DETENTION BASIN PLANS FOR THE VILLAGE AT DISCOVERY PARK ZONE 1

LEE'S SUMMIT, JACKSON COUNTY, MO

SECTION 30, T48N, R31W

DATE: 06/20/2024

PROJECT LOCATION

LEGAL DESCRIPTION:

THE VILLAGE AT DISCOVERY PARK, TRACT A

LOCATION MAP SECTION 30, TOWNSHIP 48N, RANGE 31W JACKSON COUNTY, MISSOURI



UTILITY CONTACTS:

SANITARY & WATER: CITY OF LEE'S SUMMIT, MO 220 SE GREEN STREET LEE'S SUMMIT, MO 64063 PHONE: (816) 969-1900

PUBLIC ROADWAY: CITY OF LEE'S SUMMIT, MO 220 SE GREEN STREET LEE'S SUMMIT, MO 64063 PHONE: (816) 969-1800

POWER: **EVERGY**

1300 SE HAMBLEN RD LEE'S SUMMIT, MO 64081 PHONE: (816) 347-4320

STORMWATER: CITY OF LEE'S SUMMIT, MO 220 SE GREEN STREET LEE'S SUMMIT, MO 64063 PHONE: (816) 969-1800

NATURAL GAS: SPIRE GAS ENERGY 3025 SW CLOVER DRIVE LEE'S SUMMIT. MO 64082 PHONE: (816) 985-8888

TELECOMMUNICATIONS:

PHONE: 800-286-8313 SPECTRUM PHONE: 877-772-2253 GOOGLE FIBER PHONE: 877-454-6959

FEMA FLOOD INFORMATION:

THE ENTIRE SITE IS LOCATED WITHIN ZONE X, "AREAS OF 0.2% ANNUAL CHANGE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE: AS DEPICTED ON THE FEMA FLOOD INSURANCE RATE (FIRM) MAP NUMBER 29095C0409G, REVISION DATE JANUARY 20, 2017.

OIL/GAS WELLS:

NO OIL OR GAS WELLS ARE LOCATED WITHIN PROJECT LIMITS. INFORMATION OBTAINED FROM THE MISSOURI DEPARTMENT OF NATURAL RESOURCES, GEOLOGICAL SURVEY GEOSCIENCES TECHNICAL RESOURCE ASSESSMENT TOOL (GEOSTRAT).



WATERSHED: LITTLE CEDAR CREEK - LITTLE BLUE RIVER

DISTURBED AREA: 10.13 AC

SHEET INDEX:

C100	COVER SHEET
C101	GENERAL NOTES
C200	GRADING PLAN
C201	SPILLWAY DETAIL PLAN
C202	SPILLWAY DETAILS
C300	ESC - PHASE I
C301	ESC - PHASE II
C302	ESC - PHASE III
C400	ESC DETAILS - 1

SURVEY CONTROL

BOILVET CONTINUE.						
	POINT TABLE					
POINT #	POINT # NORTHING EASTING ELEVATION FULL DESCRIPTION					
50	1012389.8190	2822108.7840	990.8100	CTL		
51	1011606.5710	2817819.8520	933.2990	CTL		
52	1009320.3430	2818811.2690	930.8920	CTL		
53	1011007.3400	2823445.2840	988.4360	CTL		
54	1014987.4060	2823402.9760	930.4780	CTL		
55	1015699.8100	2821686.0380	935.0540	CTL		

CP #50: 1/2" IB/CAP ON THE NORTH SIDE OF NW COLBERN ROAD. IT IS IN THE 1ST FIELD ENTRANCE WEST OF NE DOUGLAS STREET

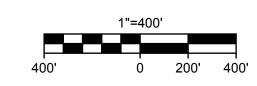
CP#51: SET 1/2" IB/CAP ON THE SW CORNER OF COLBERN ROAD AND MAIN STREET

CP#52: SET 1/2" IB/CAP ON THE SOUTH SIDE OF MAIN STREET WHERE MAIN STREET TURNS EAST ON THE SOUTH SIDE OF I-470

CP#53: SET 1/2" IB/CAP ON THE EAST SIDE OF DOUGLAS JUST SOUTH OF THE I-470 INTERCHANGE. IN THE NW CORNER OF THE PARKING LOT TO THE OLD OUTBACK

CP#54: SET 1/2" IB/CAP ON THE SOUTH SIDE OF NE DOUGLAS ST. (OLD) WHERE IT BENDS BACK NORTH AT THE SE CORNER OF "THE CURE"

CP#55: SET 1/2" IB/CAP ON THE EAST SIDE OF DOUGLAS AT DRIVEWAY FOR **HOUSE 2545**



GENERAL NOTES:

- 1. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS BY DETAILED INSPECTION PRIOR TO SUBMITTING BID AND STARTING CONSTRUCTION.
- 2. COORDINATE WORK WITH OTHER SITE RELATED DEVELOPMENT DRAWINGS.

PROJECT SPECIFICATIONS:

THE SPECIFICATIONS FOR THIS PROJECT SHALL BE THE FOLLOWING:

- MOST CURRENT VERSION OF THE DESIGN AND CONSTRUCTION MANUAL OF THE CITY OF LEE'S SUMMIT. MO.
- 2. MOST CURRENT VERSION OF THE AMERICAN PUBLIC WORKS ASSOCIATION -KANSAS CITY METRO CHAPTER

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

CIVIL ENGINEER:

OWN, INC. 8455 COLLEGE BLVD OVERLAND PARK, KS 66210 EMAIL: JBARTZ@WEAREOWN.COM PHONE: (816) 777-0400

PHONE: (573) 615-2252

DEVELOPER:

COLUMBIA, MO 65201

CONTACT: JOHN ODLE

INTRINSIC DEVELOPMENT

3622 ENDEAVOR AVE., STE. 101

Selley WBate DATE 06/20/2024 JEFFREY W. BARTZ. P.E. MISSOURI P.E. NO. 2012022594

PREPARED AND SUBMITTED BY:



8455 College Boulevard Overland Park, KS 66210 weareown.com

MASS GRADING & EROSIO CONTROL PLANS - THE VILLAGE AT DISCOVERY PARK ZONE 1

NW COLBERN RD & NE DOUGLAS ST LEE'S SUMMIT, MO

REVISIONS				
NO.	DESCRIPTION	DATE		
1	INITIAL SUBMISSION	06/20/2024		

DRAWING INFORMATION

PROJECT NO: 24KC10025 DRAWN BY: JGD

CHECK BY: JWB

ISSUED DATE: 6/19/2024

FIELD BOOK:



LICENSE NO:

A licensed Missouri Engineering Corporation COA# 00062

SHEET TITLE

COVER SHEET

SHEET NUMBER

C100

1 OF 9

GENERAL NOTES:

THE OWNER'S REPRESENTATIVE.

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE PLANS IN THEIR POSSESSION ARE THE MOST CURRENT REVISION ISSUES, ARE FULLY COORDINATED WITH ALL SUBCONTRACTORS, AND PRESENT ON SITE AT ALL TIMES. CURRENT PLANS PREPARED BY OWN, INC. MAY BE OBTAINED AT THE DIRECTION OF THE OWNER. DIRECT REQUESTS TO OWN, INC. MAY REQUIRE ADDITIONAL AUTHORIZATIONS, AGREEMENTS, AND/OR FEES. PLEASE CONTACT THE ENGINEER FOR MORE INFORMATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY RESPONSIBLE FOR ANY DEVIATIONS FROM THESE PLANS UNLESS WRITTEN APPROVAL FROM ENGINEER, OWNER, AND DEVELOPER.
 ALL WORK AND MATERIALS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE OWNER OR
- 4. ALL ESTIMATES OF QUANTITIES ARE FOR INFORMATIONAL PURPOSED ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING QUANTITIES AND ITEMS OF WORK.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LABOR, MATERIALS, AND EQUIPMENT
- REQUIRED TO COMPLETE THE WORK SHOWN IN THE PLANS.

