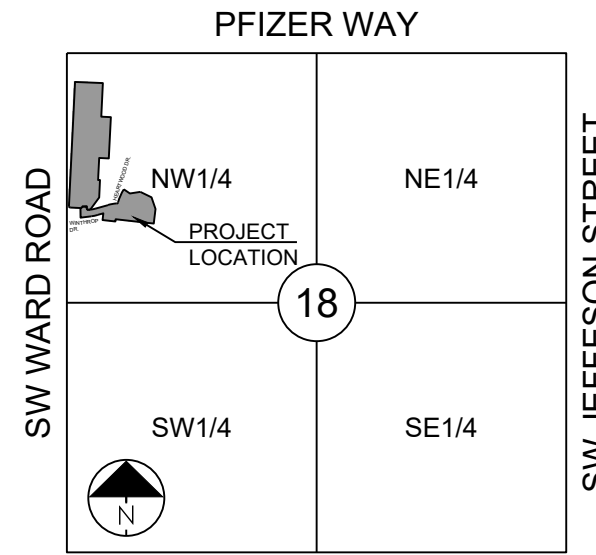


LEGEND:

Table listing various engineering symbols and their corresponding descriptions, such as A/E for Access Easement, BC for Back of Curb, and SW for Sidewalk.



SECTION 18-47N-31W

LOCATION MAP SCALE 1" = 2000'

UTILITY CONTACTS:

MISSOURI DEPARTMENT OF TRANSPORTATION (MODOT)

Contact information for Missouri Department of Transportation (MODOT) including Steve Holloway and phone numbers.

MISSOURI GAS ENERGY (MGE)

Contact information for Missouri Gas Energy (MGE) including Brent Jones and phone numbers.

KANSAS CITY POWER & LIGHT COMPANY (KCP&L)

Contact information for Kansas City Power & Light Company (KCP&L) including Ron DeJarnette and phone numbers.

CITY OF LEES SUMMIT PUBLIC WORKS

Contact information for City of Lees Summit Public Works including Dena Mezger and phone numbers.

AT&T

Contact information for AT&T including Mark Manion or Marty Loper and phone numbers.

COMCAST CABLE

Contact information for Comcast Cable including John Meadows and phone numbers.

PUBLIC WATER SUPPLY DISTRICT

Contact information for Public Water Supply District including Mark Schaffner and phone numbers.

STREET, STORMWATER, MASTER DRAINAGE, AND EROSION CONTROL PLANS FOR WOODLAND GLEN 2ND PLAT IN THE CITY OF LEE'S SUMMIT JACKSON COUNTY, MISSOURI

GENERAL NOTES:

- List of general construction notes including: ALL CONSTRUCTION TO FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813, ALL WORKMANSHIP AND MATERIALS SHALL BE SUBJECT TO THE INSPECTION AND APPROVAL OF THE ENGINEERING DEPARTMENT OF THE CITY OF LEE'S SUMMIT, MISSOURI.

EARTHWORK:

- List of earthwork notes including: IT IS RECOMMENDED THAT A GEOTECHNICAL ENGINEER OBSERVE AND DOCUMENT ALL EARTHWORK ACTIVITIES, CONTOURS HAVE BEEN SHOWN AT 1-FOOT OR 2-FOOT INTERVALS, AS INDICATED, GRADING SHALL CONSIST OF COMPLETING THE EARTHWORK REQUIRED TO BRING THE PHYSICAL GROUND ELEVATIONS OF THE EXISTING SITE TO THE FINISHED GRADE (OR SUB-GRADE) ELEVATIONS PROVIDED ON THE PLANS AS SPOT GRADES.

STREET NOTES:

- List of street construction notes including: 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, ALL INSPECTION OF STREET CONSTRUCTION TO BE PERFORMED BY THE CITY OF LEE'S SUMMIT DEVELOPMENT SERVICES DEPARTMENT.

UTILITIES:

- List of utility notes including: 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.

Sheet List Table showing sheet numbers (1-28) and corresponding sheet titles (COVER, PRE-CLEARING PLAN, ECP CONSTRUCTION, etc.).

APPROVED BY:

CITY ENGINEER APPROVED FOR ONE YEAR FROM THIS DATE

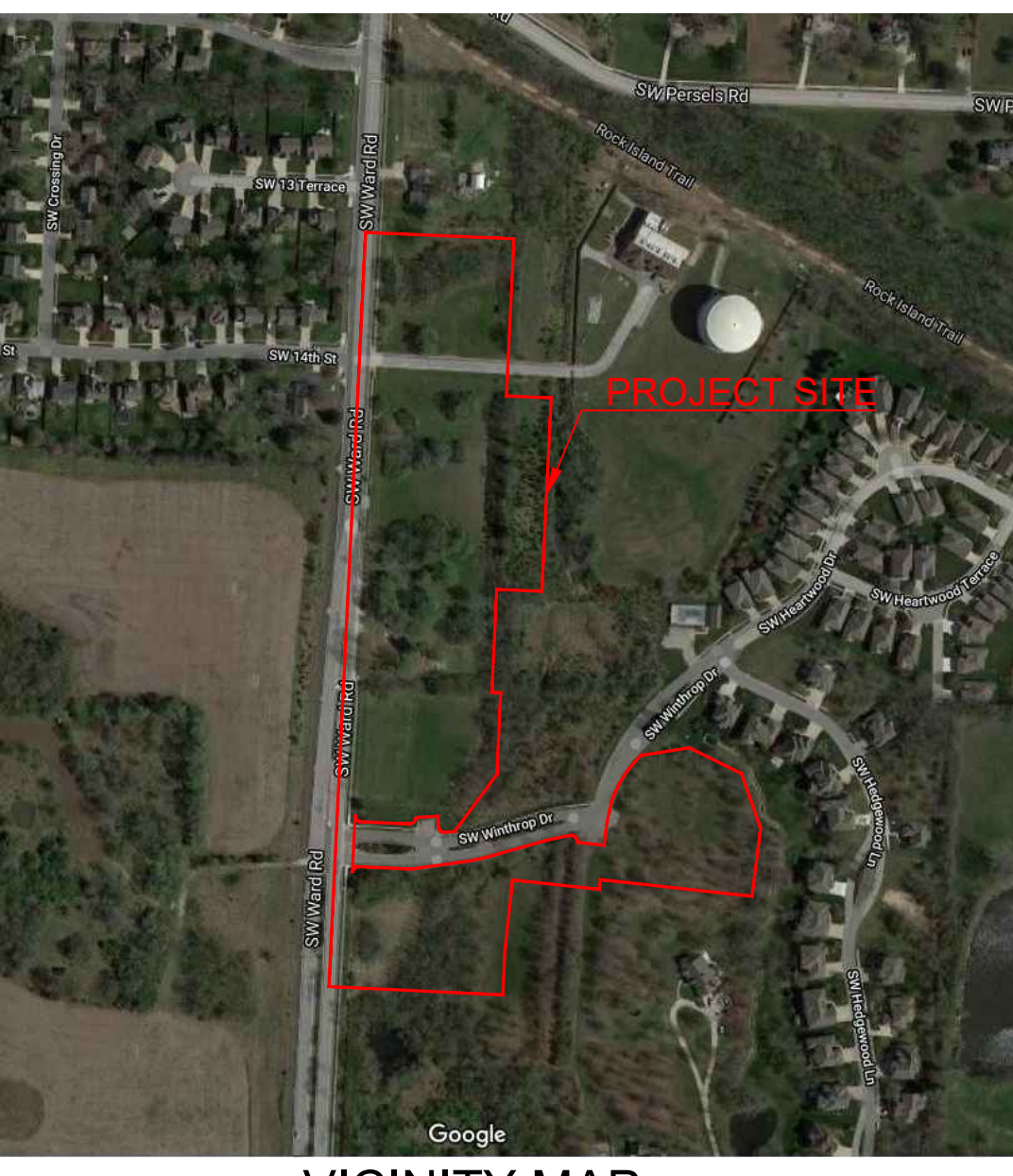
OWNER/DEVELOPER:

ABP FUNDING, LLC JOHN DUGGAN 9101 W. 110TH STREET, SUITE 200 OVERLAND PARK, KANSAS 66210

SUMMARY OF QUANTITIES

Table with columns for ITEM, QUANTITY, and UNITS, listing various construction items and their respective quantities and units.

Small table with 4 columns listing specific quantities for stop signs and road markers.



VICINITY MAP N.T.S.

SCHLAGEL ENGINEERS logo and contact information including address, phone, fax, and website.

Professional Engineer Seal for Mark Allen Breuer, No. 1020000000, State of Missouri, dated 10.13.2021.

Project name and location: WOODLAND GLEN 2ND PLAT STREET, STORMWATER, MASTER DRAINAGE, AND EROSION CONTROL PLANS WARD ROAD & WINTHROP DRIVE LEE'S SUMMIT, MISSOURI

Missouri One Call System logo with the slogan 'STOP-CALL BEFORE YOU DIG!' and contact number 1-800-344-7487.

Revision table with columns for revision date, description, and drafter, showing a series of revisions to the project.

Project information including DRAWN BY: BAL, CHECKED BY: MAB, DATE PREPARED: 2-19-2020, and SHEET number 1.

PROJECT BENCHMARK:

SW CORNER NW 1/4 SEC. 18-47N-31W, JACKSON COUNTY, MO. 3" DIAMETER ALUMINUM DISK IN MONUMENT BOX M.D.N.R. DOC. NO. 600-65374

ELEV. 1036.41

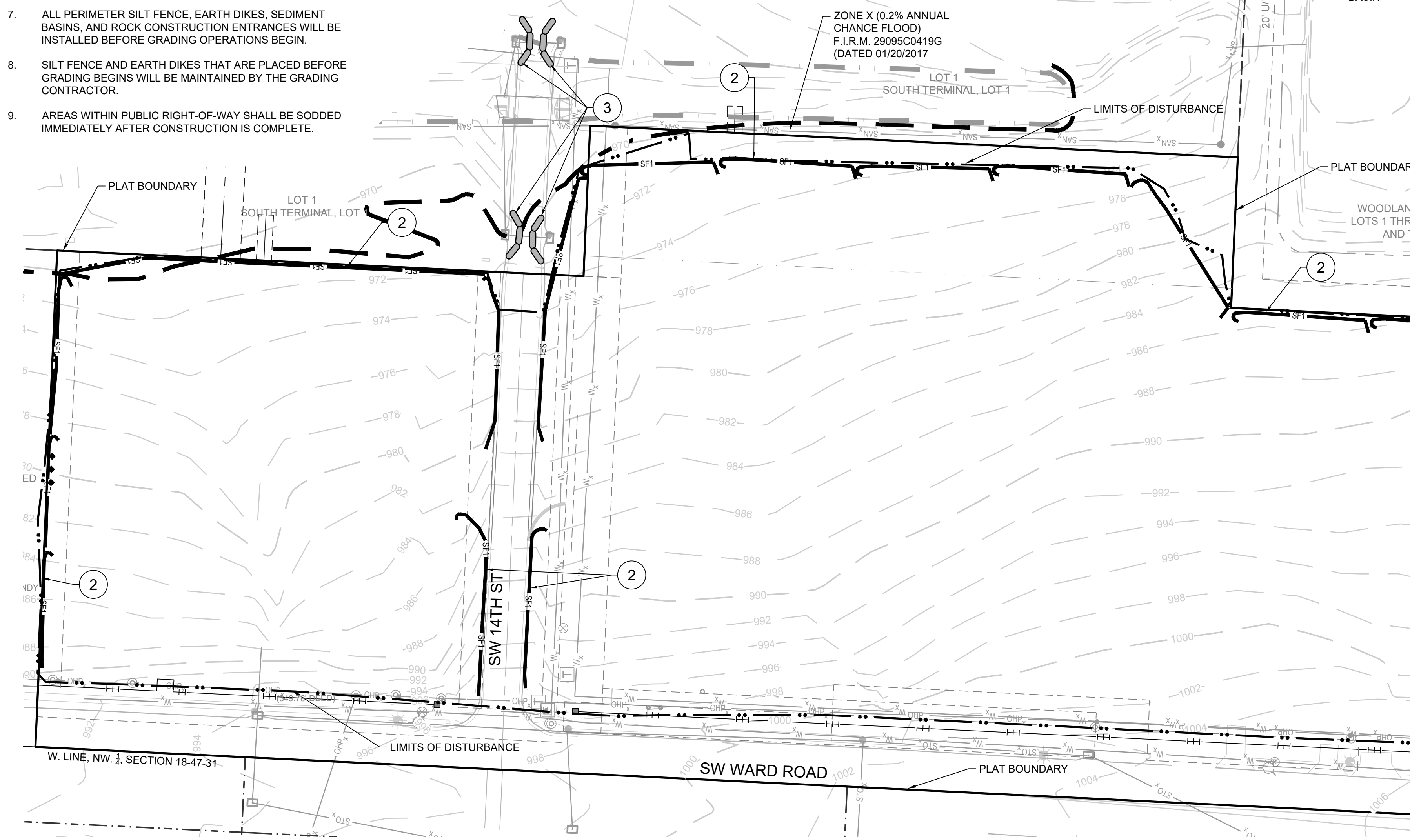
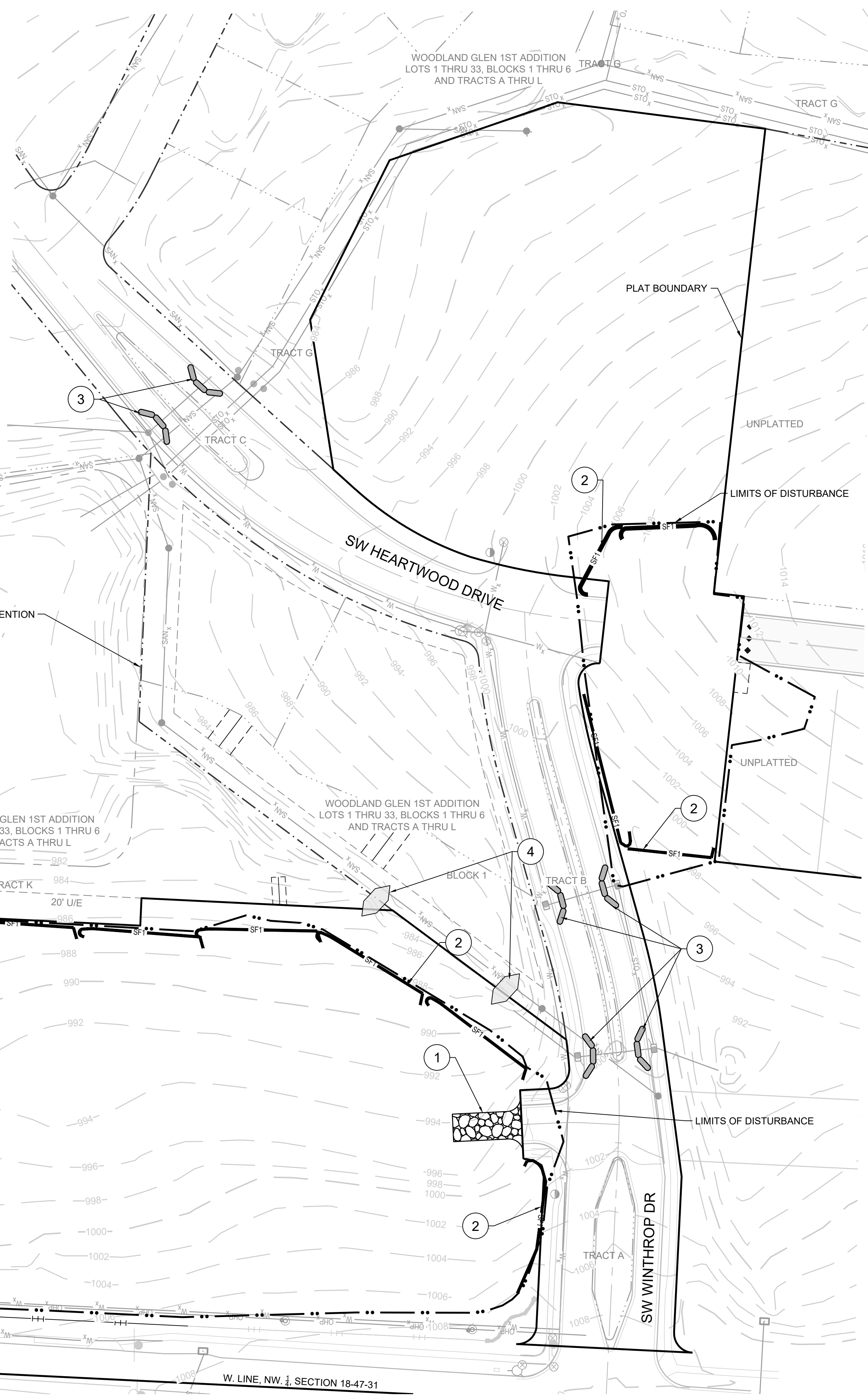
LEGEND	
	TEMPORARY STORAGE AREA FOR EXCESS MATERIAL
	TEMP. CONSTRUCTION ENTRANCE AND STAGING AREA
	CONCRETE WASHOUT AREA
	SILT FOAM DIKE OR STRAW WATTLE - STAKED & INSTALL PER MFR'S RECOMMENDATIONS
	ROCK DITCH CHECK
	STRAW WATTLE OR COIL LOG STAKED & INSTALL PER MFR'S RECOMMENDATIONS
	SILT FENCE (PRIOR TO LAND DISTURBANCE)
	SILT FENCE (DURING CONSTRUCTION)
	SILT SOCK / ROCK SOCK / SOCK WATTLE
	LIMITS OF DISTURBANCE
	EXISTING CONTOURS
	PROPOSED CONTOURS
	GRAVEL FILTER FOR STORM SEWER STRUCTURES ONLY
	BMP PLAN REF. NO.

DISTURBED AREA = 9.74 A.C.

SITE SPECIFIC NOTES:

- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATION.
- THERE ARE NO WETLANDS, NATURAL OR ARTIFICIAL WATER STORAGE DETENTION AREAS IN THE PROJECT AREA.
- NO PART OF THE PROJECT LIES WITHIN THE 100 YEAR FLOOD PLAIN PER FEMA FLOOD INSURANCE RATE MAP NUMBER 29095C0419G DATED JANUARY 20, 2017.
- ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IMPLEMENTED ACCORDING TO THE BMP STAGING CHART.
- ADDITIONAL EROSION CONTROL MAY BE REQUIRED BY THE CITY ENGINEER AT ANY TIME EXISTING MEASURES ARE FOUND TO BE INEFFECTIVE OR PROBLEMATIC AREAS ARE NOTED IN THE FIELD.
- STABILIZATION OF DISTURBED AREAS MUST, AT A MINIMUM, BE INITIATED IMMEDIATELY WHENEVER ANY CLEARING, GRADING, EXCAVATING, OR OTHER SOIL DISTURBING ACTIVITIES HAVE PERMANENTLY CEASED ON ANY PORTION OF THE SITE, OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS. THE DISTURBED AREAS SHALL BE PROTECTED FROM EROSION BY STABILIZING THE AREA WITH MULCH OR OTHER SIMILARLY EFFECTIVE SOIL STABILIZING BMP'S. INITIAL STABILIZATION ACTIVITIES MUST BE COMPLETED WITHIN 14 DAYS AFTER SOIL DISTURBING ACTIVITIES CEASE.
- ALL PERIMETER SILT FENCE, EARTH DIKES, SEDIMENT BASINS, AND ROCK CONSTRUCTION ENTRANCES WILL BE INSTALLED BEFORE GRADING OPERATIONS BEGIN.
- SILT FENCE AND EARTH DIKES THAT ARE PLACED BEFORE GRADING BEGINS WILL BE MAINTAINED BY THE GRADING CONTRACTOR.
- AREAS WITHIN PUBLIC RIGHT-OF-WAY SHALL BE SODDED IMMEDIATELY AFTER CONSTRUCTION IS COMPLETE.

EROSION AND SEDIMENT CONTROL STAGING CHART				
PROJECT STAGE	BMP PLAN REF. NO.	BMP DESCRIPTION	REMOVE AFTER STAGE	NOTES:
A - PRIOR TO LAND DISTURBANCE	1	CONSTRUCTION ENTRANCE & STAGING AREA	D	MAINTAIN, REPAIR, OR REPLACE AS NECESSARY
	2	SILT FENCE 1 (PRIOR TO LAND DISTURBANCE)	E	PLACE WHERE INDICATED, REPAIR OR REPLACE AS NECESSARY AND REMOVE ONLY WHEN GRADED AREAS HAVE SUFFICIENT GROUND COVER ESTABLISHED
	3	EXISTING INLET PROTECTION	E	PLACE WHERE INDICATED, REPAIR OR REPLACE AS NECESSARY AND REMOVE ONLY WHEN GRADED AREAS HAVE SUFFICIENT GROUND COVER ESTABLISHED
	4	FOAM SILT DIKE OR ROCK DITCH CHECK	E	PLACE WHERE INDICATED AT EXISTING SWALES AND DRAINAGE COURSES
B - MASS GRADING	5	SEDIMENT BASINS (REF. DETAIL ON SHEET 6)	E	TO BE INSTALLED PRIOR TO DISTURBING ENTIRE SITE.
	6	SILT FENCE 2 (DURING CONSTRUCTION)	E	PLACE WHERE INDICATED, REPAIR OR REPLACE AS NECESSARY AND REMOVE ONLY WHEN GRADED AREAS HAVE SUFFICIENT GROUND COVER ESTABLISHED
C - UTILITY CONSTRUCTION	7	FOAM SILT DIKE OR STRAW WATTLE/COIL LOG CHECK	E	PLACE WHERE INDICATED AS SOON AS SWALE IS ESTABLISHED, REPAIR OR REPLACE AS NECESSARY
	8	CONCRETE WASHOUT AREA	E	MAINTAIN, REPAIR, OR REPLACE AS NECESSARY
D - AFTER PAVING OPERATIONS	9	INLET PROTECTION (SILT FENCE)	D/E	PLACE SILT FENCE AROUND ALL STORM SEWER STRUCTURES / YARD AREA STORM STRUCTURES TO HAVE SILT FENCE REMOVED ONLY WHEN GRADED AREAS HAVE SUFFICIENT GROUND COVER ESTABLISHED
	10	INLET PROTECTION (GRAVEL FILTER BAGS)	E	BOARDS SHALL BE PLACED IN FRONT OF INLET OPENING FROM THE TIME SILT FENCE IS REMOVED UNTIL SUCH TIME THAT THE CURB / THROAT IS POURED. PLACE GRAVEL FILTER BAGS AT THE OPENING OF ALL CURB INLETS IMMEDIATELY AFTER THE INLET THROATS ARE POURED
E - UNTIL CLOSURE OF LAND DISTURBANCE PERMIT	11	SILT FENCE 2 (AFTER CURB CONSTRUCTION)	E	PLACE WHERE INDICATED, REPAIR OR REPLACE AS NECESSARY AND REMOVE ONLY WHEN GRADED AREAS HAVE SUFFICIENT GROUND COVER ESTABLISHED
	12	SEEDING AND MULCHING	E	ALL DISTURBED AREAS PRIOR TO 14 DAYS OF CONSTRUCTION INACTIVITY
	13			ADDITIONAL SEDIMENT AND EROSION CONTROL MEASURES MAY BE REQUIRED ANY TIME CURRENT MEASURES ARE FOUND TO BE INEFFECTIVE.



SCHLAGEL
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 WWW.SCHLAGELASSOCIATES.COM
 Missouri State Certificates of Authority
 #E200203690F #LAC201005237 #LS200208695F

MARK ALLEN BREUER
 PROFESSIONAL ENGINEER
 NUMBER PE-2005007268
 10.13.2021

WOODLAND GLEN 2ND PLAT
 STREET, STORMWATER, MASTER DRAINAGE,
 AND EROSION CONTROL PLANS
 WARD ROAD & WINTHROP DRIVE
 LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION
04/24/2020	CITY COMMENTS
01/12/2021	SCHLAGEL QUANTITIES
04/09/2021	SCHLAGEL QUANTITIES
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06/15/2021	CITY COMMENTS
09/28/2021	CITY COMMENTS
10/06/2021	SCHLAGEL UPDATE

PRE-CLEARING PLAN
 SHEET
2

I:\PROJECTS\2018\18-0713.0 Design\3.0 DWG Plans\6.0 SS\18-017 EROS CONT PLAN.dwg, 10/6/2021 2:37:01 PM, 11

LEGEND	
	TEMPORARY STORAGE AREA FOR EXCESS MATERIAL
	TEMP. CONSTRUCTION ENTRANCE AND STAGING AREA
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B - MASS GRADING	5	SEDIMENT BASIN (REF. DETAIL ON SHEET 6)	E	TO BE INSTALLED PRIOR TO DISTURBING ENTIRE SITE.
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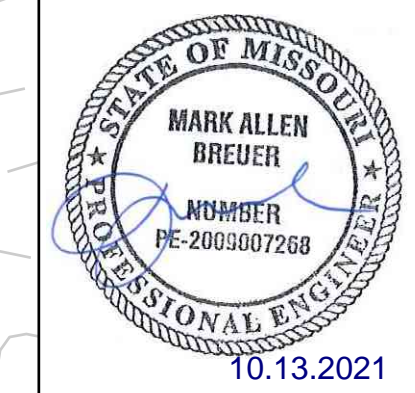
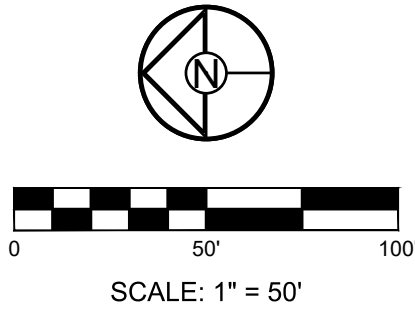
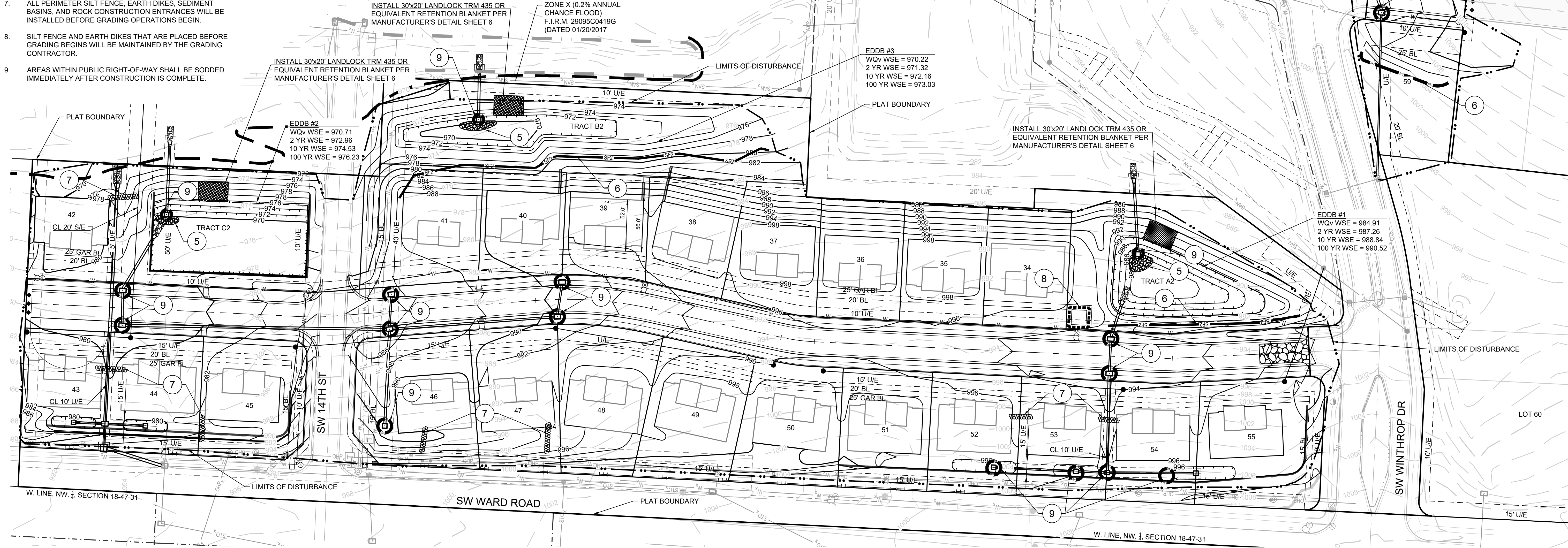
TOTAL DRAINAGE AREA TO TEMPORARY SEDIMENT BASIN
 EDDB#1 AREA = 2.59 AC.
 EDDB#2 AREA = 4.99 AC.
 EDDB#3 AREA = 1.26 AC.

SEDIMENT VOLUME REQUIRED (3600 CU. FT./AC.)
 EDDB#1 2.59 AC. * 3600 CU.FT./AC. = 9,324 CU.FT.
 EDDB#2 4.99 AC. * 3600 CU.FT./AC. = 17,964 CU.FT.
 EDDB#3 1.26 AC. * 3600 CU.FT./AC. = 4,536 CU.FT.

SEDIMENT VOLUME PROVIDED
 EDDB#1 VOLUME @ 986.90 = 9,537 CU.FT.
 EDDB#2 VOLUME @ 972.10 = 18,904 CU.FT.
 EDDB#3 VOLUME @ 971.70 = 5,225 CU.FT.

INSTALL 30"x20" LANDLOCK TRM 435 OR EQUIVALENT RETENTION BLANKET PER MANUFACTURER'S DETAIL SHEET 6

ZONE X (0.2% ANNUAL CHANCE FLOOD)
 F.I.R.M. 29095C0419G
 (DATED 01/20/2017)



WOODLAND GLEN 2ND PLAT
 STREET, STORMWATER, MASTER DRAINAGE,
 AND EROSION CONTROL PLANS
 WARD ROAD & WINTHROP DRIVE
 LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION
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09/28/2021	CITY COMMENTS
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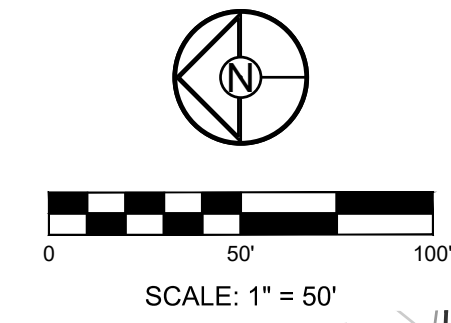
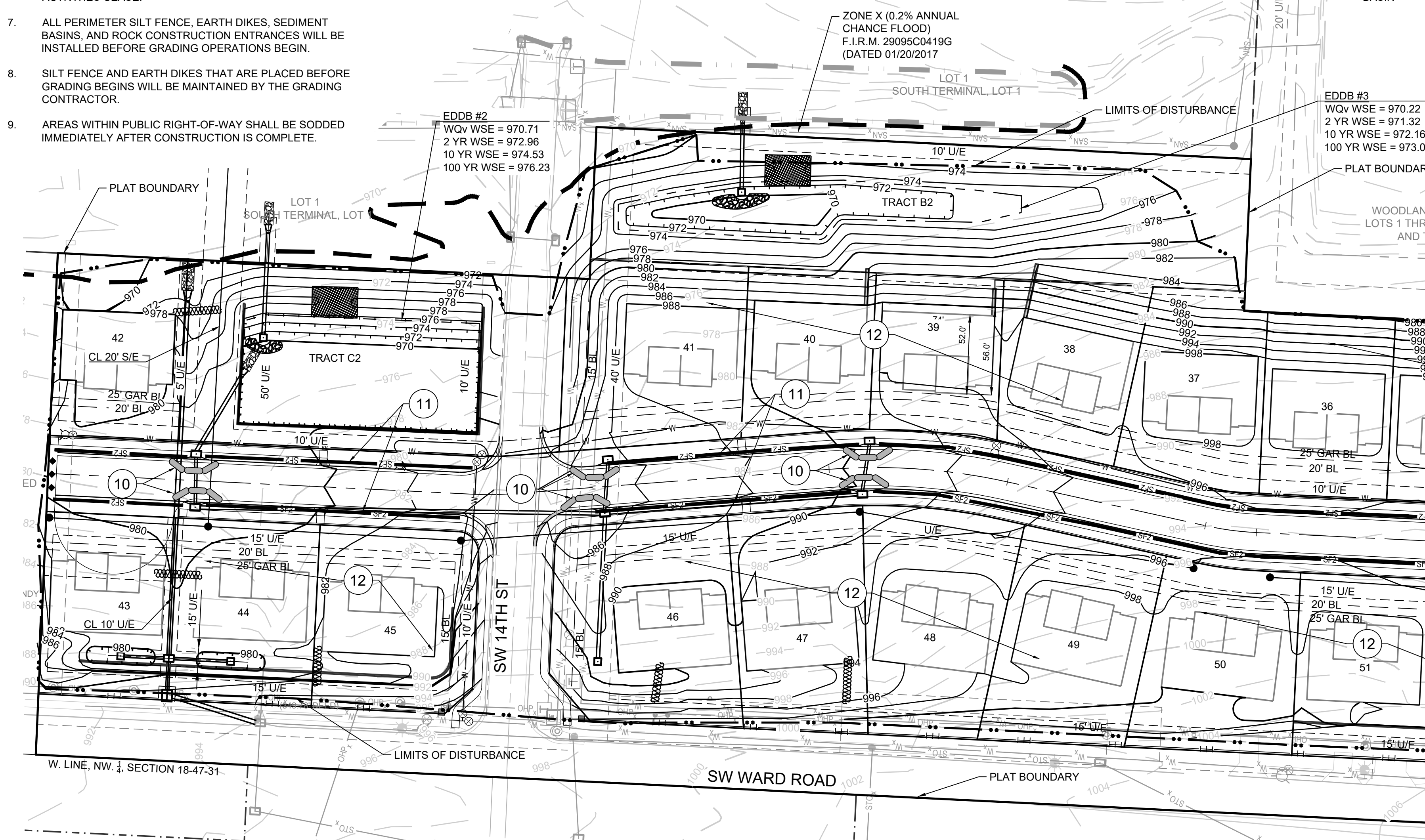
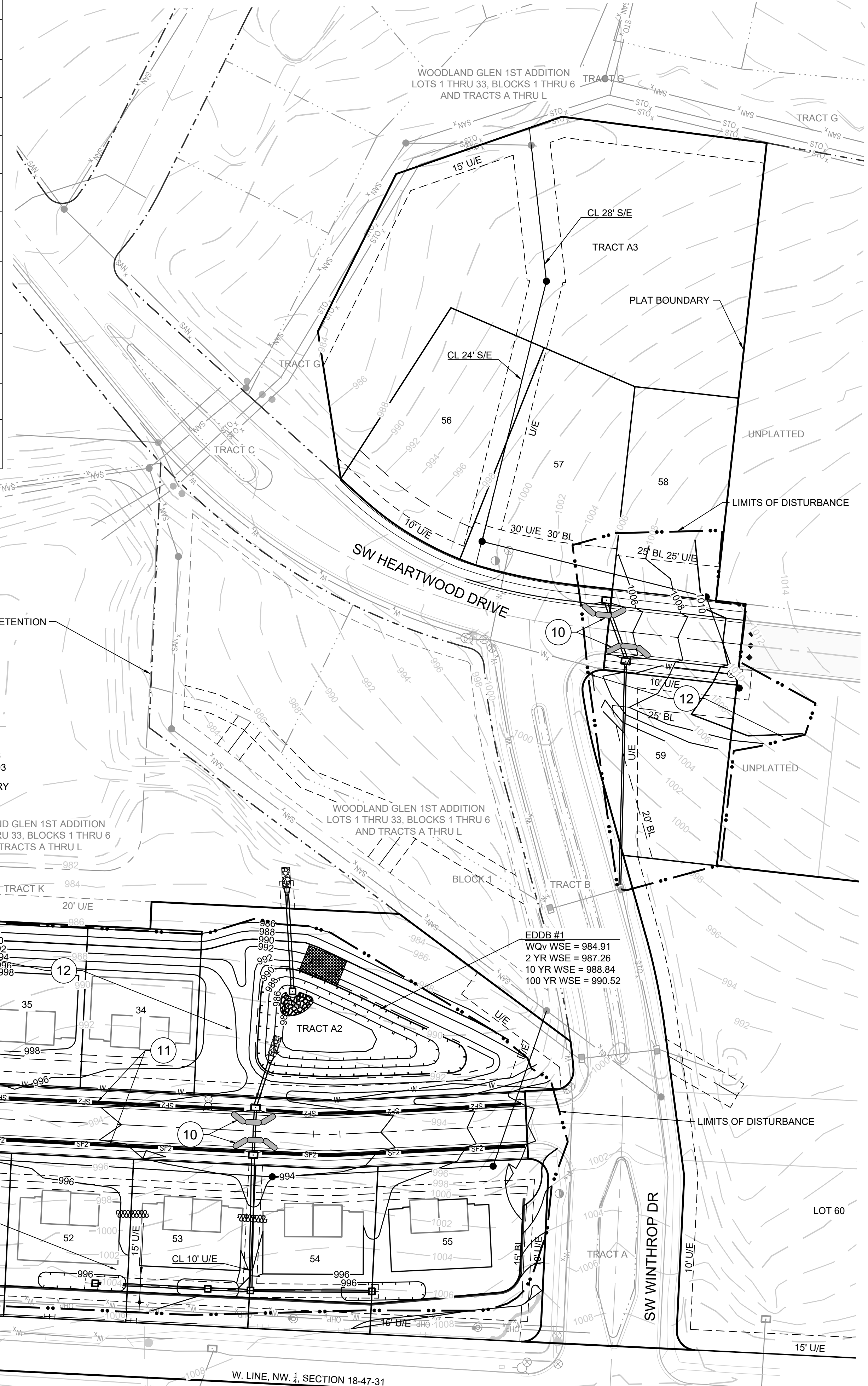
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DISTURBED AREA = 9.74 A.C.

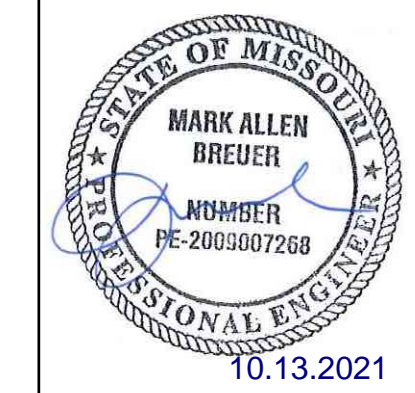
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	4	FOAM SILT DIKE OR ROCK DITCH CHECK AND SEDIMENT TRAPS	E	PLACE WHERE INDICATED AT EXISTING SWALES AND DRAINAGE COURSES
B - MASS GRADING	5	SEDIMENT BASIN (REF. DETAIL ON SHEET 6)	E	TO BE INSTALLED PRIOR TO DISTURBING ENTIRE SITE.
	6	SILT FENCE 2 (DURING CONSTRUCTION)	E	PLACE WHERE INDICATED, REPAIR OR REPLACE AS NECESSARY AND REMOVE ONLY WHEN GRADED AREAS HAVE SUFFICIENT GROUND COVER ESTABLISHED
C - UTILITY CONSTRUCTION	7	FOAM SILT DIKE OR STRAW WATTLE/COIL LOG CHECK	E	PLACE WHERE INDICATED AS SOON AS SWALE IS ESTABLISHED, REPAIR OR REPLACE AS NECESSARY
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E - UNTIL CLOSURE OF LAND DISTURBANCE PERMIT	12	SEEDING AND MULCHING	E	ALL DISTURBED AREAS AFTER PRIOR TO 14 DAYS OF CONSTRUCTION INACTIVITY
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REVISION DATE	DESCRIPTION
04/24/2020	CITY COMMENTS
01/12/2021	SCHLAGEL QUANTITIES
04/09/2021	SCHLAGEL QUANTITIES
05/12/2021	CITY COMMENTS
06/15/2021	CITY COMMENTS
09/28/2021	CITY COMMENTS
10/06/2021	SCHLAGEL UPDATE

DRAWN BY: BAL
 CHECKED BY: MAB
 DATE PREPARED: 2-19-2020
 PROJ. NUMBER: 100602021
 18-017

ECP FINAL STABILIZATION

SHEET

4

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PREPARED BY:



10.13.2021

WOODLAND GLEN 2ND PLAT
 STREET, STORMWATER, MASTER DRAINAGE,
 AND EROSION CONTROL PLANS
 WARD ROAD & WINTHROP DRIVE
 LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION
04/24/2020	CITY COMMENTS
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09/28/2021	CITY COMMENTS
10/06/2021	SCHLAGEL UPDATE
10/06/2021	10/06/2021

EROSION CONTROL DETAILS

SHEET

Notes for Concrete Washout:

- Concrete washout areas shall be installed prior to any concrete placement on site.
- Concrete washout areas shall include a flat substrate pit sized relative to the amount of concrete to be placed on site. The slopes leading out of the substrate pit shall be 3:1. The vehicle tracking pit shall be sloped towards the concrete washout area.
- Vehicle tracking control is required at the access point to all concrete washout areas.
- Slope shall be placed at the construction site entrance, washout area and elsewhere as necessary to steady outside the location(s) of the concrete washout area(s) to operators of concrete truck and pump rigs.
- A non-woven geotextile liner may be required along the bottom and sides of the substrate pit in sandy or gravelly soils.

Maintenance for Concrete Washout:

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

Excavated material shall be used for perimeter berm. Soil for berm shall be compacted in the same manner as trench backfill.

Notes for Construction Entrance:

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

Maintenance for Construction Entrance:

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

CONCRETE WASHOUT

CONSTRUCTION ENTRANCE

AMERICAN PUBLIC WORKS ASSOCIATION
APWA KANSAS CITY METRO CHAPTER
 CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT
 STANDARD DRAWING NUMBER ESC-01 ADOPTED: 10/24/2016

Construction Entrance modified from 2015 Overland Park Standard Details for Erosion and Sediment Control, Concrete Washout modified from 2009 City of Great Bend Standard Drawings.

Notes:

- Contractor shall field verify that Ponded Water Depth will not cause unintended flooding.

Notes:

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

CONCRETE WASHOUT

CONSTRUCTION ENTRANCE

AMERICAN PUBLIC WORKS ASSOCIATION
APWA KANSAS CITY METRO CHAPTER
 CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT
 STANDARD DRAWING NUMBER ESC-01 ADOPTED: 10/24/2016

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

Notes:

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

Maintenance:

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

Notes:

- 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.
- 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.
- Do not use compost or wood mulch berms in any runoff channels or concentrated flow areas.
- Wood mulch shall consist of free 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 adding volume with a maximum width of 2" and a maximum length of 10".

Maintenance for Mulch and Compost Filter Berm:

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

WATTLES AND BIODEGRADABLE LOG

MULCH OR COMPOST FILTER BERMS

AMERICAN PUBLIC WORKS ASSOCIATION
APWA 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.

