WOODSIDE RIDGE FIRST PLAT SPILLWAY RECONSTRUCTION

SECTION 2, TOWNSHIP 47 N, RANGE 32 W IN LEE'S SUMMIT, JACKSON COUNTY, MO



PROPERTY DESCRIPTION:

ALL OF JOHN KNOX RETIREMENT VILLAGE-10TH PLAT, A SUBDIVISION RECORDED AS INSTRUMENT NUMBER 1279980 IN BOOK 35 AT PAGE 61 IN JACKSON COUNTY RECORDER OF DEEDS OFFICE, AND ALL OF FOREST LAKE AT JOHN KNOX VILLAGE - 1ST PLAT A SUBDIVISION RECORDED AS INSTRUMENT NUMBER E0051292 IN BOOK 1106 AT PAGE 42 IN SAID JACKSON COUNTY RECORDER OF DEEDS OFFICE, BOTH SUBDIVISIONS OF LAND IN THE NORTHEAST QUARTER OF SECTION 2, TOWNSHIP 47 NORTH, RANGE 32, WEST OF THE 5TH PRINCIPAL MERIDIAN IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, AND ALSO AN UNPLATTED TRACT OF LAND IN SAID NORTHEAST QUARTER AND SOUTHEAST QUARTER OF SAID SECTION 2, BEING BOUNDED AND DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHEAST CORNER OF SAID SOUTHEAST QUARTER; THENCE NORTH 02*53'56" EAST, ON THE EAST LINE OF SAID SOUTHEAST QUARTER, 1,328.34 FEET TO THE SOUTHEAST CORNER OF THE NORTH HALF OF SAID SOUTHEAST QUARTER ALSO BEING THE NORTHEAST CORNER OF STERLING HILLS 1ST PLAT, A SUBDIVISION IN SAID LEE'S SUMMIT RECORDED AS INSTRUMENT NUMBER 11188888 IN BOOK 153 AT PAGE 22 IN SAID JACKSON COUNTY RECORDER OF DEEDS OFFICE; THENCE NORTH 87°49'43" WEST, 580.01 FEET ON THE SOUTH LINE OF SAID NORTH HALF OF SAID SOUTHEAST QUARTER, ALSO BEING THE NORTH LINE OF SAID STERLING HILLS 1ST PLAT TO THE POINT OF BEGINNING OF THE TRACT OF LAND TO BE HEREIN DESCRIBED; THENCE CONTINUING NORTH 87°49'43" WEST ON SAID SOUTH LINE OF SAID NORTH HALF OF SAID SOUTHEAST QUARTER, ALSO BEING THE NORTH LINE OF SAID STERLING HILLS 1ST PLAT AND ALSO ON THE NORTH LINE OF STERLING HILLS 3RD PLAT, A SUBDIVISION IN SAID LEE'S SUMMIT RECORDED AS INSTRUMENT NUMBER 11221580 IN BOOK 153 AT PAGE 96 IN SAID JACKSON COUNTY RECORDER OF DEEDS OFFICE, ALSO BEING A POINT TO THE EAST LINE OF STERLING HILLS 5TH PLAT, A SUBDIVISION IN SAID LEE'S SUMMIT RECORDED AS INSTRUMENT NUMBER 11273788 IN BOOK 154 AT