

Oct 01, 2019 - 11:23pm Plotted By: twot Z:\AE-COL\1-Projects\19001008 - Townsend Summit Orchard Lot 4-B\DWG\03-DWG-20190930\2130317-001\03-DWG-Sheets\19001008-SVTS-COVER.dwg Layout: Layout1

GENERAL NOTES

1. ALL WORK IN PUBLIC EASEMENT AND RIGHT-OF-WAY SHALL BE INSTALLED PER THE REQUIREMENTS AND SPECIFICATIONS OF THE CITY OF LEE'S SUMMIT.
2. THE CONTRACTOR SHALL BE REQUIRED TO OBTAIN ALL FEDERAL, STATE, AND LOCAL PERMITS REQUIRED FOR THIS PROJECT PRIOR TO COMMENCING CONSTRUCTION.
3. 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).
4. 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.
5. 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.
6. 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.
7. THE CONTRACTOR SHALL PREVENT ANY TRASH, DEBRIS, OR LIQUID WASTES FROM BEING DISPOSED OF IN SANITARY SEWERS, STORM SEWERS, OR OPEN DRAINAGE SYSTEMS.
8. 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.
9. CONTRACTORS AT THE SITE SHALL BE SOLELY RESPONSIBLE FOR JOBSITE SAFETY FOR ALL ASPECTS OF WORK SHOWN HEREON.
10. ALL WORK AND MATERIALS USED IN THE CONSTRUCTION OF THE IMPROVEMENTS SHOWN HEREON SHALL COMPLY WITH ALL REFERENCED STANDARDS, SPECIFICATIONS, AND PLAN NOTES.
11. ALL BUILDINGS ARE SHOWN AS A REFERENCE ONLY. ALL BUILDINGS SHALL BE LOCATED AND CONSTRUCTED PER THE ARCHITECTURAL DRAWINGS PREPARED BY OTHERS.
12. 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.
13. 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.
14. UNLESS SPECIFIED OTHERWISE, ALL CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE CITY OF LEE'S SUMMIT STANDARD SPECIFICATIONS, EXCEPT AS MODIFIED BY THESE PLANS.
15. 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.
16. 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.
17. 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.
18. CONTRACTOR SHALL PROVIDE ONE CHEMICALLY-TREATED PORTABLE TOILET FOR EVERY 20 EMPLOYEES ON THE JOB SITE.
19. 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



Know what's below.
Call before you dig.



UTILITIES

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

STORM WATER
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&T
RONALD GIPFERT
500 E 8TH STREET
KANSAS CITY, MO 64106
PHONE (816) 275-1550

KCP&L
RON DEJARNETTE
1300 SE HAMBLIN 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

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

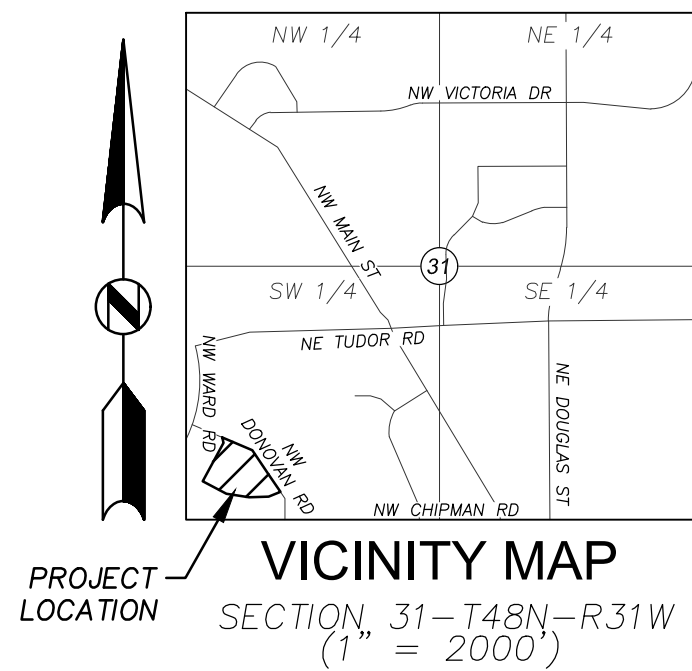
BM-"A" ELEV.=1006.99'
SQUARE CUT ON THE CENTERLINE FRONT FACE OF A CURB INLET LOCATED NEAR THE NORTHEAST QUADRANT OF THE INTERSECTION OF NW DONOVAN RD AND NW WARD RD.

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



SHEET INDEX

SITE CIVIL	
C000	COVER SHEET
C100	DEMOLITION PLAN
C200	SITE PLAN
C201	TRUCK TURN PLAN
C202	TRUCK TURN PLAN
C203	TRUCK TURN PLAN
C204	TRUCK TURN PLAN
C300	UTILITY PLAN
C400	GRADING PLAN
C401	SIDEWALK RAMP DETAILS
C402	SIDEWALK RAMP DETAILS
C403	SIDEWALK RAMP DETAILS
C500	DRAINAGE MAP
C501	STORMWATER CALCULATIONS
C502	STORM SEWER PLAN & PROFILE
C503	STORM SEWER PLAN & PROFILE
C504	STORM SEWER PLAN & PROFILE
C505	STORM SEWER PLAN & PROFILE
C506	ROOF DRAIN PLAN
C600	EROSION CONTROL PLAN
C700	DETAILS
C701	DETAILS
C702	DETAILS
C703	DETAILS
C704	DETAILS
C705	DETAILS

ARCHITECTURE

A-101	FLOOR PLAN
A-201	EXTERIOR ELEVATIONS
A-201C	COLOR EXTERIOR ELEVATIONS
A-202	EXTERIOR ELEVATIONS
A-202C	COLOR EXTERIOR ELEVATIONS

LANDSCAPING

L100	OVERALL LANDSCAPE PLAN
L101	LANDSCAPE PLAN
L102	LANDSCAPE PLAN
L103	LANDSCAPE PLAN
L201	SITE DETAILS
L202	SITE DETAILS
L203	SITE DETAILS

SITE ELECTRICAL

E100	ELECTRICAL SPECIFICATIONS & LEGEND
E101	SITE LIGHTING PLAN
E102	SIGNAGE LIGHTING PLAN
E103	SITE LIGHTING POINT BY POINT
E201	ELECTRICAL RISERS & SCHEDULES
E301	ELECTRICAL DETAILS

PREPARED & SUBMITTED BY:

ANDERSON ENGINEERING, INC.
4240 PHILLIPS FARM ROAD, SUITE
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

DATE

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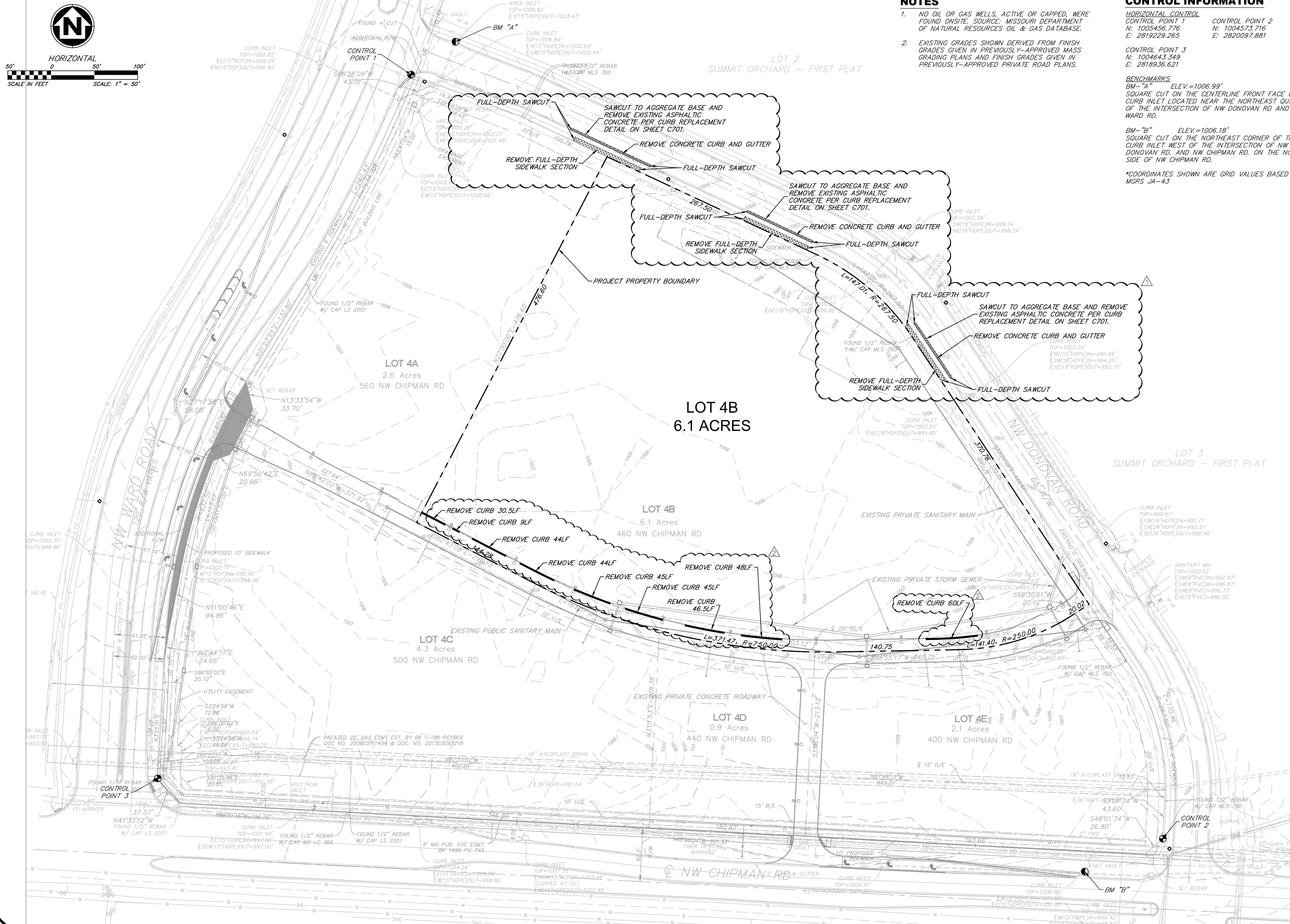
SUMMIT ORCHARDS LOT 4B
FINAL DEVELOPMENT PLAN
NW CHIPMAN RD & NW WARD RD
TPW

COVER SHEET

SHEET NUMBER

C000
1 OF 44

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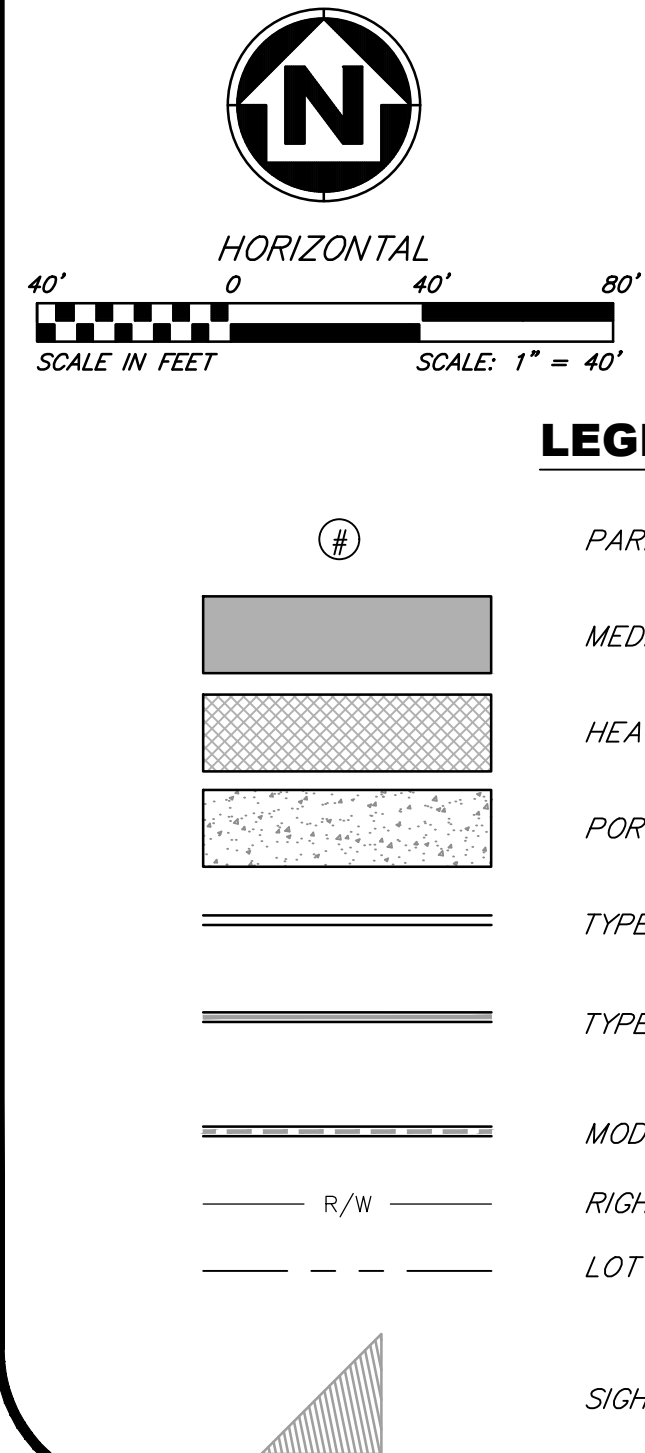
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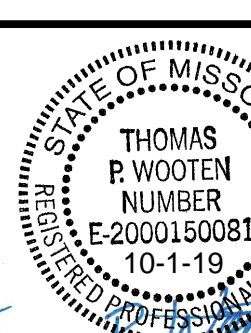
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**SUMMIT ORCHARDS LOT 4B
FINAL DEVELOPMENT PLAN**
NW CHIPMAN RD & NW WARD RD
LEE'S SUMMIT, MISSOURI 64086

DEMOLITION PLAN

SHEET NUMBER
C100
2 OF 44



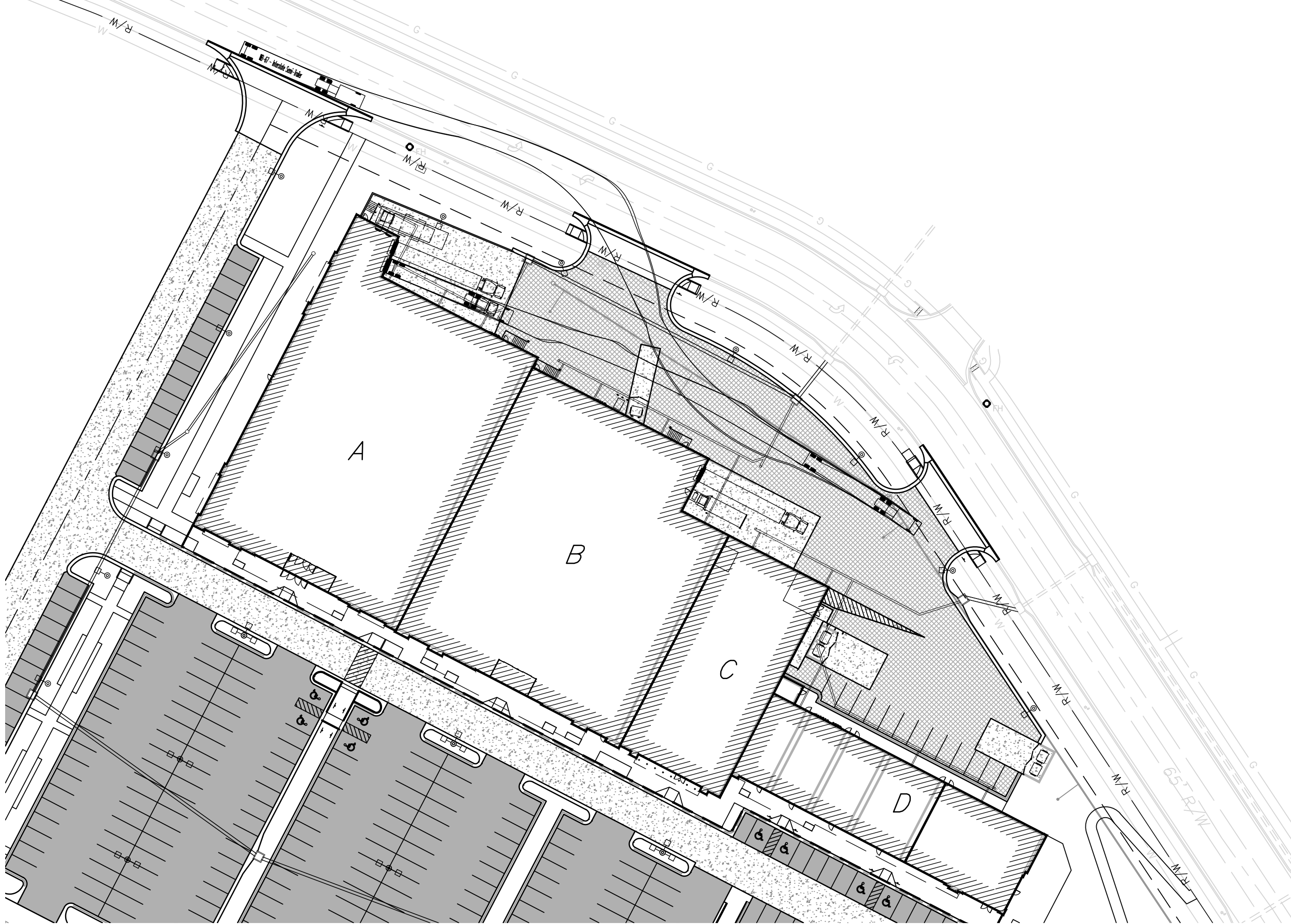
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<p>SHEET NUMBER</p> <p style="font-size: 2em; font-weight: bold;">C200</p> <p><u>3</u> OF <u>44</u></p>	



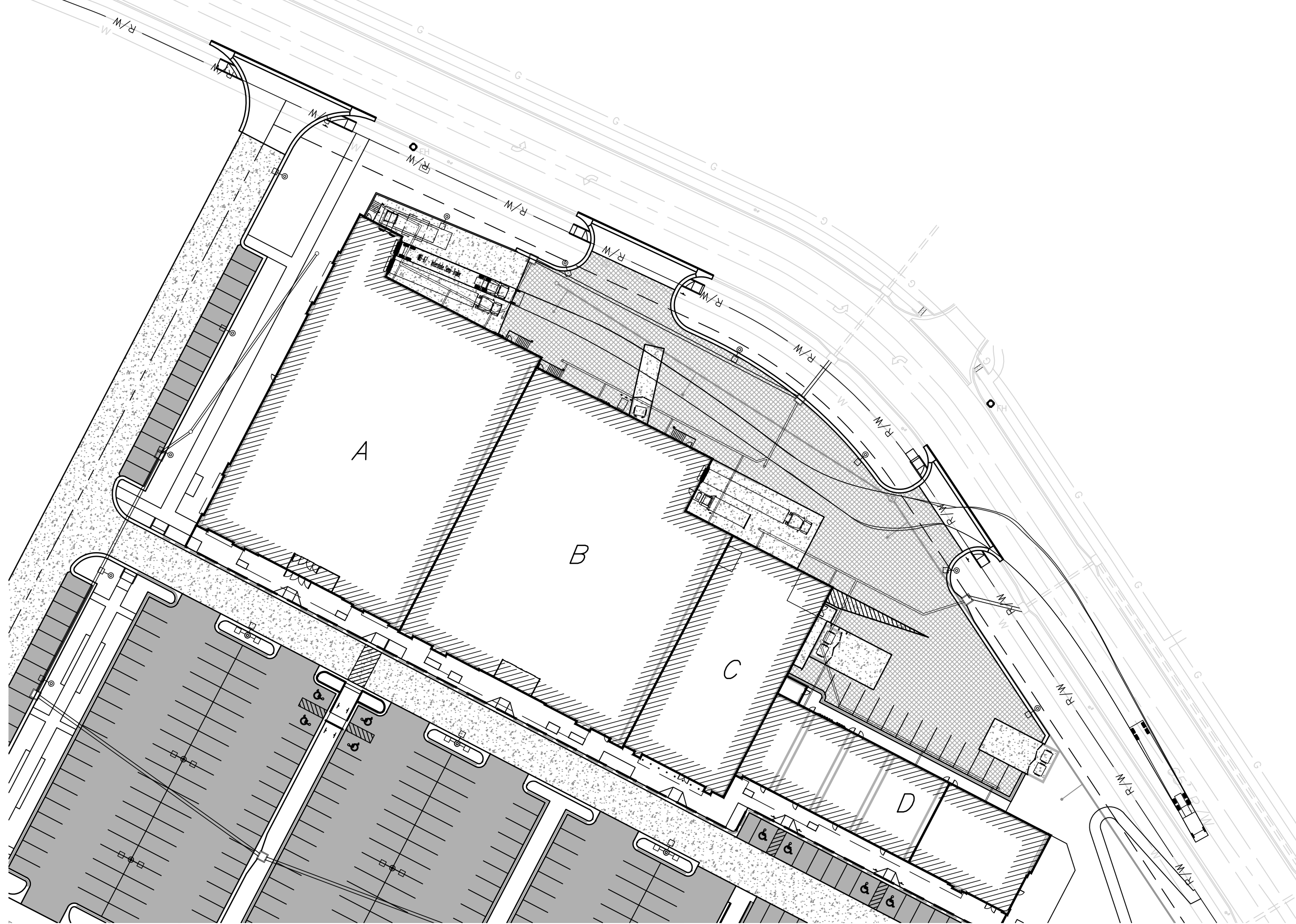
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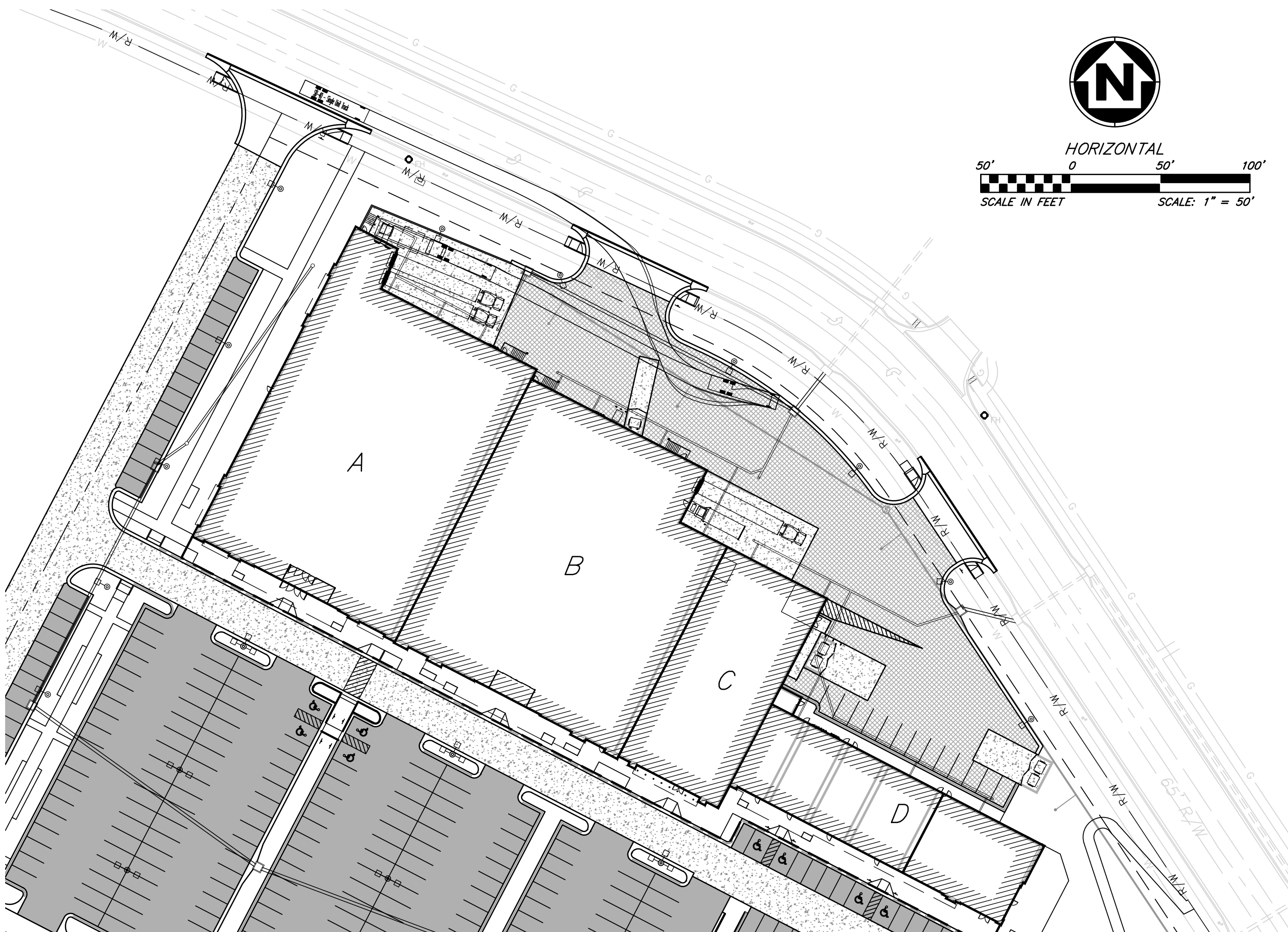
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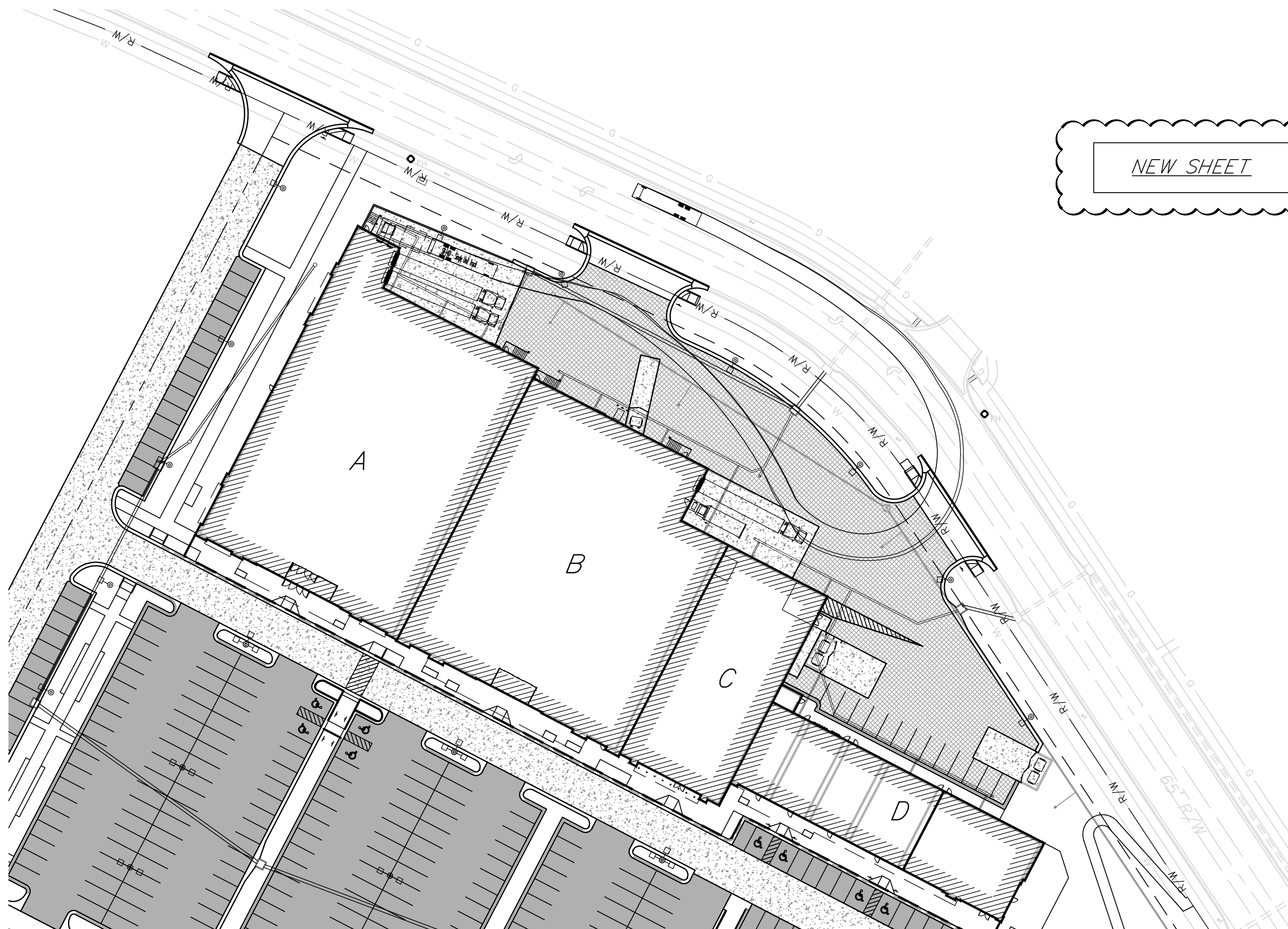
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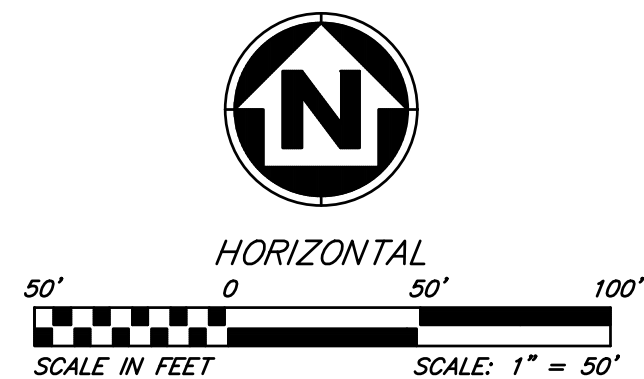
BUILDING A: WB-67 DEPARTURE



BUILDING A: SU-40 ARRIVAL



BUILDING A: SU-40 DEPARTURE



NEW SHEET

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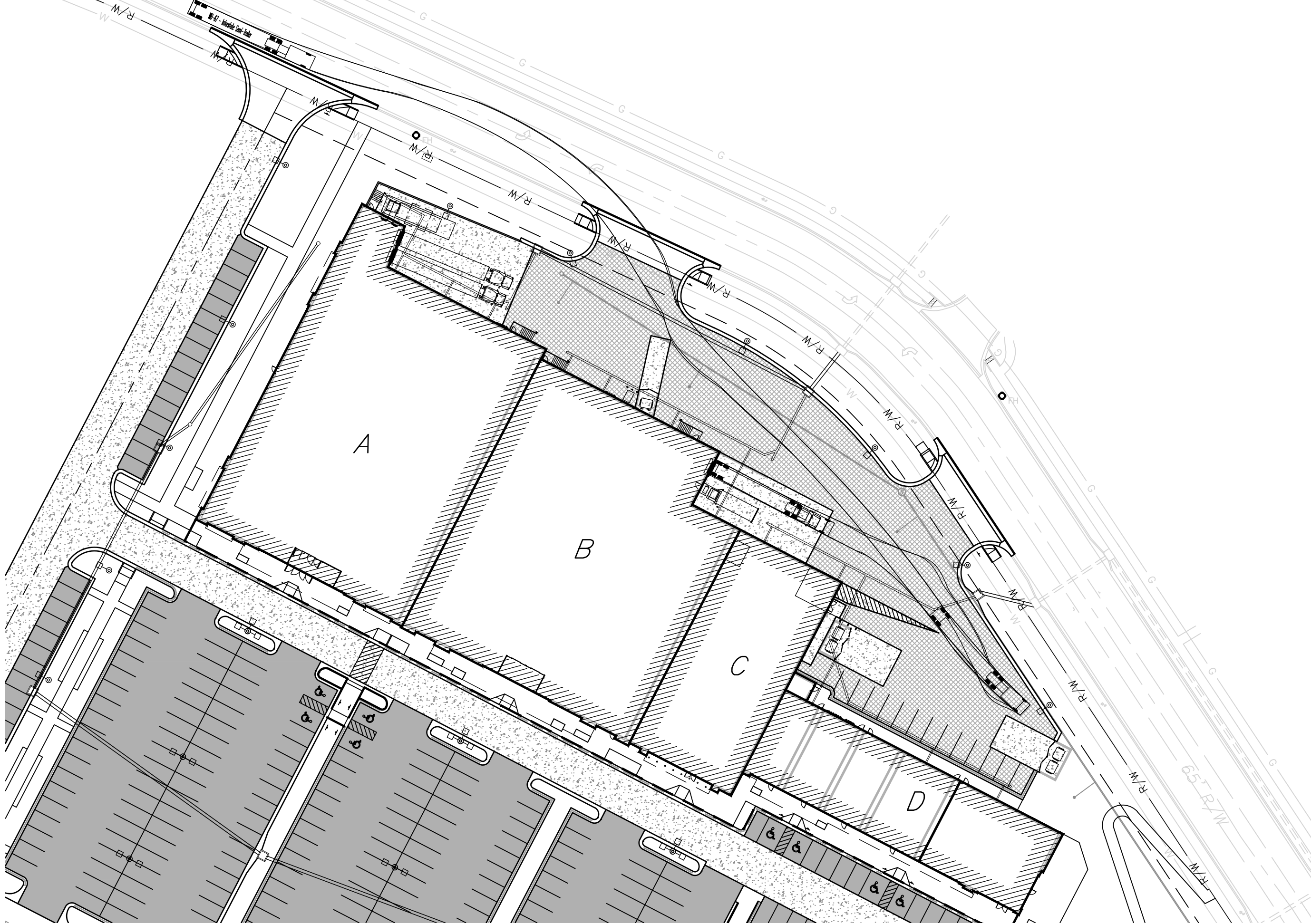
SUMMIT ORCHARDS LOT 4B
FINAL DEVELOPMENT PLAN
NW CHIPMAN RD & NW WARD RD
LEE'S SUMMIT, MISSOURI 64086

TRUCK TURN PLAN

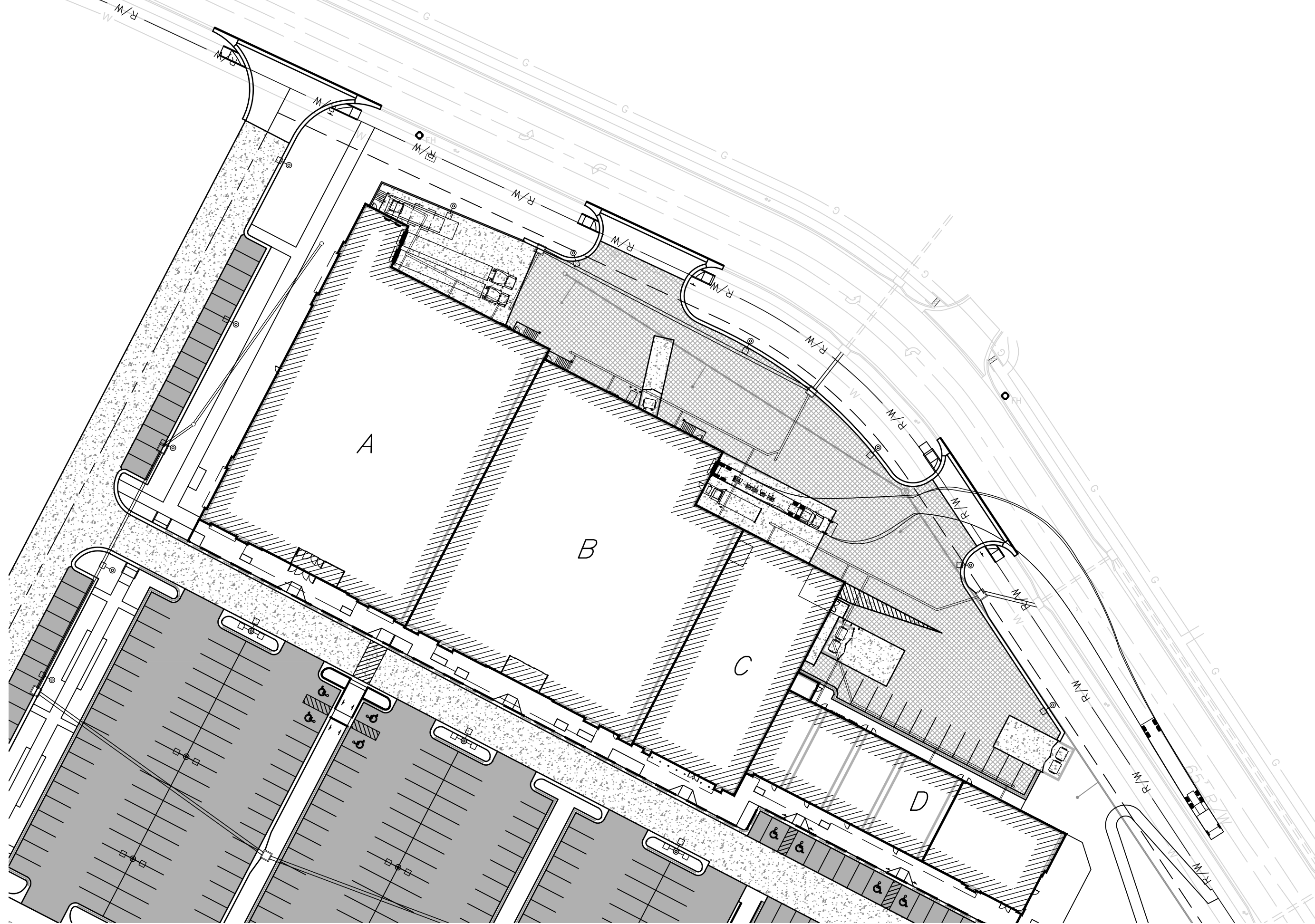
SHEET NUMBER
C201
4 OF 44

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

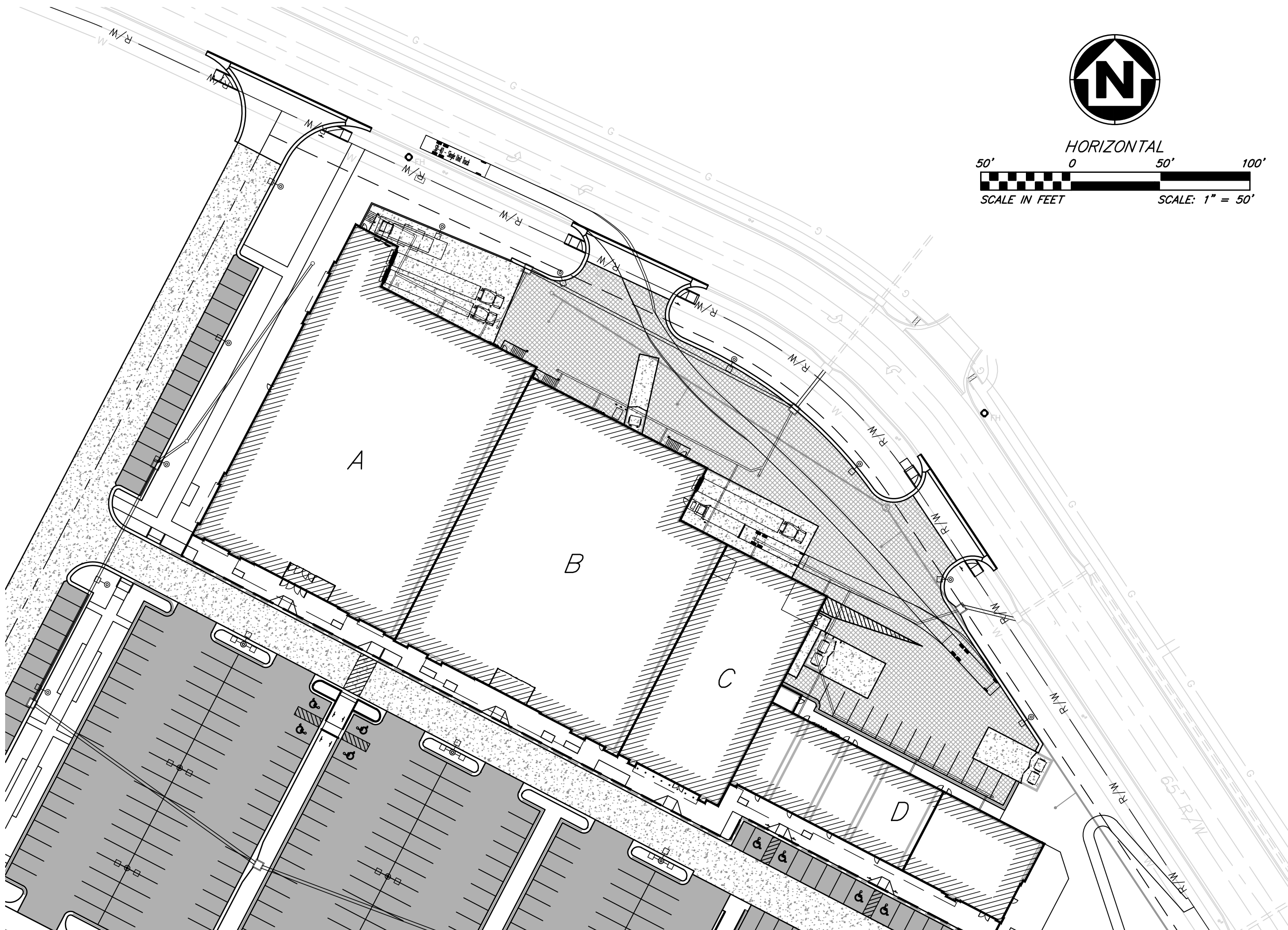
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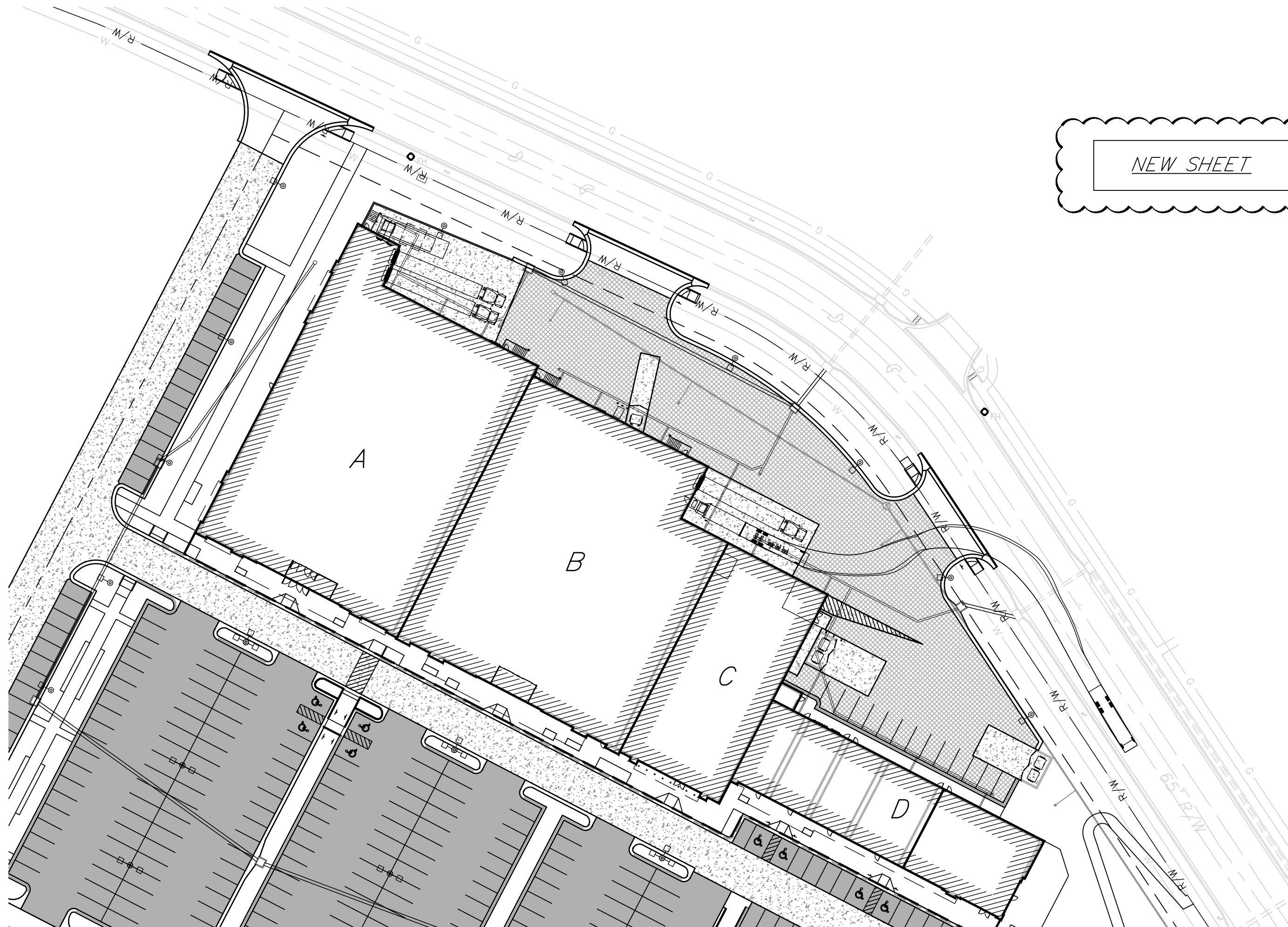
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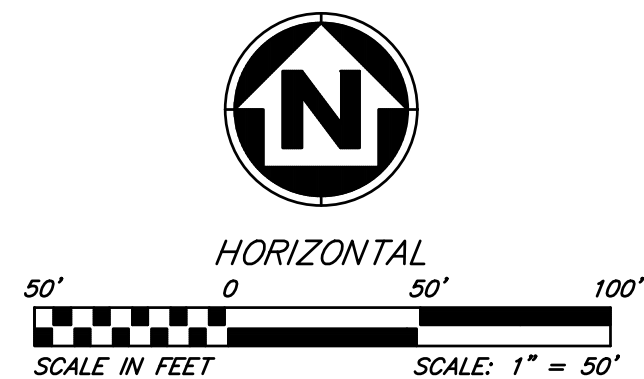
BUILDING B: WB-67 DEPARTURE



BUILDING B: SU-40 ARRIVAL



BUILDING B: SU-40 DEPARTURE



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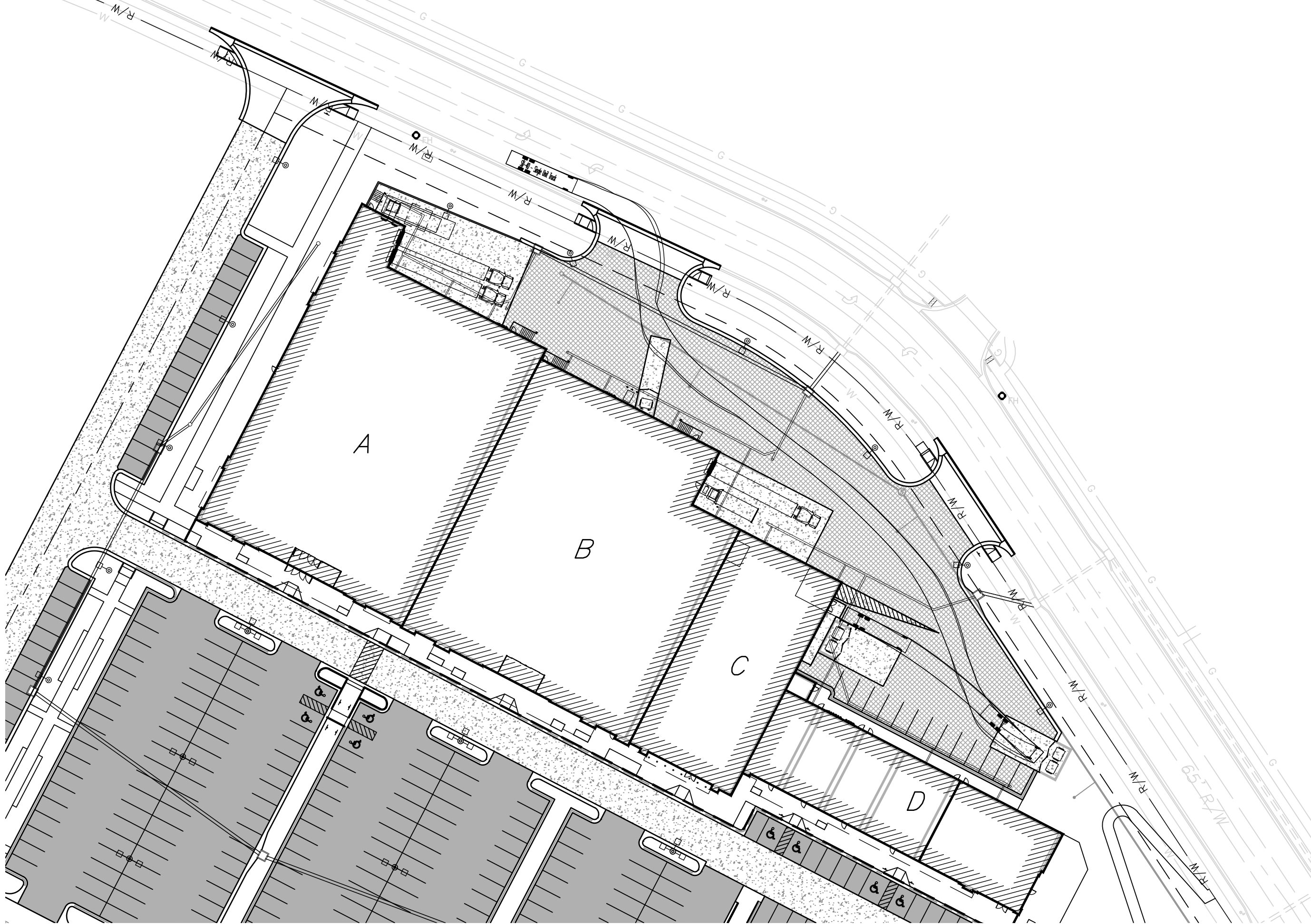
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SUMMIT ORCHARDS LOT 4B
FINAL DEVELOPMENT PLAN
NW CHIPMAN RD & NW WARD RD
LEE'S SUMMIT, MISSOURI 64086

