CONSTRUCTION DOCUMENTS FOR

MID-CONTINENT PUBLIC LIBRARY EAST LEE'S SUMMIT BRANCH

NE CORNER, SE BATTERY DRIVE AND SE BLUE PARKWAY NE 1/4 OF SECTION 10, TOWNSHIP 47 NORTH, RANGE 31 WEST LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

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DEVELOPMENT TEAM CONTACT INFORMATION OWNER/DEVELOPER ADMINISTRATIVE HEADQUARTERS 15616 E. 24 HWY. INDEPENDENCE, MO 64050 816.836.5200 STEVEN V. POTTER MID-CONTINENT PUBLIC 7301 W. 133RD STREET SUITE 200 OVERLAND PARK, KS 66213 PH: 913.381.1170 OLSSON ASSOCIATES FAX: 913.381.1174 tparsons@olssonassociates.com

BENCHMARKS:

BENCHMARK #1: ELEVATION=1027.22'

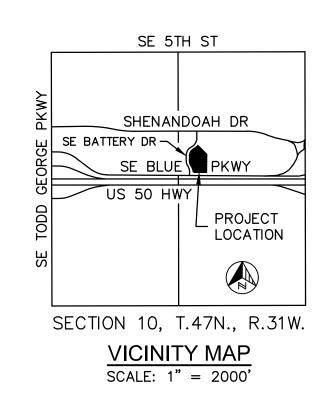
SET RAILROAD SPIKE IN THE NORTH SIDE OF A POWER POLE, 66'± NORTH OF THE & OF SE BLUE PARKWAY, 86' EAST OF THE & OF SE BATTERY DRIVE.

BENCHMARK #2: ELEVATION=1009.31'

SET CHISELED "" CUT ON THE SOUTHWESTERLY CORNER OF A CONCRETE CURB INLET #40636, 630'± NORTH OF THE & OF SE BLUE PARKWAY, 15' EAST OF THE & OF SE BATTERY DRIVE.

LEGAL DESCRIPTION:

LOT 2A, MAGNOLIA PLACE AT CHARLESTON PARK, SECOND PLAT, LOTS 2A-3, A SUBDIVISION IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, EXCEPT THE EAST 81.81 FEET THEREOF, CONTAINING 165,561 SQUARE FEET OR 3.8008 ACRES, MORE OR LESS .





Sapp Design Associates Architects, P.C. Missouri State Certificate of Authority #000607

helix.

Kansas City, MO 64108

SPECIAL NOTICES

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Terry M Parsons, Engineer MO PE-2018010505



Overland Park, KS 66213 TEL 913.381.1170 FAX 913.381.1174 www.olsson.com

Missouri State Certificate of Authority #001592

B18-0330 12.07.18

COVER SHEET

GENERAL NOTES:

- 1. THE EXISTING UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND MAY NOT INCLUDE ALL LINES PRESENT. THE CONTRACTOR SHALL BE RESPONSIBLE TO CALL "1-800-DIG-RITE", 1(800)344-7483 OR 811 AND COORDINATE FIELD LOCATION OF EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING GRADING ACTIVITIES. !!STOP!! CALL BEFORE YOU DIG!!
- THE CONTRACTOR SHALL NOT CHANGE OR DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE OWNER AND ENGINEER.
- 3. ALL WORK AND MATERIALS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE OWNER OR THE OWNER'S REPRESENTATIVE.
- 4. ALL ESTIMATES OF QUANTITIES ARE FOR INFORMATION PURPOSES ONLY. CONTRACTOR AND SUBCONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING ALL QUANTITIES AND FOR BRINGING THE PROJECT TO THE LINES AND GRADES SHOWN HEREIN. CONTRACTOR SHALL PROVIDE ALL WORK AND MATERIALS REQUIRED TO FULFILL THE PLANS IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE EARTHWORK QUANTITIES AND TO ACCOUNT FOR HAUL IN OR HAUL OFF OF MATERIAL AS NECESSARY TO MEET THE LINES AND GRADES OF THE PLANS EVEN IF QUANTITY ESTIMATES ARE SHOWN WITHIN THESE DOCUMENTS. NO ADDITIONAL PAYMENTS WILL BE MADE FOR IMPORT OR EXPORT OF MATERIAL OR FOR ADJUSTMENTS TO QUANTITY ESTIMATES.
- 5. ALL CONSTRUCTION SHALL CONFORM TO THE LATEST STANDARDS AND SPECIFICATIONS OF THE AMERICAN PUBLIC WORKS ASSOCIATION - KANSAS CITY METROPOLITAN CHAPTER (APWA-KC) AND THE CITY OF LEE'S SUMMIT, MO, EXCEPT WHERE SHOWN OTHERWISE. NOTIFY ENGINEER OF DISCREPANCIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS, PAYING ALL FEES AND FOR OTHERWISE COMPLYING WITH ALL APPLICABLE REGULATIONS GOVERNING THE WORK.
- 7. THE CONTRACTOR SHALL ADHERE TO THE PROVISIONS OF MISSOURI STATE LAW WHICH REQUIRES THAT ANY PERSON OR FIRM DOING EXCAVATION ON PUBLIC RIGHT-OF-WAY DO SO ONLY AFTER GIVING NOTICE TO, AND OBTAINING INFORMATION FROM UTILITY COMPANIES.
- PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL NOTIFY ALL THOSE COMPANIES WHICH HAVE FACILITIES IN THE NEAR VICINITY OF THE CONSTRUCTION TO BE PERFORMED.
- 9. THE CONTRACTOR SHALL LIMIT THE REMOVAL OF TREES TO THE LIMITS OF DEMOLITION SHOWN ON THE DEMOLITION PLAN.
- 10. CLEARING AND GRUBBING OPERATIONS AND DISPOSAL OF ALL DEBRIS THEREFROM SHALL BE PERFORMED BY THE CONTRACTOR IN STRICT ACCORDANCE WITH ALL LOCAL CODES AND ORDINANCES.
- 11. ALL WASTE MATERIAL RESULTING FROM THE PROJECT SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR.
- 12. ALL MANHOLES, CATCH BASINS, UTILITY VALVES AND METER PITS ARE TO BE ADJUSTED OR REBUILT TO GRADE AS REQUIRED.
- 13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROL OF SURFACE EROSION DURING CONSTRUCTION AND UNTIL THE OWNER ACCEPTS THE WORK AS COMPLETE. EROSION CONTROL MEASURES INCLUDING, BUT NOT LIMITED TO, THE SILT FENCES AND GRAVEL FILTER BAGS SHOWN ON THE EROSION CONTROL PLAN SHALL BE IN PLACE FOR THE DURATION OF THE SITE
- 14. ALL HDPE PIPE SHALL BE ADS (N-12) OR APPROVED EQUAL, AND CONFORM TO AASHTO M294 SPECIFICATIONS. ALL PIPE LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
- 15. IF PRECAST CONCRETE STORM SEWER STRUCTURES ARE TO BE USED ON THIS PROJECT, THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND HAVE THEM APPROVED BY THE ENGINEER PRIOR TO FABRICATION OF THE STRUCTURES. FAILURE TO DO SO SHALL BE CAUSE FOR REJECTION.
- 16. EXISTING TOPSOIL SHALL BE STRIPPED TO A POINT WHERE ALL VEGETATION IS REMOVED. SITE PREPARATION, GRADING AND EXCAVATION PROCEDURES SHALL CONFORM TO THE SPECIFICATIONS PROVIDED.
- 17. THE CONTRACTOR SHALL, BY HIS OWN INVESTIGATION, AND PRIOR TO COMMENCING WORK, SATISFY HIMSELF AS TO THE SURFACE AND SUBSURFACE CONDITIONS TO BE ENCOUNTERED.
- 18. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL BOUNDARY CORNERS AND SECTION CORNERS. ANY BOUNDARY CORNER AND/OR SECTION CORNER DISTURBED OR DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE RESET BY A LAND SURVEYOR LICENSED IN THE STATE OF MISSOURI, AT THE CONTRACTOR'S EXPENSE.
- 19. NO FEDERALLY OWNED MAILBOX MAY BE DISTURBED. THE CONTRACTOR SHALL GIVE AT LEAST TWENTY-FOUR (24) HOURS ADVANCE NOTICE TO THE MANAGER OF DELIVERY AND COLLECTIONS. TAMPERING WITH FEDERAL MAIL FACILITIES MAY SUBJECT THE CONTRACTOR TO PROSECUTION BY THE FEDERAL GOVERNMENT.
- 20. THE CONTOUR LINES SHOWN ARE FOR MASS GRADING PURPOSES.
- 21. EXISTING CONTOURS REPRESENT MASS GRADING ELEVATIONS.
- 22. THE CONTRACTOR SHALL FINISH GRADE SLOPES AS SHOWN NO STEEPER THAN 1 FOOT VERTICAL IN 3 FEET HORIZONTAL UNLESS OTHERWISE SHOWN BY CONTOURS OR SPOT ELEVATIONS.
- 23. THE CONTRACTOR SHALL GRADE LANDSCAPED AREAS TO PROVIDE POSITIVE DRAINAGE IN THE BORROW AREA.
- 24. THE CONTRACTOR SHALL MAKE HIS OWN ASSUMPTIONS ON THE LOCATION AND CONSISTENCY OF ANY EXISTING ROCK LAYERS UNDERLYING THE PROJECT SITE. ALL ROCK EXCAVATION AND REMOVAL SHALL BE INCLUDED IN THE CONTRACTORS' BID.
- 25. CONTRACTOR TO FIELD VERIFY ELEVATIONS AND LOCATIONS OF EXISTING UTILITIES AND INFRASTRUCTURE PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES BETWEEN PLANS AND FIELD CONDITIONS.
- 26. BY ACCEPTING AND UTILIZING ANY ELECTRONIC FILE OF ANY DRAWING, REPORT OR DATA TRANSMITTED BY OLSSON (OLSSON). THE RECIPIENT AGREES FOR ITSELF, ITS SUCCESSORS, ASSIGNS, INSURERS AND ALL THOSE CLAIMING UNDER OR THROUGH IT, THAT BY USING ANY OF THE INFORMATION CONTAINED IN THE ELECTRONIC FILE, ALL USERS AGREE TO BE BOUND BY THE FOLLOWING TERMS. ALL OF THE INFORMATION CONTAINED IN THIS ELECTRONIC FILE IS THE WORK PRODUCT AND INSTRUMENT OF SERVICE OF OLSSON, WHO SHALL BE DEEMED THE AUTHOR, AND SHALL RETAIN ALL COMMON LAW, STATUTORY LAW AND OTHER RIGHTS, INCLUDING COPYRIGHTS, UNLESS THE SAME HAVE PREVIOUSLY BEEN TRANSFERRED IN WRITING TO THE RECIPIENT. THE INFORMATION CONTAINED IN THE ELECTRONIC FILE IS PROVIDED FOR THE CONVENIENCE OF THE RECIPIENT AND IS PROVIDED IN "AS IS" CONDITION. THE RECIPIENT IS AWARE THAT DIFFERENCES MAY EXIST BETWEEN THE ELECTRONIC FILES AND THE PRINTED HARD-COPY ORIGINAL SIGNED AND SEALED DRAWINGS OR REPORTS. IN THE EVENT OF A CONFLICT BETWEEN THE SIGNED AND SEALED ORIGINAL DOCUMENTS PREPARED BY OLSSON AND THE ELECTRONIC FILES TRANSFERRED HEREWITH, THE SIGNED AND SEALED ORIGINAL DOCUMENTS SHALL GOVERN. OLSSON SPECIFICALLY DISCLAIMS ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO ELECTRONIC FILES. IT SHALL BE THE RECIPIENT'S RESPONSIBILITY TO CONFIRM THE ACCURACY OF THE INFORMATION CONTAINED IN THE ELECTRONIC FILE AND THAT IF ACCURATELY REFLECTS THE INFORMATION NEEDED BY THE RECIPIENT. THE RECIPIENT SHALL NOT RETRANSMIT THE ELECTRONIC FILE, OR ANY PORTION THEREOF, WITHOUT INCLUDING THIS DISCLAIMER AS PART OF ANY SUCH TRANSMISSION. IN ADDITION, THE RECIPIENT AGREES, TO THE FULLEST EXTENT PERMITTED BY LAW, TO INDEMNIFY AND HOLD HARMLESS OLSSON, ITS OFFICERS, DIRECTORS EMPLOYEES AND SUBCONSULTANTS AGAINST ANY AND ALL DAMAGES, LIABILITIES, CLAIMS OR COSTS, INCLUDING REASONABLE ATTORNEY'S AND EXPERT WITNESS FEES AND DEFENSE COSTS, ARISING FROM ANY CHANGES MADE BY ANYONE OTHER THAN OLSSON OR FROM ANY REUSE OF THE ELECTRONIC FILES WITHOUT THE PRIOR WRITTEN CONSENT OF OLSSON.
- 27. DESIGN PROFESSIONAL SHALL REVIEW SHOP DRAWINGS OR SAMPLES FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPTS ON THE PROJECT AND FOR COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS, AND SHALL NOT EXTEND TO MEANS OR METHODS OF CONSTRUCTION. THE DESIGN PROFESSIONAL'S REVIEW SHALL NOT RELIEVE CONTRACTOR FROM RESPONSIBILITY FOR ANY VARIATION FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS UNLESS CONTRACTOR HAS IN WRITING CALLED DESIGN PROFESSIONAL'S ATTENTION TO EACH SUCH VARIATION AT THE TIME OF SUBMISSION. AND DESIGN PROFESSIONAL HAS GIVEN WRITTEN APPROVAL OF EACH SUCH VARIATION BY SPECIFIC WRITTEN NOTATION THEREOF INCORPORATED INTO OR ACCOMPANYING THE SHOP DRAWING OR SAMPLE: NOR WILL ANY APPROVAL BY THE DESIGN PROFESSIONAL RELIEVE CONTRACTOR FROM RESPONSIBILITY FOR ERRORS OR OMISSIONS IN SHOP DRAWINGS WITH CONFORMANCE TO CONTRACT DOCUMENTS.

- GENERAL CONSTRUCTION NOTE REGARDING SEQUENCING OF EROSION CONTROL ALL PERIMETER SILT FENCE, EARTH DIKES, SEDIMENT BASINS, AND ROCK CONSTRUCTION ENTRANCES WILL BE INSTALLED BEFORE GRADING OPERATIONS BEGIN, EXCEPT THAT SILT FENCE WHICH IS TO BE PLACED ALONG THE BACK OF CURB FOR PROTECTION OF THE STREET. SILT FENCE AND EARTH DIKES THAT ARE PLACED BEFORE GRADING BEGINS WILL BE MAINTAINED BY THE GRADING CONTRACTOR UNTIL ALL UTILITIES ARE IN PLACE. THE SILT FENCE THAT IS PLACED ALONG THE BACK OF THE CURB OR RIGHT -OF-WAY WILL BE INSTALLED IMMEDIATELY AFTER THE CURB IS CONSTRUCTED. EROSION AND SEDIMENTATION CONTROLS ARE TEMPORARY AND MUST BE REMOVED BY THE CONTRACTOR AFTER CONSTRUCTION IS COMPLETE AND THE DISTURBED AREA IS AT LEAST 70% PERMANENTLY VEGETATED.
- HANDICAP PARKING STALLS SHALL BE SIGNED WITH CITY/ADA APPROVED SIGNAGE AND CONSTRUCTED IN STRICT ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF THE APWA-KC, CITY OF LEE'S SUMMIT ADA STANDARDS, AND SHALL NOT EXCEED 2.00 PERCENT IN ANY DIRECTION. ACCESSIBLE SIDEWALKS HAVE A MAXIMUM CROSS SLOPE OF 2 PERCENT AND A MAXIMUM LONGITUDINAL SLOPE OF 5 PERCENT.
- 30. ALL WATER LINES SHALL BE INSTALLED PER THE LATEST STANDARDS AND SPECIFICATIONS OF THE APWA-KC AND THE CITY OF LEE'S SUMMIT, MO. ALL WATER LINES SHALL BE A MINIMUM OF 48 INCHES BELOW THE FINISHED GRADE ELEVATIONS SHOWN
- ALL WATER LINES SHALL BE INSTALLED PER CITY STANDARDS. ALL WATER LINES SHALL BE A MINIMUM OF 48 INCHES BELOW THE FINISHED GRADE ELEVATIONS SHOWN HEREIN.
- 32. ALL EXTERIOR CONCRETE SHALL BE KCMMB-4K AND HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4000 PSI, SHALL MEET KCMMB STANDARDS AND SPECIFICATIONS, AND SHALL BE AIR ENTRAINED. FLYASH IS NOT A SUITABLE REPLACEMENT FOR PORTLAND CEMENT.
- ALL ON-SITE WIRING AND CABLES SHALL BE PLACED UNDERGROUND.
- CONCRETE PAVEMENT JOINTS SHALL BE CONSTRUCTED AS FOLLOWS (REFER TO HARDSCAPE PLANS FOR SPECIFIC TREATMENT
 - A. CONTROL JOINTS SPACED AT INTERVALS NOT GREATER THAN 12 FEET AND TOOLED TO 1/3 THE SLAB THICKNESS B. CONSTRUCTION JOINTS AT THE END OF EACH POUR AND WHEN PAVING OPERATIONS ARE SUSPENDED FOR 30 MINUTES OR
 - C. ISOLATION JOINTS PLACED WHERE THE PAVEMENT ABUTS THE BUILDING, DRAINAGE STRUCTURES AND OTHER FIXED STRUCTURES, CONSTRUCTED WITH A 1/2" NONEXTRUDING FILLER, CLOSED-CELL FOLSSONM RUBBER OR A BITUMEN-TREATED FIBER-BOLSSONRD, AND WITH A THICKENED EDGE, INCREASED BY 20 PERCENT, TAPERED TO THE REGULAR THICKNESS IN 5 FEET.
 - D. ALL EXPANSION JOINTS SHALL BE FILLED AND SEALED WITH A PLASTIC JOINT SEALANT MATERIAL.
- TELEPHONE AND COMMUNICATION SERVICE ROUTING AND CONDUITS NOT SHOWN ON PLANS. CONTRACTOR SHALL INSTALL NECESSARY CONDUIT PRIOR TO PAVEMENT INSTALLATION. CONTRACTOR SHALL COORDINATE ROUTING AND INSTALLATION SCOPE WITH SERVICE PROVIDER.
- ANY CONTRACTOR BIDDING ANY PORTION OF THIS WORK SHALL HAVE IN HIS OR HER POSSESSION A COMPLETE SET OF CONSTRUCTION DOCUMENTS AND BE FAMILIAR WITH ALL SCOPES OF WORK AND TRADES TO UNDERSTAND THEIR INTERACTIONS.
- EXISTING TOPSOIL SHALL BE STRIPPED TO A POINT WHERE ALL VEGETATION IS REMOVED. REFER TO THE GEOTECHNICAL REPORT PROVIDED BY OLSSON DATED 01/09/2019 AND ALL ADDENDUMS.
- SITE PREPARATION, GRADING AND EXCAVATION PROCEDURES SHALL CONFORM TO THE RECOMMENDATIONS AS OUTLINED IN THE GEOTECHNICAL REPORT PREPARED BY OLSSON DATED 01/09/2019 AND ALL ADDENDUMS.

GENERAL UTILITY NOTES

- 1. THE SIZE AND LOCATION OF SERVICES SHALL BE VERIFIED WITH THE ARCHITECTURAL AND MEP PLANS PRIOR TO CONSTRUCTION. IF DISCREPANCIES EXIST, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
- 2. IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING SLEEVING UNDER PAVING AREAS WHERE NECESSARY.
- 3. INSTALL ALL PIPE LENGTHS, BENDS AND FITTINGS NECESSARY FOR UTILITY CONNECTIONS.
- 4. CONTRACTOR SHALL VERIFY ALL CROSSING ELEVATIONS AND LOCATIONS, SIZES, AND ELEVATIONS OF EXISTING UTILITIES PRIOR TO CONSTRUCTION OF STORM LINES AND ALL UTILITY SERVICE CONNECTIONS. ANY CONFLICTS SHALL BE MADE KNOWN TO THE ENGINEER AND RESOLVED PRIOR TO CONSTRUCTION.
- 5. CONTRACTOR TO VERIFY FIRE SERVICE SIZE WITH SPRINKLER DESIGNER/CONTRACTOR PRIOR TO CONSTRUCTION AND INSTALLATION OF METER/BACKFLOW PREVENTER AND SERVICES. NOTIFY ENGINEER OF ALTERATIONS.
- 6. CONTRACTOR RESPONSIBLE FOR PAYING ALL TAP AND CONNECTION FEES AND SHALL CONTRACT AND PAY FOR ANY REQUIRED SUB CONTRACTORS BY UTILITY COMPANIES.
- 7. REFERENCE MEP PLANS FOR BUILDING CONNECTIONS.
- 8. CONTRACTOR TO REPAIR ALL AREA DAMAGED BY CONSTRUCTION TO EXISTING CONDITIONS OR BETTER.
- 9. BACK FLOW PREVENTION TO BE PROVIDED INSIDE BUILDING. SEE MEP AND ARCHITECTURAL PLANS FOR DETAILS.
- 10. LOCATION FOR POWER SHOWN IS APPROXIMATE AND SUBJECT TO CHANGE. CONTRACTOR TO VERIFY FINAL LOCATION AND DESIGN WITH UTILITY COMPANY PRIOR TO CONSTRUCTION.
- 11. CONTRACTOR TO COORDINATE LIGHT POLE LOCATIONS WITH OWNER, STORM SEWER INSTALLATION AND UTILITY COMPANIES PRIOR TO INSTALLATION TO AVOID CONFLICTS. NOTIFY ENGINEER AND ARCHITECT OF ANY CONFLICTS PRIOR TO INSTALLATION.
- 12. WATER METER CANNOT BE INSTALLED IN THE BUILDING.
- 13. CONTRACTOR SHALL COORDINATE CABLE/FIBER OPTIC CONDUIT AND SERVICE INSTALLATION WITH UTILITY COMPANY.
- 14. ALL TAPS AND CONNECTIONS FOR FIRE AND DOMESTIC WATER SERVICES ARE TO BE IN ACCORDANCE WITH THE CITY OF BLUE SPRINGS STANDARDS AND SPECIFICATIONS.
- 15. CONTRACTOR TO COORDINATE POWER ROUTING TO MONUMENT SIGNS NOT SHOWN ON PLANS.
- 16. ALL ROOF DRAIN AND DOWNSPOUT HEADER PIPES SHALL BE 12" HDPE PIPE AND INSTALLED AT 1.00% MINIMUM SLOPE UNLESS OTHERWISE NOTED WITHIN THIS PLAN. ALL BENDS AND FITTINGS NEEDED TO BUILD ROUTING AS SHOWN SHALL BE INCLUDED IN BID.
- 17. CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY FITTINGS TO COMPLETE ROOF DRAIN AND DOWNSPOUT CONNECTIONS TO BUILDINGS. ALL ROOF DRAIN AND DOWNSPOUT CONNECTIONS / FITTINGS, INCLUDING BUT NOT LIMITED TO BENDS AND TEES, SHALL BE MADE OF HDPE PIPE UNLESS OTHERWISE NOTED WITHIN THIS PLAN.



THE CONTRACTOR SHALL ADHERE TO THE PROVISIONS OF THE SENATE BILL NUMBER 583. 78TH GENERAL ASSEMBLY OF THE STATE OF MISSOURI. THE BILL REQUIRES THAT ANY PERSON OR FIRM DOING EXCAVATION ON PUBLIC RIGHT-OF-WAY DO SO ONLY AFTER GIVING NOTICE TO. & OBTAINING INFORMATION FROM, UTILITY COMPANIES. STATE LAW REQUIRES 48 HOURS ADVANCE NOTICE. CALL 1-800-DIG-RITE.



Sapp Design Associates Architects, P.C. Missouri State Certificate of Authority #000607

Kansas City, MO 64108

SPECIAL NOTICES

hanges to any plans, specifications or other construction ocuments, and these changes are not approved in writing by th esign professional, the client recognizes that such changes and the ults thereof are not the responsibility of the design profession Therefore, the client agrees to release the design professional from any liability arising from the construction, use or result of such

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art or parts of the architectural project.

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Terry M Parsons, Engineer MO PE-2018010505

Overland Park, KS 66213 TEL 913.381.1170 FAX 913.381.1174 www.olsson.com

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B18-0330

GENERAL NOTES

02.18.19





Kansas City, MO 64108

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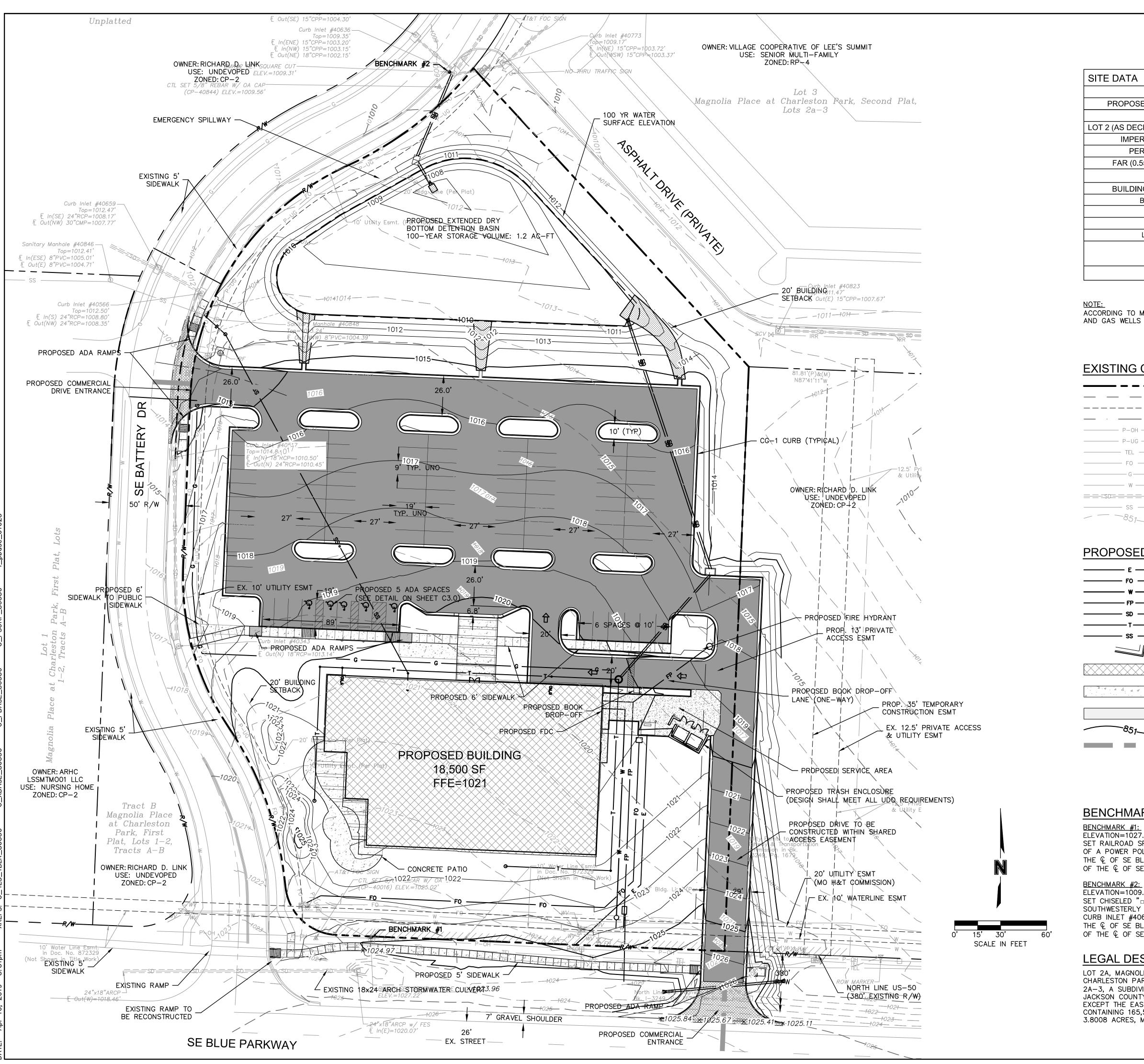
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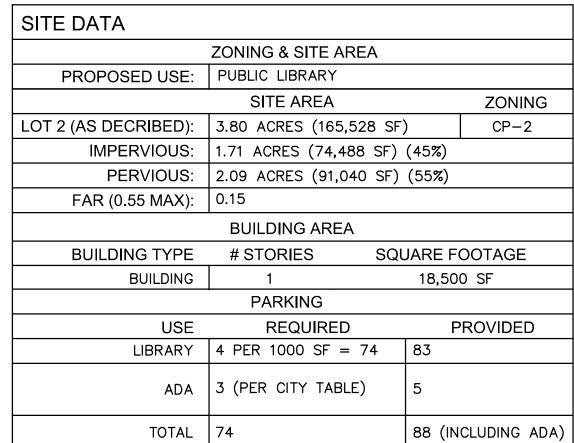
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SURVEY SHEET



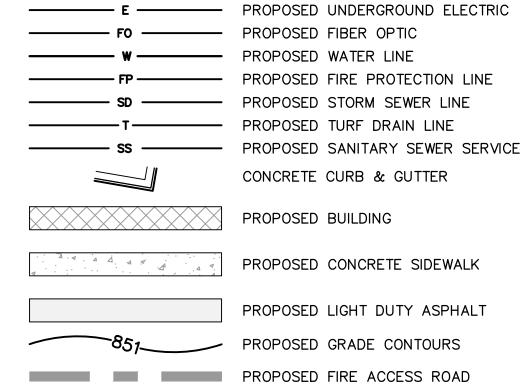


ACCORDING TO MDNR STATE OIL & GAS COUNSEL THERE ARE NO OIL AND GAS WELLS LOCATED WITHIN OR ADJACENT TO THE PROPERTY.

EXISTING CONDITIONS LEGEND

	PROPERTY LINES
	RIGHT-OF-WAY LINES
	EASEMENT LINES
<u> </u>	BUILDING SETBACK LINES
	OVERHEAD ELECTRIC
	UNDERGROUND ELECTRIC
TEL	UNDERGROUND TELEPHONE
——— FO ———	UNDERGROUND FIBER OPTIC
G	GAS LINE
W	WATER LINE
===SD=====	STORM SEWER LINE
SS	SANITARY SEWER LINE
851	GRADE CONTOURS

PROPOSED CONDITIONS LEGEND



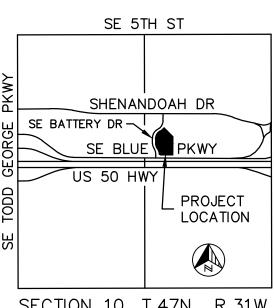
BENCHMARKS:

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ELEVATION=1009.31' SET CHISELED "-" CUT ON THE SOUTHWESTERLY CORNER OF A CONCRETE CURB INLET #40636, 630'± NORTH OF THE & OF SE BLUE PARKWAY, 15' EAST OF THE & OF SE BATTERY DRIVE.

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SECTION 10, T.47N., R.31W. **VICINITY MAP** SCALE: 1" = 2000'

PLANyright 2018 - Sapp Design Associates, Architects, P.C.

