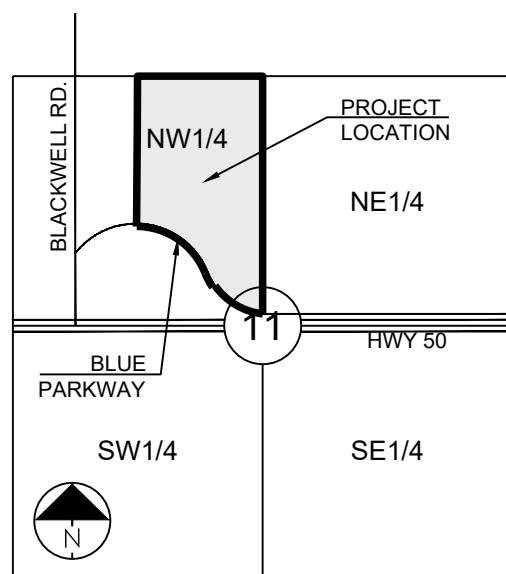


A/E	- ACCESS EASEMENT
BC	- BACK OF CURB
B/B	- BACK TO BACK
BM	- BENCHMARK
BL or B.L.	- BUILDING LINE
CO	- CLEANOUT
TJB	- TELEPHONE JUNCTION BOX
C&G	- CURB AND GUTTER
D/E	- DRAINAGE EASEMENT
E/E	- ELECTRICAL EASEMENT
EL	- ELEVATION
FL	- FLOW LINE
G/E	- GAS LINE EASEMENT
HDPE	- HIGH-DENSITY POLYETHYLENE
L/E	- LANDSCAPE EASEMENT
MSFE	- MINIMUM SERVICEABLE FLOOR ELEVATION
PVC	- POLYVINYL CHLORIDE
P/L	- PROPERTY LINE
PUB/E	- PUBLIC EASEMENT
RCP	- REINFORCED CONCRETE PIPE
ROW or R/W	- RIGHT-OF-WAY
S/E	- SANITARY SEWER EASEMENT
SL	- SERVICE LINE
SW	- SIDEWALK
TE	- TOP ELEVATION
U/E	- UTILITY EASEMENT
WSE	- WATER SURFACE ELEVATION
W/E	- WATERLINE EASEMENT



**LOCATION MAP**  
SCALE 1" = 2000'

MISSOURI DEPARTMENT OF  
TRANSPORTATION (MODOT)

SPIRE

Brent Jones  
3025 SE Clover Drive  
Lee's Summit, MO 64082  
(816) 399-0663 [brent.jones@spireenergy.com](mailto:brent.jones@spireenergy.com)

Philip Ingram  
1300 SE Hamblin Road  
Lee's Summit, MO 64081  
Office: (816) 347-347-4339  
[philip.ingram@evergy.com](mailto:philip.ingram@evergy.com)

CITY OF LEES SUMMIT PUBLIC WORKS

Dena Mezger  
220 SE Green Street  
Lee's Summit, MO 64063  
(816) 969-1800

AT&T

Mark Manion or Marty Loper  
500 E. 8th Street, Room 370  
Kansas City, MO 64106  
(816) 275-2341 or (816) 275-1550

COMCAST CABLE

John Meadows  
4700 Little Blue Parkway  
Independence, MO 64051  
(816) 795-2257

## CITY OF LEE'S SUMMIT WATER UTILITIES

Mark Schaufler  
1200 SE Hamblen Road  
Lee's Summit, MO 64081  
(816) 969-1900



811 or  
1-800-344-7483  
mo1call.com

SUMMARY OF QUANTITIES			
	ITEM	QUANTITY	UNITS
1	COMMON EXCAVATION	133,890	CY
2	EMBANKMENT	135,270	CY
3	CLEARING, GRUBBING & DISPOSAL	1	LS
4	CONSTRUCTION ENTRANCE & STAGING AREA	1	EA
5	CONCRETE WASHOUT AREA	1	EA
6	SILT FENCE (PRIOR TO CONSTRUCTION)	7,470	LF
7	SILT FENCE (DURING CONSTRUCTION)	8,504	LF
8	SEDIMENT BASIN	2	EA
9	ROCK DITCH CHECK	7	EA
10	INLET PROTECTION (SILT FENCE)	24	EA
11	INLET PROTECTION (GRAVEL FILTER BAGS)	28	EA
12	TURF REINFORCEMENT MAT	21,553	SY
13	SEEDING AND MULCHING	37	AC

**GENERAL NOTES:**

1. ALL CONSTRUCTION TO FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813.
2. ALL WORKMANSHIP AND MATERIALS SHALL BE SUBJECT TO THE INSPECTION AND APPROVAL OF THE ENGINEERING DEPARTMENT OF THE CITY OF LEE'S SUMMIT, MISSOURI.
3. EIGHT FOOT MEASUREMENTS SHOWN ON THE PLANS ARE HORIZONTAL MEASUREMENTS, NOT SLOPE MEASUREMENTS. ALL PAYMENTS SHALL BE MADE ON HORIZONTAL MEASUREMENTS.
4. NO GEOLOGICAL INVESTIGATION HAS BEEN PERFORMED ON THE SITE.
5. THE UTILITY LOCATIONS SHOWN ON THESE PLANS ARE TAKEN FROM UTILITY COMPANY RECORDS AND APPARENT FIELD LOCATIONS. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION.
6. THE CONTRACTOR SHALL ADHERE TO THE PROVISIONS OF THE SENATE BILL NUMBER 583, 78TH GENERAL ASSEMBLY OF THE STATE OF MISSOURI. THE BILL REQUIRES THAT ANY PERSON OR FIRM DOING BUSINESS ON PUBLIC RIGHT OF WAY DO SO ONLY AFTER GIVING NOTICE TO, AND OBTAINING INFORMATION FROM, UTILITY COMPANIES. STATE LAW REQUIRES 48 HOURS ADVANCE NOTICE. THE CONTRACTOR MAY ALSO UTILIZE THE FOLLOWING TOLL FREE PHONE NUMBER PROVIDED BY "MISSOURI ONE CALL SYSTEM, INC.": 1-800-DIG-RITE. THIS PHONE NUMBER IS APPLICABLE ANYWHERE WITHIN THE STATE OF MISSOURI. PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL NOTIFY ALL THOSE COMPANIES WHICH HAVE FACILITIES IN THE NEAR VICINITY OF THE CONSTRUCTION TO BE PERFORMED.
7. PRIOR TO ORDERING PRECAST STRUCTURES, SHOP DRAWING SHALL BE SUBMITTED TO THE DESIGN ENGINEER FOR APPROVAL. AFTER APPROVAL OF THE SHOP DRAWINGS, A COPY OF THE APPROVED AND SIGNED SHOP DRAWING SHALL BE SUBMITTED TO THE CITY ENGINEER FOR HIS REVIEW AND APPROVAL. THE CONTRACTOR SHALL PROTECT ALL MAJOR TREES FROM DAMAGE. NO TREE SHALL BE REMOVED WITHOUT PERMISSION OF THE OWNER, UNLESS SHOWN OTHERWISE.
9. CLEARING AND GRUBBING OPERATIONS AND DISPOSAL OF ALL DEBRIS THEREFROM SHALL BE PERFORMED BY THE CONTRACTOR IN STRICT ACCORDANCE WITH ALL LOCAL CODES AND ORDINANCES.
10. ALL WASTE MATERIAL RESULTING FROM THE PROJECT SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR, OR AS DIRECTED BY THE OWNER.
11. ALL EXCAVATIONS SHALL BE UNCLASSIFIED. NO SEPARATE PAYMENT WILL BE MADE FOR ROCK EXCAVATION.
12. THE CONTRACTOR SHALL CONTROL THE EROSION AND SILTATION DURING ALL PHASED OF CONSTRUCTION, AND SHALL KEEP THE STREETS CLEAN OF MUD AND DEBRIS.
13. ALL MANHOLES, CATCH BASINS, UTILITY VALVES AND METER PITS TO BE ADJUSTED OR REBUILT TO GRADE AS REQUIRED.
14. THE CONTRACTOR SHALL CONTACT DEVELOPMENT SERVICES INSPECTIONS AT: 816-969-1200 TO OBTAIN A DEVELOPMENT SERVICES CONSTRUCTION PERMIT. A MINIMUM 48 HOUR NOTICE SHALL BE GIVEN PRIOR TO PERMIT ISSUANCE.
15. THE CONTRACTOR SHALL CONTACT THE RIGHT OF WAY INSPECTOR AT 816-969-1800 PRIOR TO ANY LAND DISTURBANCE ACTIVITIES WITHIN THE RIGHT OF WAY. THESE ACTIVITIES MAY REQUIRE A PERMIT.
16. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL TRAFFIC HANDLING MEASURES NECESSARY TO ENSURE THAT THE GENERAL PUBLIC IS PROTECTED AT ALL TIMES. TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD-LATEST EDITION).

1. ALL STREET CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL. ALL APPLICABLE AASHTO STANDARDS HAVE BEEN MET.
2. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATION.
3. ALL INSPECTION OF STREET CONSTRUCTION TO BE PERFORMED BY THE CITY OF LEE'S SUMMIT DEVELOPMENT ENGINEER.
4. CURB RETURN RADI SHALL BE 30' AT BACK OF CURB UNLESS OTHERWISE NOTED.
5. SUBGRADE TO BE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
6. ASSUMED DESIGN SPEED = 30 MPH (RESIDENTIAL COLLECTOR).
7. MINIMUM STOPPING SIGHT DISTANCE = 200 FEET.
8. MINIMUM K, SAG CURVE = 37 (20 WITH LIGHTING), CREST CURVE = 19.
9. GRADE INTERSECTIONS TO DRAIN AS SHOWN.
10. SSD = STOPPING SIGHT DISTANCE.
11. ALL ADA SIDEWALK RAMPS SHALL BE CONSTRUCTED BY THE DEVELOPER WITH THE PUBLIC INFRASTRUCTURE.

