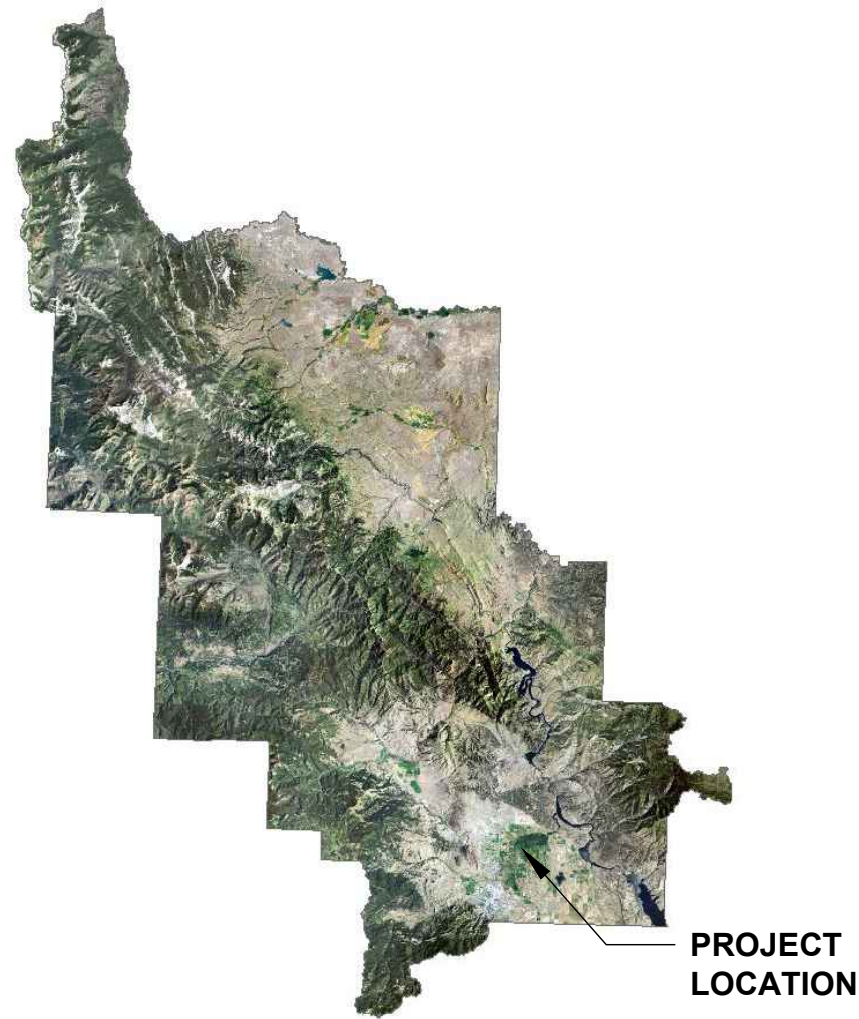


VALLEY FLOOD MITIGATION MASTER PLAN IMPLEMENTATION

PHASE II - LOWER D2 DITCH CROSSING IMPROVEMENTS

LEWIS AND CLARK COUNTY PUBLIC WORKS
SEPTEMBER 2024
RESPEC PROJECT NO. W0138.23003



PROJECT LOCATION

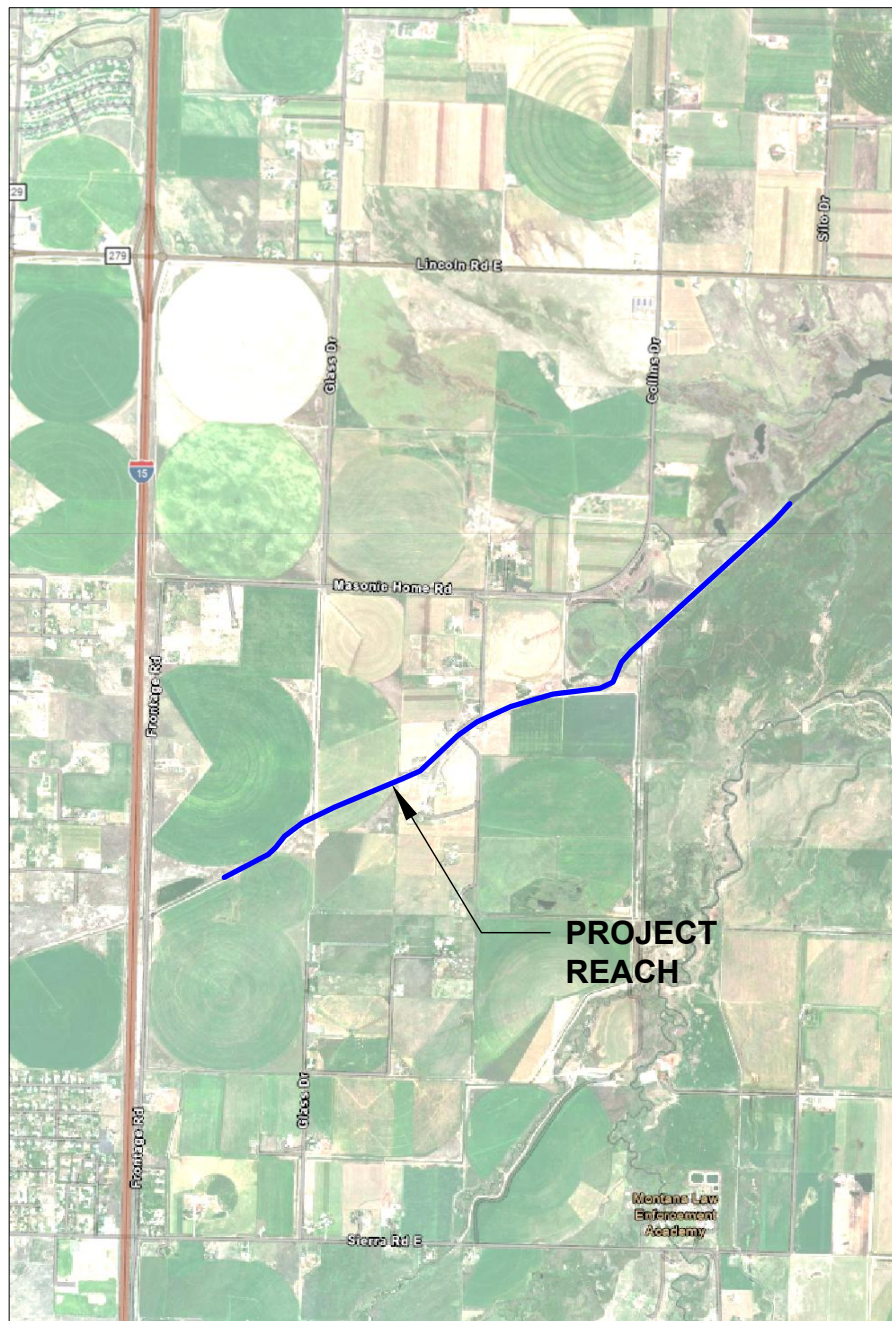
LEWIS AND CLARK COUNTY
N.T.S

APPROVED BY:

LEWIS AND CLARK COUNTY ENGINEER

MATTHEW JOHNSON
REGISTERED PROFESSIONAL ENGINEER
STATE OF MONTANA NO. PEL-PE-LIC-32820

DATE



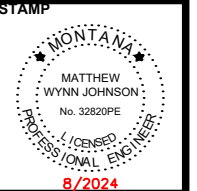
PROJECT REACH

PROJECT VICINITY MAP
N.T.S

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DESIGNED	JAL	DATE	8/30/2024
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COVER SHEET

SHEET NUMBER:
G-00
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NAME: N:\PROJECTS\W0138_23003-LCC_VFMMP_LOWER D2 TO\CAD\SHEETS\W0138_23003_LOWER D2_S_GENERAL.DWG
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GENERAL NOTES

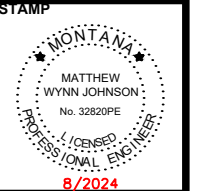
1. ALL WORK, ACCESS, AND STAGING MUST BE COORDINATED WITH THE LANDOWNER PARTNERS OF THE PROJECT.
2. FIELD STAKING OF CONSTRUCTION LIMITS, EXCAVATIONS, AND PUBLIC RIGHT OF WAY IS THE RESPONSIBILITY OF THE CONTRACTOR.
3. ALL REINFORCED CONCRETE BOX CULVERTS (RCBs) ARE DRAWN WITH END SECTIONS IN PLAN VIEW AND IN PROFILE VIEW.
4. ALL RCBs LENGTHS ARE SHOWN WITHOUT END SECTIONS.
5. CONTRACTOR RESPONSIBLE TO CONSTRUCT ALL TRENCHES TO APPLICABLE OSHA SPECIFICATIONS FOR ALL EXCAVATIONS AND INSTALLATIONS. DRAWINGS DO NOT SHOW LIMITS, DEPTHS, OR SLOPES OF TRENCH EXCAVATIONS REQUIRED TO COMPLY WITH APPLICABLE OSHA SPECIFICATIONS.
6. USE SUITABLE NATIVE MATERIAL FOR BACKFILL. SEE SPECIFICATIONS FOR CONDITIONS REQUIRING IMPORTED BACKFILL MATERIAL.
7. DISPOSE OF ALL CONCRETE AND ASPHALT RUBBLE ACCORDING TO ALL APPLICABLE LOCAL, STATE, AND FEDERAL LAWS. NO CONCRETE, RUBBLE, OR EXTRA MATERIALS SHALL BE BACKFILLED ON SITE.
8. ALL RIPRAP SHALL BE CLASS II, AS DEFINED IN SECTION 701.06 OF MONTANA DEPARTMENT OF TRANSPORTATION (MDT) STANDARD SPECIFICATIONS (2014) AND INSTALLED ACCORDING TO SECTION 613 AS SHOWN IN THE PLANS.
9. ALL PUBLIC LAND SURVEY MONUMENTS TO BE REMOVED, RELOCATED, RESET, OR REFERENCED BY A LICENSED LAND SURVEYOR.
10. CLEAR AND GRUB TO CONSTRUCTION LIMITS AND MINIMIZE DAMAGE TO ADJACENT VEGETATION. CLEARING AND GRUBBING SHALL NOT BE MEASURED AND PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE WORK.
11. ALL ROADWAYS AND APPROACHES TO BE RECONSTRUCTED TO THEIR EXISTING CONDITION, INCLUDING ALL SURFACE AND BASE COURSE TYPES, THICKNESSES, AND EXISTING ELEVATIONS.
12. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THE APPROVED PLANS AND A COPY OF ALL PERMITS AND EXTENSION AGREEMENTS NEEDED FOR THE JOB, ON-SITE AT ALL TIMES.
13. THE CONTRACTOR IS RESPONSIBLE FOR THE SAFETY OF ALL PERSONNEL, ALL SITE VISITORS, AND THE GENERAL PUBLIC WHO MAY BE AFFECTED BY THE CONSTRUCTION. THIS INCLUDES BUT IS NOT LIMITED TO GENERAL AND CHANNEL EXCAVATION, SHORING, TRAFFIC CONTROL, AND SECURITY.
14. IF DURING THE CONSTRUCTION PROCESS, CONDITIONS ARE ENCOUNTERED WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY.
15. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS SHOWN ON THESE DRAWINGS, OR DESIGNATED TO BE PROVIDED, INSTALLED, OR CONSTRUCTED, UNLESS SPECIFICALLY NOTED OTHERWISE.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING AS-BUILT INFORMATION ON A SET OF RECORD DRAWINGS KEPT ON THE CONSTRUCTION SITE AND AVAILABLE TO THE ENGINEER AT ALL TIMES. CONTRACTOR SHALL PROVIDE A FINAL SET OF AS-BUILT DRAWINGS TO THE ENGINEER PRIOR TO THE FINAL ACCEPTANCE AND FINAL PAYMENT.
17. DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. IF PERTINENT DIMENSIONS ARE NOT SHOWN, CONTACT THE CONSULTANT ENGINEER FOR CLARIFICATION AND ANNOTATE THE DIMENSION ON THE AS-BUILT RECORD DRAWINGS.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SAVING AND PROTECTING ALL EXISTING TREES AND VEGETATION WHERE REMOVAL FOR CONSTRUCTION IS NOT MANDATORY. TREES TO BE REMOVED ARE NOTED IN THE PLANS. ALL TREES TO BE REMOVED OR RELOCATED WILL BE MARKED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER PRIOR TO REMOVAL.
19. IF WOUNDING OF SAVED TREES OCCUR, A NON-TOXIC WOUND DRESSING MUST BE APPLIED IMMEDIATELY.
20. MATERIALS STORED ON THE SITE WHICH MIGHT CONTRIBUTE POLLUTANTS TO RUNOFF SHALL BE STORED ACCORDING TO ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
21. ALL EXISTING AND PROPOSED CONTOURS ARE LABELED IN FEET AND REFERENCE THE NATIONAL VERTICAL DATUM OF 1988. ALL SLOPES ARE SHOWN AS DIAGRAMMATIC AND SHALL BE ROUNDED AT THE TOP AND BOTTOM.
22. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING NECESSARY DISCHARGE PERMITS AND STORMWATER CONTROL PERMITS.
23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANUP OF THE PROJECT SITE AND SURROUNDING AREAS ON A DAILY BASIS OF ANY TRASH OR MUD ON THE SITE OR ADJACENT STREETS AS A RESULT OF CONSTRUCTION.
24. THE CONTRACTOR SHALL RESTORE ALL STAGING AND STOCKPILING AREAS TO THEIR ORIGINAL OR BETTER THAN EXISTING CONDITION UPON COMPLETION OF THE PROJECT. THE COST TO RESTORE THESE AREAS SHALL NOT BE MEASURED AND PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE WORK.
25. THE CONTRACTOR SHALL MAINTAIN ALL HAUL ROUTES AND RESTORE THEM TO THEIR ORIGINAL OR BETTER THAN EXISTING CONDITION UPON COMPLETION OF USE AT NO EXPENSE TO THE OWNER.

26. ALL PAVED HAUL ROUTES SHALL BE MAINTAINED FREE OF MUD AND DEBRIS RESULTING FROM CONSTRUCTION OPERATIONS.
27. THE CONTRACTOR SHALL NOT DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE ENGINEER. THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES.
28. ALL ESTIMATES OF QUANTITIES SHALL BE VERIFIED BY THE CONTRACTOR/SUBCONTRACTOR, WHO SHALL BE RESPONSIBLE FOR DETERMINING ALL QUANTITIES AND PROVIDING THE WORK AND MATERIALS AS SHOWN ON THE PLANS.
29. THE LOCATION OF EXISTING UTILITIES SHOWN IS APPROXIMATE AND DEPTHS ARE UNKNOWN. THE CONTRACTOR SHALL FIELD VERIFY PRIOR TO CONSTRUCTION AND COORDINATE CONSTRUCTION SCHEDULE WITH UTILITY RELOCATION SCHEDULE. THE CONTRACTOR IS REQUIRED TO TAKE ALL PRECAUTIONARY MEANS TO PROTECT EXISTING UTILITIES NOT INTENDED FOR RELOCATION.
30. ALL WORK AND MATERIALS SHALL CONFORM TO THE "MONTANA PUBLIC WORKS STANDARD SPECIFICATIONS, SEVENTH ADDITION, 2021" AND MODIFICATIONS THERETO UNLESS NOTED OTHERWISE. IN CASE OF A CONFLICT BETWEEN REGULATORY OR STANDARD SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT WILL PREVAIL.
31. CONSTRUCTION SAFETY AND SANITATION FACILITIES SHALL BE PROVIDED BY THE CONTRACTOR AND MAINTAINED PER THE REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION.
32. THE CONTRACTOR SHALL PROTECT ADJACENT PRIVATE AND PUBLIC PROPERTY FROM DAMAGE DURING CONSTRUCTION. ANY DISTURBED PROPERTY OR SECTION CORNERS ARE TO BE RESET BY A PROFESSIONAL LAND SURVEYOR AT THE CONTRACTORS EXPENSE.
33. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY NEEDED TRAFFIC CONTROL. TRAFFIC CONTROL SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE APPROPRIATE GOVERNING AUTHORITY PRIOR TO IMPLEMENTATION.
34. THE CONTRACTOR SHALL REPLACE EXISTING FENCING AND ROADSIDE APPURTENANCES DISPLACED OR DAMAGED BY CONSTRUCTION.
35. CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL, USING WATER OR OTHER METHODS APPROVED BY THE ENGINEER.
36. THESE GENERAL NOTES ARE IN ADDITION TO SPECIFICATIONS PROVIDED IN THE CONTRACT DOCUMENTS, STANDARD SPECIFICATIONS, AND SPECIAL PROVISIONS. THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY DISCREPANCIES, ERRORS, OR INCONSISTENCIES.

NAME: N:\PROJECTS\W0138_23005-LCC_VFMMP-LOWER D2_T05\CAD\SHEETS\W0138_23005_LOWER D2_S_GENERAL.DWG
PLOT DATE: August 28, 2024 1:40 PM BY: JACOB LACY

DESIGNED	JAL	DATE	8/30/2024
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GENERAL NOTES

SHEET NUMBER:
G-01
SHEET

LEGEND*		
DESCRIPTION	EXISTING	PROPOSED
ASPHALT		
CONCRETE		
WETLAND		
RIGHT OF WAY		
SURVEY CONTROL		
CONTOUR		
CULVERT		
STORM DRAIN MANHOLE		
OVERHEAD POWER		
UNDERGROUND POWER		
POWER TRANSFORMER PEDESTAL		
UNDERGROUND FIBER OPTIC/PEDESTAL		
UNDERGROUND PHONE/PEDESTAL		
UNDERGROUND GAS		
TELEVISION		
WELL		
GUARDRAIL		
FENCE		
SIGN		
TREE		
RIPRAP		

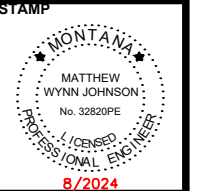
*TO BE UPDATED WITH RELEVANT PLANIMETRICS FOLLOWING FIELD SURVEY.