Springfield, MO 65804 417.877.9600

Sapp Design Associates Architects, P.C. Missouri State Certificate of Authority #000607

816.300.0300 Kansas City, MO 64108

SPECIAL NOTICES

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240 SE BL E'S SUMI JACKSO

Engineer of Record TERRY M. PARSONS PE-201801050

Terry M Parsons, Engineer MO PE-2018010505

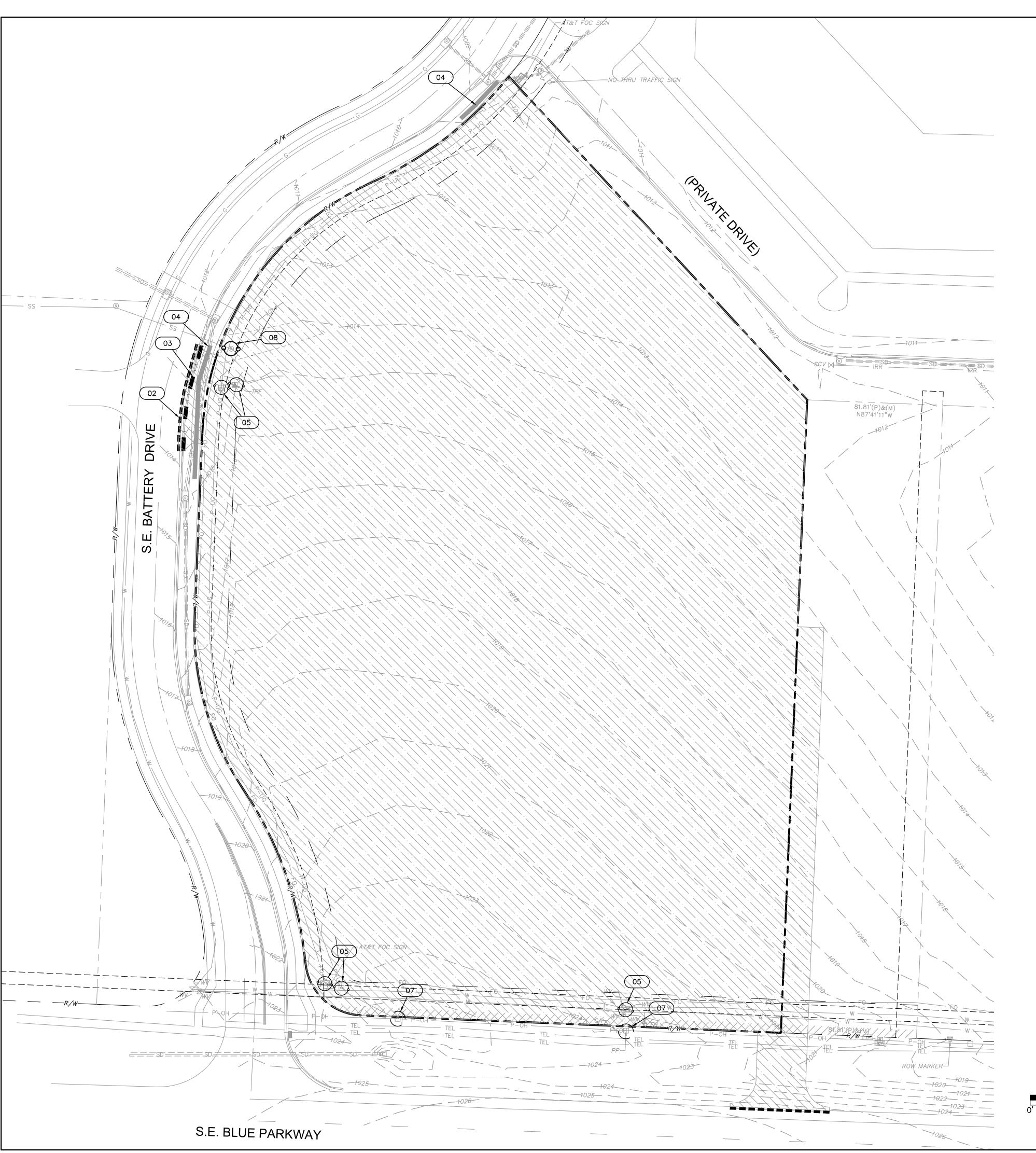
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FINAL DEVELOPMENT



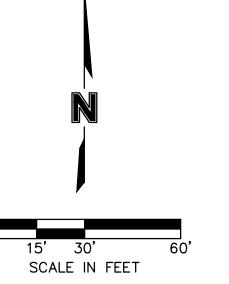
DEMOLITION NOTES

- 1. CONTRACTOR TO PRESERVE ALL SURVEY CONTROL.
- 2. CONTRACTOR TO COMPLETE DEMOLITION PER THE INTENT OF THESE PLANS.
- 3. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE ENGINEER MAKES NO GUARANTEES THAT THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE ENGINEER HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. THIS INCLUDES PRIVATE AND PUBLIC UTILITIES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT MISSOURI ONE CALL AT 1-800-344-7483 IN ADVANCE OF ANY EXCAVATION TO COORDINATE UTILITY LOCATIONS.
- 4. CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER EXISTING LINES NOT OF RECORD OR SHOWN ON THESE PLANS.
- 5. CONTRACTOR TO REMOVE ALL TREES AND BRUSH FOR INSTALLATION OF IMPROVEMENTS.
- 6. REMOVAL AND DISPOSAL OF BUSHES AND TREES SMALLER THAN 12" IN DIAMETER SHALL BE CONSIDERED SUBSIDIARY TO THE PRICE BID FOR CLEARING AND GRUBBING.
- 7. ALL ITEMS REMOVED SHALL BE LEGALLY DISPOSED OF OFF SITE BY THE CONTRACTOR.
- 8. DO NOT DISRUPT UTILITY SERVICE TO ADJACENT BUSINESSES OR RESIDENCES WITHOUT PRIOR WRITTEN APPROVAL BY THE ENGINEER.
- 9. DO NOT DISRUPT TRAFFIC ON ADJACENT PUBLIC STREETS WITHOUT PRIOR WRITTEN APPROVAL BY THE CITY.
- 10. ALL SIDEWALK AND PAVEMENT TO REMAIN SHALL BE PROTECTED IN PLACE INCLUDING PROTECTION FROM DAMAGE CAUSED BY REMOVAL OF ABUTTING PAVEMENT. CONTRACTOR SHALL SAW CUT WHERE NECESSARY.
- 11. CONTRACTOR SHALL GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DISCONNECTION, DEMOLITION, AND REMOVAL OF SERVICE LINES. CAP ALL LINES BEFORE PROCEEDING WITH WORK ON THIS CONTRACT.
- 12. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANIES WORK FORCE AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES.
- 13. CONTRACTOR SHALL PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, ETC. TO THE BEST PRACTICES AND AS APPROVED BY THE ENGINEER AND THE CITY.
- 14. DAMAGE TO ALL EXISTING CONDITIONS TO REMAIN SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- 15. DEMOLITION OF BUILDINGS SHALL INCLUDE THE BUILDING STRUCTURE, PAD, FOOTINGS, FOUNDATIONS, BASEMENT WALLS, BASEMENT FLOORS, TRUCK DOCKS, STEPS, DECKS, ALL ITEMS REMAINING IN BUILDING, ALL BUILDING UTILITY SERVICES, SIDEWALKS, AND BACKFILLING AND RESTORING REMAINING EXCAVATIONS, BASEMENTS AND TRENCHES PER SPECIFICATIONS. ALL REMOVALS SHALL INCLUDE BUT NOT BE LIMITED TO ITEMS SUCH AS BUILDING FOOTINGS, SUBSURFACE STRUCTURES, SURFACE STRUCTURES, DRAINAGE STRUCTURES, PIPES, PAVEMENT OF ALL TYPES, CURB & GUTTER, SIDEWALK, ROCK, ABANDONED UTILITIES AS DIRECTED BY THE ENGINEERS, TREES, TREE ROOTS, ANY UNKNOWN MATERIALS, AND UNSUITABLE SUBGRADE MATERIALS. THE SITE SHOULD BE CLEARED FOR THE PROPOSED IMPROVEMENTS PER CITY REQUIREMENTS.
- 16. ALL LIGHT POLE DEMOLITION SHALL INCLUDE FIXTURES, BASES AND WIRING.
- 17. ALL UTILITY DEMOLITION SHALL INCLUDE METERS, MANHOLES AND OTHER STRUCTURES ASSOCIATED WITH THE UTILITY SERVICE LINE.

	KEY NOTE LEGEND
01	REMOVE EXISTING INFRASTRUCTURE, BUILDINGS, VEGETATION AND PAVEMENT FOR THE PURPOSE OF PROJECT CONSTRUCTION.
02	SAWCUT EXISTING PAVEMENT
03	REMOVE EXISTING CURB & GUTTER
04	REMOVE EXISTING SIDEWALK
05	PROTECT EXISTING UTILITY EQUIPMENT/ MANHOLE
06	INSTALL TREE PROTECTION. SEE DETAIL ON C6.5
07	COORDINATE DEMOLITION WITH POWER COMPANY
08	PROTECT EXISTING SANITARY SEWER TO REMAIN

LEGEND

- PROPERTY LINE



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Kansas City, MO 64108

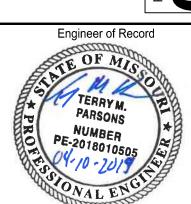
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Terry M Parsons, Engineer MO PE-2018010505

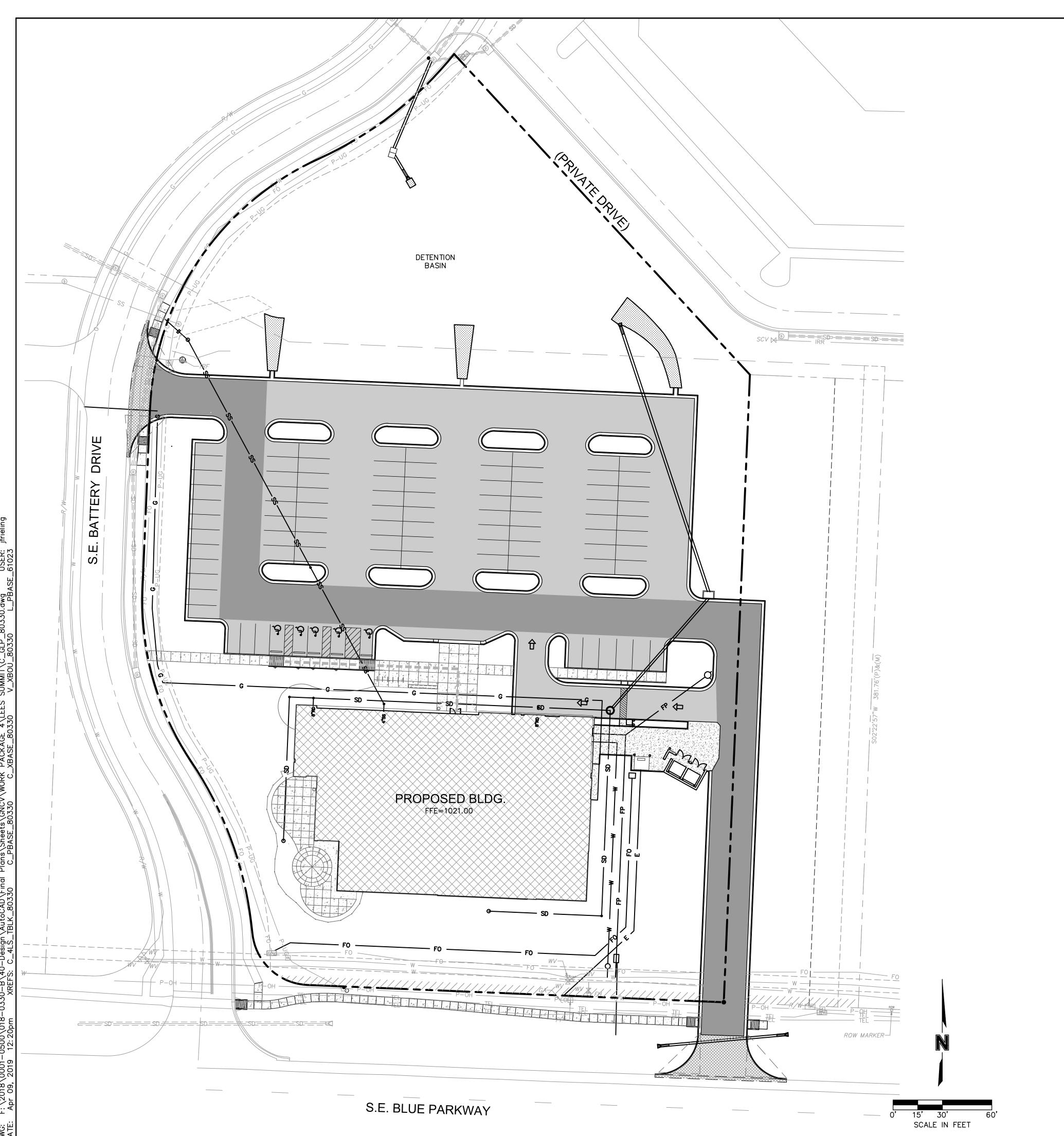
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DEMOLITION PLAN



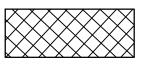
LEGEND

PROPERTY LINE

CONCRETE CURB & GUTTER TYPE "CG-1"

CONCRETE CURB & GUTTER TYPE "CG-1 DRY"

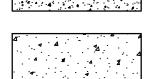
SAWCUT PAVEMENT FULL DEPTH



COMMERCIAL ENTRANCE 8" PCC CONCRETE PAVEMENT

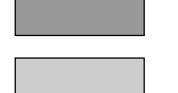


6" PCC CONCRETE PAVEMENT

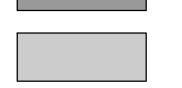




CONCRETE SIDEWALK PAVEMENT



ASPHALT PAVEMENT -HEAVY DUTY



ASPHALT PAVEMENT-PARKING AREAS

ADA ACCESSIBLE ROUTE

*BID ALTERNATES

BID ALTERNATE 1 -

THE SUBSTITUTION OF LIGHT DUTY ASPHALT PAVEMENT FOR HEAVY DUTY ASPHALT PAVEMENT IN PARKING DRIVE LANES.

BID ALTERNATE 2 -

THE PLACEMENT OF TENSAR TRIAX TX GEOGRID BETWEEN THE SUBGRADE AND BASE ASPHALT LAYER UNDER ALL ASPHALT SURFACING INSTALLED PER MANUFACTURES RECOMMENDATIONS.

BID ALTERNATE 3 -

THE SUBSTITUTION OF NON-TINTED CONCRETE FOR INTEGRALLY TINTED CONCRETE IN THE PEDESTRIAN PATIO AREA.

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Kansas City, MO 64108

816.300.0300

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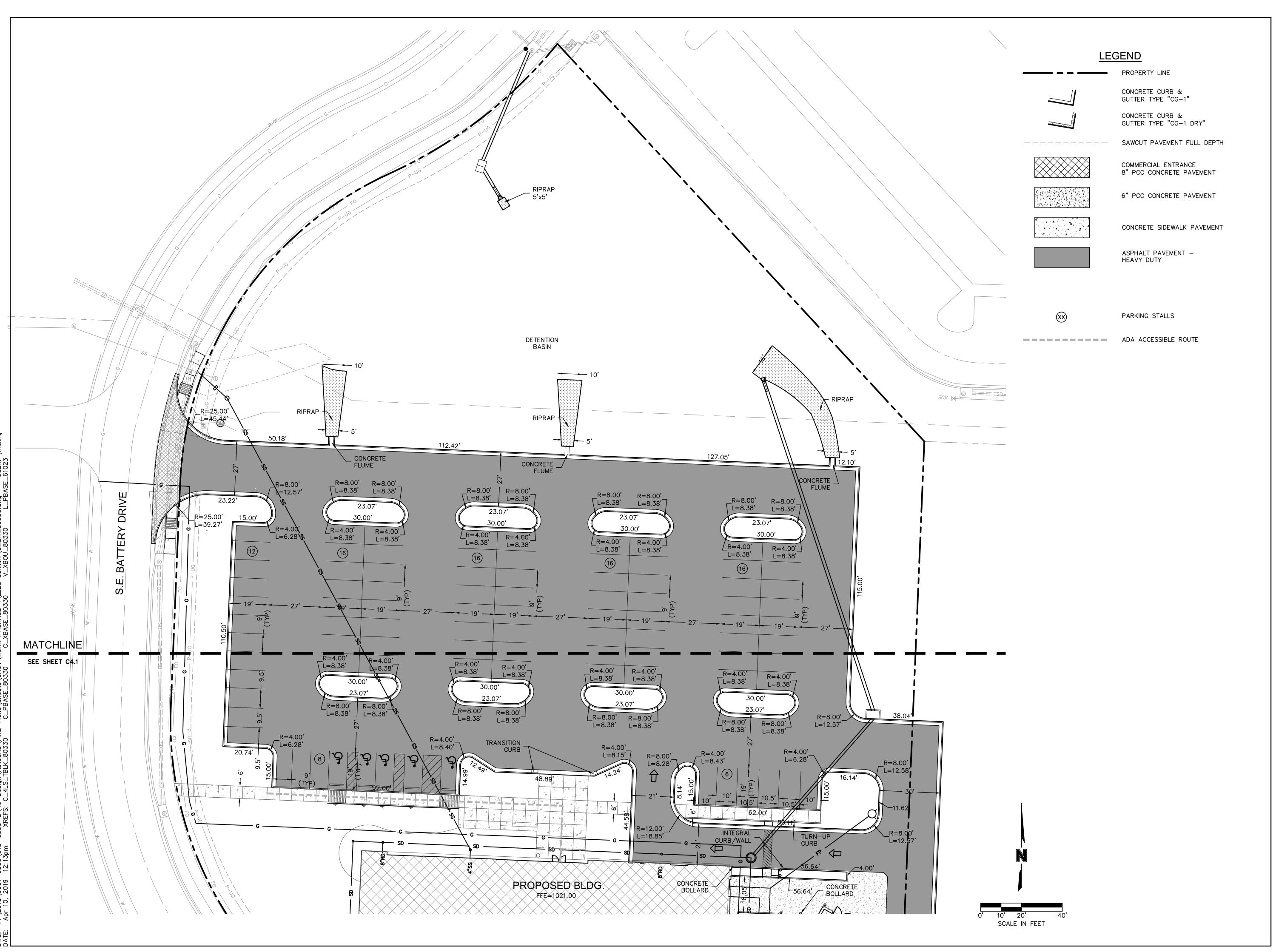
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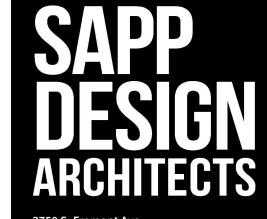
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GENERAL LAYOUT PLAN





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Mid-Contine

Engineer of Record TERRY M.
PARSONS PE-2018010505

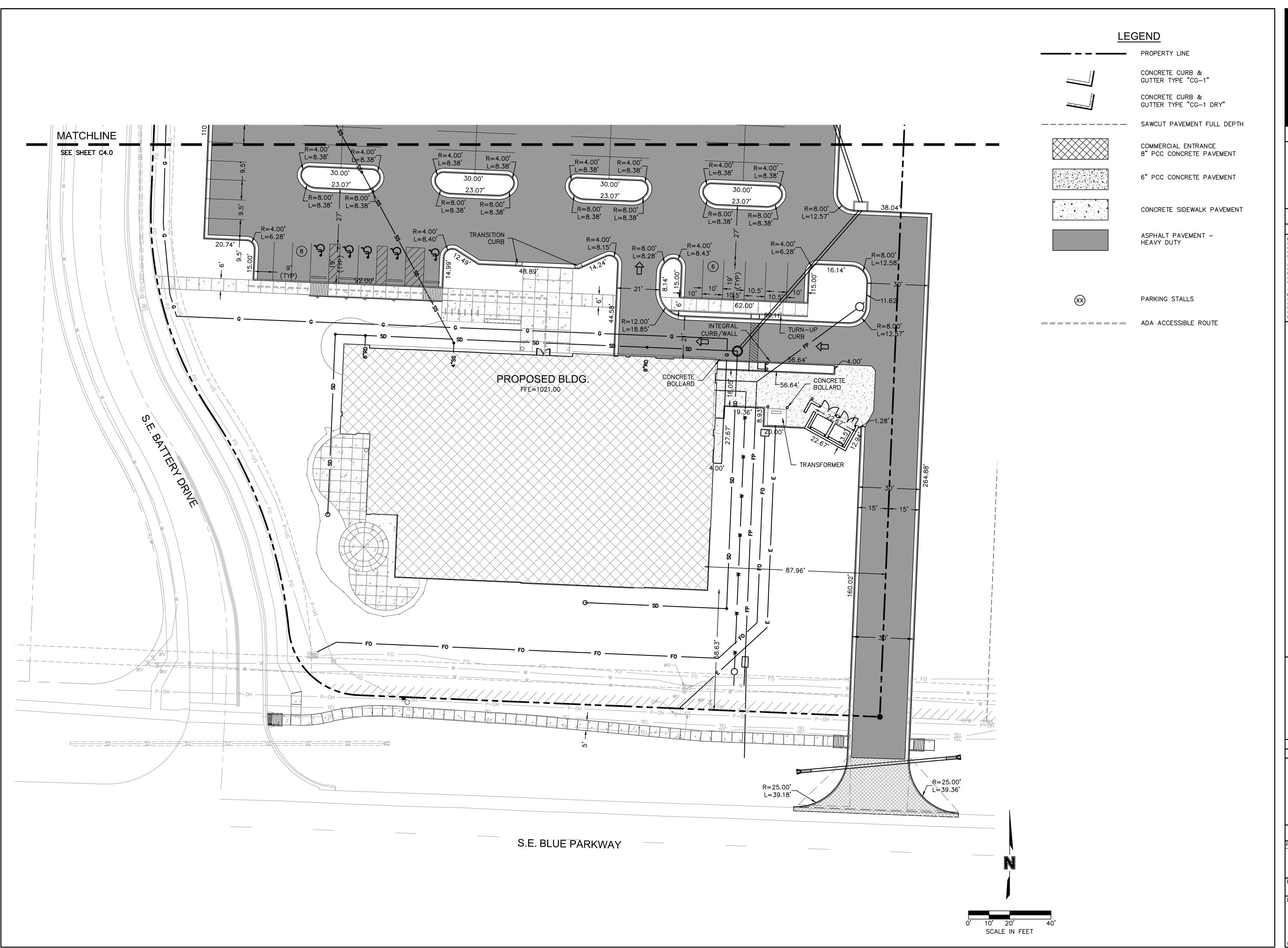
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ASI#1 02.18.19

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SITE DIMENSION PLAN



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Engineer of Record

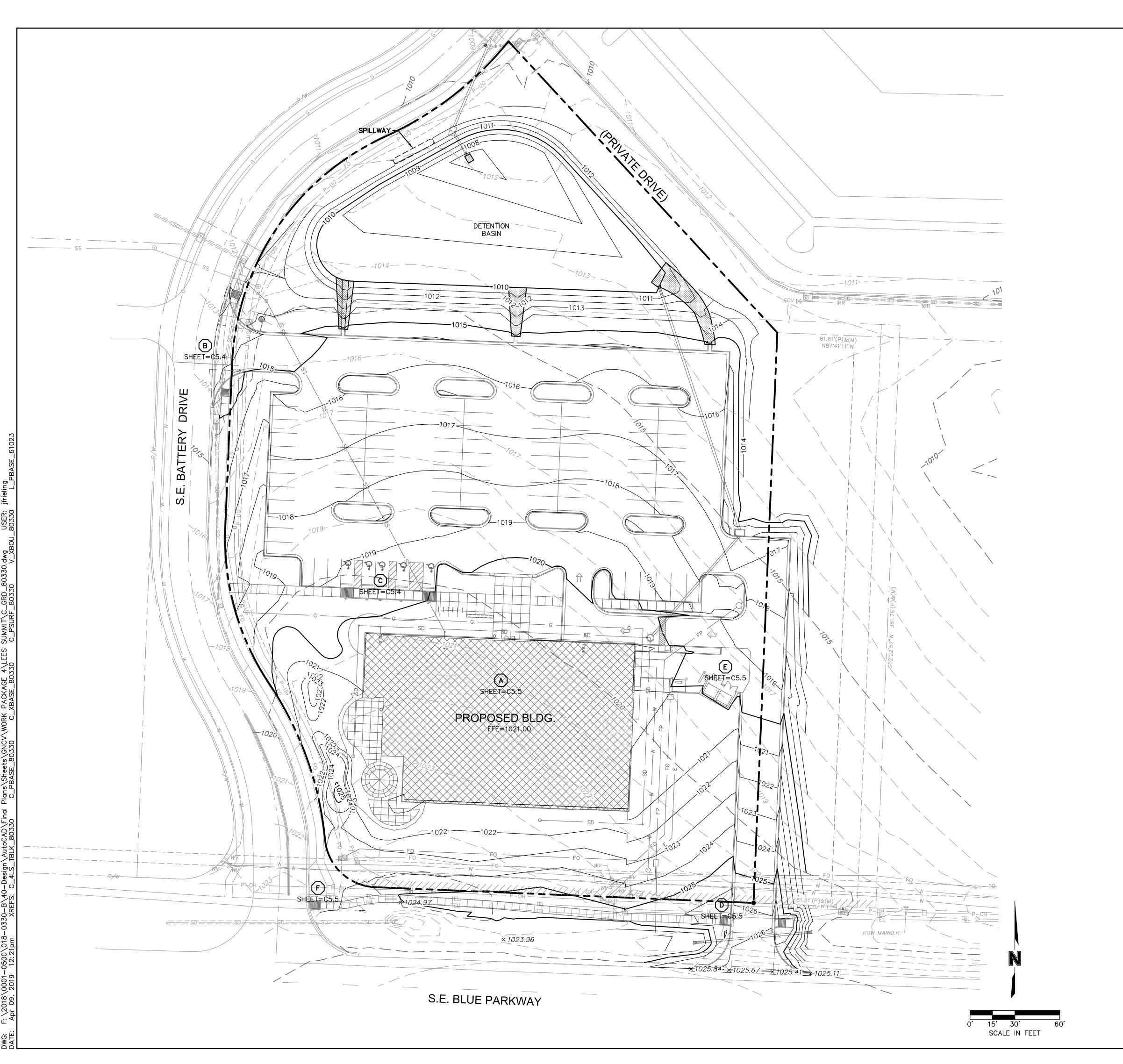
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SITE DIMENSION PLAN



LEGEND

PROPERTY LINE — 995 — — EXISTING MAJOR CONTOUR EXISTING MINOR CONTOUR — PROPOSED MAJOR CONTOUR PROPOSED MINOR CONTOUR

CONCRETE CURB & GUTTER TYPE "CG-1"

RE: SHEET C5.1 THRU C5.5

CONCRETE CURB & GUTTER TYPE "CG-1 DRY" CONCRETE CURB

TYPE "C-1" MODIFIED $\langle X \rangle$ GRADING DETAIL DESIGNATION

RAMP

NOTES:

- 1. CONTRACTOR TO REMOVE AND REPLACE ALL SIDEWALK NECESSARY FOR CONNECTION TO EXISTING.
- 2. ALL ADA ACCESSIBLE SIDEWALK CROSS SLOPES SHALL HAVE A MAXIMUM CROSS SLOPE OF 2.00% AND MAXIMUM LONGITUDINAL SLOPE OF 5.00%.
- 3. ALL ADA ACCESSIBLE PARKING AREAS SHALL NOT EXCEED 2.00% IN ANY DIRECTION.

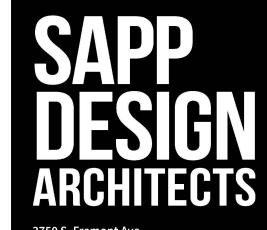
SPOT ELEVATION LEGEND

ALL SPOT ELEVATIONS ARE TOP OF PAVEMENT ELEVATION UNLESS NOTED OTHERWISE. RE: PLAN VIEW, LEGEND AND DETAILS FOR CURB TYPE AND TO CALCULATE TOP OF CURB ELEVATION.

