

GENERAL NOTES

- ALL WORK IN PUBLIC EASEMENT AND RIGHT-OF-WAY SHALL BE INSTALLED PER THE REQUIREMENTS AND SPECIFICATIONS OF THE CITY OF LEE'S SUMMIT.
- THE CONTRACTOR SHALL BE REQUIRED TO OBTAIN ALL FEDERAL, STATE, AND LOCAL PERMITS REQUIRED FOR THIS PROJECT PRIOR TO COMMENCING CONSTRUCTION.
- ANY WORK ADJACENT TO OR CROSSING EXISTING STREETS REQUIRES PROPER TRAFFIC CONTROL DEVICES. TRAFFIC CONTROL DEVICES SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- THE CONTRACTOR SHALL NOT DISRUPT ANY OPERATIONS OF ADJACENT PROPERTIES DURING CONSTRUCTION. IF DISRUPTION IS NECESSARY TO FACILITATE CONSTRUCTION, CONTRACTOR IS TO CONTACT ENGINEER FOR COORDINATION.
- ANY UNFORESEEN CONDITIONS, SITE DISCOVERIES, OR INTERACTION WITH ADJACENT PROPERTY OWNERS OR THE CITY SHALL BE BROUGHT UP WITH THE ENGINEER IMMEDIATELY FOR REMEDY AND DOCUMENTATION. ANY MODIFICATION TO THE PLANS MUST BE AUTHORIZED BY THE ENGINEER WHERE APPLICABLE.
- THE CONTRACTOR SHALL BE REQUIRED TO DEMOLISH, REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, PAVEMENTS, AND FEATURES NECESSARY TO CONSTRUCT THE IMPROVEMENTS SHOWN HEREON. ANY WASTE MATERIALS GENERATED DURING CONSTRUCTION SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR AND DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS GOVERNING SUCH DISPOSAL.
- THE CONTRACTOR SHALL PREVENT ANY TRASH, DEBRIS, OR LIQUID WASTES FROM BEING DISPOSED OF IN SANITARY SEWERS, STORM SEWERS, OR OPEN DRAINAGE SYSTEMS.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR DAMAGE CAUSED TO OTHER PROPERTIES DURING CONSTRUCTION. IN THE EVENT OF DAMAGE TO ADJACENT PROPERTY, STRUCTURES, OR IMPROVEMENTS, THE CONTRACTOR SHALL REPAIR OR REPLACE SUCH DAMAGE TO THE PRECONSTRUCTION CONDITION AT THE CONTRACTOR'S EXPENSE.
- CONTRACTORS AT THE SITE SHALL BE SOLELY RESPONSIBLE FOR JOBSITE SAFETY FOR ALL ASPECTS OF WORK SHOWN HEREON.
- ALL WORK AND MATERIALS USED IN THE CONSTRUCTION OF THE IMPROVEMENTS SHOWN HEREON SHALL COMPLY WITH ALL REFERENCED STANDARDS, SPECIFICATIONS, AND PLAN NOTES.
- ALL BUILDINGS ARE SHOWN AS A REFERENCE ONLY. ALL BUILDINGS SHALL BE LOCATED AND CONSTRUCTED PER THE ARCHITECTURAL DRAWINGS PREPARED BY OTHERS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES FOR FIELD LOCATIONS OF UNDERGROUND UTILITIES AFFECTED BY THE CONTRACT. ALL EXISTING UTILITIES INDICATED ON THESE PLANS ARE ACCORDING TO THE BEST INFORMATION AVAILABLE TO THE ENGINEER; HOWEVER, ALL UTILITIES ACTUALLY EXISTING MAY NOT BE SHOWN. UTILITIES DAMAGED THROUGH THE NEGLIGENCE OF THE CONTRACTOR SHALL BE REPAIRED OR REPLACED AT THE EXPENSE OF THE CONTRACTOR.
- ANY AND ALL HAZARDS SHALL BE PROPERLY IDENTIFIED AND BARRICADED FROM ACCESS DURING ALL NON-CONSTRUCTION PERIODS. ALL EXCAVATIONS AND HAZARDOUS AREAS SHALL BE FENCED OFF OR OTHERWISE SECURED AS TO NOT PRESENT A HAZARD TO THE GENERAL PUBLIC, AT A MINIMUM AT THE END OF EACH WORKING DAY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOBSITE SAFETY.
- UNLESS SPECIFIED OTHERWISE, ALL CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE CITY OF LEE'S SUMMIT STANDARD SPECIFICATIONS, EXCEPT AS MODIFIED BY THESE PLANS.
- PRIVATE EROSION & SEDIMENT CONTROL INSPECTIONS ARE REQUIRED IN ACCORDANCE WITH NPDES SCHEDULE AND REQUIREMENTS. AFTER INSPECTIONS, PROVIDE THE CITY OF LEE'S SUMMIT WITH REPORTS AND DOCUMENTATION.
- A RIGHT-OF-WAY PERMIT IS REQUIRED FROM THE CITY OF LEE'S SUMMIT PUBLIC WORKS DEPARTMENT FOR ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY.
- WORKING HOURS SHALL BE FROM 7AM TO 7PM MONDAY THROUGH SATURDAY, WITH NO WORK ON SUNDAY WITHOUT PRIOR WRITTEN PERMISSION FROM THE CITY OF LEE'S SUMMIT.
- CONTRACTOR SHALL PROVIDE ONE CHEMICALLY-TREATED PORTABLE TOILET FOR EVERY 20 EMPLOYEES ON THE JOB SITE.
- FOLLOWING SUBSTANTIAL COMPLETION OF SITE/BUILDING IMPROVEMENTS, THE CONTRACTOR SHALL CONTACT THE ENGINEER TO PERFORM A CHECKLIST OF SITE IMPROVEMENTS PRIOR TO FINAL ACCEPTANCE OF THE PROJECT.

FEMA INFORMATION:

THE SITE IS NOT LOCATED WITHIN ANY SPECIAL FLOOD HAZARD AREAS (SFHA) PER FEMA FIRM MAP 29095C0417G; EFFECTIVE DATE OF JANUARY 20, 2017. NO LETTERS OF MAP AMENDMENT OR REVISIONS ARE BEING PROPOSED.

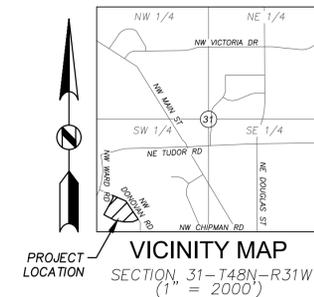
LEGAL DESCRIPTION:

LOT 4B, CORRECTED SUMMIT ORCHARD, LOTS 4A THRU 4E, A SUBDIVISION IN THE CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

SUMMIT ORCHARDS LOT 4B FINAL DEVELOPMENT PLAN (PL2019278)

NW CHIPMAN RD & NW WARD RD
LEE'S SUMMIT, MISSOURI 64086

SECTION 31, TOWNSHIP 48 NORTH, RANGE 31 WEST



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E103	SITE LIGHTING POINT BY POINT
E201	ELECTRICAL RISERS & SCHEDULES
E301	ELECTRICAL DETAILS

CONTROL POINT INFORMATION:

HORIZONTAL CONTROL	
CONTROL POINT 1 N: 1005456.776 E: 2819229.265	CONTROL POINT 2 N: 1004573.716 E: 2820097.881
CONTROL POINT 3 N: 1004643.349 E: 2818936.621	

BENCHMARKS
 BM-"A" ELEV.=1006.99'
 SQUARE CUT ON THE CENTERLINE FRONT FACE OF A CURB INLET LOCATED NEAR THE NORTHEAST QUADRANT OF THE INTERSECTION OF NW DONOVAN RD AND NW WARD RD.
 BM-"B" ELEV.=1006.18'
 SQUARE CUT ON THE NORTHEAST CORNER OF THE 2ND CURB INLET WEST OF THE INTERSECTION OF NW DONOVAN RD. AND NW CHIPMAN RD. ON THE NORTH SIDE OF NW CHIPMAN RD.

*COORDINATES SHOWN ARE GRID VALUES BASED ON MGRS JA-43

DEVELOPER

TOWNSEND SUMMIT, LLC.
11311 MCCORMICK ROAD, SUITE 470
HUNT VALLEY, MARYLAND 21031
(816) 251-54100
CONTACT: STEVE RICH

PREPARED & SUBMITTED BY:

ANDERSON ENGINEERING, INC.
4240 PHILLIPS FARM ROAD, SUITE 101
COLUMBIA, MO 65201
(579) 397-5476

THOMAS P. WOOTEN, P.E.
MISSOURI P.E. NO. 2000150081

APPROVED BY:

CITY OF LEE'S SUMMIT, MISSOURI

AUTHORIZING POSITION

DATE



Know what's below.
Call before you dig.



UTILITIES

SANITARY & WATER	STORM WATER
CITY OF LEE'S SUMMIT JEFF THORN 1200 SE HAMBLÉN STREET LEE'S SUMMIT, MO 64081 PHONE (816) 969-1900	CITY OF LEE'S SUMMIT LEE'S SUMMIT, MO 64063 PHONE (816) 969-1900

STREETS
CITY OF LEE'S SUMMIT
MICHAEL PARK
220 SE GREEN STREET
LEE'S SUMMIT, MO 64063
PHONE (816) 969-1900

AT&I
RONALD GIPPERT
500 E 8TH STREET
KANSAS CITY, MO 64106
PHONE (816) 275-1550

KCP&L
RON DEJARNETTE
1300 SE HAMBLÉN ROAD
LEE'S SUMMIT, MO 64081
PHONE (816) 347-4316

MISSOURI GAS ENERGY
RICHARD FROCK
3025 SW CLOVER DRIVE
LEE'S SUMMIT, MO 64082
PHONE (816) 472-3489

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DRAWING INFO.	
DRAWN BY: DRS	CHECK BY: TPW
DATE: 08/28/2019	FIELD BOOK: 19C010008
NO. 1	REVISIONS PER CITY COMMENTS

**SUMMIT ORCHARDS LOT 4B
FINAL DEVELOPMENT PLAN**
NW CHIPMAN RD & NW WARD RD
LEE'S SUMMIT, MISSOURI 64086

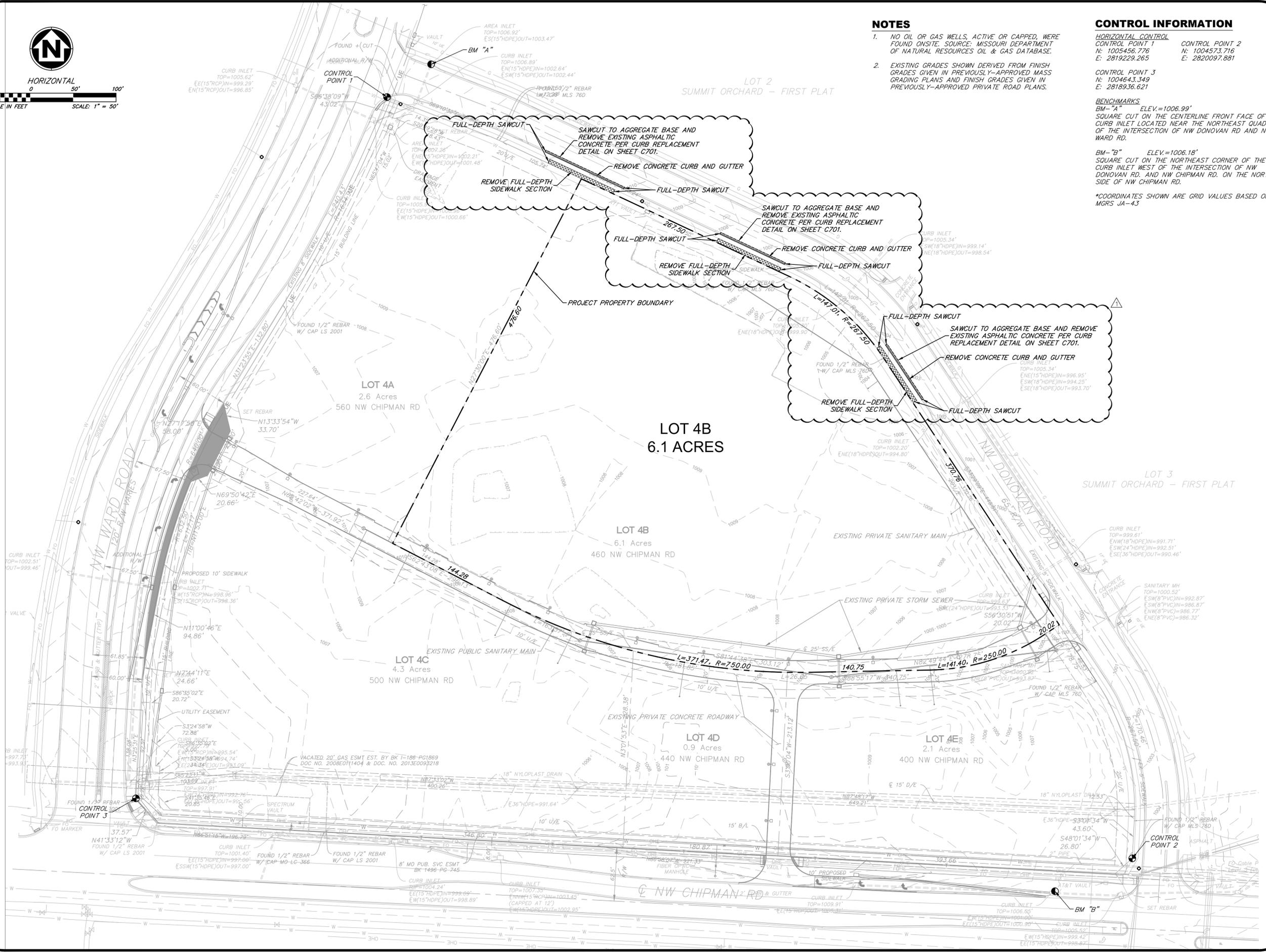
COVER SHEET

SHEET NUMBER
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HORIZONTAL
0 50' 100'
SCALE IN FEET SCALE: 1" = 50'



NOTES

- NO OIL OR GAS WELLS, ACTIVE OR CAPPED, WERE FOUND ONSITE. SOURCE: MISSOURI DEPARTMENT OF NATURAL RESOURCES OIL & GAS DATABASE.
- EXISTING GRADES SHOWN DERIVED FROM FINISH GRADES GIVEN IN PREVIOUSLY-APPROVED MASS GRADING PLANS AND FINISH GRADES GIVEN IN PREVIOUSLY-APPROVED PRIVATE ROAD PLANS.

CONTROL INFORMATION

HORIZONTAL CONTROL
CONTROL POINT 1
N: 1005456.776
E: 2819229.265

CONTROL POINT 2
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E: 2820097.881

CONTROL POINT 3
N: 1004643.349
E: 2818936.621

BENCHMARKS
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BM-"B" ELEV.=1006.19'
SQUARE CUT ON THE NORTHEAST CORNER OF THE 2ND CURB INLET WEST OF THE INTERSECTION OF NW DONOVAN RD. AND NW CHIPMAN RD. ON THE NORTH SIDE OF NW CHIPMAN RD.

*COORDINATES SHOWN ARE GRID VALUES BASED ON MGRS JA-43

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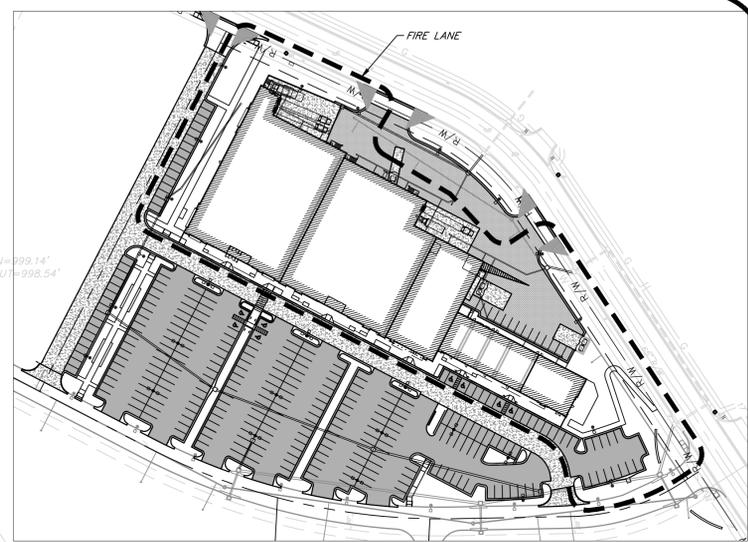
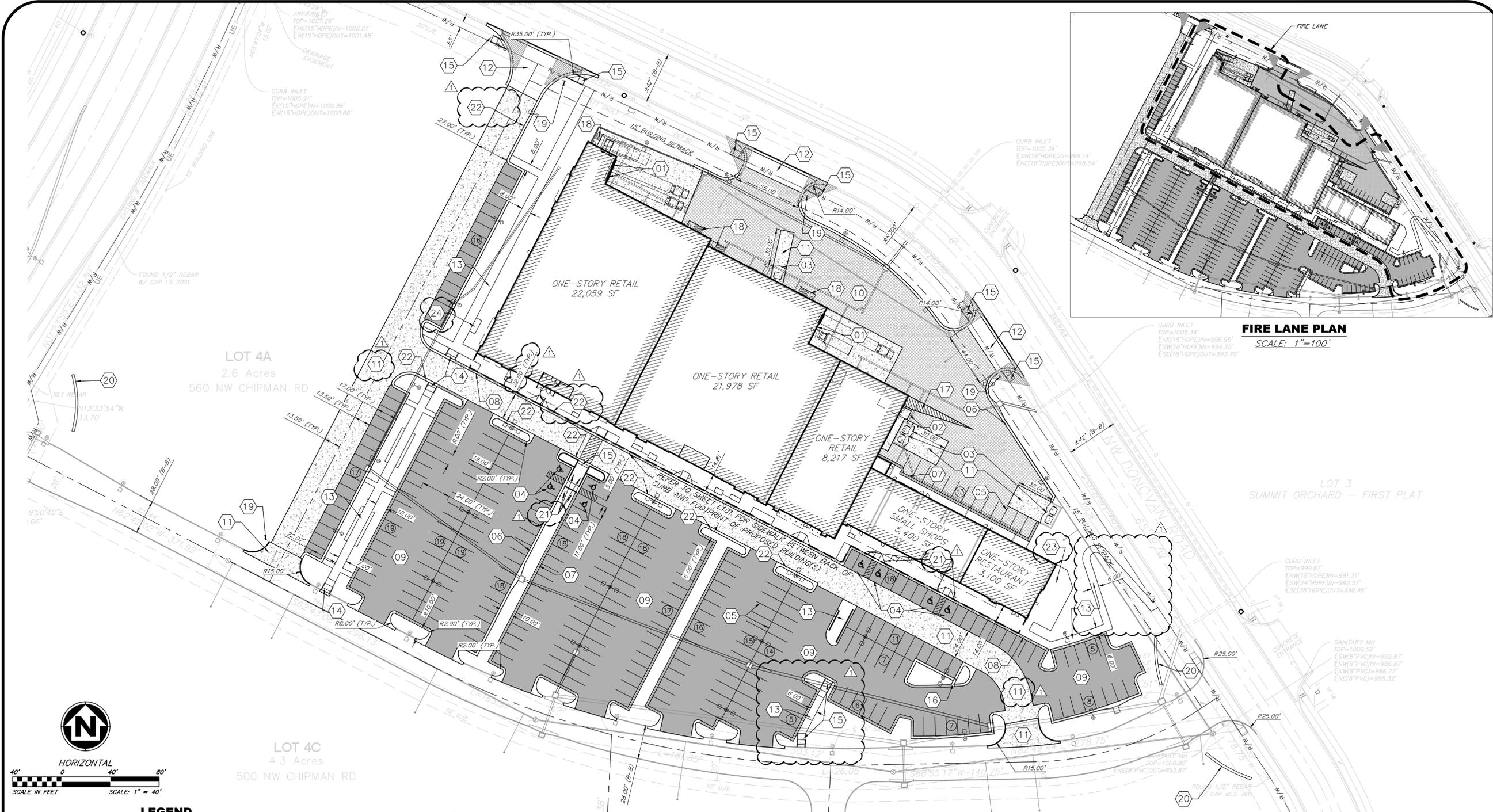
SUMMIT ORCHARDS LOT 4B
FINAL DEVELOPMENT PLAN
NW CHIPMAN RD & NW WARD RD
LEE'S SUMMIT, MISSOURI 64086

DEMOLITION PLAN

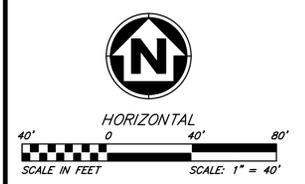
THOMAS P. WOOTEN
REGISTERED PROFESSIONAL ENGINEER
STATE OF MISSOURI
E-2000150081
9-20-19

SHEET NUMBER
C100
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FIRE LANE PLAN
SCALE: 1"=100'



LEGEND

- PARKING STALL COUNT
- MEDIUM-DUTY ASPHALTIC CONCRETE PAVEMENT
- HEAVY-DUTY ASPHALTIC CONCRETE PAVEMENT
- PORTLAND CEMENT CONCRETE PAVEMENT
- TYPE CG-1 CURB & GUTTER
- TYPE CG-1 (DRY) CURB & GUTTER
- MODIFIED 5" DRY CURB & GUTTER
- RIGHT-OF-WAY LINE
- LOT LINE
- SIGHT TRIANGLE (25'X25')

CONSTRUCTION NOTES

- 01 48" TRUCK LOADING DOCK PER FUTURE BUILDING PLANS.
- 02 30" TRUCK LOADING DOCK PER FUTURE BUILDING PLANS.
- 03 DUMPSTER ENCLOSURE LOCATION - REFER TO ARCHITECTURAL PLANS.
- 04 CONSTRUCT ADA PARKING STALL. CHEVRON PAINT TO BE 4" WIDE PAINTED AT 45° TO PERPENDICULAR, SPACING TO BE 2' O.C. PAINT TO BE LEAD-FREE, WATER-BORNE, EMULSION-BASED TRAFFIC PAINT, BLUE IN COLOR.
- 05 PAINT PARKING STRIPING (TYP.). PAINT TO BE LEAD-FREE, WATER-BORNE, EMULSION-BASED TRAFFIC PAINT, WHITE IN COLOR.
- 06 CONSTRUCT TYPE CG-1 CURB & GUTTER (TYP.) PER DETAIL ON SHEET C701.
- 07 CONSTRUCT TYPE CG-1 DRY CURB & GUTTER (TYP.) PER DETAIL ON SHEET C701.
- 08 CONSTRUCT MODIFIED 5" DRY CURB & GUTTER (TYP.) PER DETAIL ON SHEET C701.
- 09 CONSTRUCT MEDIUM-DUTY ASPHALTIC CONCRETE PAVEMENT PER PAVEMENT SECTION ON SHEET C701.
- 10 CONSTRUCT HEAVY-DUTY ASPHALTIC CONCRETE PAVEMENT PER PAVEMENT SECTION ON SHEET C701.
- 11 CONSTRUCT PORTLAND CEMENT CONCRETE PAVEMENT PER PAVEMENT SECTION ON SHEET C701.
- 12 CONSTRUCT 8" CONCRETE COMMERCIAL DRIVEWAY PER DETAIL ON SHEET C700.
- 13 CONSTRUCT 4" CONCRETE SIDEWALK PER PAVEMENT SECTION ON SHEET C700.
- 14 CONSTRUCT ADA RAMP PER LANDSCAPE PLANS.
- 15 CONSTRUCT ADA RAMP PER DETAILS ON SHEET C401.
- 16 CONSTRUCT 2"-WIDE INTEGRAL CURB FLUME PER DETAIL ON SHEET C701.
- 17 CONSTRUCT CONCRETE WEDGE PER PAVEMENT SECTION ON SHEET C701. PAINT CHEVRON PATTERN. CHEVRON PAINT TO BE 4" WIDE PAINTED AT 45° TO PERPENDICULAR, SPACING TO BE 2' O.C. PAINT TO BE LEAD-FREE, WATER-BORNE, EMULSION-BASED TRAFFIC PAINT, YELLOW IN COLOR.
- 18 STAIR LOCATION - REFER TO ARCHITECTURAL PLANS.
- 19 INSTALL 36"X36" R1-1 STOP SIGN WITH BREAKAWAY SIGN POST PER DETAIL ON SHEET C701.
- 20 LANDSCAPE WALL BY OTHERS.
- 21 INSTALL ADA ACCESSIBLE PARKING SIGNAGE PER DETAIL ON SHEET C705.
- 22 PAINT CURB AND GUTTER RED TO DENOTE FIRE LANE. PAINT TO BE LEAD-FREE, WATER-BORNE, EMULSION-BASED TRAFFIC PAINT, RED IN COLOR.
- 23 CONSTRUCT CONCRETE PATIO PER SIDEWALK PAVEMENT SECTION ON SHEET C701.
- 24 BIKE RACK AREA PER LANDSCAPING PLANS.

LAND USE DATA

SITE	
TOTAL LOT AREA:	266,151 SF (6.11 ACRES)
IMPERVIOUS AREA:	226,318 SF (85.0%)
BUILDING	
TOTAL FLOOR AREA:	60,754 SF
FLOOR AREA RATIO:	0.23
NUMBER OF DWELLING UNITS:	0
PARKING	
TOTAL REQUIRED PARKING STALLS:	304
(RETAIL: 4.5 PER 1,000 SF GFA)	
(RESTAURANT: 14 PER 1,000 SF GFA)	
TOTAL PROVIDED PARKING STALLS:	304
REQUIRED HANDICAP PARKING STALLS:	8 (1 VAN)
PROVIDED HANDICAP PARKING STALLS:	8 (8 VAN)

PROJECT ADDRESS

460 NW CHIPMAN ROAD
LEE'S SUMMIT, MISSOURI 64086

ZONING

PMIX

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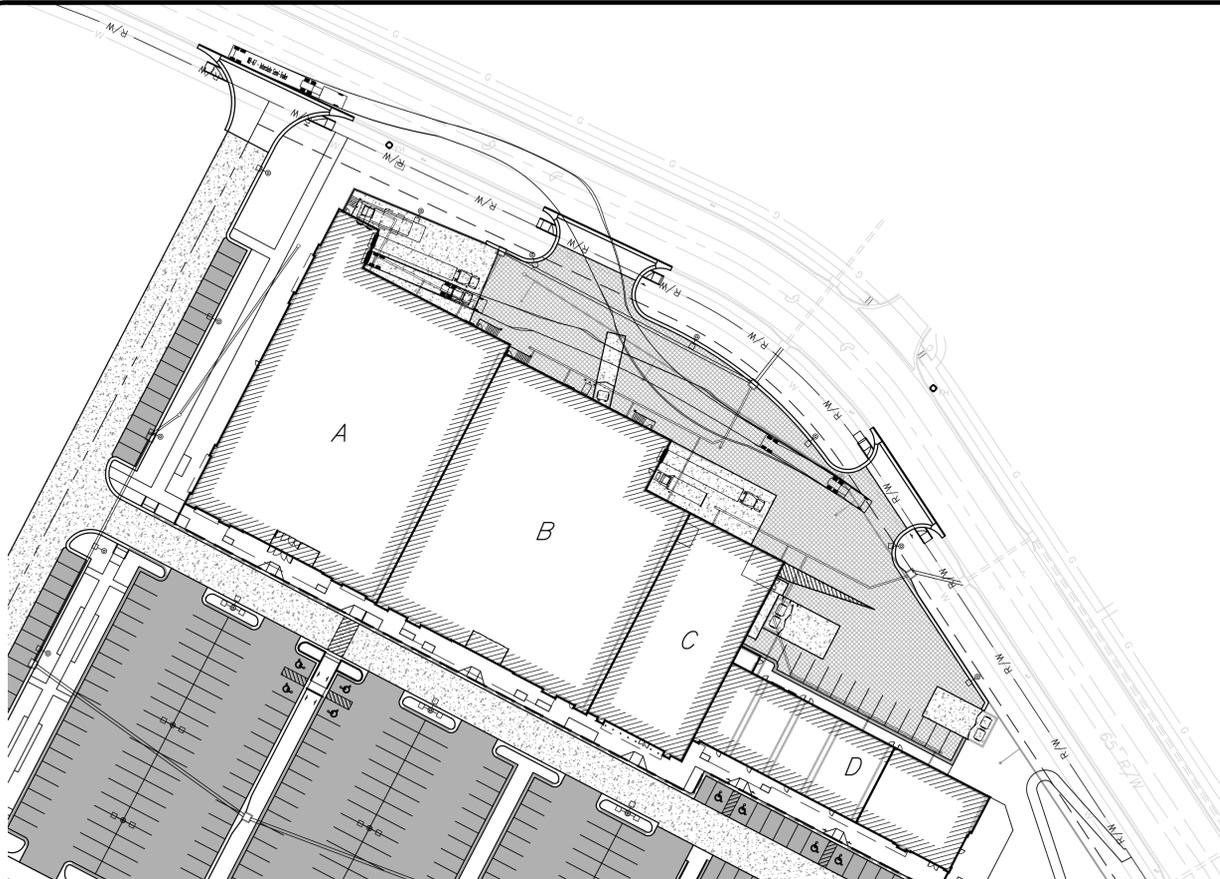
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FINAL DEVELOPMENT PLAN
NW CHIPMAN RD & NW WARD RD
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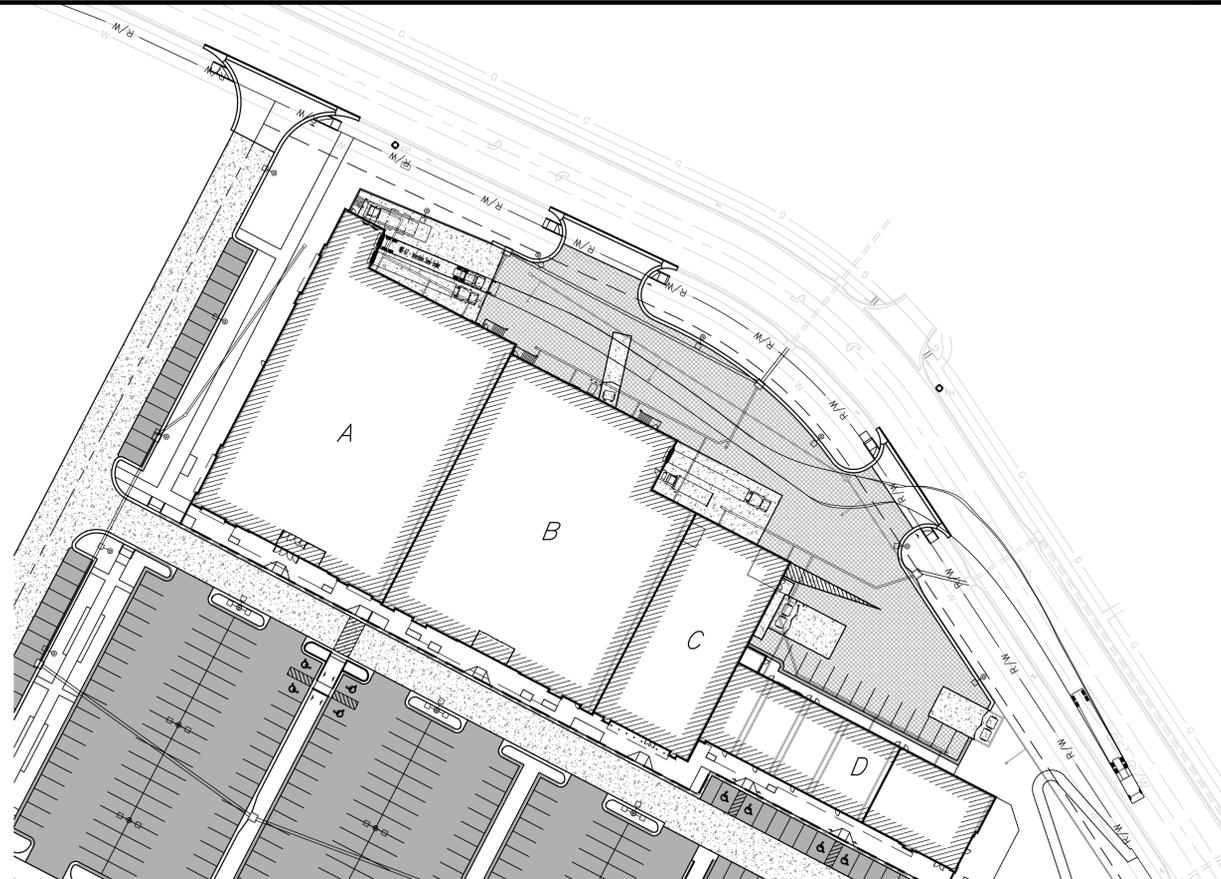
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SHEET NUMBER
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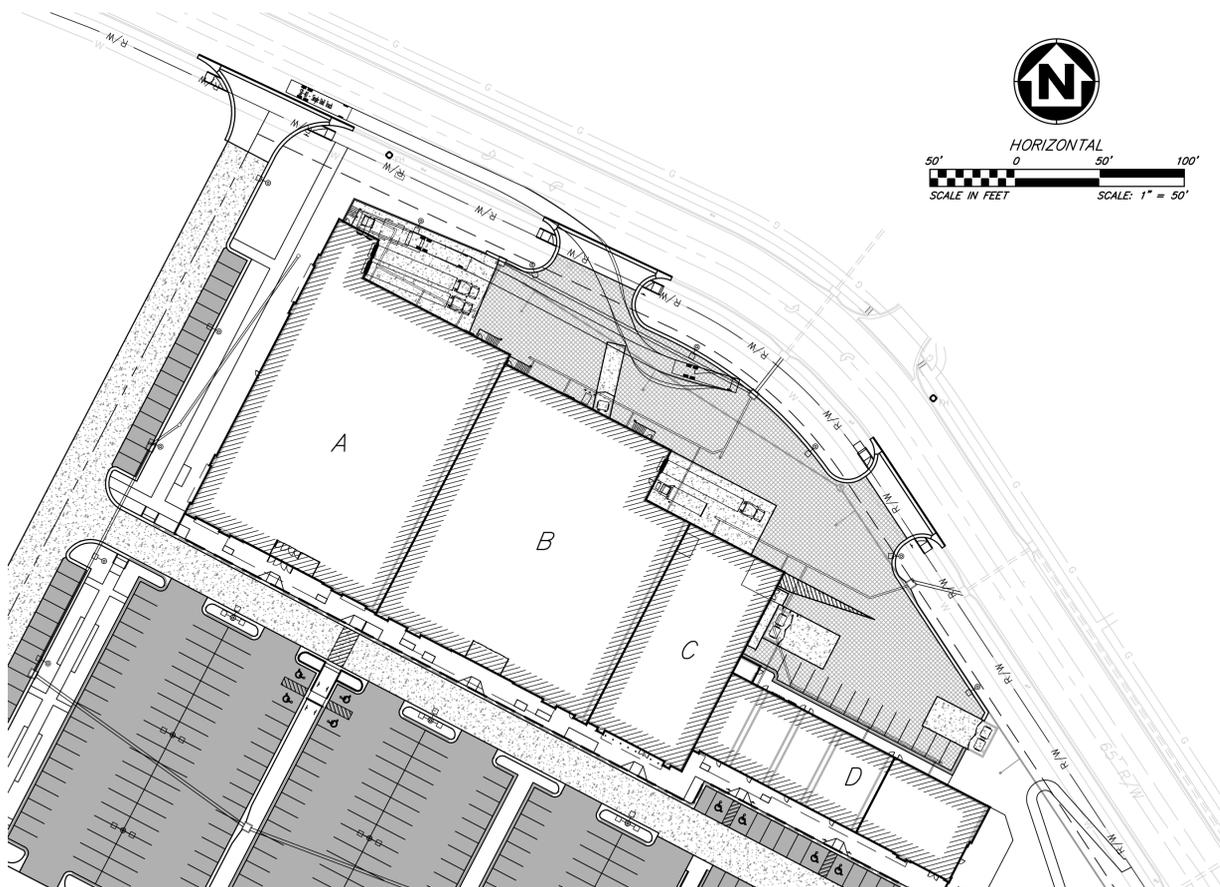
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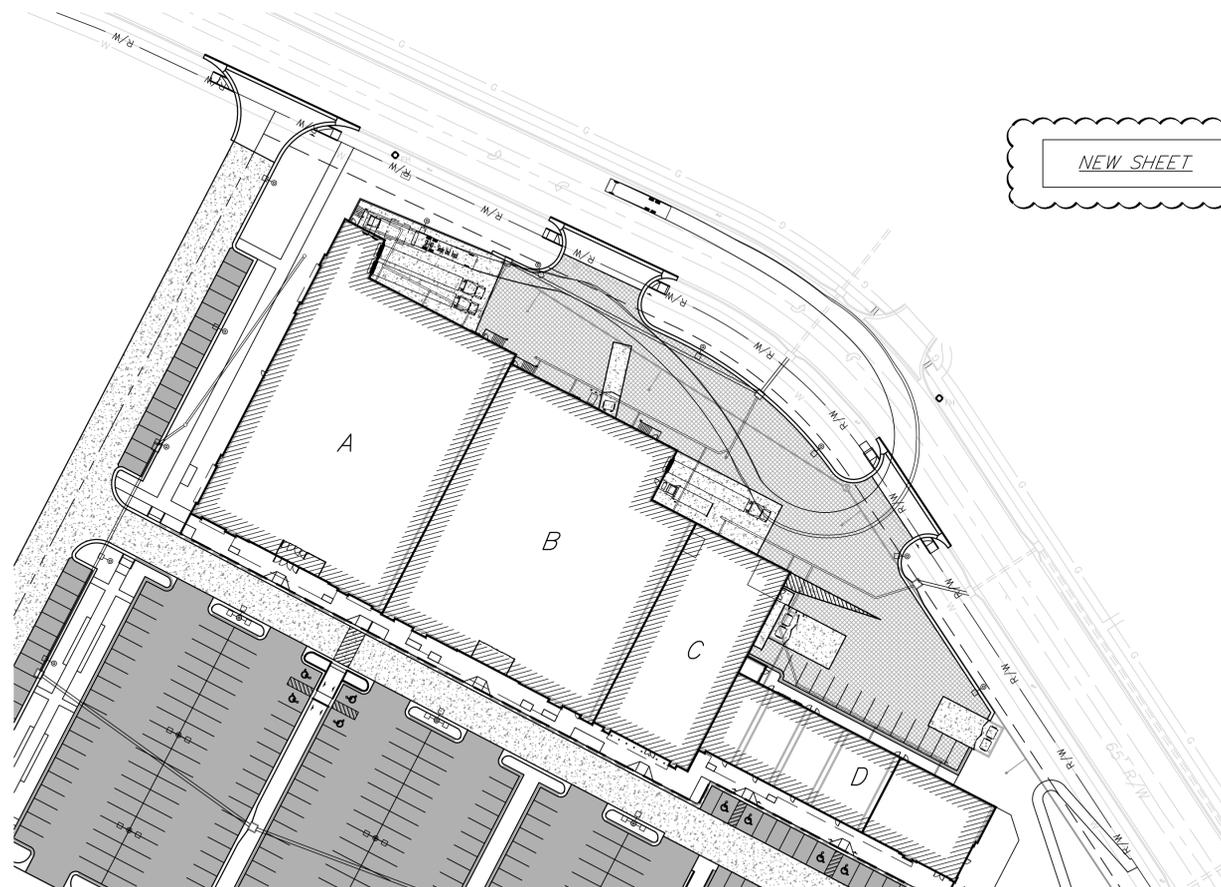
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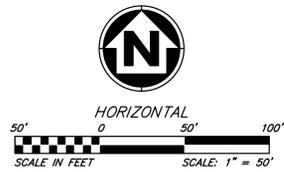
BUILDING A: WB-67 DEPARTURE



BUILDING A: SU-40 ARRIVAL



BUILDING A: SU-40 DEPARTURE



NEW SHEET

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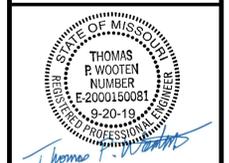
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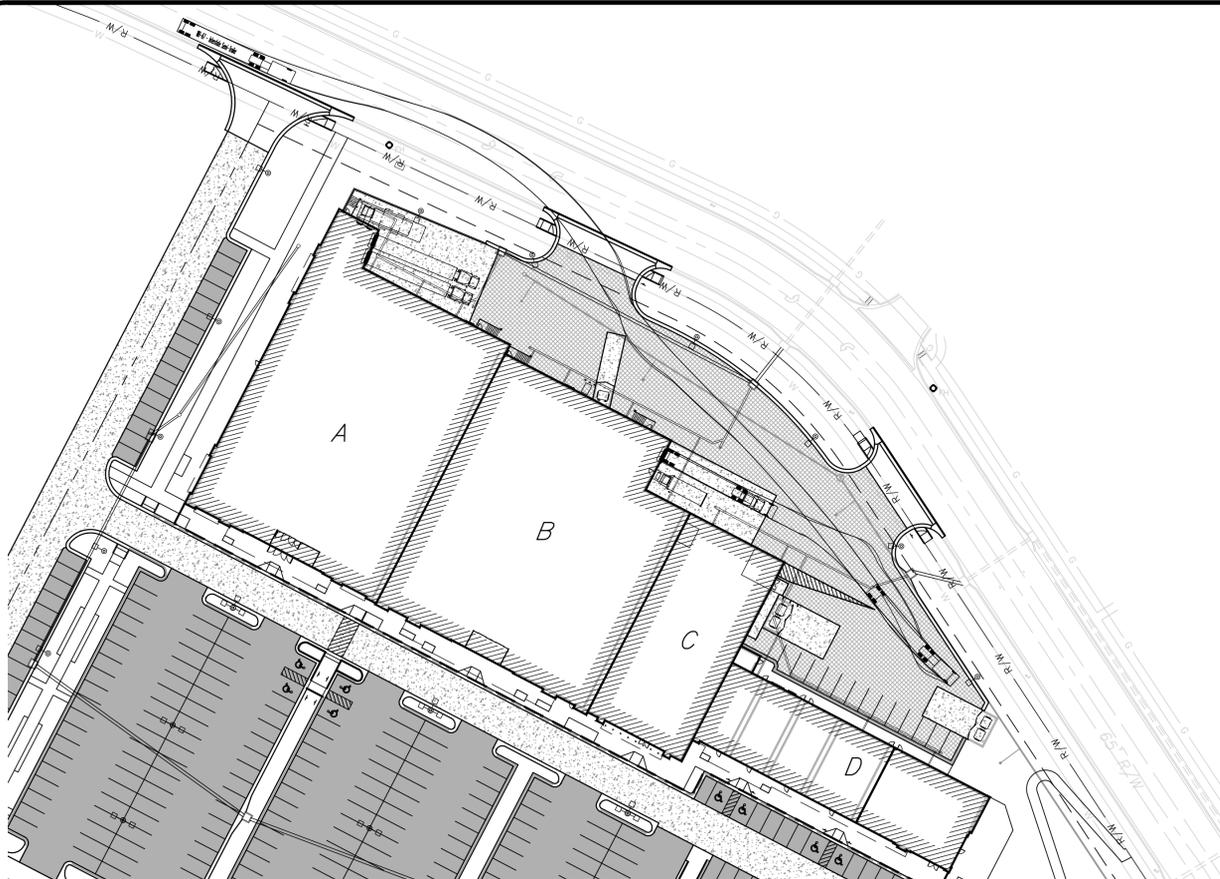
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TRUCK TURN PLAN

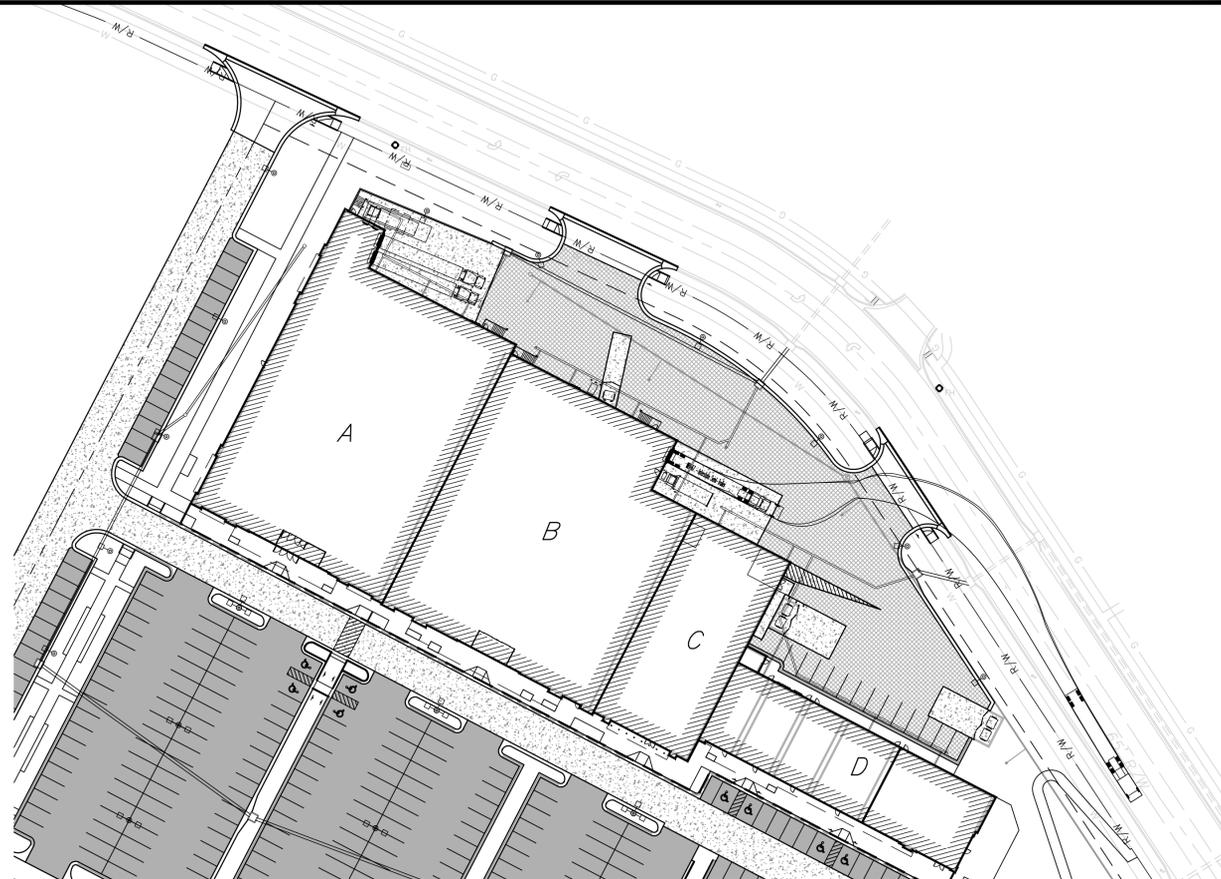


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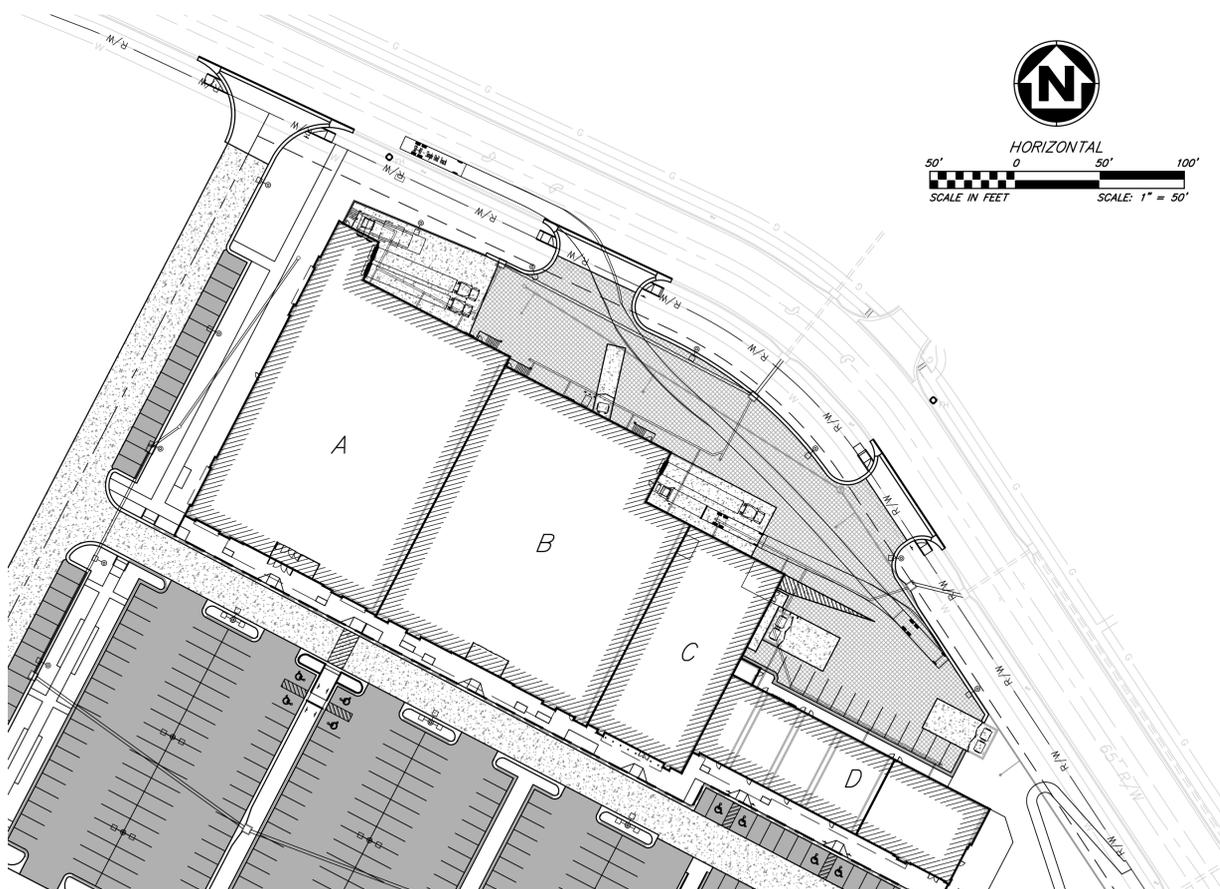
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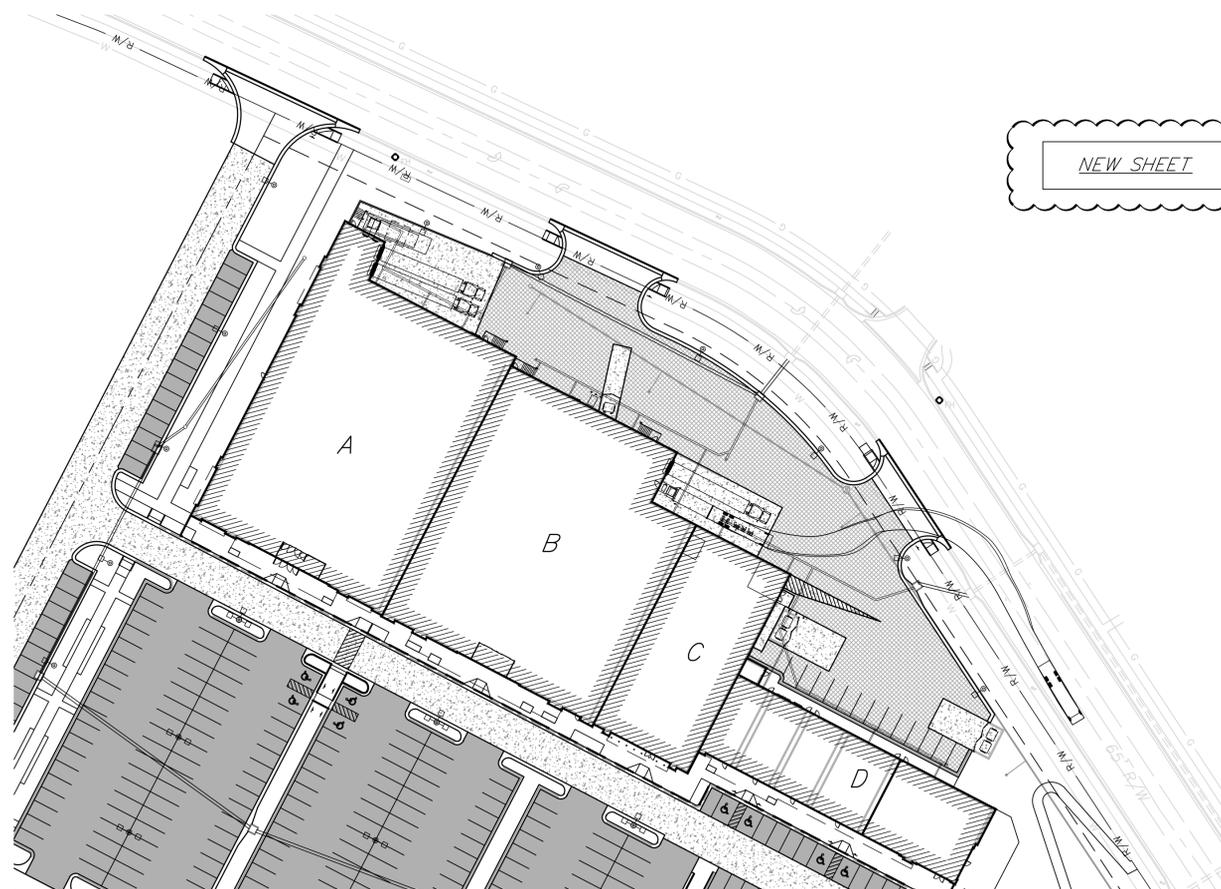
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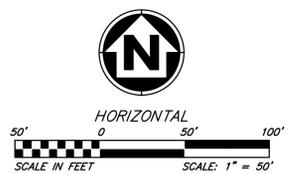
BUILDING B: WB-67 DEPARTURE



