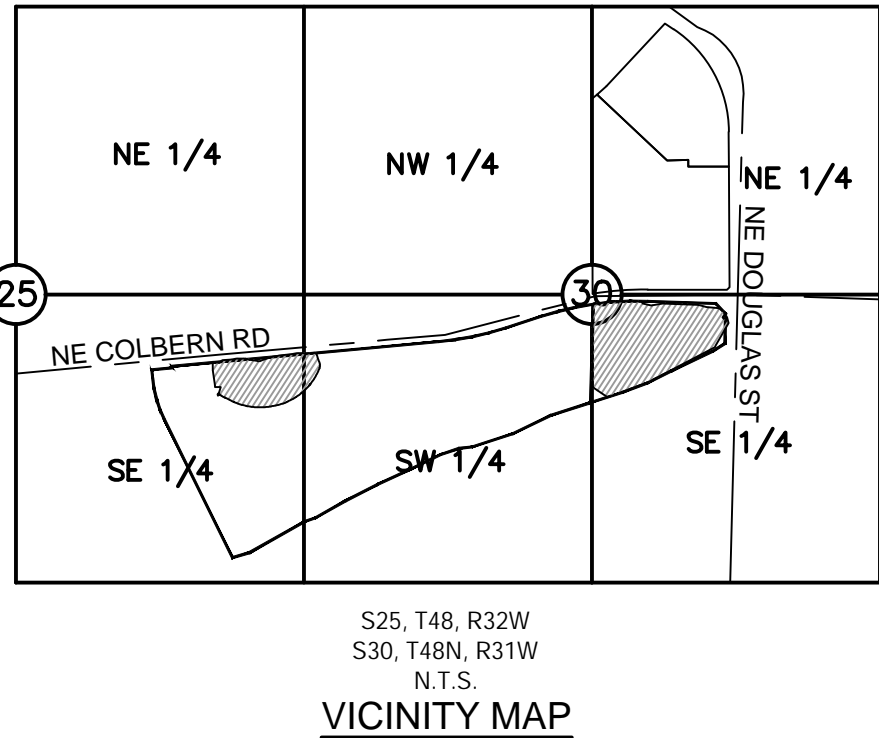
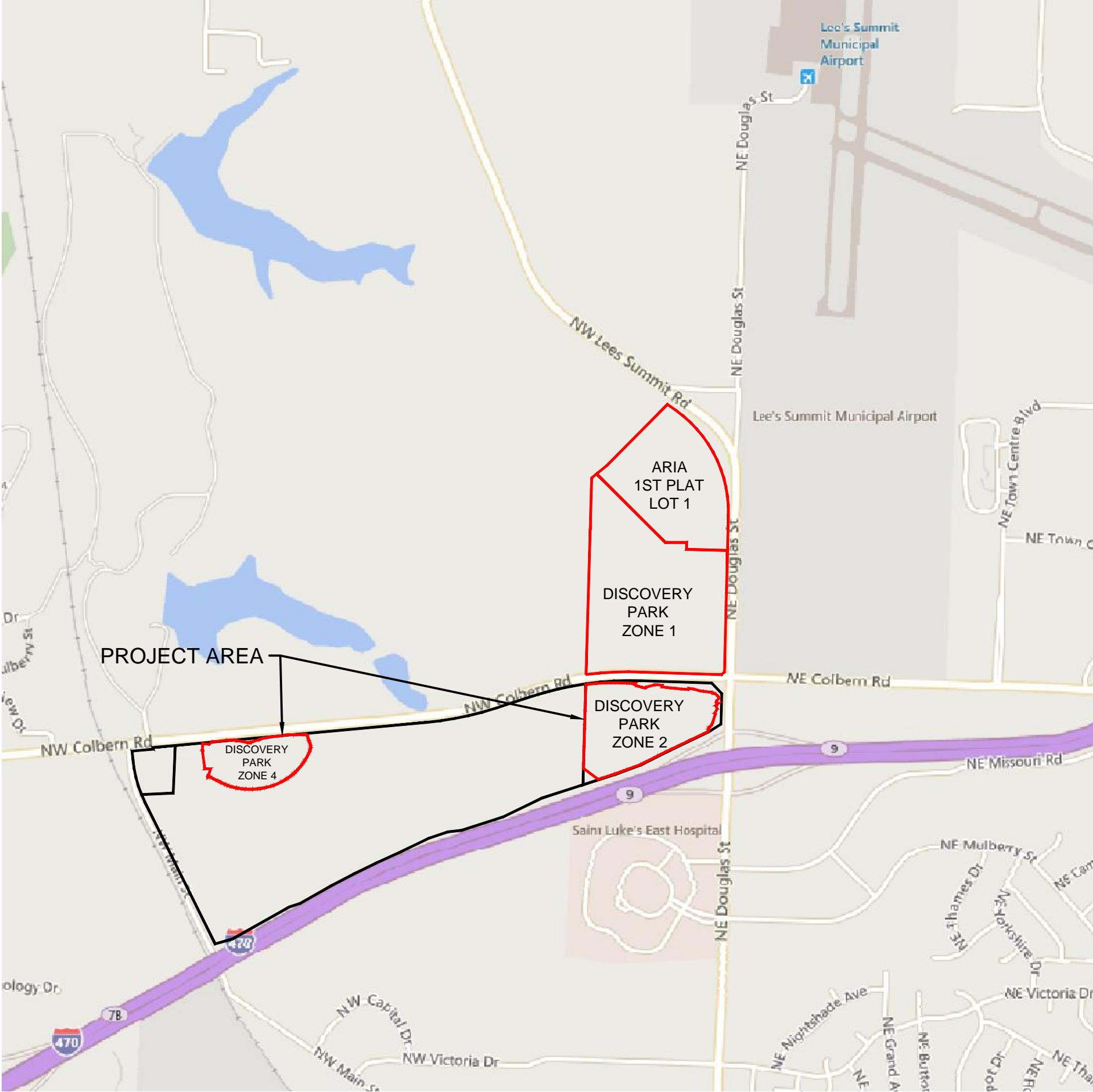


MASS GRADING & EROSION AND SEDIMENT CONTROL PLANS
FOR DISCOVERY PARK ZONES 2 AND 4

SECTION 25, TOWNSHIP 48N, RANGE 32W
SECTION 30, TOWNSHIP 48N, RANGE 31W
IN LEE'S SUMMIT, JACKSON COUNTY, MO
ZONE 2 DISTURBED AREA 17.85 AC.
ZONE 4 DISTURBED AREA 8.57 AC.



PROJECT TEAM & UTILITY CONTACT LIST	
OWNER/DEVELOPER INTRINSIC DEVELOPMENT 3622 ENDEAVOR AVE. STE. 101 COLUMBIA, MO 65201 CONTACT: JON ODLE PHONE: 573.615.2252	UTILITY SERVICE NUMBERS NAME: LEE'S SUMMIT PUBLIC WORKS PHONE: 816-969-1800
	NAME: LEE'S SUMMIT WATER UTILITIES PHONE: 816-969-1900
	NAME: SPIRE (MGE) PHONE: 314-342-0500
ENGINEER OLSSON 1301 BURLINGTON, SUITE 100 NORTH KANSAS CITY, MO 64116 CONTACT: DAVID EICKMAN PHONE: 816.854.9315 EMAIL: DEICKMAN@OLSSON.COM	NAME: AT&T PHONE: 800-286-8313
	NAME: EVERGY PHONE: 816-471-5275
SURVEYOR OLSSON 1301 BURLINGTON, SUITE 100 NORTH KANSAS CITY, MO 64116 CONTACT: JASON ROUDEBUSH PHONE: 816.361.1177 EMAIL: JROUDEBUSH@OLSSON.COM	NAME: SPECTRUM (TWC) PHONE: 877-772-2253
	NAME: GOOGLE FIBER PHONE: 877-454-6959



PROPERTY DESCRIPTION

DISCOVERY PARK ZONE 2:
A TRACT OF LAND IN THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 30 TOWNSHIP 48 NORTH, RANGE 31 WEST OF THE 5TH PRINCIPAL MERIDIAN IN THE CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI BEING BOUNDED AND DESCRIBED BY OR UNDER THE DIRECT SUPERVISION OF JASON S ROUDEBUSH, P.L.S. 2002014092 AS FOLLOWS: COMMENCING AT THE SOUTHWEST CORNER OF SAID SOUTHEAST QUARTER, SAID POINT ALSO BEING THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER OF SAID SECTION 30; THENCE NORTH 01°36'54" EAST ON THE WEST LINE OF SAID SOUTHEAST QUARTER, SAID LINE ALSO BEING THE EAST LINE OF SAID SOUTHWEST QUARTER, 1,633.15 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF INTERSTATE HIGHWAY NO. 470 AS ESTABLISHED BY THE REPORT OF COMMISSIONERS, CASE 741042, RECORDED AS DOCUMENT NO. 19710086010, IN BOOK 1258 AT PAGE 1207, SAID POINT ALSO BEING THE POINT OF BEGINNING OF THE TRACT OF LAND TO BE HEREIN DESCRIBED: THENCE CONTINUING NORTH 01°36'54" EAST ON THE WEST LINE OF SAID SOUTHEAST QUARTER, AND THE EAST LINE OF SAID SOUTHWEST QUARTER, 925.47 FEET TO A POINT ON THE SOUTHERLY RIGHT-OF-WAY LINE OF NW COLBERN ROAD AS ESTABLISHED BY DOCUMENT NO. 193010284624; THENCE EASTERLY ON A CURVE TO THE RIGHT HAVING AN INITIAL TANGENT BEARING OF NORTH 81°50'55" EAST WITH A RADIUS OF 2,924.93 FEET, A CENTRAL ANGLE OF 10°02'09" AND AN ARC DISTANCE OF 512.33 FEET; THENCE SOUTH 88°06'56" EAST, ON SAID SOUTHERLY RIGHT-OF-WAY LINE, 642.13 FEET TO A POINT ON THE WESTERLY RIGHT-OF-WAY LINE OF NE DOUGLAS STREET ESTABLISHED BY SAID REPORT OF COMMISSIONERS CASE 741042, RECORDED AS DOCUMENT NO. 19710086010, IN BOOK 1258 AT PAGE 1207; THENCE SOUTH 43°46'24" EAST, ON SAID WESTERLY RIGHT-OF-WAY LINE, 133.40 FEET; THENCE SOUTH 01°29'58" WEST, ON SAID WESTERLY RIGHT-OF-WAY LINE, 280.00 FEET TO A POINT ON THE AFORESAID NORTHWESTERLY RIGHT-OF-WAY LINE OF INTERSTATE HIGHWAY NO. 470; THENCE SOUTH 57°43'10" WEST, ON SAID NORTHWESTERLY RIGHT-OF-WAY LINE, 134.56 FEET; THENCE SOUTH 64°30'32" WEST, ON SAID NORTHWESTERLY RIGHT-OF-WAY LINE, 434.06 FEET; THENCE SOUTH 63°04'56" WEST, ON SAID NORTHWESTERLY RIGHT-OF-WAY LINE, 254.50 FEET; THENCE SOUTH 69°50'03" WEST, 250.20 FEET; THENCE SOUTH 72°07'30" WEST, 311.41 FEET TO THE POINT OF BEGINNING. CONTAINING 863,837 SQUARE FEET OR 19.831 ACRES MORE OR LESS.

