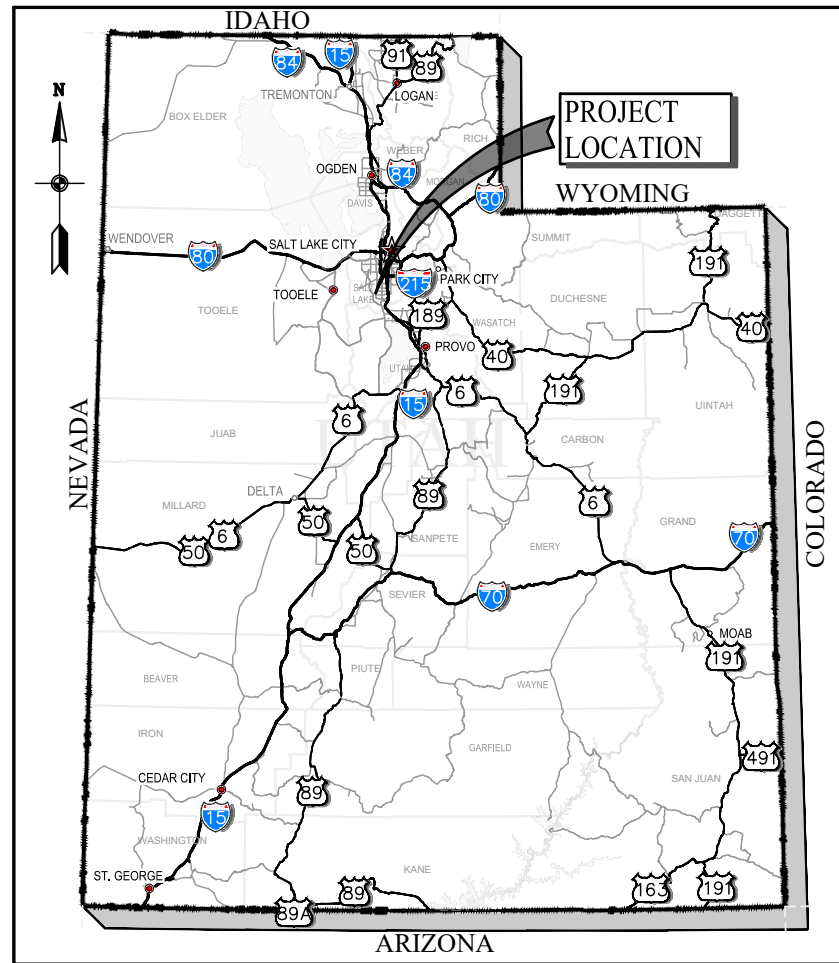
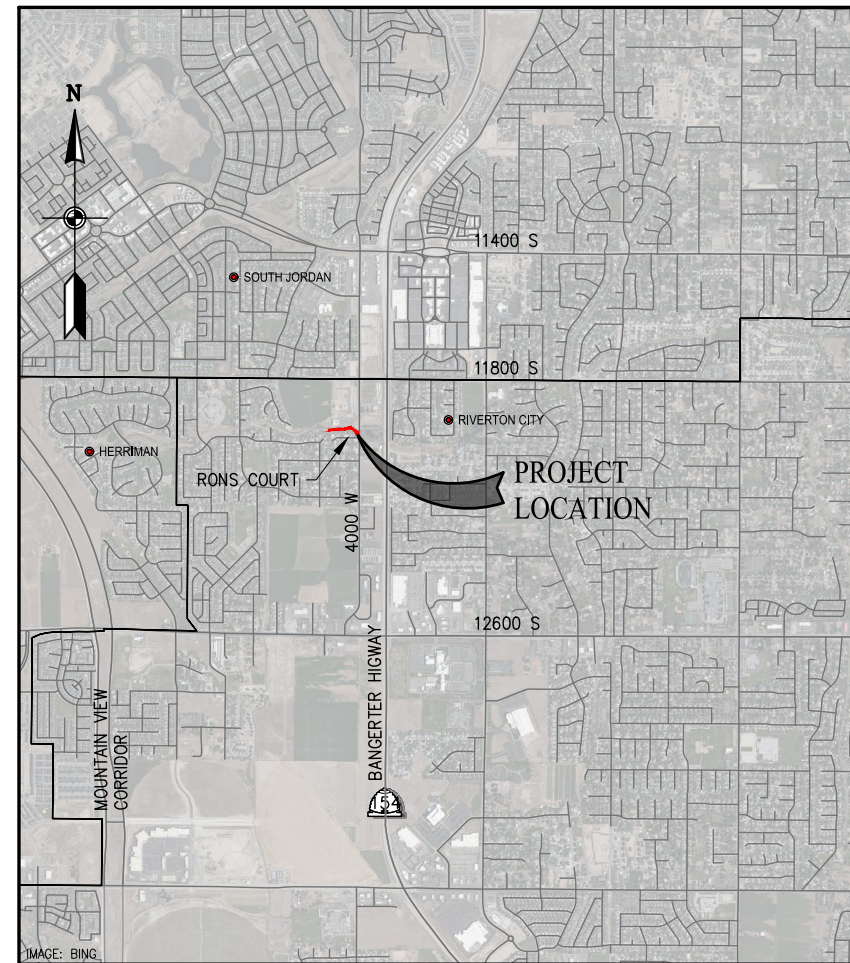


DRAWINGS FOR CONSTRUCTION OF THE MIDAS CREEK TRAIL RIVERTON, UTAH

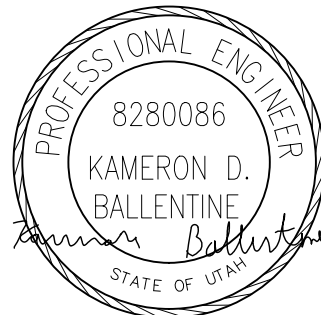


PROJECT LOCATION MAP

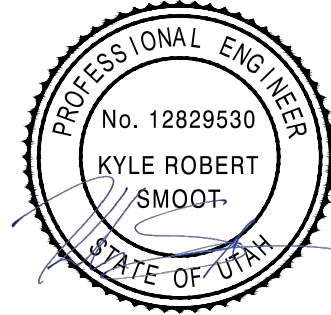
INDEX OF DRAWINGS		
SHT NO.	DWG NO.	DESCRIPTION
GENERAL		
01	G-01	INDEX OF DRAWINGS, PROJECT LOCATION AND VICINITY MAPS
02	G-02	ABBREVIATIONS
03	G-03	SYMBOLS
04	G-04	GENERAL NOTES
CIVIL		
05	C-01	TRAIL PLAN AND PROFILE
06	C-02	SECTIONS
07	C-03	SITE PHOTO
08	C-04	TRAIL SECTIONS
STRUCTURAL		
09	S-01	EXISTING RETAINING WALL AND SLAB DEMOLITION PLAN
10	S-02	RETAINING WALL BASE PLAN AND SECTION
11	S-03	RETAINING WALL SECTIONS AND DETAILS
GENERAL CIVIL DETAILS		
12	GC-01	GENERAL CIVIL DETAILS - 1
GENERAL STRUCTURAL DETAILS		
13	GS-01	GENERAL STRUCTURAL NOTES AND DETAILS



PROJECT VICINITY MAP



CIVIL
04/05/2023



STRUCTURAL
04/05/2023



NO.	DATE	REV. BY	DESCRIPTION

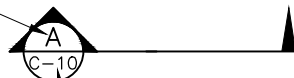
DESIGN DESIGN: K. BALLENTINE DRAWN: S. RIGGS	CHECKED: K. BALLENTINE APPROVED: K. BAGLEY	REVIEW REVIEWED: K. BALLENTINE APPROVED: K. BAGLEY
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GENERAL INDEX OF DRAWINGS, PROJECT LOCATION AND VICINITY MAPS	PROJECT NUMBER 066-22-04
--	--------------------------------

DRAWING NO. G-01	DATE: MARCH 2023
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SECTION IDENTIFICATION

(1) SECTION CUT SHOWN ON DRAWING AS:
SECTION LETTER



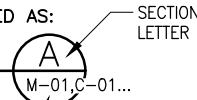
DRAWING NUMBER WHERE THE SECTION IS SHOWN (SEE NOTE A)

(2) THIS SECTION IS IDENTIFIED AS:

SECTION

SCALE: AS DESIGNATED

DRAWING NUMBER WHERE THE SECTION CUT IS SHOWN (SEE NOTE A)



DETAIL IDENTIFICATION

(1) DETAIL IDENTIFICATION SHOWN ON DRAWING AS:

DETAIL NUMBER THE DETAIL NAME IS OPTIONAL AND LOCATED HERE, FOLLOWING DETAIL CALLOUT

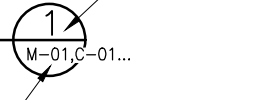


(2) THIS DETAIL IS IDENTIFIED AS:

DETAIL

SCALE: AS DESIGNATED

DRAWING NUMBER WHERE THE DETAIL IS SHOWN (SEE NOTE A)



TYPICAL DETAIL IDENTIFICATION

TYPICAL DETAIL

NTS

TYPICAL DETAIL NUMBER, SEE INDEX OF DRAWINGS FOR LOCATION OF GENERAL DRAWINGS



APWA DETAIL IDENTIFICATION

(1) DETAIL IDENTIFICATION SHOWN ON DRAWING AS:

PLAN NUMBER WHERE THE DETAIL IS SHOWN ON 2017 APWA STANDARD PLANS



DRAWING IDENTIFICATION SYSTEM

LETTER	DISCIPLINE
G	GENERAL
C	CIVIL
L	LANDSCAPE
S	STRUCTURAL
GC	GENERAL CIVIL DETAILS
GS	GENERAL STRUCTURAL DETAILS



NOTES:

- IF PLAN AND SECTION (OR DETAIL CALL-OUT AND DETAIL) ARE SHOWN ON SAME DRAWING, DRAWING NUMBER IS REPLACED BY A HORIZONTAL LINE.
- ELECTRICAL SYMBOLS SHOWN ON ELECTRICAL DRAWINGS. FOR WELDING SYMBOLS USE AMERICAN WELDING SOCIETY STANDARD SYMBOLS. SEE AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL.

- COORDINATE IDENTIFICATION
- ELEVATION INDICATOR
- SECTION CORNER
- CONTROL POINT
- MONUMENT INDICATOR
- POTHOLE
- TEST HOLE
- BORING HOLE
- SECTION LINE
- PROPERTY LINE
- EASEMENT
- CONSTRUCTION BOUNDARY LINE
- EXISTING GROUND SURFACE
- FINAL TRAIL GRADE
- PARCEL
- R/W RIGHT-OF-WAY
- NEW ASPHALT
- EXISTING ASPHALT
- CENTERLINE
- 4500 CONTOUR LINE, FINISHED GRADE
- 4500 CONTOUR LINE, EXISTING GRADE TO BE CONSTRUCTED
- (4500.20) FINISHED ELEVATION IN FEET
- (4500.20) EXISTING ELEVATION IN FEET
- SILT FENCE
- FENCE
- RAILING
- DITCH
- CULVERT
- RIPRAP
- TREE LINE/VEGETATION
- EXISTING STRUCTURE OR FACILITY
- NEW STRUCTURE OR FACILITY
- FUTURE STRUCTURE OR FACILITY
- NEW PIPELINE (CIVIL SHEETS)
- ATMS
- CABLE
- C(ug) COMMUNICATION BURIED
- COMM COMMUNICATION OVERHEAD
- P(ug) ELECTRICAL BURIED
- OHP ELECTRICAL OVERHEAD
- FO FIBER OPTICS OVERHEAD
- FO(ug) FIBER OPTICS UNDERGROUND
- G GAS
- IRR IRRIGATION
- PETRO PETROLEUM LINE
- SS SANITARY SEWER
- SD STORM DRAIN
- T(ug) TELEPHONE BURIED
- TEL TELEPHONE OVERHEAD
- W WATERLINE
- CABLE BOX
- CATCH BASIN
- EB ELECTRICAL BOX
- HYDRANT
- G GAS MANHOLE
- S SEWER MANHOLE
- D STORM DRAIN MANHOLE
- T TELEPHONE MANHOLE
- W WATER MANHOLE
- WM WATER METER

