

PALACIO DEL SOL - NEW BUILDING ADDITION

9101 Old Cedar Avenue South Bloomington, Minnesota

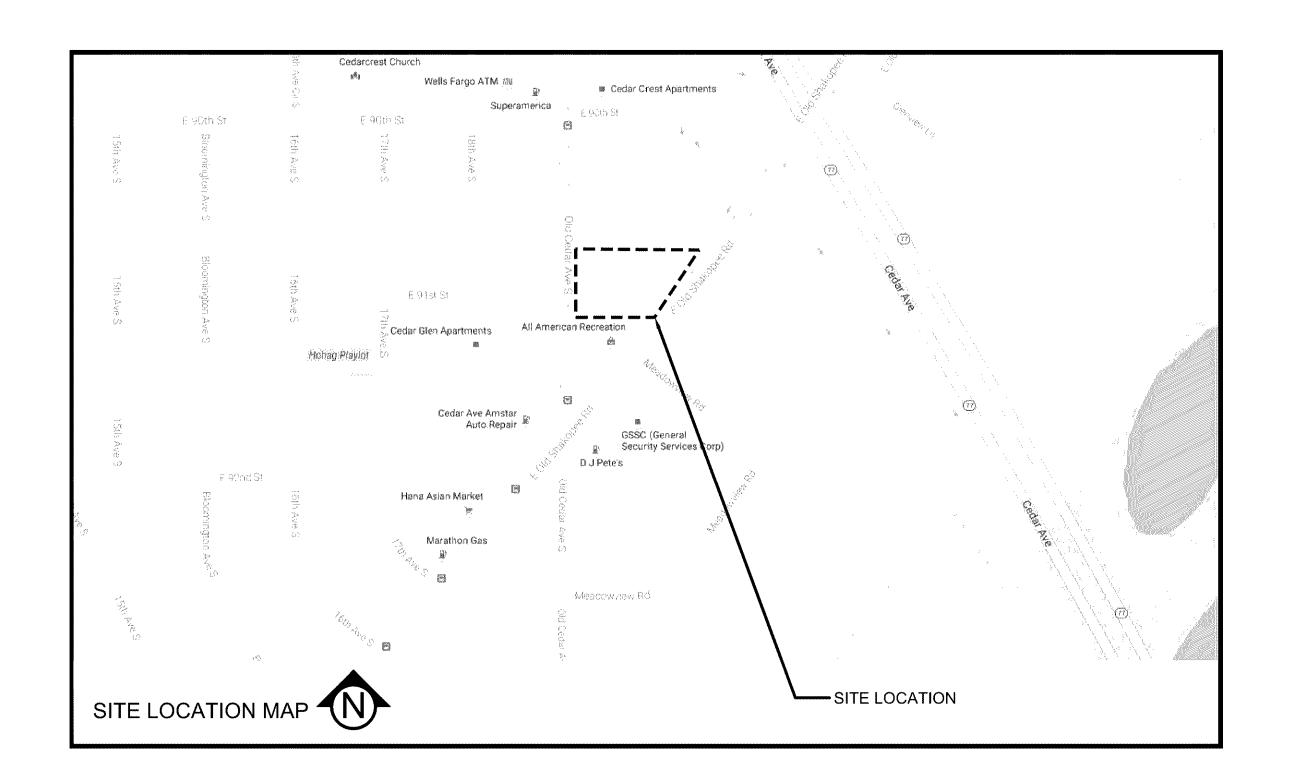
October 26, 2016

Exterior Rendering



PALACIO DEL SOL APARTMENTS

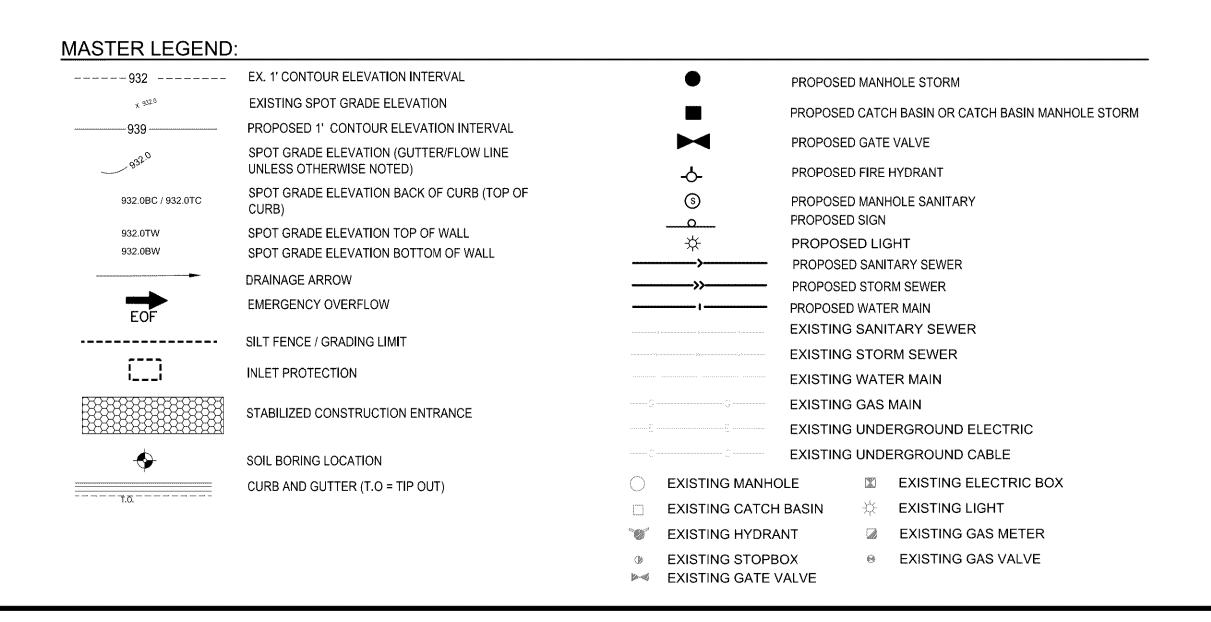
BLOOMINGTON, MINNESOTA ISSUED FOR: CITY SUBMITTAL



DEVELOPER / PROPERTY OWNER: PHD PROPERTIES P.O. BOX 5093 HOPKINS, MN 55343 **ENGINEER / LANDSCAPE ARCHITECT:** CIVIL SITE GROUP 4931 W 35TH STREET SUITE 200 ST LOUIS PARK, MN 55416 612-615-0060 SURVEYOR: W. BROWN LAND SURVEYING, INC. 8030 CEDAR AVENUE S., SUITE 228 BLOOMINGTON, MN 55425 952-854-4055 **GEOTECHNICAL ENGINEER:** BRAUN INTERTEC CORPORATION 11001 HAMPSHIRE AVENUE SOUTH

MINNEAPOLIS, MN 55438

952-995-2000





333 Washington Ave N, Suite 210

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SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER

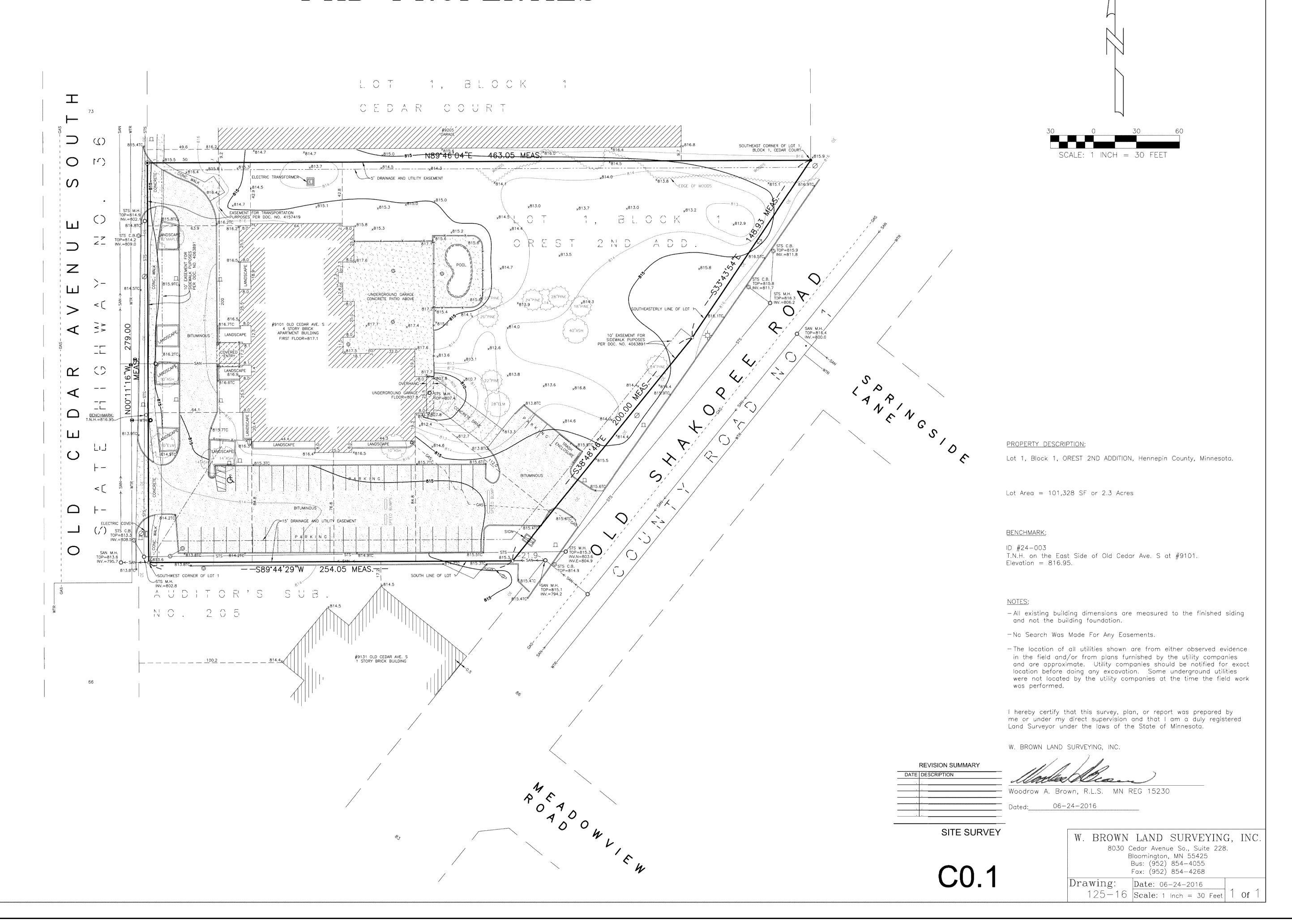
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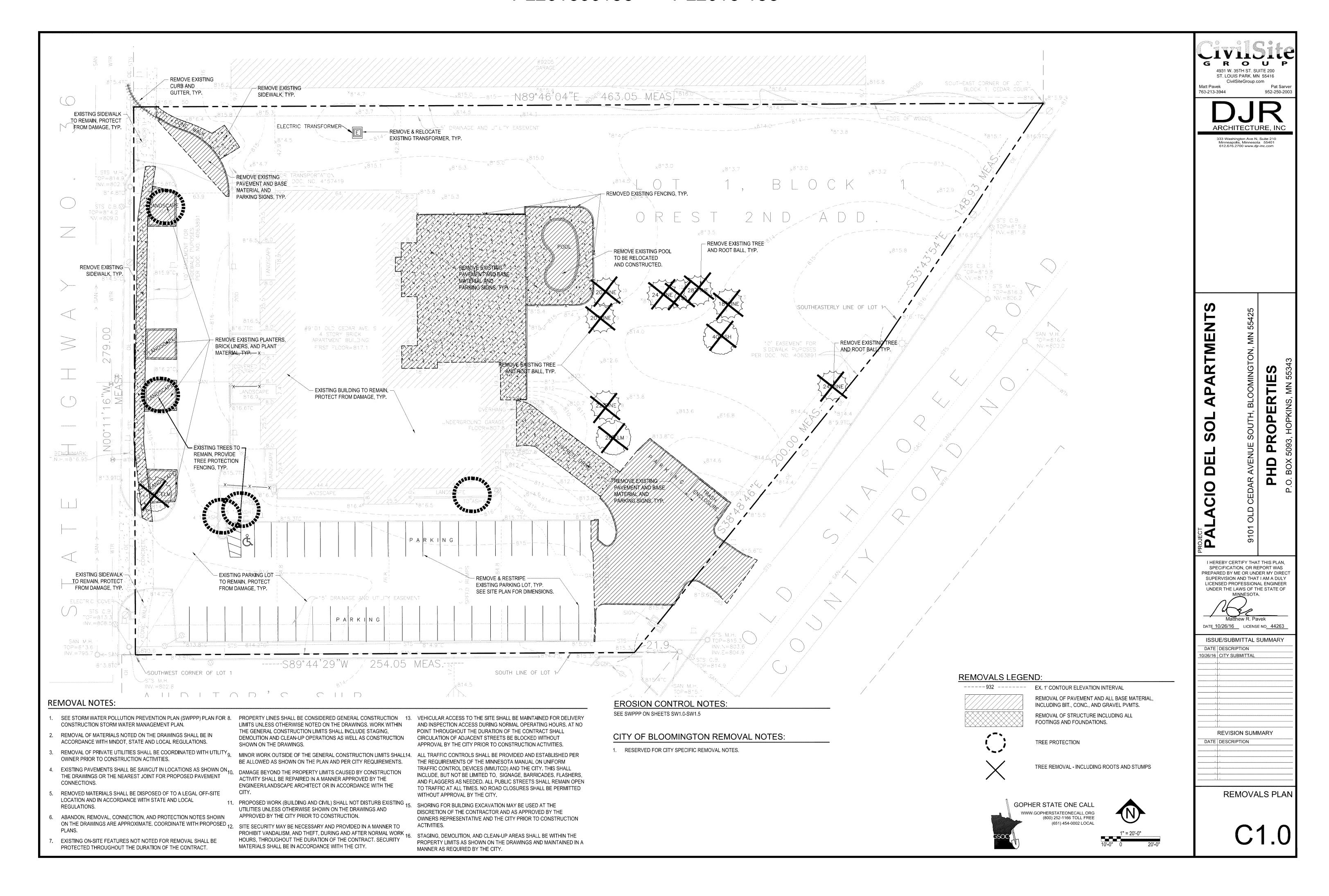
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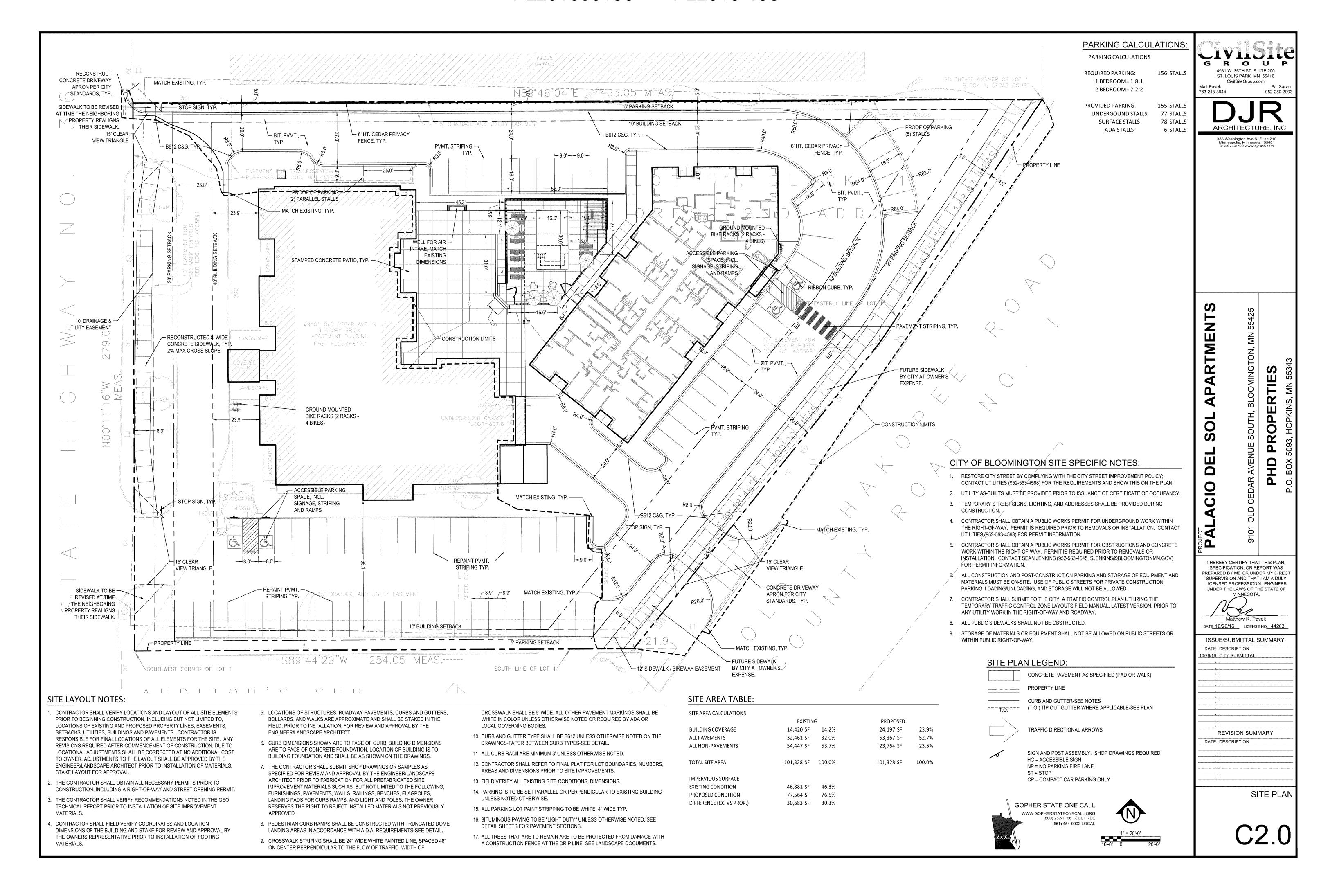
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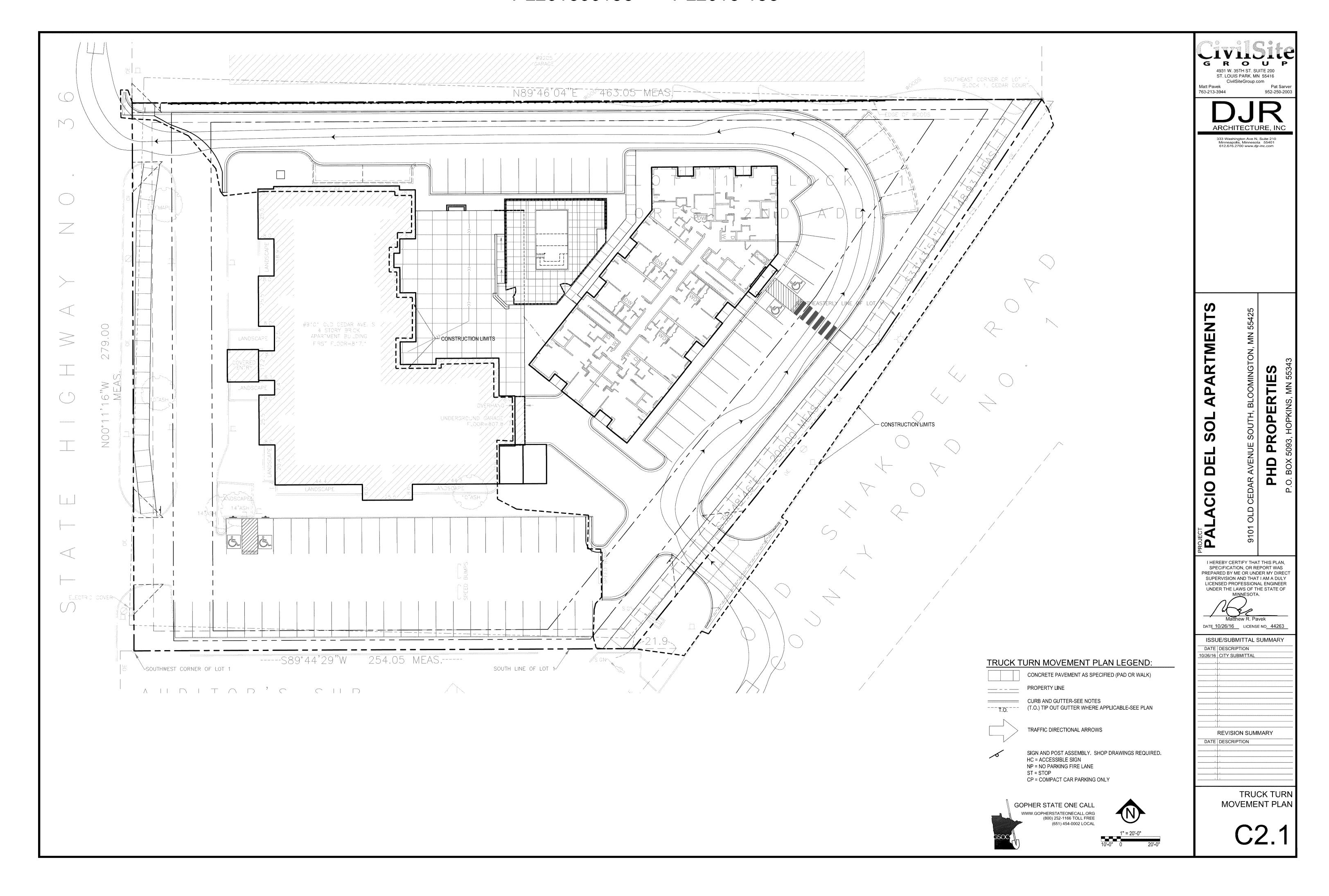
Underground Electric Storm Sewer Sanitary Sewer Water Main Underground Gas Telephone Box Catch Basin Manhole Gas Meter Light Pole Power Pole Water Shutoff Hydrant Gate Valve Traffic Sign Concrete Curb Existing Elevation 0.OTC Top of Curb Elevation Existing Contour Set Mag Nail Found Iron Monument Set, 1/2" x 14" Iron Pipe Inscribed w/ R.L.S 15230