RELEASED FOR CONSTRUCTION
As Noted on Plan Review

Development Services Department
Lee's Summit, Missouri
10/27/2023

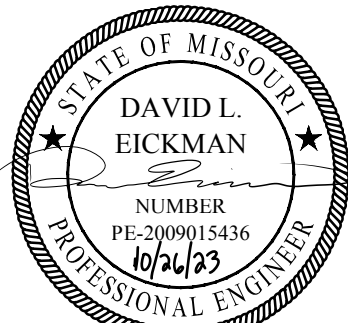
Sheet List Table	
Sheet Number	Sheet Title
C120	TITLE SHEET
C121	GENERAL NOTES
C-Z2-122	ZONE 2 - EXISTING CONDITIONS AND DEMOLITION PLAN
C-Z2-130	ZONE 2 - GRADING PLAN
C-Z2-140	ZONE 2 - EROSION CONTROL PLAN (PHASE A)
C-Z2-150	ZONE 2 - EROSION CONTROL PLAN (PHASE B)
C-Z2-151	ZONE 2 - PHASE B SEDIMENT TRAP DETAILS
C-Z2-160	ZONE 2 - EROSION CONTROL PLAN (PHASE C)
C-Z4-122	ZONE 4 - EXISTING CONDITIONS
C-Z4-130	ZONE 4 - GRADING PLAN
C-Z4-140	ZONE 4 - EROSION CONTROL PLAN (PHASE A)
C-Z4-150	ZONE 4 - EROSION CONTROL PLAN (PHASE B)
C-Z4-151	ZONE 4 - PHASE B SEDIMENT TRAP DETAILS
C-Z4-160	ZONE 4 - EROSION CONTROL PLAN (PHASE C)
C170	DETAIL SHEET

OIL/GAS WELLS:

NO OIL OR GAS WELLS ARE LOCATED WITHIN PROJECT LIMITS.
INFORMATION OBTAINED FROM THE MISSOURI DEPARTMENT OF NATURAL RESOURCES,
GEOLOGICAL SURVEY GEOSCIENCES TECHNICAL RESOURCE ASSESSMENT TOOL (GEOSTRAT).

FLOOD CERTIFICATION:

THE ENTIRE SITE IS LOCATED WITHIN ZONE X, "AREAS OF 0.2% ANNUAL CHANCE FLOOD;
AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR
WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES
FROM THE 1% ANNUAL CHANCE FLOOD" AS DEPICTED ON THE FEMA FLOOD INSURANCE
RATE MAP (FIRM) MAP NUMBER 29095C0409G, REVISION DATE JANUARY 20, 2017.



DAVID EICKMAN, P.E.
MOR 2009015436

BY		REV. NO.		DATE	REVISIONS DESCRIPTION
		1		09/28/2023	CIVIL REVISIONS

TITLE SHEET		2023
MASS GRADING & EROSION AND SEDIMENT CONTROL PLANS		
DISCOVERY PARK ZONES 2 AND 4		
NW COLBERN RD & NE DOUGLAS ST		
LEE'S SUMMIT, MISSOURI		

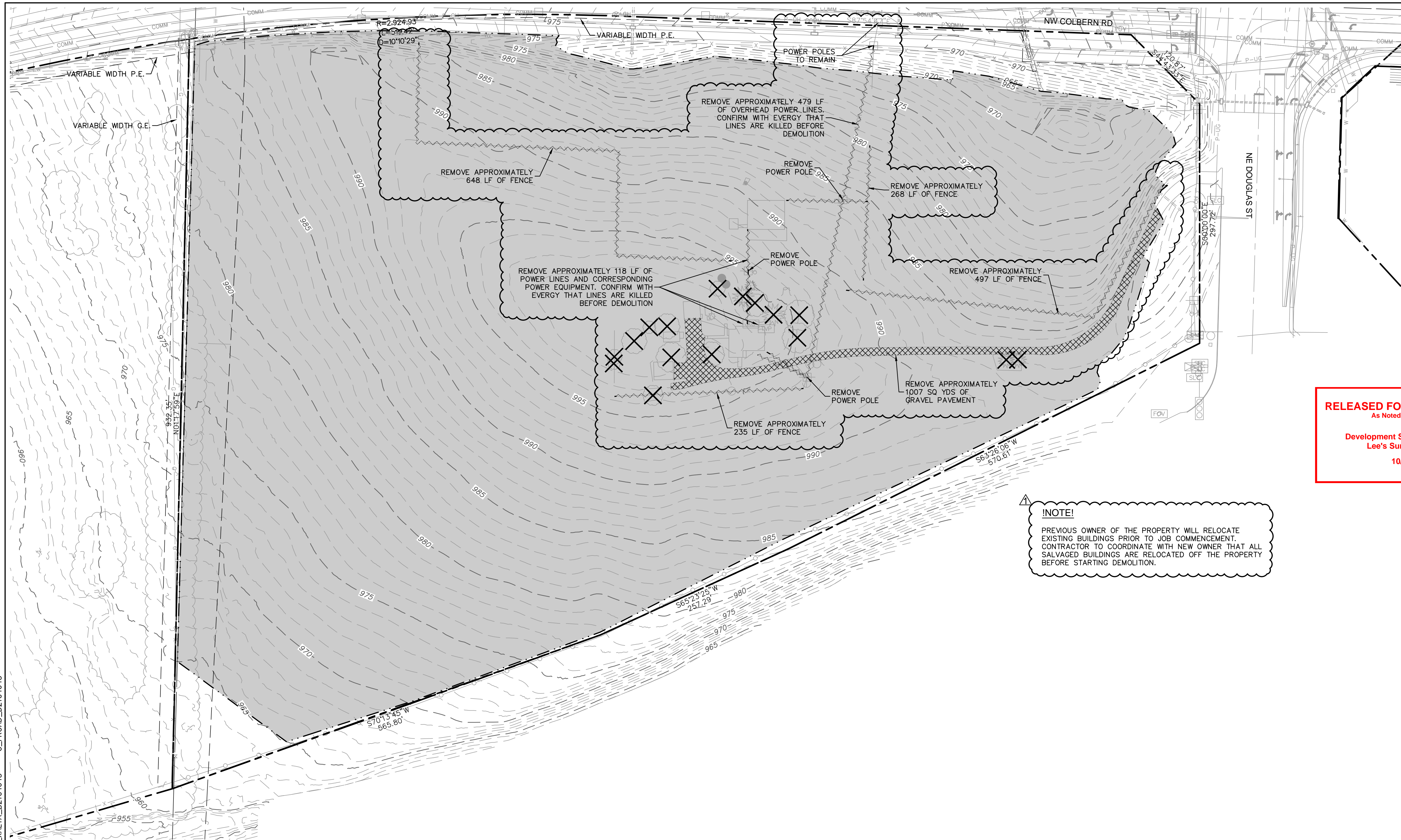
drawn by: GS/SJS/JN
checked by: AR/JN
approved by: DE
QA/QC by: JS/NH
project no.: D21-04643
drawing no.: C_TTL02_D2104643
date: 10/26/2023

SHEET
C120

olsson

Olsson - Civil Engineering
Missouri Certificate of Authority #001592
1301 Burlington Street
North Kansas City, MO 64116
TEL 816.361.1177
www.olsson.com

















EXISTING CONDITIONS LEGEND

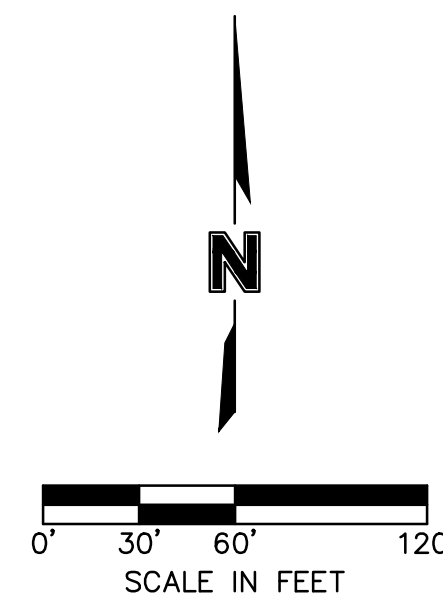
*THIS LEGEND APPLIES TO ALL SHEETS UNLESS
EXPLICITLY SHOWN OTHERWISE ON EACH SHEET.

