REQUEST

for

QUALIFICATIONS

for the

JOHNSTOWN LITTLE THOMPSON TRAIL

PROJECT

Project No: TAP M690-001 (21992)
Federal Aid Project No:
CDOT Subaccount Number:

Date of Issue: September 26, 2022

Submittal Deadline: October 17, 2022

The Town of Johnstown, Colorado is seeking Request for Qualifications from firms interested, experienced and knowledgeable in providing construction management services for the construction of the Johnstown Little Thompson Trail.

Submit to: Town of Johnstown
Attn: Matt LeCerf
450 S Parish Ave
PO Box 609
Johnstown, CO 80534
mlecerf@johnstownco.gov

I. GENERAL INSTRUCTIONS

The Town of Johnstown is requesting Statements of Qualifications (SOQ) from firms interested, experienced and knowledgeable in providing construction management services for the construction of the Little Thompson Trail Project.

The SOQ is limited to 10 double-sided pages, not including the cover, table of contents, dividers and resumes. The Town will select the firms most qualified for the work, and will invite those short-listed firms to submit a formal proposal for construction management services.

One hard copy of the SOQ is to be submitted on or prior to the closing date and time referenced on the cover sheet: **October 17, 4:00PM MST**. Also, an electronic copy of the complete SOQ shall be submitted as an email attachment (email to: mlecerf@johnstownco.gov) or delivered to Town Hall on a USB flash drive. Note that email attachments must be less than 15 MB with the Subject Line: **CMS LITTLE THOMPSON TRAIL**. Submittals shall be sent to:

Town of Johnstown
Attn: Matt LeCerf
450 S Parish Ave
PO Box 609
Johnstown, CO 80534
mlecerf@johnstownco.gov

Questions or requests for additional information should be sent in writing to Matt LeCerf, Town Manager at mlecerf@johnstownco.gov, no later than **4:00 PM, October 10, 2022**.

The project **construction** schedule is approximate, and shown below:

October 24, 2022	Advertise for Bids
November 21, 2022	Award Construction Contract
December 1, 2022	Begin Construction
April 15, 2023	Hardscape Complete
May 1, 2023	Landscaping Complete
June 15, 2023	Project Closeout

Attachment:

Preliminary Design Drawings (F. O. R)

II. PROJECT DESCRIPTION

An approximately 4,330 ft. long and nominal 10 ft. wide concrete trail will be constructed beginning at the Weld County Road (WCR) 46.5 east of the Great Western Railroad Tracks and meander through the land on the north side of WCR 46.5 and terminating at WCR 19.

The trail construction will also include fencing along the property to ensure preservation of the endangered species habitat to the north and protection of the private property to the south. The project construction cost is estimated at $750,000. Otak, Inc. is the consultant responsible for the design.

The major components of the project include the following items:

- Construction of a 10 ft. wide concrete trail with associated fencing and signage as applicable
- Installation of storm sewers and culverts, grading, removal of trees/vegetation as necessary.

Please review the progress F.O.R. design drawings attached to this SOQ for additional information.

The project is partially funded by federal aid from FHWA (Transportation Improvement Program) and therefore subject to CDOT Local Agency project requirements.

III. SCOPE OF WORK

The scope of work to be performed by the construction management consultant will include but not be limited to the Quality Control requirements of the FHWA/CDOT Stewardship Agreement, as described in the Local Agency Contract Administration Checklist.

IV. SUBMITTAL REQUIREMENTS

The Proposer shall submit a SOQ not to exceed Ten (10) double-sided pages in length, excluding cover pages, dividers and resumes. The Town recommends that the SOQ include concise, but complete information about the firm, emphasizing why the firm is uniquely qualified to provide construction management services for this project. The Proposer shall include the following:

1. Brief description of the firm's interest and understanding the work, the role of the firm in the project and its capacity to do the work. The Town considers the sub-consultants (if required) to be crucial to the project.

2. Description of the team's experience with similar projects. As previously noted, the project has received federal funding through the Colorado Department of Transportation (CDOT). Work for this project will therefore need to comply with State and Federal requirements and will need to follow the Colorado Department of Transportation submittal requirements. Any CDOT related experience should be highlighted.

3. Describe the team's capacity to accomplish the work, including assurance of adequate staff and availability of the staff and resources to accomplish the project goals.

V. SELECTION PROCESS

The statement of interest, qualifications, and performance information will be used to identify qualified firms capable of performing this work. Responders should clearly demonstrate their experience with the construction inspection and management of federal aid and CDOT funded trail projects.

Based on the evaluations of the submitting firms, the Town may invite up to three firms for interviews. These firms will be requested to submit detailed proposals along with separate (sealed) fee estimates for the construction management services indicated in the Scope of Work. If interviews are scheduled, they would be for the week of October 20 & October 21, 2022. The Town reserves the right to reject any and all proposals. The successful consultant will need to execute a Professional Services Contract with the Town.

PoDI / NHS		
FHWA PROJECT OF DIVISION INTEREST (PoDI)?	■ NO	□ YES
NATIONAL HIGHWAY SYSTEM?	■ NO	□ YES

TOWN OF JOHNSTOWN
STATE OF COLORADO

CONSTRUCTION BID PLANS OF PROPOSED
FEDERAL AID PROJECT NO. TAP M690-001

LITTLE THOMPSON RIVER TRAIL

TOWN OF JOHNSTOWN, WELD COUNTY, COLORADO
CONSTRUCTION PROJECT CODE NO. 21992

RELATED PROJECTS:
P.E. UNDER PROJECT:
PROJECT NUMBER:
PROJECT CODE:

R.O.W. PROJECTS:
NONE

TABULATION OF LENGTH

STATION		FEET PATH
BEGIN PATH STA. 10+00.00 END PATH STA. 53+11.33		4,311.33
SUMMARY OF PROJECT LENGTH	FEET	4,311.33
	MILES	0.8165

TABULATION OF DESIGN

	LITTLE THOMPSON RIVER TRAIL
MINIMUM RADIUS OF CURVE	25.00'
MAXIMUM GRADE	5.00%
MINIMUM S.S.D. HORIZONTAL	N/A
MINIMUM S.S.D. VERTICAL	N/A
MAXIMUM DESIGN SPEED	N/A
2035 DESIGN TRAFFIC	N/A
DHV TRUCK %	N/A
CONSTRUCTION CLEAR ZONE	N/A

INDEX OF SHEETS

SHEET NO.	TITLE
1	TITLE SHEET
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3	GENERAL NOTES
4 – 5	OVERALL SITE PLAN
6 – 7	SUMMARY OF APPROXIMATE QUANTITIES
8	PROJECT TABULATIONS
9	TYPICAL SECTIONS
10	SURVEY TABULATION
11 – 12	SURVEY CONTROL
13	PROJECT GEOMETRY
14	TYPICAL DETAILS
15 – 19	TRAIL PLAN & PROFILE
20 – 26	STORMWATER MANAGEMENT PLAN
27 – 32	EROSION CONTROL PLAN
33 – 44	TRAIL CROSS SECTIONS

PROJECT CONTACTS

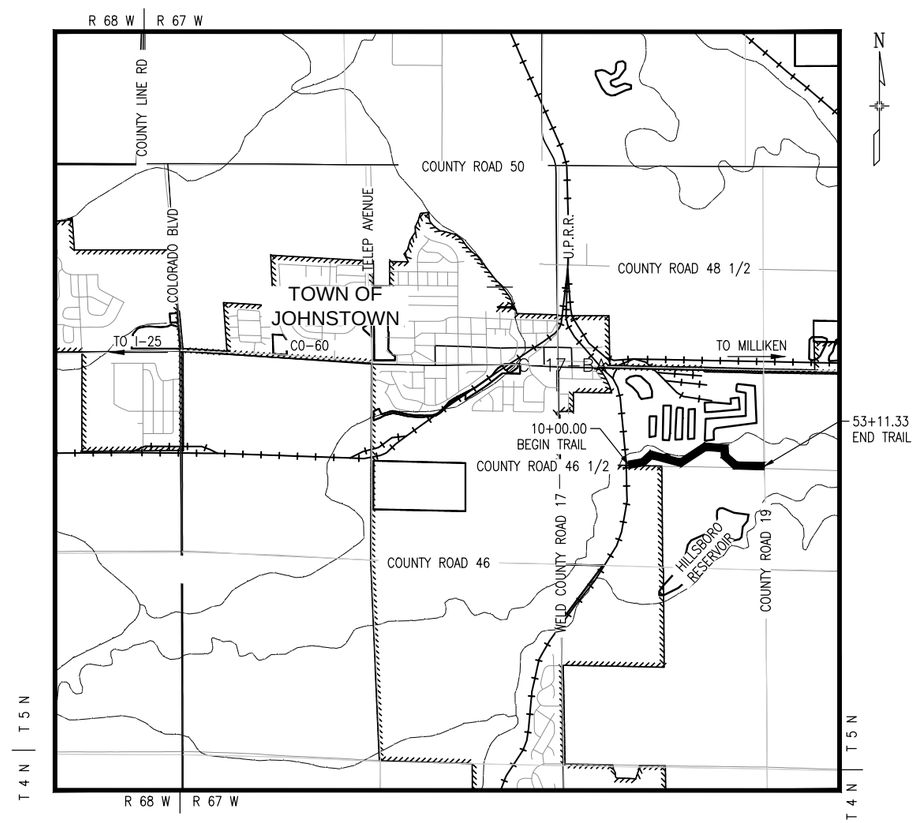
OWNER
TOWN OF JOHNSTOWN
TROY WHITE
450 S. PARISH AVENUE
JOHNSTOWN, CO 80534
P. (970) 578-9603

CIVIL ENGINEER
OTAK, INC.
SCOTT BELONGER, PE
371 CENTENNIAL PARKWAY, SUITE 210
LOUISVILLE, COLORADO 80027
P. (720) 758-7717

SURVEYOR
KING SURVEYORS, LLC
CHAD DILKA, PLS
650 E. GARDEN DR.
WINDSOR, CO 80550
P. (970) 686-5011

ENVIRONMENTAL ENGINEER
ERO RESOURCES CORPORATION
RON BEANE
1842 CLARKSON STREET
DENVER, CO 80218
P. (303) 830-1188

GEOTECHNICAL ENGINEER
CTL THOMPSON, INC.
SPENCER SCHRAM, PE
400 NORTH LINK LANE
FORT COLLINS, CO 80524
P. (970) 206-9455



PROJECT LOCATION MAP
SECTION 9 – TOWNSHIP 5 – NORTH RANGE 67 WEST
0' 2000' 4000' 8000'

Print Date: Sep 19, 2022	Sheet Revisions			As Constructed	Contract Information	Project No./Code
File Name: 19658-001-Title Sheet.dwg	Date:	Comments	Init.		Contractor:	TAP M690-001
Horiz. Scale: Vert. Scale:				No Revisions:	Resident Engineer:	
				Revised:	Project Engineer:	21992
				Void:	PROJECT STARTED: / / ACCEPTED: / /	Sheet Number 1
					Comments:	

Otak

Y:\shared\Projects\Town of Johnstown\19658-Little Thompson River Trail\50 CADD\50 DWG\19658-001-Title Sheet.dwg | SHEET01 | michael.cunningham | Sep 19, 2022 – 11:25am

PLAN NUMBER	M STANDARD TITLE	PAGE NUMBER
■ M-100-1	STANDARD SYMBOLS (3 SHEETS)	1-3
■ M-100-2	ACRONYMS AND ABBREVIATIONS (4 SHEETS)	4-7
□ M-203-1	APPROACH ROADS	8
□ M-203-2	DITCH TYPES	9
□ M-203-11	SUPERELEVATION CROWNED AND DIVIDED HIGHWAYS (3 SHEETS)	10-12
□ M-203-12	SUPERELEVATION STREETS (2 SHEETS)	13-14
□ M-206-1	EXCAVATION AND BACKFILL FOR STRUCTURES (2 SHEETS)	15-16
□ M-206-2	EXCAVATION AND BACKFILL FOR BRIDGES (2 SHEETS)	17-18
■ M-208-1	TEMPORARY EROSION CONTROL (11 SHEETS)	19-29
□ M-210-1	MAILBOX SUPPORTS (2 SHEETS)	30-31
□ M-214-1	NURSERY STOCK DETAILS	32
■ M-216-1	SOIL RETENTION COVERING (2 SHEETS)	33-34
■ M-412-1	CONCRETE PAVEMENT JOINTS (9 SHEETS) *(REVISED ON JANUARY 31, 2022)*	~~35-39~~
□ M-412-2	CONCRETE PAVEMENT CRACK REPAIR (6 SHEETS) *(REVISED ON SEPTEMBER 6, 2022)*	
□ M-510-1	STRUCTURAL PLATE PIPE H-20 LOADING	40
□ M-601-1	SINGLE CONCRETE BOX CULVERT (CAST-IN-PLACE) (2 SHEETS)	41-42
□ M-601-2	DOUBLE CONCRETE BOX CULVERT (CAST-IN-PLACE) (2 SHEETS)	43-44
□ M-601-3	TRIPLE CONCRETE BOX CULVERT (CAST-IN-PLACE) (2 SHEETS)	45-46
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□ M-603-3	PRECAST CONCRETE BOX CULVERT *(REVISED ON SEPTEMBER 10, 2020)*	~~57~~
□ M-603-4	CORRUGATED POLYETHYLENE PIPE (AASHTO M294) AND CORRUGATED POLYPROPYLENE PIPE (AASHTO M330) (2 sheets) *(REVISED ON MARCH 7, 2022)*	~~58~~
□ M-603-5	POLYVINYL CHLORIDE (PVC) PIPE (AASHTO M304)	59
□ M-603-6	STEEL REINFORCED POLYETHYLENE RIBBED PIPE (AASHTO MP 20)	60
□ M-603-10	CONCRETE AND METAL END SECTIONS	61
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□ M-604-11	INLET, TYPE D	66
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□ M-606-13	GUARDRAIL TYPE 7 F-SHAPE BARRIER (4 SHEETS)	98-101
□ M-606-14	PRECAST TYPE 7 CONCRETE BARRIER (4 SHEETS) *(REVISED ON AUGUST 21, 2020)*	~~102-104~~
□ M-606-15	GUARDRAIL TYPE 9 SINGLE SLOPE BARRIER (11 SHEETS) *(REVISED ON MARCH 5, 2020)*	~~105-115~~
□ M-607-1	WIRE FENCES AND GATES (3 SHEETS)	116-118
□ M-607-2	CHAIN LINK FENCE (3 SHEETS)	119-121
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□ M-607-4	DEER FENCE, GATES, AND GAME RAMPS (7 SHEETS) *(REVISED ON JULY 13, 2020)*	~~123-127~~
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□ M-607-15	ROAD CLOSURE GATE (9 SHEETS)	129-137
■ M-608-1	CURB RAMPS (10 SHEETS)	138-147
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□ M-611-2	DEER GUARD (2 SHEETS)	154-155
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□ M-620-11	FIELD OFFICE CLASS 1	167
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COLORADO
DEPARTMENT OF TRANSPORTATION

M&S STANDARDS PLANS LIST

July 31, 2019

Revised on September 6, 2022

ALL OF THE M&S STANDARD PLANS, AS SUPPLEMENTED AND REVISED, APPLY TO THIS PROJECT WHEN USED BY DESIGNATED PAY ITEM OR SUBSIDIARY ITEM.

THE M&S STANDARD PLANS USED TO DESIGN THIS PROJECT ARE INDICATED BY A MARKED BOX ■ AND WILL BE ATTACHED TO THE PLANS. ALL THE OTHER M&S STANDARD PLANS ARE STILL ELIGIBLE FOR CONSTRUCTION IF APPROVED BY AN APPROPRIATE CDOT ENGINEER.

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□ S-612-1	DELINEATOR INSTALLATIONS (8 SHEETS)	171-178
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□ S-614-3	CLASS II SIGNS	190
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□ S-614-5	BREAK-AWAY SIGN SUPPORT DETAILS FOR CLASS III SIGNS (2 SHEETS)	194-195
□ S-614-6	CONCRETE FOOTINGS AND SIGN ISLANDS FOR CLASS III SIGNS (2 SHEETS)	196-197
□ S-614-8	TUBULAR STEEL SIGN SUPPORT DETAILS (7 SHEETS) *(REVISED ON DECEMBER 31, 2020)*	198-204
~~S-614-9~~	~~PEDESTRIAN PUSH BUTTON POST ASSEMBLY (2 SHEETS) *(SUPERSEDED ON JANUARY 23, 2020 BY S-614-45)*~~	~~205-206~~
□ S-614-10	MARKER ASSEMBLY INSTALLATIONS	207
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□ S-614-20	TYPICAL POLE MOUNT SIGN INSTALLATIONS	215
□ S-614-21	CONCRETE BARRIER SIGN POST INSTALLATIONS (2 SHEETS) *(REVISED ON SEPTEMBER 21, 2020)*	216-217
□ S-614-22	TYPICAL MULTI-SIGN INSTALLATIONS	218
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□ S-614-40A	ALTERNATIVE TRAFFIC SIGNAL 25'-55' SINGLE MAST ARMS (4 SHEETS) *(REVISED ON JULY 22, 2022)*	224-227
□ S-614-41	TEMPORARY SPAN WIRE SIGNALS (13 SHEETS)	228-240
□ S-614-42	CABINET FOUNDATION DETAIL (4 SHEETS)	241-244
□ S-614-43	TRAFFIC LOOP AND MISCELLANEOUS SIGNAL DETAILS (8 SHEETS)	245-252
□ S-614-44	PEDESTAL POLE SIGNALS (2 SHEETS)	253-254
□ S-614-45	PEDESTRIAN PUSH BUTTON POST ASSEMBLY DETAILS (6 SHEETS) *(REVISED ON DECEMBER 3, 2020)*	
□ S-614-50	STATIC SIGN MONOTUBE STRUCTURES (12 SHEETS)	255-266
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□ S-627-1	PAVEMENT MARKINGS (9 SHEETS) *(REVISED ON JULY 22, 2022)*	281-289
□ S-630-1	TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION (24 SHEETS)	290-313
□ S-630-2	BARRICADES, DRUMS, CONCRETE BARRIERS (TEMP) AND VERTICAL PANELS	314
□ S-630-3	FLASHING BEACON (PORTABLE) DETAILS	315
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100% ADVERTISEMENT SET - SEPTEMBER, 2022

Y:\shared\Projects\Town of Johnstown\19658-Little Thompson River Trail\30 CADD\50 DWG\19658-002-Standard Plans List.dwg | SHEET01 | michael.cunningham | Sep 19, 2022 - 11:25am

Print Date: Sep 19, 2022	Sheet Revisions		
File Name: 19658-002-Standard Plans List.dwg	Date:	Comments	Init.
Horiz. Scale: Vert. Scale:			
Unit Information Unit Leader Initials			

Otak

As Constructed	LITTLE THOMPSON RIVER TRAIL STANDARD PLANS LIST				Project No./Code
No Revisions:					TAP M690-001
Revised:	Designer:	SJB	Structure Numbers		21992
	Detailer:	TMC			
Void:	Sheet Subset:	M&S	Subset Sheets:	1 of 1	Sheet Number 2

UTILITIES:

U1. UTILITY LINES AS SHOWN ON THE PLAN SHEETS ARE PLOTTED FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR'S ATTENTION IS DIRECTED TO SECTION 105.11 OF THE CDOT STANDARD SPECIFICATION CONCERNING UTILITIES. **FOR UTILITY LOCATES, THE CONTRACTOR SHALL CALL THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT 811 AT LEAST THREE (3) WORKING DAYS (NOT INCLUDING THE INITIAL DAY OF CONTACT) PRIOR TO DIGGING, GRADING OR EXCAVATING.**

U2. THE LOCATION OF EXISTING UTILITIES SHOWN ON THESE DRAWINGS HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. IT IS HOWEVER THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES PRIOR TO COMMENCING CONSTRUCTION AND TO NOTIFY THE ENGINEER OF ANY DISCREPANCY. ALL CONFLICTING UTILITIES SHALL BE EXPOSED BY THE CONTRACTOR PRIOR TO CONSTRUCTION AND INSPECTED BY THE ENGINEER TO VERIFY CONFORMANCE WITH THE PLANS. THIS PARTICULARLY APPLIES TO UNDERGROUND WORK TO BE COMPLETED ON THIS PROJECT BY THE CONTRACTOR. RELOCATION OF EXISTING UTILITIES IS NOT A PART OF THIS CONTRACT EXCEPT AS SHOWN ON THESE DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF UTILITY RELOCATIONS BY UTILITY COMPANIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITIES DURING CONSTRUCTION AND SHALL HOLD THE TOWN OF JOHNSTOWN HARMLESS FOR DAMAGES ARISING FROM CONTRACTOR'S FAILURE TO ADEQUATELY PROTECT EXISTING UTILITIES.

U3. THE CONTRACTOR SHALL REFERENCE THE PROJECT TECHNICAL SPECIFICATIONS FOR ADDITIONAL ITEMS THE CONTRACTOR SHALL ADHERE TO IN COOPERATION WITH UTILITIES.

UTILITY CONTACT LIST

ADDITIONAL UTILITIES MAY BE ENCOUNTERED WITHIN THE PROJECT LIMITS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL THE WORK BEING DONE WITH ALL THE UTILITY COMPANIES WITHIN THE PROJECT AREA. CONTRACTOR TO ASK THE OWNERS REPRESENTATIVE FOR A LIST OF CONTACT INFORMATION FOR UTILITIES WITHIN THE TOWN OF JOHNSTOWN.

ENTITY	CONTACT	PHONE
CENTURY LINK – FIBER OPTIC	CENTURY LINK	1(866) 642–0447
XCEL ENERGY – ELECTRIC	ANDREW HOLDER	(720) 369–0204
TDS – FIBER OPTIC		1(855) 244–0122
WESTERN MIDSTREAM LP – GAS	KELLY REYOS	(303) 357–7768
CDP MIDSTREAM – GAS	LEWIS HAGENLOCK	(970) 378–6351

CONSTRUCTION:

C1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE COLORADO DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, DATED 2022, AND AS SUBSEQUENTLY REVISED, THE STANDARD PLANS, DATED JULY 2019, AND AS SUBSEQUENTLY REVISED.

C2. TRAIL ALIGNMENT MAY BE ADJUSTED BY THE ENGINEER IN THE FIELD. CONTRACTOR SHALL OBTAIN FORMAL APPROVAL OF THE PROJECT MANAGER PRIOR TO THE PLACEMENT OF THE TRAIL.

C3. THE CONTRACTOR SHALL PROTECT ALL WORK AREAS AND FACILITIES FROM WATER AT ALL TIMES. AREAS AND FACILITIES SUBJECTED TO FLOODING, REGARDLESS OF THE SOURCE OF WATER SHALL BE PROMPTLY DEWATERED AND RESTORED AT NO COST TO THE OWNER. THIS SHALL INCLUDE REMOVAL OF ANY DEBRIS CAUSED BY FLOODING.

C4. LIMITS OF CONSTRUCTION SHALL BE CONFINED TO PUBLIC RIGHTS–OF–WAY, EASEMENTS, CONSTRUCTION LIMIT AREAS, OR AS DIRECTED BY THE ENGINEER IN THE FIELD.

C5. REPAIR OF ANY DAMAGE TO EXISTING IMPROVEMENTS, IRRIGATION, ACCESS POINTS OR LANDSCAPING IS THE RESPONSIBILITY OF THE CONTRACTOR. ALL ACCESS ROUTES SHALL BE RETURNED TO PRECONSTRUCTION CONDITION UPON COMPLETION OF THE PROJECT. ALL ASSOCIATED COSTS FOR REPAIR SHALL BE PAID FOR BY THE CONTRACTOR, AT NO EXPENSE TO THE TOWN OF JOHNSTOWN.

C6. THE CONTRACTOR SHALL NOTIFY THE OWNER 48 HOURS PRIOR TO THE START OF CONSTRUCTION. A PRE–CONSTRUCTION MEETING SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION.

C7. THE CONTRACTOR SHALL HAVE: ONE (1) COPY OF THE PLANS, ONE (1) COPY OF THE CONSTRUCTION SPECIFICATIONS AND ONE (1) COPY OF THE STORMWATER MANAGEMENT PLAN ON THE PROJECT SITE AT ALL TIMES.

C8. THE CONTRACTOR SHALL LIMIT CONSTRUCTION ACTIVITIES TO THOSE AREAS WITHIN THE LIMITS OF DISTURBANCE AND/OR TOES OF SLOPES AS SHOWN ON THE PLANS AND CROSS–SECTIONS. ANY DISTURBANCE BEYOND THESE LIMITS SHALL BE RESTORED TO ORIGINAL CONDITION BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. CONSTRUCTION ACTIVITIES IN ADDITION TO NORMAL CONSTRUCTION PROCEDURES SHALL INCLUDE THE PARKING OF VEHICLES OR EQUIPMENT, DISPOSAL OF LITTER, AND ANY OTHER ACTION WHICH WOULD ALTER EXISTING CONDITIONS. THE CONTRACTOR SHALL NOT CONDUCT ANY OPERATIONS OR STAGING OUTSIDE THE CONSTRUCTION LIMITS SHOWN ON THE PLANS.

C9. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH IMPACTED UTILITIES TO ASSURE THE TIMELY RELOCATION OF THEIR FACILITIES. THIS COORDINATION SHALL INCLUDE ANTICIPATED IMPACTED UTILITIES AND UNFORESEEN UTILITIES.

C10. CROSS SLOPE: SIDEWALK AND TRAIL CROSS SLOPES SHALL BE NO GREATER THAN 2.0% UNLESS OTHERWISE SHOWN ON THE PLANS. THE MINIMUM CROSS SLOPE SHALL BE WITHIN INDUSTRY ACCEPTED CONSTRUCTION TOLERANCES OF THE STATED MAXIMUM CROSS SLOPE. THE CONTRACTOR SHALL VERIFY CROSS SLOPE WITH A DIGITAL SMART LEVEL OR OTHER APPROPRIATE MEASURING TOOLS DURING CONSTRUCTION. UNLESS INDICATED ON THE PLANS OR OTHERWISE APPROVED, ANY PORTION OF CONSTRUCTED TRAIL FOUND TO CONTAIN A CROSS–SLOPE GREATER THAN 2% SHALL BE REMOVED AND REPLACED AT NO COST TO THE OWNER.

C11. THE SEVERITY OF SULFATE EXPOSURE OF ALL CONCRETE SHALL BE CLASS S2.

C12. VEGETATION: THE CONTRACTOR SHALL PROTECT EXISTING VEGETATION NOT SPECIFICALLY IDENTIFIED FOR REMOVAL TO THE GREATEST EXTENT POSSIBLE. REMOVAL OF TREES, UNLESS SPECIFICALLY IDENTIFIED IN THE PLANS SHALL BE APPROVED BY THE OWNER PRIOR TO REMOVAL. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND OFF–SITE DISPOSAL OF ALL PLANT MATERIAL.

C13. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE TOWN OF JOHNSTOWN, AND THE TOWN RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO THEIR STANDARDS AND SPECIFICATIONS.

C14. ALL ITEMS REMOVED ON THE PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE NOTED, AND SHALL BE DISPOSED OF PROPERLY.

EARTHWORK:

E1. WATER SHALL BE USED AS A DUST PALLIATIVE WHERE REQUIRED. LOCATIONS SHALL BE AS ORDERED AND WILL NOT BE PAID FOR SEPARATELY.

E2. PRIOR TO MOISTURE DENSITY CONTROL, THE CONTRACTOR SHALL REMOVE ALL TOPSOIL AND SOFT OR DISTURBED SOILS. DEPTH OF MOISTURE – DENSITY CONTROL FOR THIS PROJECT SHALL BE AS FOLLOWS:

FULL DEPTH OF ALL EMBANKMENTS

BASES OF CUTS AND FILLS – 12 INCHES

E3. EXCAVATION REQUIRED FOR COMPACTION OF BASES OF CUTS AND FILLS WILL BE CONSIDERED AS SUBSIDIARY TO THAT OPERATION AND WILL NOT BE PAID FOR SEPARATELY.

E4. ALL COMPACTION SHALL BE PER THE 2021 CDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND ANY PROJECT SPECIAL PROVISIONS OR STANDARD SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER. PROOF ROLLING OF ALL SUBGRADE WILL BE REQUIRED PRIOR TO CONCRETE PLACEMENT AND SHALL BE INCLUDED IN THE COST OF THE WORK.

E5. FINAL GRADES SHOWN REFLECT A MINIMUM OF SIX (6) INCHES OF TOPSOIL BEING PLACED ON ALL DISTURBED AREAS NOT SURFACED. TOPSOIL TO BE USED IS SUBJECT TO REVIEW AND APPROVAL BY THE PROJECT ENGINEER.

SIGNING, STRIPING, TRAFFIC CONTROL NOTES:

SS1. CONSTRUCTION TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) CURRENT EDITION. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT A METHOD OF HANDLING TRAFFIC (MHT) TO THE OWNER FOR APPROVAL FOR EACH APPLICABLE PHASE OF WORK.

EROSION CONTROL NOTES:

SEE STORMWATER MANAGEMENT PLAN.

SEEDING AND MULCHING:

SEE STORMWATER MANAGEMENT PLAN

DRAINAGE/STORM SEWER NOTES:

D1. THE CONTRACTOR IS REQUIRED TO KEEP ALL DRAINAGE FACILITIES FUNCTIONAL AND MAINTAIN DRAINAGE TO THOSE FACILITIES AT ALL TIMES DURING CONSTRUCTION.

VEGETATION NOTES:

V1. THE CONTRACTOR SHALL REVIEW THE SITE WITH THE OWNER PRIOR TO CONSTRUCTION. NO TREES SHALL BE REMOVED WITHOUT PRIOR APPROVAL FROM THE OWNER. TREES SHALL BE FALLEN AND REMOVED FROM THE PROJECT ON THE SAME DAY OF REMOVAL. THE CONTRACTOR SHALL SHALL PROTECT EXISTING TREES TO THE GREATEST EXTENT POSSIBLE.

V2. TREES GREATER THAN 6" DIAMETER TO BE PAID FOR AS TREE REMOVALS. TREES SHALL BE MEASURED FROM 4'–6" FROM THE GROUND (AS DEFINED DIAMETER AT BREAST HEIGHT). TREES 6" OR LESS THAN THIS CALIPER TO BE REMOVED SHALL BE PAID FOR UNDER CLEARING AND GRUBBING. ANY TREE LIMB TRIMMING DESIRED BY THE CONTRACTOR SHALL BE REVIEWED WITH THE OWNER AT LEAST ONE WEEK IN ADVANCE OF THE TASK.

V3. THE PAY LIMITS FOR SEEDING ARE DEFINED BY THE CLEARING & GRUBBING LIMITS SHOWN IN THE PLANS. THESE ITEMS WILL BE PAID FOR BASED UPON PLAN QUANTITIES. ANY ADDITIONAL DISTURBED AREAS SHALL BE SEEDED AT NO ADDITIONAL COST TO THE PROJECT.

ENVIRONMENTAL NOTES:

EN1. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN EXISTING BMPs AND ENSURE THEIR COMPLETE REMOVAL ONCE 70% VEGETATION OF SPECIFIED SPECIES HAS BEEN RE–ESTABLISHED IN DISTURBED AREAS.

EN2. THE CONTRACTOR SHALL PREVENT DEBRIS FROM BEING TRANSPORTED OUTSIDE OF THE SITE DURING CONSTRUCTION. CONSTRUCTION DEBRIS SHALL BE CLEANED FROM THE SITE DAILY AND CONTAINED IN A TRASH ENCLOSURE.

EN3. ONCE CONSTRUCTION HAS BEEN COMPLETED, THE TOWN OF JOHNSTOWN PROJECT MANAGER, CDOT R4 ENVIRONMENTAL STAFF, AND THE CONTRACTOR WILL CONDUCT A WALKTHROUGH OF THE PROJECT SITE. THE PURPOSE OF THE WALKTHROUGH IS TO IDENTIFY ANY AREAS WHERE BMPS NEED TO BE REMOVED OR MAINTAINED AND IDENTIFY THE RESPONSIBLE PARTY UNTIL THE CDPS PERMIT IS CLOSED.

MIGRATORY BIRD TREATY ACT CONSTRUCTION GUIDELINES (SUMMARIZED FROM CDOT & CPW)

THE MIGRATORY BIRD TREATY ACT (MBTA) PROTECTS MIGRATORY BIRDS, THEIR NESTS, AND THEIR EGGS (EXCEPT FOR PIGEONS AND STARLINGS). MOST NESTING AND REARING ACTIVITIES OCCUR BETWEEN APRIL 1 AND AUGUST 31, BUT RAPTORS MAY NEST AS EARLY AS FEBRUARY 15. THESE DATES ARE GUIDELINES AND NESTING BIRDS ARE PROTECTED AT ALL TIMES. PRECONSTRUCTION SURVEYS FOR NESTING BIRDS SHOULD BE COMPLETED BY A WILDLIFE BIOLOGIST WITH A MINIMUM OF THREE YEARS EXPERIENCE CONDUCTING MIGRATORY BIRD SURVEYS. NO CONSTRUCTION ACTIVITIES MAY OCCUR WITHIN 50 FEET OF AN ACTIVE NEST AND ORANGE CONSTRUCTION FENCING SHOULD BE INSTALLED AROUND ACTIVE NESTS TO PROTECT THEM UNTIL THE NEST FAILS OR THE YOUNG FLEDGE.