ABBREVIATIONS

- EOP EDGE OF PAVEMENT
- EOC EDGE OF CONCRETE
- FES FLARED END SECTION
- ROW RIGHT OF WAY
- TYP TYPICAL SECTION
- RCB REINFORCED CONCRETE BOX

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LEGEND

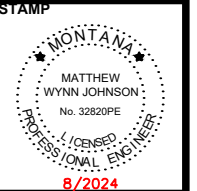
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CROSSING B - CONSTRUCTION QUANTITIES			
DESCRIPTION	UNIT	QUANTITY	NOTES
REMOVE AND DISPOSE EXISTING CULVERTS TYPE I	EA	0	SMALL CMP
REMOVE AND DISPOSE EXISTING CULVERTS TYPE II	EA	1	DOUBLE CMP, BOX CULVERT, OR CULVERT WITH EXCESSIVE REMOVAL OF FOUNDATION MATERIALS
CULVERT PROCURMENT & PLACEMENT (RCB 12'x6')	LF	30	CULVERT LENGTH (WITHOUT END SECTIONS)
CULVERT END SECTION (RCB 12'X6'X12')	EA	2	NUMBER OF END SECTIONS
RCB CULVERT BEDDING PROCUREMENT AND PLACEMENT	CY	20	INCLUDES END SECTIONS
RCB SAND CUSHION	CY	4	INCLUDES END SECTIONS
UNCLASSIFIED EXCAVATION	CY	381	INCLUDES OVER EXCAVATION FOR RIPRAP. DOES NOT INCLUDE CULVERT EXCAVATION
CULVERT EXCAVATION	CY	370	BASED ON ASSUMED CULVERT EXCAVATION SIDE SLOPE AND OVER EXCAVATION FOR BEDDING MATERIAL; INCLUDES VOLUME OCCUPIED BY EXISTING CULVERT
CULVERT NATIVE BACKFILL	CY	150	INCLUDES CULVERT EXCAVATION LESS CULVERT VOLUME, DOES NOT INCLUDE CULVERT BEDDING
RIPRAP PROCUREMENT & PLACEMENT	CY	381	RIPRAP VOLUME
STABILIZATION GEOTEXTILE	SY	451	AREA OF STABILIZATION GEOTEXTILE
HAUL OFF	CY	601	EXCESS EXCAVATION MATERIAL
AGGREGATE BASE COURSE	CY	12	MATERIAL FOR ROAD BASE OR SURFACE OF NON-ROAD CROSSINGS
AGGREGATE SURFACE COURSE	CY	0	MATERIAL FOR ROAD SURFACING
GRANULAR FILTER MATERIAL	CY	5	GRANULAR FILTER PLACED ON TOP OF RIPRAP
REVEGETATION	LS	1	RESEED DISTURBED AREAS WITHIN CONSTRUCTION LIMITS. INCLUDES SEEDBED PREPARATION, SEED, AND DRILL SEEDING

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CONSTRUCTION
QUANTITIES -
CROSSING B


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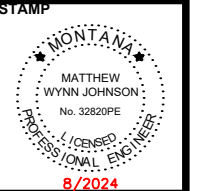
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CROSSING C - CONSTRUCTION QUANTITIES			
DESCRIPTION	UNIT	QUANTITY	NOTES
REMOVE AND DISPOSE EXISTING CULVERTS TYPE I	EA	1	SMALL CMP
REMOVE AND DISPOSE EXISTING CULVERTS TYPE II	EA	0	DOUBLE CMP, BOX CULVERT, OR CULVERT WITH EXCESSIVE REMOVAL OF FOUNDATION MATERIALS
TOPSOIL -- BANK TREATMENT	CY	72	SALVAGED TOPSOIL
COIR LOG -- BANK TREATMENT	LF	472	PLACED AT OHWE
EROSION CONTROL BLANKET -- BANK TREATMENT	SY	72	TO COVER SEEDED TOPSOIL
STONE/COBBLE -- BANK TREATMENT	CY	48	PLACED AT TOE OF EMBANKMENT TO OHWE
HAUL OFF	CY	243	EMBANKMENT TO BE REMOVED VOLUME LESS SALVAGED TOPSOIL
REVEGETATION	LS	1	RESEED DISTURBED AREAS WITHIN CONSTRUCTION LIMITS. INCLUDES SEEDBED PREPARATION, SEED, AND DRILL SEEDING

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CONSTRUCTION
 QUANTITIES -
 CROSSING C

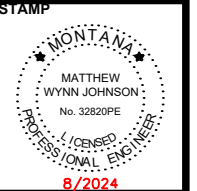
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CROSSING D - CONSTRUCTION QUANTITIES			
DESCRIPTION	UNIT	QUANTITY	NOTES
REMOVE AND DISPOSE EXISTING CULVERTS TYPE I	EA	1	SMALL CMP
REMOVE AND DISPOSE EXISTING CULVERTS TYPE II	EA	0	DOUBLE CMP, BOX CULVERT, OR CULVERT WITH EXCESSIVE REMOVAL OF FOUNDATION MATERIALS
CULVERT PROCURMENT & PLACEMENT (RCB 12'x6')	LF	48	CULVERT LENGTH (WITHOUT END SECTIONS)
CULVERT END SECTION (RCB 12'X6'X12')	EA	2	NUMBER OF END SECTIONS
STRUCTURAL BACKFILL	CY	408.78	
RCB CULVERT BEDDING PROCUREMENT AND PLACEMENT	CY	27	INCLUDES END SECTIONS
RCB SAND CUSHION	CY	5	INCLUDES END SECTIONS
UNCLASSIFIED EXCAVATION	CY	395	INCLUDES OVER EXCAVATION FOR RIPRAP. DOES NOT INCLUDE CULVERT EXCAVATION
CULVERT EXCAVATION	CY	500	BASED ON ASSUMED CULVERT EXCAVATION SIDE SLOPE AND OVER EXCAVATION FOR BEDDING MATERIAL; INCLUDES VOLUME OCCUPIED BY EXISTING CULVERT
CULVERT NATIVE BACKFILL	CY	210	INCLUDES CULVERT EXCAVATION LESS CULVERT VOLUME, DOES NOT INCLUDE CULVERT BEDDING
NATIVE MATERIAL TO BE REPLACED BY STRUC. BACKFILL	CY	409	VOLUME OF NATIVE EMBANKMENT
RIPRAP PROCUREMENT & PLACEMENT	CY	395	RIPRAP VOLUME
TOPSOIL -- BANK TREATMENT	CY	93	SALVAGED TOPSOIL
COIR LOG -- BANK TREATMENT	LF	551	PLACED AT OHWE
EROSION CONTROL BLANKET -- BANK TREATMENT	SY	93	TO COVER SEEDED TOPSOIL
STONE/COBBLE -- BANK TREATMENT	CY	30	PLACED AT TOE OF EMBANKMENT TO OHWE
STABILIZATION GEOTEXTILE	SY	489	AREA OF STABILIZATION GEOTEXTILE
HAUL OFF	CY	1415	EMBANKMENT TO BE REMOVED VOLUME LESS SALVAGED TOPSOIL
AGGREGATE BASE COURSE	CY	94	MATERIAL FOR ROAD BASE OR SURFACE OF NON-ROAD CROSSINGS
AGGREGATE SURFACE COURSE	CY	47	MATERIAL FOR ROAD SURFACING
GRANULAR FILTER MATERIAL	CY	7	GRANULAR FILTER PLACED ON TOP OF RIPRAP
REVEGETATION	LS	1	RESEED DISTURBED AREAS WITHIN CONSTRUCTION LIMITS. INCLUDES SEEDBED PREPARATION, SEED, AND DRILL SEEDING
EXISTING ROADWAY/EMBANKMENT REMOVAL	CY	823	
STRUCTURAL BACKFILL	CY	550	
INSTALL CATTLE GUARD PROVIDED BY OWNER	EA	1	

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 QUANTITIES -
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SHEET NUMBER:
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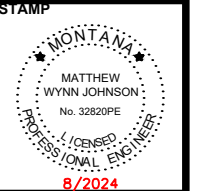
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CROSSING E - CONSTRUCTION QUANTITIES			
DESCRIPTION	UNIT	QUANTITY	NOTES
REMOVE AND DISPOSE EXISTING CULVERTS TYPE I	EA	1	SMALL CMP
REMOVE AND DISPOSE EXISTING CULVERTS TYPE II	EA	0	DOUBLE CMP, BOX CULVERT, OR CULVERT WITH EXCESSIVE REMOVAL OF FOUNDATION MATERIALS
CULVERT PROCURMENT & PLACEMENT (RCB 12'x6')	LF	48	CULVERT LENGTH (WITHOUT END SECTIONS)
CULVERT END SECTION (RCB 12'X6'X12')	EA	2	NUMBER OF END SECTIONS
RCB CULVERT BEDDING PROCUREMENT AND PLACEMENT	CY	27	INCLUDES END SECTIONS
RCB SAND CUSHION	CY	5	INCLUDES END SECTIONS
UNCLASSIFIED EXCAVATION	CY	380	INCLUDES OVER EXCAVATION FOR RIPRAP. DOES NOT INCLUDE CULVERT EXCAVATION
CULVERT EXCAVATION	CY	500	BASED ON ASSUMED CULVERT EXCAVATION SIDE SLOPE AND OVER EXCAVATION FOR BEDDING MATERIAL; INCLUDES VOLUME OCCUPIED BY EXISTING CULVERT
CULVERT NATIVE BACKFILL	CY	210	INCLUDES CULVERT EXCAVATION LESS CULVERT VOLUME, DOES NOT INCLUDE CULVERT BEDDING
RIPRAP PROCUREMENT & PLACEMENT	CY	380	RIPRAP VOLUME
STABILIZATION GEOTEXTILE	SY	431	AREA OF STABILIZATION GEOTEXTILE
HAUL OFF	CY	670	EXCESS EXCAVATION MATERIAL
AGGREGATE BASE COURSE	CY	24	MATERIAL FOR ROAD BASE OR SURFACE OF NON-ROAD CROSSINGS
AGGREGATE SURFACE COURSE	CY	0	MATERIAL FOR ROAD SURFACING
GRANULAR FILTER MATERIAL	CY	5	GRANULAR FILTER PLACED ON TOP OF RIPRAP
REVEGETATION	LS	1	RESEED DISTURBED AREAS WITHIN CONSTRUCTION LIMITS. INCLUDES SEEDBED PREPARATION, SEED, AND DRILL SEEDING

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CONSTRUCTION
QUANTITIES -
CROSSING E

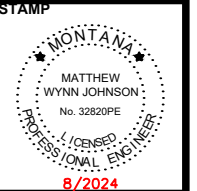
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CROSSING F - CONSTRUCTION QUANTITIES			
DESCRIPTION	UNIT	QUANTITY	NOTES
REMOVE AND DISPOSE EXISTING CULVERTS TYPE I	EA	1	SMALL CMP
REMOVE AND DISPOSE EXISTING CULVERTS TYPE II	EA	0	DOUBLE CMP, BOX CULVERT, OR CULVERT WITH EXCESSIVE REMOVAL OF FOUNDATION MATERIALS
CULVERT PROCURMENT & PLACEMENT (RCB 12'x6')	LF	78	CULVERT LENGTH (WITHOUT END SECTIONS)
CULVERT END SECTION (RCB 12'X6'X12')	EA	2	NUMBER OF END SECTIONS
RCB CULVERT BEDDING PROCUREMENT AND PLACEMENT	CY	38	INCLUDES END SECTIONS
RCB SAND CUSHION	CY	7	INCLUDES END SECTIONS
UNCLASSIFIED EXCAVATION	CY	354	INCLUDES OVER EXCAVATION FOR RIPRAP. DOES NOT INCLUDE CULVERT EXCAVATION
CULVERT EXCAVATION	CY	700	BASED ON ASSUMED CULVERT EXCAVATION SIDE SLOPE AND OVER EXCAVATION FOR BEDDING MATERIAL; INCLUDES VOLUME OCCUPIED BY EXISTING CULVERT
CULVERT NATIVE BACKFILL	CY	280	INCLUDES CULVERT EXCAVATION LESS CULVERT VOLUME, DOES NOT INCLUDE CULVERT BEDDING
RIPRAP PROCUREMENT & PLACEMENT	CY	354	RIPRAP VOLUME
STABILIZATION GEOTEXTILE	SY	508	AREA OF STABILIZATION GEOTEXTILE
HAUL OFF	CY	774	EXCESS EXCAVATION MATERIAL
AGGREGATE BASE COURSE	CY	48	MATERIAL FOR ROAD BASE OR SURFACE OF NON-ROAD CROSSINGS
AGGREGATE SURFACE COURSE	CY	0	MATERIAL FOR ROAD SURFACING
GRANULAR FILTER MATERIAL	CY	5	GRANULAR FILTER PLACED ON TOP OF RIPRAP
REVEGETATION	LS	1	RESEED DISTURBED AREAS WITHIN CONSTRUCTION LIMITS. INCLUDES SEEDBED PREPARATION, SEED, AND DRILL SEEDING

NAME: N:\PROJECTS\W0138_23005-LCC_VFMMP_LOWER D2 TO S\CAD\SHEETS\W0138_23005_LOWER D2_S_GENERAL.DWG
PLOT DATE: August 28, 2024 1:40 PM BY: JACOB LACY

DESIGNED	JAL	DATE	8/30/2024
DRAWN	JAL	CHECKED	MMJ
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VFMMP - LOWER D2
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INFRASTRUCTURE
IMPROVEMENTS


CONSTRUCTION
QUANTITIES -
CROSSING F

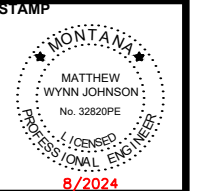
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G-07
SHEET

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CROSSING GLASS DRIVE #2 - CONSTRUCTION QUANTITIES			
DESCRIPTION	UNIT	QUANTITY	NOTES
REMOVE AND DISPOSE EXISTING CULVERTS TYPE I	EA	0	SMALL CMP
REMOVE AND DISPOSE EXISTING CULVERTS TYPE II	EA	1	DOUBLE CMP, BOX CULVERT, OR CULVERT WITH EXCESSIVE REMOVAL OF FOUNDATION MATERIALS
CULVERT PROCURMENT & PLACEMENT (RCB 12'x6')	LF	30	CULVERT LENGTH (WITHOUT END SECTIONS)
CULVERT END SECTION (RCB 12'X6'X12')	EA	2	NUMBER OF END SECTIONS
RCB CULVERT BEDDING PROCUREMENT AND PLACEMENT	CY	20	INCLUDES END SECTIONS
RCB SAND CUSHION	CY	4	INCLUDES END SECTIONS
UNCLASSIFIED EXCAVATION	CY	422	INCLUDES OVER EXCAVATION FOR RIPRAP. DOES NOT INCLUDE CULVERT EXCAVATION
CULVERT EXCAVATION	CY	370	BASED ON ASSUMED CULVERT EXCAVATION SIDE SLOPE AND OVER EXCAVATION FOR BEDDING MATERIAL; INCLUDES VOLUME OCCUPIED BY EXISTING CULVERT
CULVERT NATIVE BACKFILL	CY	150	INCLUDES CULVERT EXCAVATION LESS CULVERT VOLUME, DOES NOT INCLUDE CULVERT BEDDING
NATIVE MATERIAL TO BE REPLACED BY STRUC. BACKFILL	CY	293	VOLUME OF NATIVE EMBANKMENT
RIPRAP PROCUREMENT & PLACEMENT	CY	422	RIPRAP VOLUME
TOPSOIL -- BANK TREATMENT	CY	70	SALVAGED TOPSOIL
COIR LOG -- BANK TREATMENT	LF	426	PLACED AT OHWE
EROSION CONTROL BLANKET -- BANK TREATMENT	SY	70	TO COVER SEEDED TOPSOIL
STONE/COBBLE -- BANK TREATMENT	CY	33	PLACED AT TOE OF EMBANKMENT TO OHWE
STABILIZATION GEOTEXTILE	SY	495	AREA OF STABILIZATION GEOTEXTILE
HAUL OFF	CY	900	EMBANKMENT TO BE REMOVED VOLUME LESS SALVAGED TOPSOIL
AGGREGATE BASE COURSE	CY	24	MATERIAL FOR ROAD BASE OR SURFACE OF NON-ROAD CROSSINGS
AGGREGATE SURFACE COURSE	CY	12	MATERIAL FOR ROAD SURFACING
GRANULAR FILTER MATERIAL	CY	11	GRANULAR FILTER PLACED ON TOP OF RIPRAP
REVEGETATION	LS	1	RESEED DISTURBED AREAS WITHIN CONSTRUCTION LIMITS. INCLUDES SEEDBED PREPARATION, SEED, AND DRILL SEEDING
EXISTING ROADWAY/EMBANKMENT REMOVAL	CY	328	
STRUCTURAL BACKFILL	CY	293	

NAME: N:\PROJECTS\W0138_23005-LCC_VFMMP-LOWER D2 TO S\CAD\SHEETS\W0138_23005_LOWER D2_S_GENERAL.DWG
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 IMPROVEMENTS


CONSTRUCTION
 QUANTITIES -
 GLASS DRIVE #2

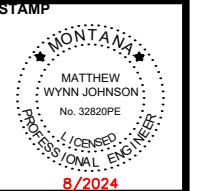
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GLASS DRIVE #1 - CONSTRUCTION QUANTITIES			
DESCRIPTION	UNIT	QUANTITY	NOTES
REMOVE AND DISPOSE EXISTING CULVERTS TYPE I	EA	1	SMALL CMP
REMOVE AND DISPOSE EXISTING CULVERTS TYPE II	EA	0	DOUBLE CMP, BOX CULVERT, OR CULVERT WITH EXCESSIVE REMOVAL OF FOUNDATION MATERIALS
CULVERT PROCURMENT & PLACEMENT (RCB 12'x6')	LF	48	CULVERT LENGTH (WITHOUT END SECTIONS)
CULVERT END SECTION (RCB 12'X6'X12')	EA	2	NUMBER OF END SECTIONS
RCB CULVERT BEDDING PROCUREMENT AND PLACEMENT	CY	27	INCLUDES END SECTIONS
RCB SAND CUSHION	CY	5	INCLUDES END SECTIONS
UNCLASSIFIED EXCAVATION	CY	414	INCLUDES OVER EXCAVATION FOR RIPRAP. DOES NOT INCLUDE CULVERT EXCAVATION
CULVERT EXCAVATION	CY	500	BASED ON ASSUMED CULVERT EXCAVATION SIDE SLOPE AND OVER EXCAVATION FOR BEDDING MATERIAL; INCLUDES VOLUME OCCUPIED BY EXISTING CULVERT
CULVERT NATIVE BACKFILL	CY	210	INCLUDES CULVERT EXCAVATION LESS CULVERT VOLUME, DOES NOT INCLUDE CULVERT BEDDING
RIPRAP PROCUREMENT & PLACEMENT	CY	414	
STABILIZATION GEOTEXTILE	SY	508	AREA OF STABILIZATION GEOTEXTILE
HAUL OFF	CY	704	EXCESS EXCAVATION MATERIAL
AGGREGATE BASE COURSE	CY	19	MATERIAL FOR ROAD BASE OR SURFACE OF NON-ROAD CROSSINGS
AGGREGATE SURFACE COURSE	CY	0	MATERIAL FOR ROAD SURFACING
GRANULAR FILTER MATERIAL	CY	5	GRANULAR FILTER PLACED ON TOP OF RIPRAP
REVEGETATION	LS	1	RESEED DISTURBED AREAS WITHIN CONSTRUCTION LIMITS. INCLUDES SEEDBED PREPARATION, SEED, AND DRILL SEEDING

NAME: N:\PROJECTS\W0138_23005-LCC_VFMMP-LOWER D2 TO S\CAD\SHEETS\W0138_23005_LOWER D2_S_GENERAL.DWG
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DESIGNED	JAL	DATE	8/30/2024
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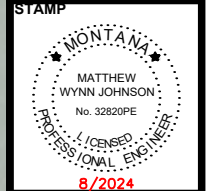
CONSTRUCTION
QUANTITIES -
GLASS DRIVE #1