BUILDING B: SU-40 ARRIVAL



BUILDING B: SU-40 DEPARTURE



NEW SHEET

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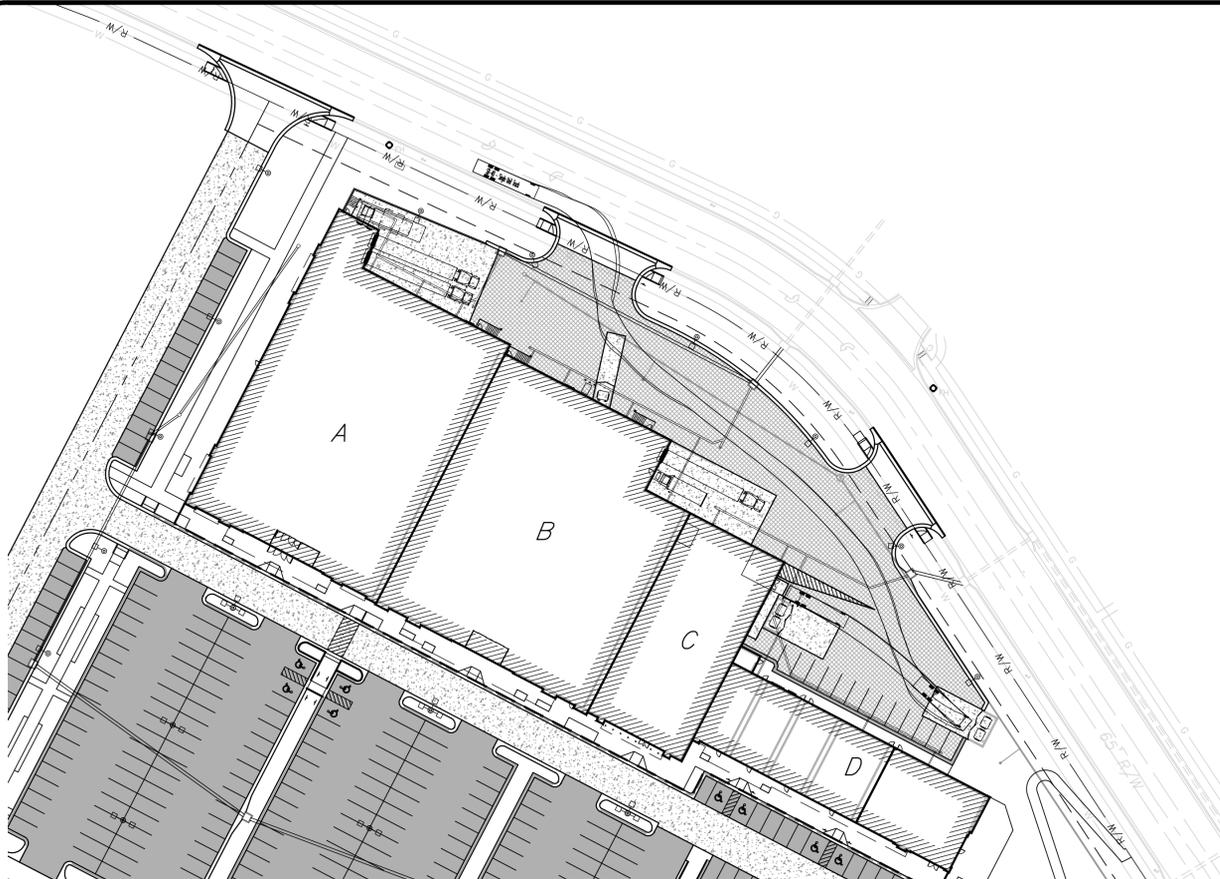
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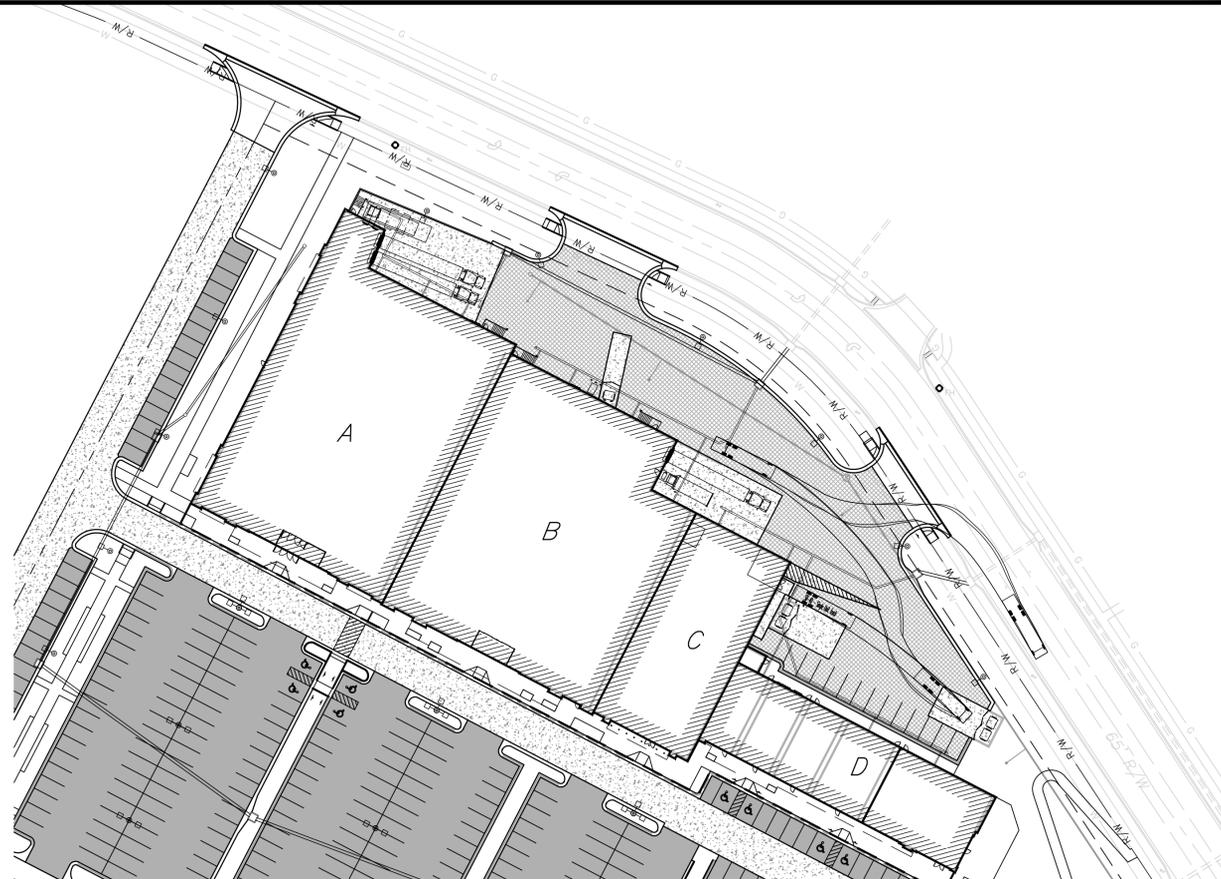


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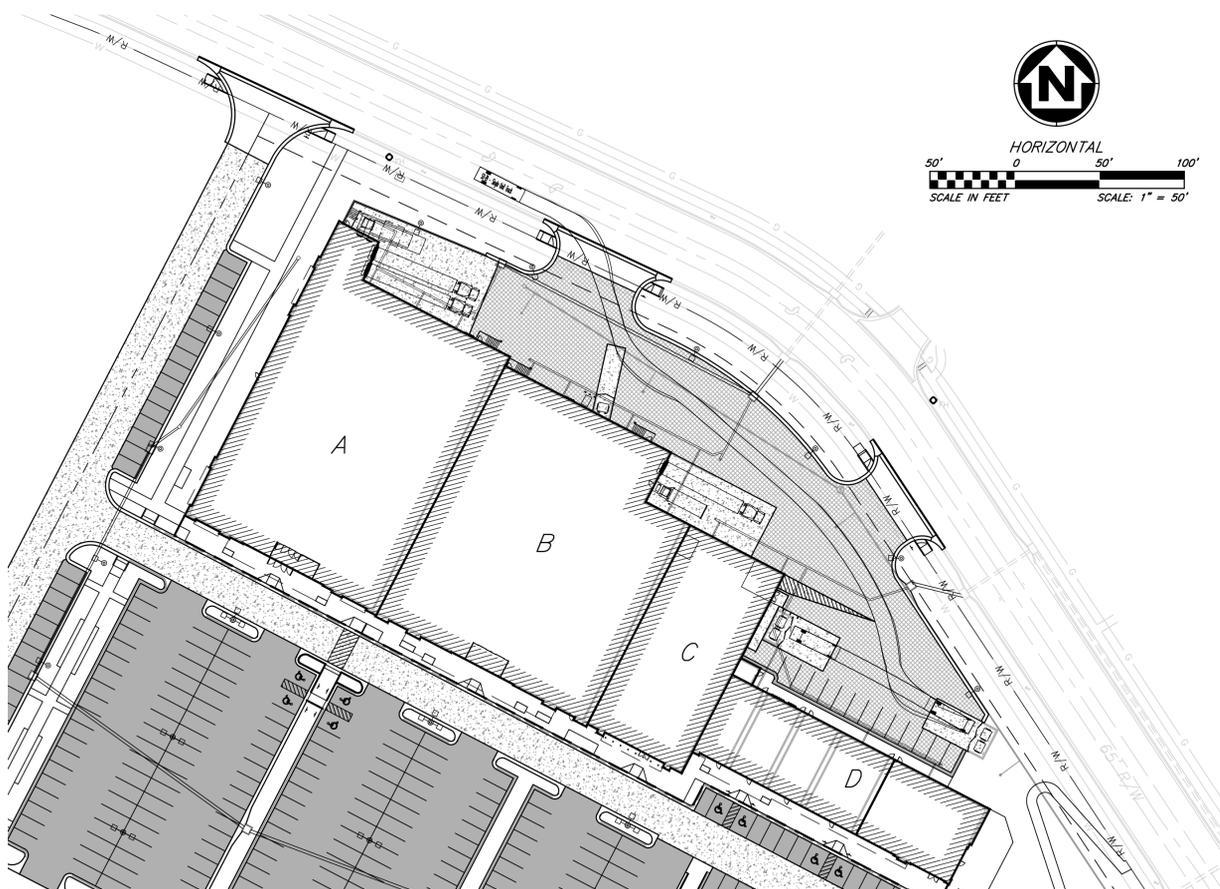
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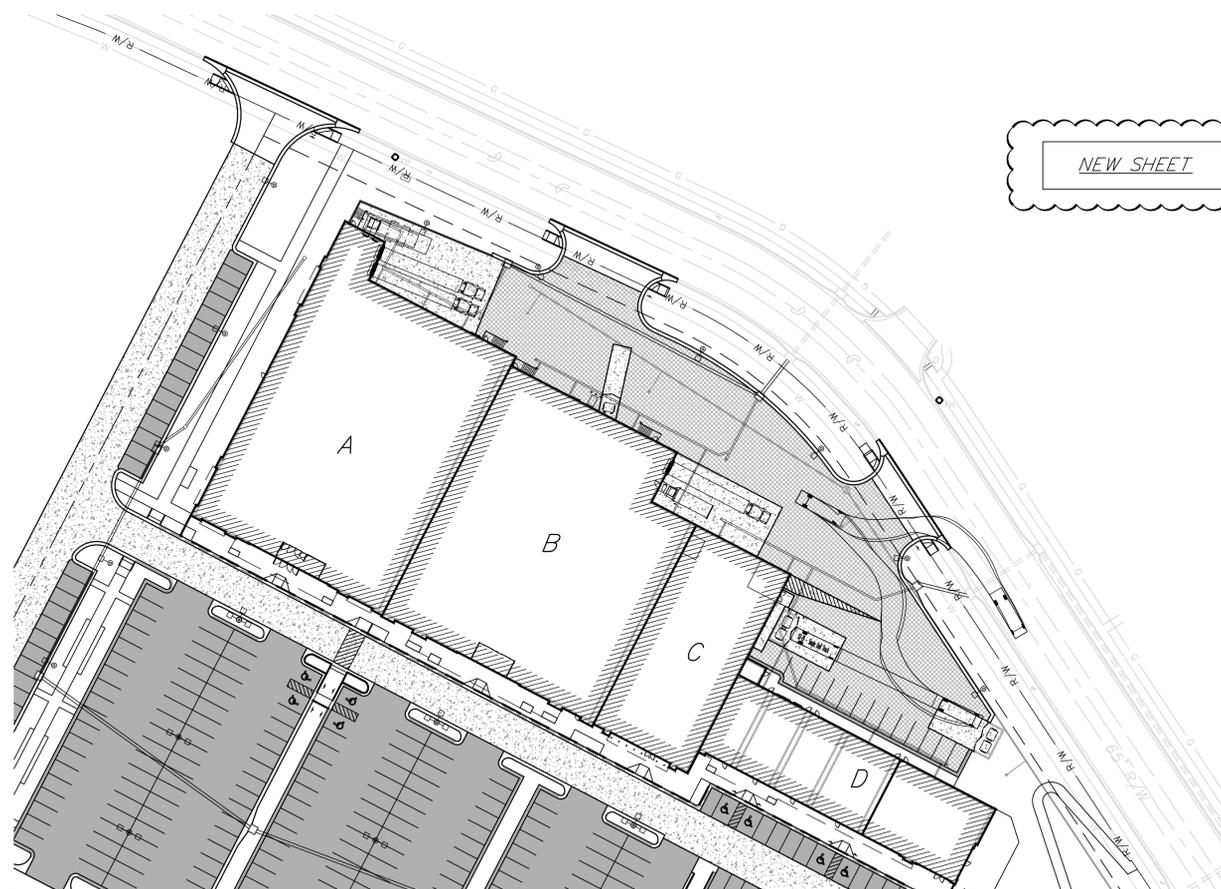
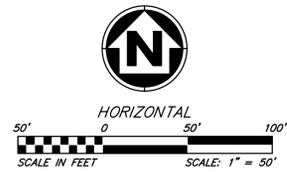
BUILDING C: SU-40 ARRIVAL



BUILDING C: SU-40 DEPARTURE



BUILDING C: SU-9 ARRIVAL



BUILDING C: SU-9 DEPARTURE

NEW SHEET

ANDERSON ENGINEERING
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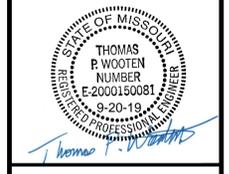
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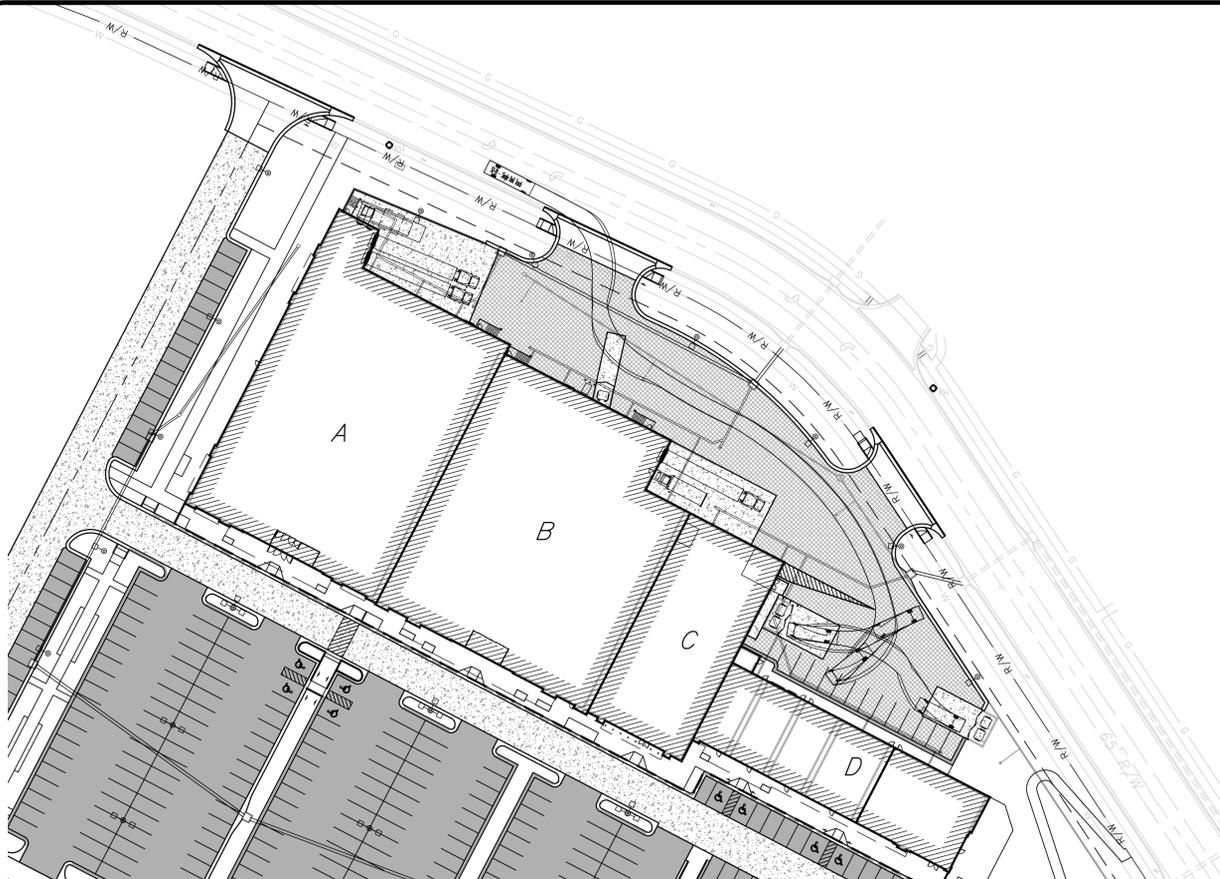
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SUMMIT ORCHARDS LOT 4B
FINAL DEVELOPMENT PLAN
 NW CHIPMAN RD & NW WARD RD
 LEE'S SUMMIT, MISSOURI 64086
TRUCK TURN PLAN

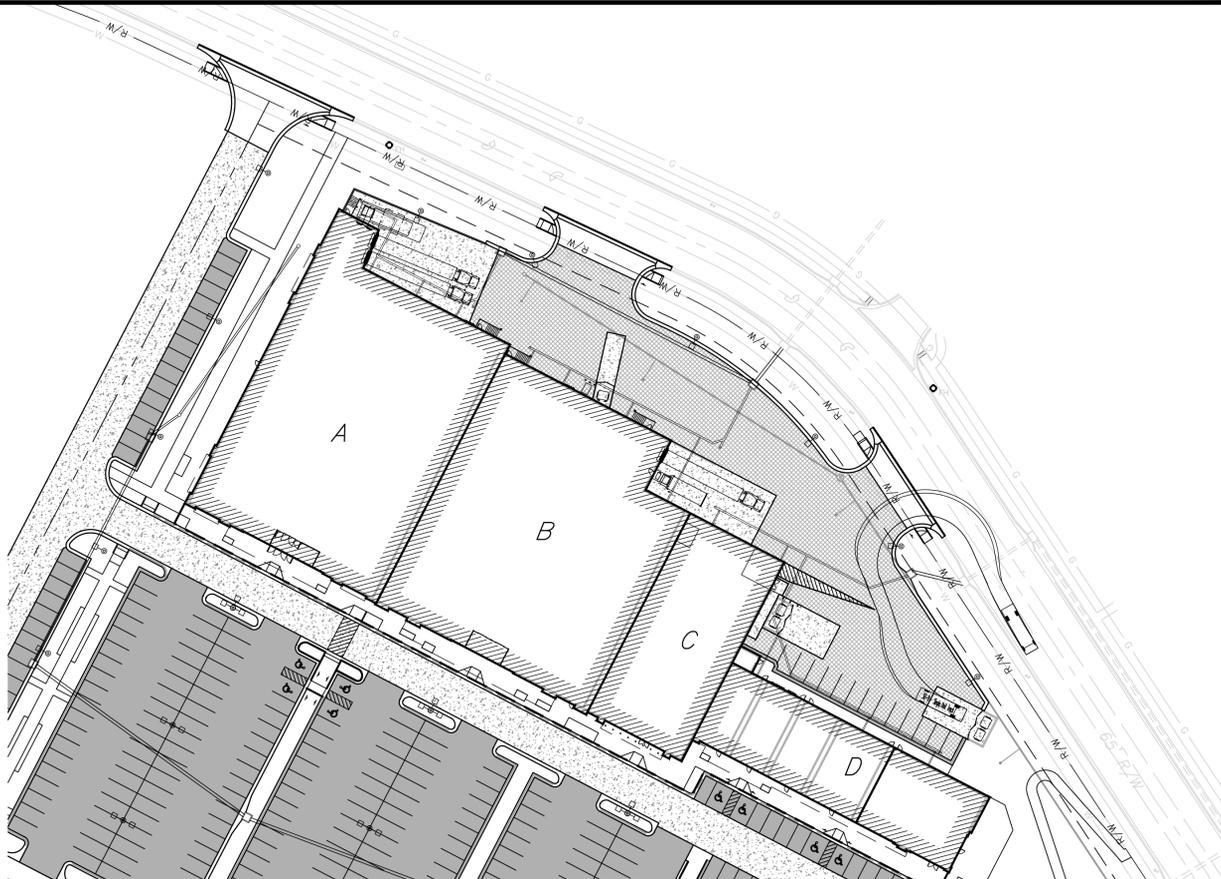


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C203
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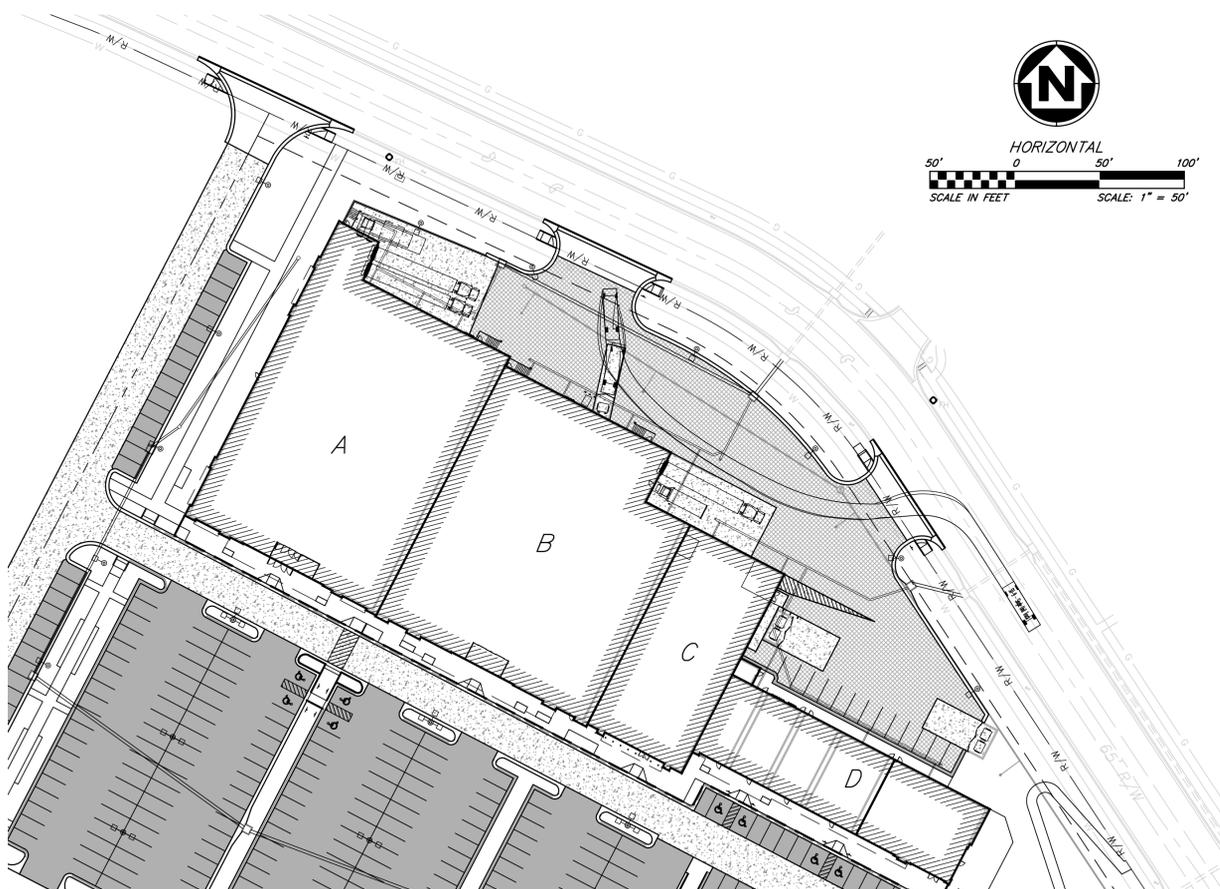
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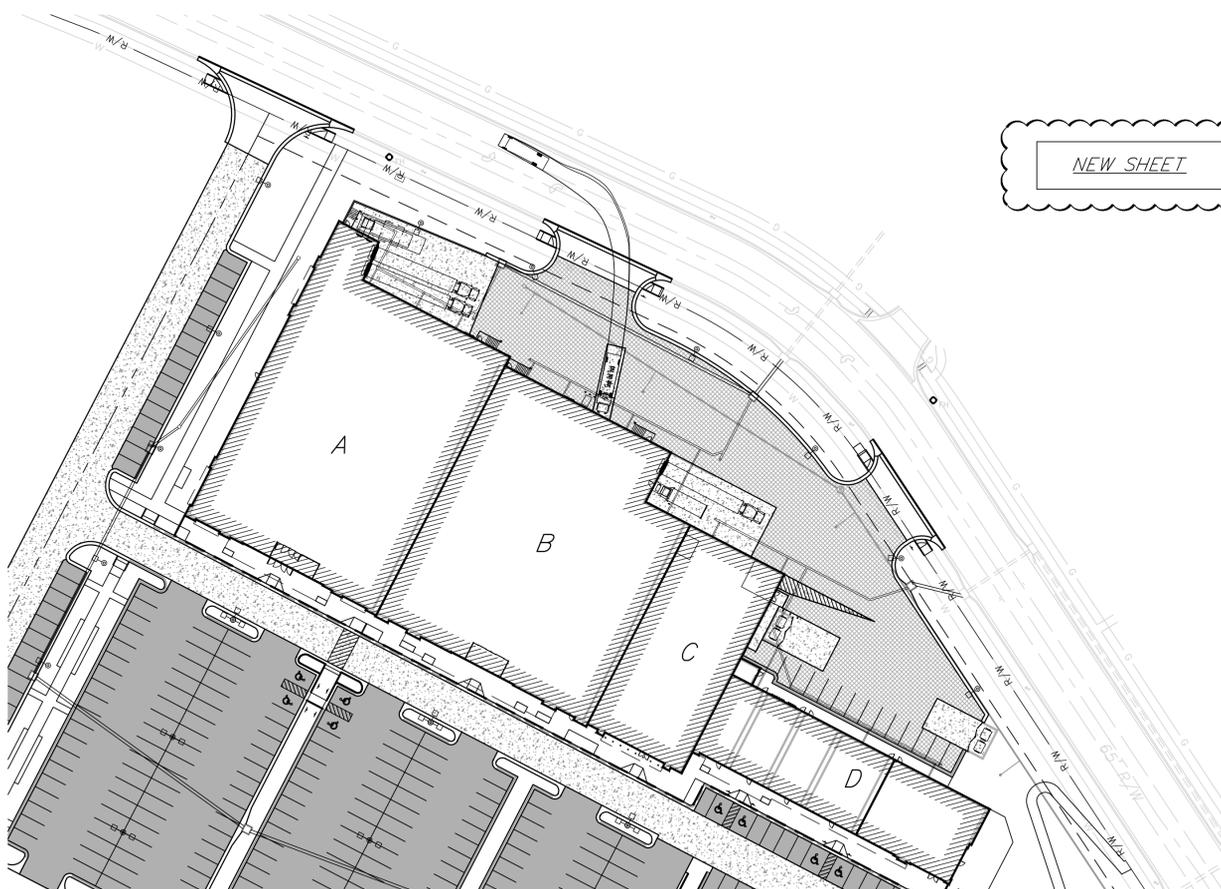
BUILDING D: SU-9 ARRIVAL



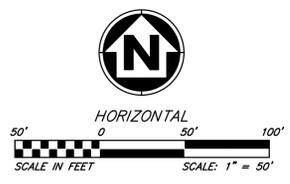
BUILDING D: SU-9 DEPARTURE



BUILDING B: SU-9 ARRIVAL



BUILDING B: SU-9 DEPARTURE



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TRUCK TURN PLAN

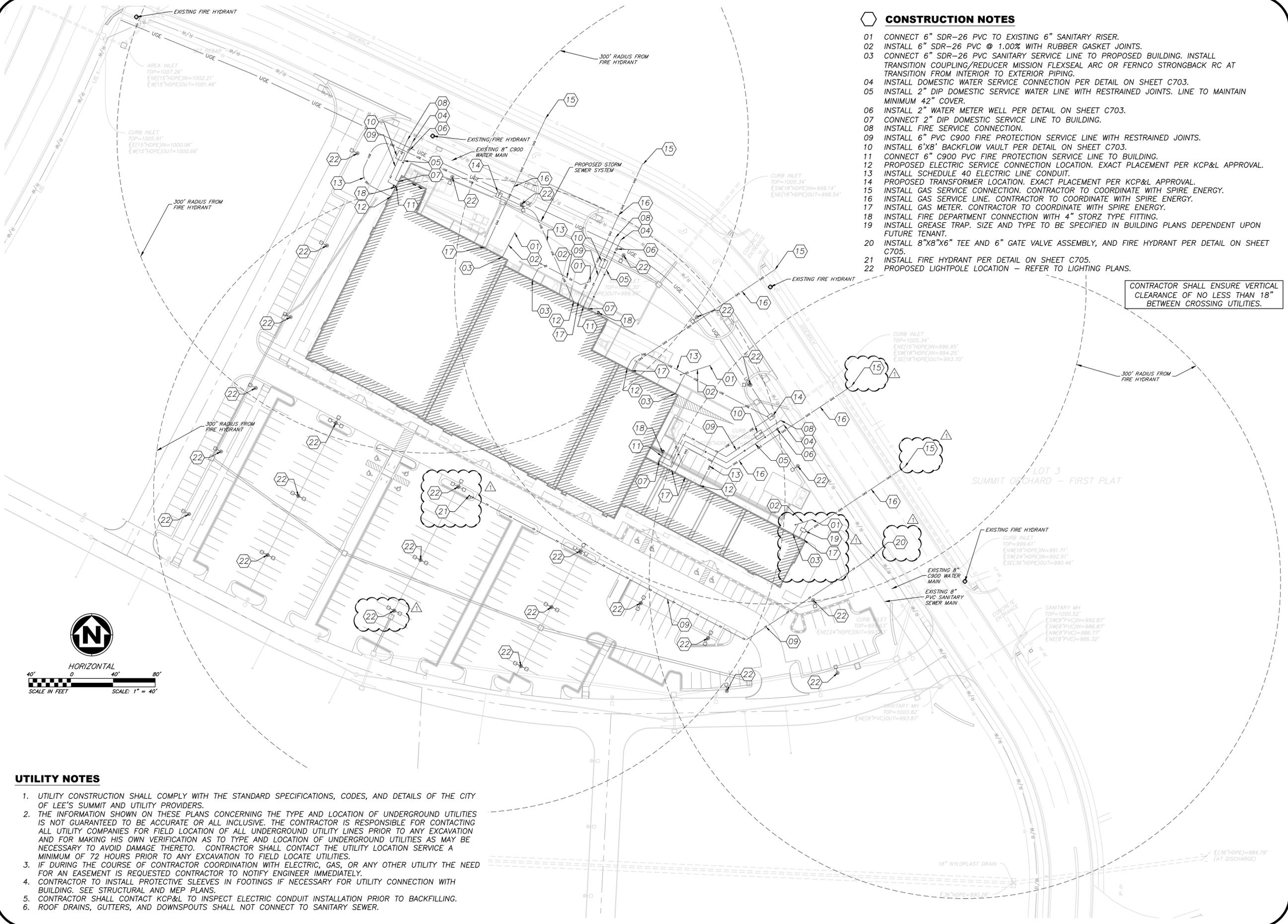
THOMAS P. WOOTEN
REGISTERED PROFESSIONAL ENGINEER
STATE OF MISSOURI
E-2000150081
9-20-19

SHEET NUMBER

C204

7 OF 44

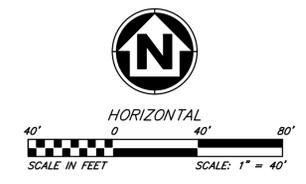
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CONSTRUCTION NOTES

- 01 CONNECT 6" SDR-26 PVC TO EXISTING 6" SANITARY RISER.
- 02 INSTALL 6" SDR-26 PVC @ 1.00% WITH RUBBER GASKET JOINTS.
- 03 CONNECT 6" SDR-26 PVC SANITARY SERVICE LINE TO PROPOSED BUILDING. INSTALL TRANSITION COUPLING/REDUCER MISSION FLEXSEAL ARC OR FERNOCO STRONGBACK RC AT TRANSITION FROM INTERIOR TO EXTERIOR PIPING.
- 04 INSTALL DOMESTIC WATER SERVICE CONNECTION PER DETAIL ON SHEET C703.
- 05 INSTALL 2" DIP DOMESTIC SERVICE WATER LINE WITH RESTRAINED JOINTS. LINE TO MAINTAIN MINIMUM 42" COVER.
- 06 INSTALL 2" WATER METER WELL PER DETAIL ON SHEET C703.
- 07 CONNECT 2" DIP DOMESTIC SERVICE LINE TO BUILDING.
- 08 INSTALL FIRE SERVICE CONNECTION.
- 09 INSTALL 6" PVC C900 FIRE PROTECTION SERVICE LINE WITH RESTRAINED JOINTS.
- 10 INSTALL 6"x8" BACKFLOW VAULT PER DETAIL ON SHEET C703.
- 11 CONNECT 6" C900 PVC FIRE PROTECTION SERVICE LINE TO BUILDING.
- 12 PROPOSED ELECTRIC SERVICE CONNECTION LOCATION. EXACT PLACEMENT PER KCP&L APPROVAL.
- 13 INSTALL SCHEDULE 40 ELECTRIC LINE CONDUIT.
- 14 PROPOSED TRANSFORMER LOCATION. EXACT PLACEMENT PER KCP&L APPROVAL.
- 15 INSTALL GAS SERVICE CONNECTION. CONTRACTOR TO COORDINATE WITH SPIRE ENERGY.
- 16 INSTALL GAS SERVICE LINE. CONTRACTOR TO COORDINATE WITH SPIRE ENERGY.
- 17 INSTALL GAS METER. CONTRACTOR TO COORDINATE WITH SPIRE ENERGY.
- 18 INSTALL FIRE DEPARTMENT CONNECTION WITH 4" STORZ TYPE FITTING.
- 19 INSTALL GREASE TRAP. SIZE AND TYPE TO BE SPECIFIED IN BUILDING PLANS DEPENDENT UPON FUTURE TENANT.
- 20 INSTALL 8"x8"x6" TEE AND 6" GATE VALVE ASSEMBLY, AND FIRE HYDRANT PER DETAIL ON SHEET C705.
- 21 INSTALL FIRE HYDRANT PER DETAIL ON SHEET C705.
- 22 PROPOSED LIGHTPOLE LOCATION - REFER TO LIGHTING PLANS.

CONTRACTOR SHALL ENSURE VERTICAL CLEARANCE OF NO LESS THAN 18" BETWEEN CROSSING UTILITIES.



UTILITY NOTES

1. UTILITY CONSTRUCTION SHALL COMPLY WITH THE STANDARD SPECIFICATIONS, CODES, AND DETAILS OF THE CITY OF LEE'S SUMMIT AND UTILITY PROVIDERS.
2. THE INFORMATION SHOWN ON THESE PLANS CONCERNING THE TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES FOR FIELD LOCATION OF ALL UNDERGROUND UTILITY LINES PRIOR TO ANY EXCAVATION AND FOR MAKING HIS OWN VERIFICATION AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO. CONTRACTOR SHALL CONTACT THE UTILITY LOCATION SERVICE A MINIMUM OF 72 HOURS PRIOR TO ANY EXCAVATION TO FIELD LOCATE UTILITIES.
3. IF DURING THE COURSE OF CONTRACTOR COORDINATION WITH ELECTRIC, GAS, OR ANY OTHER UTILITY THE NEED FOR AN EASEMENT IS REQUESTED CONTRACTOR TO NOTIFY ENGINEER IMMEDIATELY.
4. CONTRACTOR TO INSTALL PROTECTIVE SLEEVES IN FOOTINGS IF NECESSARY FOR UTILITY CONNECTION WITH BUILDING. SEE STRUCTURAL AND MEP PLANS.
5. CONTRACTOR SHALL CONTACT KCP&L TO INSPECT ELECTRIC CONDUIT INSTALLATION PRIOR TO BACKFILLING.
6. ROOF DRAINS, GUTTERS, AND DOWNSPOUTS SHALL NOT CONNECT TO SANITARY SEWER.