THE FOLLOWING CONDITIONS APPLY TO CONSTRUCTION ACTIVITIES:

B1. TREE TRIMMING/REMOVAL: TREE TRIMMING AND/OR REMOVAL ACTIVITIES SHOULD BE COMPLETED BETWEEN SEPTEMBER 1 AND FEBRUARY 14. IF THESE ACTIVITIES WILL OCCUR BETWEEN FEBRUARY 15 AND AUGUST 31, THEN A PRECONSTRUCTION SURVEY FOR NESTING BIRDS MUST BE COMPLETED. PRE–CONSTRUCTION SURVEYS FOR NESTING BIRDS ARE VALID FOR FIVE DAYS. IF WORK IS NOT COMPLETED WITHIN THIS TIME, THEN A NEW SURVEY IS REQUIRED.

B2. CLEARING/GRUBBING ACTIVITIES: CLEARING AND GRUBBING OF VEGETATION THAT MAY DISTURB GROUND NESTING BIRDS SHOULD BE COMPLETED BETWEEN SEPTEMBER 1 AND MARCH 31. IF THESE ACTIVITIES WILL OCCUR BETWEEN APRIL 1 AND AUGUST 31, VEGETATION SHALL BE REMOVED AND/OR TRIMMED TO A HEIGHT OF SIX INCHES OR LESS PRIOR TO APRIL 1. ONCE VEGETATION HAS BEEN REMOVED AND/OR TRIMMED, APPROPRIATE MEASURES, I.E. REPEATED MOWING/TRIMMING, SHALL BE IMPLEMENTED TO ASSURE VEGETATION DOES NOT GROW MORE THAN SIX INCHES. ANY VEGETATED AREAS THAT ARE NOT REGULARLY MOWED MUST BE SURVEYED FOR NESTING BIRDS PRIOR TO CONSTRUCTION BETWEEN APRIL 1 AND AUGUST 31. PRECONSTRUCTION SURVEYS MUST BE COMPLETED BY A QUALIFIED WILDLIFE BIOLOGIST. PRE–CONSTRUCTION SURVEYS FOR NESTING BIRDS ARE VALID FOR FIVE DAYS. IF WORK IS NOT COMPLETED WITHIN THIS TIME, THEN A NEW SURVEY IS REQUIRED.

B3. BIRDS OF PREY/RAPTORS: IF CONSTRUCTION OCCURS BETWEEN FEBRUARY 15 AND AUGUST 31, A PRECONSTRUCTION SURVEY FOR NESTING RAPTORS MUST BE COMPLETED WITHIN A HALF MILE BUFFER OF THE PROJECT LIMITS.

IF ANY NESTING RAPTORS OCCUR WITHIN THE BUFFER AREA, THEN COLORADO DIVISION OF WILDLIFE'S "RECOMMENDED BUFFER ZONES AND SEASONAL RESTRICTIONS FOR COLORADO RAPTORS" GUIDELINES SHOULD BE FOLLOWED. THE CDOW MAY REDUCE THE BUFFER REQUIREMENTS BASED ON SITE CONDITIONS AND TYPE OF WORK BEING DONE, BUT MUST BE CONSULTED FOR APPROVAL PRIOR TO CONSTRUCTION WITHIN THE RECOMMENDED BUFFER ZONE OF AN ACTIVE NEST.

PREBLE'S MEADOW JUMPING MOUSE (PMJM) NOTES:

M1. ALL CONSTRUCTION ACTIVITIES SHALL BE DURING THE INACTIVE PERIOD FOR PMJM (BETWEEN OCTOBER 15 AND MAY 1).

M2. FENCE (PLASTIC) SHALL BE INSTALLED AT THE NORTHERN PROJECT BOUNDARY TO PROTECT ALL DELINEATED PMJM HABITAT PRIOR TO ANY OTHER CONSTRUCTION OPERATIONS. SEE OVERALL SITE PLAN FOR PMJM HABITAT DELINEATIONS.

M3. THE CONTRACTOR SHALL NOT ENTER THE DELINEATED PMJM HABITAT DURING CONSTRUCTION.

M4. THE CONTRACTOR SHALL NOT CONDUCT NIGHT WORK OR USE LIGHTING DURING CONSTRUCTION.

M5. SEE US FISH AND WILDLIFE SERVICE CONCURRENCE LETTER (TAILS: 06E24000–2021–I–0828) FOR ADDITIONAL INFORMATION.

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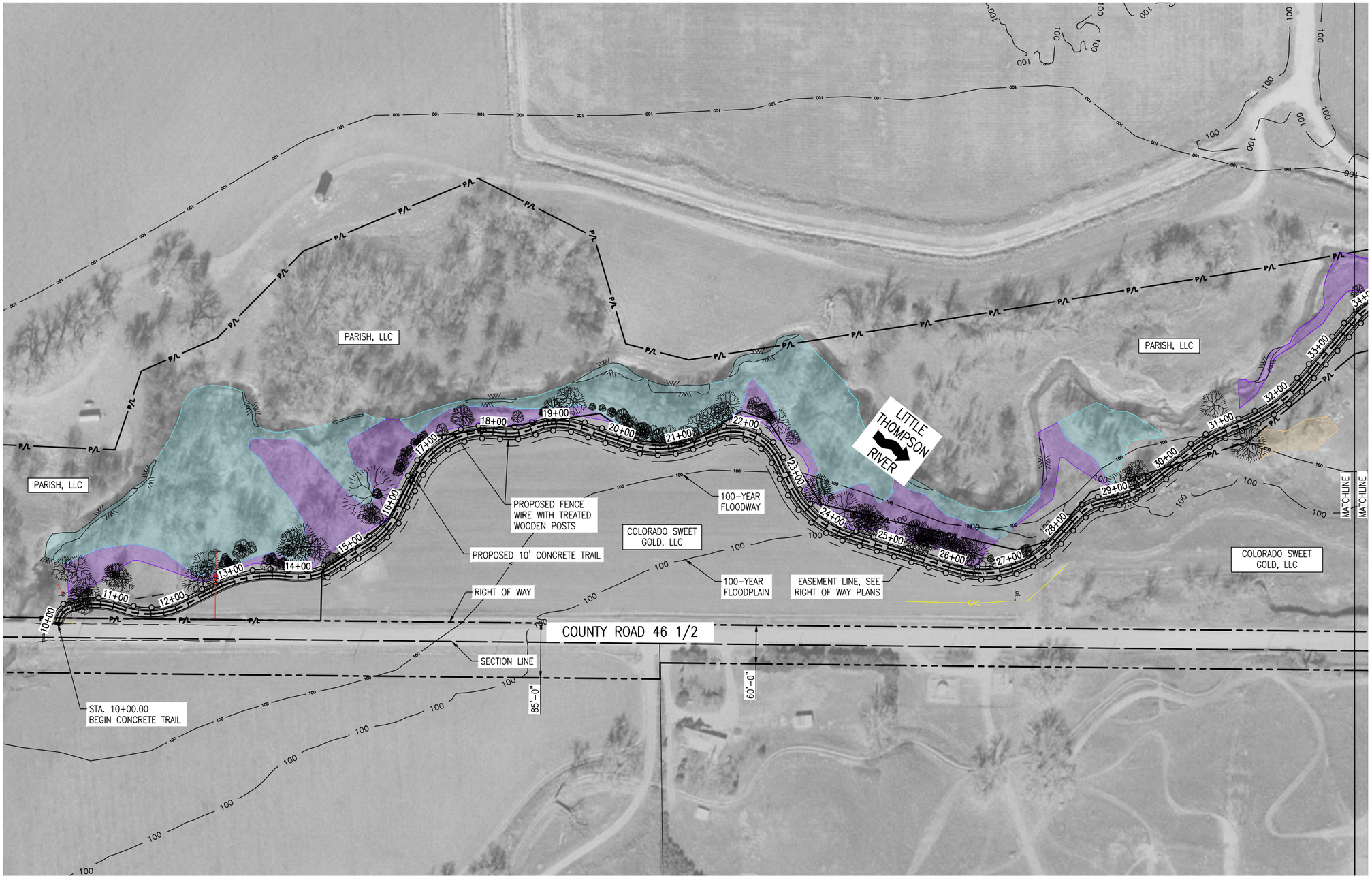


NOTES:

1.

LEGEND:

- RIGHT OF WAY
- SECTION LINE
- PROPERTY LINE
- EXISTING EASEMENT
- 100-YEAR FLOODWAY – PRELIMINARY FLOODWAY PER COLORADO HAZARD MAPPING PROGRAM
- 100-YEAR FLOODPLAIN – PRELIMINARY ZONE AE PER COLORADO HAZARD MAPPING PROGRAM
- WIRE FENCE
- EXISTING WELTAND
- EASEMENT LINE, SEE RIGHT OF WAY PLANS
- LOW QUALITY PREBLE MOUSE HABITAT
- MODERATE QUALITY PREBLE MOUSE HABITAT
- MODERATE-HIGH QUALITY PREBLE MOUSE HABITAT

N

0 80 160

SCALE IN FEET

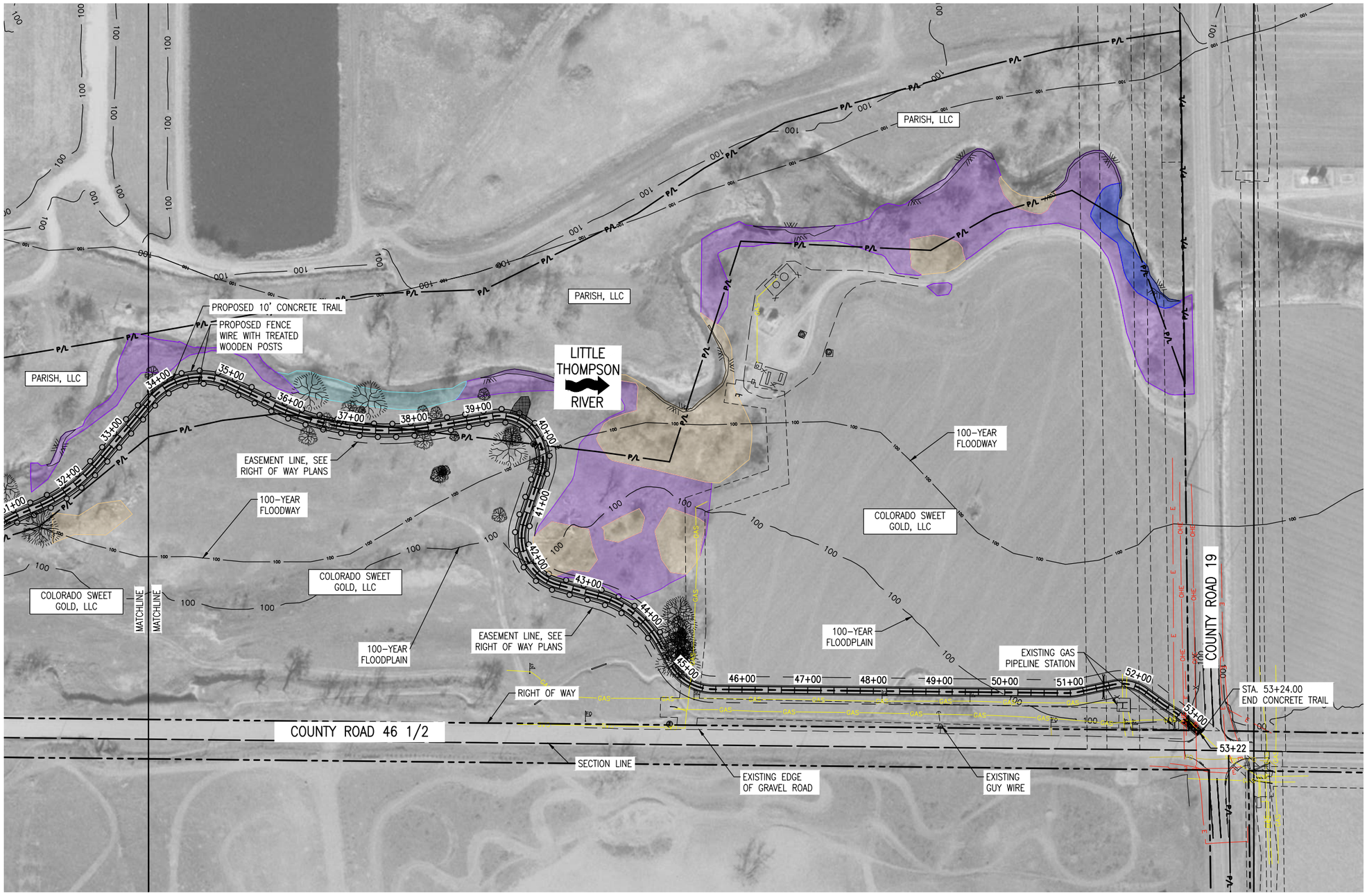
100% ADVERTISEMENT SET - SEPTEMBER, 2022

Y:\shared\Projects\Town of Johnstown\19658-Little Thompson River Trail\50 CADD\50 DWG\19658-006 Overall Site Plan.dwg | SHEET01 | michael.cunningham | Sep 19, 2022 - 11:26am

Print Date: Sep 19, 2022	Sheet Revisions		
File Name: 19658-006 Overall Site Plan.dwg	Date:	Comments	Init.
Horiz. Scale: Vert. Scale:			
Unit Information Unit Leader Initials			

Otak

As Constructed	LITTLE THOMPSON RIVER TRAIL OVERALL SITE PLAN (WEST)		Project No./Code
No Revisions:			TAP M690-001
Revised:	Designer: SJB	Structure Numbers	21992
Void:	Detailer: TMC		
	Sheet Subset: OSP	Subset Sheets: 1 of 2	Sheet Number 4



NOTES:

1.

LEGEND:

- RIGHT OF WAY
- SECTION LINE
- PROPERTY LINE
- EXISTING EASEMENT
- 100-YEAR FLOODWAY – PRELIMINARY FLOODWAY PER COLORADO HAZARD MAPPING PROGRAM
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- WIRE FENCE
- EXISTING WELTAND
- EASEMENT LINE, SEE RIGHT OF WAY PLANS
- LOW QUALITY PREBLE MOUSE HABITAT
- MODERATE QUALITY PREBLE MOUSE HABITAT
- MODERATE–HIGH QUALITY PREBLE MOUSE HABITAT

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0 80 160
SCALE IN FEET

100% ADVERTISEMENT SET - SEPTEMBER, 2022

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Print Date: Sep 19, 2022	Sheet Revisions		
File Name: 19658-006 Overall Site Plan.dwg	Date:	Comments	Init.
Horiz. Scale: Vert. Scale:			
Unit Information Unit Leader Initials			

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As Constructed
No Revisions:
Revised:
Void:

LITTLE THOMPSON RIVER TRAIL
OVERALL SITE PLAN
(EAST)

Designer:	SJB	Structure Numbers	
Detailer:	TMC		
Sheet Subset:	OSP	Subset Sheets:	2 of 2

Project No./Code
TAP M690-001
21992
Sheet Number 5

INDEX BOOK	INDEX PAGE	INDEX SHEET	INDEX ITEM NO	CONTRACT ITEM	UNIT	PROJECT PLAN	PROJECT AS CONST	PLAN	AS CONST	PLAN	AS CONST	PLAN	AS CONST	PLAN	AS CONST	PROJECT TOTALS PLAN	PROJECT TOTALS AS CONST
			201-00000	CLEARING AND GRUBBING	L S	1										1	
			202-00010	REMOVAL OF TREE	EACH	2										2	
			202-00000	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	L S	1										1	
			203-00010	UNCLASSIFIED EXCAVATION (COMPLETE IN PLACE)	CY	1,543										1,543	
			203-01597	POTHOLING	HOUR	16										16	
			207-00700	TOPSOIL (ONSITE)	CY	2,292										2,292	
			207-00210	STOCKPILE TOPSOIL	CY	2,292										2,292	
			208-00002	EROSION LOG TYPE 1 (12 INCH)	LF	6,630										6,630	
			208-00045	CONCRETE WASHOUT STRUCTURE	EACH	2										2	
			208-00070	VEHICLE TRACKING PAD	EACH	2										2	
			208-00103	REMOVAL AND DISPOSAL OF SEDIMENT (LABOR)	HOUR	8										8	
			208-00105	REMOVAL AND DISPOSAL OF SEDIMENT (EQUIPMENT)	HOUR	8										8	
			208-00107	REMOVAL OF TRASH	HOUR	12										12	
			208-00207	EROSION CONTROL MANAGEMENT	DAY	15										15	
			212-00100	TREE RETENTION AND PROTECTION	L S	1										1	
			212-00700	ORGANIC FERTILIZER	LB	849										849	
			212-00701	COMPOST (MECHANICALLY APPLIED)	CY	184										184	
			212-00703	HUMATE	LB	509										509	
			212-00704	MYCORRHIZAE	LB	23										23	
			212-00706	SEEDING (NATIVE) DRILL	ACRE	2.8300										2.8300	
			213-00004	MULCHING (WEED FREE STRAW)	ACRE	2.8300										2.8300	
			213-00061	MULCH TACKIFIER	LB	566										566	
			304-06007	AGGREGATE BASE COURSE (CLASS 6)	CY	804										804	
			603-30018	18 INCH STEEL END SECTION	EACH	2										2	
			603-10180	18 INCH CORRUGATED STEEL PIPE	LF	30										30	
			607-01055	FENCE WIRE WITH TREATED WOODEN POSTS	LF	6,470										6,470	
			607-11525	FENCE (PLASTIC)	LF	5,720										5,720	
			608-00026	CONCRETE BIKEWAY (6 INCH)	SY	4,808										4,808	
			608-00015	DETECTABLE WARNINGS	SF	36										36	
			614-00011	SIGN PANEL (CLASS I)	SF	5										5	
			620-00020	SANITARY FACILITY	EACH	1										1	
			625-00000	CONSTRUCTION SURVEYING	L S	1										1	
			626-00000	MOBILIZATION	L S	1										1	
			700-70010	F/A MINOR CONTRACT REVISIONS	F A	1										1	

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Print Date: Sep 19, 2022
File Name: 19658-010-SAQ.dwg
Horiz. Scale: Vert. Scale:
Unit Information Unit Leader Initials

Sheet Revisions

Date:	Comments	Init.

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As Constructed
No Revisions:
Revised:
Void:

LITTLE THOMPSON RIVER TRAIL
SUMMARY OF APPROXIMATE QUANTITIES

Designer: SJB
Detailer: TMC
Sheet Subset: SAQ
Structure Numbers
Subset Sheets: 1 of 2

Project No./Code
TAP M690-001
21992
Sheet Number 6

INDEX			INDEX ITEM NO	CONTRACT ITEM	UNIT	PROJECT										PROJECT TOTALS	
BOOK	PAGE	SHEET				PLAN	AS CONST	PLAN	AS CONST	PLAN	AS CONST	PLAN	AS CONST	PLAN	AS CONST	PLAN	AS CONST
			700-70016	F/A FUEL COST ADJUSTMENT	F A	1										1	
			700-70023	F/A ON-THE-JOB TRAINEE	F A	1										1	
			700-70380	F/A EROSION CONTROL	F A	1										1	

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TABULATION OF REMOVALS

ITEM NO.	201-00000	202-00010	202-00000	212-00100
LOCATION	CLEARING AND GRUBBING	REMOVAL OF TREE	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	TREE RETENTION AND PROTECTION
	L S	EACH	L S	L S
PROJECT	1		1.00	1
STA 10+00.00 TO STA 20+00.00		1		
STA 20+00.00 TO STA 30+00.00		1		
STA 30+00.00 TO STA 40+00.00				
STA 40+00.00 TO STA 50+00.00				
STA 50+00.00 TO STA 53+24.00				
TOTAL	1	2	1	1

TABULATION OF DRAINAGE ITEMS

ITEM NO.	603-10180	603-30018
LOCATION	18 INCH CORRUGATED STEEL PIPE	18 INCH STEEL END SECTION
	LF	EACH
STA 10+00.00 TO STA 20+00.00	0	0
STA 20+00.00 TO STA 30+00.00	0	0
STA 30+00.00 TO STA 40+00.00	0	0
STA 40+00.00 TO STA 50+00.00	0	0
STA 50+00.00 TO STA 53+24.00	30	2
TOTAL	30	2

TABULATION OF EARTHWORK QUANTITIES

ITEM NO.			203-00010	PROJECT TOTALS
INDEX				
BOOK	PAGE	SHEET	UNCLASSIFIED EXCAVATION (COMPLETE IN PLACE)	
			FOR BIKEWAY FROM COMPUTER SURFACE MODELS	
			UNCLASSIFIED EXCAVATION	CU. YARDS
			FROM CIVIL 3D	1543
			TOTAL FOR PAY QUANTITY	1,543
			FOR INFORMATION ONLY	
			FOR BIKEWAY FROM COMPUTER SURFACE MODELS	
			EMBANKMENT (NET)	CU. YARDS
			FROM CIVIL 3D	774
			TOTAL	774
			UNCLASSIFIED EXCAVATION TOTAL	1,543
			EMBANKMENT (NET) TOTAL	774
			EMBANKMENT (NET) x FACTOR (1.15) TOTAL	891
			EXCESS EXCAVATION TOTAL	652
			EMBANKMENT FACTORED PLUS EXCESS EXCAVATION TOTAL	1,543

NOTES:
1. THE CONTRACTOR IS RESPONSIBLE FOR DISPOSAL OF EXCESS MATERIAL.

TABULATION OF TEMPORARY EROSION CONTROL ITEMS

ITEM NO.	607-11525	208-00002	208-00045	208-00070	208-00103	208-00105	208-00107	208-00207
LOCATION	FENCE (PLASTIC)	EROSION LOG TYPE 1 (12 INCH)	CONCRETE WASHOUT STRUCTURE	VEHICLE TRACKING PAD	REMOVAL AND DISPOSAL OF SEDIMENT (LABOR)	REMOVAL AND DISPOSAL OF SEDIMENT (EQUIPMENT)	REMOVAL OF TRASH	EROSION CONTROL MANAGEMENT
	LF	LF	EACH	EACH	HOUR	HOUR	HOUR	DAY
STA 10+00.00 TO STA 53+24.00								
INITIAL	4,400	5,100	2	2	4	4	8	15
INTERIM	1,320	1,530			4	4	4	
FINAL								
TOTAL	5,720	6,630	2	2	8	8	12	15

TABULATION OF PERMANENT EROSION CONTROL

ITEM NO.	207-00700			207-00210	212-00700	212-00701	212-00703	212-00704	212-00706	213-00004	213-00061
LOCATION	TOPSOIL (ONSITE)			STOCKPILE TOPSOIL	ORGANIC FERTILIZER	COMPOST (MECHANICALLY APPLIED)	HUMATE	MYCORRHIZAE	SEEDING (NATIVE) DRILL	MULCHING (WEED FREE STRAW)	MULCH TACKIFIER
	AREA	T	CY	CY	LB	CY	LB	LB	ACRE	ACRE	LB
	SF	INCH									
STA 10+00.00 TO STA 20+00.00	28,600	6	530	530	196	42.55	118	5.32	0.6545	0.6545	131
STA 20+00.00 TO STA 30+00.00	28,600	6	530	530	196	42.55	118	5.32	0.6545	0.6545	131
STA 30+00.00 TO STA 40+00.00	28,600	6	530	530	196	42.55	118	5.32	0.6545	0.6545	131
STA 40+00.00 TO STA 50+00.00	28,600	6	530	530	196	42.55	118	5.32	0.6545	0.6545	131
STA 50+00.00 TO STA 53+24.00	9,266	6	172	172	64	13.79	38	1.72	0.2121	0.2121	42
SUBTOTAL	123,666		2,292	2,292	849	184	509	23	2.8300	2.8300	566
TOTAL	2,292			2,292	849	184	509	23	2.8300	2.8300	566

TABULATION OF MISCELLANEOUS ITEMS

ITEM NO.	203	614	620	625	626
	203-01597	614-00011	620-00020	625-00000	626-00000
LOCATION	POTHOLING	SIGN PANEL (CLASS I)	SANITARY FACILITY	CONSTRUCTION SURVEYING	MOBILIZATION
	HOUR	SF	EACH	L S	L S
PROJECT	16	5	1	1	1
TOTAL	16	5	1	1	1

TABULATION OF FENCING

ITEM NO.	607-01055
LOCATION	FENCE WIRE WITH TREATED WOODEN POSTS
	LF
10+00.00 TO STA 20+00.00	1,578
20+00.00 TO STA 30+00.00	2,000
30+00.00 TO STA 40+00.00	2,000
40+00.00 TO STA 50+00.00	891
50+00.00 TO STA 53+24.00	0
TOTAL	6,470

TABULATION OF AGGREGATES

ITEM NO.	304-06007
LOCATION	AGGREGATE BASE COURSE (CLASS 6)
	CY
STA 10+00.00 TO STA 20+00.00	186
STA 20+00.00 TO STA 30+00.00	186
STA 30+00.00 TO STA 40+00.00	186
STA 40+00.00 TO STA 50+00.00	186
STA 50+00.00 TO STA 53+24.00	60
TOTAL	804

TABULATION OF CONCRETE SURFACING

ITEM NO.	304-06007			608-00026	608-00015
LOCATION	AGGREGATE BASE COURSE (CLASS 6)			CONCRETE BIKEWAY (6 INCH)	DETECTABLE WARNINGS
	AREA	T			
	SF	INCH	CY	SY	SF
10+00.00 TO STA 20+00.00	10,000	6	186	1,112	18
20+00.00 TO STA 30+00.00	10,000	6	186	1,112	
30+00.00 TO STA 40+00.00	10,000	6	186	1,112	
40+00.00 TO STA 50+00.00	10,000	6	186	1,112	
50+00.00 TO STA 53+24.00	3,240	6	60	360	18
TOTAL			*	4,808	36

* FOR INFORMATION ONLY, SEE TABULATION OF AGGREGATES

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Print Date: Sep 20, 2022	Sheet Revisions		
File Name: 19658-011-Tabulations.dwg	Date:	Comments	Init.
Horiz. Scale: Vert. Scale:			
Unit Information Unit Leader Initials			

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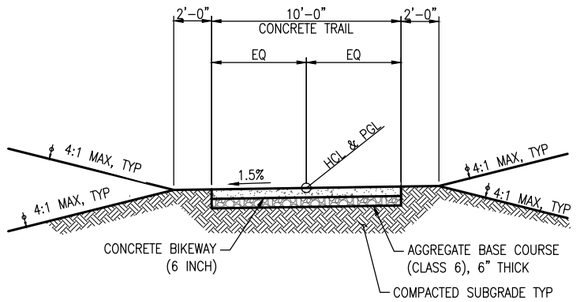
LITTLE THOMPSON RIVER TRAIL
PROJECT TABULATIONS

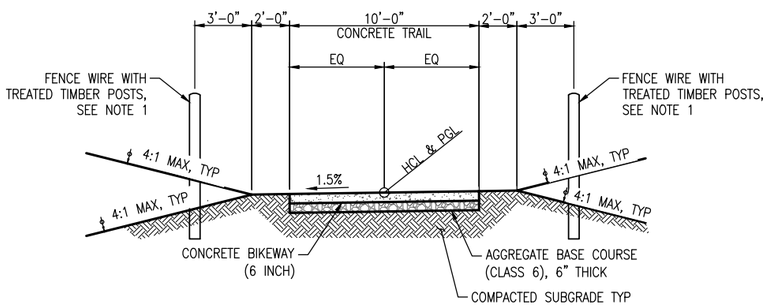
Designer: SJB
Detailer: TMC
Sheet Subset: TABS
Structure Numbers
Subset Sheets: 1 of 1

Project No./Code
TAP M690-001
21992
Sheet Number 8



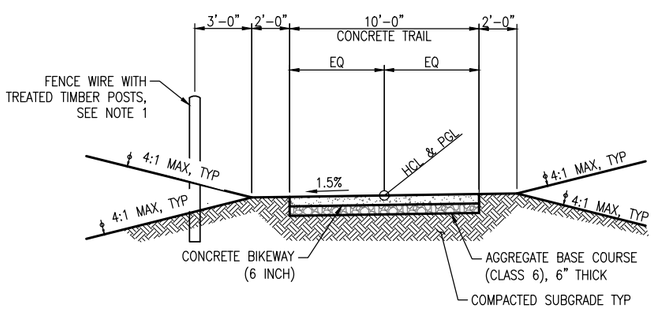
TYPICAL SECTION 3

44+45.52 TO 52+95.83



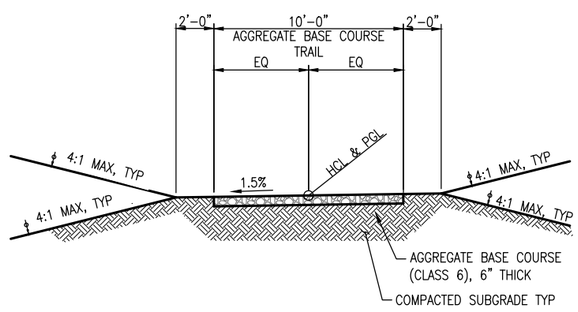
TYPICAL SECTION 2

14+34.07 TO 44+45.52



TYPICAL SECTION 1

10+00.00 TO 14+34.07



TYPICAL SECTION 4

52+95.83 TO 53+11.33

NOTES:

1. FENCE WIRE WITH TREATED WOODEN POSTS SHALL BE SMOOTH WIRE AND PAID FOR AS ITEM 607-01055.

LEGEND:

THE CONTRACTOR IS REQUIRED TO STRIP AND STOCKPILE (IF APPLICABLE) AND/OR PLACE TOPSOIL UPON COPLETION OF FINAL GRADING. TOPSOIL SHALL BE 6-INCHES IN DEPTH. STOCKPILING & STRIPPING WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF ITEM 207 - TOPSOIL. ALL STOCKPILED MATERIALS SHOULD COMPLY WITH STORMWATER GUIDELINES FOR STABILIZATION.

100% ADVERTISEMENT SET - SEPTEMBER, 2022

Y:\shared\Projects\Town of Johnstown\19658-Little Thompson River Trail\50 CADD\50 DWG\19658-018-Typical Sections.dwg | SHEET01 | michael.cunningham | Sep 19, 2022 - 11:27am

Print Date: Sep 19, 2022	Sheet Revisions			As Constructed	LITTLE THOMPSON RIVER TRAIL TYPICAL SECTIONS	Project No./Code
File Name: 19658-018-Typical Sections.dwg	Date:	Comments	Init.	No Revisions:		TAP M690-001
Horiz. Scale: Vert. Scale:				Revised:	Designer: SJB / Structure Numbers	21992
Unit Information Unit Leader Initials				Void:	Detailer: TMC	
					Sheet Subset: TYPSEC / Subset Sheets: 1 of 1	Sheet Number 9

Otak

TO ESTABLISH GEOMETRIC CONTROL FOR THE CONSTRUCTION OF THIS PROJECT, THE DEPARTMENT HAS PROVIDED THE FOLLOWING INFORMATION:

Format *

- ■ 3D Design Modeling Electronic Files AUTOCAD CIVIL 3D 2018
- ■ Horizontal Control PLAN SHEET
- ■ Vertical Control PLAN SHEET
- ☐ Roadway Alignment
- ■ Original Terrain Data PLAN SHEET
- ■ Other: TRAIL ALIGNMENT

* Specify the information format, ie., plan sheet, computer disk, computer printout, or other. The information marked is either contained on the plans or is available from the Engineer.