PAGE 88 IN SAID JACKSON COUNTY RECORDER OF DEEDS OFFICE 2,048.69 FEET TO THE SOUTHWEST CORNER OF SAID NORTH HALF OF SAID SOUTHEAST QUARTER; THENCE NORTH 03°05'41" EAST ON SAID EAST LINE OF STERLING HILLS 5TH PLAT, ALSO BEING THE WEST LINE OF SAID SOUTHEAST QUARTER, 389.26 FEET; THENCE NORTH 85°54'26" EAST, 236.75 FEET; THENCE NORTH 29°55'27" EAST, 306.11 FEET; THENCE NORTH 41°11'03" EAST, 60.06 FEET; THENCE SOUTH 75°51'31" EAST, 21.43 FEET; THENCE NORTH 22°12'04" EAST, 173.03 FEET; THENCE WESTERLY, ALONG A CURVE TO THE LEFT, HAVING AN INITIAL TANGENT BEARING OF NORTH 81°09'01" WEST WITH A RADIUS OF 225.00 FEET, A CENTRAL ANGLE OF 15°28'14" AND AN ARC DISTANCE OF 60.75 FEET; THENCE NORTH 06°37'15" WEST, 50.00 FEET; THENCE EASTERLY ALONG A CURVE TO THE RIGHT HAVING AN INITIAL TANGENT BEARING OF NORTH 83°22'45" EAST WITH A RADIUS OF 275.00 FEET, A CENTRAL ANGLE OF 28°01'47" AND AN ARC DISTANCE OF 134.53 FEET; THENCE NORTH 21°24'31" EAST, 135.10 FEET; THENCE NORTH 61°49'26" EAST, 951.56 FEET; THENCE NORTH 70°59'24" EAST, 137.47 FEET; THENCE NORTH 85°52'23" EAST, 130.41 FEET; THENCE NORTH 19°50'07" EAST, 128.42 FEET; THENCE WESTERLY ALONG A CURVE TO THE LEFT HAVING AN INITIAL TANGENT BEARING OF NORTH 70°09'53" WEST WITH A RADIUS OF 375.00 FEET, A CENTRAL ANGLE OF 08°59'37" AND AN ARC DISTANCE OF 58.86 FEET; THENCE NORTH 10°50'30" EAST, 50.00 FEET; THENCE EASTERLY ALONG A CURVE TO THE RIGHT HAVING AN INITIAL TANGENT BEARING OF SOUTH 79°09'30" EAST WITH A RADIUS OF 425.00 FEET, A CENTRAL ANGLE OF 09°42'06" AND AN ARC DISTANCE OF 71.96 FEET; THENCE NORTH 20°32'36" EAST, 229.10 FEET TO A POINT ON THE NORTH LINE OF THE SOUTH HALF OF THE SOUTH HALF OF SAID NORTHEAST QUARTER; THENCE NORTH 87°37'42" WEST, ON SAID NORTH LINE OF SAID SOUTH HALF OF SAID NORTHEAST QUARTER, 574.95 FEET TO THE SOUTHEAST CORNER OF THE FORESTS OF BROOKRIDGE ESTATES THIRD PLAT, A SUBDIVISION IN SAID LEE'S SUMMIT RECORDED AS INSTRUMENT NUMBER 11198645 IN BOOK 153 AT PAGE 46 IN SAID JACKSON COUNTY RECORDER OF