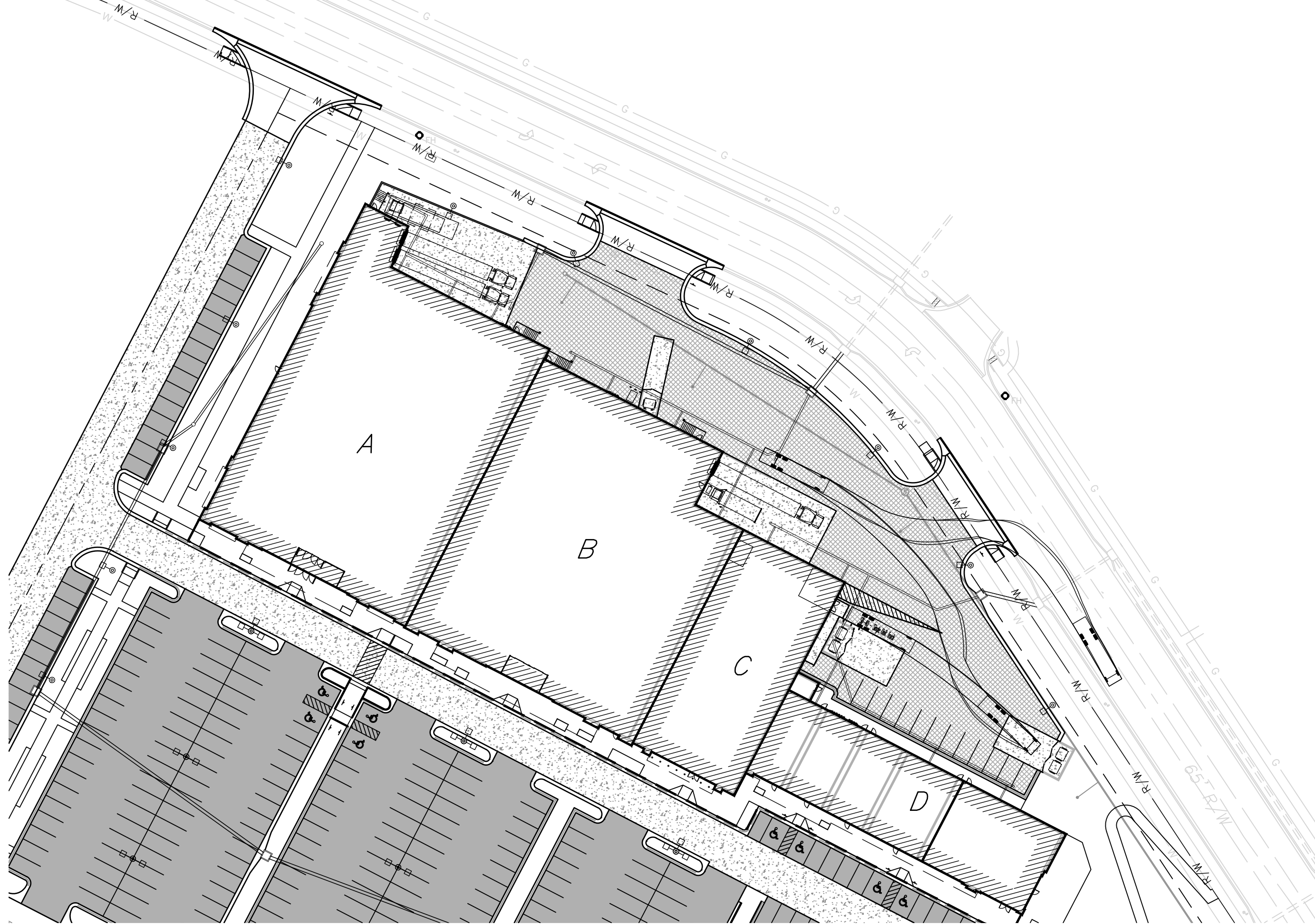
TRUCK TURN PLAN

SHEET NUMBER
C202
5 OF 44

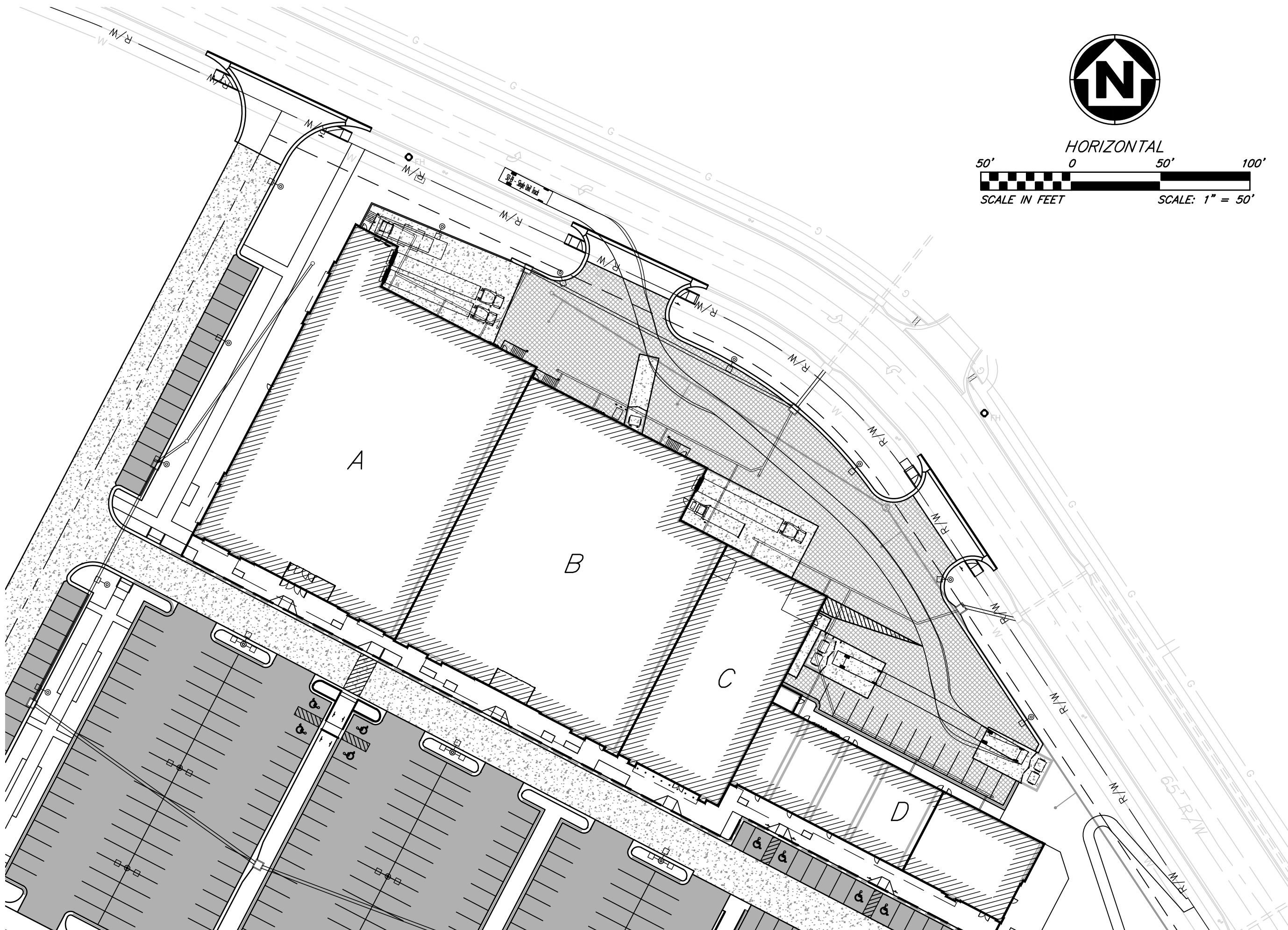
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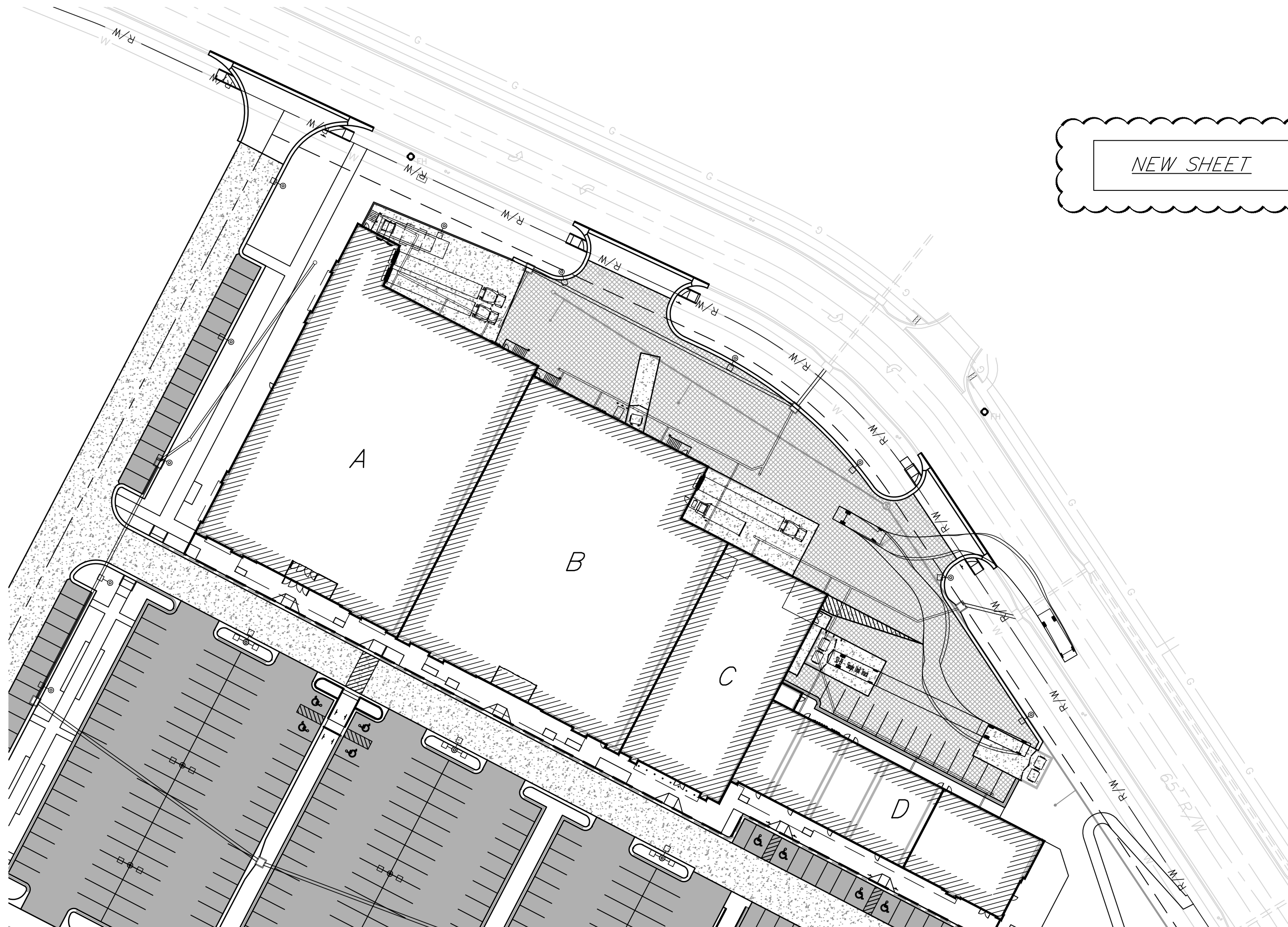
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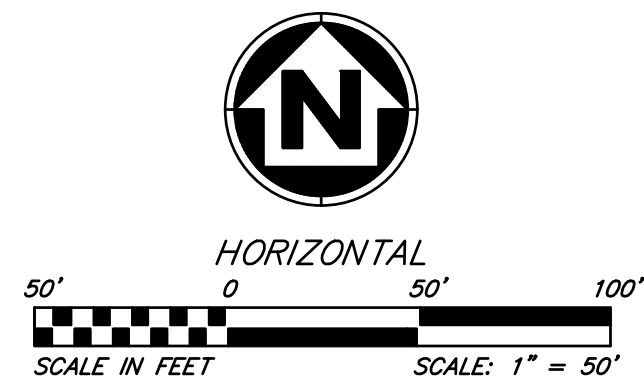
BUILDING C: SU-40 DEPARTURE



BUILDING C: SU-9 ARRIVAL



BUILDING C: SU-9 DEPARTURE



NEW SHEET

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

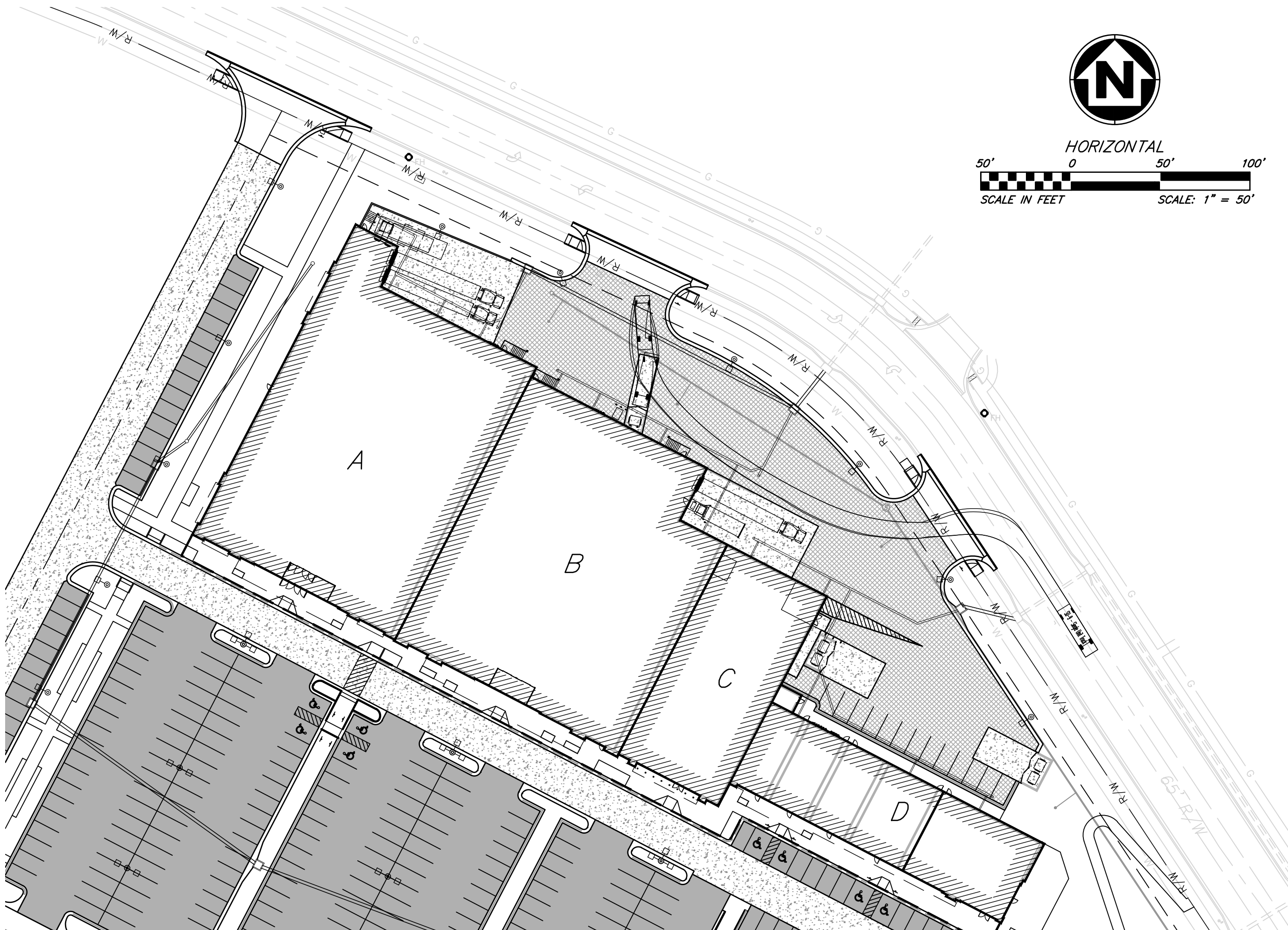
TRUCK TURN PLAN

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

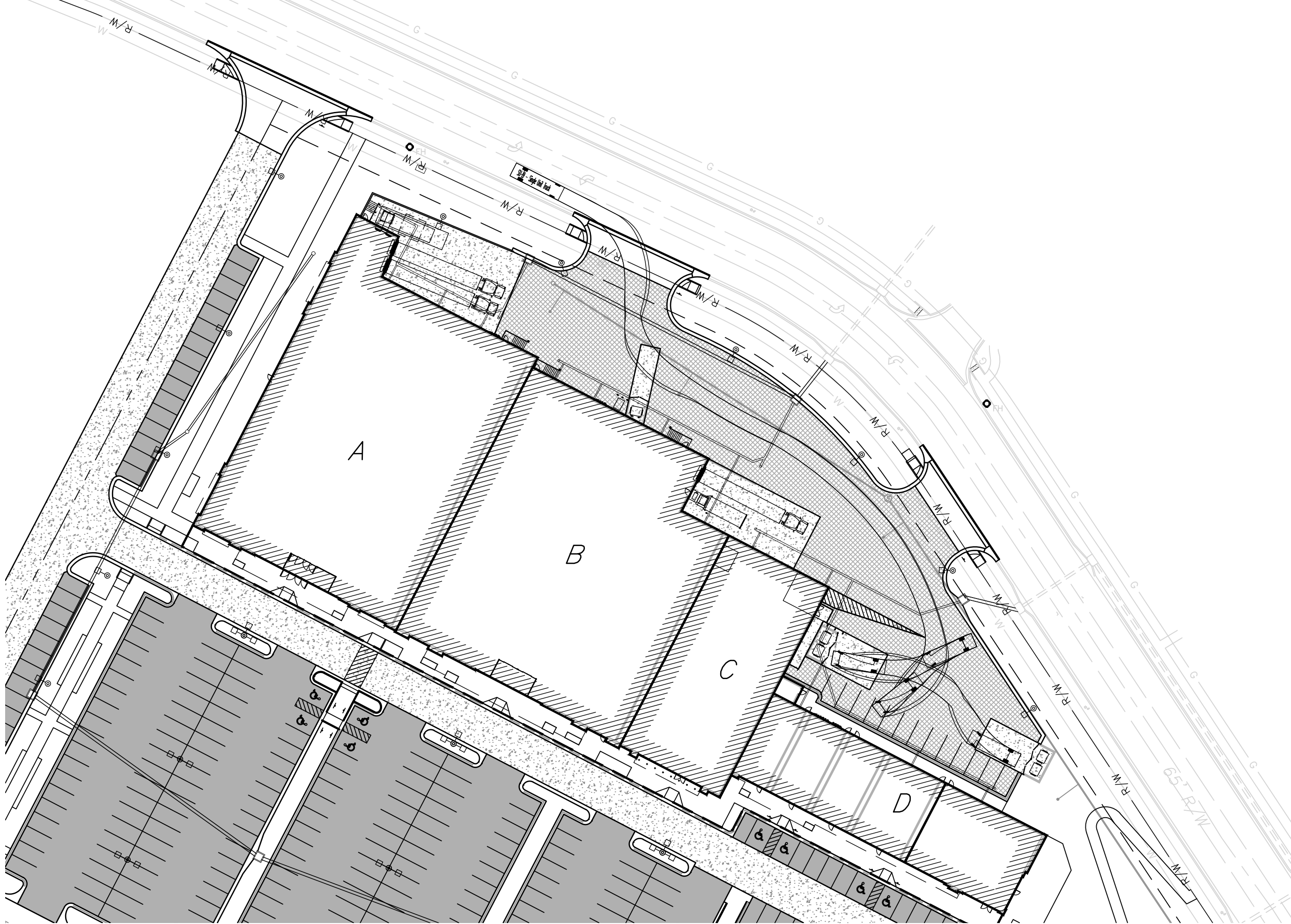
Thomas P. Woollen

SHEET NUMBER
C203
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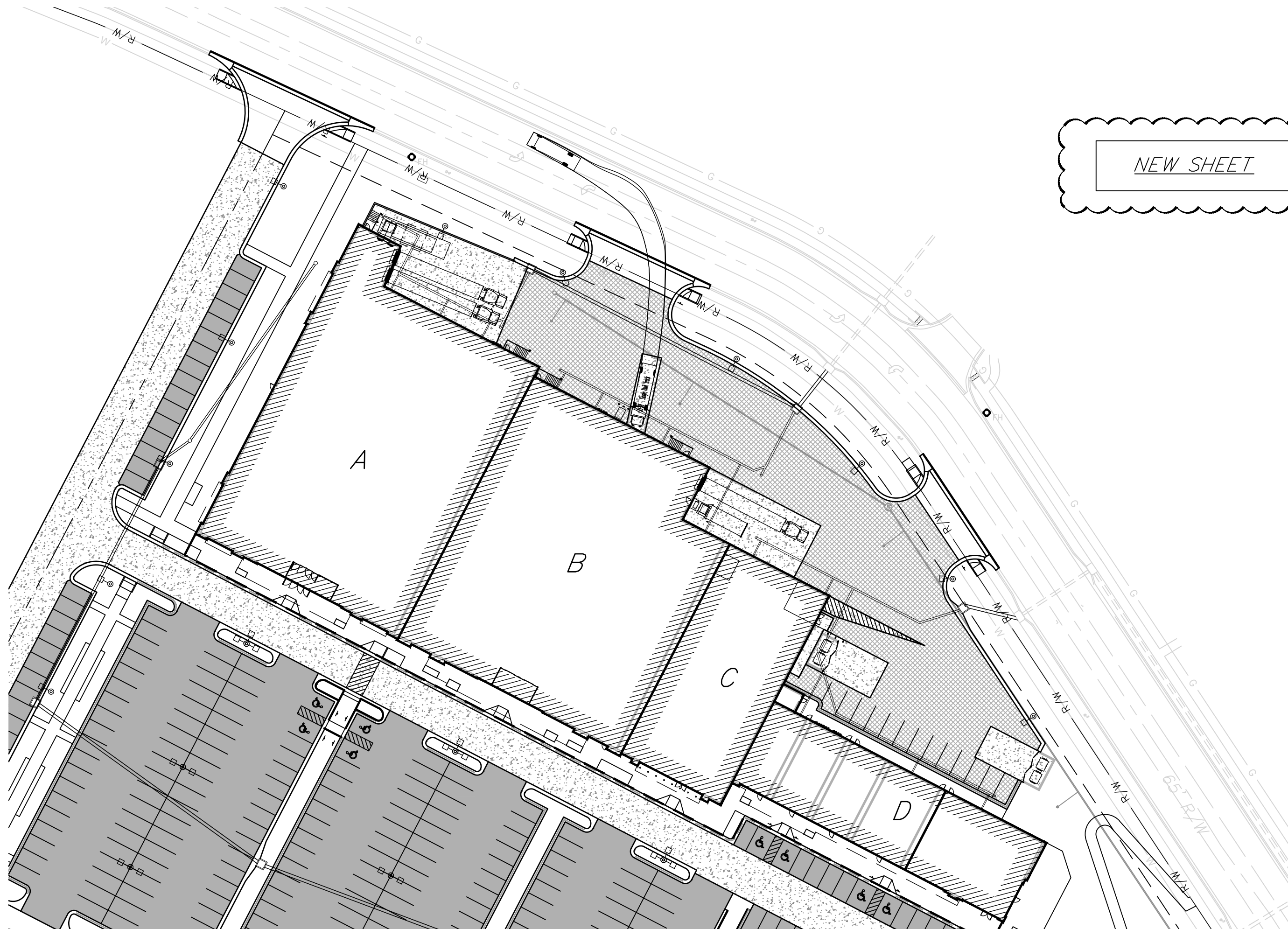
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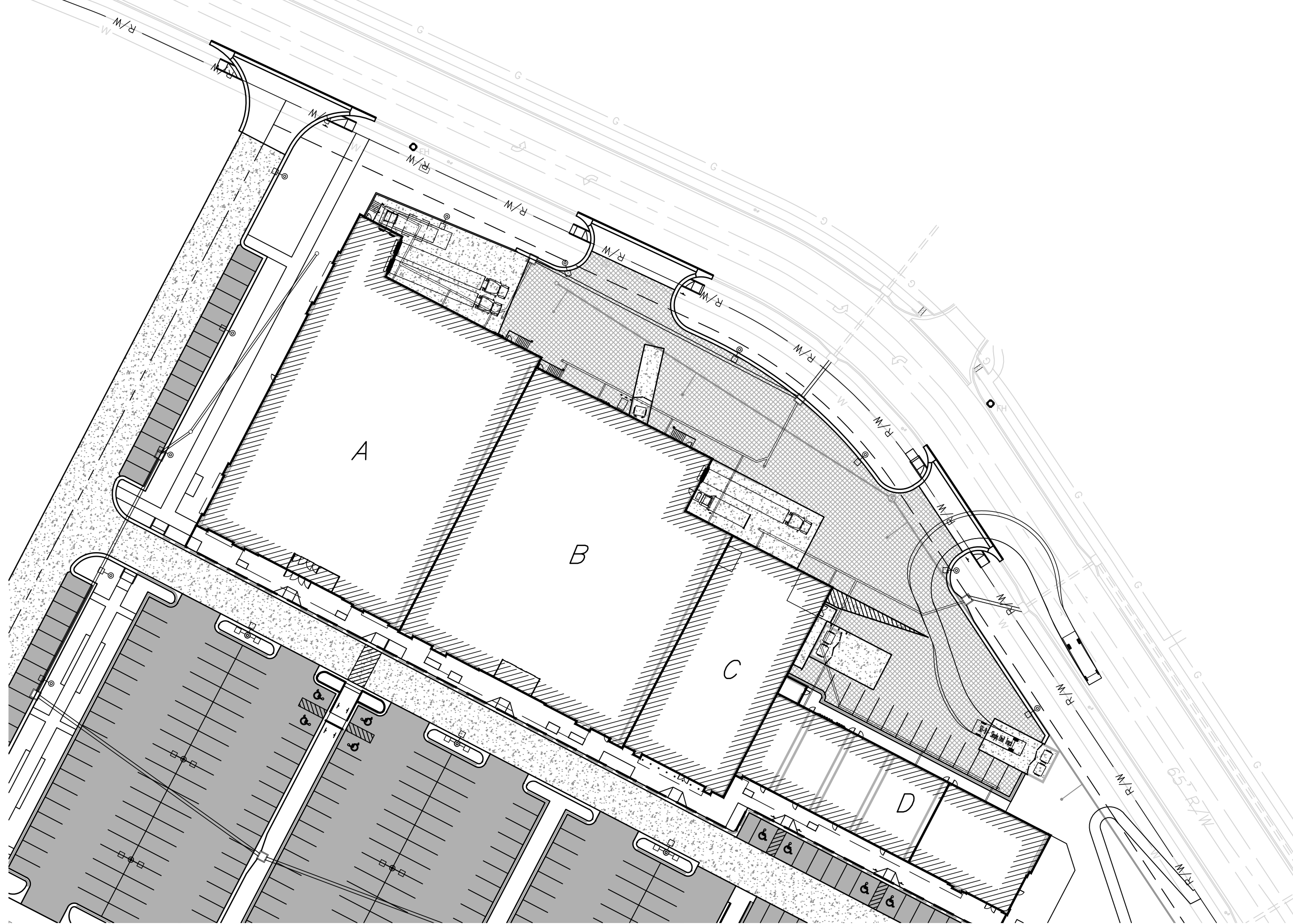
BUILDING B: SU-9 ARRIVAL



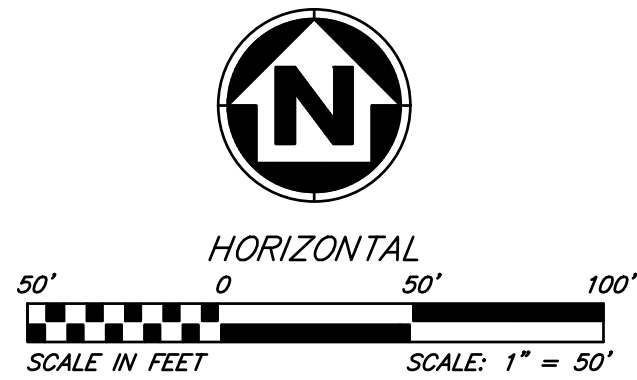
BUILDING D: SU-9 ARRIVAL



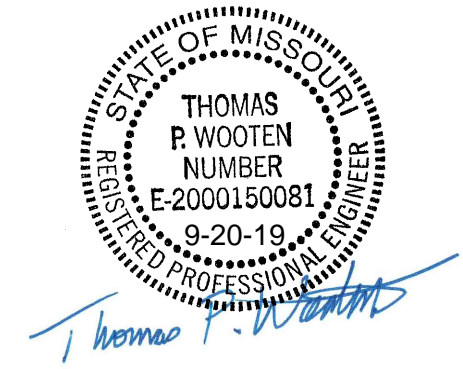
BUILDING B: SU-9 DEPARTURE



BUILDING D: SU-9 DEPARTURE



NEW SHEET



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

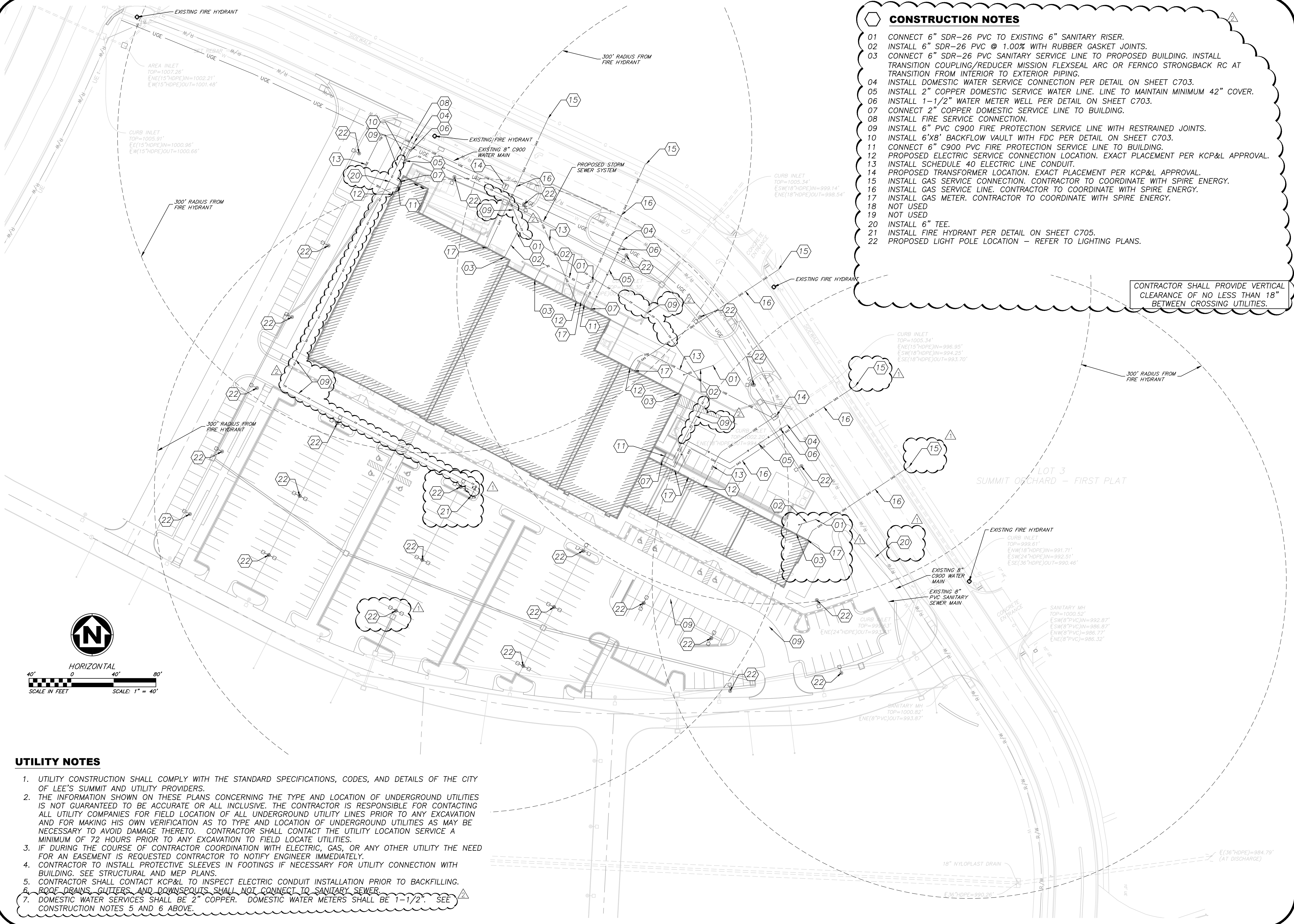
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C204
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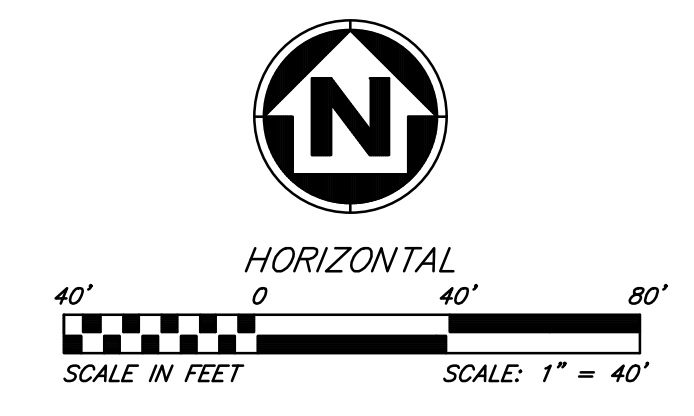
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CONSTRUCTION NOTES

- CONNECT 6" SDR-26 PVC TO EXISTING 6" SANITARY RISER.
- INSTALL 6" SDR-26 PVC @ 1.00% WITH RUBBER GASKET JOINTS.
- CONNECT 6" SDR-26 PVC SANITARY SERVICE LINE TO PROPOSED BUILDING. INSTALL TRANSITION COUPLING/REDUCER MISSION FLEXSEAL ARC OR FERNCO STRONGBACK RC AT TRANSITION FROM INTERIOR TO EXTERIOR PIPING.
- INSTALL DOMESTIC WATER SERVICE CONNECTION PER DETAIL ON SHEET C703.
- INSTALL 2" COPPER DOMESTIC SERVICE WATER LINE. LINE TO MAINTAIN MINIMUM 42" COVER.
- INSTALL 1-1/2" WATER METER WELL PER DETAIL ON SHEET C703.
- CONNECT 2" COPPER DOMESTIC SERVICE LINE TO BUILDING.
- INSTALL FIRE SERVICE CONNECTION.
- INSTALL 6" PVC C900 FIRE PROTECTION SERVICE LINE WITH RESTRAINED JOINTS.
- INSTALL 6'X8' BACKFLOW VAULT WITH FDC PER DETAIL ON SHEET C703.
- CONNECT 6" C900 PVC FIRE PROTECTION SERVICE LINE TO BUILDING.
- PROPOSED ELECTRIC SERVICE CONNECTION LOCATION. EXACT PLACEMENT PER KCP&L APPROVAL.
- INSTALL SCHEDULE 40 ELECTRIC LINE CONDUIT.
- PROPOSED TRANSFORMER LOCATION. EXACT PLACEMENT PER KCP&L APPROVAL.
- INSTALL GAS SERVICE CONNECTION. CONTRACTOR TO COORDINATE WITH SPIRE ENERGY.
- INSTALL GAS SERVICE LINE. CONTRACTOR TO COORDINATE WITH SPIRE ENERGY.
- INSTALL GAS METER. CONTRACTOR TO COORDINATE WITH SPIRE ENERGY.
- NOT USED
- NOT USED
- INSTALL 6" TEE.
- INSTALL FIRE HYDRANT PER DETAIL ON SHEET C705.
- PROPOSED LIGHT POLE LOCATION - REFER TO LIGHTING PLANS.

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



- UTILITY NOTES**
 - UTILITY CONSTRUCTION SHALL COMPLY WITH THE STANDARD SPECIFICATIONS, CODES, AND DETAILS OF THE CITY OF LEE'S SUMMIT AND UTILITY PROVIDERS.
 - 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.
 - 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.
 - CONTRACTOR TO INSTALL PROTECTIVE SLEEVES IN FOOTINGS IF NECESSARY FOR UTILITY CONNECTION WITH BUILDING. SEE STRUCTURAL AND MEP PLANS.
 - CONTRACTOR SHALL CONTACT KCP&L TO INSPECT ELECTRIC CONDUIT INSTALLATION PRIOR TO BACKFILLING.
 - ROOF DRAINS, GUTTERS, AND DOWNSPOUTS SHALL NOT CONNECT TO SANITARY SEWER.
 - DOMESTIC WATER SERVICES SHALL BE 2" COPPER. DOMESTIC WATER METERS SHALL BE 1-1/2". SEE CONSTRUCTION NOTES 5 AND 6 ABOVE.

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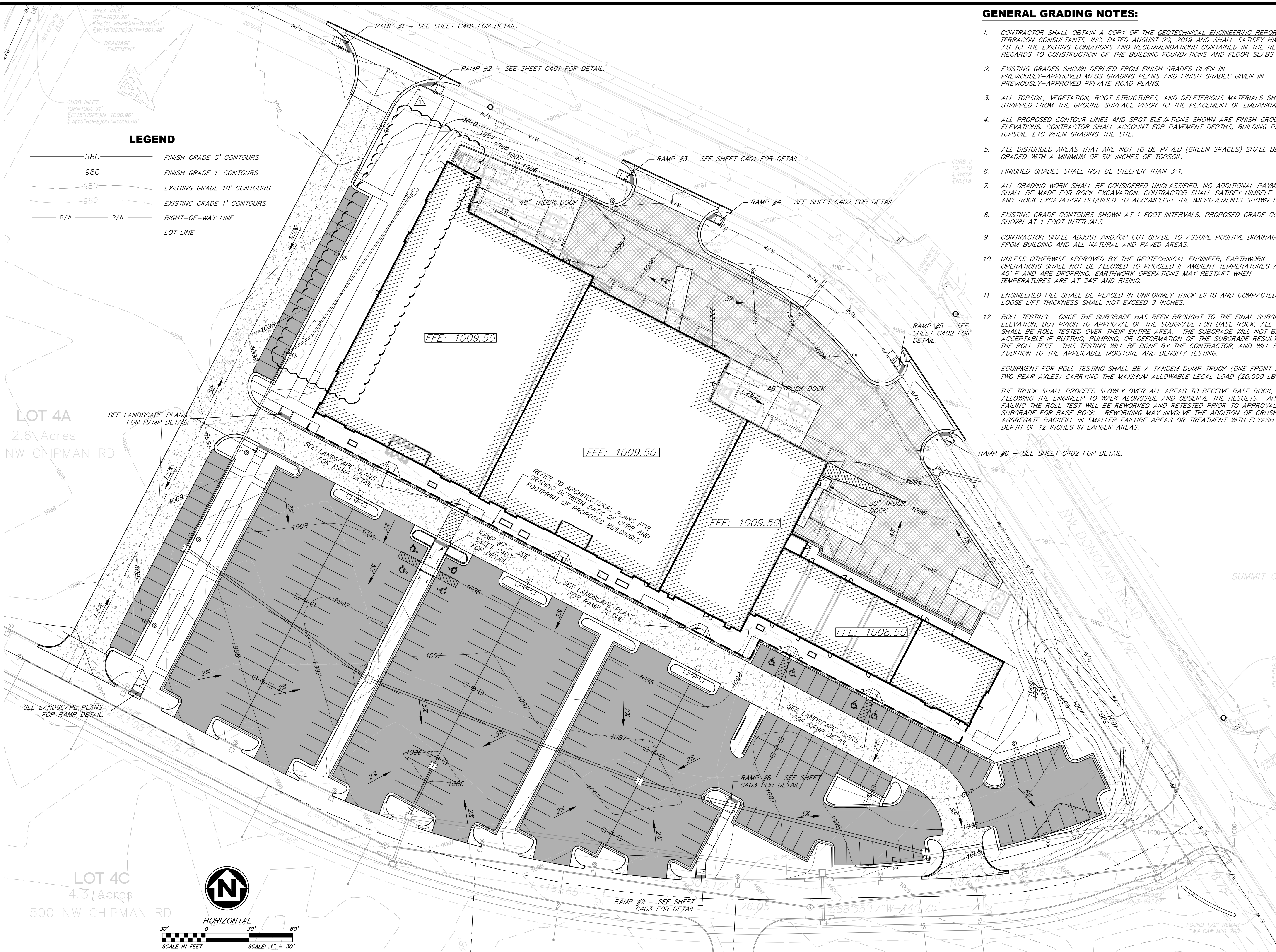
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2	REVISIONS PER CITY COMMENTS	TPW	10/1/19
		LICENSE NO.	08/28/2019
		DATE:	
		FIELD BOOK:	
		JOB NUMBER:	190010008
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SUMMIT ORCHARDS LOT 4B
FINAL DEVELOPMENT PLAN
NW CHIPMAN RD & NW WARD RD
LEE'S SUMMIT, MISSOURI 64086

UTILITY PLAN

SHEET NUMBER
C300
8 OF 44

Sep 20, 2019 - 10:35am Plotted By: AE Eng 4 Z:\Engineering Design\Projects\2019\190010008 SUMMIT ORCHARDS LOT 4B\01 CIVIL\01-DWG\Sheet\190010008-SHITS-GRAD.dwg Layout: OVERALL



GENERAL GRADING NOTES:

1. CONTRACTOR SHALL OBTAIN A COPY OF THE GEOTECHNICAL ENGINEERING REPORT BY TERRACON CONSULTANTS, INC. DATED AUGUST 20, 2019 AND SHALL SATISFY HIMSELF AS TO THE EXISTING CONDITIONS AND RECOMMENDATIONS CONTAINED IN THE REPORT IN REGARDS TO CONSTRUCTION OF THE BUILDING FOUNDATIONS AND FLOOR SLABS.
2. EXISTING GRADES SHOWN DERIVED FROM FINISH GRADES GIVEN IN PREVIOUSLY-APPROVED MASS GRADING PLANS AND FINISH GRADES GIVEN IN PREVIOUSLY-APPROVED PRIVATE ROAD PLANS.
3. ALL TOPSOIL, VEGETATION, ROOT STRUCTURES, AND DELETERIOUS MATERIALS SHALL BE STRIPPED FROM THE GROUND SURFACE PRIOR TO THE PLACEMENT OF EMBANKMENTS.
4. ALL PROPOSED CONTOUR LINES AND SPOT ELEVATIONS SHOWN ARE FINISH GROUND ELEVATIONS. CONTRACTOR SHALL ACCOUNT FOR PAVEMENT DEPTHS, BUILDING PADS, TOPSOIL, ETC WHEN GRADING THE SITE.
5. ALL DISTURBED AREAS THAT ARE NOT TO BE PAVED (GREEN SPACES) SHALL BE FINISH GRADED WITH A MINIMUM OF SIX INCHES OF TOPSOIL.
6. FINISHED GRADES SHALL NOT BE STEEPER THAN 3:1.
7. ALL GRADING WORK SHALL BE CONSIDERED UNCLASSIFIED. NO ADDITIONAL PAYMENTS SHALL BE MADE FOR ROCK EXCAVATION. CONTRACTOR SHALL SATISFY HIMSELF AS TO ANY ROCK EXCAVATION REQUIRED TO ACCOMPLISH THE IMPROVEMENTS SHOWN HEREON.
8. EXISTING GRADE CONTOURS SHOWN AT 1 FOOT INTERVALS. PROPOSED GRADE CONTOURS SHOWN AT 1 FOOT INTERVALS.
9. CONTRACTOR SHALL ADJUST AND/OR CUT GRADE TO ASSURE POSITIVE DRAINAGE AWAY FROM BUILDING AND ALL NATURAL AND PAVED AREAS.
10. UNLESS OTHERWISE APPROVED BY THE GEOTECHNICAL ENGINEER, EARTHWORK OPERATIONS SHALL NOT BE ALLOWED TO PROCEED IF AMBIENT TEMPERATURES ARE AT 40° F AND ARE DROPPING. EARTHWORK OPERATIONS MAY RESTART WHEN TEMPERATURES ARE AT 34° F AND RISING.
11. ENGINEERED FILL SHALL BE PLACED IN UNIFORMLY THICK LIFTS AND COMPACTED. THE LOOSE LIFT THICKNESS SHALL NOT EXCEED 9 INCHES.
12. ROLL TESTING: ONCE THE SUBGRADE HAS BEEN BROUGHT TO THE FINAL SUBGRADE ELEVATION, BUT PRIOR TO APPROVAL OF THE SUBGRADE FOR BASE ROCK, ALL AREAS SHALL BE ROLL TESTED OVER THEIR ENTIRE AREA. THE SUBGRADE WILL NOT BE ACCEPTABLE IF RUTTING, PUMPING, OR DEFORMATION OF THE SUBGRADE RESULTS FROM THE ROLL TEST. THIS TESTING WILL BE DONE BY THE CONTRACTOR, AND WILL BE IN ADDITION TO THE APPLICABLE MOISTURE AND DENSITY TESTING.

EQUIPMENT FOR ROLL TESTING SHALL BE A TANDEM DUMP TRUCK (ONE FRONT AND TWO REAR AXLES) CARRYING THE MAXIMUM ALLOWABLE LEGAL LOAD (20,000 LBS).

THE TRUCK SHALL PROCEED SLOWLY OVER ALL AREAS TO RECEIVE BASE ROCK, ALLOWING THE ENGINEER TO WALK ALONGSIDE AND OBSERVE THE RESULTS. AREAS FAILING THE ROLL TEST WILL BE REWORKED AND RETESTED PRIOR TO APPROVAL OF THE SUBGRADE FOR BASE ROCK. REWORKING MAY INVOLVE THE ADDITION OF CRUSHED AGGREGATE BACKFILL IN SMALLER FAILURE AREAS OR TREATMENT WITH FLYASH TO A DEPTH OF 12 INCHES IN LARGER AREAS.