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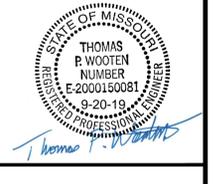
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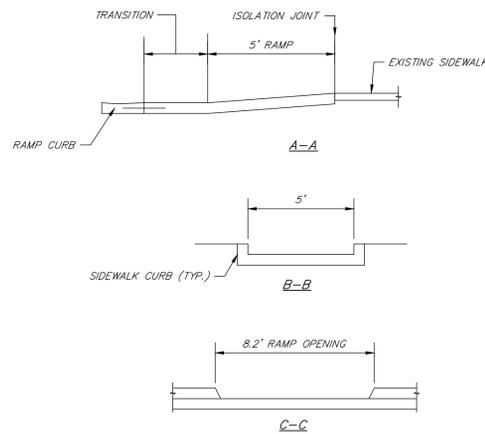
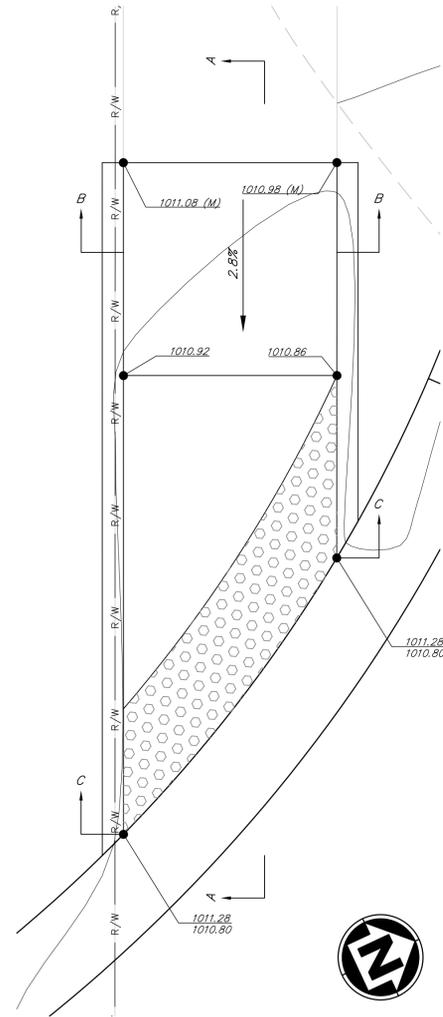
**SUMMIT ORCHARDS LOT 4B
 FINAL DEVELOPMENT PLAN**
 NW CHIPMAN RD & NW WARD RD
 LEE'S SUMMIT, MISSOURI 64086

UTILITY PLAN

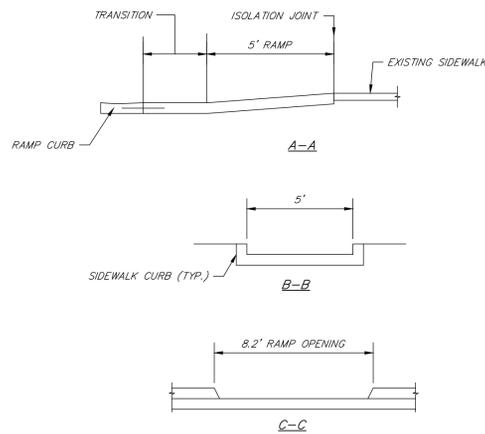
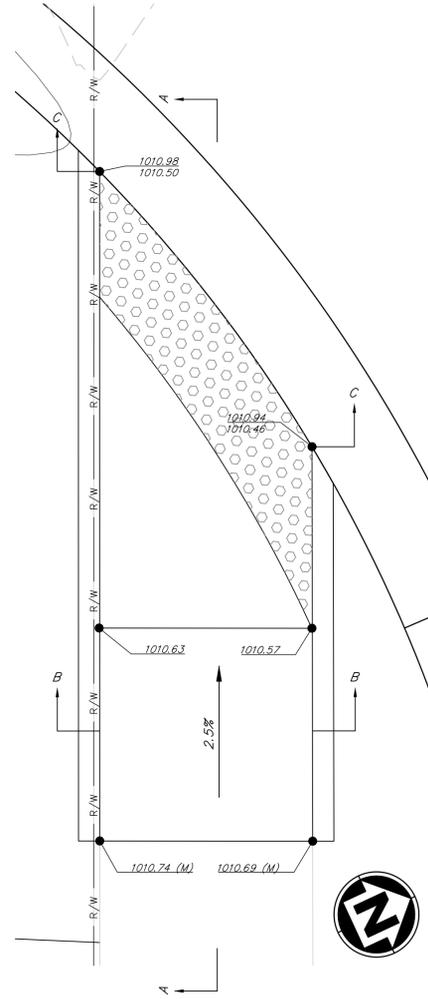


SHEET NUMBER
C300
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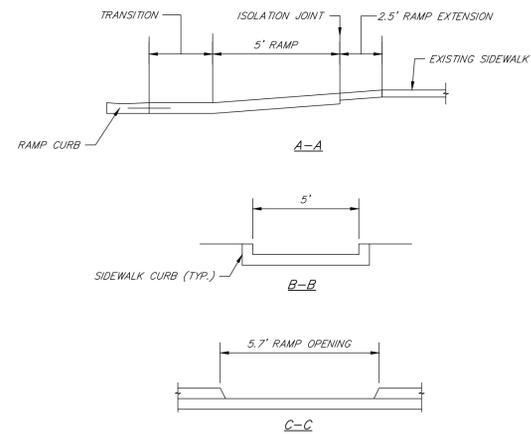
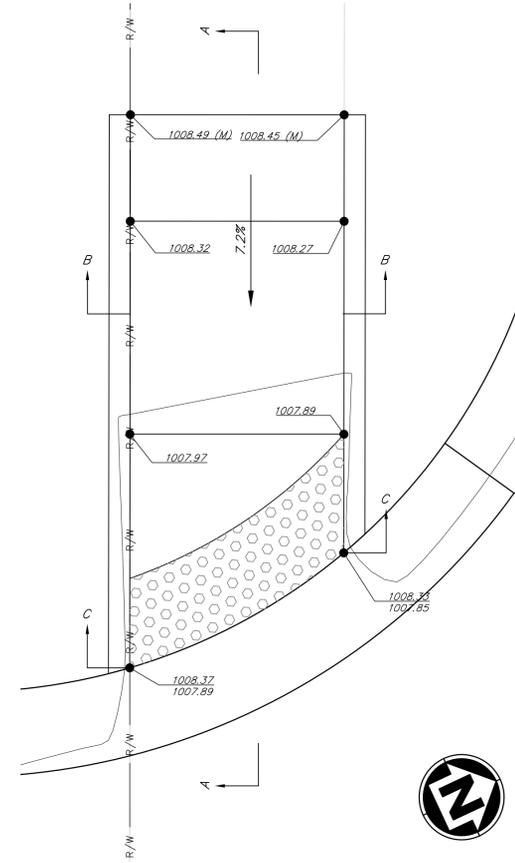
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RAMP DETAIL #1
SCALE: 1"=2'



RAMP DETAIL #2
SCALE: 1"=2'



RAMP DETAIL #3
SCALE: 1"=2'

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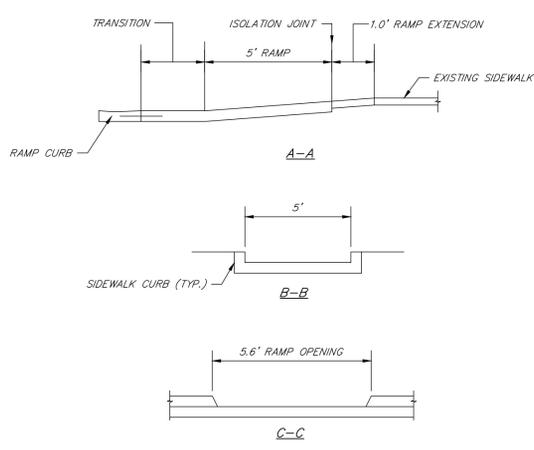
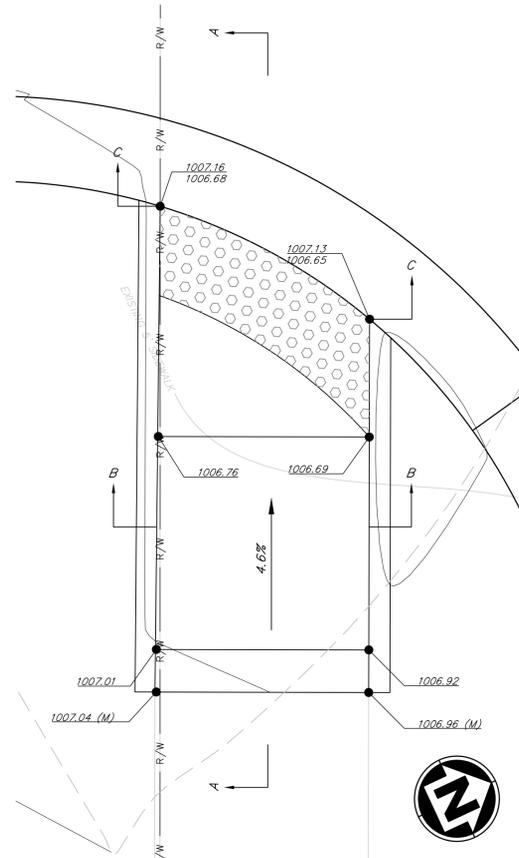
SIDEWALK RAMP DETAILS

STATE OF MISSOURI
REGISTERED PROFESSIONAL ENGINEER
THOMAS P. WOOTEN
NUMBER
E-200015008
9-20-19

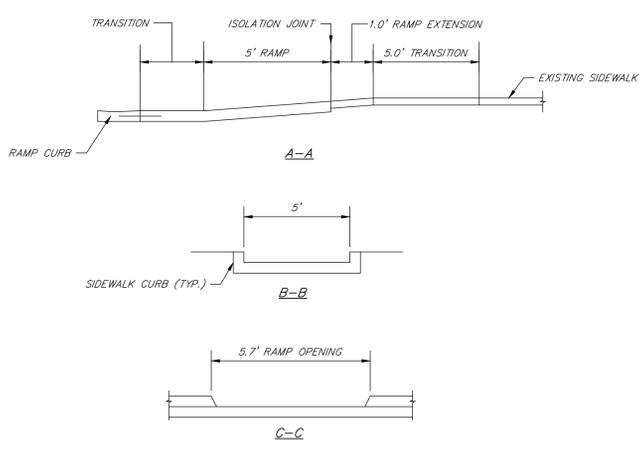
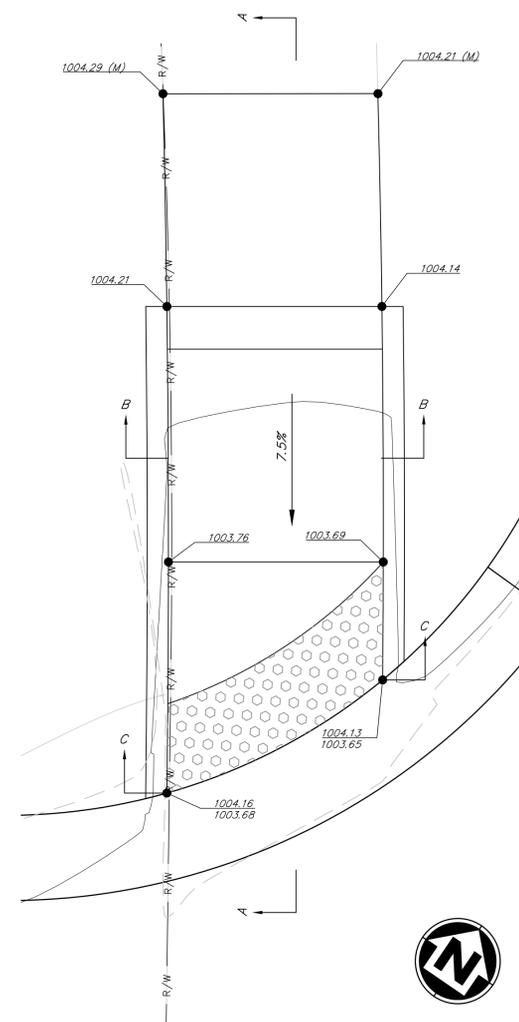
Thomas P. Wooten

SHEET NUMBER
C401
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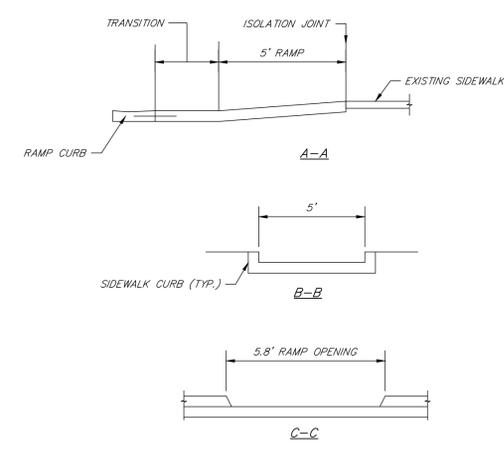
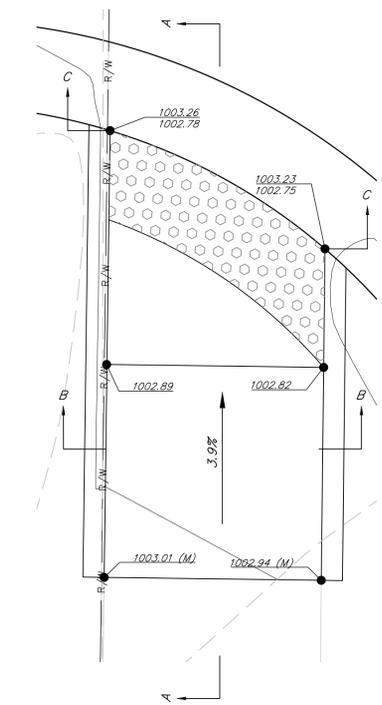
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RAMP DETAIL #4
SCALE: 1"=2'



RAMP DETAIL #5
SCALE: 1"=2'



RAMP DETAIL #6
SCALE: 1"=2'



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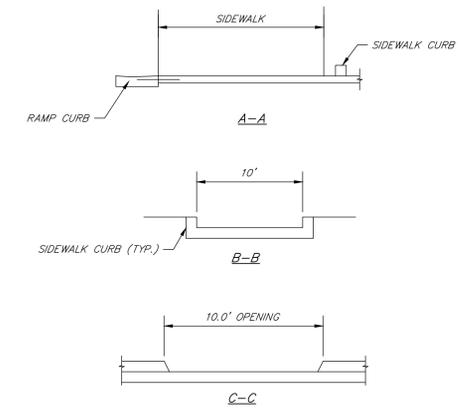
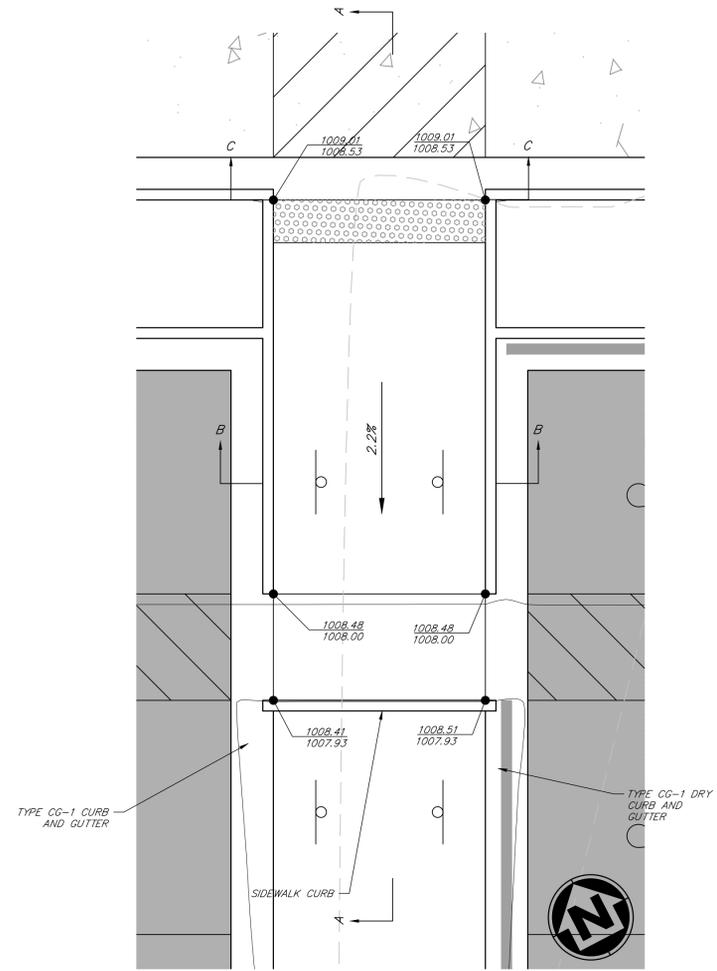
SUMMIT ORCHARDS LOT 4B
FINAL DEVELOPMENT PLAN
NW CHIPMAN RD & NW WARD RD
LEE'S SUMMIT, MISSOURI 64086

SIDEWALK RAMP DETAILS

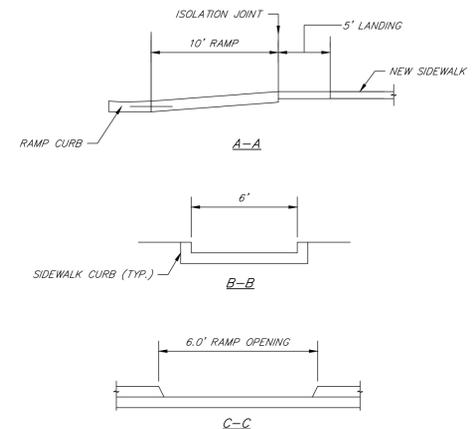
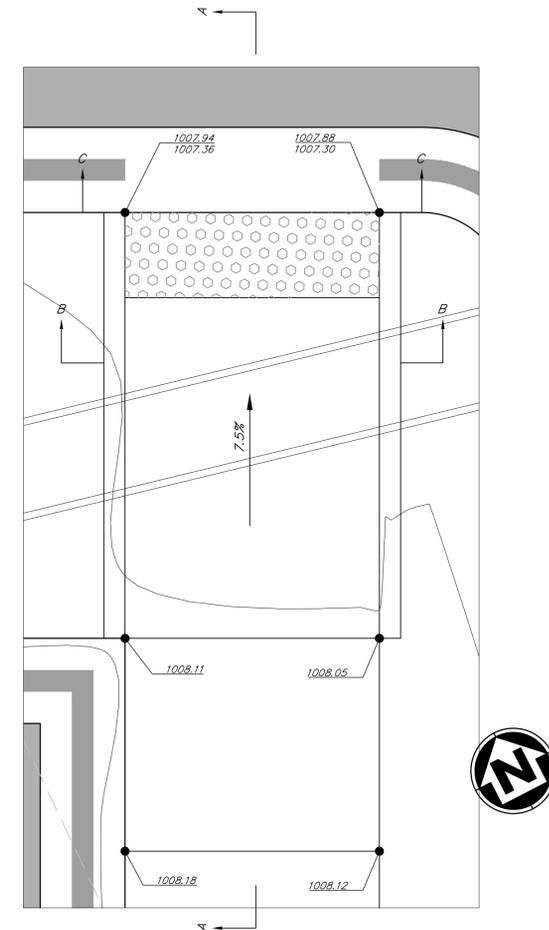


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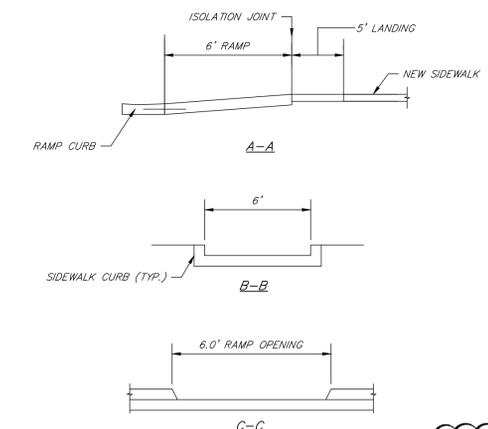
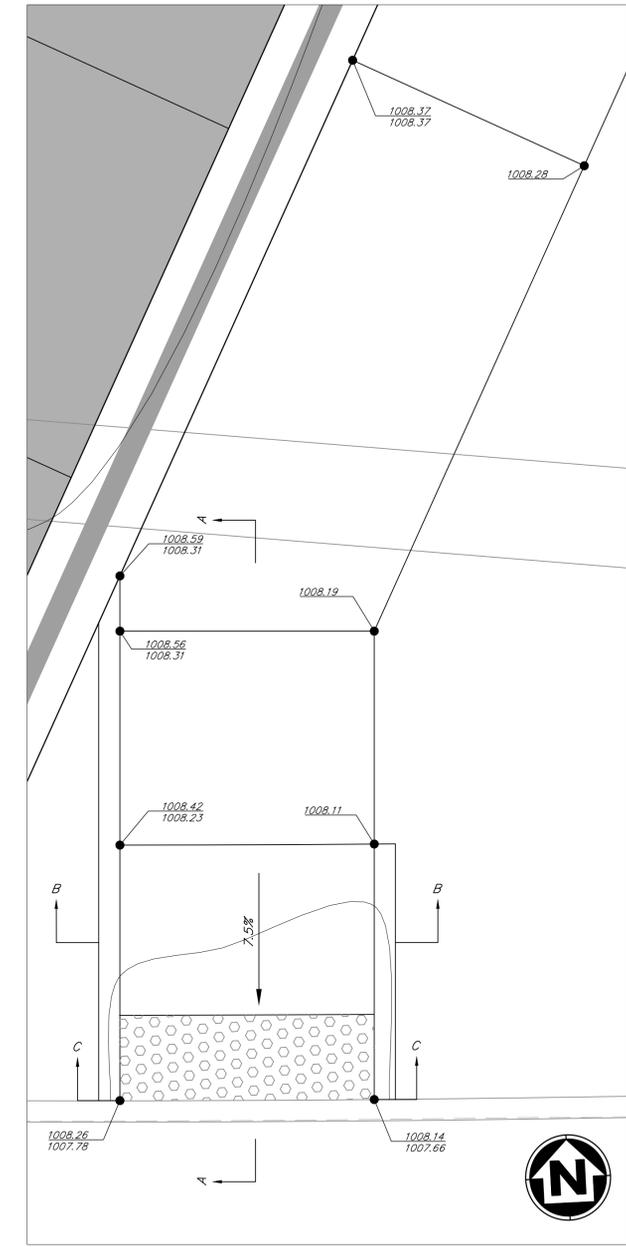
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RAMP DETAIL #7
SCALE: 1"=4'



RAMP DETAIL #8
SCALE: 1"=2'



RAMP DETAIL #9
SCALE: 1"=2'

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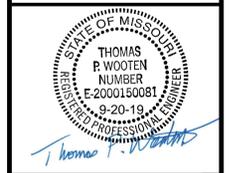
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SIDEWALK RAMP DETAILS



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C403
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LOT 2
SUMMIT ORCHARD - FIRST PLAT

DETENTION AND WATER QUALITY NOTE:

THIS PROJECT IS PART OF A LARGER DEVELOPMENT WITH REGIONAL WATER QUALITY TREATMENT AND REGIONAL DETENTION, THUS ON-SITE CONTROLS ARE NOT REQUIRED.

WATERSHED NOTE:

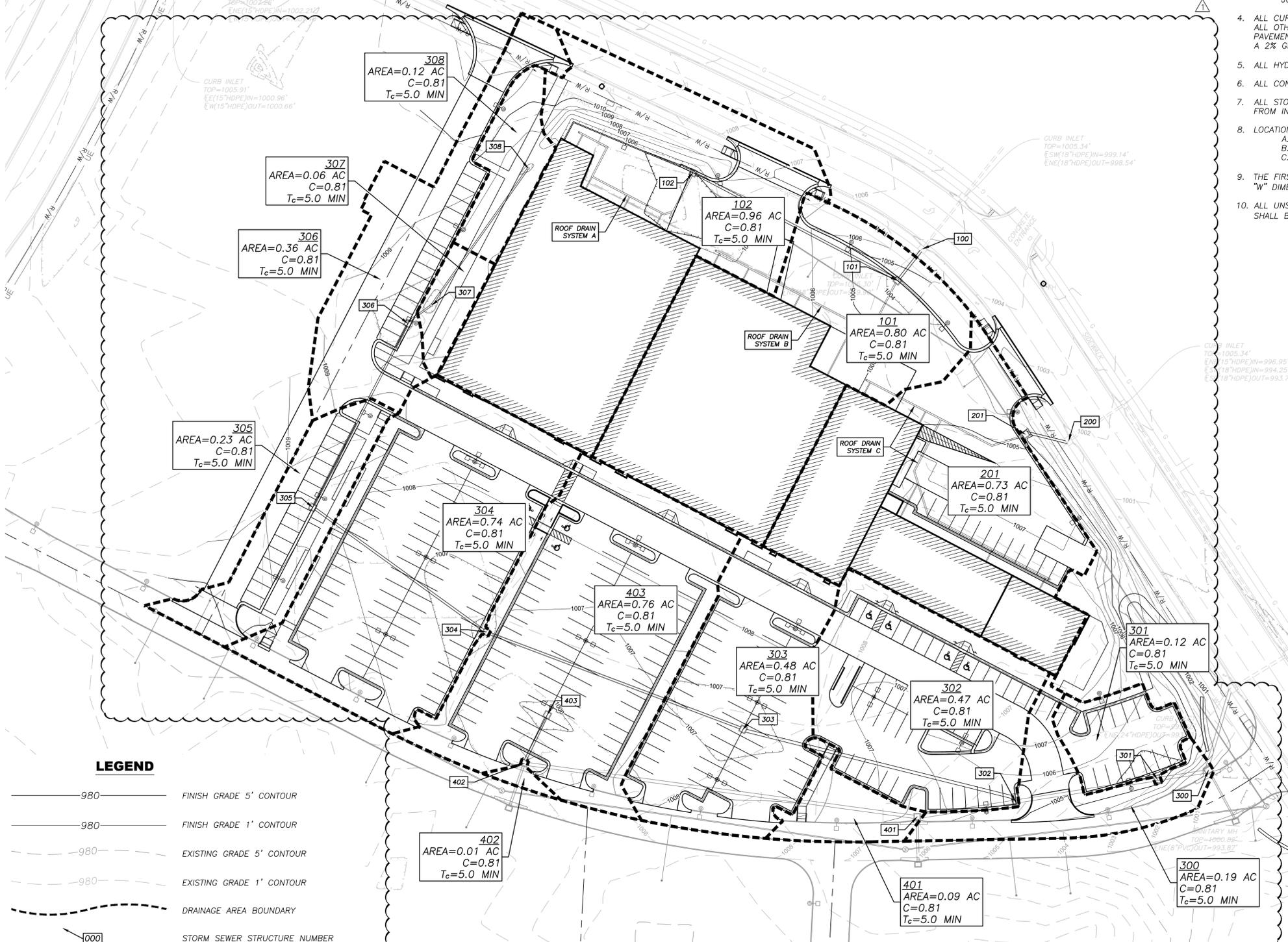
THIS PROJECT IS LOCATED IN THE LITTLE CEDAR WATERSHED.

STORM SEWER NOTES:

- PIPE LENGTHS SHOWN ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE OR TO THE CENTER OF TOE OF END SECTION. ALL PIPES SHALL BE FIELD STAKED TO THE CENTER OF THE INSIDE WALL FACE OF THE STRUCTURE.
- THE DIMENSION FOR ALL STRUCTURES ARE FROM INSIDE FACE OF STRUCTURE TO INSIDE FACE OF STRUCTURE.
- STORM SEWER PIPE SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED:
A. HIGH DENSITY POLYETHYLENE (HDPE) MEETING THE REQUIREMENTS FOR TEST METHODS, DIMENSIONS, AND MARKINGS FOUND IN AASHTO M294 AND ASTM F2306. JOINTS SHALL BE WATER TIGHT REINFORCED BELL & GASKETED SPIGOT TYPE.
- ALL CURB INLETS AND OTHER STRUCTURES SET AT LOW POINTS ARE TO BE SET LEVEL. ALL OTHER CURB INLETS ARE TO BE SET WITH THE GRADE AT THE TOP OF CURB OR PAVEMENT. ALL CURB INLETS SHALL HAVE TOP SLABS SLOPING TOWARD THE PAVEMENT AT A 2% GRADE UNLESS OTHERWISE NOTED.
- ALL HYDRAULIC GRADE LINES (HGL) SHOWN ARE FOR THE 100-YEAR STORM.
- ALL CONCRETE STRUCTURES ARE TO BE PRECAST.
- ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED CONCRETE INVERT FROM INVERT IN TO INVERT OUT.
- LOCATIONS OF NORTHINGS AND EASTINGS SHOWN ARE AS FOLLOWS:
A. GRATED AREA INLET: CENTER OF STRUCTURE
B. SETBACK CURB INLET: CENTER OF STRUCTURE
C. MODIFIED CURB INLET: CENTER OF STRUCTURE ALONG TOP OF CURB AT INLET
- THE FIRST STRUCTURE DIMENSION SHOWN IS THE "L" DIMENSION AND THE SECOND IS THE "W" DIMENSION (SEE STORM SEWER STRUCTURE DETAILS).
- ALL UNSUITABLE MATERIAL ENCOUNTERED DURING THE INSTALLATION OF STORM SEWER SHALL BE REMOVED AT CONTRACTOR'S EXPENSE.



LOT 3
SUMMIT ORCHARD - FIRST PLAT



LEGEND

- 980 — FINISH GRADE 5' CONTOUR
- 980 — FINISH GRADE 1' CONTOUR
- - - 980 - - - EXISTING GRADE 5' CONTOUR
- - - 980 - - - EXISTING GRADE 1' CONTOUR
- - - - - DRAINAGE AREA BOUNDARY
- 000 STORM SEWER STRUCTURE NUMBER
- 000 DRAINAGE AREA IDENTIFICATION NUMBER
- 000 AREA=0.00 AC RATIONAL "C" RUNOFF COEFFICIENT
- 000 C=0.00 TIME OF CONCENTRATION
- 000 Tc=5.0 MIN

NOTE:
REFER TO SHEET C501 FOR HYDROLOGY, PIPE, AND INLET DESIGN TABLES.

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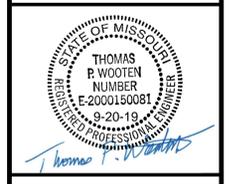
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DRAINAGE MAP



SHEET NUMBER
C500
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HYDROLOGY - 10 YEAR												PIPE HYDRAULICS - 10 YEAR										INLET HYDRAULICS - 10 YEAR							
STRUCTURE	LOCAL C	LOCAL			SYSTEM			LOCAL INTENSITY (in/hr)	SYSTEM INTENSITY (in/hr)	LOCAL Q ₁₀ (cfs)	SYSTEM Q ₁₀ (cfs)	PIPE	U/S INVERT (ft)	D/S INVERT (ft)	PIPE LENGTH (ft)	PIPE SLOPE (%)	PIPE SIZE (in)	MANNING'S n	DESIGN Q ₁₀ (cfs)	CAPACITY FLOW (cfs)	DESIGN VELOCITY (ft/s)	HGL UP (ft)	HGL DN (ft)	STRUCTURE	INLET LOCATION	PEAK FLOW (cfs)	INTERCEPTED FLOW (cfs)	BYPASS FLOW (cfs)	INLET EFFICIENCY (%)
		INLET AREA (ac)	CA (ac)	T _c (min)	TOTAL AREA (ac)	CA (ac)	T _c (min)																						
101	0.81	0.80	0.65	5.00	1.76	1.43	5.90	7.24	6.99	4.69	9.97	LINE 101	1000.25	1000.10	29.06	0.50	18	0.012	9.97	8.17	5.64	1001.82	1001.60	101	Sag	4.69	4.69	0.00	100
102	0.81	0.96	0.78	5.00	0.96	0.78	5.00	7.24	7.24	5.63	5.63	LINE 102	1001.58	1000.75	167.73	0.50	18	0.012	5.63	8.00	3.28	1002.92	1002.56	102	Sag	5.63	5.63	0.00	100
201	0.81	0.73	0.59	5.00	0.73	0.59	5.00	7.24	7.24	4.28	4.28	LINE 201	998.48	995.30	31.75	10.01	15	0.012	4.28	22.14	9.42	999.32	995.67	201	On Grade	4.28	3.42	0.86	80
301	0.81	0.12	0.10	5.00	3.44	2.79	11.70	7.24	5.72	0.70	15.95	LINE 301	997.51	997.14	37.74	0.98	24	0.012	15.95	24.26	7.42	998.95	998.32	301	Sag	0.70	0.70	0.00	100
302	0.81	0.47	0.38	5.00	3.32	2.69	11.40	7.24	5.78	2.76	15.55	LINE 302	998.53	997.51	104.04	0.98	24	0.012	15.55	24.26	6.47	999.95	998.95	302	Sag	2.76	2.76	0.00	100
303	0.81	0.48	0.39	5.00	1.99	1.61	10.30	7.24	5.98	2.81	9.63	LINE 303	1000.05	999.03	204.94	0.50	24	0.012	9.63	17.29	5.52	1001.16	1000.10	303	Sag	2.81	2.81	0.00	100
304	0.81	0.74	0.60	5.00	1.51	1.22	9.60	7.24	6.12	4.34	7.48	LINE 304	1001.75	1000.75	199.40	0.50	18	0.012	7.48	8.06	5.17	1002.90	1001.89	304	Sag	4.34	4.34	0.00	100
305	0.81	0.23	0.19	5.00	0.77	0.62	8.50	7.24	6.35	1.35	3.96	LINE 305	1002.73	1001.95	155.02	0.50	18	0.012	3.96	8.07	3.56	1003.49	1003.10	305	Sag	1.35	1.35	0.00	100
306	0.81	0.36	0.29	5.00	0.54	0.44	7.50	7.24	6.57	2.11	2.87	LINE 306	1003.48	1002.73	150.00	0.50	15	0.012	2.87	4.95	3.94	1004.16	1003.49	306	Sag	2.11	2.11	0.00	100
307	0.81	0.06	0.05	5.00	0.18	0.15	7.30	7.24	6.64	0.35	0.97	LINE 307	1004.08	1003.98	21.50	0.50	12	0.012	0.97	2.63	3.09	1004.50	1004.40	307	Sag	0.35	0.35	0.00	100
308	0.81	0.12	0.10	5.00	0.12	0.10	5.00	7.24	7.24	0.70	0.70	LINE 308	1004.89	1004.28	121.42	0.50	12	0.012	0.70	2.73	2.90	1005.24	1004.63	308	Sag	0.70	0.70	0.00	100
403	0.81	0.76	0.62	5.00	0.76	0.62	5.00	7.24	7.24	4.46	4.46	LINE 403	1002.65	1002.46	38.58	0.50	18	0.012	4.46	7.98	4.61	1003.46	1003.26	403	Sag	4.46	4.46	0.00	100

HYDROLOGY - 100 YEAR												PIPE HYDRAULICS - 100 YEAR										INLET HYDRAULICS - 100 YEAR							
STRUCTURE	LOCAL C	LOCAL			SYSTEM			LOCAL INTENSITY (in/hr)	SYSTEM INTENSITY (in/hr)	LOCAL Q ₁₀₀ (cfs)	SYSTEM Q ₁₀₀ (cfs)	PIPE	U/S INVERT (ft)	D/S INVERT (ft)	PIPE LENGTH (ft)	PIPE SLOPE (%)	PIPE SIZE (in)	MANNING'S n	DESIGN Q ₁₀₀ (cfs)	CAPACITY FLOW (cfs)	DESIGN VELOCITY (ft/s)	HGL UP (ft)	HGL DN (ft)	STRUCTURE	INLET LOCATION	PEAK FLOW (cfs)	INTERCEPTED FLOW (cfs)	BYPASS FLOW (cfs)	INLET EFFICIENCY (%)
		INLET AREA (ac)	CA (ac)	T _c (min)	TOTAL AREA (ac)	CA (ac)	T _c (min)																						
101	0.81	0.80	0.65	5.00	1.76	1.43	5.60	9.83	9.61	6.37	13.70	LINE 101	1000.25	1000.10	29.06	0.50	18	0.012	13.70	8.17	7.75	1002.02	1001.60	101	Sag	6.37	6.37	0.00	100
102	0.81	0.96	0.78	5.00	0.96	0.78	5.00	9.83	9.83	7.65	7.65	LINE 102	1001.58	1000.75	167.73	0.50	18	0.012	7.65	8.00	4.33	1004.16	1003.41	102	Sag	7.65	7.65	0.00	100
201	0.81	0.73	0.59	5.00	0.73	0.59	5.00	9.83	9.83	5.81	5.81	LINE 201	998.48	995.30	31.75	10.01	15	0.012	5.81	22.14	10.43	999.46	995.74	201	On Grade	5.81	4.24	1.57	73
301	0.81	0.12	0.10	5.00	3.44	2.79	9.90	9.83	8.38	0.96	23.35	LINE 301	997.51	997.14	37.74	0.98	24	0.012	23.35	24.26	8.47	999.23	998.72	301	Sag	0.96	0.96	0.00	100
302	0.81	0.47	0.38	5.00	3.32	2.69	9.70	9.83	8.44	3.74	22.69	LINE 302	998.53	997.51	104.04	0.98	24	0.012	22.69	24.26	7.95	1000.23	999.23	302	Sag	3.74	3.74	0.00	100
303	0.81	0.48	0.39	5.00	1.99	1.61	8.90	9.83	8.64	3.82	13.92	LINE 303	1000.05	999.03	204.94	0.50	24	0.012	13.92	17.29	6.12	1001.41	1000.39	303	Sag	3.82	3.82	0.00	100
304	0.81	0.74	0.60	5.00	1.51	1.22	8.40	9.83	8.78	5.89	10.74	LINE 304	1001.75	1000.75	199.40	0.50	18	0.012	10.74	8.06	6.08	1004.03	1002.25	304	Sag	5.89	5.89	0.00	100
305	0.81	0.23	0.19	5.00	0.77	0.62	7.60	9.83	9.00	1.83	5.61	LINE 305	1002.73	1001.95	155.02	0.50	18	0.012	5.61	8.07	3.18	1004.69	1004.31	305	Sag	1.83	1.83	0.00	100
306	0.81	0.36	0.29	5.00	0.54	0.44	6.90	9.83	9.22	2.87	4.03	LINE 306	1003.48	1002.73	150.00	0.50	15	0.012	4.03	4.95	3.29	1005.42	1004.93	306	Sag	2.87	2.87	0.00	100
307	0.81	0.06	0.05	5.00	0.18	0.15	6.70	9.83	9.28	0.48	1.35	LINE 307	1004.08	1003.98	21.50	0.50	12	0.012	1.35	2.63	3.42	1005.57	1005.54	307	Sag	0.48	0.48	0.00	100
308	0.81	0.12	0.10	5.00	0.12	0.10	5.00	9.83	9.83	0.96	0.96	LINE 308	1004.89	1004.28	121.42	0.50	12	0.012	0.96	2.73	3.17	1005.66	1005.59	308	Sag	0.96	0.96	0.00	100
403	0.81	0.76	0.62	5.00	0.76	0.62	5.00	9.83	9.83	6.05	6.05	LINE 403	1002.65	1002.46	38.58	0.50	18	0.012	6.05	7.98	4.96	1003.63	1003.44	403	Sag	6.05	6.05	0.00	100

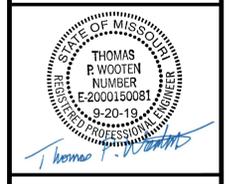
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			190010008

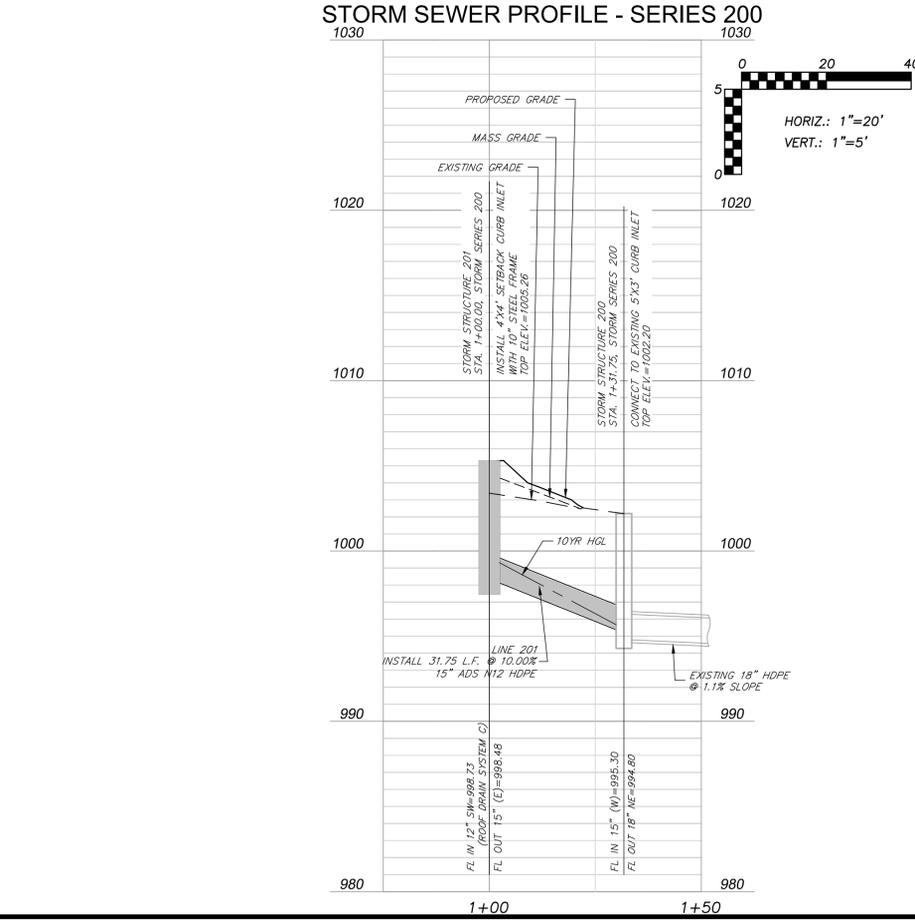
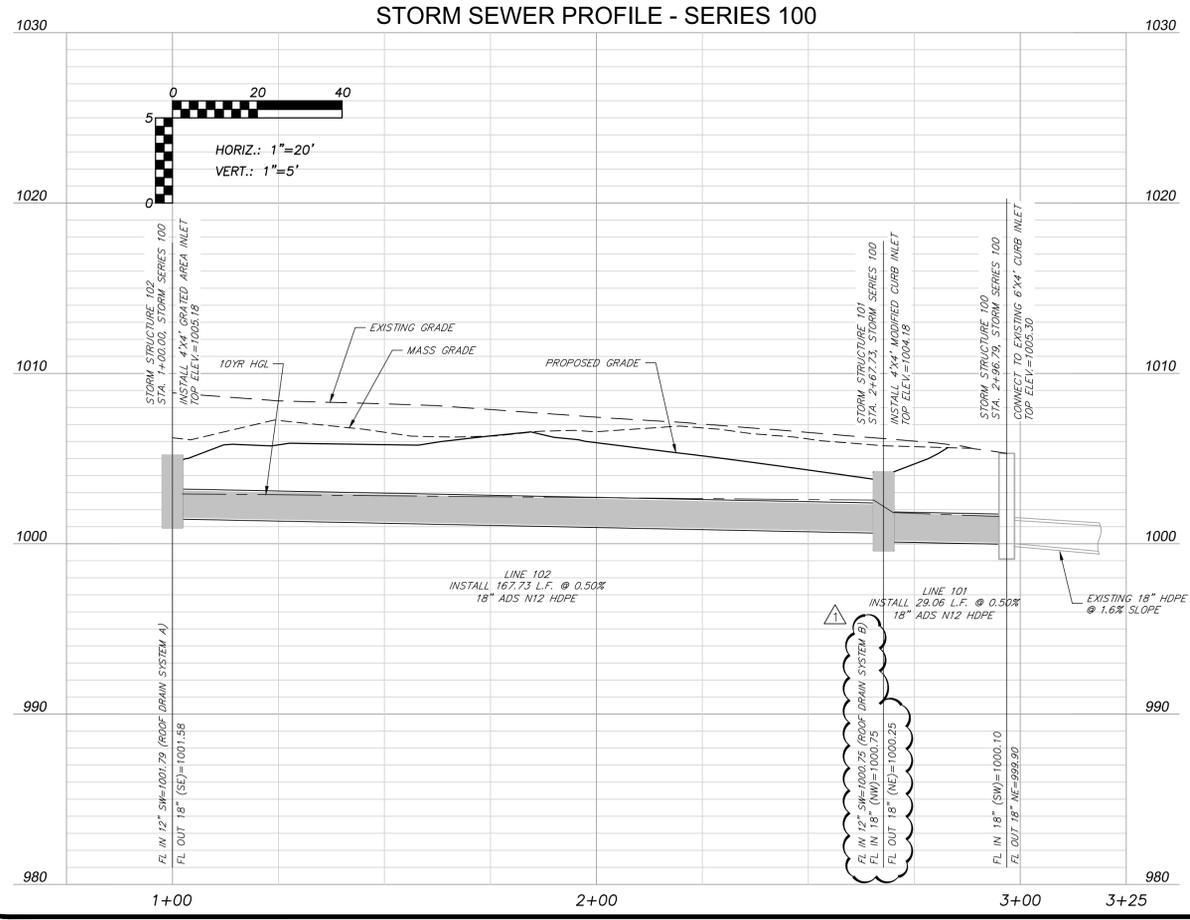
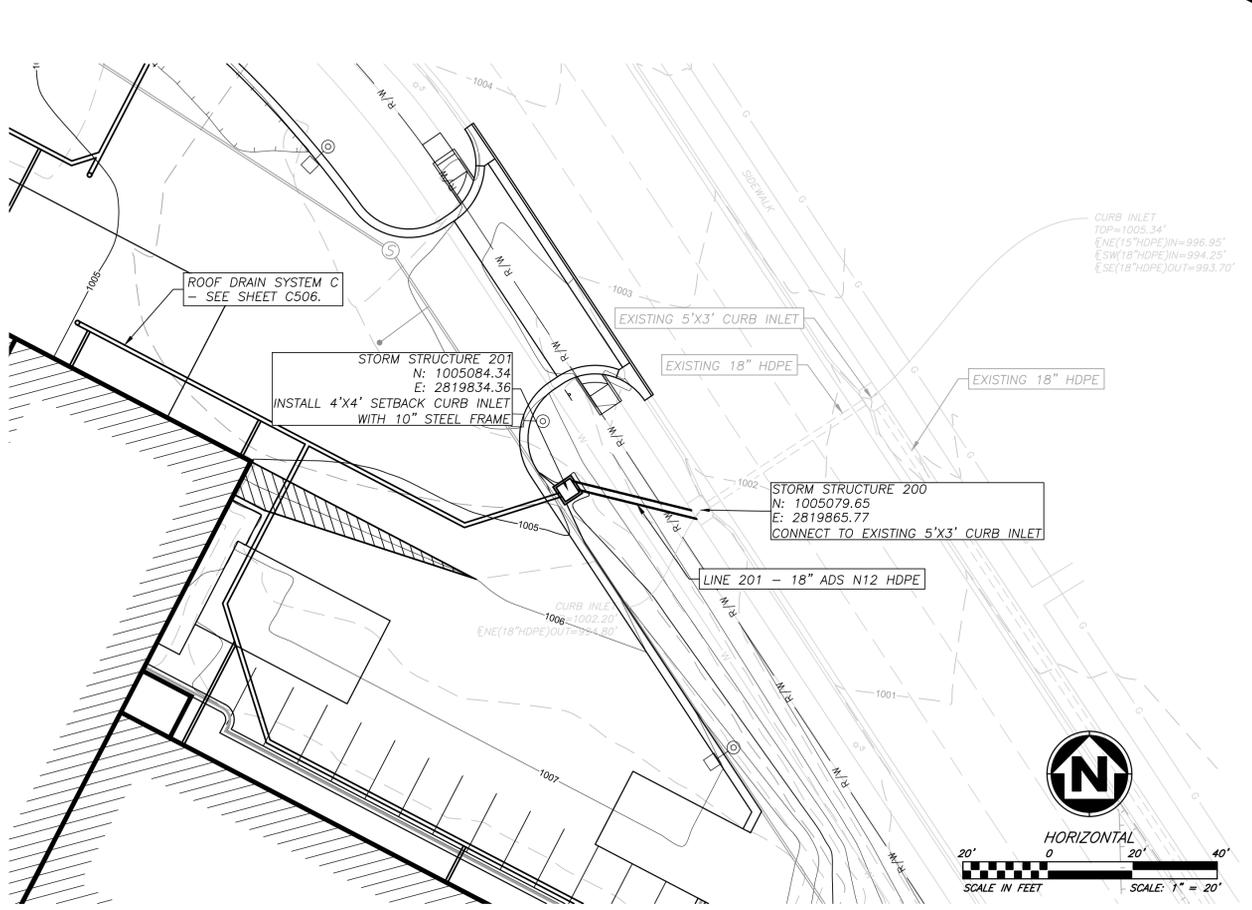
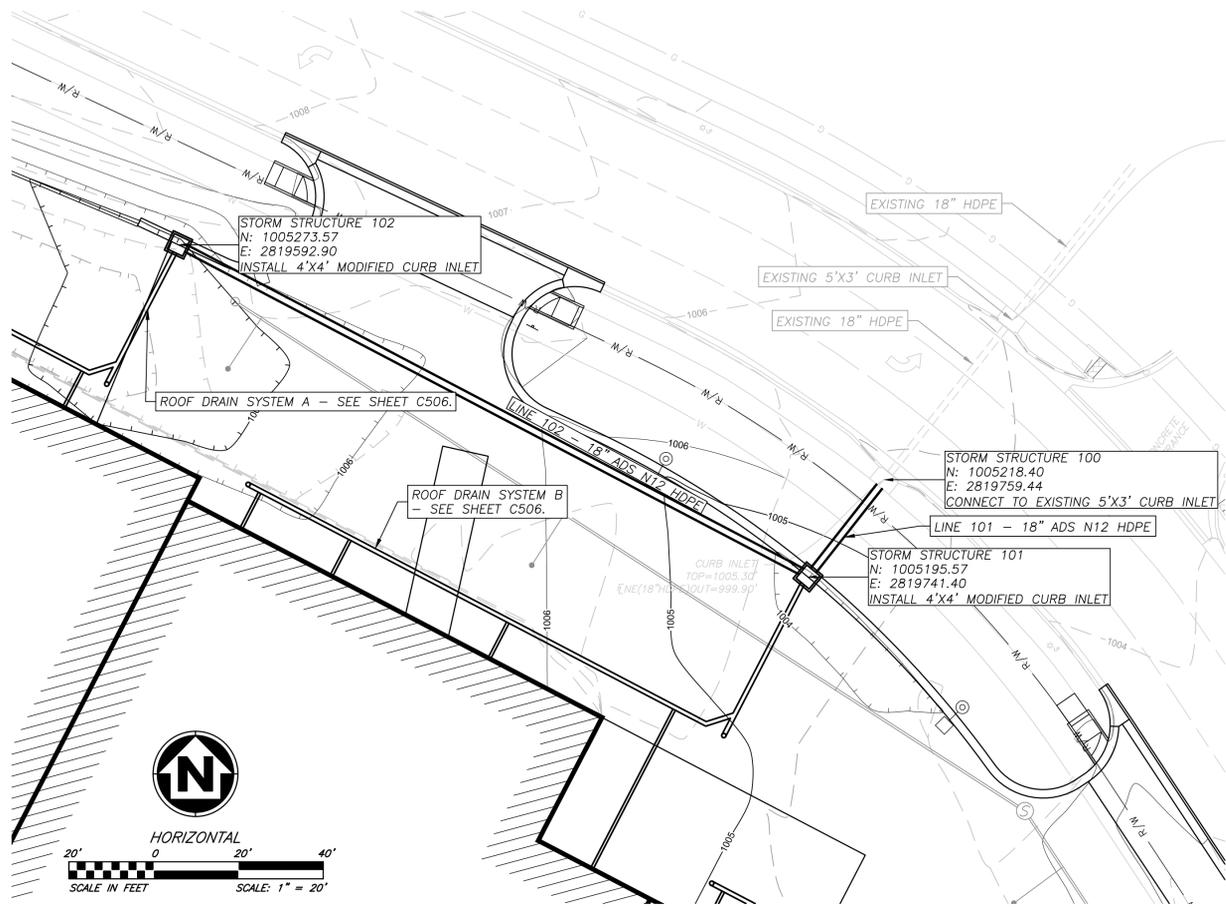
SUMMIT ORCHARDS LOT 4B
FINAL DEVELOPMENT PLAN
 NW CHIPMAN RD & NW WARD RD
 LEE'S SUMMIT, MISSOURI 64086

STORMWATER CALCULATIONS



SHEET NUMBER
C501
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Sep 20, 2019 - 10:36am Plotted By: AE Eng 4 Z:\Engineering Design\Projects\2019\90010008 SUMMIT ORCHARD LOT 4B\01 CIVIL\03-DWG\Sheet\190010008-SWIS-STRM.dwg Layout: 100 & 200



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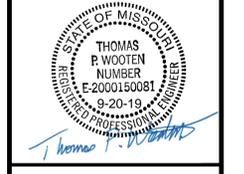
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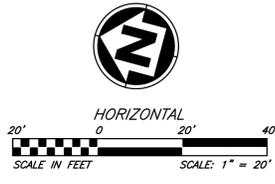
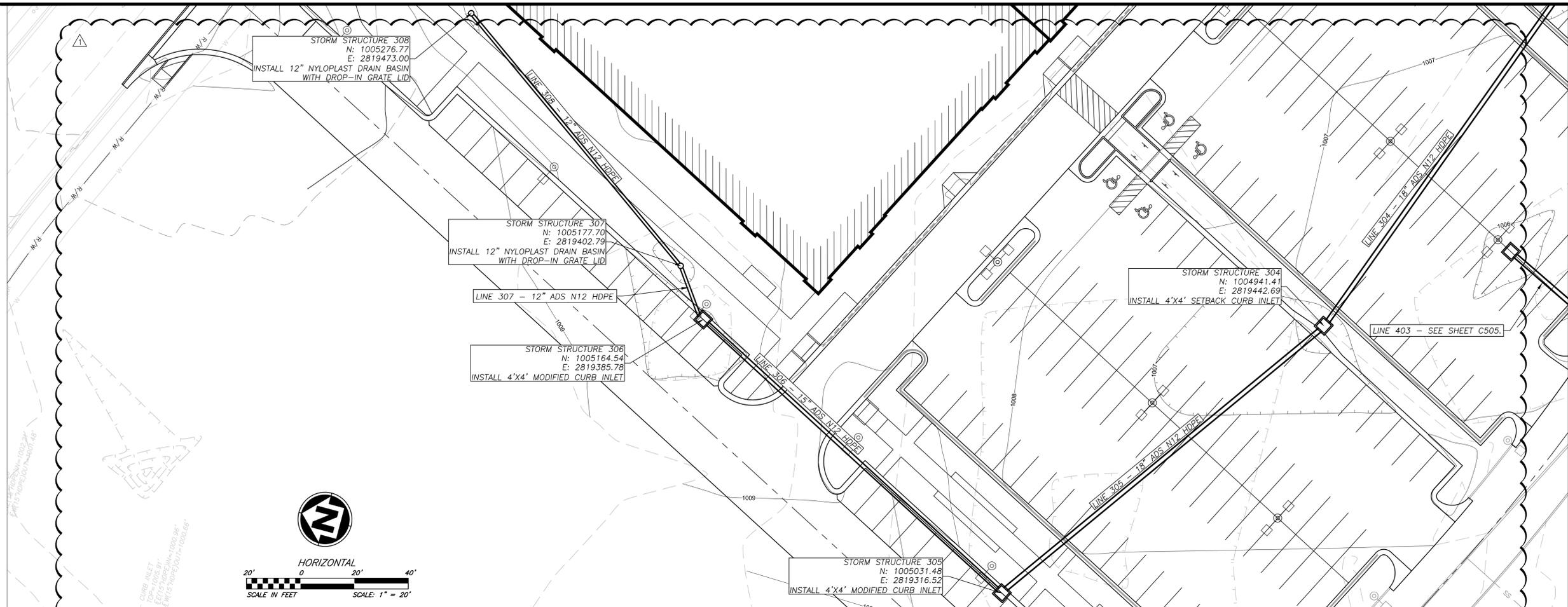
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FINAL DEVELOPMENT PLAN
 NW CHIPMAN RD & NW WARD RD
 LEE'S SUMMIT, MISSOURI 64086