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G-09
SHEET

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JAL	JAL	MWJ	8/30/2024

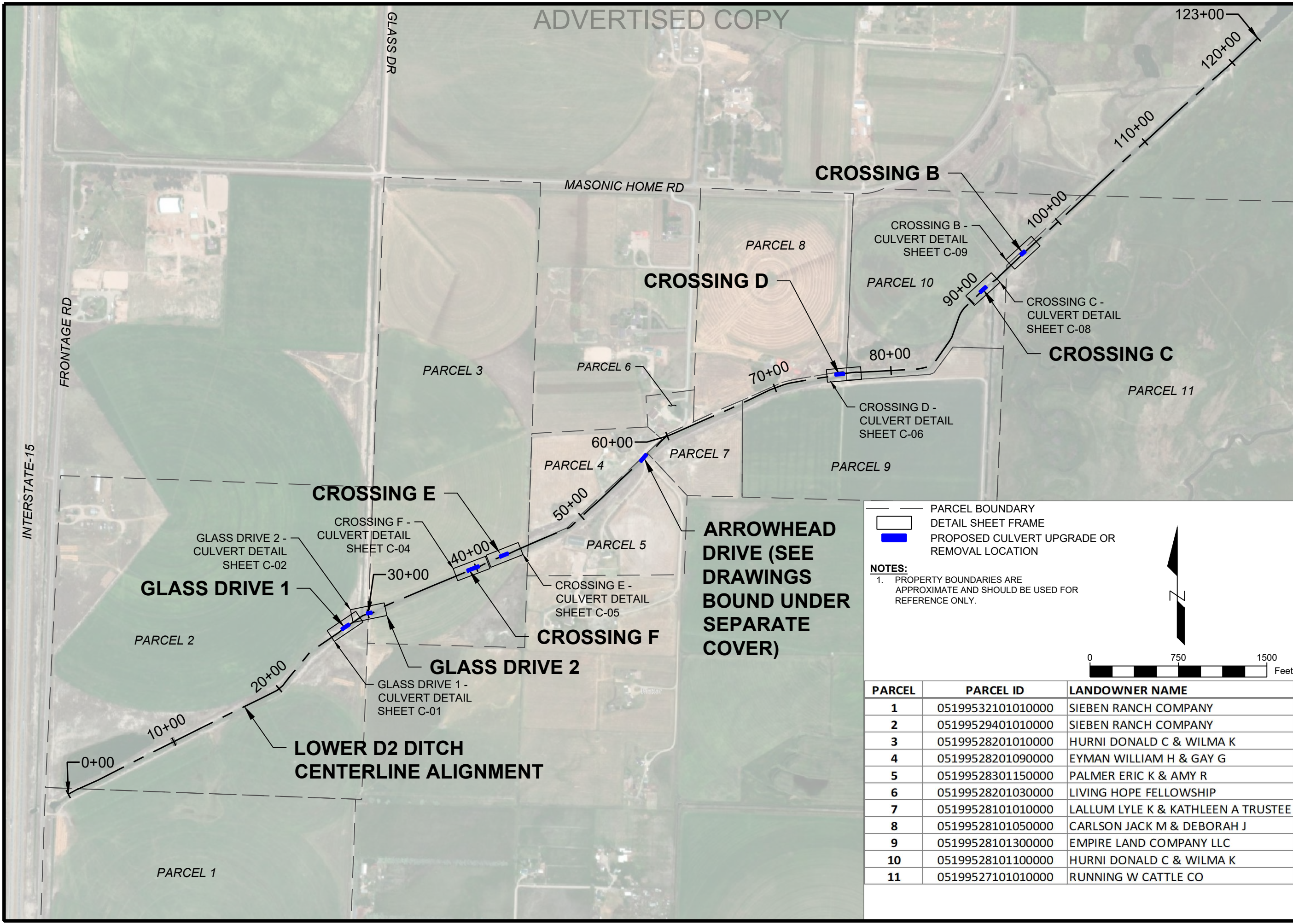


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PROJECT OVERVIEW

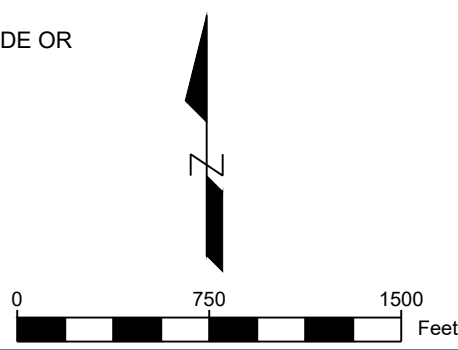
SHEET NUMBER:
G-10
SHEET



PARCEL BOUNDARY
 DETAIL SHEET FRAME
 PROPOSED CULVERT UPGRADE OR REMOVAL LOCATION

NOTES:

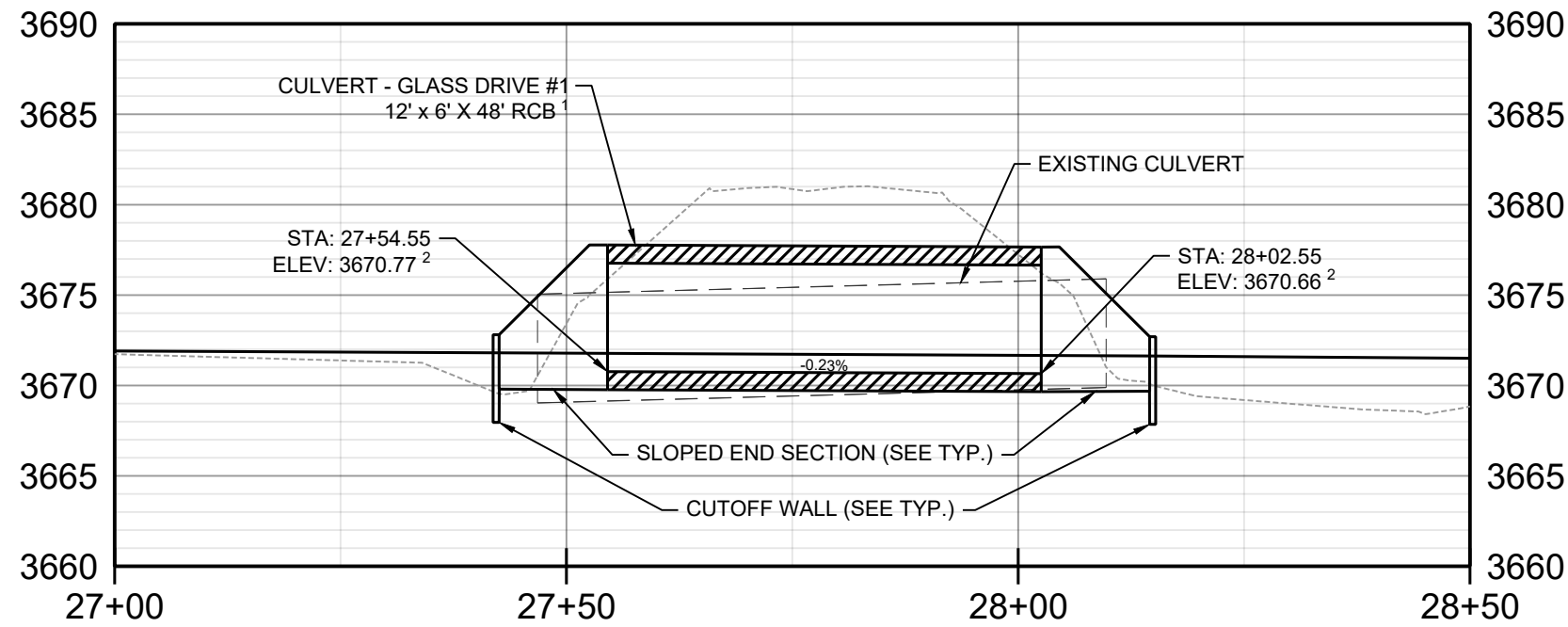
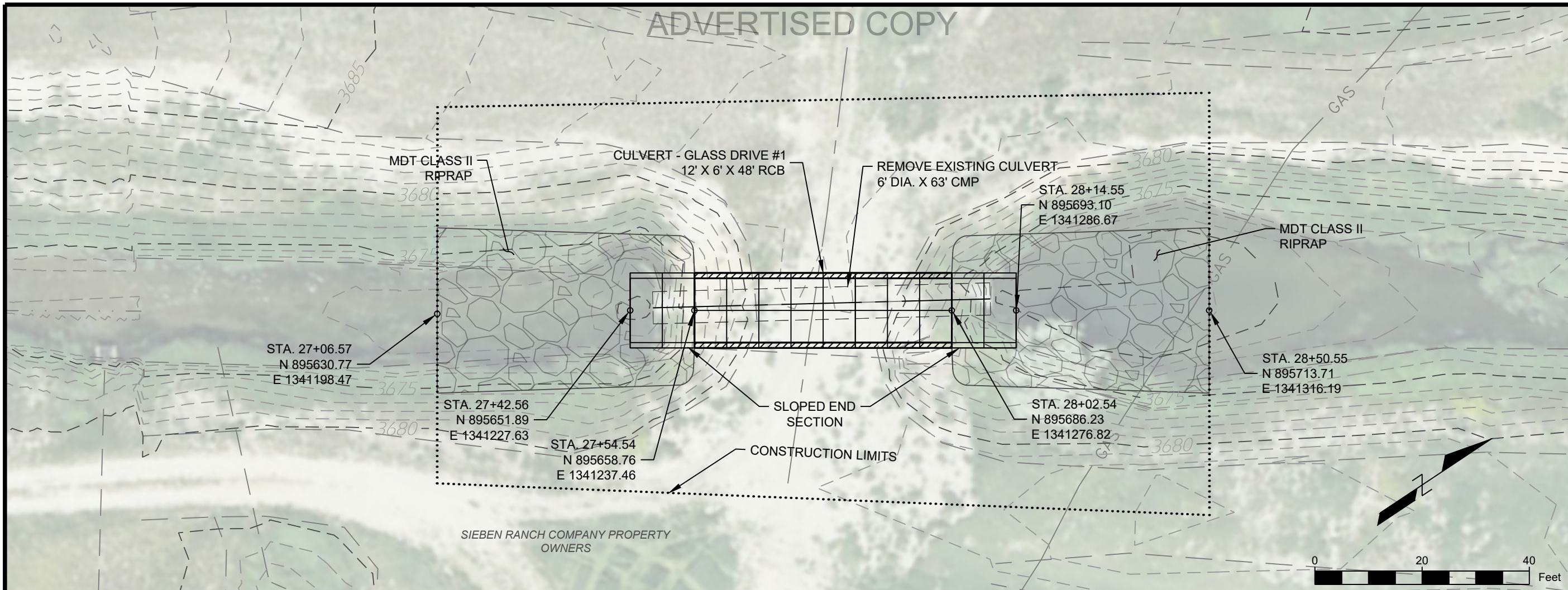
- PROPERTY BOUNDARIES ARE APPROXIMATE AND SHOULD BE USED FOR REFERENCE ONLY.



PARCEL	PARCEL ID	LANDOWNER NAME
1	05199532101010000	SIEBEN RANCH COMPANY
2	05199529401010000	SIEBEN RANCH COMPANY
3	05199528201010000	HURNI DONALD C & WILMA K
4	05199528201090000	EYMAN WILLIAM H & GAY G
5	05199528301150000	PALMER ERIC K & AMY R
6	05199528201030000	LIVING HOPE FELLOWSHIP
7	05199528101010000	LALLUM LYLE K & KATHLEEN A TRUSTEE
8	05199528101050000	CARLSON JACK M & DEBORAH J
9	05199528101300000	EMPIRE LAND COMPANY LLC
10	05199528101100000	HURNI DONALD C & WILMA K
11	05199527101010000	RUNNING W CATTLE CO

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GLASS DRIVE #1 - CULVERT PROFILE
 HORIZ. SCALE: 1" = 20'
 VERT. SCALE: 1" = 10'

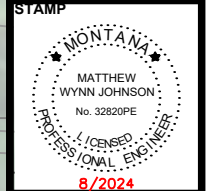
- NOTES:**
- CULVERT WILL BE PLACED IN A MANNER THAT THE POST-CONSTRUCTION EQUILIBRATED CHANNEL PROFILE WILL BE 1.0' ABOVE CULVERT INVERTS.

----- EXISTING GROUND PROFILE
 _____ POST CONSTRUCTION EQUILIBRATED CHANNEL PROFILE

NAME: N:\PROJECTS\W0138_23003-LCC_VFMMP-LOWER D2 TO S\CAD\SHEETS\W0138_23003_LOWER D2_S_CULVERT P&P.DWG
 PLOT DATE: August 28, 2024 1:41 PM BY: JACOB LACY

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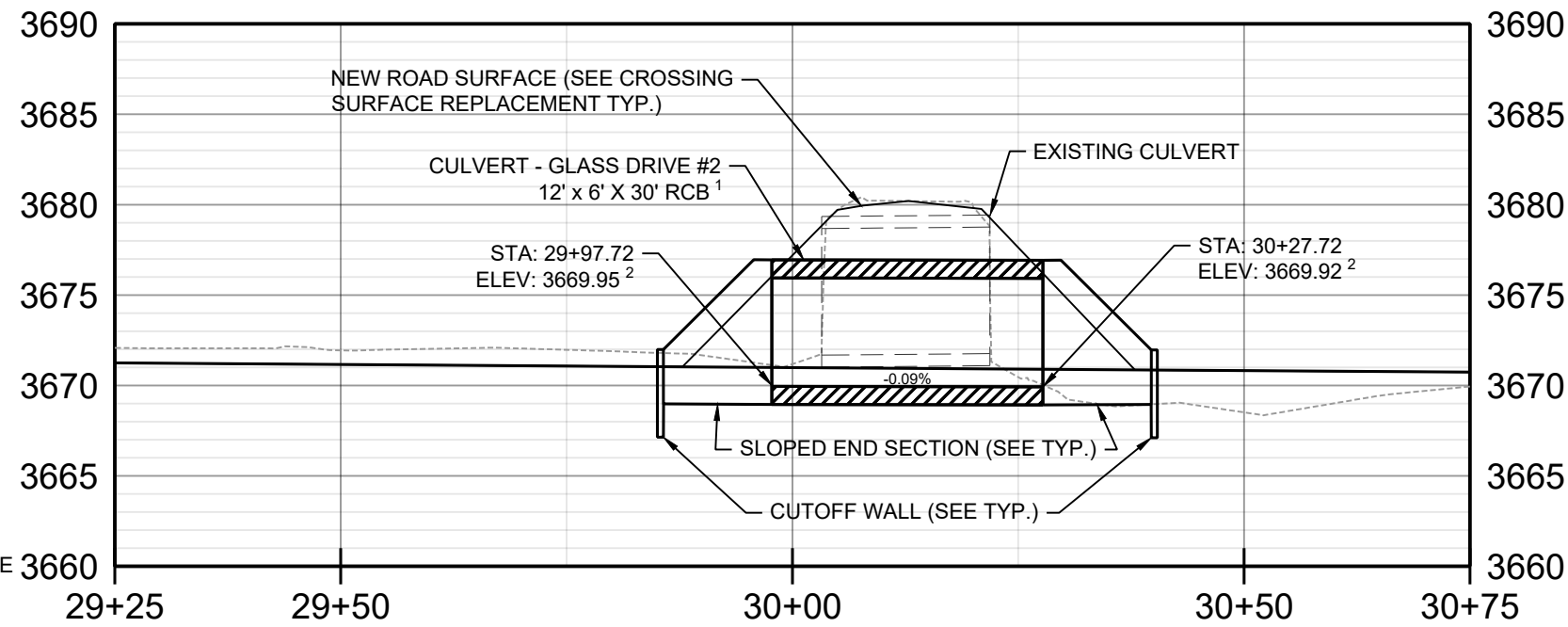
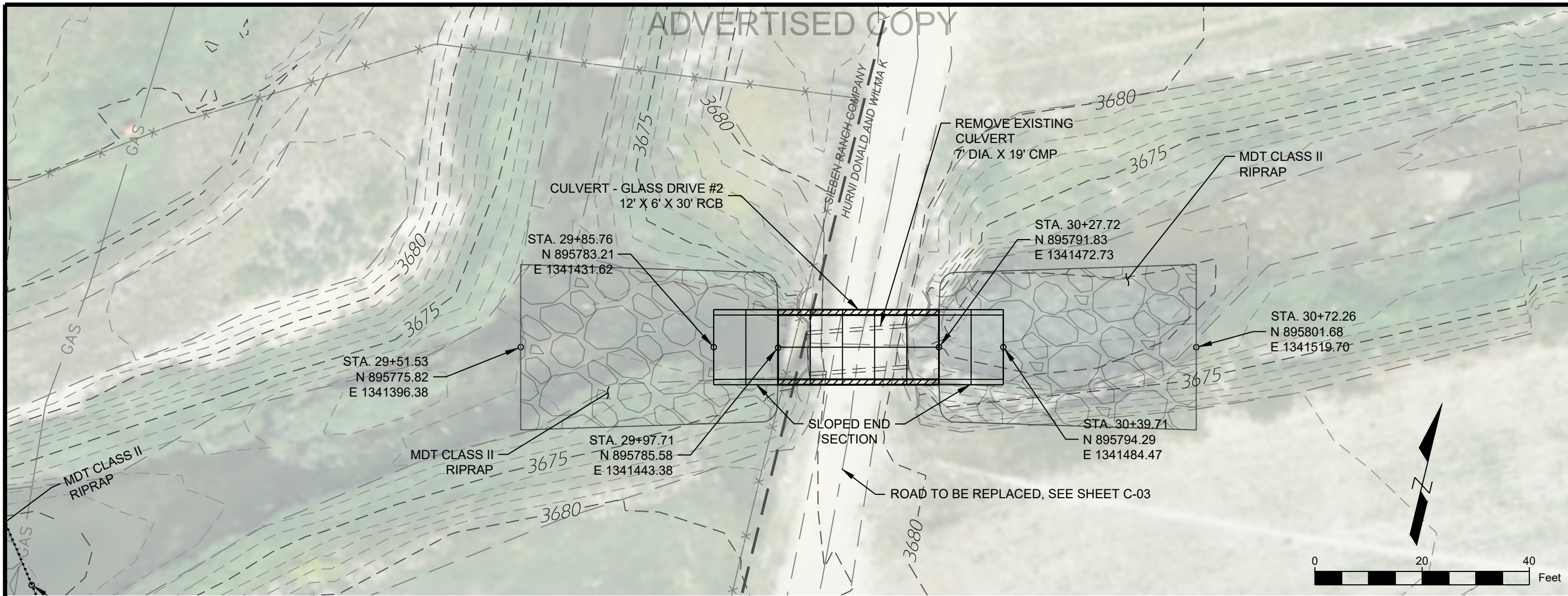
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 IMPROVEMENTS

GLASS DRIVE 1 -
 CULVERT DETAIL

SHEET NUMBER:
C-01
 SHEET

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GLASS DRIVE #2 - CULVERT PROFILE
 HORIZ. SCALE: 1" = 20'
 VERT. SCALE: 1" = 10'

----- EXISTING GROUND PROFILE
 _____ POST CONSTRUCTION EQUILIBRATED CHANNEL PROFILE

- NOTES:**
1. CULVERT WILL BE PLACED IN A MANNER THAT THE POST-CONSTRUCTION EQUILIBRATED CHANNEL PROFILE WILL BE 1.0' ABOVE CULVERT INVERTS.
 2. EASEMENT BOUNDARIES ARE APPROXIMATE AND NOT FOR LEGAL PURPOSES.
 3. CONSTRUCTION LIMITS SHOWN ON SHEET C-03

NAME: N:\PROJECTS\W0138_23005-LCC_VFMMP-LOWER D2_T05\CAD\SHEETS\W0138_23005_LOWER D2_S_CULVERT P&P.DWG
 PLOT DATE: August 28, 2024 1:42 PM BY: JACOB LACY

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811 Know what's below. Call before you dig.