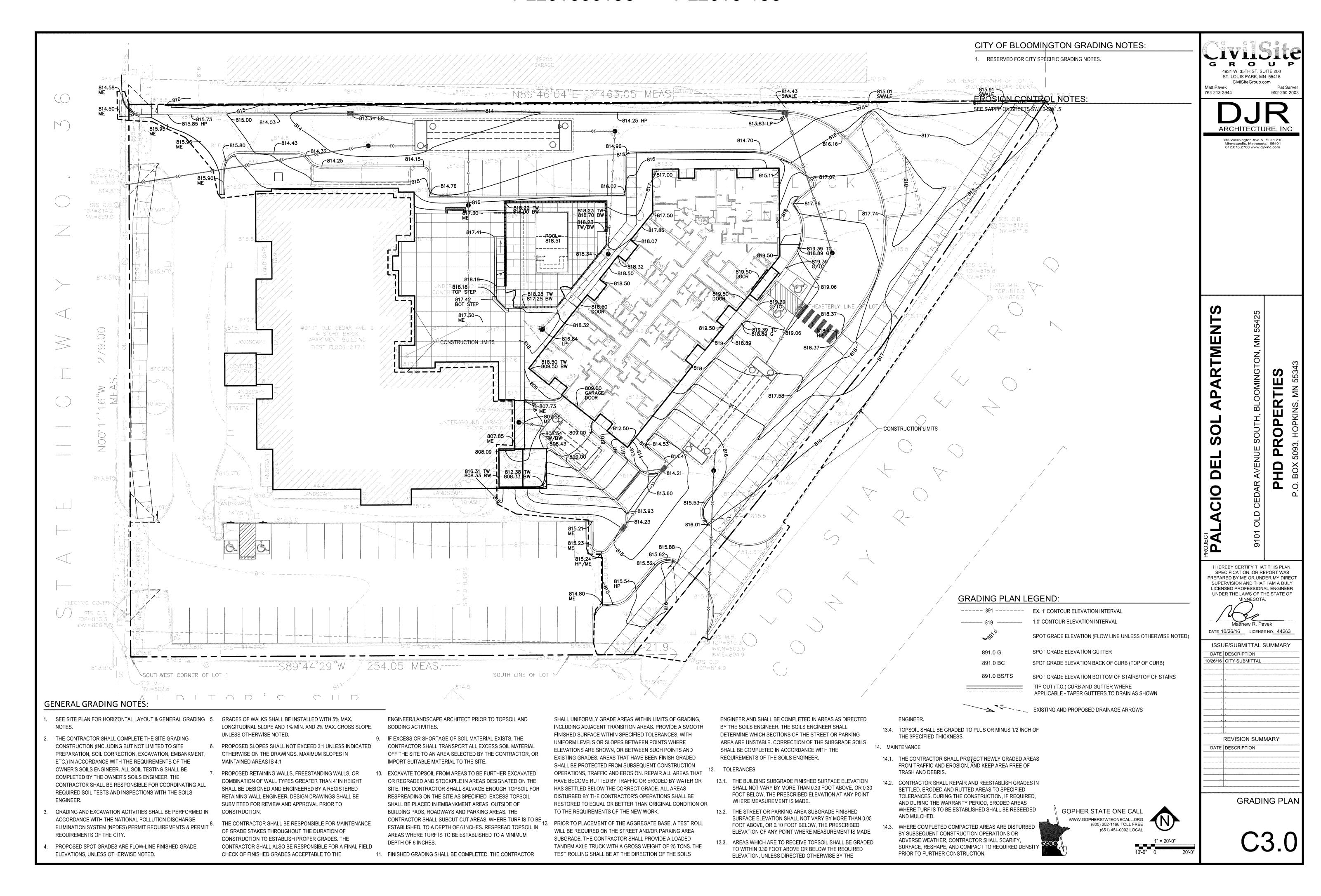
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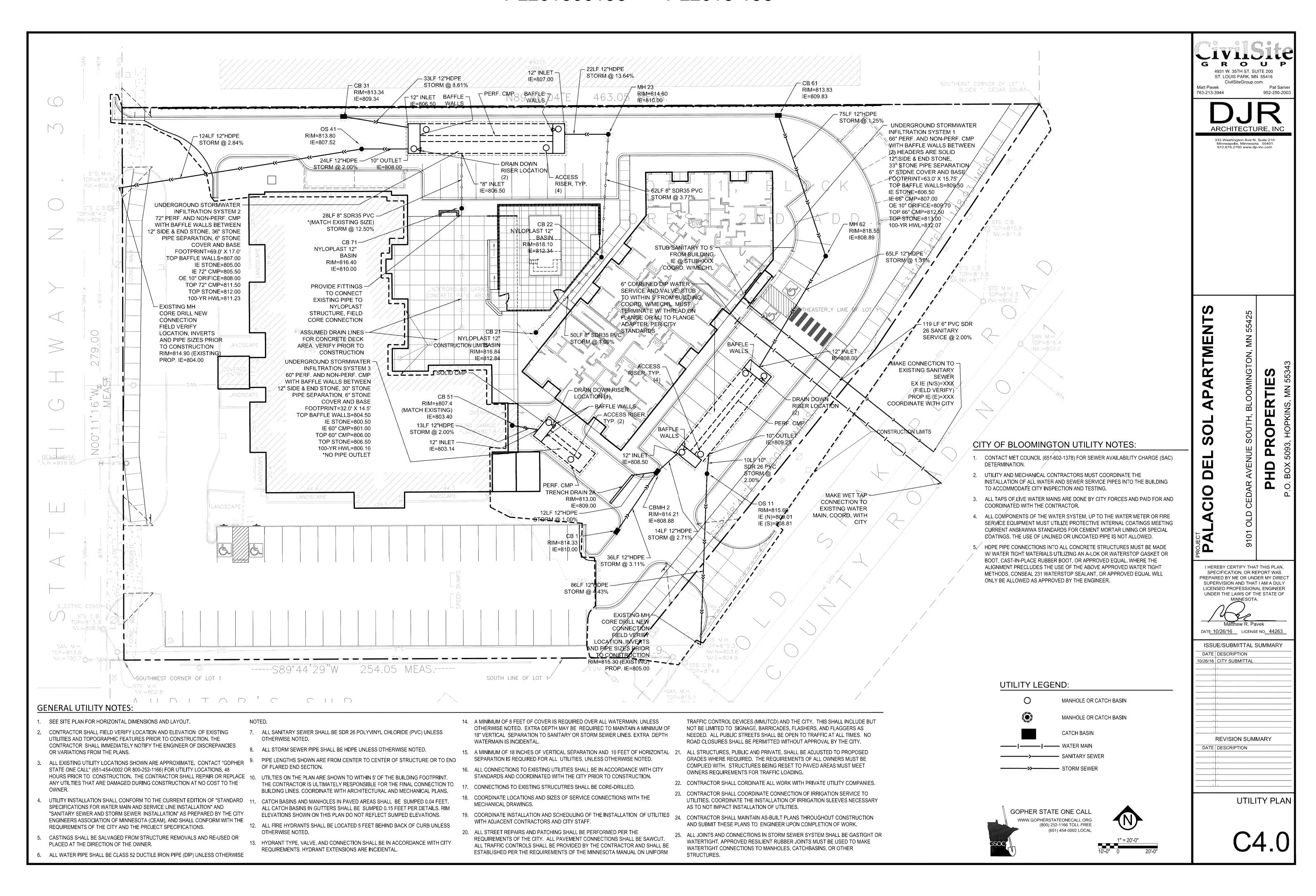




