0.30	989.32	988.90	0.14	0.69	5	12.9
STR B5	21.76	985.40	985.10	1.38	18.00	0.012	13.36	7.40	4.19	1.00	989.25	989.11	0.99	0.58	5	12.9
STR C2	126.69	978.48	977.71	0.61	36.00	0.012	56.33	73.21	10.36	0.40	996.93	982.01	0.22	0.9	5	12.9
STR C3	191.07	979.84	978.68	0.61	36.00	0.012	56.30	71.00	10.04	0.15	1001.06	984.53	0.46	0.74	5	12.9
STR C4	105.14	980.68	980.04	0.61	36.00	0.012	56.37	66.88	9.46	0.15	1001.09	985.66	0.71	0.68	5	12.9
STR C5	161.58	981.87	980.88	0.61	36.00	0.012	56.55	60.96	8.62	0.15	999.54	987.02	0.46	0.76	5	12.9
STR C6	91.452	995.5	994.13	1.5	18	0.012	13.92	4.64	4.65	0.15 z	1001.12	996.33	0.5	0.72	5	12.9

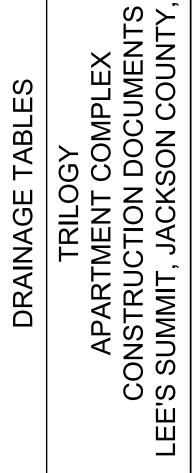


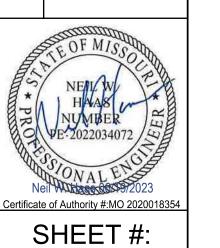
NO.: REVISIONS/APPROVALS:	BIIII DING PERMIT		CITY COMMENTS	REVISED PER CITY COMMENTS					
NO.:			_	2					
DATE:	2023 03 15	2020.00.10	2023.04.11	2023.04.28					
REVIEWED BY:	M.G.D	DESIGNED BY:	N.W.H	DRAFTED BY:	D.A.n	SP PROJECT #:	4024	NEIL W. HAAS, P.E.	2022034072

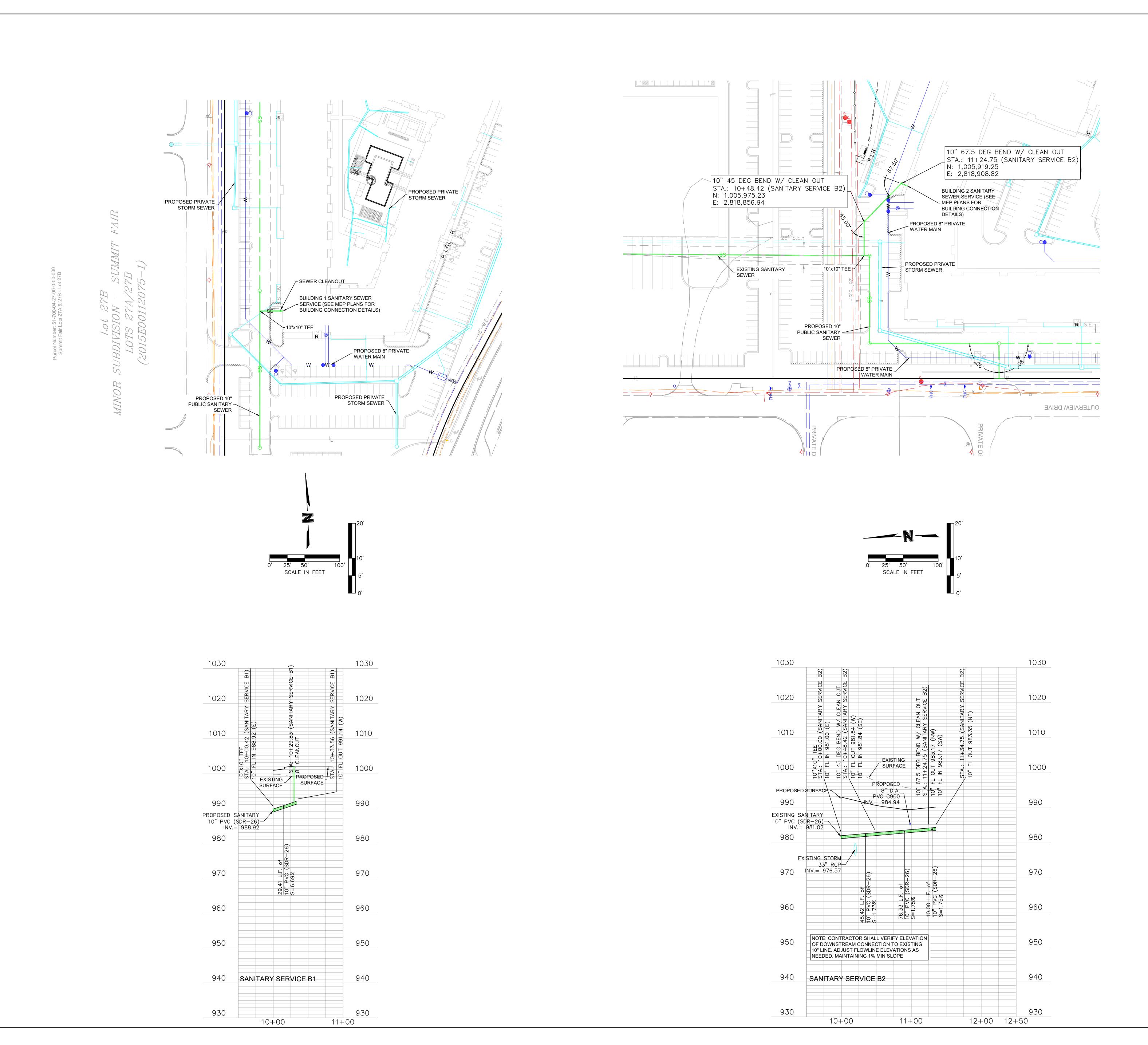
7.34

0.72

0.5

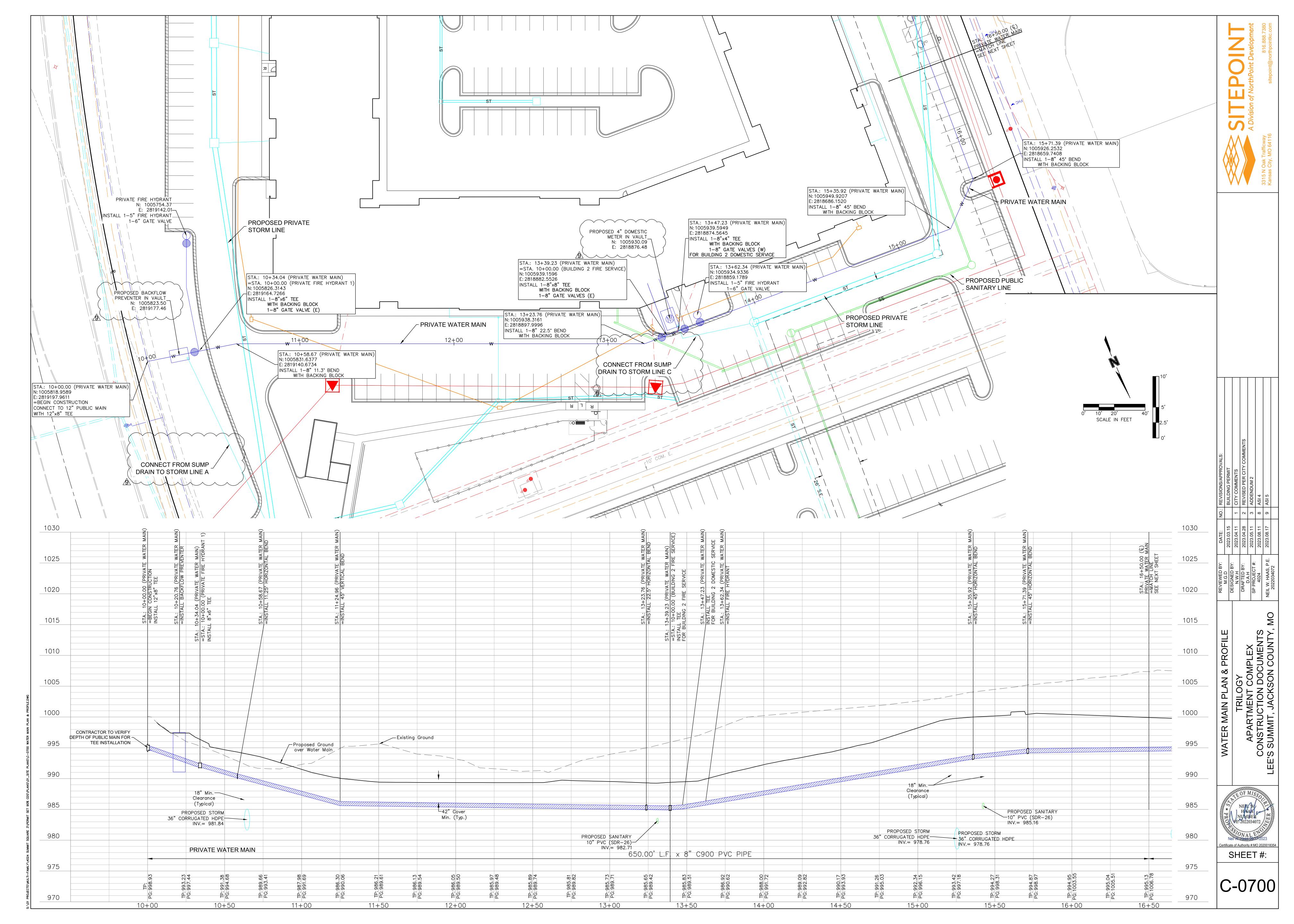


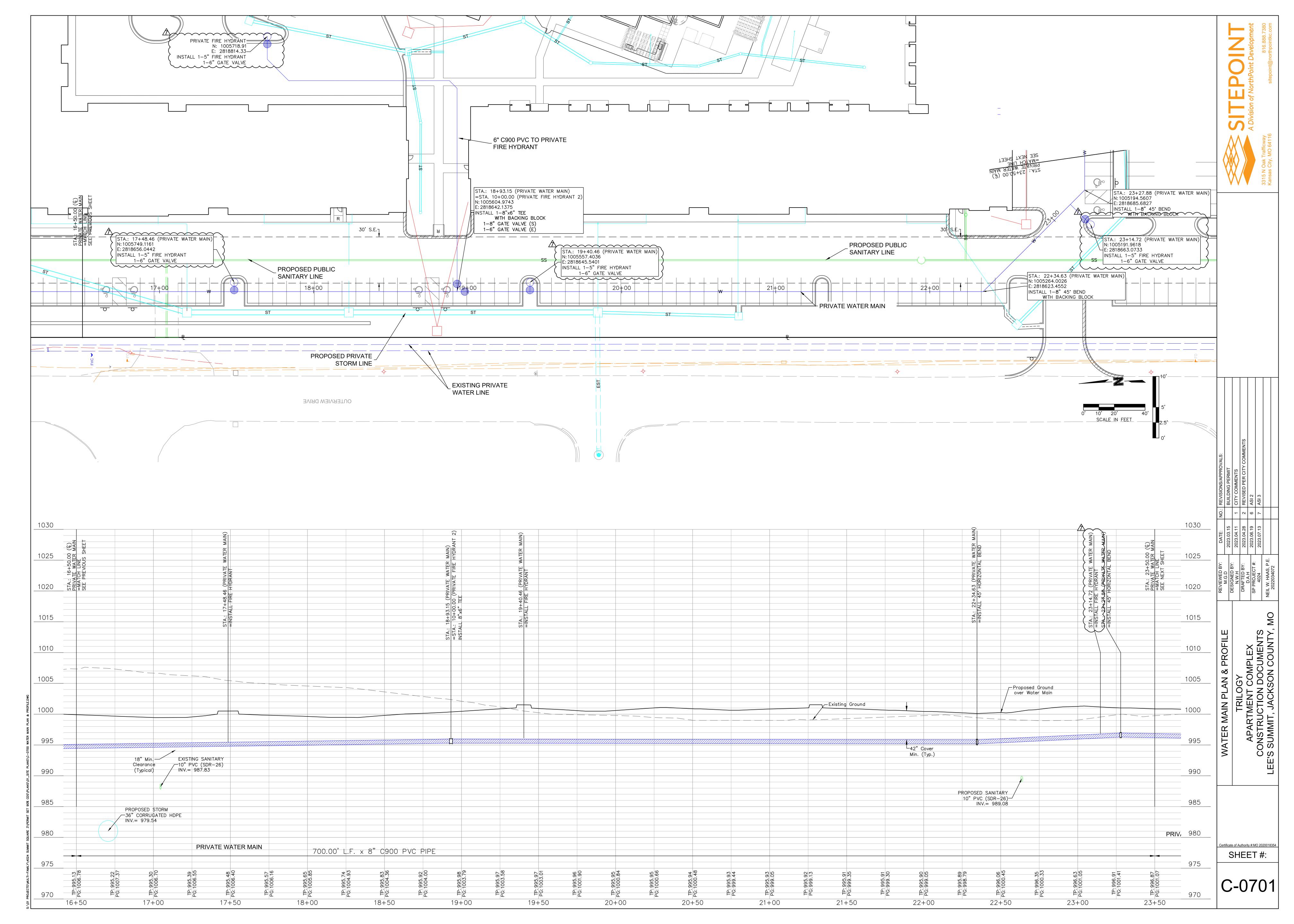


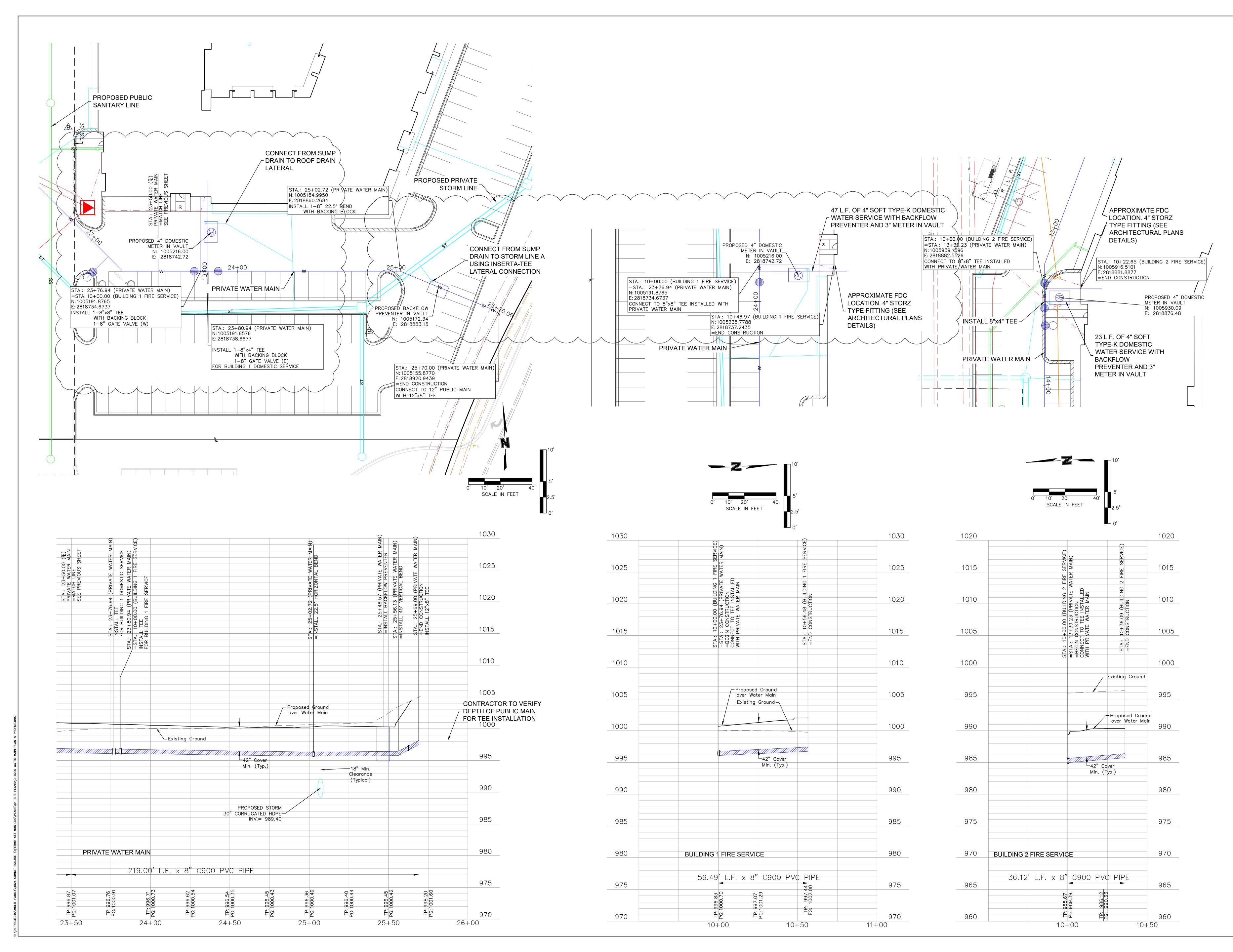


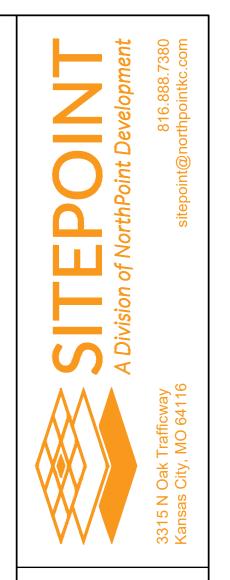






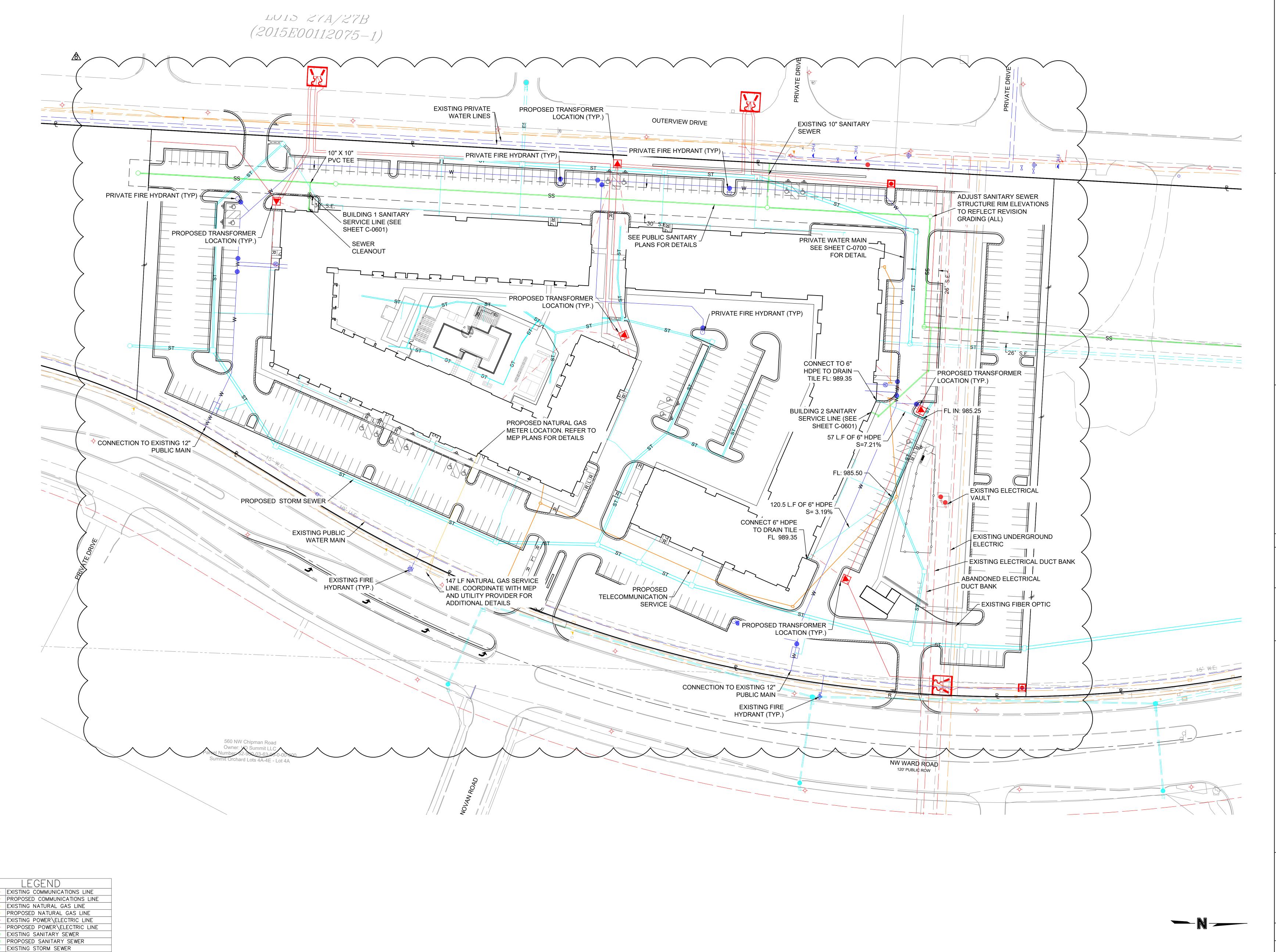






		YOU HOT		APAKIMENI COMPLEX	CONSTRUCTION DOCUMENTS		
REVIEWED BY:	M.G.D	N.W.H	DRAFTED BY:	SP PROJECT #:	4024	NEIL W. HAAS, P.E.	2022034072
DATE:	2023.03.15	2023-04.11	2023.04.28	2023.05.11	2023.08.17		
NO.: REVISIONS/APPROVALS:	BUILDING PERMIT	GHTY COMMENTS	2 REVISED PER CITY COMMENTS	3 ADDENDUM 2	9 ASI 5		

SHEET #:



PROPOSED STORM SEWER

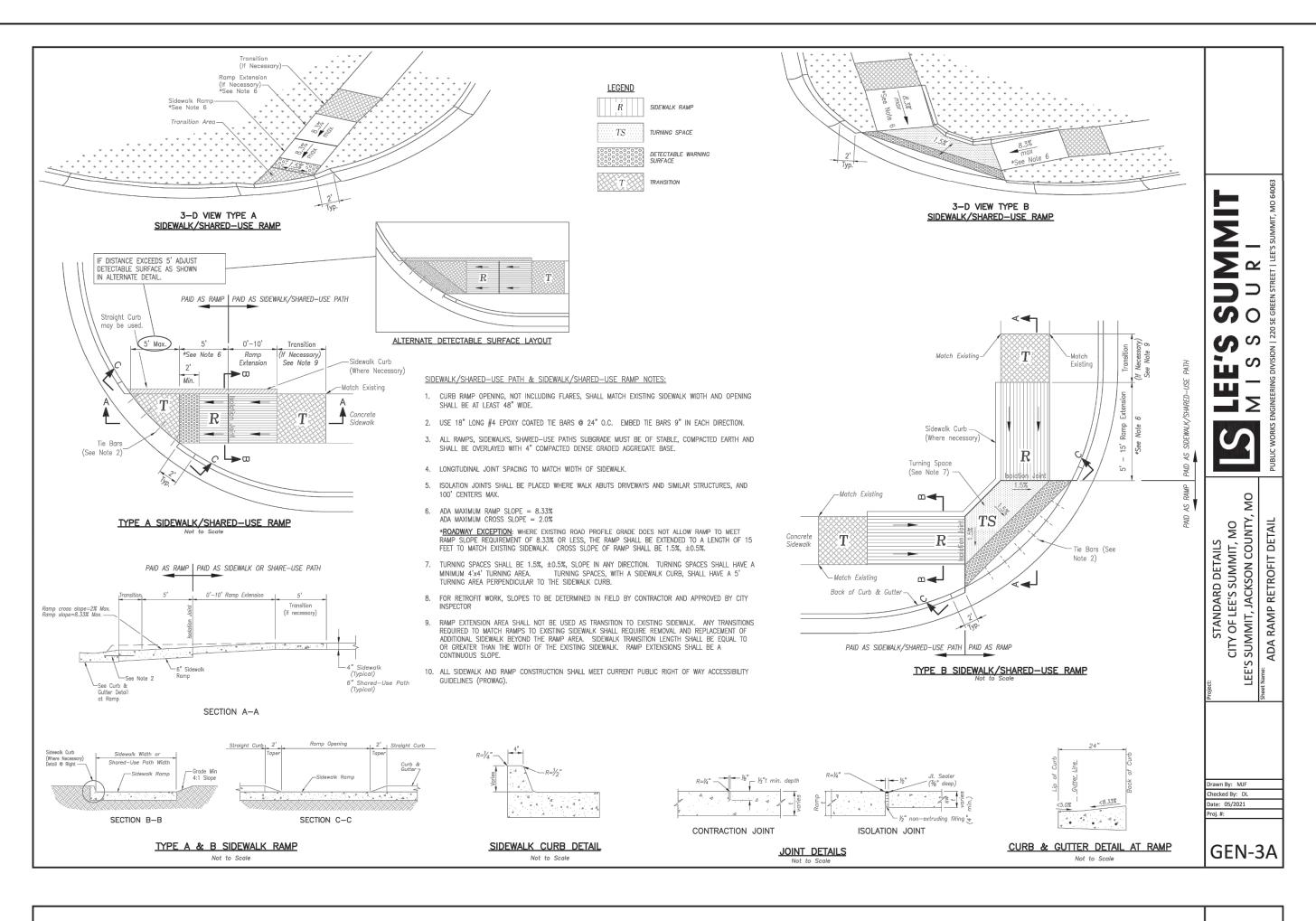
FUTURE STORM SEWER
EXISTING WATER LINE
PROPOSED WATER LINE

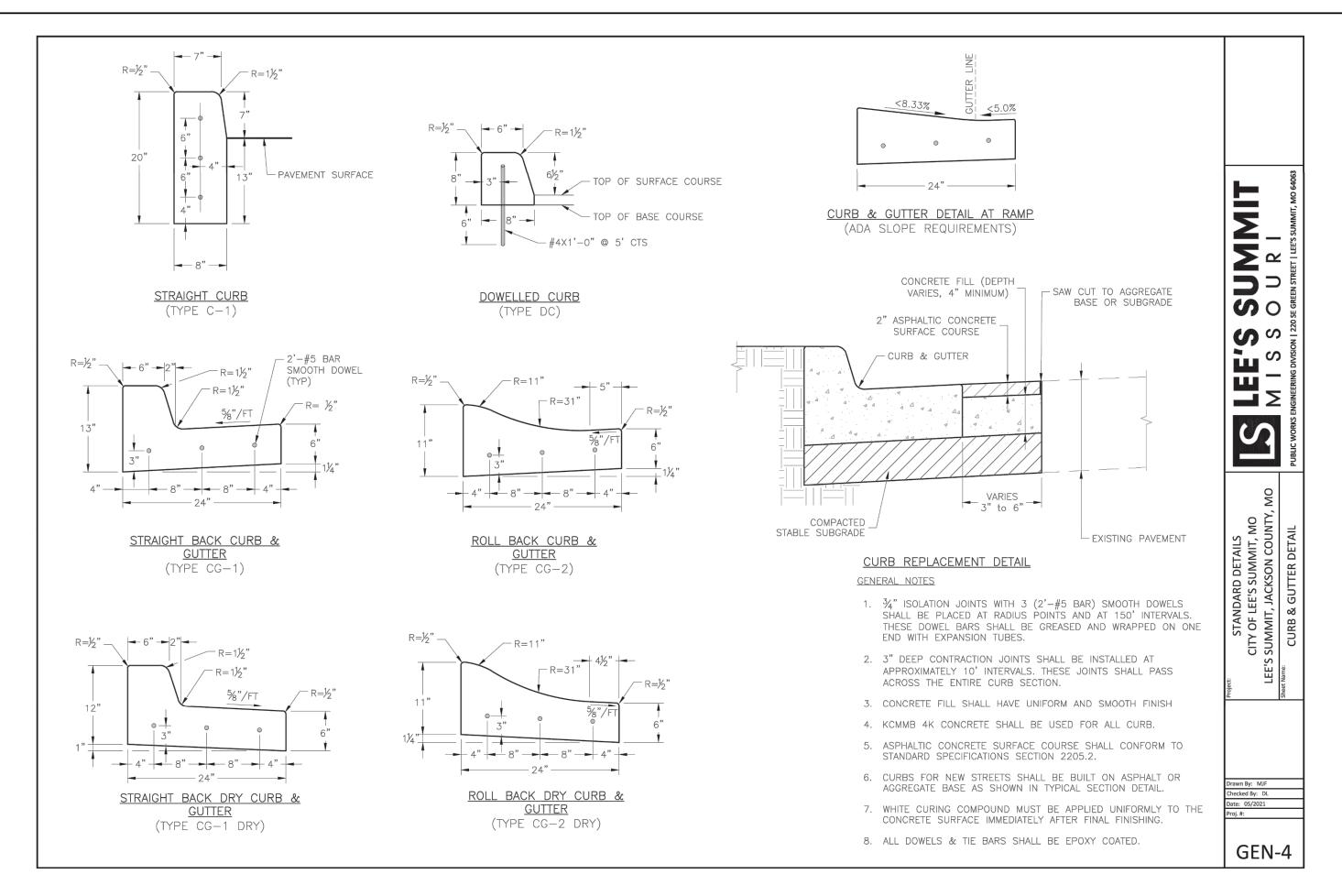


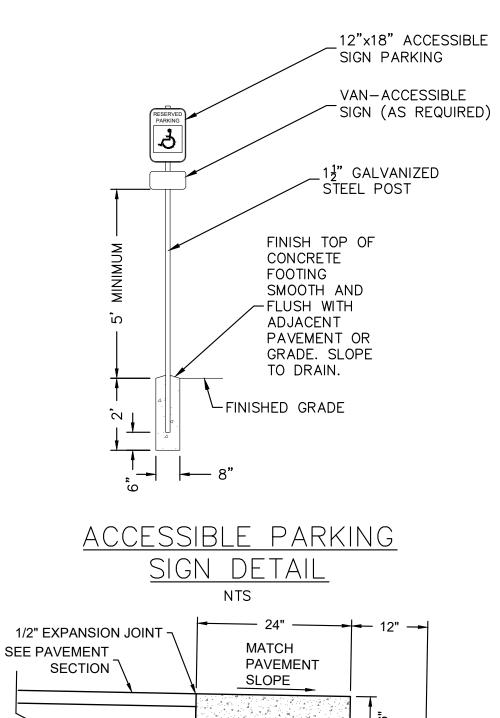
 UTILITY PLAN
 REVIEWED BY: M.G.D M.G.D N.W.H
 DATE: NO.: REIMGED BY: REIMGED BY: NO.: R

NEW WHARE PE 2022034072

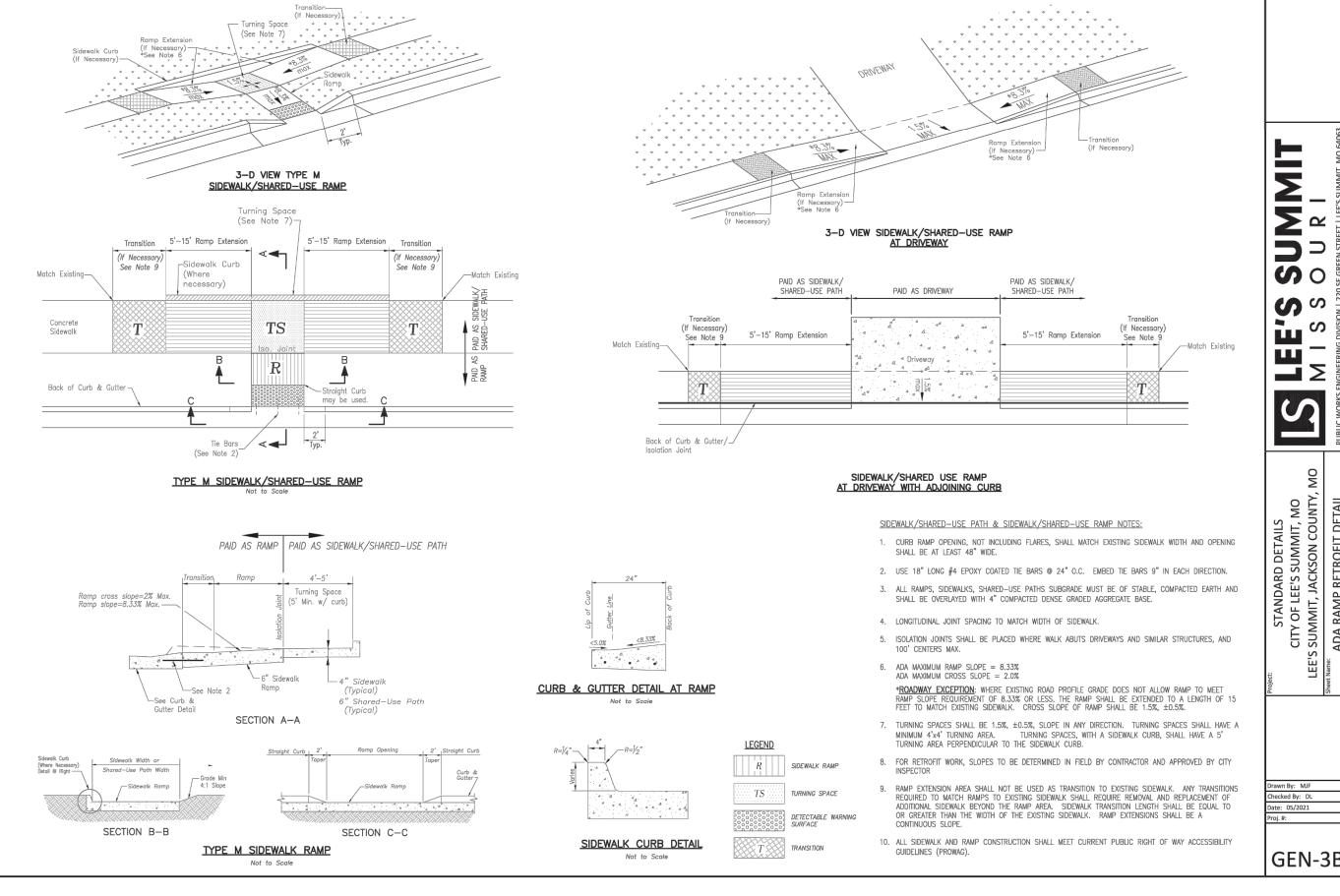
New York OF MISSON ALE PROPERTY WITH A PROPERTY WITH

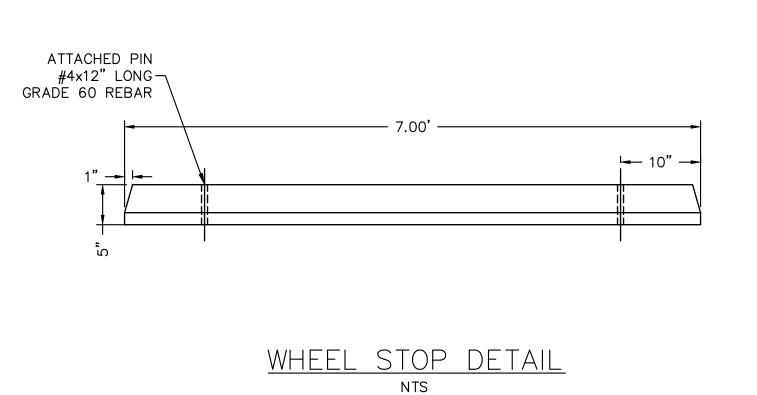


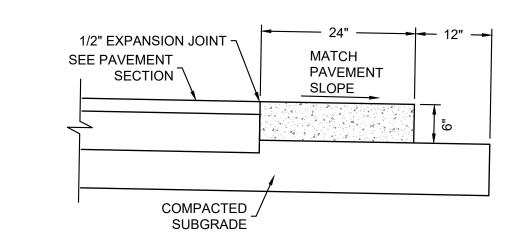




COMPACTED SUBGRADE



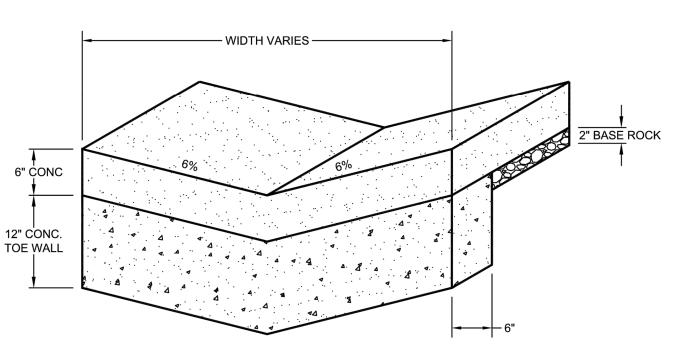




1. 3/4" ISOLATION JOINTS WITH 5/8" DIA. X 2' SMOOTH DOWELS SHALL BE PLACED AT RADIUS POINTS AND AT 150' INTERVALS. THESE DOWEL BARS SHALL BE GREASED AND WRAPPED ON ONE END WITH EXPANSION TUBES. 2. 1" DEEP CONTRACTION JOINTS SHALL BE INSTALLED AT APPROXIMATELY 10' INTERVALS. THESE JOINTS SHALL PASS ACROSS THE ENTIRE CURB SECTION.

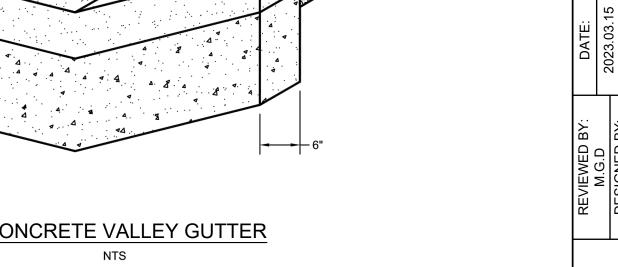
3. FIX DOWEL BARS WITH BAR SUPPORTS. 4. DEPTH OF CURB SHALL BE A MINIMUM OF 8" THROUGH HANDICAP ACCESS RAMP.





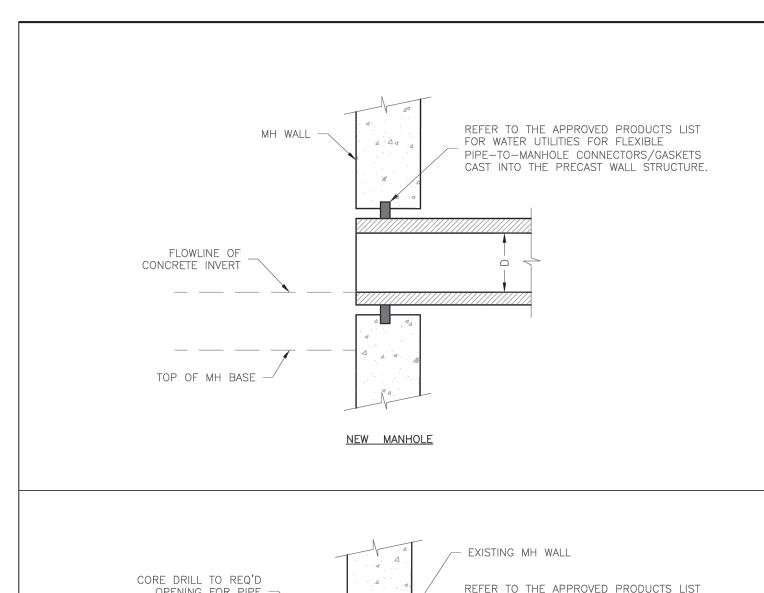
CONCRETE VALLEY GUTTER

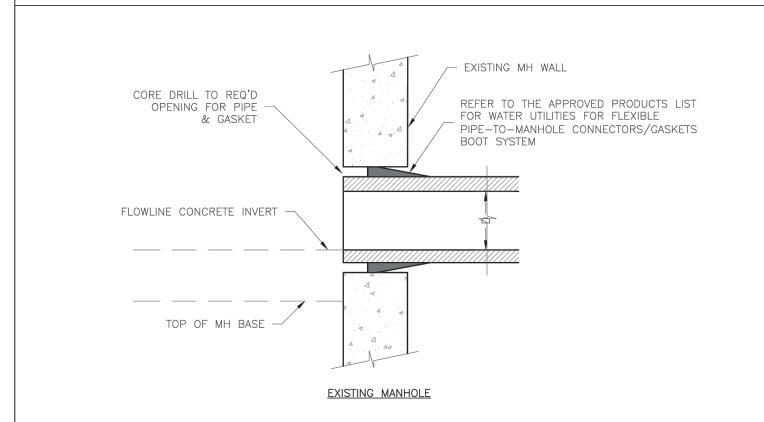
1. CONSTRUCT CONTRACTION JOINTS EVERY 12.5' MAXIMUM. 2. USE CLASS 'B' CONCRETE. 3. CONSTRUCT EXPANSION JOINTS EVERY 50' MAXIMUM.