- POWER POLE
- TELEPHONE BOX
- LIGHT POLE ONE LUMINAIRE
- LIGHT POLE TWO LUMINAIRES
- LIGHT POLE
- STREET LIGHT WITH BRACKET
- TO BE REMOVED OR ABANDONED
- MASONRY
- STEEL
- INSULATION
- GRAVEL
- CONCRETE
- EARTH
- SAND
- ALUMINUM OR METAL DECKING
- CHECKERED PLATE
- GRATING
- PLASTIC, RUBBER OR NEOPRENE
- WOOD (ROUGH FRAMING) OR, OPENING OR DEPRESSION IN SLAB OR WALL
- FHC FIRE HOSE CABINET
- FE FIRE EXTINGUISHER
- UNIT HEATER
- PCOTG PRESSURE CLEANOUT TO GRADE
- WCO WALL CLEANOUT
- FCO FLOOR CLEANOUT
- COTG CLEANOUT TO GRADE
- BLOW OFF ASSEMBLY
- HUB DRAIN
- FLOOR DRAIN
- FLOOR SINK
- DRAIN TRAP
- CHANGE IN PIPING MATERIAL
- 24" RCP-RW PIPE SIZE AND TYPE/FLUID ABBREVIATION (USE FOR EXISTING PIPE CALLOUT)
- 10" PW (2) PIPE CALLOUT (SEE PIPING SCHEDULE)
- ME-2 EQUIPMENT NUMBER (SEE EQUIPMENT SCHEDULE)
- STOP GATE
- SLIDE GATE
- SLUICE GATE
- GATE VALVE
- HOSE BIBB (H/B)
- REDUCER OR INCREASER
- LIQUID SURFACE EL

- REVISION WORK
- REFERENCE TO NOTE
- COLUMN LINE GRID
- WINDOW TYPE
- DOOR NUMBER
- ROOM NUMBER

BOWEN COLLINS ASSOCIATES

RIVERTON CITY
MIDAS CREEK TRAIL
RIVERTON, UTAH

DESIGN
K. BALLENTINE

REVIEW
K. BALLENTINE

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

APPROVED
K. BAGLEY

SYMBOLS

DATE: APRIL 2023

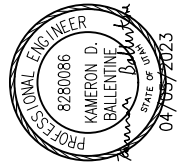
PROJECT NUMBER
066-22-04

DRAWING NO.
G-03

SHEET 03 OF 13

GENERAL NOTES

- STANDARDS SPECIFICATIONS: WHEN REFERENCE IS MADE TO STANDARD SPECIFICATIONS, THEY REFER TO THE SPECIFICATIONS INCLUDED IN THIS PROJECT, AND THE "RIVERTON CITY STANDARD SPECIFICATIONS AND PLANS MANUAL: AND APWA MANUAL OF STANDARD SPECIFICATIONS 2017 EDITION. THIS REFERENCE SHALL CONTROL. IF THERE IS A CONFLICT BETWEEN STANDARDS, RIVERTON CITY STANDARDS GOVERN.
- SYMBOLS FOR STRUCTURES, PIPE AND ETC. USED FOR IDENTIFICATION ARE SHOWN IN LEGENDS AND SHALL BE FOLLOWED THROUGHOUT THE PLANS WHENEVER APPLICABLE. NOT ALL OF THE VARIOUS COMPONENTS SHOWN IN THESE LEGENDS ARE NECESSARILY USED IN THE PROJECT.
- SCALE OF THE DRAWINGS OR DETAILS ARE SHOWN IN TITLE BLOCK OR DIRECTLY UNDER THE PLAN OR DETAIL. THE SIZE OF THE ORIGINAL PLOTTED DRAWINGS IS 22"x34". CARE SHOULD BE TAKEN TO VERIFY THE SCALE BAR IN THE TITLE BLOCK AREA TO DETERMINE THE SCALE OF REDUCED REPRODUCTIONS.
- IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PERFORM CONSTRUCTION ACTIVITIES PER THE CONTRACT DOCUMENTS. ANY ADDITIONS, DELETIONS, OR MODIFICATIONS SHALL FIRST MEET WITH THE WRITTEN APPROVAL OF THE ENGINEER AND THE OWNER.
- THE CONTRACTOR SHALL KEEP ALL CONSTRUCTION ACTIVITIES WITHIN THE BOUNDARIES IDENTIFIED ON DRAWINGS. THIS SHALL INCLUDE BUT NOT BE LIMITED TO, VEHICLES AND EQUIPMENT, LIMITS OF TRENCH EXCAVATION, AND EXCAVATED MATERIAL AND BACKFILL STORAGE. IF THE CONTRACTOR REQUIRES ADDITIONAL CONSTRUCTION EASEMENTS, IT SHALL BE SOLELY THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN SUCH EASEMENTS FROM INDIVIDUAL PROPERTY OWNERS.
- UTILITY LOCATIONS:
 - CONTRACTOR SHALL CONTACT BLUE STAKES TO LOCATE EXISTING UTILITIES.
 - CONTRACTOR TO VERIFY DEPTHS OF UTILITIES IN THE FIELD BY POT HOLING A MINIMUM OF TWO WEEKS TIME OR 500- FEET AHEAD OF CONSTRUCTION TO AVOID CONFLICTS WITH DESIGNED GRADE AND ALIGNMENT. IF A CONFLICT ARISES RESULTING FROM THE CONTRACTOR NEGLECTING TO POT HOLE UTILITIES, THE CONTRACTOR TO RESOLVE THE CONFLICT WITHOUT ADDITIONAL COST OR CLAIM TO THE OWNER.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR CONFORMANCE WITH LOCAL AND FEDERAL CODES GOVERNING SHORING AND BRACING OF EXCAVATIONS AND TRENCHES. CONTRACTOR IS RESPONSIBLE FOR THE SAFETY OF THE PUBLIC AND PROTECTION OF PERSONNEL AND WORKERS.
- IF THE CONTRACTOR CHOOSES TO WORK ON THE PROJECT WHEN HOT MIX ASPHALT IS NOT AVAILABLE, THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE GOVERNING AGENCY PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY ASPHALT SURFACING MATERIAL. WHEN PERMANENT ASPHALT BECOMES AVAILABLE, THE CONTRACTOR SHALL REMOVE THE TEMPORARY ASPHALT, FURNISH AND INSTALL THE PERMANENT ASPHALT AT NO ADDITIONAL COST TO THE OWNER.
- AERIAL PHOTOS IN DRAWINGS: THE AERIAL PHOTOS PROVIDED AS BACKGROUND IN THESE DRAWINGS ARE PROVIDED TO HELP CLARIFY THE WORK SITE. PRESENT DAY CONDITIONS MAY VARY FROM THOSE SHOWN. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO BIDDING. BID SHALL INCLUDE ALL WORK REQUIRED TO COMPLETE THE PROJECT.
- ALL CONSTRUCTION ACTIVITIES SHALL BE PERFORMED IN A WORKMANLIKE AND SAFE MANNER AND IN ACCORDANCE WITH ALL STATE AND LOCAL CODES AND JOB-SITE RELATED CONSTRUCTION CONDITIONS AND REQUIREMENTS. OBTAIN PERMITS, INSPECTIONS AND APPROVALS AS REQUIRED BY JURISDICTIONAL AGENCIES AND PAY ALL ASSOCIATED FEES. CONTRACTOR AND INSTALLERS SHALL BE LICENSED AS REQUIRED BY STATE AND LOCAL JURISDICTIONS, AND BONDED AS DETERMINED BY PROJECT REQUIREMENTS.
- CONTRACTOR TO PROVIDE AND DISTRIBUTE APPROVED WRITTEN NOTICE OF CONSTRUCTION ACTIVITIES TO ALL RESIDENTS AND BUSINESSES LOCATED IN THE CONSTRUCTION AREA AT LEAST 48 HOURS PRIOR TO CONSTRUCTION. WRITTEN NOTICE SHALL BE APPROVED BY THE ENGINEER PRIOR TO DISTRIBUTION.
- CONTRACTOR SHALL SUBMIT STORM RUNOFF CONTROL PLAN FOR APPROVAL BY ENGINEER AND OBTAIN A SWPPP PERMIT FROM THE UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY. EROSION CONTROL MEASURES TO BE SUBMITTED AS PART OF THE LDP PERMIT. THESE PLANS SHOULD PROVIDE MINIMUM CONTROL MEASURES TO PROTECT THE STREAM CHANNEL DURING CONSTRUCTION.
- MIDAS CREEK IS AN EPHEMERAL STREAM THAT TYPICALLY FLOWS ONLY IN RESPONSE TO STORM EVENTS. THE CONTRACTOR IS RESPONSIBLE TO MANAGE WATER FLOWING IN MIDAS CREEK. NO CONSTRUCTION MAY TAKE PLACE IN THE CHANNEL WHEN WATER IS FLOWING, UNLESS THE FLOW IN MIDAS CREEK IS DIVERTED AROUND THE TRAIL IMPROVEMENTS.
- THIS DESIGN INCLUDES AN ASPHALT TRAIL THE ASPHALT TRAIL WILL NEED TO MEET RIVERTON SPECIFICATIONS FOR A LOCAL STREET.
- CONTRACTOR SHALL SAW CUT ASPHALT, SIDEWALK TO THE NEAREST JOINT, AND WHERE REQUIRED CURB AND GUTTER TO THE NEAREST JOINT AT THE LIMITS OF ALL TRENCH EXCAVATION.
- RIVERTON CITY CONFORMS TO SALT LAKE COUNTY WORK HOURS (I.E. 7:00 AM TO 10:00 PM). EXCEPTIONS MUST BE WORKED THROUGH RIVERTON CITY INSPECTORS. CITY INSPECTION HOURS, BETWEEN 7:00 AM TO 4:30 PM.
- CONTRACTOR SHALL RESTORE ALL DAMAGED CURB, GUTTER, SIDEWALK, DRIVEWAY APPROACHES, AND WATER WAYS IN ACCORDANCE WITH APWA MANUAL OF STANDARD PLANS 2017 EDITION, PLAN NO. 205, 211, 221, AND 231 WITHIN RIVERTON CITY RIGHT-OF-WAY. TO PRESERVE AND PROTECT EXISTING CURB AND GUTTER, CONTRACTOR SHALL FLOWABLE FILL UNDERNEATH CURB AND GUTTER AFTER TUNNELING FOR HYDRANTS OR SERVICE CONNECTIONS.
- PERMITS - A STREAM ALTERATION PERMIT AND A SALT LAKE COUNTY FLOOD CONTROL PERMIT HAVE BEEN OBTAINED FOR THE PROJECT. THE CONTRACTOR IS OBLIGATED TO FOLLOW THE STANDARDS, REGULATIONS AND GENERAL REQUIREMENTS DICTATED BY THOSE PERMITS. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL OTHER NECESSARY PERMITS TO COMPLETE THE WORK AND COMPLY WITH THE REQUIREMENTS OF THOSE PERMITS.
- A LAND DISTURBANCE PERMIT MUST BE OBTAINED FROM RIVERTON CITY PRIOR TO DISTURBING ANY VEGETATION OR MOVING ANY SOIL. CONTACT RIVERTON CITY STORMWATER DIVISION AT 801-208-3152.
- A RIGHT-OF-WAY ENCROACHMENT PERMIT MUST BE OBTAINED FROM RIVERTON CITY PRIOR TO DOING ANY WORK IN THE RIGHT-OF-WAY. CONTACT RIVERTON CITY PERMITS/UTILITY MANAGER AT 801-208-3172.
- RONS COURT AND THE CUL-DE-SAC OFF 4130 WEST ARE NOT BE USED FOR ACCESS TO THE PROJECT SITE. THE ONLY ACCESS FOR THE PROJECT SITE IS FROM 4000 WEST.
- CONTRACTOR TO RESTORE AREAS DISTURBED BY CONSTRUCTION ACTIVITIES. SEE SPECIFICATIONS FOR SEED MIX AND RESTORATION REQUIREMENTS.
- THE CENTERLINE OF THE CHANNEL AND TOPOGRAPHY IN THE PROJECT AREA MAY HAVE SHIFTED SINCE SURVEY WAS COLLECTED IN APRIL 2021. THE CONTRACTOR WILL NEED TO COORDINATE FIELD CHANGES WITH THE FIELD ENGINEER.
- CONTRACTOR WILL WAIT UNTIL 2023 SPRING RUNOFF HAS PAST TO BEGIN WORKING ON THIS PROJECT.