 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS, PAYING ALL FEES, AND FOR OTHERWISE COMPLYING WITH ALL APPLICABLE REGULATIONS GOVERNING THE
- 7. THE CONTRACTOR SHALL NOT ENGAGE IN ACTIVITIES THAT MAY ENCROACH ON WATERS OF THE U.S., INCLUDING WETLANDS, UNTIL ANY NECESSARY PERMITS MAY BE OBTAINED. THE CONTRACTOR SHALL REVIEW AND COMPLY WITH ALL CONDITIONS DESCRIBED IN THE PERMIT.
- 8. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, THE SAFETY OF ALL PERSONS INCLUDING VISITORS AND THE GENERAL PUBLIC, AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY THROUGHOUT THE PROJECT AND NOT BE LIMITED BY WORKING HOURS. ANY CONSTRUCTION OBSERVATION BY THE ENGINEER OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES.
- PRIOR TO COMMENCEMENT OF WORK THE CONTRACTOR SHALL NOTIFY AND COORDINATE WITH ALL UTILITY COMPANIES AND OBTAIN ANY RELEVANT INFORMATION. NOTIFY ENGINEER OF ANY DISCREPANCIES
- 10. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL BOUNDARY CORNERS AND SECTION CORNERS. ANY BOUNDARY CORNER AND/OR SECTION CORNER DISTURBED OR DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE RESET BY A LAND SURVEYOR LICENSED IN THE STATE OF MISSOURI, AT THE CONTRACTOR'S EXPENSE.
- 11. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ADJACENT PROPERTIES AND SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT DAMAGE DURING CONSTRUCTION. THE CONTRACTOR IS ALSO RESPONSIBLE FOR REPAIRING ANY DAMAGE RESULTING FROM CONSTRUCTION ACTIVITIES.
- 12. PRIOR TO MOVING OFF THE JOB THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER TO PERFORM A FINAL WALK-THROUGH OF THE CONSTRUCTION SITE.

REFERENCES

- UNLESS EXPLICITLY DESCRIBED OTHERWISE WITHIN THESE PLANS THE FOLLOWING SHALL APPLY;
 ALL CONSTRUCTION, INCLUDING THOSE LISTED BELOW, SHALL CONFORM TO THE LATEST CODES AND ORDINANCES OF LEE'S SUMMIT, MISSOURI.
- B. ALL CONSTRUCTION IN MODOT RIGHT-OF-WAY SHALL CONFORM TO THE LATEST SPECIFICATIONS ADOPTED BY THE U.S. DEPARTMENT OF TRANSPORTATION AND MODOT.
- C. ALL TRAFFIC CONTROL SIGNAGE SHALL CONFORM WITH THE CURRENT EDITION OF THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- D. ALL UTILITY EXTENSIONS AND CONSTRUCTION SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE UTILITY COMPANIES.
- E. ALL EXTERIOR PAVEMENT (PCC, ASPHALT, ETC.) SHALL BE IN CONFORMANCE WITH THE SPECIFICATIONS OF LEE'S SUMMIT, MISSOURI AND THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT.

EXISTING CONDITIONS:

- 1. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS OF THE PROJECT AREA.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING THEIR OWN INVESTIGATIONS AND MAKING THEIR OWN ASSUMPTIONS REGARDING SITE SURFACE AND SUBSURFACE CONDITIONS. THIS INCLUDES THE LOCATION AND CONSISTENCY OF ANY EXISTING ROCK LAYERS UNDERLYING THE PROJECT SITE. CONTACT THE ENGINEER REGARDING ANY DISCREPANCIES THAT MAY AFFECT THE ABILITY TO CONSTRUCT FROM THESE PLANS AS DESIGNED.
- 3. EXISTING CONDITIONS WERE DETERMINED THROUGH A VARIETY OF METHODS THAT MAY INCLUDE SURVEY, AERIAL IMAGERY, AVAILABLE RECORDS, GIS DATA, ETC. SUBSURFACE CONDITIONS ARE APPROXIMATE AND MAY NOT INCLUDE ALL UTILITIES AND OTHER SITES IMPROVEMENTS PRESENT ON SITE. THE CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING UNDERGROUND UTILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS WHEN CONFLICTS AND DISCREPANCIES ARE FOUND.

GENERAL EROSION & SEDIMENTATION NOTES:

- A. THE STORMWATER POLLUTION PREVENTION PLAN IS COMPRISED OF THIS DRAWING, THE STANDARD DETAILS, ATTACHMENTS INCLUDED IN SPECIFICATIONS, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
- B. 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.
- C. 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
- D. 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.

 E. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.
- F. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
- G. 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 FACILITIES.

 H. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.)
 SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
- I. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
- J. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
- K. 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.
- L. 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.
- M. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY WILL BE STOPPED FOR AT LEAST 7 DAYS, SHALL BE TEMPORARILY STABILIZED. THESE AREAS SHALL BE STABILIZED NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.
- N. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE STABILIZED. THESE AREAS SHALL BE STABILIZED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE GRADING PLAN.
- O. 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.
- P. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
- Q. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION
- WITH THE STABILIZATION OF THE SITE.

 R. 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.
- S. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
- T. 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.

EROSION & SEDIMENTATION CONTROL MAINTENANCE

ALL MEASURES STATED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

- 1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.
- 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. 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 AS CONDITIONS DEMAND.
- 4. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AREA AS CONDITIONS DEMAND.



8455 College Boulevard Overland Park, KS 66210 816.777.0400 weareown.com

Engineering beyond."

FORMERLY ANDERSON ENGINEERING

MASS GRADING & EROSION CONTROL PLANS - THE VILLAGE AT DISCOVERY PARK ZONE 1

NW COLBERN RD & NE DOUGLAS ST LEE'S SUMMIT, MO

REVISIONS		
NO.	DESCRIPTION	DATE
1	INITIAL SUBMISSION	06/20/2024

DRAWING INFORMATION

PROJECT NO: 24KC10025

DRAWN BY: JGD

CHECK BY: JWB

ISSUED DATE: 6/19/2024

FIELD BOOK:



ISSUED BY: LICENSE NO:

> A licensed Missouri Engineering Corporation COA# 00062

> > SHEET TITLE

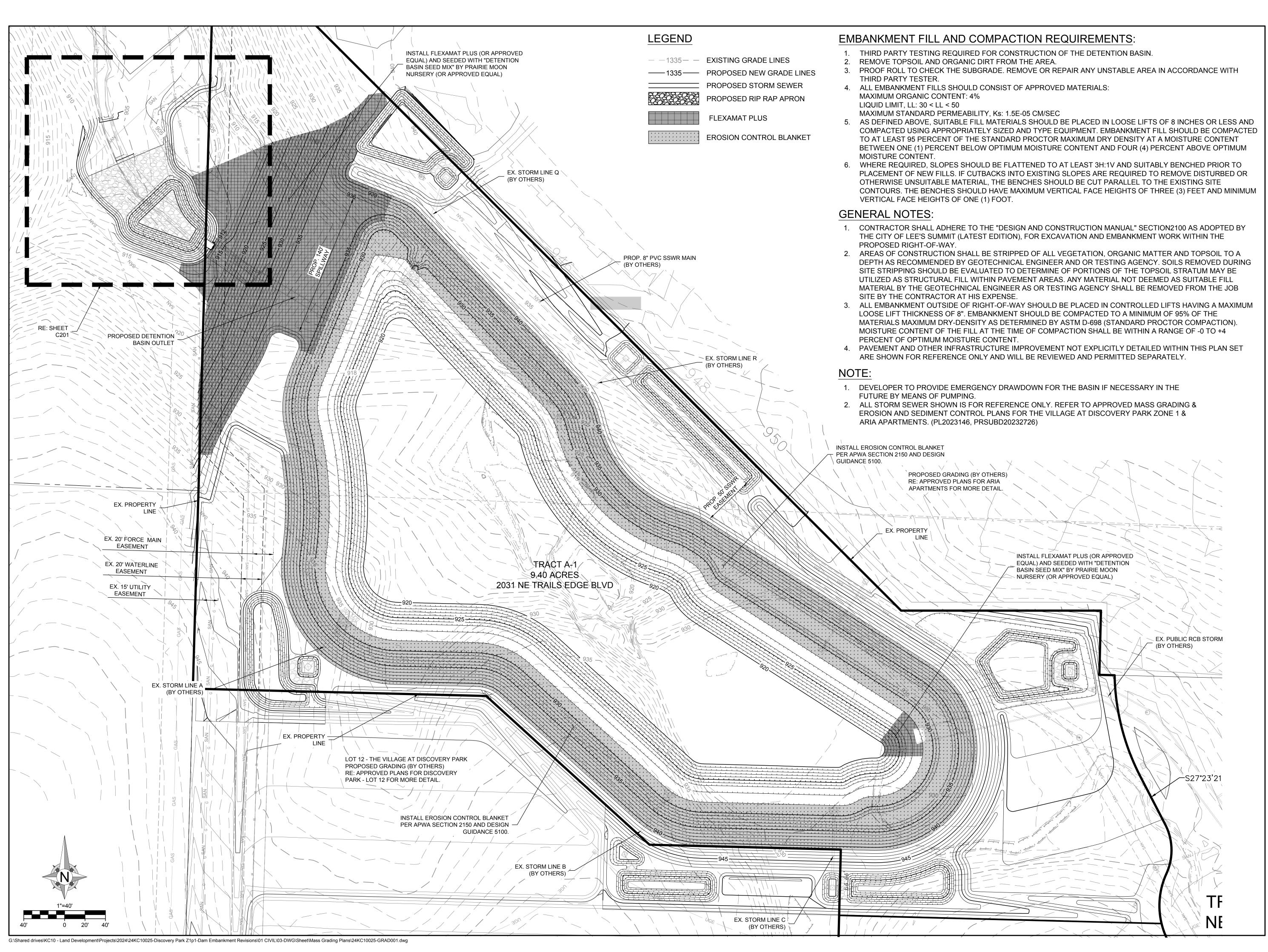
GENERAL NOTES

SHEET NUMBER

C101

2 OF 9

G:\Shared drives\KC10 - Land Development\Projects\2024\24KC10025-Discovery Park Z1p1-Dam Embankment Revisions\01 CIVIL\03-DWG\Sheet\Mass Grading Plans\24KC10025-GENN001.dwg





8455 College Boulevard Overland Park, KS 66210

Engineering beyond.™

816.777.0400 weareown.com

FORMERLY ANDERSON ENGINEERING

MASS GRADING & EROSION CONTROL PLANS - THE VILLAGE AT DISCOVERY PARK ZONE 1

NW COLBERN RD & NE DOUGLAS ST LEE'S SUMMIT, MO

REVISIONS					
NO.	DESCRIPTION	DATE			
1	INITIAL SUBMISSION	06/20/2024			

PROJECT NO: 24KC10025

DRAWN BY: JGD

CHECK BY: JWB

ISSUED DATE: 6/19/2024

DRAWING INFORMATION

FIELD BOOK:



ISSUED BY: LICENSE NO:

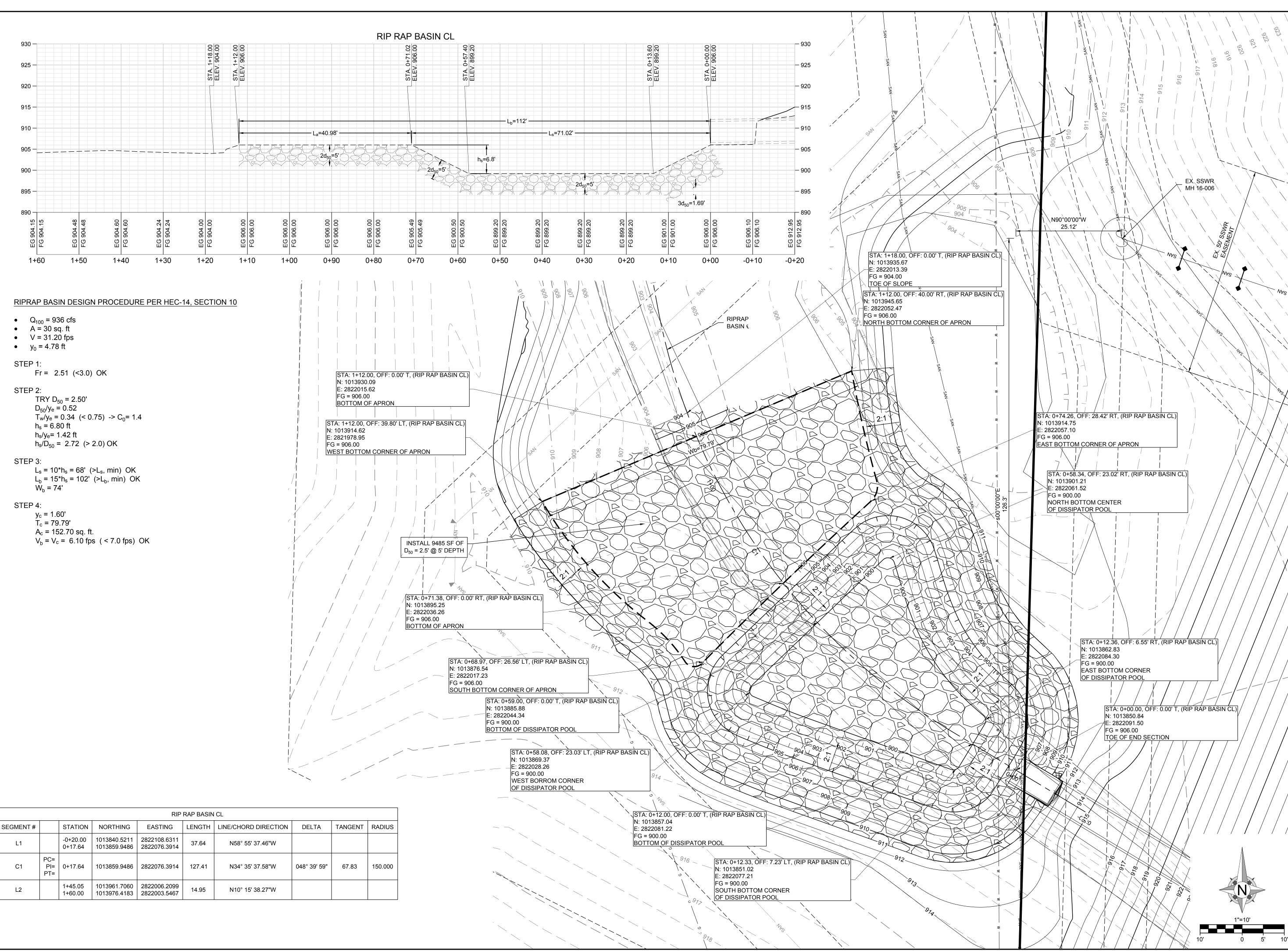
> A licensed Missouri Engineering Corporation COA# 00062

SHEET TITLE

GRADING PLAN

SHEET NUMBER

C200





Engineering beyond.™

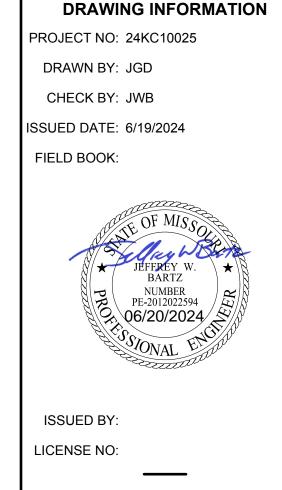
8455 College Boulevard Overland Park, KS 66210 816.777.0400 weareown.com