TC= TOP OF CURB FG= FINISHED GRADE WITHIN GREENSPACE TOP OF STRUCTURE CURB DEPRESSED TO BE FLUSH WITH TP=TC=

ADJACENT PAVEMENT HP= HIGH POINT LOW POINT MATCH EX.= MATCH EXISTING

FINISH FLOOR ELEVATION AT TOP OF SLAB



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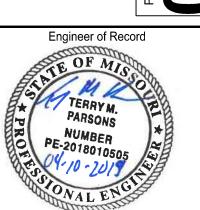
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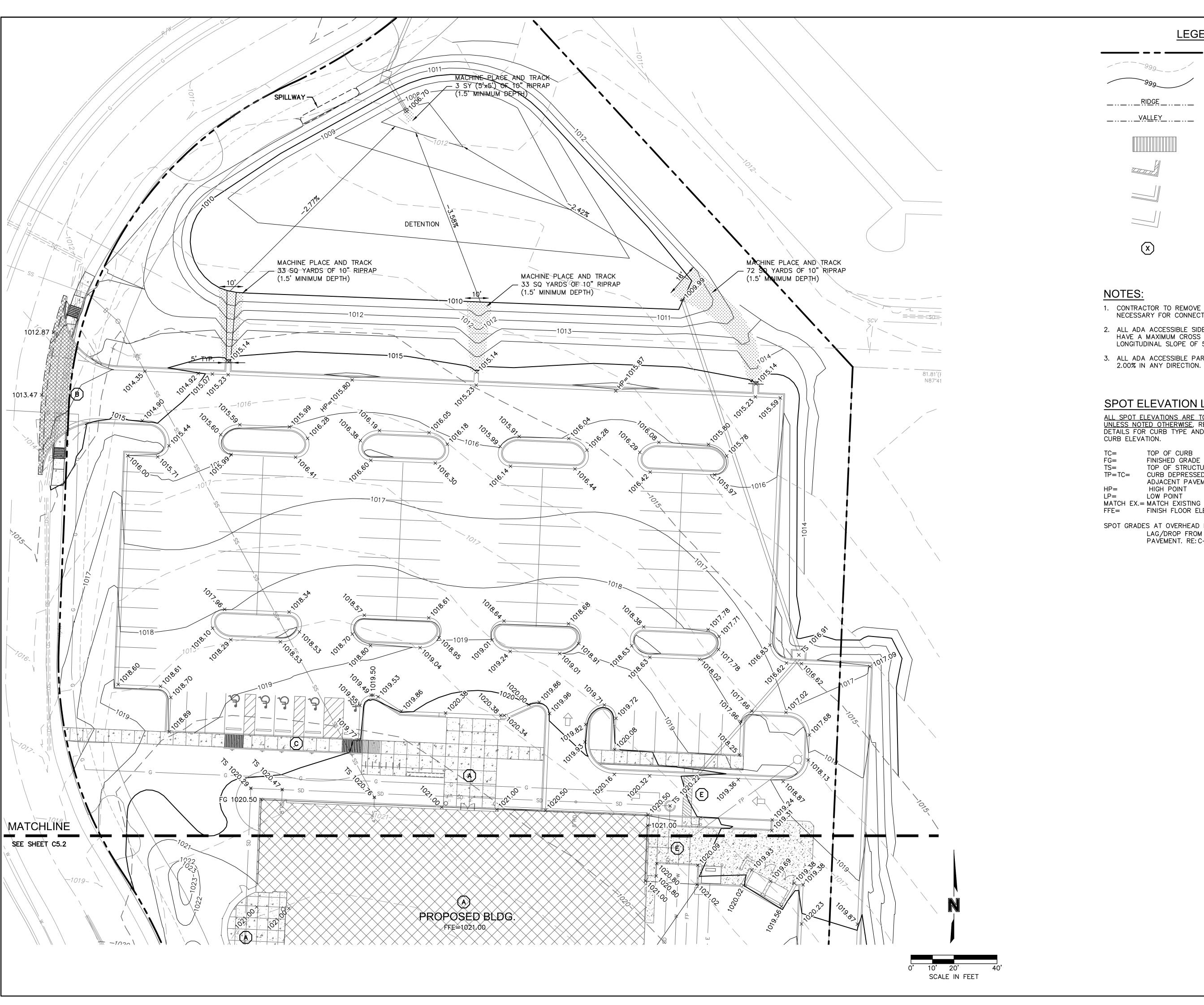
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B18-0330

12.07.18

GRADING PLAN





RAMP

PROPERTY LINE

EXISTING GRADE CONTOUR

FINISHED GRADE CONTOUR

RIDGE LINE VALLEY LINE

> CONCRETE CURB & GUTTER TYPE "CG-1"

CONCRETE CURB

CONCRETE CURB & GUTTER TYPE "CG-1 DRY"

TYPE "C-1" MODIFIED

GRADING DETAIL DESIGNATION RE: SHEET C5.1 THRU C5.5

- 1. CONTRACTOR TO REMOVE AND REPLACE ALL SIDEWALK NECESSARY FOR CONNECTION TO EXISTING.
- 2. ALL ADA ACCESSIBLE SIDEWALK CROSS SLOPES SHALL HAVE A MAXIMUM CROSS SLOPE OF 2.00% AND MAXIMUM LONGITUDINAL SLOPE OF 5.00%.
- 3. ALL ADA ACCESSIBLE PARKING AREAS SHALL NOT EXCEED

SPOT ELEVATION LEGEND

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FINISHED GRADE WITHIN GREENSPACE TOP OF STRUCTURE CURB DEPRESSED TO BE FLUSH WITH ADJACENT PAVEMENT

FINISH FLOOR ELEVATION AT TOP OF SLAB

SPOT GRADES AT OVERHEAD DOORS REPRESENT A 2" LAG/DROP FROM FINISH FLOOR TO EXTERIOR PAVEMENT. RE: C-06



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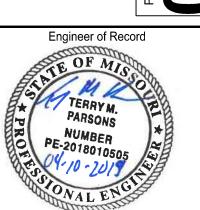
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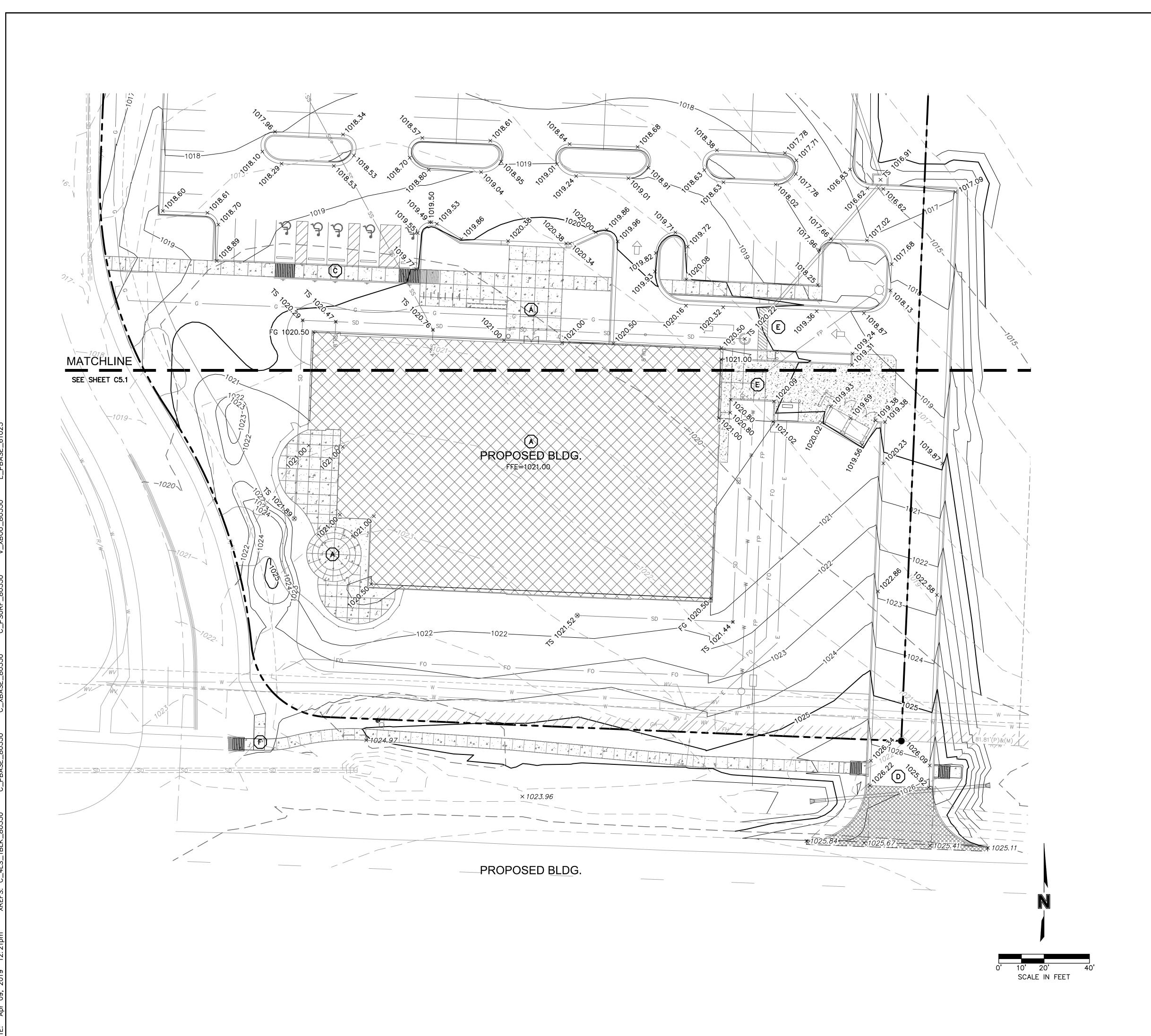
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GRADING DETAILS



LEGEND

PROPERTY LINE

EXISTING GRADE CONTOUR

FINISHED GRADE CONTOUR

VALLEY LINE

RIDGE LINE

RAMP

CONCRETE CURB & GUTTER TYPE "CG-1" CONCRETE CURB &

GUTTER TYPE "CG-1 DRY" CONCRETE CURB TYPE "C-1" MODIFIED

 $\langle X \rangle$ GRADING DETAIL DESIGNATION RE: SHEET C5.1 THRU C5.5

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TOP OF CURB
FINISHED GRADE WITHIN GREENSPACE
TOP OF STRUCTURE
CURB DEPRESSED TO BE FLUSH WITH
ADJACENT PAVEMENT TC= FG= TS= HP= HIGH POINT LOW POINT

MATCH EX.= MATCH EXISTING

FFE= FINISH FLOOR ELEVATION AT TOP OF SLAB

SPOT GRADES AT OVERHEAD DOORS REPRESENT A 2"

LAG/DROP FROM FINISH FLOOR TO EXTERIOR PAVEMENT. RE: C-06

3750 S. Fremont Ave. Springfield, MO 65804 417.877.9600

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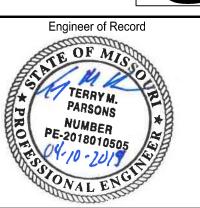
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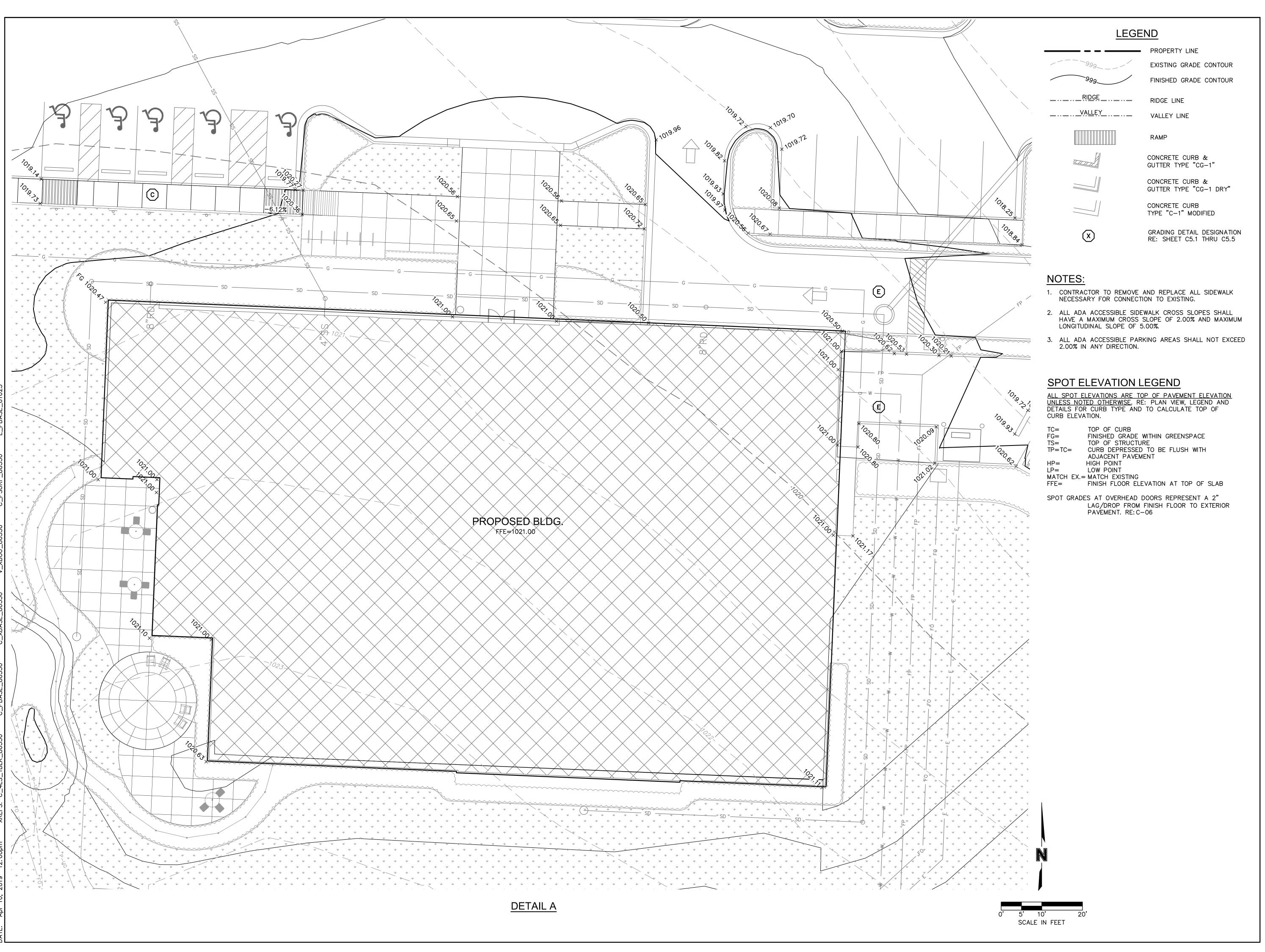
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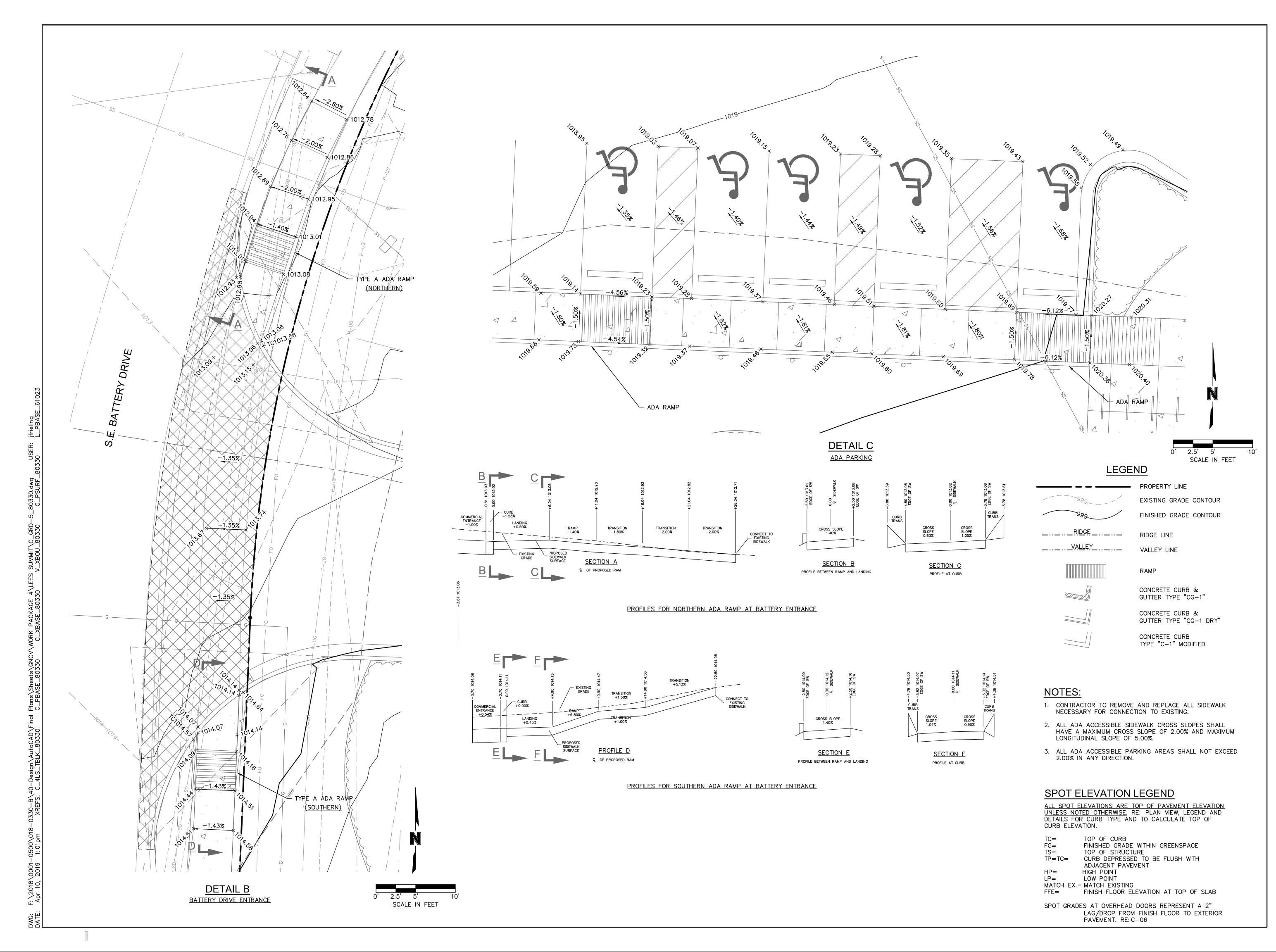
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1629 Walnut Kansas City, MO 64108

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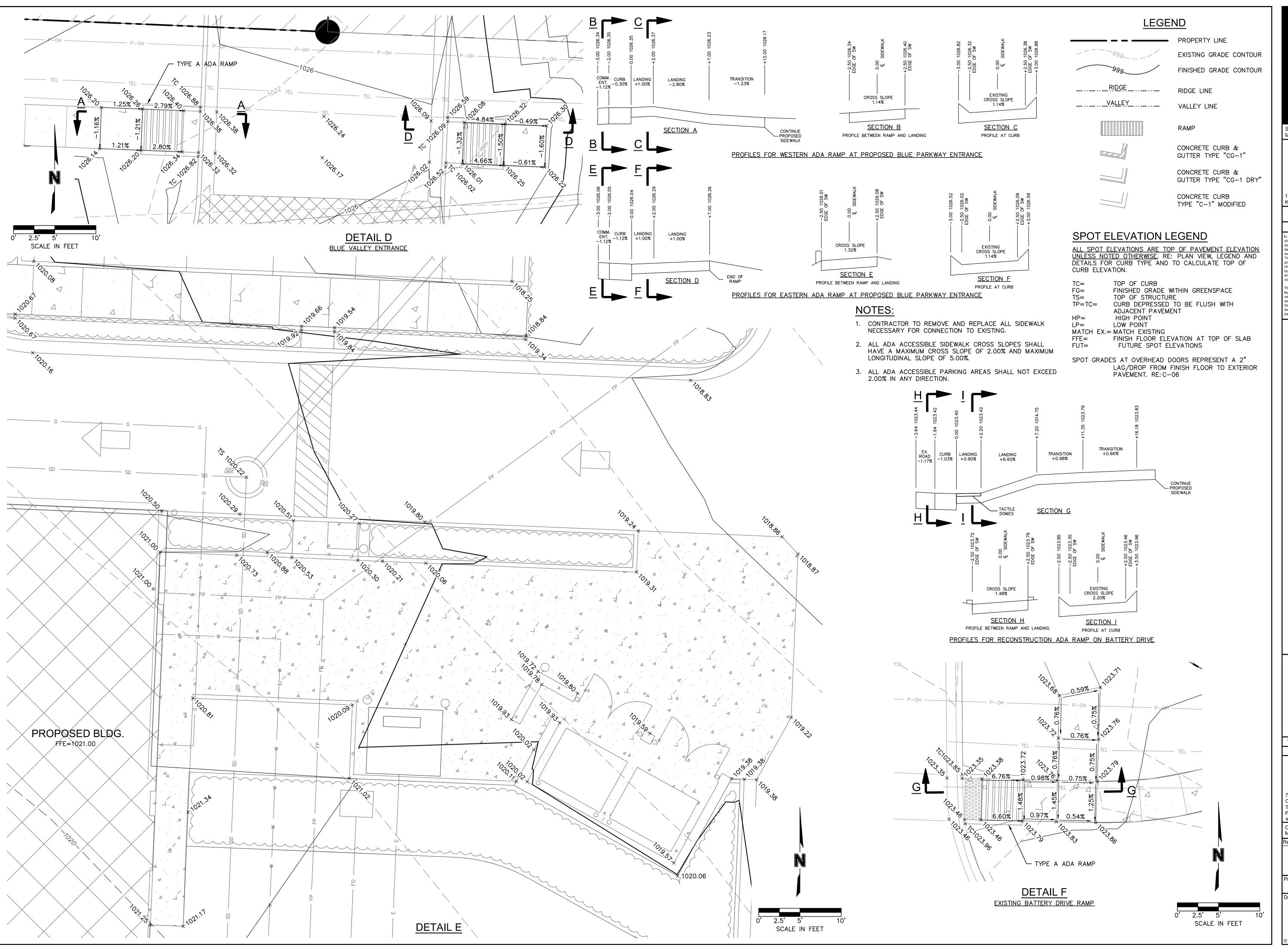
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Revision No. Description Date
1 ASI#1 02.18.19

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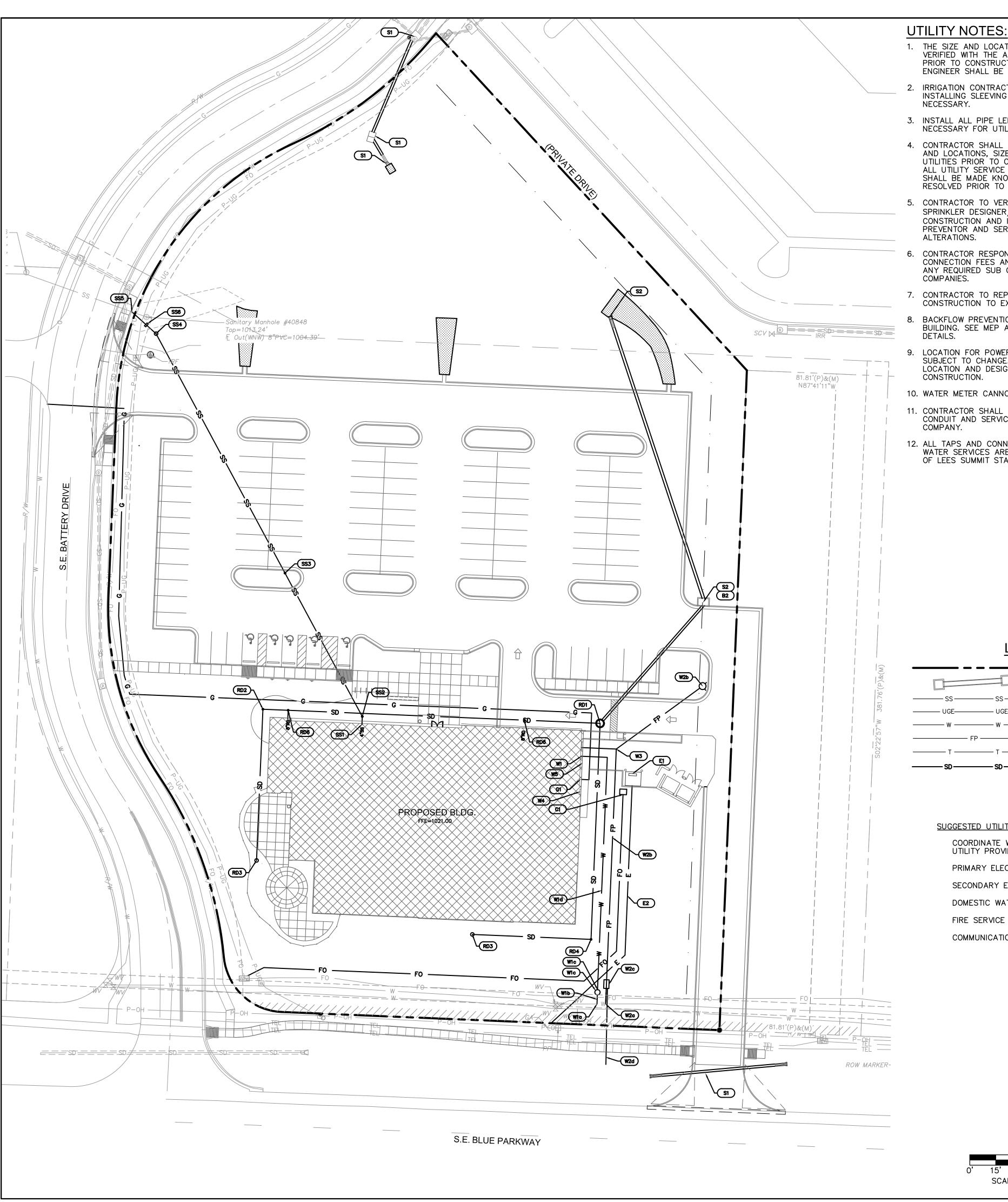
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GRADING DETAILS



- THE SIZE AND LOCATION OF SERVICES SHALL BE VERIFIED WITH THE ARCHITECTURAL AND MEP PLANS PRIOR TO CONSTRUCTION. IF DISCREPANCIES EXIST, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
- 2. IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING SLEEVING UNDER PAVING AREAS WHERE
- 3. INSTALL ALL PIPE LENGTHS, BENDS AND FITTINGS NECESSARY FOR UTILITY CONNECTIONS.
- 4. CONTRACTOR SHALL VERIFY ALL CROSSING ELEVATIONS AND LOCATIONS, SIZES, AND ELEVATIONS OF EXISTING UTILITIES PRIOR TO CONSTRUCTION OF STORM LINES AND ALL UTILITY SERVICE CONNECTIONS. ANY CONFLICTS SHALL BE MADE KNOWN TO THE ENGINEER AND RESOLVED PRIOR TO CONSTRUCTION.
- 5. CONTRACTOR TO VERIFY FIRE SERVICE SIZE WITH SPRINKLER DESIGNER/CONTRACTOR PRIOR TO CONSTRUCTION AND INSTALLATION OF METER/BACKFLOW PREVENTOR AND SERVICES. NOTIFY ENGINEER OF
- CONTRACTOR RESPONSIBLE FOR PAYING ALL TAP AND CONNECTION FEES AND SHALL CONTRACT AND PAY FOR ANY REQUIRED SUB CONTRACTORS BY UTILITY COMPANIES.
- 7. CONTRACTOR TO REPAIR ALL AREA DAMAGED BY CONSTRUCTION TO EXISTING CONDITIONS OR BETTER.
- 8. BACKFLOW PREVENTION TO BE PROVIDED INSIDE BUILDING. SEE MEP AND ARCHITECTURAL PLANS FOR
- 9. LOCATION FOR POWER SHOWN IS APPROXIMATE AND SUBJECT TO CHANGE. CONTRACTOR TO VERIFY FINAL LOCATION AND DESIGN WITH UTILITY COMPANY PRIOR TO CONSTRUCTION.
- 10. WATER METER CANNOT BE INSTALLED IN THE BUILDING.
- 11. CONTRACTOR SHALL COORDINATE CABLE/FIBER OPTIC CONDUIT AND SERVICE INSTALLATION WITH UTILITY
- 12. ALL TAPS AND CONNECTIONS FOR FIRE AND DOMESTIC WATER SERVICES ARE TO BE IN ACCORDANCE WITH CITY OF LEES SUMMIT STANDARDS AND SPECIFICATIONS.

LEGEND PROPERTY LINE CONSTRUCT STORM SEWER INSTALL SANITARY SEWER SERVICE INSTALL ELECTRICAL LINE INSTALL DOMESTIC WATER SERVICE INSTALL FIRE PROTECTION LINE INSTALL COMMUNICATION SERVICE INSTALL STORM DRAIN

SUGGESTED UTILITY DEPTHS:

COORDINATE WITH UTILITY PROVIDERS AND FOLLOW UTILITY PROVIDERS STANDARDS IF CONFLICT EXISTS. PRIMARY ELECTRIC 24"

SECONDARY ELECTRIC 18"

DOMESTIC WATER 48"

FIRE SERVICE 48"

COMMUNICATION LINES 18"

KEY NOTES:

STORM SEWER:

S1. SEE SHEETS C-10 THRU C-13 FOR STORM SEWER PLAN & PROFILE. S2. CONNECT TO EXISTING STORM SEWER. RE: SHEET C-10

ROOF / LANDSCAPE DRAIN SYSTEM:

- B2. INSTALL 89 LF OF 12" PVC @ 2.84% (SW) TO RD1 1=1011.86
- RD1. INSTALL 24" ADS BASIN WITH STEEL COVER, 193 LF OF 10" PVC @ 1.00% (E) AND 125 LF 8" PVC @ 1.00 (S).
- TS=1020.20 © OUT (NE)=1013.39, © IN (W)=1013.89, © IN (S)=1014.76 RD2. INSTALL 15" ADS BASIN WITH DOMED LID AND 88 LF OF 8" PVC (S) @ 1.00%
- TS=1020.20, f=1015.82 RD3. INSTALL 10" ADS BASIN WITH DOMED LID. TS=1020.20, =1016.70
- RD4. INSTALL 12" ADS BASIN WITH DOMED LID AND 69 LF OF 8" PVC (S) @ 1.00% TS=1020.20, =1016.01
- RD5. INSTALL 10" ADS BASIN WITH DOMED LID. TS=1020.20, =1016.70
- RD6. INSTALL ONE-WAY CLEANOUT AND 5 LF OF 8" PVC (S.) @ 1.00% MIN. RE: MEP FOR CONNECTION AT BLDG.

ELECTRICAL:

- E1. PROPOSED TRANSFORMER LOCATION. COORDINATED INSTALLATION WITH UTILITY COMPANY AND MEP PLANS. CONTRACTOR TO INSTALL TRANSFORMER PAD PER UTILITY COMPANY STANDARDS AND SPECIFICATIONS.
- E2. INSTALL 156+/-LF OF PVC CONDUIT FOR PRIMARY ELECTRICAL SERVICE PER UTILITY COMPANY STANDARDS AND SPECIFICATIONS. VERIFY CONDUIT SIZE AND ROUTING WITH KCP&L. ELECTRICAL DESIGN IS BY KCP&L. THE ALIGNMENT SHOWN ON THE PLANS IS APPROXIMATE. THE CONTRACTOR SHALL COORDINATE ELECTRICAL SERVICE ROUTE DIRECTLY WITH KCP&L
- AND PROVIDE NECESSARY CONDUIT TO TO SERVE THE PROJECT. SEE MEP PLANS FOR LIGHTING AND LIGHTING CONDUIT.

!!!!CONTRACTOR NOTE: ALL CONNECTIONS WILL BE MADE TO THE CITY'S 12" MAIN. THE 20" MAIN IS NOT TO BE DISTURBED.!!!

W1. DOMESTIC WATER:

- a. TAP EXISTING 12" CITY WATER LINE PER STANDARD CITY DETAIL. COORDINATE TAP WITH LEE'S SUMMIT WATER DISTRICT.
- b. INSTALL 6 LF OF 2" TYPE COPPER PIPE FROM TAP TO METER.
- c. INSTALL 1-1/2" METER AND PIT PER STANDARD CITY DETAIL.
- d. INSTALL A MINIMUM 10 LF OF 2" TYPE SPLICE-FREE COPPER PIPE FROM TAP TO METER TOWARDS BUILDING PER CITY DETAIL.
- e. CONTINUE BUILDING SERVICE CONNECTION WITH 140 LF OF 2" POLYETHYLENE PIPE (AWWA C901)
- RE: MEP FOR CONNECTION AT BLDG.

W2. FIRE LINE TO HYDRANT:

- a. CUT 12x12x6 TEE INTO EXISTING 12" CITY MAIN
- b. INSTALL 209 LF OF 6" AWWA C900 FIRE LINE, HYDRANT AND GATE VALVE.(SEE SHEET C10.4 FOR HYDRANT DETAIL)
- c. INSTALL 6" GATE VALVE, BACK FLOW PREVENTOR, AND VAULT PER STANDARD CITY DETAIL ON SHEET C10.2.
- d. INSTALL 50 LF OF 2" PVC PIPE @ 1% MINIMUM SLOPE TO DRAIN BACK FLOW PREVENTOR TO EXISTING DITCH. PLACE CONCRETE COLLAR FLUSH WITH GRADE ON DAYLIGHTED PIPE TO PREVENT MOWER DAMAGE.
- W3. FIRE LINE TO BUILDING INSTALL 20 LF OF 6" AWWA C900 FIRE LINE.
- RE: MEP FOR CONNECTION AT BLDG.
- W4. IRRIGATION PLANS AND CONNECTION (BY OTHERS).

W5. FDC LOCATION (REF: MEP PLANS)

G1 521± LF GAS SERVICE LINE AND METER. COORDINATE CONNECTION AND LOCATION WITH GAS SERVICE COMPANY.

COMMUNICATIONS:

C1 INSTALL 312 LF OF 3-4" PVC CONDUIT W/PULL STRING. COORDINATE CONNECTION LOCATION WITH COMMUNICATIONS COMPANY.