1. ALL CONSTRUCTION TO FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813.
2. ALL WORKMANSHIP AND MATERIALS SHALL BE SUBJECT TO THE INSPECTION AND APPROVAL OF THE ENGINEERING DEPARTMENT OF THE CITY OF LEE'S SUMMIT, MISSOURI.
3. UTILITIES NOT MEASURED OR SHOWN ON THE PLANS ARE HORIZONTAL MEASUREMENTS, NOT SLOPE MEASUREMENTS. ALL PAYMENTS SHALL BE MADE ON HORIZONTAL MEASUREMENTS.
4. NO GEOLOGICAL INVESTIGATION HAS BEEN PERFORMED ON THE SITE.
5. THE UTILITY LOCATIONS SHOWN ON THESE PLANS ARE TAKEN FROM UTILITY COMPANY RECORDS AND APPARENT FIELD LOCATIONS. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION.
6. THE CONTRACTOR SHALL ADHERE TO THE PROVISIONS OF THE SENATE BILL NUMBER 583, 78TH GENERAL ASSEMBLY OF THE STATE OF MISSOURI. THE BILL REQUIRES THAT ANY PERSON OR FIRM DOING EXCAVATION OR PAVING THE RIGHT OF WAY DO SO ONLY AFTER GIVING NOTICE TO, AND OBTAINING INFORMATION FROM, UTILITY COMPANIES. STATE LAW REQUIRES 48 HOURS ADVANCE NOTICE. THE CONTRACTOR MAY ALSO UTILIZE THE FOLLOWING TOLL FREE PHONE NUMBER PROVIDED BY MISSOURI ONE CALL SYSTEM, INC.: 1-800-DIG-RTITE. THIS PHONE NUMBER IS APPLICABLE ANYWHERE WITHIN THE STATE OF MISSOURI. PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL NOTIFY ALL THOSE COMPANIES WHICH HAVE FACILITIES IN THE NEAR VICINITY OF THE CONSTRUCTION TO BE PERFORMED.
7. PRIOR TO ORDERING PRECAST STRUCTURES, SHOP DRAWING SHALL BE SUBMITTED TO THE DESIGN ENGINEER FOR APPROVAL. AFTER APPROVAL OF THE SHOP DRAWINGS, A COPY OF THE APPROVED AND SIGNED SHOP DRAWINGS SHALL BE SUBMITTED TO THE CITY ENGINEER AND THE CITY REQUEST.
8. THE CONTRACTOR SHALL PROTECT ALL MAJOR TREES FROM DAMAGE. NO TREE SHALL BE REMOVED WITHOUT PERMISSION OF THE OWNER, UNLESS SHOWN OTHERWISE.
9. CLEARING AND GRUBBING OPERATIONS AND DISPOSAL OF ALL DEBRIS THEREFROM SHALL BE PERFORMED BY THE CONTRACTOR IN STRICT ACCORDANCE WITH ALL LOCAL CODES AND ORDINANCES.
10. ALL WASTE MATERIAL RESULTING FROM THE PROJECT SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR, OR AS DIRECTED BY THE OWNER.
11. ALL EXCAVATIONS SHALL BE UNCLASSIFIED. NO SEPARATE PAYMENT WILL BE MADE FOR ROCK EXCAVATION.
12. THE CONTRACTOR SHALL CONTROL THE EROSION AND SILTATION DURING ALL PHASED OF CONSTRUCTION, AND SHALL KEEP THE STREETS CLEAN OF MUD AND DEBRIS.
13. ALL MANHOLES, CATCH BASINS, UTILITY VALVES AND METER PITS TO BE ADJUSTED OR REBUILT TO GRADE AS REQUIRED.
14. THE CONTRACTOR SHALL CONTACT DEVELOPMENT SERVICES INSPECTIONS AT: 816-969-1200 TO OBTAIN A DEVELOPMENT SERVICES CONSTRUCTION PERMIT. A MINIMUM 48 HOUR NOTICE SHALL BE GIVEN PRIOR TO PERMIT ISSUANCE.
15. THE CONTRACTOR SHALL CONTACT THE RIGHT OF WAY INSPECTOR AT 816-969-1800 PRIOR TO ANY LAND DISTURBANCE ACTIVITIES WITHIN THE RIGHT OF WAY. THESE ACTIVITIES MAY REQUIRE A PERMIT.
16. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL TRAFFIC HANDLING MEASURES NECESSARY TO ENSURE THAT THE GENERAL PUBLIC IS PROTECTED AT ALL TIMES. TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD-LATEST EDITION).

1. EXISTING UTILITIES HAVE BEEN SHOWN TO THE GREATEST EXTENT POSSIBLE BASED UPON INFORMATION PROVIDED TO THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE RESPECTIVE UTILITY COMPANIES AND FIELD LOCATING UTILITIES PRIOR TO CONSTRUCTION AND IDENTIFYING ANY POTENTIAL CONFLICTS. ALL CONFLICTS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ANY REQUIRED UTILITY RELOCATIONS. UTILITIES DAMAGED THROUGH THE NEGLIGENCE OF THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
3. CONTRACTOR SHALL VERIFY FLOW-LINES AND STRUCTURE TOPS PRIOR TO CONSTRUCTION, AND SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES. PROVIDE SHOP DRAWINGS FOR ALL PRECAST AND MANUFACTURED UTILITY STRUCTURES FOR REVIEW BY THE ENGINEER PRIOR TO CONSTRUCTION OF THE STRUCTURES.
4. UTILITY SEPARATION: WATERLINES SHALL HAVE A MINIMUM OF 10 FEET HORIZONTAL AND 2 FEET VERTICAL SEPARATION FROM ALL SANITARY SEWER LINES, MANHOLES, AND SANITARY SEWER SERVICE LATERALS, AS MEASURED FROM EDGE TO EDGE. IF MINIMUM SEPARATIONS CAN NOT BE OBTAINED, CONCRETE ENCASEMENT OF THE SANITARY LINE SHALL BE REQUIRED 10 FEET IN EACH DIRECTION OF THE CONFLICT.
5. MEASURES FOR PREVENTING PIPE EMBEDMENT, PIPE ENCASEMENT, FLOWABLE FILL, BACKFILL MATERIALS, CLEANING, SODDING, AND ANY OTHER ITEMS NECESSARY FOR THE CONSTRUCTION OF THE UTILITY LINE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE UTILITY INSTALLATION.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING RESPECTIVE UTILITY COMPANIES 48-HOURS IN ADVANCE FOR THE INSPECTION OF ANY PROPOSED UTILITY MAIN EXTENSION OR SERVICE LINE OR SERVICE CONNECTION TO ANY EXISTING MAIN.
7. OFFSITE MATERIALS SHALL BE NEATLY PLACED ONSITE ADJACENT TO THE TRENCH, AND COMPACTED TO PREVENT SATURATION AND EXCESS SEDIMENT RUNOFF. UNSUITABLE MATERIALS, EXCESS ROCK AND SHALE, ASPHALT, CONCRETE, TREES, BRUSH ETC. SHALL BE PROPERLY DISPOSED OF OFFSITE. MATERIALS MAY BE WASTED ONSITE AT THE DIRECTION OF THE OWNER OR HIS APPOINTED REPRESENTATIVE.

Sheet List Table	
Sheet Number	Sheet Title
1	COVER SHEET
2	GRADING PLAN FULL SITE
3	PRE-CONSTRUCTION EROSION CONTROL PLAN
4	EROSION CONTROL PLAN
5	POST-CONSTRUCTION EROSION CONTROL PLAN
6	EROSION CONTROL DETAILS
7	EROSION CONTROL DETAILS
8	OUTLET STRUCTURE 801
9	OUTLET STRUCTURE 2401
10	OUTLET STRUCTURE 201

**Development Services Department**  
**Lee's Summit, Missouri**

06/20/2023

**APPROVED BY:**

CITY ENGINEER  
APPROVED FOR ONE YEAR FROM THIS DATE

**OWNER/DEVELOPER:**

GRIFFIN RILEY PROPERTY GROUP  
 JAKE LOVELESS, VICE PRESIDENT  
 21 SE 29TH TERRACE  
 LEE'S SUMMIT  
 p 816-366-7900  
 JAKE@GRIFFINRILEY.COM

**MO GRS BENCHMARK:**

STATION NAME - JA-90

KC METRO ALUMINUM GRS DISK SET IN CONCRETE STAMPED "JA-90, 1988"  
LOCATED NEAR THE INTERSECTION OF LANGSFORD ROAD AND OLD  
LANGSFORD ROAD, 43 FEET SOUTHEAST OF THE CENTER OF LANGSFORD  
ROAD AND 32 FEET NORTH OF THE CENTER OF OLD LANGSFORD ROAD.  
N:1001052.8503, E:2845604.8272

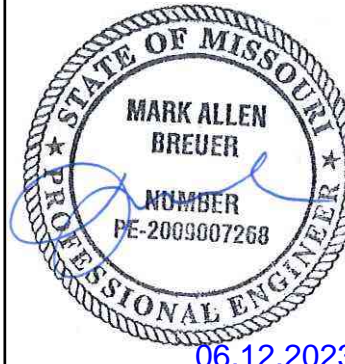
ELEV. 997.045

### PROJECT BENCHMARK:

"SQUARE" CUT IN TOP OF CONCRETE STORM MANHOLE  
STORM MANHOLE IS LOCATED APPROX. 130 FEET EAST OF THE  
INTERSECTION OF SE JOEL AVE & BLUE PARKWAY AND 26 FEET SOUTH  
OF THE CENTERLINE OF BLUE PARKWAY.  
N:996874.9690, E:2840937.1365

ELEV. 1005.719

PREPARED BY:



06.12.2023

SCHLAGEL &amp; ASSOCIATES, P.A.

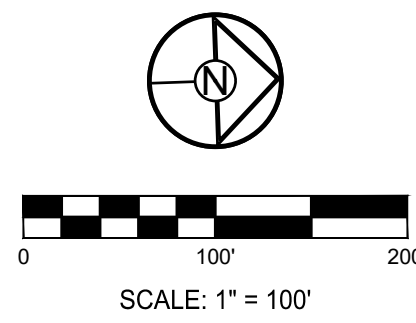
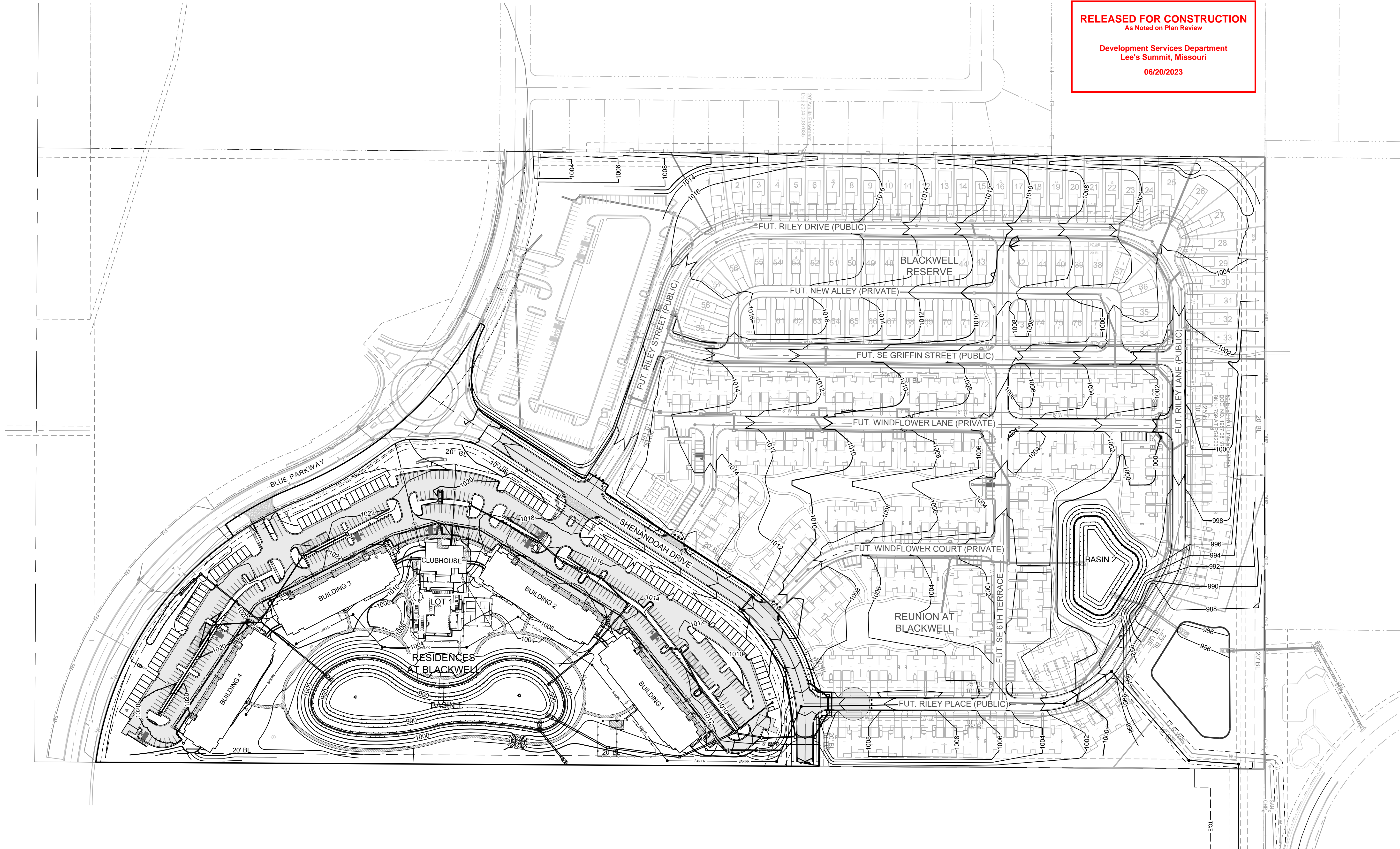
RESIDENCES, REUNION & RESERVE AT BLACKWELL  
MASS GRADING & EROSION SEDIMENT CONTROL PLANS

