CONTRACT DOCUMENTS
FOR CONSTRUCTION OF THE

WOOD HOLLOW DRAINAGE IMPROVEMENTS PROJECT

Volume 2 of 2
DRAWINGS

JORDAN VALLEY WATER CONSERVANCY DISTRICT

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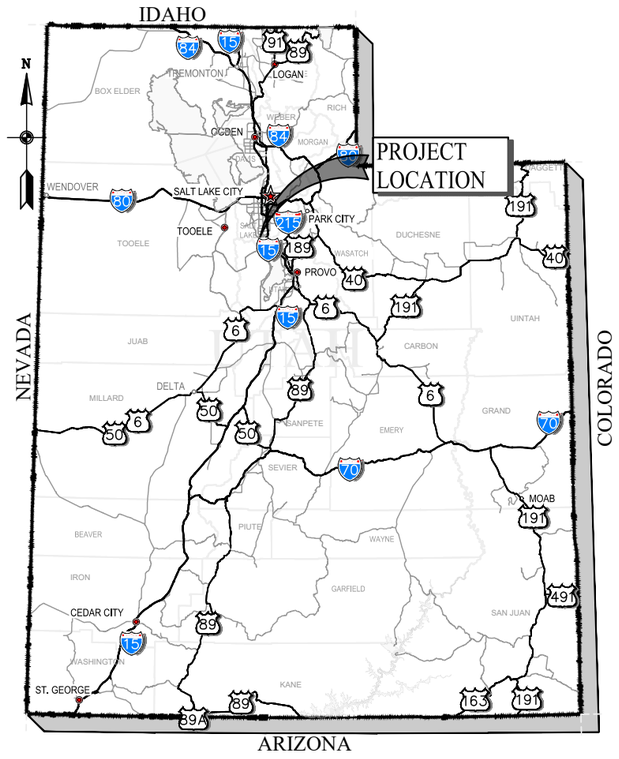
BOWEN COLLINS & ASSOCIATES

JANUARY 2026

DRAWINGS FOR CONSTRUCTION OF THE

WOOD HOLLOW DRAINAGE IMPROVEMENTS PROJECT

HERRIMAN, UTAH



PROJECT LOCATION MAP

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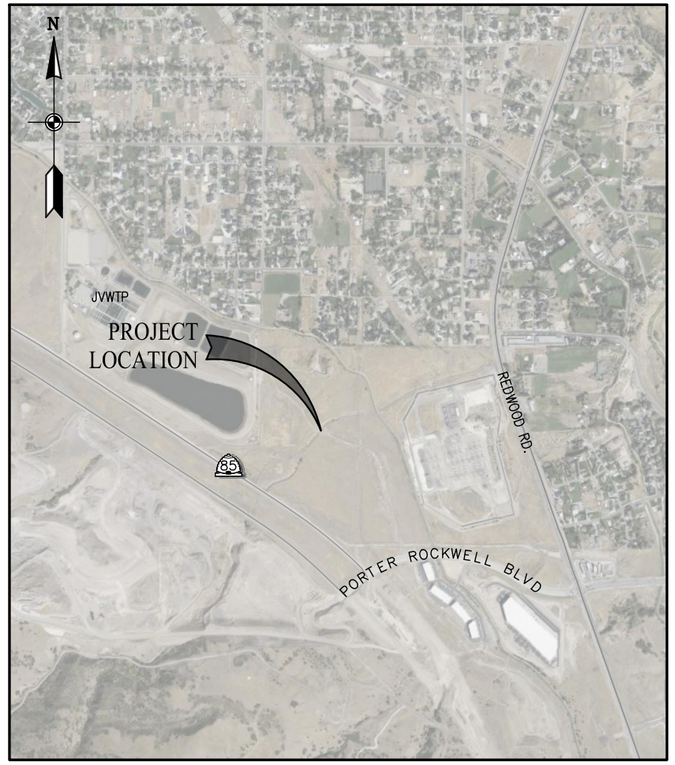
JORDAN VALLEY WATER CONSERVANCY DISTRICT



PROJECT VICINITY MAP

PROFESSIONAL ENGINEER
8280086
KAMERON D. BALLENTINE
STATE OF UTAH

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REGISTERED PROFESSIONAL ENGINEER
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01/30/26
STRUCTURAL

BOWEN COLLINS & ASSOCIATES

NO.	DATE	REV. BY	DESCRIPTION
			REVISIONS

JORDAN VALLEY WATER CONSERVANCY DISTRICT
WOOD HOLLOW DRAINAGE IMPROVEMENTS PROJECT
HERRIMAN, UTAH

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

DESIGN
DESIGN B. RYAN
DRAWN T. TANNER

REVIEW
CHECKED K. BALLENTINE
APPROVED C. NELSON

GENERAL
INDEX OF DRAWINGS, PROJECT LOCATIN AND VICINITY MAPS

DATE: JANUARY 2026
PROJECT NUMBER 010-25-01

DRAWING NO.
G-01
SHEET 01 OF 09

P:\JORDAN VALLEY WCD\010-25-01 WOOD HOLLOW DRAINAGE IMPROVEMENTS\2.0 DESIGN PHASE\2.7 DRAWINGS\SHT\0102501_G-01.dwg Plotted: 1/30/2026 1:39 PM By: Jeremy Black

@	AT
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY TRANSPORTATION OFFICIALS
AB	ANCHOR BOLT
ABBR	ABBREVIATION
ABS	ACRYLONITRILE–BUTADIENE–STYRENE
AC	ASPHALTIC CONCRETE OR ALTERNATING CURRENT OR ACTIVATED CARBON
ACI	AMERICAN CONCRETE INSTITUTE
ACP	ASPHALTIC CONCRETE PAVEMENT
ADDL	ADDITIONAL
ADJ	ADJACENT OR ADJUSTABLE
AER	AERATION
AFF	ABOVE FINISH FLOOR
AGGR	AGGREGATE
AH	AIR HANDLER
AIR CONT	AIR CONDITIONING
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AL	ALUMINUM, ALUM
ALTN	ALTERNATIVE, ALTERNATE
ANOD	ANODIZED
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
APPROX	APPROXIMATE
APVD	APPROVED
ARCH	ARCHITECTURAL
ARV	AIR RELEASE VALVE
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIAL
ASSY	ASSEMBLY
AUTO	AUTOMATIC
AUX	AUXILIARY
AVAR	AIR VACUUM AND AIR RELEASE VALVE
AWS	AMERICAN WELDING SOCIETY
AWWA	AMERICAN WATER WORKS ASSOCIATION
B & S	BELL & SPIGOT
BC	BEGIN CURVE, BOLT CIRCLE
BF	BLIND FLANGE, BUTTERFLY VALVE
BFG	BELOW FINISH GRADE
BFP	BACK FLOW PREVENTER
BFV	BUTTERFLY VALVE
BHD	BULKHEAD
BHP	BRAKE HORSEPOWER
BLDG	BUILDING
BLK	BLACK OR BLOCK
BLKG	BLOCKING
BLT	BOLT
BM	BEAM, BENCH MARK
BO	BLOW–OFF ASSEMBLY, BLOW–OFF
BOT	BOTTOM
BPS	BOOSTER PUMPING STATION
BPV	BACK PRESSURE VALVE
BRK	BRICK
BTU	BRITISH THERMAL UNIT
BTWN	BETWEEN
BUR	BUILT–UP ROOFING
BVC	BEGIN VERTICAL CURVE
BVCE	BEGIN VERTICAL CURVE ELEVATION
BVCS	BEGIN VERTICAL CURVE STATION
BW	BACK WASH, FILTER BACKWASH
C	CENTIGRADE OR CELSIUS
CAB	CABINET
CAP	CAPACITY
CARV	COMBINATION AIR RELEASE VALVE
CB	CATCH BASIN
CC	CENTER TO CENTER
CCP	CONCRETE CYLINDER PIPE
CD	CEILING DIFFUSER CHEMICAL DRAIN AND VENT
CER	CERAMIC
CFH	CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
CFR	CODE OF FEDERAL REGULATIONS
CFS	CUBIC FEET PER SECOND
CG	CHLORINE GAS
CGB	CORD GRIP BUSHING
CHBD	CHALKBOARD
CHEM	CHEMICAL
CHG	CHANGE
CHKD PL	CHECKERED PLATE
CI	CAST IRON
CIP	CAST IRON PIPE
CISP	CAST IRON SOIL PIPE
CJ	CONSTRUCTION JOINT
CJP	COMPLETE JOINT PENETRATION
CL	CHLORINATOR, CHAIN LINK, CENTERLINE OR CHLORINE

CLR	CLEAR, CLEARANCE
CLST	CEMENT LINED STEEL PIPE
CLSM	CONTROLLED LOW STRENGTH MATERIAL
CM	CENTIMETER
CML & C	CEMENT MORTAR LINED AND COATED
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
CO	CLEANOUT
COL	COLUMN
COMM	COMMUNICATION
COMB	COMBINED
CONC	CONCRETE, CONCENTRIC
COND	CONDENSER, CONDENSATE
CONN	CONNECTION
CONST	CONSTRUCTION, CONSTRUCT
CONT	CONTINUED, CONTINUOUS, CONTINUATION
COORD	COORDINATE
COP	COPPER
COTG	CLEAN–OUT TO GRADE
CPLG	COUPLING
CPS	CULINARY PUMP STATION
CPVC	CHLORINATED POLYVINYL CHLORIDE
CS	CAST STEEL OR CAUSTIC SODA
CSS	CALDWELL SUPPLEMENTAL SPECIFICATIONS
CTRD	CENTERED
CTR	CENTER
CTSK	COUNTERSUNK
CU FT	CUBIC FOOT
CU IN	CUBIC INCH
CU YD	CUBIC YARD
CULV	CULVERT
CV	CHECK VALVE
CW	COLD WATER
CWO	CHAIN WHEEL OPERATOR
CYL	CYLINDER
d	PENNY
DBA	DEFORMED ANCHOR
DBL	DOUBLE
DC	DIRECT CURRENT
DEG	DEGREE
DEMO	DEMOLITION, DEMOLISH
DEQ	DEPARTMENT OF ENVIRONMENTAL QUALITY
DET	DETAIL
DI	DUCTILE IRON, DROP INLET
DIA	DIAMETER
DIAG	DIAGONAL
DIAPH	DIAPHRAGM
DIFF	DIFFUSER
DIM	DIMENSION
DIP	DUCTILE IRON PIPE
DIR	DIRECTION
DISCH	DISCHARGE
DIST	DISTANCE
DIV	DIVISION
D–LOAD	LOADING CONDITION FOR RCP
DMPR	DAMPER
DN	DOWN, DECANT
DOT	DEPARTMENT OF TRANSPORTATION
DP	DAMP PROOFING
DR	DOOR, DRAIN
DS	DRENCH SHOWER & EYE WASH, DOWNSPOUT
DWG	DRAWING
DWL	DOWEL
E(UG)	ELECTRICAL (UNDERGROUND)
E(OH)	ELECTRICAL (OVERHEAD POWER)
E	EAST
EA	EACH
EB	EXPANSION BOLT
EC	END CURVE
ECC	ECCENTRIC
EF	EACH FACE, EXHAUST FAN
EFF	EFFLUENT
EG	EXISTING GRADE
EL	ELEVATION
ELB	ELBOW
ELEV	ELEVATION
ELEC	ELECTRICAL, ELECTRONIC
EMB	EMBEDMENT
EMER	EMERGENCY
ENCL	ENCLOSURE
ENG	ENGINE
ENGR	ENGINEER
EP	EDGE OF PAVEMENT
EPDM	ETHYL PROPYLENE DIENE MONOMER
EPS	EXPANDED POLYSTYRENE
EQ	EQUAL

