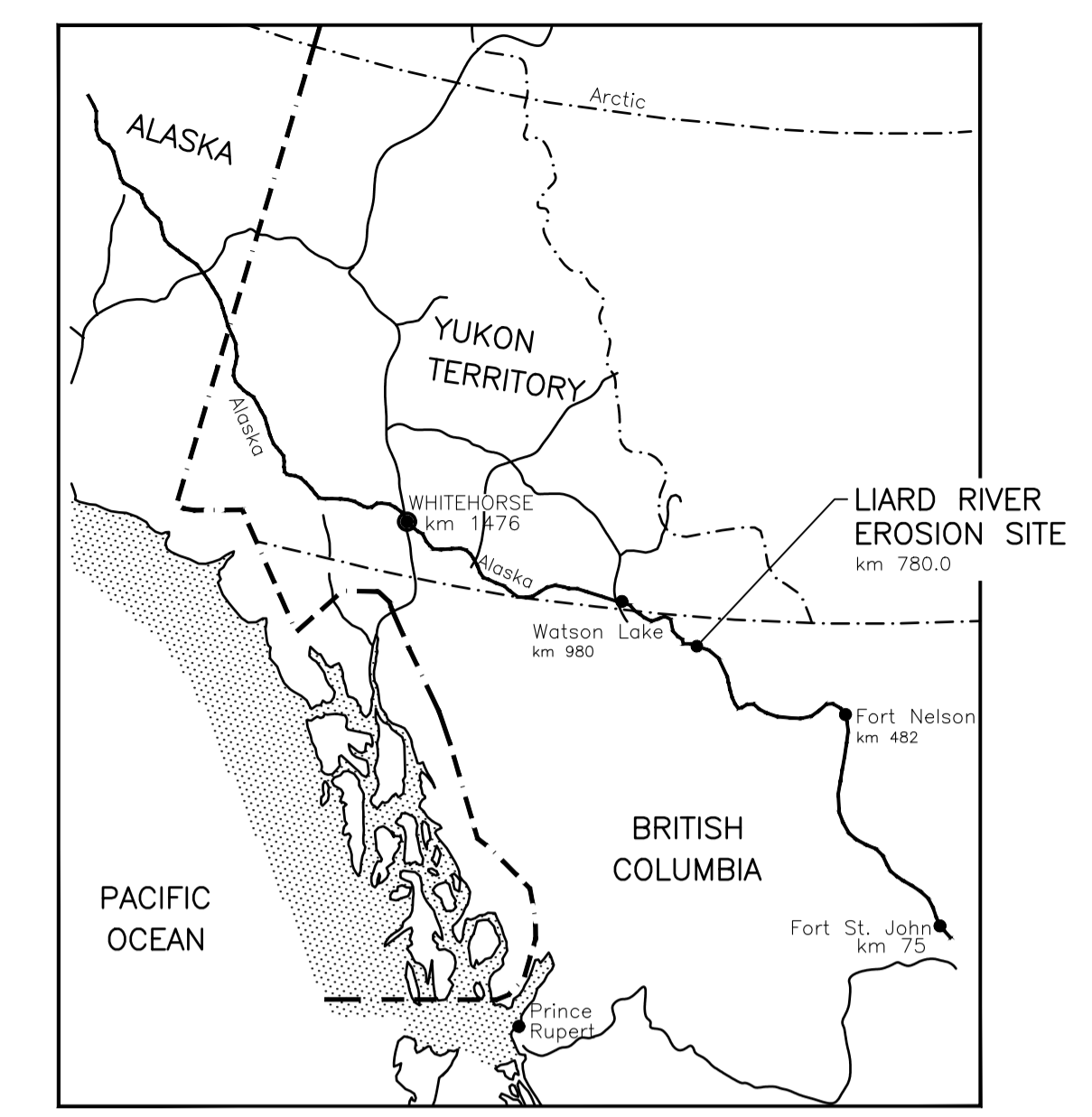
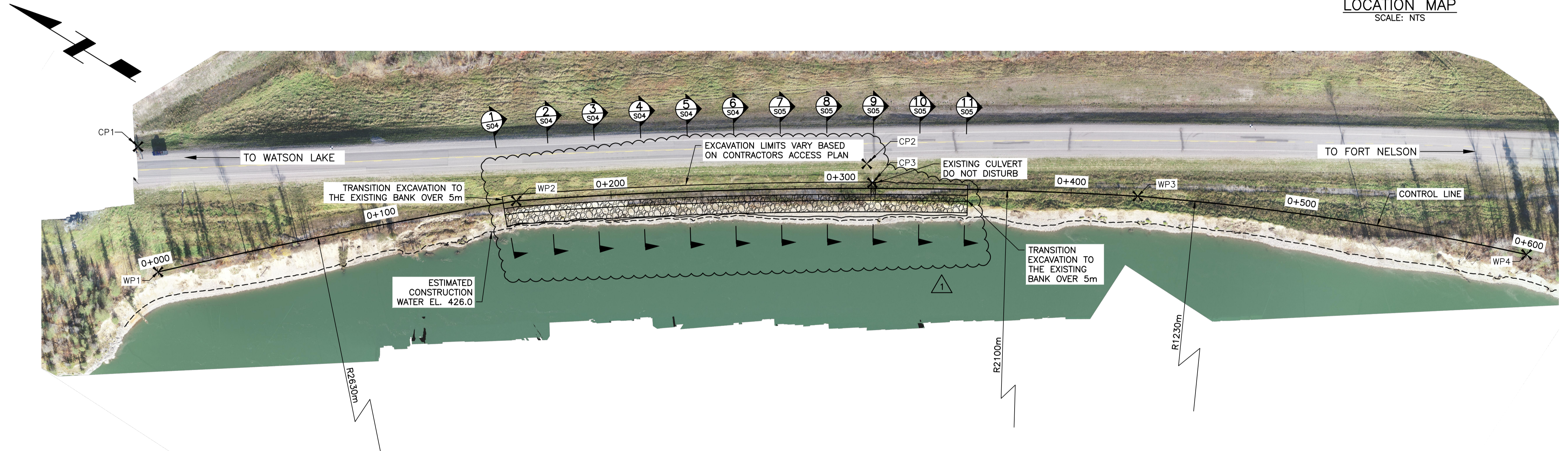


