LOCATION SW1/4 **SECTION 16-47-31**

LOCATION MAP SCALE 1" = 2000 **BASIS OF BEARINGS** MISSOURI COORDINATI **SYSTEM 1983, WEST ZONE**

UTILITY CONTACTS:

MISSOURI DEPARTMENT OF TRANSPORTATION (MODOT) Steve Holloway 600 NE Colbern Road Lee's Summit, MO 64086

MISSOURI GAS ENERGY (MGE) **Brent Jones**

3025 SE Clover Drive Lee's Summit, MO 64082 (816) 399-9633 brent.jones@spireenergy.com

(816) 607-2186

KANSAS CITY POWER & LIGHT COMPANY (KCP&L) Ron Dejarnette 1300 SE Hamblin Road Lee's Summit, MO 64081

Office: (816) 347-4316 Cell: (816) 810-5234 ron.dejarnette@kcpl.com

CITY OF LEES SUMMIT PUBLIC WORKS Dena Mezger

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

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

COMCAST CABLE John Meadows 4700 Little Blue Parkway Independence, MO 64057 (816) 795-2257

CITY OF LEE'S SUMMIT WATER UTILITIES

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

EROSION AND SEDIMENT CONTROL PLAN CORNERSTONE AT BAILEY FARMS, FIRST PLAT

IN THE CITY OF LEE'S SUMMIT JACKSON COUNTY, MISSOURI

GENERAL NOTES:

STREET NOTES:

DEVELOPMENT ENGINEERING.

SSD = STOPPING SIGHT DISTANCE.

INFRASTRUCTURE.

- ALL CONSTRUCTION TO FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS
- ALL WORKMANSHIP AND MATERIALS SHALL BE SUBJECT TO THE INSPECTION AND APPROVAL OF THE ENGINEERING DEPARTMENT OF THE CITY OF LEE'S SUMMIT, MISSOURI.
- LINEAL FOOT MEASUREMENTS SHOWN ON THE PLANS ARE HORIZONTAL MEASUREMENTS, NOT SLOPE
- MEASUREMENTS. ALL PAYMENTS SHALL BE MADE ON HORIZONTAL MEASUREMENTS. NO GEOLOGICAL INVESTIGATION HAS BEEN PERFORMED ON THE SITE. THE UTILITY LOCATIONS SHOWN ON THESE PLANS ARE TAKEN FROM UTILITY COMPANY RECORDS AND
- THE CONTRACTOR SHALL ADHERE TO THE PROVISIONS OF THE SENATE BILL NUMBER 583, 78TH GENERAL ASSEMBLY OF THE STATE OF MISSOURI. THE BILL REQUIRES THAT ANY PERSON OR FIRM DOING EXCAVATION ON PUBLIC RIGHT OF WAY DO SO ONLY AFTER GIVING NOTICE TO, AND OBTAINING INFORMATION FROM, UTILITY COMPANIES. STATE LAW REQUIRES 48 HOURS ADVANCE NOTICE. THE CONTRACTOR MAY ALSO UTILIZE THE FOLLOWING TOLL FREE PHONE NUMBER PROVIDED BY "MISSOURI ONE

APPARENT FIELD LOCATIONS. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES

- PRIOR TO ORDERING PRECAST STRUCTURES, SHOP DRAWING SHALL BE SUBMITTED TO THE DESIGN
- WITHOUT PERMISSION OF THE OWNER, UNLESS SHOWN OTHERWISE
- CLEARING AND GRUBBING OPERATIONS AND DISPOSAL OF ALL DEBRIS THEREFROM SHALL BE PERFORMED BY THE CONTRACTOR IN STRICT ACCORDANCE WITH ALL LOCAL CODES AND ORDINANCES.
- ALL WASTE MATERIAL RESULTING FROM THE PROJECT SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR, OR AS DIRECTED BY THE OWNER
- THE CONTRACTOR SHALL CONTROL THE EROSION AND SILTATION DURING ALL PHASED OF CONSTRUCTION,
- AND SHALL KEEP THE STREETS CLEAN OF MUD AND DEBRIS. 13. ALL MANHOLES, CATCH BASINS, UTILITY VALVES AND METER PITS TO BE ADJUSTED OR REBUILT TO GRADE
- THE CONTRACTOR SHALL CONTACT DEVELOPMENT SERVICES INSPECTIONS AT: 816-969-1200 TO OBTAIN A DEVELOPMENT SERVICES CONSTRUCTION PERMIT. A MINIMUM 48 HOUR NOTICE SHALL BE GIVEN PRIOR TO
- 15. THE CONTRACTOR SHALL CONTACT THE RIGHT OF WAY INSPECTOR AT 816-969-1800 PRIOR TO ANY LAND
- DISTURBANCE ACTIVITIES WITHIN THE RIGHT OF WAY. THESE ACTIVITIES MAY REQUIRE A PERMIT. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL TRAFFIC HANDLING MEASURES NECESSARY TO ENSURE THAT THE GENERAL PUBLIC IS PROTECTED AT ALL TIMES. TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD-LATEST EDITION).

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

CURB RETURN RADII SHALL BE 25' AT BACK OF CURB UNLESS OTHERWISE NOTED.

10. ALL ADA SIDEWALK RAMPS SHALL BE CONSTRUCTED BY THE DEVELOPER WITH THE PUBLIC

SUBGRADE TO BE COMPACTED TO 95% STANDARD PROCTOR DENSITY.

MINIMUM K, SAG CURVE = 26 (14 WITH LIGHTING), CREST CURVE = 12.

ASSUMED DESIGN SPEED = 25 MPH (COLLECTOR).

MINIMUM STOPPING SIGHT DISTANCE = 155 FEET.

GRADE INTERSECTIONS TO DRAIN AS SHOWN.

EARTHWORK:

- 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, contours or others means as indicated on the plans.
- The existing site topography depicted on the plans by contouring has been established by aerial photography and field verified by g.p.s. observation near 2-20-19. The contour elevations provided may not be exact ground elevations, but rather interpretations of such. Accuracy shall be considered to be such that not more than 10 percent of spot elevation checks shall be in error by more than one-half the contour interval provided, as defined by the National Map Accuracy Standards Any quantities provided for earthwork volumes are established using this topography contour accuracy, and therefore the inherent accuracy of any earthwork quantity is assumed from the topography accuracy.
- Proposed contours are to approximate finished grade. Unless otherwise noted, payment for earthwork shall include backfilling of the curb and gutter, sidewalk and further manipulation of utility trench spoils. The site shall be left in a mowable condition and positive drainage maintained
- Unless otherwise noted, all earthwork is considered Unclassified. No additional compensation will be provided for rock or shale excavation, unless specifically stated otherwise.
- Prior to earthwork activities, pre-disturbance erosion and sediment control devices shall be in place per the Storm Water
- Pollution Prevention plan and/or the Erosion and Sediment Control Plan prepared for this site. All topsoil shall be stripped from all areas to be graded and stockpiled adjacent to the site at an area specified by the project owner or his appointed representative. Vegetation, trash, trees, brush, tree roots and limbs, rock fragments greater then 6-inches and other deleterious materials shall be removed and properly disposed of offsite or as directed by the owner
- Unless otherwise specified in the Geotechnical Report, all fills shall be placed in maximum 6-inch lifts and compacted to
- 95-percent of maximum density as defined using a standard proctor test (AASHTO T99/ASTM 698). Fill materials shall be per Geotechnical Report and shall not include organic matter, debris or topsoil. All fills placed on
- slopes greater than 6:1 shall be benched The Contractor shall be responsible for redistributing the topsoil over proposed turf and landscaped areas to a minimum
- 12. All areas shall be graded for positive drainage. Unless noted otherwise the following grades shall apply: a. Turf Areas – 2.5% Minimum, 4H:1V Maximum
- b. Paved Areas 1.2% Minimum, 5% Maximum