EQL SP	EQUALLY SPACED
EQUIP	EQUIPMENT
ETC	ETCETERA
EVAP	EVAPORATOR
EVC	END VERTICAL CURVE
EVCE	END VERTICAL CURVE ELEVATION
EVCS	END VERTICAL CURVE STATION
EW	EACH WAY, EYE WASH
EXH	EXHAUST
EXIST	EXISTING
EXP ANR	EXPANSION BOLT, ANCHOR
EXP JT	EXPANSION JOINT
EXT	EXTERIOR, EXTENSION, EXTERNAL
F	FAHRENHEIT, FACE
F TO F	FACE TO FACE
FAB	FABRICATION, FABRICATE, OR FABRICATED
FB	FLAT BAR
FC	FLEXIBLE COUPLING
FCA	FLANGE COUPLING ADAPTER
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FDN	FOUNDATION
FDR	FEEDER
FEXT	FIRE EXTINGUISHER
FF	FLAT FACE, FAR FACE, FINISH FLOOR
FG	FINISH GRADE, FLOW GLASS
FH	FIRE HYDRANT
FLR	FLOOR
FL	FLOW LINE
FLEX	FLEXIBLE
FLG	FLANGE
FM	FORCE MAIN (SANITARY SEWER)
FND	FOUND
FNSH	FINISH
FO	FIBER OPTIC
FRP	FIBERGLASS REINFORCED PLASTIC
FW	FINISH WATER
G	GAS
GA	GAGE, GAUGE
GAL	GALLON
GALV	GALVANIZED
GEN	GENERATOR
GFI	GROUND FAULT INTERRUPTER
GI	GALVANIZED IRON
GIS	GEOGRAPHIC INFORMATION SYSTEM
GL	GLASS
GLAZ	GLAZING
GLV	GLOBE VALVE
GND	GROUND
GPD	GALLONS PER DAY
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GR	GRADE
GR BRK	GRADE BREAK, GRADE CHANGE
GRTG	GRATING
GRV	GROOVED
GSP	GALVANIZED STEEL PIPE
GV	GATE VALVE
GYP	GYPSUM BOARD
H	HEIGHT
HAS	HEADED ANCHOR STUD
HB	HOSE BIBB
HD	HUB DRAIN
HDPE	HIGH DENSITY POLYETHYLENE
HDR	HEADER
HDW	HARDWARE
HEX	HEXAGONAL
HGR	HANGER
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HP	HORSEPOWER, HIGH PRESSURE,HEAT PUMP, HIGH POINT
HR	HEATING RETURN, HOUR, HOSE RACK
HS	HIGH STRENGTH
HSS	HOLLOW STRUCTURAL SECTION
HTG	HEATING
HTR	HEATER
HV	HOSE VALVE
HVAC	HEATING, VENTILATING AND AIR CONDITIONING
HWL	HIGH WATER LEVEL
HWO	HANDWHEEL OPERATED
HYD	HYDRANT, HYDRAULIC

ICFM	INLET CUBIC FEET PER MINUTE
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
IF	INSIDE FACE
IN	INCH
IN LB	INCH–POUND
INFL	INFLUENT
INSUL	INSULATING
INVT	INVERT
IOB	INLET OUTLET BYPASS
IPS	IRON PIPE SIZE
IRR	IRRIGATION
ISPWC	IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION
ITD	IDAHO TRANSPORTATION DEPARTMENT
JA	JORDAN AQUEDUCT
JT	JOINT
JTS	JOINTS
JVWCD	JORDAN VALLEY WATER CONSERVANCY DISTRICT
JVWTP	JORDAN VALLEY WATER TREATMENT PLANT
K	KELVIN, KILO OR THOUSAND POUNDS
KG	KILOGRAM
KV	KILOVOLT
KW	KILOWATT
KWH	KILOWATT HOUR
L	LEFT OR LITER
LAB	LABORATORY
LAV	LAVATORY
LB	POUND
LC	LENGTH OF CURVE
LF	LINEAR FEET
LG	LENGTH OR LONG
LH	LEFT HAND
LIP	LIP OF GUTTER
LL	LIVE LOAD
LLV	LONG LEG VERTICAL
LOL	LENGTH OF LINE
LP	LOW POINT
LR	LONG RADIUS
LT	LIGHT, LEFT
LVL	LEVEL
LWL	LOW WATER LEVEL
LWR	LOWER
M	METER, MALE (PIPE THREAD)
MACH	MACHINE
MAN	MAGNETIC, MANUAL
MATL	MATERIAL
MAX	MAXIMUM
MB	MACHINE BOLT
MCC	MOTOR CONTROL CENTER
MECH	MECHANICAL, MECHANISM
MEMB	MEMBRANE
MET	METAL
MFR	MANUFACTURER
MG	MILLION GALLONS
MGD	MILLION GALLONS PER DAY
MH	MANHOLE, MONORAIL HOIST
MI	MALLEABLE IRON
MID	MIDDLE
MIL	1/1,000 INCH
MIN	MINIMUM OR MINUTE
MISC	MISCELLANEOUS
MJ	MECHANICAL JOINT
MO	MASONRY OPENING
MPH	MILES PER HOUR
MTG	MOUNTING
MTL	METAL OR MATERIAL
MTR	MOTOR
MWS	MAXIMUM WATER SURFACE
N	NORTH
NAVD	NORTH AMERICAN VERTICAL DATUM
NBS	NATIONAL BUREAU OF STANDARDS
NC	NORMALLY CLOSED
NE	NORTHEAST
NEC	NATIONAL ELECTRIC CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURES ASSOCIATION
NF	NEAR FACE
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NO	NUMBER OR NORMALLY OPEN
NOM	NOMINAL
NPT	NATIONAL PIPE THREAD
NS	NEAR SIDE
NSF	NATIONAL SANITATON FOUNDATION

NTS	NOT TO SCALE
NW	NORTHWEST
O TO O	OUT TO OUT
OC	ON CENTER, OVER–CROSSING
OD	OUTSIDE DIAMETER, OVERALL DIMENSION
OF	OUTSIDE FACE, OVERFLOW
OFS	OVERFLOW STRUCTURE
OH	OVERHEAD
OPER	OPERATOR, OPERATING
OPNG	OPENING
OPP	OPPOSITE
ORIG	ORIGINAL
OVHD	OVERHEAD
OZ	OUNCE
PC	PORTLAND CEMENT, POINT OF CURVE OR PRIMARY CLARIFIER
PCC	PORTLAND CEMENT CONCRETE
PCF	POUNDS PER CUBIC FOOT
PE	PLAIN END, POLYELECTROLYTE POLYMER, POLYETHYLENE
PG	PRESSURE GAUGE
pH	HYDROGEN ION CONCENTRATION
PI	PLANT INFLUENT, POINT OF INTERSECTION
PJF	PREMOLDED JOINT FILLER
PL	PLATE, PROPERTY LINE, PLACE
PLYWD	PLYWOOD
PM	PUMP, PROPELLER METER
POB	POINT OF BEGINNING
PP	POTASSIUM PERMANGANATE
PPD	POUNDS PER DAY
PPH	POUNDS PER HOUR
PPM	PARTS PER MILLION
PR	PAIR
PRC	POINT OF REVERSE CURVE
PREFAB	PREFABRICATED
PRI	PRIMARY
PRV	PRESSURE REGULATING/REDUCING VALVE
PS	PRESSURE SWITCH, PUMP STATION
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE INCH GAUGE
PT	POINT OF TANGENT, PRESSURE TREATED
PTDF	PRESSURE TREATED DOUGLAS FIR
PV	PAVEMENT
PVC	POLYVINYL CHLORIDE
PVI	POINT OF VERTICAL INTERSECTION
PW	POTABLE WATER
RAD	RADIUS
RC	REINFORCED CONCRETE
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN OR ROAD
RDCR	REDUCER, REDUCING
RECIRC	RECIRCULATION
RED	REDUCING
REF	REFERENCE, REFER
REG	REGULATING, REGISTER
REINF	REINFORCE, REINFORCED
REQD	REQUIRED
REV	REVISION
RF	ROOF, RAISED FACE
RND	ROUND
RPM	REVOLUTIONS PER MINUTE
RP	RADIUS POINT
RS	RAW SEWAGE
RST	REINFORCING STEEL, RESET
RT	REGULATING TANK, RADIOGRAPHIC, RIGHT
RV	ROOF VENT
R/W	RIGHT OF WAY
RW	RAW WATER
S	SOUTH, SECOND
SA	SAMPLE, SAMPLE LINE
SCFM	STANDARD CUBIC FEET PER MINUTE
SCH	SCHEDULE
SD	STORM DRAIN
SECT	SECTION
SHT	SHEET
SIM	SIMILAR
SLP	SLOPE
SP	SPACING, STATIC PRESSURE

SPA	SPACED
SPEC	SPECIFIED, SPECIFICATION
SPECS	SPECIFICATIONS
SPG	SPACING
SPKR	SPEAKER
SPLY	SUPPLY
SPRT	SUPPORT
SQ	SQUARE
SQ FT	SQUARE FOOT
SR	SUPPLY REGISTER
SS	SANITARY SEWER, SERVICE SINK
SST	STAINLESS STEEL
STA	STATION
STD	STANDARD
STIFF	STIFFENER
STL	STEEL
STRL	STRUCTURAL
SUC	STRUCTURAL UNDERDRAIN COLLECTOR
SWA	SOUTHWEST AQUEDUCT
SWPP	STORM WATER POLLUTION PREVENTION
SYM	SYMBOL
SYMM	SYMMETRICAL
SYS	SYSTEM
T	THICKNESS, TOP, TOILET
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
TAN	TANGENT
TBC	TOP BACK OF CURB
TBM	TEMPORARY BENCH MARK
TDH	TOTAL DYNAMIC HEAD
TECH	TECHNICAL
TEL	TELEPHONE
TEMP	TEMPERATURE, TEMPORARY
THK	THICK
THR'D	THREADED
TK	TANK
TO	TOP OF
TOC	TOP OF CONCRETE
TOG	TOP OF GRADE
TP	TELEPHONE POLE, TURNING POINT
TW	TOP OF WALL
TYP	TYPICAL
UBC	UNIFORM BUILDING CODE
UD	UNDERDRAIN
UG	UNDERGROUND
UH	UNIT HEATER
UL	UNDERWRITERS LABORATORIES
UNO	UNLESS NOTED OTHERWISE
USBR	U.S. BUREAU OF RECLAMATION
V	VALVE, VENT, VOLT, VACUUM
VAR	VARIES, OR VARIABLE
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
VERT	VERTICAL
VIC	VICTAULIC COUPLING
VOL	VOLUME
VPI	VERTICAL POINT OF INFLECTION
VSS	VOLATILE SUSPENDED SOLIDS
VTC	VENT THROUGH CEILING
VTR	VENT THROUGH ROOF
W	WEST, WASTE, WIDE FLANGE (BEAM)
W/	WITH
W/O	WITHOUT
WC	WATER COLUMN OR WATER CLOSET
WCO	WALL CLEANOUT
WD	WOOD
WH	WATER HEATER
WS	WATER STOP, WATER SURFACE
WSP	WELDED STEEL PIPE
WSTP	WATER STOP
WT	WEIGHT
WWM	WELDED WIRE MESH
XMFR	TRANSFORMER
XMTR	TRANSMITTER
XS	EXTRA STRONG
YD	YARD
YP	YARD PIPING
YR	YEAR

BOWEN COLLINS & ASSOCIATES

PROFESSIONAL ENGINEER 8280086 BENJAMIN C. BALLENTINE STATE OF UTAH 01/30/26

NO.	DATE	REV. BY	DESCRIPTION
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JORDAN VALLEY WATER CONSERVANCY DISTRICT
WOOD HOLLOW DRAINAGE IMPROVEMENTS PROJECT
HERRIMAN, UTAH

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CHECKED K. BALLENTINE
APPROVED C. NELSON