-
- PROPERTY BOUNDARIES
DEMOLITION ITEM
EASEMENT/SETBACK LINE
EXISTING STORM SEWER
EXISTING PRESSURE PIPE
EXISTING SANITARY SEWER
EXISTING POWER SERVICE
EXISTING WATER PIPE
EXISTING TELECOM SERVICE
EXISTING NATURAL GAS PIPE
DEMOLISH GRAVEL PAVEMENT
LIMITS OF DISTURBANCE

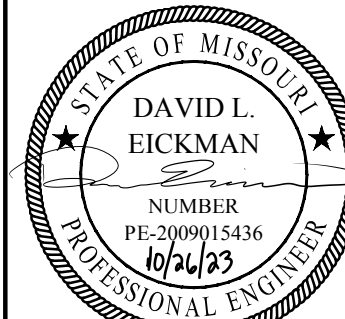
-  REMOVE EXISTING TREE
-  EXISTING LIGHT POLE
-  EXISTING SIGN
-  EXISTING SPRINKLER BOX
-  EXISTING SPRINKLER CONTROL VALVE
-  EXISTING WATER VALVE
-  EXISTING FIRE HYDRANT
-  EXISTING WATER METER
-  EXISTING ELECTRIC BOX
-  EXISTING ELECTRIC VAULT
-  EXISTING ELECTRIC RISER
-  EXISTING ELECTRIC MANHOLE

P.E. POWER EASEMENT
S.E. SANITARY EASEMENT
D.E. STORM EASEMENT
W.E. WATER EASEMENT

*SCALE MAY AFFECT THE SIZE OF SURVEY
SYMBOLS IN PLAN, BUT SHAPE WILL BE RETAINED

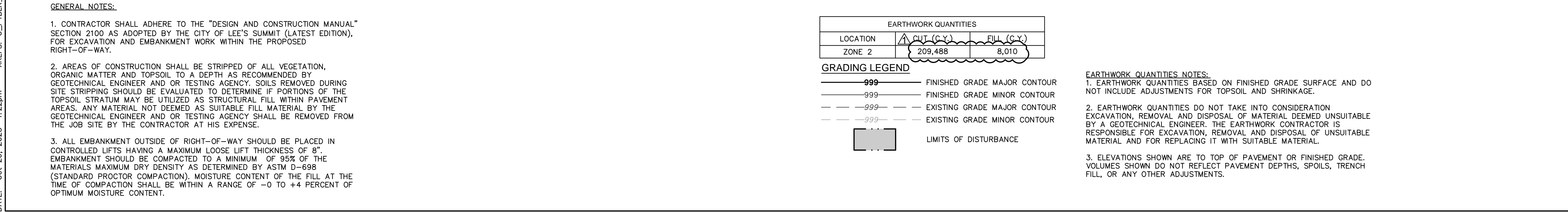
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REVISIONS



DAVID EICKMAN, P.E.
MO# 2009015436

BY



<div style="display: flex; justify-content: space-between;"> <div> <p>drawn by: _____ GS/OSON</p> <p>checked by: _____ AR/JN</p> <p>approved by: _____ DE</p> <p>QA/QC by: _____ JS/NH</p> <p>project no.: _____ D21-04643</p> <p>drawing no.: C-GRD02 D2104643</p> <p>date: _____ 10.26.2023</p> </div> <div style="text-align: right;"> <p>STATE OF MISSOURI</p> <p>DAVID EICKMAN, P.E.</p> <p>MO# 2005015436</p> </div> </div>	
<p>ZONE 2 - GRADING PLAN</p> <p>MASS GRADING & EROSION AND SEDIMENT CONTROL PLANS</p>	<p>DISCOVERY PARK ZONES 2 AND 4</p> <p>NW COLBERN RD & NE DOUGLAS ST</p>
<p>LEE'S SUMMIT, MISSOURI</p>	<p>2023</p>
<p>SHEET</p> <p>C-Z2-130</p>	

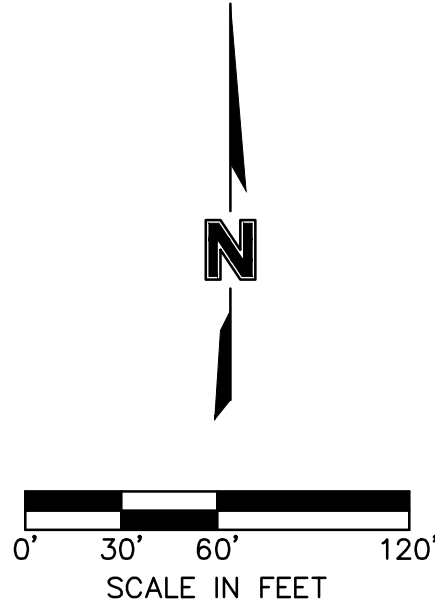


NOTE:
THE SITE DISTURBANCE PLANS INDICATES THE FINAL PLACEMENT OF EROSION CONTROL DEVICES. THE CONTRACTOR(S) MAY PROCEED WITH THE CONSTRUCTION PRIOR TO THE FINAL PLACEMENT OF THESE DEVICES BY PROVIDING ADDITIONAL DEVICES TO CONTROL EROSION ON THEIR ITEMS OF WORK. THESE DEVICES SHALL BE MAINTAINED UNTIL THE FINAL DEVICES ARE IN PLACE.

CONTRACTOR TO KEEP SWPPP REPORTS AND MDNR PERMIT IN THE ON-SITE CONSTRUCTION OFFICE TRAILER. TRAILER LOCATION TO BE DETERMINED BY CONTRACTOR

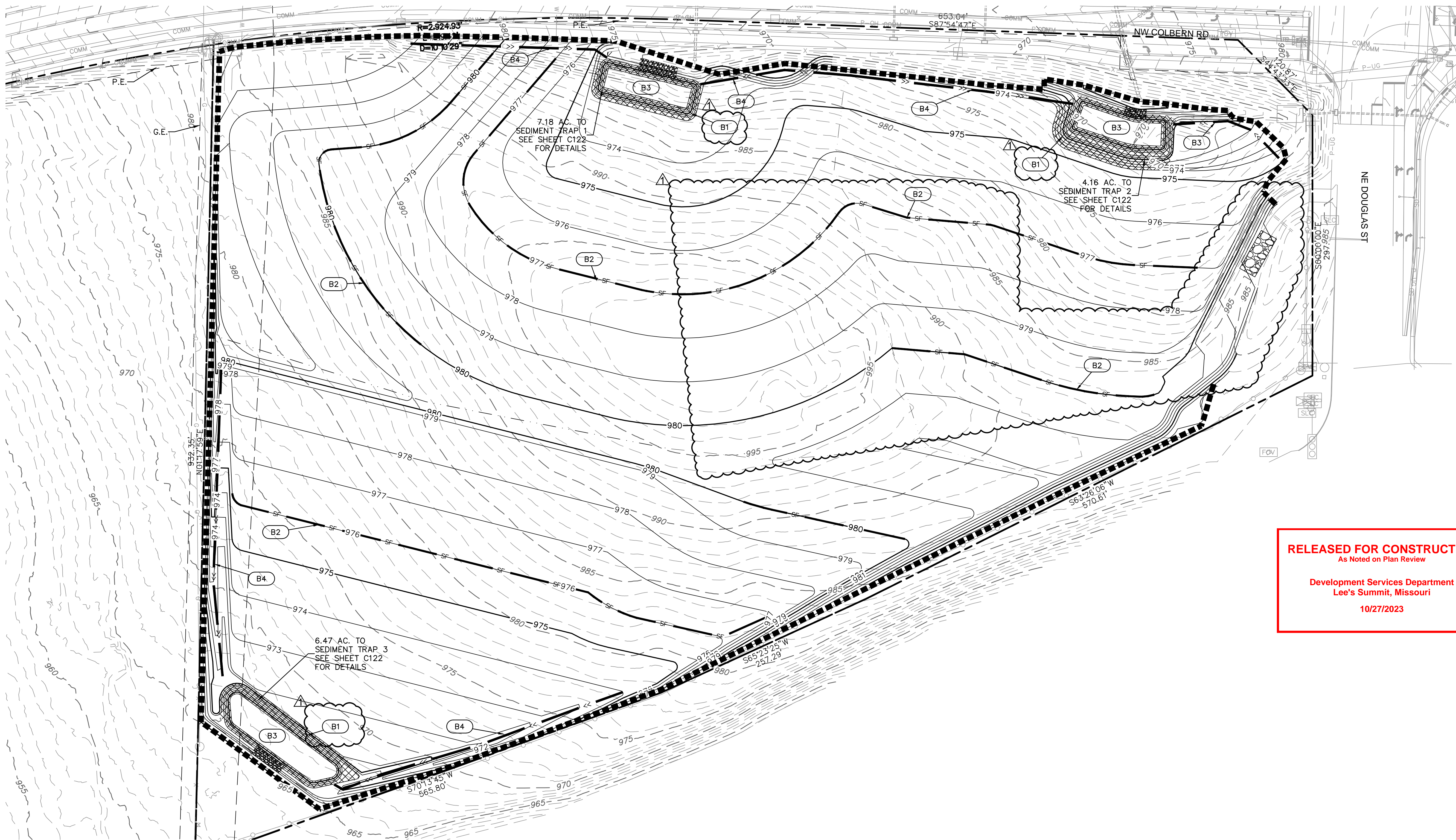
SEDIMENT TRAPS MUST BE FULLY INSTALLED PRIOR TO ANY SITE DISTURBANCE WITHIN THE TRIBUTARY AREA.


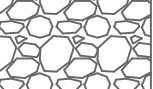
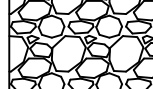
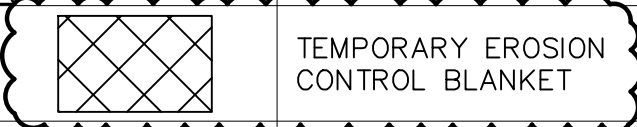
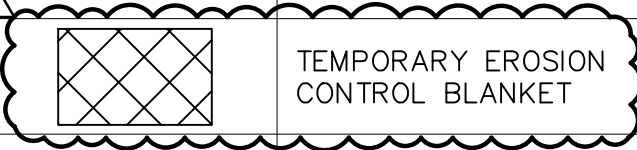




SEDIMENT TRAPS ARE SHOWN AS NEEDED PRIOR TO DISTURBING THE SITE. CONTRACTOR IS RESPONSIBLE FOR CONTROLLING ALL SEDIMENT RUNOFF DURING TRANSITION TO FINAL CONDITIONS AS SHOWN ON SHEET C370.