NO.	DATE	REV. BY	DESCRIPTION

RIVERTON CITY RIVERTON, UTAH		DESIGN K. BALLENTINE		CHECKED K. BALLENTINE		REVIEW K. BALLENTINE		VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING
		DRAWN S. RIGGS		APPROVED K. BAGLEY				

GENERAL GENERAL NOTES	DATE: APRIL 2023	PROJECT NUMBER 066-22-04
	DRAWING NO. G-04	

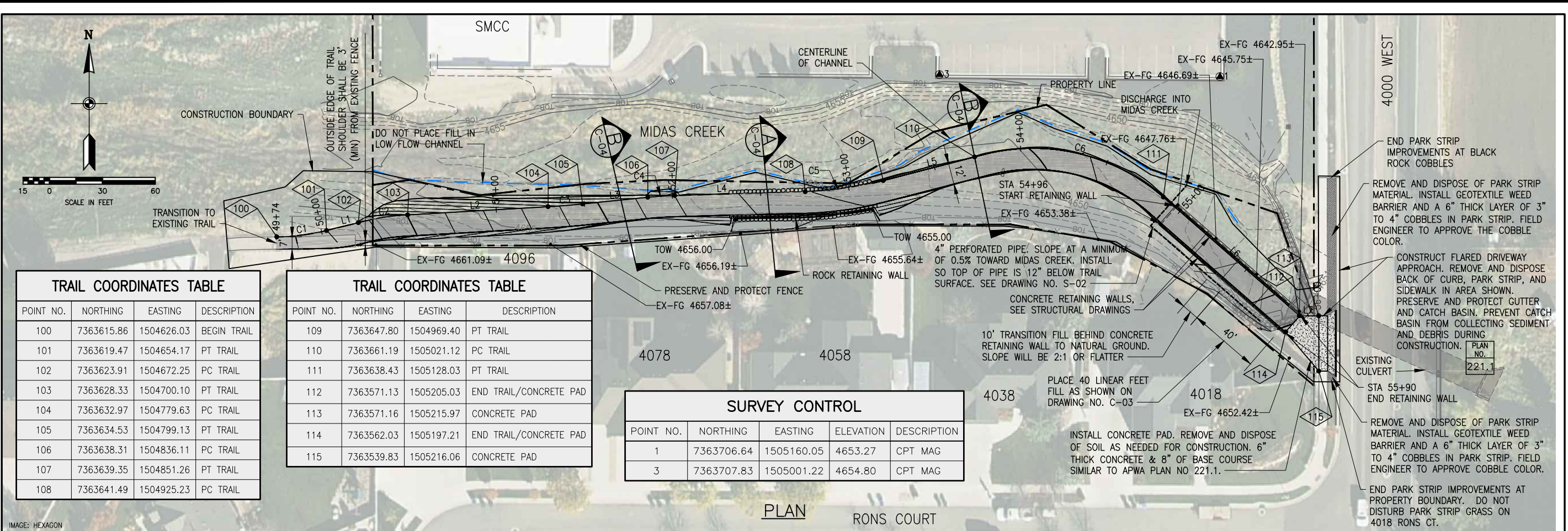
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NO.	DATE	REV. BY	DESCRIPTION

VERIFY SCALE	BAR IS ONE INCH ON ORIGINAL DRAWING

DESIGN	REVIEW
DESIGN: K. BALLENTINE DRAWN: S. RIGGS	CHECKED: K. BALLENTINE APPROVED: K. BAGLEY

PROJECT NUMBER	DATE
066-22-04	APRIL 2023



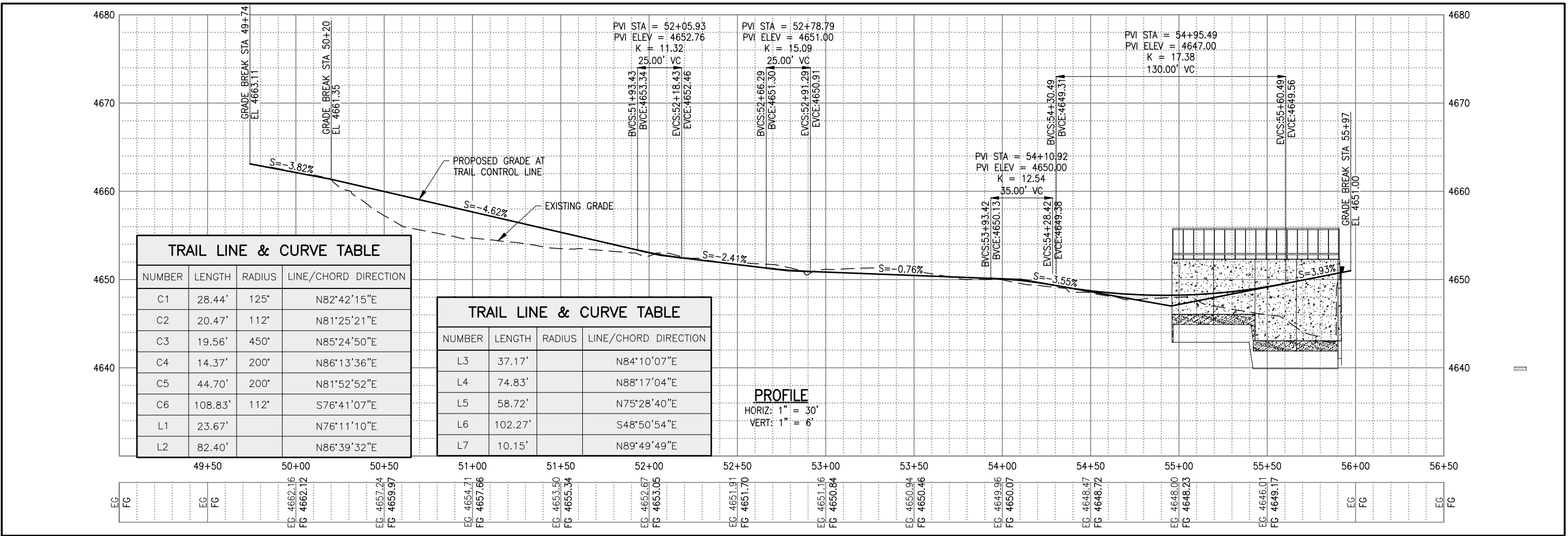
POINT NO.	NORTHING	EASTING	DESCRIPTION
100	7363615.86	1504626.03	BEGIN TRAIL
101	7363619.47	1504654.17	PT TRAIL
102	7363623.91	1504672.25	PC TRAIL
103	7363628.33	1504700.10	PT TRAIL
104	7363632.97	1504779.63	PC TRAIL
105	7363634.53	1504799.13	PT TRAIL
106	7363638.31	1504836.11	PC TRAIL
107	7363639.35	1504851.26	PT TRAIL
108	7363641.49	1504925.23	PC TRAIL

POINT NO.	NORTHING	EASTING	DESCRIPTION
109	7363647.80	1504969.40	PT TRAIL
110	7363661.19	1505021.12	PC TRAIL
111	7363638.43	1505128.03	PT TRAIL
112	7363571.13	1505205.03	END TRAIL/CONCRETE PAD
113	7363571.16	1505215.97	CONCRETE PAD
114	7363562.03	1505197.21	END TRAIL/CONCRETE PAD
115	7363539.83	1505216.06	CONCRETE PAD

POINT NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	7363706.64	1505160.05	4653.27	CPT MAG
3	7363707.83	1505001.22	4654.80	CPT MAG

IMAGE: HEXAGON

PLAN RONS COURT



NUMBER	LENGTH	RADIUS	LINE/CHORD DIRECTION
C1	28.44'	125'	N82°42'15"E
C2	20.47'	112'	N81°25'21"E
C3	19.56'	450'	N85°24'50"E
C4	14.37'	200'	N86°13'36"E
C5	44.70'	200'	N81°52'52"E
C6	108.83'	112'	S76°41'07"E
L1	23.67'		N76°11'10"E
L2	82.40'		N86°39'32"E

NUMBER	LENGTH	RADIUS	LINE/CHORD DIRECTION
L3	37.17'		N84°10'07"E
L4	74.83'		N88°17'04"E
L5	58.72'		N75°28'40"E
L6	102.27'		S48°50'54"E
L7	10.15'		N89°49'49"E

PROFILE
HORIZ: 1" = 30'
VERT: 1" = 6'

NO.	DATE	REV. BY	DESCRIPTION

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

DESIGN
K. BALLENTINE
DRAWN
S. RIGGS

REVIEW
K. BALLENTINE
CHECKED
K. BALLENTINE
APPROVED
K. BAGLEY

RIVERTON CITY
RIVERTON, UTAH

MIDAS CREEK TRAIL

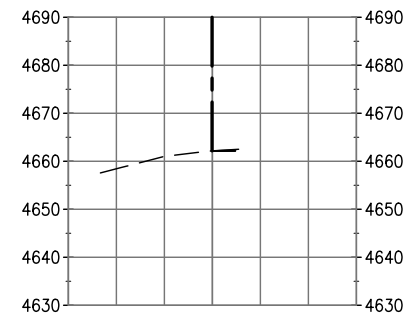
SECTIONS

DATE: APRIL 2023

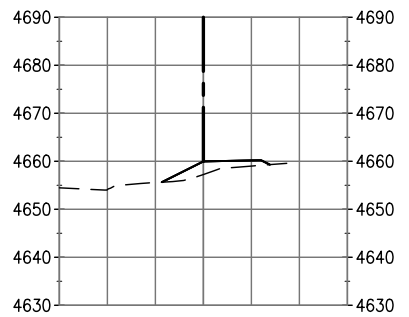
PROJECT NUMBER: 066-22-04

DRAWING NO.
C-02

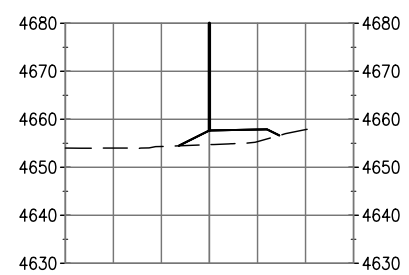
SHEET 06 OF 13



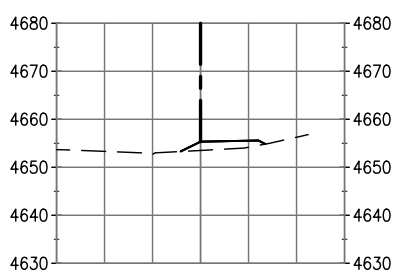
50+00



50+50

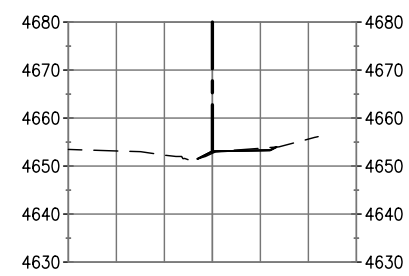


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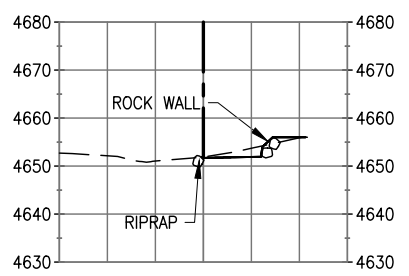


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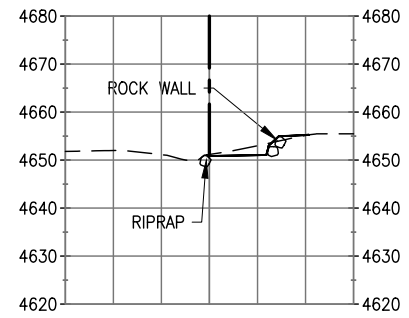
NOTES:
1. IN AREAS WHERE FILL MATERIAL IS REQUIRED, USE GRANULAR BARROW A-1-A. COMPACT TO 95% PER APWA STANDARDS.



