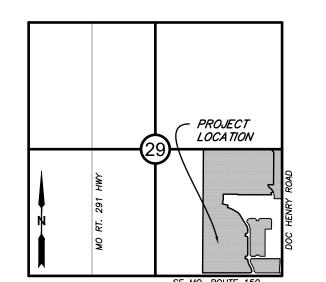
SEC. 29, TWP. 47N, RNG. 31W



VICINITY MAP

SECTION 29, TOWNSHIP 47, RANGE 31 LEE'S SUMMIT, JACKSON COUNTY, MISSOURI NOT TO SCALE

LEGAL DESCRIPTION.

A SUBDIVISION LOCATED IN THE SOUTHEAST QUARTER OF SECTION 29, TOWNSHIP 49 NORTH RANGE 31 WEST, IN THE CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, REFER TO FINAL PLAT FOR FULL LEGAL DESCRIPTION.

OIL AND GAS WELL NOTES:

NO ABANDONED OIL OR GAS WELLS HAVE BEEN PROPOSED CONSTRUCTION ACTIVITIES, PER THE MISSOURI DEPARTMENT OF NATURAL RESOURCES (MDNR) PERMITTED OIL AND GAS DATABASE, DATED JUNE 2, 2020.





UTILITY CONTACTS:

SANITARY & WATER: CITY OF LEE'S SUMMIT

JEFF THORN 220 SE GREEN STREET LEE'S SUMMIT, MO 64063 PHONE (816) 969-1900

STREETS: CITY OF LEE'S SUMMIT

MICHAEL PARK 220 SE GREEN STREET LEE'S SUMMIT, MO 64063 PHONE (816) 969-1900

RICHARD FROCK

DOUG DAVIN 1300 SE HAMBLEN ROAD LEE'S SUMMIT, MO 64081 PHONE (816) 347-4320 PHONE (816) 472-3489

FEMA FLOOD INFORMATION:

THE SUBJECT PROPERTY LIES IN ZONE X, OTHER FLOOD AREAS, AREAS DETERMINED TO BE OUTSIDE THE 0.2% CHANCE ANNUAL FLOODPLAIN, AS SHOWN ON FLOOD INSURANCE RATE MAP 29095C0551G EFFECTIVE JANUARY *20, 2017.*

BENCHMARK:

PROJECT BENCHMARK T 201 ALUMINUM CAP IN TOP OF CONCRETE BASE OF FIRST PILLAR OF HWY 150 AND MISSOURI PACIFIC RAILROAD. ELEV=917.39

STORMWATER:

CITY OF LEE'S SUMMIT

PUBLIC WORKS 220 SE GREEN STREET LEE'S SUMMIT, MO 64063 PHONE (816) 969-1800

RONALD GIPFERT 500 E 8TH STREET KANSAS CITY, MO 64106 PHONE (816) 275-1550

MISSOURI GAS ENERGY: 3025 SW CLOVER DRIVE LEE'S SUMMIT, MO 64082

ALUMINUM CAP STAMPED KS 1069 MO 2134 NORTHEAST CORNER OF THE PROJECT N: 980459.77 E: 2828336.04 EL: 967.82

WATERSHED: BIG CREEK

SURVEY CONTROL:

CHISELED "+" ON CURB INLET

CURB INLET AT THE SOUTHWEST

2006016633 CENTERLINE OF SE

COBEY CREEK DRIVE AT THE

CORNER OF SE GILLETTE ROAD

AND SE COBEY CREEK DRIVE

BAR AND CAP STAMPED

CP #100

N: 978174.32

E: 2827539.80

EL: 1005.17

CP #9039

DEAD END

N: 979305.16

EL: 1002.42

E: 2827174.35

DATE: 03/14/2022

GENERAL NOTES:

- CONTRACTOR SHALL SATISFY THEMSELVES AS TO THE EXISTING CONDITIONS OF THE SITE AND HAVE ALL UTILITIES MARKED PRIOR TO COMMENCING CONSTRUCTION.
- 2. CONTRACTOR SHALL POTHOLE ALL CONNECTION POINTS TO EXISTING UTILITIES AND POTENTIAL UTILITY CONFLICT LOCATIONS PRIOR TO ANY CONSTRUCTION ACTIVITIES. NOTIFY ENGINEER IMMEDIATELY IF CONFLICT OR DISCREPANCY EXISTS.
- 3. CONTRACTOR SHALL PROTECT EXISTING STRUCTURES TO REMAIN FROM DAMAGE DURING DEMOLITION AND CONSTRUCTION. ANY DAMAGE SHALL BE REPAIRED / REPLACED TO PRE-CONSTRUCTION CONDITION AT CONTRACTOR'S EXPENSE.
- 4. THE CONTRACTOR SHALL CONTACT THE CITY'S DEVELOPMENT SERVICES ENGINEERING INSPECTION TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH A FIELD ENGINEERING INSPECTOR PRIOR TO ANY LAND DISTURBANCE WORK AT (816) 969-1200.

DEVELOPER:

BRAD KEMPF CLAYTON PROPERTIES GROUP 120 SE 30TH STREET LEE'S SUMMIT, MO 64082 BRADLEY@SUMMITHOMESKC.COM (816) 927–9711

DISTURBED AREA: 73.3 AC

CIVIL ENGINEER:

GARRETT CATES ANDERSON ENGINEERING, INC. 941 W 141ST TERR KANSAS CITY, MO 64145 GCATES@AE-INC.COM (816) 777-0400 EXT. 508

SHEET INDEX

TOTAL LOTS: 123

C807 - OUTLET PROTECTION DETAILS C808 - SEDIMENT BASIN DETAILS

PROJECT SPECIFICATIONS:

THE SPECIFICATIONS FOR THIS PROJECT SHALL BE THE FOLLOWING:

1. MOST CURRENT VERSION OF THE DESIGN AND CONSTRUCTION MANUAL OF THE CITY OF LEE'S SUMMIT AS ADOPTED BY ORDINANCE 5813.

THE STANDARD SPECIFICATIONS THROUGH AND INCLUDING THE LATEST AMENDMENTS SHALL BE PART OF THESE PROJECT DRAWINGS AND SPECIFICATIONS AND ARE INCORPORATED HEREIN BY REFERENCE. THE MORE STRINGENT OF THESE STANDARD SPECIFICATIONS AND THOSE PREPARED BY THE ENGINEER PREPARING THESE PLANS SHALL GOVERN.

PREPARED & SUBMITTED BY:

ANDERSON ENGINEERING INC. KANSAS CITY, MISSOURI



03/14/2022

GARRETT CATES, P.E. MISSOURI P.E. NO. 2021025089 DATE

SHEET NUMBER

GARRETT R.

MBER LUE

2. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORMWATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.

CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.

4. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.

SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.

CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.

GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET

ALL WASH WATER (CONCRETE TRUCKS. VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY

SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READLY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.

10. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS

RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.

12. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.

13. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY WILL BE STOPPED FOR AT LEAST 7 DAYS, SHALL BE TEMPORARILY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.

14. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE STABILIZED. THESE AREAS SHALL BE STABILIZED NO LATER THAN 21 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. STABILIZATION MAY CONSIST OF SEED. SOD. ROCK. PAVEMENT. STRUCTURE OR OTHER NON-ERODIBLE

15. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE. ONLY USE INGRESS/EGRESS

16. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.

LOCATIONS AS PROVIDED.

17. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF

18. ON-SITE & OFFSITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.

19. SLOPES CONSISTING OF TOPSOIL, CLAY, OR SILT SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.

20. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION AND SEDIMENT CONTROL MEASURES (SILT FENCES, ETC.) TO PREVENT EROSION AND POLLUTANT

21. CONTRACTOR RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE. PONDING OF WATER WILL NOT BE ALLOWED ON SITE. IF NECESSARY, CONTRACTOR TO PROVIDE TEMPORARY SWALES OR PUMPING IN LOW POINT SUMP CONDITIONS UNTIL THE INSTALLATION OF STORM SEWER.

DISCHARGE.

ACERAGE SUMMARY:

TOTAL DISTURBED AREA = 73.3 AC AC

FEMA FLOOD NOTE:

THE SUBJECT PROPERTY LIES IN ZONE X, OTHER FLOOD AREAS. AREAS DETERMINED TO BE OUTSIDE THE 0.2% CHANCE ANNUAL FLOODPLAIN, AS SHOWN ON FLOOD INSURANCE RATE MAP

KCAPWA REFERENCE DETAILS.

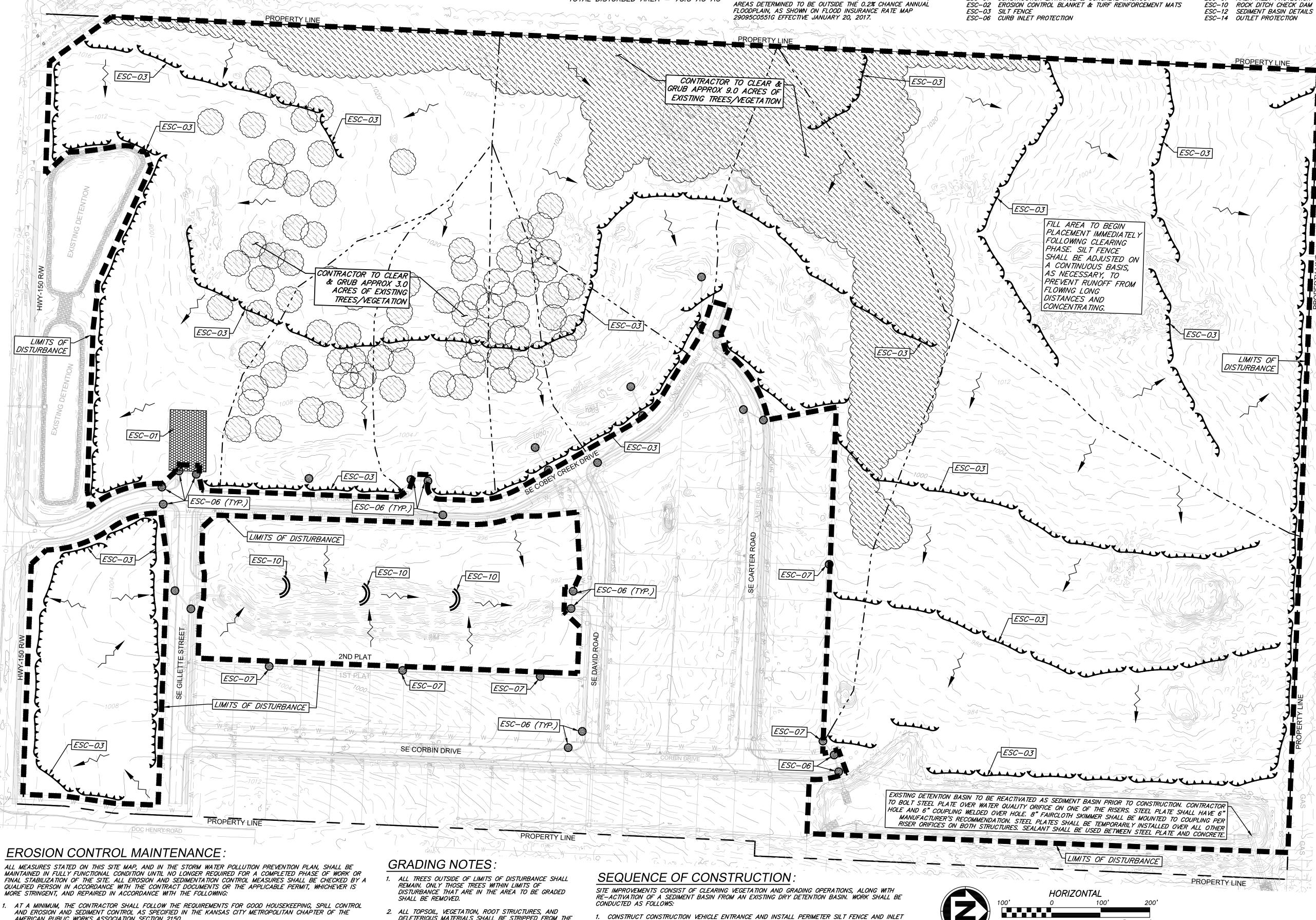
ESC-01 CONSTRUCTION ENTRANCE & CONCRETE WASHOUT