UTILITIES:

- 13. All disturbed areas shall be fertilized, seeded and mulched immediately after earthwork activities have ceased. Seeding shall be per the Erosion and Sediment Control Plan and/or Landscape Plan. If not specified seeding shall be per APWA Section 2400, latest edition. Unless otherwise noted, seeding shall be subsidiary to the contract price for earthwork and grading activities.
- All disturbed areas in the right-of-way shall be sodded.
- Underdrains are recommended for all paved areas adjacent to irrigated turf and landscaped beds.
- Contractor shall adhere to the reporting requirements outlined in the Storm Water Pollution Prevention Plan (SWPPP) prepared for this project. Erosion and Sediment control devices shall be properly maintained and kept clean of silt and debris and in good working order. Additional erosion and sediment control measures shall be installed as required.

Existing utilities have been shown to the greatest extent possible based upon information provided to the Engineer. The

Contractor shall verify flow-lines and structure tops prior to construction, and shall notify Engineer of any discrepancies.

Utility Separation: Waterlines shall have a minimum of 10 feet horizontal and 2 feet vertical separation from all sanitary

not be obtained, concrete encasement of the sanitary line shall be required 10 feet in each direction of the conflict.

Trench spoils shall be neatly placed onsite adjacent to the trench, and compacted to prevent saturation and excess

disposed of offsite. Materials may be wasted onsite at the direction of the Owner or his appointed representative.

information provided to the Project Engineer. The Engineer has the authority to identify and define the physical

8. All excavation is considered unclassified, unless noted otherwise. Unclassified excavation for utility trenching is

SEDIMENT BASIN SHALL BE CONSTRUCTED AT

THE START OF THE PROJECT.

sediment runoff. Unsuitable materials, excess rock and shale, asphalt, concrete, trees, brush etc. shall be properly

Payment for trenching, backfilling, pipe embedment, flowable fill, backfill materials, clean up, seeding, sodding and any

other items necessary for the construction of the utility line shall be included in the contract price for the utility installation.

subsidiary to the unit price provided for the pipe. Any quantity provided for rock excavation is estimated based on the best

characteristics to determine the classification. Unit price quantities for rock excavation will be paid at a trench width of the nominal pipe diameter of the installed main plus 18 inches. Contractor is required to dispose of excess rock from their

The Contractor shall be responsible for contacting respective utility companies 48-hours in advance for the inspection of

Provide shop drawings for all precast and manufactured utility structures for review by the Engineer prior to construction of

sewer lines, manholes, and sanitary sewer service laterals, as measured from edge to edge. If minimum separations can

identifying any potential conflicts. All conflicts shall immediately be brought to the attention of the Engineer

any proposed utility main extension or service line or service connection to any existing main.

negligence of the contractor shall be repaired at the contractor's expense.

trenches by disposing it in areas as specified by the Project Engineer.

NOTE:

contractor is responsible for contacting the respective utility companies and field locating utilities prior to construction and 2. The contractor shall be responsible for coordinating any required utility relocations. Utilities damaged through the

OWNER/DEVELOPER:

CLAYTON PROPERTIES GROUP INC., DBA SUMMIT HOMES BRADLEY KEMPF 120 SE 30TH ST LEE'S SUMMIT, MO 64082 p (816) 246-6700 BRADLEY@SUMMITHOMESKC.COM

APPROVED FOR ONE YEAR FROM THIS DATE





MISSOURI GEOGRAPHIC REFERENCE SYSTEM BENCHMARK:

BM JA-45, IS A KC METRO ALUMINUM GRS DISK SET IN CONCRETE AND ABOUT 3 INCHES BELOW THE PAVEMENT ON THE SHOULDER OF SE RANSON ROAD. IT IS STAMPED JA45, 1987.

ELEV. = 1046.25

APPROVED BY

CITY ENGINEER

Sheet List Table

EROSION CONTROL PLAN

SEDIMENT BASIN DESIGN

EROSION CONTROL DETAILS

EROSION CONTROL DETAILS

COVER SHEET

Sheet Title

PRE CONSTRUCTION EROSION CONTROL

POST CONSTRUCTION EROSION CONTROL

Sheet Number

DATE

PREPARED BY

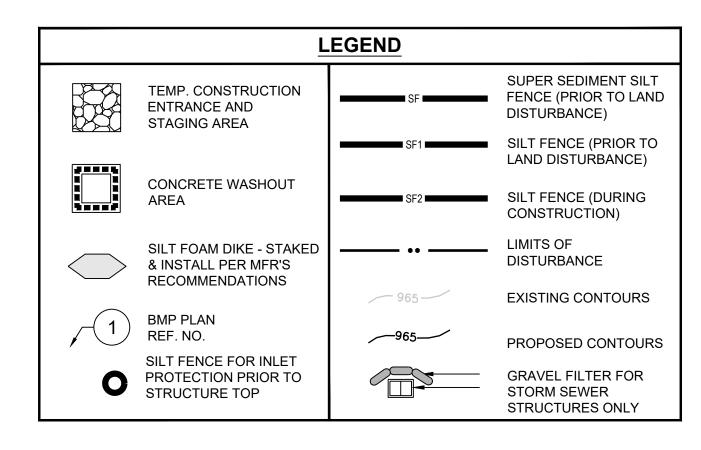
5/19/2022

Ш S

 \mathbf{B}

SCHLAGEL & ASSOCIATES, P.A

COVER SHEET



DISTURBED AREA = 13.80 AC.

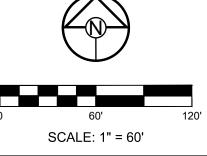
SITE SPECIFIC NOTES:

- 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
- NO PART OF THE PROJECT LIES WITHIN THE 100 YEAR FLOOD PLAIN PER FEMA FLOOD INSURANCE RATE MAP NUMBER 29095C0438G & 29095C0439G DATED JANUARY 20TH, 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 BMPS. 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 DESCRIPTION **AFTER** NOTES: REF. NO STAGE CONSTRUCTION ENTRANCE & MAINTAIN, REPAIR, OR REPLACE AS NECESSARY STAGING AREA PLACE WHERE INDICATED, REPAIR OR REPLACE AS SUPER SEDIMENT FENCE AND NECESSARY AND REMOVE ONLY WHEN GRADED AREAS ORANGE SAFETY FENCE HAVE ESTABLISHED SUFFICIENT GROUND COVER A - PRIOR TO LAND DISTURBANCE PLACE WHERE INDICATED, REPAIR OR REPLACE AS SILT FENCE (PRIOR TO LAND NECESSARY AND REMOVE ONLY WHEN GRADED AREAS DISTURBANCE) HAVE ESTABLISHED SUFFICIENT GROUND COVER CONSTRUCT SEDIMENT BASIN BASED ON DESIGN SEDIMENT BASIN SHOWN IN PUBLIC STREETS, STORM WATER, AND MASTER DRAINAGE PLAN SET. PLACE WHERE INDICATED, REPAIR OR REPLACE AS SILT FENCE (DURING B - MASS GRADING NECESSARY AND REMOVE ONLY WHEN GRADED AREAS CONSTRUCTION) HAVE SUFFICIENT ESTABLISHED GROUND COVER CONCRETE WASHOUT AREA MAINTAIN, REPAIR, OR REPLACE AS NECESSARY C - UTILITY CONSTRUCTION PLACE SILT FENCE AROUND ALL STORM SEWER STRUCTURES / YARD AREA STORM STRUCTURES TO INLET PROTECTION (SILT FENCE) HAVE SILT FENCE REMOVED ONLY WHEN GRADED AREAS HAVE ESTABLISHED SUFFICIENT GROUND COVER BOARDS SHALL BE PLACED IN FRONT OF INLET OPENING FROM THE TIME SILT FENCE IS REMOVED UNTIL SUCH INLET PROTECTION (GRAVEL TIME THAT THE CURB / THROAT IS POURED. PLACE FILTER BAGS) GRAVEL FILTER BAGS AT THE OPENING OF ALL CURB INLETS IMMEDIATELY AFTER THE INLET THROATS ARE D - AFTER PAVING OPERATIONS PLACE WHERE INDICATED, REPAIR OR REPLACE AS SILT FENCE (AFTER CURB NECESSARY AND REMOVE ONLY WHEN GRADED AREAS CONSTRUCTION) HAVE ESTABLISHED SUFFICIENT GROUND COVER ALL DISTURBED AREAS AFTER 14 DAYS OF SEEDING, MULCHING, AND TURF CONSTRUCTION INACTIVITY. INSTALL TURF REINFORCEMENT MAT REINFORCEMENT MAT WHERE SHOWN PER MANUFACTURER'S RECOMMENDATIONS. ADDITIONAL SEDIMENT AND EROSION CONTROL E - UNTIL CLOSURE OF LAND MEASURES MAY BE REQUIRED ANY TIME CURRENT DISTURBANCE PERMIT MEASURES ARE FOUND TO BE INEFFECTIVE.



PREPARED BY:

5/19/2022

JAMES L.

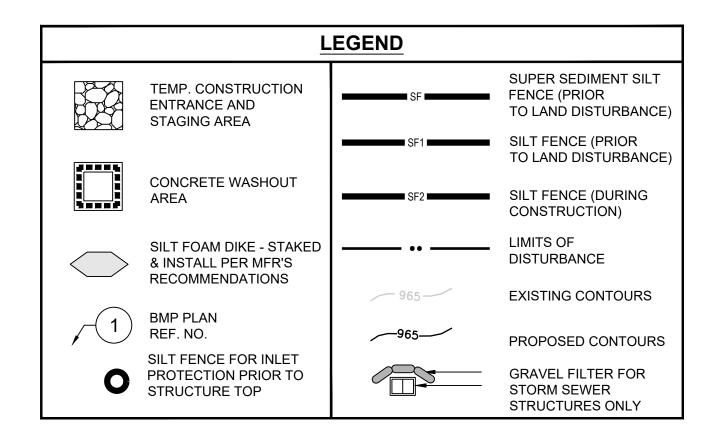
LONG

SCHLAGEL & ASSOCIATES, P.A.

ORNERSTONE AT EROSION AND S BAILE LEE'S

PER

CONSTRUCTION **EROSION** CONTROL



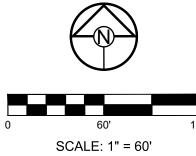
DISTURBED AREA = 13.80 AC.

SITE SPECIFIC NOTES:

- 1. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATION.
- 2. THERE ARE NO WETLANDS, NATURAL OR ARTIFICIAL WATER STORAGE DETENTION AREAS IN THE PROJECT
- NO PART OF THE PROJECT LIES WITHIN THE 100 YEAR FLOOD PLAIN PER FEMA FLOOD INSURANCE RATE MAP NUMBER 29095C0438G & 29095C0439G DATED JANUARY 20TH, 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 BMPS. 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:				
FINAL STABILIZATION CONSTRUCTION PHASE PRE-CLEARING PHASE PHASE		A - PRIOR TO LAND DISTURBANCE	1	CONSTRUCTION ENTRANCE & STAGING AREA	D	MAINTAIN, REPAIR, OR REPLACE AS NECESSARY				
			2	SUPER SEDIMENT FENCE AND ORANGE SAFETY FENCE	E	PLACE WHERE INDICATED, REPAIR OR REPLACE AS NECESSARY AND REMOVE ONLY WHEN GRADED AREAS HAVE ESTABLISHED SUFFICIENT GROUND COVER				
			3	SILT FENCE (PRIOR TO LAND DISTURBANCE)	E	PLACE WHERE INDICATED, REPAIR OR REPLACE AS NECESSARY AND REMOVE ONLY WHEN GRADED AREAS HAVE ESTABLISHED SUFFICIENT GROUND COVER				
	>-		3	SEDIMENT BASIN	E	CONSTRUCT SEDIMENT BASIN BASED ON DESIGN SHOWN IN PUBLIC STREETS, STORM WATER, AND MASTER DRAINAGE PLAN SET.				
	_	B - MASS GRADING	4	SILT FENCE (DURING CONSTRUCTION)	Е	PLACE WHERE INDICATED, REPAIR OR REPLACE AS NECESSARY AND REMOVE ONLY WHEN GRADED AREAS HAVE SUFFICIENT ESTABLISHED GROUND COVER				
		C - UTILITY CONSTRUCTION	5	CONCRETE WASHOUT AREA	E	MAINTAIN, REPAIR, OR REPLACE AS NECESSARY				
	> -		6	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 ESTABLISHED SUFFICIENT GROUND COVER				
	ТАОЕ	D - AFTER PAVING OPERATIONS	7	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				
	_		8	SILT FENCE (AFTER CURB CONSTRUCTION)	E	PLACE WHERE INDICATED, REPAIR OR REPLACE AS NECESSARY AND REMOVE ONLY WHEN GRADED AREAS HAVE ESTABLISHED SUFFICIENT GROUND COVER				
			9	SEEDING, MULCHING, AND TURF REINFORCEMENT MAT	E	ALL DISTURBED AREAS AFTER 14 DAYS OF CONSTRUCTION INACTIVITY. INSTALL TURF REINFORCEMENT MAT WHERE SHOWN PER MANUFACTURER'S RECOMMENDATIONS.				
		E - UNTIL CLOSURE OF LAND DISTURBANCE PERMIT				ADDITIONAL SEDIMENT AND EROSION CONTROL MEASURES MAY BE REQUIRED ANY TIME CURRENT MEASURES ARE FOUND TO BE INEFFECTIVE.				



PREPARED BY:

JAMES L.

LONG

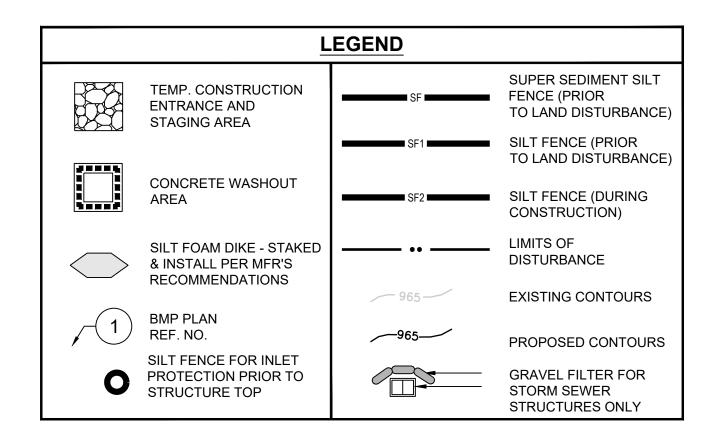
5/19/2022

SCHLAGEL & ASSOCIATES, P.A.

