Heartland Market

Lee's Summit, Jackson County, Missouri
Section 29, Township 48N, Range 31W

Final Development Plans

LEGEND

Existing Section Line	Proposed Right-of-Way
Existing Right-of-Way Line	Proposed Property Line
Existing Lot Line	Proposed Lot Line
Existing Easement Line	Proposed Easement
Existing Curb & Gutter	Proposed Curb & Gutter
Existing Sidewalk	Proposed Sidewalk
Existing Storm Sewer	Proposed Storm Sewer
Existing Storm Structure	Proposed Storm Structure
Existing Waterline	Proposed Fire Hydrant
Existing Gas Main	Proposed Waterline
Existing Sanitary Sewer	Proposed Sanitary Sewer
Existing Sanitary Manhole	Proposed Sanitary Manhole
Existing Contour Major	Proposed Contour Major
Existing Contour Minor	Proposed Contour Minor
	Future Curb and Gutter
U/E Utility Easement	
SS/E Sanitary Sewer Easement	A/E Access Easement
D/E Drainage Easement	T/E Temporary Easement

Site Benchmarks:

BM A:
Elev.=

BM B:
Elev. =

Lot 2 Legal Description:

A TRACT OF LAND BEING LOCATED IN SECTION 29, TOWNSHIP 48, RANGE 31, LEE'S SUMMIT, JACKSON COUNTY MISSOURI, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF LOT 4 OF RICE ACRES, LOTS 4 & 5, A SUBDIVISION IN SAID LEE'S SUMMIT, MISSOURI; THENCE NORTH 88° 38' 41" WEST, A DISTANCE OF 84.60 FEET TO THE POINT OF BEGINNING; THENCE NORTH 88° 38' 41" WEST, A DISTANCE OF 256.00 FEET; THENCE NORTH 1° 23' 04" EAST, A DISTANCE OF 276.31 FEET; THENCE SOUTH 88° 38' 51" EAST, A DISTANCE OF 255.59 FEET; THENCE ALONG A CURVE TO THE RIGHT TANGENT TO THE PRECEDING COURSE AND HAVING A RADIUS OF 15.00 FEET, AN ARC DISTANCE OF 23.57 FEET; THENCE SOUTH 1° 23' 04" WEST, A DISTANCE OF 172.36; THENCE SOUTH 13° 21' 00" WEST, A DISTANCE OF 37.98 FEET; THENCE ALONG A CURVE TO THE LEFT TANGENT TO THE PRECEDING COURSE AND HAVING A RADIUS OF 328.00 FEET, AN ARC DISTANCE OF 552.28 FEET TO THE POINT OF BEGINNING.

TRACT CONTAINS 73,958.97 SF (1.70 ACRES) MORE OR LESS.

Earthwork:

Cut: 1024.34 CY (Cut)
Fill: 3383.97 CY (Fill)
Net: 2359.63 CY Net (Fill)

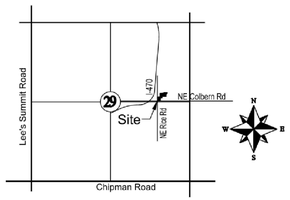
FLOOD PLAIN NOTE

According to the FEMA Flood Insurance Rate Map Number 29095C0430G, revised January 20, 2017 portions of this tract lie in: Zone X, AREA OF MINIMAL FLOOD HAZARD.

Oil / Gas Well Note:
There is no visible evidence, this date, of abandoned oil or gas wells located within the property boundary, as identified in "Environmental Impact Study of Abandoned Oil and Gas Wells in Lee's Summit, Missouri", by Edward Alton May.

The information concerning locations of underground utilities shown hereon which are not visible from the surface, has been taken from the records and field locations of the various utility companies and has not been field verified by this company. These locations are not to be construed as accurate or exact.

811 Know what's below. Call before you dig.



LOCATION MAP
SECTION 29-T48N-R31W

Sheet List Table

Consultant/Applicant:
Dustin Burton
400 E 17th St, Kansas City, MO 64108
(816) 800-0950

Prepared For:
Colbern Road Investors, LLC
1325 Fair Market Dr,
Wentzville, MO 63385

RENAISSANCE INFRASTRUCTURE CONSULTING:

Dustin Burton , P.E. Date

Final Development Plans
22-0133
Heartland Market
Lee's Summit, Jackson County, Missouri

Title Sheet

NO.	DATE	REVISION

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Renaissance Infrastructure Consulting
816.800.0950
www.RIC-CONSULT.COM
400 E 17TH STREET
KANSAS CITY, MISSOURI 64108
MO Certificate of Authority: E-2010033630

STATE OF MISSOURI
DUSTIN J. BURTON
NUMBER PE-2011015709
PROFESSIONAL ENGINEER
5/30/2023

Sheet
C01

Unplatted
Future Lot
Zoning: CP-2

Proposed Sidewalk
(5' Typical)
(By Developer)

50.0'

Proposed
Sanitary MH
(By Developer)

Boundary Line

Proposed NE Ikerd Rd
(50' Public ROW)
(Road by Developer)

Storm Connection to Public
Infrastructure

Proposed
Water Service Line

Proposed Fire Hydrant
(By Developer)

Proposed Water Meter

Proposed
Sanitary
Service Line

15.0'
U/E

Proposed
Nyloplast Curb
Inlet (typ)

Proposed
Storm Sewer

Lot 4
Rice Acres, Lots 4 & 5
Zoning: CP-2

50.0'
Gas Esmt

70.0'

Lot Boundary

Proposed
Transformer

Proposed
Grease
Interceptor

C-Store
5,400 sq. ft.

ADA Ramps

Proposed NE Lucky Rd
(70' Public ROW)
(Road by Developer)

Unplatted
Future Lot
Zoning: CP-2

ADA Sign

Temporary Curb

Proposed
Storm Sewer

Lot 2
73,958.97 sq. ft.
(1.70 acres)

Gas Pump
Gas Pump
Gas Pump
Gas Pump

Gas Storage Tanks

Proposed
Underground Power

10.0'
U/E

Boundary Line
Utility Easement

Canopy

Gas Pump
Gas Pump
Gas Pump
Gas Pump

Proposed
Water Main
(By Developer)

Proposed
Storm Sewer

Proposed Sidewalk
(5' Typical)
(By Developer)

Proposed
Telephone

Proposed
Gas Line

Proposed
Monument Sign

Boundary Line

End of Existing Sidewalk
(4' Typical)

NE Colbern Rd
(100' Public ROW)

Lot 2 Information:
Required Parking: 27 (5 / 1000 sq ft of gfa)
Provided Parking: 27 (2 ADA)

Parking Count Legend

XX Typical Parking Spaces Count

XX ADA Parking Spaces Count

SITE DATA TABLE (Proposed):

Proposed Building Area: 5,400 SF

LOT 2:

A. Zoning: CP-2
B. Total Lot Area: 73,959 Sq. Ft. = 1.70 Ac.
C. Land Area or acres for existing and proposed street right of way: N/A
D. Net Land Area: 1.70 Acres
E. Proposed Use: Convenience Store/Fuel Sales
F. Height above Grade at Building: 25.67'
G. Gross Floor Area - Main Building: 5,400 Sq. Ft.
H. Total Floor Area: 5,400 Sq. Ft.
I. Building Coverage and Floor Area Ratio (FAR): 0.073
J. Residential Gross and Net Density: N/A
K. Commercial Parking
   Required - 5 stalls per 1,000 Sq. Ft. (gross): 27
   Provided: 27 Stalls (2 ADA)

L. Parking Set Back:
   20 ft from Colbern Rd
   15 ft from other roads
   0 ft internal
M. Building Set Back
   Front yard: 15 ft (from Colbern Rd)
   Side yard: 15 ft (from NE Lucky Rd), 0 ft internal lot line
   Rear yard: 15 ft (from NE Ikerd Rd)
N. Impervious Area: 56,557 Sq. Ft. (76.47%)
   Pervious Area: 17,402 Sq. Ft. (23.53%)

PAVEMENT SECTION DETAILS

PC Concrete Pavement

6" PC Concrete Pavement
(4K KCMMB Mix)

4" - 3/4" Clean
Aggregate base

12" - 95% Standard
Compacted Soils

Heavy Duty Concrete Pavement

½" Bars, 12' O.C., Ea.Dir

7" PC Concrete Pavement
(4K KCMMB Mix)

4" - 3/4" Clean
Aggregate base

12" - 95% Standard
Compacted Soils

Sidewalk Pavement

4" PC Concrete Pavement

Compacted Low Plasticity
Subgrade

CG-1 Curb

NORTH
1"=20'
0 10' 20'

Final Development Plans
22-0133
Heartland Market
Lee's Summit, Jackson County, Missouri

General Layout

NO.	DATE	REVISION

DRAWN BY: ALS
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Renaissance Infrastructure Consulting
816.800.0950
www.RIC-consult.com
400 E 17th Street
Kansas City, Missouri 64108
MO Certificate of Authority: E-2010033630

STATE OF MISSOURI
DUSTIN J. BURTON
NUMBER PE-2011015709
5/30/2023
PROFESSIONAL ENGINEER

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C02

Final Development Plans

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Lee's Summit, Jackson County, Missouri

Dimension Plan

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816.800.0950
www.ric-consult.com
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Kansas City, Missouri 64108
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DUSTIN J. BURTON
NUMBER PE-2010157709
STATE OF MISSOURI
PROFESSIONAL ENGINEER
5/30/2023

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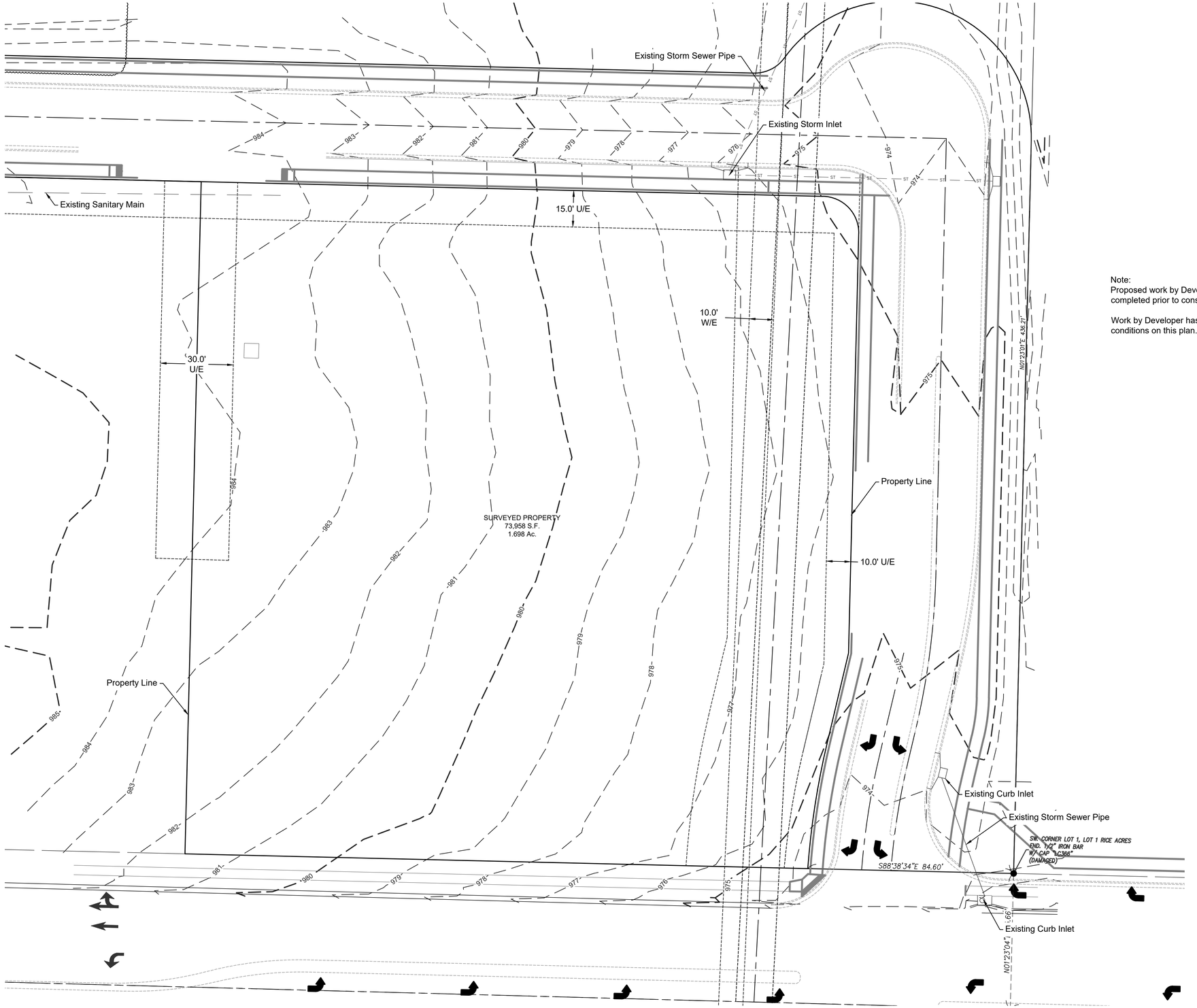
NORTH
1"=20'
0 10' 20'



Note:
Proposed work by Developer should be completed prior to construction.

Work by Developer has been shown as existing conditions on this plan.

Final Development Plans

22-0133
Heartland Market
Lee's Summit, Jackson County, Missouri

Existing Conditions

NO.	DATE	REVISION

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www.RIC-CONSULT.COM
400 E 17TH STREET
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DUSTIN T. BURTON
NUMBER PE-2011015709
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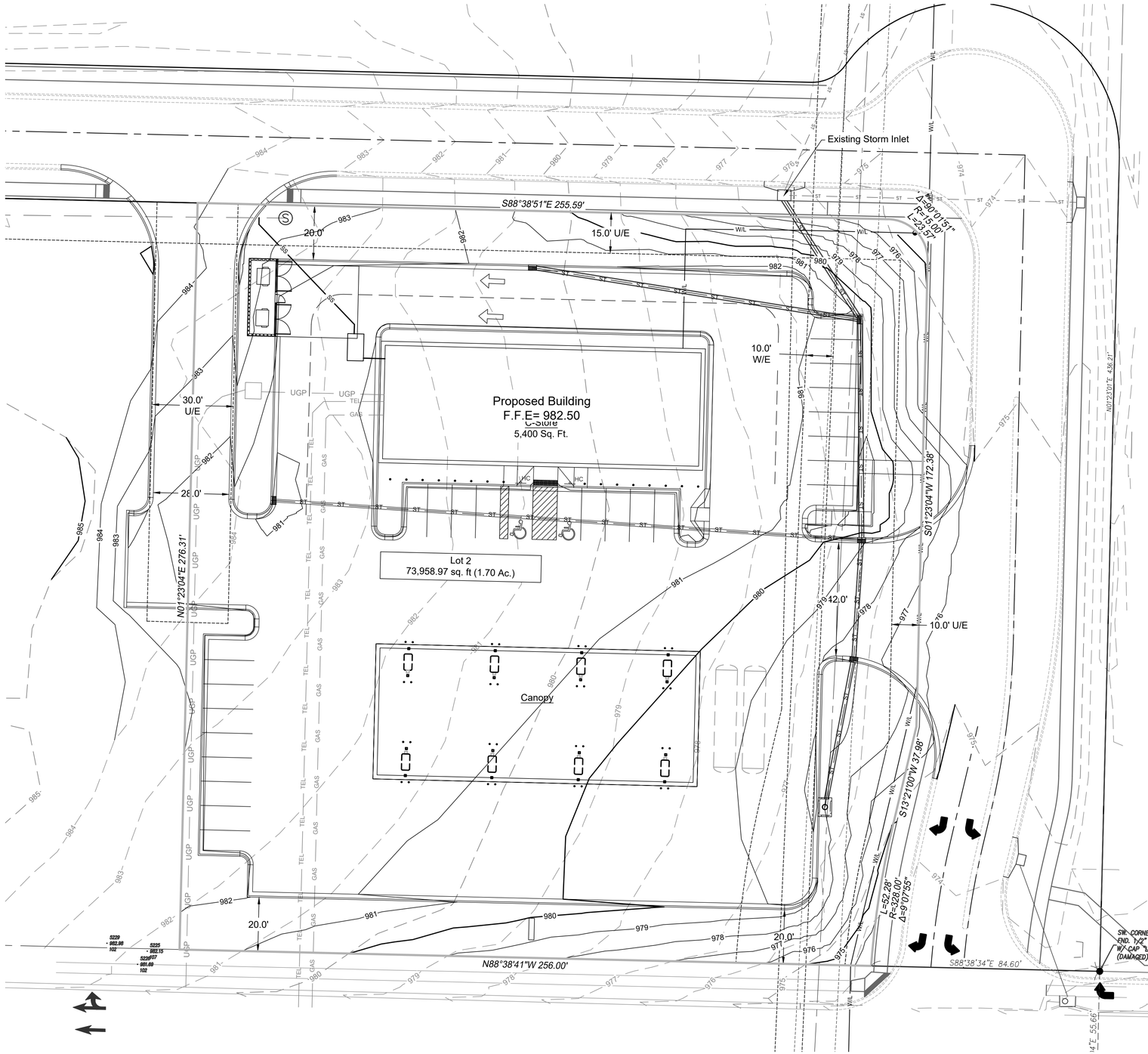

CONTOUR LEGEND

- 985 — EXISTING MAJOR CONTOURS
- 983 — EXISTING MINOR CONTOURS
- 985 — FINISH MAJOR CONTOURS
- 983 — FINISH MINOR CONTOURS

GRADING NOTES

1. All construction shall conform to the City's minimum design standards.
2. Spot Grades shown herein shall govern over finished grades.
3. The contractor shall provide evidence that his insurance meets the requirements of the Project.
4. All traffic control shall be in conformance with the Manual of Uniform Traffic Control Devices (MUTCD).
5. The contractor is responsible for the protection of all property corners and section corners. Any property corners and/or section corners disturbed or damaged by construction activities shall be reset by a Registered Land Surveyor licensed in the State of Missouri, at the contractor's expense.
6. The contractor shall be responsible for the restoration of the right-of-way and for damaged improvements such as curbs, driveways, sidewalks, street light and traffic signal junction boxes, traffic signal loop lead ins, signal poles, irrigation systems, etc. Damaged improvements shall be repaired in conformance with the latest City standards and to the City's satisfaction.
7. The contractor is responsible for providing erosion and sediment control BMPs to prevent sediment from reaching paved areas, storm sewer systems, drainage courses and adjacent properties. In the event the prevention measures are not effective, the contractor shall remove any debris, silt, or mud and restore the right-of-way, or adjacent properties to original or better condition.
8. The contractor shall sod all disturbed areas within the public street right-of-way unless otherwise noted on the plans or if specific written approval is granted by the City.
9. All work shall be confined within easements and/or construction limits as shown on the plans.
10. Curb stakes and hubs shall be provided at all high points, low points, ADA ramp openings, and on each side of all curb inlets when setting string line.
11. All National Pollution Discharge Elimination System (NPDES) standards shall be met.
12. Public and Private utility facilities shall be moved or adjusted as necessary by the owners to fit the new construction unless otherwise noted on the plans. The Contractor is responsible for the cost of utility relocations unless otherwise indicated on the plans.
13. Retaining wall elevation shown for reference only. Contractor is responsible for final design of wall, including engineering calculations by a professional structural engineer registered in the State of Missouri.