EROSION CONTROL PHASING CHART				
PROJECT PHASE	EROSION CONTROL BMP REFERENCE NO.	BMP DESCRIPTION	REMOVE AFTER PHASE	NOTES:
A – PRE-MASS GRADING	A1	CONSTRUCTION ENTRANCE	B	INSTALL PER APWA DETAIL ESC-01, PRIOR TO PERFORMING ANY OTHER ACTIVITIES ON SITE
UPON REMOVAL CONTRACTOR TO OVER-EXCAVATE SEDIMENT TRAPS, FULLY REMOVING ALL SILT, AND FILLING IN CONTROLLED LIFTS TO PREVENT VOIDS OR				
B – INTERIM	B1	TEMPORARY EROSION CONTROL BLANKET	N/A	INSTALL PER APWA DETAIL ESC-02, PRIOR TO PERFORMING ANY OTHER ACTIVITIES ON SITE
	B2	SILT FENCE	C	INSTALL PER APWA DETAIL ESC-03, PRIOR TO PERFORMING ANY OTHER ACTIVITIES ON SITE
	B3	SEDIMENT TRAP	N/A	INSTALL PER APWA DETAIL ESC-08, SEDIMENT TRAPS SHALL BE MAINTAINED BEYOND FINAL STABILIZATION OR SHALL BE REMOVED AS SHOWN IN FUTURE SITE DEVELOPMENT PLANS
	B4	DIVERSION BERM	N/A	INSTALL PER APWA DETAIL ESC-05, SEDIMENT TRAPS SHALL BE MAINTAINED BEYOND FINAL STABILIZATION OR SHALL BE REMOVED AS SHOWN IN FUTURE SITE DEVELOPMENT PLANS
	MAINTAIN ALL INSTALLED EROSION CONTROL DEVICES			
C – DISTURBED AREA STABILIZATION	C1	ESTABLISH SEEDING AND STABILIZATION OUTSIDE OF SEDIMENT BASIN AND TRAPS	N/A	SITE STABILIZATION PER LOCAL CODES AND ORDINANCES. AT A MINIMUM, STABILIZATION SHALL CONFORM WITH APWA SECTION 2406. COORDINATE ALL STABILIZATION WITH EROSION CONTROL MEASURES INDICATED IN SITE DEVELOPMENT PLANS.

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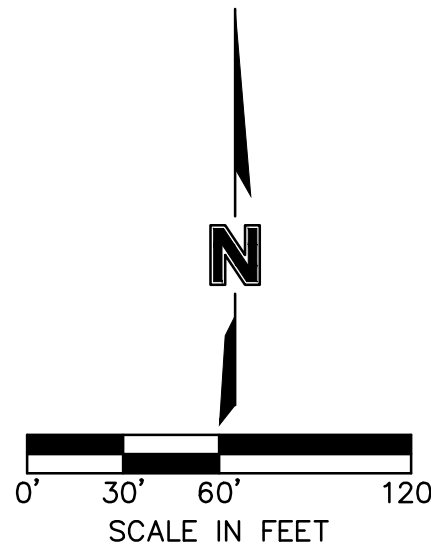
LEGEND	
PHASE A	PHASE B
	 SILT FENCE
	 TEMPORARY STONE CONSTRUCTION ENTRANCE
	 TEMPORARY EROSION CONTROL BLANKET
	 DRAINAGE AREA TO BASIN/TRAP
	 TEMPORARY DIVERSION BERM
	 LIMITS OF DISTURBANCE

NOTE:
THE SITE DISTURBANCE PLANS INDICATES THE FINAL
PLACEMENT OF EROSION CONTROL DEVICES. THE
CONTRACTOR(S) MAY PROCEED WITH THE CONSTRUCTION
PRIOR TO THE FINAL PLACEMENT OF THESE DEVICES BY
PROVIDING ADDITIONAL DEVICES TO CONTROL EROSION ON
THEIR ITEMS OF WORK. THESE DEVICES SHALL BE
MAINTAINED UNTIL THE FINAL DEVICES ARE IN PLACE.

CONTRACTOR TO KEEP SWPPP REPORTS AND MDNR PERMIT
IN THE ON-SITE CONSTRUCTION OFFICE TRAILER. TRAILER
LOCATION TO BE DETERMINED BY CONTRACTOR

SEDIMENT TRAPS MUST BE FULLY INSTALLED PRIOR TO ANY SITE DISTURBANCE WITHIN THE TRIBUTARY AREA.

SEDIMENT TRAPS ARE SHOWN AS NEEDED PRIOR TO
DISTURBING THE SITE. CONTRACTOR IS RESPONSIBLE FOR
CONTROLLING ALL SEDIMENT RUNOFF DURING TRANSITION
TO FINAL CONDITIONS AS SHOWN ON SHEET C370.



EROSION CONTROL PHASING CHART				
PROJECT PHASE	EROSION CONTROL BMP REFERENCE NO.	BMP DESCRIPTION	REMOVE AFTER PHASE	NOTES:
A – PRE-MASS GRADING	A1	CONSTRUCTION ENTRANCE	B	INSTALL PER APWA DETAIL ESC-01, PRIOR TO PERFORMING ANY OTHER ACTIVITIES ON SITE
UPON REMOVAL CONTRACTOR TO OVER-EXCAVATE SEDIMENT TRAPS, FULLY REMOVING ALL SILT, AND FILLING IN CONTROLLED LIFTS TO PREVENT VOIDS OR EXCESSIVE SETTLING THAT COULD IMPACT BUILDING FOUNDATIONS				
B – INTERIM	B1	TEMPORARY EROSION CONTROL BLANKET	N/A	INSTALL PER APWA DETAIL ESC-02, PRIOR TO PERFORMING ANY OTHER ACTIVITIES ON SITE
	B2	SILT FENCE	C	INSTALL PER APWA DETAIL ESC-03, PRIOR TO PERFORMING ANY OTHER ACTIVITIES ON SITE
	B3	SEDIMENT TRAP	N/A	INSTALL PER APWA DETAIL ESC-08, SEDIMENT TRAPS SHALL BE MAINTAINED BEYOND FINAL STABILIZATION OR SHALL BE REMOVED AS SHOWN IN FUTURE SITE DEVELOPMENT PLANS
	B4	DIVERSION BERM	N/A	INSTALL PER APWA DETAIL ESC-05, SEDIMENT TRAPS SHALL BE MAINTAINED BEYOND FINAL STABILIZATION OR SHALL BE REMOVED AS SHOWN IN FUTURE SITE DEVELOPMENT PLANS
	MAINTAIN ALL INSTALLED EROSION CONTROL DEVICES			
C – DISTURBED AREA STABILIZATION	C1	ESTABLISH SEEDING AND STABILIZATION OUTSIDE OF SEDIMENT BASIN AND TRAPS	N/A	SITE STABILIZATION PER LOCAL CODES AND ORDINANCES. AT A MINIMUM STABILIZATION SHALL CONFORM WITH APWA SECTION 2406. COORDINATE ALL STABILIZATION WITH EROSION CONTROL MEASURES INDICATED IN SITE DEVELOPMENT PLANS.

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TEL 816.361.1177
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DAVID EICKMAN, P.E.
MO# 2009015436