Notes:

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

Maintenance:

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

Notes:

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Maintenance for Mulch and Compost Filter Berm:

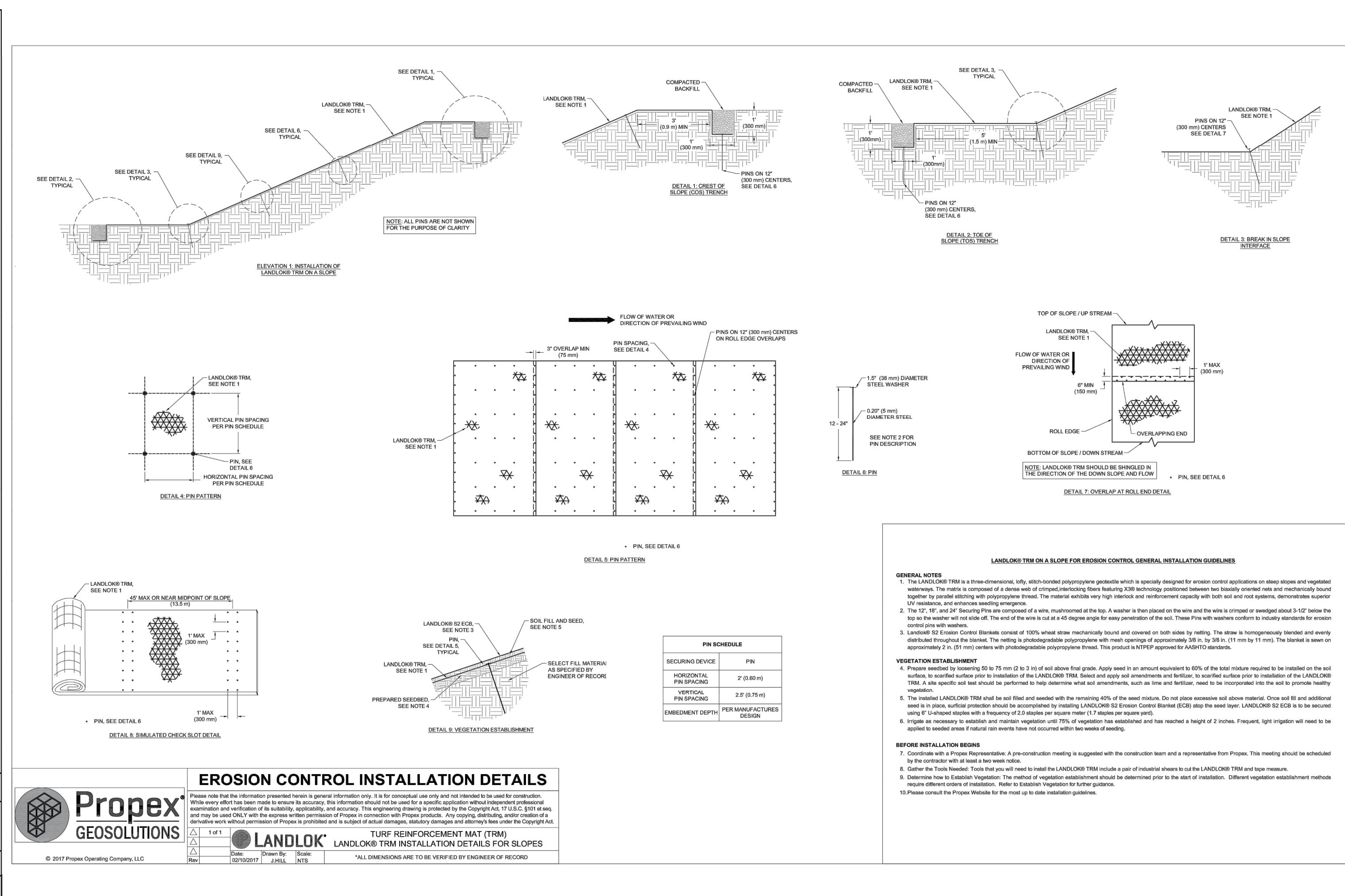
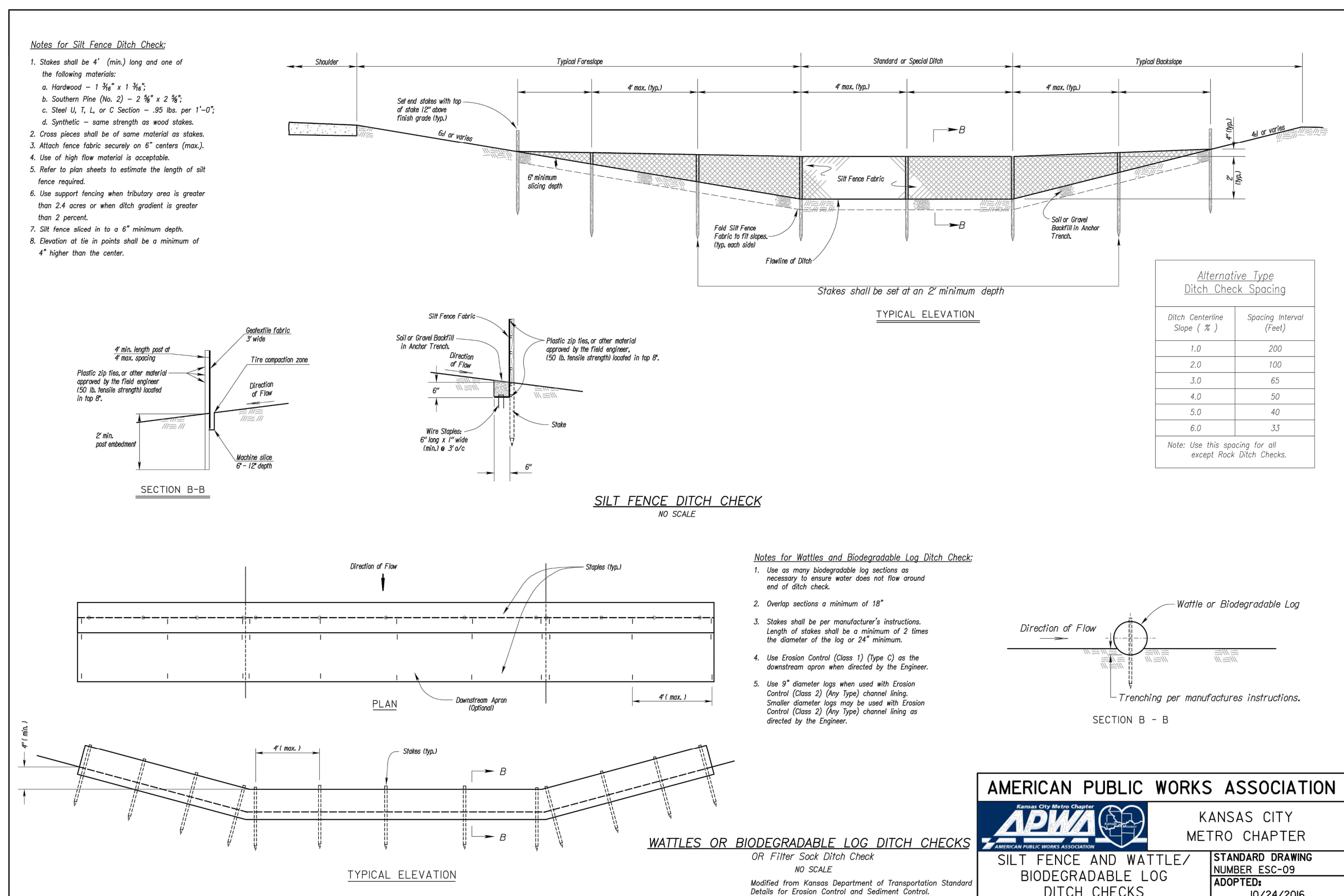
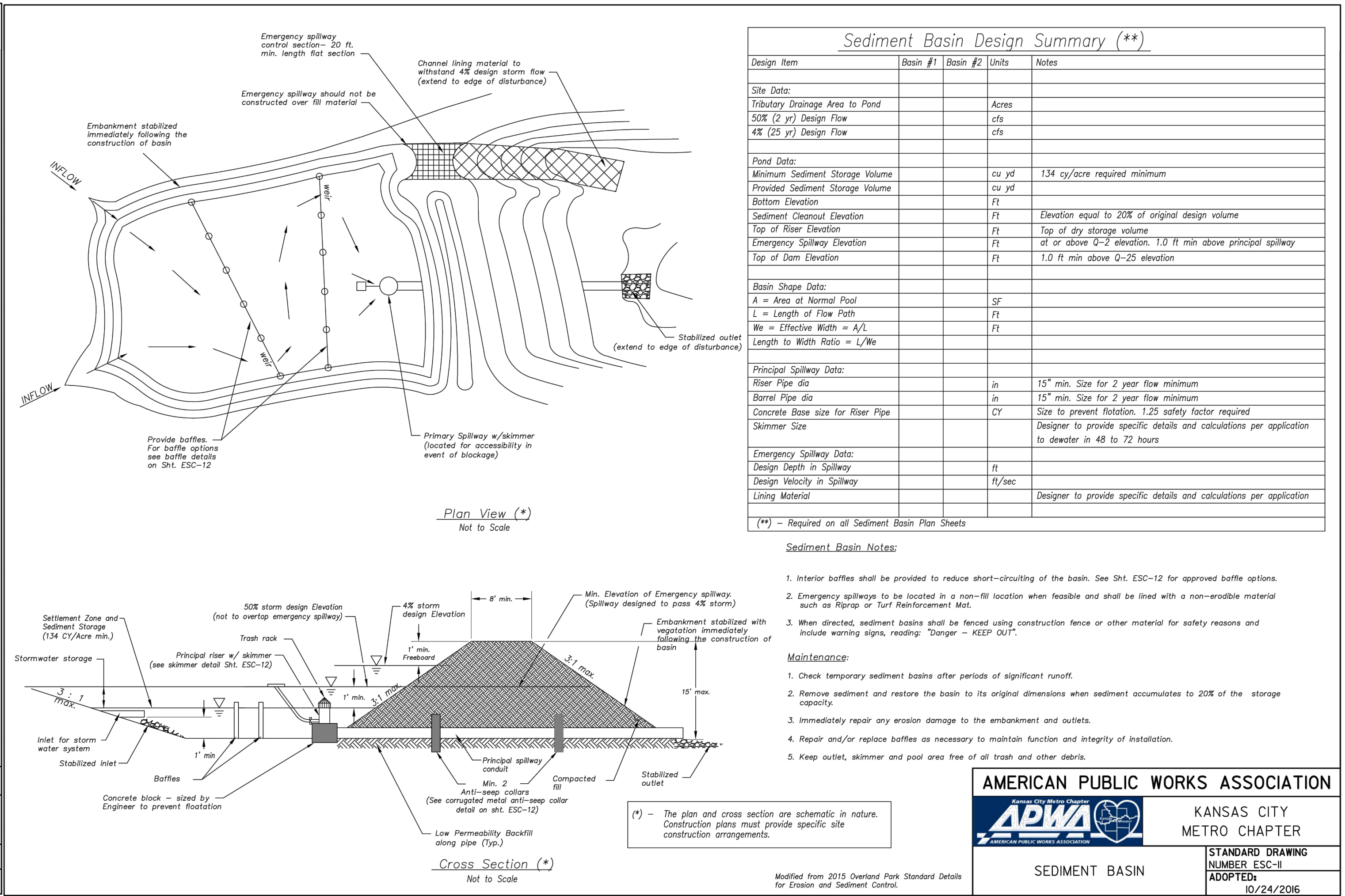
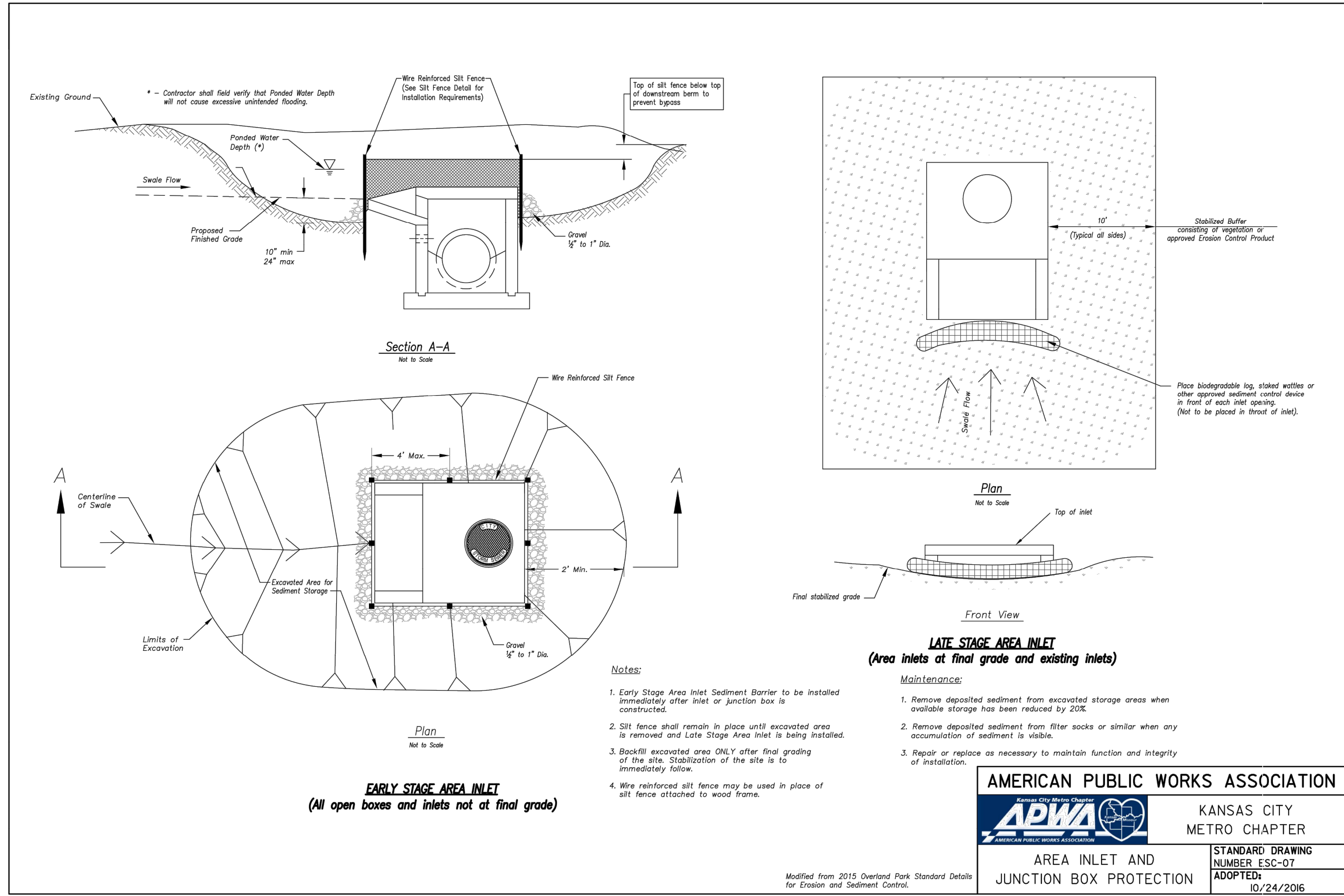
- Berm shall be reshaped and material added as necessary to maintain function and dimensions.
- Breaches in the berm shall be repaired promptly.

WATTLES AND BIODEGRADABLE LOG

MULCH OR COMPOST FILTER BERMS

AMERICAN PUBLIC WORKS ASSOCIATION
APWA 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.



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 (913) 492-5158 • Fax: (913) 492-8400
 WWW.SCHLAGELASSOCIATES.COM
 Missouri State Certificate of Authority #E-200200360P-FLAC201005237 #LS200200859F

PREPARED BY: **MARK ALLEN BREUER**
 MISSOURI PROFESSIONAL ENGINEER NUMBER RE-2005007268
 10.13.2021

WOODLAND GLEN 2ND PLAT STREET, STORMWATER, MASTER DRAINAGE, AND EROSION CONTROL PLANS
WARD ROAD & WINTHROP DRIVE
LEE'S SUMMIT, MISSOURI

AMERICAN PUBLIC WORKS ASSOCIATION
 KANSAS CITY METRO CHAPTER
 STANDARD DRAWING NUMBER ESC-II
 ADOPTED: 10/24/2016

AMERICAN PUBLIC WORKS ASSOCIATION
 KANSAS CITY METRO CHAPTER
 STANDARD DRAWING NUMBER ESC-09
 ADOPTED: 10/24/2016

REVISION DATE	DESCRIPTION
04/24/2020	CITY COMMENTS
01/12/2021	SCHLAGEL QUANTITIES
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10/06/2021	SCHLAGEL UPDATE

DRAWN BY: BAL
 CHECKED BY: MAB
 DATE PREPARED: 2-19-2020
 PROJ. NUMBER: 18-017

EROSION CONTROL DETAILS

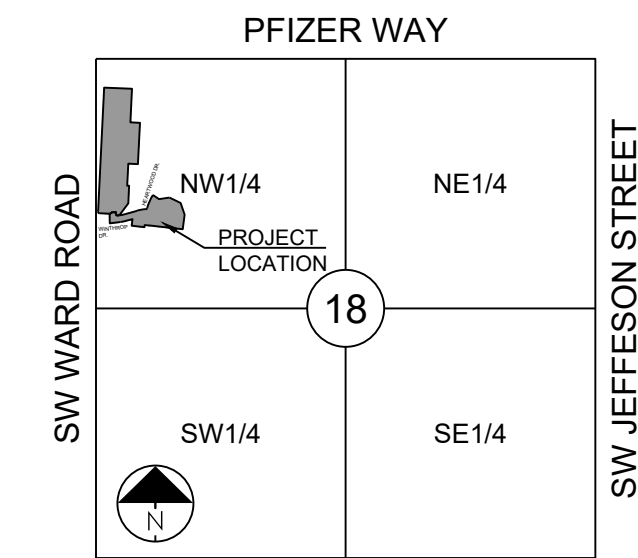
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PROJECT BENCHMARK:

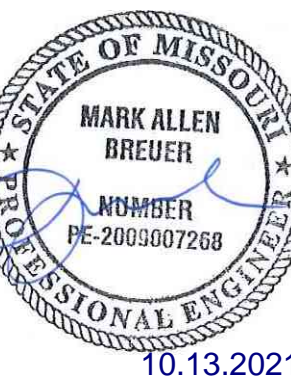
SW. CORNER NW 1/4 SEC. 18-47N-31W, JACKSON COUNTY, MO.
 3" DIAMETER ALUMINUM DISK IN MONUMENT BOX
 M.D.N.R. DOC. NO. 600-65374

ELEV. 1036.41



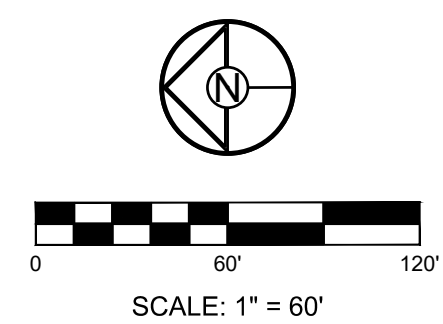
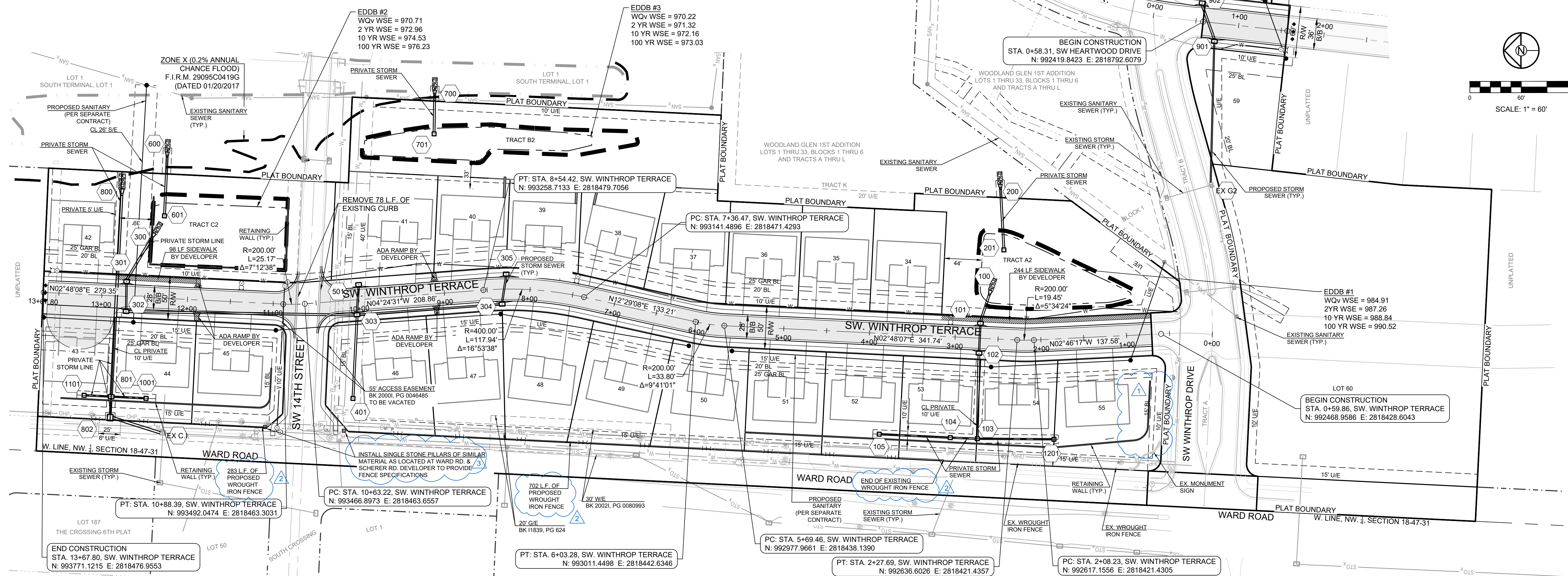
SECTION 18-47N-31W

LOCATION MAP
 SCALE 1" = 2000'



10.13.2021

- 1 WALL UPDATED AND REQUIRED ADDITIONAL GOEGRID IN THIS AREA RESULTING IN THE WALL MOVING NORTH ROUGHLY 2 FEET.
- 2 PROPOSED WROUGHT IRON FENCE CALLED OUT TO MATCH AND CONTINUE WITH THE EXISTING WROUGHT IRON FENCE IN THIS AREA.
- 3 ADDED STONE PILLARS AND DETAIL TO THE END OF THE WROUGHT IRON FENCE AS REQUESTED BY THE CITY. DEVELOPER TO PROVIDE WROUGHT FENCE SPECIFICATIONS FROM SUPPLIER.



WOODLAND GLEN 2ND PLAT
 STREET, STORMWATER, MASTER DRAINAGE,
 AND EROSION CONTROL PLANS
 WARD ROAD & WINTHROP DRIVE
 LEE'S SUMMIT, MISSOURI

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09/28/2021	CITY COMMENTS
10/06/2021	SCHLAGEL UPDATE

DRAWN BY:	DESCRIPTION
BAL	CITY COMMENTS
MAB	CITY COMMENTS
2-19-2020	CITY COMMENTS
10/06/2021	SCHLAGEL UPDATE
18-017	

GENERAL LAYOUT

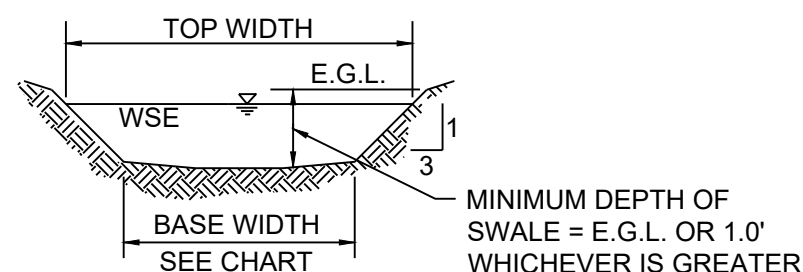
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NOTES:

- MBOE = MINIMUM BUILDING OPENING ELEVATION FOR HOUSES ADJACENT TO ENGINEERED OVERFLOW SWALES SHALL BE MINIMUM 2 FEET ABOVE THE 100 YR WATER SURFACE ELEVATION.
- EGL = ENERGY GRADE LINE (100 YR)
- WSE = WATER SURFACE ELEVATION (100 YR)
- ENGINEERED SWALES TO BE GRADED TO NORMAL DEPTH OF FLOW (WATER SURFACE ELEVATION) OR 1.0 FT, WHICHEVER IS GREATER. MINIMUM SLOPE OF ENGINEERED SWALES SHALL BE AS NOTED.
- MBOE'S ADJACENT TO SUMPED INLETS SHALL BE A MINIMUM OF 1' ABOVE TOP OF ADJACENT BERM.
- SWALE SECTIONS EXTEND THE ENTIRE LENGTH BETWEEN UPSTREAM AND DOWNSTREAM STRUCTURES WITH THE EXCEPTION OF A TRANSITION AT EACH STRUCTURE.

RUNOFF CALCULATIONS:
 $Q = K \cdot C \cdot I \cdot A$
 $K_{10} = 1.0$ $K_{100} = 1.25$ $C = 0.51$ $I = \text{INTENSITY}$
 DESIGN OVERFLOW = $Q_{\text{OVERFLOW}} = Q_{100} - Q_{10}$
 MANNINGS "n" = .030 FOR SWALES



100 YR OVERFLOW SWALE SECTIONS
SECTION 1-2

100 YEAR OVERFLOW SWALES												
SECTION	DRAINAGE AREA (AC.)	Q100 (CFS)	Q10 (CFS)	DESIGN OVERFLOW (CFS)	BED SLOPE (%)	BASE WIDTH (FT.)	SIDE SLOPE	TOP WIDTH (FT.)	NORMAL DEPTH (FT.)	VELOCITY (FPS)	VELOCITY HEAD (FT.)	EGL (FT.)
A-A	0.32	2.11	-	2.11	2.52	5	3:1	6.02	0.17	2.26	0.08	0.25
B-B	3.54	23.29	-	23.29	7.93	5	3:1	7.91	0.49	7.44	0.86	1.35
C-C	0.93	6.12	-	6.12	6.50	5	3:1	6.44	0.24	4.46	0.31	0.55
D-D	2.65	17.44	-	17.44	5.93	5	3:1	7.69	0.45	6.13	0.58	1.03

DETENTION STORAGE EDDB #1:
 100 YEAR, 24 HR. RAINFALL - MAXIMUM WSE = 990.54 (SEE FINAL STORMWATER MGMT. PLAN)

AUXILIARY SPILLWAY SET AT 0.5 FEET ABOVE MAX. WSE, SPILLWAY ELEV. = 991.04

AUXILIARY SPILLWAY DESIGN:
 $Q(100)=2.71$ CFS, $Q=CLH^{\wedge}(3/2)$, $C=3.33$, $L=20$ FT., 2.71 CFS = $3.33 * 20FT. * (H^{\wedge}(3/2))$, $H=0.12$ FT.

DETENTION STORAGE EDDB #2:
 100 YEAR, 24 HR. RAINFALL - MAXIMUM WSE = 975.90 (SEE FINAL STORMWATER MGMT. PLAN)

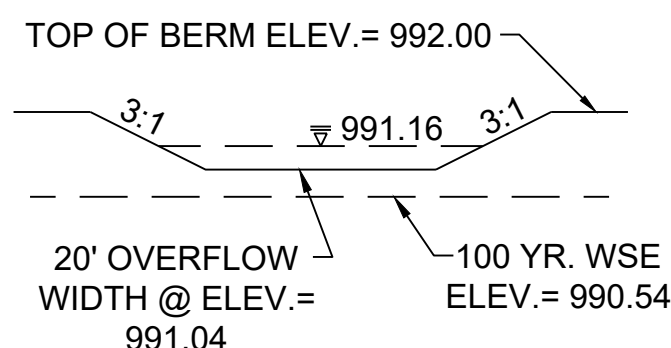
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AUXILIARY SPILLWAY DESIGN:
 $Q(100)=18.47$ CFS, $Q=CLH^{\wedge}(3/2)$, $C=3.33$, $L=20$ FT., 18.47 CFS = $3.33 * 20FT. * (H^{\wedge}(3/2))$, $H=0.43$ FT.

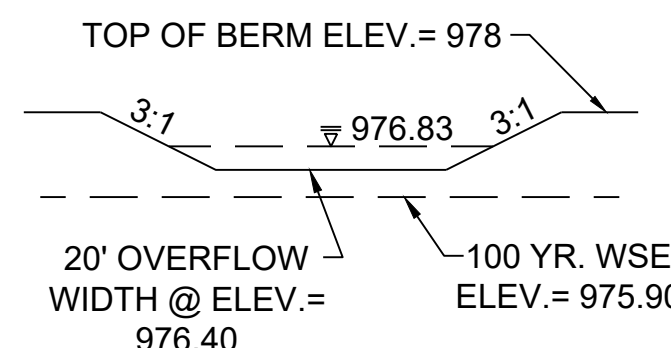
DETENTION STORAGE EDDB #3:
 100 YEAR, 24 HR. RAINFALL - MAXIMUM WSE = 972.96 (SEE FINAL STORMWATER MGMT. PLAN)

AUXILIARY SPILLWAY SET AT 0.5 FEET ABOVE MAX. WSE, SPILLWAY ELEV. = 973.46

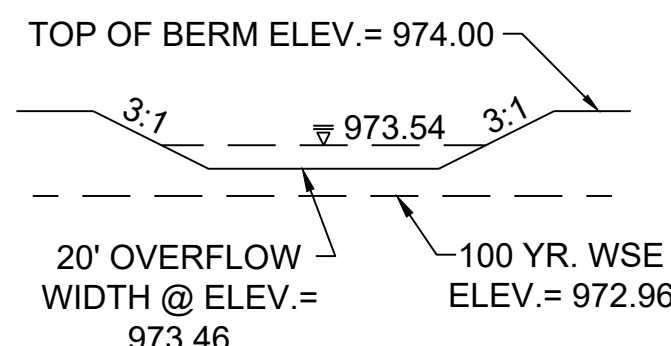
AUXILIARY SPILLWAY DESIGN:
 $Q(100)=1.43$ CFS, $Q=CLH^{\wedge}(3/2)$, $C=3.33$, $L=20$ FT., 1.43 CFS = $3.33 * 20FT. * (H^{\wedge}(3/2))$, $H=0.08$ FT.



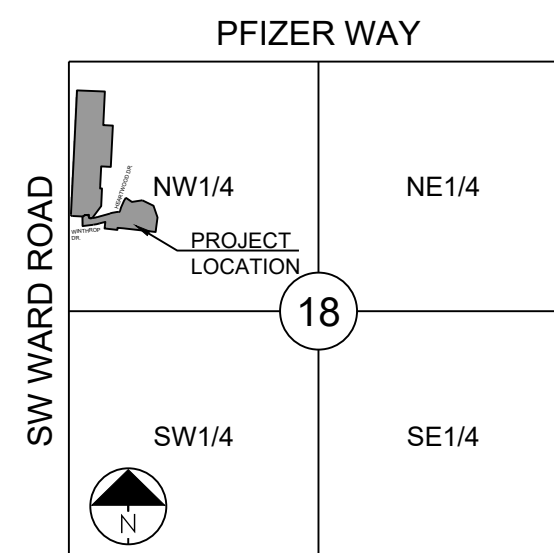
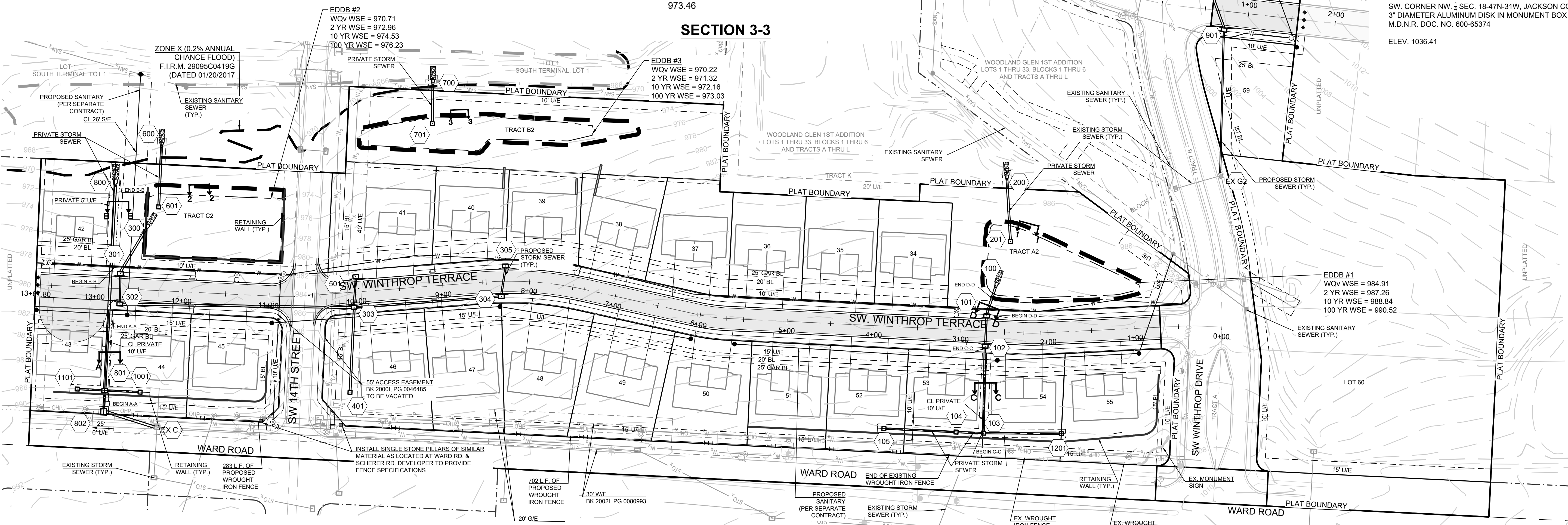
SECTION 1-1



SECTION 2-2



SECTION 3-3



SECTION 18-47N-31W
LOCATION MAP
 SCALE 1" = 2000'



PROJECT BENCHMARK:

SW CORNER NW 1/4 SEC. 18-47N-31W, JACKSON COUNTY, MO.
 3" DIAMETER ALUMINUM DISK IN MONUMENT BOX
 M.D.N.R. DOC. NO. 600-65374
 ELEV. 1036.41

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 ENGINEERS PLANNERS SURVEYORS LANDSCAPE ARCHITECTS
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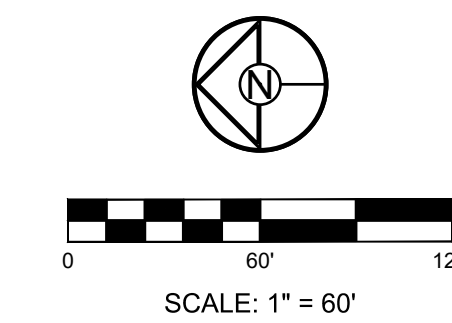
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 MARK ALLEN BREUER
 PROFESSIONAL ENGINEER
 NO. 2005007268
 10.13.2021

WOODLAND GLEN 2ND PLAT
 STREET, STORMWATER, MASTER DRAINAGE,
 AND EROSION CONTROL PLANS
 WARD ROAD & WINTHROP DRIVE
 LEE'S SUMMIT, MISSOURI

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MASTER DRAINAGE PLAN
 GRADING PLAN

SHEET



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LOT TYPE TABLE		
LOT #	BASEMENT TYPE	MBOE
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36	WALKOUT	N/A
37	WALKOUT	975.0
38	WALKOUT	975.0
39	WALKOUT	975.0
40	WALKOUT	975.0
41	WALKOUT	975.0
42	WALKOUT	971.5
43	STANDARD	981.0
44	STANDARD	981.0
45	STANDARD	N/A
46	STANDARD	982.8
47	STANDARD	N/A
48	STANDARD	N/A
49	STANDARD	N/A
50	STANDARD	N/A
51	STANDARD	N/A
52	STANDARD	996.0
53	STANDARD	996.0
54	STANDARD	996.0
55	STANDARD	996.0
56	WALKOUT	N/A
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58	WALKOUT	N/A
59	WALKOUT	N/A

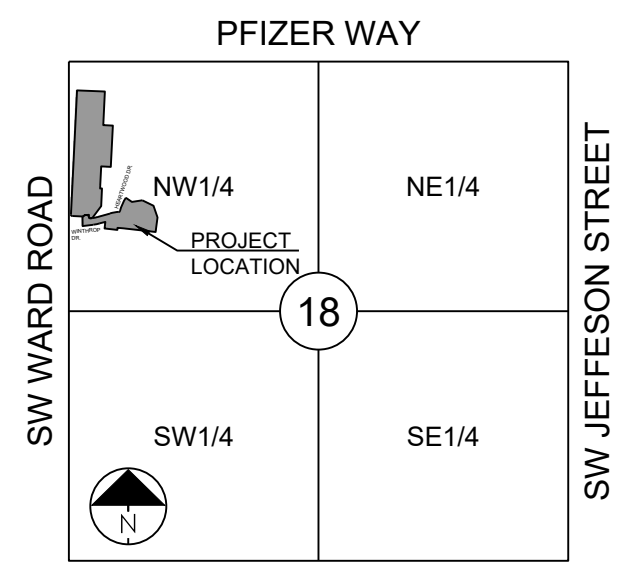
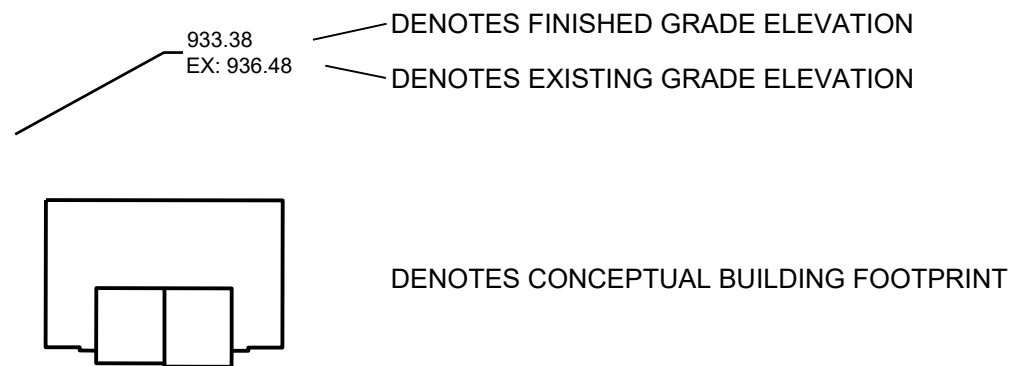
- NOTE:**
- DAYLIGHT BASED ON ADJACENT GRADE 4 FT BELOW TOP OF FOUNDATION WHILE MAINTAINING 2.5% (MIN) GRADE TO LOT CORNERS.
 - WALKOUT BASED ON ADJACENT GRADE AT BASEMENT FLOOR ELEVATION WHILE MAINTAINING 2.5% (MIN) GRADE TO LOT CORNERS.

NOTES:

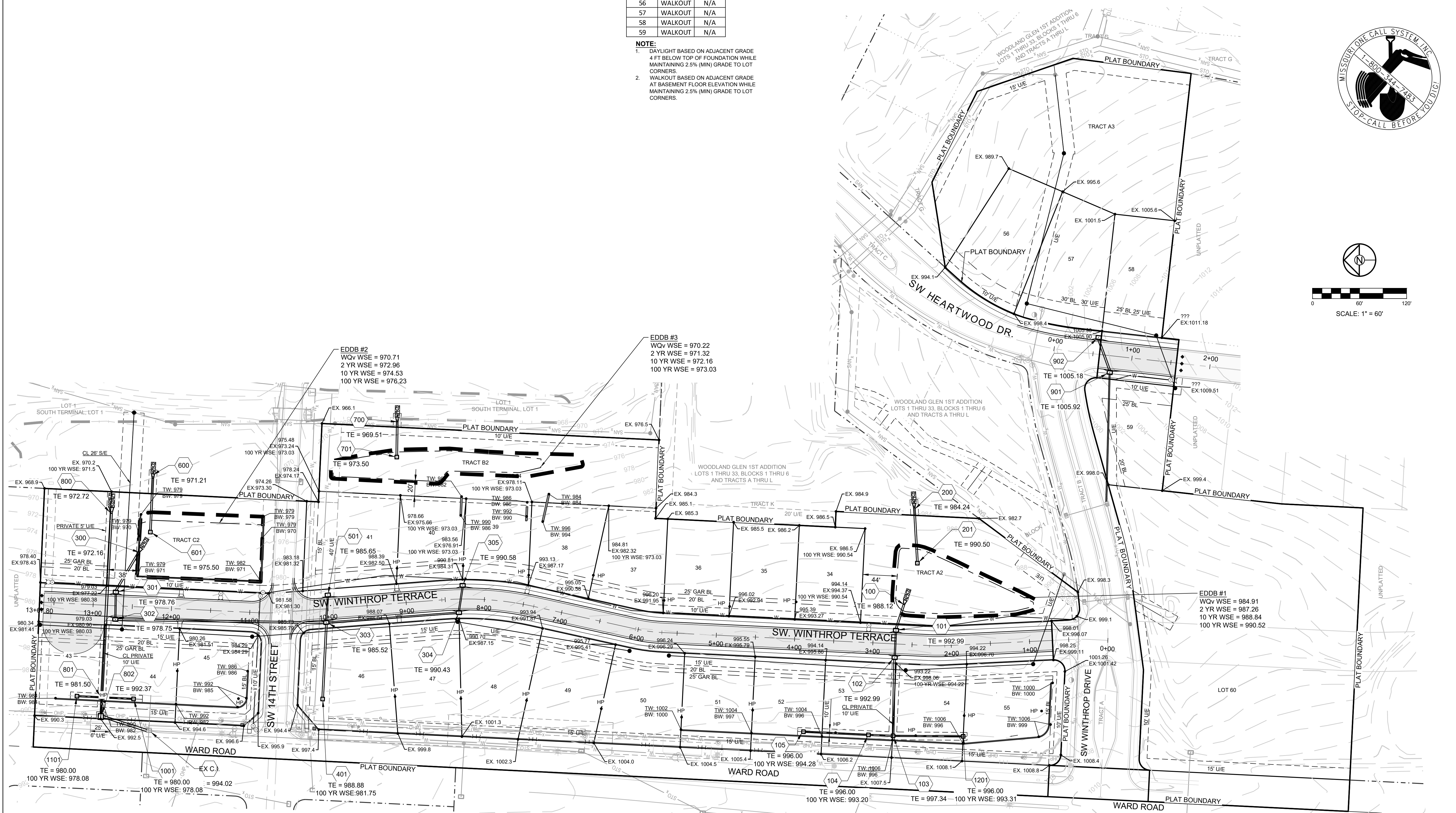
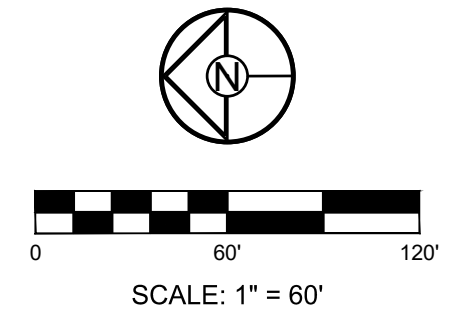
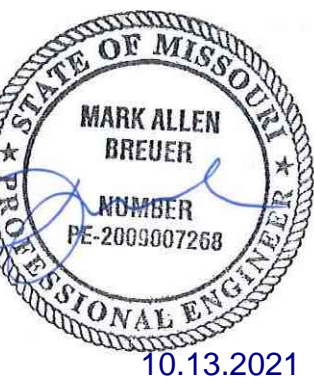
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- MBOE'S ADJACENT TO SUMPED INLETS SHALL BE A MINIMUM OF 1' ABOVE TOP OF ADJACENT BERM

PROJECT BENCHMARK:

SW. CORNER NW 1/4 SEC. 18-47N-31W, JACKSON COUNTY, MO.
3" DIAMETER ALUMINUM DISK IN MONUMENT BOX
M.D.N.R. DOC. NO. 600-65374
ELEV. 1036.41



SECTION 18-47N-31W
LOCATION MAP
SCALE 1" = 2000'



WOODLAND GLEN 2ND PLAT
STREET, STORMWATER, MASTER DRAINAGE,
AND EROSION CONTROL PLANS
WARD ROAD & WINTHROP DRIVE
LEE'S SUMMIT, MISSOURI

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10/06/2021	

MASTER DRAINAGE PLAN
SPOT ELEVATIONS

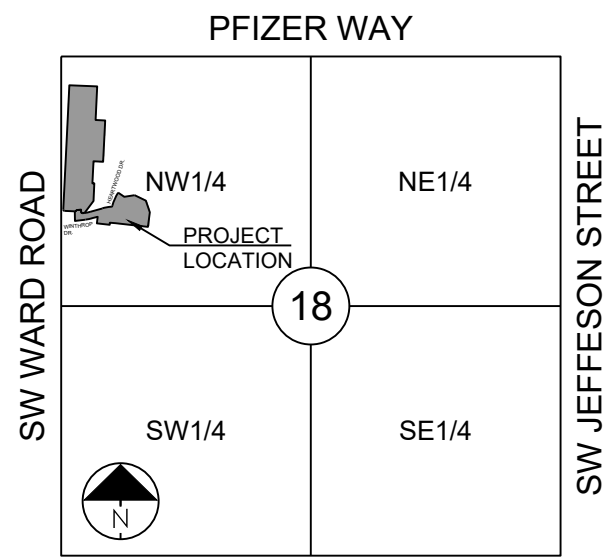
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PROJECT BENCHMARK:

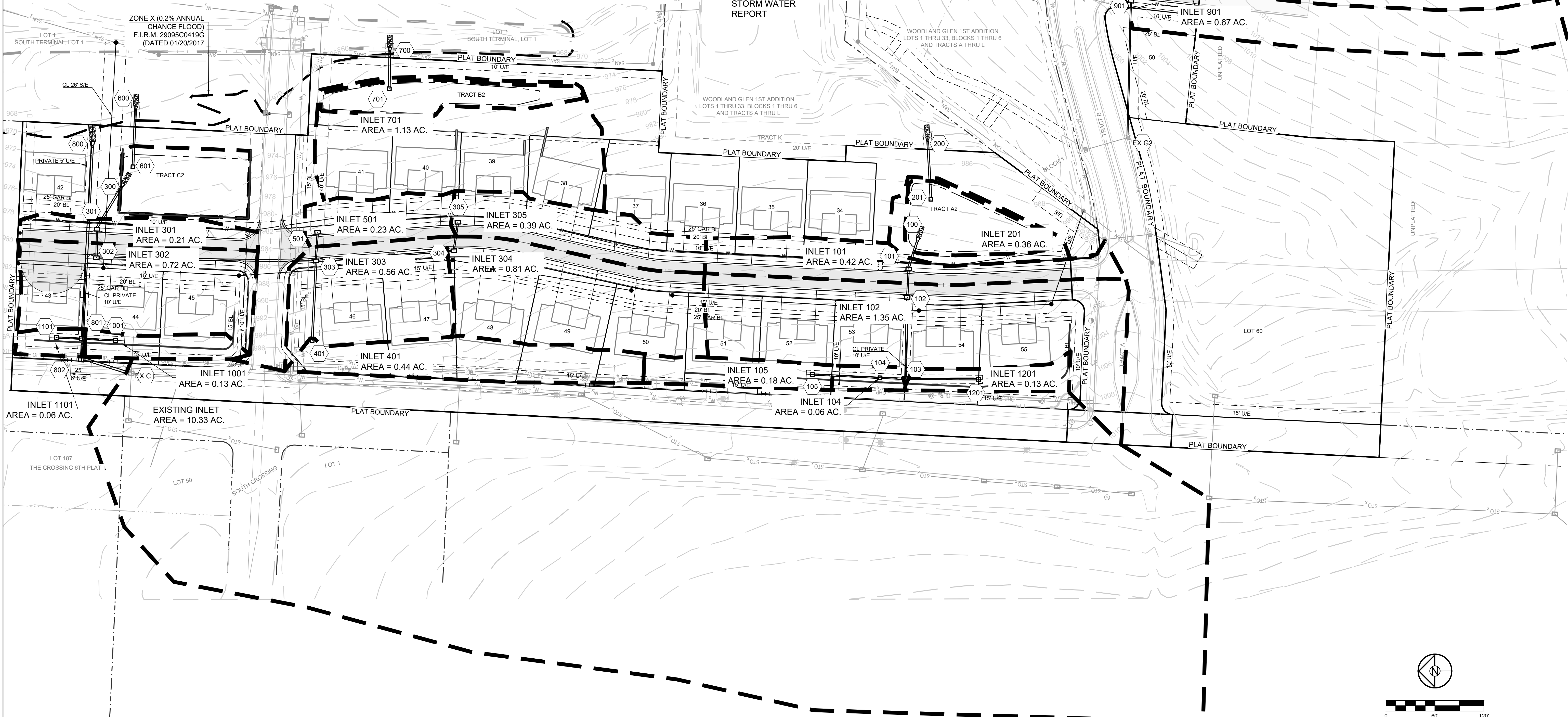
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ELEV. 1036.41



SECTION 18-47N-31W

LOCATION MAP
SCALE 1" = 2000'



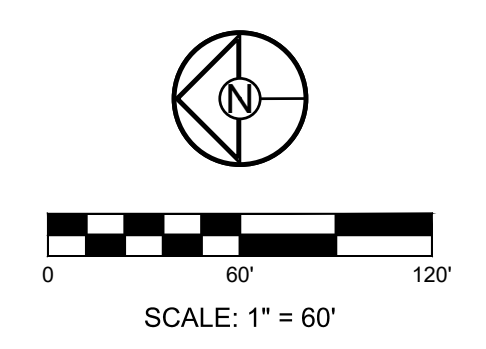
SCHLAGEL
ENGINEERS PLANNERS SURVEYORS LANDSCAPE ARCHITECTS
14920 West 107th Street • Lenexa, Kansas 66215
(913) 492-5158 • Fax: (913) 492-8400
WWW.SCHLAGELASSOCIATES.COM
Missouri State Certificates of Authority
#E200200360P-F #LAC201005237 #LS200200859-F

WOODLAND GLEN 2ND PLAT
STREET, STORMWATER, MASTER DRAINAGE,
AND EROSION CONTROL PLANS
WARD ROAD & WINTHROP DRIVE
LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION
04/24/2020	CITY COMMENTS
01/12/2021	SCHLAGEL QUANTITIES
04/09/2021	SCHLAGEL QUANTITIES
05/12/2021	CITY COMMENTS
06/15/2021	CITY COMMENTS
09/28/2021	CITY COMMENTS
10/06/2021	SCHLAGEL UPDATE

MASTER DRAINAGE PLAN
DRAINAGE AREAS

SHEET
10



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10 YR STORM SEWER DESIGN CALCULATIONS

Design Storm: 10
K Value: 1.00
F Factor: 1.00
Runoff Calculations table with columns: Inlet #, Area, C, Cumul. Area, Cumul. Cx, Intensity, To Inlet, Cumul. Runoff, Pipe Cap., Pipe Vel., Up Piped Inlet 1, Up Piped Inlet 2, Up Area, Up CxA, Pipe Properties (Up Inlet, Down Inlet, Pipe Type, n, Pipe Size, Length, Slope, Drop Inlet, FL Up, FL Down, Inlet Top, HGL Elev.)