EN.

SE RANSON FIT, MISSOURI BAILEY RD & LEE'S SUMMI

EROSION CONTROL PLAN



DISTURBED AREA = 13.80 AC.

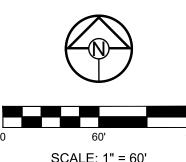
SITE SPECIFIC NOTES:

- 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
- NO PART OF THE PROJECT LIES WITHIN THE 100 YEAR FLOOD PLAIN PER FEMA FLOOD INSURANCE RATE MAP NUMBER 29095C0438G & 29095C0439G DATED JANUARY 20TH, 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 BMPS. 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:			
ASE	A - PRIOR TO LAND DISTURBANCE	1	CONSTRUCTION ENTRANCE & STAGING AREA	D	MAINTAIN, REPAIR, OR REPLACE AS NECESSARY			
PRE-CLEARING PHASE		2	SUPER SEDIMENT FENCE AND ORANGE SAFETY FENCE	E	PLACE WHERE INDICATED, REPAIR OR REPLACE AS NECESSARY AND REMOVE ONLY WHEN GRADED AREAS HAVE ESTABLISHED SUFFICIENT GROUND COVER			
E-CLEA		3	SILT FENCE (PRIOR TO LAND DISTURBANCE)	E	PLACE WHERE INDICATED, REPAIR OR REPLACE AS NECESSARY AND REMOVE ONLY WHEN GRADED AREAS HAVE ESTABLISHED SUFFICIENT GROUND COVER			
		3	SEDIMENT BASIN	E	CONSTRUCT SEDIMENT BASIN BASED ON DESIGN SHOWN IN PUBLIC STREETS, STORM WATER, AND MASTER DRAINAGE PLAN SET.			
CONSTRUCTION PHASE	B - MASS GRADING	4	SILT FENCE (DURING CONSTRUCTION)	E	PLACE WHERE INDICATED, REPAIR OR REPLACE AS NECESSARY AND REMOVE ONLY WHEN GRADED AREAS HAVE SUFFICIENT ESTABLISHED GROUND COVER			
STRUCT	C - UTILITY CONSTRUCTION	5	CONCRETE WASHOUT AREA	E	MAINTAIN, REPAIR, OR REPLACE AS NECESSARY			
SOO		6	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 ESTABLISHED SUFFICIENT GROUND COVER			
STABILIZATION PHASE	D - AFTER PAVING OPERATIONS	7	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			
FINALS		8	SILT FENCE (AFTER CURB CONSTRUCTION)	E	PLACE WHERE INDICATED, REPAIR OR REPLACE AS NECESSARY AND REMOVE ONLY WHEN GRADED AREAS HAVE ESTABLISHED SUFFICIENT GROUND COVER			
		9	SEEDING, MULCHING, AND TURF REINFORCEMENT MAT	E	ALL DISTURBED AREAS AFTER 14 DAYS OF CONSTRUCTION INACTIVITY. INSTALL TURF REINFORCEMENT MAT WHERE SHOWN PER MANUFACTURER'S RECOMMENDATIONS.			
	E - UNTIL CLOSURE OF LAND DISTURBANCE PERMIT				ADDITIONAL SEDIMENT AND EROSION CONTROL MEASURES MAY BE REQUIRED ANY TIME CURRENT MEASURES ARE FOUND TO BE INEFFECTIVE.			



SCALE: 1" = 60'

PREPARED BY:



SCHLAGEL & ASSOCIATES, P.A.