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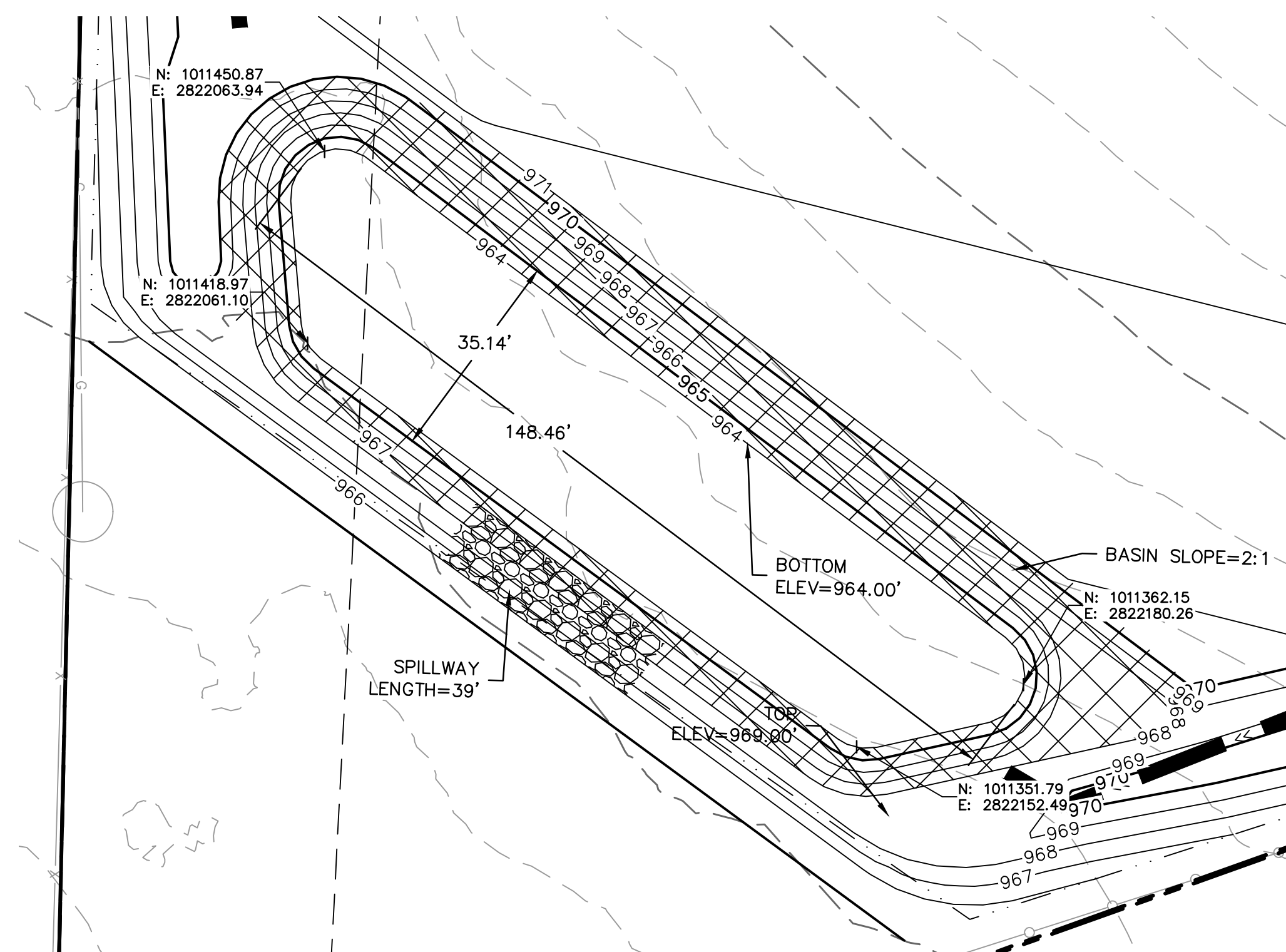
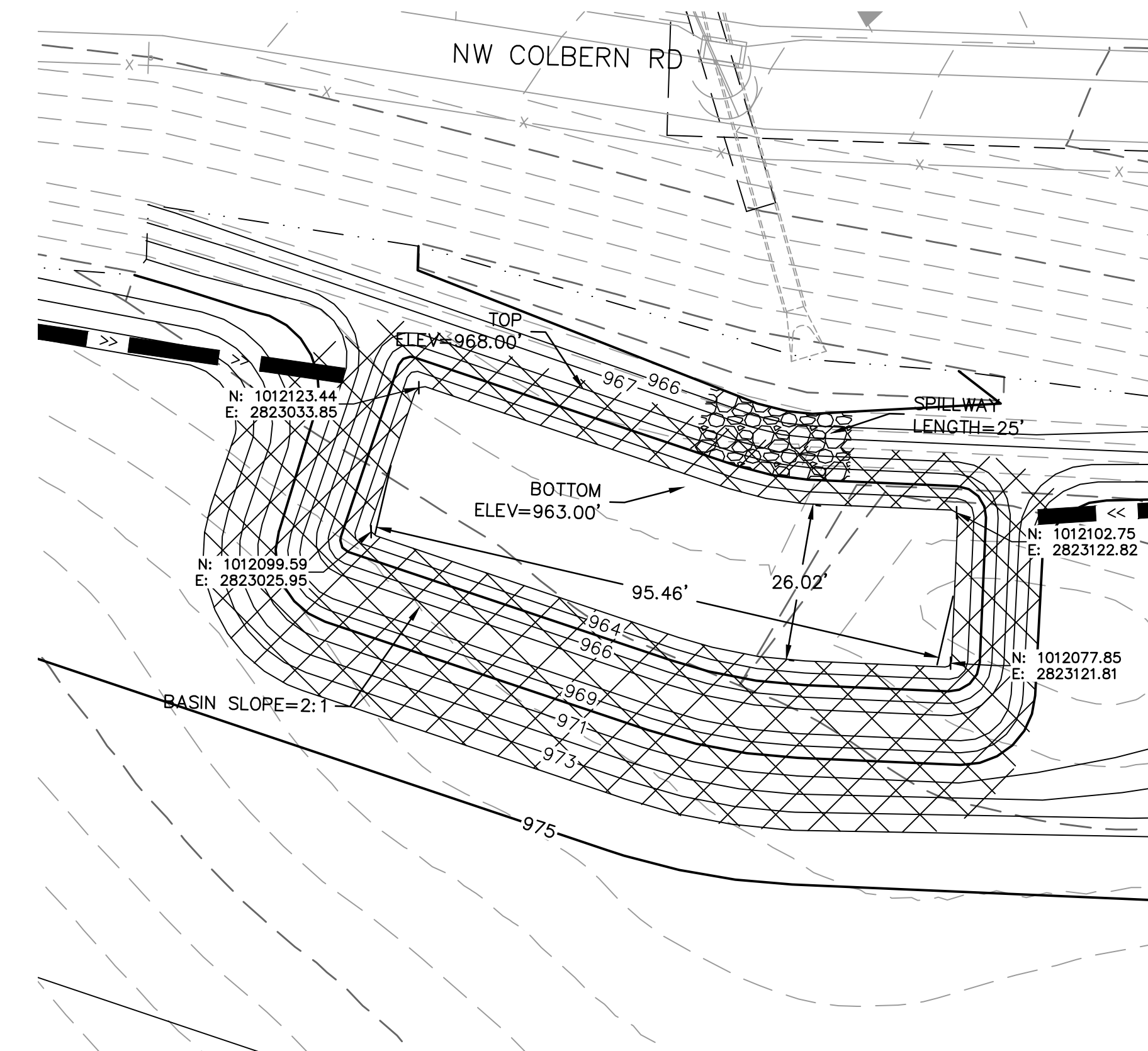
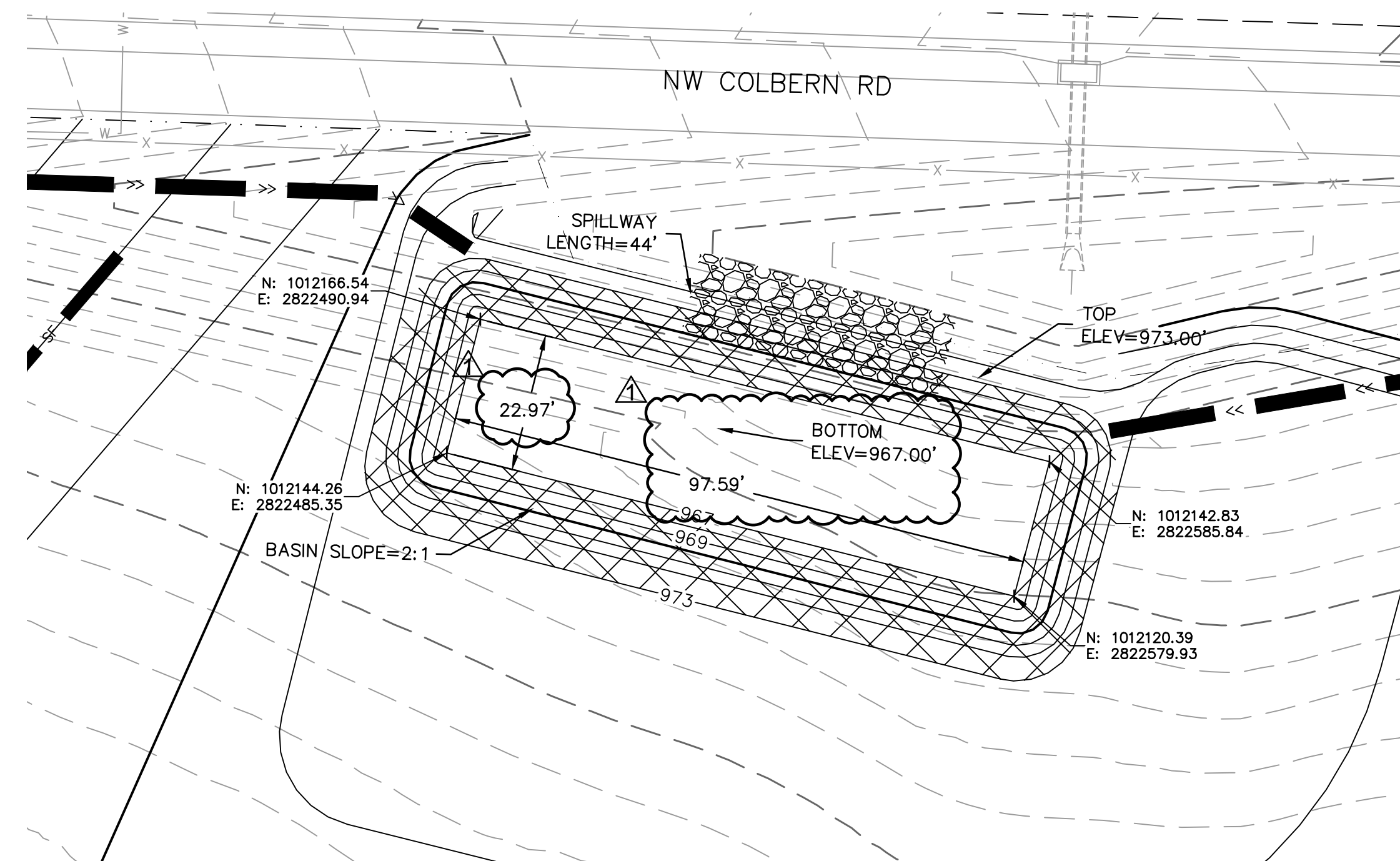
ZONE 2 - EROSION CONTROL PLAN (PHASE B)
MASS GRADING & EROSION AND SEDIMENT CONTROL PLANS