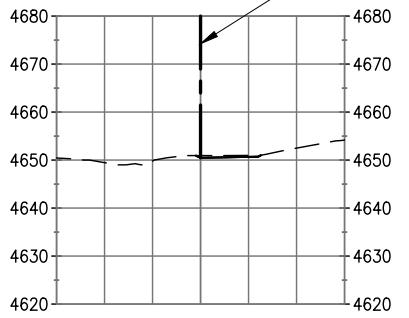
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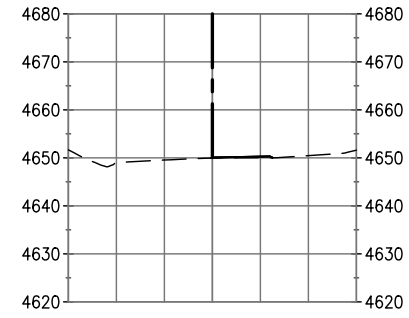
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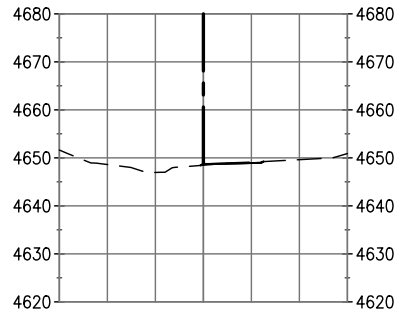
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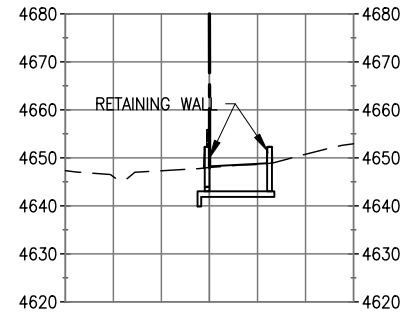
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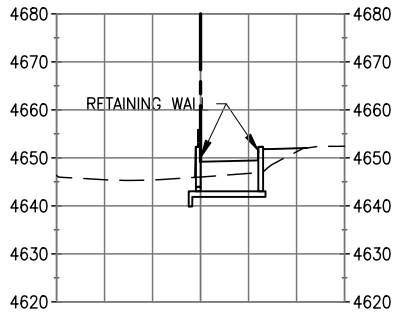
54+00



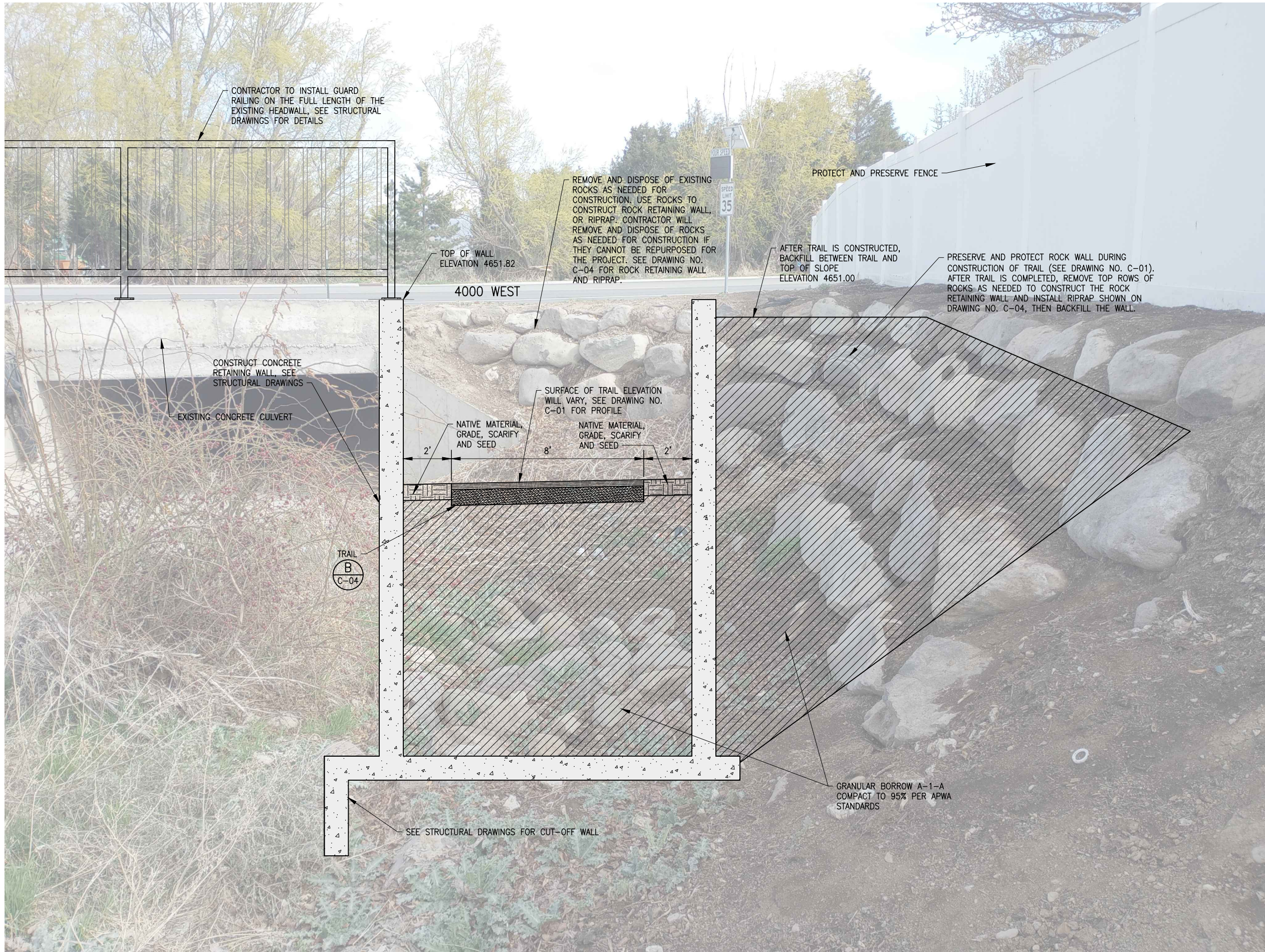
54+50



55+00



55+50

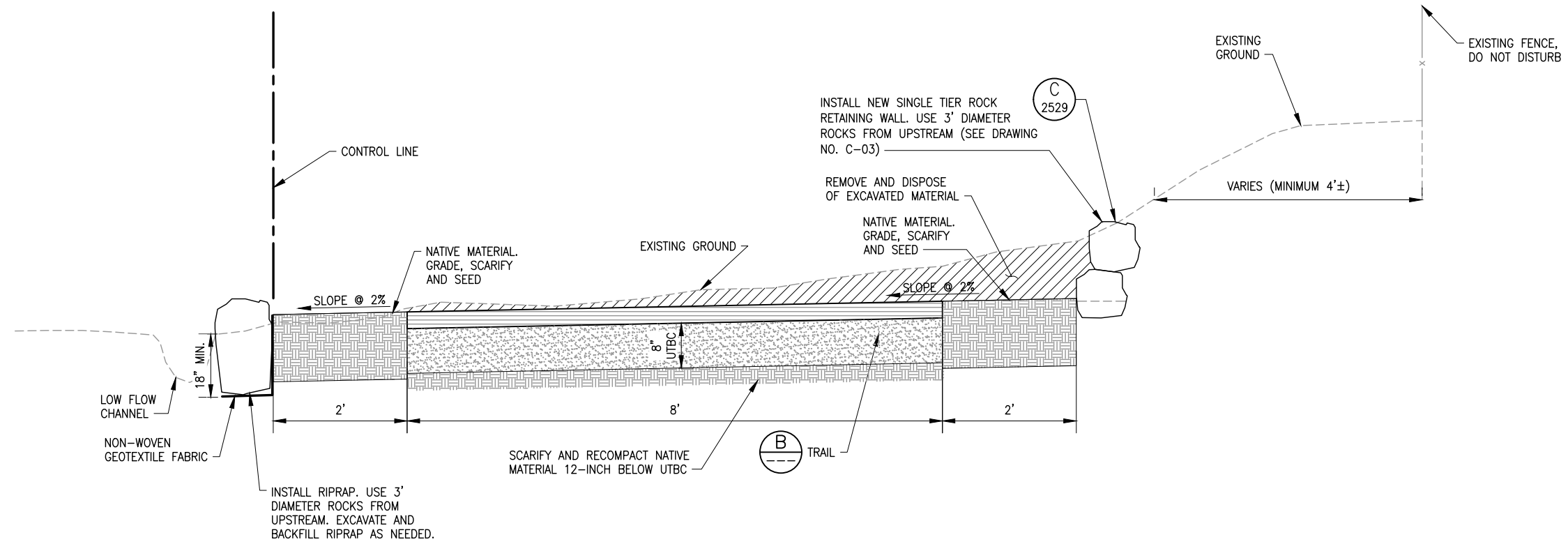


NO.	DATE	REV. BY	DESCRIPTION

RIVERTON CITY RIVERTON, UTAH		DESIGN K. BALLENTINE M. WASHBURN	REVIEW K. BALLENTINE K. BAGLEY	VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING
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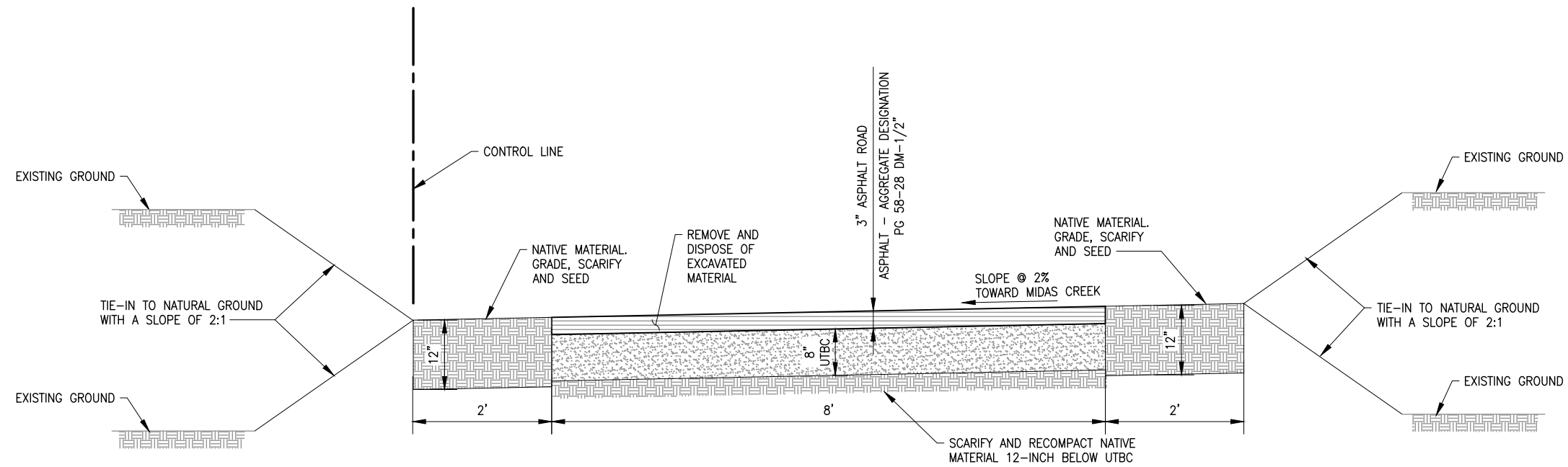
SITE PHOTO	DATE: APRIL 2023
	PROJECT NUMBER: 066-22-04