FORMERLY ANDERSON ENGINEERING

MASS GRADING & EROSION CONTROL PLANS - THE VILLAGE AT DISCOVERY PARK ZONE 1

NW COLBERN RD & NE DOUGLAS ST LEE'S SUMMIT, MO

REVISIONS					
NO.	DESCRIPTION	DATE			
1	INITIAL SUBMISSION	06/20/2024			



SHEET TITLE

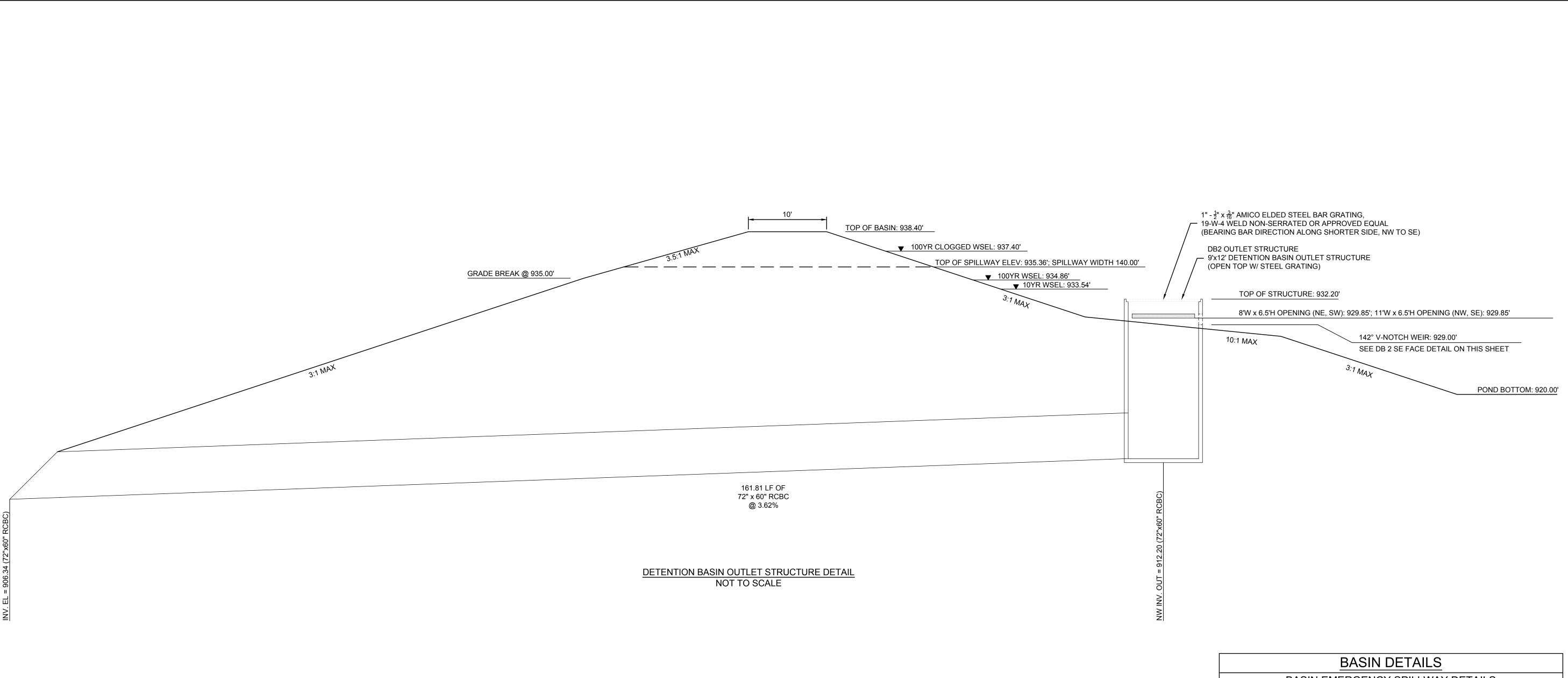
A licensed Missouri

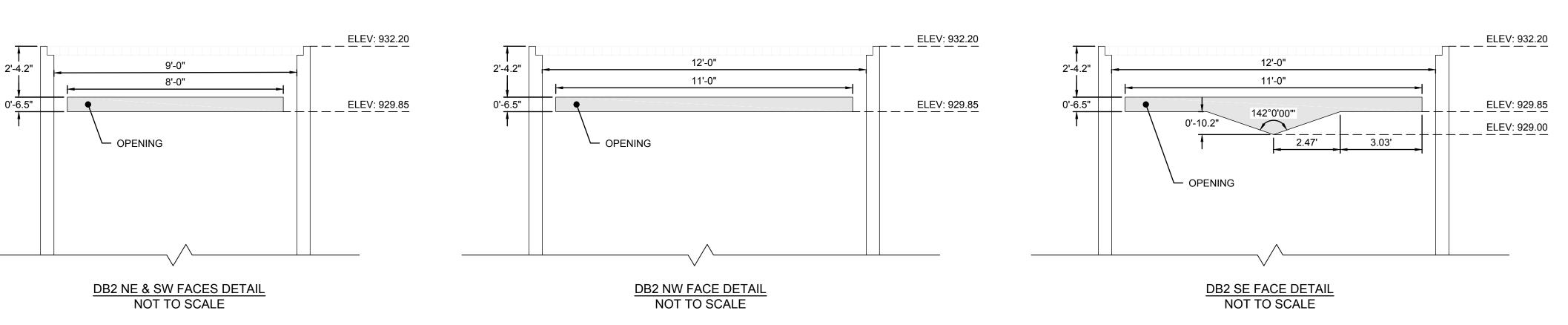
Engineering Corporation COA# 00062

SPILLWAY DETAIL PLAN

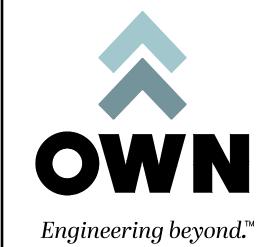
SHEET NUMBER

C201 4 OF 9





	BASIN DETAILS
BASIN EN	MERGENCY SPILLWAY DETAILS
TYPE	RECTANGULAR BROAD CRESTED WEIR
LENGTH	140.00'
WIDTH	42.70'
ELEVATION	935.36'
DEPTH	2.04'
TOP ELEVATION	938.40'
100-YR FLOW	1,225.95 CFS
100-YR CLOGGED FLOW	1,225.95 CFS
<u>B</u> .	ASIN HYDROLOGIC DETAILS
PERMANENT POOL ELEVATION	929.00'
10-YR FLOW, WSEL, DEPTH, STORAGE	414.92 CFS, 933.54', 4.54', 16.53 AC-FT
100-YR FLOW, WSEL, DEPTH, STORAGE	720.09 CFS, 943.86', 5.86', 22.00 AC-FT
100-YR CLOGGED FLOW, WSEL, DEPTH, STORAGE	1,225.95 CFS, 937.40', 8.40', 33.21 AC-FT



8455 College Boulevard Overland Park, KS 66210 816.777.0400 weareown.com

FORMERLY ANDERSON ENGINEERING

MASS GRADING & EROSION
CONTROL PLANS - THE
VILLAGE AT DISCOVERY
PARK ZONE 1

NW COLBERN RD & NE DOUGLAS ST LEE'S SUMMIT, MO

REVISIONS			
NO.	DESCRIPTION	DATE	
1	INITIAL SUBMISSION	06/20/2024	

DRAWING INFORMATION

PROJECT NO: 24KC10025

DRAWN BY: JGD

CHECK BY: JWB
ISSUED DATE: 6/19/2024

FIELD BOOK:



ISSUED BY:

LICENSE NO:

A licensed Missouri Engineering Corporation COA# 00062

SHEET TITLE

SPILLWAY DETAILS

SHEET NUMBER

C202

5 OF 9

G:\Shared drives\KC10 - Land Development\Projects\2024\24KC10025-Discovery Park Z1p1-Dam Embankment Revisions\01 CIVIL\03-DWG\Sheet\Mass Grading Plans\24KC10025-STDT001.dwg

GENERAL NOTES:

- 1. THE STORMWATER POLLUTION PREVENTION PLAN IS COMPRISED OF THIS DRAWING ("EROSION CONTROL"), THE STANDARD DETAILS, ATTACHMENTS INCLUDED IN SPECIFICATIONS ("SWPPP"), PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND
- 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 AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DIRECTED 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.
- 5. SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATER OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.
- 6. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
- 7. 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 FACILITIES.
- 8. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OF DISPOSED.
- 9. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOATATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR
- CHEMICAL SPILLS AND LEAKS.

 10. DUST ON SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
- 11. 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 STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATER OF THE STATE.
- 12. ALL STORM WATER POLLUTION PREVENTION MEASURED PRESENTED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS POSSIBLE.
- 13. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY WILL BE STOPPED FOR AT LEAST 14 DAYS, SHALL BE TEMPORARILY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 7 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, TOCK, PAVEMENT, STRUCTURE OR OTHER
- NON-ERODIBLE COVER.

 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 IS IS
- CARRIED OFF THE SITE. ONLY USED 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 THE SITE.

 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. CONTR5ACTOR RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE. PONDING OF WATER WILL NOT BE ALLOWED ON SITE. IF NECESSARY, CONTRACTOR TO PROVIDE TEMPORARY SWARDS OR PUMPING IN LOW POINT SUMP CONDITIONS UNTIL THE INSTALLATION OF STORM

EROSION CONTROL & MAINTENANCE PLAN NOTES:

ALL MEASURES STATED ON THIS SITE MAP, AND IN THE STORMWATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

HOUSEKEEPING, SPILL CONTROL AND EROSION AND SEDIMENT CONTROL AS SPECIFIED IN THE KANSAS CITY METROPOLITAN CHAPTER OF THE AMERICAN PUBLIC WORKS ASSOCIATION SECTION 2150.

