

NAPA VALLEY - 4th PLAT
Street, Stormwater, Master Drainage Plan, and Erosion and Sediment Control
LOTS 147-165

PART OF THE NW 1/4 SECTION 36. TOWNSHIP 47 N, RANGE 32 W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

CONSTRUCTION AND DESIGN NOTES:

STREET & STORM SEWERS:

- 1 ~ STREET PAVEMENT SHALL CONSIST OF TYPE CG-2 CURBS WITH PAVEMENT PER TABLE LS-2 OF THE LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL
OPTION 1) 4" TYPE 5 ASPHALT BASE AND 2" TYPE 5 OR 6 ASPHALT SURFACE OVER A 6" MoDOT TYPE 5 BASE AND A SUBGRADE MIXTURE OF 6" FLY ASH STABILIZED SUBGRADE IN ACCORDANCE WITH THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL.
OPTION 2) 4" TYPE 5 ASPHALT BASE AND 2" TYPE 5 OR 6 ASPHALT SURFACE OVER 10" MoDOT TYPE 5 BASE OVERTOP A BIAXIAL GEOGRID MEETING THE REQUIREMENTS OF TABLE 2201.6-1
- 2 ~ RESIDENTIAL STREETS SHALL BE PER APWA STANDARD FOR 50' R/W TYPICAL SECTION TABLE LS-2 SECTION 5200 (RESIDENTIAL LOCAL STREET). RESIDENTIAL STREETS SHALL BE PER APWA STANDARD FOR 60' R/W TYPICAL SECTION TABLE LS-2 SECTION 5200 (RESIDENTIAL COLLECTOR).
- 3 ~ STORM SEWER PIPE SHALL BE HIGH DENSITY POLYETHYLENE (HDPE) AS APPROVED BY CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL.
- 4 ~ JUNCTION BOXES SHALL BE PER CITY OF LEE'S SUMMIT STANDARD DRAWING NO. JB-1. FIELD INLETS SHALL BE PER CITY OF LEE'S SUMMIT STANDARD DRAWING FI-1. TOEWALLS SHALL BE PER CITY OF LEE'S SUMMIT DRAWING NO. SD-35. STORM MANHOLES SHALL BE PER CITY OF LEE'S SUMMIT DETAIL SD-27. ROCK LINING AND RIP RAP SHALL BE PER CITY OF LEE'S SUMMIT.

WATER:

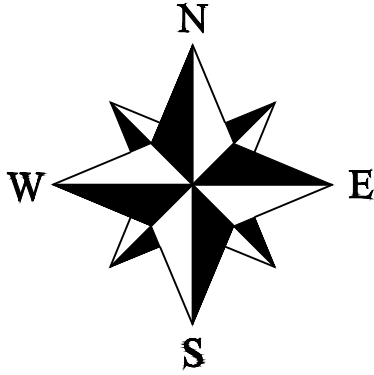
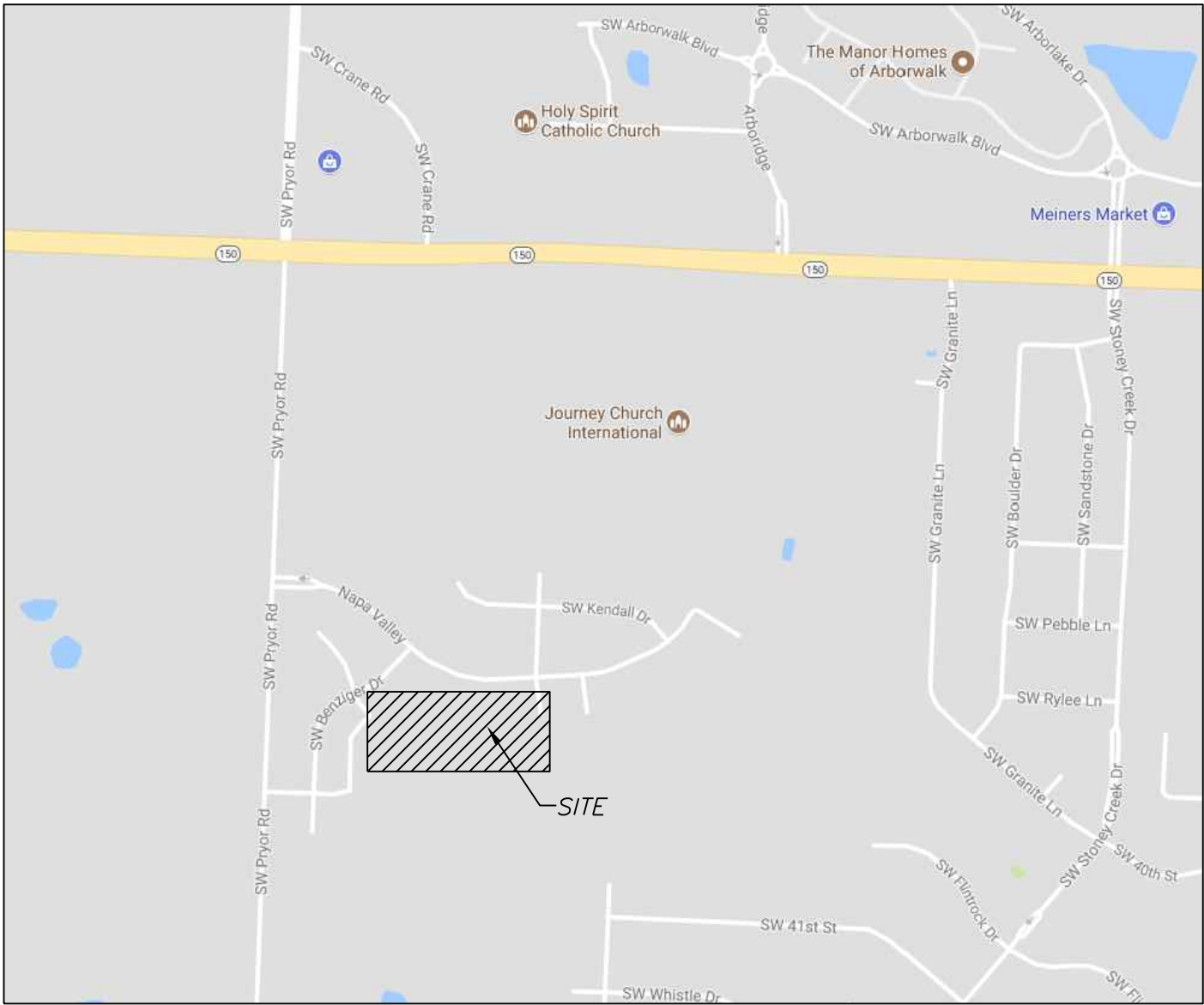
- 1 ~ THE CONTRACTOR SHALL NOTIFY THE CITY OF LEE'S SUMMIT WATER UTILITIES DEPARTMENT AT 816.969.1900 AT LEAST 48 HOURS PRIOR TO CONNECTING TO ANY EXISTING WATER MAIN.
- 2 ~ ALL WATER MAINS SHALL COMPLY WITH ANSI/AWWA C150/A21.50 AND C151/A21.51, AND CITY OF LEE'S SUMMIT STANDARDS.
- 3 ~ FIRE HYDRANTS SHALL BE OPTIC YELLOW WATEROUS "PACER" MODEL NO. WB-67-250 WITH NON-RISING STEM OR CITY ENGINEER APPROVED EQUAL. HYDRANTS SHALL HAVE A 5 1/4" VALVE WITH A 4 1/2" PUMPER NOZZLE AND 2 - 2 1/2" HOSE NOZZLES (LEFT HAND OPENING).
- 4 ~ GATE VALVES SHALL BE MUELLER NO. A 2380-5 HUB END "O" RING SEAL NON-RISING STEM. VALVES 12" OR LARGER SHALL BE BUTTERFLY VALVES MANUFACTURED BY THE HENRY PRATT COMPANY OR CITY ENGINEER APPROVED EQUAL. LEFT HAND OPENING. MINIMUM 200# TESTING AWWA.
- 5 ~ VALVE BOXES SHALL BE CLAY & BAILEY NO. P-108 OR CITY ENGINEER APPROVED EQUAL. ALL VALVE BOXES SHALL BE LOCATED OUT OF EXISTING OR PROPOSED PAVEMENT AREAS.
- 6 ~ ALL WATER MAINS SHALL BE CONSTRUCTED WITH A MINIMUM COVER OF 42 INCHES. STREET GRADING SHALL BE COMPLETED PRIOR TO BEGINNING CONSTRUCTION OF WATER MAINS.
- 7 ~ ALL BENDS, TEES AND FIRE HYDRANTS SHALL BE INSTALLED WITH SUITABLE CONCRETE THRUST BLOCKS POURED IN PLACE AGAINST UNDISTURBED EARTH AND PER CITY OF LEE'S SUMMIT AND APWA STANDARDS.
- 8 ~ THE MINIMUM SEPARATION BETWEEN THE PROPOSED WATER MAIN AND SANITARY OR STORM SEWERS IS AS FOLLOWS:
A ~ SANITARY SEWERS: HORIZONTAL = 10 FEET - VERTICAL = 18 INCHES
B ~ STORM SEWERS: HORIZONTAL = 5 FEET - VERTICAL = 18 INCHES
THESE SEPARATIONS SHALL PREVAIL OVER ANY DATA SHOWN IN THESE PLANS AND THE CONTRACTOR SHALL INSTALL BENDS OR OTHER FITTINGS AS NECESSARY TO ACHIEVE THE REQUIRED SEPARATIONS.

GENERAL NOTES:

- 1 ~ ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813.
- 2 ~ ALL REQUIRED EASEMENTS WITHIN THE BOUNDARY OF THIS PROJECT SHALL BE PROVIDED FOR ON THE FINAL PLAT.
- 3 ~ ANY REQUIRED EASEMENT LOCATED OUTSIDE OF THE BOUNDARY OF THIS PROJECT SHALL BE PROVIDED FOR BY SEPARATE INSTRUMENT PRIOR TO ISSUANCE OF CONSTRUCTION PERMITS.
- 4 ~ THE CONTRACTOR SHALL NOTIFY THE CITY OF LEE'S SUMMIT PUBLIC WORKS INSPECTION AT 816.969.1800 AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.
- 5 ~ THE CONTRACTOR SHALL NOTIFY ENGINEERING SOLUTIONS AT 816.623.9888 OF ANY CONFLICT WITH THE IMPROVEMENTS PROPOSED BY THESE PLANS AND SITE CONDITIONS.
- 6 ~ THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AND OBTAIN THE APPROPRIATE BLASTING PERMITS FOR A REQUIRED BLASTING. IF BLASTING IS ALLOWED, ALL BLASTING SHALL CONFORM TO STATE REGULATIONS AND LOCAL ORDINANCES.

NOTE :

ALL CONSTRUCTION SHALL FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813. WHERE DISCREPANCIES EXIST BETWEEN THESE PLANS AND THE DESIGN AND CONSTRUCTION MANUAL, THE DESIGN AND CONSTRUCTION MANUAL SHALL PREVAIL.



- LEGEND:
B/L - BUILDING SET-BACK
C/A - COMMON AREA
D/E - DRAINAGE EASEMENT
FND. - FOUND
L/E - LANDSCAPE EASEMENT
L.N.A. - LIMITS OF NO ACCESS
R/W - RIGHT OF WAY
SAN - SANITARY SEWER LINE
S/W - SIDEWALK
U/E - UTILITY EASEMENT
W - WATER LINE
ST - STORM SEWER LINE

INDEX OF SHEETS:

- C.001 ~ COVER SHEET
C.050 ~ ESC PHASE 1 - Pre Clearing Plan
C.051 ~ ESC PHASE 2 - Inactive Area Stabilization Plan
C.052 ~ ESC PHASE 3 - Final Restoration Plan
C.053 ~ ESC DETAILS
C.100 ~ SITE PLAN
C.101 ~ STREET SIGNAGE PLAN
C.200 ~ MASTER DRAINAGE PLAN SHEET 1 OF 3 GRADING PLAN - SWPPP
C.201 ~ MASTER DRAINAGE PLAN SHEET 2 OF 3 SPOT ELEVATIONS
C.202 ~ MASTER DRAINAGE PLAN SHEET 3 OF 3 DRAINAGE AREA MAP
C.203 ~ STREET PLAN AND PROFILE
C.300 ~ STORM SEWER GENERAL LAYOUT
C.301 ~ STORM SEWER PLAN AND PROFILE
C.302 ~ 10 YR & 100 YR STORM TABLES
C.303 ~ STORM SEWER DETAILS
C.600 ~ CONSTRUCTION DETAILS
C.601 ~ CONSTRUCTION DETAILS
C.602 ~ CONSTRUCTION DETAILS

UTILITY COMPANIES:

THE FOLLOWING LIST OF UTILITY COMPANIES IS PROVIDED FOR INFORMATION ONLY. WE DO NOT OFFER ANY GUARANTEE OR WARRANTY THAT THIS LIST IS COMPLETE OR ACCURATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES THAT MAY BE AFFECTED BY THE PROPOSED CONSTRUCTION AND VERIFYING THE ACTUAL LOCATION OF EACH UTILITY LINE. THE CONTRACTOR SHALL NOTIFY ENGINEERING SOLUTIONS AT 816.623.9888 OF ANY CONFLICT WITH PROPOSED IMPROVEMENTS.
KCP&L ~ 298-1196
MISSOURI GAS ENERGY ~ 756-5261
SOUTHWESTERN BELL TELEPHONE ~ 761-5011
COMCAST CABLE ~ 795-1100
WILLIAMS PIPELINE ~ 422-6300
CITY OF LEE'S SUMMIT PUBLIC WORKS ~ 969-1800
CITY OF LEE'S SUMMIT PUBLIC WORKS INSPECTIONS ~ 969-1800
CITY OF LEE'S SUMMIT WATER UTILITIES ~ 969-1900
MISSOURI ONE CALL (DIG RITE) ~ 1-800-344-7483

ENGINEER'S CERTIFICATION:

I HEREBY CERTIFY THAT THIS PROJECT HAS BEEN DESIGNED AND THESE PLANS PREPARED IN ACCORDANCE WITH THE CURRENT DESIGN CRITERIA OF THE CITY OF LEE'S SUMMIT, MISSOURI AND THE STATE OF MISSOURI. I FURTHER CERTIFY THAT THESE PLANS WERE DESIGNED IN ACCORDANCE TO AASHTO STANDARDS.

CITY OF LEE'S SUMMIT, MISSOURI

APPROVED: DATE:

BY: CITY ENGINEER

"AS-BUILT"

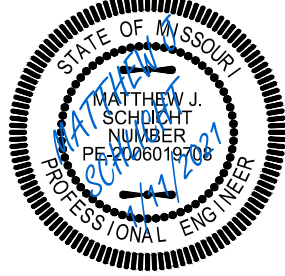
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ENGINEERING SOLUTIONS
Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005008319-D
Kansas
Engineering E-1685
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Napa Valley 4th Plat
Lee's Summit, Jackson County, Missouri

Project: NAPA VALLEY LS100
Issue Date: July 13, 2018

Cover Sheet
Street, Stormwater, Master Drainage Plan, and Erosion and Sediment Control Plans
for:
Napa Valley 4th Plat
Lee's Summit, Jackson County, Missouri



Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

REVISIONS

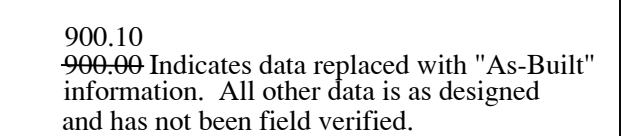
1/11/2021 As-Built

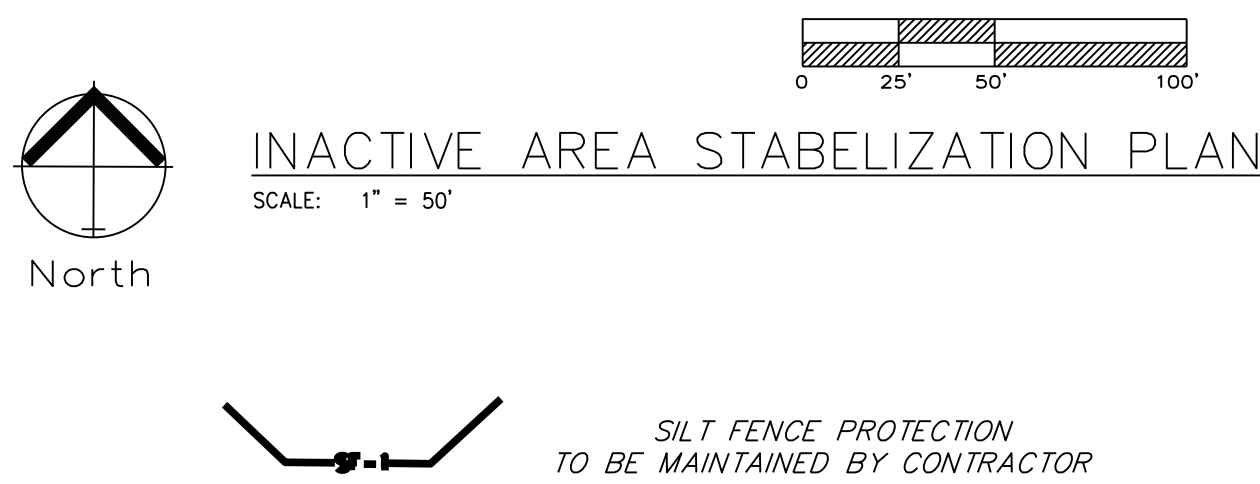
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INLET PROTECTION
GUTTER BUDDY OR EQUIVALENT

NOTES: The Land Disturbance Plans indicates the final placement of erosion control devices. The contractor(s) may proceed with construction prior to the final placement of these devices by providing additional devices to control erosion on their items of work. These devices shall be maintained until the final devices are in place.





