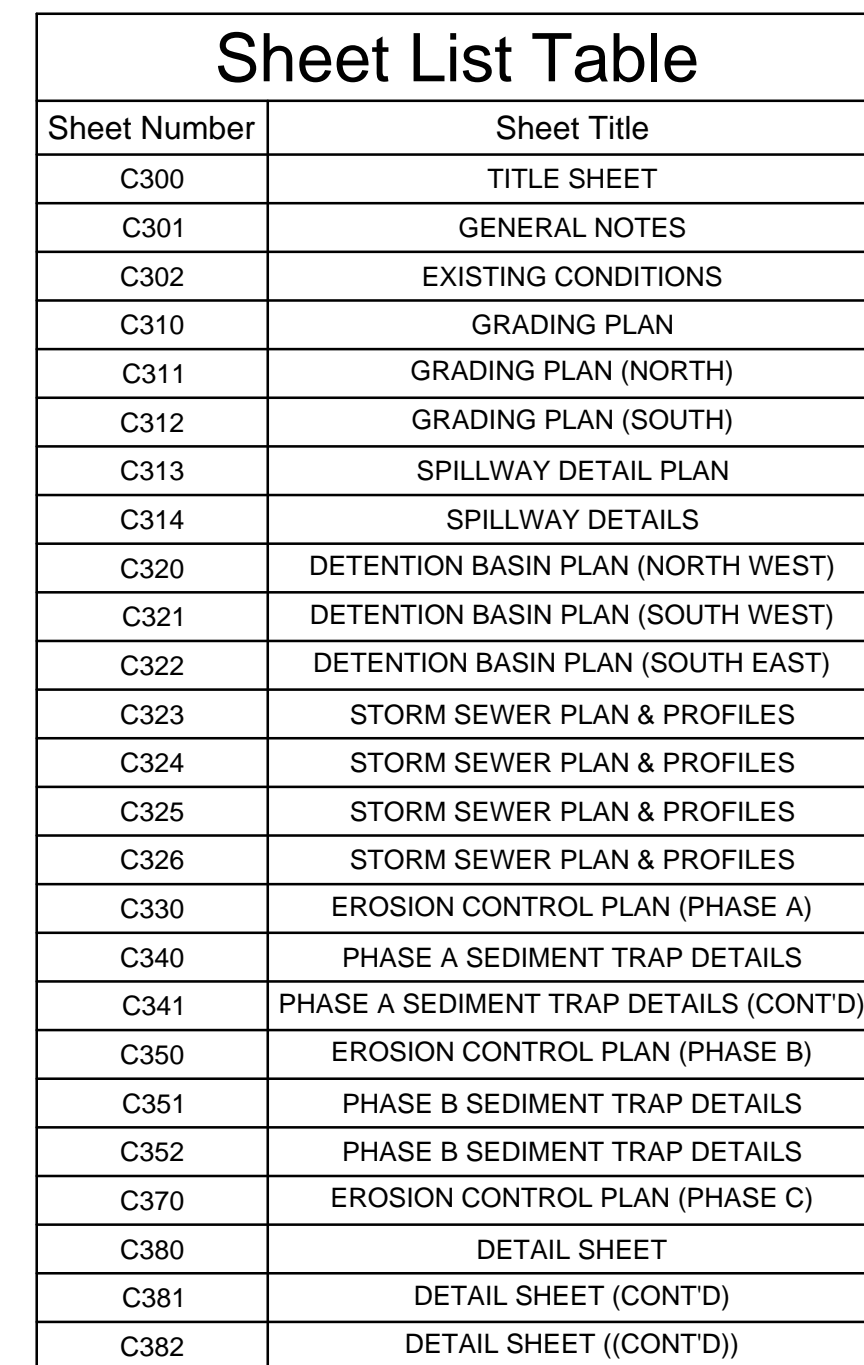


SECTION 25, TOWNSHIP 48N, RANGE 32W
SECTION 30, TOWNSHIP 48N, RANGE 31W
IN LEE'S SUMMIT, JACKSON COUNTY, MO

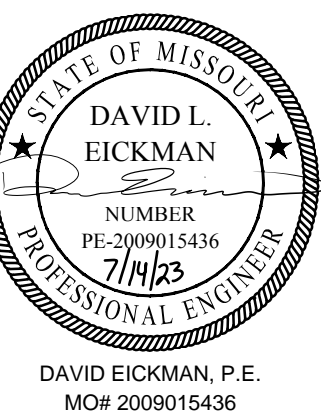


NO OIL OR GAS WELLS ARE LOCATED WITHIN PROJECT LIMITS.
INFORMATION OBTAINED FROM THE MISSOURI DEPARTMENT OF NATURAL RESOURCES,
GEOLOGICAL SURVEY GEOSCIENCES TECHNICAL RESOURCE ASSESSMENT TOOL (GEOSTRAT).

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

ARIA FIRST PLAT LOT 1:
AS PROVIDED BY STEWART TITLE GUARANTY COMPANY:
TRACT OF LAND IN THE NORTHEAST QUARTER OF SECTION 30 TOWNSHIP 48 NORTH, RANGE 31 WEST OF THE 5TH PRINCIPAL MERIDIAN IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI BEING BOUNDED AND DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHWEST CORNER OF SAID NORTHEAST QUARTER SECTION; THENCE SOUTH 01 DEGREES 37 MINUTES 50 SECONDS WEST, ON THE WEST LINE OF SAID QUARTER SECTION, 853.75 FEET TO A POINT ON THE SOUTHEAST LOT LINE OF LOT 1, LEE'S SUMMIT ROAD PUMP STATION, A SUBDIVISION RECORDED IN BOOK 1 51 AT PAGE 90; THENCE SOUTHWEST ALONG SAID DEEDS OFFICE, THENCE NORTH 50 DEGREES 41 MINUTES 15 SECONDS EAST, ON SAID SOUTHEAST LOT LINE, 59.22 FEET TO THE POINT OF BEGINNING OF THE TRACT OF LAND TO BE HEREIN DESCRIBED; THENCE CONTINUING NORTH 50 DEGREES 41 MINUTES 15 SECONDS EAST ALONG SAID LINE, 116.89 FEET; THENCE NORTH 44 DEGREES 49 MINUTES 51 SECONDS EAST, 792.38 FEET TO A POINT ON THE WESTELY RIGHT-OF-WAY LINE OF NW LEE'S SUMMIT ROAD AS ESTABLISHED BY DOCUMENT NUMBER 2015EO017982 IN THE JACKSON COUNTY RECORDER OF DEEDS OFFICE; THENCE ON SAID WESTELY RIGHT-OF-WAY LINE, SOUTH 54 DEGREES 34 MINUTES 12 SECONDS EAST, 95.69 FEET; THENCE SOUTHEASTERLY ALONG A CURVE TO THE RIGHT BEING TANGENT TO THE LAST DESCRIBED COURSE WITH A RADIUS OF 1,142.00 FEET, A CENTRAL ANGLE OF 56 DEGREES 01 MINUTES 43 SECONDS AND AN ARC DISTANCE OF 1,116.74 FEET; THENCE SOUTH 01 DEGREES 27 MINUTES 31 SECONDS WEST, 322.27 FEET; THENCE LEAVING SAID RIGHT-OF-WAY LINE, NORTH 88 DEGREES 00 SECONDS WEST, 375.00 FEET; THENCE NORTH 01 DEGREES 07 MINUTES 27 SECONDS EAST, 62.94 FEET; THENCE SOUTH 90 DEGREES 00 MINUTES 00 SECONDS WEST, 195.68 FEET; THENCE NORTH 45 DEGREES 00 MINUTES 00 SECONDS WEST, 889.18 FEET TO THE POINT OF BEGINNING, CONTAINING 979.968 SQUARE FEET OR 22.50 ACRES, MORE OR LESS.

DISCOVERY PARK ZONE 1:
A TRACT OF LAND IN THE NORTHEAST QUARTER OF SECTION 30 TOWNSHIP 48 NORTH, RANGE 31 WEST OF THE 5TH PRINCIPAL MERIDIAN IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI BEING BOUNDED AND DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHWEST CORNER OF SAID NORTHEAST QUARTER SECTION; THENCE SOUTH 01°37'50" WEST, ON THE WEST LINE OF SAID QUARTER SECTION, 853.75 FEET TO A POINT ON THE SOUTHEAST LOT LINE OF LOT 1, LEE'S SUMMIT ROAD PUMP STATION, A SUBDIVISION RECORDED IN BOOK 1 51 AT PAGE 90 IN THE JACKSON COUNTY RECORDER OF DEEDS OFFICE, AND THE POINT OF BEGINNING OF THE TRACT OF LAND TO BE HEREIN DESCRIBED; THENCE NORTH 50°41'15" EAST, ON SAID SOUTHEAST LOT LINE, 59.22 FEET; THENCE LEAVING SAID LOT LINE, SOUTH 45°00'00" EAST, 889.18 FEET; THENCE NORTH 90°00'00" EAST, 195.68 FEET; THENCE SOUTH 01°27'27" WEST, 62.94 FEET; THENCE SOUTH 88°32'29" EAST, 375.74 FEET TO A POINT ON THE WESTERLY RIGHT-OF-WAY LINE OF NE DOUGLAS STREET AS ESTABLISHED BY DOCUMENT NUMBER 2015E0017982 IN THE JACKSON COUNTY RECORDER OF DEEDS OFFICE; THENCE ON SAID WESTERLY RIGHT-OF-WAY LINE, SOUTH 01°27'31" WEST, 1,114.58 FEET; THENCE SOUTH 46°40'17" WEST, 35.22 FEET TO THE INTERSECTION OF THE NORTHERLY RIGHT-OF-WAY LINE OF NE COLBURN ROAD AS ESTABLISHED BY A SURVEY PROVIDED BY HAMILTON STERRETT AND DOOLEY, PROJECT NUMBER 99021; THENCE ON SAID NORTHERLY RIGHT-OF-WAY LINE NORTH 88°06'56" WEST, 730.85 FEET; THENCE WESTERLY ALONG A CURVE TO THE LEFT HAVING AN INITIAL TANGENT BEARING OF NORTH 87°33'04" WEST WITH A RADIUS OF 2,904.93 FEET, A CENTRAL ANGLE OF 10°06'02" AND AN ARC DISTANCE OF 512.10 FEET TO THE SOUTHWEST CORNER OF THE SAID NORTHEAST QUARTER; THENCE NORTH 01°37'22" EAST, ON THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 30, A DISTANCE OF 1,328.05 FEET TO THE NORTHWEST CORNER OF THE SOUTHWEST QUARTER OF THE SAID NORTHEAST QUARTER; THENCE CONTINUING ON THE SAID WEST LINE, NORTH 01°37'50" EAST, 473.96 FEET TO THE POINT OF BEGINNING, CONTAINING 1,717,197 SQUARE FEET OR 39.42 ACRES, MORE OR LESS.



11111 SHEET 1	MASS GRADING & EROSION AND SEDIMENT CONTROL PLANS
THE VILLAGE AT DISCOVERY PARK ZONE 1 & ARIA APARTMENTS NW COLBORN RD & NE DOUGLAS ST	
LEE'S SUMMIT, MISSOURI	2023

Drawn by: GS/OS/JN
 Checked by: AR/JN
 Approved by: DE
 A/QC by: JS/NH
 Project no.: D21-04643
 Drawing no.: C_TTL01_D2104643
 Date: 07.14.2023

SHEET
C300

GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE PLANS IN THEIR POSSESSION ARE THE MOST CURRENT VERSION ISSUED, ARE FULLY COORDINATED WITH ALL SUBCONTRACTORS, AND PRESENT ON SITE AT ALL TIMES. CURRENT PLANS PREPARED BY OLSSON MAY BE OBTAINED AT THE DIRECTION OF OLSSON'S CLIENT. DIRECT REQUESTS TO OLSSON MAY REQUIRE ADDITIONAL AUTHORIZATIONS, AGREEMENTS, AND/OR FEES. PLEASE CONTACT THE ENGINEER FOR INFORMATION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DEVIATIONS FROM THESE PLANS UNLESS WRITTEN APPROVAL FROM ENGINEER, OWNER, AND DEVELOPER.
3. ALL WORK AND MATERIALS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE OWNER OR THE OWNER'S REPRESENTATIVE.
4. ALL ESTIMATES OF QUANTITIES ARE FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING QUANTITIES AND ITEMS OF WORK.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING 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 WORK.
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.
9. 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

1. UNLESS EXPLICITLY DESCRIBED OTHERWISE WITHIN THESE PLANS THE FOLLOWING SHALL APPLY;

A. 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 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.
4. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE DELIVERY MANAGER AND COORDINATING ANY MAILBOXES THAT MAY BE DISTURBED. FAILURE TO DO SO MAY SUBJECT THE CONTRACTOR TO PROSECUTION BY THE FEDERAL GOVERNMENT.

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 SITE 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.

CONSTRUCTION

1. THE CONTRACTOR SHALL INSTALL TRAFFIC CONTROL WHILE WORKING IN THE PUBLIC RIGHT-OF-WAY AS SHOWN IN THESE PLANS. IF PLANS ARE NOT PROVIDED, CONTRACTOR SHALL COORDINATE AND PROVIDE CONTROLS TO THE SATISFACTION OF THE RIGHT-OF-WAY OWNER.
2. THE CONTRACTOR SHALL PROTECT ALL TREES OVER 3" CALIPER FROM DAMAGE. NO TREE SHALL BE REMOVED WITHOUT PERMISSION OF THE OWNER, UNLESS SHOWN OTHERWISE ON THESE PLANS.
3. THE CONTRACTOR SHALL DISPOSE ALL WASTE MATERIAL RESULTING FROM THE PROJECT OFF-SITE AND IN STRICT CONFORMANCE WITH ALL LOCAL CODES AND ORDINANCES.
4. ALL MANHOLES, CATCH BASINS, UTILITY VALVES AND METER PITS ARE TO BE ADJUSTED OR REBUILT TO GRADE AS REQUIRED. NOT ALL ADJUSTMENTS ARE INDICATED IN THE PLANS.
5. THE CONTRACTOR SHALL STREET SWEEP OR OTHERWISE CLEAN ALL ACCESS ROUTES TO THE SITE AT CONCLUSION OF THE PROJECT.

GENERAL NOTES:

1. THE INTENT OF THIS LAND DISTURBANCE PLAN IS TO ASSIST THE DEVELOPER IN HIS RESPONSIBILITY TO PROVIDE ALL MATERIALS, TOOLS, EQUIPMENT AND LABOR NECESSARY TO CONTROL EROSION, SILTATION AND DISCHARGES OF SOIL MATERIAL (SEDIMENT) INTO DOWNSTREAM SYSTEMS OR RECEIVING CHANNELS. THIS SHALL BE REQUIRED DURING ALL PHASES OF CONSTRUCTION AND UNTIL SUITABLE GROUND COVER IS ESTABLISHED FOR ALL DISTURBED AREAS. IF ANY METHOD OF CONTROL FAILS, THE DEVELOPER SHALL NOTIFY THE OWNER IMMEDIATELY, SO THAT THE OWNER OR HIS AGENT CAN REVIEW THE DEVELOPER'S PROPOSED METHOD OF REPAIR.

THIS PLAN INDICATES THE CRITICAL AREA(S) OF CONCERN AND THESE AREA(S) WILL BE CONTROLLED AS A MINIMUM. THE CONTROL MAY CONSIST OF TEMPORARY CONTROL MEASURES AS SHOWN ON THE PLANS OR ORDERED BY THE OWNER DURING THE LIFE OF THE CONTRACT TO CONTROL EROSION OR WATER POLLUTION, THROUGH THE USE OF BERMS, DIKES, DAMS, SEDIMENT BASINS, FIBER MATS, NETTING, STRAW BALES, GRAVEL, MULCHES, GRASSES, SLOPE DRAINS, DIVERSION SWALES OR OTHER EROSION CONTROL DEVICES OR METHODS. THE OWNER HAS THE AUTHORITY TO LIMIT THE SURFACE AREA OF ERODIBLE EARTH MATERIAL EXPOSED BY THE CONSTRUCTION OPERATIONS AND TO DIRECT THE DEVELOPER TO PROVIDE IMMEDIATE PERMANENT OR TEMPORARY POLLUTION CONTROL MEASURES TO PREVENT CONTAMINATION OF ADJACENT STREAMS OR OTHER WATER COURSES, LAKES, PONDS, OR OTHER AREAS OF WATER IMPOUNDMENT OR CONVEYANCES.

THE TEMPORARY POLLUTION CONTROL PROVISIONS CONTAINED HEREIN SHALL BE COORDINATED WITH ANY PERMANENT EROSION CONTROL FEATURES SPECIFIED ELSEWHERE IN THE CONTRACT TO THE EXTENT PRACTICAL TO ASSURE ECONOMICAL, EFFECTIVE AND CONTINUOUS EROSION CONTROL THROUGHOUT THE CONSTRUCTION AND POST CONSTRUCTION PERIOD.

2. THIS SEDIMENTATION CONTROL PLAN MAKES USE OF THE FOLLOWING APPLICATIONS:

___X_PRESERVATION OF EXISTING VEGETATION

___X_SEDIMENT BARRIERS

___X_SEDIMENT TRAPS

___X_INLET PROTECTION

___OUTLET PROTECTION

___SOIL RETAINING SYSTEMS

___SLOPE DRAINS

___SUBSURFACE DRAINS

PHYSICAL DESCRIPTION OF EACH SPECIFIC SEDIMENT CONTROL DEVICE TO BE UTILIZED IS CALLED OUT ON THE PLANS WITH INSTALLATION PROCEDURES, CONSTRUCTION SPECIFICATIONS AND MAINTENANCE ARRANGEMENT AS CALLED FOR ON THE DETAIL SHEET. IN ADDITION TO THE MEASURES SPECIFIED, THE FOLLOWING GENERAL PRACTICES SHALL BE ADHERED TO WHEN APPLICABLE.

A) CLEARING AND GRUBBING WITHIN 50' OF A DEFINED DRAINAGE COURSE SHOULD BE AVOIDED WHEN POSSIBLE. WHERE CHANGES TO A DEFINED DRAINAGE COURSE OCCUR, WORK SHOULD BE DELAYED UNTIL ALL MATERIALS AND EQUIPMENT NECESSARY TO PROTECT AND COMPLETE THE DRAINAGE CHANGE ARE ON SITE. CHANGES SHALL BE COMPLETED AS QUICKLY AS POSSIBLE ONCE THE WORK HAS BEEN INITIATED. THE AREA IMPACTED BY THE CONSTRUCTION ACTIVITIES SHALL BE REVEGETATED OR PROTECTED FROM EROSION AS SOON AS POSSIBLE. AREAS WITHIN 50' OF A DEFINED DRAINAGE WAYS SHOULD BE RECONTOURED AS NEEDED OR OTHERWISE PROTECTED WITHIN FIVE (5) WORKING DAYS AFTER GRADING HAS CEASED.

B) WHERE SOIL DISTURBING ACTIVITIES CEASE IN AN AREA FOR MORE THAN 14 DAYS, THE DISTURBED AREAS SHALL BE PROTECTED FROM EROSION BY STABILIZING THE AREA WITH MULCH OR OTHER SIMILARLY EFFECTIVE EROSION CONTROL MEASURES. IF THE SLOPE OF THE AREA IS GREATER THAN 3:1 OR IF THE SLOPE IS GREATER THAN 3% AND GREATER THAN 150 FEET IN LENGTH, THEN THE DISTURBED AREAS SHALL BE PROTECTED FROM EROSION BY STABILIZING THE AREA WITH MULCH OR OTHER SIMILARLY EFFECTIVE EROSION CONTROL MEASURES IF ACTIVITIES CEASE FOR MORE THAN SEVEN (7) DAYS.

C) EXISTING VEGETATION SHALL BE PRESERVED TO THE EXTENT AND WHERE PRACTICAL. IN NO CASE SHALL DISTURBED AREAS REMAIN WITHOUT VEGETATIVE GROUND COVER FOR A PERIOD IN EXCESS OF 60 DAYS.

D) ADDITIONAL SITE MANAGEMENT PRACTICES WHICH SHALL BE ADHERED TO DURING THE CONSTRUCTION PROCESS SHALL INCLUDE:

SOLID AND HAZARDOUS WASTE MANAGEMENT INCLUDING PROVIDING TRASH CONTAINERS AND REGULAR SITE CLEAN UP FOR PROPER DISPOSAL OF SOLID WASTE SUCH AS BUILDING MATERIAL, PRODUCT/MATERIAL SHIPPING WASTE, FOOD CONTAINERS AND CUPS, AND PROVIDING CONTAINERS FOR THE PROPER DISPOSAL OF WASTE PAINTS SOLVENTS, AND CLEANING COMPOUNDS.

PROVISIONS OF PORTABLE TOILETS FOR PROPER DISPOSAL OF SANITARY SEWAGE.

STORAGE OF CONSTRUCTION MATERIALS AWAY FROM DRAINAGE COURSES AND LOW AREAS.

INSTALLATION OF CONTAINMENT BERMS AND USE OF DRIP PANS AT PETROLEUM PRODUCT AND LIQUID STORAGE TANKS AND CONTAINERS.

3. ALL DISTURBED AREAS SHALL BE SEEDED, FERTILIZED AND MULCHED, OR SODDED, IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS ADOPTED BY THE CITY OF LEE'S SUMMIT AND GOOD ENGINEERING PRACTICES. THIS SHALL BE COMPLETED WITHIN FOURTEEN (14) DAYS AFTER COMPLETING THE WORK, IN ANY AREA, IF THIS IS OUTSIDE OF THE SEEDING PERIOD. SILT BARRIERS OR OTHER SIMILARLY EFFECTIVE MEASURES SHALL BE PROVIDED UNTIL SUCH TIME THAT THE AREAS CAN BE SEEDED.

4. THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO ALL CURRENT STANDARDS AND SPECIFICATIONS ADOPTED BY THE CITY OF LEE'S SUMMIT. THE DEVELOPER WILL BE RESPONSIBLE FOR DETERMINING ALL ADDITIONAL STANDARDS, SPECIFICATIONS OR REQUIREMENTS WHICH ARE REQUIRED BY GOVERNING AGENCIES (INCLUDING LOCAL, STATE AND FEDERAL AUTHORITIES) HAVING JURISDICTION OVER THE WORK PROPOSED BY THESE CONSTRUCTION DRAWINGS.

5. ALL EROSION CONTROL MEASURES, TEMPORARY OR PERMANENT, REQUIRE MAINTENANCE TO PRESERVE THEIR EFFECTIVENESS. ALL EROSION CONTROL DEVICES SHALL BE INSPECTED IMMEDIATELY AFTER EACH HEAVY RAINSTORM AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHOULD BE MADE IMMEDIATELY. ALL COSTS ASSOCIATED WITH THE REPAIR WORK INCLUDING RELATED INCIDENTALS WILL BE THE DEVELOPER'S RESPONSIBILITY AND SHALL BE INCLUDED IN THE DEVELOPER'S BID FOR THE PROPOSED WORK.

6. ALL EROSION CONTROL MEASURES TO BE PER APWA KANSAS CITY METRO CHAPTER STANDARD DETAILS.

7. THE DEVELOPER MUST REMOVE AT HIS COST ANY BAD SUBSURFACE SOIL WHICH WOULD NOT BE ABLE TO SUPPORT ANY PROPOSED PUBLIC IMPROVEMENT. BACKFILL SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL SECTIONS 2100 AND 2201 ENTITLED "GRADING AND SITE PREPARATION" AND "SUBGRADE PREPARATION".

8. THE CONTRACTOR SHALL CONTACT THE CITY'S DEVELOPMENT SERVICES ENGINEERING INSPECTORS 48 HOURS PRIOR TO ANY LAND DISTURBANCE WORK AT (816) 969-1200

9. TREE CLEARING TO HAPPEN BETWEEN NOVEMBER 1 AND MARCH 31. TREES CLEARED BETWEEN APRIL 1 AND OCTOBER 31 MUST BE TREES GREATER THAN 1,000 FEET FROM FORESTED OR WOODED AREAS OR TREES LESS THAN 3 INCHES IN DIAMETER, AT BREAST HEIGHT, AND NOT MIXED WITH LARGER TREES. IF LARGER TREES NEED TO BE CLEARED, A SURVEY OF THE TREES MUST BE CONDUCTED TO MAKE SURE THERE ARE NO BAT ROOSTS IN THE TREES. TREE CLEARING TO BE CONDUCTED BY CUTTING DOWN AND MULCHING OR BY PUSHING OVER AND MULCHING. TREES SHALL NOT BE BURNED DOWN.