EARTHWORK NOTES:

CONTOURS AND ELEVATIONS: Existing and proposed contours are shown on plans at one feet (1') contour intervals, unless otherwise noted. Proposed contours and elevations shown represent approximate finish grade.

1. CLEARING AND GRUBBING: Prior to the start of grading and earthwork, the areas to be graded shall be stripped of all vegetation, organic matter, and topsoil, to a minimum depth of four inches (4") or as otherwise directed by the Geotechnical Engineer. Stripping materials shall not be incorporated into structural fills. Topsoil materials shall not be used in building and pavement areas.
2. TOPSOIL: Prior to the start of grading, the contractor shall strip all topsoil from areas to be graded and stockpile at a location on or adjacent to the site as directed by the owner. At completion of grading operations and related construction, the contractor will be responsible for redistribution of topsoil over all areas disturbed by the construction activities. Topsoil shall be placed to a minimum depth of six inches (6") and in accordance with specifications for landscaping.
3. SUBGRADE PREPARATION: Prior to placement of new fill material, the existing subgrade shall be proofrolled and approved under the direction of the Geotechnical Engineer or his representative.
4. PROOFROLLING: Prior to the placement of new fill material, the existing subgrade shall be proofrolled and approved under the direction of the Geotechnical Engineer. Unsuitable areas identified by the proofrolling areas shall be undercut and replaced with controlled structural fill or treated with flyash per the Geotechnical report.
5. EARTHWORK:
   - A. GEOTECHNICAL: All earthwork shall conform to the recommendations of the Geotechnical report.
   - B. SURFACE WATER: Surface water shall be intercepted and diverted during the placement of fill.
   - C. FILLS: All fills shall be considered controlled or structural fill and shall be free of vegetation, organic matter, topsoil, and debris. All fill required for project shall be provided by the Contractor. Material Shall be pre-approved by the Geotechnical Engineer prior to placement.
   - D. EXISTING SLOPES: Where fill material is to be placed on existing slopes greater than 5:1 (horizontal to vertical), existing slope shall be benched providing a minimum vertical face of twelve inches (12"). Fill material shall be placed and compacted in horizontal lifts not exceeding nine inched (9") (loose fit measurement), unless otherwise approved by the Geotechnical Engineer.
   - E. COMPACTION REQUIREMENTS: Earth fill material shall be placed and compacted to a minimum density of ninety five percent (95%) of the material's maximum dry density as determined by ASTM D698 (standard proctor compaction). The moisture content at the time of placement and compaction shall be within a range of -2% to 3% off the optimum moisture content as defined by the standard proctor compaction procedure. The moisture contents shall be maintained within this range until completion of the work. Where compaction of earth fill by a large roller is impractical or undesirable, the earth fill shall be hand compacted with small vibrating rollers or mechanical tampers.
   The Geotechnical recommendations shall supersede any information in the above note.

NORTH

1"=20'

0 10' 20'

Final Development Plans

22-0133
Heartland Market
Lee's Summit, Jackson County, Missouri

Grading Plan

NO.	DATE	REVISION

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Renaissance Infrastructure Consulting
816.800.0950
www.RIC-CONSULT.com
400 E 17th Street
Kansas City, Missouri 64108
MO Certificate of Authority: E2010033630

STATE OF MISSOURI
DUSTIN J. BURTON
NUMBER PE-2010015709
PROFESSIONAL ENGINEER
5/30/2023

Sheet
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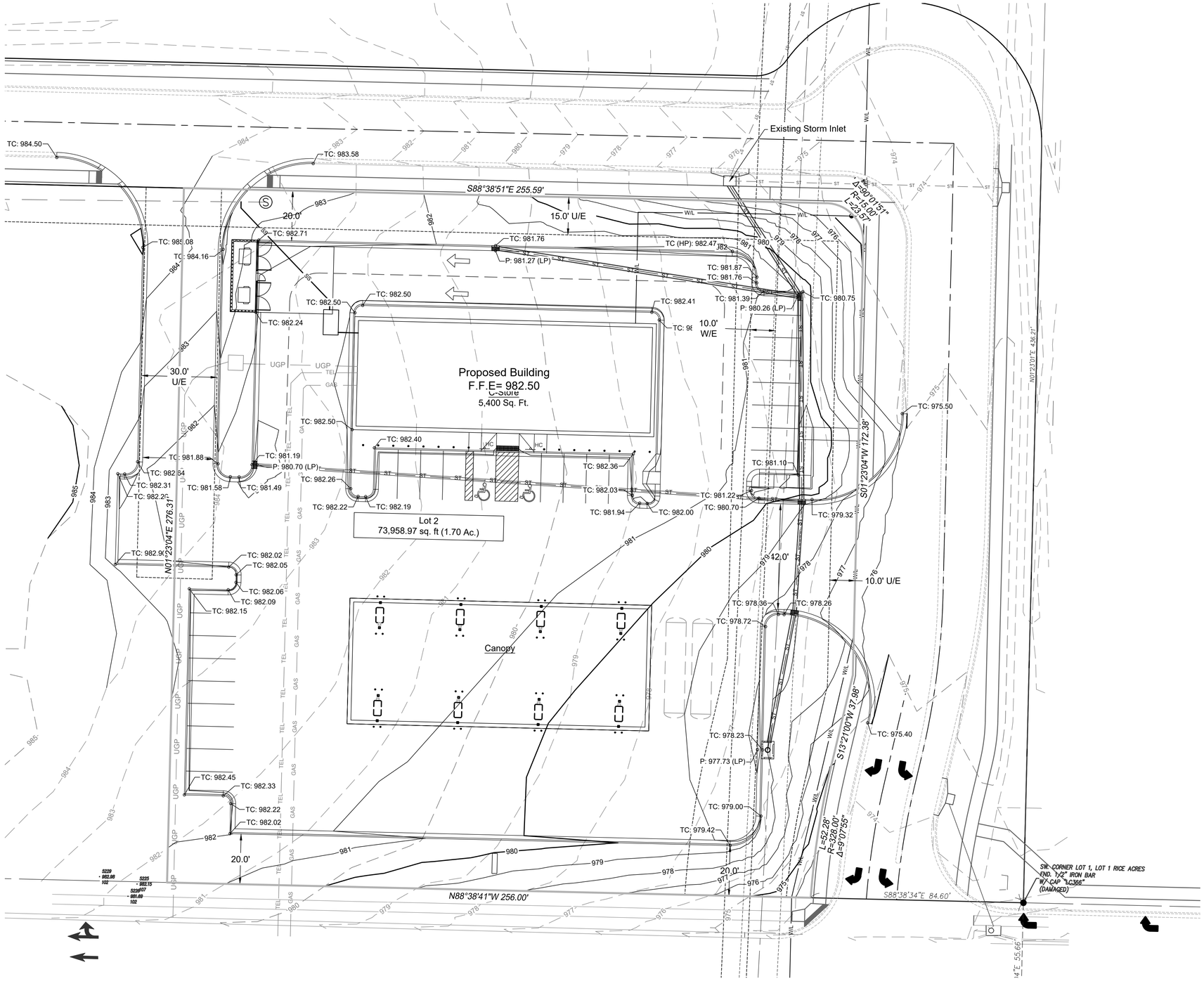

LEGEND

TC:	Top of Curb
P:	Pavement
T/S:	Top of Structure
F/L:	Flowline of Pipe
G:	Ground
(HP)	High Point
(LP)	Low Point
TW:	Top of Wall
BW:	Bottom of Wall

- Existing Major Contour
- Existing Minor Contour
- Proposed Major Contour
- Proposed Minor Contour

N
1"=20'
0 10' 20'

Final Development Plans

22-0133
Heartland Market
Lee's Summit, Jackson County, Missouri

Spot Elevation Plan

NO.	DATE	REVISION

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4,00 E 17TH STREET KANSAS CITY, MISSOURI 64108
816.800.0950
WWW.RIC-CONSULT.COM
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DUSTIN J. BURTON
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5/30/2023

Sheet
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aschwartz
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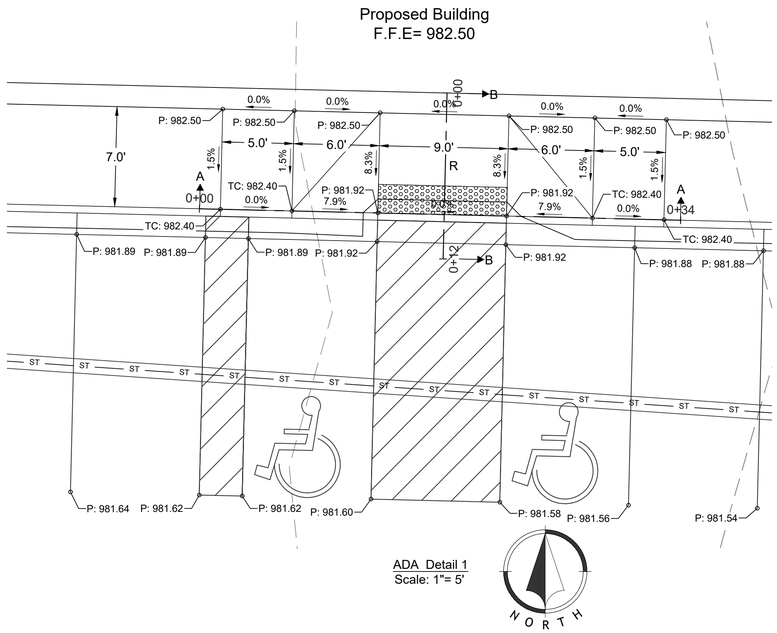
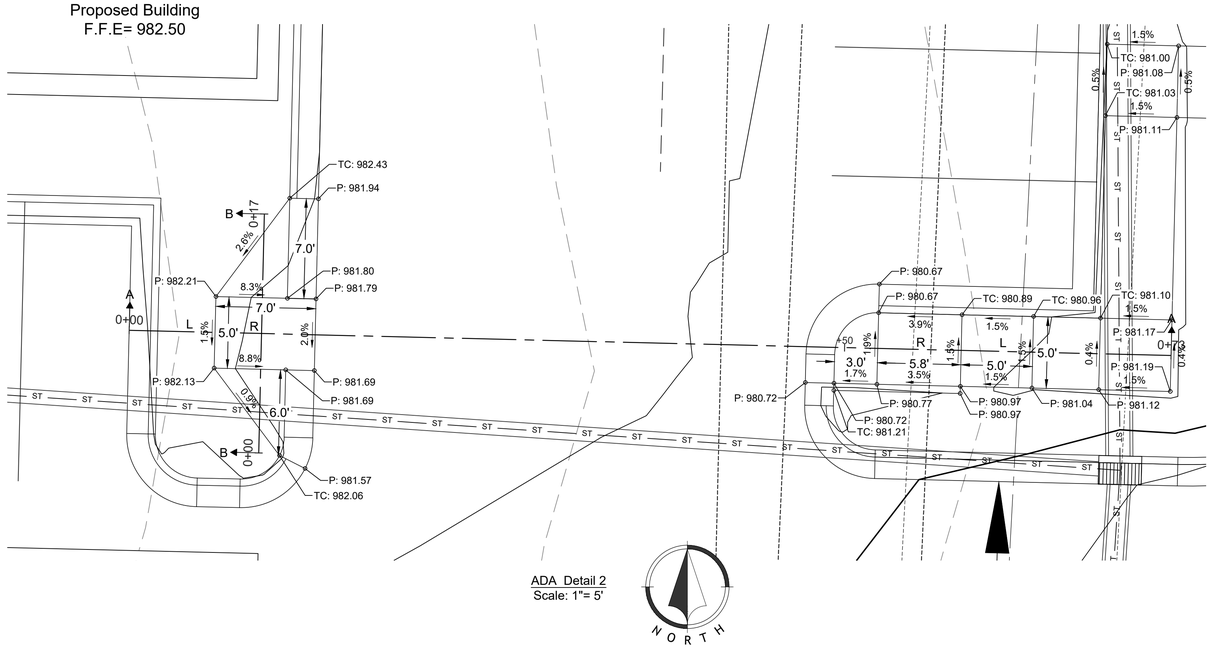
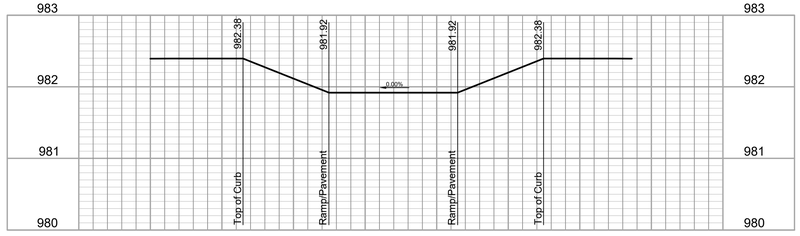


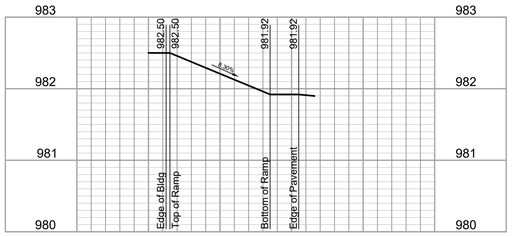
ADA Detail 1
Scale: 1"= 5'



ADA Detail 2
Scale: 1"= 5'



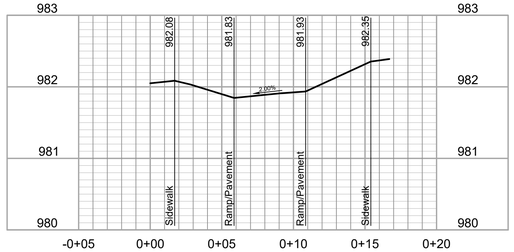
Ramp 1 Section A-A
Scale: 1"= 5'



Ramp 1 Section B-B
Scale: 1"= 5'

1"=1'

Ramp 2 & 3 Section A-A
Scale: 1"= 5'



Ramp 2 Section B-B
Scale: 1"= 5'

LEGEND

TC:	Top of Curb
P:	Pavement
T/S:	Top of Structure
F/L:	Flowline of Pipe
G:	Ground
(HP)	High Point
(LP)	Low Point
TW:	Top of Wall
BW:	Bottom of Wall

Existing Major Contour
Existing Minor Contour
Proposed Major Contour
Proposed Minor Contour

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Lee's Summit, Jackson County, Missouri

Grading Details

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DUSTIN J BURTON
NUMBER PE-2011017709
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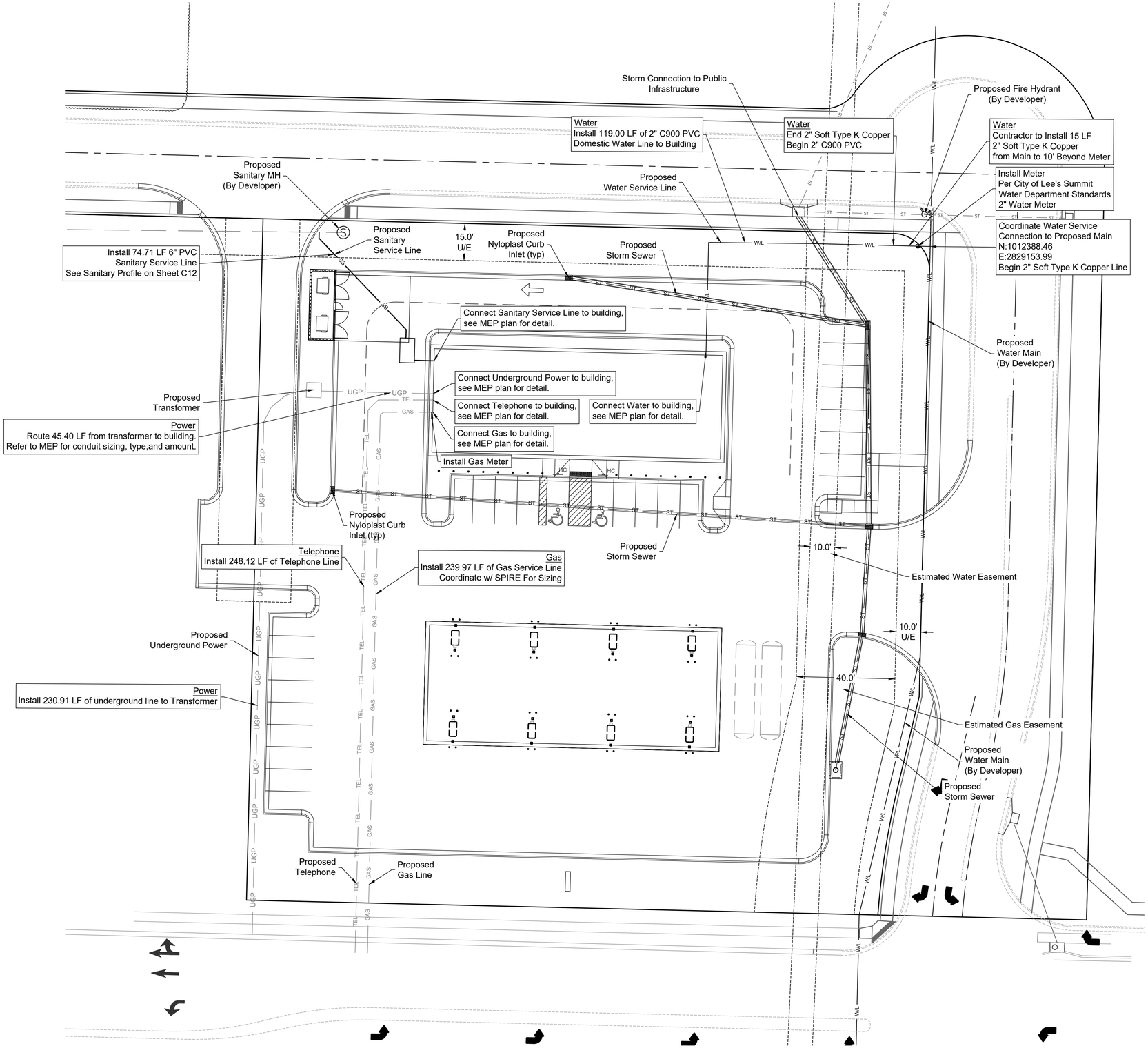