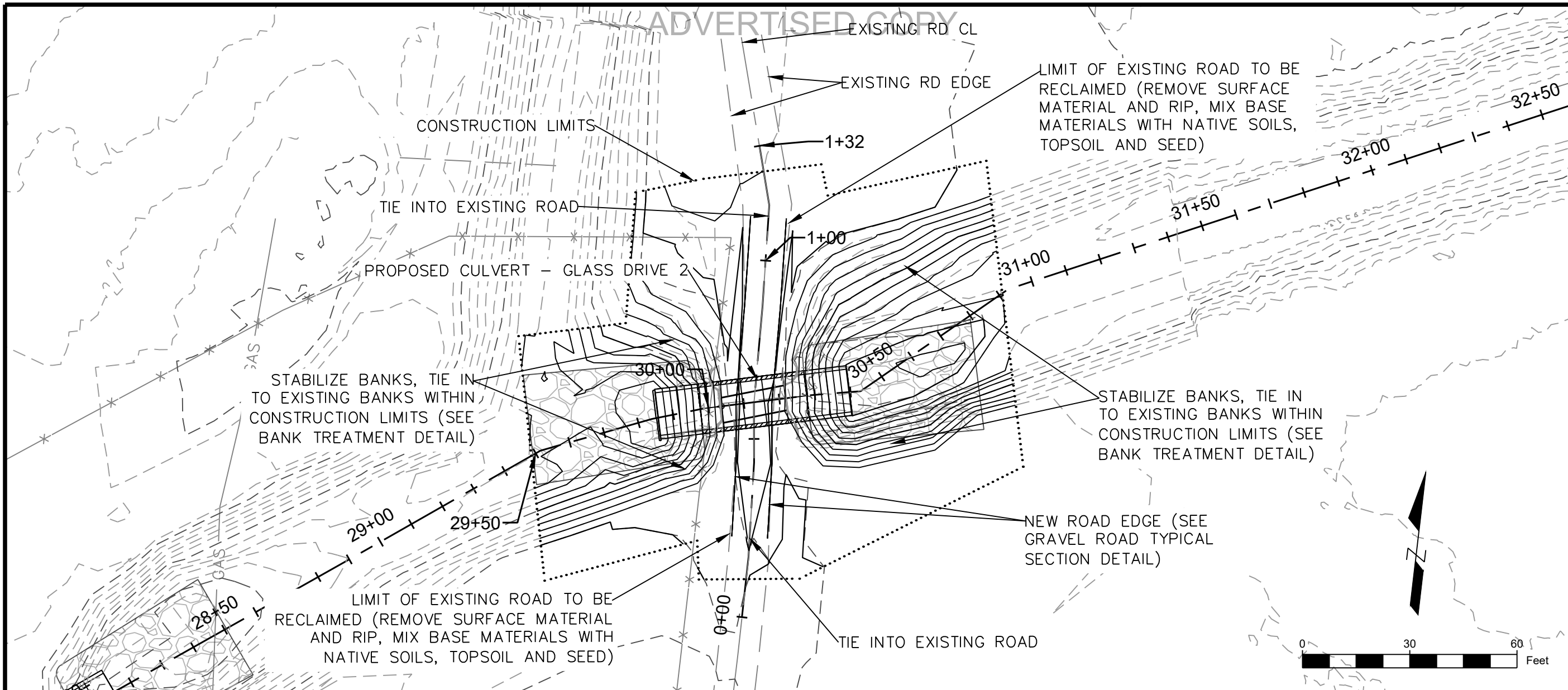
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 PUBLIC WORKS
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 HELENA, MT 59602

VFMMP - LOWER D2
 FLOOD
 INFRASTRUCTURE
 IMPROVEMENTS

GLASS DRIVE 2 -
 CULVERT DETAIL

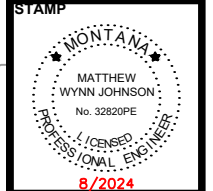
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C-02
 SHEET

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JAL	JAL	MWJ	8/30/2024

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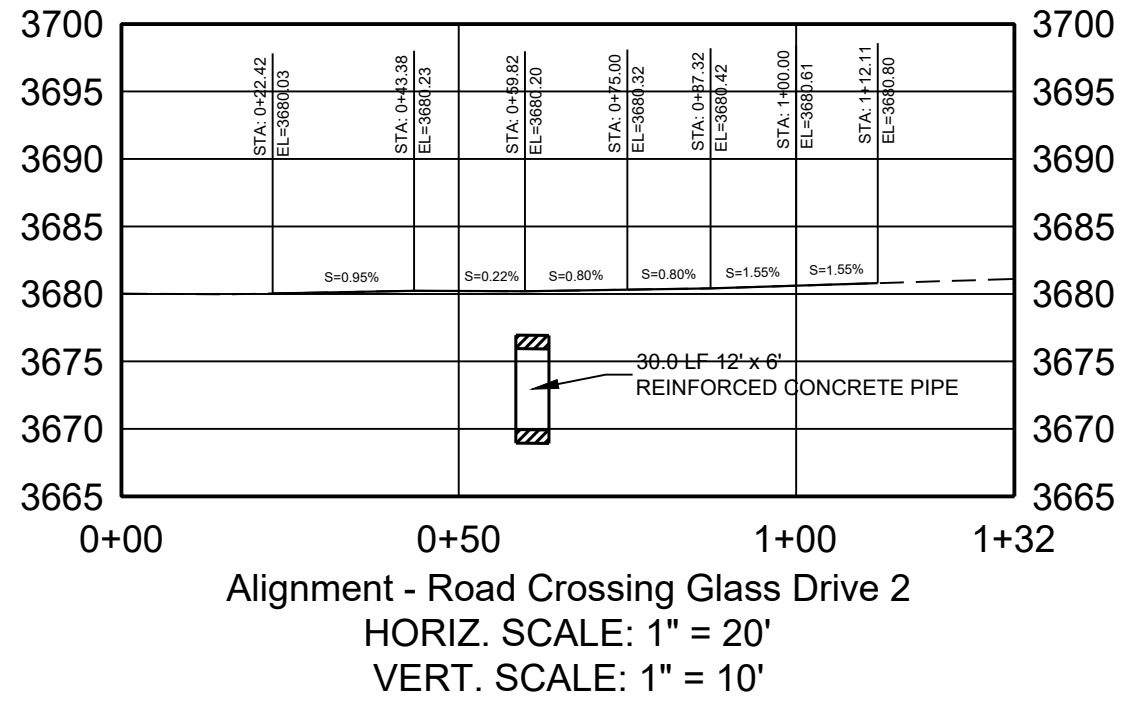


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VFMMP - LOWER D2
 FLOOD
 INFRASTRUCTURE
 IMPROVEMENTS

GLASS DRIVE 2 -
 PROPOSED ROAD
 CROSSING DETAIL

SHEET NUMBER:
C-03
 SHEET

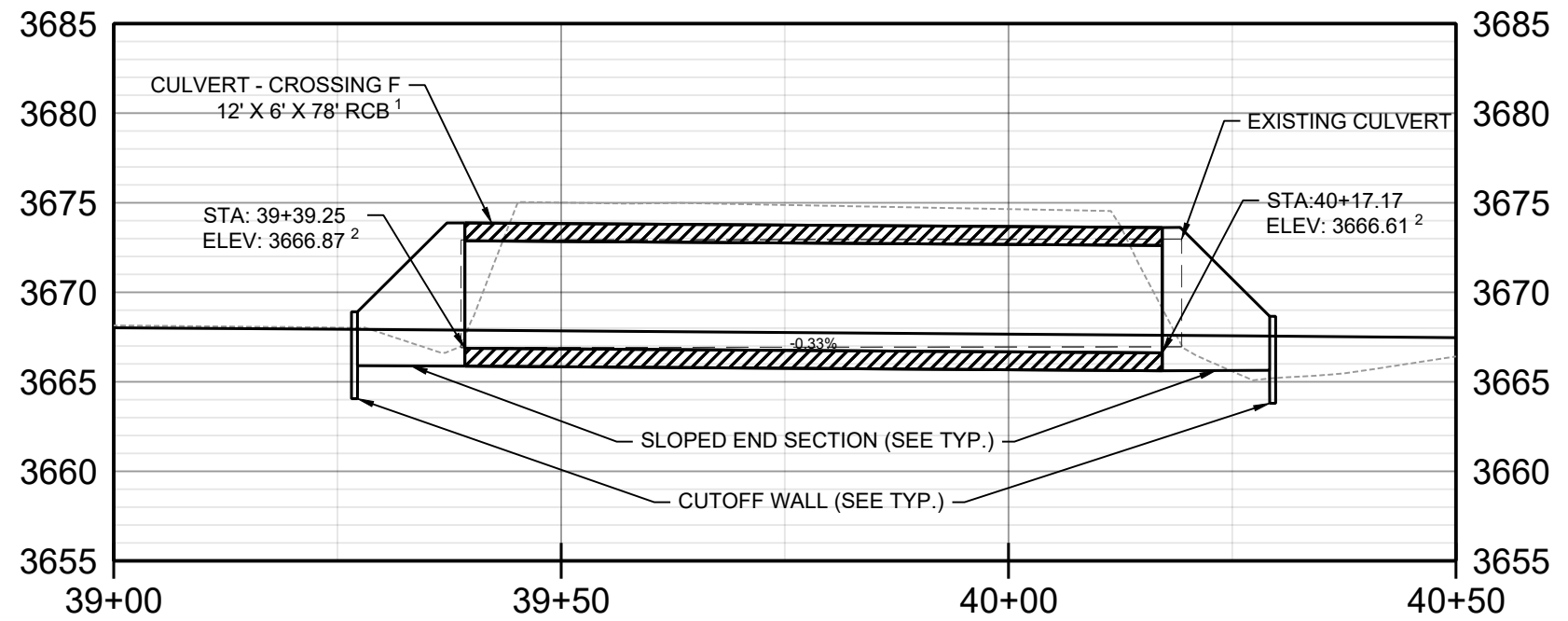
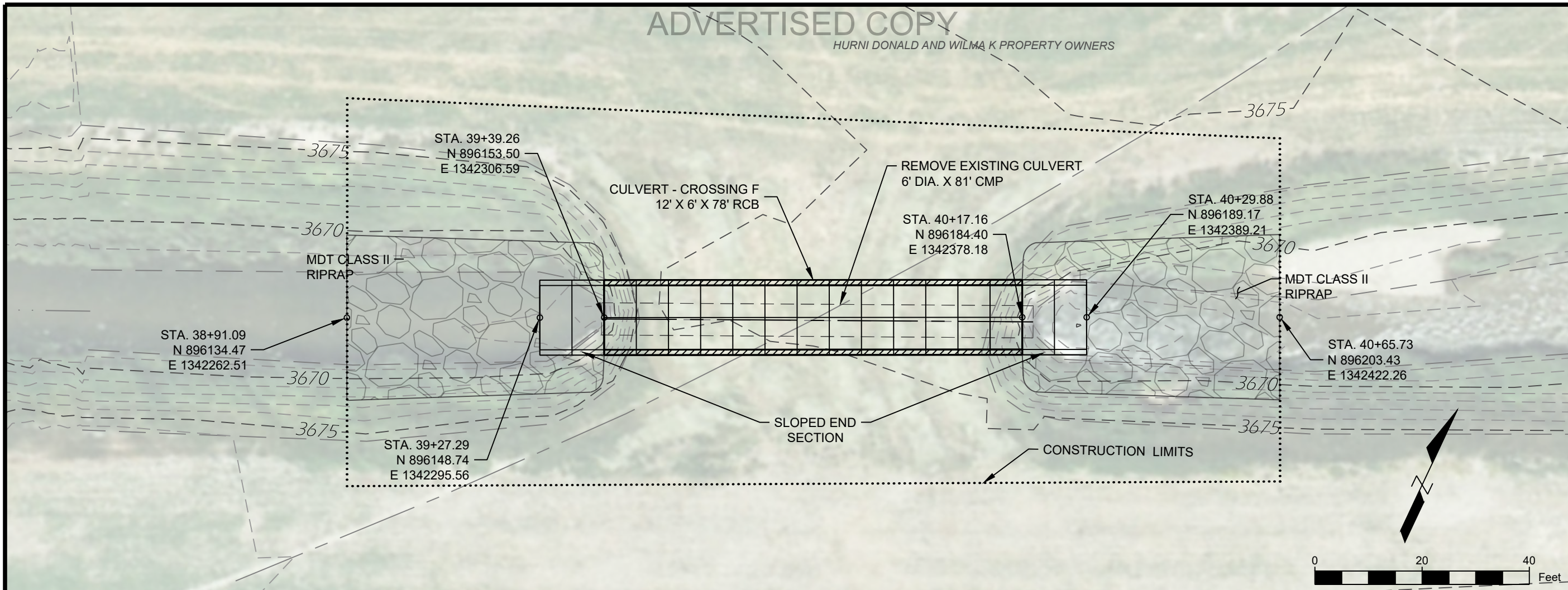


----- EXISTING GROUND PROFILE
 _____ POST CONSTRUCTION ROAD PROFILE

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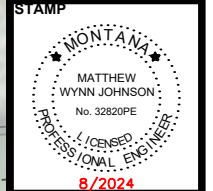
HURNI DONALD AND WILMA K PROPERTY OWNERS



NOTES:
 1. CULVERT WILL BE PLACED IN A MANNER THAT THE POST-CONSTRUCTION EQUILIBRATED CHANNEL PROFILE WILL BE 1.0' ABOVE CULVERT INVERTS.

CROSSING F - CULVERT PROFILE
 HORIZ. SCALE: 1" = 20'
 VERT. SCALE: 1" = 10'

DESIGNED	DRAWN	CHECKED	DATE
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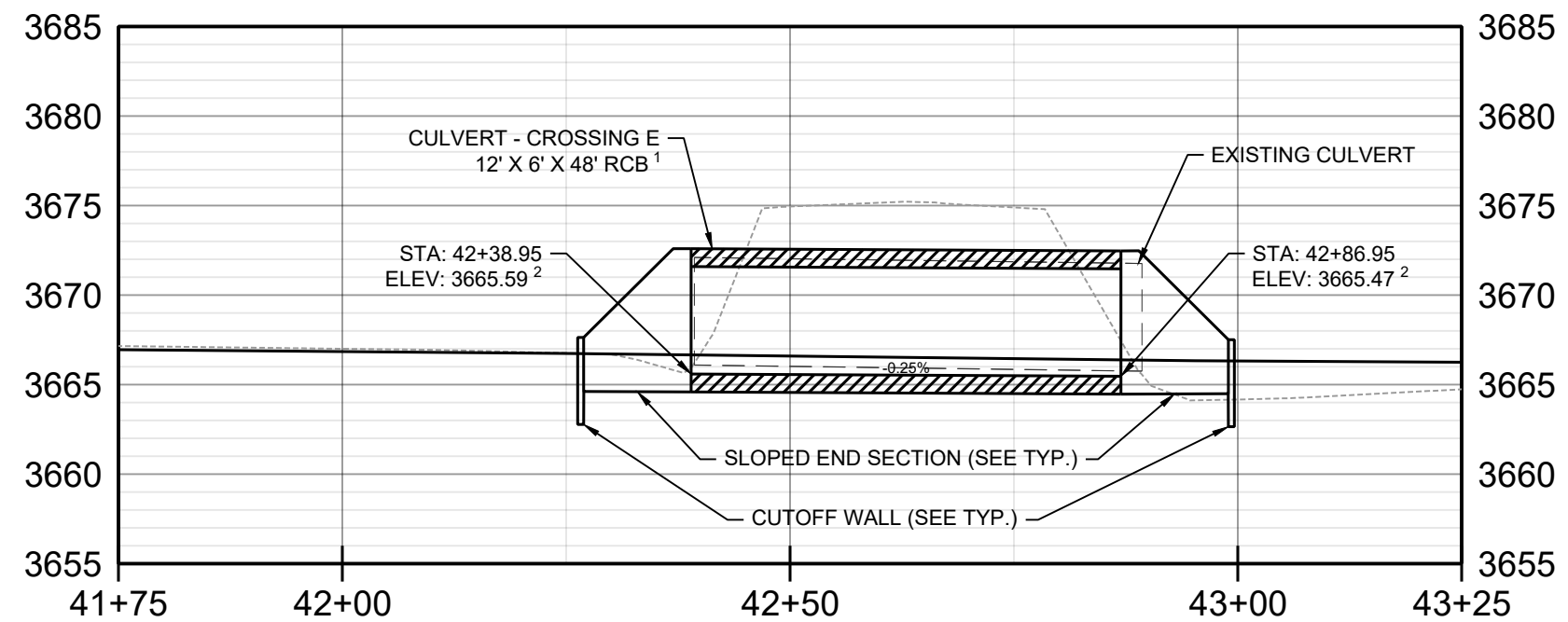
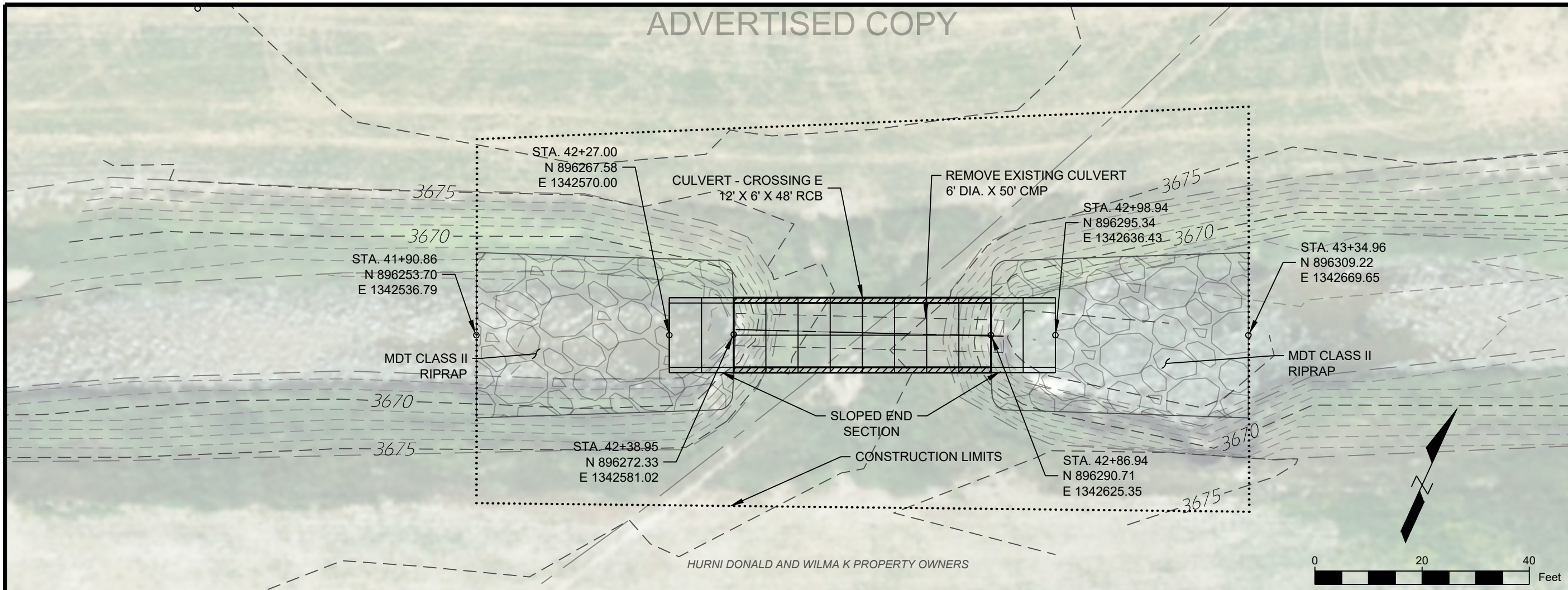
VFMP - LOWER D2
 FLOOD
 INFRASTRUCTURE
 IMPROVEMENTS

CROSSING F -
 CULVERT DETAIL

SHEET NUMBER:
C-04
 SHEET

NAME: N:\PROJECTS\W0138_23005-LCC_VFMP-LOWER D2 TO CAD\SHEETS\W0138_23005_LOWER D2_S_CULVERT P&P.DWG
 PLOT DATE: August 28, 2024 1:43 PM BY: JACOB LACY

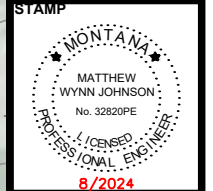
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NOTES:
 1. CULVERT WILL BE PLACED IN A MANNER THAT THE POST-CONSTRUCTION EQUILIBRATED CHANNEL PROFILE WILL BE 1.0' ABOVE CULVERT INVERTS.