SANITARY SEWER:

- SS1 275 LF 4" PVC SERVICE LINE @ 4.26% WITH TRACER WIRE. RE: MEP <code>₸=1017.00</code>
- SS2 INSTALL ONE-WAY CLEANOUT.
- TS=1020.76 **½**=1016.80
- SS3 INSTALL ONE-WAY CLEANOUT
- TS=1018.81
- <code>₸=1012.80</code> SS4 INSTALL ONE-WAY CLEANOUT
- TS=1013.29
- ₸=1006.11 SS5 INSTALL WYE CONNECTION ON EXISTING 8" MAIN.
 - **½**=1005.31
- SS6 INSTALL TRENCH CHECK PER CITY DETAIL

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417.877.9600

816.300.030

Kansas City, MO 64108

Springfield, MO 65804

SPECIAL NOTICES

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egal equivalent of his signature whenever & wherever used, and the owner of the seal shall authenticate this sheet and the specification ections pertaining to this sheet. Responsibility shall be disclaimed or all other plans, specifications, estimates, reports or other

documents or instruments relating to or intended to be used for any part or parts of the architectural project.

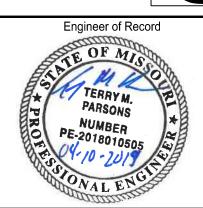
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Mid-Contine





Terry M Parsons, Engineer MO PE-2018010505



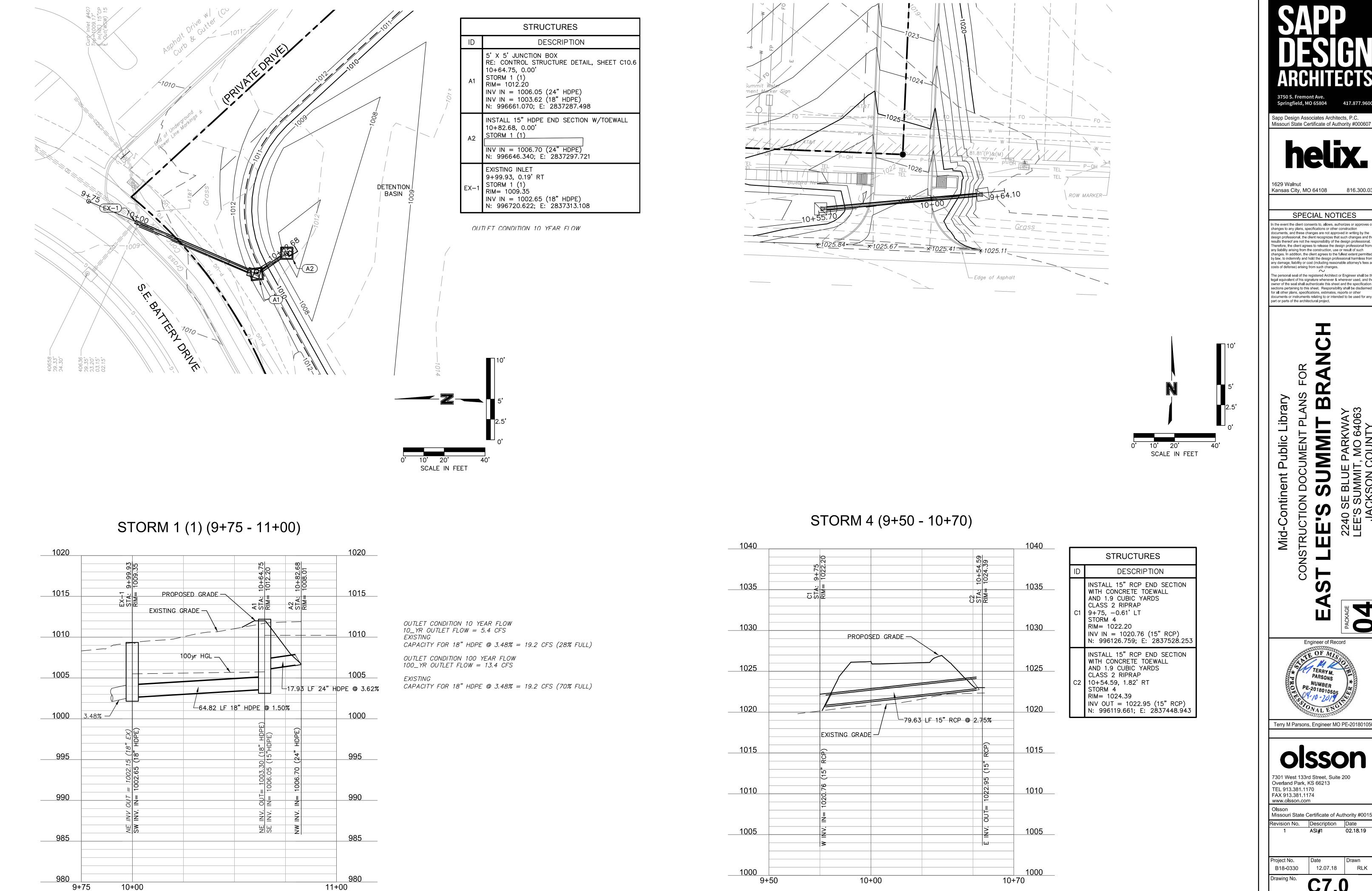
Overland Park, KS 66213 TEL 913.381.1170

FAX 913.381.1174 www.olsson.com

Missouri State Certificate of Authority #001592 02.18.19

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Engineer of Record TERRY M.
PARSONS PE-2018010505

Terry M Parsons, Engineer MO PE-2018010505

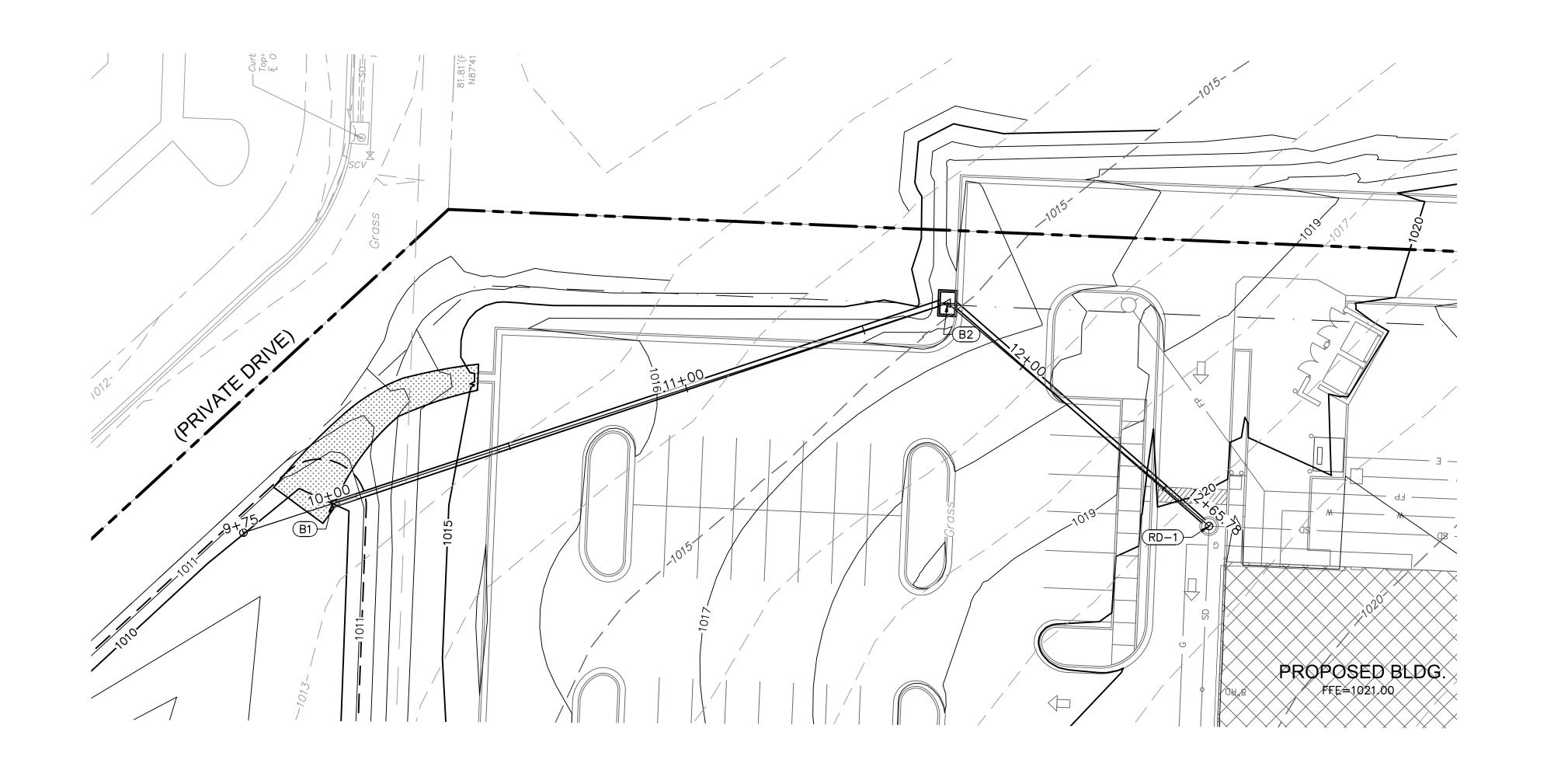
7301 West 133rd Street, Suite 200 Overland Park, KS 66213 TEL 913.381.1170

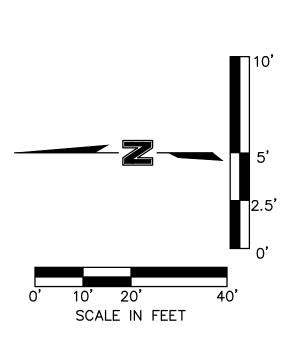
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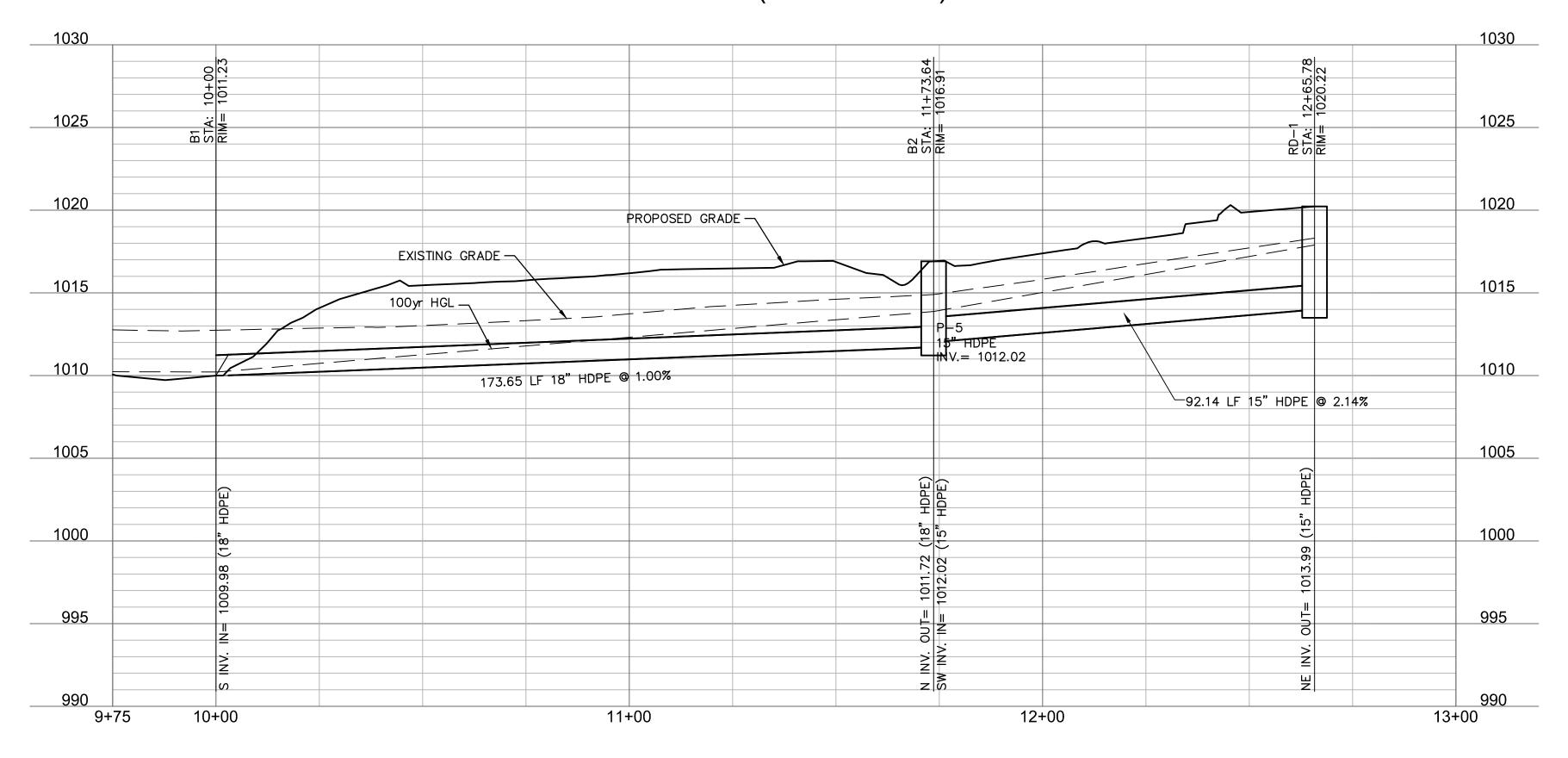
STORM SEWER

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STORM 3 (9+75 - 13+00)



	STRUCTURES						
ID	DESCRIPTION						
B1	INSTALL 18" HDPE END SECTION W/TOEWALL AND XX LF OF 150# RIPRAP 10+00, 0.00' STORM 3 RIM= 1011.23 INV IN = 1009.98 (18" HDPE) N: 996558.877; E: 2837426.099						
B2	INSTALL STD. 6'X4' NON-SETBACK CURB INLET 11+73.64, 0.00' STORM 3 RIM= 1016.91 INV IN = 1012.02 (15" HDPE) INV OUT = 1011.72 (18" HDPE) N: 996393.767; E: 2837479.875						
RD-1	INSTALL STD. 4' DIA. MH W/HEAVY DUTY RING & COVER 12+65.78, 0.00' STORM 3 RIM= 1020.22 INV OUT = 1013.99 (15" HDPE) N: 996323.625; E: 2837420.130						



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816.300.0300

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Engineer of Record

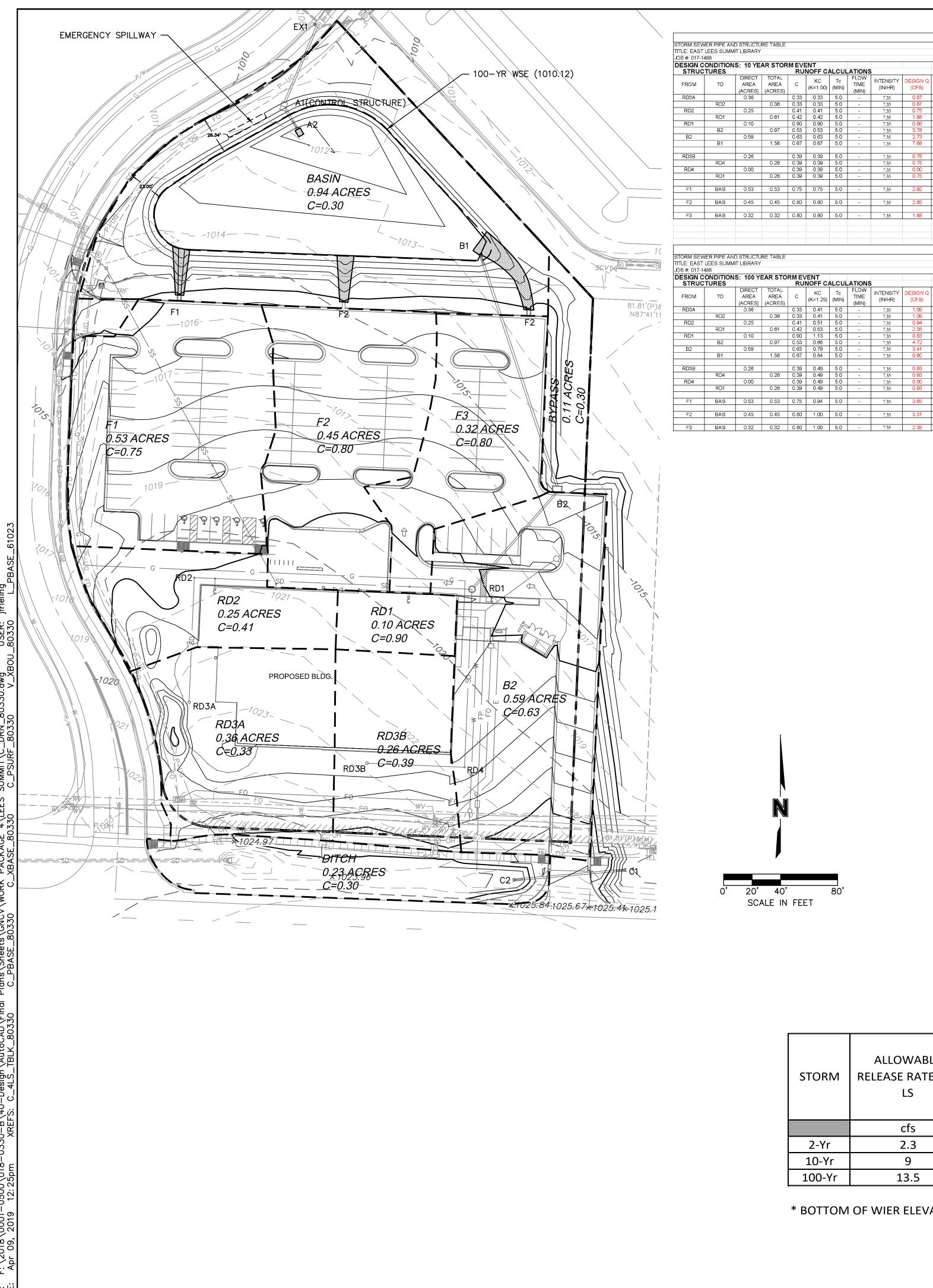
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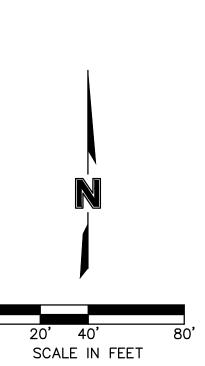
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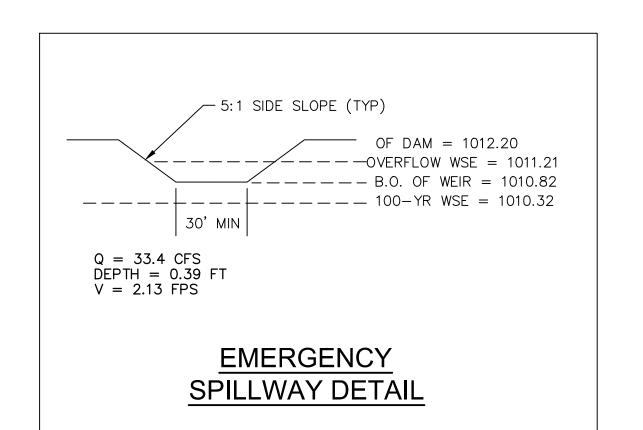
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STORM SEWER PLAN & PROFILE



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RD3A		0.36			0.33			7.35	0.87	ADS BASINS/ROOF DRAINS									1020.20											1017.54	1019.20	
	RD2		0.36		0.33			7.35	0.87	8 in. HDPE	88.00	1.00	8	1.21	0.35	3.47	3.80	1.04		1016.70	1015.82	1016.85	0.47	1.00	1.00	0.22	0.69	1017.40	1017.54			
RD2	20.4	0.25	2.24	0.41	0.41			7.35	0.75	ADS BASINS/ROOF DRAINS	100.00	4.00			2.55	4.00	4.50		1020.20	1015.00	4040.00	1010.10		0.40	2.40	0.10		1010.05	1015.00	1016.85	1019.20	
554	RD1		0.61	0.42	0.42			7.35	1.88	10 in. HDPE	193.00	1.00	10	2.20	0.55	4.03	4.53	1.24	1000.00	1015.82	1013.89	1013.48	1.45	0.40	0.40	0.13	1.57	1016.85	1015.82	4040.05	1010.00	
RD1		0.10	0.07	0.90		5.0		7.35	0.66	JUNCTION BOX	00.44	4.00	45	40.05	4.00	40.50	0.45	0.07	1020.20	4045.70	4040.00	1017.54	0.00	0.00	0.00	0.00	0.74	4040.04	4040.05	1018.25	1019.20	
	B2	0.50	0.97		0.53			7.35	3.78	15 in. HDPE CURB INLET	92.14	4.00	15	12.95	1.23	10.56	9.15	0.97	1017.86	1015.72	1012.02	1017.54	0.32	0.30	0.30	0.39	0.71	1016.94	1018.25	4040.40	1010.00	
B2	B1	0.59	1.56	0.63	0.63 ±	5.0		7.35	2.73 7.68	18 in. HDPE	173.65	1.00	40	40 F2	1.77	5.96	6.50	4 47	1017.86	1011.72	1009.98	1009.52	0.94	0.50	0.50	0.33	1.27	1013.48	1011.72	1013.48	1016.86	END SECTION TO BASIN
	ы		1.50	0.07	0.07	,.0	-	7.35	7.00	10 III. HDPE	173.00	1.00	10	10.55	1.77	5.90	0.50	1.17		1011.72	1009.90	1009.52	0.94	0.50	0.50	0.33	1.27	1013.46	1011.72			END SECTION TO BASIN
RD3B		0.26		0.30	0.39	5.0		7.35	0.75	ADS BASINS/ROOF DRAINS									1020.20											1017.33	1019.20	
KD35	RD4	0.20	0.26		0.39			7.35	0.75	8 in. HDPE	67.00	1.00	8	1 21	0.35	3.47	3.64	0.04	1020.20	1016.70	1016.01	1016.59	0.26	1.00	1.00	0.21	0.46	1017 33	1017.06	1017.33	1019.20	
RD4	IND4	0.00	0.20		0.39			7.35	0.00	ADS BASINS/ROOF DRAINS	07.00	1.00	-	1.21	0.55	5.41	3.04	0.04	1020.20	1010.70	1010.01	1010.55	0.20	1.00	1.00	0.21	0.40	1017.55	1017.00			
IXD4	RD1	0.00	0.26		0.39			7.35	0.75	8 in. HDPE	125.00	1.00	8	1 21	0.35	3 47	3 64	0.94	1020.20	1016.01	1014.76	1017.54	0.48	0.40	1.00	0.21	0.69	1016 64	1018.23			
			0.20	0.00	0.00	5.0		7.55	0.10	0 III. 1 IBI L	120.00	1.00	Ť		0.00	0. 11	0.01	0.01		1010.01	1011.10	1011.01	0.10	0.10	1.00	0.21	0.00	1010:01	1010.20			
F1	BAS	0.53	0.53	0.75	0.75	5.0	-	7.35	2.92	FLUME																						
F2	BAS	0.45	0.45	0.80	0.80 \$	5.0	-	7.35	2.65	FLUME																						
F3	BAS	0.32	0.32	0.80	0.80	5.0 -	-	7.35	1.88	FLUME																						
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FROM	TO	AREA	AREA	C	(K=1.25) (N	AIND TIN	WE ∣ ,	(IN/HR)	(CFS)	DESCRIPTION	LENGTH	SLOPE (%)	DIA	(CFS)	AREA (SQ.FT.)	(F/S)	DESIGN V (F/S)	Hw/D	FLEVATION	FLOWLINE	FLOWLINE	WATER	HEAD (h f)	COEFFICIENT	ENTRY	LOSS (h m)) (FD	CONTROL	OUTLET	GRADE	GRADE	Comments
		(ACRES)	(ACRES)			(M) (M	IIN) '		(5. 5)		(L.F.)	(%)	[(IN)	(-, -)	(SQ.FT.)	()	. ()					ELEVATION	1	(k)	LOSS (k)		′ '''		CONTROL	ELEV.	(MAX)	





MID CONTINENT PUBLIC LIBRARY - EAST LEE'S SUMMIT BRANCH DETENTION BASIN FLOW AND WSE ELEVATION ANALYSIS

STORM	ALLOWABLE RELEASE RATE PER	MAX INFLOW INTO		18" OUTLET PIPE FROM STRUCTURE WSE FOR		ND ELEVAT		24" INLET PIPE FROM POND TO STRUCTURE WSE
	LS	BASIN	RATE	DESIGN RELEASE RATE	FLOW THOUGH 1"	FLOW THROUGH	WSE	FOR DESIGN RELEASE RATE
					PERF HOLES	WEIR	VVSL	
	cfs	cfs	cfs	elev ft	cfs	cfs	elev ft	elev ft
2-Yr	2.3	13.7	2.1	1004.06 OC	0.92	1.18	1008.98	1008.99
10-Yr	9	21.1	5.5	1004.62 OC	0.98	4.52	1009.36	1009.43
100-Yr	13.5	33.4	13.4	1006.16 IC	1.08	12.32	1009.92	1010.32

* BOTTOM OF WIER ELEVATION @ 1008.40



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1629 Walnut Kansas City, MO 64108

END SECTION TO BASIN

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Mid-Contine

Engineer of Record PE-2018010505

Terry M Parsons, Engineer MO PE-2018010505

7301 West 133rd Street, Suite 200 Overland Park, KS 66213 TEL 913.381.1170

FAX 913.381.1174 www.olsson.com

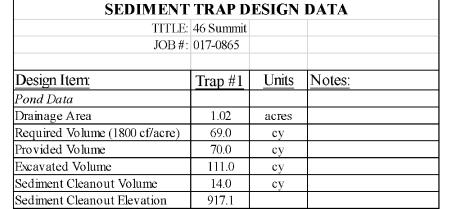
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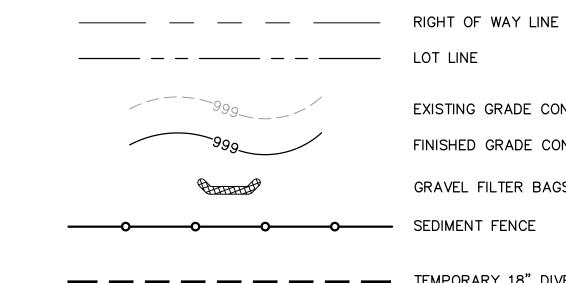
B18-0330 12.07.18

DRAINAGE PLAN









EXISTING GRADE CONTOUR

FINISHED GRADE CONTOUR

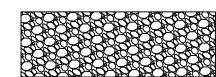
GRAVEL FILTER BAGS

SEDIMENT FENCE

LEGEND

TEMPORARY 18" DIVERSION BERM (SEE DETAILS)

LIMITS OF DISTURBANCE (XX ACRES)



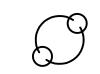
TEMPORARY CONSTRUCTION ENTRANCE

 CONCRETE WASHOUT

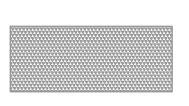
STAGING/STOCKPILE AREA



EROSION CONTROL REFERENCE NUMBER

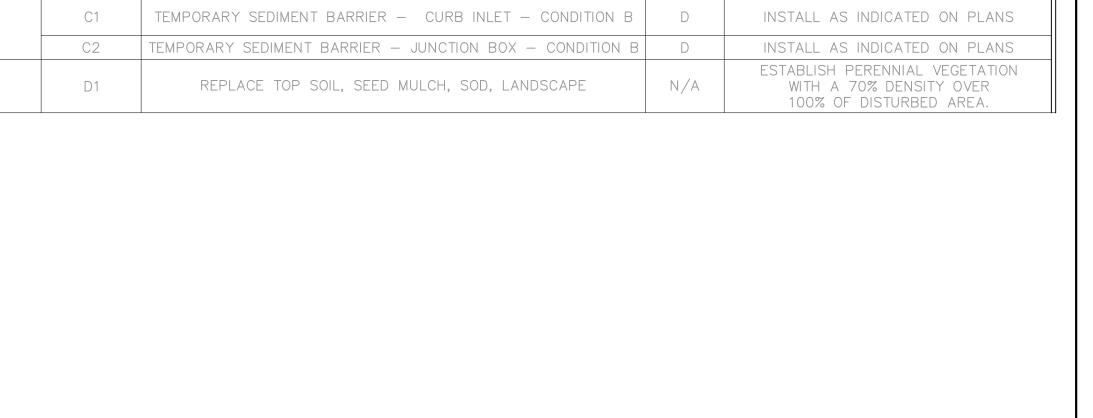


STRAW WATTLES



STABILIZATION. "LANDLOK (S2)" SHALL BE USED OR APPROVED EQUÁL. CONTACTOR TO SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL. SEED WITH PERENNIAL SEEDING TO MEET SWPPP REQUIREMENTS. INSTALL PER DETAIL AND MANUFACTURER RECOMMENDATIONS.