1. GENERAL

- 1.1 THE METRIC SYSTEM OF MEASUREMENT IS USED ON ALL DRAWINGS. ELEVATIONS AND STATIONS ARE SHOWN IN METRES AND ALL OTHER DIMENSIONS ARE SHOWN IN MILLIMETERS, UNLESS NOTED OTHERWISE (U.N.O.)
- 1.2 ALL ELEVATIONS REFERENCED TO CVGD28
- 1.3 PROJECTED COORDINATE NAD 1983 UTM ZONE 9N
- 1.4 AIR PHOTO AND SURVEY DATA CAPTURED ON 2020-10-02
- 1.5 REPAIRS BEING UNDERTAKEN ARE FOR THE EMERGENCY PROTECTION AND STABILIZATION OF THE HIGHWAY EMBANKMENT SLOPE.
- 1.6 DESIGN DIMENSIONS ARE BASED ON INSPECTION INFORMATION AND SURVEY DATA. ADJUSTMENTS TO THE DESIGN MAY BE REQUIRED BASED ON ACTUAL FIELD CONDITIONS AT THE TIME OF CONSTRUCTION. THE ENGINEER OF RECORD SHALL BE CONTACTED IF SIGNIFICANT DIFFERENCES ARE FOUND.



LOCATION MAP
SCALE: NTS



LIARD RIVER EROSION SITE - PLAN
SCALE: 1:1000

CONSTRUCTION SEQUENCE NOTES

1. PRIOR TO CONSTRUCTION, DISCUSS THE RIPRAP LAYOUT OF THE SITE WITH THE DEPARTMENTAL REPRESENTATIVE AND AGREE ON ANY CHANGES REQUIRED IF CONDITIONS DO NOT MATCH DRAWINGS.
2. INSTALL ENVIRONMENTAL PROTECTION MEASURES AND SITE ISOLATION AS NEEDED.
3. EXCAVATE, TRIM AND BACKFILL AS NECESSARY TO CONSTRUCT 1.5H:1V SLOPE SUITABLE FOR RIPRAP PLACEMENT.
4. PLACE RIPRAP TO DIMENSIONS AND ELEVATIONS SHOWN AND AS AGREED TO WITH DEPARTMENTAL REPRESENTATIVE.
5. TRIM AND PREPARE FINAL SLOPES AS REQUIRED.

RIPRAP NOTES

1. ESTIMATED DESIGN 50-YEAR FLOW WITHOUT CLIMATE CHANGE: 8440 m³/s.
 2. ESTIMATED DESIGN CONSTRUCTION FLOW: 1500 m³/s. (APPROXIMATE AVERAGE FLOW FOR AUGUST)
 3. CLASS 500 kg RIPRAP SHALL BE PLACED AT A MINIMUM OF 1500 mm THICK.
 4. MODIFIED CLASS 2000 kg RIPRAP SHALL BE PLACED AT A MINIMUM OF 1500mm THICK.
 5. PLACE RIPRAP AT A SLOPE NO STEEPER THAT 1.5H:1V
 6. PLACE NON-WOVEN FILTER FABRIC UNDER ALL ROCK RIPRAP.
 7. CLASS 500 kg RIPRAP SHALL CONTAIN ANGULAR ROCK WITH AN AVERAGE DIMENSION OF 725 mm, AND SHALL CONFORM TO THE FOLLOWING GRADATION REQUIREMENTS:
- | ROCK GRADATION % | WEIGHT LESS THAN (kg) | APPROXIMATE DIAMETER LESS THAN (mm) |
|------------------|-----------------------|-------------------------------------|
| 15% | 50 | 340 |
| 50% | 500 | 752 |
| 85% | 1500 | 1050 |
8. MODIFIED CLASS 2000 kg RIPRAP SHALL CONTAIN ANGULAR ROCK WITH AN AVERAGE DIMENSION OF 1200 mm AND NO SMALLER THAN 725 mm.

9. TOTAL ESTIMATED CLASS 500 kg RIPRAP VOLUME = 1320 m³
10. TOTAL ESTIMATED MODIFIED CLASS 2000 kg RIPRAP VOLUME = 540 m³
11. BOTTOM OF ROCK ELEVATION MAY BE INCREASED TO ACCOMMODATE HIGHER THAN ANTICIPATED WATER LEVELS. MAXIMUM TOP OF RIPRAP ELEVATION SHALL REMAIN AT 429.8 m.

WORKPOINT	NORTHING	EASTING	ELEVATION
WP1	6598640.648	651165.701	431.500
WP2	6598526.923	651276.360	431.500
WP3	6598301.523	651425.140	431.500
WP4	6598145.953	651495.879	431.500

WORKPOINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP1	6598677.605	651206.694	448.160	CONTROL POINT
CP2	6598407.930	651372.841	435.996	CONTROL POINT
CP3	6598401.379	651367.233	433.727	CSP CULVERT OUTLET TOP

Revision	Description	Date
1	ISSUED FOR ADDENDUM 001	21/09/29
0	ISSUED FOR TENDER	21/08/06



Project title
BRITISH COLUMBIA ALASKA HIGHWAY

EROSION REPAIRS
Emergency Embankment Stabilization
Liard River km 780
Project No.: R.117668.001