DEEDS OFFICE; THENCE NORTH 03°27'53" EAST, ON THE EAST LINE OF SAID THE FORESTS OF BROOKRIDGE ESTATES - THIRD PLAT, 765.70 FEET TO THE SOUTHWEST CORNER OF LOT 1, VILLAGE CARE CENTER PLAT, A SUBDIVISION IN SAID LEE'S SUMMIT RECORDED AS INSTRUMENT NUMBER 1736897 IN BOOK 143 AT PAGE 122 IN SAID JACKSON COUNTY RECORDER OF DEEDS OFFICE; THENCE SOUTH 87°23'49" EAST, ON THE SOUTH LINE OF SAID LOT 1, ALSO A PORTION BEING ON THE NORTH LINE OF SAID JOHN KNOX RETIREMENT VILLAGE-10TH PLAT AND SAID FOREST LAKE AT JOHN KNOX VILLAGE-1ST PLAT 1,343.71 FEET TO THE NORTHEAST CORNER OF SAID FOREST LAKE AT JOHN KNOX VILLAGE 1ST PLAT, ALSO BEING A POINT ON THE EXISTING WEST RIGHT-OF-WAY LINE OF NW PRYOR ROAD, AS NOW ESTABLISHED; THENCE SOUTH 03°27'53" WEST, ON SAID EXISTING WEST RIGHT-OF-WAY LINE ALSO BEING THE EAST LINE OF FOREST LAKE AT JOHN KNOX VILLAGE-1ST PLAT FOR THE NORTH 243.74 FEET, 481.43 FEET; THENCE NORTH 86°32'07" WEST, 479.89 FEET; THENCE SOUTH 03°27'53" WEST, 70.20 FEET; THENCE NORTH 86°32'07" WEST, 200.00 FEET; THENCE SOUTH 03°27'53" WEST, 221.62 FEET TO A POINT ON THE NORTH LINE OF THE SOUTH HALF OF THE SOUTH HALF OF SAID NORTHEAST QUARTER; THENCE SOUTH 87°37'42" EAST ON SAID NORTH LINE OF SAID SOUTH HALF OF SAID SOUTH HALF OF SAID NORTHEAST QUARTER, 200.04 FEET TO THE NORTHWEST CORNER OF LOT 1, JOHN KNOX RETIREMENT VILLAGE 9TH PLAT, A SUBDIVISION IN LEE'S SUMMIT RECORDED AS INSTRUMENT NUMBER 1274676 IN BOOK 35 AT PAGE 42 IN SAID JACKSON COUNTY RECORDER OF DEEDS OFFICE; THENCE SOUTH 03°27'53" WEST, ON THE WEST LINE OF SAID JOHN KNOX RETIREMENT VILLAGE 9TH PLAT 400.00 FEET TO THE SOUTHWEST CORNER OF SAID JOHN KNOX RETIREMENT VILLAGE 9TH PLAT; THENCE SOUTH 04°27'07" WEST, 289.53 FEET; THENCE NORTH 85°32'53" WEST, 175.00 FEET; THENCE SOUTH 04°27'07" WEST, 425.00 FEET; THENCE SOUTH 85°32'53" EAST, 175.00 FEET; THENCE SOUTH 04°27'07" WEST, 484.59 FEET; THENCE SOUTH 02°53'56" WEST, 385.97 FEET TO THE POINT OF BEGINNING. CONTAINING 3,360,308 SQUARE FEET OR 77.14 ACRES, MORE OR LESS.