	ERO	OSION CONTROL STAGING CHA	ART	
PROJECT STAGE	EROSION CONTROL BMP REFERENC E NO.	BMP DESCRIPTION	REMOV E AFTER STAGE	NOTES:
	A1	TEMPORARY CONSTRUCTION ENTRANCE	С	INSTALL AS INDICATED ON PLANS
	A2	CONCRETE WASHOUT	С	INSTALL AS INDICATED ON PLANS
	А3	TEMPORARY SLOPE BARRIER (SEDIMENT FENCE)	D	INSTALL AS INDICATED ON PLANS
A - PRE-CONSTRUCTION	A4	STAGING / STOCKPILE AREA	С	INSTALL AS INDICATED ON PLANS
	A5	EXISTING CURB INLET PROTECTION — TEMPORARY SEDIMENT BARRIER — CONDITION A	С	INSTALL AS INDICATED ON PLANS
	A6	TEMPORARY SEDIMENT TRAP	С	INSTALL AS INDICATED ON PLANS
	A7	TEMPORARY DIVERSION BERM	С	INSTALL AS INDICATED ON PLANS
B — STORM SEWER & UTILITY CONSTRUCTION (STABILIZE ANY DISTURBED ARES OUTSIDE OF BUILDING	B1	TEMPORARY SEDIMENT BARRIER — CURB INLET — CONDITION A	С	INSTALL AS INDICATED ON PLANS
PADS AND PARKING LOTS)	B2	TEMPORARY SEDIMENT BARRIER - JUNCTION BOX - CONDITION A	С	INSTALL AS INDICATED ON PLANS
	В3	TEMPORARY EROSION CONTROL BLANKET (LANDLOK S2)	С	INSTALL AS INDICATED ON PLANS
C - BUILDING AND PAVEMENT	C1	TEMPORARY SEDIMENT BARRIER - CURB INLET - CONDITION B	D	INSTALL AS INDICATED ON PLANS
CONSTRUCTION	C2	TEMPORARY SEDIMENT BARRIER - JUNCTION BOX - CONDITION B	D	INSTALL AS INDICATED ON PLANS
D — FINAL STABILIZATION	D1	REPLACE TOP SOIL, SEED MULCH, SOD, LANDSCAPE	N/A	ESTABLISH PERENNIAL VEGETATION WITH A 70% DENSITY OVER



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Engineer of Record

Terry M Parsons, Engineer MO PE-2018010505



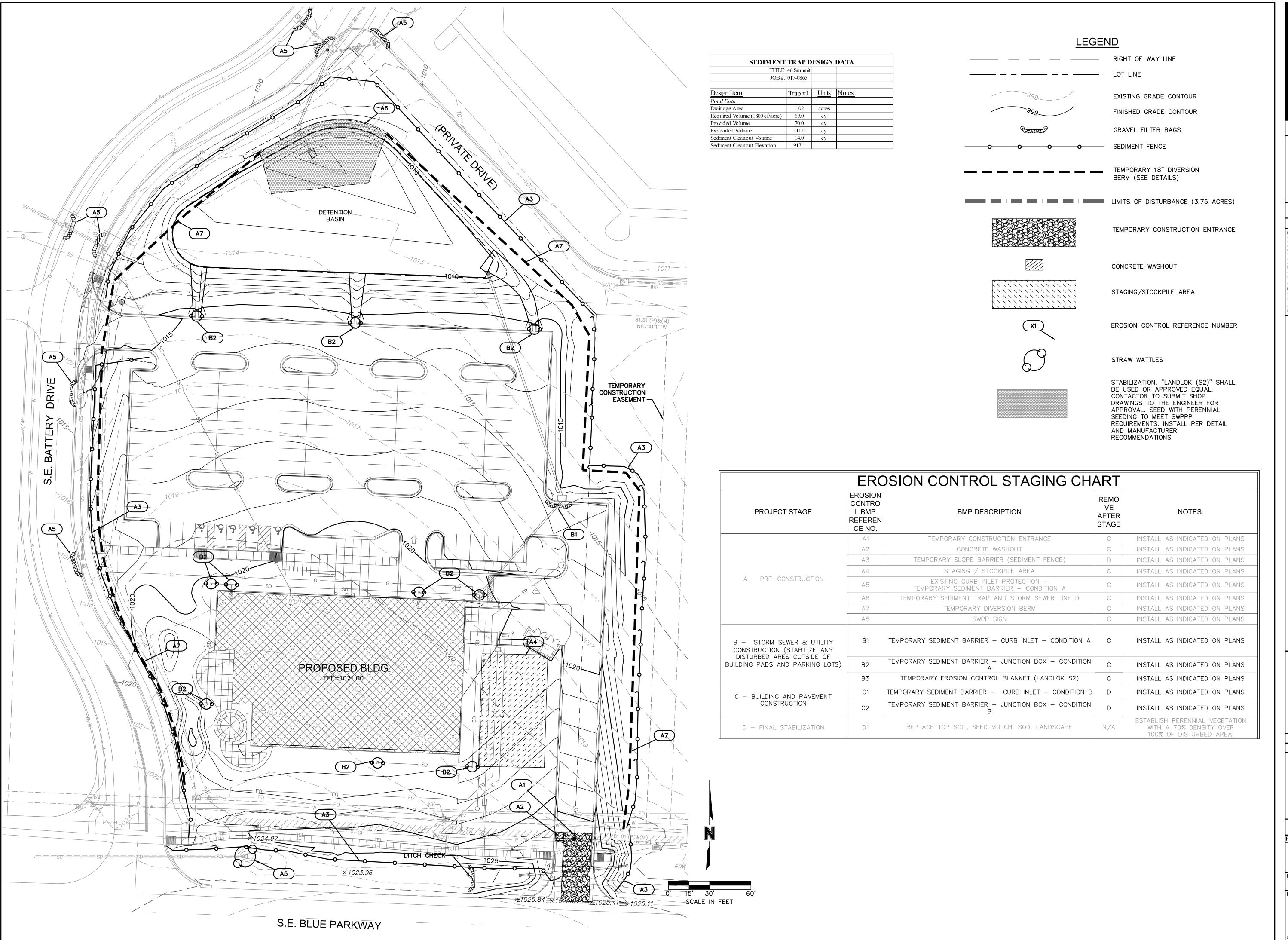
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B18-0330 12.07.18

EROSION CONTROL PLAN

- PRE CONSTRUCTION yright 2018 - Sapp Design Associates, Architects, P.C.





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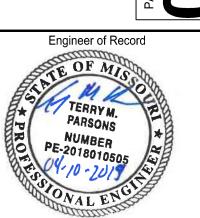
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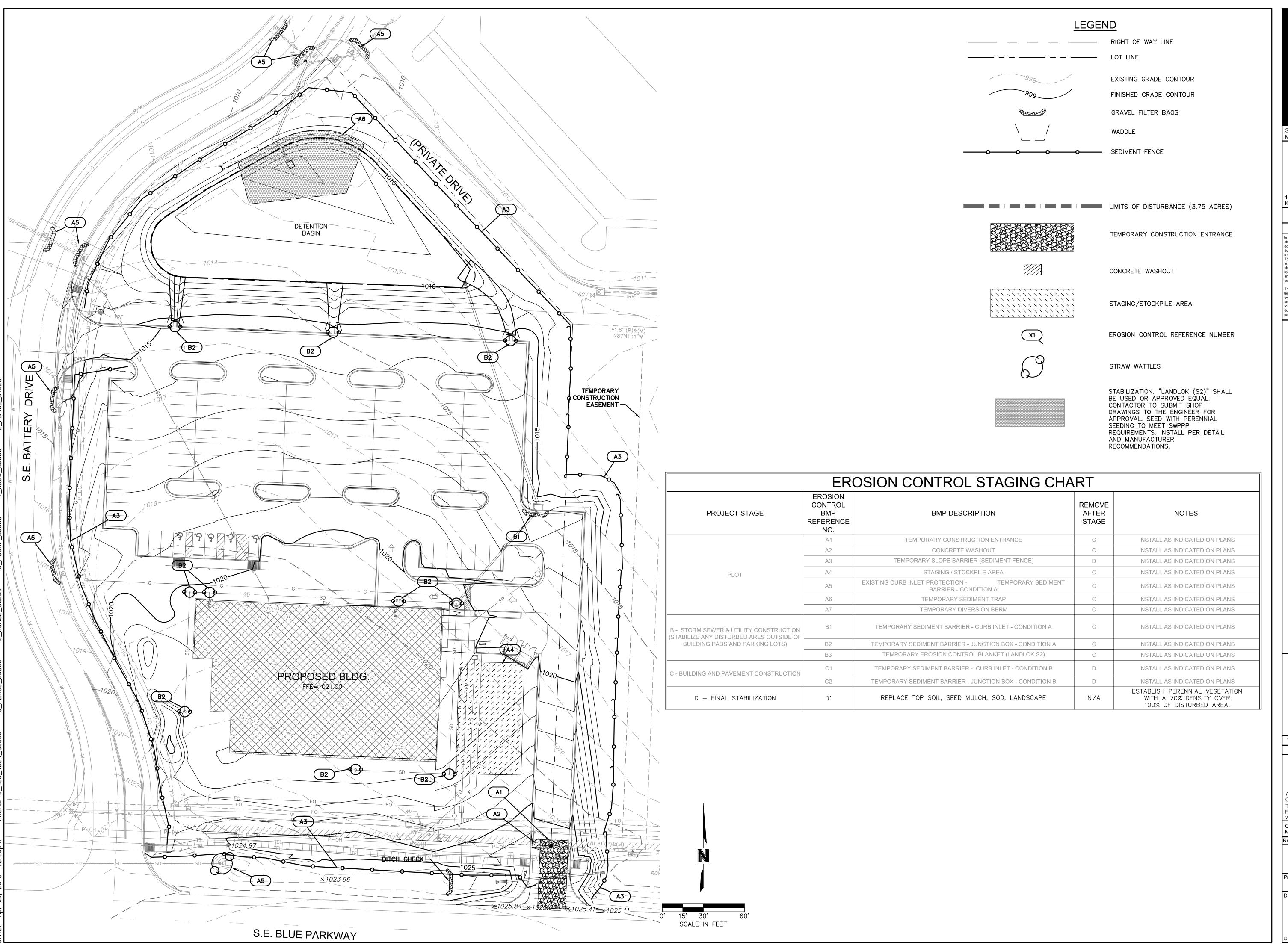
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EROSION CONTROL -CONSTRUCTION





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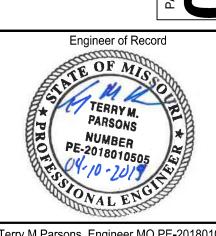
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> **EROSION CONTROL -**POST CONSTRUCTION

Existing Ground -

Existing Ground —

Notes for Construction Entrance:

public road to divert runoff from it.

drainage ditches along public roads.

If conditions warrant, place geotextile fabric on the graded foundation to improve stability.

Leave surface sloped for drainage.

a sediment control device.

Avoid locating on steep slopes, at curves on public roads, or downhill of disturbed area.

2. Remove all vegetation and other unsuitable material from

the foundation area, grade, and crown for positive drainage.

3. If slope towards the public road exceeds 2%, construct a 6- to 8-inch high ridge with 3H:1V side slopes across the foundation approximately 15 feet from the edge of the

5. Place stone to dimensions and grade as shown on plans.

6. Divert all surface runoff and drainage from the entrance to

4. Install pipe under the entrance if needed to maintain

* - Must extend full width of

Non-Woven Geotextile —

Sediment Trapping Device

Mountable Berm (Optional)

<u>Plan View</u>

50' Min.

6" Min.

Section A-A

Maintenance for Construction Entrance:

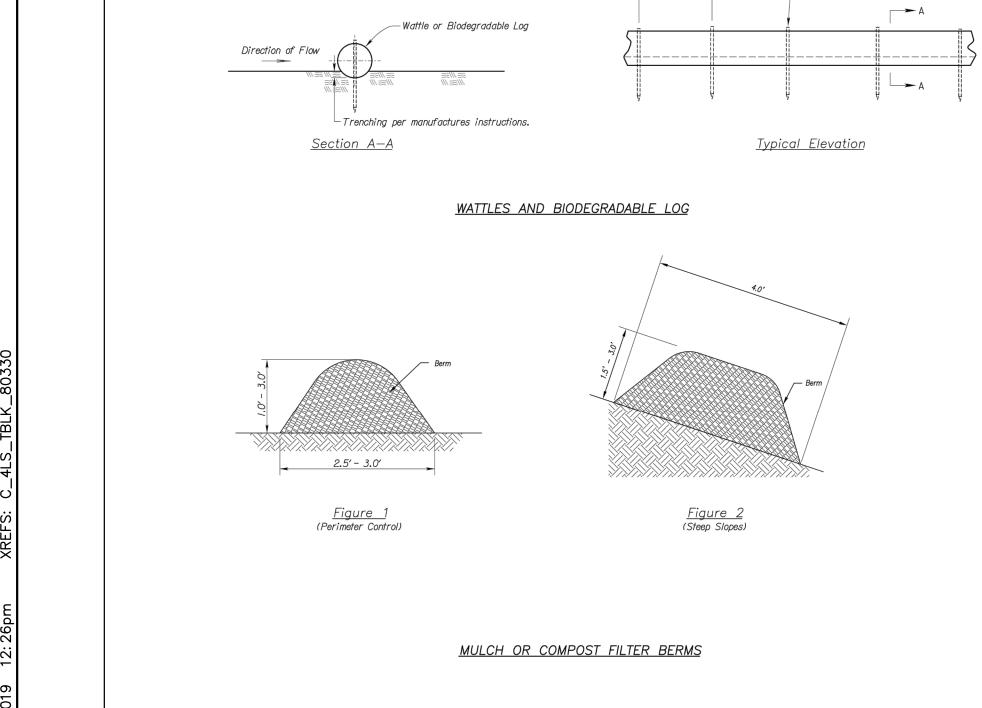
1. Reshape entrance as needed to maintain function and integrity of Installation. Top dress with clean aggregate

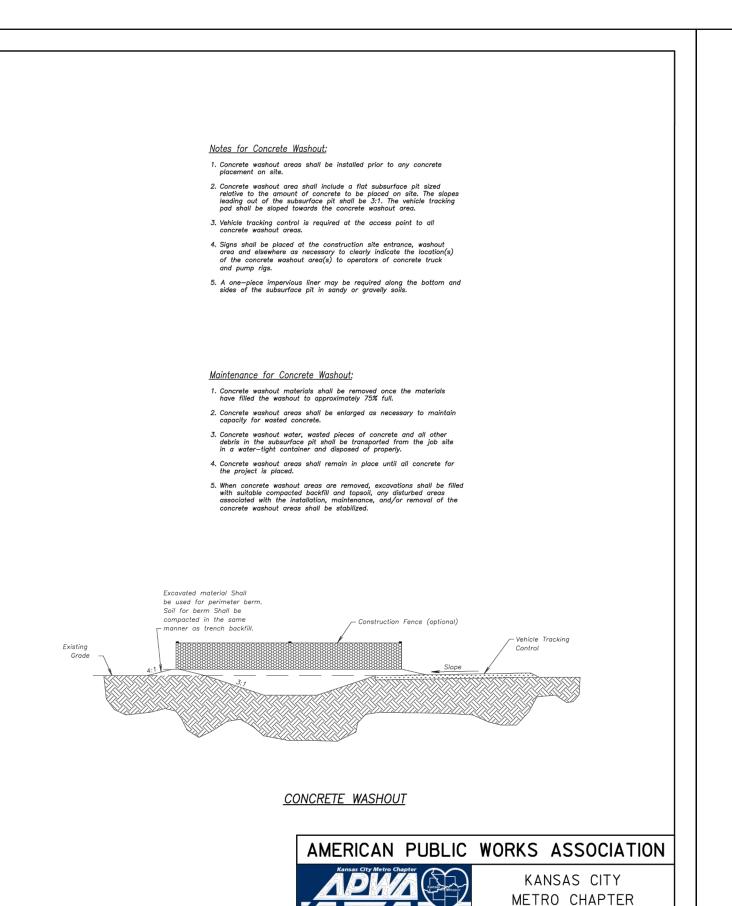
CONSTRUCTION ENTRANCE

<u>Side Elevation</u>

Not to Scale

Not to Scale





CONSTRUCTION ENTRANCE

AND CONCRETE WASHOUT

Notes for Wattles and Biodegradable Log Slope

Notes for Mulch and Compost Filter Beam:

2. Parallel to the base of the slope, or around the perimeter of other affected areas, construct a 1 to 3 foot high by 2.5 to 3 foot wide berm (see Figure 1). For maximum water treatment ability or for steep slopes, construct a 1.5 to 3 foot high trapezoidal berm that is

directed by the engineer.

The sediment control berm shall be placed uncompacted in a windrow at locations shown on the plans or as

a minimum of 4 feet wide at the base (see Figure 2). In extreme conditions, or where specified by the engineer

a second berm shall be constructed at the top of the slope. Engineer will specify berm requirements.

natural landscape, the compost berm may be seeded during application for permanent vegetation.

3. If berm is to be left as permanent or part of the

4. Do not use compost or wood mulch berms in any

5. Wood mulch shall consist of tree and shrub debris

tub grinder or other approved method.

to maintain function and dimensions.

Modified from 2015 Overland Park Standard Detail for Erosion and Sediment Control.

resulting from clearing and grubbing and shall be ground by the mechanical means such as a chipper, hammermill,

Mulch sizing varies with a maximum width of 2" and a maximum length of 10".

Maintenance for Mulch and Compost Filter Beam:

1. Berm shall be reshaped and material added as necessary

MULCH/COMPOST FILTER BERM |

AMERICAN PUBLIC WORKS ASSOCIATION

WATTLES/BIODEGRADABLE LOG STANDARD DRAWING

KANSAS CITY

METRO CHAPTER

NUMBER ESC-04
ADOPTED:

2. Breaches in the berm shall be repaired promptly.

1. The Slope barriers shall be placed along contour lines, with a

short section turned upgrade at each end of the barrier. The maximum length of the slope barrier shall not exceed 250 feet, and the barrier ends need to be staggered.

2. Install wattles and biodegradable logs per manufacturer's instructions.

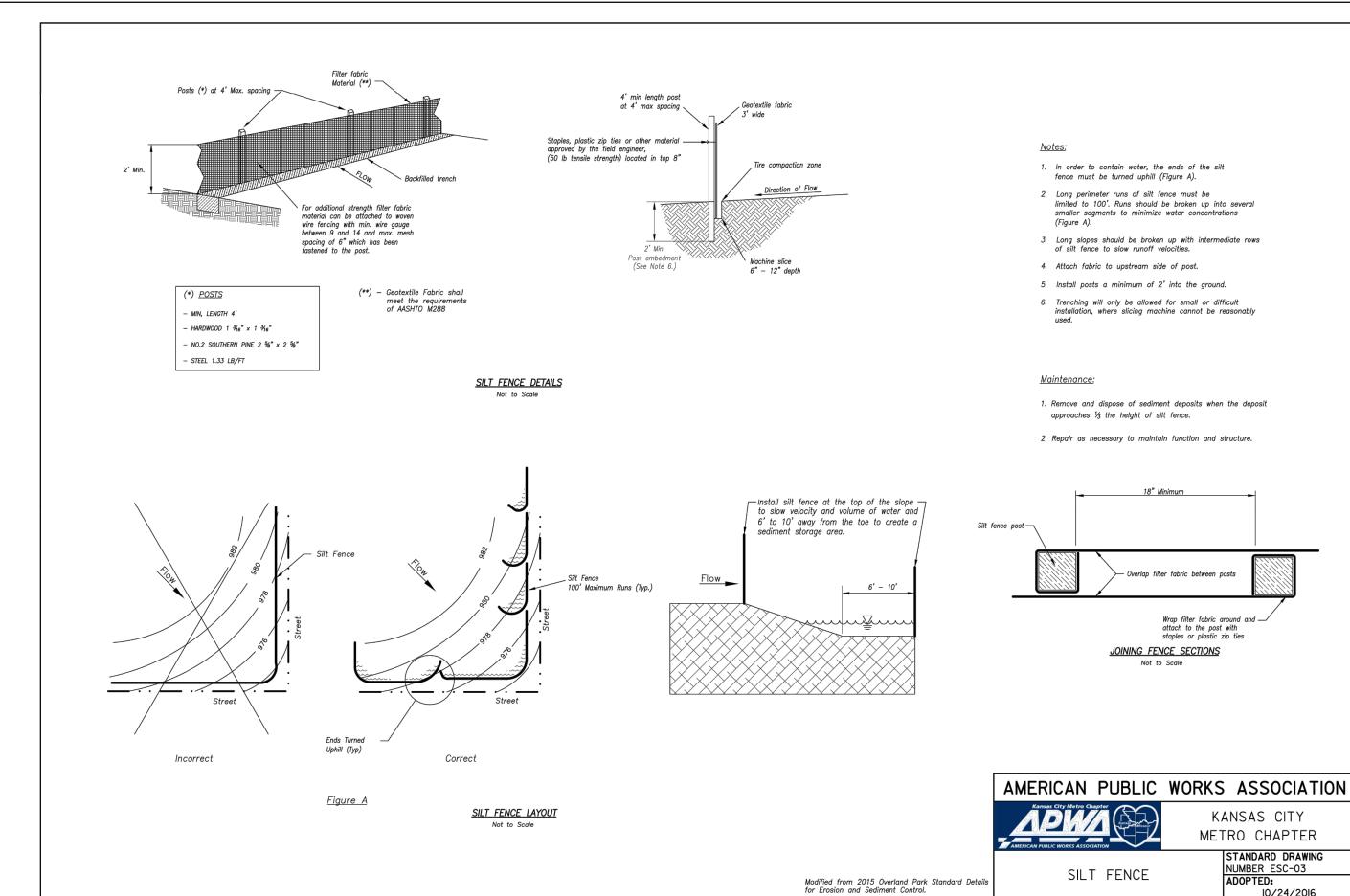
Spacing of stakes per manufacturer's instructions with 4' max. spacing. Length of stakes shall be a minimum of 2 times the diameter of the log with minimum of 24".

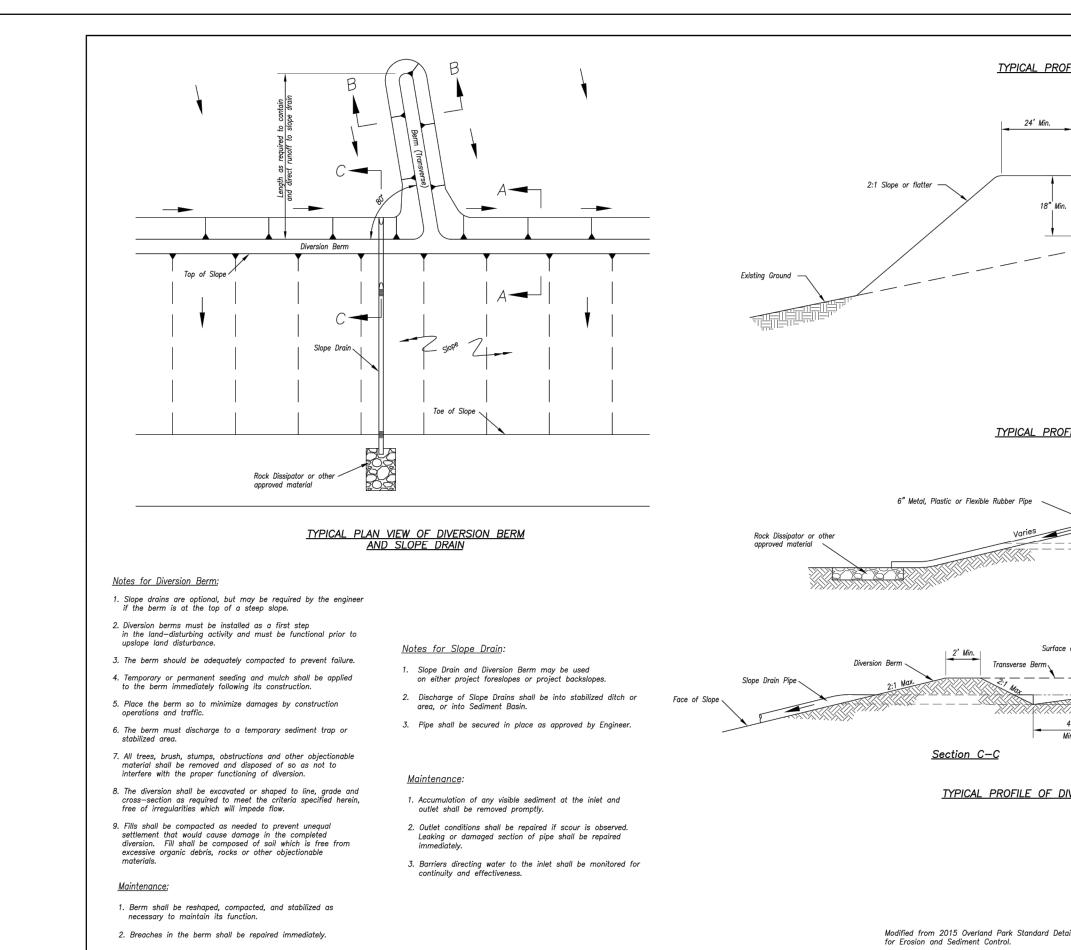
Construction Entrance modified from 2015 Overland Park Standard Details

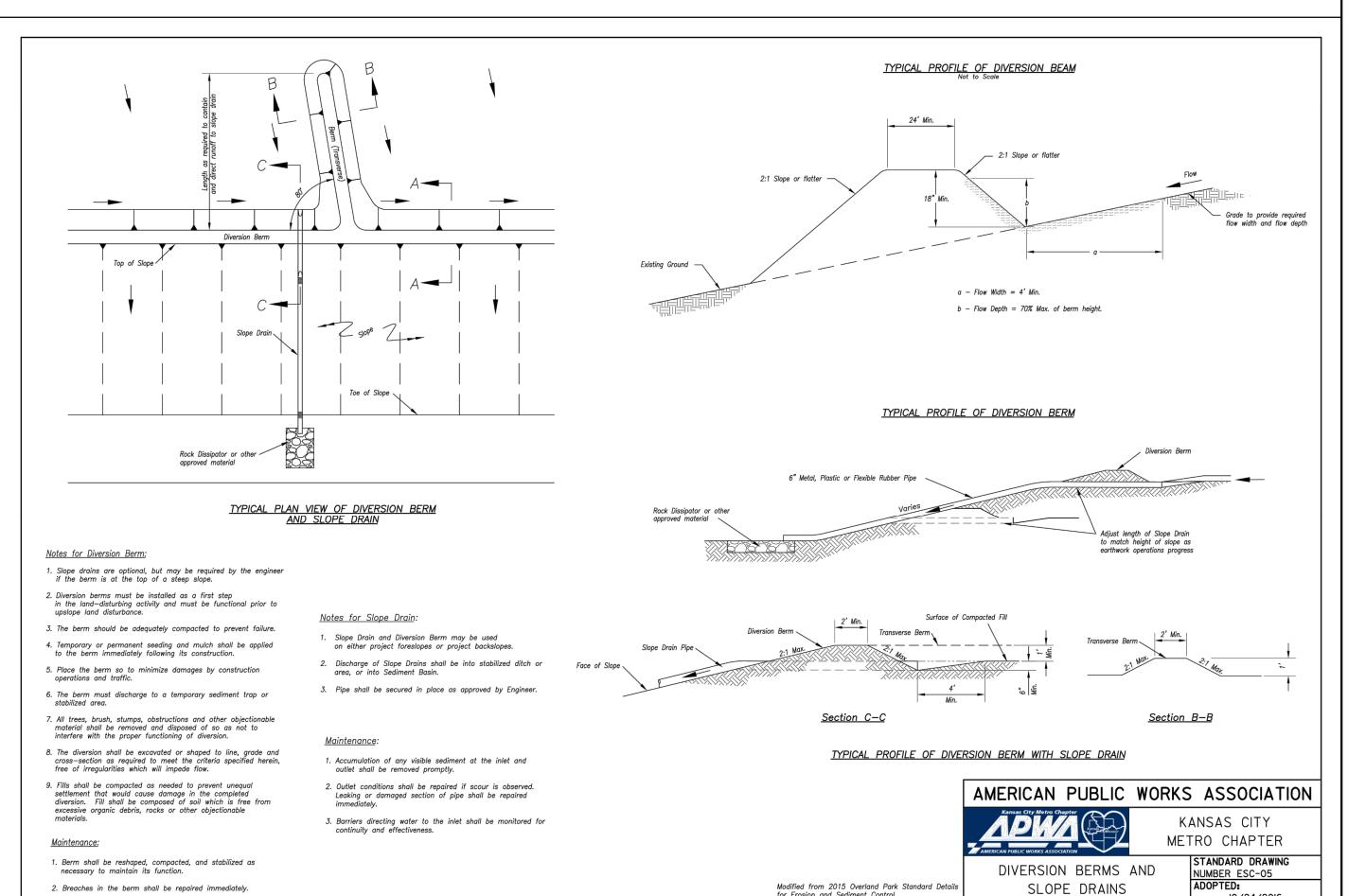
for Erosion and Sediment Control; Concrete Washout modified from 2005 City of Great Bend Standard Drawings.

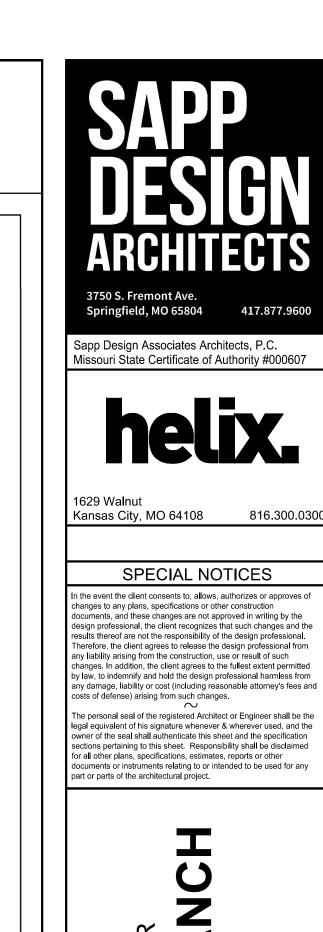
STANDARD DRAWING

NUMBER ESC-OI
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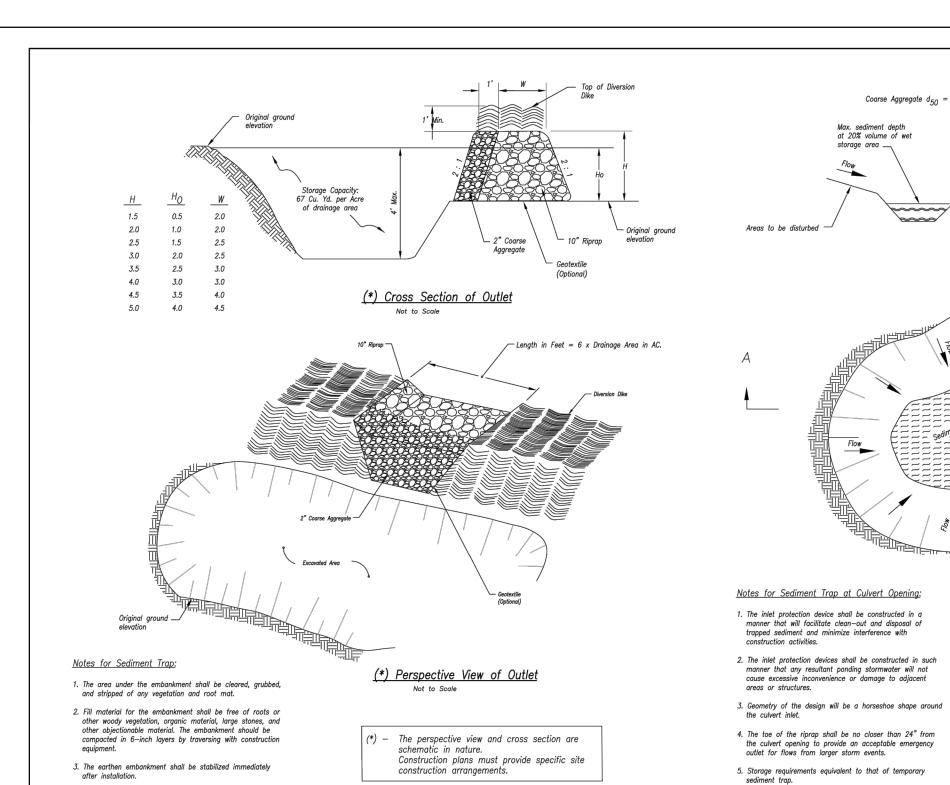
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Maintenance for Sediment Trap:

SEDIMENT TRAP 4. Keep outlet and pool area free of all trash and other debris.

1. Check sediment traps after periods of significant runoff.

Remove sediment and restore the trap to its original dimensions when sediment accumulates to 20% of the storage capacity.