1. AT A MINIMUM, THE CONTRACTOR SHALL FOLLOW THE REQUIREMENTS FOR GOOD

- 2. INLET PROTECTION DEVISED AND BARRIERS SHALL BE REPAIRED OR REPLACED IN THEY SHOWN 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 REACHED ONE-THIRD 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 RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DARFOSING OF THE CONSTRUCTION EXITS AS CONDITIONS DEMAND.
- TOP D4RESSING OF THE CONSTRUCTION EXITS AS CONDITIONS DEMAND.

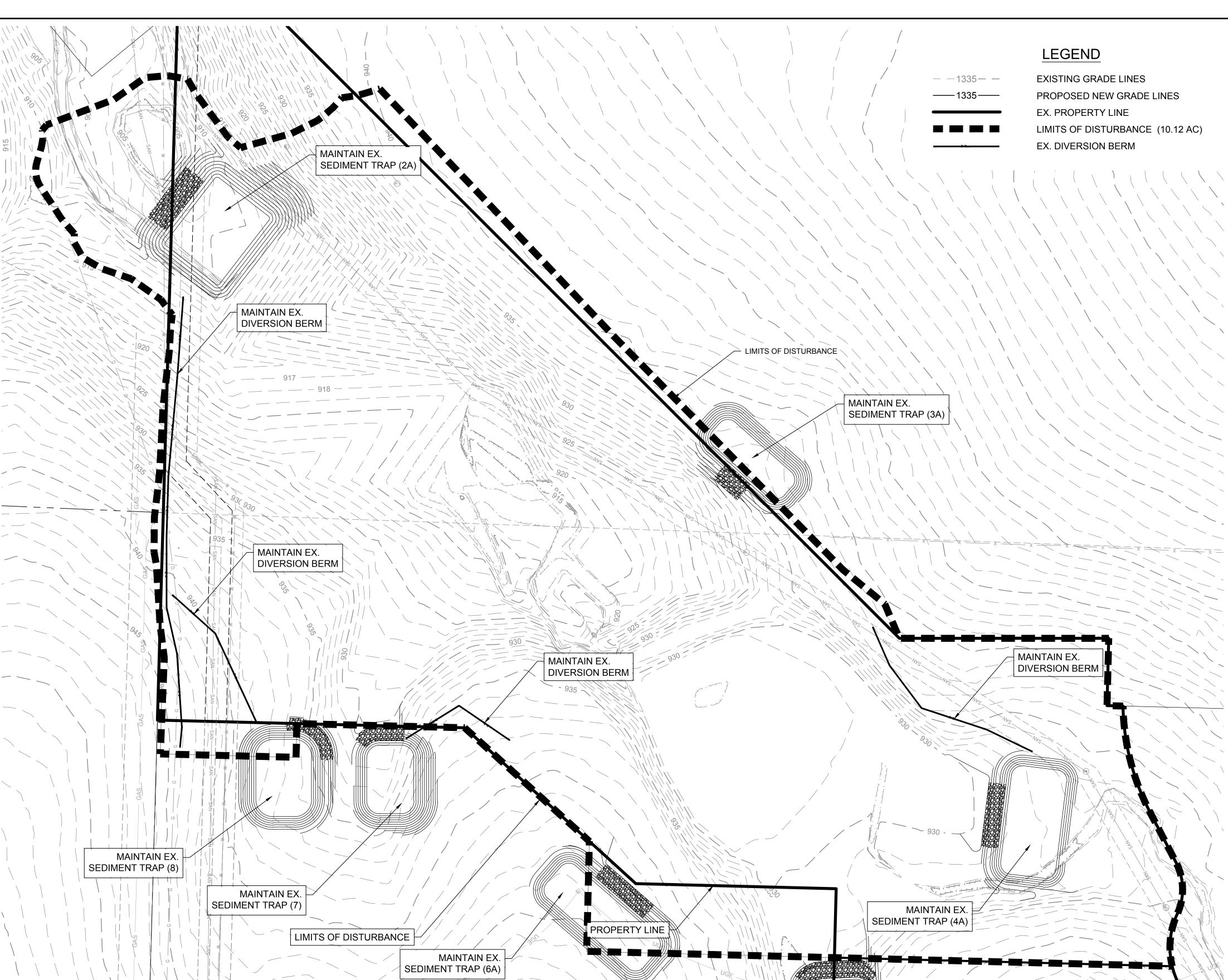
 6. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF

THE TEMPORARY PARKING AREA AS CONDITIONS DEMAND.

7. DRAINAGE SWALES WITH SLOPES STEEPER THAN 15% SHALL BE INSPECTED AFTER EACH RAINFALL EVENT. THESE CHANNELS AND SLOPES SHOULD BE TREATED WITH EROSION CONTROL FABRIC. IF THE CHANNELS OR SLOPES SHOW ANY SIGNS OF FAILURE, COORDINATE WITH THE ENGINEER TO DEVELOP A PLAN TO RE-STABLIZE THE FAILED

GRADING NOTES:

- 1. ALL TREES OUTSIDE OF LIMITS OF DISTURBANCE SHALL REMAIN. ONLY THOSE TREES WITHIN LIMITS OF DISTURBANCE THAT AREA 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.
- ALL PROPOSED CONTOUR LINES AND SPOT ELEVATIONS SHOWN ARE FINISH GRADE 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 HEREIN.



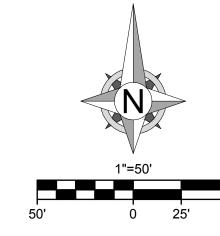
SEQUENCE OF CONSTRUCTION:

SITE IMPROVEMENTS CONSIST OF GRADING OPERATIONS, ALONG WITH RE-ACTIVATING OF AN EXISTING SEDIMENT TRAP. WORK SHALL BE CONDUCTED AS FOLLOWS:

- 1. MAINTAIN/RECONSTRUCT EXISTING SEDIMENT TRAPS AS DETAILED IN "MASS GRADING & EROSION AND SEDIMENT CONTROL PLANS FOR THE VILLAGE AT DISCOVERY PARKING ZONE 1 & ARIA APARTMENTS." (CITY OF LEE'S SUMMIT, MO PROJECT NUMBER PRSUBD20232726)
- MAINTAIN EXISTING CONSTRUCTION VEHICLE ENTRANCE LOCATED ALONG NW COLBERN RD.
 INSTALL DIVERSION BERMS AS SHOWN ON PLANS. ENSURE PROPOSED DIVERSION BERM CAPTURE ALL SEDIMENTS INTENDED FOR PROPOSED SEDIMENT TRAPS. CONTRACTOR SHALL ADJUST AS
- 4. CONTRACTOR TO CONSTRUCT/MAINTAIN STORMWATER MANAGEMENT FACILITIES, SPECIFICALLY THOSE 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.

5. AS 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.

REFERENCE APPROVED MASS GRADING & EROSION AND SEDIMENT CONTROL PLANS FOR DISCOVERY PARK - ZONE 1 & ARIA APARTMENTS FOR EX. SEDIMENT BASINS AND TEMPORARY CONSTRUCTION ENTRANCE LOCATION ALONG NW COLBERN ROAD.