* FLOW FROM CAPTURED FROM THESE LINE DRAIN THE THE EXISTING DETENTION BASIN. THE ADDED DRAINAGE DOES NOT EXCEED THE DESIGN OF THE EXISTING BASIN.

100 YR STORM SEWER DESIGN CALCULATIONS

Design Storm: 100
K Value: 1.25
F Factor: 1.00
Runoff Calculations table with columns: Inlet #, Area, C, Cumul. Area, Cumul. Cx, Intensity, To Inlet, Cumul. Runoff, Pipe Cap., Pipe Vel., Up Piped Inlet 1, Up Piped Inlet 2, Up Area, Up CxA, Pipe Properties (Up Inlet, Down Inlet, Pipe Type, n, Pipe Size, Length, Slope, Drop Inlet, FL Up, FL Down, Inlet Top, HGL Elev.)

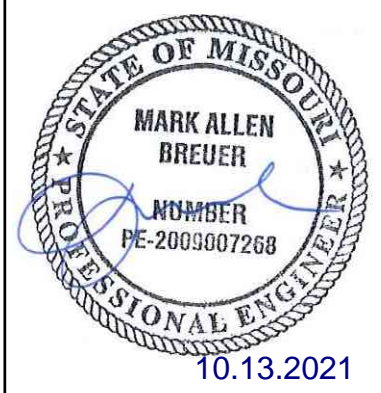
* FLOW FROM CAPTURED FROM THESE LINE DRAIN THE THE EXISTING DETENTION BASIN. THE ADDED DRAINAGE DOES NOT EXCEED THE DESIGN OF THE EXISTING BASIN.

GUTTER SPREAD AND INLET CAPACITY CALCULATIONS - WOODLAND GLEN - 2ND PLAT

DESIGN STORM: 10
K FACTOR: 1.00
CURB TYPE "A" = LAZY BACK
CURB TYPE "B" = HIGH BACK

RUNOFF CALCULATIONS table with columns: Inlet #, Composite C, Area, Tc, Intensity, Runoff, Upstream Inlet, Upstream Inlet, Upstream Inlet, Upstream Inlet, Bypass from Upstream Inlet, Total Runoff, Street Grade, Street Cross Slope, Curb Type, Inlet Length, Effective Length 80% Cap, Inlet Interception, Bypass to Downstream Inlet, Street Grade, Street Cross Slope, Depth at Curb, Spread of Flow

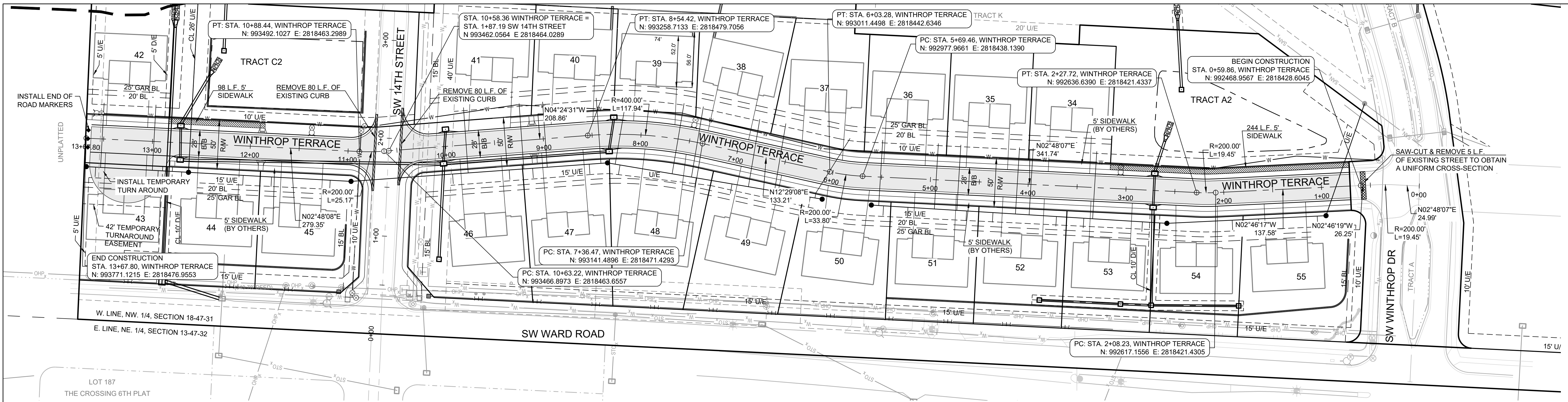
- NOTES:
1. CAPACITY OF INLETS ON GRADE DETERMINED USING ROUTINE OUTLINED ON PGS 56-95 TO 56-97, SECTION 5600 APWA
2. CAPACITY OF SUMP INLETS CALCULATED USING FIGURE 5604-21, SECTION 5600 APWA
3. MANNINGS "n" VALUE FOR COMBINED ASPHALT PAVEMENT AND CONCRETE CURB - 0.014



WOODLAND GLEN 2ND PLAT
STREET, STORMWATER, MASTER DRAINAGE, AND EROSION CONTROL PLANS
WARD ROAD & WINTHROP DRIVE
LEE'S SUMMIT, MISSOURI

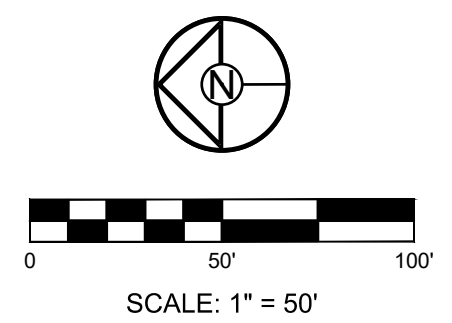
Revision table with columns: Revision, Date, Description. Includes entries for City Comments and Schedule Updates.

MASTER DRAINAGE PLAN
DRAINAGE CALCS

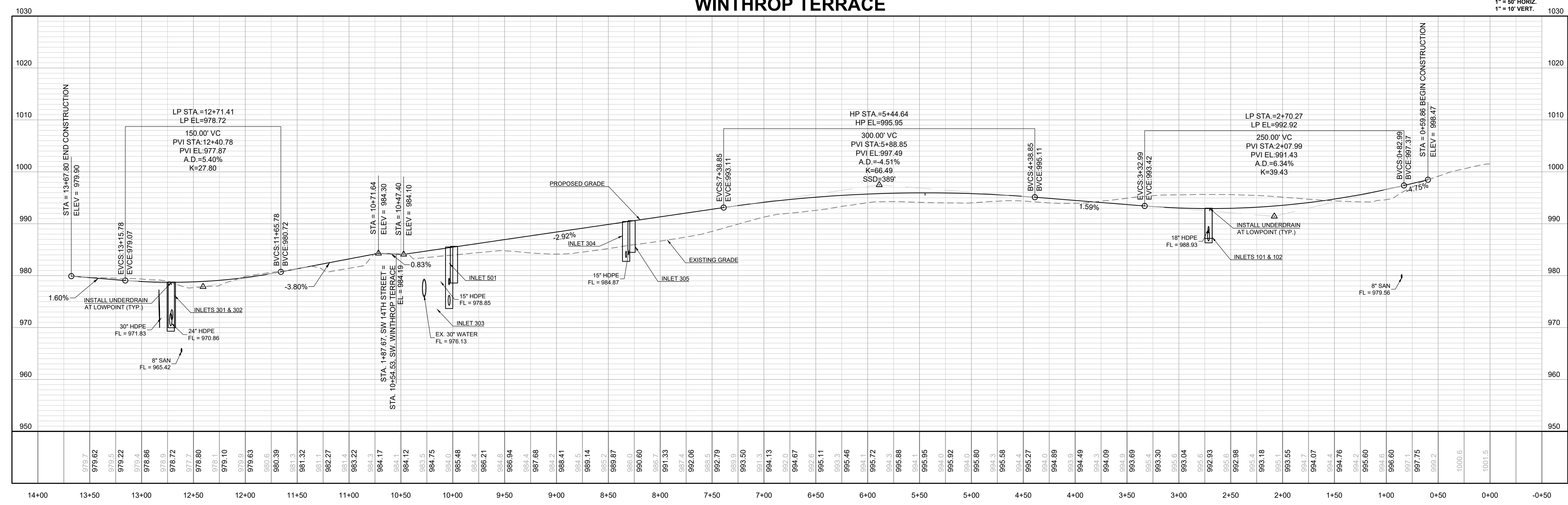


PROJECT BENCHMARK:

SW CORNER NW 1/4 SEC. 18-47N-31W, JACKSON COUNTY, MO.
 3" DIAMETER ALUMINUM DISK IN MONUMENT BOX
 M.D.N.R. DOC. NO. 600-65374
 ELEV. 1036.41



WINTHROP TERRACE



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STATE OF MISSOURI
 MARK ALLEN BREUER
 PROFESSIONAL ENGINEER
 NUMBER PE-2005007268
 10.13.2021

WOODLAND GLEN 2ND PLAT
 STREET, STORMWATER, MASTER DRAINAGE,
 AND EROSION CONTROL PLANS
 WARD ROAD & WINTHROP DRIVE
 LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION
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06/15/2021	CITY COMMENTS
09/28/2021	CITY COMMENTS
09/28/2021	SCHLAGEL UPDATE
10/06/2021	10/06/2021

WINTHROP
 TERRACE PLAN &
 PROFILE

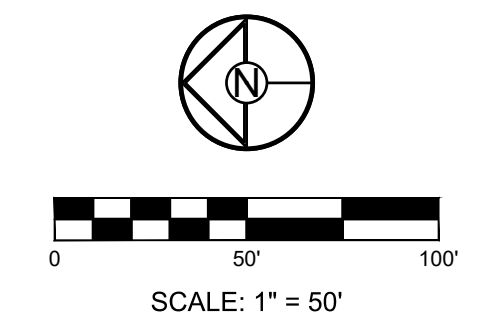
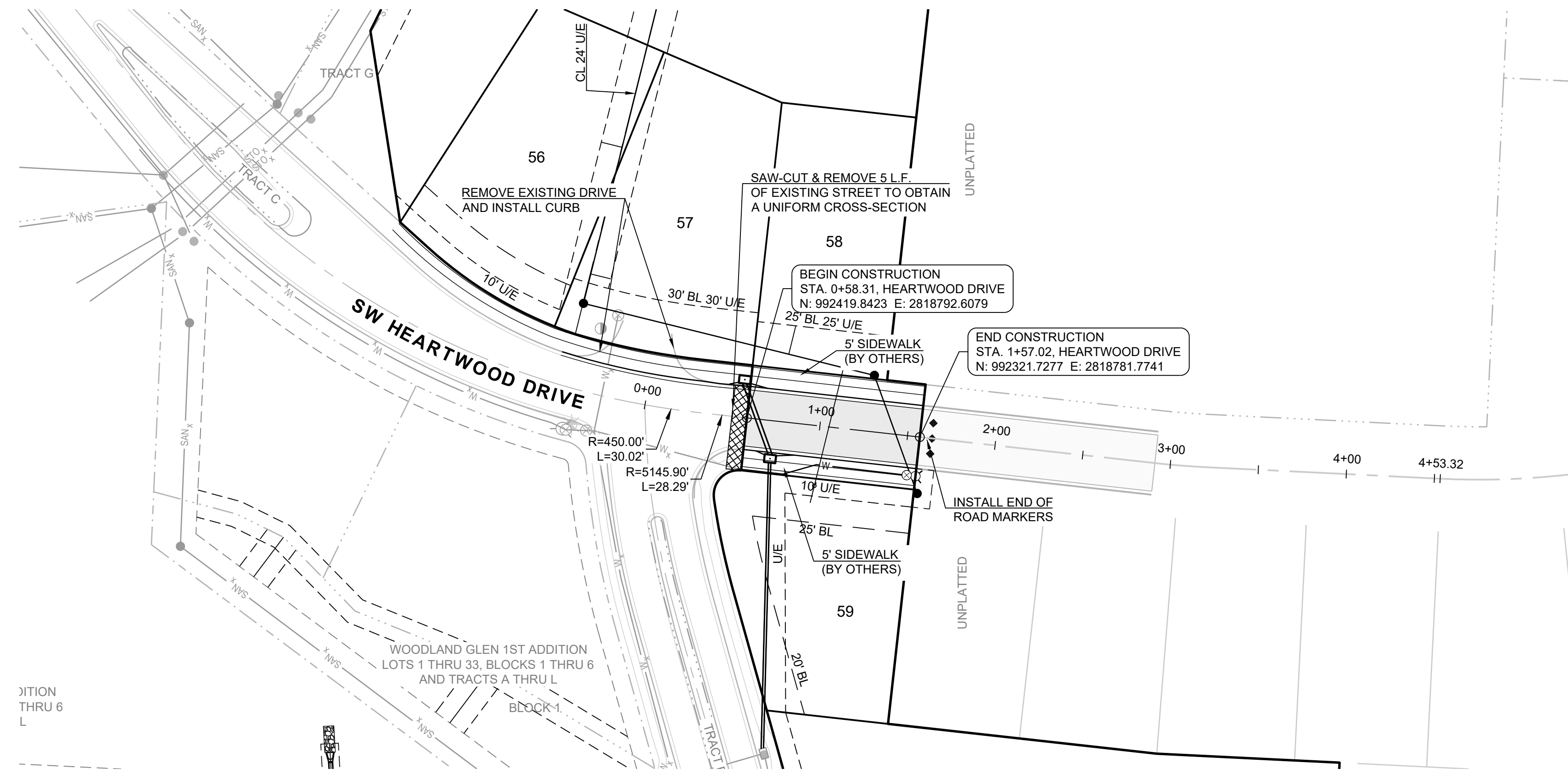
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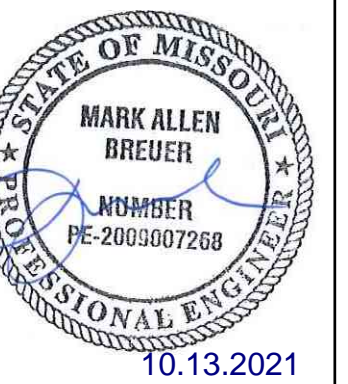
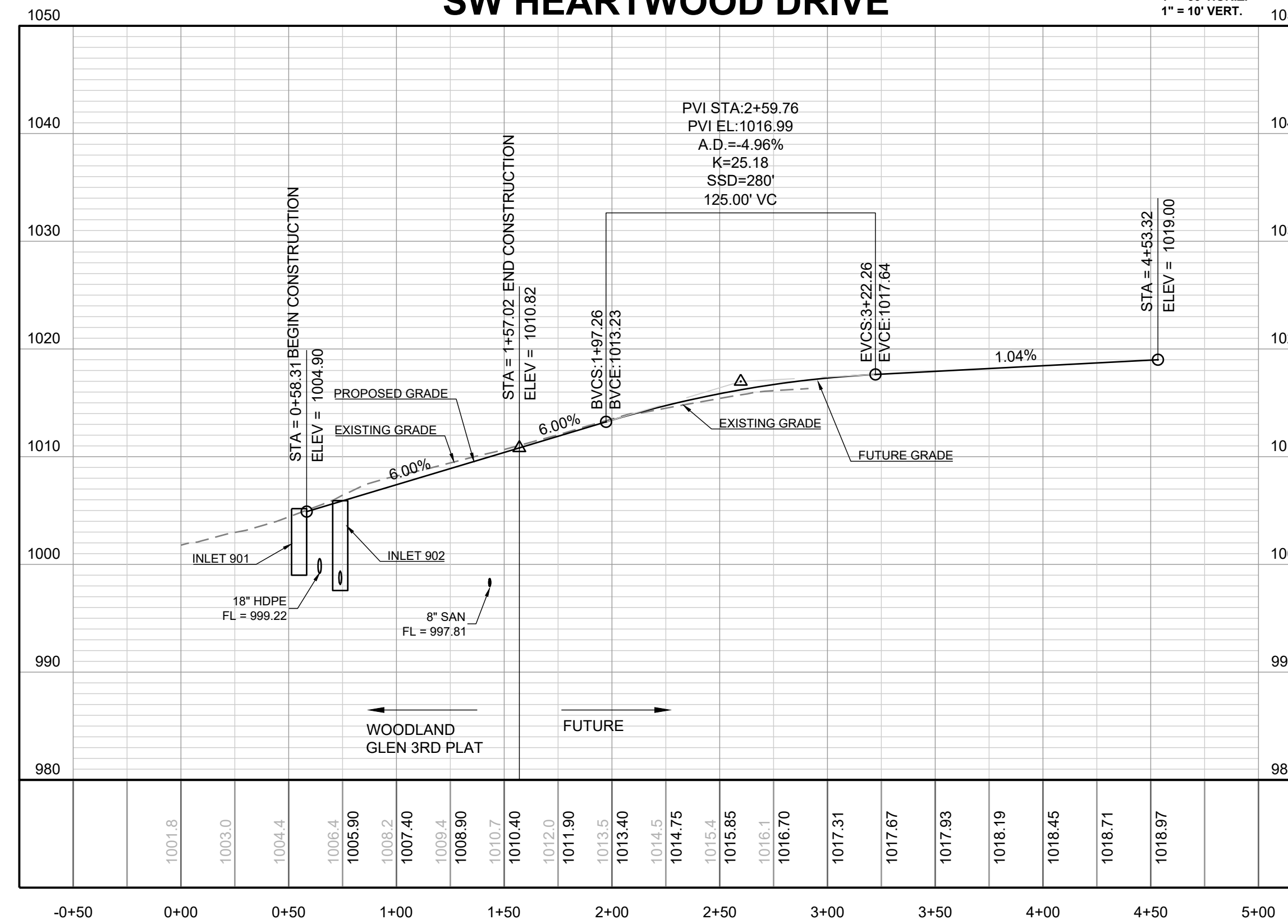
SW CORNER NW 1/4 SEC. 18-47N-31W, JACKSON COUNTY, MO.
 3" DIAMETER ALUMINUM DISK IN MONUMENT BOX
 M.D.N.R. DOC. NO. 600-65374

ELEV. 1036.41



SW HEARTWOOD DRIVE

1" = 50' HORIZ.
 1" = 10' VERT.



WOODLAND GLEN 2ND PLAT
 STREET, STORMWATER, MASTER DRAINAGE,
 AND EROSION CONTROL PLANS
 WARD ROAD & WINTHROP DRIVE
 LEE'S SUMMIT, MISSOURI

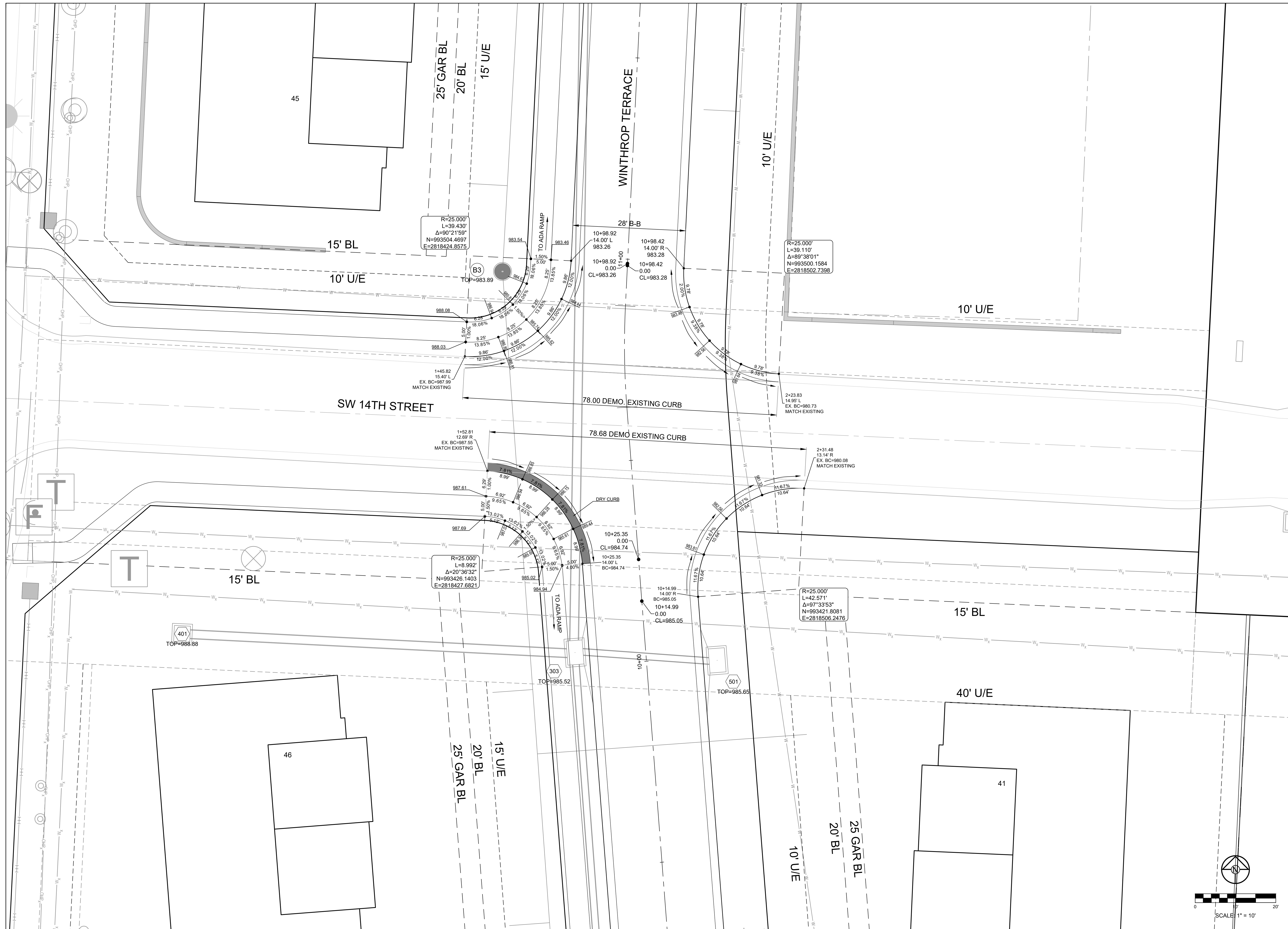
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01/12/2021	SCHLAGEL QUANTITIES
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05/12/2021	CITY COMMENTS
06/15/2021	CITY COMMENTS
09/28/2021	CITY COMMENTS
10/06/2021	SCHLAGEL UPDATE

HEARTWOOD DRIVE PLAN & PROFILE

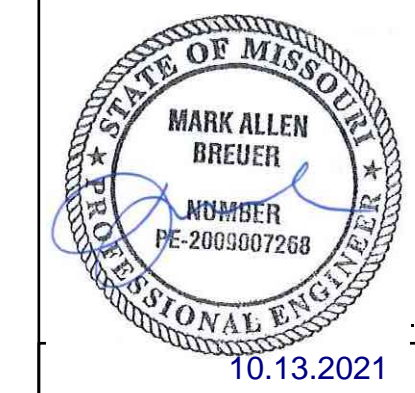
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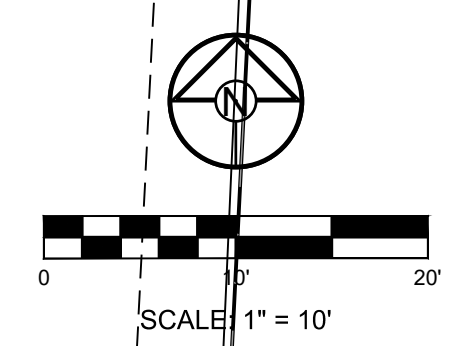
PREPARED BY:



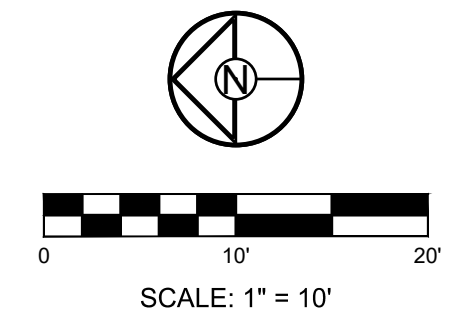
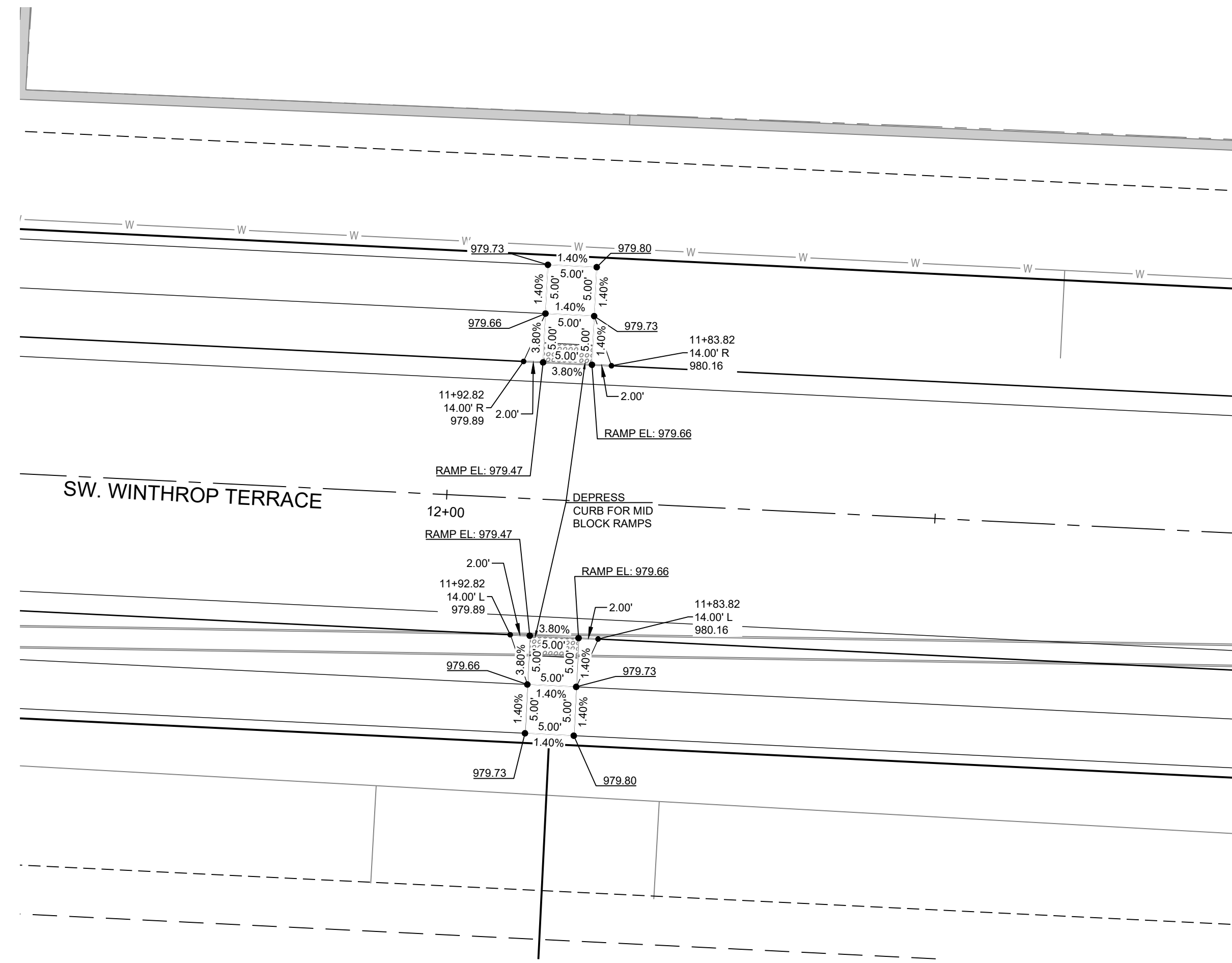
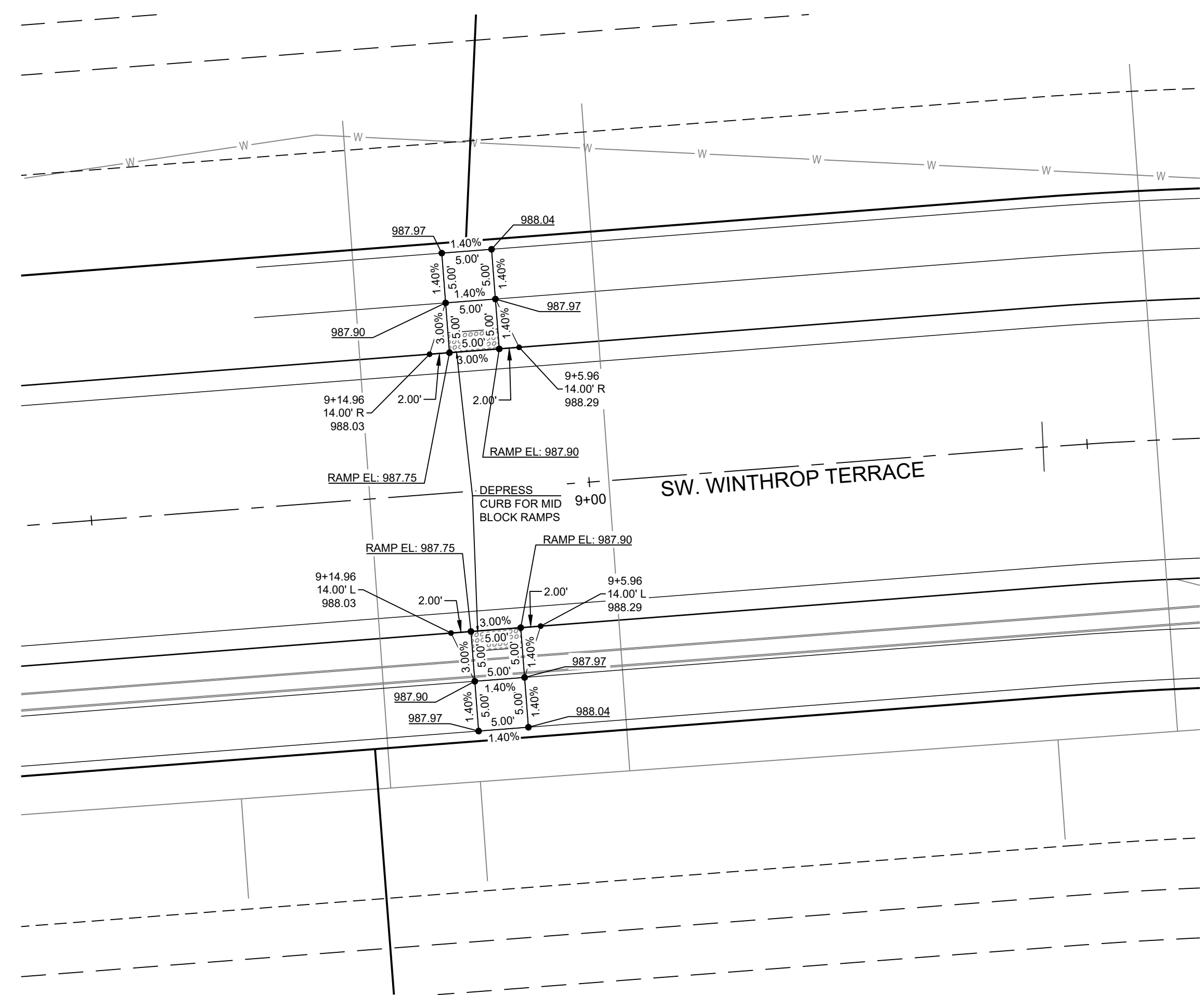
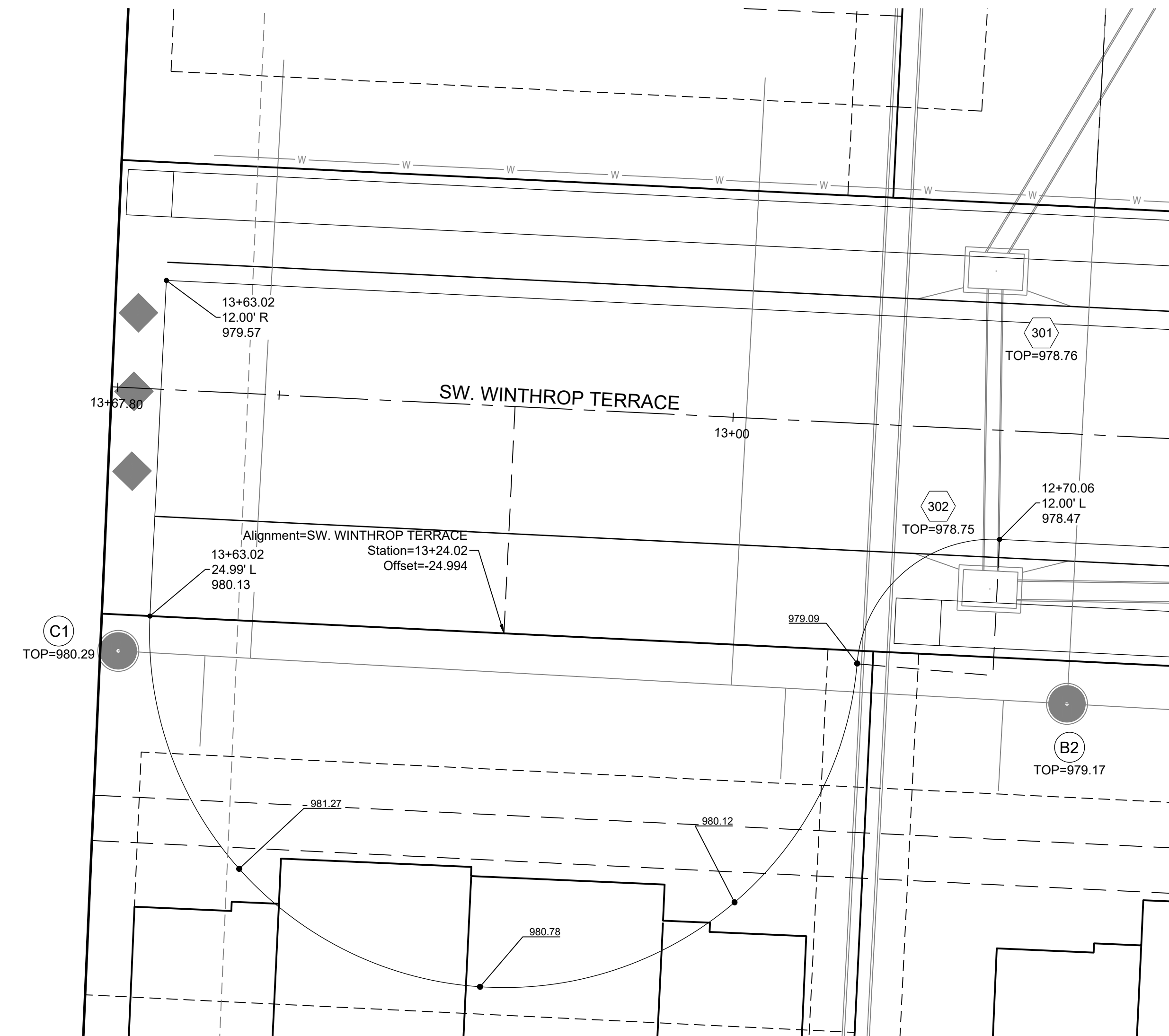
**WOODLAND GLEN 2ND PLAT
 STREET, STORMWATER, MASTER DRAINAGE,
 AND EROSION CONTROL PLANS
 WARD ROAD & WINTHROP DRIVE
 LEE'S SUMMIT, MISSOURI**

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09/28/2021	CITY COMMENTS
10/06/2021	SCHLAGEL UPDATE

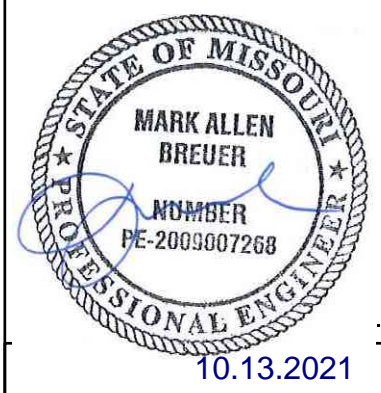
INTERSECTION
 DETAIL



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PREPARED BY:



WOODLAND GLEN 2ND PLAT
 STREET, STORMWATER, MASTER DRAINAGE,
 AND EROSION CONTROL PLANS
 WARD ROAD & WINTHROP DRIVE
 LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION
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10/06/2021	SCHLAGEL UPDATE

INTERSECTION
 DETAILS

SHEET
15

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PROJECT BENCHMARK:

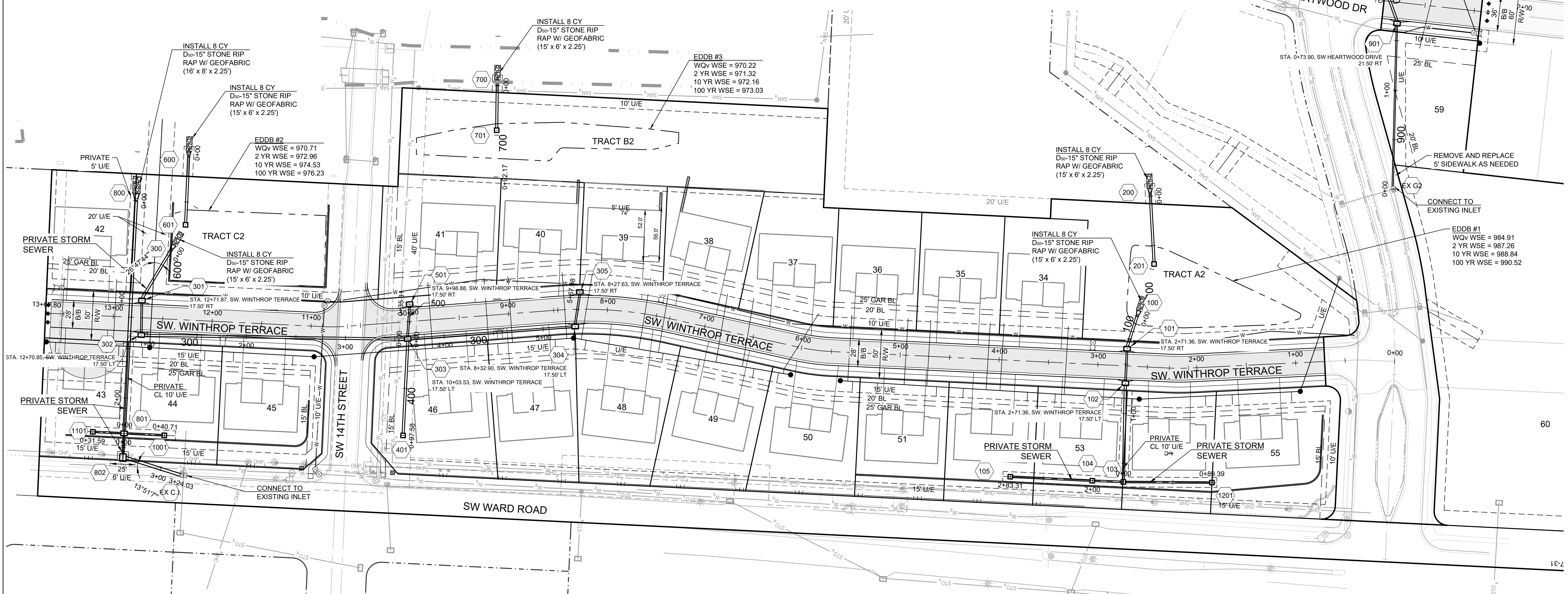
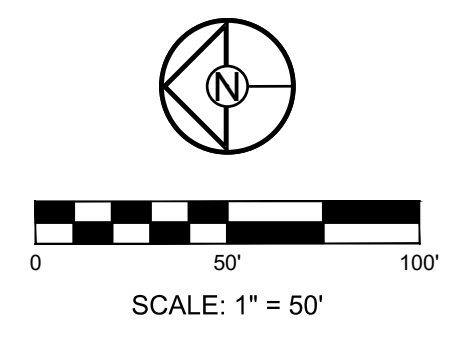
SW CORNER NW 1/4 SEC. 18-47N-31W, JACKSON COUNTY, MO.
 3" DIAMETER ALUMINUM DISK IN MONUMENT BOX
 M.D.N.R. DOC. NO. 600-65374
 ELEV. 1036.41