SITE UTILITY NOTES

1. The contractor is specifically cautioned that the location and/or elevation of existing utilities as Shown on these plans is based on records of the various utility Companies, and where possible, measurements taken in the field. The information is not to be relied on as being exact or complete. The contractor must call the appropriate utility companies at least 48 hours before any excavation to request exact field location of utilities. It shall be the responsibility of the contractor to coordinate with and relocate and/or remove all existing utilities which conflict with the proposed improvements shown on the plans.
2. The construction of storm sewers on this project shall conform to the requirements of the Technical Specifications for this Project.
3. The contractor shall field verify the exact location and elevation of the existing storm sewer locations and the existing elevations at locations where the proposed storm sewer collects or releases to existing ground. If discrepancies are encountered from the information shown on the plans. The contractor shall contact the design engineer. No pipes shall be laid until direction is received from the design engineer.
4. It is the contractors responsibility to field adjust the top of all manholes and boxes as necessary to match the finish grade of the adjacent area. Tops of existing manholes shall be raised as necessary to be flush with proposed pavement elevations, and to be 6-inches above finished ground elevations in non-paved areas. No separate or additional compensation will be made to the contractor for making final adjustments to the manholes and boxes.
5. Inlet locations, horizontal pipe information and vertical pipe information is shown to the center of the structure. Deflection angles shown for storm sewer pipes are measured from the center of the curb inlets and manholes. The contractor shall adjust the horizontal location of the pipes to go to the face of the boxes. All roof drains shall be connected to storm sewer structures. Provide cleanouts on roof drain lines at 100' max. spacing and at all bend points. Do not connect roof drains directly to storm sewer pipes.
6. The contractor shall be responsible for furnishing and installing all fire and domestic water lines, meters, back flow devices, pits, valves and all other incidentals required for a complete operable fire protection and domestic water system, if not furnished or installed by the Water Utility. The Contractor shall Coordinate with the Water Utility. All costs associated with the complete water system for the building shall be the responsibility of the contractor. All work shall conform to the requirements of the City of Lee's Summit's Design and Construction Manual.
7. The contractor shall be responsible for furnishing and installing all sanitary sewer service lines from the building to the public line. The contractor shall refer to the architectural plans for specific locations and elevations of the service lines of the building connection. All work shall conform to the requirements of the City of Lee's Summit's Design and Construction Manual.The contractor is responsible for securing all permits, bonds and insurance required by the contract documents, City of Lee's Summit, Missouri, and all other governing agencies (including local, county, state and federal authorities) having jurisdiction over the work proposed by the construction documents. The cost for all permit bonds and insurance shall be the contractors responsibility and shall be included in the bid for the work.
8. By the use of these construction documents the contractor hereby agrees that he/she shall be solely responsible for the safety of the construction workers and the public. The contractor agrees to hold the engineer and owner harmless for any and all injuries, claims, losses or damages related to the project.
9. The contractor shall be responsible for furnishing all materials, tools and equipment and installation of electrical power, telephone and gas service from a point of connection from the public utility lines to the building structure. This will include all conduits, service lines, meters, concrete pads and all other incidentals required for a complete and operational system as required by the owner and the public utilities. Refer to building plans for exact tie-in locations of all utilities. Contractor shall verify connection points prior to installation of utility line.
10. All fill material is to be in place, compacted, and consolidated before installation of proposed utilities. On-site geotechnical engineer shall provide written confirmation that this requirement has been met and that utilities may proceed in the fill areas. All utilities are to be placed in trench conditions.
11. Contractor shall notify the utility authorities inspectors 48 hours before connecting to any existing line.
12. Storm sewer roof drains(st) shall be as follows (unless otherwise shown on plans).
    -PVC SDR 35 per ASTM D3034, for pipes less than 12' deep.
    -PVC SDR 26 per ASTM D3034, for pipes 12' to 20' deep.
13. Waterlines shall be as follows (unless otherwise shown on plans):
    -for 10" and larger: ductile iron pipe per AWWA C150
    -between 3" and 8": DR14 PVC per AWWA C900
    -For smaller than 2":copper tube Type "K" per ANSI 816.22
14. Minimum trench width shall be 2 feet.
15. Contractor shall maintain a minimum of 42" of cover on all waterlines. All water line joints are to be mechanical joints with thrust blocking as called out in specifications and construction plans. Water mains and service lines shall be constructed in accordance to the Public Works, Engineering Division of the City of Lee's Summit, Missouri Standards and Specifications for commercial services.
16. All waterlines shall be kept ten feet (10') apart (parallel) from sanitary sewer lines or manholes. Or when crossing, an 18" vertical clearance (outside edge of pipe to outside edge of pipe) of the waterline above the sewer line is required.
17. Water meter provided by City of Lee's Summit, Water Services and Installed by The Contractor in Accordance with the Direction, Standards and Specifications of the City Water services Department.
18. In the event of a vertical conflict between waterlines, sanitary lines, storm lines and gas lines (existing and proposed), the sanitary line shall be ductile iron pipe with mechanical joints at least 10 feet on both sides of the crossing (or encased in concrete the same distance), the waterline shall have mechanical joints with appropriate thrust blocking as required to provide a minimum of 18" clearance. Meeting requirements ANSI A21.10 or ANSI 21.11 (AWWA C151)(Class 50).
19. All underground storm, sanitary, water and other utility lines shall be installed, inspected and approved before backfilling. Failure to have inspection approval prior to backfill will constitute rejection of work.
20. All necessary inspections and/or certifications required by codes and/or utility service companies shall be performed prior to announced building possession and the final connection of service. Contractor shall coordinate with all utility companies for installation requirements and specifications.
21. Refer to building plans for site lighting electrical plan, irrigation, parking lot security system and associated conduit requirements. Coordinate with Owner that all required conduits are in place and tested prior to paving.
22. When a building utility Connection from site utilities leading up to the building cannot be made immediately, temporarily mark all such utility terminations.
23. See Architectural and Structural Building Plans for Roof Drains. The Contractor Shall Verify/Coordinate Size and Location of Roof Drains As Required Prior to Beginning Construction and Report Any Descrepancies In the Plans to the Engineer for Resolution.
27. Contractor is Responsible for providing all necessary fittings, bends, and structures to connect roof drains to the stormwater system.
28. All Connections to Existing Storm Drainage Structures Shall Be Cored and Grouted in Accordance With City of Lee's Summit, Standards and Specifications.

Final Development Plans

22-0133
Heartland Market
Lee's Summit, Jackson County, Missouri

Utility Plan

NO.	DATE	REVISION

DRAWN BY: ALS
CHECKED BY: DJB

Renaissance Infrastructure Consulting
816.800.0950
www.RIC-CONSULT.com
400 E 17TH STREET
KANSAS CITY, MISSOURI 64108
MO Certificate of Authority: E2010033830

STATE OF MISSOURI
DUSTIN J BURTON
NUMBER PE-2011015709
5/30/2023
PROFESSIONAL ENGINEER

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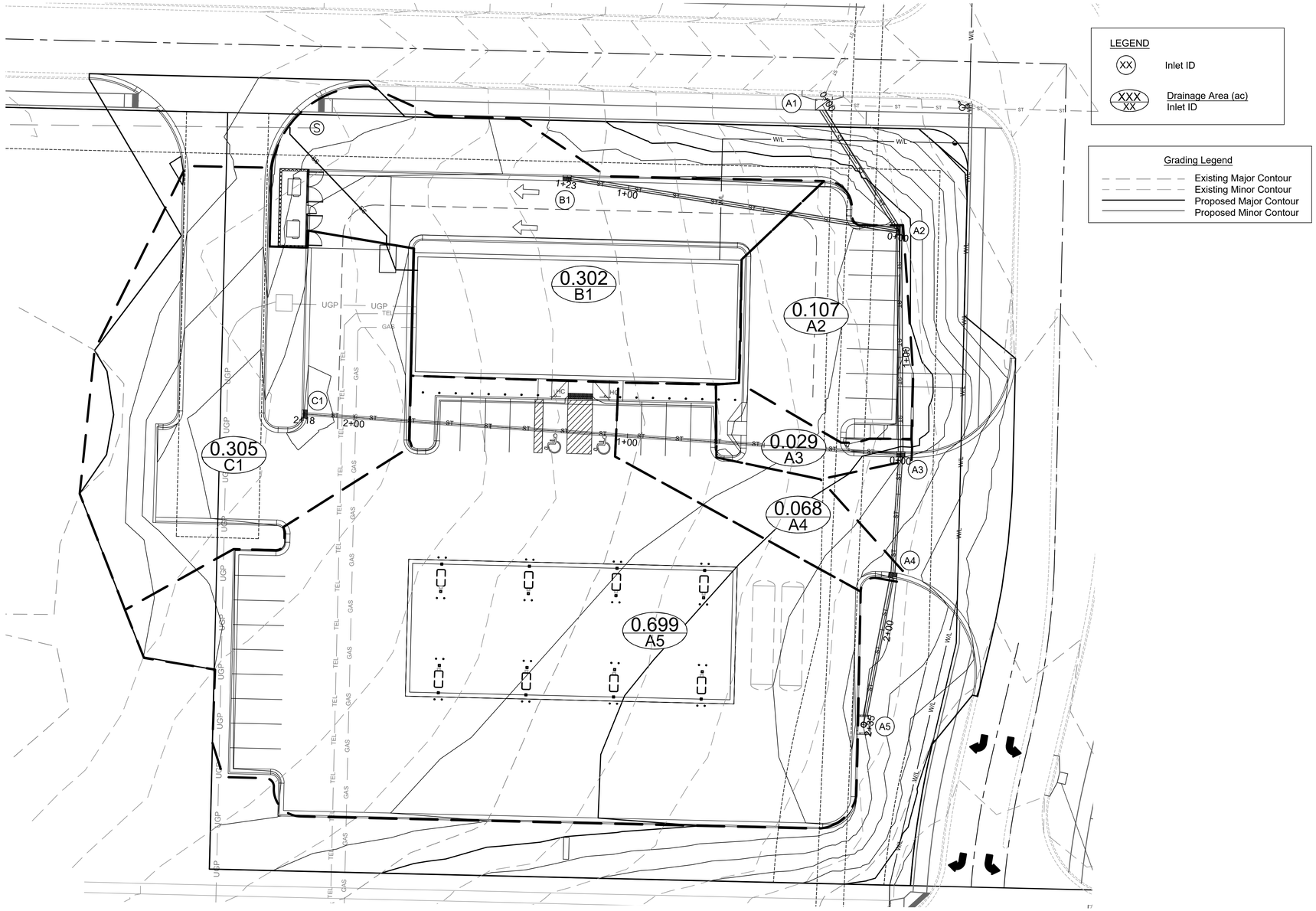

1-year Return Period

LineNo.	InletID	DrainageArea	InletTime	iInlet	RunoffCoeff	IncrQ	QCaptured	QBypass	JunctType	ThroatHt	StructLength	InletDepth	GutterDepth	GutterSpread	DnStrmLine No.	LineSize	LineLength	FlowRate	InvertDn	InvertUp	LineSlope	n-valuePipe	CapacityFull	HGLDn	HGLUp	HGLJnct	DepthDn	DepthUp	VelAve	Hw	J-LossCoeff
		(ac)	(min)	(in/hr)	(C)	(cfs)	(cfs)	(cfs)		(in)	(ft)	(ft)	(ft)	(ft)		(in)	(ft)	(cfs)	(ft)	(ft)	(%)		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft/s)	(ft)	
1	A2	0.11	5	3.03	0.9	0.3	0.3	0	Curb	6	3	0.11	0.11	2.68	Outfall	18	53.908	3.31	970.25	971.9	3.06	0.012	19.9	971.31	972.59 j	972.59	1.06	0.69**	3.32	0.69	1.91 z
2	B1	0.3	5	3.03	0.9	0.82	0.82	0	Curb	6	3	0.19	0.19	5.23	1	15	122.684	0.82	972.15	975.5	2.73	0.012	11.56	972.59	975.85 j	975.85	0.44	0.35**	2.48	0.35	1.00 z
3	A3	0.03	5	3.03	0.9	0.08	0.05	0.03	Curb	6	3	0.05	0.05	1.02	1	18	81.553	2.51	972.1	972.75	0.8	0.012	10.16	972.61	973.35	973.35	0.51	0.60**	4.28	0.6	1.50 z
4	A4	0.07	5	3.03	0.9	0.19	0.09	0.1	Curb	6	3	0.07	0.07	1.44	3	15	44.262	2.03	973	973.75	1.69	0.012	9.11	973.4	974.32	974.32	0.4	0.57**	4.86	0.57	0.50 z
5	A5	0.7	5	3.03	0.9	1.91	1.91	0	Curb	6	7	0.21	0.21	4.85	4	15	55.603	1.91	974	974.25	0.45	0.012	4.69	974.55	974.81 j	975.01	0.55	0.56**	3.62	0.76	1
6	C1	0.3	5	3.03	0.9	0.82	0.82	0	Curb	6	3	0.18	0.18	4.49	3	12	218.155	0.82	973.25	975.43	1	0.012	3.86	973.56	975.81	975.81	0.31	0.38**	3.45	0.38	1.00 z

10-year Return Period

LineNo.	InletID	DrainageArea	InletTime	iInlet	RunoffCoeff	IncrQ	QCaptured	QBypass	JunctType	ThroatHt	StructLength	InletDepth	GutterDepth	GutterSpread	DnStrmLine No.	LineSize	LineLength	FlowRate	InvertDn	InvertUp	LineSlope	n-valuePipe	CapacityFull	HGLDn	HGLUp	HGLJnct	DepthDn	DepthUp	VelAve	Hw	J-LossCoeff
		(ac)	(min)	(in/hr)	(C)	(cfs)	(cfs)	(cfs)		(in)	(ft)	(ft)	(ft)	(ft)		(in)	(ft)	(cfs)	(ft)	(ft)	(%)		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft/s)	(ft)	
1	A2	0.11	5	7.35	0.9	0.73	0.73	0	Curb	6	3	0.18	0.18	4.84	Outfall	18	53.908	9.29	970.25	971.9	3.06	0.012	19.9	971.31	973.08	973.08	1.06	1.18**	6.6	1.18	1.91 z
2	B1	0.3	5	7.35	0.9	1.98	1.98	0	Curb	6	3	0.31	0.31	9.46	1	15	122.684	1.98	972.15	975.5	2.73	0.012	11.56	973.08	976.06 j	976.06	0.93	0.56**	2.88	0.56	1.00 z
3	A3	0.03	5	7.35	0.9	0.2	0.09	0.11	Curb	6	3	0.07	0.07	1.42	1	18	81.553	6.86	972.1	972.75	0.8	0.012	10.16	973.08	973.76	973.76	0.98	1.01**	5.51	1.01	1.50 z
4	A4	0.07	5	7.35	0.9	0.46	0.14	0.32	Curb	6	3	0.1	0.1	3.78	3	15	44.262	5.04	973	973.75	1.69	0.012	9.11	973.76	974.66	974.66	0.76	0.91**	5.85	0.91	0.50 z
5	A5	0.7	5	7.35	0.9	4.63	4.63	0	Curb	6	7	0.37	0.37	8.76	4	15	55.603	4.63	974	974.25	0.45	0.012	4.69	975.01	975.26	975.56	1.01	1.01	4.36	1.31	1
6	C1	0.3	5	7.35	0.9	1.98	1.98	0	Curb	6	3	0.31	0.31	8.11	3	12	218.155	1.98	973.25	975.43	1	0.012	3.86	973.76	976.03	976.03	0.51	0.60**	4.46	0.6	1.00 z

100-year Return Period

LineNo.	InletID	DrainageArea	InletTime	iInlet	RunoffCoeff	IncrQ	QCaptured	QBypass	JunctType	ThroatHt	StructLength	InletDepth	GutterDepth	GutterSpread	DnStrmLine No.	LineSize	LineLength	FlowRate	InvertDn	InvertUp	LineSlope	n-valuePipe	CapacityFull	HGLDn	HGLUp	HGLJnct	DepthDn	DepthUp	VelAve	Hw	J-LossCoeff
		(ac)	(min)	(in/hr)	(C)	(cfs)	(cfs)	(cfs)		(in)	(ft)	(ft)	(ft)	(ft)		(in)	(ft)	(cfs)	(ft)	(ft)	(%)		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft/s)	(ft)	
1	A2	0.11	5	12.89	0.9	1.28	1.28	0	Curb	6	3	0.24	0.24	7.05	Outfall	18	53.908	16.83	970.25	971.9	3.06	0.012	19.9	971.31	973.34	973.34	1.06	1.44**	11.15	1.44	1.91 z
2	B1	0.3	5	12.89	0.9	3.48	3.48	0	Curb	6	3	0.44	0.44	13.76	1	15	122.684	3.48	972.15	975.5	2.73	0.012	11.56	973.34	976.25 j	976.25	1.19	0.75**	3.7	0.75	1.00 z
3	A3	0.03	5	12.89	0.9	0.35	0.12	0.23	Curb	6	3	0.09	0.09	2.72	1	18	81.553	12.35	972.1	972.75	0.8	0.012	10.16	973.6	974.56	975.7	1.5	1.5	6.99	2.95	1.5
4	A4	0.07	5	12.89	0.9	0.81	0.19	0.62	Curb	6	3	0.11	0.11	5.48	3	15	44.262	8.88	973	973.75	1.69	0.012	9.11	975.7	976.42	976.82	1.25	1.25	7.24	3.07	0.5
5	A5	0.7	5	12.89	0.9	8.12	8.12	0	Curb	6	7	0.52	0.52	12.74	4	15	55.603	8.12	974	974.25	0.45	0.012	4.69	976.82	977.57	978.25	1.25	1.25	6.62	4	1
6	C1	0.3	5	12.89	0.9	3.48	3.48	0	Curb	6	3	0.44	0.44	11.8	3	12	218.155	3.48	973.25	975.43	1	0.012	3.86	975.7	977.48	977.78	1	1	4.43	2.35	1

Final Development Plans

22-0133
Heartland Market
Lee's Summit, Jackson County, Missouri

Drainage Area Map

NO.	DATE	REVISION

DRAWN BY ALS | CHECKED BY DJB

Renaissance Infrastructure Consulting
816.800.0950
www.RIC-CONSULT.com
4.00 E 17TH STREET
KANSAS CITY, MISSOURI 64108
MO Certificate of Authority: E-2010033630