ESTIMATE OF QUANTITIES				
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	AS-BUILT
SITE DISTURBANCE				
1	DIVERSION BERM	L.F.	6254	
2	SILT FENCE	L.F.	1,667	
3	ROCK DITCH CHECK	EA.	19	
4	TREE CLEARING	AC.	27.74	
5	DISTURBED AREA	AC.	61.91	
6	INLET PROTECTION	EA.	26	

SUMMARY OF QUANTITIES AS INDICATED ABOVE AND ANY QUANTITIES AS SHOWN WITHIN THE PLANS HAVE BEEN PROVIDED FOR PERMITTING PURPOSES ONLY AND ARE NOT INTENDED FOR USE IN PREPARATION OF CONTRACT DOCUMENTS. QUANTITIES INTENDED FOR, BUT NOT LIMITED TO, THE PREPARATION OF PROPOSALS AND BID DOCUMENTS SHALL BE INDEPENDENTLY EVALUATED BY THE ESTIMATING PARTY BASED UPON THE CONTENTS OF THESE PLANS.

olsson

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STATE OF MISSOURI
DAVID L. EICKMAN
NUMBER PE-2009015436
7/14/23
PROFESSIONAL ENGINEER

DAVID EICKMAN, P.E.
MOR 2009015436

BY

REVISIONS DESCRIPTION

DATE

REV. NO.

REVISIONS

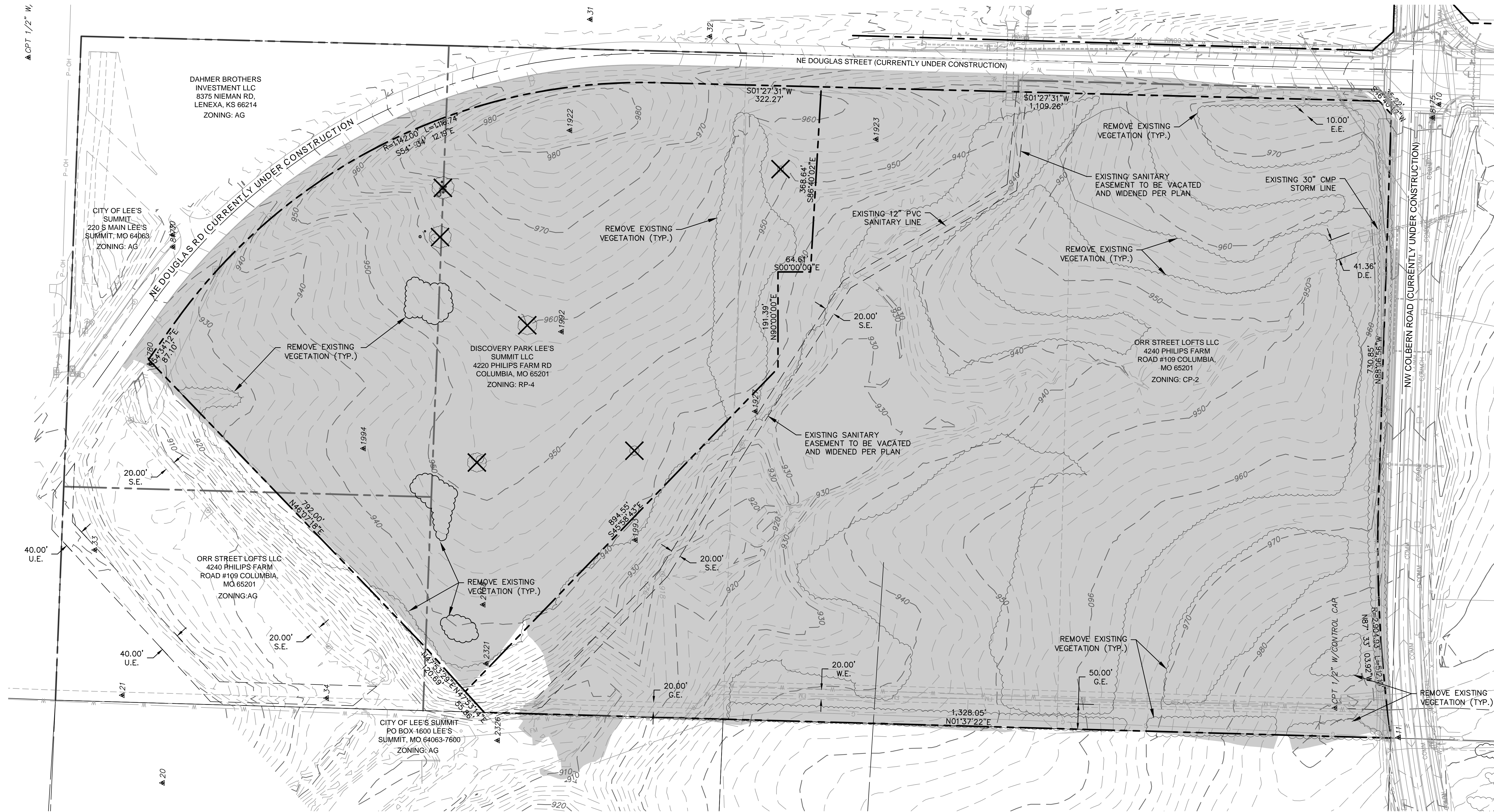
GENERAL NOTES
MASS GRADING & EROSION AND SEDIMENT CONTROL PLANS
THE VILLAGE AT DISCOVERY PARK ZONE 1 & ARIA APARTMENTS
NW COLBERN RD & NE DOUGLAS ST
LEE'S SUMMIT, MISSOURI

2023

drawn by: GS/SOS/JN
checked by: AR/JN
approved by: DE
QA/QC by: JS/NH
project no.: D21-04643
drawing no.: C_GEN01_D2104643
date: 07.14.2023

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DWG: F:\2021\04501-05000\021-04643-d\40-design\AutoCAD\final_plans\Sheets\GNCV\Site Disturbance Plans\C_EX001_D2104643.dwg
DATE: Jul 14, 2023 11:09am XREFS: C_XALTA_B2104643 C_PBDLK_D2104643 C_PBNID_D2104643 C_FROAD_D2104643
USER: aramonov



POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	FULL DESCRIPTION
10	1012183.1810	2823309.3060	982.032	CTL IB3CONCAP
11	1012263.3886	2822050.3556	984.472	CTL IB3CONCAP
20	1014720.8109	2821959.9084	931.642	CTL 60D
21	1014800.6805	2822134.3364	938.619	CTL 60D
30	1014700.8927	2823050.0451	932.433	CTL IB3CAP
31	1013870.3509	2823478.4777	981.044	CTL IB3CAP
32	1013632.5713	2823444.5928	972.448	CTL IB3CAP
33	1014855.4436	2822423.2331	929.324	CTL IB3CAP
34	1014394.5412	2822128.5531	907.079	CTL IB3CAP
35	1014607.4024	2821781.3351	902.219	CTL IB3CAP
1780	1014745.6930	2822793.1640	922.175	CTL 60D














POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	FULL DESCRIPTION
1922	1013910.9320	2823257.7240	986.639	CTL 60D
1923	1013301.9140	2823240.0500	956.352	CTL 60D
1927	1013542.2660	2822698.8750	936.292	CTL 60D
1992	1013927.5320	2822857.4500	959.400	CTL 60D
1993	1013780.6490	2822442.8070	937.257	CTL 60D
1994	1014321.2550	2822625.1060	944.103	CTL 60D
2158	1014083.2650	2822314.4510	941.622	CTL 60D
2321	1014077.0070	2822196.9780	937.570	CTL 60D
2326	1014054.6210	2822044.3360	905.594	CTL 60D
8175	1012195.5307	2823282.8905	982.458	BMK
8177	1014699.7206	2823025.8627	932.314	BMK

EXISTING CONDITIONS LEGEND

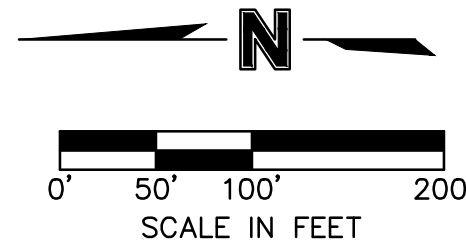
*THIS LEGEND APPLIES TO ALL SHEETS UNLESS
EXPLICITLY SHOWN OTHERWISE ON EACH SHEET.

=====	PROPERTY BOUNDARIES
-----	EASEMENT/SETBACK LINE
-----	EXISTING STORM SEWER
----- FM -----	EXISTING PRESSURE PIPE
== -----	EXISTING SANITARY SEWER
----- P=UG -----	EXISTING POWER SERVICE
----- W ----- W -----	EXISTING WATER PIPE
----- T ----- T -----	EXISTING TELECOM SERVICE
----- G -----	EXISTING NATURAL GAS PIPE

LIMITS OF DISTURBANCE

-  REMOVE EXISTING TREE
-  EXISTING LIGHT POLE
-  EXISTING SIGN
-  EXISTING SPRINKLER BOX
-  EXISTING SPRINKLER CONTROL VALVE
-  EXISTING WATER VALVE
-  EXISTING FIRE HYDRANT
-  EXISTING WATER METER
-  EXISTING ELECTRIC BOX
-  EXISTING ELECTRIC VAULT
-  EXISTING ELECTRIC METER
-  EXISTING ELECTRIC RISER
-  EXISTING ELECTRIC MANHOLE

*SCALE MAY AFFECT THE SIZE OF SURVEY SYMBOLS IN PLAN, BUT SHAPE WILL BE RETAINED.



EXISTING CONDITIONS

THE VILLAGE AT DISCOVERY PARK ZONE 1 & ARIA APARTMENTS
NW COLBERN RD & NE DOUGLAS ST

LEE'S SUMMIT, MISSOURI

2023

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
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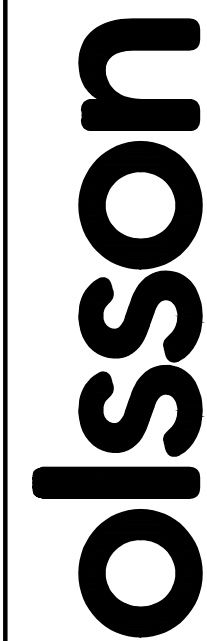
DATE _____

REVISIONS DESCRIPTION

BY



DAVID EICKMAN, P.E.
MO# 2009015436



Olsson - Civil Engineering
Missouri Certificate of Authority #001592
1301 Burlington Street
North Kansas City, MO 64116

TEL 816.361.1177 www.plsson.com

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C302



EARTHWORK QUANTITIES NOTES:

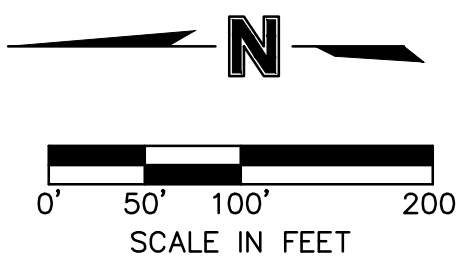
1. EARTHWORK QUANTITIES FOR DISCOVERY PARK ZONE 1 ARE BASED ON FINISHED GRADE SURFACE AND DO NOT INCLUDE ADJUSTMENTS FOR TOPSOIL AND SHRINKAGE.
2. EARTHWORK QUANTITIES FOR ARIA APARTMENTS ARE BASED ON SUBGRADE SURFACE (ASSUME 12 IN. BELOW FINISHED GRADE ACROSS THE SITE) AND DO NOT INCLUDE ADJUSTMENTS FOR TOPSOIL AND SHRINKAGE.
3. EARTHWORK QUANTITIES DO NOT TAKE INTO CONSIDERATION EXCAVATION, REMOVAL, AND DISPOSAL OF MATERIAL DEEMED UNSUITABLE BY A GEOTECHNICAL ENGINEER. THE EARTHWORK CONTRACTOR IS RESPONSIBLE FOR EXCAVATION, REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL AND FOR REPLACING IT WITH SUITABLE MATERIAL.
4. ELEVATIONS SHOWN ON DISCOVERY PARK ZONE 1 ARE TO TOP OF PAVEMENT OF FINISHED GRADE. VOLUMES SHOWN DO NOT REFLECT PAVEMENT DEPTHS, SPOILS, TRENCH FILL, OR ANY OTHER ADJUSTMENTS. SEE SHEET C230 ON PRIVATE SITE DEVELOPMENT PLANS FOR PAVEMENT SECTION DETAILS.
5. ELEVATIONS SHOWN ON ARIA APARTMENTS ARE TO SUBGRADE (12 IN. BELOW FINISHED GRADE ACROSS THE SITE). VOLUMES APPROXIMATELY REFLECT PAVEMENT DEPTHS, BUT DO NOT REFLECT SPOILS, TRENCH FILL, OR ANY OTHER ADJUSTMENTS. SEE SEPARATE SITE DEVELOPMENT PLANS FOR ARIA APARTMENTS FOR MORE DETAILS.



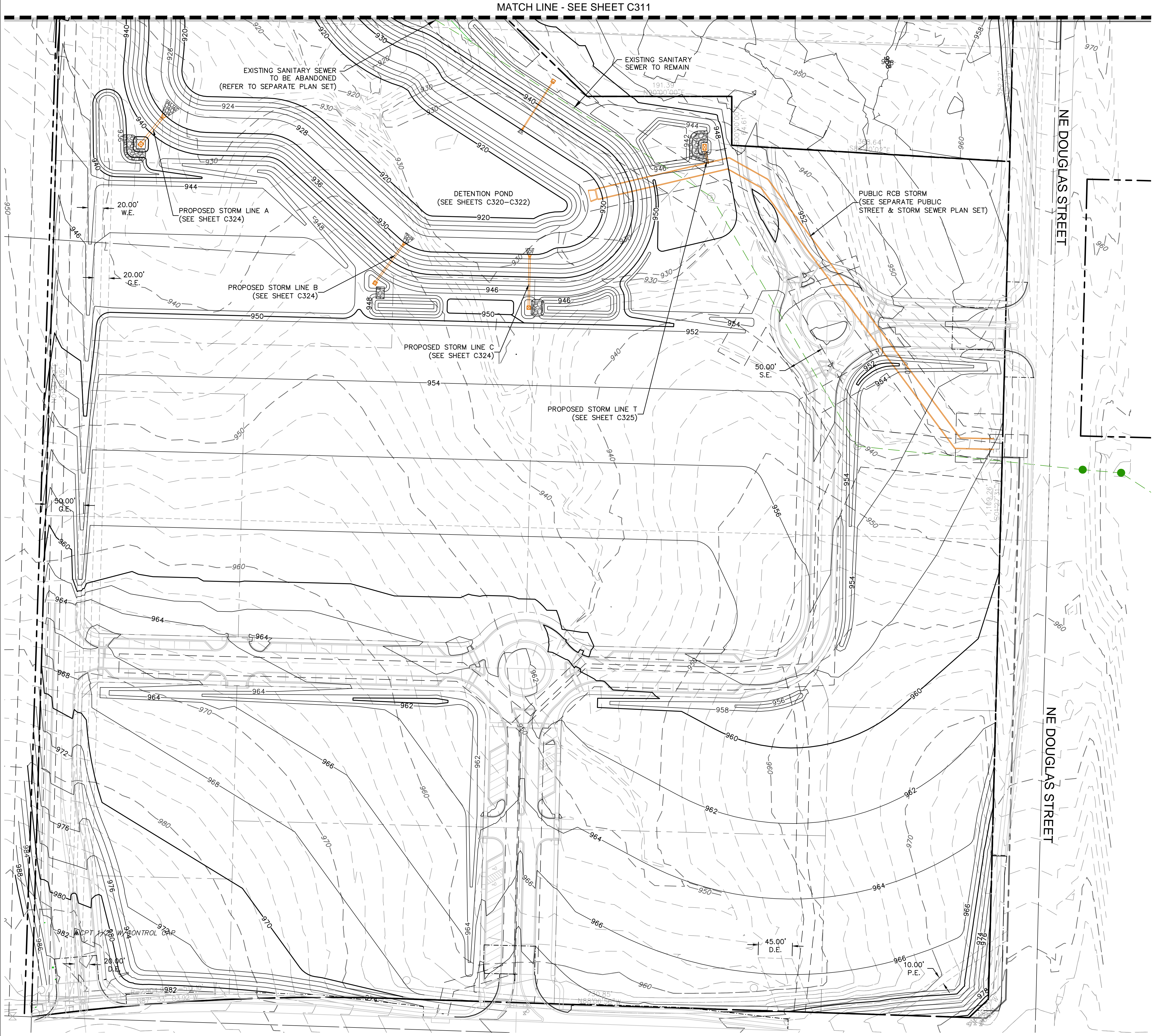
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-  FINISHED GRADE MINOR CONTOUR
-  EXISTING GRADE MAJOR CONTOUR
- EXISTING GRADE MINOR CONTOUR
- PROPOSED STORM SEWER
- PROPOSED SANITARY SEWER TO BE RELOCATED
-  EXISTING SANITARY SEWER

EARTHWORK QUANTITIES		
LOCATION	CUT (C.Y.)	FILL (C.Y.)
ARIA APARTMENTS	139,557	70,893
ZONE 1	91,058	393,869

LIMITS OF DISTURBANCE



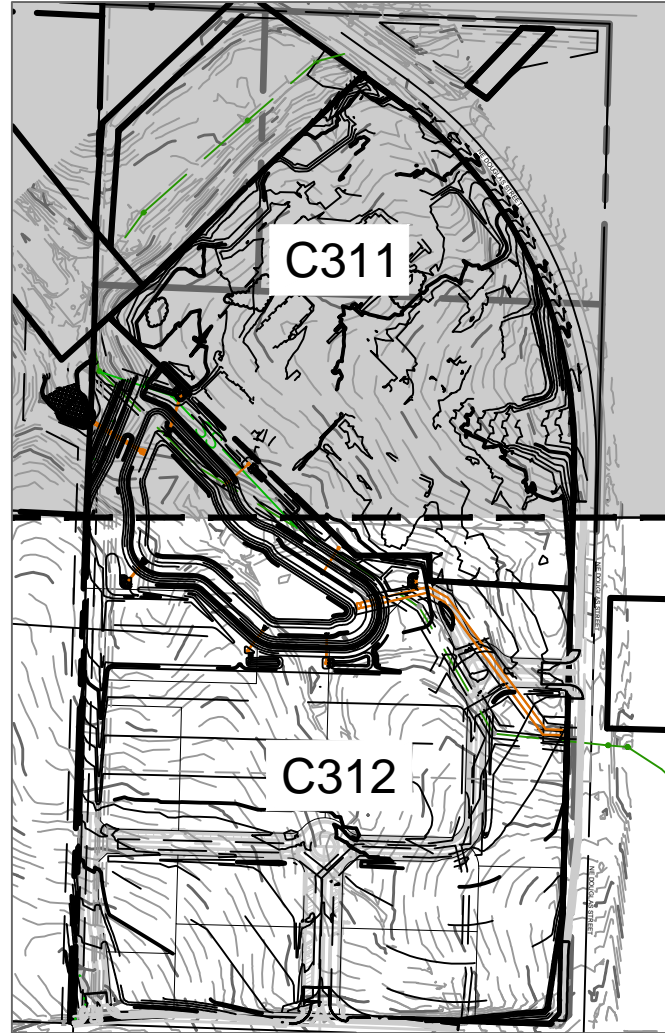
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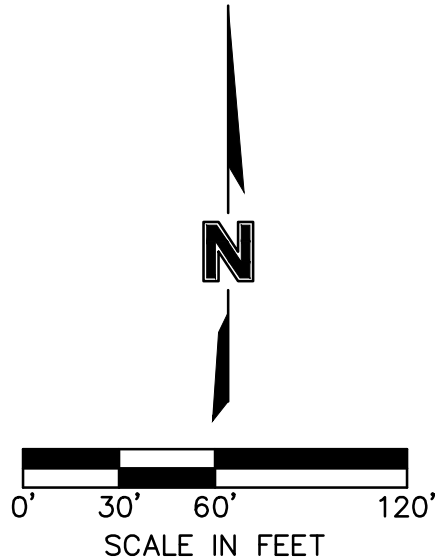
GRADING LEGEND

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- 999 FINISHED GRADE MINOR CONTOUR
- 999 EXISTING GRADE MAJOR CONTOUR
- 999 EXISTING GRADE MINOR CONTOUR
- SS PROPOSED STORM SEWER
- SS PROPOSED SANITARY SEWER TO BE RELOCATED
- EXISTING SANITARY SEWER

NOTE: PAVEMENT AND OTHER INFRASTRUCTURE IMPROVEMENTS NOT EXPLICITLY DETAILED WITHIN THIS PLAN SET ARE SHOWN FOR REFERENCE ONLY AND WILL BE REVIEWED AND PERMITTED SEPARATELY.



SITE KEY



GRADING PLAN (SOUTH)
MASS GRADING & EROSION AND SEDIMENT CONTROL PLANS

THE VILLAGE AT DISCOVERY PARK ZONE 1 & ARIA APARTMENTS
NW COLBURN RD & NE DOUGLAS ST

LEE'S SUMMIT, MISSOURI

drawn by: GS/SJS/JN
checked by: AR/JN
approved by: DE
QA/QC by: JS/NH
project no.: D21-04643
drawing no.: C_GRD01_D2104643
date: 07.14.2023

2023

BY

REVISIONS DESCRIPTION

DATE

REV. NO.