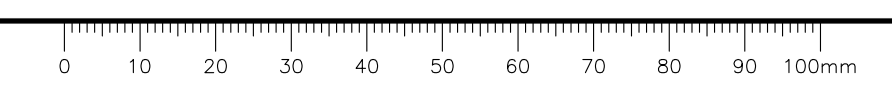
Designed by
S. HARADA

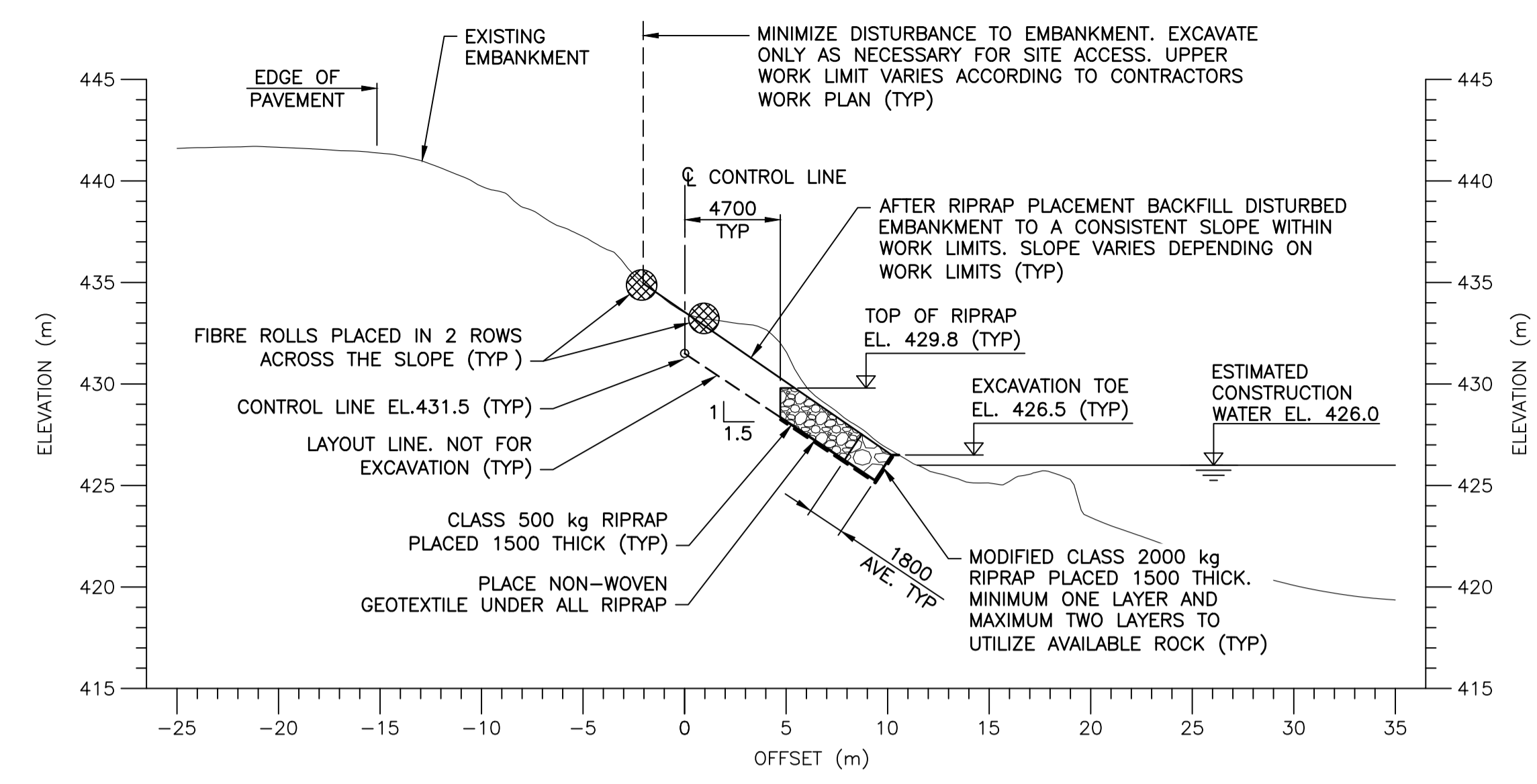
Drawn by
J. ERNEST

Approved by
K. HENSHAW

Drawing title
LIARD RIVER km 780
GENERAL ARRANGEMENT

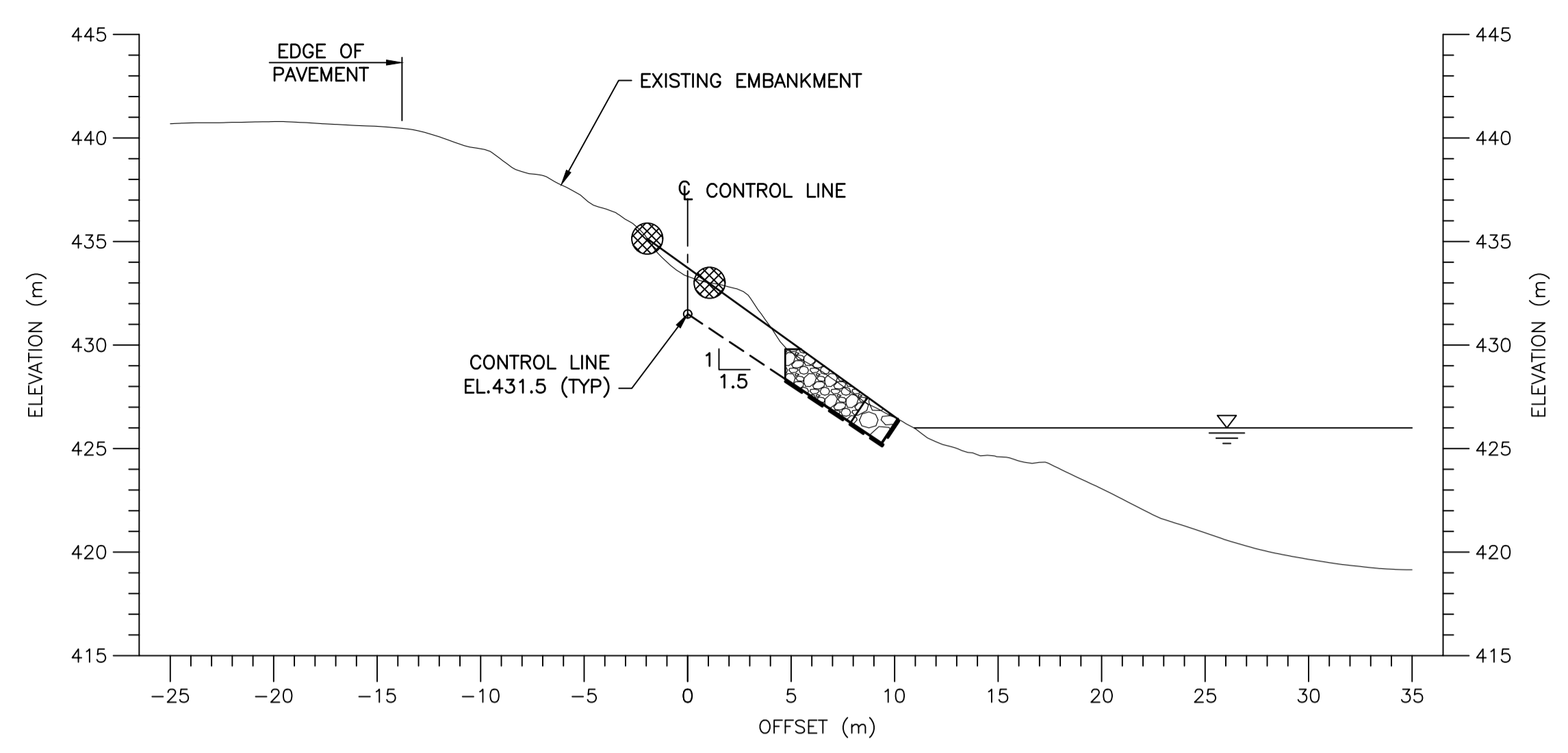
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R.117668.001	C03 OF 5	1