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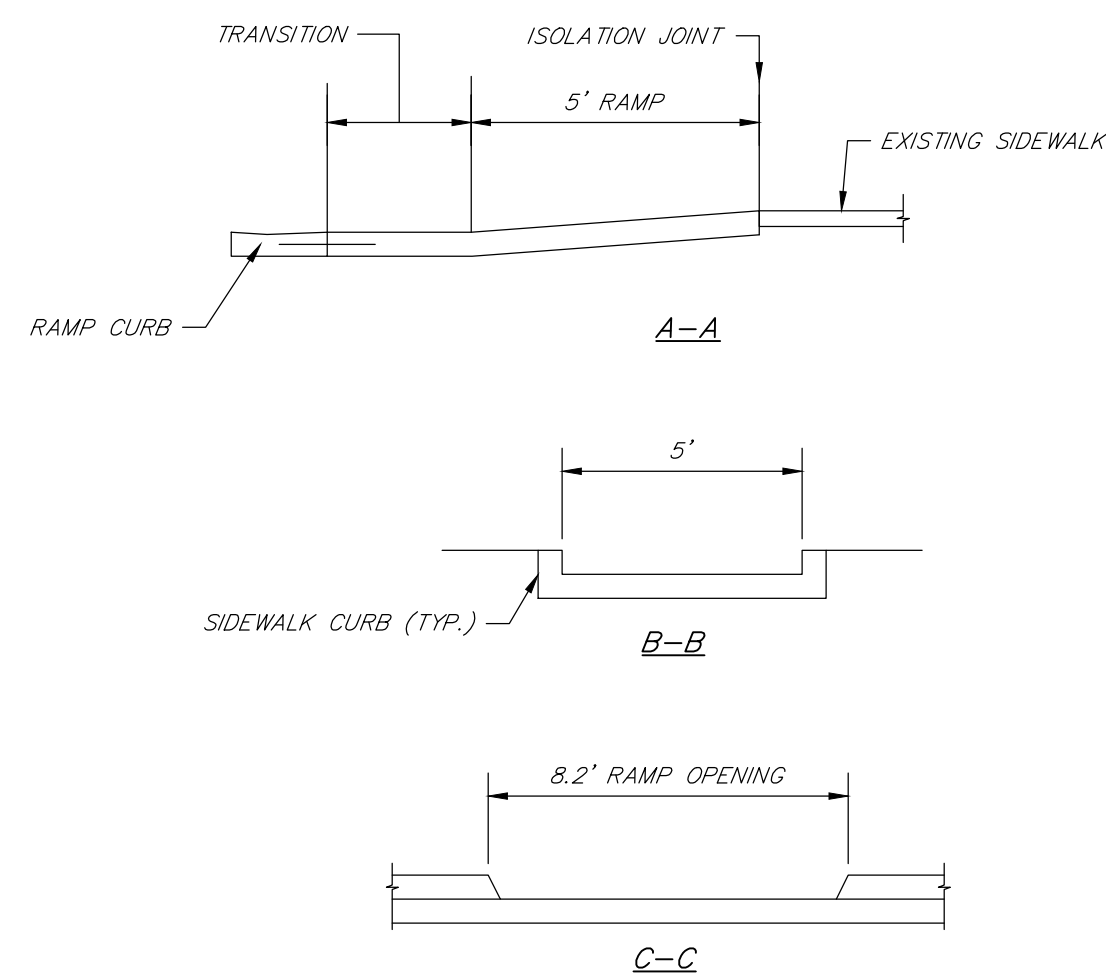
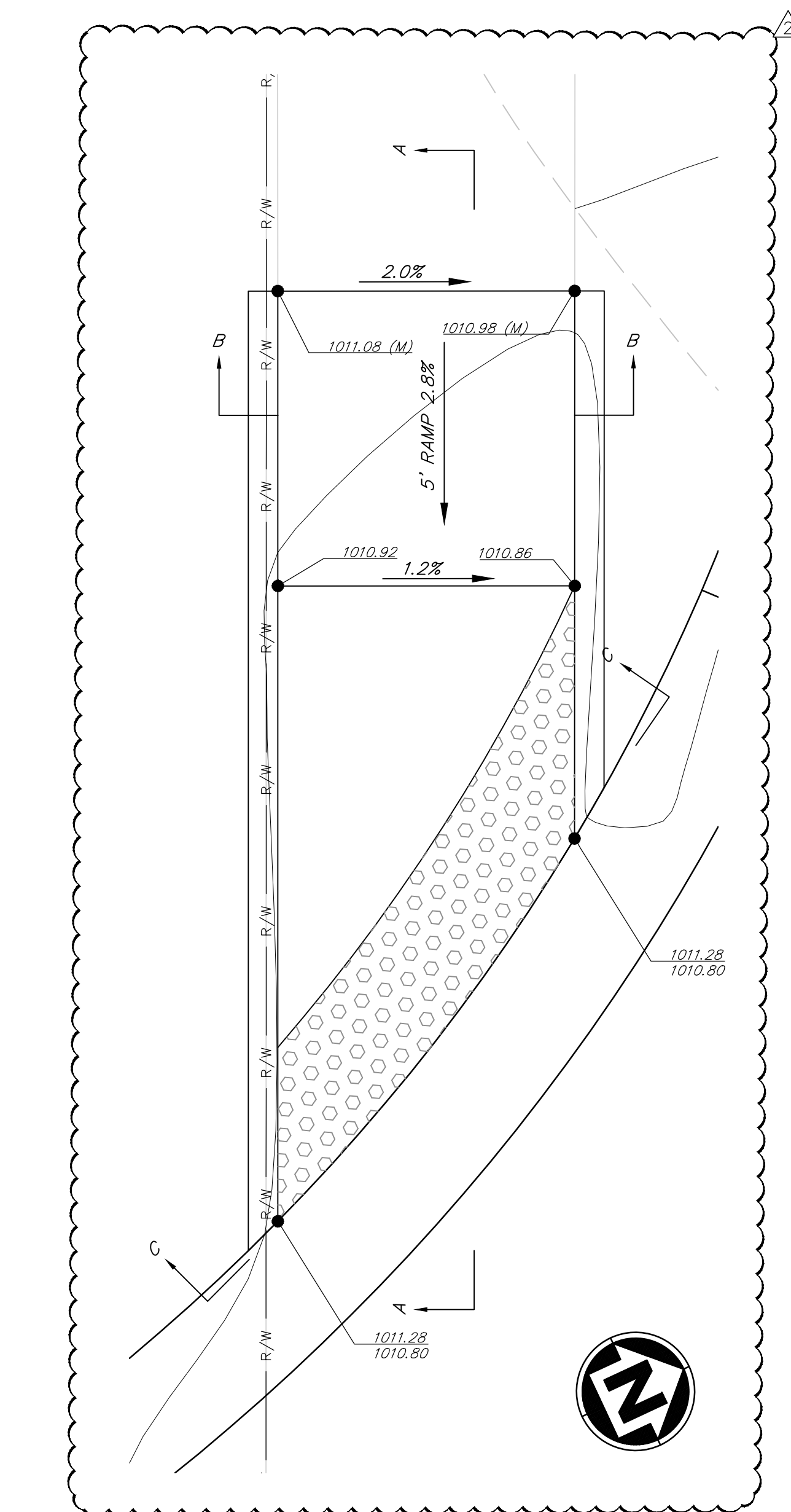
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		CHECK BY:	TPW
		LICENSE NO.	08/28/2019
		DATE:	08/28/2019
		FIELD BOOK:	190010008
		JOB NUMBER:	190010008

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

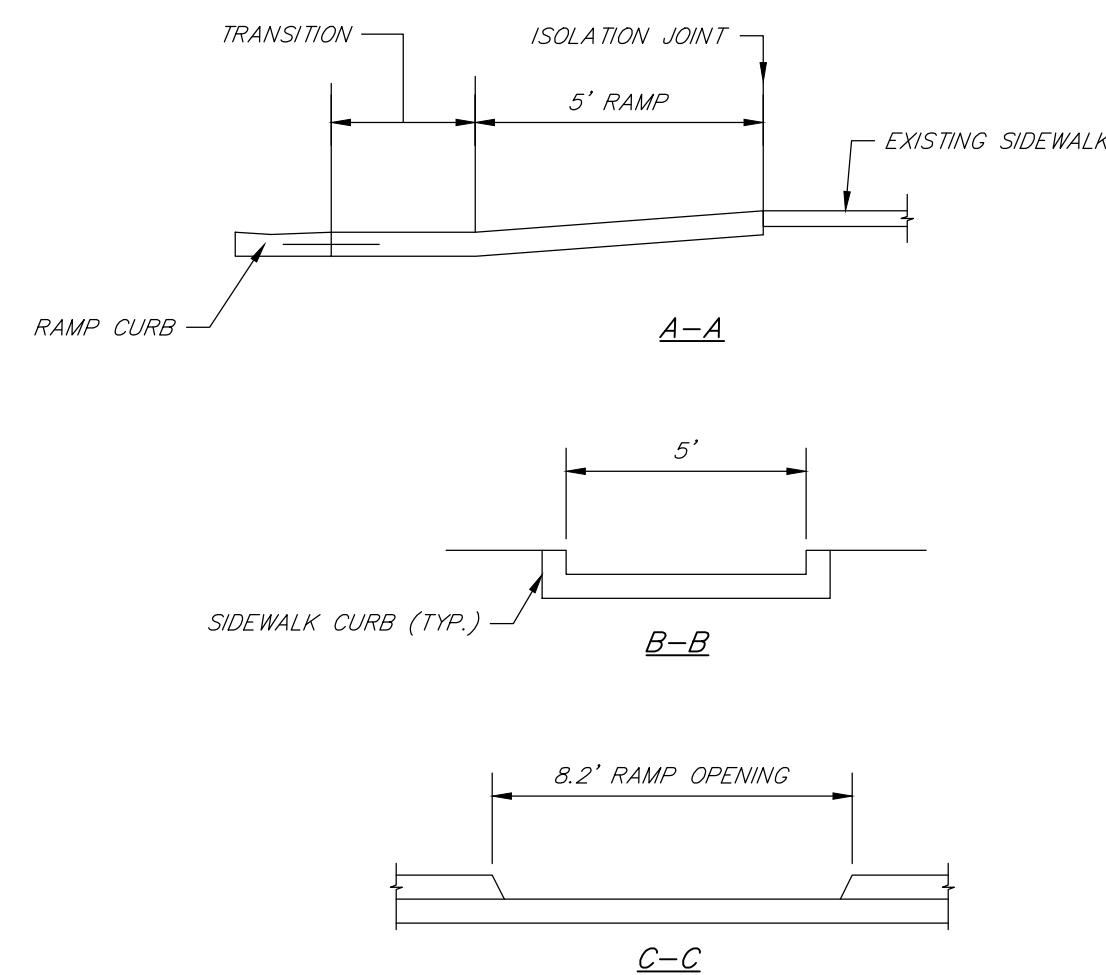
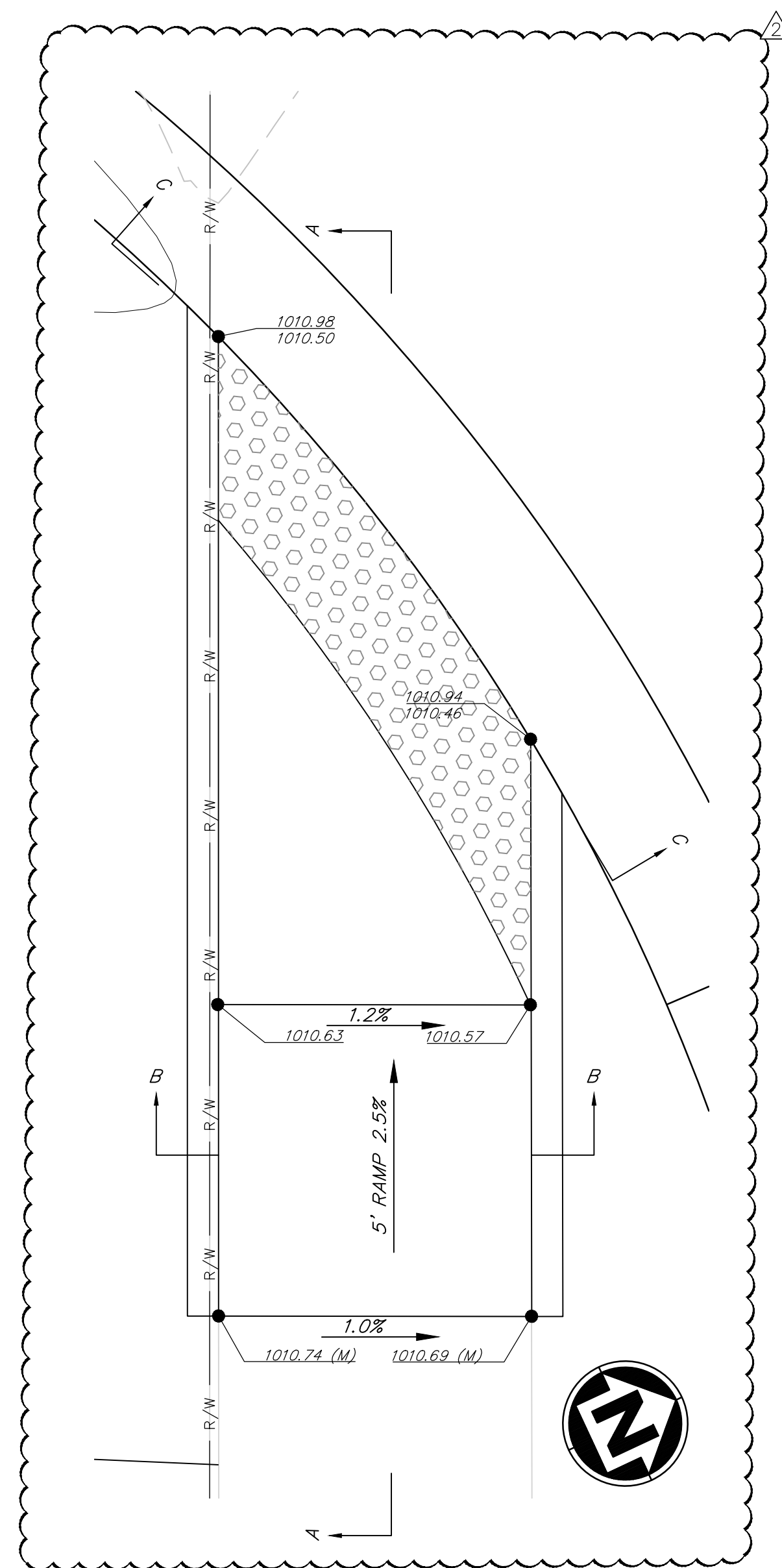
GRADING PLAN

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

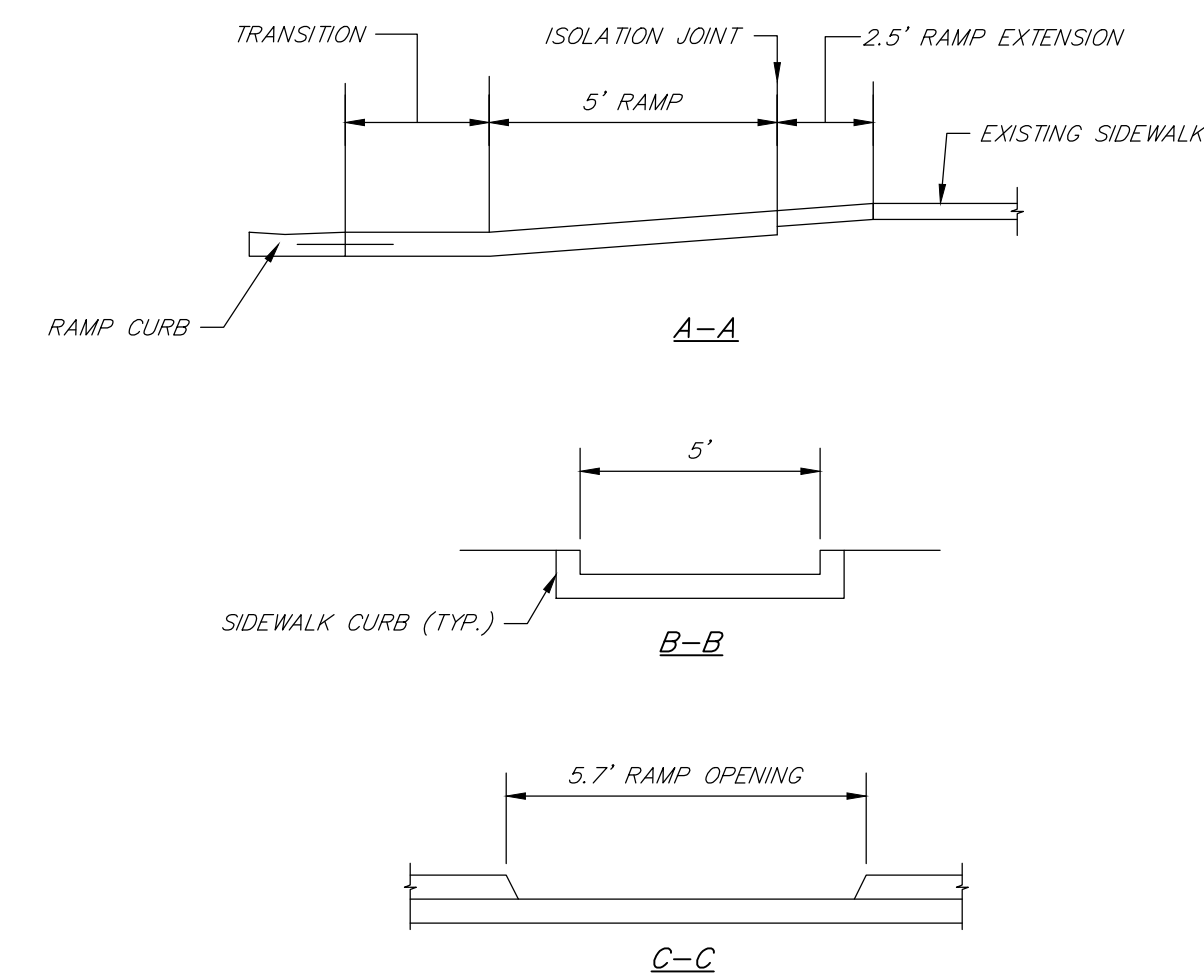
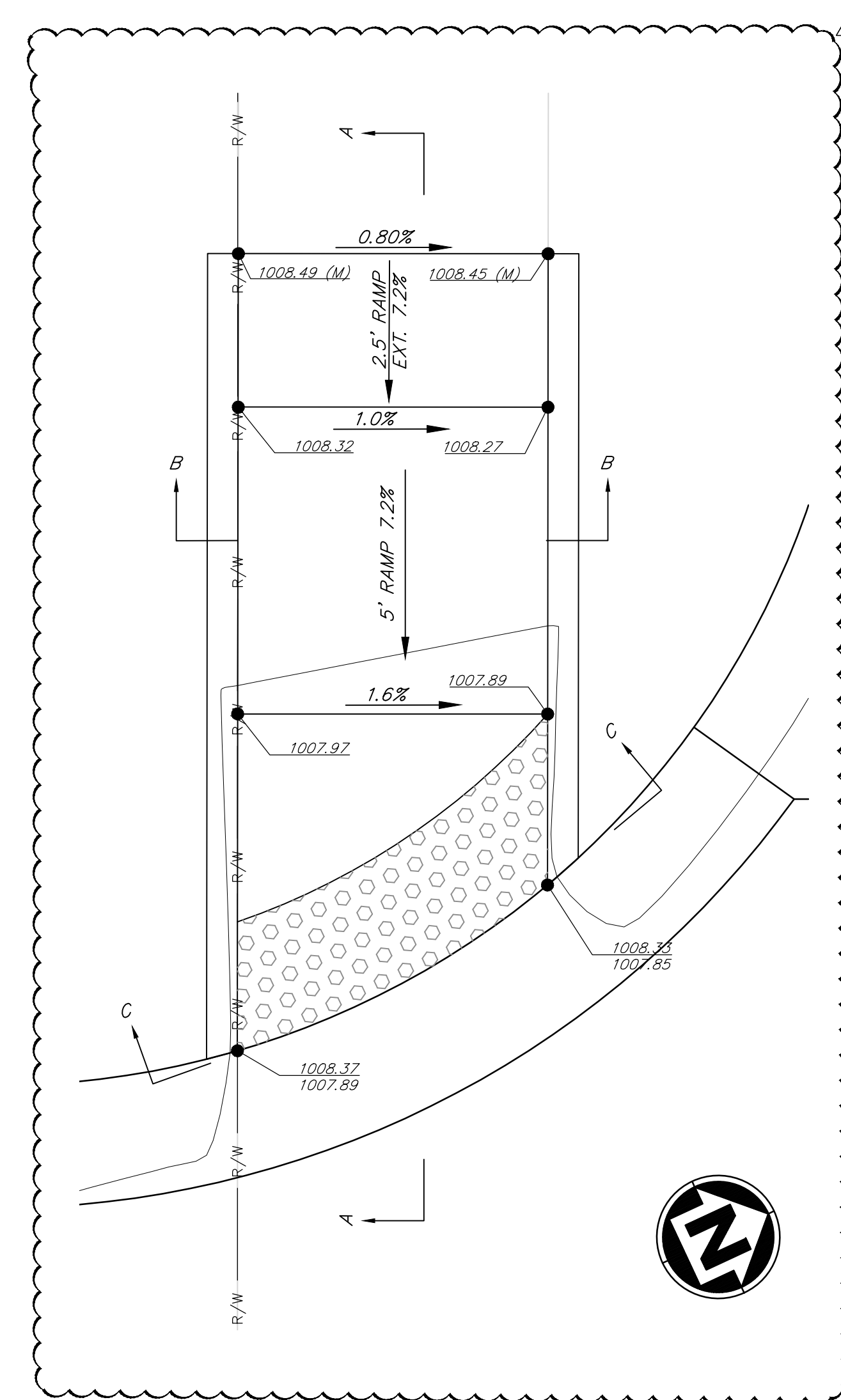
SHEET NUMBER
C400
9 OF 44



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RAMP DETAIL #2
SCALE: 1"=2'



RAMP DETAIL #3
SCALE: 1"=2'

NEW SHEET

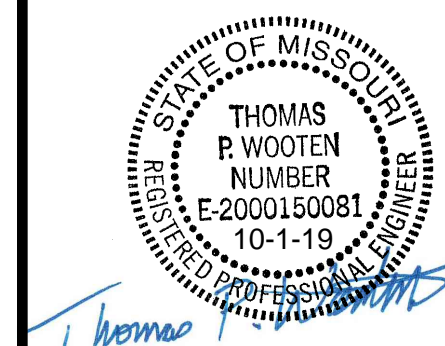
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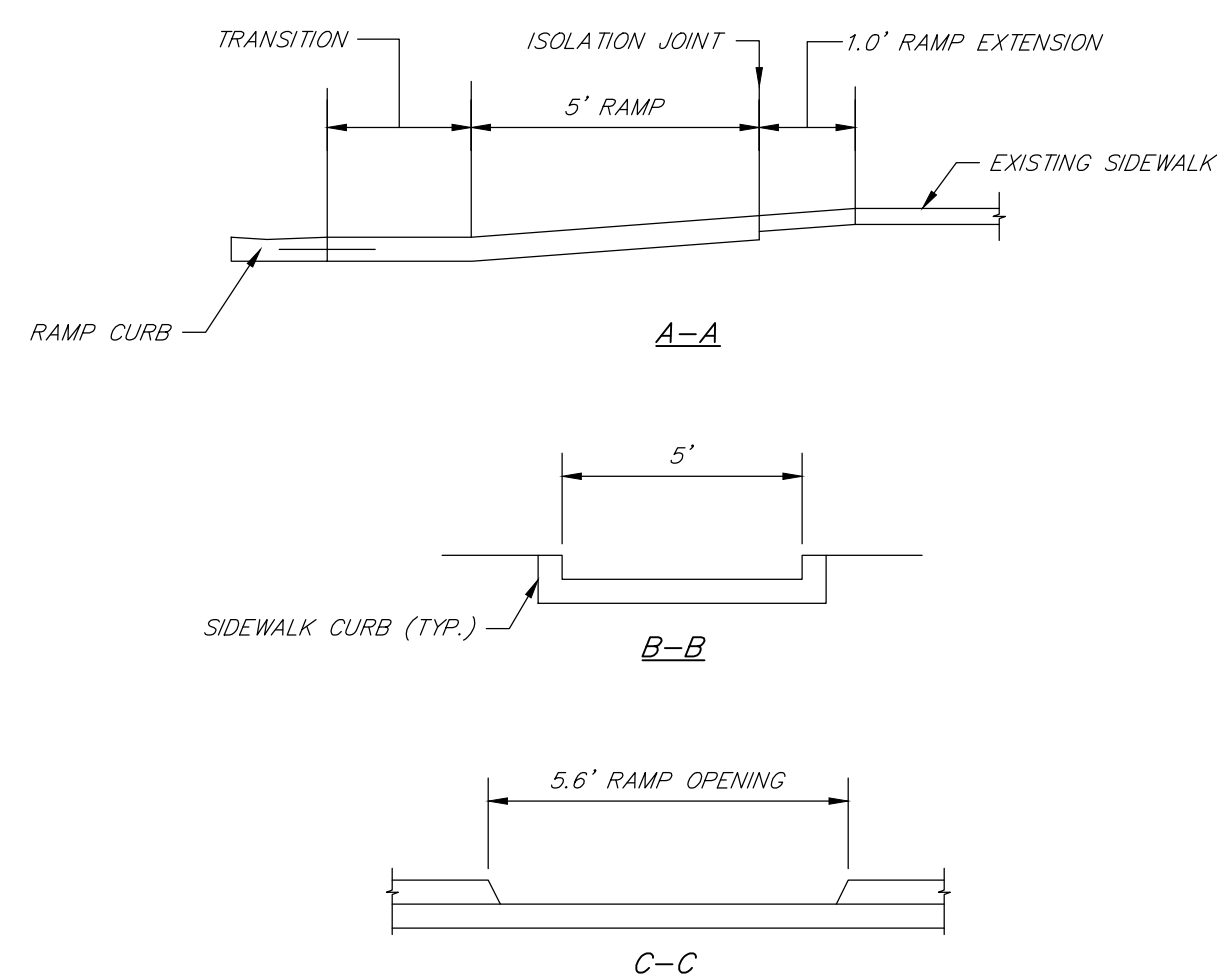
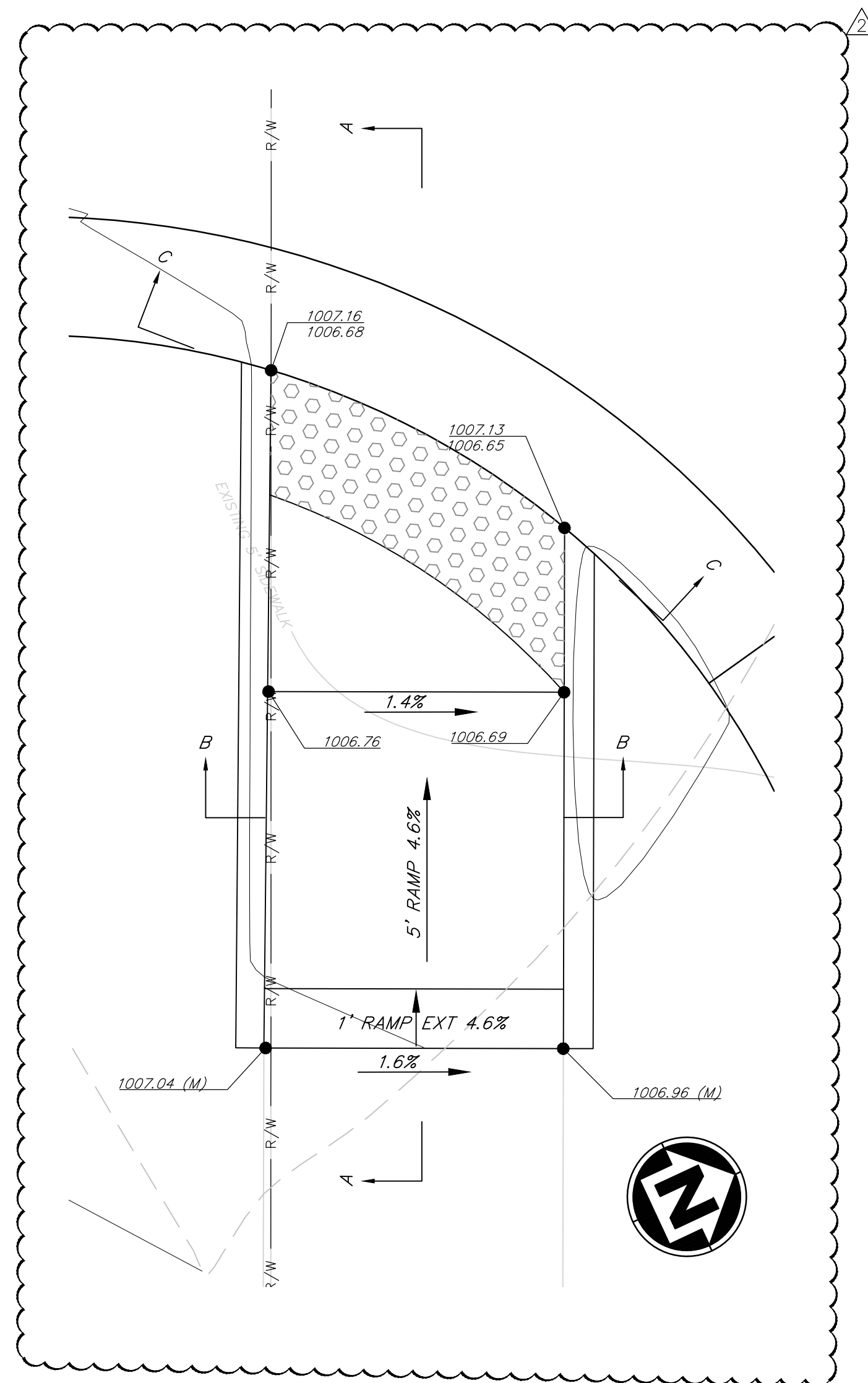
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**SUMMIT ORCHARDS LOT 4B
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NW CHIPMAN RD & NW WARD RD
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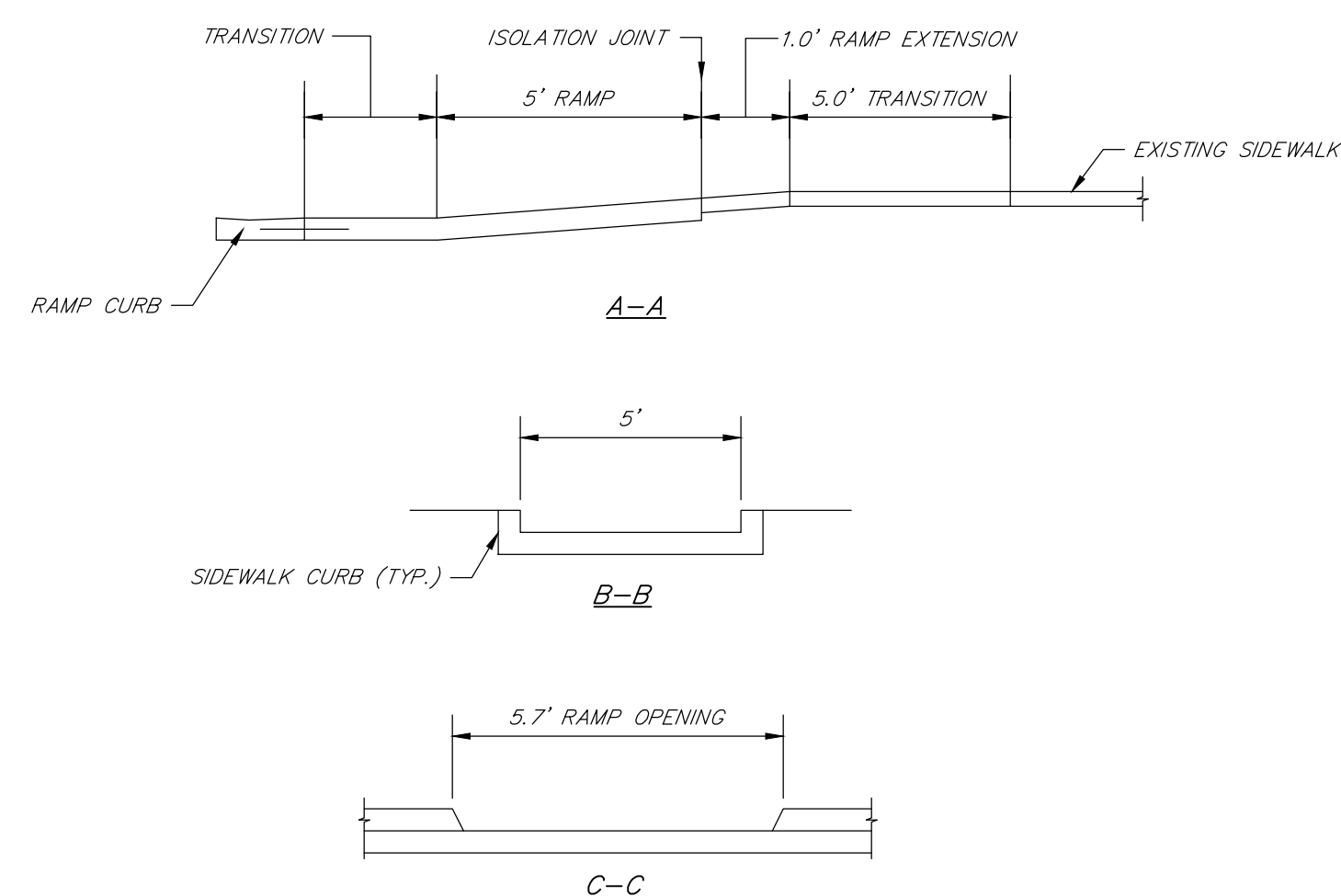
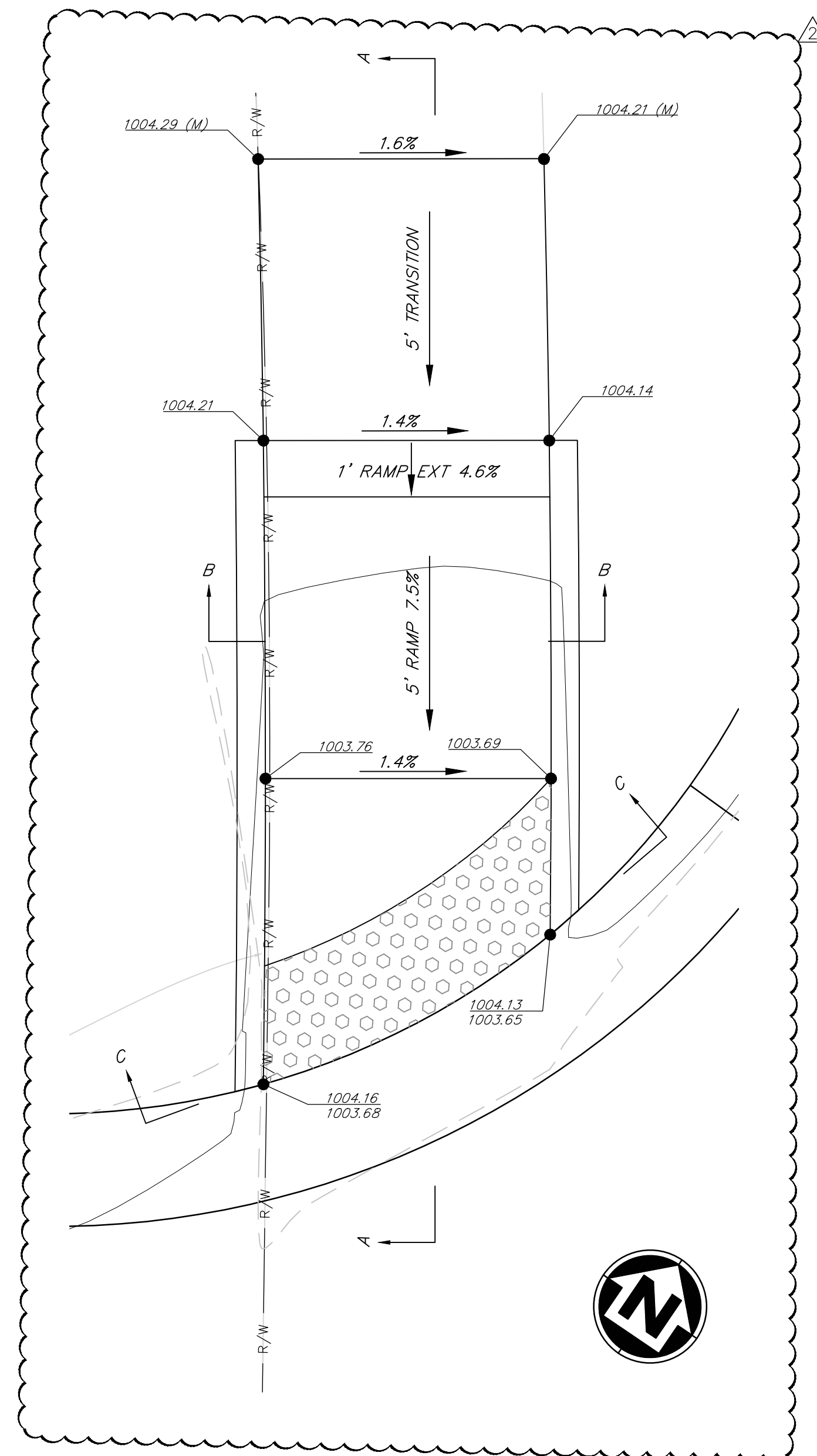
SIDEWALK RAMP DETAILS



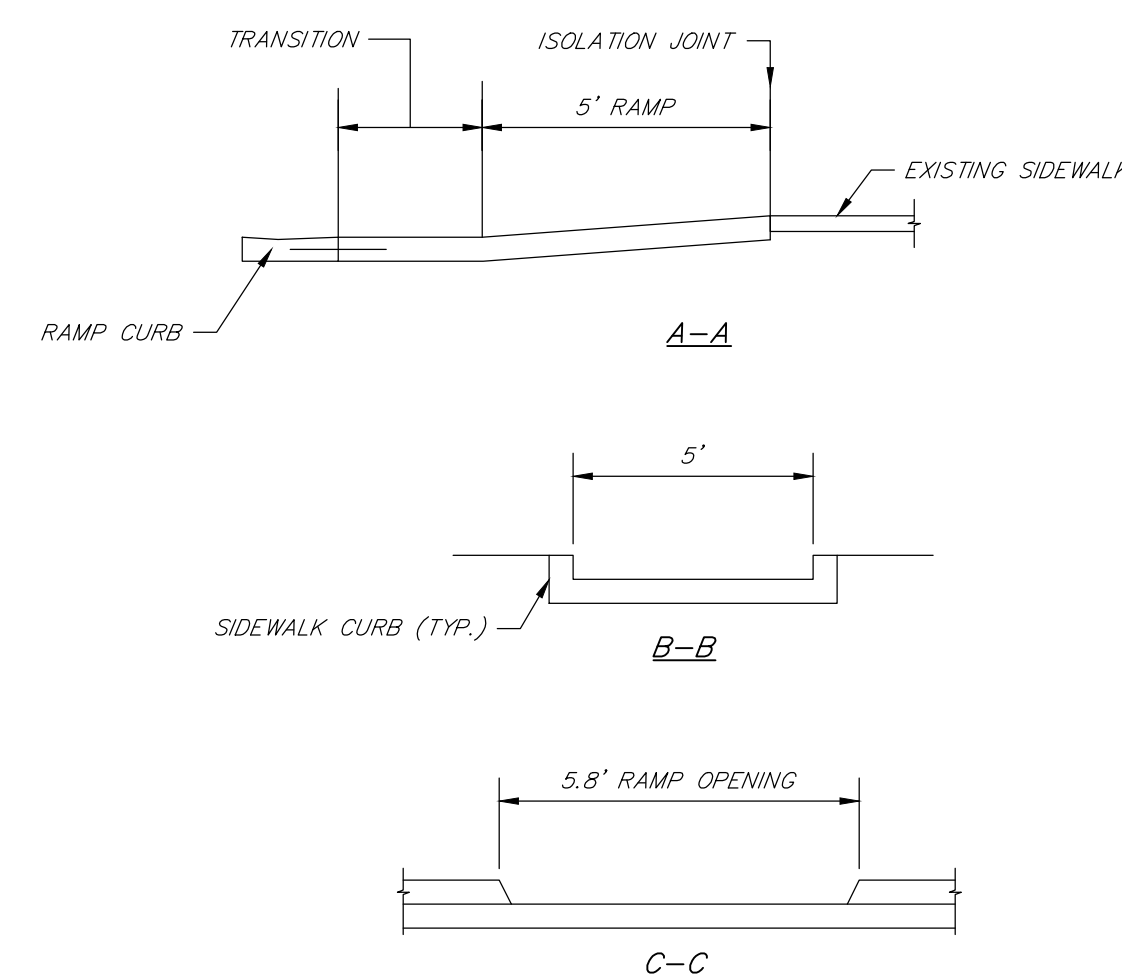
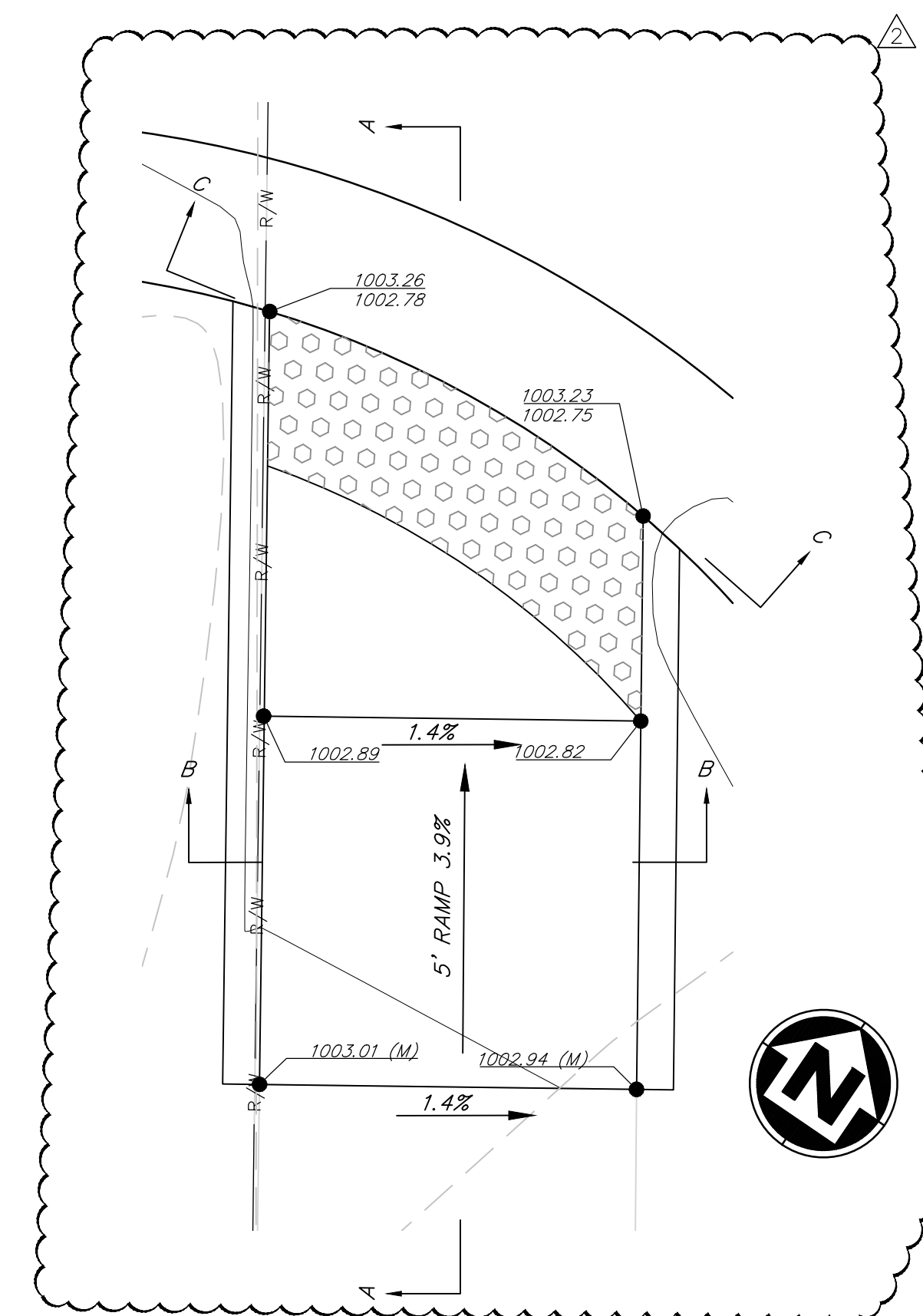
SHEET NUMBER
C401
10 OF 44



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RAMP DETAIL #5
SCALE: 1"=2'



RAMP DETAIL #6
SCALE: 1"=2'

NEW SHEET

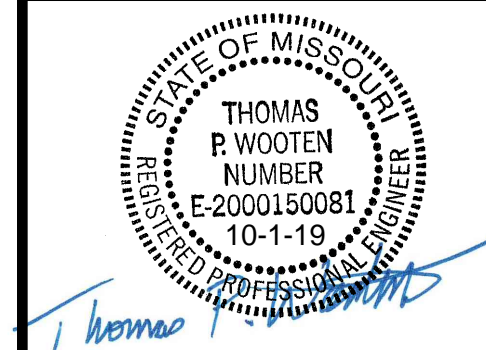
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				DATE:	08/28/2019	
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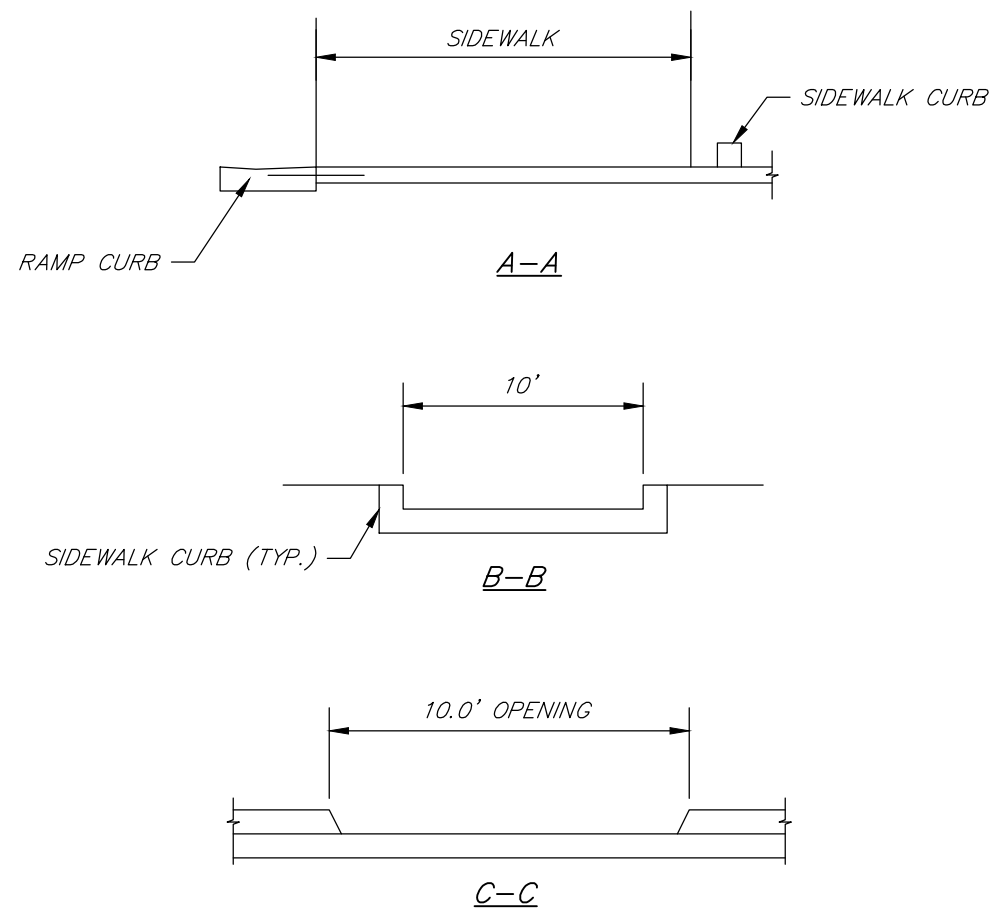
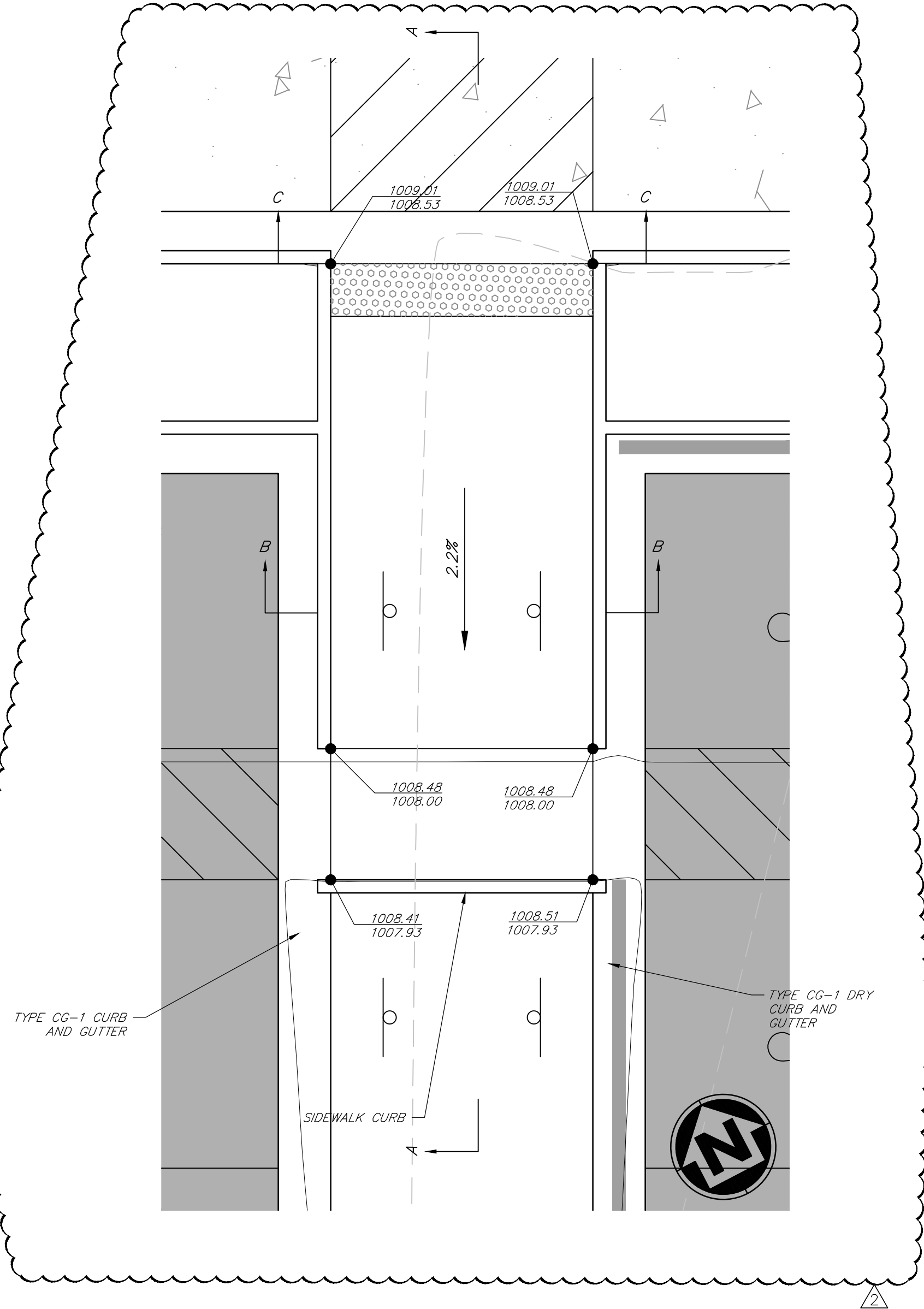
**SUMMIT ORCHARDS LOT 4B
FINAL DEVELOPMENT PLAN**
NW CHIPMAN RD & NW WARD RD
LEE'S SUMMIT, MISSOURI 64086