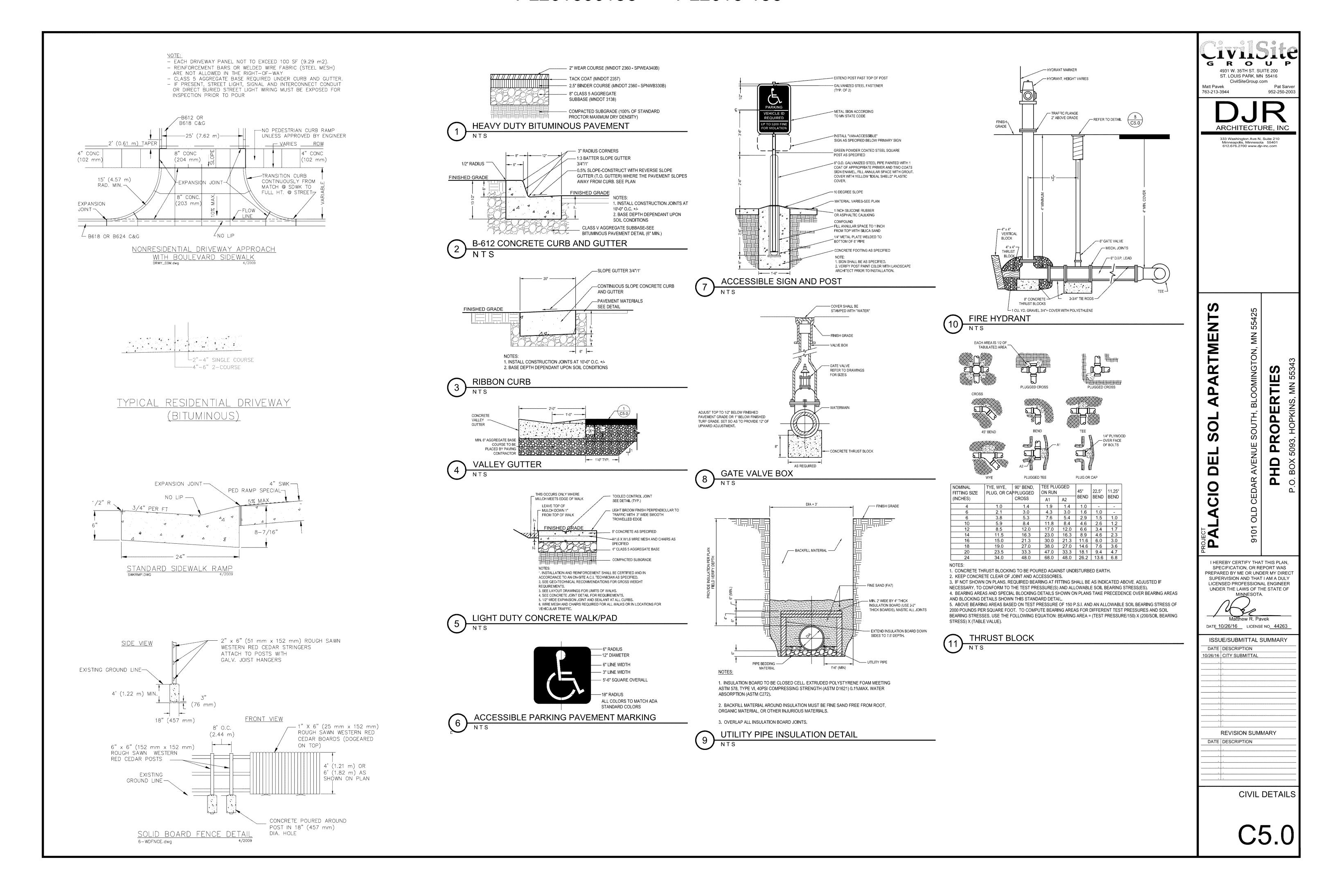


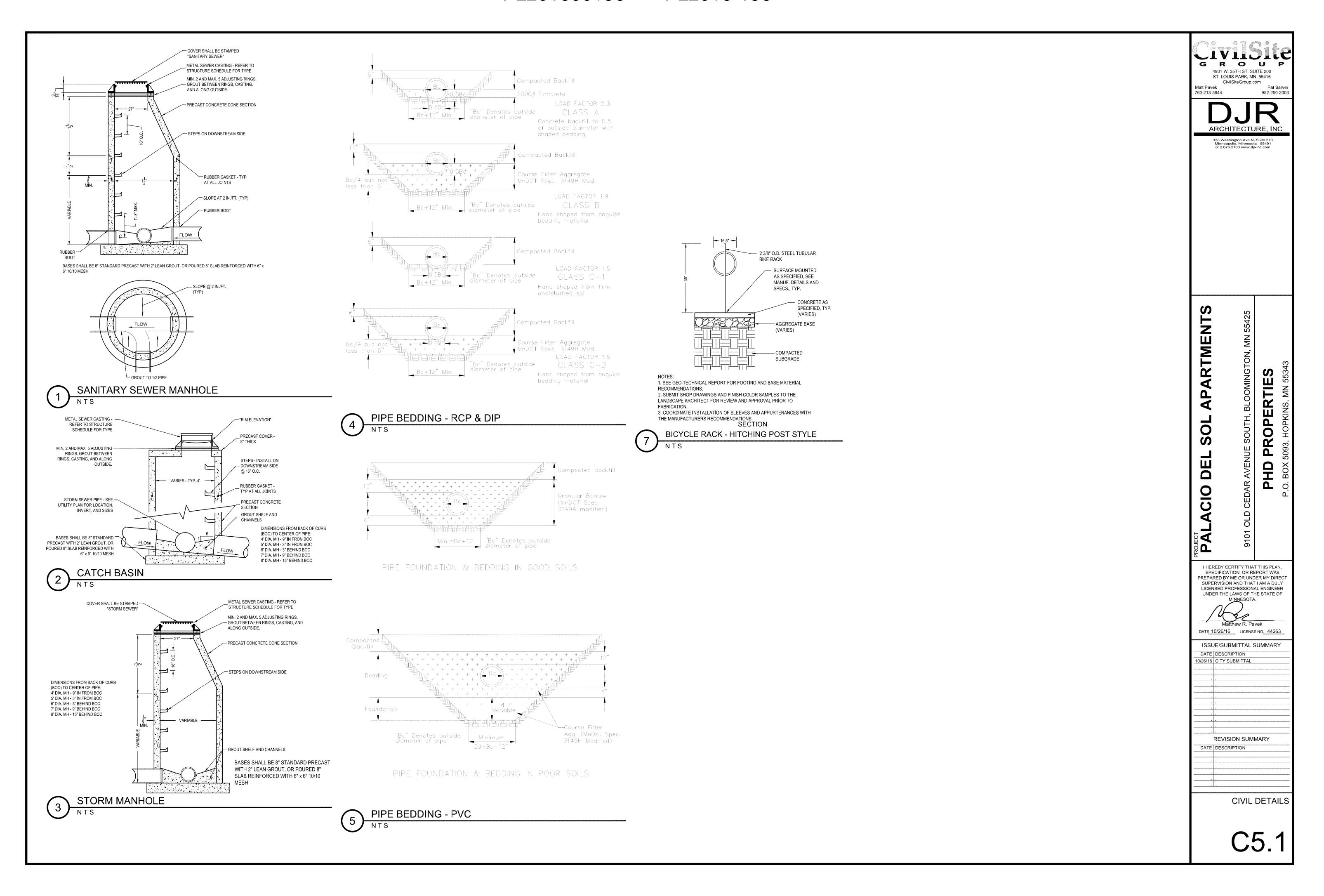


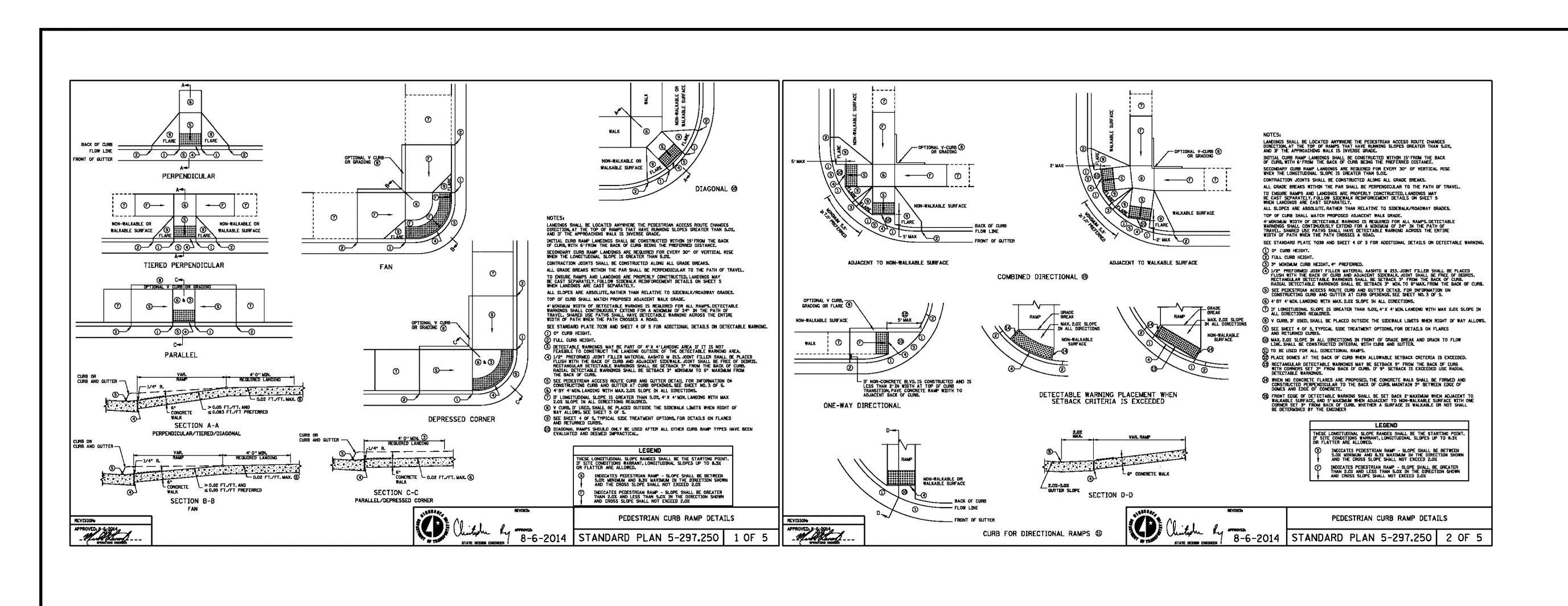


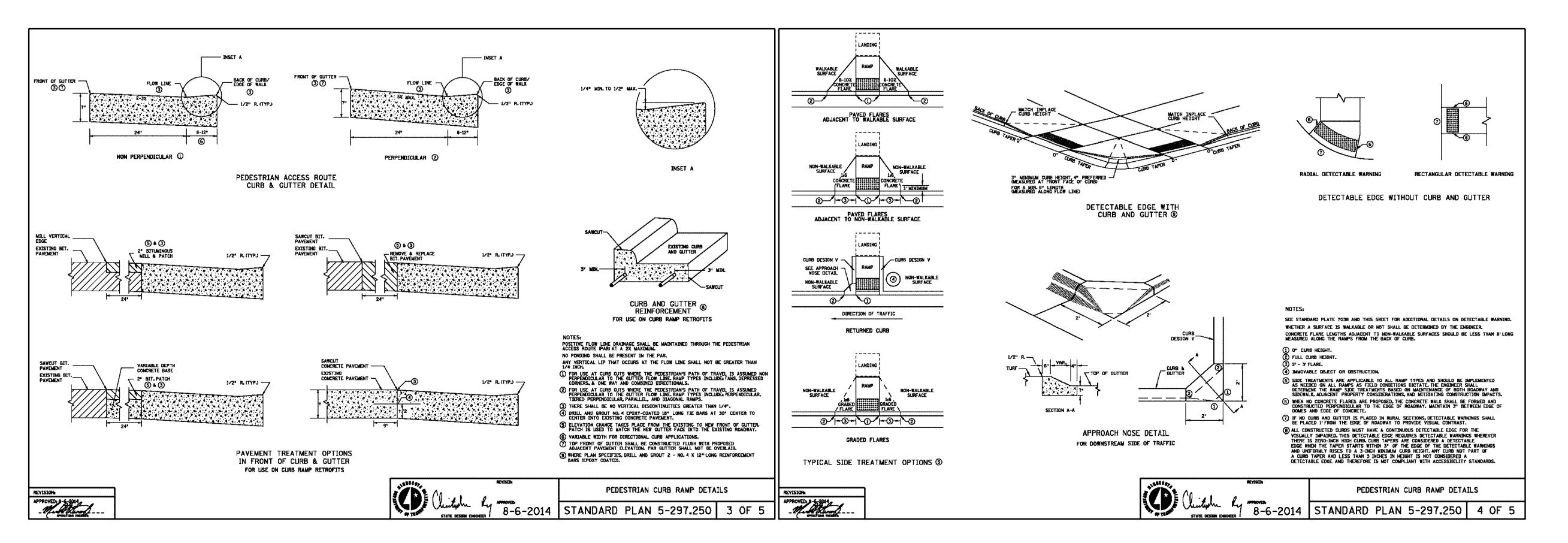


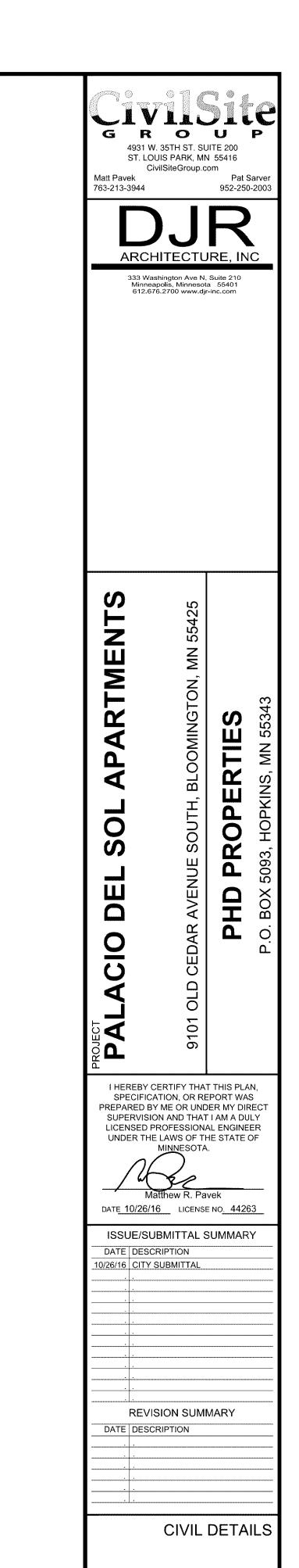
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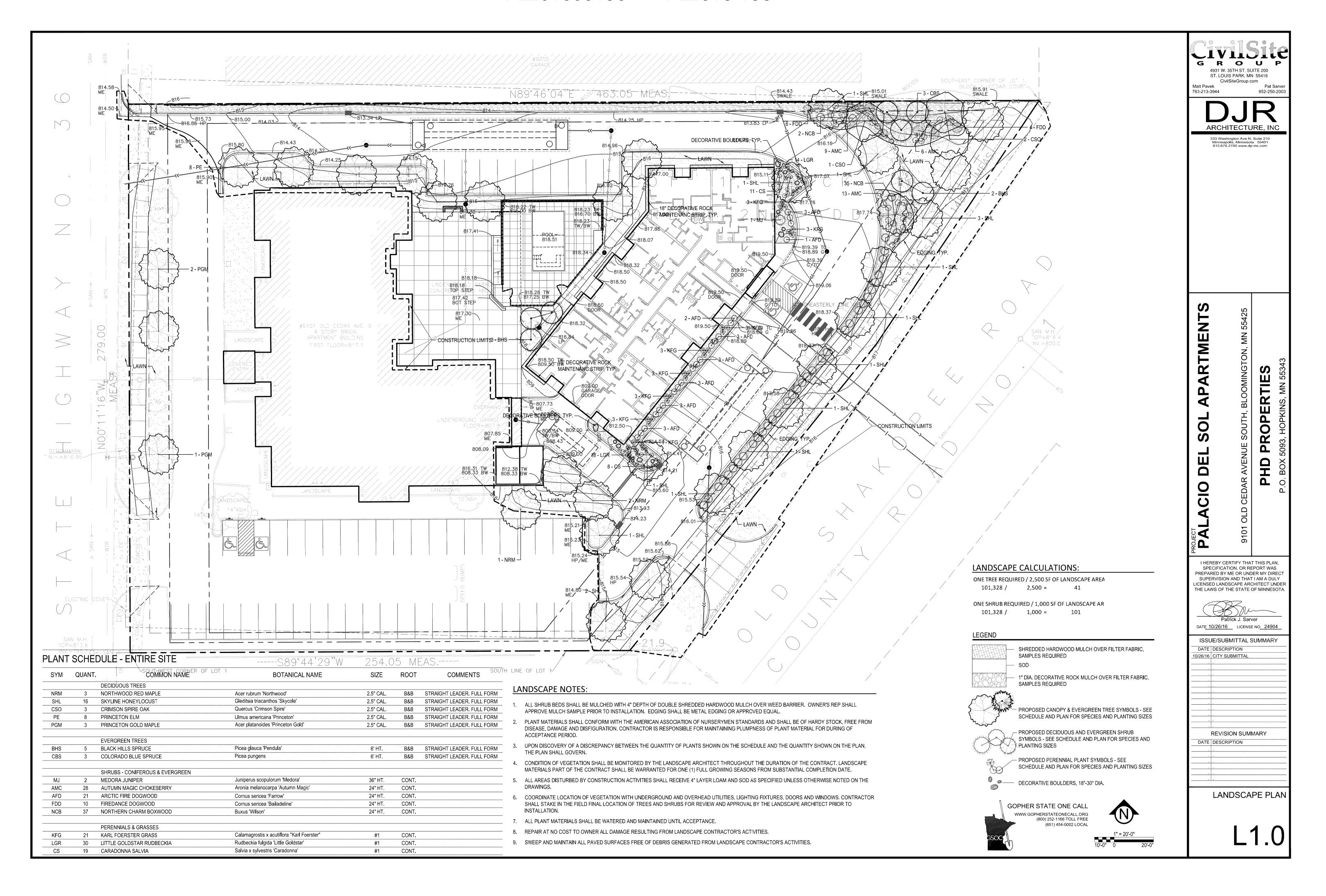