REVISIONS

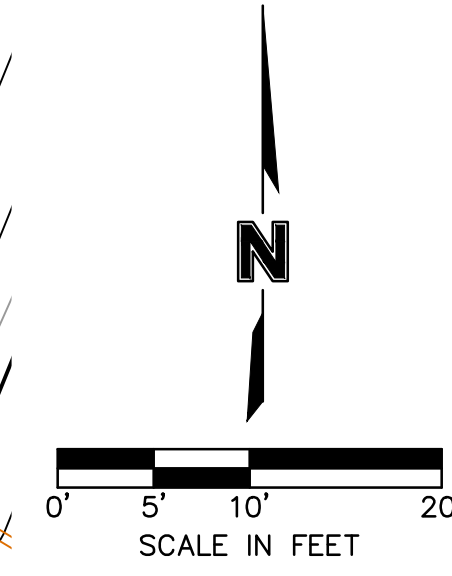
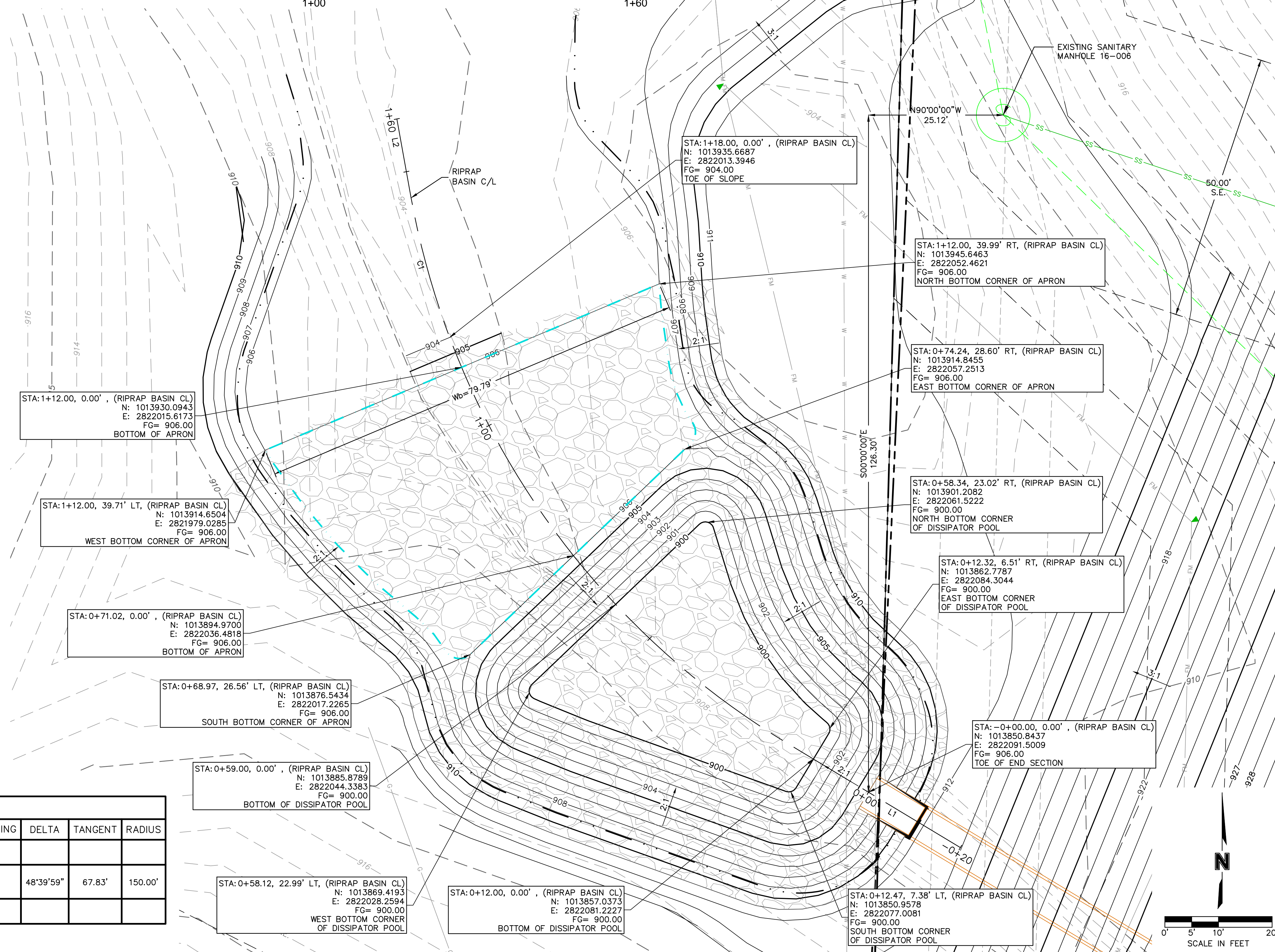
DAVID L. EICKMAN
NUMBER PE-2009015436
7/14/23
PROFESSIONAL ENGINEER
DAVID EICKMAN, P.E.
MOR 2009015436

olsson
Olsson - Civil Engineering
Missouri Certificate of Authority #001592
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North Kansas City, MO 64116
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2.50' d_{50} ROCK

RIPRAP BASIN CL									
NO.		STATION	NORTHING	EASTING	LENGTH	LINE/CHORD BEARING	DELTA	TANGENT	RADIUS
L1		−0+20.00 0+17.64	1013840.5211 1013859.9485	2822108.6311 2822076.3915	37.64'	N58°55'37"W			
C1	PC= PI= PT=	0+17.64 0+85.47 1+45.05	1013859.9485 1013894.9588 1013961.7062	2822076.3915 2822018.2926 2822006.2099	127.41'	N34°35'38"W	48°39'59"	67.83'	150.00'
L2		1+45.05 1+60.00	1013961.7062 1013976.4183	2822006.2099 2822003.5467	14.95'	N10°15'38"W			



SPILLWAY DETAIL PLAN
MASS GRADING & EROSION AND SEDIMENT CONTROL PLANS
THE VILLAGE AT DISCOVERY PARK ZONE 1 & ARIA APARTMENTS
NW COLBORN RD & NE DOUGLAS ST

drawn by: GS/OS/JNN
checked by: AR/JNN
approved by: DE
QA/QC by: JS/NH
project no.: D21-04643
drawing no.: C GRD02 D2104643
date: 07.14.2023

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North Kansas City, MO 64116

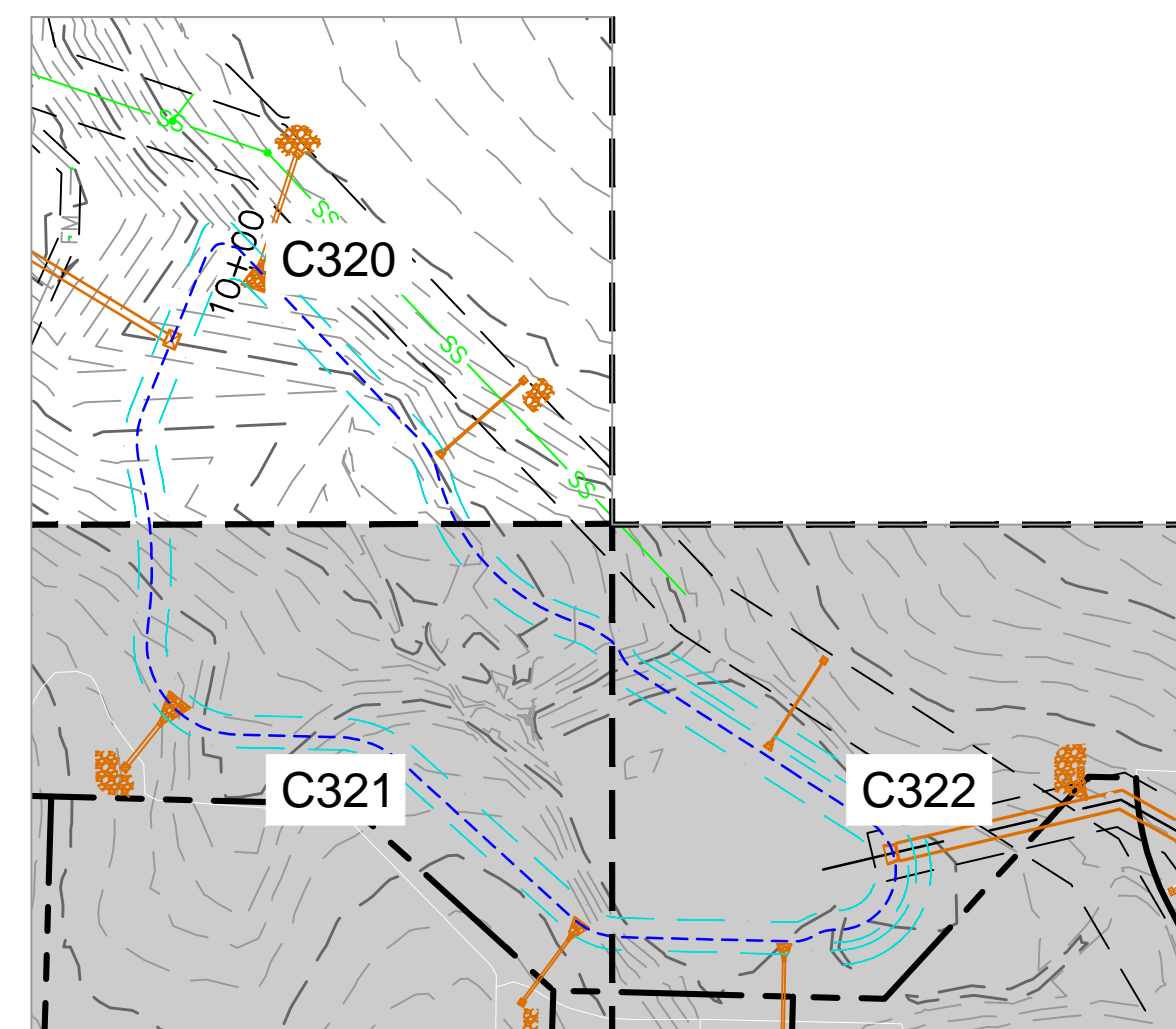
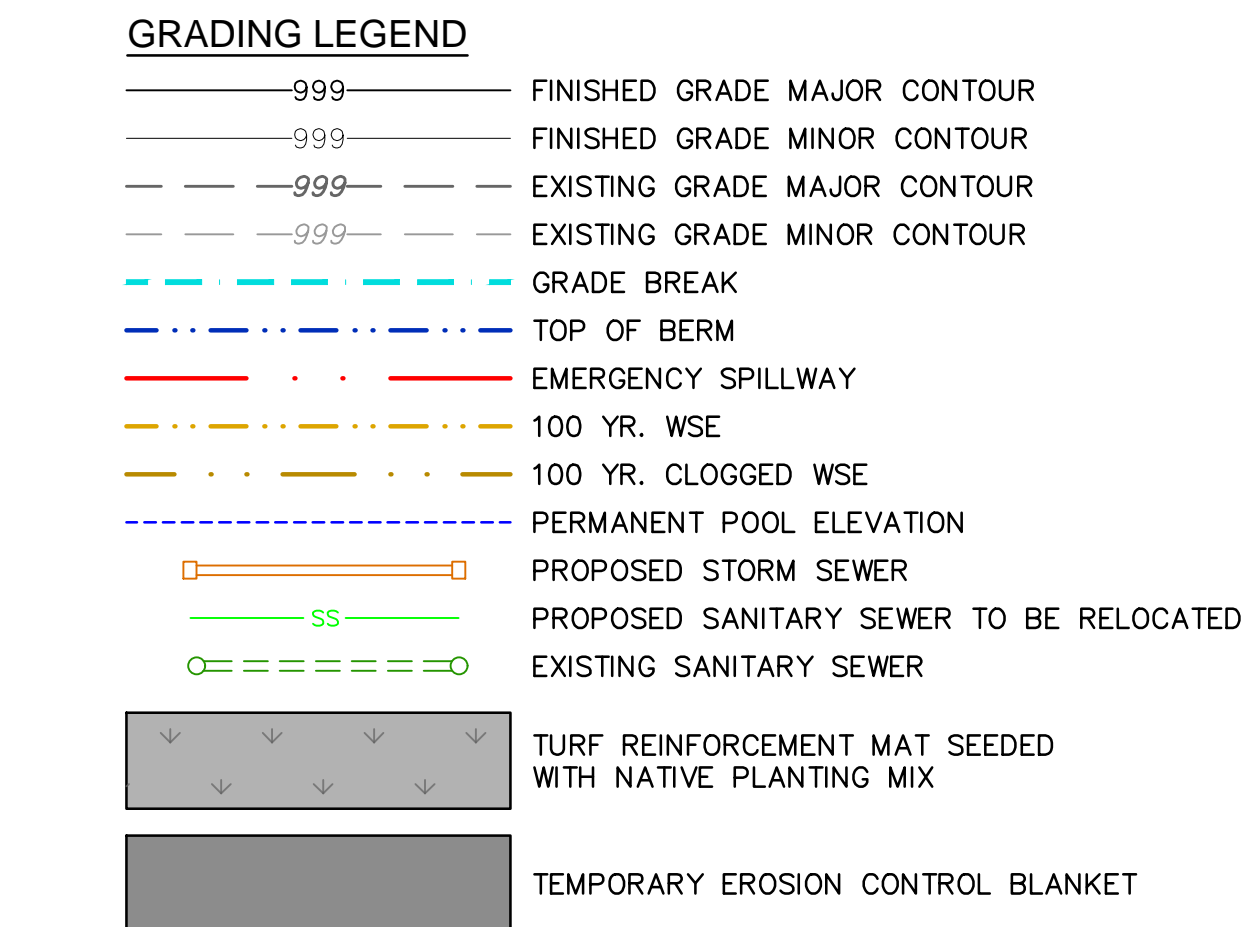
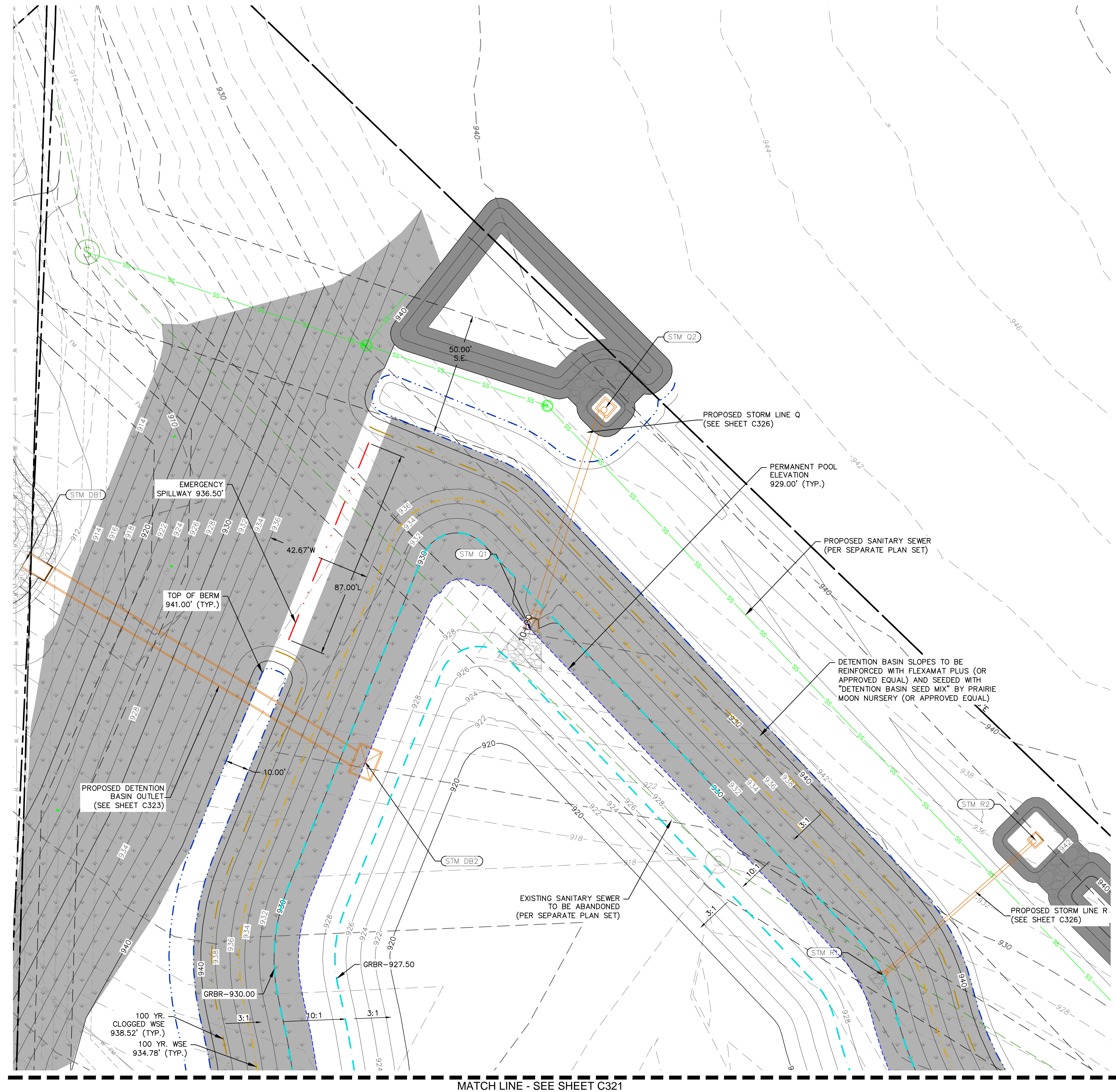
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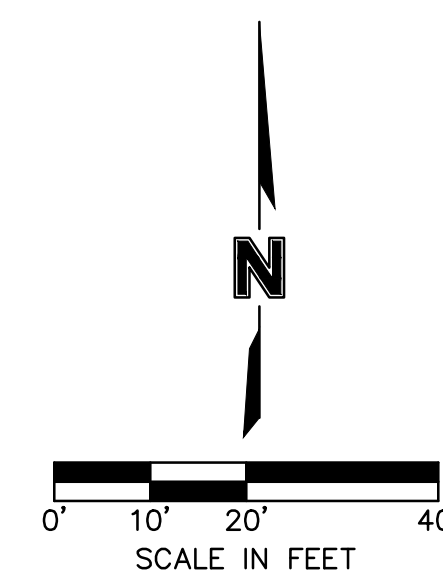
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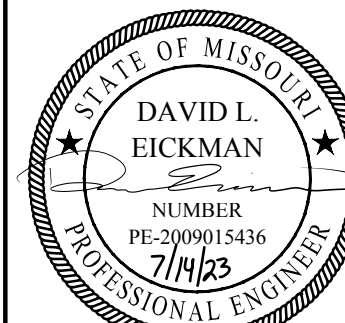
DETENTION BASIN PLAN (NORTH WEST)

MASS GRADING & EROSION AND SEDIMENT CONTROL PLANS

THE VILLAGE AT DISCOVERY PARK ZONE 1 & ARIA APARTMENTS
NW COLBERN RD & NE DOUGLAS ST

LEE'S SUMMIT, MISSOURI

2023

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DAVID EICKMAN, P.E.
MO# 2009015436

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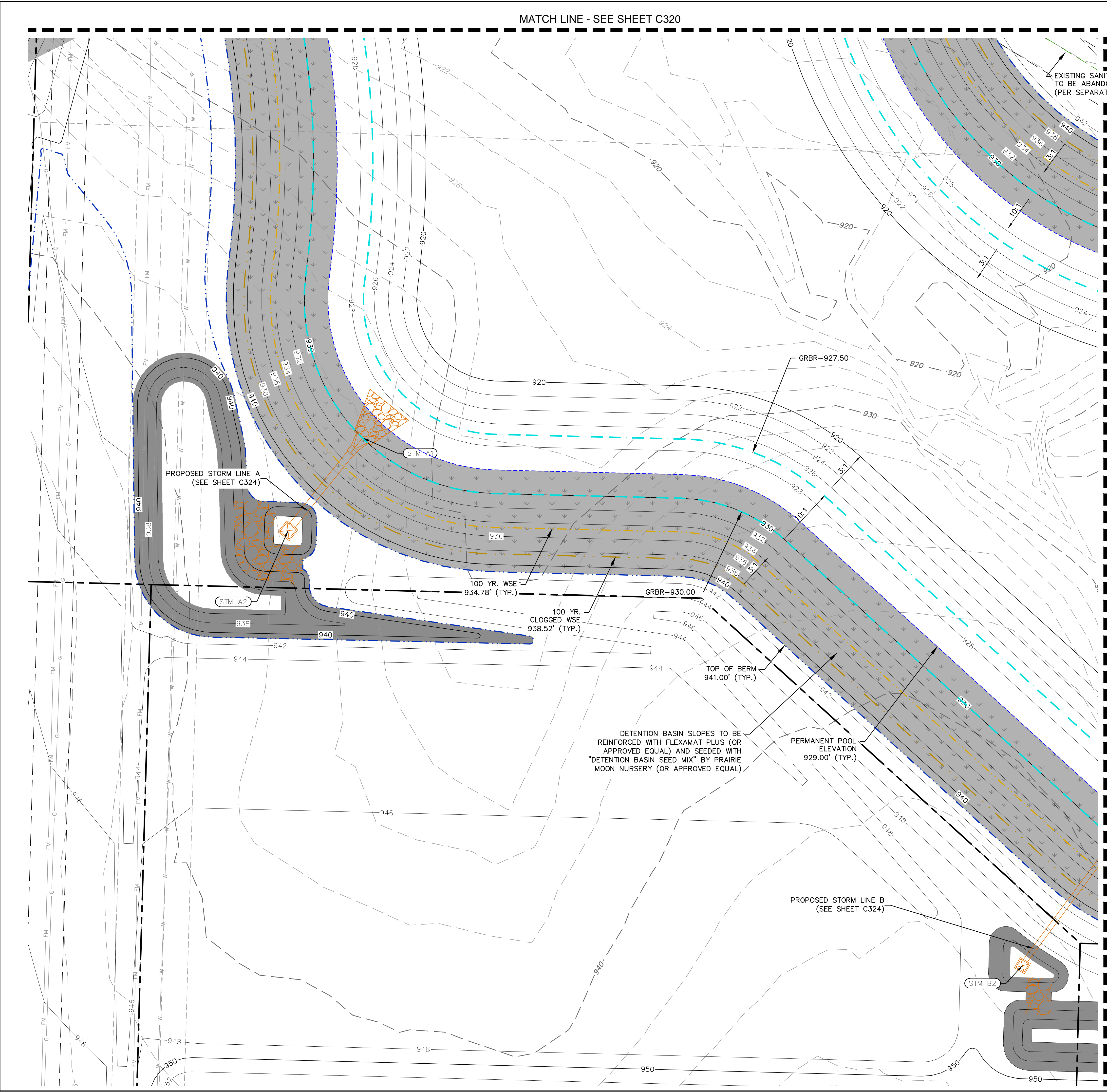
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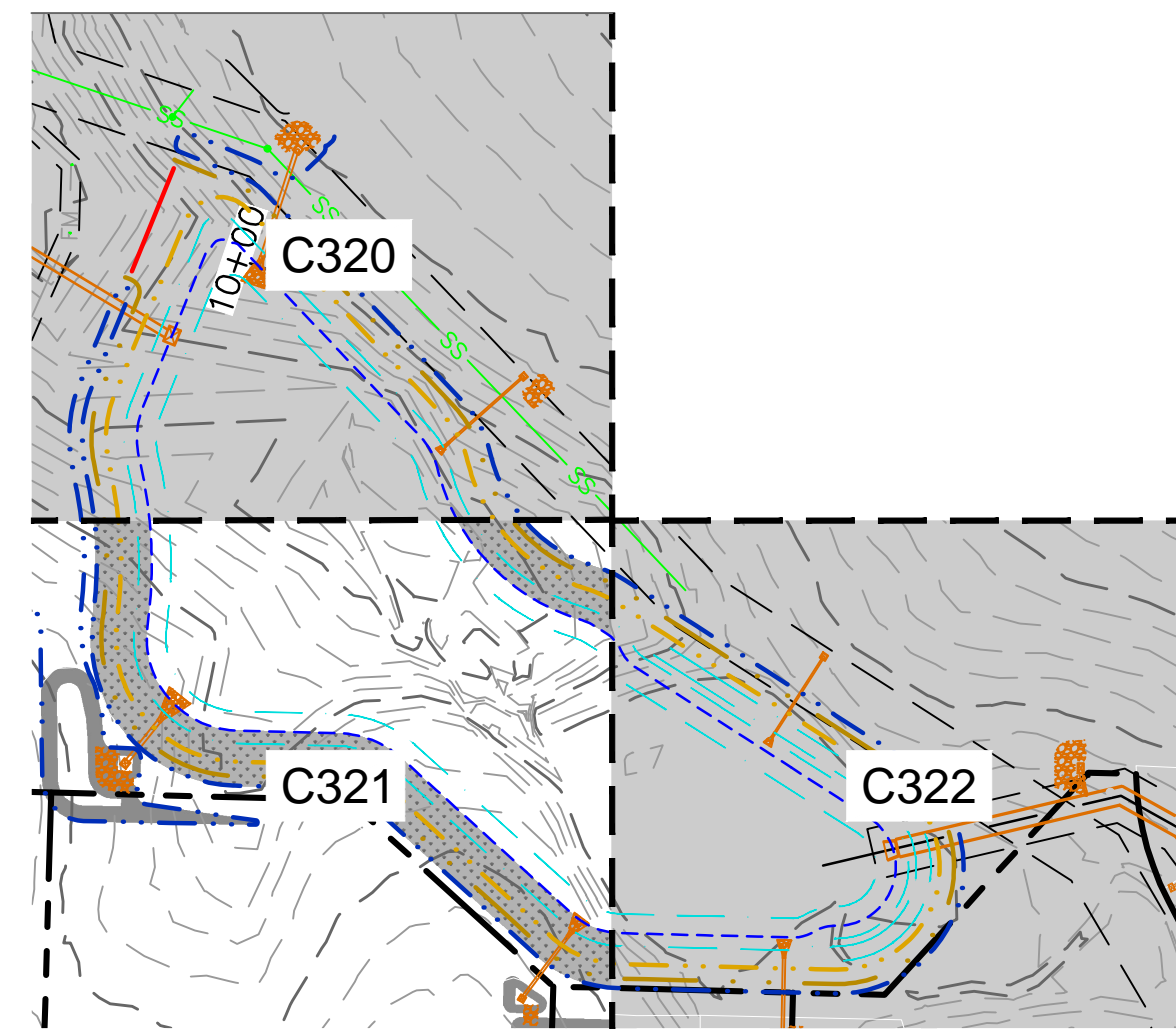
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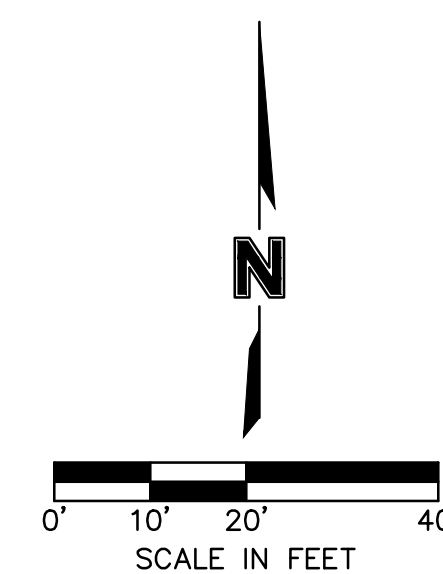
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C_PUTIL_D2104643



- GRADING LEGEND**
- 999 FINISHED GRADE MAJOR CONTOUR
 - 999 FINISHED GRADE MINOR CONTOUR
 - 999 EXISTING GRADE MAJOR CONTOUR
 - 999 EXISTING GRADE MINOR CONTOUR
 - GRADE BREAK
 - TOP OF BERM
 - EMERGENCY SPILLWAY
 - 100 YR. WSE
 - 100 YR. CLOGGED WSE
 - PERMANENT POOL ELEVATION
 - PROPOSED STORM SEWER
 - PROPOSED SANITARY SEWER TO BE RELOCATED
 - EXISTING SANITARY SEWER
 - TURF REINFORCEMENT MAT SEEDED WITH NATIVE PLANTING MIX
 - TEMPORARY EROSION CONTROL BLANKET



SITE KEY



DETENTION BASIN PLAN (SOUTH WEST)