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ROCK RETAINING WALL AND RIPRAP
SCALE: NTS

A
C-01



TRAIL SECTION
SCALE: NTS

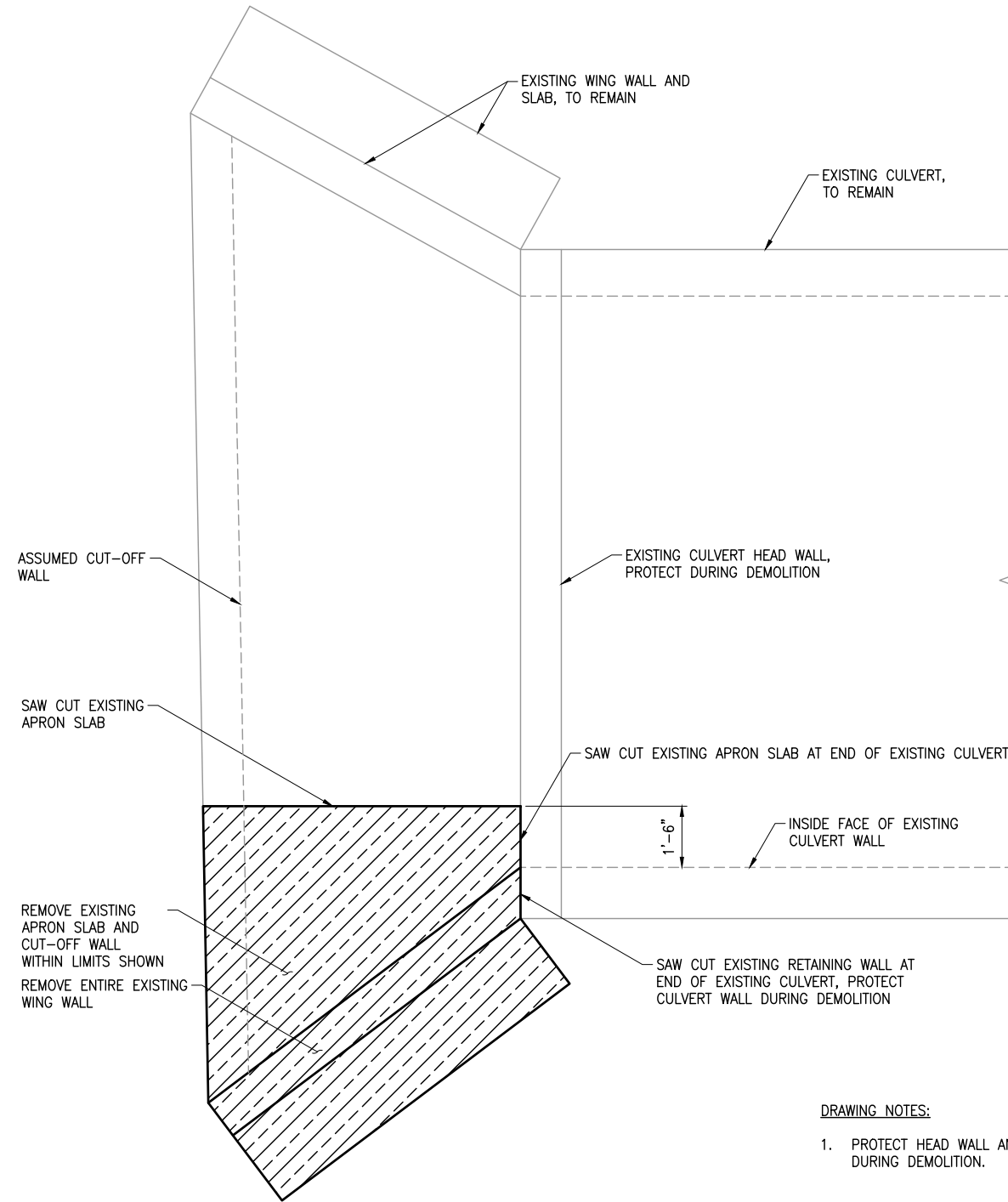
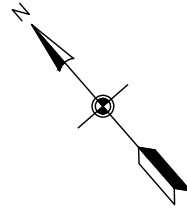
B
C-01

NO.	DATE	REV. BY	DESCRIPTION

RIVERTON CITY MIDAS CREEK TRAIL RIVERTON, UTAH		VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING
DESIGN K. BALLENTINE M. WASHBURN	REVIEW K. BALLENTINE K. BAGLEY	

TRAIL SECTIONS	PROJECT NUMBER 066-22-04
DATE APRIL 2023	

P:\Riverton\066-22-01 Midas Creek Trail\Design\Sheet\0662204_C-04.dwg Pktdtd: 4/7/2023 10:22 AM By: Kameron Ballentine



DRAWING NOTES:

1. PROTECT HEAD WALL AND CULVERT IN PLACE DURING DEMOLITION.

DEMOLITION PLAN

SCALE: 1/2"=1'-0"

NO.	DATE	REV. BY	DESCRIPTION

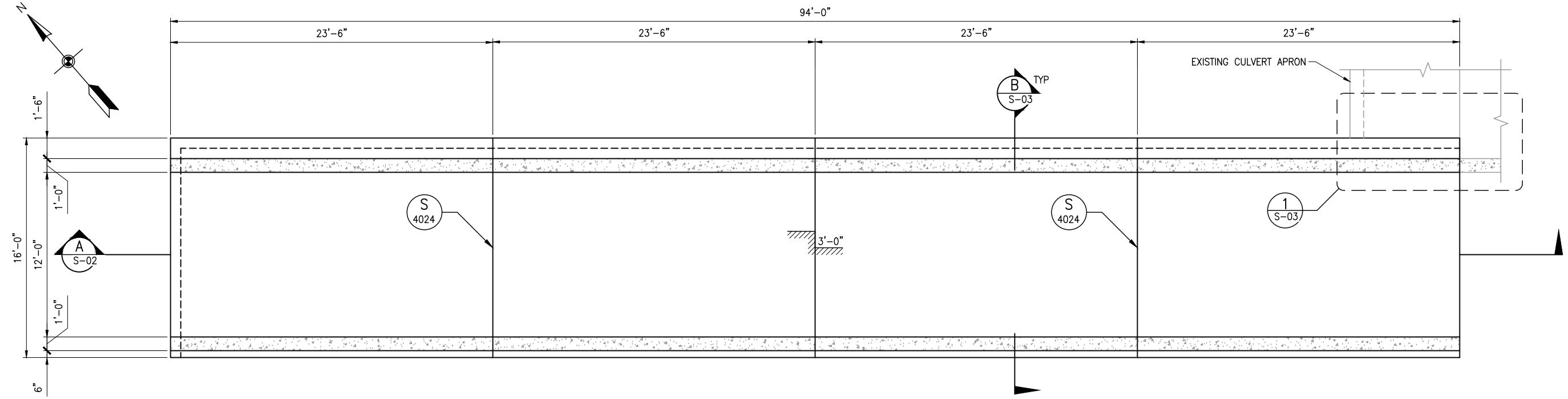
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

DESIGN: K. SMOOT
DRAWN: K. SMOOT
CHECKED: S. COHEN
APPROVED: K. SMOOT

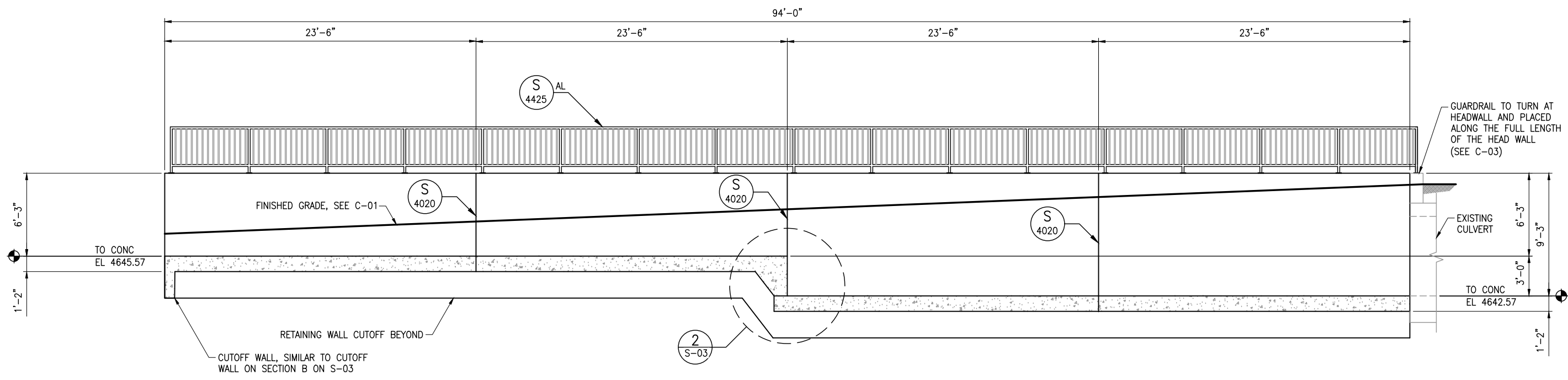
REVIEW: S. COHEN
APPROVED: K. SMOOT

STRUCTURAL
EXISTING RETAINING WALL AND SLAB DEMOLITION PLAN
DATE: MARCH 2023
PROJECT NUMBER: 066-22-04

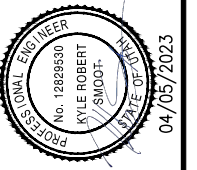
DRAWING NO.
S-01



BASE PLAN
SCALE: 1/4"=1'-0"



SECTION
SCALE: 1/4"=1'-0" A
S-02



NO.	DATE	REV. BY	DESCRIPTION

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING	
DESIGN K. SMOOT	REVIEW S. COHEN
DRAWN K. SMOOT	APPROVED K. SMOOT

RETAINING WALL BASE PLAN AND SECTION
DATE: MARCH 2023
PROJECT NUMBER: 066-22-04

P:\Riverton\066-22-01 Midas Creek Trail\Design\Sheet\0662204_S-02.dwg Plotted: 4/6/2023 9:40 AM By: Kyle Smoot