Structure	Notes
100	STA 0+00.00, 100 INSTALL 24" END SECTION N 992669.2728 E 2818473.6957
101	STA 0+34.17, 100 INSTALL 6 X 4 CURB INLET N 992679.3667 E 2818441.0459
102	STA 0+69.17, 100 INSTALL 6 X 4 CURB INLET N 992681.0777 E 2818406.0877
103	STA 1+68.90, 100 INSTALL 4 X 4 JUNCTION BOX F.F.B. 358°53'41" N 992683.0605 E 2818306.3812
104	STA 2+00.35, 100 INSTALL 4 X 4 AREA INLET (OPENINGS N.E.S.W) F.F.B. 0°00'00" N 992714.4882 E 2818307.6069
105	STA 2+83.31, 100 INSTALL 4 X 4 AREA INLET (OPENINGS N.E.S.W) F.F.B. 86°30'58" N 992797.3500 E 2818311.6624
200	STA -0+00.04, 200 INSTALL 15" END SECTION N 992655.8760 E 2818595.2227

Structure	Notes
201	STA 0+68.76, 200 INSTALL OUTLET STRUCTURE F.F.B. 180°00'00" N 992652.0986 E 2818526.5222
300	STA -0+00.00, 300 INSTALL 24" END SECTION N 993645.0883 E 2818540.6336
301	STA 0+58.76, 300 INSTALL 6 X 4 CURB INLET N 993674.4582 E 2818489.7451
302	STA 0+93.77, 300 INSTALL 6 X 4 CURB INLET N 993675.1476 E 2818454.7370
303	STA 3+62.91, 300 INSTALL 6 X 4 CURB INLET N 993406.0386 E 2818450.7956
304	STA 5+32.58, 300 INSTALL 6 X 4 CURB INLET N 993236.8248 E 2818463.2865
305	STA 5+67.98, 300 INSTALL 6 X 4 CURB INLET N 993232.1336 E 2818498.3682

Structure	Notes
401	STA 0+97.58, 400 INSTALL 4 X 4 AREA INLET (OPENINGS S.W) F.F.B. 357°17'49" N 993410.6806 E 2818353.3299
501	STA 0+35.31, 500 INSTALL 6 X 4 CURB INLET N 993404.0946 E 2818486.0494
600	STA -0+00.04, 600 INSTALL 18" END SECTION N 993627.2204 E 2818639.2364
601	STA 0+73.07, 600 INSTALL OUTLET STRUCTURE F.F.B. 357°23'29" N 993630.3926 E 2818566.1938
700	STA 0+00.00, 700 INSTALL 15" END SECTION N 993315.5193 E 2818706.7724
701	STA 0+44.96, 700 INSTALL OUTLET STRUCTURE F.F.B. 0°00'00" N 993316.1131 E 2818661.8180
800	STA 0+00.85, 800 INSTALL 38" END SECTION N 993680.3317 E 2818589.9535

Structure	Notes
801	STA 2+35.65, 800 INSTALL 6 X 4 JUNCTION BOX F.F.B. 87°17'49" N 993692.4917 E 2818355.4726
802	STA 2+60.17, 800 INSTALL 7 X 6 JUNCTION BOX N 993693.6905 E 2818330.9777
901	STA 1+67.35, 900 INSTALL 6 X 4 CURB INLET N 992406.7121 E 2818769.5220
902	STA 2+14.40, 900 INSTALL 6 X 4 CURB INLET N 992420.9665 E 2818814.3651
1001	STA 0+40.71, 1000 INSTALL 4 X 4 AREA INLET (OPENINGS N.E.S.W) F.F.B. 357°17'49" N 993651.8261 E 2818353.4824
1101	STA 0+31.59, 1100 INSTALL 4 X 4 AREA INLET (OPENINGS N.E.S.W) F.F.B. 357°17'49" N 993724.0390 E 2818357.0166
1201	STA 0+89.39, 1200 INSTALL 4 X 4 AREA INLET (OPENINGS N.E.S.W) F.F.B. 0°53'19" N 992593.6700 E 2818305.7533



WOODLAND GLEN 2ND PLAT
 STREET, STORMWATER, MASTER DRAINAGE,
 AND EROSION CONTROL PLANS
 WARD ROAD & WINTHROP DRIVE
 LEE'S SUMMIT, MISSOURI

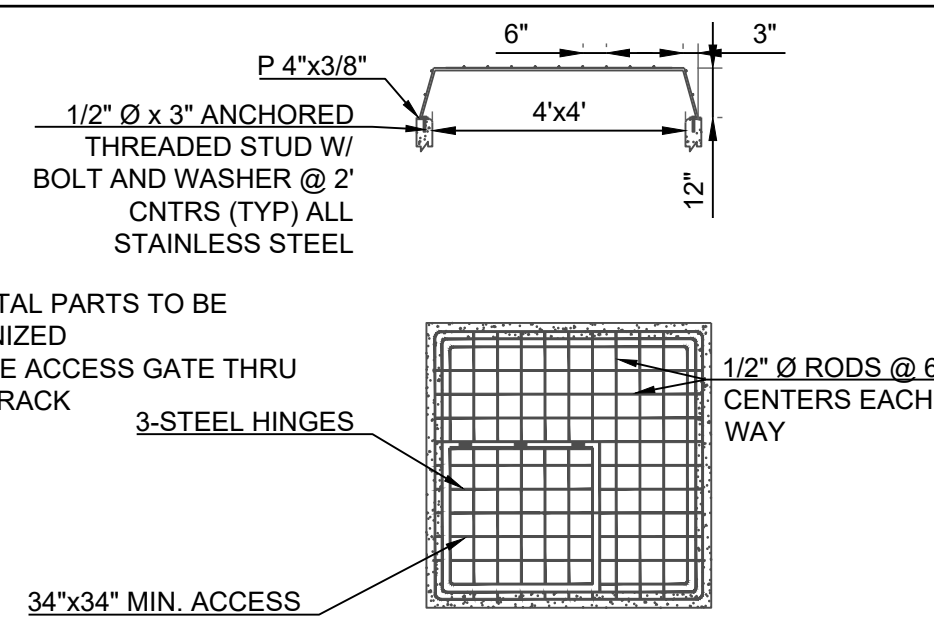
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01/12/2021	SCHLAGEL QUANTITIES
04/09/2021	SCHLAGEL QUANTITIES
05/12/2021	CITY COMMENTS
06/15/2021	CITY COMMENTS
09/28/2021	CITY COMMENTS
10/06/2021	SCHLAGEL UPDATE

DRAWN BY: BAL
 CHECKED BY: MAB
 DATE PREPARED: 2-19-2020
 PROJ. NUMBER: 10062021
 18-017

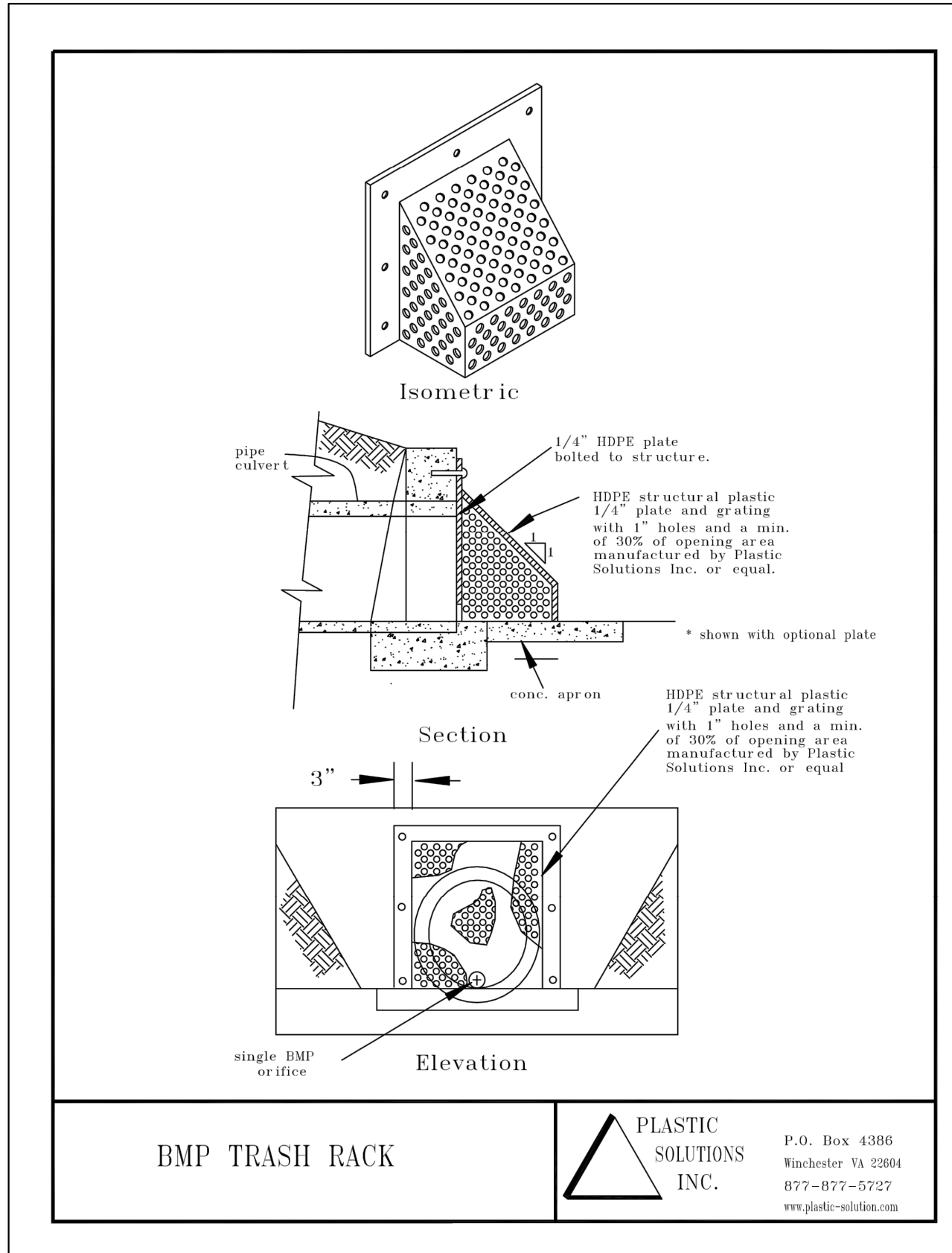
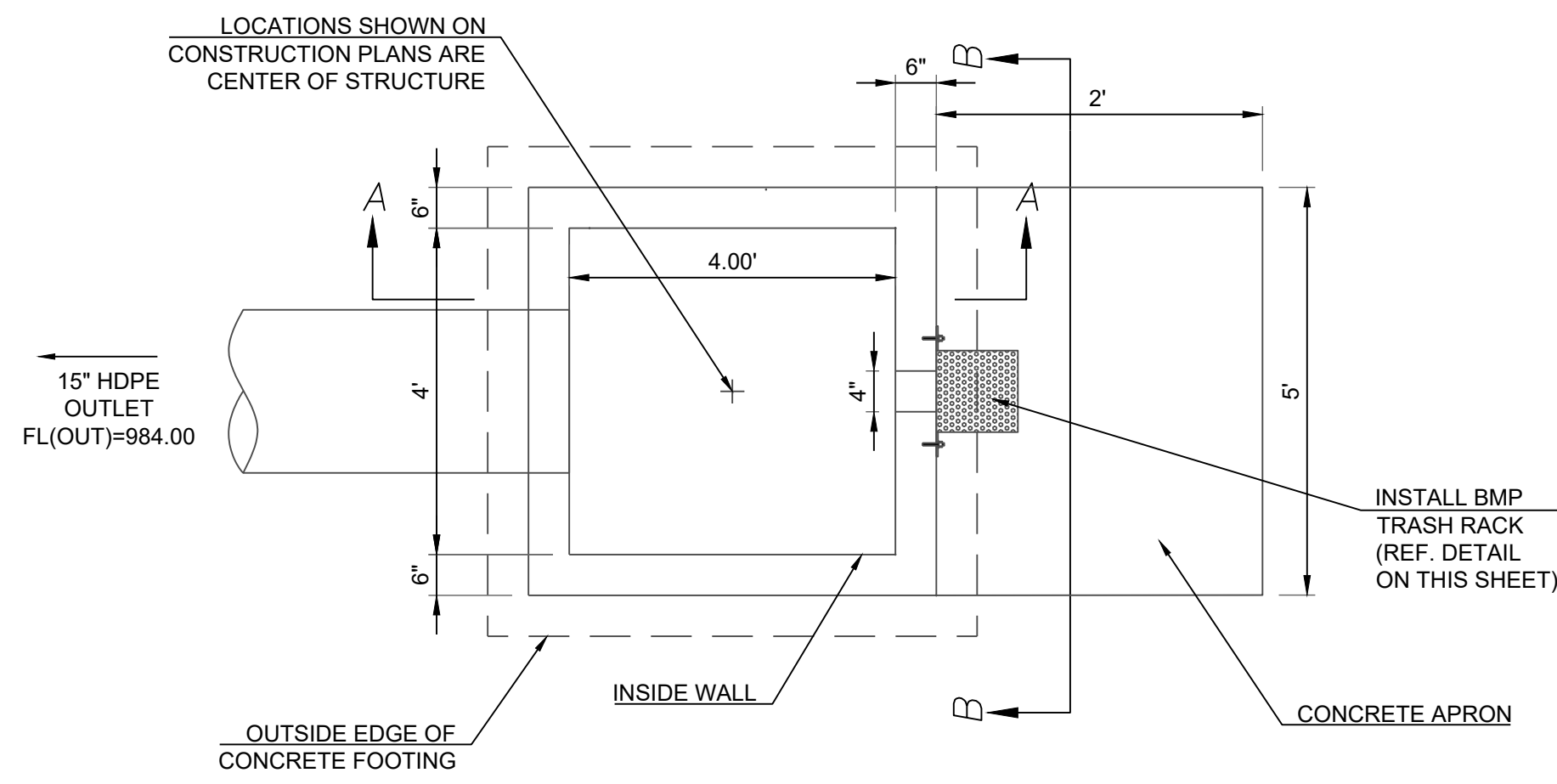
STORM PLAN
 SHEET
16

I:\PROJECTS\2018\18-017\3.0 Design\3.0 DWG Plans\6.0 SS\18-017 STORM PP.dwg, 10/06/2021 2:41:47 PM, 1:1

- NOTES:
- ALL METAL PARTS TO BE GALVANIZED
 - PROVIDE ACCESS GATE THRU TRASH RACK

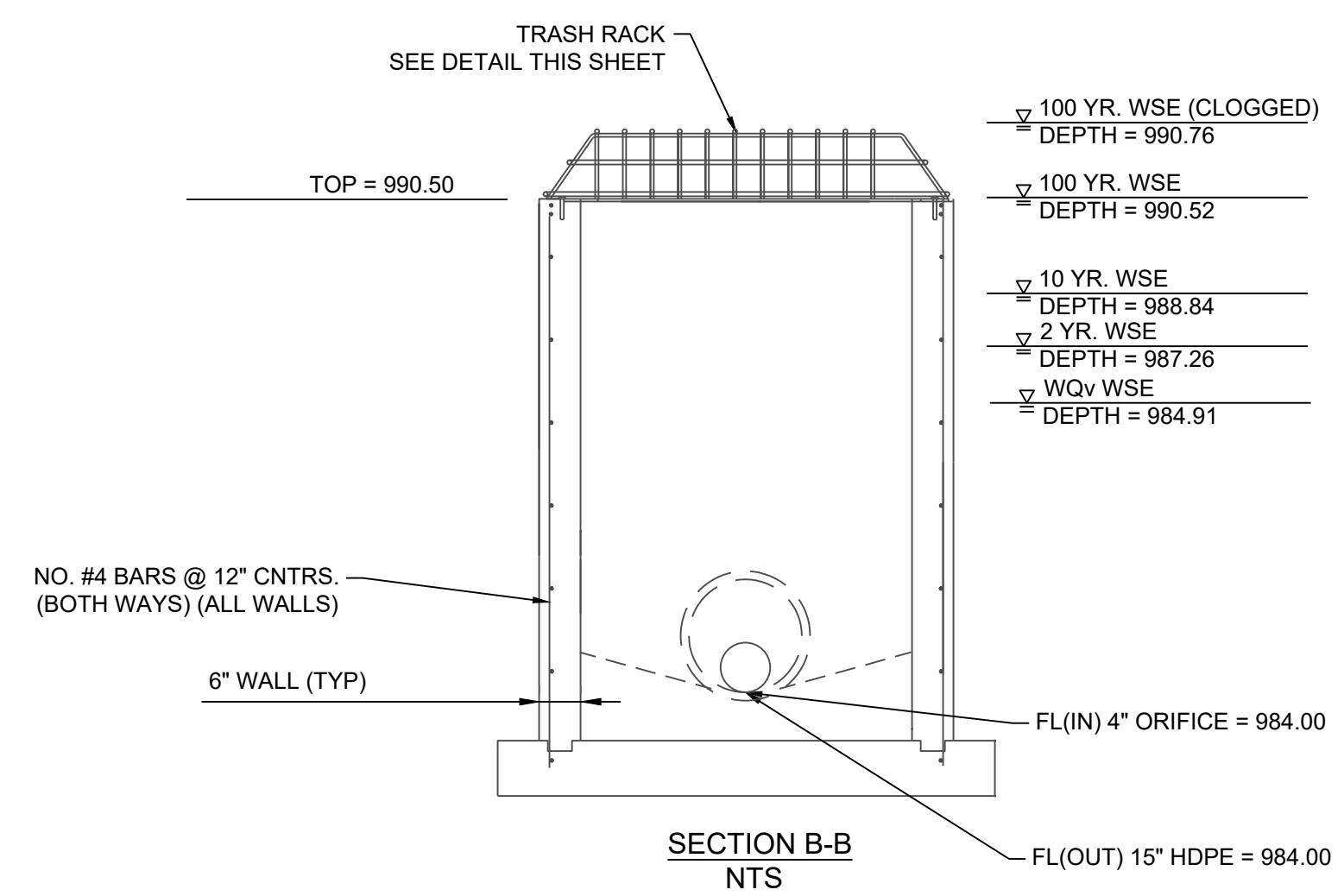
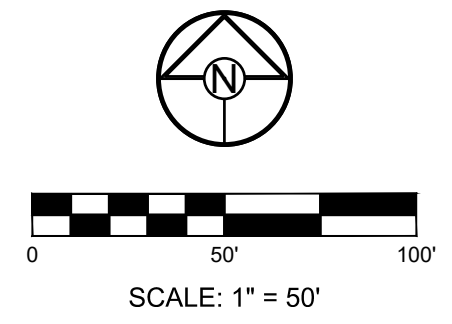
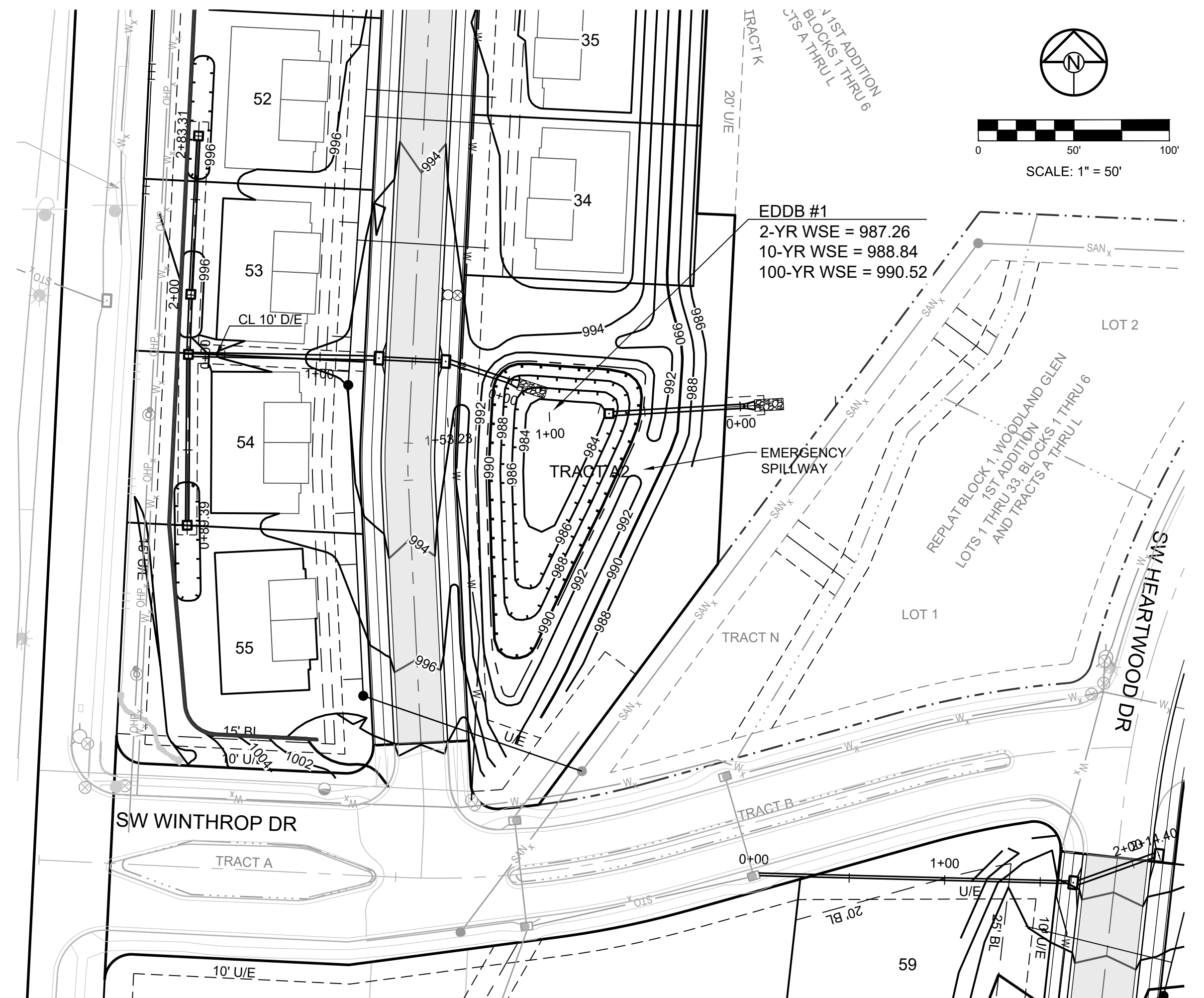


TRASH RACK DETAIL

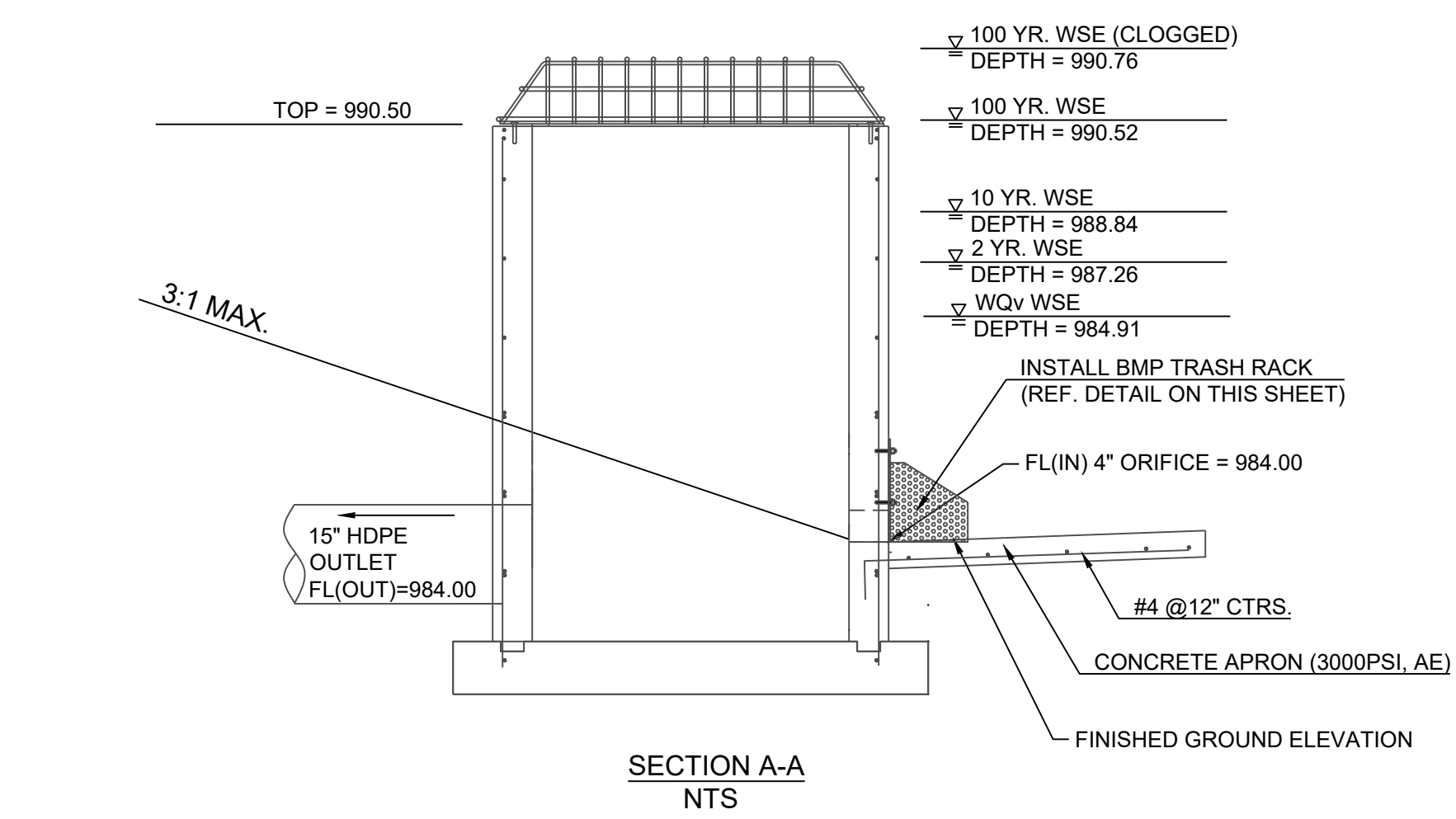


BMP TRASH RACK

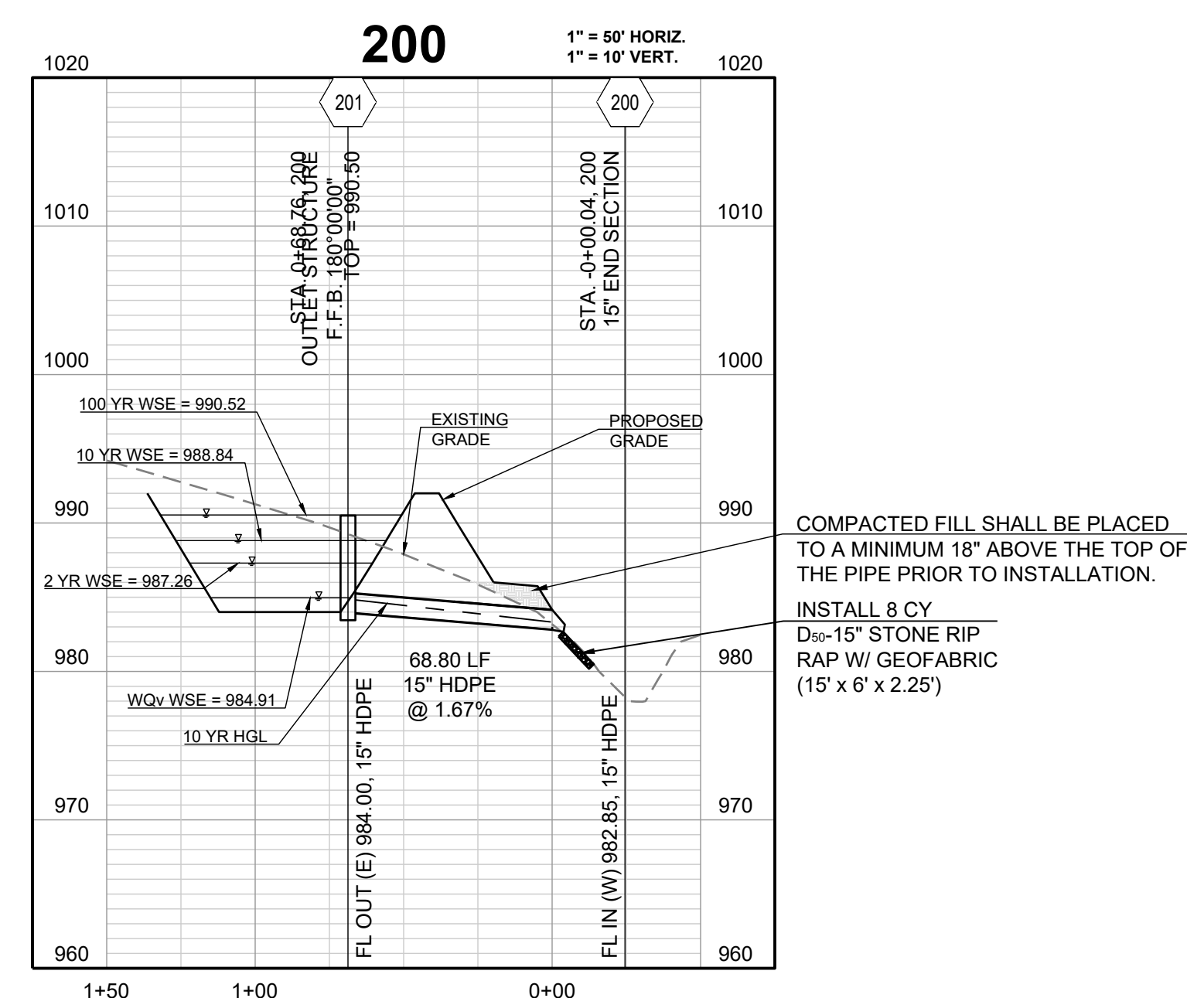
PLASTIC SOLUTIONS INC.
P.O. Box 4386
Winchester VA 22094
877-877-5727
www.julco-solutions.com



SECTION B-B NTS



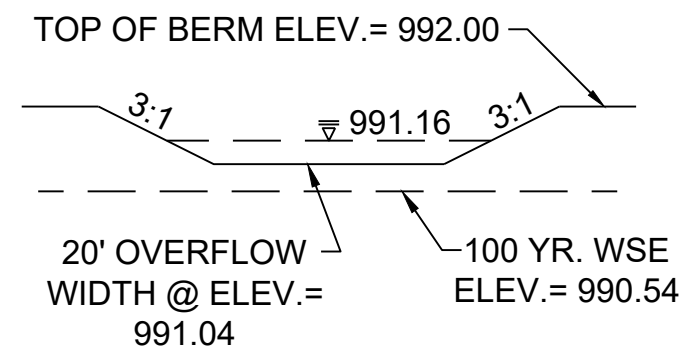
SECTION A-A NTS



DETENTION STORAGE EDDB #1:
100 YEAR, 24 HR. RAINFALL - MAXIMUM WSE = 990.52 (SEE FINAL STORMWATER MGMT. PLAN)

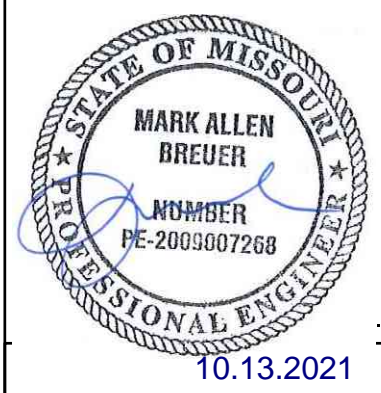
AUXILIARY SPILLWAY SET AT 0.5 FEET ABOVE MAX. WSE, SPILLWAY ELEV. = 991.02

AUXILIARY SPILLWAY DESIGN:
Q(100)=2.71 CFS, Q=CLH^{3/2}, C=3.33, L=20 FT., 2.71 CFS = 3.33 * 20FT. * (H^{3/2}), H=0.12 FT.



PROJECT BENCHMARK:
SW. CORNER NW 1/4 SEC. 18-47N-31W, JACKSON COUNTY, MO.
3" DIAMETER ALUMINUM DISK IN MONUMENT BOX
M.D.N.R. DOC. NO. 600-65374
ELEV. 1036.41

PREPARED BY:



WOODLAND GLEN 2ND PLAT
STREET, STORMWATER, MASTER DRAINAGE,
AND EROSION CONTROL PLANS
WARD ROAD & WINTHROP DRIVE
LEE'S SUMMIT, MISSOURI

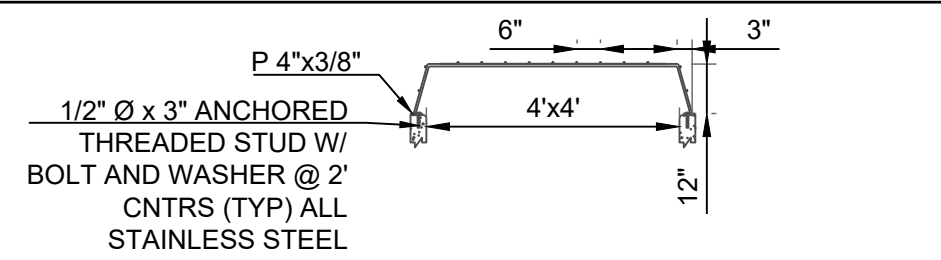
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05/12/2021	CITY COMMENTS
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06/28/2021	CITY COMMENTS
09/28/2021	SCHLAGEL UPDATE
10/06/2021	

EDDB 1 OUTLET STRUCTURE

SHEET

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- NOTES:
- ALL METAL PARTS TO BE GALVANIZED
 - PROVIDE ACCESS GATE THRU TRASH RACK