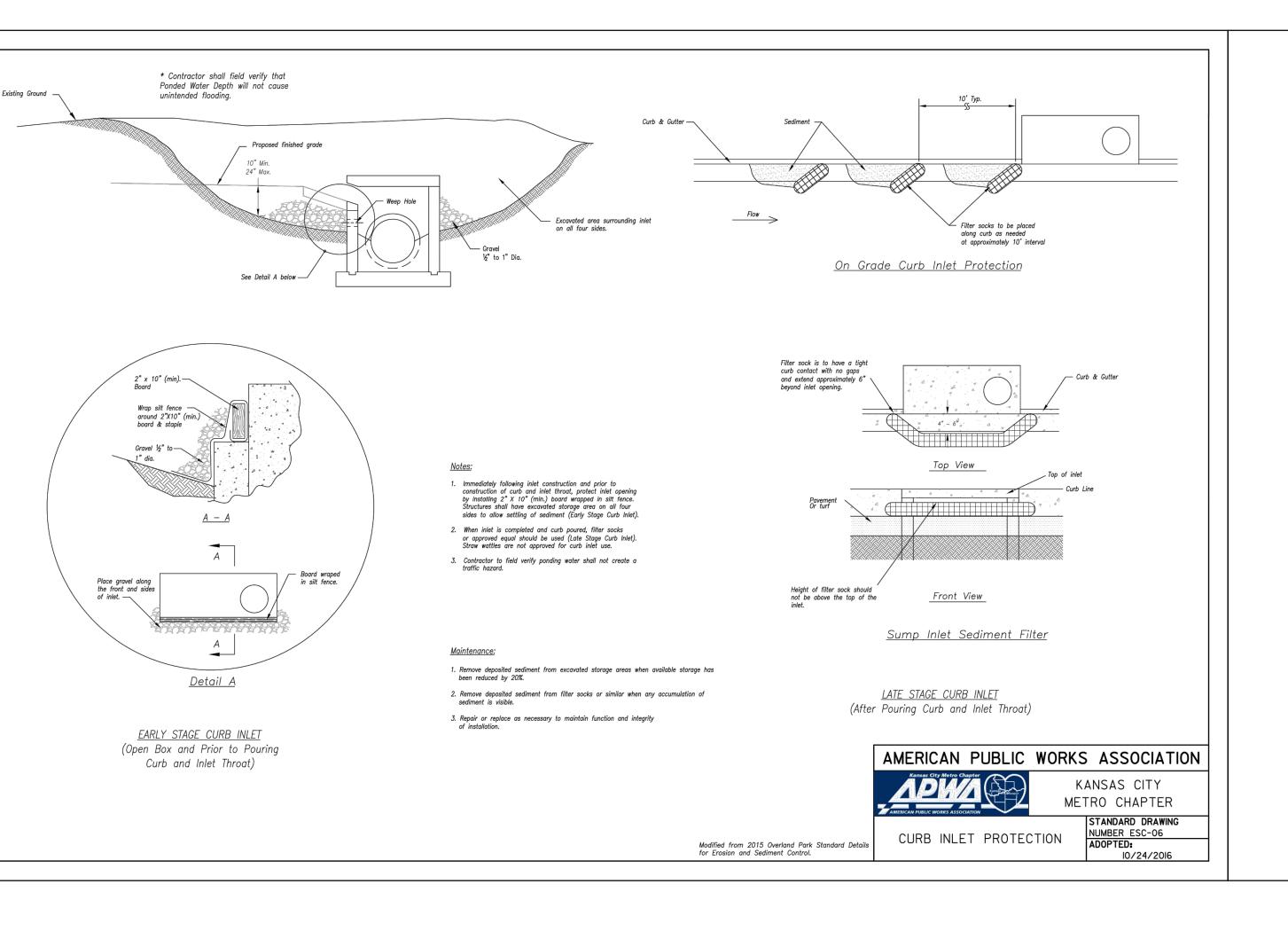
3. Immediately repair any erosion damage to the embankment and outlet.

4. Construction operations shall be carried out to minimize

All cut and fill slopes shall be 2H: 1V or flatter, except for excavated, wet storage areas which may be at a maximum 1H: 1V grade.

5. The structure shall be removed and the area stabilized when the upslope drainage area has been stabilized.

erosion and water pollution.



Coarse Aggregate $d_{50} = 2$

Stabilize area between berm and pipe

r d₅₀ 10" Stone

SEDIMENT TRAPS

Section A-A

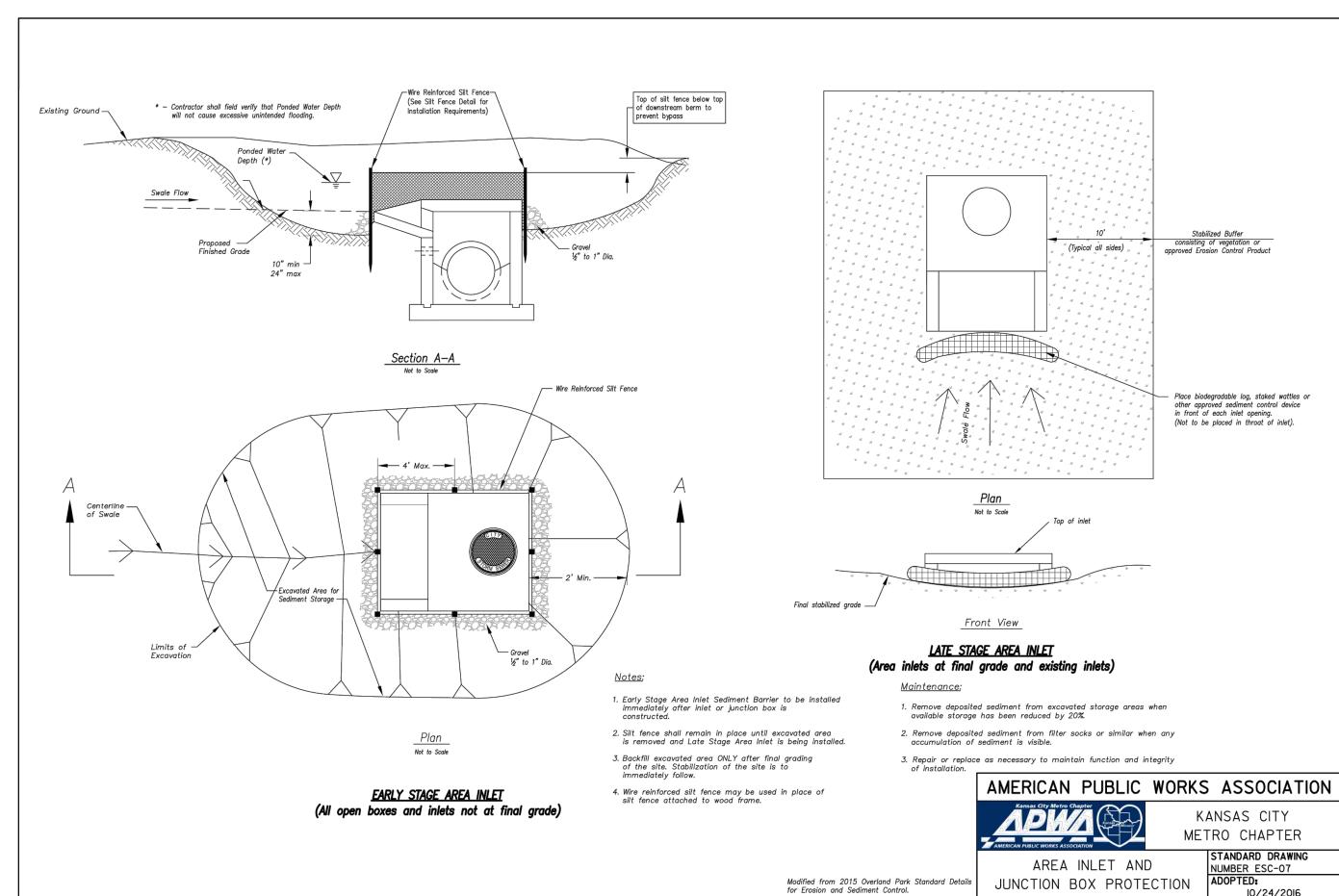
Not to Scale

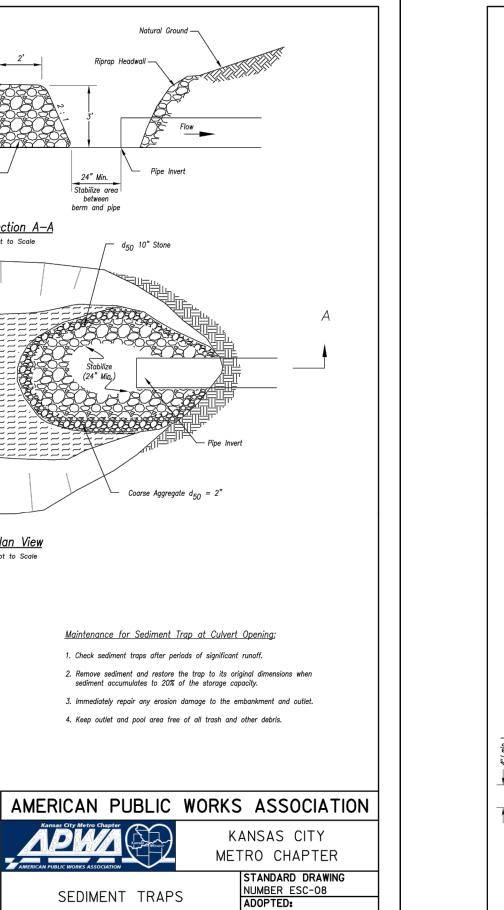
Max. sediment depth at 20% volume of wet

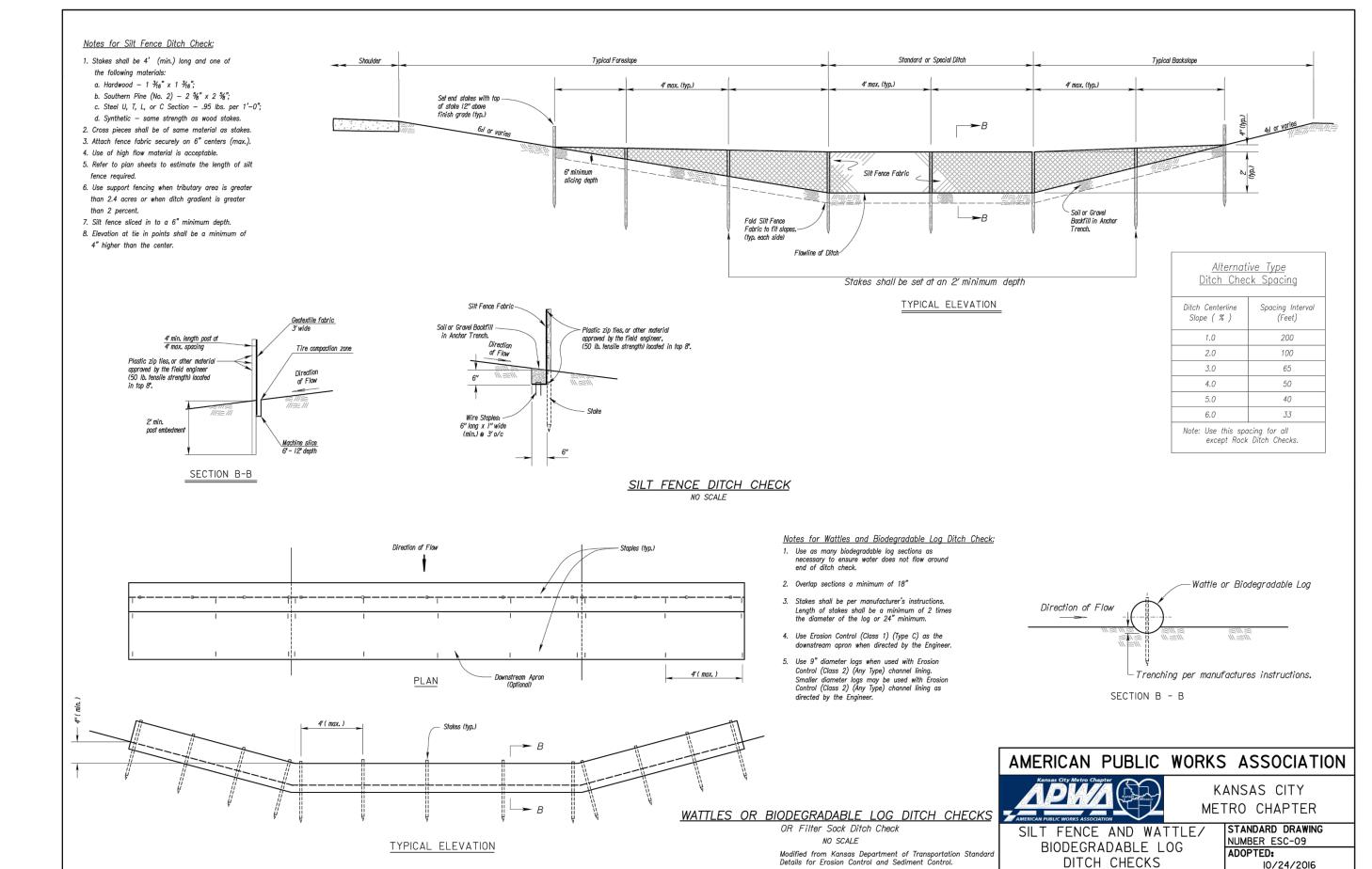
6. 67 C.Y./Acre wet storage below base of stone.

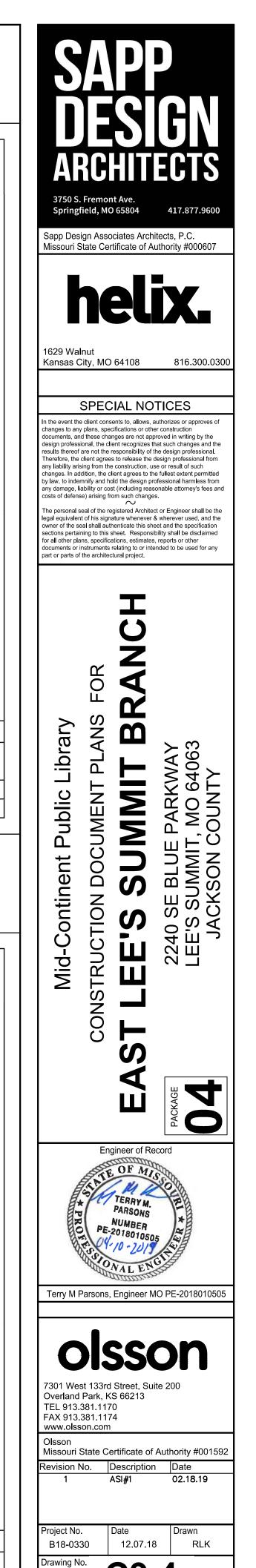
7. 67 C.Y./Acre dry storage from base of stone to top of

Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.

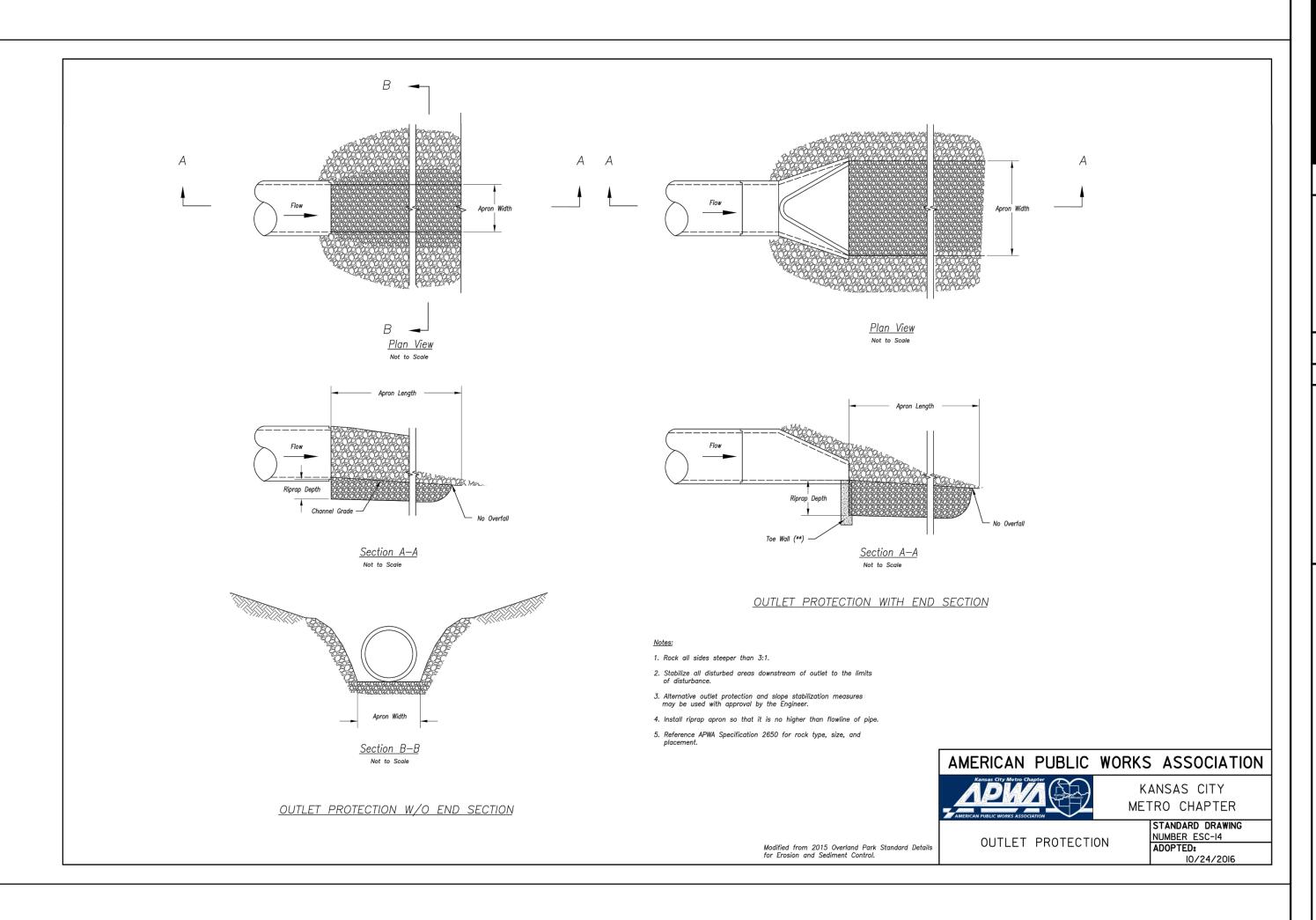








EROSION CONTROL DETAILS





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PE-2018010505

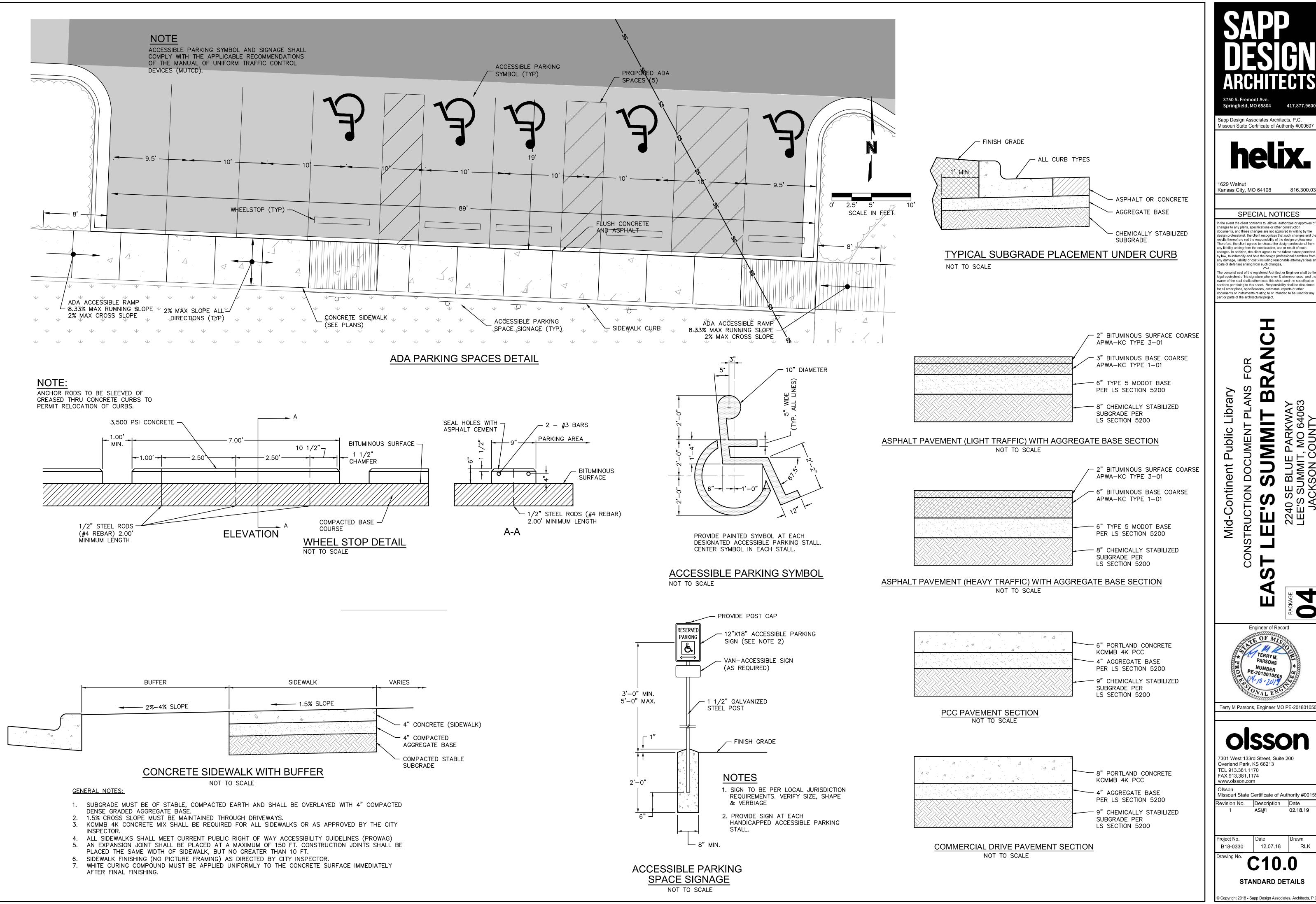
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Terry M Parsons, Engineer MO PE-2018010505

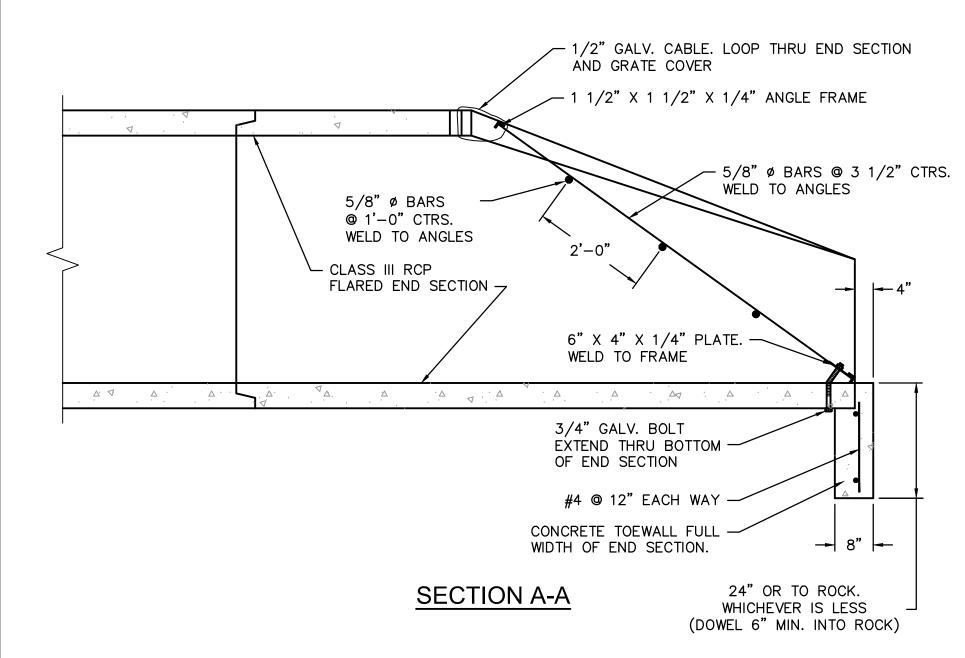
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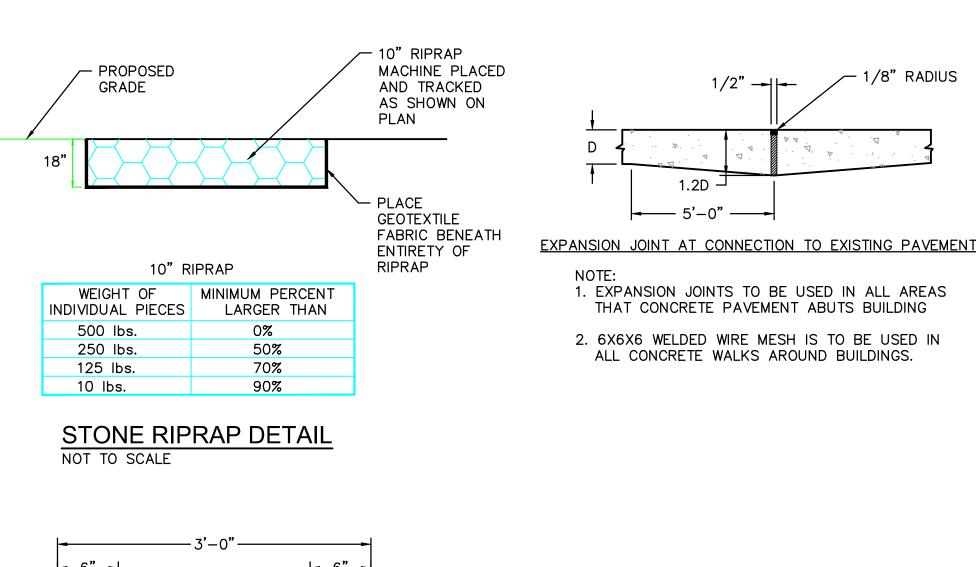
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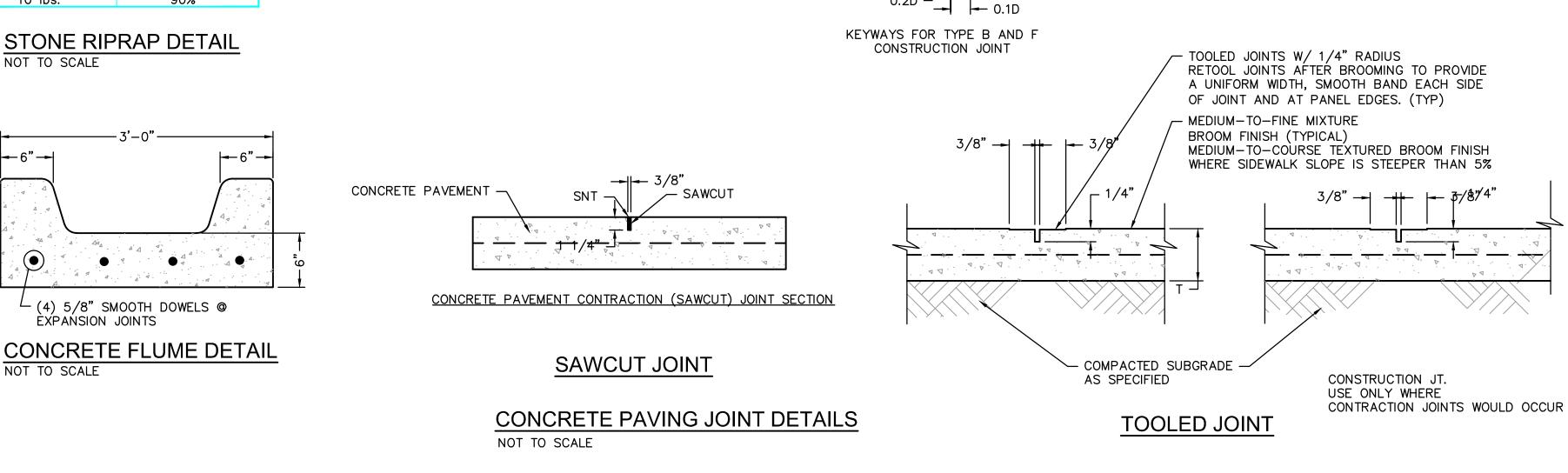


END SECTION NOTES

- 1. GRATE COVER DETAIL SHALL BE ADJUSTED AS NECESSARY TO FIT END SECTION PROVIDED.
- 2. MAXIMUM OPENING THRU END SECTION SHALL BE NO GREATER THAN 6". ADJUST DETAIL AS NECESSARY.
- 3. ALL METAL SURFACES SHALL BE HOT DIP ZINC COATED IN ACCORDANCE WITH ASTM A-123.
- 4. USE CITY APPROVED CONCRETE THROUGHOUT.
- 5. ALL CONCRETE AND MATERIALS USED IN THIS WORK SHALL MEET THE REQUIREMENTS OF THE GOVERNING BODY.
- 6. REINFORCING STEEL SHALL BE NEW BILLET, MINIMUM GRADE 40 AS PER ASTM A615, AND SHALL BE BENT COLD.
- 7. ALL DIMENSIONS RELATIVE TO REINFORCING STEEL ARE TO CENTERLINE OF BARS. 2" CLEARANCE SHALL BE PROVIDED THROUGHOUT UNLESS NOTED OTHERWISE. TOLERANCE OF ±1/8" SHALL BE PERMITTED.
- 8. ALL LAP SPLICES NOT SHOWN SHALL BE A MINIMUM OF 40 BAR DIAMETERS IN LENGTH.
- 9. ALL DOWELS SHALL BE ACCURATELY PLACED AND SECURELY TIED IN PLACE PRIOR TO PLACEMENT OF BOTTOM SLAB CONCRETE. STICKING OF DOWELS INTO FRESH OR PARTIALLY HARDENED CONCRETE WILL NOT BE ACCEPTABLE.
- 10. ALL REINFORCING STEEL SHALL BE SUPPORTED ON FABRICATED STEEL BAR SUPPORTS @ 3'-0" MAXIMUM SPACING.
- 11. DO NOT SCALE THESE DRAWINGS FOR DIMENSIONS OR CLEARANCES. ANY QUESTIONS REGARDING DIMENSIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONSTRUCTION.