NOT FOR CONSTRUCTION

|X REVIEWED FOR CONSTRUCTION

BENCHMARK

BMK #5 CHISELED SQUARE ON THE S.E. CORNER OF A CONCRETE PAD FOR A TRAFFIC SIGNAL BOX AT THE S.W. CORNER OF PRYOR ROAD AND O'BRIEN ROAD. ELEVATION: 979.24

Sheet List Table Sheet Number | Sheet Title COVER SHEET GENERAL LAYOUT SPILLWAY PLAN & ELEVATION SPILLWAY DETAILS

AS-BUILT

Date Surveyed: 12/14/2020 I hereby certify that the conditions shown are correct and the sewers are acceptably located within existing

SELLERS Julie E. Sellers, PE

ONLY FOR ELEVATION OF SPILLWAY

OLSSON HAS BEEN RETAINED TO PROVIDE AS-BUILT DRAWINGS FOR THIS PROJECT

Grant wekent

MO# 2012018100

GRANT LUCKENBILL P.E. CIVIL ENGINEER

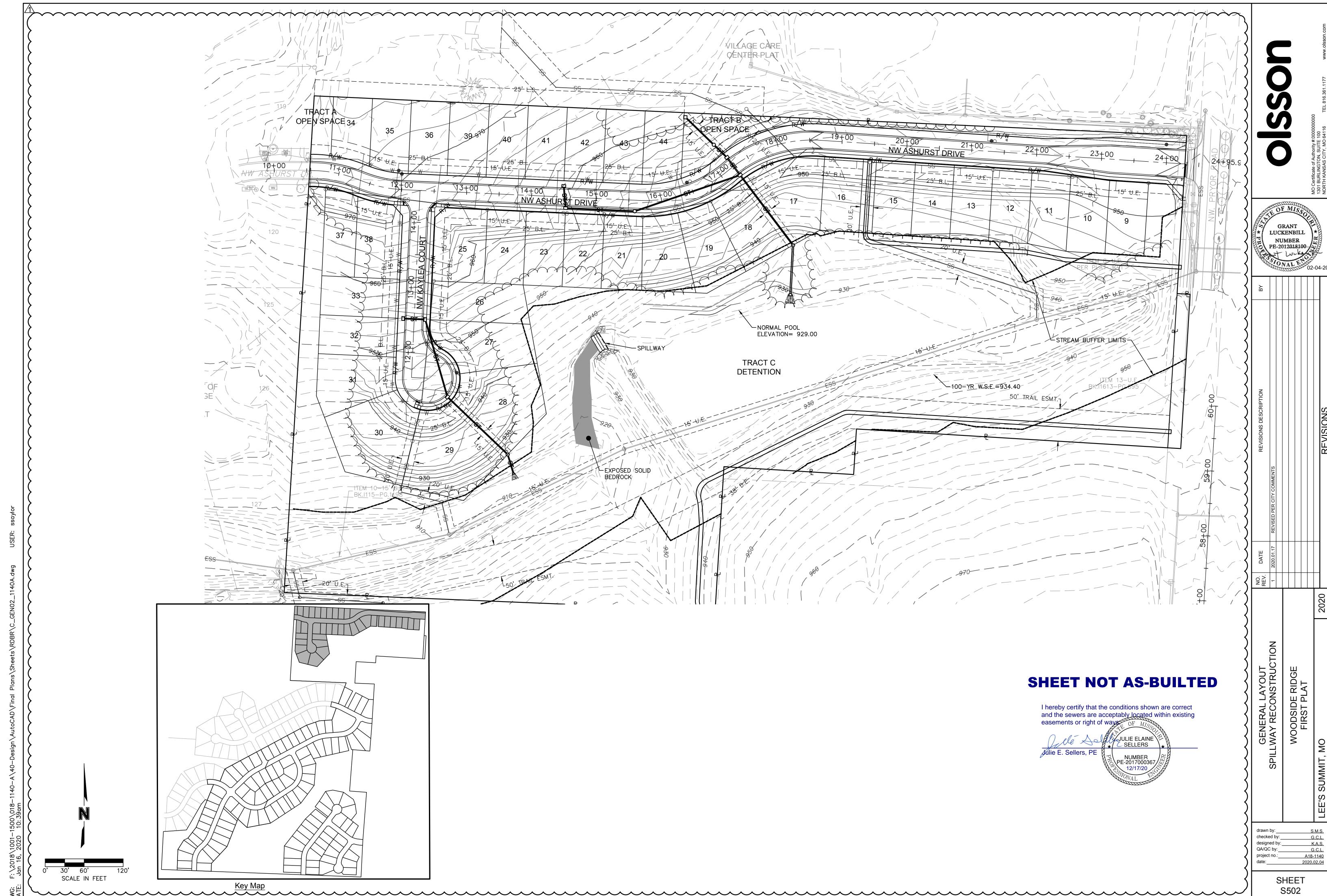
DATE

02-04-2020

LUCKENBILL NUMBER

NO. DATE		REVISIONS DESCRIPTION BY	
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SHEET



GENERAL NOTES:

DESIGN SPECIFICATIONS: INTERNATIONAL BUILDING CODE, 2018 EDITION

DESIGN UNIT STRESSES:

KCMMB 4K CONCRETE f'c = 4,000 PSIREINFORCING STEEL (GRADE 60) fy = 60,000 PSI

DESIGN LOADING:

EARTH: 120 #/CU. FT. EQUIVALENT FLUID PRESSURE: 90 #/CU. FT. (MAX.)

(RIPRAP: LIGHT RIPRAP SHALL CONFORM TO THE MATERIAL AND

CONSTRUCTION REQUIREMENTS IN SECTION 2605 OPEN (CHANNELS OF THE APWA KC METRO CHAPTER CONSTRUCTION AND MATERIAL SPECIFICATIONS DATED (FEBRUARY 2017.