SIDEWALK RAMP DETAILS

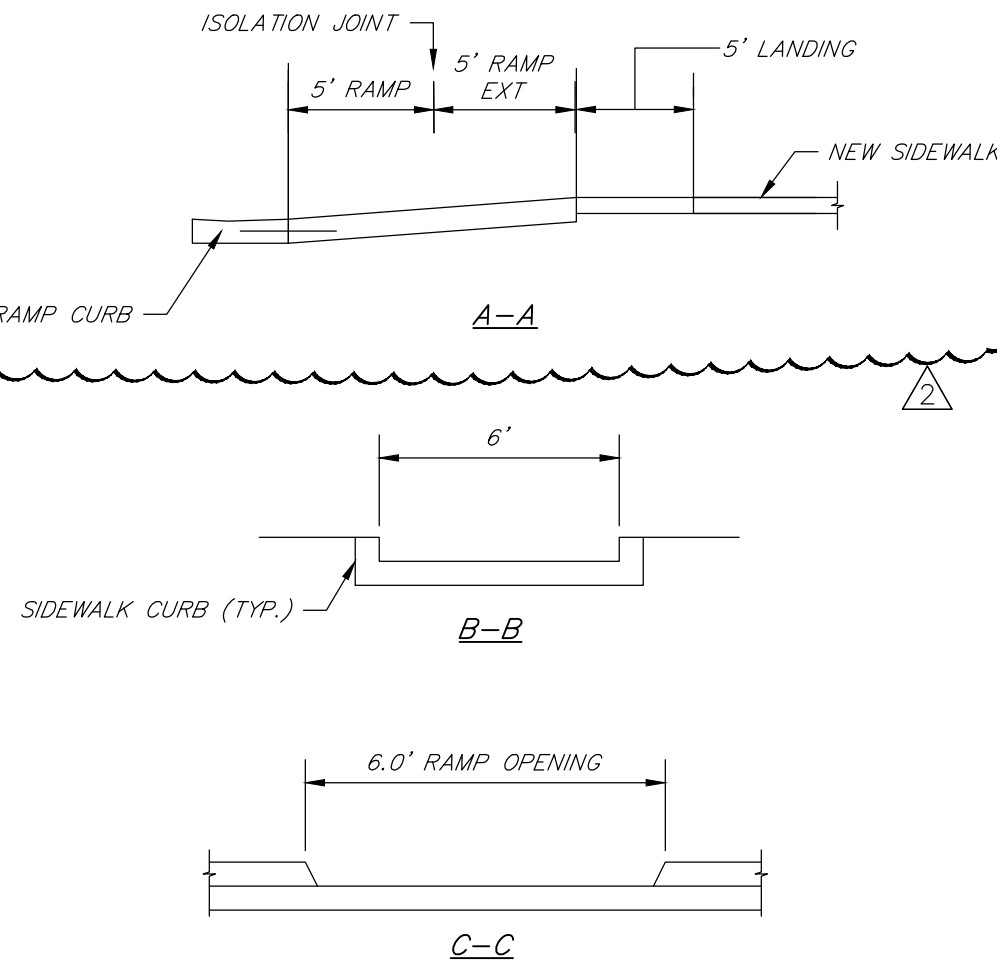
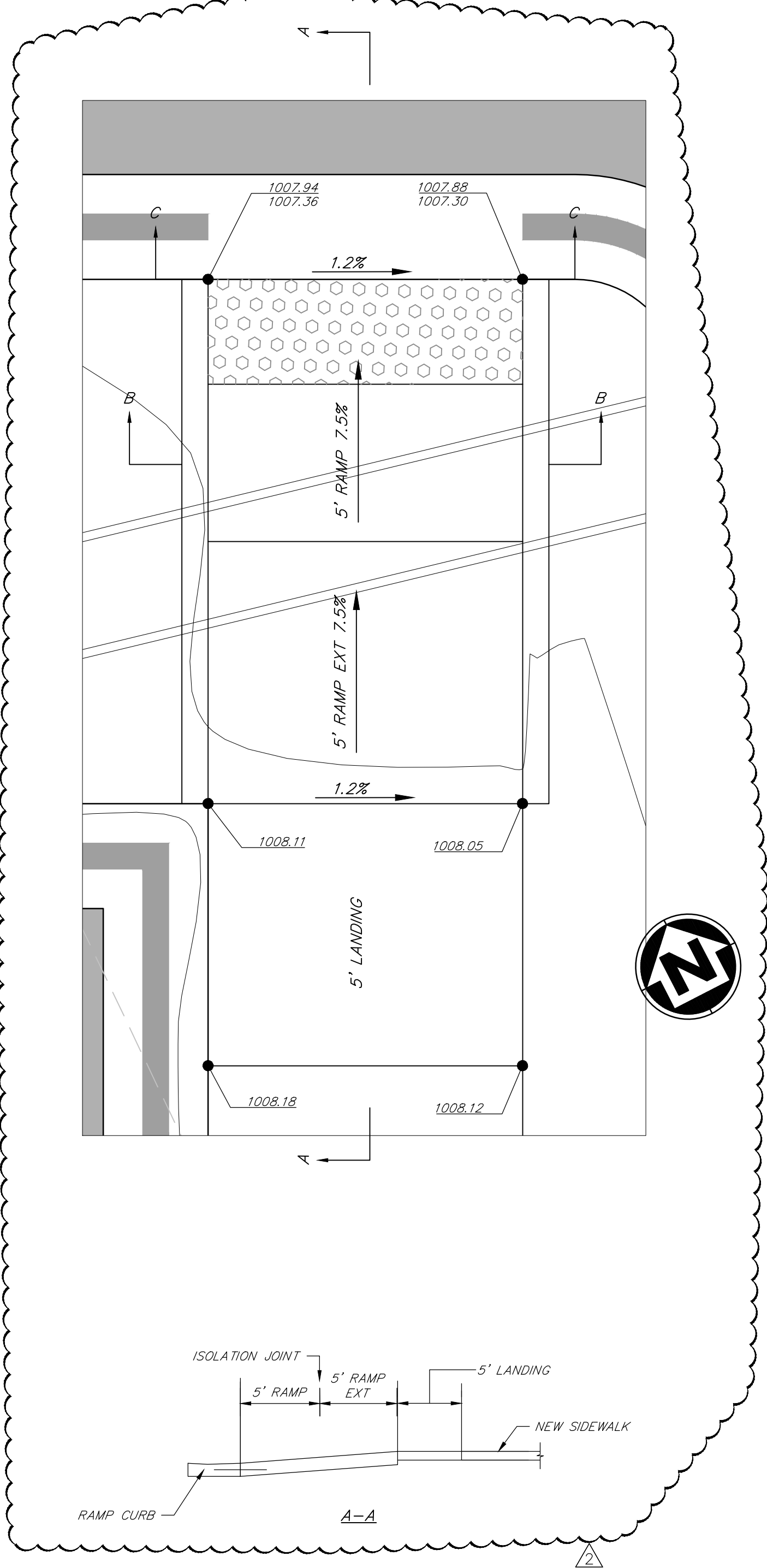


SHEET NUMBER
C402
11 OF 44

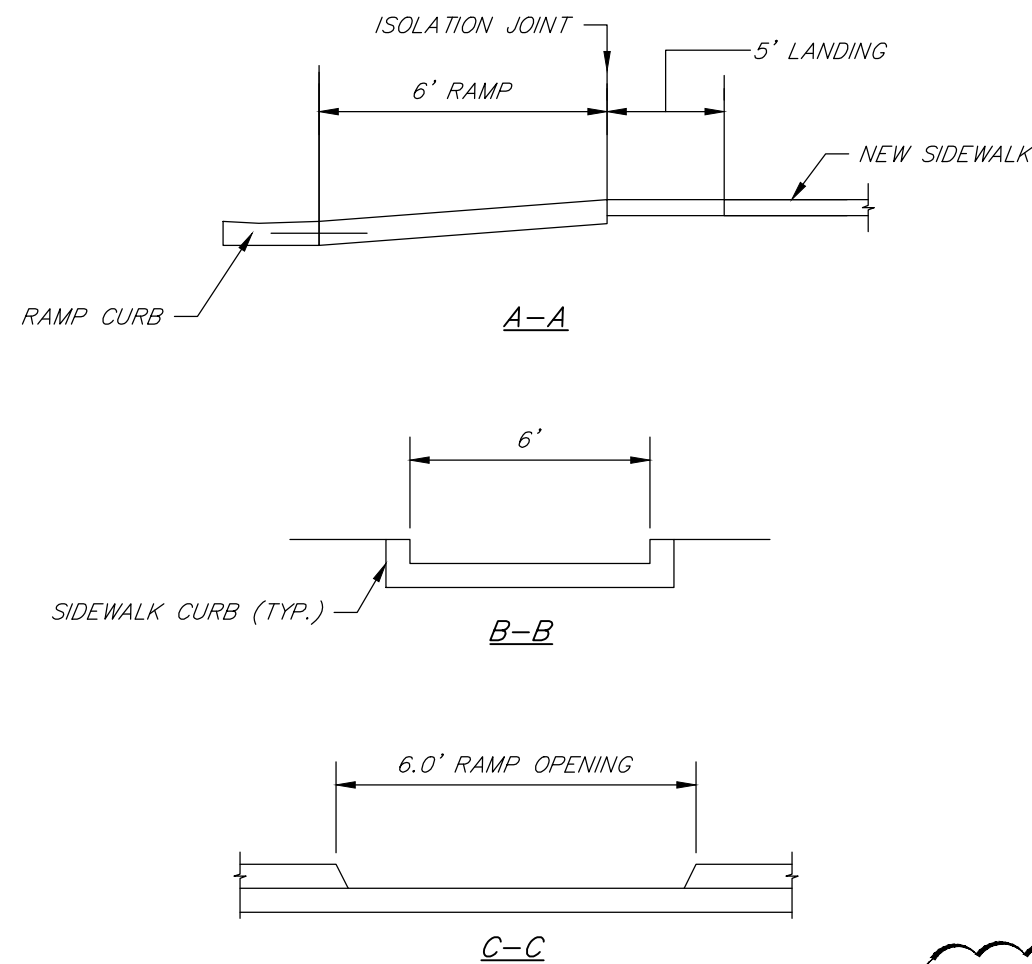
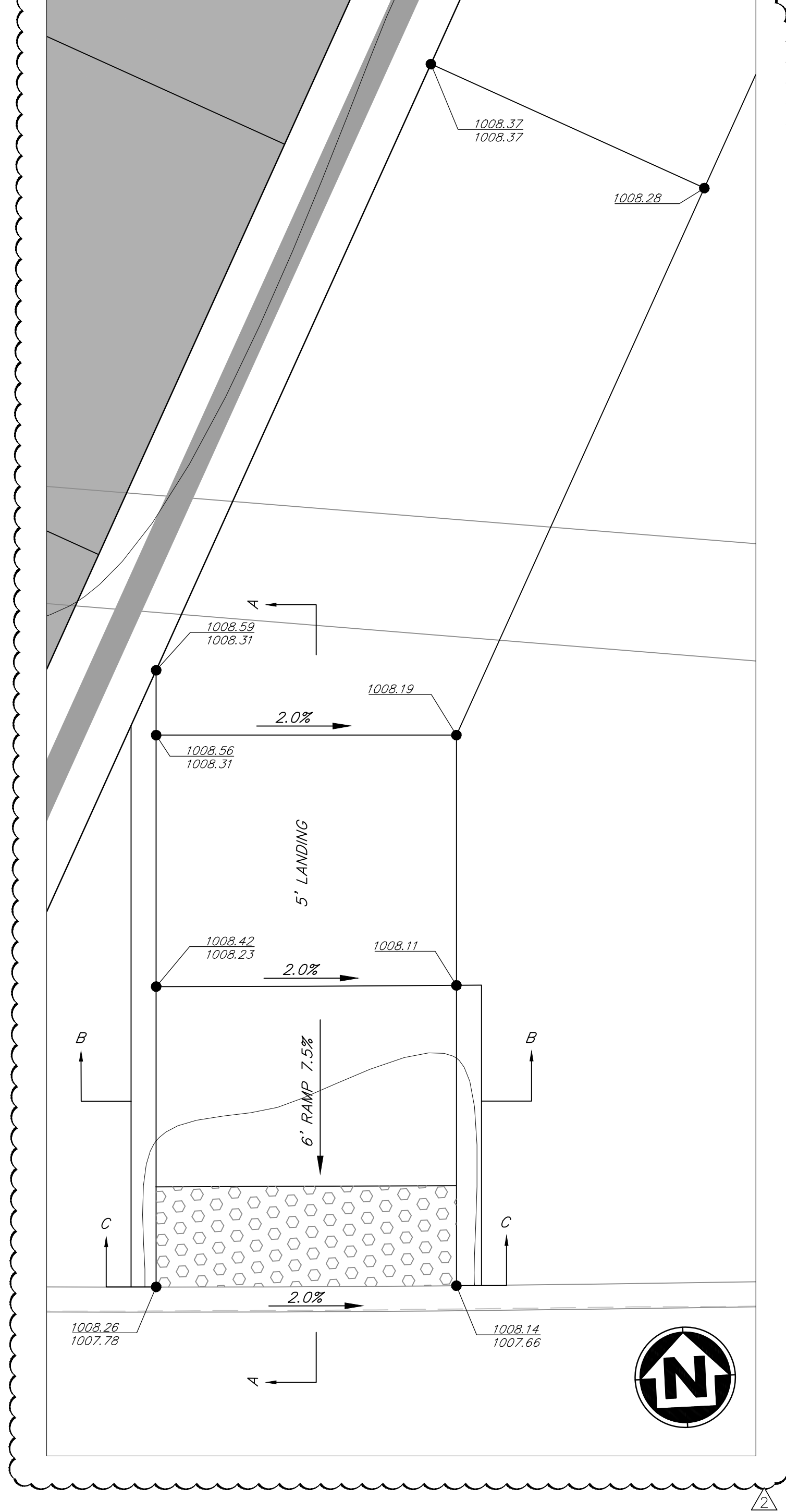
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RAMP DETAIL #7
SCALE: 1"=4'



RAMP DETAIL #8
SCALE: 1"=2'



RAMP DETAIL #9
SCALE: 1"=2'

NEW SHEET

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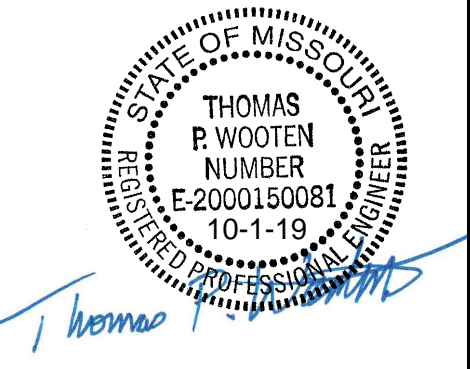
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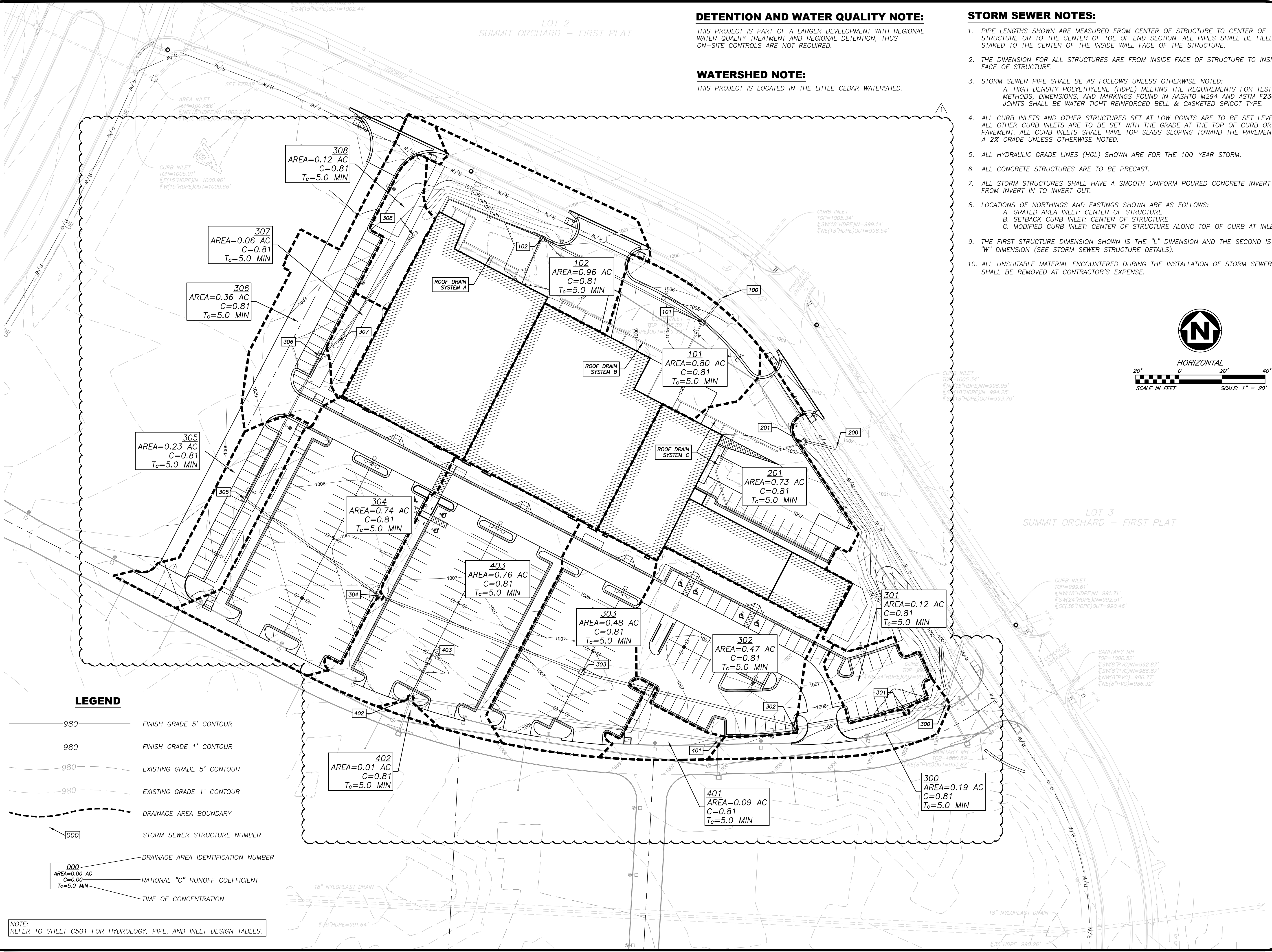
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**SUMMIT ORCHARDS LOT 4B
FINAL DEVELOPMENT PLAN**
NW CHIPMAN RD & NW WARD RD
LEE'S SUMMIT, MISSOURI 64086

SIDEWALK RAMP DETAILS



SHEET NUMBER
C403
12 OF 44



DETENTION AND WATER QUALITY NOTE:

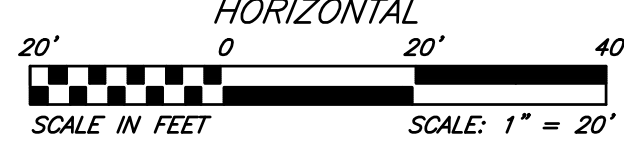
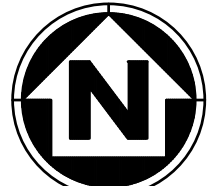
THIS PROJECT IS PART OF A LARGER DEVELOPMENT WITH REGIONAL WATER QUALITY TREATMENT AND REGIONAL DETENTION, THUS ON-SITE CONTROLS ARE NOT REQUIRED.

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.



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 C=0.00 Tc=5.0 MIN ——— RATIONAL "C" RUNOFF COEFFICIENT
- [000] AREA=0.00 AC C=0.00 Tc=5.0 MIN ——— TIME OF CONCENTRATION

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

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		JOB NUMBER:	190010008

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

DRAINAGE MAP

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

THOMAS P. WOOTEN

SHEET NUMBER
C500
13 OF 44

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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										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

STORMWATER CALCULATIONS

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

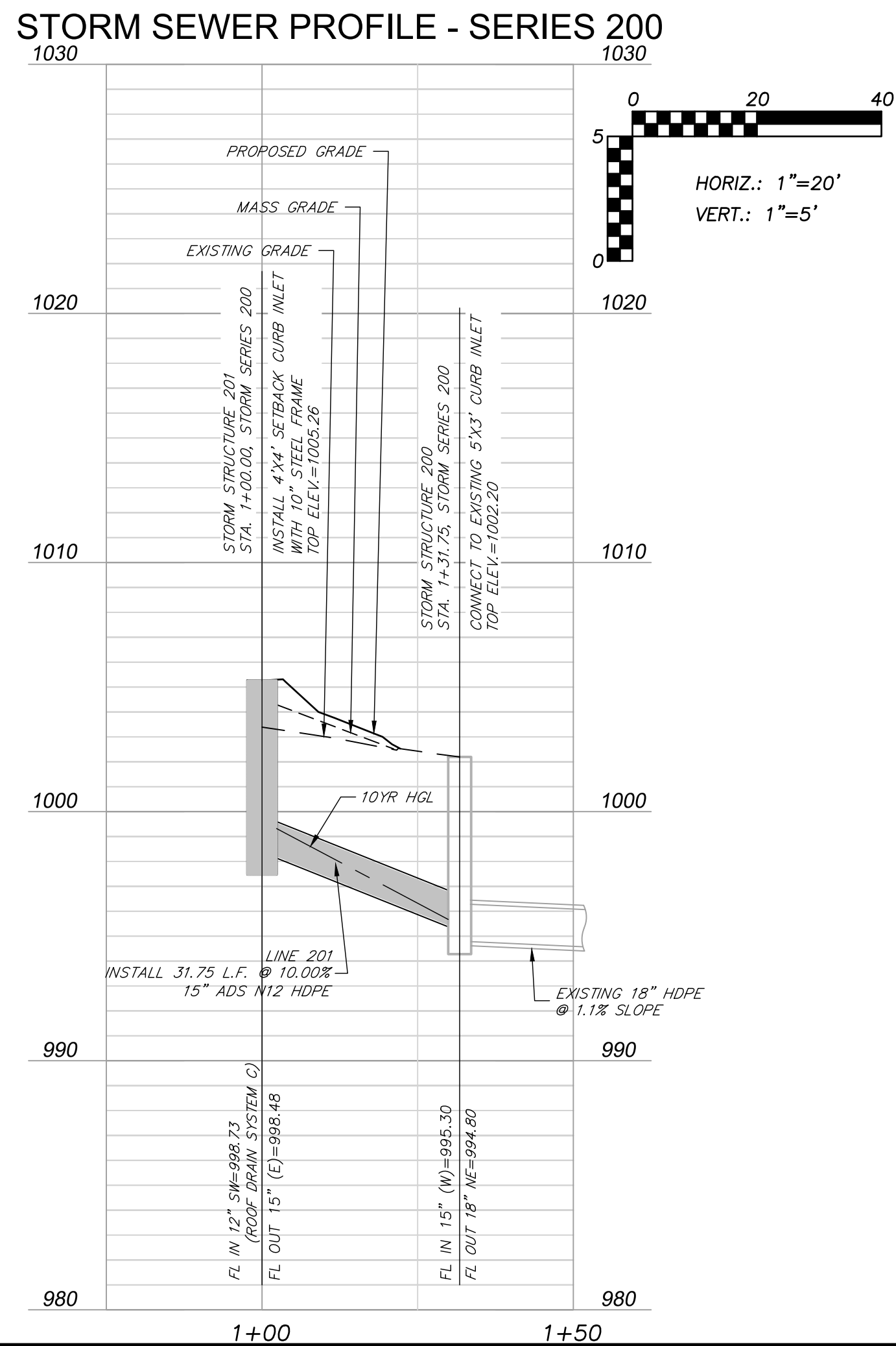
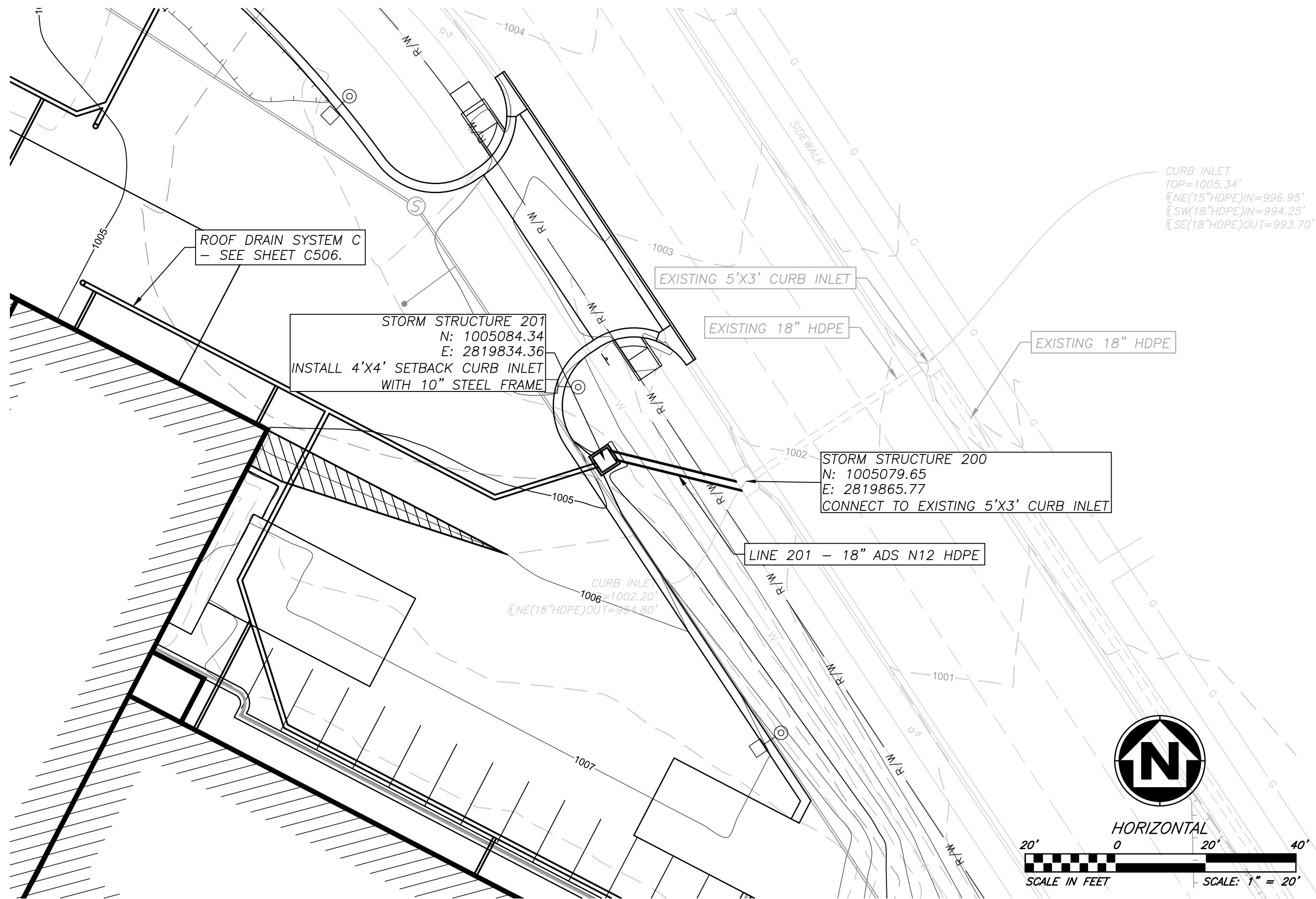
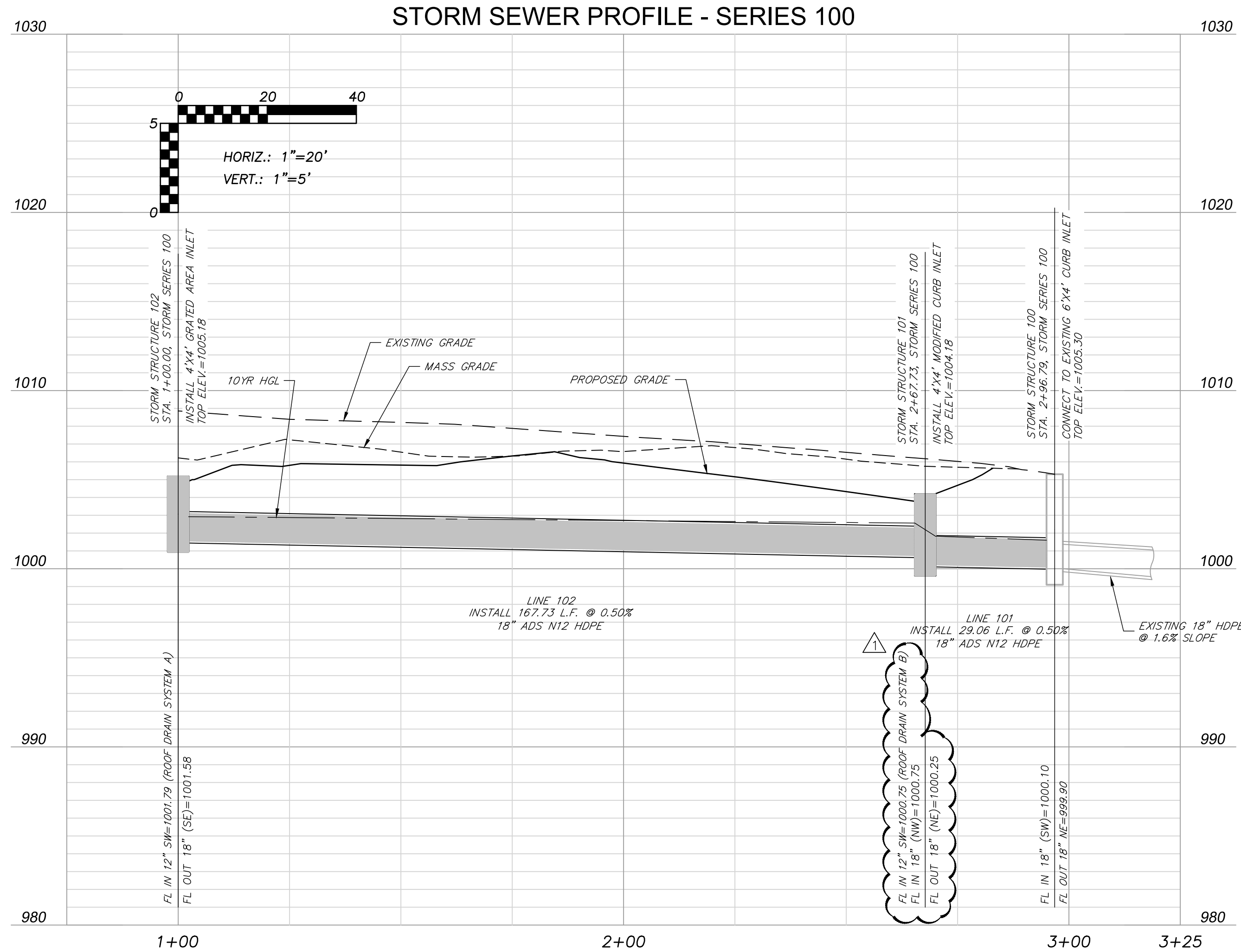
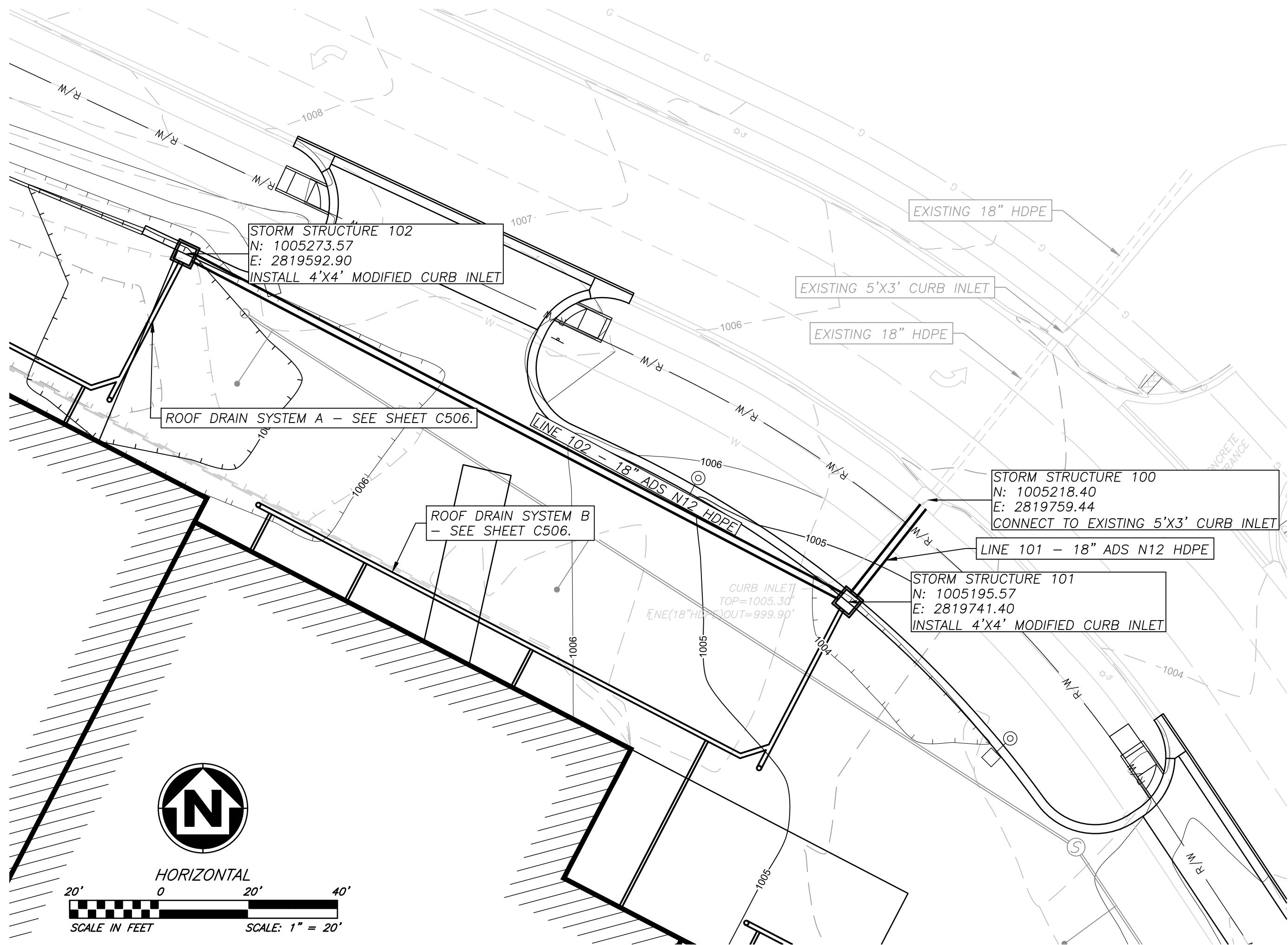
Thomas P. Wooten

SHEET NUMBER

C501

14 OF 44

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			JOB NUMBER:

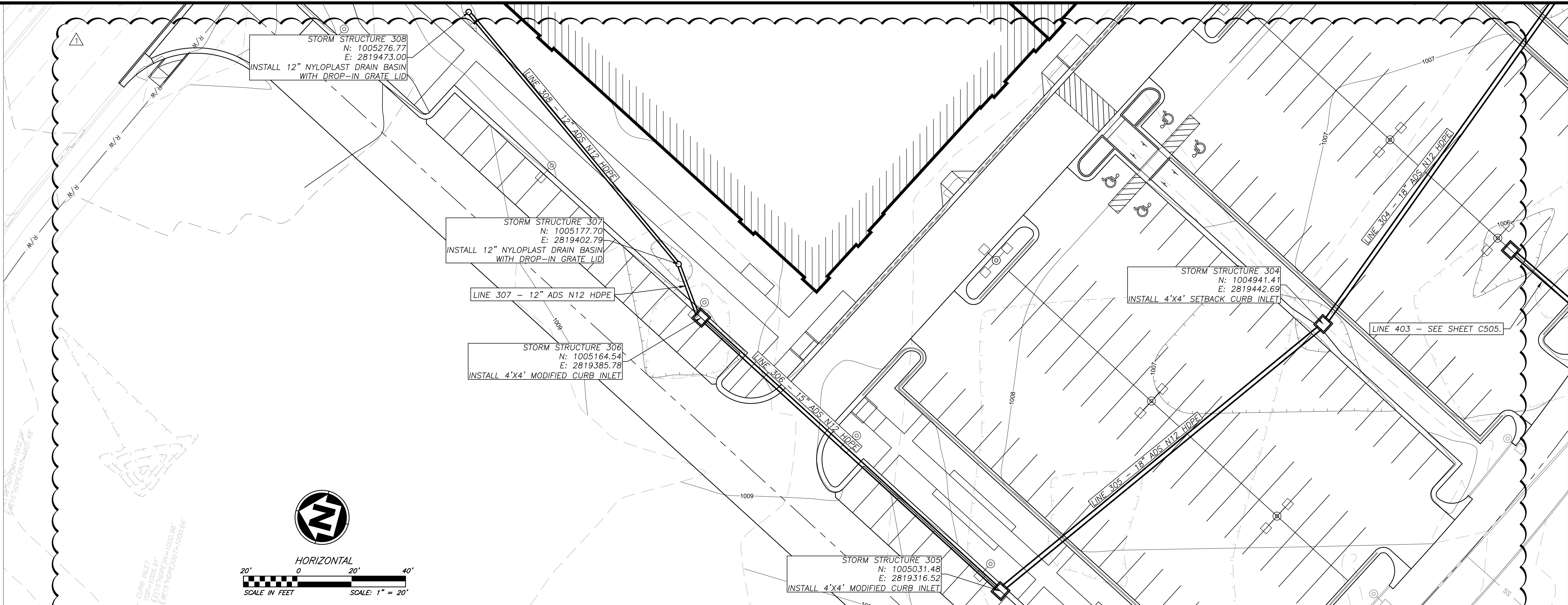
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FINAL DEVELOPMENT PLAN
NW CHIPMAN RD & NW WARD RD
LEE'S SUMMIT, MISSOURI 64086

STORM SEWER PLAN & PROFILE

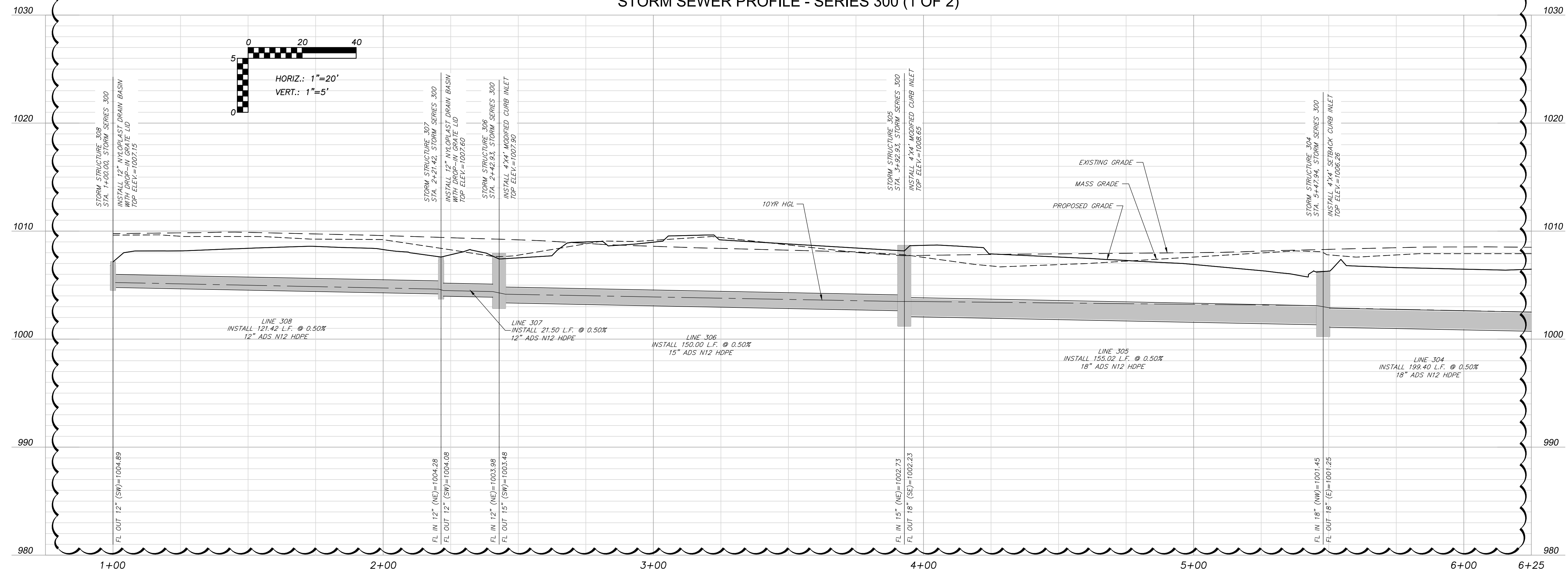
THOMAS P. WOOTEN
REGISTERED PROFESSIONAL ENGINEER
E-2000150081
9-20-19

SHEET NUMBER
C502
15 OF 44

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STORM SEWER PROFILE - SERIES 300 (1 OF 2)



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		JOB NUMBER:	190010008

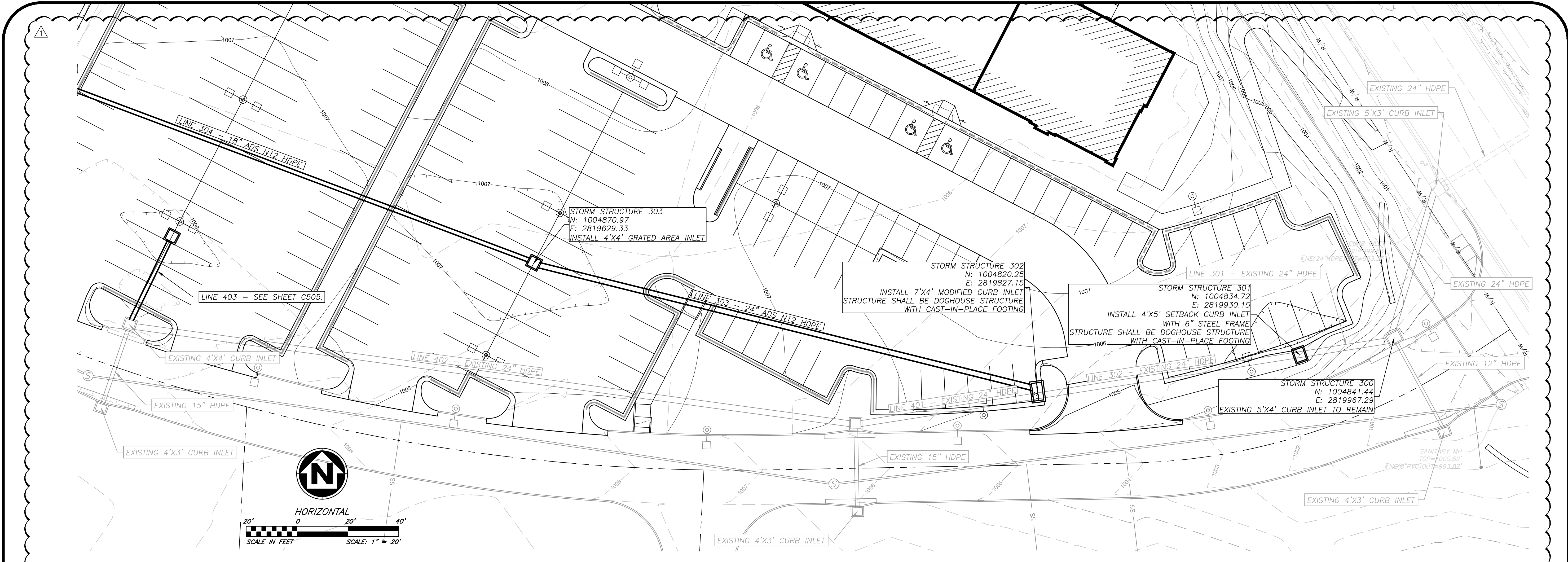
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FINAL DEVELOPMENT PLAN
NW CHIPMAN RD & NW WARD RD
LEE'S SUMMIT, MISSOURI 64086

STORM SEWER PLAN & PROFILE

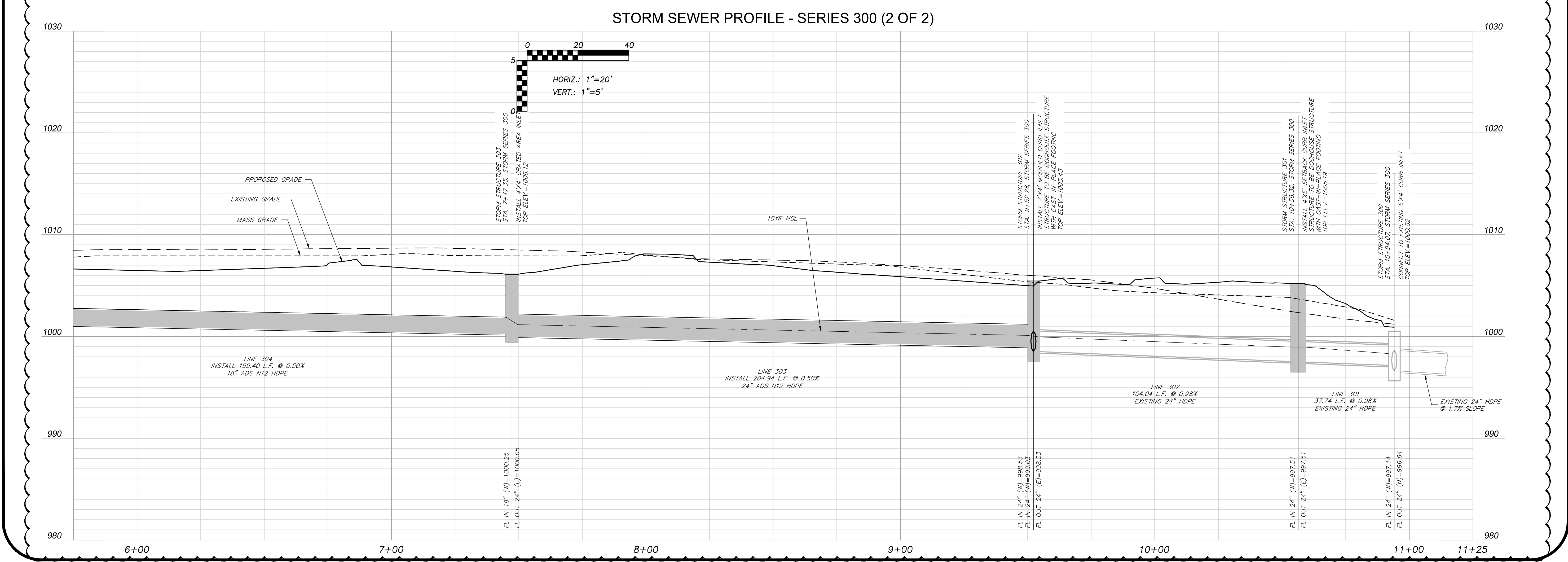
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C503
16 OF 44