DISCOVERY PARK ZONES 2 AND 4
NW COLBERN RD & NE DOUGLAS ST

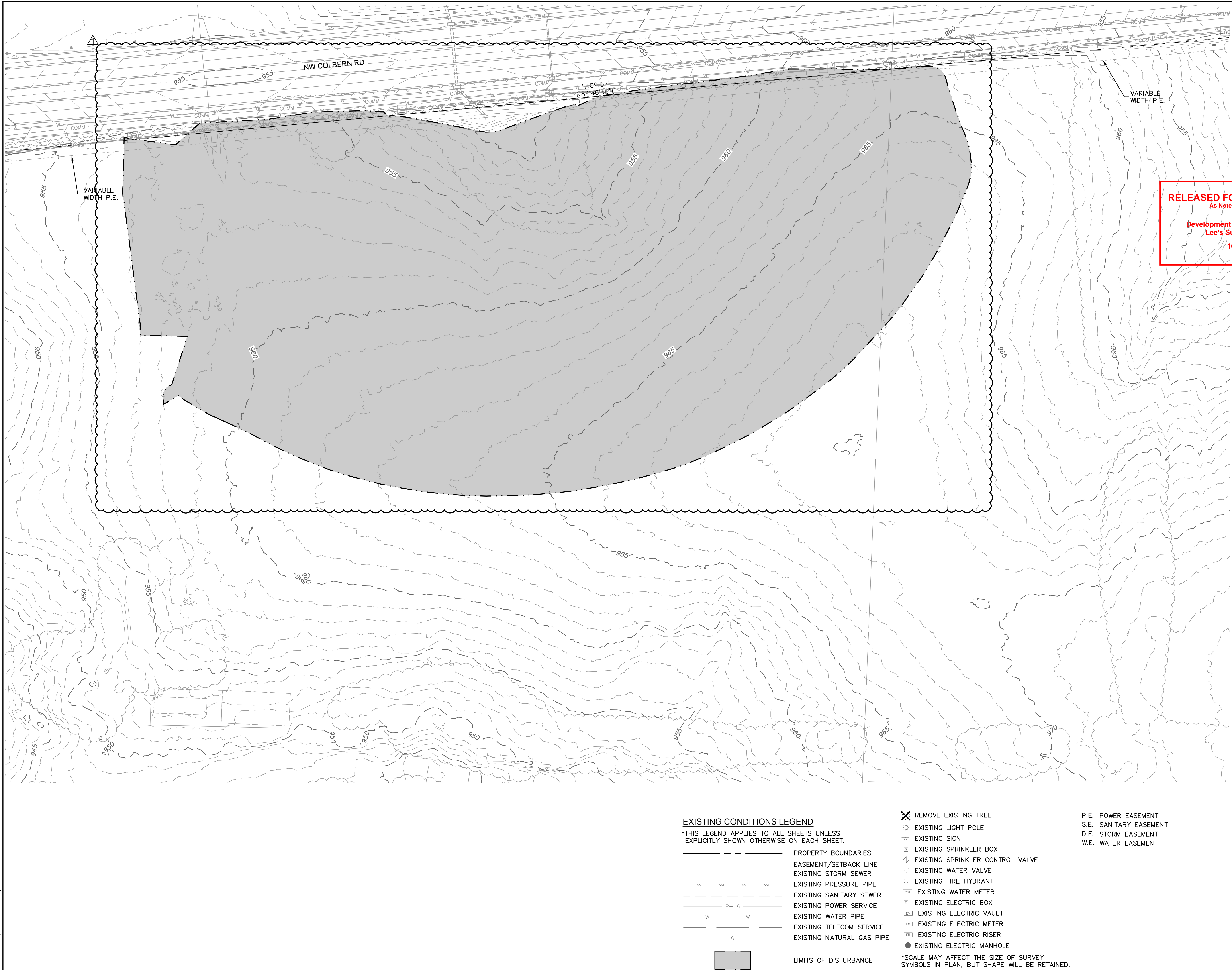
LEE'S SUMMIT, MISSOURI

drawn by: GS/OS/JN
checked by: AR/JN
approved by: DE
QA/QC by: JS/NH
project no.: D21-04643
drawing no. C_ERC02B_D2104643
date: 10.26.2023

SHEET
C-Z2-150



TRAP	TRIBUTARY AREA	REQUIRED VOLUME	BERM HEIGHT "H"	HEIGHT "H ₀ "	STORAGE VOLUME	BERM TOP WIDTH "W"	BOTTOM ELEVATION	RIPRAP ELEVATION	BERM ELEVATION	SPILLWAY LENGTH	EXCAVATED DEPTH	EXCAVATED VOLUME	CLEANOUT VOLUME	CLEANOUT ELEVATION
	(AC)	(C.F.)	(FT)	(FT)	(C.F.)	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	(C.F.)	(C.F.)	(FT)
1	7.18	12924.00	2.0	1.0	13171.17	2.0	967	972.00	973.00	44	3.0	3548.96	2634.23	968.05
2	4.16	7488.00	2.0	1.0	9869.92	2.0	963	967.00	968.00	25	2.0	3184.41	1973.98	963.72
3	6.47	11646.00	2.0	1.0	15602.82	2.0	964	968.00	969.00	39	2.0	5727.64	3138.67	964.60



Development Services Department
Lee's Summit, Missouri
10/27/2023

ZONE 4 - EXISTING CONDITIONS
MASS GRADING & EROSION AND SEDIMENT CONTROL PLANS

DISCOVERY PARK ZONES 2 AND 4
NW COLBERN RD & NE DOUGLAS ST

HUMMIT, MISSOURI

drawn by: GS/OS/JN
checked by: AR/JN
approved by: DE
QA/QC by: JS/NH
project no.: D21-04643
drawing no.: C_EXC04_D2104643
date: 10.26.2023

SHEET
C-Z4-122

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GENERAL NOTES:

1. CONTRACTOR SHALL ADHERE TO THE "DESIGN AND CONSTRUCTION MANUAL" SECTION 2100 AS ADOPTED BY THE CITY OF LEE'S SUMMIT (LATEST EDITION), FOR EXCAVATION AND EMBANKMENT WORK WITHIN THE PROPOSED RIGHT-OF-WAY.
2. AREAS OF CONSTRUCTION SHALL BE STRIPPED OF ALL VEGETATION, ORGANIC MATTER AND TOPSOIL TO A DEPTH AS RECOMMENDED BY GEOTECHNICAL ENGINEER AND OR TESTING AGENCY. SOILS REMOVED DURING SITE STRIPPING SHOULD BE EVALUATED TO DETERMINE IF PORTIONS OF THE TOPSOIL STRATUM MAY BE UTILIZED AS STRUCTURAL FILL WITHIN PAVEMENT AREAS. ANY MATERIAL NOT DEEMED AS SUITABLE FILL MATERIAL BY THE GEOTECHNICAL ENGINEER AND OR TESTING AGENCY SHALL BE REMOVED FROM THE JOB SITE BY THE CONTRACTOR AT HIS EXPENSE.
3. ALL EMBANKMENT OUTSIDE OF RIGHT-OF-WAY SHOULD BE PLACED IN CONTROLLED LIFTS HAVING A MAXIMUM LOOSE LIFT THICKNESS OF 8". EMBANKMENT SHOULD BE COMPACTED TO A MINIMUM OF 95% OF THE MATERIALS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-698 (STANDARD PROCTOR COMPACTION). MOISTURE CONTENT OF THE FILL AT THE TIME OF COMPACTION SHALL BE WITHIN A RANGE OF -0 TO +4 PERCENT OF OPTIMUM MOISTURE CONTENT.

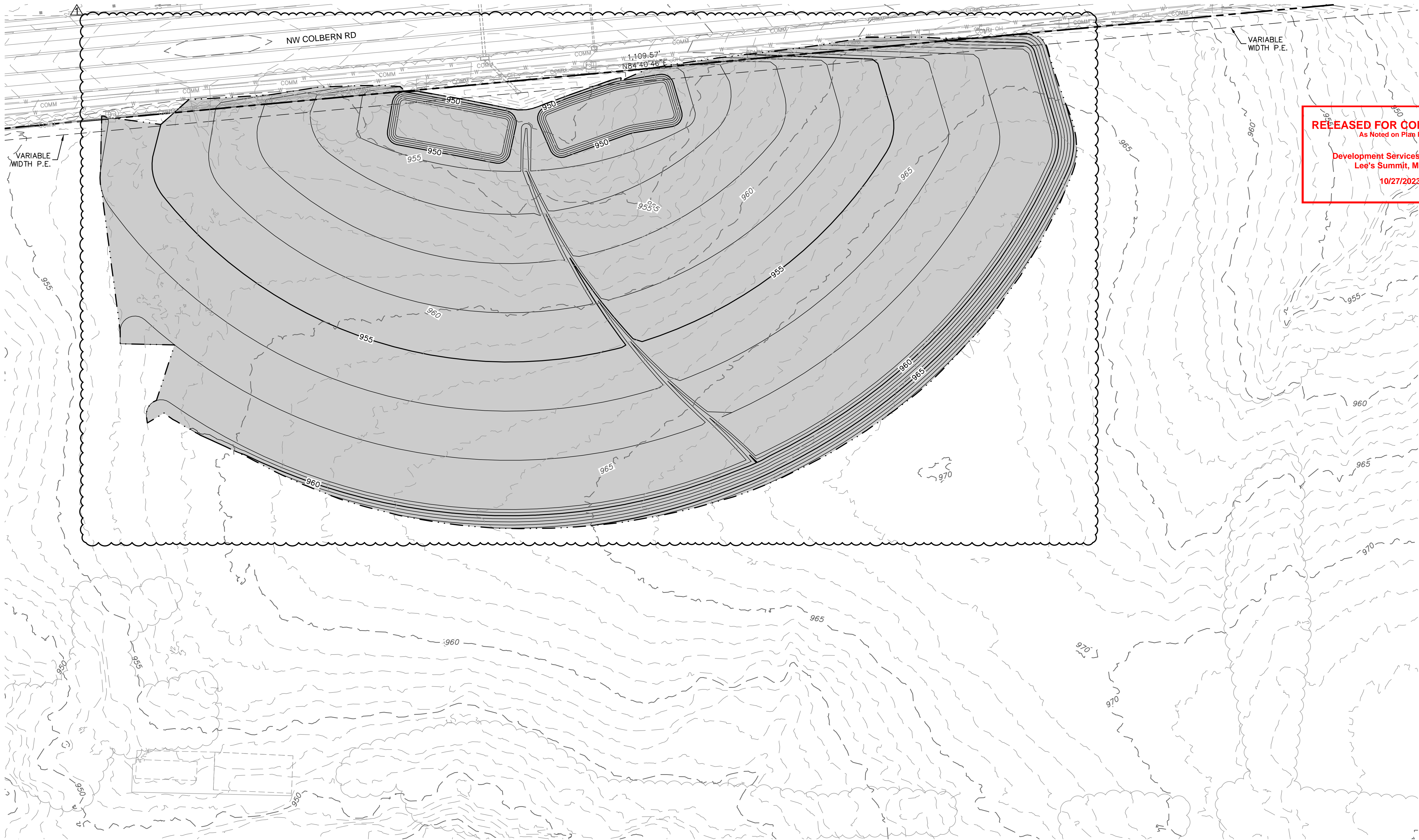
EARTHWORK QUANTITIES		
LOCATION	CUT (C.Y.)	FILL (C.Y.)
ZONE 2	78,387	32

GRADING LEGEND

- 999 — FINISHED GRADE MAJOR CONTOUR
— 999 — FINISHED GRADE MINOR CONTOUR
- - - 999 - - - EXISTING GRADE MAJOR CONTOUR
- - - 999 - - - EXISTING GRADE MINOR CONTOUR
- LIMITS OF DISTURBANCE