TYPE OF PROJECT

- ☐ Landscaping
- ☐ Signalization
- ■ Safety Improvement
- ☐ Asphalt Overlay
- ☐ Concrete Overlay
- ☐ Minor Widening
- ☐ Major Reconstruction
- ☐ New Roadway Construction
- ☐ Bridge Replacement
- ☐ Bridge Widening
- ☐ New Bridge
- ■ Other: NEW TRAIL ALIGNMENT

SURVEY WORK TO BE PERFORMED BY OTHERS: _____

WORK PERFORMED BY THE CONTRACTOR'S SURVEYOR UNDER SECTION 625:

- ___ ☐ A complete passing Base Line report (completed within 6 months prior to the start of the project)
- ___ ☐ An instrument calibration Certification (completed within 6 months prior to the start of the project)
- ___ ■ Establish and Maintain Project Centerline or Engineer Approved Offset Line(s)
- ___ ■ Verification and Maintenance of Horizontal and Vertical Control
- ___ ☐ Verify or Determine existing grades and alignments
- ___ ☐ Verify or Determine existing topography
- ___ ■ Clearing and Grubbing Limits (Section 201)
- ___ ■ Removal Limits (Section 202)
- ___ ■ Reset Items (Section 210)
- ___ ■ Excavation and Embankment (Section 203)
  - ___ ■ Excavation
    - ___ ■ Unclassified
    - ___ ☐ Stripping
    - ___ ☐ Muck
    - ___ ☐ Rock
    - ___ ☐ Borrow
    - ___ ☐ Other: _____
    - ___ ☐ Potholing
  - ___ ■ Embankment
  - ___ ■ Site Grading
  - ___ ■ Erosion Control (Perm)
  - ___ ☐ Other: _____
  - ___ ☐ As Staked Earthwork Quantities (See General Notes)

	Slope Staking (Y/N)	Grid (Y/N)	Grade (Y/N)	Special Interval
Excavation	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
Embankment	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-

- ___ ☐ Landscaping
  - ___ ☐ Top Soil (Section 207)
  - ___ ☐ Seeding (Section 212)
  - ___ ☐ Mulching (Section 213)
  - ___ ☐ Planting (Section 214)
  - ___ ☐ Herbicide (Section 217)
  - ___ ☐ Other: _____
- ___ ☐ Erosion Control (Section 208)
  - ___ ☐ Seeding (Temp)
  - ___ ☐ Silt Fence
  - ___ ☐ Erosion Bales
  - ___ ☐ Erosion Logs
  - ___ ☐ Riprap (Temp)
  - ___ ☐ Other: _____
- ___ ☐ Roadway Bases
  - ___ ☐ Untreated Subgrade
  - ___ ☐ Treated Subgrade
  - ___ ☐ Aggregate Base Course (Section 304)
  - ___ ☐ Reconditioning
  - ___ ☐ PMBB - Plant Mix Bituminous Base
  - ___ ☐ Other: _____

	Grid (Y/N)	Grade (Y/N)	Special Interval	Special Offset
Roadway Bases	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-

- ___ ☐ Pavements
  - ___ ☐ HMA - Hot Mix Asphalt (Section 403)
  - ___ ☐ Concrete (Section 412)
  - ___ ☐ Heating & Scarifying Treatment
  - ___ ☐ Prime Coat, Tack Coat & Rejuvenating Agent (Section 407)
  - ___ ☐ Seal Coat or Chip Seal (Section 409)
  - ___ ☐ Other: _____

	Grid (Y/N)	Special Interval	Special Offset
Pavements	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-
	-	-	-

- ___ ■ Roadway Elements
  - ___ ☐ Curb and Gutter (Section 609)
  - ___ ☐ Drop inlets - alignment and grades (Section 604)
  - ___ ☐ Retaining Walls
  - ___ ☐ Guard Rail (Section 606)
  - ___ ■ Sidewalk (Section 608)
  - ___ ☐ Overlay Stationing
  - ___ ☐ Other: _____

	Tangent Interval	Curve Interval	Special Offset
Curb & Gutter	-	-	-

	Left Interval	Center Interval	Right Interval
Stationing	-	-	-

- ___ ☐ Riprap (Perm) (Section 506)
- ___ ☐ Slope and Ditch Paving (Section 507)
- ___ ☐ Minor Structures
  - ___ ☐ Structure Excavation limits (Section 206)
  - ___ ☐ Culverts (Section 603)
  - ___ ☐ Culverts w/ Headwalls and Wingwalls (Section 601)
  - ___ ☐ Concrete Box Culverts w/ Headwalls and Wingwalls
  - ___ ☐ Pipes (Section 603)
    - ___ ☐ Sanitary Sewer
    - ___ ☐ Storm Sewer
    - ___ ☐ Water
    - ___ ☐ Irrigation
    - ___ ☐ Miscellaneous
  - ___ ☐ Manholes (Section 604)
  - ___ ☐ Inlets (Section 604)
  - ___ ☐ Permanent Water Quality BMP (Section 208)
  - ___ ☐ Other: _____
- ___ ☐ Major Structures - Overhead Signs (Section 614), Concrete Box Culverts, Bridges - and all other structures assigned a structure number
  - ___ ☐ Structure Excavation limits (Section 206)
  - ___ ☐ Concrete Box Culverts (Section 603) w/ Headwalls and Wingwalls (Section 601)
  - ___ ☐ Piling locations and cut off elevations (Section 502)
  - ___ ☐ Caisson locations and elevations (Section 503)
  - ___ ☐ Footing locations, alignment, and elevations
  - ___ ☐ Abutment/Pier locations, alignment, and elevations
  - ___ ☐ Wingwall skew angles/offsets
  - ___ ☐ Structural concrete form locations
  - ___ ☐ Substructure As-constructed survey required for Bridges (Subsection 601 .12) and Overhead signs (S-614-50)
  - ___ ☐ Bridge expansion joint(s) alignment and grade (longitudinal and transverse)
  - ___ ☐ Deck grades at Girder 10th or 'n' th point locations and elevations
  - ___ ☐ Slope and Ditch Paving (Section 507)
  - ___ ☐ Other: _____
- ___ ■ Fencing (Section 607)
  - ___ ☐ Temporary
  - ___ ■ Permanent
  - ___ ☐ Sound Barrier
  - ___ ☐ Other: _____
- ___ ☐ Delineators (Section 612)
  - ___ ☐ Temporary
  - ___ ☐ Permanent
- ___ ☐ Lighting (Section 613) and Traffic Control Devices (Permanent) (Section 614)
  - ___ ☐ Signal pole locations and elevations
  - ___ ☐ Light pole locations and elevations
  - ___ ☐ Sign locations
  - ___ ☐ Field verify sign post locations, elevations, and lengths before fabrication.
  - ___ ☐ Other: _____
- ___ ■ Pavement Marking (Section 627)
  - ___ ☐ Striping (Temp)
  - ___ ■ Striping (Perm)
  - ___ ☐ Symbols
  - ___ ☐ Other: _____
- ___ ☐ Temporary Lighting and Construction Traffic Control Devices (Section 630)
  - ___ ☐ Signal pole locations and elevations (Temp)
  - ___ ☐ Light pole locations and elevations (Temp)
  - ___ ☐ Sign Locations (Temp)
  - ___ ☐ Other: _____
- ___ ■ All Easements (Temp Staking by P.L.S. Only)
- ___ ■ Right of Way (Temp Staking by P.L.S. Only)

WORK PERFORMED BY THE CONTRACTOR'S SURVEYOR UNDER SECTION 629:

- ___ ☐ Monumentation (Section 629)
  - ___ ☐ Control
  - ___ ☐ Right of Way
  - ___ ☐ Land corners, Aliquot corners
  - ___ ☐ Easements
  - ___ ☐ Reference the specified existing monuments: ** _____
  - ___ ☐ Replace the specified existing monuments: ** _____
  - ___ ☐ Locate monuments. It is estimated ___ hours are required.

NOTE: All 629 items shall include adequate research, calculations, and evaluations of evidence for monuments to be set.

** A Tabulation of Survey Monuments may be provided on the plans.

GENERAL NOTES:

1. Unless indicated otherwise on this Survey Tabulation Sheet, all survey work and staking intervals shall be done in accordance with the latest edition of the CDOT Survey Manual.
2. Adequate information for establishing lines, grades, and locations for all work items have been specified on the plans. Any additional information required to stake the item or element shall be generated by the Contractor's surveyor.
3. The Contractor's surveyor shall provide an estimate of the man-hours necessary to complete the work items indicated on this sheet. A copy of this sheet, with the estimated man-hours written on the blank line to the left of the specified items, shall be submitted with the Survey Schedule to the Engineer _____ days prior to the Presurvey Conference - Construction Survey.
4. Stakes and Monuments which are damaged or destroyed by the progress of construction shall be replaced by the Contractor at no additional cost to the Department.
5. The Contractor shall furnish an As Staked (or 3D Design Modeling Electronic Files) Earthwork Quantity report to the Engineer prior to completion of twenty percent (20%) of the planned earthwork in any phase as per the CDOT Survey Manual. A printed copy of the As Staked (or 3D Design Modeling Electronic Files) Earthwork data report and a computer disk with that information on it, in the specified format shall be submitted to the Engineer. The Contractor shall field verify original ground cross sections at a maximum 500 feet intervals.
6. Prior to beginning work on any subsequent operation, such as placing base course or paving, the Contractor shall certify in writing to the Engineer that the final grade is within specified tolerance.
7. The Contractor's surveyor shall perform all field surveying and calculations necessary to tie plan grades into field grades.
8. The Contractor shall coordinate construction staking on the project with any utility work.
9. Fieldbooks shall contain daily records of points set and or measurements observed. The information recorded shall contain: date, crew members' names, point no., description, staking information, and sketches. If the survey information is collected electronically, information recorded shall be provided to the Project Engineer in a hard copy format that is intuitive, clear and related to the supplemental information recorded in the field books. All linear surveys, such as slope stakes and blue tops, shall have the station and offset information related to the measured information. Non-linear surveys such as structures staking shall have sketches relating electronic information, such as point numbers, to the sketch.
10. The Contractor's surveyor shall submit the following fieldbooks to the Engineer:
    - ☐ Horizontal Control (Primary & Secondary)
    - ☐ Vertical Control (i.e. Benchmarks)
    - ☐ Property Pin Ties
    - ☐ Horizontal Alignment
    - ☐ Grading
    - ☐ Slope Staking
    - ☐ Minor Structures
    - ☐ Major Structures
    - ☐ One fieldbook for each work category shown on this sheet
    - ☐ Other Fieldbook(s): _____
11. The Contractor's surveyor shall submit the following (prior to surveying on the project) to the Engineer:
    - ☐ All required Instrument Calibrations

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Print Date: Sep 19, 2022	Sheet Revisions		
File Name: 19658-012-Survey Tabulation.dwg	Date:	Comments	Init.
Horiz. Scale: Vert. Scale:			
Unit Information Unit Leader Initials			

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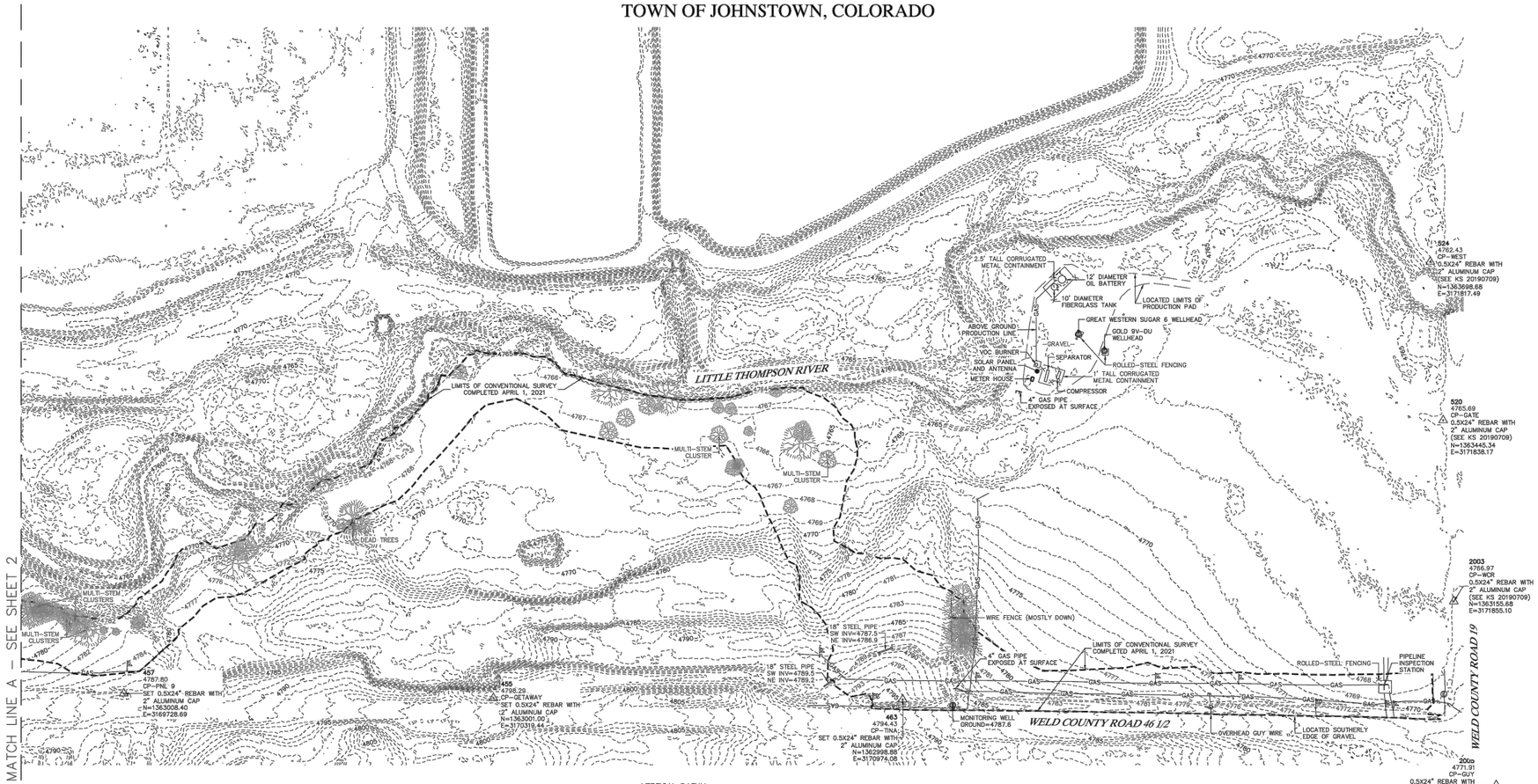
As Constructed	LITTLE THOMPSON RIVER TRAIL SURVEY TABULATION		Project No./Code
No Revisions:			TAP M690-001
Revised:	Designer: SJB	Structure Numbers	21992
Void:	Detailer: TMC		
	Sheet Subset: SURVTAB	Subset Sheets: 1 of 1	Sheet Number 10

TOPOGRAPHIC SURVEY

FOR

LITTLE THOMPSON RIVER TRAIL PROJECT

TOWN OF JOHNSTOWN, COLORADO



VERTICAL DATUM:
NORTH AMERICAN VERTICAL DATUM OF 1988. PROJECT VERTICAL BENCHMARK IS MILLIKEN – JOHNSTOWN BENCHMARK DESIGNATION "60–19," ELEVATION=4781.202, A 3.25" ALUMINUM CAP STAMPED "60–19, 2002 KSI" AND SET IN THE SOUTHEAST CORNER OF A CONCRETE IRRIGATION STRUCTURE LOCATED AT THE SOUTHWEST CORNER OF HIGHWAY 60 AND COUNTY ROAD 19.

HORIZONTAL DATUM:
COLORADO STATE PLANE NORTH ZONE 0501 (GROUND) COORDINATES NAD 83(2011) DATUM. HORIZONTAL CONTROL BASED UPON TRIMBLE VRS NETWORK SOLUTION.

PLEASE NOTE:

1. THIS DRAWING IS IN MODIFIED STATE PLANE (GROUND) COORDINATES. TO REDUCE TO STATE PLANE COORDINATES, SCALE X,Y ONLY WITH COMBINED SCALE FACTOR 0.9997227399 (1.0002773369) ABOUT THE ORIGIN 0,0.

2. THIS AUTOCAD DRAWING CONTAINS INFORMATION THAT IS NOT VISIBLE ON THE PLOTTED COPY. TO OBTAIN ALL THE INFORMATION THAT IS AVAILABLE IN THIS DRAWING, ALL AUTOCAD LAYERS MUST BE TURNED ON AND THAWED.

3. THE SIZE, TYPE AND LOCATION OF ALL KNOWN UNDERGROUND UTILITIES ARE APPROXIMATE WHEN SHOWN ON THESE DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE OF ALL UNDERGROUND UTILITIES IN THE AREA OF THE WORK BEFORE COMMENCING NEW CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL BE RESPONSIBLE FOR ALL UNKNOWN UNDERGROUND UTILITIES.

4. ALL PROJECT CONTROL LISTED HEREON IS PROVIDED AS A COURTESY. IT IS THE RESPONSIBILITY OF THE RECIPIENT TO VERIFY THE ACCURACY OF THE COORDINATES AND ELEVATIONS SHOWN PRIOR TO USING THEM FOR ANY PURPOSES.

5. THE REGION LABELED "LIMITS OF CONVENTIONAL SURVEY COMPLETED APRIL 1, 2021" INDICATES THE ONLY REGION (EXCEPTING FEATURE MAPPING ON THE OIL AND GAS PRODUCTION PAD) WHERE KING SURVEYORS COMPLETED BOOTS–ON–THE–GROUND, CONVENTIONAL SURVEY EFFORTS; ALL OTHER CONTOUR INFORMATION SHOWN HEREON WAS TAKEN FROM POST–2013 FLOOD LIDAR PANELS CO_N_2280.IMG AND CO_N_2297.IMG; THESE RASTER PANELS WERE CONVERTED TO A DIGITAL SURFACE MODEL AND THE CONVENTIONAL SURVEY REGION WAS INTEGRATED INTO THIS, SUPERCEDING ALL LIDAR–DERIVED INFORMATION WITHIN THE INDICATED CONVENTIONAL SURVEY LIMITS.

6. ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON. (13–80–105 C.R.S. 2012)

LEGEND

EDGE OF ASPHALT	CONTROL POINT
EDGE OF GRAVEL ROAD	DECIDUOUS TREE
FENCING	ELECTRIC MANHOLE
PIPE	FIBER OPTIC MARKER
RAILROAD TRACK	GAS MARKER
FIBER OPTIC LINE	GAS WELL
GAS LINE	GUY WIRE
GAS FEATURE	MONITORING WELL
OVERHEAD POWER LINE	POWER POLE
OVERHEAD UTILITY LINE	STEEL POST
UNDERGROUND POWER LINE	
CONVENTIONAL SURVEY LIMITS	
ONE FOOT CONTOUR	
FIVE FOOT CONTOUR	

80 40 0 80 160 240

SCALE IN FEET
SCALE: 1"=80'

DATE: 4/15/2021
FILE NAME: 202000291TOP2
SCALE: 1"=80'
DRAWN BY: AMD
CHECKED BY: TW/RW

KING SURVEYORS
650 E. Garden Drive | Windsor, Colorado 80550
phone: (970) 686-5011 | email: contact@kingsurveyors.com

REVISIONS: DATE:

TOPOGRAPHIC SURVEY
FOR
OTAK, INC.
371 CENTENNIAL PKWY #210
LOUISVILLE, COLORADO 80027

PROJECT #: 20200291

1

SHEET 1 OF 2

100% ADVERTISEMENT SET - SEPTEMBER, 2022

Y:\shared\Projects\Town of Johnstown\19658-Little Thompson River Trail\50 CADD\50 DWG\19658-013-Survey Control.dwg | SV01 | michael.cunningham | Sep 19, 2022 - 11:27am

Print Date: Sep 19, 2022	Sheet Revisions			As Constructed	LITTLE THOMPSON RIVER TRAIL SURVEY CONTROL	Project No./Code
File Name: 19658-013-Survey Control.dwg	Date:	Comments	Init.	No Revisions:		TAP M690-001
Horiz. Scale: Vert. Scale:				Revised:	Designer: SJB / Structure Numbers	21992
Unit Information Unit Leader Initials				Void:	Detailer: TMC	Sheet Number 11
					Sheet Subset: SURVCONTROL / Subset Sheets: 1 of 2	

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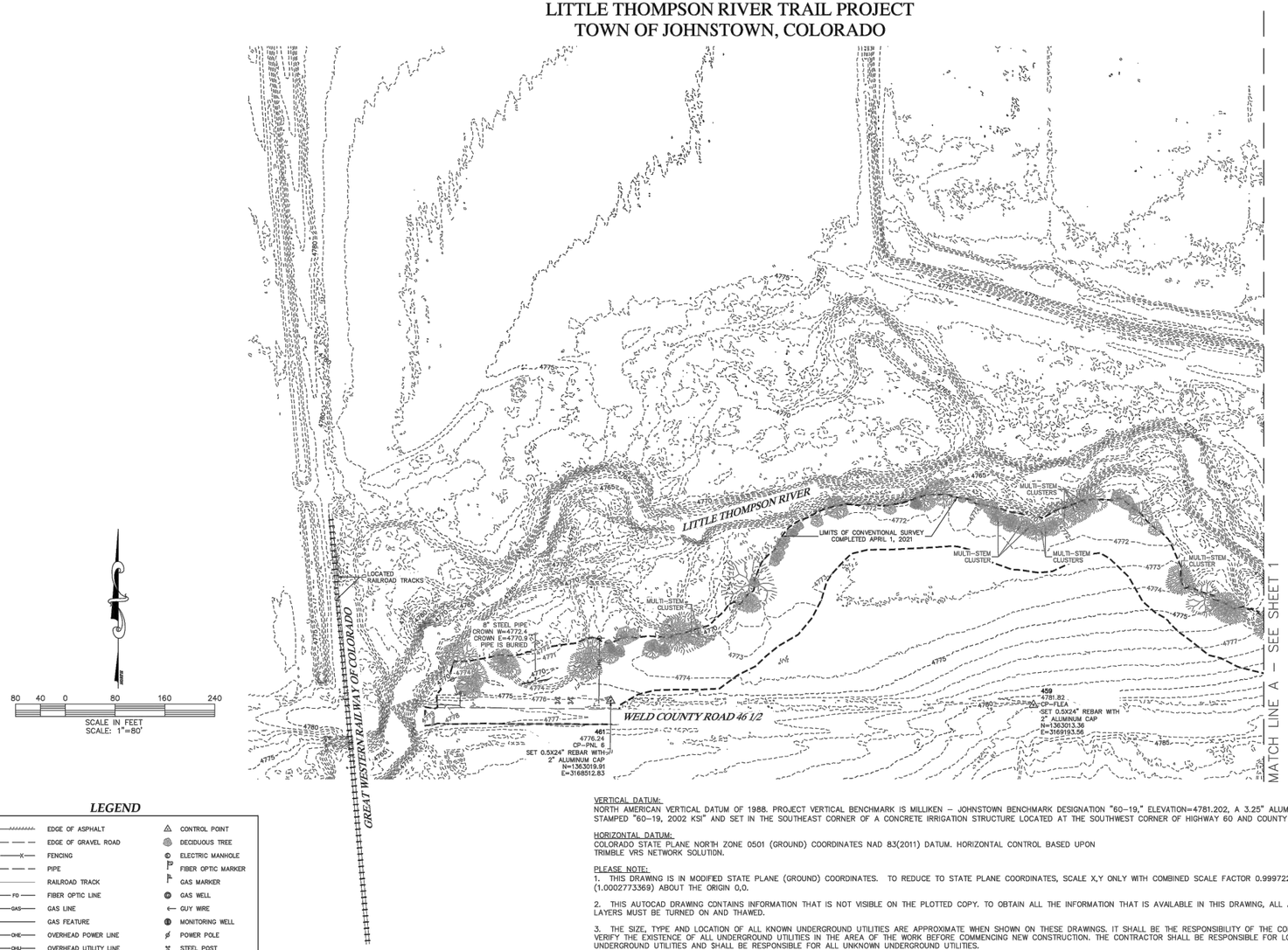
TOPOGRAPHIC SURVEY

FOR

LITTLE THOMPSON RIVER TRAIL PROJECT

TOWN OF JOHNSTOWN, COLORADO



LEGEND

EDGE OF ASPHALT	CONTROL POINT
EDGE OF GRAVEL ROAD	DECIDUOUS TREE
FENCING	ELECTRIC MANHOLE
PIPE	FIBER OPTIC MARKER
RAILROAD TRACK	GAS MARKER
FO — FIBER OPTIC LINE	GAS WELL
GAS — GAS LINE	GUY WIRE
GAS FEATURE	MONITORING WELL
OHE — OVERHEAD POWER LINE	POWER POLE
OHU — OVERHEAD UTILITY LINE	STEEL POST
E — UNDERGROUND POWER LINE	
CONVENTIONAL SURVEY LIMITS	
4876 ONE FOOT CONTOUR	
4835 FIVE FOOT CONTOUR	

VERTICAL DATUM:
NORTH AMERICAN VERTICAL DATUM OF 1988. PROJECT VERTICAL BENCHMARK IS MILLIKEN – JOHNSTOWN BENCHMARK DESIGNATION "60-19," ELEVATION=4781.202, A 3.25" ALUMINUM CAP STAMPED "60-19, 2002 KSI" AND SET IN THE SOUTHEAST CORNER OF A CONCRETE IRRIGATION STRUCTURE LOCATED AT THE SOUTHWEST CORNER OF HIGHWAY 60 AND COUNTY ROAD 19.

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PLEASE NOTE:

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4. ALL PROJECT CONTROL LISTED HEREON IS PROVIDED AS A COURTESY. IT IS THE RESPONSIBILITY OF THE RECIPIENT TO VERIFY THE ACCURACY OF THE COORDINATES AND ELEVATIONS SHOWN PRIOR TO USING THEM FOR ANY PURPOSES.

5. THE REGION LABELED "LIMITS OF CONVENTIONAL SURVEY COMPLETED APRIL 1, 2021" INDICATES THE ONLY REGION (EXCEPTING FEATURE MAPPING ON THE OIL AND GAS PRODUCTION PAD) WHERE KING SURVEYORS COMPLETED BOOTS-ON-THE-GROUND, CONVENTIONAL SURVEY EFFORTS; ALL OTHER CONTOUR INFORMATION SHOWN HEREON WAS TAKEN FROM POST-2013 FLOOD LIDAR PANELS CO_N_2280.IMG AND CO_N_2297.IMG; THESE RASTER PANELS WERE CONVERTED TO A DIGITAL SURFACE MODEL AND THE CONVENTIONAL SURVEY REGION WAS INTEGRATED INTO THIS, SUPERCEDING ALL LIDAR-DERIVED INFORMATION WITHIN THE INDICATED CONVENTIONAL SURVEY LIMITS.

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DATE: 4/15/2021
FILE NAME: 20200291TOP2
SCALE: 1"=80'
DRAWN BY: AMD
CHECKED BY: TW/RW

KING SURVEYORS
650 E. Garden Drive | Windsor, Colorado 80550
phone: (970) 686-5011 | email: contact@kingsurveyors.com

REVISIONS: DATE:

TOPOGRAPHIC SURVEY
FOR
OTAK, INC.
371 CENTENNIAL PKWY #210
LOUISVILLE, COLORADO 80027

PROJECT #: 20200291

2

SHEET 2 OF 2

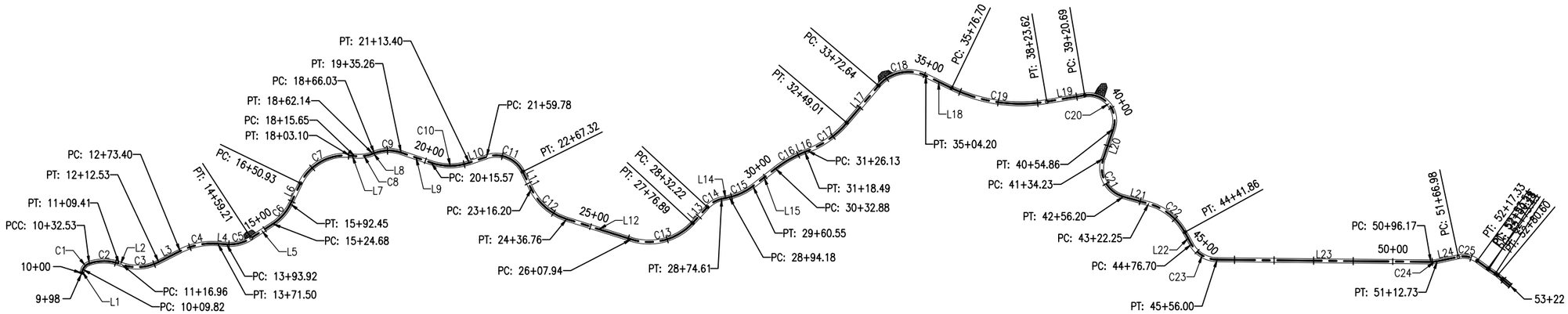
100% ADVERTISEMENT SET - SEPTEMBER, 2022

Y:\shared\Projects\Town of Johnstown\19658-Little Thompson River Trail\50 CADD\50 DWG\19658-013-Survey Control.dwg | SV02 | michael.cunningham | Sep 19, 2022 - 11:27am

Print Date: Sep 19, 2022	Sheet Revisions		
File Name: 19658-013-Survey Control.dwg	Date:	Comments	Init.
Horiz. Scale: Vert. Scale:			
Unit Information Unit Leader Initials			

Otak

As Constructed	LITTLE THOMPSON RIVER TRAIL SURVEY CONTROL		Project No./Code
No Revisions:			TAP M690-001
Revised:	Designer: SJB	Structure Numbers	21992
Void:	Detailer: TMC		
	Sheet Subset: SURVCONTROL	Subset Sheets: 2 of 2	Sheet Number 12



LITTLE THOMPSON RIVER TRAIL HCL DATA						
SEGMENT NUMBER	START STATION	START NORTHING	START EASTING	LENGTH	RADIUS	LINE/CHORD DIRECTION
L1	9+98.42	1363007.21	3168249.36	11.39		N20°00'00.00"E
C1	10+09.82	1363017.92	3168253.26	22.72	25.00	N46°01'56.23"E
C2	10+32.53	1363033.15	3168269.05	76.88	120.00	S89°34'54.59"E
L2	11+09.41	1363032.60	3168344.62	7.55		S71°13'41.65"E
C3	11+16.96	1363030.17	3168351.76	95.57	120.00	N85°57'18.04"E
L3	12+12.53	1363036.74	3168444.60	60.87		N63°08'17.72"E
C4	12+73.40	1363064.24	3168498.90	98.10	180.00	N78°45'07.59"E
L4	13+71.50	1363083.14	3168593.93	22.41		S85°38'02.55"E
C5	13+93.92	1363081.43	3168616.28	65.30	100.00	N75°39'36.70"E
L5	14+59.21	1363097.32	3168678.42	65.47		N56°57'15.96"E
C6	15+24.68	1363133.02	3168733.30	67.77	125.00	N41°25'24.26"E
L6	15+92.45	1363183.22	3168777.59	58.48		N25°53'32.57"E
C7	16+50.93	1363235.82	3168803.13	152.17	125.00	N60°46'01.08"E
L7	18+03.10	1363305.63	3168927.87	12.55		S84°21'30.41"E
C8	18+15.65	1363304.40	3168940.36	46.50	100.00	N82°19'17.43"E
L8	18+62.14	1363310.56	3168986.02	3.89		N69°00'05.28"E
C9	18+66.03	1363311.95	3168989.65	69.23	100.00	N88°50'06.18"E
L9	19+35.26	1363313.33	3169057.49	80.31		S71°19'52.92"E
C10	20+15.57	1363287.62	3169133.58	97.83	150.00	N89°59'01.45"E
L10	21+13.40	1363287.65	3169229.69	46.38		N71°17'55.82"E

LITTLE THOMPSON RIVER TRAIL HCL DATA						
SEGMENT NUMBER	START STATION	START NORTHING	START EASTING	LENGTH	RADIUS	LINE/CHORD DIRECTION
C11	21+59.78	1363302.52	3169273.62	107.54	75.00	S67°37'26.24"E
L11	22+67.32	1363265.00	3169364.76	48.88		S26°32'48.30"E
C12	23+16.20	1363221.27	3169386.60	120.56	150.00	S49°34'18.74"E
L12	24+36.76	1363145.18	3169475.92	171.18		S72°35'49.18"E
C13	26+07.94	1363093.98	3169639.27	168.95	150.00	N75°08'07.02"E
L13	27+76.89	1363135.07	3169794.07	55.33		N42°52'03.22"E
C14	28+32.22	1363175.62	3169831.71	42.39	70.00	N60°12'50.74"E
L14	28+74.61	1363196.36	3169867.94	19.57		N77°33'38.27"E
C15	28+94.18	1363200.57	3169887.05	66.37	150.00	N64°53'07.49"E
L15	29+60.55	1363228.51	3169946.66	72.34		N52°12'36.71"E
C16	30+32.88	1363272.84	3170003.82	85.60	300.00	N60°23'05.53"E
L16	31+18.49	1363315.00	3170077.99	7.64		N68°33'34.35"E
C17	31+26.13	1363317.79	3170085.10	122.88	250.00	N54°28'40.96"E
L17	32+49.01	1363388.47	3170184.12	123.62		N40°23'47.57"E
C18	33+72.64	1363482.62	3170264.23	131.57	100.00	N78°05'13.80"E
L18	35+04.20	1363507.86	3170383.88	72.49		S64°13'19.97"E
C19	35+76.70	1363476.34	3170449.16	246.92	400.00	S81°54'24.23"E
L19	38+23.62	1363442.12	3170689.76	97.07		N80°24'31.52"E
C20	39+20.69	1363458.30	3170785.47	134.17	65.00	S40°27'20.96"E
L20	40+54.86	1363373.39	3170857.88	79.37		S18°40'46.57"W

LITTLE THOMPSON RIVER TRAIL HCL DATA						
SEGMENT NUMBER	START STATION	START NORTHING	START EASTING	LENGTH	RADIUS	LINE/CHORD DIRECTION
C21	41+34.23	1363298.20	3170832.46	121.96	75.00	S27°54'27.05"E
L21	42+56.20	1363201.90	3170883.46	66.05		S74°29'40.67"E
C22	43+22.25	1363184.25	3170947.10	119.61	150.00	S51°39'04.26"E
L22	44+41.86	1363111.99	3171038.44	34.84		S28°48'27.84"E
C23	44+76.70	1363081.46	3171055.23	79.31	75.00	S59°06'03.55"E
L23	45+56.00	1363042.61	3171120.15	540.17		S89°23'39.26"E
C24	50+96.17	1363036.89	3171660.29	16.55	75.00	N84°16'57.02"E
L24	51+12.73	1363038.54	3171676.73	54.26		N77°57'33.31"E
C25	51+66.98	1363049.86	3171729.79	50.35	60.00	S78°00'05.99"E

N

0 150 300
SCALE IN FEET

100% ADVERTISEMENT SET - SEPTEMBER, 2022

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Print Date: Sep 19, 2022
File Name: 19658-014 Project Geometry.dwg
Horiz. Scale: Vert. Scale:
Unit Information Unit Leader Initials

Sheet Revisions

Date:	Comments	Init.