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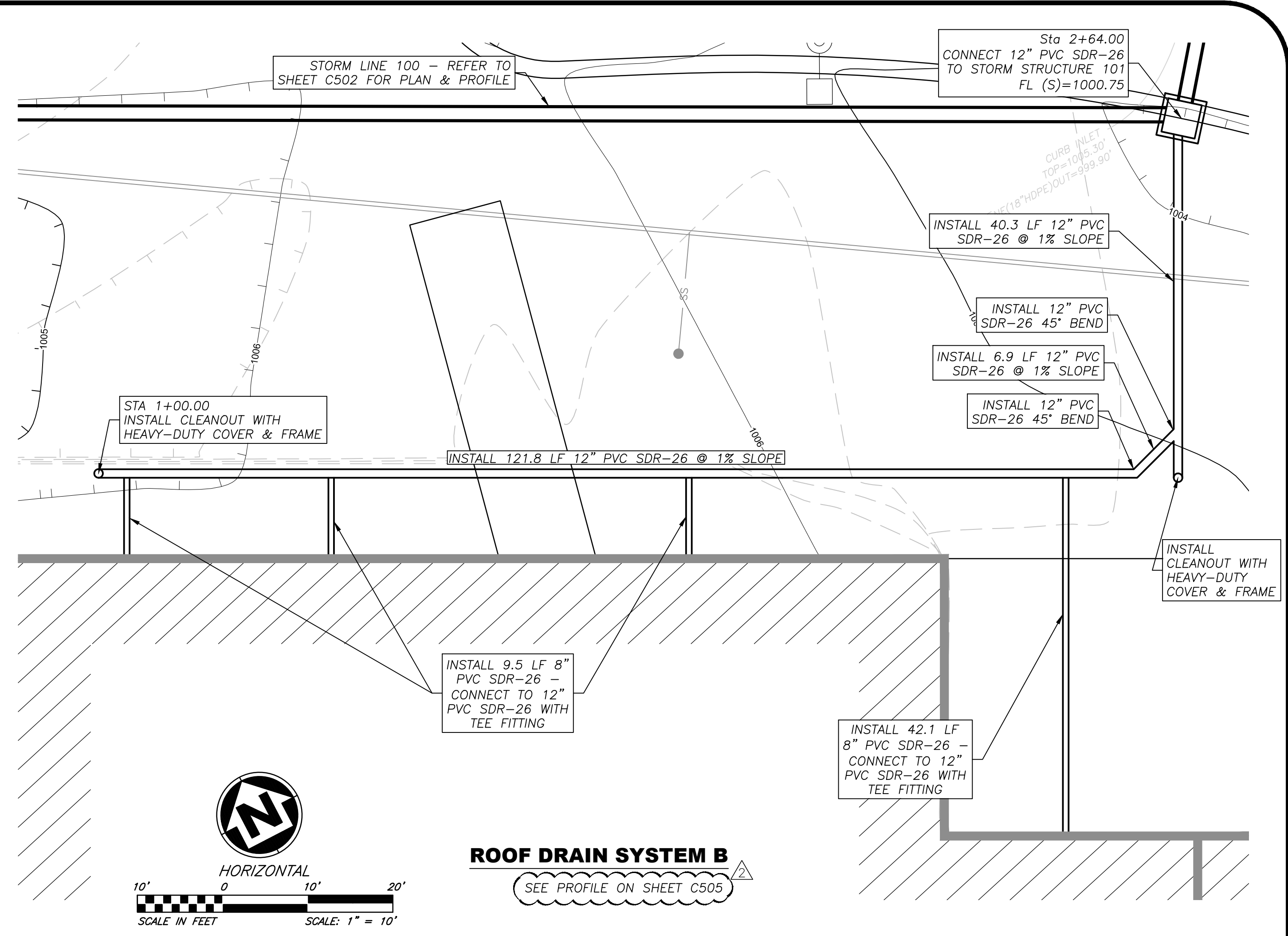
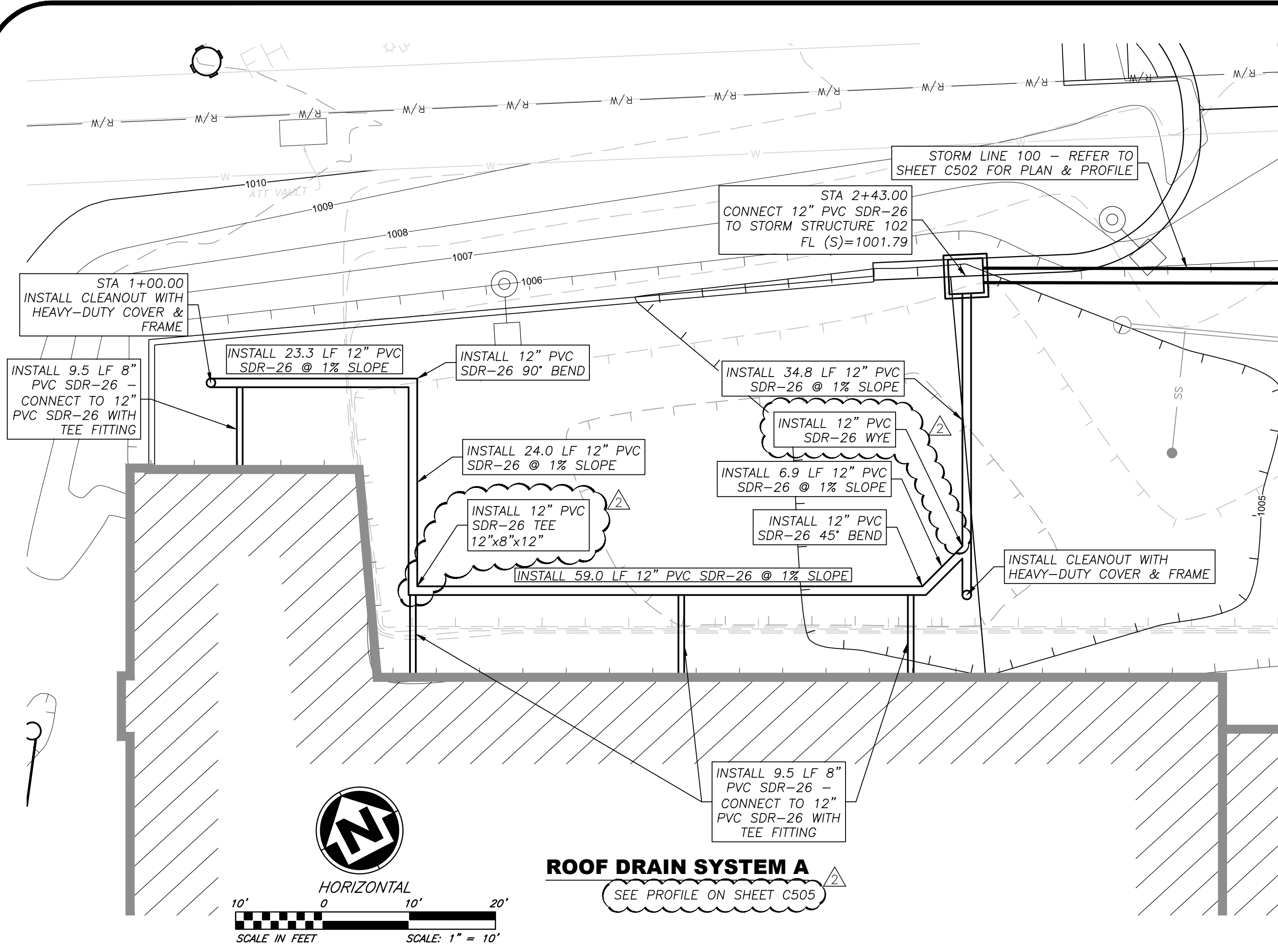
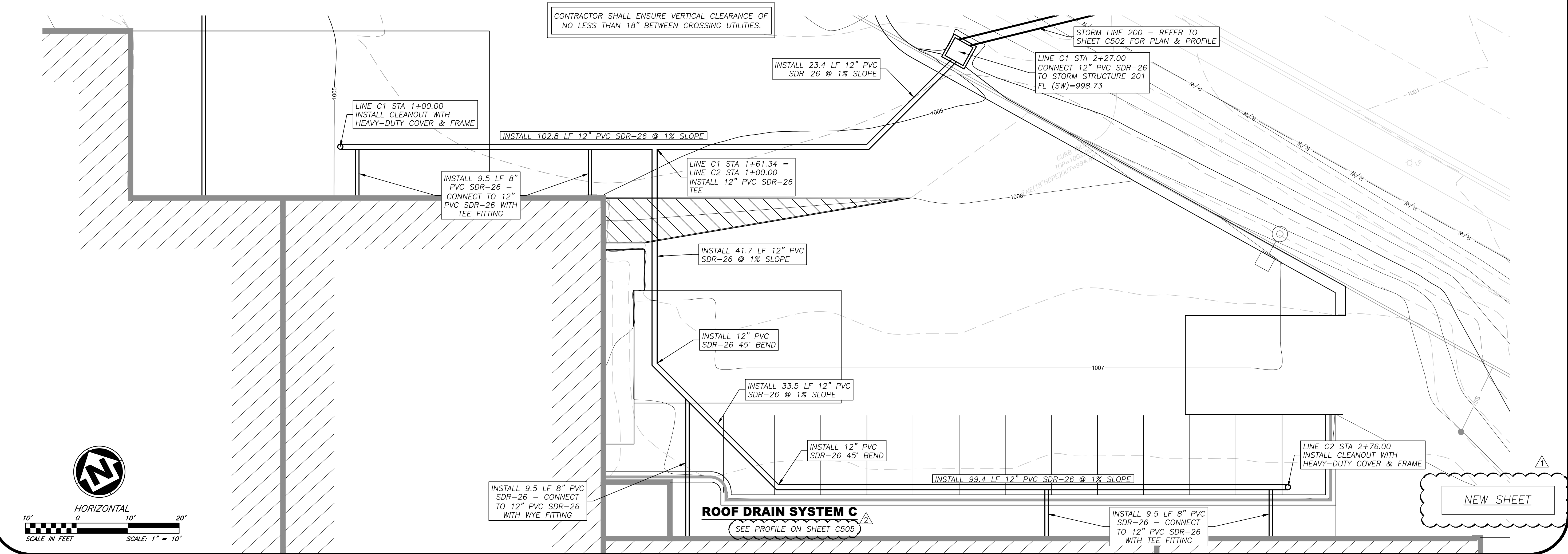
SUMMIT ORCHARDS LOT 4B
FINAL DEVELOPMENT PLAN
NW CHIPMAN RD & NW WARD RD
LEE'S SUMMIT, MISSOURI 64086

STORM SEWER PLAN & PROFILE

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

SHEET NUMBER
C504
17 OF 44

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

ROOF DRAIN PLAN

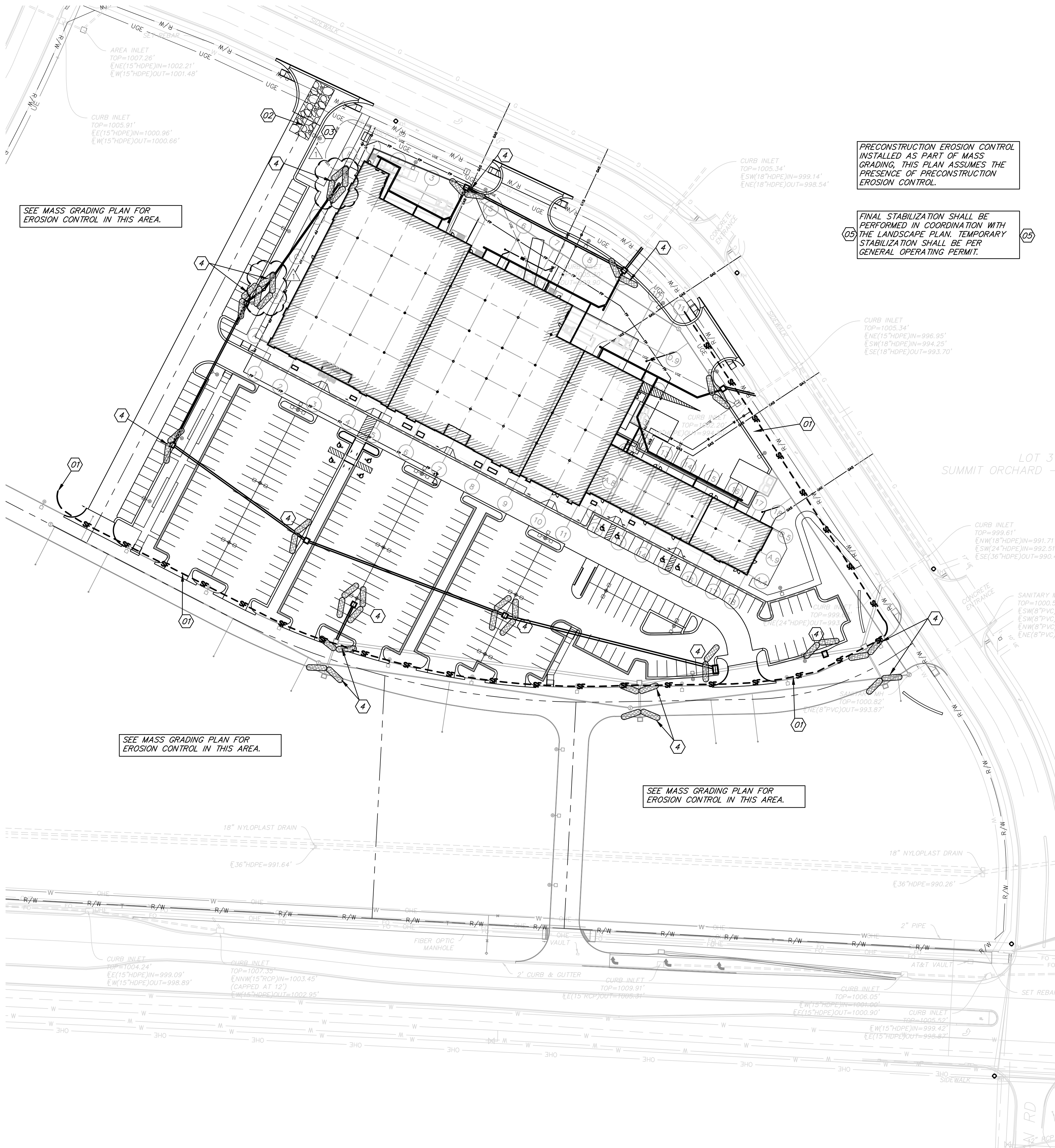
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Oct 01, 2019 - 9:23pm Plotted By: twost Z:\ME-C00\1-Proj\1-Projects\Townsend Summit Orchard Lot 4-B\Draw\03-DWG-20180920\20180920\03-DWG-20180920\03-DWG-20180920-SHFB-ESC.dwg Layout: Layout1



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.

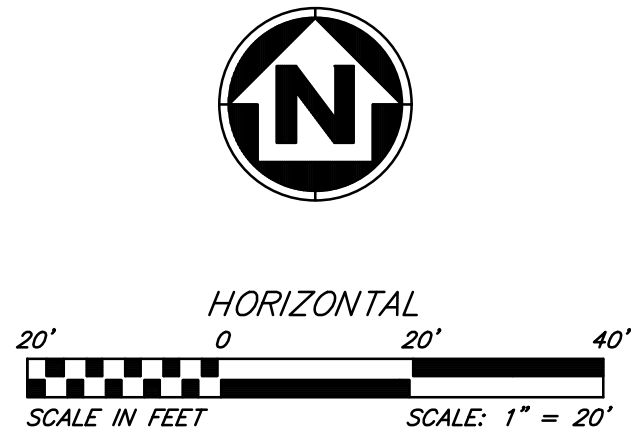
LEGEND

934 — PROPOSED CONTOUR
934 - - - EXISTING CONTOUR
- - - SF - SEDIMENT FENCE

INLET FILTER BAGS

CONSTRUCTION ENTRANCE

FINAL SEEDING (SOD &/OR LANDSCAPING)



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		JOB NUMBER:	19C010008

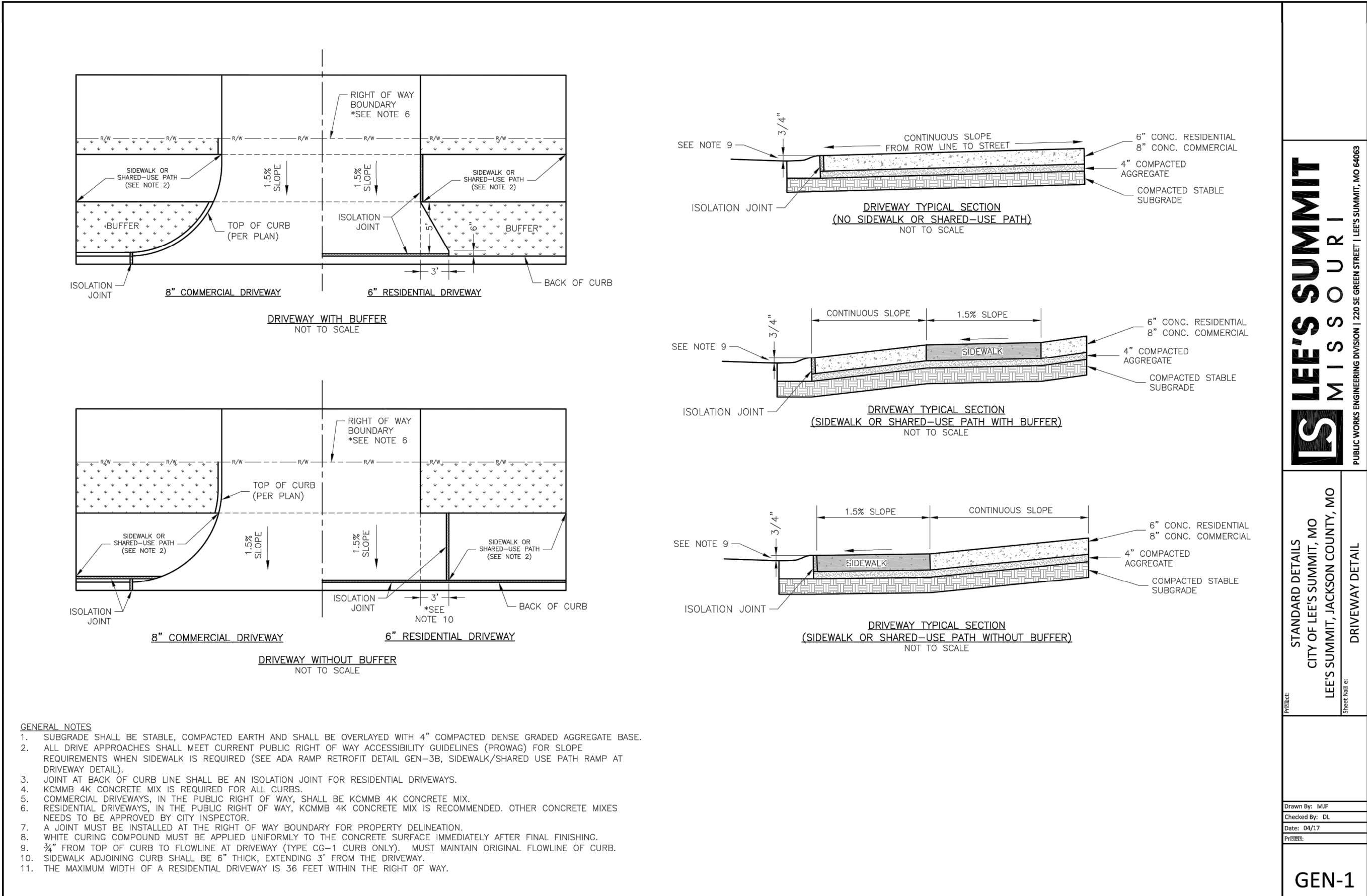
SUMMIT ORCHARDS LOT 4B
FINAL DEVELOPMENT PLAN
NW CHIPMAN RD & NW WARD RD
LEE'S SUMMIT, MISSOURI 64086

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

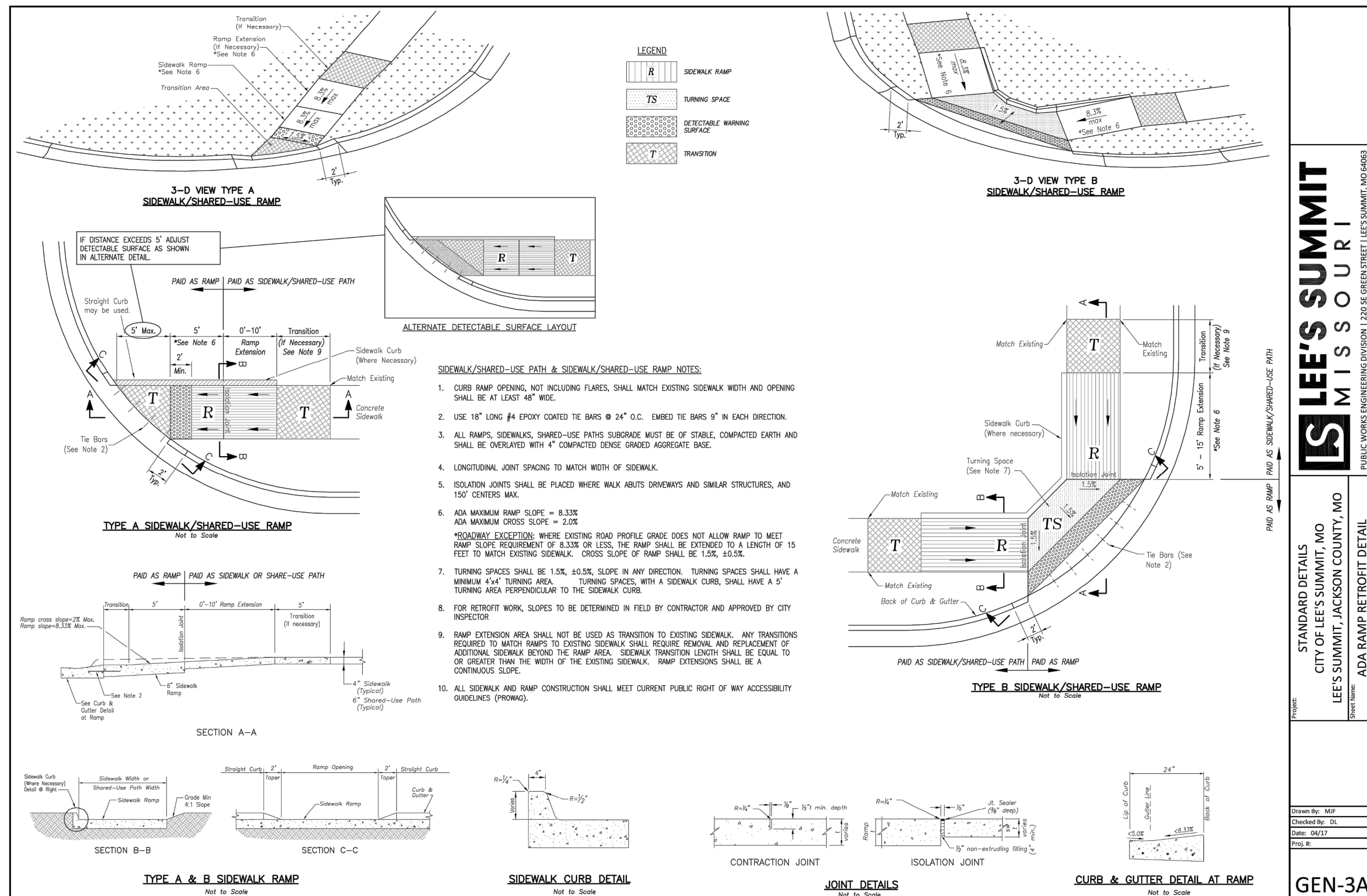
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EROSION CONTROL PLAN

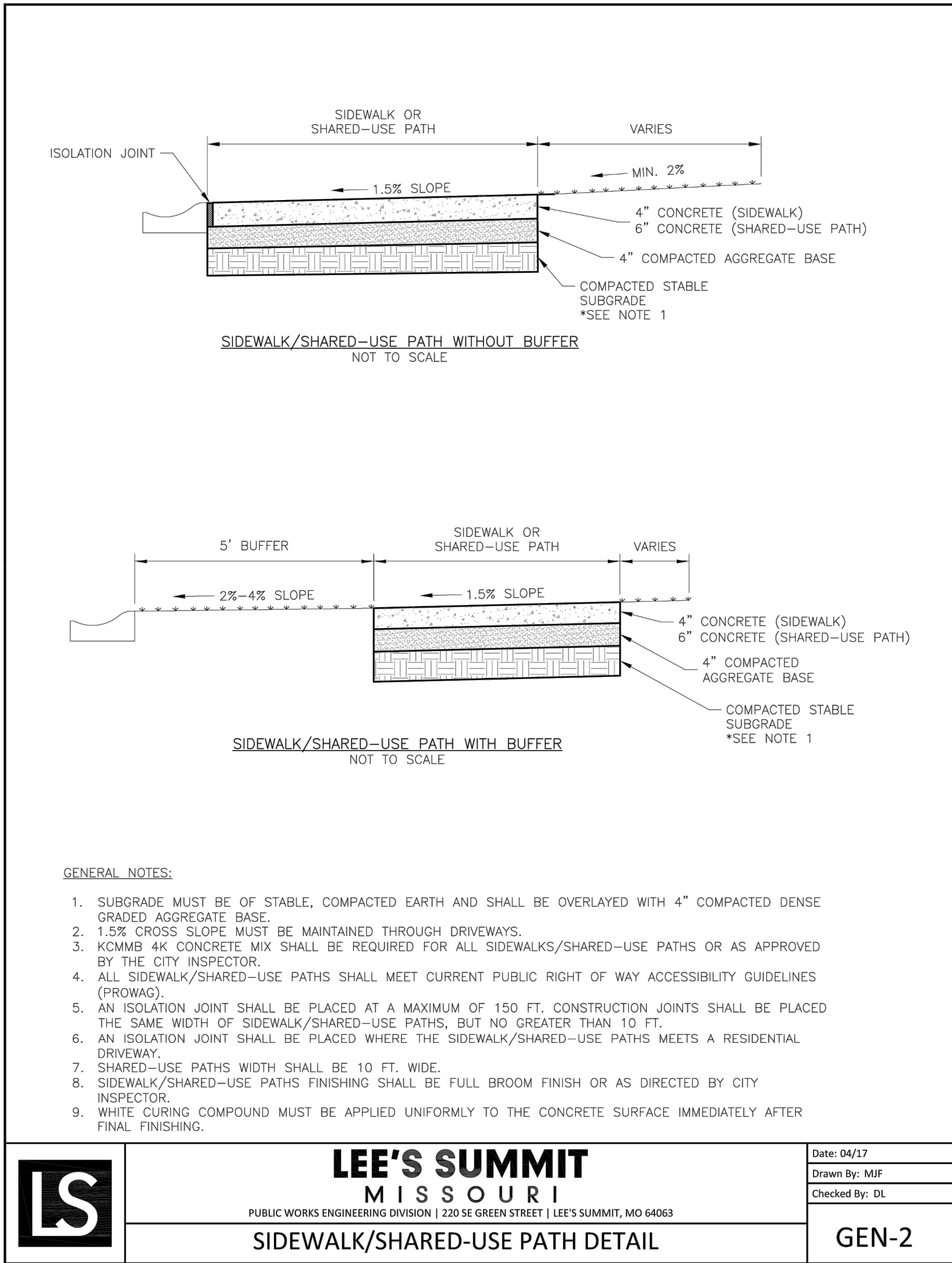
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STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64083
ADA RAMP RETROFIT DETAIL
GEN-1



STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64083
ADA RAMP RETROFIT DETAIL
GEN-3A



LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64083
SIDEWALK/SHARED-USE PATH DETAIL
GEN-2

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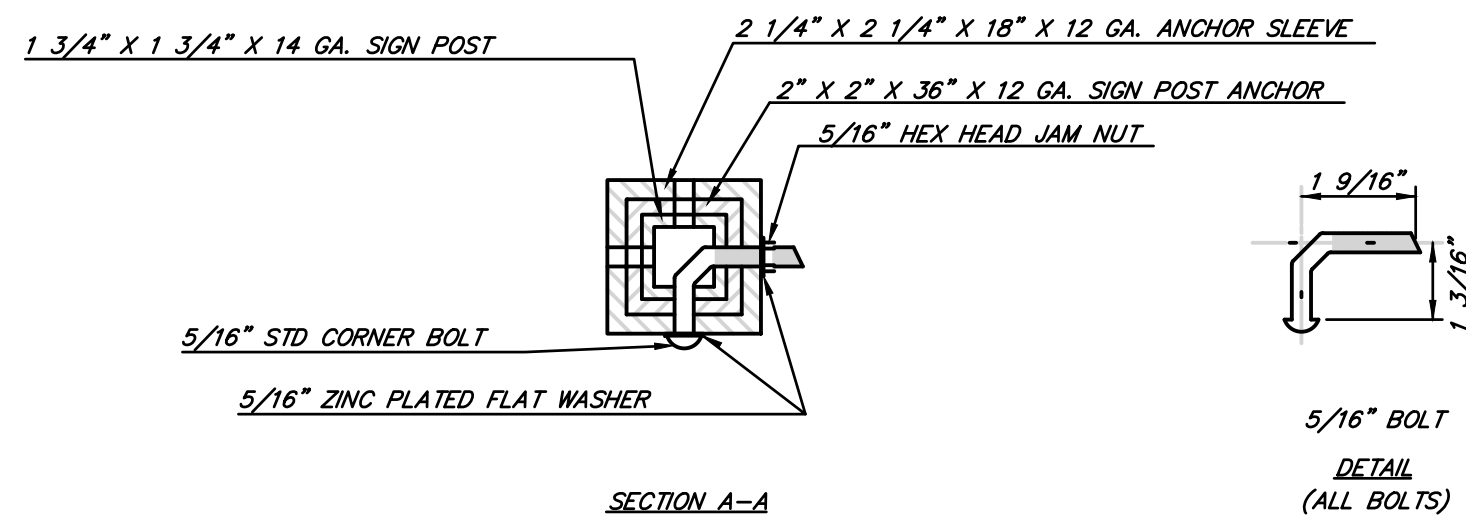
**SUMMIT ORCHARDS LOT 4B
FINAL DEVELOPMENT PLAN**
NW CHIPMAN RD & NW WARD RD
LEE'S SUMMIT, MISSOURI 64086

DETAILS

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

SHEET NUMBER
C700
21 OF 44

STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64083
ADA RAMP RETROFIT DETAIL
GEN-3B



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

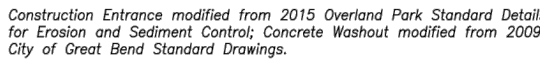
DETAILS

AE **ANDERSON**
ENGINEERING
EMPLOYEE OWNED

ENGINEERS • SURVEYORS • LABORATORY • DRILLING
941 W. 141ST TERR. STE. A • KANSAS CITY, MO 64146 • PHONE (816) 777-9400
A LICENSED MISSOURI ENGINEERING & SURVEYING CORPORATION - LC 62

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

SHEET NUMBER
C701
22 OF 44



SCALE: N.T.S.



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DETAILS



SHEET NUMBER
C704
25 OF 44



ACCESSIBLE SIGNAGE



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 HYDRANT 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.

LS

LEE'S SUMMIT
MISSOURI

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

HYDRANT INSTALLATION – STRAIGHT SET

Date: 02/13

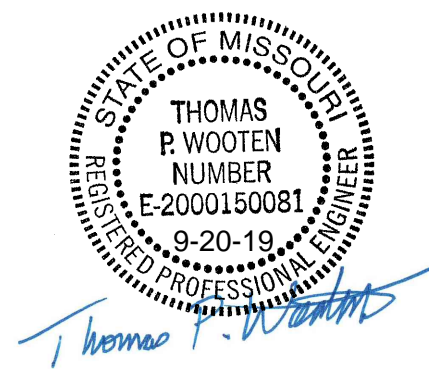
Checked By: DL

FILE: WAT-7

Page 1/14

Rev: 1/14
Date:

NEW SHEET

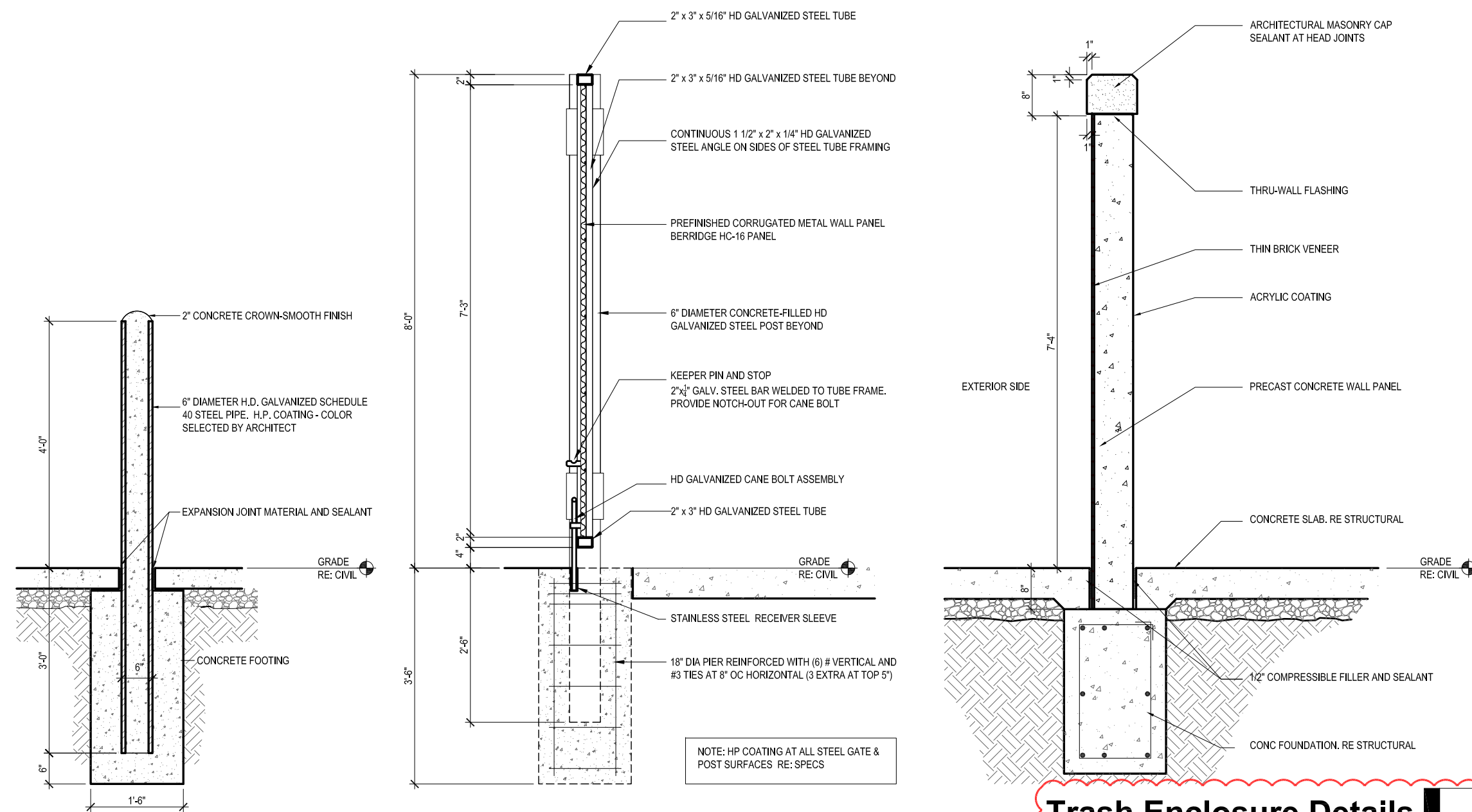


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C705
26 OF 44

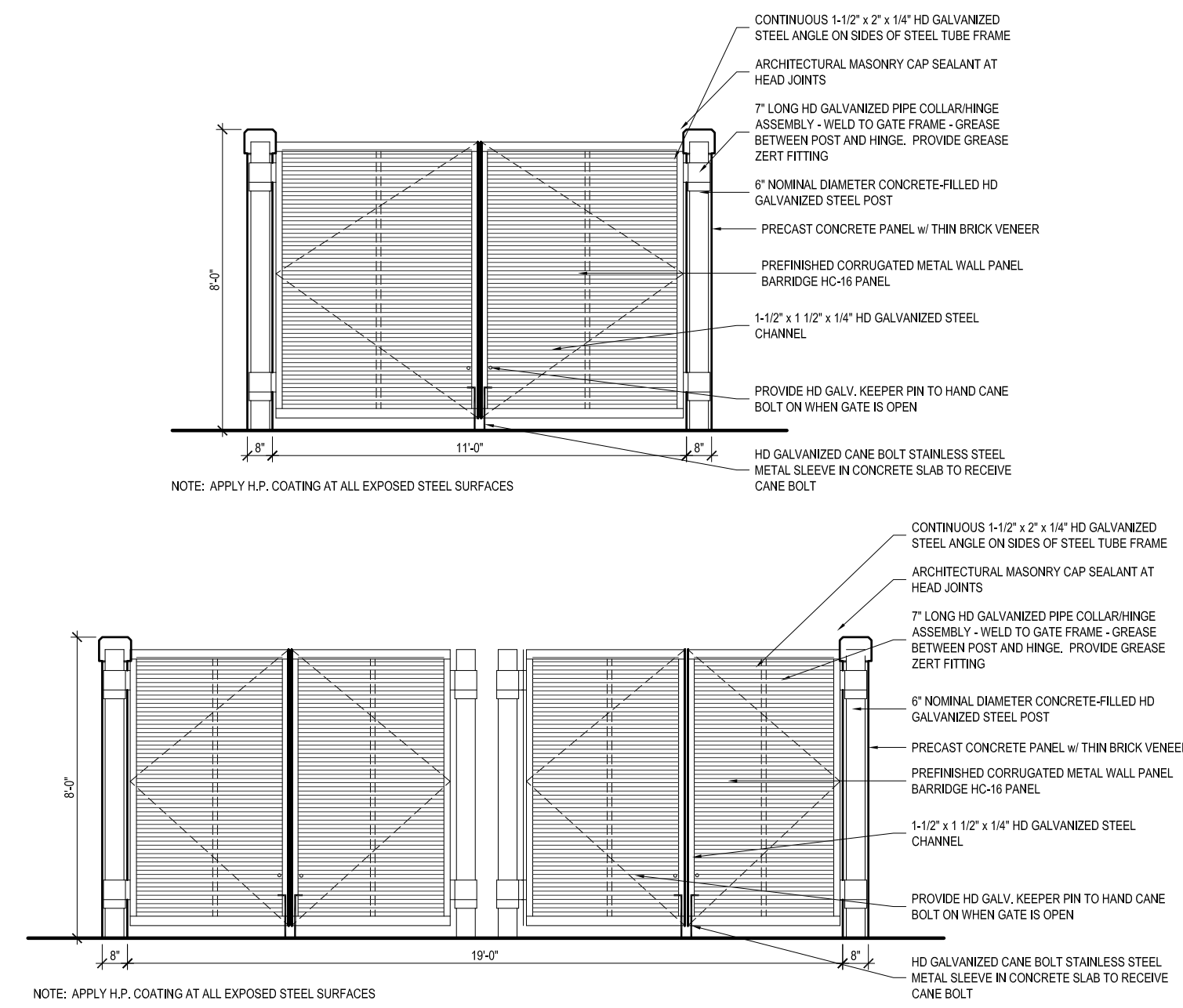
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DETAILS

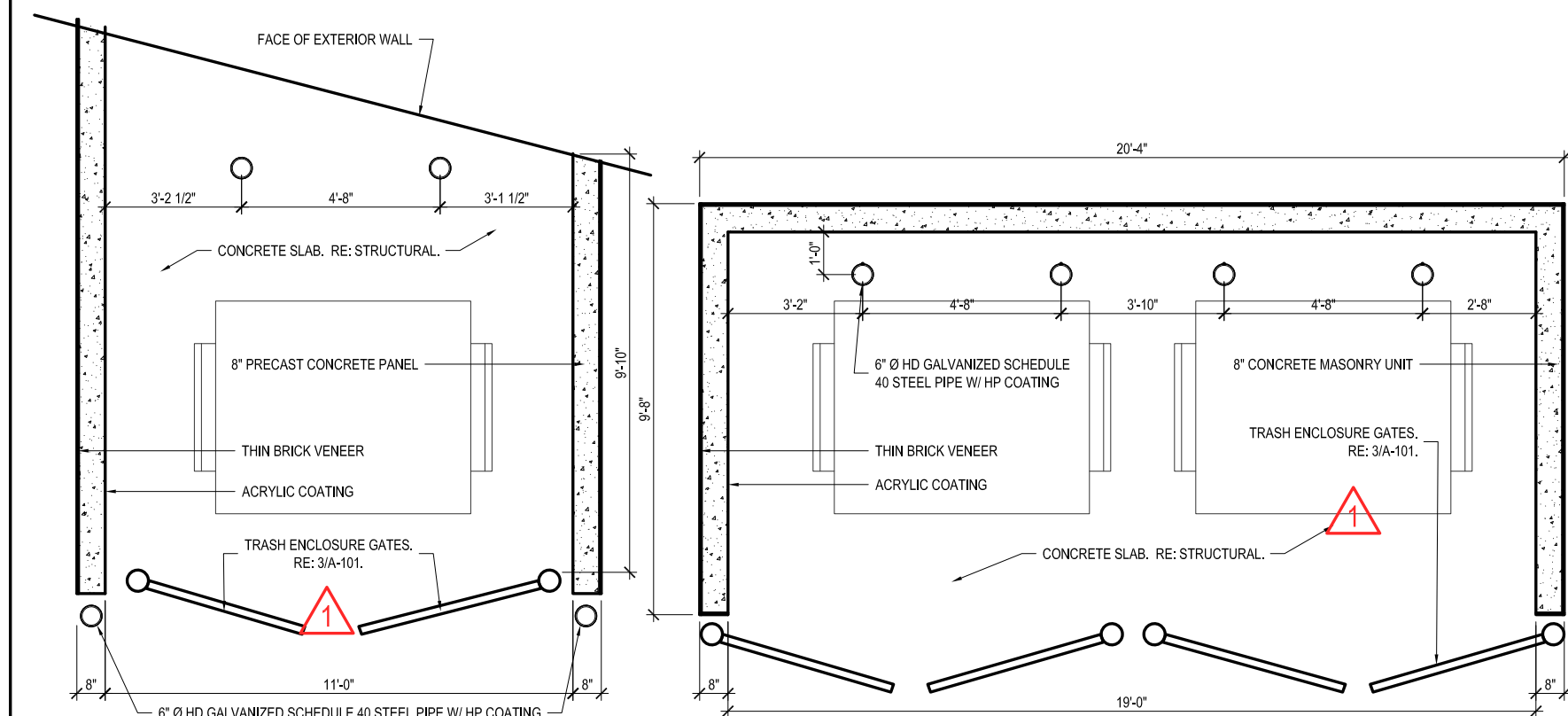
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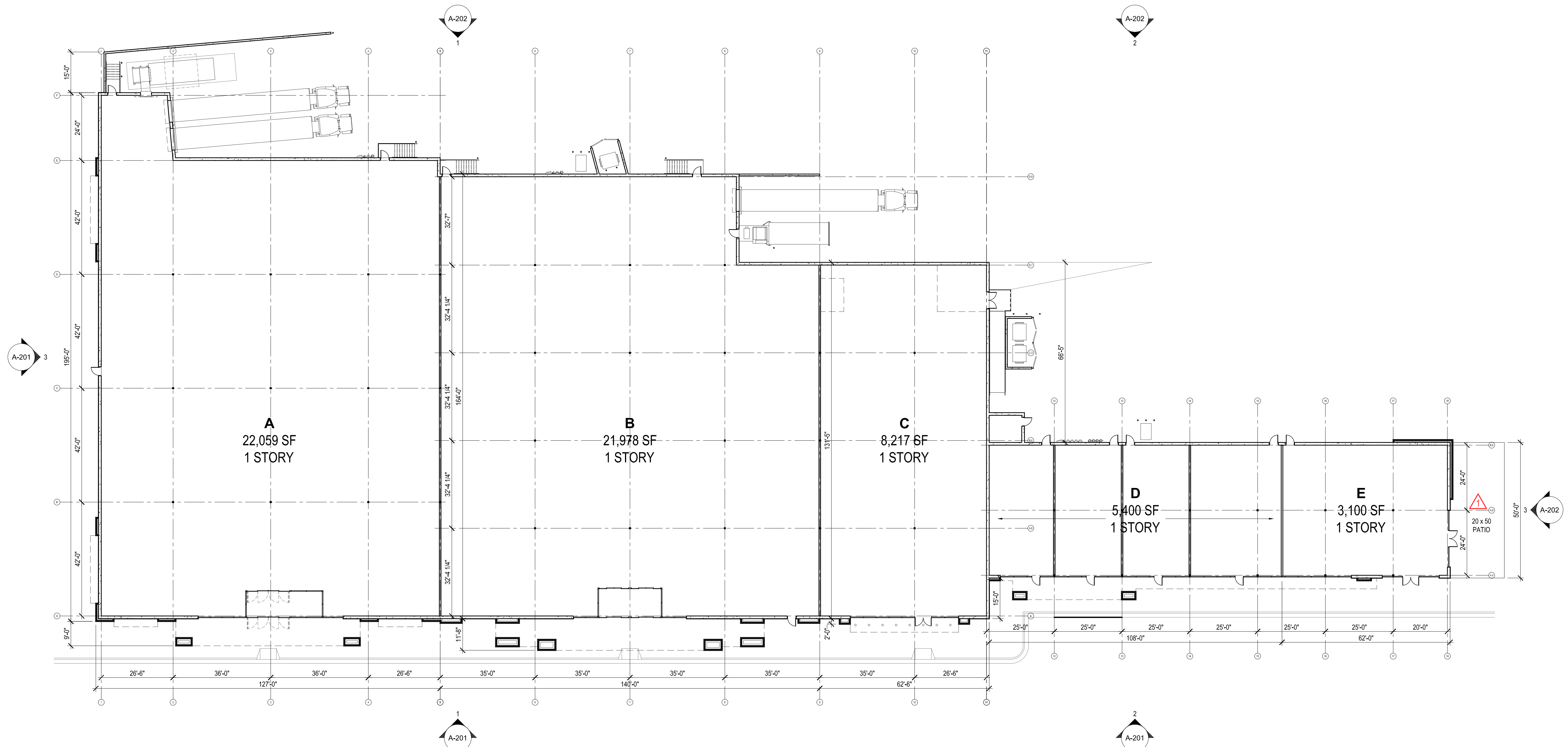
Trash Enclosure Details 4
1/2" = 1'-0"



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



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



Floor Plan 1
1" = 20'



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Summit Orchards Lot 4B

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

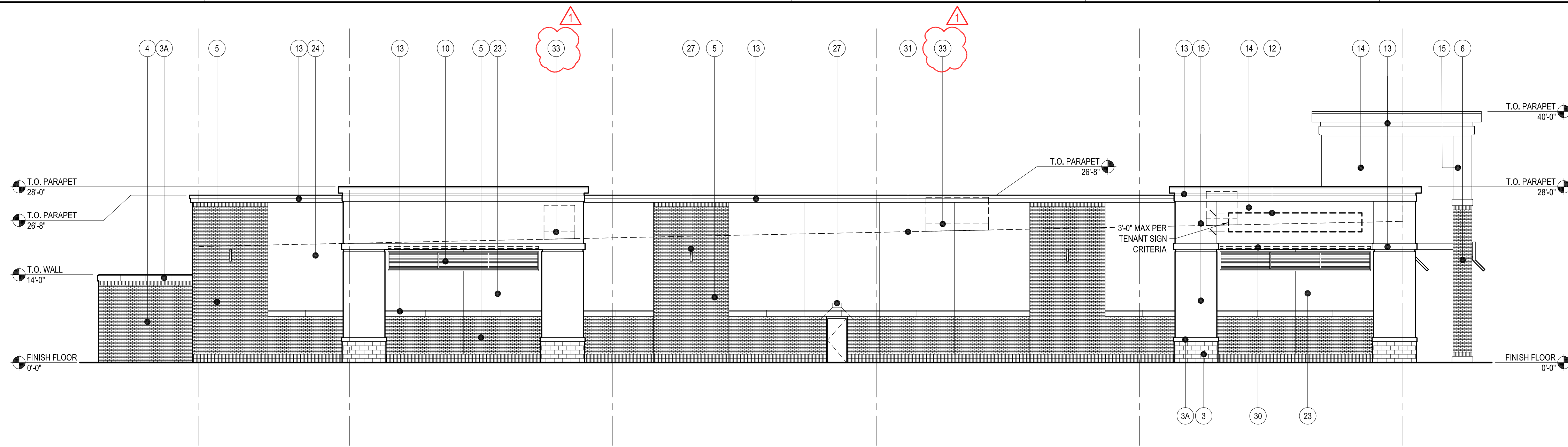
#	Revisions:
1	FDP Revisions 09-20-19
2	Revisions Per City Comments 10-01-19