ESC-07 AREA INLET PROTECTION ESC-10 ROCK DITCH CHECK DAM ESC-14 OUTLET PROTECTION

REVISIONS			AO	DRAWING INFO.
DESCRIPTION	ВУ	DATE	BY DATE DRAWN BY:	29
			CHECK BY:	PJ
			TICENSE NO.	PE-2021025089
			DATE:	03/14/2022
			ISSUED FOR:	ISSUED FOR: FOR REVIEW
			JOB NUMBER: 21KC10060	21KC10060
© COPYRIGHT ANDERSON ENGINEERING, INC. 2022	2022			



SHEET NUMBER 2 OF 12



AMERICAN PUBLIC WORKS ASSOCIATION SECTION 2150.

2. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.

SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED. 4. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE—HALF THE HEIGHT OF THE SILT FENCE.

3. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS

5. THE CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION EXITS 6. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING

7. Drainage swales with slopes steeper than 15% shall be inspected after each rainfall event. These CHANNELS AND SLOPES SHOULD BE TREATED WITH EROSION FABRIC. IF THE CHANNELS OR SLOPES SHOW ANY SIGN OF FAILURE, COORDINATE WITH THE ENGINEER TO DEVELOP A PLAN TO RE-STABILIZE THE FAILED AREA.

AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AREA AS CONDITIONS

DELETERIOUS MATERIALS SHALL BE STRIPPED FROM THE GROUND SURFACE PRIOR TO THE PLACEMENT OF EMBANKMENTS. CONTRACTOR SHALL OBTAIN THE ON-SITE GEOTECHNICAL REPRESENTATIVE'S ACCEPTANCE OF THE EXISTING GROUND SURFACE MATERIALS AND THE PROPOSED FILL MATERIAL PRIOR TO THE PLACEMENT OF FILL.

3. ALL PROPOSED CONTOUR LINES AND SPOT ELEVATIONS SHOWN ARE FINISH GROUND ELEVATIONS. CONTRACTOR SHALL ACCOUNT FOR PAVEMENT DEPTHS, BUILDING PADS, TOPSOIL, ETC. WHEN GRADING THE SITE.

4. ALL DISTURBED AREAS THAT SHALL BE FINISH GRADED WITH A MINIMUM OF FOUR INCHES OF TOPSOIL.

5. FINISHED GRADES SHALL NOT BE STEEPER THAN 3:1.

6. ALL GRADING WORK SHALL BE CONSIDERED UNCLASSIFIED. NO ADDITIONAL PAYMENTS SHALL BE MADE FOR ROCK EXCAVATION. CONTRACTOR SHALL SATISFY HIMSELF AS TO ANY ROCK EXCAVATION REQUIRED TO ACCOMPLISH THE IMPROVEMENTS SHOWN HEREON.

2. CLEAR TREES AND VEGETATION WHERE PHASE 1 GRADING OPERATIONS WILL BE COMPLETED. ONLY REMOVE THOSE TREES NECESSARY TO ACCOMPLISH GRADING ACTIVITIES AS SHOWN ON

3. INSTALL SILT FENCE AND/OR DIVERSION BERM(S) AT TOE OF SLOPE ALONG PERIMETER OF PHASE I AREA. PHASE IÍ ACTIVITIES CANNOT BÉGIN UNTIL PHASE I IS COMPLETED.

FEATURES RELATED TO DETENTION, PRIOR TO ANY LAND DISTURBANCE OF THE SITE AND PRIOR TO THE CONSTRUCTION OF ANY OTHER SITE DEVELOPMENT WORK AS NOT TO EFFECT DOWNSTREAM NEIGHBORS WITH UNDETAINED STORMWATER DISCHARGE.

6. AS TREE CLEARING AND GRADING OPERATIONS ARE COMPLETED, AREAS TO REMAIN INACTIVE FOR MORE THAN 14 DAYS SHALL BE STABILIZED WITH SEED AND COMPOST MULCH AND/OR STEEP SLOPE PROTECTION. SEE INTERMEDIATE EROSION CONTROL PLAN.

PROTECTION TO EXISTING INLETS SURROUNDING THE LIMITS OF DISTURBANCE.

PLAN. INSTALL ROCK DITCH CHECKS AS ACCESS TO DRAINAGE DITCHES BECOMES AVAILABLE.

4. CONTRACTOR TO CONSTRUCT STORMWATER MANAGEMENT FACILITIES, SPECIFICALLY THOSE

5. CLEAR REMAINING TREES AND VEGETATION WHERE PHASE II GRADING OPERATIONS WILL BE COMPLETED. ONLY REMOVE THOSE TREES NECESSARY TO ACCOMPLISH GRADING ACTIVITIES AS

LEGEND

INLET PROTECTION

---- DRAINAGE AREAS EX. RIGHT-OF-WAY EX. PROPERTY LINE EX. STORM DRAIN EX. MAJOR CONTOUR EX. MINOR CONTOUR

LIMITS OF DISTURBANCE

EX. SLOPE DIRECTION

CONSTRUCTION EXIT TREE / VEGETATION ROCK DITCH CHECK DAM (ESC-10)

SILT FENCE W/

HOOKS (ESC-03)

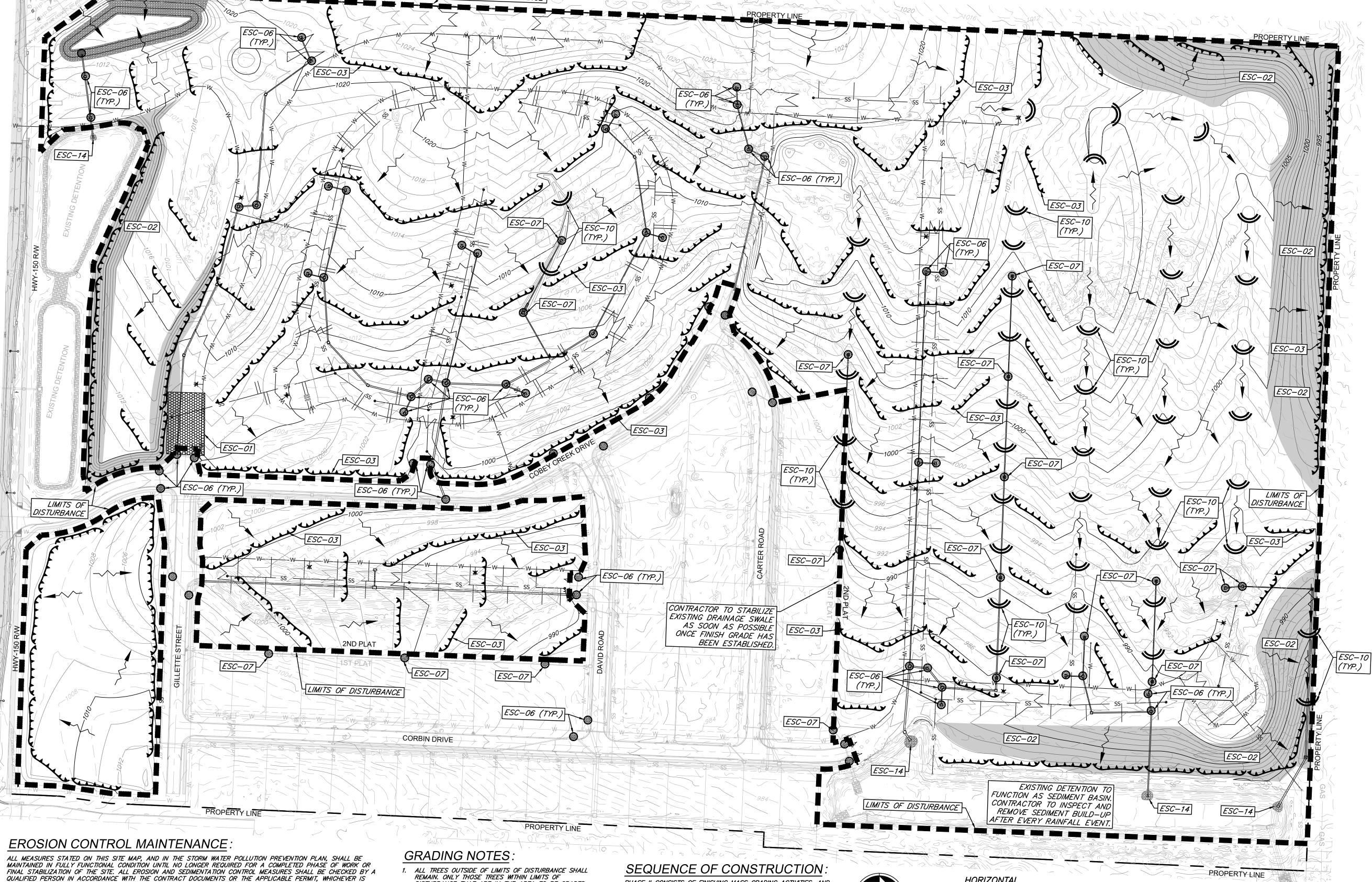
DRAINAGE AREA - 97.28 AC MINIMUM VOLUME FOR SEDIMENT BASIN STORAGE - 350,214 FT³ (3600 FT³/AC) ACTUAL VOLUME - 676,477 FT3 BOTTOM AREA/ELEVATION - 2,378 FT²/966.00 TOP AREA/ELEVATION TEMPORARY STONE - 108.226 FT²/978.00 DEPTH - 12.0 FT MAX. PERMANENT POOL VOLUME (50% OF POND) - 175,107 FT³

SEDIMENT BASIN.