DESIGNED	DRAWN	CHECKED	DATE
JAL	JAL	MWJ	8/30/2024

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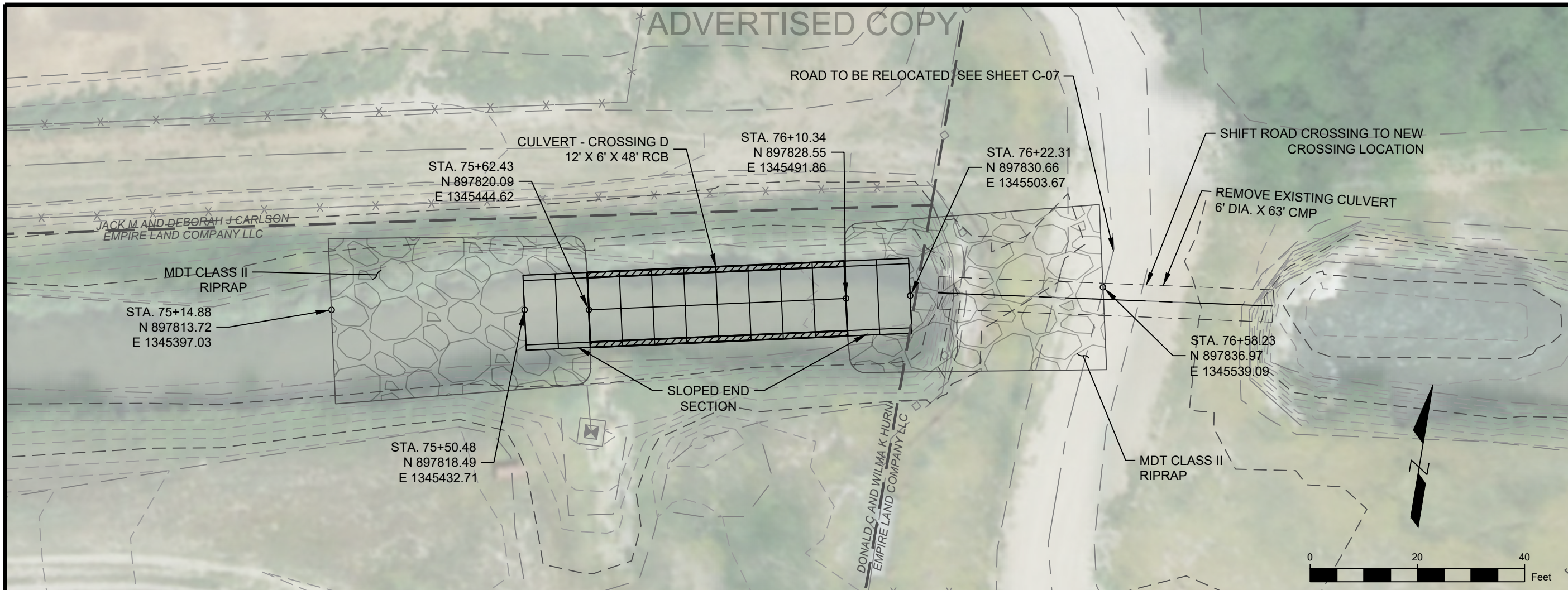
VFMP - LOWER D2
 FLOOD
 INFRASTRUCTURE
 IMPROVEMENTS

CROSSING E -
 CULVERT DETAIL

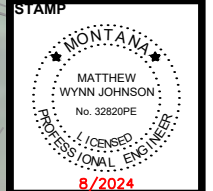
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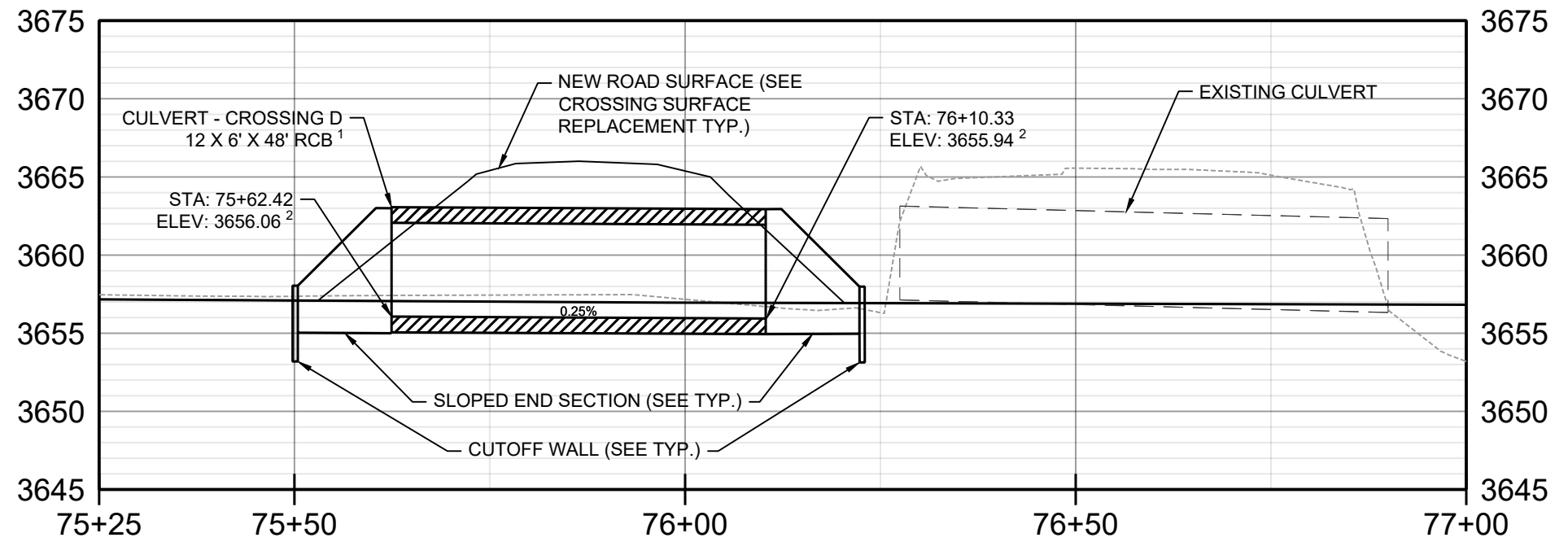


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VFMP - LOWER D2
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CROSSING D -
CULVERT DETAIL

SHEET NUMBER:
C-06
SHEET



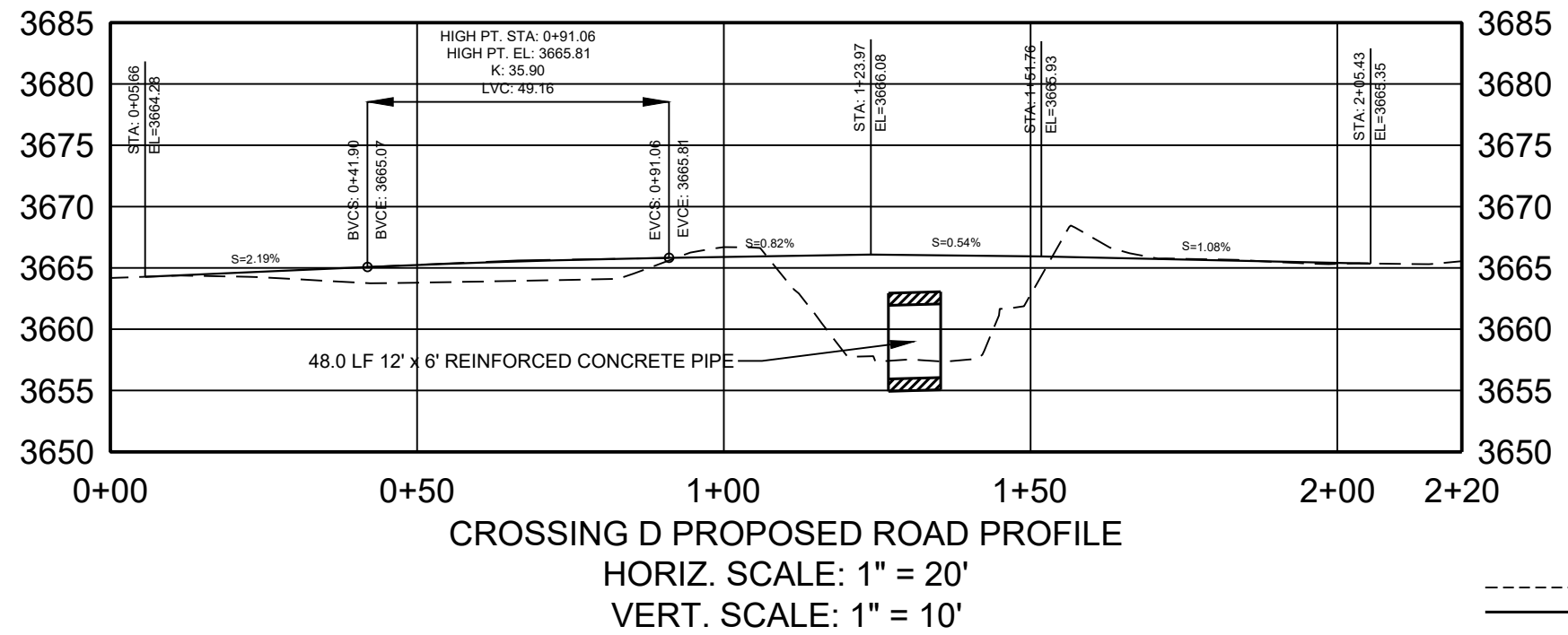
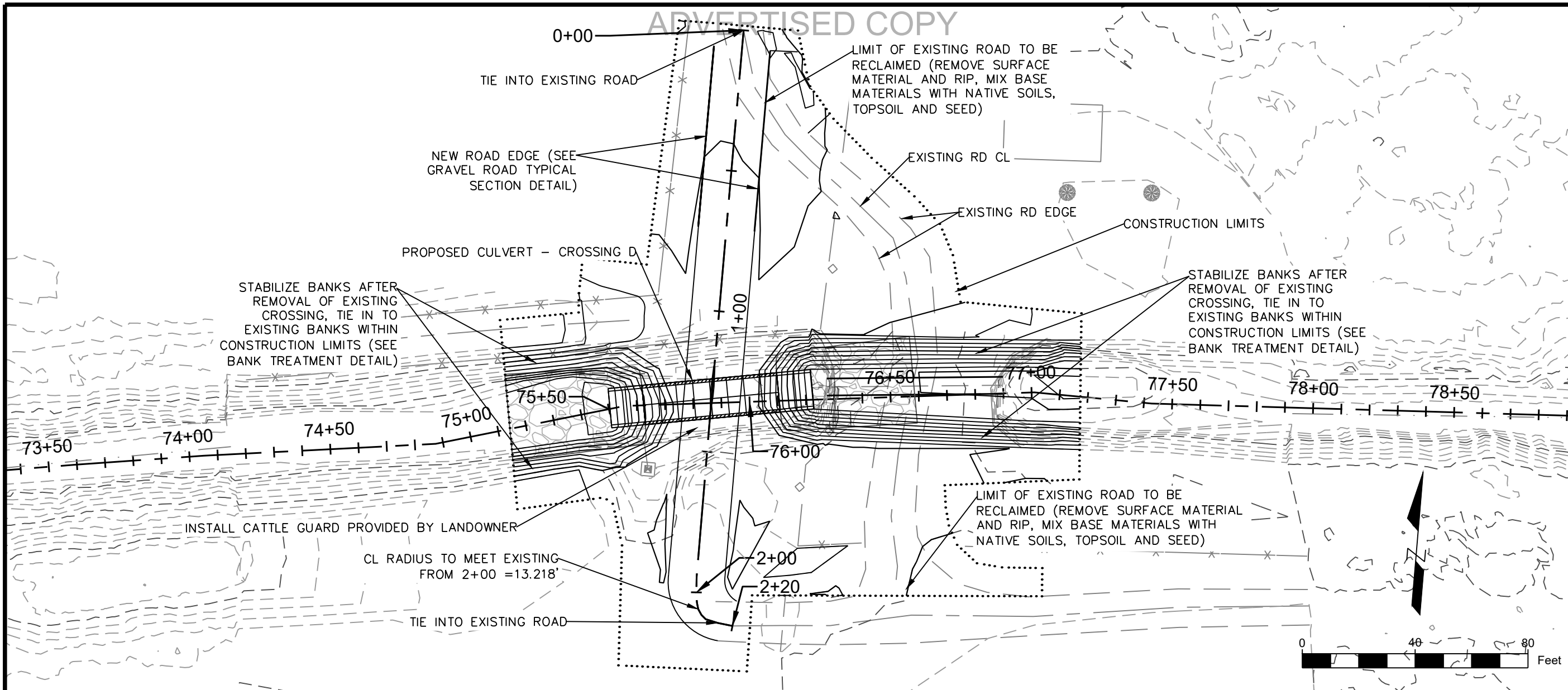
CROSSING D - CULVERT PROFILE
HORIZ. SCALE: 1" = 20'
VERT. SCALE: 1" = 10'

----- EXISTING GROUND PROFILE
————— POST CONSTRUCTION EQUILIBRATED CHANNEL PROFILE

- NOTES:**
1. REMOVAL OF EXISTING CULVERT TO BE COMPLETED ONLY AFTER NEW CULVERT INSTALLED AND NEW ROADWAY COMPLETED.
 2. CULVERT WILL BE PLACED IN A MANNER THAT THE POST-CONSTRUCTION EQUILIBRATED CHANNEL PROFILE WILL BE 1.0' ABOVE CULVERT INVERTS.
 3. EASEMENT BOUNDARIES ARE APPROXIMATE AND NOT FOR LEGAL PURPOSES.
 4. CONSTRUCTION LIMITS SHOWN ON SHEET C-07

NAME: N:\PROJECTS\10138_23005-LCC_VFMP-LOWER D2_T05\CAD\SHEETS\10138_23005_LOWER D2_S_CULVERT P&P.DWG
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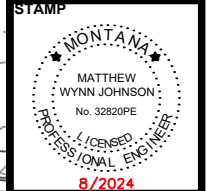


----- EXISTING GROUND PROFILE
 _____ POST CONSTRUCTION ROAD PROFILE

NAME: N:\PROJECTS\10138_23005-LCC-VFMMP-LOWER D2 TO S\CAD\SHEETS\10138_23005_LOWER D2_S_ROAD CROSSING P&P.DWG
 PLOT DATE: August 28, 2024 1:44 PM BY: JACOB LACY