MASS GRADING & EROSION AND SEDIMENT CONTROL PLANS

THE VILLAGE AT DISCOVERY PARK ZONE 1 & ARIA APARTMENTS

NW COLBURN RD & NE DOUGLAS ST

LEE'S SUMMIT, MISSOURI

drawn by: GS/SJN

checked by: AR/JN

approved by: DE

QA/QC by: JS/NH

project no.: D21-04643

drawing no.: C_DBP01_D2104643

date: 07.14.2023

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BY

REVISIONS DESCRIPTION

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1301 Burlington Street
North Kansas City, MO 64116
TEL 816.361.1177
www.olson.com

STATE OF MISSOURI

DAVID L. EICKMAN

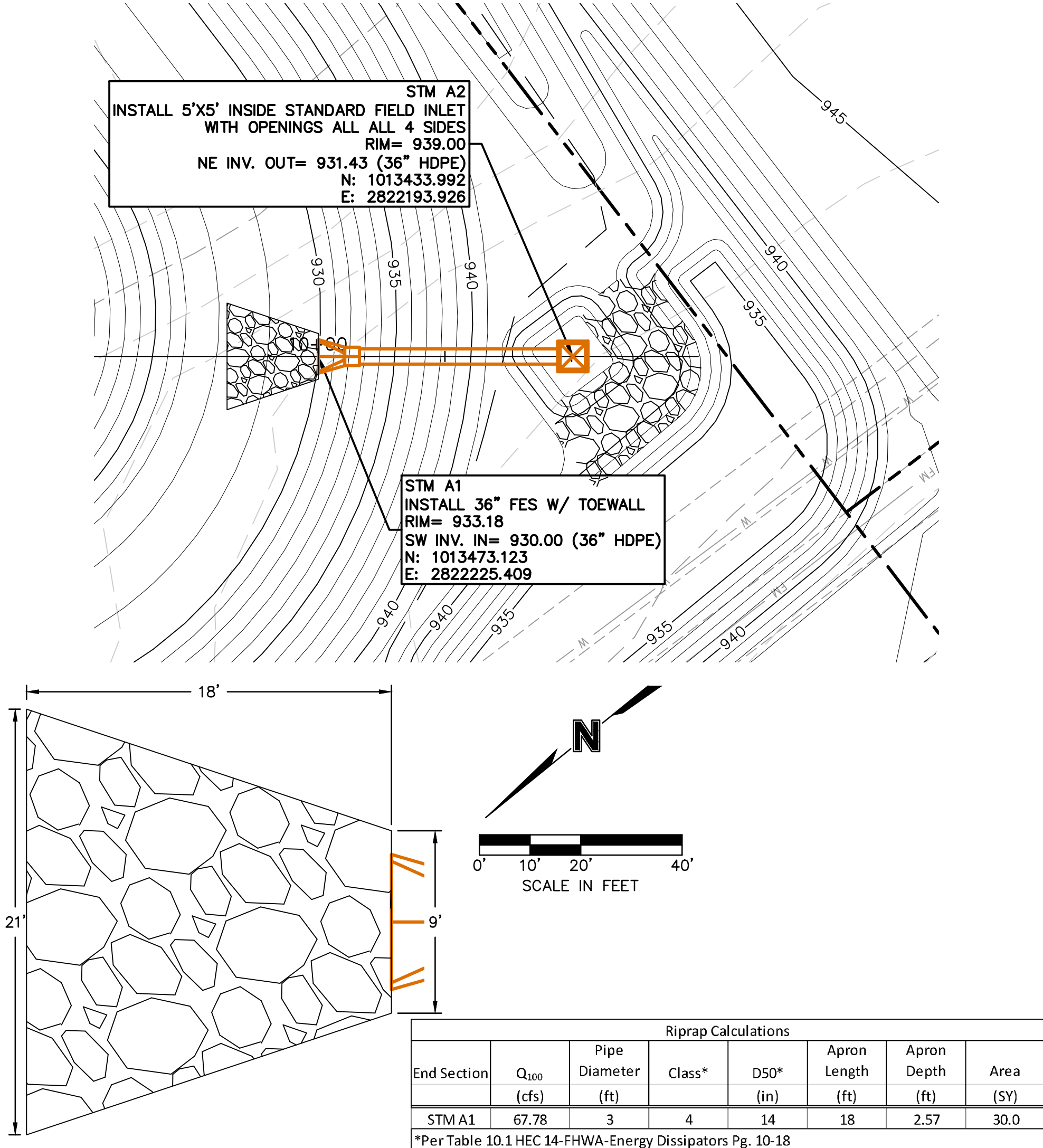
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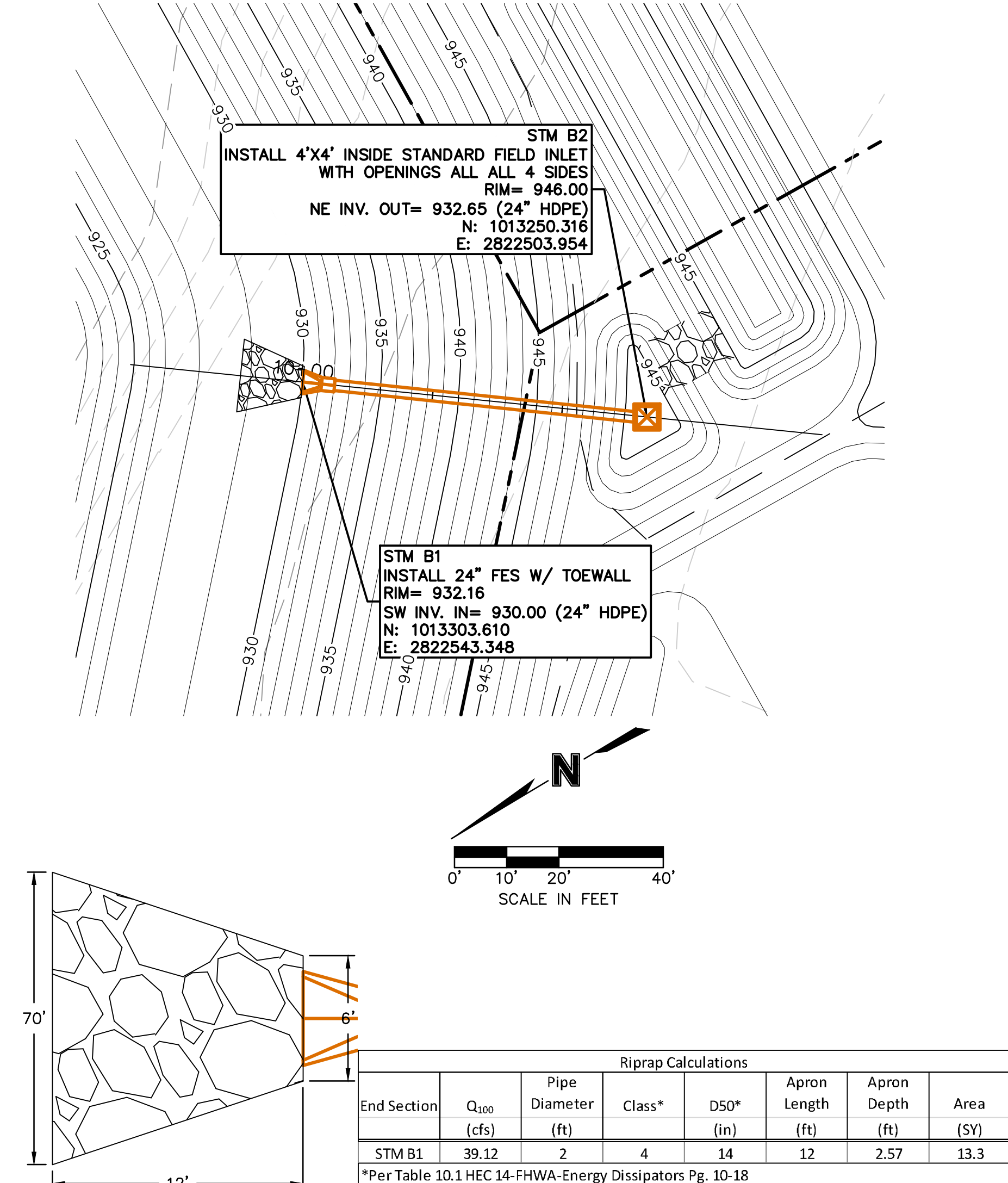
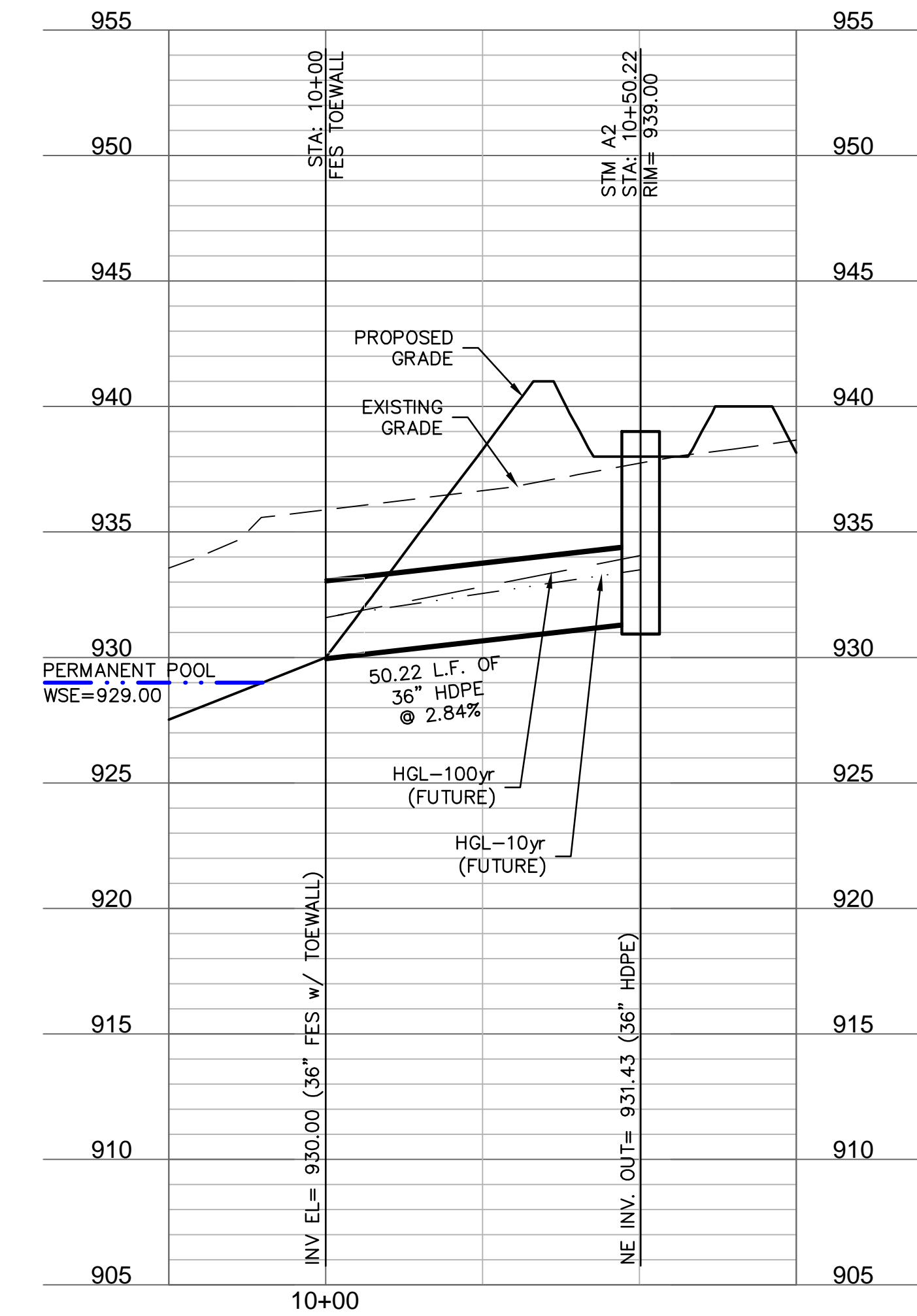
PROFESSIONAL ENGINEER

DAVID EICKMAN, P.E.
MOR 2009015436

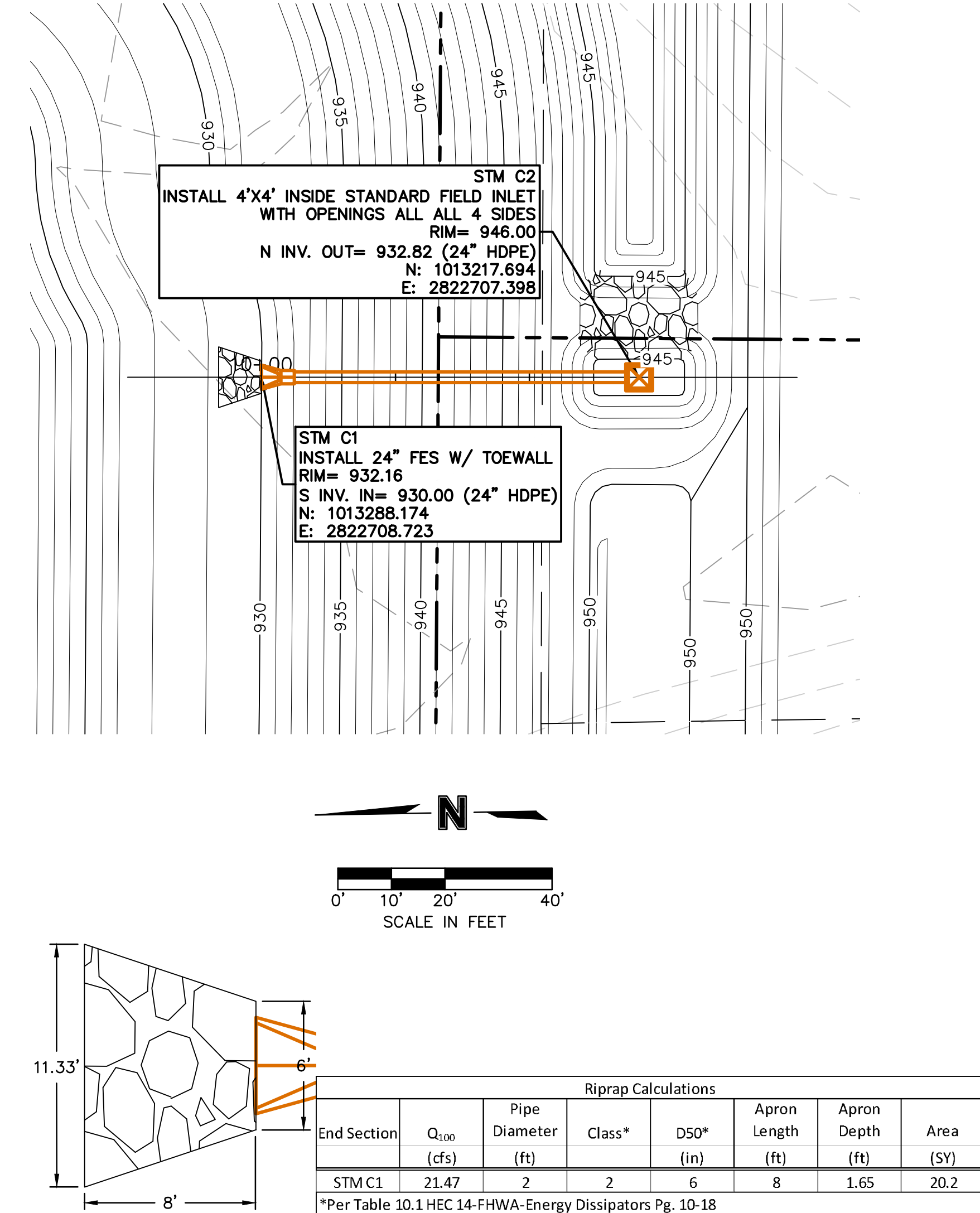
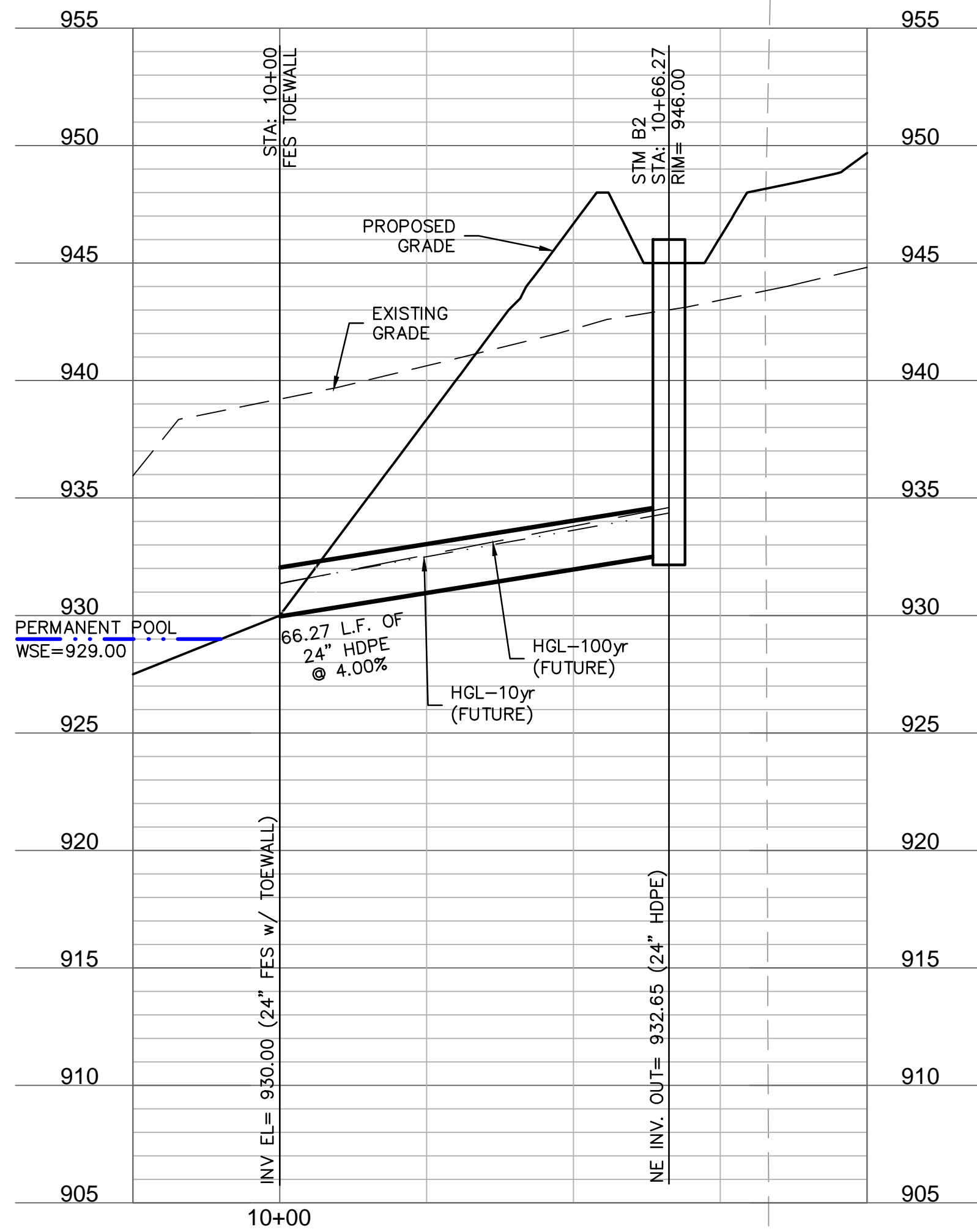
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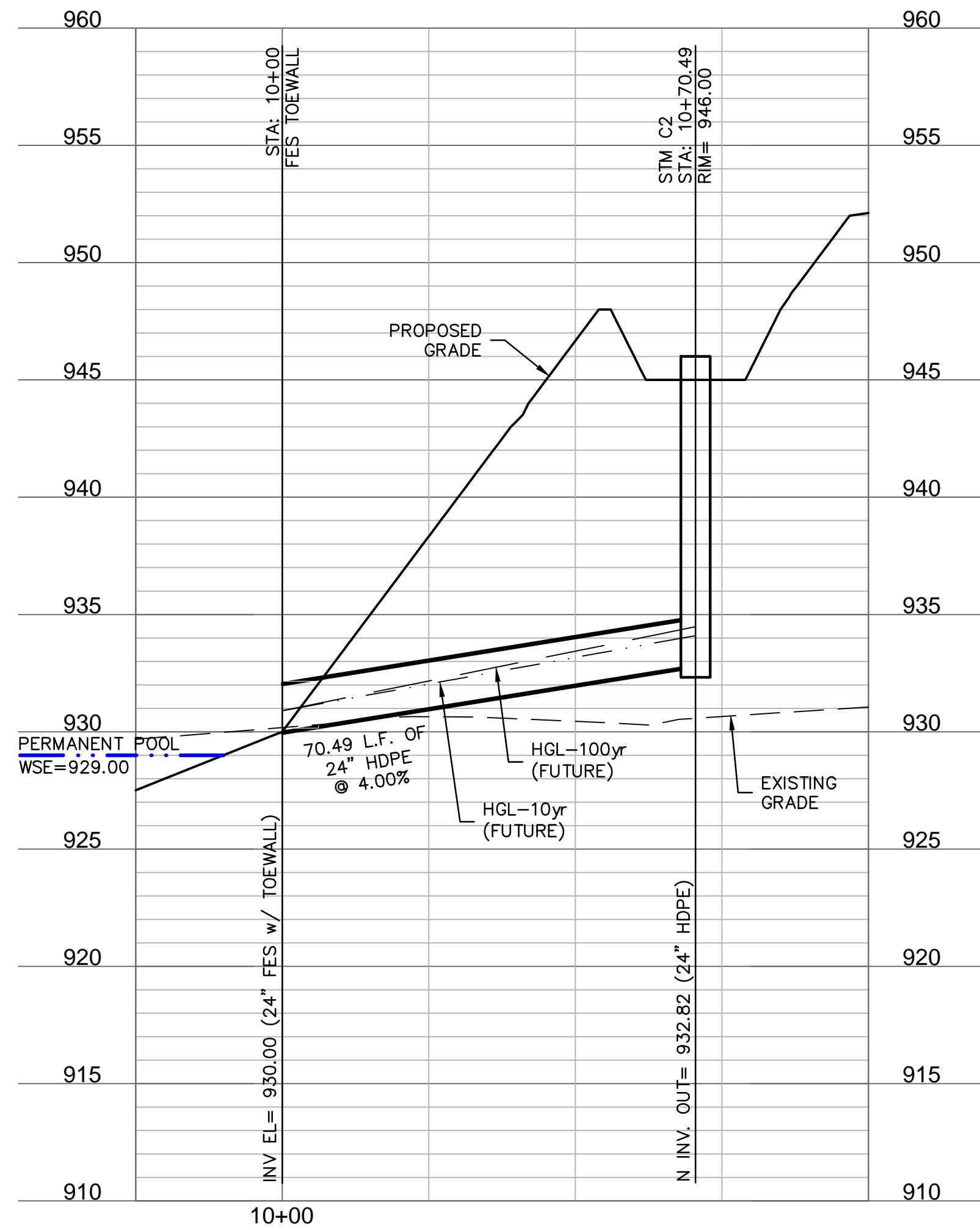
STORM LINE A (9+75 - 10+75)



STORM LINE B (9+75 - 11+00)



STORM LINE C (9+75 - 11+00)



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STATE OF MISSOURI
DAVID L. EICKMAN
NUMBER
PE-2009015436
7/14/23
PROFESSIONAL ENGINEER
DAVID EICKMAN, P.E.
MOR 2009015436