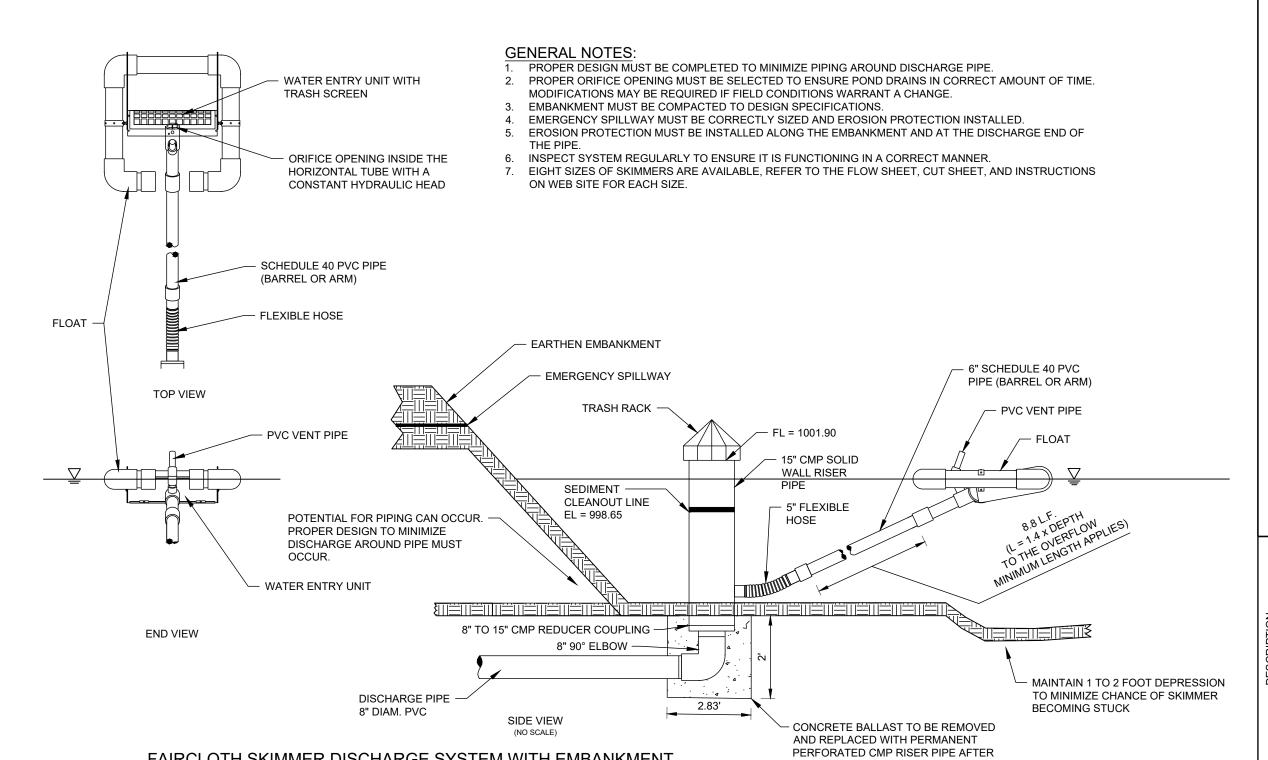
FARMS, FIRST F CONTROL PLA EN. CORNERSTONE AT BAIL EROSION AND SEDIM

SE RANSON , MISSOURI

POST CONSTRUCTION **EROSION** CONTROL

-			asin Design Summary
Design Item	EDDB #1	Units	Notes
Site Data:			
Tributary Drainage Area to Pond	31.71	Acres	
50% (2 yr) Design Flow	107.19	cfs	
4% (25 yr) Design Flow	206.00	cfs	
Pond Data:			
Minimum Sediment Storage Volume	4,249	cu yd	134 cy/acre required minimum
Provided Sediment Storage Volume	4,325	cu yd	
Bottom Elevation	995.67	Ft	
Sediment Cleanout Elevation	998.65	Ft	Elevation equal to 20% of original design volume
Top of Riser Elevation	1001.90	Ft	Top of dry storage volume
Emergency Spillway Elevation	1007.14	Ft	at or above Q-2 elevation. 1.0 ft min above principal spillway
Top of Dam Elevation	1008.64	Ft	1.0 ft min above Q-25 elevation
Basin Shape Data:			
A = Area at Normal Pool	44,926	SF	Based on 2-year event
L = Length of Flow Path	490	Ft	
We = Effective Width = A/L	92	Ft	
Length to Width Ratio = L/We	5.34		
Principal Spillway Data:			
Riser Pipe dia	15	in	15" min. size for 2 year flow minimum
Barrel Pipe dia	15	in	15" min. size for 2 year flow minimum
Concrete Base size for Riser Pipe	0.09	CY	Size to prevent flotation. 1.25 safety factor required (1.61 provided)
Skimmer Size / Skimmer Diameter	8" / 5.9"		Designer to provide specific details and calculations per application to dewater in 48 to 72 hours
Emergency Spillway Data:			dewater in 40 to 72 hours
Design Depth in Spillway	0.50	ft	
Design Velocity in Spillway	100 0 0 0	ft/sec	
Lining Material	Turf		Designer to provide specific details and calculations per application

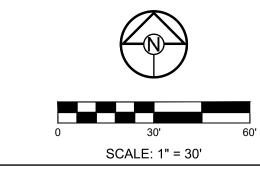
2-yr Volume		Dewater Time		
Basin	(cu ft)	(Days)	Skimmer Size	Orifice Diam.
EDDB #1	164.409	3	8"	5.9"



EXISTING CONTOURS PROPOSED CONTOURS SEDIMENT BASIN CONTOURS

NOTES:

- 1. SEDIMENT BASIN SHALL BE CONSTRUCTED ALONG WITH ALL OTHER EROSION AND SEDIMENT CONTROL DEVICES PRIOR TO ANY WORK BEING PERFORMED.
- 2. SILT SHALL BE REMOVED WHEN DEPTH REACHES RED MARK ON RISER PIPE AS SHOWN



PROJECT IS 80% BUILT AND
STABILIZED. SEE DETENTION BASIN
DESIGN SHEET FOR DETAILS.

PREPARED BY:

5/19/2022

SCHLAGEL & ASSOCIATES, P.A.