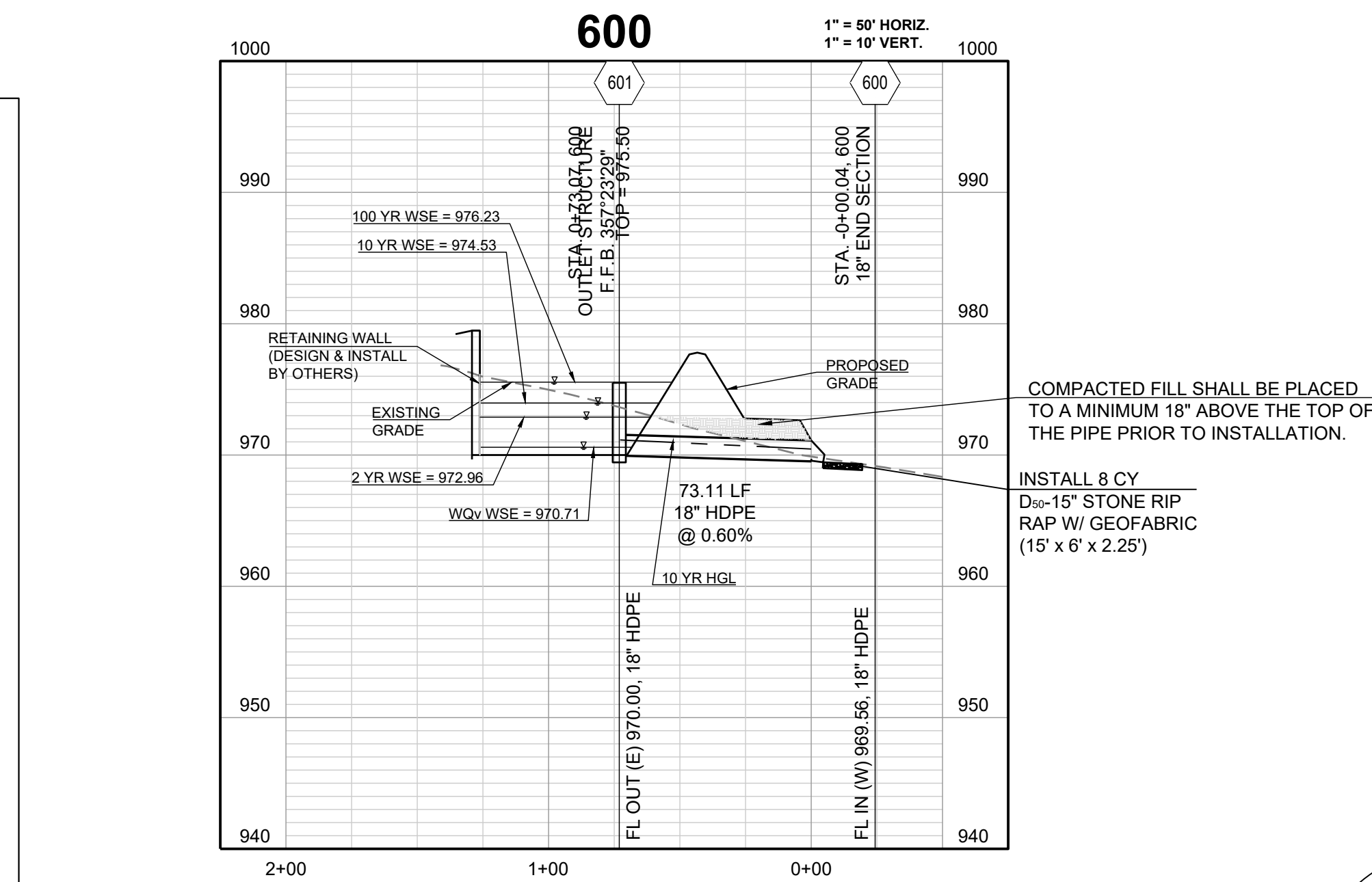
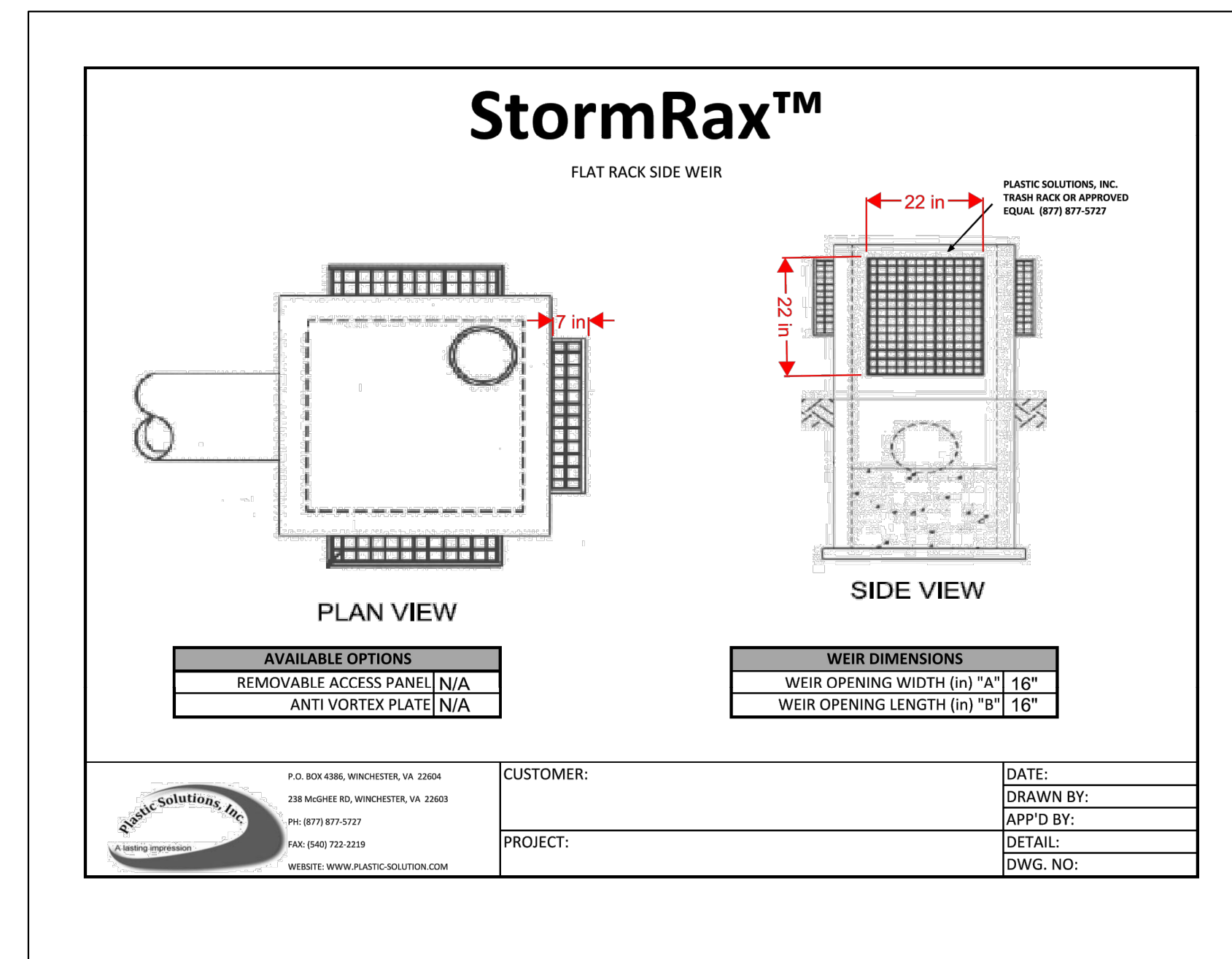
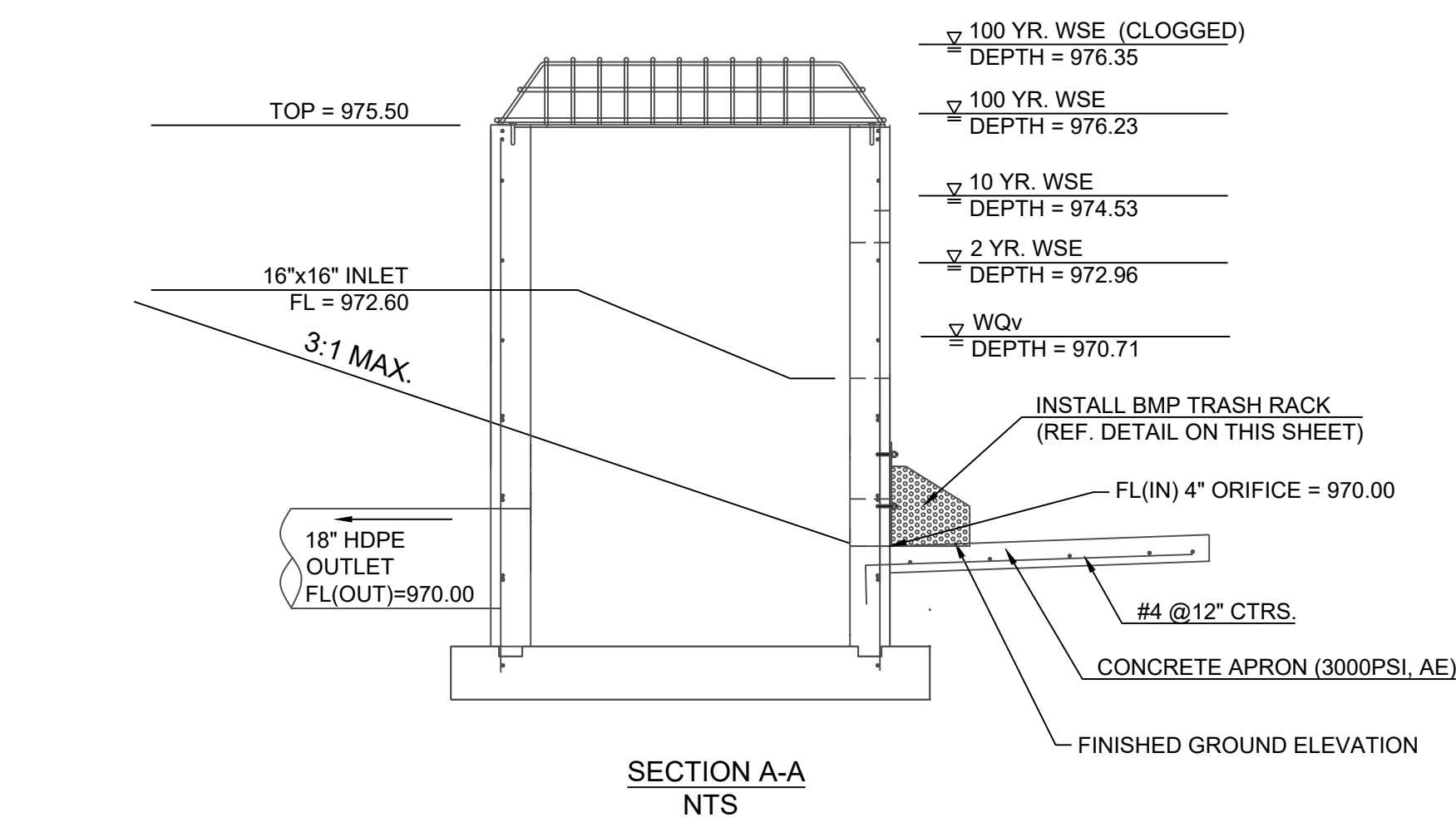
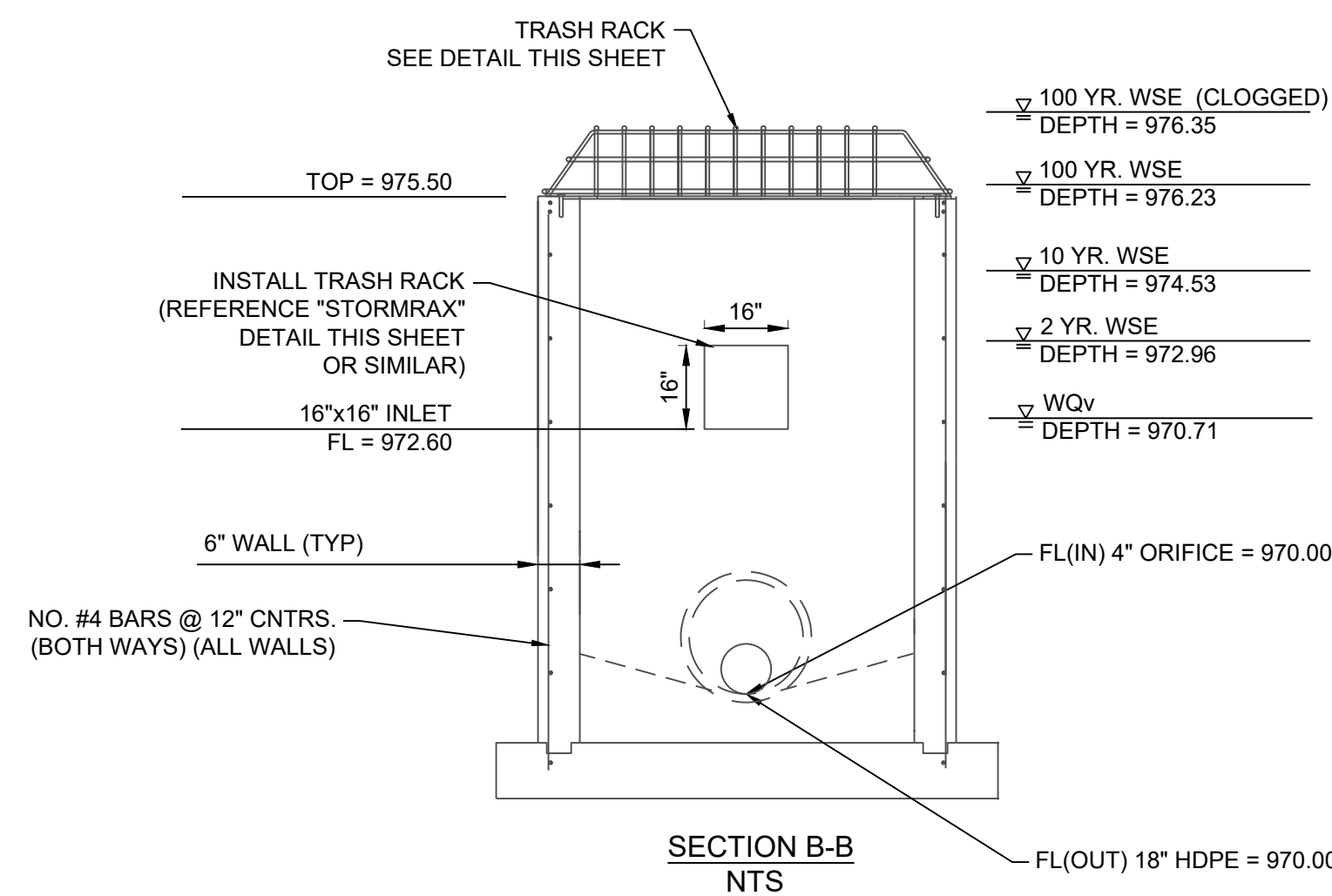
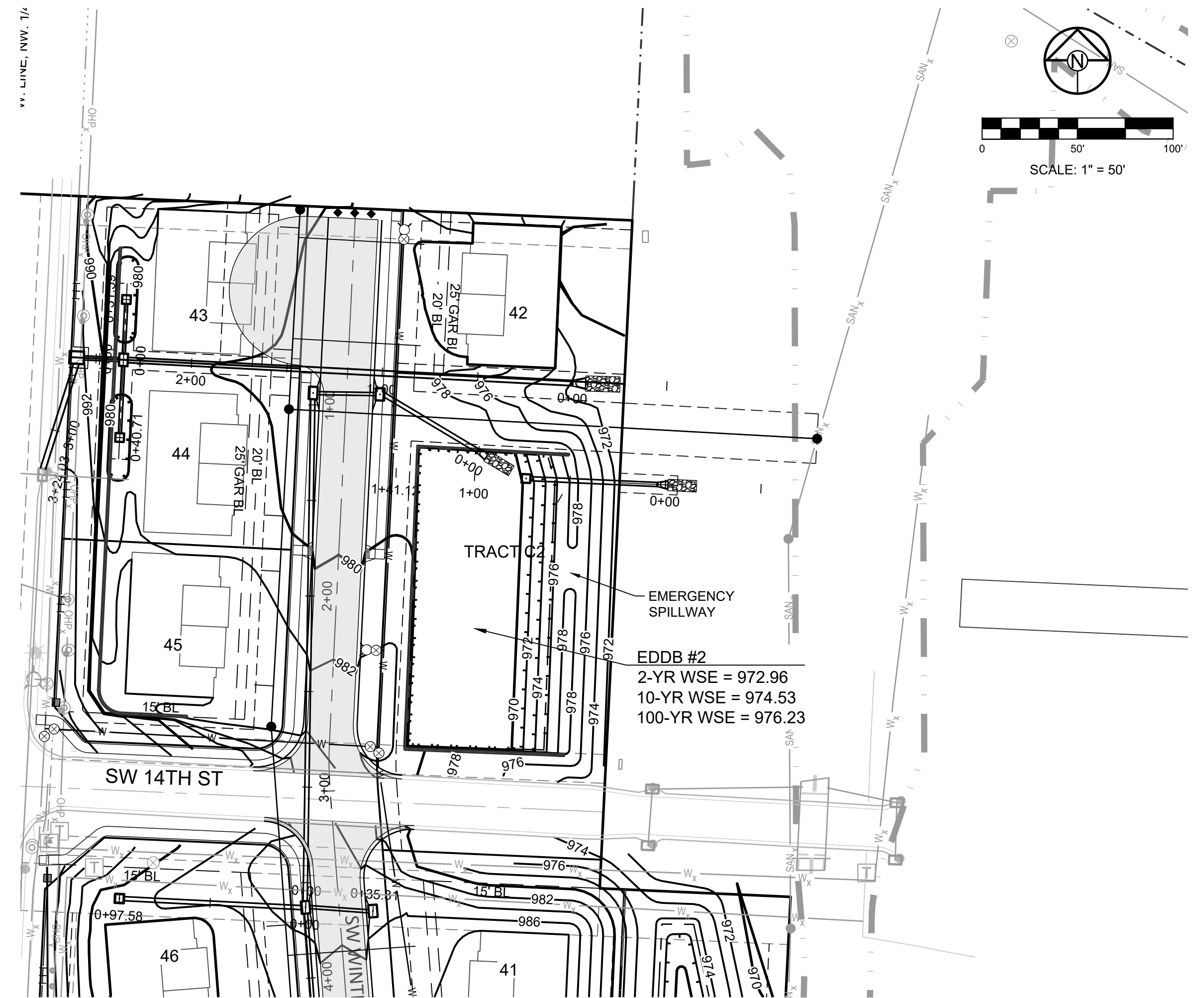
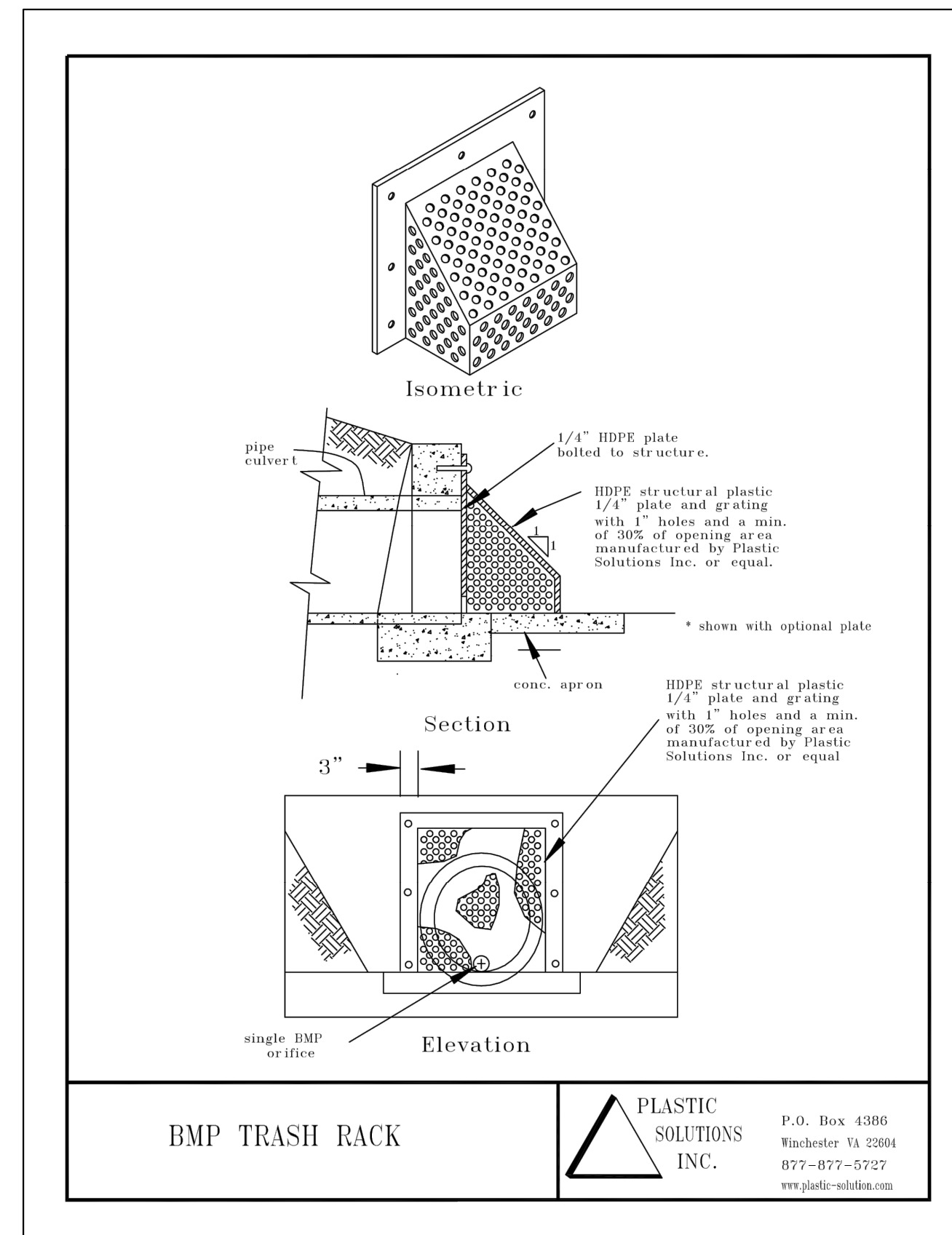
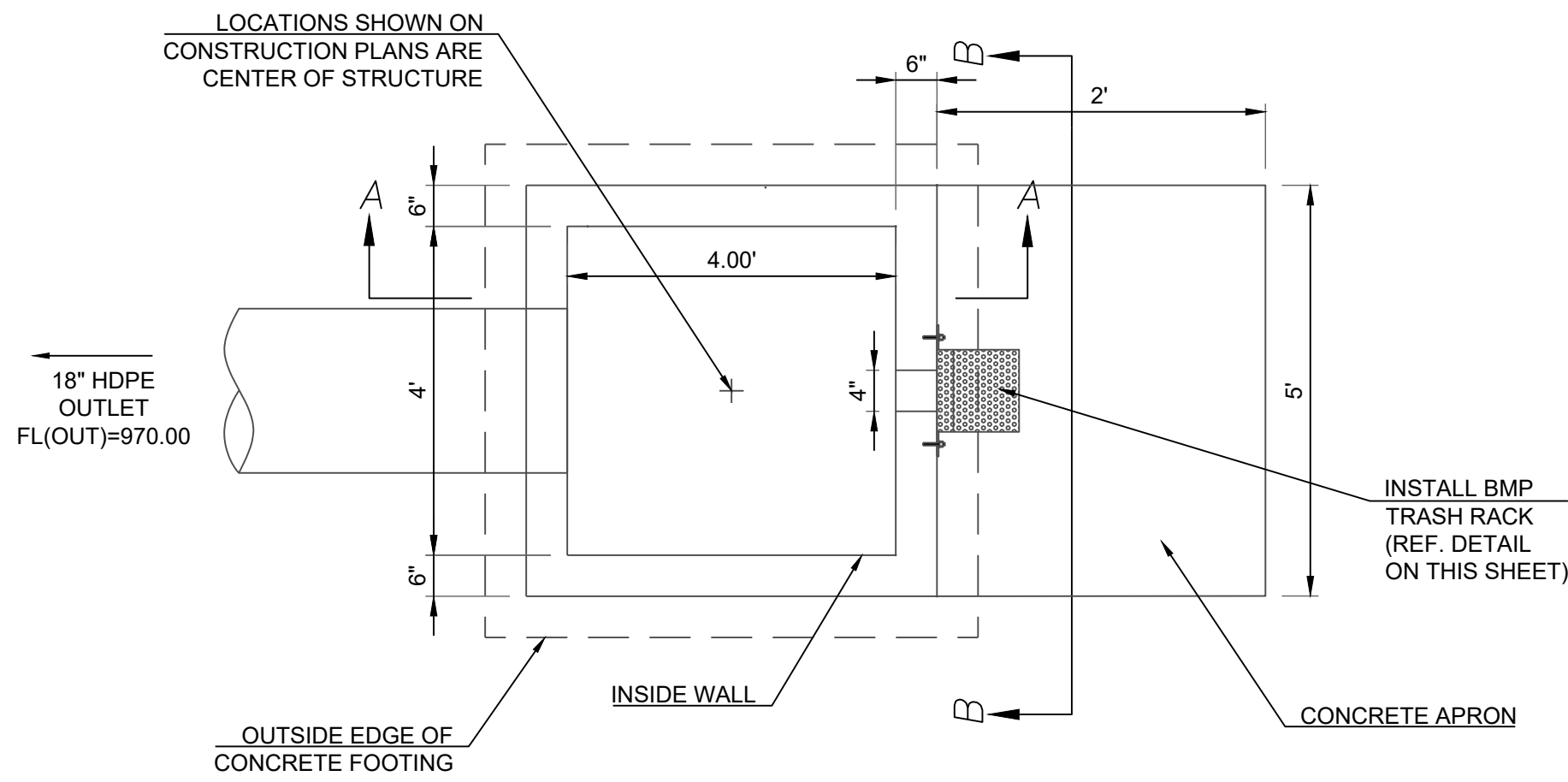


1/2" Ø RODS @ 6" CENTERS EACH WAY

3-STEEL HINGES

34"x34" MIN. ACCESS HATCH PROVIDE MEANS TO LOCK ACCESS HATCH

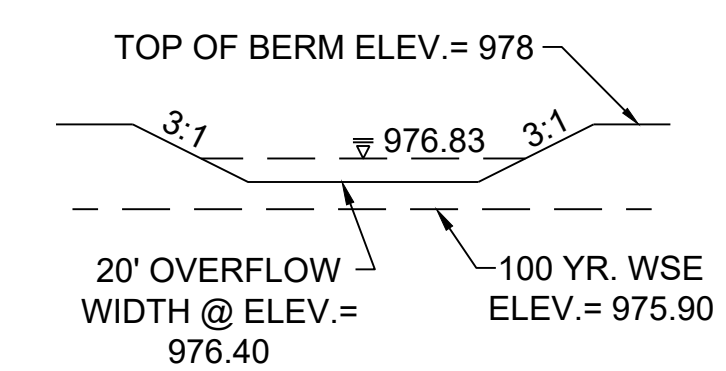
TRASH RACK DETAIL



DETENTION STORAGE EDDB #2:
100 YEAR, 24 HR. RAINFALL - MAXIMUM WSE = 976.23 (SEE FINAL STORMWATER MGMT. PLAN)

AUXILIARY SPILLWAY SET AT 0.5 FEET ABOVE MAX. WSE, SPILLWAY ELEV. = 976.73

AUXILIARY SPILLWAY DESIGN:
Q(100)=18.47 CFS, Q=CLH^{3/2}, C=3.33, L=20 FT., 18.47 CFS = 3.33 * 20FT. * (H^{3/2}), H=0.43 FT.



PROJECT BENCHMARK:
SW. CORNER NW. 1/4 SEC. 18-47N-31W, JACKSON COUNTY, MO.
3" DIAMETER ALUMINUM DISK IN MONUMENT BOX
M.D.N.R. DOC. NO. 600-65374
ELEV. 1036.41

PREPARED BY:



WOODLAND GLEN 2ND PLAT
STREET, STORMWATER, MASTER DRAINAGE,
AND EROSION CONTROL PLANS
WARD ROAD & WINTHROP DRIVE
LEE'S SUMMIT, MISSOURI

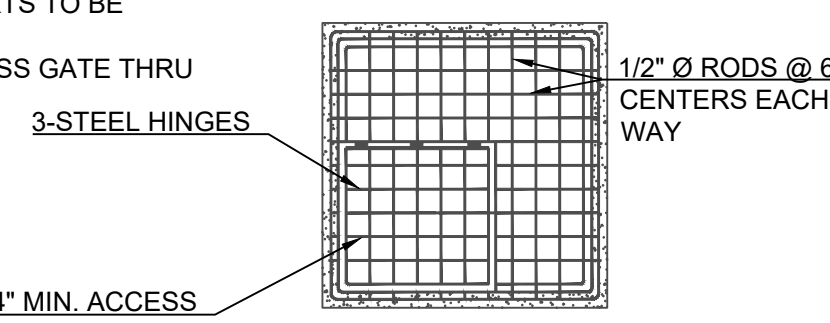
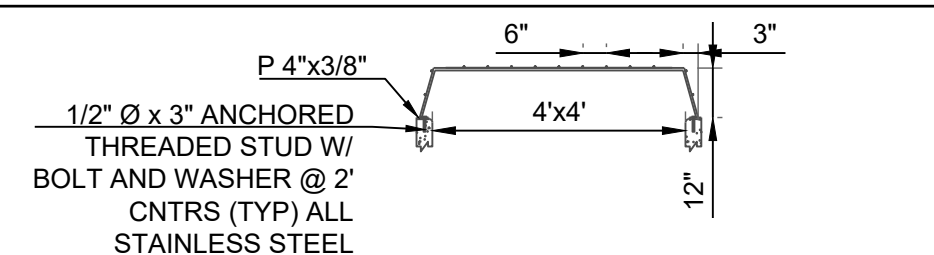
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01/12/2021	SCHLAGEL QUANTITIES
04/09/2021	SCHLAGEL QUANTITIES
05/12/2021	CITY COMMENTS
05/15/2021	CITY COMMENTS
06/28/2021	CITY COMMENTS
09/28/2021	SCHLAGEL UPDATE
10/06/2021	10/06/2021

EDDB 2 OUTLET STRUCTURE

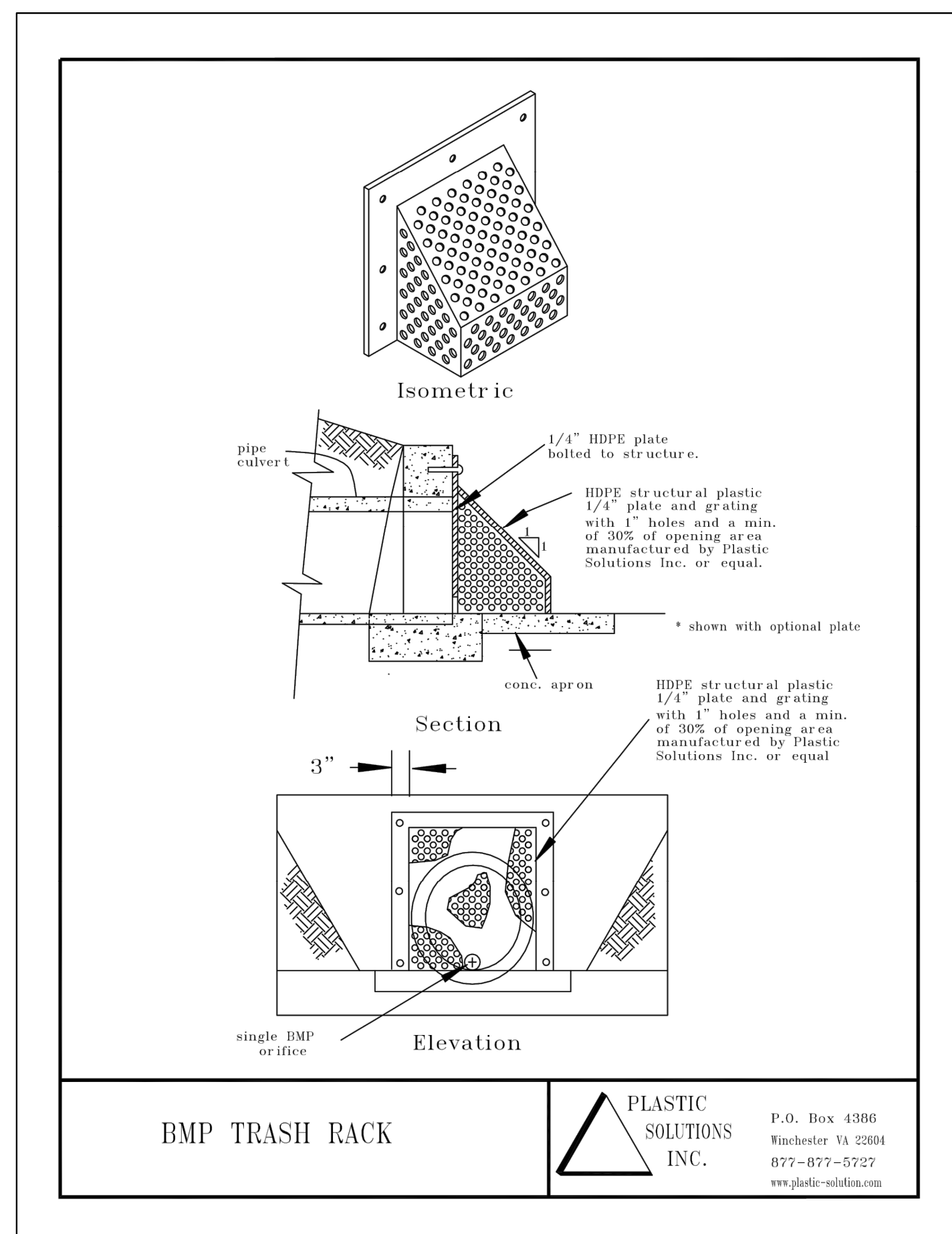
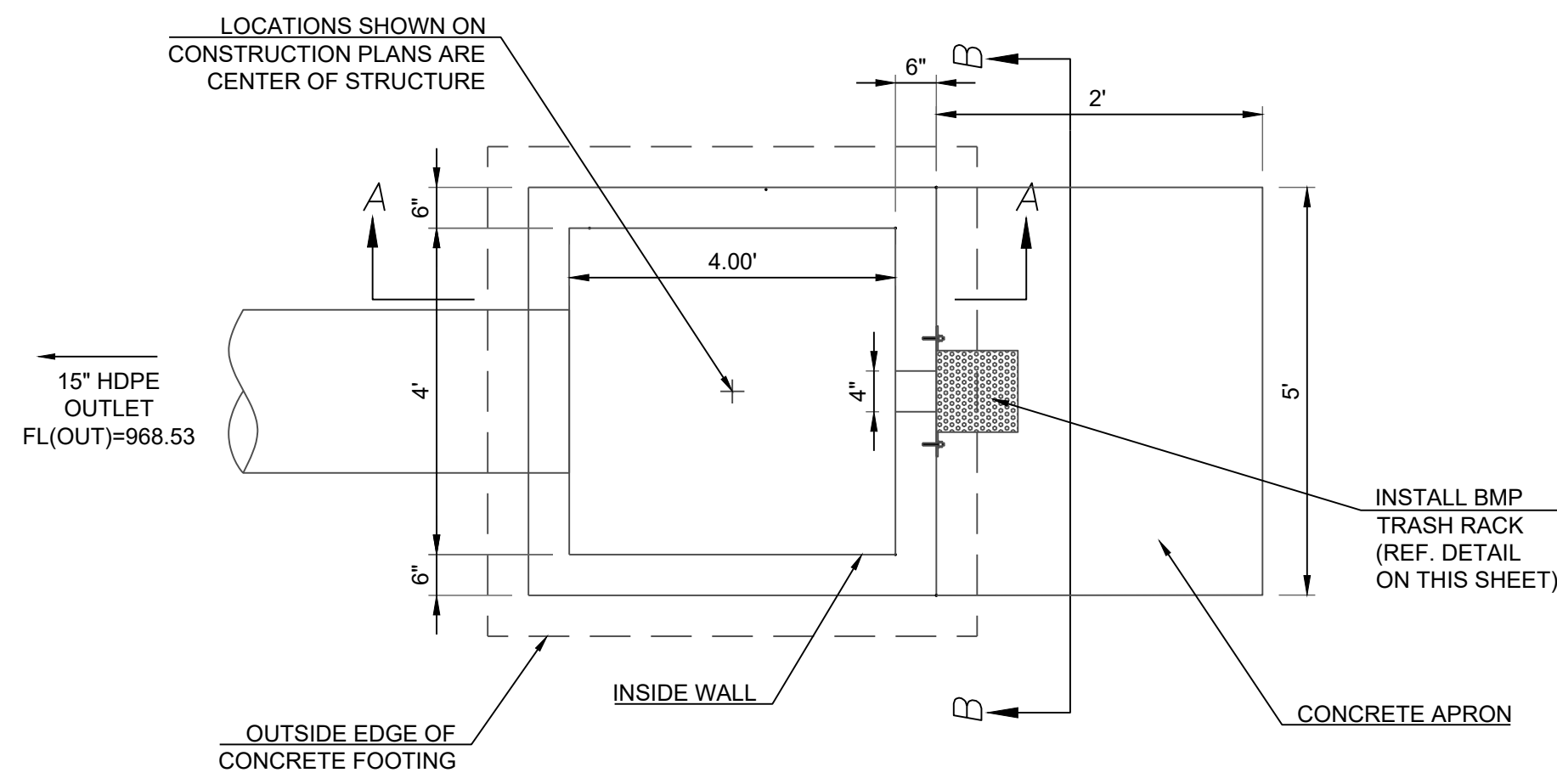
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I:\PROJECTS\2018\18-0713.0 Design\3.0 DWG Plans\6.0 SS\18-017 SS EDDB OUTLETS.dwg, 10/06/2021 2:42:58 PM, 1:1

- NOTES:
1. ALL METAL PARTS TO BE GALVANIZED
 2. PROVIDE ACCESS GATE THRU TRASH RACK

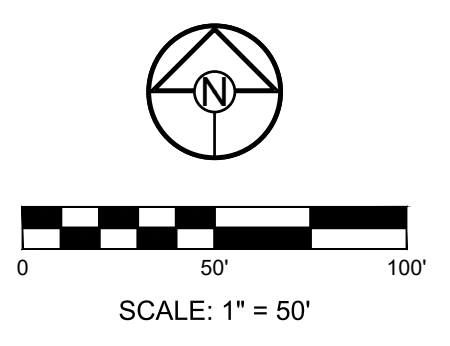
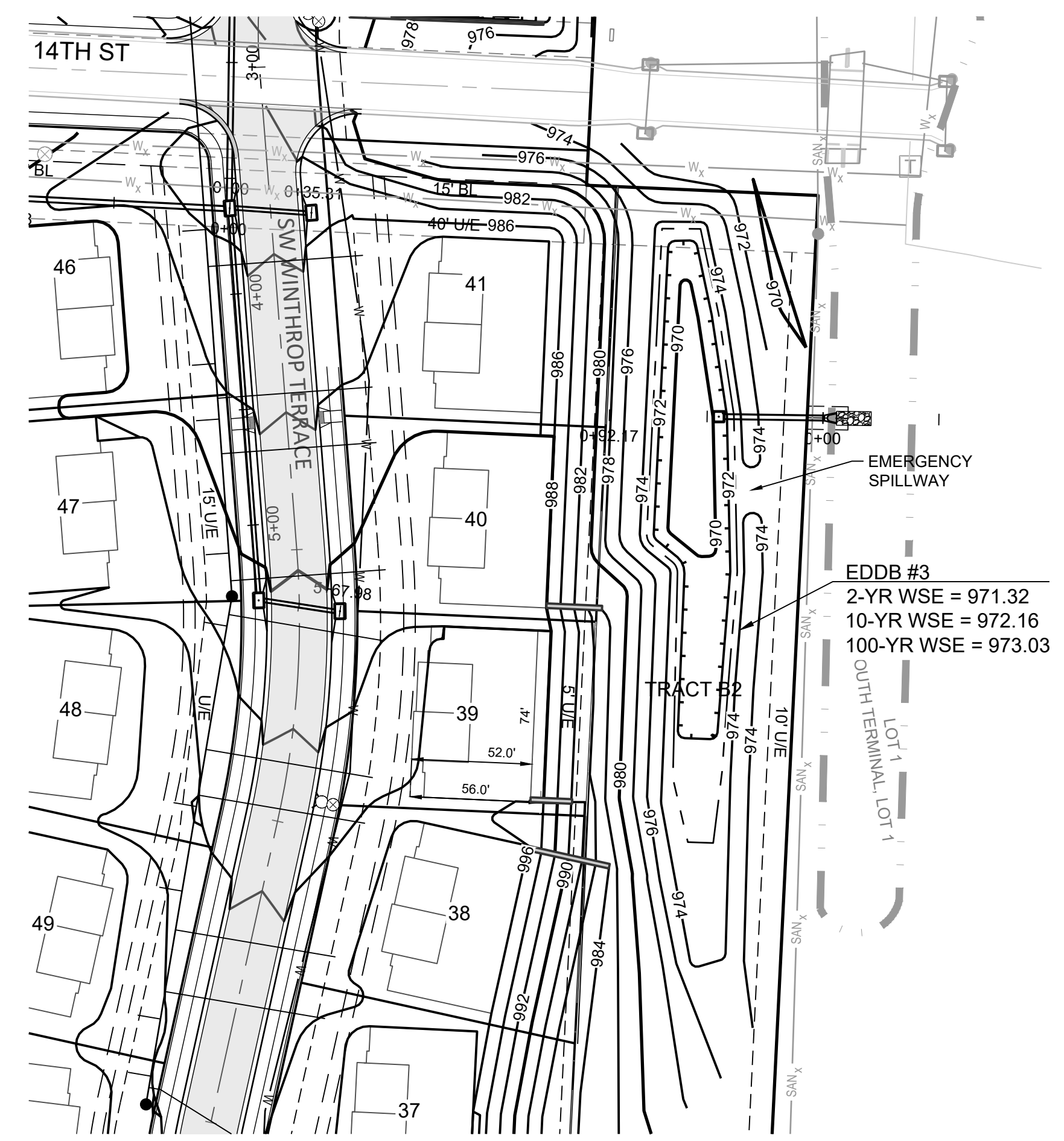


TRASH RACK DETAIL

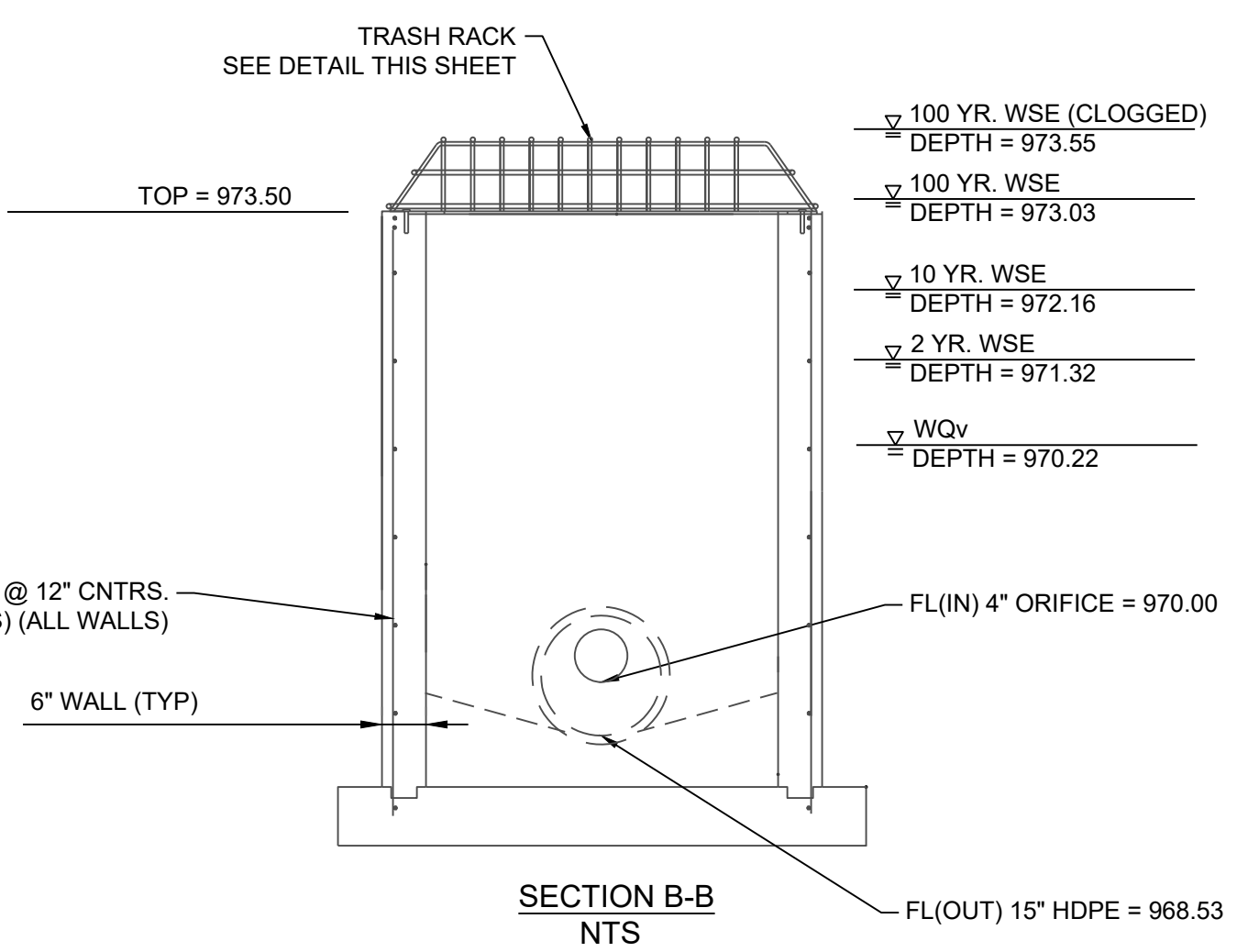


BMP TRASH RACK

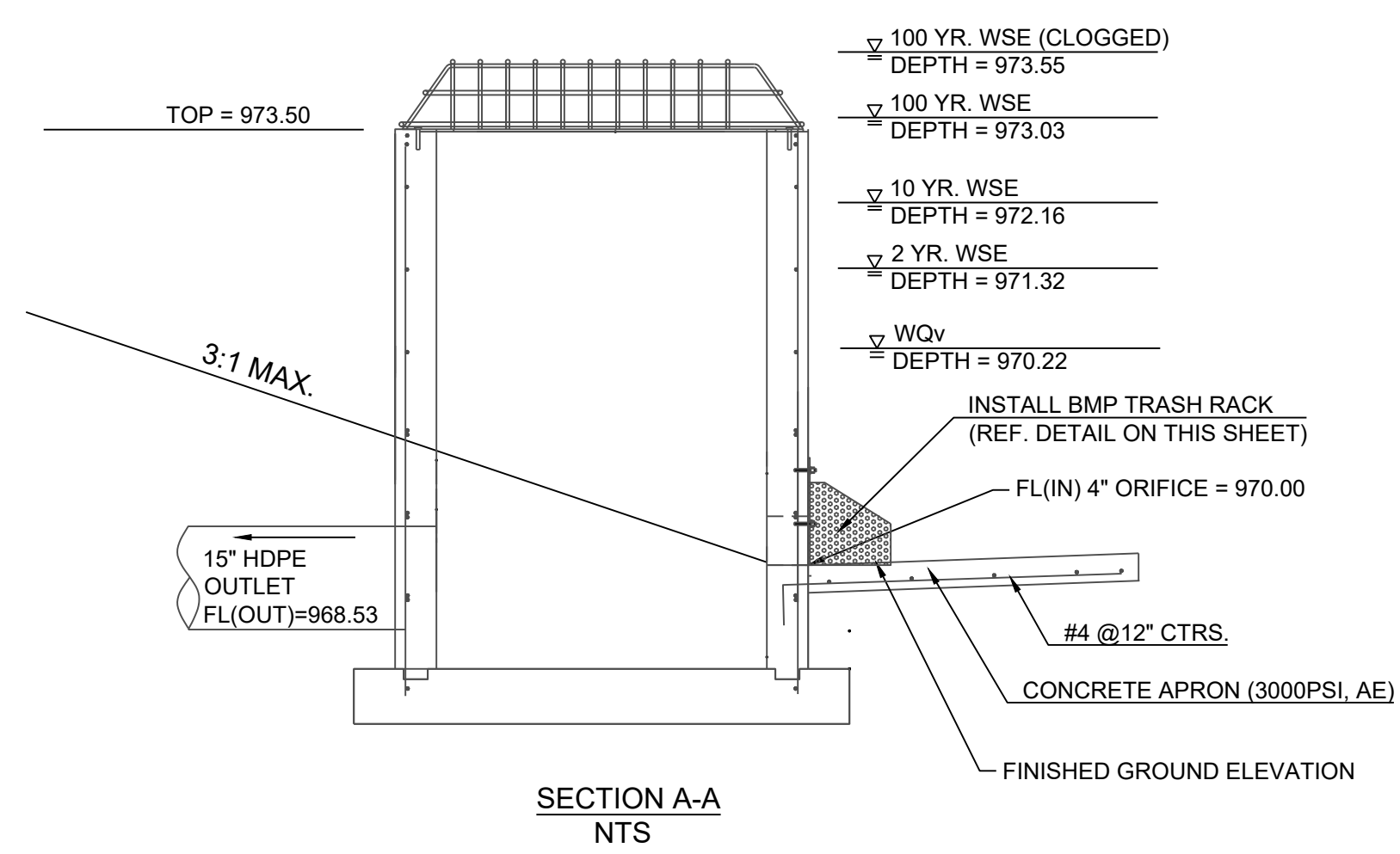
PLASTIC SOLUTIONS INC.
 P.O. Box 4886
 Winchester VA 23091
 877-877-5727
 www.plastic-solutions.com



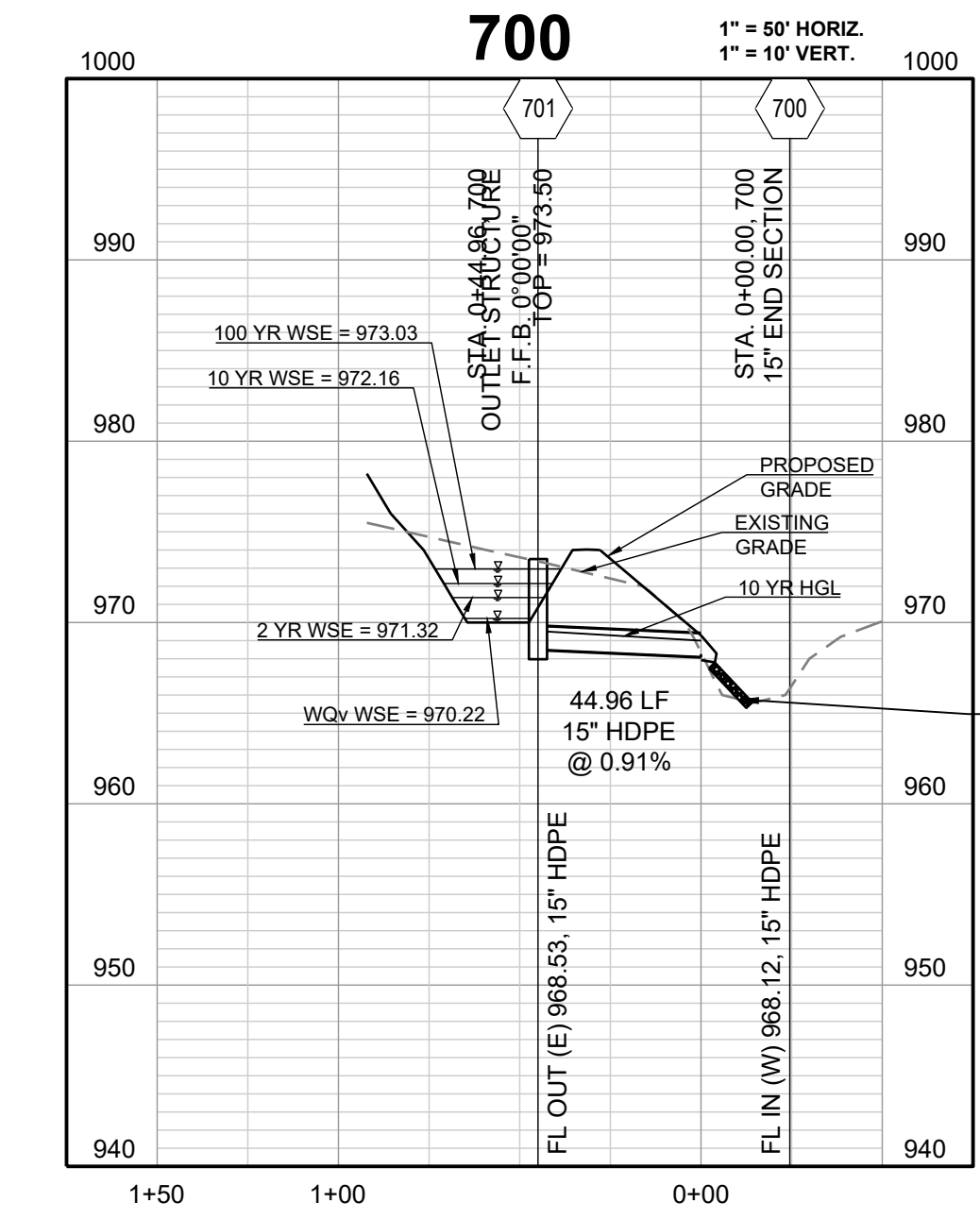
EDDB #3
 2-YR WSE = 971.32
 10-YR WSE = 972.16
 100-YR WSE = 973.03



SECTION B-B NTS



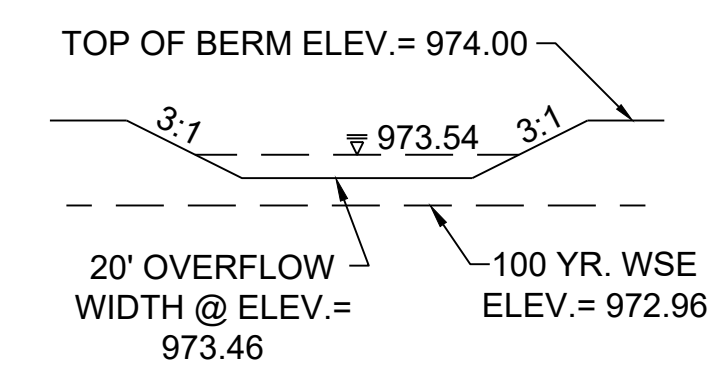
SECTION A-A NTS



DETENTION STORAGE EDDB #3:
 100 YEAR, 24 HR. RAINFALL - MAXIMUM WSE = 973.03 (SEE FINAL STORMWATER MGMT. PLAN)