BY
REV. NO.
DATE
REVISIONS DESCRIPTION

REVISIONS

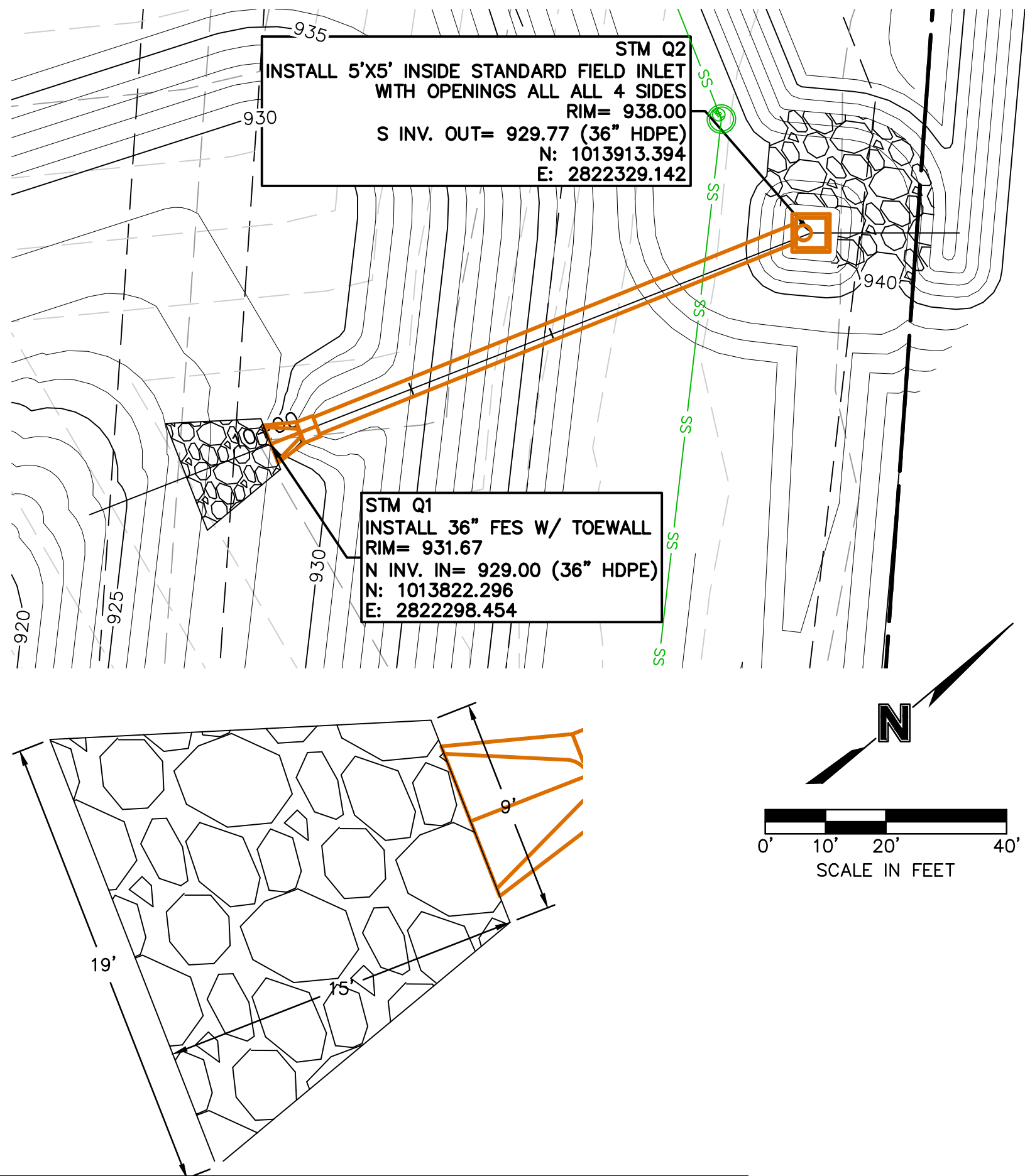
STORM SEWER PLAN & PROFILES
MASS GRADING & EROSION AND SEDIMENT CONTROL PLANS
THE VILLAGE AT DISCOVERY PARK ZONE 1 & ARIA APARTMENTS
NW COLBURN RD & NE DOUGLAS ST
LEE'S SUMMIT, MISSOURI

2023

drawn by: GS/SJS/IN
checked by: AR/JN
approved by: DE
QA/QC by: JS/NH
project no.: D21-04643
drawing no.: C_DBP02_D2104643
date: 07.14.2023

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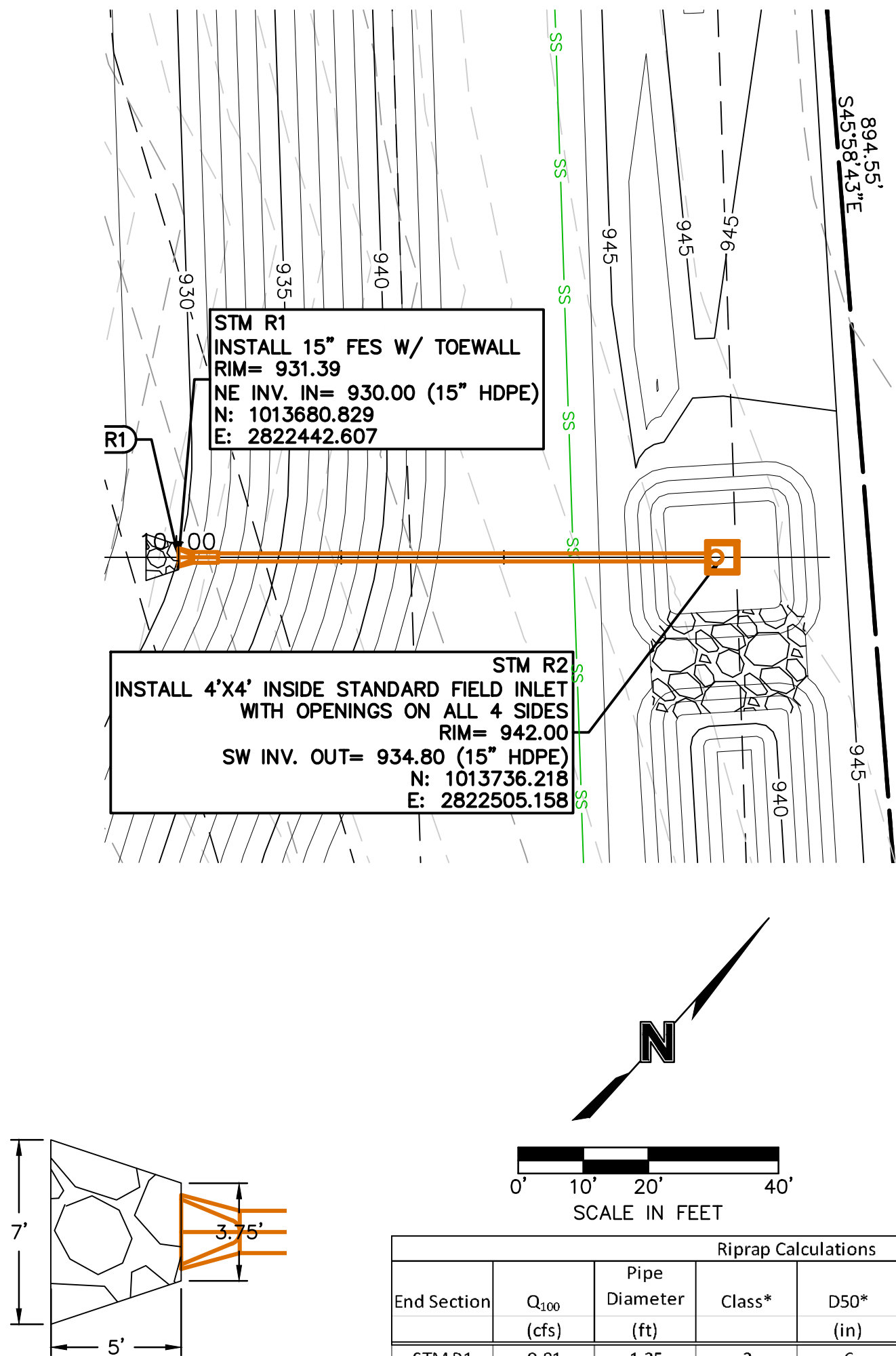
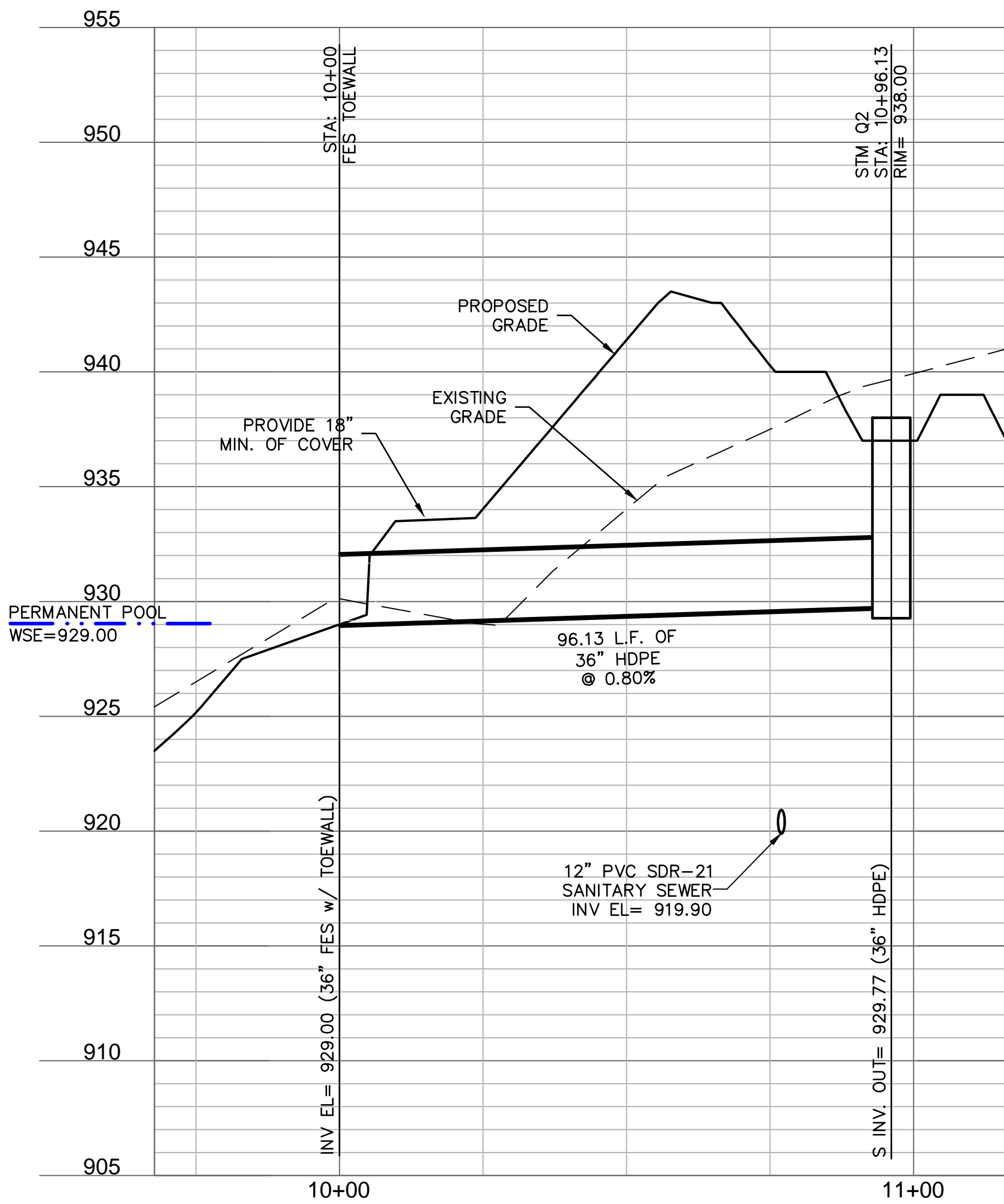
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USER: cronynov C_PUTIL_D2104643



Riprap Calculations						
End Section	Q ₁₀₀ (cfs)	Pipe Diameter (ft)	Class*	D50* (in)	Apron Length (ft)	Apron Depth (ft)
STM Q1	55.79	3	3	10	15	2.00
STM Q2	96.13	36	36	10	23.3	2.00

*Per Table 10.1 HEC 14-FHWA-Energy Dissipators Pg. 10-18

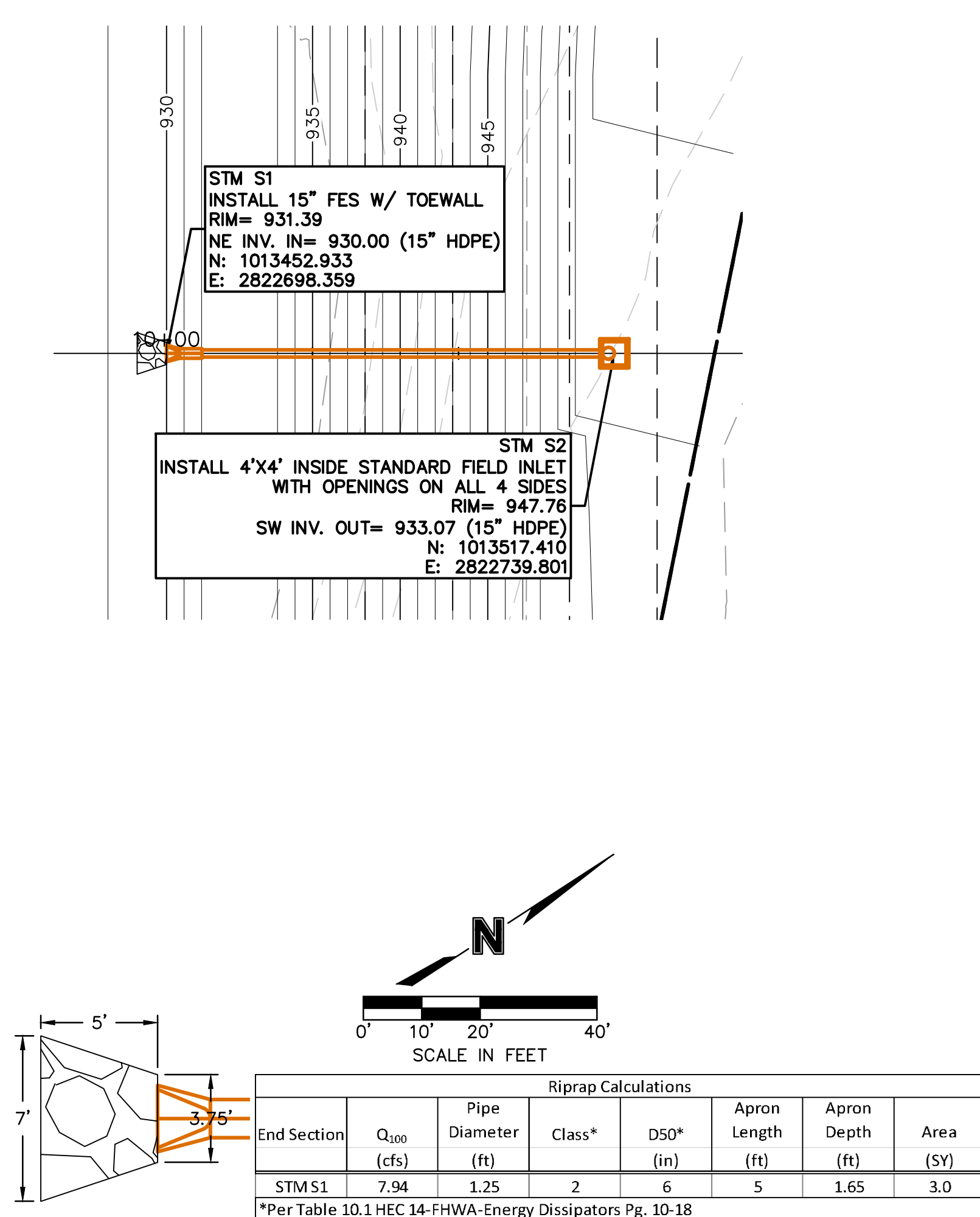
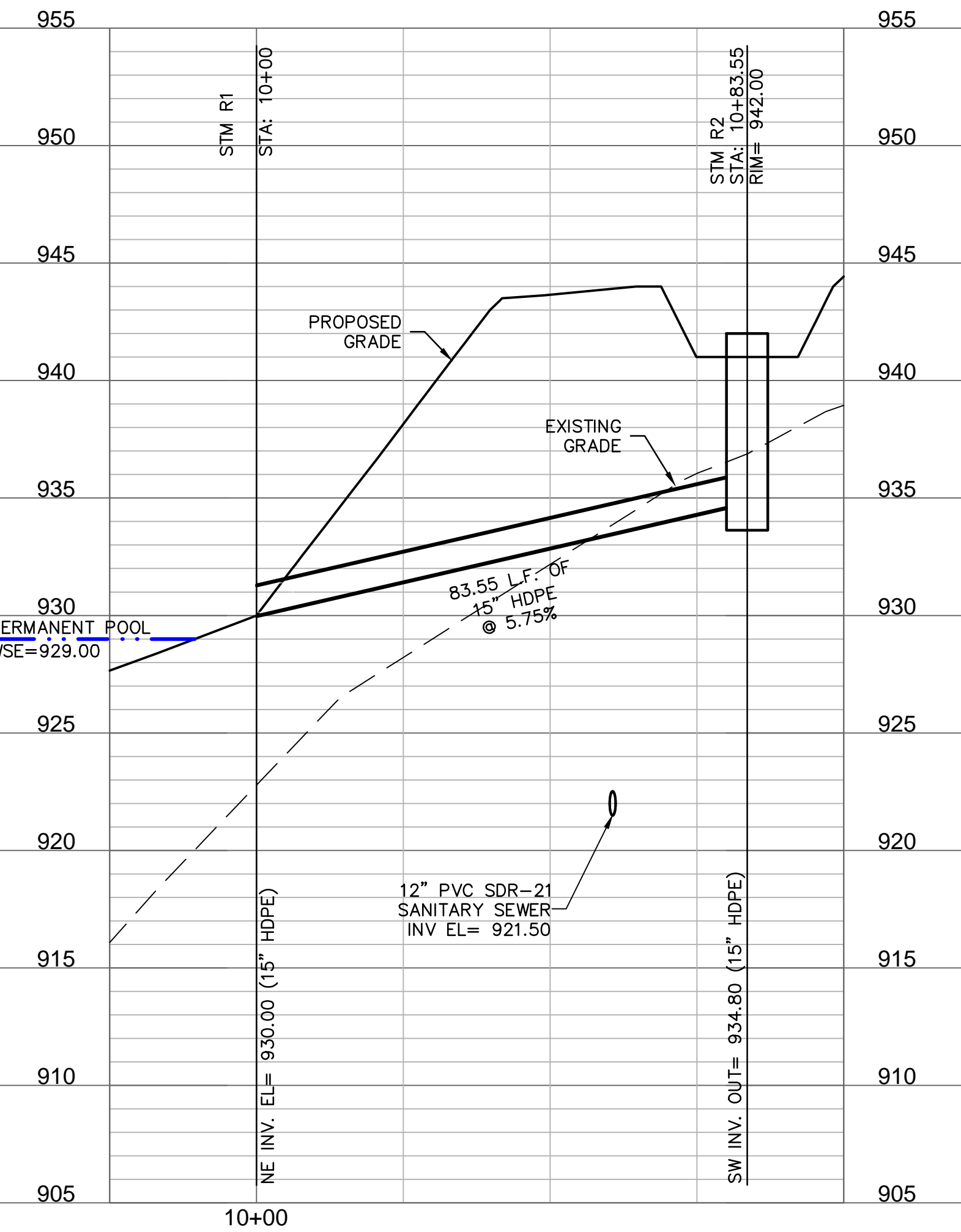
STORM LINE Q (9+67.76 - 11+20.71)



Riprap Calculations						
End Section	Q ₁₀₀ (cfs)	Pipe Diameter (ft)	Class*	D50* (in)	Apron Length (ft)	Apron Depth (ft)
STM R1	9.81	1.25	2	6	5	1.65
STM R2	83.55	15	15	6	3.0	1.65

*Per Table 10.1 HEC 14-FHWA-Energy Dissipators Pg. 10-18

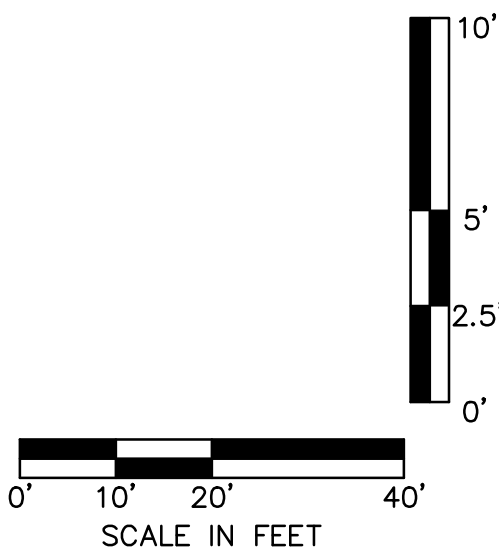
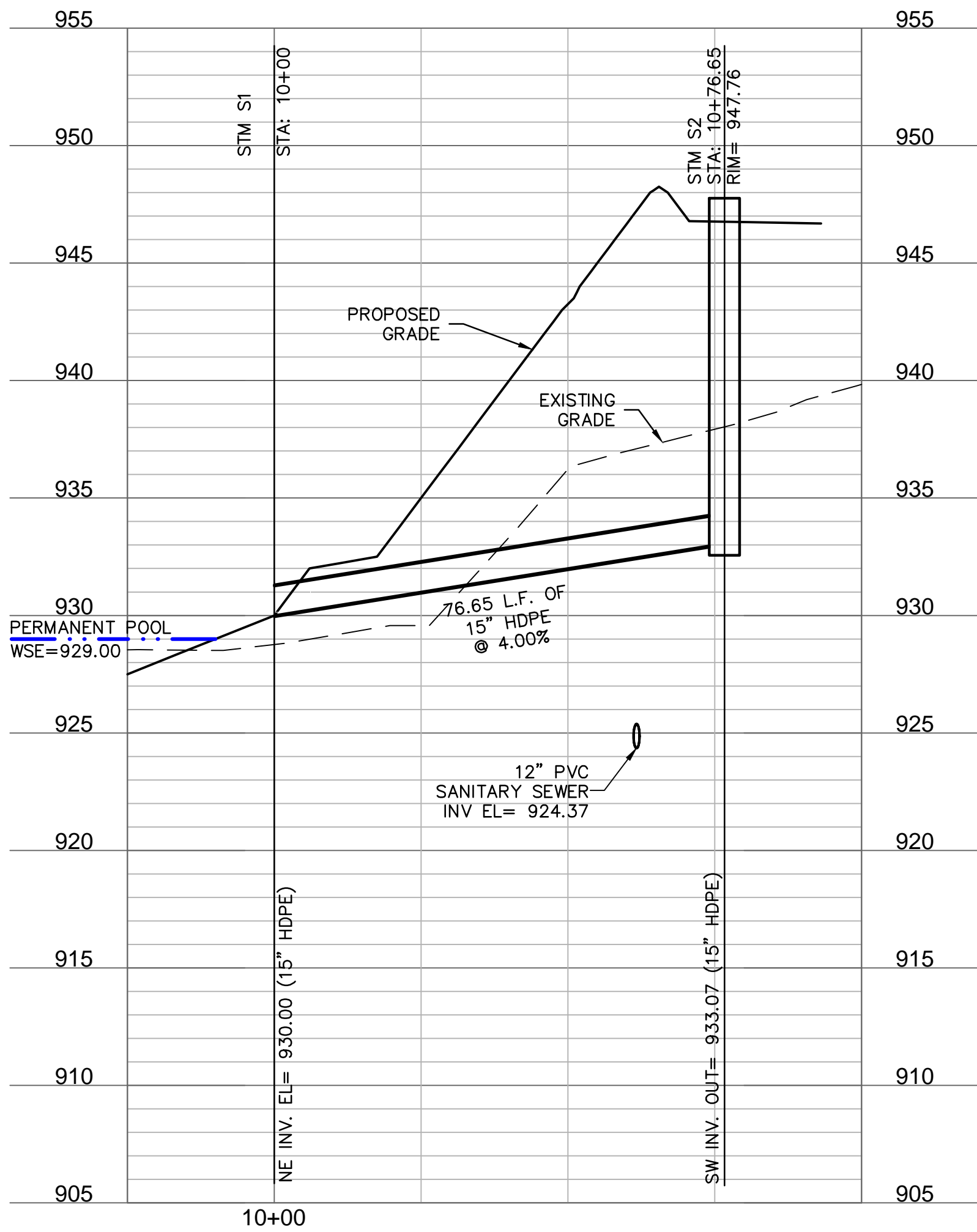
STORM LINE R (9+75 - 11+00)



Riprap Calculations						
End Section	Q ₁₀₀ (cfs)	Pipe Diameter (ft)	Class*	D50* (in)	Apron Length (ft)	Apron Depth (ft)
STM S1	7.94	1.25	2	6	5	1.65
STM S2	76.65	15	15	6	3.0	1.65

*Per Table 10.1 HEC 14-FHWA-Energy Dissipators Pg. 10-18

STORM LINE S (9+75 - 11+00)



STORM SEWER PLAN & PROFILES
MASS GRADING & EROSION AND SEDIMENT CONTROL PLANS

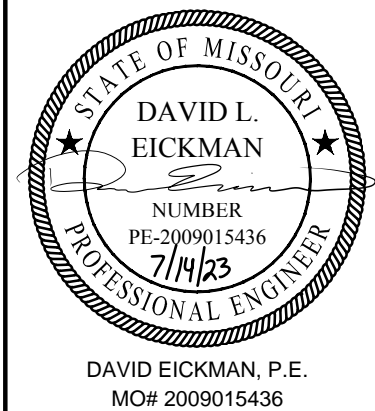
THE VILLAGE AT DISCOVERY PARK ZONE 1 & ARIA APARTMENTS
NW COLBURN RD & NE DOUGLAS ST