STORM SEWER PLAN & PROFILE

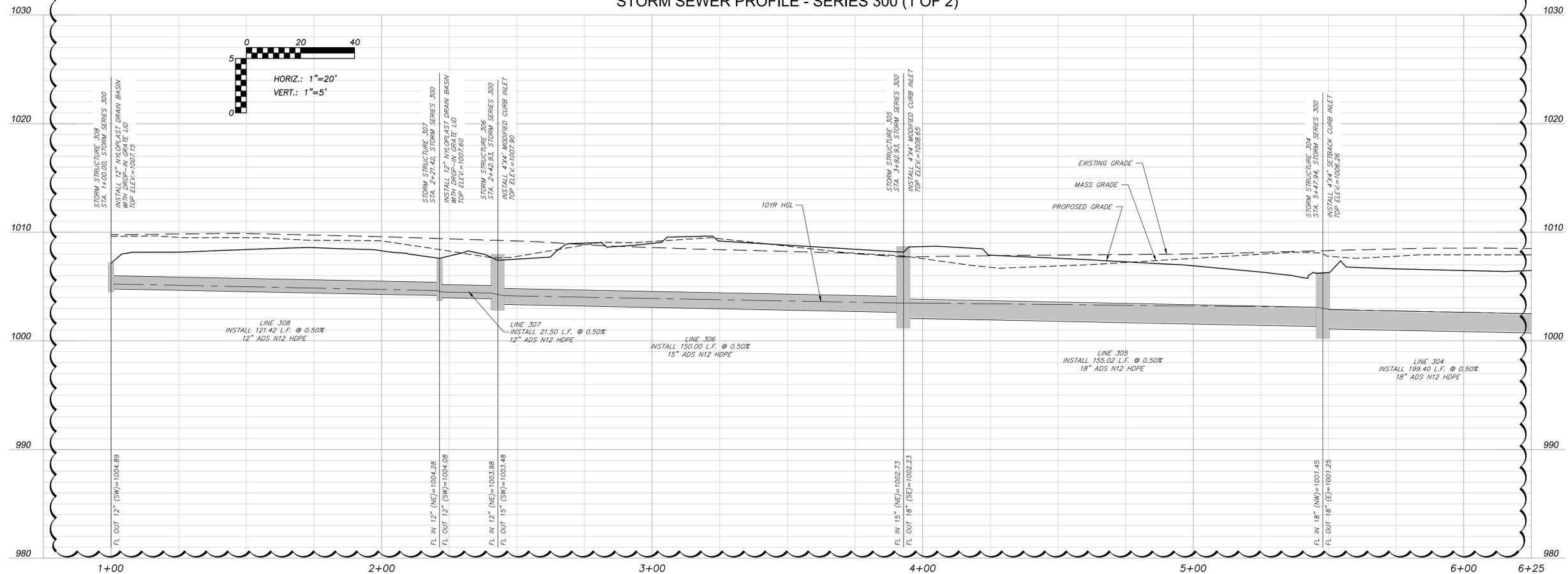


SHEET NUMBER
C502
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STORM SEWER PROFILE - SERIES 300 (1 OF 2)



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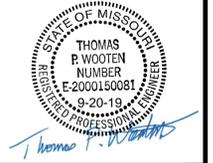
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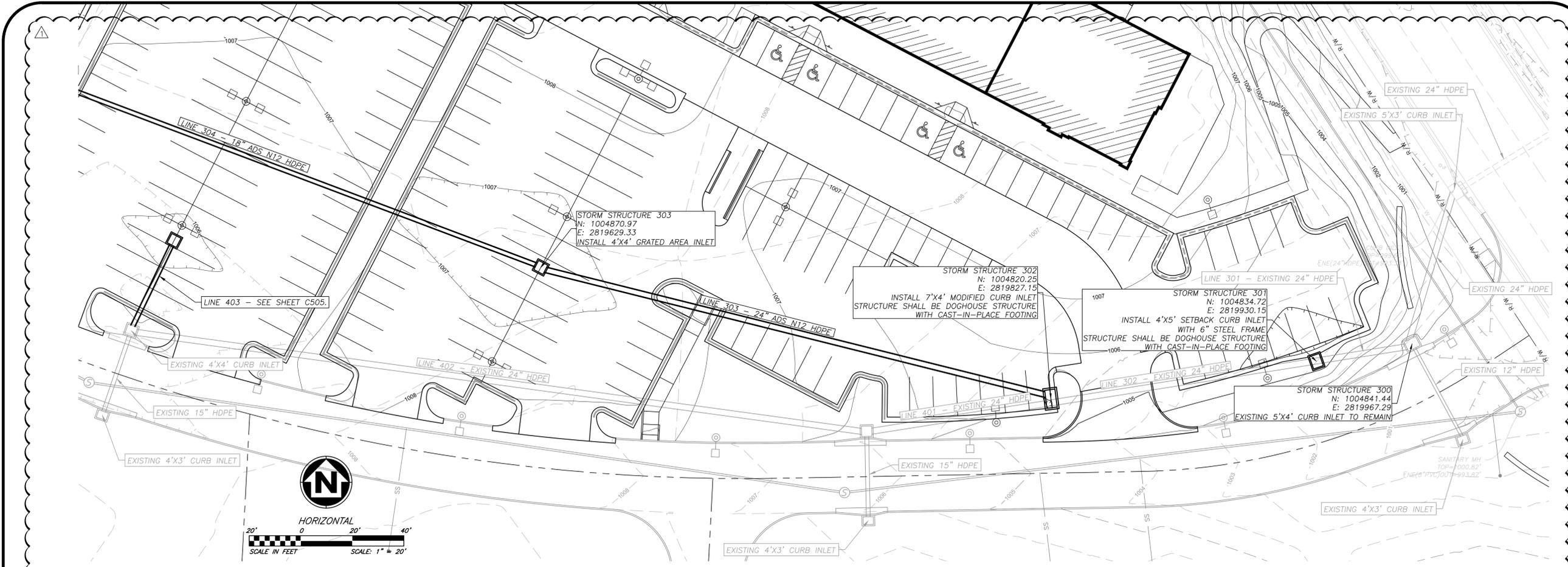
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 NW CHIPMAN RD & NW WARD RD
 LEE'S SUMMIT, MISSOURI 64086

STORM SEWER PLAN & PROFILE

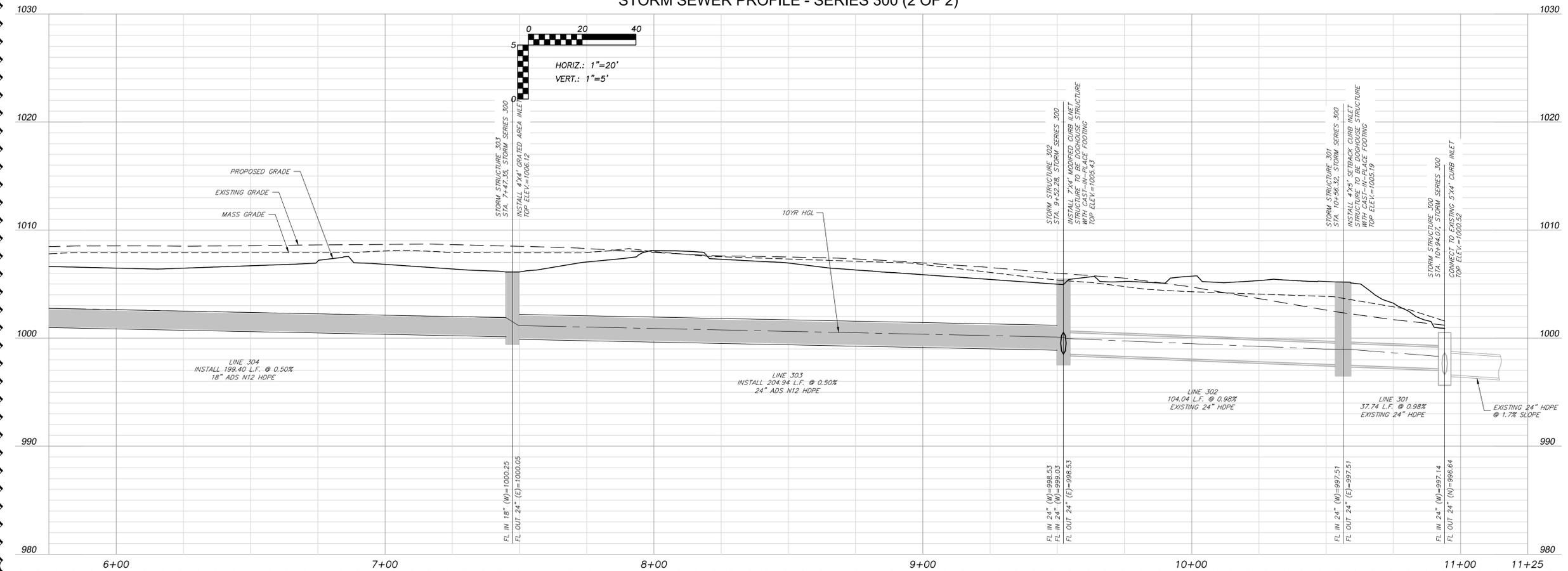


SHEET NUMBER
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STORM SEWER PROFILE - SERIES 300 (2 OF 2)



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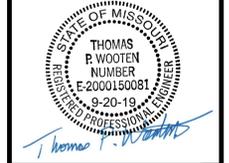
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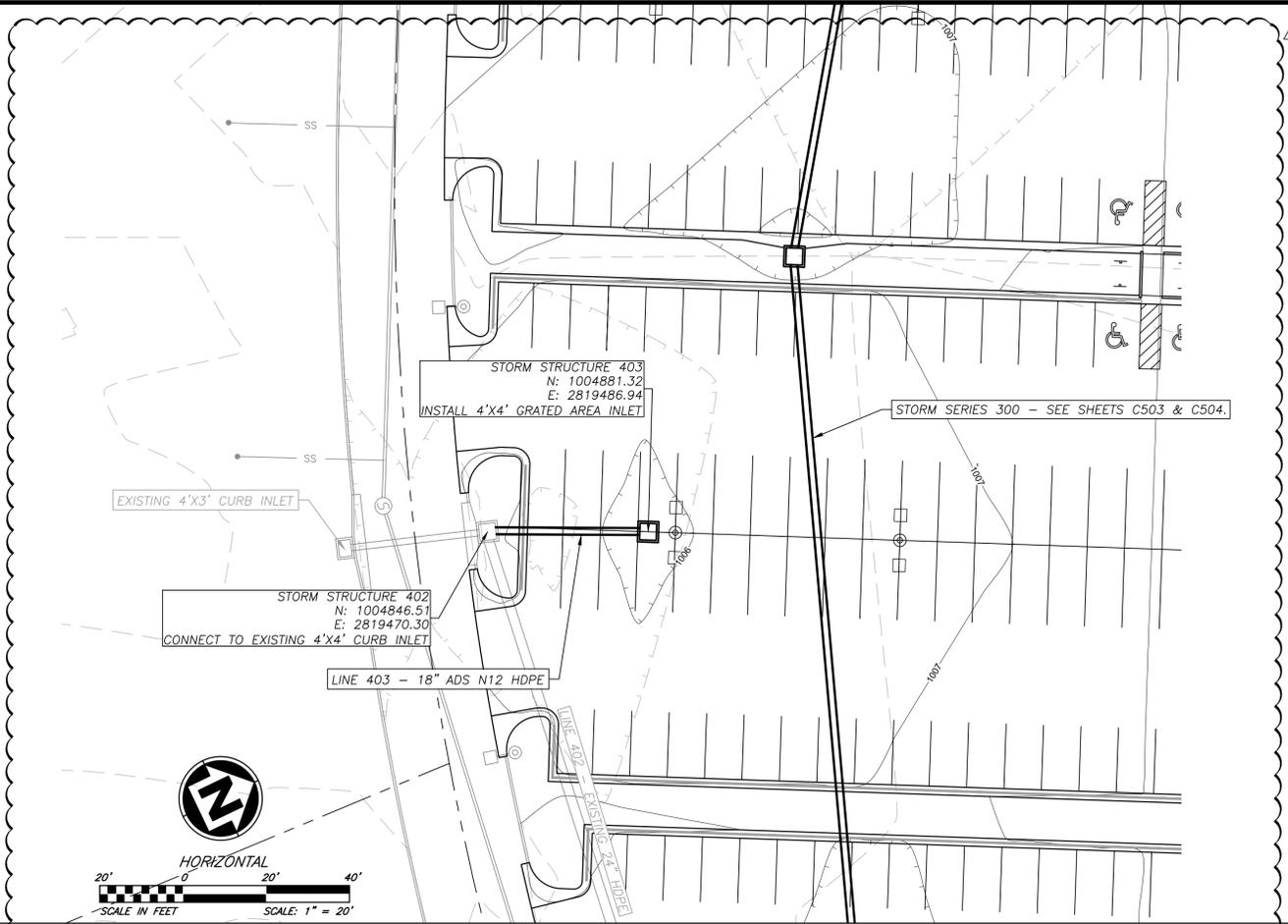
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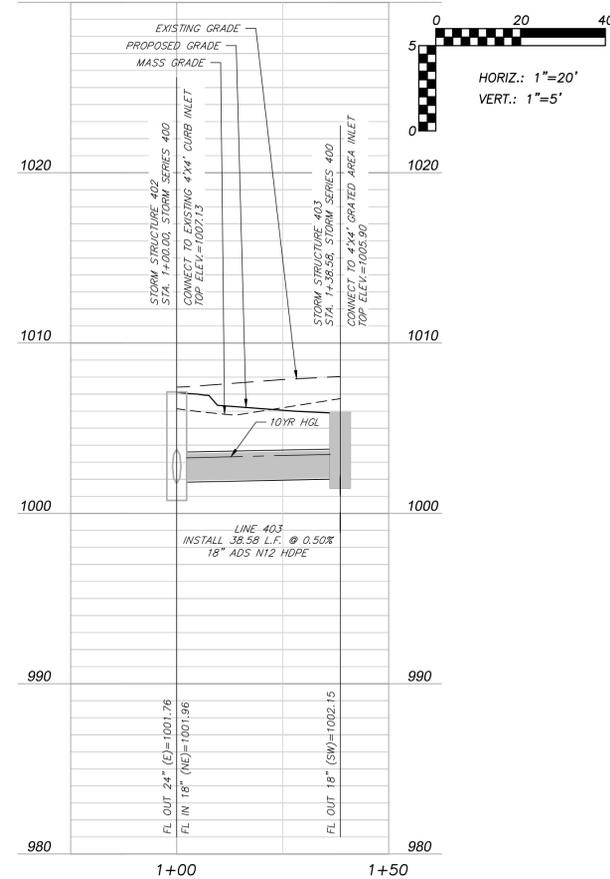
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SHEET NUMBER
C504
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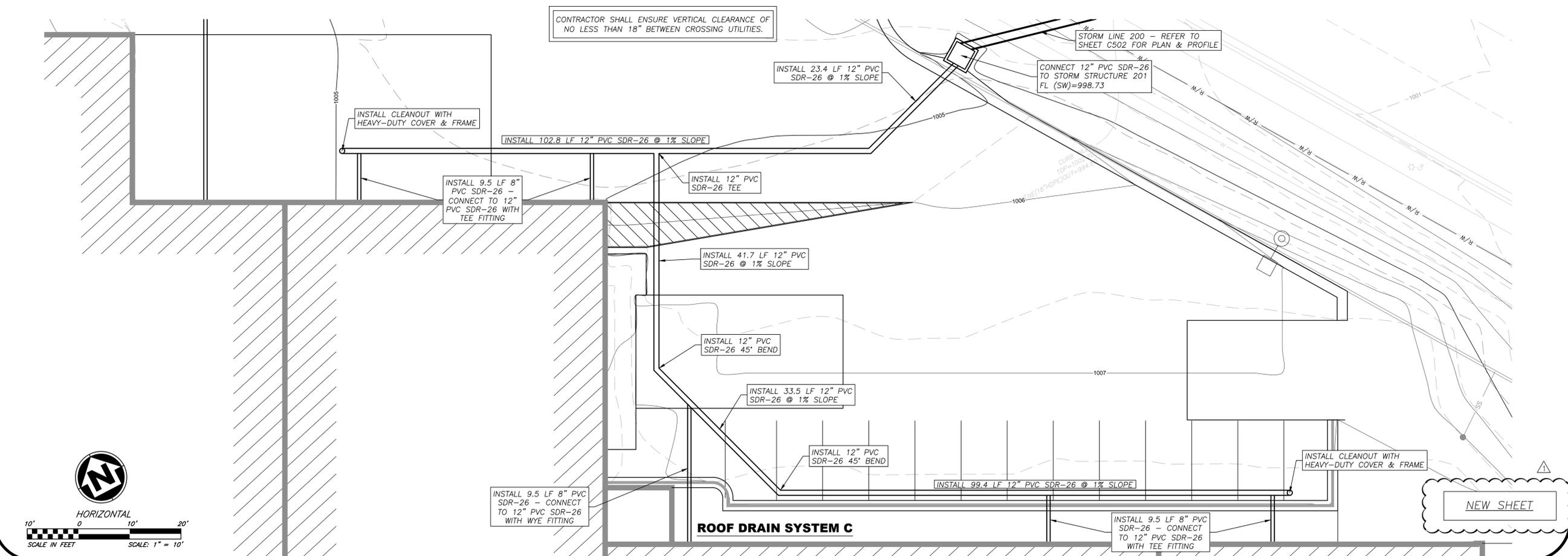
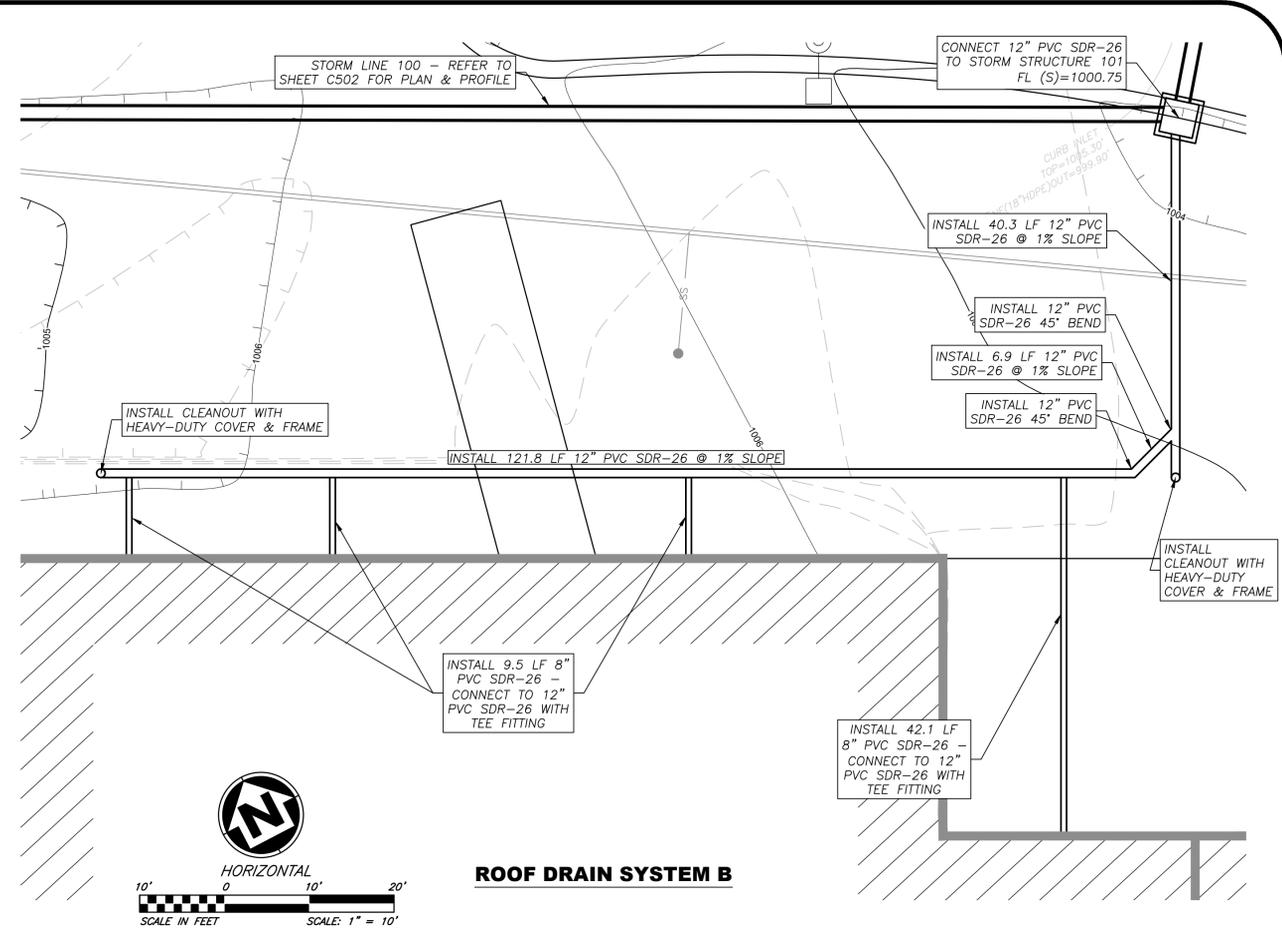
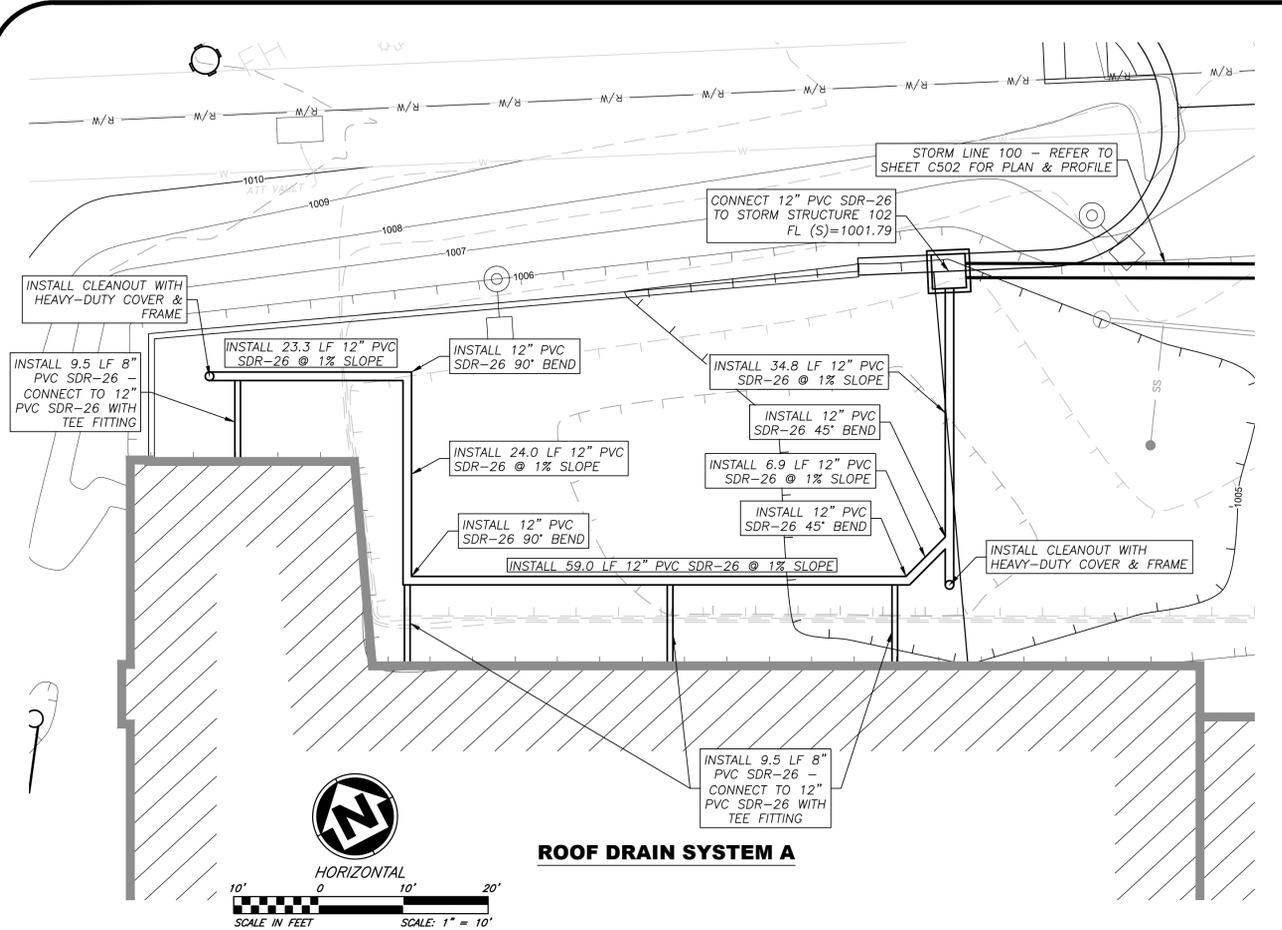
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FINAL DEVELOPMENT PLAN**
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LEE'S SUMMIT, MISSOURI 64086

STORM SEWER PLAN & PROFILE



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C505
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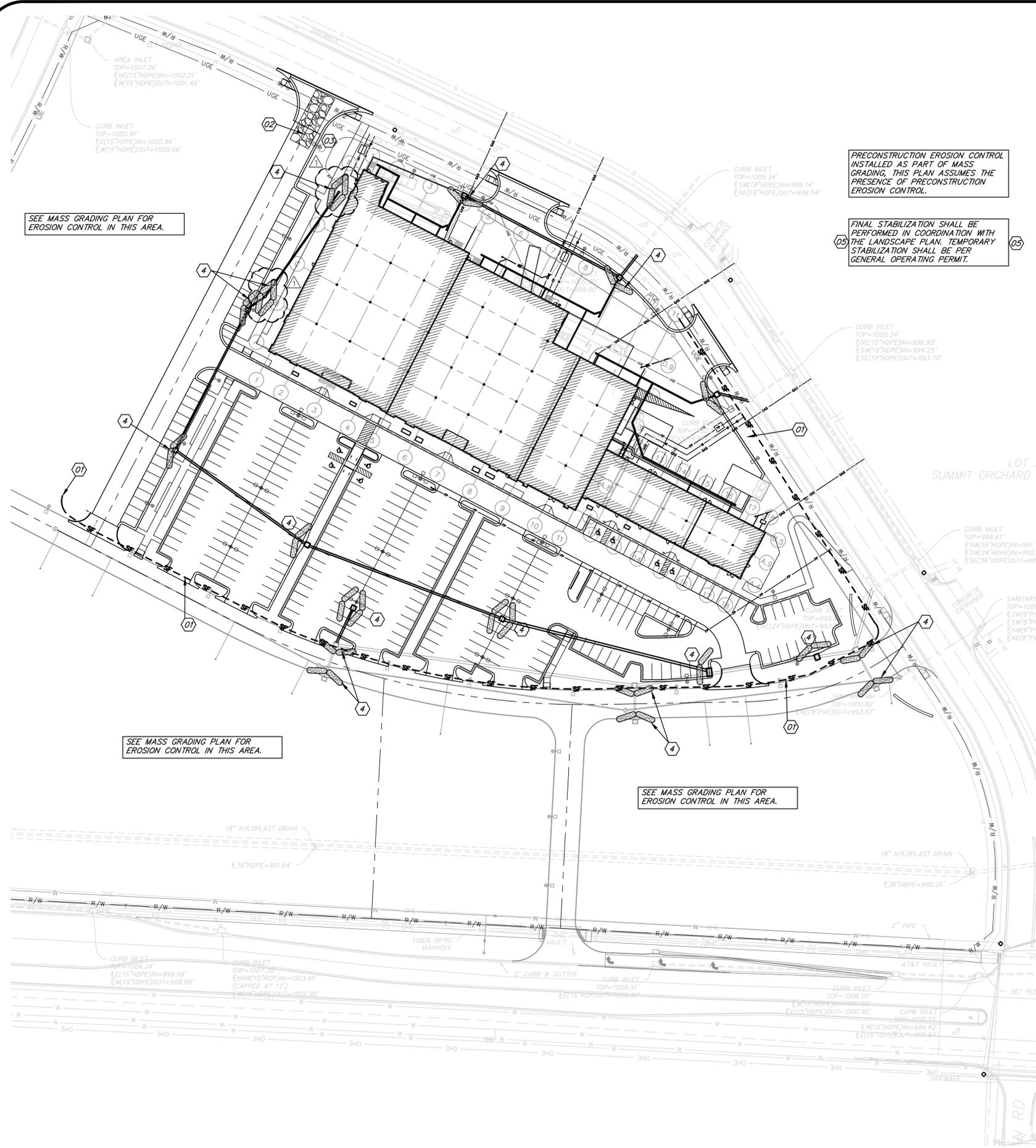
**SUMMIT ORCHARDS LOT 4B
 FINAL DEVELOPMENT PLAN**
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ROOF DRAIN PLAN



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SEE MASS GRADING PLAN FOR EROSION CONTROL IN THIS AREA.

SEE MASS GRADING PLAN FOR EROSION CONTROL IN THIS AREA.

SEE MASS GRADING PLAN FOR EROSION CONTROL IN THIS AREA.

PRECONSTRUCTION EROSION CONTROL INSTALLED AS PART OF MASS GRADING. THIS PLAN ASSUMES THE PRESENCE OF PRECONSTRUCTION EROSION CONTROL.

FINAL STABILIZATION SHALL BE PERFORMED IN COORDINATION WITH THE LANDSCAPE PLAN. TEMPORARY STABILIZATION SHALL BE PER GENERAL OPERATING PERMIT.

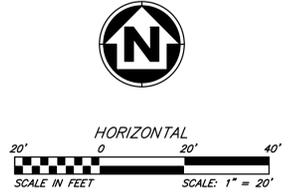
EROSION AND SEDIMENT CONTROL GENERAL NOTES

- PRIOR TO LAND DISTURBANCE ACTIVITIES, THE CONTRACTOR SHALL:
 - DELINEATE THE OUTER LIMITS OF ANY NATURAL STREAM CORRIDOR DESIGNATED WITH CONSTRUCTION FENCING.
 - CONSTRUCT A STABILIZED ENTRANCE/PARKING/DELIVERY AREA.
 - INSTALL PERIMETER CONTROLS AND REQUEST THE INSPECTION OF THE PRE-CONSTRUCTION EROSION AND SEDIMENT CONTROL MEASURES DESIGNATED ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN. LAND DISTURBANCE WORK SHALL NOT PROCEED UNTIL THERE IS A SATISFACTORY INSPECTION.
 - IDENTIFY THE LIMITS OF CONSTRUCTION ON THE GROUND WITH EASILY RECOGNIZABLE INDICATIONS SUCH AS CONSTRUCTION STAKING, CONSTRUCTION FENCING, AND PLACEMENT OF PHYSICAL BARRIERS OR OTHER MEANS ACCEPTABLE TO THE CITY INSPECTOR AND IN CONFORMANCE WITH THE EROSION AND SEDIMENT CONTROL PLAN.
- THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE KC-APWA SPECIFICATIONS SECTION 2150, INCLUDING BUT NOT LIMITED TO:
 - THE CONTRACTOR SHALL SEED, MULCH, OR OTHERWISE STABILIZE ANY DISTURBED AREA WHERE THE LAND DISTURBANCE ACTIVITY HAS CEASED FOR MORE THAN 14 DAYS.
 - THE CONTRACTOR SHALL PERFORM INSPECTIONS OF EROSION AND SEDIMENT CONTROL MEASURES AT THE FOLLOWING MINIMUM INTERVALS:
 - DURING ACTIVE CONSTRUCTION PHASES - AT LEAST ONCE PER WEEK
 - DURING PERIODS OF INACTIVITY - AT LEAST ONCE PER 14 DAYS
 - AFTER EACH RAINFALL EVENT OF 1/8 INCH OR MORE - WITHIN 24 HOURS OF THE RAIN EVENT
 - THE CONTRACTOR SHALL MAINTAIN AN INSPECTION LOG INCLUDING THE INSPECTOR'S NAME, DATE OF INSPECTION, OBSERVATIONS AS TO THE EFFECTIVENESS OF THE EROSION AND SEDIMENT CONTROL MEASURES, ACTIONS NECESSARY TO CORRECT DEFICIENCIES, WHEN THE DEFICIENCIES WERE CORRECTED, AND THE SIGNATURE OF THE PERSON PERFORMING THE INSPECTION. THE INSPECTION LOG SHALL BE AVAILABLE FOR REVIEW BY THE REGULATORY AUTHORITY.
 - THE CONTRACTOR SHALL HAVE THE EROSION AND SEDIMENT CONTROL PLAN ROUTINELY UPDATED TO SHOW ALL CHANGES AND AMENDMENTS TO THE PLAN. A COPY OF THE EROSION AND SEDIMENT CONTROL PLAN SHALL BE KEPT ON SITE AND MADE AVAILABLE FOR REVIEW BY THE REGULATORY AUTHORITY.
- UNLESS OTHERWISE NOTED IN THE PLANS, ALL SEEDING MUST CONFORM TO DIVISION II-CONSTRUCTION AND MATERIALS SPECIFICATION-SECTION 2150 PUBLISHED BY THE KANSAS CITY METROPOLITAN CHAPTER OF THE AMERICAN PUBLIC WORKS ASSOCIATION DATED MAY 21, 2008. PERMANENT SEEDING SHALL BE INSTALLED AFTER COMPLETION OF FINAL GRADING EXCEPT WHEN SEEDING WILL OCCUR OUTSIDE OF THE ACCEPTABLE SEEDING SEASON AS SPECIFIED IN SECTION 2150. WHEN TEMPORARY SEEDING IS INSTALLED, PERMANENT SEEDING SHALL BE INSTALLED AT THE NEXT SEEDING SEASON. TEMPORARY SEEDING SHALL NOT BE USED AS A STABILIZATION MEASURE FOR A PERIOD EXCEEDING 12 MONTHS. THE PERMIT WILL NOT BE CLOSED UNTIL PERMANENT SEEDING HAS BEEN ESTABLISHED TO A MINIMUM OF 70% DENSITY OVER THE ENTIRE DISTURBED AREA.
- THE CONTRACTOR SHALL MAINTAIN INSTALLED EROSION AND SEDIMENT CONTROL DEVICES IN A MANNER THAT PRESERVES THEIR EFFECTIVENESS FOR PREVENTING SEDIMENT FROM LEAVING THE SITE OR ENTERING A SENSITIVE AREA SUCH AS A NATURAL STREAM CORRIDOR, AREAS OF THE SITE INTENDED TO BE LEFT UNDISTURBED, A STORM SEWER, OR AN ON-SITE DRAINAGE CHANNEL.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING EROSION AND SEDIMENT CONTROL FOR THE DURATION OF A PROJECT. IF THE CITY DETERMINES THAT THE BMPs IN PLACE DO NOT PROVIDE ADEQUATE EROSION AND SEDIMENT CONTROL AT ANY TIME DURING THE PROJECT, THE CONTRACTOR SHALL INSTALL ADDITIONAL OR ALTERNATE MEASURES THAT PROVIDE EFFECTIVE CONTROL.
- CONCRETE WASH OR RINSE WATER FROM CONCRETE MIXING EQUIPMENT, TOOLS AND/OR READY-MIX TRUCKS, TOOLS, ETC. MAY NOT BE DISCHARGED INTO OR BE ALLOWED TO RUN DIRECTLY INTO ANY EXISTING WATER BODY OR STORM INLET. ONE OR MORE LOCATIONS FOR CONCRETE WASH OUT WILL BE DESIGNATED ON SITE, SUCH THAT DISCHARGES DURING CONCRETE WASHOUT WILL BE CONTAINED IN A SMALL AREA WHERE WASTE CONCRETE CAN SOLIDIFY IN PLACE.
- CHEMICALS OR MATERIALS CAPABLE OF CAUSING POLLUTION MAY ONLY BE STORED ONSITE IN THEIR ORIGINAL CONTAINER. MATERIALS STORED OUTSIDE MUST BE IN CLOSED AND SEALED WATER-PROOF CONTAINERS AND LOCATED OUTSIDE OF DRAINAGE WAYS OR AREAS SUBJECT TO FLOODING. LOCKS AND OTHER MEANS TO PREVENT OR REDUCE VANDALISM SHALL BE USED. SPILLS WILL BE REPORTED AS REQUIRED BY LAW AND IMMEDIATE ACTIONS TAKEN TO CONTAIN THEM.
- SILT FENCES AND EROSION CONTROL BMPs WHICH ARE SHOWN ALONG THE BACK OF CURB MUST BE INSTALLED WITHIN TWO WEEKS OF CURB BACKFILL AND PRIOR TO PLACEMENT OF BASE ASPHALT. EXACT LOCATIONS OF THESE EROSION CONTROL METHODS MAY BE FIELD ADJUSTED TO MINIMIZE CONFLICTS WITH UTILITY CONSTRUCTION; HOWEVER, ANTICIPATED DISTURBANCE BY UTILITY CONSTRUCTION SHALL NOT DELAY INSTALLATION.
- INTERIOR SILT FENCE AS NECESSARY DURING CONSTRUCTION. PORTIONS MAY BE LIMITED AS VEGETATION IS ESTABLISHED AND HARDSCAPE IS INSTALLED. ENTIRE LENGTH MAY BE INSTALLED AT THE CONTRACTOR'S OPTION TO AID IN STABILIZING SLOPES.
- PRIVATE EROSION & SEDIMENT CONTROL INSPECTIONS ARE REQUIRED IN ACCORDANCE WITH NPDES SCHEDULE AND REQUIREMENTS. AFTER INSPECTIONS, PROVIDE THE CITY OF LEE'S SUMMIT WITH REPORTS AND DOCUMENTATION IF REQUESTED.

EROSION/SEDIMENT CONTROL STAGING CHART				
PROJECT STAGE	BMP PLAN REF. NO.	BMP DESCRIPTION	REMOVE AFTER STAGE:	NOTES:
A - PLACE BMP'S PRIOR TO PAVING/UTILITY INSTALLATION. ALL EXISTING ERC IN PLACE (SEE MASS GRADING)	01	PERIMETER SILT FENCE	B	PLACE AS SHOWN ON PLAN.
	02	CONSTRUCTION ENTRANCE & STAGING AREA	C	PLACE AS SHOWN ON PLAN.
	03	CONCRETE WASH-OUT	C	PLACE AS SHOWN ON PLAN.
B - AFTER UTILITY STORM SEWER CONSTRUCTION	04	STORM INLET PROTECTION	C	PLACE AS SHOWN ON PLAN.
C - FINAL GRADING, PAVING & LANDSCAPING	05	FINAL SEEDING, SOD AND LANDSCAPING	N/A	SILT FENCING & INLET PROTECT MAY BE REMOVED ONCE SEED & SODDED AREAS ARE ESTABLISHED ON 80% OF SITE.

LEGEND

- 934 PROPOSED CONTOUR
- 934 EXISTING CONTOUR
- SEDIMENT FENCE
- INLET FILTER BAGS
- CONSTRUCTION ENTRANCE
- FINAL SEEDING (SOD &/OR LANDSCAPING)



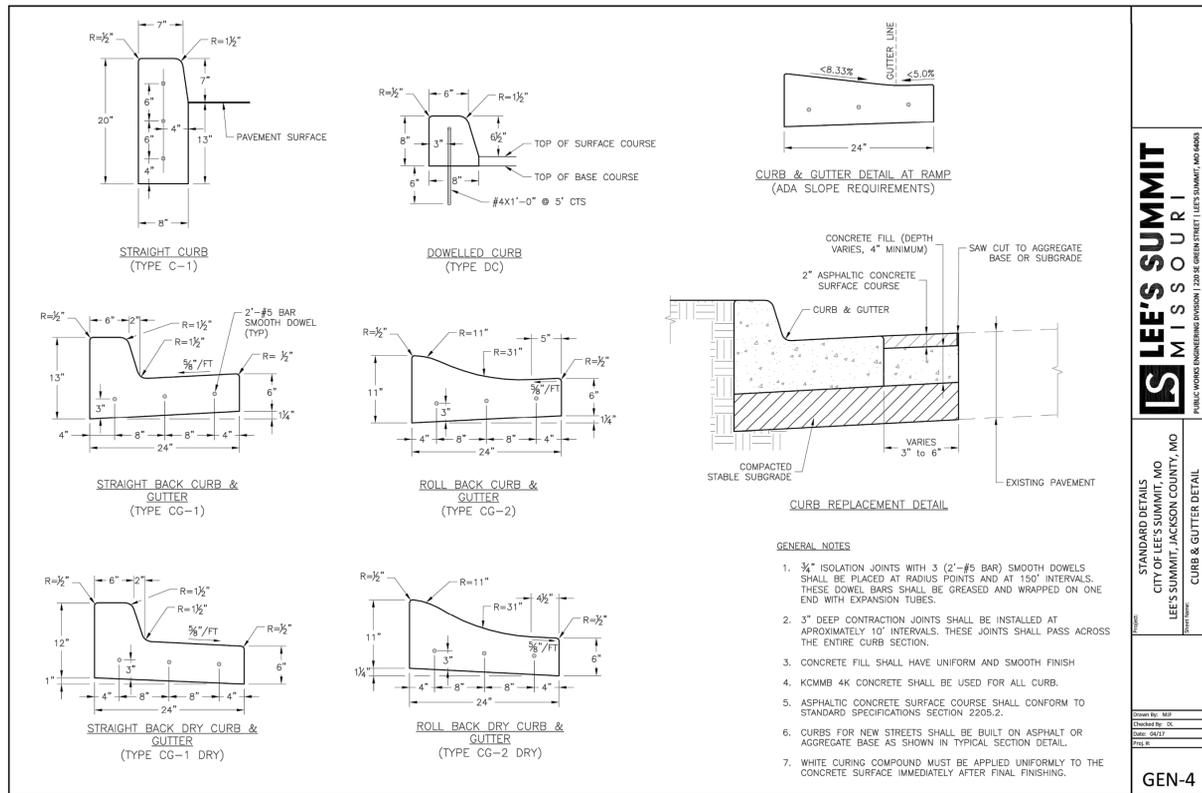
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		LICENSE NO.	
		DATE:	08/28/2019
		FIELD BOOK:	
		JOB NUMBER:	19010008

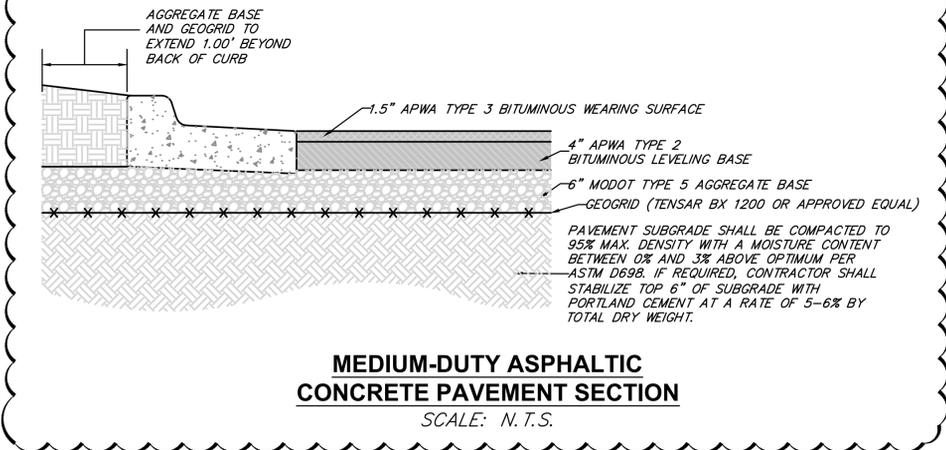
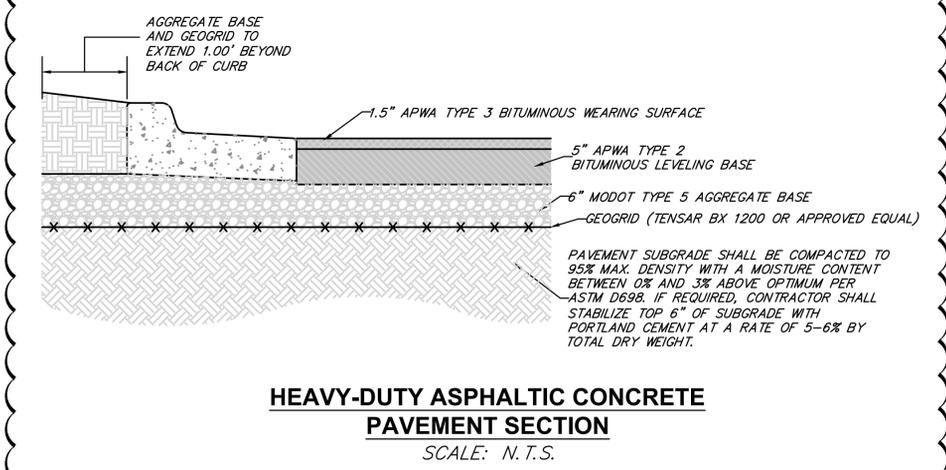
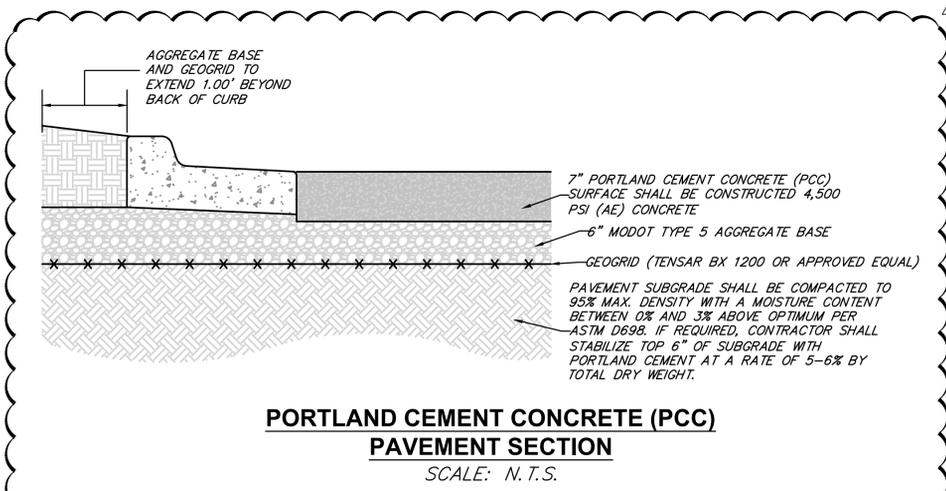
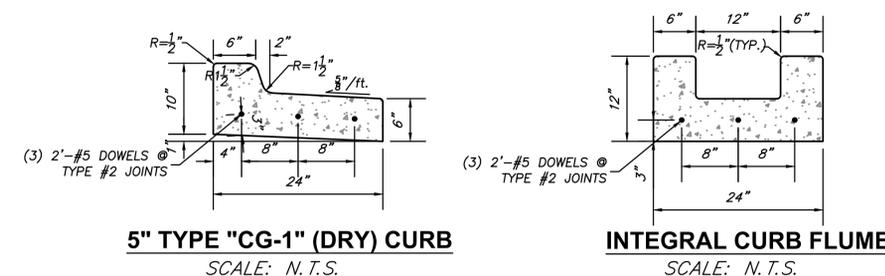
SUMMIT ORCHARDS LOT 4B
 FINAL DEVELOPMENT PLAN
 NW CHIPMAN RD & NW WARD RD
 LEE'S SUMMIT, MISSOURI 64086
 EROSION CONTROL PLAN

SHEET NUMBER
C600
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LEE'S SUMMIT MISSOURI
 STANDARD DETAILS AND CURB & GUTTER DETAIL
 CIP OF LEE'S SUMMIT, MISSOURI
 LEE'S SUMMIT, JACKSON COUNTY, MO
 PUBLIC WORKS ENGINEERING DIVISION 1200 DE GREEN STREET | LEE'S SUMMIT, MO 64660
 GEN-4



PAVEMENT INSTALLATION SEQUENCE

- SIGN POST ANCHOR DRIVEN PARTIALLY INTO SUBGRADE USING A DRIVE CAP WITH SLEDGE OR POWER EQUIPMENT PRIOR TO THE PLACEMENT OF THE PAVEMENT.
- ANCHOR SLEEVE SLIPPED OVER ANCHOR AND DRIVEN INTO SUBGRADE TOGETHER WITH THE SIGN POST ANCHOR PRIOR TO THE PLACEMENT OF THE PAVEMENT.
- INSERT SIGN POST INTO THE POST ANCHOR AND BOLT IN PLACE.