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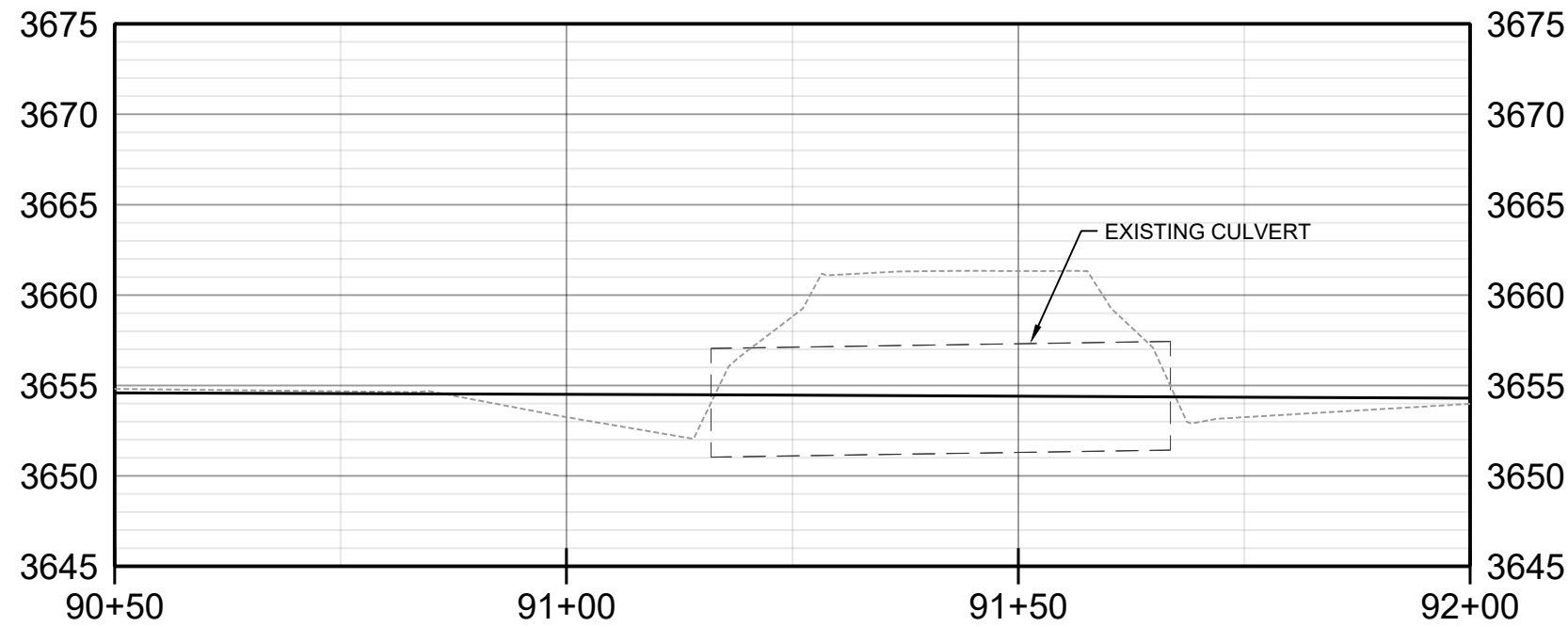
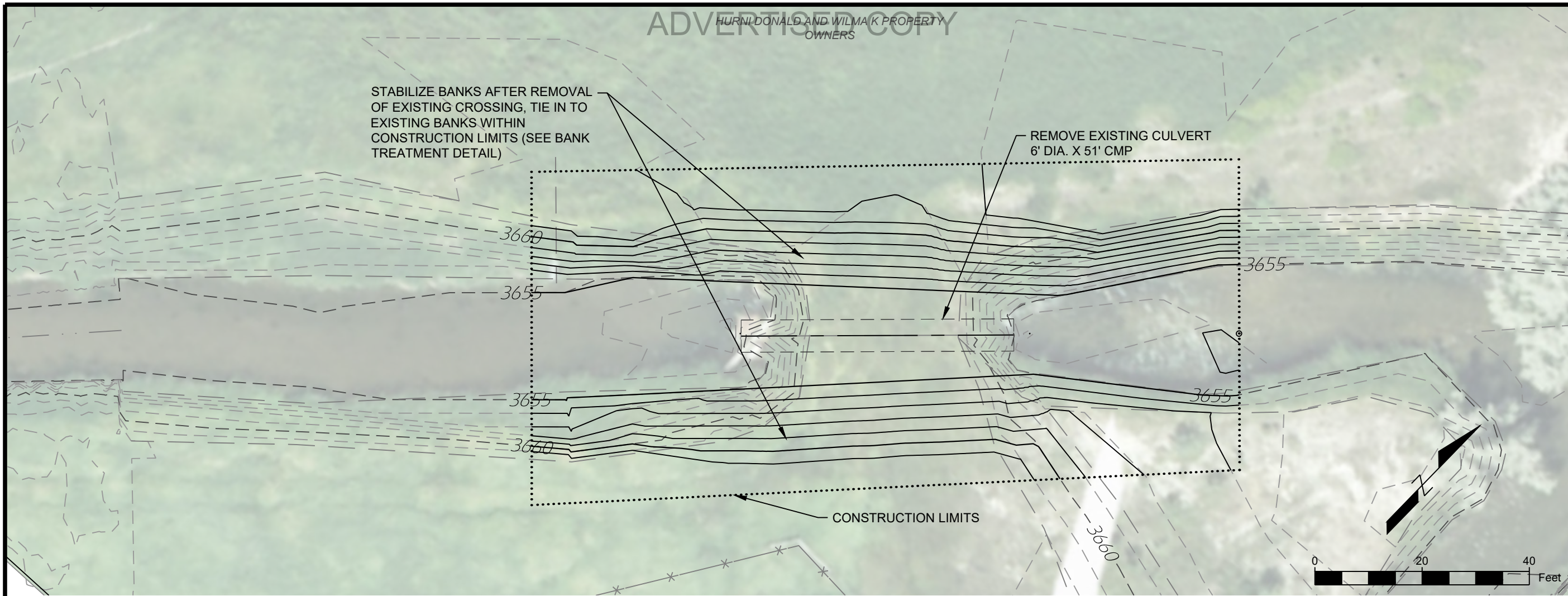
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CROSSING D -
 PROPOSED ROAD
 CROSSING DETAIL

SHEET NUMBER:
C-07
 SHEET

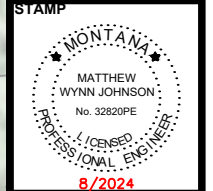
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HURN/DONALD AND WILMA/K PROPERTY OWNERS



NOTES:
1. CULVERT WILL BE PLACED IN A MANNER THAT THE POST-CONSTRUCTION EQUILIBRATED CHANNEL PROFILE WILL BE 1.0' ABOVE CULVERT INVERTS.

DESIGNED	DRAWN	CHECKED	DATE
JAL	JAL	MWJ	8/30/2024

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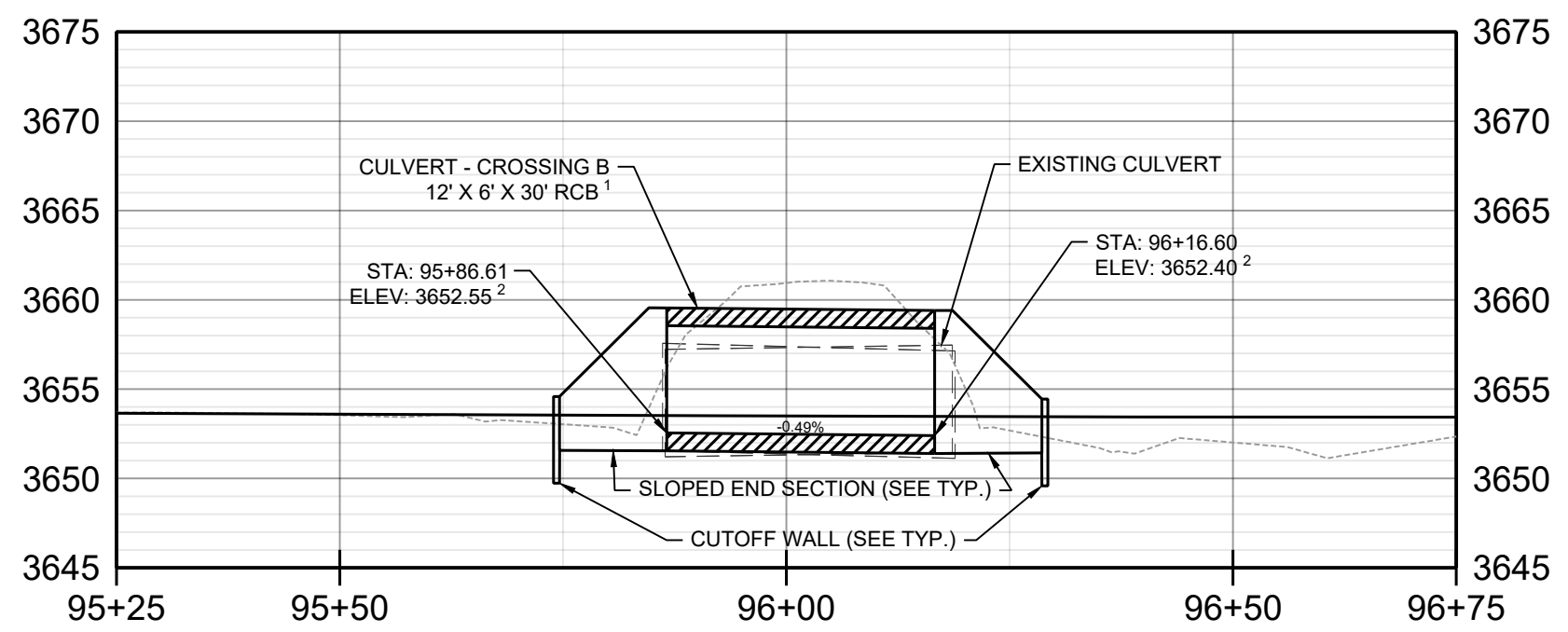
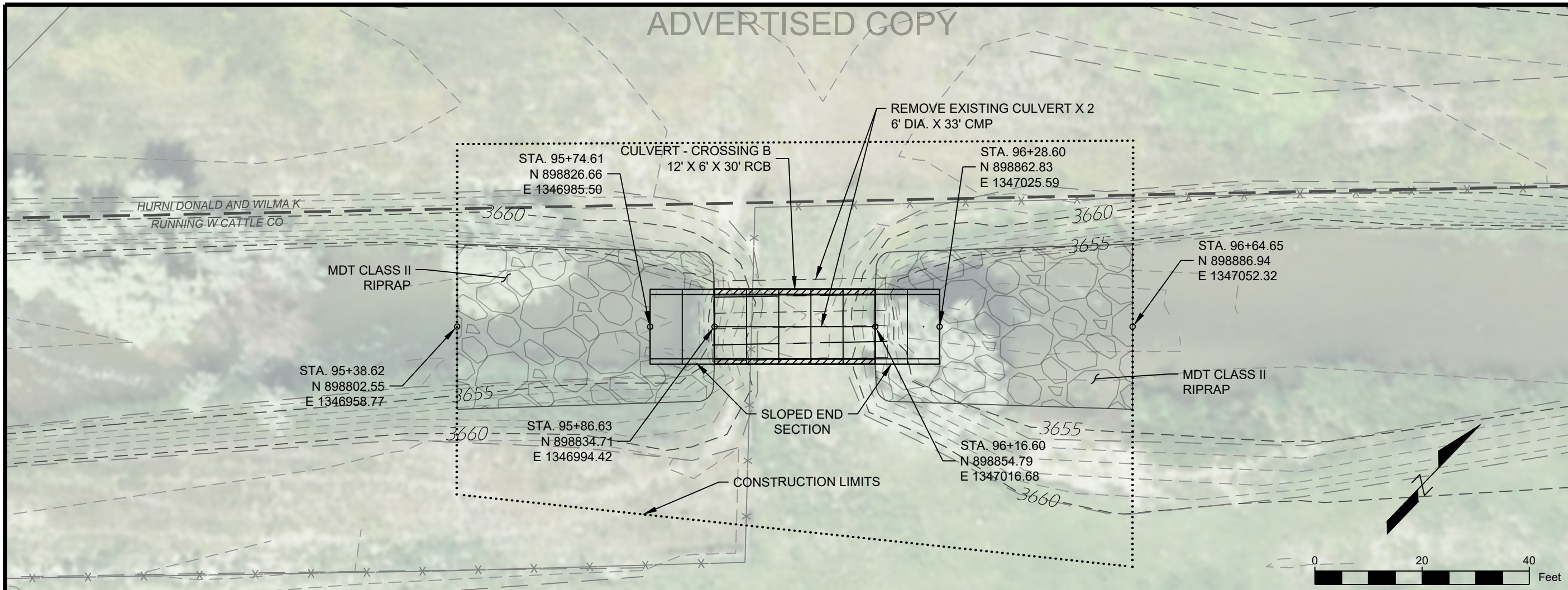
VFMP - LOWER D2
FLOOD
INFRASTRUCTURE
IMPROVEMENTS

CROSSING C -
CULVERT DETAIL

SHEET NUMBER:
C-08
SHEET

NAME: N:\PROJECTS\W0138_23005-LCC_VFMP-LOWER D2 TO CAD\SHEETS\W0138_23005_LOWER D2_S_CULVERT P&P.DWG
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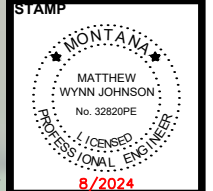


NOTES:
 1. CULVERT WILL BE PLACED IN A MANNER THAT THE POST-CONSTRUCTION EQUILIBRATED CHANNEL PROFILE WILL BE 1.0' ABOVE CULVERT INVERTS.

--- EXISTING GROUND PROFILE
 — POST CONSTRUCTION EQUILIBRATED CHANNEL PROFILE

DESIGNED	DRAWN	CHECKED	DATE
JAL	JAL	MWJ	8/30/2024

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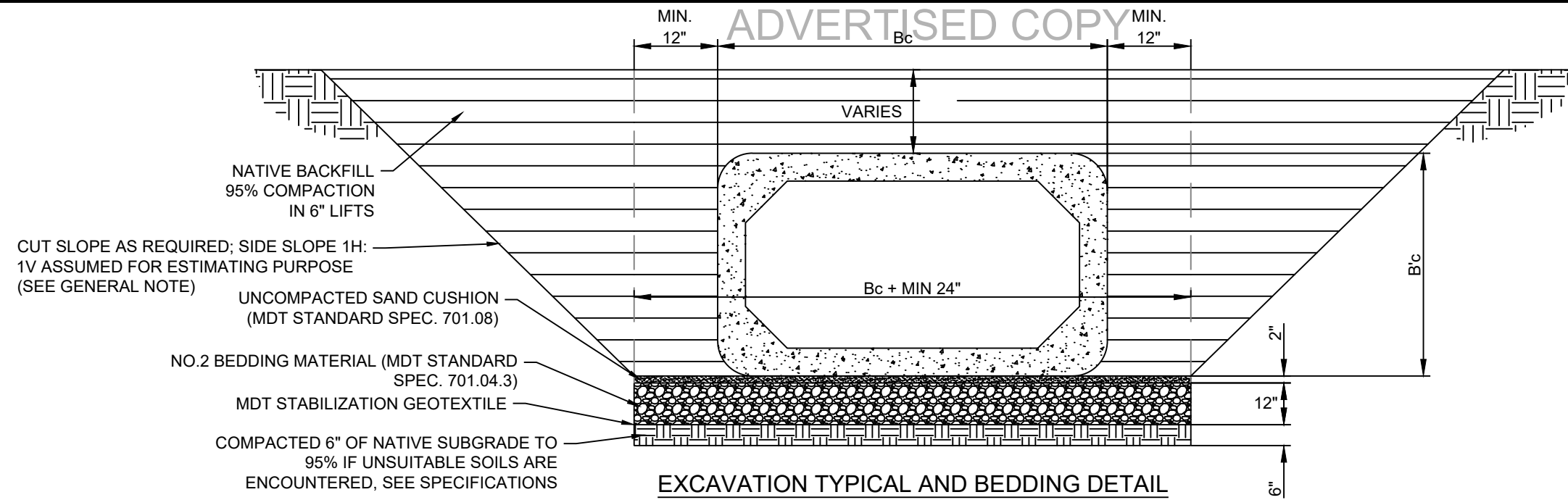
VFMP - LOWER D2
 FLOOD
 INFRASTRUCTURE
 IMPROVEMENTS

CROSSING B -
 CULVERT DETAIL

SHEET NUMBER:
C-09
 SHEET

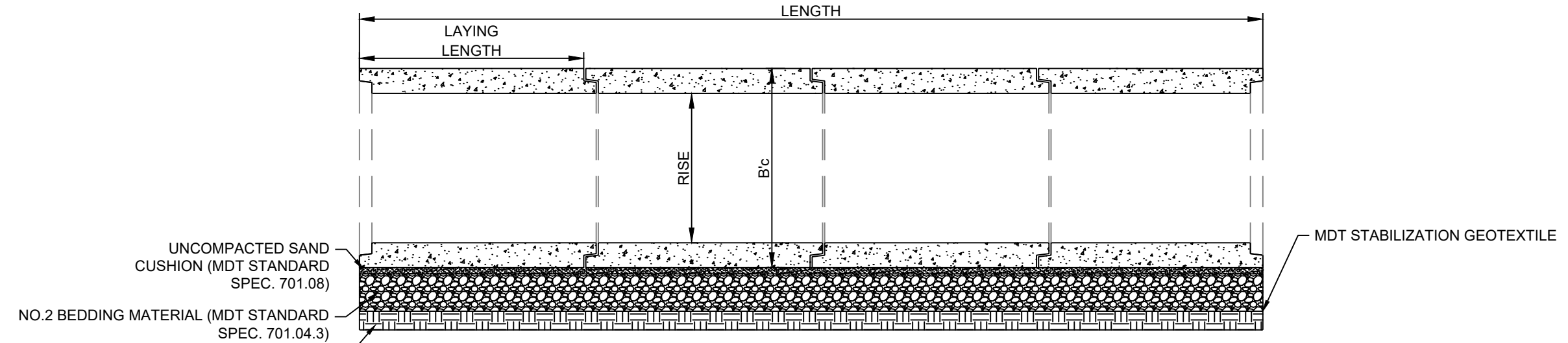
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EXCAVATION TYPICAL AND BEDDING DETAIL

N.T.S.



TYPICAL RCB PROFILE AND BEDDING DETAIL

N.T.S.

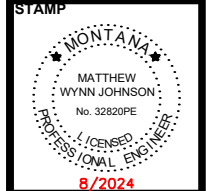
CULVERT	BEGIN STA	BEGIN NORTHING	BEGIN EASTING	END STA	BEGIN NORTHING	BEGIN EASTING	SPAN (FT)	RISE (FT)	LENGTH (FT)	SLAB (IN)	WALL (IN)	Bc (FT)	B'c (FT)	LAY LENGTH (FT)	UPSTREAM INVERT	DOWNSTREAM INVERT
GLASS DRIVE #1	27+54.55	895658.761	1341237.472	28+02.55	895686.235	1341276.829	12	6	48	12	12	14	8	6	3670.77	3670.66
GLASS DRIVE #2	29+97.72	895785.674	1341443.36	30+27.72	895791.830	1341472.724	12	6	30	12	12	14	8	6	3669.95	3669.92
CROSSING F	39+39.25	896153.495	1342306.581	40+17.17	896184.409	1342378.193	12	6	78	12	12	14	8	6	3666.87	3666.61
CROSSING E	42+38.95	896272.205	1342581.075	42+86.95	896290.713	1342625.362	12	6	48	12	12	14	8	6	3665.59	3665.47
CROSSING D	75+62.42	897820.084	1345444.607	76+10.33	897828.547	1345491.855	12	6	48	12	12	14	8	6	3656.06	3655.94
CROSSING B	95+86.61'	898834.696	1346994.408	96+16.60	898854.789	1347016.682	12	6	30	12	12	14	8	6	3652.55	3652.4

* LENGTH DOES NOT INCLUDE END SECTIONS.