PERMANENT POOL TOP AREA/ELEVATION - 95,000 FT²/976.00 (87,552 REQUIRED) FT³/AC PERMANENT POOL DEPTH - 10.0 FT. ACTUAL SEDIMENT VOLUME - 95,500 FT3

- 2. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORMWATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
- CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
- 4. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
- SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.
- CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
- GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET
- 8. ALL WASH WATER (CONCRETE TRUCKS. VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY
- SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READLY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
- 10. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS
- RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
- 12. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.
- 13. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY WILL BE STOPPED FOR AT LEAST 7 DAYS, SHALL BE TEMPORARILY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.
- 14. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE STABILIZED. THESE AREAS SHALL BE STABILIZED NO LATER THAN 21 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. STABILIZATION MAY CONSIST OF SEED. SOD. ROCK. PAVEMENT. STRUCTURE OR OTHER NON-ERODIBLE
- 15. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE. ONLY USE INGRESS/EGRESS LOCATIONS AS PROVIDED.
- 16. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
- 17. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF
- 18. ON-SITE & OFFSITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
- 19. SLOPES CONSISTING OF TOPSOIL, CLAY, OR SILT SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
- 20. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION AND SEDIMENT CONTROL MEASURES (SILT FENCES, ETC.) TO PREVENT EROSION AND POLLUTANT DISCHARGE.
- 21. CONTRACTOR RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE. PONDING OF WATER WILL NOT BE ALLOWED ON SITE. IF NECESSARY, CONTRACTOR TO PROVIDE TEMPORARY SWALES OR PUMPING IN LOW POINT SUMP CONDITIONS UNTIL THE INSTALLATION OF STORM SEWER.

FEMA FLOOD NOTE: KCAPWA REFERENCE DETAILS. ACERAGE SUMMARY: GENERAL NOTES TOTAL DISTURBED AREA = 73.3 AC AC THE SUBJECT PROPERTY LIES IN ZONE X, OTHER FLOOD AREAS, ESC-01 CONSTRUCTION ENTRANCE & CONCRETE WASHOUT AREAS DETERMINED TO BE OUTSIDE THE 0.2% CHANCE ANNUAL FLOODPLAIN, AS SHOWN ON FLOOD INSURANCE RATE MAP THE STORMWATER POLLUTION PREVENTION ESC-02 EROSION CONTROL BLANKET & TURF REINFORCEMENT MATS PLAN IS COMPRISED OF THIS DRAWING ESC-03 SILT FENCE 29095C0551G EFFECTIVE JANUARY 20, 2017. ("EROSION CONTROL"), THE STANDARD ESC-06 CURB INLET PROTECTION LIMITS OF DISTURBANCE DETAILS, ATTACHMENTS INCLUDED IN SPECIFICATIONS ("SWPPP"), PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.



QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

- 1. AT A MINIMUM, THE CONTRACTOR SHALL FOLLOW THE REQUIREMENTS FOR GOOD HOUSEKEEPING, SPILL CONTROL AND EROSION AND SEDIMENT CONTROL AS SPECIFIED IN THE KANSAS CITY METROPOLITAN CHAPTER OF THE AMERICAN PUBLIC WORKS ASSOCIATION SECTION 2150.
- 2. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.
- 3. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.
- 4. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE—HALF THE HEIGHT OF THE SILT FENCE.
- 5. THE CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION EXITS

6. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING

7. DRAINAGE SWALES WITH SLOPES STEEPER THAN 15% SHALL BE INSPECTED AFTER EACH RAINFALL EVENT. THESE CHANNELS AND SLOPES SHOULD BE TREATED WITH EROSION FABRIC. IF THE CHANNELS OR SLOPES SHOW ANY

SIGN OF FAILURE, COORDINATE WITH THE ENGINEER TO DEVELOP A PLAN TO RE-STABILIZE THE FAILED AREA.

AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AREA AS CONDITIONS

DISTURBANCE THAT ARE IN THE AREA TO BE GRADED SHALL BE REMOVED.

- 2. ALL TOPSOIL, VEGETATION, ROOT STRUCTURES, AND DELETERIOUS MATERIALS SHALL BE STRIPPED FROM THE GROUND SURFACE PRIOR TO THE PLACEMENT OF EMBANKMENTS. CONTRACTOR SHALL OBTAIN THE ON-SITE GEOTECHNICAL REPRESENTATIVE'S ACCEPTANCE OF THE EXISTING GROUND SURFACE MATERIALS AND THE PROPOSED FILL MATERIAL PRIOR TO THE PLACEMENT OF FILL.
- 3. ALL PROPOSED CONTOUR LINES AND SPOT ELEVATIONS SHOWN ARE FINISH GROUND ELEVATIONS. CONTRACTOR SHALL ACCOUNT FOR PAVEMENT DEPTHS, BUILDING PADS, TOPSOIL, ETC. WHEN GRADING THE SITE.
- 4. ALL DISTURBED AREAS THAT SHALL BE FINISH GRADED WITH A MINIMUM OF FOUR INCHES OF TOPSOIL.
- 5. FINISHED GRADES SHALL NOT BE STEEPER THAN 3:1.
- 6. ALL GRADING WORK SHALL BE CONSIDERED UNCLASSIFIED. NO ADDITIONAL PAYMENTS SHALL BE MADE FOR ROCK EXCAVATION. CONTRACTOR SHALL SATISFY HIMSELF AS TO ANY ROCK EXCAVATION REQUIRED TO ACCOMPLISH THE IMPROVEMENTS SHOWN HEREON.

PHASE II CONSISTS OF FINISHING MASS GRADING ACTIVITIES, AND INSTALLATION OF WATER MAIN, SEWER MAIN, SEWER SERVICE LINES, AND STORM SEWERS. WORK SHALL BE CONDUCTED AS FOLLOWS:

FINISH ANY MASS GRADING AND/OR STEEP SLOPE STABILIZATION ACTIVITIES THAT WERE NOT COMPLETED IN PHASE I.

SANITARY SEWER, FOLLOWED BY STORM SEWER, THEN WATER LINE. INSTALL INLET PROTECTION AND SLOPE INTERRUPT SILT FENCE ONCE PIPE BACKFILLING HAS BEEN COMPLETED.

2. BEGIN INSTALLING UNDERGROUND INFRASTRUCTURE STARTING WITH

3. AS PIPE INSTALLATION OPERATIONS ARE COMPLETED, AREAS TO REMAIN INACTIVE FOR MORE THAN 14 DAYS SHALL BE STABILIZED WITH SEED AND COMPOST MULCH AND/OR STEEP SLOPE PROTECTION. SEE FINAL STABILIZATION PLAN.

PROTECTION AND RIPRAP SHALL BE INSTALLED TO PROTECT

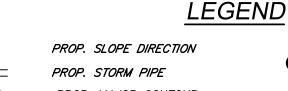
OUTLET AREAS FROM HIGHLY CONCENTRATED DISCHARGE FLOWS. 5. ALL PHASE I AND PHASE II EROSION CONTROL MEASURES SHALL CONTINUE BEING REGULARLY INSPECTED AND MAINTAINED UNTIL FINAL STABILIZATION OF AT LEAST 70% OF THE DISTURBED

SURFACE HAS BEEN MET THROUGH TEMPORARY SEEDING.

4. AS STORM SEWER INFRASTRUCTURE IS COMPLETED, OUTLET



√



900 PROP. MAJOR CONTOUR 901 PROP. MINOR CONTOUR EX. MAJOR CONTOUR EX. MINOR CONTOUR

ROCK CHECK DAM

BERM (ESC-10)

LIMITS OF DISTURBANCE

TEMPORARY STONE CONSTRUCTION EXIT (ESC-01)

INLET PROTECTION

J HOOKS (ESC-03)

SILT FENCE W/

(ESC-06 OR ESC-07)

PROTECTION (ESC-02) RIPRAP OUTLET

PROTECTION (ESC-14)

SEDIMENT BASIN. DRAINAGE AREA - 97.28 AC MINIMUM VOLUME FOR SEDIMENT BASIN STORAGE — 350,214 FT³ (3600 FT³/AC) ACTUAL VOLUME - 676,477 FT3 BOTTOM AREA/ELEVATION – *2,378 FT²/966.00* TOP AREA/ELEVATION - 108,226 FT²/978.00

DEPTH - 12.0 FT MAX. PERMANENT POOL VOLUME (50% OF POND) — 175,107 FT³ PERMANENT POOL TOP AREA/ELEVATION - 95,000 FT²/976.00 (87,552 REQUIRED) FT3/AC PERMANENT POOL DEPTH - 10.0 FT.

ACTUAL SEDIMENT VOLUME - 95,500 FT3

SHEET NUMBER 3 OF 12

ESC-07 AREA INLET PROTECTION ESC-10 ROCK DITCH CHECK DAM

ESC-12 SEDIMENT BASIN DETAILS

ESC-14 OUTLET PROTECTION

GARRETT R. MBER PE-2021025089

2. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORMWATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.

CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.

BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.

SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.

CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.

GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET

ALL WASH WATER (CONCRETE TRUCKS. VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY

SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READLY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.

10. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS

RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.

12. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.

13. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY WILL BE STOPPED FOR AT LEAST 7 DAYS, SHALL BE TEMPORARILY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.

14. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE STABILIZED. THESE AREAS SHALL BE STABILIZED NO LATER THAN 21 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. STABILIZATION MAY CONSIST OF SEED, SOD, ROCK, PAVEMENT, STRUCTURE OR OTHER NON-ERODIBLE

15. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE. ONLY USE INGRESS/EGRESS

16. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.

LOCATIONS AS PROVIDED.

17. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF

18. ON-SITE & OFFSITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.

19. SLOPES CONSISTING OF TOPSOIL, CLAY, OR SILT SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.

20. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION AND SEDIMENT CONTROL MEASURES (SILT FENCES, ETC.) TO PREVENT EROSION AND POLLUTANT

21. CONTRACTOR RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE. PONDING OF WATER WILL NOT BE ALLOWED ON SITE. IF NECESSARY, CONTRACTOR TO PROVIDE TEMPORARY SWALES OR PUMPING IN LOW POINT SUMP CONDITIONS UNTIL THE INSTALLATION OF STORM SEWER.

DISCHARGE.

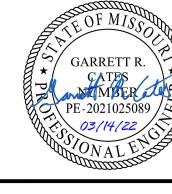
ACERAGE SUMMARY:

TOTAL DISTURBED AREA = 73.3 AC AC

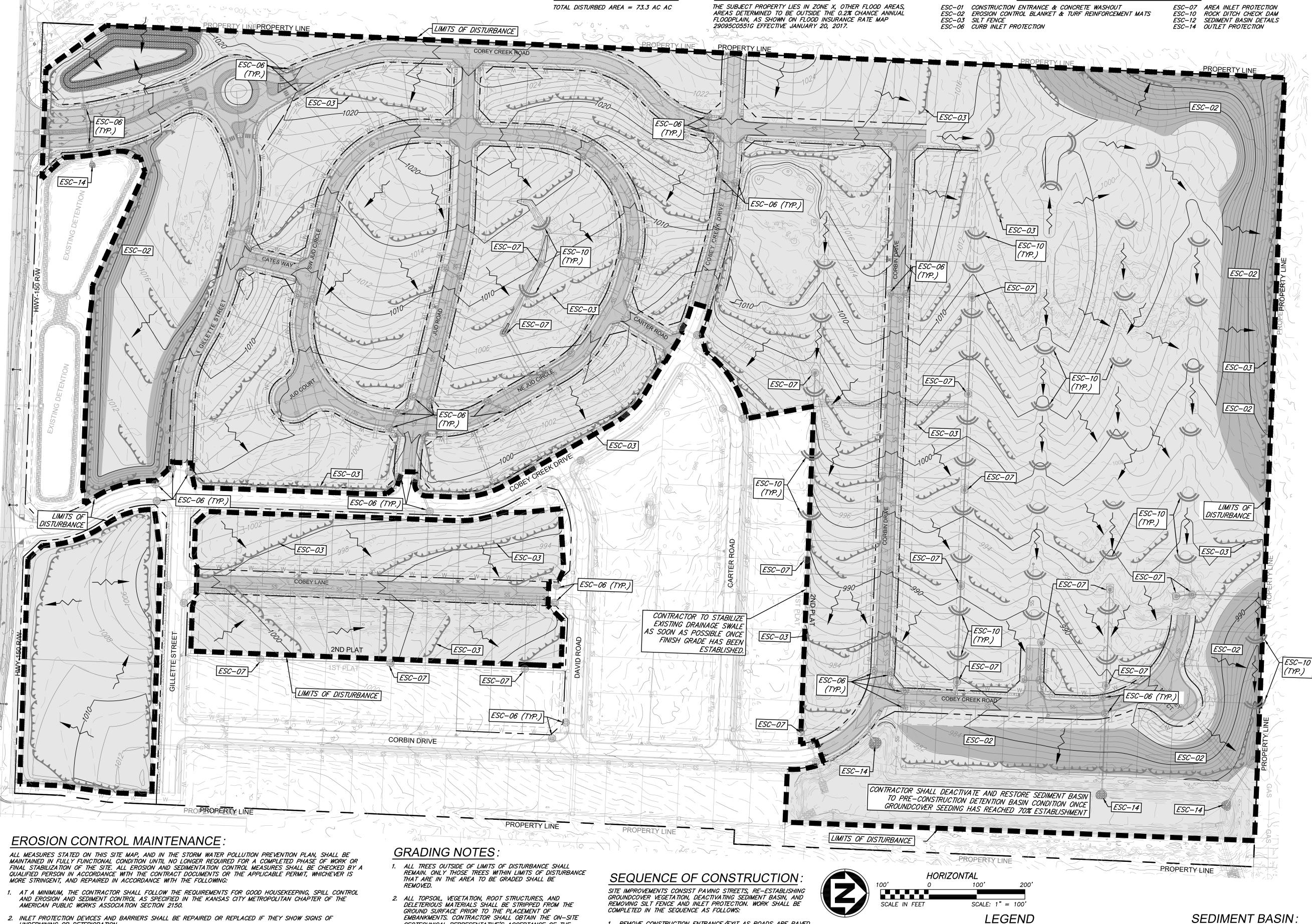
FEMA FLOOD NOTE:

KCAPWA REFERENCE DETAILS.





SHEET NUMBER 4 OF 12



2. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION. 3. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS

SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED. 4. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE—HALF THE HEIGHT OF THE SILT FENCE.

MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION EXITS 6. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING

5. THE CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF

7. Drainage swales with slopes steeper than 15% shall be inspected after each rainfall event. These CHANNELS AND SLOPES SHOULD BE TREATED WITH EROSION FABRIC. IF THE CHANNELS OR SLOPES SHOW ANY SIGN OF FAILURE, COORDINATE WITH THE ENGINEER TO DEVELOP A PLAN TO RE-STABILIZE THE FAILED AREA.

EMBANKMENTS. CONTRACTOR SHALL OBTAIN THE ON-SITE GEOTECHNICAL REPRESENTATIVE'S ACCEPTANCE OF THE EXISTING GROUND SURFACE MATERIALS AND THE PROPOSED FILL MATERIAL PRIOR TO THE PLACEMENT OF FILL.

3. ALL PROPOSED CONTOUR LINES AND SPOT ELEVATIONS SHOWN ARE FINISH GROUND ELEVATIONS. CONTRACTOR SHALL ACCOUNT FOR PAVEMENT DEPTHS, BUILDING PADS, TOPSOIL, ETC. WHEN GRADING THE SITE.

4. ALL DISTURBED AREAS THAT SHALL BE FINISH GRADED WITH A MINIMUM OF FOUR INCHES OF TOPSOIL.

5. FINISHED GRADES SHALL NOT BE STEEPER THAN 3:1.

ALL GRADING WORK SHALL BE CONSIDERED UNCLASSIFIED. NO ADDITIONAL PAYMENTS SHALL BE MADE FOR ROCK EXCAVATION. CONTRACTOR SHALL SATISFY HIMSELF AS TO ANY ROCK EXCAVATION REQUIRED TO ACCOMPLISH THE IMPROVEMENTS SHOWN HEREON.

1. REMOVE CONSTRUCTION ENTRANCE/EXIT AS ROADS ARE PAVED. 2. INSTALL CURB, ROAD PAVEMENT, AND REQUIRED SIDEWALKS ADJACENT TO TRACTS. ADJUST SILT FENCE AND SLOPE INTERRUPTS AS NECESSARY TO PREVENT MUD AND SILT FROM

FLOWING LONG DISTANCES.

3. SEED AND/OR SOD ALL DISTURBED AREAS ONCE FINISH GRADE HAS BEEN ACHIEVED. MAINTAIN SILT FENCE. SLOPE INTERRUPTS, STEEP SLOPE PROTECTION, AND INLET PROTECTION UNTIL VEGETATIVE COVER HAS BEEN ESTABLISHED OVER 70% OF THE TOTAL DISTURBED AREA.

4. AS ALL DISTURBED AREAS ARE STABILIZED WITH VEGETATIVE COVER, STORM SEWER INLET PROTECTION, SILT FENCE, SLOPE INTERRUPTS, ROCK DITCH CHECKS, AND DIVERSION BERMS CAN BE REMOVED UPON CITY INSPECTION AND APPROVAL. ENSURE ENTIRE SITE IS STABILIZED PRIOR TO DEACTIVATION OF SEDIMENT BASIN.

PROP. SLOPE DIRECTION PROP. STORM PIPE 900 PROP. MINOR CONTOUR

√

_ _ 900 - _

PROP. MAJOR CONTOUR EX. MAJOR CONTOUR EX. MINOR CONTOUR

ROCK CHECK DAM

BERM (ESC-10)

LIMITS OF DISTURBANCE

STEEP SLOPE

J HOOKS (ESC-03) (ALL AREAS UNPAVED) PROTECTION (ESC-02)

INLET PROTECTION

SILT FENCE W/

RIPRAP OUTLET

PROTECTION (ESC-14)

(ESC-06 OR ESC-07)

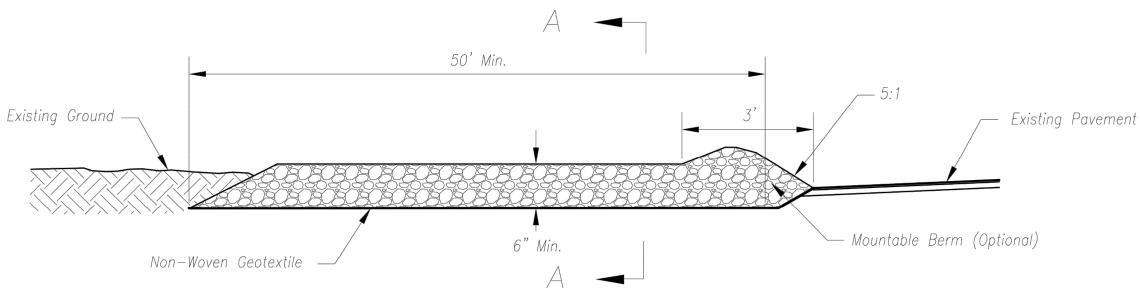
DRAINAGE AREA - 97.28 AC MINIMUM VOLUME FOR SEDIMENT BASIN STORAGE - 350,214 FT³ (3600 FT³/AC) ACTUAL VOLUME - 676,477 FT3 BOTTOM AREA/ELEVATION – *2,378 FT²/966.00* TOP AREA/ELEVATION - 108,226 FT²/978.00 DEPTH - 12.0 FT MAX. PERMANENT POOL VOLUME (50% OF POND) - 175,107 FT3 PERMANENT POOL TOP AREA/ELEVATION - 95,000 FT²/976.00

ACTUAL SEDIMENT VOLUME - 95,500 FT3

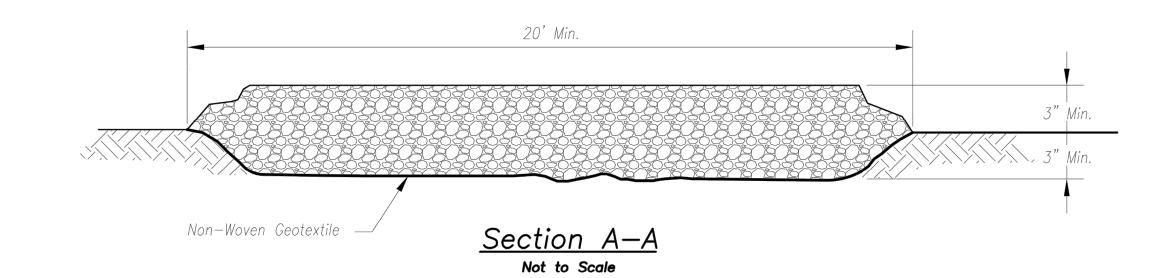
(87,552 REQUIRED) FT3/AC PERMANENT POOL DEPTH - 10.0 FT.

AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AREA AS CONDITIONS

Plan View Not to Scale



Side Elevation Not to Scale



Notes for Construction Entrance:

- Avoid locating on steep slopes, at curves on public roads, or downhill of disturbed area.
- Remove all vegetation and other unsuitable material from the foundation area, grade, and crown for positive drainage.
- 3. If slope towards the public road exceeds 2%, construct a 6— to 8—inch high ridge with 3H: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.
- 6. Divert all surface runoff and drainage from the entrance to a sediment control device.
- 7. 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.

CONSTRUCTION ENTRANCE

Notes for Concrete Washout:

- Concrete washout areas shall be installed prior to any concrete placement on site.
- 2. Concrete washout area shall include a flat subsurface pit sized relative to the amount of concrete to be placed on site. The slopes leading out of the subsurface pit shall be 3:1. The vehicle tracking pad shall be sloped towards the concrete washout area.
- Vehicle tracking control is required at the access point to all concrete washout areas.
- 4. Signs shall be placed at the construction site entrance, washout area and elsewhere as necessary to clearly indicate the location(s) of the concrete washout area(s) to operators of concrete truck and pump rigs.
- 5. A one—piece impervious liner may be required along the bottom and sides of the subsurface pit in sandy or gravelly soils.

Maintenance for Concrete Washout:

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

Existing
Grade

Exact and a material Shall
be used for perimeter berm.
Soil for berm Shall be
compacted in the same
manner as trench backfill.

Existing
Grade

4:1

Slope

Slope

Slope

CONCRETE WASHOUT

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KANSAS CITY METRO CHAPTER

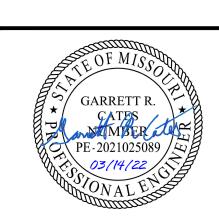
CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT

STANDARD DRAWING
NUMBER ESC-OI
ADOPTED:
10/24/2016

ENGINEERS • SURVEYORS • LABORATORIES • DRII.
941 W 141ST TERR. STE A • KANSAS CITY, MO 64145 • PHONE (816)
A LICENSED MISSOURI ENGINEERING & SURVEYING CORPORATIC

	DRAWING INFO.	OS .	PJ	PE-2021025089	03/14/2022	ISSUED FOR: FOR REVIEW	21KC10060	
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	REVISIONS	DESCRIPTION						© COPYRIGHT ANDERSON ENGINEERING, INC. 2022
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CONSTRUCTION
NTRANCE DETAILS

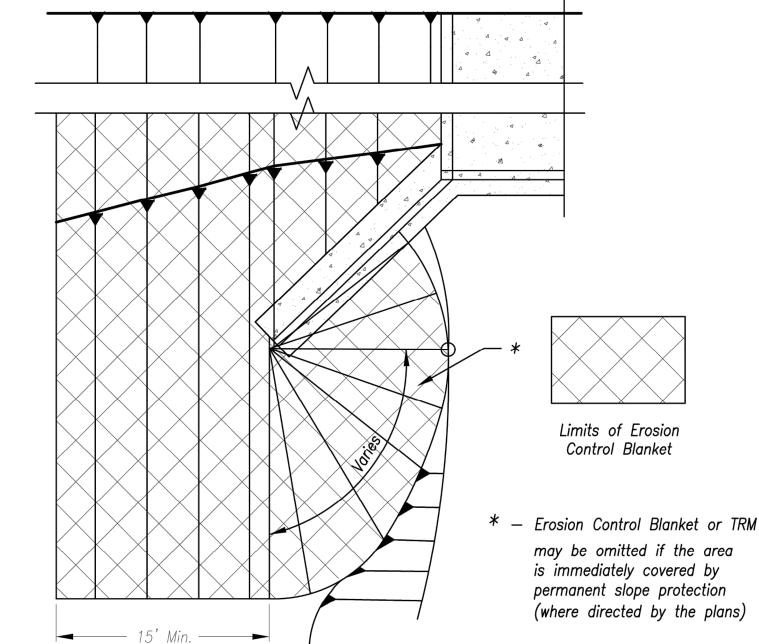


SHEET NUMBER

C801

5 OF 12

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.

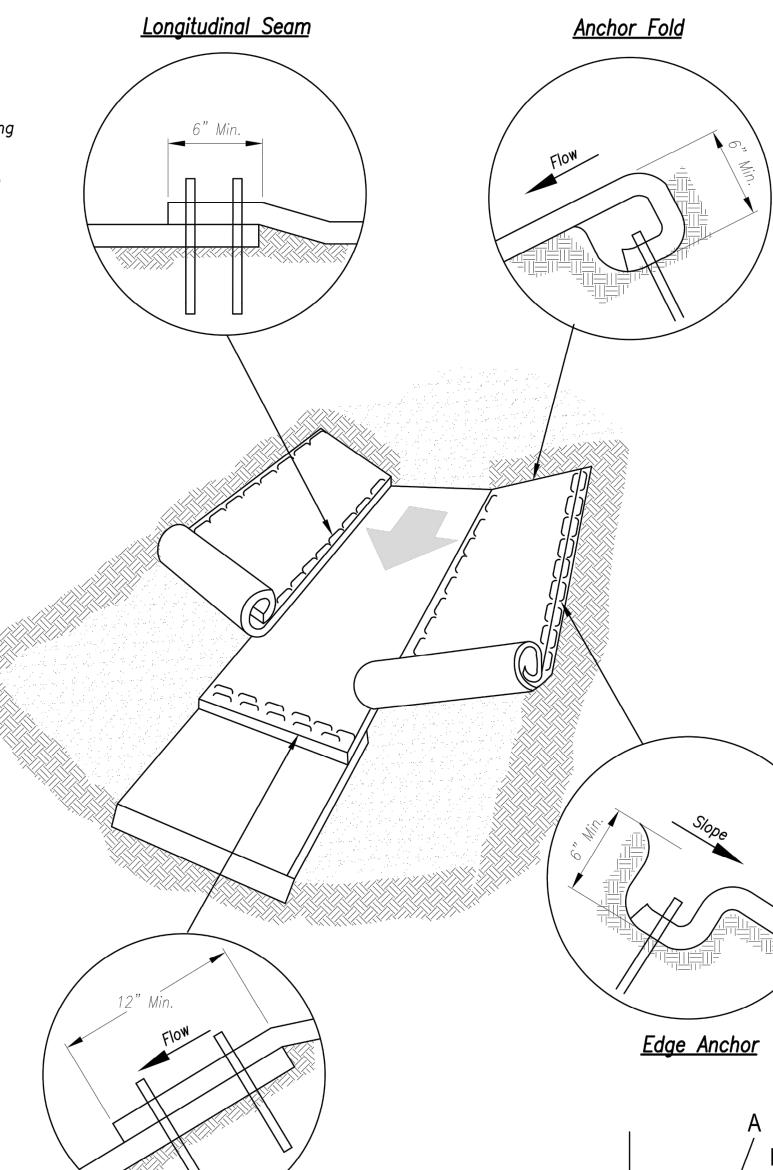


Installation Around Culvert Slope

<u>Partial Box Culvert Plan</u> Not to Scale

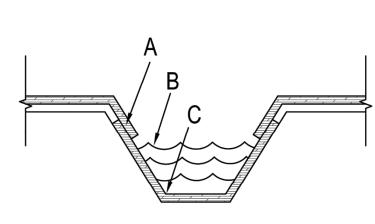
Notes for Installation on Slopes:

- 1. Erosion Control Blankets and TRMs shall be laid in the direction of the slope. In order for blanket to be in contact with the soil, lay blanket loosely, avoiding stretching.
- 2. ANCHOR SLOTS: The top of the blanket should be "slotted in" at the top of the slope and anchored in place with anchors 6 inches apart. The slots should be 6 inches wide x 6 inches deep with the blanket anchored in the bottom of the slot, then backfilled, tamped and seeded.
- 3. SPLICE SEAM: When splices are necessary, overlap end a minimum of 8 inches in direction of water flow. Stagger splice
- 4. TERMINAL FOLD: The bottom edge of the blanket shall be turned under a minimum of 4 inches, then anchored in place with anchors 9 inches apart.



Notes for Installation in Channels:

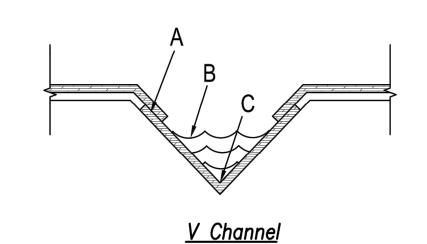
- 1. Erosion Control Blankets and TRMs shall be laid in the direction of the flow, with the first course at the centerline of channel, where applicable. In order for the mat to be in contact with the soil, lay the mat loosely, avoiding stretching.
- 2. ANCHOR FOLD: The top of the mat should be folded under, buried and secured with wood or other approved anchors placed 6 inches apart. The top edge of the mat should be buried in a slot 6 inches wide \times 6 inches deep, anchored in the bottom of the slot, backfilled, and the mat folded over the top as shown in detail.
- 3. SPLICE SEAM: When splices are necessary, overlap end a minimum of 12 inches in direction of water flow. Stagger splice seams.
- 4. CHECK SLOTS: Establish check slots transverse to slope every 30 feet. The slots should be 6 inches wide x 6 inches deep. The mat shall be cut to a length 12 inches beyond the slot. The top of the downstream mat shall be slotted in, secured and buried similar to the edge anchor fold. The upstream mat shall then cover the slot and be anchored as shown.
- 5. EDGE ANCHORS: Lay outside edge of mat into trench at top of the slope and anchor.
- 6. TERMINUS: The bottom edge of the mat shall be anchored.