Phase 1 Silt Fence	—SF-1—	SF-1—
Phase 2 Silt Fence	—SF-2—	SF-2—
Proposed Storm Line	—S—	S—S—
Existing Storm Line	—X—STM—	— — — —
Inlet Protection		
Gutter Buddy or Equivalent		

DURING ALL PHASES OF CONSTRUCTION,
INACTIVE AREA STABILIZATION METHODS AS
DESCRIBED IN APWA SECTION 5111.3 SHALL
BE USED TO CONTROL EROSION AND
STABILIZATION.

NOTES: The Land Disturbance Plans indicates the final placement of erosion control devices. The contractor(s) may proceed with construction prior to the final placement of these devices by providing additional devices to control erosion on their items of work. These devices shall be maintained until the final devices are in place.

MAINTENANCE:

TO MAINTAIN THE EROSION AND SEDIMENT CONTROLS, THE FOLLOWING PROCEDURES WILL BE PERFORMED:

SEDIMENT CAPTURE DEVICES: SEDIMENT WILL BE REMOVED FROM THE UPSTREAM OR UPSLOPE SIDE OF THE FILTER FABRIC FENCES, WHEN THE DEPTH OF ACCUMULATED SEDIMENT REACHES ABOUT ONE-THIRD THE HEIGHT OF THE STRUCTURE.

STORM SEWER INLETS: ANY SEDIMENT IN THE STORM SEWER INLETS WILL BE REMOVED AND DISPOSED OF PROPERLY.

TEMPORARY CONTROLS: ALL TEMPORARY CONTROLS WILL BE REMOVED AFTER THE DISTURBED AREAS HAVE BEEN STABILIZED.

INSPECTION PROCEDURES:

INSPECTIONS WILL BE DONE BY THE RESPONSIBLE PERSON(S) AT LEAST ONCE EVERY WEEK AND WITHIN 24 HOURS EACH SITE EVENT PRODUCING ANY AMOUNT OF RAINFALL. AREAS THAT HAVE BEEN RESEEDED WILL BE INSPECTED REGULARLY AFTER SEED GERMINATION TO ENSURE COMPLETE COVERAGE OF EXPOSED AREAS. DISTURBED AREAS THAT HAVE NOT BEEN FINALLY STABILIZED SHALL HAVE ALL POLLUTION CONTROL MEASURES INSPECTED FOR PROPER INSTALLATION, OPERATION AND MAINTENANCE. LOCATIONS WHERE STORM WATER LEAVES THE SITE SHALL BE INSPECTED FOR EVIDENCE OF EROSION OR SEDIMENT DEPOSITION. ANY DEFICIENCIES SHALL BE NOTED IN A REPORT OF THE INSPECTION AND CORRECTED WITHIN SEVEN CALENDAR DAYS OF THE INSPECTION. THE PERMITTEE SHALL PROMPTLY NOTIFY THE SITE CONTRACTORS RESPONSIBLE FOR OPERATION AND MAINTENANCE OF POLLUTION CONTROL DEVICES OF DEFICIENCIES.

IF THE EXISTING GROUND COVER IS NATURAL GRASS, DISTURBED AREAS SHALL BE TEMPORARILY SEEDDED WITH WHEATGRYGE AT A RATE OF 15 POUNDS PER 1000 SQUARE FEET. PERMANENT SEEDING SHALL CONSIST OF 90% IN THREE EQUAL PARTS OF THIN BLADE, TURF-TYPE, TALL FESCUE AND 10% BLUEGRASS SEED AT A RATE OF 10 POUNDS PER 1000 SQUARE FEET. BOTH TEMPORARY AND PERMANENT SEEDS ARE SHALL BE MULCHED AND WATERED TO MAINTAIN THE PROPER MOISTURE LEVEL OF THE SOIL TO ESTABLISH GRASS. NEW GRASS SHALL BE WATERED AND MAINTAINED UNTIL IT REACHES A HEIGHT OF 3 INCHES. ANY BARE AREAS SHALL BE RESEEDDED.

ALL EROSION CONTROL DEVICES SHALL BE REMOVED BY GENERAL CONTRACTOR AFTER SITE STABILIZATION IS COMPLETE AND APPROVED BY ENGINEER.

THE DEVELOPER WILL DESIGNATE A QUALIFIED PERSON OR PERSONS TO PERFORM THE FOLLOWING INSPECTIONS.

STABILIZATION MEASURES: DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION WILL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM. AFTER A PORTION OF THE SITE IS FINALLY STABILIZED, INSPECTIONS WILL BE CONDUCTED AT LEAST ONCE EVERY MONTH THROUGHOUT THE LIFE OF THE PROJECT. CONTRACTOR CAN CONTACT ENGINEERING SOLUTIONS FOR COPIES OF THE INSPECTION FORM TO BE USED FOR STABILIZATION MEASURES.

STRUCTURAL CONTROLS: FILTER FABRIC FENCES AND ALL OTHER EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN WILL BE INSPECTED REGULARLY FOR PROPER POSITIONING, ANCHORING, AND EFFECTIVENESS IN TRAPPING SEDIMENTS. SEDIMENT WILL BE REMOVED FROM THE UPSTREAM OR UPSLOPE SIDE OF THE FILTER FABRIC. CONTRACTOR CAN CONTACT ENGINEERING SOLUTIONS FOR COPIES OF THE INSPECTION FORM TO BE USED FOR STABILIZATION MEASURES.

DISCHARGE POINTS: DISCHARGE POINTS OR LOCATIONS WILL BE INSPECTED TO DETERMINE WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT AMOUNTS OF POLLUTANTS FROM ENTERING RECEIVING WATERS

CONSTRUCTION ENTRANCE: LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE WILL BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING.

A LOG OF EACH INSPECTION SHALL BE KEPT. THE INSPECTION REPORT IS TO INCLUDE THE FOLLOWING MINIMUM INFORMATION: INSPECTOR'S NAME, DATE OF INSPECTION, OBSERVATIONS RELATIVE TO THE EFFECTIVENESS OF THE POLLUTION CONTROL DEVICES, ACTIONS TAKEN OR NECESSARY TO CORRECT DEFICIENCIES, AND LISTING OF AREAS WHERE LAND DISTURBANCE OPERATIONS HAVE PERMANENTLY OR TEMPORARILY STOPPED. THE INSPECTION REPORT SHALL BE SIGNED BY THE PERMITEE OR BY THE PERSON PERFORMING THE INSPECTION IF DULY AUTHORIZED TO DO SO.

EROSION CONTROL DESCRIPTION:

- 1.) SILT FENCE SHALL BE PLACED AT THE PERIMETER OF THE GRADING AND AT INTERMEDIATE AREAS THROUGHOUT THE SITE AS SHOWN ON THE PLAN. INLET SEDIMENT TRAPS SHALL BE PLACED SURROUNDING ALL STORM INLETS

EROSION CONTROL PROCEDURE:

- 1.) SILT FENCE AND TEMPORARY CONSTRUCTION ENTRANCE SHALL BE INSTALLED AT THE PERIMETER OF THE GRADED AREAS PRIOR TO BEGINNING OF CLEARING OR DEMOLITION OPERATIONS. THE CONTRACTOR SHALL INSTALL SILT FENCE AS SHOWN ON PLANS AS GRADING PROGRESSES.

TEMPORARY CONSTRUCTION ENTRANCE NOTES:

- A) INSTALLATION
- 1) AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC STREETS. IF POSSIBLE, LOCATE WHERE PERMANENT ROADS WILL EVENTUALLY BE CONSTRUCTED
 - 2) REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA. GRADE AND GROWN FOR POSITIVE DRAINAGE
 - 3) IF SLOPE TOWARDS THE PUBLIC ROAD EXCEED 2% CONSTRUCT A 6 TO 8 INCH HIGH RIDGE WITH 3/4" 1/4 SIDE SLOPES ACROSS THE FOUNDATION APPROXIMATELY 15 FEET FROM THE EDGE OF THE PUBLIC ROAD TO DIVERT RUNOFF AWAY FROM IT.
 - 4) INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES ALONG PUBLIC ROADS
 - 5) PLACE STONE TO DIMENSIONS AND GRADES AS SHOWN ON PLANS. LEAVE SURFACE SMOOTH AND SLOPED FOR DRAINAGE
 - 6) DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE
 - 7) IF SOIL CONDITIONS ARE ANTICIPATED PLACE GEOTEXTILE FABRIC ON THE GRADED FOUNDATION TO IMPROVE STABILITY
- B) TROUBLESHOOTING
- 1) CONSULT WITH A QUALIFIED DESIGN PROFESSIONAL IF ANY OF THE FOLLOWING OCCUR:
 - INADEQUATE RUNOFF CONTROLS TO THE EXTENT THAT SEDIMENT WASHES ONTO PUBLIC ROADS
 - INSTALL DIVERSIONS OR OTHER RUNOFF CONTROL MEASURES
 - SMALL STONE, THIN STONE OR ABSENCE OF GEOTEXTILE FABRIC RESULTS IN RUTS AND MUDDY CONDITIONS AS STONE IS PRESSURE INTO SOIL - INCREASE STONE SIZE OR PAD
 - THICKNESS OR ADD GEOTEXTILE FABRIC
 - PAD TOO SHORT FOR HEAVY CONSTRUCTION TRAFFIC - EXTEND PAD BEYOND THE MINIMUM 50 FOOT LENGTH AS NECESSARY
- C) INSPECTION AND MAINTENANCE
- 1) INSPECT STONE PAD AND SEDIMENT DISPOSAL AREA WEEKLY AND AFTER ANY RAIN EVENT
 - 2) RESHAPE PAD AS NEEDED FOR PROPER DRAINAGE AND RUNOFF CONTROL
 - 3) TOP DRESS WITH CLEAN 2" AND 3 INCH STONE AS NEEDED
 - 4) IMMEDIATELY REMOVE MUD OR SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADWAY. REPAIR ANY BROKEN ROAD PAVEMENT IMMEDIATELY
 - 5) REMOVE ALL TEMPORARY ROAD MATERIALS FROM AREAS WHERE PERMANENT VEGETATION WILL BE ESTABLISHED

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Professional Registration
Missouri
Engineering 2005002186-D
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Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

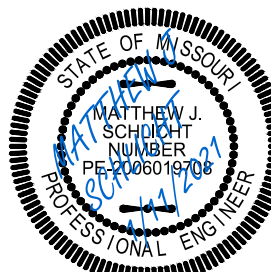
Napa Valley 4th Plat
Lee's Summit, Jackson County, Missouri

Project: NAPA VALLEY LSMO

Issue Date: July 13, 2018

ESC PHASE 2 PLAN
Street, Stormwater, Master Drainage Plan,
and Erosion and Sediment Control Plans

Lee's Summit, Jackson County, Missouri

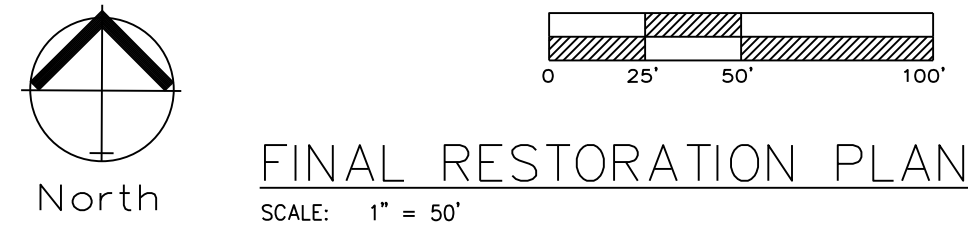


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KS PE 19071
OK PE 25226
NE PE E-14335

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C.051



LEGEND

PHASE 1 SILT FENCE

PHASE 2 SILT FENCE

INLET PROTECTION

GUTTER BUDDY OR EQUIVALENT

DURING ALL PHASES OF CONSTRUCTION, INACTIVE AREA STABILIZATION METHODS AS DESCRIBED IN APWA SECTION 5111.3 SHALL BE USED TO CONTROL EROSION AND SILTATION.

ONCE SITE IS 90% VEGETATED ALL ESC DEVICES SHALL BE REMOVED
AND ANY DISTURBED AREAS SHALL BE RESTORED

NOTE

- 1) *The Land Disturbance Plans indicates the Final placement of erosion control devices. The contractor(s) may proceed with construction prior to the final placement of these devices by providing additional devices to control erosion on their items of work. These devices shall be maintained until the final devices are in place.*
- 2) *Per Unified Ordinance Section 14.090.B.2. All portions of the site not covered with paving or buildings shall be landscaped. Open areas not covered with other materials shall be covered with sod. Ground cover shall be utilized on all slopes in excess of 3:1 slope.*

ONCE SITE IS 90% VEGETATED ALL ESC
DEVICES SHALL BE REMOVED AND ANY
DISTURBED AREAS SHALL BE RESTORED

SEED AND MULCH NOTES:

Seeding shall be done before the proposed seedbed becomes eroded, crusted over, or dried out and shall not be done when the ground is frozen, or covered with snow. The seed shall comply with the requirements of the Missouri Seed Law and the Federal Seed Act. Also, it shall contain no seed of any plant on the Federal Noxious Weed List. Other weed seeds shall not exceed one percent by weight of mix

Seed and Fertilizer Rate:

Mix 1 - Rye Grass / Blue Grass ----- 100 lbs. per Acre

Mix II - Tall Fescue / Blue Grass ----- 195 lbs. per Acre

Lime ----- 2000 lbs per Acre (50 lbs. per 1000 sq. ft.)

Fertilizer -----800 to 1200 lbs per

During the dates December 15th through May 31 ALL lime fertilizer, seed and mulch shall be applied to finished slopes of disturbed areas. During the months of June, July, October and November 1st through December 15th, lime fertilizer, seed and mulch shall be applied at the following rates:

Lime = 100% of specified quantity

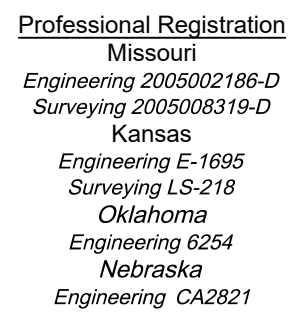
Fertilizer – 75% of the specified quantity

Seed - 50% of the specified quantity

Mulch - 100% of the specified quantity

Mulch shall be Vegetative type, cereal straw from stalks of oats, rye, or barley, or approved equal. The straw shall be free of prohibited weed seed and relatively free of all other noxious and undesirable seed. Mulch shall be applied at the rate of 2 tons per acre, (70 to 90 lbs per 1000 sq. ft.). Mulch shall be embedded by a mulch anchoring tool or disk **"AS BUILT"** and shall have flat serrated disks spaced not more than 10 inches apart and cleaning scrapers shall be provided

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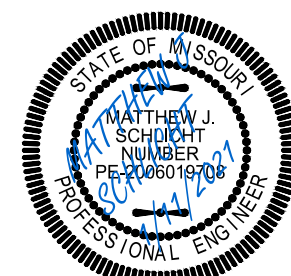


Napa Valley 4th Plat
Lee's Summit, Jackson County, Missouri

Project: _____
NAPA VALLEY LSMO

Issue Date: _____
July 13, 2018

ESC Phase 3 Plan
Street, Stormwater, Master Drainage Plan,
and Erosion and Sediment Control Plans
for:
Napa Valley 4th Plat
Lee's Summit, Jackson County, Missouri