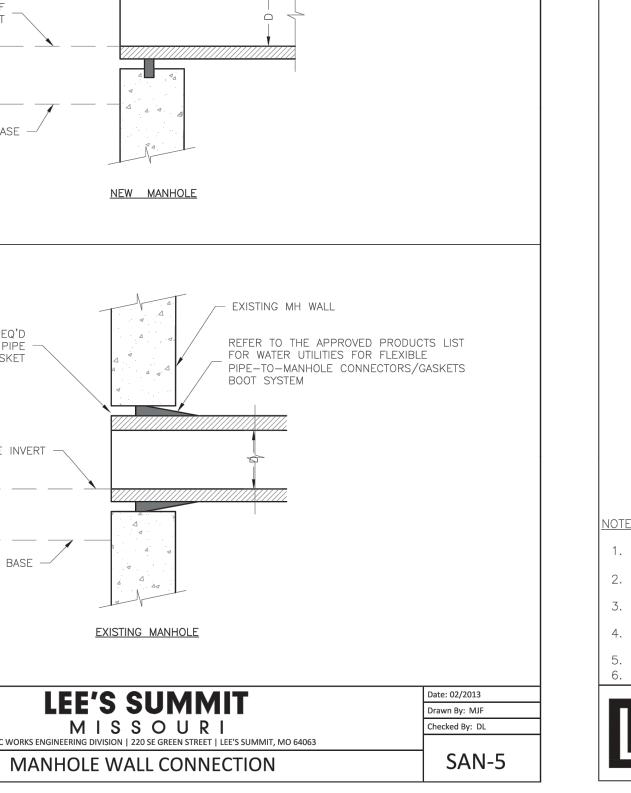


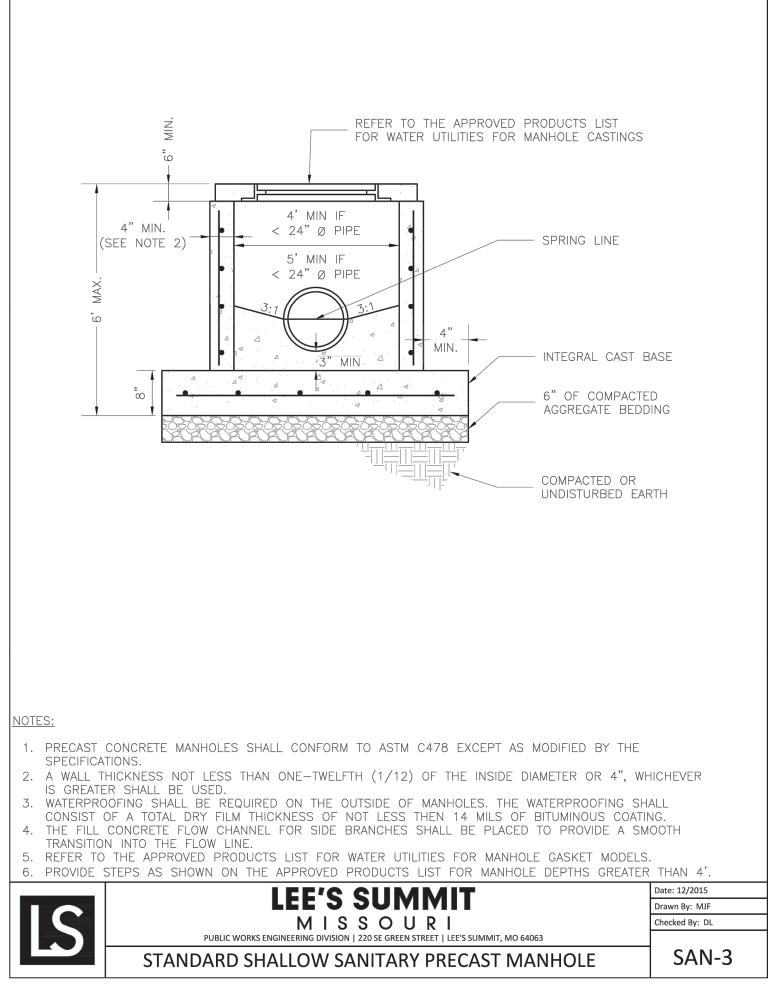


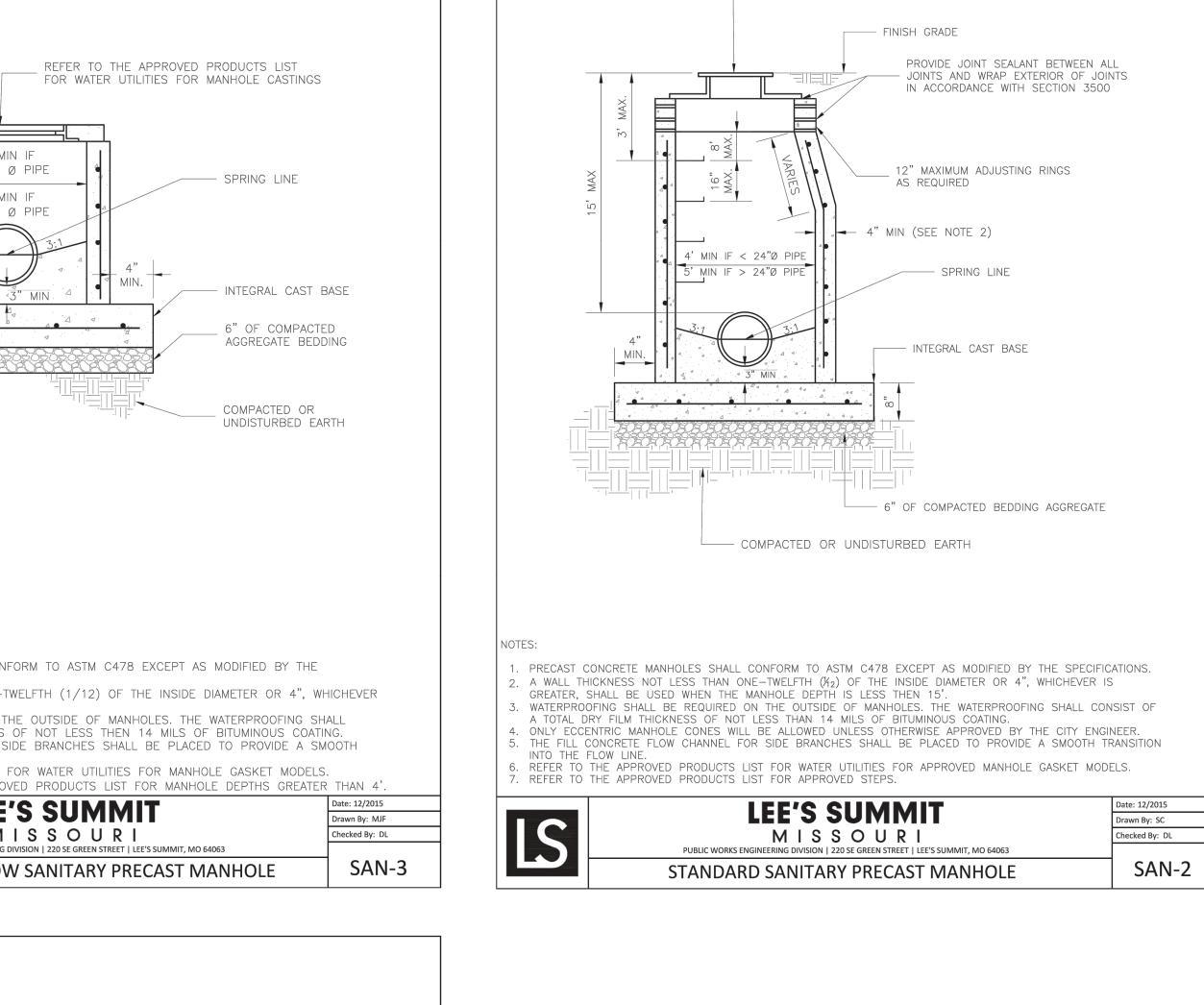




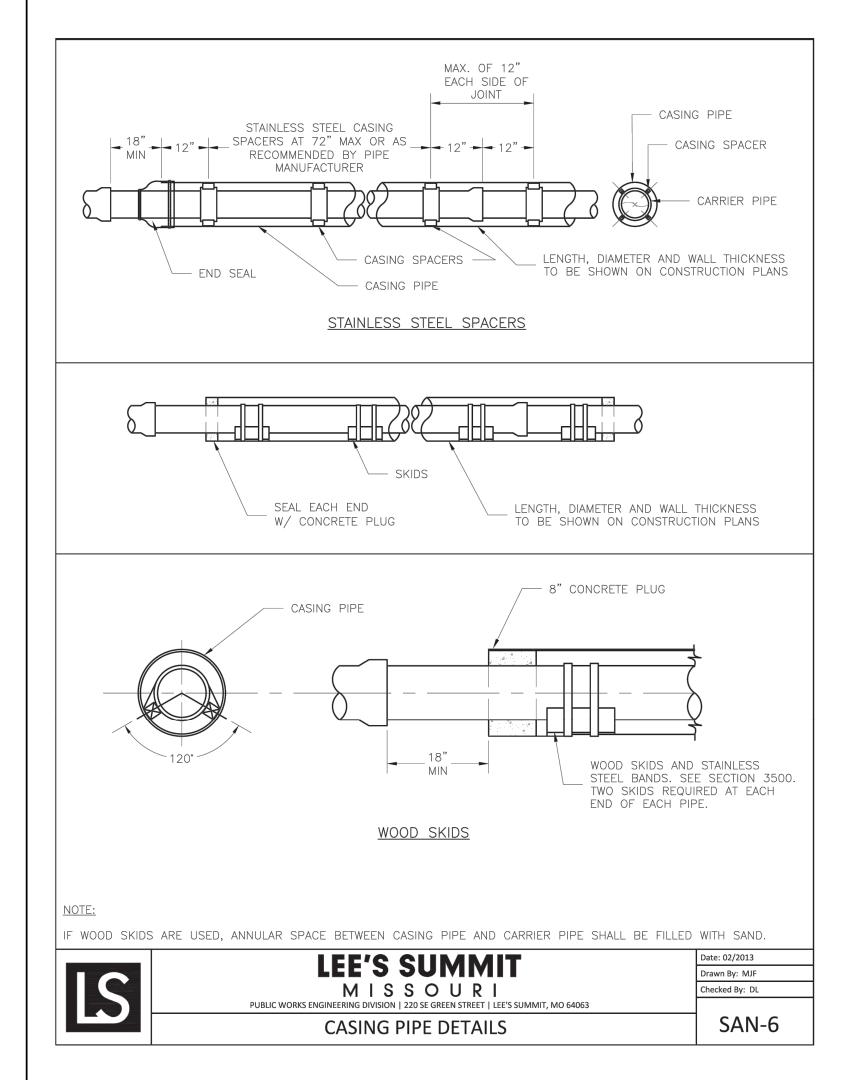


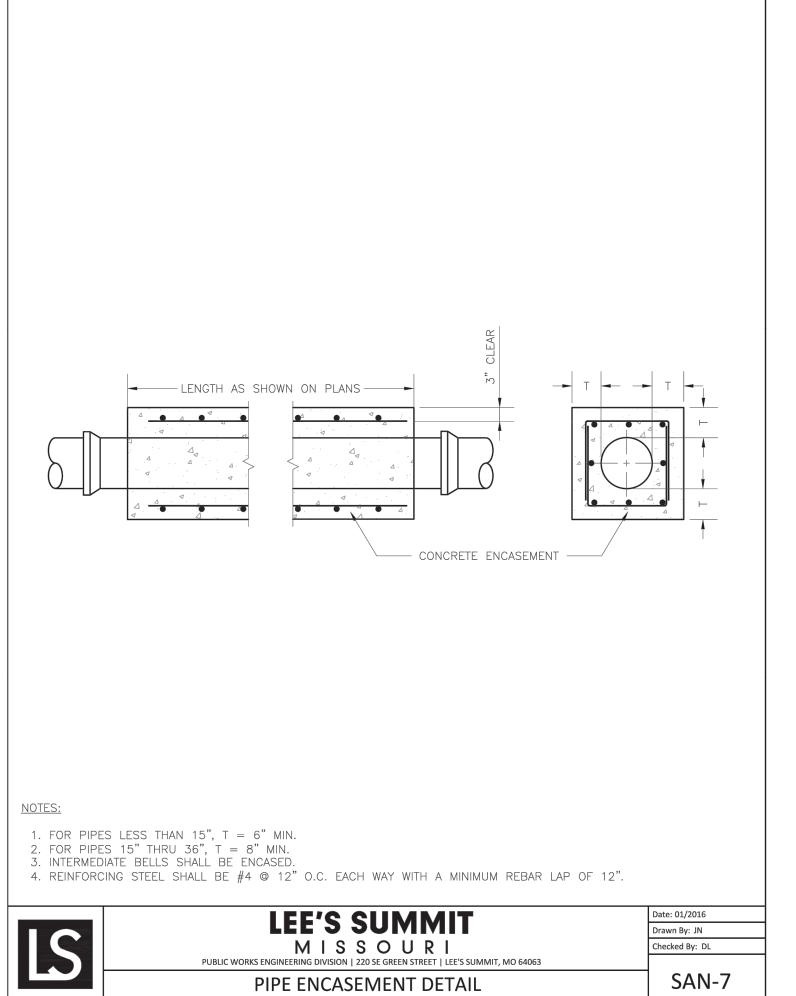


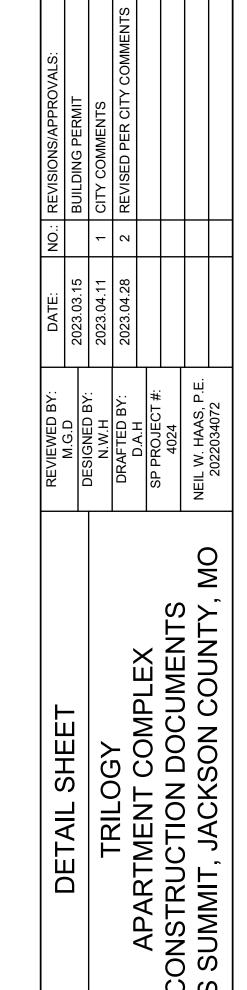




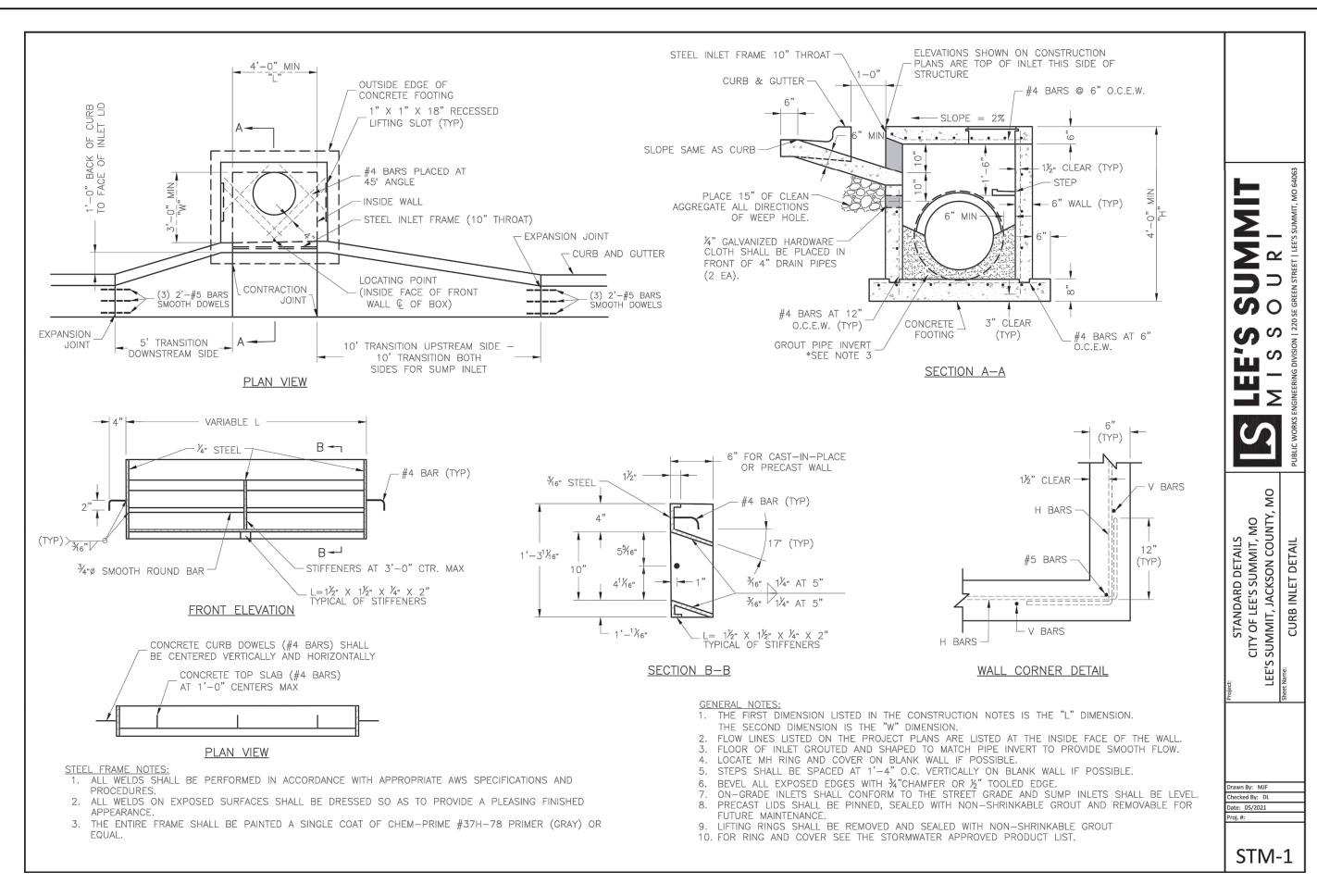
REFER TO THE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR MANHOLE CASTINGS

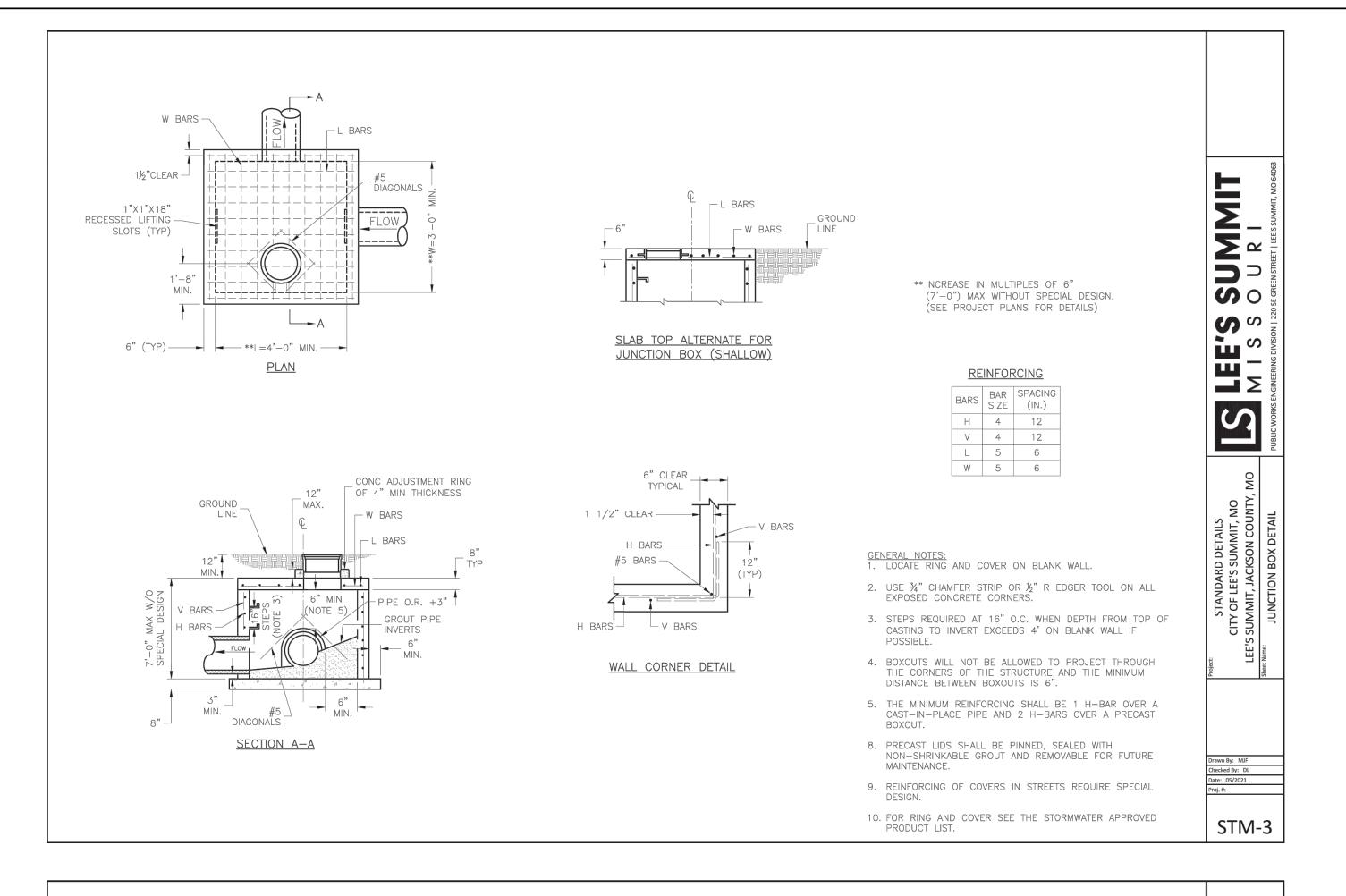


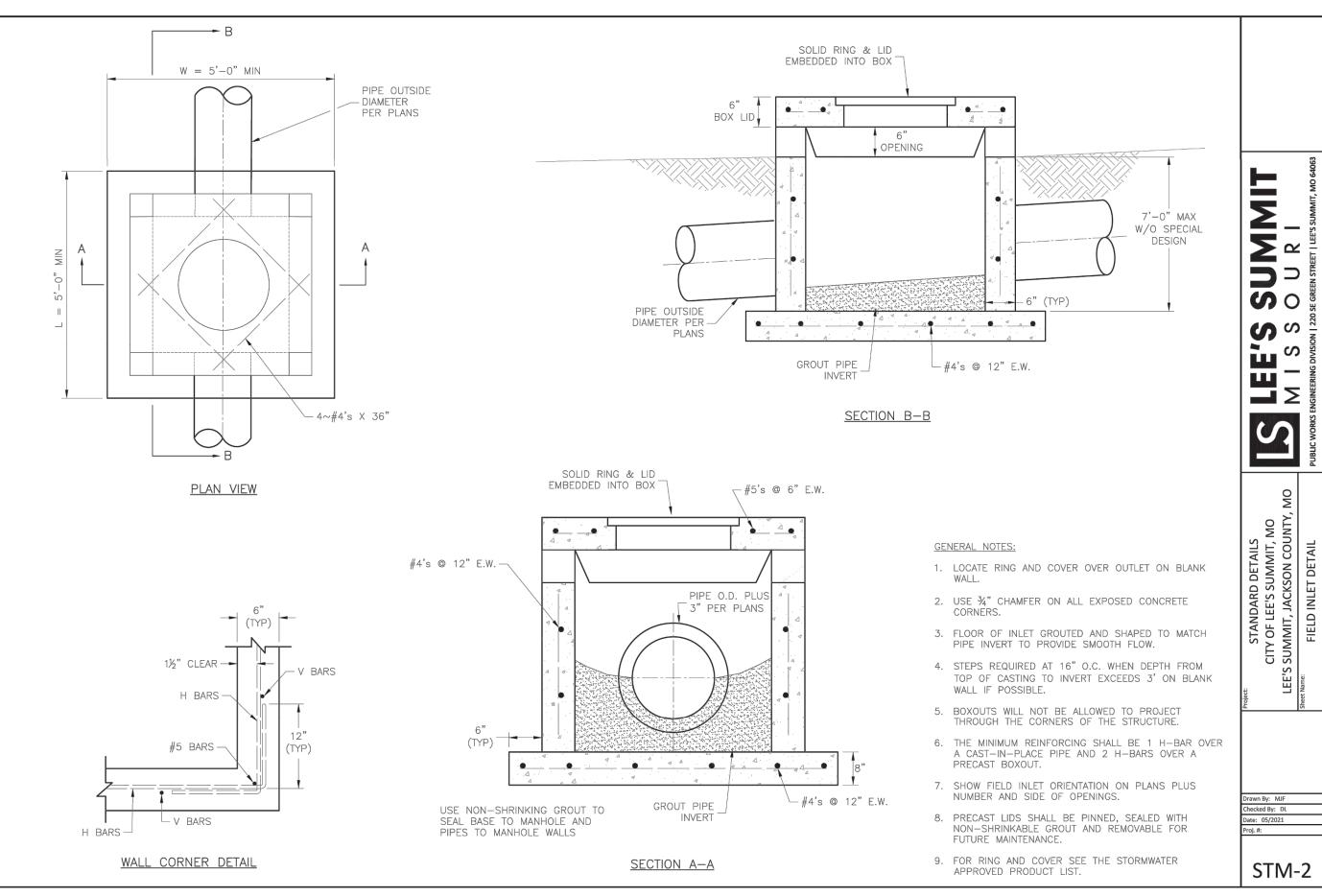


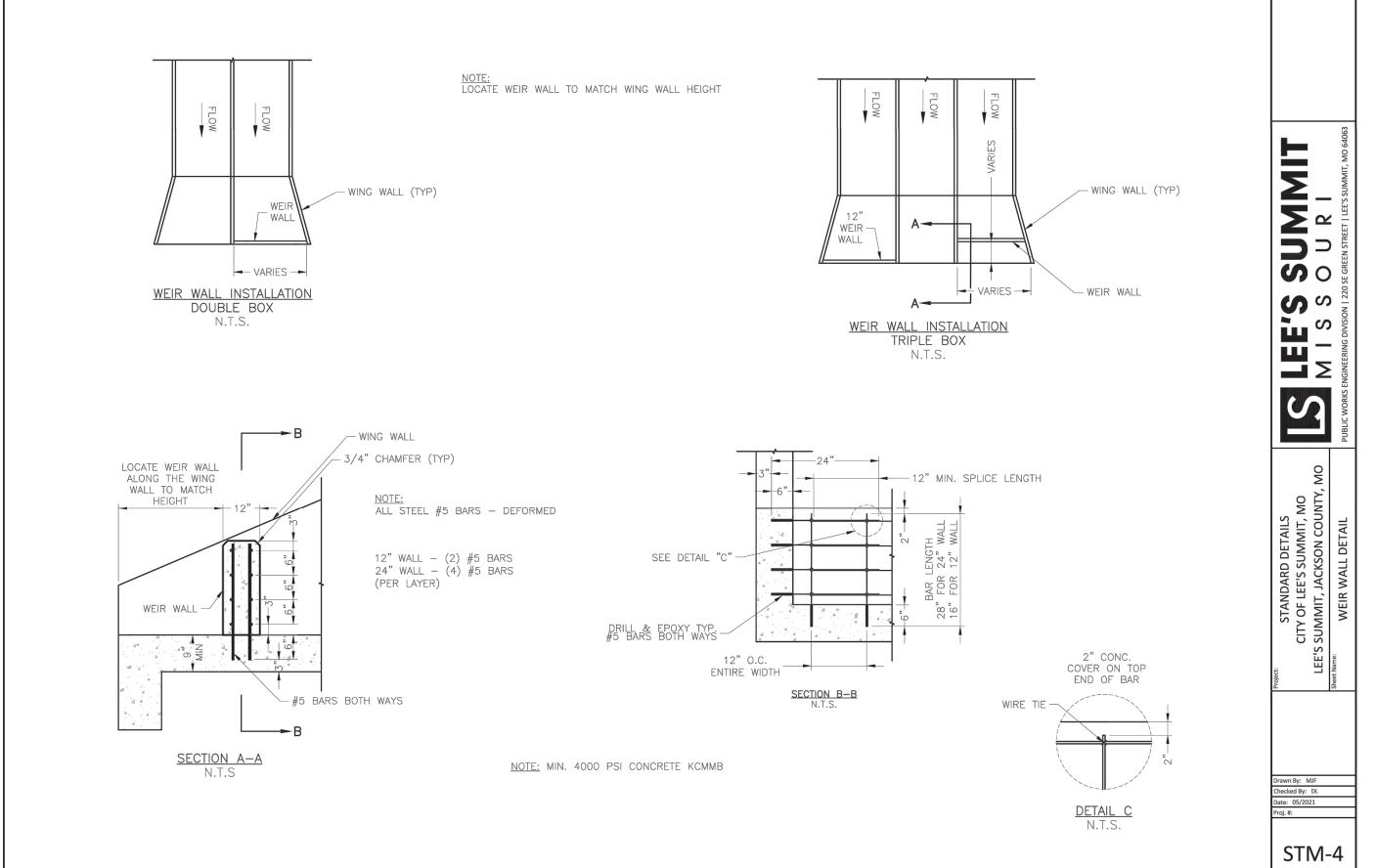


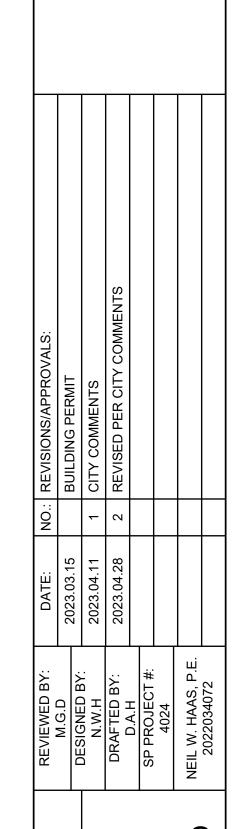




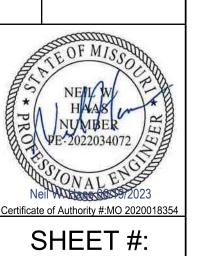


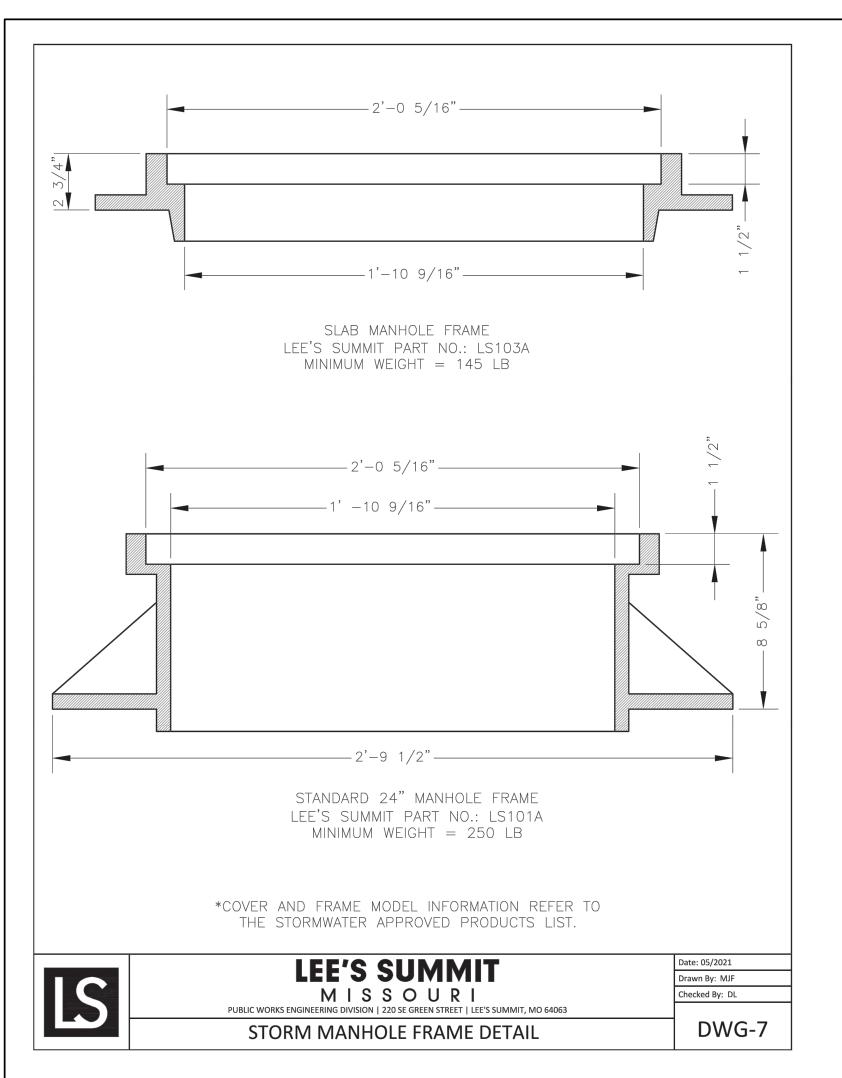


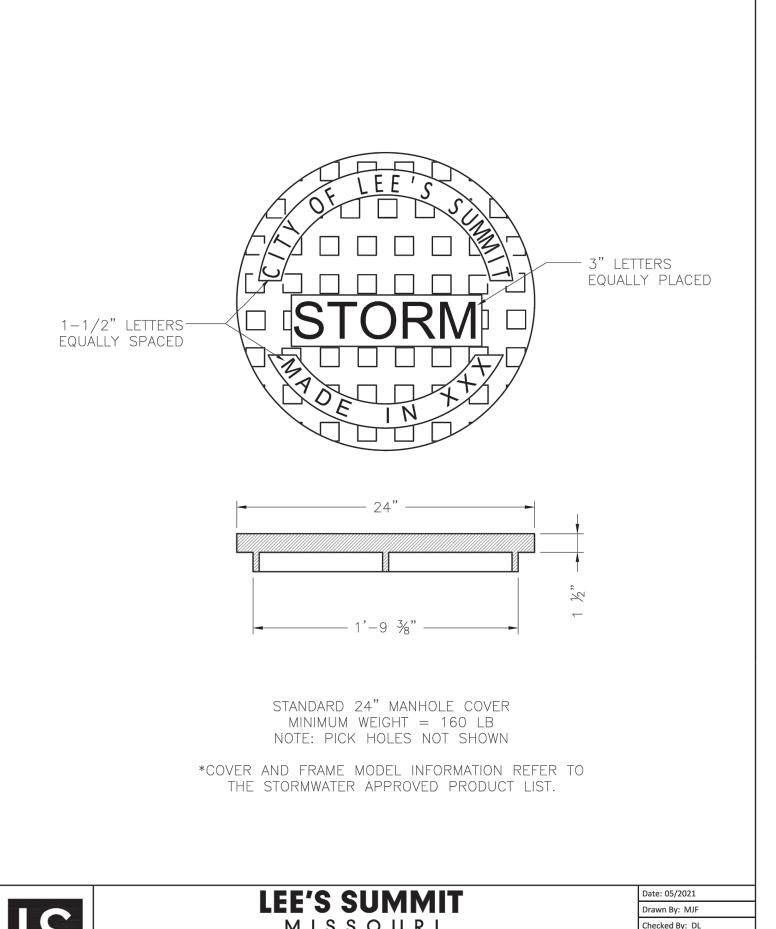




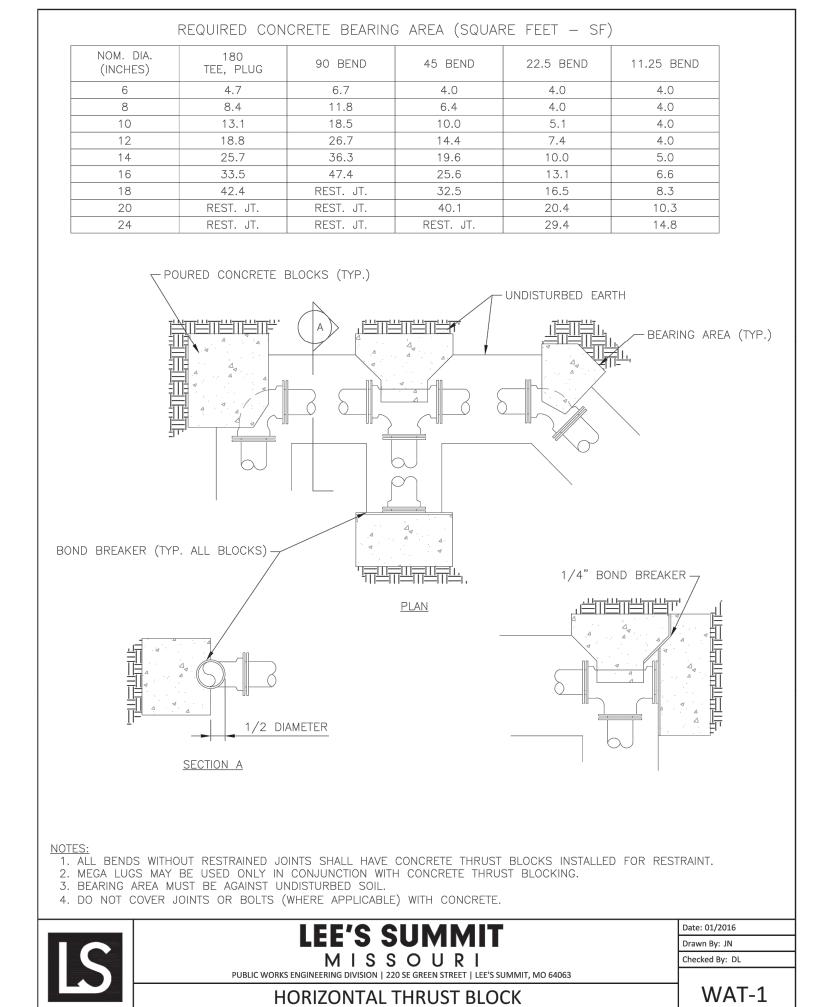
DETAIL SHEET
TRILOGY
APARTMENT COMPI
CONSTRUCTION DOCUI

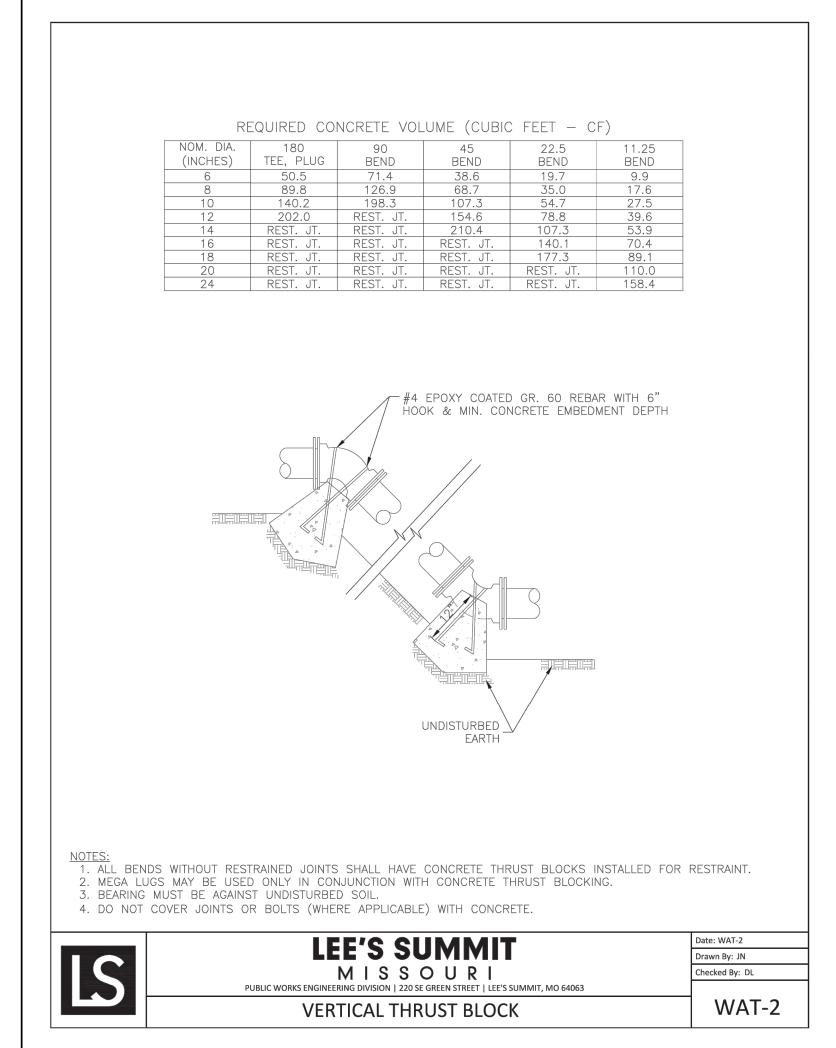


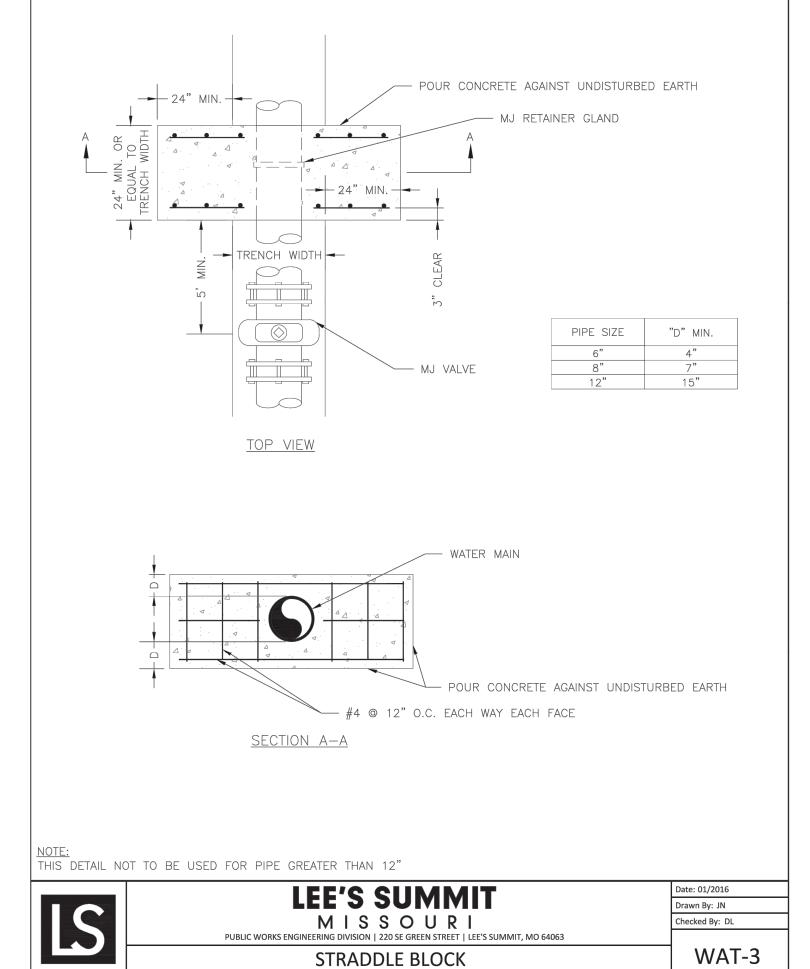


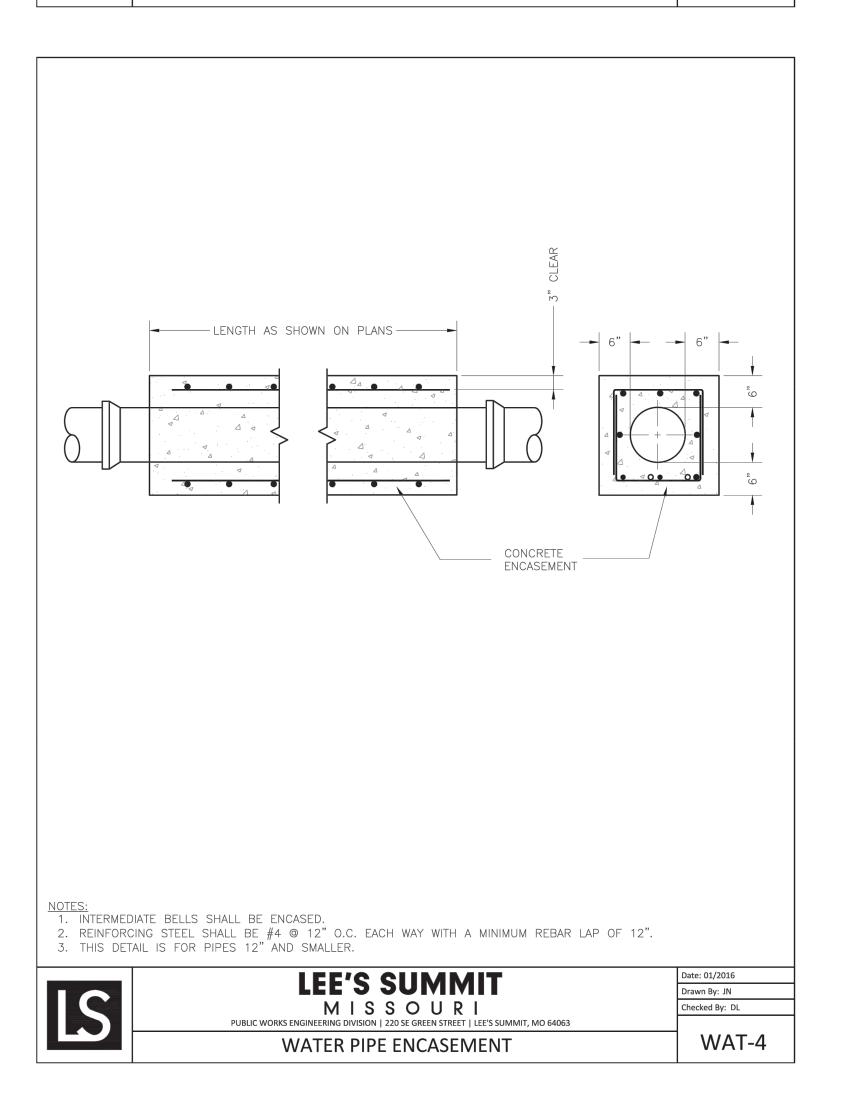


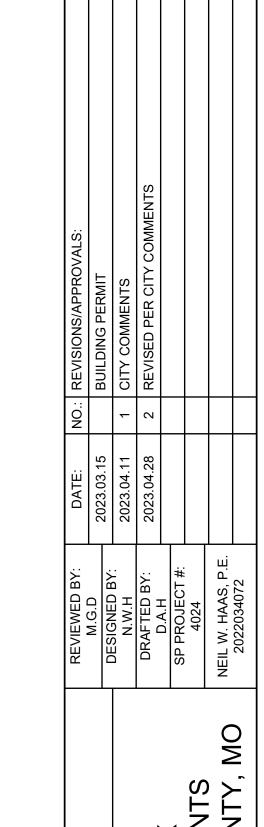
LEE'S SUMMIT	Date: 05/2021 Drawn By: MJF
M I S S O U R I PUBLIC WORKS ENGINEERING DIVISION 220 SE GREEN STREET LEE'S SUMMIT, MO 64063	Checked By: DL
STORM MANHOLE COVER DETAIL	STM-6