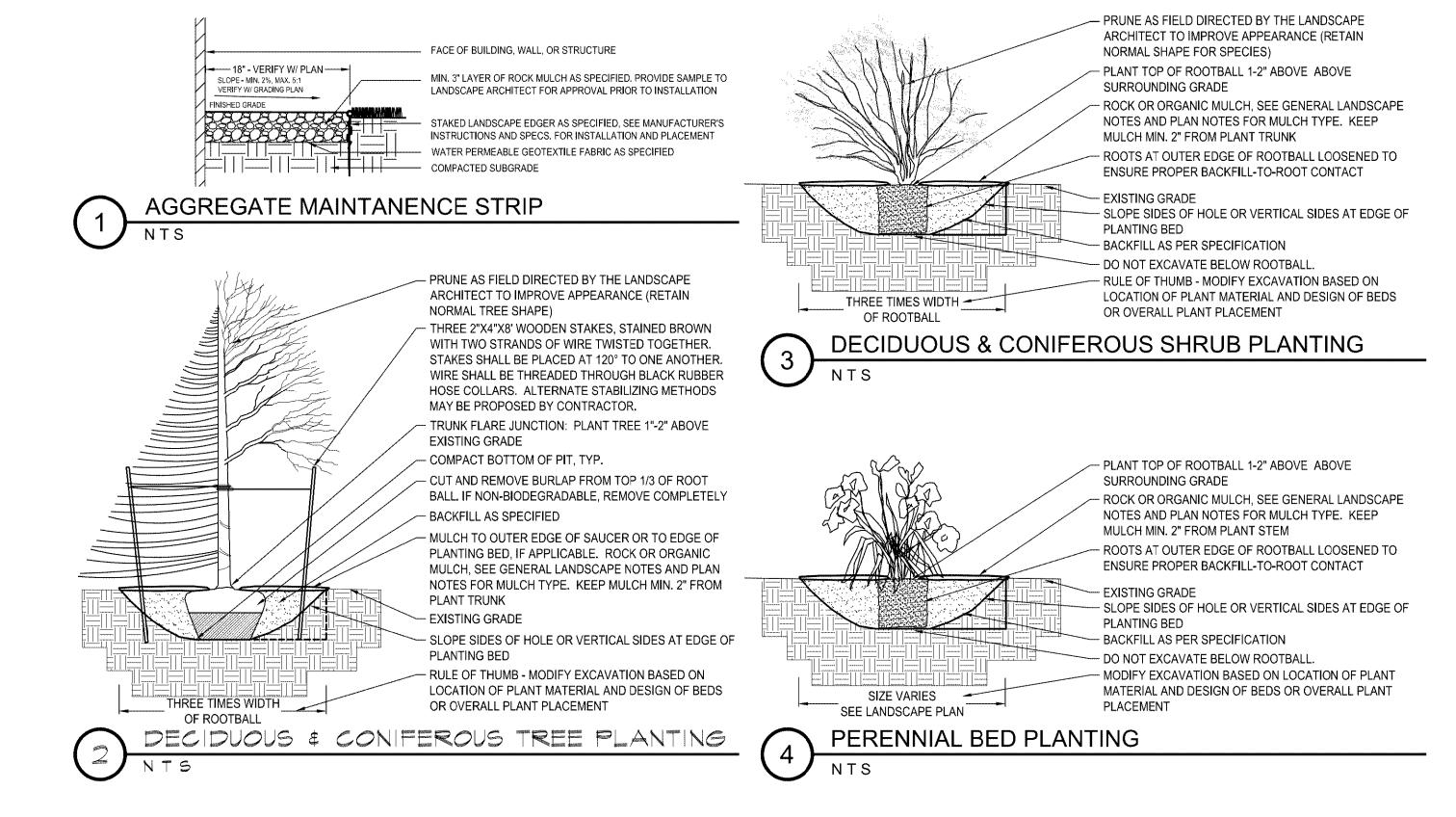






IRRIGATION NOTES:

- 1. ENTIRE SITE SHALL BE FULLY IRRIGATED. THE CONTRACTOR SHALL SUBMIT IRRIGATION SHOP DRAWINGS FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- 2. SEE MECHANICAL AND ELECTRICAL PLANS AND SPECIFICATIONS FOR IRRIGATION WATER, METER, AND POWER CONNECTIONS.
- 3. CONTRACTOR TO VERIFY LOCATION OF ALL UNDERGROUND/ABOVE GROUND FACILITIES PRIOR TO ANY EXCAVATION/INSTALLATION. ANY DAMAGE TO UNDERGROUND/ABOVE GROUND FACILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND COSTS ASSOCIATED WITH CORRECTING DAMAGES SHALL BE BORNE ENTIRELY BY THE CONTRACTOR.
- 4. SERVICE EQUIPMENT AND INSTALLATION SHALL BE PER LOCAL UTILITY COMPANY STANDARDS AND SHALL BE PER NATIONAL AND LOCAL CODES. EXACT LOCATION OF SERVICE EQUIPMENT SHALL BE COORDINATED WITH THE LANDSCAPE ARCHITECT OR EQUIVALENT AT THE JOB SITE.
- 5. CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY COMPANY FOR THE PROPOSED ELECTRICAL SERVICE AND METERING FACILITIES.
- 6. IRRIGATION WATER LINE CONNECTION SIZE IS 1-1/2" AT BUILDING. VERIFY WITH MECHANICAL PLANS.COVAGE.
- 7. ALL MAIN LINES SHALL BE 18" BELOW FINISHED GRADE.
- 8. ALL LATERAL LINES SHALL BE 12" BELLOW FINISHED GRADE.
- 9. ALL EXPOSED PVC RISERS, IF ANY, SHALL BE GRAY IN COLOR.
- 10. CONTRACTOR SHALL LAY ALL SLEEVES AND CONDUIT AT 2'-0" BELOW THE FINISHED GRADE OF THE TOP OF PAVEMENT. EXTEND SLEEVES TO 2'-0" BEYOND PAVEMENT.
- 11. CONTRACTOR SHALL MARK THE LOCATION OF ALL SLEEVES AND CONDUIT WITH THE SLEEVING MATERIAL "ELLED" TO 2'-0" ABOVE FINISHED GRADE AND CAPPED.
- 12. FABRICATE ALL PIPE TO MANUFACTURE'S SPECIFICATIONS WITH CLEAN AND SQUARE CUT JOINTS. USE QUALITY GRADE PRIMER AND SOLVENT CEMENT FORMULATED FOR INTENDED TYPE OF CONNECTION.
- 13. BACKFILL ALL TRENCHES WITH SOIL FREE OF SHARP OBJECTS AND DEBRIS.
- 14. ALL VALVE BOXES AND COVERS SHALL BE BLACK IN COLOR.
- 15. GROUP VALVE BOXES TOGETHER FOR EASE WHEN SERVICE IS REQUIRED. LOCATE IN PLANT BED AREAS WHENEVER POSSIBLE.
- 16. IRRIGATION CONTROLLER LOCATION SHALL BE VERIFIED ON-SITE WITH OWNER'S REPRESENTATIVE.
- 17. CONTROL WIRES: 14 GAUGE DIRECT BURIAL, SOLID COPPER IRRIGATION WIRE. RUN UNDER MAIN LINE. USE MOISTURE-PROOF SPLICES AND SPLICE ONLY AT VALVES OR PULL BOXES. RUN SEPARATE HOT AND COMMON WIRE TO EACH VALVE AND ONE (1) SPARE WIRE AND GROUND TO FURTHEST VALVE FROM CONTROLLER. LABEL OR COLOR CODE ALL WIRES.
- 18. AVOID OVER SPRAY ON BUILDINGS, PAVEMENT, WALLS AND ROADWAYS BY INDIVIDUALLY ADJUSTING RADIUS OR ARC ON SPRINKLER HEADS AND FLOW CONTROL ON AUTOMATIC VALVE.
- 19. ADJUST PRESSURE REGULATING VALVES FOR OPTIMUM PRESSURE ON SITE.
- 20. USE SCREENS ON ALL HEADS.
- 21. A SET OF AS-BUILT DRAWINGS SHALL BE MAINTAINED ON-SITE AT ALL TIMES IN AN UPDATED CONDITION.
- 22. ALL PIPE 3" AND OVER SHALL HAVE THRUST BLOCKING AT EACH TURN.
- 23. ALL AUTOMATIC REMOTE CONTROL VALVES WILL HAVE 3" MINIMUM DEPTH OF 3/4" WASHED GRAVEL UNDERNEATH VALVE AND VALVE BOX. GRAVEL SHALL EXTENT 3" BEYOND PERIMETER OF VALVE BOX.
- 24. THERE SHALL BE 3" MINIMUM SPACE BETWEEN BOTTOM OF VALVE BOX COVER AND TOP OF VALVE STRUCTURE.





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DATE 10/26/16 LICENSE NO. 24904

ISSUE/SUBMITTAL SUMMARY

DATE DESCRIPTION

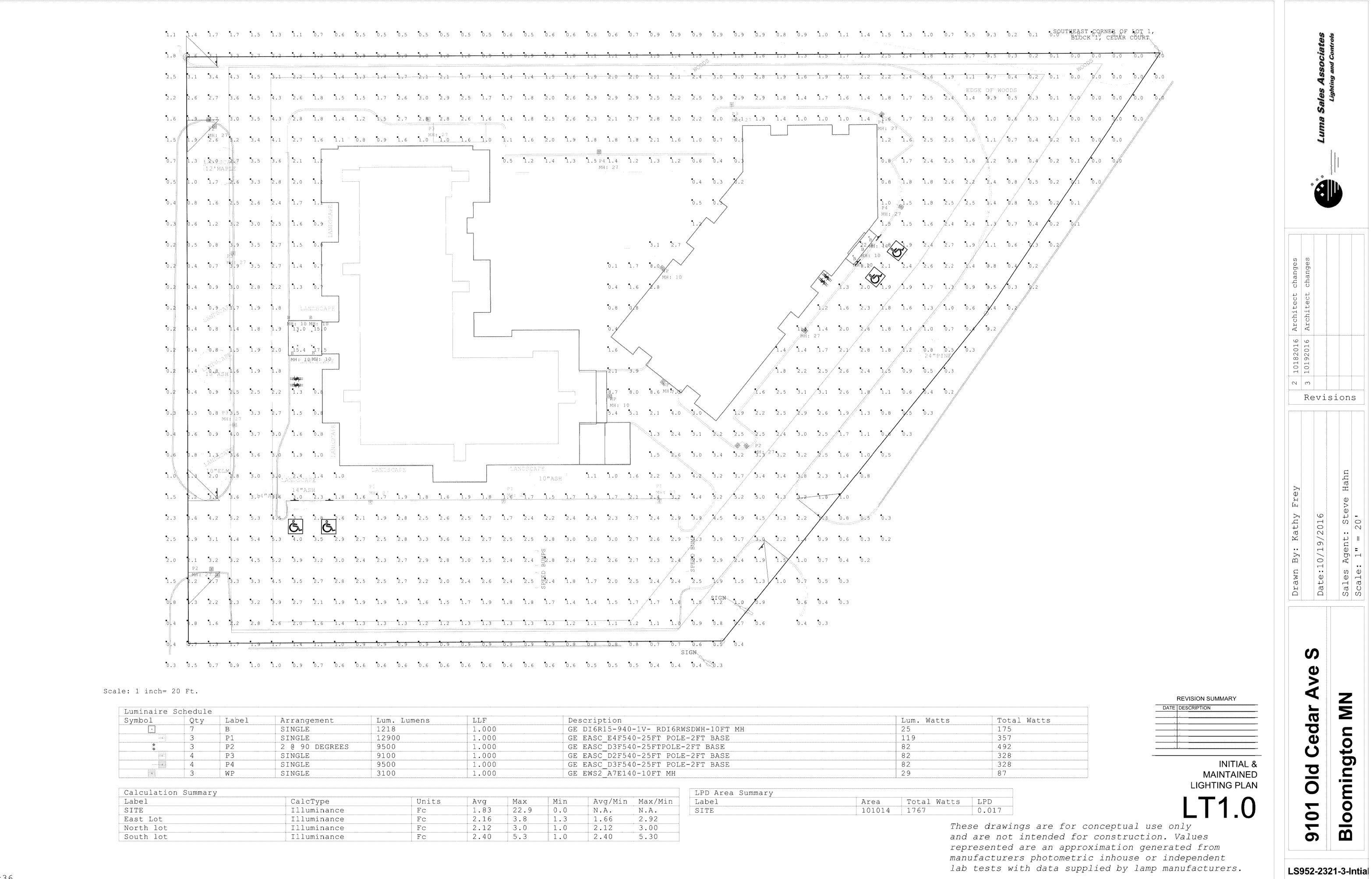
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REVISION SUMMARY