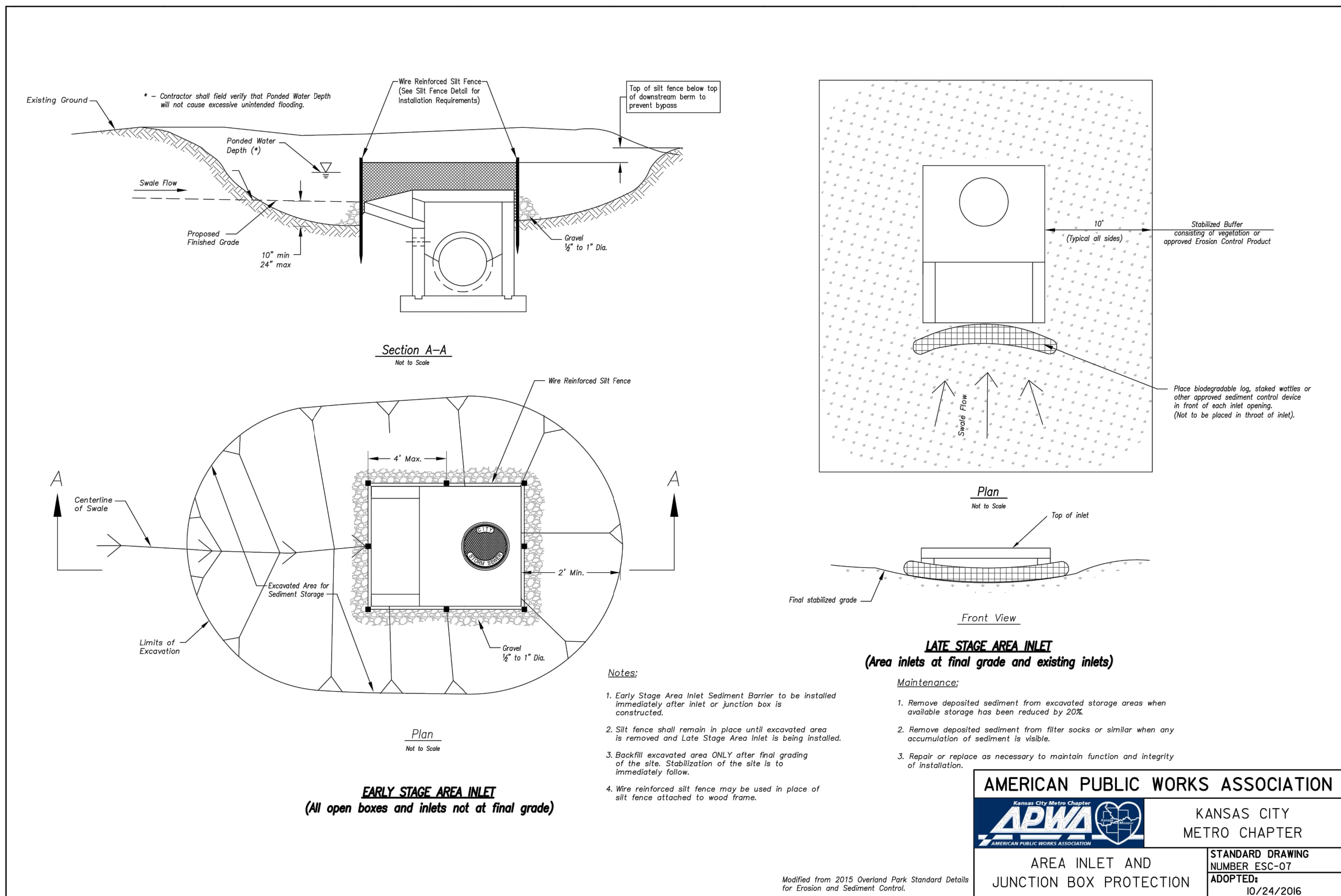
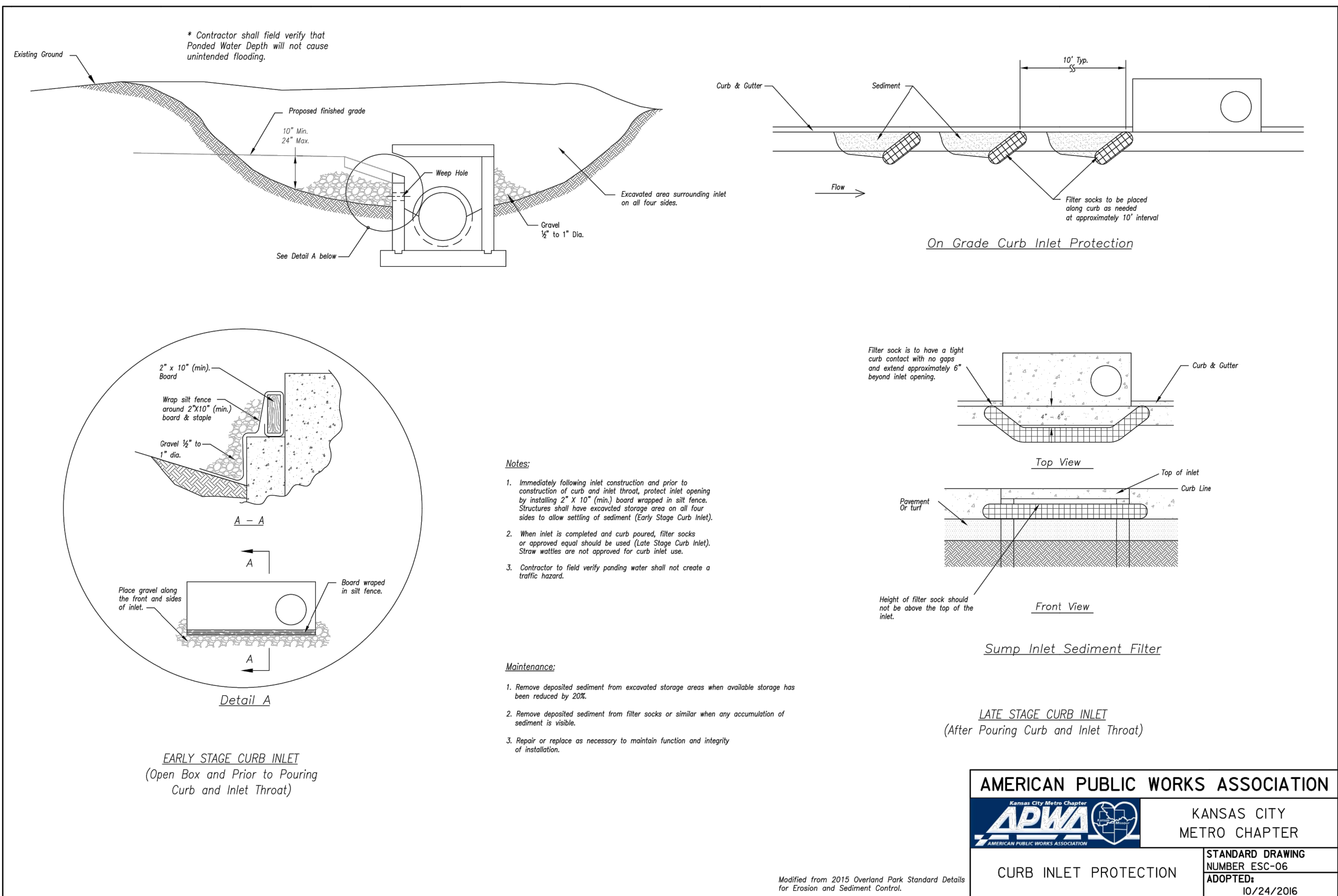
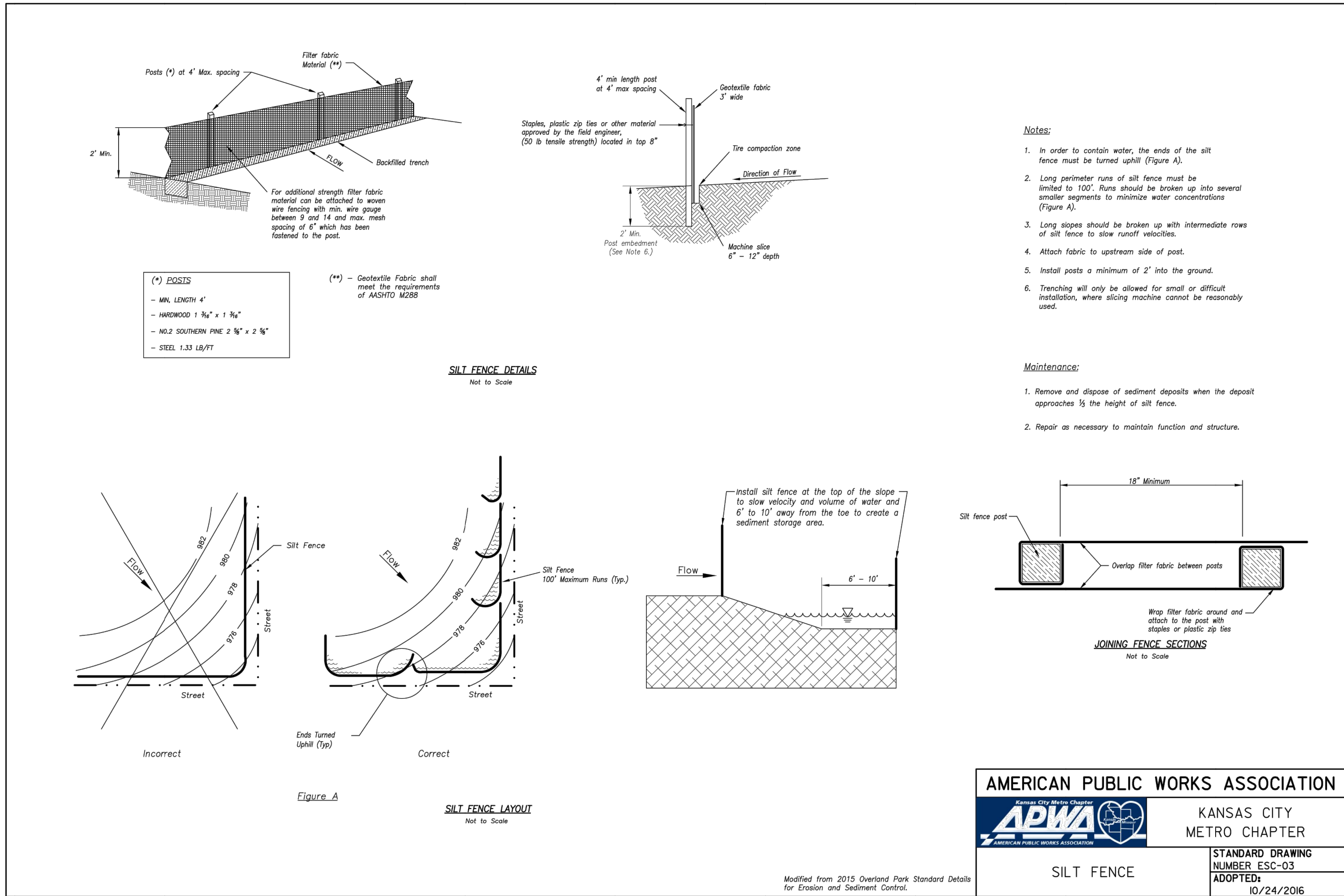
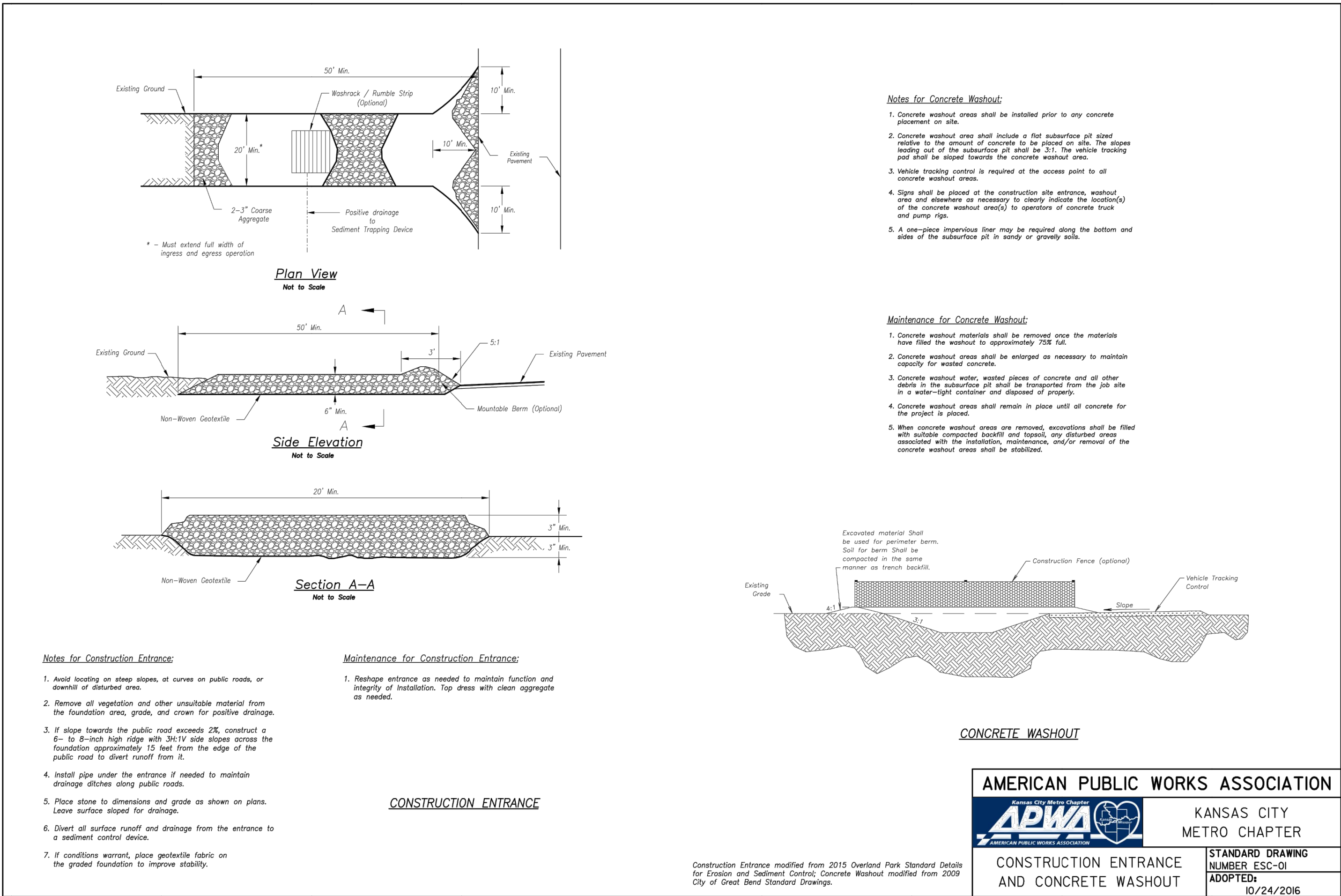


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NE PE E-14335

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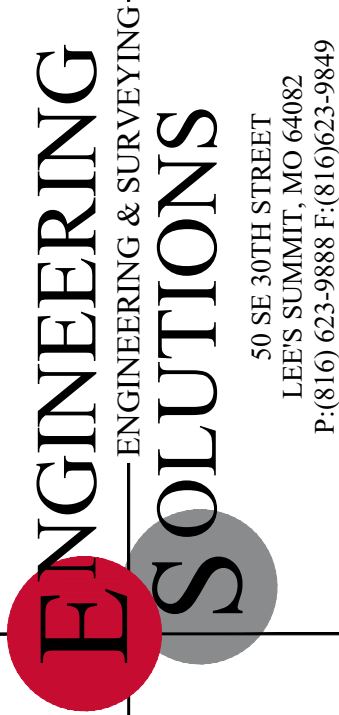
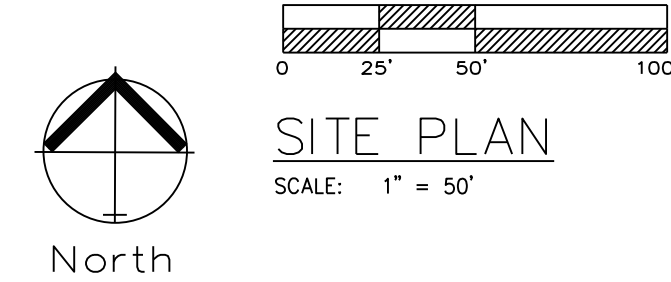
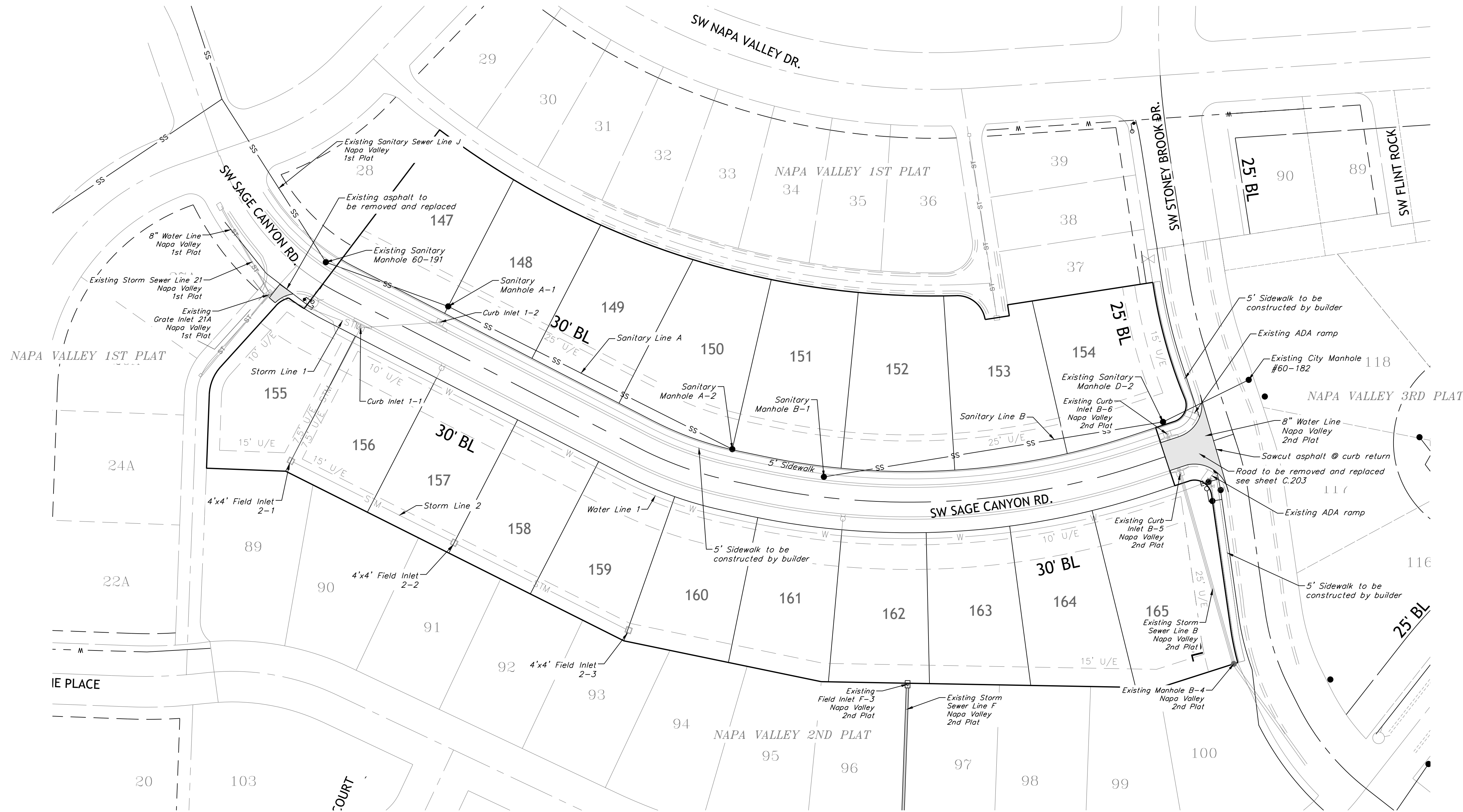
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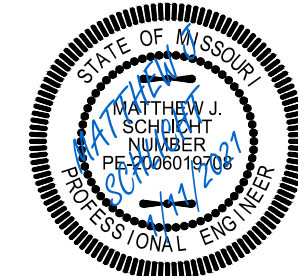