STATE OF MISSOURI
DUSTIN J. BURTON
NUMBER PE-2011015709
PROFESSIONAL ENGINEER
5/30/2023

Sheet
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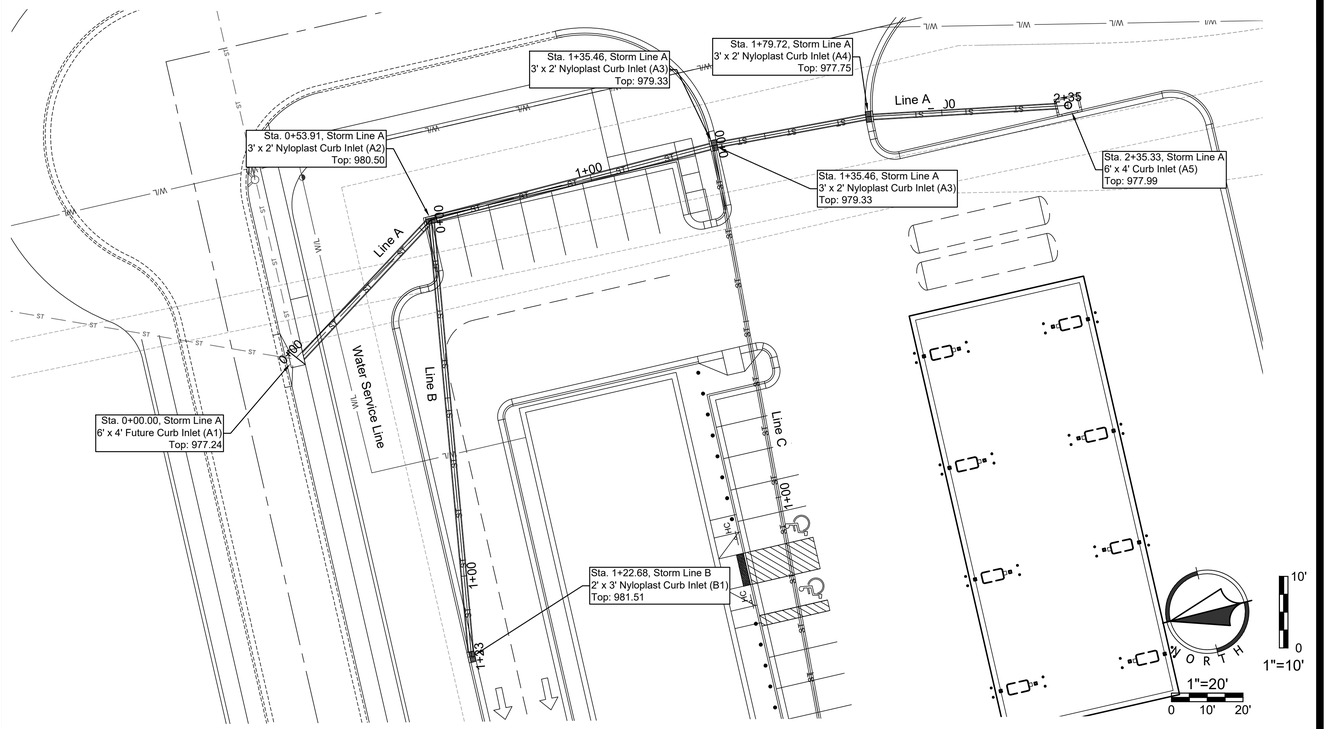
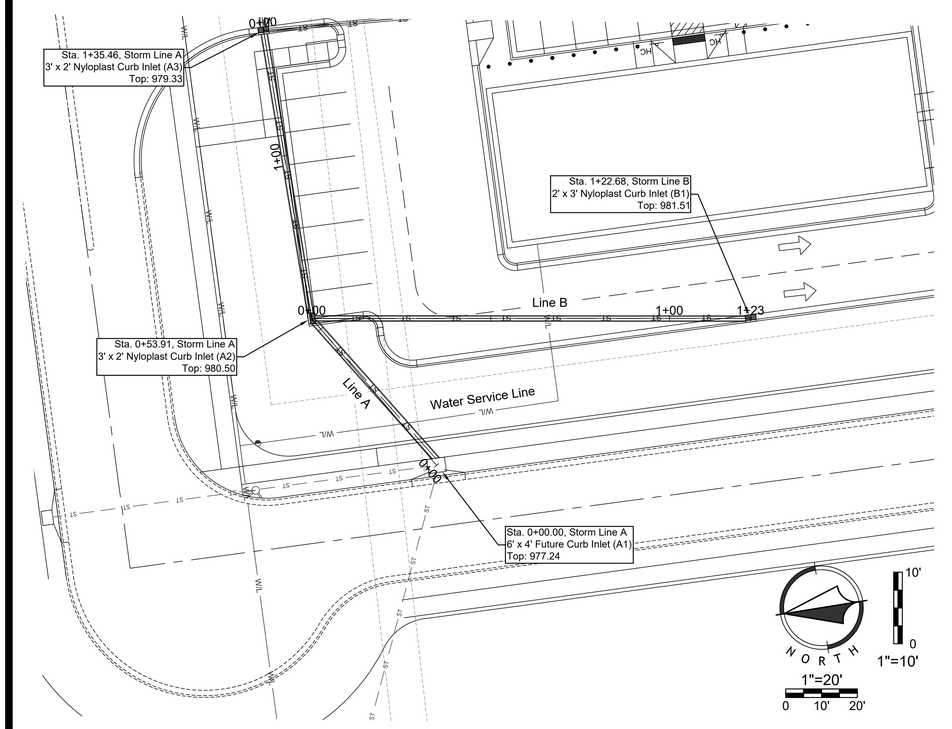
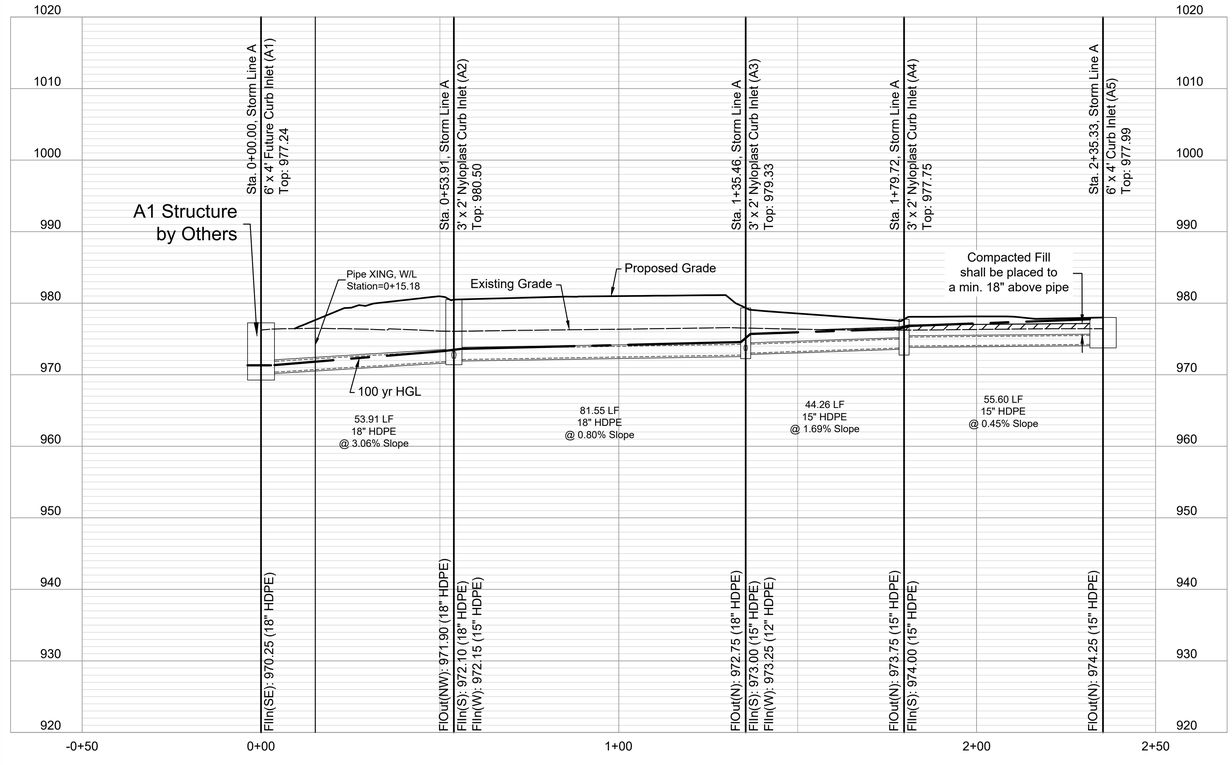
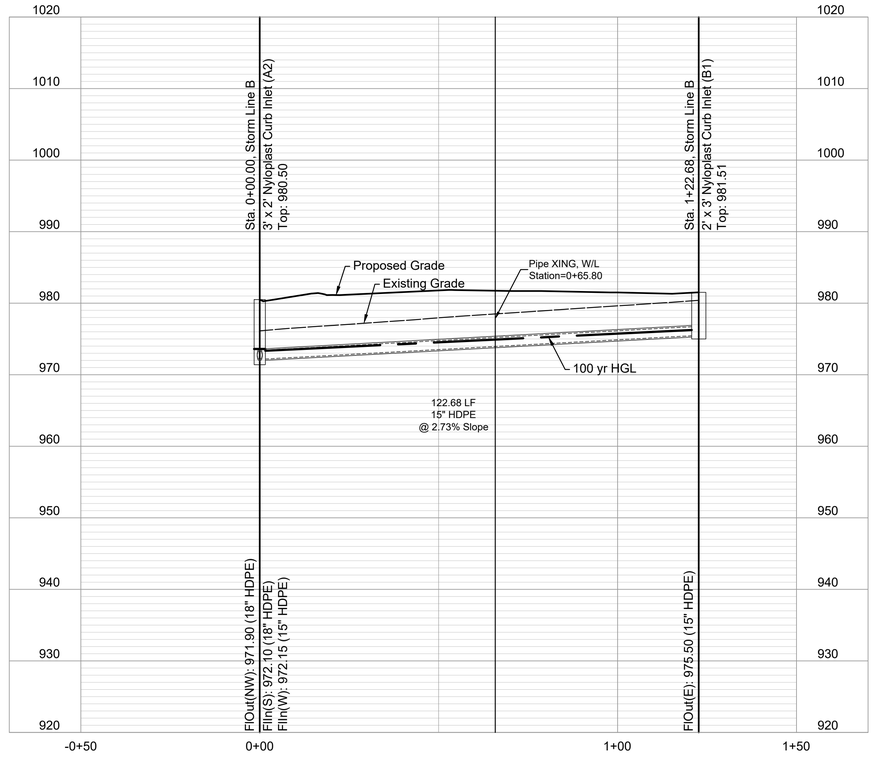




Compacted Fill - Compacted Fill to be placed a minimum 18" above the top of pipe prior to installation





Final Development Plans

22-0133
Heartland Market
Lee's Summit, Jackson County, Missouri

Storm P&P 1

NO.	DATE	REVISION

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400 E 17th Street
Kansas City, Missouri 64108
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www.ric-consult.com
MO Certificate of Authority: E-2010033630

STATE OF MISSOURI
DUSTIN J. BURTON
NUMBER PE-2011015799
5/30/2023
PROFESSIONAL ENGINEER

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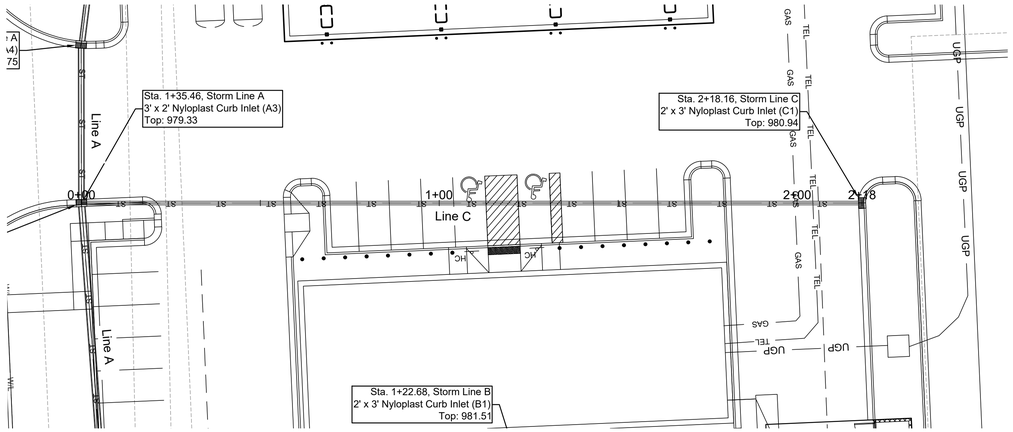

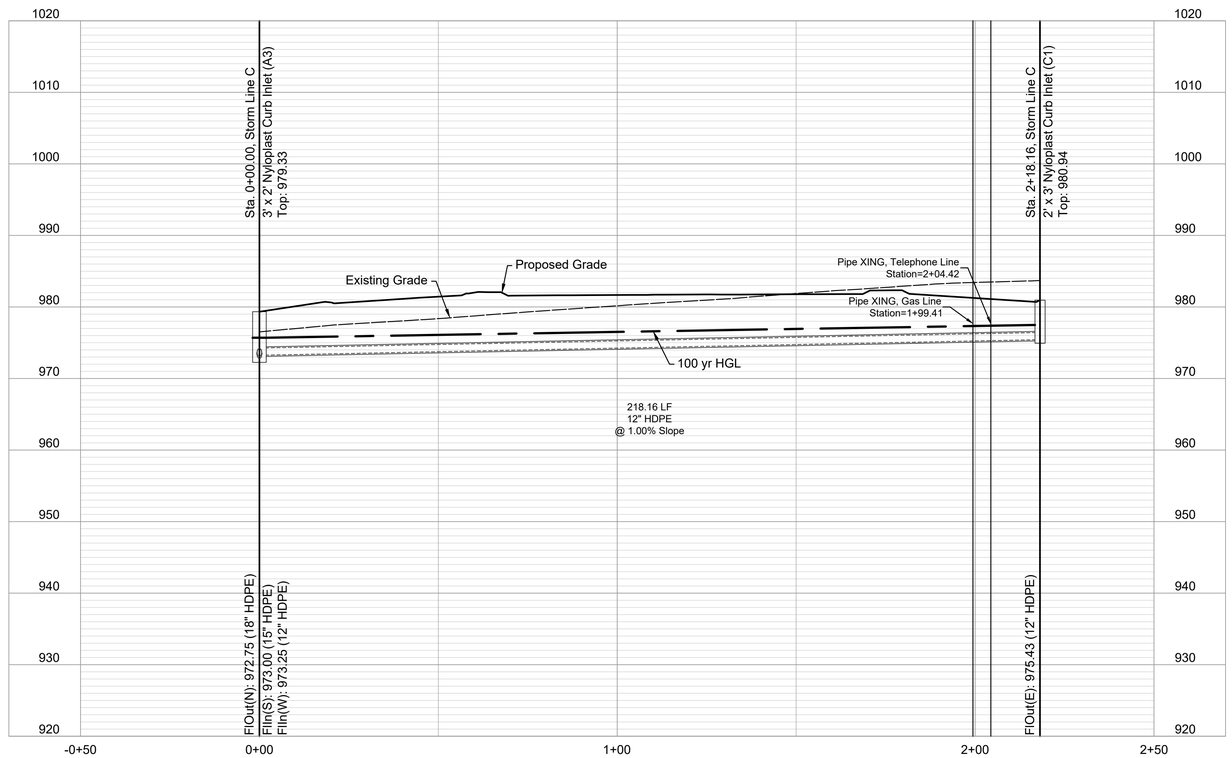

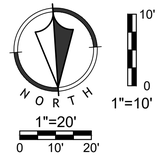

Final Development Plans

22-0133
Heartland Market
Lee's Summit, Jackson County, Missouri

Storm P&P 2

NO.	DATE	REVISION

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400 E 17th Street
Kansas City, Missouri 64108
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STATE OF MISSOURI
DUSTIN J. BURTON
NUMBER PE-2011015709
PROFESSIONAL ENGINEER
5/30/2023

Sheet
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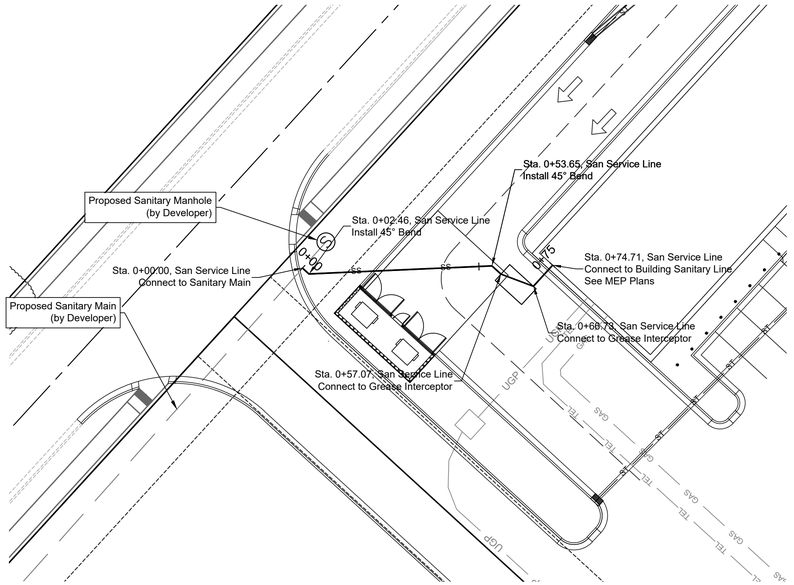
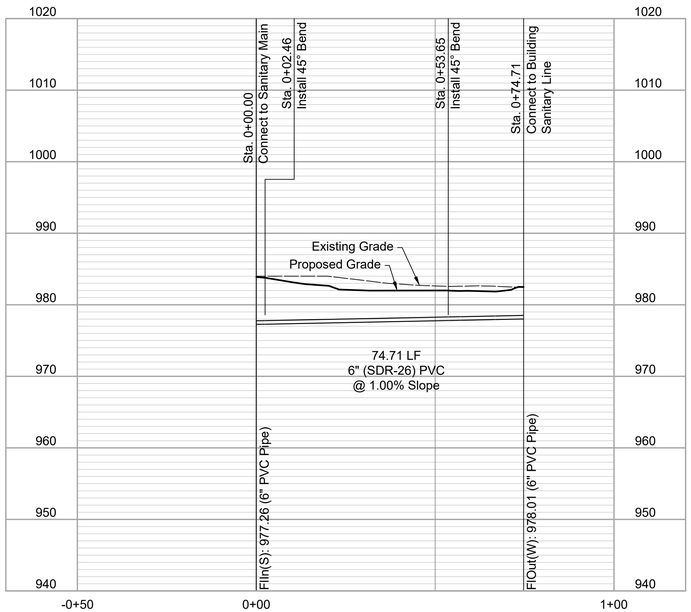
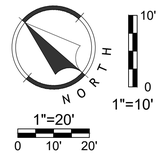


Notes:

1. Contractor shall refer to the MEP plan for all connections at the building as well as actual locations for tie to private main.