DESIGN
DESIGN B. RYAN
DRAWN T. TANNER

GENERAL
ABBREVIATIONS

PROJECT NUMBER 010-25-01
DATE: JANUARY 2026

DRAWING NO.
G-02
SHEET 02 OF 09

P:\JORDAN VALLEY WCD\010-25-01 WOOD HOLLOW DRAINAGE IMPROVEMENTS\2.0 DESIGN PHASE\2.7 DRAWINGS\SHT\0102501_G-02.dwg Plotted: 1/30/2026 1:39 PM By: Jeremy Black

SECTION IDENTIFICATION

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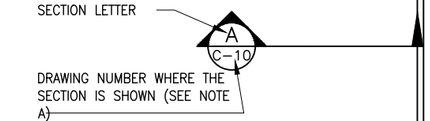

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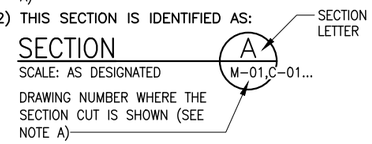
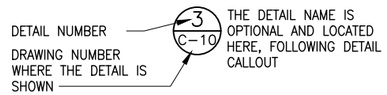


DETAIL IDENTIFICATION

(1) DETAIL IDENTIFICATION SHOWN ON DRAWING AS:



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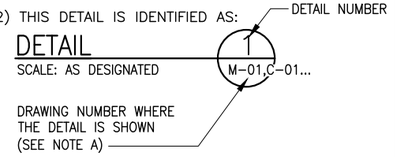
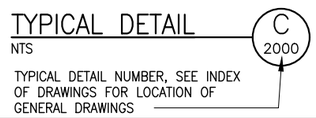


TYPICAL DETAIL IDENTIFICATION



DRAWING IDENTIFICATION SYSTEM

LETTER	DISCIPLINE
G	GENERAL
C	CIVIL
CP	CORROSION PROTECTION
L	LANDSCAPE
A	ARCHITECTURAL
S	STRUCTURAL
M	MECHANICAL
E	ELECTRICAL
I	INSTRUMENTATION
GC	GENERAL CIVIL DETAILS
GA	GENERAL ARCHITECTURAL DETAILS
GS	GENERAL STRUCTURAL DETAILS
GM	GENERAL MECHANICAL DETAILS
GE	GENERAL ELECTRICAL DETAILS
GI	GENERAL INSTRUMENTATION DETAILS

S-02
- S — DISCIPLINE
- 02 — INDIVIDUAL DRAWING NUMBER

NOTES:

A. IF PLAN AND SECTION (OR DETAIL CALL-OUT AND DETAIL) ARE SHOWN ON SAME DRAWING, DRAWING NUMBER IS REPLACED BY A HORIZONTAL LINE.

B. ELECTRICAL SYMBOLS SHOWN ON ELECTRICAL DRAWINGS. FOR WELDING SYMBOLS USE AMERICAN WELDING SOCIETY STANDARD SYMBOLS. SEE AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL.

- 1 — COORDINATE IDENTIFICATION
- ELEVATION INDICATOR
- SECTION CORNER
- BENCH MARK
- MONUMENT INDICATOR
- POTHOLE
- TEST HOLE
- BORING HOLE
- SECTION LINE
- PROPERTY LINE
- EASEMENT
- PARCEL
- R/W — RIGHT-OF-WAY
- NEW ASPHALT
- EXISTING ASPHALT
- CENTERLINE
- 4500 — CONTOUR LINE, FINISHED GRADE
- 4500 — CONTOUR LINE, EXISTING GRADE
- 4500.20 — FINISHED ELEVATION
- (4500.20) — EXISTING ELEVATION
- TOP / TOE — CUT OR FILL SLOPE TO BE CONSTRUCTED
- SILT FENCE
- X—X — FENCE
- RAILING
- DITCH
- CULVERT
- RIPRAP
- TREE LINE/VEGETATION
- EXISTING STRUCTURE OR FACILITY
- NEW STRUCTURE OR FACILITY
- FUTURE STRUCTURE OR FACILITY
- NEW PIPELINE (CIVIL SHEETS)
- NEW PIPELINE 10" DIA AND SMALLER (CIVIL SHEETS)
- EXISTING UTILITY PIPELINE
- ATMS — ATMS
- CTV — 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
- TV — CABLE BOX
- CATCH BASIN
- EB — ELECTRICAL BOX
- HYDRANT
- G — GAS MANHOLE
- S — SEWER MANHOLE
- D — STORM DRAIN MANHOLE
- TELEPHONE MANHOLE
- W — WATER MANHOLE
- WM — WATER METER

- POWER POLE
- TB — TELEPHONE BOX
- LIGHT POLE ONE LUMINAIRE
- LIGHT POLE TWO LUMINAIRS
- LIGHT POLE
- STREET LIGHT WITH BRACKET
- TO BE REMOVED OR ABANDONED
- MASONRY
- STEEL
- INSULATION
- GRAVEL
- CONCRETE
- EARTH
- SAND
- ALUMINUM OR METAL DECKING
- CHECKERED PLATE
- SPAN — 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
- SWA AND JA AQUADUCTS

- 1 — REVISION WORK
- 3 — REFERENCE TO NOTE
- 1 — COLUMN LINE GRID
- A — WINDOW TYPE
- 05 — DOOR NUMBER
- 05 — ROOM NUMBER

GENERAL NOTES:

1. STANDARD SPECIFICATIONS:
WHEN REFERENCE IS MADE TO STANDARD SPECIFICATIONS, THEY REFER TO THE SPECIFICATIONS INCLUDED IN THIS PROJECT, AND APWA MANUAL OF STANDARD SPECIFICATION OF MOST RECENT EDITION.
2. PERMITS:
CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMIT(S) AND COMPLY WITH THE STANDARDS, REGULATIONS AND GENERAL REQUIREMENTS DICTATED BY EACH INDIVIDUAL PERMIT.
3. CHANGES:
IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM CONSTRUCTION AS PER THE CONTRACT DOCUMENTS. ANY ADDITION, DELETIONS, OR CHANGES SHALL FIRST MEET WITH THE APPROVAL OF THE ENGINEER AND THE OWNER.
4. SYMBOLS:
SYMBOLS, LEGENDS, AND PIPE USE IDENTIFICATIONS SHOWN SHALL BE FOLLOWED THROUGHOUT THE PLANS WHEREVER APPLICABLE. NOT ALL OF THE VARIOUS SYMBOLS ARE NECESSARILY USED OR SHOWN IN THE PROJECT.
5. EXISTING FACILITIES:
THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING UTILITIES AND IMPROVEMENTS, WHICH ARE TO REMAIN IN PLACE FROM DAMAGE. ALL SUCH UTILITIES AND IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR RECONSTRUCTED TO ORIGINAL OR BETTER CONDITION TO THE SATISFACTION OF THE OWNER AT THE SOLE EXPENSE OF THE CONTRACTOR.
6. EXCAVATION SAFETY:
EXCAVATION LIMITS SHOWN IN THE DETAILS ARE GRAPHICAL REPRESENTATIONS ONLY, AND DO NOT REPRESENT ACTUAL EXCAVATION LIMITS OR SAFE TRENCH CONDITIONS REQUIRED TO COMPLETE THE WORK. THE 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 THE PERSONNEL AND WORKERS.
7. SURVEY MONUMENTS:
CONTRACTOR SHALL NOT DESTROY, REMOVE, OR DISTURB ANY EXISTING SURVEY MONUMENTS WITHOUT WRITTEN AUTHORIZATION OF THE CONTROLLING AGENCY. CONTRACTOR SHALL TAKE OUT A PERMIT WITH THE SALT LAKE COUNTY SURVEYORS OFFICE A MINIMUM OF 72-HOURS PRIOR TO DISTURBING ANY SURVEY MONUMENT. CONTRACTOR IS RESPONSIBLE FOR COST ASSOCIATED WITH PERMIT. NO PAVEMENT CUTTING OR REMOVAL SHALL BEGIN UNTIL ALL SURVEY MARKERS OR MONUMENT POINTS THAT HAVE THE POTENTIAL OF BEING DISTURBED BY THE CONSTRUCTION OPERATIONS HAVE BEEN PROPERLY REFERENCED BY THE SALT LAKE COUNTY SURVEYOR. CONSTRUCTION SURVEYING SHALL MEET THE REQUIREMENTS OF STANDARD SPECIFICATION 01050-CONSTRUCTION SURVEYING AND FIELD ENGINEERING, CONTRACTOR SHALL RESTORE ALL STREET MONUMENTS DISTURBED DURING CONSTRUCTION.
8. OVER-HEAD POWER:
CONTRACTOR SHALL COMPLY WITH SAFETY REQUIREMENTS AS REQUIRED FOR OPERATING CONSTRUCTION EQUIPMENT BENEATH HIGH VOLTAGE POWER LINES.
9. NO CHANGE IN DESIGN LOCATION OR GRADE SHALL BE MADE BY THE CONTRACTOR WITHOUT THE WRITTEN APPROVAL OF THE DESIGN ENGINEER, OR THEIR AUTHORIZED REPRESENTATIVE.
10. CONTRACTOR SHALL MAINTAIN A 10-FOOT HORIZONTAL AND AN 18-INCH VERTICAL SEPARATION (OUTSIDE OF PIPE TO OUTSIDE OF PIPE/MANHOLE) BETWEEN ALL SEWER AND WATER LINES, UNLESS EXCEPTION IF NOTED.
11. IT IS THE CONTRACTORS RESPONSIBILITY TO PROTECT IN PLACE, OR REMOVE AND REPLACE TO THE SATISFACTION OF THE UTILITY OWNER, ALL UTILITY LATERAL ENCOUNTERED DURING CONSTRUCTION. DURATION OF UTILITY SERVICE OUT AGES AND PUBLIC NOTIFICATION PROCEDURE SHALL CONFORM TO THE STANDARDS OF THE CONTROLLING AGENCY. IT IS THE CONTRACTORS RESPONSIBILITY TO COORDINATE UTILITY RELOCATION SUCH AS GAS, FIBER OPTIC AND TELEPHONE WITH THE APPROPRIATE UTILITY OWNERS.
12. WOOD HOLLOW CREEK IS AN EPHEMERAL STREAM THAT TYPICALLY FLOWS ONLY IN RESPONSE TO STORM EVENTS. THE CONTRACTOR IS RESPONSIBLE TO MANAGE WATER FLOWING IN WOOD HOLLOW CREEK. NO CONSTRUCTION MAY TAKE PLACE IN THE CANNEL WHEN WATER IS FLOWING, UNLESS THE FLOW IN WOOD HOLLOW CREEK IS DIVERTED AROUND THE CHANNEL IMPROVEMENTS.
13. UTILITY LOCATIONS:
THE LOCATIONS OF EXISTING UTILITIES, DITCHES, CONDUITS, AND UNDERGROUND STRUCTURES SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF, AND PRESERVING, ALL UTILITIES IMPACTED BY THE CONSTRUCTION OF THE PIPELINE.
14. STATIONING:
STATIONS AND LENGTHS SHOWN ON THE DRAWINGS ARE CENTERLINE OF PIPELINE. PROFILE DRAWINGS ARE HORIZONTAL PROJECTIONS OF THE PIPELINE CENTERLINE, UNLESS OTHERWISE NOTED.
15. THE CONTRACTOR IS RESPONSIBLE FOR LOCATION SERVICE LINES FOR GAS, SEWER, WATER, AND OTHER UTILITIES AND REPAIRING DAMAGE TO SUCH LINES AS A RESULT OF THE CONTRACTOR'S OPERATIONS. SERVICE CONNECTIONS FOR UTILITIES ARE NOT SHOWN ON THE DRAWINGS.
16. AERIAL PHOTOS IN DRAWINGS:
THE AERIAL PHOTOS PROVIDED AS BACKGROUND IN THESE DRAWINGS ARE PROVIDED TO HELP CLARIFY THE WORK SITE. HOWEVER, THE PHOTOS DEPICT CONDITIONS AS THEY EXISTED IN 2021. PRESENT DAY CONDITIONS MAY VARY FROM THOSE SHOWN. CONTRACTOR SHALL VERIFY EXITING CONDITIONS PRIOR TO BIDDING. BID SHALL INCLUDE ALL WORK REQUIRED TO COMPLETE THE PROJECT.
17. CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY SETTLEMENT OF EXCAVATIONS, AND ANY DAMAGE OF UTILITIES RESULTING FROM SETTLEMENT.
18. CONTRACTOR SHALL PREVENT ANY GROUND WATER OR DEBRIS FROM ENTERING NEW PIPES DURING CONSTRUCTION. THE ENDS OF THE PIPES SHALL BE SEALED AT THE END OF EACH WORKDAY.
19. PROFILE DRAWINGS ARE HORIZONTAL PROJECTIONS OF THE PIPELINE CENTERLINE, UNLESS OTHERWISE NOTED.
20. LAY PIPE TO DEPTH AND ALONG HORIZONTAL ALIGNMENT AS DEFINED IN THESE DRAWINGS. CONTRACTOR SHALL NOT DEVIATE FROM PROPOSED ALIGNMENT OR GRADE WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER. AVOID HIGH AND LOW POINTS EXCEPT WHERE DESIGNED.
21. SWA-1 PARALLELS JA-1 THROUGHOUT THE PROJECT. ALL CONSTRUCTION ACTIVITIES NEAR AND WITHIN THE JA-1 EASEMENT MUST CONFORM TO THE JA-1 USBR PROTECTION CRITERIA. NO STORAGE OF MATERIALS OR EQUIPMENT MAY OCCUR ABOVE JA-1. LOADING, BACKFILL AND EXCAVATION CRITERIA EXIST FOR WORK NEAR JA-1, SEE USBR PROTECTION CRITERIA REFERENCE DOCUMENT.
22. CONSTRUCTION, MARKING, DELINEATION, AND FLAGGING OF JA-1 AND SWA TO BE ESTABLISHED BY CONTRACTOR ALONG JA-1 AND SWA AND MAINTAINED THROUGHOUT CONSTRUCTION FOR VERIFICATION OF PROTECTION CRITERIA CONFORMANCE.
23. CONTRACTOR SHALL NOT DESTROY, REMOVE, OR DISTURB ANY EXISTING SURVEY MONUMENTS OR JA-1 OR SWA USBR ALIGNMENT MONUMENTS WITHOUT AUTHORIZATION OF CONTROLLING AGENCY. NO PAVEMENT CUTTING, EXCAVATION OR REMOVAL SHALL BEGIN UNTIL ALL SURVEY MARKERS OR MONUMENT POINTS THAT HAVE THE POTENTIAL OF BEING DISTURBED BY THE CONSTRUCTION OPERATIONS HAVE BEEN PROPERLY REFERENCED BY A REGISTERED LAND SURVEYOR. ALL SURVEY MONUMENTS OR POINTS DISTURBED BY THE CONTRACTOR SHALL BE ACCURATELY RESET BY A REGISTERED LAND SURVEYOR AFTER ALL RESTORATION AND RESURFACING HAS BEEN COMPLETED.