GROUND INSTALLATION SEQUENCE

- SIGN POST ANCHOR DRIVEN PARTIALLY INTO THE GROUND USING A DRIVE CAP WITH SLEDGE OR POWER EQUIPMENT.
- ANCHOR SLEEVE SLIPPED OVER ANCHOR AND DRIVEN INTO THE GROUND TOGETHER WITH THE SIGN POST ANCHOR.
- INSERT SIGN POST INTO THE POST ANCHOR AND BOLT IN PLACE.

NOTE: IN ALL INSTALLATIONS, THE FIRST HOLE ABOVE THE FINISHED GRADE LEVEL IN ALL THREE UNITS MUST BE IN LINE FOR INSERTION OF THE CORNER BOLT.

ALL CORNER BOLTS AND NUTS FOR FASTENING THE SIGNS AND SIGN POST ASSEMBLY AND ALL WASHERS SHALL COMPLY WITH APPROPRIATE SECTIONS OF THE STANDARD SPECIFICATIONS (LATEST EDITION) AND SHALL BE A SUBSIDIARY ITEM.

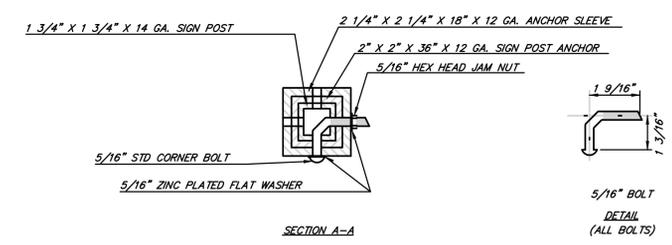
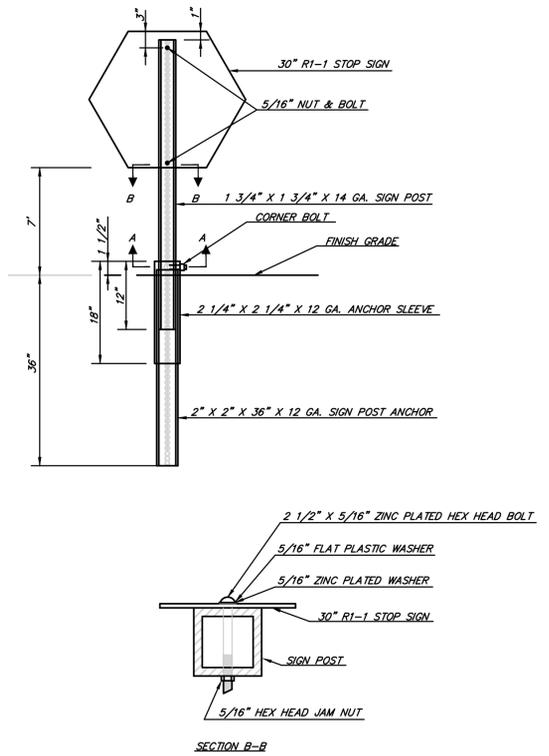
MATERIAL REQUIREMENTS

SIGN POSTS, POST ANCHORS, AND POST ANCHOR SLEEVES:
THE SIGN POSTS, POST ANCHORS, AND POST ANCHOR SLEEVES SHALL BE GALVANIZED FINISH HOT ROLLED CARBON STEEL ASTM A-446 GRADE A WITH A GALVANIZING CONFORMING TO ASTM A-525, DESIGNATION G-90.

THE SIGN POST SHALL HAVE 7/16" DIA. HOLES AT 1" CENTERS ON ALL FOUR SIDES FOR TOTAL LENGTH OF POST.

THE POST ANCHOR AND POST ANCHOR SLEEVE SHALL BE FURNISHED WITH THE BOLT HOLES ON ALL FOUR SIDES ALONG THE ENTIRE LENGTH.

ALL HOLES SHALL BE DRILLED OR PUNCHED AND ALL WELDS, CUTS, BURRS, AND SHARP EDGES ARE TO BE SMOOTHED OFF BEFORE APPLICATION OF FINISH.



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		LICENSE NO.	08/28/2019
		DATE:	
		FIELD BOOK:	
		JOB NUMBER:	19C010008

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SUMMIT ORCHARDS LOT 4B
FINAL DEVELOPMENT PLAN
NW CHIPMAN RD & NW WARD RD
LEE'S SUMMIT, MISSOURI 64086

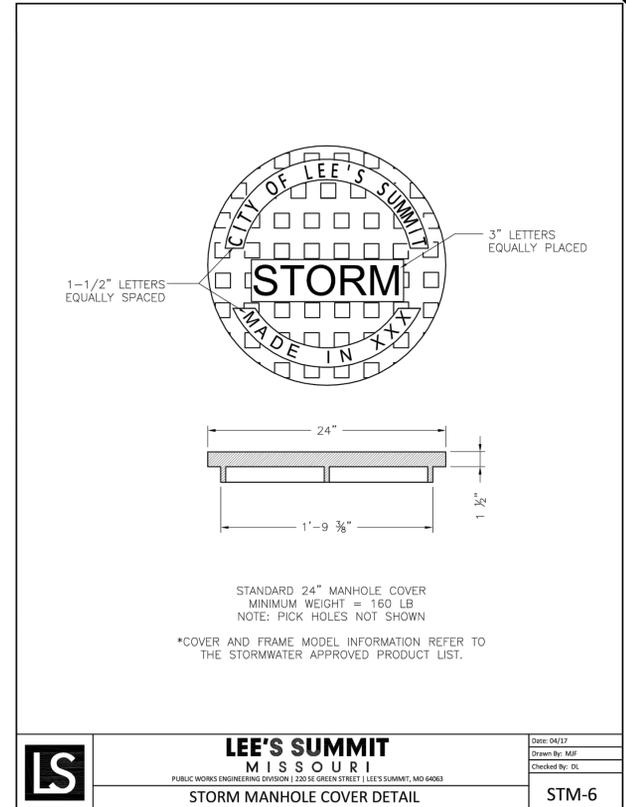
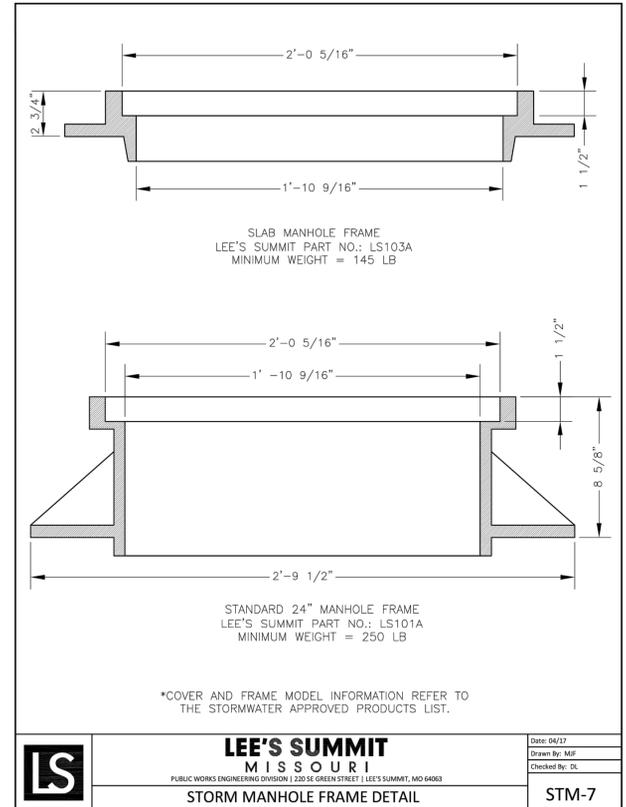
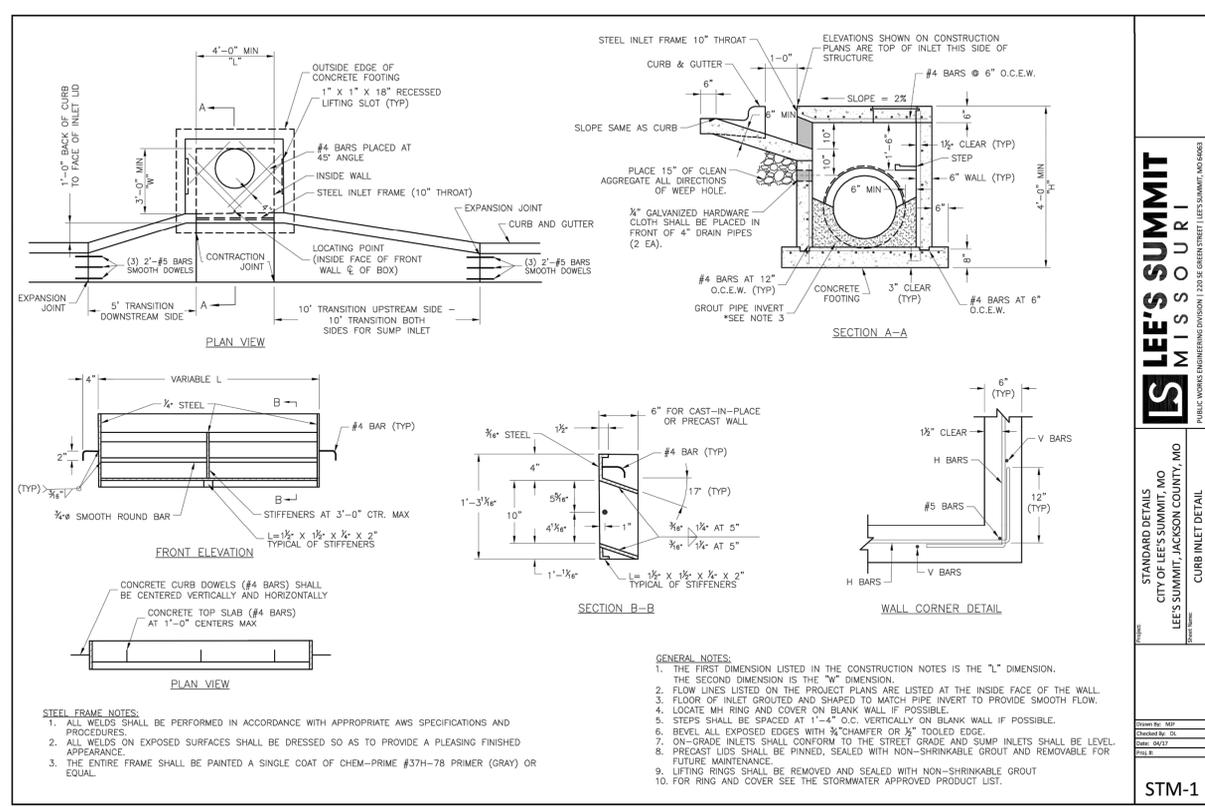
DETAILS

STATE OF MISSOURI
REGISTERED PROFESSIONAL ENGINEER
THOMAS P. WOOTEN
NUMBER
E-2000150081
9-20-19

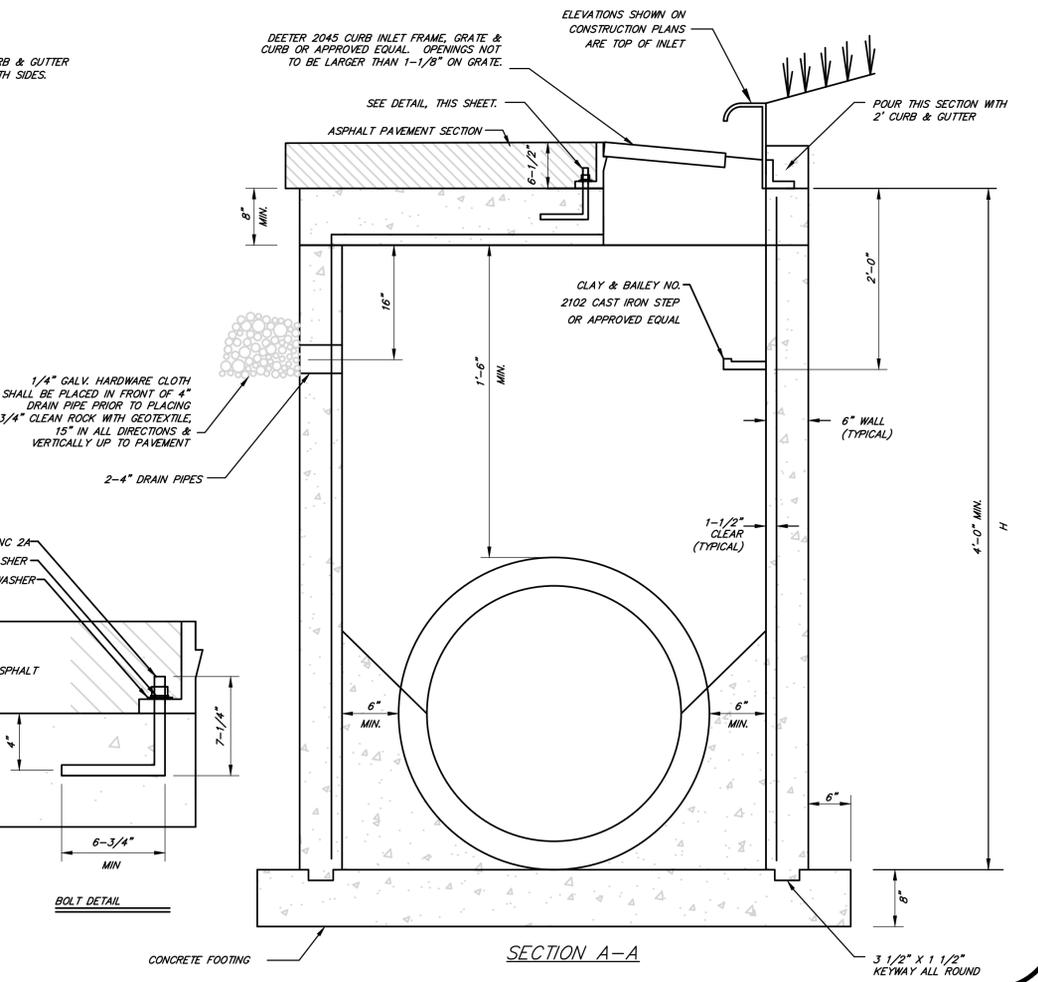
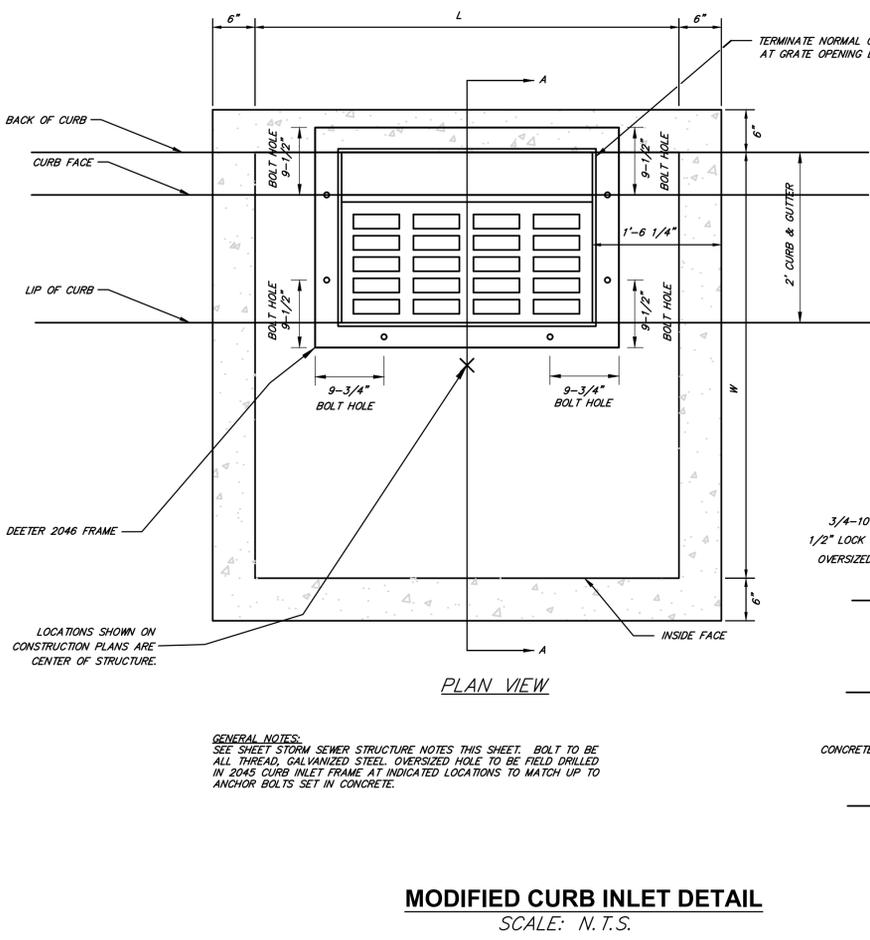
Thomas P. Wooten

SHEET NUMBER
C701
22 OF 44

Sep 20, 2019 - 10:37am Plotted By: AE Eng 4 Z:\Engineering Design\Projects\2019\190010008 SUMMIT ORCHARDS LOT 4B\01 CIVIL\03-DWG-SHTS\190010008-SHTS-DTL5.dwg Layout: DETAILS 3



- STORM SEWER NOTES:**
1. THE FIRST DIMENSION LISTED IN THE CONSTRUCTION NOTES IS THE "L" DIMENSION. THE SECOND DIMENSION IS THE "W" DIMENSION.
 2. FLOOR OF INLET SHALL BE SHAPED WITH NON-REINFORCED CONCRETE INVERT TO PROVIDE SMOOTH FLOW.
 3. EXPANSION JOINTS SHALL BE EITHER HOT OR COLD POURED JOINT SEALING COMPOUND, OR PREMOLED EXPANSION JOINT FILLER.
 4. STEEL INLET FRAME SPACERS SHALL BE PLACED AT EQUAL SPACINGS NOT TO EXCEED 4'-0".
 5. CAST IRON STEPS TO BE CLAY & BAILEY 2102 OR APPROVED EQUAL. STEEL CORE, PLASTIC COATED STEPS MAY BE USED (M.A. IND., INC. NO. PS1-09, PS2-09, OR APPROVED EQUAL). STEPS SHALL BE SPACED AT 1'-4" O.C. VERTICALLY. THE DISTANCE FROM THE LAST STEP TO THE TOP OF CONCRETE INVERT SHOULD BE A MAXIMUM OF 24".
 6. BEVEL ALL EXPOSED EDGES WITH 3/4" TRIANGULAR MOLDING.
 7. ON-GRADE INLETS SHALL CONFORM TO THE STREET GRADE AND SUMP INLETS SHALL BE LEVEL. FIELD INLETS SHOULD BE GRADED TO IMPOUND WATER TO A MINIMUM DEPTH OF 6" ABOVE INLET TOP.
 8. ALL STORM SEWER STRUCTURES SHALL BE PRECAST OR POURED IN PLACE. PRECAST SHOP DRAWINGS ARE TO BE REVIEWED BY THE ENGINEER PRIOR TO FABRICATION.
 9. ALL CONCRETE CONSTRUCTION SHALL MEET THE APPLICABLE REQUIREMENTS OF STANDARD SPECIFICATIONS FOR STATE ROAD AND BRIDGE CONSTRUCTION, MISSOURI DEPARTMENT OF TRANSPORTATION, LATEST EDITION, AND SPECIAL PROVISIONS.
 10. REINFORCING STEEL SHALL BE NEW BILLET, MINIMUM GRADE 60 AS PER ASTM A615, AND SHALL BE BENT COLD.
 11. 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.
 12. ALL LAP SPLICES NOT SHOWN SHALL BE A MINIMUM OF 40 BAR DIAMETERS IN LENGTH.
 13. 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.
 14. ALL REINFORCING STEEL SHALL BE SUPPORTED ON FABRICATED STEEL BAR SUPPORTS @ 3'-0" MAXIMUM SPACING.
 15. DO NOT SCALE THESE DRAWINGS FOR DIMENSIONS OR CLEARANCES. ANY QUESTIONS REGARDING DIMENSIONS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION.
 16. THE BOTTOM SLAB SHALL BE AT LEAST 24 HOURS OLD BEFORE PLACING SIDEWALL CONCRETE. ALL SIDEWALL FORMS SHALL REMAIN IN PLACE A MINIMUM OF 24 HOURS AFTER SIDEWALLS ARE POURED BEFORE REMOVAL, AND AFTER REMOVAL SHALL BE IMMEDIATELY TREATED WITH MEMBRANE CURING COMPOUND.
 17. ALL CURB INLET TOPS ARE TO BE CONSTRUCTED AFTER FINAL CURB STRING LINE HAS BEEN APPROVED BY THE OWNER'S REPRESENTATIVE AND PRIOR TO CURB CONSTRUCTION.
 18. TOP CONNECTIONS TO PRECAST STRUCTURES SHALL HAVE A MINIMUM OF 6" OF CONCRETE AROUND THE ENTIRE PIPE WITHIN 2' OF THE STRUCTURE.
 19. ALL STRUCTURES SHALL BE DESIGNED TO MEET AASHTO HS20 LOADING.
 20. GEOTEXTILE FABRIC AROUND WEEPS SHALL BE AASHTO M288 CLASS A OR AN APPROVED EQUAL.
 21. PRIOR TO SETTING OF STRUCTURES OR LAYING OF PIPE, ANY UTILITY CROSSING SHALL BE EXPOSED TO CONFIRM NO CONFLICTS EXIST WITH PROPOSED INSTALLATION.



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FIELD BOOK:	
JOB NUMBER:	190010008

REVISIONS

NO.	DESCRIPTION	DATE

SUMMIT ORCHARDS LOT 4B
FINAL DEVELOPMENT PLAN
 NW CHIPMAN RD & NW WARD RD
 LEE'S SUMMIT, MISSOURI 64086

DETAILS

STATE OF MISSOURI
 REGISTERED PROFESSIONAL ENGINEER
 THOMAS P. WOOTEN
 NUMBER E-2000150081
 9-20-19

THOMAS P. WOOTEN

SHEET NUMBER
C702
 23 OF 44

BEDDING

1/2"-3/4" CLEAN AGGREGATE, HAND TAMPED OR MECHANICALLY COMPACTED IN MAX. 4" LIFTS

INITIAL BACKFILL

-UNDER PAVED AREAS OR WITHIN 4' HORIZONTAL OF PAVED AREAS

1/2"-3/4" CLEAN AGGREGATE, HAND TAMPED OR MECHANICALLY COMPACTED IN MAX. 4" LIFTS

-UNDER OPEN AREAS

1/2"-3/4" CLEAN AGGREGATE, HAND TAMPED OR MECHANICALLY COMPACTED IN MAX. 4" LIFTS

OR

SELECT FILL CONSISTING OF SITE EXCAVATED OR IMPORTED NON-COHESIVE MATERIAL FREE OF CLAY, ORGANICS, TRASH, FROZEN MATERIAL, OR ROCKS LARGER THAN 3" COMPACTED TO 95% OF STANDARD DENSITY PER ASTM D-698

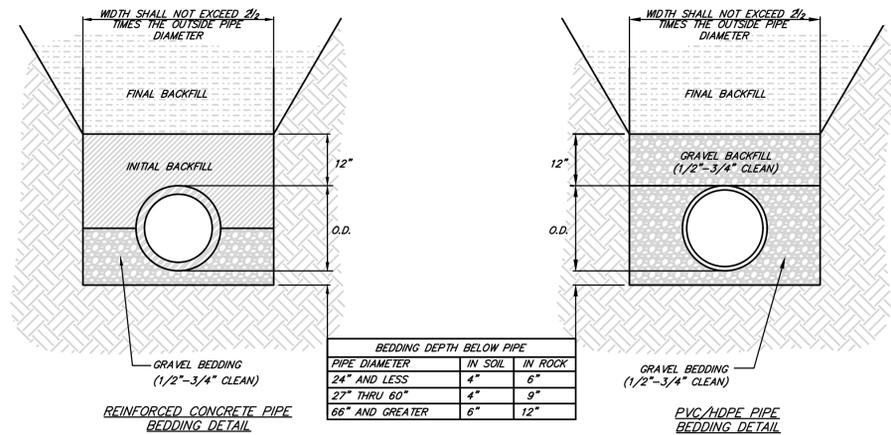
FINAL BACKFILL

-UNDER PAVED AREAS OR WITHIN 4' HORIZONTAL OF PAVED AREAS

ON-SITE OR IMPORTED MATERIAL FREE OF MUCK, FROZEN MATERIAL, EXCESS MOISTURE, ORGANICS, TOPSOIL, RUBBISH, CONSTRUCTION DEBRIS, ROCK OR BRICK LARGER THAN 8", COMPACTED TO 95% OF STANDARD DENSITY PER ASTM D-698

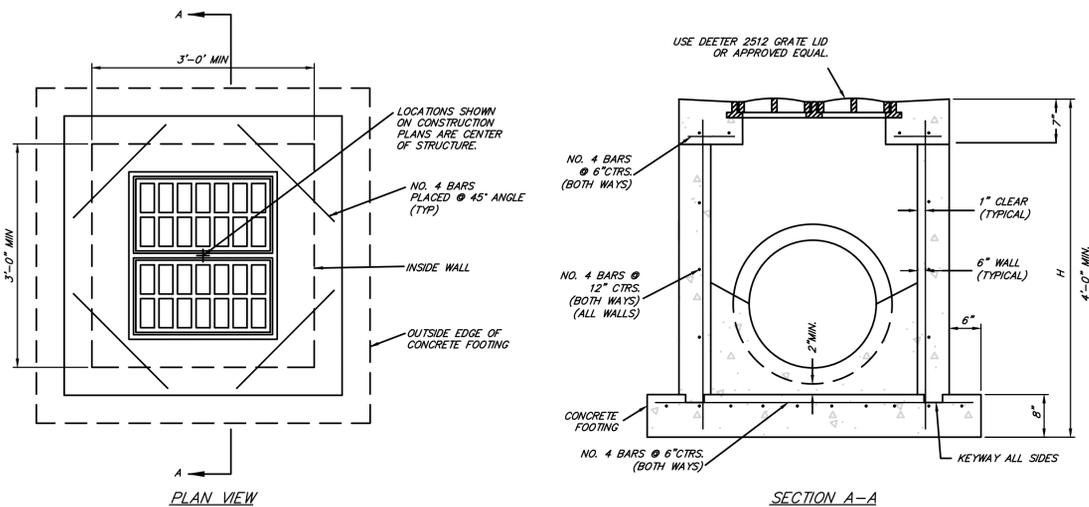
-UNDER OPEN AREAS

ON-SITE OR IMPORTED MATERIAL FREE OF MUCK, FROZEN MATERIAL, EXCESS MOISTURE, ORGANICS, TOPSOIL, RUBBISH, CONSTRUCTION DEBRIS, ROCK OR BRICK LARGER THAN 8", COMPACTED TO 90% OF STANDARD DENSITY PER ASTM D-698



STORM SEWER PIPE BEDDING DETAIL

SCALE: N.T.S.

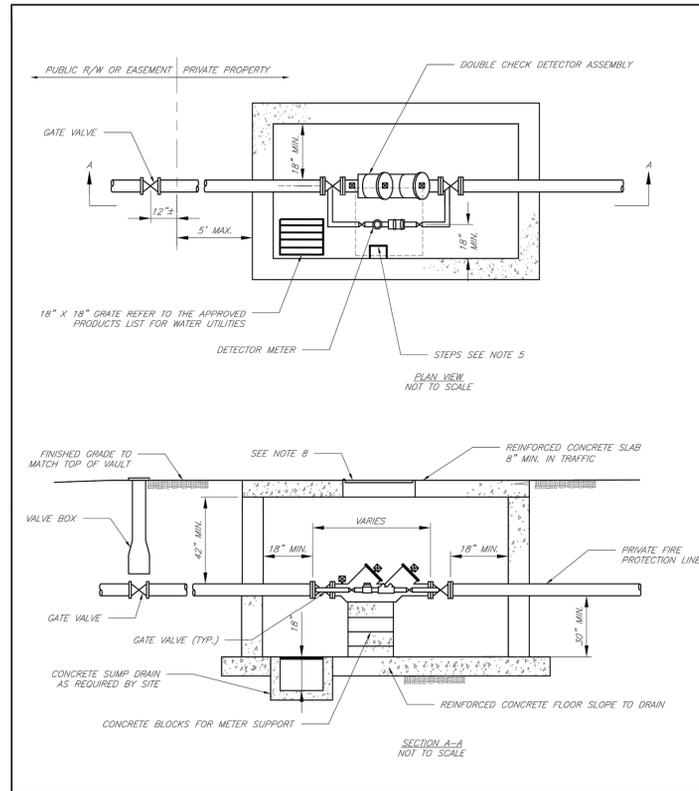


GRADED AREA INLET DETAIL

SCALE: N.T.S.

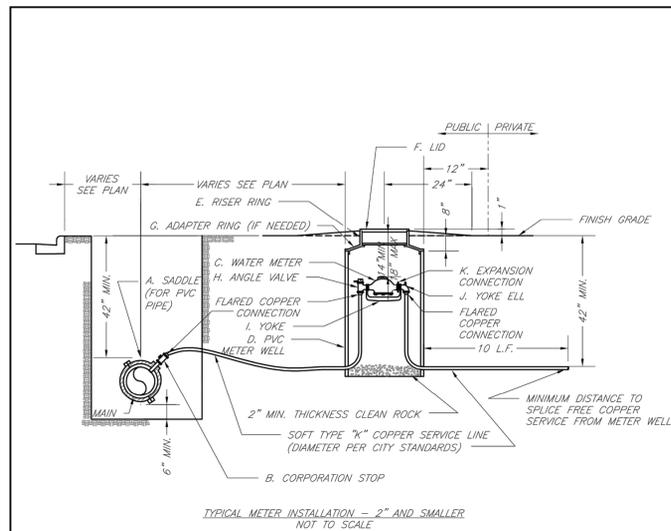
NOTES

- ALL CONCRETE SHALL BE 4000 PSI.
- THE FIRST DIMENSION LISTED IN THE CONSTRUCTION NOTES IS THE "L" DIMENSION. THE SECOND DIMENSION IS THE "W" DIMENSION.
- FLOOR OF INLET SHALL BE SHAPED WITH NON-REINFORCED CONCRETE INVERT TO PROVIDE SMOOTH FLOW.
- EXPANSION JOINTS SHALL BE EITHER HOT OR COLD-POURED JOINT SEALING COMPOUND, OR PREMOLDED EXPANSION JOINT FILLER.
- STEEL INLET FRAME SPACERS SHALL BE PLACED AT EQUAL SPACINGS NOT TO EXCEED 4'-0".
- BEVEL ALL EXPOSED EDGES WITH TRIANGULAR MOLDING.
- 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.
- ALL LAP SPLICES NOT SHOWN SHALL BE A MINIMUM OF 40 BAR DIAMETERS IN LENGTH.
- 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.
- ALL REINFORCING STEEL SHALL BE SUPPORTED ON FABRICATED STEEL BAR SUPPORTS @ 3'-0" MAXIMUM SPACING.
- 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.
- CONNECTIONS TO PRECAST STRUCTURES SHALL HAVE A MINIMUM OF 6" OF CONCRETE AROUND THE ENTIRE PIPE WITHIN 2' OF THE STRUCTURE.
- THE BOTTOM SLAB SHALL BE AT LEAST 24 HOURS OLD BEFORE PLACING SIDEWALL CONCRETE. ALL SIDEWALL FORMS SHALL REMAIN IN PLACE A MINIMUM OF 24 HOURS AFTER SIDEWALLS ARE POURED BEFORE REMOVAL AND AFTER REMOVAL SHALL BE IMMEDIATELY TREATED WITH MEMBRANE CURING COMPOUND.



GENERAL NOTES:

- METER VAULT WALLS TO BE POURED OR PRECAST CONCRETE. METER VAULT ROOF TO BE REINFORCED CONCRETE WITH OPENING CENTERED OVER DETECTOR METER. REINFORCED WALLS AND SLABS ARE TO BE DESIGNED BY THE OWNER'S ENGINEER OR PRECAST ENGINEER.
- METER VAULT TO BE LOCATED, WHEN POSSIBLE, OUTSIDE TRAFFIC AREA AND WHERE SURFACE WATER WILL NOT DRAIN INTO IT. PROVIDE CONCRETE SUMP TO DRAIN TO AN ABOVE GROUND DISCHARGE POINT.
- ALL PIPE AND FITTINGS FROM THE CITY WATER MAIN THROUGH THE VAULT SHALL BE PROVIDED WITH RESTRAINED JOINT FITTINGS.
- ALL FITTINGS FOR THE DETECTOR METER TO BE BRASS.
- STEPS SHALL BE IN ACCORDANCE WITH THE APPROVED PRODUCTS LIST FOR WATER UTILITIES AND SHALL BE ON 16" CENTERS.
- A DEPARTMENT OF NATURAL RESOURCES APPROVED DOUBLE CHECK DETECTOR ASSEMBLY BACKFLOW PREVENTER MUST BE USED FOR A COPY OF THE MISSOURI DEPARTMENT OF NATURAL RESOURCES APPROVED BACKFLOW PREVENTION ASSEMBLIES, CONTACT WATER UTILITIES AT 816-969-1900.
- ALL VALVES SHALL HAVE RISING STEMS.
- MANHOLE COVER SHALL BE A BILCO #4-1 MODEL UNLESS IN A VEHICLE TRAFFIC AREA. SEE THE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR TRAFFIC CONDITIONS. THE COVER SHALL HAVE A 1-3/4" Ø HOLE DRILLED FOR A TOUCH-READ DEVICE.
- A MINIMUM OF 18" CLEARANCE SHALL BE PROVIDED AROUND ALL PIPING, VALVES, APPURTENANCES, ETC.
- CONTACT PUBLIC WORKS ENGINEERING FOR VAULTS THAT INCLUDE A FIRE DEPARTMENT CONNECTION OR A 3" OR LARGER METER.



NOTES:

- METER INSTALLATION SHALL NOT BE LOCATED IN AREAS SUBJECT TO VEHICULAR TRAFFIC OR IN CONCRETE PAVEMENT WITHOUT CITY APPROVAL.
- IF METER IS TO BE LOCATED OTHER THAN IN FRONT OF PROPERTY LINE, CITY APPROVAL SHALL BE OBTAINED.
- CITY TO FURNISH ITEMS A-K.
- NO OTHER EQUIPMENT SHALL BE INSTALLED IN THIS PIT.
- 42" MINIMUM BURY DEPTH FOR ALL SERVICE LINES.
- EXCAVATION FOR TAP TO EXPOSE 4' LINEAR FEET OF MAIN.
- NO SPLICES ALLOWED BETWEEN METER AND MAIN.
- SERVICE CONNECTION TAP AT APPROXIMATELY 45 DEGREES.
- LID AND RISER RING SHALL BE SET SO THAT GROUND WATER WILL DRAIN AWAY FROM THE WELL.
- CONTACT WATER UTILITIES, 816-969-1900, FOR REQUIREMENTS OF A METER LARGER THAN 2"



LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Date: 02/13
Drawn By: JN
Checked By: DL
File: WAT-11
Rev: 1/14

CITY OF LEE'S SUMMIT, MO
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
LEE'S SUMMIT, MO 64063

STANDARD DRAWINGS

WAT-12

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SUMMIT ORCHARDS LOT 4B
FINAL DEVELOPMENT PLAN
NW CHIPMAN RD & NW WARD RD
LEE'S SUMMIT, MISSOURI 64068

DETAILS

STATE OF MISSOURI
THOMAS P. WOOTEN
REGISTERED PROFESSIONAL ENGINEER
E-2000150081
9-20-19

SHEET NUMBER
C703
24 OF 44

Plan View
Not to Scale

Side Elevation
Not to Scale

Section A-A
Not to Scale

Notes for Concrete Washout:

- Concrete washout areas shall be installed prior to any concrete placement on site.
- Concrete washout areas shall include a flat substrate at least equal to the amount of concrete to be placed on site. The slopes leading out of the substrate shall be 2:1. The entire washing pad shall be sloped towards the concrete washout area.
- Vehicle tracking control is required at the access point to all concrete washout areas.
- Slopes shall be placed at the substrate the entrance, approach area and elsewhere as necessary to clearly indicate the location(s) of the concrete washout area(s) to operators of concrete trucks and pump rigs.
- A one-piece impervious liner may be required along the bottom and sides of the substrate on all slope or gravelly soils.

Maintenance for Concrete Washout:

- Concrete washout materials shall be removed once the materials have filled the washout to approximately 75% full.
- Concrete washout areas shall be enlarged as necessary to maintain capacity for washed concrete.
- Concrete washout water, washed pieces of concrete and all other debris on the substrate shall be transported from the job site in a water-tight container and disposed of properly.
- Concrete washout areas shall remain in place until all concrete for the project is placed.
- When concrete washout areas are removed, excavations shall be filled with suitable compacted backfill and topped, any disturbed areas associated with the retention, maintenance, and/or removal of the concrete washout areas shall be stabilized.

Notes for Construction Entrance:

- Avoid leveling at steep slopes, at curves on public roads, or directly of disturbed areas.
- Remove all vegetation and other unsuitable material from the foundation area, grade, and crown for positive drainage.
- If slope towards the public road exceeds 2%, construct a 6- to 8-inch high ridge with 3/4" x 1/4" side slopes across the foundation approximately 15 feet from the edge of the public road to divert runoff from it.
- Install pipe under the entrance if needed to maintain drainage slopes along public roads.
- Place stone to dimensions and grade as shown on plans. Leave surface sloped for drainage.
- Divert all surface runoff and drainage from the entrance to a sediment control device.
- If conditions warrant, place geotextile fabric on the graded foundation to improve stability.

Maintenance for Construction Entrance:

- Regrade entrance as needed to maintain function and integrity of installation. Top dress with clean aggregate as needed.

CONCRETE WASHOUT

CONSTRUCTION ENTRANCE

AMERICAN PUBLIC WORKS ASSOCIATION

KANSAS CITY METRO CHAPTER

CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT

STANDARD DRAWING NUMBER ESC-01 ADOPTED: 10/24/2016

SILT FENCE DETAILS
Not to Scale

(*) GEOTEX

- MIN. LENGTH 4'
- HARDWOOD 1 1/2" x 1 1/2"
- NO.2 SOUTHERN PINE 2 1/2" x 2 1/2"
- STEEL 1.33 LB/YD

() Geotextile Fabric** shall meet the requirements of ASTM D 4892.

Notes:

- In order to contain water, the ends of the silt fence must be turned up 90° (Figure A).
- Long perimeter runs of silt fence must be limited to 100'. Runs should be broken up into several smaller segments to minimize water concentrations (Figure A).
- Long slopes should be broken up with intermediate runs of silt fence to slow runoff velocities.
- Attach posts to upstream side of post.
- Install posts a minimum of 2' into the ground.
- Trenching will only be allowed for small or difficult installation, where silt fence machine cannot be reasonably used.

Maintenance:

- Remove and dispose of sediment deposits when the deposit approaches 1/3 the height of silt fence.
- Repair as necessary to maintain function and structure.

Figure A

SILT FENCE LAYOUT
Not to Scale

JOINING FENCE SECTIONS
Not to Scale

AMERICAN PUBLIC WORKS ASSOCIATION

KANSAS CITY METRO CHAPTER

SILT FENCE

STANDARD DRAWING NUMBER ESC-03 ADOPTED: 10/24/2016

On Grade Curb Inlet Protection

Sump Inlet Sediment Filter

Notes:

- Immediately following inlet construction and prior to construction of curb and inlet throat, protect inlet opening by installing 2' x 10' (min.) board wrapped in silt fence. Structures shall have excavated storage area on all four sides to allow settling of sediment (Early Stage Curb Inlet).
- When inlet is completed and curb around filter sock or approved equal should be used (Late Stage Curb Inlet). Stone within the inlet approved for curb inlet use.
- Contractor to field verify ponding water shall not create a traffic hazard.

Maintenance:

- Remove deposited sediment from excavated storage areas when available storage has been reduced by 25%.
- Remove deposited sediment from filter socks or similar when any accumulation of sediment is visible.
- Repair or replace as necessary to maintain function and integrity of installation.

AMERICAN PUBLIC WORKS ASSOCIATION

KANSAS CITY METRO CHAPTER

CURB INLET PROTECTION

STANDARD DRAWING NUMBER ESC-06 ADOPTED: 10/24/2016

NOTES:

- ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS.
- FILTER MEDIA FILL TO MEET APPLICATION REQUIREMENTS.
- COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

GRATED AREA INLET PROTECTION

SCALE: N.T.S.

AMERICAN PUBLIC WORKS ASSOCIATION

KANSAS CITY METRO CHAPTER

CURB INLET PROTECTION

STANDARD DRAWING NUMBER ESC-06 ADOPTED: 10/24/2016

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FIELD BOOK:	
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NO.	
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DESCRIPTION	
DATE	

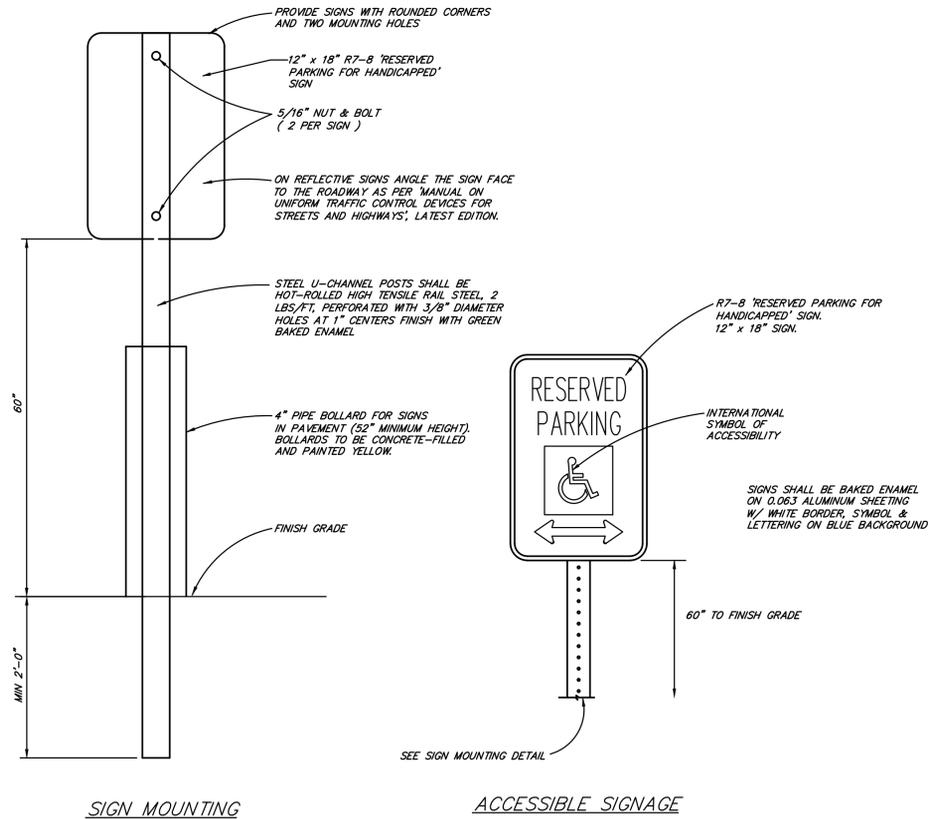
SUMMIT ORCHARDS LOT 4B
FINAL DEVELOPMENT PLAN
NW CHIPMAN RD & NW WARD RD
LEE'S SUMMIT, MISSOURI 64086

DETAILS

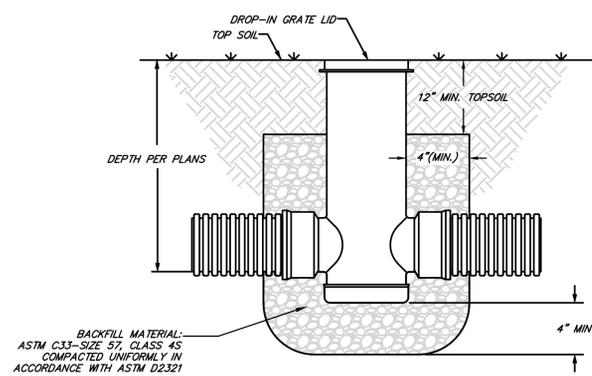
THOMAS P. WOOTEN
PROFESSIONAL ENGINEER
STATE OF MISSOURI
E-2000150081
9-20-19

SHEET NUMBER
C704
25 OF 44

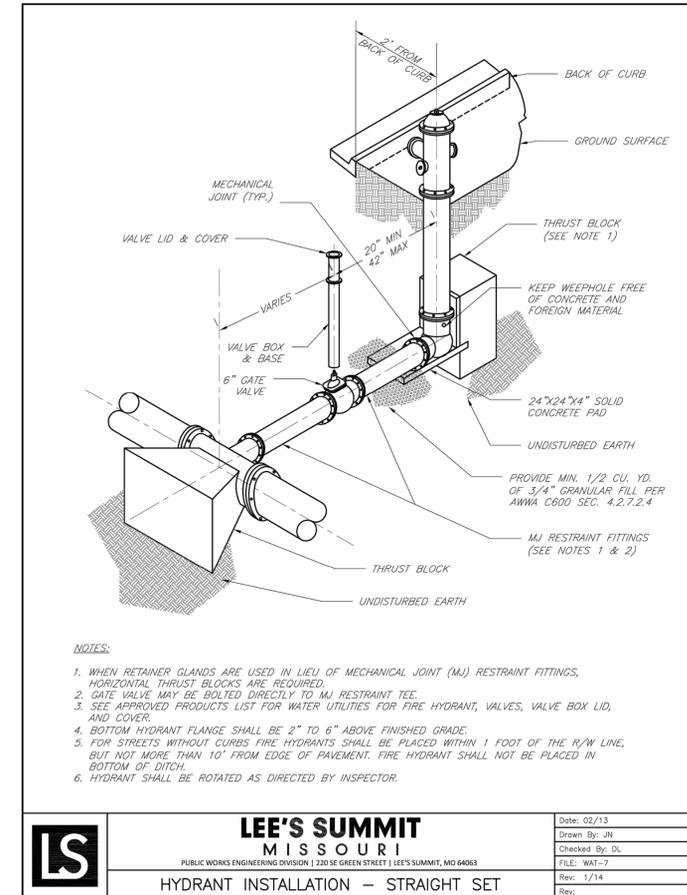
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ADA ACCESSIBLE PARKING SIGNAGE DETAIL
SCALE: N.T.S.



NYLOPLAST DRAIN BASIN DETAIL
SCALE: N.T.S.



- NOTES:**
1. WHEN RETAINER GLANDS ARE USED IN LIEU OF MECHANICAL JOINT (MJ) RESTRAINT FITTINGS, HORIZONTAL THRUST BLOCKS ARE REQUIRED.
 2. GATE VALVE MAY BE BOLTED DIRECTLY TO MJ RESTRAINT TEE.
 3. SEE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR FIRE HYDRANT, VALVES, VALVE BOX LID, AND COVER.
 4. BOTTOM HYDRANT FLANGE SHALL BE 2" TO 6" ABOVE FINISHED GRADE.
 5. FOR STREETS WITHOUT CURBS FIRE HYDRANTS SHALL BE PLACED WITHIN 1 FOOT OF THE R/W LINE, BUT NOT MORE THAN 10' FROM EDGE OF PAVEMENT. FIRE HYDRANT SHALL NOT BE PLACED IN BOTTOM OF DITCH.
 6. HYDRANT SHALL BE ROTATED AS DIRECTED BY INSPECTOR.