LEE'S SUMMIT, MISSOURI

2023

drawn by: GS/SOS/JN
checked by: AR/JN
approved by: DE
QA/QC by: JS/NH
project no.: D21-04643
drawing no.: C_DBP02_D2104643
date: 07.14.2023

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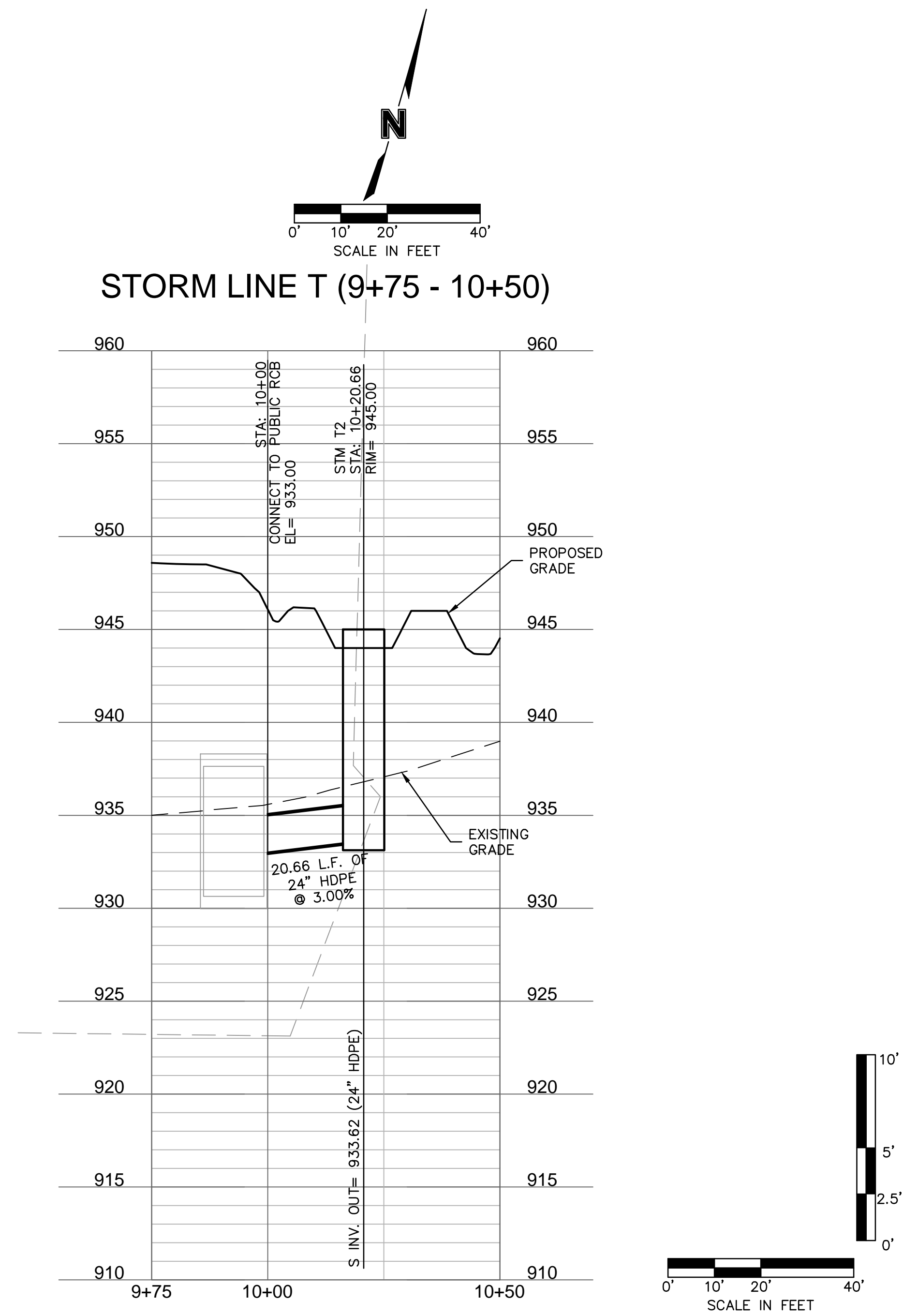
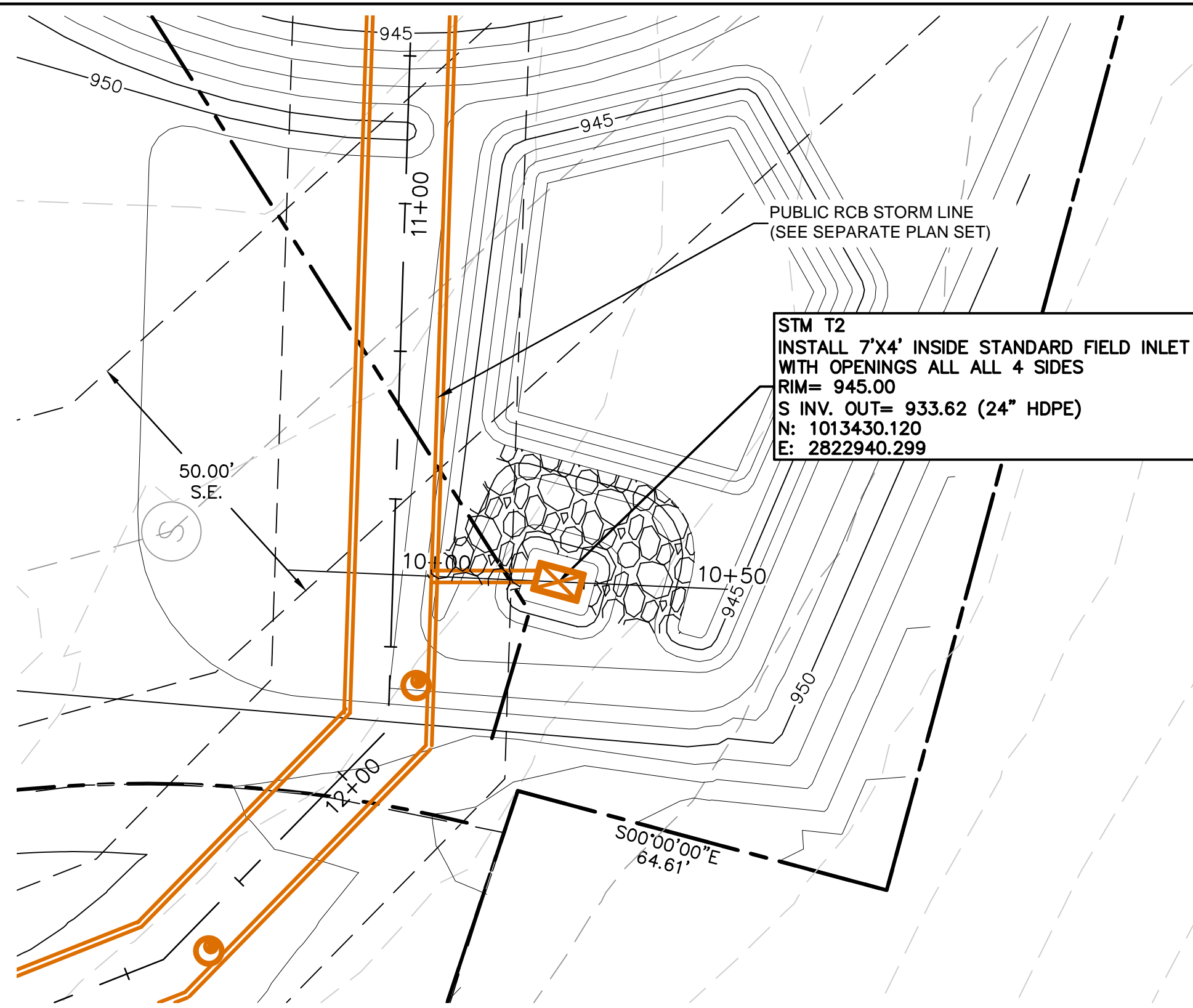


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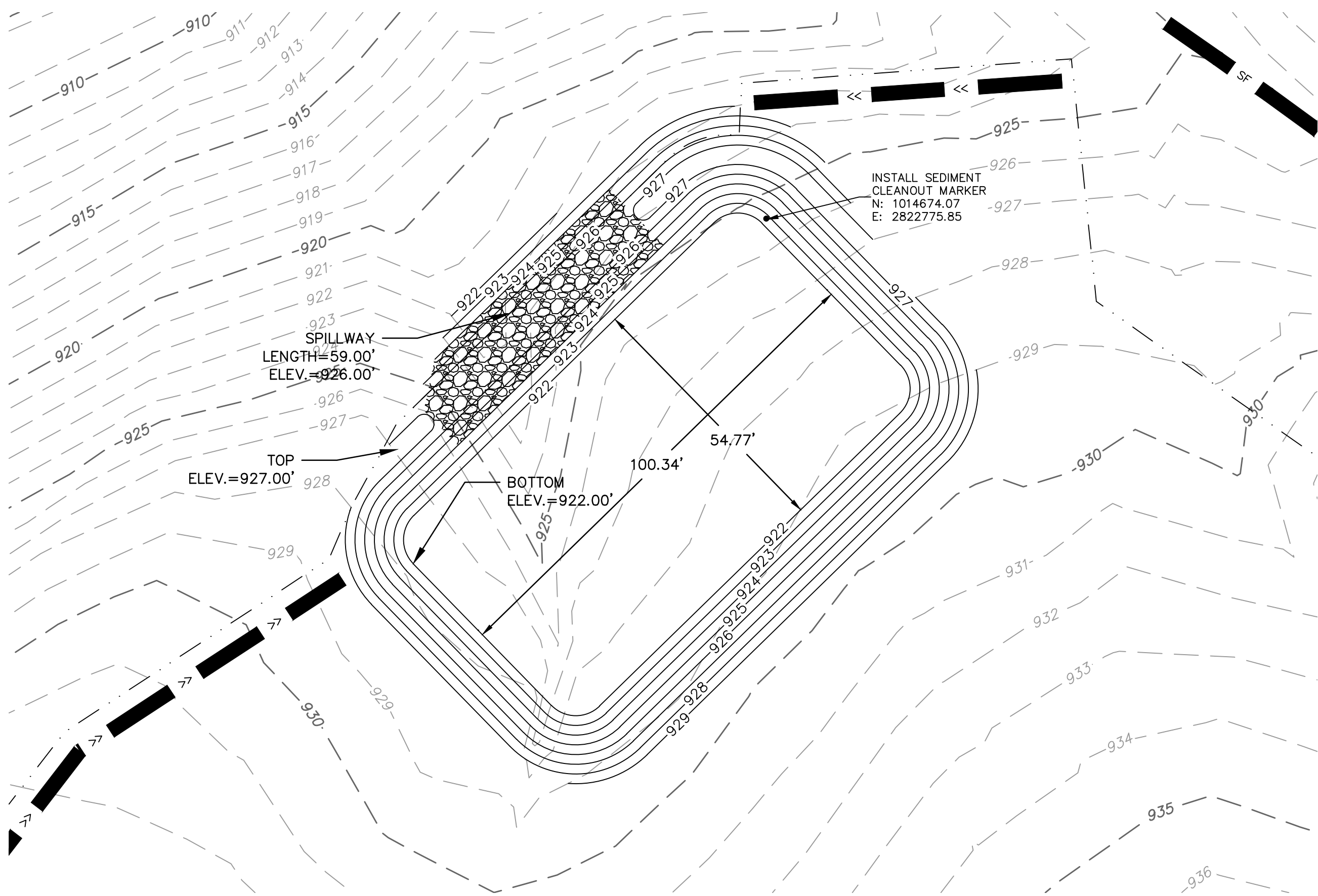
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1301 Burlington Street
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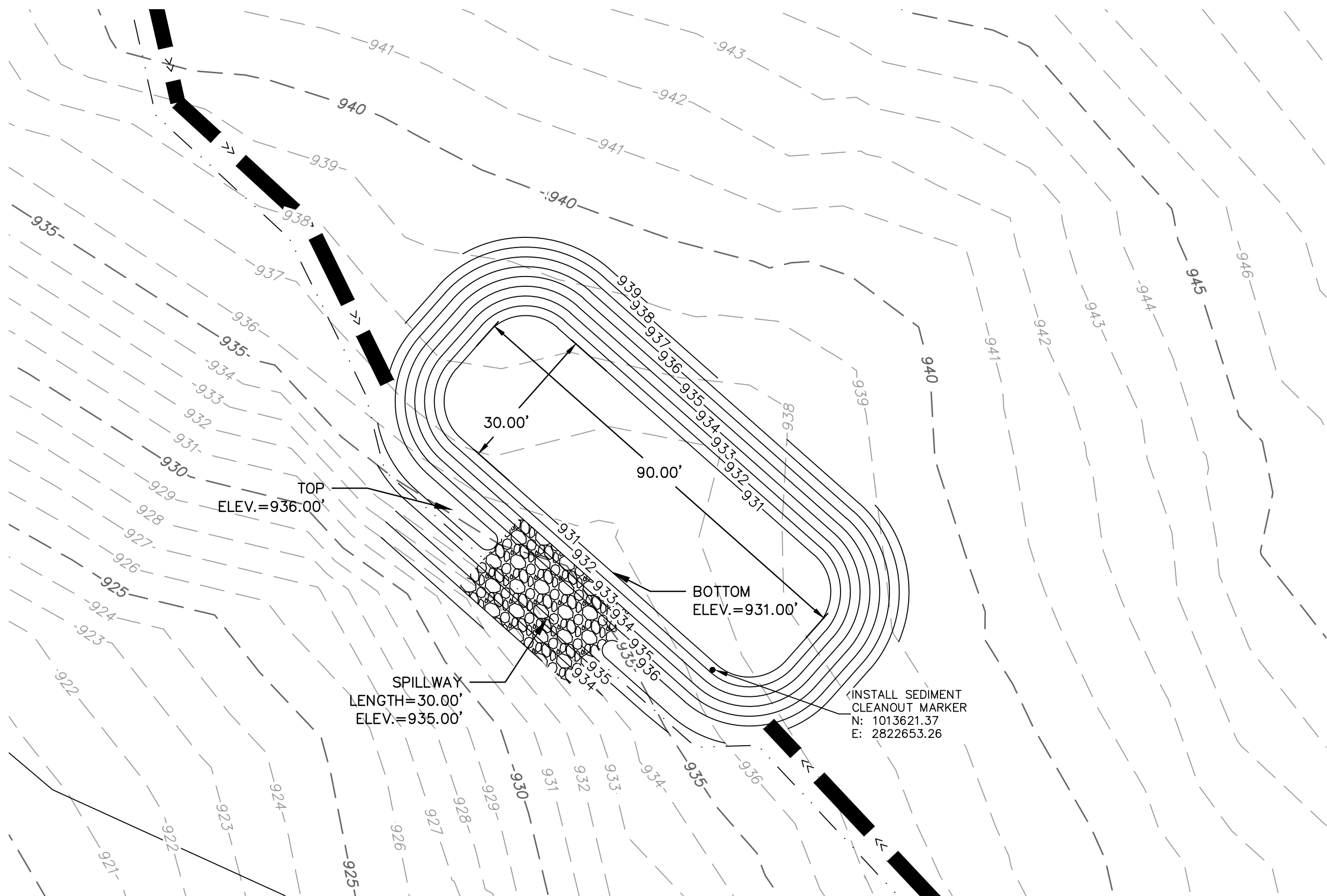
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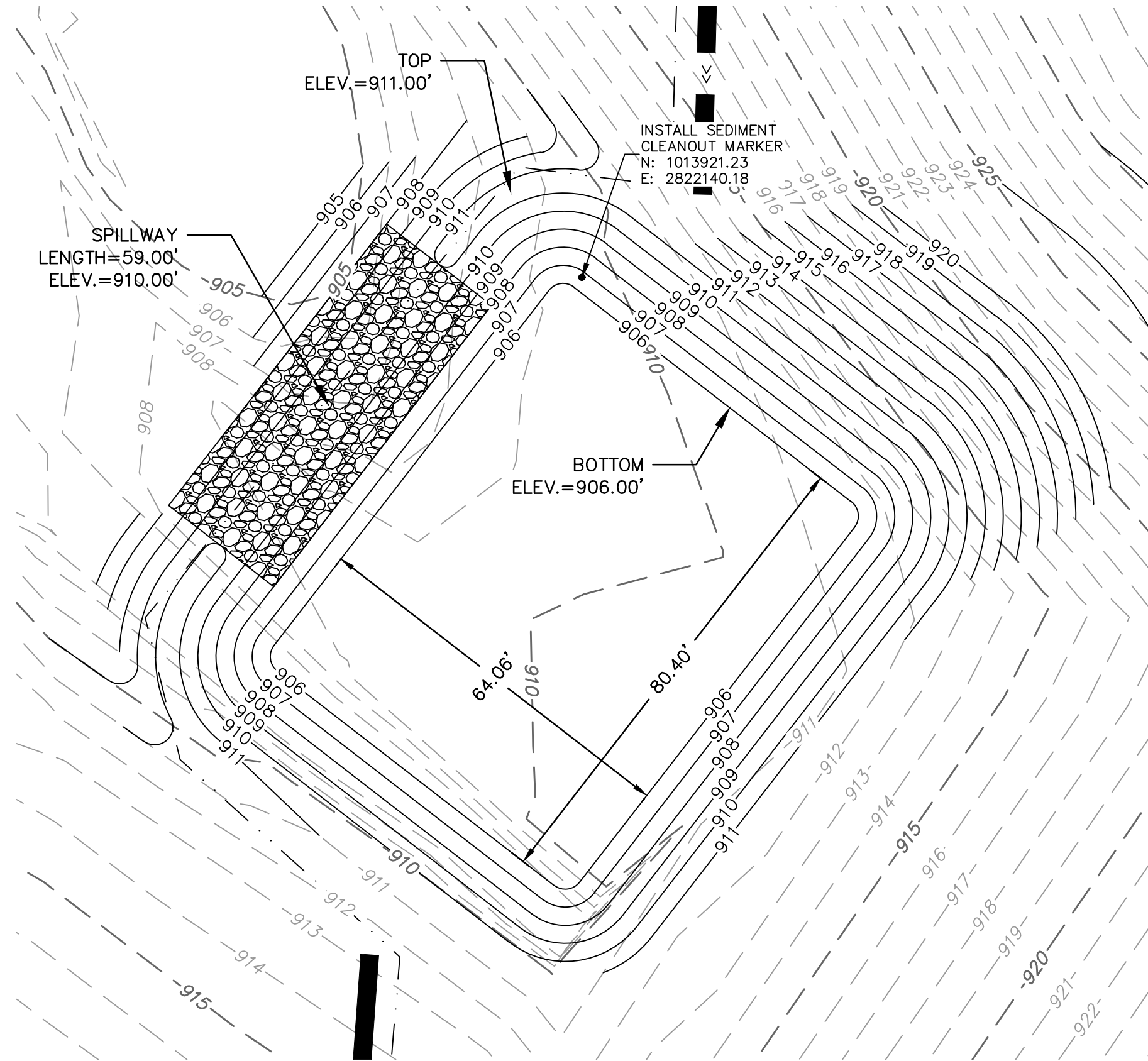
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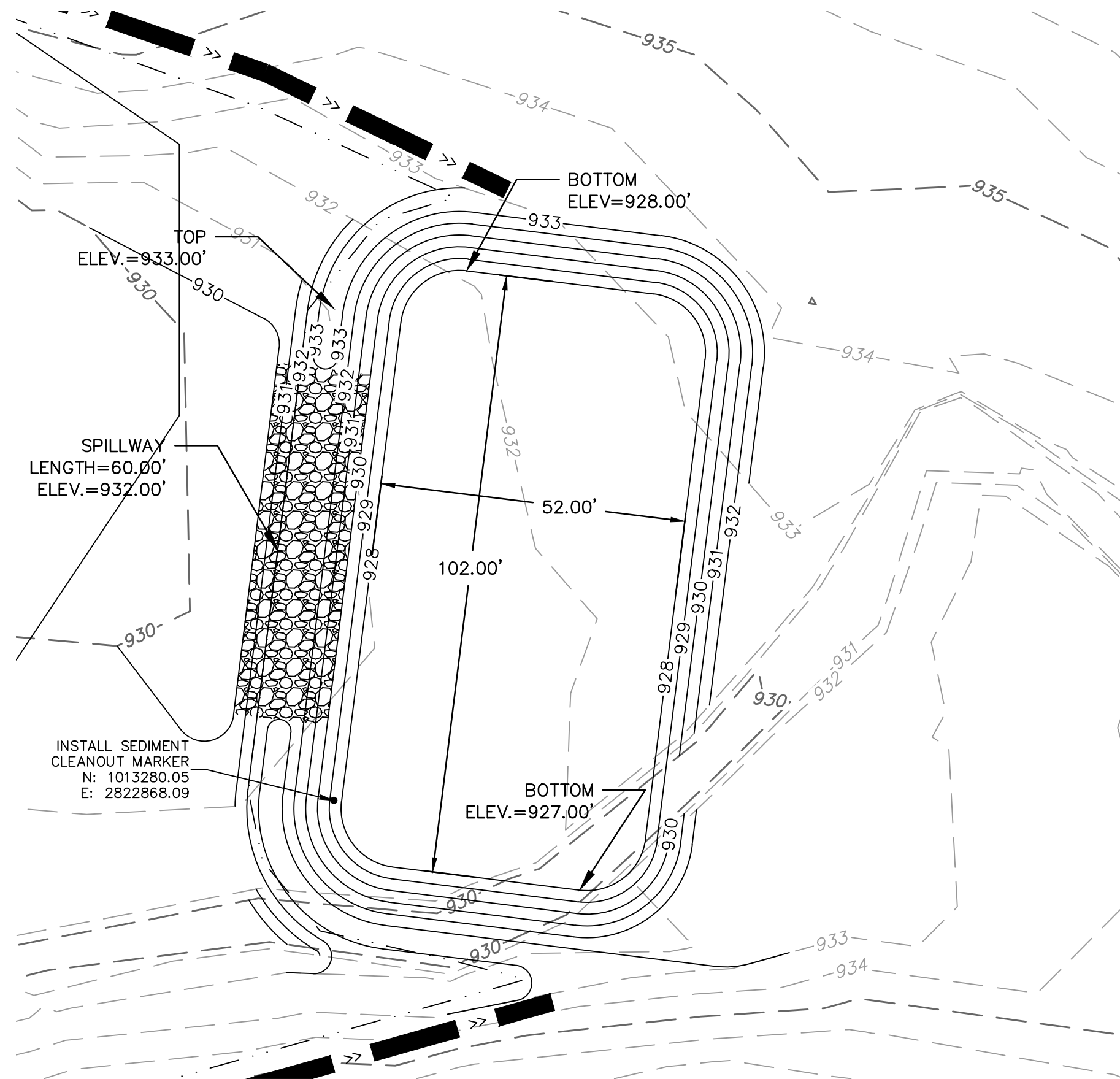
SEDIMENT TRAP 1A



SEDIMENT TRAP 3A

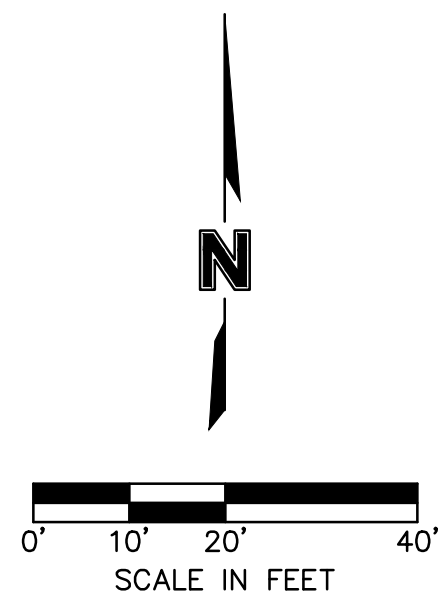


SEDIMENT TRAP 2A



SEDIMENT TRAP 4A

- EROSION CONTROL PLAN LEGEND**
- 999 FINISHED GRADE MAJOR CONTOUR
 - 999 FINISHED GRADE MINOR CONTOUR
 - 999 EXISTING GRADE MAJOR CONTOUR
 - 999 EXISTING GRADE MINOR CONTOUR
 - DRAINAGE AREA
 - SF SILT FENCE
 - << DIVERSION BERM



PHASE A SEDIMENT TRAP DETAILS
MASS GRADING & EROSION AND SEDIMENT CONTROL PLANS

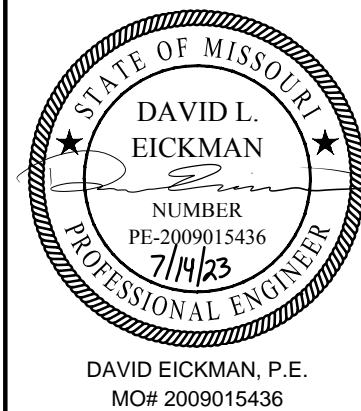
THE VILLAGE AT DISCOVERY PARK ZONE 1 & ARIA APARTMENTS
NW COLBURN RD & NE DOUGLAS ST

LEE'S SUMMIT, MISSOURI

2023

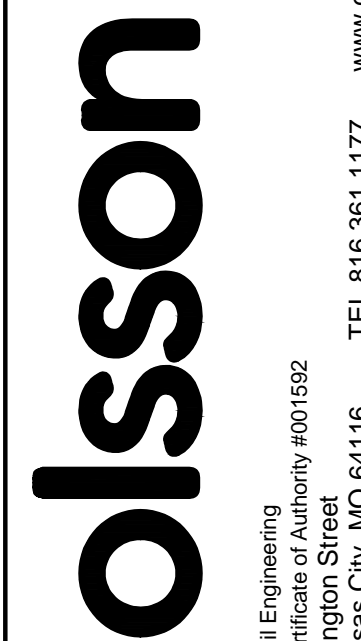
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checked by: AR/JN
approved by: DE
QA/QC by: JS/NH
project no.: D21-04643
drawing no. C_ERC01A_D2104643
date: 07.14.2023

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TEL 816.361.1177
www.olson.com

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LEGEND		
PHASE A	PHASE B	
		SILT FENCE
		TEMPORARY DIVERSION BERM
		CONCRETE WASHOUT
		TEMPORARY STONE CONSTRUCTION ENTRANCE
		TURF REINFORCEMENT MAT (FLEXMAT PLUS SPECS)
		TEMPORARY EROSION CONTROL BLANKET
		DRAINAGE AREA TO BASIN/TRAP
		LIMITS OF DISTURBANCE

NOTE:
THE SITE DISTURBANCE PLANS INDICATES THE FINAL PLACEMENT OF EROSION CONTROL DEVICES. THE CONTRACTOR(S) MAY PROCEED WITH THE CONSTRUCTION PRIOR TO THE FINAL PLACEMENT OF THESE DEVICES BY PROVIDING ADDITIONAL DEVICES TO CONTROL EROSION ON THEIR ITEMS OF WORK. THESE DEVICES SHALL BE MAINTAINED UNTIL THE FINAL DEVICES ARE IN PLACE.