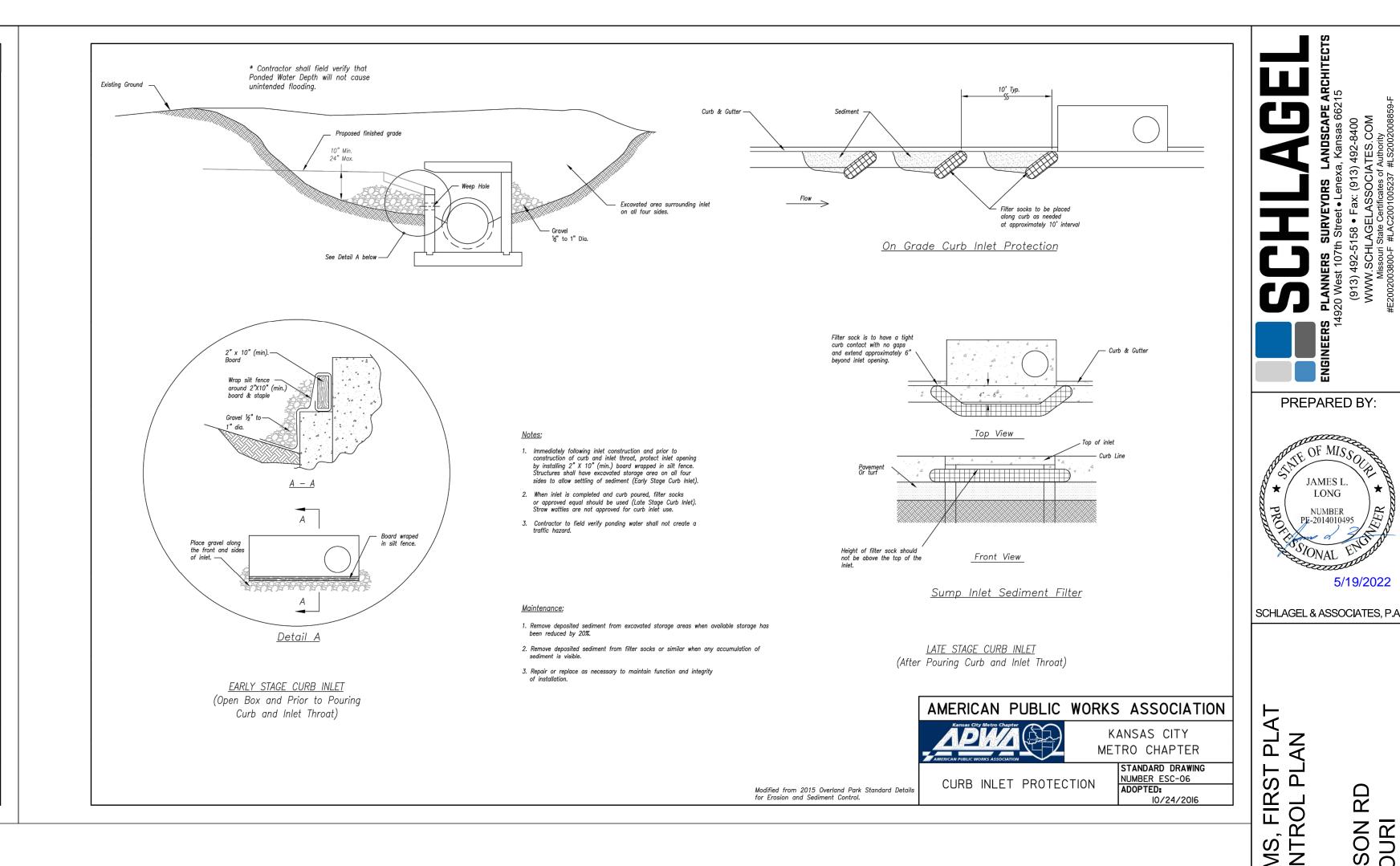
EY FARMS, FIRST PLAT ENT CONTROL PLAN

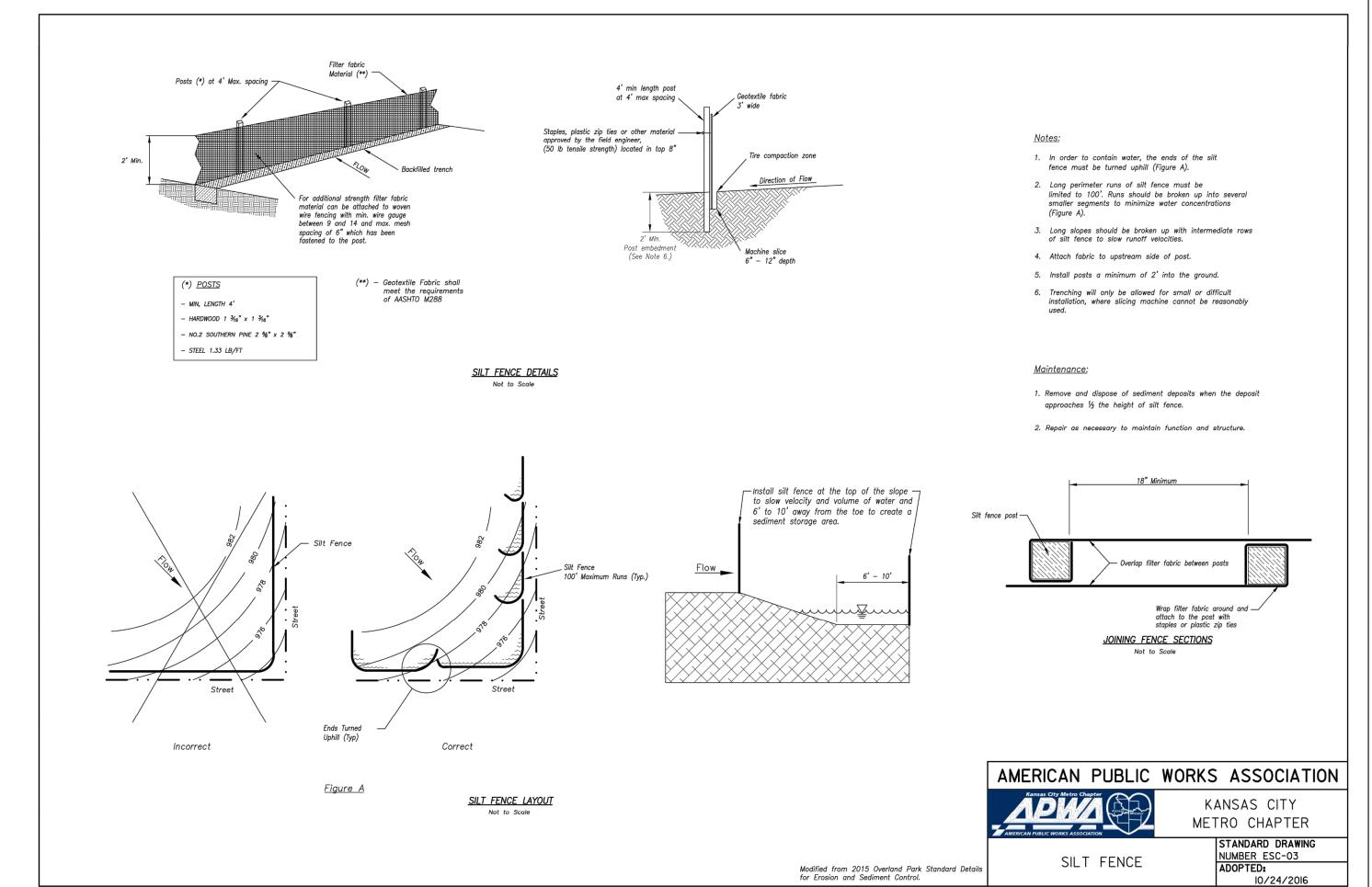
SEDIMENT BASIN DESIGN

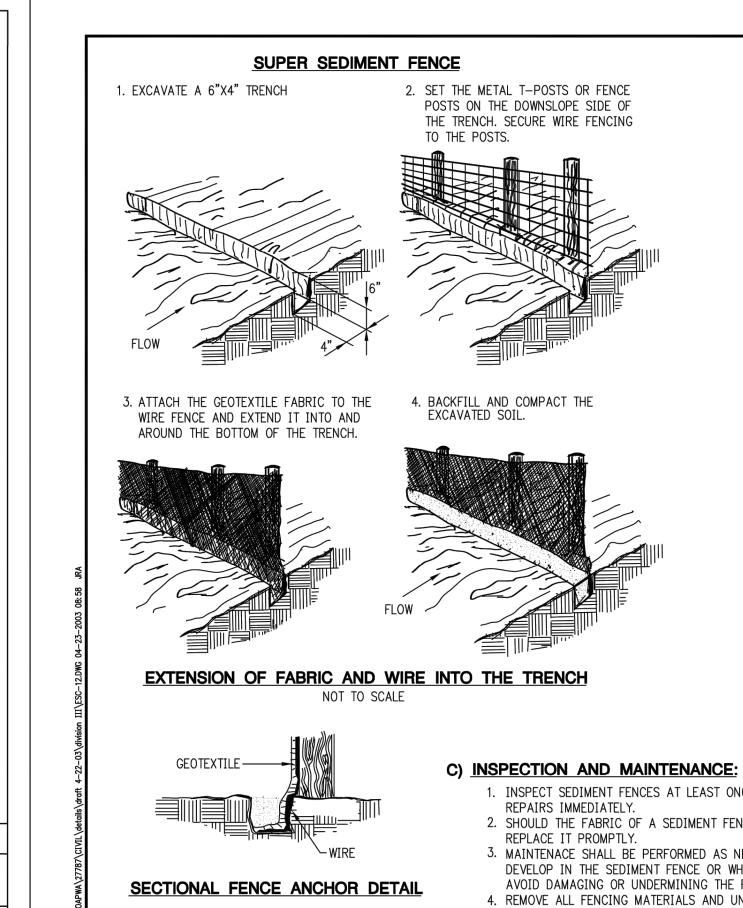
SHEET

FAIRCLOTH SKIMMER DISCHARGE SYSTEM WITH EMBANKMENT

(FOR TEMPORARY SEDIMENT BASIN)







SOURCE: MODIFIED FROM VA. DCR, 1992

SUPER SEDIMENT FENCE NOTES: A) CONSTRUCTION SPECIFICATIONS:

- 1. FENCING SHALL BE 42-INCHES IN HEIGHT. 2. WIRE FENCE SHALL BE FASTENED SECURELY TO THE FENCE POSTS WITH WIRE TIES AND STAPLES. THE LOWER TENSION WIRE, BRACE AND TRUSS RODS, DRIVE ANCHORS, AND POST CAPS ARE NOT REQUIRED EXCEPT ON THE ENDS OF THE FENCE.
- 3. SEDIMENT FENCE SHALL BE FASTENED SECURELY TO THE WIRE FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID-SECTION. 4. SEDIMENT FENCE AND WIRE SHALL BE EMBEDDED A MINIMUM OF 8-INCHES INTO THE GROUND.
- 5. WHEN TWO SECTIONS OF GEOTEXTILE FABRIC ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY
- 6. WIRE FENCE WILL BE BETWEEN 9 AND 14 GAUGE AND SHALL HAVE A MAXIMUM MESH SPACING OF
- 7. SEDIMENT FENCE SHALL MEET THE FOLLOWING REQUIREMENTS FOR GEOTEXTILE CLASS F:

ADDITIONAL SPECIFICATIONS ARE FOUND IN ASTM 6461.