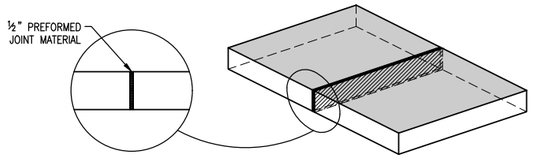
Otak

As Constructed
No Revisions:
Revised:
Void:

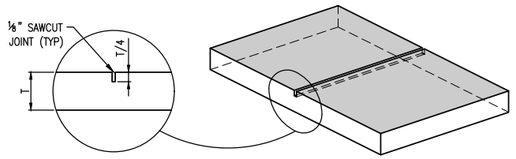
LITTLE THOMPSON RIVER TRAIL
PROJECT GEOMETRY

Designer: SJB
Detailer: TMC
Sheet Subset: PROJGEO
Structure Numbers
Subset Sheets: 1 of 1

Project No./Code
TAP M690-001
21992
Sheet Number 13



EXPANSION JOINT



CONTRACTION JOINT

NOTES:

1. EXPANSION JOINTS SHALL BE PLACED IN SIDEWALK OR BIKEWAY AT INTERVALS OF NOT MORE THAN 500 FT.
2. PREFORMED FILLERS FOR EXPANSION JOINTS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 213.
3. ALL CONTRACTION OR DUMMY JOINTS ARE TO BE SAWCUT. SAWCUTTING SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE WORK.
4. ALL CONTRACTION OR DUMMY JOINTS SHALL BE SPACED AT INTERVALS EQUAL TO THE WIDTH OF THE SIDEWALK OR BIKEWAY (SEE PLANS FOR WIDTHS).

EXPANSION AND CONTRACTION JOINT

N.T.S.

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Print Date: Sep 19, 2022			
File Name: 19658-019-Typical Details.dwg			
Horiz. Scale:	Vert. Scale:		
Unit Information	Unit Leader Initials		

Sheet Revisions

Date:	Comments	Init.

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As Constructed

No Revisions:

Revised:

Void:

LITTLE THOMPSON RIVER TRAIL
TYPICAL DETAILS

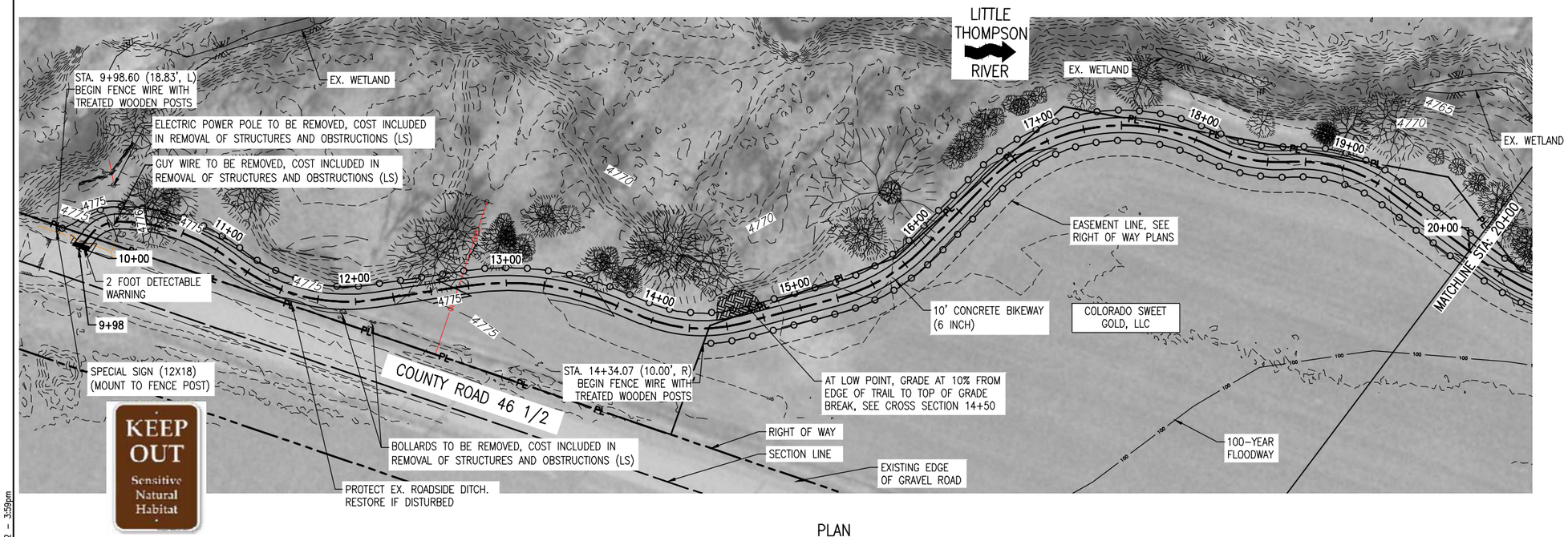
Designer:	SJB	Structure Numbers	
Detailer:	TMC		
Sheet Subset:	TYPDET	Subset Sheets:	1 of 1

Project No./Code

TAP M690-001

21992

Sheet Number 14

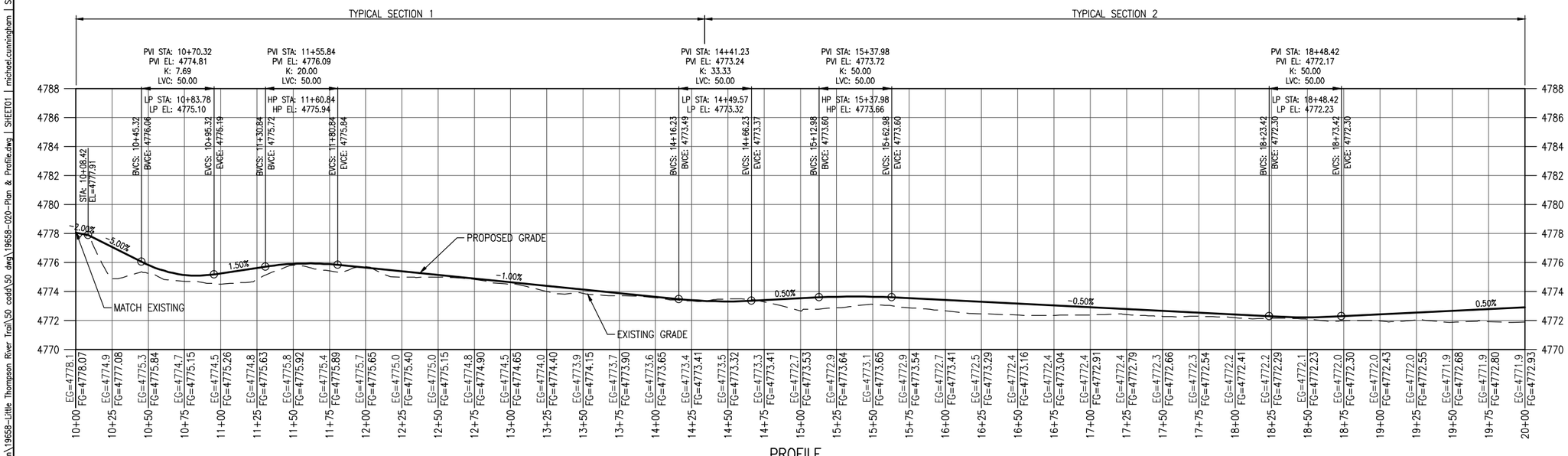


PLAN

LEGEND

- RIGHT OF WAY
- SECTION LINE
- PROPERTY LINE
- EASEMENT
- 100-YEAR FLOODWAY – PRELIMINARY FLOODWAY PER COLORADO HAZARD MAPPING PROGRAM
- 100-YEAR FLOODPLAIN – PRELIMINARY ZONE AE PER COLORADO HAZARD MAPPING PROGRAM
- WIRE FENCE
- EXISTING WELTAND
- 10% GRADING AT LOW POINT
- CONCRETE BIKEWAY
- AGGREGATE BASE COURSE (CLASS 6)

Know what's below. Call before you dig.



PROFILE
(TAKEN ALONG HCL)

100% ADVERTISEMENT SET - SEPTEMBER, 2022

Print Date: Sep 20, 2022	Sheet Revisions	As Constructed	LITTLE THOMPSON RIVER TRAIL TRAIL PLAN & PROFILE 10+00 – 20+00	Project No./Code
File Name: 19658-020-Plan & Profile.dwg	Date: / Comments / Init.	No Revisions:		TAP M690-001
Horiz. Scale: Vert. Scale:		Revised:	Designer: SJB / Structure Numbers	21992
Unit Information Unit Leader Initials		Void:	Detailer: TMC	Sheet Number 15
			Sheet Subset: P&P / Subset Sheets: 1 of 5	

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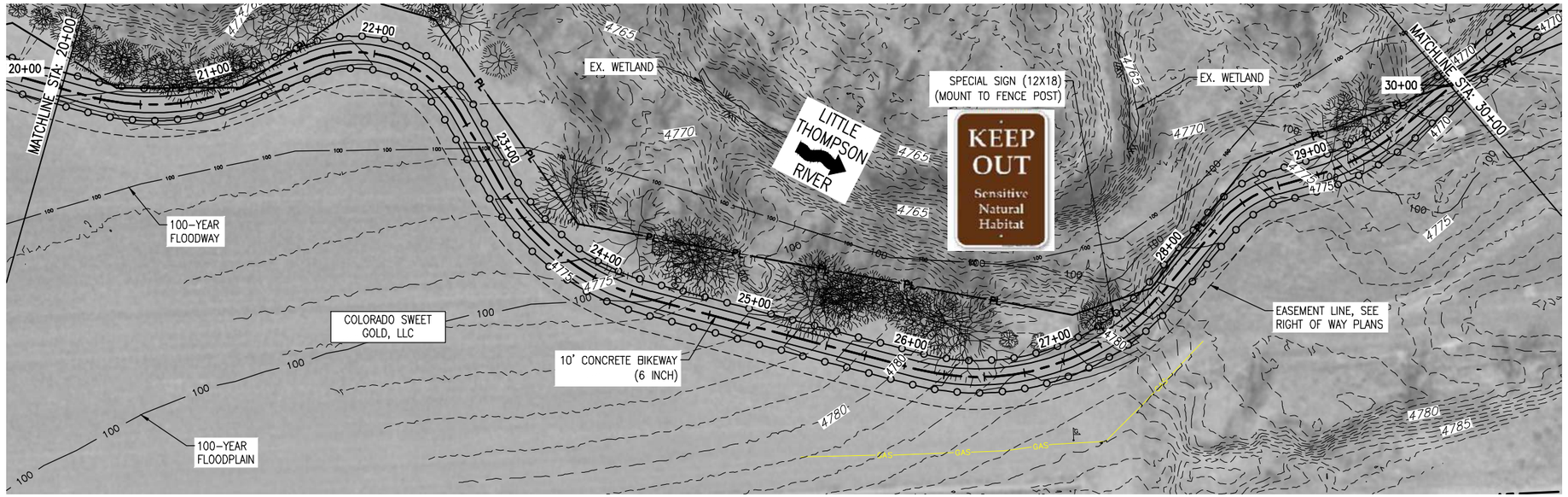
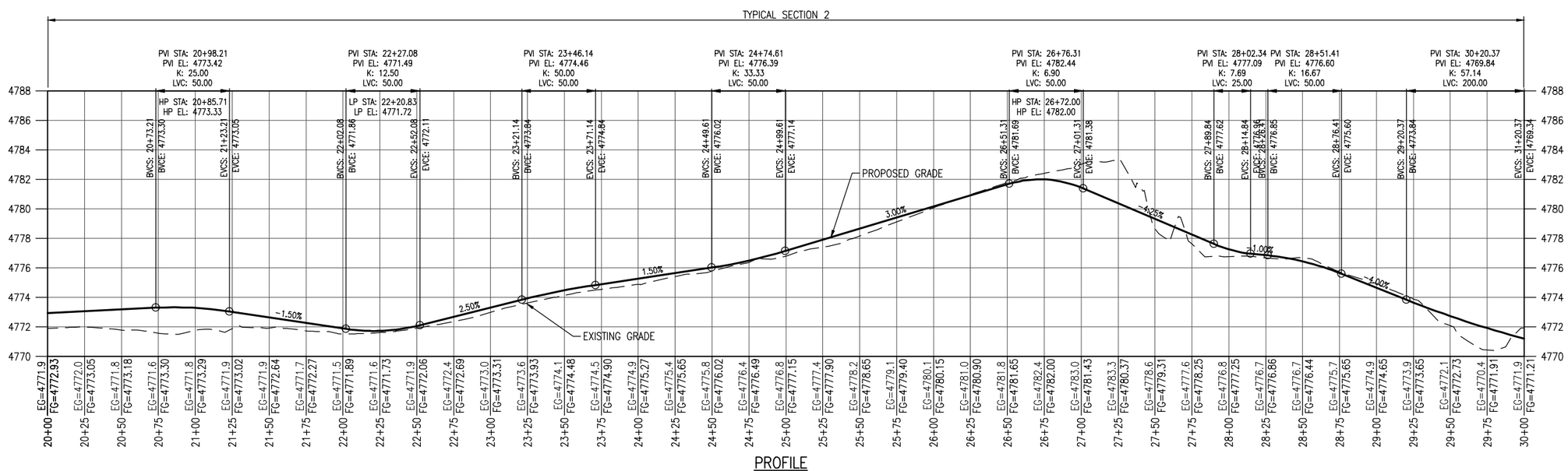


PLAN



PROFILE
(TAKEN ALONG HCL)

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

N

0' 40' 80' 0' 4' 8'

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Print Date: Sep 20, 2022	Sheet Revisions	As Constructed	LITTLE THOMPSON RIVER TRAIL TRAIL PLAN & PROFILE 20+00 – 30+00	Project No./Code
File Name: 19658-020-Plan & Profile.dwg	Date: / Comments / Init.	No Revisions:		TAP M690-001
Horiz. Scale: Vert. Scale:		Revised:	Designer: SJB / Structure Numbers	21992
Unit Information Unit Leader Initials		Void:	Detailer: TMC	Sheet Number 16
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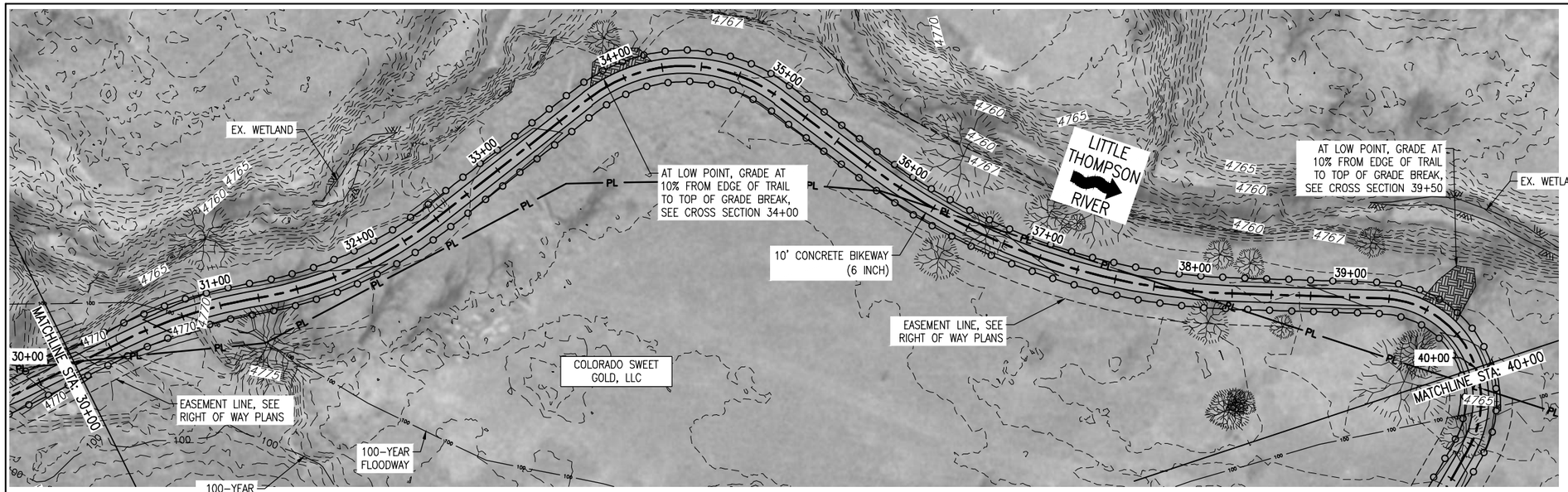

PLAN

LEGEND

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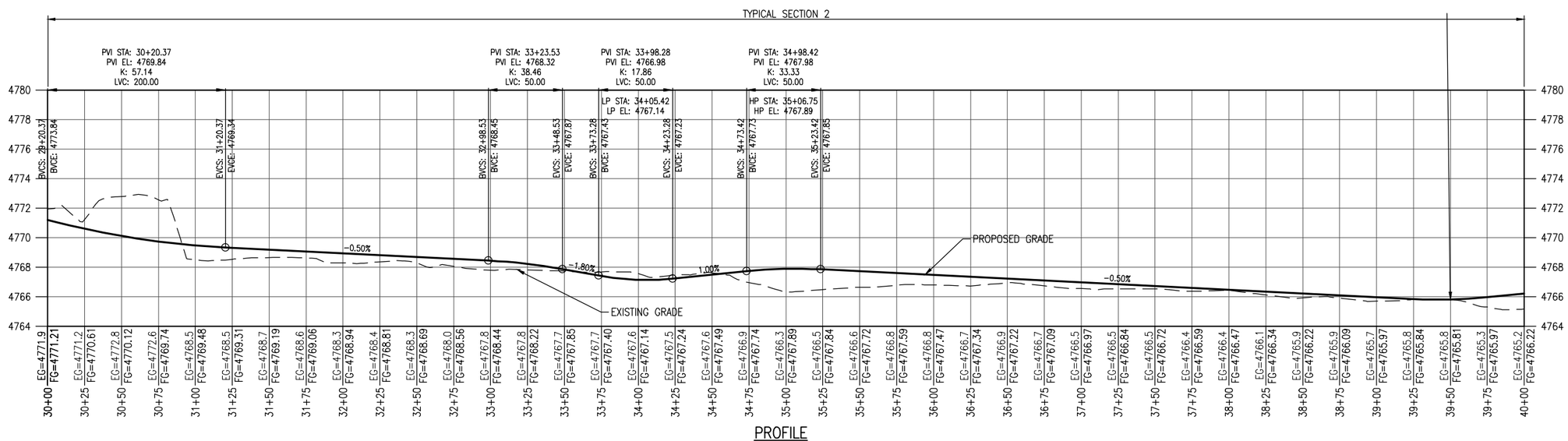

PROFILE
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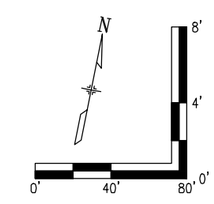
Know what's below. Call before you dig.



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Print Date: Sep 20, 2022	Sheet Revisions	As Constructed	LITTLE THOMPSON RIVER TRAIL TRAIL PLAN & PROFILE 30+00 – 40+00
File Name: 19658-020-Plan & Profile.dwg	Date: / Comments / Init.	No Revisions:	
Horiz. Scale: Vert. Scale:		Revised:	Designer: SJB / Structure Numbers
Unit Information Unit Leader Initials		Void:	Detailer: TMC / Sheet Subset: P&P / Subset Sheets: 3 of 5

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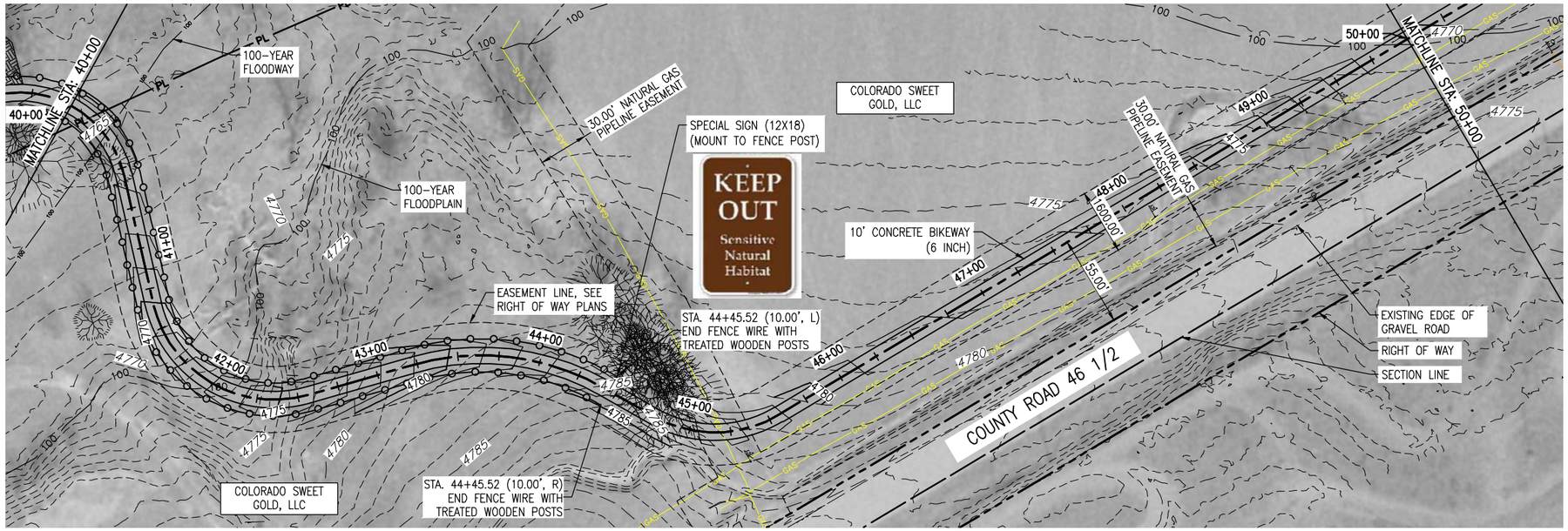
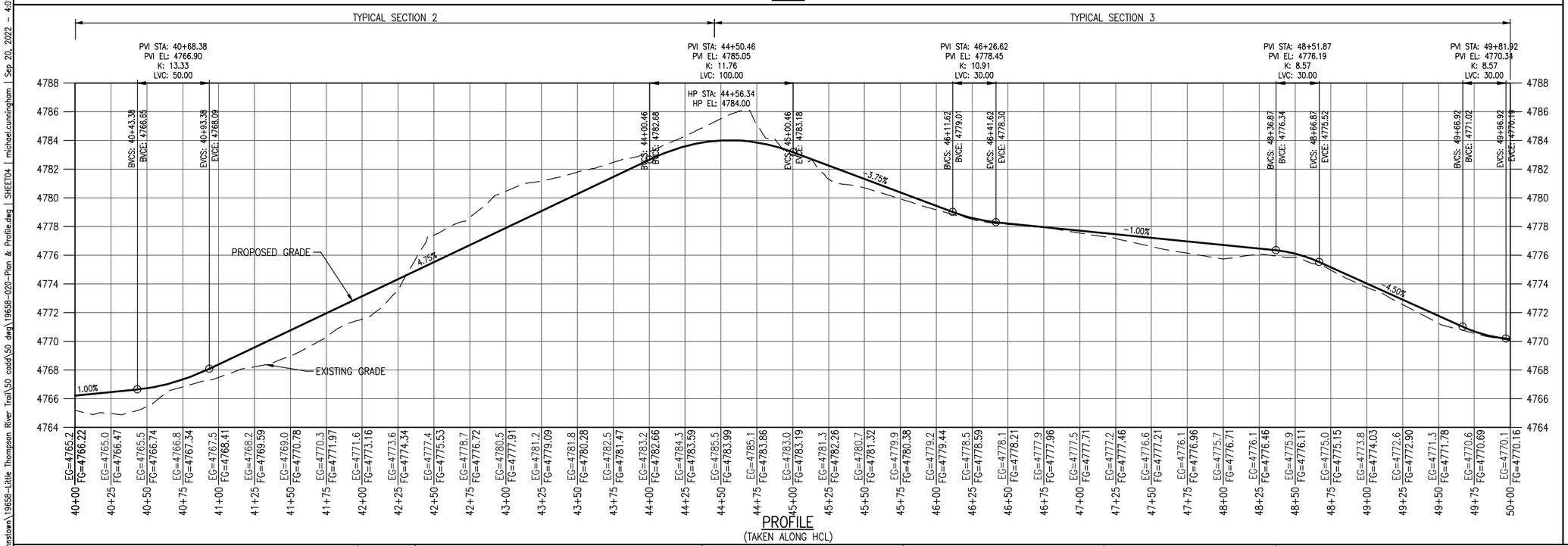
Project No./Code
TAP M690-001
21992
Sheet Number 17



PLAN



PROFILE
(TAKEN ALONG HCL)

LEGEND

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- SECTION LINE
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Know what's below. Call before you dig.

0' 40' 80' 0' 4' 8'

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Print Date: Sep 20, 2022	Sheet Revisions	As Constructed	LITTLE THOMPSON RIVER TRAIL TRAIL PLAN & PROFILE 40+00 – 50+00	Project No./Code
File Name: 19658-020-Plan & Profile.dwg	Date: / Comments / Init.	No Revisions:		TAP M690-001
Horiz. Scale: Vert. Scale:		Revised:	Designer: SJB / Structure Numbers	21992
Unit Information Unit Leader Initials		Void:	Detailer: TMC / Sheet Subset: P&P / Subset Sheets: 4 of 5	Sheet Number 18

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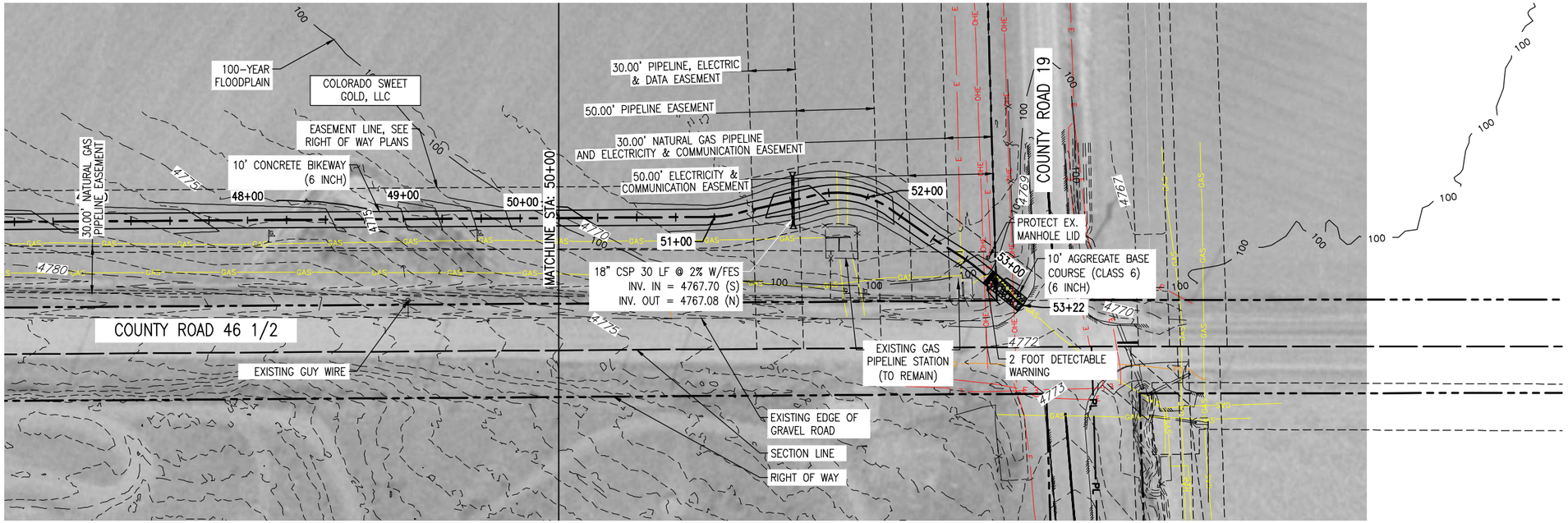

PLAN

LEGEND

- RIGHT OF WAY
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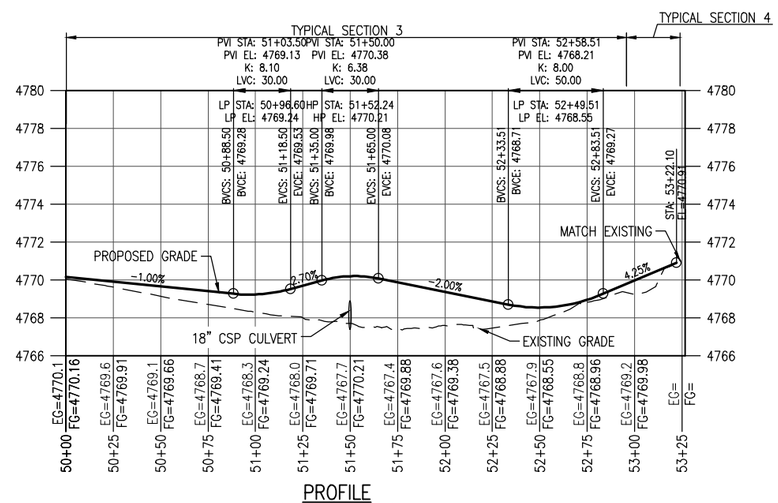
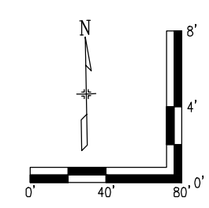


PROFILE
(TAKEN ALONG HCL)



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Print Date: Sep 20, 2022	Sheet Revisions	As Constructed	LITTLE THOMPSON RIVER TRAIL TRAIL PLAN & PROFILE 40+00 – 53+25	Project No./Code
File Name: 19658-020-Plan & Profile.dwg	Date: / Comments / Init.	No Revisions:		TAP M690-001
Horiz. Scale: Vert. Scale:		Revised:	Designer: SJB / Structure Numbers	21992
Unit Information Unit Leader Initials		Void:	Detailer: TMC / Sheet Subset: P&P / Subset Sheets: 5 of 5	Sheet Number 19

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SWMP TEMPLATE (PLAN SHEETS) FOR PROJECTS WITH 1 ACRE OR MORE OF DISTURBANCE 2/25/2022 UPDATE

1. SITE DESCRIPTION

The Contractor shall comply with all CDOT contractual requirements, and all requirements associated with the CDPS-SCP on this project. The SWMP Administrator for Construction shall update the SWMP to reflect current project site conditions.

A. PROJECT SITE LOCATION:
Location or address of construction office:
The project is located in Weld County along County Road 46 ½ and ending at the intersection of County Road 46 ½ and County Road 19.

B. PROJECT SITE DESCRIPTION:
This project consists of construction of a 10' wide concrete bikeway and fence wire with treated wooden posts. The work includes grading, clearing, and seeding.

C. PROPOSED SCHEDULE FOR SEQUENCE FOR MAJOR CONSTRUCTION ACTIVITIES:
Stabilize all areas that are not paved or landscaped through establishment of vegetation cover.

1. Mobilization
2. Erosion Control
3. Clearing and grubbing
4. Final Grading and concrete bikeway installation
5. Fence wire with treated wooden posts installation
6. Site restoration, stabilization, and cleanup.

D. ACRES OF DISTURBANCE:
1. Total area of construction site (LOC (PERMITTED AREA)): 3.82 acres
2. Total area of proposed disturbance (LDA): 3.41 acres
3. Total area of seeding: 2.83 acres
4. Total area of pre-project impervious surface: 0.00 sq. ft.
5. Total area of final impervious surface: 43,235.75 sq. ft.