(stone for riprap shall consist of quarried rock (AND BE SOUND, DURABLE, AND ANGULAR IN SHAPE, NO (MORE THAN 10% SHALL HAVE AN ELONGATION GREATER (THAN 3:1, AND NO STONE SHALL HAVE AN ELONGATION (GREATER THAN 4:1. MATERIAL SHALL BE FREE FROM (CRACKS, SEAMS, OR OTHER DEFECTS, SHALE AND (STONE WITH SHALE SEAMS ARE NOT ACCEPTABLE.

(THE MINIMUM UNIT WEIGHT OF THE STONE SHALL BE (155 PCF.

(NOT MORE THAN 10% OF THE STONE SHALL EXHIBIT (SPLITTING, CRUMBLING, OR SPALLING WHEN SUBJECT TO 5 CYCLES OF SODIUM SULFATE SOUNDNESS TEST IN (ACCORDANCE WITH ASTM C 88.

 \ref{RIPRAP} SHALL HAVE A MINIMUM THICKNESS OF 15 INCHES, OR 1.5 TIMES AS THICK AS THE LARGER STONES, WHICHEVER IS GREATER. AT LEAST 60% OF THE MASS SHALL BE OF PIECES HAVING A VOLUME OF (ONE CUBIC FOOT OR MORE AND THE PIECES SHALL BE WELL GRADED. NO MORE THAN 6% OF THE STONES SHALL WEIGH LESS THAN 10 POUNDS.

MISCELLANEOUS:

THE SPILLWAY STRUCTURE SHALL BE CONSTRUCTED IN CONFORMANCE WITH APWA KC METRO CHAPTER CONSTRUCTION AND MATERIAL SPECIFICATIONS DATED FEBRUARY 2017, SECTION 2400 STRUCTURES SHALL GOVERN THE MATERIALS AND CONSTRUCTION REQUIREMENTS FOR STRUCTURAL CONCRETE.

ALL ELEVATIONS ARE SHOWN IN FEET UNLESS OTHERWISE NOTED.

MINIMUM CLERANCE TO REINFORCING STEEL SHALL BE 1½", UNLESS OTHERWISE SHOWN.

DRAWING NOT TO SCALE. FOLLOW DIMENSIONS.

CONTRACTOR TO PROVIDE SHOP DRAWINGS THAT INCLUDE A BILL OF REINFORCING FOR APPROVAL BY THE ENGINEER PRIOR TO ORDERING MATERIALS.

CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING THE EXCAVATION. EXCAVATION SHALL BE FREE OF FLOWING WATER PRIOR TO CONSTRUCTION OF SLAB. A MINIMUM OF 4" THICK CONCRETE SEAL COURSE SHALL BE PROVIDED IF THE UNDERLYING ROCK IS FRAGMENTED AND/OR THE FLOW OF WATER CAN NOT BE ARRESTED.

* STRUCTURE IS TO BE FOUNDED ON SOUND ROCK. THE SURFACE SHALL BE CLEANED AND FREE OF LAITENT MATERIAL PRIOR TO CASTING THE SLAB. IF UNSUITABLE FOUNDATION MATERIAL IS ENCOUNTERED, EXCAVATION OF UNSUITABLE MATERIAL AND BACKFILLING WITH AN APPROVED FLOWABLE FILL SHALL BE COMPLETED. CONTRACTOR TO COORDINATE FINDINGS WITH THE ENGINEER.