NO.	DATE	REV. BY	DESCRIPTION

VERIFY SCALE
 BAR IS ONE INCH ON ORIGINAL DRAWING

DESIGN: K. SMOOT
 DRAWN: K. SMOOT
 REVIEW: S. COHEN
 CHECKED: S. COHEN
 APPROVED: K. SMOOT

RIVERTON CITY
 MIDAS CREEK TRAIL
 RIVERTON, UTAH

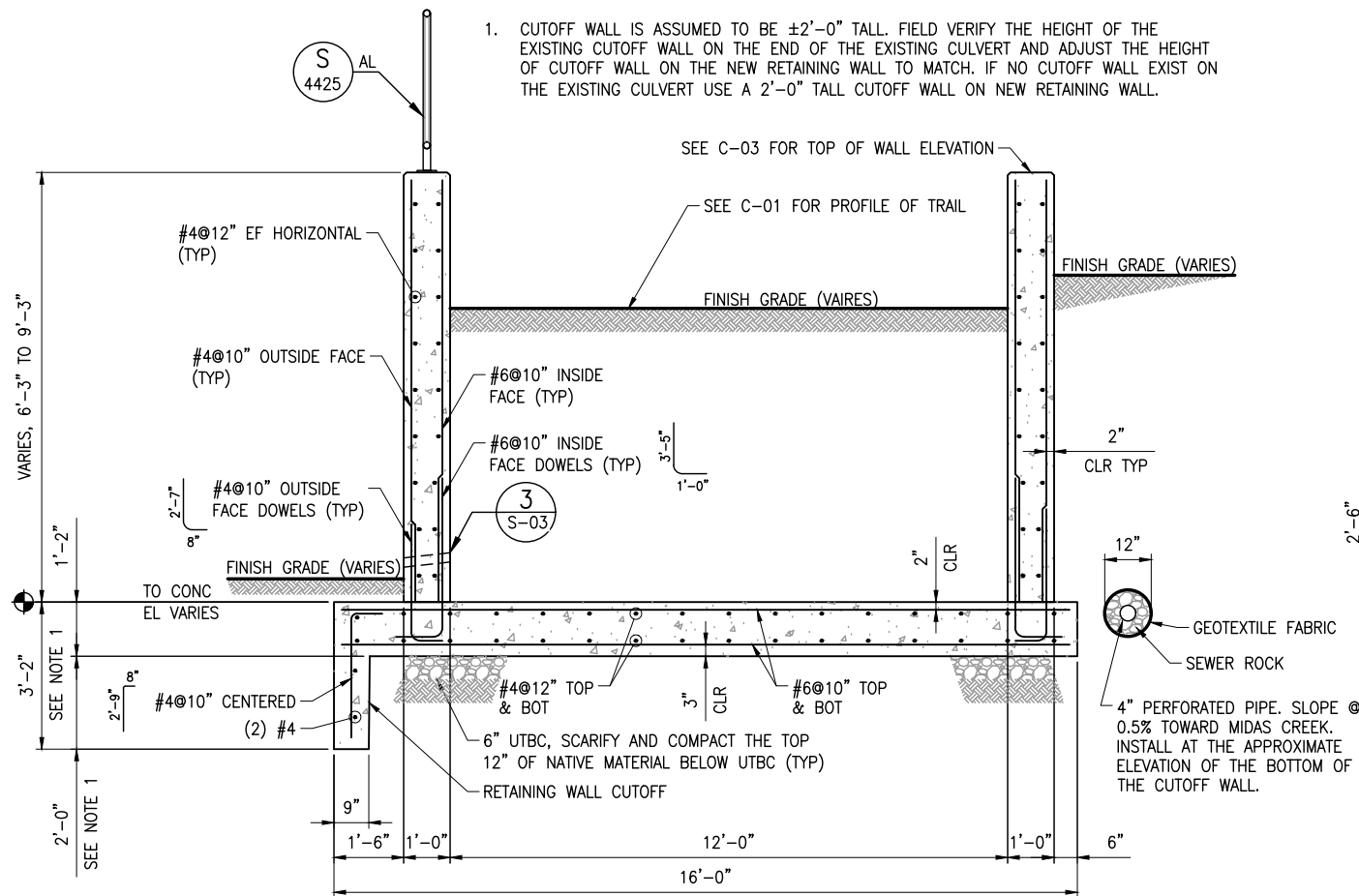
STRUCTURAL
RETAINING WALL SECTIONS AND DETAILS
 PROJECT NUMBER: 066-22-04

DATE: APRIL 2023

DRAWING NO. **S-03**
 SHEET 11 OF 13

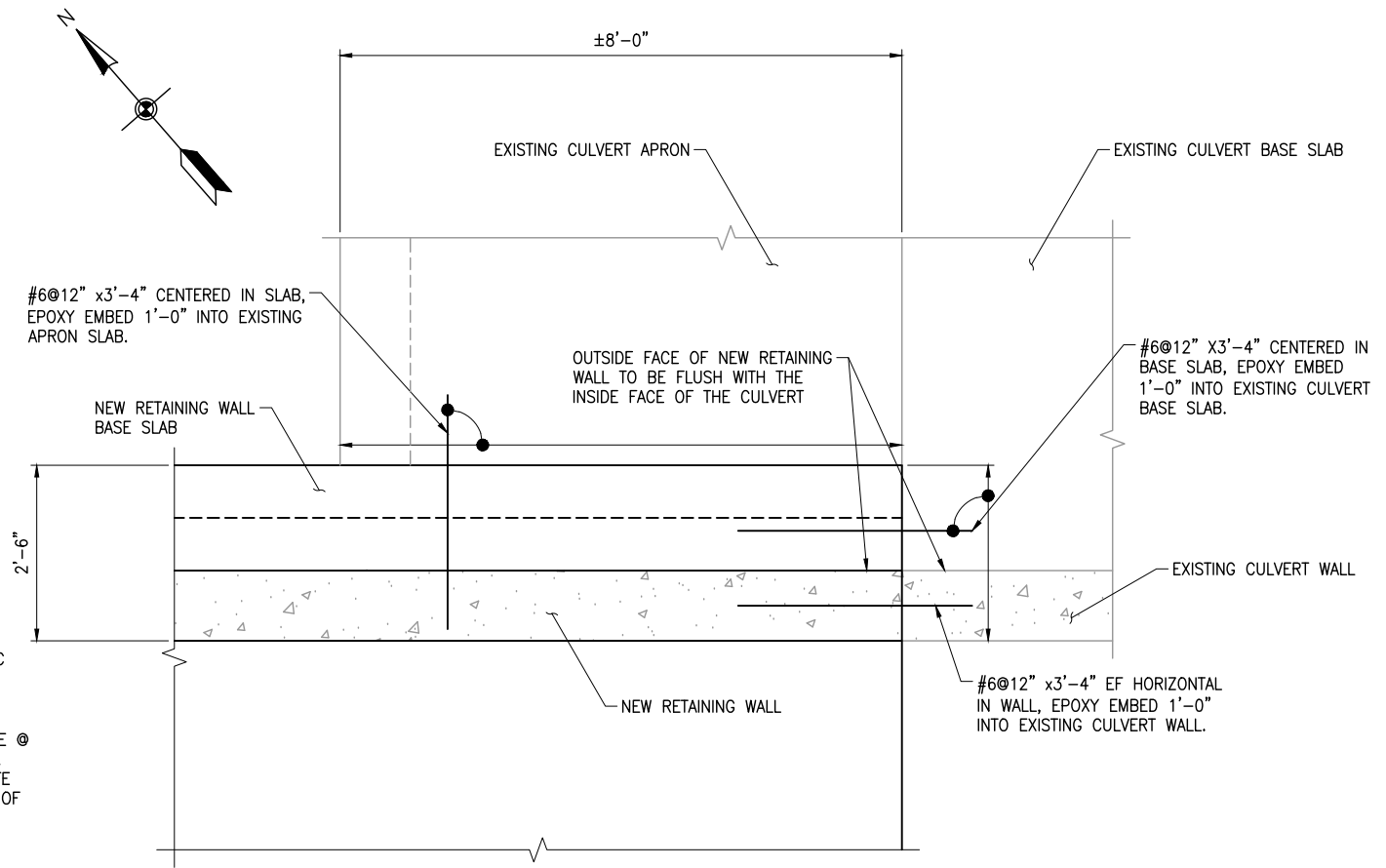
SECTION NOTES:

- CUTOFF WALL IS ASSUMED TO BE ±2'-0" TALL. FIELD VERIFY THE HEIGHT OF THE EXISTING CUTOFF WALL ON THE END OF THE EXISTING CULVERT AND ADJUST THE HEIGHT OF CUTOFF WALL ON THE NEW RETAINING WALL TO MATCH. IF NO CUTOFF WALL EXIST ON THE EXISTING CULVERT USE A 2'-0" TALL CUTOFF WALL ON NEW RETAINING WALL.



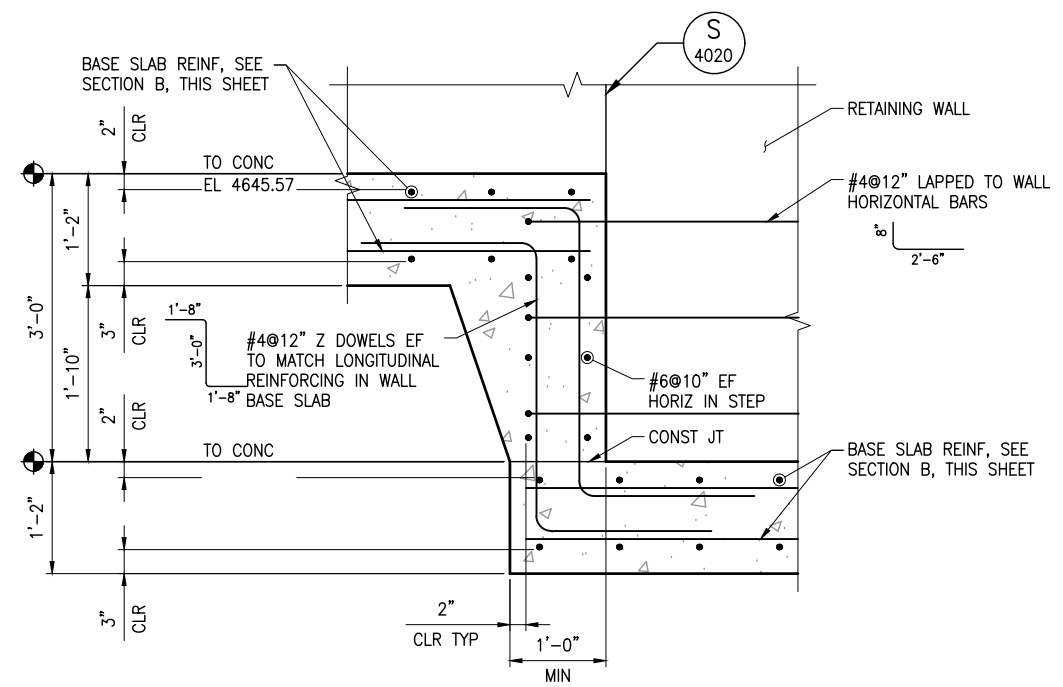
SECTION
 SCALE: 1/2"=1'-0"

B
 S-02



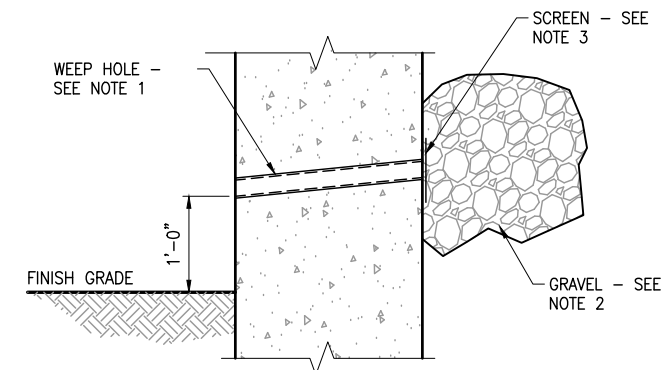
DETAIL
 SCALE: 3/4"=1'-0"

1
 S-02



DETAIL
 SCALE: 1"=1'-0"

2
 S-02



WEEP HOLE NOTES:

- 2" DIA DRAINS AT 6' MAXIMUM CENTER TO CENTER. EXPOSED DRAINS TO BE LOCATED ±3" ABOVE FINISH GRADE.
- 2 CUBIC FEET OF ASTM D448 SIZE 2 COARSE DRAINROCK ENCAPSULATED IN A NONWOVEN GEOTEXTILE FABRIC, SECURELY TIED. GEOTEXTILE FABRIC TO CONFORM TO FOLLOWING:
 - HAVE AN AOS NOT GREATER THAN U.S. SIEVE No. 40.
 - HAVE A PERMITIVITY OF AT LEAST 0.5 1/SEC.
- 8" SQUARE STAINLESS STEEL WIRE MESH HARDWARE CLOTH (4 OPENINGS PER INCH AND MINIMUM WIRE DIAMETER OF 0.03").