E. EXISTING SOIL DATA:
Based on NCRS data the existing soil on site consists mostly of Kim Loam (1-3% slopes), Cascajo Gravelly Sandy Loam (5-20% slopes), Otero Sandy Loam (1-3% slopes), and Paoli Loam (0-1% slopes).
Data Source(s): NCRS Web Survey Soil Maps.

F. EXISTING VEGETATION, INCLUDING PERCENT OF VEGETATIVE COVER:
During design, the SWMP Administrator for Design in consultation with the Engineer will determine if the SWMP Administrator for Design or the SWMP Administrator for Construction will conduct the Vegetation Transects. If the site is disturbed, an Adequate Reference Site(s) may be utilized, refer to the permit.

Pre-Construction Date of survey: _____ Percent Existing Vegetative Cover: _____
Description of existing vegetation: _____
Method for determining percent vegetative cover: Recommend using CDOT Vegetative Transect Procedure; if not used, provide a copy of methodology and have SWMP Reviewer pre-approve.
Include a map or table showing transect locations, photos documenting pre-Construction vegetative cover, and methodology used to determine existing vegetative cover to SWMP tab 17:
[Transect form is located on CDOT Landscape Architecture website]
https://www.codot.gov/programs/environmental/landscape-architecture

Post-Construction Date of survey: _____ Percent Vegetative Cover: _____
Description of vegetation:
The method used to determine pre-construction percent cover shall be used to determine post construction percent cover.
Include map or table showing transect locations, photos documenting post-Construction vegetative cover, and methodology used to determine existing vegetative cover to SWMP tab 17:

G. POTENTIAL POLLUTANTS SOURCES:
Refer to Potential Pollutant Sources in SWMP Section 4A. The SWMP Administrator for Construction shall prepare a list of all potential pollutants and their locations in accordance with subsection 107.25.

H. DRAINAGE PATTERNS AND RECEIVING WATER(S):
1. Description of drainage patterns from the Site:
In the existing conditions drainage within the project corridor sheet flows from the crown line of County Road 46 ½ to the North and then discharges into Little Thompson River.
In the proposed conditions drainage within the project corridor maintain the same drainage patterns and will continue to sheet flow from the crown line of County Road 46 ½ to the North and sheet flow across the proposed 10' wide concrete bikeway and discharge into Little Thompson River.
2. Names of immediate and ultimate receiving water(s) on site:
Little Thompson River
On-site receiving water has 303d impaired designation: 303(d) : E. ColiS; 303(d) : Mn-D; 303(d) : Se-D
3. Description of all stream crossings located within the Construction Site Boundary: N/A

Location	Stream Name	Description Of Any Disturbed Upland Areas
N/A		

I. ALLOWABLE NON-STORMWATER DISCHARGES:

Discharge Description	Site Map #	Method Statement (Location)
Concrete Washout Water (in-ground washout structure) #		
Emergency Fire Fighting		

#Concrete washout water associated with the washing of concrete tools and concrete mixer chutes can be discharged to the ground if site is managed accordingly to prevent the water from leaving the site as surface runoff or reaching receiving waters.

J. DIVERSION CRITERIA:
1. Is a diversion planned for the Site? No.
2. If yes, complete information below:
   a. What is the 2-year peak flow for the waterway being diverted (cubic feet per second)?
   b. What are the monthly averages if available? (provide averages for Jan- Dec if available)
   c. What is the upstream contributing drainage area and imperviousness?
   d. A method statement must be prepared by the Contractor and approved by CDOT for each diversion. Diversion structures must minimize soil transport and erosion within the entire diversion, minimize erosion during discharge, and minimize run-on into the diversion and meet the conditions in the SCP.
   e. If the conditions in the SCP cannot be met and an alternative is required, CDOT must approve the alternative and then it must be submitted and approved by CDPHE's Water Quality Control Division prior to implementation.

K. ALTERNATIVE TEMPORARY STABILIZATION SCHEDULE:
[If applicable, provide a description of the alternative temporary stabilization schedule. If temporary stabilization exceeds the 14-day schedule, then the SWMP must document the constraints necessitating the alternative schedule, provide the alternative
schedule, and identify all the locations where the alternative schedule is applicable on the site map.
Alternative temporary stabilization schedules must be approved by CDOT prior to implementation]

2. SITE MAP COMPONENTS:

Pre-construction

A. PROJECT CONSTRUCTION POTENTIAL SITE BOUNDARIES:
See Erosion Control Plans

B. FLOW ARROWS THAT DEPICT STORMWATER FLOW DIRECTIONS ON-SITE, RUN-ON AND RUNOFF DIRECTION:
See Erosion Control Plans

C. ALL AREAS OF GROUND SURFACE DISTURBANCE:
See Erosion Control Plans

Know what's below. Call before you dig.

Template Revised: 2.25.2022

D. AREAS OF CUT AND FILL:
See Erosion Control Plans

E. AREAS USED FOR STORING AND STOCKPILING OF MATERIALS, STAGING AREAS (field trailer, fueling, etc.) and LOCATIONS OF ALL WASTE ACCUMULATION and BATCH PLANTS INCLUDING MASONRY MIXING STATIONS:
See Erosion Control Plans

F. LOCATION OF ALL STRUCTURAL CONTROL MEASURES IDENTIFIED IN THE SWMP:
See Erosion Control Plans

G. LOCATION OF NON-STRUCTURAL CONTROL MEASURES AS APPLICABLE IN THE SWMP:
See Erosion Control Plans

H. SPRINGS, STREAMS, WETLANDS, DIVERSIONS, AND OTHER STATE WATERS, INCLUDING AREAS THAT REQUIRE PRE-EXISTING VEGETATION BE MAINTAINED WITHIN 50 FEET OF A RECEIVING WATER:
See Erosion Control Plans

I. LOCATIONS OF ALL STREAM CROSSING LOCATED WITHIN THE CONSTRUCTION SITE BOUNDARY:
See Erosion Control Plans

J. PROTECTION OF TREES, SHRUBS, SENSITIVE HABITAT, AND CULTURAL RESOURCES:
See Erosion Control Plans

K. LOCATIONS WHERE ALTERNATIVE TEMPORARY STABILIZATION SCHEDULES APPLY:
N/A

3. QUALIFIED STORMWATER MANAGERS:

A. SWMP ADMINISTRATOR FOR DESIGN:
CDOT Certified Individual responsible for developing SWMP Plan Sheets and SWMP Site Maps during the design phase.

Name/Title	Contact Information	Certification #
Iwona Dumin, Civil Project Engineer	720-758-7722 iwona.dumin@otak.com	4F628502

B. SWMP ADMINISTRATOR FOR CONSTRUCTION: (As defined in Section 208) The Contractor shall designate a SWMP Administrator for Construction upon accepting co-permittee of the permit. The SWMP Administrator for Construction shall become the operator for the SWMP and assume responsibility for all design changes to the SWMP implementation and maintenance in accordance to 208.03, the SWMP shall remain the property of CDOT. The SWMP Administrator for Construction shall be responsible for implementing, maintaining and revising SWMP, including the title and contact information. The activities and responsibilities of the SWMP Administrator for Construction shall address all aspects of the project's SWMP. (Update the information below for each new SWMP Administrator for Construction) (A copy of TECS Certification must be included in the SWMP.)

Name/Title	Contact Information (phone & email)	Certification #	Start Date	Engineer Approval

C. EROSION CONTROL INSPECTOR: (As defined in Section 208) The Contractor may designate an Erosion Control Inspector. The Erosion Control Inspector shall complete duties in accordance with subsection 208.03 (c) (Copy of TECS Certification must also be included in the SWMP.)

Name/Title	Contact Information (phone & email)	TECS Certification #	Start Date	Engineer Approval

D. PERMANENT STABILIZATION SUBJECT MATTER EXPERT: This qualified individual will be either a Regional Environmental Staff member, or an Independent Contractor Controller (Independent Assurance Program). This expert is a project team leader responsible for ensuring project adherence to requirements of the 207 and 212 Project Special Provisions as follows and will be available for questions regarding permanent stabilization requirements.

1. Review the Topsoil Management Plan and the Permanent Stabilization Site Maps.
2. Attend the Environmental Pre-Construction Conference.
3. Coordinate the Site Pre-Vegetation Conference.
4. Review and recommend approval of products.
5. Review and recommend approval of the Quantities Verification Prerequisite.
6. Attend the Partial Landscape Completion Walkthrough.
7. Attend the Final Landscape Completion Walkthrough.

Name/Title	Contact Information [phone & email]

4. STORMWATER MANAGEMENT CONTROLS FOR FIRST CONSTRUCTION ACTIVITIES

THE CONTRACTOR SHALL PERFORM THE FOLLOWING:

A. POTENTIAL POLLUTANT SOURCES:
Evaluate, identify, locate and describe all potential sources of pollutants at the site in accordance with subsection 107.25, CDPS-SCP and place in the SWMP. All control measures related to potential pollutants shall be shown on the SWMP Site Map by the Contractor's SWMP Administrator for Construction.

B. OFFSITE DRAINAGE (RUN ON WATER):
Describe and record control measures on the SWMP Site Map that have been implemented to address off site run-on water in accordance with subsection 208.03.

C. VEHICLE TRACKING CONTROL:
Control measures shall be implemented in accordance with subsection 208.04.

D. PERIMETER CONTROL:
1. Perimeter control shall be established as the first item on the SWMP to prevent the potential for pollutants leaving the construction site boundaries, entering the stormwater drainage system, or discharging to state waters. Perimeter control shall be in accordance with subsection 208.04
2. Perimeter control may consist of berms, silt fence, erosion logs, existing landforms, or other control measures as approved.

5. DURING CONSTRUCTION

RESPONSIBILITIES OF THE SWMP ADMINISTRATOR FOR CONSTRUCTION: Considered a "living document", the SWMP is continuously reviewed and modified throughout the construction phases. During construction, SWMP Administrator for Construction shall add, update, or amend the items A-G below as needed in accordance with subsection 208.03.

During construction, indicate how items that were not addressed during design are being handled in construction. If items are covered in other sections of the SWMP, indicate below what section the discussion takes place.

A. MATERIALS HANDLING AND SPILL PREVENTION AND RESPONSE PLAN: Prior to construction commencing the Contractor shall submit a Spill Response Plan. Materials handling and Spill Response Plan shall be in accordance with subsection 208.06.

B. OTHER CDPS PERMITS: List applicable CDPS permits associated with the permitted site and activities.

C. STOCKPILE MANAGEMENT: Shall be done in accordance with subsections 107.25 and 208.07.

D. CONCRETE WASHOUT: Concrete washout water or waste from field laboratories and paving equipment shall be contained in accordance with subsection 208.05.

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E. SAW CUTTING: Shall be done in accordance with subsections 107.25, 208.04, 208.05

F. STREET SWEEPING: Shall be done in accordance with subsection 208.04.

6. INSPECTIONS

A. Water Quality Inspections shall be in accordance with subsection 208.03(c).

B. Permanent Stabilization Inspections shall be in accordance with subsections 208.04(e)4 and 208.10.

7. CONTROL MEASURE MAINTENANCE

Maintenance shall be in accordance with subsection 208.04(f).

8. RECORD KEEPING

Records shall be kept in accordance with subsection 208.03(d).

9. INTERIM, PERMANENT STABILIZATION and LONG-TERM STORMWATER MANAGEMENT

The Contractor shall comply with all interim stabilization and permanent stabilization requirements in accordance with subsection 208.04(e).

A. SEEDING PLAN:
The following seed mix(es) and rates are for drill seeding method as shown on the Permanent Stabilization Site Maps shall be used:

COMMON NAME	BOTANICAL NAME	LBS. PLS PER ACRE
WESTERN WHEATGRASS	AGROPYRON SMITHII VAR. ARRIBA	3.0
BIG BLUESTERN	ANDROPOGON GERARDII VAR. PAWNEE	6.2
SIDE-OATS GRAMA	BOUTELOUA CURTIPENDULA VAR. EL RENO	2.2
BLUE GRAMA	BOUTELOUA GRACILIS VAR. LOVINGTON	1.2
SWITCHGRASS	PANICYM VIRGATUM VAR. PATHFINDER	2.2
INDIANGRASS	SORGHASTRUM NUTANS VAR. CHEYENNE	2.2
LITTLE BLUESTEM	SCHIZACHYRIUM SCOPARIUS VAR. CIMARON	1.8
PRAIRIE CONEFLOWER	RATIBIDA COLUMNIFERA	1.0
PURPLE PRAIRIE CLOVER	DALEA PURPUREA	3.0
SHOWY MILKWEED	ASCLEPIAS SPECIOSA	2.0
ANNUAL SUNFLOWER	HELIANTHUS ANNUUS	7.0
PURPLE VERBENA	VERBENA STRICTA	2.0
TOTAL		33.8

B. SEEDING APPLICATION METHOD:
The following seeding methods shall be used for all areas shown on the Permanent Stabilization Site Maps. Soil compaction shall be minimized for areas where permanent stabilization will be achieved through vegetative cover.

Pay Item	Seeding Method (subsection 212.05)	Acre
212-00706	Seeding (Native) Drill	2.83
	Total	2.83

C. SOIL STABILIZATION METHODS:
Minimum soil stabilization methods (attached mulch) for all disturbances to receive seeding.

D. SPECIAL REQUIREMENTS:
1. Soil amendments, seedbed preparation, and permanent stabilization mulching shall be accomplished within four working days of placing the topsoil on the de-compacted civil subgrades. If placed topsoil is not mulched with permanent stabilization mulch within four working days, the Contractor shall complete interim stabilization methods in accordance with subsection 208.04(e) at no additional cost to the Department.
2. Complete permanent stabilization mulching within 24 hours of hydraulic application of native seed.
3. The Contractor shall submit a proposed Permanent Stabilization Phasing Plan to the Engineer for approval showing how implementation of SWMP Permanent Stabilization Plans will minimize damage to seeded areas.

E. SOIL AMENDMENT REQUIREMENTS: Minimum amendment material requirements for all disturbances to receive seeding.

2.83 Total Acres of Seeding (Native) Drill With Topsoil Generated From

	Pay Item	Description	Amount/Acre	Units	Total For This Method
Seeding (Native) Drill Pay Item 212-00706	212-00700	Organic Fertilizer Low N	300	Pounds	849
	212-00701	Compost (Mechanically Applied)	65	CY	184
	212-00703	Humate	180	Pounds	509
	212-00704	Mycorrhizae	8	Pounds	23
	212-00705	Elemental Sulfur	0	Pounds	0

F. Permanent Stabilization Application Under Structures:
Under structures shade patterns should be considered and the use of Median Cover Material (Stone) or other stabilized options with an approved Project Special Provision should be used. See SWMP Site Map for locations.

G. RESEEDING OPERATIONS/CORRECTIVE STABILIZATION:
Prior to stormwater construction work partial acceptance.
1. All seeded areas shall be reviewed by the SWMP Administrator for Construction and or Erosion Control Inspector for bare soils caused by surface or wind erosion. Bare areas caused by surface or gully erosion, blown away mulch, etc. shall be re-graded, seeded, and have the designated mulching applied as necessary, at no additional cost to the project.
2. The Contractor shall maintain seeding/mulch/tackifier/blanket/TRM, mow to control weeds or apply herbicide to control weeds in the seeded areas, at no additional cost to the project.

H. LOCATION AND DESCRIPTION OF PLANNED PERMANENT CONTROL MEASURES: Is Permanent Water Quality Required. Yes_____No___X___.

10. PRIOR TO PROJECT FINAL ACCEPTANCE

A. When directed by the Engineer, removal and disposal of temporary control measures shall be included in the cost of work.

B. At the end of the project, all ditch checks shall consist of either temporary erosion logs (or equivalent) or permanent riprap.

C. Refer to subsection 208.10 for Items to be completed prior to requesting partial acceptance of water quality work.

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11. NARRATIVES

Control Measure Matrixes During Construction:

1. Control measure narratives have been included for the CDOT Standard Specifications and Standard Plan M-208 and M-216 along with any non-standard control measures approved during the design process. If a Non-Standard Control Measure not included in the SWMP is proposed and approved by the Engineer the SWMP Administrator for Construction shall do the following: Place an "X" in the column for non-standard and complete a Non-Standard Control Measure Specification and Narrative covering the what, when, where and why the control measure is being used shall be add to the SWMP. The appropriate "X" shall also be added to the implementation phase(s).
2. The SWMP Administrator for Construction shall place an "X" in the column In Use On Site when the control measure has been installed.
3. A "B" in the Initial Activities Column indicates that the control measure shall be installed **before** construction activity starts. Locations and quantities will be discussed during the Environmental Pre-Construction Conference with the Regional Water Pollution Control Manager.

STRUCTURAL Control Measures that may be potentially used on the project for erosion and sediment control; practices may include, but are not limited to the following:

APPLICATION, CONTROL MEASURE	NARRATIVE	M- 208 STANDARD or "X" for NON-STANDARD	IN USE ON SITE	CONTROL MEASURE IMPLEMENTATION PHASE		
				INITIAL ACTIVITIES	INTERIM ACTIVITIES	PERMANENT STABILIZATION
PROTECTION OF EXISTING WETLANDS *Fence (plastic) and erosion logs*	Fence (plastic) shall be placed in combination with erosion logs to prevent encroachment of construction traffic and sediment into state waters prior to start of construction disturbances. Fence (plastic) shall be placed adjacent to the wetlands; erosion logs shall be placed between the plastic fence and disturbance area. Logs shall be placed to direct flows away from or filter water running into wetlands from disturbance areas.			B	X	
PROTECTION OF EXISTING TREES/LANDSCAPING *Fence (plastic)*	Fence (plastic) shall be used in areas indicated in the plans to prevent encroachment of construction traffic and sediment for the protection of sensitive habitat, mature trees and/or existing landscaping prior to start of construction disturbances.			X	X	
CHECK DAM/DITCH CHECK *Erosion log, silt berm, silt dike, rock check dam*	Placed in ditches immediately upon completion of ditch grading to reduce velocity of runoff in ditch. For existing ditches, place prior to start of construction disturbances.	M-208		X	X	
Storm Drain Inlet Protection In Paved Roadways (Type 1, 2 and 3 as shown on M-208-1, sheet 5 of 11)	Manufactured storm drain inlet protection placed prior to construction disturbances as detailed in M-208-1, to protect existing inlets or immediately upon completion of new inlets to prevent sediment from entering the inlet throughout construction.	M-208				
Storm Drain Inlet Protection In Native Seed Areas (M-604 Standard Inlets Type C and D)	Erosion logs or aggregate bags placed around inlet grate to prevent sediment from entering inlet. Place prior to construction disturbances to protect existing inlets or immediately upon completion of new inlets.	M-208				
CULVERT INLET/OUTLET PROTECTION *Erosion logs, aggregate bags*	Placed at mouth of culvert inlets and over top of culvert at inlet and outlet where disturbance may be occurring adjacent to pipe to prevent sediment laden water from entering pipe or drainage. Place prior to the start of construction disturbances.	M-208			X	X
TYPE C, TYPE D AND TYPE 13 PROTECTION *Erosion logs, aggregate bags, erosion bales*	Placed around inlet grate or slope and ditch paving to prevent sediment from entering inlet. Place prior to the start of construction disturbances.	M-208				
STOCKPILE PROTECTION *Temporary berm, erosion logs, aggregate bags**	Placed within specified distance, in accordance with subsection 208.06, from toe to contain sediment around stockpile. *Aggregate bags are easily moved and replaced for access during the work day. Place prior to start of stockpiling, increase control as the stockpile increases size.	M-208			X	
TOE OF FILL PROTECTION *Erosion logs, temporary berm, silt fence, topsoil windrow**	Place prior to slope/embankment work to capture sediment and protect and delineate undisturbed areas. *Can be used to stockpile topsoil for salvage.	M-208		X	X	
PERIMETER CONTROL *Erosion logs, silt fence, temporary berm, topsoil windrow**	Placed prior to construction commencing to address potential run-on water from off site, and to divert around disturbed area. *Can be used to stockpile topsoil for salvage.	M-208		X	X	
SLOPE CONTROL *Silt fence, erosion logs*	Placed on the contour of a slope to contain and slow down construction runoff. Place prior to the start of construction disturbances.	M-208		X	X	
TEMPORARY SEDIMENT TRAP	Used to capture sediment laden runoff from disturbed areas < 5 acres during construction. Place prior to the start of construction disturbances. Outlets that withdraw water from or near the surface may be installed when discharging from basins and impoundments.	M-208		X	X	
TEMPORARY SLOPE DRAIN	Placed as a conduit or chute to drain runoff down slope and to prevent erosion of slope.	M-208			X	X
OUTLET PROTECTION *Riprap, or approved other*	Material placed as an energy dissipater to prevent erosion at outlet structure.	M-601-12				
CONCRETE WASHOUT *In-ground or fabricated*	Construction control, used for waste management of concrete and concrete equipment cleaning. Place prior to the start of concrete activities.	M-208		X	X	

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APPLICATION, CONTROL MEASURE	NARRATIVE	M- 208 STANDARD or "X" for NON-STANDARD	IN USE ON SITE	CONTROL MEASURE IMPLEMENTATION PHASE		
				INITIAL ACTIVITIES	INTERIM ACTIVITIES	PERMANENT STABILIZATION
VEHICLE TRACKING PAD	Source control, placed to prevent tracking of sediment from disturbed area to offsite surface. Place prior to the start of construction disturbances.	M-208		X	X	
Engineered SEDIMENT BASIN	Constructed early in the project, prior to storm sewer/ditches and in accordance with 208.05(p) to capture storm flow. Outlet structure and/or outfall shall be modified for temporary sediment control using an approved non-standard detail. Outlets that withdraw water from or near the surface shall be installed when discharging from basins and impoundments, unless infeasible					
DEWATERING (Contractor is responsible for obtaining a permit from Colorado Department of Health and Environment.)	Shall be done in such a manner to prevent potential pollutants from entering state waters.					
TEMPORARY STREAM CROSSING	Constructed over stream or drainage to prevent discharge of pollutants from construction equipment into water.					
CLEAN WATER DIVERSION	Placed to divert clean surface or groundwater around the disturbance area to prevent it from mixing with construction runoff.					
OTHER						

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NON-STRUCTURAL Control Measures that may be potentially used on the project for erosion and sediment control; practices may include, but are not limited to:
Erosion control devices are used to limit the amount of soil loss on site. Sediment control devices are designed to capture sediment on the project site. Construction controls are control measures related to construction access and staging. Control Measure locations are indicated on the SWMP Site Map.

* **Use of vegetative buffer strip requirements.** The CDPHE Water Quality Control Division Technical Memorandum dated August 27, 2015 clarifies the requirements for utilization of existing vegetation as a buffer type of sediment control measure, while maintaining compliance with the CDPS permit for Stormwater Discharges Associated with Construction Activity – CDPS Permit No. COR4000000. In general, the division does not recommend that vegetated buffers be implemented as a sediment removal control measure for runoff from disturbed areas at construction sites, unless implemented as a "finishing" component of a treatment train comprised of additional, adequate up-gradient Control Measures. The entire memorandum can be found at: **https://www.colorado.gov/pacific/sites/default/files/Vegetative%20Buffer%20Memo.pdf**

APPLICATION, CONTROL MEASURE	NARRATIVE	M-STANDARD or "For NON-STANDARD	IN USE ON SITE	CONTROL MEASURE IMPLEMENTATION PHASE		
				INITIAL ACTIVITY	INTERIM ACTIVITIES	PERMANENT STABILIZATION
** VEGETATIVE BUFFER STRIP*	Finishing component for filtering sediment-laden runoff from disturbance area. Area within CDOT ROW or temporary easement to be identified on SWMP prior to construction starting.					
GRADING APPLICATIONS (LANDFORM)	Existing or created landforms may be used as a control measure if they prevent sediment from entering or leaving the disturbance area. If a landform directs flow of water to a concentrated outfall point, the outfall point shall be protected to prevent erosion. Area to be identified on SWMP prior to construction starting.	M-208				
TOPSOIL MANAGEMENT STOCKPILE/SALVAGE Stockpile	Prior to any site disturbance work commencing, existing topsoil shall be scraped to a depth six inches or as specified, and placed in stockpiles or windrows. Upon completion of final grading, topsoil shall be evenly distributed over embankment to a depth of six inches or as specified.	M-208				
SURFACE ROUGHENING / GRADING TECHNIQUES	Temporary stabilization of disturbance and to minimize wind and erosion.				X	
SEEDING (TEMPORARY)	Temporary stabilization used for over wintering of disturbance or used to control erosion for areas scheduled for future construction.					
BONDED FIBER MATRIX or MULCHING (HYDRAULIC)	Not to be used in areas of concentrated flows, i.e. ditch lines. To be for either Interim or Permanent Stabilization placed as a surface cover for erosion control. May be used as surface cover when work is temporarily halted and as approved by the Engineer for stockpiles.				X	
Straw or Hay MULCH/MULCH TACKIFIER	Interim or Permanent Stabilization placed as a surface cover for erosion control and or seeding establishment. To be installed as Interim Stabilization as a surface cover when work is temporarily halted and as approved by the Engineer				X	
SPRAY-ON MULCH BLANKET (Not to be used in areas of concentrated flows, i.e. ditch lines.)	Interim or Permanent Stabilization placed as a surface cover for erosion control and or seeding establishment. To be installed as temporary surface cover when work is temporarily halted and as approved by the Engineer					
SEEDING PERMANENT (NATIVE PERENNIAL)	Permanent Stabilization of disturbance and to reduce runoff and control erosion on disturbed areas.					X
SOIL RETENTION BLANKET (SRB)	Permanent Stabilization of disturbance and to reduce runoff and control erosion on disturbed areas.	M-216				
TURF REINFORCEMENT MAT (TRM)	Permanent Stabilization of disturbance and to reduce runoff and control erosion on disturbed areas. Placed in channels or on slopes for erosion control, channel liner and seeding establishment.	M-216				
Sweeping	Source control, used to remove sediment tracked onto paved surfaces and to prevent sediment from entering drainage system. Sweep daily and at the end of the construction shift as needed. Kick brooms shall not be permitted.					
OTHER						

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12. TABULATION OF STORMWATER QUANTITIES

A. Control Measure sediment removal and disposal shall be paid for as: 208 Removal and Disposal of Sediment (Equipment) and 208 Removal and Disposal of Sediment (Labor). All other control measure maintenance shall be included in the cost of the control measure.

PSP Spec.	Pay Item	Description	Pay Unit	Initial Const.	Interim Const.	Permanent Stabilization	*Total Quantity
	207-00700	Topsoil (Onsite)	CY			2,292	2,292
	207-00710	Stockpile Topsoil	CY			2,292	2,292
	208-00002	Erosion Log Type 1 (12 inch)	LF	5,100	1,530		6,630
	208-00045	Concrete Washout Structure	Each	2			2
	208-00070	Vehicle Tracking Pad	Each	2			2
	208-00103	Removal and Disposal of Sediment (Labor)	Hour	4	4		8
	208-00105	Removal and Disposal of Sediment (Equipment)	Hour	4	4		8
	208-00107	Removal of Trash	Hour	8	4		12
	208-00207	Erosion Control Management (ECM)	Day	15			15
	212-00700	Organic Fertilizer	Pounds			849	849
	212-00701	Compost (Mechanically Applied)	CY			184	184
	212-00703	Humate	Pounds			509	509
	212-00704	Mycorrhizae	Pounds			23	23
	212-00706	Seeding (Native) Drill	Acre			2.83	2.83
	213-00004	Mulching (Weed Free Straw)	Acre			2.83	2.83
	213-00061	Mulch Tackifier	LB			566	566
	607-11525	Fence (Plastic)	LF	4,400	1,320		5,720

*It is anticipated that additional control measures and control measure quantities not shown on the SWMP Site Maps shall be required on the project for unforeseen conditions and replacement of items that are beyond their useful service life, see subsections 208.03 and 208.04. **Quantities for all control measures shown above are estimated and have been increased for unforeseen conditions and normal control measure life expectancy.** Quantities shall be adjusted according to the conditions encountered in the field as directed and approved by the Engineer. Payment shall be for the actual work completed and material used.
**Pay Item 208-00071 is included for anticipated maintenance of vehicle tracking pads based on the service life of the control measure in the field. The use of the material shall be directed and approved by the Engineer.
*** F/A refers to CDOT's Force Account Pay Items.

13. BIOLOGICAL IMPACTS and DEWATERING

A. ENVIRONMENTAL IMPACTS:
1. Wetland Impacts: NO
2. Stream Impacts: NO
3. Threatened and Endangered Species:

B. DEWATERING:
(Not covered under the CDPHE guidance document Low Risk Discharge Guidance Discharges of Uncontaminated Groundwater to Land):
https://www.colorado.gov/pacific/sites/default/files/WQ%20LOW%20RISK%20GW.pdf
1. Dewatering: Refer to other environmental permits in accordance with subsection 107.02 and the permits contained in Tab 16 of the SWMP.
2. If groundwater does not meet water quality standards for receiving water a separate CDPS Dewatering Permit shall be obtained by the Contractor from CDPHE in accordance with subsections 107.02 and 107.25.

14. NOTES

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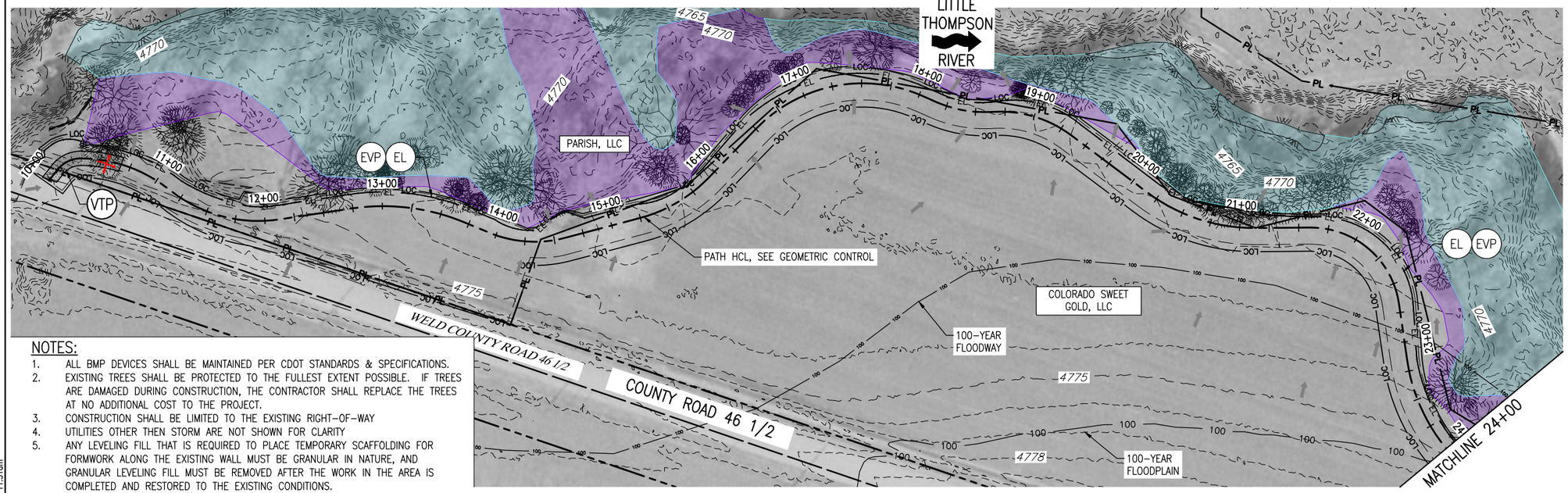
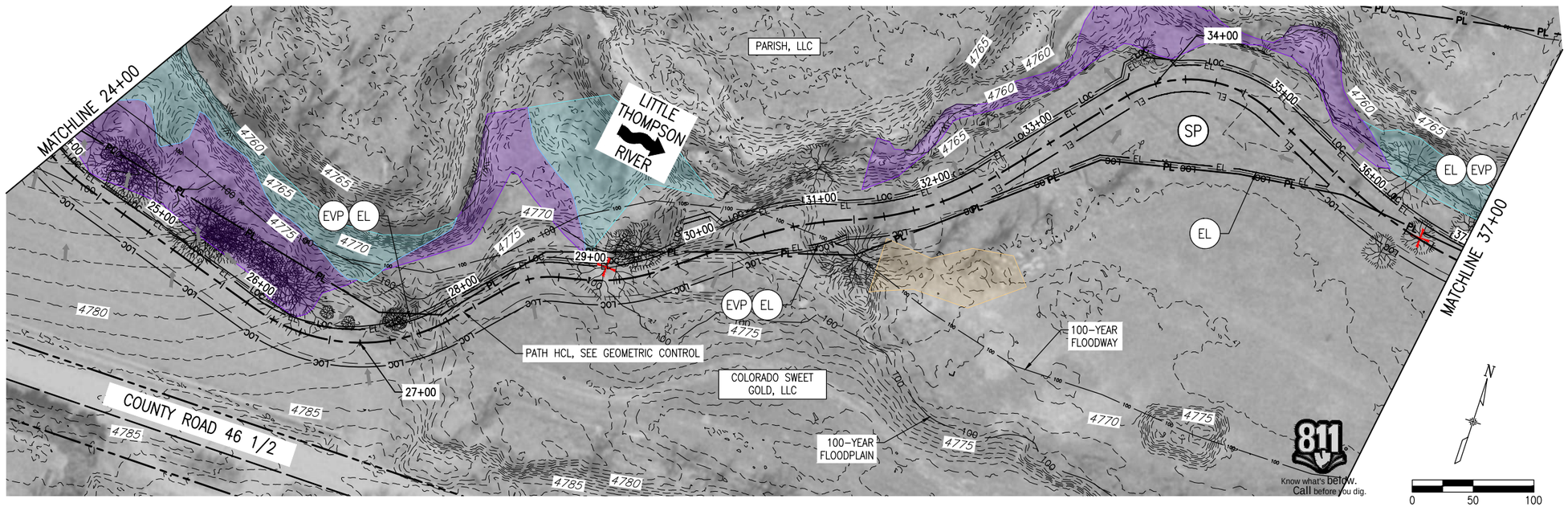


NOTES:

1. ALL BMP DEVICES SHALL BE MAINTAINED PER CDOT STANDARDS & SPECIFICATIONS.
2. EXISTING TREES SHALL BE PROTECTED TO THE FULLEST EXTENT POSSIBLE. IF TREES ARE DAMAGED DURING CONSTRUCTION, THE CONTRACTOR SHALL REPLACE THE TREES AT NO ADDITIONAL COST TO THE PROJECT.
3. CONSTRUCTION SHALL BE LIMITED TO THE EXISTING RIGHT-OF-WAY
4. UTILITIES OTHER THEN STORM ARE NOT SHOWN FOR CLARITY
5. ANY LEVELING FILL THAT IS REQUIRED TO PLACE TEMPORARY SCAFFOLDING FOR FORMWORK ALONG THE EXISTING WALL MUST BE GRANULAR IN NATURE, AND GRANULAR LEVELING FILL MUST BE REMOVED AFTER THE WORK IN THE AREA IS COMPLETED AND RESTORED TO THE EXISTING CONDITIONS.
6. LIMITS OF CONSTRUCTION TO FOLLOW THE RIGHT-OF-WAY EASEMENT ALONG THE SOUTHERN EDGE OF THE PROPOSED TRAIL ALIGNMENT.