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Napa Valley 4th Plat
Lee's Summit, Jackson County, Missouri

Project: NAPA VALLEY L.S.MO
Issue Date: July 13, 2018

SITE PLAN
Street, Stormwater, Master Drainage Plan,
and Erosion and Sediment Control Plans
for:
Napa Valley 4th Plat
Lee's Summit, Jackson County, Missouri



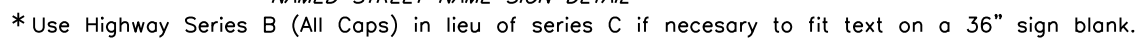
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REVISIONS
1/11/2021 As-Built

C.100

"AS-BUILT"

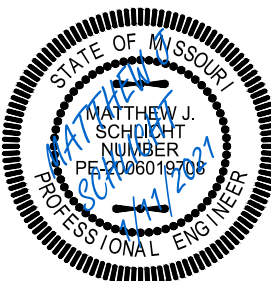
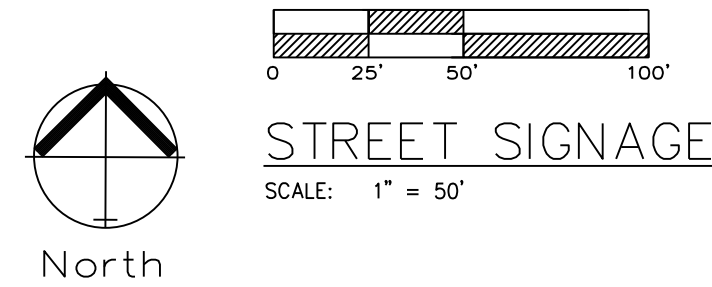
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* The height to the bottom of a sign when it is located in a pedestrian walkway or extends into a walkway shall be a minimum of 80 inches above the walkway.

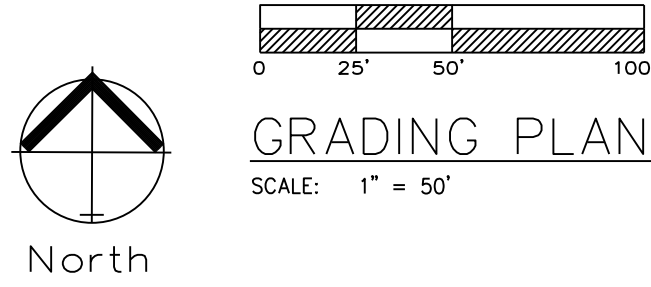


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Notes

1. Contractor is responsible for verifying all existing utility locations prior to excavation.
2. There are no known natural or artificial water storage detention areas, or wetlands in the area designated for construction.
3. No part of the project lies within the 100 year flood plain.
4. All erosion and sediment control measures need to be implemented prior to construction.
5. Additional erosion control may be required by the City Engineer, Design Engineer or Owner, at any time problematic areas are noted in the field or existing measures are found to be ineffective.
6. Soil Stabilization of disturbed areas shall be completed within 14 days of construction inactivity.
7. Contractor responsible for all density testing of roadway subgrade and granular base.



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Master Drainage Plan 1 of 3:

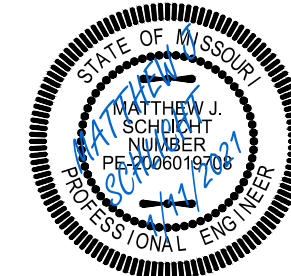
Grading Plan
Street, Stormwater, Master Drainage Plan,
and Erosion and Sediment Control Plans
for:
Napa Valley 4th Plat
Lee's Summit, Jackson County, Missouri

Project:
NAPA VALLEY LS MO

Issue Date:
July 13, 2018

Napa Valley 4th Plat
Lee's Summit, Jackson County, Missouri

Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005008319-D
Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821



Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

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1/11/2021 As-Built





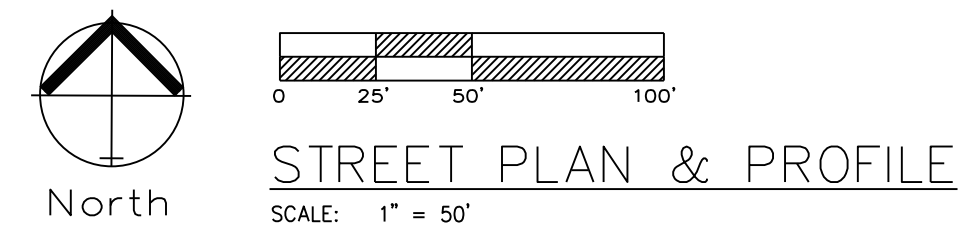
- Notes:**
1. Typical Swale Section 1-1 to be graded at the face of all field inlets with openings E & W. Transition swale section to finish grade per Grading Plan.
 2. Swales shall be constructed during this phase of construction.

PIPE 100-YEAR CALCS. EX. LINE F/B/T LOTS 96 & 97																						
D.S. Line	U.S. Line	LineLength (ft)	Incr.Area (ac)	TotalArea (ac)	RunoffCoeff. (C)	IncrC x A	TotalC x A	InletTime (min)	TimeConc (min)	RnfallTn (in/hr)	TotalRunoff (cfs)	TotalFlow (cfs)	CapacFull (cfs)	Veloc (ft/s)	PipeSize (in)	PipeSlope (%)	Inv ElevDn (ft)	Inv ElevUp (ft)	HGLDn (ft)	HGLUp (ft)	Grnd/RimDn (ft)	Grnd/RimUp (ft)
F-1	F-2	63.34	0.49	1.23	0.51	0.25	0.63	5	5.7	10.7	6.71	6.71	29.09	2.14	24	0.98	1010.69	1011.31	1013.66	1013.69	1015.24	1015.86
F-2	F-3	143.26	0.74	0.74	0.51	0.38	0.38	5	5	11	4.15	4.15	15.85	3.41	18	1.35	1011.61	1013.54	1013.77	1014.32	1015.86	1017.89

Reference Information Ex. Storm Sewer:

1. The existing storm sewer system b/t Lots 96 and 97 consisting of 143.26 LF of 18" HDPE @ 1.35% conveys the 100-yr peak flow of 4.15 cfs in the system with an upstream HGL = 1014.32 and a downstream HGL = 1013.66 from the original design.
2. The tributary area to curb inlet F-1 = 0.49 acres was taken from the Napa Valley 2nd Plat Drainage Plan.

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Surveying 2005008319-D
Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Napa Valley 4th Plat
Lee's Summit, Jackson County, Missouri

Project: NAPA VALLEY LSMO

Issue Date: July 13, 2018

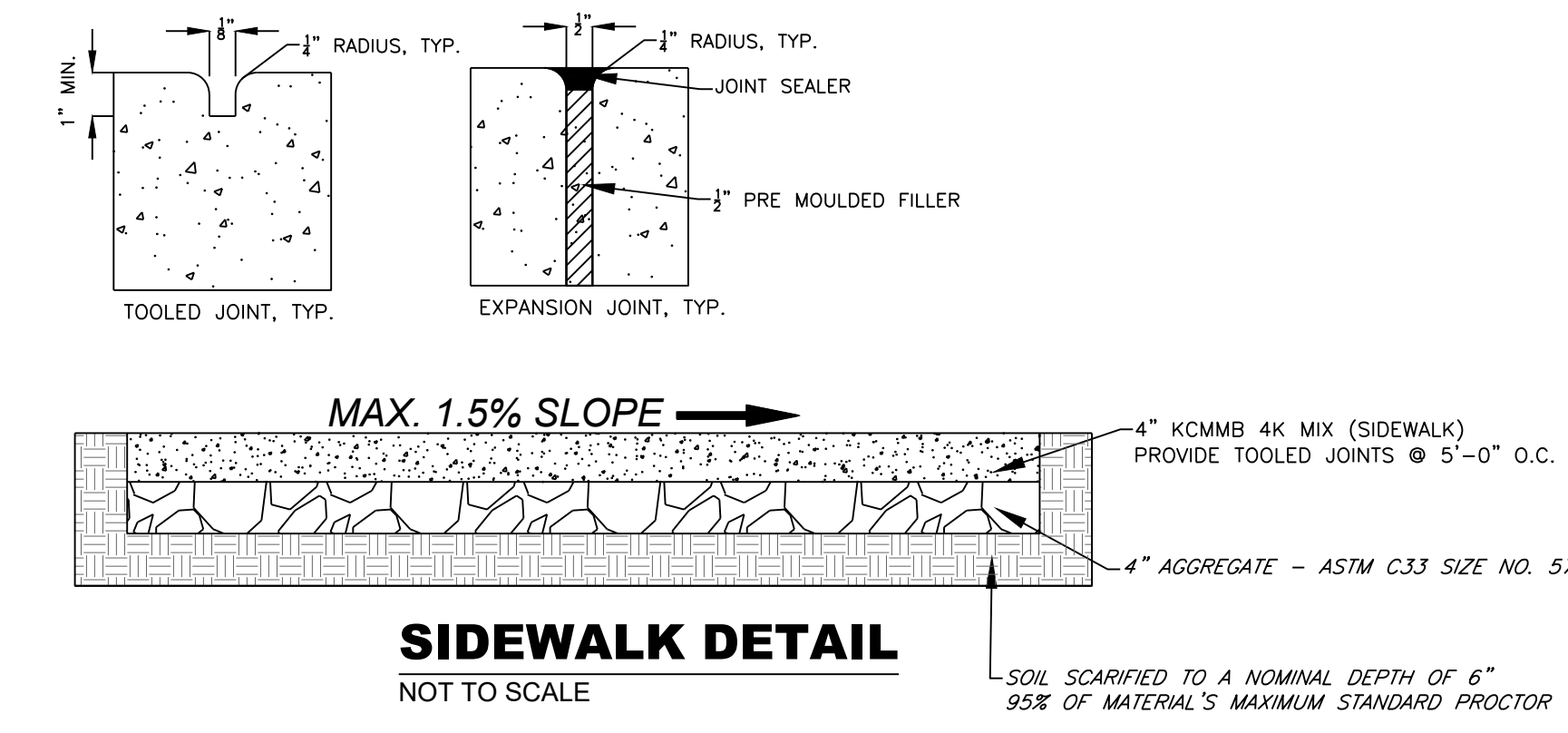
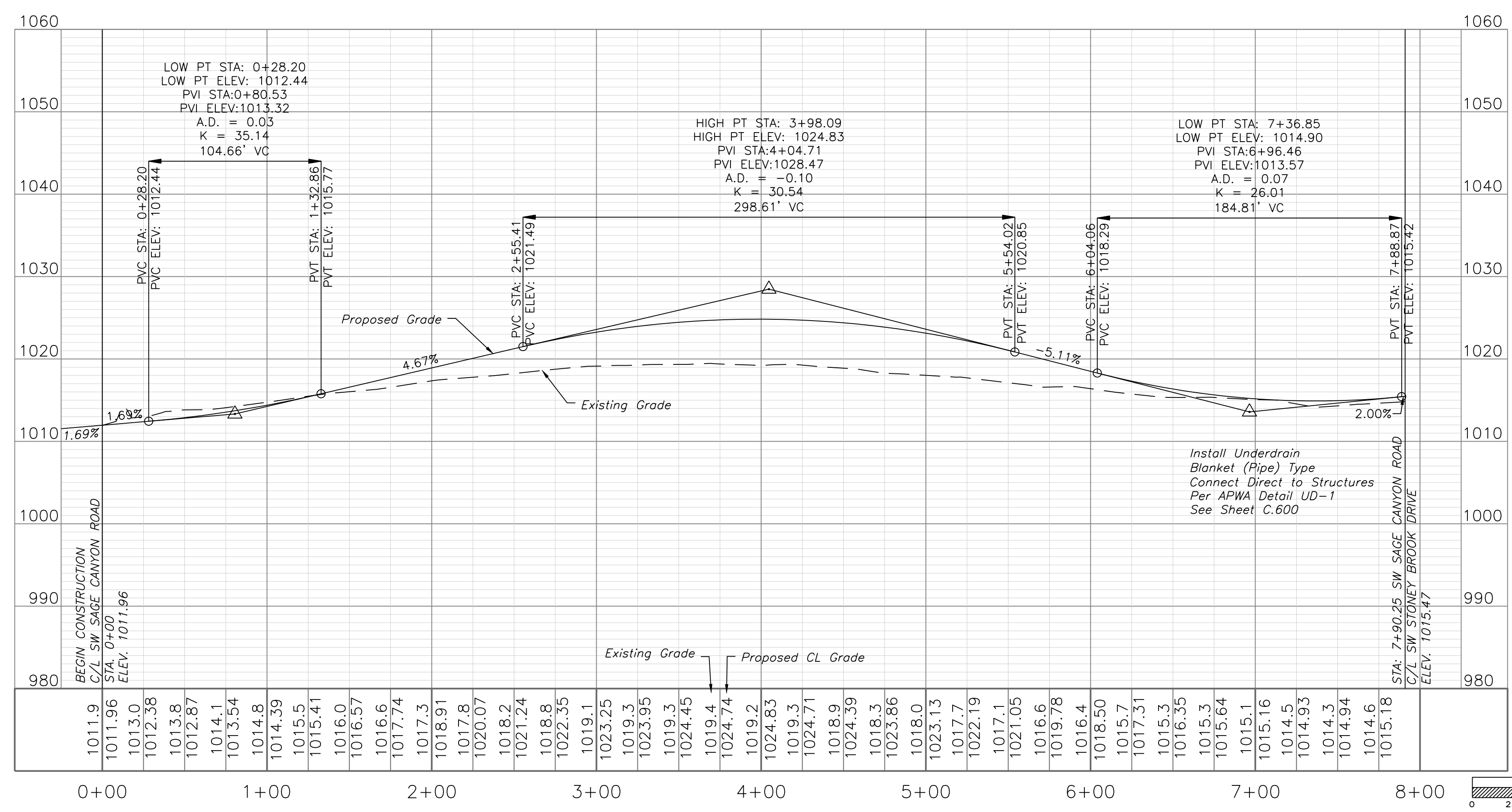
STREET PLAN & PROFILE
Street, Stormwater, Master Drainage Plan,
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for:
Napa Valley 4th Plat
Lee's Summit, Jackson County, Missouri

Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

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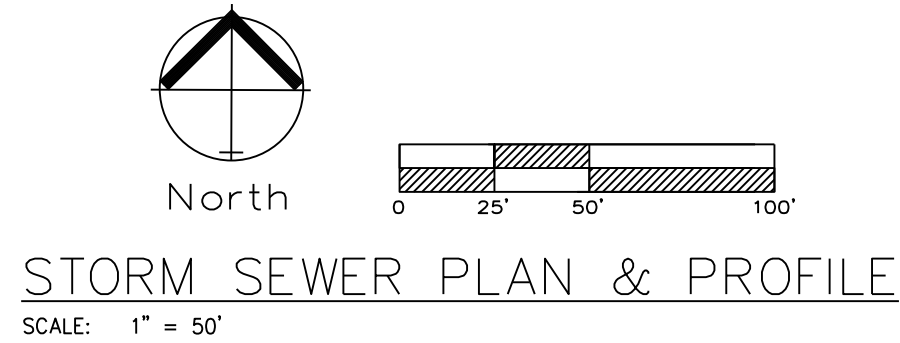
1/11/2021 As-Built

C.203

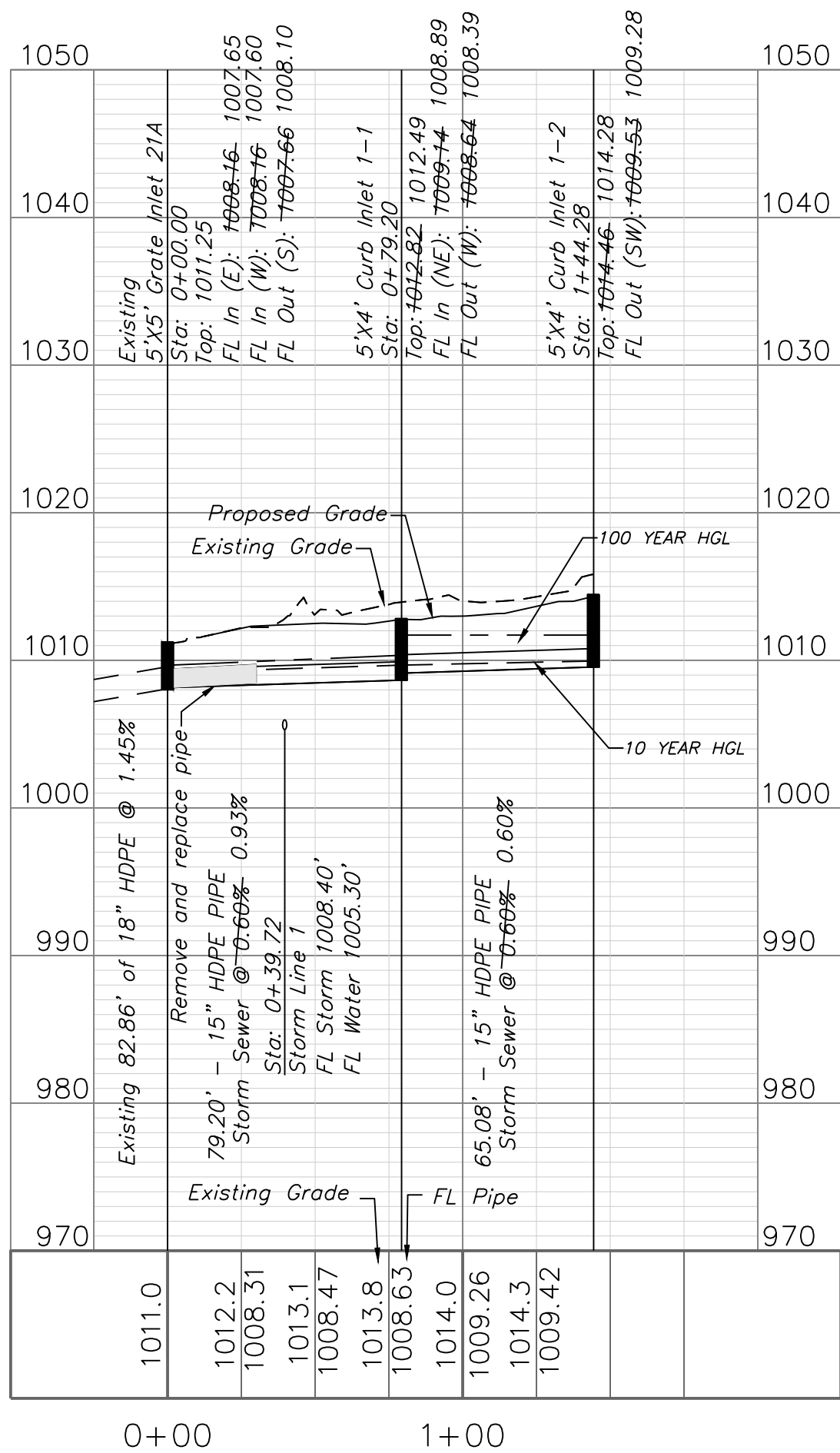


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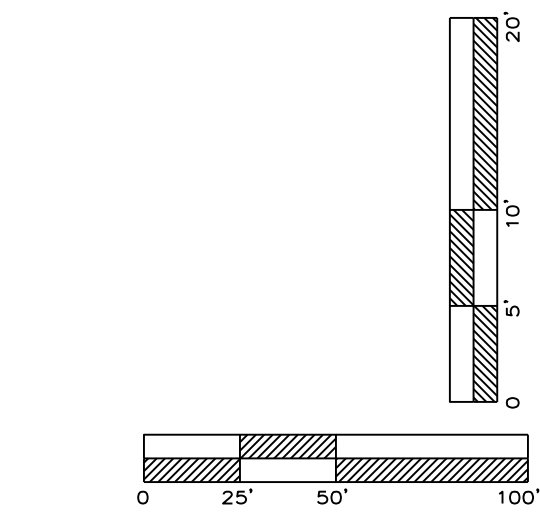
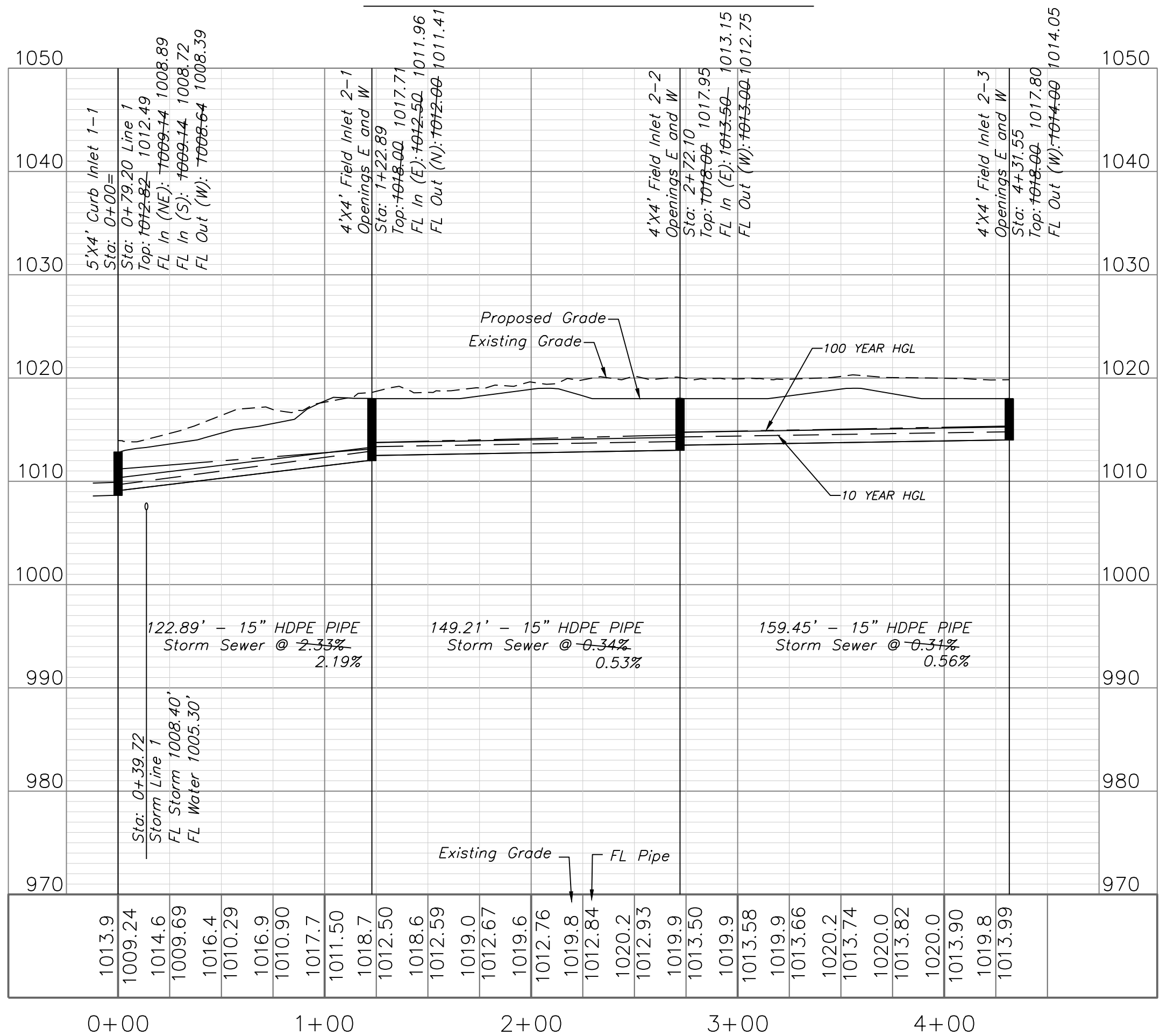




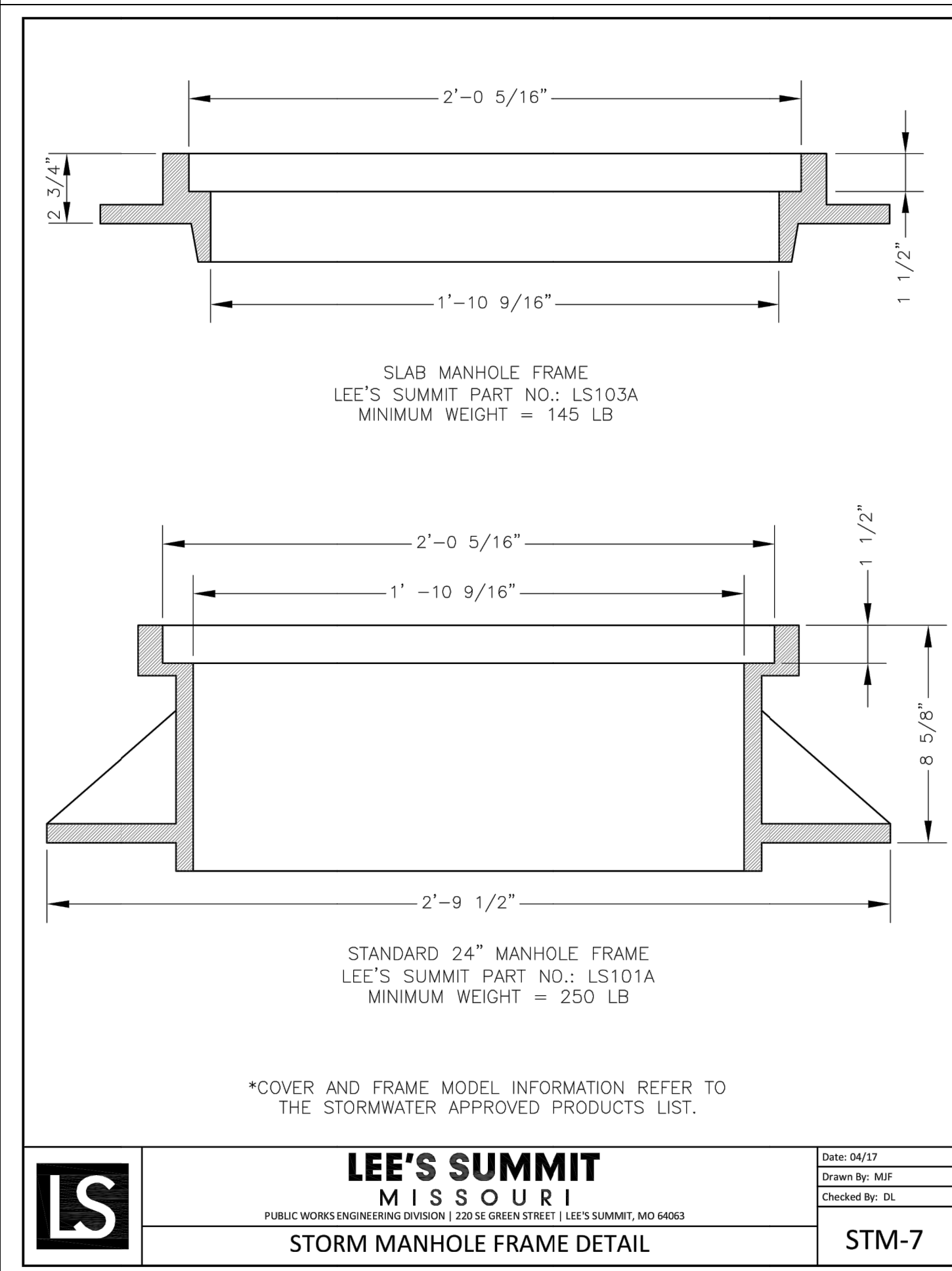
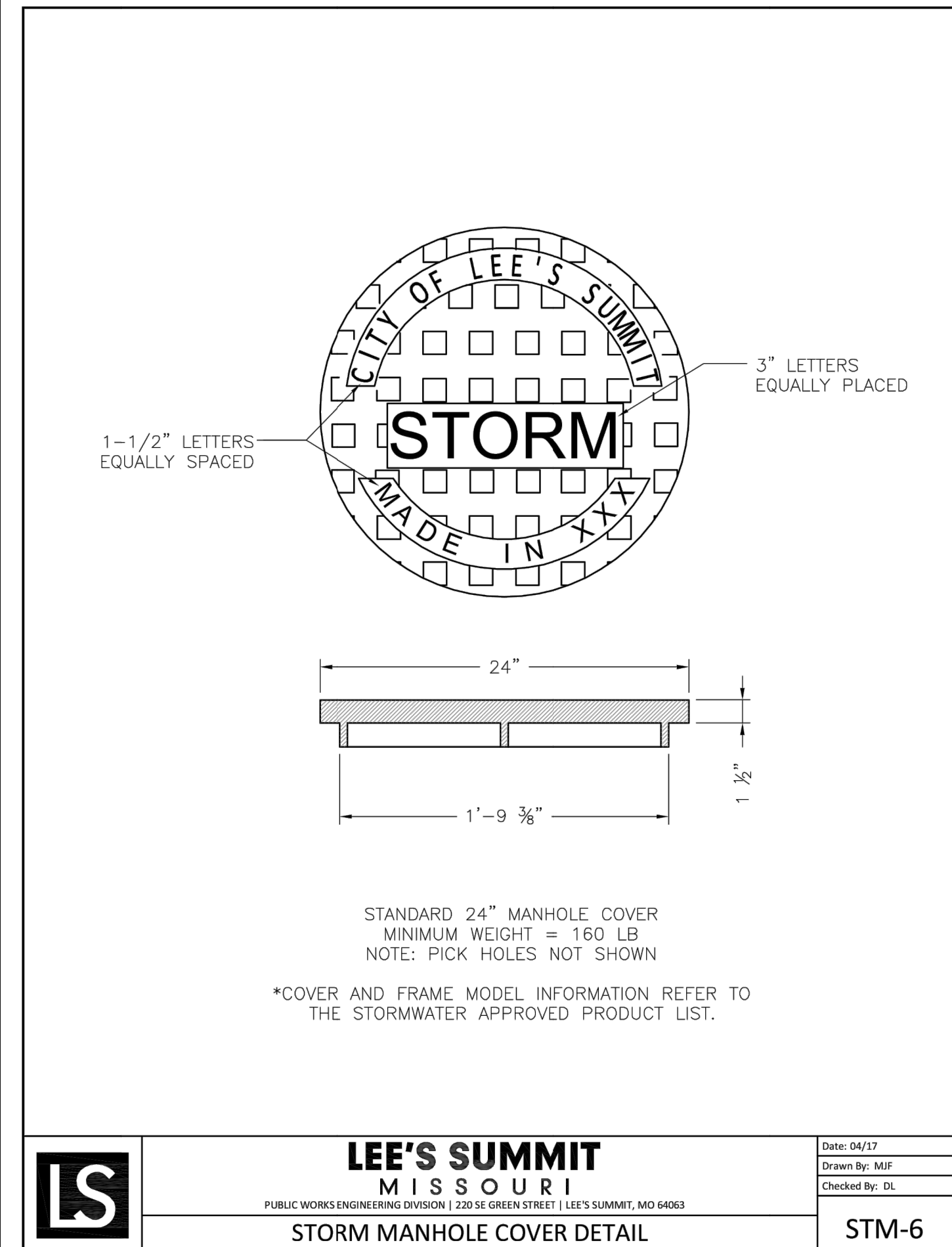
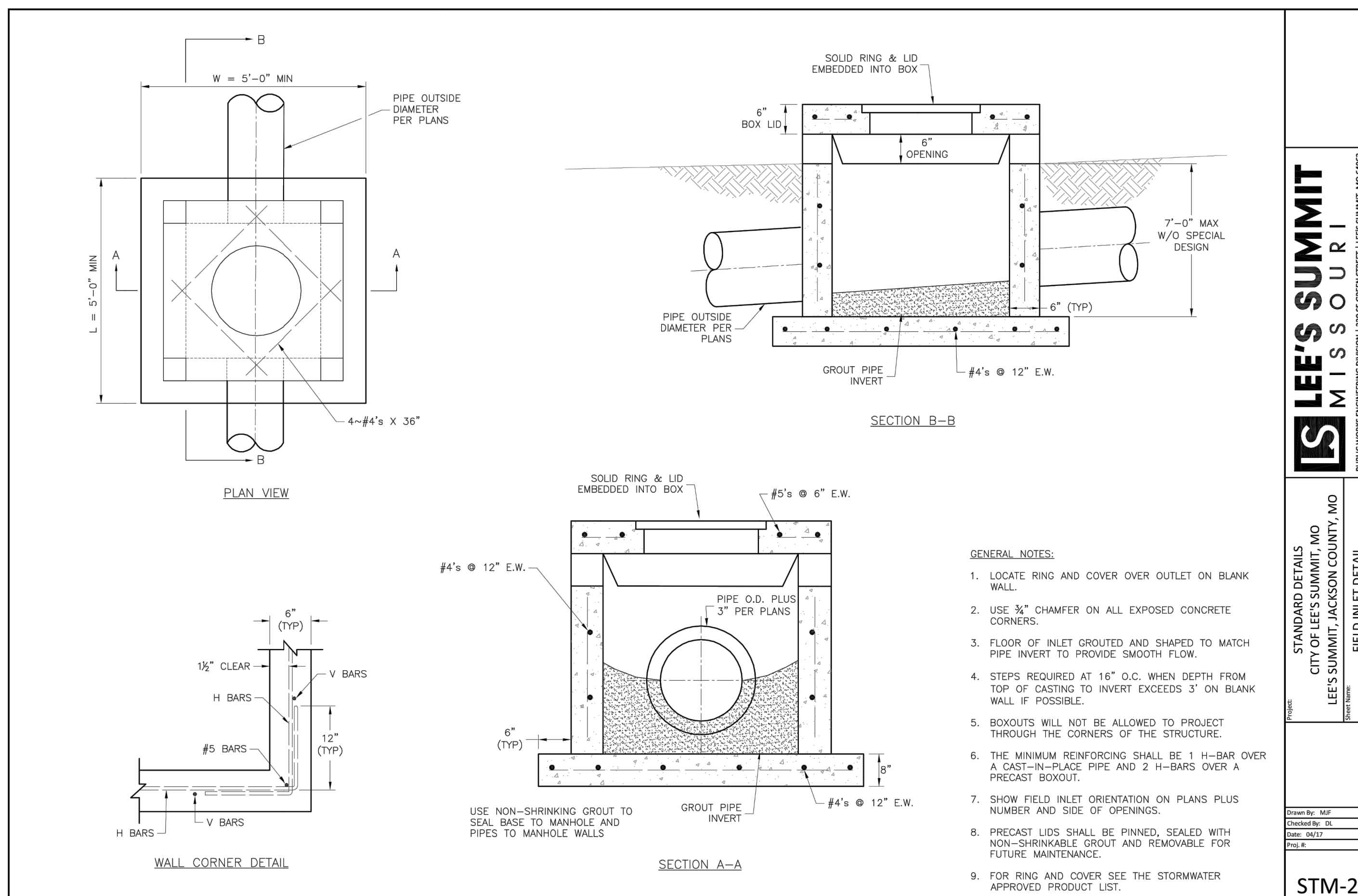
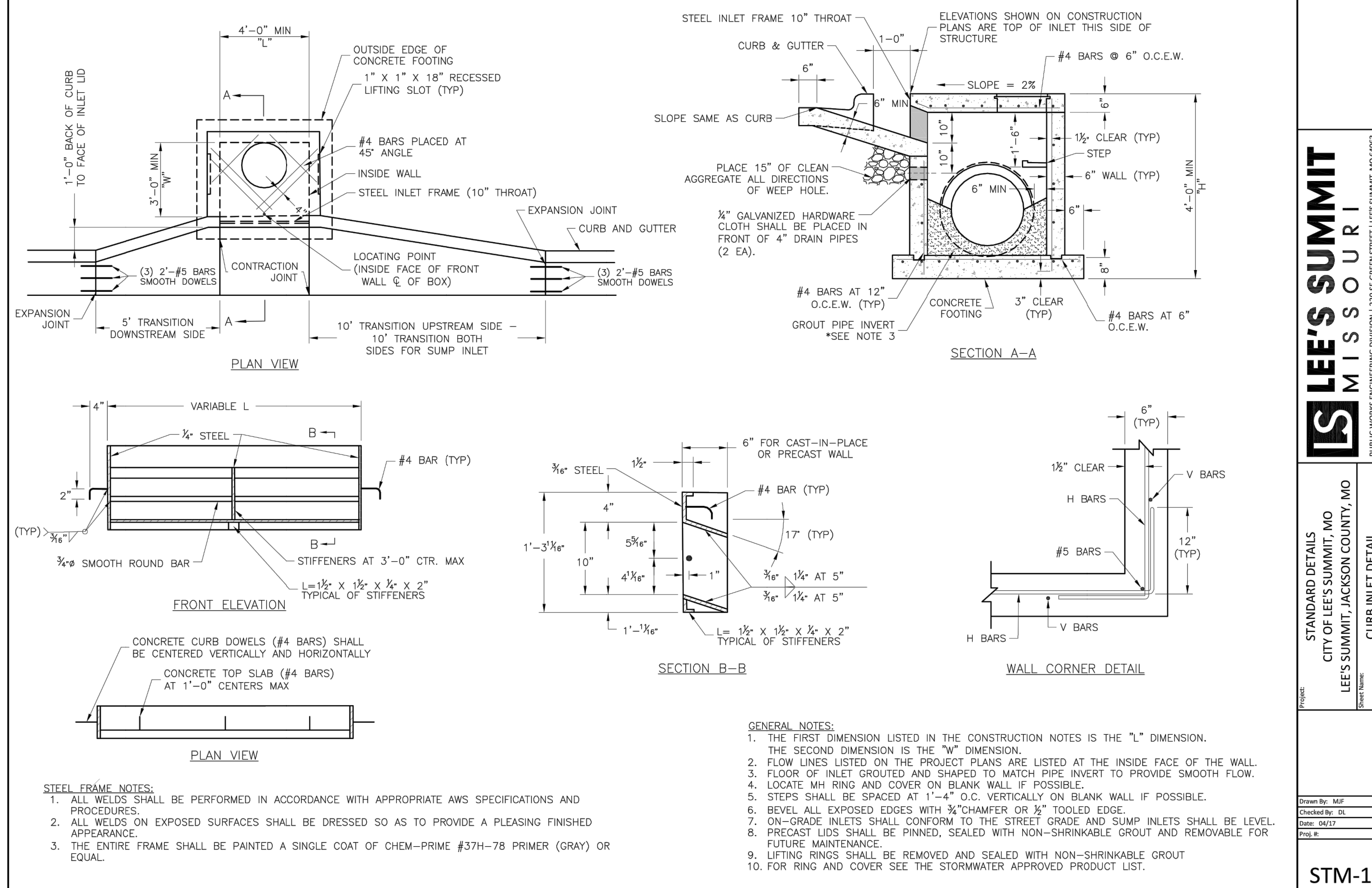
STORM LINE 1