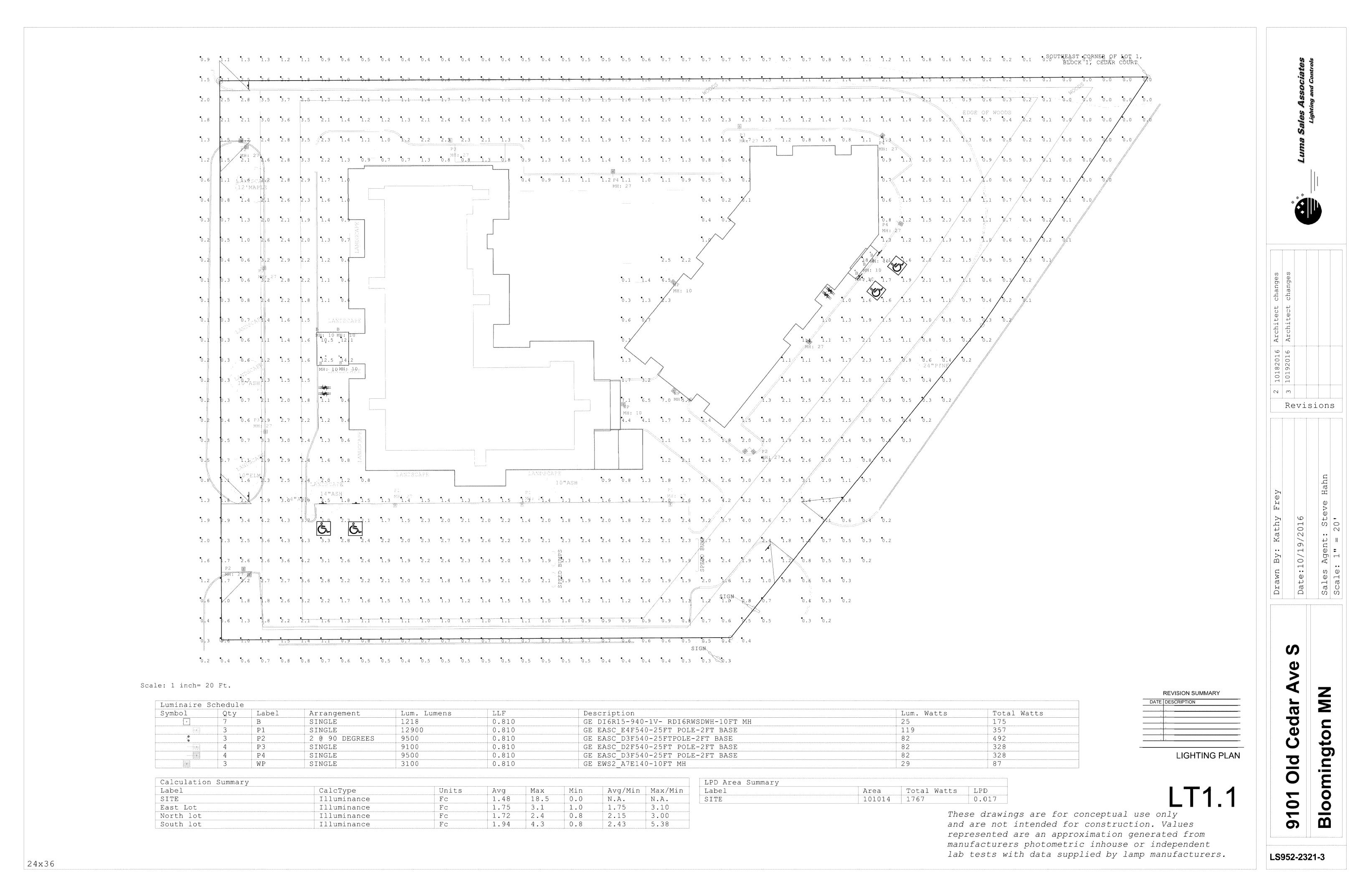
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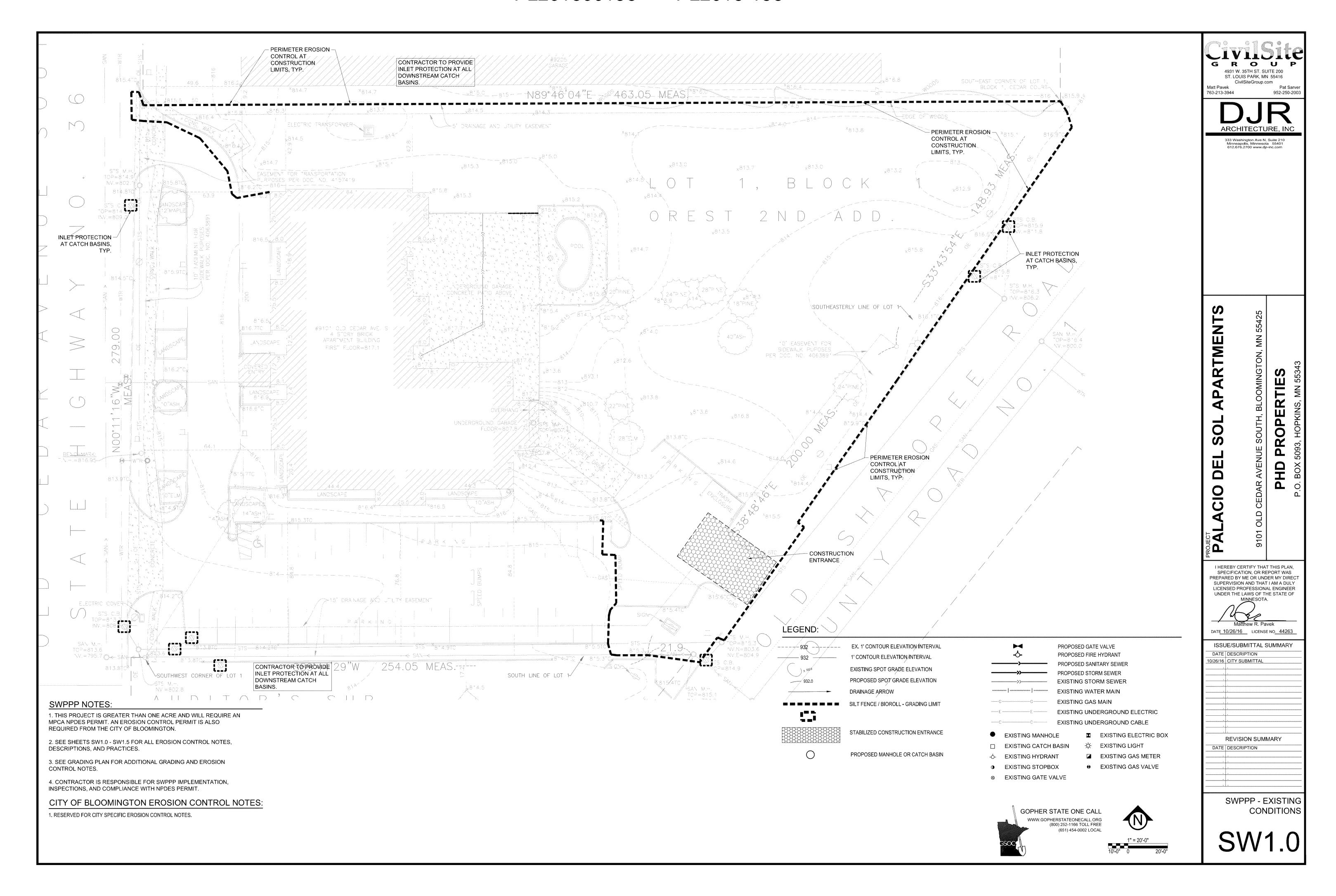
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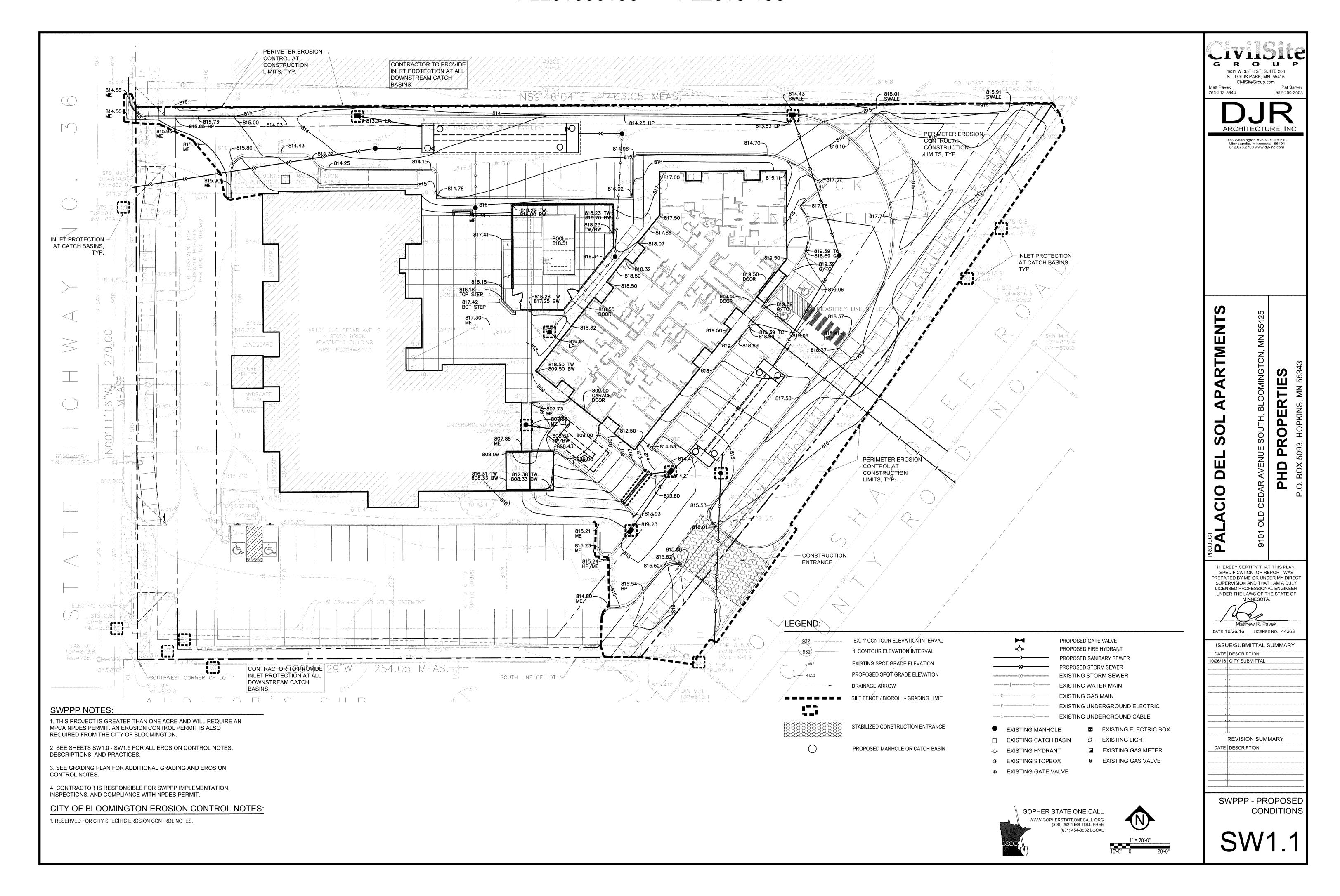
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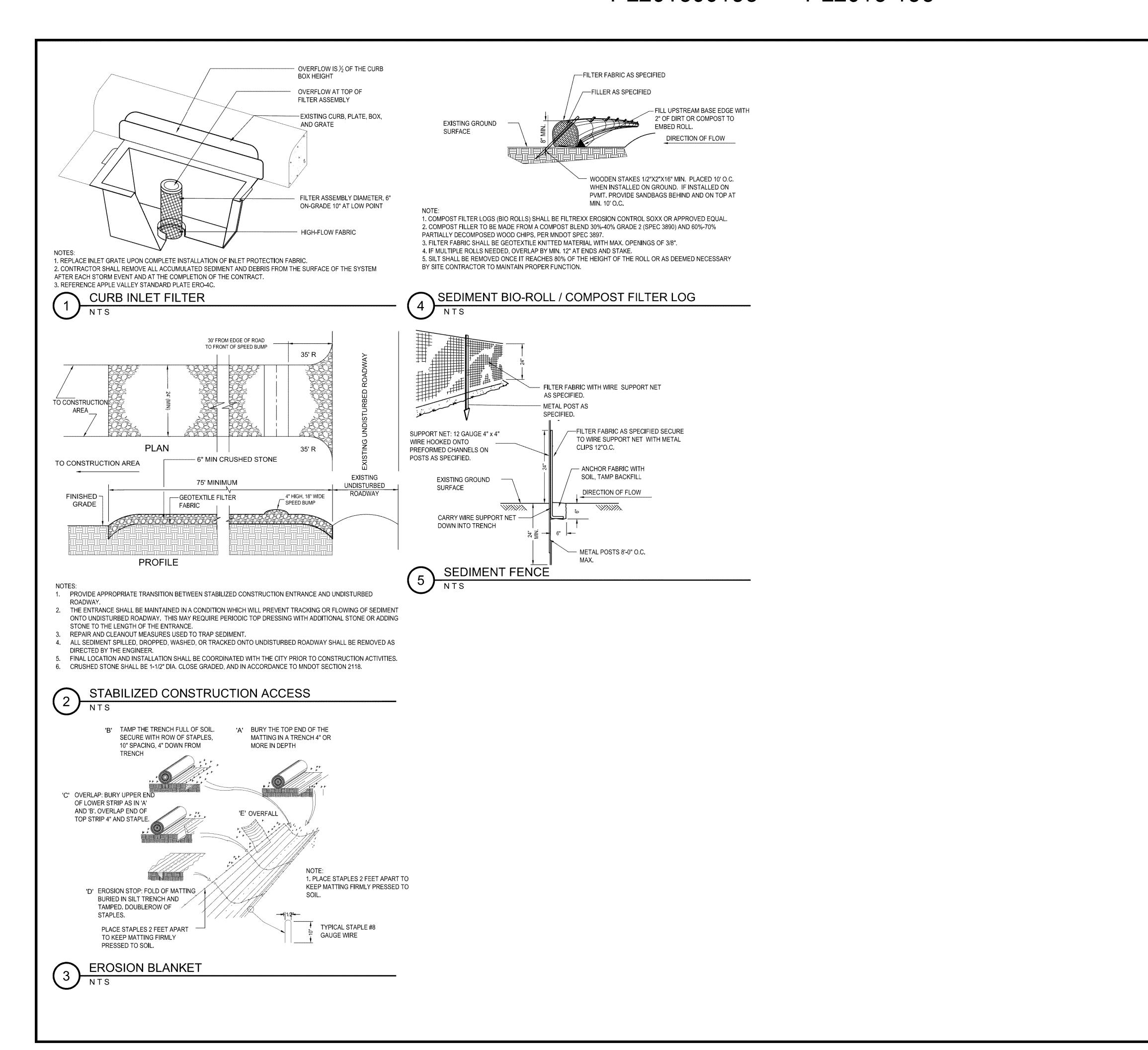


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GROUP 4931 W. 35TH ST. SUITE 200 ST. LOUIS PARK, MN 55416 CivilSiteGroup.com Matt Pavek 763-213-3944 952-250-2003 ARCHITECTURE, INC 333 Washington Ave N, Suite 210 Minneapolis, Minnesota 55401 612.676.2700 www.djr-inc.com RTMENT **Q**_ 0 Ω **₽** SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF DATE 10/26/16 LICENSE NO. 44263 ISSUE/SUBMITTAL SUMMARY DATE DESCRIPTION 10/26/16 CITY SUBMITTAL REVISION SUMMARY DATE DESCRIPTION SWPPP - DETAILS

SW1.2

GENERAL SWPPP REQUIREMENTS AND NOTES

THE CONTRACTOR AND ALL SUBCONTRACTORS INVOLVED WITH A CONSTRUCTION ACTIVITY THAT DISTURBS SITE SOIL OR WHO IMPLEMENT A POLLUTANT CONTROL MEASURE IDENTIFIED IN THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) MUST COMPLY WITH THE REQUIREMENTS OF THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT (DATED AUGUST 1, 2013 # MNR100001 PAGES 1-35) AND ANY LOCAL GOVERNING AGENCY HAVING JURISDICTION CONCERNING EROSION AND SEDIMENTATION CONTROL.