BOWEN COLLINS & ASSOCIATES

PROFESSIONAL ENGINEER — 8280086 — BALLENTINE — STATE OF UTAH — 01/30/26

NO.	DATE	REV. BY	DESCRIPTION
			REVISIONS

JORDAN VALLEY WATER CONSERVANCY DISTRICT
WOOD HOLLOW DRAINAGE IMPROVEMENTS PROJECT
HERRIMAN, UTAH

VERIFY SCALE — BAR IS ONE INCH ON ORIGINAL DRAWING

REVIEW — CHECKED K. BALLENTINE — APPROVED C. NELSON

DESIGN — DESIGN B. RYAN — DRAWN T. TANNER

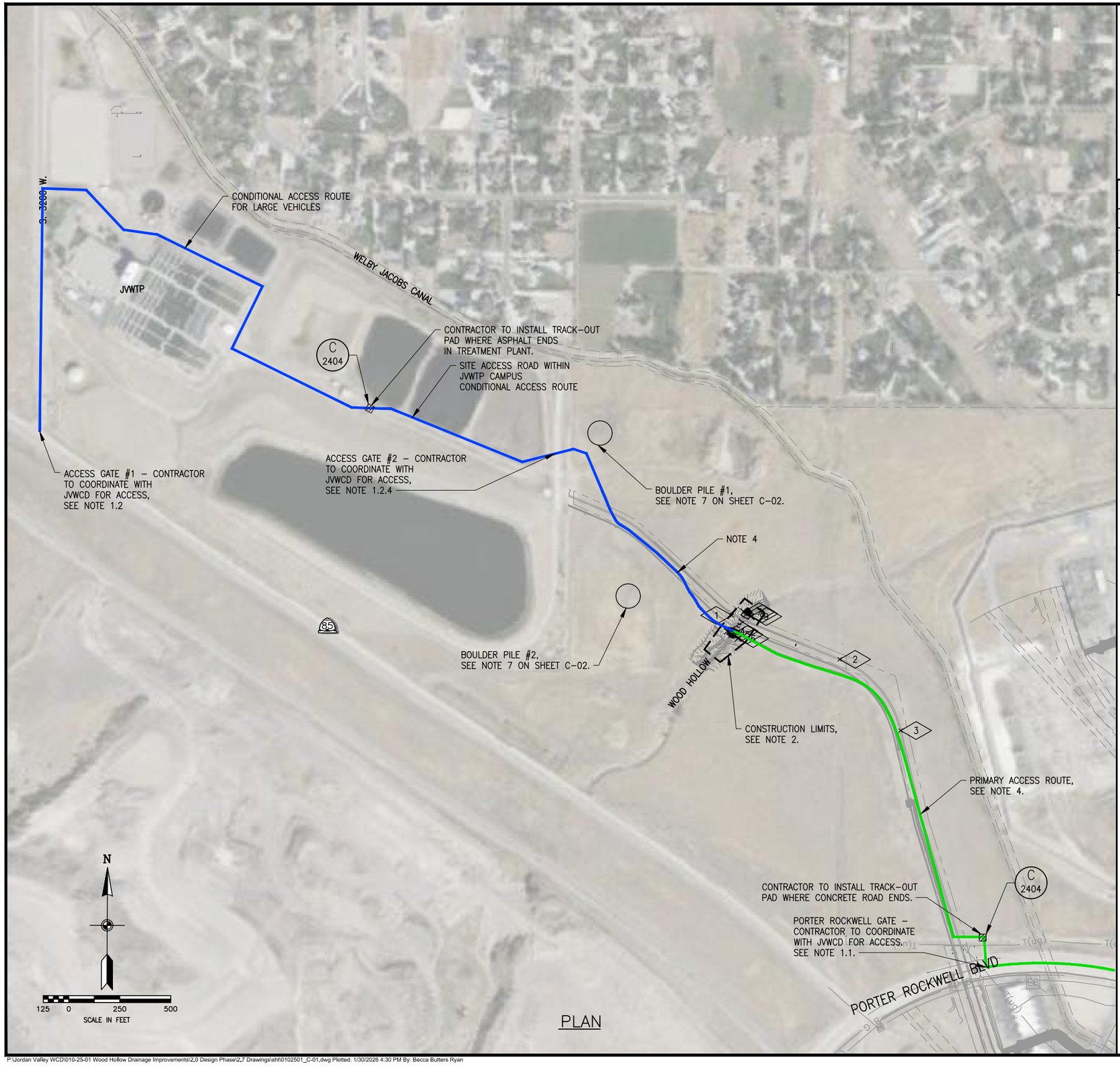
GENERAL

GENERAL NOTES AND SYMBOLS

DATE: JANUARY 2026 — PROJECT NUMBER 010-25-01

DRAWING NO. G-03

SHEET 03 OF 09



PLAN

NOTES:

1. BASIS OF BEARINGS AND DATUM.
   a. PROJECT COORDINATES WERE ESTABLISHED USING THE STATE OF UTAH (TURN) GPS VRS NETWORK AND ARE NAD83 UTAH STATE PLANE COORDINATES, CENTRAL ZONE, US SURVEY FEET.
   b. ELEVATIONS ARE NAVD88 (GEOID18)
2. SURVEY CONTROL
   NAD 83 UTAH STATE PLANE COORDINATES, CENTRAL ZONE, US SURVEY FEET, NAVD 88 ELEVATIONS (GEOIE18)
3. A CSF COMBINED SCALE FACTOR OF 0.99973615, OR 1.00026385 FOR CONVERTING FROM GRID DISTANCE TO GROUND DISTANCE.

SURVEY CONTROL

POINT NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	7339746.61	1513782.20	4759.78	FND. STAMPED PIPE-CP#25 SWA REACH 1
2	7339531.40	1514311.82	4751.61	FND. STAMPED PIPE-CP#26 SWA REACH 1
3	7339182.59	1514610.48	4753.38	FND. STAMPED PIPE-CP#616 SWA REACH 1

ACCESS NOTES:

1. THERE ARE TWO ACCESS ROUTES AVAILABLE, EACH DESIGNATED FOR SPECIFIC USES, AS DESCRIBED BELOW.
   1.1. DAY-TO-DAY ACCESS AND SMALLER VEHICLES SHALL ACCESS THE SITE VIA THE PRIMARY ACCESS ROUTE (GREEN LINE) OFF PORTER ROCKWELL BLVD:
      1.1.1. ACCESS JORDAN VALLEY WCD PROPERTY VIA THE GATE ON PORTER ROCKWELL BLVD.
   1.2. EQUIPMENT, MACHINERY, AND MATERIALS SHALL BE BROUGHT TO THE SITE VIA THE CONDITIONAL ACCESS ROUTE (BLUE LINE) THROUGH THE WATER TREATMENT PLANT:
      1.2.1. ACCESS JORDAN VALLEY WCD PROPERTY VIA THE GATE AT S. 3200 W. OFF OF NORTHBOUND MVC. CONTRACTOR MUST COORDINATE WITH JVWCD TO GAIN ACCESS THROUGH THE GATE.
      1.2.2. PROCEED TO THE SECOND RIGHT, NORTH OF THE WATER TREATMENT FACILITY. FOLLOW THE ROAD THROUGH THE FACILITY AROUND THE NORTH SIDE OF THE TREATMENT PLANT.
      1.2.3. TURN LEFT ON TO THE ROAD THAT RUNS BETWEEN THE RESERVOIR AND THE PONDS EAST OF THE WATER TREATMENT PLANT.
      1.2.4. FOLLOW THE ROAD EAST UNTIL THE SECOND GATE. CONTRACTOR MUST COORDINATE WITH JVWCD TO GAIN ACCESS THROUGH THE GATE. ONCE THROUGH THE GATE, FOLLOW THE ACCESS ROAD WEST APPROXIMATELY 160 FEET. FOLLOW THE SOUTHWEST-BOUND ROAD FROM THE FORK UNTIL REACHING THE PROJECT SITE AT THE CROSSING ON WOOD HOLLOW CREEK.
2. CONTRACTOR TO LIMIT CONSTRUCTION ACTIVITIES TO THE SITE ACCESS ROAD AND TO AN AREA OF 250 FEET ALONG CHANNEL AND 110 FEET OUT FROM THE CENTERLINE OF THE CHANNEL.
3. INSTALL TRACKOUT PADS AT BOTH ENTRANCES (PRIMARY AND CONDITIONAL ACCESS ROUTES) APPROXIMATELY AT THE CALLOUT LOCATIONS.
4. REGRADE AND RESTORE THE ACCESS ROAD TO EXISTING CONDITIONS WHERE DISTURBED BY CONSTRUCTION ACCESS OUTSIDE OF THE PROJECT AREA.