Final Development Plans

22-0133
Heartland Market
Lee's Summit, Jackson County, Missouri

Sanitary P&P

NO.	DATE	REVISION

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400 E 17th Street
Kansas City, Missouri 64108
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STATE OF MISSOURI
DUSTIN J. BURTON
NUMBER PE-2011017709
5/30/2023
PROFESSIONAL ENGINEER

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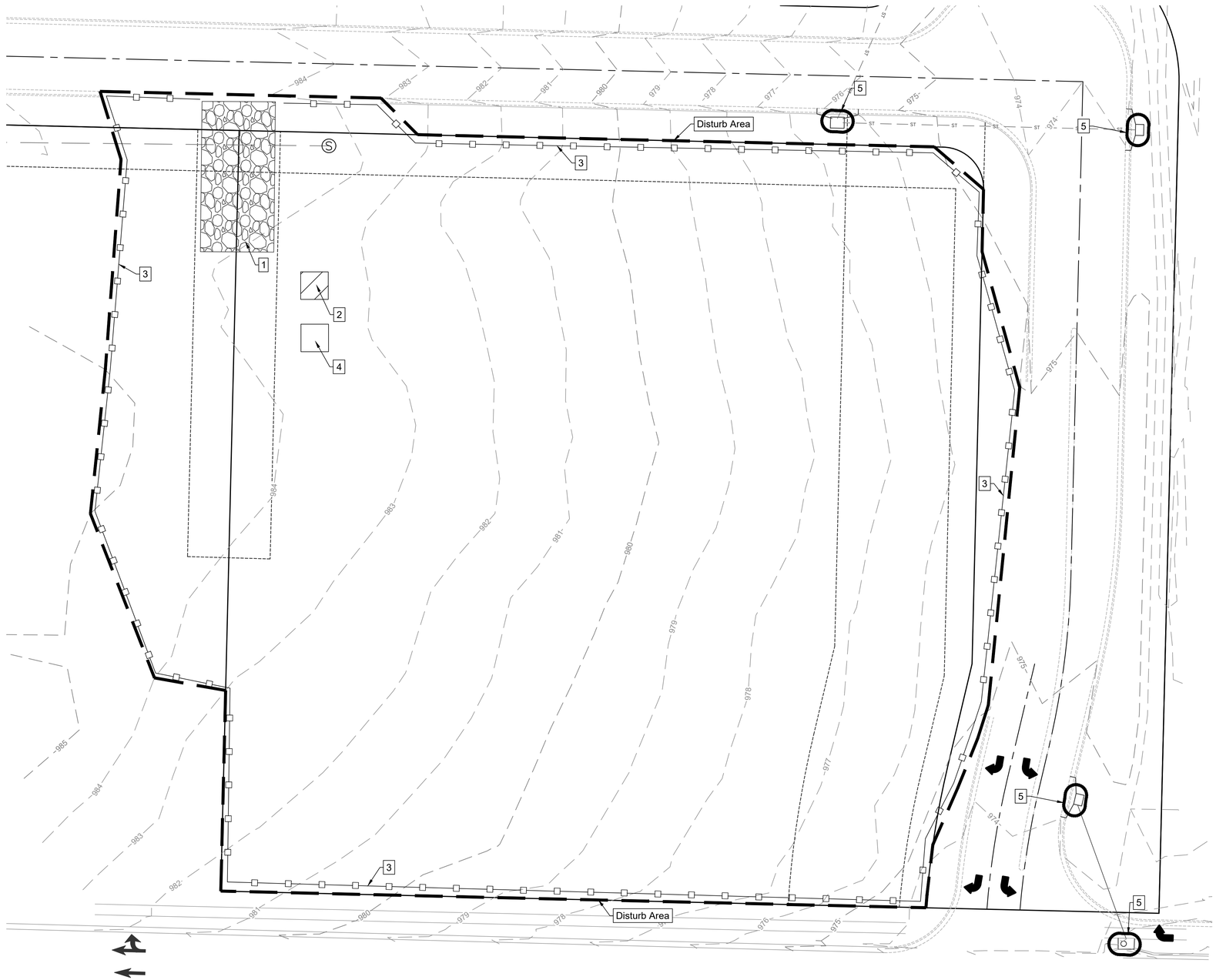

EROSION CONTROL LEGEND

- Stabilized Construction Entrance
- Staging Area
- Concrete Washout
- Limits of Disturbance
- Perimeter Silt Fence
- Inlet Protection

EROSION CONTROL NOTES

1. All work in public easements and right-of-way and all erosion control work must comply with the latest specifications set forth by the City of Lee's Summit, MO, the Kansas City Chapter of American Public Works Association (APWA). If any of the specification and/or general notes conflict with the requirements provided by the City of Lee's Summit, the City of Lee's Summit's standards shall override.
2. The contractor shall provide all materials, tools, equipment, and labor as necessary to install and maintain adequate erosion control, keep the streets clean of mud and debris, and prevent soil from leaving the project site. The contractor's erosion control measures shall conform to the City of Lee's Summit, MO, the Kansas City Chapter of American Public Works Association (APWA), Standards and Specifications.
3. Erosion control plan modifications shall be required if the plan fails to substantially control erosion and offsite sedimentation.
4. The contractor shall be responsible for maintaining erosion control devices and removing sediment until a minimum of 70% of permanent vegetation has become stabilized and established. Erosion control devices shall remain in place until the 70% established vegetation is met, or the duration of the project, whichever is the later date.
5. The contractor shall temporarily seed and mulch all disturbed areas if there is to be no construction activity on them for a period of fourteen (14) calendar days.
6. Install "J' Hooks on silt fence every 100 LF
7. Contractor to install all Phase I erosion control devices prior to construction.
8. Contractor shall replace disturbed area with seed or sod, as indicated on the plans, and shall be installed within 14 days after paving completion and final topsoil grading.
9. Topsoil replacement shall be 6" thick.
10. Silt fence to be installed in accordance with the City of Lee's Summit, MO.
11. Contractor shall remove mud and debris from City Streets and Outer Roadway within 4 hours of notification by City staff that it is a nuisance.

WRITTEN SEQUENCING

1. Implement Pre-Construction Plan:
   All temporary structural BMP's shown on the BMP plan must be in place before any site disturbance. Clearing necessary to place temporary structural BMP's is the minimum required for installation. Coordinate clearing necessary to place temporary structural BMP's with local weather forecast so that clearing and placement may be completed within a forecast dry period. Stabilize all erosion control measures after installation. Temporary Barrier Fence shall be in Place, around areas not to be disturbed, prior to any construction activities. This area includes Stream Corridor.
2. Clear and Stabilize Work Areas:
   Grade contractor areas and place all-weather surface on contractor areas.
3. Clearing and Grubbing:
   After Phase I BMP's are installed, contractor may clear, grub, and demo required areas as necessary.

	PROJECT STAGE	PLAN REFERENCE NUMBER	BMP DESCRIPTION	REMOVE AFTER PHASE	NOTES
Phase I	A-Prior to Construction	1	Construction Entrance	II	Install Construction Entrance in accordance with APWA Standard Detail ESC-01
		2	Staging Area	II	Install Staging Area
		3	Perimeter Silt Fence	III	Install Silt Fence in accordance with APWA Standard Detail ESC-03
		4	Concrete Washout	II	Install Concrete Washout as Shown on Plans Prior to Pouring Any Concrete in accordance with APWA Standard Detail ESC-01
		5	Inlet Protection	III	Install Filter Bags Prior to Construction, Maintain Until All Area is Stabilized.
Phase II	B-During Land Disturbance and Storm Infrastructure Installation	6	Inlet Protection	III	Install Filter Bags Prior to Construction, Maintain Until All Area is Stabilized.
Phase III	C-Final Stabilization	7	Establish Perennial Vegetation	N/A	Redistribute Topsoil and Seed and Mulch all Disturbed Area. Stabilization Complete when 100% of Disturbed Area is Established with Perennial Vegetation with a Density of 70%

Disturbed Area for Site Improvements : 1.95 Acres

NORTH
1"=20'
0 10' 20'

Final Development Plans

22-0133
Heartland Market
Lee's Summit, Jackson County, Missouri

Erosion Control I

NO.	DATE	REVISION

DRAWN BY ALS | CHECKED BY DJB

Renaissance Infrastructure Consulting
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www.ric-consult.com
4700 E 17th Street
Kansas City, Missouri 64108
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STATE OF MISSOURI
DUSTIN J. BURTON
NUMBER PE-2011015709
PROFESSIONAL ENGINEER
5/30/2023

Sheet
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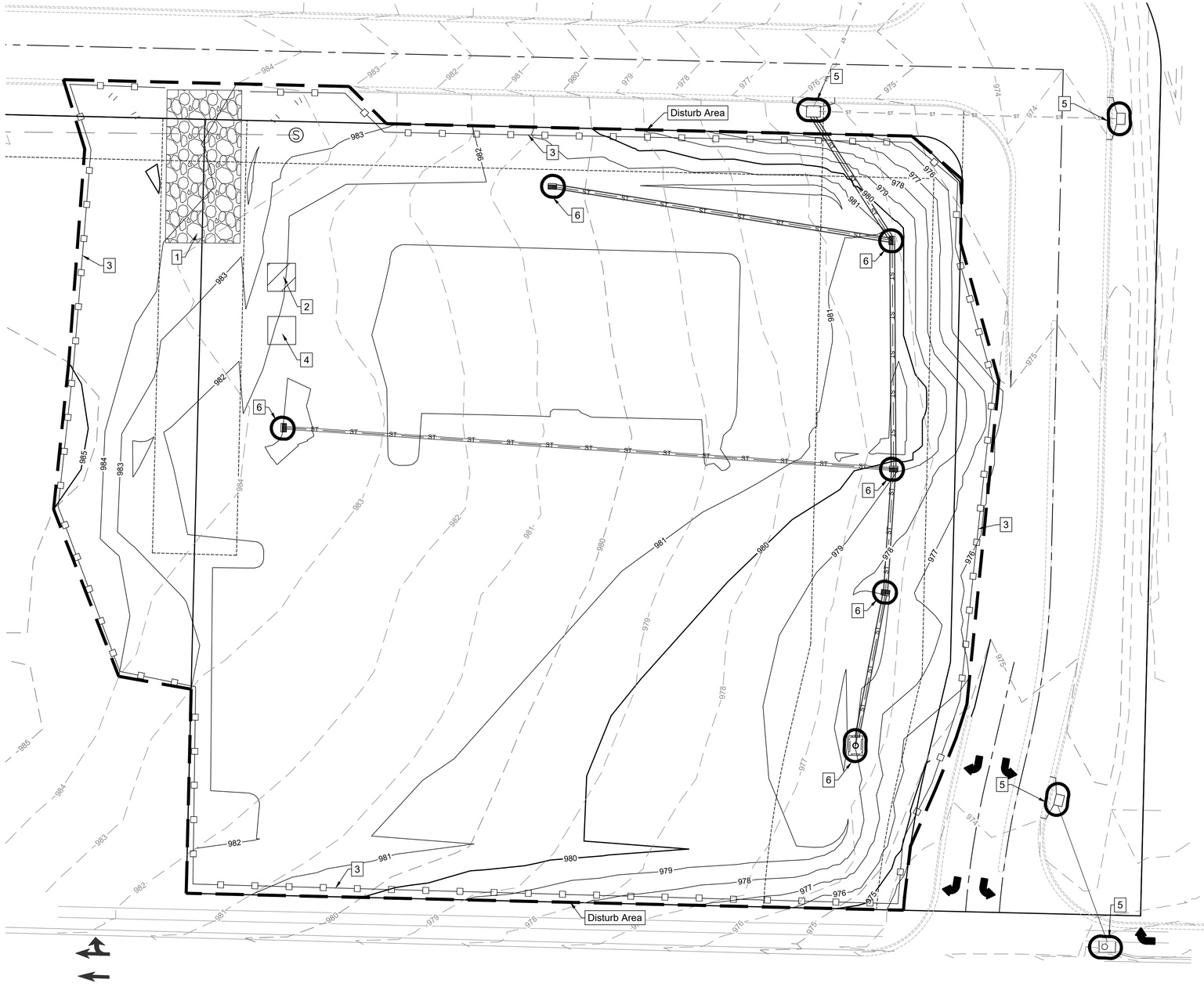

EROSION CONTROL LEGEND

- Stabilized Construction Entrance
- Staging Area
- Concrete Washout
- Limits of Disturbance
- Perimeter Silt Fence
- Inlet Protection

EROSION CONTROL NOTES

1. All work in public easements and right-of-way and all erosion control work must comply with the latest specifications set forth by the City of Lee's Summit, MO, the Kansas City Chapter of American Public Works Association (APWA). If any of the specification and/or general notes conflict with the requirements provided by the City of Lee's Summit, the City of Lee's Summit's standards shall override.
2. The contractor shall provide all materials, tools, equipment, and labor as necessary to install and maintain adequate erosion control, keep the streets clean of mud and debris, and prevent soil from leaving the project site. The contractor's erosion control measures shall conform to the City of Lee's Summit, MO, the Kansas City Chapter of American Public Works Association (APWA), Standards and Specifications.
3. Erosion control plan modifications shall be required if the plan fails to substantially control erosion and offsite sedimentation.
4. The contractor shall be responsible for maintaining erosion control devices and removing sediment until a minimum of 70% of permanent vegetation has become stabilized and established. Erosion control devices shall remain in place until the 70% established vegetation is met, or the duration of the project, whichever is the later date.
5. The contractor shall temporarily seed and mulch all disturbed areas if there is to be no construction activity on them for a period of fourteen (14) calendar days.
6. Install "J' Hooks on silt fence every 100 LF
7. Contractor to install all Phase I erosion control devices prior to construction.
8. Contractor shall replace disturbed area with seed or sod, as indicated on the plans, and shall be installed within 14 days after paving completion and final topsoil grading.
9. Topsoil replacement shall be 6" thick.
10. Silt fence to be installed in accordance with the City of Lee's Summit, MO.
11. Contractor shall remove mud and debris from City Streets and Outer Roadway within 4 hours of notification by City staff that it is a nuisance.

WRITTEN SEQUENCING

1. Implement Pre-Construction Plan:
   All temporary structural BMP's shown on the BMP plan must be in place before any site disturbance. Clearing necessary to place temporary structural BMP's is the minimum required for installation. Coordinate clearing necessary to place temporary structural BMP's with local weather forecast so that clearing and placement may be completed within a forecast dry period. Stabilize all erosion control measures after installation. Temporary Barrier Fence shall be in Place, around areas not to be disturbed, prior to any construction activities. This area includes Stream Corridor.
2. Clear and Stabilize Work Areas:
   Grade contractor areas and place all-weather surface on contractor areas.
3. Clearing and Grubbing:
   After Phase I BMP's are installed, contractor may clear, grub, and demo required areas as necessary.

	PROJECT STAGE	PLAN REFERENCE NUMBER	BMP DESCRIPTION	REMOVE AFTER PHASE	NOTES
Phase I	A-Prior to Construction	1	Construction Entrance	II	Install Construction Entrance in accordance with APWA Standard Detail ESC-01
		2	Staging Area	II	Install Staging Area
		3	Perimeter Silt Fence	III	Install Silt Fence in accordance with APWA Standard Detail ESC-03
		4	Concrete Washout	II	Install Concrete Washout as Shown on Plans Prior to Pouring Any Concrete in accordance with APWA Standard Detail ESC-01
		5	Inlet Protection	III	Install Filter Bags Prior to Construction, Maintain Until All Area is Stabilized.
Phase II	B-During Land Disturbance and Storm Infrastructure Installation	6	Inlet Protection	III	Install Filter Bags Prior to Construction, Maintain Until All Area is Stabilized.
Phase III	C-Final Stabilization	7	Establish Perennial Vegetation	N/A	Redistribute Topsoil and Seed and Mulch all Disturbed Area. Stabilization Complete when 100% of Disturbed Area is Established with Perennial Vegetation with a Density of 70%

Disturbed Area for Site Improvements : 1.95 Acres

NORTH
1"=20'
0 10' 20'

Final Development Plans

22-0133
Heartland Market
Lee's Summit, Jackson County, Missouri

Erosion Control II

NO.	DATE	REVISION

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Renaissance Infrastructure Consulting
816.800.0950
WWW.RIC-CONSULT.COM
400 E 17TH STREET KANSAS CITY, MISSOURI 64108
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STATE OF MISSOURI
DUSTIN J. BURTON
NUMBER PE-2011015709
PROFESSIONAL ENGINEER
5/30/2023

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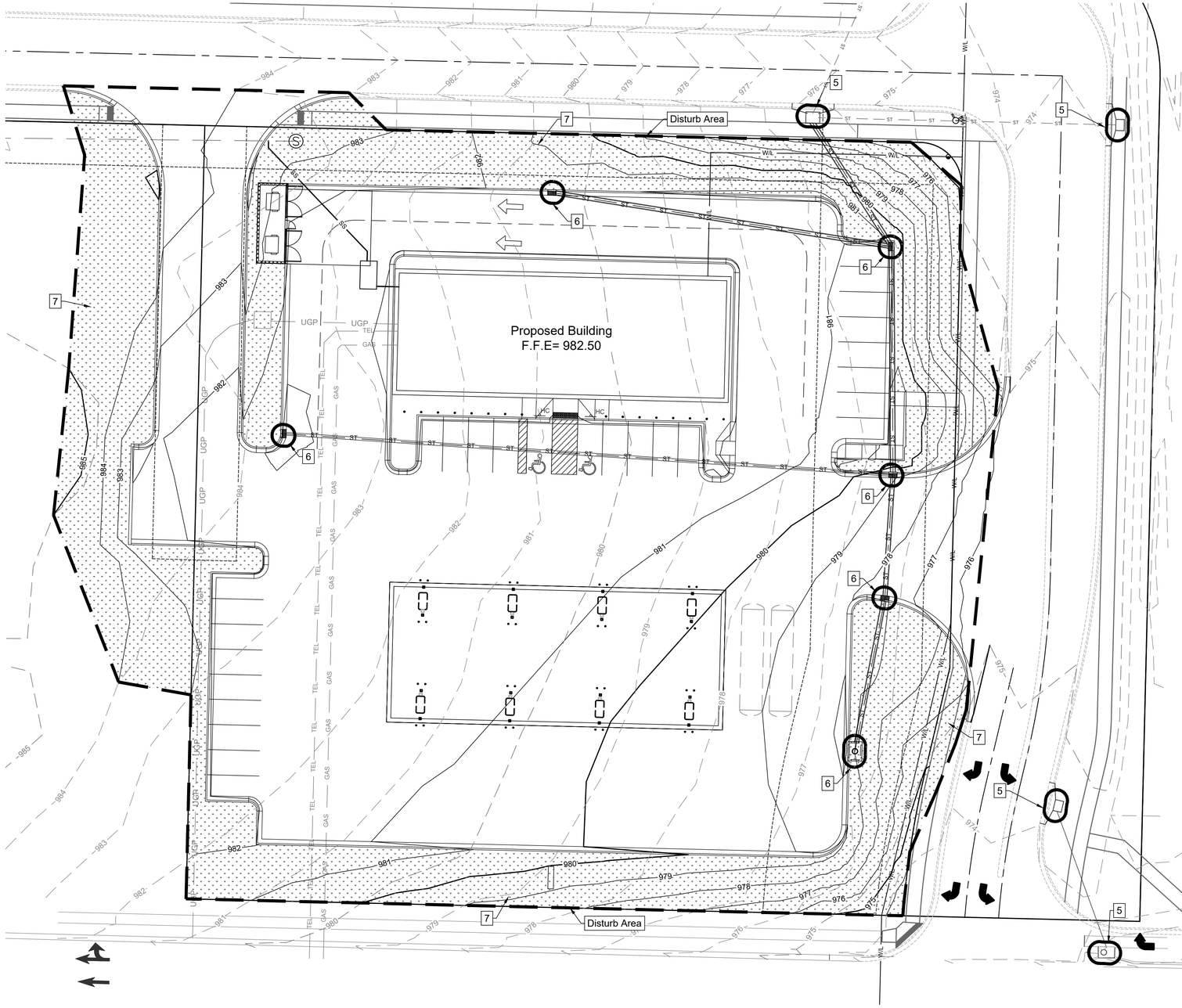