PART III STORMWATER DISCHARGE DESIGN REQUIREMENTS

SWPPP (PART III.A)

THE NATURE OF THIS PROJECT WILL BE CONSISTENT WITH WHAT IS REPRESENTED IN THIS SET OF CONSTRUCTION PLANS AND SPECIFICATIONS. SEE THE SWPPP PLAN SHEETS AND SWPPP NARRATIVE (ATTACHMENT A: CONSTRUCTION SWPPP TEMPLATE) FOR ADDITIONAL SITE SPECIFIC SWPPP INFORMATION. THE PLANS SHOW LOCATIONS AND TYPES OF ALL TEMPORARY AND PERMANENT EROSION PREVENTION AND SEDIMENT CONTROL BMP'S, STANDARD DETAILS ARE ATTACHED TO THIS SWPPP DOCUMENT.

- THE INTENDED SEQUENCING OF MAJOR CONSTRUCTION ACTIVITIES IS AS FOLLOWS:
- 1. INSTALL STABILIZED ROCK CONSTRUCTION ENTRANCE
- 2. INSTALLATION OF SILT FENCE AROUND SITE 3. INSTALL ORANGE CONSTRUCTION FENCING AROUND INFILTRATION AREAS.
- 4. CLEAR AND GRUB FOR TEMPORARY SEDIMENT BASIN / POND INSTALL
- 5. CONSTRUCT TEMPORARY SEDIMENT BASIN / POND (PART III.B)
- 6. CLEAR AND GRUB REMAINDER OF SITE 7. STRIP AND STOCKPILE TOPSOIL
- 8. ROUGH GRADING OF SITE
- 9. STABILIZE DENUDED AREAS AND STOCKPILES 10. INSTALL SANITARY SEWER, WATER MAIN STORM SEWER AND SERVICES
- 11. INSTALL SILT FENCE / INLET PROTECTION AROUND CB'S
- 12. INSTALL STREET SECTION 13. INSTALL CURB AND GUTTER
- 14. BITUMINOUS ON STREETS
- 15. FINAL GRADE BOULEVARD, INSTALL SEED AND MULCH 16. REMOVE ACCUMULATED SEDIMENT FROM BASIN / POND
- 17. FINAL GRADE POND / INFILTRATION BASINS (DO NOT COMPACT SOILS IN INFILTRATION AREAS.) (PART III.C)
- 18. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED BY EITHER SEED OR SOD/LANDSCAPING, REMOVE SILT FENCE AND RESEED ANY AREAS DISTURBED BY THE REMOVAL.

RECORDS RETENTION (PART III.E):

THE SWPPP (ORIGINAL OR COPIES) INCLUDING, ALL CHANGES TO IT, AND INSPECTIONS AND MAINTENANCE RECORDS MUST BE KEPT AT THE SITE DURING CONSTRUCTION BY THE PERMITTEE WHO HAS OPERATIONAL CONTROL OF THAT PORTION OF THE SITE. THE SWPPP CAN BE KEPT IN EITHER THE FIELD OFFICE OR IN AN ON SITE VEHICLE DURING NORMAL WORKING HOURS.

ALL OWNER(S) MUST KEEP THE SWPPP, ALONG WITH THE FOLLOWING ADDITIONAL RECORDS, ON FILE FOR THREE (3) YEARS AFTER SUBMITTAL OF THE NOT AS OUTLINED IN PART II.C. THIS DOES NOT INCLUDE ANY RECORDS AFTER SUBMITTAL OF THE NOT.

1. THE FINAL SWPPP;

- 2. ANY OTHER STORMWATER RELATED PERMITS REQUIRED FOR THE PROJECT;
- 3. RECORDS OF ALL INSPECTION AND MAINTENANCE CONDUCTED DURING CONSTRUCTION (SEE PART IV.E. INSPECTIONS AND MAINTENANCE);
- 4. ALL PERMANENT OPERATION AND MAINTENANCE AGREEMENTS THAT HAVE BEEN IMPLEMENTED, INCLUDING ALL RIGHT OF WAY, CONTRACTS, COVENANTS AND OTHER BINDING REQUIREMENTS REGARDING PERPETUAL MAINTENANCE; AND
- 5. ALL REQUIRED CALCULATIONS FOR DESIGN OF THE TEMPORARY AND PERMANENT STORMWATER MANAGEMENT SYSTEMS.

PART IV. CONSTRUCTION ACTIVITY REQUIREMENTS

EROSION PREVENTION (PART IV.B):

THE CONTRACTOR IS RESPONSIBLE FOR PLANING FOR AND IMPLEMENTING APPROPRIATE CONSTRUCTION PHASING, VEGETATIVE BUFFER STRIPS, HORIZONTAL SLOPE GRADING, AND OTHER CONSTRUCTION PRACTICES THAT MINIMIZE EROSION, SO THAT THE INSPECTION AND MAINTENANCE REQUIREMENTS OF PART IV.E. ARE COMPLIED WITH. THE LOCATION OF AREAS NOT TO BE DISTURBED MUST BE DELINEATED (E.G. WITH FLAGS, STAKES, SIGNS, SILT FENCE ETC.) ON THE DEVELOPMENT SITE BEFORE WORK BEGINS.

ALL EXPOSED SOIL AREAS MUST BE STABILIZED AS SOON AS POSSIBLE TO LIMIT SOIL EROSION BUT NO LATER THAN THE END OF THE NEXT WORK DAY WHEN EARTH-DISTURBING ACTIVITIES WILL CEASE FOR AT LEAST 14 DAYS. TEMPORARY STOCKPILES WITHOUT SIGNIFICANT SILT, CLAY OR ORGANIC COMPONENTS (E.G., CLEAN AGGREGATE STOCKPILES, DEMOLITION CONCRETE STOCKPILES, SAND STOCKPILES) AND THE CONSTRUCTED BASE COMPONENTS OF ROADS, PARKING LOTS AND SIMILAR SURFACES ARE EXEMPT FROM THIS REQUIREMENT BUT MUST COMPLY WITH PART IV.C.5.

SOILS WITHIN 200 FEET OF A PUBLIC WATER (AS DESIGNATED BY THE MINNESOTA DNR) MUST BE STABILIZED WITHIN 24 HOURS DURING FISH SPAWNING TIMES.

THE NORMAL WETTED PERIMETER OF ANY TEMPORARY OR PERMANENT DRAINAGE DITCH OR SWALE THAT DRAINS WATER FROM ANY PORTION OF THE CONSTRUCTION SITE, OR DIVERTS WATER AROUND THE SITE, MUST BE STABILIZED WITHIN 200 LINEAL FEET FROM THE PROPERTY EDGE, OR FROM THE POINT OF DISCHARGE INTO ANY SURFACE WATER. STABILIZATION OF THE LAST 200 LINEAL FEET MUST BE COMPLETED WITHIN 24 HOURS AFTER CONNECTING TO A SURFACE WATER.

STABILIZATION OF THE REMAINING PORTIONS OF ANY TEMPORARY OR PERMANENT DITCHES OR SWALES MUST BE COMPLETE WITHIN 14 DAYS AFTER CONNECTING TO A SURFACE WATER AND CONSTRUCTION IN THAT PORTION OF THE DITCH HAS TEMPORARILY OR PERMANENTLY CEASED.

TEMPORARY OR PERMANENT DITCHES OR SWALES THAT ARE BEING USED AS A SEDIMENT CONTAINMENT SYSTEM (WITH PROPERLY DESIGNED ROCK DITCH CHECKS, BIO ROLLS, SILT DIKES ETC.) DO NOT NEED TO BE STABILIZED. THESE AREAS MUST BE STABILIZED WITHIN 24 HOURS AFTER NO LONGER BEING USED AS A SEDIMENT CONTAINMENT

PIPE OUTLETS MUST BE PROVIDED WITH TEMPORARY OR PERMANENT ENERGY DISSIPATION WITHIN 24 HOURS AFTER CONNECTION TO A SURFACE WATER.

SEED NOTES (PART III.A.4.A):

ALL SEED MIXES AND APPLICATION SHALL BE IN ACCORDANCE WITH THE MNDOT SEEDING MANUAL.

GENERAL RECOMMENDATIONS:

IMMEDIATELY BEFORE SEEDING THE SOIL SHALL BE TILLED TO A MINIMUM DEPTH OF 3 INCHES.

TEMPORARY EROSION CONTROL SEEDING, MULCHING & BLANKET.

• TEMPORARY SEED SHALL BE MNDOT SEED MIX 21-112 (WINTER WHEAT COVER CROP) FOR WINTER AND 21-111 (OATS COVER CROP) FOR SPRING/SUMMER APPLICATIONS. BOTH SEED MIXES SHALL BE APPLIED AT A SEEDING RATE OF 100 LBS/ACRE.

• IMMEDIATELY AFTER SEEDING, WITHIN 24 HOURS, MNDOT TYPE 1 MULCH SHOULD BE APPLIED TO PROTECT AND ENHANCE SEED GERMINATION. MULCH SHALL BE APPLIED AT 90% COVERAGE (2 TONS PER ACRE OF STRAW MULCH)

- 3:1 (HORIZ/VERT.) OR FLATTER MUCH SHALL BE COVERED WITH MULCH
- SLOPES STEEPER THAN 3:1 OR DITCH BOTTOMS SHALL BE COVERED WITH EROSION CONTROL BLANKET. SEE PLAN FOR MORE DETAILED DITCH AND STEEP SLOPE EROSION CONTROL TREATMENTS.

SEDIMENT CONTROL (PART IV.C): SEDIMENT CONTROL PRACTICES MUST MINIMIZE SEDIMENT FROM ENTERING SURFACE WATERS, INCLUDING CURB AND GUTTER SYSTEMS AND STORM SEWER INLETS.

- a. TEMPORARY OR PERMANENT DRAINAGE DITCHES AND SEDIMENT BASINS THAT ARE DESIGNED AS PART OF A SEDIMENT CONTAINMENT SYSTEM (E.G., DITCHES WITH ROCK CHECK DAMS) REQUIRE SEDIMENT CONTROL PRACTICES ONLY AS APPROPRIATE FOR SITE CONDITIONS.
- b. IF THE DOWN GRADIENT TREATMENT SYSTEM IS OVERLOADED, ADDITIONAL UPGRADIENT SEDIMENT CONTROL PRACTICES OR REDUNDANT BMPS MUST BE INSTALLED TO ELIMINATE THE OVERLOADING, AND THE SWPPP MUST BE AMENDED TO IDENTIFY THESE ADDITIONAL PRACTICES AS REQUIRED IN PART III.A.4, A. THROUGH C.
- c. IN ORDER TO MAINTAIN SHEET FLOW AND MINIMIZE RILLS AND/OR GULLIES, THERE SHALL BE NO UNBROKEN SLOPE LENGTH OF GREATER THAN 75 FEET FOR SLOPES WITH A GRADE OF 3:1 OR STEEPER.

SEDIMENT CONTROL PRACTICES MUST BE ESTABLISHED ON ALL DOWN GRADIENT PERIMETERS BEFORE ANY UPGRADIENT LAND DISTURBING ACTIVITIES BEGIN. THESE PRACTICES SHALL REMAIN IN PLACE UNTIL FINAL STABILIZATION HAS BEEN ESTABLISHED IN ACCORDANCE WITH PART IV.G.

THE TIMING OF THE INSTALLATION OF SEDIMENT CONTROL PRACTICES MAY BE ADJUSTED TO ACCOMMODATE SHORT-TERM ACTIVITIES SUCH AS CLEARING OR GRUBBING, OR PASSAGE OF VEHICLES. ANY SHORT-TERM ACTIVITY MUST BE COMPLETED AS QUICKLY AS POSSIBLE AND THE SEDIMENT CONTROL PRACTICES MUST BE INSTALLED IMMEDIATELY AFTER THE ACTIVITY IS COMPLETED. HOWEVER, SEDIMENT CONTROL PRACTICES MUST BE INSTALLED BEFORE THE NEXT PRECIPITATION EVENT EVEN IF THE ACTIVITY IS NOT COMPLETE.

ALL STORM DRAIN INLETS MUST BE PROTECTED BY APPROPRIATE BMPS DURING CONSTRUCTION UNTIL ALL SOURCES WITH POTENTIAL FOR DISCHARGING TO THE INLET HAVE BEEN STABILIZED. INLET PROTECTION MAY BE REMOVED FOR A PARTICULAR INLET IF A SPECIFIC SAFETY CONCERN (STREET FLOODING/FREEZING) HAS BEEN IDENTIFIED AND THE PERMITTEE(S) HAVE RECEIVED WRITTEN CORRESPONDENCE FROM THE JURISDICTIONAL AUTHORITY (E.G. CITY/COUNTY/TOWNSHIP/MNDOT ENGINEER) VERIFYING THE

NEED FOR REMOVAL. THE WRITTEN CORRESPONDENCE MUST BE DOCUMENTED IN THE SWPPP OR AVAILABLE WITHIN 72 HOURS UPON REQUEST. WHEN WRITTEN CORRESPONDENCE CAN NOT BE OBTAINED IN A TIMELY MANNER, THE SPECIFIC INLET PROTECTION CAN BE REMOVED TO ALLEVIATE THE IMMEDIATE SAFETY CONCERN. HOWEVER, EFFORTS TO OBTAIN WRITTEN CORRESPONDENCE MUST BE DOCUMENTED IN THE SWPPP AND AVAILABLE WITHIN 72 HOURS UPON REQUEST. PERMISSION TO REMOVE INLET PROTECTION BASED ON A SPECIFIC SAFETY CONCERN MUST STILL BE OBTAINED FROM THE JURISDICTIONAL AUTHORITY WITHIN 30 DAYS OF REMOVAL.