DRAWN BY:		REVISION	DATE	DESCRIPTION
TRC		1	5/12/2023	PER CITY COMMENTS
		2	5/12/2023	PER CITY COMMENTS
CHECKED BY:		3	06/12/2023	PER CITY COMMENTS
MAB		4		
DATE PREPARED:		5		
11/30/2022		6		
		7		
PROJ. NUMBER:		8		
22-102		9		

## COVER SHEET

SHEET

1

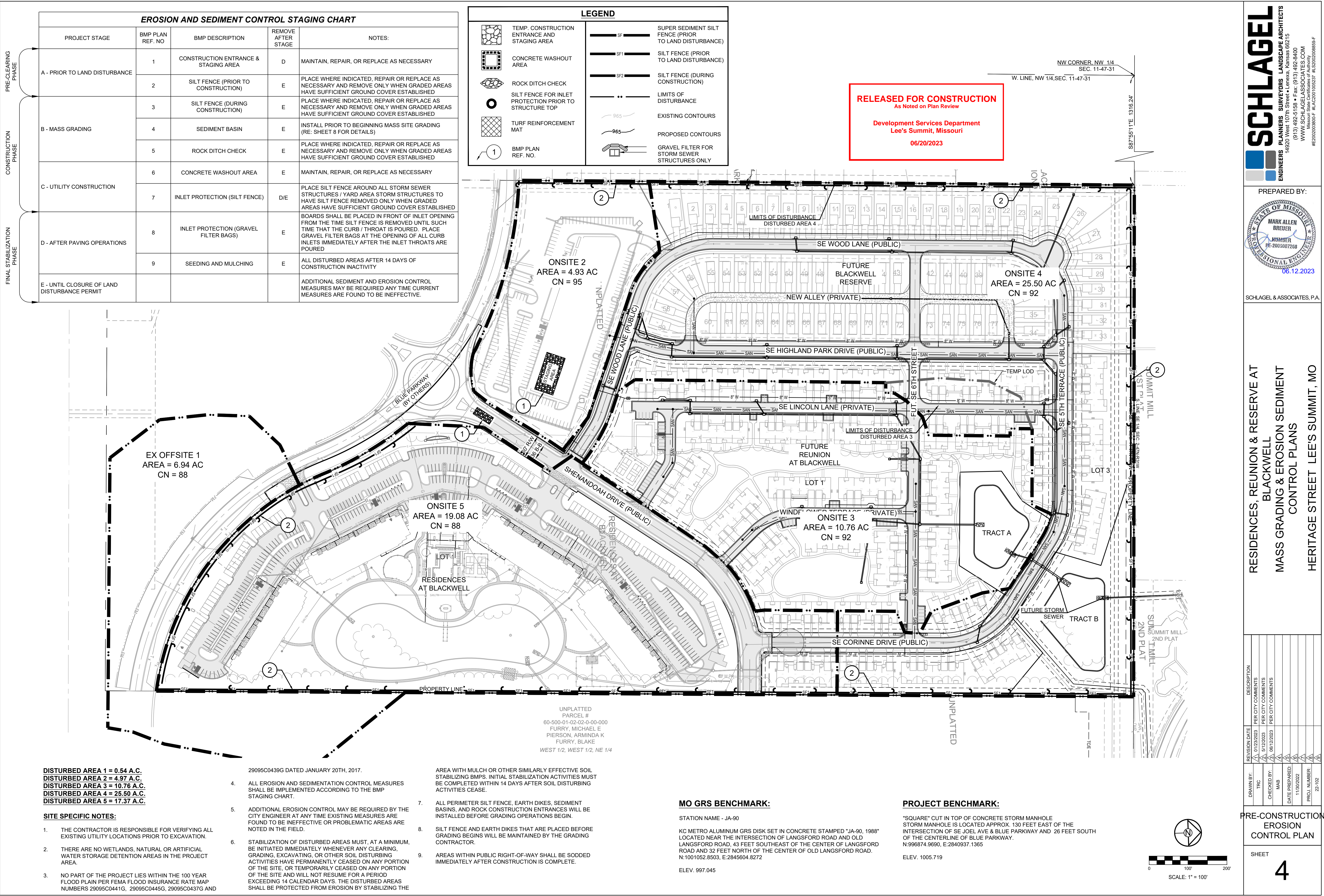


RESIDENCES, REUNION & RESERVE AT BLACKWELL  
MASS GRADING & EROSION SEDIMENT CONTROL PLANS  
HERITAGE STREET LEE'S SUMMIT, MO

REVISION DATE	DESCRIPTION
1 01/23/2023	PER CITY COMMENTS
2 5/12/2023	PER CITY COMMENTS
3 06/12/2023	PER CITY COMMENTS
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GRADING PLAN  
FULL SITE





**As Noted on Plan Review**

06/20/2023



1. SEE SHEET 4 FOR EROSION CONTROL NOTES, LEGEND AND STAGING CHART.
2. SEDIMENT BASIN #2 SHALL BE INSTALLED AND UTILIZED UNTIL SUCH TIME THAT THE 20' D/E DOWNSTREAM OF SEDIMENT BASIN #3 IS ACQUIRED. UPON DEDICATION OF SAID 20' D/E SEDIMENT BASIN #3 SHALL BE INSTALLED AND SEDIMENT BASIN #2 CONVERTED TO AN EWDB.



PREPARED BY:
--------------



RESIDENCES, REUNION & RESERVE AT  
BLACKWELL  
MASS GRADING & EROSION SEDIMENT  
CONTROL PLANS  
HERITAGE STREET LEE'S SUMMIT, MO

DRAWN BY:	REVISION DATE	DESCRIPTION
TRC	1/ 01/23/2023	PER CITY COMMENTS
	2/ 5/12/2023	PER CITY COMMENTS
CHECKED BY:	3/ 06/12/2023	PER CITY COMMENTS
IMB	4/	
	5/	
	6/	
11/30/2022	7/	
	8/	
PROJ. NUMBER:		

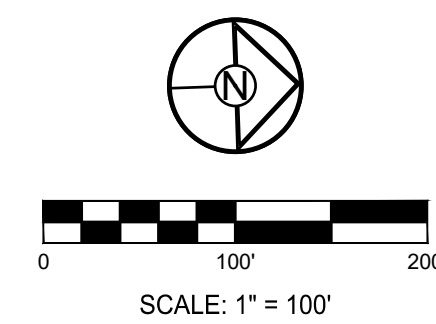
SHEET

5

**Development Services Department**  
**Lee's Summit, Missouri**  
**06/20/2023**



SEE SHEET 4 FOR EROSION CONTROL NOTES, LEGEND  
AND STAGING CHART.



PREPARED BY:



SCHLAGEL &amp; ASSOCIATES, P.A.

RESIDENCES, REUNION & RESERVE AT  
BLACKWELL  
MASS GRADING & EROSION SEDIMENT  
CONTROL PLANS  
HERITAGE STREET LEE'S SUMMIT, MO

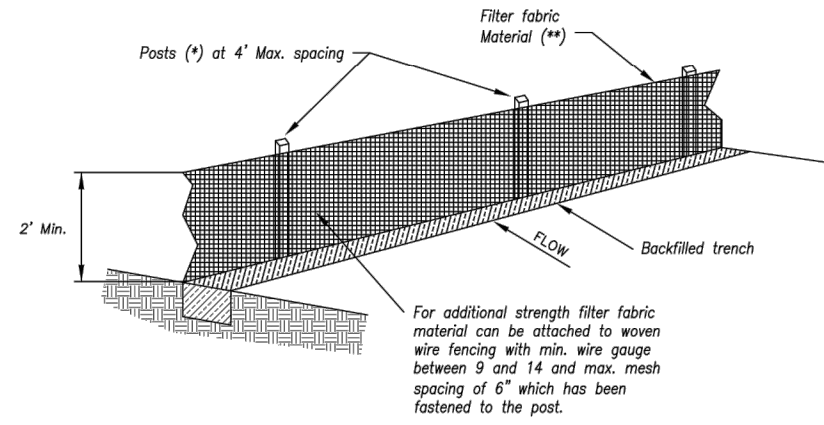
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CHECKED BY:	2	5/12/2023	PER CITY COMMENTS
MAB	3	06/12/2023	PER CITY COMMENTS
DATE PREPARED:	4		
11/30/2022	5		
PROJ. NUMBER:	6		
22-102	7		

POST  
-CONSTRUCTION  
EROSION  
CONTROL PLAN

SHEET

6

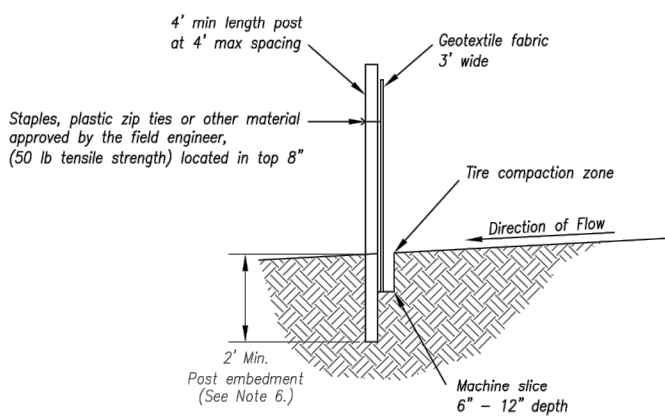




- (\*) POSTS
- MIN. LENGTH 4"
  - HARDWOOD 1 3/4" x 1 3/4"
  - NO.2 SOUTHERN PINE 2 3/4" x 2 3/4"
  - STEEL 1.53 LB/YD

(\*\*) - Geotextile Fabric shall meet the requirements of AASHTO M288

SILT FENCE DETAILS  
Not to Scale

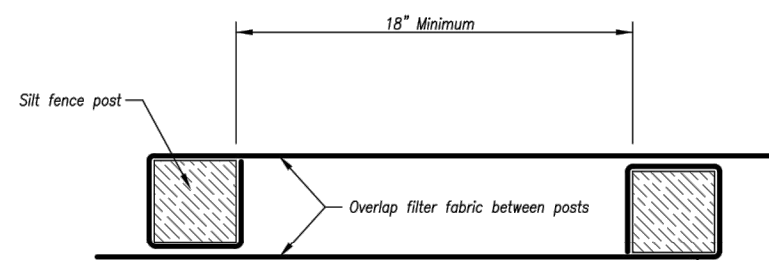


Notes:

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

Maintenance:

1. Remove and dispose of sediment deposits when the deposit approaches 1/2 the height of silt fence.
2. Repair as necessary to maintain function and structure.