8455 College Boulevard Overland Park, KS 66210 816.777.0400 weareown.com

FORMERLY ANDERSON ENGINEERING

MASS GRADING & EROSION CONTROL PLANS - THE VILLAGE AT DISCOVERY PARK ZONE 1

NW COLBERN RD & NE DOUGLAS ST LEE'S SUMMIT, MO

REVISIONS		
NO.	DESCRIPTION	DATE
1	INITIAL SUBMISSION	06/20/2024

PROJECT NO: 24KC10025

DRAWN BY: JGD

CHECK BY: JWB

ISSUED DATE: 6/19/2024

FIELD BOOK:

JEFFREY W.
BARTZ
NUMBER
PE-2012022594
06/20/2024

ISSUED BY:

LICENSE NO:

DRAWING INFORMATION

SHEET TITLE

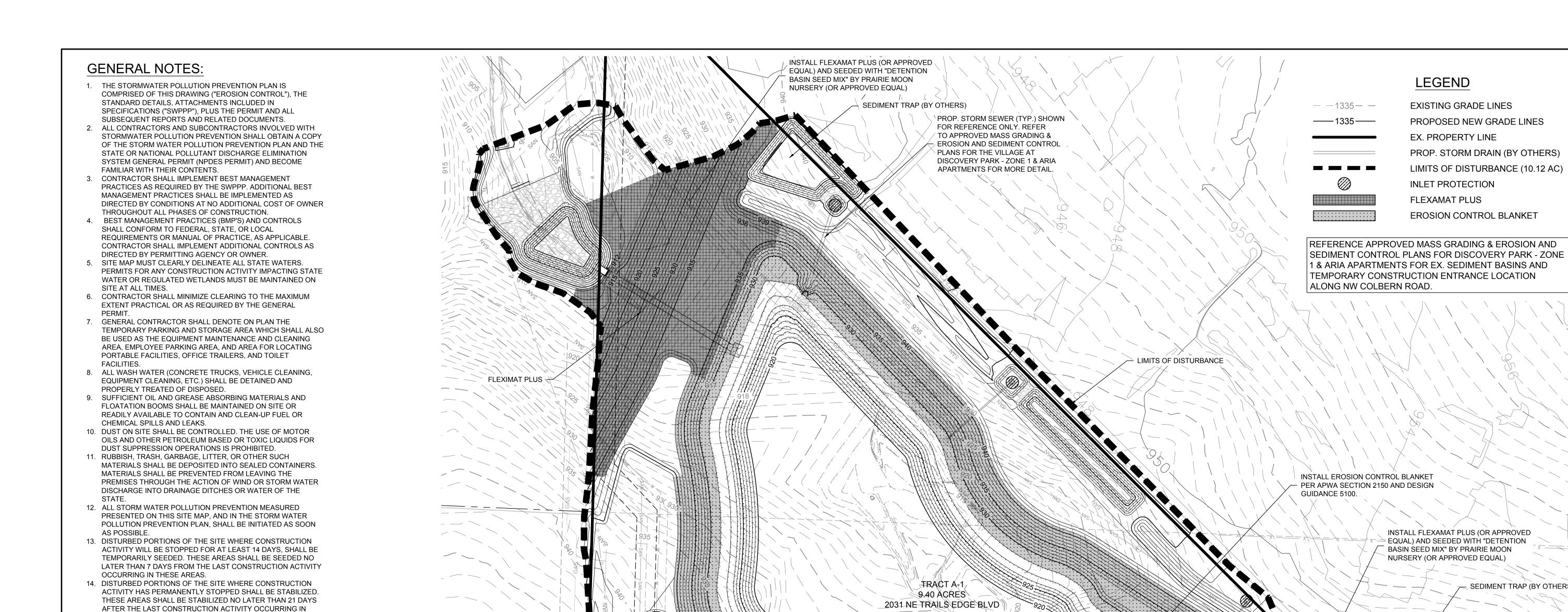
A licensed Missouri

Engineering Corporation COA# 00062

ESC - PHASE

SHEET NUMBER

C300 6 OF 9



SEDIMENT TRAP (BY OTHERS)

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 IS IS CARRIED OFF THE SITE. ONLY USED INGRESS/EGRESS LOCATIONS AS PROVIDED.

THESE AREAS. STABILIZATION MAY CONSIST OF SEED, SOD, TOCK, PAVEMENT, STRUCTURE OR OTHER NON-ERODIBLE

15. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE

COVER.

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 THE SITE.

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. CONTR5ACTOR 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.

MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

REACHED ONE-THIRD THE HEIGHT OF THE SILT FENCE.

A PLAN TO RE-STABLIZE THE FAILED AREA.

RESEEDED AS NEEDED.

EROSION CONTROL & MAINTENANCE PLAN NOTES:

MAY REQUIRE PERIODIC TOP D4RESSING OF THE CONSTRUCTION EXITS AS CONDITIONS DEMAND.

PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AREA AS CONDITIONS DEMAND.

GRADING NOTES:

LIMITS OF DISTURBANCE

1. ALL TREES OUTSIDE OF LIMITS OF DISTURBANCE SHALL REMAIN. ONLY THOSE TREES WITHIN LIMITS OF DISTURBANCE THAT AREA IN

SEDIMENT TRAP (BY OTHERS)

INSTALL EROSION CONTROL BLANKET

PER APWA SECTION 2150 AND DESIGN

GUIDANCE 5100.

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 GRADE ELEVATIONS. CONTRACTOR SHALL ACCOUNT FOR PAVEMENT DEPTHS, BUILDING PADS, TOPSOIL, ETC. WHEN GRADING THE SITE.

MINIMUM OF FOUR INCHES OF TOPSOIL 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. REQUIRED TO ACCOMPLISH THE IMPROVEMENTS SHOWN HEREIN.

SEQUENCE OF CONSTRUCTION

SITE IMPROVEMENTS CONSIST OF FINISHING MASS GRADING ACTIVITIES, BUILDING CONSTRUCTION, PARKING LOT PAVING, PROPOSED SERVICE LINE UTILITY INSTALLATION, 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. 2. BEGIN INSTALLING UNDERGROUND INFRASTRUCTURE STARTING WITH SANITARY SEWER, FOLLOWED BY STORM SEWER, THEN WATER LINE. INSTALL INLET PROTECTION AND SLOPE INTERRUPT SILT FENCE ONCE PIPE BACKFILLING

HAS BEEN COMPLETED. 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.

4. AS STORM SEWER INFRASTRUCTURE IS COMPLETED, INLET PROTECTION SHALL BE INSTALLED TO PROTECT EXISTING STORM SEWER INFRASTRUCTURE 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.

6. INSTALL TEMPORARY AND PERMANENT EROSION CONTROL MATTING. SEED AREAS PER MANUFACTURER RECOMMENDATION.



LEGEND

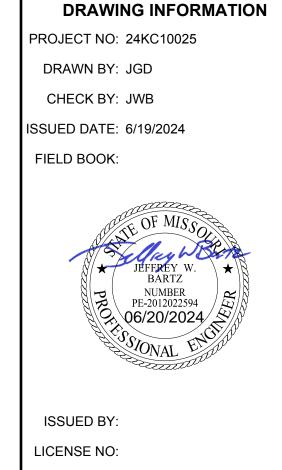
8455 College Boulevard Overland Park, KS 66210 816.777.0400 weareown.com

FORMERLY ANDERSON ENGINEERING

MASS GRADING & EROSION **CONTROL PLANS - THE VILLAGE AT DISCOVERY PARK ZONE 1**

NW COLBERN RD & NE DOUGLAS ST LEE'S SUMMIT, MO

REVISIONS			
NO.	DESCRIPTION	DATE	
1	INITIAL SUBMISSION	06/20/2024	



SHEET TITLE

A licensed Missouri Engineering Corporation

COA# 00062

ESC - PHASE II

SHEET NUMBER

C301

7 OF 9

G:\Shared drives\KC10 - Land Development\Projects\2024\24KC10025-Discovery Park Z1p1-Dam Embankment Revisions\01 CIVIL\03-DWG\Sheet\Mass Grading Plans\24KC10025-ESCP001.dwg

ALL MEASURES STATED ON THIS SITE MAP, AND IN THE STORMWATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION

UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL

1. AT A MINIMUM, THE CONTRACTOR SHALL FOLLOW THE REQUIREMENTS FOR GOOD HOUSEKEEPING, SPILL CONTROL AND EROSION AND SEDIMENT

3. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED, AREAS SHOULD BE FERTILIZED, WATERED, AND

4. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT

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

5. THE CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS

7. DRAINAGE SWALES WITH SLOPES STEEPER THAN 15% SHALL BE INSPECTED AFTER EACH RAINFALL EVENT. THESE CHANNELS AND SLOPES SHOULD BE

TREATED WITH EROSION CONTROL FABRIC. IF THE CHANNELS OR SLOPES SHOW ANY SIGNS OF FAILURE, COORDINATE WITH THE ENGINEER TO DEVELOP

CONTROL AS SPECIFIED IN THE KANSAS CITY METROPOLITAN CHAPTER OF THE AMERICAN PUBLIC WORKS ASSOCIATION SECTION 2150.

2. INLET PROTECTION DEVISED AND BARRIERS SHALL BE REPAIRED OR REPLACED IN THEY SHOWN SIGNS OF UNDERMINING OR DETERIORATION.

MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS

SEDIMENT TRAP (BY OTHERS)

SEDIMENT TRAP (BY OTHERS)

THE AREA TO BE GRADED SHALL BE REMOVED.