Trapezoidal Channel

Critical Points:

- A Overlaps and seams;
- B Projected water line;
- C Channel bottom / side slope vertices;



<u>Installation in Channels</u>

Splice Seam

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EROSION CONTROL BLANKETS AND TURF REINFORMENT MATS ADOPTED:

NUMBER ESC-02

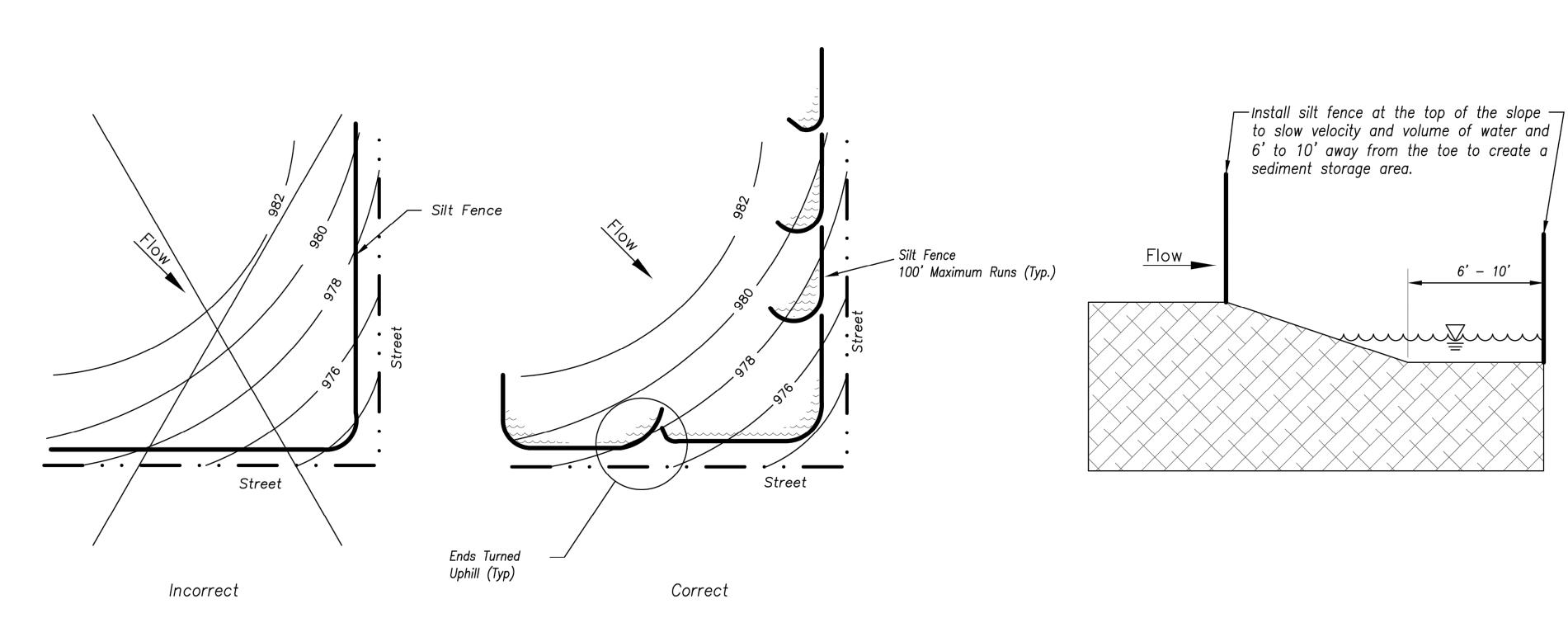
STANDARD DRAWING 10/24/2016

SHEET NUMBER 6 OF 12

GARRETT R.

STEEP SLOPE PROTECTION DETAIL

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



<u>Figure A</u>

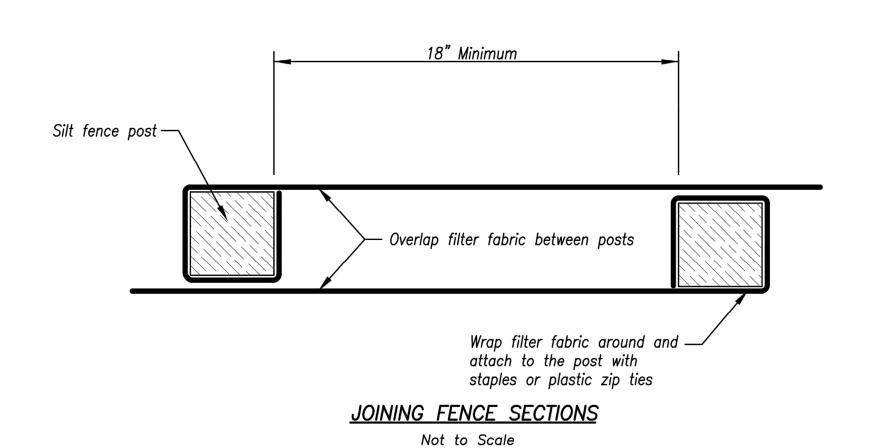
SILT FENCE LAYOUT Not to Scale

<u>Notes:</u>

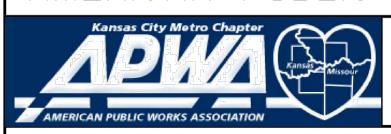
- 1. In order to contain water, the ends of the silt fence must be turned uphill (Figure A).
- 2. Long perimeter runs of silt fence must be limited to 100'. Runs should be broken up into several smaller segments to minimize water concentrations (Figure A).
- 3. Long slopes should be broken up with intermediate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

<u>Maintenance:</u>

- 1. Remove and dispose of sediment deposits when the deposit approaches 1/3 the height of silt fence.
- 2. Repair as necessary to maintain function and structure.



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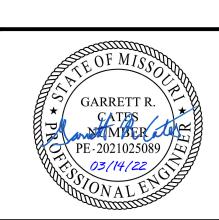


KANSAS CITY METRO CHAPTER

SILT FENCE

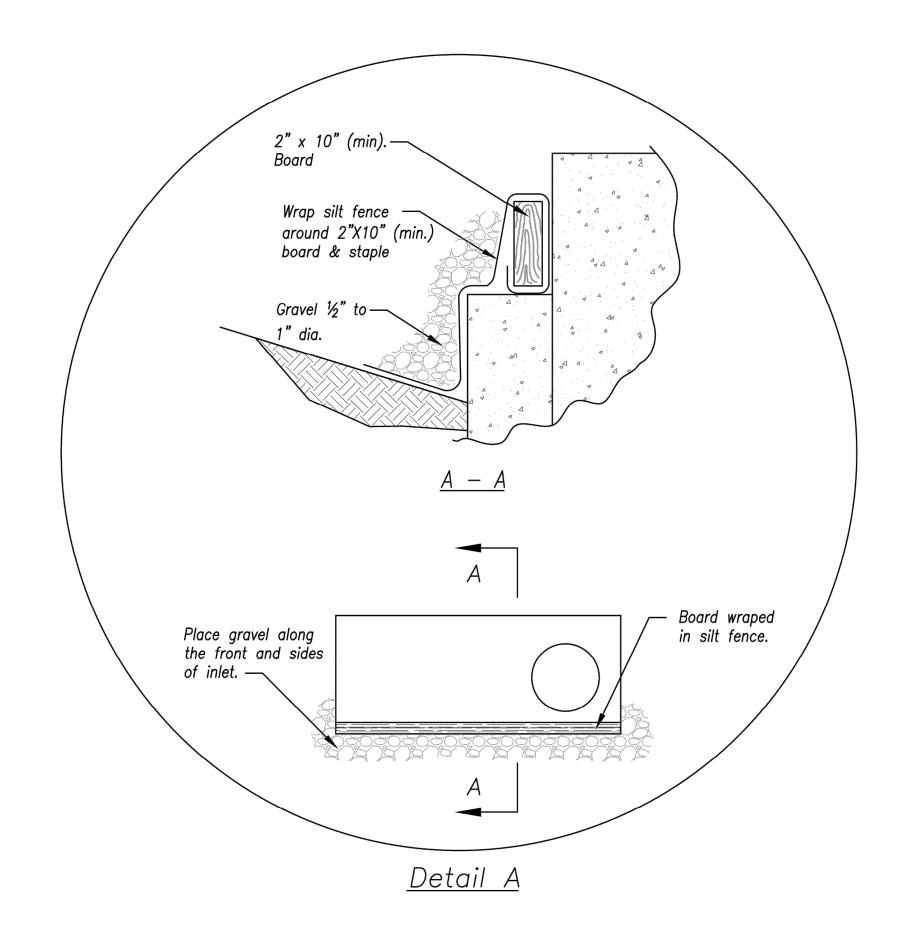
STANDARD DRAWING NUMBER ESC-03 ADOPTED: 10/24/2016

	DRAWING INFO.	29	PJ	PE-2021025089	03/14/2022	FOR REVIEW	21KC10060	
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I		DATE						
l		ВУ						2022
	REVISIONS	DESCRIPTION						© COPYRIGHT ANDERSON ENGINEERING, INC. 2022
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SHEET NUMBER

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



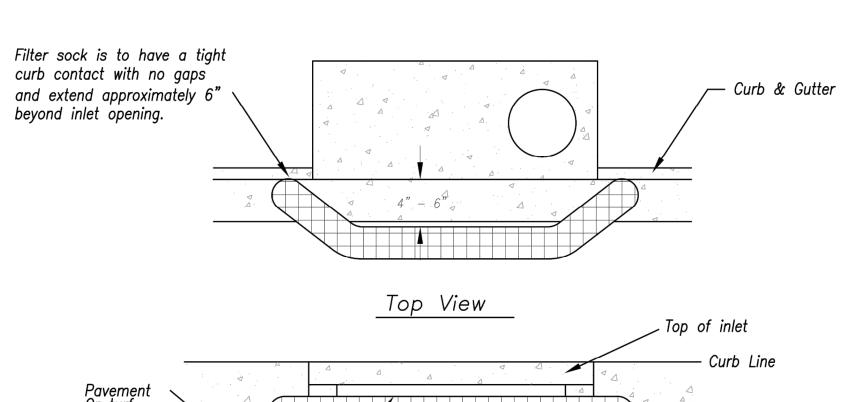
EARLY STAGE CURB INLET (Open Box and Prior to Pouring Curb and Inlet Throat)

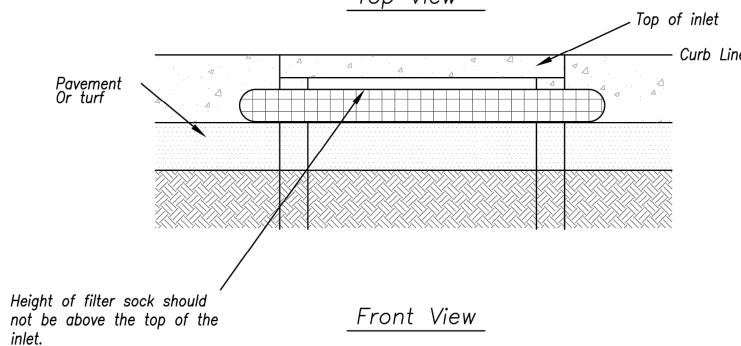
<u>Notes:</u>

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

<u>Maintenance:</u>

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





Sump Inlet Sediment Filter

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

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CURB INLET PROTECTION

STANDARD DRAWING NUMBER ESC-06 ADOPTED: 10/24/2016

GARRETT R.