JOINING FENCE SECTIONS  
Not to Scale

AMERICAN PUBLIC WORKS ASSOCIATION

KANSAS CITY METRO CHAPTER

SILT FENCE

STANDARD DRAWING NUMBER ESC-03

ADOPTED: 10/24/2016

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

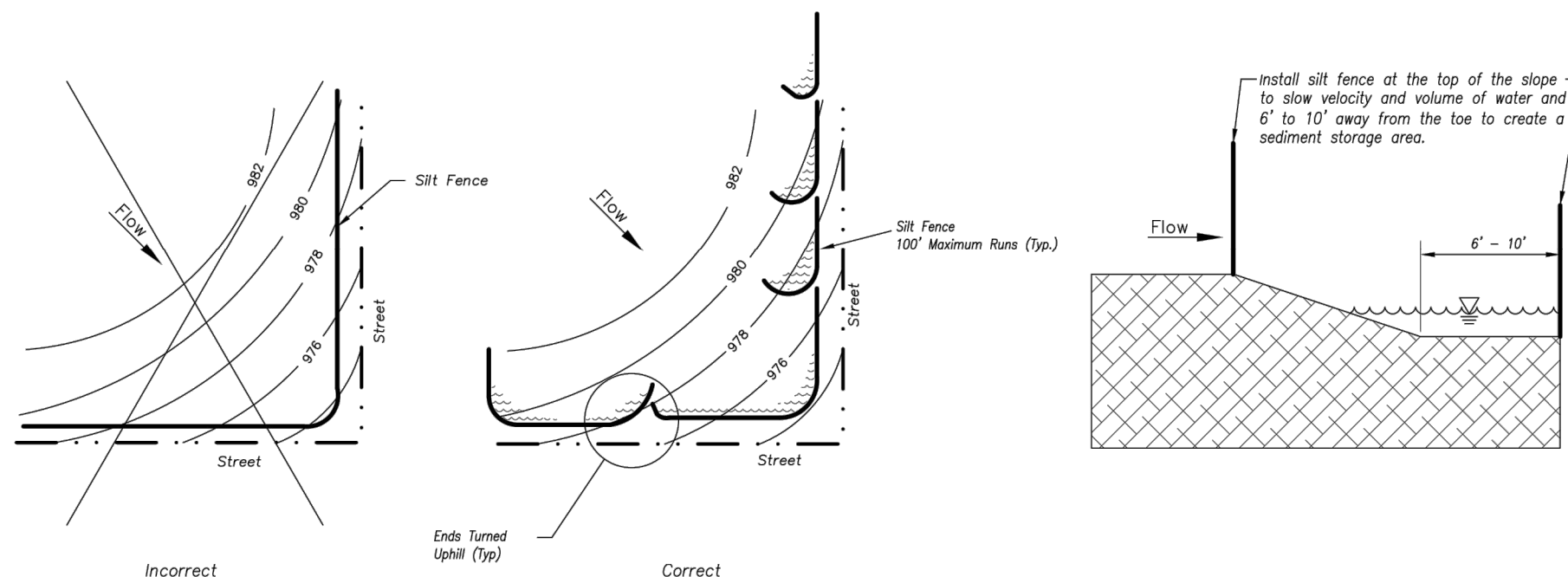
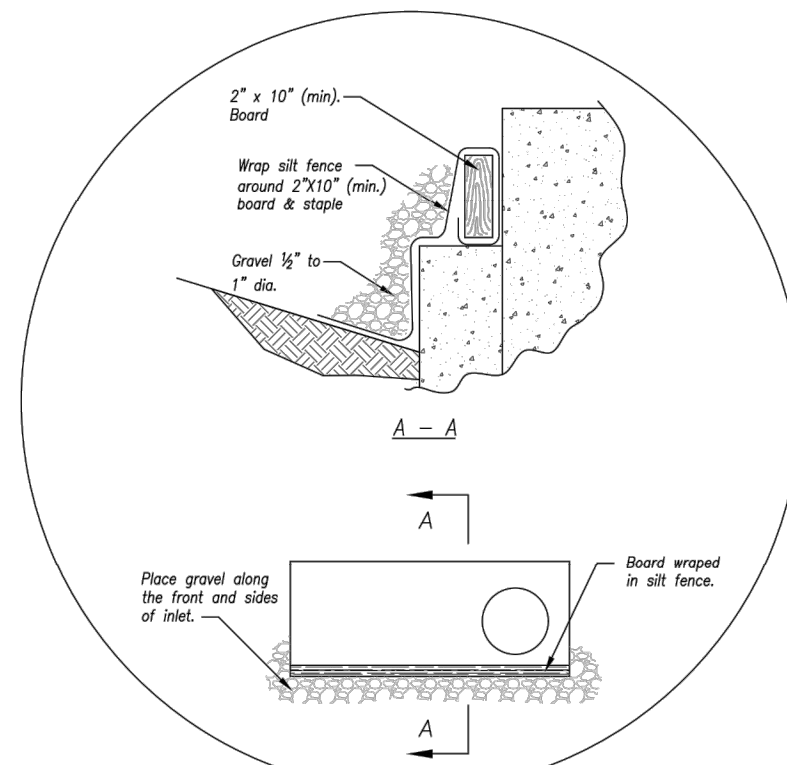
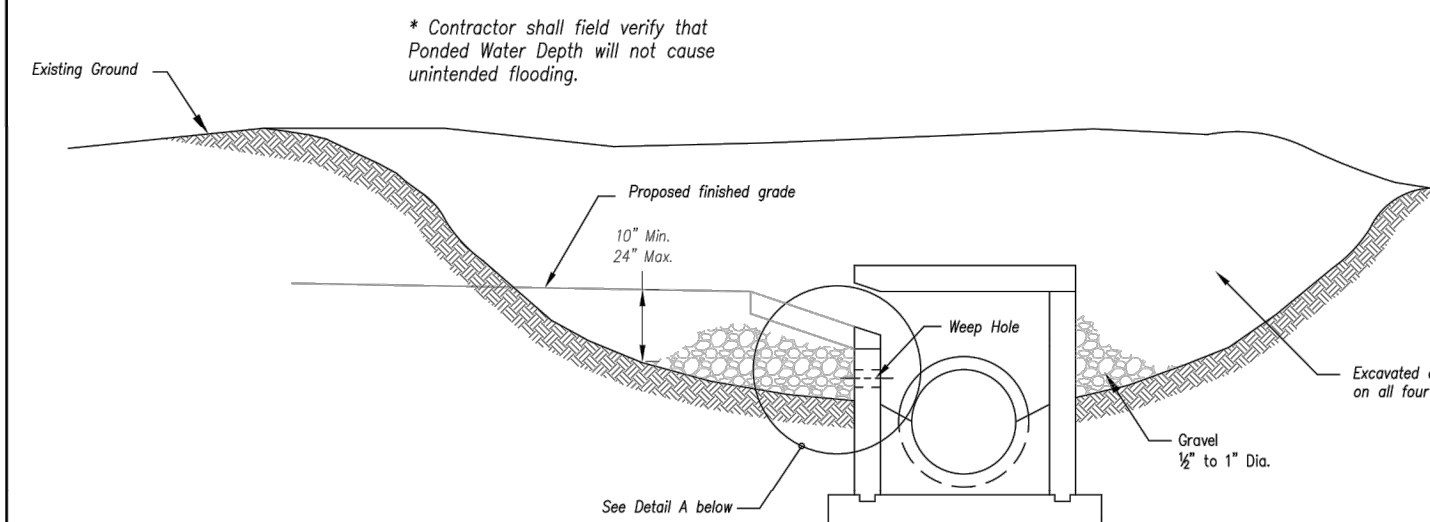


Figure A

SILT FENCE LAYOUT  
Not to Scale



EARLY STAGE CURB INLET  
(Open Box and Prior to Pouring Curb and Inlet Throat)

Notes:

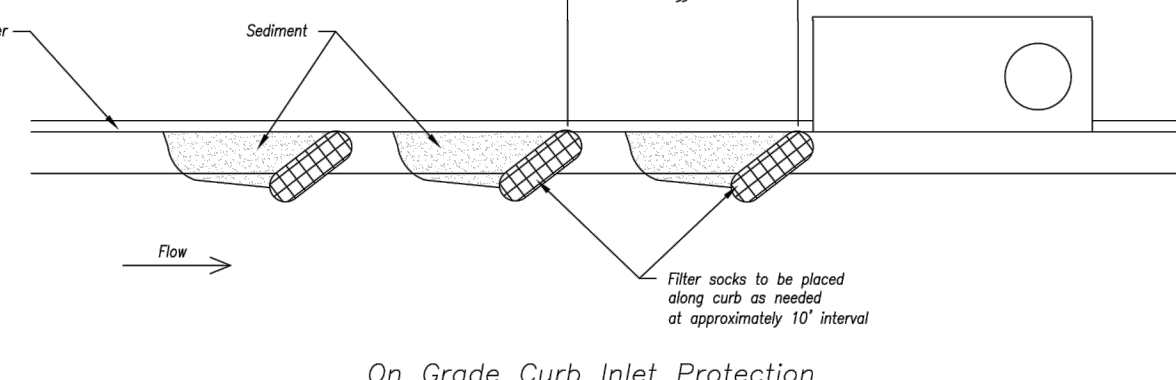
1. Immediately following inlet construction and prior to construction of curb and inlet throat, protect inlet opening by installing 2" x 10" (min.) board wrapped in silt fence. Structures shall have excavated storage area on all four sides to allow settling of sediment (Early Stage Curb Inlet).
2. When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

Maintenance:

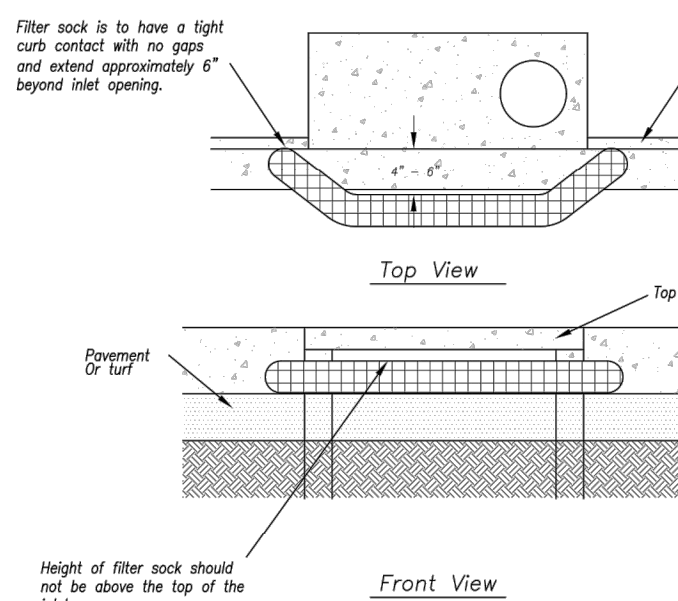
1. Remove deposited sediment from excavated storage areas when available storage has been reduced by 20%.
2. Remove deposited sediment from filter socks or similar when any accumulation of sediment is visible.
3. Repair or replace as necessary to maintain function and integrity of installation.