Project #: 180902

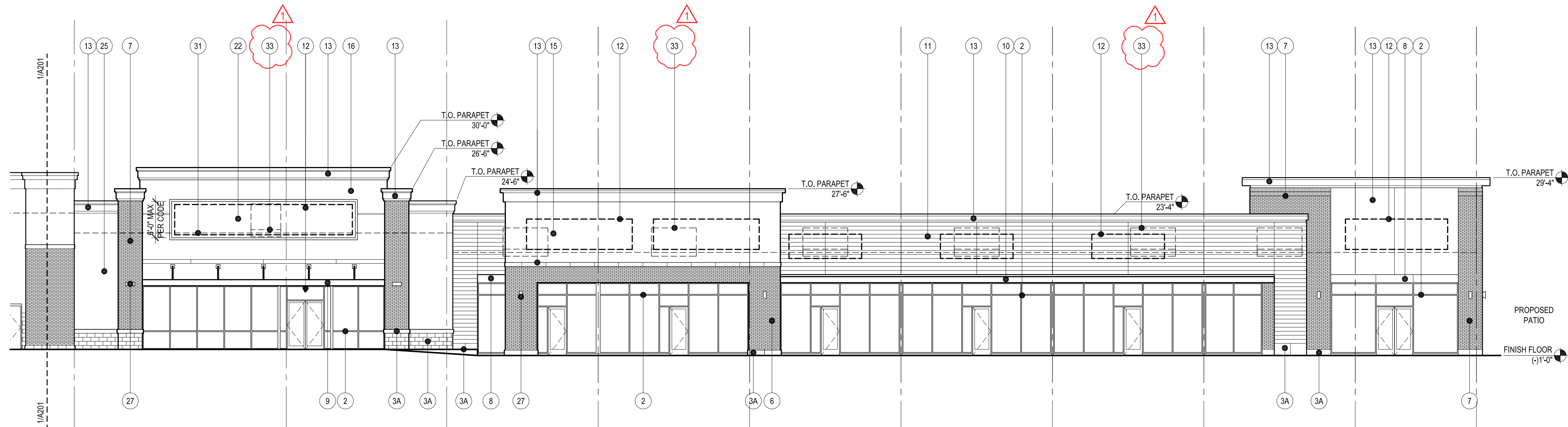
Final Development Plan
August 28, 2019

FLOOR PLAN

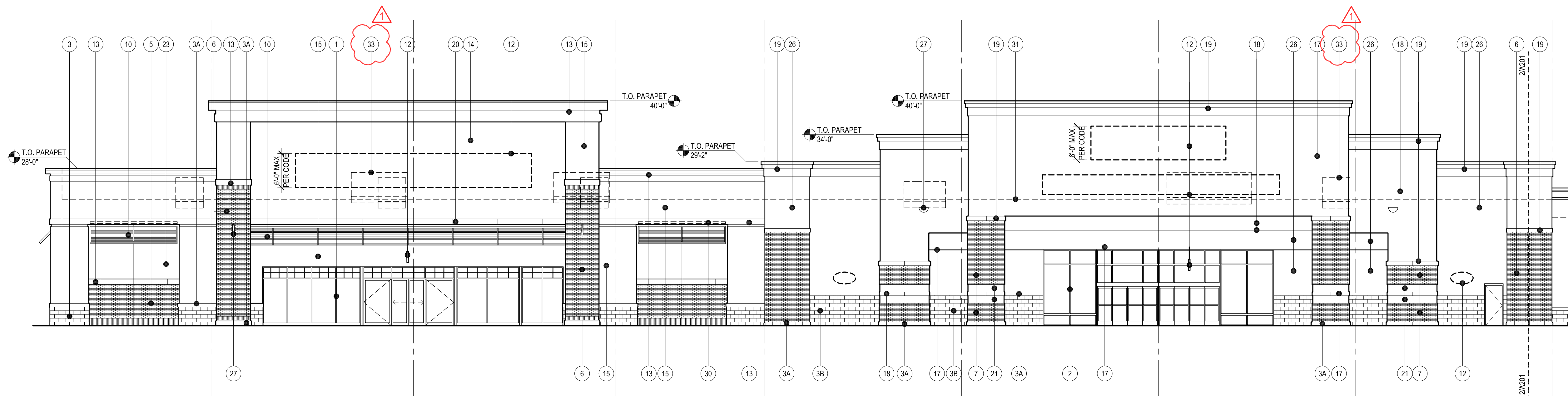
A-101



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, #UC109880 STANDARD PERMAFLUOR COLOR (INTERIOR & EXTERIOR), CLEAR LOW-E GLAZING.
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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

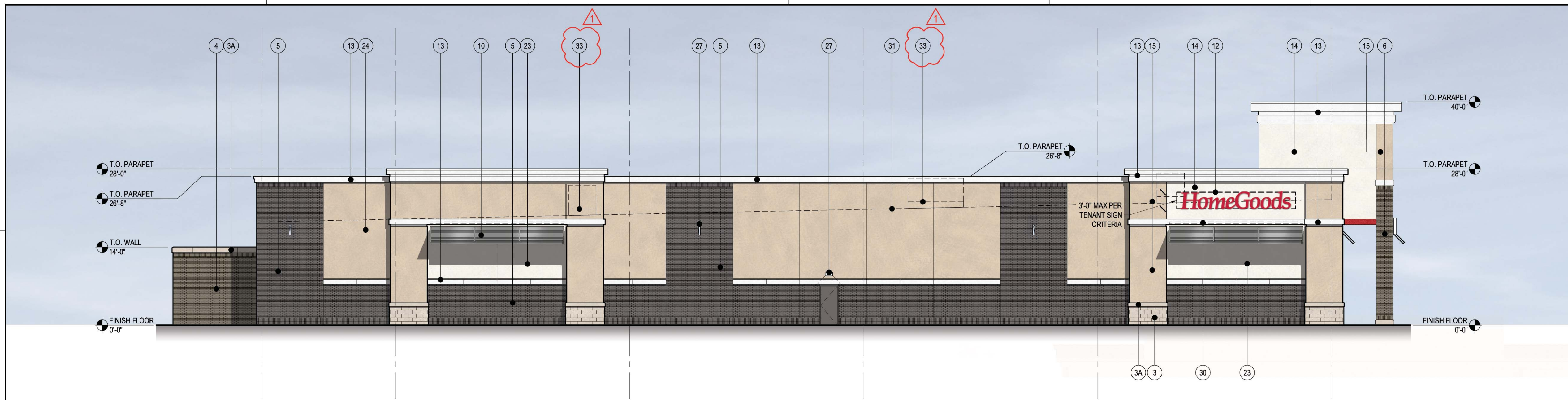
Project #: 180902

Final Development Plan

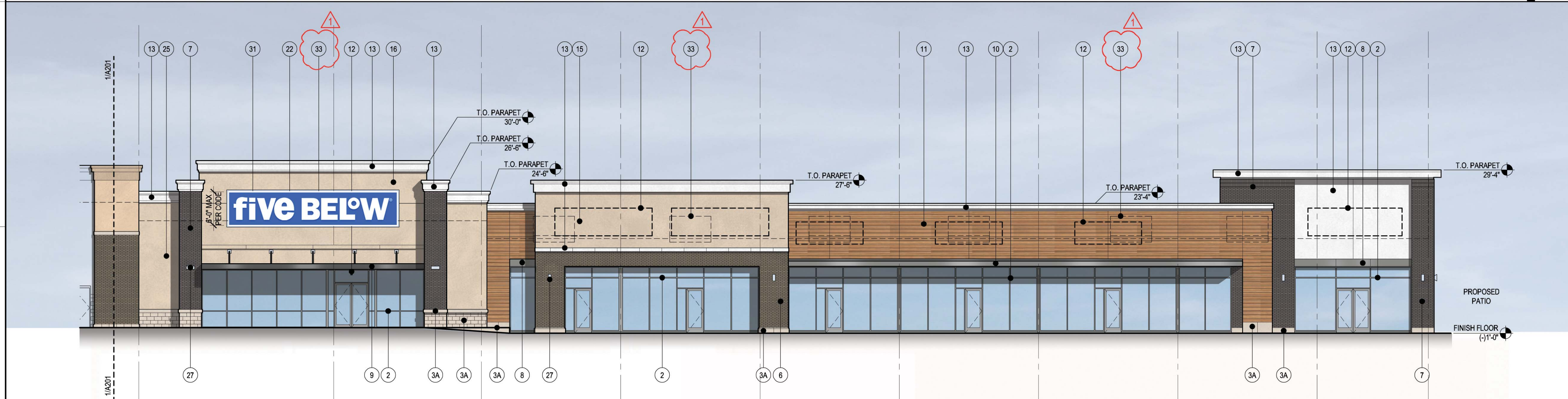
August 28, 2019

EXTERIOR ELEVATIONS

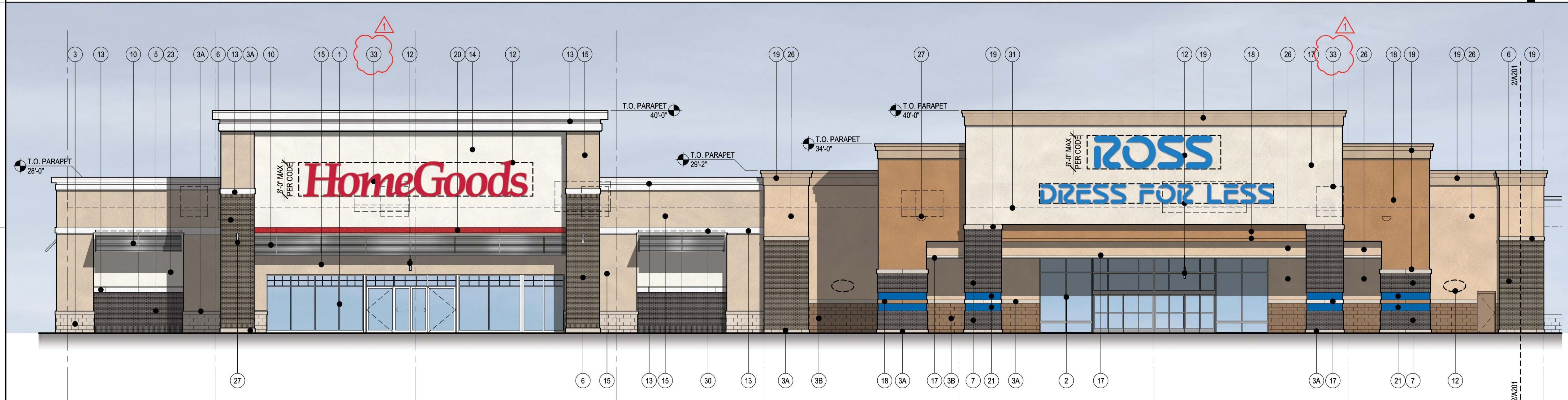
A-201



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



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

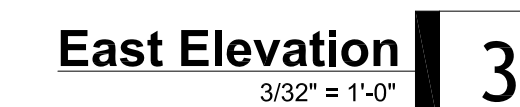


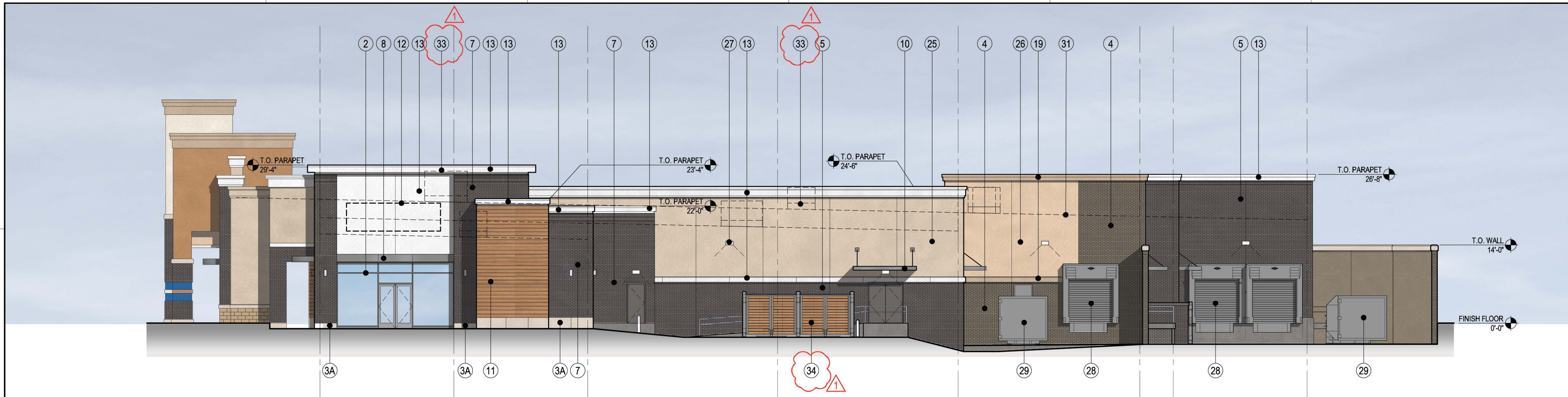
South Elevation - Area 'A' & 'B' 1
3/32" = 1'-0"

MATERIALS LEGEND*

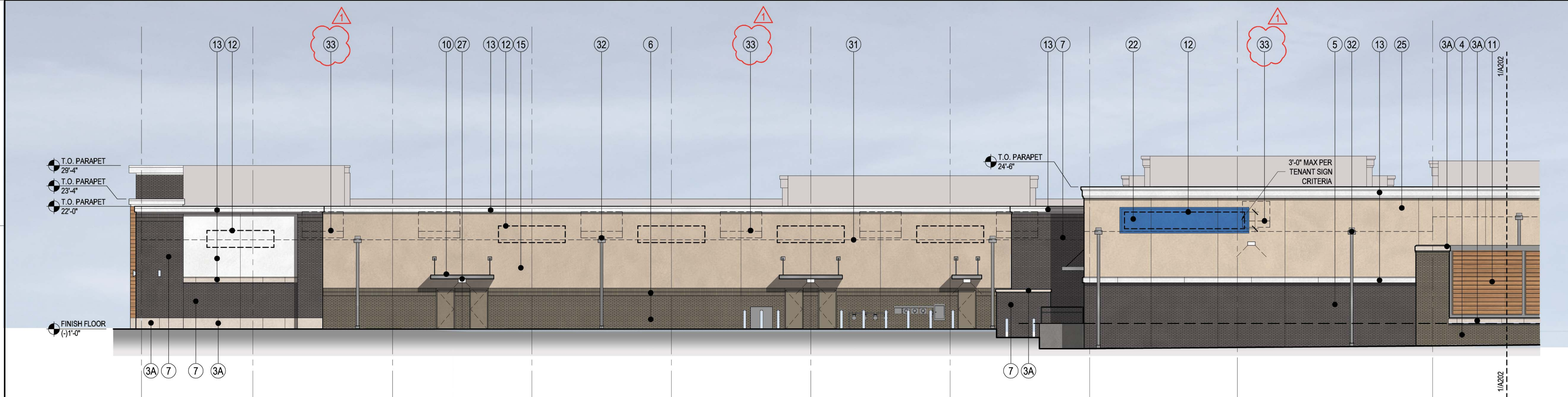
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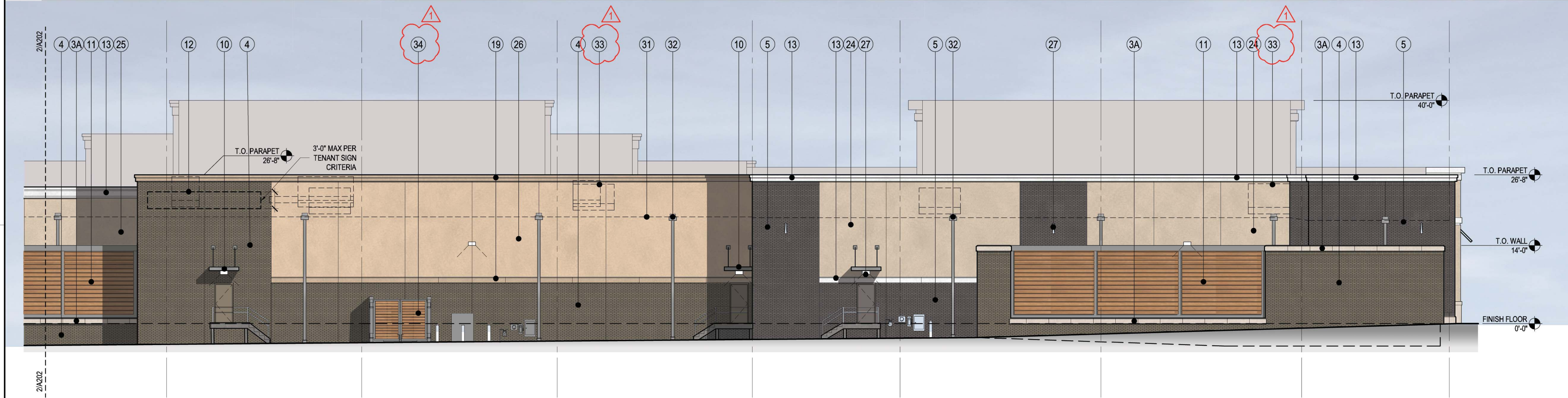




East Elevation 3
3/32" = 1'-0"



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



North Elevation - Area 'A' & 'B' 1
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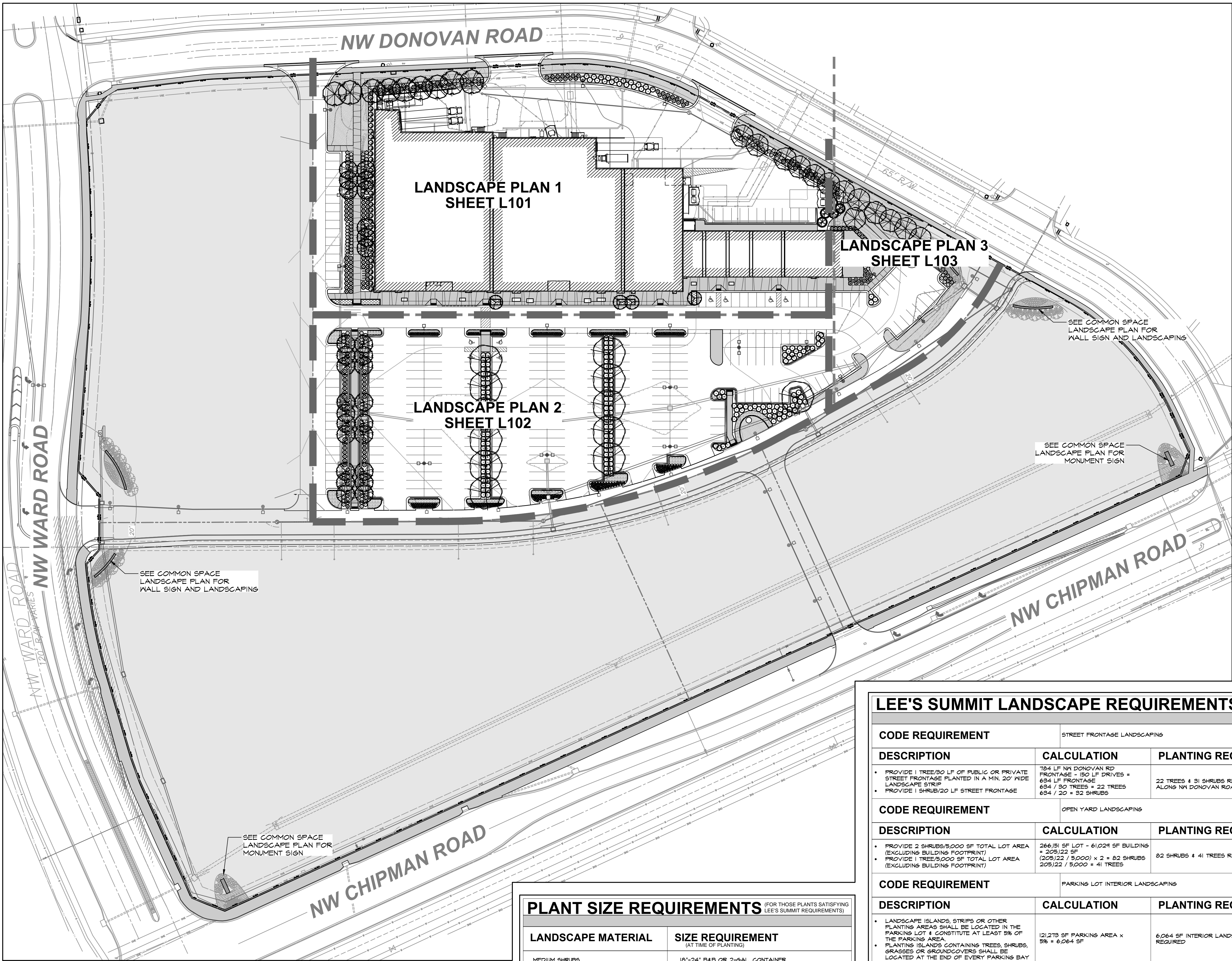
Summit Orchards Lot 4B
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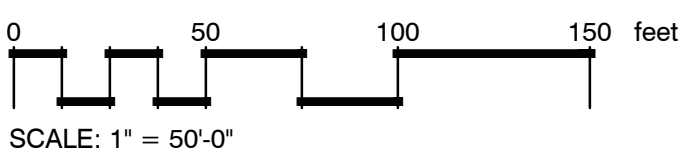
Project #: 180902

Final Development Plan
August 28, 2019

COLOR EXTERIOR ELEVATIONS
A-202C



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



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 1/2" PEA POT
DECIDUOUS TREES	3" CALIPER
EVERGREEN TREES	6' HT. MIN.

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 STRIPPROVIDE 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 & 104 SHRUBS PROVIDED
CODE REQUIREMENT		OPEN YARD LANDSCAPING	
DESCRIPTION	CALCULATION	PLANTING REQUIRED	PLANTING PROVIDED
<ul style="list-style-type: none">PROVIDE 2 SHRUBS/5,000 SF TOTAL LOT AREA (EXCLUDING BUILDING FOOTPRINT)PROVIDE 1 TREE/5,000 SF TOTAL LOT AREA (EXCLUDING BUILDING FOOTPRINT)	266,131 SF LOT - 61,024 SF BUILDING (205,122 / 5,000) x 2 = 82 SHRUBS 205,122 / 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 AREAPLANTING 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 = 38 SHRUBS (414 LF LOADING AREA ADJACENT TO NW DONOVAN RD / 40) x 12 = 125 SHRUBS	38 SHRUBS ADJACENT TO PARKING LOT ABUTTING NW DONOVAN RD REQUIRED 125 SHRUBS ADJACENT TO LOADING AREA ABUTTING NW DONOVAN RD REQUIRED	31 SHRUBS PROVIDED ADJACENT TO PARKING LOT 128 SHRUBS PROVIDED ADJACENT TO LOADING AREA

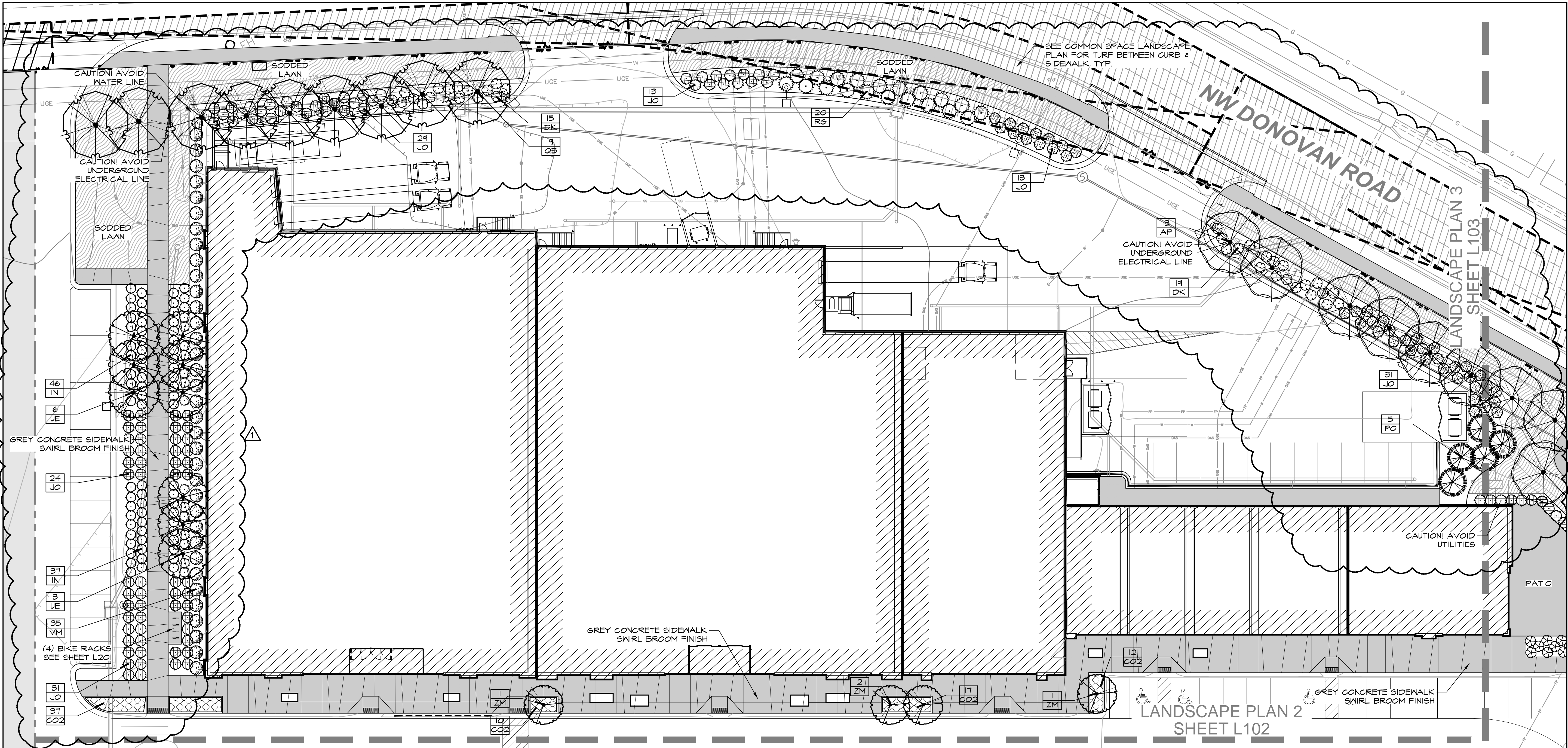


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NW CHIPMAN RD & NW WARD RD
LEE'S SUMMIT, MISSOURI 64086
LOT 4B FINAL DEVELOPMENT PLAN

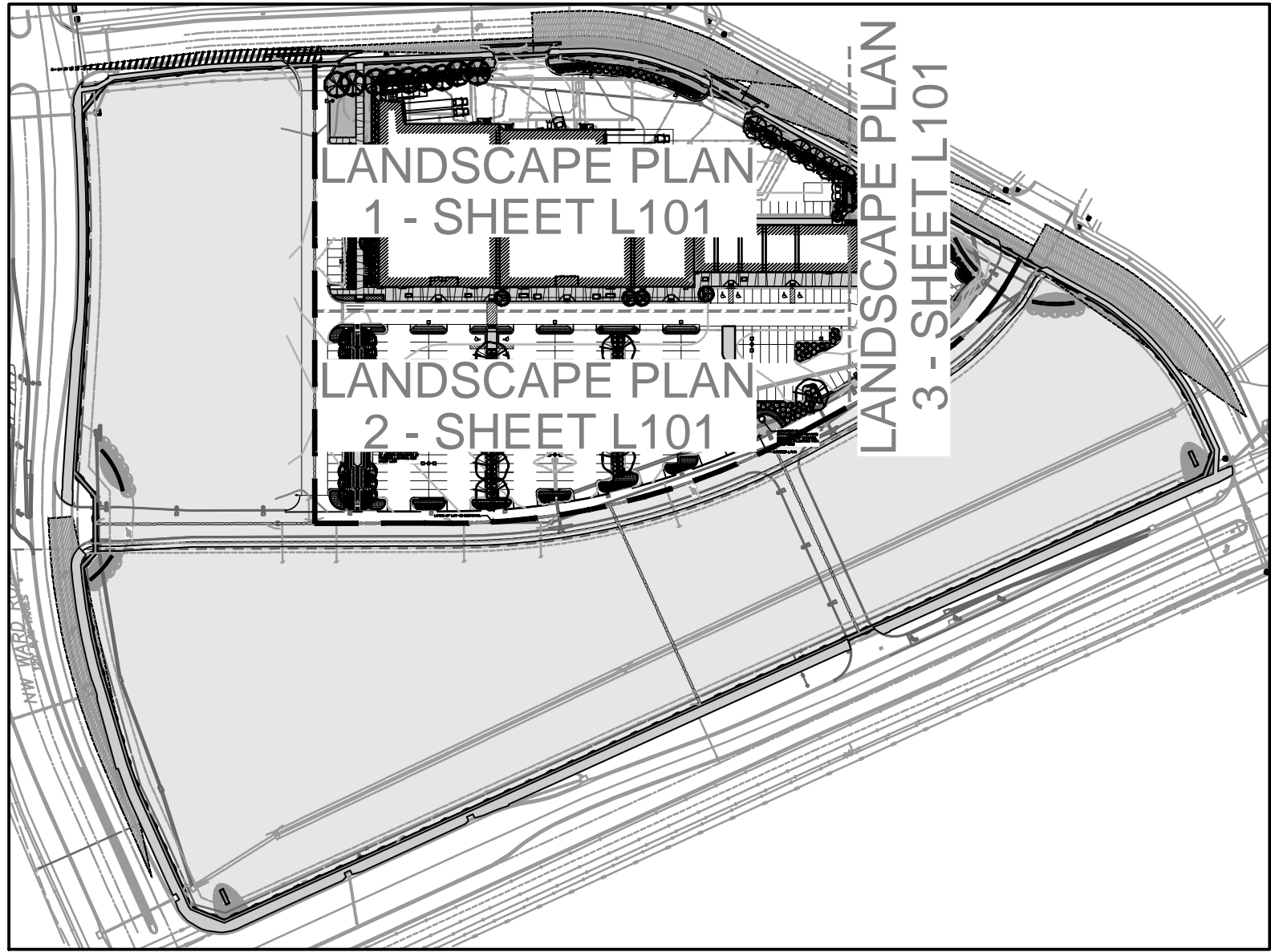
REVISION:
FPD REVISIONS 9/20/19

AUGUST 28, 2019
OVERALL LANDSCAPE PLAN

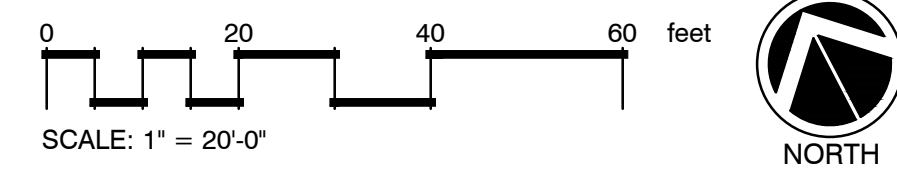
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LANDSCAPE PLAN - 1
SCALE: 1"=20'-0"



REFERENCE PLAN
SCALE: NTS

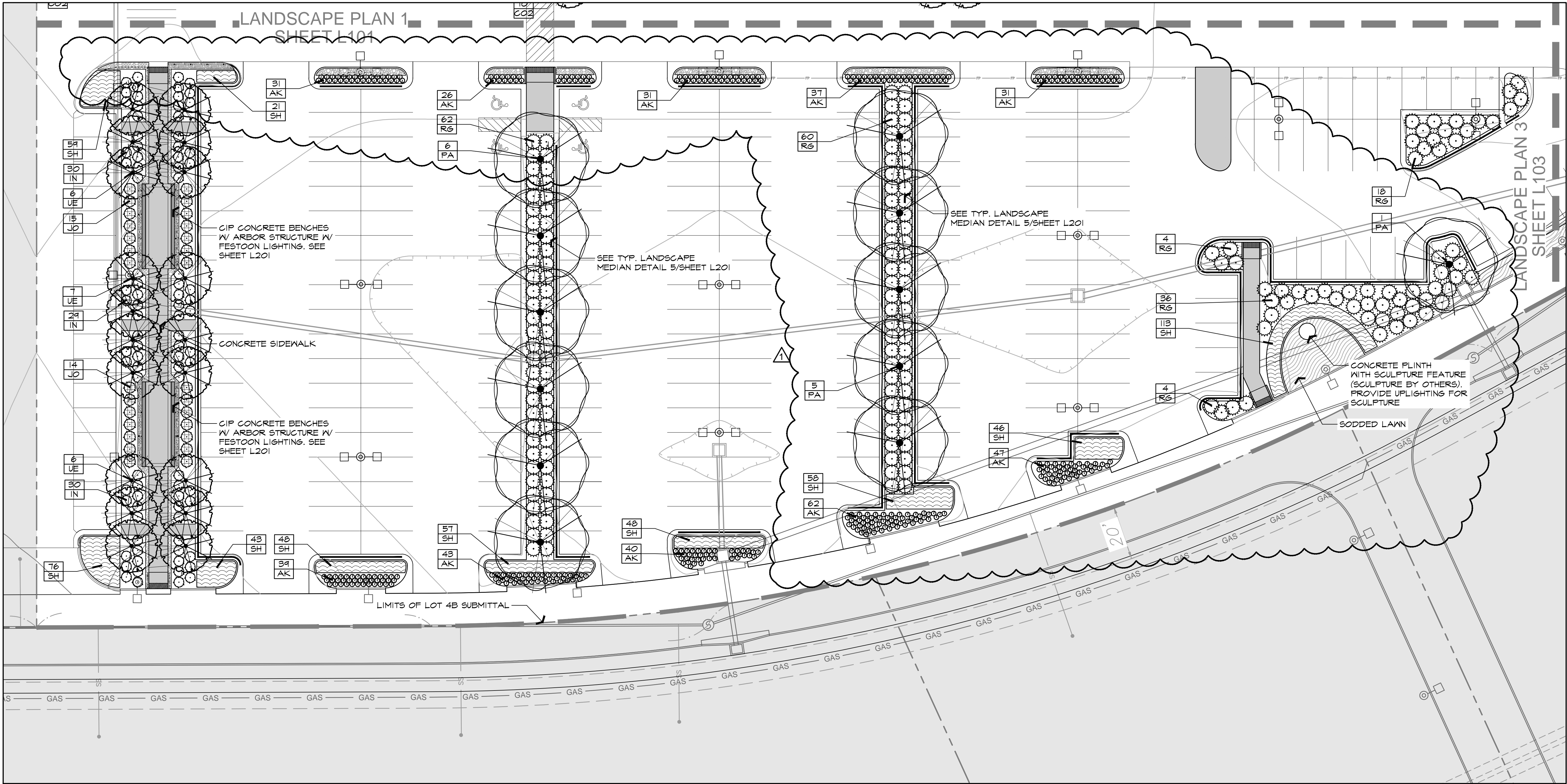


PLANT SCHEDULE

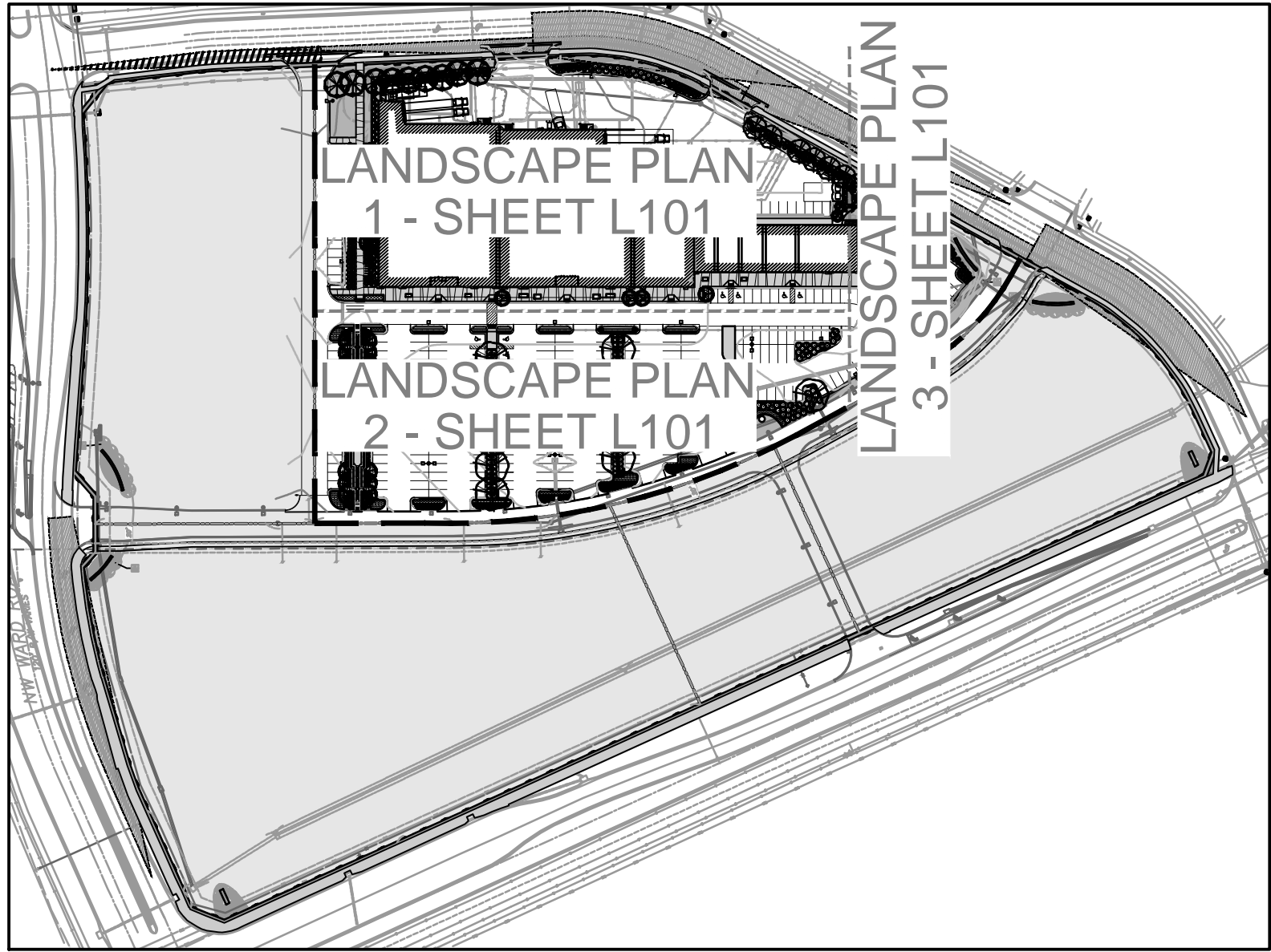
TREES					
	CODE	BOTANICAL / COMMON NAME	CONT.	CAL.	SIZE
	AP	Acer truncatum 'Pacific Sunset' TM / Pacific Sunset Maple	B # B	9" Cal.	
	PO	Picea omorika / Serbian Spruce	B # B		8' ht. min.
	PA	Platanus x acerifolia / London Plane Tree	B # B	9" Cal.	
	OB	Quercus bicolor / Swamp White Oak	B # B	9" Cal.	
	UE	Ulmus parvifolia 'Emer II' TM / Allee Elm	B # B	9" Cal.	
	ZM	Zelkova serrata 'Mushino' / Sanleaf Zelkova	B # B	9" Cal.	
SHRUBS					
	CODE	BOTANICAL / COMMON NAME	SIZE	FIELD2	FIELD3
	AK	Aronia melanocarpa Low Scape Mound / Low Scape Mound Chokeberry	#3		
	DK	Diervilla x Kodiak Orange / Kodiak Orange Bush Honeysuckle	#3		
	HB	Hydrangea paniculata 'Bobo' / Bobo Hydrangea	#5		
	IN	Ilex verticillata 'Nana' / 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' / Blue Muffin Viburnum	#5		
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

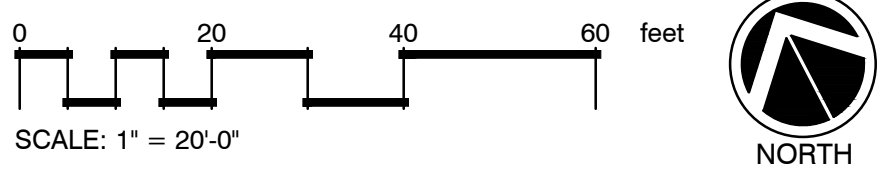
SYMBOL	DESCRIPTION
	SODDED LAWN
	SEPARATE SUBMITTAL



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



REFERENCE PLAN
SCALE: NTS



PLANT SCHEDULE

TREES		CODE	BOTANICAL / COMMON NAME	CONT.	GAL.	SIZE
	AP	Acer truncatum 'Pacific Sunset' TM / Pacific Sunset Maple	B & B	3"	Gal	
	PO	Picea omorika / 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 II' TM / Allee Elm	B & B	3"	Gal	
	ZM	Zelkova serrata 'Muehlenbergii' / Sawleaf Zelkova	B & B	3"	Gal	
SHRUBS		CODE	BOTANICAL / COMMON NAME	SIZE	FIELD2	FIELD3
	AK	Aronia melanocarpa Low Scape Mound / Low Scape Mound Chokeberry	#3			
	DK	Diervilla x Kodiak Orange / Kodiak Orange Bush Honeysuckle	#3			
	IN	Ilex verticillata 'Nana' / 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	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

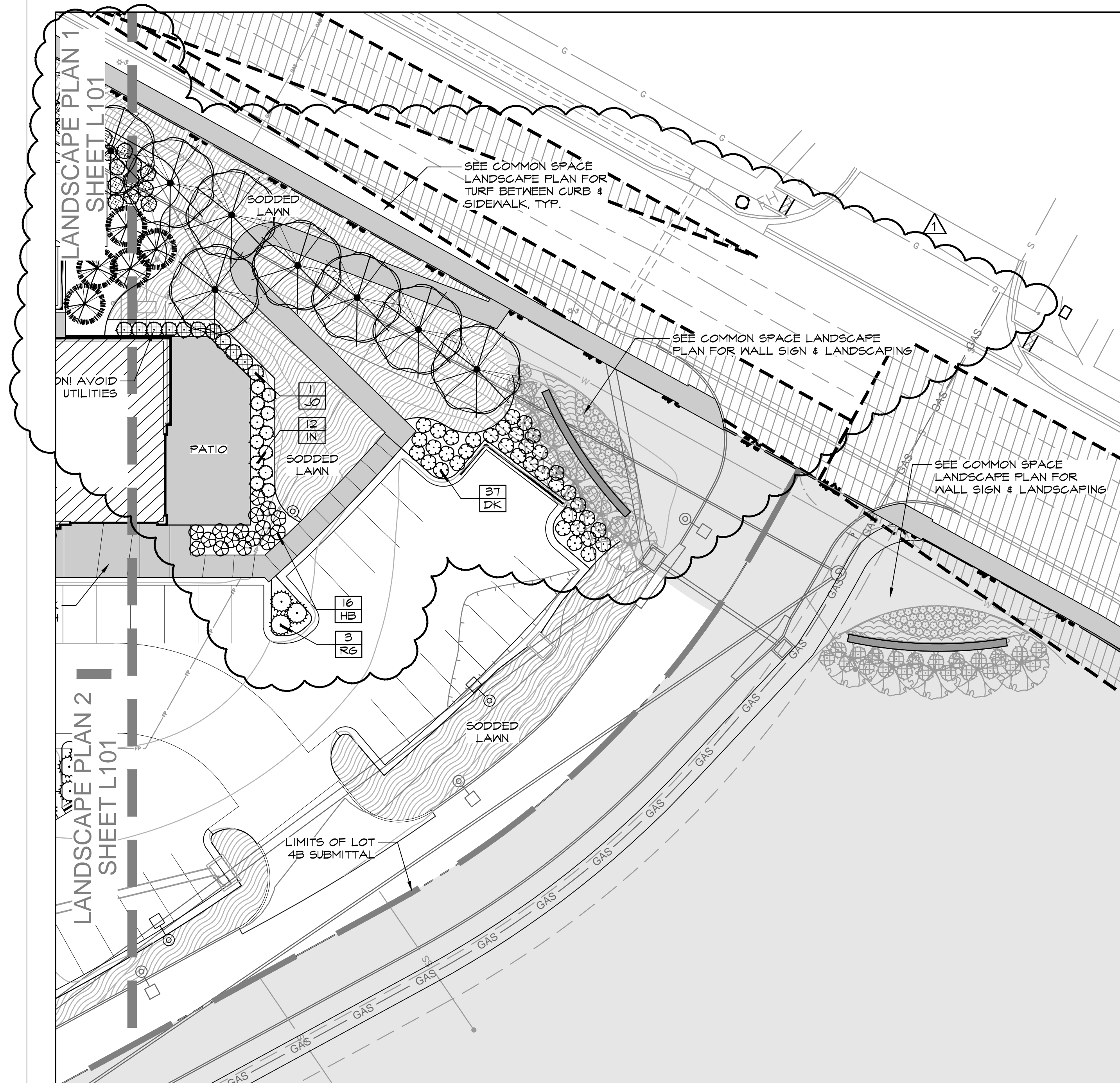
SUMMIT ORCHARDS
NW CHIPMAN RD & NW WARD RD
LEE'S SUMMIT, MISSOURI 64086
LOT 4B FINAL DEVELOPMENT PLAN



REVISION:
FPD REVISIONS 9/20/19

AUGUST 28, 2019
LANDSCAPE PLAN

L102



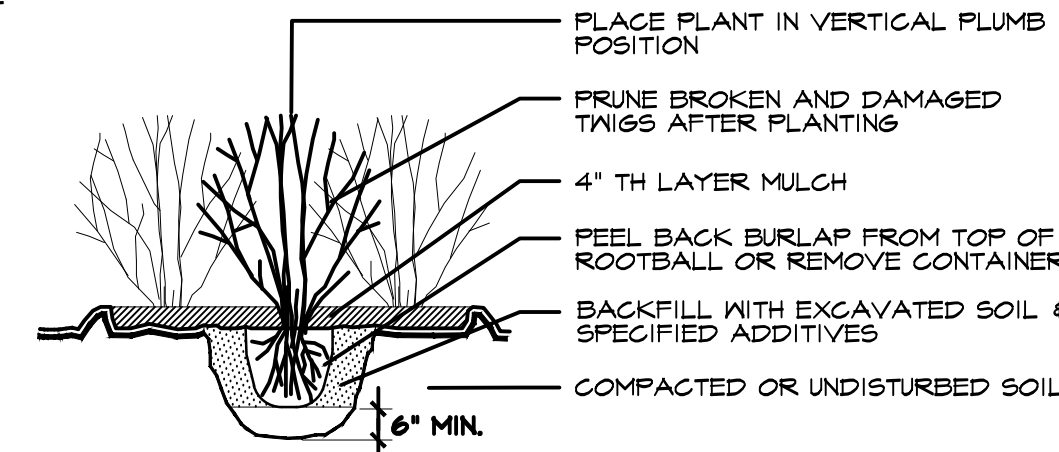
LANDSCAPE PLAN - 3
SCALE: 1"=20'-0"

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 Z601-H-1986) 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 LAYER 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 TREFLAN 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 WIRE, 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 S150. 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 EXCESSIVE 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

SHRUB PLANTING NOTES:

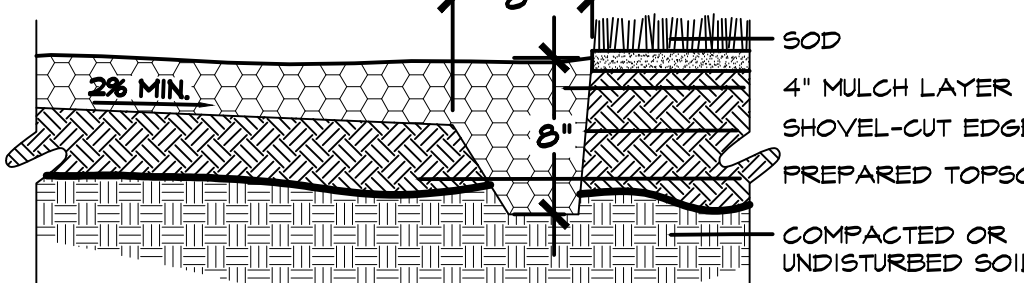
- 1) SET SHRUB AT SAME DEPTH AT WHICH IT GROWN IN THE FIELD OR CONTAINER.
- 2) PRUNE, THIN & SHAPE SHRUBS IN ACCORDANCE W/ STANDARD HORTICULTURAL PRACTICE.
- 3) BALL OF PLANT TO BE KEPT MOIST AND PROTECTED FROM DAMAGE PRIOR TO PLANTING. ADD ROOT STIMULATOR TO SURFACE IMMEDIATELY AFTER PLANTING AS PER 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: FIELD SHALL HAND DUS IN SMOOTH CURVING SHAPES WHERE INDICATED.