4. ALL DISTURBED AREAS THAT SHALL BE FINISH GRADED WITH A

CONTRACTOR SHALL SATISFY HIMSELF AS TO ANY ROCK EXCAVATION

GENERAL NOTES:

- 1. THE STORMWATER POLLUTION PREVENTION PLAN IS COMPRISED OF THIS DRAWING ("EROSION CONTROL"), THE STANDARD DETAILS, ATTACHMENTS INCLUDED IN SPECIFICATIONS ("SWPPP"), PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND
- 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.
- 3. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DIRECTED 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
- 5. SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATER OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.
- 6. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
- 7. 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 FACILITIES.
- 8. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OF DISPOSED.
- 9. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOATATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR
- CHEMICAL SPILLS AND LEAKS.

 10. DUST ON SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
- 11. 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 STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATER OF THE STATE.
- 12. ALL STORM WATER POLLUTION PREVENTION MEASURED PRESENTED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS POSSIBLE.
- 13. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY WILL BE STOPPED FOR AT LEAST 14 DAYS, SHALL BE TEMPORARILY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 7 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, TOCK, PAVEMENT, STRUCTURE OR OTHER NON EPODIRI E COVER.
- 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 IS IS
- CARRIED OFF THE SITE. ONLY USED 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 THE SITE.
- 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. CONTR5ACTOR 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.

EROSION CONTROL & MAINTENANCE PLAN NOTES:

ALL MEASURES STATED ON THIS SITE MAP, AND IN THE STORMWATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

HOUSEKEEPING, SPILL CONTROL AND EROSION AND SEDIMENT CONTROL AS SPECIFIED IN THE KANSAS CITY METROPOLITAN CHAPTER OF THE AMERICAN PUBLIC WORKS ASSOCIATION SECTION 2150.

1. AT A MINIMUM, THE CONTRACTOR SHALL FOLLOW THE REQUIREMENTS FOR GOOD

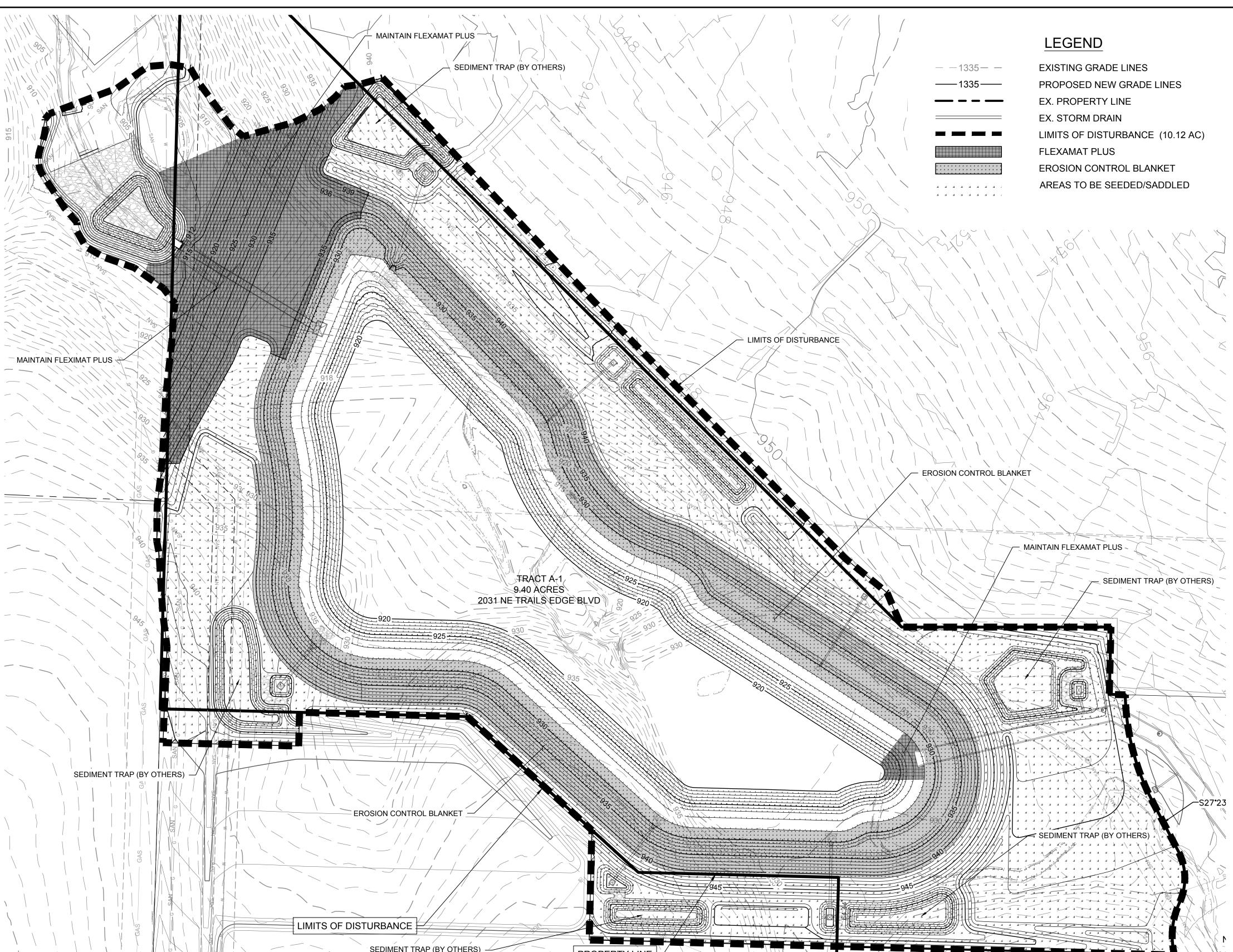
- 2. INLET PROTECTION DEVISED AND BARRIERS SHALL BE REPAIRED OR REPLACED IN THEY SHOWN SIGNS OF UNDERMINING OR DETERIORATION.
- 3. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED, AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.
- 4. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED.
 SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHED ONE-THIRD 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 RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DAPESSING OF THE CONSTRUCTION EXITS AS CONDITIONS DEMAND.
- TOP D4RESSING OF THE CONSTRUCTION EXITS AS CONDITIONS DEMAND.

 6. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF
- THE TEMPORARY PARKING AREA AS CONDITIONS DEMAND.

 7. DRAINAGE SWALES WITH SLOPES STEEPER THAN 15% SHALL BE INSPECTED AFTER EACH RAINFALL EVENT. THESE CHANNELS AND SLOPES SHOULD BE TREATED WITH EROSION CONTROL FABRIC. IF THE CHANNELS OR SLOPES SHOW ANY SIGNS OF FAILURE, COORDINATE WITH THE ENGINEER TO DEVELOP A PLAN TO RE-STABLIZE THE FAILED

GRADING NOTES:

- ALL TREES OUTSIDE OF LIMITS OF DISTURBANCE SHALL REMAIN. ONLY THOSE TREES WITHIN LIMITS OF DISTURBANCE THAT AREA IN THE AREA TO BE GRADED SHALL BE REMOVED.
 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 GRADE 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 HEREIN.

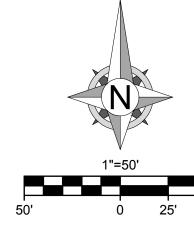


SEQUENCE OF CONSTRUCTION:

SITE IMPROVEMENTS CONSIST OF GRADING OPERATIONS, ALONG WITH RE-ACTIVATING OF AN EXISTING SEDIMENT TRAP. WORK SHALL BE CONDUCTED AS FOLLOWS:

- 1. SEED AND/OR SOD ALL DISTURBED AREAS ONCE FINISHED GRADE HAS BEEN ACHIEVED. MAINTAIN SILT FENCE AND INLET PROTECTION UNTIL VEGETATIVE COVER HAS BEEN ESTABLISHED OVER 70% OF THE TOTAL DISTURBED AREA.
- AS ALL DISTURBED AREAS ARE STABLIXED WITH VEGETATIVE COVER, STORM SEWER INLET PROTECTION, SILT FENCE, AND SEDIMENT TRAP CAN BE REMOVED UPON CITY INSPECTION AND APPROVAL. ENSURE ENTIRE SITE IS STABLIZED PRIOR TO DEACTIVATION ON EROSION CONTROL.