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

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



On Grade Curb Inlet Protection



Sump Inlet Sediment Filter

LATE STAGE CURB INLET  
(After Pouring Curb and Inlet Throat)

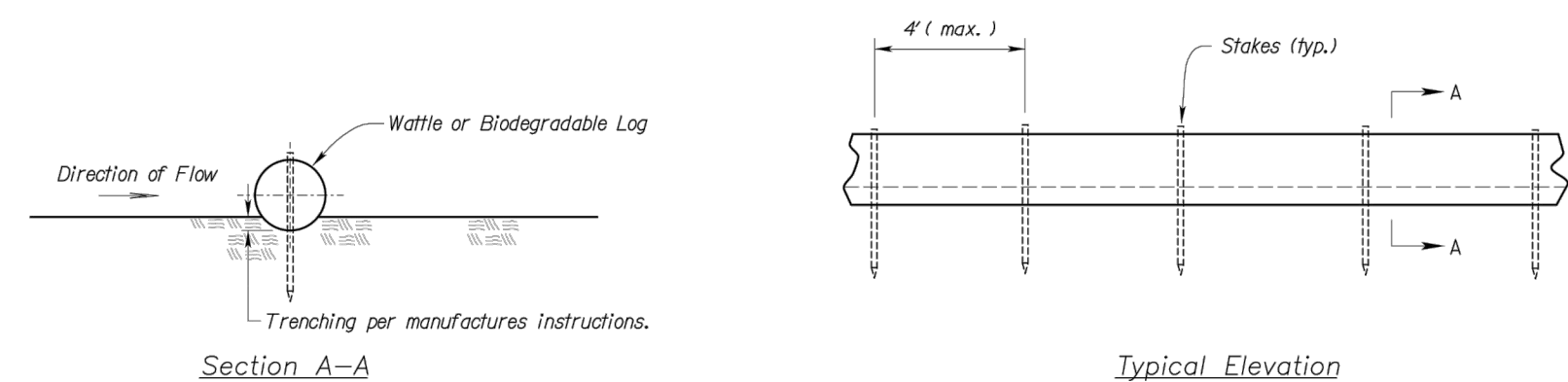
AMERICAN PUBLIC WORKS ASSOCIATION

KANSAS CITY METRO CHAPTER

CURB INLET PROTECTION

STANDARD DRAWING NUMBER ESC-06

ADOPTED: 10/24/2016



WATTLES AND BIODEGRADABLE LOG

Notes for Wattles and Biodegradable Log Slope Protection:

1. The Slope barriers shall be placed along contour lines, with a short section turned up-slope at each end of the barrier. The maximum length of the slope barrier shall not exceed 250 feet, and the barrier ends need to be staggered.
2. Install wattles and biodegradable logs per manufacturer's instructions.
3. Spacing of stakes per manufacturer's instructions with 4' max. spacing. Length of stakes shall be a minimum of 2 times the diameter of the log with minimum of 24".

Notes for Mulch and Compost Filter Berm:

1. The sediment control berm shall be placed uncompact in a window at locations shown on the plans or as directed by the engineer.
2. Parallel to the base of the slope, or around the perimeter of other affected areas, construct a 1 to 3 foot high by 2.5 to 3 foot wide berm (see Figure 1). For maximum water treatment ability or for steep slopes, construct a 1.5 to 3 foot high trapezoidal berm that is a minimum of 4 feet wide at the base (see Figure 2). In extreme conditions, or where specified by the engineer, a second berm shall be constructed at the top of the slope. Engineer will specify berm requirements.
3. If berm is to be left as permanent or part of the natural landscape, the compost berm may be seeded during application for permanent vegetation.
4. Do not use compost or wood mulch berms in any runoff channels or concentrated flow areas.
5. Wood mulch shall consist of tree and shrub debris resulting from clearing and grubbing and shall be ground by the mechanical means such as a chipper, hammermill, tub grinder or other approved method. Mulch sizing varies with a maximum width of 2" and a maximum length of 10".

Maintenance for Mulch and Compost Filter Berm:

1. Berm shall be reshaped and material added as necessary to maintain function and dimensions.
2. Breaches in the berm shall be repaired promptly.

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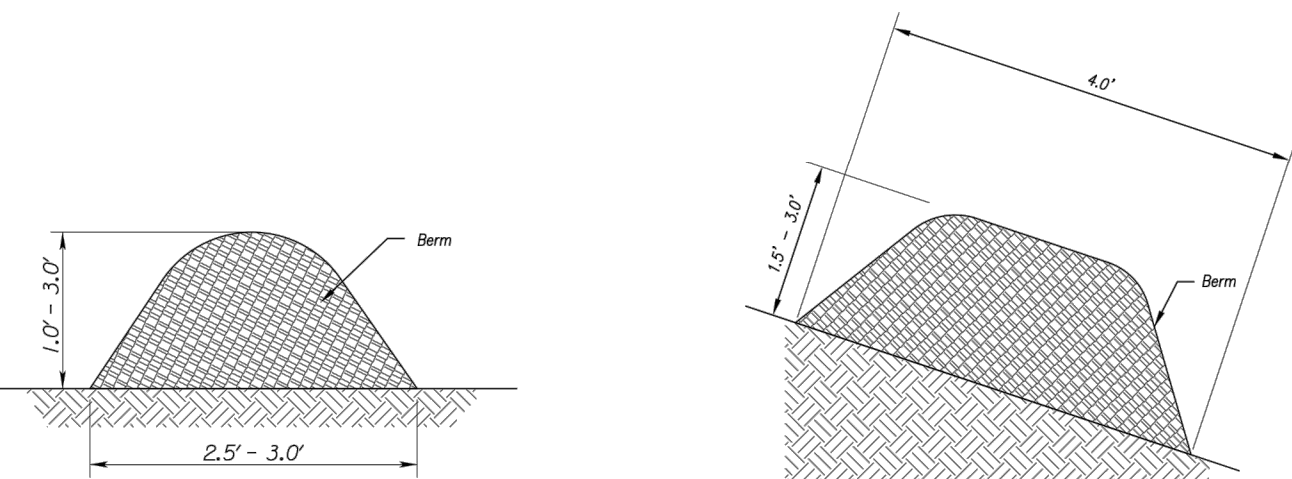
KANSAS CITY METRO CHAPTER

WATTLES/BIODEGRADABLE LOG AND MULCH/COMPOST FILTER BERM

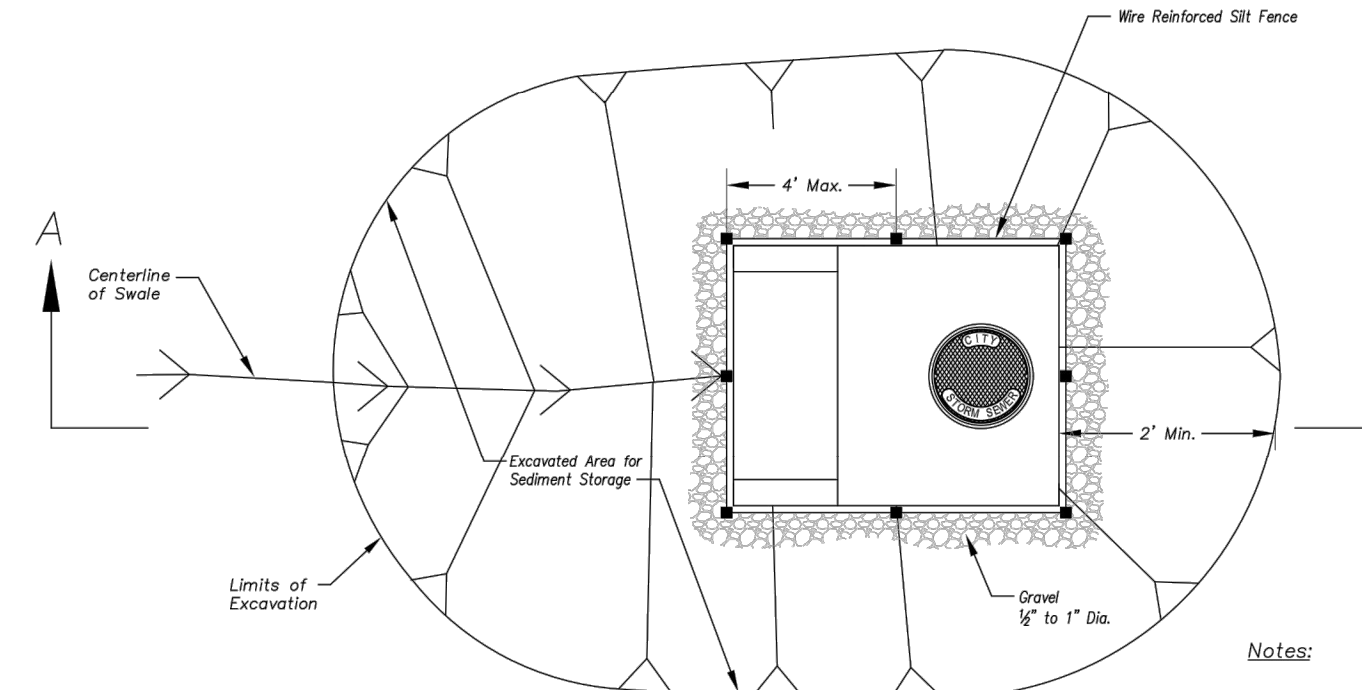
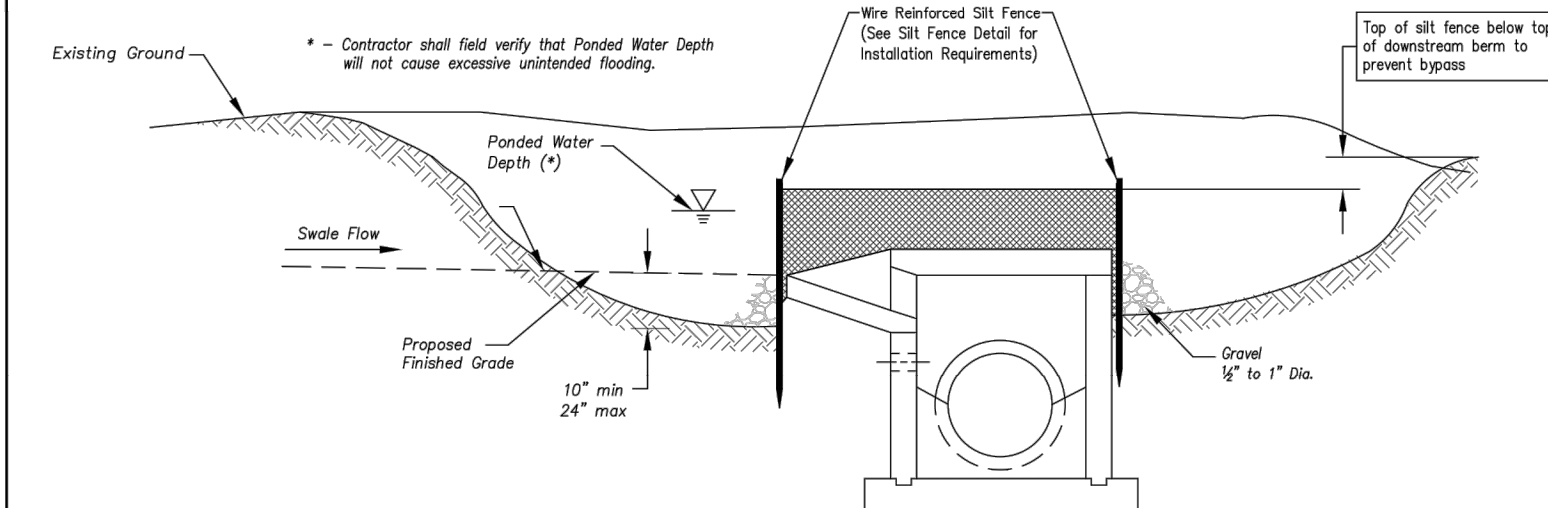
STANDARD DRAWING NUMBER ESC-04