END SECTION TOE WALL WITH GRATE NOT TO SCALE





- 1/8" RADIUS

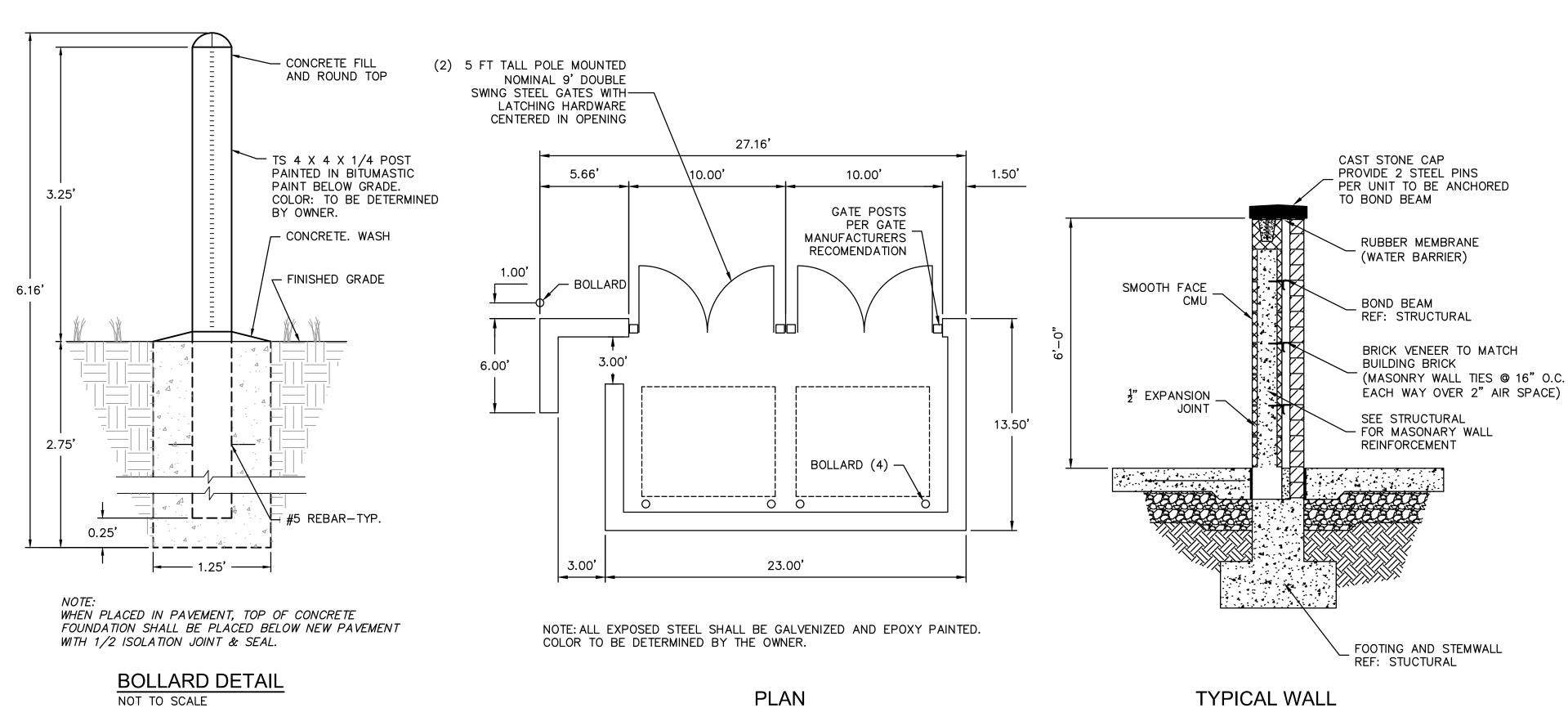
1/2" --||--

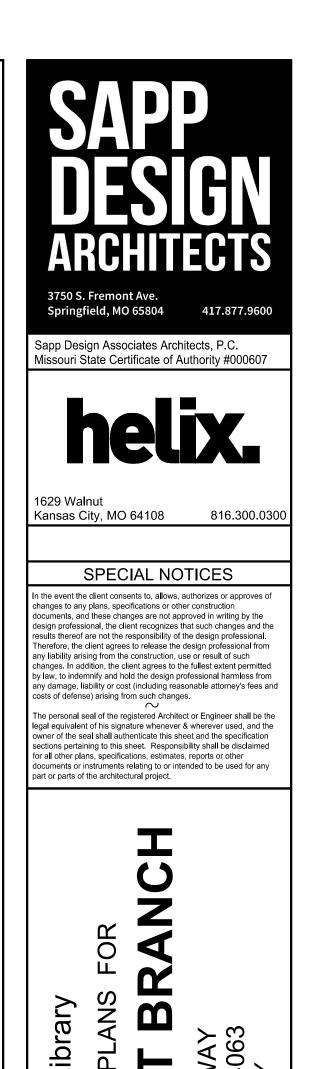
SEE SAWCUT OR

SAWED LONGITUDINAL OR TRANSVERSE

_ 1:4 SLOPE

TOOLED JOINT DETAIL





- JOINT SEALER

(SAW 1/4"x1/2" DEEP)

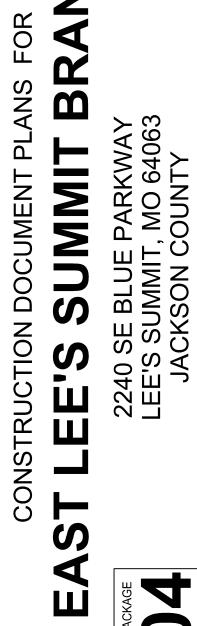
DEFORMED TIE BARS 1/2" ø 24" LONG

@ 30" CENTERS

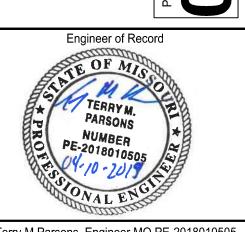
EMERGENCY TIED TRANSVERSE CONSTRUCTION JOINT

(USED AT MIDDLE THIRD NORMAL JOINT SPACING)

SECTION



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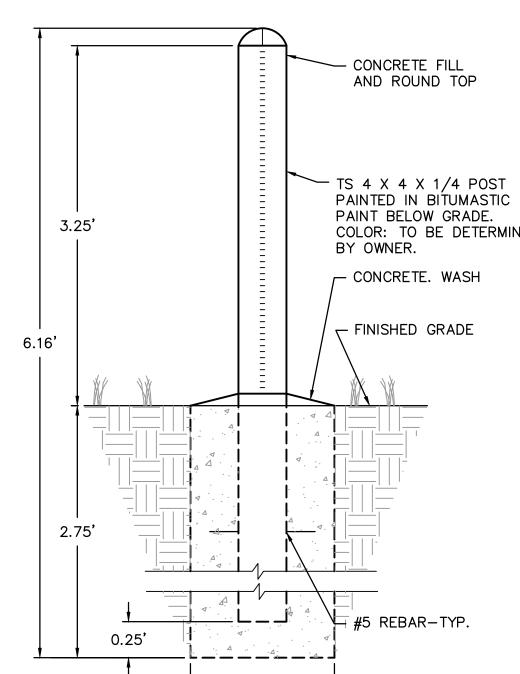
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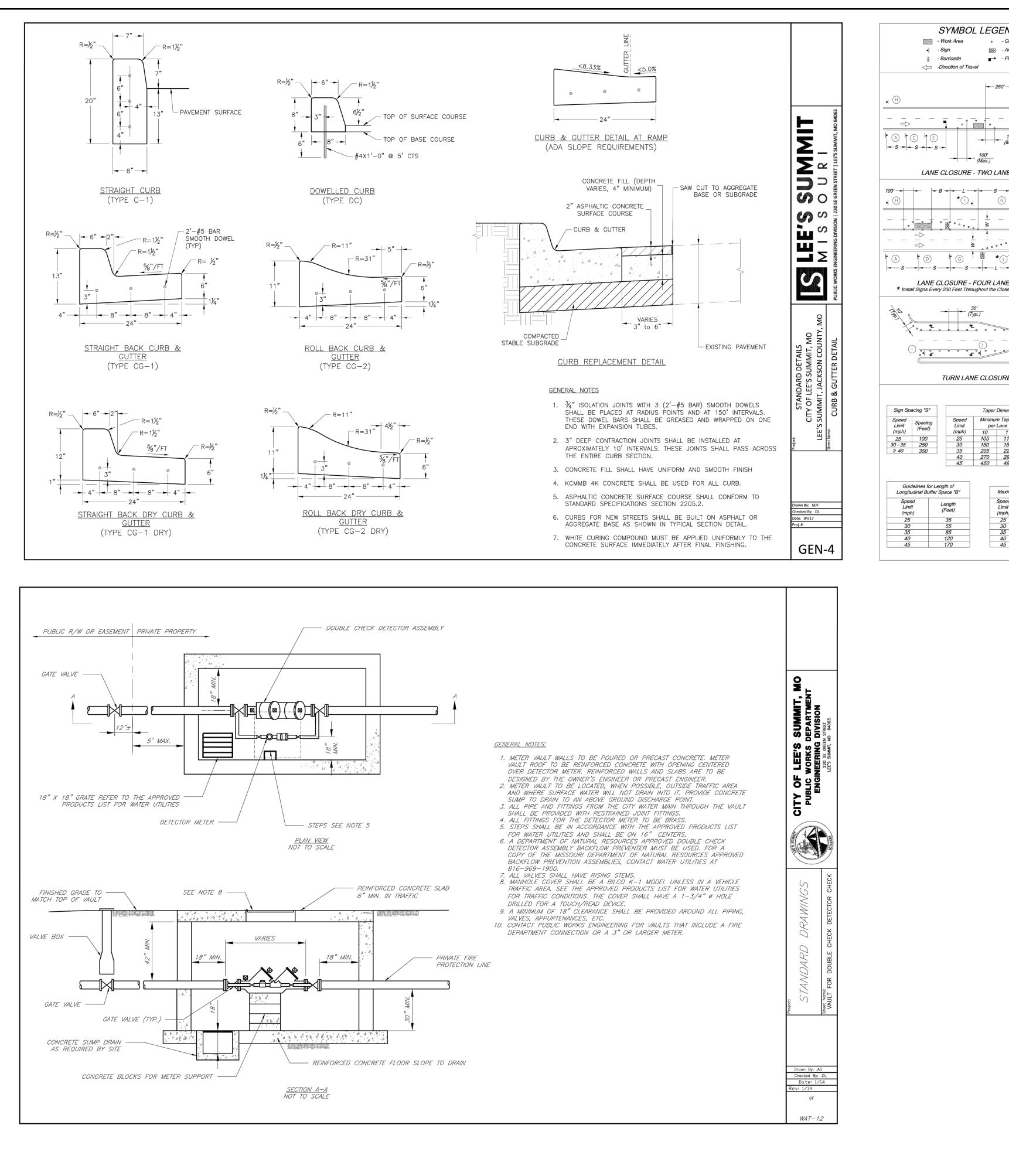
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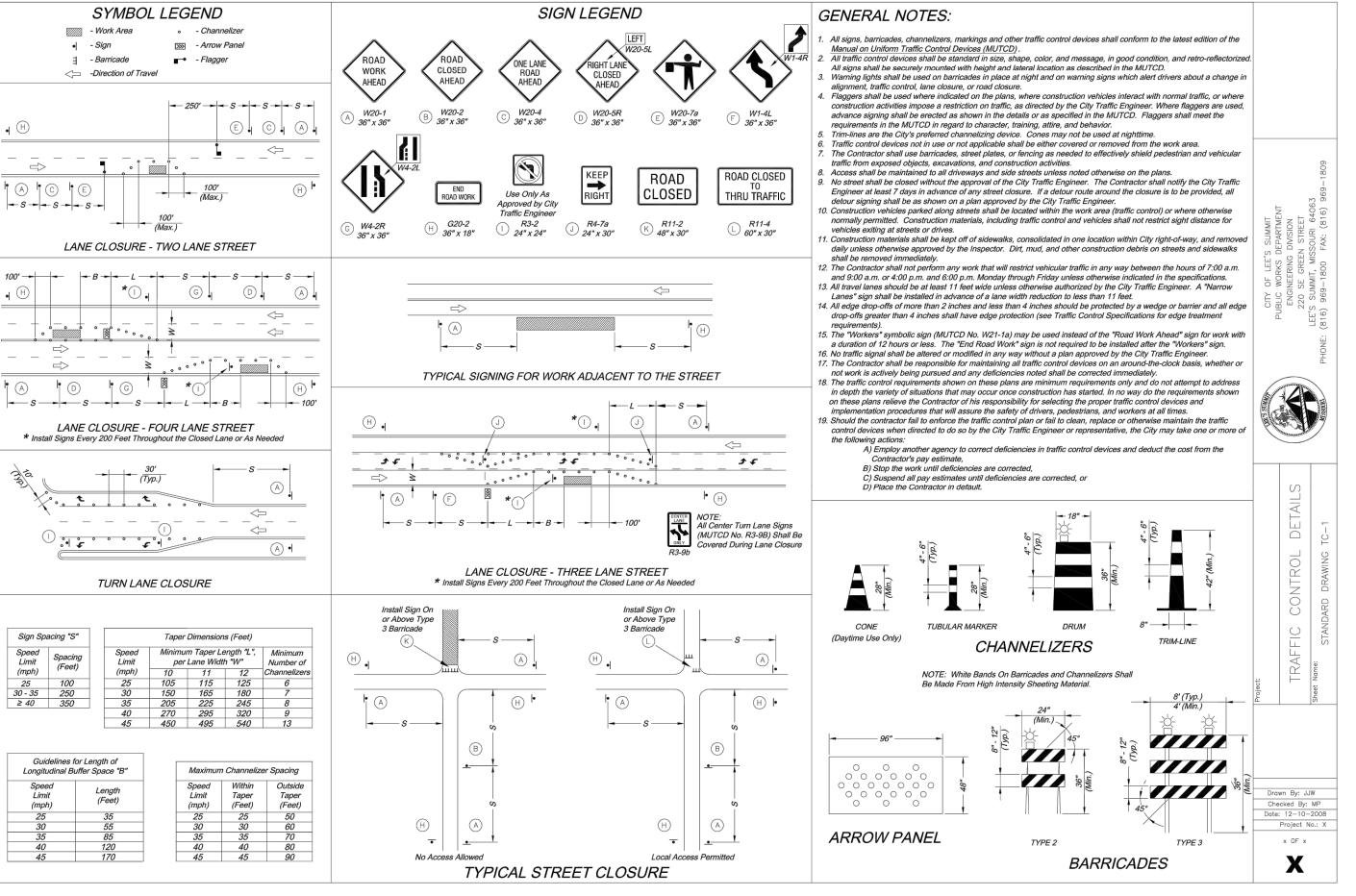


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NUMBER PE-201801050F

Terry M Parsons, Engineer MO PE-2018010505

PARSONS

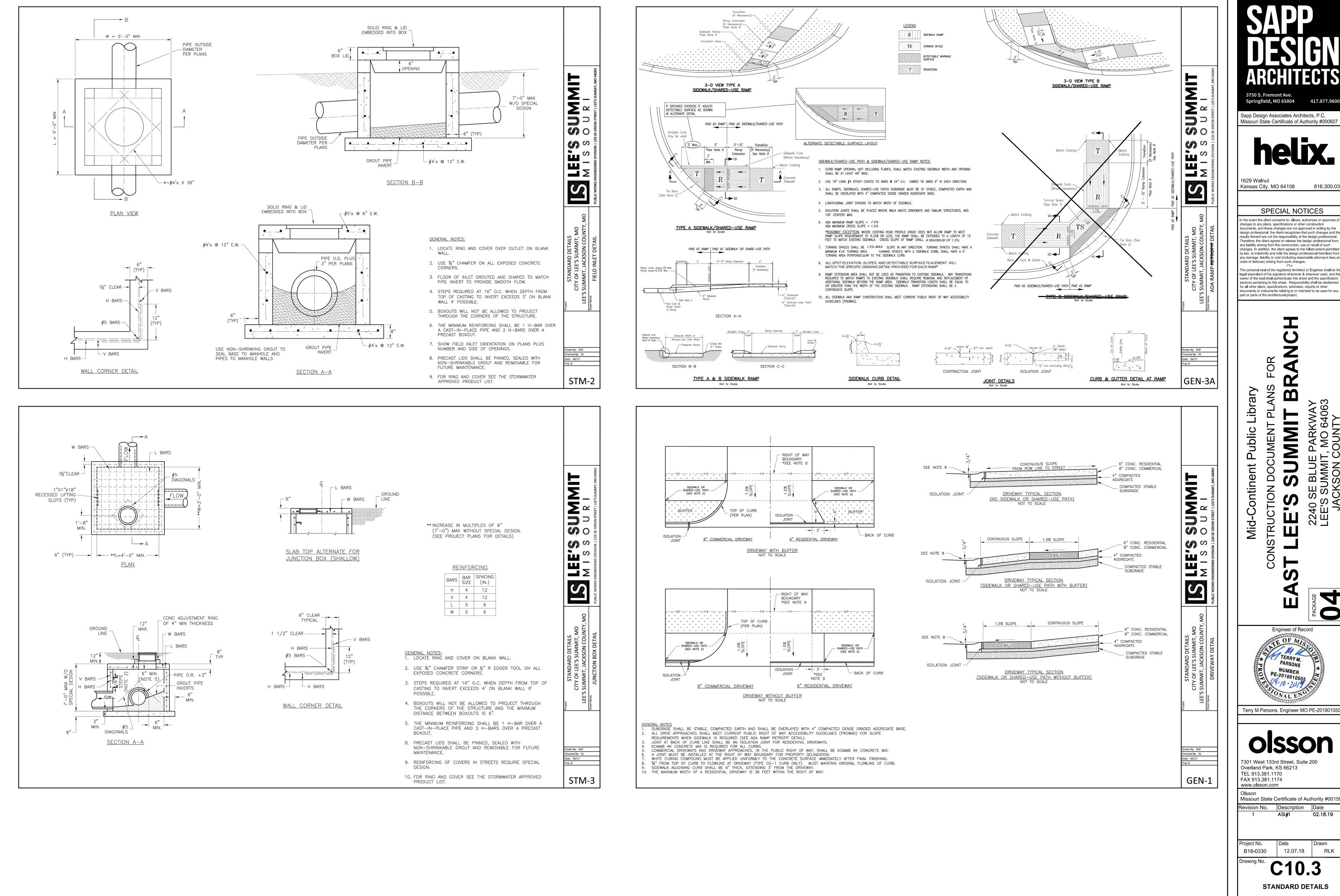
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NUMBER PE-2018010505

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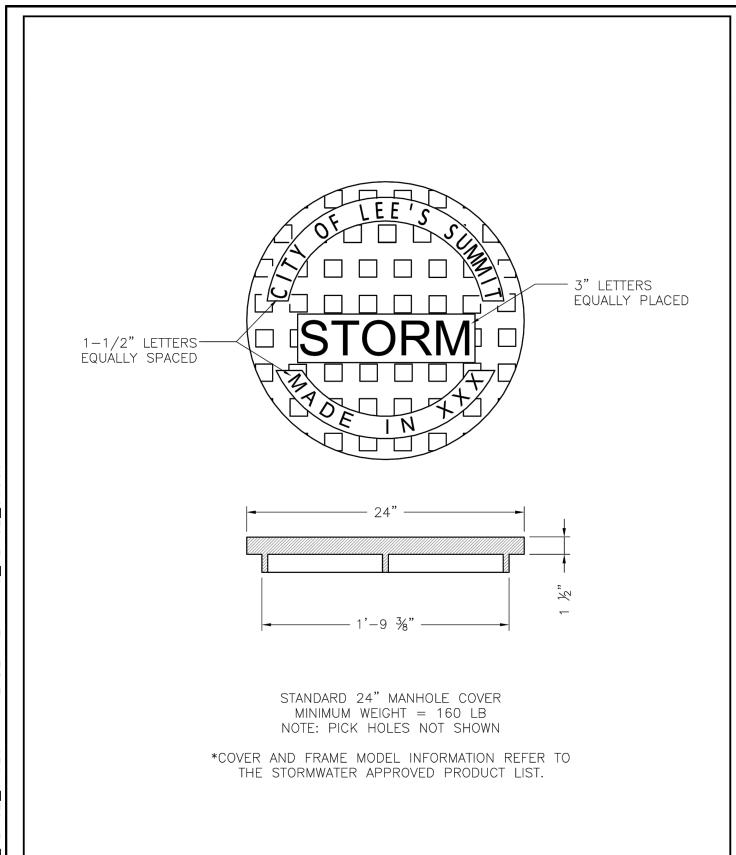
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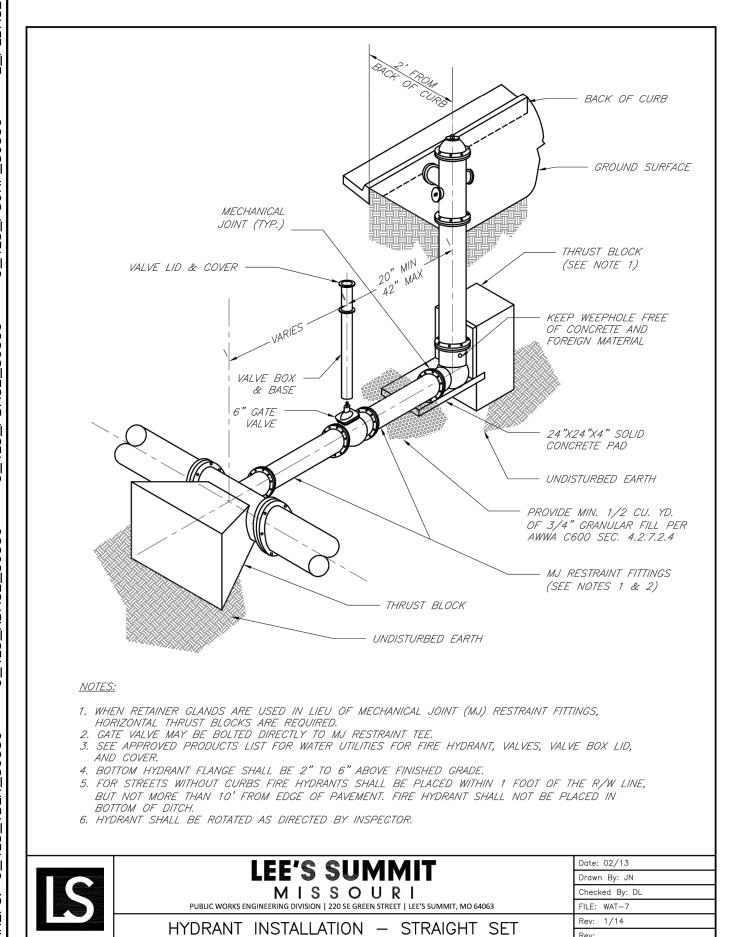
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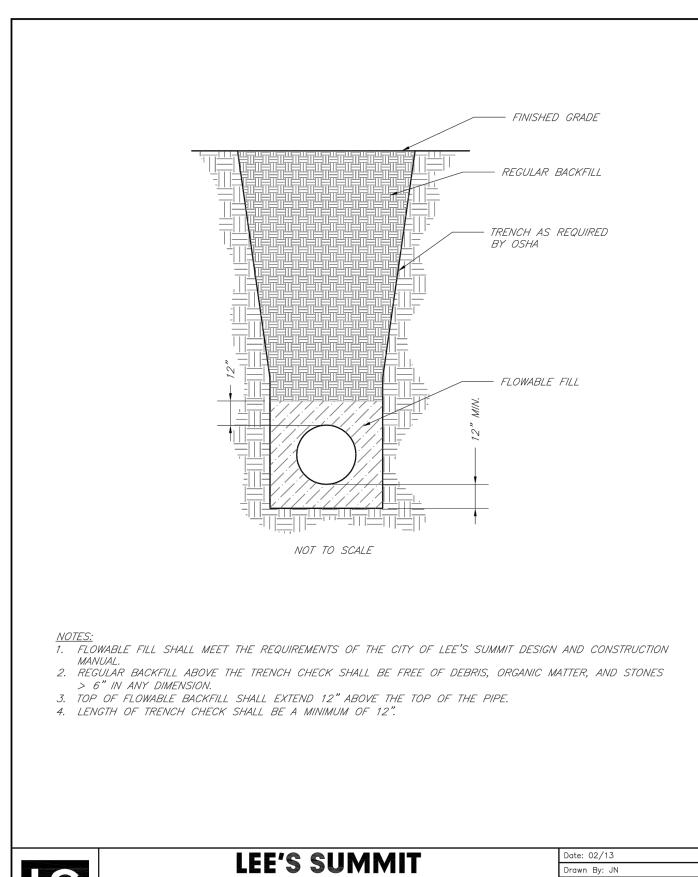
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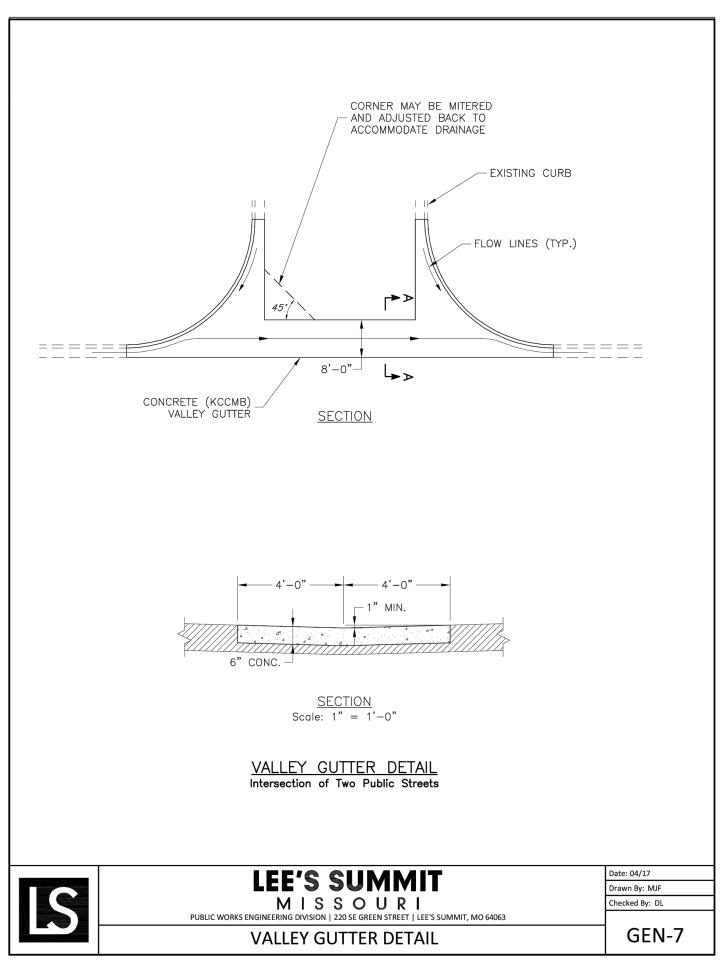
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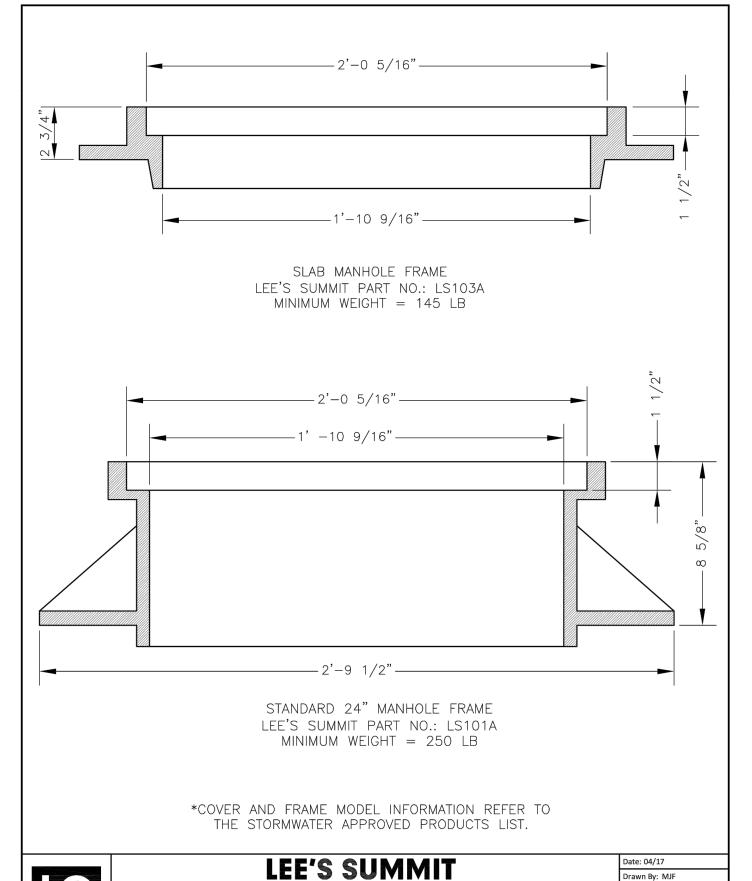
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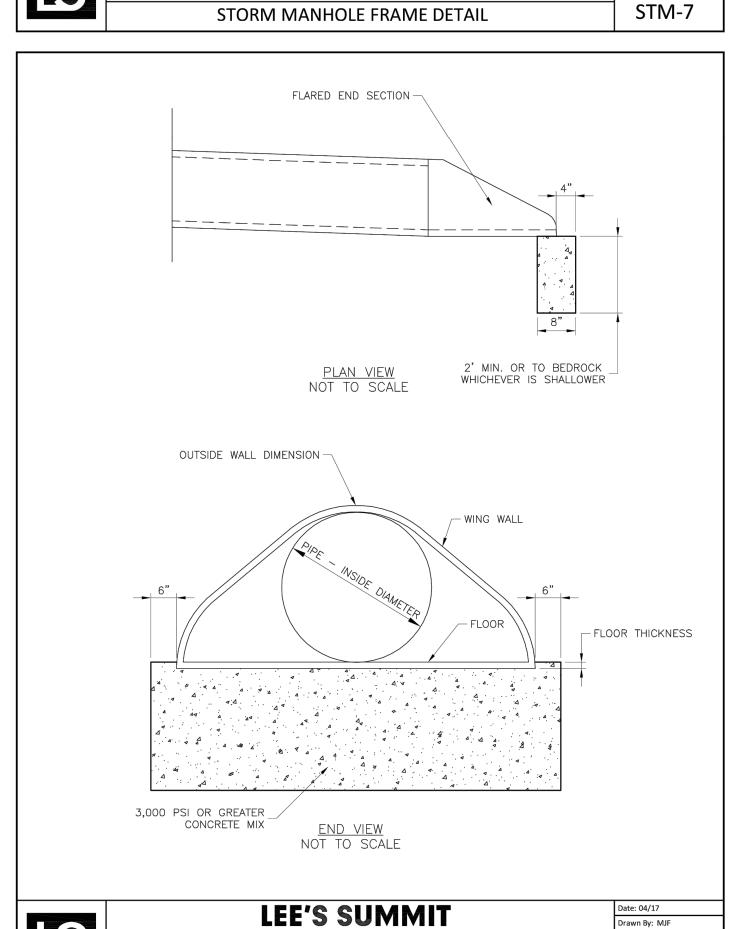
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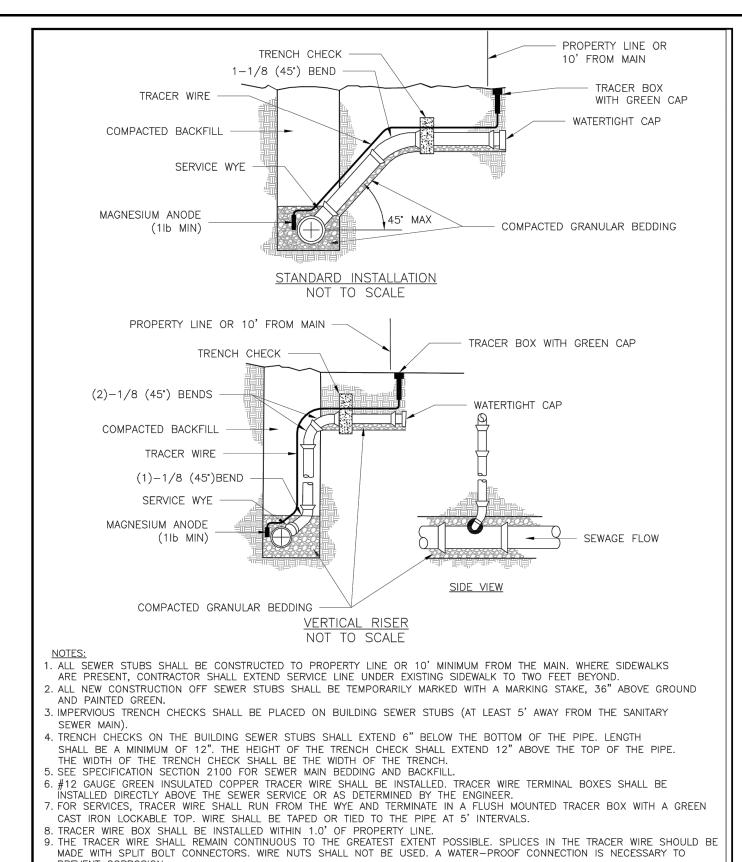
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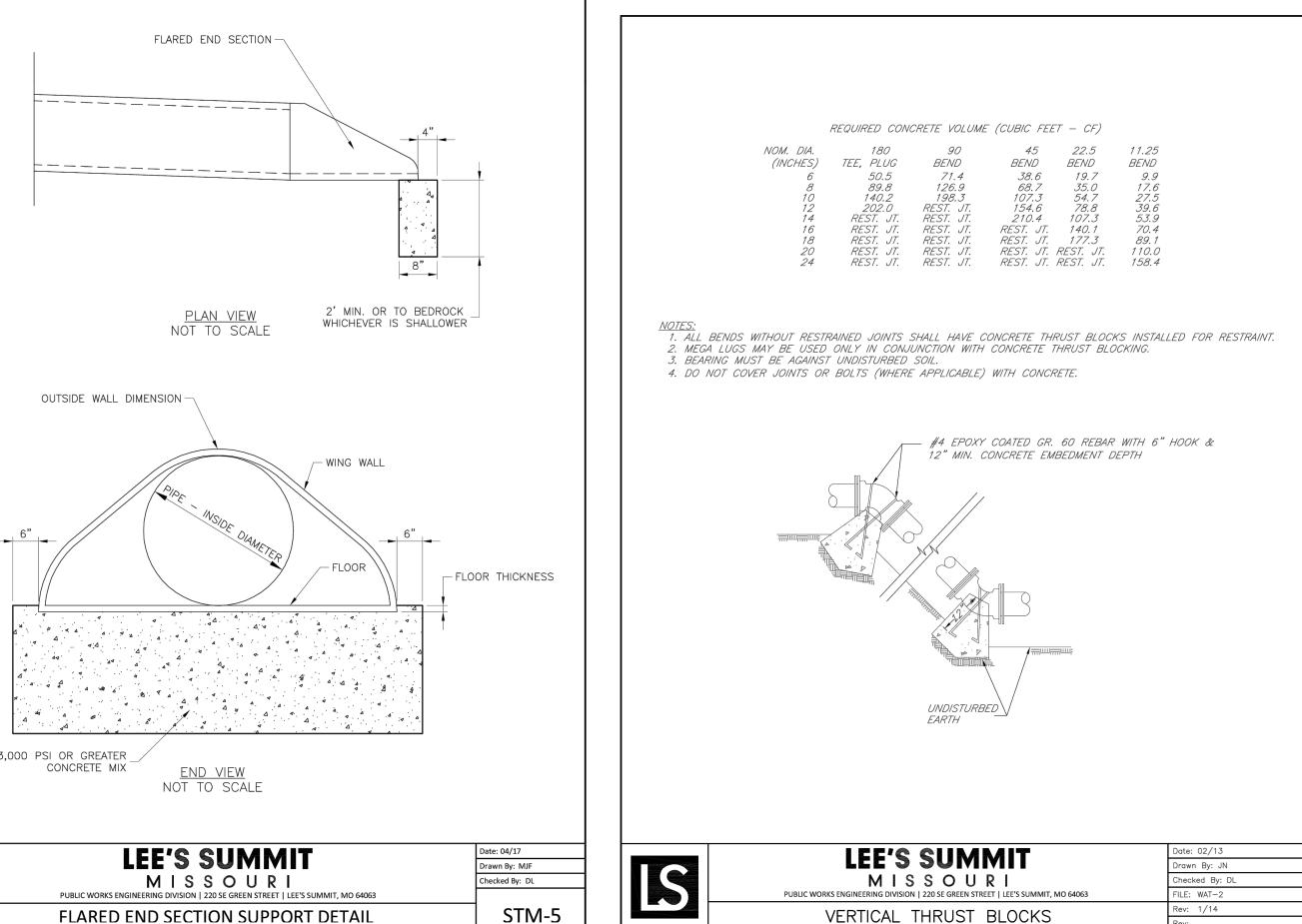


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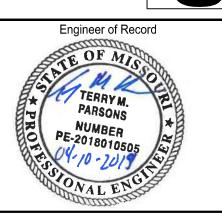
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the event the client consents to, allows, authorizes or approves or nanges to any plans, specifications or other construction design professional, the client recognizes that such changes and the results thereof are not the responsibility of the design professional. herefore, the client agrees to release the design professional from any liability arising from the construction, use or result of such changes. In addition, the client agrees to the fullest extent permitted y law, to indemnify and hold the design professional harmless from ny damage, liability or cost (including reasonable attorney's fees and

sts of defense) arising from such changes. ne personal seal of the registered Architect or Engineer shall be the legal equivalent of his signature whenever & wherever used, and the owner of the seal shall authenticate this sheet and the specification ctions pertaining to this sheet. Responsibility shall be disclaimed or all other plans, specifications, estimates, reports or other ocuments or instruments relating to or intended to be used for any

art or parts of the architectural project.