REFERENCE APPROVED MASS GRADING & EROSION AND SEDIMENT CONTROL PLANS FOR DISCOVERY PARK - ZONE 1 & ARIA APARTMENTS FOR EX. SEDIMENT BASINS AND TEMPORARY CONSTRUCTION ENTRANCE LOCATION ALONG NW COLBERN ROAD.





8455 College Boulevard Overland Park, KS 66210 816.777.0400

Engineering beyond.™

FORMERLY ANDERSON ENGINEERING

weareown.com

MASS GRADING & EROSION CONTROL PLANS - THE VILLAGE AT DISCOVERY PARK ZONE 1

NW COLBERN RD & NE DOUGLAS ST LEE'S SUMMIT, MO

	REVISIONS	
NO.	DESCRIPTION	DATE
1	INITIAL SUBMISSION	06/20/2024

DRAWING INFORMATION

PROJECT NO: 24KC10025

DRAWN BY: JGD

CHECK BY: JWB

ISSUED DATE: 6/19/2024

FIELD BOOK:

OF MISSON

BARTZ

NUMBER
PE-2012022594
06/20/2024

ISSUED BY:

LICENSE NO:

SHEET TITLE

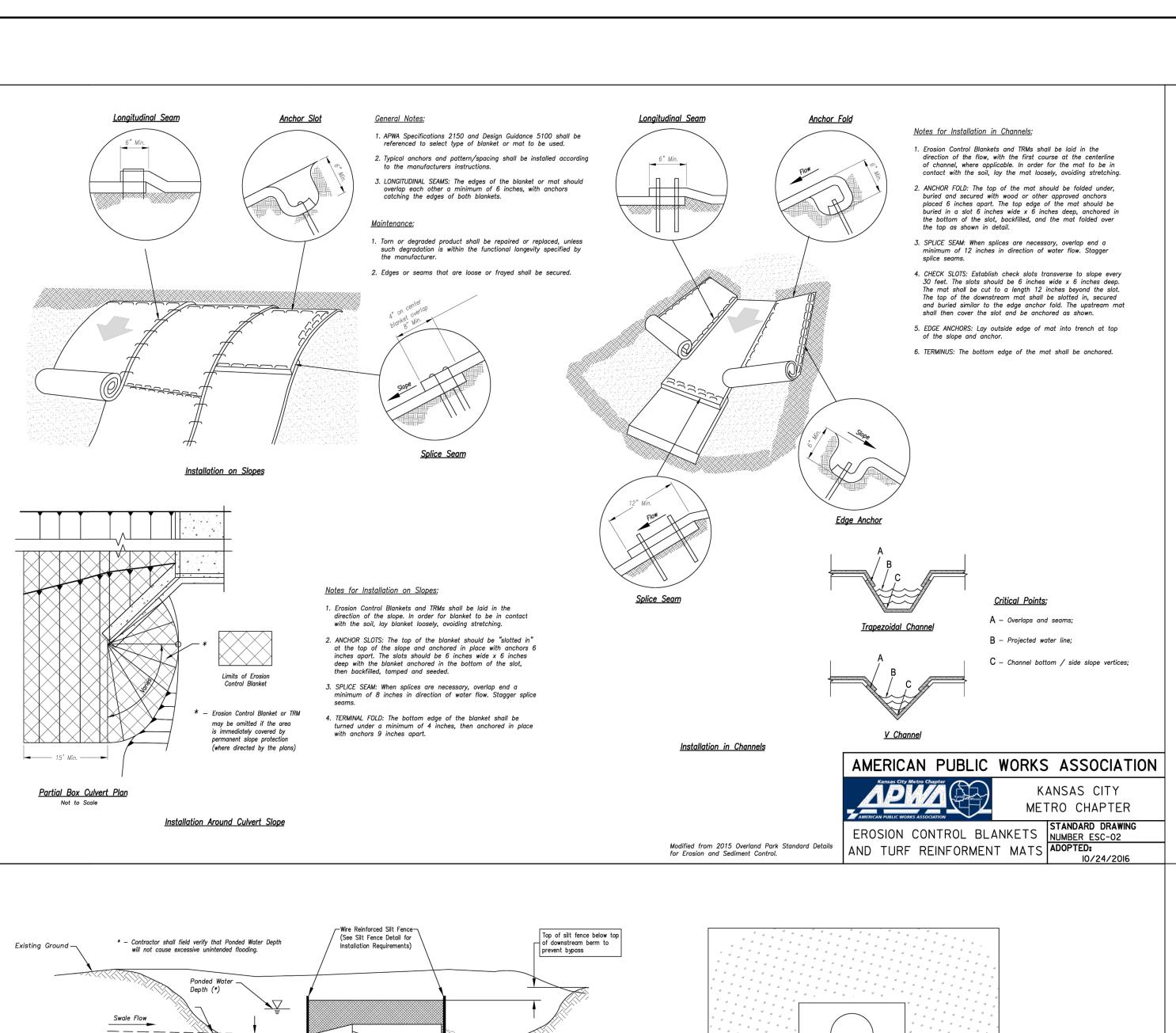
A licensed Missouri

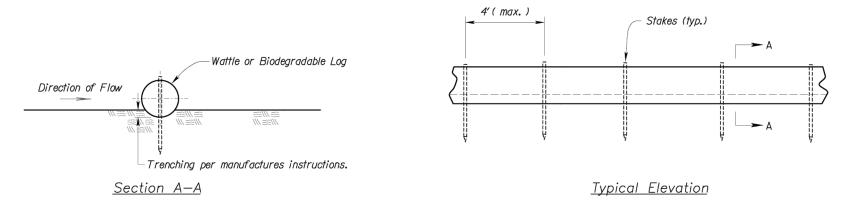
Engineering Corporation COA# 00062

ESC - PHASE III

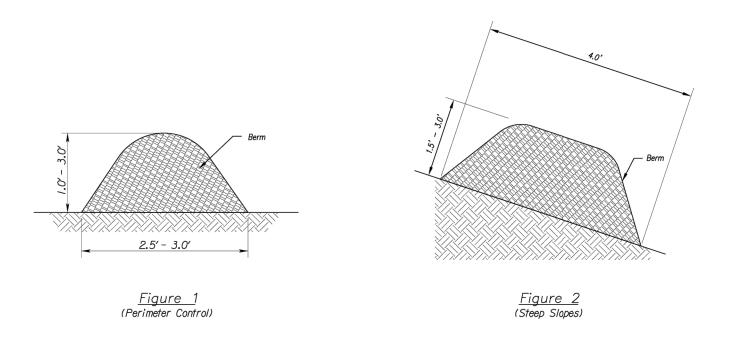
SHEET NUMBER

C302





WATTLES AND BIODEGRADABLE LOG



MULCH OR COMPOST FILTER BERMS

Notes for Wattles and Biodegradable Log Slope

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

Notes for Mulch and Compost Filter Beam:

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

Maintenance for Mulch and Compost Filter Beam:

1. Berm shall be reshaped and material added as necessary to maintain function and dimensions.

Breaches in the berm shall be repaired promptly.



METRO CHAPTER

AND Modified from 2015 Overland Park Standard Details MULCH/COMPOST FILTER BERM

WATTLES/BIODEGRADABLE LOG NUMBER ESC-04

weareown.com FORMERLY ANDERSON ENGINEERING MASS GRADING & EROSION **CONTROL PLANS - THE**

NW COLBERN RD & NE DOUGLAS ST

LEE'S SUMMIT, MO

VILLAGE AT DISCOVERY

PARK ZONE 1

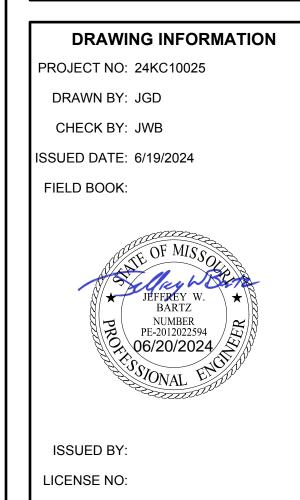
Engineering beyond.™

8455 College Boulevard

Overland Park, KS 66210

816.777.0400

REVISIONS DESCRIPTION DATE INITIAL SUBMISSION 06/20/2024



SHEET TITLE

ESC DETAILS - 1

A licensed Missouri

Engineering Corporation COA# 00062

9 OF 9

SHEET NUMBER