ADOPTED: 10/24/2016

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



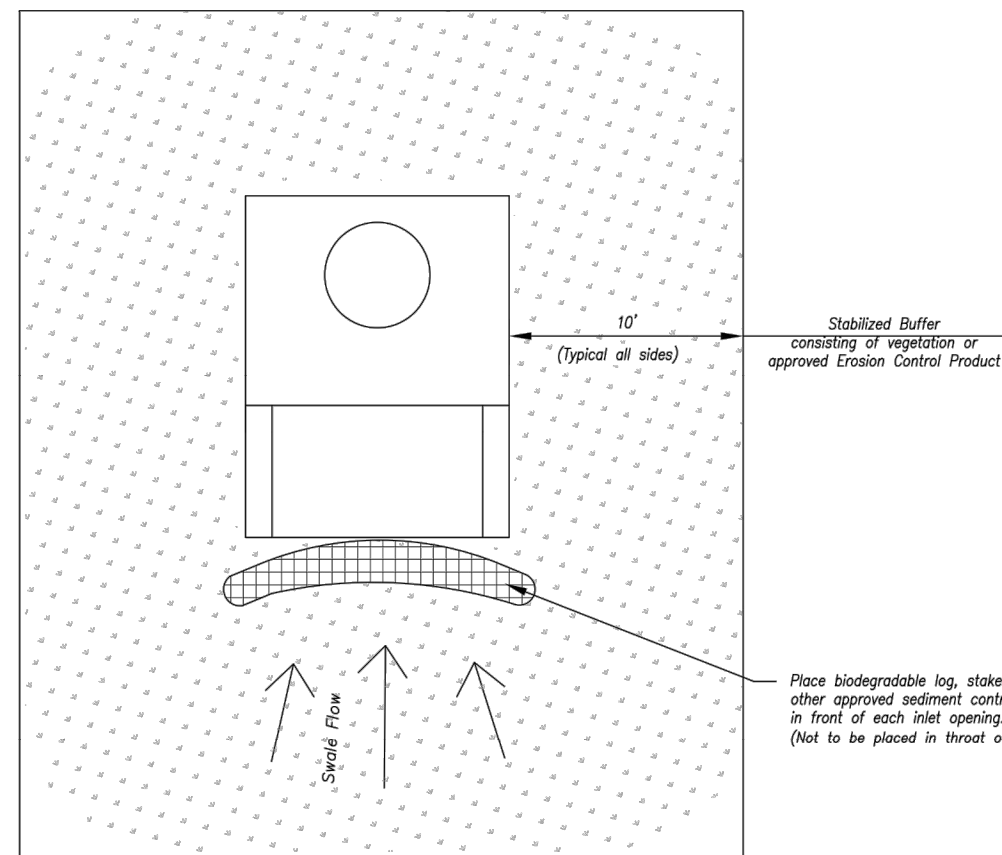
MULCH OR COMPOST FILTER BERMS



EARLY STAGE AREA INLET  
(All open boxes and inlets not at final grade)

Notes:

1. Early Stage Area Inlet Sediment Barrier to be installed immediately after inlet or junction box is constructed.
2. Silt fence shall remain in place until excavated area is removed and Late Stage Area Inlet is being installed.
3. Backfill excavated area ONLY after final grading of the site. Stabilization of the site is to immediately follow.
4. Wire reinforced silt fence may be used in place of silt fence attached to wood frame.



LATE STAGE AREA INLET  
(Area inlets at final grade and existing inlets)

Maintenance:

1. Remove deposited sediment from excavated storage areas when available storage has been reduced by 20%.
2. Remove deposited sediment from filter socks or similar when any accumulation of sediment is visible.
3. Repair or replace as necessary to maintain function and integrity of installation.

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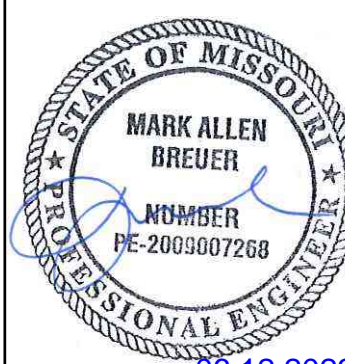
KANSAS CITY METRO CHAPTER

AREA INLET AND JUNCTION BOX PROTECTION

STANDARD DRAWING NUMBER ESC-07

ADOPTED: 10/24/2016

PREPARED BY:



SCHLAGEL & ASSOCIATES, P.A.

RESIDENCES, REUNION & RESERVE AT  
BLACKWELL  
MASS GRADING & EROSION SEDIMENT  
CONTROL PLANS  
HERITAGE STREET LEE'S SUMMIT, MO

REVISION DATE	DESCRIPTION
01/23/2023	PER CITY COMMENTS
05/12/2023	PER CITY COMMENTS
06/12/2023	PER CITY COMMENTS
11/30/2022	DATE PREPARED
22-102	PROJ. NUMBER

EROSION  
CONTROL  
DETAILS

SHEET

8

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ENGINEERS PLANNERS SURVEYORS LANDSCAPE ARCHITECTS

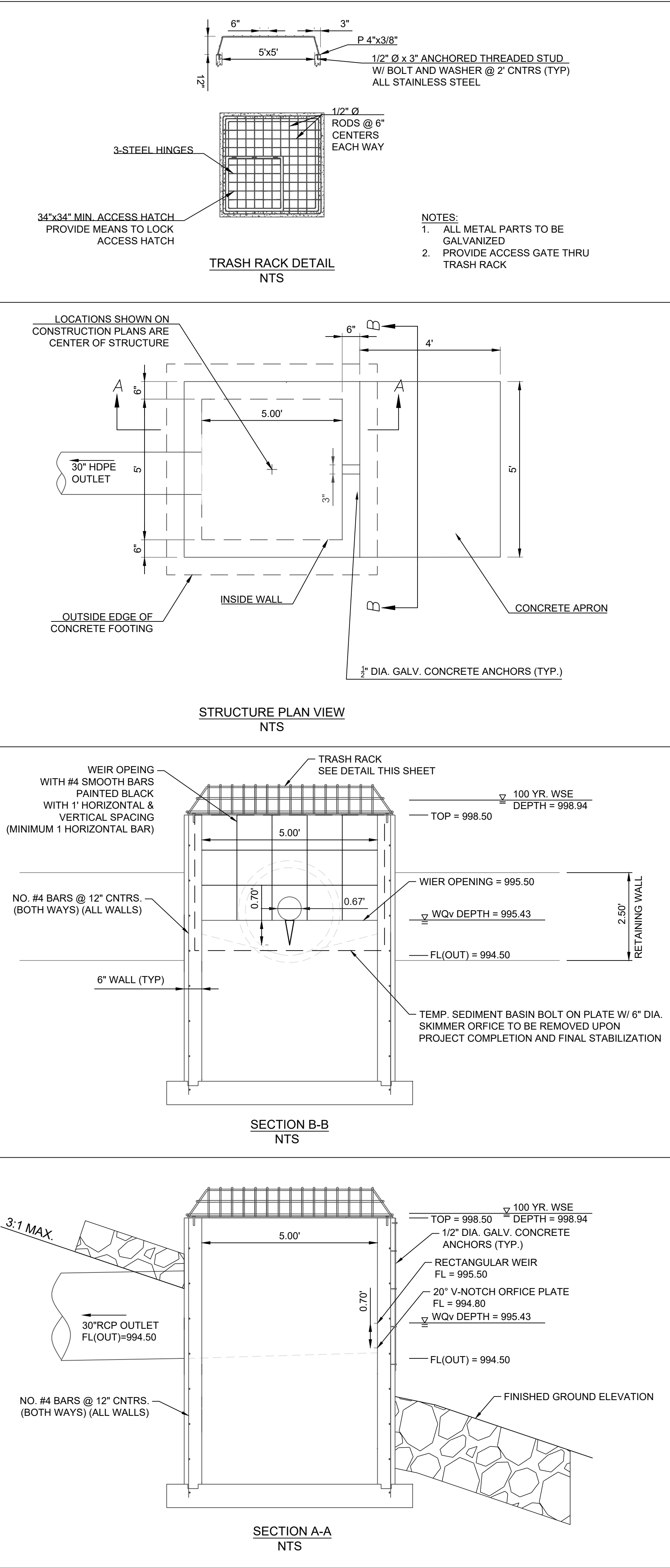
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Missouri State Certificate of Authority

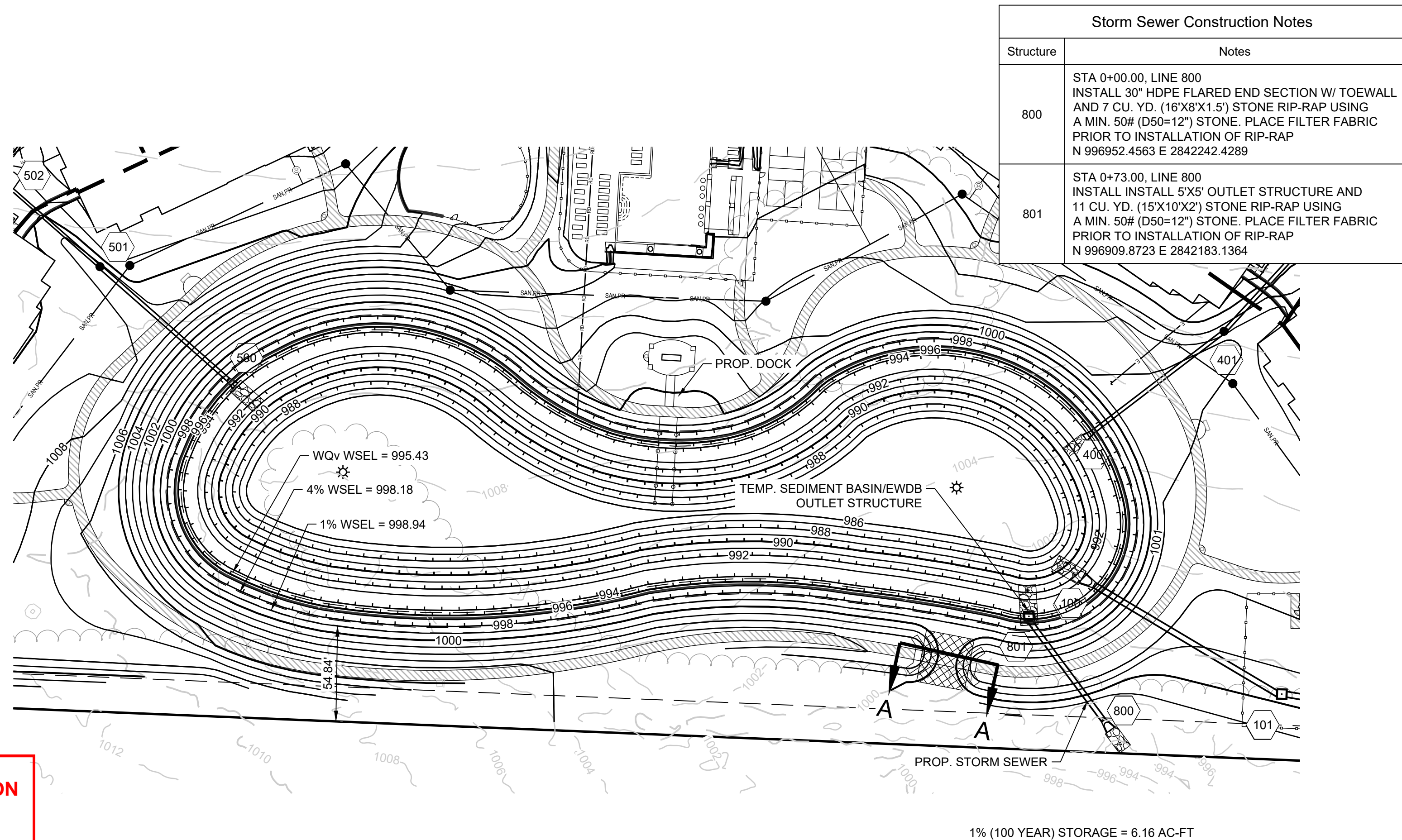
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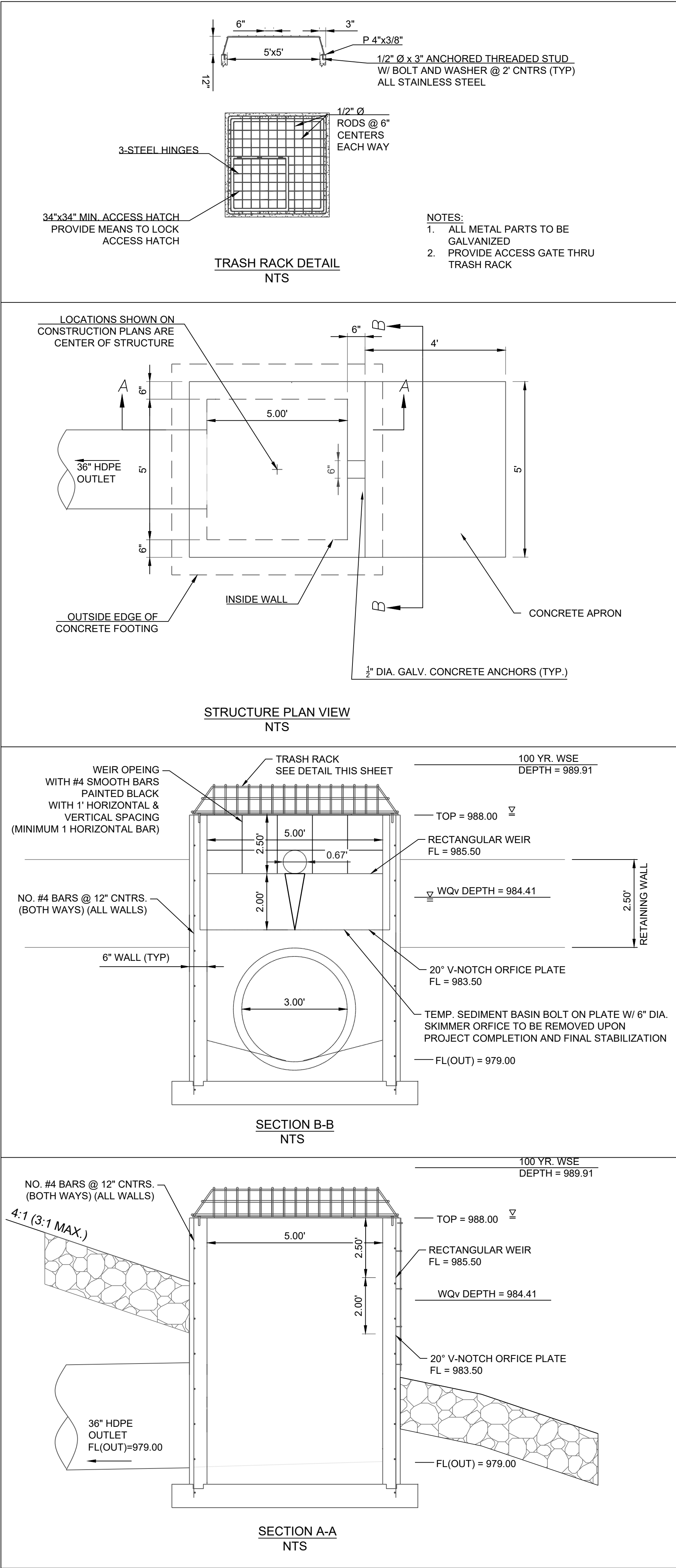