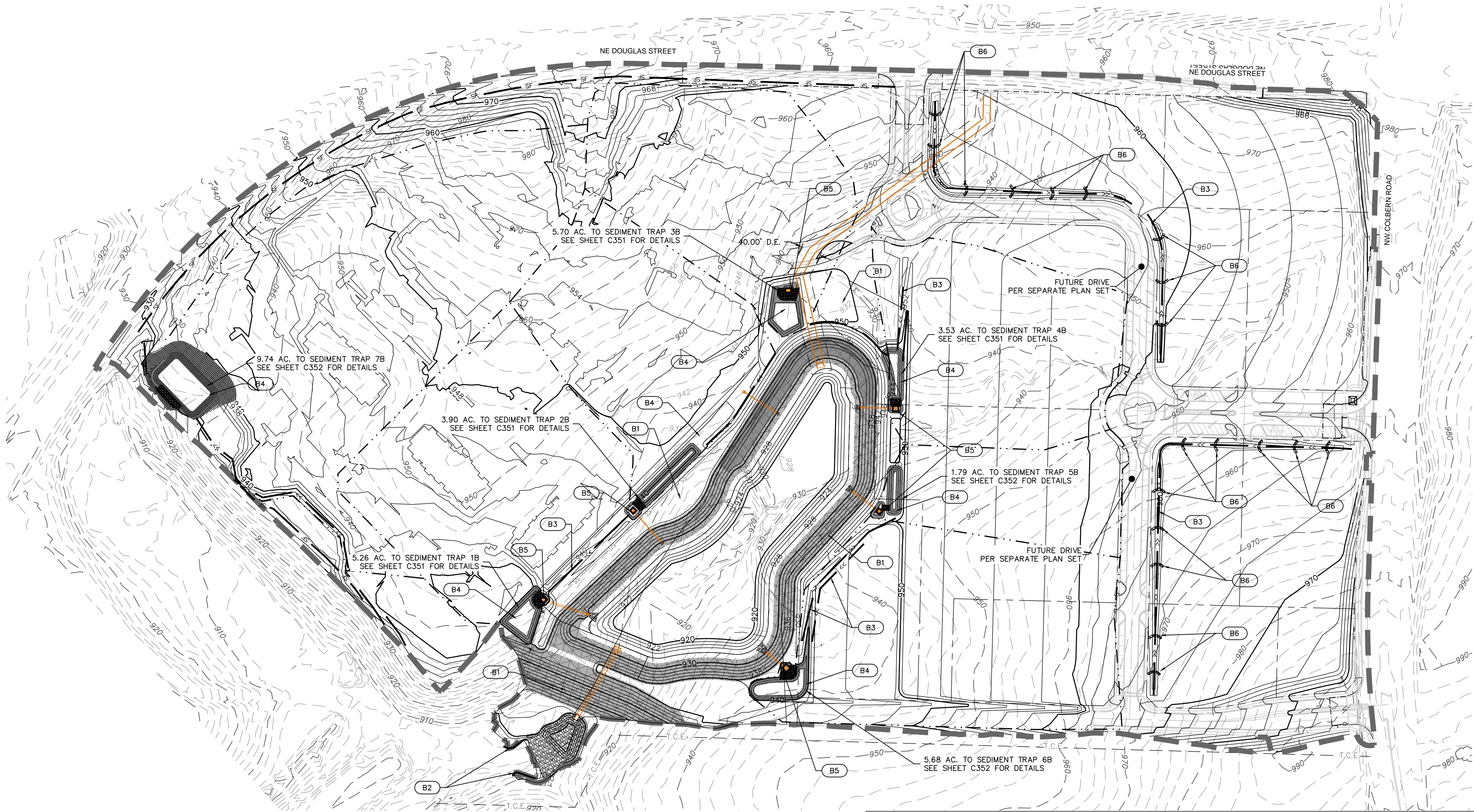
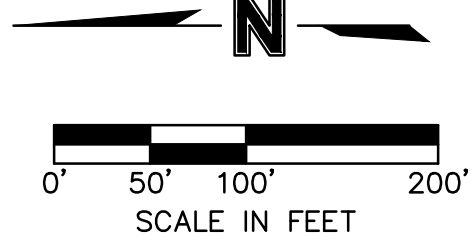
CONTRACTOR TO KEEP SWPPP REPORTS AND MDNR PERMIT IN THE ON-SITE CONSTRUCTION OFFICE TRAILER. TRAILER LOCATION TO BE DETERMINED BY CONTRACTOR

SEDIMENT TRAPS MUST BE FULLY INSTALLED PRIOR TO ANY SITE DISTURBANCE WITHIN THE TRIBUTARY AREA.

SEDIMENT TRAPS ARE SHOWN AS NEEDED PRIOR TO DISTURBING THE SITE. CONTRACTOR IS RESPONSIBLE FOR CONTROLLING ALL SEDIMENT RUNOFF DURING TRANSITION TO FINAL CONDITIONS AS SHOWN ON SHEET C370.

GRADING LEGEND

—999— FINISHED GRADE MAJOR CONTOUR
- - -999- FINISHED GRADE MINOR CONTOUR
- - -999- EXISTING GRADE MAJOR CONTOUR
- - -999- EXISTING GRADE MINOR CONTOUR



EROSION CONTROL PHASING CHART				
PROJECT PHASE	EROSION CONTROL BMP REFERENCE NO.	BMP DESCRIPTION	REMOVE AFTER PHASE	NOTES:
A – PRE-MASS GRADING	A1	CONSTRUCTION ENTRANCE	D	INSTALL PER APWA DETAIL ESC–01, PRIOR TO PERFORMING ANY OTHER ACTIVITIES ON SITE
	A2	CONCRETE WASHOUT	D	INSTALL PER APWA DETAIL ESC–01, PRIOR TO PERFORMING ANY OTHER ACTIVITIES ON SITE
	A3	SILT FENCE	D	INSTALL PER APWA DETAIL ESC–03, PRIOR TO PERFORMING ANY OTHER ACTIVITIES ON SITE
	A4	DIVERSION BERM	D	INSTALL PER APWA DETAIL ESC–05, AND CONTRACTOR SHALL ADJUST AS NECESSARY THROUGHOUT CONSTRUCTION TO ENSURE SEDIMENT REMAINS CONTROLLED ON SITE.
	A5	SEDIMENT TRAP	D	INSTALL PER APWA DETAILS ESC–08
	A6	ROCK CHECK DAM	D	INSTALL PER APWA DETAIL ESC–10
UPON REMOVAL CONTRACTOR TO OVER-EXCAVATE SEDIMENT TRAPS, FULLY REMOVING ALL SILT, AND FILLING IN CONTROLLED LIFTS TO PREVENT VOIDS OR EXCESSIVE SETTLING THAT COULD IMPACT BUILDING FOUNDATIONS.				
B – INTERIM (64.66 AC DISTURBED)	B1	EROSION CONTROL BLANKET/TRM	D	INSTALL PER APWA DETAIL ESC–02
	B2	SILT FENCE	D	INSTALL PER APWA DETAIL ESC–03
	B3	DIVERSION BERM	D	INSTALL PER APWA DETAIL ESC–05
	B4	SEDIMENT TRAP	D	INSTALL PER APWA DETAIL ESC–08
	B5	AREA INLET PROTECTION	D	INSTALL PER APWA DETAIL ESC–07
	B6	ROCK CHECK DAM	D	INSTALL PER APWA DETAIL ESC–10
	B7	SLOPE INTERRUPTS	D	INTALL PER APWA DETAIL ESC–09 OR APPROVED EQUAL
MAINTAIN ALL INSTALLED EROSION CONTROL DEVICES				
C – DISTURBED AREA STABILIZATION	C1	ESTABLISH SEEDING AND STABILIZATION OUTSIDE OF SEDIMENT BASIN AND TRAPS		SITE STABILIZATION PER LOCAL CODES AND ORDINANCES. AT A MINIMUM STABILIZATION SHALL CONFORM WITH APWA SECTION 2406. COORDINATE ALL STABILIZATION WITH EROSION CONTROL MEASURES INDICATED IN SITE DEVELOPMENT PLANS.

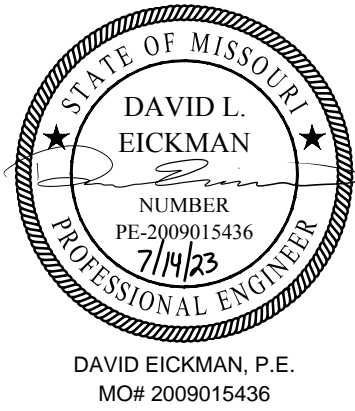
EROSION CONTROL PLAN (PHASE B)
MASS GRADING & EROSION AND SEDIMENT CONTROL PLANS

THE VILLAGE AT DISCOVERY PARK ZONE 1 & ARIA APARTMENTS
NW COLBERN RD & NE DOUGLAS ST

LEE'S SUMMIT, MISSOURI

drawn by: GS/SJS/JN
checked by: AR/JN
approved by: DE
QA/QC by: JS/NH
project no.: D21-04643
drawing no.: C_ERC02_D2104643
date: 07.14.2023

SHEET
C350



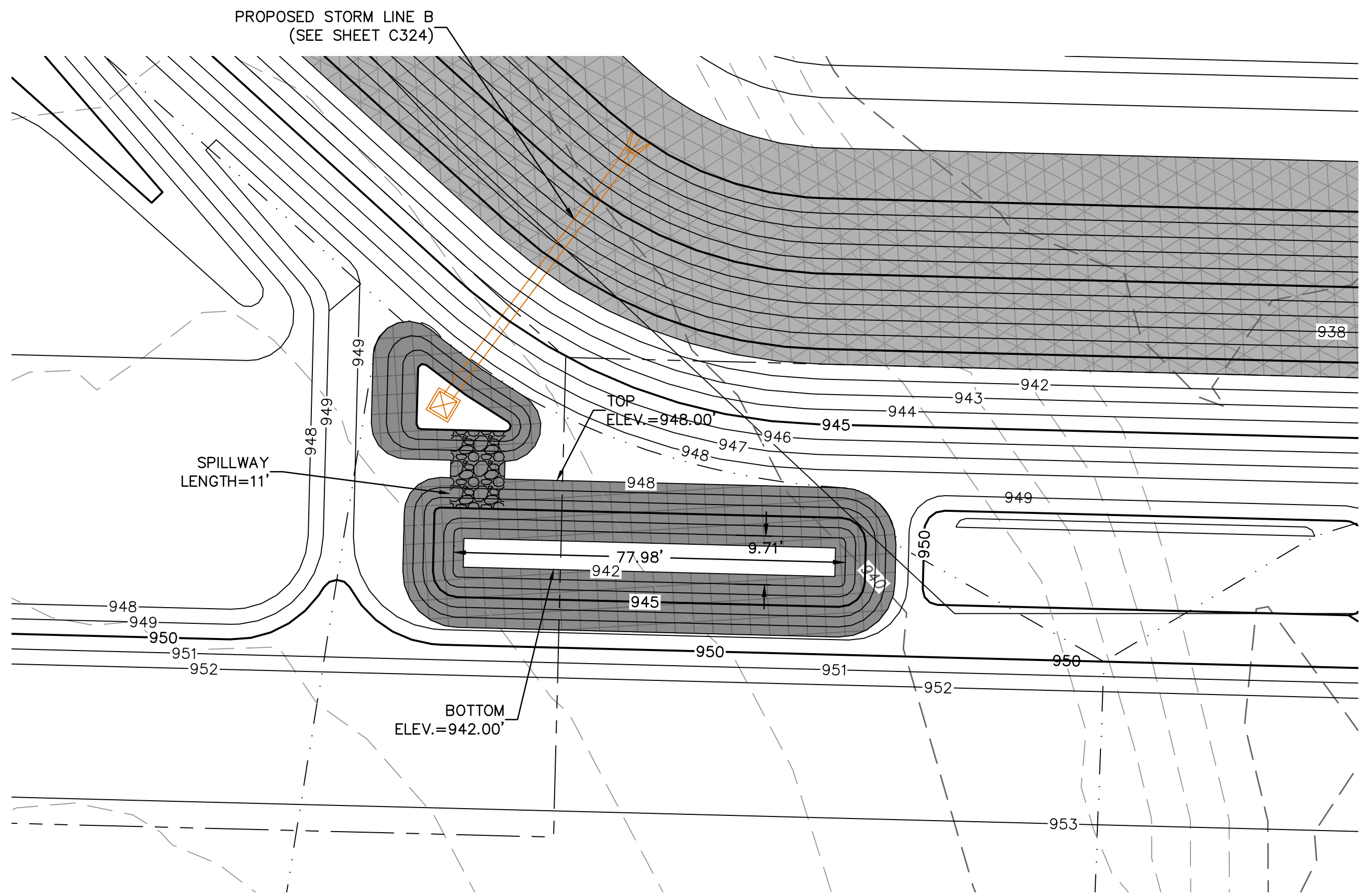
REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

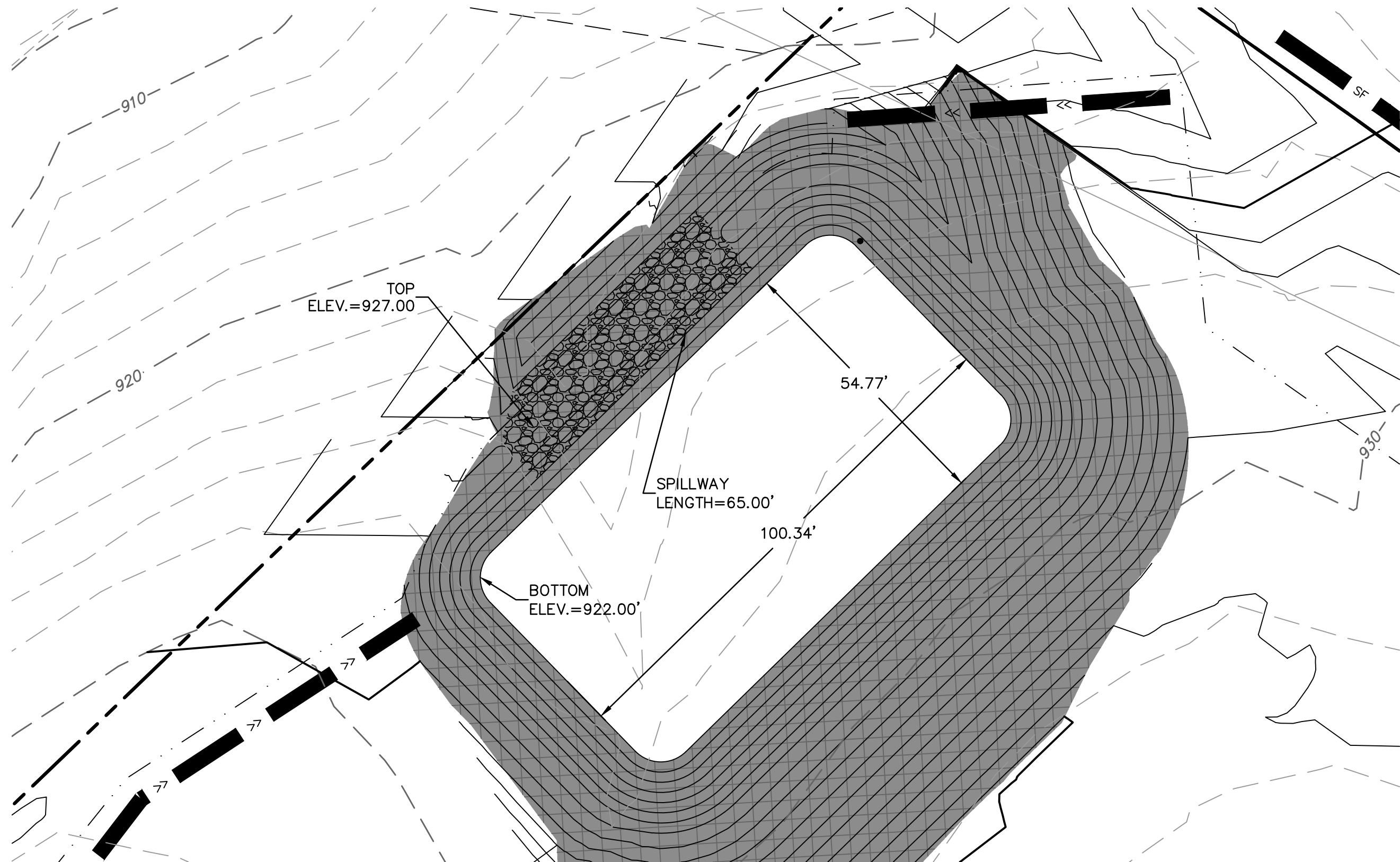
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1301 Burlington Street
North Kansas City, MO 64116
TEL 816.361.1177
www.olson.com

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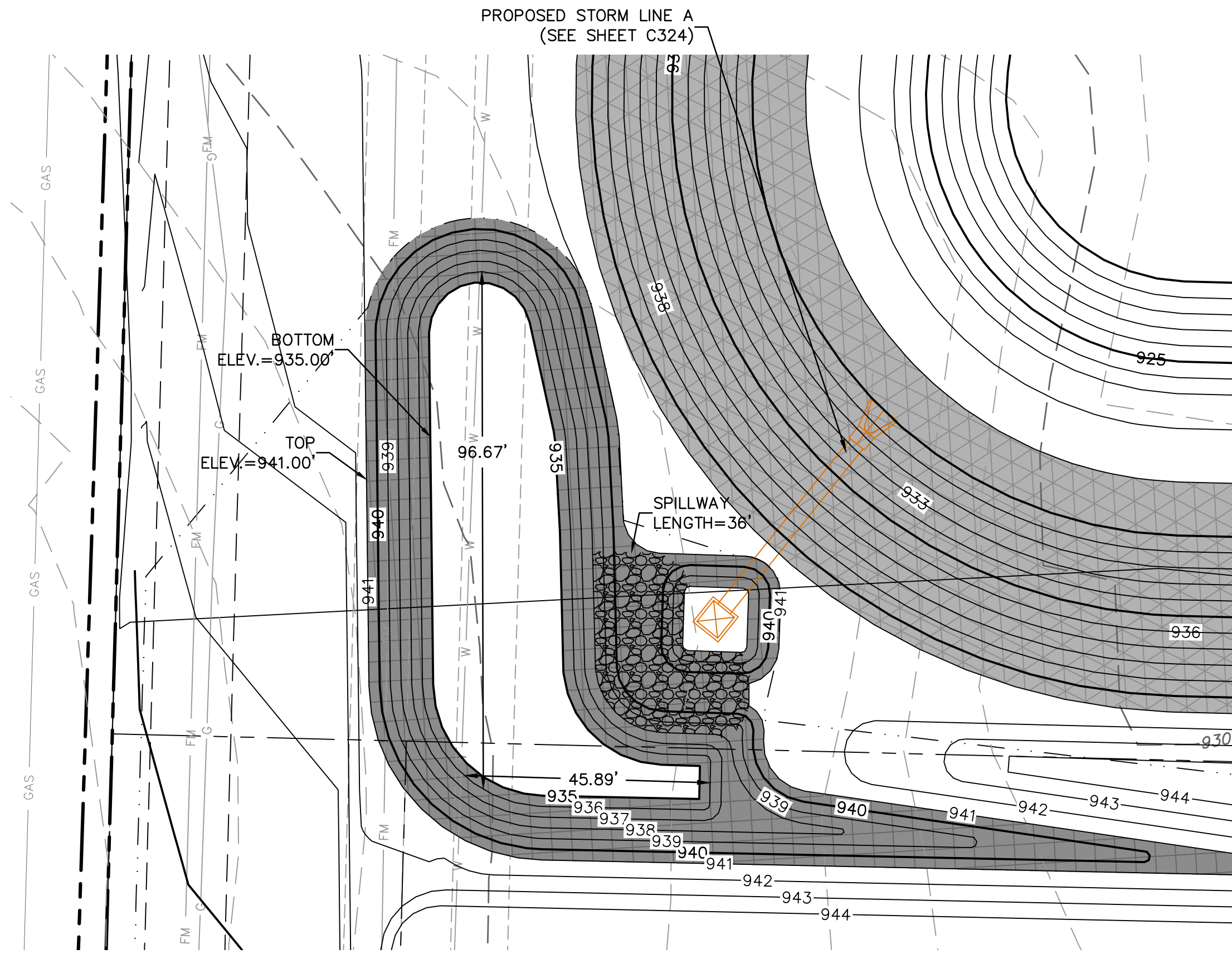


SEDIMENT TRAP 5B

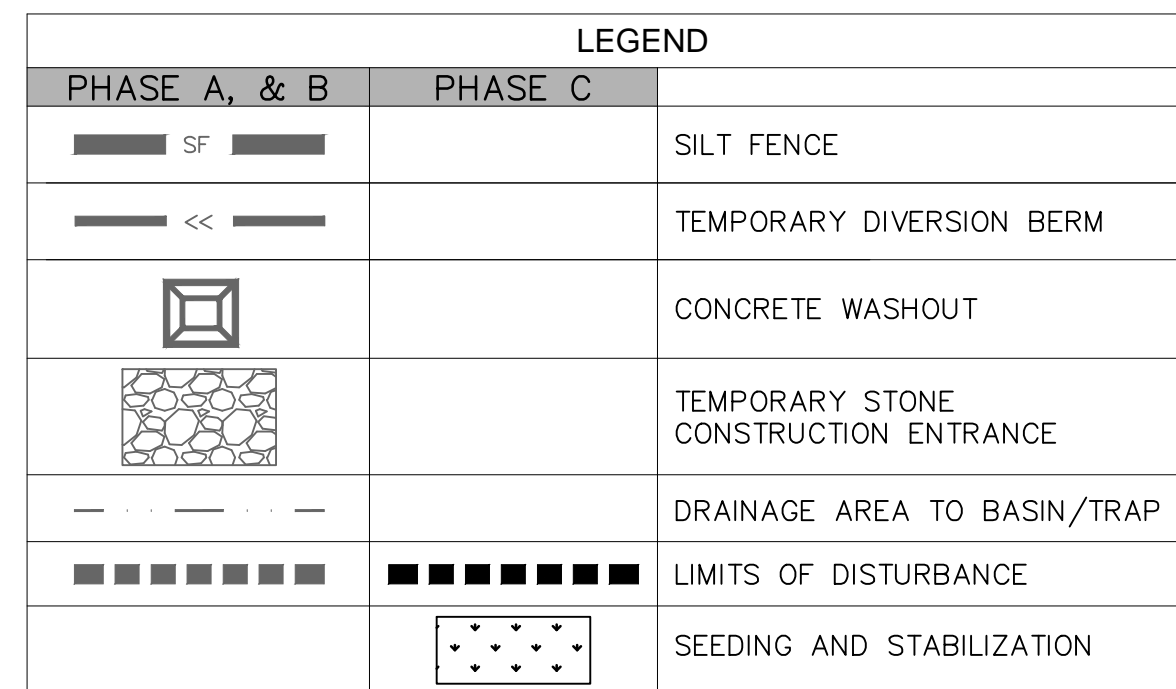


SEDIMENT TRAP 7B

TRAP	TRIBUTARY AREA (AC.)	REQUIRED VOLUME (C.F.)	BERM HEIGHT "H" (FT.)	SPILLWAY HEIGHT "HO" (FT.)	STORAGE VOLUME (C.F.)	BERM TOP WIDTH "W" (FT.)	BOTTOM ELEVATION (FT.)	RIPRAP ELEVATION (FT.)	TOP OF BERM ELEVATION (FT.)	SPILLWAY LENGTH (FT.)	EXCAVATED DEPTH (FT.)	EXCAVATED VOLUME (C.F.)	SEDIMENT CLEANOUT VOLUME (C.F.)	SEDIMENT CLEANOUT ELEVATION (FT.)
1B	5.26	9468.00	3.0	2.0	11330.23	2.5	934	939.00	940.00	32	2.0	2552.39	2266.05	935.07
2B	3.90	7020.00	3.0	2.0	7671.54	2.5	938	943.00	944.00	24	2.0	1586.32	1534.31	939.55
3B	5.70	10260.00	3.0	2.0	11310.59	2.5	941	946.00	947.00	35	2.0	2524.23	2262.12	942.05
4B	3.53	6354.00	3.0	2.0	5023.13	2.5	943	948.00	949.00	22	2.0	1061.98	1004.63	944.37
5B	1.79	3222.00	3.0	2.0	4531.10	2.5	942	947.00	948.00	11	2.0	931.18	906.22	943.56
6B	5.86	10548.00	3.0	2.0	13902.40	2.5	935	940.00	941.00	36	2.0	3122.75	2780.48	936.08
7B	9.74	17532.00	3.0	2.0	25790.63	2.5	936	941.00	942.00	59	2.0	3742.39	5158.13	936.83



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GRADING LEGEND

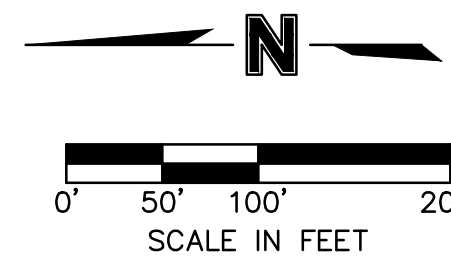
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— — —999 — —	EXISTING GRADE MAJOR CONTOUR
— — —999 — —	EXISTING GRADE MINOR CONTOUR

NOTE:
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CONTRACTOR(S) MAY PROCEED WITH THE CONSTRUCTION
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TO FINAL CONDITIONS AS SHOWN ON THIS SHEET.