EROSION CONTROL LEGEND

- Stabilized Construction Entrance
- Staging Area
- Concrete Washout
- Limits of Disturbance
- Perimeter Silt Fence
- Inlet Protection

LEGEND

- Landscape Areas (See LA Plan)

	PROJECT STAGE	PLAN REFERENCE NUMBER	BMP DESCRIPTION	REMOVE AFTER PHASE	NOTES
Phase I	A-Prior to Construction	1	Construction Entrance	II	Install Construction Entrance in accordance with APWA Standard Detail ESC-01
		2	Staging Area	II	Install Staging Area
		3	Perimeter Silt Fence	III	Install Silt Fence in accordance with APWA Standard Detail ESC-03
		4	Concrete Washout	II	Install Concrete Washout as Shown on Plans Prior to Pouring Any Concrete in accordance with APWA Standard Detail ESC-01
		5	Inlet Protection	III	Install Filter Bags Prior to Construction, Maintain Until All Area is Stabilized.
Phase II	B-During Land Disturbance and Storm Infrastructure Installation	6	Inlet Protection	III	Install Filter Bags Prior to Construction, Maintain Until All Area is Stabilized.
Phase III	C-Final Stabilization	7	Establish Perennial Vegetation	N/A	Redistribute Topsoil and Seed and Mulch all Disturbed Area. Stabilization Complete when 100% of Disturbed Area is Established with Perennial Vegetation with a Density of 70%

Disturbed Area for Site Improvements : 1.95 Acres

NORTH

1"=20'

0 10' 20'

Final Development Plans

22-0133
Heartland Market
Lee's Summit, Jackson County, Missouri

Erosion Control III

NO.	DATE	REVISION

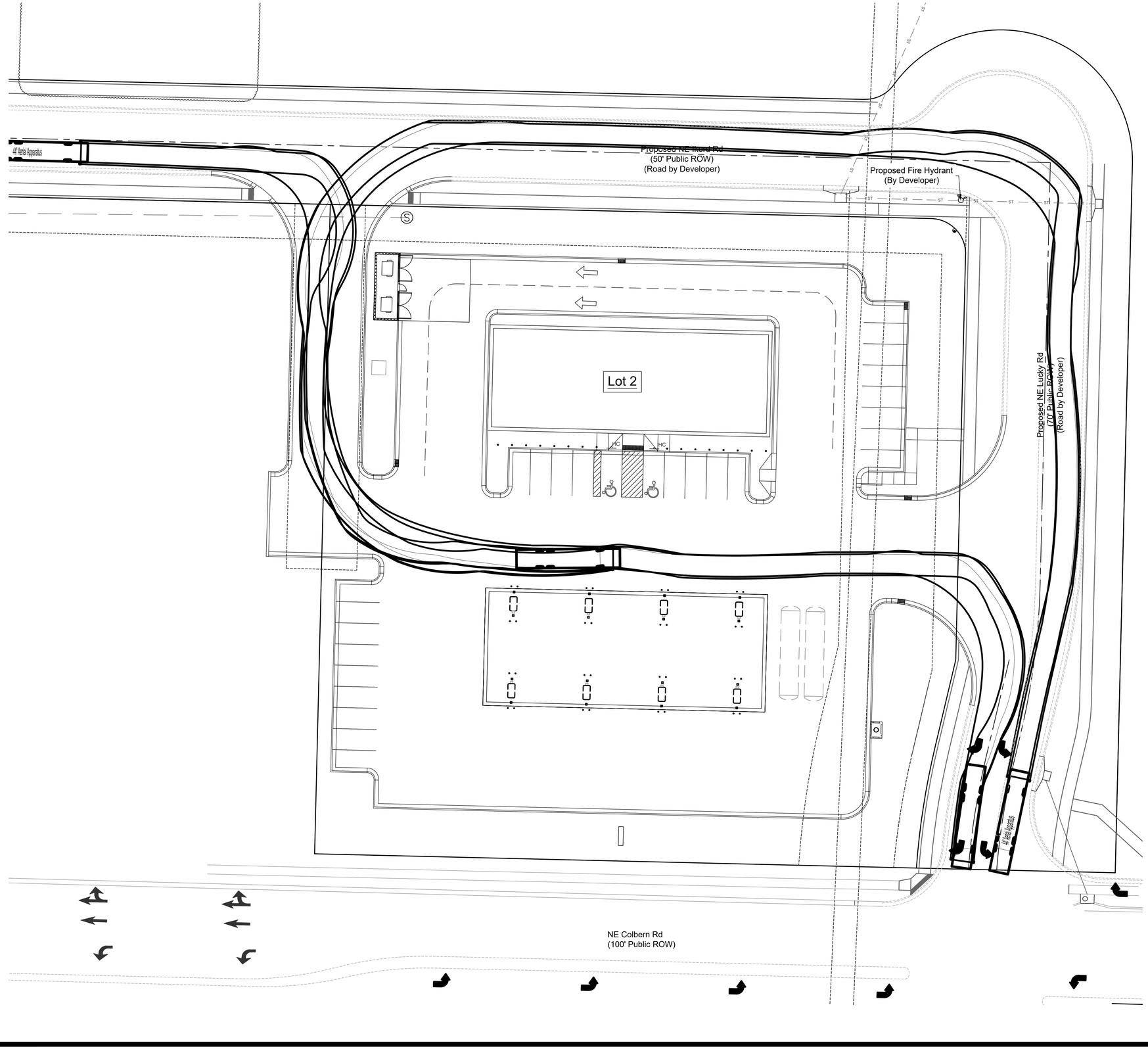
DRAWN BY ALS

CHECKED BY DJB

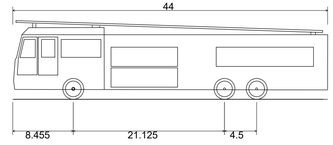
Renaissance Infrastructure Consulting
816.800.0950
www.RIC-consult.com
400 E 17th Street
Kansas City, Missouri 64108
MO Certificate of Authority: E-2010038630

STATE OF MISSOURI
DUSTIN J. BURTON
NUMBER PE-2011015709
PROFESSIONAL ENGINEER
5/30/2023

Sheet
C15



Truck Model Specifications



44' Aerial Apparatus	
Overall Length	44.000ft
Overall Width	8.000ft
Overall Body Height	11.000 ft
Min Body Ground Clearance	1.400ft
Track Width	8.000ft
Lock-to-lock time	4.00s
Max Wheel Angle	45.00°

FT Scale
1" = 10'

NORTH
1"=20'
0 10' 20'

Final Development Plans

22-0133
Heartland Market
Lee's Summit, Jackson County, Missouri

Fire Truck Turning Plan

NO.	DATE	REVISION

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816.800.0950
www.ric-consult.com
400 E 17th Street
Kansas City, Missouri 64108
MO Certificate of Authority: E-2010033630

STATE OF MISSOURI
DUSTIN J. BURTON
NUMBER PE-2010017709
5/30/2023
PROFESSIONAL ENGINEER

Sheet
C16

aschwartz
May 30, 2023 - 10:22am
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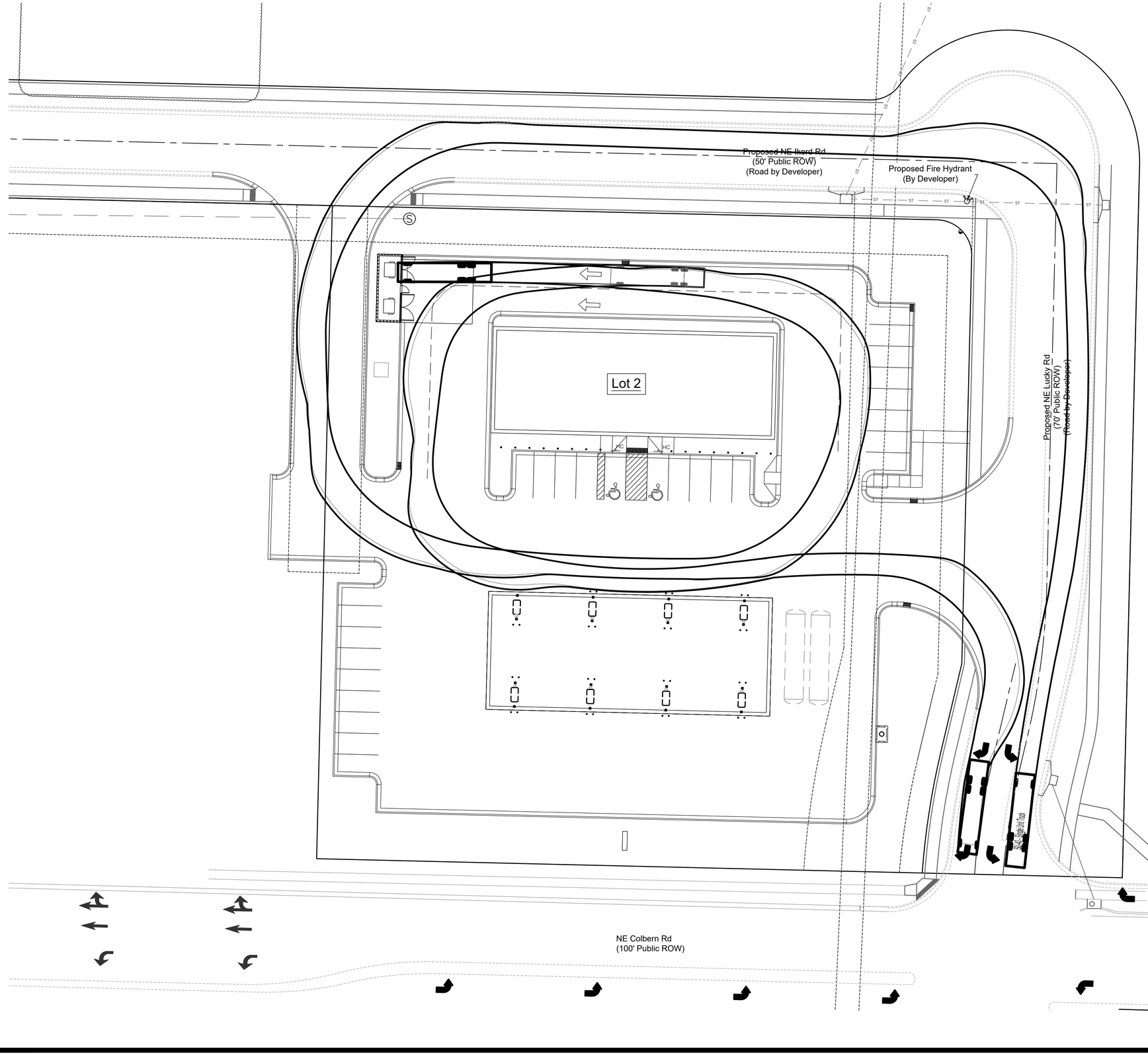

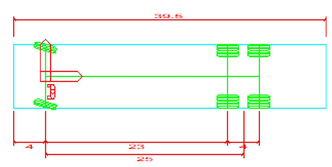

SU-40 - Single Unit Truck

Overall Length	39.500ft
Overall Width	8.000ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.367ft
Track Width	8.000ft
Lock-to-lock time	5.00s
Max Steering Angle (Virtual)	31.80°

NORTH

1"=20'

0 10' 20'

Final Development Plans

22-0133
Heartland Market
Lee's Summit, Jackson County, Missouri

Trash Truck Turning Plan

NO.	DATE	REVISION

DRAWN BY ALS | CHECKED BY DJB

Renaissance Infrastructure Consulting
816.800.0950
www.RIC-CONSULT.COM
400 E 17th Street
Kansas City, Missouri 64108
MO Certificate of Authority: E-2010033630

STATE OF MISSOURI
DUSTIN J. BURTON
NUMBER PE-2011017709
5/30/2023
PROFESSIONAL ENGINEER

Sheet
C17

aschwartz
May 30, 2023 - 10:22am
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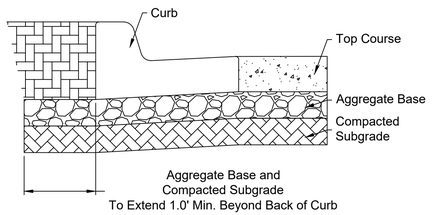
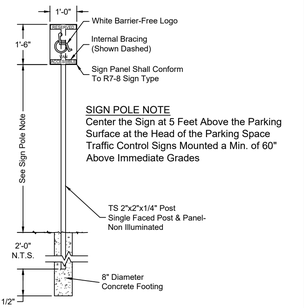


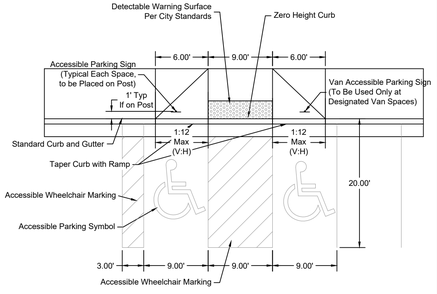
Aggregate Base and Compacted Subgrade To Extend 1.0' Min. Beyond Back of Curb

Aggregate Base Extension Detail
Not to Scale



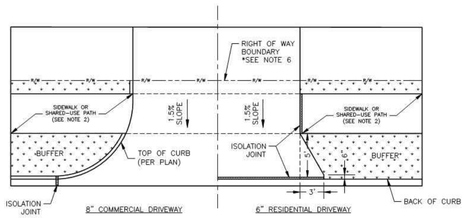
SIGN POLE NOTE
Center the Sign at 5 Feet Above the Parking Surface at the Head of the Parking Space Traffic Control Signs Mounted a Min. of 60" Above Immediate Grades

HANDICAP SIGNAGE
Not to Scale



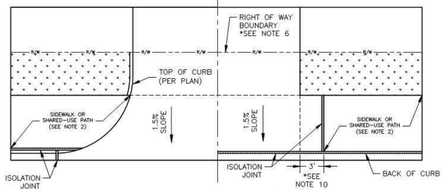
Note:
Accessible Parking Symbol and Signage Shall Comply with the Applicable Recommendations of the Manual of Uniform Traffic Control Devices (MUTCD)

ACCESSIBLE PARKING DETAIL (90°)
Not to Scale



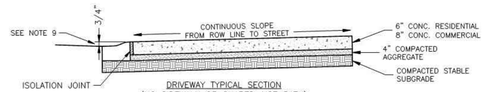
8" COMMERCIAL DRIVEWAY — 6" RESIDENTIAL DRIVEWAY

DRIVEWAY WITH BUFFER
NOT TO SCALE

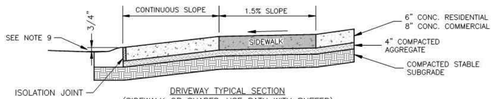


8" COMMERCIAL DRIVEWAY — 6" RESIDENTIAL DRIVEWAY

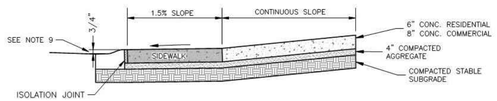
DRIVEWAY WITHOUT BUFFER
NOT TO SCALE



DRIVEWAY TYPICAL SECTION
(NO SIDEWALK OR SHARED-USE PATH)
NOT TO SCALE



DRIVEWAY TYPICAL SECTION
(SIDEWALK OR SHARED-USE PATH WITH BUFFER)
NOT TO SCALE



DRIVEWAY TYPICAL SECTION
(SIDEWALK OR SHARED-USE PATH WITHOUT BUFFER)
NOT TO SCALE

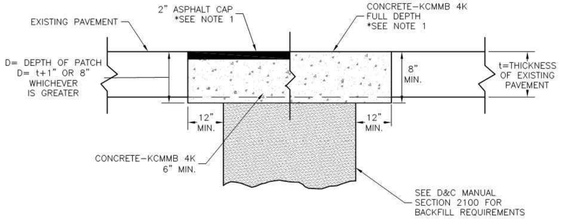
GENERAL NOTES
1. SUBGRADE SHALL BE STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
2. ALL DRIVE APPROACHES SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG) FOR SLOPE REQUIREMENTS WHEN SIDEWALK IS REQUIRED (SEE ADA RAMP RETROFIT DETAIL GEN-3B, SIDEWALK/SHARED USE PATH RAMP AT DRIVEWAY DETAIL).
3. JOINT AT BACK OF CURB LINE SHALL BE AN ISOLATION JOINT FOR RESIDENTIAL DRIVEWAYS.
4. KCMMB 4K CONCRETE MIX IS REQUIRED FOR ALL CURBS.
5. COMMERCIAL DRIVEWAYS, IN THE PUBLIC RIGHT OF WAY, SHALL BE KCMMB 4K CONCRETE MIX.
6. RESIDENTIAL DRIVEWAYS, IN THE PUBLIC RIGHT OF WAY, KCMMB 4K CONCRETE MIX IS RECOMMENDED. OTHER CONCRETE MIXES NEEDS TO BE APPROVED BY CITY INSPECTOR.
7. A JOINT MUST BE INSTALLED AT THE RIGHT OF WAY BOUNDARY FOR PROPERTY DELINEATION.
8. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.
9. ¾" FROM TOP OF CURB TO FLOWLINE AT DRIVEWAY (TYPE CC-1 CURB ONLY). MUST MAINTAIN ORIGINAL FLOWLINE OF CURB.
10. SIDEWALK ADJOINING CURB SHALL BE 6" THICK, EXTENDING 3' FROM THE DRIVEWAY.
11. THE MAXIMUM WIDTH OF A RESIDENTIAL DRIVEWAY IS 36 FEET WITHIN THE RIGHT OF WAY.

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

STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
DRIVEWAY DETAIL

Project:
Sheet Name:
Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #:

GEN-1



TRENCHING/PATCHING DETAIL
NOT TO SCALE

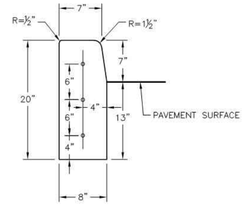
NOTE:
1. ASPHALT CAP OR FULL DEPTH CONCRETE SHALL BE DETERMINED BY CITY INSPECTOR.