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	MISSOURI	Drawn By: JH
	PUBLIC WORKS ENGINEERING DIVISION 2203E GREEN STREET LEE'S SUMMIT, MO 64063	Checked By: DL
	HYDRANT INSTALLATION - STRAIGHT SET	FILE: MAT-7 Rev: 1/14

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FINAL DEVELOPMENT PLAN
 NW CHIPMAN RD & NW WARD RD
 LEE'S SUMMIT, MISSOURI 64086

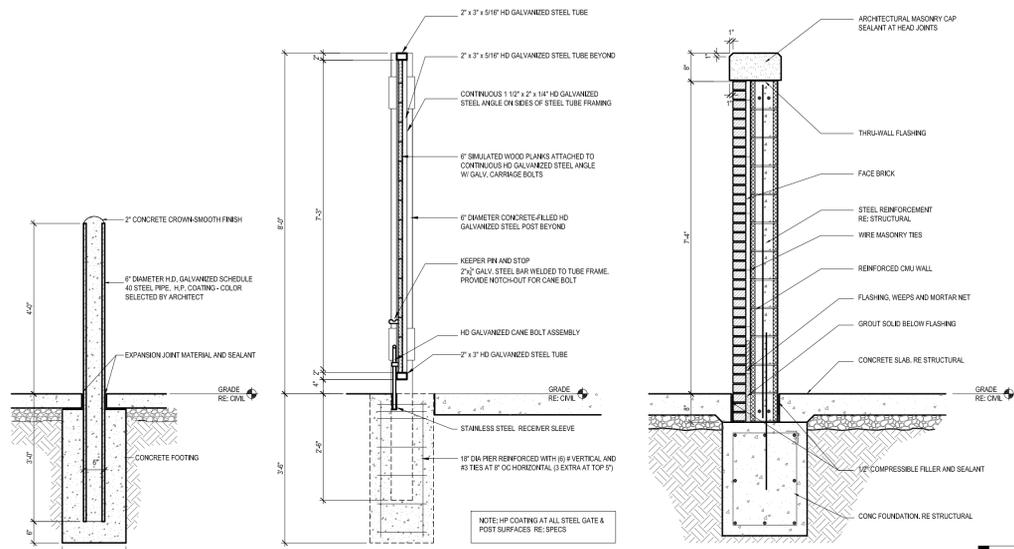
STATE OF MISSOURI

THOMAS P. WOOTEN
REGISTERED PROFESSIONAL ENGINEER
E-2000150081
9-20-19

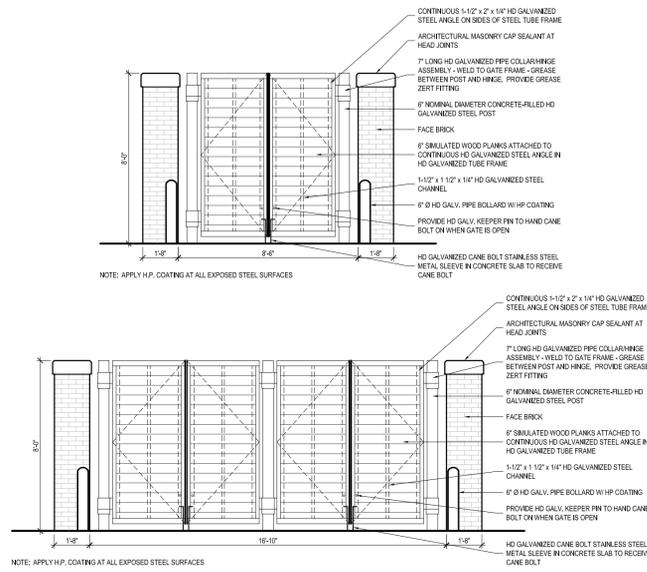
Thomas P. Wooten

SHEET NUMBER
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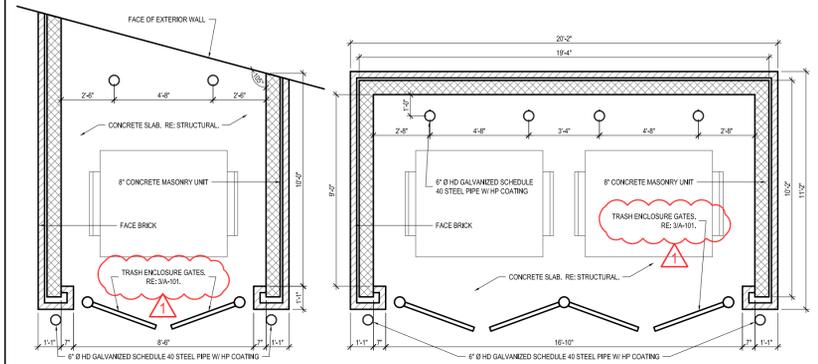
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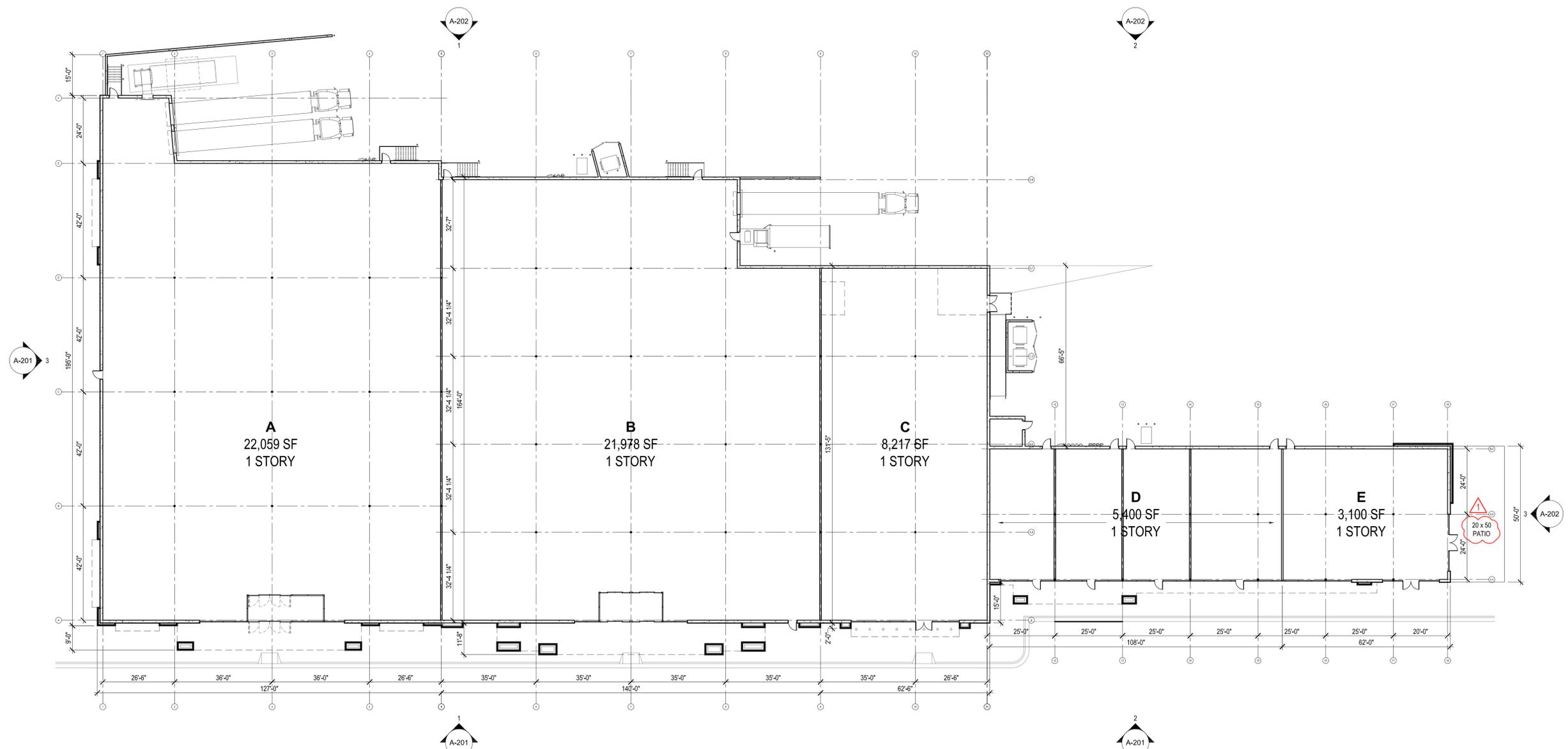
Trash Enclosure Details
1/2" = 1'-0" 4



Enlarged Trash Enclosure Elevations
1/4" = 1'-0" 3



Enlarged Trash Enclosure Plans
1/4" = 1'-0" 2



Floor Plan
1" = 20' 1



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Summit Orchards Lot 4B

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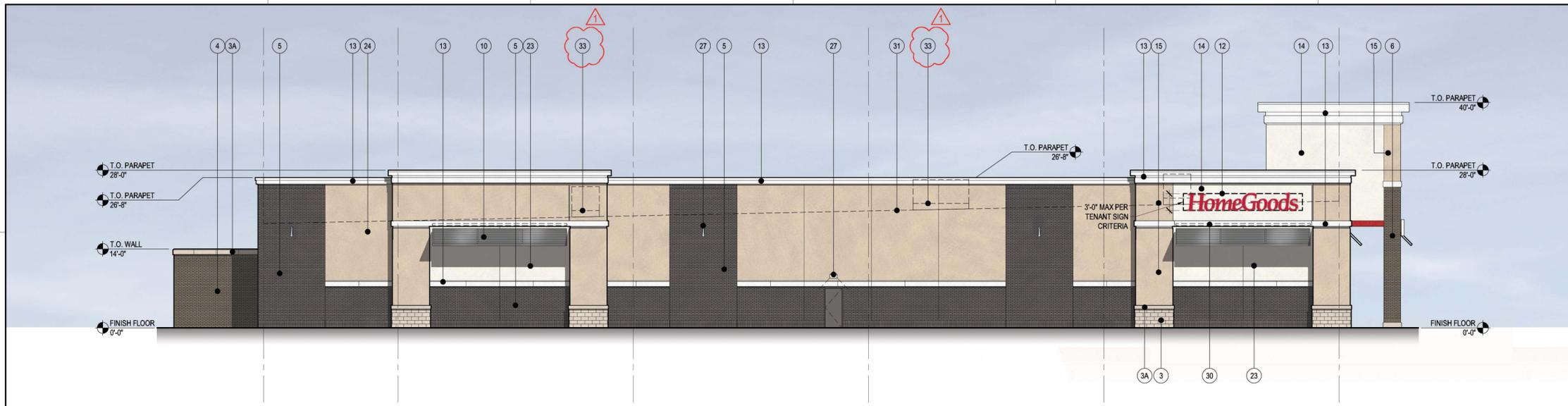
#	Revisions:
1	FDP Revisions 09/20/2019

Project #: 180902

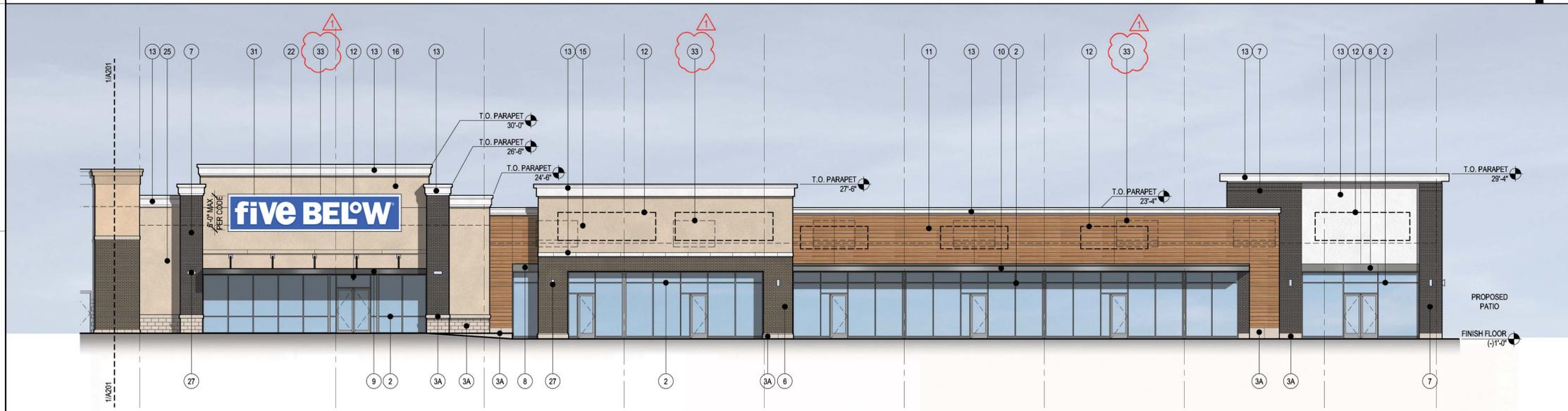
Final Development Plan
August 28, 2019

FLOOR PLAN

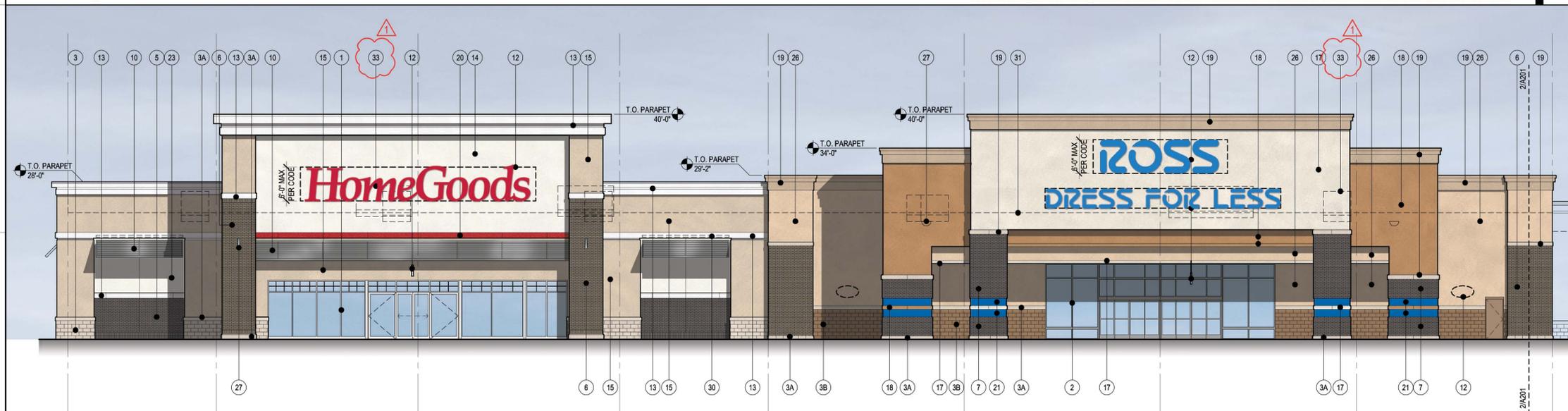
A-101



West Elevation 3
3/32" = 1'-0"



South Elevation - Area 'C' & 'D' 2
3/32" = 1'-0"



South Elevation - Area 'A' & 'B' 1
3/32" = 1'-0"

MATERIALS LEGEND*

- 1 ALUMINUM STOREFRONT - KAWNEER, BONE WHITE, #JC109880 STANDARD PERMAFLUOR COLOR (INTERIOR & EXTERIOR). CLEAR LOW-E GLAZING.
- 2 ALUMINUM STOREFRONT - KAWNEER, 451 T SERIES, CLEAR ANODIZED ALUMINUM, DOUBLE PANE, INSULATED GLAZING. CLEAR LOW-E GLAZING.
- 3 ARCHITECTURAL MASONRY UNIT, ROCKCAST, COLOR: BUTTERSCOTCH; TEXTURE: SPLIT-FACE.
- 3A ARCHITECTURAL MASONRY UNIT, ROCKCAST, COLOR: BUTTERSCOTCH; TEXTURE: GROUND-FACE.
- 3B ARCHITECTURAL MASONRY UNIT, ANGELUS BLOCK COMPANY, COLOR: OAK; TEXTURE: SPLIT-FACE.
- 4 ENDICOTT THIN BRICK, COLOR: LIGHT GREY BLEND; TEXTURE: SMOOTH; SIZE: MODULAR.
- 5 ENDICOTT THIN BRICK, COLOR: MANGANESE BROWN; TEXTURE: SMOOTH; SIZE: MODULAR.
- 6 ENDICOTT FULL BRICK, COLOR: LIGHT GREY BLEND; TEXTURE: SMOOTH; SIZE: MODULAR.
- 7 ENDICOTT FULL BRICK, COLOR: MANGANESE BROWN; TEXTURE: SMOOTH; SIZE: MODULAR.
- 8 ALUMINUM COMPOSITE METAL PANEL, ALPOLIC, COLOR: MICA MFS GRAY.
- 9 METAL CANOPY, MAPES BAKED ENAMEL BRONZE.
- 10 METAL SUNSHADE CANOPY, COLOR: ANODIZED ALUMINUM.
- 11 NICHHA FIBER CEMENT PLANK SYSTEM, SERIES: VINTAGEWOOD; FINISH: CEDAR.
- 12 TENANT SIGNAGE.
- 13 EIFS, DRYVIT #310 CHINA WHITE.
- 14 EIFS, DRYVIT #102 BRITE WHITE.
- 15 EIFS, DRYVIT #113 AMARILLO WHITE.
- 16 EIFS, DRYVIT #456 OYSTER SHELL.
- 17 EIFS, COLOR: SHERWIN WILLIAMS, DOVER WHITE, SW 6385.
- 18 EIFS, COLOR: SHERWIN WILLIAMS, TATAMI TAN, SW 6116.
- 19 EIFS, COLOR: SHERWIN WILLIAMS, NOMADIC DESERT, SW 6107.
- 20 EIFS, COLOR: BENJAMIN MOORE, 2087-10 NEON RED.
- 21 EIFS, COLOR: TK PRODUCTS, TK 6010-40, BLUE TO MATCH TENANT STANDARD.
- 22 EIFS, COLOR: DRYVIT #FIB011021S, BLUE TO MATCH TENANT STANDARD.
- 23 TEXTURED ACRYLIC COATING TO MATCH DRYVIT #102 BRITE WHITE.
- 24 TEXTURED ACRYLIC COATING TO MATCH DRYVIT #113 AMARILLO WHITE.
- 25 TEXTURED ACRYLIC COATING TO MATCH DRYVIT #456 OYSTER SHELL.
- 26 TEXTURED ACRYLIC COATING TO MATCH SHERWIN WILLIAMS, INTERACTIVE CREAM, SW 6113.
- 27 WALL-MOUNTED LIGHT FIXTURE.
- 28 OVERHEAD DOOR WITH HIGH PERFORMANCE COATING.
- 29 TRASH COMPACTOR.
- 30 CONCEALED LED LIGHT SOURCE.
- 31 LINE OF ROOF BEYOND. ALL ROOFTOP MECHANICAL EQUIPMENT TO BE SCREENED FROM VIEW AT RIGHT OF WAY.
- 32 EXTERNAL SCUPPER AND DOWNSPOUT ROUTED INTO STORM SYSTEM.
- 33 TENANT ROOFTOP MECHANICAL EQUIPMENT DASHED BEYOND. ALL ROOFTOP MECHANICAL EQUIPMENT TO BE SCREENED FROM VIEW AT RIGHT OF WAY.
- 34 SIMULATED WOOD PLANK SYSTEM, "TREX TRANSCEND, COLOR: SPICED RUM.

*ALL MATERIALS & COLORS SUBJECT TO LOCAL GOVERNMENT APPROVAL.



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Summit Orchards Lot 4B

Final Development Plan
NW Chipman Rd & NW Ward Rd
Lee's Summit, MO 64086

Revisions:	
1	FDP Revisions 09/20/2019

Project #: 180902

Final Development Plan
August 28, 2019

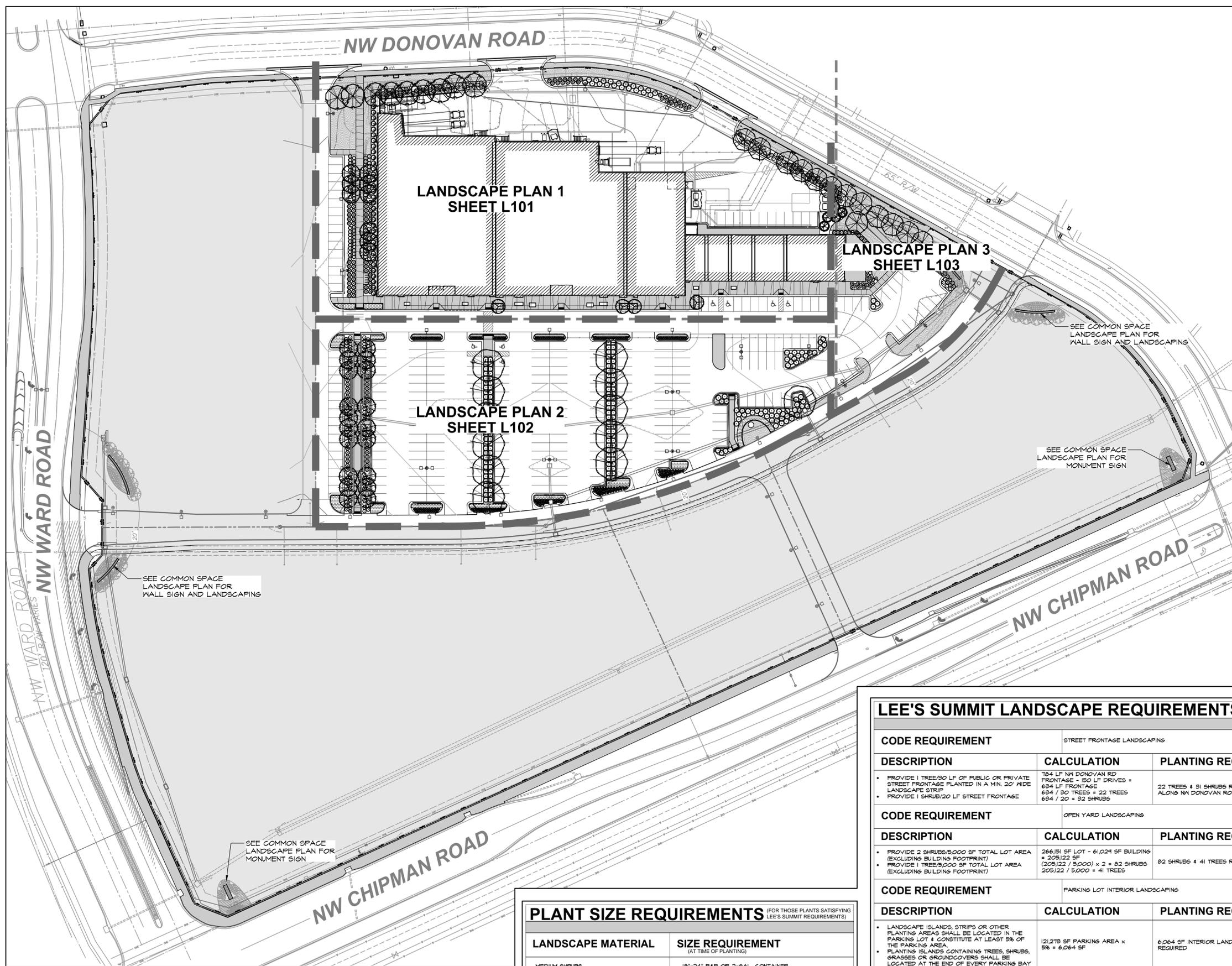


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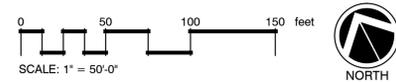


9/20/19

SUMMIT ORCHARDS
NW CHIPMAN RD & NW WARD RD
LEE'S SUMMIT, MISSOURI 64086
LOT 4B FINAL DEVELOPMENT PLAN



OVERALL LANDSCAPE PLAN
SCALE: 1"=50'-0"



HATCH LEGEND	
SYMBOL	DESCRIPTION
	SODDED LAWN
	SEPARATE SUBMITTAL

LEE'S SUMMIT LANDSCAPE REQUIREMENTS

CODE REQUIREMENT		STREET FRONTAGE LANDSCAPING	
DESCRIPTION	CALCULATION	PLANTING REQUIRED	PLANTING PROVIDED
<ul style="list-style-type: none"> PROVIDE 1 TREE/30 LF OF PUBLIC OR PRIVATE STREET FRONTAGE PLANTED IN A MIN. 20' WIDE LANDSCAPE STRIP PROVIDE 1 SHRUB/20 LF STREET FRONTAGE 	784 LF NW DONOVAN RD FRONTAGE = 150 LF DRIVES = 634 LF FRONTAGE 634 / 30 TREES = 22 TREES 634 / 20 = 32 SHRUBS	22 TREES & 31 SHRUBS REQUIRED ALONG NW DONOVAN ROAD	22 TREES & 184 SHRUBS PROVIDED
CODE REQUIREMENT		OPEN YARD LANDSCAPING	
DESCRIPTION	CALCULATION	PLANTING REQUIRED	PLANTING PROVIDED
<ul style="list-style-type: none"> PROVIDE 3 SHRUBS/5,000 SF TOTAL LOT AREA (EXCLUDING BUILDING FOOTPRINT) PROVIDE 1 TREE/5,000 SF TOTAL LOT AREA (EXCLUDING BUILDING FOOTPRINT) 	266,151 SF LOT - 61,024 SF BUILDING = 205,127 SF (205,127 / 5,000) x 3 = 123 SHRUBS 205,127 / 5,000 = 41 TREES	82 SHRUBS & 41 TREES REQUIRED	41 TREES & 508 SHRUBS PROVIDED
CODE REQUIREMENT		PARKING LOT INTERIOR LANDSCAPING	
DESCRIPTION	CALCULATION	PLANTING REQUIRED	PLANTING PROVIDED
<ul style="list-style-type: none"> LANDSCAPE ISLANDS, STRIPS OR OTHER PLANTING AREAS SHALL BE LOCATED IN THE PARKING LOT & CONSTITUTE AT LEAST 5% OF THE PARKING AREA PLANTING ISLANDS CONTAINING TREES, SHRUBS, GRASSES OR GROUNDCOVERS SHALL BE LOCATED AT THE END OF EVERY PARKING BAY 	121,278 SF PARKING AREA x 5% = 6,064 SF	6,064 SF INTERIOR LANDSCAPE AREAS REQUIRED	15,512 SF INTERIOR LANDSCAPE AREAS PROVIDED. LANDSCAPE ISLANDS HAVE BEEN PROVIDED AT THE ENDS OF PARKING BAYS IN ACCORDANCE WITH THE LANDSCAPE ORDINANCE
CODE REQUIREMENT		PARKING LOT ADJACENT TO RIGHT-OF-WAY	
DESCRIPTION	CALCULATION	PLANTING REQUIRED	PLANTING PROVIDED
<ul style="list-style-type: none"> PARKING LOTS AND LOADING AREAS VISIBLE FROM ROW SHALL BE SCREENED TO A HT. OF 24' WITH A HEDGE CONSISTING OF 12 SHRUBS/40 LF. SHRUBS SHALL BE 18' HT. AT TIME OF PLANTING. 	(115 LF ADJACENT TO NW DONOVAN RD / 40) x 12 = 33 SHRUBS (414 LF LOADING AREA ADJACENT TO NW DONOVAN RD / 40) x 12 = 125 SHRUBS	33 SHRUBS ADJACENT TO PARKING LOT ABUTTING NW DONOVAN RD REQUIRED 125 SHRUBS PROVIDED TO LOADING AREA ABUTTING NW DONOVAN RD REQUIRED	31 SHRUBS PROVIDED ADJACENT TO PARKING LOT 128 SHRUBS PROVIDED ADJACENT TO LOADING AREA

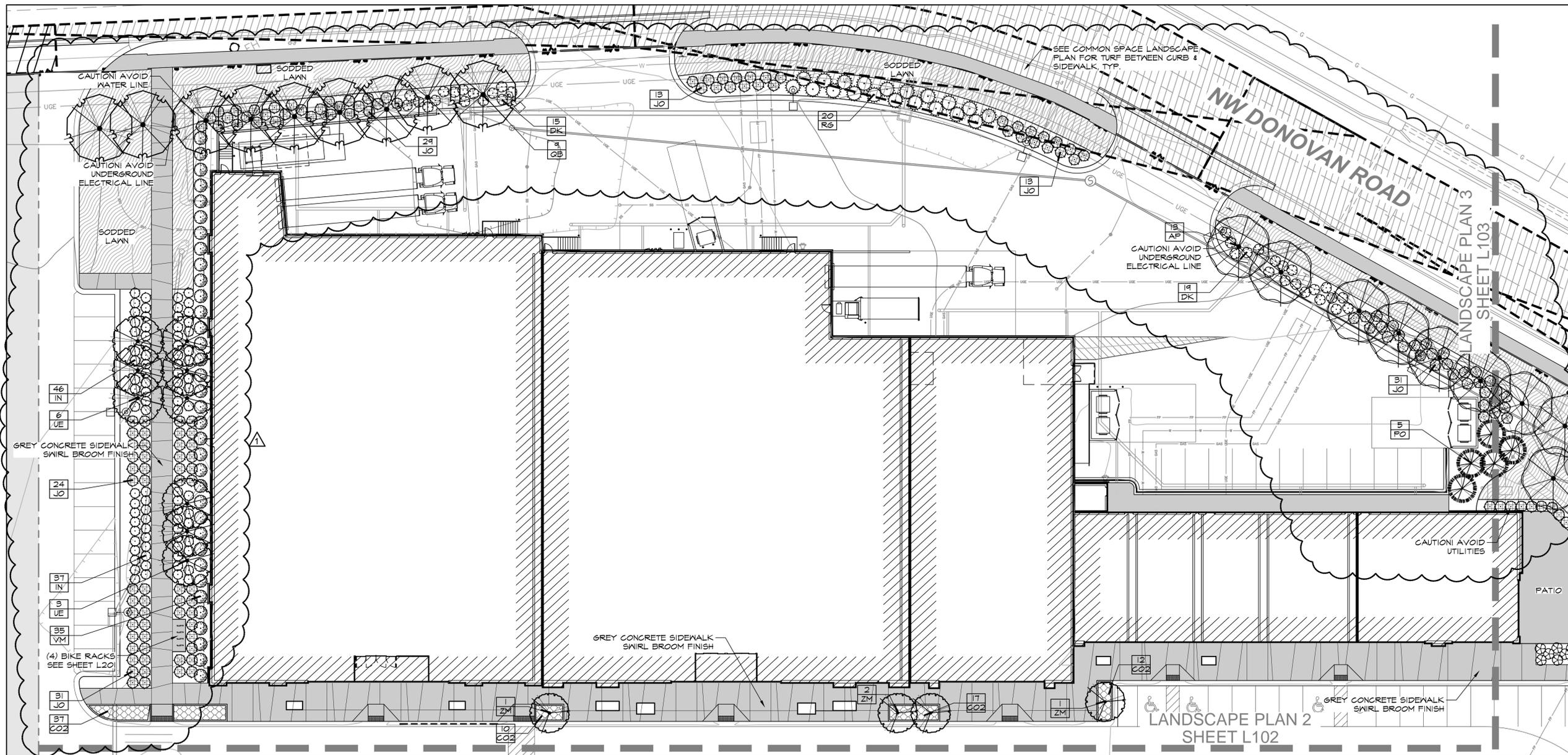
PLANT SIZE REQUIREMENTS (FOR THOSE PLANTS SATISFYING LEE'S SUMMIT REQUIREMENTS)

LANDSCAPE MATERIAL	SIZE REQUIREMENT (AT TIME OF PLANTING)
MEDIUM SHRUBS	18"-24" B&B OR 2-GAL. CONTAINER
LARGE SHRUBS	24"-30" B&B OR 5-GAL. CONTAINER
GROUNDCOVER	2" PEA POT
DECIDUOUS TREES	3" CALIPER
EVERGREEN TREES	8' HT. MIN.

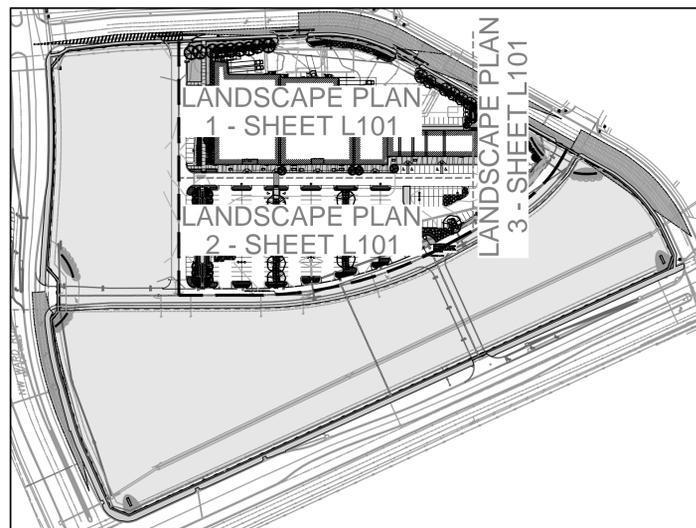
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AUGUST 28, 2019
OVERALL LANDSCAPE PLAN

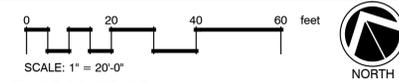
L100



LANDSCAPE PLAN - 1
SCALE: 1"=20'-0"



REFERENCE PLAN
SCALE: NTS



SCALE: 1"=20'-0"

PLANT SCHEDULE

TREES		CODE	BOTANICAL / COMMON NAME	CONT	GAL	SIZE
	AP	Acer truncatum 'Pacific Sunset'™ / Pacific Sunset Maple	B # B	3'	Gal	3' Cal
	PO	Picea omorika / Serbian Spruce	B # B			8' ht. min.
	PA	Platanus x acerifolia / London Plane Tree	B # B	3'	Gal	3' Cal
	GB	Quercus bicolor / Swamp White Oak	B # B	3'	Gal	3' Cal
	UE	Ulmus parvifolia 'Emer II'™ / Allee Elm	B # B	3'	Gal	3' Cal
	ZM	Zelkova serrata 'Musashino' / Sanleaf Zelkova	B # B	3'	Gal	3' Cal
SHRUBS		CODE	BOTANICAL / COMMON NAME	SIZE	FIELD2	FIELD3
	AK	Aronia melanocarpa Low Scope Mound / Low Scope Mound Chokeberry	#B			
	DK	Dierilla x Kodiak Orange / Kodiak Orange Bush Honeysuckle	#B			
	HB	Hydrangea paniculata 'Bobo' / Bobo Hydrangea	#B			
	IN	Ilex verticillata 'Nana' / Red Sprite Winterberry	#B			
	JO	Juniperus chinensis 'Gold Lace' / Gold Lace Juniper	#B			
	R6	Rhus aromatica 'Gro-Low' / Gro-Low Fragrant Sumac	#B			
	VM	Viburnum dentatum 'Blue Muffin' / Blue Muffin Viburnum	#B			
SHRUB AREAS		CODE	BOTANICAL / COMMON NAME	CONT	FIELD2	FIELD3
	CO2	Calamagrostis x acutiflora 'Overdam' / Overdam Feather Reed Grass	#1			
	SH	Sporobolus heterolepis 'Tara' / Prairie Dropseed	#1			

HATCH LEGEND

SYMBOL	DESCRIPTION
	SODDED LAWN
	SEPARATE SUBMITTAL

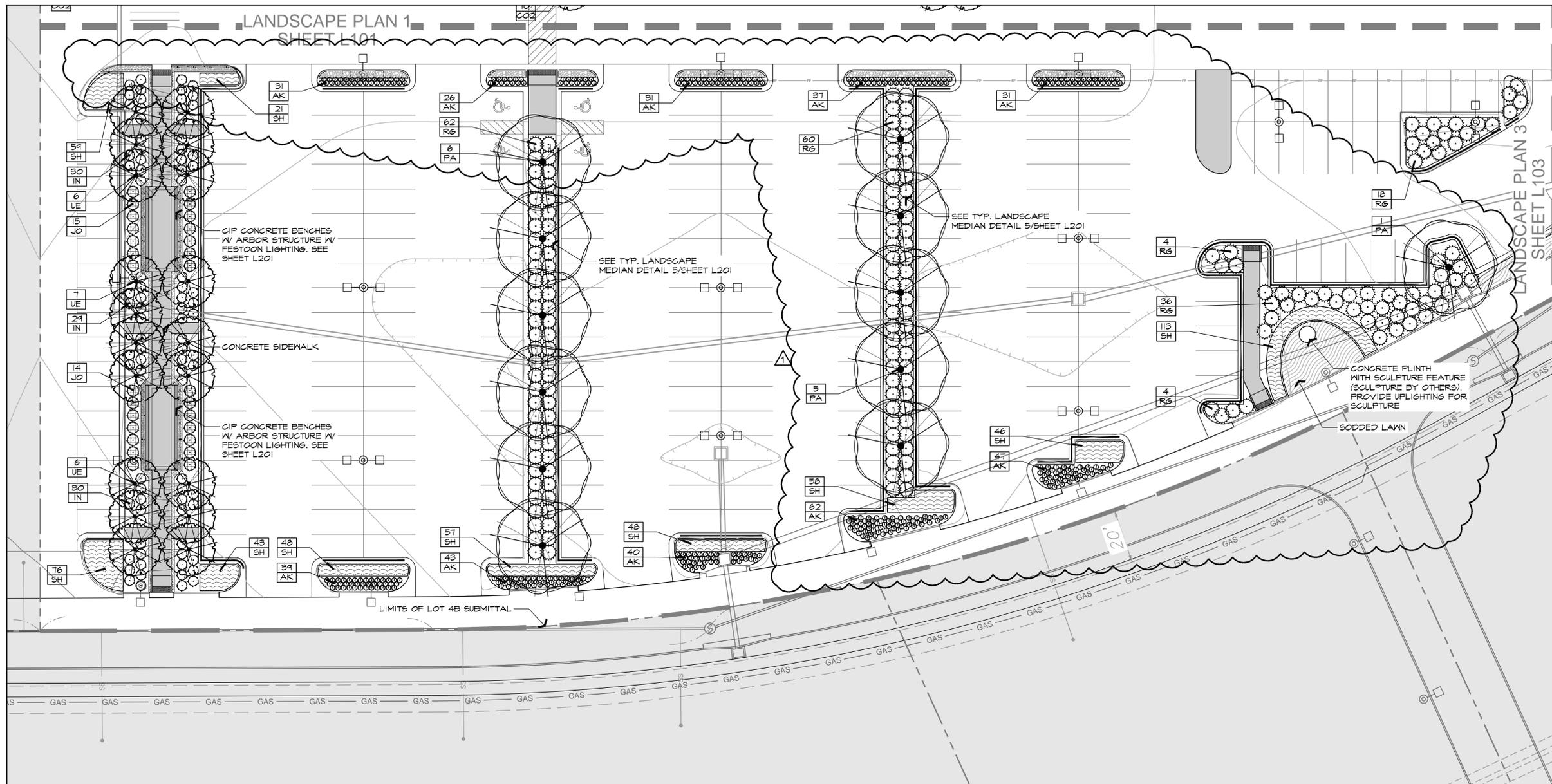


SUMMIT ORCHARDS
NW CHIPMAN RD & NW WARD RD
LEE'S SUMMIT, MISSOURI 64086
LOT 4B FINAL DEVELOPMENT PLAN

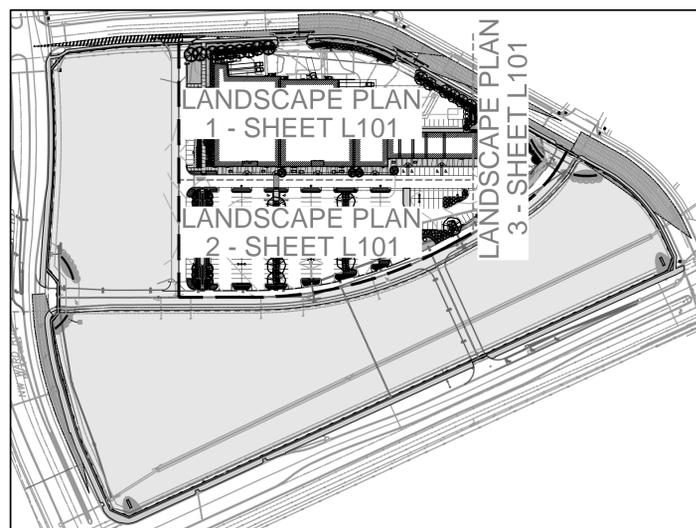
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AUGUST 28, 2019
LANDSCAPE PLAN

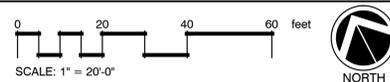
L101



LANDSCAPE PLAN - 2
SCALE: 1"=20'-0"



REFERENCE PLAN
SCALE: NTS



PLANT SCHEDULE

TREES	CODE	BOTANICAL / COMMON NAME	QNT	COL	SIZE
	AP	Acer truncatum 'Pacific Sunset'™ / Pacific Sunset Maple	B + B	3'	Gal
	PO	Picea amarica / Serbian Spruce	B + B	8'	ht. min.
	PA	Platanus x acerifolia / London Plane Tree	B + B	3'	Gal
	QB	Quercus bicolor / Swamp White Oak	B + B	3'	Gal
	UE	Ulmus parvifolia 'Emer III'™ / Allee Elm	B + B	3'	Gal
	ZM	Zelkova serrata 'Mesashino' / Sawleaf Zelkova	B + B	3'	Gal
SHRUBS	CODE	BOTANICAL / COMMON NAME	SIZE	FIELD2	FIELD3
	AK	Aronia melanocarpa 'Lan Scape Mound' / Lan Scape Mound Chokeberry	#3		
	DK	Dierilla x Kodiak Orange / Kodiak Orange Bush Honeysuckle	#3		
	IN	Ilex verticillata 'Nano' / Red Sprite Winterberry	#3		
	JO	Juniperus chinensis 'Gold Lace' / Gold Lace Juniper	#3		
	RG	Rhus aromatica 'Gro-Low' / Gro-Low Fragrant Sumac	#3		
	VM	Viburnum dentatum 'Blue Muffin' / Southern Arrowwood	#5		
SHRUB AREAS	CODE	BOTANICAL / COMMON NAME	QNT	FIELD2	FIELD3
	CO2	Calamagrostis x acutiflora 'Overdam' / Overdam Feather Reed Grass	#1		
	SH	Sporobolus heterolepis 'Tara' / Prairie Dropseed	#1		

HATCH LEGEND

SYMBOL	DESCRIPTION
	SODDED LAWN
	SEPARATE SUBMITTAL

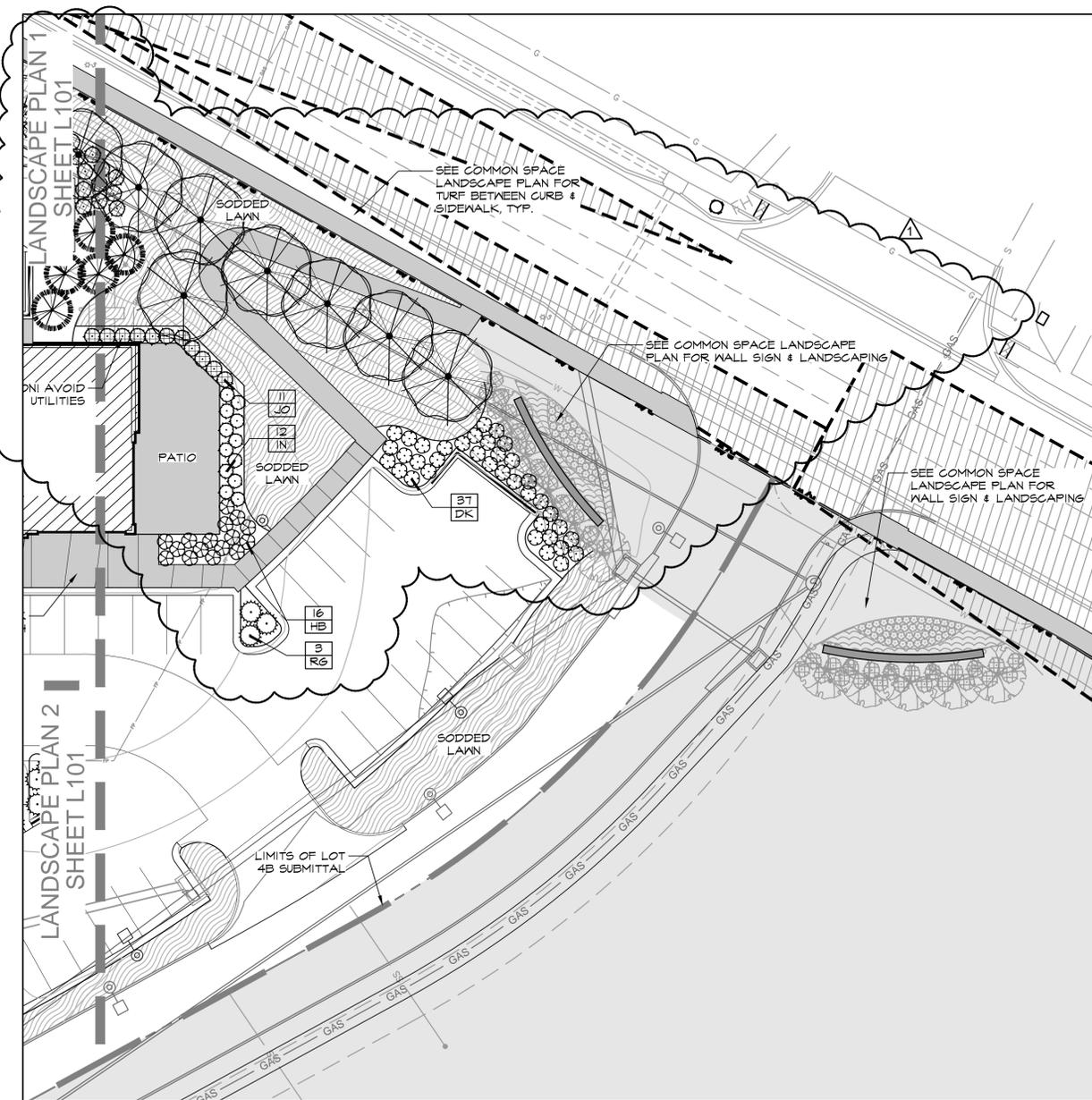


SUMMIT ORCHARDS
NW CHIPMAN RD & NW WARD RD
LEE'S SUMMIT, MISSOURI 64086
LOT 4B FINAL DEVELOPMENT PLAN

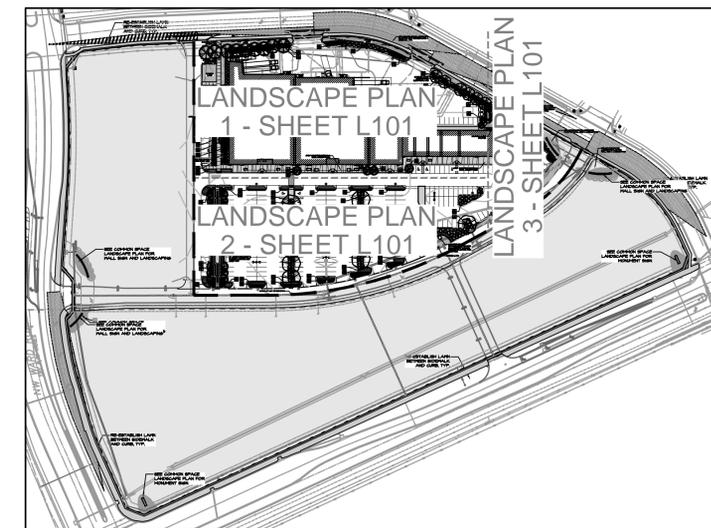
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LANDSCAPE PLAN

L102



LANDSCAPE PLAN - 3
SCALE: 1"=20'-0"