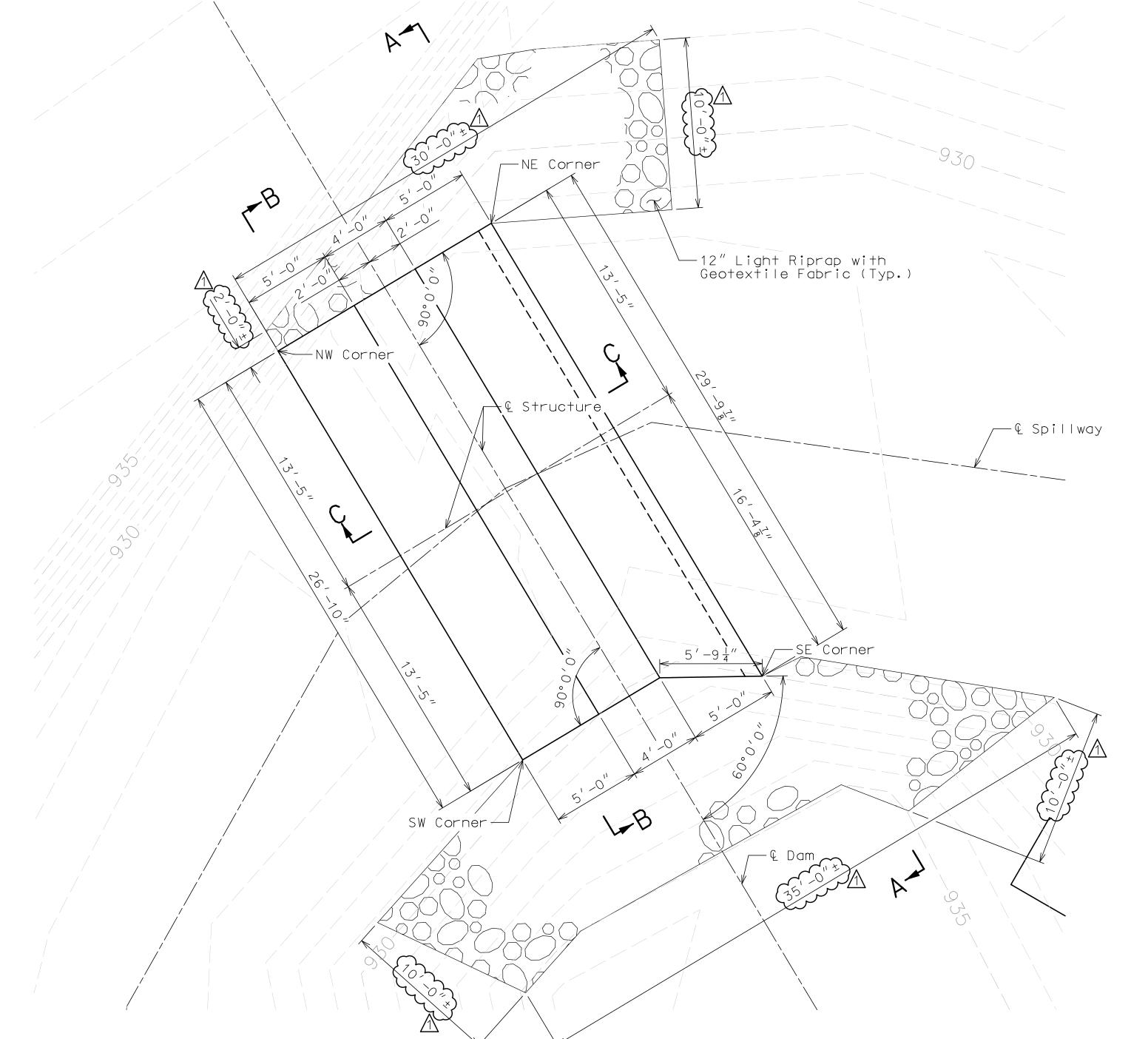
CONTRACTOR SHALL RESTORE ORIGINAL EMBANKMENT (SLOPF.)