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

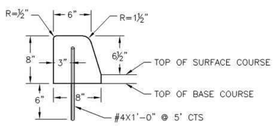
TRENCHING/PATCHING ROADWAYS DETAIL

Date: 04/17
Drawn By: MJF
Checked By: DL

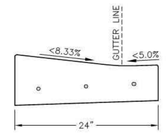
GEN-5



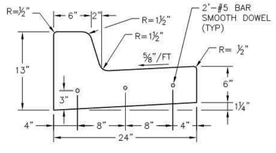
STRAIGHT CURB
(TYPE C-1)



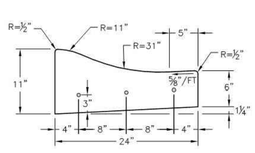
DOWELLED CURB
(TYPE DC)



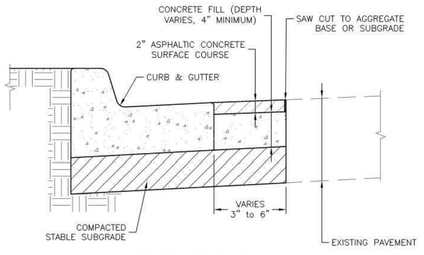
CURB & GUTTER DETAIL AT RAMP
(ADA SLOPE REQUIREMENTS)



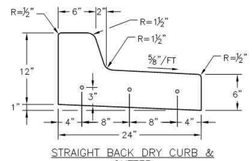
STRAIGHT BACK CURB & GUTTER
(TYPE CG-1)



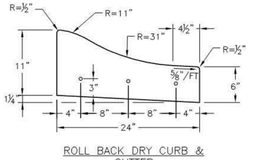
ROLL BACK CURB & GUTTER
(TYPE CG-2)



CURB REPLACEMENT DETAIL



STRAIGHT BACK DRY CURB & GUTTER
(TYPE CG-1 DRY)



ROLL BACK DRY CURB & GUTTER
(TYPE CG-2 DRY)

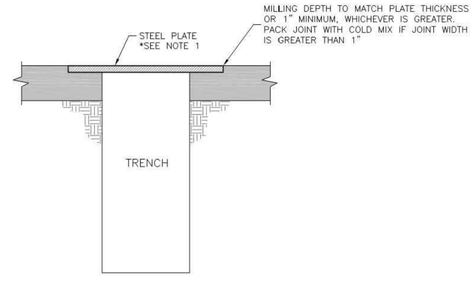
GENERAL NOTES
1. ¾" ISOLATION JOINTS WITH 3 (2'-#5 BAR) SMOOTH DOWELS SHALL BE PLACED AT RADIUS POINTS AND AT 150' INTERVALS. THESE DOWEL BARS SHALL BE GREASED AND WRAPPED ON ONE END WITH EXPANSION TUBES.
2. 3" DEEP CONTRACTION JOINTS SHALL BE INSTALLED AT APROXIMATELY 10' INTERVALS. THESE JOINTS SHALL PASS ACROSS THE ENTIRE CURB SECTION.
3. CONCRETE FILL SHALL HAVE UNIFORM AND SMOOTH FINISH
4. KCMMB 4K CONCRETE SHALL BE USED FOR ALL CURB.
5. ASPHALTIC CONCRETE SURFACE COURSE SHALL CONFORM TO STANDARD SPECIFICATIONS SECTION 2205.2.
6. CURBS FOR NEW STREETS SHALL BE BUILT ON ASPHALT OR AGGREGATE BASE AS SHOWN IN TYPICAL SECTION DETAIL.
7. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.

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

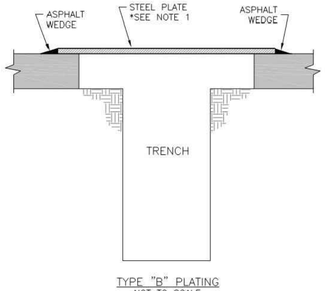
STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
CURB & GUTTER DETAIL

Project:
Sheet Name:
Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #:

GEN-4



TYPE "A" PLATING
NOT TO SCALE
(CITY POSTED SPEEDS OF 35 MPH AND GREATER)



TYPE "B" PLATING
NOT TO SCALE
(CITY POSTED SPEEDS OF 30 MPH OR LESS)

GENERAL NOTES:
1. THE CONTRACTOR SHALL PROVIDE ADEQUATE OVERLAP OF PLATE ON ASPHALT TO ASSURE NO SLIPPAGE OF PLATE AND NO COLLAPSING OF TRENCH.
2. ALL PLATES SHALL BE ANCHORED SO PLATES DO NOT MOVE OR SHIFT UNDER TRAFFIC.

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

TRENCHING PLATE DETAIL

Date: 04/17
Drawn By: MJF
Checked By: DL

GEN-6

Final Development Plans

22-0133
Heartland Market
Lee's Summit, Jackson County, Missouri

Typical Details - General 1

NO.	DATE	REVISION

DRAWN BY ALS | CHECKED BY DJB

Renaissance Infrastructure Consulting
816.800.0950
www.ric-consult.com
400 E. 17th Street
Kansas City, Missouri 64108
MO Certificate of Authority: E-2010033630

STATE OF MISSOURI
DUSTIN J. BURTON
NUMBER PE-2010015709
5/30/2023
PROFESSIONAL ENGINEER

Sheet
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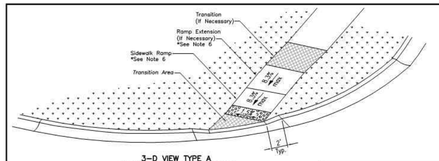
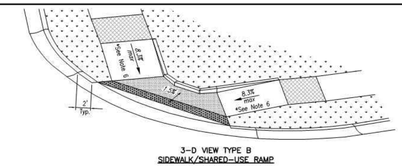


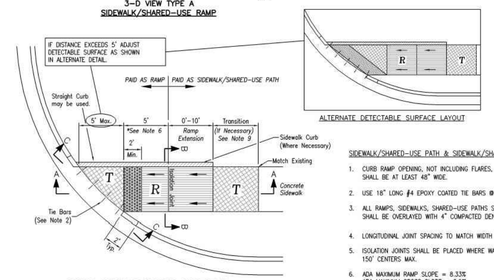
3-D VIEW TYPE A
SIDEWALK/SHARED-USE RAMP

LEGEND

- R — SIDEWALK RAMP
- TS — TURNING SPACE
- DETECTABLE WARNING SURFACE
- T — TRANSITION



3-D VIEW TYPE B
SIDEWALK/SHARED-USE RAMP

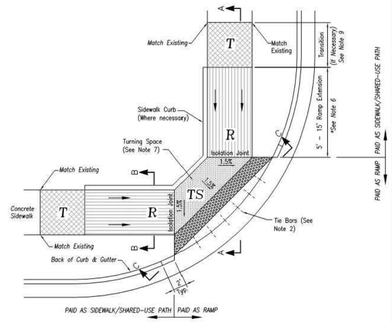


TYPE A SIDEWALK/SHARED-USE RAMP
Not to Scale

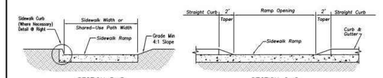
ALTERNATE DETECTABLE SURFACE LAYOUT

SIDEWALK/SHARED-USE PATH & SIDEWALK/SHARED-USE RAMP NOTES:

1. CURB RAMP OPENING, NOT INCLUDING FLARES, SHALL MATCH EXISTING SIDEWALK WIDTH AND OPENING SHALL BE AT LEAST 48" WIDE.
2. USE 18" LONG #4 EPOXY COATED TIE BARS @ 24" O.C. EMBED TIE BARS 9" IN EACH DIRECTION.
3. ALL RAMPS, SIDEWALKS, SHARED-USE PATHS SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
4. LONGITUDINAL JOINT SPACING TO MATCH WIDTH OF SIDEWALK.
5. ISOLATION JOINTS SHALL BE PLACED WHERE WALK ABUTS DRIVEWAYS AND SIMILAR STRUCTURES, AND 150' CENTERS MAX.
6. ADA MAXIMUM RAMP SLOPE = 8.33%
   ADA MAXIMUM CROSS SLOPE = 2.0%
   *ROADWAY EXCEPTION: WHERE EXISTING ROAD PROFILE GRADE DOES NOT ALLOW RAMP TO MEET RAMP SLOPE REQUIREMENT OF 8.33% OR LESS, THE RAMP SHALL BE EXTENDED TO A LENGTH OF 15 FEET TO MATCH EXISTING SIDEWALK. CROSS SLOPE OF RAMP SHALL BE 1.5%, ±0.5%.
7. TURNING SPACES SHALL BE 1.5%, ±0.5%, SLOPE IN ANY DIRECTION. TURNING SPACES SHALL HAVE A MINIMUM 4'x4' TURNING AREA. TURNING SPACES, WITH A SIDEWALK CURB, SHALL HAVE A 5' TURNING AREA PERPENDICULAR TO THE SIDEWALK CURB.
8. FOR RETROFIT WORK, SLOPES TO BE DETERMINED IN FIELD BY CONTRACTOR AND APPROVED BY CITY INSPECTOR.
9. RAMP EXTENSION AREA SHALL NOT BE USED AS TRANSITION TO EXISTING SIDEWALK. ANY TRANSITIONS REQUIRED TO MATCH RAMPS TO EXISTING SIDEWALK SHALL REQUIRE REMOVAL AND REPLACEMENT OF ADDITIONAL SIDEWALK BEYOND THE RAMP AREA. SIDEWALK TRANSITION LENGTH SHALL BE EQUAL TO OR GREATER THAN THE WIDTH OF THE EXISTING SIDEWALK. RAMP EXTENSIONS SHALL BE A CONTINUOUS SLOPE.
10. ALL SIDEWALK AND RAMP CONSTRUCTION SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG).



TYPE B SIDEWALK/SHARED-USE RAMP
Not to Scale

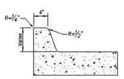


SECTION A-A

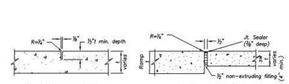
SECTION B-B

SECTION C-C

TYPE A & B SIDEWALK RAMP
Not to Scale

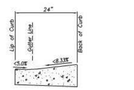


SIDEWALK CURB DETAIL
Not to Scale



CONTRACTION JOINT ISOLATION JOINT

JOINT DETAILS
Not to Scale



CURB & GUTTER DETAIL AT RAMP
Not to Scale

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

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

Project
Sheet Name

PAID AS RAMP PAID AS SIDEWALK/SHARED-USE PATH

Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #:

GEN-3A

Final Development Plans

22-0133
Heartland Market
Lee's Summit, Jackson County, Missouri

Typical Details - General 2

NO.	DATE	REVISION

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ALS	DJB

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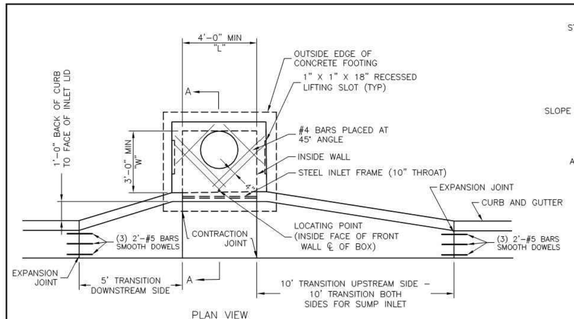
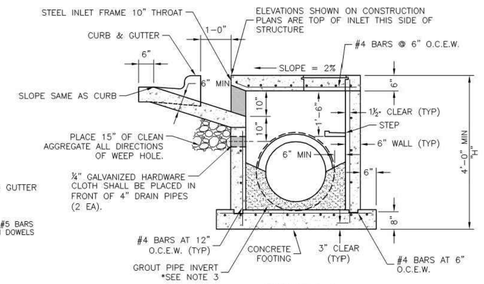
400 E 17th Street
Kansas City, Missouri 64108
816.800.0950
www.ric-consult.com
MO Certificate of Authority: E-2010033630

STATE OF MISSOURI
DUSTIN J. BURTON
NUMBER PE-2011015709
PROFESSIONAL ENGINEER
5/30/2023

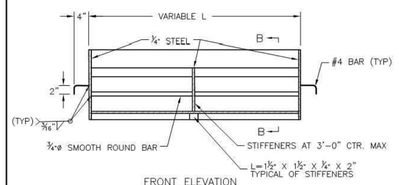
Sheet
C19



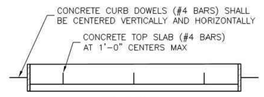
PLAN VIEW



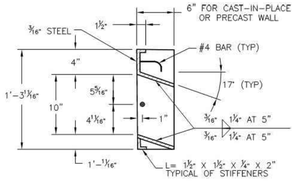
SECTION A–A



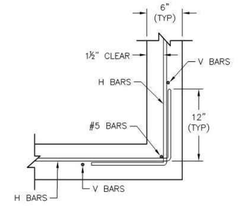
FRONT ELEVATION



PLAN VIEW



SECTION B–B



WALL CORNER DETAIL

STEEL FRAME NOTES:
1. ALL WELDS SHALL BE PERFORMED IN ACCORDANCE WITH APPROPRIATE AWS SPECIFICATIONS AND PROCEDURES.
2. ALL WELDS ON EXPOSED SURFACES SHALL BE DRESSED SO AS TO PROVIDE A PLEASING FINISHED APPEARANCE.
3. THE ENTIRE FRAME SHALL BE PAINTED A SINGLE COAT OF CHEM–PRIME #37H–78 PRIMER (GRAY) OR EQUAL.

GENERAL NOTES:
1. THE FIRST DIMENSION LISTED IN THE CONSTRUCTION NOTES IS THE "L" DIMENSION. THE SECOND DIMENSION IS THE "W" DIMENSION.
2. FLOW LINES LISTED ON THE PROJECT PLANS ARE LISTED AT THE INSIDE FACE OF THE WALL.
3. FLOOR OF INLET GROUTED AND SHAPED TO MATCH PIPE INVERT TO PROVIDE SMOOTH FLOW.
4. LOCATE MH RING AND COVER ON BLANK WALL IF POSSIBLE.
5. STEPS SHALL BE SPACED AT 1'–4" O.C. VERTICALLY ON BLANK WALL IF POSSIBLE.
6. BEVEL ALL EXPOSED EDGES WITH ¾"CHAMFER OR ¾" TOOLED EDGE.
7. ON–GRADE INLETS SHALL CONFORM TO THE STREET GRADE AND SUMP INLETS SHALL BE LEVEL.
8. PRECAST LIDS SHALL BE PINNED, SEALED WITH NON–SHRINKABLE GROUT AND REMOVABLE FOR FUTURE MAINTENANCE.
9. LIFTING RINGS SHALL BE REMOVED AND SEALED WITH NON–SHRINKABLE GROUT
10. FOR RING AND COVER SEE THE STORMWATER APPROVED PRODUCT LIST.

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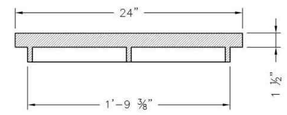
STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

Project:
Sheet Name: CURB INLET DETAIL

Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #:

STM-1



STANDARD 24" MANHOLE COVER
MINIMUM WEIGHT = 160 LB
NOTE: PICK HOLES NOT SHOWN

*COVER AND FRAME MODEL INFORMATION REFER TO THE STORMWATER APPROVED PRODUCT LIST.

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STORM MANHOLE COVER DETAIL

Date: 04/17
Drawn By: MJF
Checked By: DL

STM-6

Final Development Plans

22-0133
Heartland Market
Lee's Summit, Jackson County, Missouri

Typical Details - Storm

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400 E 17th Street
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NUMBER PE-2011015709
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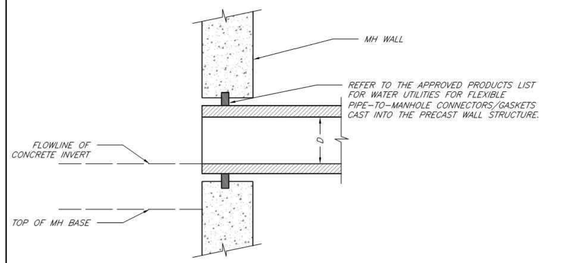
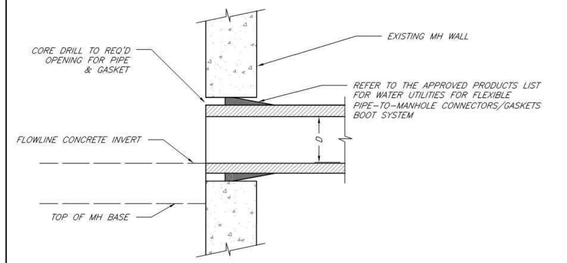


NEW MANHOLE



EXISTING MANHOLE

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MISSOURI
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MANHOLE WALL CONNECTIONS

Date:	02/13
Drawn By:	JN
Checked By:	DL
FILE:	SAN-5
Rev:	1/14
Rev:	

Final Development Plans

22-0133
Heartland Market
Lee's Summit, Jackson County, Missouri

Typical Details - Sanitary

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Kansas City, Missouri 64108
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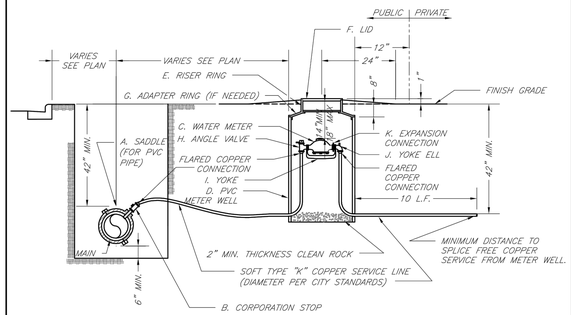

TYPICAL METER INSTALLATION – 2" AND SMALLER
NOT TO SCALE

NOTES:

1. METER INSTALLATION SHALL NOT BE LOCATED IN AREAS SUBJECT TO VEHICULAR TRAFFIC OR IN CONCRETE PAVEMENT WITHOUT CITY APPROVAL.
2. IF METER IS TO BE LOCATED OTHER THAN IN FRONT OF PROPERTY LINE, CITY APPROVAL SHALL BE OBTAINED.
3. CITY TO FURNISH ITEMS A–K.
4. NO OTHER EQUIPMENT SHALL BE INSTALLED IN THIS PIT.
5. 42" MINIMUM BURY DEPTH FOR ALL SERVICE LINES.
6. EXCAVATION FOR TAP TO EXPOSE 4 LINEAR FEET OF MAIN.
7. NO SPLICES ALLOWED BETWEEN METER AND MAIN.
8. SERVICE CONNECTION TAP AT APPROXIMATELY 45 DEGREES.
9. LID AND RISER RING SHALL BE SET SO THAT GROUND WATER WILL DRAIN AWAY FROM THE WELL.
10. CONTACT WATER UTILITIES, 816-969-1900, FOR REQUIREMENTS OF A METER LARGER THAN 2"

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SERVICE CONNECTION/METER WELL

Date:	02/13
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Checked By:	DL
FILE:	WAT-11
Rev:	1/14
Rev:	

Final Development Plans

22-0133
Heartland Market
Lee's Summit, Jackson County, Missouri

Typical Details - Water

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5/30/2023

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C22

LANDSCAPE CALCULATIONS

Zoning: CP-2 (Planned Community Commercial)

Street Frontage
Required: 1 Tree / 30' Street Frontage and 20' Landscape Strip with 1 Shrub / 20'
Provided:
Colbern Rd (256') = 9 Trees + 13 Shrubs
Ikerd Rd (256') = 9 Trees + 13 Shrubs
Lucky Rd (226') = 8 Trees + 12 Shrubs

Open Yard
Required: 2 Shrubs / 5,000 sf Lot Area (excluding building) + 1 Tree / 5,000 sf Landscape Open Space
Provided: Lot Area (68,560 sf) = 28 Shrubs; Landscape Open Space (17,229 sf) = 4 Trees

Trash Storage
Required: Screened from public view
Provided: As required

Interior Parking Lot
Required: 1 Tree / Parking Island
Provided: 2 Islands = 2 Trees