EROSION CONTROL PHASING CHART				
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UPON REMOVAL CONTRACTOR TO OVER-EXCAVATE EXCESSIVE SETTLING THAT COULD IMPACT BUILDING FOUNDATIONS.		SEDIMENT TRAPS, FULLY REMOVING ALL SILT, AND FILLING IN CONTROLLED LIFTS TO PREVENT VOIDS OR		
B – INTERIM	B1	EROSION CONTROL BLANKET/TRM	D	INSTALL PER APWA DETAIL ESC-02
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	B3	DIVERSION BERM	D	INSTALL PER APWA DETAIL ESC-05
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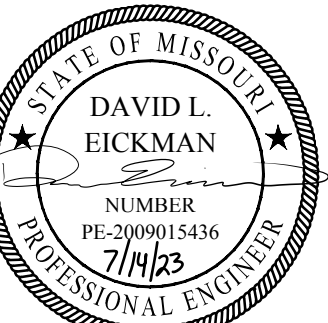
EROSION CONTROL PLAN (PHASE C)
MASS GRADING & EROSION AND SEDIMENT CONTROL PLANS

THE VILLAGE AT DISCOVERY PARK ZONE 1 & ARIA APARTMENTS
NW COLBERN RD & NE DOUGLAS ST

LEE'S SUMMIT, MISSOURI

2023

REVISIONS



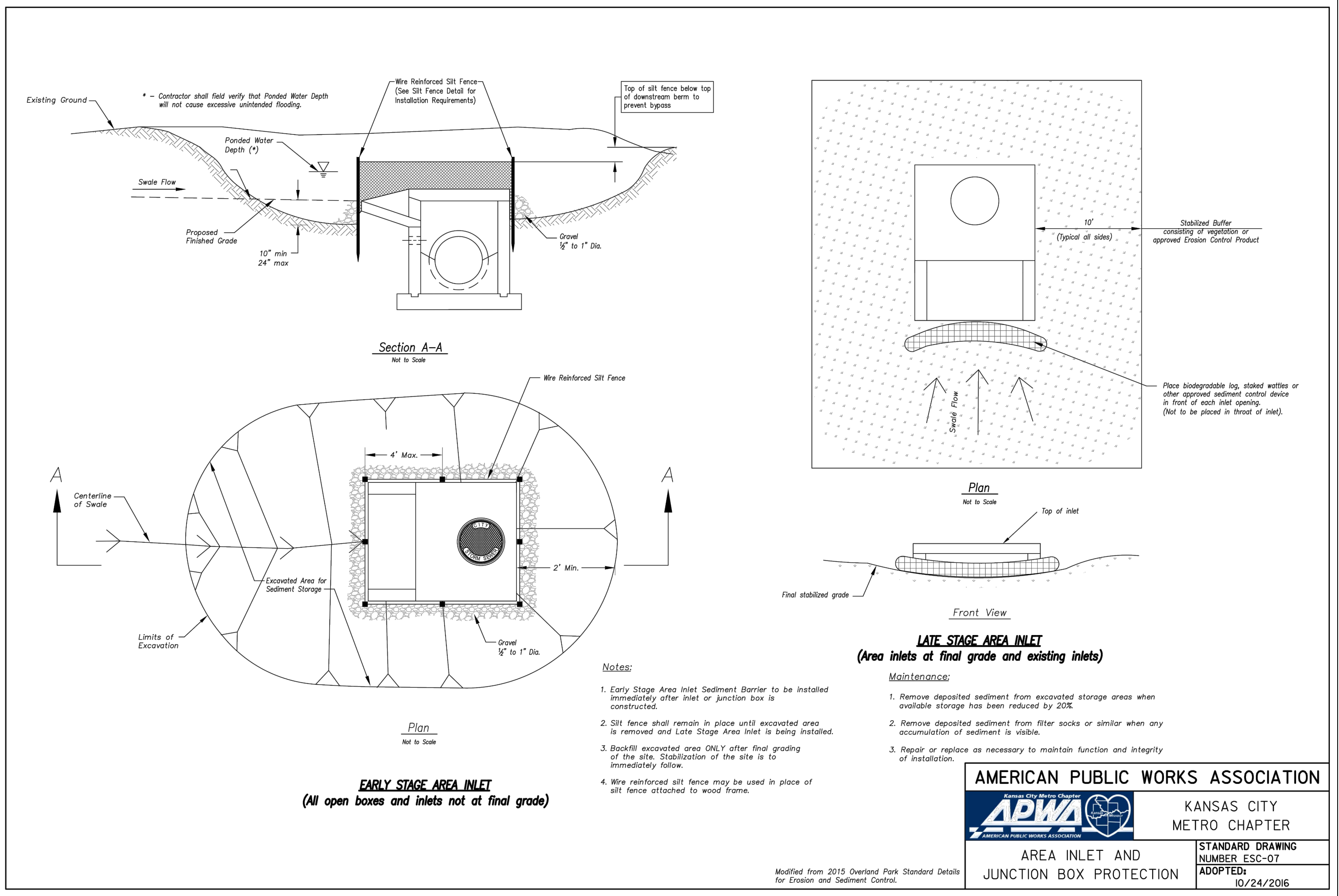
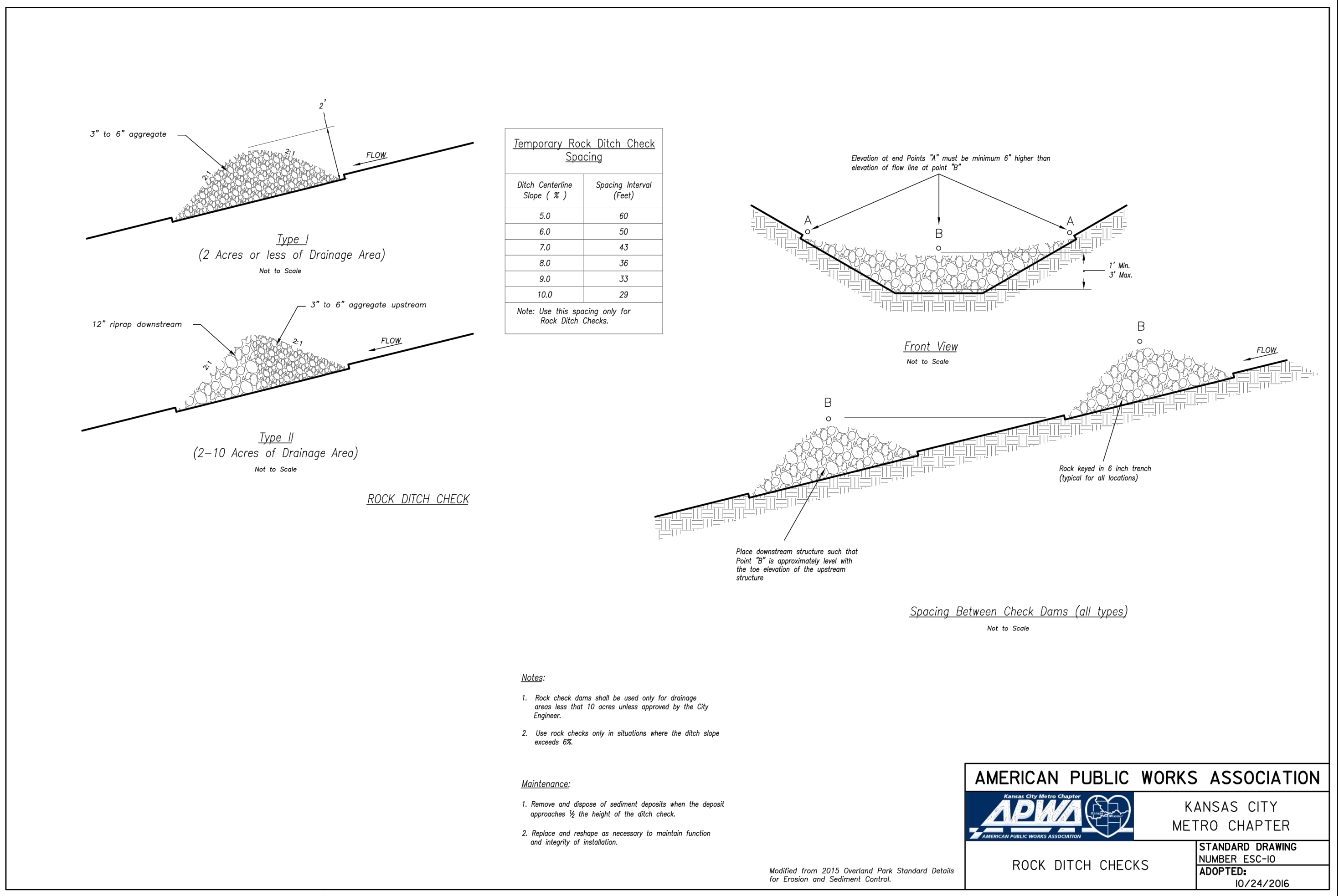
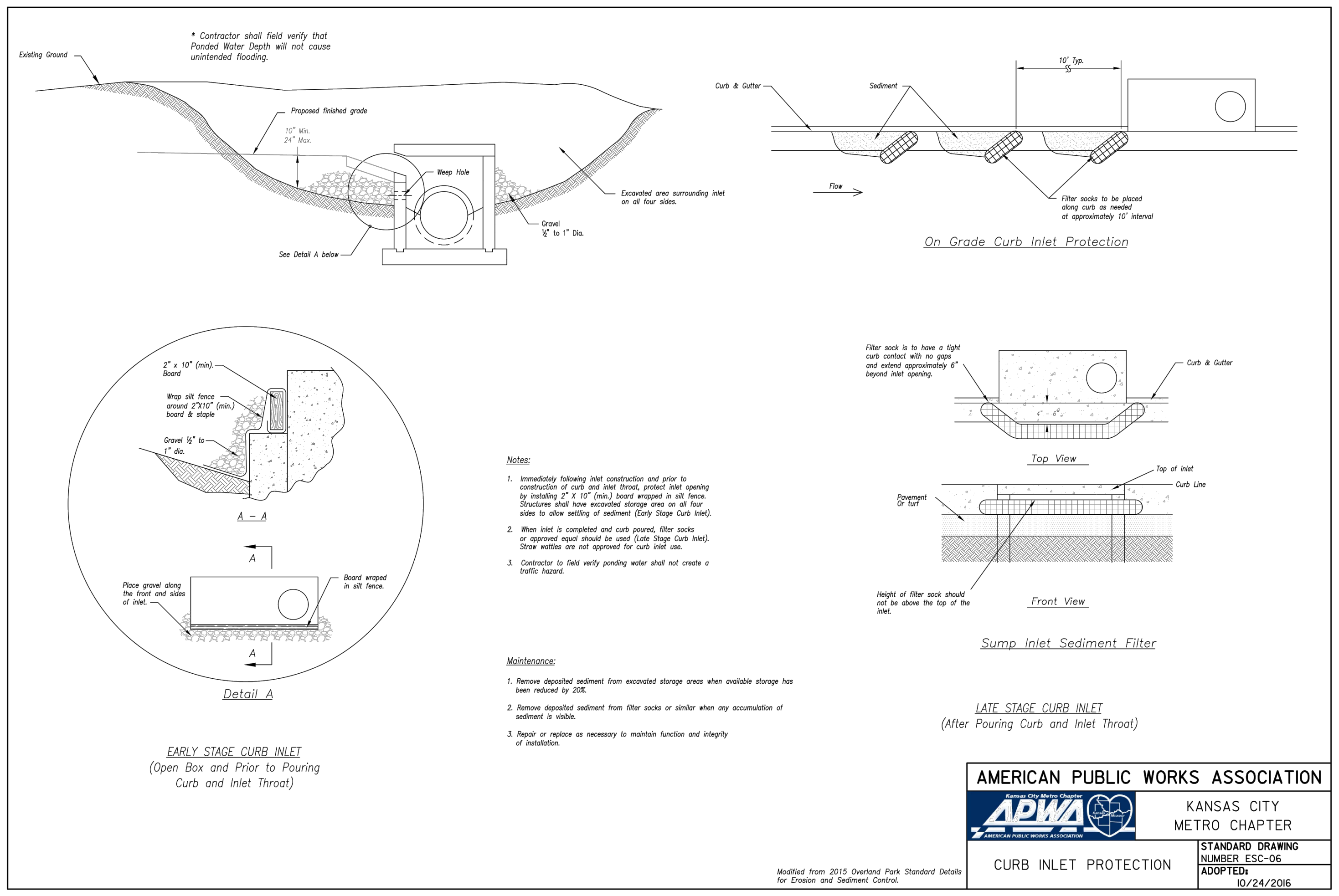
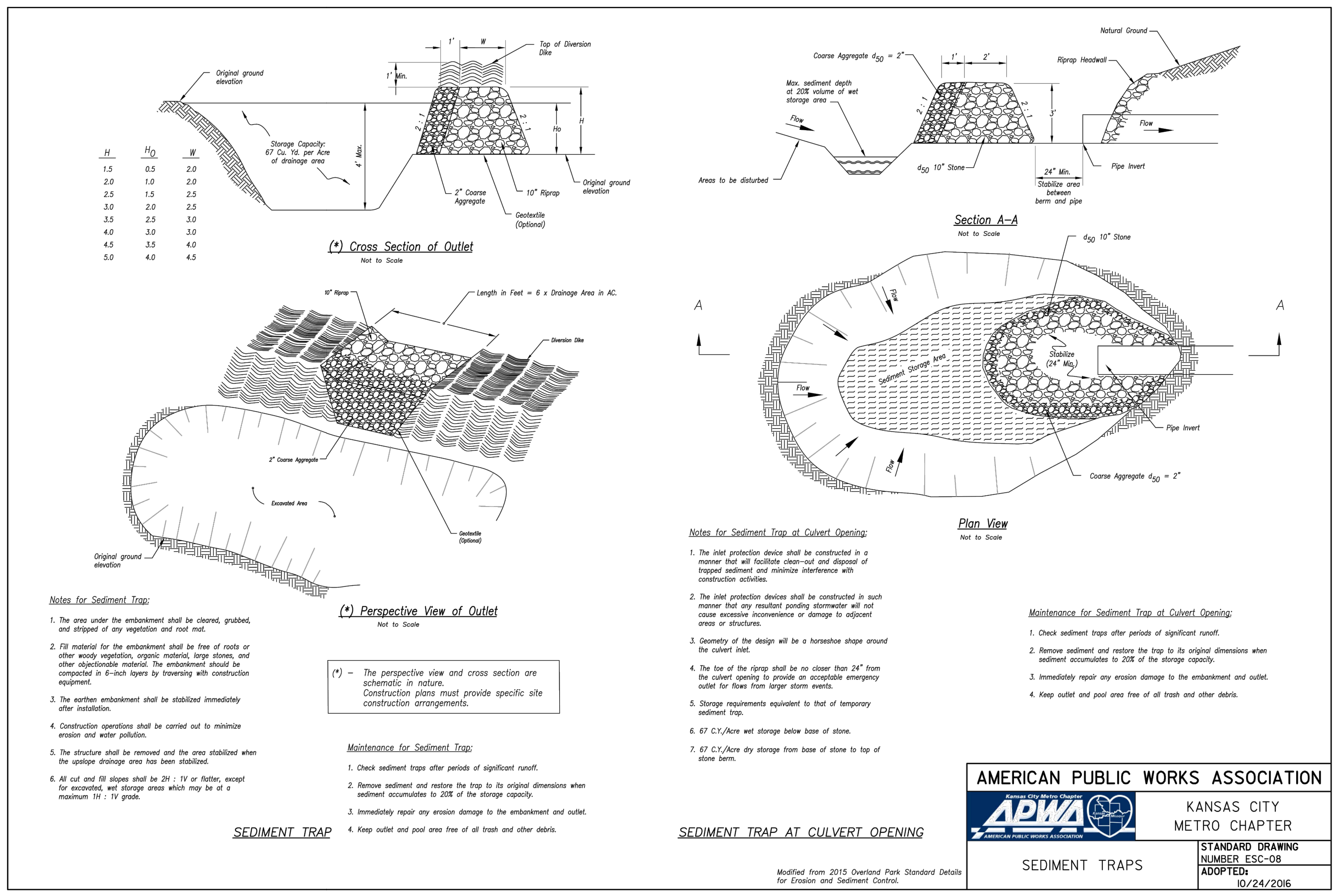
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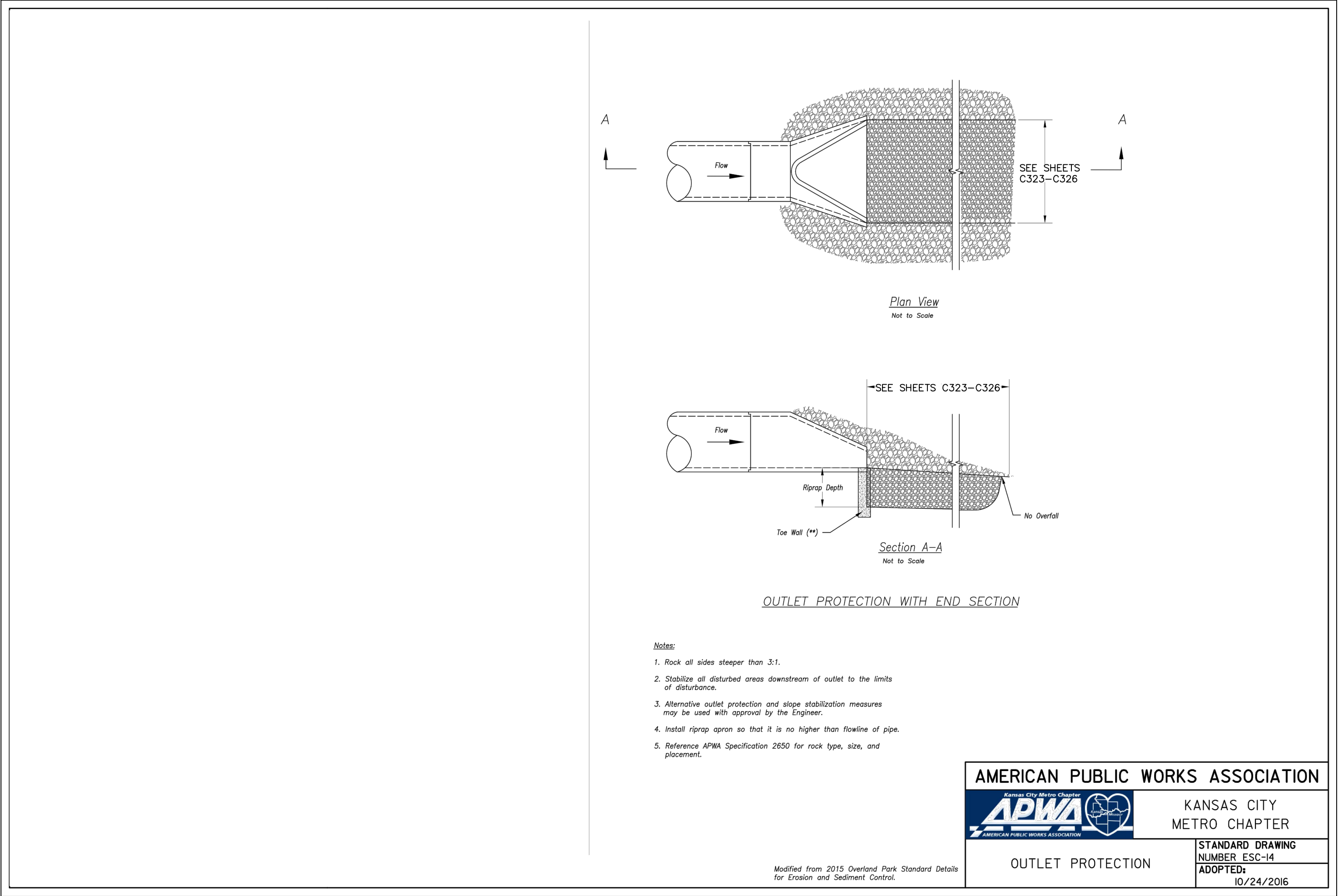
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SHEET
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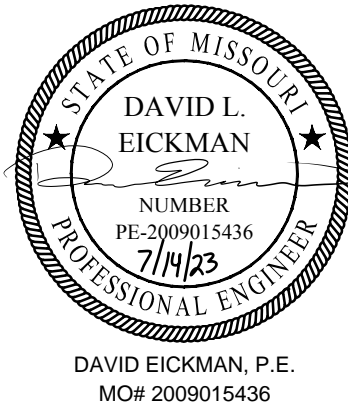




Notes:

1. Rock all sides steeper than 3:1.
2. Stabilize all disturbed areas downstream of outlet to the limits of disturbance.
3. Alternative outlet protection and slope stabilization measures may be used with approval by the Engineer.
4. Install riprap apron so that it is no higher than flowline of pipe.
5. Reference APWA Specification 2650 for rock type, size, and placement.

AMERICAN PUBLIC WORKS ASSOCIATION  <div> <div> KANSAS CITY METRO CHAPTER </div> <div> STANDARD DRAWING NUMBER ESC-14 ADOPTED: 10/24/2016 </div> </div>	
OUTLET PROTECTION	

[illegible]

<p>DETAIL SHEET ((CONTD))</p> <p>MASS GRADING & EROSION AND SEDIMENT CONTROL PLANS</p> <p>THE VILLAGE AT DISCOVERY PARK ZONE 1 & ARIA APARTMENTS NW COLBORN RD & NE DOUGLAS ST</p>	2023
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