PLAN



PREBLE'S MEADOW JUMPING MOUSE NOTES (PMJM):

1. ALL CONSTRUCTION ACTIVITIES SHALL BE DURING THE INACTIVE PERIOD FOR PMJM (BETWEEN OCTOBER 15 AND MAY 1).
2. FENCE (PLASTIC) SHALL BE PLACED IN COMBINATION WITH EROSION LOGS AT THE NORTHERN PROJECT BOUNDARY TO PROTECT ALL DELINEATED PMJM HABITAT PRIOR TO ANY OTHER CONSTRUCTION OPERATIONS. SEE OVERALL SITE PLAN FOR PMJM HABITAT DELINEATIONS.
3. THE CONTRACTOR SHALL NOT ENTER THE DELINEATED PMJM HABITAT DURING CONSTRUCTION.

LEGEND

- LOW QUALITY PREBLE MOUSE HABITAT
- MODERATE QUALITY PREBLE MOUSE HABITAT
- MODERATE-HIGH QUALITY PREBLE MOUSE HABITAT
- EXISTING VEGETATION PROTECTION
- EROSION LOG TYPE 1 (12 INCH) — EVP — EL
- EROSION LOG TYPE 1 (12 INCH) — EL
- STAGING AREA (SEE CDOT DETAIL) — SA
- SEEDING (NATIVE) — TS
- TOPSOIL (CIP)
- MULCHING (WEED FREE HAY) — MU
- STOCKPILE TOPSOIL — SP
- CONCRETE WASHOUT STRUCTURE — CWA
- VEHICLE TRACKING PAD — VTP
- LIMITS OF DISTURBANCE
- LIMITS OF CONSTRUCTION — LOC
- DIRECTION OF EXISTING OVERLAND FLOW
- DIRECTION OF PROPOSED OVERLAND FLOW
- EXISTING CONTOUR — 5280
- PROPOSED CONTOUR — 5280
- REMOVAL OF TREE

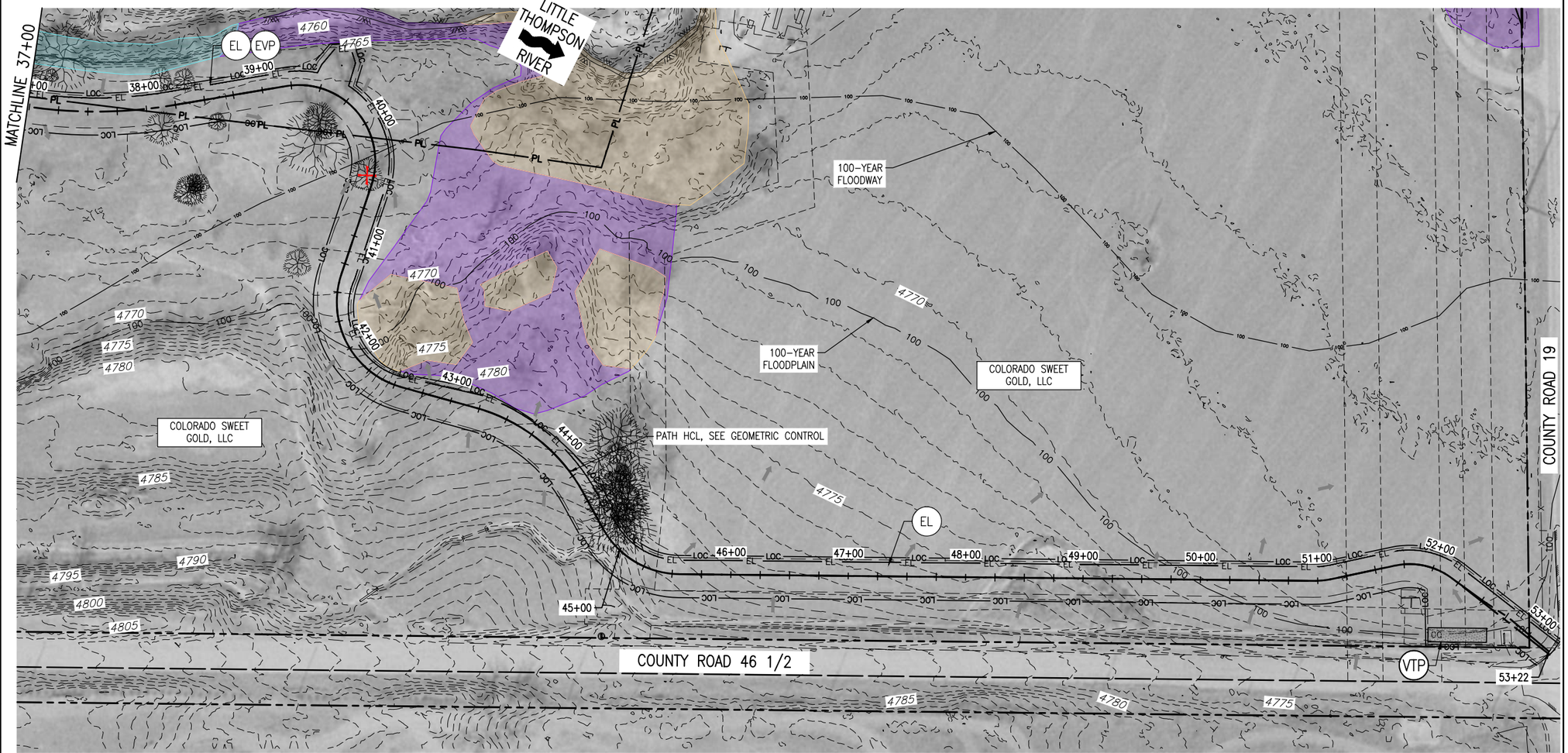
100% ADVERTISEMENT SET - SEPTEMBER, 2022

Y:\shared\Projects\Town of Johnstown\19658-Little Thompson River Trail\50 CADD\50 DWG\19658-023-Erosion Control.dwg | SHEET01 | michael.cunningham | Sep 19, 2022 - 11:31am

Print Date: Sep 19, 2022	Sheet Revisions		
File Name: 19658-023-Erosion Control.dwg	Date:	Comments	Init.
Horiz. Scale: Vert. Scale:			
Unit Information Unit Leader Initials			

Otak

As Constructed	LITTLE THOMPSON RIVER TRAIL EROSION CONTROL PLAN - INITIAL STA. 10+00 - 37+00			Project No./Code
No Revisions:				TAP M690-001
Revised:	Designer: SJB	Structure Numbers		21992
Void:	Detailer: TMC			
	Sheet Subset: ECP	Subset Sheets: 1 of 6		Sheet Number 27



PREBLE'S MEADOW JUMPING MOUSE NOTES (PMJM):

1. ALL CONSTRUCTION ACTIVITIES SHALL BE DURING THE INACTIVE PERIOD FOR PMJM (BETWEEN OCTOBER 15 AND MAY 1).
2. FENCE (PLASTIC) SHALL BE PLACED IN COMBINATION WITH EROSION LOGS AT THE NORTHERN PROJECT BOUNDARY TO PROTECT ALL DELINEATED PMJM HABITAT PRIOR TO ANY OTHER CONSTRUCTION OPERATIONS. SEE OVERALL SITE PLAN FOR PMJM HABITAT DELINEATIONS.
3. THE CONTRACTOR SHALL NOT ENTER THE DELINEATED PMJM HABITAT DURING CONSTRUCTION.

LEGEND

- LOW QUALITY PREBLE MOUSE HABITAT
- MODERATE QUALITY PREBLE MOUSE HABITAT
- MODERATE–HIGH QUALITY PREBLE MOUSE HABITAT
- EXISTING VEGETATION PROTECTION — EL EVP — EL
- EROSION LOG TYPE 1 (12 INCH) — EL
- EROSION LOG TYPE 1 (12 INCH) — EL — EL
- STAGING AREA (SEE CDOT DETAIL) — SA
- SEEDING (NATIVE) — TS
- TOPSOIL (CIP)
- MULCHING (WEED FREE HAY) — MU
- STOCKPILE TOPSOIL — SP
- CONCRETE WASHOUT STRUCTURE — CWA
- VEHICLE TRACKING PAD — VTP
- LIMITS OF DISTURBANCE
- LIMITS OF CONSTRUCTION — LOC —
- DIRECTION OF EXISTING OVERLAND FLOW
- DIRECTION OF PROPOSED OVERLAND FLOW
- EXISTING CONTOUR — 5280 —
- PROPOSED CONTOUR — 5280 —
- REMOVAL OF TREE

NOTES:

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

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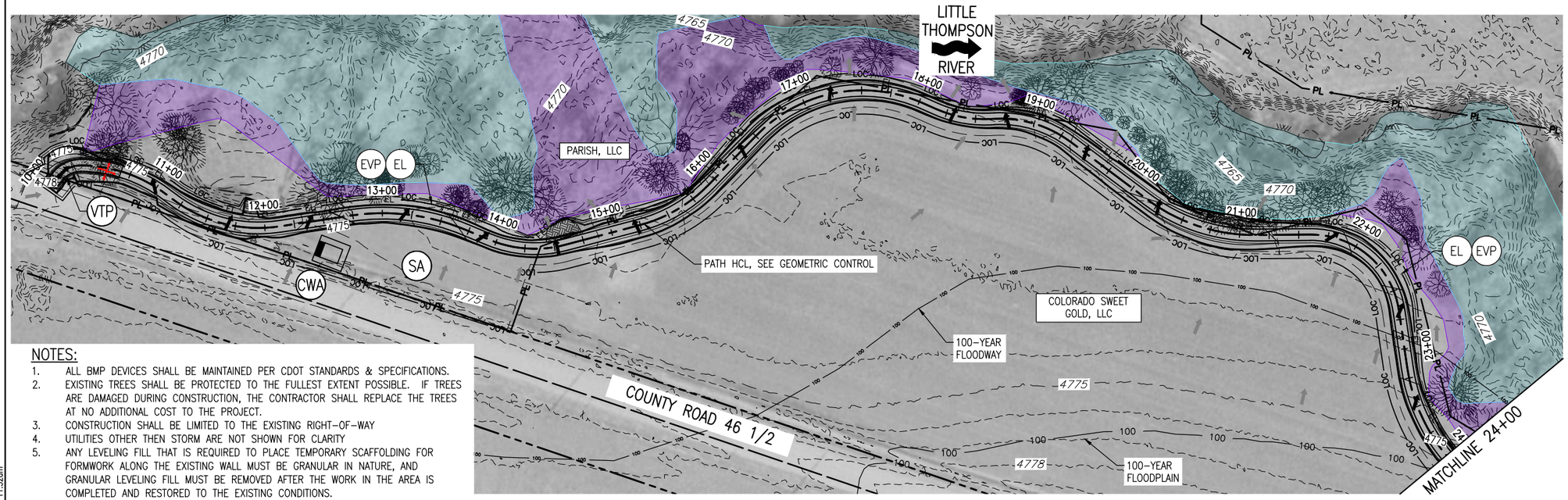
Print Date: Sep 19, 2022	Sheet Revisions			As Constructed	LITTLE THOMPSON RIVER TRAIL EROSION CONTROL PLAN – INITIAL STA. 37+00 – 53+13	Project No./Code
File Name: 19658–023–Erosion Control.dwg	Date:	Comments	Init.	No Revisions:		TAP M690–001
Horiz. Scale: Vert. Scale:				Revised:	Designer: SJB / Structure Numbers	21992
Unit Information Unit Leader Initials				Void:	Detailer: TMC / Sheet Subset: ECP / Subset Sheets: 2 of 6	Sheet Number 28

Otak

Y:\shared\Projects\Town of Johnstown\19658–Little Thompson River Trail\50 CADD\50 DWG\19658–023–Erosion Control.dwg | SHEET02 | michael.cunningham | Sep 19, 2022 – 11:31am



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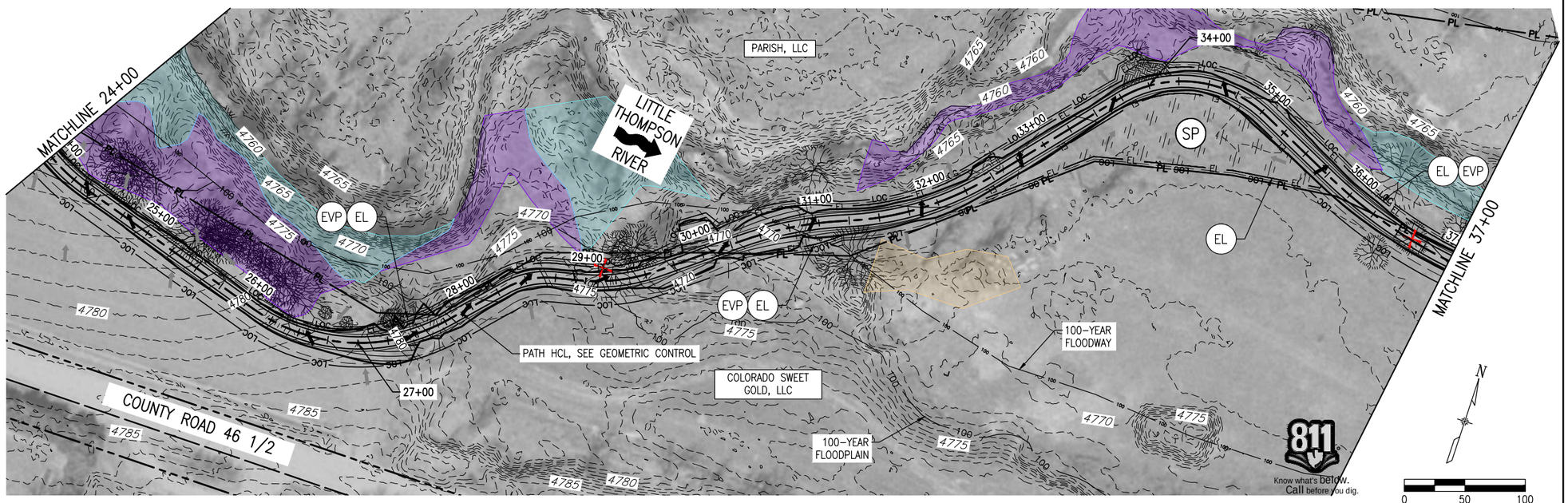
PLAN



PREBLE'S MEADOW JUMPING MOUSE NOTES (PMJM):

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LEGEND

- LOW QUALITY PREBLE MOUSE HABITAT
- MODERATE QUALITY PREBLE MOUSE HABITAT
- MODERATE-HIGH QUALITY PREBLE MOUSE HABITAT
- EXISTING VEGETATION PROTECTION
- EROSION LOG TYPE 1 (12 INCH) — EVP, EL
- EROSION LOG TYPE 1 (12 INCH) — EL
- STAGING AREA (SEE CDOT DETAIL) — SA
- SEEDING (NATIVE) — TS
- TOPSOIL (CIP)
- MULCHING (WEED FREE HAY) — MU
- STOCKPILE TOPSOIL — SP
- CONCRETE WASHOUT STRUCTURE — CWA
- VEHICLE TRACKING PAD — VTP
- LIMITS OF DISTURBANCE
- LIMITS OF CONSTRUCTION — LOC
- DIRECTION OF EXISTING OVERLAND FLOW
- DIRECTION OF PROPOSED OVERLAND FLOW
- EXISTING CONTOUR — 5280
- PROPOSED CONTOUR — 5280
- REMOVAL OF TREE

100% ADVERTISEMENT SET - SEPTEMBER, 2022

Y:\shared\Projects\Town of Johnstown\19658-Little Thompson River Trail\50 CADD\50 DWG\19658-023-Erosion Control.dwg | SHEET03 | michael.cunningham | Sep 19, 2022 - 11:32am

Print Date: Sep 19, 2022	Sheet Revisions		
File Name: 19658-023-Erosion Control.dwg	Date:	Comments	Init.
Horiz. Scale: Vert. Scale:			
Unit Information Unit Leader Initials			

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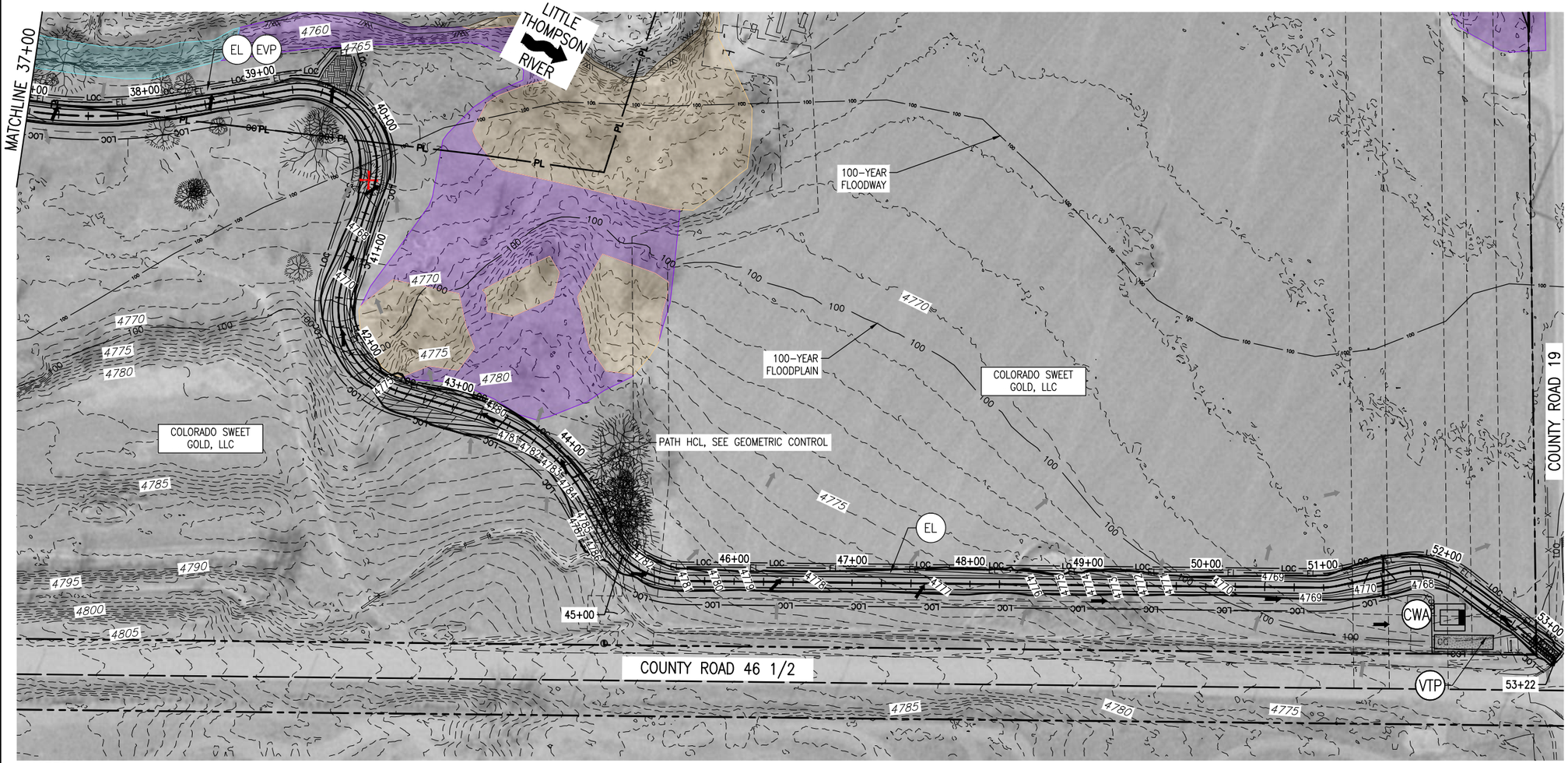
As Constructed	LITTLE THOMPSON RIVER TRAIL EROSION CONTROL PLAN - INTERIM STA. 10+00 - 37+00			Project No./Code
No Revisions:				TAP M690-001
Revised:	Designer: SJB	Structure Numbers		21992
Void:	Detailer: TMC			
	Sheet Subset: ECP	Subset Sheets: 3 of 6		Sheet Number 29



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

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LEGEND

LOW QUALITY PREBLE MOUSE HABITAT

MODERATE QUALITY PREBLE MOUSE HABITAT

MODERATE-HIGH QUALITY PREBLE MOUSE HABITAT

EXISTING VEGETATION PROTECTION

EROSION LOG TYPE 1 (12 INCH) — EL

EROSION LOG TYPE 1 (12 INCH) — EL

STAGING AREA (SEE CDOT DETAIL) — SA

SEEDING (NATIVE) — TS

TOPSOIL (CIP)

MULCHING (WEED FREE HAY) — MU

STOCKPILE TOPSOIL — SP

CONCRETE WASHOUT STRUCTURE — CWA

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LIMITS OF DISTURBANCE

LIMITS OF CONSTRUCTION — LOC

DIRECTION OF EXISTING OVERLAND FLOW

DIRECTION OF PROPOSED OVERLAND FLOW

EXISTING CONTOUR — 5280

PROPOSED CONTOUR — 5280

REMOVAL OF TREE

100% ADVERTISEMENT SET - SEPTEMBER, 2022

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Print Date: Sep 19, 2022	Sheet Revisions			As Constructed	LITTLE THOMPSON RIVER TRAIL EROSION CONTROL PLAN - INTERIM STA. 37+00 - 53+13	Project No./Code
File Name: 19658-023-Erosion Control.dwg	Date:	Comments	Init.	No Revisions:		TAP M690-001
Horiz. Scale: Vert. Scale:				Revised:	Designer: SJB / Structure Numbers	21992
Unit Information Unit Leader Initials				Void:	Detailer: TMC / Sheet Subset: ECP / Subset Sheets: 4 of 6	Sheet Number 30

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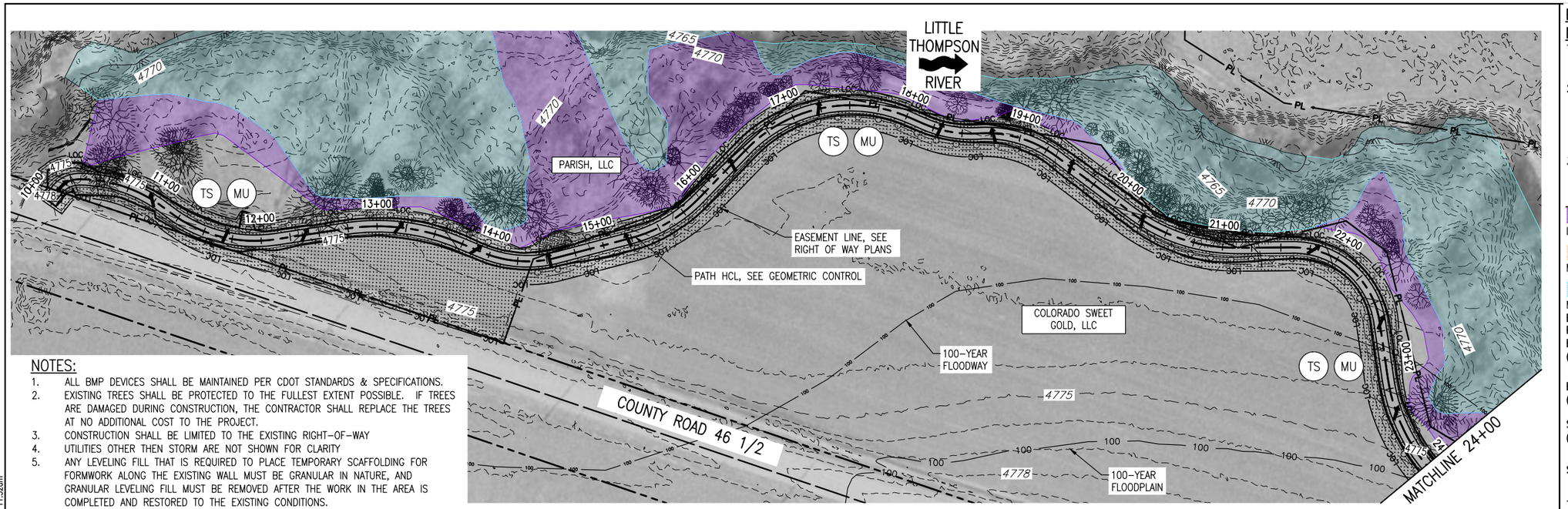

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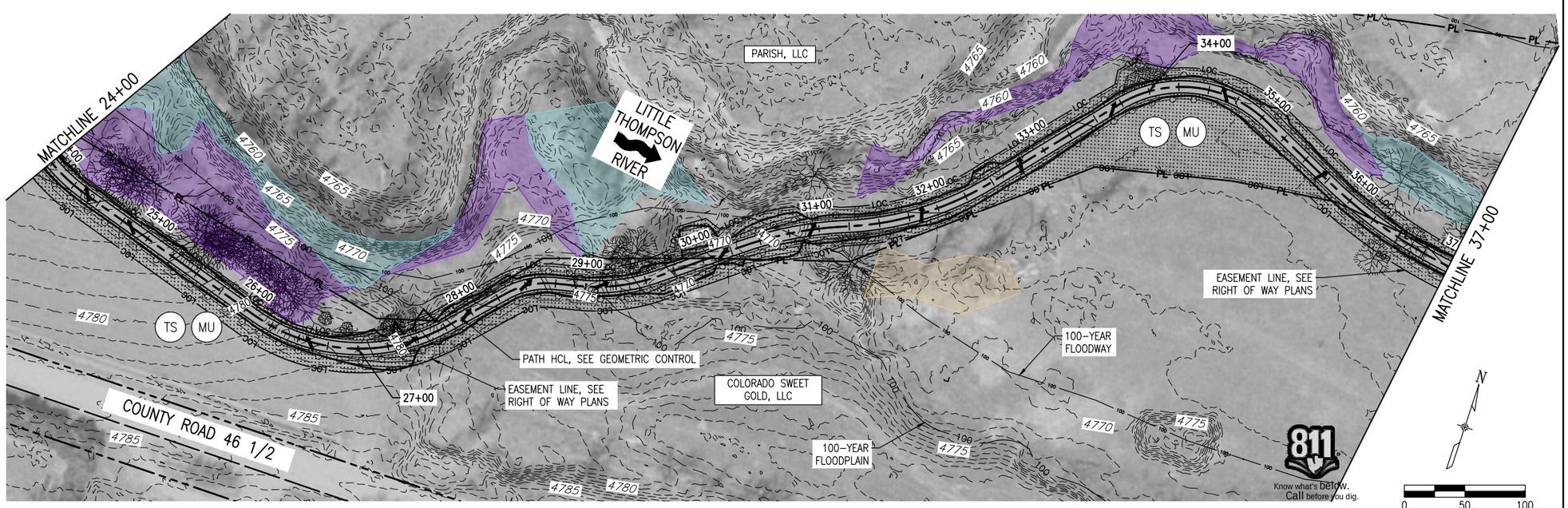
PLAN



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100% ADVERTISEMENT SET - SEPTEMBER, 2022

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Print Date: Sep 19, 2022	Sheet Revisions			As Constructed	LITTLE THOMPSON RIVER TRAIL EROSION CONTROL PLAN – FINAL STA. 10+00 – 37+00	Project No./Code
File Name: 19658-023-Erosion Control.dwg	Date:	Comments	Init.	No Revisions:		TAP M690-001
Horiz. Scale: Vert. Scale:				Revised:	Designer: SJB / Structure Numbers	21992
Unit Information Unit Leader Initials				Void:	Detailer: TMC	Sheet Number 31
					Sheet Subset: ECP / Subset Sheets: 5 of 6	

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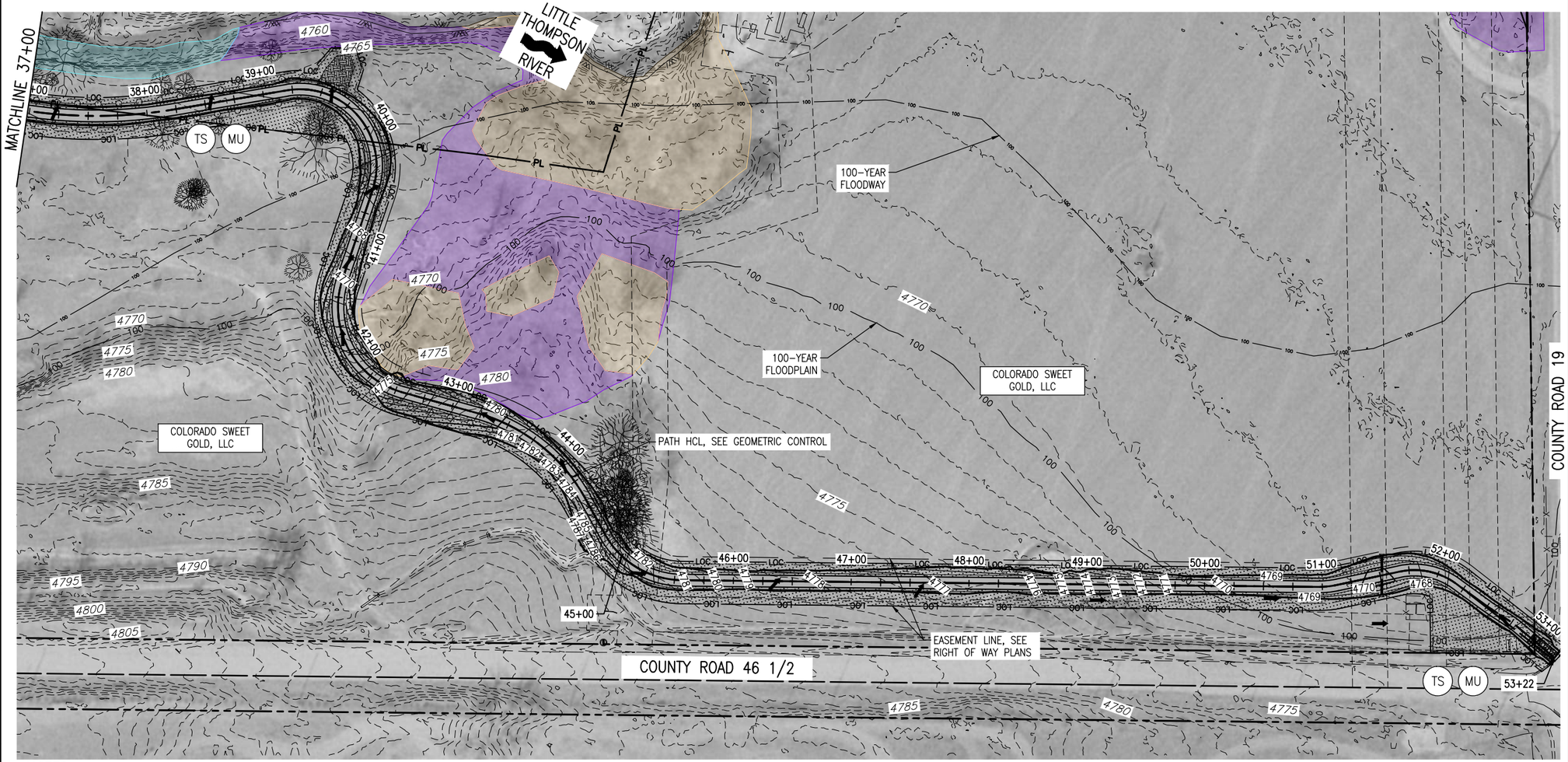