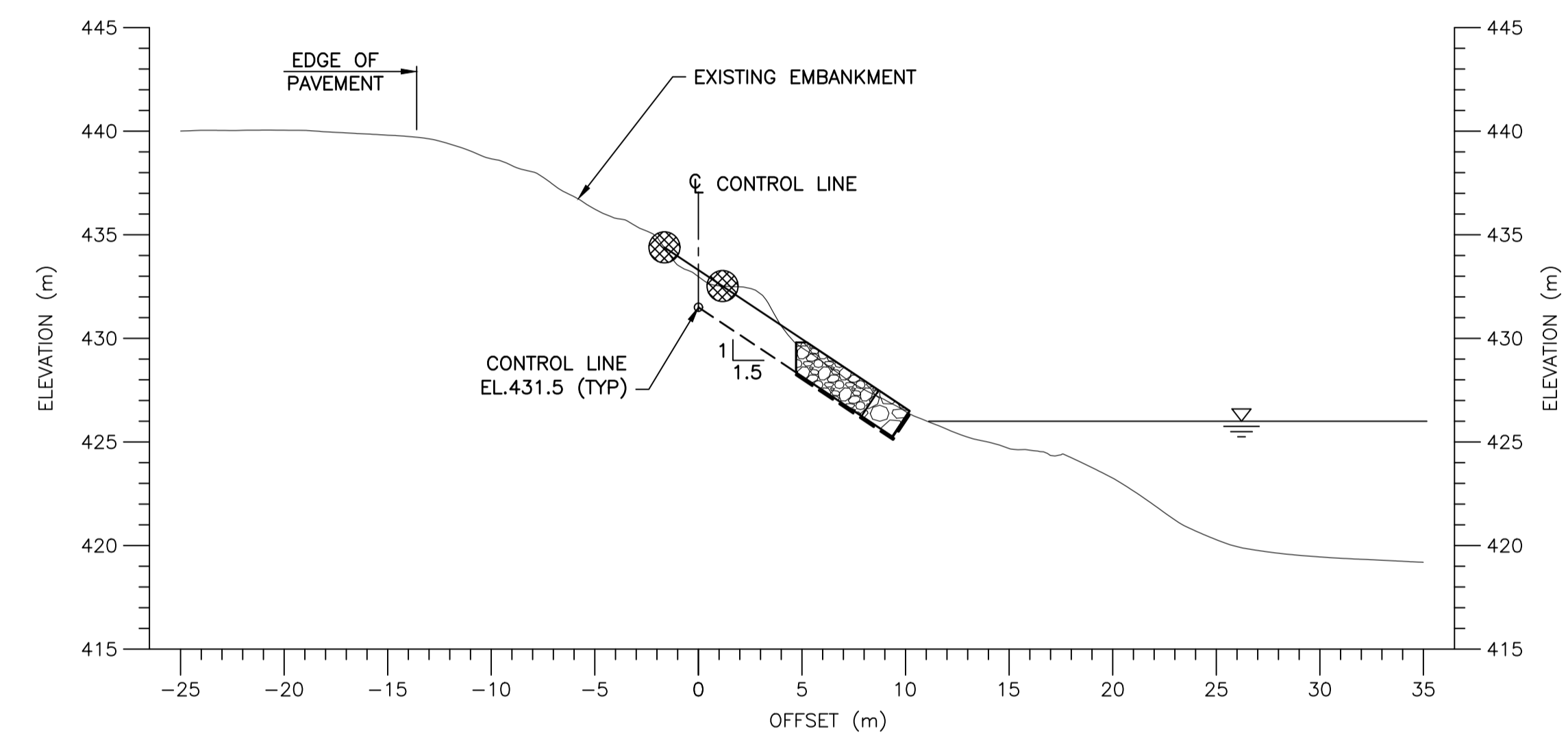
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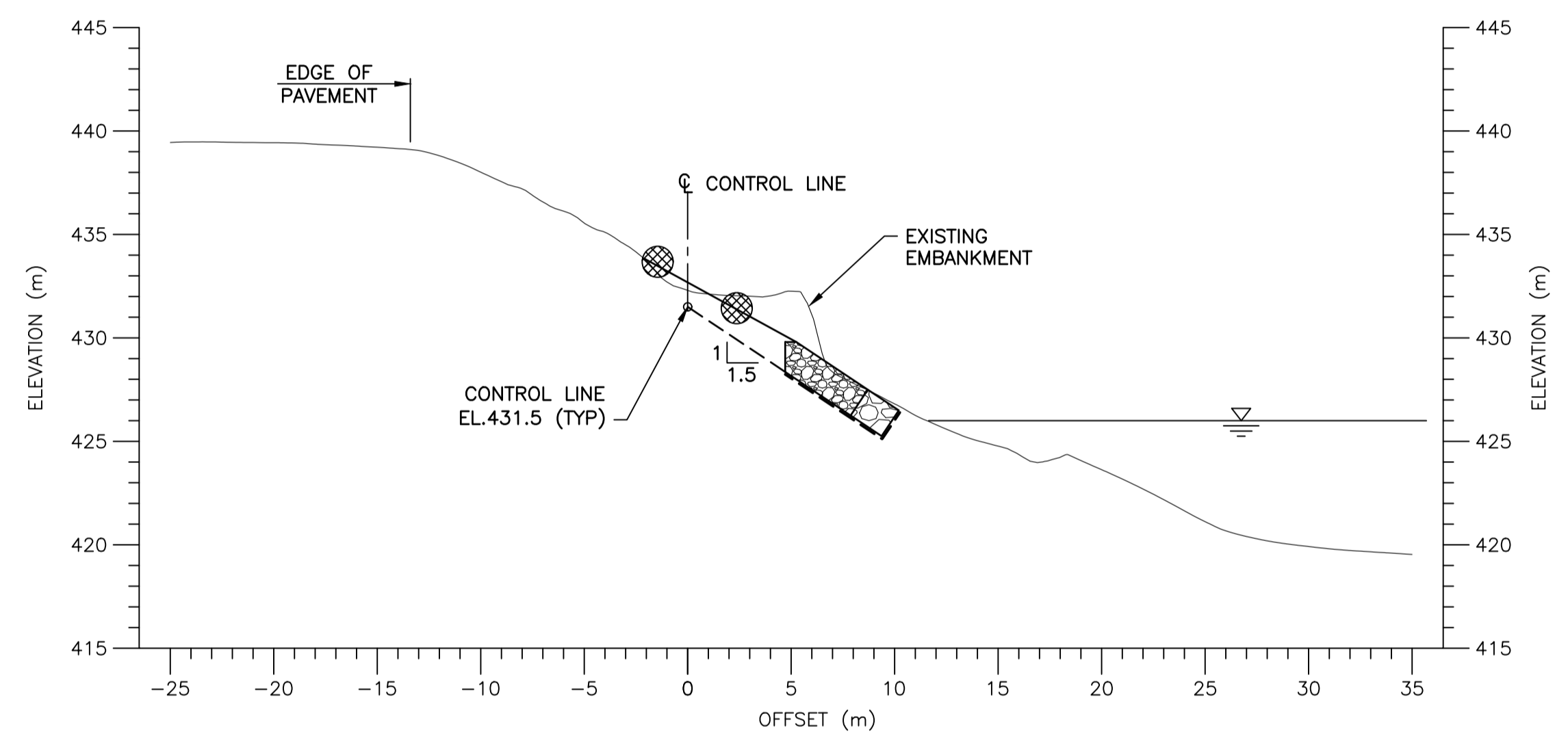