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REVISION



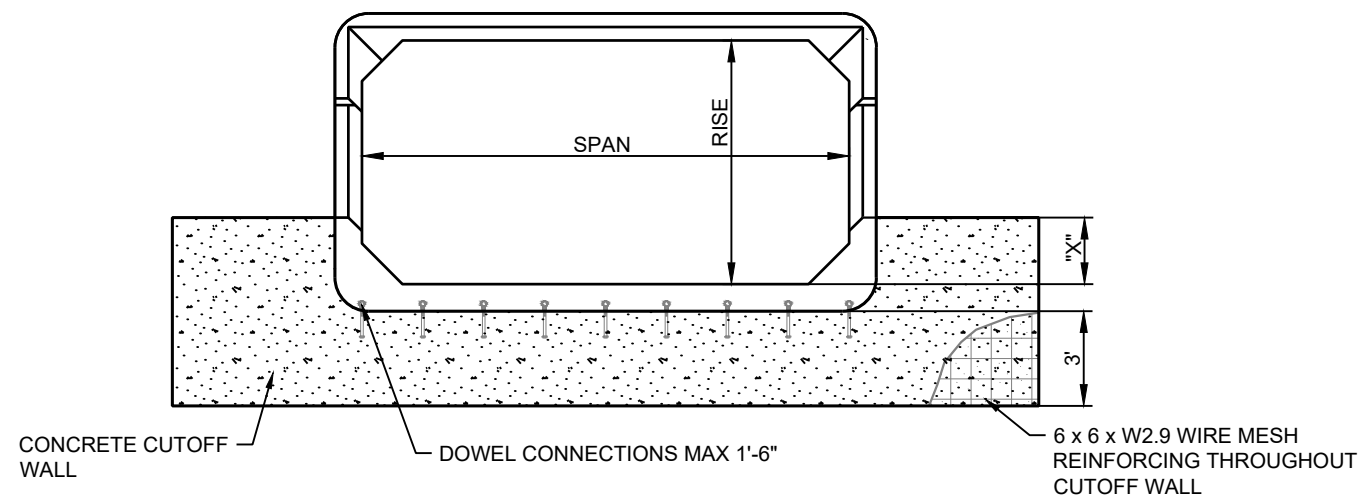
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VFMP - LOWER D2
FLOOD
INFRASTRUCTURE
IMPROVEMENTS

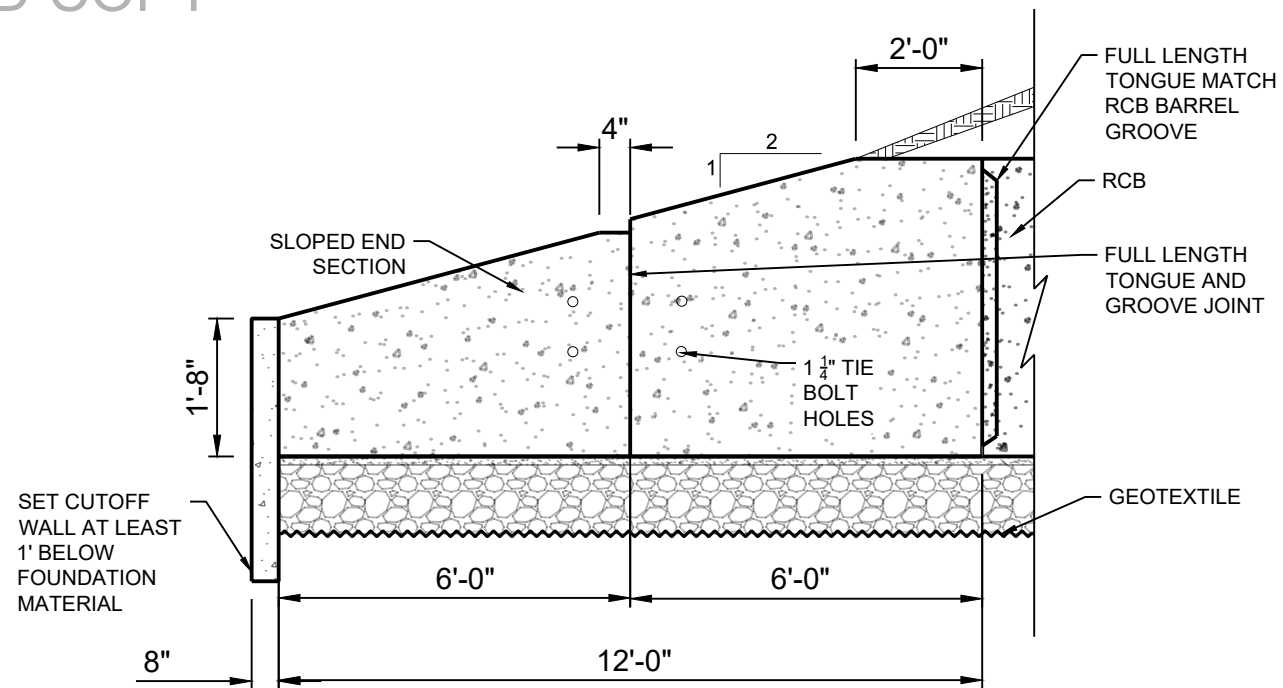
CULVERT TYPICAL
DETAILS

SHEET NUMBER:
D-01
SHEET

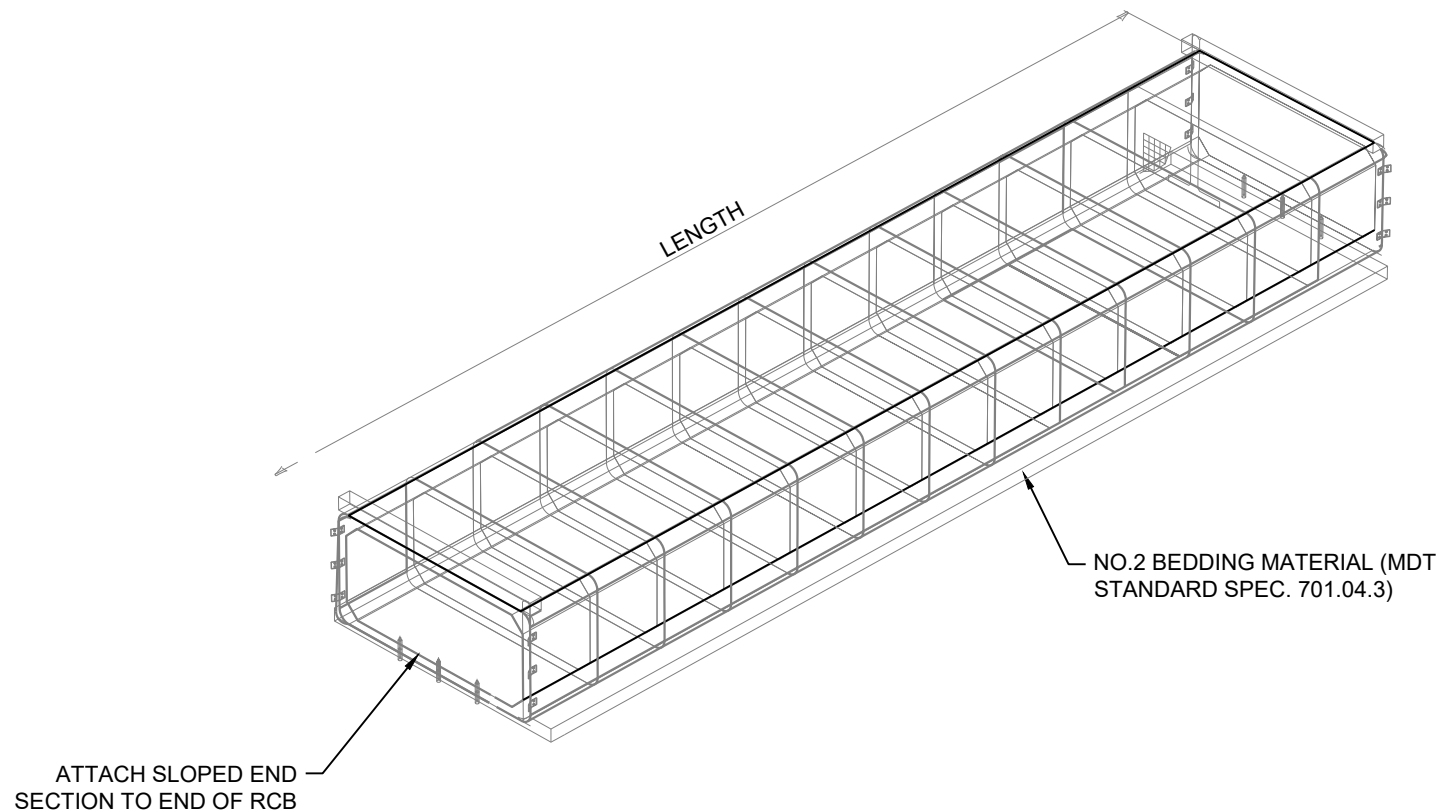
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FRONT ELEVATION
N.T.S.



SIDE ELEVATION
N.T.S.
SLOPED END SECTION RCB

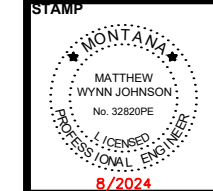


ISOMETRIC VIEW OUTLET END
N.T.S.

NAME: N:\PROJECTS\W0138-23005-LCC-VFMMP-LOWER D2 TO S/CAD/SHEETS\W0138-23005-LOWER D2_S_DETAILS.DWG
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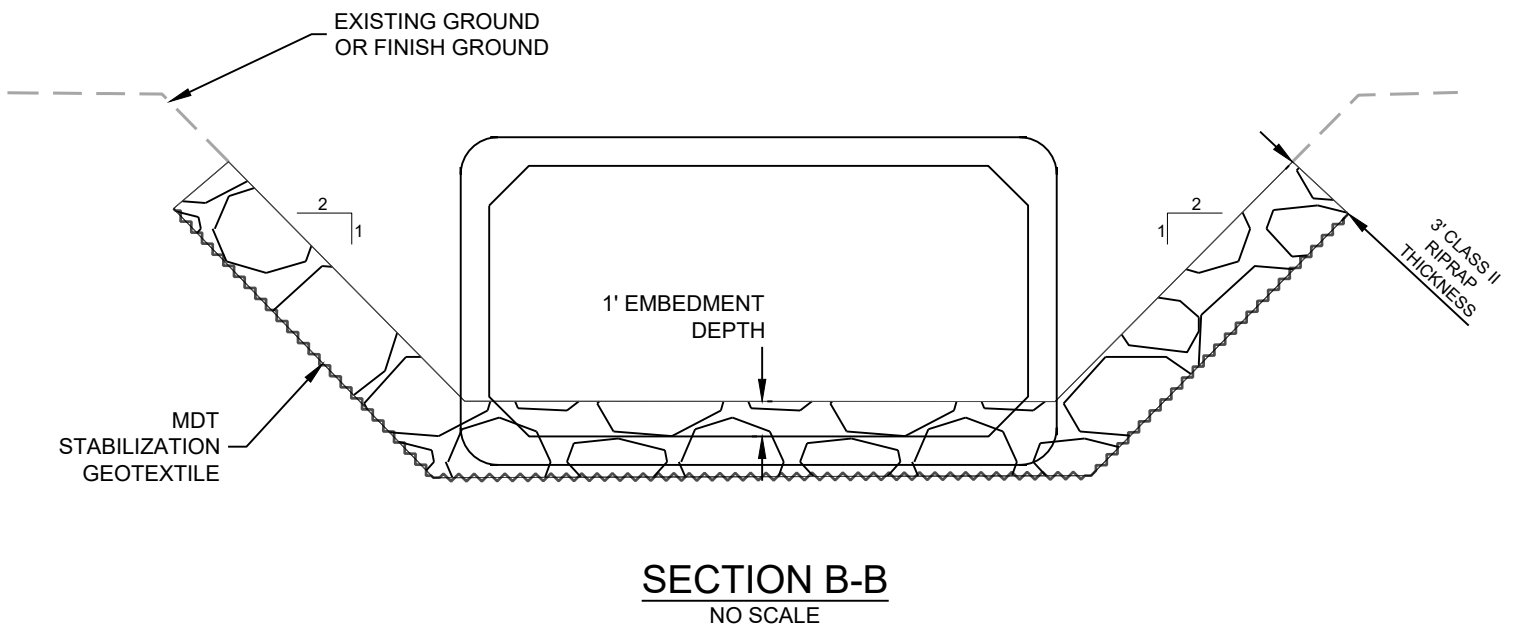
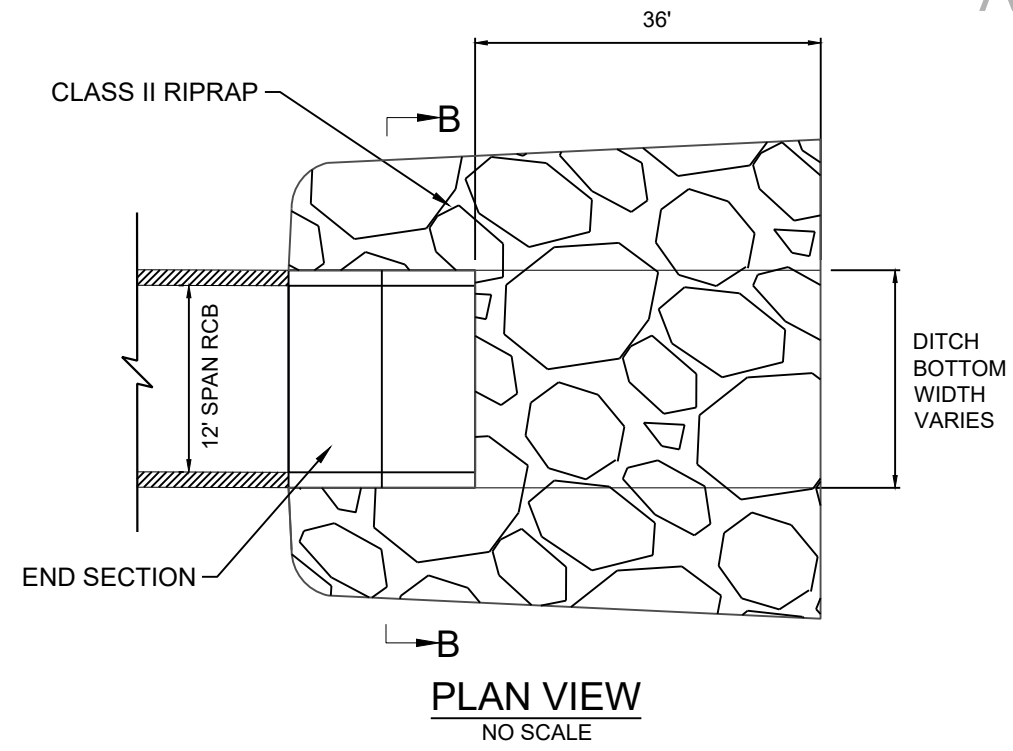
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FLOOD
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IMPROVEMENTS

CULVERT TYPICAL
DETAILS

SHEET NUMBER:
D-02
SHEET

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CULVERT INLET AND OUTLET DETAIL

CULVERT	STATION START INLET RIPRAP	STATION END INLET RIPRAP	CHANNEL LENGTH OF INLET RIPRAP (FT)	STATION START OUTLET RIPRAP	STATION END OUTLET RIPRAP	CHANNEL LENGTH OF OUTLET RIPRAP (FT)
GLASS DRIVE #1	27+06.57	27+57.54	36	28+02.54	28+50.55	36
GLASS DRIVE #2	29+51.53	29+97.71	36	30+27.72	30+72.26	36
CROSSING F	38+91.09	39+39.26	36	40+17.16	40+65.73	36
CROSSING E	41+90.86	42+38.95	36	42+86.94	43+34.96	36
CROSSING D	75+14.88	75+62.42	36	76+10.34	76+58.23	36
CROSSING B	95+38.62	95+86.63	36	96+16.60	96+64.65	36

NAME: N:\PROJECTS\W0138_23003-LCC_VFMMP-LOWER D2 TOS\CAD\SHEETS\W0138_23003_LOWER D2_S_DETAILS.DWG
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JAL	JAL	MMJ	8/30/2024

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MONTANA
MATTHEW WYNN JOHNSON
No. 32820PE
LICENSED PROFESSIONAL ENGINEER
8/2024

811
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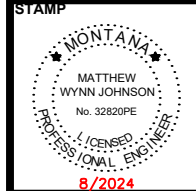
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VFMMP - LOWER D2
FLOOD
INFRASTRUCTURE
IMPROVEMENTS

INLET AND
OUTLET RIP RAP
TYPICAL DETAILS

SHEET NUMBER:
D-03
SHEET

DESIGNED	JAL	REVISION
DRAWN	JAL	
CHECKED	MMJ	
DATE	8/30/2024	

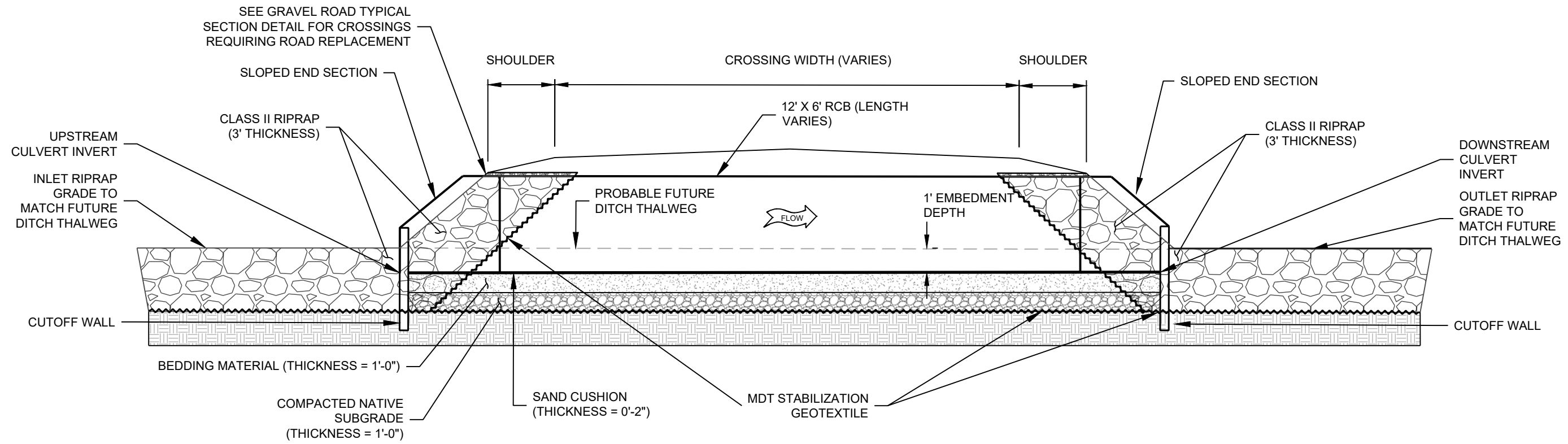


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VFMMP - LOWER D2
FLOOD
INFRASTRUCTURE
IMPROVEMENTS

CROSSING
SURFACE
REPLACEMENT
TYPICAL DETAILS

SHEET NUMBER:
D-04
SHEET



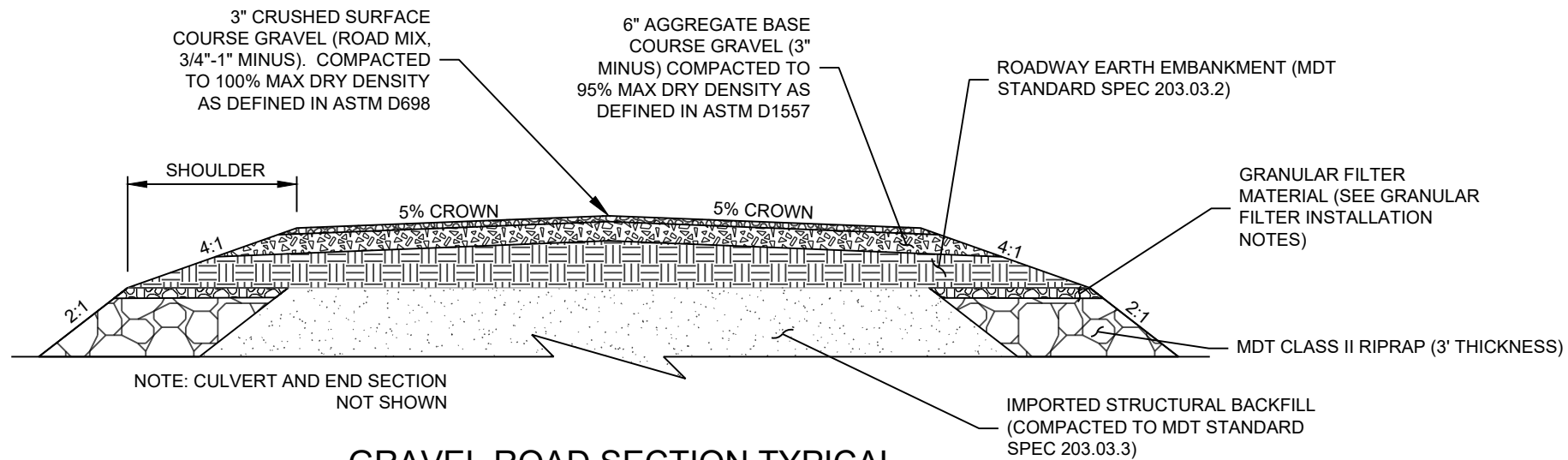
REPLACEMENT CROSSING TYPICAL PROFILE
N.T.S

CULVERT	PROPOSED CROSSING WIDTH (FT)	SHOULDER WIDTH (FT)
GLASS DRIVE #1	20	2
GLASS DRIVE #2*	10	2
CROSSING F	63	2
CROSSING E	29	2
CROSSING D*	20	3
CROSSING B	13	2