STORM LINE 2



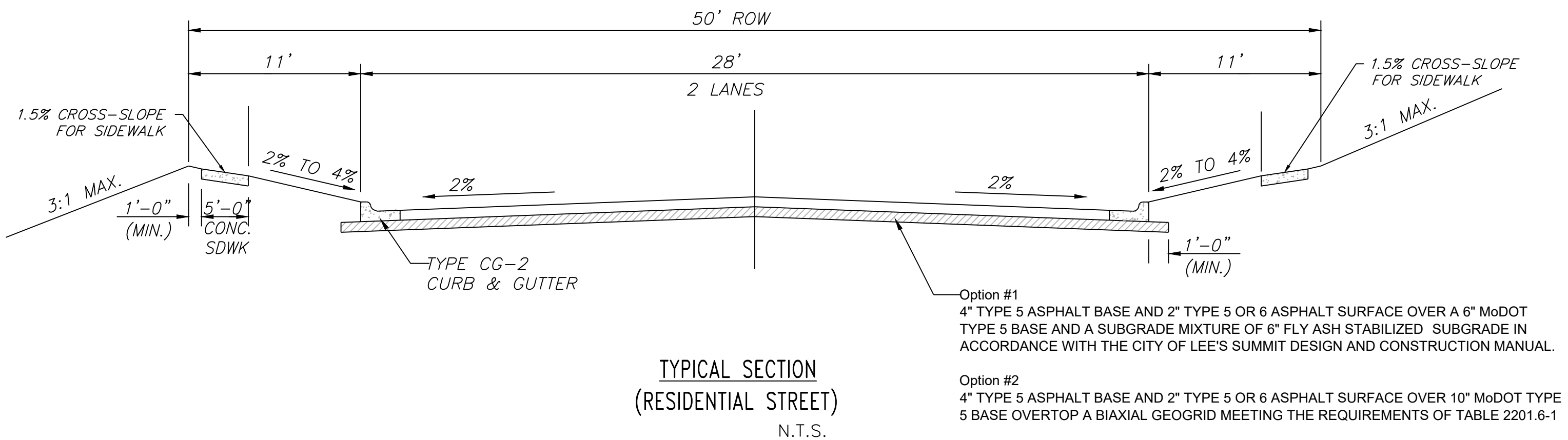
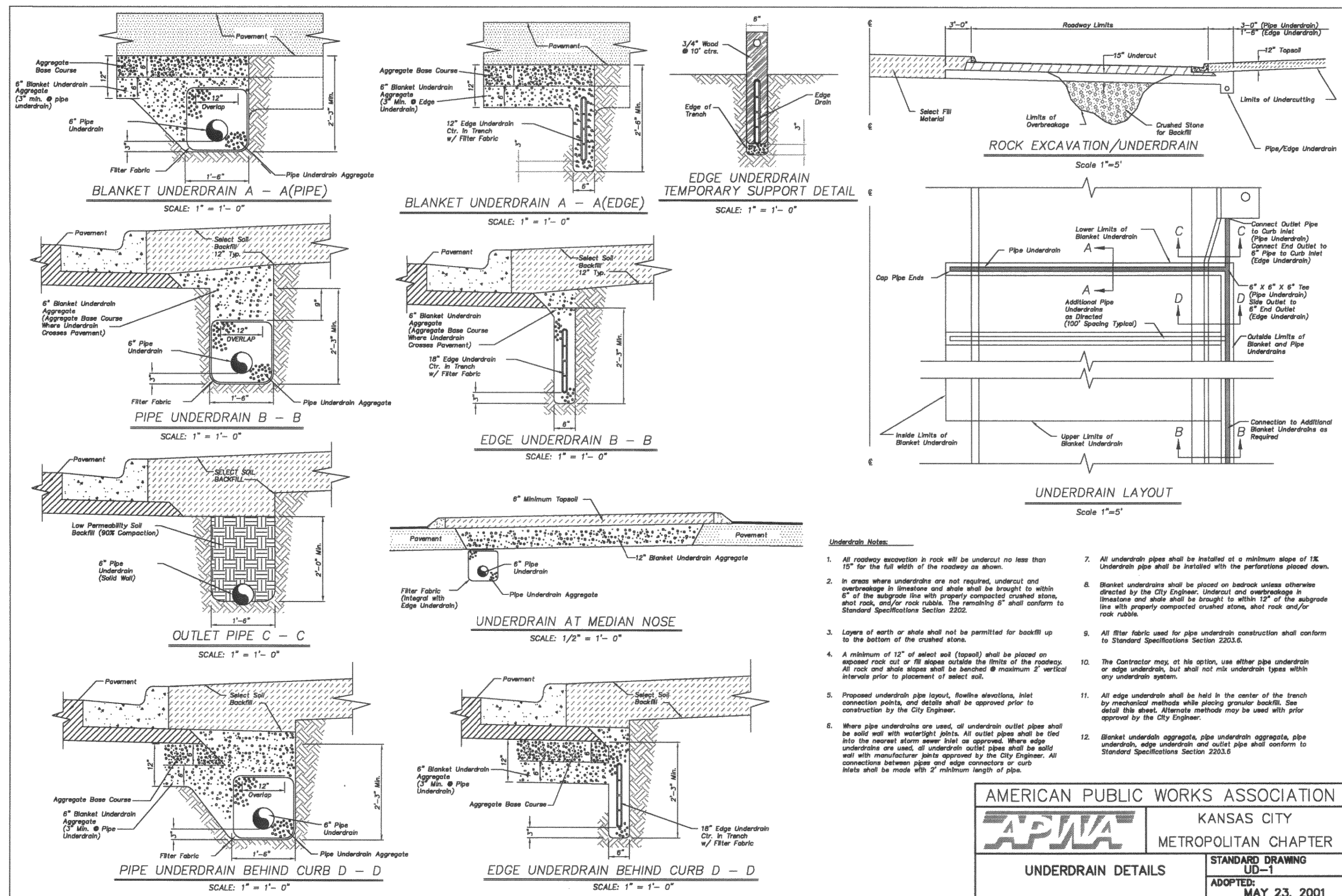
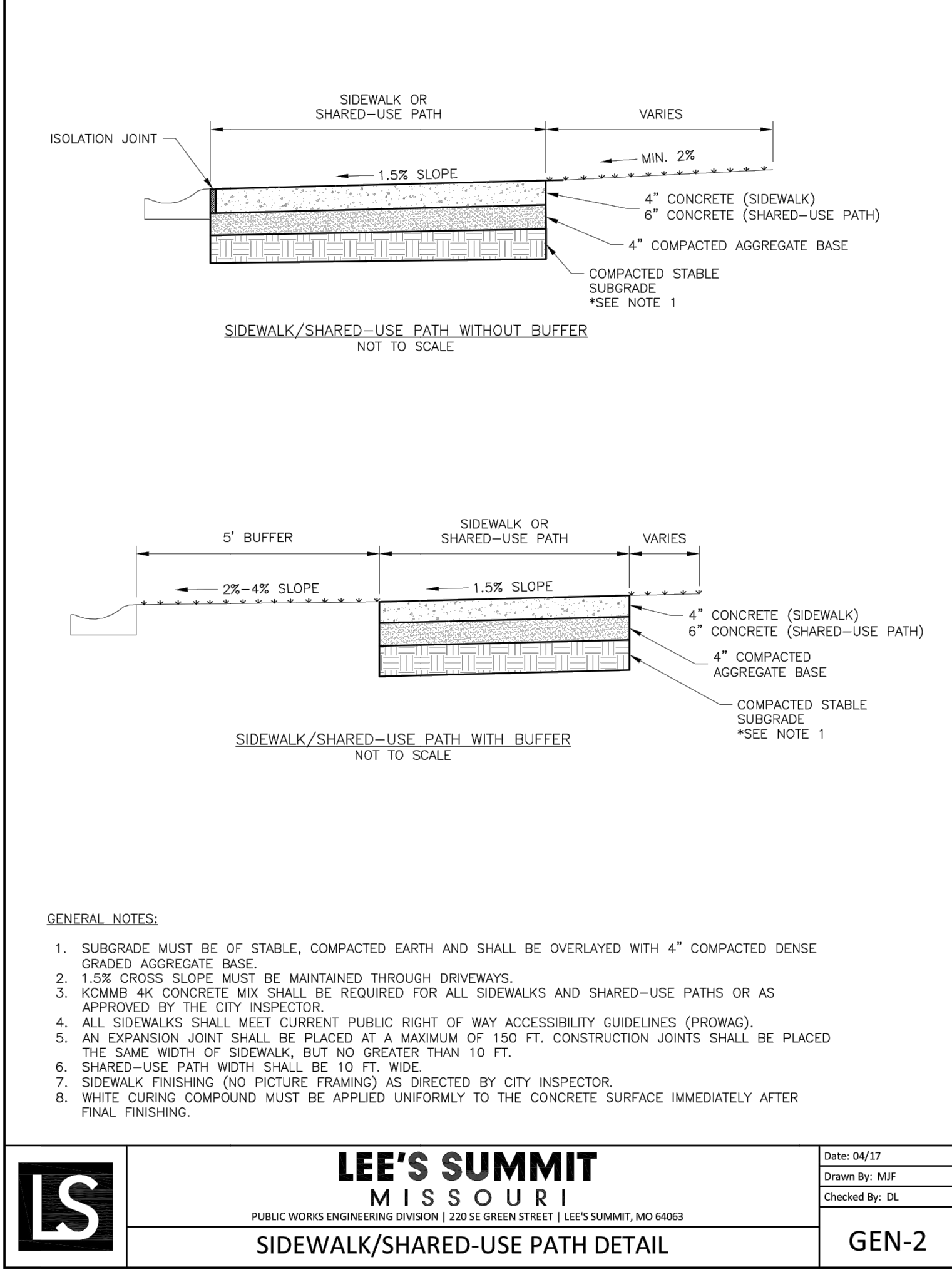
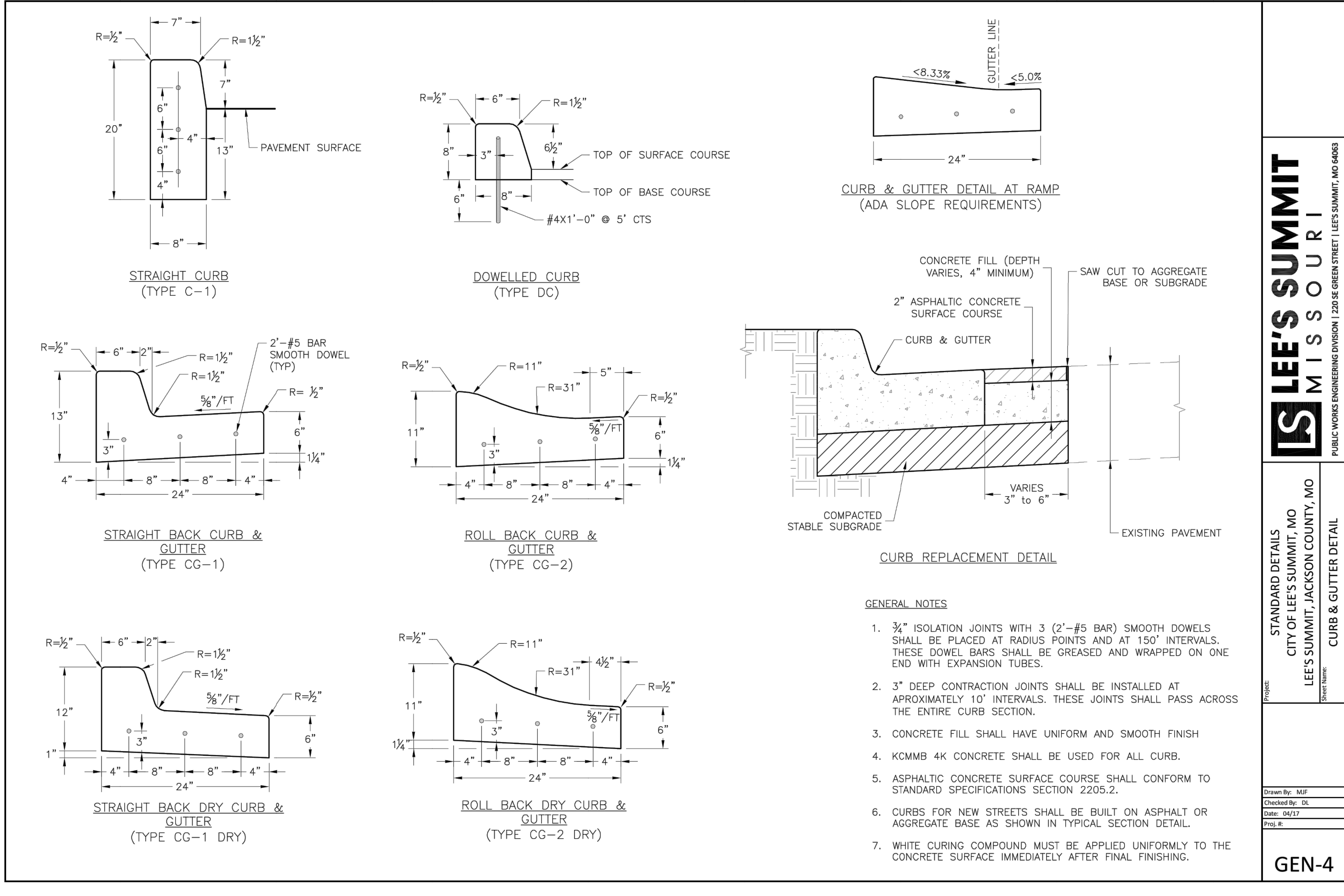
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ORDINANCE 5813.