AUXILIARY SPILLWAY SET AT 0.5 FEET ABOVE MAX. WSE, SPILLWAY ELEV. = 973.53

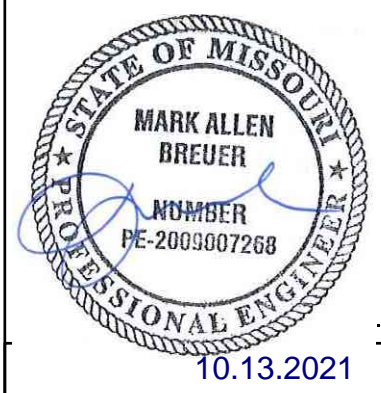
AUXILIARY SPILLWAY DESIGN:
 $Q(100) = 1.43 \text{ CFS}$, $Q = CLH^{3/2}$, $C = 3.33$, $L = 20 \text{ FT.}$, $1.43 \text{ CFS} = 3.33 * 20 \text{ FT.} * (H^{3/2})$, $H = 0.08 \text{ FT.}$



PROJECT BENCHMARK:

SW. CORNER NW 1/4 SEC. 18-47N-31W, JACKSON COUNTY, MO.
 3" DIAMETER ALUMINUM DISK IN MONUMENT BOX
 M.D.N.R. DOC. NO. 600-65374
 ELEV. 1036.41

PREPARED BY:



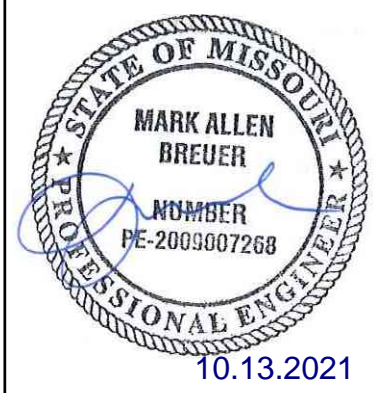
WOODLAND GLEN 2ND PLAT
 STREET, STORMWATER, MASTER DRAINAGE,
 AND EROSION CONTROL PLANS
 WARD ROAD & WINTHROP DRIVE
 LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION
04/24/2020	CITY COMMENTS
01/12/2021	SCHLAGEL QUANTITIES
04/09/2021	SCHLAGEL QUANTITIES
05/12/2021	CITY COMMENTS
05/15/2021	CITY COMMENTS
06/28/2021	CITY COMMENTS
09/28/2021	SCHLAGEL UPDATE
10/06/2021	10/06/2021

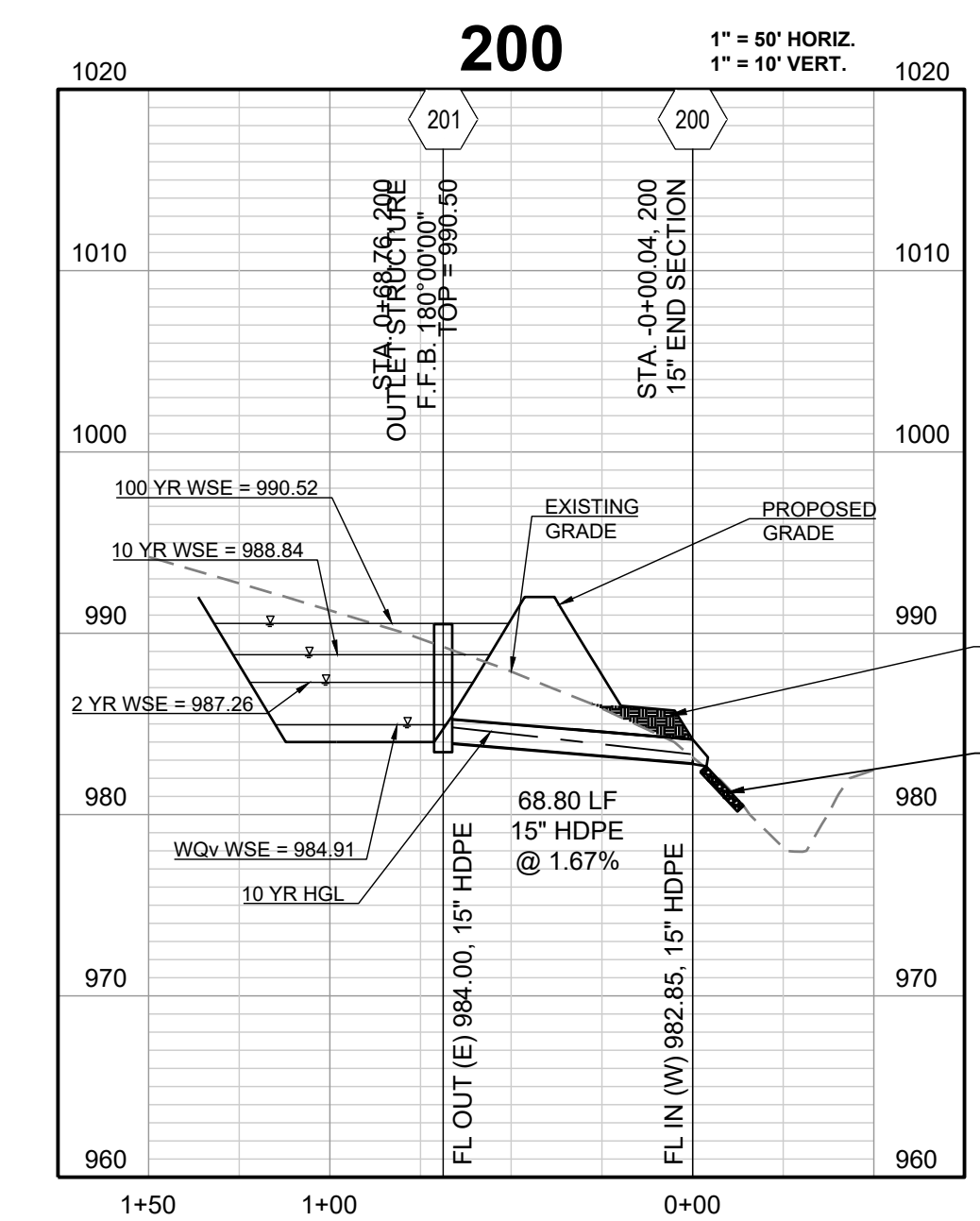
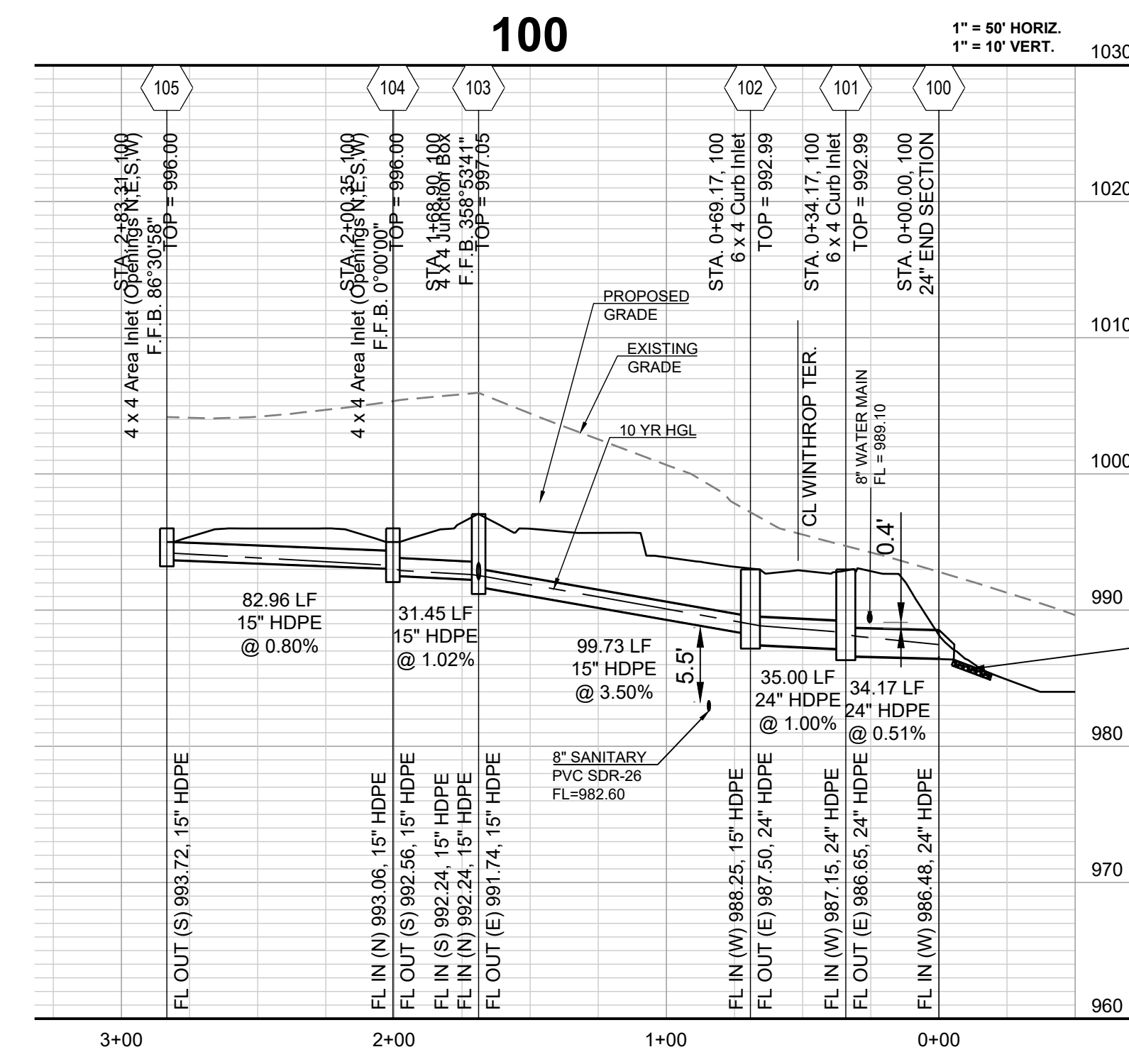
EDDB 3 OUTLET STRUCTURE

SHEET

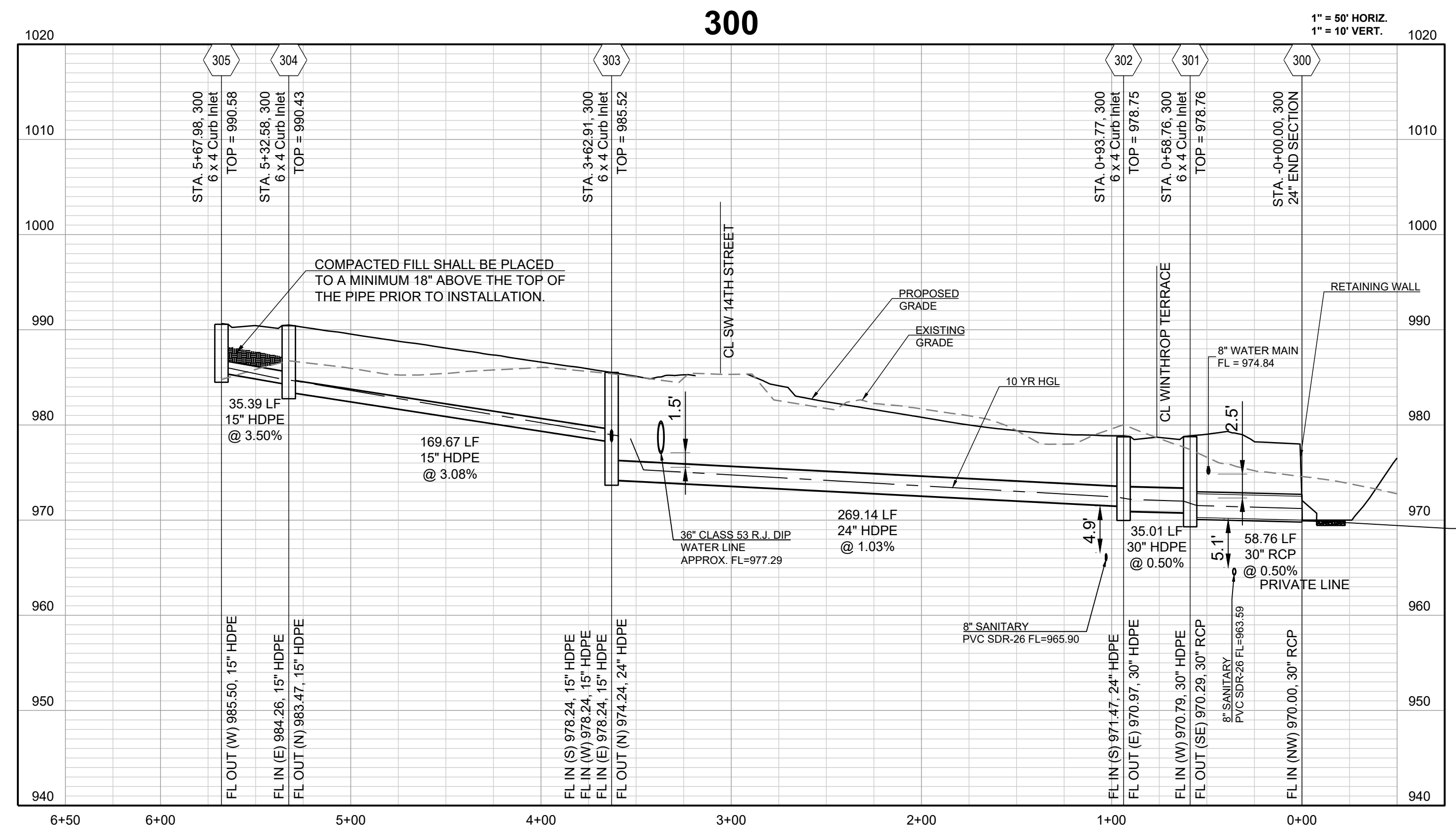
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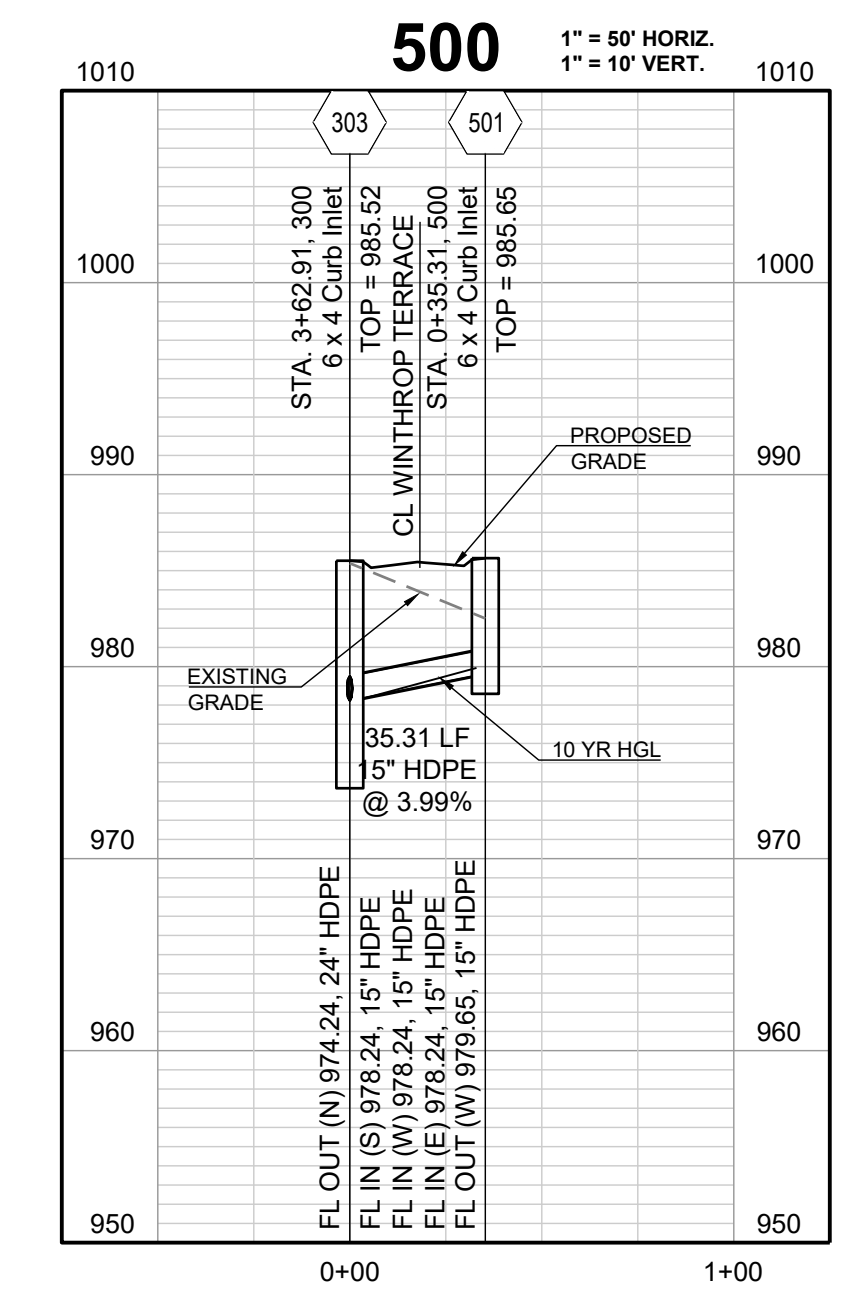
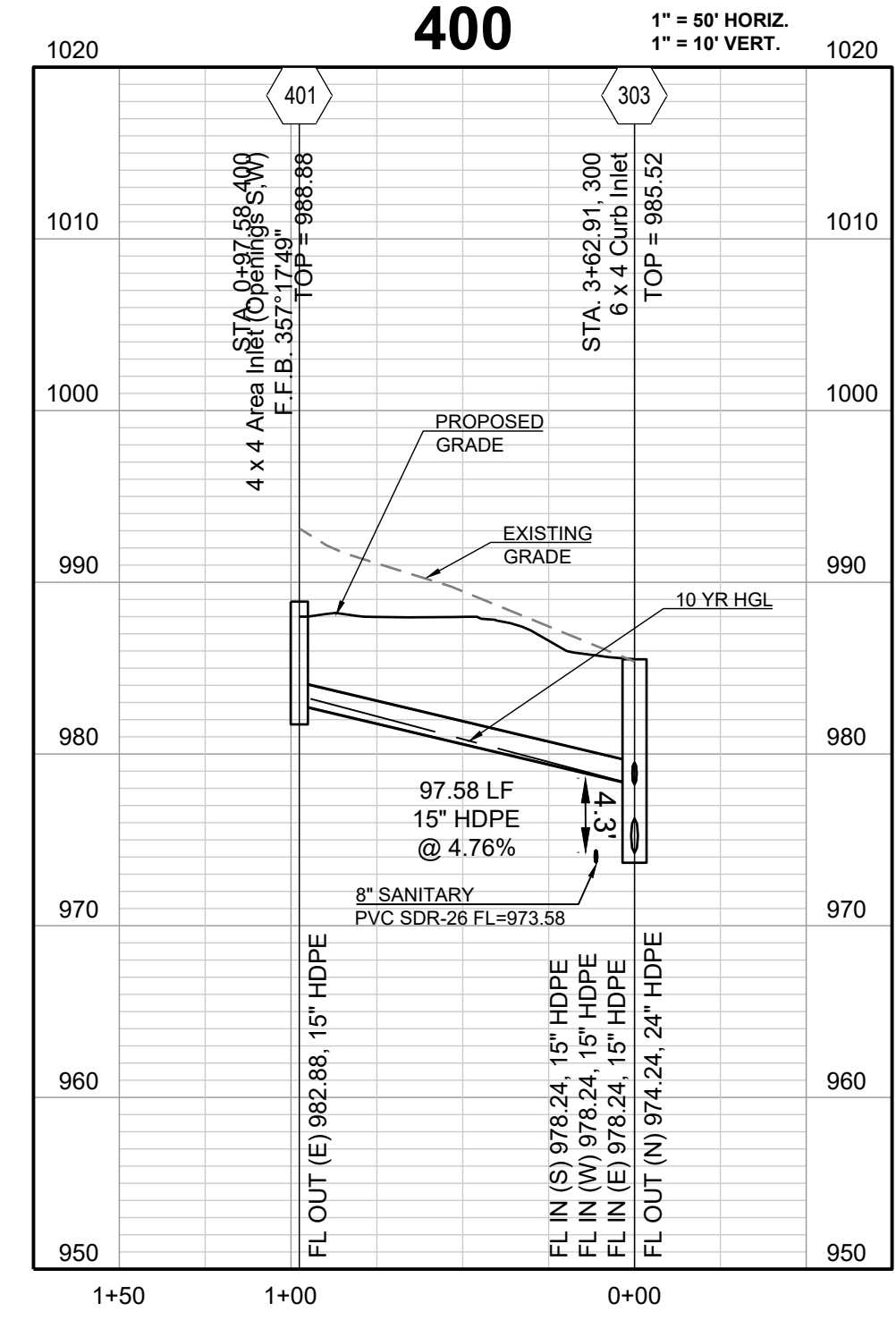
WOODLAND GLEN 2ND PLAT
 STREET, STORMWATER, MASTER DRAINAGE,
 AND EROSION CONTROL PLANS
 WARD ROAD & WINTHROP DRIVE
 LEE'S SUMMIT, MISSOURI



COMPACTED FILL SHALL BE PLACED TO A MINIMUM 18" ABOVE THE TOP OF THE PIPE PRIOR TO INSTALLATION.
 INSTALL 8 CY D₁₅₀-15" STONE RIP RAP W/ GEOFABRIC (15' x 6' x 2.25')

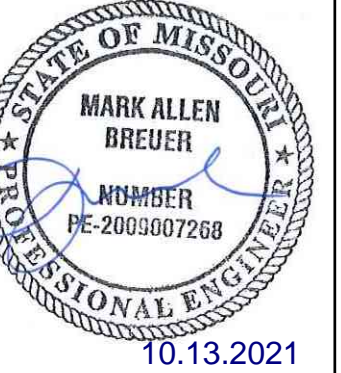
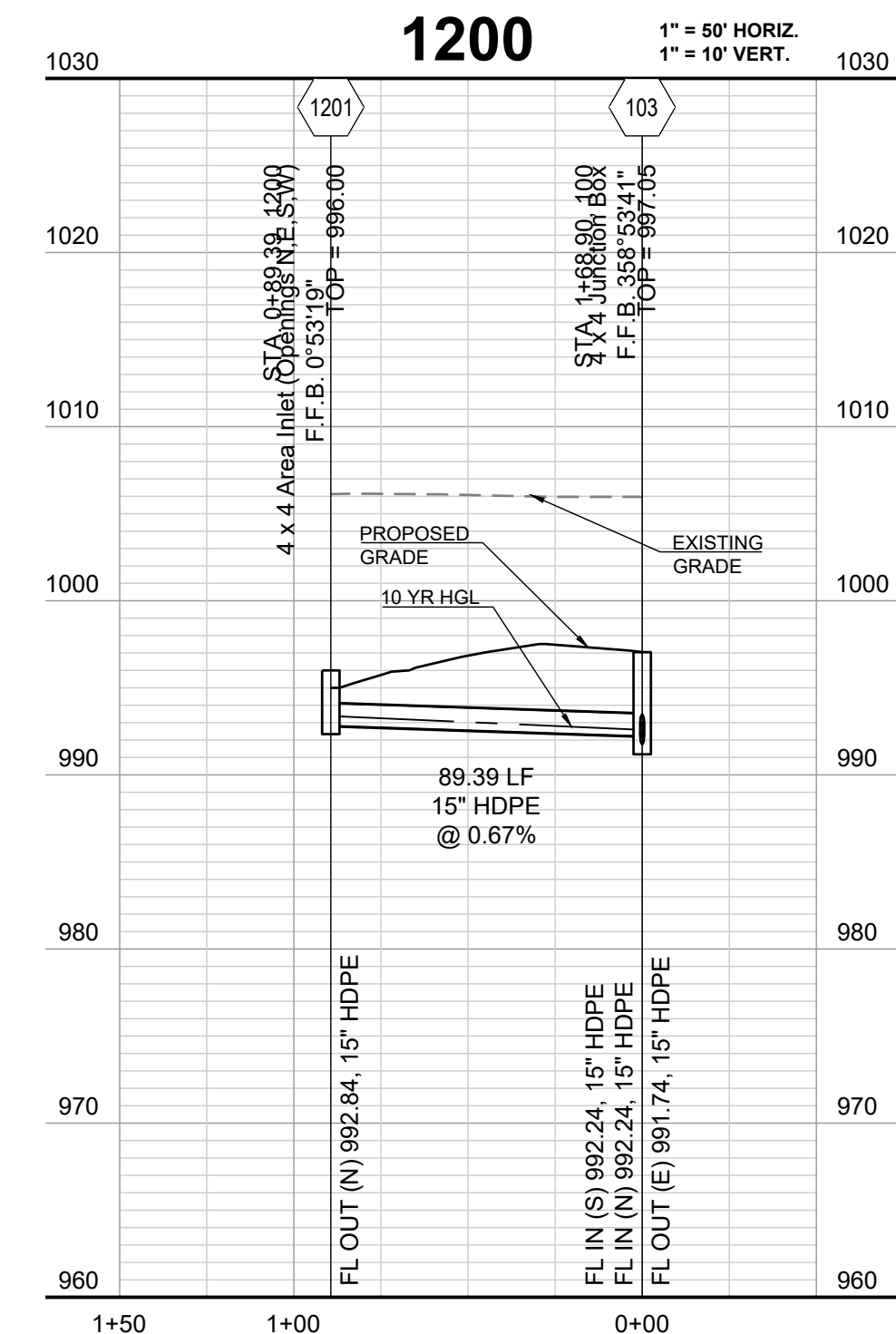
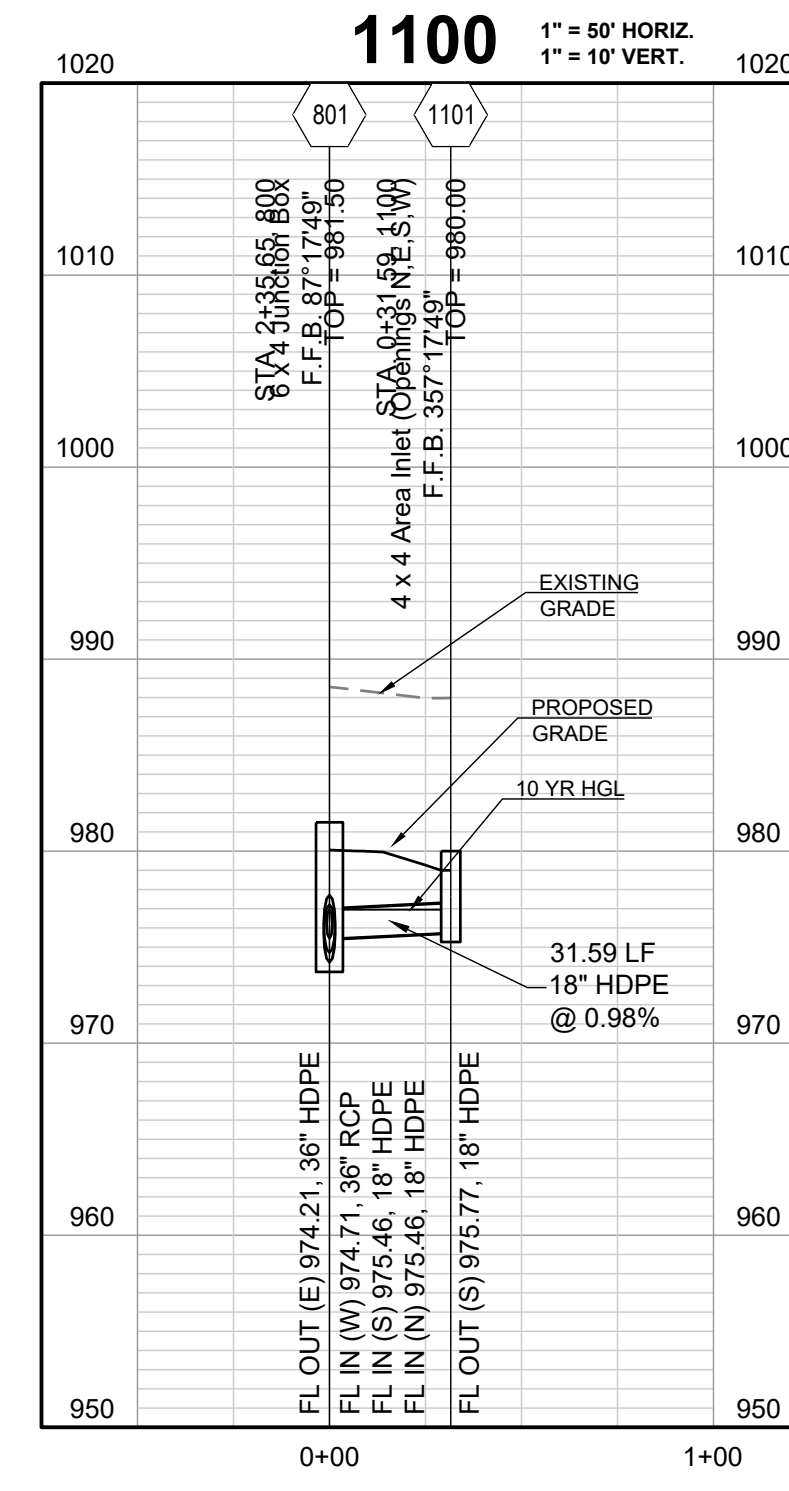
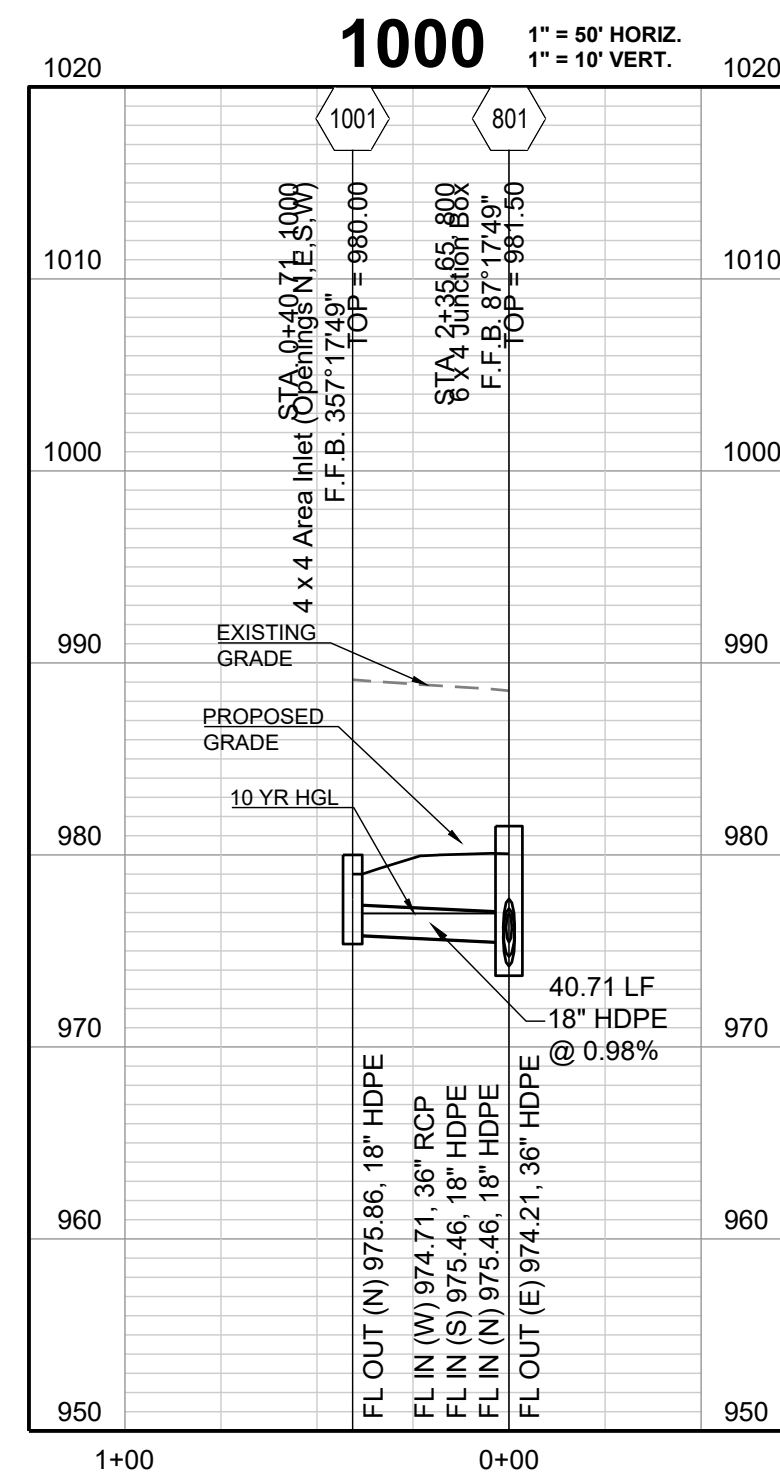
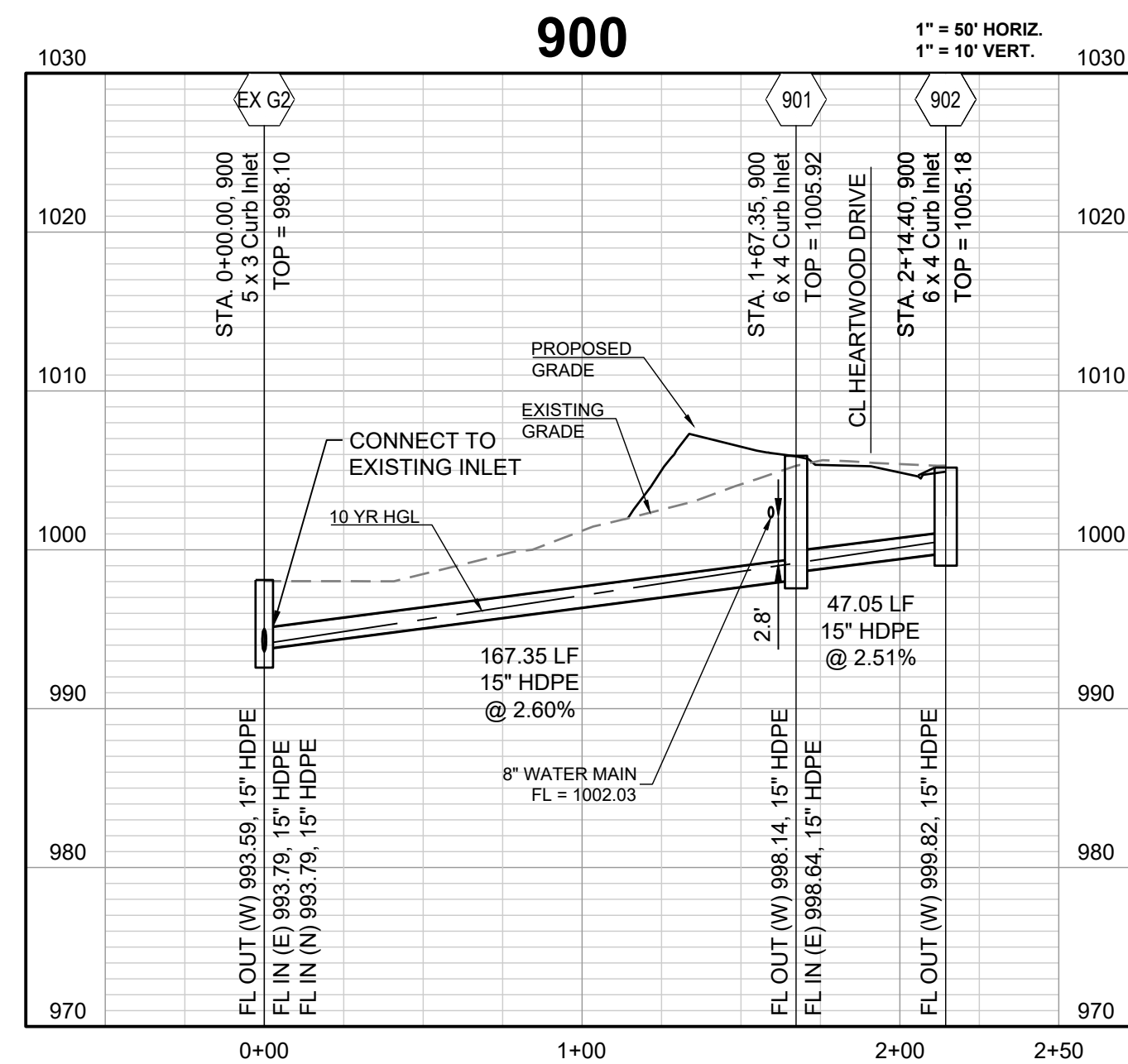
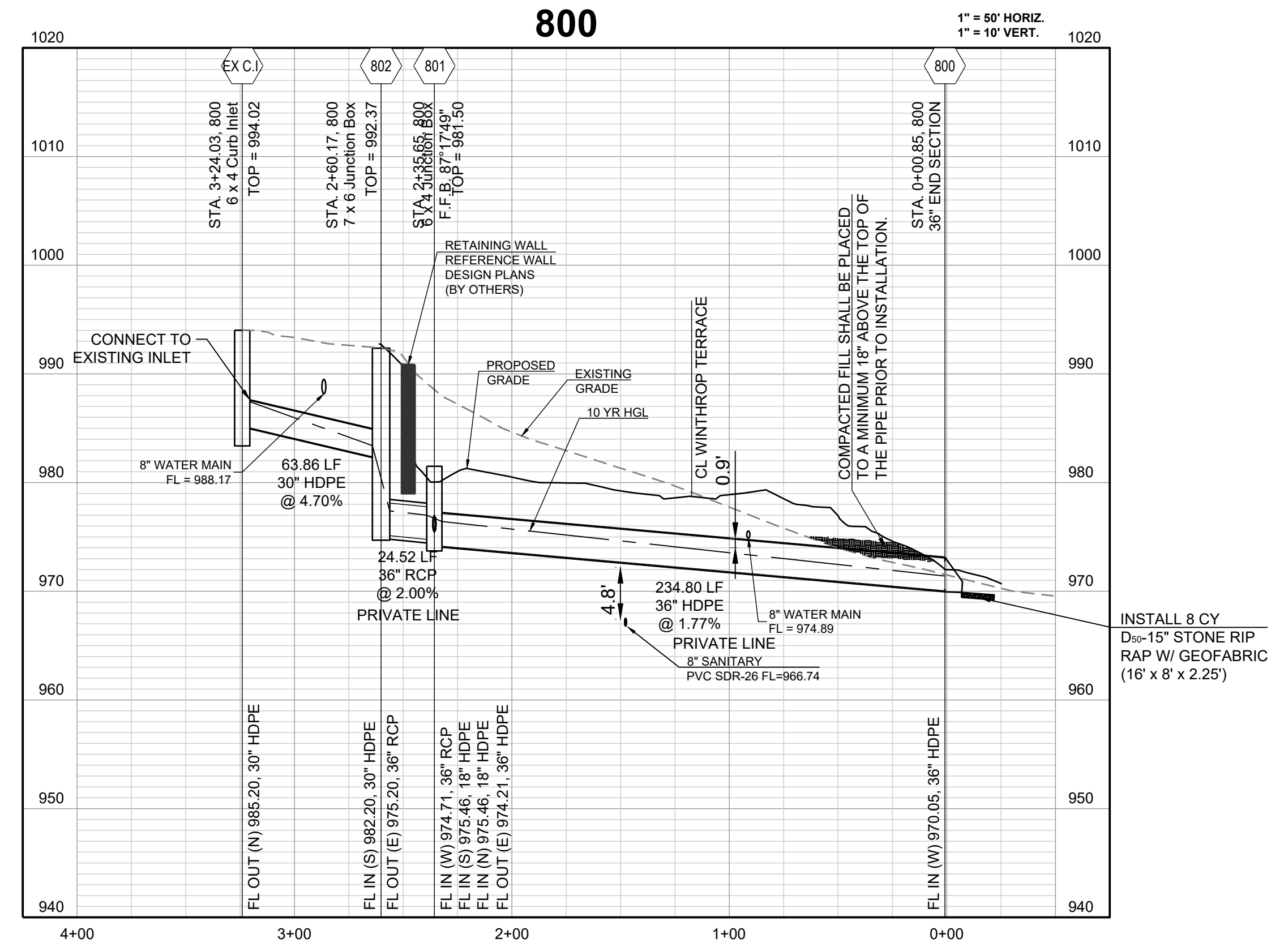
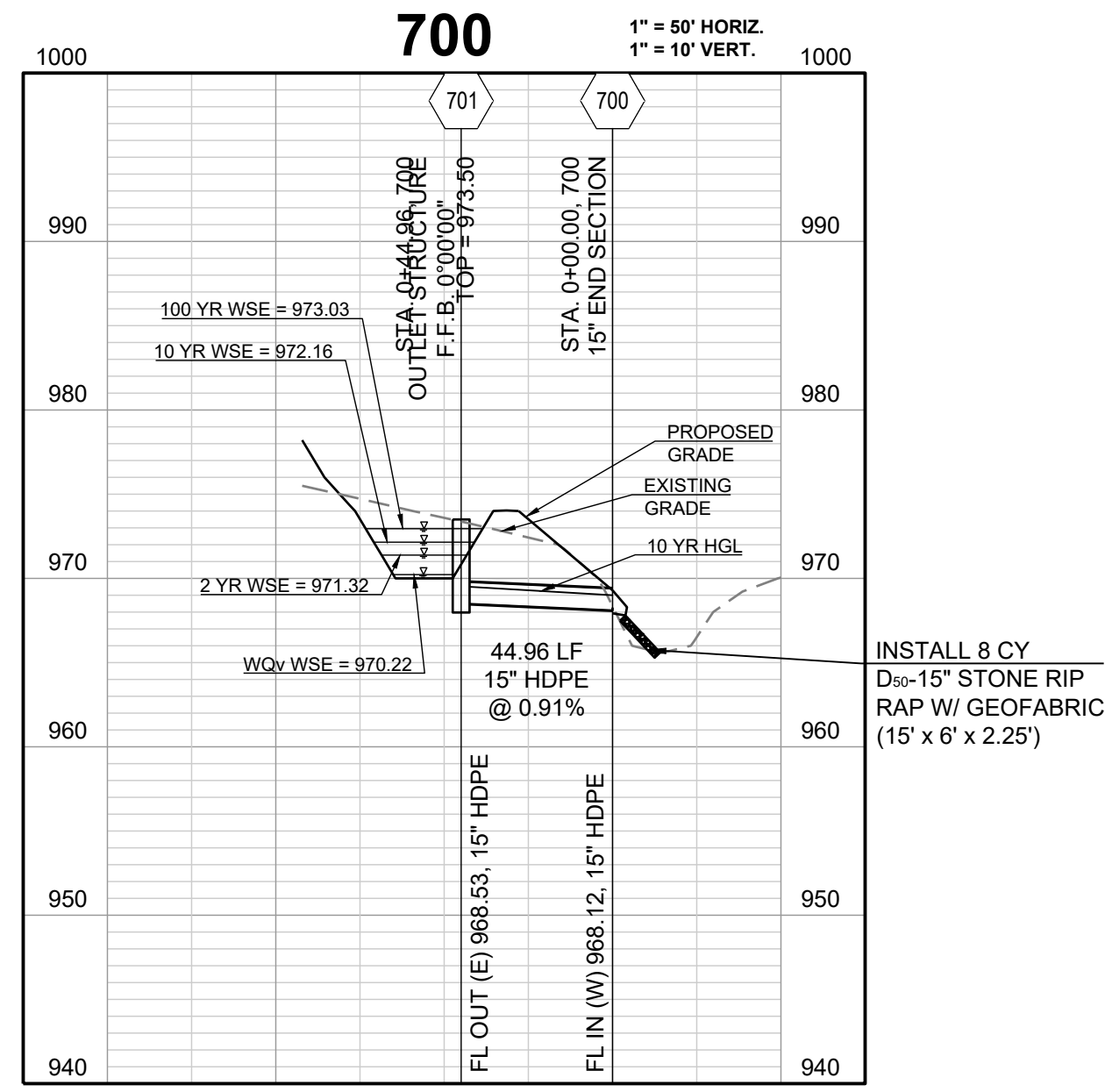
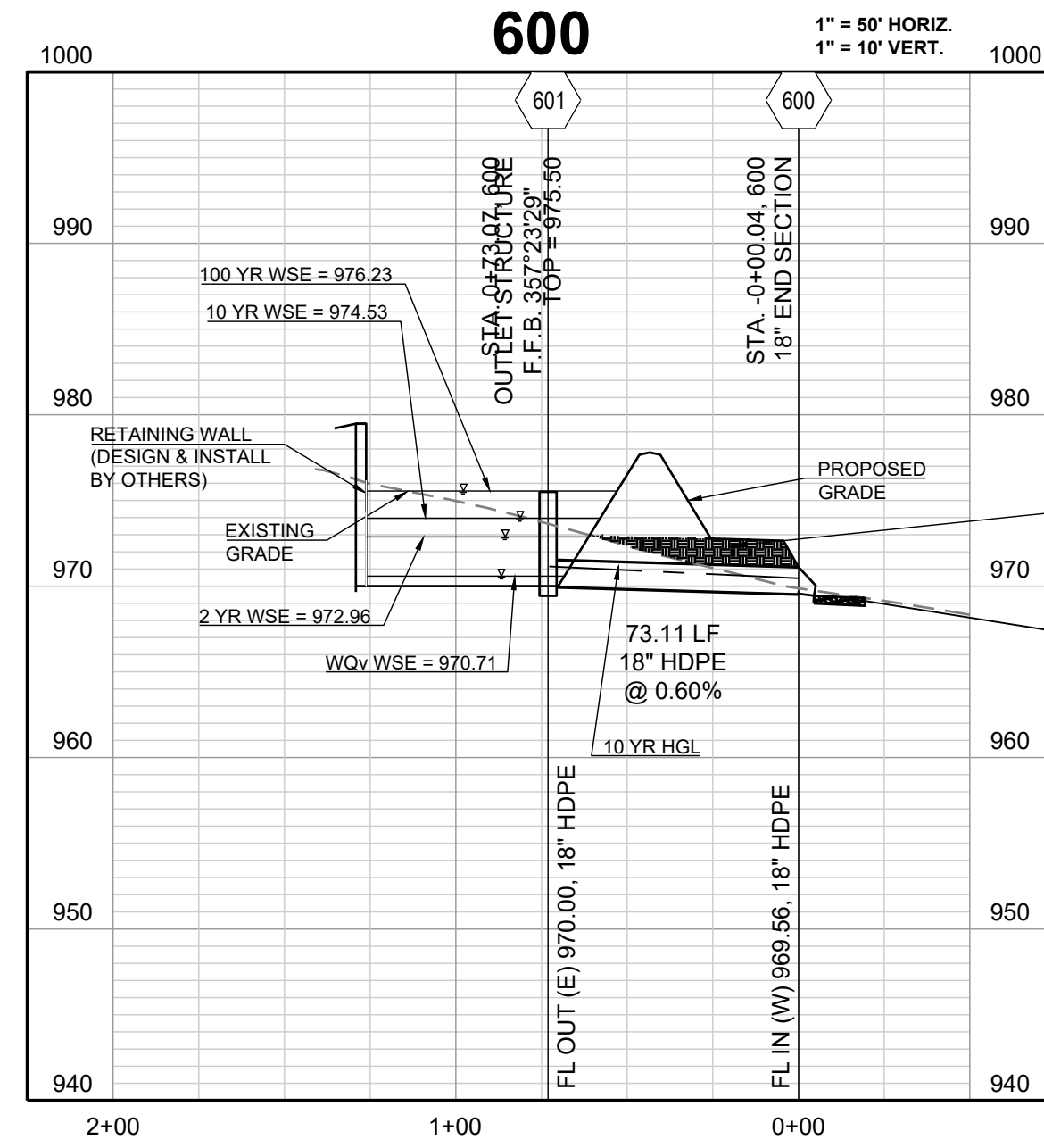