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Development Services Department  
Lee's Summit, Missouri

06/20/2023

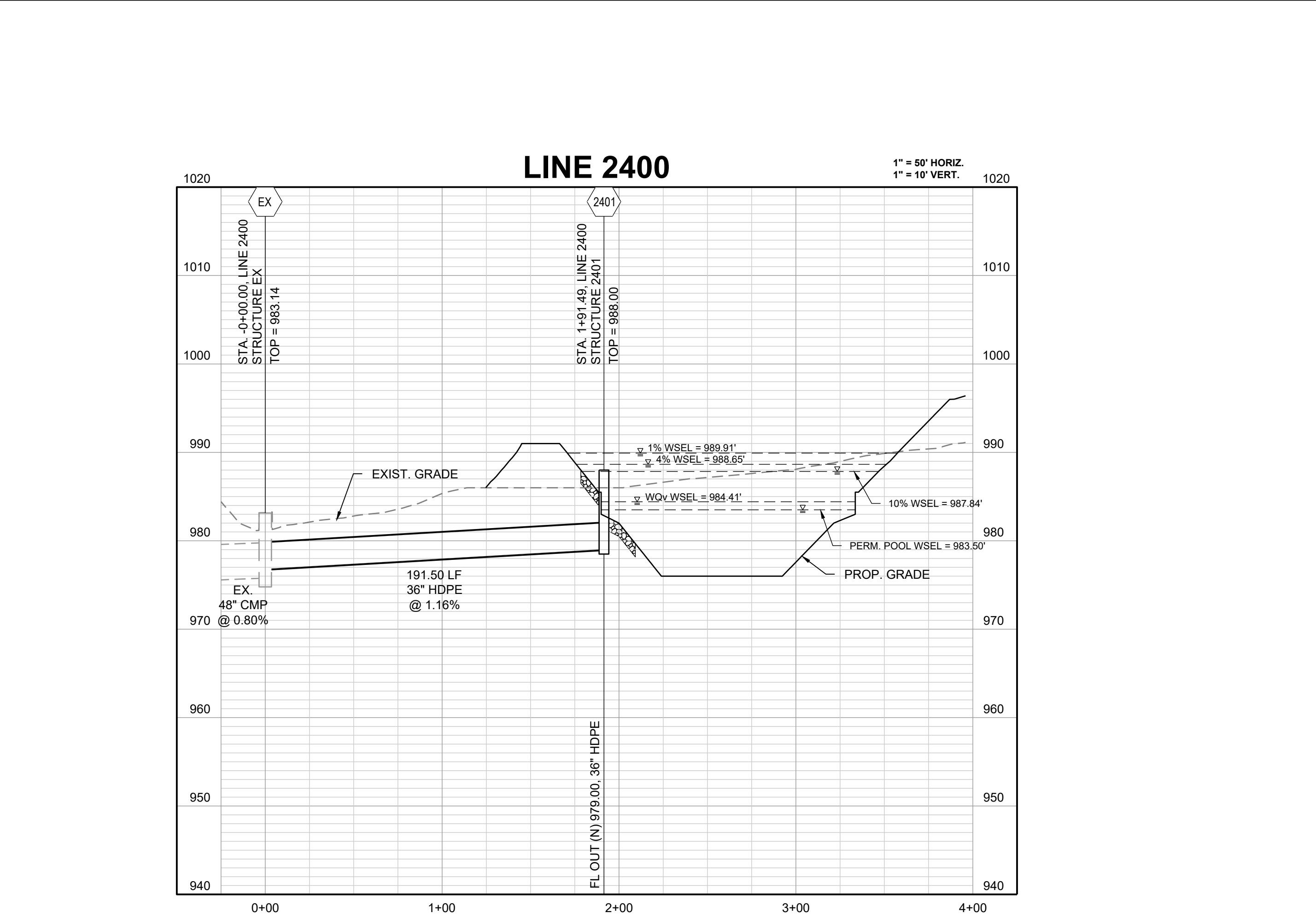
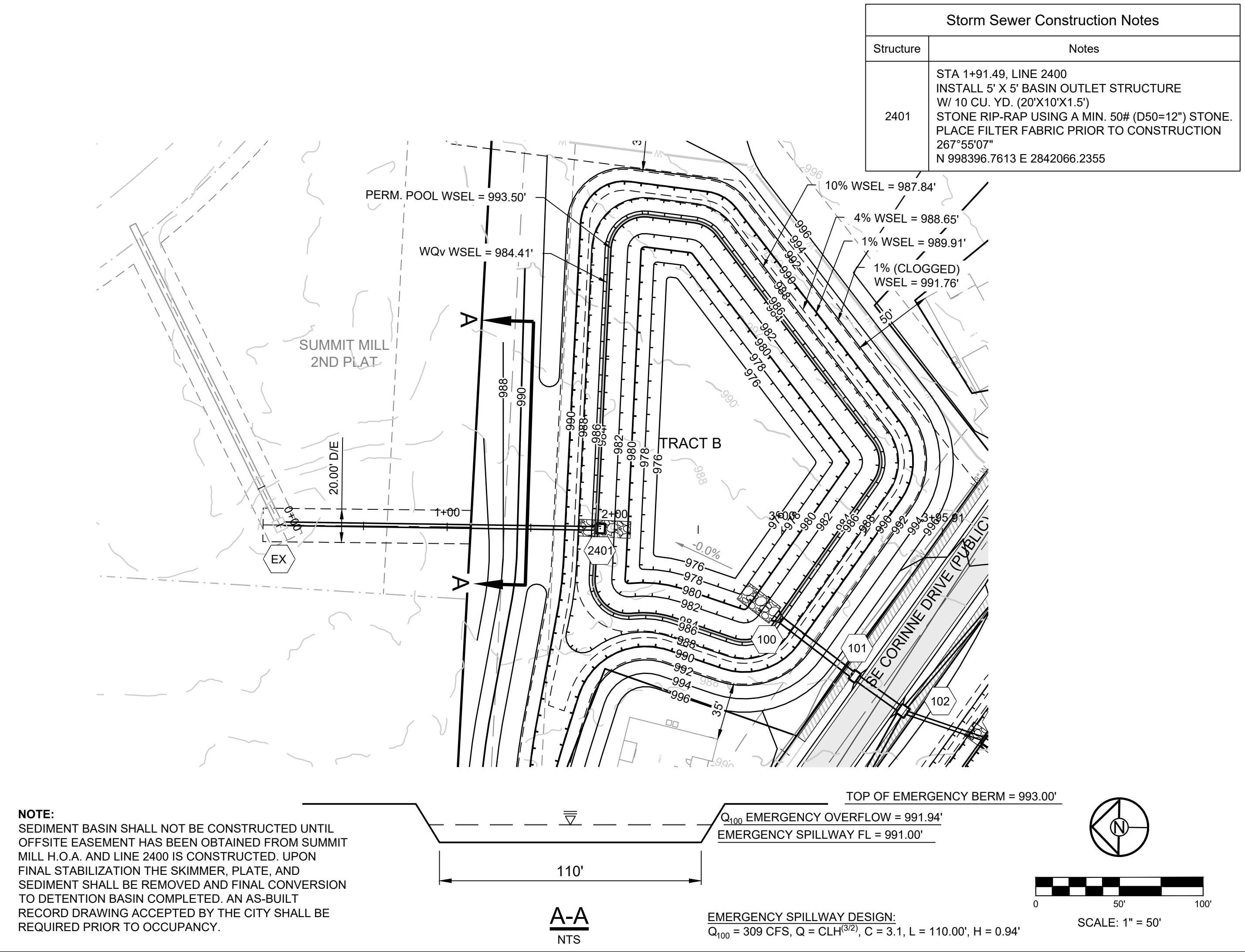