BOWEN COLLINS & ASSOCIATES

PROFESSIONAL ENGINEER 8280086 KEVIN R. BALLENTINE STATE OF UTAH 01/30/26

NO.	DATE	REV. BY	DESCRIPTION
			REVISIONS

JORDAN VALLEY WATER CONSERVANCY DISTRICT
WOOD HOLLOW DRAINAGE IMPROVEMENTS PROJECT
HERRIMAN, UTAH

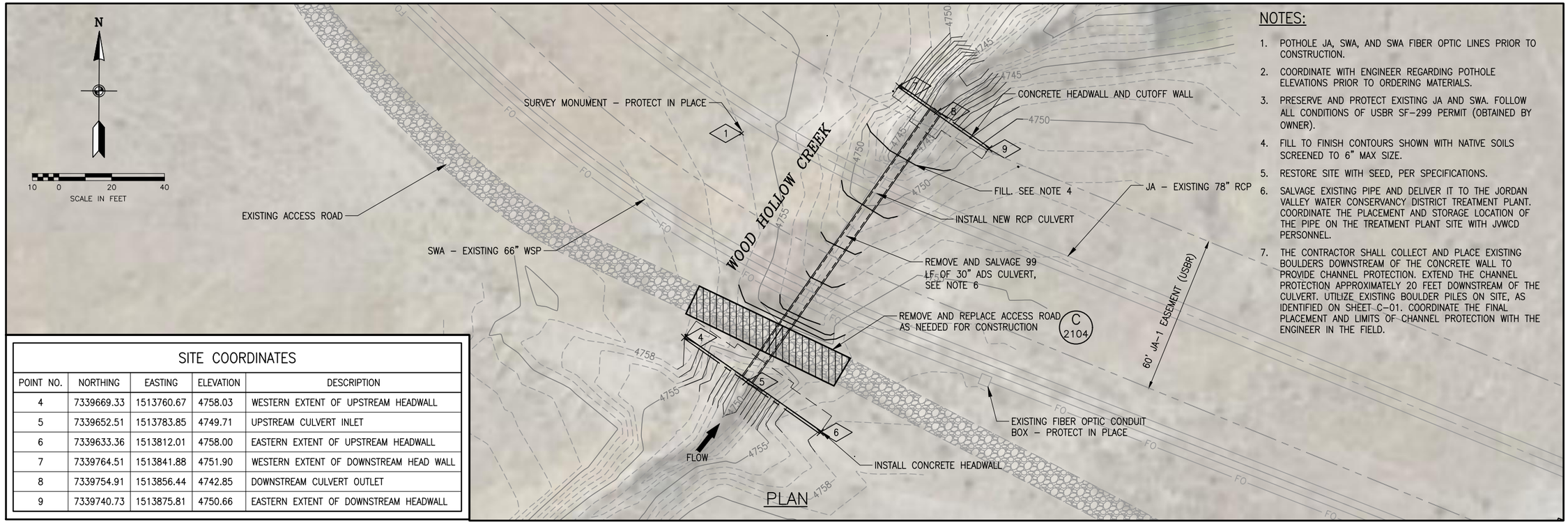
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

DESIGN B. RYAN
DRAWN T. TANNER
REVIEW
CHECKED K. BALLENTINE
APPROVED C. NELSON

CIVIL
SITE PLAN AND ACCESS ROAD
PROJECT NUMBER 010-25-01
DATE: JANUARY 2026

DRAWING NO.
C-01
SHEET 04 OF 09

P:\Jordan Valley WCD\010-25-01 Wood Hollow Drainage Improvements\2,0 Design Phase\2,7 Drawings\sht\0102501_C-01.dwg Plotted: 1/30/2026 4:30 PM By: Becca Butters Ryan

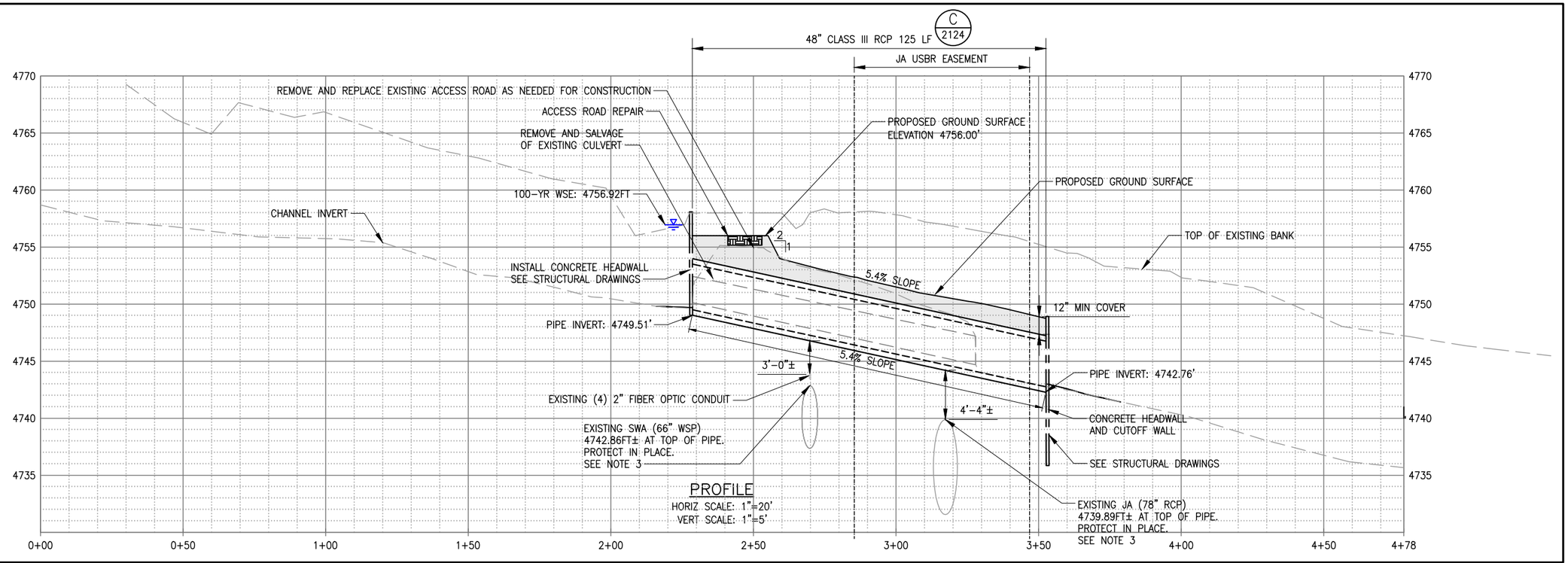


SITE COORDINATES

POINT NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
4	7339669.33	1513760.67	4758.03	WESTERN EXTENT OF UPSTREAM HEADWALL
5	7339652.51	1513783.85	4749.71	UPSTREAM CULVERT INLET
6	7339633.36	1513812.01	4758.00	EASTERN EXTENT OF UPSTREAM HEADWALL
7	7339764.51	1513841.88	4751.90	WESTERN EXTENT OF DOWNSTREAM HEAD WALL
8	7339754.91	1513856.44	4742.85	DOWNSTREAM CULVERT OUTLET
9	7339740.73	1513875.81	4750.66	EASTERN EXTENT OF DOWNSTREAM HEADWALL

NOTES:

1. POTHOLE JA, SWA, AND SWA FIBER OPTIC LINES PRIOR TO CONSTRUCTION.
2. COORDINATE WITH ENGINEER REGARDING POTHOLE ELEVATIONS PRIOR TO ORDERING MATERIALS.
3. PRESERVE AND PROTECT EXISTING JA AND SWA. FOLLOW ALL CONDITIONS OF USBR SF-299 PERMIT (OBTAINED BY OWNER).
4. FILL TO FINISH CONTOURS SHOWN WITH NATIVE SOILS SCREENED TO 6" MAX SIZE.
5. RESTORE SITE WITH SEED, PER SPECIFICATIONS.
6. SALVAGE EXISTING PIPE AND DELIVER IT TO THE JORDAN VALLEY WATER CONSERVANCY DISTRICT TREATMENT PLANT. COORDINATE THE PLACEMENT AND STORAGE LOCATION OF THE PIPE ON THE TREATMENT PLANT SITE WITH JVWCD PERSONNEL.
7. THE CONTRACTOR SHALL COLLECT AND PLACE EXISTING BOULDERS DOWNSTREAM OF THE CONCRETE WALL TO PROVIDE CHANNEL PROTECTION. EXTEND THE CHANNEL PROTECTION APPROXIMATELY 20 FEET DOWNSTREAM OF THE CULVERT. UTILIZE EXISTING BOULDER PILES ON SITE, AS IDENTIFIED ON SHEET C-01. COORDINATE THE FINAL PLACEMENT AND LIMITS OF CHANNEL PROTECTION WITH THE ENGINEER IN THE FIELD.



PROFILE
HORIZ SCALE: 1"=20'
VERT SCALE: 1"=5'

BOWEN COLLINS & ASSOCIATES

PROFESSIONAL ENGINEER 8280086 BALLENTINE STATE OF UTAH
01/30/26

NO.	DATE	REV. BY	DESCRIPTION
			REVISIONS

JORDAN VALLEY WATER CONSERVANCY DISTRICT
WOOD HOLLOW DRAINAGE IMPROVEMENTS PROJECT
HERRIMAN, UTAH

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

DESIGN
DESIGN B. RYAN
DRAWN T. TANNER

REVIEW
CHECKED K. BALLENTINE
APPROVED C. NELSON

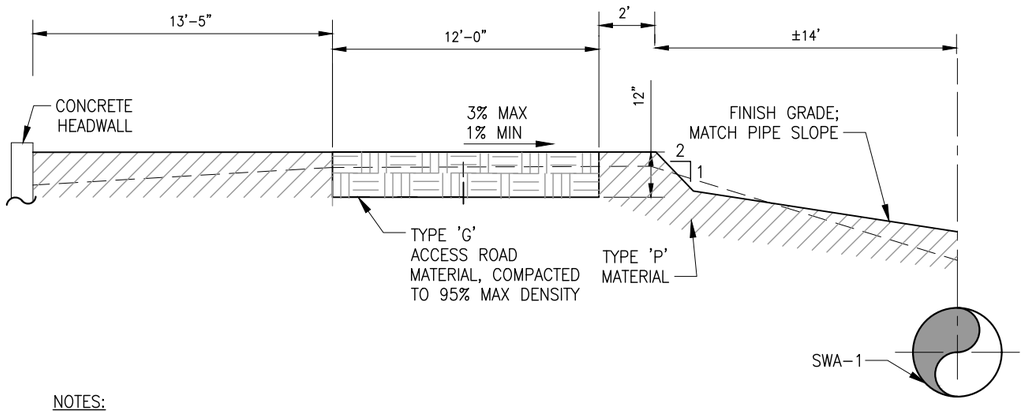
CIVIL

PLAN & PROFILE - CULVERT & BACKFILL

DATE: JANUARY 2026
PROJECT NUMBER 010-25-01

DRAWING NO.
C-02

SHEET 05 OF 09

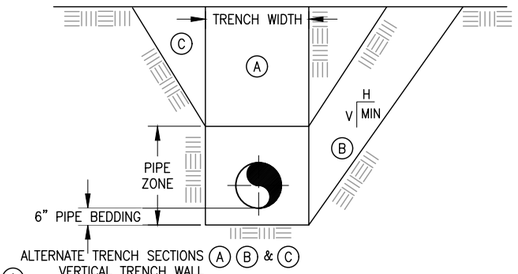


NOTES:

1. COORDINATE FINAL LOCATION OF ROAD WITH ENGINEER IN THE FIELD.

GRAVEL ACCESS ROAD
NOT TO SCALE

C 2104



ALTERNATE TRENCH SECTIONS (A) (B) & (C)

(A) VERTICAL TRENCH WALL
1. MAX UNSUPPORTED HEIGHT = 3.5 FT.
2. FOR DEPTH OVER 3.5 FT SHORING OR SHEATHING REQUIRED.