TEMPORARY SOIL STOCKPILES MUST HAVE SILT FENCE OR OTHER EFFECTIVE SEDIMENT CONTROLS. AND CANNOT BE PLACED IN SURFACE WATERS, INCLUDING STORMWATER CONVEYANCES SUCH AS CURB AND GUTTER SYSTEMS, OR CONDUITS AND DITCHES UNLESS THERE IS A

VEHICLE TRACKING OF SEDIMENT FROM THE CONSTRUCTION SITE (OR ONTO STREETS WITHIN THE SITE) MUST BE MINIMIZED BY BMPS SUCH AS STONE PADS, CONCRETE OR STEEL WASH RACKS, OR EQUIVALENT SYSTEMS. STREET SWEEPING MUST BE USED IF SUCH BMPS ARE NOT ADEQUATE TO PREVENT SEDIMENT FROM BEING TRACKED ONTO

THE PERMITEE MUST MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL. MINIMIZING SOIL COMPACTION IS NOT REQUIRED WHERE THE FUNCTION OF THE SPECIFIC AREA OF THE SITE DICTATES THAT IT BE COMPACTED. METHODS FOR MINIMIZING COMPACTION INCLUDE THE USE OF TRACKED EQUIPMENT, AND STAYING OFF OF AREAS TO BE LEFT UN-COMPACTED. METHODS TO PRESERVE TOPSOIL INCLUDE STRIPPING AND STOCKPILING TOPSOIL PRIOR TO GRADING OR EXCAVATION OPERATIONS.

THE PERMITTEE MUST INSTALL TEMPORARY SEDIMENTATION BASINS AS REQUIRED IN PART III.B. OF THIS PERMIT.

DEWATERING AND BASIN DRAINING (PART IV.D):

BYPASS IN PLACE FOR THE STORMWATER

DEWATERING OR BASIN DRAINING (E.G., PUMPED DISCHARGES, TRENCH/DITCH CUTS FOR DRAINAGE) RELATED TO THE CONSTRUCTION ACTIVITY THAT MAY HAVE TURBID OR SEDIMENT LADEN DISCHARGE WATER MUST BE DISCHARGED TO A TEMPORARY OR PERMANENT SEDIMENTATION BASIN ON THE PROJECT SITE WHENEVER POSSIBLE. IF THE WATER CANNOT BE DISCHARGED TO A SEDIMENTATION BASIN PRIOR TO ENTERING THE SURFACE WATER. IT MUST BE TREATED WITH THE APPROPRIATE BMP'S SUCH THAT THE DISCHARGE DOES NOT ADVERSELY AFFECT THE RECEIVING WATER, DOWNSTREAM LANDOWNERS OR WETLANDS. THE CONTRACTOR MUST ENSURE THAT DISCHARGE POINTS ARE ADEQUATELY PROTECTED FROM EROSION AND SCOUR. THE DISCHARGE MUST BE DISPERSED OVER NATURAL ROCK RIPRAP, SAND BAGS, PLASTIC SHEATHING OR OTHER ACCEPTED ENERGY DISSIPATION MEASURES. ADEQUATE SEDIMENTATION CONTROL MEASURES ARE REQUIRED FOR DISCHARGE WATER THAT CONTAINS SUSPENDED SOLIDS.

FILTER BACKWASH WATERS MUST BE HAULED AWAY FOR DISPOSAL, RETURNED TO THE BEGINNING OF THE TREATMENT PROCESS, OR INCORPORATE INTO THE SITE IN A MANNER THAT DOES NOT CAUSE EROSION. DISCHARGE OF THE BACKWASH WATER TO SANITARY SEWER IS ALLOWED WITH PERMISSION OF THE SANITARY SEWER AUTHORITY.

INSPECTIONS AND MAINTENANCE (PART IV.E):

THE CONTRACTOR IS RESPONSIBLE AT ALL TIMES FOR THE MAINTENANCE AND PROPER OPERATION OF EROSION AND SEDIMENT CONTROL FACILITIES. THE CONTRACTOR SHALL AT A MINIMUM, INSPECT, MAINTAIN AND REPAIR ALL DISTURBED SURFACES AND ALL EROSION AND SEDIMENT CONTROL FACILITIES AND SOIL STABILIZATION MEASURES ONCE EVERY SEVEN (7) DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS FOLLOWING A RAINFALL OF 0.5 INCHES OR GREATER AND WITHIN 7 DAYS AFTER THAT. CONTINUE INSPECTION ACTIVITIES UNTIL LAND-DISTURBING ACTIVITY HAS CEASED. THEREAFTER THE CONTRACTOR SHALL PERFORM THESE RESPONSIBILITIES AT LEAST WEEKLY UNTIL VEGETATIVE COVER IS ESTABLISHED. INSPECTIONS MUST INCLUDE STABILIZED AREAS, EROSION PREVENTION AND SEDIMENT CONTROL BMP'S AND INFILTRATION AREAS.

BASED ON INSPECTION RESULTS THE CONTRACTOR MAY MODIFY THE SWPPP IN ORDER TO PREVENT POLLUTANTS FROM LEAVING THE SITE VIA STORM WATER RUNOFF. THIS MODIFICATION MUST BE MADE WITHIN 7 CALENDAR DAYS OF THE INSPECTION UNLESS OTHERWISE REQUIRED BY THE TERMS OF THE PERMIT, LEGAL, REGULATORY, OR PHYSICAL ACCESS CONSTRAINTS.

INSPECTION REPORTS MUST BE RECORDED WITHIN 24 HOURS IN WRITING AND KEPT ON FILE BY THE CONTRACTOR AS AN INTEGRAL PART OF THE SWPPP ON SITE AND THEN FOR AT LEAST 3 YEARS FROM THE DATE OF COMPLETION OF THIS PROJECT.

ALL PERIMETER CONTROL DEVICES MUST BE REPAIRED, REPLACED OR SUPPLEMENTED WHEN THEY BECOME NONFUNCTIONAL OR THE SEDIMENT REACHES 1/2 OF THE HEIGHT OF THE DEVICE. THESE REPAIRS MUST BE MADE BY THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY, OR THEREAFTER AS SOON AS FIELD CONDITIONS ALLOW ACCESS.

REMOVE ALL DELTAS AND SEDIMENT DEPOSITED IN SURFACE WATERS, INCLUDING DRAINAGE WAYS, CATCH BASINS, AND OTHER DRAINAGE SYSTEMS, AND RESTABILIZE THE AREAS WHERE SEDIMENT REMOVAL RESULTS IN EXPOSED TOPSOIL. THIS REMOVAL AND STABILIZATION MUST TAKE PLACE WITHIN 7 DAYS OF DISCOVERY UNLESS PRECLUDED BY LEGAL, REGULATORY, OR PHYSICAL ACCESS CONSTRAINTS.

SEE (ATTACHMENT A: CONSTRUCTION SWPPP TEMPLATE) FOR SITE SPECIFIC INSPECTIONS AND MAINTENANCE REQUIREMENTS.

POLLUTION PREVENTION MANAGEMENT (PART IV.F):

THE CONTRACTOR SHALL IMPLEMENT THE FOLLOWING POLLUTION PREVENTION MANAGEMENT MEASURES ON THE SITE;

SOLID WASTE: COLLECTED SEDIMENT, ASPHALT AND CONCRETE MILLINGS, FLOATING DEBRIS, PAPER, PLASTIC, FABRIC, CONSTRUCTION AND DEMOLITION DEBRIS AND OTHER WASTES MUST BE DISPOSED OF PROPERLY AND MUST COMPLY WITH MINNESOTA POLLUTION CONTROL AGENCY (MPCA) DISPOSAL REQUIREMENTS.

HAZARDOUS MATERIALS: OIL, GASOLINE, PAINT AND ANY HAZARDOUS SUBSTANCES MUST BE PROPERLY STORED, INCLUDING SECONDARY CONTAINMENT, TO PREVENT SPILLS, LEAKS OR OTHER DISCHARGE. RESTRICTED ACCESS TO STORAGE AREAS MUST BE PROVIDED TO PREVENT VANDALISM. STORAGE AND DISPOSAL OF HAZARDOUS WASTE MUST BE IN COMPLIANCE WITH MPCA REGULATIONS.

EXTERNAL WASHING OF TRUCKS AND OTHER CONSTRUCTION VEHICLES MUST BE LIMITED TO A DEFINED AREA OF THE SITE, RUNOFF MUST BE CONTAINED AND WASTEWATER PROPERLY DISPOSED OF, NO ENGINE DEGREASING IS ALLOWED ON SITE.

CONCRETE WASHOUT: ALL LIQUID AND SOLID WASTES GENERATED BY CONCRETE WASHOUT OPERATIONS MUST BE CONTAINED IN A LEAK PROOF CONTAINMENT FACILITY OR IMPERMEABLE LINER, A COMPACTED CLAY LINER THAT DOES NOT ALLOW WASHOUT LIQUIDS TO ENTER THE GROUND IS CONSIDERED AN IMPERMEABLE LINER, THE LIQUID AND SOLID WASTES MUST NOT CONTACT THE GROUND, AND THERE MUST NOT BE RUNOFF FROM THE CONCRETE WASHOUT OPERATIONS OR AREAS. LIQUID AND SOLID WASTES MUST BE DISPOSED OF PROPERLY AND IN COMPLIANCE WITH MPCA REGULATIONS. A SIGN MUST BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES. CONCRETE WASHOUT MAY ALSO OCCUR OFF SITE ACCORDING TO THE APPROPRIATE REGULATIONS.

FUELING OPERATION PLAN: ALL FUELING SHALL TAKE PLACE AT THE DESIGNATED FUELING LOCATION AND ACCORDING TO BEST PRACTICES FOR SITE FUELING OPERATIONS AS TO MINIMIZE THE POTENTIAL FOR SPILLS.

SPILL PREVENTION PLAN: ALL SPILLS SHALL BE IMMEDIATELY CLEANED UP AFTER DISCOVERY. THE SITE SUPERINTENDENT, WHO IS RESPONSIBLE FOR DAY-TO-DAY ONSITE CONSTRUCTION OPERATIONS WILL BE THE SPILL PREVENTION COORDINATOR AND WILL BE RESPONSIBLE FOR IMPLEMENTING CLEAN UP PROCEDURES, POSTING CLEAN UP RECOMMENDATIONS, AND ENSURING PROPER CLEAN UP TRAINING OF APPROPRIATE PERSONNEL.

SANITARY AND SEPTIC WASTE: SANITARY/SEPTIC FACILITIES SHALL BE PROVIDED AND MAINTAINED IN A NEAT AND SANITARY CONDITION. FOR THE USE OF THE CONTRACTOR'S EMPLOYEES, A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR AS REQUIRED BY STATE REGULATIONS WILL COLLECT SANITARY WASTE FROM PORTABLE UNITS.

FINAL STABILIZATION (PART IV.G):

THE CONTRACTOR MUST ENSURE FINAL STABILIZATION OF THE SITE ACCORDING THE DEFINITIONS IN THE NPDES GENERAL PERMIT PART IV SECTION G. THE CONTRACTOR MUST SUBMIT A NOTICE OF TERMINATION (N.O.T.) WITHIN 30 DAYS AFTER FINAL STABILIZATION IS COMPLETE OR WITHIN 7 DAYS AFTER SELLING THE SITE OR PORTION OF THE SITE (THAT HAS NOT UNDERGONE FINAL STABILIZATION) TO ANOTHER PARTY. A COPY OF THIS NOTICE OF TERMINATION / PERMIT MODIFICATION FORM MUST GO TO THE NEW OWNER. THE ORIGINAL CURRENT OWNER MUST PROVIDE A SWPPP TO THE NEW OWNER THAT SPECIFICALLY ADDRESSES THE REMAINING CONSTRUCTION ACTIVITY. SEE THE SWPPP PŁAN SHEETS AND SWPPP NARRATIVE (ATTACHMENT A: CONSTRUCTION SWPPP TEMPLATE) AND SWPPP PLAN SHEETS FOR FINAL STABILIZATION MEASURES

TRAINING (PART III.A.2)

DESIGN ENGINEER: MATTHEW R, PAVEK P.E. TRAINING COURSE: DESIGN OF SWPPP TRAINING ENTITY: UNIVERSITY OF MINNESOTA INSTRUCTOR: JOHN CHAPMAN DATES OF TRAINING COURSE: 5/15/2011 - 5/16/2011

TOTAL TRAINING HOURS: 12 RE-CERTIFICATION: 1/13/14-1/13/14 (8 HOURS), EXP. 5/31/2017

AREAS AND QUANTITIES (PART III.A.4.B&C)

SITE AREA CALCULATIONS EXISTING PROPOSED 14,420 SF 14.2% BUILDING COVERAGE 24,197 SF 23.9% **ALL PAVEMENTS** 32,461 SF 32.0% 52.7% 53,367 SF **ALL NON-PAVEMENTS** 54,447 SF 53.7% 23.5% 23,764 SF TOTAL SITE AREA 101,328 SF 100.0% 101,328 SF 100.0% IMPERVIOUS SURFACE EXISTING CONDITION 46,881 SF 46.3% PROPOSED CONDITION 77,564 SF 76.5%

OWNER INFORMATION

PHD PROPERTIES

HOPKINS, MN 55343

P.O. BOX 5093

CONTACT:

TBD

DIFFERENCE (EX. VS PROP.) 30,683 SF 30.3% **EROSION CONTROL QUANTITIES** DISTURBED AREA 62,570 SF SILT FENCE/BIO-ROLL 1,050 LF EROSION CONTROL BLANKET 0 SF

NOTE: QUANTITIES ARE FOR INFORMATIONAL PURPOSES ONLY, CONTRACTOR SHALL DETERMINE FOR THEMSELVES THE EXACT QUANTITIES FOR BIDDING AND CONSTRUCTION.

±16 EA

SWPPP CONTACT PERSON

INLET PROTECTION DEVICES

CONTRACTOR:

SWPPP INSPECTOR TRAINING: ALL SWPPP INSPECTIONS MUST BE PERFORMED BY A PERSON THAT MEETS THE TRAINING REQUIREMENTS OF THE NPDES CONSTRUCTION SITE PERMIT. TRAINING CREDENTIALS SHALL BE PROVIDED BY THE CONTRACTOR AND KEPT ON SITE WITH THE SWPPP

PARTY RESPONSIBLE FOR LONG TERM OPERATION AND MAINTENANCE OF PERMANENT STORM WATER MANAGEMENT SYSTEM

PERMANENT STORMWATER MANAGEMENT IS NOT REQUIRED AS PART OF THIS PROJECT TO MEET NPDES PERMIT REQUIREMENTS. THE PROPERTY OWNER IS RESPONSIBLE FOR THE LONG TERM OPERATION AND MAINTENANCE OF THE PROPOSED STORMWATER SYSTEM.

CONTRACTOR SHALL OBTAIN A COPY OF THE FOLLOWING SWPPP ATTACHMENTS WHICH ARE A PART OF THE OVERALL SWPPP PACKAGE: ATTACHMENT A. CONSTRUCTION SWPPP TEMPLATE - SITE SPECIFIC SWPPP DOCUMENT

ATTACHMENT B. CONSTRUCTION STORMWATER INSPECTION CHECKLIS ATTACHMENT C. MAINTENANCE PLAN FOR PERMANENT STORM WATER TREATMENT SYSTEMS

ATTACHMENT D: STORMWATER MANAGEMENT REPORT - ON FILE AT THE OFFICE OF PROJECT ENGINEER. AVAILABLE UPON REQUEST. ATTACHMENT E: GEOTECHNICAL EVALUATION REPORT - ON FILE AT THE OFFICE OF PROJECT ENGINEER, AVAILABLE UPON REQUEST.

SWPPP ATTACHMENTS (ONLY APPLICABLE IF SITE IS 1 ACRE OR GREATER):

SUPPLEMENTARY SITE SPECIFIC EROSION CONTROL NOTES: THESE NOTES SUPERCEDE ANY GENERAL SWPPP NOTES.