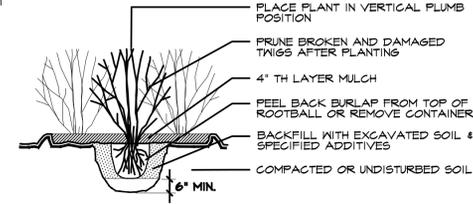
REFERENCE PLAN
SCALE: NTS

GENERAL NOTES

1. THE LANDSCAPE CONTRACTOR SHALL READ ALL LANDSCAPE PLANS, SPECIFICATIONS AND VISIT THE PROJECT SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BIDDING THIS PROJECT.
2. ANY AND ALL QUESTIONS CONCERNING THE LANDSCAPE PLANS AND SPECIFICATIONS SHALL BE DIRECTED TO THE LANDSCAPE ARCHITECT.
3. THE LANDSCAPE CONTRACTOR IS TO VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES (INCLUDING THOSE INDICATED ON THE PLAN) PRIOR TO INSTALLATION OF PLANT MATERIAL.
4. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING, MULCHING, AND OTHER REQUIREMENTS OF PLANT MATERIALS WHILE THEY ARE TEMPORARILY STORED ON OR OFF SITE.
5. THE LANDSCAPE CONTRACTOR SHALL COORDINATE LAYOUT OF PLANTING BEDS, PLANT MASSINGS, STAKED LOCATION OF TREES AND INSTALLATION OF PLANT MATERIAL WITH LANDSCAPE ARCHITECT PRIOR TO COMMENCEMENT OF WORK.
6. ALL PLANT MATERIAL (EXCEPT SHADE TREES) IS DELINEATED AT MATURE SIZE OF PLANT MATERIAL. SHADE TREES ARE DELINEATED AT 85% OF ACTUAL MATURE SIZE.
7. ALL LANDSCAPE MATERIAL SHALL MEET THE AMERICAN STANDARD FOR NURSERY STOCK (ANS Z60.1-1996) PER THE AMERICAN ASSOCIATION OF NURSERYMEN.
8. PER OWNER'S DIRECTION, THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO INSPECT ALL PLANT MATERIAL AT THE NURSERY, PRIOR TO SELECTION OR DIGGING.
9. CONDUCT PLANTING UNDER FAVORABLE WEATHER CONDITIONS DURING EITHER THE SPRING PLANTING SEASON (MARCH 1 TO JUNE 1) OR THE FALL PLANTING SEASON (SEPTEMBER 30 UNTIL FREEZING OF THE GROUND). DURING THE FALL PLANTING SEASON, CONIFEROUS MATERIAL PLANTING SHALL BE CONDUCTED AUGUST 15 TO OCTOBER 1. DEVIATION FROM THE ABOVE PLANTING DATES WILL ONLY BE PERMITTED WITH APPROVAL IN WRITING BY THE LANDSCAPE ARCHITECT.
10. THE PLANTING SOIL MIXTURE FOR ALL TREE PLANTINGS SHALL INCLUDE SOIL EXCAVATED FROM THE HOLE. RATIO: 50% VIRGIN SOIL + 50% AMENDED TOP SOIL.
11. ROOT STIMULATOR SHALL BE APPLIED TO ALL PLANT MATERIALS WITH THE EXCEPTION OF LAWN AREAS. APPLY AS PER THE MANUFACTURER'S SPECIFICATIONS.
12. THE LANDSCAPE CONTRACTOR SHALL RESTORE FINISH GRADES IN ALL PLANTING AREAS (PER GRADING PLANS) WHICH MAY HAVE BEEN DISTURBED DURING PLANTING OPERATIONS.
13. ALL TREE SAUCERS AND PLANTING BEDS ARE TO BE MULCHED WITH A MINIMUM OF 3" DOUBLE-GROUND HARDWOOD MULCH (COLOR DYED DARK BROWN). LANDSCAPE CONTRACTOR TO PROVIDE MULCH SAMPLE TO LANDSCAPE ARCHITECT FOR REVIEW PRIOR TO INSTALLATION. WHERE PLANTING BEDS ARE ADJACENT TO WALKS AND CURBS THE SOIL LEVEL SHALL BE 3" LOWER TO ALLOW FOR MULCH LAYERS WHERE SOD IS INDICATED ITS THICKNESS SHALL ALSO BE ACCOUNTED FOR SO THAT THE SOIL SURFACE IN THE SOD IS 1/2" BELOW THE HARDSCAPE SURFACE.
14. ALL SHRUB/PERENNIAL PLANTING BEDS SHALL BE TREATED WITH A PRE-EMERGENT HERBICIDE SUCH AS TRIFLURAN OR EQUAL. APPLY PER MANUFACTURER'S SPECIFICATIONS. THE PRE-EMERGENT SHALL NOT BE APPLIED UNTIL AFTER ALL PLANTING WITHIN THESE AREAS IS COMPLETE BUT BEFORE THESE AREAS ARE MULCHED. DO NOT DISTURB AREAS AFTER APPLICATION. WATER IN AS DIRECTED.
15. MULCH, STAKES, GUY WIRES, PRE-EMERGENT HERBICIDES, ETC. SHALL BE SUBSIDIARY TO INDIVIDUAL PLANTS.
16. ALL SLOPES THAT EXCEED A 3:1 GRADE SHALL BE PROTECTED WITH AN EROSION CONTROL BLANKET WITH NORTH AMERICAN GREEN 5150. INSTALL PER THE MANUFACTURER'S SPECIFICATIONS.
17. LABEL EACH TREE AND SHRUB WITH A SECURELY ATTACHED, WATERPROOF TAG BEARING LEGIBLE DESIGNATION OF BOTH BOTANICAL AND COMMON NAME. LABEL EACH ORNAMENTAL GRASS, GROUNDCOVER, PERENNIAL AND ANNUAL WITH THE LABEL PROVIDED BY THE ORIGINAL GROWER OF THE PLANT. LABELS SHALL NOT BE REMOVED UNTIL AFTER PROVISIONAL ACCEPTANCE BY LANDSCAPE ARCHITECT.
18. STAKES AND GUY WIRES SHALL BE REMOVED AT THE END OF ONE FULL GROWING SEASON.
19. LOOSEN SOIL FOR ALL PLANTING ISLANDS AND SHRUB/PERENNIAL BEDS TO A DEPTH OF 12". ALL AREAS DENOTED AS SOD LAWN AREAS) SHALL HAVE A 6" MINIMUM TOPSOIL LAYER. TOPSOIL SHALL BE LAID IN 3" LIFTS. IN AREAS WHERE CONSTRUCTION GRADING HAS NOT OCCURRED AND THE VIRGIN GRADES YET EXIST, THE TOPSOIL LAYER MAY NOT BE REQUIRED BASED ON THE DECISION OF THE LANDSCAPE ARCHITECT.
20. TOPSOIL SHALL BE FERTILE NATURAL TOPSOIL. TYPICAL OF THE LOCALITY, OBTAINED FROM WELL DRAINED AREAS. STOCKPILED TOPSOIL MAY BE USED. IT SHALL BE WITHOUT ADMIXTURE OF SUBSOIL OR SLAG AND SHALL BE FREE OF STONES, LUMPS, STICKS, PLANTS OR THEIR ROOTS. TOXIC SUBSTANCES OR OTHER EXTRANEOUS MATTER THAT MAY BE HARMFUL TO PLANT GROWTH OR WOULD INTERFERE WITH FUTURE MAINTENANCE. TOPSOIL PH RANGE SHALL BE 5.5 TO 7.0.
21. THERE SHALL BE NO ADDITIONS, DELETIONS OR SUBSTITUTION OF PLANT MATERIAL SPECIES WITHOUT THE WRITTEN APPROVAL BY THE

22. IN THE CONDITION WHERE THE PLANT MATERIAL HAS BEEN SUPPLIED BY THE OWNER THROUGH A PLANT PROCUREMENT PROGRAM WITH A THREE (3) YEAR WARRANTY, THE LANDSCAPE CONTRACTOR'S WARRANTY OF PLANT MATERIAL SHALL BEGIN FROM THE TIME OF HANDLING PLANT MATERIAL AT TIME OF DELIVERY THROUGH INSTALLATION AND END AFTER SUBSTANTIAL COMPLETION AND FINAL RAINFALL APPROVAL BY LANDSCAPE ARCHITECT.
23. THE LANDSCAPE CONTRACTOR WILL BE RESPONSIBLE FOR THE COLLECTION, REMOVAL, AND PROPER DISPOSAL OF ANY AND ALL DEBRIS GENERATED DURING THE INSTALLATION OF THE LANDSCAPE CONSTRUCTION.
24. ALL LANDSCAPE AREAS SHALL BE WATERED BY AN AUTOMATIC IRRIGATION SYSTEM. IRRIGATION SYSTEM SHALL UTILIZE A RAIN SENSOR. DRIP IRRIGATION SHALL BE UTILIZED AT LANDSCAPE BEDS.
25. COORDINATION WITH THE OWNER AND GENERAL CONTRACTOR FOR SLEEVE LOCATIONS AND TIMING OF SLEEVE INSTALLATION. ALL SLEEVING REQUIRED UNDER HARDSCAPE SURFACES FOR THE IRRIGATION SYSTEM SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR.
26. COORDINATE LANDSCAPE PLANTING WITH IRRIGATION CONTRACTOR. THE TREE PLANTING SHALL BE IN PLACE BEFORE IRRIGATION LINE ROUTING BEGINS. WATER TREES BY HAND UNTIL IRRIGATION SYSTEM IS FULLY FUNCTIONAL. SHRUBS AND PERENNIALS SHALL NOT BE INSTALLED UNTIL THE IRRIGATION SYSTEM IS FULLY FUNCTIONAL. THE IRRIGATION SYSTEM SHALL BE COMPLETE AND FULLY FUNCTIONAL IN ALL LAWN AREAS BEFORE SOD IS PLACED.

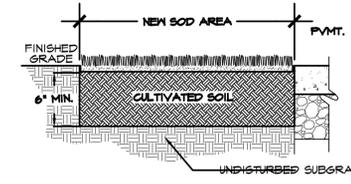
- SHRUB PLANTING NOTES:**
- 1) SET SHRUB AT SAME DEPTH AT WHICH IT GREW IN THE FIELD OR CONTAINER.
 - 2) PRUNE, THIN & SHAPE SHRUBS IN ACCORDANCE W/ STANDARD HORTICULTURAL PRACTICE.
 - 3) BALL OF PLANT TO BE KEPT MOIST AND PROTECTED FROM DAMAGE PRIOR TO PLANTING. ADD ROOT STIMULATOR TO SURFACE IMMEDIATELY AFTER PLANTING AS PER MANUFACTURER'S RECOMMENDATIONS.
 - 4) WHEN BACKFILL IS 2/3 COMPLETE, WATER THOROUGHLY UNTIL NO MORE IS ABSORBED.



1 SHRUB PLANTING
SCALE: N.T.S.

- NOTE:** EDGE SHALL HAND DIG IN SMOOTH CURVING SHAPES WHERE INDICATED.
-

2 SHOVEL-CUT EDGING
SCALE: N.T.S.



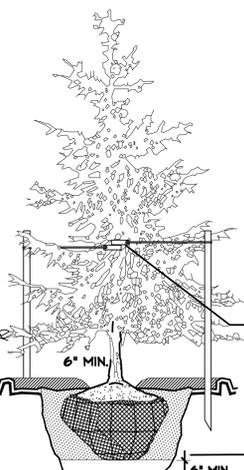
3 SOD INSTALLATION
SCALE: N.T.S.

- SOD INSTALLATION NOTES:**
- 1) FINISHED GRADES SHALL BE ACCURATE.
 - 2) CULTIVATE ENTIRE AREA TO A MINIMUM 6" DEPTH. EXCEPTIONS TO AREAS MAY BE MADE IF TREE ROOTS ARE ENCOUNTERED WITHIN THE DRIFLINE OF EXISTING TREES. HAND RAKE SMOOTH.
 - 3) ADD ADDITIVES (AS PER SOIL TEST RECOMMENDATIONS) AND TILL INTO SOIL.
 - 4) LAY AND ROLL SOD. WATER THOROUGHLY.

HATCH LEGEND

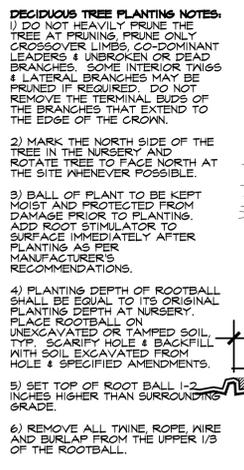
SYMBOL	DESCRIPTION
	SODDED LAWN
	SEPARATE SUBMITTAL

- EVERGREEN TREE PLANTING**
- 1) DO NOT HEAVILY PRUNE THE TREE AT PRUNING. PRUNE ONLY CROSSOVER LINES, CO-DOMINANT LEADERS & UNBROKEN OR DEAD BRANCHES. SOME INTERIOR TWIGS & LATERAL BRANCHES MAY BE PRUNED IF REQUIRED. DO NOT REMOVE THE TERMINAL BUDS OF THE BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.
 - 2) MARK THE NORTH SIDE OF THE TREE IN THE NURSERY AND ROTATE TREE TO FACE NORTH AT THE SITE WHENEVER POSSIBLE.
 - 3) BALL OF PLANT TO BE KEPT MOIST AND PROTECTED FROM DAMAGE PRIOR TO PLANTING. ADD ROOT STIMULATOR TO SURFACE IMMEDIATELY AFTER PLANTING AS PER MANUFACTURER'S RECOMMENDATIONS.
 - 4) PLANTING DEPTH OF ROOTBALL SHALL BE EQUAL TO ITS ORIGINAL PLANTING DEPTH AT NURSERY. PLACE ROOTBALL ON UNEXCAVATED OR TAMPED SOIL. TYP. SCARIFY HOLE & BACKFILL WITH SOIL EXCAVATED FROM HOLE & SPECIFIED AMENDMENTS.
 - 5) SET TOP OF ROOT BALL 1-2 INCHES HIGHER THAN SURROUNDING GRADE.
 - 6) REMOVE ALL TWINE, ROPE, WIRE AND BURLAP FROM THE UPPER 1/3 OF THE ROOTBALL.



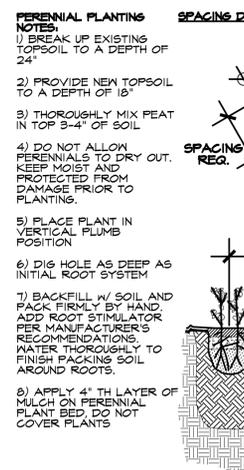
4 EVERGREEN TREE PLANTING
SCALE: N.T.S.

- 1) EACH TREE MUST BE PLANTED SUCH THE TRUNK FLARE IS VISIBLE AT THE TOP OF THE ROOT BALL. TREES WHERE THE FLARE IS NOT VISIBLE SHALL BE REJECTED. DO NOT COVER THE TOP OF THE ROOT BALL W/ SOIL.
- 2) SOAK BACKFILL AFTER PLANTING.
- 3) MARK THE NORTH SIDE OF THE TREE IN THE NURSERY AND ROTATE TREE TO FACE NORTH AT THE SITE WHENEVER POSSIBLE.
- 4) BALL OF PLANT TO BE KEPT MOIST AND PROTECTED FROM DAMAGE PRIOR TO PLANTING. ADD ROOT STIMULATOR TO SURFACE IMMEDIATELY AFTER PLANTING AS PER MANUFACTURER'S RECOMMENDATIONS.
- 5) SET TOP OF ROOT BALL 1-2 INCHES HIGHER THAN SURROUNDING GRADE.
- 6) REMOVE ALL TWINE, ROPE, WIRE AND BURLAP FROM THE UPPER 1/3 OF THE ROOTBALL.



5 DECIDUOUS TREE PLANTING
SCALE: N.T.S.

- 1) EACH TREE MUST BE PLANTED SUCH THE TRUNK FLARE IS VISIBLE AT THE TOP OF THE ROOT BALL. TREES WHERE THE FLARE IS NOT VISIBLE SHALL BE REJECTED. DO NOT COVER THE TOP OF THE ROOT BALL W/ SOIL.
- 2) SOAK BACKFILL AFTER PLANTING.
- 3) MARK THE NORTH SIDE OF THE TREE IN THE NURSERY AND ROTATE TREE TO FACE NORTH AT THE SITE WHENEVER POSSIBLE.
- 4) BALL OF PLANT TO BE KEPT MOIST AND PROTECTED FROM DAMAGE PRIOR TO PLANTING. ADD ROOT STIMULATOR TO SURFACE IMMEDIATELY AFTER PLANTING AS PER MANUFACTURER'S RECOMMENDATIONS.
- 5) SET TOP OF ROOT BALL 1-2 INCHES HIGHER THAN SURROUNDING GRADE.
- 6) REMOVE ALL TWINE, ROPE, WIRE AND BURLAP FROM THE UPPER 1/3 OF THE ROOTBALL.



6 PERENNIAL PLANTING
SCALE: N.T.S.



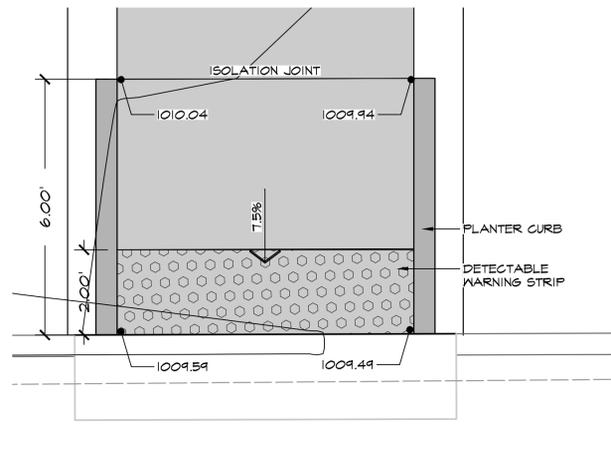
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SUMMIT ORCHARDS
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LOT 4B FINAL DEVELOPMENT PLAN

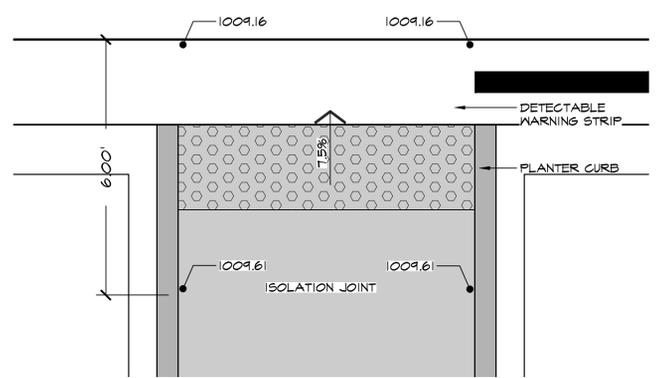
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△ FPD REVISIONS 9/20/19

AUGUST 28, 2019
LANDSCAPE PLAN

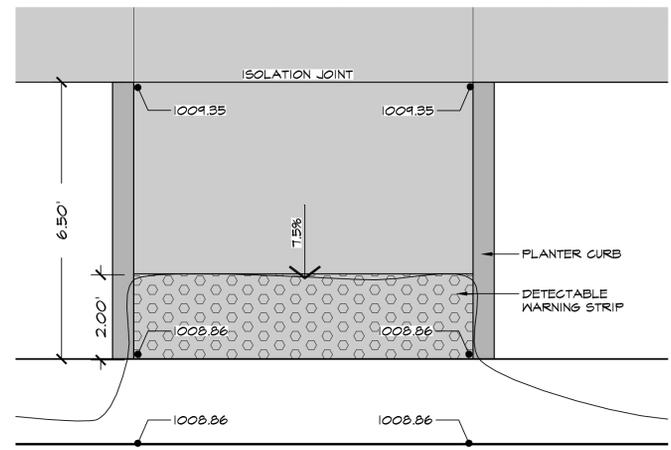
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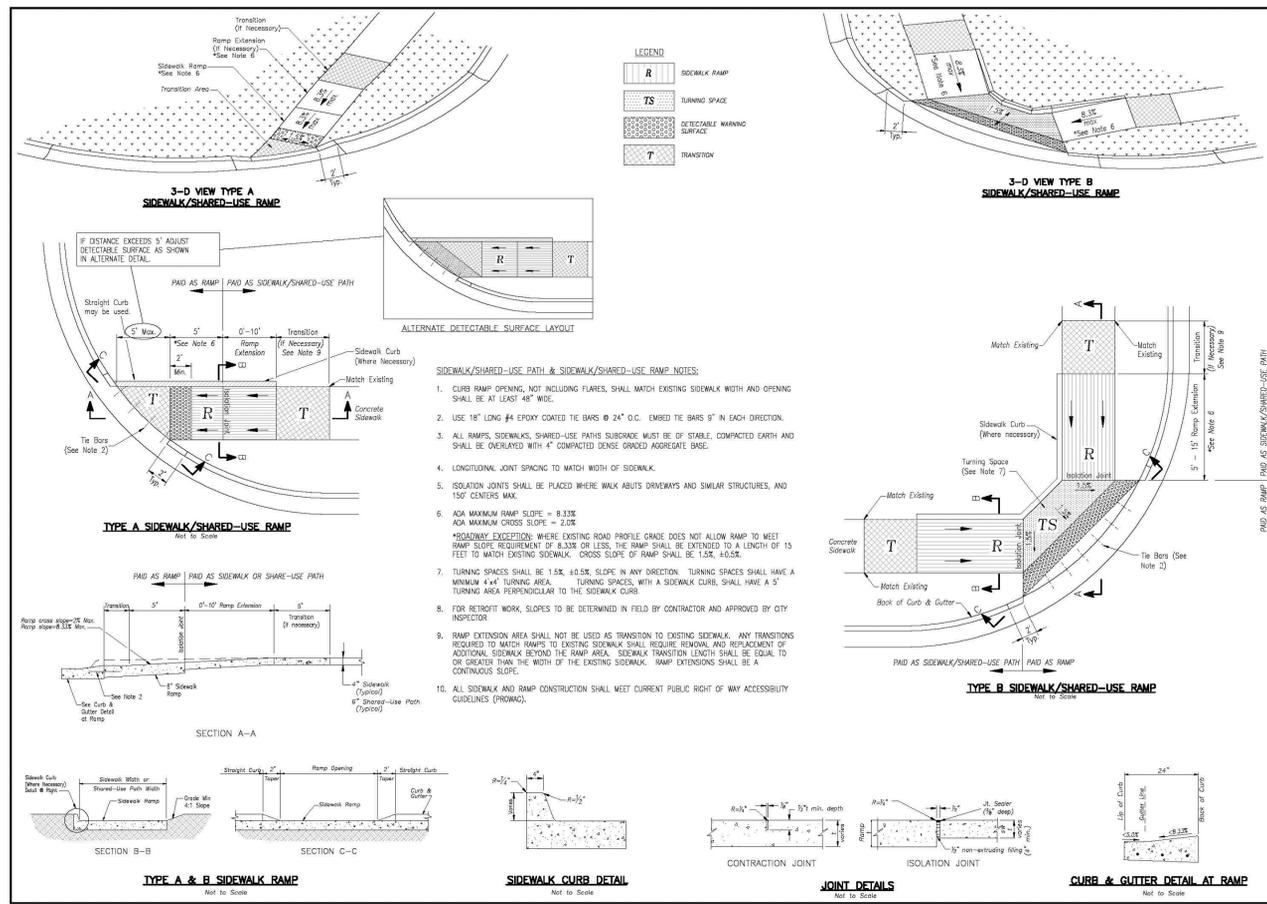
1 ADA CURB RAMP #1
SCALE: 1/2" = 1'-0" ENLARGED PLAN



2 ADA CURB RAMP #2
SCALE: 1/2" = 1'-0" ENLARGED PLAN



3 ADA CURB RAMP #3
SCALE: 1/2" = 1'-0" ENLARGED PLAN



4 CITY STANDARD RAMP DETAILS
SCALE: N.T.S CITY DETAILS

STANDARD DETAILS
 CITY OF LEE'S SUMMIT, MO
 LEE'S SUMMIT, JACKSON COUNTY, MO
 ADA RAMP RETROFIT DETAIL
 GEN-3A

U2RACK

Durable and Maintenance-Free
 Highland inverted U/2 bicycle racks provide leading edge technology and offer the best solution for short-term bicycle parking. The one-bend bike rack design accommodates two bicycles per rack and is widely regarded as the recommended standard for space efficiency and bicycle protection. Highland bike racks are completely coated with a thick, rubberized plastisol coating over schedule 40 steel pipe for maximum corrosion resistance, impact resistance, and protection of bicycle finish. This combination has proven to resist scratches and dents better than any other finish.

In-ground Installation
 Recommended installation methods for in-ground style rack: If installing on existing concrete, Highland U/2 Bike Racks can be anchored with a non-shrink grout poured into a 4" or 6" diameter by 12" deep core drilled holes. In-ground installations for new improved surfaces 9" Sonotube forms can be put in place to create 18" footings. U/2 inverted-U racks come in optional square pipe or in two-bend configurations.

In-ground Installation
 This is the standard for new construction and the most secure type of inverted-U installation. Existing concrete surface may be core drilled with a 3"-4" hole saw and filled with quikrete or a construction adhesive.

Superior Design for Better Safety
 Highland U/2 racks provide lean to support with more stability for the bicycle frame than front wheel holders or ribbon type racks which do not support the bike frame in two places. The clean lines of the One-Bend inverted-U rack design are safer for pedestrian traffic with bikes parked securely in a uniform fashion. U/2 racks accommodate more bicycles per square foot to increase bike parking capacity. Bicycle racks are typically installed directly into a slab which results in additional strength and permanence to bolster user confidence. Bicycle frame should be secured to the rack with a standard U lock for optimal security.

Aesthetically Pleasing
 The Highland U/2 rack is symmetrically designed to resemble the commonly used "U" locks and are aesthetically pleasing to blend with any environment. All racks leave the bicycle vulnerable to theft of components and vandalism, bike lockers are the preferred choice for protection and security. Coating of metal racks vary widely, the best long term solution is a thick jacketed plastisol coating as provided by Cycle-Cor. Our standard U/2 rack finish is a black plastisol coating, polyester powder coat finishes are available in a variety of custom colors. Cycle offers the best finishes that maintain quality that an owner can depend on for years.

5 BIKE RACK
SCALE: N.T.S MANUFACTURER'S SPECIFICATIONS

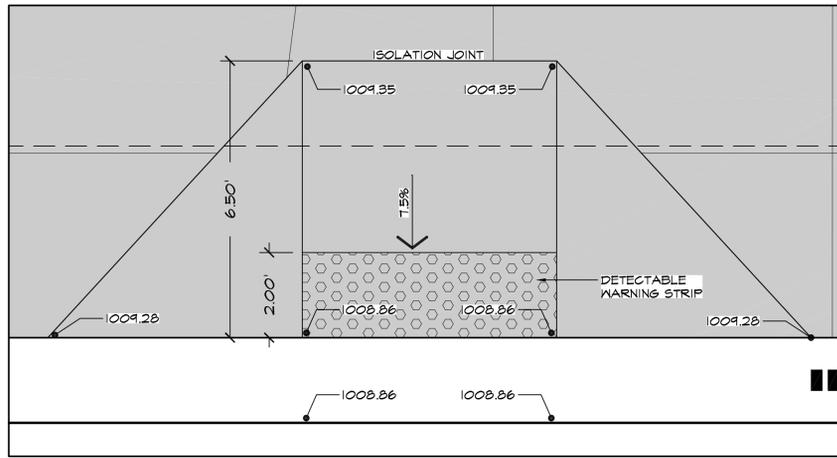


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 LOT 4B FINAL DEVELOPMENT PLAN

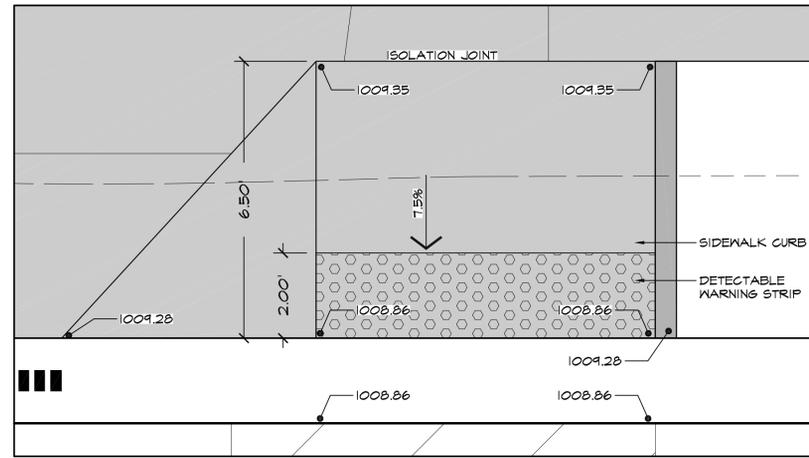
REVISION:
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AUGUST 28, 2019
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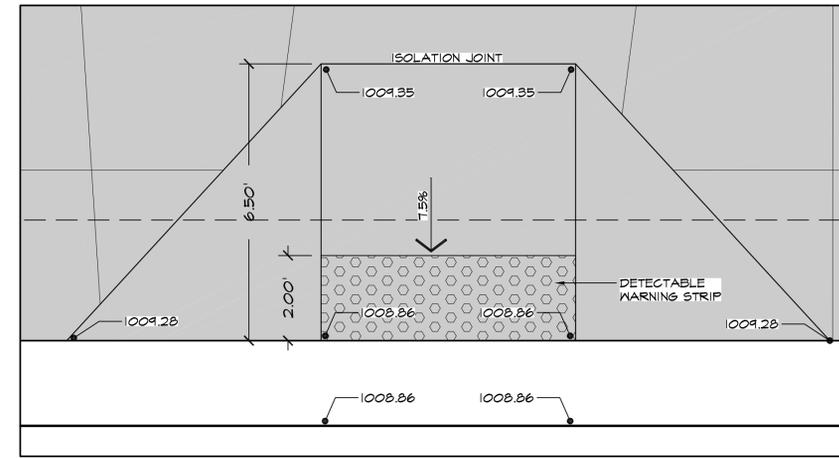
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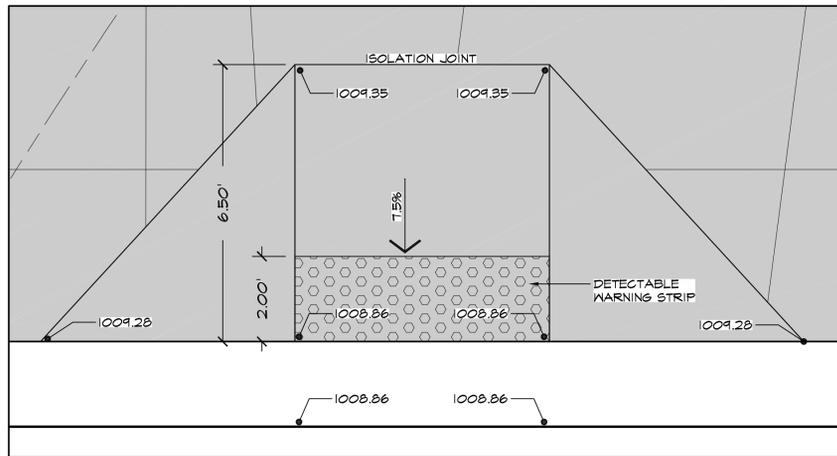
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SCALE: 1/2" = 1'-0" ENLARGED PLAN



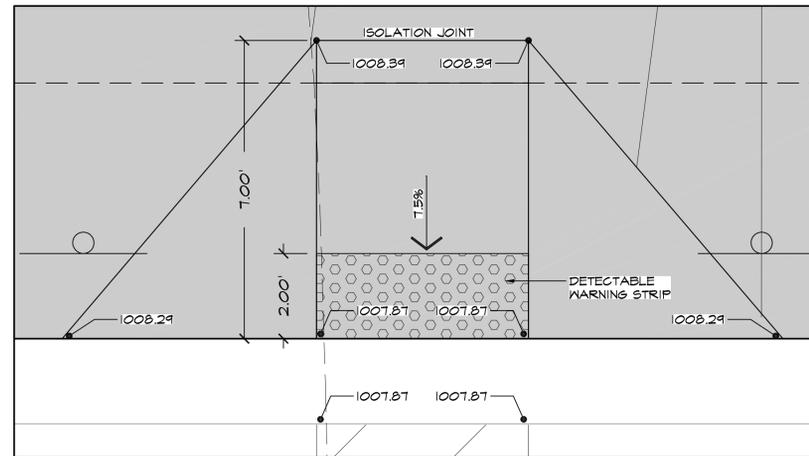
2 ADA CURB RAMP #5
SCALE: 1/2" = 1'-0" ENLARGED PLAN



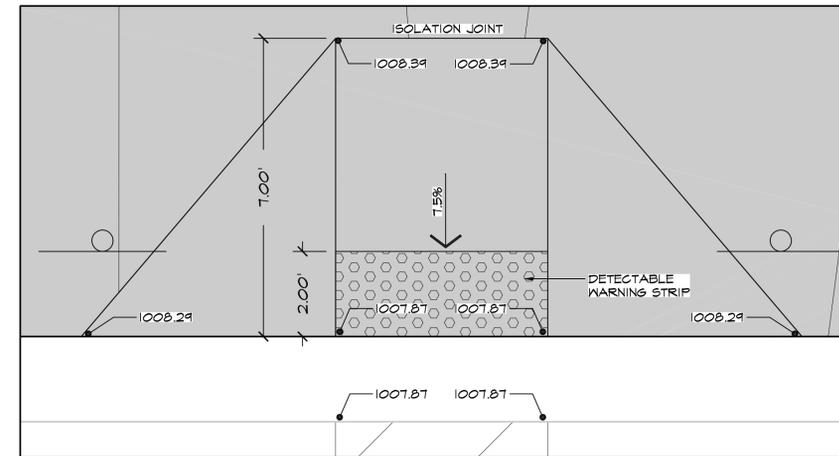
3 ADA CURB RAMP #6
SCALE: 1/2" = 1'-0" ENLARGED PLAN



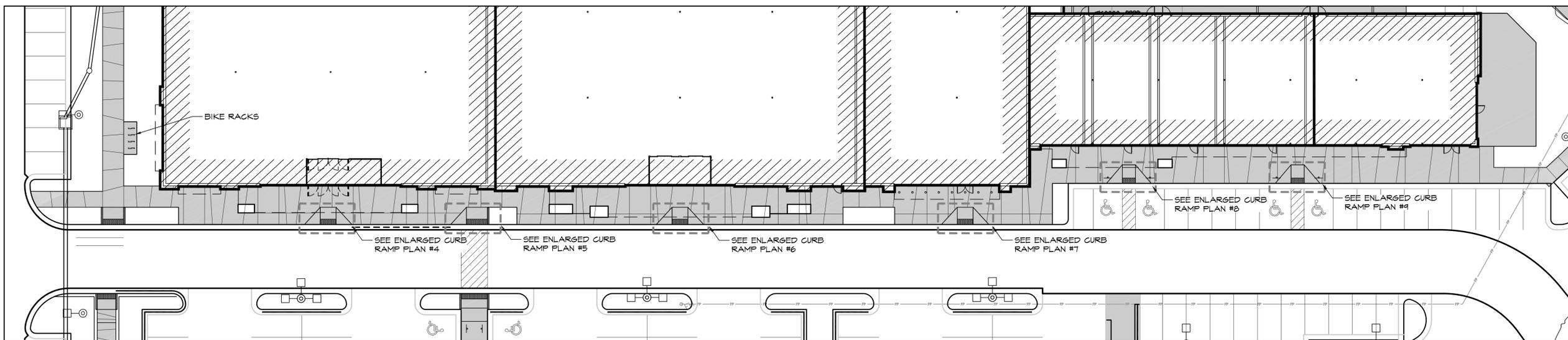
4 ADA CURB RAMP #7
SCALE: 1/2" = 1'-0" ENLARGED PLAN



5 ADA CURB RAMP #8
SCALE: 1/2" = 1'-0" ENLARGED PLAN



6 ADA CURB RAMP #9
SCALE: 1/2" = 1'-0" ENLARGED PLAN



7 STOREFRONT REFERENCE PLAN
SCALE: 1" = 20'-0"



9/20/19

SUMMIT ORCHARDS
NW CHIPMAN RD & NW WARD RD
LEE'S SUMMIT, MISSOURI 64086
LOT 4B FINAL DEVELOPMENT PLAN

REVISION:
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SITE DETAILS

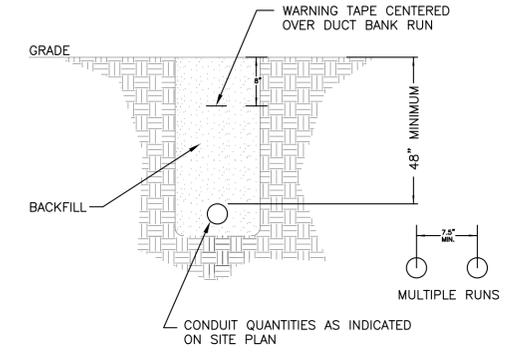
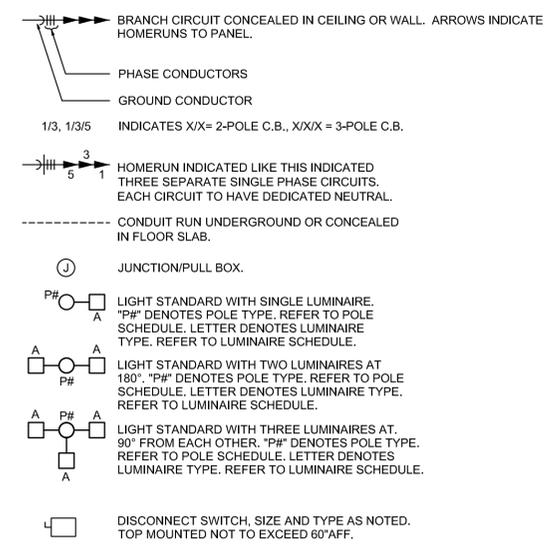
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ELECTRICAL GENERAL PROVISIONS

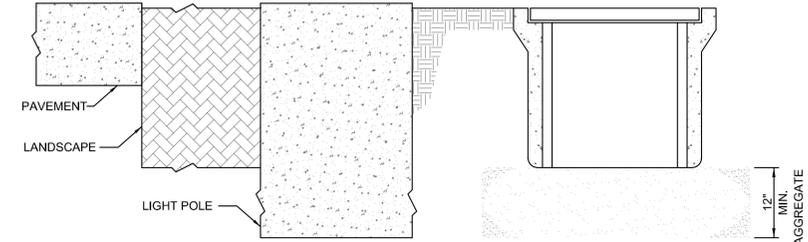
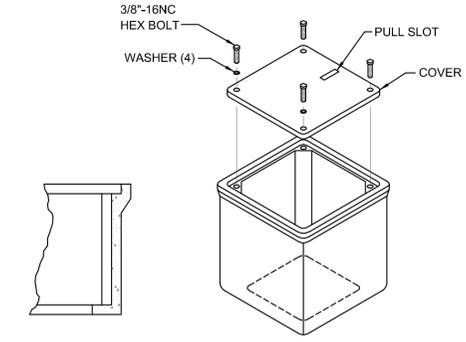
- 1.01 DESCRIPTION:
- A. DIVISION 26 SHALL BE GOVERNED BY ALL APPLICABLE PROVISIONS OF THE CONTRACT DOCUMENTS. THE ELECTRICAL CONTRACTOR SHALL FURNISH, INSTALL AND CONNECT ALL MATERIALS, EQUIPMENT, APPARATUS, ELECTRICAL SYSTEMS AND INCIDENTALS REQUIRED FOR COMPLETE AND WORKING INSTALLATION. THE CONTRACTOR SHALL SUPPLY ALL NECESSARY LABOR, EQUIPMENT, TOOLS, INSURANCE, TAXES SERVICES; AND SHALL ASSUME FULL RESPONSIBILITY FOR ALL OBLIGATIONS ASSOCIATED WITH COMPLETION OF ELECTRICAL WORK AS PROVIDED BY THE CONTRACT DOCUMENTS.
- 1.02 STANDARDS, REGULATIONS AND CODES:
- A. THE WORK SHALL COMPLY WITH THE EDITION OF THE APPLICABLE STANDARDS, REGULATIONS AND CODES CURRENTLY IN FORCE OF ALL STATE AND LOCATION AUTHORITIES HAVING JURISDICTION. WHERE QUANTITIES, SIZES, OR OTHER REQUIREMENTS INDICATED ON THE DRAWINGS OR HEREIN SPECIFIED ARE IN EXCESS OF THE STANDARD OR CODE REQUIREMENTS, THE SPECIFICATIONS AND/OR DRAWINGS SHALL GOVERN. IN THE ABSENCE OF OTHER APPLICABLE LOCAL CODES, ACCEPTABLE TO THE ARCHITECT/ENGINEER, THE NATIONAL ELECTRICAL CODE SHALL APPLY TO THIS WORK.
 - B. THE CONTRACTOR SHALL COMPLY WITH RULES AND REGULATIONS OF PUBLIC UTILITIES AND MUNICIPAL DEPARTMENTS AFFECTED BY CONNECTIONS OF SERVICES. THE CONTRACTOR SHALL PAY ALL FEES ASSOCIATED THERE WITH.
 - C. THE ELECTRICAL CONTRACTOR SHALL BE LICENSED TO PERFORM ELECTRICAL WORK IN THE MUNICIPALITY IN WHICH THE PROJECT IS LOCATED.
 - D. ALL PRODUCTS AND TYPES OF CONSTRUCTION SHALL MEET OR EXCEED THE LATEST EDITION OF APPLICABLE STANDARDS OF MANUFACTURER, TESTING, PERFORMANCE AND INSTALLATION.
- 1.03 LOCAL CONDITIONS:
- A. THE CONTRACTOR SHALL CAREFULLY EXAMINE THE LOCAL CONDITIONS AND EXISTING INSTALLATIONS AND SHALL BECOME THOROUGHLY FAMILIAR WITH ALL EXISTING CONDITIONS WHICH MAY AFFECT ASSOCIATED WORK. THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES AND PROTECT THEM DURING THE EXECUTION OF THE WORK.
 - B. THE CONTRACTOR SHALL EXAMINE THE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS TO BECOME FAMILIAR WITH THE TYPE OF CONSTRUCTION, MATERIALS, AND EQUIPMENT TO BE USED FOR ALL WORK AND HOW IT WILL AFFECT THE INSTALLATION OF THIS CONTRACT.
 - C. BY THE ACT OF SUBMITTING A BID, THE CONTRACTOR WILL BE DEEMED TO HAVE MADE SUCH EXAMINATION, TO HAVE ACCEPTED SUCH CONDITIONS, TO HAVE MADE ALLOWANCE THEREFOR, AND INCLUDED ALL COSTS IN PROPOSAL. FAILURE TO DETERMINE EXISTING CONDITIONS WILL NOT BE CONSIDERED A BASIS FOR THE GRANTING OF ADDITIONAL COMPENSATION.
- 1.04 WORKMANSHIP:
- A. ALL WORK PERFORMED UNDER THIS CONTRACT SHALL PROVIDE A NEAT AND "WORKMANLIKE" APPEARANCE WHEN COMPLETED, TO THE SATISFACTION OF THE ARCHITECT/ENGINEER. THE COMPLETE INSTALLATION SHALL FUNCTION AS DESIGNED AND INTENDED WITH RESPECT TO EFFICIENCY, CAPACITY, AND NOISE LEVEL, ETC.
- 1.05 CUTTING AND PATCHING:
- A. ALL NECESSARY CUTTING, DRILLING AND PATCHING SHALL BE PROVIDED BY THIS CONTRACTOR. STRUCTURAL MEMBERS SHALL NOT BE DISTURBED WITHOUT PRIOR APPROVAL OF THE ARCHITECT/ENGINEER. ALL AREAS DISTURBED BY WORK PERFORMED UNDER THIS CONTRACT SHALL BE NEATLY REPAIRED AND REFINISHED TO THE CONDITION OF ADJOINING SURFACES IN A MANNER SUITABLE TO THE ARCHITECT/ ENGINEER.
- 1.06 OPERATION DURING CONSTRUCTION:
- A. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND OPERATION, SERVICE AND MAINTENANCE OF ALL NEW EQUIPMENT DURING CONSTRUCTION AND PRIOR TO ACCEPTANCE BY THE OWNER OF THE COMPLETED PROJECT. WARRANTY PERIODS SHALL NOT COMMENCE UNTIL FINAL ACCEPTANCE BY THE OWNER.
- 1.07 SAFETY REGULATIONS:
- A. ALL ELECTRICAL WORK SHALL BE PERFORMED IN COMPLIANCE WITH ALL APPLICABLE GOVERNING SAFETY REGULATIONS, INCLUDING OSHA REGULATIONS. PROVIDE SAFETY LIGHTS, GUARDS AND SIGNS REQUIRED.
- 1.08 HOUSEKEEPING:
- A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING STOCKS OF MATERIAL AND EQUIPMENT STORED ON THE PREMISES IN A NEAT AND ORDERLY MANNER.
 - B. THE CONTRACTOR SHALL CLEAN AND MAINTAIN OWN PORTION OF THE WORK AS SPECIFIED IN THE GENERAL CONDITIONS.
 - C. THE CONTRACTOR SHALL REMOVE FROM THE PREMISES ALL WASTE MATERIAL PRESENT AS A RESULT OF ASSOCIATED WORK.
- 1.09 CONNECTION AND ALTERATION TO EXISTING SYSTEMS:
- A. CONNECTION TO THE EXISTING BUILDING ELECTRICAL, MUST BE ACCOMPLISHED UNDER THIS CONTRACT. SYSTEM "DOWNTIME" DUE TO CONNECTION SHALL BE KEPT TO AN ABSOLUTE MINIMUM. THE OWNER'S REPRESENTATIVE SHALL JUDGE IF AT WHAT TIME, AND FOR WHAT LENGTH OF TIME A SHUT-DOWN CAN BE TOLERATED.
 - B. PROVIDE ALL TEMPORARY PIPING AND WIRING SYSTEMS REQUIRED DURING CONSTRUCTION IN ORDER TO KEEP ALL EXISTING SYSTEMS FUNCTIONING.
 - C. DEMOLITION, CUTTING AND PATCHING TO RESTORE SURFACES TO ORIGINAL CONDITION AS NECESSITATED FOR ACCESS TO WORK PERFORMED BY THE CONTRACTOR OR ASSOCIATED SUBCONTRACTORS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
 - D. WHEN ADDING BREAKER(S) TO AN EXISTING PANELBOARD, MATCH PANELBOARD MANUFACTURER, SERIES, KAIC RATING, BREAKER TYPE, ETC.
- 1.10 GRAPHIC REPRESENTATION AND JOB CONDITIONS:
- A. THE DRAWINGS SHALL SERVE AS WORKING DRAWINGS FOR THE GENERAL LAYOUT OF THE VARIOUS ITEMS OF EQUIPMENT; ARE DIAGRAMMATIC UNLESS SPECIFICALLY DIMENSIONED; AND DO NOT NECESSARILY INDICATE EVERY REQUIRED ITEM.
 - B. THE ARCHITECTURAL DRAWINGS TAKE PRECEDENCE OVER THE ELECTRICAL DRAWINGS IN THE REPRESENTATION OF THE GENERAL CONSTRUCTION WORK.
 - C. ARRANGE WORK IN A NEAT, WELL ORGANIZED MANNER. COORDINATE WORK WITH OTHER TRADES INVOLVED.
- 1.11 GUARANTEES:
- A. THE CONTRACTOR SHALL GUARANTEE ALL WORK PERFORMED AND MATERIALS AND EQUIPMENT FURNISHED UNDER THIS CONTRACT, AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM THE DATE OF THE OWNER'S FINAL ACCEPTANCE OF THE WORK, OR AS NOTED IN EACH SECTION.
- 1.12 SUBSTITUTIONS:
- A. THE MATERIALS, PRODUCTS AND EQUIPMENT DESCRIBED IN THE BIDDING DOCUMENTS ESTABLISHED A STANDARD OF QUALITY TO BE MET BY ANY PROPOSED SUBSTITUTION.
 - B. CONTRACTOR'S BIDS SHALL BE BASED ON THE MATERIAL MENTIONED OR SPECIFIED, AND ANY PROPOSALS FOR A SUBSTITUTION SHALL BE MADE IN WRITING TO THE ARCHITECT/ENGINEER ALLOWING ADEQUATE TIME FOR APPROPRIATE ACTION. THE PRODUCTS OF OTHER MANUFACTURERS MAY BE ACCEPTED, IF IN THE OPINION OF THE ARCHITECT/ENGINEER, THE SUBSTITUTE MATERIAL IS OF A QUALITY AS GOOD OR BETTER THAN THE MATERIAL SPECIFIED, AND WILL SERVE WITH EQUAL EFFICIENCY AND DEPENDABILITY. THE PURPOSE FOR WHICH THE ITEMS SPECIFIED WERE INTENDED, THE BURDEN OF PROOF OF EQUALITY IS UPON THE PROPOSER.
 - C. WHEREVER SUBSTITUTIONS ALTER THE DESIGN OR SPACE REQUIREMENTS, THE CONTRACTOR SHALL INCLUDE ALL ITEMS OF COST OF THE REVISED DESIGN AND CONSTRUCTION.