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REMOVAL OF TREE

100% ADVERTISEMENT SET - SEPTEMBER, 2022

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Print Date: Sep 19, 2022	Sheet Revisions		
File Name: 19658-023-Erosion Control.dwg	Date:	Comments	Init.
Horiz. Scale: Vert. Scale:			
Unit Information Unit Leader Initials			

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As Constructed	LITTLE THOMPSON RIVER TRAIL EROSION CONTROL PLAN - FINAL STA. 37+00 - 53+13			Project No./Code
No Revisions:				TAP M690-001
Revised:	Designer: SJB	Structure Numbers		21992
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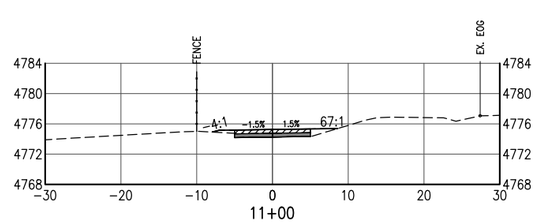

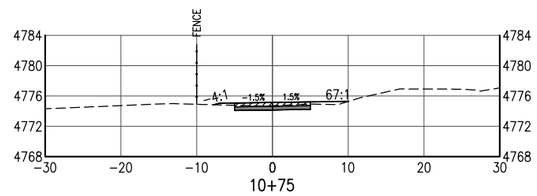

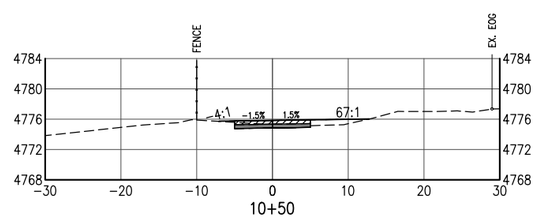

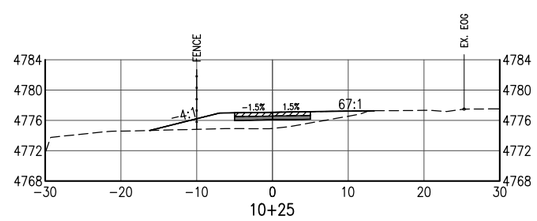

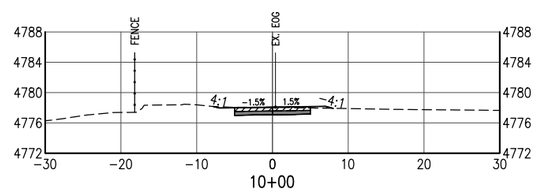

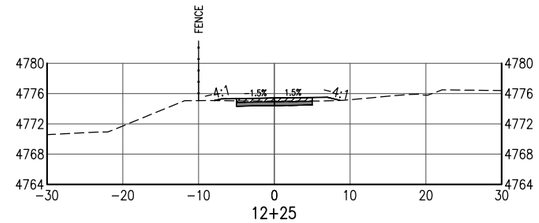

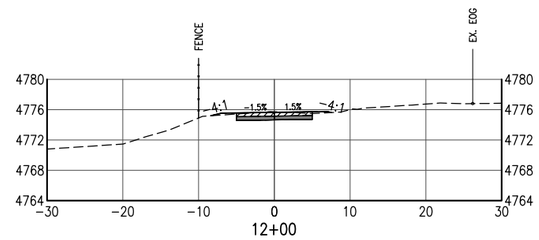

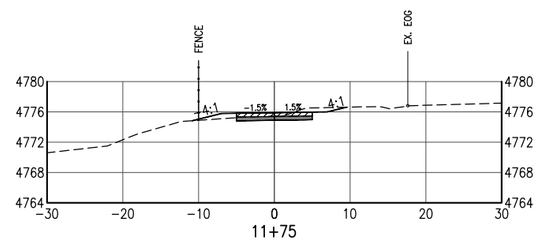

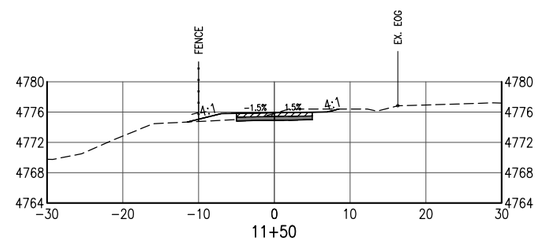

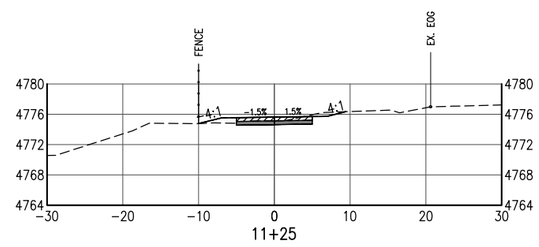

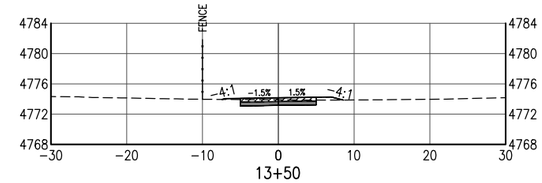

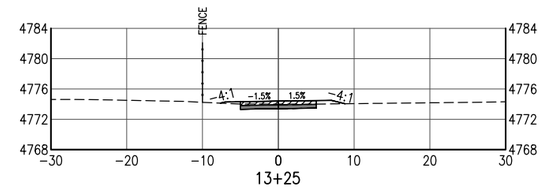

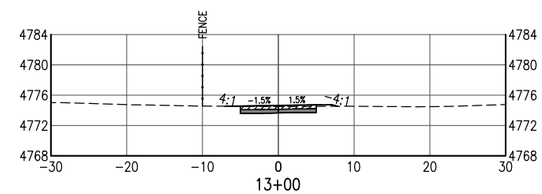

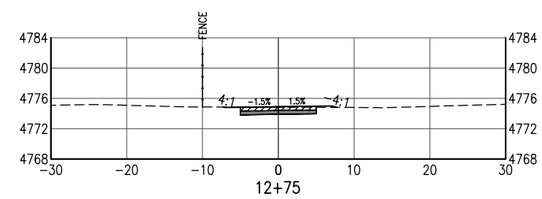

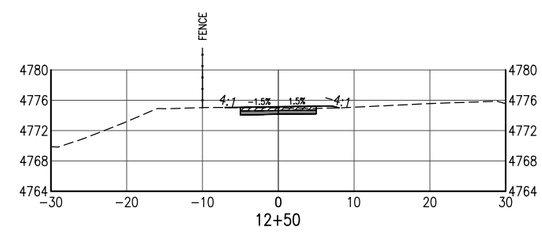

LEGEND

EOG = EDGE OF GRAVEL
T.O.J. = TOWN OF JOHNSTOWN
R.O.W. = RIGHT-OF-WAY
C.S.G. = COLORADO SWEET GOLD

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Print Date: Sep 19, 2022			
File Name: 19658-030-Cross Sections.dwg			
Horiz. Scale:	Vert. Scale:		
Unit Information	Unit Leader Initials		

Sheet Revisions

Date:	Comments	Init.

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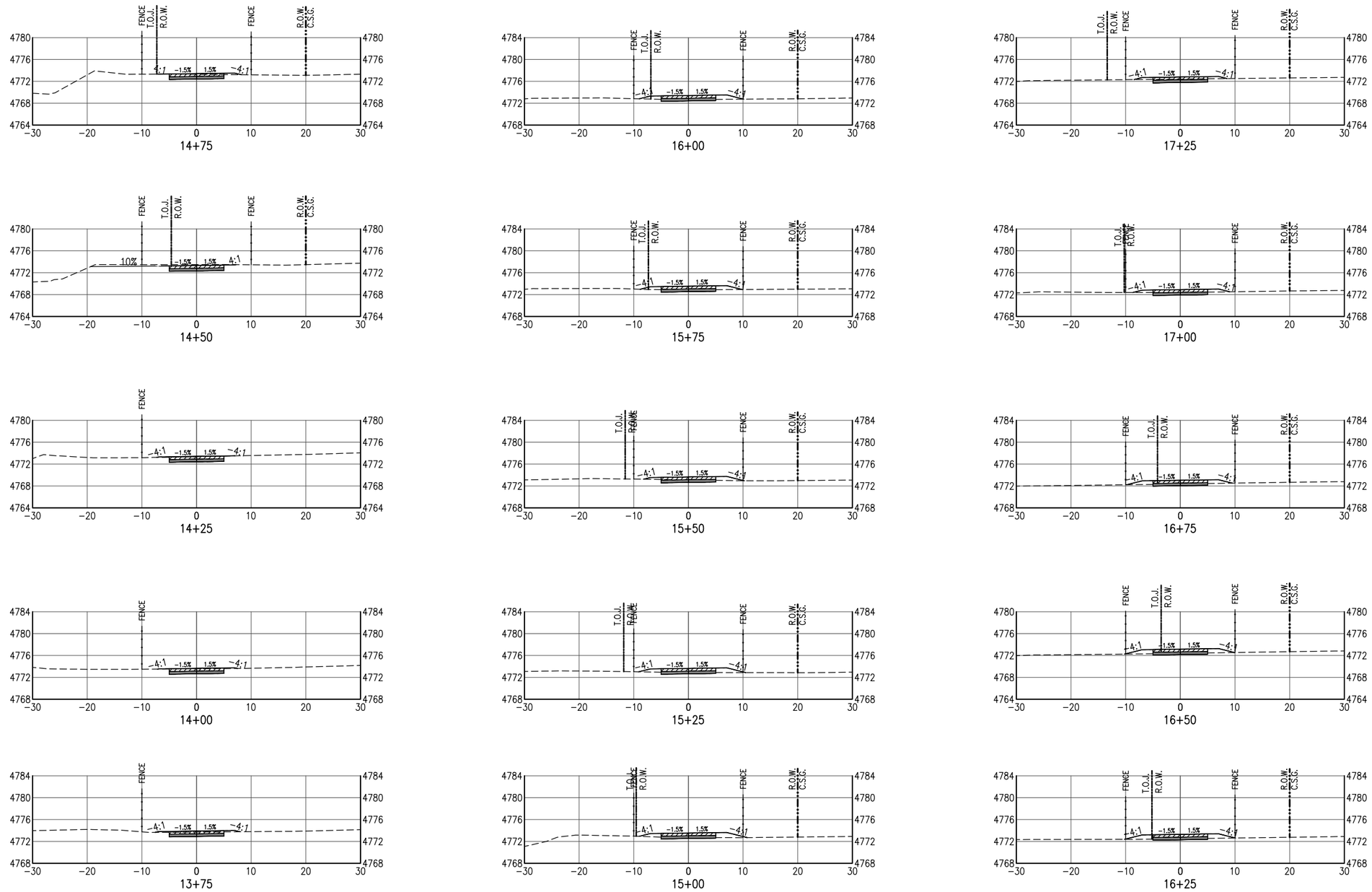
As Constructed
No Revisions:
Revised:
Void:

LITTLE THOMPSON RIVER TRAIL
TRAIL CROSS SECTIONS

Designer:	SJB	Structure Numbers	
Detailer:	TMC		
Sheet Subset:	XSEC	Subset Sheets:	1 of 12

Project No./Code
TAP M690-001
21992
Sheet Number 33



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Print Date: Sep 19, 2022	Sheet Revisions		
File Name: 19658-030-Cross Sections.dwg	Date:	Comments	Init.
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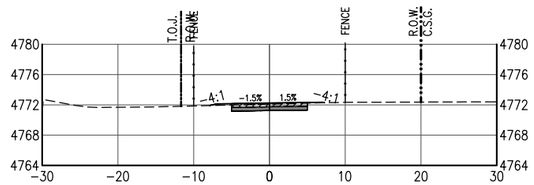
As Constructed
No Revisions:
Revised:
Void:

LITTLE THOMPSON RIVER TRAIL
TRAIL CROSS SECTIONS

Designer: SJB
Detailer: TMC
Sheet Subset: XSEC
Structure Numbers
Subset Sheets: 2 of 12

Project No./Code
TAP M690-001
21992
Sheet Number 34



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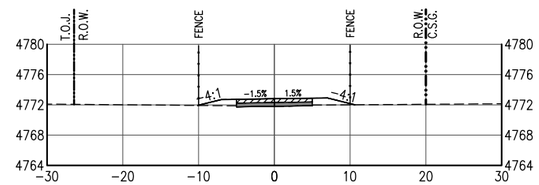

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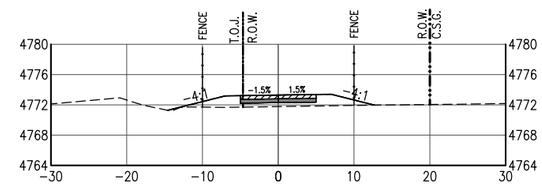

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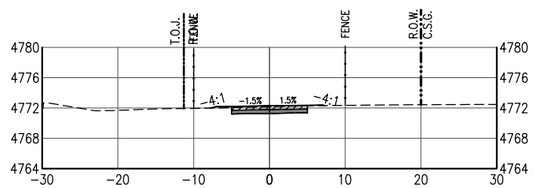

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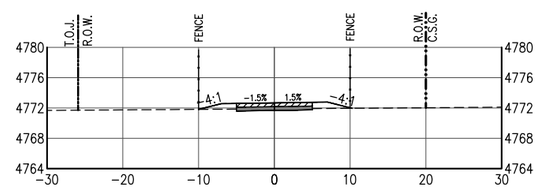

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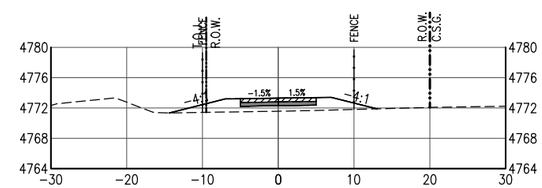

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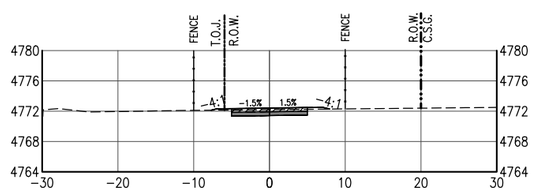

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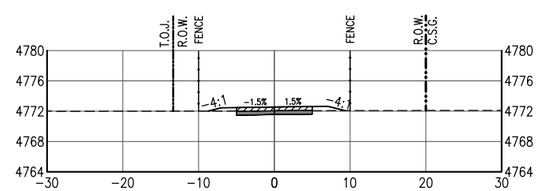

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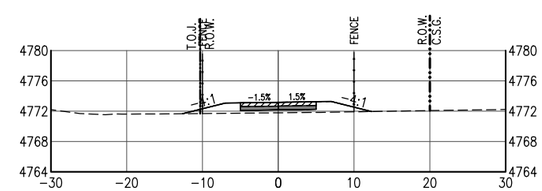

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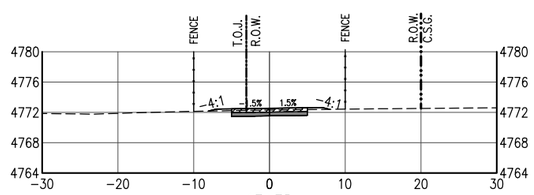

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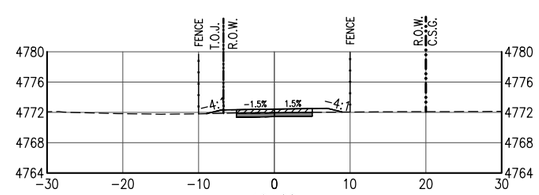

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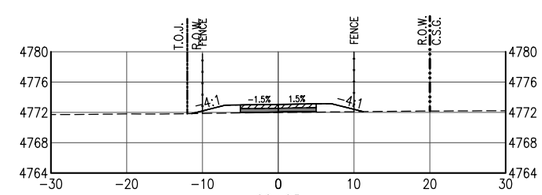

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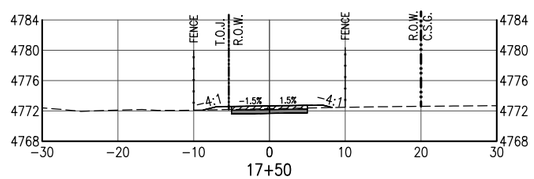

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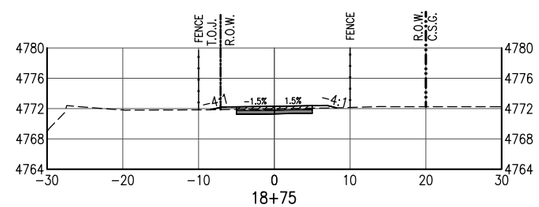

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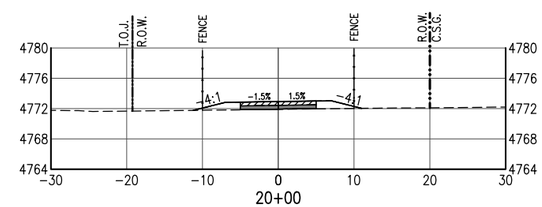

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LEGEND

EOG = EDGE OF GRAVEL
T.O.J. = TOWN OF JOHNSTOWN
R.O.W. = RIGHT-OF-WAY
C.S.G. = COLORADO SWEET GOLD

Know what's **below.**
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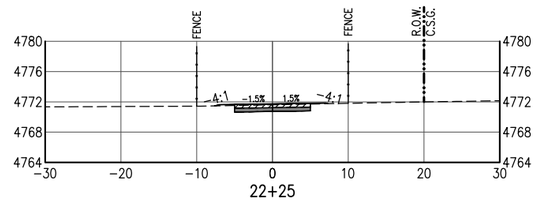
100% ADVERTISEMENT SET - SEPTEMBER, 2022

Y:\shared\Projects\Town of Johnstown\19658-Little Thompson River Trail\50 CADD\50 DWG\19658-030-Cross Sections.dwg | SHEET03 | michael.cunningham | Sep 19, 2022 - 11:34am

Print Date: Sep 19, 2022	Sheet Revisions			As Constructed	LITTLE THOMPSON RIVER TRAIL TRAIL CROSS SECTIONS	Project No./Code
File Name: 19658-030-Cross Sections.dwg	Date:	Comments	Init.	No Revisions:		TAP M690-001
Horiz. Scale: Vert. Scale:				Revised:	Designer: SJB / Structure Numbers	21992
Unit Information Unit Leader Initials				Void:	Detailer: TMC / Sheet Subset: XSEC / Subset Sheets: 3 of 12	Sheet Number 35

Otak



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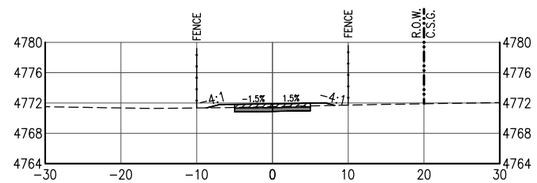

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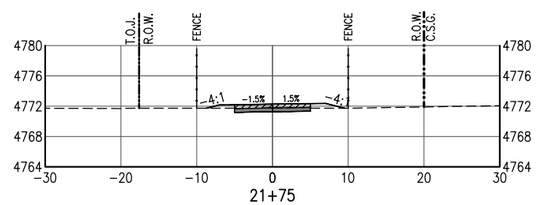

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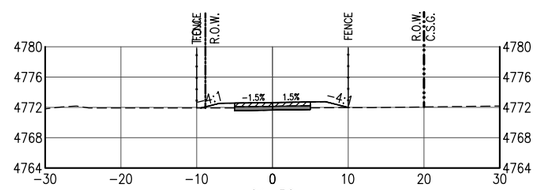

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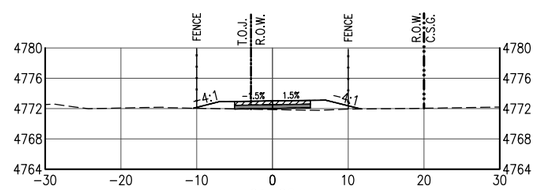

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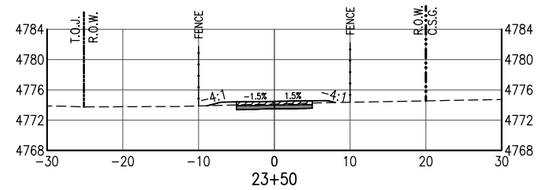

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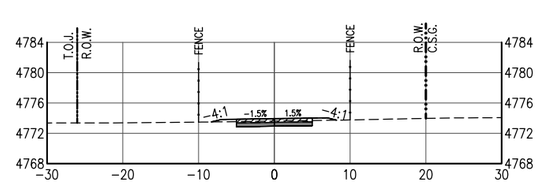

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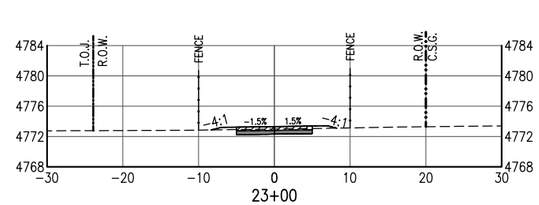

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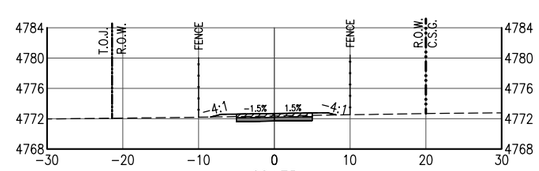

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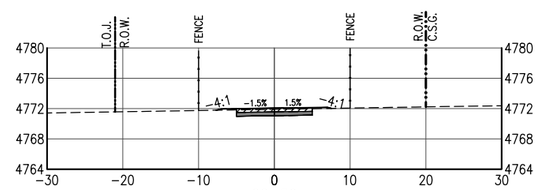

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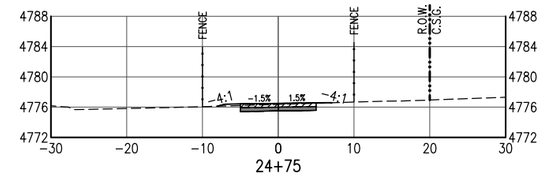

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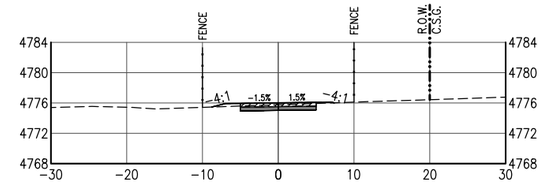

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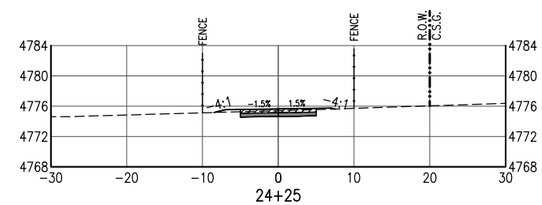

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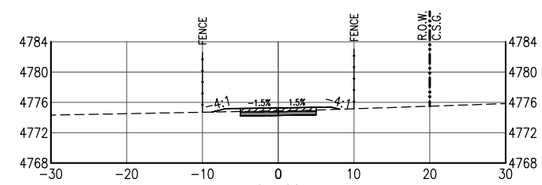

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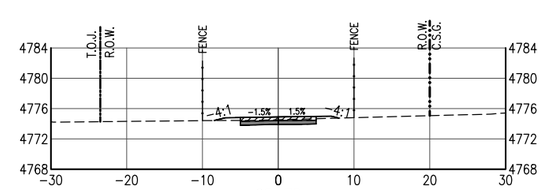

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LEGEND

EOG = EDGE OF GRAVEL
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100% ADVERTISEMENT SET - SEPTEMBER, 2022

Y:\shared\Projects\Town of Johnstown\19658-Little Thompson River Trail\50 CADD\50 DWG\19658-030-Cross Sections.dwg | SHEET04 | michael.cunningham | Sep 19, 2022 - 11:34am

Print Date: Sep 19, 2022	Sheet Revisions		
File Name: 19658-030-Cross Sections.dwg	Date:	Comments	Init.
Horiz. Scale: Vert. Scale:			
Unit Information Unit Leader Initials			

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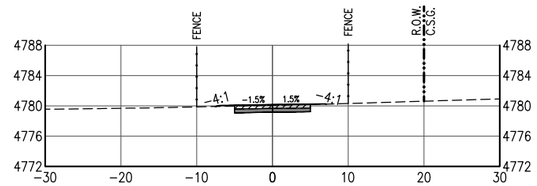
As Constructed	LITTLE THOMPSON RIVER TRAIL TRAIL CROSS SECTIONS			Project No./Code
No Revisions:				TAP M690-001
Revised:	Designer: SJB	Structure Numbers		21992
	Detailer: TMC			
Void:	Sheet Subset: XSEC	Subset Sheets: 4 of 12		Sheet Number 36



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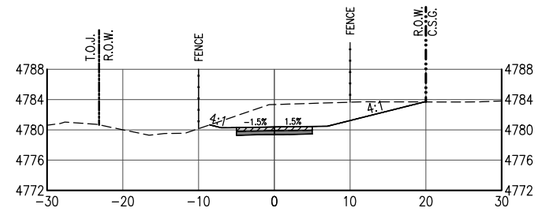

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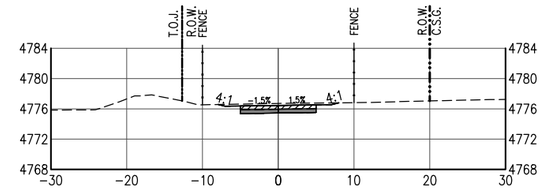

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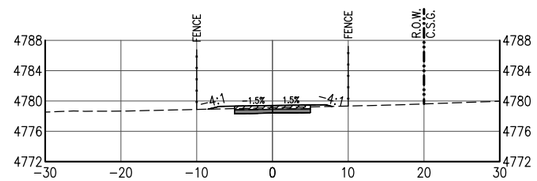

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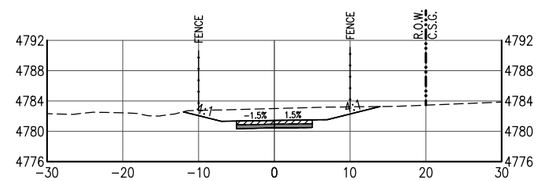

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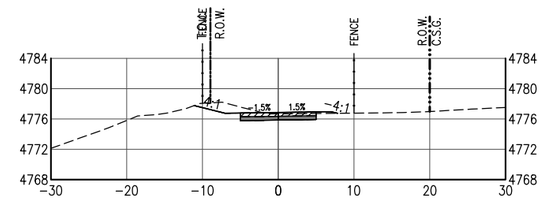

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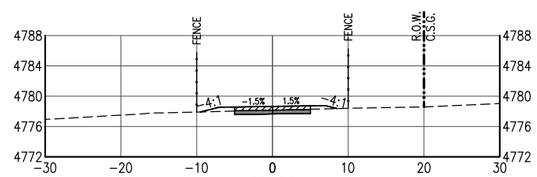

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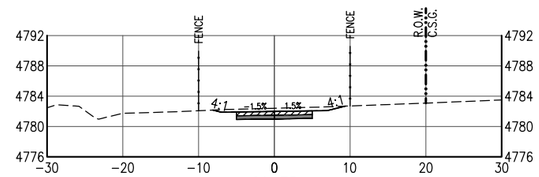

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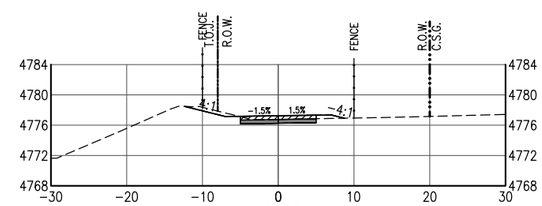

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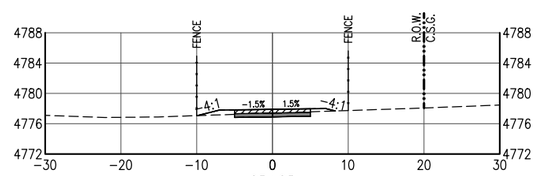

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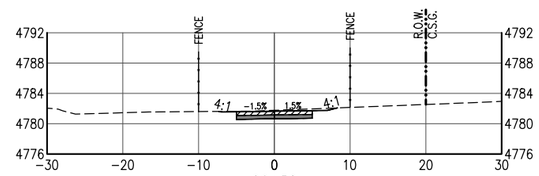

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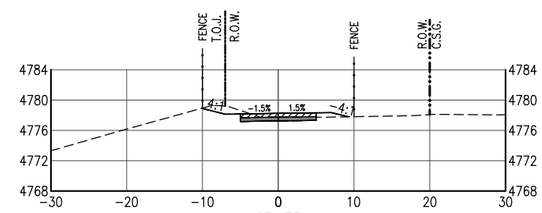

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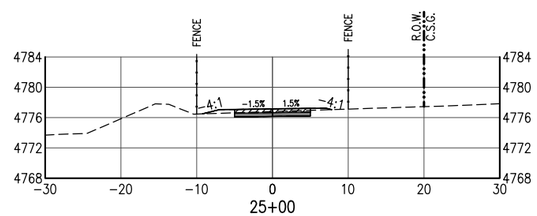

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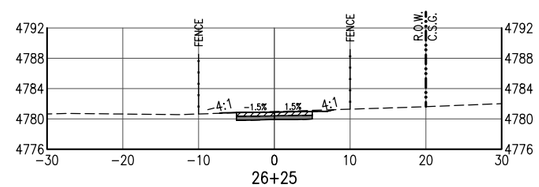

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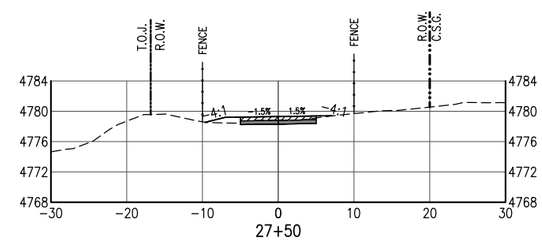

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100% ADVERTISEMENT SET - SEPTEMBER, 2022

Y:\shared\Projects\Town of Johnstown\19658-Little Thompson River Trail\50 CADD\50 DWG\19658-030-Cross Sections.dwg | SHEET05 | michael.cunningham | Sep 19, 2022 - 11:34am

Print Date: Sep 19, 2022	Sheet Revisions			As Constructed	LITTLE THOMPSON RIVER TRAIL TRAIL CROSS SECTIONS	Project No./Code
File Name: 19658-030-Cross Sections.dwg	Date:	Comments	Init.	No Revisions:		TAP M690-001
Horiz. Scale: Vert. Scale:				Revised:	Designer: SJB / Detailer: TMC / Structure Numbers	21992
Unit Information Unit Leader Initials				Void:	Sheet Subset: XSEC / Subset Sheets: 5 of 12	Sheet Number 37

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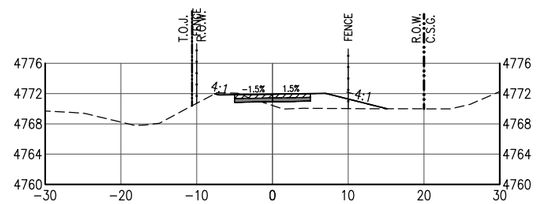

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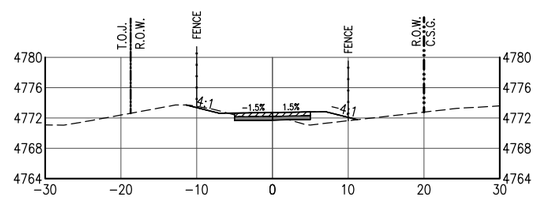

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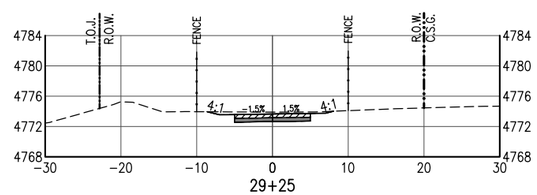

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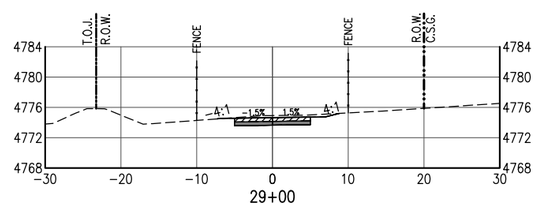