CORNER	NORTHING	EASTING
NE	1,003,341.9236	2,812,551.6906
NW	1,003,334.7319	2,812,539.6789
SE	1,003,316.4239	2,812,566.9579
SW	1,003,311.7090	2,812,553.4634

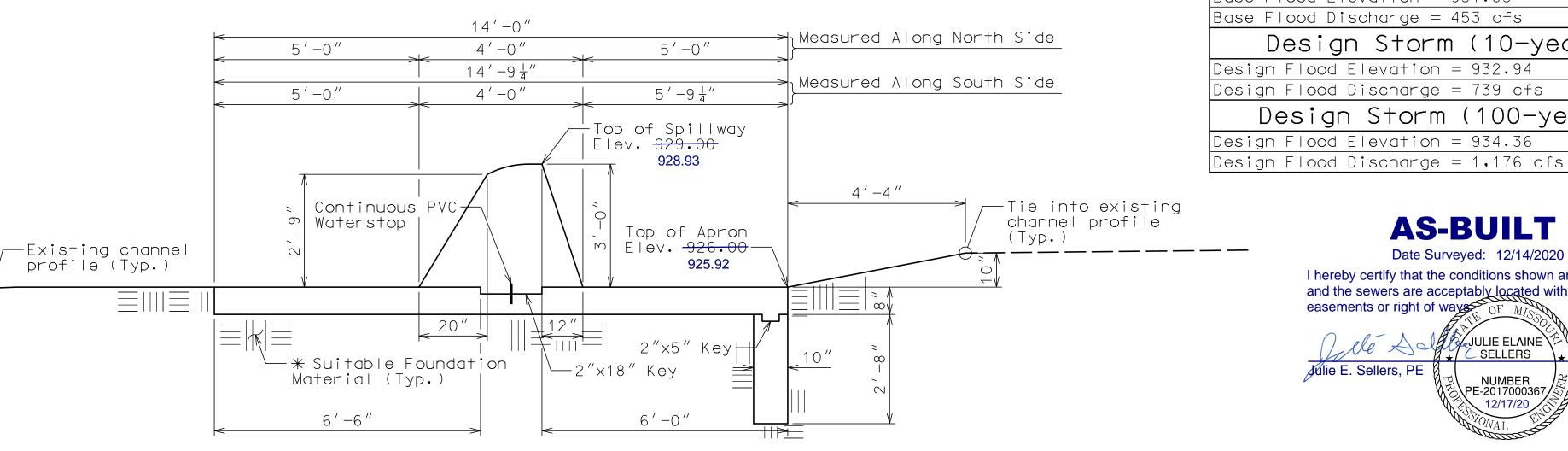


ALL WORK SHOWN IN THE PLANS NECESSARY TO COMPLETE THE SPILLWAY COMPLETE IN PLACE SHALL BE COVERED BY THE BID ITEM "KCMMB 5K CONCRETE" PER CU. YD.

EXCAVATION, REMOVAL AND DISPOSAL OF EXISTING SPILLWAY, REINFORCING, CONCRETE, AND BACKFILL ARE CONSIDERED SUBSIDIARY TO THE BID ITEM "KCMMB 5K CONCRETE" PER CU. YD.



PLAN SHOWING LAYOUT DIMENSIONS



ELEVATION

Hydrologic Data

Design Storm (2-year) Base Flood Elevation = 931.83 Base Flood Discharge = 453 cfs

Design Storm (10-year) Design Flood Elevation = 932.94

Design Flood Discharge = 739 cfs Design Storm (100-year)

AS-BUILT

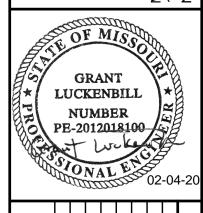
Date Surveyed: 12/14/2020

I hereby certify that the conditions shown are correct and the sewers are acceptably located within existing easements or right of ways