- 1.13 SHOP DRAWINGS AND PRODUCT DATA:
- A. THE CHECKING OF SHOP DRAWINGS IS A GRATUITOUS ASSISTANCE AND IN NO WAY RELIEVES THE CONTRACTOR FROM RESPONSIBILITY FOR DEVIATIONS FROM THE CONTRACT DOCUMENTS.
 - B. SHOP DRAWINGS AND CATALOG DATA ON ALL MAJOR ITEMS OF EQUIPMENT AND APPARATUS, AND SUCH OTHER ILLUSTRATIVE MATERIALS AS MAY BE CONSIDERED NECESSARY BY THE ARCHITECT/ENGINEER SHALL BE SUBMITTED BY THE CONTRACTOR IN ADEQUATE TIME TO PREVENT DELAY AND CHANGES DURING CONSTRUCTION.
- 1.14 OPERATING AND MAINTENANCE BROCHURE:
- A. AT THE COMPLETION OF THE PROJECT, EACH CONTRACTOR SHALL PROVIDE THREE (3) HARD BOUND VOLUMES OF MANUALS CONTAINING OPERATING SERVICE AND LUBRICATION INSTRUCTIONS, AND PARTS LISTS FOR ALL MAJOR EQUIPMENT AND MANUFACTURER'S GUARANTIES OR WARRANTIES.
- 1.15 RECORD DRAWINGS:
- A. ON COMPLETION OF THE PROJECT, SUBMIT TWO NEW SETS OF BLUELINES PRINTS WITH ALL FIELD CHANGES NEATLY NOTED. THE ORIGINAL ROUTING AND LAYOUT SHALL BE CLEARLY MARKED OUT.
- ELECTRICAL SPECIFICATIONS**
- 1.01 SCOPE:
- A. THE WORK INCLUDED UNDER THIS CONTRACT CONSISTS OF THE FURNISHING OF ALL LABOR, MATERIALS, TOOLS, TRANSPORTATION SERVICES, ETC., NECESSARY TO COMPLETE THE INSTALLATION OF THE ELECTRICAL SYSTEMS AND OTHER ITEMS HEREIN LISTED, ALL AS DIRECTED BY THE ARCHITECT OR ENGINEER, WHICH WORK IS COMPRISED OF, BUT NOT LIMITED TO THE FOLLOWING PRINCIPAL ITEMS:
 1. ELECTRICAL SYSTEM FOR LIGHT AND POWER:
 - a. SYSTEMS OF CONDUIT, CONDUCTORS, AND BOXES.
 - b. LIGHTING FIXTURES AND LAMPS.
 - c. COMPLETE LIGHTING AND POWER SYSTEMS.
 - d. ALL SYSTEMS, WIRING AND CONDUIT AS REQUIRED.
 2. CONTROL WIRING AND ELECTRICAL INSTALLATION AND CONNECTIONS FOR ITEMS IN OTHER CONTRACTS AS MAY BE LISTED IN THE DRAWINGS.
 3. ROUGH-IN AND FINAL CONNECTION TO EQUIPMENT FURNISHED BY OTHERS.
 - B. RACEWAY WIRING SYSTEMS SHALL BE CONCEALED IN ALL FINISHED PARTS OF THE BUILDING, WHERE POSSIBLE. WHERE THE RACEWAYS ARE EXPOSED, THEY SHALL BE RUN PARALLEL WITH THE BUILDING WALLS IN A NEAT AND WORKMANLIKE MANNER. SHOULD IT APPEAR NECESSARY TO EXPOSE ANY CONDUIT OR WIRING IN FINISHED SPACES, IT SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION IMMEDIATELY AND THIS CONTRACTOR SHALL REARRANGE ASSOCIATED WORK AS DIRECTED TO FACILITATE AN APPROVED INSTALLATION. CONTRACTOR TO COORDINATE WITH MECHANICAL TRADES TO AVOID DUCTWORK AND PIPING.
 - C. CONTRACTOR IS RESPONSIBLE TO PROVIDE LIAISON WITH ELECTRICAL AND COMMUNICATION COMPANIES. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL REQUIRED EQUIPMENT AND CONNECT AS REQUIRED TO COMPLETE AN OPERATING SERVICE TO THE BUILDING.
- 1.02 RACEWAYS:
- A. ALL ELECTRICAL EXTERIOR CONDUCTORS ARE TO BE INSTALLED IN SCHEDULE 40 PVC RACEWAYS, UNLESS SPECIFICALLY SPECIFIED OR NOTED OTHERWISE. PROVIDE PULL WIRES IN ALL EMPTY CONDUIT SYSTEMS. IDENTIFY TERMINUS OF EACH PULL WIRE.
- 1.03 WIRES AND CABLES:
- A. INTERIOR ELECTRICAL CONDUCTORS: SOFT ANNEALED COPPER WITH CONDUCTIVITY 98% OF THAT OF PURE, STRANDED COPPER, 90 DEGREE - 600V INSULATION AND EQUAL TO GENERAL CABLE COMPANY. WIRE AND CABLE FOR ALL BRANCH CIRCUITS ENTERING BUILDINGS (FROM OUTDOORS) SHALL BE THHN-2/THWN-2. MINIMUM WIRE SIZE SHALL BE #10 GAUGE AWG. CONTROL WIRING MAY BE #14 GAUGE.
 - B. EXTERIOR ELECTRICAL CONDUCTORS: SOFT ANNEALED COPPER WITH CONDUCTIVITY 98% OF THAT OF PURE, STRANDED COPPER, 90 DEGREE - 600V INSULATION AND EQUAL TO GENERAL CABLE COMPANY. WIRE AND CABLE FOR ALL EXTERIOR BRANCH CIRCUITS SHALL BE RHH-2RHW-2/USE-2. MINIMUM WIRE SIZE SHALL BE #10 GAUGE AWG. CONTROL WIRING MAY BE #14 GAUGE.

ELECTRICAL SYMBOLS:



2 SINGLE CONDUIT DIRECT BURIED
NO SCALE



1 JUNCTION BOX DETAIL
NO SCALE



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SUMMIT LOT 4
LEE'S SUMMIT, MISSOURI

ELEC SPECIFICATIONS & LEGEND



SHEET NUMBER
E100
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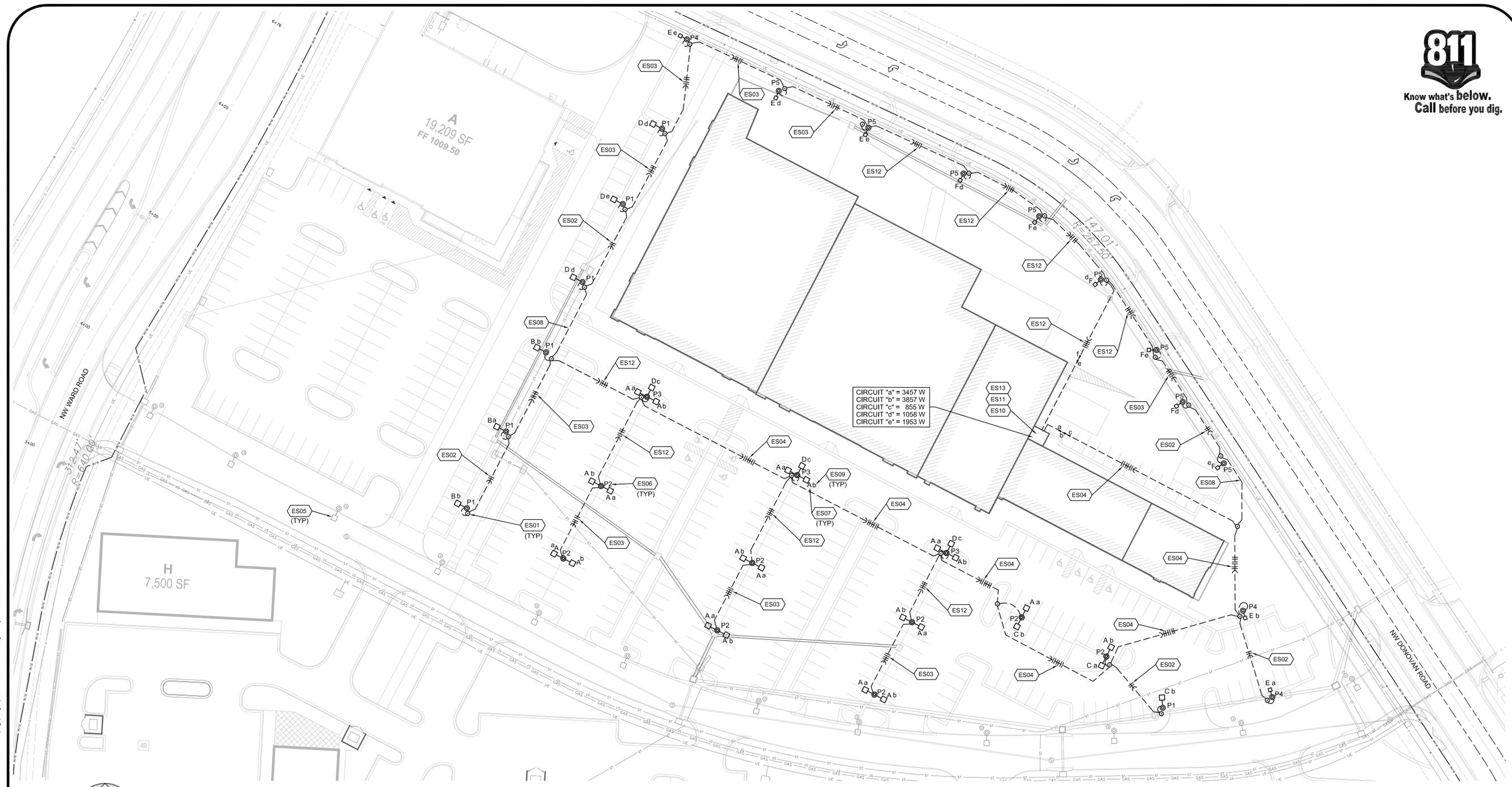
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SUMMIT LOT 4
LEE'S SUMMIT, MISSOURI
SITE LIGHTING PLAN



SHEET NUMBER
E101
XX OF XX



CIRCUIT "a" = 3457 W
CIRCUIT "b" = 3857 W
CIRCUIT "c" = 855 W
CIRCUIT "d" = 1058 W
CIRCUIT "e" = 1953 W



SITE LIGHTING
1"=40 FT

GENERAL NOTES	
A.	PROVIDE 1-1/2" CONDUIT, MINIMUM, UNLESS NOTED OTHERWISE
B.	PROVIDE #10 AWG CONDUCTORS FROM HANDHOLE TO LIGHT FIXTURE, MINIMUM, UNLESS NOTED OTHERWISE.
C.	PROVIDE #8 AWG CONDUCTORS FOR SITE LIGHTING CIRCUIT, MINIMUM, UNLESS NOTED OTHERWISE. CONDUCTORS TO BE RHH-2/RHW-2/USE-2.
D.	LIGHTING SHALL COMPLY WITH CITY OF LEE'S SUMMIT, MISSOURI UNIFIED DEVELOPMENT ORDINANCE. (ARTICLE 8 SITE STANDARDS, DIVISION 1 DESIGN STANDARDS, SUBDIVISION 5 LIGHTING STANDARDS.)

PLAN NOTES	
ES01	PROVIDE MINIMUM 12"X12"X12", IN GROUND, OPEN BOTTOM, POLYMER JUNCTION BOX. COVER TO BE BOLTED, GASKETED TYPE WITH 'PARKING LIGHTING' LOGO. TYPICAL, UNLESS NOTED OTHERWISE. MOUNT ADJACENT TO EACH POLE BASE. (WHERE SHOWN)
ES02	PROVIDE 2 #10 AWG AND 1 #10 GROUND IN 1-1/2" CONDUIT.
ES03	PROVIDE 4 #10 AWG AND 1 #10 GROUND IN 1-1/2" CONDUIT.
ES04	PROVIDE 6 #8 AWG AND 1 #8 GROUND IN 1-1/2" CONDUIT.
ES05	EXISTING LIGHT STANDARDS TO REMAIN.
ES06	"P#" DENOTES POLE TYPE. REFER TO POLE SCHEDULE FOR SPECIFICATION.
ES07	CAPITAL LETTER DENOTES LUMINAIRE TYPE. REFER TO LUMINAIRE SCHEDULE.
ES08	PROVIDE 1-1/2" SPARE CONDUIT WITH PULL STRING.

ES09	LOWERCASE LETTER DENOTES WHICH FIXTURES ARE TO BE CONTROLLED TOGETHER.
ES10	CIRCUITS TO BE CONTROLLED VIA PHOTOCELL ON AND TIMECLOCK OFF. BUILDING CONTRACTOR TO PROVIDE PHOTOCELL, CONTACTOR AND TIMECLOCK CONTROL. COORDINATE WITH BUILDING CONTRACTOR FOR EXACT LOCATION.
ES11	TIMECLOCK TO SHUT OFF FIXTURES WITH LOWERCASE LETTER "D" AND "B" WITHIN 60 MINUTES OF CLOSING. (FOR 50% LIGHT REDUCTION)
ES12	PROVIDE 4 #8 AWG AND 1 #8 GROUND IN 1-1/2" CONDUIT.
ES13	EXTEND TO 480V PANEL. COORDINATE EXACT LOCATION WITH BUILDING CONTRACTOR.

Sep 19, 2019 - 1:37pm Plotted By: monica.santos C:\00_P\Projects\A219-09.1 Summit Lot 4 pkg\dwgs\A219-09.1 E101.dwg Layout: E101 - SITE LIGHTING PLAN

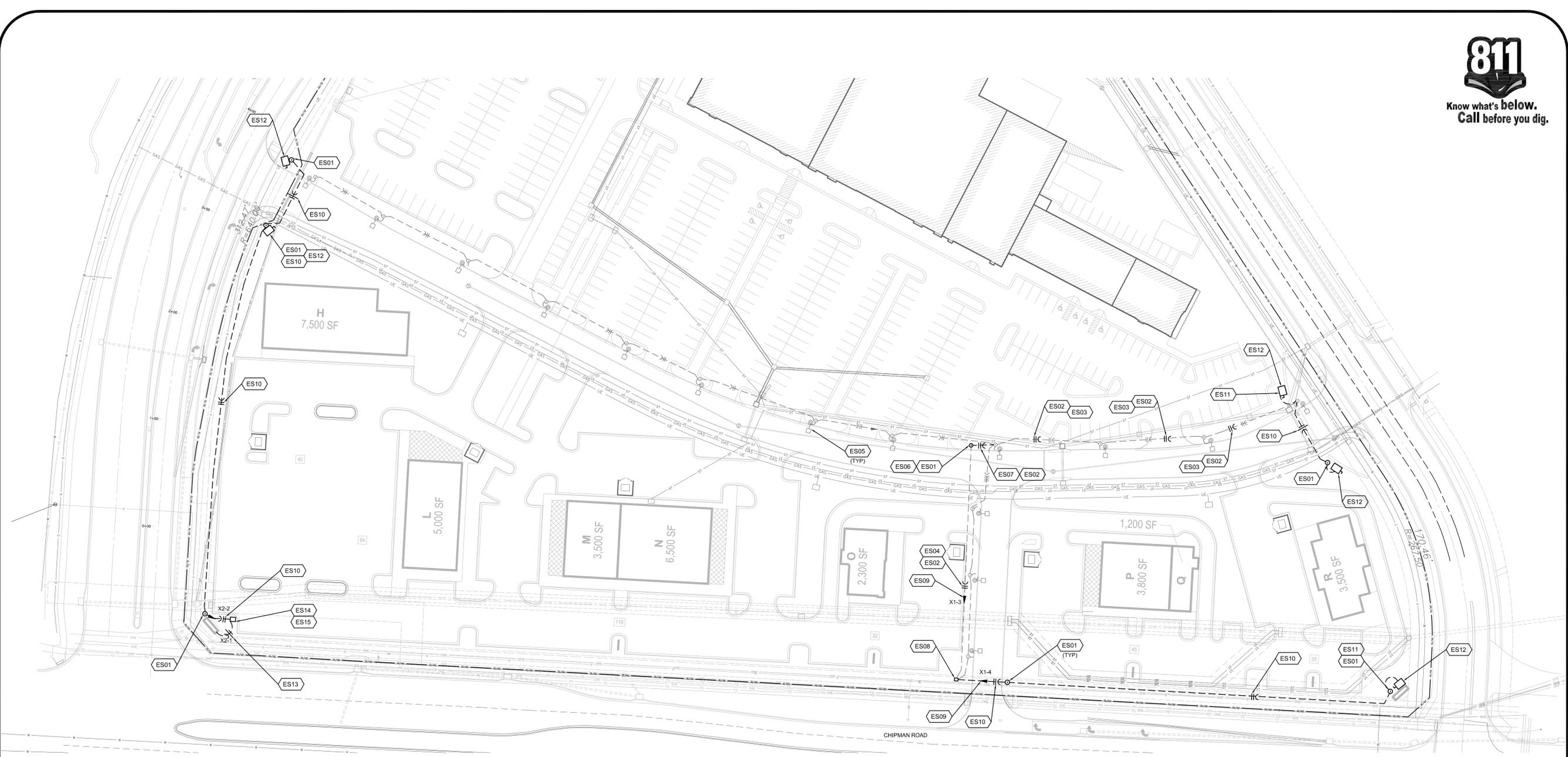


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SITE LIGHTING

1"=50 FT
0 50' 100'

GENERAL NOTES

A.	PROVIDE 1-1/2" CONDUIT, MINIMUM, UNLESS NOTED OTHERWISE
B.	PROVIDE #10 AWG CONDUCTORS FROM HANDHOLE TO LIGHT FIXTURE, MINIMUM, UNLESS NOTED OTHERWISE.
C.	PROVIDE #8 AWG CONDUCTORS FOR SITE LIGHTING CIRCUIT, MINIMUM, UNLESS NOTED OTHERWISE. CONDUCTORS TO BE RHH-2/RHW-2/USE-2.
D.	LIGHTING SHALL COMPLY WITH CITY OF LEE'S SUMMIT, MISSOURI SECTION 5800 STREET LIGHTING DESIGN CRITERIA.

PLAN NOTES	
ES01	PROVIDE MINIMUM 12"x12"x12", IN GROUND, OPEN BOTTOM, POLYMER JUNCTION BOX. COVER TO BE BOLTED, GASKETED TYPE WITH 'SITE LIGHTING' LOGO. TYPICAL, UNLESS NOTED OTHERWISE.
ES02	PROVIDE 2 #4 AWG AND 1 #4 GROUND.
ES03	ROUTE THROUGH EXISTING 1-1/2" CONDUIT FOR ROADWAY LIGHTING. LABEL CONDUCTORS 'SIGNAGE'
ES04	ROUTE THROUGH SPARE 2" CONDUIT.
ES05	EXISTING LIGHT STANDARDS TO REMAIN.
ES06	INSTALL PULL BOX AND EXTEND SPARE 2" CONDUIT TO NEW PULLBOX.
ES07	EXTEND NEW 1-1/2" CONDUIT TO EXISTING PULLBOX.
ES08	EXISTING LIGHTING CONTROLLER "X1".
ES09	EXTEND SIGNAGE CIRCUIT TO SPARE BREAKER. REPLACE BREAKER WITH A 2 POLE, 20 AMP BREAKER WITH MATCHING AIC RATING. LABEL "SITE SIGNAGE"

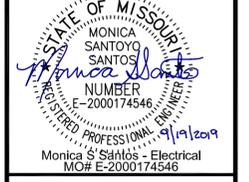
ES10	PROVIDE 2 #6 AWG AND 1 #6 GROUND IN 1-1/2" CONDUIT.
ES11	PROVIDE A SINGLE PHASE 240V TO 120V STEPDOWN TRANSFORMER IN NEMA 3R ENCLOSURE FOR SIGNAGE POWER. REFER TO RISER DIAGRAM SHEET E201 FOR ADDITIONAL INFORMATION. CONTRACTOR TO COORDINATE WITH SIGNAGE SUPPLIER FOR EXACT POWER REQUIREMENTS. MAKE ALL FINAL CONNECTIONS.
ES12	PROVIDE A 2 POLE, 30A, 250V, FUSIBLE DISCONNECT IN NEMA 3R ENCLOSURE FOR SIGNAGE DISCONNECTING MEANS. FUSE AT 20 AMP, MOUNT NEXT TO TRANSFORMER.
ES13	PROVIDE 2 #10 AWG AND 1 #10 GROUND IN 1-1/2" CONDUIT.
ES14	PROVIDE NEW LIGHTING CONTROLLER "X2" REFER TO SHEET E301 FOR SPECIFICATIONS.
ES15	COORDINATE TRANSFORMER LOCATION WITH KCP&L PRIOR TO ROUGH-IN.

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SHEET NUMBER
E102
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Sep 19, 2019 - 1:32pm Plotted By: monica.santos C:\00 Projects\A219-09.1 Summit Lot 4 .plg\dwgs\A219-09.1 E103.dwg Layout: E103 - SITE LIGHTING POINT BY POINT



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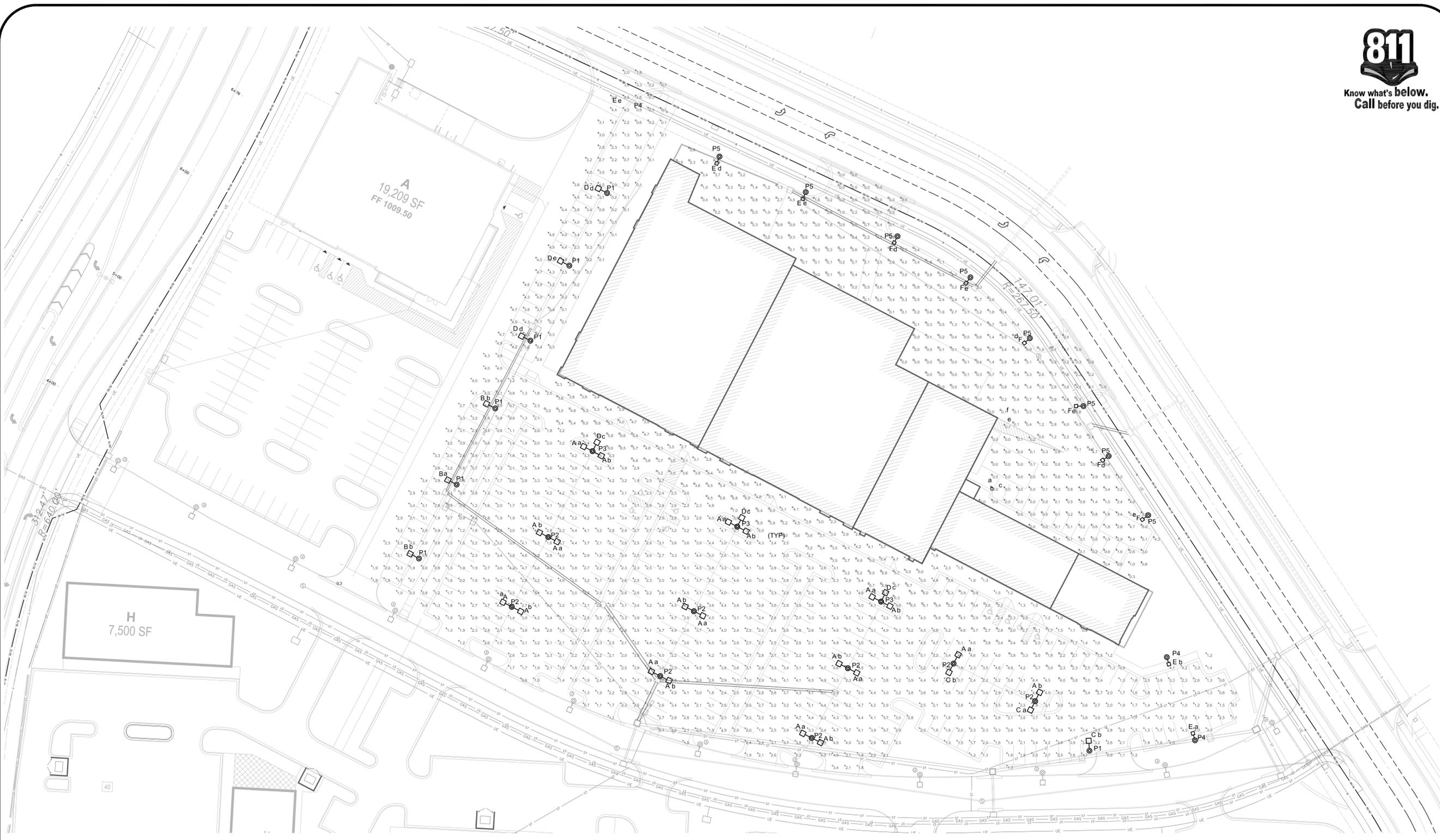
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SUMMIT LOT 4
 LEE'S SUMMIT, MISSOURI
SITE LIGHTING POINT BY POINT



SHEET NUMBER
E103
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SITE LIGHTING - POINT BY POINT CALCULATIONS

1"=40 FT
 0 40' 80'

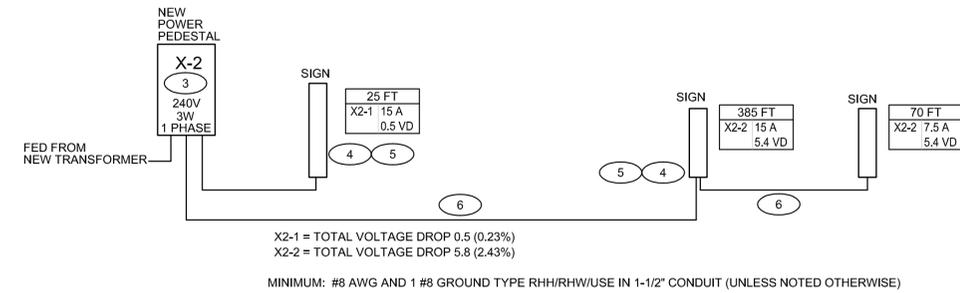
STATISTICS						
DESCRIPTION	SYMBOL	Avg	Max	Min	Max/Min	Avg/Min
NORTH DRIVE	□	1.5 fc	7.0 fc	0.0 fc	NA	NA
LOT 4	+	3.0 fc	6.6 fc	0.4 fc	16.5:1	7.5:1
EMPLOYEE PARKING	×	1.3 fc	6.9 fc	0.0 fc	NA	NA
WEST LOT/DRIVE	◇	2.1 fc	5.5 fc	0.1 fc	55.0:1	21.0:1
BIG BOX SIDEWALK	×	3.8 fc	5.4 fc	2.0 fc	2.7:1	1.9:1
BIG BOX FRONT DRIVE	□	4.9 fc	7.0 fc	3.0 fc	2.3:1	1.6:1
SMALL SHOPS SIDEWALK	+	1.8 fc	5.5 fc	0.9 fc	6.1:1	2.0:1
SMALL SHOPS FRONT DRIVE	□	3.3 fc	6.5 fc	1.3 fc	5.0:1	2.5:1



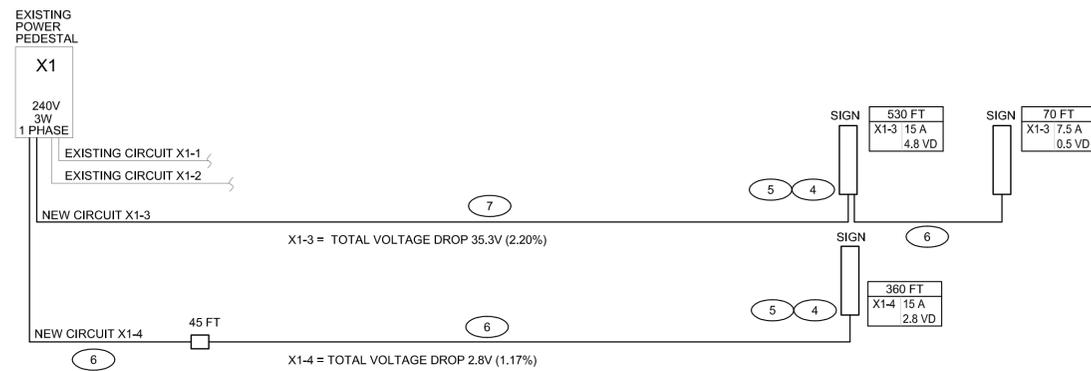
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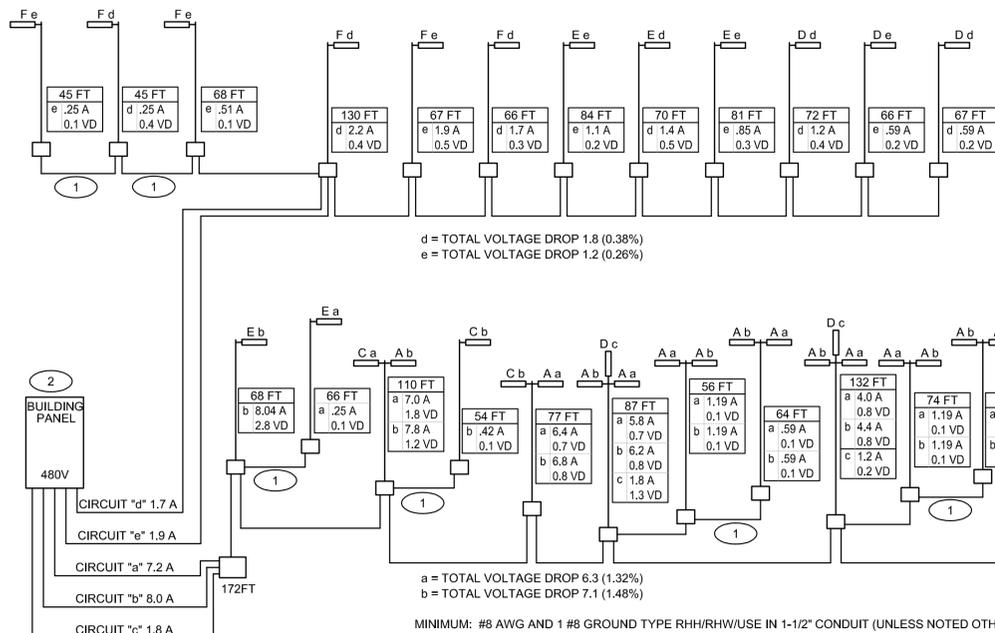
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3 RISER DIAGRAM - WEST SIGNAGE NO SCALE



2 RISER DIAGRAM - EAST SIGNAGE NO SCALE



1 RISER DIAGRAM - SITE LIGHTING NO SCALE

LUMINAIRE SCHEDULE								
TYPE	MOUNTING	LAMP	LUMENS	COLOR TEMPERATURE	CRI	WATT	VOLTAGE	DESCRIPTION
A	POLE	LED	35000 lm	4000 K	80	285W	480V	HUBELL - KIM LIGHTING ALT2-100L-285-4K8-4-480 -A46-LG-BC-DF POLE: SEE POLE SCHEDULE KIM ALTITUDE 2.0 LED SERIES, GRAY, 3.5" TALL, 23.44" LONG, 16" WIDE, TYPE IV DISTRIBUTION, 480V, ARM MOUNT, LIGHT GRAY, WITH 480V FUSING AND BACKLIGHT CONTROL. (BUG RATING: B1/U0/G3), REFER TO PLANS FOR CONFIGURATION AND POLE REFERENCE FOR POLE TYPE. PROVIDE NUMBER OF LUMINAIRES PER POLE AS SHOWN ON PLANS.
B	POLE	LED	25000 lm	4000 K	80	200W	480V	HUBELL - KIM LIGHTING ALT2-100L-200-4K8-3-480-A46-LG-BC-DF POLE: SEE POLE SCHEDULE KIM ALTITUDE 2.0 LED SERIES, GRAY, 3.5" TALL, 23.44" LONG, 16" WIDE, TYPE III DISTRIBUTION, 480V, ARM MOUNT, LIGHT GRAY, WITH 480V FUSING AND BACKLIGHT CONTROL. (BUG RATING: B1/U0/G2), REFER TO PLANS FOR CONFIGURATION AND POLE REFERENCE FOR POLE TYPE. PROVIDE NUMBER OF LUMINAIRES PER POLE AS SHOWN ON PLANS.
C	POLE	LED	25000 lm	4000 K	80	200W	480V	HUBELL - KIM LIGHTING ALT2-100L-200-4K8-4-480-A46-LG-BC-DF POLE: SEE POLE SCHEDULE KIM ALTITUDE 2.0 LED SERIES, GRAY, 3.5" TALL, 23.44" LONG, 16" WIDE, TYPE IV DISTRIBUTION, 480V, ARM MOUNT, LIGHT GRAY, WITH 480V FUSING AND BACKLIGHT CONTROL. (BUG RATING: B1/U0/G3), REFER TO PLANS FOR CONFIGURATION AND POLE REFERENCE FOR POLE TYPE. PROVIDE NUMBER OF LUMINAIRES PER POLE AS SHOWN ON PLANS.
D	POLE	LED	35000 lm	4000 K	80	285W	480V	HUBELL - KIM LIGHTING ALT2-100L-285-4K8-3-480 -A46-LG-BC-DF POLE: SEE POLE SCHEDULE KIM ALTITUDE 2.0 LED SERIES, GRAY, 3.5" TALL, 23.44" LONG, 16" WIDE, TYPE III DISTRIBUTION, 480V, ARM MOUNT, LIGHT GRAY, WITH 480V FUSING AND BACKLIGHT CONTROL. (BUG RATING: B1/U0/G3), REFER TO PLANS FOR CONFIGURATION AND POLE REFERENCE FOR POLE TYPE. PROVIDE NUMBER OF LUMINAIRES PER POLE AS SHOWN ON PLANS.
E	POLE	LED	15000 lm	4000 K	80	122W	480V	HUBELL - KIM LIGHTING ALT1-54L-120-4K8-4-480 -A46-LG-BC-DF POLE: SEE POLE SCHEDULE KIM ALTITUDE 2.0 LED SERIES, GRAY, 3" TALL, 18.44" LONG, 14" WIDE, TYPE IV WIDE DISTRIBUTION, 480V, ARM MOUNT, LIGHT GRAY, WITH 480V FUSING AND BACKLIGHT CONTROL. (BUG RATING: B1/U0/G2), REFER TO PLANS FOR CONFIGURATION AND POLE REFERENCE FOR POLE TYPE. PROVIDE NUMBER OF LUMINAIRES PER POLE AS SHOWN ON PLANS.
F	POLE	LED	15000 lm	4000 K	80	122W	480V	HUBELL - KIM LIGHTING ALT1-54L-120-4K8-4-480 -A46-LG-BC-DF POLE: SEE POLE SCHEDULE KIM ALTITUDE 2.0 LED SERIES, GRAY, 3" TALL, 18.44" LONG, 14" WIDE, TYPE IV DISTRIBUTION, 480V, ARM MOUNT, LIGHT GRAY, WITH 480V FUSING AND BACKLIGHT CONTROL. (BUG RATING: B0/U0/G2), REFER TO PLANS FOR CONFIGURATION AND POLE REFERENCE FOR POLE TYPE. PROVIDE NUMBER OF LUMINAIRES PER POLE AS SHOWN ON PLANS.

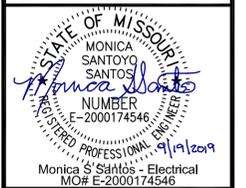
POLE SCHEDULE					
TYPE	POLE HEIGHT	BASE	POLE DIAMETER	MANUFACTURER	DESCRIPTION
P1	27'	1' CONCRETE BASE	6"X.188	HUBELL - KIM LIGHTING PRA27/A; (SINGLE FIXTURE) PROVIDE WITH VIBRATION DAMPER 1ST MODE.	POLE TO BE 27FT TALL, 6" ROUND ALUMINUM STRAIGHT, .188 THICK. COLOR LIGHT GRAY TO BE CONFIRMED PRIOR TO ORDERING. SINGLE ARM MOUNT
P2	25'	3' CONCRETE BASE	6"X.188	HUBELL - KIM LIGHTING PRA25/B; (TWO OPPOSING FIXTURES) PROVIDE WITH VIBRATION DAMPER 1ST MODE.	POLE TO BE 25FT TALL, 6" ROUND ALUMINUM STRAIGHT, .188 THICK. COLOR LIGHT GRAY TO BE CONFIRMED PRIOR TO ORDERING. TWO ARM MOUNT 180DEG
P3	27'	1' CONCRETE BASE	6"X.188	HUBELL - KIM LIGHTING PRA27/T; (THREE FIXTURES) PROVIDE WITH VIBRATION DAMPER 1ST MODE.	POLE TO BE 27FT TALL, 6" ROUND ALUMINUM STRAIGHT, .188 THICK. COLOR LIGHT GRAY TO BE CONFIRMED PRIOR TO ORDERING. THREE ARM MOUNT AT 90 DEG ANGLES
P4	14'	1' CONCRETE BASE	6"X.188	HUBELL - KIM LIGHTING PRA14/T; (SINGLE FIXTURE)	POLE TO BE 14FT TALL, 6" ROUND ALUMINUM STRAIGHT, .188 THICK. COLOR LIGHT GRAY TO BE CONFIRMED PRIOR TO ORDERING. SINGLE ARM MOUNT
P5	12'	3' CONCRETE BASE	6"X.188	HUBELL - KIM LIGHTING PRA12/T; (SINGLE FIXTURE)	POLE TO BE 14FT TALL, 6" ROUND ALUMINUM STRAIGHT, .188 THICK. COLOR LIGHT GRAY TO BE CONFIRMED PRIOR TO ORDERING. SINGLE ARM MOUNT

RISER DIAGRAM NOTES	
1	PROVIDE #10 AWG AND #10 GROUND TYPE RHH/RHW/USE IN 1-1/2" CONDUIT. REFER TO PLANS FOR QUANTITY.
2	COORDINATE WITH BUILDING CONTRACTOR EXACT LOCATION OF PANEL PRIOR TO ROUGH-IN.
3	PROVIDE NEW POWER PEDISTAL. REFER TO SHEET E301 FOR DETAILS.
4	CONTRACTOR SHALL PROVIDE SINGLE PHASE 3KVA, 240V TO 120V, 150 DEG RISE, NEMA 3R ENCLOSURE, UL/CL LISTED, STEP DOWN TRANSFORMER. COORDINATE WITH SIGN SUPPLIER ACTUAL VOLTAGE REQUIRED AND WATTAGE PRIOR TO ORDERING TRANSFORMER. MOUNT TO BACKSIDE OF SIGNAGE. COORDINATE EXACT LOCATION PRIOR TO ROUGH-IN.
5	PROVIDE A 2 POLE, 20 AMP FUSIBLE DISCONNECT IN NEMA 3R ENCLOSURE. PROVIDE 20 AMP FUSES. FOR SIGNAGE DISCONNECTING MEANS. COORDINATE WITH SIGNAGE LOAD.
6	PROVIDE #6 AWG AND 1 #6 GROUND TYPE RHH/RHW/USE IN 1-1/2" CONDUIT. REFER TO PLANS FOR QUANTITY.
7	PROVIDE #4 AWG AND 1 #4 GROUND TYPE RHH/RHW/USE IN 1-1/2" CONDUIT. REFER TO PLANS FOR QUANTITY.

REVISIONS	
NO.	DESCRIPTION

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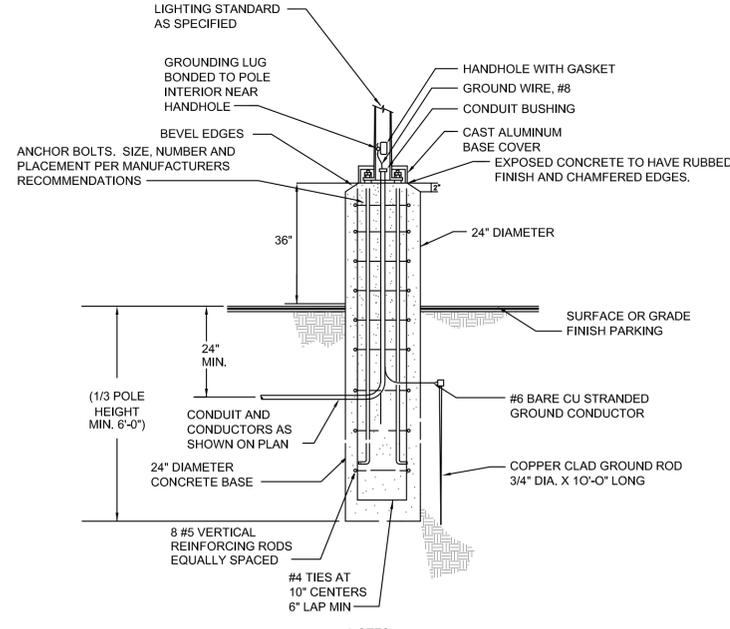
SUMMIT LOT 4
LEE'S SUMMIT, MISSOURI
ELECTRICAL RISER & SCHEDULES



SHEET NUMBER
E201
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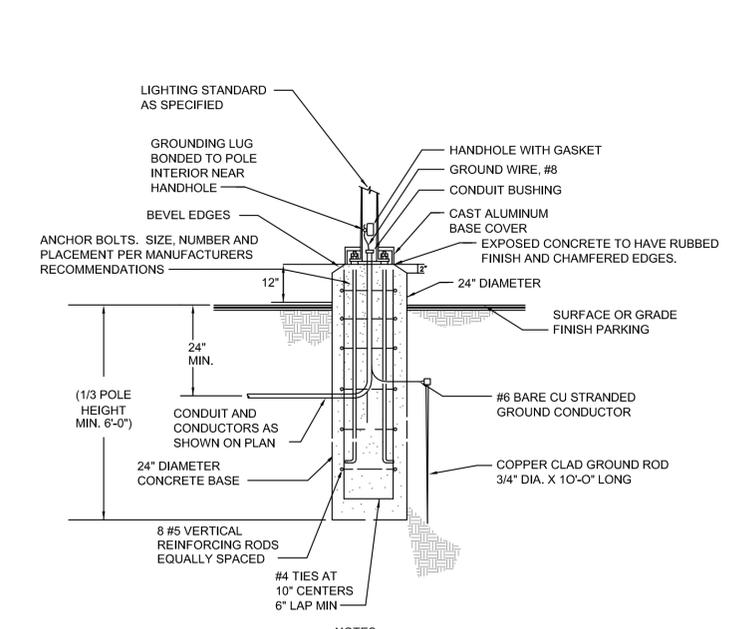
Sep 19, 2019 - 1:36pm Plotted By: monica.santos

3 LIGHTING POLE BASE DETAIL (P2, P5) NO SCALE



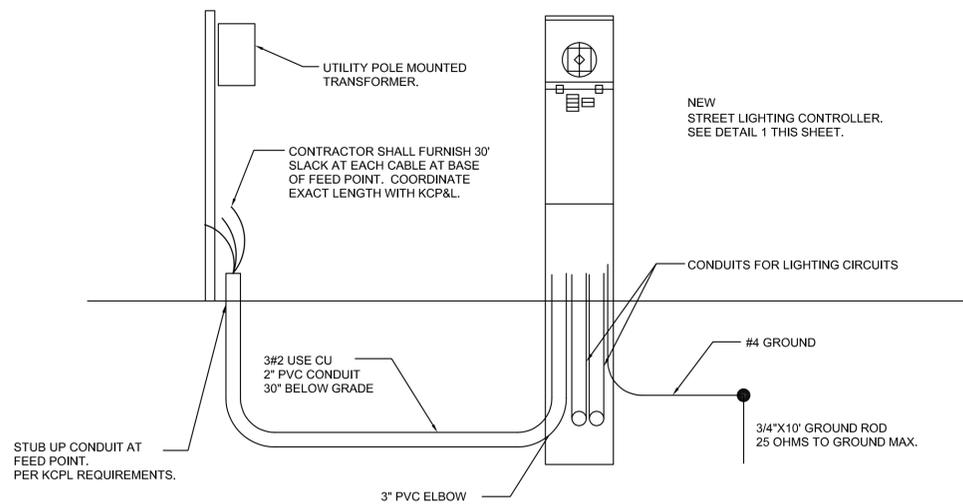
- NOTES:**
- *POLE BASE SHALL BE CALCULATED USING THE FOLLOWING CRITERIA:
 - WWD LOADING 100MPH (1.3 GUST)
 - TOTAL EPA OF LUMINAIRES
 - +TOTAL EPA OF BRACKETS
 - =TOTAL EPA OF LUMINAIRES/BRACKETS
 - 1. SELECT POLE BASED ON MAXIMUM EPA LISTED IN MANUFACTURERS CATALOG.
 - 2. IN ANY CASE MIN. POLE BASE DEPTH SHALL BE 72". FINAL DEPTH OF POLE BASE SHALL BE VERIFIED WITH STRUCTURAL ENGINEER PRIOR TO PLACEMENT.
 - 3. CONCRETE SHALL BE 3000 PSI CLASS A CONCRETE PLACED NEXT TO UNDISTURBED EARTH.
 - 4. CONTRACTOR TO INCLUDE CONTINGENCY FOR ENCOUNTERING ROCK AS PART OF POLE BASE INSTALLATION.

2 LIGHTING POLE BASE DETAIL (P1, P3, P4) NO SCALE

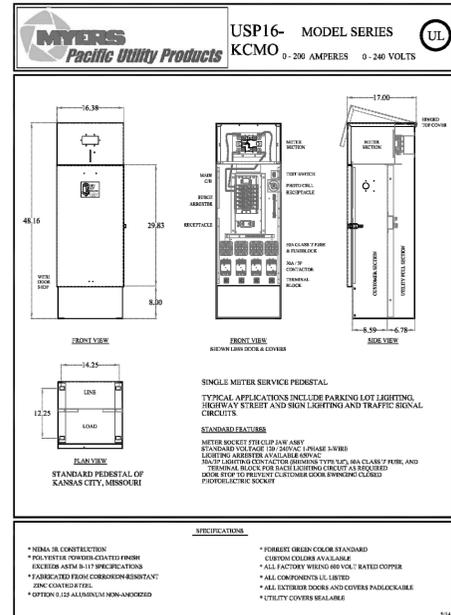


- NOTES:**
- *POLE BASE SHALL BE CALCULATED USING THE FOLLOWING CRITERIA:
 - WWD LOADING 100MPH (1.3 GUST)
 - TOTAL EPA OF LUMINAIRES
 - +TOTAL EPA OF BRACKETS
 - =TOTAL EPA OF LUMINAIRES/BRACKETS
 - 1. SELECT POLE BASED ON MAXIMUM EPA LISTED IN MANUFACTURERS CATALOG.
 - 2. IN ANY CASE MIN. POLE BASE DEPTH SHALL BE 72". FINAL DEPTH OF POLE BASE SHALL BE VERIFIED WITH STRUCTURAL ENGINEER PRIOR TO PLACEMENT.
 - 3. CONCRETE SHALL BE 3000 PSI CLASS A CONCRETE PLACED NEXT TO UNDISTURBED EARTH.
 - 4. CONTRACTOR TO INCLUDE CONTINGENCY FOR ENCOUNTERING ROCK AS PART OF POLE BASE INSTALLATION.

1 USP SERVICE PEDESTAL 0-200 AMP, 0-600 VOLTS (X2) NO SCALE



4 SERVICE CONNECTION DETAIL (CONTROLLER X1) NO SCALE



COMPONENT DIRECTORY	
CAT. NO. MHPD-KCMO-33	
No.	120/240 VAC 1 PH 3W 100AMPS
1	LANDING LUGS (2) 350KCMIL
2	METER SOCKET 125A 4JAW 100AMPS
3	MAIN CB 100A, 2P, 120/240VAC 10KAIC
4	LOAD CENTER 125A 12-CK, 1-PHASE
5	(3) CB 30A 2P 120/240V 10KAIC, (2) CB 20A, 1P
6	(1) CB GFCL 20A 1P 120/240V 10KAIC
7	(1) CB 15A 1P 120/240V 10KAIC
8	(8) FUSE 60A CLASS 'J' 600V BUSSMAN
9	(4) CONTACTOR EH 30A, 3P SIEMENS 'LE'
10	(2) TERM BLK 2P 85A MARATHON
11	(1) RECEPTACLE 20A, 120V DUPLEX
12	SWITCH TOGGLE SPST 20A
13	PE RECEPTACLE
14	(1) SURGE ARRESTER GE
15	BONDED NEUTRAL BUS
16	INSULATED NEUTRAL BUS

NO.	AMP.	POLE	DESCRIPTION
1-3	100	2	SERVICE DISCONNECT
5-7	30	2	SIGNAGE CKT #1
9-11	30	2	SPARE(FUTURE LTG)
2	20	1	SIGNAGE CKT #2 (120V)
4	20	1	SPARE
6-8	30	2	SPARE (FUTURE LTG)
10	15	1	PEC
12	20	1	RECEPTACLE

- SPECIFICATIONS:**
- NEMA 3R CONSTRUCTION
 - FABRICATED FROM CORROSION-RESISTANT ZINC COATED STEEL.
 - FACTORY WIRING 800 VOLT RATED COPPER
 - COLOR DARK GREEN UNLESS OTHERWISE SPECIFIED
 - POLYESTER POWDER-COATED FINISH EXCEEDS ASTM B-117 SPECIFICATION.
 - ALL EXTERIOR HINGES CONTINUOUS PIANO TYPE STAINLESS STEEL
 - ALL COMPONENTS ARE U.L. LISTED.



Antella
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Fax: 816-249-2439

Missouri Certificate of Authority #2005013590

DRAWING INFO.	
NO.	DESCRIPTION
DRAWN BY:	MSS
CHECK BY:	MSS
LICENSE NO.	E-2000174546
DATE:	2019-09-19
FIELD BOOK:	
JOB NUMBER:	19C010001

SUMMIT LOT 4
LEE'S SUMMIT, MISSOURI

ELECTRICAL DETAILS

STATE OF MISSOURI
MONICA SANTOS
SANTOS
ELECTRICAL ENGINEER
NUMBER
E-2000174546
9/19/2019
Monica Santos, Electrical
MO# E-2000174546

SHEET NUMBER
E301
XX OF XX