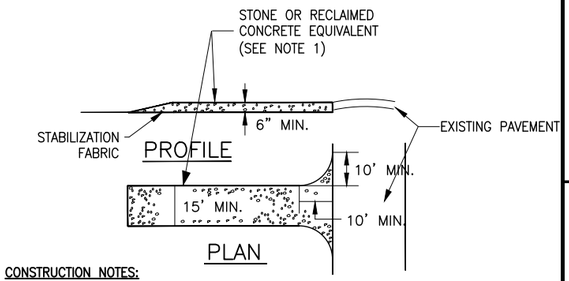
(B) SLOPING TRENCH WALL
1. NOT TO BE USED WITHOUT APPROVAL OF ENGINEER.
2. REQUIRES IMPROVED PIPE ZONE BACKFILL OR INCREASE IN PIPE CLASS

(C) COMBINATION VERTICAL/SLOPING TRENCH
1. TRENCH IN PIPE ZONE SHALL HAVE VERTICAL WALLS WHERE STABLE SOIL EXISTS

NOTES:
1. TRENCH EXCAVATIONS TO BE IN ACCORDANCE WITH OSHA SAFETY AND HEALTH STANDARDS FOR CONSTRUCTION. (29 CFR 1926).
2. CONTRACTOR TO PROVIDE ALL DEWATERING MEASURES AS REQUIRED. GROUNDWATER ELEVATION SHALL BE MAINTAINED AT LEAST 2' BELOW BOTTOM OF TRENCH UNTIL BACKFILL IS COMPLETE.
3. SLIDE SLOPES SHALL MEET MINIMUM REQUIREMENTS OF THE GEOTECHNICAL INVESTIGATION.

TYPICAL TRENCH EXCAVATION SECTION
NTS

C 2122



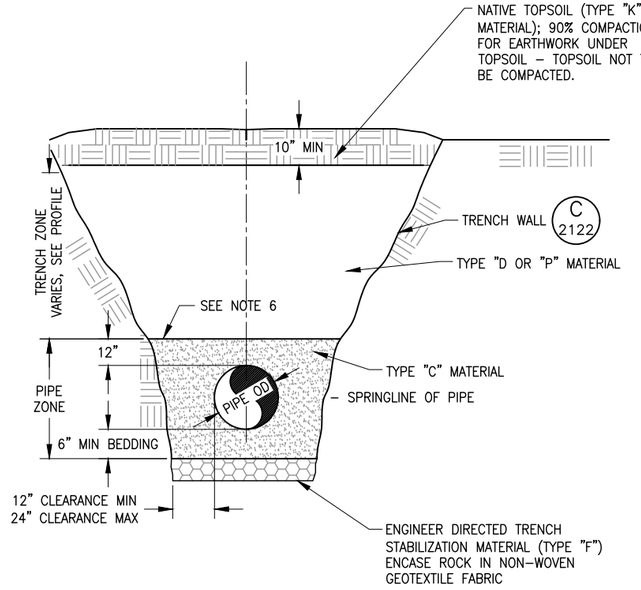
CONSTRUCTION NOTES:

1. STONE SIZE – USE 2" STONE, OR RECLAIMED CONCRETE EQUIVALENT.
2. LENGTH – AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS – NOT LESS THAN SIX (6) INCHES.
4. WIDTH – FIFTEEN (15) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. STABILIZATION FABRIC – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SIDE SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY OR JORDAN VALLEY WCD PAVED ROADS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY OR JORDAN VALLEY WCD PAVED ROADS MUST BE REMOVED.
8. WASHING – WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY OR JORDAN VALLEY WCD PAVED ROADS. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS TO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE
SCALE: NTS

C 2404

NOTES:
1. NOT USED.
2. SCREENED NATIVE MATERIAL MEETING SPECIFICATION REQUIREMENT FOR 'SUITABLE MATERIAL' MAY BE USED FOR TRENCH ZONE BACKFILL.
3. IN PROJECT AREA, STRIP TOP 8" OF SOIL AND STOCKPILE PRIOR TO TRENCH EXCAVATION.
4. IF NATIVE SOILS DO NOT PROVIDE A FIRM, STABLE FOUNDATION, AS DETERMINED BY ENGINEER, OVER EXCAVATE BELOW BOTTOM OF TRENCH AND BACKFILL WITH TRENCH STABILIZATION MATERIAL AS SHOWN.
5. TOP 6" OF TRENCH BACKFILL BENEATH THE TOPSOIL LAYER SHOULD BE INSTALLED, SMOOTHED, BUT LEFT UN-COMPACTED.
6. IN AREAS WITH ONLY ±12" OF COVER OVER THE PIPE, CONTRACTOR SHALL NOT ADD LAYERS OF TRENCH FILL OR NATIVE TOPSOIL MATERIAL BEYOND THE PIPE ZONE.



TYPICAL TRENCH BACKFILL SECTION
NTS

C 2124

BOWEN COLLINS & ASSOCIATES

PROFESSIONAL ENGINEER 8280086 BALLENTINE STATE OF UTAH 01/30/26

NO.	DATE	REV. BY	DESCRIPTION
			REVISIONS

JORDAN VALLEY WATER CONSERVANCY DISTRICT
WOOD HOLLOW DRAINAGE IMPROVEMENTS PROJECT
HERRIMAN, UTAH

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

REVIEW CHECKED K. BALLENTINE APPROVED C. NELSON

DESIGN DESIGN B. RYAN DRAWN T. TANNER

CIVIL

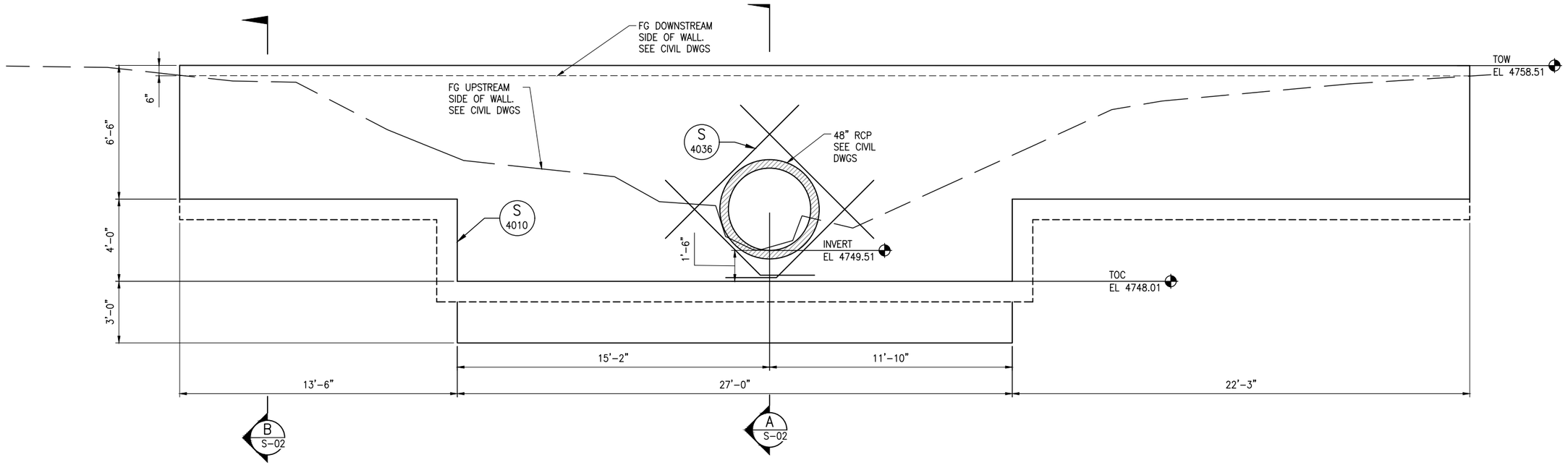
GENERAL CIVIL DETAILS - 1

DATE: JANUARY 2026 PROJECT NUMBER 010-25-01

DRAWING NO. GC-01

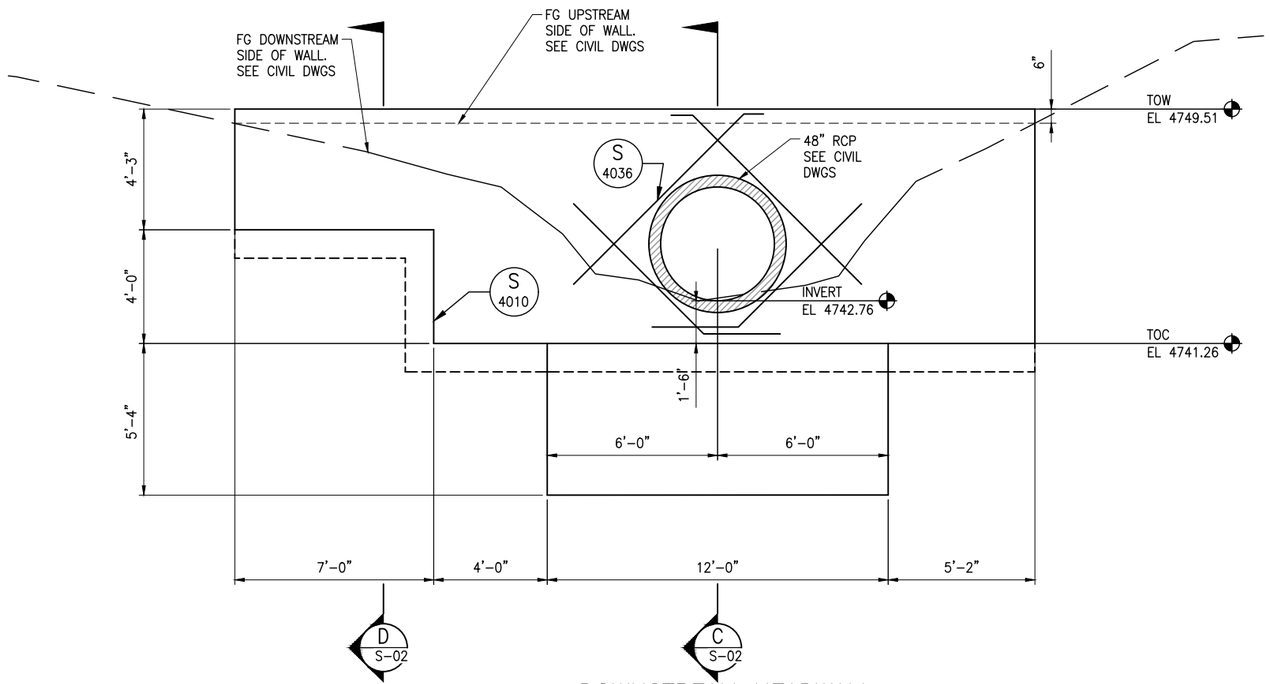
SHEET 06 OF 09

P:\Jordan Valley WCD\010-25-01 Wood Hollow Drainage Improvements\2,0 Design Phase\2,7 Drawings\sht\0102501_GC-01.dwg Plotted: 1/30/2026 4:51 PM By: Becca Butters Ryan



UPSTREAM HEADWALL

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



DOWNSTREAM HEADWALL

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

NOTES:

1. FOR ADDITIONAL INFORMATION SEE SHEET GS-01.
2. FOR ADDITIONAL INFORMATION ON FINAL GRADES SEE CIVIL DWGS.

BOWEN COLLINS & ASSOCIATES

PROFESSIONAL ENGINEER — STEVEN G. PUGH — NO. 9420765-2202 — STATE OF UTAH — REGISTERED — 01/30/2026

NO.	DATE	REV. BY	DESCRIPTION

REVISIONS

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

JORDAN VALLEY WATER CONSERVANCY DISTRICT

WOOD HOLLOW DRAINAGE IMPROVEMENTS

HERRIMAN, UTAH

REVIEW
CHECKED S. COHEN
APPROVED S. PUGH

DESIGN
DESIGN S. PUGH
DRAWN S. PUGH

STRUCTURAL

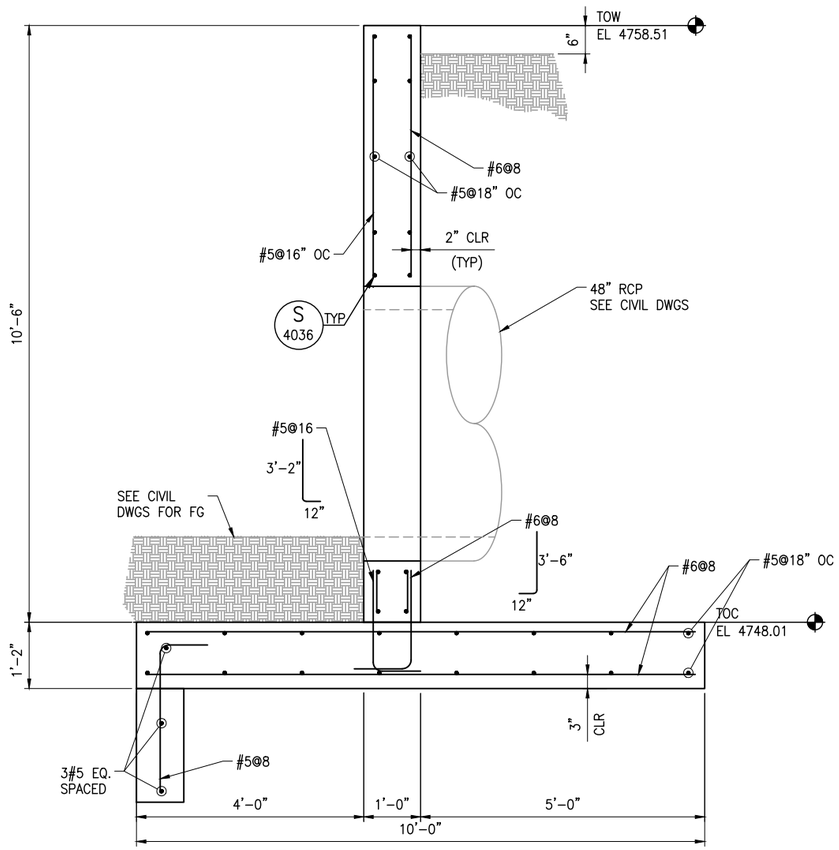
UPSTREAM AND DOWNSTREAM HEADWALL ELEVATIONS

DATE: JANUARY 2026

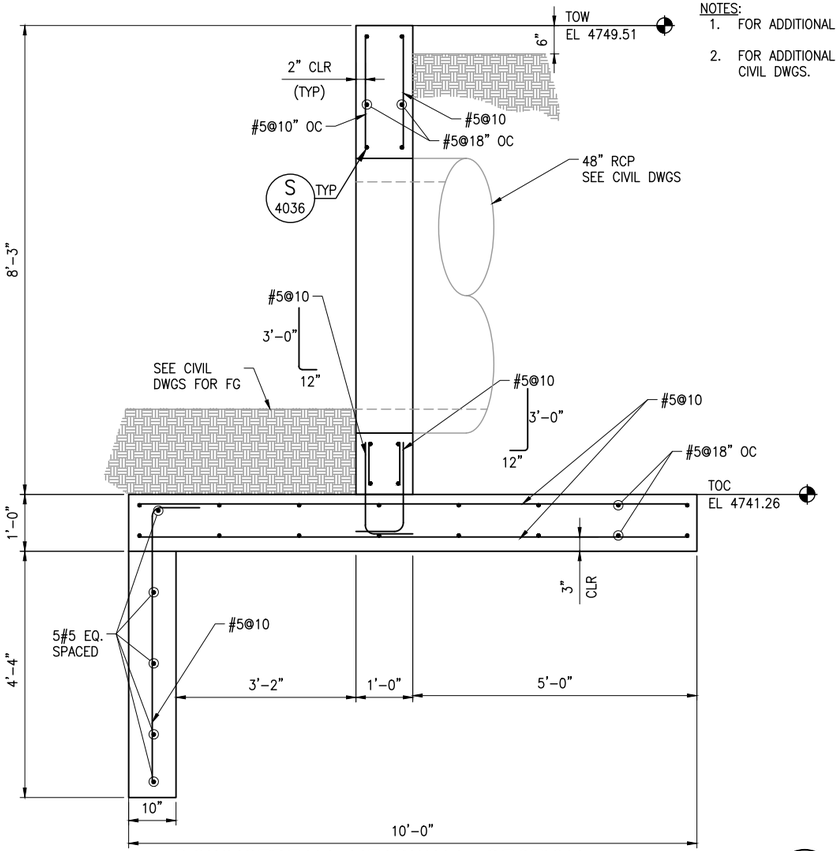
PROJECT NUMBER 010-25-01

DRAWING NO. S-01

SHEET 07 OF 09

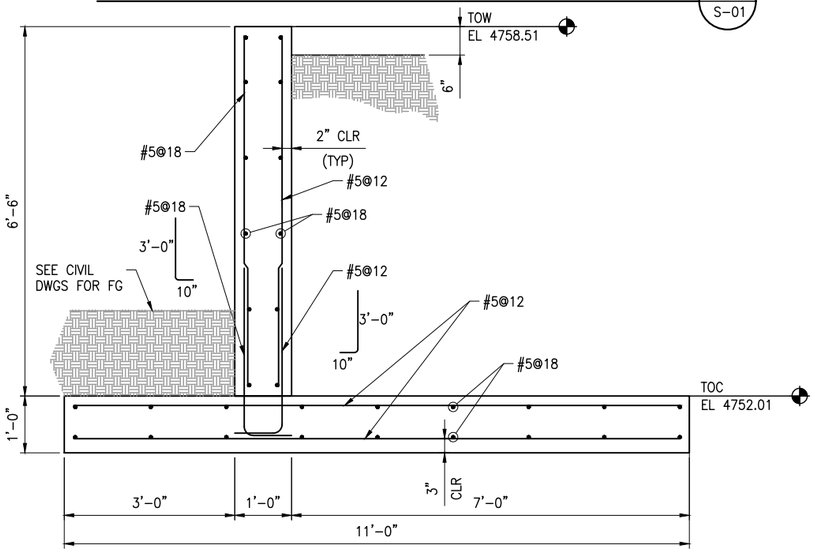


UPSTREAM HEADWALL SECTION — A / S-01

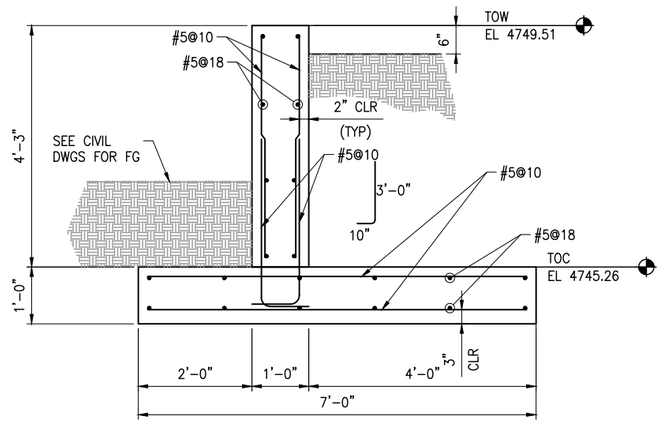


NOTES:
1. FOR ADDITIONAL INFORMATION SEE SHEET GS-01.
2. FOR ADDITIONAL INFORMATION ON FINAL GRADES SEE CIVIL DWGS.

DOWNSTREAM HEADWALL SECTION — C / S-01



UPSTREAM HEADWALL SECTION — B / S-01



DOWNSTREAM HEADWALL SECTION — D / S-01

BOWEN COLLINS & ASSOCIATES

REGISTERED PROFESSIONAL ENGINEER — STATE OF UTAH — STEVEN G. PUGH — NO. 8492702-2202 — 01/30/2026

NO.	DATE	REV. BY	DESCRIPTION
			REVISIONS

JORDAN VALLEY WATER CONSERVANCY DISTRICT

WOOD HOLLOW DRAINAGE IMPROVEMENTS

HERRIMAN, UTAH

VERIFY SCALE — BAR IS ONE INCH ON ORIGINAL DRAWING

REVIEW — CHECKED S. COHEN — APPROVED S. PUGH

DESIGN — DESIGN S. PUGH — DRAWN S. PUGH

STRUCTURAL

UPSTREAM AND DOWNSTREAM HEADWALL SECTIONS

PROJECT NUMBER 010-25-01

DATE: JANUARY 2026

DRAWING NO. S-02

SHEET 08 OF 09

GENERAL STRUCTURAL NOTES

GENERAL

1. THE SPECIFICATIONS AND REQUIREMENTS INDICATED ON THIS SHEET ARE INTENDED AS A BASIC SUMMARY OF THE MATERIAL CONSTRUCTION AND INSPECTION REQUIREMENTS FOR THIS PROJECT. ADDITIONAL REQUIREMENTS ARE GIVEN IN THE PROJECT SPECIFICATIONS. IN THE EVENT OF A CONFLICT BETWEEN THESE GENERAL NOTES AND THE REQUIREMENTS GIVEN IN THE PROJECT SPECIFICATIONS, THE ENGINEER SHALL BE CONTACTED TO DETERMINE WHICH PROVISION GOVERNS.
2. 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.
3. SUBMIT DRAWINGS AND RECEIVE REVIEW OF ALL STRUCTURAL RELATED SHOP DRAWINGS PRIOR TO ERECTION OR CONSTRUCTION.
4. APPLICABLE BUILDING CODE FOR THE PROJECT IS THE 2019 EDITION OF THE AMERICAN CONCRET INSTITUTE 318 (ACI 318-19). ANY CHANGES MADE DURING CONSTRUCTION TO THE APPROVED CONSTRUCTION DOCUMENTS SHALL BE APPROVED BY THE ENGINEER.

SITE PREPARATION NOTES

1. NO GEOTECHNICAL INVESTIGATION HAS BEEN PREPARED FOR THIS PROJECT. SITE PREPARATION NOTES FOR THIS PROJECT ARE BASED ON TYPICAL REQUIREMENTS FOR PROJECTS WITH SIMILAR ASSUMED SOIL CONDITIONS AND SIMILAR CONSTRUCTION. IF DURING SITE PREPARATION, THE SUBSURFACE SOILS CONDITIONS ARE FOUND UNSUITABLE FOR THE PROPOSED CONSTRUCTION, MODIFICATIONS TO THESE RECOMMENDATIONS MAY BE NECESSARY, AS DIRECTED BY THE OWNER'S TESTING LABORATORY.
2. ALL SURFACE MATERIALS SUCH AS VEGETATION (INCLUDING THE ROOT ZONE), TOPSOIL, DEBRIS, NON-ENGINEERED FILL, BOULDERS LARGER THAN 12" AND ANY OTHER DELETERIOUS MATERIALS SHALL BE REMOVED FROM WITHIN THE BUILDING PAD AREA. THESE STRIPPED SOILS ARE CONSIDERED UNSUITABLE FOR STRUCTURAL FILL.
3. AFTER SURFACE MATERIALS HAVE BEEN REMOVED, THE EXPOSED SUBGRADE SHALL BE SCARIFIED TO A MINIMUM OF DEPTH OF 8 INCHES AND COMPACTED TO THE REQUIREMENTS OF STRUCTURAL FILL. IF SOFT OR LOOSE AREAS ARE ENCOUNTERED DURING THE SCARIFYING AND COMPACTION PROCESS, THEY MUST BE COMPLETELY REMOVED AND REPLACED WITH STRUCTURAL FILL TO A MAXIMUM DEPTH OF TWO FEET.
4. ALL WALL FOOTINGS SHALL BE SUPPORTED UPON 12" OF STRUCTURAL FILL EXTENDING TO FIRM UNDISTURBED SOILS. IF FIRM UNDISTURBED SOILS BECOME LOOSE OR DISTURBED, THEY SHALL BE REMOVED AND REPLACED WITH COMPACTED STRUCTURAL FILL PRIOR TO PLACEMENT OF CONCRETE. THE OWNER'S TESTING LABORATORY SHALL OBSERVE THE NATURAL SOILS AT THE TIME OF FOOTING EXCAVATION, PRIOR TO PLACEMENT OF FORMWORK OR REINFORCING STEEL, TO DETERMINE THE SUITABLITIY OF THE UNDISTURBED SOILS FOR SUPPORTING THE FOOTINGS.
5. STRUCTURAL FILL, IF REQUIRED, SHALL CONSIST OF GRANULAR SOILS CLASSIFIED AS GW, GP, SW, SP IN ACCORDANCE WITH ASTM D 2487. THESE GRANULAR SOILS SHALL CONSIST OF 6 INCH MINUS, CLEAN, GRANURAL SOIL WITH NO MORE THAN 30 PERCENT RETAINED ON THE 3/4" SIEVE AND NO MORE THAT 12 PERCENT PASSING THE #200 SIEVE.
6. WHERE REQUIRED, STRUCTURAL FILL BELOW FOOTINGS AND BELOW SLAB ON GRADE SHALL BE PLACED IN MAXIMUM 8 INCH LOOSE LIFTS AND COMPACTED TO AT LEAST 95% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D-1557 AND SHALL BE COMPACTED AT A MOISTURE CONTENT WITHIN 2% OF THE OPTIMUM MOISTURE CONTENT.
7. COMPACTION OF STRUCTURAL FILL SHALL BE OBSERVED AND TESTED BY OWNER'S TESTING LABORATORY TO ENSURE THAT THE ABOVE REQUIREMENTS ARE ACHIEVED.