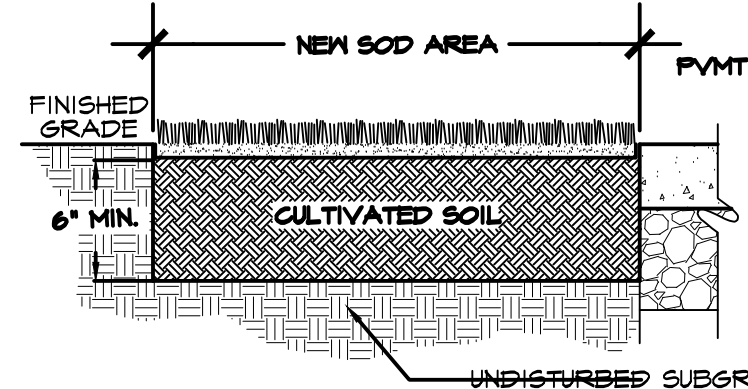


2 SHOVEL-CUT EDGING

SCALE: N.T.S.

3 SOD INSTALLATION

SCALE: N.T.S.

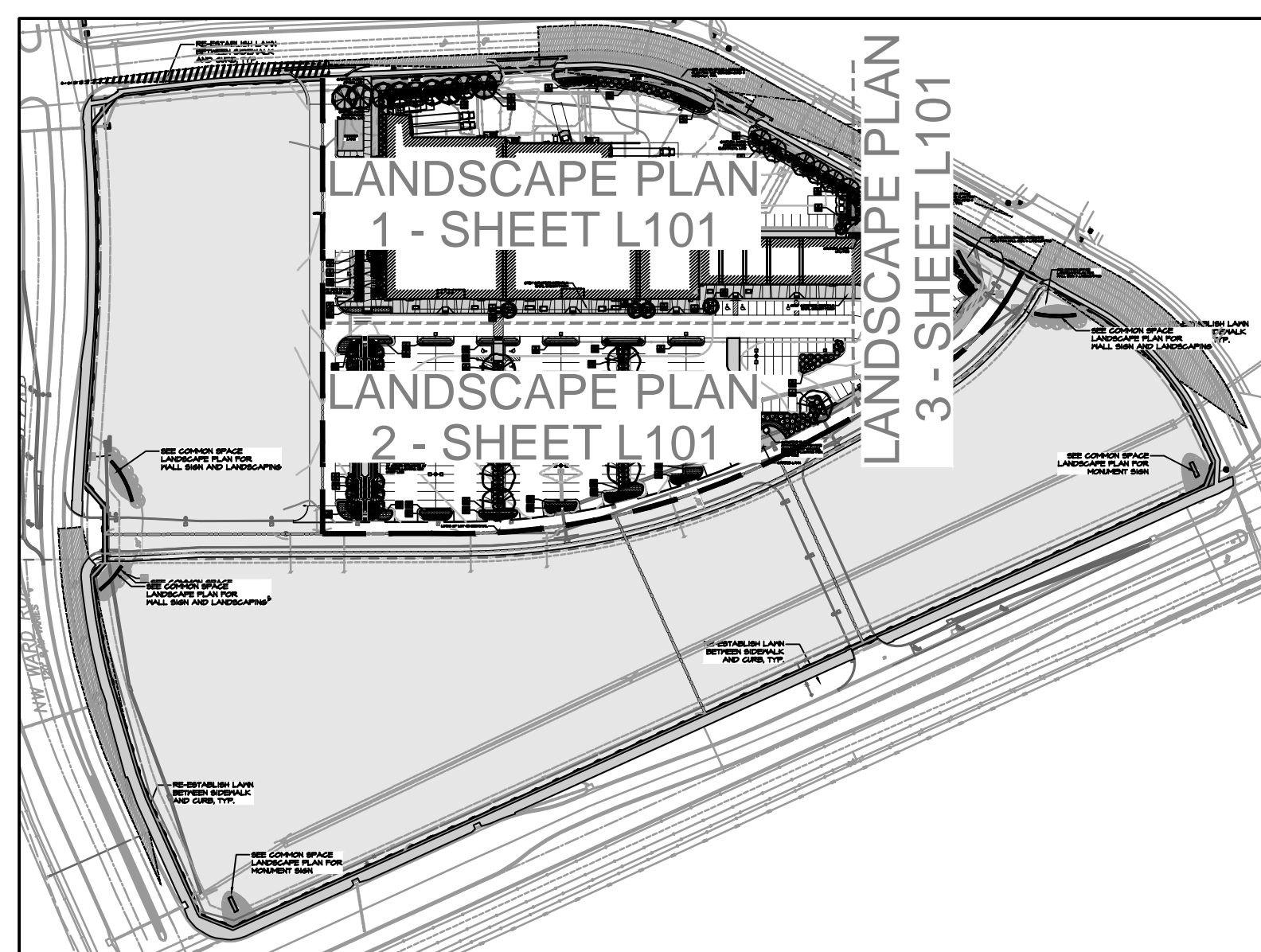


SOD INSTALLATION NOTES:

- 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

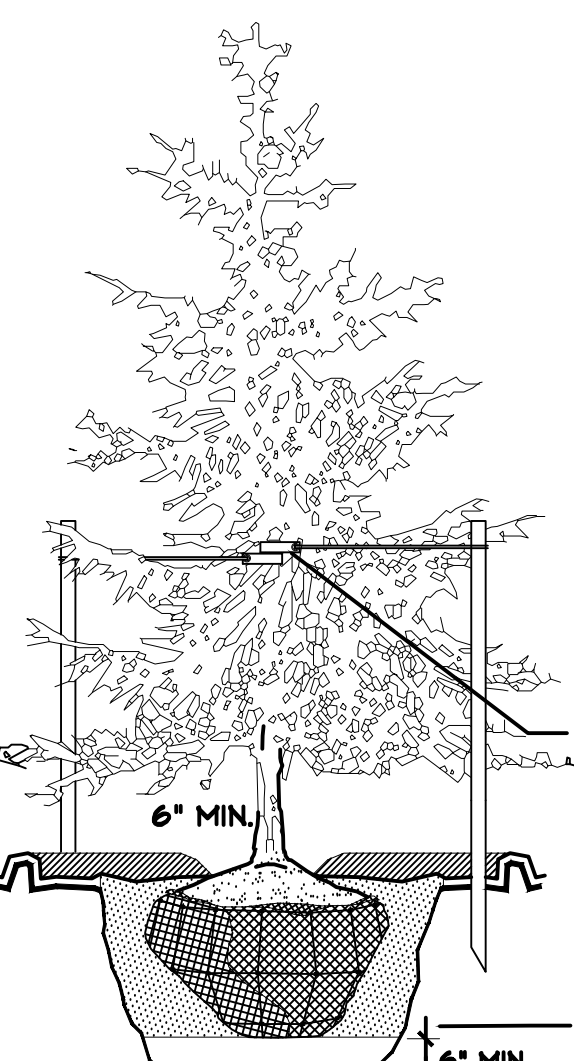
SYMBOL	DESCRIPTION
[Hatched Pattern]	SODDED LAWN
[Hatched Pattern]	SEPARATE SUBMITTAL



REFERENCE PLAN
SCALE: NTS

EVERGREEN TREE PLANTING

- 1) DO NOT HEAVILY PRUNE THE TREE AT PRUNING. PRUNE ONLY CROSSOVER LIMBS, 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.



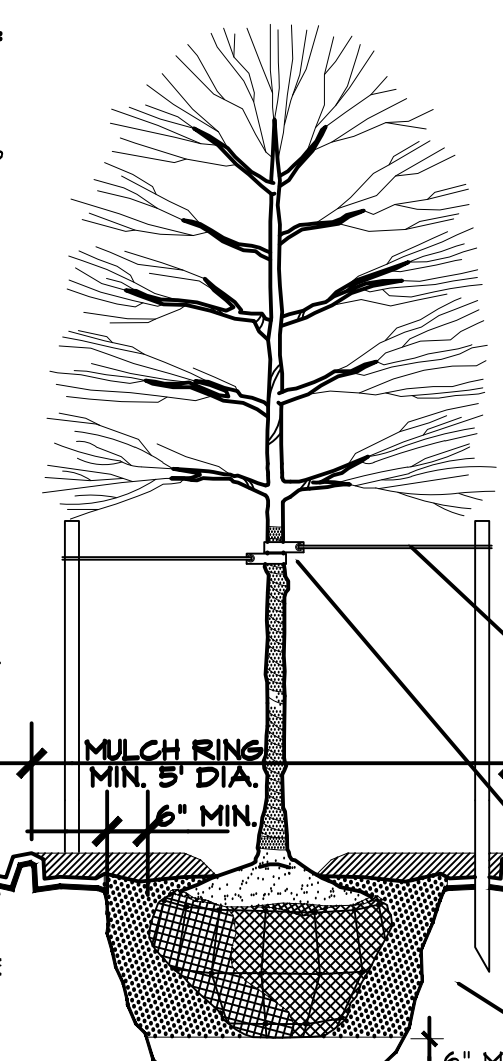
4 EVERGREEN TREE PLANTING

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) APPLY 4" TH. MULCH LAYER AROUND TREE. DO NOT PLACE MULCH IN DIRECT CONTACT W/ CROWN OF TREE TRUNK.
- 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.

DECIDUOUS TREE PLANTING NOTES:

- 1) DO NOT HEAVILY PRUNE THE TREE AT PRUNING. PRUNE ONLY CROSSOVER LIMBS, 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.



5 DECIDUOUS TREE PLANTING

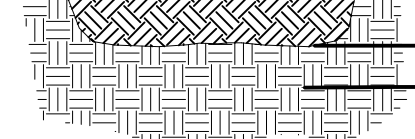
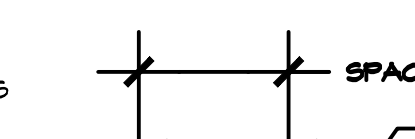
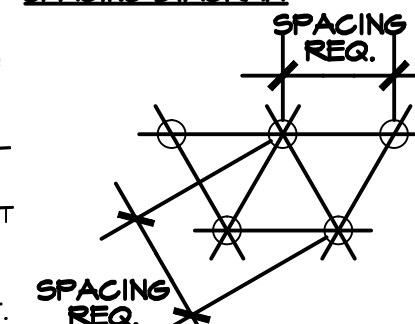
SCALE: N.T.S.

- 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) APPLY 4" TH. MULCH LAYER AROUND TREE. DO NOT PLACE MULCH IN DIRECT CONTACT W/ CROWN OF TREE TRUNK.
- 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.

PERENNIAL PLANTING

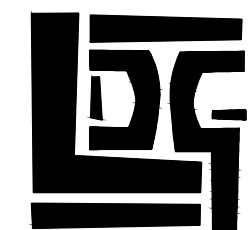
- 1) BREAK UP EXISTING TOPSOIL TO A DEPTH OF 24".
- 2) PROVIDE NEW TOPSOIL TO A DEPTH OF 18".
- 3) THOROUGHLY MIX PEAT IN TOP 3-4" OF SOIL.
- 4) DO NOT ALLOW PERENNIALS TO DRY OUT. KEEP MOIST AND PROTECTED FROM DAMAGE PRIOR TO PLANTING.
- 5) PLACE PLANT IN VERTICAL PLUMB POSITION.
- 6) DIG HOLE AS DEEP AS INITIAL ROOT SYSTEM.
- 7) BACKFILL W/ SOIL AND PACK FIRMLY BY HAND. ADD ROOT STIMULATOR PER MANUFACTURER'S RECOMMENDATIONS. WATER THOROUGHLY TO FINISH PLACING SOIL AROUND ROOTS.
- 8) APPLY 4" TH LAYER OF MULCH ON PERENNIAL PLANT BED DO NOT COVER PLANTS.

SPACING DIAGRAM



6 PERENNIAL PLANTING

SCALE: N.T.S.



LORAX
DESIGN GROUP

8021 SANTA FE DRIVE
OVERLAND PARK, KS 66204
WWW.LORAXDESIGNGROUP.COM



9/20/19

SUMMIT ORCHARDS

NW CHIPMAN RD & NW WARD RD

LEE'S SUMMIT, MISSOURI 64086

LOT 4B FINAL DEVELOPMENT PLAN

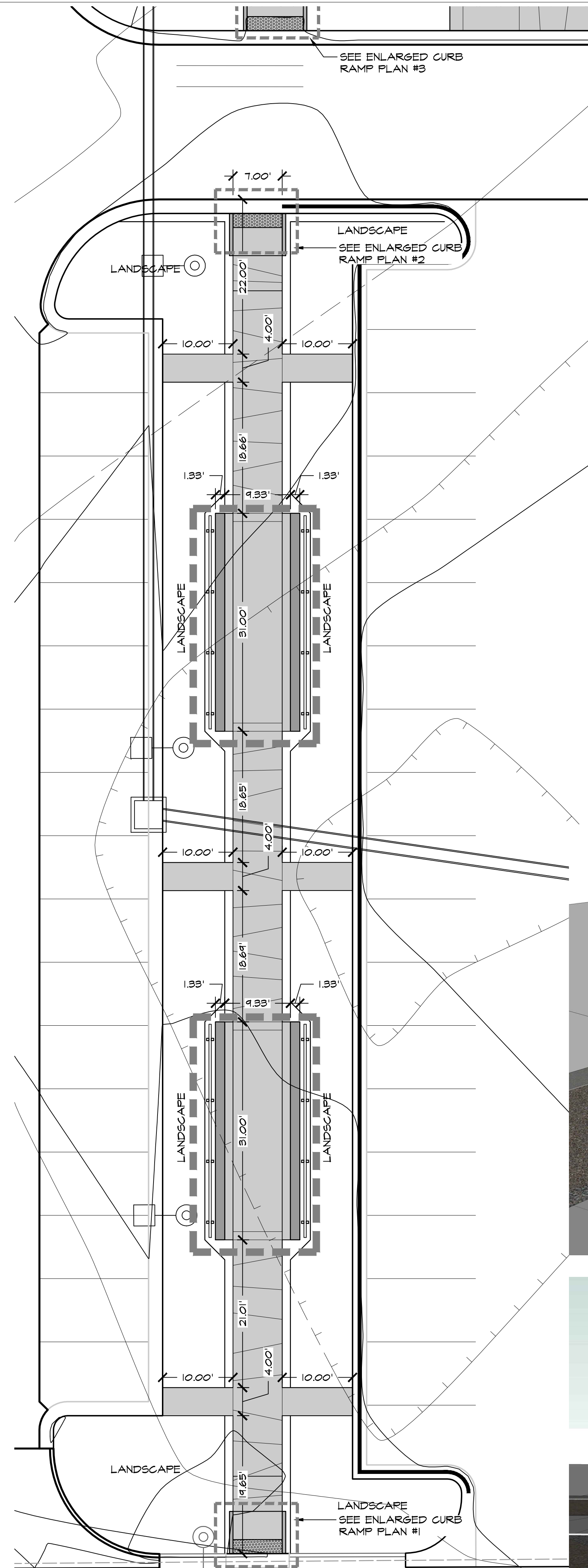
REVISION:

△ FPD REVISIONS 9/20/19

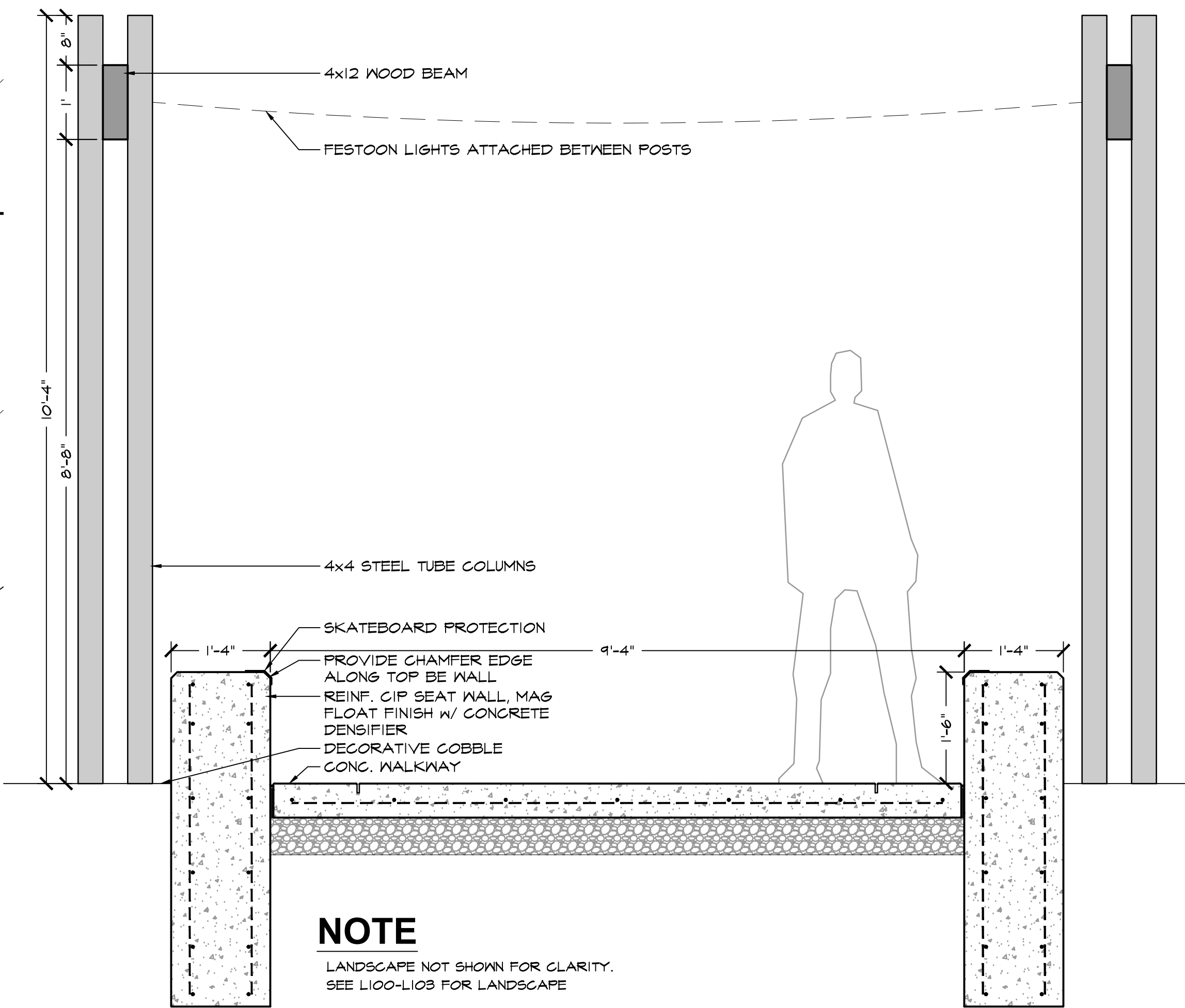
AUGUST 28, 2019

LANDSCAPE PLAN

L103

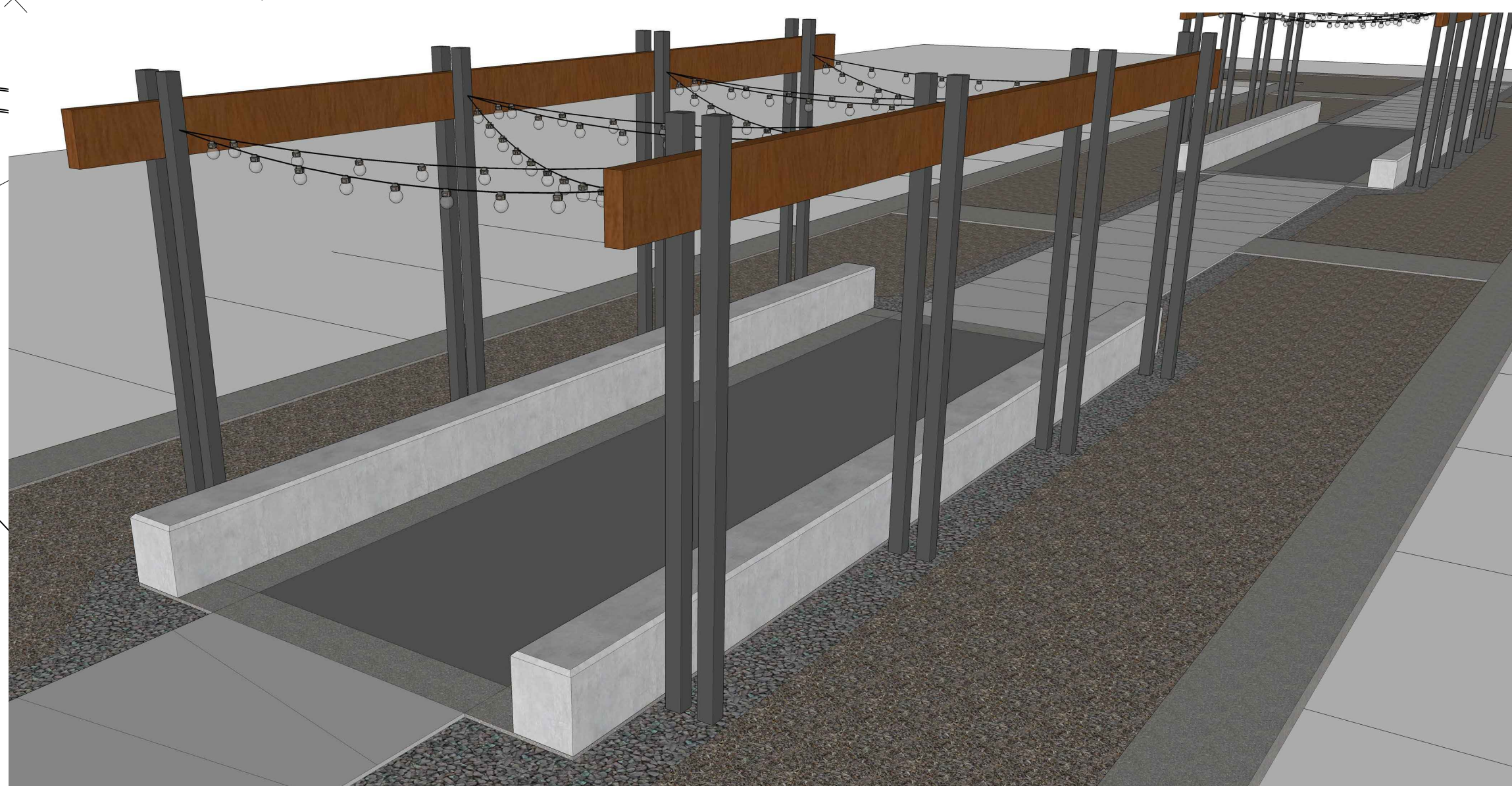


3 LOT 4B ALLEE
SCALE: 1" = 10'-0" PLAN

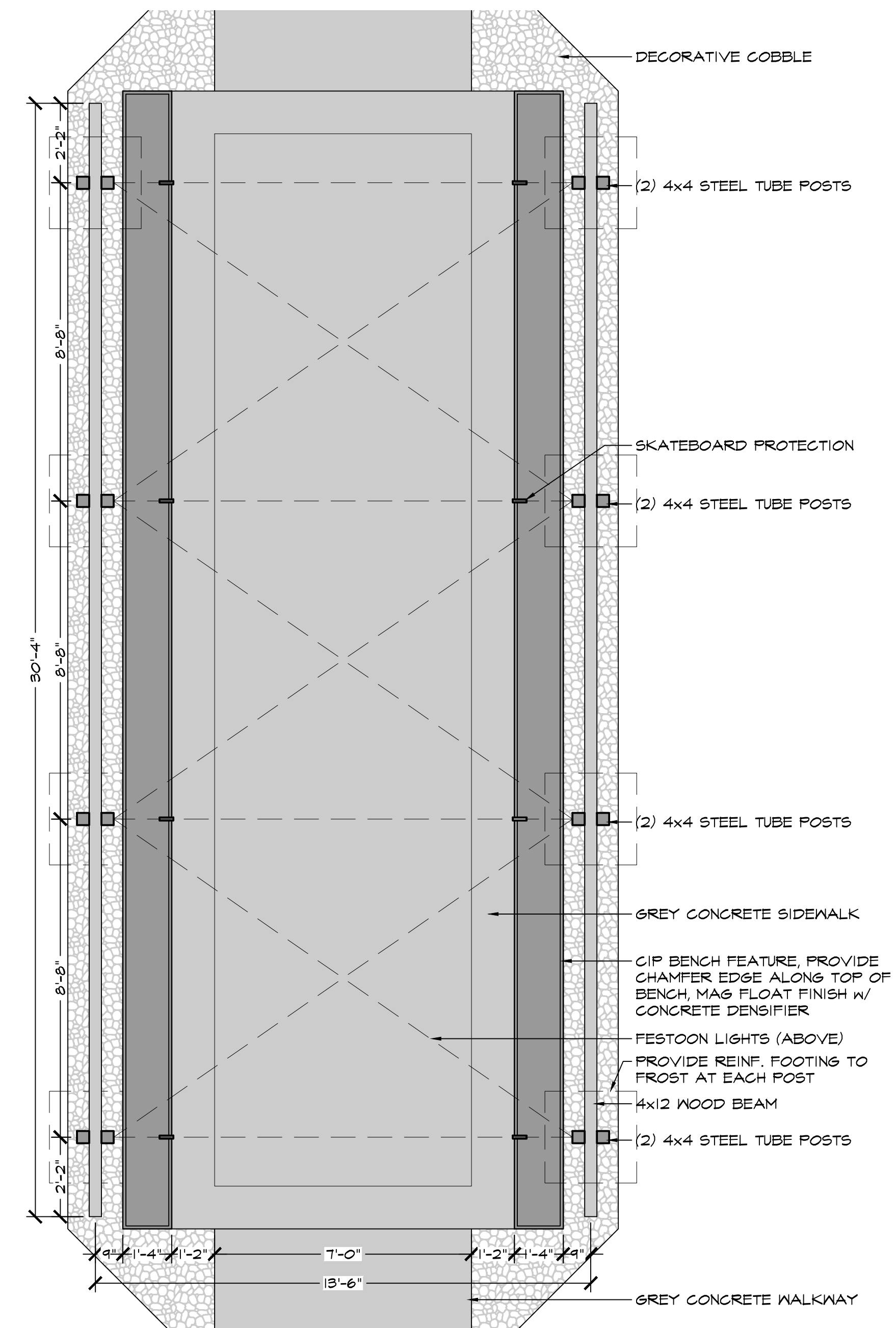


NOTE
LANDSCAPE NOT SHOWN FOR CLARITY.
SEE L100-L103 FOR LANDSCAPE

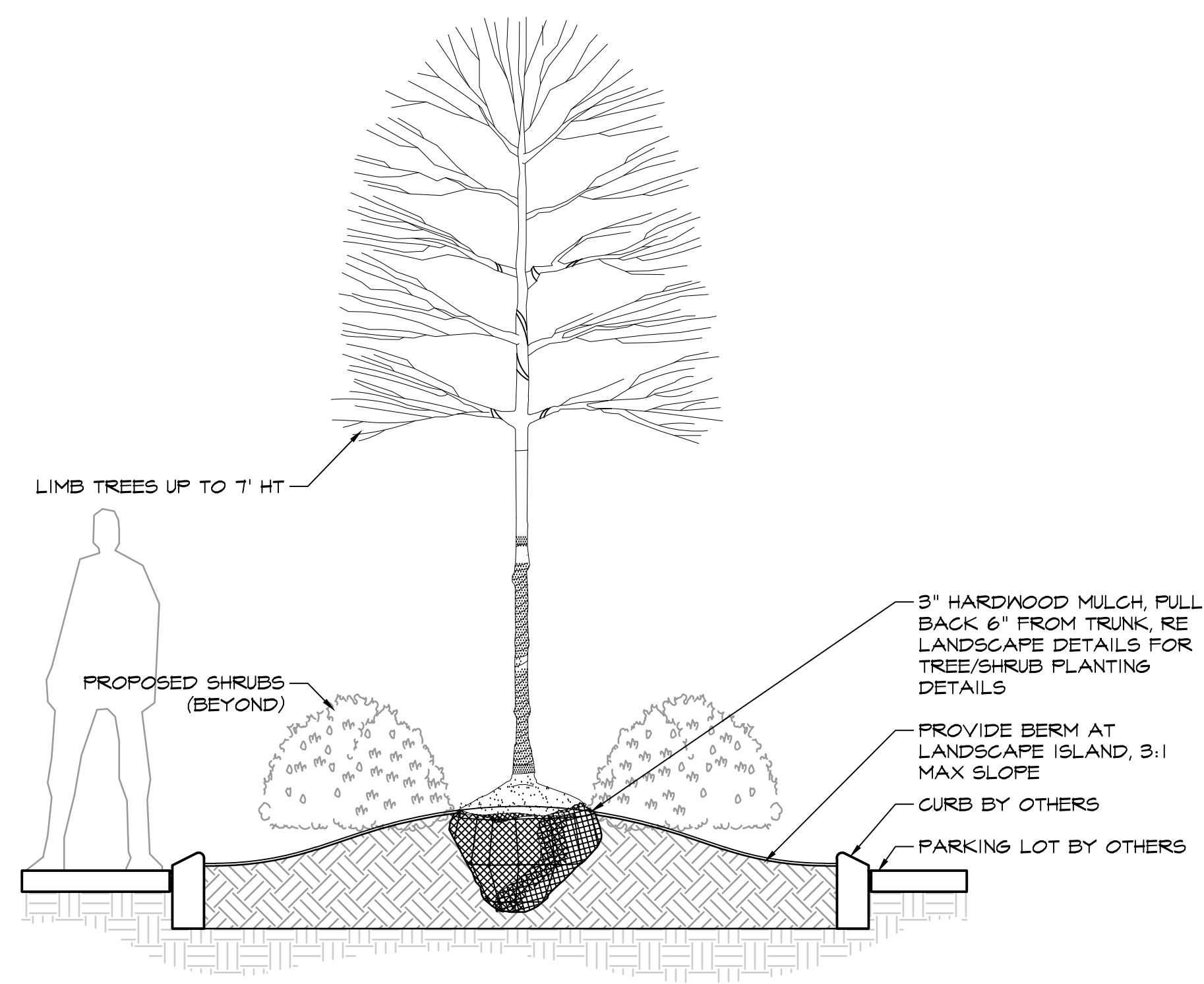
1 LOT 4B ALLEE
SCALE: 3/4" = 1'-0" SECTION



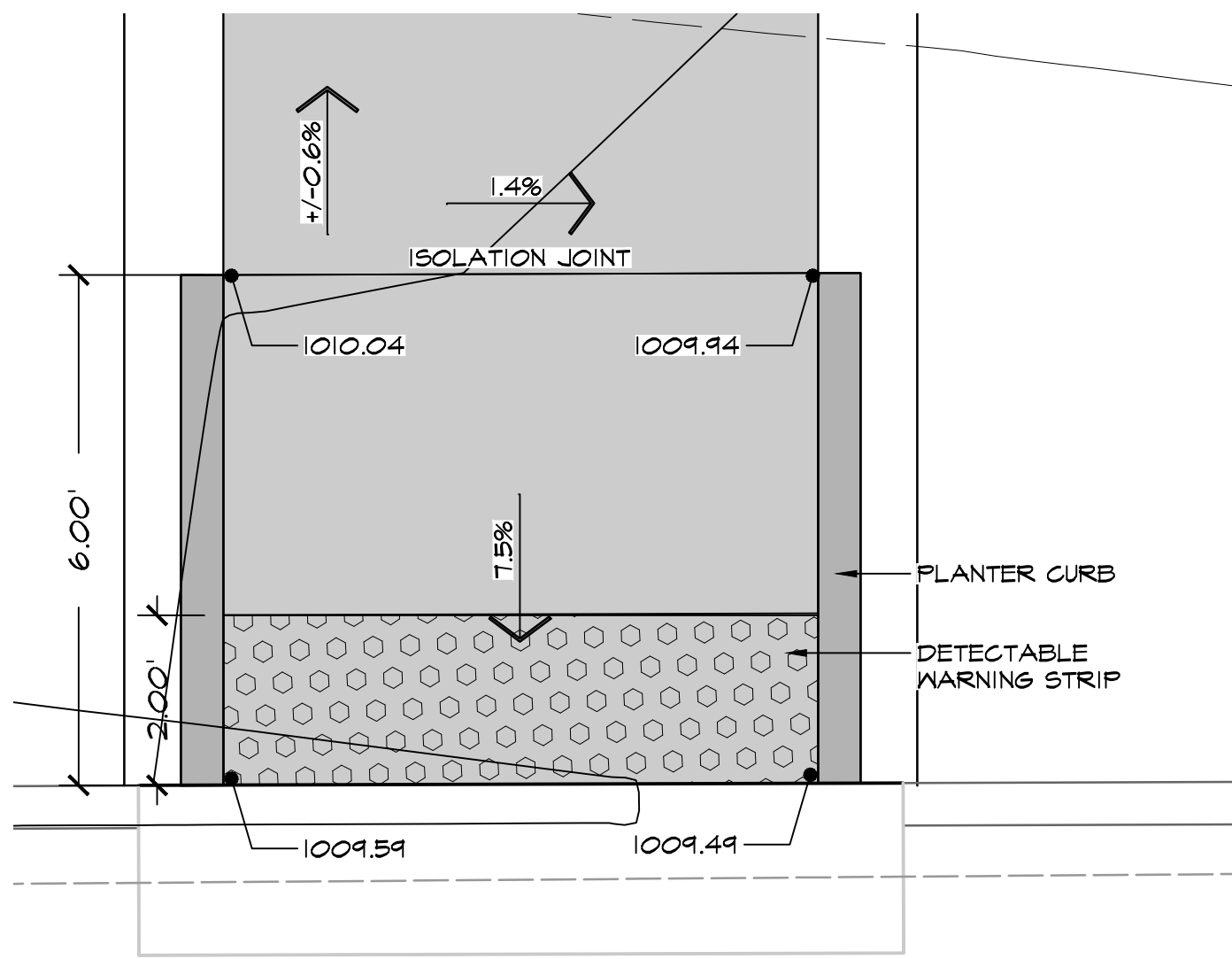
4 LOT 4B ALLEE VIGNETTE
SCALE: NTS ILLUSTRATIVE VIEW



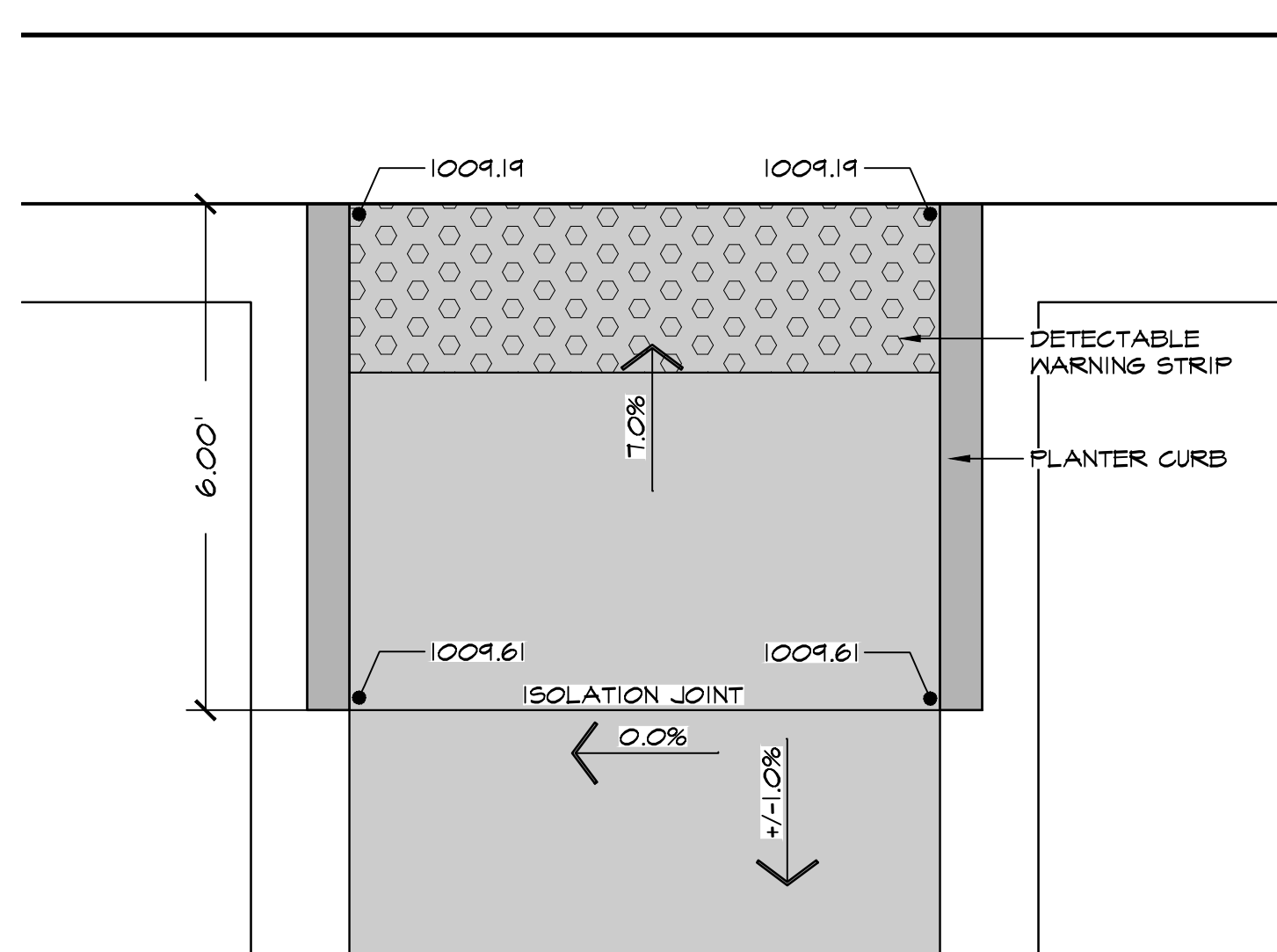
2 LOT 4B ALLEE
SCALE: 3/8" = 1'-0" ENLARGE PLAN



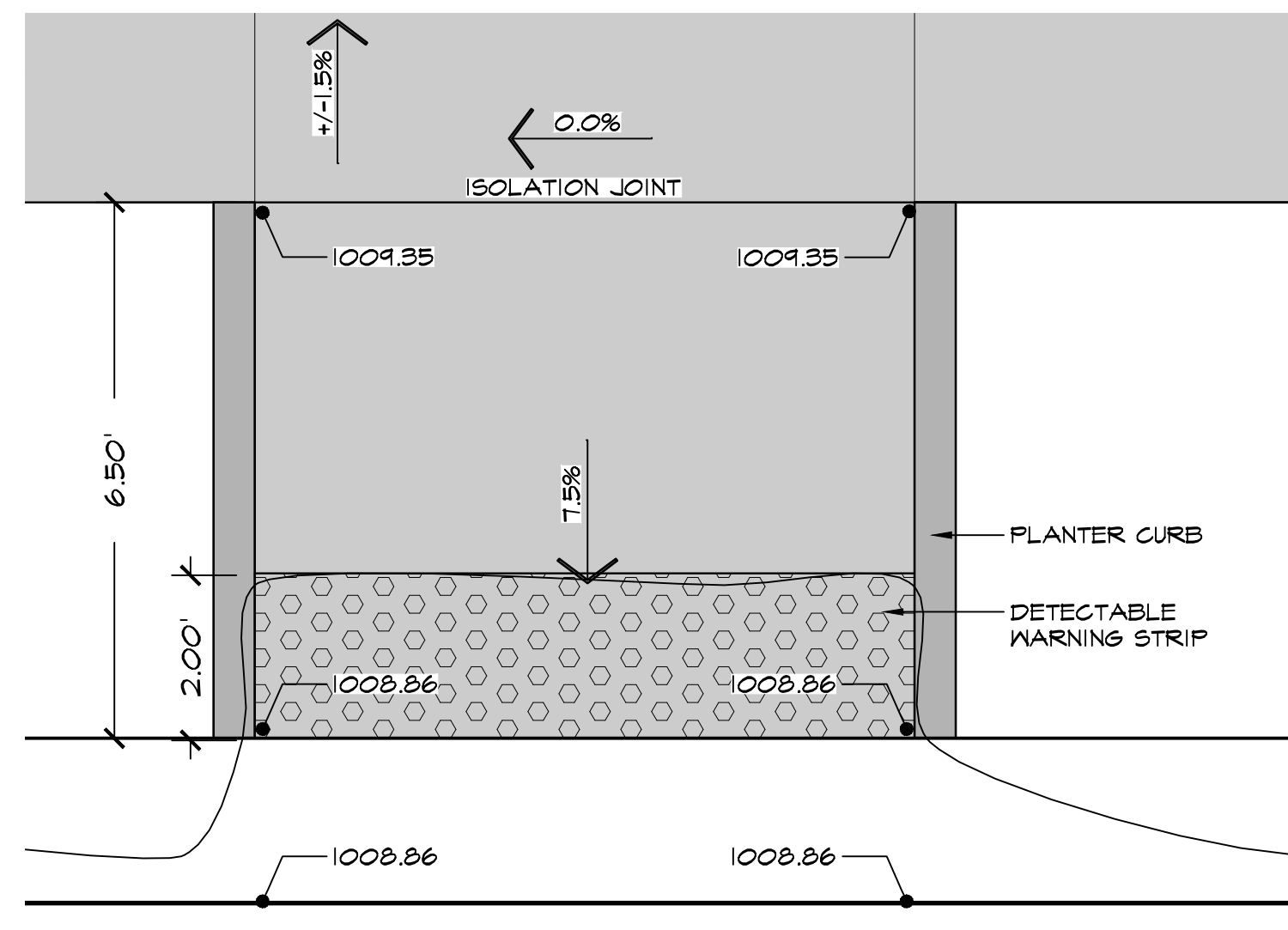
5 TYP. LANDSCAPED MEDIAN
SCALE: 1/2" = 1'-0" SECTION



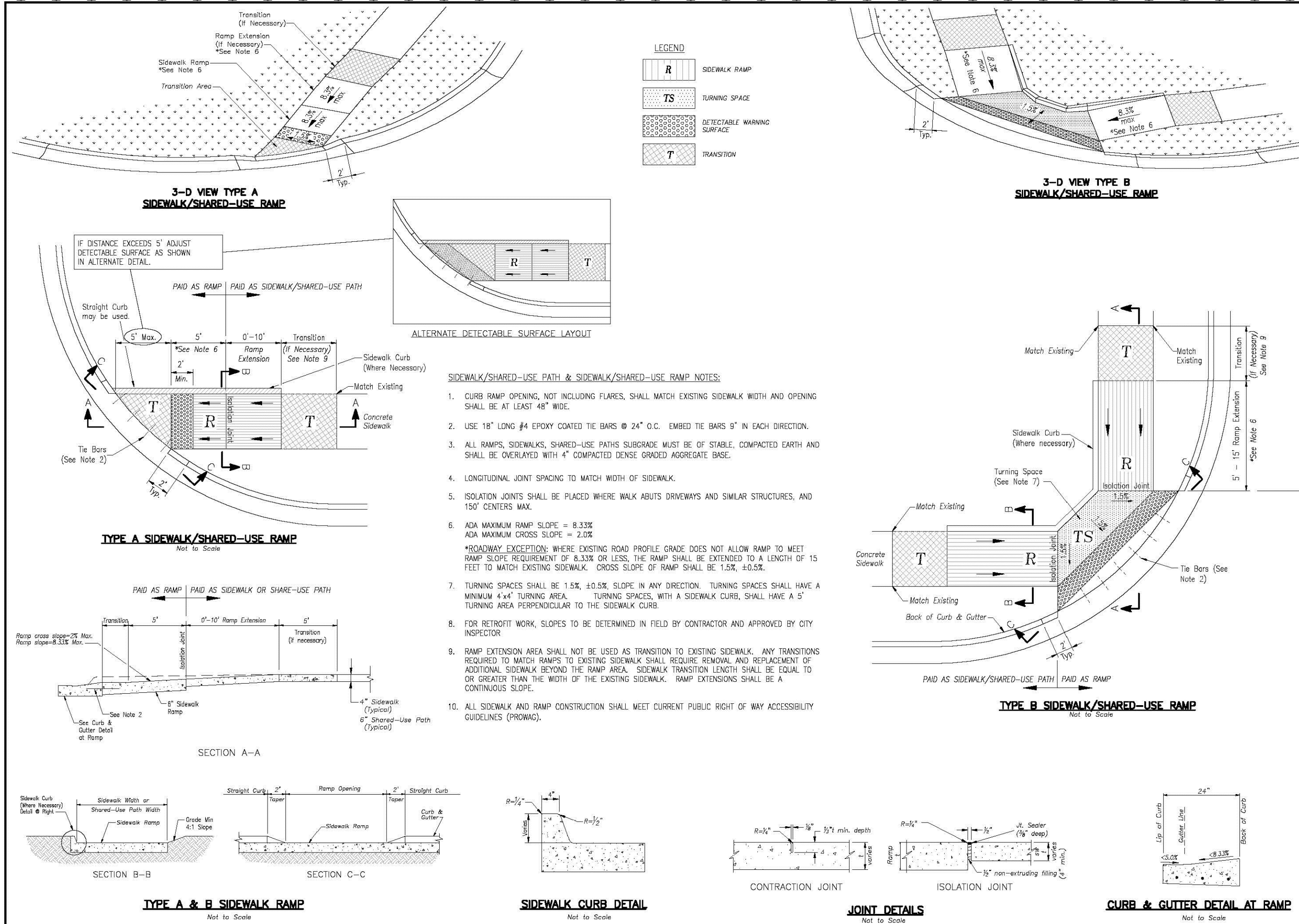
1 ADA CURB RAMP #1
SCALE: 1/2" = 1'-0" ENLARGED PLAN



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

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.

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-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.

In-ground Installation

Inverted U/2 Rack, IN-GROUND/ 2 Bicycle Capacity

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

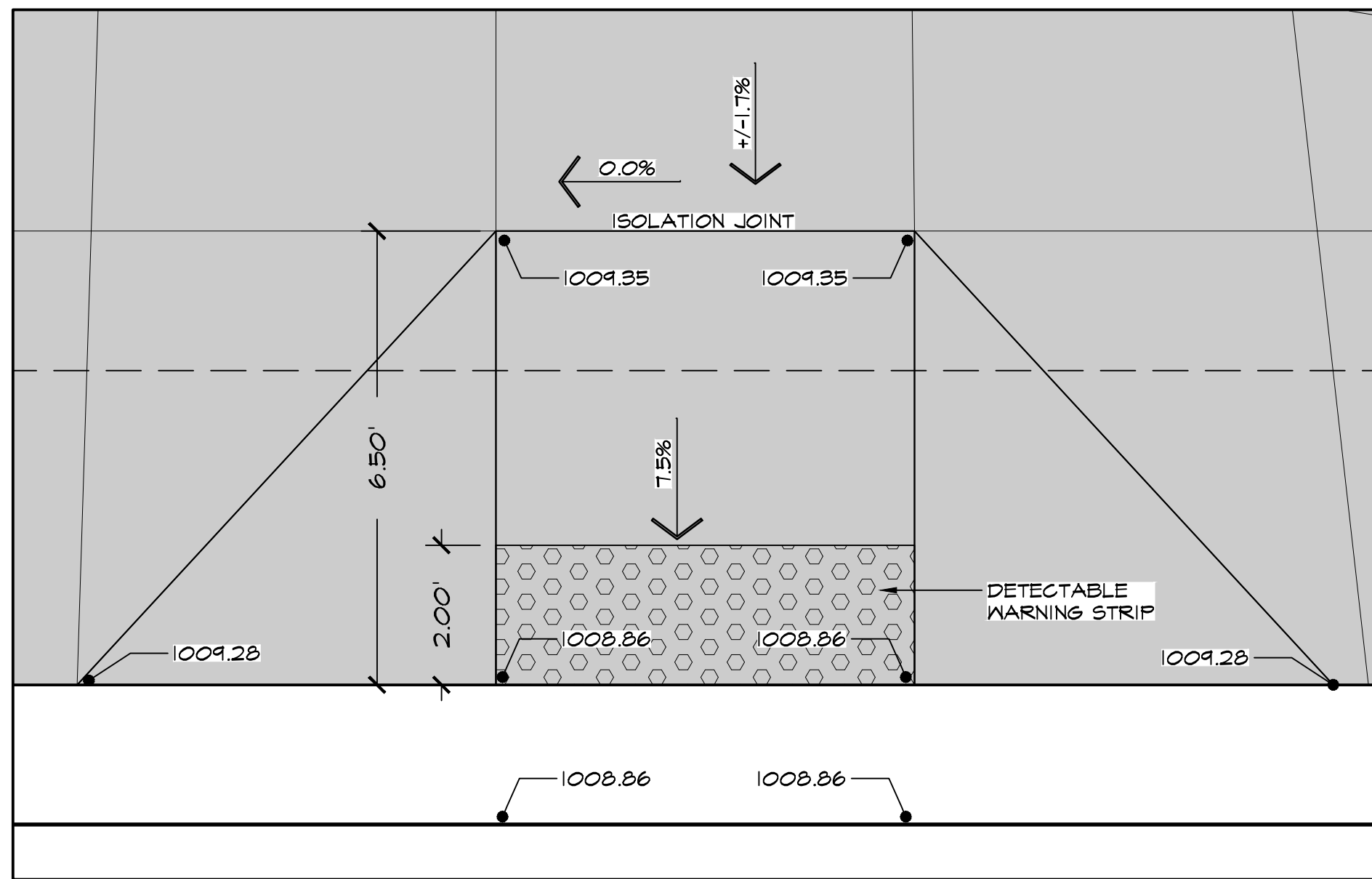
This is the standard for new construction and the most secure type of inverted-U installation. Existing concrete surface may be core drilled with a 3'-4" hole saw and filled with quikrete or a construction adhesive.