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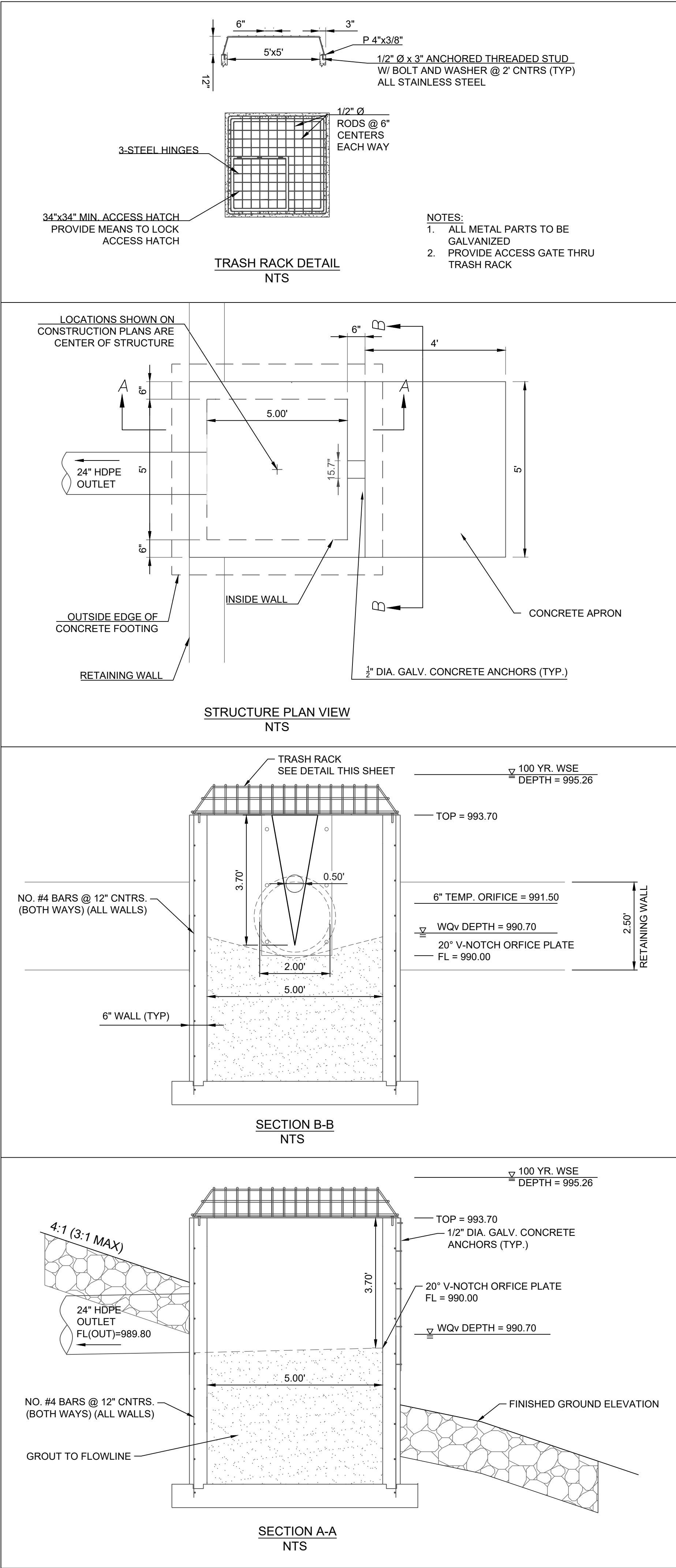
Development Services Department  
Lee's Summit, Missouri

06/20/2023



REVISION DATE	DESCRIPTION
1 01/23/2023	PER CITY COMMENTS
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5	
6	
7 11/30/2022	DATE PREPARED
8	
9	
10 22-102	PROJ. NUMBER

OUTLET  
STRUCTURE 2401

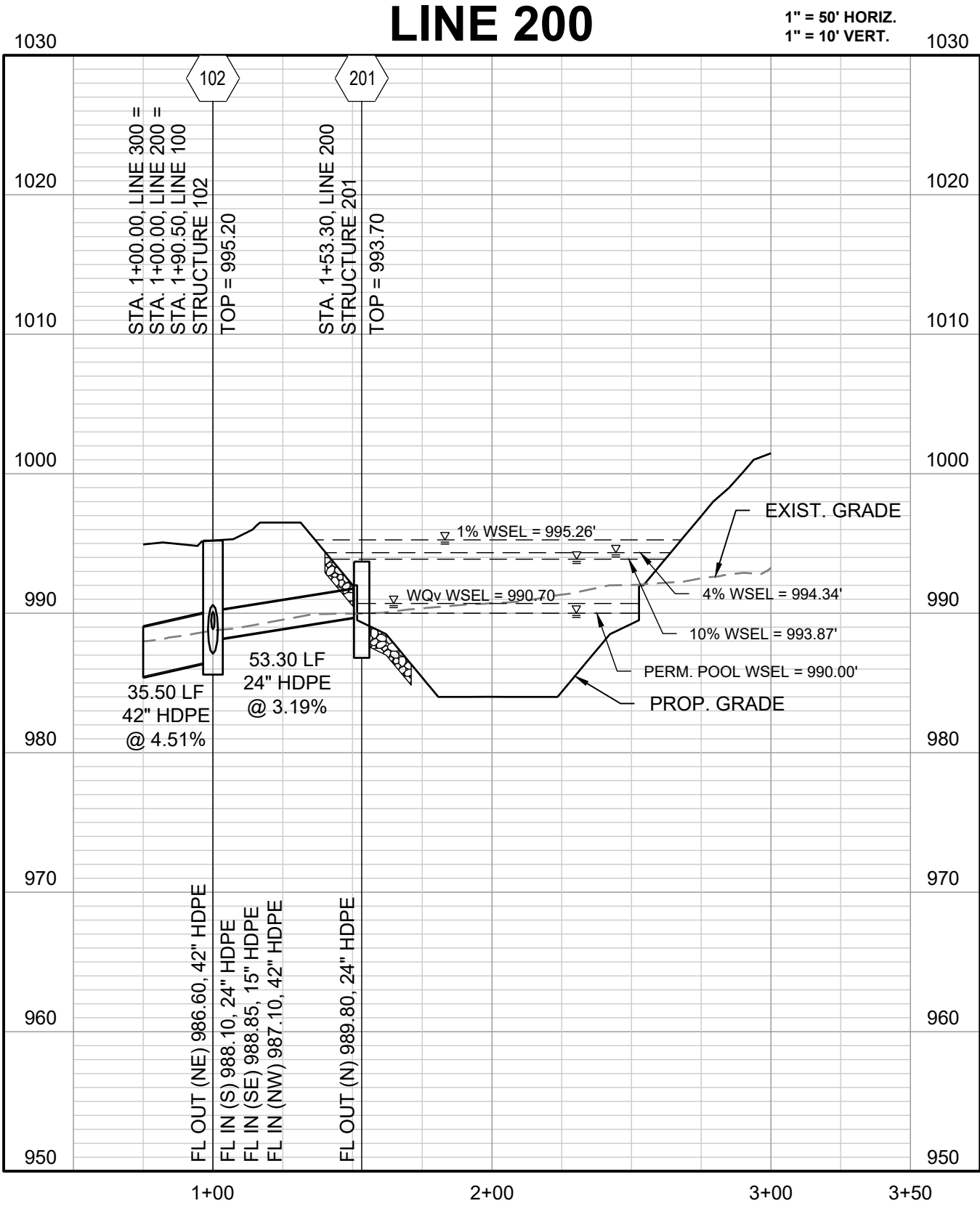
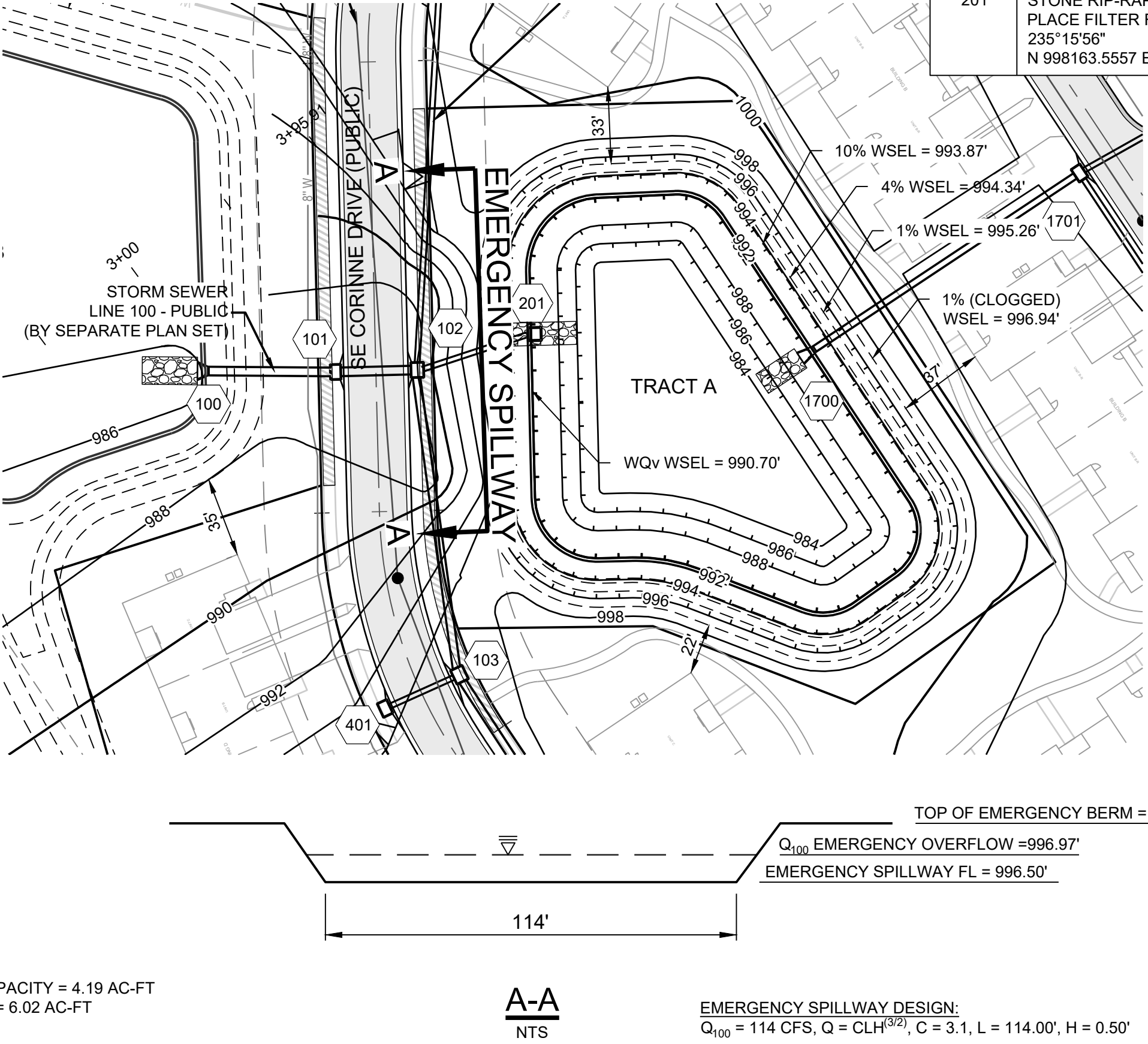


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Development Services Department  
Lee's Summit, Missouri

06/20/2023

NOTE:  
TEMPORARY SEDIMENT BASIN AND OUTLET STRUCTURE W/ SKIMMER AND PLATE SHALL BE CONSTRUCTED WITH THE FIRST PHASE OF THE EROSION CONTROL PLAN. UPON FINAL STABILIZATION THE SKIMMER, PLATE, AND SEDIMENT SHALL BE REMOVED AND FINAL CONVERSION TO DETENTION BASIN COMPLETED. AN AS-BUILT RECORD DRAWING ACCEPTED BY THE CITY SHALL BE REQUIRED PRIOR TO OCCUPANCY.



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ENGINEERS PLANNERS SURVEYORS LANDSCAPE ARCHITECTS

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Missouri State Certificates of Authority  
#E2002003609-F #LAC2001005237 #LS200200859-F

PREPARED BY:

MARK ALLEN BREUER

NUMBER PE-2003007268

PROFESSIONAL ENGINEER

06.12.2023

SCHLAGEL & ASSOCIATES, P.A.

RESIDENCES, REUNION & RESERVE AT BLACKWELL

MASS GRADING & EROSION SEDIMENT CONTROL PLANS

HERITAGE STREET LEE'S SUMMIT, MO

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8	

DRAWN BY:	TRC
CHECKED BY:	MAB
DATE PREPARED:	11/30/2022
PROJ. NUMBER:	22-102

OUTLET STRUCTURE 201

SHEET

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