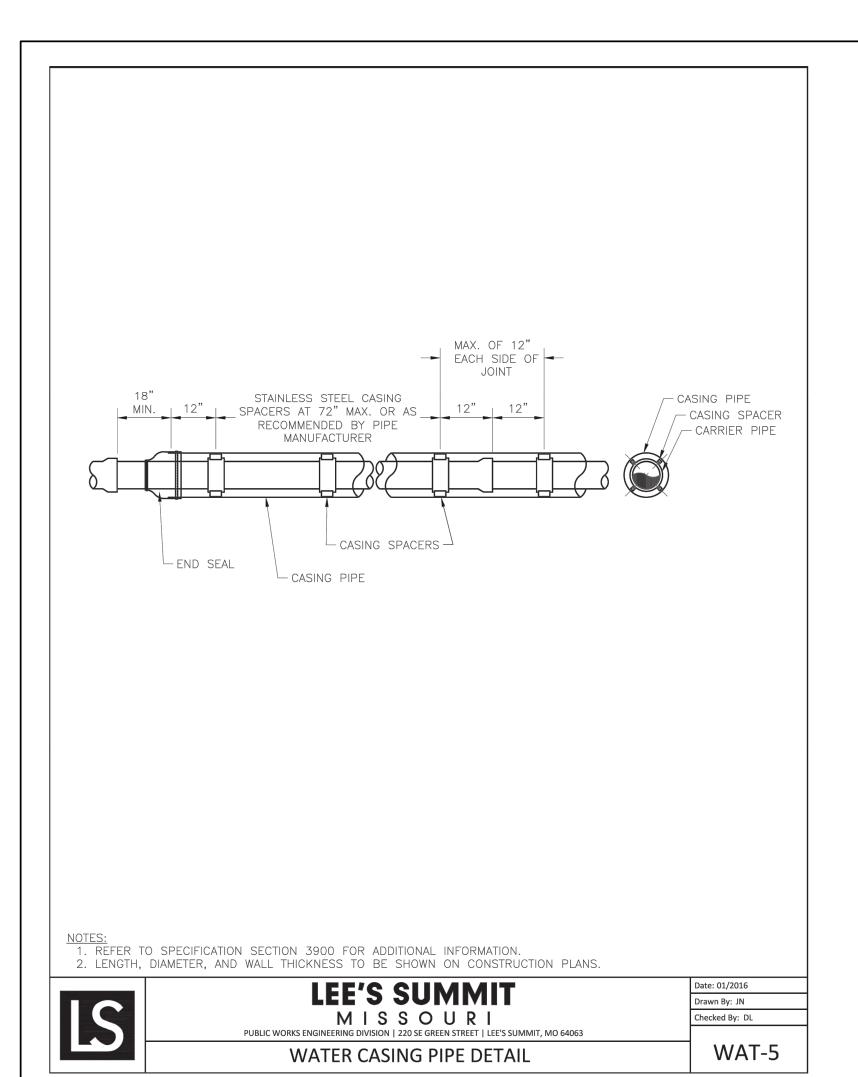


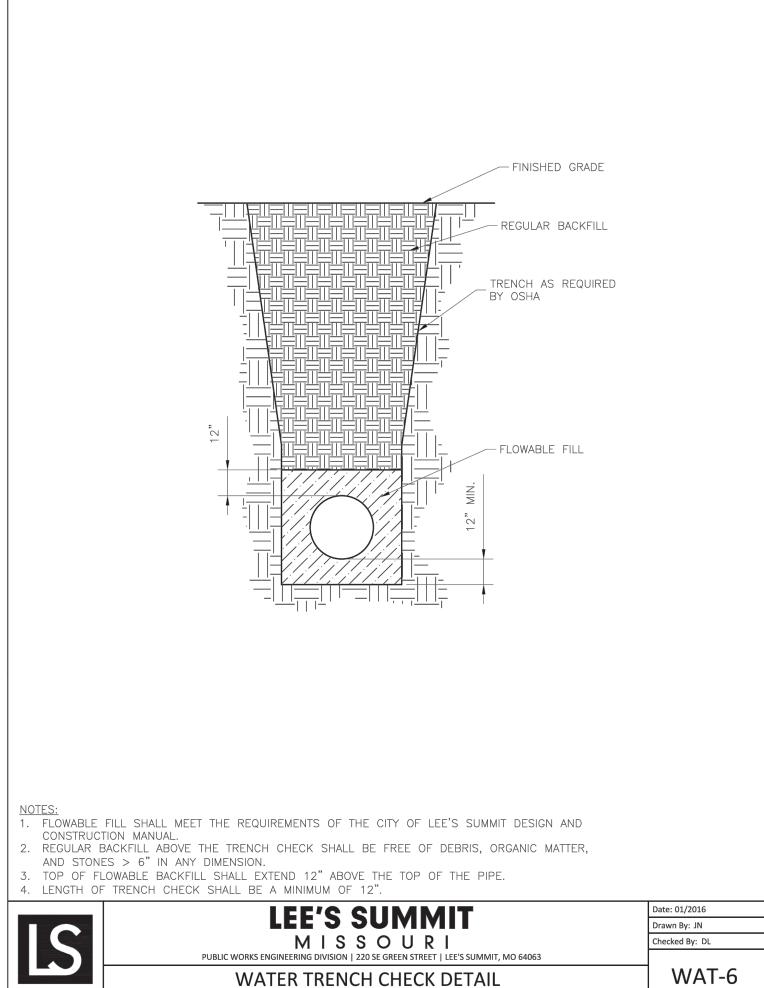


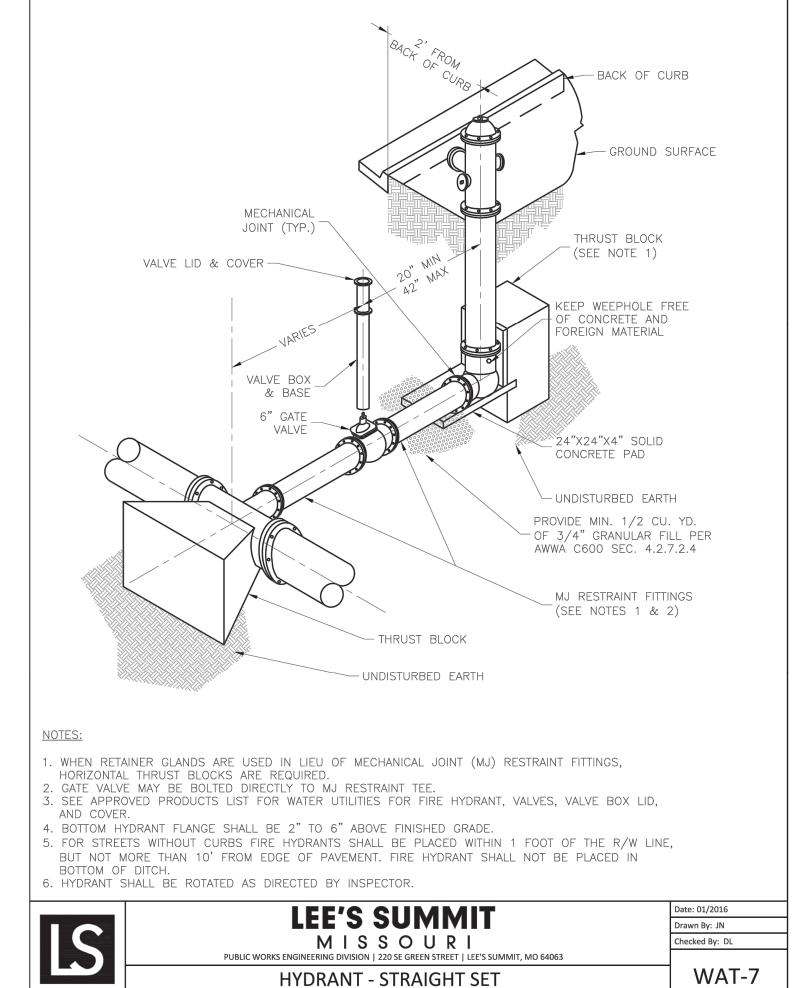


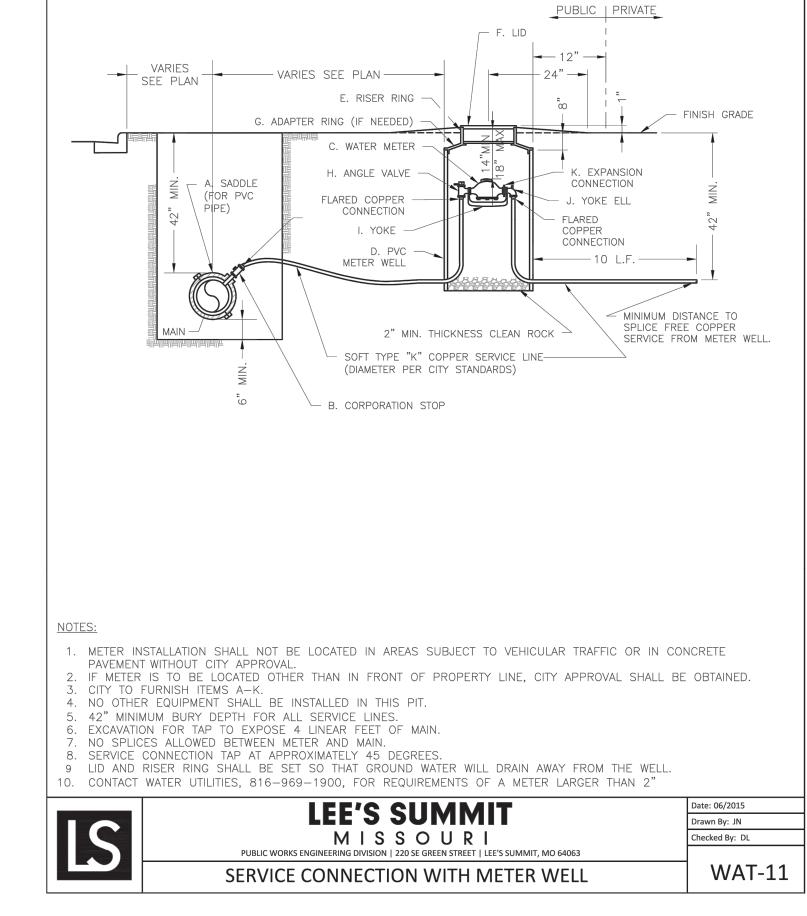


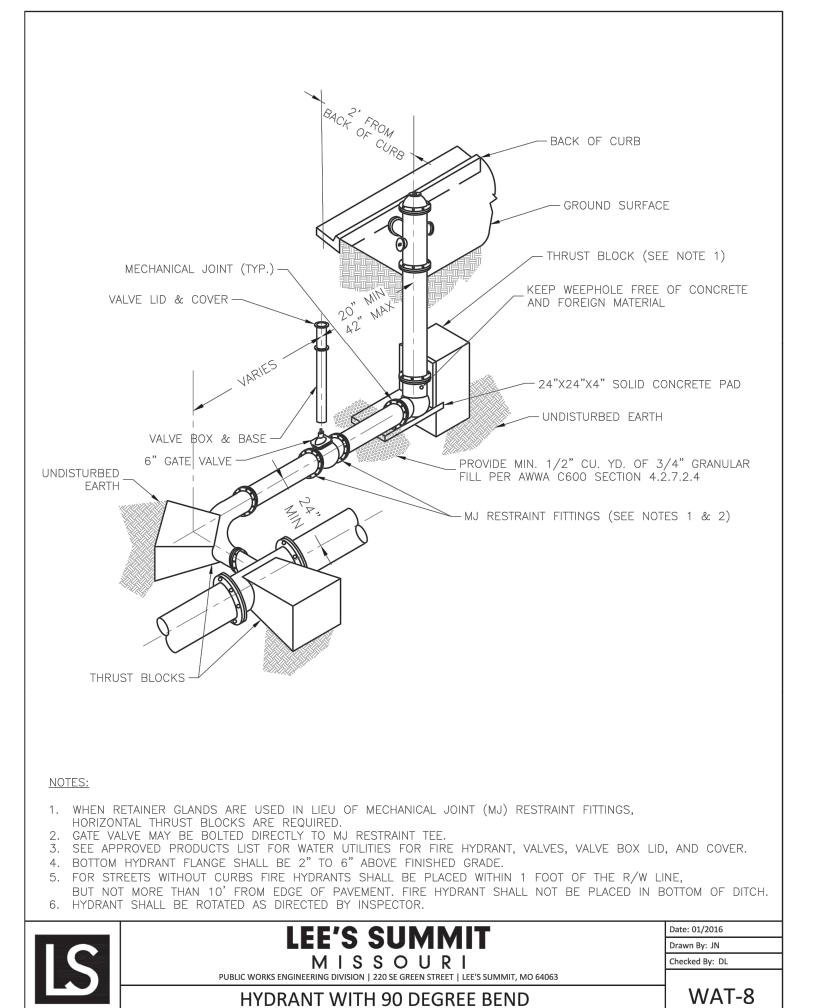


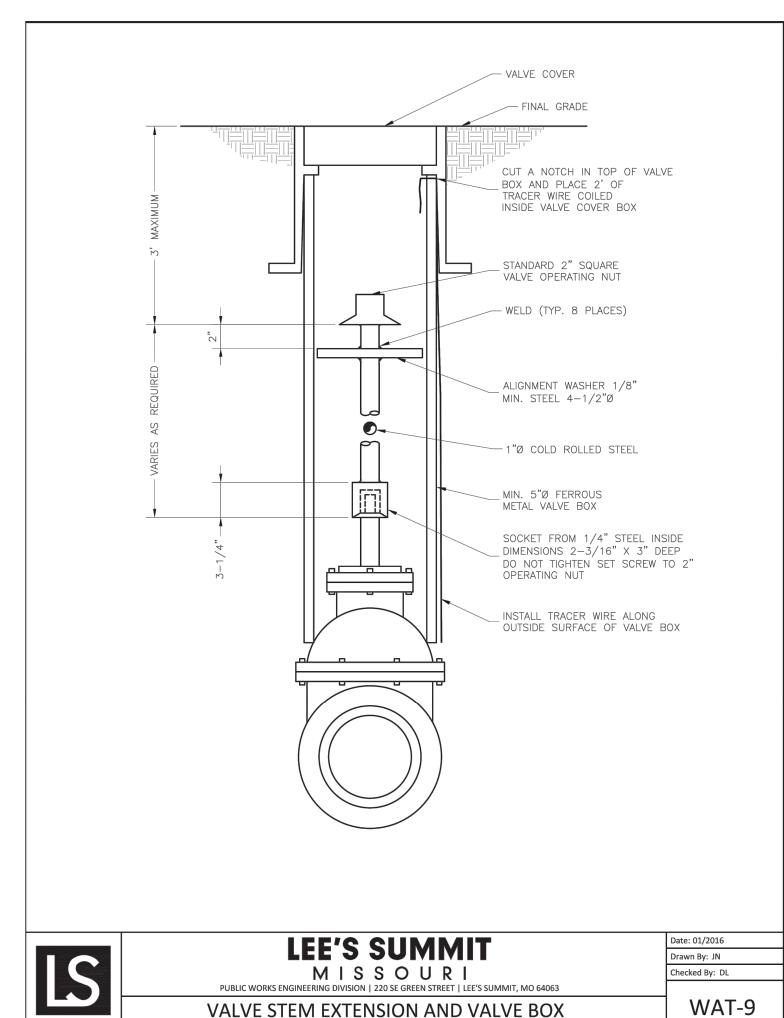




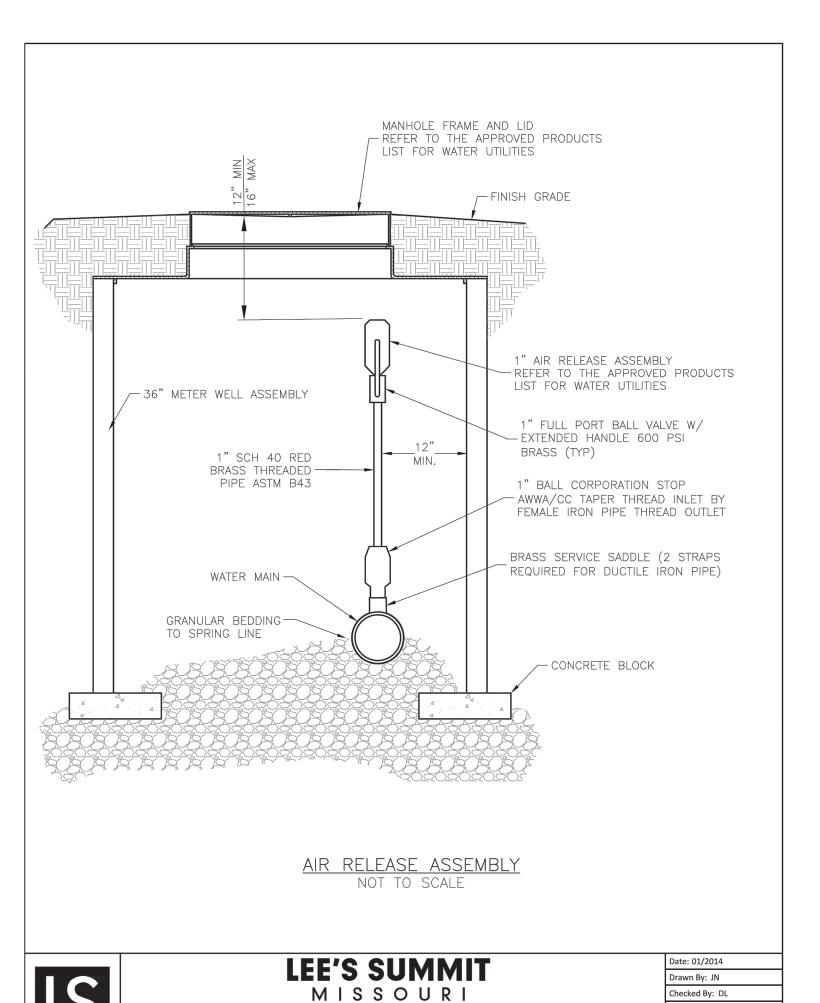




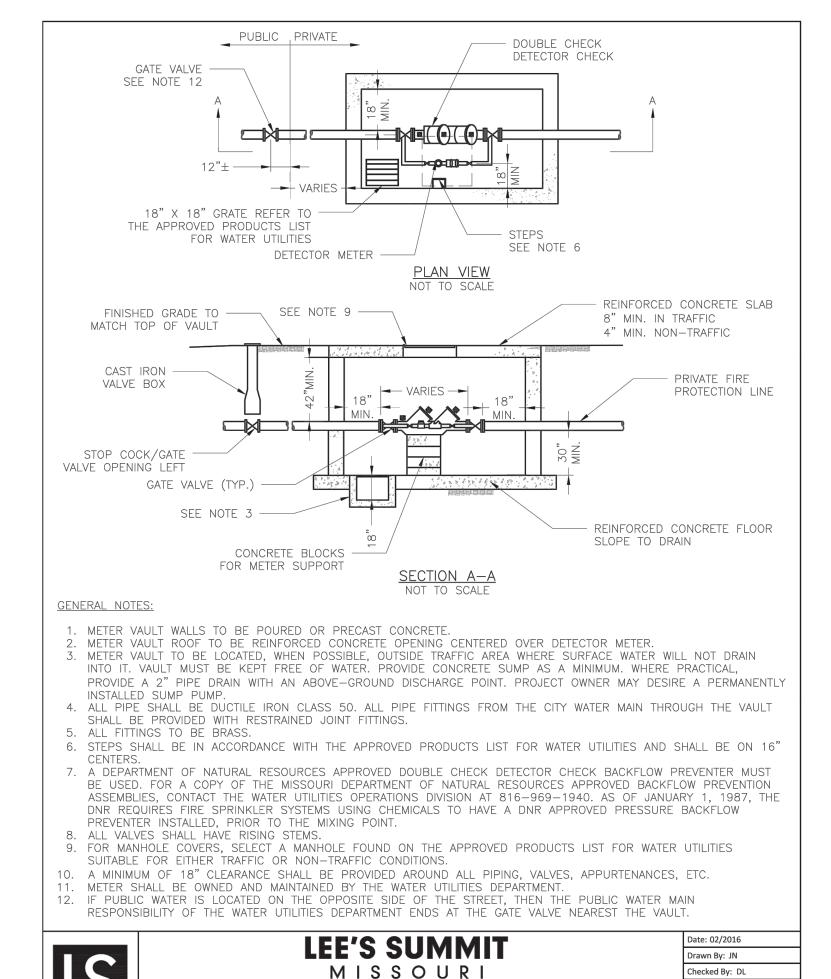




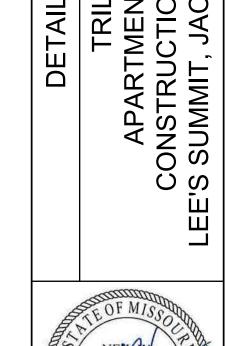
VALVE STEM EXTENSION AND VALVE BOX

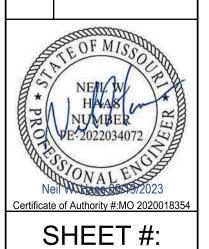


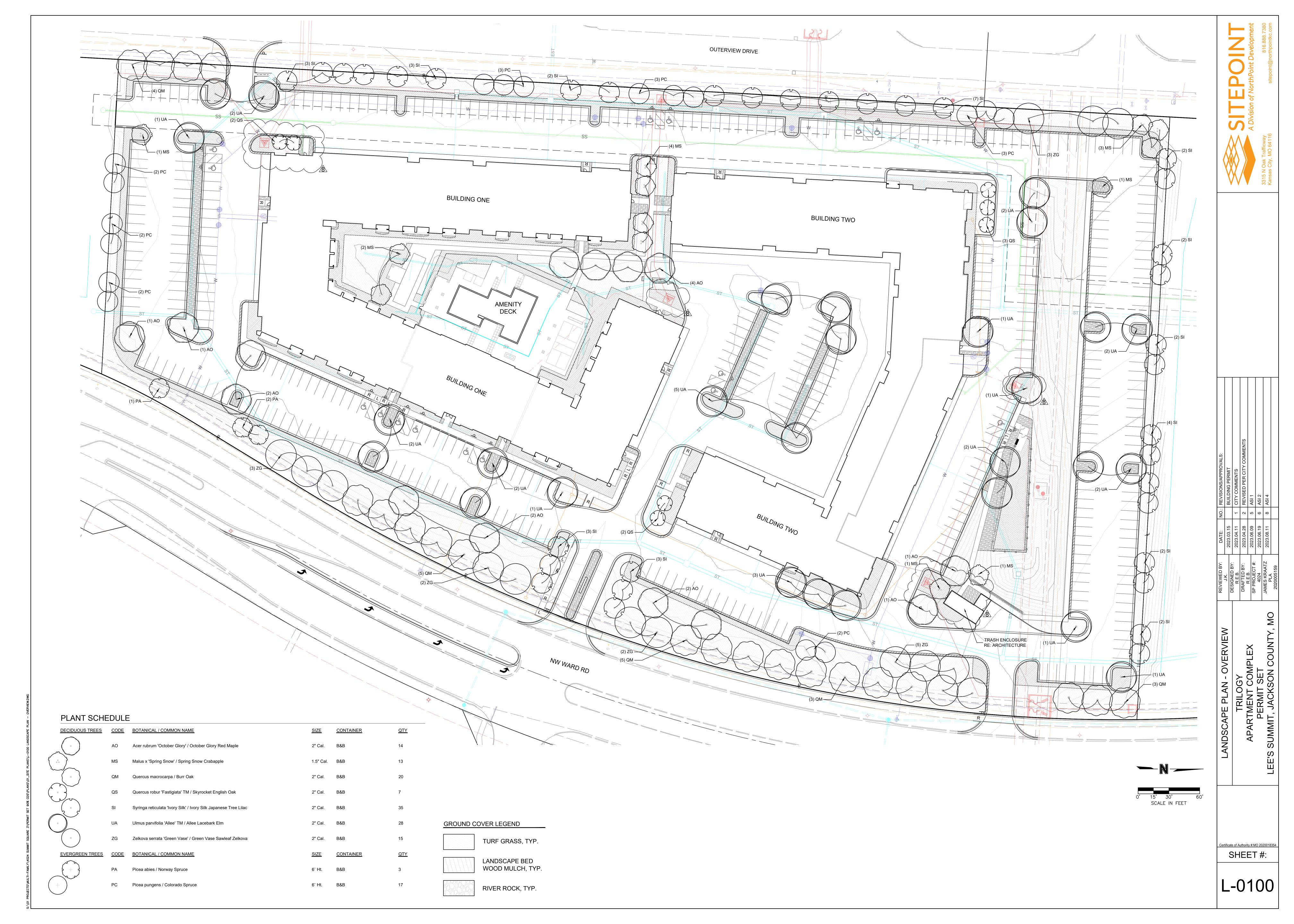
AIR RELEASE ASSEMBLY

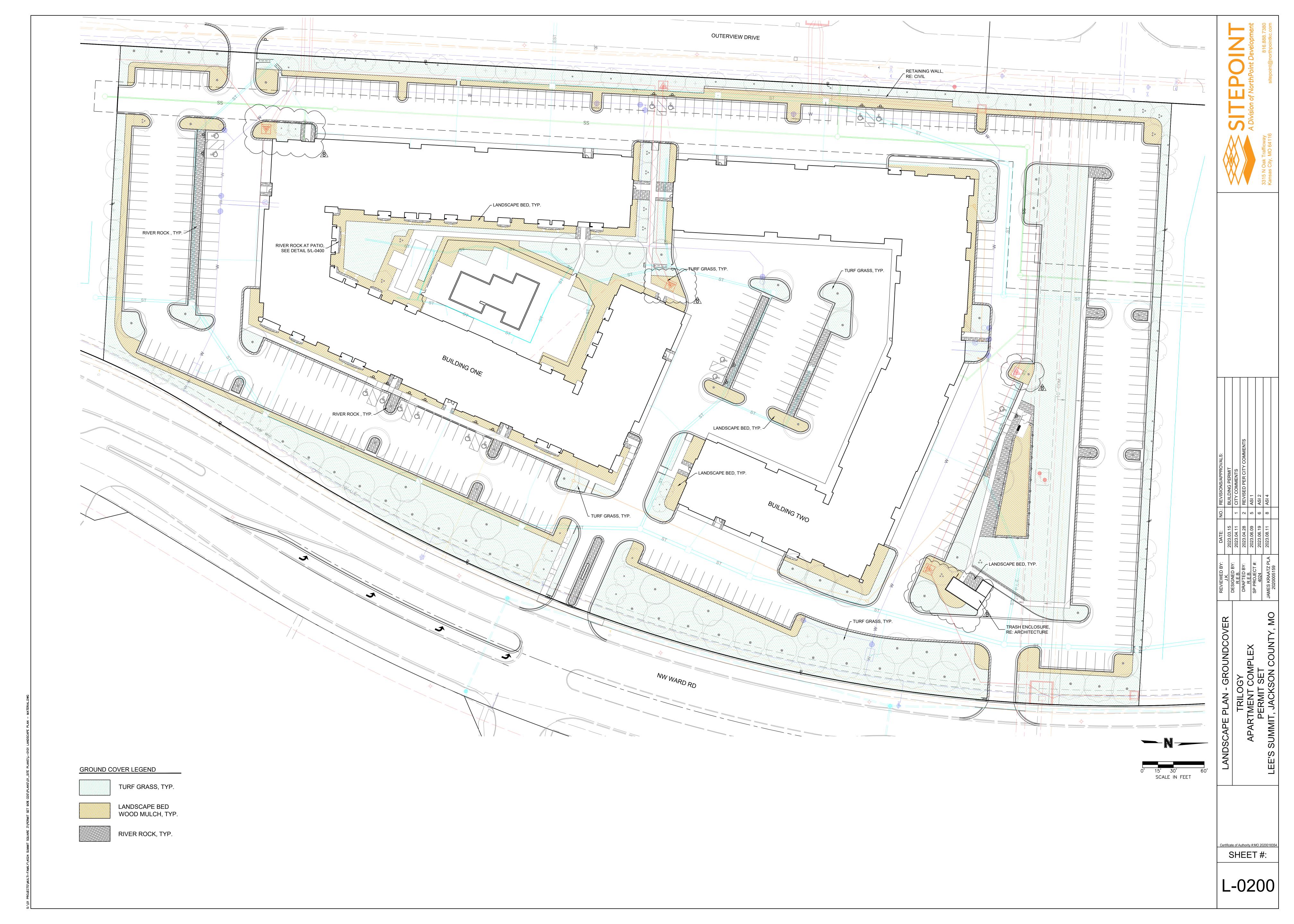


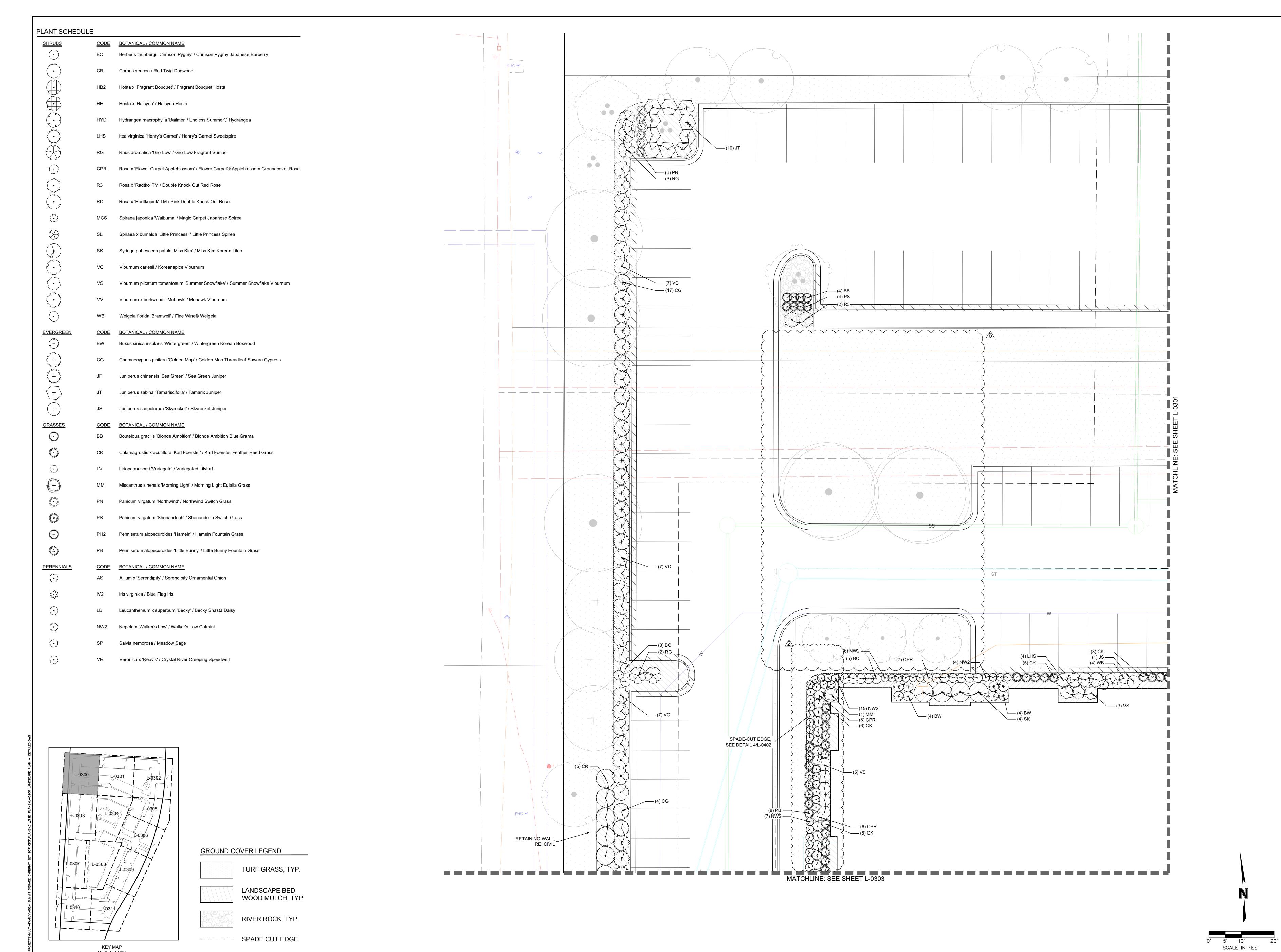
-	LEE'S SUMMIT	Date: 02/2016
	LEE 9 30 MIMILI	Drawn By: JN
	MISSOURI	Checked By: DL
	PUBLIC WORKS ENGINEERING DIVISION 220 SE GREEN STREET LEE'S SUMMIT, MO 64063	
	VAULT FOR DOUBLE CHECK DETECTOR CHECK	WAT-12

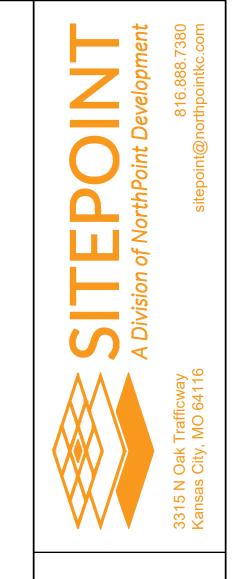


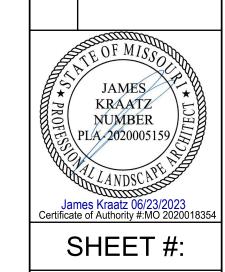


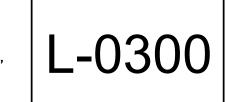


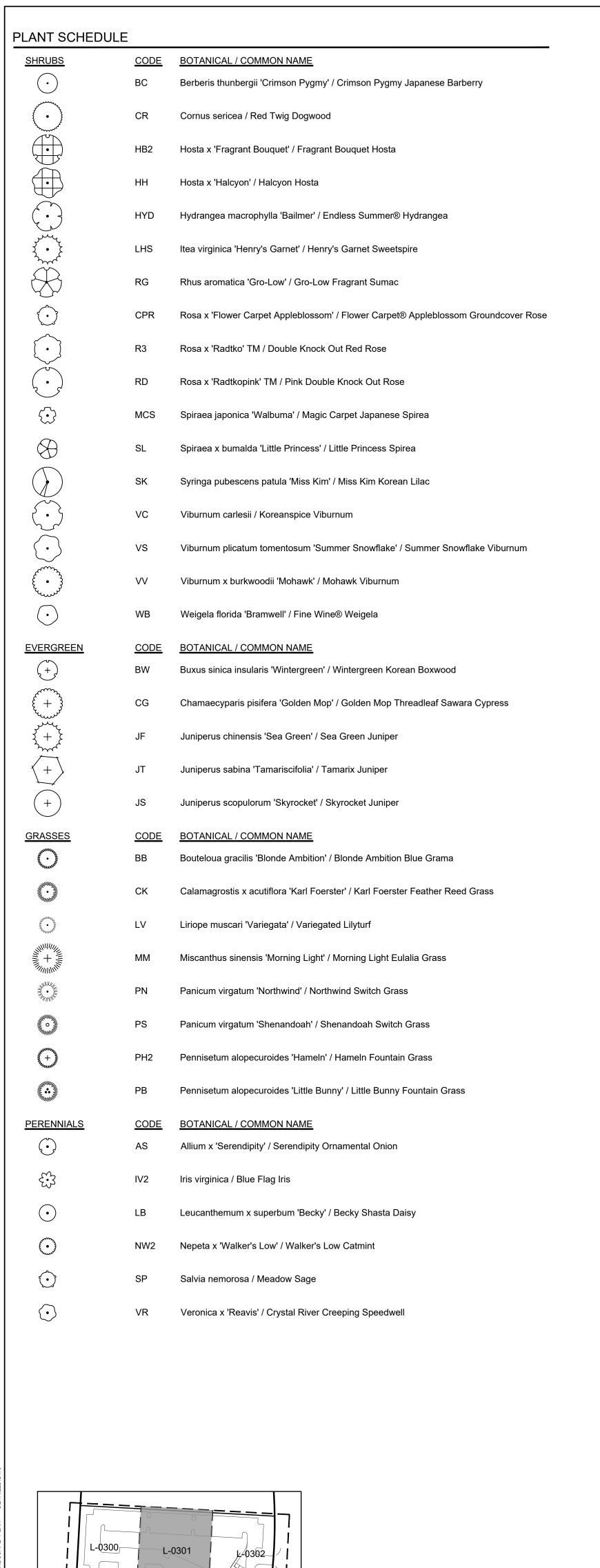


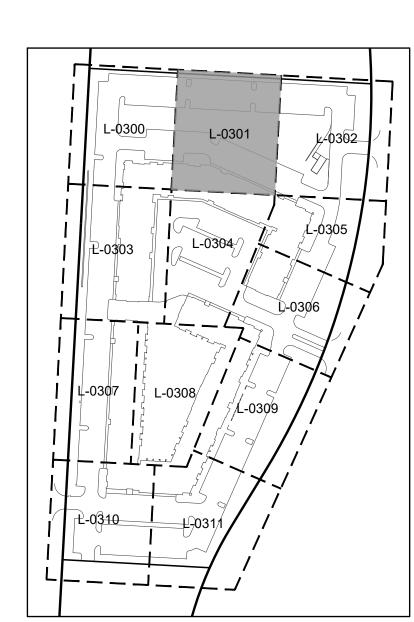


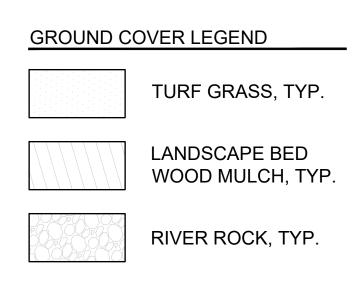




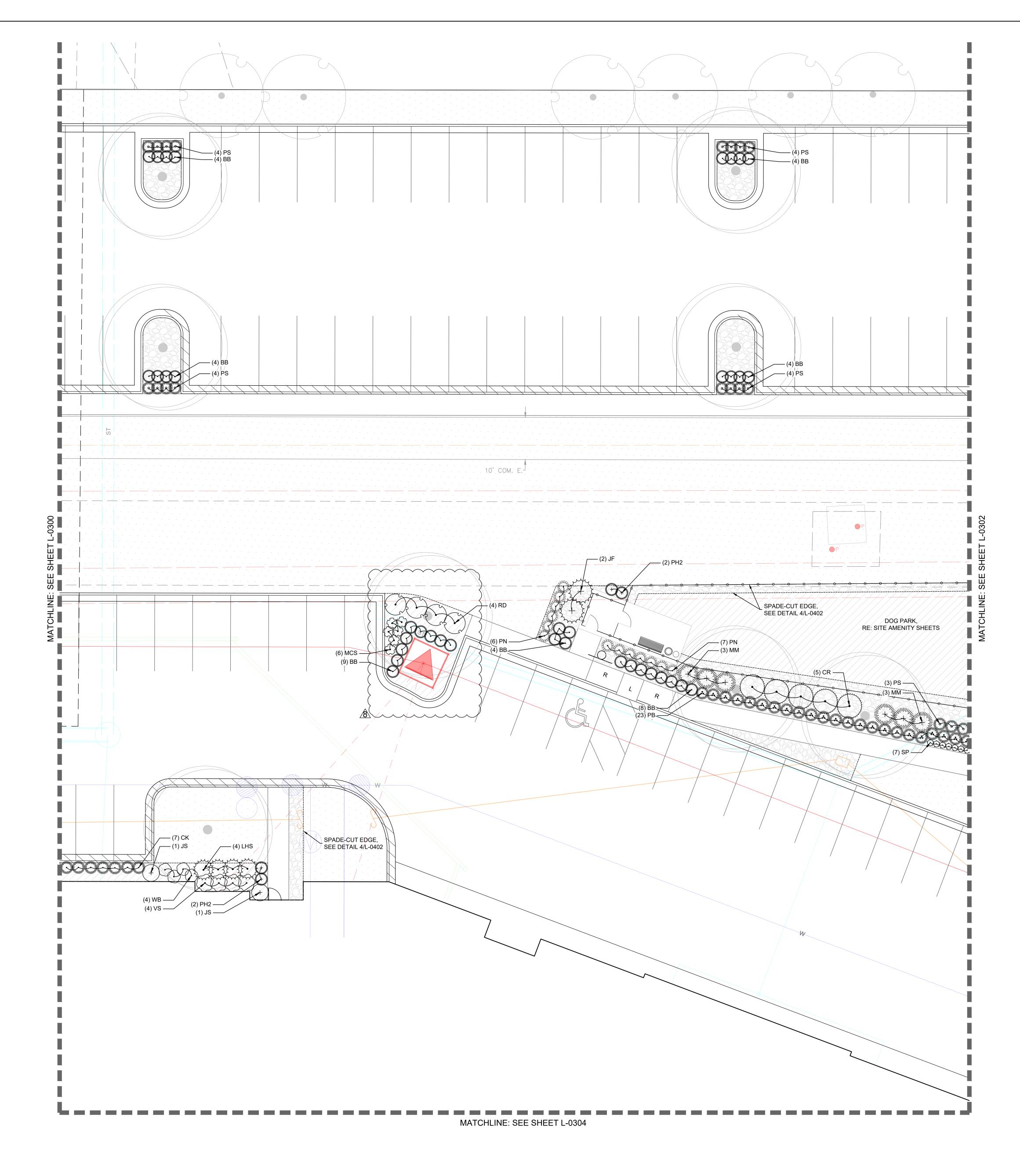


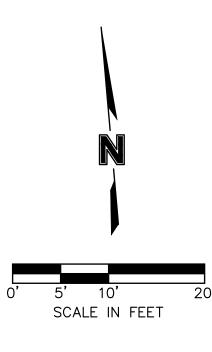






----- SPADE CUT EDGE



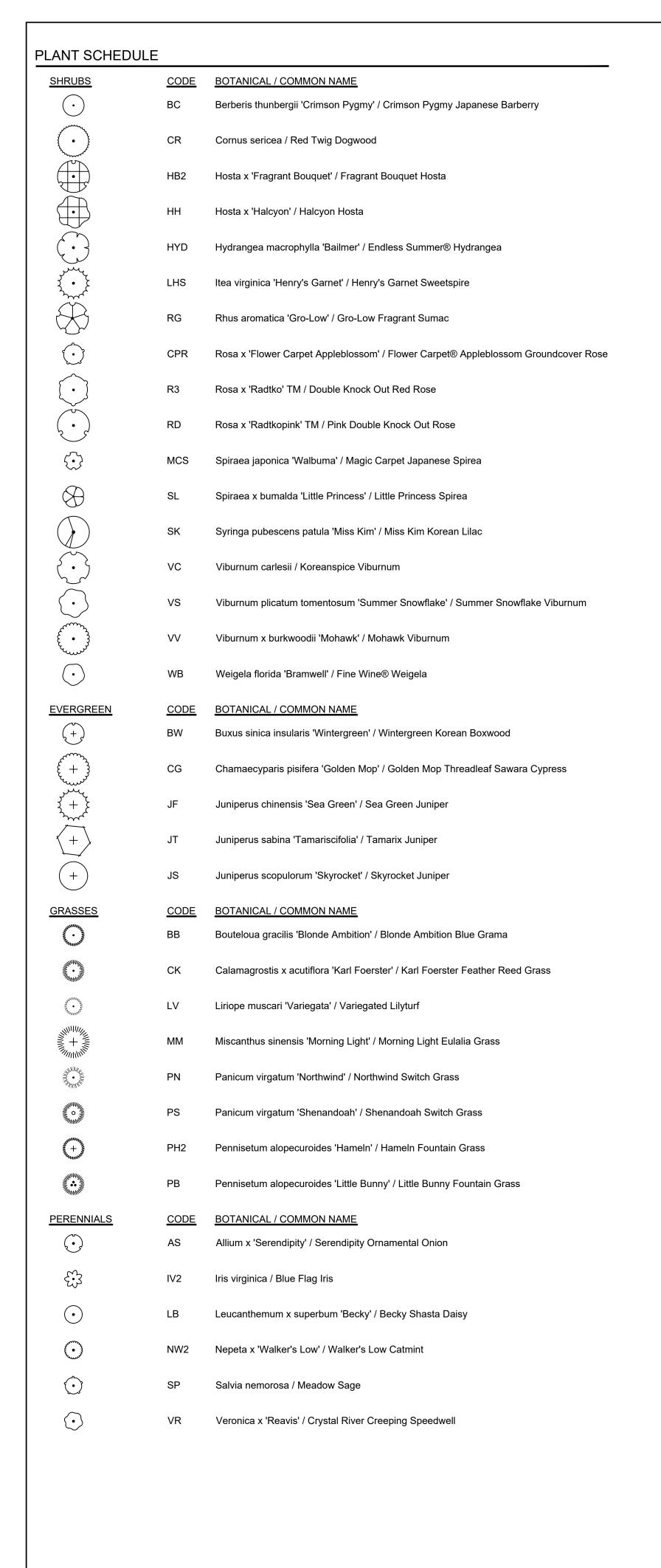


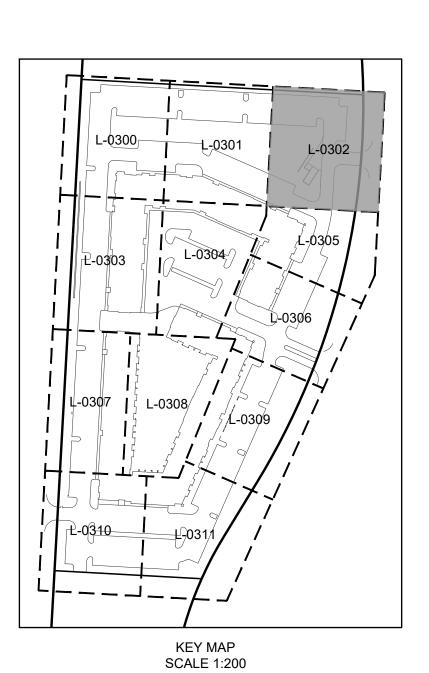
SITEPOIN NorthPoint Developmer

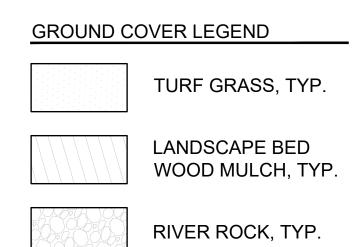
3315 N Oak Trafficway
Kansas City, MO 64116