CATES

MERCANICAL STREET OF THE CONTROL SHEET NUMBER

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

Not to Scale

EARLY STAGE AREA INLET

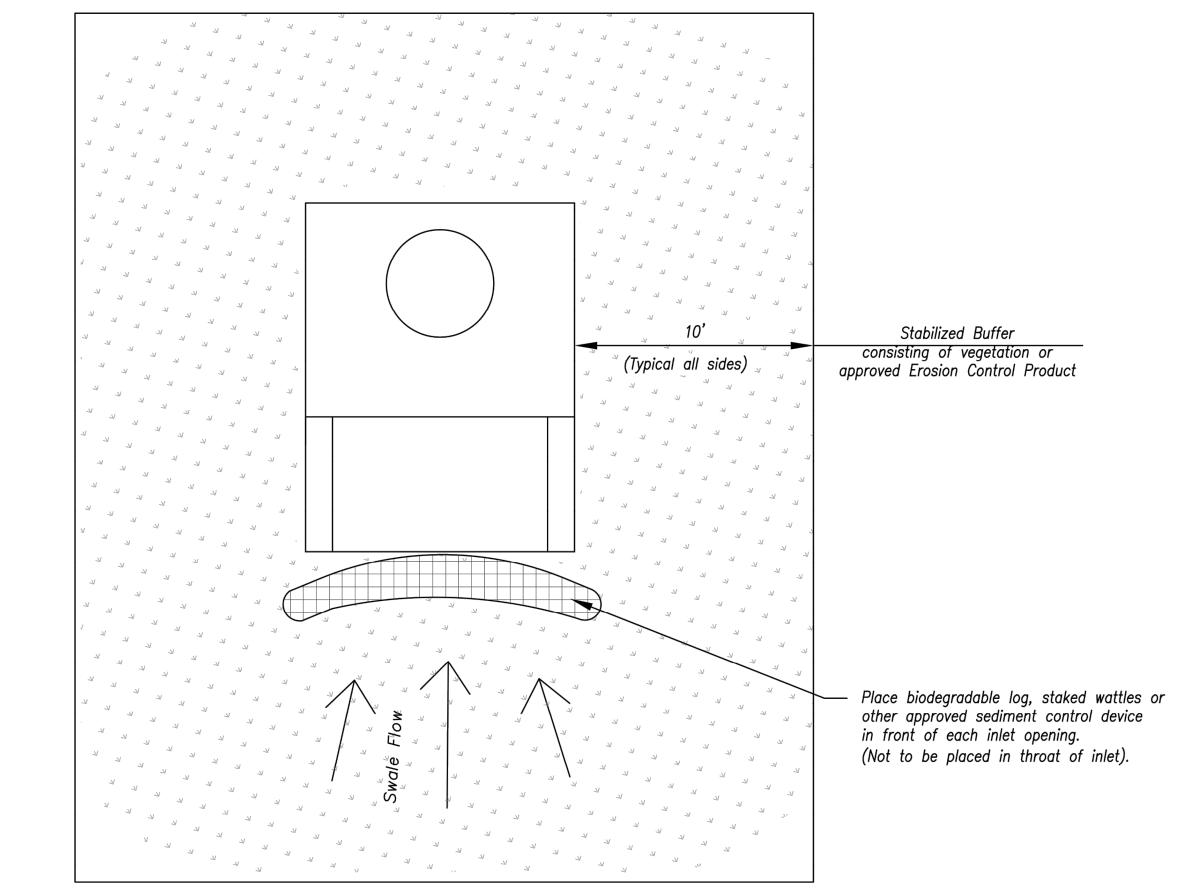
(All open boxes and inlets not at final grade)

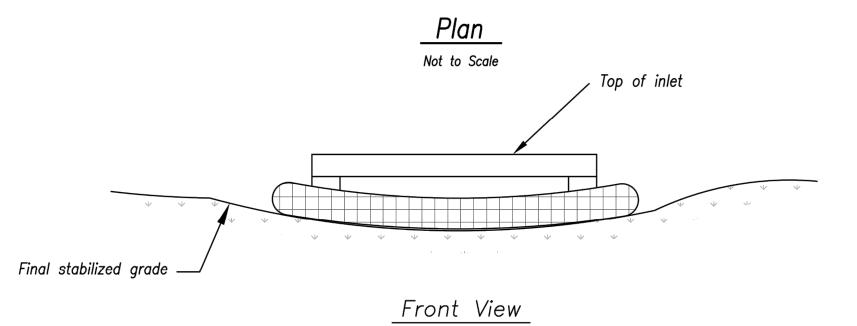
Early Stage Area Inlet Sediment Barrier to be installed immediately after inlet or junction box is constructed.

- 2. Silt fence shall remain in place until excavated area is removed and Late Stage Area Inlet is being installed.
- 3. Backfill excavated area ONLY after final grading of the site. Stabilization of the site is to immediately follow.

<u>Notes:</u>

Wire reinforced silt fence may be used in place of silt fence attached to wood frame.



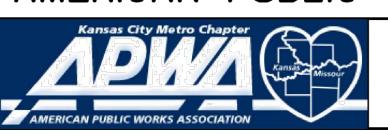


LATE STAGE AREA INLET (Area inlets at final grade and existing inlets)

<u>Maintenance:</u>

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

AMERICAN PUBLIC WORKS ASSOCIATION

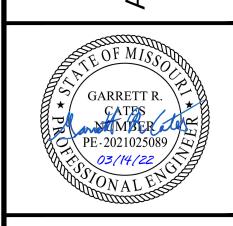


KANSAS CITY METRO CHAPTER

AREA INLET AND JUNCTION BOX PROTECTION

STANDARD DRAWING NUMBER ESC-07 ADOPTED: 10/24/2016

DRAWING INFO.	29	PJ	PE-2021025089	03/14/2022	ISSUED FOR: FOR REVIEW	21KC10060	
AO	DRAWN BY:	CHECK BY:	LICENSE NO.	DATE:	ISSUED FOR:	JOB NUMBER: 21KC10060	
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REVISIONS	DESCRIPTION						© COPYRIGHT ANDERSON ENGINEERING, INC. 2022
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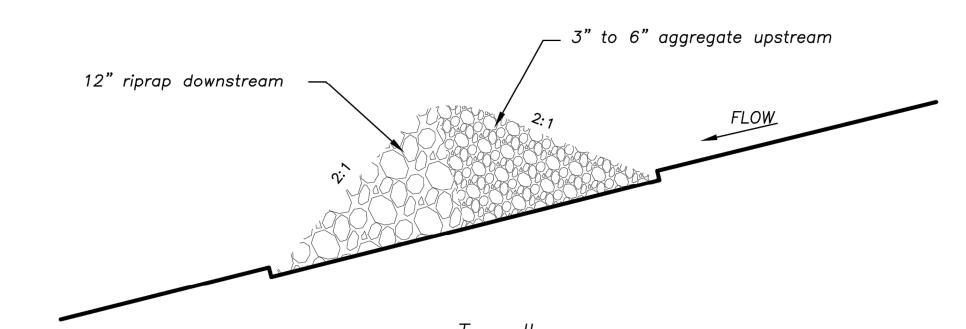
SHEET NUMBER