THIS PROJECT IS GREATER THAN 1.0 ACRES SO AN NPDES PERMIT IS REQUIRED AND NEEDS TO BE SUBMITTED TO THE MPCA. THE CONTRACTOR IS REQUIRED TO FOLLOW THE GUIDELINES IN THE NPDES PERMIT THROUGHOUT CONSTRUCTION.

PROJECT NARRATIVE:

PROJECT IS A REDEVELOPMENT OF AN EXISTING APARTMENT COMPLEX. THE EXISTING SITE CONTAINS A BUILDING, POOL, PARKING AREAS AND LANDSCAPING. THE EXISTING BUILDING AND THE MAJORITY OF THE PARKING AREAS ARE TO REMAIN, THE POOL WILL BE RECONSTRUCTED. A NEW BUILDING AND PARKING AREAS/DRIVES WILL BE CONSTRUCTED. GRADIN AND LANDSCAPING IMPROVEMENTS WILL OCCUR.

SPECIAL TMDL BMP REQUIREMENTS SITE SPECIFIC (IF REQUIRED):

DURING CONSTRUCTION:

A. STABILIZATION OF ALL EXPOSED SOIL AREAS MUST BE INITIATED IMMEDIATELY TO LIMIT SOIL EROSION BUT IN NO CASE COMPLETED LATER THAN SEVEN (7) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.

B. TEMPORARY SEDIMENT BASIN REQUIREMENTS DESCRIBED IN PART III.C. MUST BE USED FOR COMMON DRAINAGE LOCATIONS THAT SERVE AN AREA WITH FIVE (5) OR MORE ACRES DISTURBED AT ONE TIME.

2. POST CONSTRUCTION: THE WATER QUALITY VOLUME THAT MUST BE RETAINED ON SITE BY THE PROJECT'S PERMANENT STORMWATER MANAGEMENT SYSTEM DESCRIBED IN PART III.D. SHALL BE ONE (1) INCH OF RUNOFF FROM THE NEW IMPERVIOUS SURFACES CREATED BY THE PROJECT. SEE PART III.D.1. FOR MORE INFORMATION ON INFILTRATION DESIGN, PROHIBITIONS AND APPROPRIATE SITE CONDITIONS.

PERMANENT STABILIZATION NOTES SITE SPECIFIC:

PERMANENT SEED MIX

- FOR THIS PROJECT ALL AREAS THAT ARE NOT TO BE SODDED OR LANDSCAPED SHALL RECEIVE A NATIVE PERMANENT SEED
- •• AREAS IN BUFFERS AND ADJACENT TO OR IN WET AREAS MNDOT SEED MIX 33-261 (STORMWATER SOUTH AND WEST) AT 35 LBS PER ACRE.
- DRY AREAS MNDOT SEED MIX 35-221 (DRY PRAIRIE GENERAL) AT 40 LBS PER ACRE.
- MAINTENANCE SHALL BE IN ACCORDANCE TO THE MNDOT SEEDING MANUAL.

GROU 4931 W. 35TH ST. SUITE 200 ST. LOUIS PARK, MN 55416 CivilSiteGroup.com Matt Pavek 763-213-3944 952-250-200

333 Washington Ave N, Suite 210

612.676.2700 www.djr-inc.com

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DATE 10/26/16 LICENSE NO. 44263 ISSUE/SUBMITTAL SUMMARY DATE DESCRIPTION

HEREBY CERTIFY THAT THIS PLAN. SPECIFICATION, OR REPORT WAS

PREPARED BY ME OR UNDER MY DIRECT

SUPERVISION AND THAT I AM A DULY

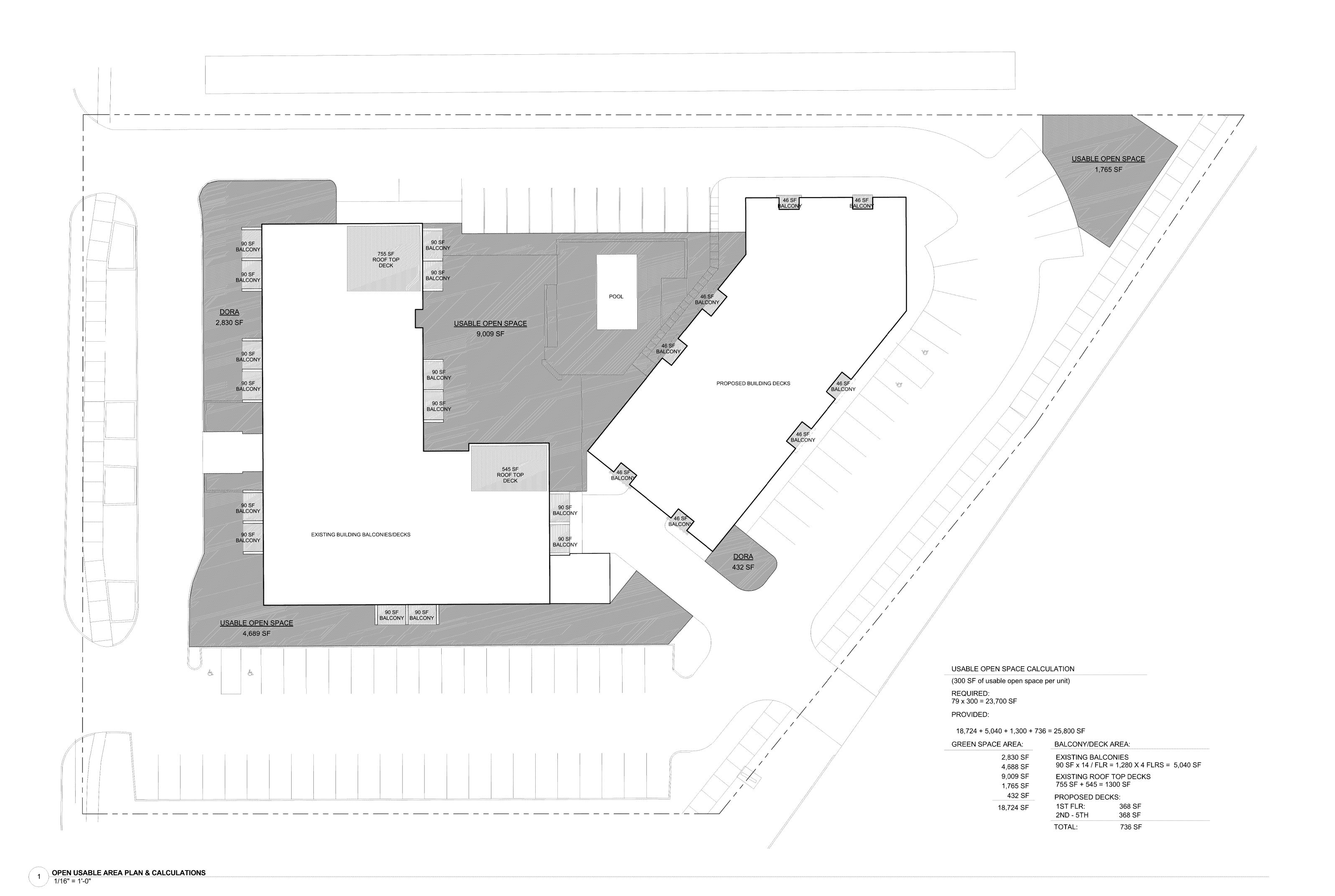
LICENSED PROFESSIONAL ENGINEER

UNDER THE LAWS OF THE STATE OF

0/26/16 CITY SUBMITTA

REVISION SUMMARY DATE DESCRIPTION

SWPPP - NARRATIVE



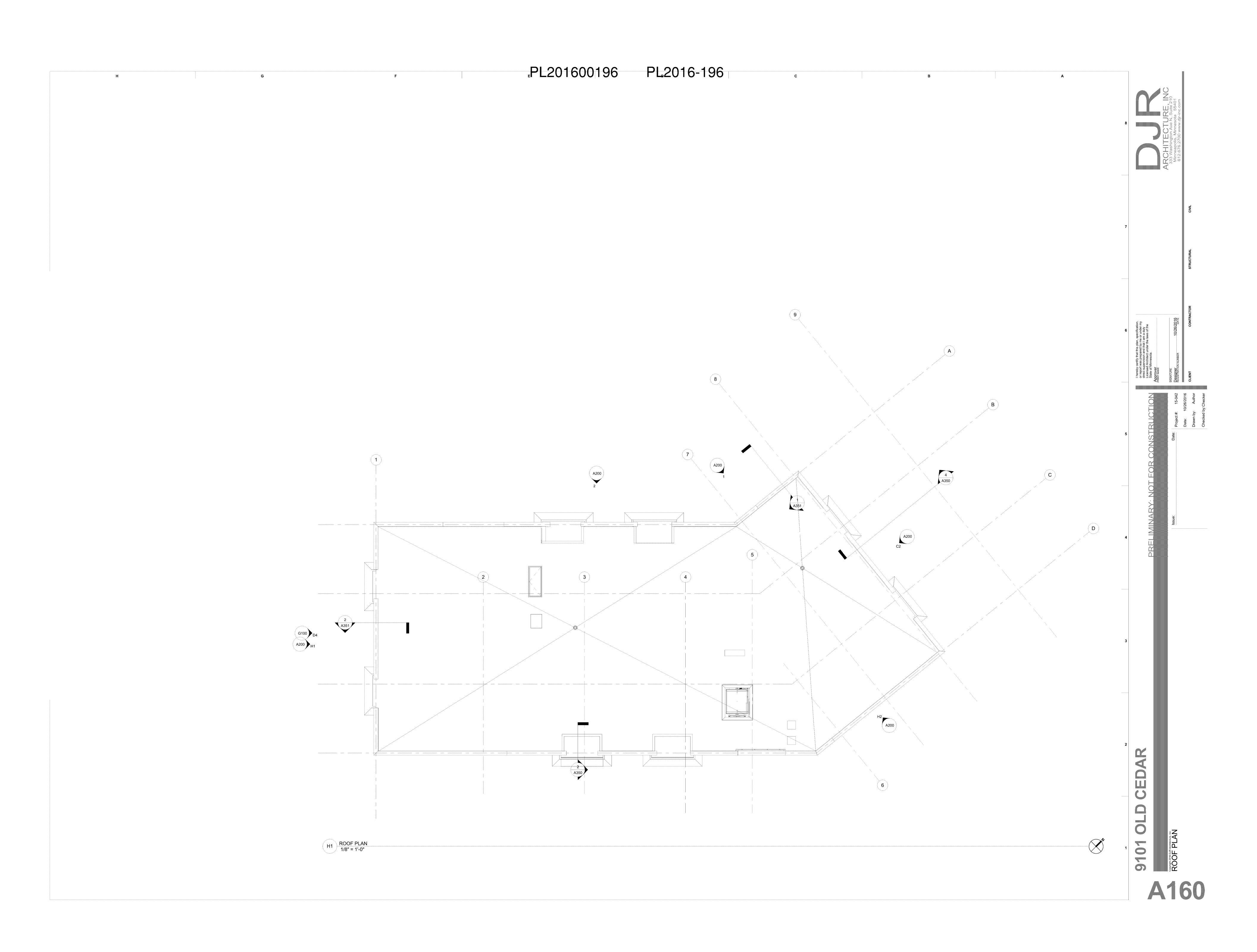
PRELIMINARY: NOT FOR CONSTRUCTION
State of Minnesota.

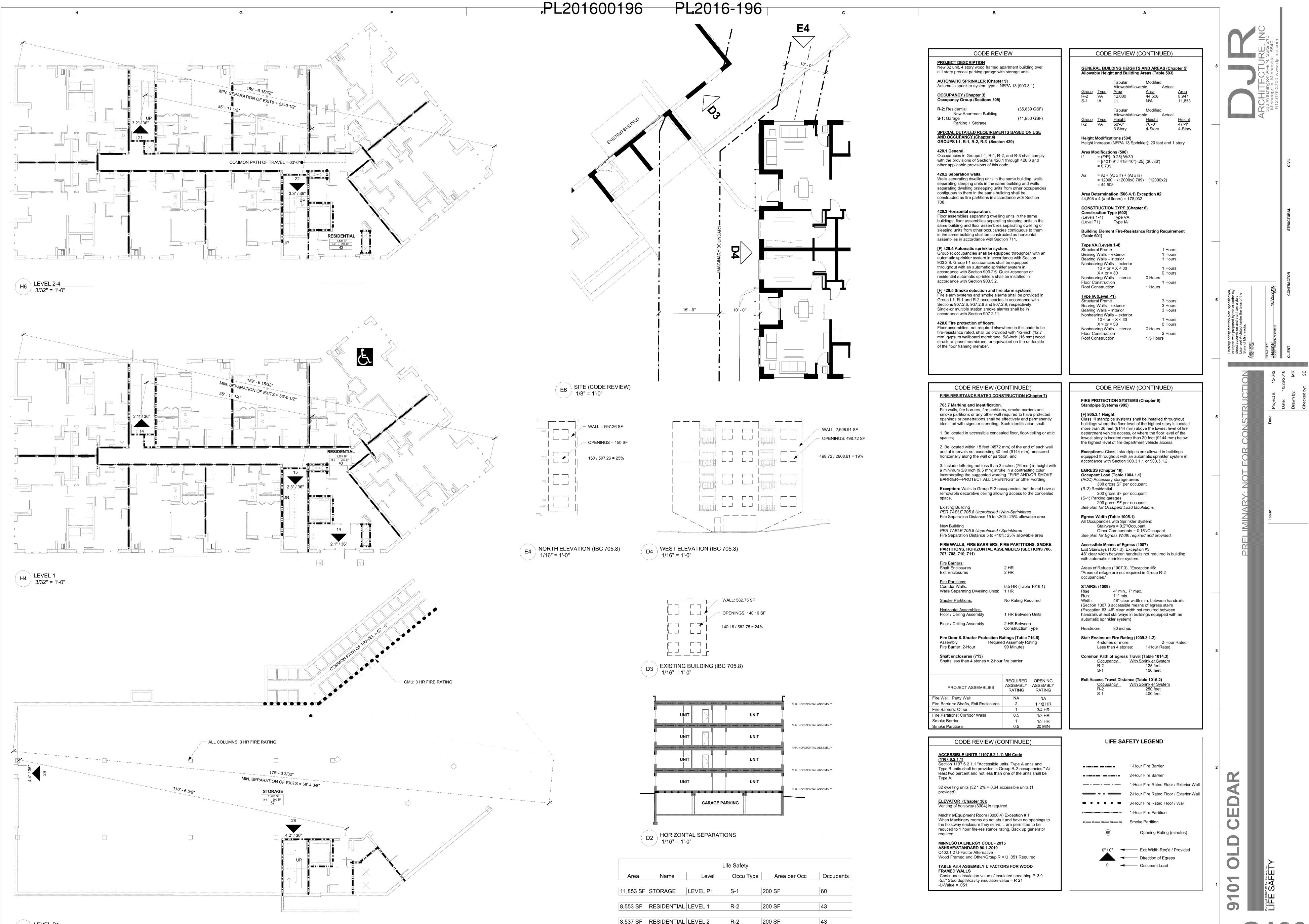
Approver
Approver
PRINT NAME

Issue:

Date: 10-26-16

CLIENT





H1 LEVEL P1 3/32" = 1'-0"

43