DETAIL
 SCALE: 1"=1'-0"

3
 S-03

NO.	DATE	REV. BY	DESCRIPTION

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

DESIGN: K. BALLENTINE
DRAWN: S. RIGGS

REVIEW: K. BALLENTINE
CHECKED: K. BALLENTINE
APPROVED: K. BAGLEY

RIVERTON CITY
RIVERTON, UTAH
MIDAS CREEK TRAIL

CIVIL

GENERAL CIVIL DETAILS - 1

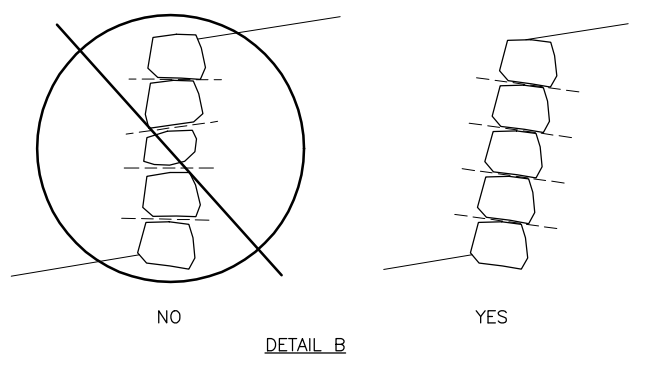
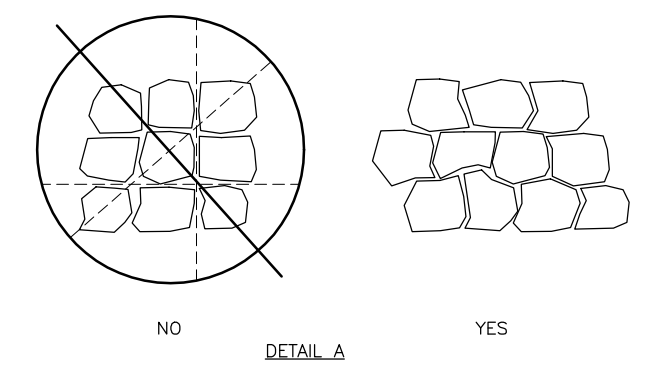
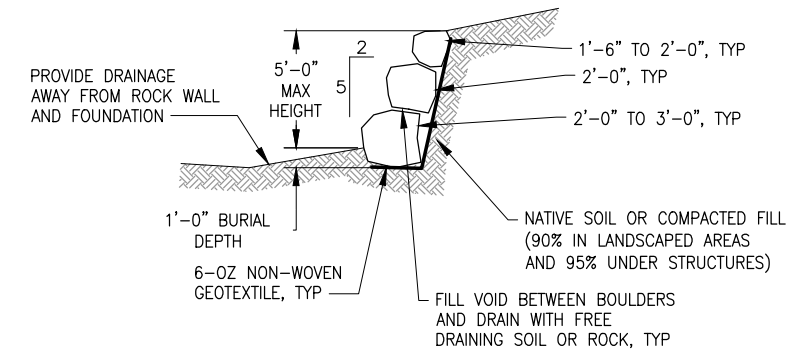
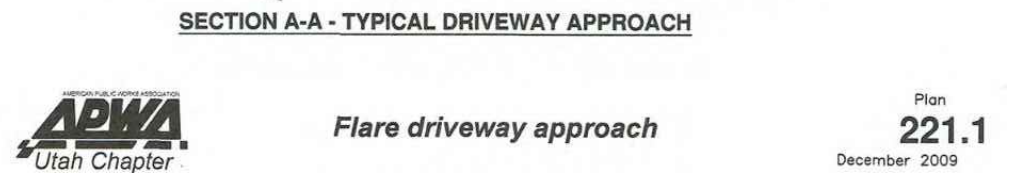
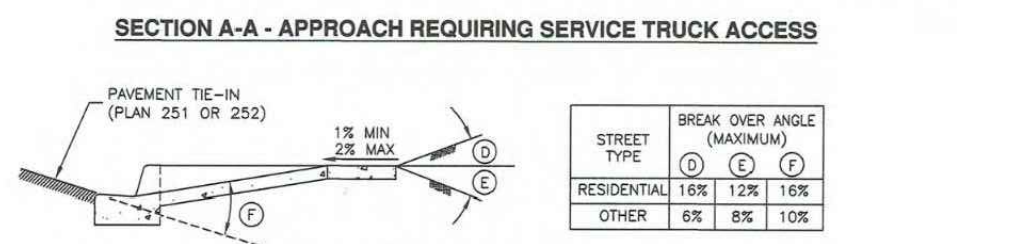
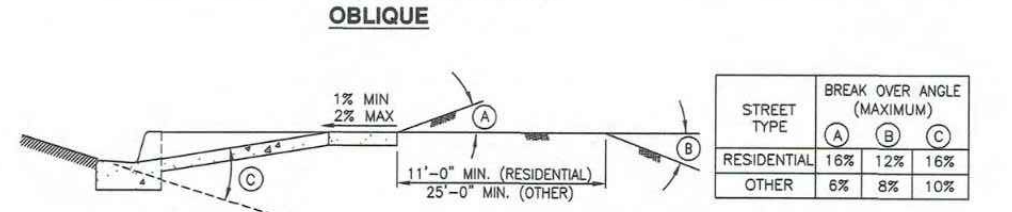
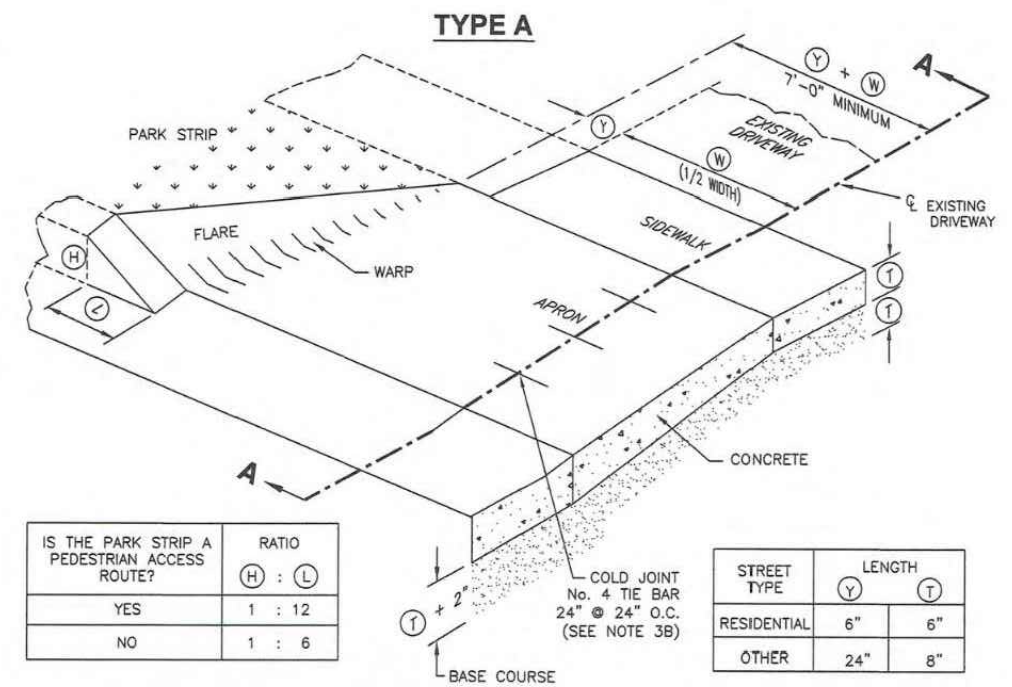
DATE: APRIL 2023
PROJECT NUMBER: 066-22-04

DRAWING NO. **GC-01**
SHEET 12 OF 13

ROCK STACKING CONSTRUCTION GUIDELINES:

ROCKS SHOULD BE STACKED IN GENERAL ACCORDANCE WITH THE ASSOCIATED ROCKERY CONTRACTORS (ARC) ROCKERY CONSTRUCTION GUIDELINES, SUMMARIZED AS FOLLOWS:

- ROCKS SHOULD BE PLACED SO THAT THERE ARE NO CONTINUOUS JOINT PLANES IN EITHER THE VERTICAL OR LATERAL DIRECTION (SEE DETAIL A).
- WHEREVER POSSIBLE, EACH ROCK SHOULD BEAR ON AT LEAST TWO ROCKS BELOW IT.
- THE UPPER PLANE OF EACH ROCK BETWEEN COURSES (THE TOP SURFACE OF ROCK), SHOULD SLOPE BACK TOWARDS THE SLOPE FACE AND AWAY FROM THE FACE OF THE ROCK WALL (SEE DETAIL B).



ROCK RETAINING WALL
SCALE: NTS

GENERAL STRUCTURAL NOTES

GENERAL

- THE SPECIFICATIONS AND REQUIREMENTS INDICATED ON THIS SHEET ARE INTENDED AS A BASIC SUMMARY OF THE MATERIAL CONSTRUCTION AND INSPECTION REQUIREMENTS FOR THIS PROJECT, AS INCLUDED IN THE PROJECT SPECIFICATIONS. ADDITIONAL AND MORE STRINGENT REQUIREMENTS ARE GIVEN IN THOSE SPECIFICATIONS. IN THE EVENT OF A CONFLICT BETWEEN THESE GENERAL NOTES AND THE REQUIREMENTS GIVEN IN THE PROJECT SPECIFICATIONS, CONTACT THE ENGINEER FOR CLARIFICATION ON WHICH GOVERNS.
- FOR LOCATION AND DIMENSIONS OF SLEEVES, CURBS, OPENINGS, AND DEPRESSIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS, SEE CIVIL DRAWINGS. THE CONTRACTOR SHALL VERIFY AND COORDINATE PENETRATIONS SHOWN ON THE OTHER PROJECT DRAWINGS, WHETHER THEY ARE SHOWN ON THE STRUCTURAL DRAWINGS OR NOT.
- EMBEDDED ITEMS, SUCH AS PIPE SLEEVES, CONDUITS, AND INSERTS SHALL ALL BE RIGIDLY INSTALLED IN PLACE BEFORE CONCRETE IS POURED. SEE CIVIL DRAWINGS FOR ITEMS REQUIRING SLEEVES AND EMBEDMENTS IN CONCRETE, WHICH ARE NOT SHOWN ON THE STRUCTURAL DRAWINGS.
- NO STRUCTURAL MEMBER SHALL BE CUT FOR PIPES, DUCTS, ETC. UNLESS SPECIFICALLY DETAILED OR APPROVED IN WRITING BY THE ENGINEER.
- DESIGN DETAILS AS SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND APPLY TO ALL SIMILAR SITUATIONS OCCURRING ON THE PROJECT, WHETHER OR NOT THEY ARE SPECIFICALLY REFERENCED IN EACH LOCATION. CONSULT THE ENGINEER FOR CONCURRENCE PRIOR TO CONSTRUCTION.
- SUBMIT DRAWINGS AND RECEIVE REVIEW OF ALL STRUCTURAL RELATED SHOP DRAWINGS PRIOR TO ERECTION OR CONSTRUCTION.
- APPLICABLE BUILDING CODE FOR THE PROJECT IS THE 2018 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC).

FOUNDATIONS

- PROVIDE AND PLACE 6" MINIMUM COMPACTED THICKNESS OF UNTREATED BASE COURSE BENEATH ALL SLABS/FOOTINGS. COMPACTED UNTREATED BASE COURSE FILL TO EXTEND FROM BOTTOM OF SLAB/FOOTING DOWN TO UNDISTURBED EARTH AND TO EXTEND MINIMUM 1'-0" HORIZONTALLY BEYOND THE EDGE OF ALL FOOTINGS OR SLABS.
- FOUNDATIONS ARE DESIGNED FOR NET ALLOWABLE BEARING PRESSURE OF 1500 PSF.
- DO NOT PLACE BACKFILL AGAINST CANTILEVERED WALLS UNTIL THE CONCRETE IN THOSE WALLS HAS ATTAINED 100% OF ITS SPECIFIED COMPRESSIVE STRENGTH.
- DESIGN AND INSTALL ALL REQUIRED SHORING TO PREVENT SUBSIDENCE OR DAMAGE TO ADJACENT EXISTING STRUCTURES, STREETS, UTILITIES, ETC.
- OBTAIN APPROVAL OF FOUNDATION BEARING SURFACES BY ENGINEER/SPECIAL INSPECTOR PRIOR TO PLACING UNTREATED BASE COURSE FILL.