SEDIMENT FENCE REQUI	SEDIMENT FENCE REQUIREMENTS						
TENSION STRENGTH	50 LB/IN OR MORE	ASTM 4632					
TENSION MODULUS	20 LB/IN OR MORE	ASTM 4632					
FLOW RATE	0.3 GAL/FT ² /MINUTE OR LESS	ASTM 5141					
FILTERING EFFICIENCY	75 % OR MORE	ASTM 5141					

B) INSTALLATION:

- 1. THE HEIGHT OF A SEDIMENT FENCE SHALL BE A MINIMUM OF 16 INCHES ABOVE THE ORIGINAL GROUND SURFACE AND SHALL NOT EXCEED 34-INCHES ABOVE GROUND SURFACE.
- 2. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL AND CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE UNAVOIDABLE, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6-INCH OVERLAP, AND SECURELY SEALED.
- A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4 INCHES WIDE AND 6 INCHES DEEP ON THE UPSLOPE 4. SIDE OF THE PROPOSED LOCATION OF THE FENCE.
- WHEN WIRE SUPPORT IS USED, STANDARD-STRENGTH FILTER CLOTH MAY BE USED. POSTS FOR THIS TYPE OF INSTALLATION SHALL BE PLACED A MAXIMUM OF 10 FEET APART. THE WIRE MESH FENCE MUST BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 1 INCH LONG, TIE WIRES, OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2 INCHES AND SHALL NOT EXTEND MORE THAN 34 INCHES ABOVE THE ORIGINAL GROUND SURFACE. THE STANDARD-STRENGTH FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE, AND 8 INCHES OF THE FABRIC
- 5. SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT BE STAPLED TO EXISTING TREES. IF A SEDIMENT FENCE IS TO BE CONSTRUCTED ACROSS A DITCH LINE OR SWALE, IT MUST BE OF SUFFICIENT LENGTH TO ELIMINATE ENDFLOW, AND THE PLAN CONFIGURATION SHALL RESEMBLE AN ARC OR HORSESHOE WITH THE ENDS ORIENTED UPSLOPE. EXTRA-STRENGTH FILTER FABRIC SHALL BE USED FOR
- 6. THIS APPLICATION WITH A MAXIMUM 3-FOOT SPACING OF POSTS. THE 4 INCH BY 6 INCH TRENCH SHALL BE BACKFIELD AND THE SOIL COMPACTED OVER THE FILTER
- 7. FABRIC. SEDIMENT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE
- THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED. SEDIMENT ACCUMULATION SHOULD NOT EXCEED 1/2 THE HEIGHT OF THE FENCE.
- 1. INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED
- 2. SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE,
- REPLACE IT PROMPTLY.
- 3. MAINTENACE SHALL BE PERFORMED AS NEEDED AND SEDIMENT BUILD-UPS REMOVED WHEN BULGES DEVELOP IN THE SEDIMENT FENCE OR WHEN SEDIMENT REACHES 50% OF THE FENCE HEIGHT. AVOID DAMAGING OR UNDERMINING THE FENCE DURING CLEANOUT.
- 4. REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS, AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

AMERICAN PUBLIC WORKS ASSOCIATION KANSAS CITY METROPOLITAN CHAPTER STANDARD DRAWING

SUPER SEDIMENT FENCE

JAMES L.

LONG

NUMBER

EN.