FOOTINGS

1. EXTERIOR WALL FOOTINGS SHALL BEAR AT A MINIMUM DEPTH OF 2'-6" BELOW FINISHED EXTERIOR GRADE.
2. NO FOOTINGS SHALL BE PLACED IN WATER OR ON FROZEN GROUND.

CONCRETE

1. 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.
2. THE MINIMUM COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS SHALL BE: 4,500 PSI
3. A STATEMENT OF MIX DESIGN FOR ALL CONCRETE SHALL BE SUBMITTED TO AND REVIEWED BY THE STRUCTURAL ENGINEER PRIOR TO COMMENCING WORK.
4. THE VARIOUS CONCRETE ITEMS ARE ASSIGNED TO THE FOLLOWING EXPOSURE CATEGORIES AND CLASSES PER SECTION 19.3 OF ACI 318-19:

FOOTINGS	F1, S1, W0, C1
FOUNDATION WALLS	F1, S1, W1, C1
EXTERIOR FLAT WORK	F3, S1, W1, C1

5. NON-STRUCTURAL ELEMENTS, SUCH AS ENCASEMENTS, CURBS, SIDEWALKS AND LEAN CONCRETE TO HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI.
6. USE CEMENT CONFORMING TO ASTM C595, TYPE IL (10) (MS).
7. 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.
8. PROVIDE 3/4-INCH CHAMFER AT ALL EXPOSED EDGES AND CORNERS UNLESS NOTED OTHERWISE.
9. BEFORE PLACING THE SECOND POUR AT CONSTRUCTION JOINTS REMOVE LAITANCE, THOROUGHLY CLEAN AND ROUGHEN ALL JOINT SURFACES TO A MINIMUM AMPLITUDE OF 1/4 INCH.

REINFORCEMENT STEEL

1. PROVIDE REINFORCEMENT STEEL CONFORMING TO ASTM A615, GRADE 60.
2. 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"
FORMED SURFACES IN CONTACT WITH THE GROUND OR EXPOSED TO THE WEATHER	2"
ALL OTHER CONCRETE SURFACES	2"

3. UNLESS OTHERWISE NOTED, ALL HOOKS SHOWN ARE 90° STANDARD HOOK AS DEFINED IN ACI 318-19.
4. 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* – CONCRETE

BAR SIZE	#4	#5	#6	#7	#8	#9	#10	#11
CONCRETE DESIGN STRENGTH = 4500 PSI								
LAP LENGTH	1'-7"	2'-0"	2'-4"	3'-4"	3'-9"	4'-10"	5'-9"	7'-0"

*ASSUMES 2" MINIMUM CLEARANCE TO SURFACE

LOADING CRITERIA

1. DEAD LOAD	CALCULATED FROM UNIT WEIGHT
2. LATERAL EARTH PRESSURE (EFP)	
NON SATURATED	60 PCF
TRAFFIC SURCHARGE	2 FT OF EARTH
HYDROSTATIC FLUID PRESSURE	62.4 PCF
3. FROST DEPTH:	30 INCHES
4. ALLOWABLE SOIL BEARING CAPACITY	2,000 PSF

SPECIAL INSPECTIONS

1. SPECIAL INSPECTION IN ACCORDANCE WITH APPROPRIATE SECTIONS OF IBC 2018, CHAPTER 17 IS REQUIRED FOR THE PROJECT.
2. 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.
3. AN APPLICATION FOR OFF-SITE FABRICATION SHALL BE SUBMITTED TO THE BUILDING OFFICIAL FOR APPROVAL PRIOR TO FABRICATION.
4. A CERTIFICATE OF COMPLIANCE FOR OFF-SITE FABRICATION SHALL BE COMPLETED AND SUBMITTED TO THE BUILDING OFFICIAL FOR APPROVAL PRIOR TO ERECTION OF PREFABRICATED COMPONENTS. SPECIAL INSPECTION REQUIRED PER IBC SECTION 1704.2.
5. SPECIAL INSPECTION ITEMS REQUIRED PER LIST BELOW. CONTINUOUS OR PERIODIC INSPECTIONS IS DESIGNATED WITH A (C) OR (P).

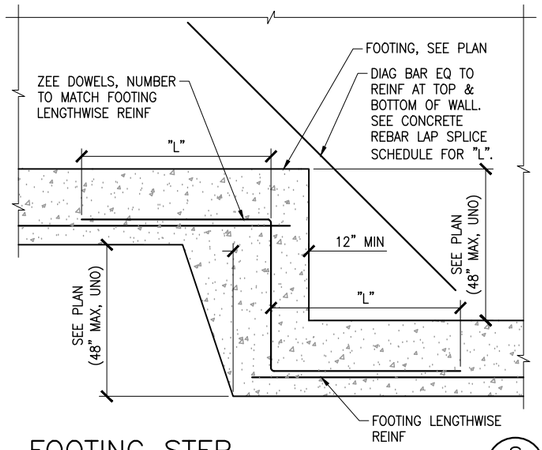
CONCRETE: (TABLE 1705.3, 2018 IBC)

A. PLACING REINFORCEMENT STEEL.	P
B. WELDING REINFORCEMENT STEEL (IF APPROVED BY ENGINEER).	C
C. PLACING ANCHOR BOLTS AND EMBEDDED PLATES.	P
D. VERIFY APPLICABLE CONCRETE MIX BEING USED.	P
E. SAMPLING CONCRETE FOR STRENGTH TESTS.	C
F. CURING TECHNIQUES AND APPLICATION.	P

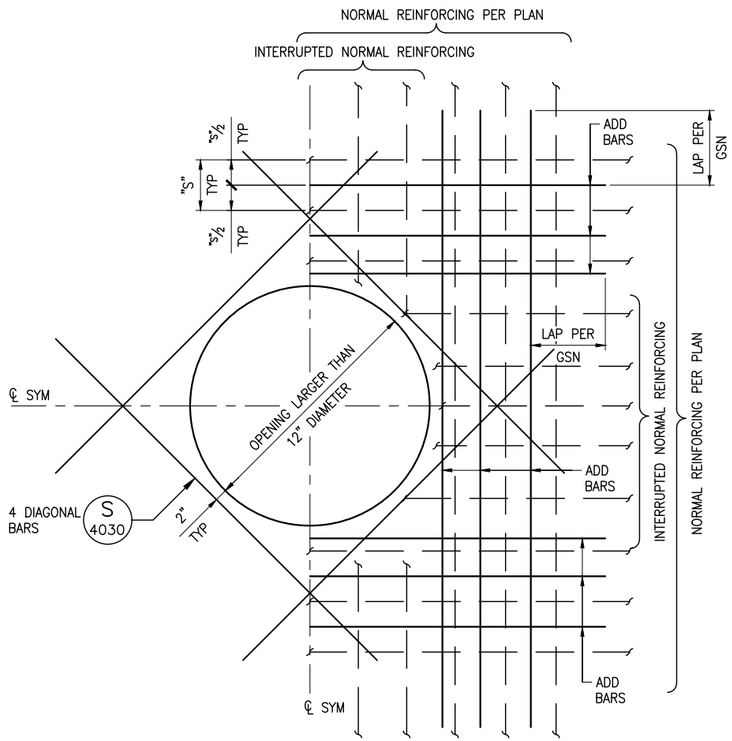
STRUCTURAL OBSERVATION

BOWEN COLLINS & ASSOCIATES SHALL BE NOTIFIED BY THE CONTRACTOR 5 BUSINESS DAYS BEFORE THE COMPLETION OF THE ITEMS LISTED IN THIS SECTION SO THAT STRUCTURAL OBSERVATION MAY BE PERFORMED IN ACCORDANCE WITH IBC SECTION 1704.5. THE OBSERVATIONS WILL BE PERFORMED AT THE DISCRETION OF BOWEN COLLINS & ASSOCIATES. COMPLETED OBSERVATION REPORTS WILL BE SUBMITTED TO THE BUILDING OFFICIAL.

1. REBAR PRIOR TO PLACEMENT OF CONCRETE.



FOOTING STEP
NOT TO SCALE
S 4010



ADDITIONAL REINFORCING AT CIRCULAR OPENINGS IN WALLS/SLABS
NOT TO SCALE
S 4036

DETAIL NOTES:

1. THIS DETAIL TO BE USED FOR OPENINGS LARGER THAN 12"ø AND WHEN CALLED FOR ON THE DRAWINGS OR WHEN NO OTHER ADDITIONAL REINFORCING IS SPECIFIED. FOR OPENINGS SMALLER THAN 12"ø, USE DETAIL S/4030.
2. AREA OF ADD BARS AT EACH EDGE OF OPENING IN EACH DIRECTION SHALL MATCH ½ THE CROSS SECTIONAL AREA OF THE INTERRUPTED BARS. BARS UP TO TWO BAR SIZES LARGER THAN NORMAL REINFORCING MAY BE USED. FIT ADD BARS WITHIN A DISTANCE OF 2X WALL/SLAB THICKNESS FROM EDGE OF OPENING.
3. CUT NORMAL REINFORCING 2" CLEAR OF OPENING.
4. PROVIDE STANDARD ACI HOOKS ON BARS/DOWELS IF STRAIGHT EXTENSION PAST THE OPENING CANNOT BE ACHIEVED.
5. PLACE ADD BARS IN SAME PLANES AS NORMAL REINFORCING INDICATED.
6. PLACE #5 ADD DIAGONAL CORNER BARS UNDER NORMAL REINFORCING INDICATED.
7. WHEN AN INTERSECTING SLAB OR WALL OCCURS WITHIN ONE WALL/SLAB THICKNESS OF THE EDGE OF OPENING, NO ADD BARS ARE REQUIRED ON THAT SIDE.

BOWEN COLLINS & ASSOCIATES

PROFESSIONAL ENGINEER — STEVEN C. PUGH — NO. 8400762-2202 — STATE OF UTAH — REGISTERED
01/30/2026

NO.	DATE	REV. BY	DESCRIPTION
			REVISIONS

JORDAN VALLEY WATER CONSERVANCY DISTRICT
WOOD HOLLOW DRAINAGE IMPROVEMENTS
HERRIMAN, UTAH

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

REVIEW: CHECKED S. COHEN; APPROVED S. PUGH
DESIGN: DESIGN S. PUGH; DRAWN S. PUGH

STRUCTURAL

GENERAL STRUCTURAL NOTES AND DETAILS

DATE: JANUARY 2026
PROJECT NUMBER 010-25-01

DRAWING NO. GS-01
SHEET 09 OF 09