SELLERS Julie E. Sellers, PE PE-2017000367/ 12/17/20

ONLY FOR ELEVATION OF SPILLWAY

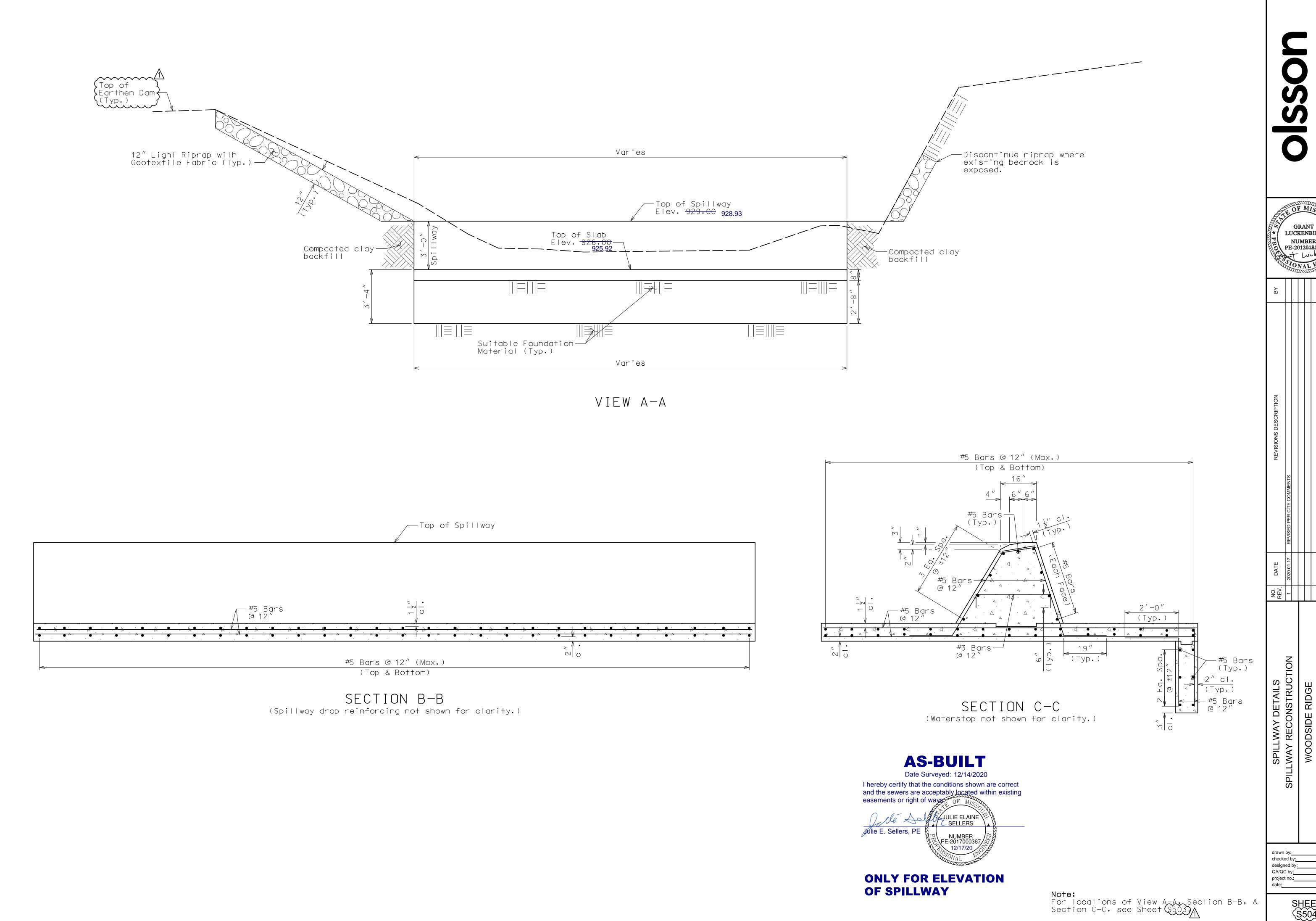
For View A-A, Section B-B, & Section C-C, see Sheet \$504)



Y GENERAL PLAN AND ELEVATION		NO REV	DATE	REVISIONS DESCRIPTION	ВУ	
ILLWAY RECONSTRUCTION		-	2020.01.17	REVISED PER CITY COMMENTS		-dl
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WOODSIDE RIDGE						227
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checked by: designed by: QA/QC by:___ M.G.L A18-1140 project no 2020.02.04





OF MISSO GRANT LUCKENBILL NUMBER PE-2012018100

SHEET S504