Parking Lot Screening
Required: Min. 2.5' ht. perimeter screen adj. to street - 12 Shrubs / 40'
Provided: Colbern Rd (230') = 69 Shrubs

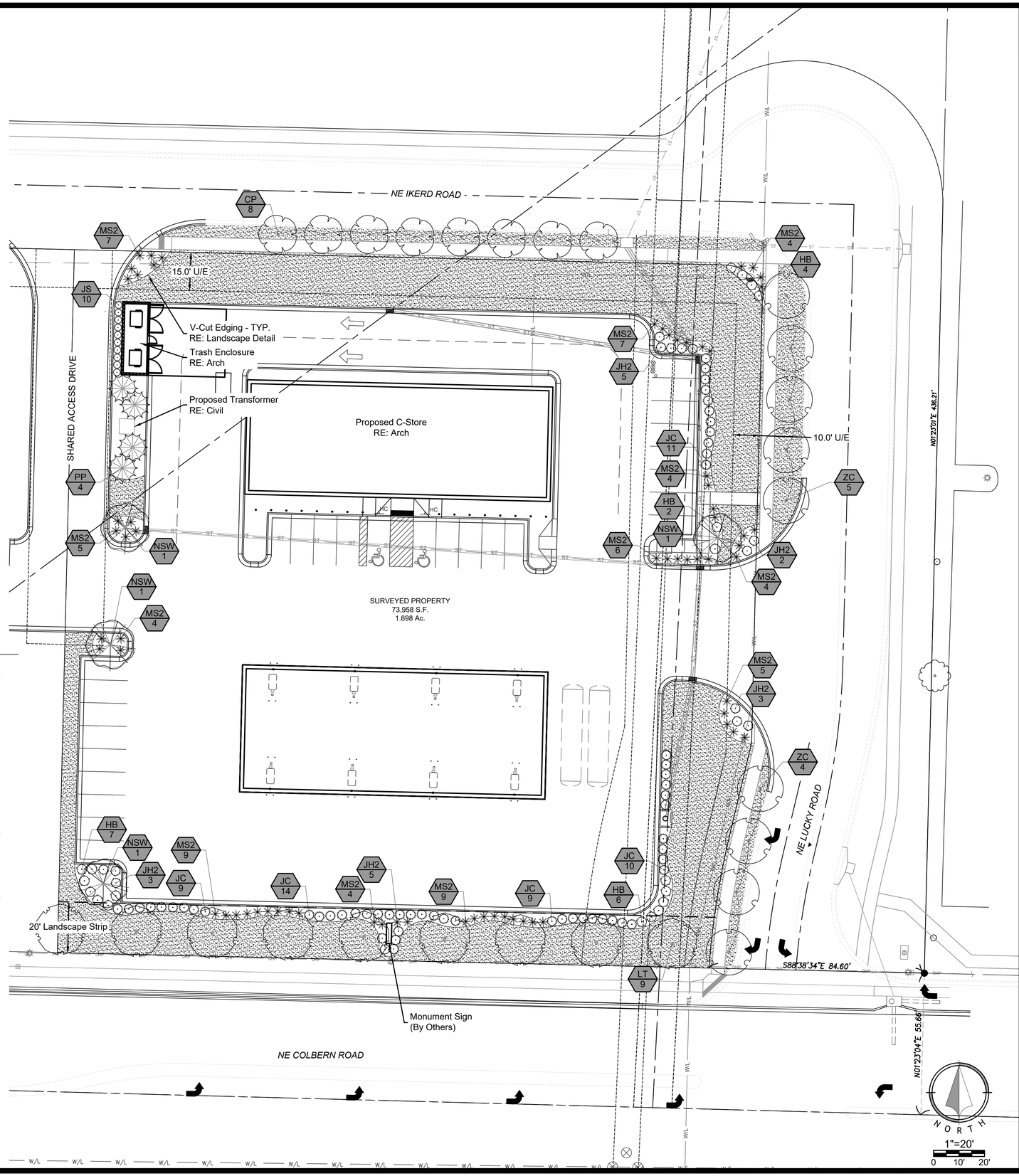
LANDSCAPE NOTES

1. LOCATE UTILITIES PRIOR TO COMMENCING LANDSCAPE OPERATIONS. ALL TREES SHALL BE FIELD POSITIONED AS TO AVOID CONFLICTS WITH EXISTING AND PROPOSED UTILITIES. NOTIFY LANDSCAPE ARCHITECT OF ANY CONFLICTS OR OBSTRUCTIONS.
2. CONTRACTOR SHALL STAKE ALL PLANTING AREAS IN THE FIELD PRIOR TO PLANTING FOR APPROVAL OF THE OWNER OR THEIR REPRESENTATIVE.
3. QUANTITIES SHOWN ARE FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY ALL PLANT QUANTITIES PRIOR TO BIDDING AND SHALL BE RESPONSIBLE FOR ALL QUANTITIES FOR THEIR BID. ANY DISCREPANCIES WITH THE PLAN SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT. THE PLAN QUANTITIES SHALL SUPERCEDE SCHEDULED QUANTITIES.
4. ALL PLANT MATERIAL SHALL BE SPECIMEN QUALITY AND SHALL COMPLY WITH RECOMMENDATIONS AND REQUIREMENTS OF ANSI Z60.1 THE 'AMERICAN STANDARD FOR NURSERY STOCK'.
5. ALL PLANTING BEDS & NATIVE GRASS STANDS SHALL BE EDGED AS SHOWN IN PLAN.
6. PREPARE PLANTING BEDS AND INCORPORATE AMENDMENTS ACCORDING TO PLANS.
7. SHREDDED HARDWOOD MULCH, PER SPECIFICATIONS SHALL BE USED AS A THREE INCH (3") TOP DRESSING IN ALL PLANTING BEDS AND AROUND ALL TREES. SINGLE TREES AND SHRUBS SHALL BE MULCHED TO THE OUTSIDE EDGE OF THE SAUCER OR LANDSCAPE ISLAND.
8. ALL TREES SHALL BE STAKED PER DETAIL.
9. ALL PLANT MATERIAL SHALL BE INSTALLED TO ALLOW A ONE FOOT (1') CLEARANCE BETWEEN PLANT AND ADJACENT PAVEMENT.
10. THE LANDSCAPE CONTRACTOR SHALL NOT COMMENCE WORK UNTIL THE SITE IS FREE OF DEBRIS CAUSED BY ON-GOING CONSTRUCTION OPERATIONS. REMOVAL OF DEBRIS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. LANDSCAPE WORK SHALL NOT BEGIN UNTIL THE LANDSCAPE ARCHITECT AND OWNER HAVE GIVEN WRITTEN APPROVAL FOR SUCH. THERE SHALL BE NO DELAYS DUE TO LACK OF COORDINATION FOR THIS ACTIVITY.
11. THE LANDSCAPE ARCHITECT AND OWNER SHALL APPROVE GRADES AND CONDITION OF SITE PRIOR TO SODDING/SEEDING OPERATIONS.
12. ALL AREAS DISTURBED DURING CONSTRUCTION AND NOT DESIGNATED FOR OTHER PLANTINGS OR HARDSCAPE SHALL BE SODDED WITH TURF TYPE FESCUE.
13. ALL LANDSCAPE AREAS SHALL BE IRRIGATED. TURF AREAS SHALL BE IRRIGATED BY SPRAY OR ROTOR. PLANT BEDS SHALL BE IRRIGATED BY DRIP IRRIGATION. IRRIGATION SYSTEM SHALL INCLUDE AUTOMATIC RAIN-SENSOR DEVICE. IRRIGATION SHOP DRAWINGS SHALL BE PROVIDED BY THE CONTRACTOR FOR APPROVAL PRIOR TO CONSTRUCTION.

PLANT SCHEDULE

TREES	CODE	BOTANICAL / COMMON NAME	CONT	SIZE	QTY
	CP	Celtis occidentalis `Prairie Sentinel` / Prairie Sentinel Hackberry	B&B, 3" Cal.		8
	LT	Liriodendron tulipifera / Tulip Poplar	B&B, 3" Cal.		9
	NSW	Nyssa sylvatica `Wildfire` / Black Gum	B&B, 3" Cal.		4
	ZC	Zelkova serrata `City Sprite` TM / City Sprite Zelkova	B&B, 3" Cal.		9
EVERGREEN	CODE	BOTANICAL / COMMON NAME	CONT	SIZE	QTY
	PP	Picea pungens `Fat Albert` / Colorado Spruce	B&B, 8` ht. min.		4
SHRUBS	CODE	BOTANICAL / COMMON NAME	CONT	-	QTY
	HB	Hydrangea paniculata `ILVOBO` TM / Bobo Panicle Hydrangea	3 Gal.	18"-24" Ht. Min.	19
	JC	Juniperus chinensis `Gold Lace` / Gold Lace Juniper	5 Gal.	18"-24" Ht. Min.	53
	JH2	Juniperus horizontalis `Hughes` / Hughes Juniper	5 Gal.		18
	JS	Juniperus scopulorum `Skyrocket` / Skyrocket Juniper	5 Gal.	18"-24" Ht. Min.	10
	MS2	Miscanthus sinensis `Morning Light` / Eulalia Grass	3 Gal.	18"-24" Ht. Min.	68

GROUND COVERS	BOTANICAL / COMMON NAME	CONT	SPACING	QTY
	Turfgrass Sod Fescue Mix; RE: Notes / Fescue Sod	SOD		16,544 sf



Final Development Plans

22-0133
Heartland Market
Lee's Summit, Jackson County, Missouri

Landscape Plan

NO.	DATE	REVISION

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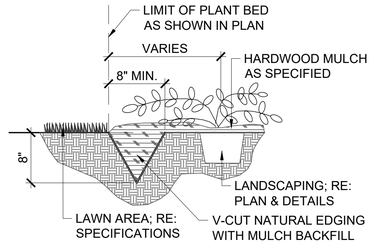
STATE OF MISSOURI
T. ANDREW GABBERT
NUMBER LA-2007013278
LANDSCAPE ARCHITECT
6-30-24
T. Andrew Gabbert
MO# LA-2007013278

Sheet
L01

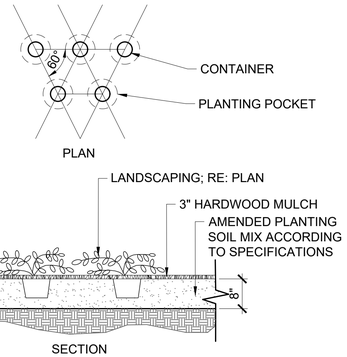
UTILITY BOXES SHALL BE CLUSTERED AS MUCH AS POSSIBLE

TYPICAL UTILITY BOX SCREENING DETAILS - NTS

NOTES:
1. CONTRACTOR SHALL LOCATE AND MARK ALL PLANTBED LOCATIONS PRIOR TO EXCAVATING FOR FINAL APPROVAL BY OWNER OR LANDSCAPE ARCHITECT.
2. TRANSITION TO MULCH CONTAINMENT DETAIL AT ALL LOCATIONS ADJACENT TO CURBS & SIDEWALKS. RE: DETAIL, THIS SHEET.
3. CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS PRIOR TO TRENCHING OR LANDSCAPE INSTALLATION.

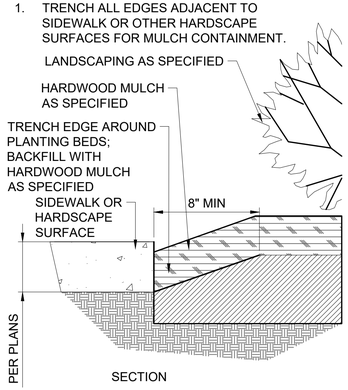


V-CUT NATURAL EDGE DETAIL - NTS

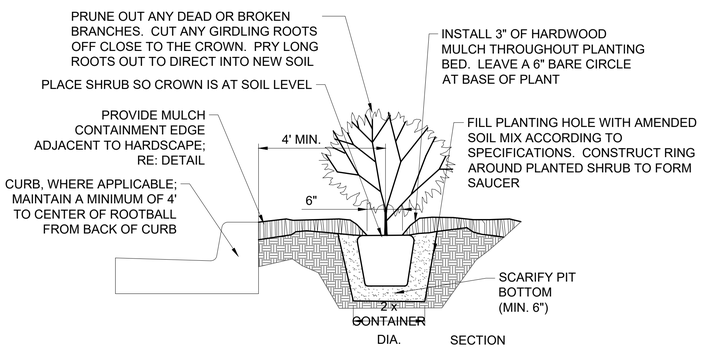


CONTAINER PLANTING DETAIL - NTS

NOTES:
1. TRENCH ALL EDGES ADJACENT TO SIDEWALK OR OTHER HARDSCAPE SURFACES FOR MULCH CONTAINMENT.



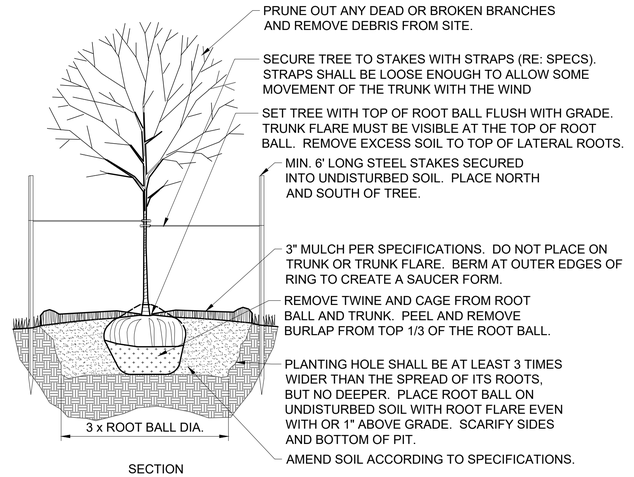
MULCH CONTAINMENT DETAIL - NTS



NOTES:
1. REFER TO SPECIFICATIONS FOR TOPSOIL BACKFILL MIX.
2. CONTRACTOR TO WATER THOROUGHLY AFTER PLANTING
3. INSTALLATION TO BE IN ACCORDANCE WITH PLANTING SPECIFICATIONS
4. WHERE ADJACENT TO CURB, MAINTAIN THE MINIMUM OFFSET SHOWN. FOR SHRUBS LARGER THAN 4' MATURE DIAMETER, PROVIDE A GREATER OFFSET EQUAL TO 1/2 OF THE MATURE DIAMETER MINIMUM.

SHRUB PLANTING DETAIL - NTS

NOTES:
1. TREES THAT DO NOT MEET THE SIZE REQUIREMENT WILL BE REJECTED
2. TREES SHALL BE INSPECTED BY OWNERS REPRESENTATIVE PRIOR TO INSTALLATION.



DECIDUOUS TREE PLANTING DETAIL - NTS

Final Development Plans

22-0133
Heartland Market
Lee's Summit, Jackson County, Missouri

Landscape Details

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4,00 E 17TH STREET KANSAS CITY, MISSOURI 64108
816.800.0950
WWW.RIC-CONSULT.COM
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Sheet
L02

LUMINAIRE SCHEDULE

SYMBOL	MOUNTING	MODEL	WATTAGE	QUANTITY	MOUNTING HEIGHT	LAMP DEPRECIATION
□	RECESSED	CREE, INC., CAN-304-SL-xx-04-E-UL-700-40K or BXCPxE04E-UD7 (700mA)	135	32	16'-6"	0.9
○—□	POLE	HUBBELL OUTDOOR, RAR-2-320L-110-4K7-2-BC	110	2	28'	0.9
○—□	POLE	HUBBELL OUTDOOR, RAR-2-320L-110-4K7-3-BC	110	10	28'	0.9
○—□	POLE	HUBBELL OUTDOOR, RAR2-320L-110-4K7-4W	110	1	28'	0.9

Canopy

AVERAGE FOOT-CANDLES	21.43
MAXIMUM FOOT-CANDLES	32.8
MINIMUM FOOT-CANDLES	6.4
AVERAGE TO MINIMUM FC RATIO	3.36

Parking Lot

AVERAGE FOOT-CANDLES	2.42
MAXIMUM FOOT-CANDLES	6.3
MINIMUM FOOT-CANDLES	0.5
AVERAGE TO MINIMUM FC RATIO	4.87

HUBBELL Outdoor Lighting

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

RATIO Series

AREA/SITE LIGHTER

FEATURES

- Low profile LED area/site luminaire with a variety of IES distributions for lighting applications such as retail, commercial and campus parking lots
- Featuring Micro Strike Optics which maximizes target zone illumination with minimal losses at the house-side, reducing light trespass issues
- Visual comfort standard
- Compact and lightweight design with low EPA
- 3G rated for high vibration applications including bridges and overpasses
- Control options including photo control, occupancy sensing, NX Distributed Intelligence™ and 7-Pin with networked controls
- Best in class surge protection available

c UL us IP66 DLC DLC PREMIUM BUY AMERICAN SOLUTIONS

See Certification Specifications

RELATED PRODUCTS

Airo | Cimarron LED | Ratio Family

304 Series™

LED Recessed Canopy Luminaire

Rev. Date: V7 04/05/2021

Product Description

Luminaire housing is constructed from rugged die cast aluminum components (RS Mount) or die cast and extruded aluminum components (RD Mount). LED driver is mounted in a sealed weathertight center chamber that allows for access from below the fixture. Luminaire mounts directly to the canopy deck and is secured in place with die cast aluminum trim frame. Luminaire housing is provided with factory applied foam gasket that provides a watertight seal between luminaire housing and canopy deck. Suitable for use in single or double skin canopies with 16" (406 mm) wide panels. Designed for canopies of 19-22 gauge (maximum 0.040" [1 mm] thickness). **Applications:** Petroleum stations, convenience stores, drive-thru banks and restaurants, retail and grocery

Performance Summary

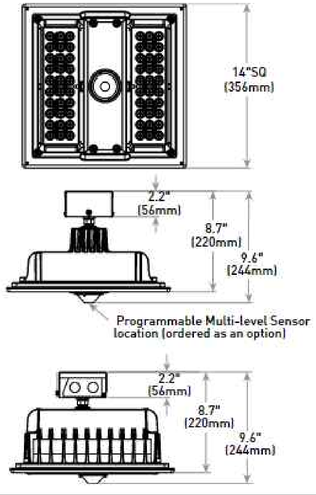
- Patented NanoOptic® Product Technology
- Assembled in the U.S.A. of U.S. and imported parts
- **CRI:** Minimum 70 CRI
- **CCT:** 4000K (+/- 300K), 5700K (+/- 500K) standard
- **Limited Warranty†:** 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

† See http://creelighting.com/warranty for warranty terms

Accessories

Field-Installed
Hand-Held Remote XA-SENSREM - For successful implementation of the programmable multi-level option, a minimum of one hand-held remote is required

RS Mount



Final Development Plan

22-0133
Heartland Market - Lee's Summit
Lee's Summit, Jackson County, MO

Photometric Plan

NO.	DATE	REVISION

DRAWN BY BMR | CHECKED BY GDN

Renaissance Infrastructure Consulting
913.317.9500
WWW.RIC-CONSULT.COM
132 ABBIE AVENUE KANSAS CITY, KANSAS 66108
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