sitepoint@northpointkc.co

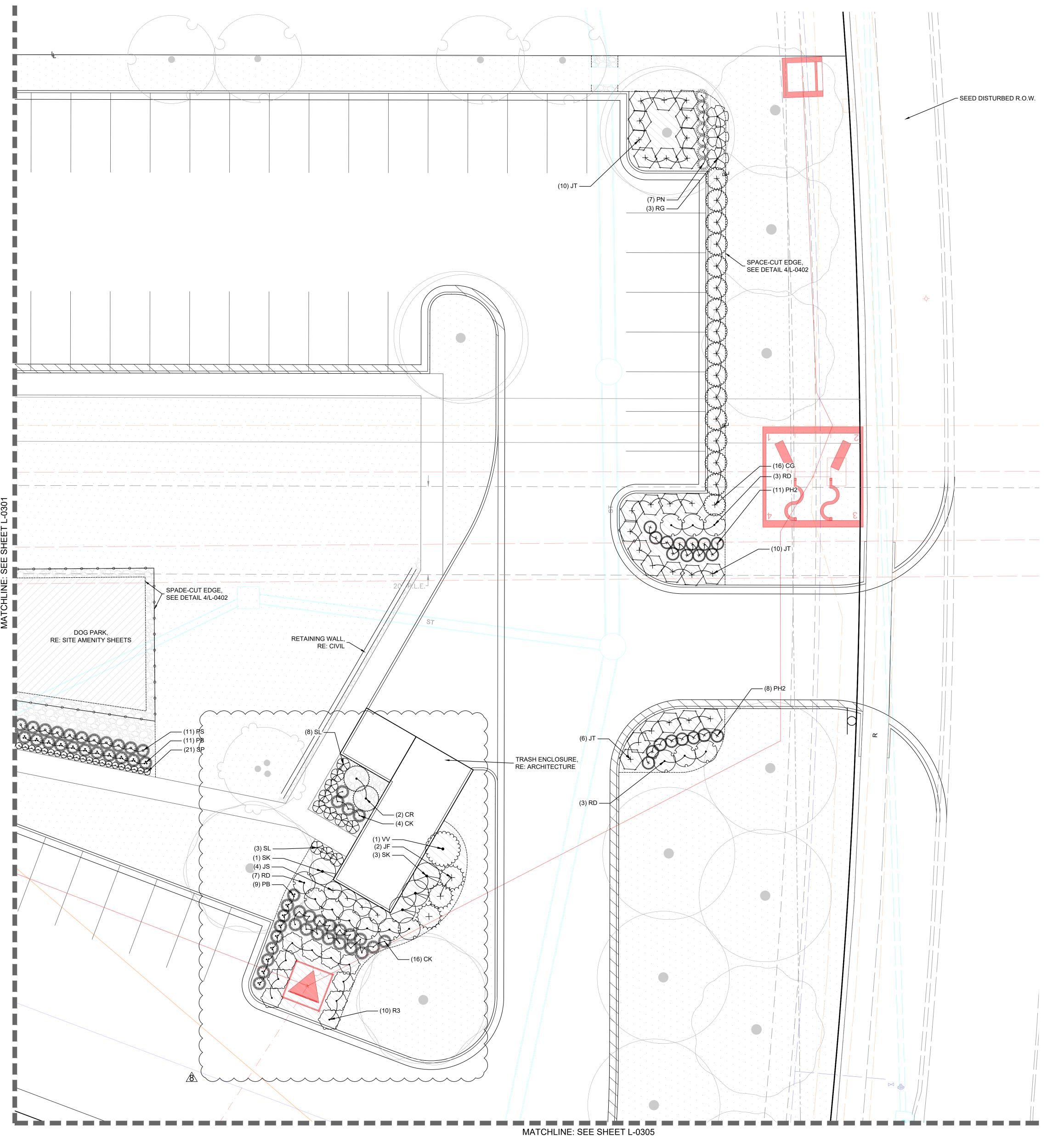
	REVIEWED BY:	DATE:	NO.:	NO.: REVISIONS/APPROVALS:	
こしりしなアロ アにカマ・ フローカににし	J.K.	2000000		TIMODO CINICILIDA	
	DECICNED BY:	2023.03.13		BOILDING PERINI I	
TO HOL	R.E.B.	2023.04.11	_	CITY COMMENTS	
	DRAFTED BY:	2023.04.28	2	2 REVISED PER CITY COMMENTS	
	K.E.B.	000000	,		
	SP PROJECT #	2023.06.19	0 ASI 2	ASI 2	
PERMIT SET	4024	2023.08.11	8 ASI 4	ASI 4	
	JAMES KRAATZ PLA				
SOMMINI, SACROON COONIT, MO	2020005159				
			1		

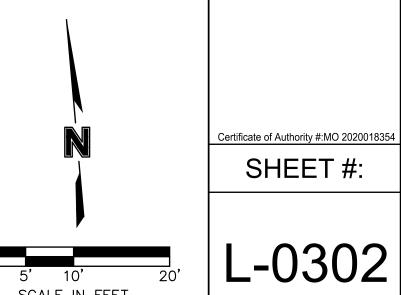


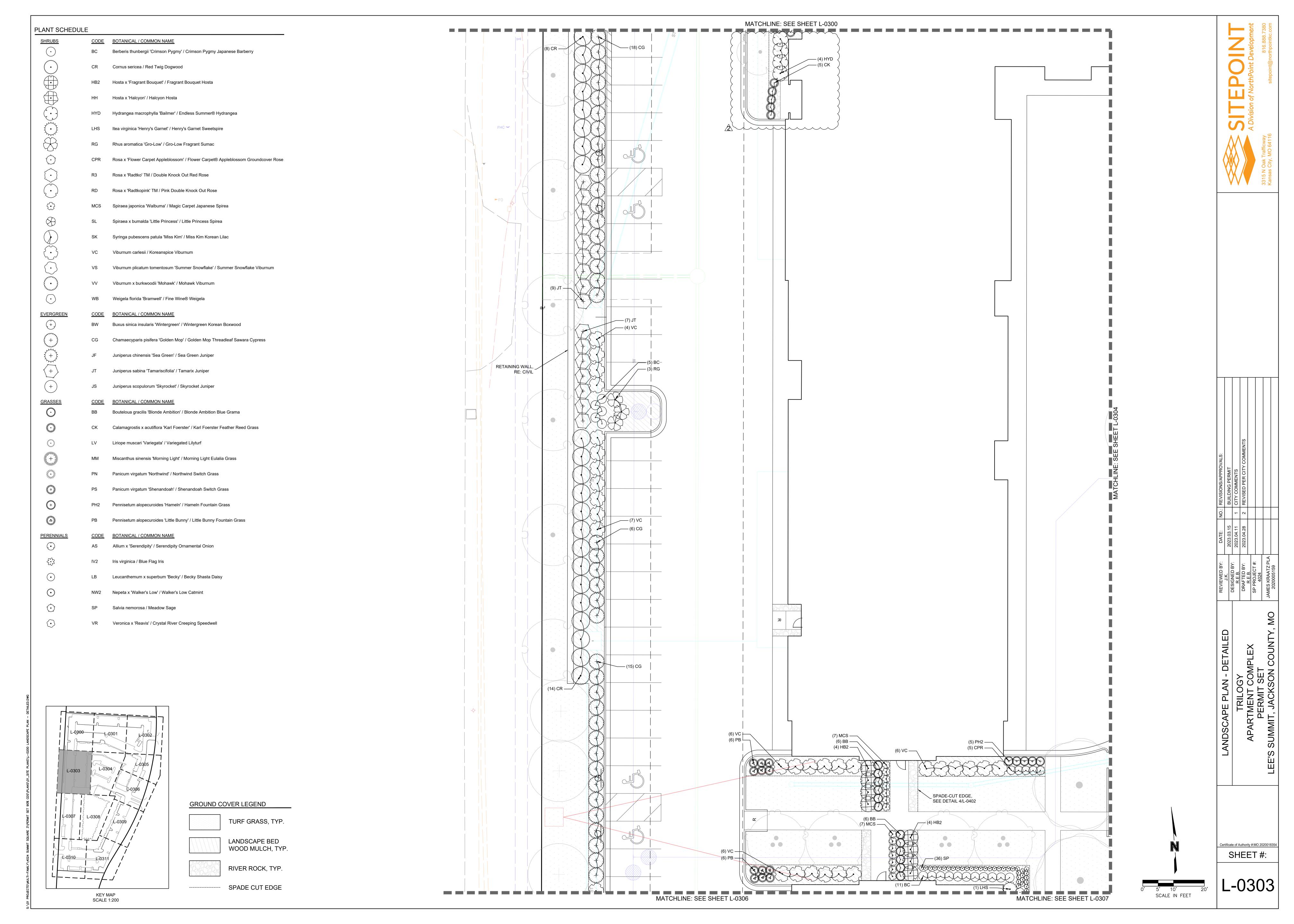


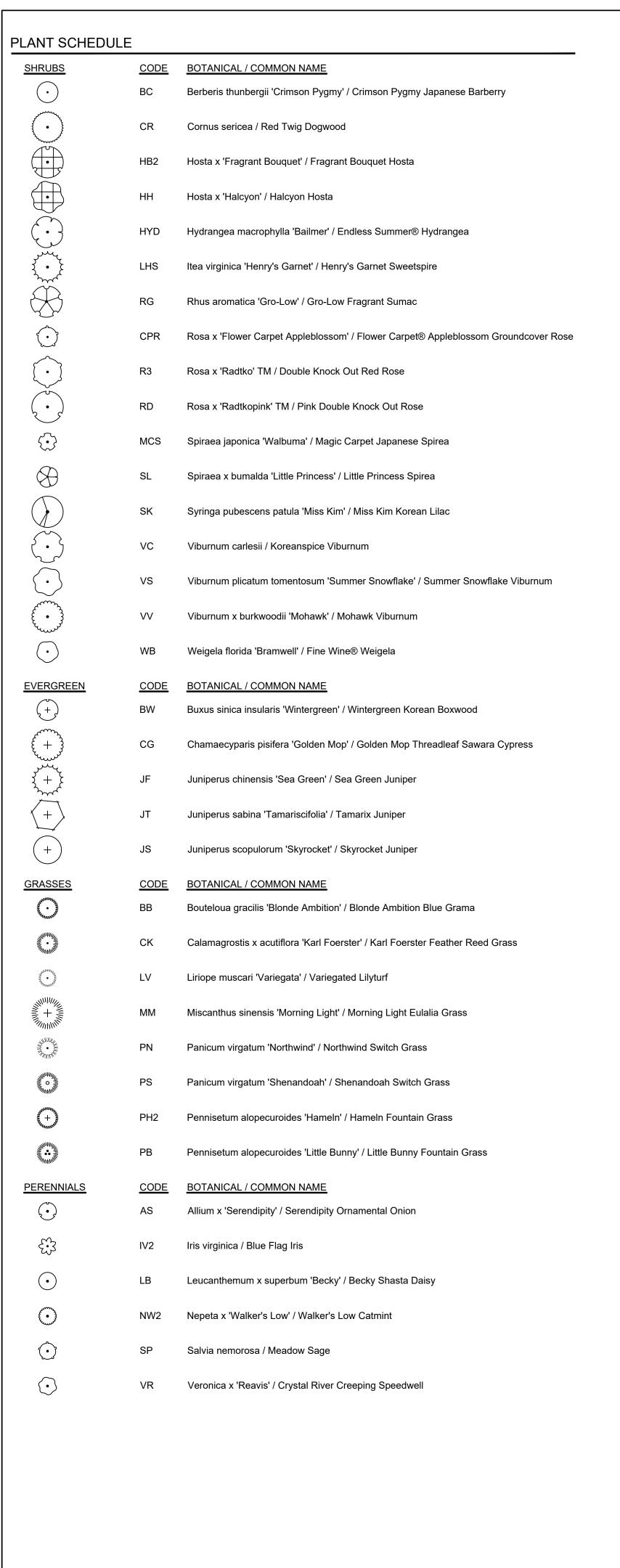


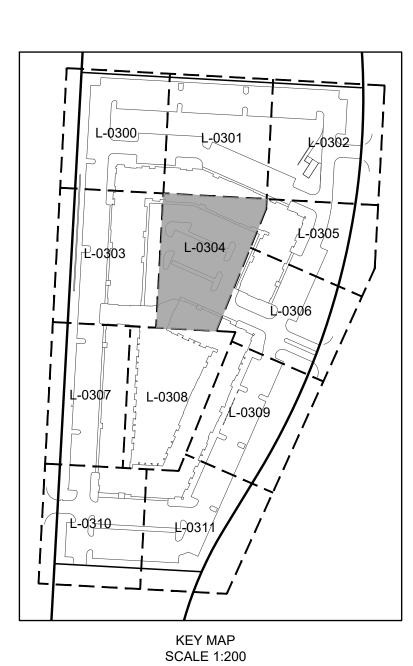
----- SPADE CUT EDGE

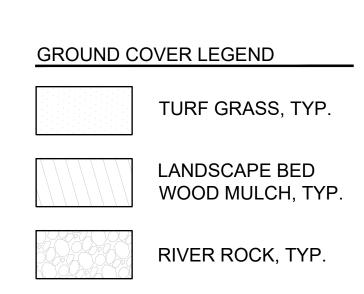




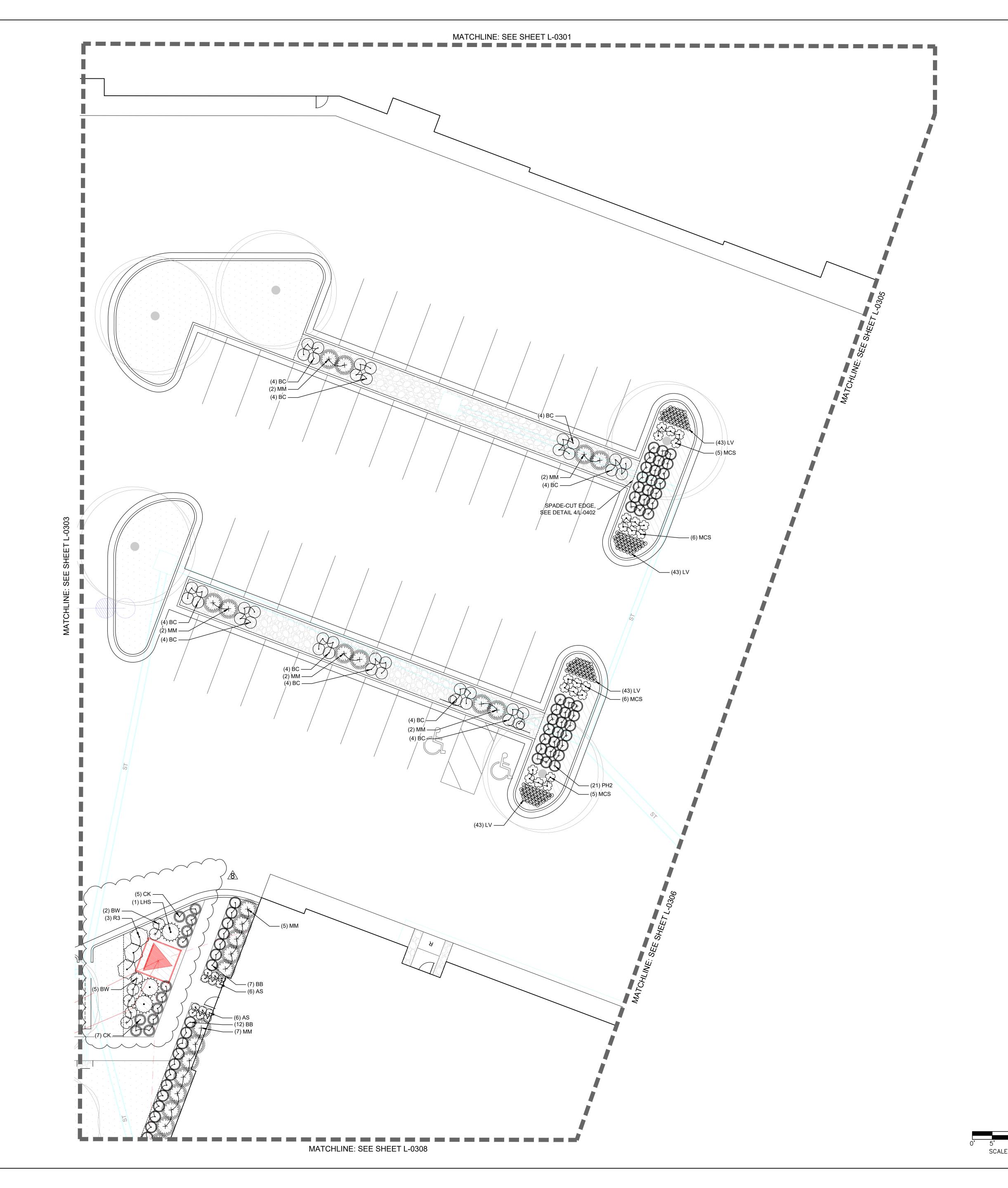








SPADE CUT EDGE

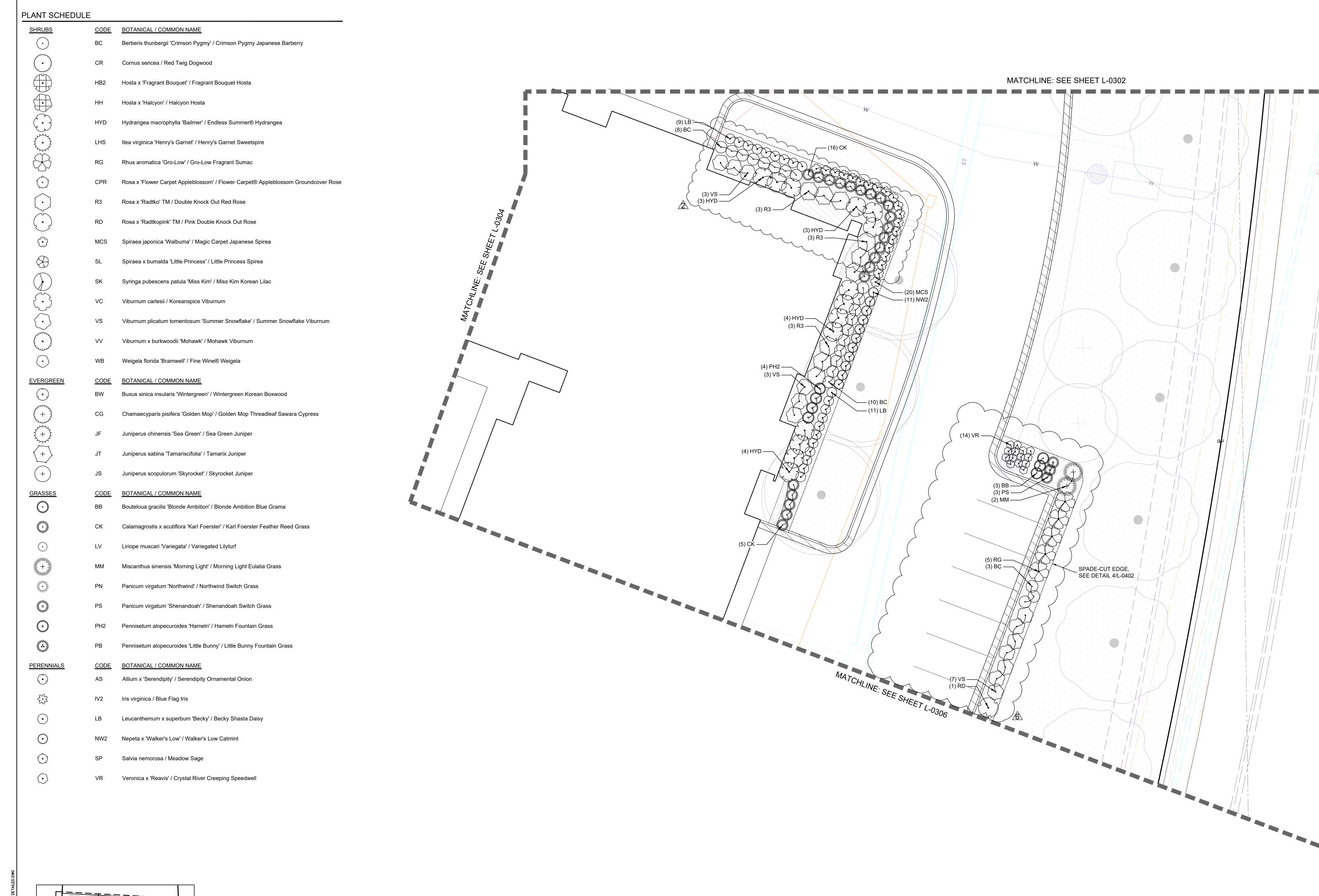


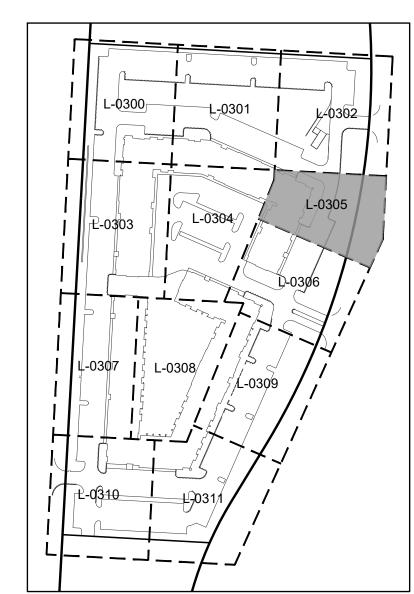


·Si		MMENTS				
NO.: REVISIONS/APPROVALS: BUILDING PERMIT	1 CITY COMMENTS	2 REVISED PER CITY COMMENTS	5 ASI 1	8 ASI 4		
DATE: 2023.03.15	2023.04.11	2023.04.28	2023.06.09	2023.08.11		
REVIEWED BY: J.K.	DESIGNED BY: F R.E.B.	DRAFTED BY:	SP PRO IECT #:	4024	JAMES KRAATZ PLA	2020005159
LANDSCAPE PLAN - DETAILED	>00 =0H		APARTMENT COMPLEX	PERMIT SET		LEE O DOINIMIT, JACKOON COONTY, MO

SHEET #:

L-0304





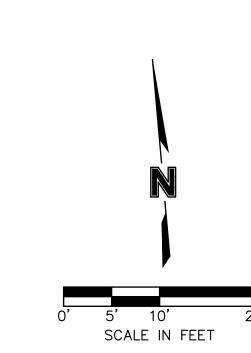
GROUND COVER LEGEND

TURF GRASS, TYP.

LANDSCAPE BED
WOOD MULCH, TYP.

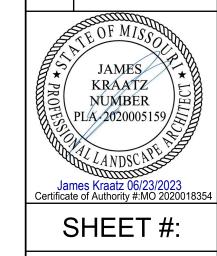
RIVER ROCK, TYP.

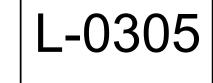
----- SPADE CUT EDGE

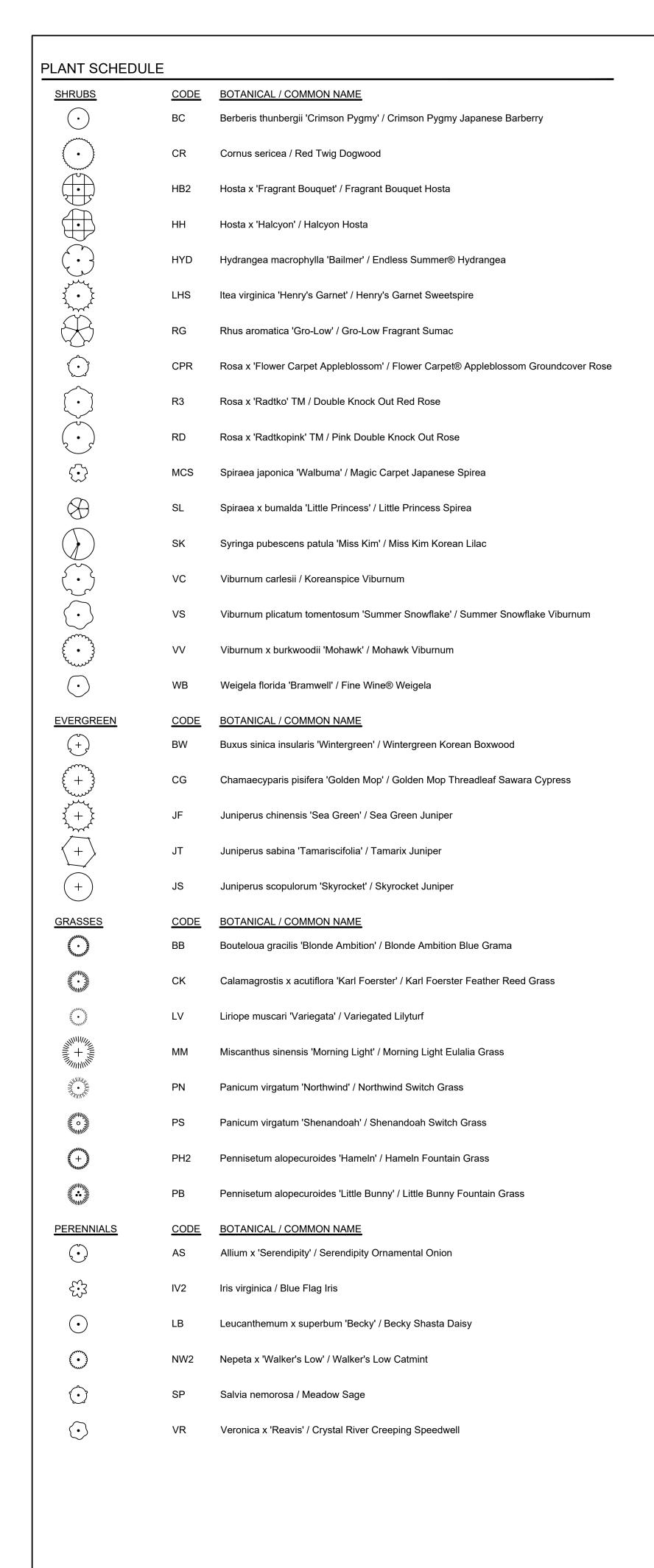


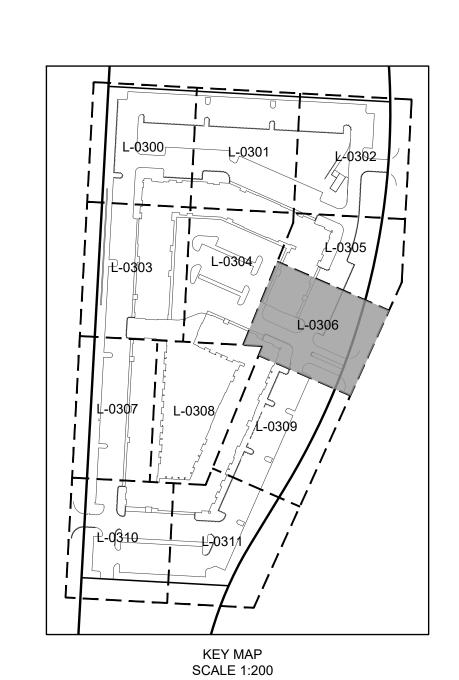


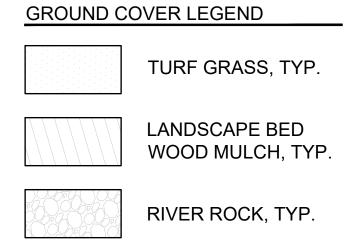
	REVIEWED BY:	DATE:	NO.:	NO.: REVISIONS/APPROVALS:	
TE TLAN - DE LAILED	J.K.	37 00 0000		TIMODO CINO III O	
	DECICALED BY:	2023.03.13		BUILDING PERMIT	
TDII OCV	R.E.B.	2023.04.11	1	CITY COMMENTS	
	DRAFTED BY:	2023.04.28	2	REVISED PER CITY COMMENTS	
	R.E.B.	0000 00 10	,		
	SP PROJECT #	2023.00.19	0	ASI 2	
DERMIT SET	4024				
	JAMES KRAATZ PLA				
, JACKSON COON T, MO	2020005159				
			1	-	



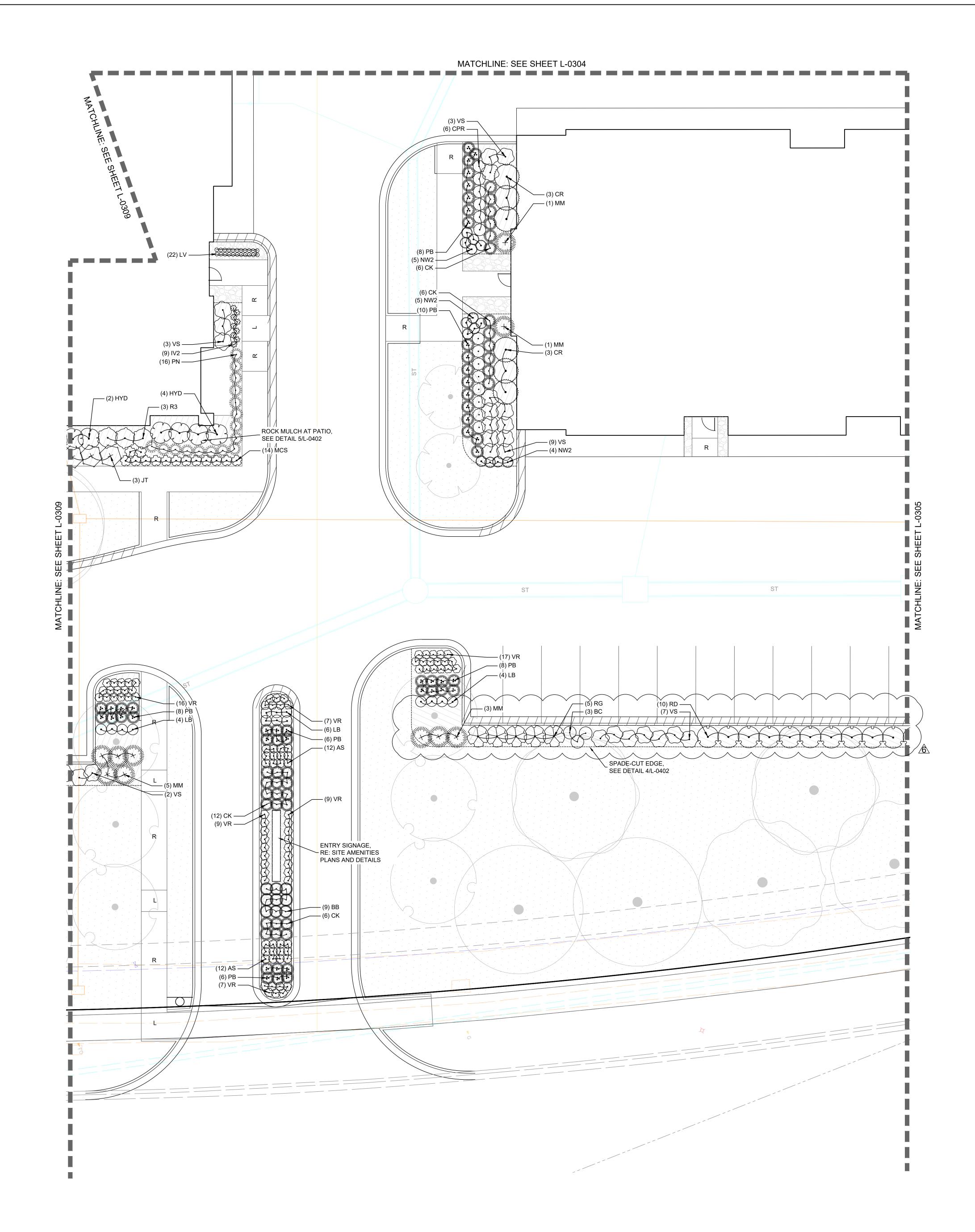






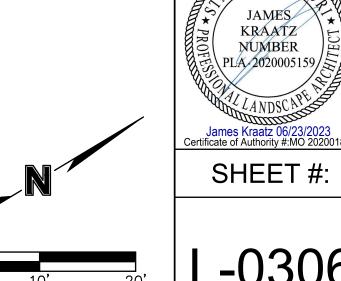


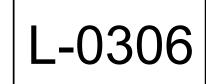
----- SPADE CUT EDGE

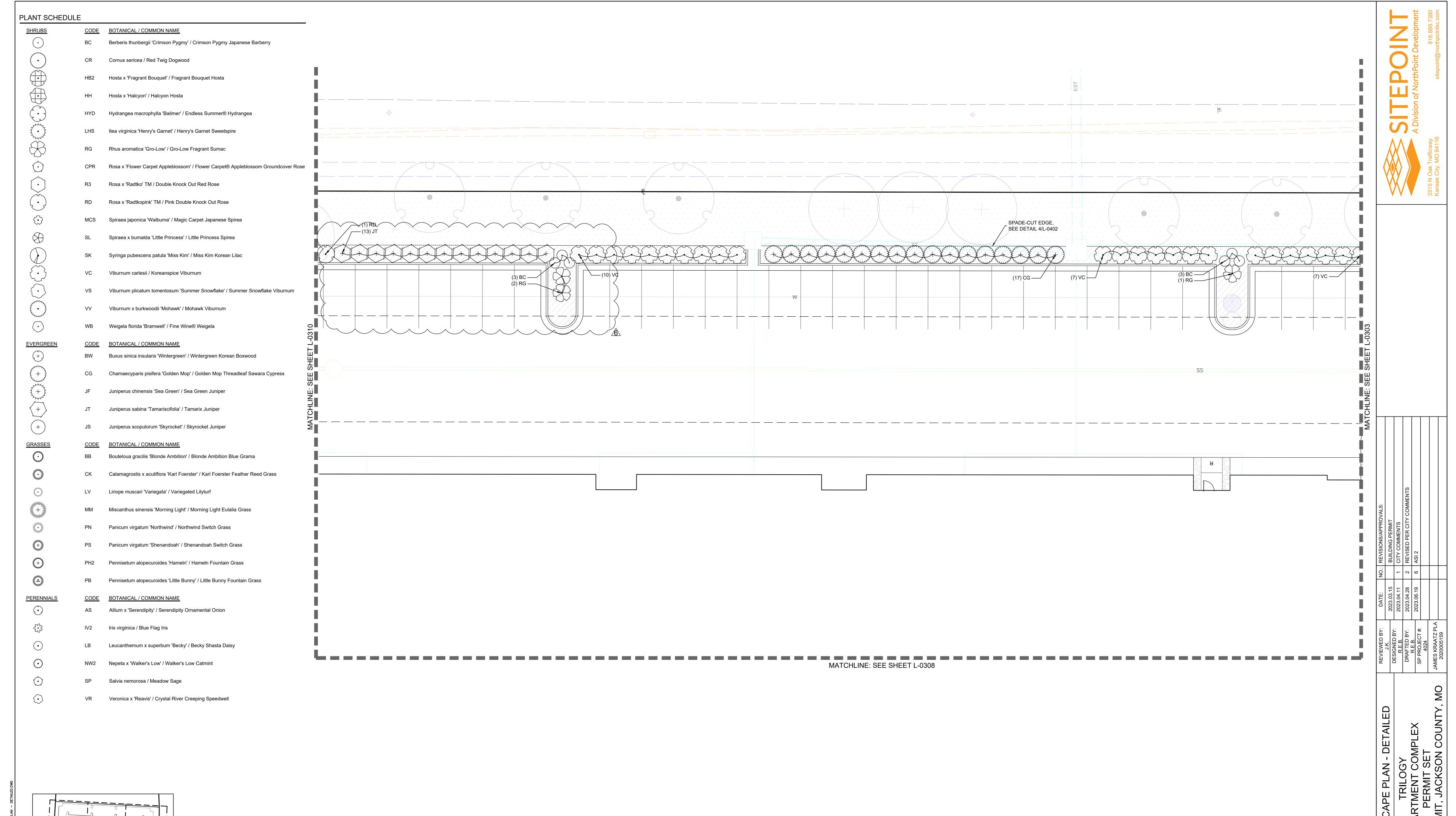


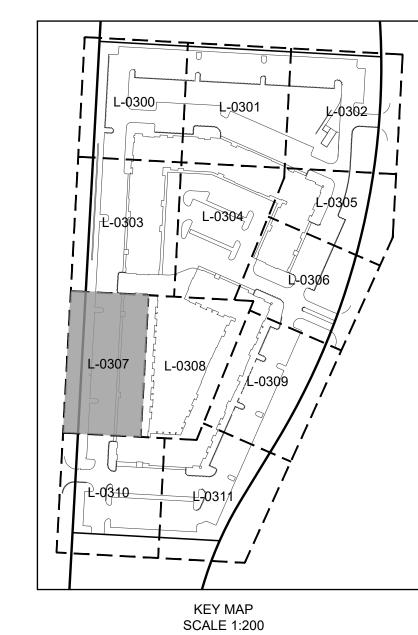


しひしみアロ アにカマ・ フローカににし	J.K.	2000000		TIMODO CINO III O	
	DECICNED BY:	2023.03.13		BOILDING PERINI I	
YOU HOT	R.E.B.	2023.04.11	1	CITY COMMENTS	
	DRAFTED BY:	2023.04.28	2	REVISED PER CITY COMMENTS	
	K.E.B.	000000	,	0.04	
	SP PRO IFCT #:	2023.06.19	٥	6 ASI 2	
PERMIT SET					
	JAMES KRAATZ PLA				
DIVIDITION OF THE RIGHT OF THE PROPERTY IN THE PROPERTY OF THE	2020005159				









TURF GRASS, TYP.

LANDSCAPE BED
WOOD MULCH, TYP.

----- SPADE CUT EDGE

RIVER ROCK, TYP.