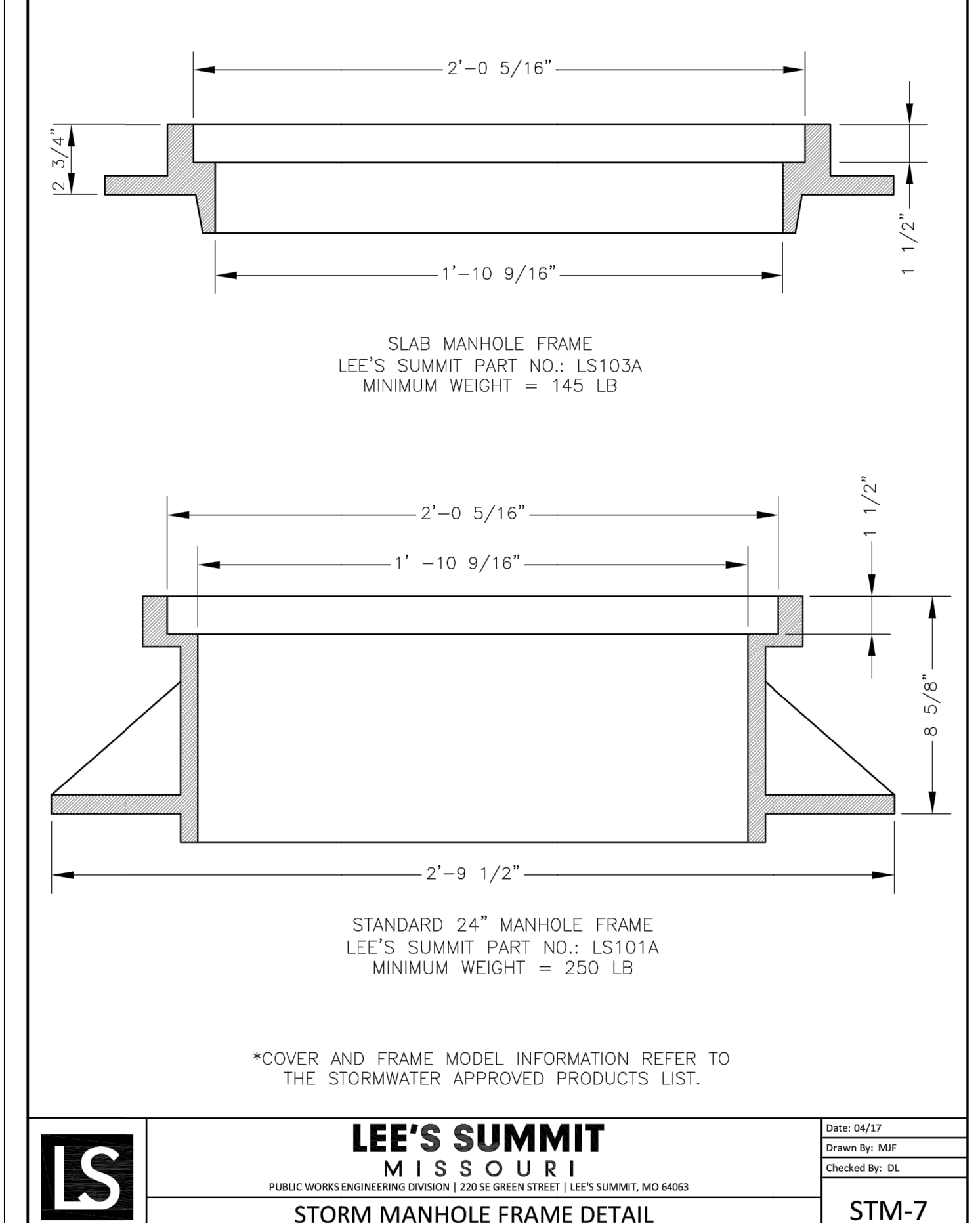
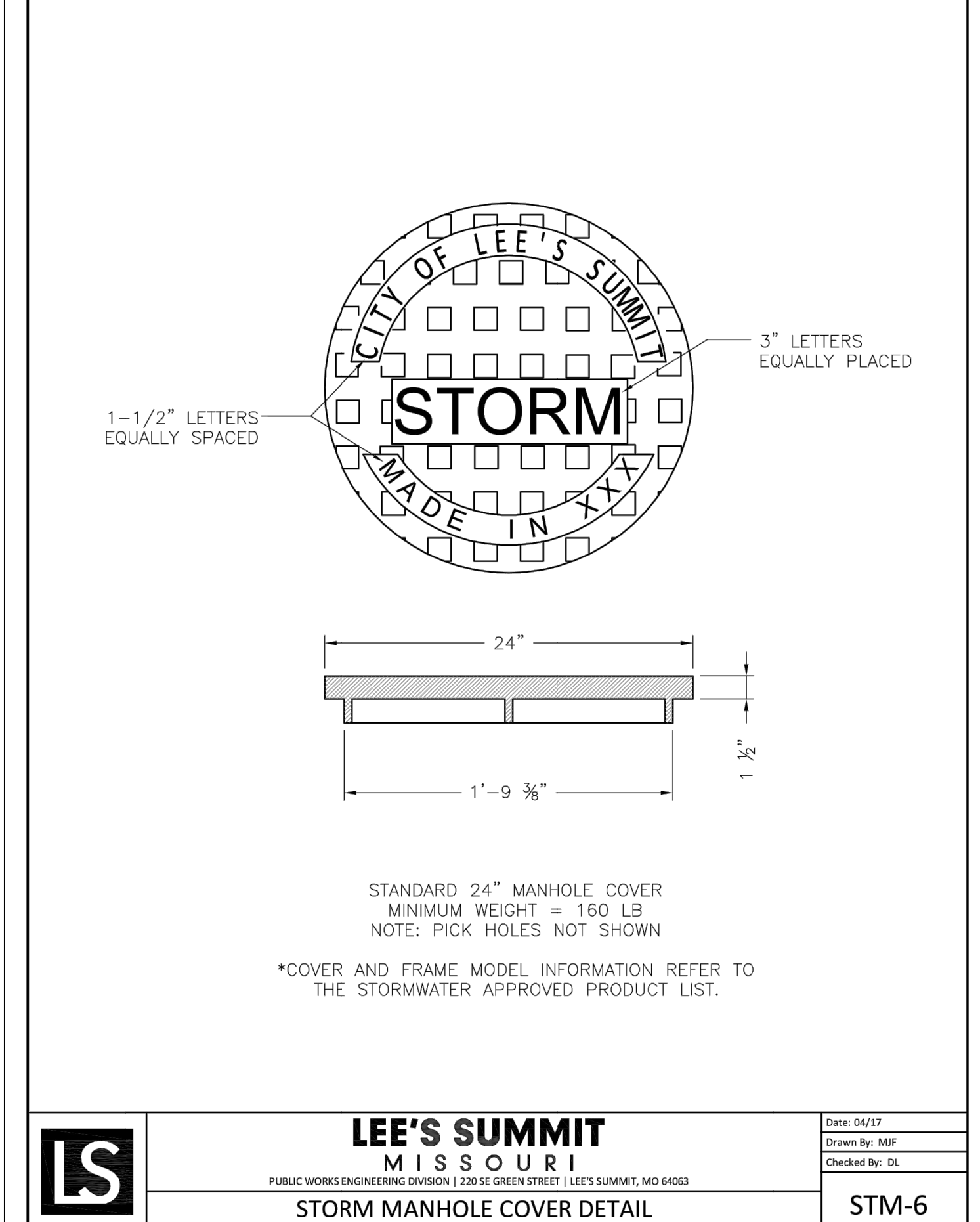
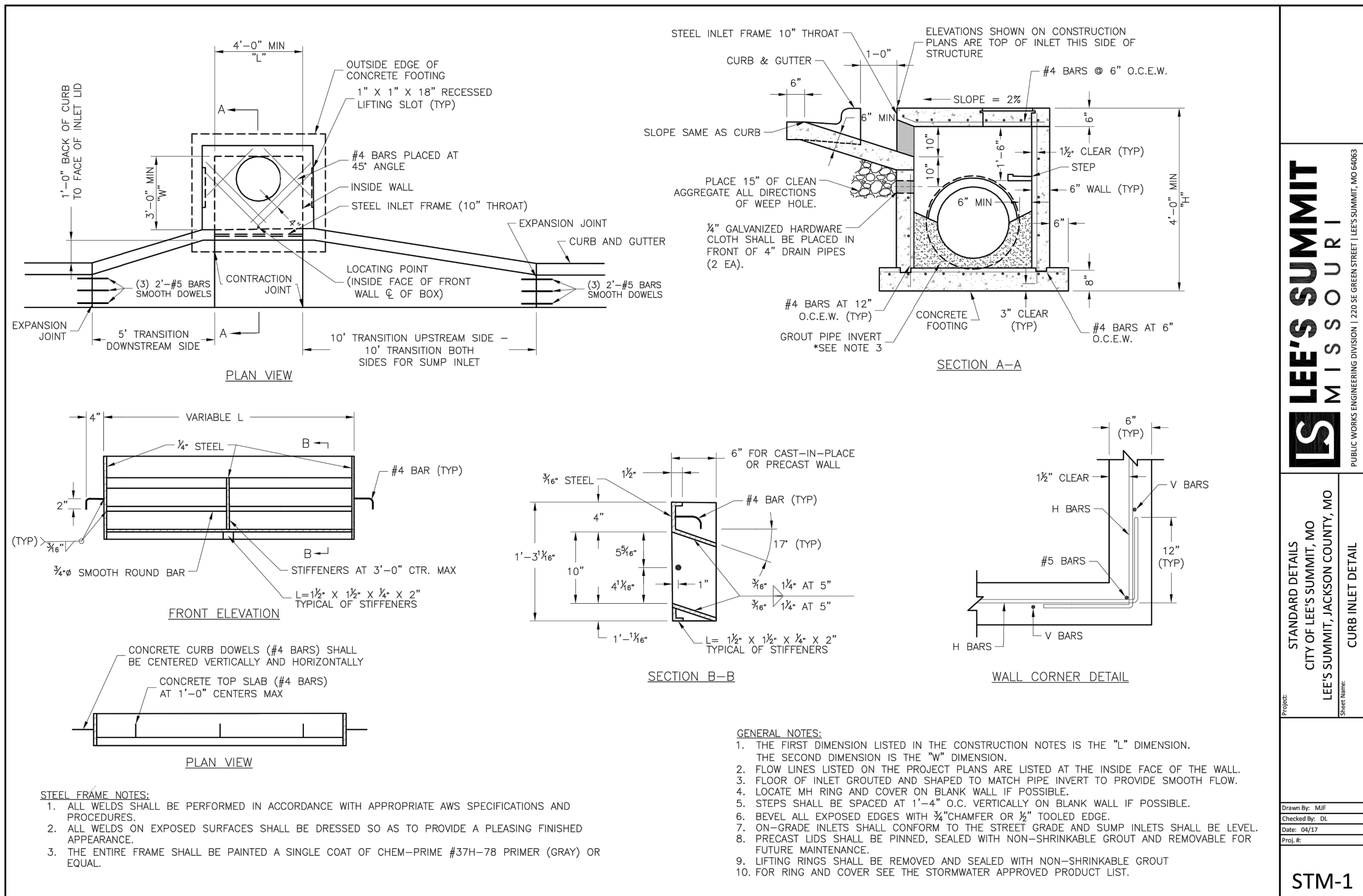
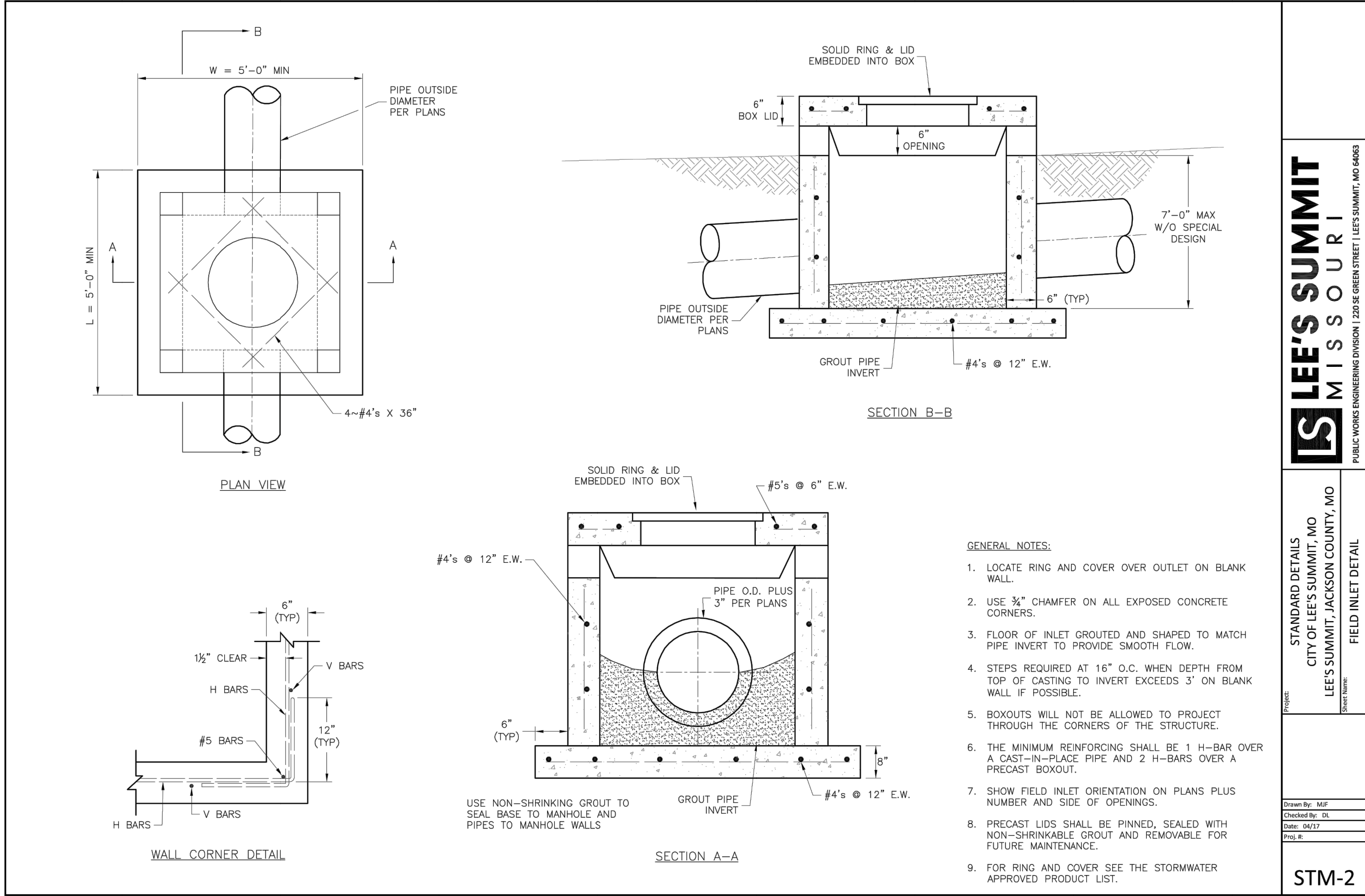
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