EARTHWORK QUANTITIES NOTES:

1. EARTHWORK QUANTITIES BASED ON FINISHED GRADE SURFACE AND DO NOT INCLUDE ADJUSTMENTS FOR TOPSOIL AND SHRINKAGE.
2. EARTHWORK QUANTITIES DO NOT TAKE INTO CONSIDERATION EXCAVATION, REMOVAL AND DISPOSAL OF MATERIAL DEEMED UNSUITABLE BY A GEOTECHNICAL ENGINEER. THE EARTHWORK CONTRACTOR IS RESPONSIBLE FOR EXCAVATION, REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL AND FOR REPLACING IT WITH SUITABLE MATERIAL.
3. ELEVATIONS SHOWN ARE TO TOP OF PAVEMENT OR FINISHED GRADE. VOLUMES SHOWN DO NOT REFLECT PAVEMENT DEPTHS, SPOILS, TRENCH FILL, OR ANY OTHER ADJUSTMENTS.



ZONE 4 - GRADING PLAN
MASS GRADING & EROSION AND SEDIMENT CONTROL PLANS

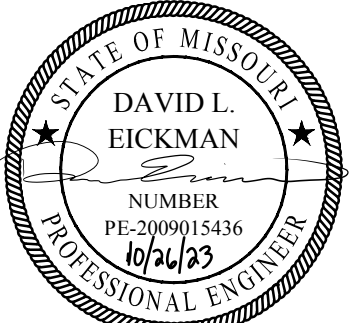
DISCOVERY PARK ZONES 2 AND 4
NW COLBERN RD & NE DOUGLAS ST

LEE'S SUMMIT, MISSOURI

2023

drawn by: GS/SOS/JN
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project no.: D21-04643
drawing no.: C_GRD04_D2104643
date: 10/26/2023

SHEET
C-Z4-130



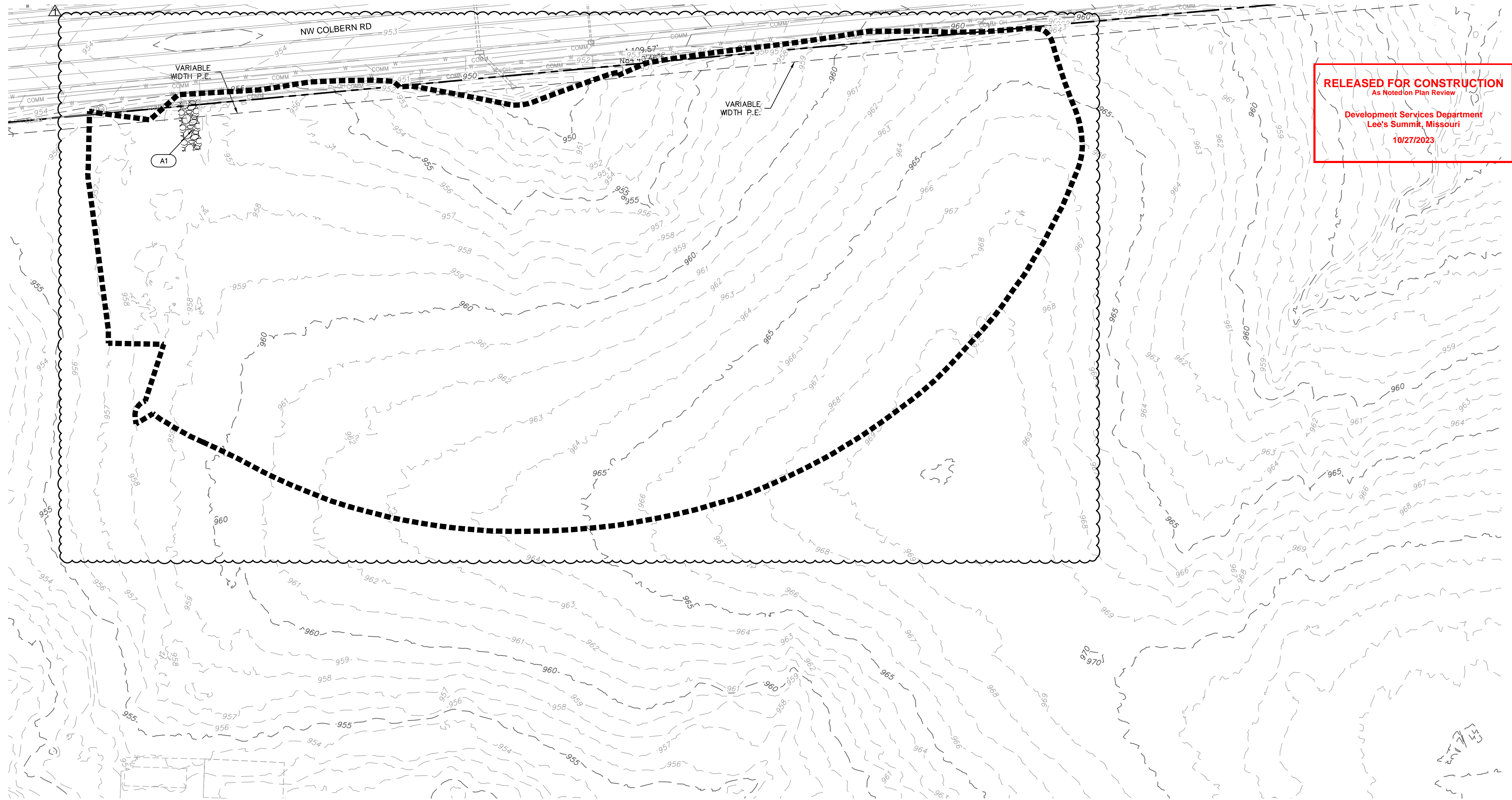
DAVID EICKMAN, P.E.
MOR 2009015436



REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	09/28/2023	CIVIL REVISIONS	

REVISIONS

olsson

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1301 Burlington Street
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www.olson.com



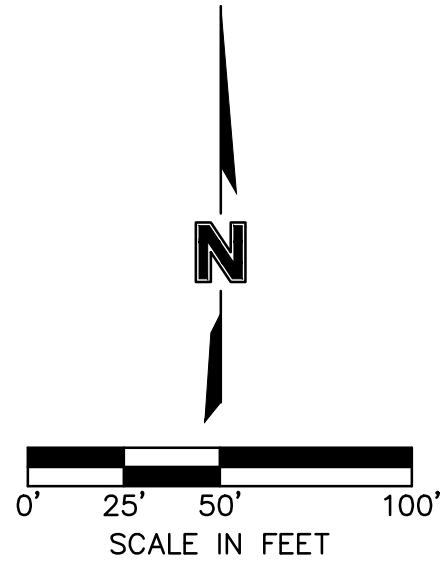
LEGEND	
PHASE A	
	TEMPORARY STONE CONSTRUCTION ENTRANCE
	LIMITS OF DISTURBANCE

NOTE:
THE SITE DISTURBANCE PLAN INDICATES THE FINAL PLACEMENT OF EROSION CONTROL DEVICES. THE CONTRACTOR(S) MAY PROCEED WITH THE CONSTRUCTION PRIOR TO THE FINAL PLACEMENT OF THESE DEVICES BY PROVIDING ADDITIONAL DEVICES FOR EROSION CONTROL ON THEIR ITEMS OF WORK. THESE DEVICES SHALL BE MAINTAINED UNTIL THE FINAL DEVICES ARE IN PLACE.

CONTRACTOR TO KEEP SWPPP REPORTS AND MDNR PERMIT IN THE ON-SITE CONSTRUCTION OFFICE TRAILER. TRAILER LOCATION TO BE DETERMINED BY CONTRACTOR

SEDIMENT TRAPS MUST BE FULLY INSTALLED PRIOR TO ANY SITE DISTURBANCE WITHIN THE TRIBUTARY AREA.

SEDIMENT TRAPS ARE SHOWN AS NEEDED PRIOR TO DISTURBING THE SITE. CONTRACTOR IS RESPONSIBLE FOR CONTROLLING ALL SEDIMENT RUNOFF DURING TRANSITION TO FINAL CONDITIONS AS SHOWN ON SHEET C370.