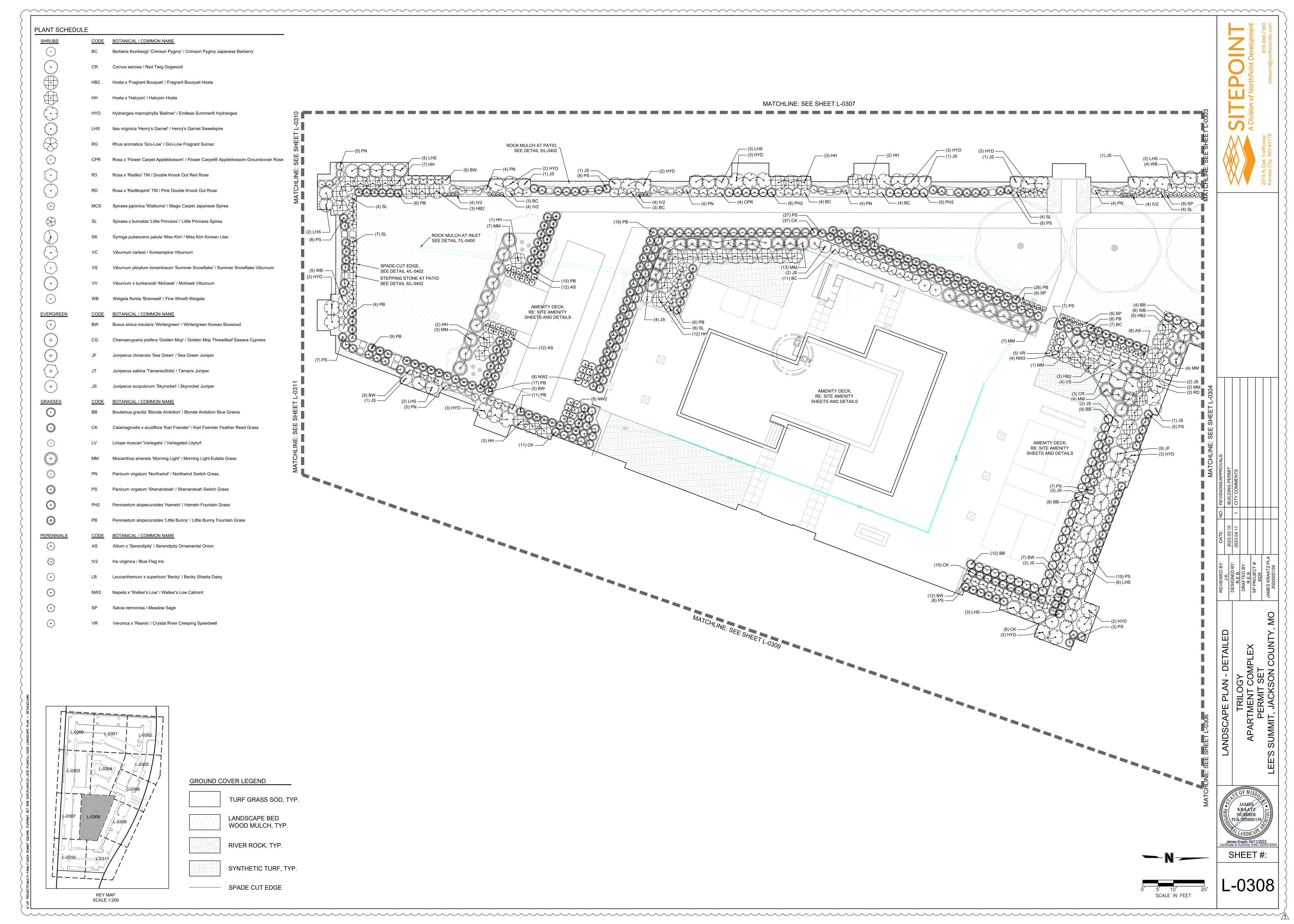
L-0307

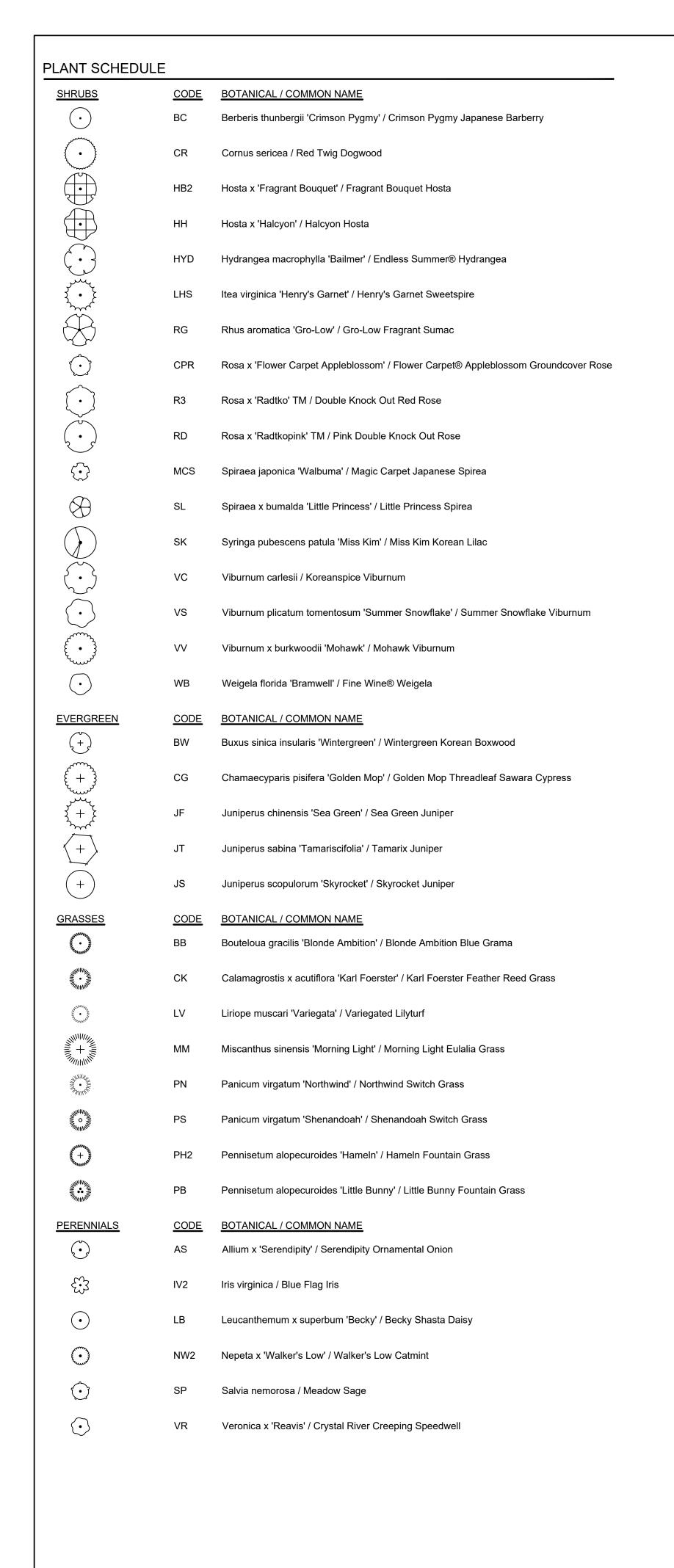
JAMES

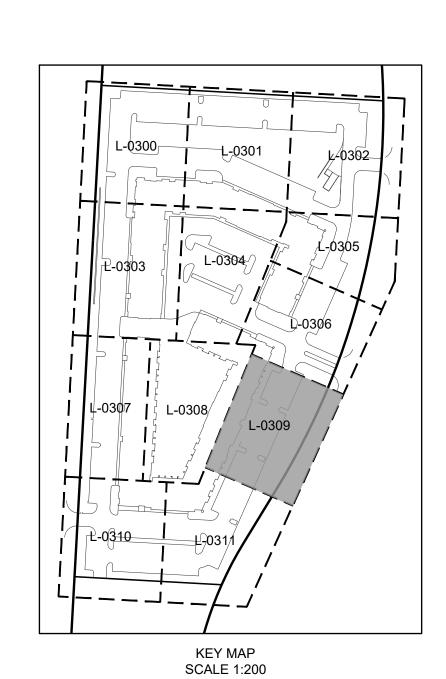
KRAATZ

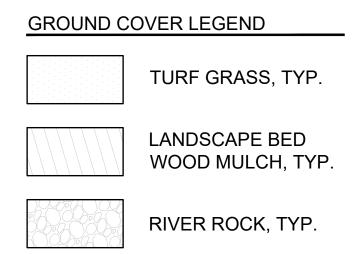
NUMBER

PLA 2020005159

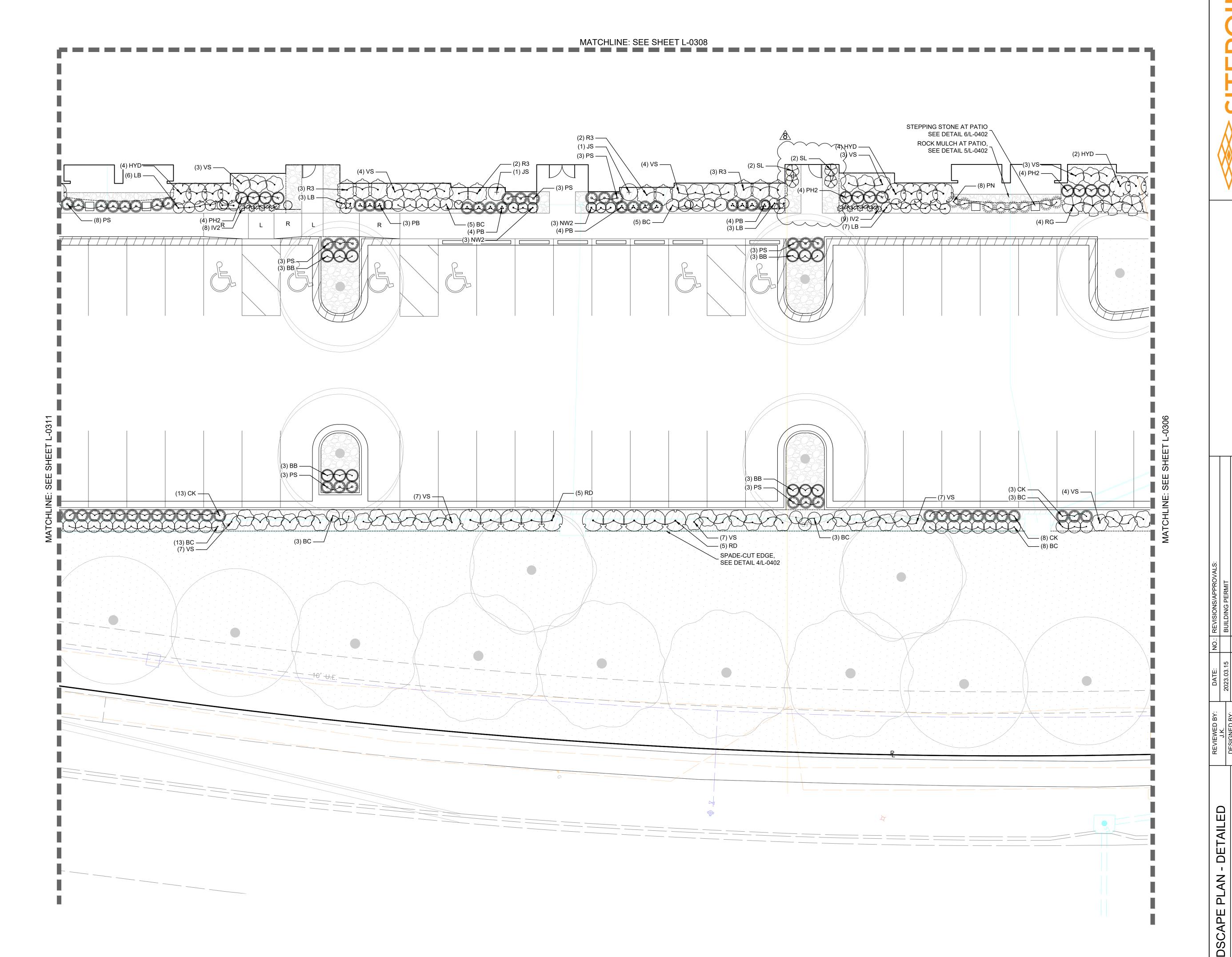


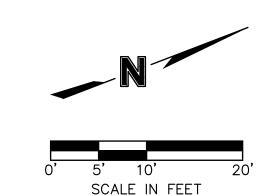


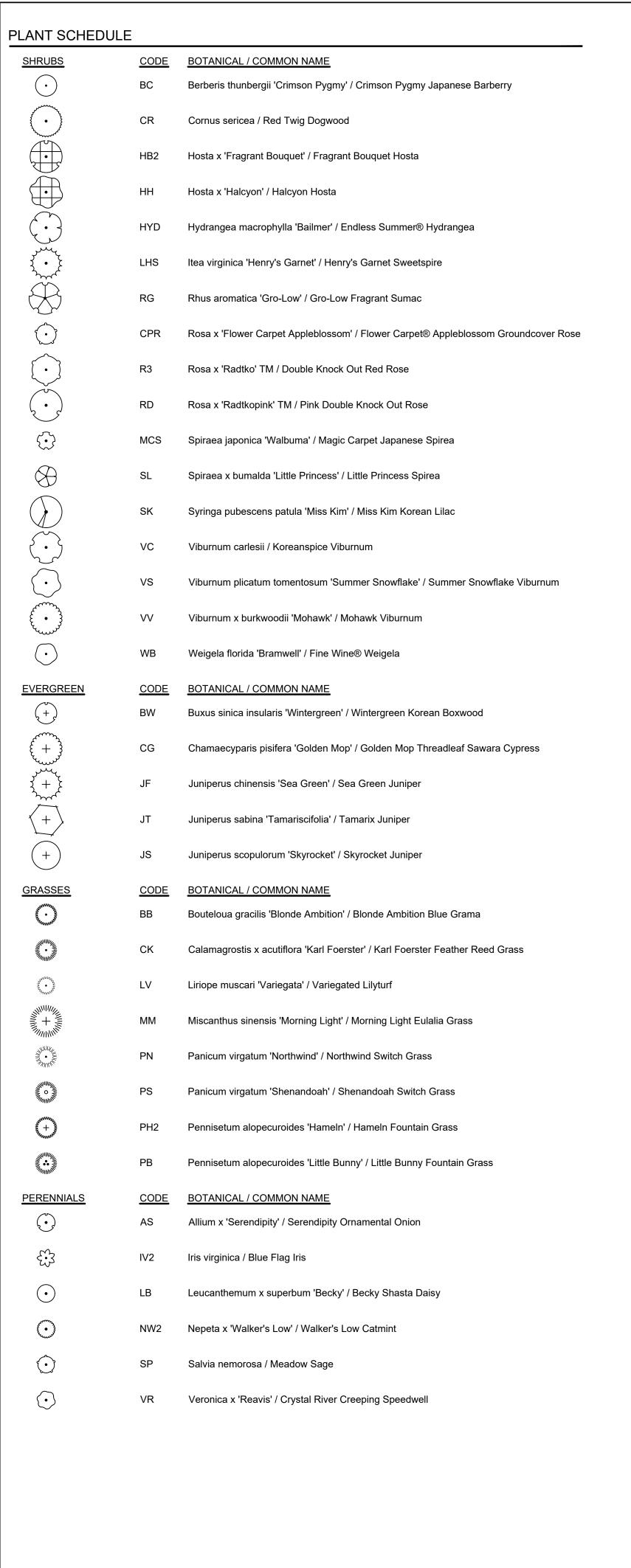


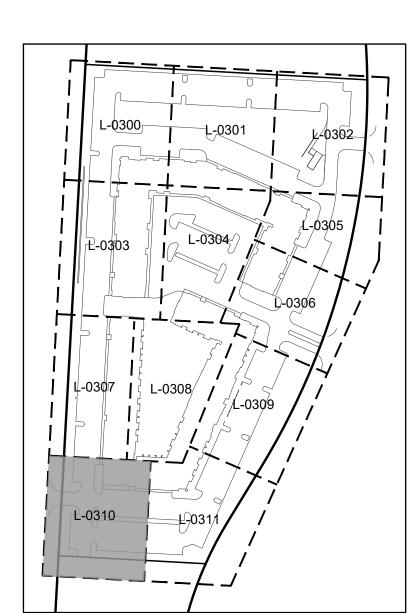


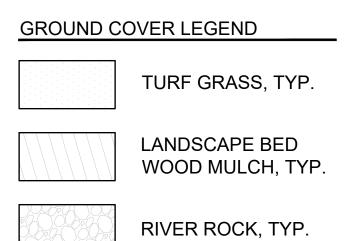
----- SPADE CUT EDGE



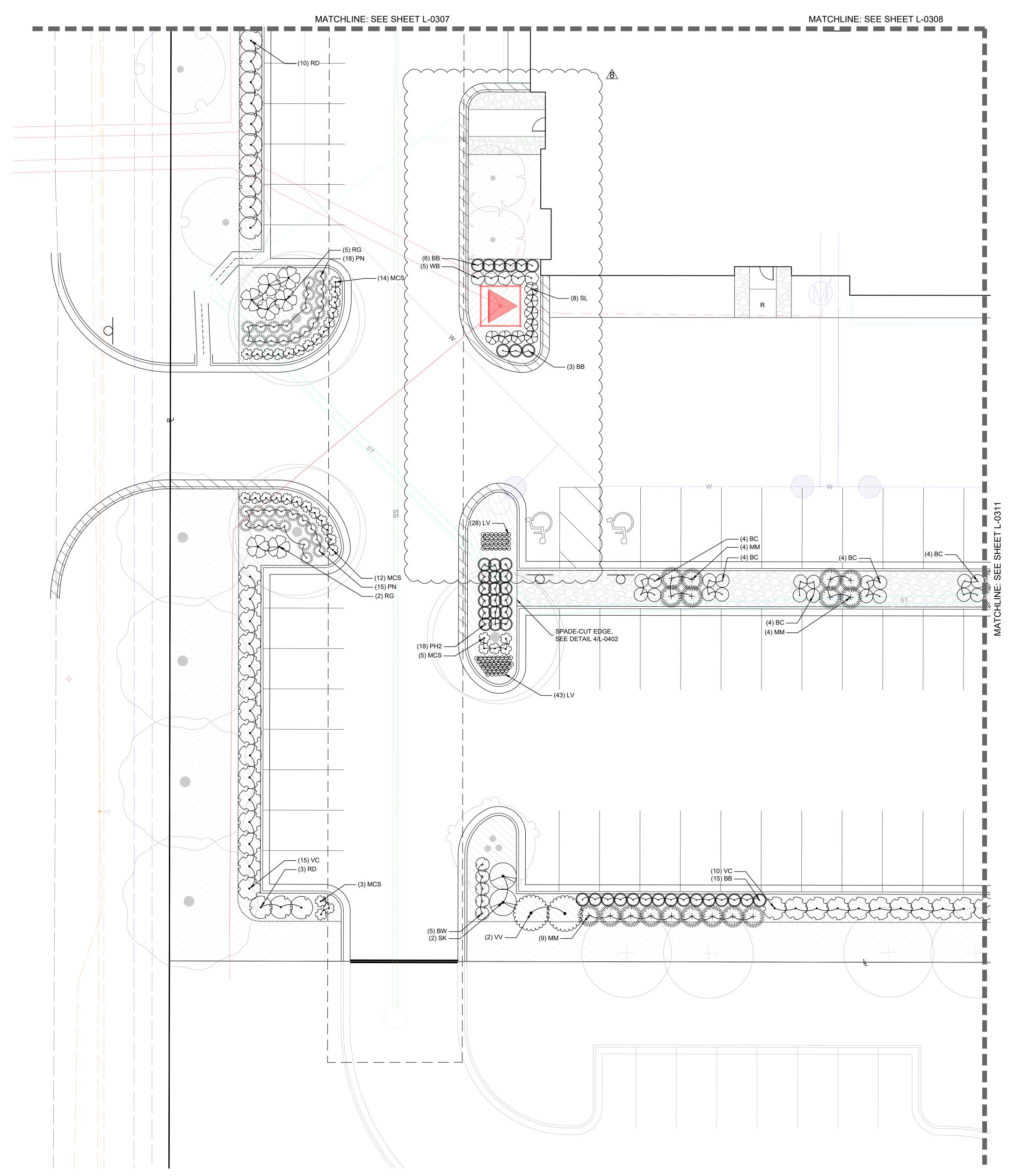


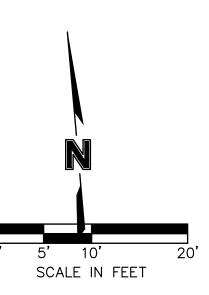


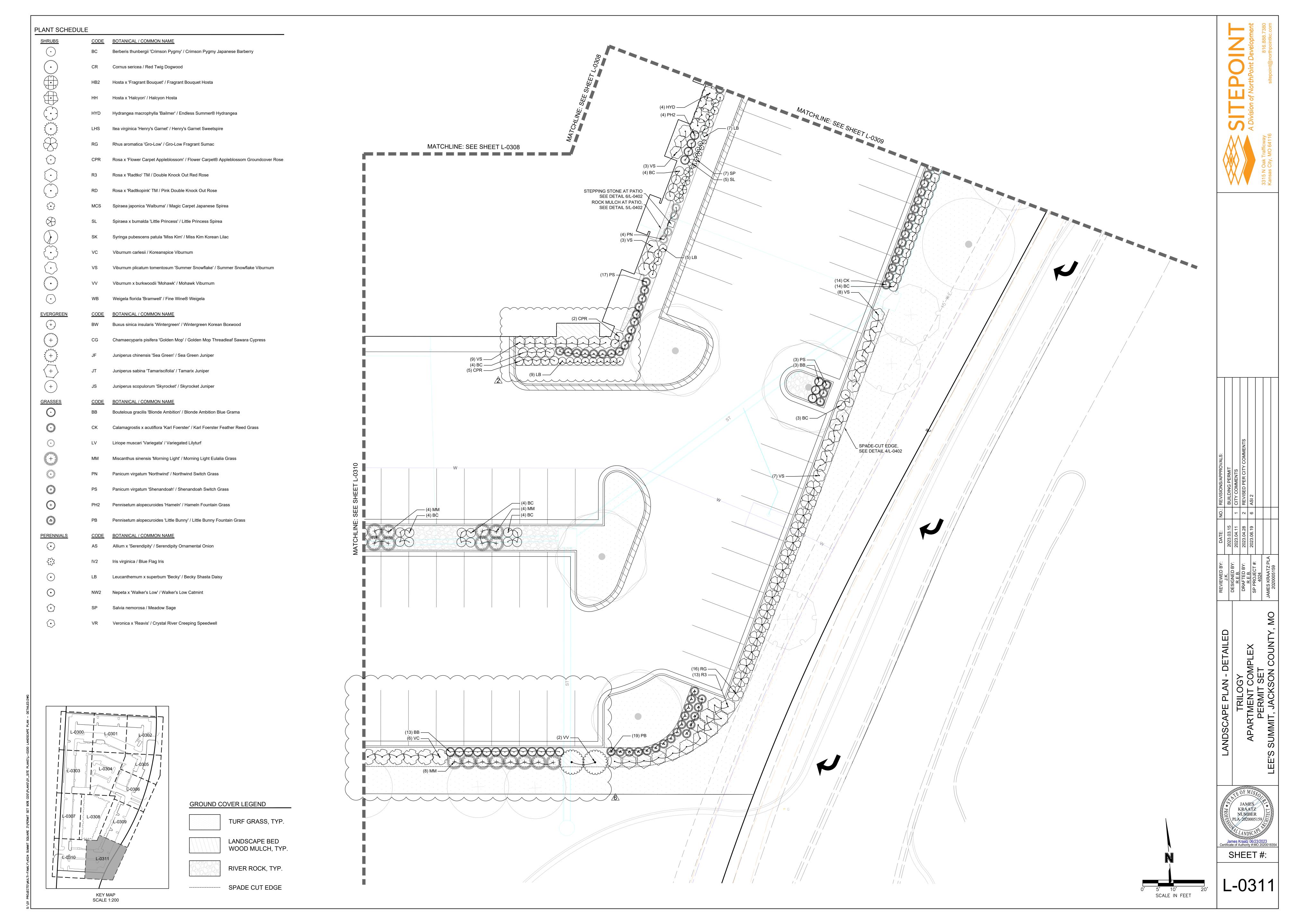




----- SPADE CUT EDGE







PART 1 - GENERAL

1.1 PROJECT CONDITIONS

- A. FIELD MEASUREMENTS: VERIFY ACTUAL GRADE ELEVATIONS, SERVICE AND UTILITY LOCATIONS, IRRIGATION SYSTEM COMPONENTS, AND DIMENSIONS OF PLANTINGS AND CONSTRUCTION CONTIGUOUS WITH NEW PLANTINGS BY FIELD MEASUREMENTS BEFORE PROCEEDING WITH PLANTING WORK.
- B. SITE EXAMINATION: CONTRACTOR SHALL VERIFY ALL CONDITIONS, DIMENSIONS, AND ELEVATIONS IN THE FIELD BEFORE STARTING WORK, AND NOTIFY THE PROJECT ENGINEER OR LANDSCAPE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS IF ENCOUNTERED.
- C. INTERRUPTION OF EXISTING SERVICES OR UTILITIES: DO NOT INTERRUPT SERVICES OR UTILITIES TO FACILITIES OCCUPIED BY OWNER OR OTHERS UNLESS PERMITTED UNDER THE FOLLOWING CONDITIONS AND THEN ONLY AFTER ARRANGING TO PROVIDE TEMPORARY SERVICES OR UTILITIES ACCORDING TO REQUIREMENTS INDICATED:
- 1. NOTIFY LANDSCAPE ARCHITECT NO FEWER THAN SEVEN (7) DAYS IN ADVANCE OF PROPOSED INTERRUPTION OF EACH SERVICE OR UTILITY.
- 2. DO NOT PROCEED WITH INTERRUPTION OF SERVICES OR UTILITIES WITHOUT LANDSCAPE ARCHITECT'S WRITTEN PERMISSION.

CONTRACTOR SHALL KEEP THE PREMISES CLEAN AND FREE FROM RUBBISH AND ALL

- DEBRIS ASSOCIATED WITH THE WORK AT ALL TIMES. ALL UNUSED MATERIALS AND DEBRIS SHALL BE REMOVED FROM THE SITE. 2. CONTRACTOR IS RESPONSIBLE FOR REPAIRS OR DAMAGE TO ANY EXISTING
- IMPROVEMENTS DURING CONSTRUCTION SUCH AS BUT NOT LIMITED TO: DRAINAGE UTILITIES, PAVEMENT, STRIPING, CURB, ETC. ANY REPAIR WORK IN THE CITY R.O.W. SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS. 3. CONTRACTOR SHALL COMPLY WITH SPECIFICATIONS PRIOR TO COMMENCEMENT OF ANY
- 4. ALL DISTURBED AREAS OUTSIDE OF THE PROJECT LIMITS AS SHOWN ON THE PLANS ARE TO BE RESTORED BACK TO THE ORIGINAL CONDITIONS WITH TURF-TYPE, TALL FESCUE
- 5. CONTRACTOR SHALL NOT COMMENCE WITH WORK UNTIL THE SITE IS FREE OF DEBRIS CAUSED BY ONGOING CONSTRUCTION OPERATIONS. REMOVAL OF DEBRIS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
- 6. CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER CONTRACTORS ON SITE THROUGHOUT THE CONSTRUCTION.

. NEITHER THE OWNER NOR THE LANDSCAPE ARCHITECT WILL ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS.

1. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS AND RESPONSIBILITY TO LOCATE AND PROTECT ANY AND ALL PUBLIC AND PRIVATE UNDERGROUND OR CONCEALED CONDUIT, PLUMBING OR OTHER UTILITIES WHERE NEW WORK IS BEING PERFORMED. CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC., WHICH OCCUR AS A RESULT OF THE LANDSCAPE CONSTRUCTION. CONTRACTOR SHALL MAINTAIN STAKES SET BY OTHERS UNTIL ALL PARTIES CONCERNED MUTUALLY AGREE UPON REMOVAL. IN NO CASE SHALL LANDSCAPE MATERIAL BE PLANTED IN A WAY WHICH WILL INTERFERE WITH OR CAUSE DAMAGE TO OVERHEAD OR UNDERGROUND UTILITIES. 2. MISSOURI ONE CALL SYSTEM: 1-800-344-7483

1. ALL WORK SHALL CONFORM TO ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS FOR INSTALLATION AND MAINTENANCE.

2. THE FINAL, APPROVED LANDSCAPE PLAN MUST BE AVAILABLE FOR ONSITE INSPECTION AT ALL TIMES.

- 1. THE CLEARZONE SHALL BE MAINTAINED AT ALL INTERSECTIONS THAT INGRESS AND EGRESS TO THE SITE. IT IS THE OWNER'S RESPONSIBILITY TO MAINTAIN THE PLANT MATERIAL AT A HEIGHT OF NOT OVER THIRTY (30) INCHES ABOVE PAVEMENT AND PROVIDE UNOBSTRUCTED SIGHT DISTANCE FOR DRIVERS IN VEHICLES APPROACHING THE
- INTERSECTION. 2. VERTICAL CLEARANCE OF AT LEAST EIGHTY (80) INCHES MUST BE PROVIDED ABOVE WALKS AT ALL TIMES. IT IS THE OWNER'S RESPONSIBILITY TO MAINTAIN TREES AND OTHER OVERHANGING OBJECTS TO PROVIDE ADEQUATE HEADROOM TO COMPLY WITH ADA GUIDELINES.

I. CONFLICTS:

1. SHOULD A CONFLICT ARISE BETWEEN SPECIFICATIONS, CODES, STANDARDS, ORDINANCES AND PLANS, THE MOST STRINGENT REQUIREMENTS SHALL APPLY. 2. WHERE NO CONSTRUCTION DETAILS ARE SHOWN OR NOTED FOR ANY PART OF THE WORK, SUCH DETAILS SHALL BE THE SAME AS FOR SIMILAR WORK SHOWN ON THE DRAWING AND SHALL MEET WITH MANUFACTURER'S SPECIFICATIONS.

J. MEASUREMENTS:

- 1. BEFORE COMMENCING WORK OR ORDERING ANY MATERIALS, THE CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AND SHALL BE RESPONSIBLE FOR THEIR ACCURACY. ANY DISCREPANCIES SHALL BE REPORTED TO THE PROJECT LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DIFFERENCES BETWEEN ACTUAL DIMENSIONS AND MEASUREMENTS INDICATED.
- 2. WRITTEN DIMENSIONS SHALL PREVAIL. IN NO CASE SHALL WORKING DIMENSIONS BE SCALED FROM PLANS, SECTIONS OR DETAILS ON THE DRAWING.
- 3. LANDSCAPE CONTRACTOR SHALL SUPPLY BID TO NORTHPOINT FOR REVIEW. BID SHALL INCLUDE UNIT COSTS FOR ALL MATERIALS.

- . ALL DRAWINGS, SPECIFICATIONS, AND OTHER WORK PRODUCTS DEVELOPED BY NORTHPOINT ARE INSTRUMENTS OF SERVICE FOR THIS PROJECT ONLY AND SHALL REMAIN THE PROPERTY OF NORTHPOINT. INSTRUMENTS OF SERVICE MAY NOT BE USED, REPRODUCED OR CHANGED IN ANY FORM WITHOUT THE PRIOR WRITTEN PERMISSION OF
- 2. IN THE EVENT ANY CHANGES ARE MADE TO THE PLANS AND SPECIFICATIONS BY OWNER OR PERSONS OTHER THAN NORTHPOINT, ANY LIABILITY ARISING OUT OF SUCH CHANGES IS WAIVED AGAINST NORTHPOINT. OWNER ASSUMES FULL RESPONSIBILITY FOR SUCH CHANGES UNLESS OWNER HAS GIVEN NORTHPOINT PRIOR NOTICE AND HAS RECEIVED WRITTEN CONSENT FOR SUCH CHANGES.

L. SUBSTITUTIONS:

 ANY CHANGES OR DEVIATIONS FROM THESE PLANS MUST BE APPROVED IN WRITING BY OWNER, NORTHPOINT AND THE LOCAL MUNICIPAL AGENCIES. CHANGES SHALL POSSESS THE SAME CHARACTERISTICS AS INDICATED ON THE PLANS AND SPECIFICATIONS.

M. DELEGATED DESIGN IRRIGATION SYSTEM: 1. IF AN IRRIGATION SYSTEM IS NOT PROVIDED WITH THE LANDSCAPE PLANS. THE

- CONTRACTOR IS TO DESIGN A 100 PERCENT COVERAGE IRRIGATION SYSTEM. 2. $\,$ IRRIGATION CONTRACTOR TO DESIGN AND INSTALL IRRIGATION SYSTEM AND SHALL INCLUDE ALL REQUIRED COMPONENTS INCLUDING, BUT NOT LIMITED TO, RAIN SHUT OFF SENSOR, CONTROLLER, TAPS, BACKFLOW PREVENTERS, ALL APPROVALS, AND ALL FEES REQUIRED BY CITY.
- 3. IRRIGATION CONTRACTOR SHALL SUBMIT A COPY OF PLAN TO OWNER'S REPRESENTATIVE OR PROJECT LANDSCAPE ARCHITECT FOR REVIEW PRIOR TO INSTALLATION OF SYSTEM. 4. IRRIGATION DESIGN TO BE LIMITED TO PROPERTY BOUNDARY EXTENTS. NO IRRIGATION
- EQUIPMENT TO BE INSTALLED OUTSIDE OF PROPERTY BOUNDARY UNLESS TO BE USED FOR ESTABLISHMENT OF NATIVE SEED. 5. IRRIGATION CONTRACTOR SHALL CONDUCT A TRAINING SESSION WITH THE OWNER (OR REPRESENTATIVES) DEMONSTRATING THE OPERATION OF THE SYSTEM AND THE
- CONTROLLER. AS PART OF THIS TRAINING, CONTRACTOR SHALL PROVIDE ONE SPRING START-UP AND ONE FALL SHUT-DOWN OF THE SYSTEM. 6. LANDSCAPE CONTRACTOR TO PROVIDE COST ESTIMATES FOR IRRIGATION SYSTEM FOR
- ALL PLANT MATERIAL INDICATED ON PLANS. 7. IRRIGATION SYSTEM SHALL BE TESTED AND APPROVED BY OWNER'S REPRESENTATIVE OR
- LANDSCAPE ARCHITECT PRIOR TO BACKFILLING TRENCHES. IRRIGATION SYSTEM SHALL BE FULLY OPERATIONAL PRIOR TO THE INSTALLATION OF ANY PLANT MATERIALS. 8. ALL PLANTING BEDS SHALL BE WATERED BY THE IRRIGATION SYSTEM.
- 9. GENERAL CONTRACTOR TO SUPPLY ALL POWER REQUIRED TO OPERATE IRRIGATION 10. IRRIGATION CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE OR PROJECT
- LANDSCAPE ARCHITECT OF ANY CHANGES TO IRRIGATION CONDUIT LOCATIONS OR SIZES. 11. IT IS THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY TO DETERMINE WATER APPLICATION RATES AND TIMER CYCLING. THE IRRIGATION CONTRACTOR WILL INSTRUCT
- THE OWNER ON THE OPERATION AND PROGRAMMING OF THE CONTROLLER. 12. ALL ZONES AND MAIN LINES WILL BE PRESSURE-TESTED AT THE TIME OF INSTALLATION AND AGAIN PRIOR TO BUILDING TURNOVER. RESULTS SHALL BE SUBMITTED IN WRITING TO PROJECT LANDSCAPE ARCHITECT AND OWNER OR OWNER'S REPRESENTATIVE.
- 13. IRRIGATION SHALL NOT SPRAY ON BUILDING, SIDEWALKS, AND DRIVES.
- 14. IRRIGATION CONTROLLER LOCATION SHALL BE COORDINATED WITH OTHER
- WALL-MOUNTED SERVICE PANELS PER OWNER'S APPROVAL 15. LANDSCAPE CONTRACTOR SHALL HAND-WATER ALL TREES. TURF GRASS AREAS. AND
- NATIVE SEED MIX AREAS UNTIL SUBSTANTIAL COMPLETION. 16. TREEGATOR BAGS (OR APPROVED EQUAL) SHALL BE USED FOR ALL PROPOSED TREES ON

1.2 SUBMITTALS A. SAMPLES SHALL BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION ON

- B. PRODUCT DATA: PROVIDE FOR EACH TYPE OF PRODUCT INDICATED, INCLUDING SOILS. 1. PLANT MATERIALS: INCLUDE QUANTITIES, SIZES, QUALITY, AND SOURCES FOR PLANT
- MATERIALS. 2. PESTICIDES AND HERBICIDES: INCLUDE PRODUCT LABEL AND MANUFACTURER'S APPLICATION INSTRUCTIONS SPECIFIC TO THE PROJECT.
- C. SAMPLES FOR VERIFICATION: PROVIDE AS LISTED FOR EACH OF THE FOLLOWING: . TREES AND SHRUBS: THREE SAMPLES OF EACH VARIETY AND SIZE MUST BE DELIVERED TO THE SITE FOR REVIEW. MAINTAIN APPROVED SAMPLES ON-SITE AS A STANDARD FOR

- COMPARISON.
- 2. HARDWOOD MULCH, LEAF COMPOST MULCH, & ROCK MULCH: 1-QUART VOLUME OF EACH ORGANIC MULCH, IN SEALED PLASTIC BAGS LABELED WITH COMPOSITION OF MATERIALS BY PERCENTAGE WEIGHT AND SOURCE OF MULCH, OR COLOR IMAGE OF MATERIAL IS REQUIRED. EACH SAMPLE SHALL BE TYPICAL OF THE LOT OF MATERIAL TO BE FURNISHED; PROVIDE AN ACCURATE REPRESENTATION OF COLOR, TEXTURE, AND ORGANIC MAKEUP. 3. WEED CONTROL BARRIER: 12 BY 12 INCHES.
- E. PRODUCT CERTIFICATES: EACH TYPE OF MANUFACTURED PRODUCT, FROM MANUFACTURER,
- SHALL COMPLY WITH THE FOLLOWING: 1. MANUFACTURER'S CERTIFIED ANALYSIS OF STANDARD PRODUCTS.
- 2. ALL PLANT MATERIAL INSPECTION CERTIFICATES REQUIRED BY FEDERAL, STATE OR OTHER GOVERNING AUTHORITIES WILL ACCOMPANY EACH SHIPMENT AND BE TURNED OVER TO THE OWNER'S REPRESENTATIVE UPON DELIVERY. 3. ANALYSIS OF OTHER MATERIALS BY A RECOGNIZED LABORATORY MADE ACCORDING TO
- METHODS ESTABLISHED BY THE ASSOCIATION OF OFFICIAL ANALYTICAL CHEMISTS, WHERE APPLICABLE. 4. INVOICE:
- a. VENDOR OR GROWER'S INVOICE FOR EACH SHIPMENT OF PLANTS SHALL SHOW SIZES, QUANTITIES, AND ROOT TREATMENT OF PLANTS, I.E. CONTAINERIZED, BALLED AND BURLAPPED, OR PLUG.
- b. INVOICE FOR EACH SHIPMENT OF SOIL AMENDMENTS AND SEED MIXTURES. 5. LABEL DATA SUBSTANTIATING THAT PLANTS, TREES, SHRUBS, PERENNIALS, SEED AND PLANTING MATERIALS COMPLY WITH SPECIFICATIONS.
- SEED VENDOR'S CERTIFIED STATEMENT FOR EACH SEED MIXTURE REQUIRED STATING BOTANICAL AND COMMON NAME, PERCENTAGES BY WEIGHT, AND PERCENTAGES OF PURITY, GERMINATION, AND WEED SEED FOR EACH SEED MIXTURE.
- SURFACE TOPSOIL, EXISTING IN-PLACE SURFACE SOIL AND IMPORTED OR MANUFACTURED G. MAINTENANCE INSTRUCTIONS: RECOMMENDED TYPEWRITTEN INSTRUCTIONS AND

PROCEDURES TO BE ESTABLISHED BY THE OWNER FOR MAINTENANCE OF PLANTS DURING A

CALENDAR YEAR. SUBMIT BEFORE START OF REQUIRED MAINTENANCE PERIODS AND PRIOR

. MATERIAL TEST REPORTS: FOR STANDARDIZED ASTM D5268 TOPSOIL, EXISTING NATIVE

TO FINAL ACCEPTANCE OF LANDSCAPE MATERIAL H. WARRANTY: SAMPLE OF SPECIAL WARRANTY.

1.3 QUALITY ASSURANCE

- A. INSTALLER QUALIFICATIONS: A QUALIFIED LANDSCAPE INSTALLER WHOSE WORK HAS
- RESULTED IN SUCCESSFUL ESTABLISHMENT OF PLANTS. 1. PROFESSIONAL MEMBERSHIP: INSTALLER SHALL BE A MEMBER IN GOOD STANDING OF EITHER THE PROFESSIONAL LANDCARE NETWORK OR THE AMERICAN NURSERY AND
- LANDSCAPE ASSOCIATION 2. EXPERIENCE: A MINIMUM OF FIVE (5) YEARS EXPERIENCE ON PROJECTS SIMILAR IN CHARACTERISTICS AND SIZE. CONTRACTOR SHALL BE A COMPANY SPECIALIZING IN
- LANDSCAPE INSTALLATION. 3. INSTALLER'S FIELD SUPERVISION: REQUIRE INSTALLER TO MAINTAIN AN EXPERIENCED
- FULL-TIME SUPERVISOR ON PROJECT SITE WHEN WORK IS IN PROGRESS.

4. PESTICIDE APPLICATOR: STATE LICENSED, COMMERCIAL.

B. SOIL TESTING

- LABORATORY QUALIFICATIONS: AN INDEPENDENT OR UNIVERSITY LABORATORY, RECOGNIZED BY THE STATE DEPARTMENT OF AGRICULTURE, WITH THE EXPERIENCE AND CAPABILITY TO CONDUCT THE TESTING INDICATED AND THAT SPECIALIZES IN THE TYPES OF TESTS TO BE PERFORMED.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING BOTH THE TOPSOIL AND EXISTING SOIL TESTED FOR PROPOSED PLANT MATERIAL LOCATIONS. TOPSOIL SHALL BE TESTED BY AN INDEPENDENT SOIL TESTING AGENCY. THE CONTRACTOR SHALL FURNISH ONE (1) COPY OF THE SOIL ANALYSIS PLUS RECOMMENDED AMENDMENTS PREPARED TO MEET THE DESIRED PH AND NUTRITIONAL AND ORGANIC LEVELS DETERMINED TO BE ADEQUATE FOR THE AREA BY THE COUNTY EXTENSION AGENT OR APPROVED INDEPENDENT SOIL TESTING AGENCY TO THE LANDSCAPE ARCHITECT PRIOR TO APPLICATION OF ANY AMENDMENTS OR
- C. SOIL ANALYSIS: FOR EACH UNAMENDED SOIL TYPE, FURNISH SOIL ANALYSIS AND A WRITTEN REPORT BY A QUALIFIED SOIL TESTING LABORATORY STATING PERCENTAGES OF ORGANIC MATTER; GRADATION OF SAND, SILT, AND CLAY CONTENT; CATION EXCHANGE CAPACITY; SODIUM ABSORPTION RATIO; DELETERIOUS MATERIAL; PH; AND MINERAL AND
- PLANT-NUTRIENT CONTENT OF THE SOIL. 1. TESTING METHODS AND WRITTEN RECOMMENDATIONS SHALL COMPLY WITH USDA'S
- 2. THE SOIL TESTING LABORATORY SHALL OVERSEE SOIL SAMPLING WITH DEPTH, LOCATION, AND NUMBER OF SAMPLES TO BE TAKEN PER INSTRUCTIONS FROM LANDSCAPE ARCHITECT. A MINIMUM OF THREE REPRESENTATIVE SAMPLES SHALL BE TAKEN FROM VARIED LOCATIONS FOR EACH SOIL TO BE USED OR AMENDED FOR PLANTING PURPOSES.
- 3. REPORT SUITABILITY OF TESTED SOIL FOR PLANT GROWTH. a. BASED UPON THE TEST RESULTS. STATE THE RECOMMENDATIONS FOR SOIL TREATMENTS AND SOIL AMENDMENTS TO BE INCORPORATED. STATE RECOMMENDATIONS IN WEIGHT PER 1000 SQ. FT. OR VOLUME PER CUBIC YARD FOR NITROGEN, PHOSPHORUS, AND POTASH NUTRIENTS AND SOIL AMENDMENTS TO BE ADDED TO PRODUCE SATISFACTORY PLANTING SOIL SUITABLE FOR HEALTHY, VIABLE
- b. REPORT PRESENCE OF PROBLEM SALTS, MINERALS, OR HEAVY METALS INCLUDING ALUMINUM, ARSENIC, BARIUM, CADMIUM, CHROMIUM, COBALT, LEAD, LITHIUM, AND VANADIUM. IF SUCH PROBLEM MATERIALS ARE PRESENT, PROVIDE ADDITIONAL RECOMMENDATIONS FOR CORRECTIVE ACTION.
- D. MEASUREMENTS: MEASURE ACCORDING TO ANSI Z60.1 AMERICAN STANDARD FOR NURSERY STOCK. DO NOT PRUNE TO OBTAIN REQUIRED SIZES.
- 1. TREES AND SHRUBS: MEASURE WITH BRANCHES AND TRUNKS OR CANES IN THEIR NORMAL POSITION. TAKE HEIGHT MEASUREMENTS FROM OR NEAR THE TOP OF THE ROOT FLARE FOR FIELD-GROWN STOCK AND CONTAINER-GROWN STOCK. MEASURE MAIN BODY OF TREE OR SHRUB FOR HEIGHT AND SPREAD; DO NOT MEASURE BRANCHES OR ROOTS TIP TO TIP. TAKE CALIPER MEASUREMENTS 6 INCHES ABOVE THE ROOT FLARE FOR TREES

UP TO 4-INCH CALIPER SIZE, AND 12 INCHES ABOVE THE ROOT FLARE FOR LARGER SIZES.