Stainless Finish U/2 Racks

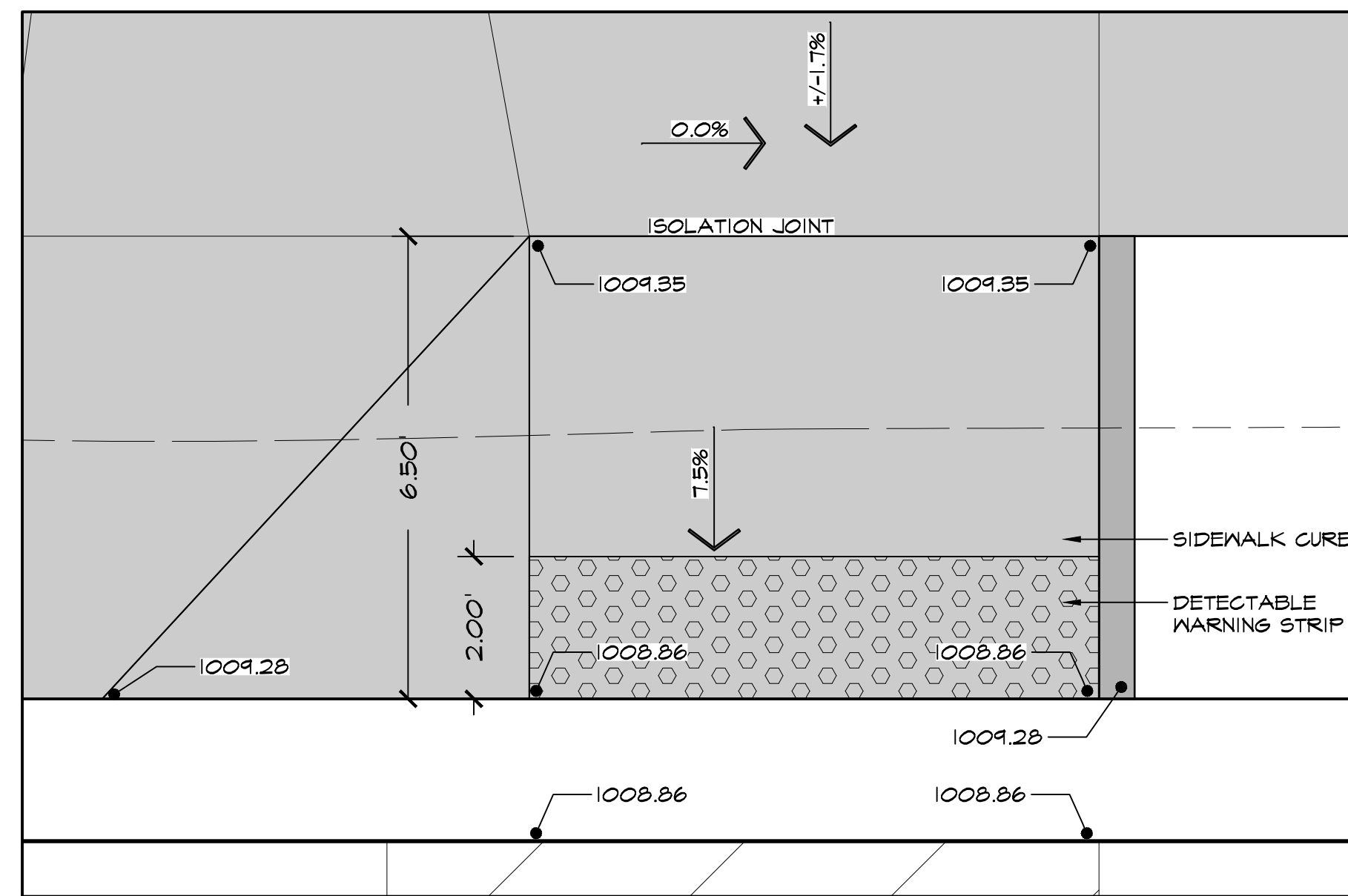
5 BIKE RACK
SCALE: N.T.S. MANUFACTURER'S SPECIFICATIONS

REVISION:	
△ FPD REVISIONS	9/20/19
△ REVISIONS PER CITY COMMENTS	10/1/19

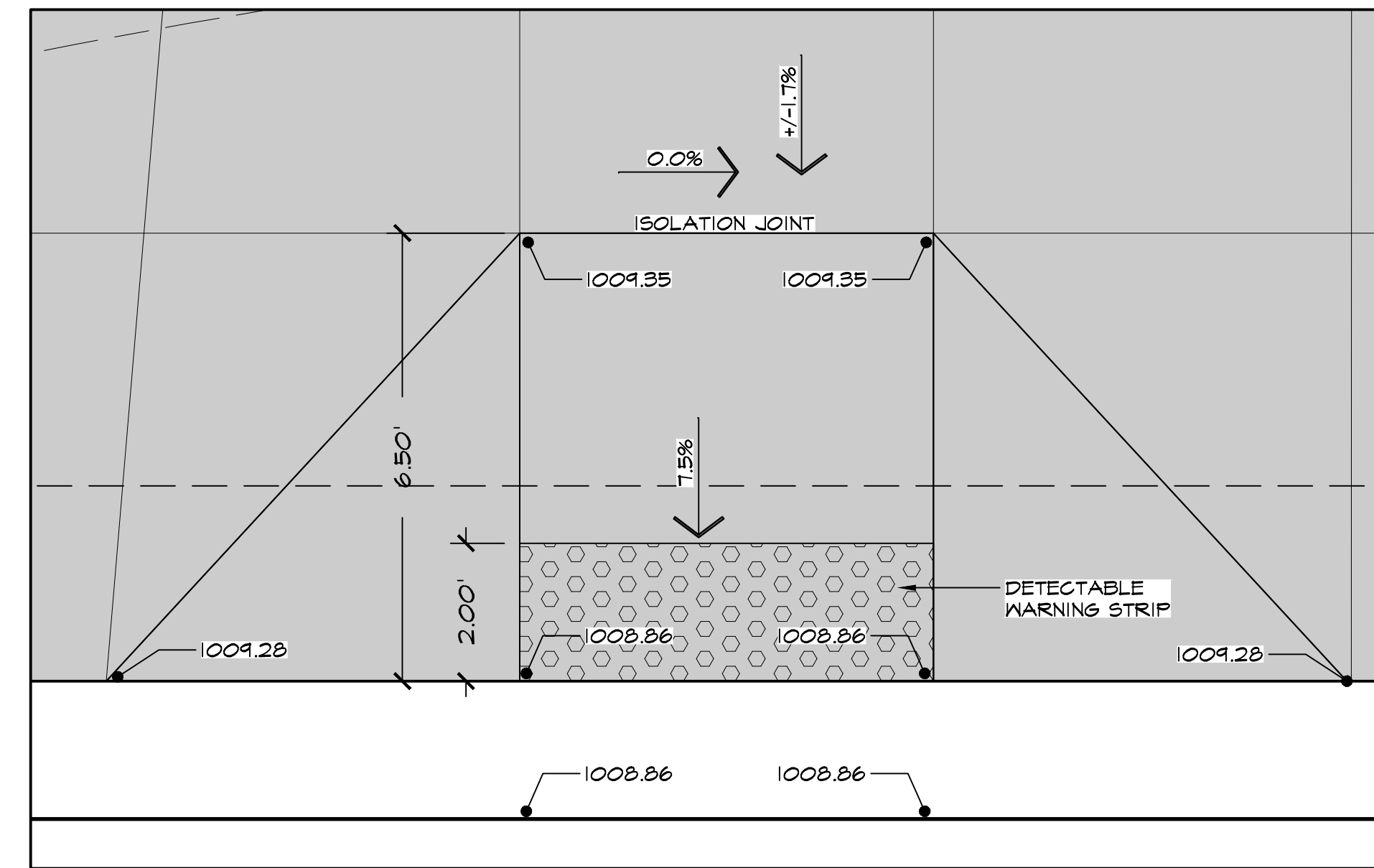
AUGUST 28, 2019
SITE DETAILS



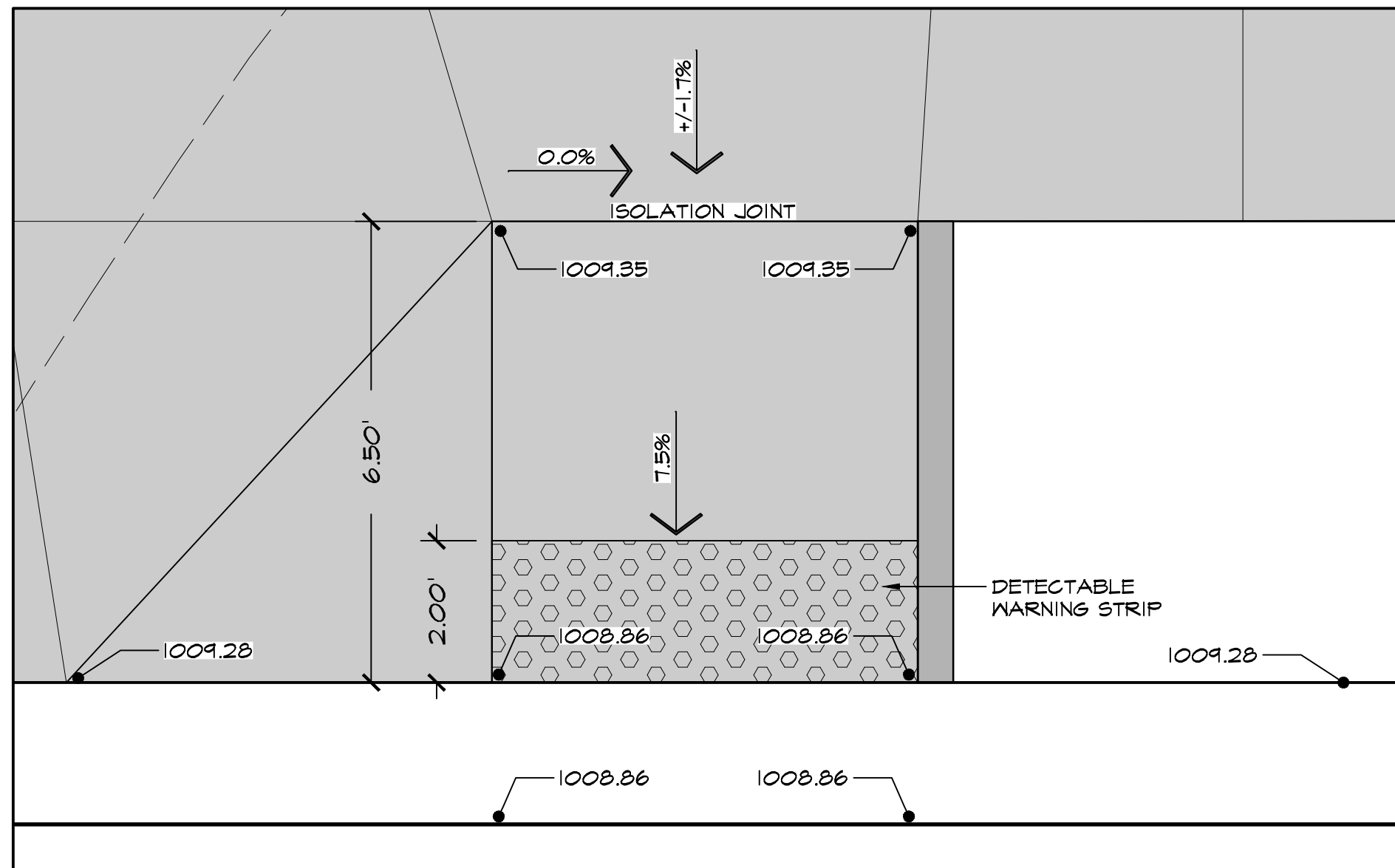
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SCALE: 1/2" = 1'-0" ENLARGED PLAN



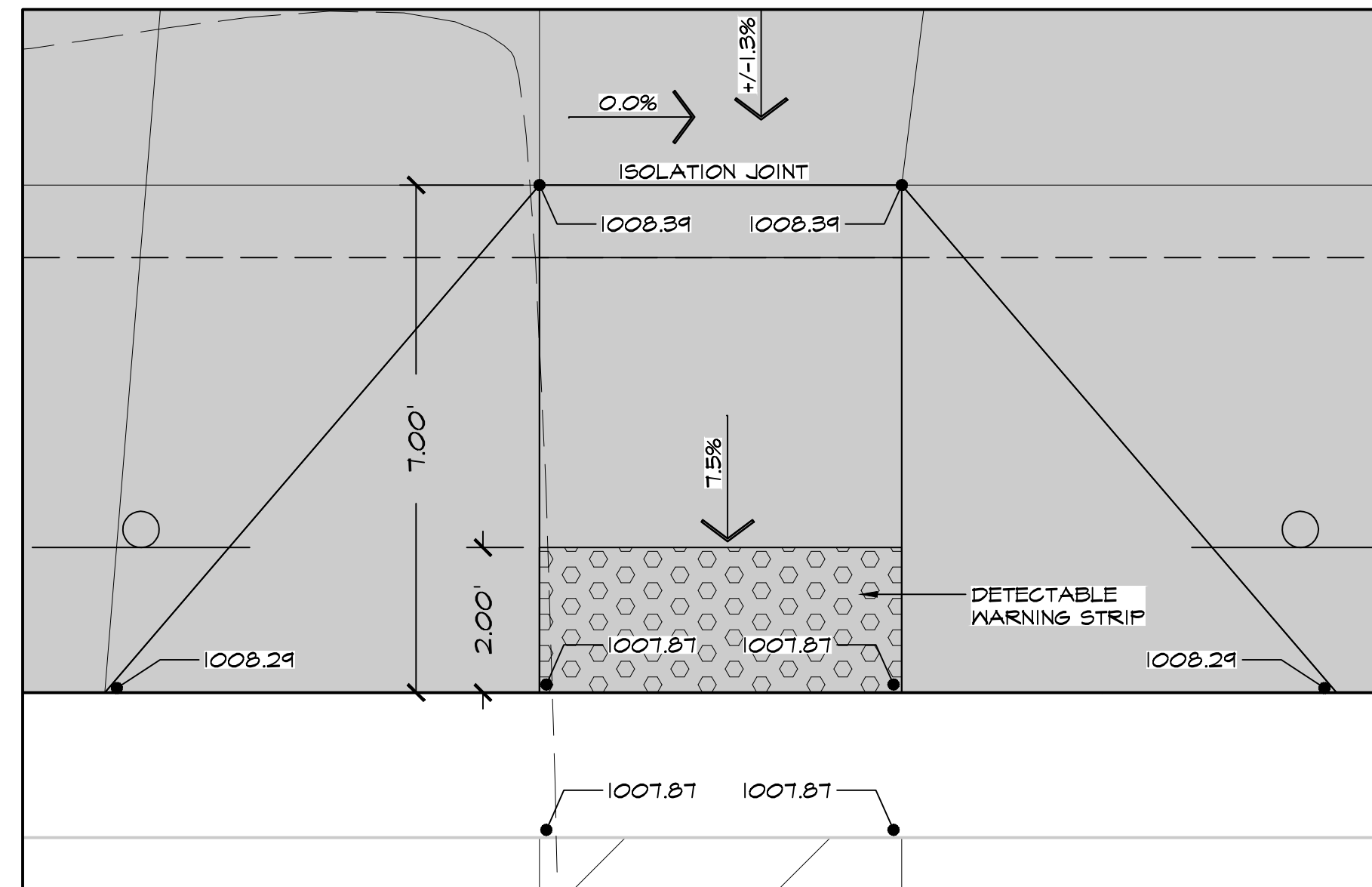
2 ADA CURB RAMP #5
SCALE: 1/2" = 1'-0" ENLARGED PLAN



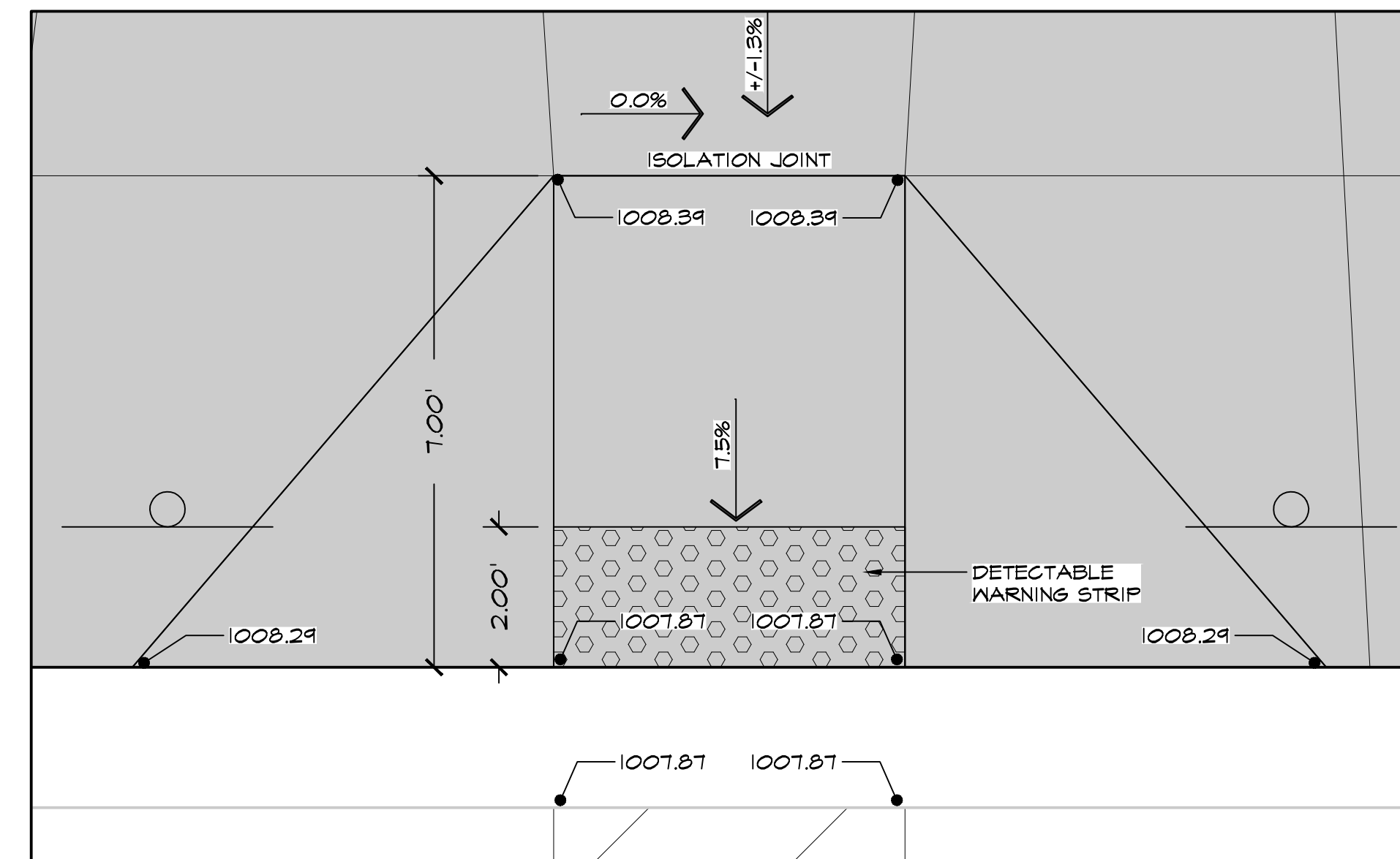
3 ADA CURB RAMP #6
SCALE: 1/2" = 1'-0" ENLARGED PLAN



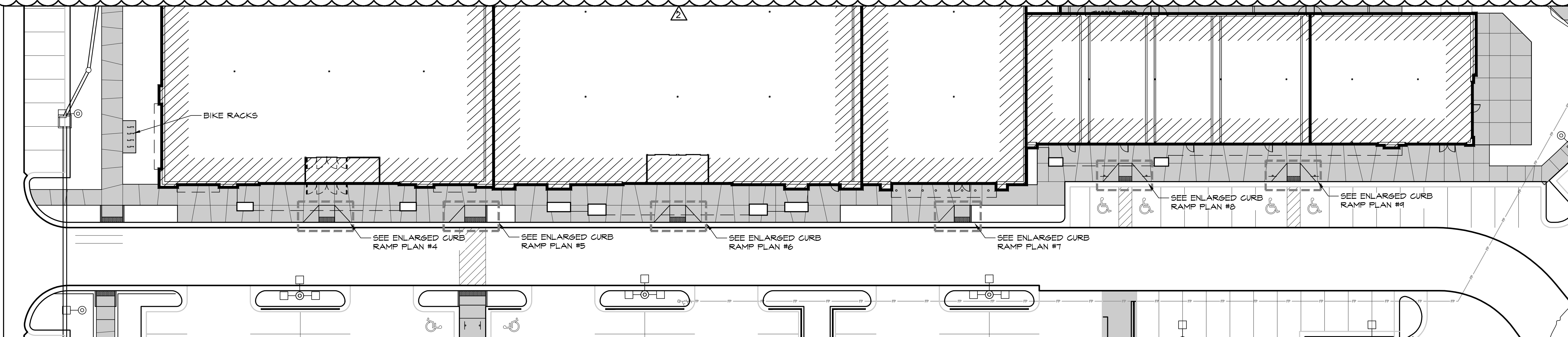
4 ADA CURB RAMP #7
SCALE: 1/2" = 1'-0" ENLARGED PLAN



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"

REVISION:	
△ FPD REVISIONS	9/20/19
△ REVISIONS PER CITY COMMENTS	10/1/19

AUGUST 28, 2019
SITE DETAILS

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.

END OF SECTION

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-2/RHW-2/USE-2. MINIMUM WIRE SIZE SHALL BE #10 GAUGE AWG. CONTROL WIRING MAY BE #14 GAUGE.
- 1.04 GROUNDING:

A.

GROUND ALL ELECTRICAL APPARATUS IN ACCORDANCE WITH N.E.C. AND AS SPECIFIED HEREIN. PROVIDE A SEPARATE GROUNDING CONDUCTOR FOR ALL LIGHTING, RECEPTACLE AND EQUIPMENT CIRCUITS. ALL CABINETS, SWITCHBOARDS, EQUIPMENT CASES, MOTOR FRAMES, INTERIOR METAL COLD WATER PIPING SYSTEMS, AND SYSTEM NEUTRAL CONDUCTORS SHALL BE EFFECTIVELY GROUNDED. USE SOLDERLESS PRESSURE TYPE CONNECTORS. NO PERFORATED STRAP CONNECTORS WILL BE ALLOWED. INSURE CONTINUOUS BOND WHERE FLEXIBLE CONDUIT IS USED. PROVIDE BONDING JUMPER INSIDE ALL FLEXIBLE CONDUIT. GROUNDING PER N.E.C. 250, AND ANY LOCAL REQUIREMENTS.
- 1.05 SPLICE AND TAPS:

A.

MAKE SPLICES AT JUNCTION BOXES, PULL BOXES, OR OUTLET BOXES ONLY.
- 1.06 CABINETS, JUNCTION AND PULL BOXES:

A.

FLUSH OR SURFACE MOUNTED AS INDICATED ON DRAWINGS. PROVIDE WHERE SHOWN ON DRAWINGS AND WHERE REQUIRED BY CODE. CONSTRUCT OF CODE GAUGE STEEL FOR FLUSH SURFACE MOUNTING.
- 1.07 LIGHTING FIXTURES:

A.

REFER TO LUMINAIRE SCHEDULE FOR FIXTURE SPECIFICATIONS.
- 1.08 IDENTIFICATION

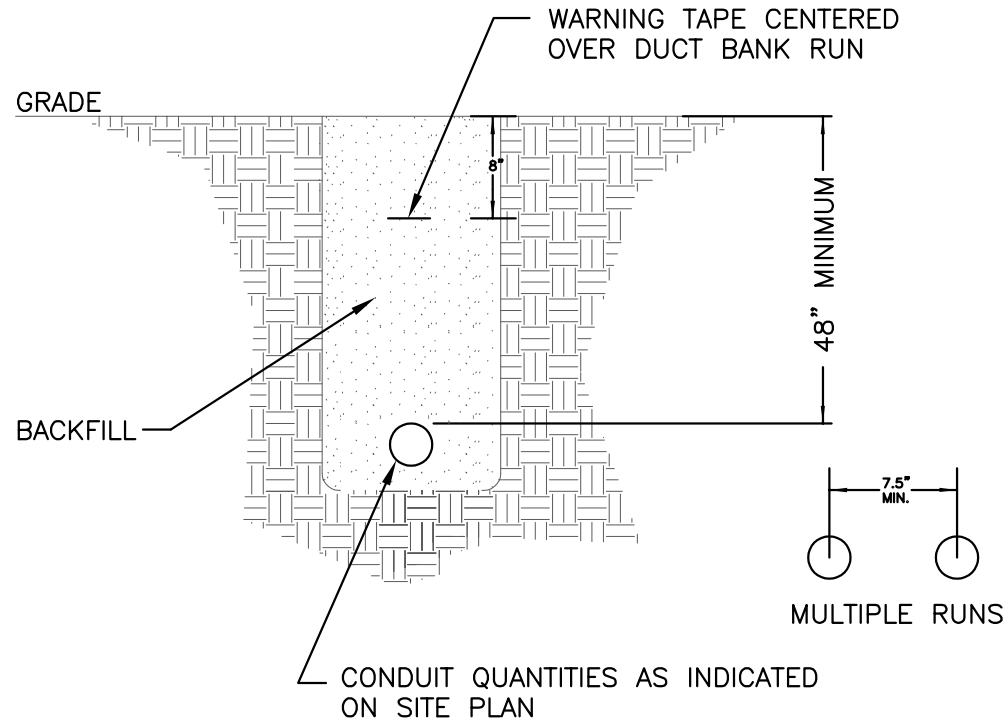
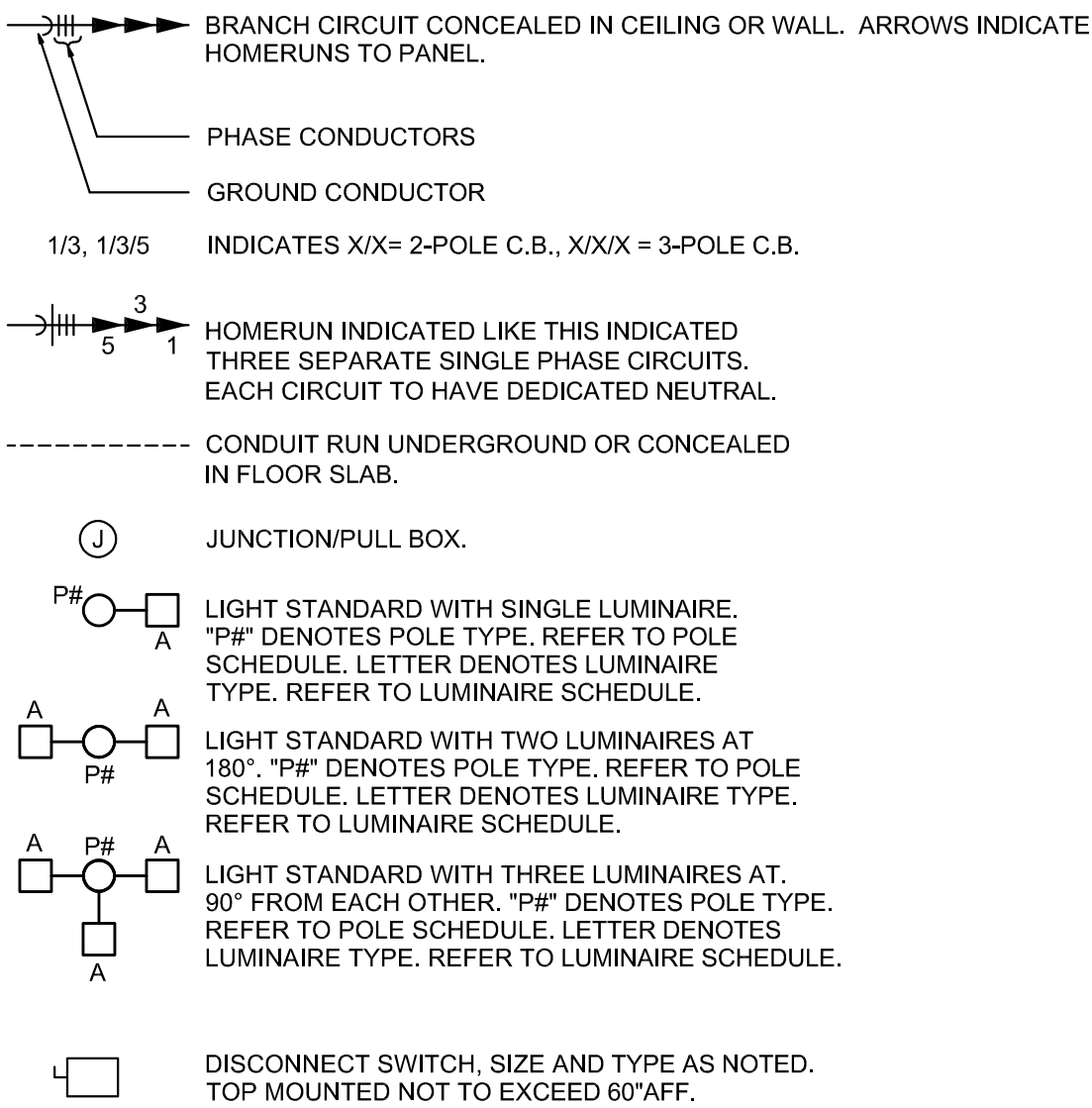
A.

CONDUCTOR IDENTIFICATION MATERIALS: COLOR-CODING CONDUCTOR TAPE- COLORED, SELF-ADHESIVE VINYL TAPE NOT LESS THAN 3 MILS BY 1 TO 2 INCHES WIDE.

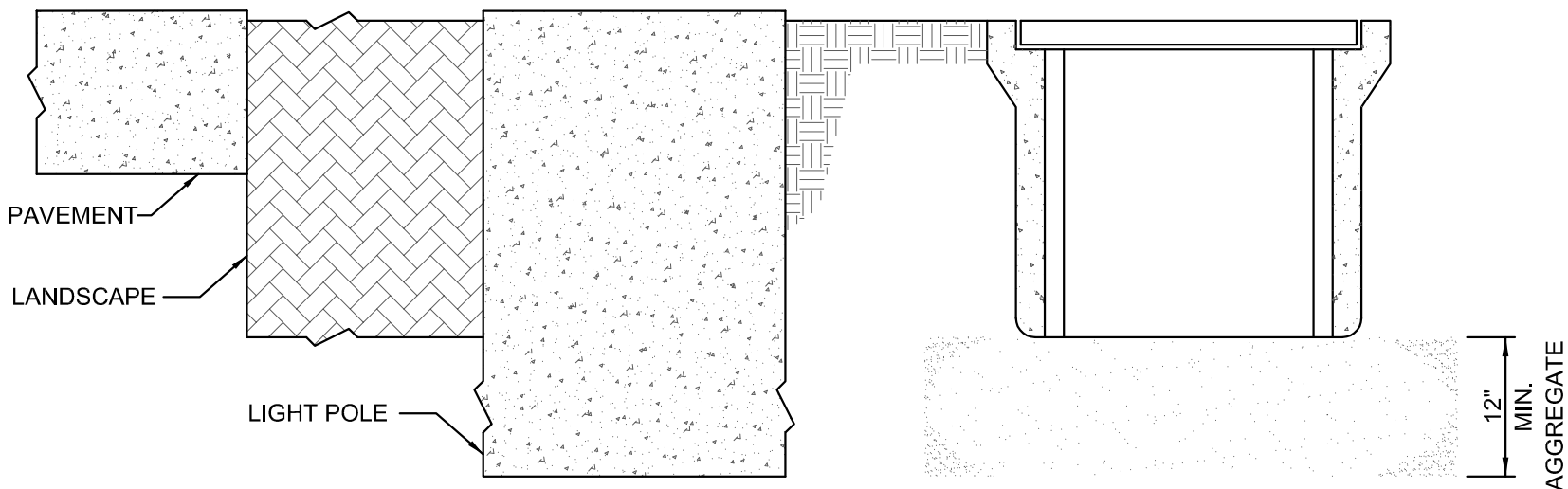
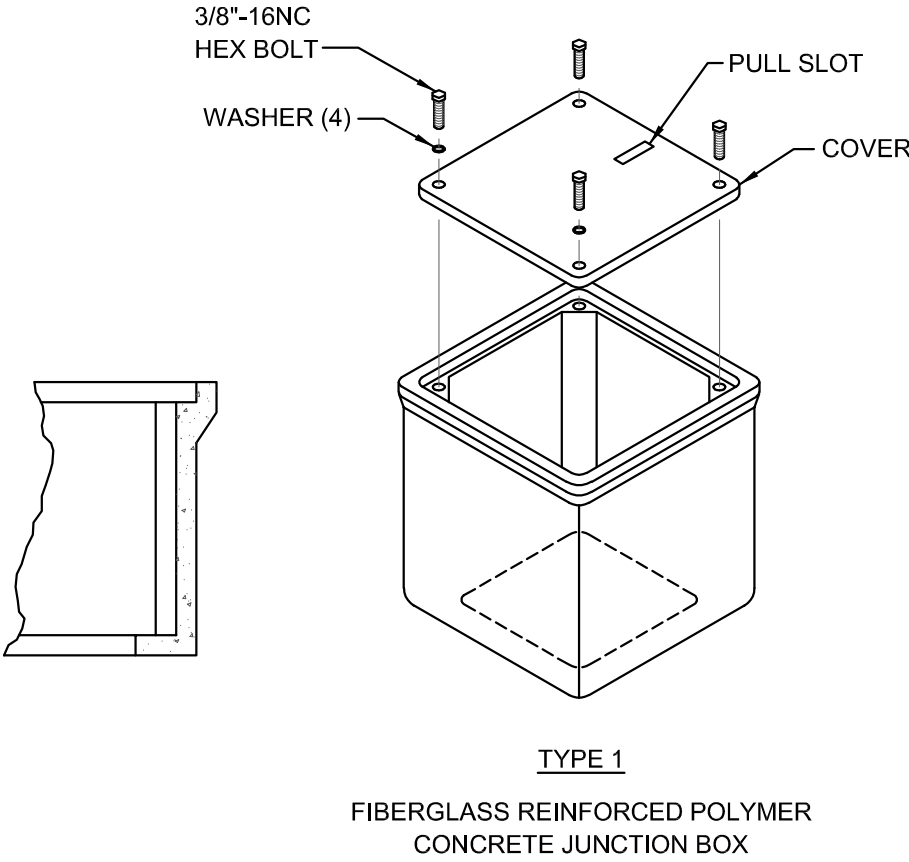
B.

EQUIPMENT IDENTIFICATION LABELS: STENCILED LEGEND: IN NONFADING WATERPROOF BLACK INK OR PAINT. MINIMUM LETTER HEIGHT SHALL BE 1 INCH.

ELECTRICAL SYMBOLS:



2 SINGLE CONDUIT DIRECT BURIED NO SCALE



1 JUNCTION BOX DETAIL NO SCALE



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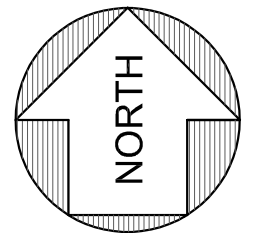
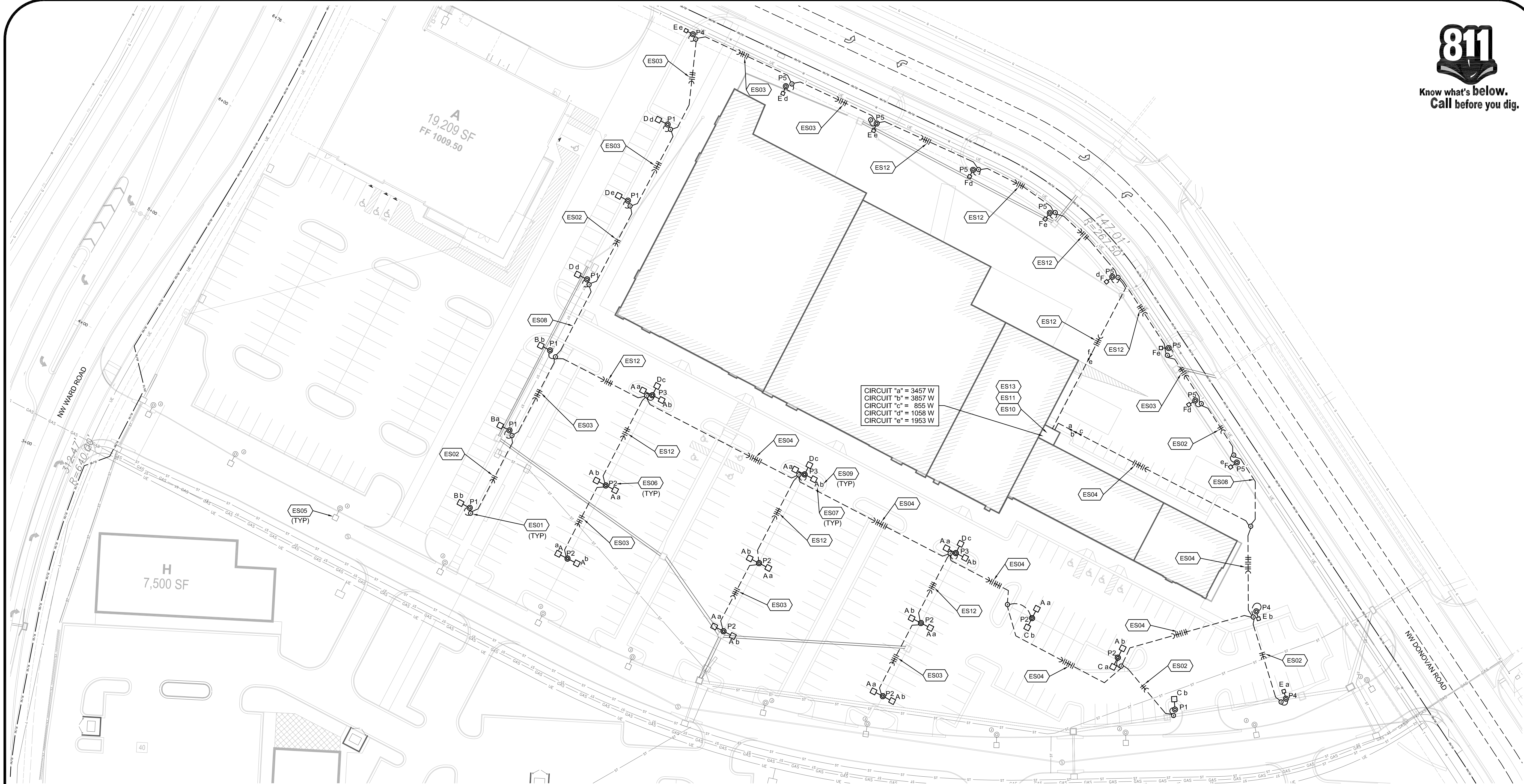
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SUMMIT LOT 4
LEE'S SUMMIT, MISSOURI
ELEC SPECIFICATIONS & LEGEND



SHEET NUMBER
E100
XX OF XX



SITE LIGHTING


1"=40 FT

0 40' 80'

A horizontal scale bar with alternating black and white segments. It is marked with '0' at the left end, '40'' at the midpoint, and '80'' at the right end. Above the bar, the text '1"=40 FT' indicates the scale.

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

<div>  <h2>PLAN NOTES</h2> </div>	
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 PHOTOCCELL ON AND TIMECLOCK OFF. BUILDING CONTRACTOR TO PROVIDE POTOCELL, 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.



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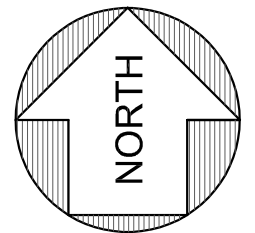
SUMMIT LOT 4
LEE'S SUMMIT, MISSOURI
SITE LIGHTING PLAN



SHEET NUMBER

E101
XX OF XX

Sep 19, 2019 - 1:31pm Plotted By: monica.santos G:\00 Projects\A219-09.1 Summit Lot 4 pkg\dwgs\A219-09.1 E102.dwg Layout: E102 - SIGNAGE LIGHTING PLAN



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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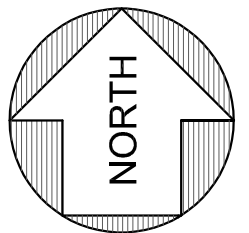
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SUMMIT LOT 4
LEE'S SUMMIT, MISSOURI
SIGNAGE LIGHTING PLAN



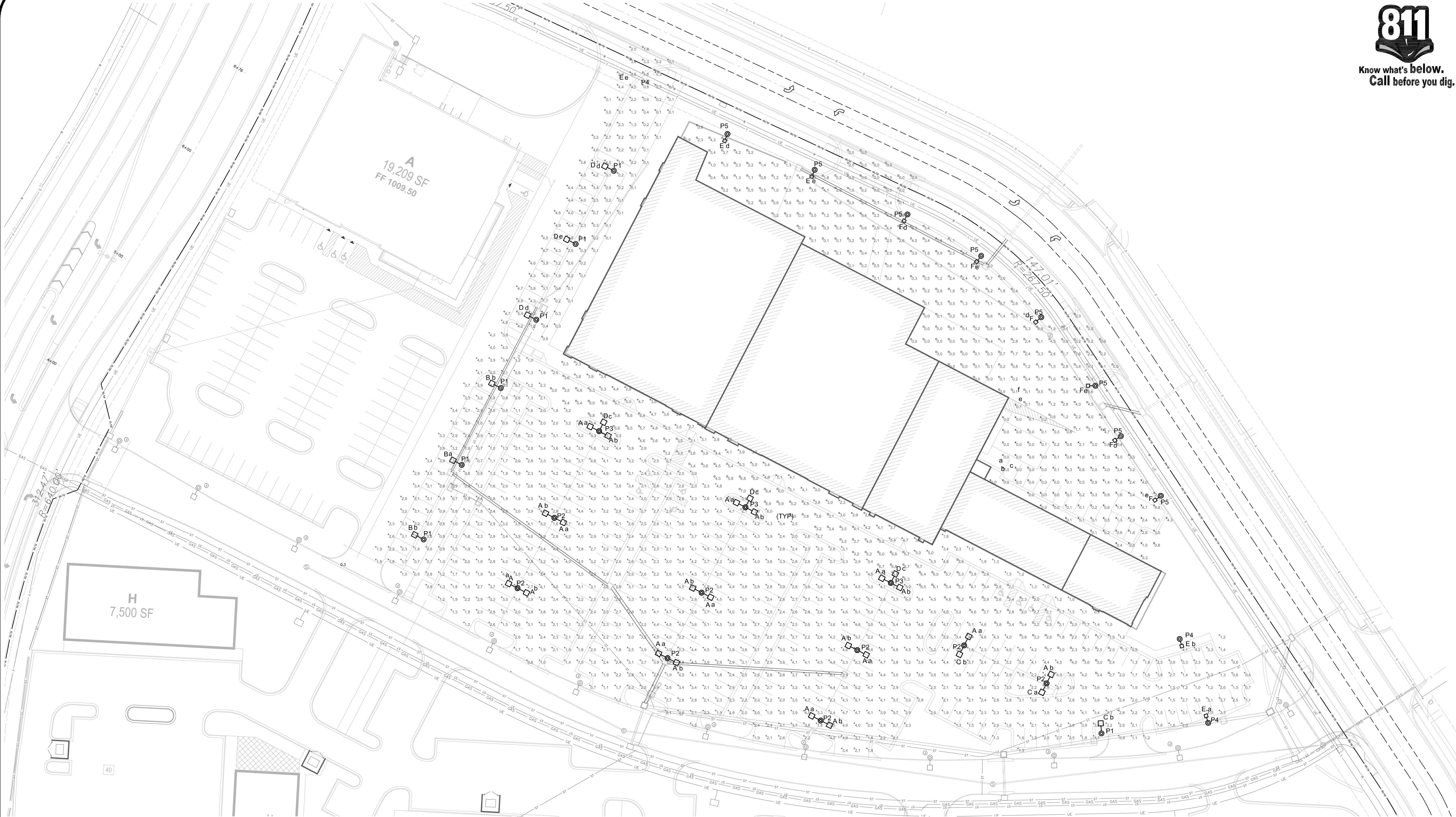
SHEET NUMBER

E102
XX OF XX



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



SHEET NUMBER
E103
XX OF XX



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.



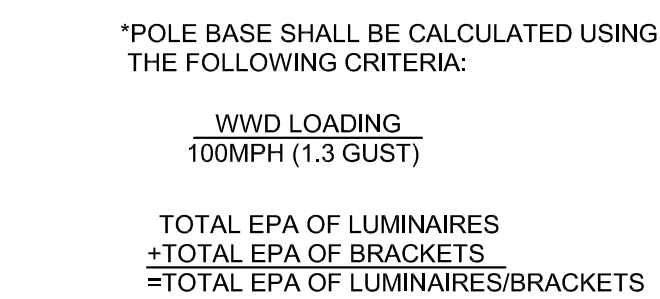
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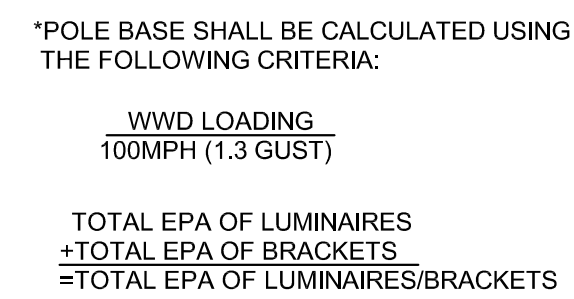
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LEE'S SUMMIT, MISSOURI



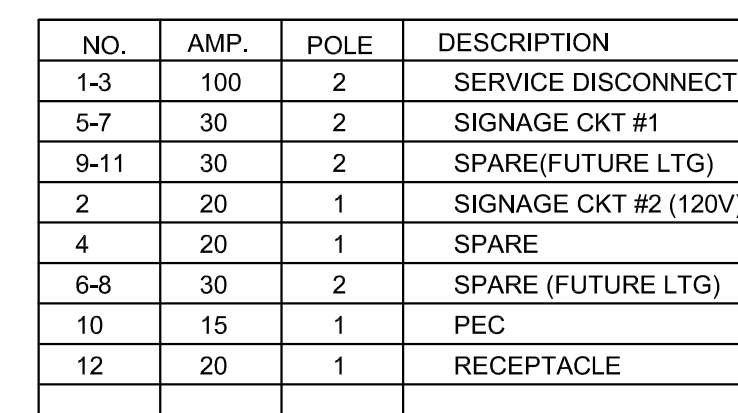
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- NOTES:**
1. SELECT POLE BASED ON MAXIMUM EPA LISTED IN MANUFACTURERS CATALOG.
 2. IN ANY CASE MIN. POLE BASE DEPTH SHALL BE 72". FINAL DEPTH OF POLE BASE SHALL BE VERIFIED WITH STRUCTURAL ENGINEER PRIOR TO PLACEMENT.
 3. CONCRETE SHALL BE 3000 PSI CLASS A CONCRETE PLACED NEXT TO UNDISTURBED EARTH.
 4. CONTRACTOR TO INCLUDE CONTINGENCY FOR ENCOUNTERING ROCK AS PART OF POLE BASE INSTALLATION.



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- SPECIFICATIONS:**
1. NEMA 3R CONSTRUCTION
 2. FABRICATED FROM CORROSION-RESISTANT ZINC COATED STEEL.
 3. FACTORY WIRING 600 VOLT RATED COPPER
 4. OR DARK GREEN UNLESS OTHERWISE SPECIFIED
 5. POLYESTER POWDER-COATED FINISH EXCEEDS ASTM B-117 SPECIFICATION.
 6. ALL EXTERIOR HINGES CONTINUOUS PIANO TYPE STAINLESS STEEL
 7. ALL COMPONENTS ARE A.U. LISTED.