INSTALL 8 CY D₁₅₀-15" STONE RIP RAP W/ GEOFABRIC (15' x 6' x 2.25')



REVISION DATE	DESCRIPTION
04/24/2020	CITY COMMENTS
01/12/2021	SCHLAGEL QUANTITIES
04/09/2021	SCHLAGEL QUANTITIES
05/12/2021	CITY COMMENTS
06/15/2021	CITY COMMENTS
09/28/2021	CITY COMMENTS
2-19-2020	SCHLAGEL UPDATE
10/06/2021	

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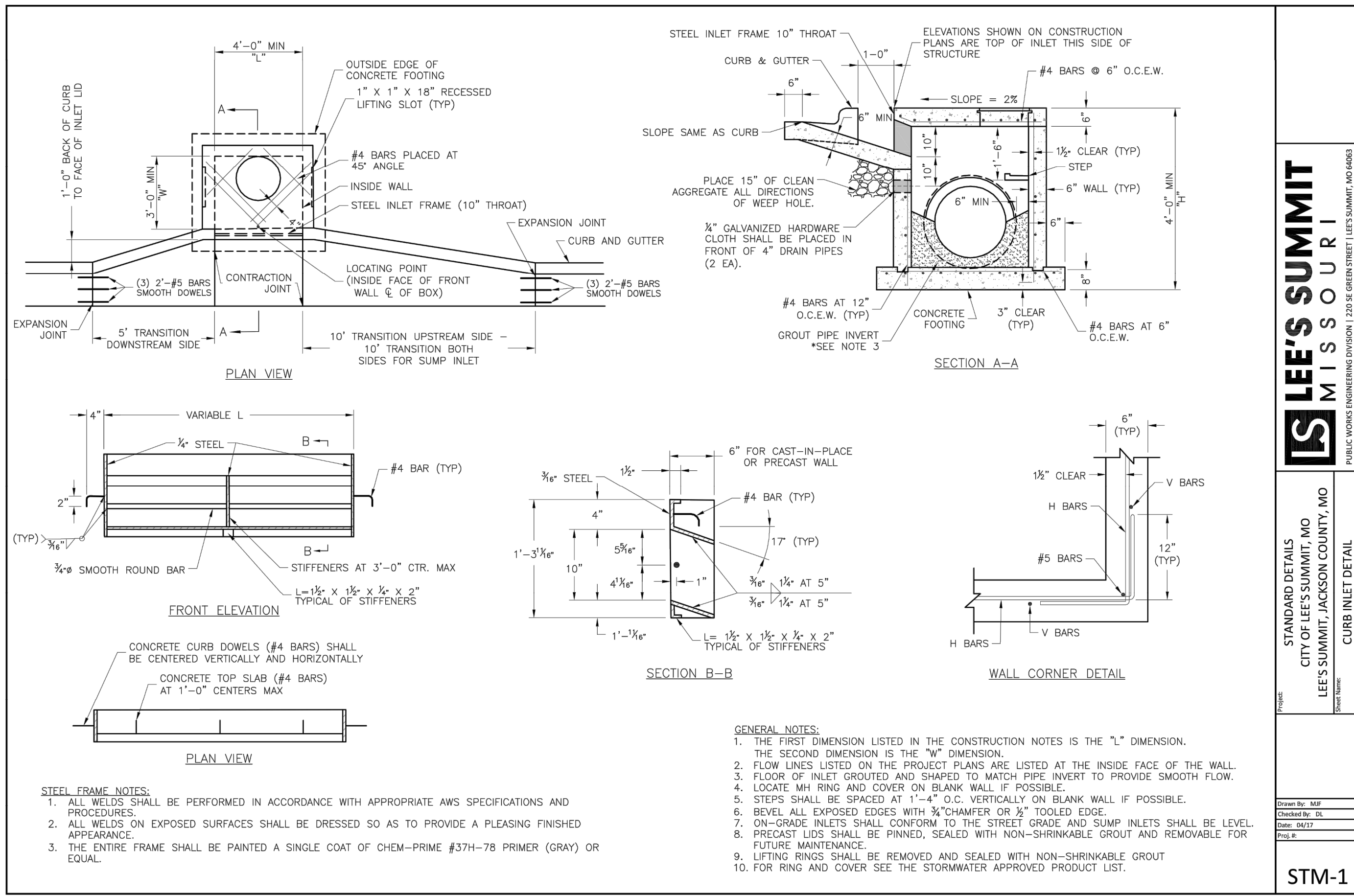


WOODLAND GLEN 2ND PLAT
 STREET, STORMWATER, MASTER DRAINAGE,
 AND EROSION CONTROL PLANS
 WARD ROAD & WINTHROP DRIVE
 LEE'S SUMMIT, MISSOURI

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06/15/2021	CITY COMMENTS
09/28/2021	CITY COMMENTS
09/28/2021	SCHLAGEL UPDATE
10/06/2021	

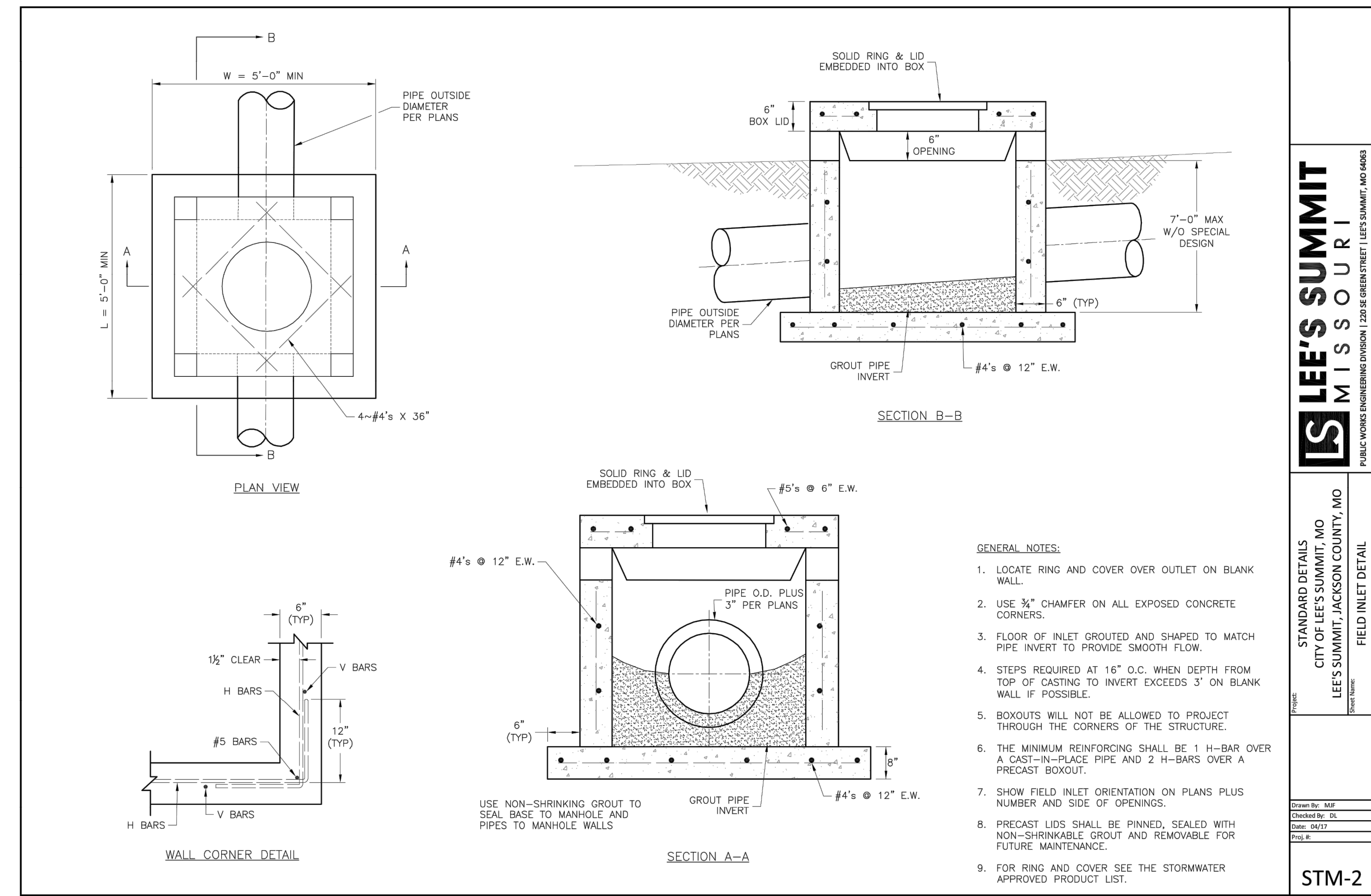
STORM PROF
 CONIT

SHEET



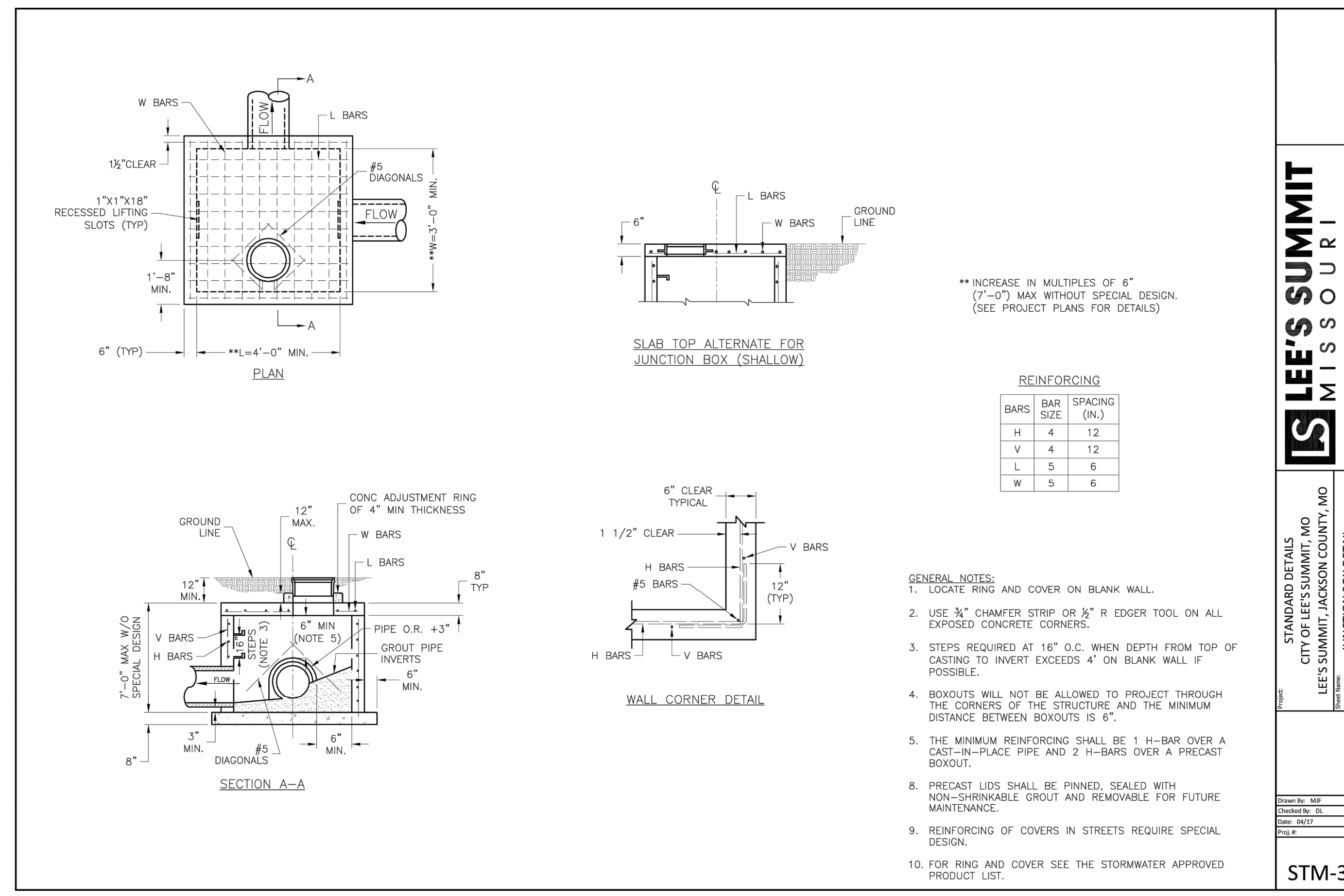
LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 S. GREEN STREET | LEE'S SUMMIT, MO 64083

STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
STM-1
CURB INLET DETAIL



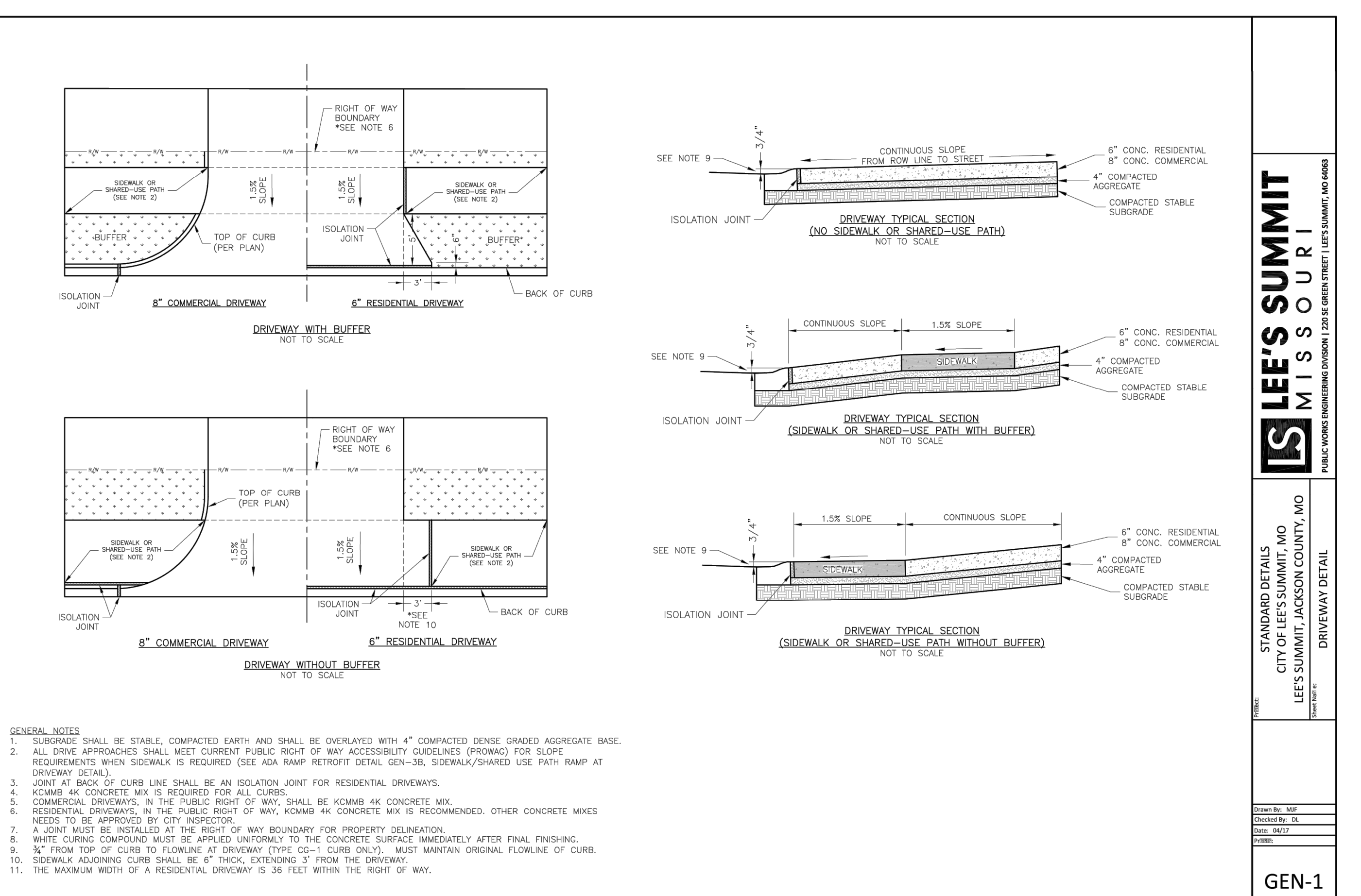
LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 S. GREEN STREET | LEE'S SUMMIT, MO 64083

STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
STM-2
FIELD INLET DETAIL



LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 S. GREEN STREET | LEE'S SUMMIT, MO 64083

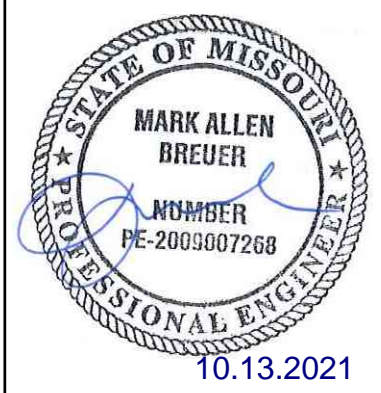
STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
STM-3
JUNCTION BOX DETAIL



LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 S. GREEN STREET | LEE'S SUMMIT, MO 64083

STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
STM-4
DRIVEWAY DETAIL

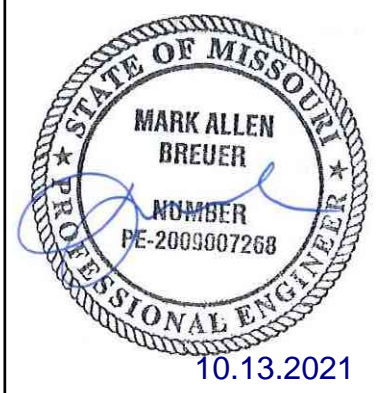
SCHLAGEL
ENGINEERS PLANNERS SURVEYORS LANDSCAPE ARCHITECTS
14920 West 107th Street • Lenexa, Kansas 66215
(913) 492-5158 • Fax: (913) 492-8400
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Missouri State Certificates of Authority
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WOODLAND GLEN 2ND PLAT
STREET, STORMWATER, MASTER DRAINAGE,
AND EROSION CONTROL PLANS
WARD ROAD & WINTHROP DRIVE
LEE'S SUMMIT, MISSOURI

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06/15/2021	CITY COMMENTS
09/28/2021	SCHLAGEL UPDATE
10/06/2021	CITY COMMENTS

STREET AND STORM DETAILS
SHEET
22
GEN-1



WOODLAND GLEN 2ND PLAT
 STREET, STORMWATER, MASTER DRAINAGE,
 AND EROSION CONTROL PLANS
 WARD ROAD & WINTHROP DRIVE
 LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION
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09/28/2021	CITY COMMENTS
10/06/2021	SCHLAGEL UPDATE
18-017	CITY COMMENTS

STREET AND STORM DETAILS

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

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

STM-6

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

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

STM-6

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

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

STM-7

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

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

GEN-2

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

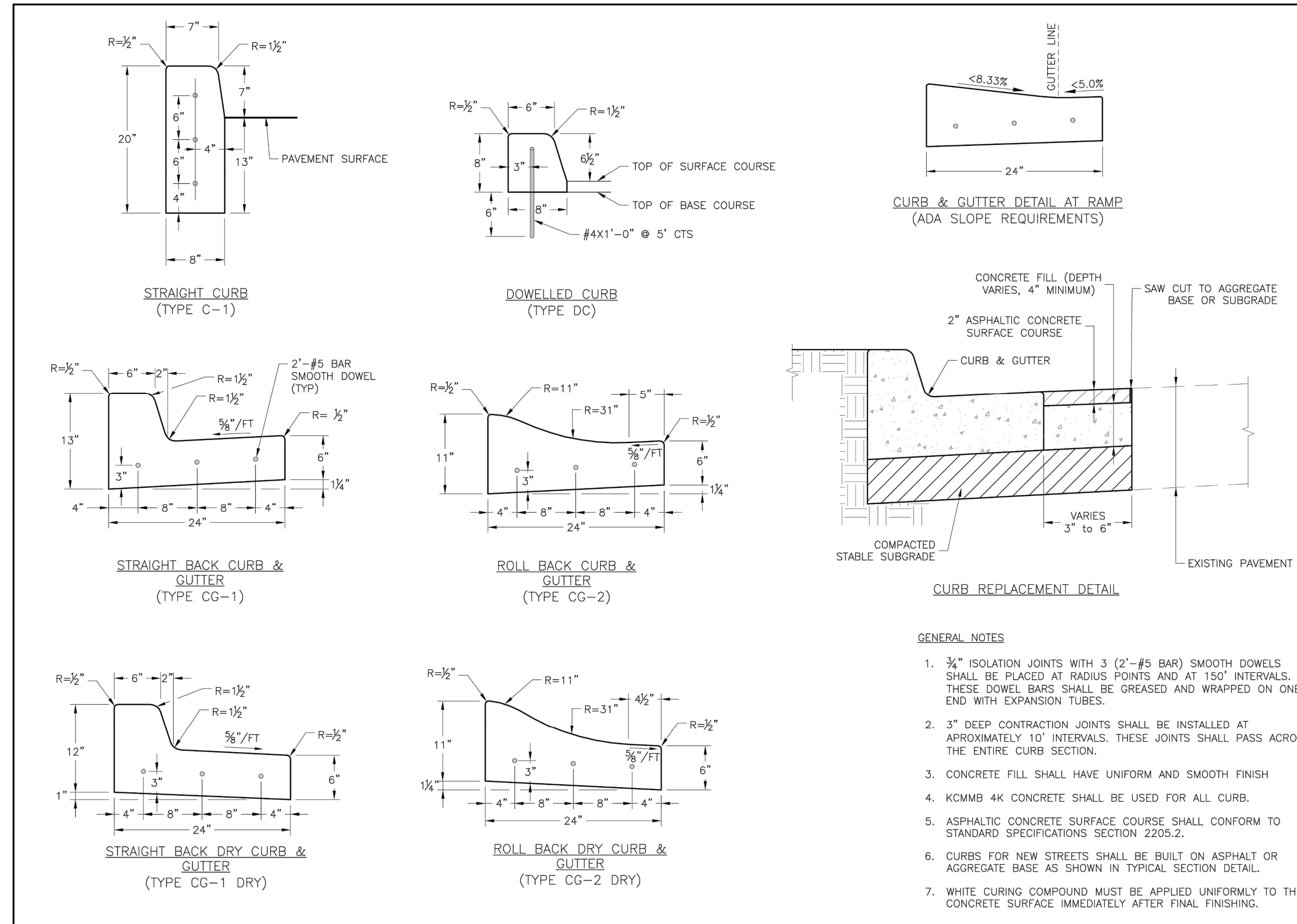
Date: 04/17
 Drawn By: MJF
 Checked By: DL

STM-5

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

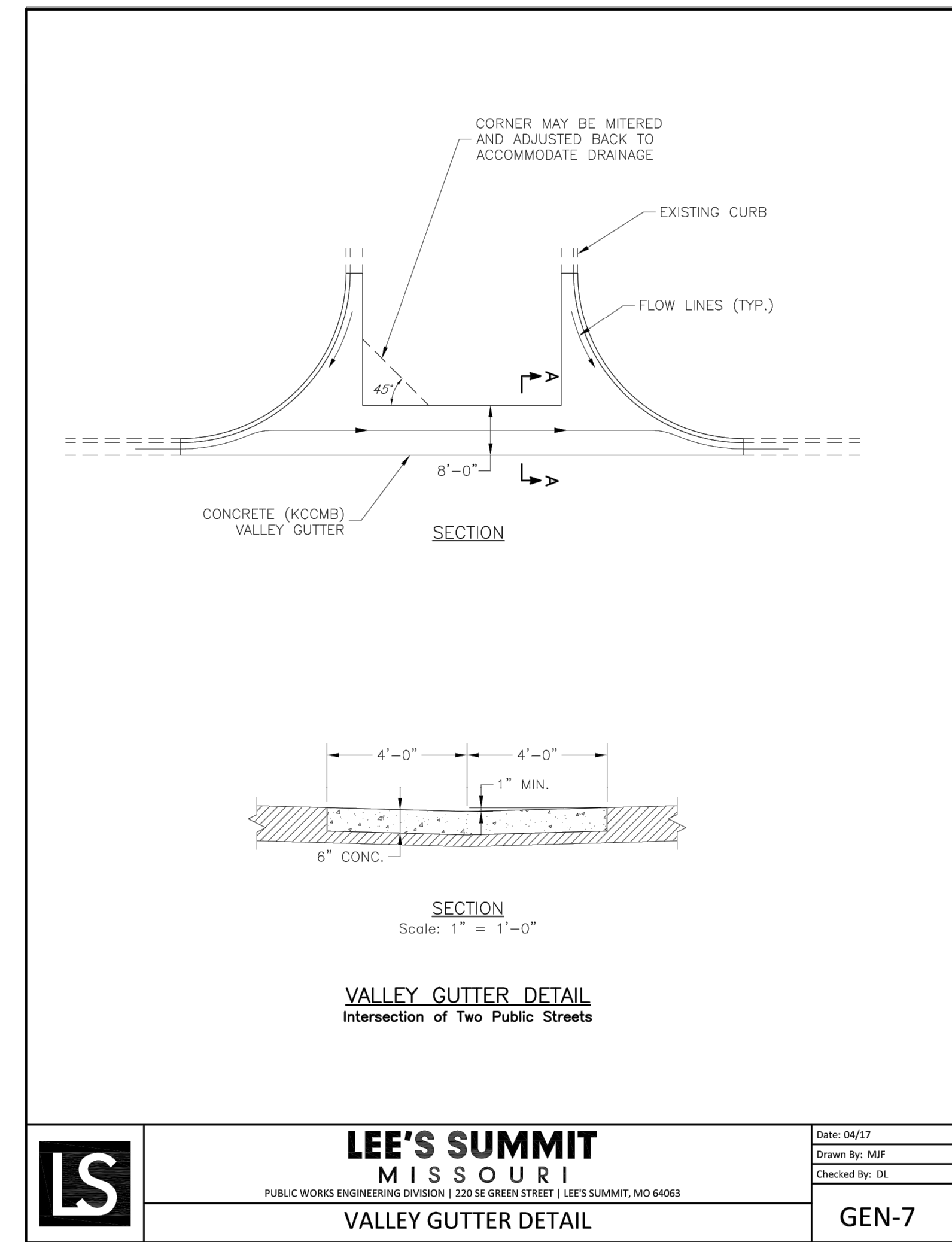
Date: 04/17
 Drawn By: MJF
 Checked By: DL

GEN-6



- GENERAL NOTES**
- 3/4" 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.
 - 3" DEEP CONTRACTION JOINTS SHALL BE INSTALLED AT APPROXIMATELY 10' INTERVALS. THESE JOINTS SHALL PASS ACROSS THE ENTIRE CURB SECTION.
 - CONCRETE FILL SHALL HAVE UNIFORM AND SMOOTH FINISH.
 - KCMMB 4K CONCRETE SHALL BE USED FOR ALL CURB.
 - ASPHALTIC CONCRETE SURFACE COURSE SHALL CONFORM TO STANDARD SPECIFICATIONS SECTION 2205.2.
 - CURBS FOR NEW STREETS SHALL BE BUILT ON ASPHALT OR AGGREGATE BASE AS SHOWN IN TYPICAL SECTION DETAIL.
 - 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
 GEN-4



LEE'S SUMMIT MISSOURI
 PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063
 VALLEY GUTTER DETAIL
 Scale: 1" = 1'-0"
 Date: 04/17
 Drawn By: MJF
 Checked By: DL
 GEN-7

TABLE LS-2: MINIMUM ASPHALT PAVEMENT THICKNESSES

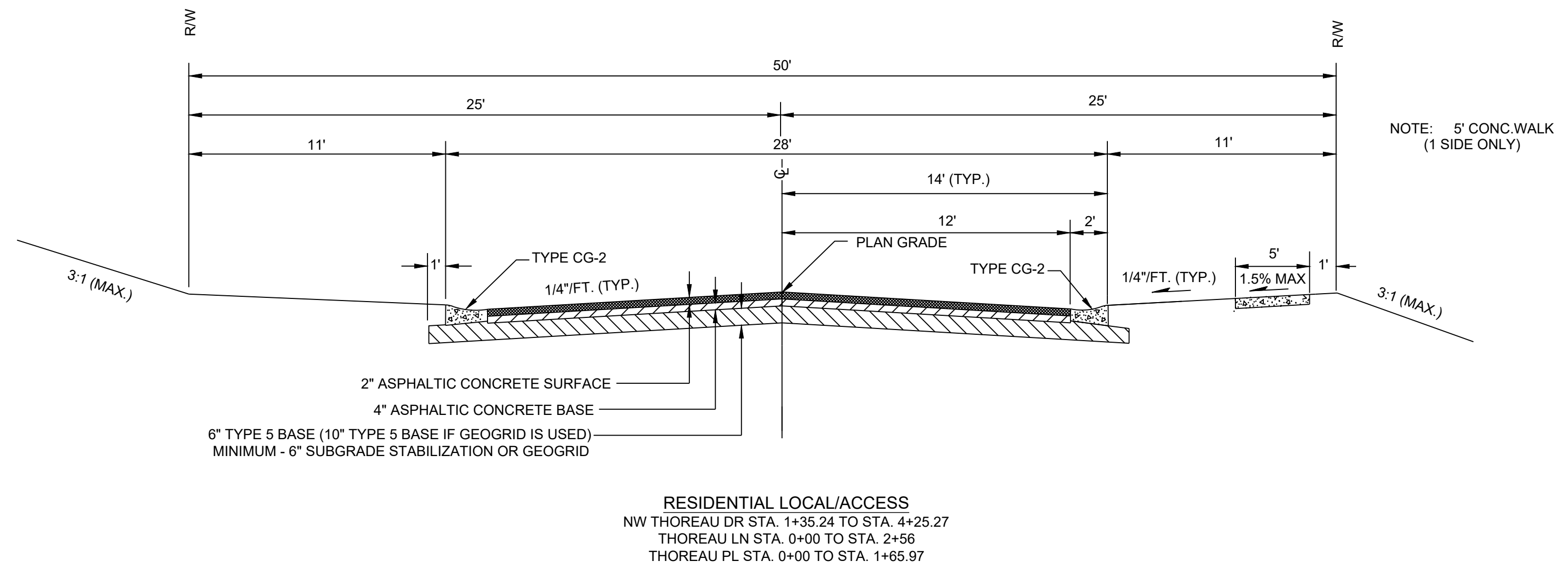
Street Classification	Pavement Option	AC Surface (in.)	AC Base (in.)	MoDOT Type 5 Base (in.)	Geogrid(1)	Chemical Subgrade Stabilization(2) (in.)
Residential Local/Access	A	2	4	6	--	6
	B	2	4	10	Geogrid	--
Residential Collector	A	2	5.5	6	--	9
	B	2	5.5	12	Geogrid	--
Commercial Industrial Local/Collector	A	2	7.5	6	--	9
	B	2	7.5	12	Geogrid	--

TABLE LS-3: MINIMUM PCC PAVEMENT THICKNESSES

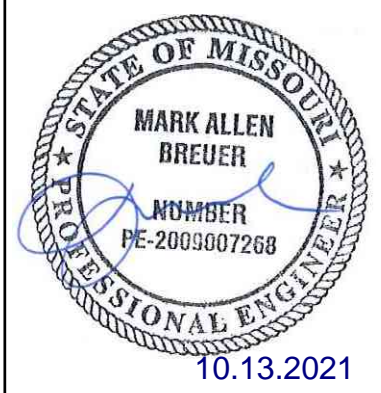
Street Classification	PCC (in.)	Aggregate Base (in.)	Subgrade Stabilization ⁽¹⁾ (in.)
Residential Local/Access	6	4	--
Residential Collector	6	4	6
Commercial Industrial Local/Collector	8	4	9

(1) Subgrade Stabilization and 4" aggregate base may be replaced by approved geogrid and 6" of aggregate base

LS5200 16 October 2016



RESIDENTIAL LOCAL/ACCESS
 NW THOREAU DR STA. 1+35.24 TO STA. 4+25.27
 THOREAU LN STA. 0+00 TO STA. 2+56
 THOREAU PL STA. 0+00 TO STA. 1+65.97



WOODLAND GLEN 2ND PLAT
 STREET, STORMWATER, MASTER DRAINAGE,
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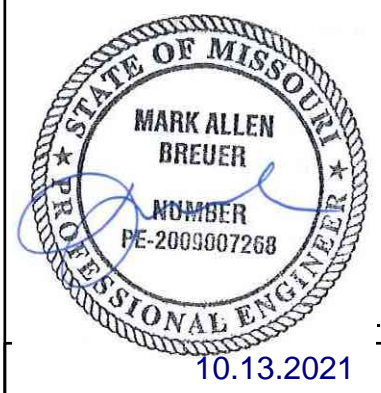
REVISION DATE	DESCRIPTION
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04/09/2021	SCHLAGEL QUANTITIES
05/12/2021	CITY COMMENTS
06/15/2021	CITY COMMENTS
09/28/2021	CITY COMMENTS
10/06/2021	SCHLAGEL UPDATE
	CITY COMMENTS

DRAWN BY: DGF
 CHECKED BY: DGF
 DATE PREPARED: 2-19-2020
 PROJ. NUMBER: 18-017

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PREPARED BY:

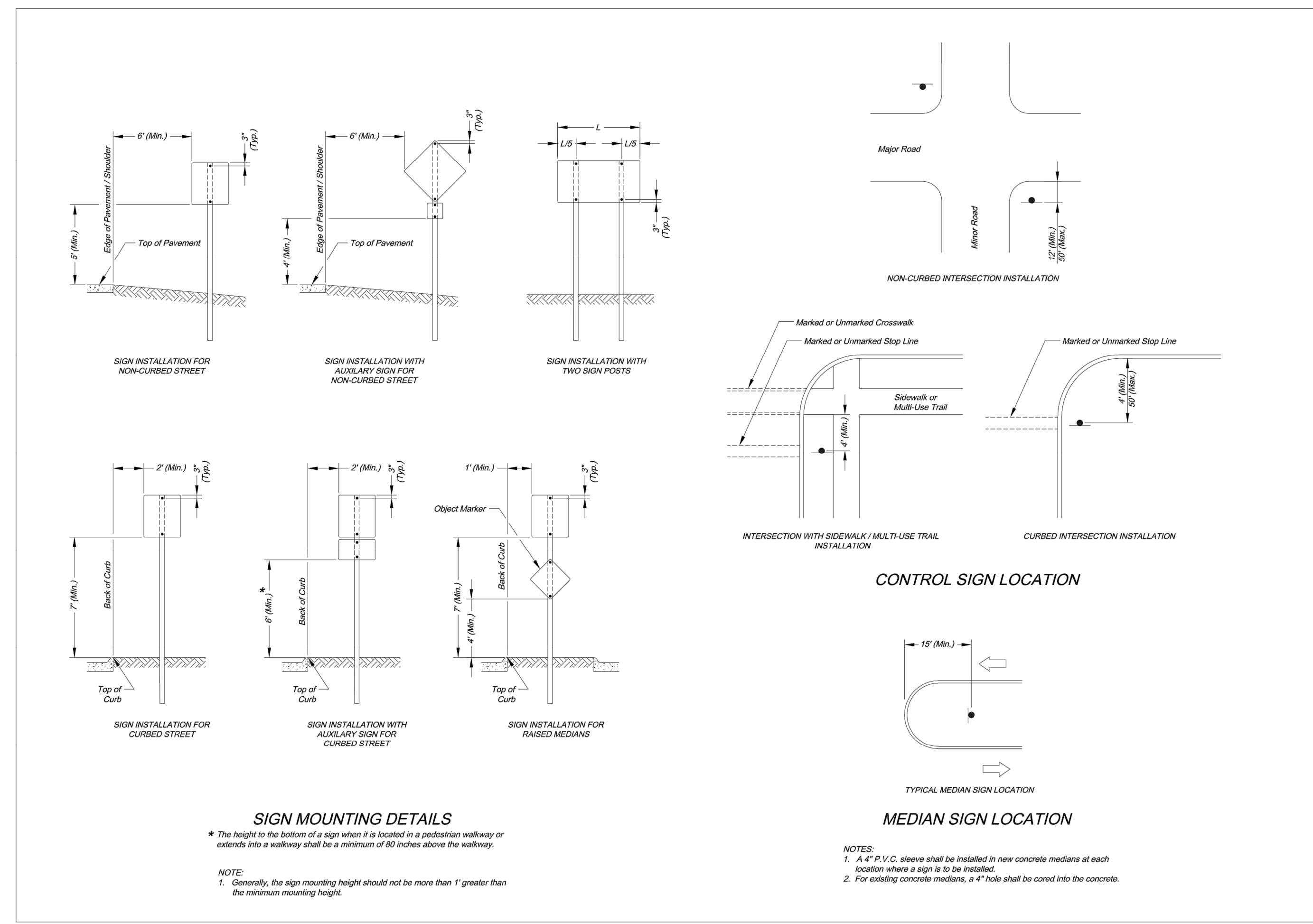


WOODLAND GLEN 2ND PLAT
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 WARD ROAD & WINTHROP DRIVE
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05/15/2021	CITY COMMENTS
06/28/2021	CITY COMMENTS
09/28/2021	SCHLAGEL UPDATE
10/06/2021	10/06/2021

SIGNING PLAN

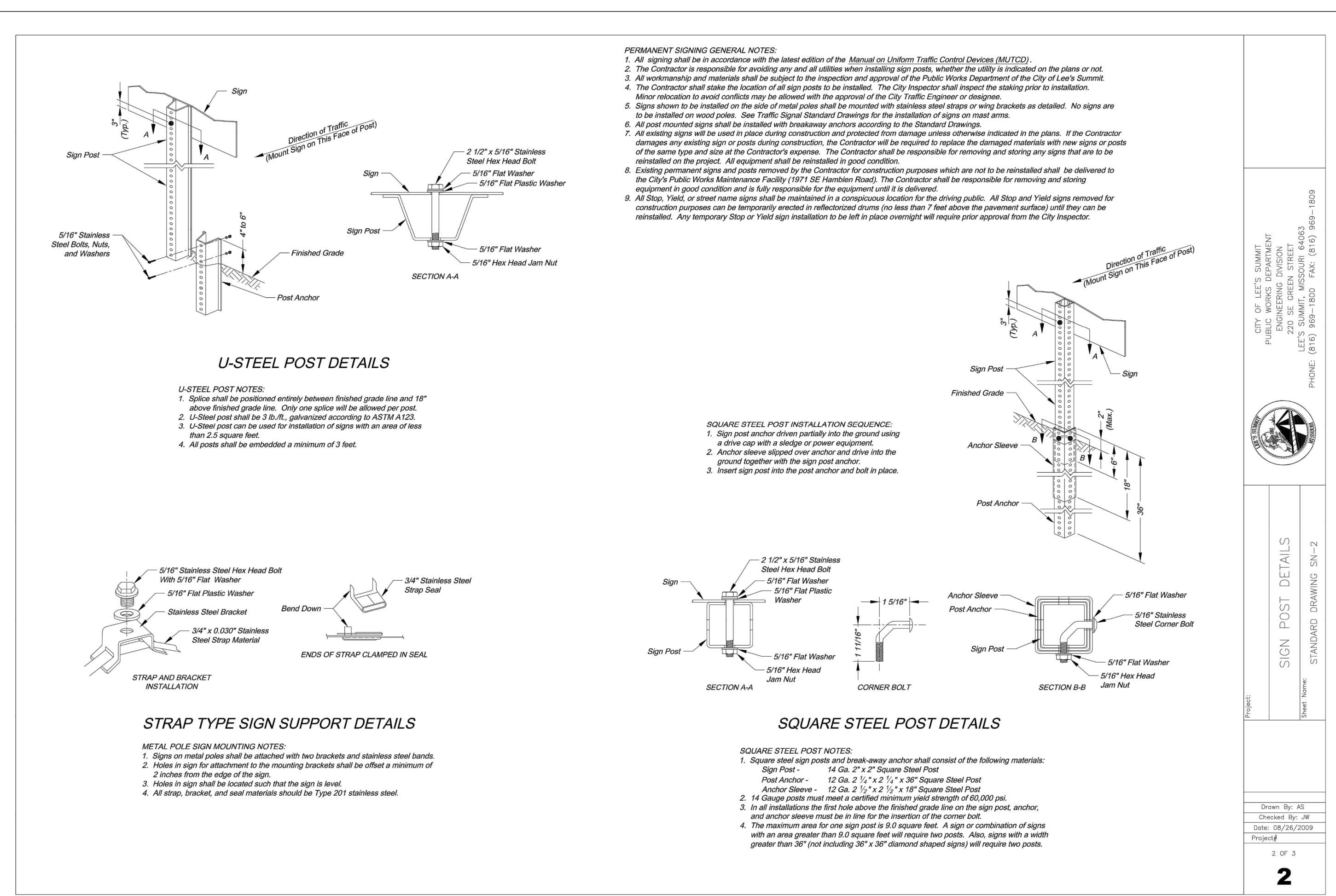
SHEET



CITY OF LEE'S SUMMIT
PUBLIC WORKS DEPARTMENT
200 S. CEDAR STREET
LEE'S SUMMIT, MISSOURI 64083
PHONE: (816) 999-1800 FAX: (816) 999-1809