2. OTHER PLANTS: MEASURE WITH STEMS, PETIOLES, AND FOLIAGE IN THEIR NORMAL POSITION.

G. QUANTITIES:

- E. QUALITY AND SIZE 1. PROVIDE QUALITY, SIZE, GENUS, SPECIES, AND VARIETY OF PLANTS INDICATED, COMPLYING WITH APPLICABLE REQUIREMENTS IN ANSI Z60.1 - AMERICAN STANDARD FOR
- 2. REQUIRED PLANT MATERIALS SHALL CONFORM TO TYPE STATED ON THE PLANT LIST. SIZES SHALL BE THE MINIMUM STATED ON THE PLANT LIST OR LARGER. ALL INSTALLATION AND MEASUREMENTS SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1) AND WITH THE GENERAL PLANTING SPECIFICATIONS AS SET FORTH BY THE LOCAL MUNICIPAL AGENCY'S LANDSCAPE
- ORDINANCE 3. LANDSCAPE PLANT MATERIAL SHALL SATISFY AAN AMERICAN STANDARDS, BE STATE DEPARTMENT OF AGRICULTURE INSPECTED, AND NO. 1 GRADE WITH STRAIGHT, UNSCARRED TRUNK AND WELL DEVELOPED UNIFORM CROWN (PARK GRADE TREES WILL
- 4. THE PLANT MATERIAL SHALL BE NURSERY GROWN AND INSPECTED BY THE OWNER'S REPRESENTATIVE BEFORE PLANTING.
- 5. PLANTS DESIGNATED "B&B" SHALL BE BALLED AND BURLAPPED, WITH FIRM BALLS OF
- 6. ALL INSTALLED PLANT MATERIALS SHALL BE CERTIFIED BY THE STATE TO BE DISEASE-FREE AND PEST-FREE AND NOT OF A SPECIES KNOWN TO CARRY OR BE HOST TO DESTRUCTIVE PATHOGENS OR PESTS. PLANTS SHALL BE HEALTHY. VIGOROUS STOCK. GROWN IN A RECOGNIZED NURSERY IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES, FREE OF DISEASE, INSECTS, EGGS, LARVAE AND DEFECTS SUCH AS KNOTS, SUN-SCALD, INJURIES. ABRASIONS OR DISFIGUREMENT.
- ALL TREES SHALL HAVE A CENTRAL LEADER AND A RADIAL BRANCHING STRUCTURE. 8. PLANT MATERIALS DELIVERED TO SITE AND NOT PLANTED WITHIN 24 HOURS OF DELIVERY SHALL BE "HEELED" AND WATERED IN A SHADED AREA, PROTECTED FROM WEATHER, MECHANICAL DAMAGE AND DEHYDRATION PRIOR TO PLANTING.
- 9. EACH TREE AND SHRUB SHALL BE SECURELY LABELED WITH A WATERPROOF TAG INDICATING THE BOTANICAL NAME, COMMON NAME, AND SIZE FOR DELIVERY TO SITE. 10. ALL PLANT SURFACES SHALL RECEIVE EMULSION TYPE, FILM-FORMING ANTI-DESICCANT AGENT DESIGNED TO PERMIT TRANSPIRATION, BUT RETARD EXCESSIVE LOSS OF MOISTURE FROM PLANTS. ANTI-DESICCANT TO BE DELIVERED IN MANUFACTURER'S FULLY
- IDENTIFIED CONTAINERS AND MIXED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. . PLANT MATERIAL OBSERVATION: LANDSCAPE ARCHITECT MAY OBSERVE PLANT MATERIAL EITHER AT PLACE OF GROWTH OR AT SITE BEFORE PLANTING FOR COMPLIANCE WITH REQUIREMENTS FOR GENUS, SPECIES, VARIETY, CULTIVAR, SIZE, AND QUALITY. LANDSCAPE ARCHITECT RETAINS RIGHT TO OBSERVE TREES AND SHRUBS FURTHER FOR SIZE AND CONDITION OF BALLS AND ROOT SYSTEMS, PESTS, DISEASE SYMPTOMS, INJURIES, AND
- 1. NOTIFY LANDSCAPE ARCHITECT OF SOURCES OF PLANTING MATERIALS SEVEN (7) DAYS IN ADVANCE OF DELIVERY TO SITE.

LATENT DEFECTS AND TO REJECT UNSATISFACTORY OR DEFECTIVE MATERIAL AT ANY TIME

DURING PROGRESS OF WORK. REMOVE REJECTED TREES OR SHRUBS IMMEDIATELY FROM

- 2. INSPECTIONS AND TESTING: a. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO INSPECT AND/OR TAG PLANTS AT PLACE OF GROWTH WITH LANDSCAPE CONTRACTOR.
- b. ALL PLANTS MUST BE INSPECTED AND APPROVED BY THE LANDSCAPE ARCHITECT BEFORE THEY ARE PLANTED. INSPECTION AND APPROVAL BY THE LANDSCAPE ARCHITECT AT PLACE OF GROWTH OR UPON DELIVERY SHALL BE FOR QUALITY, SIZE, AND VARIETY ONLY AND SHALL NOT IN ANY WAY IMPAIR THE RIGHT OF REJECTION FOR FAILURE TO MEET OTHER REQUIREMENTS DURING PROGRESS OF WORK. PLANTS DAMAGED DURING DELIVERY OR AT JOB SITE SHALL BE REJECTED.
- 3. ALL SITE WORK, INCLUDING PLANT LOCATIONS, SHALL BE STAKED BY THE LANDSCAPE CONTRACTOR AND SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. ANY WALKS, WALLS OR EDGING SHALL BE INSTALLED IN A MANNER CONSISTENT WITH THE PLANS AS SHOWN, AND SHALL BE INSTALLED FREE OF KINKS, BENDS OR ABRUPT CURVES.
- 4. ALL DEAD PLANT MATERIALS SHALL BE REMOVED AND REPLACED AS REQUIRED IN ORDER TO MAINTAIN AN ATTRACTIVE LANDSCAPE AT ALL TIMES.

- - A. PACKAGED MATERIALS: DELIVER PACKAGED MATERIALS IN ORIGINAL, UNOPENED CONTAINERS SHOWING WEIGHT, CERTIFIED ANALYSIS, NAME AND ADDRESS OF MANUFACTURER, AND INDICATION OF CONFORMANCE WITH STATE AND FEDERAL LAWS IF
 - B. BULK MATERIALS: 1. DO NOT DUMP OR STORE BULK MATERIALS NEAR STRUCTURES, UTILITIES, WALKWAYS AND

1. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS

2. QUANTITIES LISTED IN THE PLANT LIST SCHEDULE ARE FOR ESTIMATES ONLY. TREES,

THE ATTENTION OF THE PROJECT LANDSCAPE ARCHITECT FOR CLARIFICATION.

H. PLANTING RESTRICTIONS: PLANT DURING ONE OF THE FOLLOWING PERIODS. COORDINATE

APPROVED PLANTING PERIODS, CONSULT WITH PROJECT LANDSCAPE ARCHITECT OR

PLANTING PERIODS WITH MAINTENANCE PERIODS TO PROVIDE REQUIRED MAINTENANCE

I. WEATHER LIMITATIONS: PROCEED WITH PLANT MATERIAL INSTALLATION AND SODDING ONLY

WHEN EXISTING AND FORECASTED WEATHER CONDITIONS PERMIT PLANTING TO BE

J. COORDINATION WITH TURF AREAS (LAWNS): PLANT TREES, SHRUBS, AND OTHER PLANTS

AFTER FINISH GRADES ARE ESTABLISHED AND BEFORE PLANTING TURF AREAS UNLESS

PROTECT TURF AREAS, AND PROMPTLY REPAIR DAMAGE CAUSED BY PLANTING

1. WHEN PLANTING TREES, SHRUBS, AND OTHER PLANTS AFTER PLANTING TURF AREAS,

PERFORMED WHEN BENEFICIAL AND OPTIMUM RESULTS MAY BE OBTAINED.

FROM DATE OF SUBSTANTIAL COMPLETION. IF PLANTING NEEDS TO TAKE PLACE OUTSIDE OF

SPECIES AND VARIETY SHOWN AND SCHEDULED FOR LANDSCAPE WORK.

OWNER'S REPRESENTATIVE FOR APPROPRIATE COMPLETION.

PAVEMENTS, OR ON EXISTING TURF AREAS OR PLANTS.

1. SPRING PLANTING: APRIL 1ST TO JUNE 15TH

OTHERWISE INDICATED.

OPERATIONS.

1.4 DELIVERY, STORAGE, AND HANDLING

2. FALL PLANTING: AUGUST 15TH TO NOVEMBER 1ST

CONTRACTOR SHALL PROVIDE TREES, SHRUBS, AND PLANTS OF QUANTITY, SIZE, GENUS.

THE ATTENTION OF THE LANDSCAPE ARCHITECT FOR CLARIFICATION.

BEFORE PRICING THE WORK. ANY DIFFERENCE IN QUANTITIES SHOULD BE BROUGHT TO

SHRUBS, AND GROUNDCOVER OF CONTRACT QUANTITIES SHALL BE THE NUMBER OF ITEMS

SHOWN ON THE DRAWINGS. CONTRACTOR SHALL SUPPLY THE QUANTITIES NECESSARY TO

COMPLETE THE WORK AS SHOWN ON THE DRAWINGS. QUANTITIES LISTED ON THE PLANT

LIST ARE APPROXIMATE ONLY. ANY DIFFERENCE IN QUANTITIES SHOULD BE BROUGHT TO

- PROVIDE EROSION-CONTROL MEASURES TO PREVENT EROSION OR DISPLACEMENT OF BULK MATERIALS, DISCHARGE OF SOIL-BEARING WATER RUNOFF, AND AIRBORNE DUST REACHING ADJACENT PROPERTIES, WATER CONVEYANCE SYSTEMS, OR WALKWAYS. 3. ACCOMPANY EACH DELIVERY OF BULK FERTILIZERS, LIME, AND SOIL AMENDMENTS WITH
- APPROPRIATE CERTIFICATES. C. DELIVER BARE-ROOT STOCK PLANTS FRESHLY DUG. IMMEDIATELY AFTER DIGGING UP BARE-ROOT STOCK, PACK ROOT SYSTEM IN WET STRAW, HAY, OR OTHER SUITABLE MATERIAL TO KEEP ROOT SYSTEM MOIST UNTIL PLANTING.
- D. DO NOT PRUNE TREES AND SHRUBS BEFORE DELIVERY. PROTECT BARK, BRANCHES, AND ROOT SYSTEMS FROM SUN SCALD, DRYING, WIND BURN, SWEATING, WHIPPING, AND OTHER HANDLING AND TYING DAMAGE. DO NOT BEND OR BIND-TIE TREES OR SHRUBS IN SUCH A MANNER AS TO DESTROY THEIR NATURAL SHAPE. PROVIDE PROTECTIVE COVERING OF PLANTS DURING SHIPPING AND DELIVERY. DO NOT DROP PLANTS DURING DELIVERY AND HANDLING.

E. HANDLE PLANTING STOCK BY ROOT BALL.

- F. DELIVER PLANTS AFTER PREPARATIONS FOR PLANTING HAVE BEEN COMPLETED, AND INSTALL IMMEDIATELY. IF PLANTING IS DELAYED MORE THAN SIX HOURS AFTER DELIVERY, SET PLANTS AND TREES IN THEIR APPROPRIATE ASPECT (SUN, FILTERED SUN, OR SHADE), PROTECT FROM WEATHER AND MECHANICAL DAMAGE, AND KEEP ROOTS MOIST. 1. HEEL-IN BARE-ROOT STOCK. SOAK ROOTS THAT ARE IN DRY CONDITION IN WATER FOR
- TWO HOURS. REJECT DRIED-OUT PLANTS. 2. SET BALLED STOCK ON GROUND AND COVER BALL WITH SOIL, PEAT MOSS, SAWDUST, OR
- OTHER ACCEPTABLE MATERIAL. 3. DO NOT REMOVE CONTAINER-GROWN STOCK FROM CONTAINERS BEFORE TIME OF
- 4. WATER ROOT SYSTEMS OF PLANTS STORED ON-SITE DEEPLY AND THOROUGHLY WITH A FINE-MIST SPRAY. WATER AS OFTEN AS NECESSARY TO MAINTAIN ROOT SYSTEMS IN A MOIST, BUT NOT OVERLY-WET CONDITION.
- G. SOD: HARVEST, DELIVER, STORE, AND HANDLE SOD ACCORDING TO REQUIREMENTS IN "SPECIFICATIONS FOR TURFGRASS SOD MATERIALS" AND "SPECIFICATIONS FOR TURFGRASS SOD TRANSPLANTING AND INSTALLATION" IN TPI'S "GUIDELINE SPECIFICATIONS TO TURFGRASS SODDING." DELIVER SOD IN TIME FOR PLANTING WITHIN 24 HOURS OF HARVESTING. PROTECT SOD FROM BREAKAGE AND DRYING

1.5 WARRANTY

- A. SPECIAL WARRANTY: INSTALLER AGREES TO REPAIR OR REPLACE PLANTINGS AND ACCESSORIES THAT FAIL IN MATERIALS, WORKMANSHIP, OR GROWTH WITHIN SPECIFIED
- WARRANTY PERIOD. 1. FAILURES INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
- a. DEATH, UNHEALTHY CONDITION, PLANT MATERIAL WITH MORE THAN 25% DIE BACK AND UNSATISFACTORY GROWTH AS DETERMINED BY THE OWNER'S REPRESENTATIVE. EXCEPT FOR DEFECTS RESULTING FROM ABUSE, LACK OF ADEQUATE MAINTENANCE, OR NEGLECT BY OWNER, OR INCIDENTS THAT ARE BEYOND CONTRACTOR'S CONTROL. b. STRUCTURAL FAILURES INCLUDING PLANTINGS FALLING OR BLOWING OVER.
- c. FAULTY PERFORMANCE OF TREE STABILIZATION. 2. WARRANTY PERIODS FROM DATE OF SUBSTANTIAL COMPLETION:
- a. TREES, SHRUBS, VINES, AND ORNAMENTAL GRASSES: 12 MONTHS. b. GROUND COVERS, BIENNIALS, PERENNIALS, AND OTHER PLANTS: 12 MONTHS. c. ANNUALS: TWO MONTHS.
- 3. INCLUDE THE FOLLOWING REMEDIAL ACTIONS AS A MINIMUM: a. IMMEDIATELY REMOVE DEAD PLANTS AND REPLACE UNLESS REQUIRED TO PLANT IN
- THE SUCCEEDING PLANTING SEASON. b. REPLACE PLANTS THAT ARE NOT IN GOOD CONDITION OR IN AN UNHEALTHY CONDITION AS JUDGED BY THE OWNER'S REPRESENTATIVE PRIOR TO SUBSTANTIAL COMPLETION AND AT END OF THE WARRANTY PERIOD AT NO ADDITIONAL COST TO THE OWNER.
- c. A LIMIT OF ONE REPLACEMENT OF EACH PLANT WILL BE REQUIRED EXCEPT FOR LOSSES OR REPLACEMENTS DUE TO FAILURE TO COMPLY WITH REQUIREMENTS. d. PROVIDE EXTENDED WARRANTY FOR PERIOD EQUAL TO ORIGINAL WARRANTY PERIOD

1.6 MAINTENANCE SERVICE A. INSTALLATION MAINTENANCE:

FOR REPLACED PLANT MATERIAL.

- 1. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER INSTALLATION OF EACH PLANT, SOD OR TURF. ALL PLANT MATERIAL, SOD AND/OR SHALL BE MAINTAINED IN A VIGOROUS, THRIVING CONDITION UNTIL ALL PLANTING IS COMPLETED AND ACCEPTED.
- 2. MAINTAIN TURF, MATERIAL AND PLANTS UNTIL SUBSTANTIAL COMPLETION OR UNTIL OWNER ACCEPTS LANDSCAPE INSTALLATION. 3. MAINTENANCE ACTIVITIES OF TURF OR SOD SHALL INCLUDE WATERING, FERTILIZING WEEDING, MOWING, TRIMMING, AND OTHER OPERATIONS SUCH AS ROLLING, REGRADING
- AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH SODDED SURFACE, FREE OF ERODED OR BARE AREAS, FREE OF WEEDS AND ACCEPTABLE BY OWNER. 4. MAINTENANCE ACTIVITIES OF PLANT MATERIAL - TREES, SHRUBS, ORNAMENTAL GRASSES, PERENNIALS, ANNUALS, AND GROUNDCOVER - INCLUDE WATERING, WEEDING, CULTIVATING, MULCHING, ADJUSTING OF STAKES, REMOVAL OF DEAD MATERIALS, RESETTING PLANTS TO PROPER GRADES OR UPRIGHT POSITIONS, RESTORATION OF THE PLANTING SAUCER, AND ANY OTHER PROCEDURES CONSISTENT WITH GOOD

HORTICULTURAL PRACTICES NECESSARY TO INSURE NORMAL, VIGOROUS, AND HEALTHY

- B. INITIAL MAINTENANCE SERVICE FOR TREES AND SHRUBS: PROVIDE MAINTENANCE BY SKILLED EMPLOYEES OF LANDSCAPE INSTALLER. MAINTAIN AS REQUIRED IN PART 3. BEGIN MAINTENANCE IMMEDIATELY AFTER PLANTS ARE INSTALLED AND CONTINUE UNTIL PLANTINGS ARE ACCEPTABLY HEALTHY AND WELL ESTABLISHED BUT FOR NOT LESS THAN THE
- MAINTENANCE PERIOD BELOW. MAINTENANCE PERIOD: TWELVE (12) MONTHS FROM DATE OF SUBSTANTIAL COMPLETION. C. INITIAL MAINTENANCE SERVICE FOR GROUND COVER AND OTHER PLANTS: PROVIDE MAINTENANCE BY SKILLED EMPLOYEES OF LANDSCAPE INSTALLER. MAINTAIN AS REQUIRED IN

PART 3. BEGIN MAINTENANCE IMMEDIATELY AFTER PLANTS ARE INSTALLED AND CONTINUE

UNTIL PLANTINGS ARE ACCEPTABLY HEALTHY AND WELL ESTABLISHED BUT FOR NOT LESS THAN THE MAINTENANCE PERIOD BELOW. MAINTENANCE PERIOD: TWELVE (12) MONTHS FROM DATE OF SUBSTANTIAL COMPLETION. D. INITIAL MAINTENANCE SERVICE FOR TURF: PROVIDE FULL MAINTENANCE BY SKILLED EMPLOYEES OF LANDSCAPE INSTALLER. MAINTAIN AS REQUIRED IN PART 3. BEGIN

MAINTENANCE IMMEDIATELY AFTER EACH AREA IS PLANTED AND CONTINUE UNTIL

ACCEPTABLE TURF IS ESTABLISHED BUT FOR NOT LESS THAN THE FOLLOWING PERIODS: 1. SODDED TURF: TWELVE (12) MONTHS FROM DATE OF SUBSTANTIAL COMPLETION.

2.1 PLANT MATERIAL

PART 2 - PRODUCTS

- A. GENERAL: FURNISH NURSERY-GROWN PLANTS TRUE TO GENUS, SPECIES, VARIETY, CULTIVAR, STEM FORM, SHEARING, AND OTHER FEATURES INDICATED IN PLANT SCHEDULE OR PLANT LEGEND SHOWN ON DRAWINGS AND COMPLYING WITH ANSI Z60.1; AND WITH HEALTHY ROOT SYSTEMS DEVELOPED BY TRANSPLANTING OR ROOT PRUNING. PROVIDE WELL-SHAPED, FULLY BRANCHED, HEALTHY, VIGOROUS STOCK, DENSELY FOLIATED WHEN IN LEAF AND FREE OF DISEASE, PESTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN SCALD, INJURIES, ABRASIONS, AND DISFIGUREMENT.
- 1. TREES WITH DAMAGED, CROOKED, OR MULTIPLE LEADERS; TIGHT VERTICAL BRANCHES WHERE BARK IS SQUEEZED BETWEEN TWO BRANCHES OR BETWEEN BRANCH AND TRUNK ("INCLUDED BARK"); CROSSING TRUNKS; CUT-OFF LIMBS MORE THAN 3/4 INCH IN DIAMETER; OR WITH STEM GIRDLING ROOTS WILL BE REJECTED. 2. COLLECTED STOCK: DO NOT USE PLANTS HARVESTED FROM THE WILD, FROM NATIVE STANDS, FROM AN ESTABLISHED LANDSCAPE PLANTING, OR NOT GROWN IN A NURSERY

UNLESS OTHERWISE INDICATED. PARK GRADE MATERIAL IS NOT ACCEPTABLE.

B. PROVIDE PLANTS OF SIZES, GRADES, AND BALL OR CONTAINER SIZES COMPLYING WITH

- ANSI Z60.1 FOR TYPES AND FORM OF PLANTS REQUIRED. PLANTS OF A LARGER SIZE MAY BE USED IF ACCEPTABLE TO LANDSCAPE ARCHITECT, WITH A PROPORTIONATE INCREASE IN SIZE
- C. ROOT BALL DEPTH: FURNISH TREES AND SHRUBS WITH ROOT BALLS MEASURED FROM TOP OF ROOT BALL, WHICH SHALL BEGIN AT ROOT FLARE ACCORDING TO ANSI Z60.1. ROOT FLARE SHALL BE VISIBLE BEFORE PLANTING.
- D. LABELING: LABEL EACH PLANT OF EACH VARIETY, SIZE, AND CALIPER WITH A SECURELY ATTACHED, WATERPROOF TAG BEARING LEGIBLE DESIGNATION OF COMMON NAME AND FULL SCIENTIFIC NAME, INCLUDING GENUS AND SPECIES. INCLUDE NOMENCLATURE FOR HYBRID, VARIETY, OR CULTIVAR, IF APPLICABLE FOR THE PLANT AS SHOWN ON DRAWINGS.
- E. IF FORMAL ARRANGEMENTS OR CONSECUTIVE ORDER OF PLANTS IS SHOWN ON DRAWINGS, SELECT STOCK FOR UNIFORM HEIGHT AND SPREAD, AND NUMBER THE LABELS TO ASSURE SYMMETRY IN PLANTING.
- F. PERENNIALS: PROVIDE HEALTHY, DISEASE-FREE PLANTS OF SPECIES AND VARIETY SHOWN OR LISTED, WITH WELL-ESTABLISHED ROOT SYSTEMS REACHING TO SIDES OF THE CONTAINER TO MAINTAIN A FIRM BALL, BUT NOT WITH EXCESSIVE ROOT GROWTH ENCIRCLING THE CONTAINER. PROVIDE ONLY PLANTS THAT ARE ACCLIMATED TO OUTDOOR CONDITIONS BEFORE DELIVERY.

2.2 NATIVE SEED

- A. ALL DISTURBED AREAS, FILLS AND EMBANKMENTS SHALL BE SEEDED AS SPECIFIED ON THE
- B. NATIVE SEED SHALL BE OBTAINED FROM SOURCES SPECIFIED ON PLANS OR APPROVED ALTERNATE SOURCE.

2.3 TURF SEED

- A. ALL DISTURBED AREAS, FILLS AND EMBANKMENTS SHALL BE SEEDED AND FERTILIZED AS SPECIFIED ON THE PLANS.
- B. GRASS SEED SHALL HAVE A RATING OF 6.0 OR BETTER IN THE KANSAS STATE TURF GRASS TEST, WITH THE FOLLOWING CHARACTERISTICS: PURITY - 98%, AND INERT - 1.75%

- A. SOD SHALL BE GROWN FROM A SEED WITH A RATING OF 6.0 OR BETTER IN THE KANSAS STATE
- B. SOD SHALL BE COMPOSED OF FESCUE BLEND FREE FROM INSECTS, DISEASE, WEEDS AND OTHER GRASSES, CUT IN UNIFORM STRIPS CONSISTING OF 1 SQUARE YARD PER STRIP OR

2.5 PLANTING SOILS

TURF GRASS TEST.

APPROVED EQUAL.

- A. SOIL TESTING: 1. LANDSCAPE CONTRACTOR TO TEST SOIL ON SITE AND PROVIDE RESULTS TO THE OWNER AND LANDSCAPE ARCHITECT PRIOR TO COMMENCEMENT OF WORK 2. LANDSCAPE CONTRACTOR TO VERIFY AND GUARANTEE THAT THE ONSITE TOPSOIL WILL
- SUPPORT GRASS SEED, SOD, AND PLANT MATERIAL 3. LANDSCAPE CONTRACTOR TO RECOMMEND SOIL AMENDMENTS IF SOIL TEST IS NOT

ACCEPTABLE.

- B. PLANTING SOIL: 1. EXISTING, IN-PLACE SURFACE SOIL. VERIFY SUITABILITY OF EXISTING SURFACE SOIL TO PRODUCE VIABLE PLANTING SOIL. REMOVE STONES, ROOTS, PLANTS, SOD, CLODS, CLAY LUMPS, POCKETS OF COARSE SAND, CONCRETE SLURRY, CONCRETE LAYERS OR CHUNKS, CEMENT, PLASTER, BUILDING DEBRIS, AND OTHER EXTRANEOUS MATERIALS HARMFUL TO
- 2. ASTM D5268 TOPSOIL, WITH PH RANGE OF 5.5 TO 7, A MINIMUM OF FIVE (5) PERCENT ORGANIC MATERIAL CONTENT; FREE OF STONES 1 INCH OR LARGER IN ANY DIMENSION AND OTHER EXTRANEOUS MATERIALS HARMFUL TO PLANT GROWTH. SOIL SHALL BE FREE FROM CLAY LUMPS, COARSE SAND, PLANT ROOTS, STICKS AND OTHER FOREIGN MATERIALS. MIX ASTM D5268 TOPSOIL WITH THE FOLLOWING SOIL AMENDMENTS AND FERTILIZERS AS RECOMMENDED BY SOIL ANALYSIS.
- 3. TOPSOIL SHALL BE FERTILE, FRIABLE, NATURAL TOPSOIL, TYPICAL OF THE LOCALITY, OBTAINED FROM WELL-DRAINED AREAS POSSESSING CHARACTERISTICS OF SOILS IN THE VICINITY THAT PRODUCE HEAVY GROWTH OR GRASSES AND OTHER VEGETATIVE MATERIAL. STOCKPILED TOPSOIL MAY BE USED. IT SHALL BE WITHOUT ADMIXTURE OF SUBSOIL OR SLAG AND SHALL BE FREE OF SUBSOIL, STONES, LUMPS, STICKS, PLANTS OR THEIR ROOTS, TOXIC SUBSTANCES OR OTHER EXTRANEOUS MATTER THAT MAY BE HARMFUL TO PLANT GROWTH.

2.6 MULCHES

- A. HARDWOOD MULCH: FREE FROM DELETERIOUS MATERIALS AND SUITABLE AS A TOP DRESSING FOR TREES AND SHRUBS, CONSISTING OF THE FOLLOWING:
- 1. TYPE: DOUBLE-SHREDDED HARDWOOD 2. SIZE RANGE: \(\frac{1}{2}\) INCH MINIMUM TO 3 INCHES MAXIMUM
- 3. COLOR: BLACK, TO BE APPROVED BY LANDSCAPE ARCHITECT B. LEAF COMPOST MULCH: FREE FROM DELETERIOUS MATERIALS AND SUITABLE AS A TOP DRESSING FOR ORNAMENTAL GRASSES, PERENNIALS, AND GROUNDCOVERS,
- C. MINERAL MULCH: HARD, DURABLE STONE, WASHED FREE OF LOAM, SAND, CLAY, AND OTHER FOREIGN SUBSTANCES, OF FOLLOWING TYPE, SIZE, RANGE, AND COLOR:
- TYPE: RIVER ROCK

SUCH AS DURING DROUGHT OR HIGH WINDS.

AND INCORPORATED INTO SOIL AS SPECIFIED.

2. SIZE RANGE: 4-INCH MAXIMUM, 1-INCH MINIMUM 3. COLOR: LOCAL RIVER ROCK MIX, TO BE APPROVED BY LANDSCAPE ARCHITECT

AND RESIST NATURALLY-ENCOUNTERED CHEMICALS, ALKALIS, AND ACIDS.

2.4 WEED-CONTROL BARRIERS A. NONWOVEN GEOTEXTILE FILTER FABRIC: POLYPROPYLENE OR POLYESTER FABRIC, 3 OZ./SQ.

2.5 PESTICIDES A. GENERAL: PESTICIDE REGISTERED AND APPROVED BY EPA, ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION, AND OF TYPE RECOMMENDED BY MANUFACTURER FOR EACH SPECIFIC PROBLEM AND AS REQUIRED FOR PROJECT CONDITIONS AND APPLICATION. DO NOT USE RESTRICTED PESTICIDES UNLESS AUTHORIZED IN WRITING BY AUTHORITIES HAVING

YD. MINIMUM, COMPOSED OF FIBERS FORMED INTO A STABLE NETWORK SO THAT FIBERS

RETAIN THEIR RELATIVE POSITION. FABRIC SHALL BE INERT TO BIOLOGICAL DEGRADATION

B. PRE-EMERGENT HERBICIDE (SELECTIVE AND NON-SELECTIVE): EFFECTIVE FOR CONTROLLING THE GERMINATION OR GROWTH OF WEEDS WITHIN PLANTED AREAS AT THE SOIL LEVEL DIRECTLY BELOW THE MULCH LAYER. PRE-EMERGENCE APPLICATION OF "TREFLAN 5% GRANULES" OR EQUIVALENT APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS

C. POST-EMERGENT HERBICIDE (SELECTIVE AND NON-SELECTIVE): EFFECTIVE FOR

CONTAINERS AND MIX ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.

JURISDICTION. DO NOT APPLY HERBICIDE WHEN WEATHER CONDITIONS ARE UNFAVORABLE.

CONTROLLING WEED GROWTH THAT HAS ALREADY GERMINATED. POST-EMERGENT APPLICATION OF "ROUNDUP" OR EQUIVALENT, APPLIED AS SPECIFIED BY MANUFACTURER. SPRAY WITH EXTREME CAUTION TO AVOID CONTACT WITH LANDSCAPE PLANTINGS.

MATERIAL.

2.8 MISCELLANEOUS PRODUCTS A. ANTIDESICCANT: WATER-INSOLUBLE EMULSION, PERMEABLE MOISTURE RETARDER, FILM FORMING, FOR TREES AND SHRUBS. DELIVER IN ORIGINAL, SEALED, AND FULLY LABELED

LB OF VESICULAR-ARBUSCULAR MYCORRHIZAL FUNGI AND 95 MILLION SPORES PER LB OF

ECTOMYCORRHIZAL FUNGI, 33 PERCENT HYDROGEL, AND A MAXIMUM OF 5.5 PERCENT INERT

B. BURLAP: NON-SYNTHETIC, BIODEGRADABLE. C. MYCORRHIZAL FUNGI: DRY, GRANULAR INOCULANT CONTAINING AT LEAST 5300 SPORES PER



지 교 전 조



3.1 EXAMINATION

- A. EXAMINE AREAS TO RECEIVE PLANTS FOR COMPLIANCE WITH REQUIREMENTS AND
- CONDITIONS AFFECTING INSTALLATION AND PERFORMANCE. VERIFY THAT NO FOREIGN OR DELETERIOUS MATERIAL OR LIQUID SUCH AS PAINT, PAINT WASHOUT, CONCRETE SLURRY, CONCRETE LAYERS OR CHUNKS, CEMENT, PLASTER, OILS, GASOLINE, DIESEL FUEL, PAINT THINNER, TURPENTINE, TAR, ROOFING COMPOUND, OR ACID HAS BEEN DEPOSITED IN SOIL WITHIN A PLANTING AREA.
- 2. DO NOT MIX OR PLACE SOILS AND SOIL AMENDMENTS IN FROZEN, WET, OR MUDDY CONDITIONS.
- 3. SUSPEND SOIL SPREADING, GRADING, AND TILLING OPERATIONS DURING PERIODS OF EXCESSIVE SOIL MOISTURE UNTIL THE MOISTURE CONTENT REACHES ACCEPTABLE LEVELS TO ATTAIN THE REQUIRED RESULTS.
- 4. UNIFORMLY MOISTEN EXCESSIVELY DRY SOIL THAT IS NOT WORKABLE AND WHICH IS TOO
- B. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.
- C. IF CONTAMINATION BY FOREIGN OR DELETERIOUS MATERIAL OR LIQUID IS PRESENT IN PLANTING AREA SOIL, REMOVE THE SOIL AND CONTAMINATION AS DIRECTED BY OWNER'S

REPRESENTATIVE AND REPLACE WITH NEW PLANTING SOIL.

3.2 PREPARATION

- A. PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES AND TURF AREAS AND EXISTING PLANTS FROM DAMAGE CAUSED BY PLANTING OPERATIONS.
- B. INSTALL EROSION-CONTROL MEASURES TO PREVENT EROSION OR DISPLACEMENT OF SOILS AND DISCHARGE OF SOIL-BEARING WATER RUNOFF OR AIRBORNE DUST TO ADJACENT PROPERTIES AND WALKWAYS.
- C. LAY OUT INDIVIDUAL TREE AND SHRUB LOCATIONS AND AREAS FOR MULTIPLE PLANTINGS. STAKE LOCATIONS, OUTLINE AREAS, ADJUST LOCATIONS WHEN REQUESTED, AND OBTAIN LANDSCAPE ARCHITECT'S ACCEPTANCE OF LAYOUT BEFORE EXCAVATING OR PLANTING. MAKE MINOR ADJUSTMENTS AS REQUIRED.
- D. LAY OUT PLANTS AT LOCATIONS DIRECTED BY LANDSCAPE ARCHITECT. STAKE LOCATIONS OF INDIVIDUAL TREES AND SHRUBS AND OUTLINE AREAS FOR MULTIPLE PLANTINGS.
- E. OWNER'S REPRESENTATIVE SHALL INSPECT ALL PLANT MATERIAL PRIOR TO COMMENCING WITH PLANTING WORK. NO PLANT EXCAVATIONS SHALL BE UNDERTAKEN BY THE CONTRACTOR PRIOR TO THE APPROVAL OF THE OWNER'S REPRESENTATIVE.
- F. POWER-SPRAY ANTIDESICCANT TO TREES AND SHRUBS TO PROVIDE AN ADEQUATE FILM OVER TRUNKS (BEFORE WRAPPING), BRANCHES, STEMS, TWIGS, AND FOLIAGE TO PROTECT DURING DIGGING, HANDLING, AND TRANSPORTATION.
- 1. IF DECIDUOUS TREES OR SHRUBS ARE MOVED IN FULL LEAF, SPRAY WITH ANTIDESICCANT AT NURSERY BEFORE MOVING AND AGAIN TWO WEEKS AFTER PLANTING.
- G. WRAP TREES AND SHRUBS WITH BURLAP FABRIC OVER TRUNKS, BRANCHES, STEMS, TWIGS, AND FOLIAGE TO PROTECT FROM WIND AND OTHER DAMAGE DURING DIGGING, HANDLING, AND TRANSPORTATION.
- 3.3 PLANTING AREA ESTABLISHMENT
- A. LOOSEN SUBGRADE OF PLANTING AREAS TO A MINIMUM DEPTH OF 12 INCHES. REMOVE STONES LARGER THAN 1 INCH IN ANY DIMENSION AND STICKS, ROOTS, RUBBISH, AND OTHER EXTRANEOUS MATTER AND LEGALLY DISPOSE OF THEM OFF OWNER'S PROPERTY.
- 1. APPLY FERTILIZER DIRECTLY TO SUBGRADE BEFORE LOOSENING. 2. THOROUGHLY BLEND PLANTING SOIL OFF-SITE BEFORE SPREADING OR SPREAD TOPSOIL. APPLY SOIL AMENDMENTS AND FERTILIZER ON SURFACE, AND THOROUGHLY BLEND PLANTING SOIL.
- a. DELAY MIXING FERTILIZER WITH PLANTING SOIL IF PLANTING WILL NOT PROCEED WITHIN A FEW DAYS.
- b. MIX LIME WITH DRY SOIL BEFORE MIXING FERTILIZER.
- 3. SPREAD PLANTING SOIL TO A DEPTH OF 4 INCHES BUT NOT LESS THAN REQUIRED TO MEET FINISH GRADES AFTER NATURAL SETTLEMENT. DO NOT SPREAD IF PLANTING SOIL OR SUBGRADE IS FROZEN, MUDDY, OR EXCESSIVELY WET.
- a. SPREAD APPROXIMATELY ONE-HALF THE THICKNESS OF PLANTING SOIL OVER LOOSENED SUBGRADE. MIX THOROUGHLY INTO TOP 4 INCHES OF SUBGRADE. SPREAD REMAINDER OF PLANTING SOIL.
- B. UNDERGROUND UTILITY LINES MUST BE TAKEN INTO ACCOUNT IN THE EXCAVATION OF THE PLANTING AREAS.
- GRADE PLANTING AREAS TO A SMOOTH, UNIFORM SURFACE PLANE WITH LOOSE, UNIFORMLY FINE TEXTURE. ROLL AND RAKE, REMOVE RIDGES, AND FILL DEPRESSIONS TO MEET FINISH GRADES
- 2. FINISHED GRADES SHALL PROVIDE POSITIVE DRAINAGE, FREE OF DEPRESSIONS AND ANY IRREGULARITIES, AFTER THOROUGH SETTLEMENT AND COMPACTION OF SOD, AND WILL BE UNIFORM IN SLOPE BETWEEN GRADING CONTROLS AND THE ELEVATIONS INDICATED.
- D. BEFORE PLANTING, OBTAIN LANDSCAPE ARCHITECT'S ACCEPTANCE OF FINISH GRADING; RESTORE PLANTING AREAS IF ERODED OR OTHERWISE DISTURBED AFTER FINISH GRADING.

3.4 NATIVE SEED ESTABLISHMENT

BURNING.

- A. PREPARE THE AREA TO BE SEEDED WITH NATIVE PLANTINGS BY REMOVING EXISTING VEGETATION. BEGIN HERBICIDE APPLICATION IN SEPTEMBER WITH ADDITIONAL APPLICATIONS AS NECESSARY TO ACHIEVE A TOTAL KILL OF ALL VEGETATION. ENSURE THAT HERBICIDES WILL NOT BE HARMFUL TO NATIVE PLANTINGS, AND FOLLOW MANUFACTURES APPLICATION RECOMMENDATIONS.
- B. REMOVE THATCH, BY BURNING, MOWING, RAKING, AND/OR DRAGGING WITH A HARROW. APPROXIMATELY 80% OF SOIL SHOULD BE EXPOSED. OBTAIN ALL REQUIRED PERMITS IF
- C. PLACE A 2" COMPACTED LAYER OF TOPSOIL OVER ALL AREAS TO BE ESTABLISHED WITH NATIVE PLANTINGS. THE TOPSOIL LAYER SHALL BRING ALL NATIVE PLANTING AREAS TO FINISH GRADE. PREPARE PLANTING AREA BY FINE GRADING THE SURFACE TO A SMOOTH SURFACE, REMOVE ALL ROCKS, STICKS, DIRT CLUMPS, AND TRASH.
- D. A COVER CROP SHALL BE ADDED TO SEED MIXES TO STABILIZE SWALE SLOPES UNTIL NATIVE SEED IS ESTABLISHED.
- E. WINTER WHEAT SHALL BE USED AS A COVER CROP IF PLANTING IS TO TAKE PLACE DURING WINTER MONTHS. SPRING OATS SHALL BE USED FOR SPRING PLANTING.
- F. SOW SEEDS WITH A DRILL TO A DEPTH OF $\frac{1}{4}$ " IN ROWS.
- G. SEEDLING OPERATIONS MUST BE COMPLETED BY END OF APRIL.
- H. LIGHTLY MULCH SLOPES WITH WEED-FREE WHEAT OR OAT STRAW.
- I. PROVIDE WATER TO KEEP SEEDS FROM DRYING OUT COMPLETELY. CONTINUAL WATERING IS
- NOT NEEDED. J. DO NOT FERTILIZE.
- K. DO NOT SPRAY WITH HERBICIDES

3.5 TURF AREA PREPARATION

- A. LIMIT TURF SUBGRADE PREPARATION TO AREAS TO BE PLANTED.
- B. NEWLY GRADED SUBGRADES: LOOSEN SUBGRADE TO A MINIMUM DEPTH OF 8 INCHES. REMOVE STONES LARGER THAN 1 INCH IN ANY DIMENSION AND STICKS, ROOTS, RUBBISH, AND OTHER EXTRANEOUS MATTER AND LEGALLY DISPOSE OF THEM OFF OWNER'S PROPERTY.
- 1. APPLY FERTILIZER DIRECTLY TO SUBGRADE BEFORE LOOSENING. 2. SPREAD TOPSOIL, APPLY SOIL AMENDMENTS AND FERTILIZER ON SURFACE, AND THOROUGHLY BLEND PLANTING SOIL.
- a. DELAY MIXING FERTILIZER WITH PLANTING SOIL IF PLANTING WILL NOT PROCEED WITHIN A FEW DAYS. b. MIX LIME WITH DRY SOIL BEFORE MIXING FERTILIZER.
- 3. SPREAD PLANTING SOIL TO A DEPTH OF 2 INCHES BUT NOT LESS THAN REQUIRED TO MEET FINISH GRADES AFTER LIGHT ROLLING AND NATURAL SETTLEMENT. DO NOT SPREAD IF PLANTING SOIL OR SUBGRADE IS FROZEN, MUDDY, OR EXCESSIVELY WET.
- a. SPREAD APPROXIMATELY 1/2 THE THICKNESS OF PLANTING SOIL OVER LOOSENED SUBGRADE. MIX THOROUGHLY INTO TOP 2 INCHES OF SUBGRADE. SPREAD REMAINDER OF PLANTING SOIL.
- REDUCE ELEVATION OF PLANTING SOIL TO ALLOW FOR SOIL THICKNESS OF SOD. C. UNCHANGED SUBGRADES: IF TURF IS TO BE PLANTED IN AREAS UNALTERED OR UNDISTURBED
- 1. REMOVE EXISTING GRASS, VEGETATION, AND TURF. DO NOT MIX SURFACE SOIL. 2. LOOSEN SURFACE SOIL TO A DEPTH OF AT LEAST 8 INCHES. APPLY SOIL AMENDMENTS AND FERTILIZERS ACCORDING TO PLANTING SOIL MIX PROPORTIONS AND MIX

BY EXCAVATING, GRADING, OR SURFACE-SOIL STRIPPING OPERATIONS, PREPARE SURFACE

FINE TEXTURE. 3. REMOVE STONES LARGER THAN 1 INCH IN ANY DIMENSION AND STICKS, ROOTS, TRASH, AND EXTRANEOUS MATTER.

THOROUGHLY INTO TOP 4 INCHES OF SOIL. TILL SOIL TO A HOMOGENEOUS MIXTURE OF

4. LEGALLY DISPOSE OF WASTE MATERIAL, INCLUDING GRASS, VEGETATION, AND TURF OFF OWNER'S PROPERTY.

- D. FINISH GRADING: 1. GRADE PLANTING AREAS TO A SMOOTH, UNIFORM SURFACE PLANE WITH LOOSE, UNIFORMLY FINE TEXTURE. GRADE TO WITHIN PLUS OR MINUS 1/2 INCH OF FINISH ELEVATION. ROLL AND RAKE, REMOVE RIDGES, AND FILL DEPRESSIONS TO MEET FINISH GRADES. LIMIT FINISH GRADING TO AREAS THAT CAN BE PLANTED IN THE IMMEDIATE
- FUTURE. 2. FINISHED GRADES SHALL PROVIDE POSITIVE DRAINAGE, FREE OF DEPRESSIONS AND ANY IRREGULARITIES, AFTER THOROUGH SETTLEMENT AND COMPACTION OF SOD, AND WILL BE UNIFORM IN SLOPE BETWEEN GRADING CONTROLS AND THE ELEVATIONS INDICATED.
- E. MOISTEN PREPARED AREA BEFORE PLANTING IF SOIL IS DRY. WATER THOROUGHLY AND ALLOW SURFACE TO DRY BEFORE PLANTING. DO NOT CREATE MUDDY SOIL.
- F. BEFORE PLANTING, OBTAIN LANDSCAPE ARCHITECT'S ACCEPTANCE OF FINISH GRADING: RESTORE PLANTING AREAS IF ERODED OR OTHERWISE DISTURBED AFTER FINISH GRADING.

3.6 HYDROSEEDING NEW TURF LAWNS

- A. HYDROSEEDING: MIX SPECIFIED SEED, FERTILIZER, AND FIBER MULCH IN WATER, USING EQUIPMENT SPECIFICALLY DESIGNED FOR HYDROSEED APPLICATION. CONTINUE MIXING UNTIL UNIFORMLY BLENDED INTO HOMOGENOUS SLURRY SUITABLE FOR HYDRAULIC APPLICATION.
- 1. MIX SLURRY WITH NONASPHALTIC TACKIFIER.
- 2. APPLY SLURRY UNIFORMLY TO ALL AREAS TO BE SEEDED IN A 1-STEP PROCESS. APPLY MULCH AT THE MINIMUM RATE OF 1500 LB PER ACRE DRY WEIGHT BUT NOT LESS THAN THE RATE REQUIRED TO OBTAIN SPECIFIED SEED-SOWING RATE.