CORNERSTONE A

5/19/2022

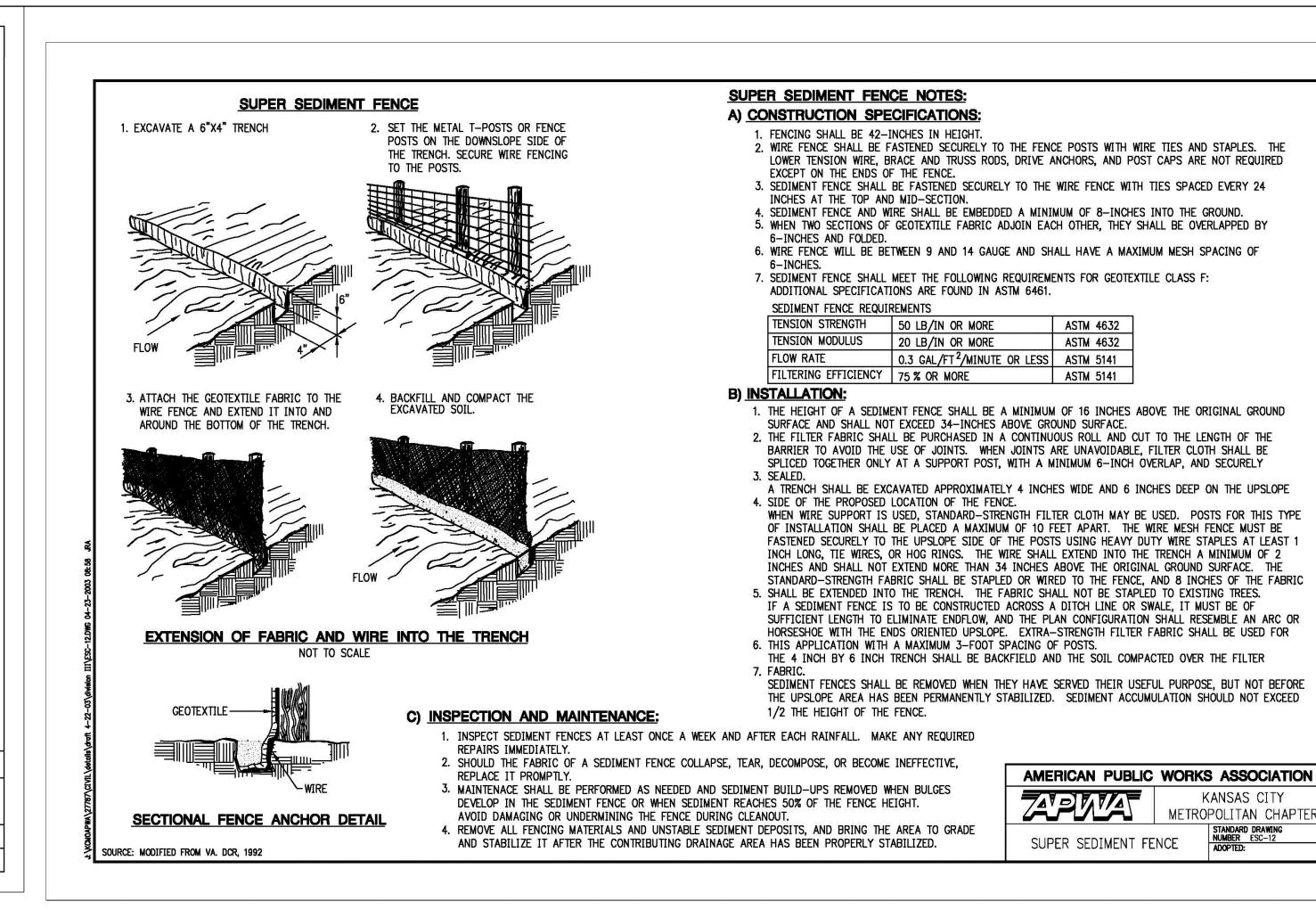
S

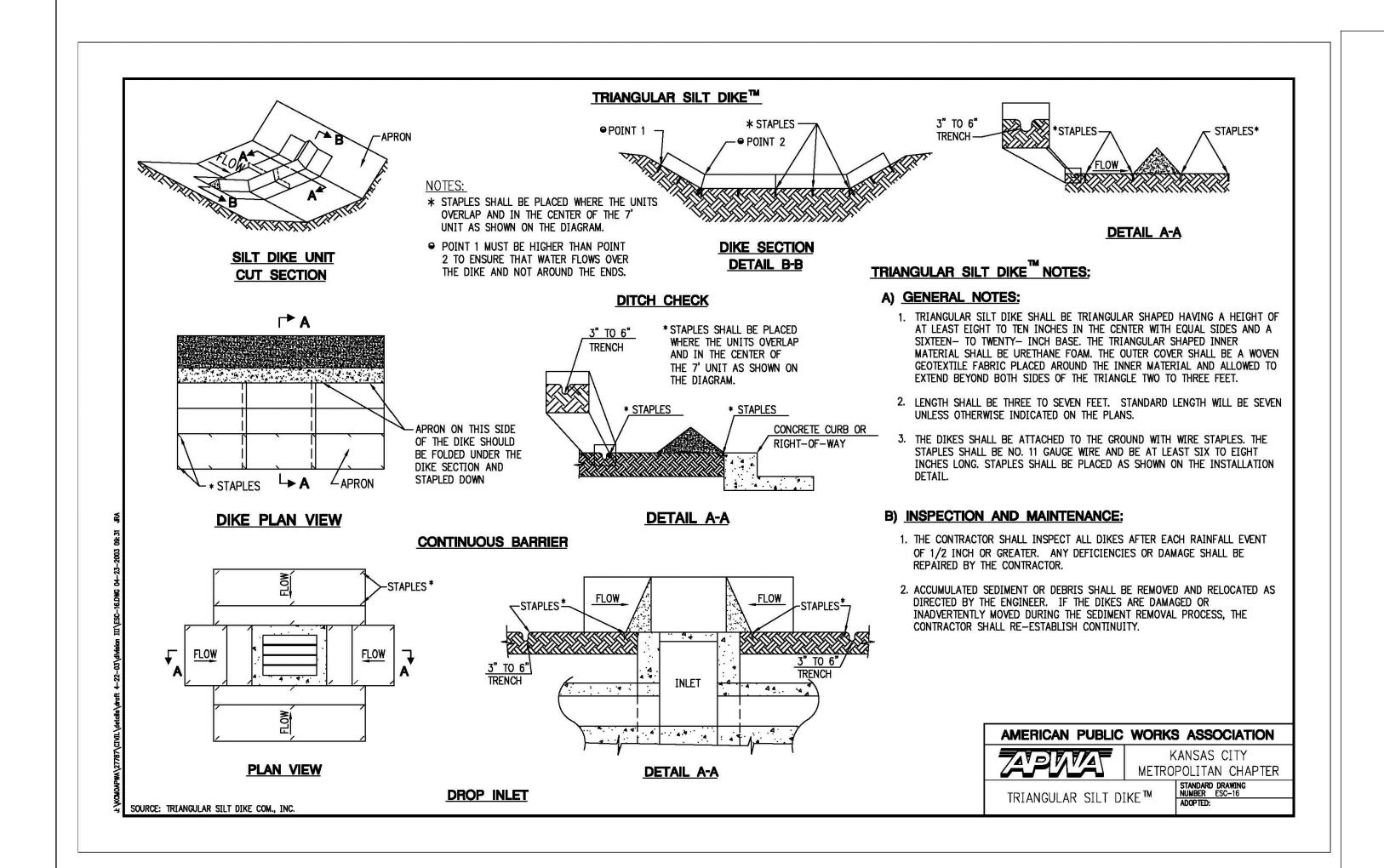
ЩΩ

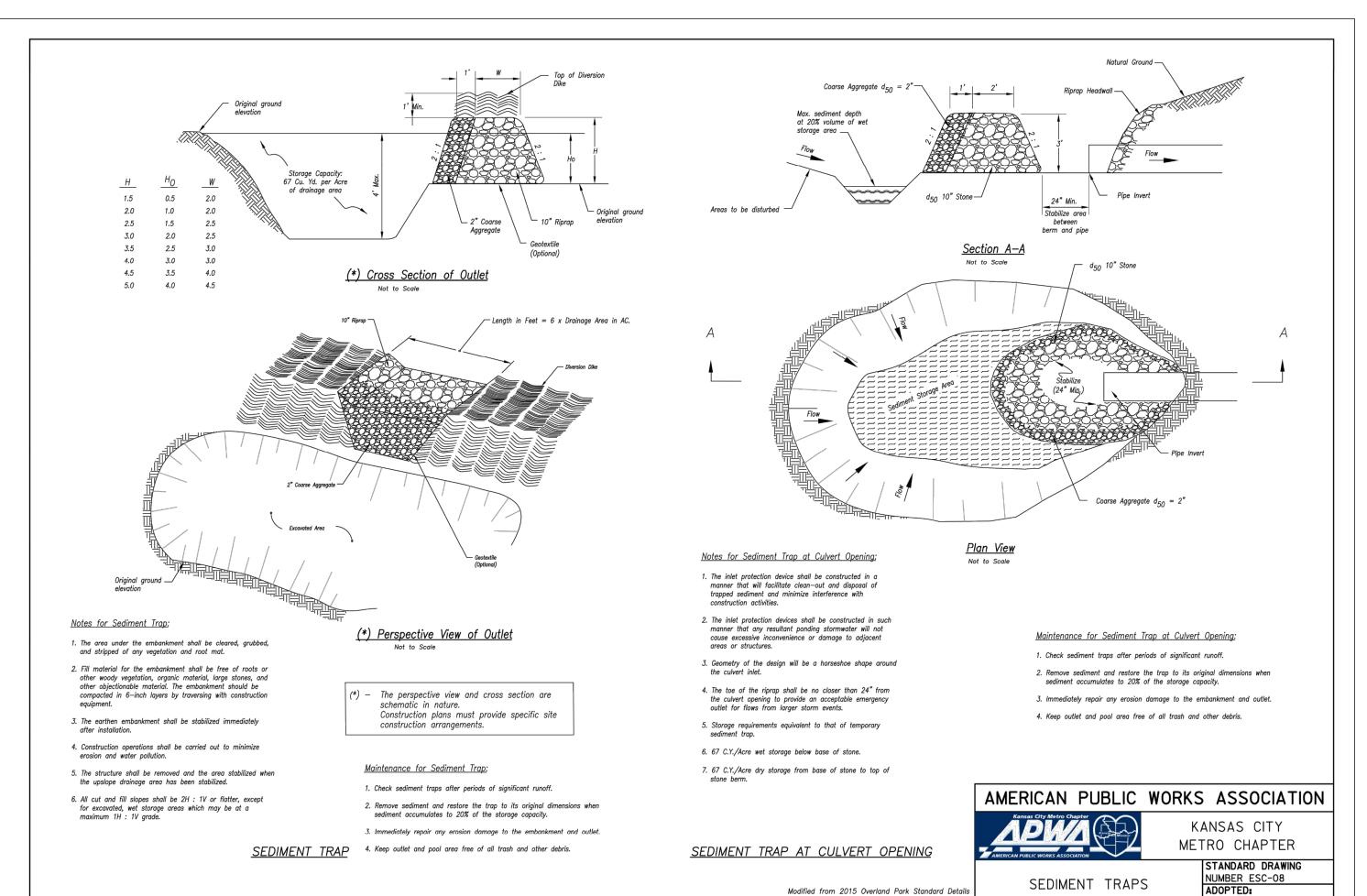
 \Box

EROSION

CONTROL DETAILS







for Erosion and Sediment Control.

S ⊢

 $\mathbf{\Omega}$

EROSION CONTROL **DETAILS**

SHEET

10/24/2016