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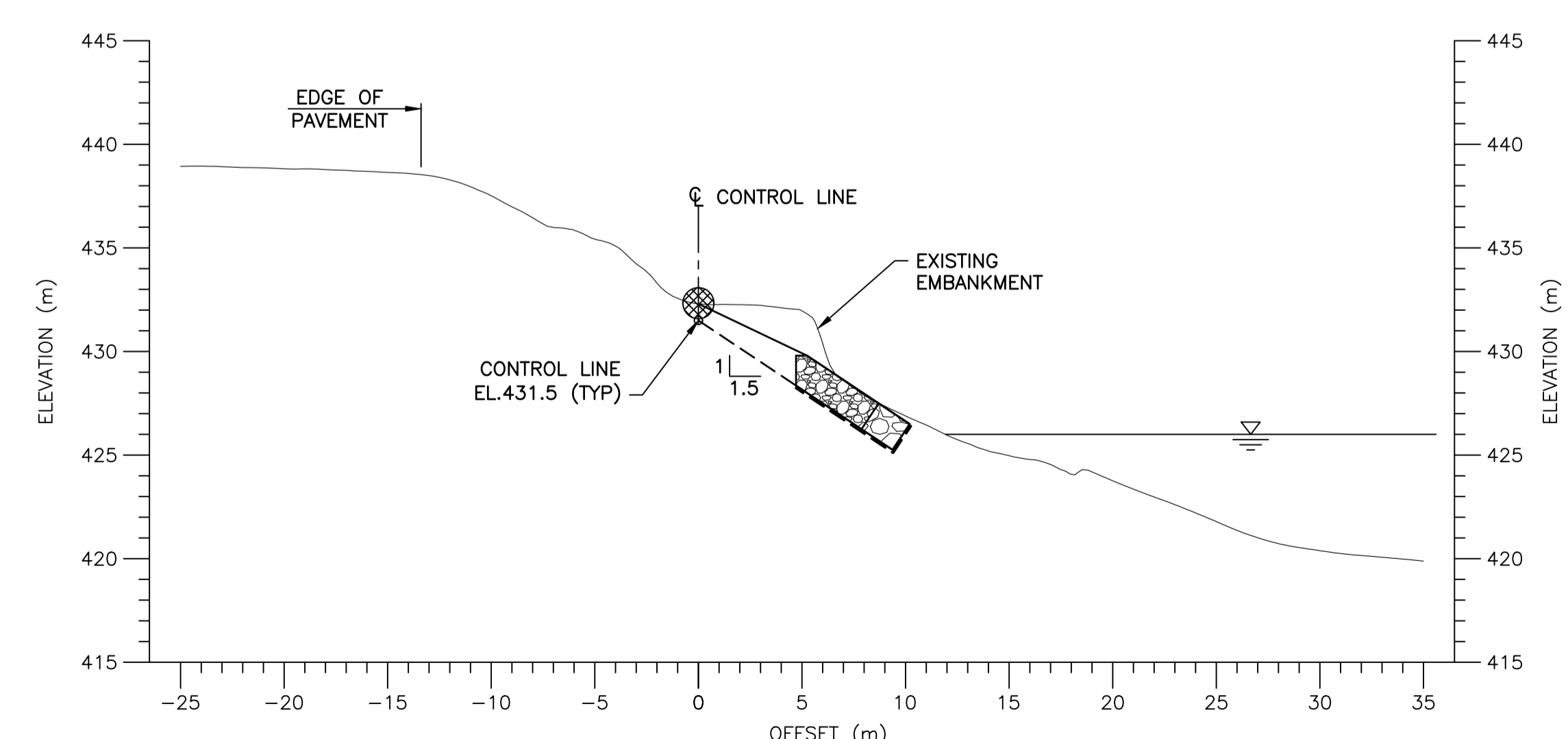
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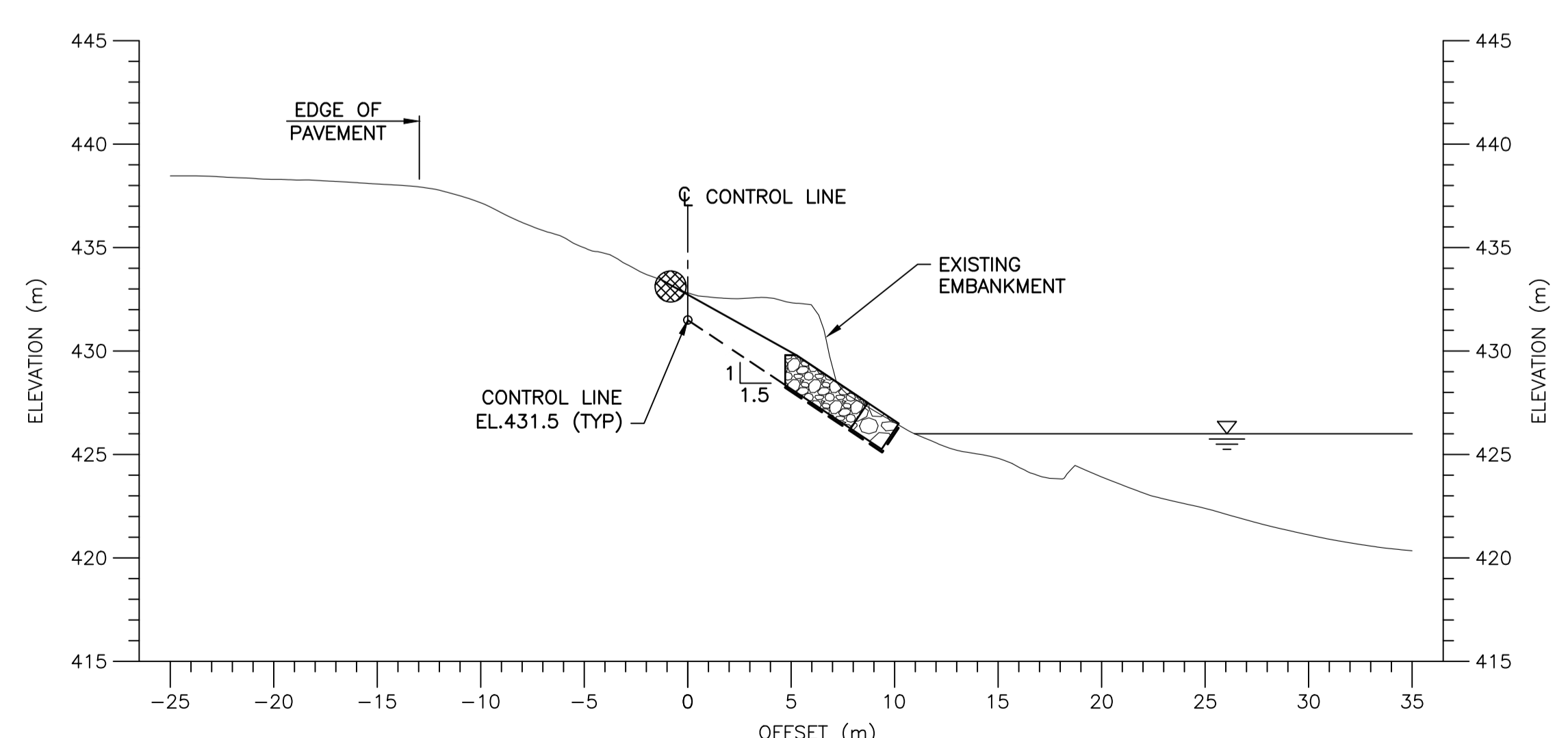
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SECTION 4
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STA. 0+234.000