3.7 SODDING NEW TURF LAWNS

- A. ALL AREAS SPECIFIED AS "SOD" SHALL BE SODDED PER DIRECTION OF THE PROJECT LANDSCAPE ARCHITECT; LANDSCAPE CONTRACTOR SHALL VERIFY QUANTITIES IN FIELD PRIOR TO INSTALLATION.
- B. LAY SOD WITHIN 24 HOURS OF STRIPPING. DO NOT LAY SOD IF DORMANT OR IF GROUND IS FROZEN.
- C. LAY SOD TO FORM A SOLID MASS WITH TIGHTLY FITTED JOINTS. BUTT ENDS AND SIDES OF SOD; DO NOT STRETCH OR OVERLAP. STAGGER SOD STRIPS OR PADS TO OFFSET JOINTS IN ADJACENT COURSES. AVOID DAMAGE TO SUBGRADE OR SOD DURING INSTALLATION. TAMP AND ROLL LIGHTLY TO ENSURE CONTACT WITH SUBGRADE, ELIMINATE AIR POCKETS, AND FORM A SMOOTH SURFACE. WORK SIFTED SOIL OR FINE SAND INTO MINOR CRACKS BETWEEN PIECES OF SOD; REMOVE EXCESS TO AVOID SMOTHERING SOD AND ADJACENT GRASS.
- D. LAY SOD ACROSS ANGLE OF SLOPES EXCEEDING 1:3.
- E. ANCHOR SOD ON SLOPES EXCEEDING 1:6 WITH WOOD PEGS SPACED AS RECOMMENDED BY SOD MANUFACTURER BUT NOT LESS THAN 2 ANCHORS PER SOD STRIP TO PREVENT SLIPPAGE.
- F. SATURATE SOD WITH FINE WATER SPRAY WITHIN 2 HOURS OF PLANTING. DURING FIRST WEEK, WATER DAILY OR MORE FREQUENTLY AS NEEDED TO MAINTAIN MOIST SOIL TO A MINIMUM DEPTH OF 1-1/2 INCHES (38 MM) BELOW THE SOD.
- G. AFTER TWO WEEKS FOLLOWING SOD INSTALLATION, APPLY FERTILIZER AT THE MANUFACTURER'S RECOMMENDED RATE FOR NEWLY ESTABLISHED LAWNS. MAINTAIN TURF DURING WARRANTY PERIOD BY WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING, AND OTHER OPERATIONS SUCH AS ROLLING, REGRADING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH SODDED SURFACE, FREE OF ERODED OR BARE AREAS, FREE OF WEEDS AND ACCEPTABLE BY OWNER.
- 3.8 EXCAVATION FOR TREES AND SHRUBS

FLARE TO THE BOTTOM OF THE ROOT BALL

- A. PLANTING PITS AND TRENCHES: EXCAVATE CIRCULAR PLANTING PITS WITH SIDES SLOPING INWARD AT A 45-DEGREE ANGLE. EXCAVATIONS WITH VERTICAL SIDES ARE NOT ACCEPTABLE. TRIM PERIMETER OF BOTTOM LEAVING CENTER AREA OF BOTTOM RAISED SLIGHTLY TO SUPPORT ROOT BALL AND ASSIST IN DRAINAGE AWAY FROM CENTER. DO NOT FURTHER DISTURB BASE. ENSURE THAT ROOT BALL WILL SIT ON UNDISTURBED BASE SOIL TO PREVENT SETTLING. SCARIFY SIDES OF PLANTING PIT SMEARED OR SMOOTHED DURING EXCAVATION.
- 1. EXCAVATE AT LEAST 12 INCHES WIDER THAN ROOT SPREAD AND DEEP ENOUGH TO ACCOMMODATE VERTICAL ROOTS FOR BALLED AND BURLAPPED STOCK. 2. DO NOT EXCAVATE DEEPER THAN DEPTH OF THE ROOT BALL, MEASURED FROM THE ROOT
- 3. IF AREA UNDER THE PLANT WAS INITIALLY DUG TOO DEEP, ADD SOIL TO RAISE IT TO THE CORRECT LEVEL AND THOROUGHLY TAMP THE ADDED SOIL TO PREVENT SETTLING.
- 4. MAINTAIN REQUIRED ANGLES OF REPOSE OF ADJACENT MATERIALS AS SHOWN ON THE DRAWINGS. DO NOT EXCAVATE SUBGRADES OF ADJACENT PAVING, STRUCTURES, HARDSCAPES, OR OTHER NEW OR EXISTING IMPROVEMENTS.
- 5. MAINTAIN SUPERVISION OF EXCAVATIONS DURING WORKING HOURS.
- 6. KEEP EXCAVATIONS COVERED OR OTHERWISE PROTECTED WHEN UNATTENDED BY INSTALLER'S PERSONNEL.
- 7. IF DRAIN TILE IS SHOWN ON DRAWINGS OR REQUIRED UNDER PLANTING AREAS, EXCAVATE TO TOP OF POROUS BACKFILL OVER TILE. B. ALL LANDSCAPE AREAS, ESPECIALLY PARKING LOT ISLANDS AND SHRUB BEDS NEXT TO BUILDINGS, SHALL BE EXCAVATED OF ALL BUILDING MATERIALS, DEBRIS AND POOR SOILS TO A DEPTH OF TWENTY-FOUR (24) INCHES AND BACKFILLED WITH A GOOD, MEDIUM TEXTURED
- PLANTING SOIL (LOAM OR LIGHT YELLOW CLAY). ALL LANDSCAPE AREAS SHALL HAVE SIX (6) INCHES OF TOPSOIL, AND AREA TO BE CROWNED A MINIMUM OF SIX (6) INCHES HIGHER, OR AS SPECIFIED ON PLANS AND DETAILS, THAN ADJACENT CURBS OR WALKS AFTER EARTH
- C. UNDERGROUND UTILITY LINES MUST BE TAKEN INTO ACCOUNT IN THE EXCAVATION OF THE PLANTING AREAS.
- D. SUBSOIL AND TOPSOIL REMOVED FROM EXCAVATIONS MAY BE USED AS PLANTING SOIL.
- E. OBSTRUCTIONS: NOTIFY LANDSCAPE ARCHITECT IF UNEXPECTED ROCK OR OBSTRUCTIONS DETRIMENTAL TO TREES OR SHRUBS ARE ENCOUNTERED IN EXCAVATIONS. 1. HARDPAN LAYER: DRILL 6-INCH DIAMETER HOLES, 24 INCHES APART, INTO FREE-DRAINING STRATA OR TO A DEPTH OF 10 FEET, WHICHEVER IS LESS, AND BACKFILL WITH FREE-DRAINING MATERIAL
- DRAINAGE: NOTIFY LANDSCAPE ARCHITECT IF SUBSOIL CONDITIONS EVIDENCE UNEXPECTED WATER SEEPAGE OR RETENTION IN TREE OR SHRUB PLANTING PITS.
- G. FILL EXCAVATIONS WITH WATER AND ALLOW TO PERCOLATE AWAY BEFORE POSITIONING TREES AND SHRUBS.

3.7 TREE, SHRUB, AND VINE PLANTING

- A. BEFORE PLANTING, VERIFY THAT ROOT FLARE IS VISIBLE AT TOP OF ROOT BALL ACCORDING TO ANSI Z60.1. IF ROOT FLARE IS NOT VISIBLE, REMOVE SOIL IN A LEVEL MANNER FROM THE ROOT BALL TO WHERE THE TOPMOST ROOT EMERGES FROM THE TRUNK. AFTER SOIL REMOVAL TO EXPOSE THE ROOT FLARE, VERIFY THAT ROOT BALL STILL MEETS SIZE
- B. REMOVE STEM GIRDLING ROOTS AND KINKED ROOTS. REMOVE INJURED ROOTS BY CUTTING CLEANLY; DO NOT BREAK.
- C. SET BALLED AND BURLAPPED STOCK PLUMB AND IN CENTER OF PLANTING PIT OR TRENCH WITH ROOT FLARE 1 INCH ABOVE ADJACENT FINISH GRADES. USE PLANTING SOIL FOR BACKFILL
- 2. AFTER PLACING SOME BACKFILL AROUND ROOT BALL TO STABILIZE PLANT, CAREFULLY CUT AND REMOVE BURLAP, ROPE, AND WIRE BASKETS FROM TOPS OF ROOT BALLS AND FROM SIDES, BUT DO NOT REMOVE FROM UNDER ROOT BALLS. REMOVE PALLETS, IF ANY, BEFORE SETTING. DO NOT USE PLANTING STOCK IF ROOT BALL IS CRACKED OR BROKEN BEFORE OR DURING PLANTING OPERATION.
- 3. BACKFILL AROUND ROOT BALL IN LAYERS, TAMPING TO SETTLE SOIL AND ELIMINATE VOIDS AND AIR POCKETS. WHEN PLANTING PIT IS APPROXIMATELY ONE-HALF FILLED, WATER THOROUGHLY BEFORE PLACING REMAINDER OF BACKFILL. REPEAT WATERING UNTIL NO MORE WATER IS ABSORBED.
- 4. PLACE PLANTING TABLETS IN EACH PLANTING PIT WHEN PIT IS APPROXIMATELY ONE-HALF FILLED; IN AMOUNTS RECOMMENDED IN SOIL REPORTS FROM SOIL-TESTING LABORATORY. PLACE TABLETS BESIDE THE ROOT BALL ABOUT 1 INCH FROM ROOT TIPS; DO NOT PLACE TABLETS IN BOTTOM OF THE HOLE.
- 5. CONTINUE BACKFILLING PROCESS. WATER AGAIN AFTER PLACING AND TAMPING FINAL LAYER OF SOIL.
- D. SET BALLED AND POTTED OR CONTAINER-GROWN STOCK PLUMB AND IN CENTER OF PLANTING PIT OR TRENCH WITH ROOT FLARE 1" ABOVE ADJACENT FINISH GRADES. USE PLANTING SOIL FOR BACKFILL.
- 2. CAREFULLY REMOVE ROOT BALL FROM CONTAINER WITHOUT DAMAGING ROOT BALL OR 3. BACKFILL AROUND ROOT BALL IN LAYERS, TAMPING TO SETTLE SOIL AND ELIMINATE VOIDS AND AIR POCKETS. WHEN PLANTING PIT IS APPROXIMATELY ONE-HALF FILLED, WATER THOROUGHLY BEFORE PLACING REMAINDER OF BACKFILL. REPEAT WATERING UNTIL NO
- 4. PLACE PLANTING TABLETS IN EACH PLANTING PIT WHEN PIT IS APPROXIMATELY ONE-HALF FILLED; IN AMOUNTS RECOMMENDED IN SOIL REPORTS FROM SOIL-TESTING LABORATORY. PLACE TABLETS BESIDE THE ROOT BALL ABOUT 1 INCH FROM ROOT TIPS; DO NOT PLACE TABLETS IN BOTTOM OF THE HOLE
- 5. CONTINUE BACKFILLING PROCESS. WATER AGAIN AFTER PLACING AND TAMPING FINAL LAYER OF SOIL. E. WHEN PLANTING ON SLOPES. SET THE PLANT SO THE ROOT FLARE ON THE UPHILL SIDE IS

FLUSH WITH THE SURROUNDING SOIL ON THE SLOPE: THE EDGE OF THE ROOT BALL ON THE

- DOWNHILL SIDE WILL BE ABOVE THE SURROUNDING SOIL. APPLY ENOUGH SOIL TO COVER THE DOWNHILL SIDE OF THE ROOT BALL. F. PLANTING:
- 1. THE CONTRACTOR IS RESPONSIBLE FOR PLANTING THE MATERIALS AT THE CORRECT GRADES AND SPACING. THE PLANTS SHALL BE ORIENTED AS TO GIVE THE BEST APPEARANCE. DO NOT PLANT CLOSER THAN FOUR (4) FEET FROM PROPERTY LINES.

2. PLANT TREES AND SHRUBS GENERALLY NO CLOSER THAN FOUR (4) FEET FROM

SIDEWALKS, CURBS AND PARKING STALLS. 3. THE PLANTING SOIL MIXTURE SPECIFIED FOR BACKFILLING PLANT PITS AND BEDS SHALL BE COMPOSED OF TOPSOIL AND ADDITIONAL SOIL AMENDMENT APPROPRIATE FOR LOCATION AND PLANTINGS. THE CONTRACTOR SHALL BLEND ONE PART EXISTING SOIL, ONE PART

APPROVED TOPSOIL, ONE PART MASON'S SAND, ONE PART SPHAGNUM PEAT MOSS AND

- ADDITIONAL FERTILIZER, TERRA-SORB AND OTHER SOIL AMENDMENTS AS SPECIFIED ON THE LANDSCAPE PLAN. 4. STAGGER PLANT MATERIAL FROM ROW TO ROW. SPACE HEDGE PLANTINGS EVENLY AND RESPACE AS REQUIRED. TRIM TOPS EVENLY AFTER PLANTING IF APPLICABLE.
- 5. ALL PLANT MATERIAL TO RECEIVE TERRA-SORB SUPER ABSORBANT POLYMER, AND GROLIFE OR PHC MYCORRHIZAL FUNGI INNOCULANT OR APPROVED EQUALS: FOLLOW MANUFACTURER'S SPECIFICATIONS.
- 6. REMOVE THE TREE STAKES AND GUYS AFTER FIRST WINTER. WHEN CONDITIONS DETRIMENTAL TO PLANT GROWTH ARE ENCOUNTERED SUCH AS RUBBLE FILL, ROCK, ADVERSE DRAINAGE CONDITIONS OR OBSTRUCTIONS, LANDSCAPE CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT BEFORE PLANTING.
- 3.8 TREE, SHRUB, AND VINE PRUNING
- A. REMOVE ONLY DEAD, DYING, OR BROKEN BRANCHES. DO NOT PRUNE FOR SHAPE.
- B. PRUNE, THIN, AND SHAPE TREES, SHRUBS, AND VINES ACCORDING TO STANDARD PROFESSIONAL HORTICULTURAL AND ARBORICULTURAL PRACTICES. UNLESS OTHERWISE

- INDICATED BY LANDSCAPE ARCHITECT, DO NOT CUT TREE LEADERS; REMOVE ONLY INJURED. DYING, OR DEAD BRANCHES FROM TREES AND SHRUBS; PRUNE TO RETAIN NATURAL

C. DO NOT APPLY PRUNING PAINT TO WOUNDS.

 NEW PLANT MATERIAL SHALL BE PRUNED IN THE FOLLOWING MANNER: DEAD AND BROKEN BRANCHES SHALL BE REMOVED. DECIDUOUS TREES AND SHRUBS SHALL BE PRUNED TO REDUCE TOTAL AMOUNT OF ANTICIPATED FOLIAGE BY 1/5. EVERGREEN PLANTS SHALL NOT BE PRUNED EXCEPT TO REMOVE INJURED BRANCHES. PRUNE IN ACCORDANCE WITH STANDARD HORTICULTURAL PRACTICE TO PRESERVE NATURAL CHARACTER OF PLANT THE AMOUNT OF PRUNING SHALL BE LIMITED TO THE REMOVAL OF DEAD OR INJURED TWIGS TO COMPENSATE FOR ROOT LOSS FROM TRANSPLANTING. CUTS SHOULD BE FLUSH, LEAVING NO STUBS.

3.9 LAWN RESTORATION

A. EXISTING LAWNS ARE TO BE INSPECTED TO DETERMINE VIABILITY. IF FOUND TO SUPPORT GOOD TURF DEVELOPMENT, RESTORE THEM TO UNIFORM, DENSE AND HEALTHY TURF, FREE FROM WEEDS, RESEMBLING NEW TURF AREAS. TOPSOIL (REFER TO TOPSOIL NOTES) WILL BE ADDED AS NEEDED TO LEVEL OUT AREAS AND FILL HOLES PRIOR TO SEEDING OR SODDING. THOSE EXISTING LAWNS FOUND TO BE IN POOR CONDITION WILL BE STRIPPED OF POOR LAWN AND WEEDS, REGRADED TO LEVEL OUT BUMPS AND DEPRESSIONS. SOIL IS TO BE LEVEL, POROUS, ORGANIC, AND CAPABLE OF SUPPORTING GOOD TURF GROWTH.

3.10 GROUND COVER, ANNUAL, BIANNUAL AND PERENNIAL PLANTING

- A. SET OUT AND SPACE GROUND COVER AND PLANTS OTHER THAN TREES, SHRUBS, AND VINES AS INDICATED IN EVEN ROWS WITH TRIANGULAR SPACING.
- B. USE PLANTING SOIL FOR BACKFILL. C. DIG HOLES LARGE ENOUGH TO ALLOW SPREADING OF ROOTS.

EVIDENCE OF RECOVERY FROM TRANSPLANTING SHOCK.

- D. FOR ROOTED CUTTING PLANTS SUPPLIED IN FLATS, PLANT EACH IN A MANNER THAT WILL MINIMALLY DISTURB THE ROOT SYSTEM BUT TO A DEPTH NOT LESS THAN TWO NODES.
- E. WORK SOIL AROUND ROOTS TO ELIMINATE AIR POCKETS AND LEAVE A SLIGHT SAUCER INDENTATION AROUND PLANTS TO HOLD WATER.
- F. WATER THOROUGHLY AFTER PLANTING, TAKING CARE NOT TO COVER PLANT CROWNS WITH WET SOIL. G. PROTECT PLANTS FROM HOT SUN AND WIND; REMOVE PROTECTION IF PLANTS SHOW

3.11 PLANTING AREA MULCHING

- MULCH BACKFILLED SURFACES OF PLANTING AREAS AND OTHER AREAS AS INDICATED. 1. HARDWOOD MULCH TREES: APPLY A 3-INCH AVERAGE THICKNESS OF HARDWOOD MULCH EXTENDING 12 INCHES BEYOND EDGE OF INDIVIDUAL PLANTING PIT OR TRENCH AND OVER ENTIRE SURFACE OF PLANTING AREA, AND FINISH LEVEL WITH ADJACENT FINISH GRADES. DO NOT PLACE MULCH WITHIN 3 INCHES OF TRUNKS OR STEMS.
- 2. SHRUBS, PERENNIALS, GRASSES, AND GROUNDCOVER SHALL RECEIVE 1-2" DIA. WASHED RIVER ROCK MULCH TO A DEPTH OF 4".
- 3. SINGLE TREES AND SHRUBS SHALL BE MULCHED TO THE SAUCER OR LANDSCAPE ISLAND. INCLUDE AN APPLICATION OF PRE-EMERGENT FOR WEED CONTROL.
- 4. ALL MULCH SHALL MATCH GRADE OF ADJACENT CURB, WALK, OR EDGE OF PAVEMENT.
- A. SHOVEL-CUT EDGING: SEPARATE MULCHED AREAS FROM TURF AREAS WITH A 45-DEGREE, 4 TO 6-INCH DEEP, SHOVEL CUT EDGE.

3.13 SATISFACTORY TURF

3.12 EDGING INSTALLATION

A. TURF INSTALLATIONS SHALL MEET THE FOLLOWING CRITERIA AS DETERMINED BY THE LANDSCAPE ARCHITECT:

1. SATISFACTORY SEEDED TURF: a. AT SUBSTANTIAL COMPLETION AND AT THE END OF THE MAINTENANCE PERIOD, A HEALTHY, UNIFORM, CLOSE STAND OF GRASS HAS BEEN ESTABLISHED, FREE OF WEEDS AND SURFACE IRREGULARITIES, WITH COVERAGE EXCEEDING 90 PERCENT

2. SATISFACTORY SODDED TURF: AT SUBSTANTIAL COMPLETION AND AT THE END OF THE

BEEN ESTABLISHED, FREE OF WEEDS, OPEN JOINTS, BARE AREAS, AND SURFACE

MAINTENANCE PERIOD, A HEALTHY, WELL-ROOTED, EVEN-COLORED, VIABLE TURF HAS

OVER ANY 10 SQ. FT. AND BARE SPOTS NOT EXCEEDING 5 BY 5 INCHES. b. ALL AREAS THAT DO NOT SHOW A SATISFACTORY CATCH OF SEEDED TURFGRASS SHALL BE RESEEDED AT INTERVALS OF 21 DAYS UNTIL DENSE, PERMANENT TURFGRASS, FREE FROM ANY BARE SPOTS, AREAS OF WASHOUT OR EROSION DAMAGE HAS BEEN ESTABLISHED.

3.14 OWNER'S ACCEPTANCE

IRREGULARITIES.

- A. THE COMPLETION OF THE CONTRACT WILL BE ACCEPTED AND NOTICE OF COMPLETION RECORDED ONLY WHEN THE ENTIRE CONTRACT IS COMPLETED TO THE OWNER'S
- SATISFACTION. B. WITHIN TEN (10) DAYS OF THE CONTRACTOR'S NOTIFICATION THAT THE INSTALLATION IS COMPLETE, THE OWNER WILL INSPECT THE INSTALLATION AND IF A FINAL ACCEPTANCE IS NOT GIVEN, HE WILL PREPARE A "PUNCH LIST" WHICH UPON COMPLETION BY THE CONTRACTOR WILL SIGNIFY ACCEPTANCE BY THE OWNER.
- C. FINAL PAYMENT WILL NOT BE MADE WITHOUT THE RECEIPT OF AN ACCURATE "AS-BUILT" DRAWING PROVIDED TO THE OWNER.
- 1. LANDSCAPE CONTRACTOR SHALL NOTIFY PROJECT LANDSCAPE ARCHITECT FOR INSPECTION OF PLANT MATERIAL FOR OWNER'S ACCEPTANCE.
- 2. OWNER SHALL RETAIN 10% FOR (12) TWELVE-MONTH WARRANTY PERIOD. 3. FINAL INSPECTION AND ACCEPTANCE WILL BE AT THE END OF (12) TWELVE-MONTH WARRANTY PERIOD. ACCEPTANCE SHALL BE BASED UPON A SATISFACTORY STAND OF TREES, SHRUBS, ORNAMENTAL GRASSES, PERENNIALS, ANNUALS, AS WELL AS
- ESTABLISHED TURF AT 100 PERCENT COVERAGE. 4. AREAS THAT DO NOT MEET THE CONTRACT REQUIREMENTS SHALL BE RESEEDED OR PLANT MATERIAL REPLACED. ANY REJECTED REPAIRS OR AREAS OF LAWN AND/OR OTHER PLANT MATERIAL WITHIN ACCEPTABLE PLANTING DATES SHALL BE DIRECTED BY THE

OWNER'S REPRESENTATIVE.

3.15 PLANT MAINTENANCE

- A. GENERAL MAINTENANCE 1. ALL LANDSCAPE AREAS TO BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE LOCAL MUNICIPAL AGENCIES STANDARDS AND REQUIREMENTS, IN A HEALTHY GROWING
- CONDITION, NEAT AND ORDERLY IN APPEARANCE AND FREE OF REFUSE AND DEBRIS. MAINTAIN PLANTINGS BY PRUNING, CULTIVATING, WATERING, WEEDING, FERTILIZING, MULCHING, RESTORING PLANTING SAUCERS, ADJUSTING AND REPAIRING TREE-STABILIZATION DEVICES, RESETTING TO PROPER GRADES OR VERTICAL POSITION, AND PERFORMING OTHER OPERATIONS AS REQUIRED TO ESTABLISH HEALTHY, VIABLE PLANTINGS. SPRAY OR TREAT AS REQUIRED TO KEEP TREES AND SHRUBS FREE OF
- INSECTS AND DISEASE. 3. FILL IN AS NECESSARY SOIL SUBSIDENCE THAT MAY OCCUR BECAUSE OF SETTLING OR
- OTHER PROCESSES. REPLACE MULCH MATERIALS DAMAGED OR LOST IN AREAS OF SUBSIDENCE. 4. APPLY TREATMENTS AS REQUIRED TO KEEP PLANT MATERIALS, PLANTED AREAS, AND SOILS FREE OF PESTS AND PATHOGENS OR DISEASE. USE INTEGRATED PAST MANAGEMENT PRACTICES WHENEVER POSSIBLE TO MINIMIZE THE USE OF PESTICIDES AND REDUCE HAZARDS. TREATMENTS INCLUDE PHYSICAL CONTROLS SUCH AS HOSING OFF

FOLIAGE, MECHANICAL CONTROLS SUCH AS TRAPS, AND BIOLOGICAL CONTROL AGENTS. B. NATIVE SEED MAINTENANCE:

- 1. SEEDLINGS SHOULD NOT COMPLETELY DRY OUT, BUT DO NOT NEED TO BE MOIST ALL OF THE TIME DURING THE FIRST 6-8 WEEKS. AFTER 8 WEEKS ONLY WATER IF IT DOES NOT RAIN FOR ONE WEEK. WATER SHOULD BE PROVIDED TO THE TOP (6) SIX INCHES OF SOIL
- 2. CUT THE PRAIRIE PLANTING AREA TO 6" IF WEED HEIGHT REACHES 12" IN THE FIRST YEAR. CUT AS MANY TIMES AS NECESSARY. DO NOT CUT PRIOR TO ANNUALS SEED SETTING AFTER BLOOMING.

(12) MONTHS FROM THE DATE OF RE-ACCEPTANCE.

- 3. REMOVE ALL LEGUMES IMMEDIATELY 4. DO NOT FERTILIZE.
- 5. DO NOT SPRAY WITH HERBICIDES.
- C. MAINTENANCE PROPOSAL: 1. CONTRACTOR SHALL PROVIDE A SEPARATE MAINTENANCE PROPOSAL TO OWNER FOR MAINTAINING PLANTS IN HEALTHY GROWING CONDITION FOR A PERIOD OF TWELVE (12) MONTHS FROM SUBSTANTIAL COMPLETION OR DATE OF ACCEPTANCE BY THE OWNER OR
- OWNER'S REPRESENTATIVE. 2. ANY PLANT MATERIAL THAT DOES NOT SURVIVE IN GOOD CONDITION PAST THIS TIME PERIOD. AS JUDGED BY THE OWNER OR OWNER'S REPRESENTATIVE. SHALL BE REPLACED AT NO ADDITIONAL COST TO THE OWNER AND WARRANTED FOR AN ADDITIONAL TWELVE

3.16 PESTICIDE APPLICATION

A. APPLY PESTICIDES AND OTHER CHEMICAL PRODUCTS AND BIOLOGICAL CONTROL AGENTS IN ACCORDANCE WITH AUTHORITIES HAVING JURISDICTION AND MANUFACTURER'S WRITTEN RECOMMENDATIONS. COORDINATE APPLICATIONS WITH OWNER'S OPERATIONS AND OTHERS

IN PROXIMITY TO THE WORK. NOTIFY OWNER BEFORE EACH APPLICATION IS PERFORMED.

- B. PRE-EMERGENT HERBICIDES (SELECTIVE AND NON-SELECTIVE): APPLY TO TREE, SHRUB, AND GROUND-COVER AREAS IN ACCORDANCE WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS. DO NOT APPLY TO SEEDED AREAS. C. POST-EMERGENT HERBICIDES (SELECTIVE AND NON-SELECTIVE): APPLY ONLY AS NECESSARY
- TO TREAT ALREADY-GERMINATED WEEDS AND IN ACCORDANCE WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS.
- 3.17 CLEANUP AND PROTECTION

D. REMOVE PLANTING DEBRIS FROM THE PROJECT SITE.

- A. DURING PLANTING, KEEP ADJACENT PAVING AND CONSTRUCTION CLEAN AND WORK AREA IN AN ORDERLY CONDITION.
- B. PROMPTLY REMOVE SOIL AND DEBRIS CREATED BY TURF WORK FROM PAVED AREAS. CLEAN WHEELS OF VEHICLES BEFORE LEAVING SITE TO AVOID TRACKING SOIL ONTO ROADS, WALKS. OR OTHER PAVED AREAS.
- C. ERECT TEMPORARY FENCING OR BARRICADES AND WARNING SIGNS AS REQUIRED TO PROTECT NEWLY PLANTED AREAS FROM TRAFFIC. MAINTAIN FENCING AND BARRICADES THROUGHOUT INITIAL MAINTENANCE PERIOD AND REMOVE AFTER PLANTINGS ARE
- ESTABLISHED. D. REMOVE NONDEGRADABLE EROSION-CONTROL MEASURES AFTER GRASS ESTABLISHMENT
- E. PROTECT PLANTS FROM DAMAGE DUE TO LANDSCAPE OPERATIONS AND OPERATIONS OF OTHER CONTRACTORS AND TRADES. MAINTAIN PROTECTION DURING INSTALLATION AND MAINTENANCE PERIODS. TREAT, REPAIR, OR REPLACE DAMAGED PLANTINGS.
- F. AFTER INSTALLATION, REMOVE NURSERY STAKES, TIE TAPE, LABELS, WIRE, BURLAP, AND OTHER DEBRIS FROM PLANT MATERIAL, PLANTING AREAS, AND PROJECT SITE. AFTER SUBSTANTIAL COMPLETION, REMOVE NURSERY TAGS.

3.18 DISPOSAL

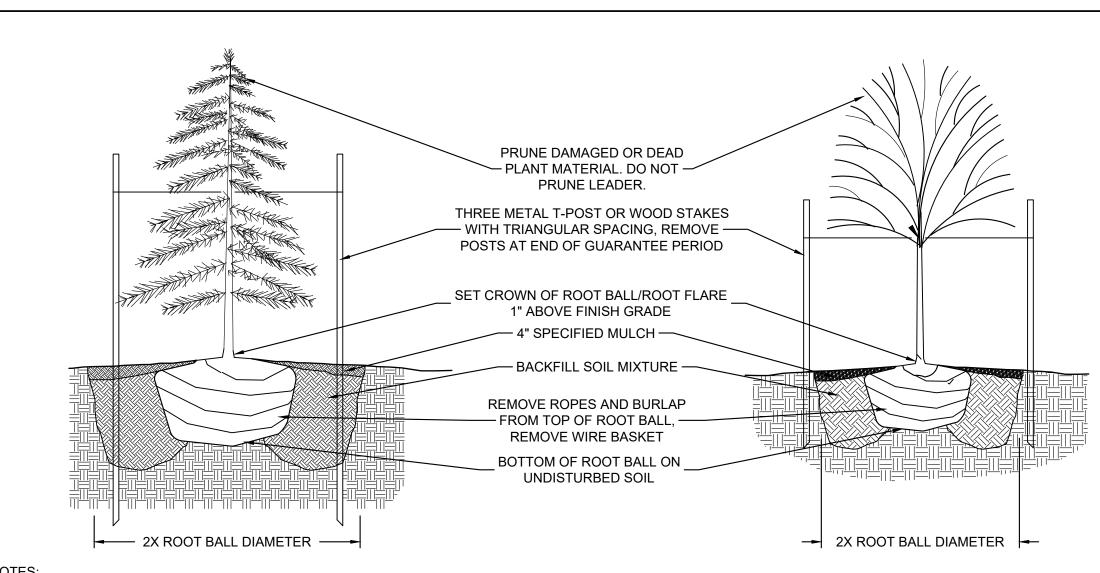
A. REMOVE SURPLUS SOIL AND WASTE MATERIAL INCLUDING EXCESS SUBSOIL, UNSUITABLE SOIL, TRASH, AND DEBRIS AND LEGALLY DISPOSE OF THEM OFF OWNER'S PROPERTY.



KRAATZ NUMBER PLA 2020005159/ SHEET #:

PLANT SCHEDULE

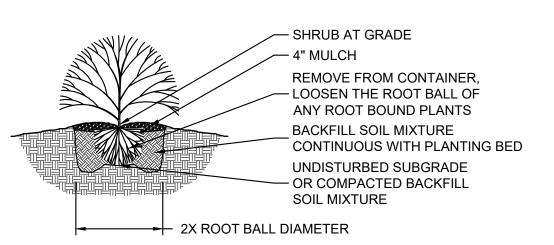
	CODE AO	BOTANICAL / COMMON NAME	SIZE	CONTAINER	QTY
	AO	Acon with wine 10 stab on Clamit / Ostab on Clamit Pad Mania	0".0-1		
/ _		Acer rubrum 'October Glory' / October Glory Red Maple	2" Cal.	B&B	14
••	MS	Malus x 'Spring Snow' / Spring Snow Crabapple	1.5" Cal.	B&B	13
	QM	Quercus macrocarpa / Burr Oak	2" Cal.	B&B	20
	QS	Quercus robur 'Fastigiata' TM / Skyrocket English Oak	2" Cal.	B&B	7
	SI	Syringa reticulata 'Ivory Silk' / Ivory Silk Japanese Tree Lilac	2" Cal.	B&B	35
	UA	Ulmus parvifolia 'Allee' TM / Allee Lacebark Elm	2" Cal.	B&B	28
•	ZG	Zelkova serrata 'Green Vase' / Green Vase Sawleaf Zelkova	2" Cal.	B&B	15
EVERGREEN TREES	CODE	BOTANICAL / COMMON NAME	<u>SIZE</u>	CONTAINER	QTY
(+)	PA	Picea abies / Norway Spruce	6` Ht.	B&B	3
+	PC	Picea pungens / Colorado Spruce	6` Ht.	B&B	17
SHRUBS	<u>CODE</u>	BOTANICAL / COMMON NAME	SIZE	CONTAINER	<u>QPY</u>
	ВС	Berberis thunbergii 'Crimson Pygmy' / Crimson Pygmy Japanese Barberry	5 gal.	Container	223
•	CR	Cornus sericea / Red Twig Dogwood	5 gal.	Container	43
	HB2	Hosta x 'Fragrant Bouquet' / Fragrant Bouquet Hosta	1 gal.	Container	23
	НН	Hosta x 'Halcyon' / Halcyon Hosta	1 gal.	Container	30
	HYD	Hydrangea macrophylla 'Bailmer' / Endless Summer® Hydrangea	2 gal.	Container	64
•	LHS	Itea virginica 'Henry's Garnet' / Henry's Garnet Sweetspire	2 gal.	Container	36
\bigoplus	RG	Rhus aromatica 'Gro-Low' / Gro-Low Fragrant Sumac	2 gal.	Container	51
\odot	CPR	Rosa x 'Flower Carpet Appleblossom' / Flower Carpet® Appleblossom Groundcover Rose	2 gal.	Container	51
	R3	Rosa x 'Radtko' TM / Double Knock Out Red Rose	5 gal.	Container	50
	RD	Rosa x 'Radtkopink' TM / Pink Double Knock Out Rose	5 gal.	Container	54
\odot	MCS	Spiraea japonica 'Walbuma' / Magic Carpet Japanese Spirea	2 gal.	Container	110
\otimes	SL	Spiraea x bumalda 'Little Princess' / Little Princess Spirea	5 gal.	Container	53
	SK	Syringa pubescens patula 'Miss Kim' / Miss Kim Korean Lilac	5 gal.	Container	10
	VC	Viburnum carlesii / Koreanspice Viburnum	5 gal.	Container	105
$\overline{\bullet}$	VS	Viburnum plicatum tomentosum 'Summer Snowflake' / Summer Snowflake Viburnum	2 gal.	Container	132
£ • 33	VV	Viburnum x burkwoodii 'Mohawk' / Mohawk Viburnum	2 gal.	Container	5
\odot	WB	Weigela florida 'Bramwell' / Fine Wine® Weigela	2 gal.	Container	28
EVERGREEN	CODE	BOTANICAL / COMMON NAME	SIZE	CONTAINER	QTY
(+)	BW	Buxus sinica insularis 'Wintergreen' / Wintergreen Korean Boxwood	5 gal.	Container	(55)
£ + 3	CG	Chamaecyparis pisifera 'Golden Mop' / Golden Mop Threadleaf Sawara Cypress	5 gal.	Container	93
+ + + + + + + + + + + + + + + + + + + +	JF	Juniperus chinensis 'Sea Green' / Sea Green Juniper	5 gal.	Container	(14)
+	JT	Juniperus sabina 'Tamariscifolia' / Tamarix Juniper	5 gal.	Container	68
+	JS	Juniperus scopulorum 'Skyrocket' / Skyrocket Juniper	5 gal.	Container	33
WARANT	CODE	BOTANICAL / COMMON NAME Routeleus grazilia (Blanda Ambitian) / Blanda Ambitian Blue Graze	SIZE	CONTAINER	QTY
MINNI Manamer	BB	Bouteloua gracilis 'Blonde Ambition' / Blonde Ambition Blue Grama Calamagrastis y acutiflora 'Karl Foorstor' / Karl Foorstor Footbar Bood Grass	2 gal.	Container	(170)
MANUTE.	CK	Calamagrostis x acutiflora 'Karl Foerster' / Karl Foerster Feather Reed Grass	3 gal.	Container	219
3000c	LV	Liriope muscari 'Variegata' / Variegated Lilyturf	#1	Pot	265
	MM	Miscanthus sinensis 'Morning Light' / Morning Light Eulalia Grass	5 gal.	Container	115
NOW.	PN	Panicum virgatum 'Northwind' / Northwind Switch Grass	1 gal.	Container	113
Manager Committee	PS	Panicum virgatum 'Shenandoah' / Shenandoah Switch Grass	1 gal.	Container	(179
TO TO THE STATE OF	PH2	Pennisetum alopecuroides 'Hameln' / Hameln Fountain Grass	3 gal.	Container	(119)
	РВ	Pennisetum alopecuroides 'Little Bunny' / Little Bunny Fountain Grass	1 gal.	Container	264
~	CODE AS	BOTANICAL / COMMON NAME Allium x 'Serendipity' / Serendipity Ornamental Onion	<u>SIZE</u> 1 gal.	<u>CONTAINER</u> Pot	<u>QTY</u> 68
00	IV2	Iris virginica / Blue Flag Iris	1 gal.	Container	42
	LB	Leucanthemum x superbum 'Becky' / Becky Shasta Daisy	1 gal.	Container	74
				Container	
~~~	NW2	Nepeta x 'Walker's Low' / Walker's Low Catmint Salvia nemorosa / Meadow Sage	1 gal.		89
۲ • ۲	SP	Salvia nemorosa / Meadow Sage	1 gal.	Container	97
	VR	Veronica x 'Reavis' / Crystal River Creeping Speedwell	1 gal.	Container	> 84

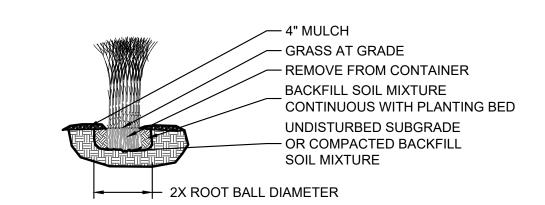


1. IN TURF AREA, PROVIDE 6' DIAMETER OF MULCH

EVERGREEN/DECIDUOUS TREE PLANTING DETAIL

N.T.S.

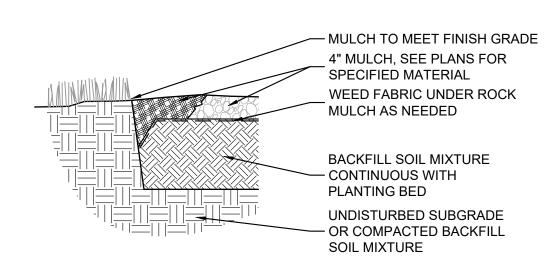


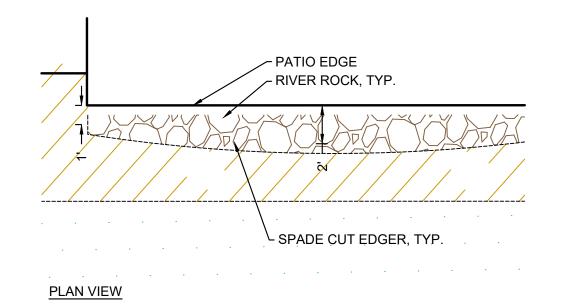


2 SHRUB PLANTING DETAIL

N.T.S.



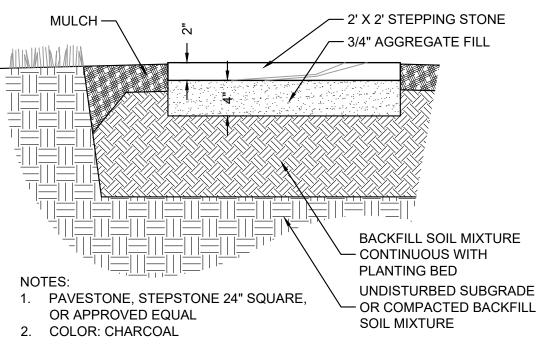


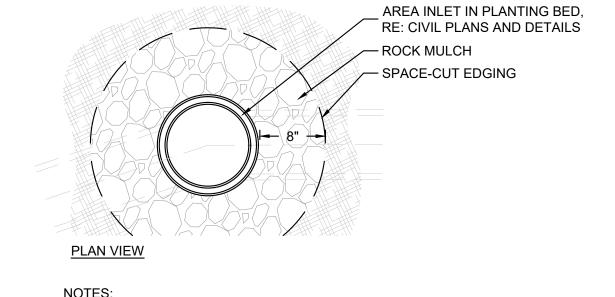


SPADE-CUT EDGE DETAIL

N.T.S.







6 STEPPING STONE AT PATIO DETAIL

7 ROCK MULCH AT AREA INLET DETAIL

 NOT REQUIRED IF AREA INLET IS LOCATED IN ROCK MULCH LANDSCAPE BED



NOTES:
1. TYPE: RIVER ROCK
2. SIZE RANGE: 4-INCH MAXIMUM, 1-INCH MINIMUM

8 ROCK MULCH DETAIL

LANDSCAPE DET	TRILOGY	APARTMENT COM	PERMIT SET	LEE'S SUMMIT, JACKSON	
---------------	---------	---------------	------------	-----------------------	--

SHEET #:

Certificate of Authority #:MO 2020018354

L-0402

NOT FOR CONSTRUCTION OUTERVIEW ROAD OUTERVIEW ROAD BUILDING #2 DÓG PÁRK ENLÁRGEMENT PLAN - SÉE SP1.04 POTENTIAL FUTURE MONUMENT, SEE SP1.05 NW WARD ROAD DATE **03.15.23** DRAWN BY **BNH** 04/11/23 CITY COMMENTS SHEET NAME
OVERALL SITE
AMENITY PLAN
SHEET NO.
SHEET NO.
SHEET NO.
SHEET NO. OVERALL SITE AMENITY PLAN

1" = 40'-0"

### SITE NOTES

- 1. UNLESS NOTED OTHERWISE IN THE PLANS & DETAILS, NEAT EXCAVATE ALL FOOTINGS INTO 2000 PSF (MIN.) SOIL (FIELD VERIFY). 3000 PSI CONC. (+/- 4" SLUMP).
- ALL EXPANSION JOINTS (EJ) TO HAVE SELF LEVELING CAULK OVER FELT TO SEAL COLOR TO MATCH ADJACENT PAVING.
   VERIFY ALL STRUCTURAL INFORMATION WITH STRUCTURAL ENGINEER, INCLUDING, BUT NOT LIMITED TO, WOOD MEMBER SIZES, ALL
- VERIFY ALL STRUCTURAL INFORMATION WITH STRUCTURAL ENGINEER, INCLUDING, BUT NOT LIMITED TO, WOOD MEMBER SIZES, ALL
  ANCHORING CONDITIONS, AND FOOTING/FOUNDATION SIZE AND REINFORCEMENT.
   VERIFY ANY NOTED ELEVATIONS AGAINST CIVIL ENGINEER GRADING PLAN.
- 5. REPORT ANY DISCREPANCIES OR MISSING INFORMATION IMMEDIATELY TO THE LANDSCAPE ARCHITECT. DO NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHERE IT IS FOUND THAT KNOWN DISCREPANCIES EXIST. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.

ALL WOOD MEMBERS TO BE TREATED LUMBER, STAINED OR PAINTED PER SPECS., COLOR AS SELECTED BY OWNER.

- 7. ALL FLATWORK CONCRETE TO BE PER CIVIL ENGINEER SPECS.
- 8. ALL VENEER MATERIALS ARE TO BE INSTALLED PER MANUFACTURER SPECS ACCORDING TO THE SUBSTRATE ON WHICH THEY ARE APPLIED. THIS INCLUDES ALL WATERPROOFING AND FLASHING NEEDS.
- 9. ALL CAST STONE TO BE SUBMITTAL AS SHOP DRAWING FOR APPROVAL. SILICONE SEAL ALL JOINTS, COLOR TO MATCH CAST STONE.

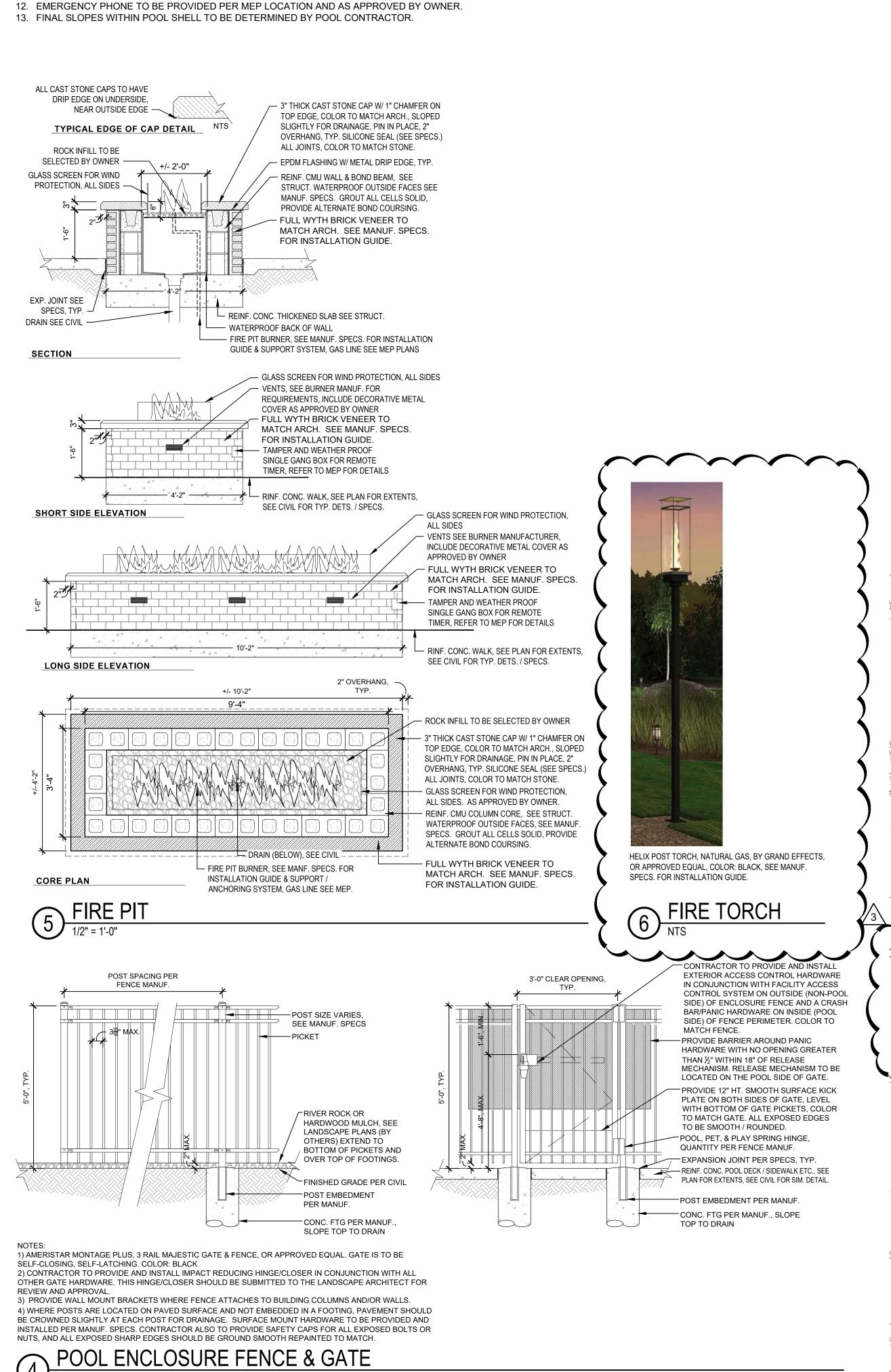
### POOL NOTES

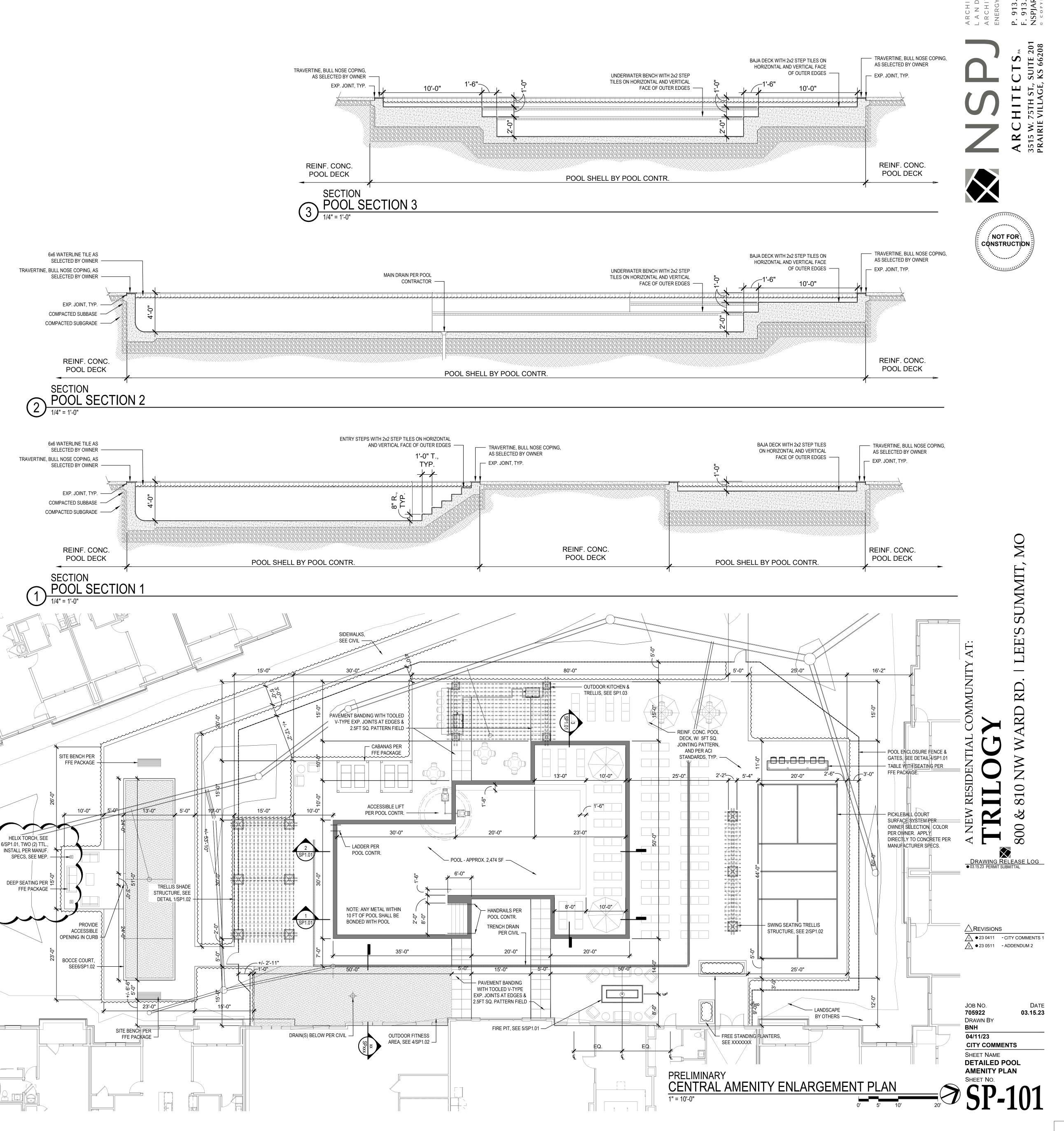
- 1. ALL POOL DRAWINGS AS PART OF THIS PACKAGE ARE TO CONVEY DESIGN INTENT. POOL IS TO BE DESIGN-BUILD AND ALL EQUIPMENT, PLUMBING, STRUCTURAL DETAILS, SAFETY EQUIPMENT, & SIGNAGE ARE TO BE PROVIDED BY THE POOL CONTRACTOR. PROVIDE MATERIAL AND COLOR SAMPLES TO THE LANDSCAPE ARCHITECT/OWNER FOR APPROVAL. ALL PERMITS & APPROVALS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- PROVIDE CHLORINATED FILTRATION SYSTEM FOR POOL.
   POOL TO BE HEATED TO RUN YEAR ROUND FOR COMFORT DURING OPEN MONTHS, AND TEMPERED FOR
- WINTERIZATION DURING OFF SEASON MONTHS.

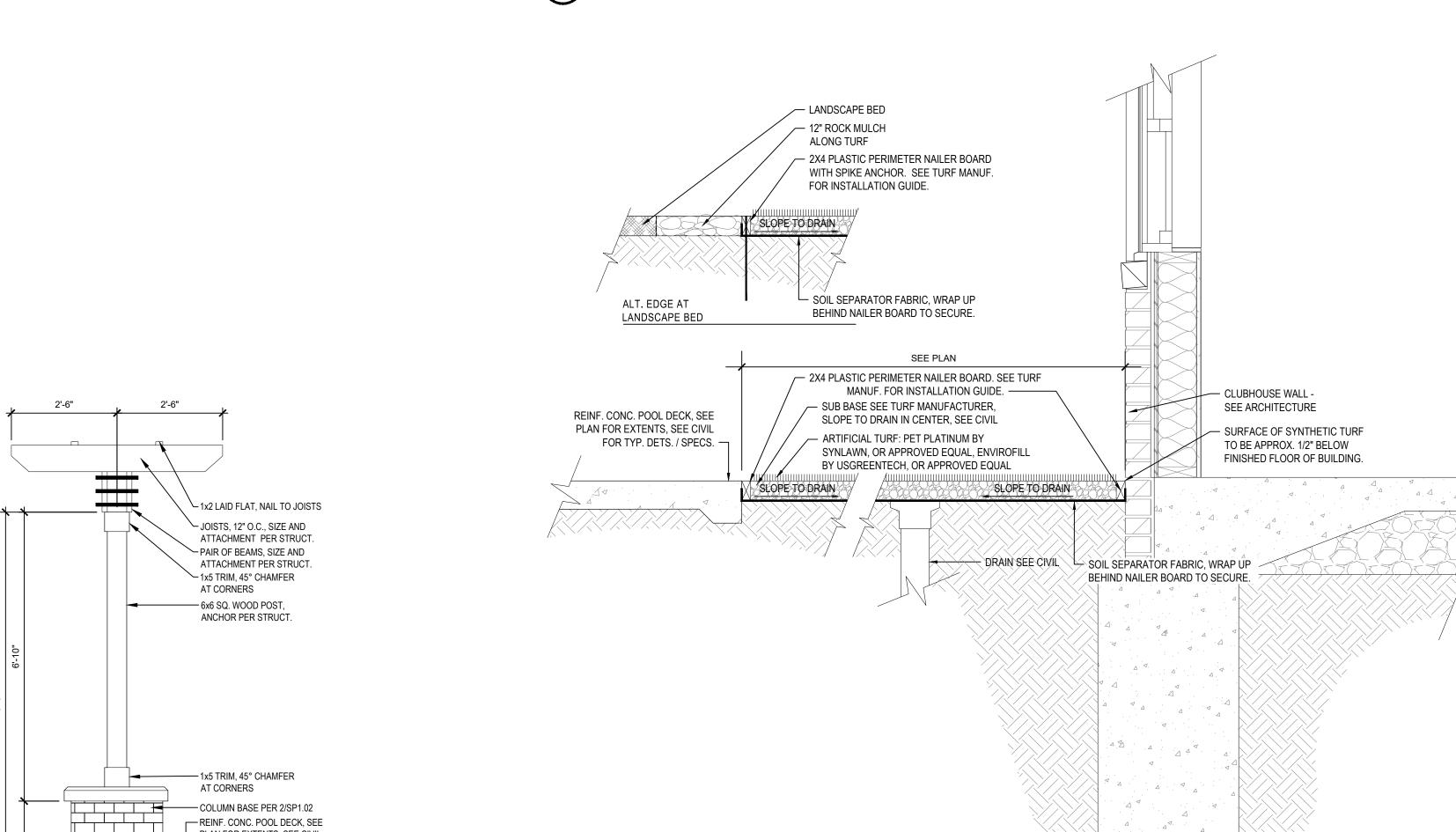
  4. POOL CONTRACTOR TO PROVIDE REMOVABLE SAFETY COVER COMPLYING WITH ASTMF1346 FOR THE POOL.
- 5. ALL POOL LIGHTING TO BE COLOR CHANGING LED & BE CONTROLLABLE BY WIRELESS CONTROLLER.6. POOL COPING TO BE BULL NOSED TRAVERTINE AS SELECTED BY OWNER.
- POOL COPING TO BE BULL NOSED TRAVERTINE AS SELECTED BY OWNER.
   COORDINATE BONDING FOR ANY METAL WITHIN 10' OF POOL WITH POOL CONTRACTOR
- PROVIDE NO DIVING/DEPTH MARKER TILES IN POOL DECK FOR ALL AREAS PER CODE REQUIREMENTS.
   ALL POOL GATES ARE TO BE SELF-CLOSING & SELF-LATCHING, INCLUDE A CRASH BAR/PANIC HARDWARE ON POOL SIDE OF GATE, ACCESS CONTROL IN CONJUNCTION WITH OTHER FACILITY ACCESS CONTROL HARDWARE ON OUTSIDE (NON-POOL SIDE) OF GATE, AND OPEN AWAY FROM THE POOL. LOCATION, SIZE, AND STYLE OF FENCE
- AND GATES ARE AS SPECIFIED IN THE PLANS & DETAILS.

  10. ACCESSIBLE LIFT SLEEVE SHALL BE ANCHORED PER MANUF. SPECS. LIFT, SLEEVE, AND REMOVABLE SLEEVE CAP
- TO BE PROVIDED BY POOL CONTRACTOR.

  11. REPORT ANY MISSING INFORMATION AND / OR DISCREPANCIES FOUND WITH REGARD TO EXISTING CONDITIONS OR PROPOSED DESIGN IMMEDIATELY TO THE LANDSCAPE ARCHITECT. DO NOT WILLFULLY PROCEED WITH
- CONSTRUCTION AS DESIGNED WHERE IT IS FOUND THAT KNOWN DISCREPANCIES EXIST. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.







- 2X8 PROTECTION BOARD, COLOR

- 2X4 PLASTIC PERIMETER NAILER BOARD PER MANUFACTURER

- SUB BASE PER TURF MANUFACTURER

SYNLAWN, OR APPROVED EQUAL, ENVIROFILL BY USGREENTECH, OR APPROVED EQUAL

SLOPE TO DRAIN

- SOIL SEPARATOR FABRIC, WRAP

UP BEHIND PROTECTION BOARD

TO SECURE.

DRAIN, REFER

TO CIVIL

- ARTIFICIAL TURF: PET PLATINUM BY

REINFORCED CONC. SIDEWALK, SEE

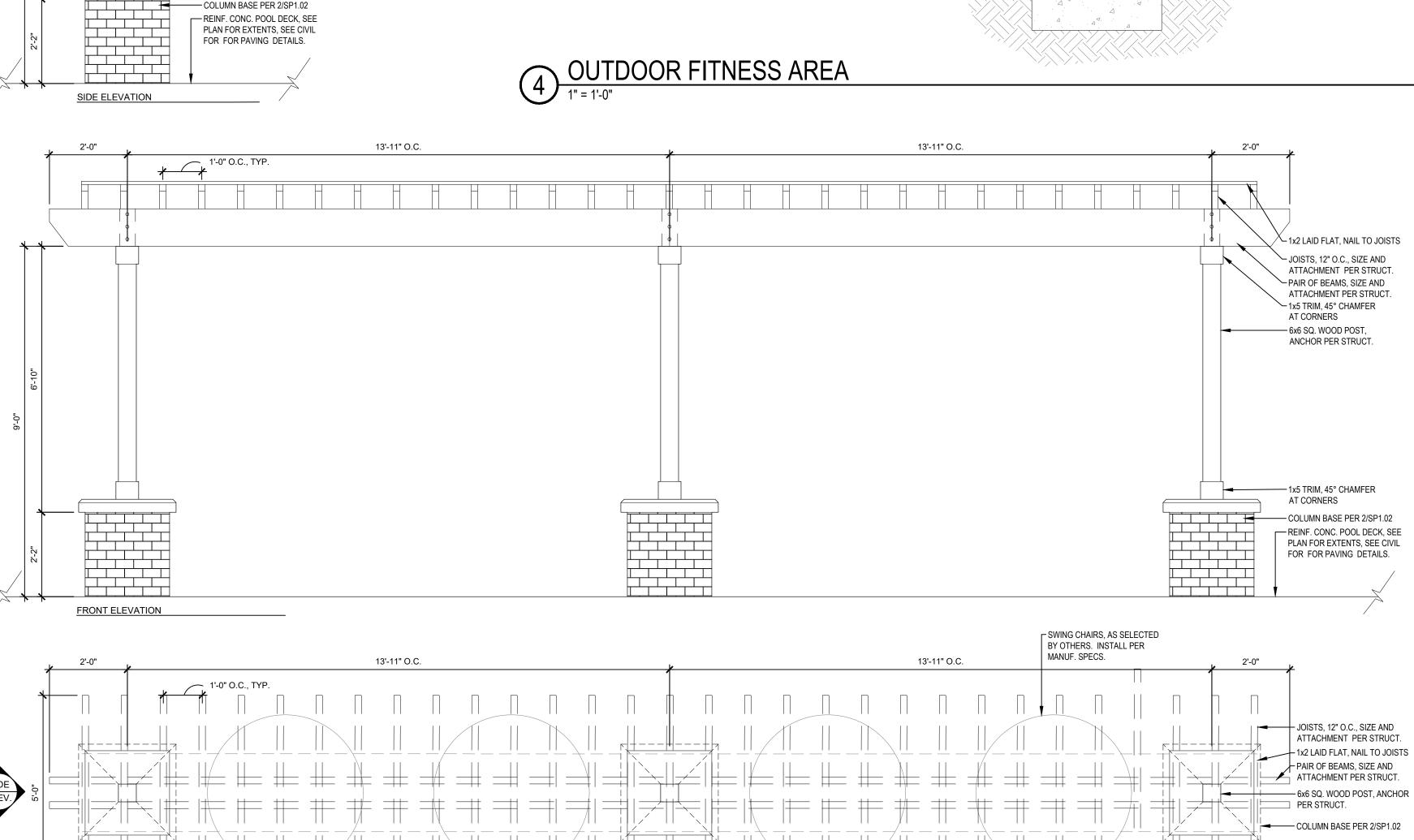
PLAN FOR EXTENTS

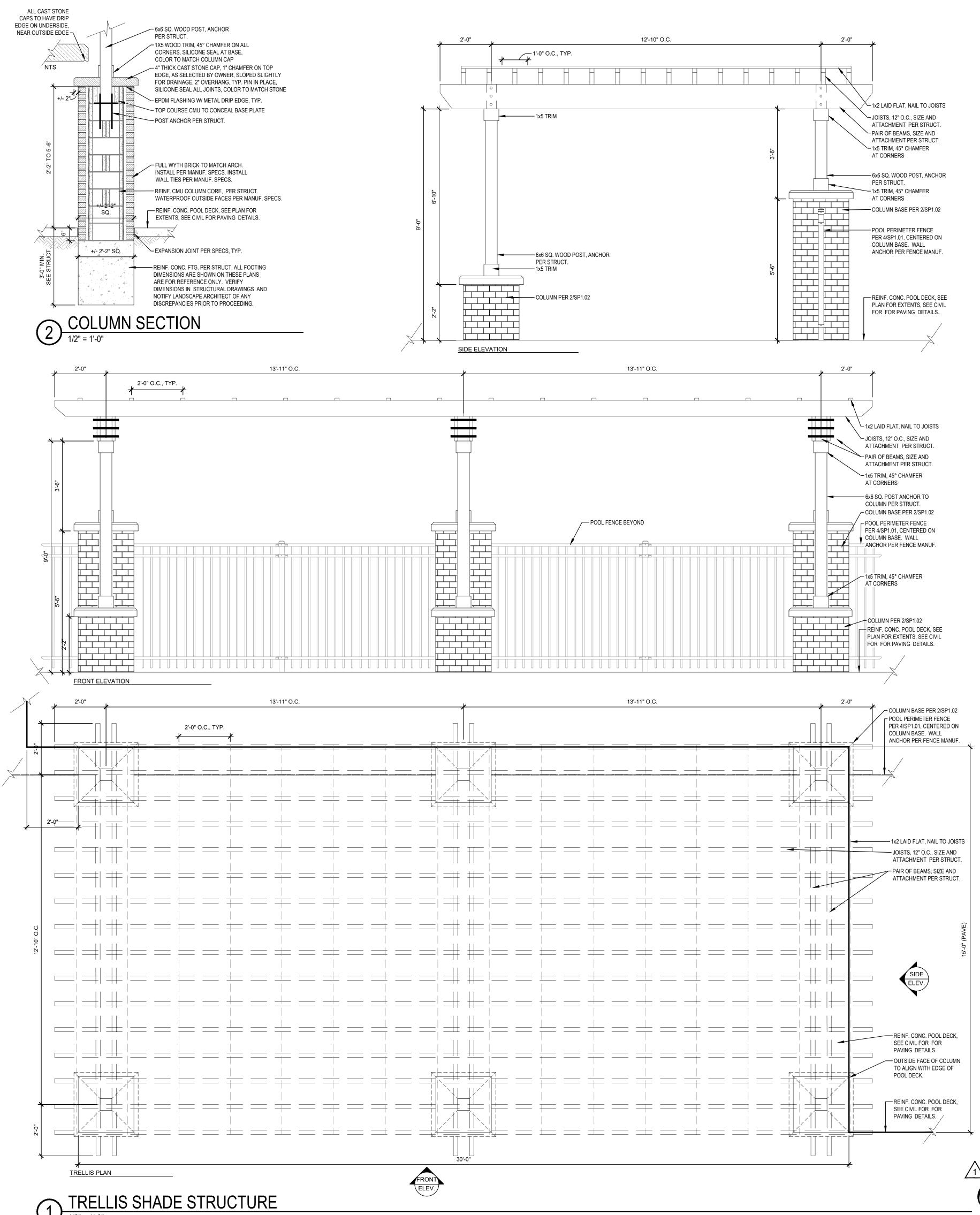
TO MATCH CONCRETE

SLOPE TO DRAIN

SURFACE OF TURF TO ALIGN

WITH SURFACE OF SIDEWALK









POOL AMENITY AREA DETAILS

DRAWN BY

**CITY COMMENTS** 

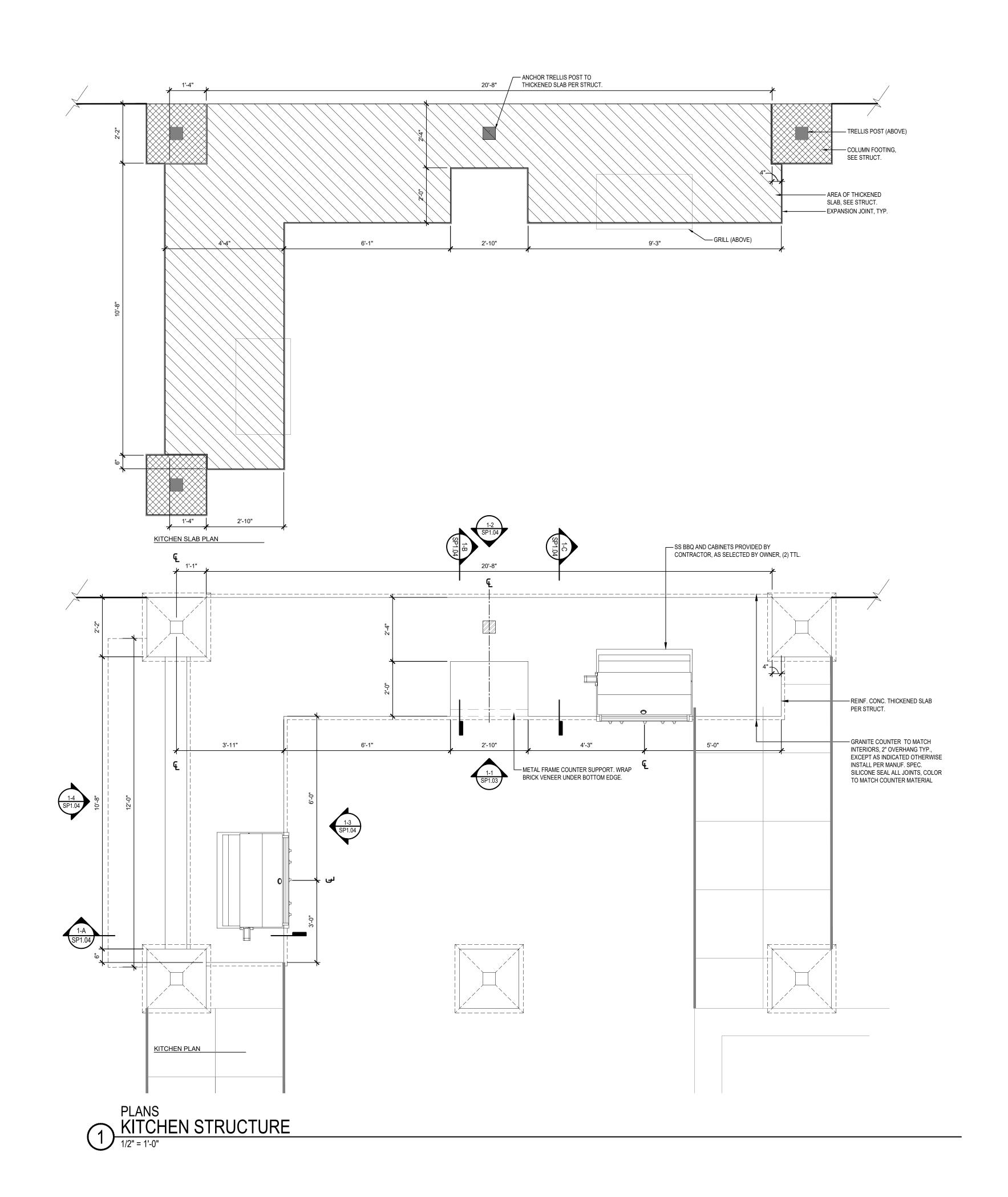
SHEET NAME

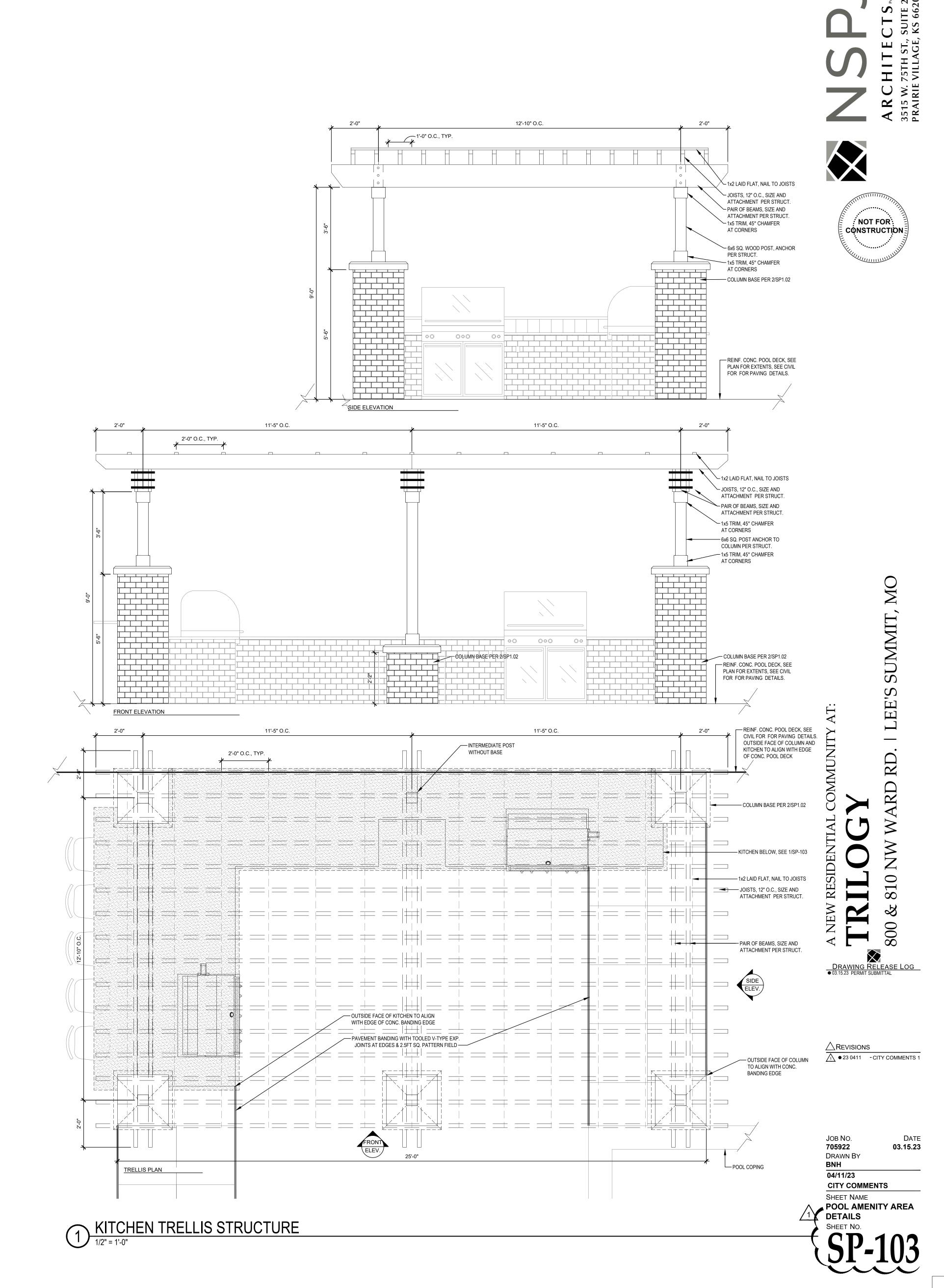
◆ 23 0411 - CITY COMMENTS 1

03.15.23

3 SWING SEATING TRELLIS STRUCTURE

- 1. UNLESS NOTED OTHERWISE IN THE PLANS & DETAILS, NEAT EXCAVATE ALL FOOTINGS INTO 2000 PSF (MIN.) SOIL (FIELD VERIFY). 3000 PSI CONC. (+/- 4" SLUMP).
- ALL EXPANSION JOÍNTS (EJ) TO HAVE SELF LEVELING CAULK OVER FELT TO SEAL COLOR TO MATCH ADJACENT PAVING.
   VERIFY ALL STRUCTURAL INFORMATION WITH STRUCTURAL ENGINEER, INCLUDING, BUT NOT LIMITED TO.
- WOOD MEMBER SIZES, ALL ANCHORING CONDITIONS, AND FOOTING/FOUNDATION SIZE AND REINFORCEMENT.
  4. VERIFY ANY NOTED ELEVATIONS AGAINST CIVIL ENGINEER GRADING PLAN.
  5. REPORT ANY DISCREPANCIES OR MISSING INFORMATION IMMEDIATELY TO THE LANDSCAPE ARCHITECT. DO
- NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHERE IT IS FOUND THAT KNOWN DISCREPANCIES EXIST. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.
- 6. ALL WOOD MEMBERS TO BE TREATED LUMBER, STAINED OR PAINTED PER SPECS., COLOR AS SELECTED BY OWNER.
  7. ALL FLATWORK CONCRETE TO BE PER CIVIL ENGINEER SPECS.
- 8. ALL VENEER MATERIALS ARE TO BE INSTALLED PER MANUFACTURER SPECS ACCORDING TO THE SUBSTRATE ON WHICH THEY ARE APPLIED. THIS INCLUDES ALL WATERPROOFING AND FLASHING NEEDS.
  9. ALL CAST STONE TO BE SUBMITTAL AS SHOP DRAWING FOR APPROVAL. SILICONE SEAL ALL JOINTS, COLOR
- TO MATCH CAST STONE TO BE 3





2022 2:48:43 PM

SITE NOTES

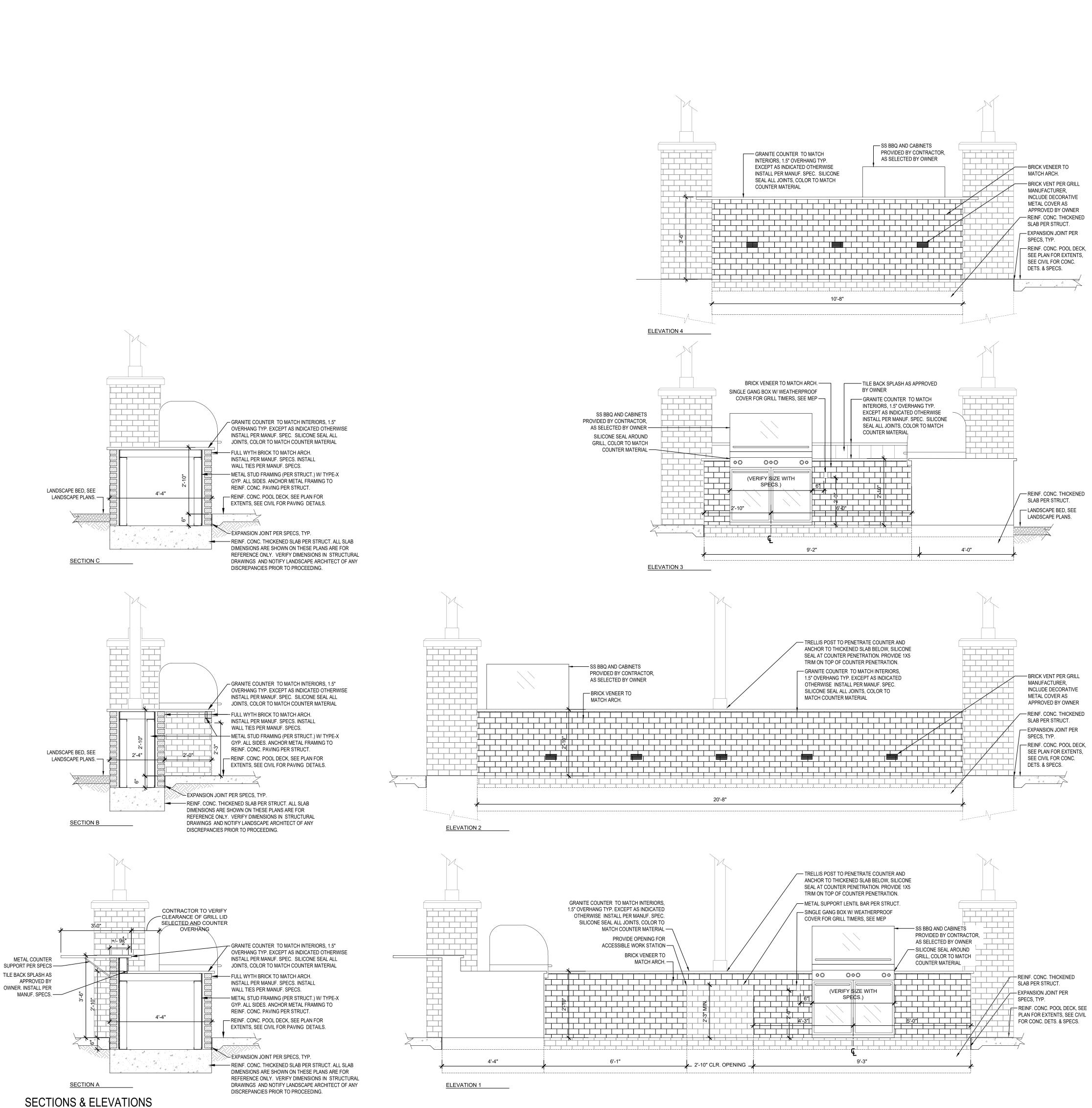
1. UNLESS NOTED OTHERWISE IN THE PLANS & DETAILS, NEAT EXCAVATE ALL FOOTINGS INTO 2000 PSF (MIN.) SOIL (FIELD VERIFY). 3000 PSI CONC. (+/- 4" SLUMP). . ALL EXPANSION JOINTS (EJ) TO HAVE SELF LEVELING CAULK OVER FELT TO SEAL - COLOR TO MATCH ADJACENT PAVING.

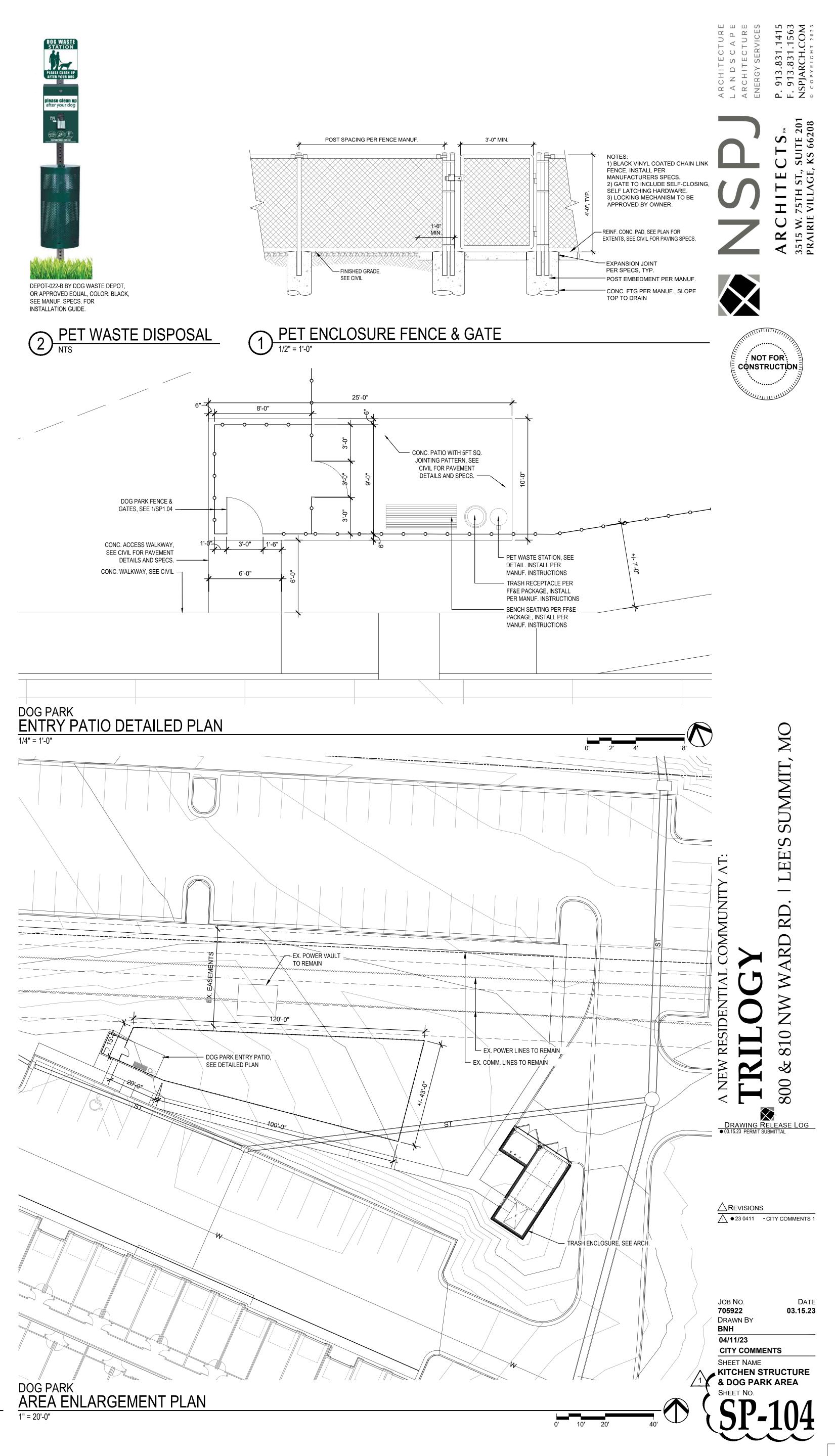
3. VERIFY ALL STRUCTURAL INFORMATION WITH STRUCTURAL ENGINEER, INCLUDING, BUT NOT LIMITED TO, WOOD MEMBER SIZES, ALL ANCHORING CONDITIONS, AND FOOTING/FOUNDATION SIZE AND REINFORCEMENT. 4. VERIFY ANY NOTED ELEVATIONS AGAINST CIVIL ENGINEER GRADING PLAN. 5. REPORT ANY DISCREPANCIES OR MISSING INFORMATION IMMEDIATELY TO THE LANDSCAPE ARCHITECT. DO NOT

WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHERE IT IS FOUND THAT KNOWN DISCREPANCIES EXIST. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION. 6. ALL WOOD MEMBERS TO BE TREATED LUMBER, STAINED OR PAINTED PER SPECS., COLOR AS SELECTED BY OWNER.

7. ALL FLATWORK CONCRETE TO BE PER CIVIL ENGINEER SPECS. 8. ALL VENEER MATERIALS ARE TO BE INSTALLED PER MANUFACTURER SPECS ACCORDING TO THE SUBSTRATE ON WHICH

THEY ARE APPLIED. THIS INCLUDES ALL WATERPROOFING AND FLASHING NEEDS. 9. ALL CAST STONE TO BE SUBMITTAL AS SHOP DRAWING FOR APPROVAL. SILICONE SEAL ALL JOINTS, COLOR TO MATCH CAST STONE.





### SITE NOTES

- 1. UNLESS NOTED OTHERWISE IN THE PLANS & DETAILS, NEAT EXCAVATE ALL FOOTINGS INTO 2000 PSF (MIN.) SOIL (FIELD VERIFY). 3000 PSI CONC. (+/- 4" SLUMP).
- ALL EXPANSION JOINTS (EJ) TO HAVE SELF LEVELING CAULK OVER FELT TO SEAL COLOR TO MATCH ADJACENT PAVING.
   VERIFY ALL STRUCTURAL INFORMATION WITH STRUCTURAL ENGINEER, INCLUDING, BUT NOT LIMITED TO, WOOD MEMBER SIZES, ALL ANCHORING CONDITIONS, AND FOOTING/FOUNDATION SIZE AND REINFORCEMENT.
- VERIFY ANY NOTED ELEVATIONS AGAINST CIVIL ENGINEER GRADING PLAN.
   REPORT ANY DISCREPANCIES OR MISSING INFORMATION IMMEDIATELY TO THE LANDSCAPE ARCHITECT. DO NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHERE IT IS FOUND THAT KNOWN DISCREPANCIES EXIST. THE
- CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.

  6. ALL WOOD MEMBERS TO BE TREATED LUMBER, STAINED OR PAINTED PER SPECS., COLOR AS SELECTED BY OWNER.
- ALL FLATWORK CONCRETE TO BE PER CIVIL ENGINEER SPECS.
   ALL VENEER MATERIALS ARE TO BE INSTALLED PER MANUFACTURER SPECS ACCORDING TO THE SUBSTRATE ON WHICH
- THEY ARE APPLIED. THIS INCLUDES ALL WATERPROOFING AND FLASHING NEEDS.

  9. ALL CAST STONE TO BE SUBMITTAL AS SHOP DRAWING FOR APPROVAL. SILICONE SEAL ALL JOINTS, COLOR TO MATCH CAST STONE.