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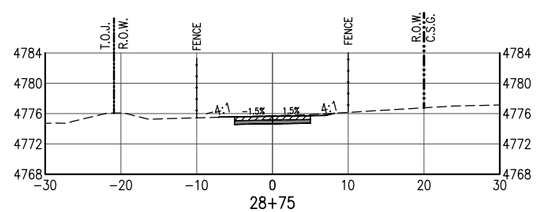

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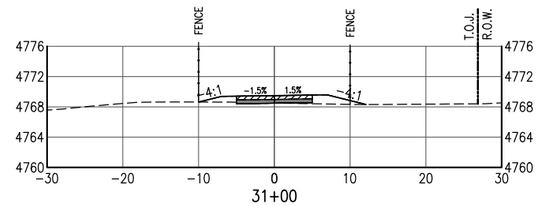

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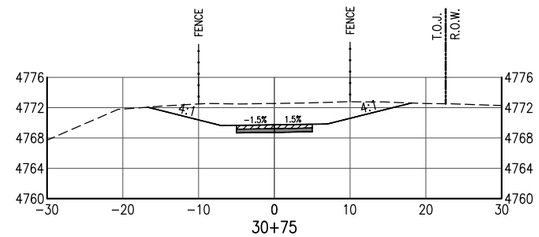

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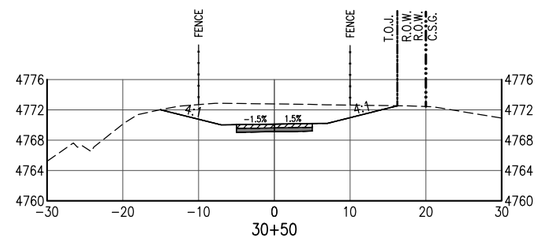

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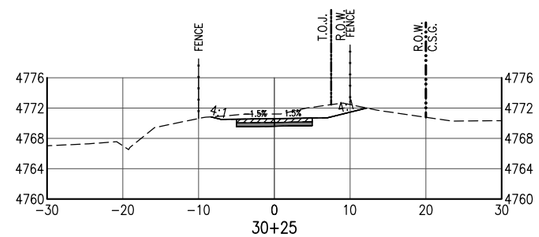

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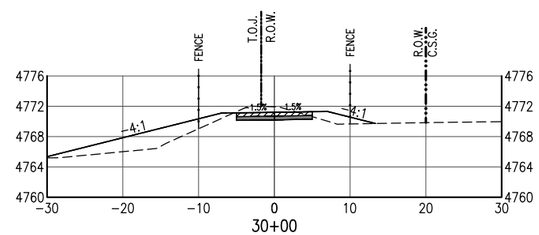

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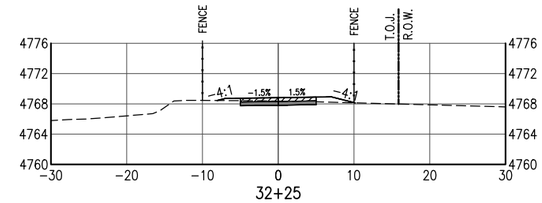

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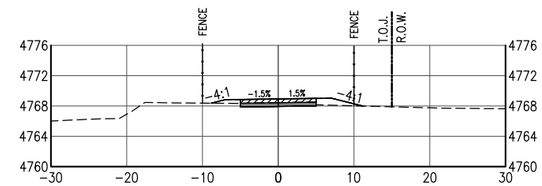

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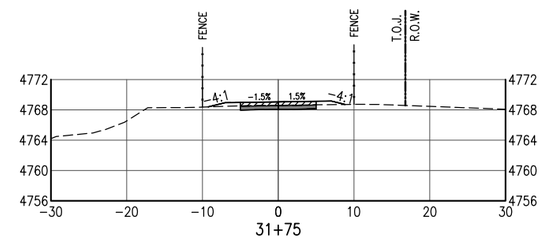

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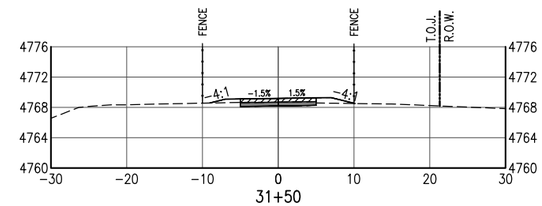

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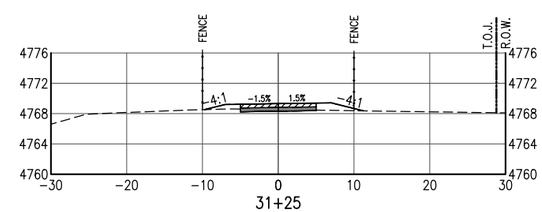

31+25

LEGEND

EOG = EDGE OF GRAVEL
T.O.J. = TOWN OF JOHNSTOWN
R.O.W. = RIGHT-OF-WAY
C.S.G. = COLORADO SWEET GOLD

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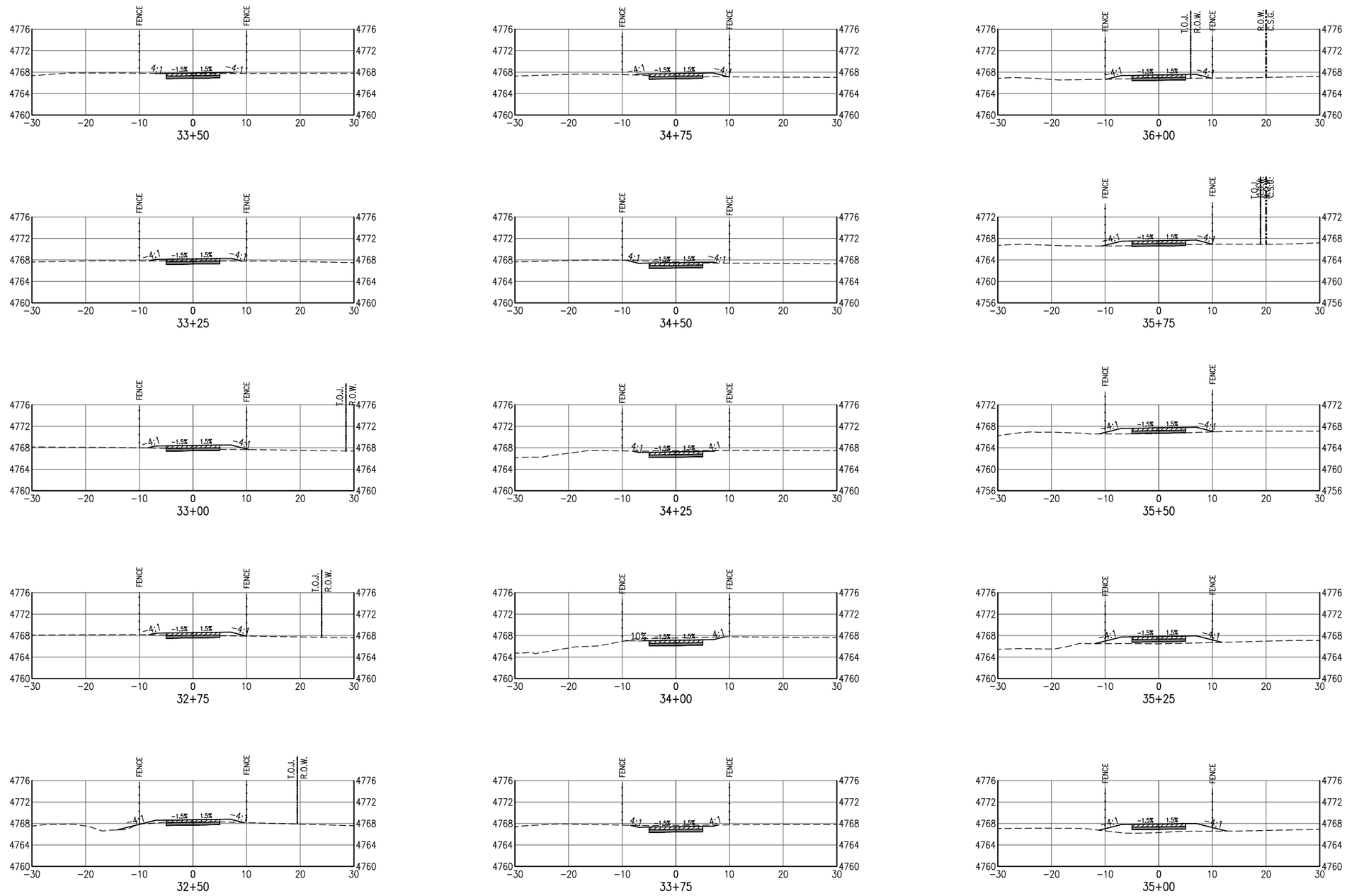
100% ADVERTISEMENT SET - SEPTEMBER, 2022

Y:\shared\Projects\Town of Johnstown\19658-Little Thompson River Trail\50 CADD\50 DWG\19658-030-Cross Sections.dwg | SHEET06 | michael.cunningham | Sep 19, 2022 - 11:34am

Print Date: Sep 19, 2022	Sheet Revisions		
File Name: 19658-030-Cross Sections.dwg	Date:	Comments	Init.
Horiz. Scale: Vert. Scale:			
Unit Information Unit Leader Initials			

Otak

As Constructed	LITTLE THOMPSON RIVER TRAIL TRAIL CROSS SECTIONS				Project No./Code
No Revisions:					TAP M690-001
Revised:	Designer: SJB	Structure Numbers			21992
	Detailer: TMC				
Void:	Sheet Subset: XSEC	Subset Sheets: 6 of 12			Sheet Number 38



LEGEND

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100% ADVERTISEMENT SET - SEPTEMBER, 2022

Y:\shared\Projects\Town of Johnstown\19658-Little Thompson River Trail\50 CADD\50 DWG\19658-030-Cross Sections.dwg | SHEET07 | michael.cunningham | Sep 19, 2022 - 11:34am

Print Date: Sep 19, 2022	Sheet Revisions		
File Name: 19658-030-Cross Sections.dwg	Date:	Comments	Init.
Horiz. Scale: Vert. Scale:			
Unit Information Unit Leader Initials			

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As Constructed	LITTLE THOMPSON RIVER TRAIL TRAIL CROSS SECTIONS		Project No./Code
No Revisions:			TAP M690-001
Revised:	Designer: SJB	Structure Numbers	21992
Void:	Detailer: TMC		
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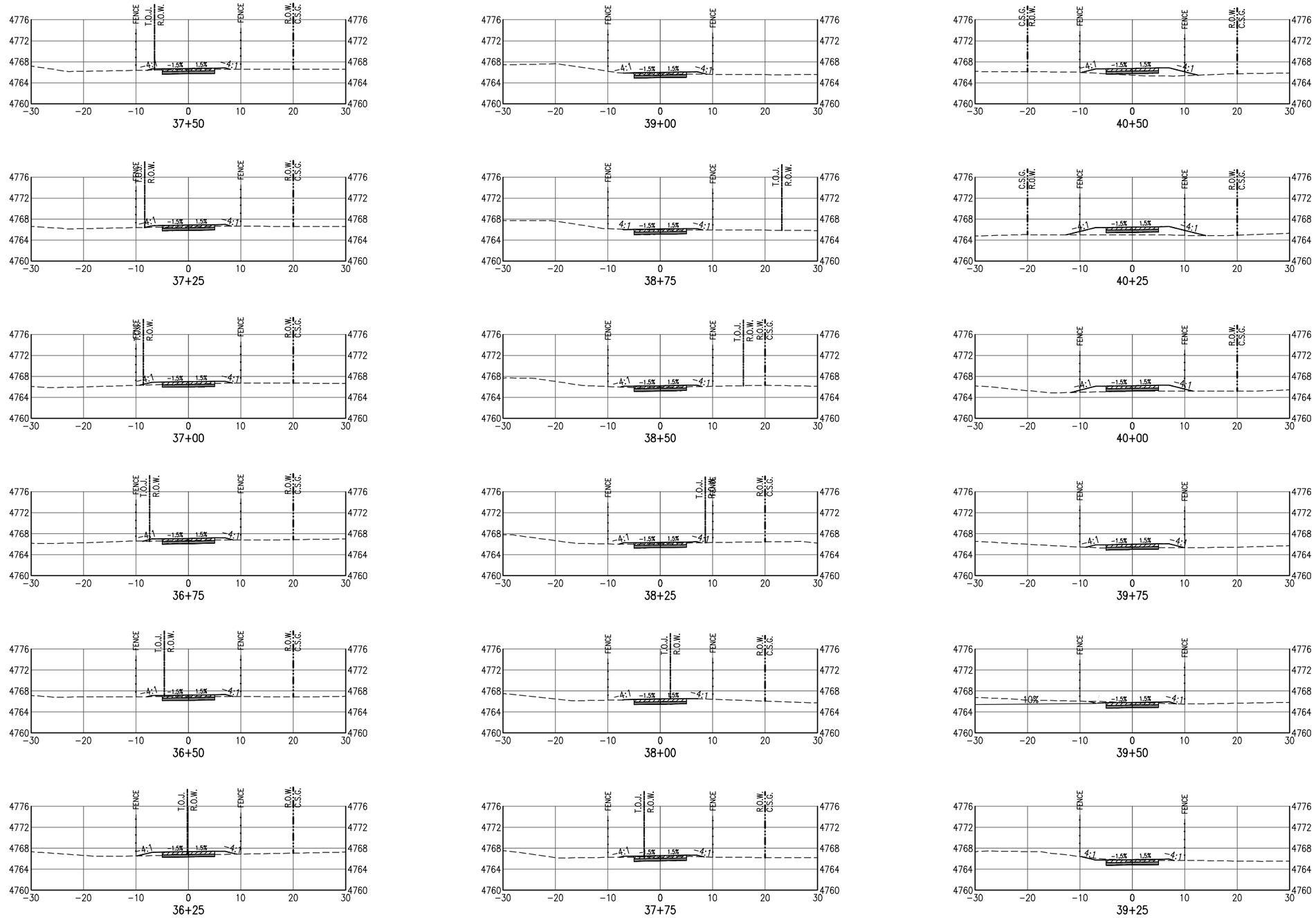

LEGEND

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100% ADVERTISEMENT SET - SEPTEMBER, 2022

Y:\shared\projects\Town of Johnstown\19658-Little Thompson River Trail\50 cadd\50 dwg\19658-030-Cross Sections.dwg | SHEET08 | michael.cunningham | Sep 20, 2022 - 3:26pm

Print Date: Sep 20, 2022	Sheet Revisions	As Constructed	LITTLE THOMPSON RIVER TRAIL TRAIL CROSS SECTIONS	Project No./Code
File Name: 19658-030-Cross Sections.dwg	Date: / Comments / Init.	No Revisions:		TAP M690-001
Horiz. Scale: Vert. Scale:		Revised:	Designer: SJB / Structure Numbers	21992
Unit Information Unit Leader Initials		Void:	Detailer: TMC	Sheet Number 40
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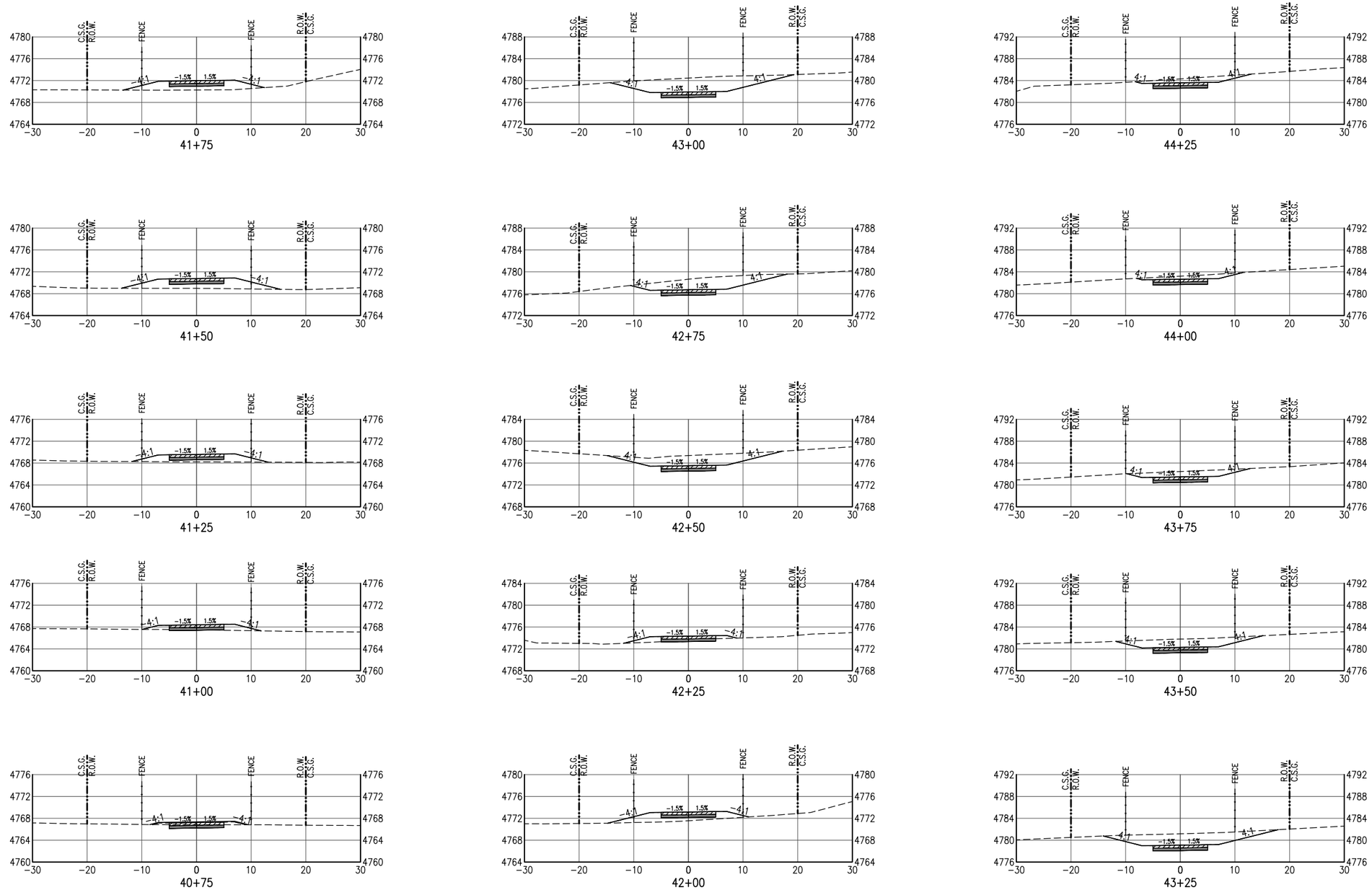

LEGEND

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100% ADVERTISEMENT SET - SEPTEMBER, 2022

Y:\shared\Projects\Town of Johnstown\19658-Little Thompson River Trail\50 CADD\50 DWG\19658-030-Cross Sections.dwg | SHEET09 | michael.cunningham | Sep 19, 2022 - 11:35am

Print Date: Sep 19, 2022	Sheet Revisions		
File Name: 19658-030-Cross Sections.dwg	Date:	Comments	Init.
Horiz. Scale: Vert. Scale:			
Unit Information Unit Leader Initials			

Otak

As Constructed	LITTLE THOMPSON RIVER TRAIL TRAIL CROSS SECTIONS		Project No./Code
No Revisions:			TAP M690-001
Revised:	Designer: SJB	Structure Numbers	21992
Void:	Detailer: TMC		
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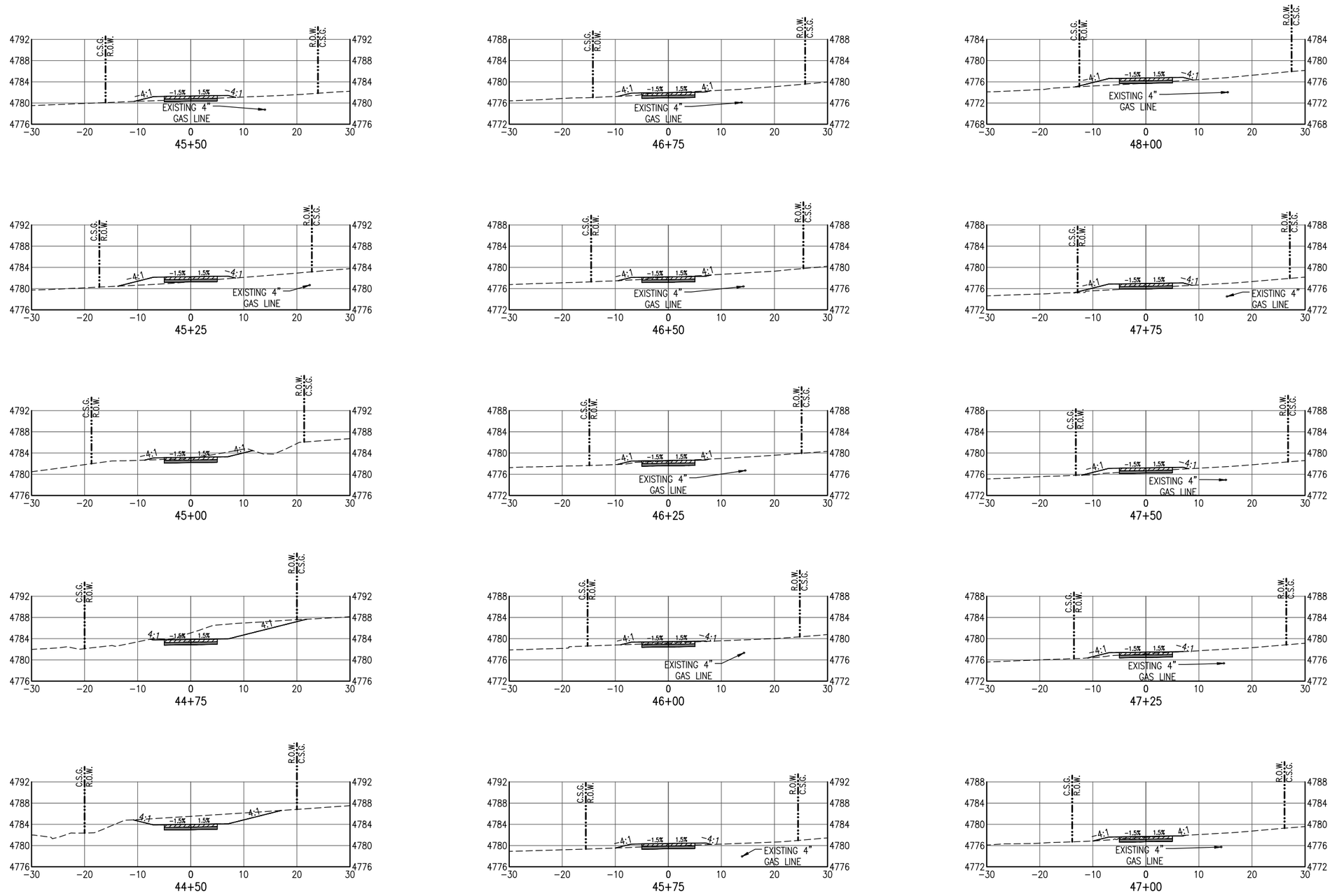

LEGEND

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100% ADVERTISEMENT SET - SEPTEMBER, 2022

Y:\shared\Projects\Town of Johnstown\19658-Little Thompson River Trail\50 CADD\50 DWG\19658-030-Cross Sections.dwg | SHEET10 | michael.cunningham | Sep 19, 2022 - 11:35am

Print Date: Sep 19, 2022	Sheet Revisions		
File Name: 19658-030-Cross Sections.dwg	Date:	Comments	Init.
Horiz. Scale: Vert. Scale:			
Unit Information Unit Leader Initials			

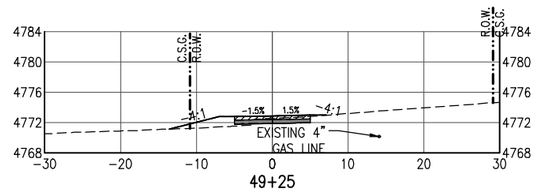
Otak

As Constructed
No Revisions:
Revised:
Void:

LITTLE THOMPSON RIVER TRAIL
TRAIL CROSS SECTIONS

Designer:	SJB	Structure Numbers	
Detailer:	TMC		
Sheet Subset:	XSEC	Subset Sheets:	10 of 12

Project No./Code
TAP M690-001
21992
Sheet Number 42



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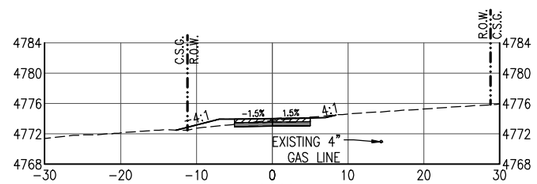

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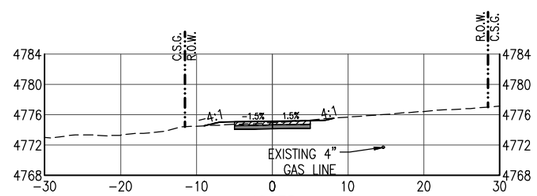

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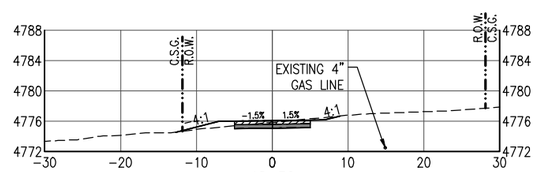

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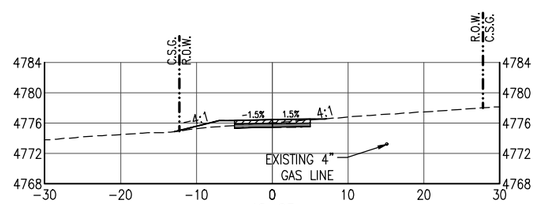

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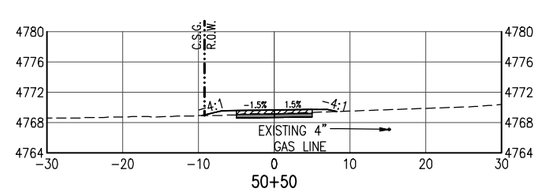

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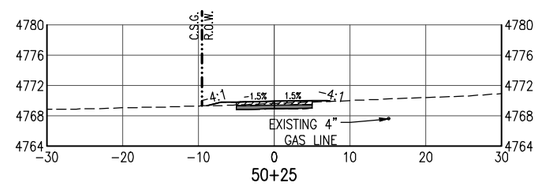

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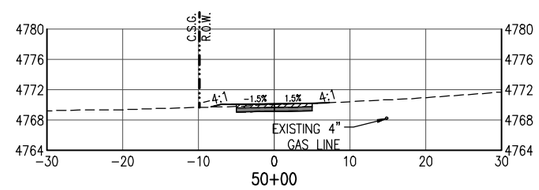

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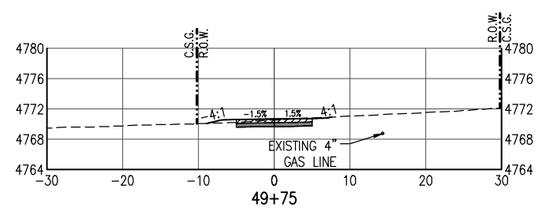

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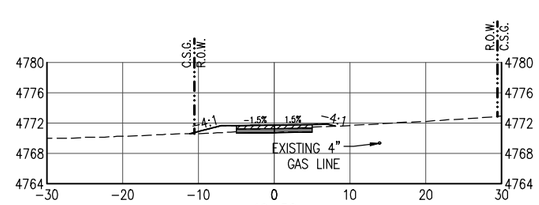

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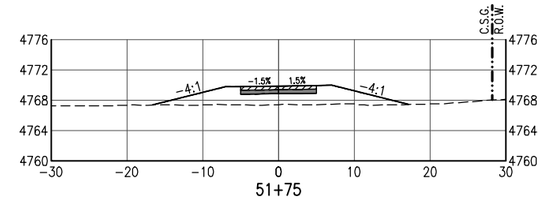

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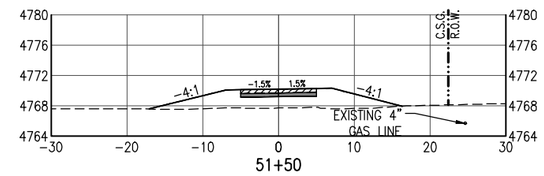

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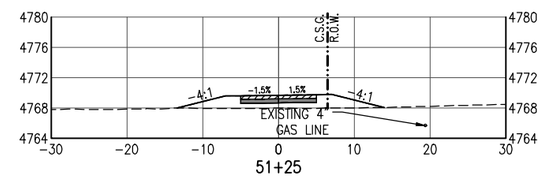

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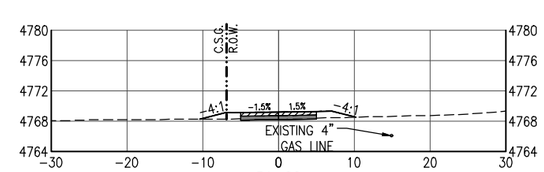

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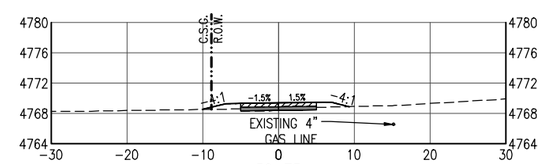

50+75

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100% ADVERTISEMENT SET - SEPTEMBER, 2022

Y:\shared\projects\Town of Johnstown\19658-Little Thompson River Trail\50 cadd\50 dwg\19658-030-Cross Sections.dwg | SHEET11 | michael.cunningham | Sep 20, 2022 - 3:51pm

Print Date: Sep 20, 2022			
File Name: 19658-030-Cross Sections.dwg			
Horiz. Scale:	Vert. Scale:		
Unit Information	Unit Leader Initials		

Sheet Revisions

Date:	Comments	Init.

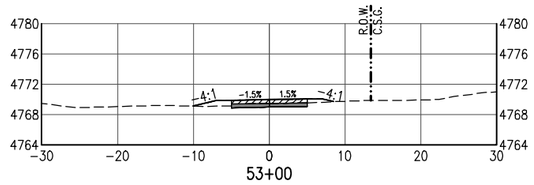
Otak

As Constructed
No Revisions:
Revised:
Void:

LITTLE THOMPSON RIVER TRAIL
TRAIL CROSS SECTIONS

Designer:	SJB	Structure Numbers	
Detailer:	TMC		
Sheet Subset:	XSEC	Subset Sheets:	11 of 12

Project No./Code
TAP M690-001
21992
Sheet Number 43



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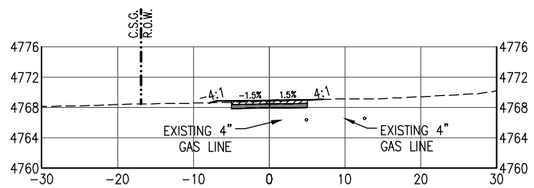

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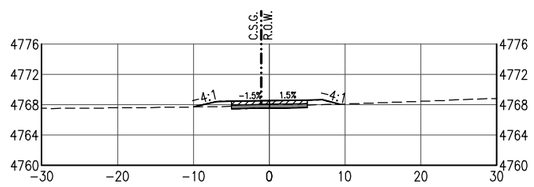

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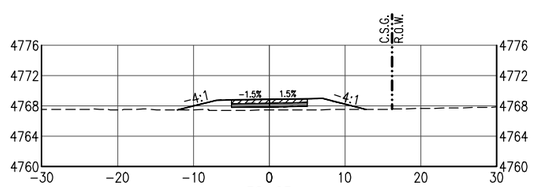

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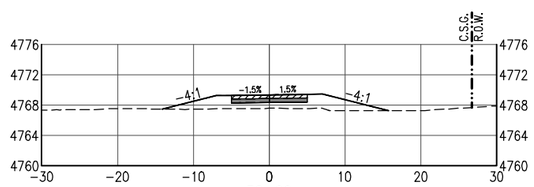

52+00

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Y:\shared\projects\Town of Johnstown\19658-Little Thompson River Trail\30 cadd\50 dwg\19658-030-Cross Sections.dwg | SHEET12 | michael.cunningham | Sep 20, 2022 - 3:54pm

Print Date: Sep 20, 2022			
File Name: 19658-030-Cross Sections.dwg			
Horiz. Scale:	Vert. Scale:		
Unit Information	Unit Leader Initials		

Sheet Revisions

Date:	Comments	Init.

Otak

As Constructed
No Revisions:
Revised:
Void:

LITTLE THOMPSON RIVER TRAIL
TRAIL CROSS SECTIONS

Designer:	SJB	Structure Numbers	
Detailer:	TMC		
Sheet Subset:	XSEC	Subset Sheets:	12 of 12

Project No./Code
TAP M690-001
21992
Sheet Number 44