FORMWORK, SHORING, AND BRACING

- CONFORM TO ACI 347 "RECOMMENDED PRACTICE FOR CONCRETE FORMWORK" FOR DESIGN AND CONSTRUCTION OF CONCRETE FORMWORK AND BRACING. CONTRACTOR IS RESPONSIBLE FOR DESIGN AND CONSTRUCTION OF FORMWORK AND BRACING.
- STRUCTURES AS SHOWN ON THESE DRAWINGS INDICATE THE FINAL CONDITION ONLY AND DO NOT INCLUDE THE NECESSARY COMPONENTS OR EQUIPMENT FOR STRUCTURAL STABILITY DURING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR WORK RELATED TO CONSTRUCTION ERECTION METHODS, BRACING, SHORING, RIGGING, GUYS, SCAFFOLDING, FORMWORK, AND OTHER WORK AIDS REQUIRED TO SAFELY PERFORM THE WORK SHOWN.
- TEMPORARY SHORING TO REMAIN IN PLACE UNTIL ELEVATED CONCRETE SLABS HAVE REACHED 28-DAY DESIGN STRENGTH AS DETERMINED BY CYLINDER BREAKS.

CONCRETE

- ALL CONCRETE CONSTRUCTION TO CONFORM TO ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE," INCLUDING BAR BENDS AND HOOKS UNLESS SPECIFICALLY DETAILED OTHERWISE ON THESE DRAWINGS.
- CAST-IN-PLACE STRUCTURAL CONCRETE TO HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI.
- NON-STRUCTURAL ELEMENTS, SUCH AS ENCASEMENTS, CURBS, SIDEWALKS AND LEAN CONCRETE TO HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI.
- USE CEMENT CONFORMING TO ASTM C595, TYPE IP (MS), LOW ALKALI.
- ALL CONSTRUCTION JOINTS, EXPANSION JOINTS, AND OTHER TYPES OF JOINTS, OTHER THAN THOSE SPECIFICALLY SHOWN ON THE DRAWINGS TO BE APPROVED BY THE ENGINEER PRIOR TO PLACING CONCRETE.
- PROVIDE 3/4-INCH CHAMFER AT ALL EXPOSED EDGES AND CORNERS UNLESS NOTED OTHERWISE.
- BEFORE PLACING THE SECOND POUR AT CONSTRUCTION JOINTS, THOROUGHLY CLEAN AND ROUGHEN ALL JOINT SURFACES TO A MINIMUM AMPLITUDE OF 1/4 INCH.

REINFORCEMENT STEEL

- PROVIDE REINFORCEMENT STEEL CONFORMING TO ASTM A615, GRADE 60 EXCEPT WHERE WELDING IS PERMITTED BY THE ENGINEER. PROVIDE STEEL CONFORMING TO ASTM A706 WHEN WELDING IS PERMITTED.
- PROVIDE WELDED WIRE FABRIC CONFORMING TO ASTM A185.
- DIMENSIONS GIVEN FOR REINFORCING BARS ARE TO BAR CENTERS UNLESS NOTED OTHERWISE. BAR COVER IS THE CLEAR DISTANCE BETWEEN BAR AND CONCRETE SURFACE. CLEARANCE FOR REINFORCEMENT BARS PER THE FOLLOWING UNLESS SHOWN OTHERWISE:
WHEN PLACED AGAINST GROUND 3"
ALL OTHER CONCRETE SURFACES 2"
- UNLESS OTHERWISE NOTED, ALL HOOKS SHOWN ARE 90° STANDARD HOOK AS DEFINED IN ACI 318-14.
- LAP VERTICAL WALL BARS WITH DOWELS FROM BELOW AND EXTEND THROUGH SLABS ABOVE TO TOP FACE. BEND AND/OR LAP TO TOP SLAB REINFORCEMENT AS INDICATED.
- UNLESS OTHERWISE INDICATED, CONTRACTOR MAY SPLICE CONTINUOUS SLAB OR LONGITUDINAL BEAM BARS AT LOCATIONS OF HIS CHOOSING, EXCEPT THAT TOP BAR SPLICES ARE TO BE LOCATED AT MIDSPAN AND BOTTOM BAR SPLICES ARE TO BE LOCATED AT SUPPORTS. MINIMUM LAP REQUIREMENTS ARE AS FOLLOWS UNLESS OTHERWISE INDICATED.

LAP LENGTHS - GRADE 60								
BAR SIZE	#4	#5	#6	#7	#8	#9	#10	#11
CONCRETE DESIGN STRENGTH = 4000 PSI								
LAP LENGTH	1'-8"	2'-2"	2'-8"	3'-6"	4'-0"	5'-0"	6'-2"	7'-5"

ALUMINUM

- WHERE REQUIRED, PROVIDE ALLOY 6061-T6 FOR ALL ALUMINUM STRUCTURAL MATERIALS.
- COAT ALL ALUMINUM SURFACES IN CONTACT WITH CONCRETE OR DISSIMILAR METALS AS DETAILED IN THE SPECIFICATIONS TO PREVENT ALUMINUM-CONCRETE REACTION OR ELECTROLYTIC ACTION.
- PERFORM ALUMINUM WELDING TO CONFORM TO THE PROVISIONS OF THE LATEST STRUCTURAL WELDING CODE (AWS D1.2).

LOADING CRITERIA

- DEAD LOAD: CALCULATED FROM UNIT WEIGHT
- LATERAL EARTH PRESSURE (EFP) NON SATURATED: 60 PCF
- TRAFFIC SURCHARGE: 2 FT OF EARTH
- HYDROSTATIC FLUID PRESSURE: 62.4 PCF
- FROST DEPTH: 30 INCHES

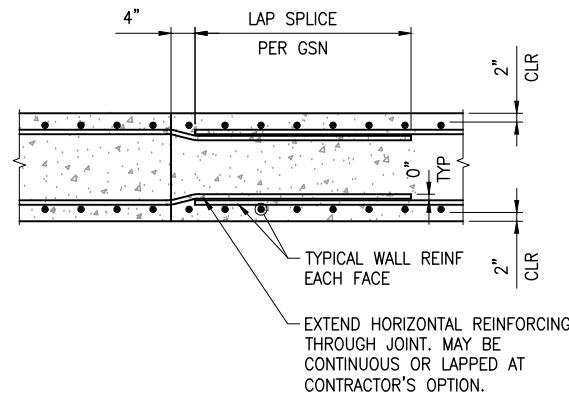
SPECIAL INSPECTIONS

- SPECIAL INSPECTION IN ACCORDANCE WITH APPROPRIATE SECTIONS OF IBC 2018, CHAPTER 17 IS REQUIRED FOR THE PROJECT.
- THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT STATING WHETHER THE WORK REQUIRING SPECIAL INSPECTION WAS, TO THE BEST OF THE INSPECTOR'S KNOWLEDGE, IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE CODE, TO THE BUILDING OFFICIAL AND THE ENGINEER.

SPECIAL INSPECTION ITEMS REQUIRED AS FOLLOWS:

- CONCRETE: (TABLE 1705.3, 2018 IBC)
- P PLACING REINFORCEMENT STEEL, INCLUDING POST-TENSIONING.
 - C WELDING REINFORCEMENT STEEL (IF APPROVED BY ENGINEER).
 - P PLACING ANCHOR BOLTS AND EMBEDDED PLATES.
 - P VERIFICATION OF USE OF REQUIRED MIX DESIGN.
 - C SAMPLING CONCRETE FOR STRENGTH TESTS.
 - P CURING TECHNIQUES AND APPLICATION.
 - C INSTALLATION OF POST INSTALLED ANCHORS AND MECHANICAL COUPLERS
 - P FORMING AND PLACING CONCRETE, SUBJECT TO EXCEPTIONS LISTED IN IBC
 - P VERIFICATION OF IN-SITU STRENGTH BEFORE REMOVING SHORING.

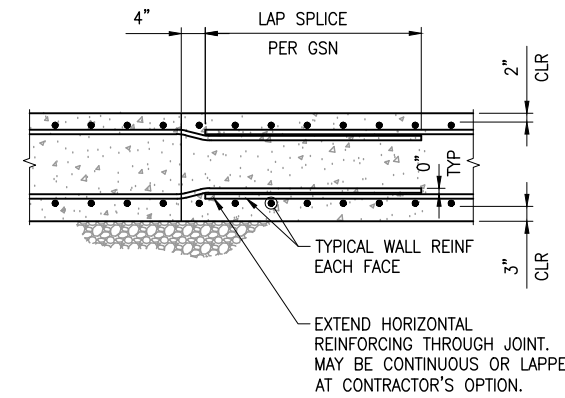
P = PERIODIC, C = CONTINUOUS



VERTICAL WALL JOINT

NOT TO SCALE

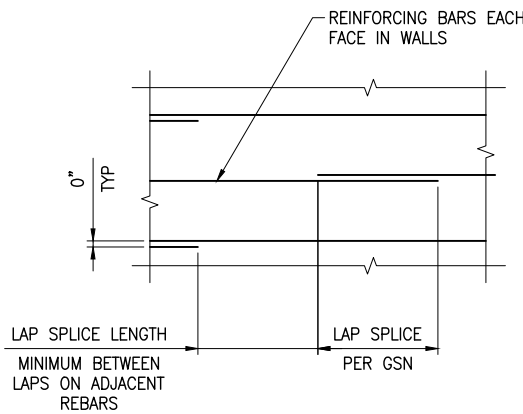
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4020



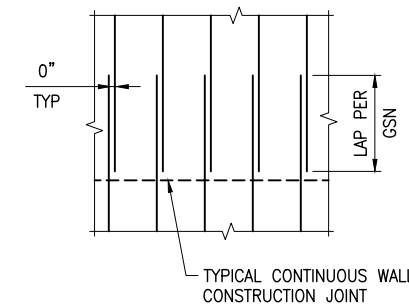
SLAB-ON-GRADE JOINTS

NOT TO SCALE

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4024



HORIZONTAL REINFORCING



VERTICAL REINFORCING

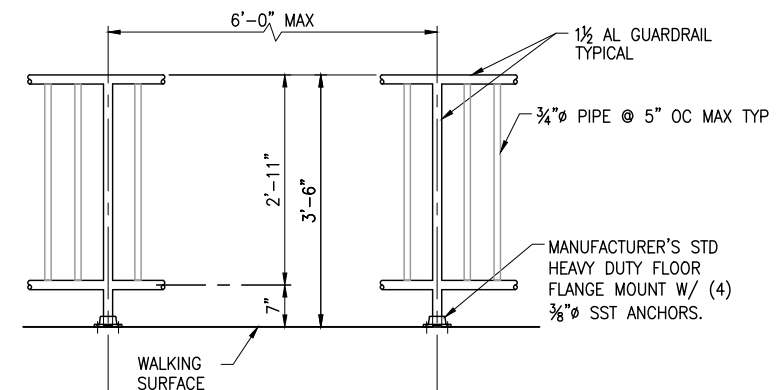
REINFORCING STEEL LAP SPLICES

NOT TO SCALE

S
4040

DETAIL NOTES:

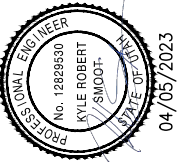
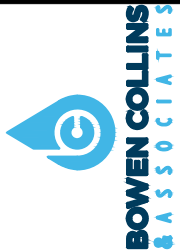
- PLACE CENTER OF FLANGE MOUNTED POSTS IN CENTER OF WALL.
- COAT ALL SURFACES OF ALUMINUM IN CONTACT WITH CONCRETE IN ACCORDANCE WITH SPECIFICATIONS.
- ALL GUARDRAILS ARE FIXED UNLESS OTHERWISE NOTED ON DRAWINGS.
- ALL GUARD RAILS ARE TO BE ALUMINUM.



PICKET GUARDRAIL

NOT TO SCALE

S
4425



NO.	DATE	REV. BY	DESCRIPTION

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

DESIGN: K. SMOOT
DRAWN: K. SMOOT
CHECKED: S. COHEN
APPROVED: K. SMOOT
REVIEW: S. COHEN
DESIGNER: K. SMOOT

MIDAS CREEK TRAIL
RIVERTON CITY, UTAH
RIVERTON, UTAH

STRUCTURAL
GENERAL STRUCTURAL NOTES AND DETAILS
DATE: MARCH 2023
PROJECT NUMBER: 066-22-04

DRAWING NO. GS-01
SHEET 13 OF 13