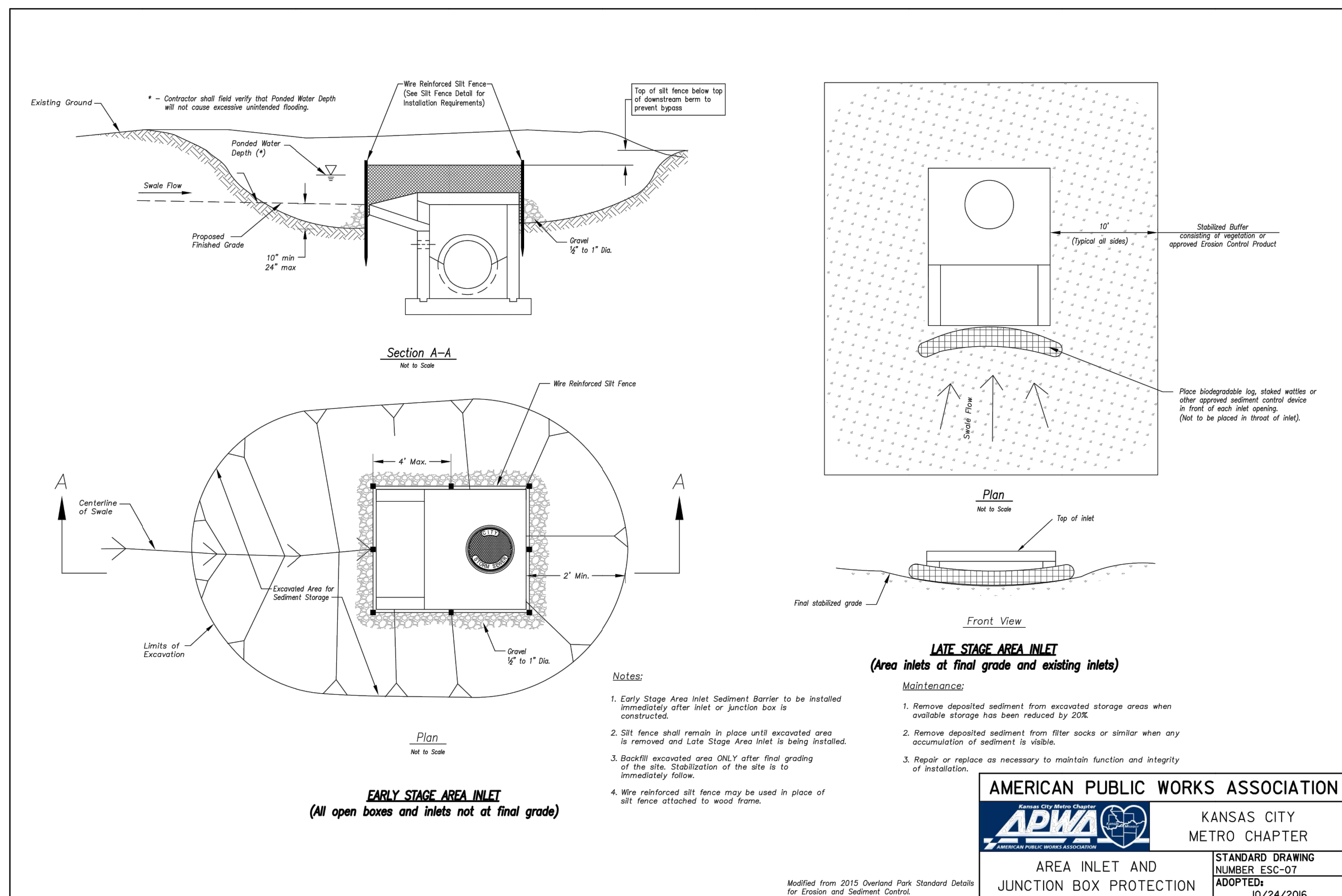
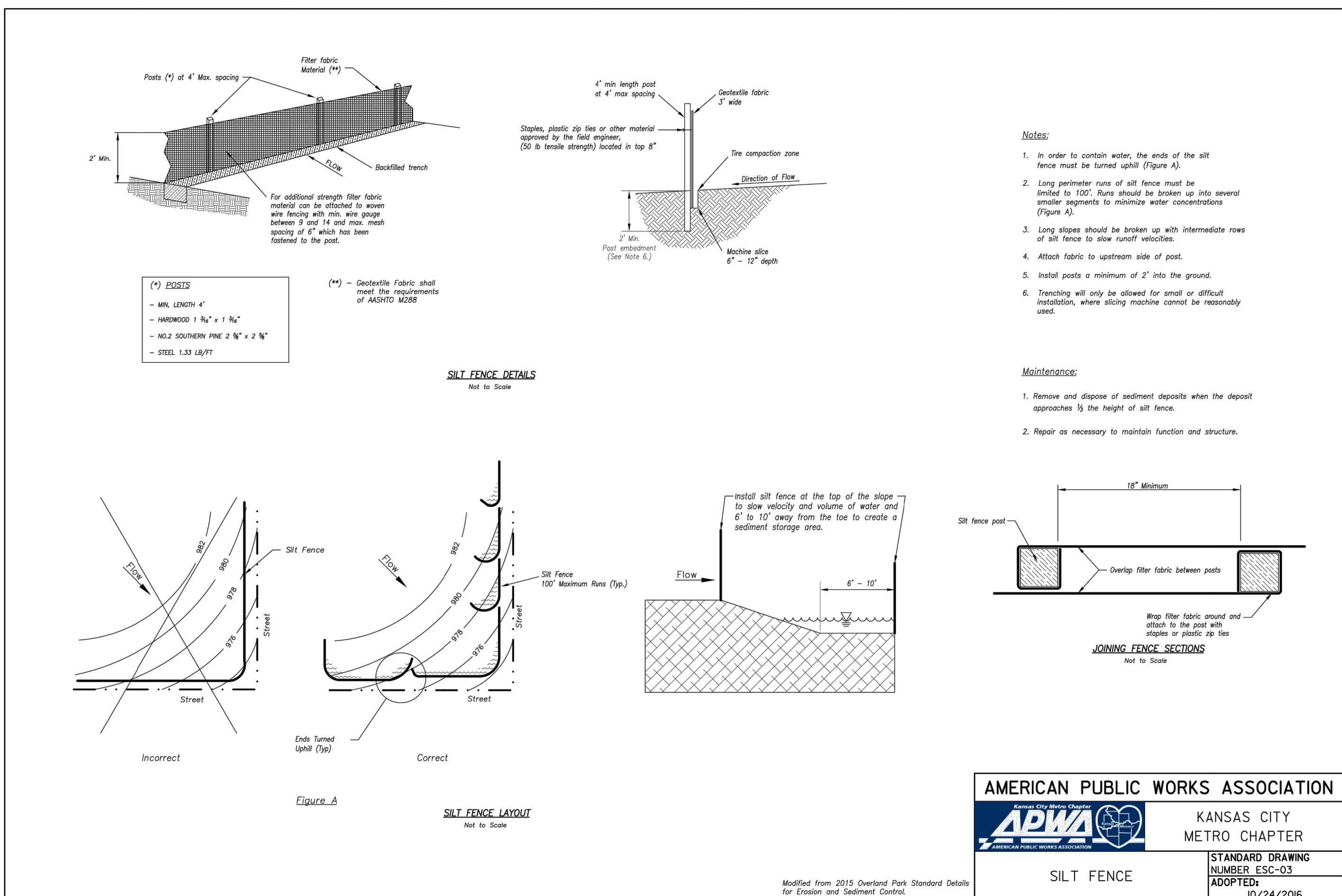
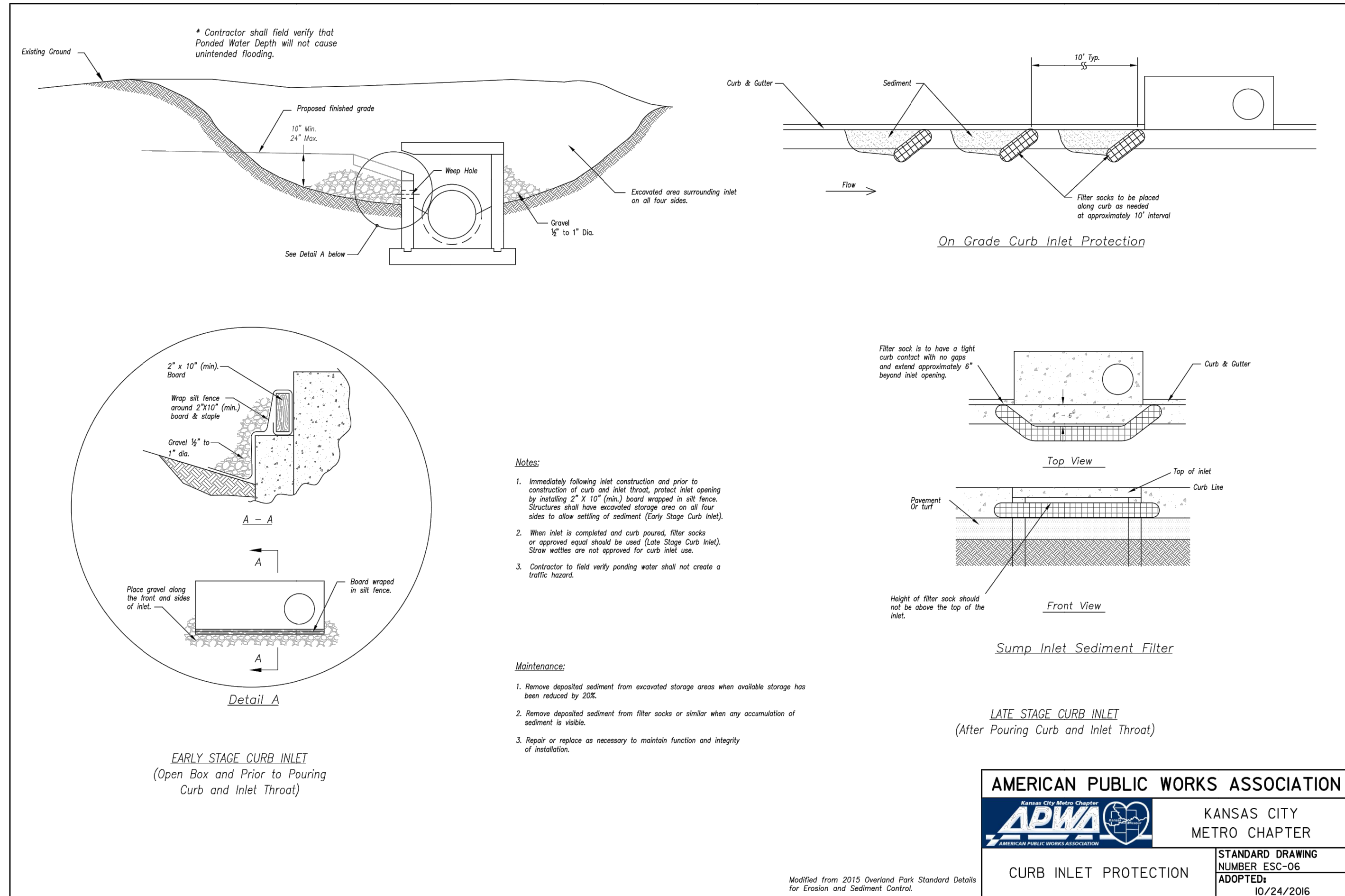
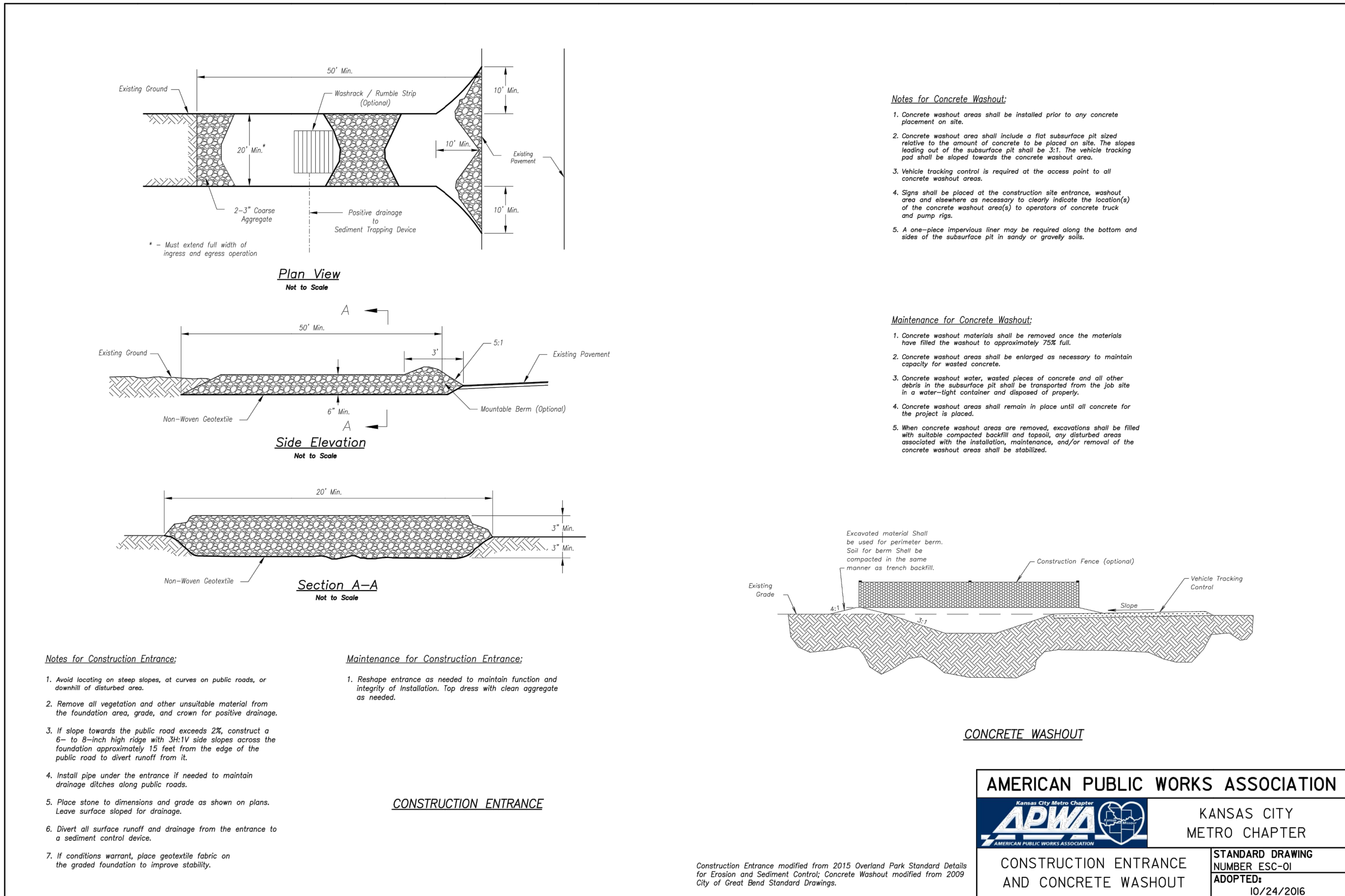
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