EROSION CONTROL PHASING CHART				
PROJECT PHASE	EROSION CONTROL BMP REFERENCE NO.	BMP DESCRIPTION	REMOVE AFTER PHASE	NOTES:
A – PRE-MASS GRADING	A1	CONSTRUCTION ENTRANCE	B	INSTALL PER APWA DETAIL ESC-01, PRIOR TO PERFORMING ANY OTHER ACTIVITIES ON SITE
UPON REMOVAL CONTRACTOR TO OVER-EXCAVATE SEDIMENT TRAPS, FULLY REMOVING ALL SILT, AND FILLING IN CONTROLLED LIFTS TO PREVENT VOIDS OR EXCESSIVE SETTling THAT COULD IMPACT BUILDING FOUNDATIONS.				
B – INTERIM	B1	DIVERSION BERM	N/A	INSTALL PER APWA DETAIL ESC-05, DIVERSION BERMS SHALL BE MAINTAINED BEYOND FINAL STABILIZATION OR SHALL BE REMOVED AS SHOWN IN FUTURE SITE DEVELOPMENT PLANS
	B2	SEDIMENT TRAP	N/A	INSTALL PER APWA DETAIL ESC-08, SEDIMENT TRAPS SHALL BE MAINTAINED BEYOND FINAL STABILIZATION OR SHALL BE REMOVED AS SHOWN IN FUTURE SITE DEVELOPMENT PLANS
	B3	SILT FENCE	C	INSTALL PER APWA DETAIL ESC-03, PRIOR TO PERFORMING ANY OTHER ACTIVITIES ON SITE
	B4	TEMPORARY EROSION CONTROL BLANKET	C	INSTALL PER APWA DETAIL ESC-02, PRIOR TO PERFORMING ANY OTHER ACTIVITIES ON SITE
	MAINTAIN ALL INSTALLED EROSION CONTROL DEVICES			
C – DISTURBED AREA STABILIZATION	SEE LEGEND FOR HATCH PATTERN EXAMPLE	ESTABLISH SEEDING AND STABILIZATION OUTSIDE OF SEDIMENT BASIN AND TRAPS	N/A	SITE STABILIZATION PER LOCAL CODES AND ORDINANCES. AT A MINIMUM STABILIZATION SHALL CONFORM WITH APWA SECTION 2406. COORDINATE ALL STABILIZATION WITH EROSION CONTROL MEASURES INDICATED IN SITE DEVELOPMENT PLANS.

RELEASED FOR CONSTRUCTION
As Noted on Plan Review

Development Services Department
Lee's Summit, Missouri

10/27/2023




NOTE: THE SITE DISTURBANCE PLANS INDICATES THE FINAL PLACEMENT OF EROSION CONTROL DEVICES. THE CONTRACTOR(S) MAY PROCEED WITH THE CONSTRUCTION PRIOR TO THE FINAL PLACEMENT OF THESE DEVICES BY PROVIDING ADDITIONAL DEVICES TO CONTROL EROSION ON THEIR ITEMS OF WORK. THESE DEVICES SHALL BE MAINTAINED UNTIL THE FINAL DEVICES ARE IN PLACE.

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B3	SILT FENCE	C	INSTALL PER APWA DETAIL ESC-03, PRIOR TO PERFORMING ANY OTHER ACTIVITIES ON SITE
B4	TEMPORARY EROSION CONTROL BLANKET	C	INSTALL PER APWA DETAIL ESC-02, PRIOR TO PERFORMING ANY OTHER ACTIVITIES ON SITE



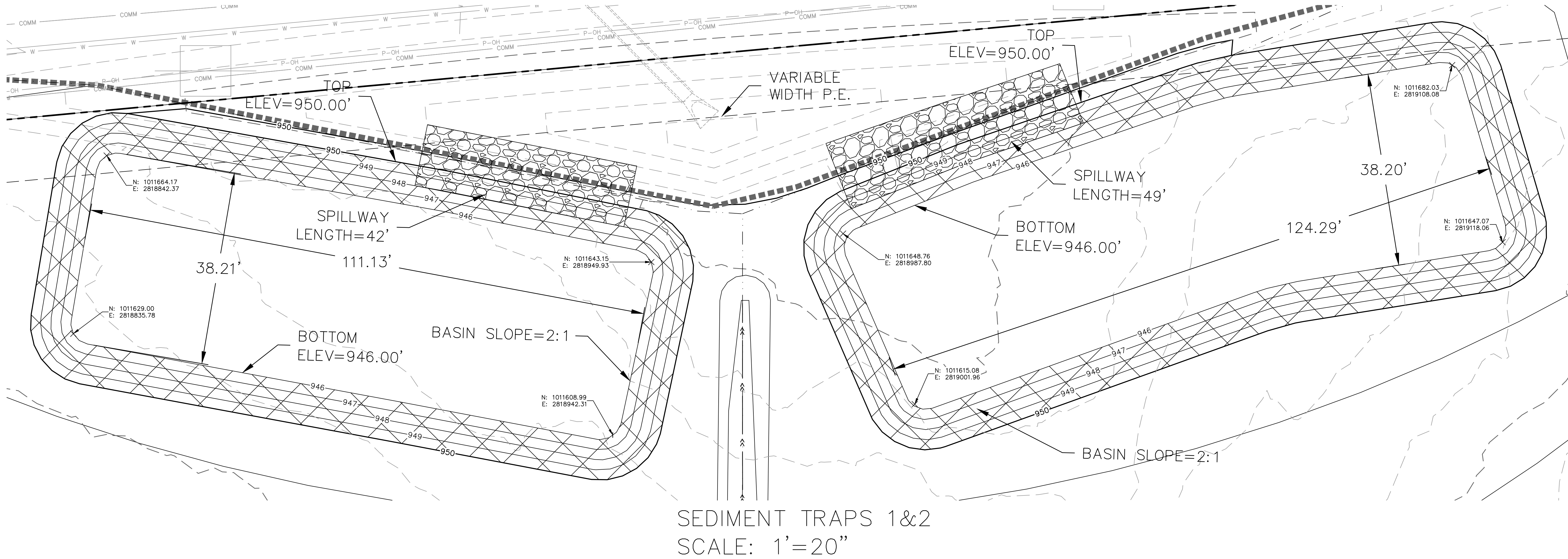
DAVID L. EICKMAN
 NUMBER
 PE-2009015436
 10/24/23
 PROFESSIONAL ENGINEER

DAVID EICKMAN, P.E.
 MO# 2009015436

<p>ZONE 4 - EROSION CONTROL PLAN (PHASE B) MASS GRADING & EROSION AND SEDIMENT CONTROL PLANS</p>	2023
<p>DISCOVERY PARK ZONES 2 AND 4 NW COLBORN RD & NE DOUGLAS ST</p>	
<p>LEE'S SUMMIT, MISSOURI</p>	

drawn by: GS/OS/JN
checked by: AR/JN
approved by: DE
QA/QC by: JS/NH
project no.: D21-04643
drawing no. C_ERC04B_D2104643
date: 10.26.2023

DWG: F:\2021\04501-05000\021-04643-1\40-design\AutoCAD\final plans\Zone 4 Mass Grading\C_ERC04S_D2104643.dwg
DATE: Oct 26, 2023 1:30pm XREFS: C_PTBULK_D2104643 C_PERS_Z4_D2104643 C_XALTA_B2104643 C_FROAD_D2104643
USER: aramanov



SEDIMENT TRAPS 1&2
SCALE: 1' = 20"

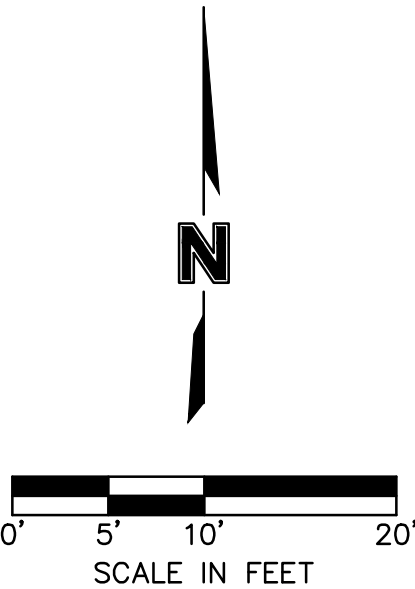
EROSION CONTROL PLAN LEGEND	
	999 FINISHED GRADE MAJOR CONTOUR
	999 FINISHED GRADE MINOR CONTOUR
	999 EXISTING GRADE MAJOR CONTOUR
	999 EXISTING GRADE MINOR CONTOUR
	DRAINAGE AREA
	SF SILT FENCE
	<< DIVERSION BERM

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TRAP	TRIBUTARY AREA (AC.)	REQUIRED VOLUME (C.F.)	BERM HEIGHT "H" (FT.)	SPILLWAY HEIGHT "HO" (FT.)	STORAGE VOLUME (C.F.)	BERM TOP WIDTH "W" (FT.)	BOTTOM ELEVATION (FT.)	RIPRAP ELEVATION (FT.)	TOP OF BERM ELEVATION (FT.)	SPILLWAY LENGTH (FT.)	EXCAVATED DEPTH (FT.)	EXCAVATED VOLUME (C.F.)	SEDIMENT CLEANOUT VOLUME (C.F.)	SEDIMENT CLEANOUT ELEVATION (FT.)
1	6.88	12382.98	2.0	1.0	15482.12	2.0	946	950.00	951.00	42	2.0	5152.38	3096.42	946.68
2	8.08	14550.79	2.0	1.0	17490.06	2.0	946	950.00	951.00	49	2.0	5821.69	3498.01	946.68

- NOTES
- THE SITE DISTURBANCE PLANS INDICATE THE FINAL PLACEMENT OF EROSION CONTROL DEVICES. THE CONTRACTOR(S) MAY PROCEED WITH THE CONSTRUCTION PRIOR TO FINAL PLACEMENT OF THESE DEVICES BY PROVIDING ADDITIONAL DEVICES O CONTROL EROSION ON THEIR ITEMS OF WORK. THESE DEVICES SHALL BE MAINTAINED UNTIL THE FINAL DEVICES ARE IN PLACE.
 - ALL EROSION CONTROL DEVICES SHALL BE INSTALLED PER THE AMERICAN PUBLIC WORKS ASSOCIATION, KANSAS CITY METRO CHAPTER DIVISION III STANDARD DRAWINGS, EROSION AND SEDIMENT CONTROL, 2016 VERSION.



ZONE 4 - PHASE B SEDIMENT TRAP DETAILS
MASS GRADING & EROSION AND SEDIMENT CONTROL PLANS

DISCOVERY PARK ZONES 2 AND 4
NW COLBERN RD & NE DOUGLAS ST

LEE'S SUMMIT, MISSOURI

drawn by: GS/SJS/JN
checked by: AR/JN
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date: 10/26/2023

SHEET
C-Z4-151

STATE OF MISSOURI
DAVID L. EICKMAN
NUMBER
PE-2009015436
10/24/23
PROFESSIONAL ENGINEER
DAVID EICKMAN, P.E.
MOR 2009015436

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