Terry M Parsons, Engineer MO PE-2018010505

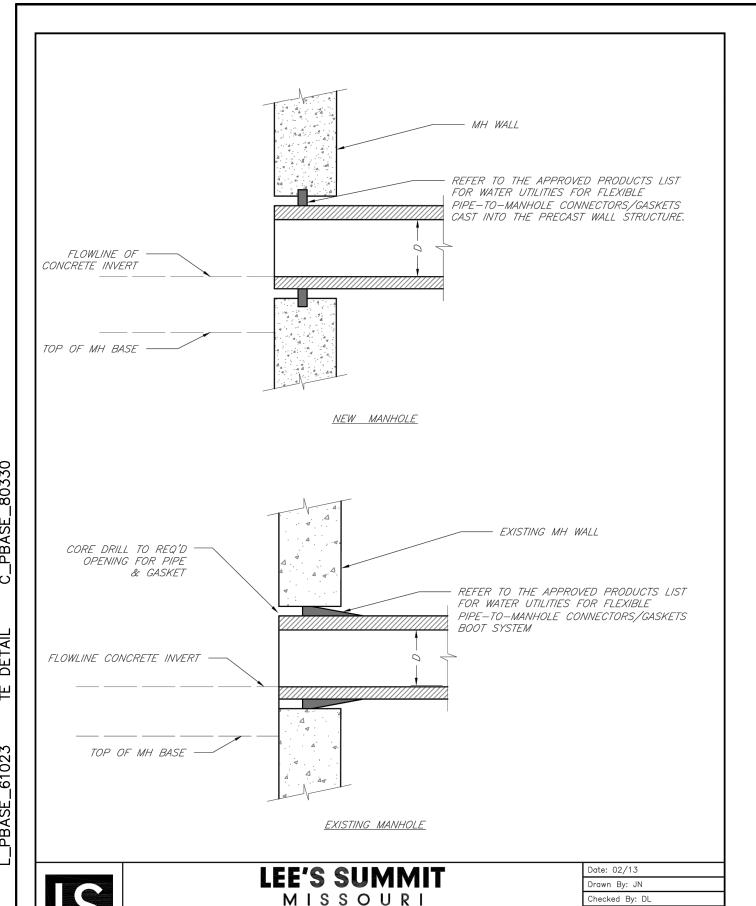
301 West 133rd Street, Suite 200 Overland Park, KS 66213 TEL 913.381.1170

FAX 913.381.1174 www.olsson.com

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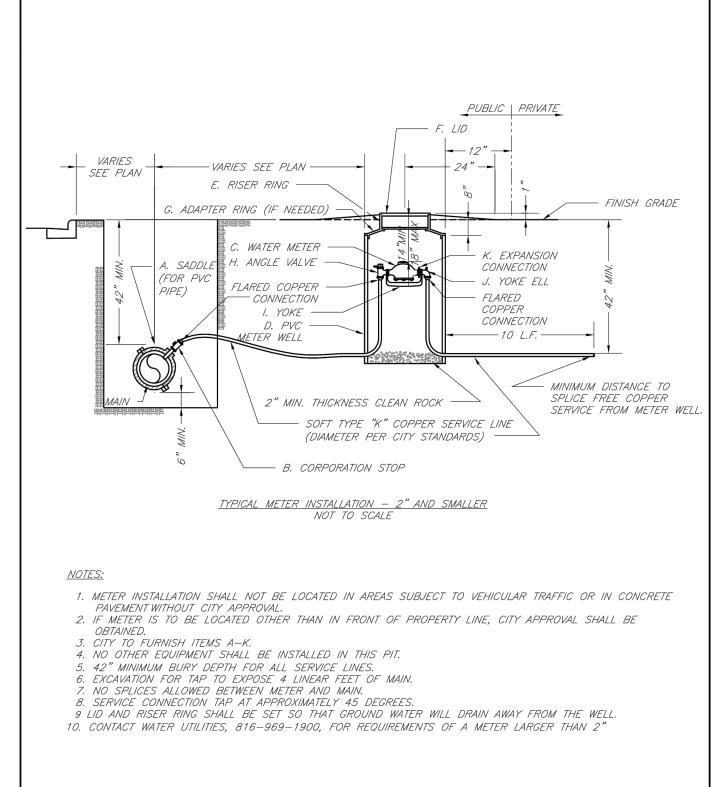
STANDARD DETAILS



MANHOLE WALL CONNECTIONS

hecked By: DL

LE: SAN-5



LEE'S SUMMIT

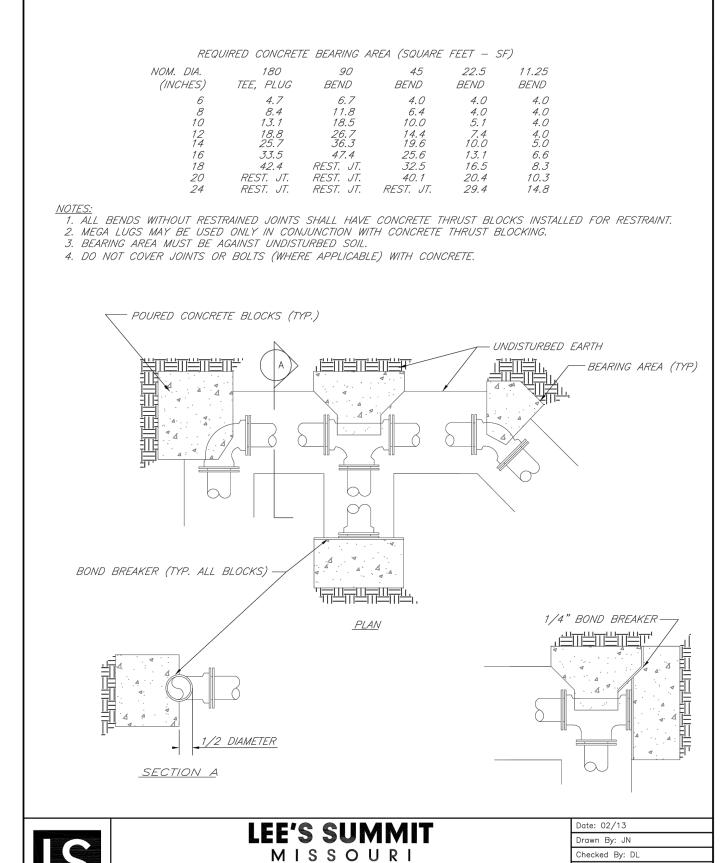
MISSOURI

SERVICE CONNECTION/METER WELL

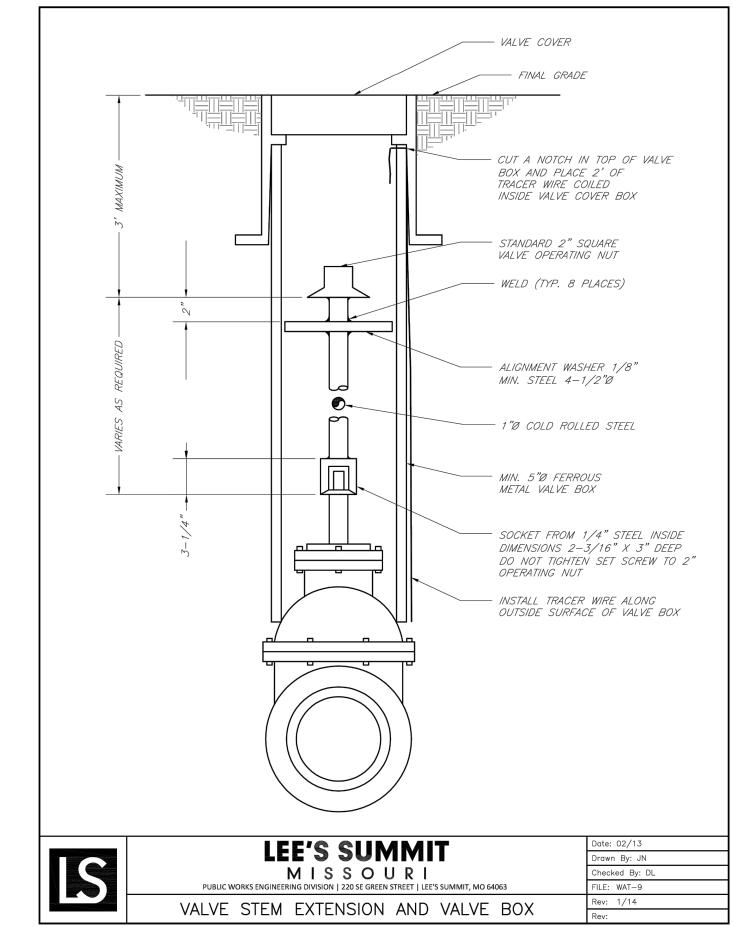
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Checked By: DL

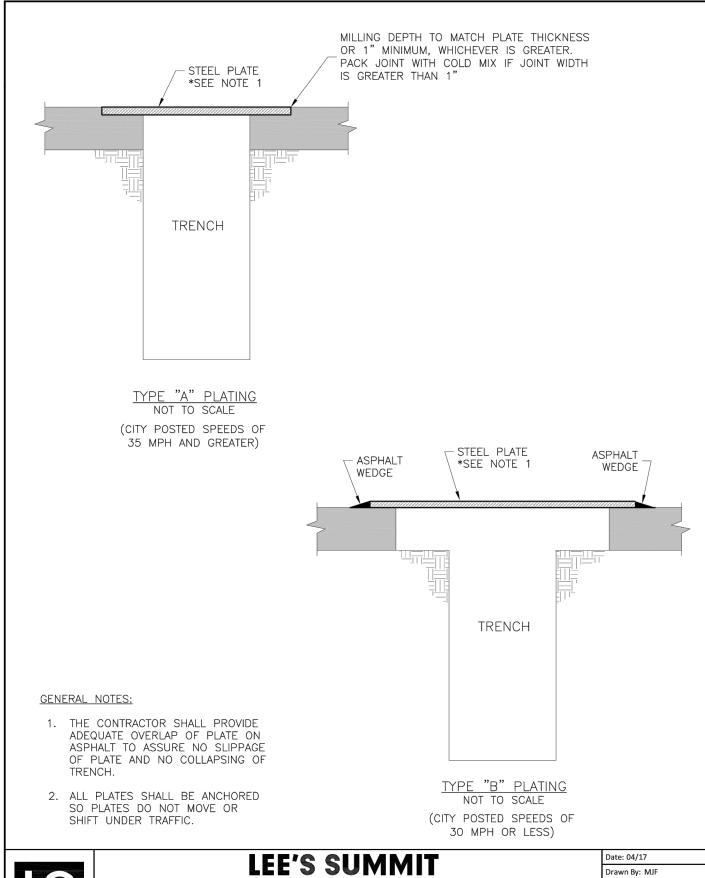
_E: WAT-11



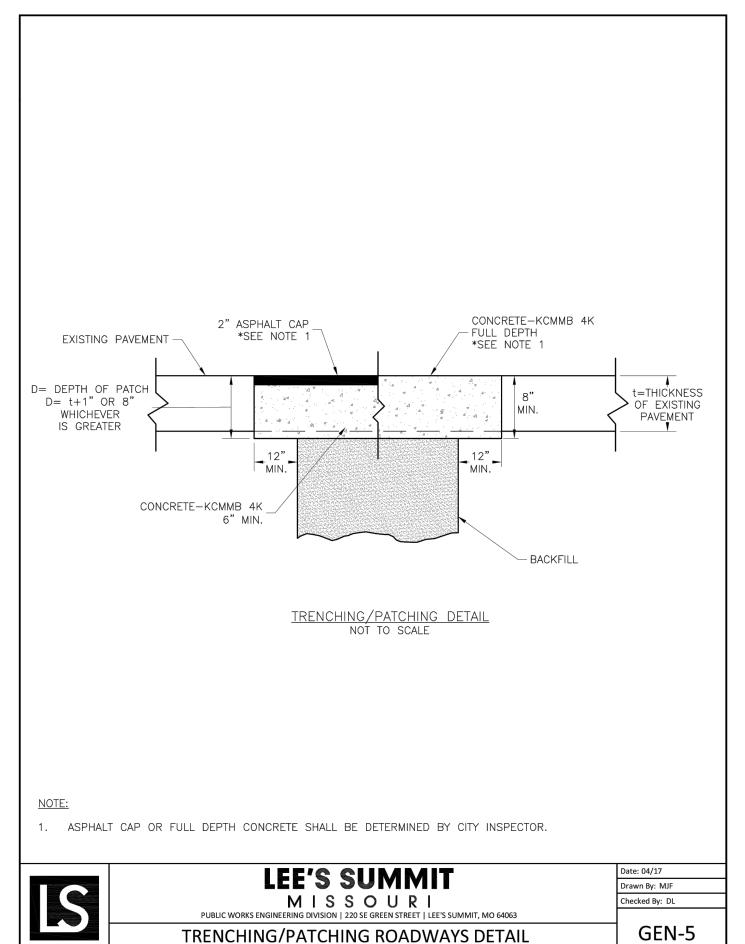
HORIZONTAL THRUST BLOCKS

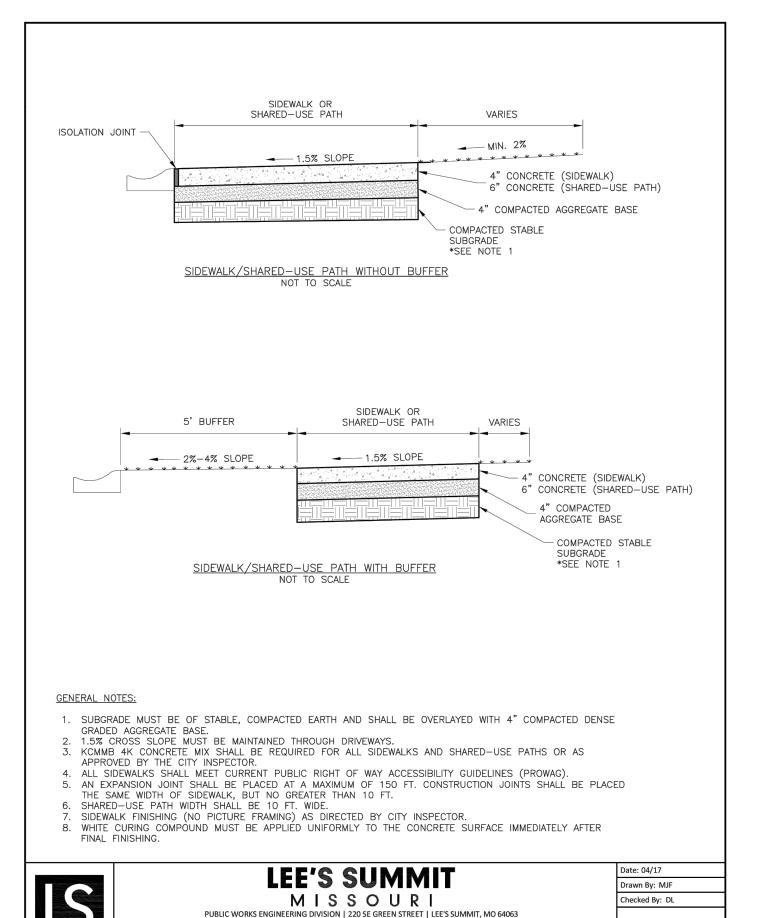












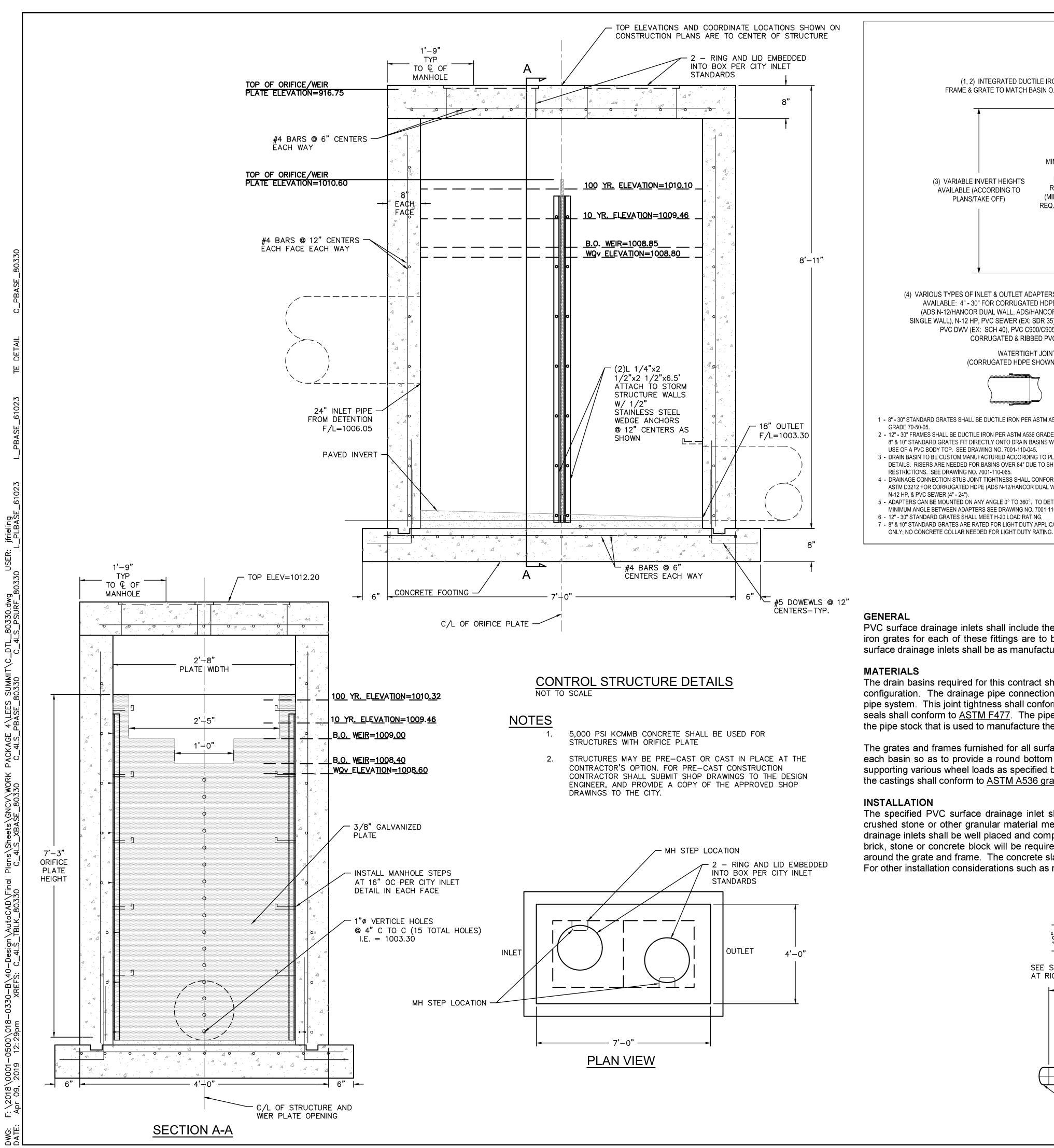
SIDEWALK/SHARED-USE PATH DETAIL

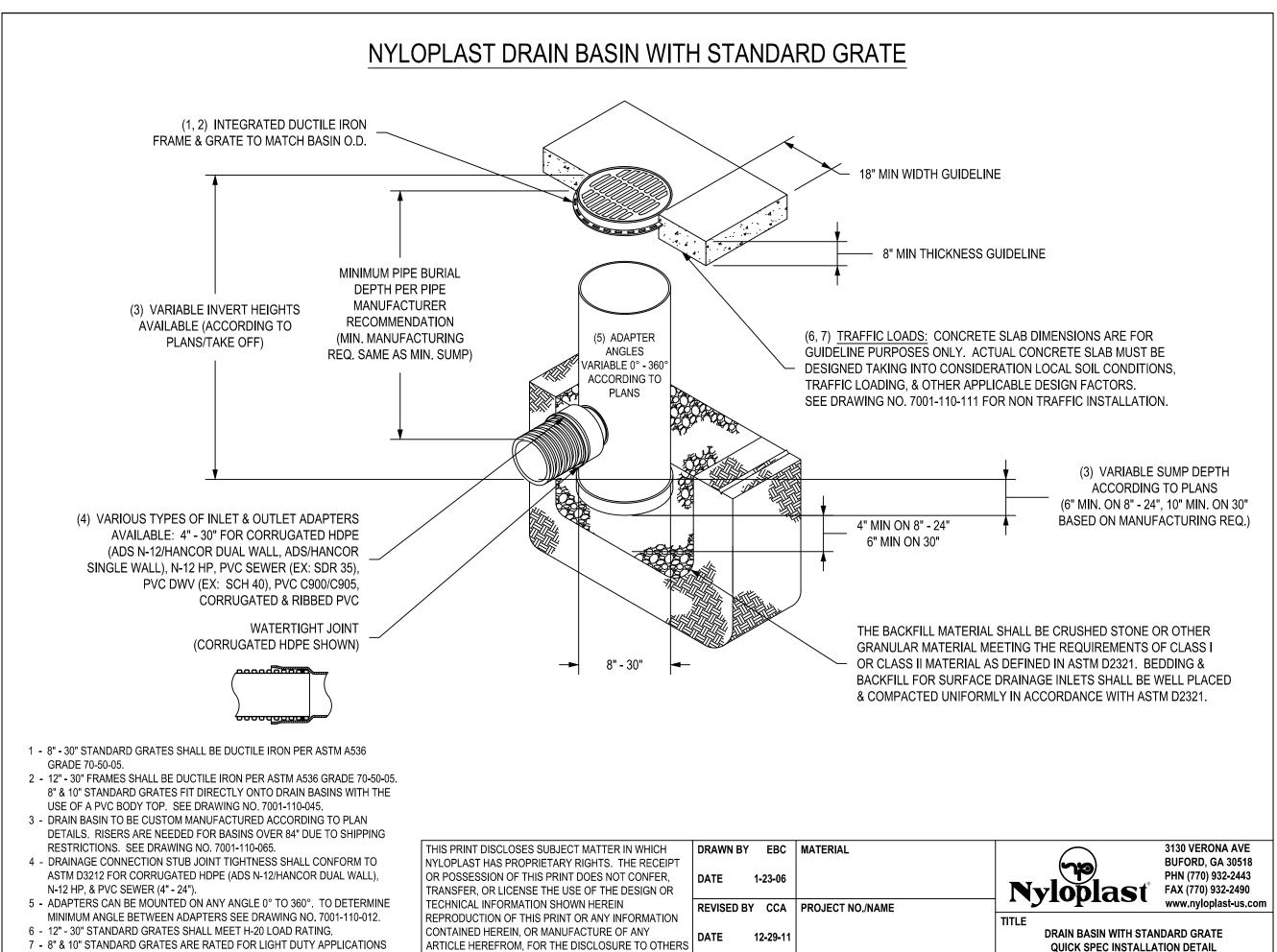
IIF: WAT-1

Rev: 1/14

GEN-2







Section 2721

IS FORBIDDEN, EXCEPT BY SPECIFIC WRITTEN

PERMISSION FROM NYLOPI AST

Engineered Surface Drainage Products

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7001-110-144

PVC surface drainage inlets shall include the drain basin type as indicated on the contract drawing and referenced within the contract specifications. The ductile iron grates for each of these fittings are to be considered an integral part of the surface drainage inlet and shall be furnished by the same manufacturer. The surface drainage inlets shall be as manufactured by Nyloplast a division of Advanced Drainage Systems, Inc., or prior approved equal.

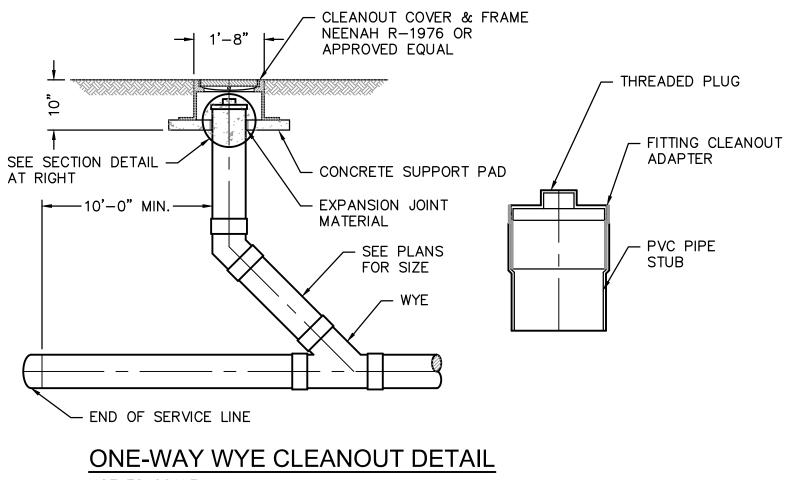
MATERIALS

The drain basins required for this contract shall be manufactured from PVC pipe stock, utilizing a thermoforming process to reform the pipe stock to the specified configuration. The drainage pipe connection stubs shall be manufactured from PVC pipe stock and formed to provide a watertight connection with the specified pipe system. This joint tightness shall conform to ASTM D3212 for joints for drain and sewer plastic pipe using flexible elastomeric seals. The flexible elastomeric seals shall conform to ASTM F477. The pipe bell spigot shall be joined to the main body of the drain basin or catch basin. The raw material used to manufacture the pipe stock that is used to manufacture the main body and pipe stubs of the surface drainage inlets shall conform to ASTM D1784 cell class 12454.

The grates and frames furnished for all surface drainage inlets shall be ductile iron for sizes 8", 10", 12", 15", 18", 24" and 30" and shall be made specifically for each basin so as to provide a round bottom flange that closely matches the diameter of the surface drainage inlet. Grates for drain basins shall be capable of supporting various wheel loads as specified by Nyloplast. 12" and 15" square grates will be hinged to the frame using pins. Ductile iron used in the manufacture of the castings shall conform to ASTM A536 grade 70-50-05. Grates and covers shall be provided painted black.

INSTALLATION

The specified PVC surface drainage inlet shall be installed using conventional flexible pipe backfill materials and procedures. The backfill material shall be crushed stone or other granular material meeting the requirements of class 1 or class 2 material as defined in ASTM D2321. Bedding and backfill for surface drainage inlets shall be well placed and compacted uniformly in accordance with ASTM D2321. The drain basin body will be cut at the time of the final grade. No brick, stone or concrete block will be required to set the grate to the final grade height. For load rated installations, a concrete slab shall be poured under and around the grate and frame. The concrete slab must be designed taking into consideration local soil conditions, traffic loading, and other applicable design factors. For other installation considerations such as migration of fines, ground water, and soft foundations refer to ASTM D2321 guidelines.



NOT TO SCALE

Sapp Design Associates Architects, P.C. Missouri State Certificate of Authority #000607

Springfield, MO 65804

Kansas City, MO 64108 816.300.0300

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Engineer of Record TERRY M.
PARSONS PE-2018010505

Terry M Parsons, Engineer MO PE-2018010505



Overland Park, KS 66213 TEL 913.381.1170 FAX 913.381.1174 www.olsson.com

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