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

Limits of

Excavation

<u>Type |</u> (2 Acres or less of Drainage Area) Not to Scale

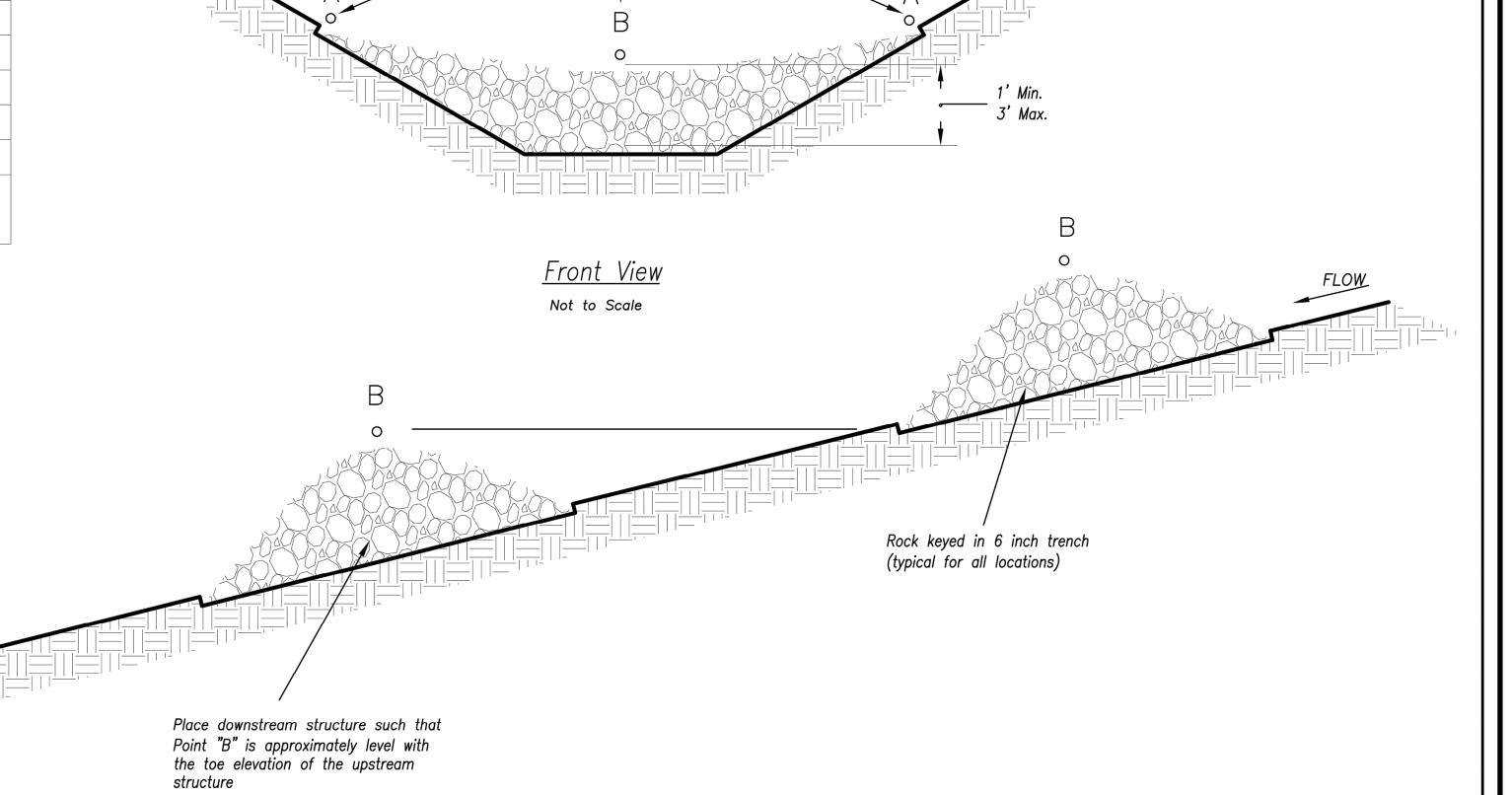


(2-10 Acres of Drainage Area)

Not to Scale

ROCK DITCH CHECK

<u>T</u> emporary Roc	<u>ck Ditch Check</u>				
<u>Spa</u>	<u>cing</u>				
	-				
Ditch Centerline	Spacing Interval				
Slope (%)	(Feet)				
5.0	60 50				
6.0					
7.0	43				
8.0	36				
9.0	33				
10.0	29				
Note: Use this spa Rock Ditch	•				



Elevation at end Points "A" must be minimum 6" higher than elevation of flow line at point "B"

Spacing Between Check Dams (all types) Not to Scale

<u>Notes:</u>

- Rock check dams shall be used only for drainage areas less that 10 acres unless approved by the City Engineer.
- Use rock checks only in situations where the ditch slope exceeds 6%.

<u>Maintenance:</u>

- 1. Remove and dispose of sediment deposits when the deposit approaches ½ the height of the ditch check.
- Replace and reshape as necessary to maintain function and integrity of installation.

AMERICAN PUBLIC WORKS ASSOCIATION

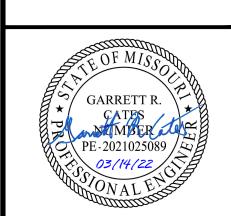


KANSAS CITY METRO CHAPTER

ROCK DITCH CHECKS

STANDARD DRAWING NUMBER ESC-IO ADOPTED: 10/24/2016

	DRAWING INFO.	29	PJ	LICENSE NO. PE-2021025089	03/14/2022	ISSUED FOR: FOR REVIEW	JOB NUMBER: 21KC10060	•
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SHEET NUMBER 10 of 12

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

<u>Section B-B</u>

Not to Scale

OUTLET PROTECTION W/O END SECTION

4. Install riprap apron so that it is no higher than flowline of pipe.

Reference APWA Specification 2650 for rock type, size, and placement.

AMERICAN PUBLIC WORKS ASSOCIATION

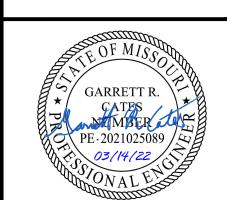


KANSAS CITY METRO CHAPTER

OUTLET PROTECTION

STANDARD DRAWING NUMBER ESC-14 ADOPTED: 10/24/2016

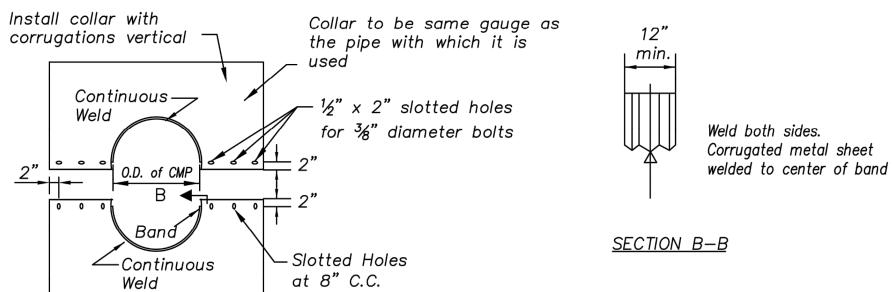
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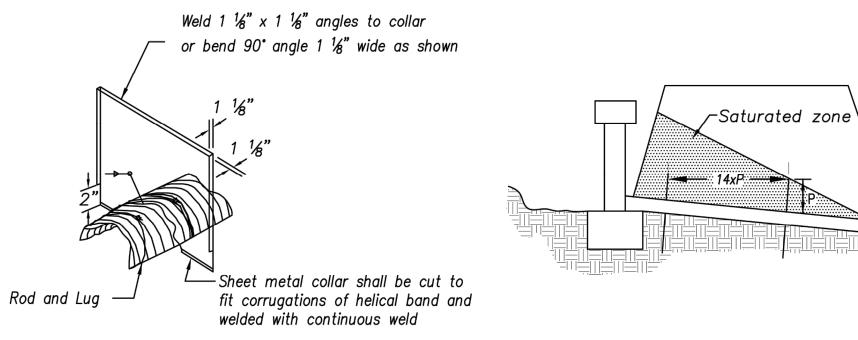
SHEET NUMBER <u>11</u> of 12

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

PRINCIPAL SPILLWAY DETAIL



Size and spacing of slotted openings shall be the same as shown for CM collar. Use rods and lugs to clamp bands securely to pipe.



ISOMETRIC VIEW

в ◀

ANTI-SEEPAGE COLLAR LOCATIONS

CORRUGATED METAL ANTI-SEEPAGE COLLAR DETAIL

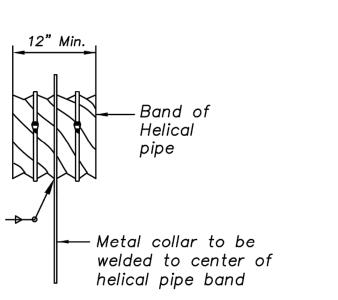
Not to Scale

SKIMMER DETAIL (Typ.) *

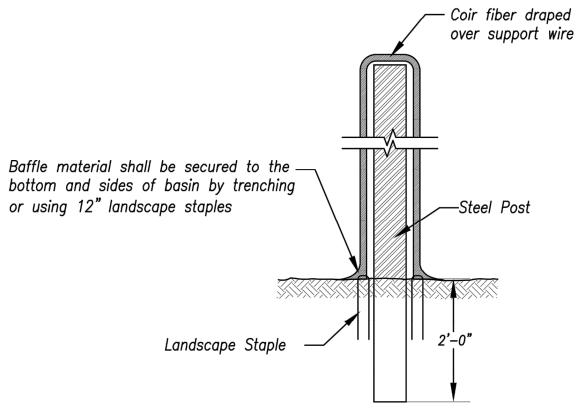
Outlet end: connection to outlet pipe or riser

Flexible pipe

* Designer to provide specific details per application (e.g. pipe sizes, screen sizes, perforation, etc.) as required.



PARTIAL ELEVATION



— Screen accessible through door

Barrel pipe longer than shown

Drape baffle material over support wire or rope and secure with plastic ties at posts and on wire every 12" Support wire or rope to prevent sagging Coir fiber or similar material

<u> Option A - Rock with Weir</u>

To increase flow path construct 1' deep weirs at

Weir width should be adjusted for expected flow

alternating ends of each baffle.

3"-6" clean aggregate -

<u> Option B - Coir Fiber Material</u>

Anti-Seepage Collar Notes:

- 1. Connections between the anti-seepage collar and the barrel must be watertight.
- 2. P = projection distance. Sized as required to achieve at least a 10% increase in seepage
- 3. 14xP = Max. spacing between collars.
- 4. Collars shall generally be placed in the middle third of the embankment, and within the saturated zone.
- 5. All materials to be in accordance with construction material specifications.
- 6. When specified on the plans, coating of collars shall be in accordance with construction material specifications.
- 7. Unassembled collars shall be marked by painting or tagging to identify matching pairs.

- 8. The lap between the two half sections and between the pipe and connecting band shall be caulked with asphalt mastic at the time of installation.
- 9. Each collar shall be furnished with two (2) $\frac{1}{2}$ " diameter rods with standard tank lugs for connecting the collars to the pipe.
- 10. For bands and collars, modification of the details shown may be used providing equal water tightness is maintained and detailed drawings are Submitted and approved by the Engineer prior to delivery.
- 11. Two other types of anti-seep collars are:
- a. Corrugated metal, similar to above, except shop welded to a 4 ft. section of the pipe and connected to the pipe with connecting bands.
- b. Concrete, 6 inches thick, formed around the pipe with #3 rebar spaced 15".

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BAFFLE DETAILS

Not to Scale

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- Stable impervious rock dam

Maximum 4' between posts

Staple or trench baffle material —

into bottom and sides of basin



KANSAS CITY METRO CHAPTER

SEDIMENT BASIN - DETAILS

STANDARD DRAWING NUMBER ESC-I2 ADOPTED: 10/24/2016

DRAWING INFO.	29	PJ	LICENSE NO. PE-2021025089	03/14/2022	ISSUED FOR: FOR REVIEW	JOB NUMBER: 21KC10060	
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SHEET NUMBER 12 OF 12