Project: SIGN MOUNTING DETAILS
Standard Drawing: SN-1

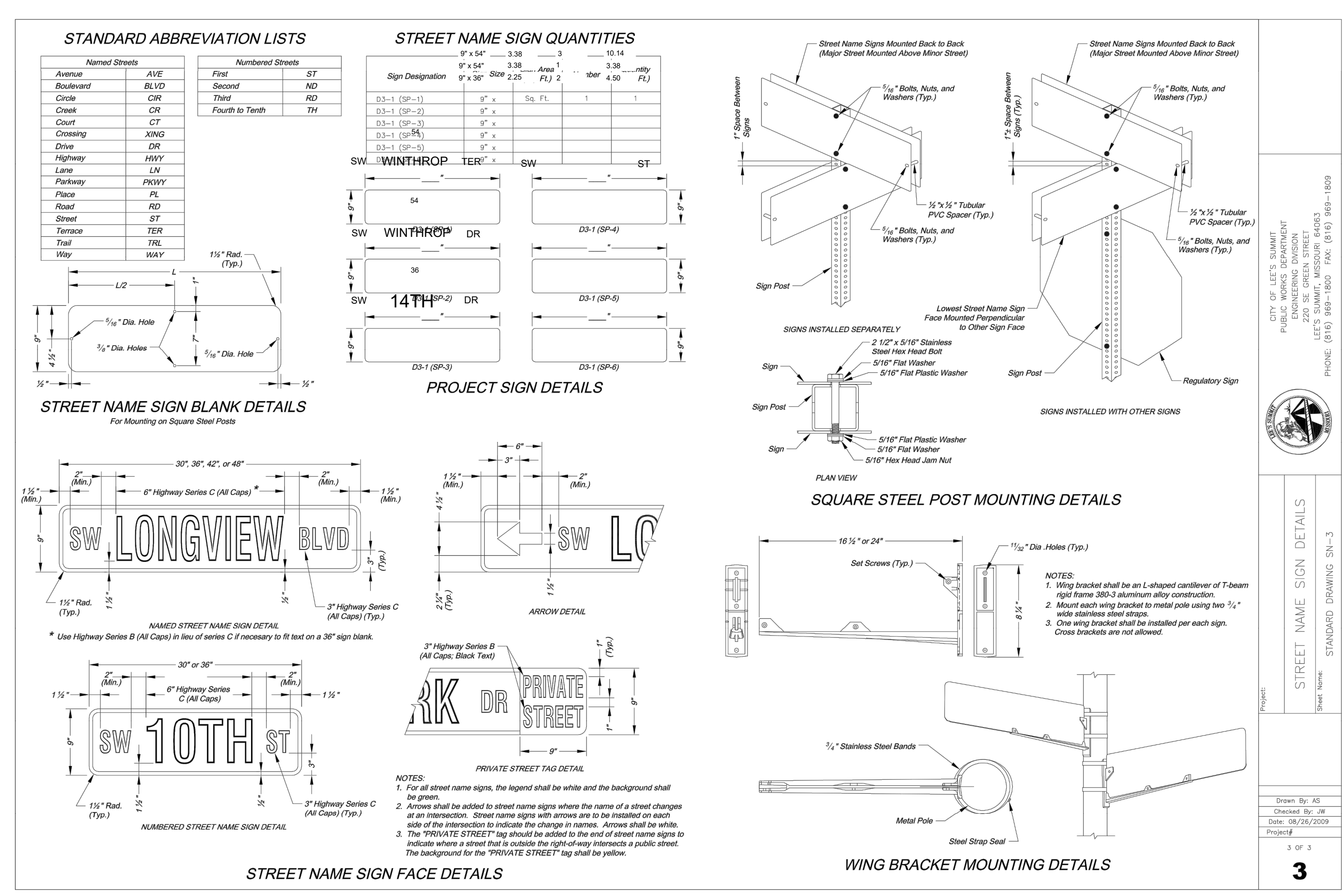
Drawn By: AS
Checked By: JH
Date: 09/25/2009
Project: 1 OF 3



CITY OF LEE'S SUMMIT
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
200 S. CEDAR STREET
LEE'S SUMMIT, MISSOURI 64083
PHONE: (816) 999-1800 FAX: (816) 999-1809

Project: SIGN POST DETAILS
Standard Drawing: SN-2

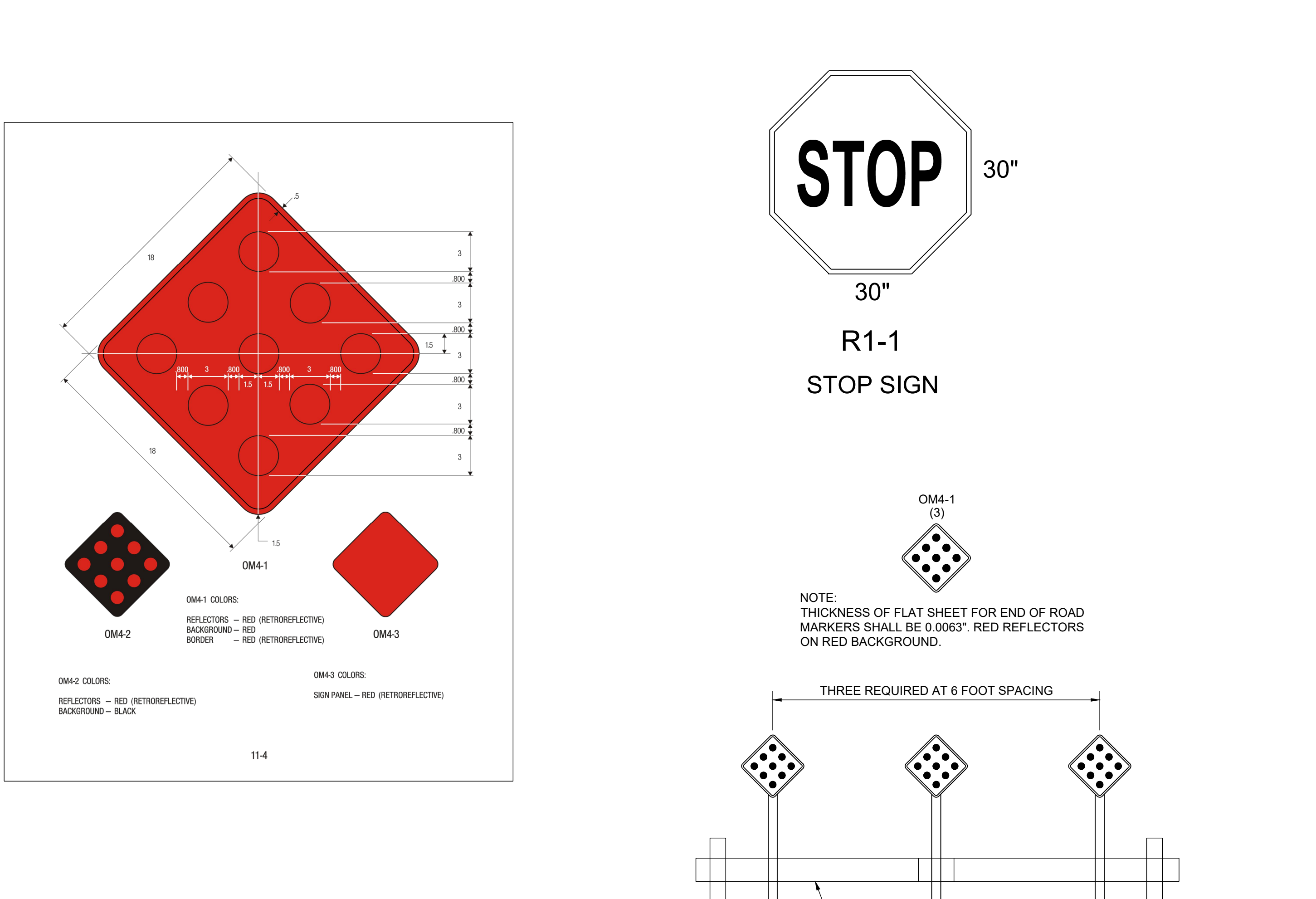
Drawn By: AS
Checked By: JH
Date: 09/25/2009
Project: 2 OF 3



CITY OF LEE'S SUMMIT
PUBLIC WORKS DEPARTMENT
200 S. CEDAR STREET
LEE'S SUMMIT, MISSOURI 64083
PHONE: (816) 999-1800 FAX: (816) 999-1809

Project: STREET NAME SIGN DETAILS
Standard Drawing: SN-3

Drawn By: AS
Checked By: JH
Date: 09/25/2009
Project: 3 OF 3



WOODLAND GLEN 2ND PLAT
STREET, STORMWATER, MASTER DRAINAGE,
AND EROSION CONTROL PLANS
WARD ROAD & WINTHROP DRIVE
LEE'S SUMMIT, MISSOURI

REVISION DATE: 04/24/2020
CITY COMMENTS: SCHLAGEL QUANTITIES

REVISION DATE: 01/11/2021
CITY COMMENTS: SCHLAGEL QUANTITIES

REVISION DATE: 04/09/2021
CITY COMMENTS: SCHLAGEL QUANTITIES

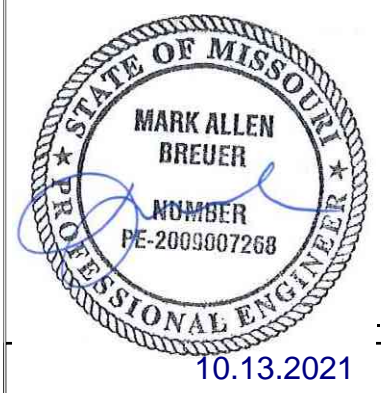
REVISION DATE: 05/12/2021
CITY COMMENTS: CITY COMMENTS

DATE PREPARED: 2-19-2020
PROJECT NUMBER: 18-017

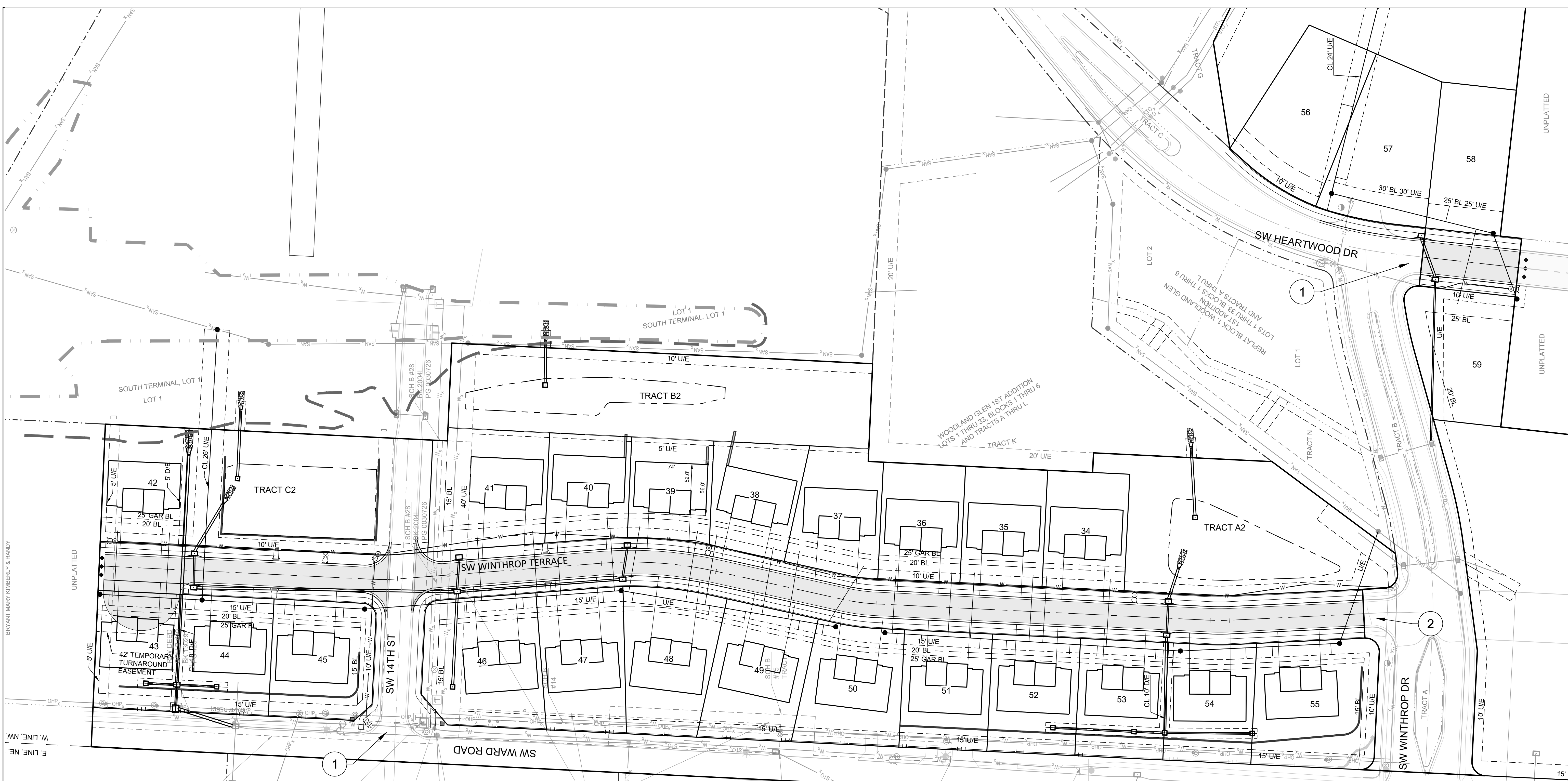
REVISION DATE: 06/28/2021
CITY COMMENTS: SCHLAGEL UPDATE

REVISION DATE: 10/06/2021
CITY COMMENTS: SCHLAGEL UPDATE

PREPARED BY:



WOODLAND GLEN 2ND PLAT
 STREET, STORMWATER, MASTER DRAINAGE,
 AND EROSION CONTROL PLANS
 WARD ROAD & WINTHROP DRIVE
 LEE'S SUMMIT, MISSOURI



Sign Spacing "S"

Speed Limit (mph)	Spacing (Feet)
25	100
30 - 35	250
≥ 40	350

Taper Dimensions (Feet)

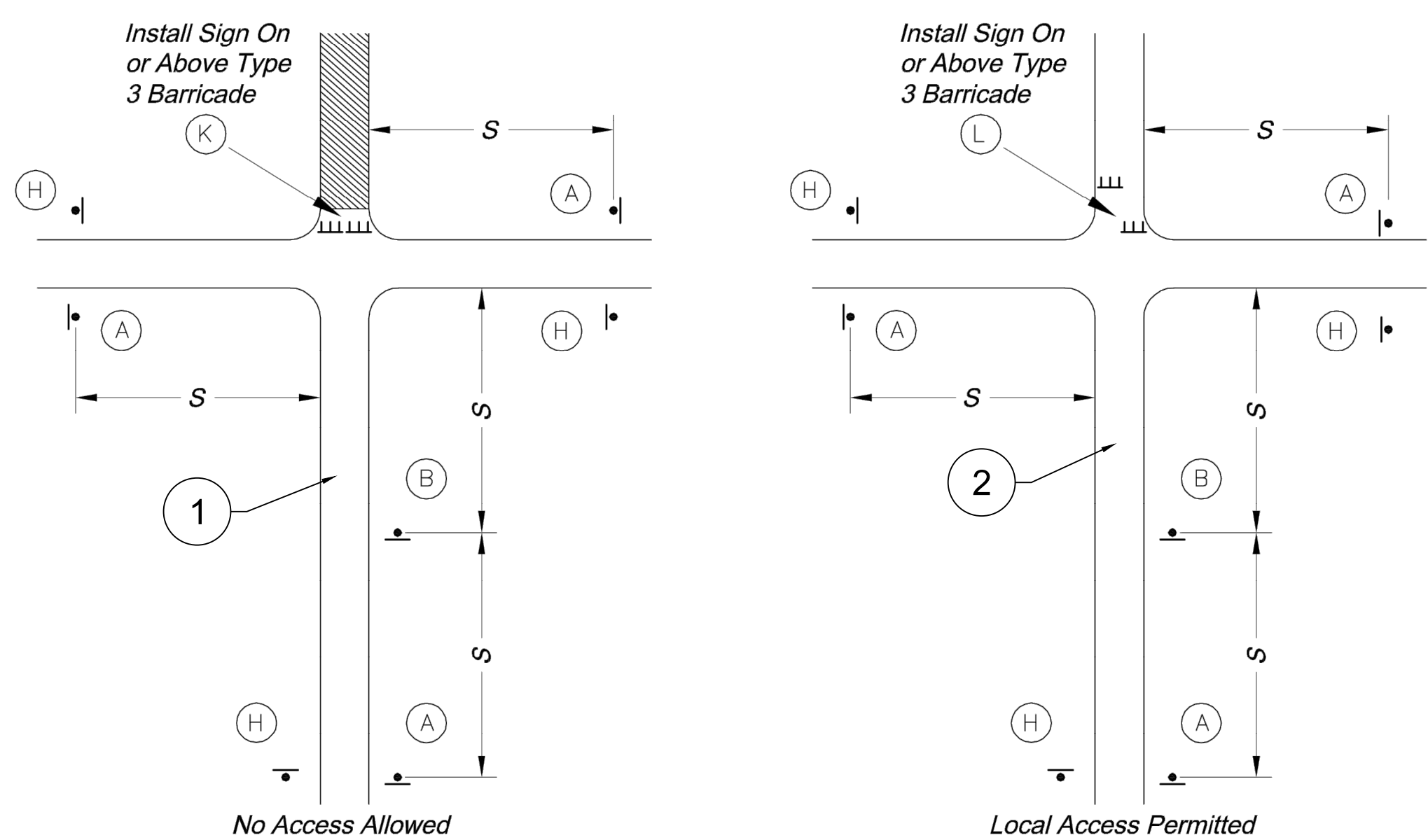
Speed Limit (mph)	Minimum Taper Length "L", per Lane Width "W"			Minimum Number of Channelizers
	10	11	12	
25	105	115	125	6
30	150	165	180	7
35	205	225	245	8
40	270	295	320	9
45	450	495	540	13

Guidelines for Length of Longitudinal Buffer Space "B"

Speed Limit (mph)	Length (Feet)
25	35
30	55
35	85
40	120
45	170

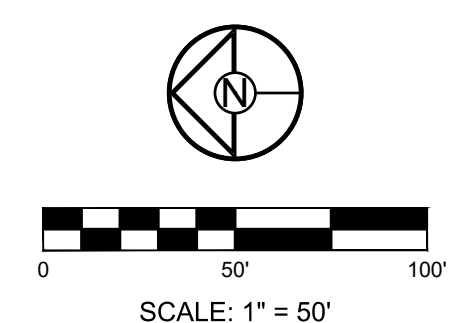
Maximum Channelizer Spacing

Speed Limit (mph)	Within Taper (Feet)	Outside Taper (Feet)
25	25	50
30	30	60
35	35	70
40	40	80
45	45	90



TYPICAL STREET CLOSURE

NOTE:
 Reference the City of Lee's Summit "TRAFFIC CONTROL DETAILS" Standard Drawing TC-1 on Sheet 28 for sign types listed in the Typical Street Closure Diagrams.



REVISION DATE	DESCRIPTION
04/24/2020	CITY COMMENTS
07/12/2021	SCHLAGEL QUANTITIES
04/09/2021	SCHLAGEL QUANTITIES
05/12/2021	CITY COMMENTS
05/15/2021	CITY COMMENTS
06/28/2021	CITY COMMENTS
09/28/2021	SCHLAGEL UPDATE
10/06/2021	10/06/2021

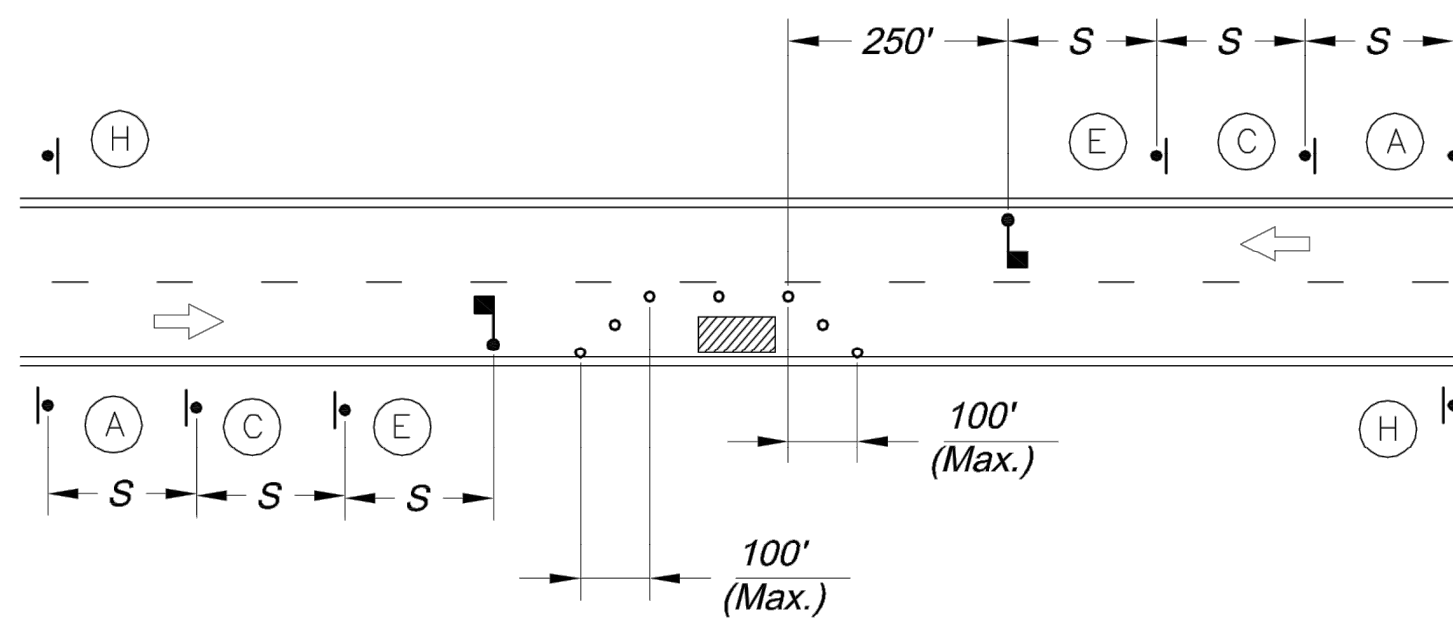
DRAWN BY: DGF
 CHECKED BY: DGF
 DATE PREPARED: 2-19-2020
 PROJ. NUMBER: 18-017

TRAFFIC CONTROL PLAN

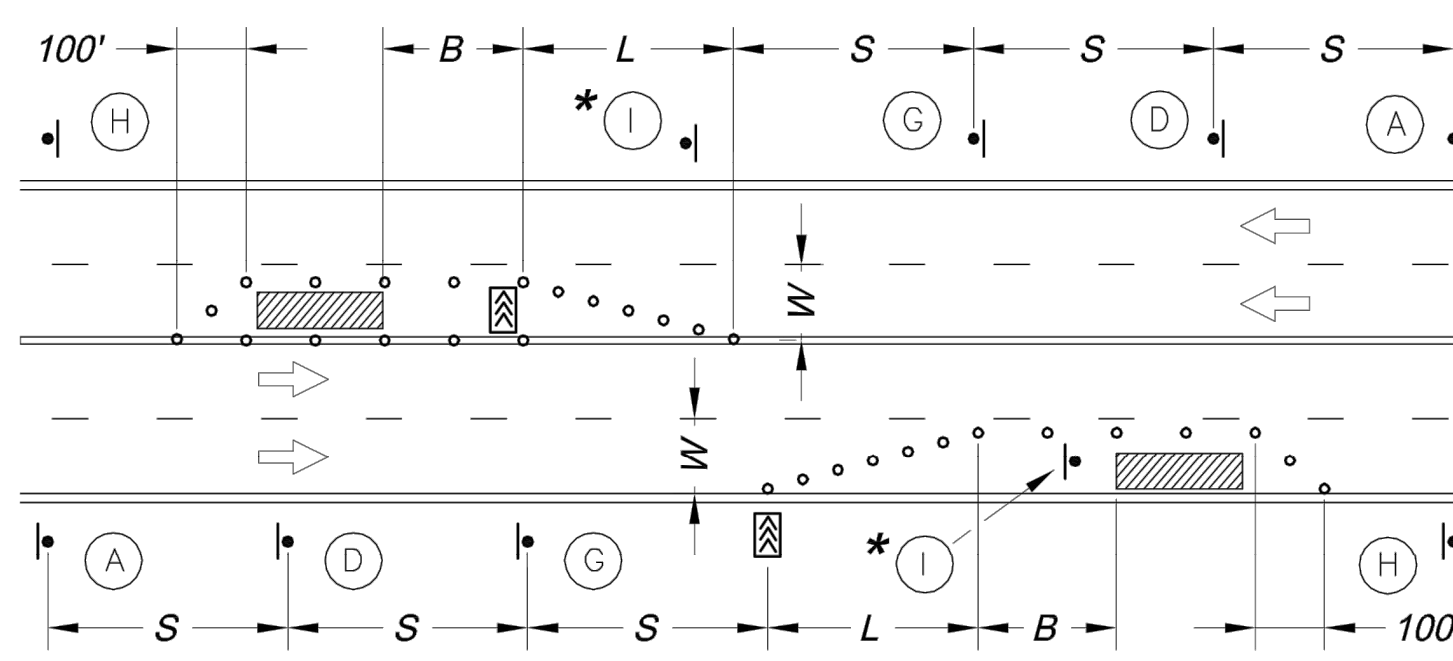
SHEET

SYMBOL LEGEND

- Work Area
- Channelizer
- Sign
- Arrow Panel
- Barricade
- Flagger
- Direction of Travel

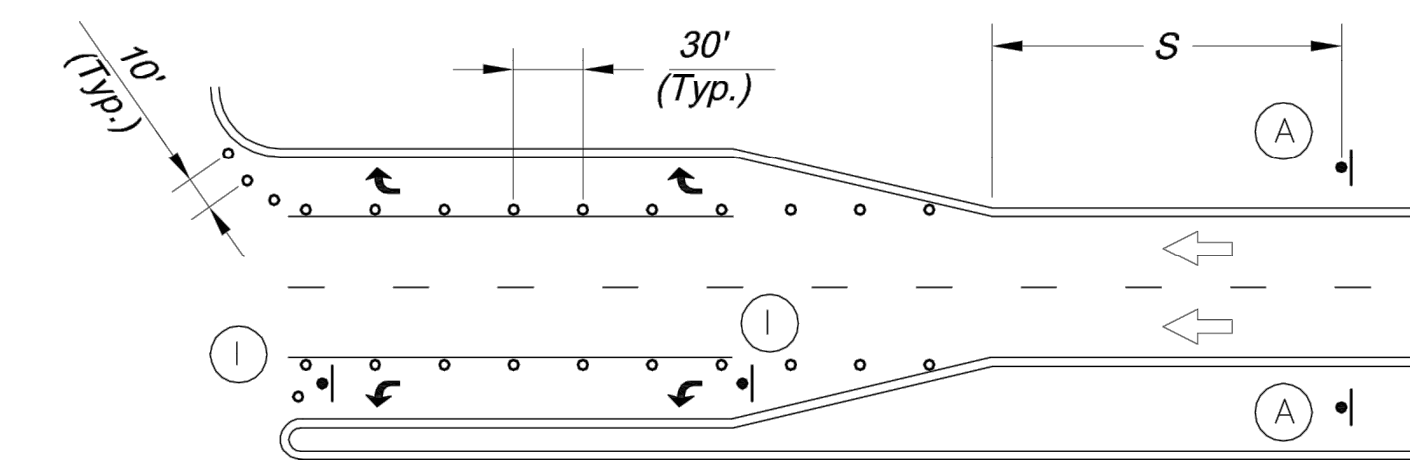


LANE CLOSURE - TWO LANE STREET



LANE CLOSURE - FOUR LANE STREET

* Install Signs Every 200 Feet Throughout the Closed Lane or As Needed



TURN LANE CLOSURE

Speed Limit (mph)	Spacing (Feet)
25	100
30 - 35	250
≥ 40	350

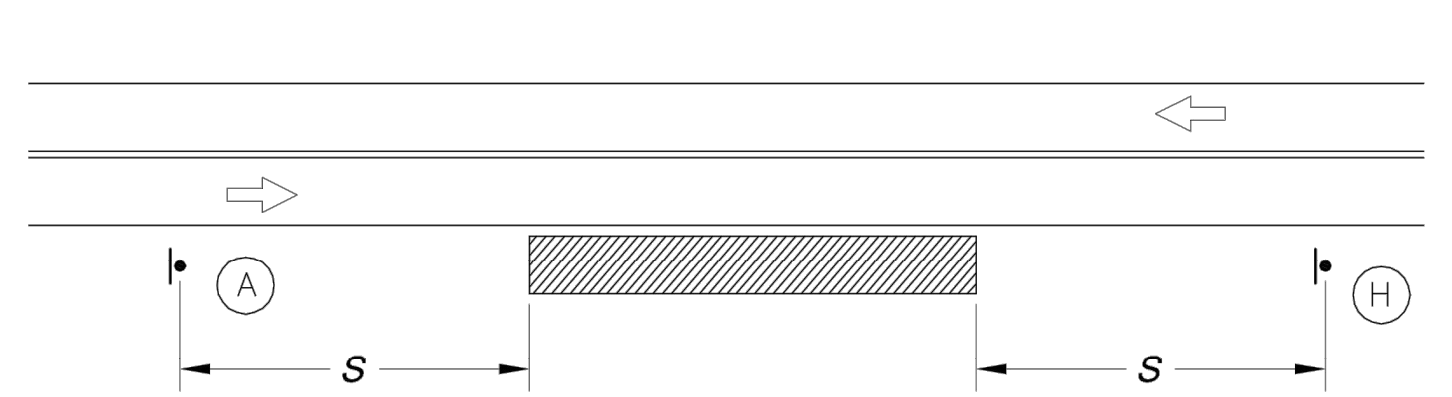
Speed Limit (mph)	Taper Dimensions (Feet)			Minimum Number of Channelizers
	Minimum Taper Length "L"	per Lane Width "W"		
25	10	11	12	6
30	105	115	125	7
35	150	165	180	7
40	205	225	245	8
45	270	295	320	9
45	450	495	540	13

Speed Limit (mph)	Length (Feet)
25	35
30	55
35	85
40	120
45	170

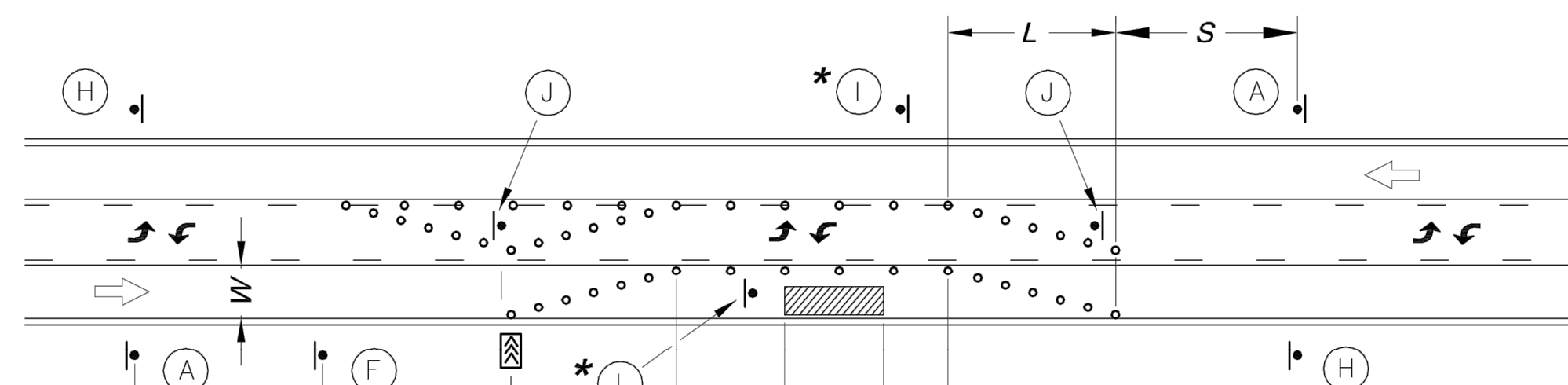
Speed Limit (mph)	Maximum Channelizer Spacing	
	Within Taper (Feet)	Outside Taper (Feet)
25	25	50
30	30	60
35	35	70
40	40	80
45	45	90

SIGN LEGEND

- ROAD WORK AHEAD (A) W20-1 36" x 36"
- ROAD CLOSED AHEAD (B) W20-2 36" x 36"
- ONE LANE ROAD AHEAD (C) W20-4 36" x 36"
- RIGHT LANE CLOSED AHEAD (D) W20-5R 36" x 36"
- LEFT LANE CLOSED AHEAD (E) W20-7a 36" x 36"
- W1-4L 36" x 36"
- W4-2R 36" x 36"
- G20-2 36" x 18"
- R3-2 24" x 24"
- R4-7a 24" x 30"
- R11-2 48" x 30"
- R11-4 60" x 30"
- END ROAD WORK (H)
- Use Only As Approved by City Traffic Engineer (I)
- KEEP RIGHT (J)
- ROAD CLOSED (K)
- ROAD CLOSED TO THRU TRAFFIC (L)

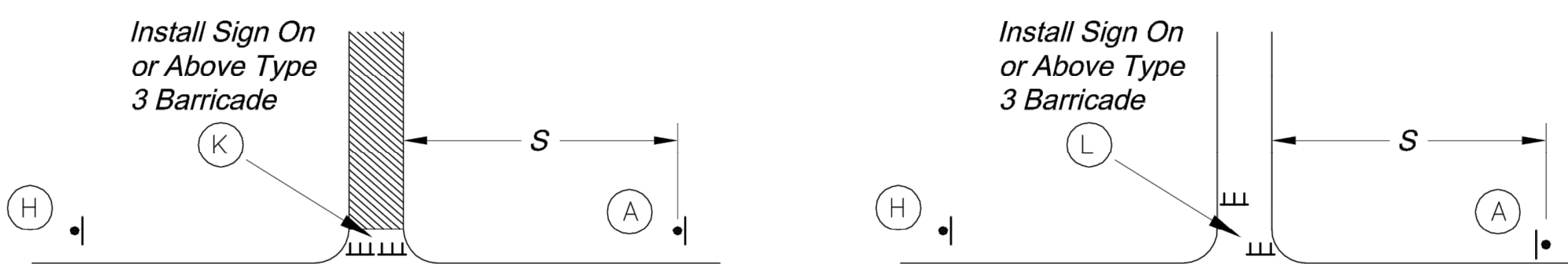


TYPICAL SIGNING FOR WORK ADJACENT TO THE STREET



LANE CLOSURE - THREE LANE STREET

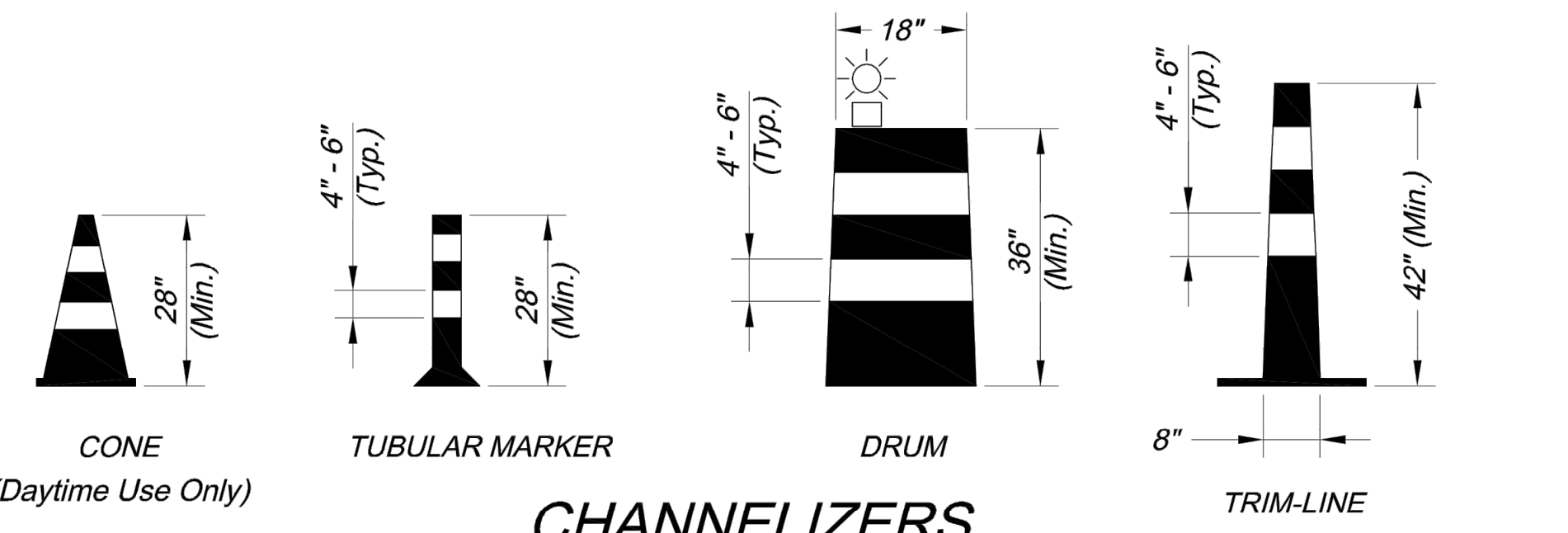
* Install Signs Every 200 Feet Throughout the Closed Lane or As Needed



TYPICAL STREET CLOSURE

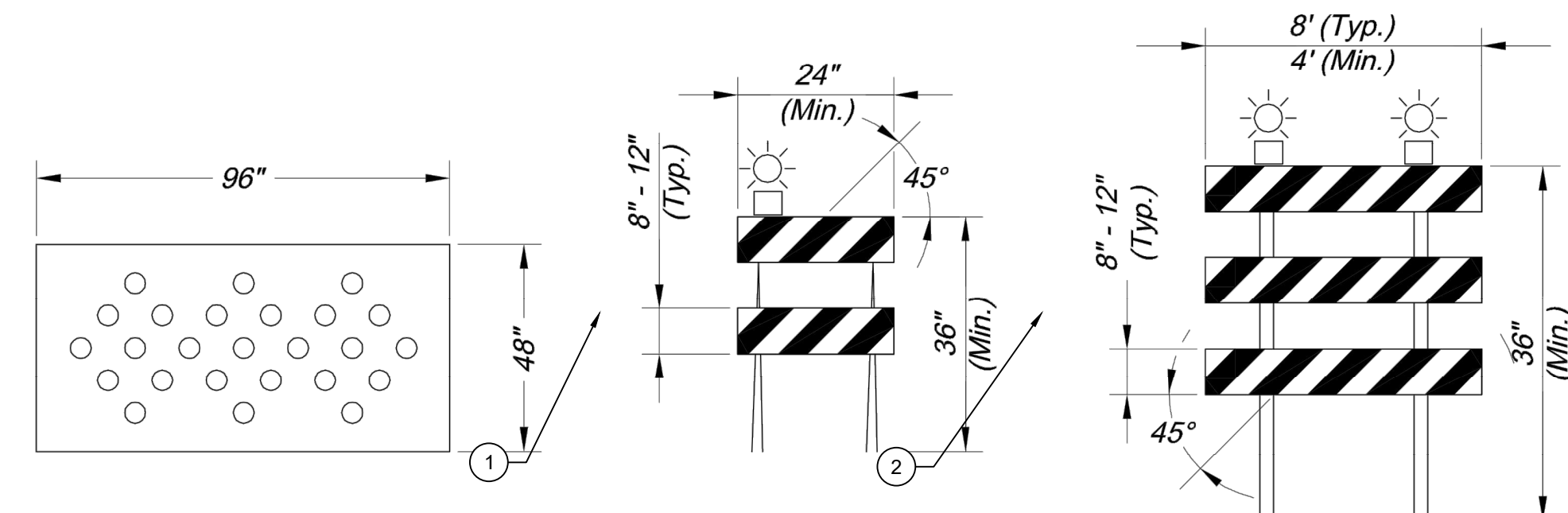
GENERAL NOTES:

- All signs, barricades, channelizers, markings and other traffic control devices shall conform to the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD).
- All traffic control devices shall be standard in size, shape, color, and message, in good condition, and retro-reflectORIZED.
- Warning lights shall be used on barricades in place at night and on warning signs which alert drivers about a change in alignment, traffic control, lane closure, or road closure.
- Flaggers shall be used where indicated on the plans, where construction vehicles interact with normal traffic, or where construction activities impose a restriction on traffic, as directed by the City Traffic Engineer. Where flaggers are used, advance signing shall be erected as shown in the details or as specified in the MUTCD. Flaggers shall meet the requirements in the MUTCD in regard to character, training, attire, and behavior.
- Trim-lines are the City's preferred channelizing device. Cones may not be used at nighttime.
- Traffic control devices not in use or not applicable shall be either covered or removed from the work area.
- The Contractor shall use barricades, street plates, or fencing as needed to effectively shield pedestrian and vehicular traffic from exposed objects, excavations, and construction activities.
- Access shall be maintained to all driveways and side streets unless noted otherwise on the plans.
- No street shall be closed without the approval of the City Traffic Engineer. The Contractor shall notify the City Traffic Engineer at least 7 days in advance of any street closure. If a detour route around the closure is to be provided, all detour signing shall be as shown on a plan approved by the City Traffic Engineer.
- Construction vehicles parked along streets shall be located within the work area (traffic control) or where otherwise normally permitted. Construction materials, including traffic control and vehicles shall not restrict sight distance for vehicles exiting at streets or drives.
- Construction materials shall be kept off of sidewalks, consolidated in one location within City right-of-way, and removed daily unless otherwise approved by the Inspector. Dirt, mud, and other construction debris on streets and sidewalks shall be removed immediately.
- The Contractor shall not perform any work that will restrict vehicular traffic in any way between the hours of 7:00 a.m. and 9:00 p.m. or 4:00 p.m. and 6:00 p.m. Monday through Friday unless otherwise indicated in the specifications.
- All travel lanes should be at least 11 feet wide unless otherwise authorized by the City Traffic Engineer. A "Narrow Lanes" sign shall be installed in advance of a lane width reduction to less than 11 feet.
- All edge drop-offs of more than 2 inches and less than 4 inches should be protected by a wedge or barrier and all edge drop-offs greater than 4 inches shall have edge protection (see Traffic Control Specifications for edge treatment requirements).
- The "Workers" symbolic sign (MUTCD No. W21-1a) may be used instead of the "Road Work Ahead" sign for work with a duration of 12 hours or less. The "End Road Work" sign is not required to be installed after the "Workers" sign.
- No traffic signal shall be altered or modified in any way without a plan approved by the City Traffic Engineer.
- The Contractor shall be responsible for maintaining all traffic control devices on an around-the-clock basis, whether or not work is actively being pursued and any deficiencies noted shall be corrected immediately.
- The traffic control requirements shown on these plans are minimum requirements only and do not attempt to address in depth the variety of situations that may occur once construction has started. In no way do the requirements shown on these plans relieve the Contractor of his responsibility for selecting the proper traffic control devices and implementation procedures that will assure the safety of drivers, pedestrians, and workers at all times.
- Should the contractor fail to enforce the traffic control plan or fail to clean, replace or otherwise maintain the traffic control devices when directed to do so by the City Traffic Engineer or representative, the City may take one or more of the following actions:
 - Employ another agency to correct deficiencies in traffic control devices and deduct the cost from the Contractor's pay estimate.
 - Stop the work until deficiencies are corrected.
 - Suspend all pay estimates until deficiencies are corrected, or
 - Place the Contractor in default.



CHANNELIZERS

NOTE: White Bands On Barricades and Channelizers Shall Be Made From High Intensity Sheeting Material.



ARROW PANEL

BARRICADES

PREPARED BY:



WOODLAND GLEN 2ND PLAT
STREET, STORMWATER, MASTER DRAINAGE,
AND EROSION CONTROL PLANS
WARD ROAD & WINTHROP DRIVE
LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION
04/24/2020	CITY COMMENTS
01/12/2021	SCHLAGEL QUANTITIES
04/09/2021	SCHLAGEL QUANTITIES
05/12/2021	CITY COMMENTS
05/15/2021	CITY COMMENTS
05/28/2021	CITY COMMENTS
09/28/2021	SCHLAGEL UPDATE
10/06/2021	SCHLAGEL UPDATE

TRAFFIC CONTROL DETAILS

I:\PROJECTS\2021\81817-01\DWG\Plan\6.0 SS\18-017 SS TC PLAN & DETAILS.dwg, 10/06/2021 2:46:23 PM, 1:1