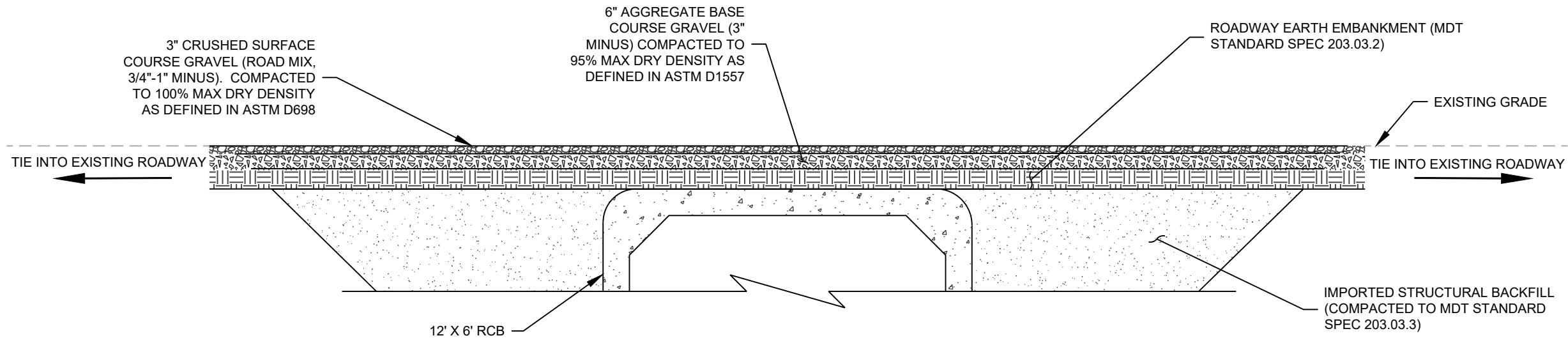
* CROSSING REQUIRING ROAD REPLACEMENT OR RELOCATION

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GRAVEL ROAD SECTION TYPICAL
N.T.S



GRAVEL ROAD PROFILE TYPICAL
N.T.S

NOTES:

1. ONLY CROSSINGS WITH ROAD RELOCATION OR REPLACEMENT TO IMPLEMENT SURFACE GRAVEL.
2. ONLY CROSSINGS WITH ROAD RELOCATION OR REPLACEMENT TO IMPLEMENT IMPORTED STRUCTURAL BACKFILL, OTHERWISE USE ROADWAY EARTH EMBANKMENT.

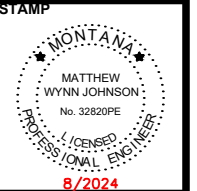
GRANULAR FILTER MATERIAL INSTALLATION NOTES:

1. THIS WORK IS THE INCORPORATION OF INFILL MATERIAL INTO RIPRAP VOIDS TO PROVIDE A UNIFORM SURFACE FOR PLACEMENT OF EMBANKMENT AND ROAD MATERIALS ON TOP OF RIPRAP SURFACES.
2. PROVIDE FILTER MATERIAL NO. 2 (MEETING SUBSECTION 701.05 REQUIREMENTS), OR NATIVE MATERIAL OF A SIMILAR GRADATION APPROVED BY THE ENGINEER.
3. FILL THE SPACES AND VOIDS BETWEEN THE ROCKS WITH RIPRAP INFILL MATERIAL. PLACE A SUFFICIENT AMOUNT OF MATERIAL OVER THE RIPRAP, SO THAT AFTER SETTLING, THE LEVEL OF FILTER MATERIAL COMES TO THE VERY TOP OF THE ROCK.
4. PLACE MATERIAL IN A MANNER THAT CREATES A SMOOTH, UNIFORM SURFACE FOR CONSTRUCTING EMBANKMENT AND ROAD ABOVE.
5. PLACE NO MATERIAL INSIDE BOX CULVERT TO ALLOW NATURAL BACKFILL.

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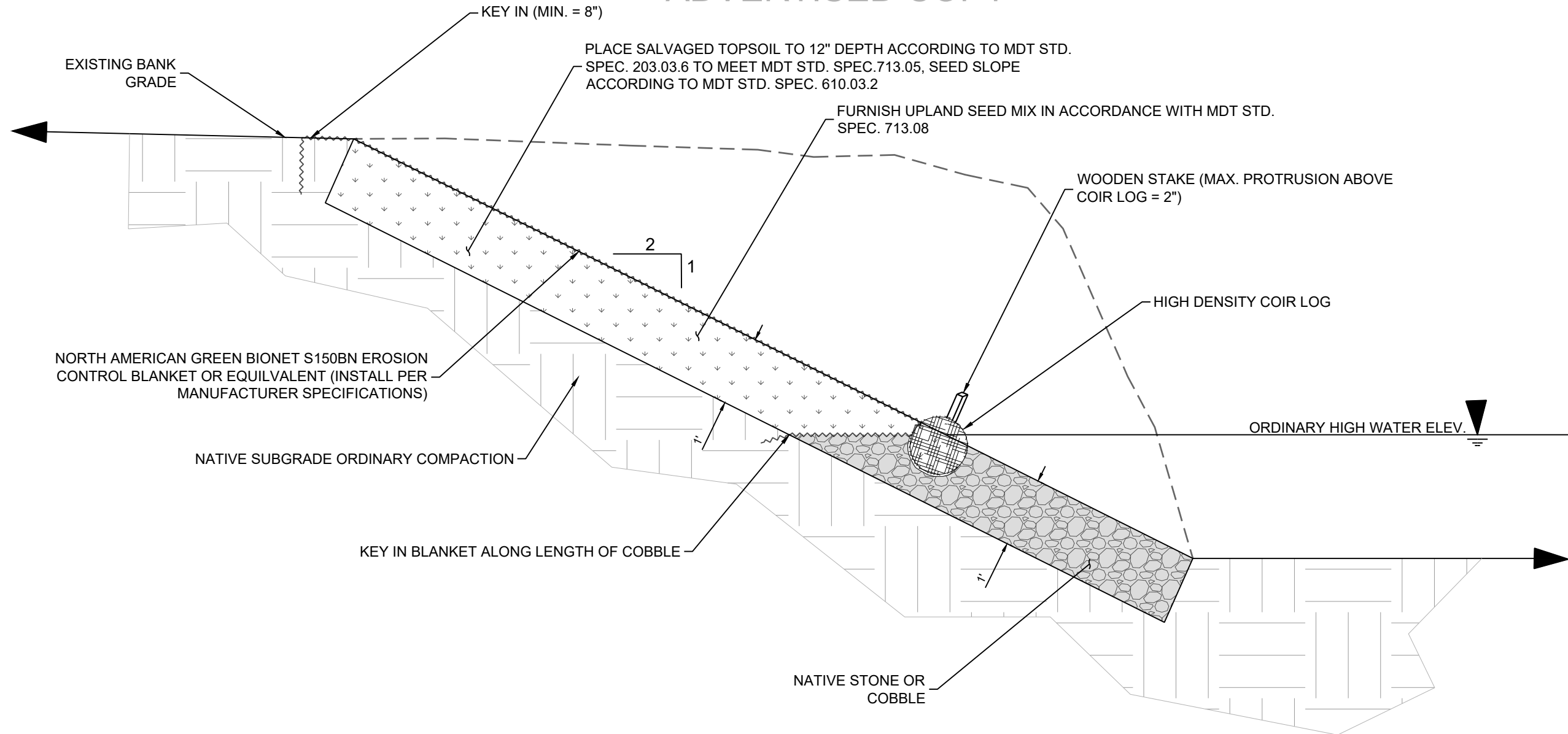


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VFMMP - LOWER D2
FLOOD
INFRASTRUCTURE
IMPROVEMENTS

GRAVEL ROAD
TYPICAL DETAILS

SHEET NUMBER:
D-05
SHEET



BANK TREATMENT TYPICAL PROFILE
N.T.S

BANK TREATMENT AREA	ORDINARY HIGH WATER ELEVATION (OHWE)
GLASS DRIVE #2	3672.0'
CROSSING C	3655.5'
CROSSING D	3659.0'

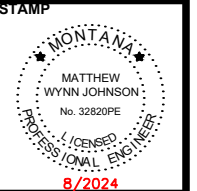
NOTES:

- ENSURE AT LEAST $\frac{2}{3}$ OF TOTAL STAKE LENGTH OR AT LEAST 16" OF STAKE LENGTH IS BELOW FINISHED GRADE WITH NO MORE THAN 2" OF STAKE PROTRUDING FROM TOP OF COIR LOG.
- PLACE WOODEN STAKES DIRECTLY IN CENTER OF COIR LOG.
- PLACE COIR LOG AT SURFACE INTERFACE OF TOPSOIL AND COBBLE, EMBED.
- SEE SHEET D-07 FOR ADDITIONAL DETAILS.

NAME: N:\PROJECTS\W0138_23005-LCC_VFMMP_LOWER D2 TO5\CAD\SHEETS\W0138_23005_LOWER D2_S_DETAILS.DWG
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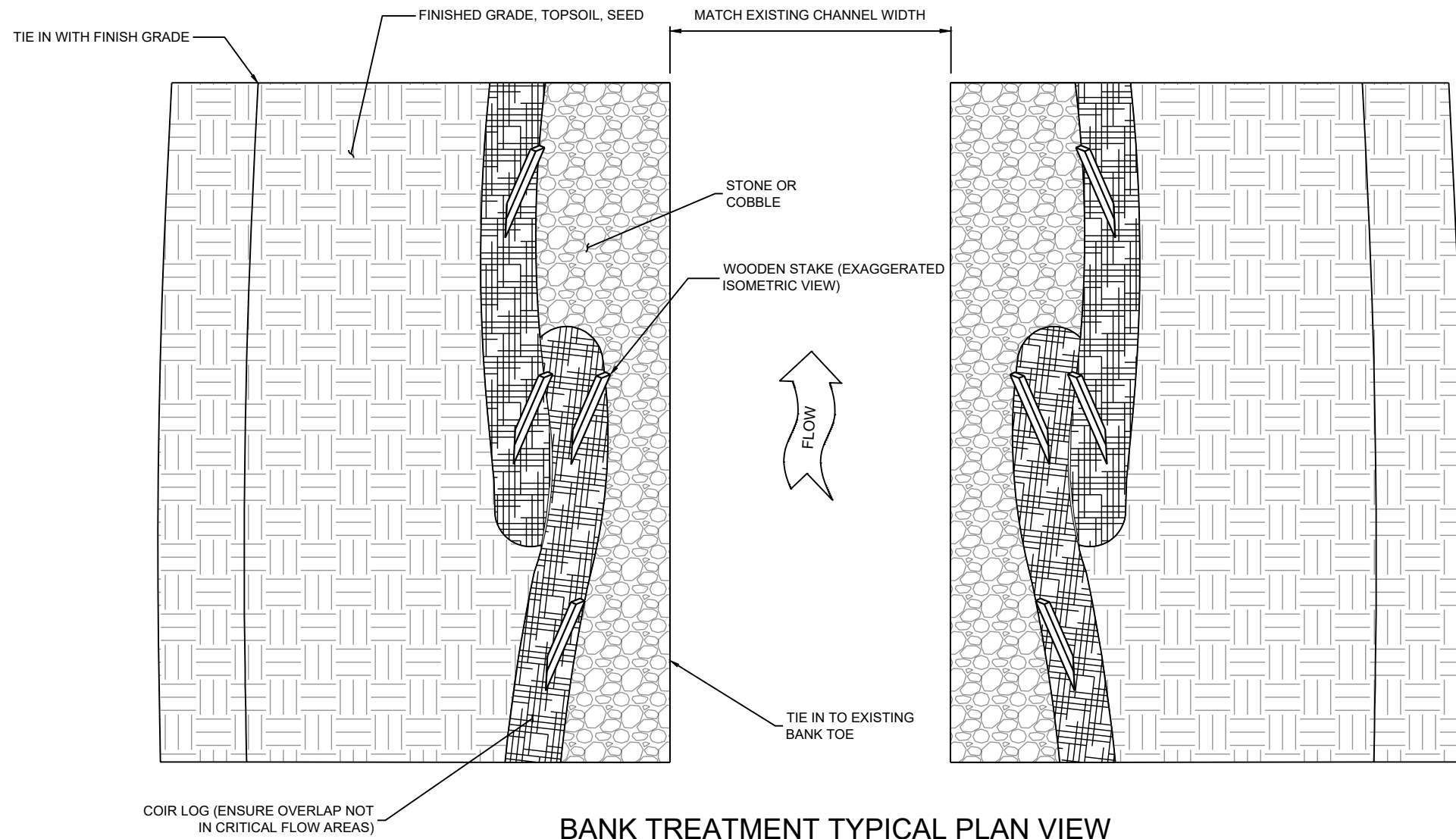
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VFMMP - LOWER D2
FLOOD
INFRASTRUCTURE
IMPROVEMENTS

BANK TREATMENT
TYPICAL DETAILS

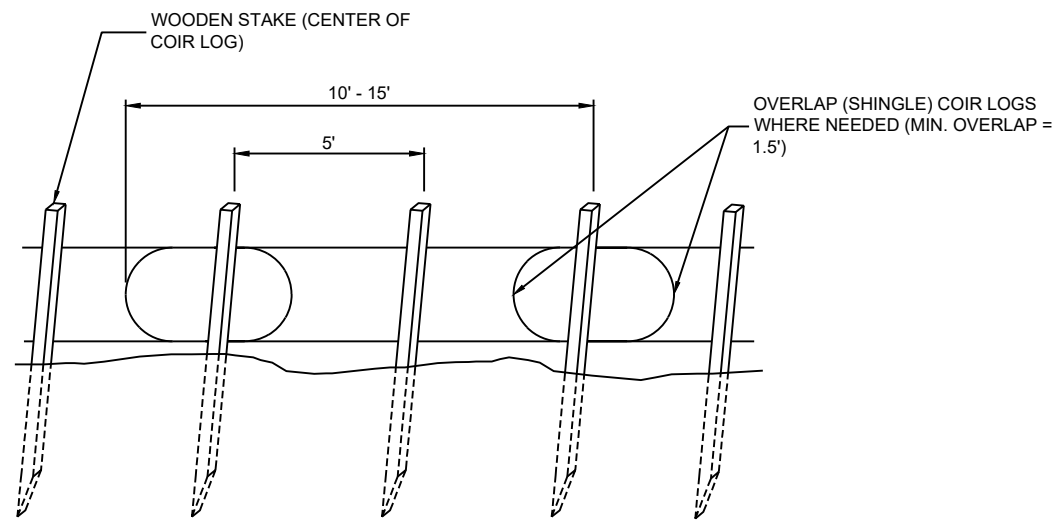
SHEET NUMBER:
D-06
SHEET

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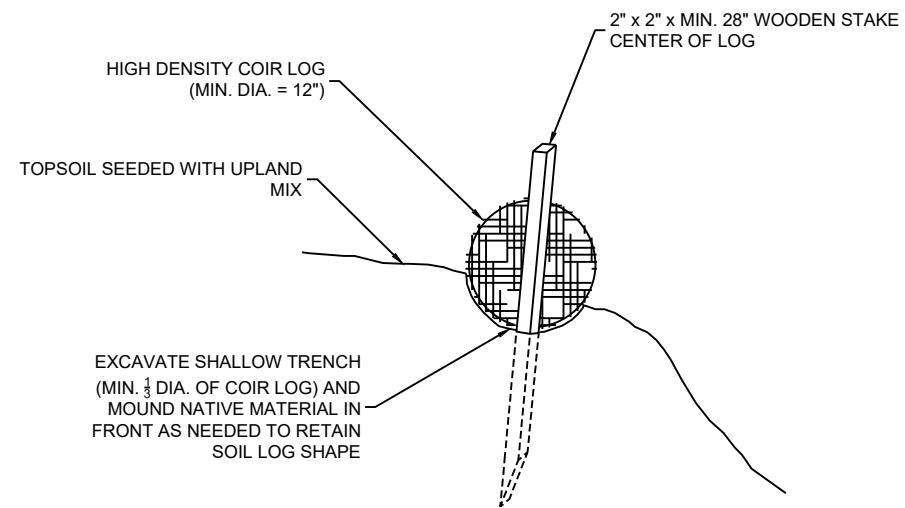
BANK TREATMENT TYPICAL PLAN VIEW

N.T.S



COIR LOG STAKING

N.T.S



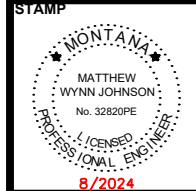
COIR LOG SECTION

N.T.S

NAME: N:\PROJECTS\W0138_23005-LCC_VFMMP-LOWER D2 TO S\CAD\SHEETS\W0138_23005_LOWER D2_S_DETAILS.DWG
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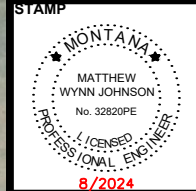
VFMMP - LOWER D2
FLOOD
INFRASTRUCTURE
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BANK TREATMENT
TYPICAL DETAILS

SHEET NUMBER:
D-07
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VFMP - LOWER D2
FLOOD
INFRASTRUCTURE
IMPROVEMENTS

TEMPORARY
CONSTRUCTION
DETOUR EXHIBIT

SHEET NUMBER:
D-08
SHEET

NAME: N:\PROJECTS\W0138_23005-LCC_VFMP-LOWER D2 TO\CAD\SHEETS\W0138_23005_LOWER D2_S_CULVERT P&P.DWG
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