SECTION 5
SCALE 1:250



STA. 0+254.000

SECTION 6
SCALE 1:250



1	ISSUED FOR ADDENDUM 001	21/09/29
0	ISSUED FOR TENDER	21/08/06
Revision	Description	Date

Client: client



Project title: BRITISH COLUMBIA ALASKA HIGHWAY

EROSION REPAIRS
Emergency Embankment Stabilization
Liard River km 780
Project No.: R.117668.001

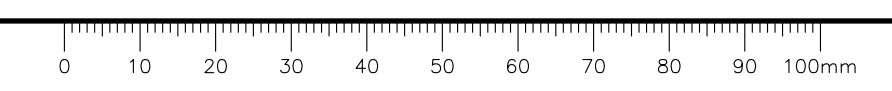
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Drawn by: J. ERNEST
Approved by: K. HENSHAW

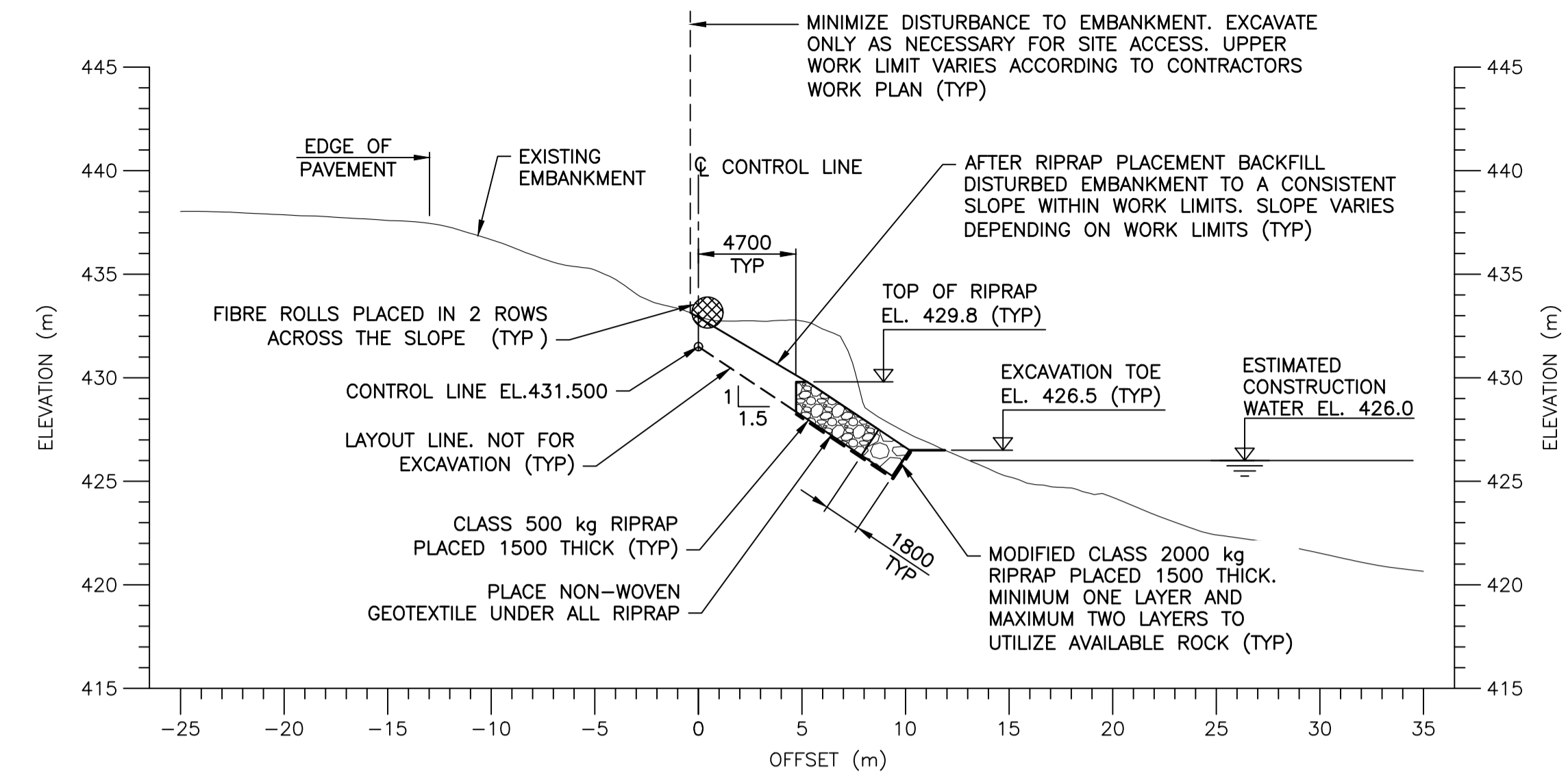
Drawing title: LIARD RIVER km 780

SECTIONS 1 OF 2

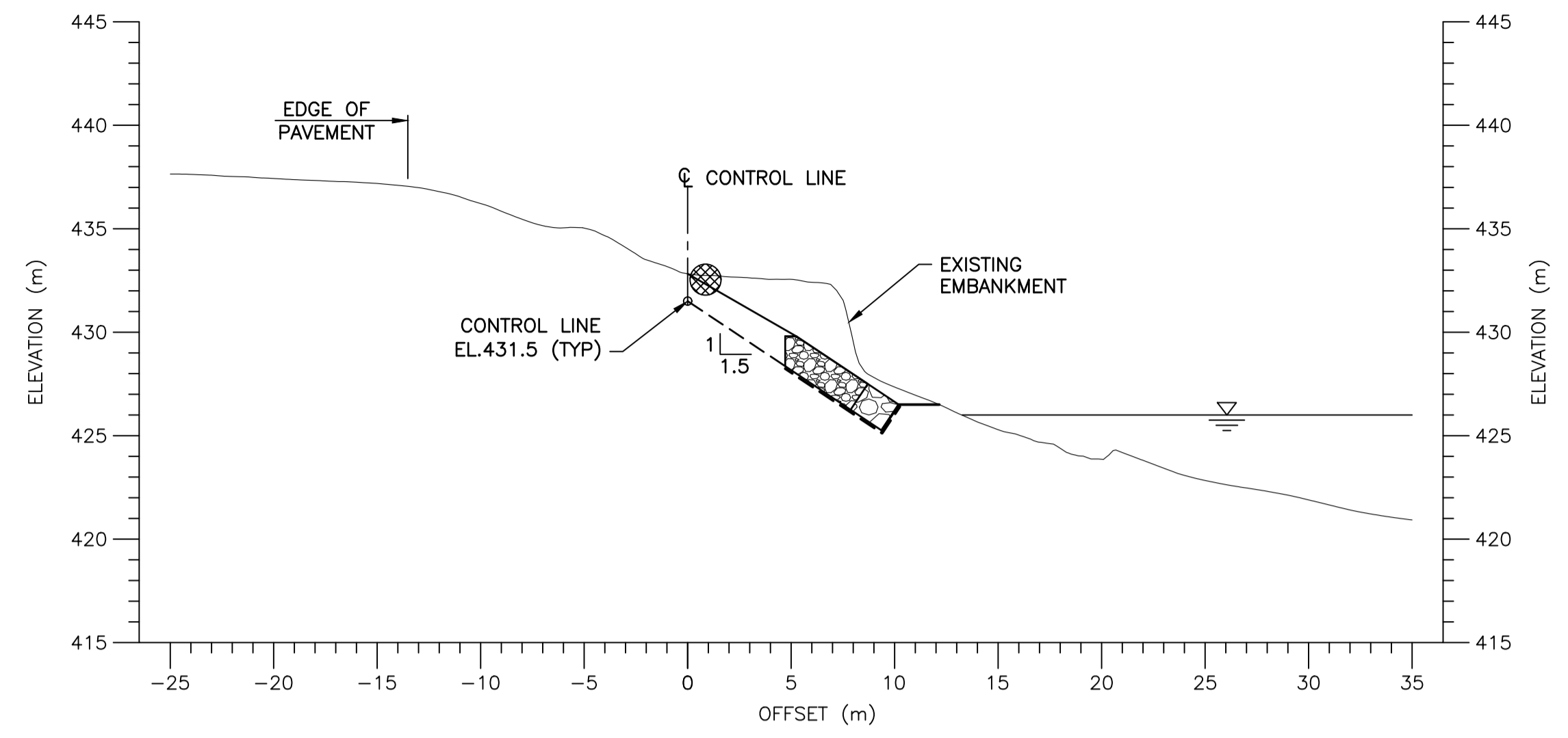
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R.117668.001	C04	1

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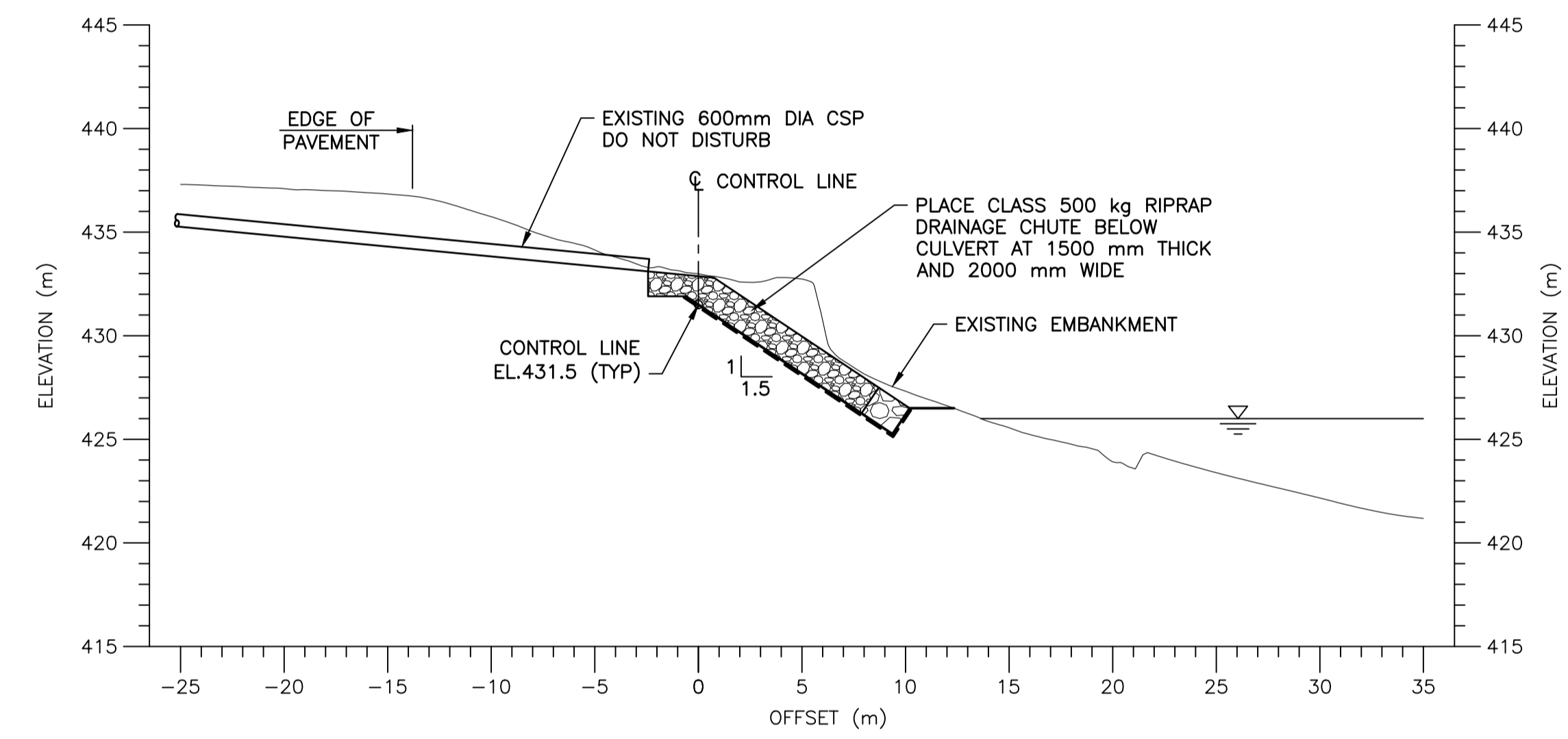




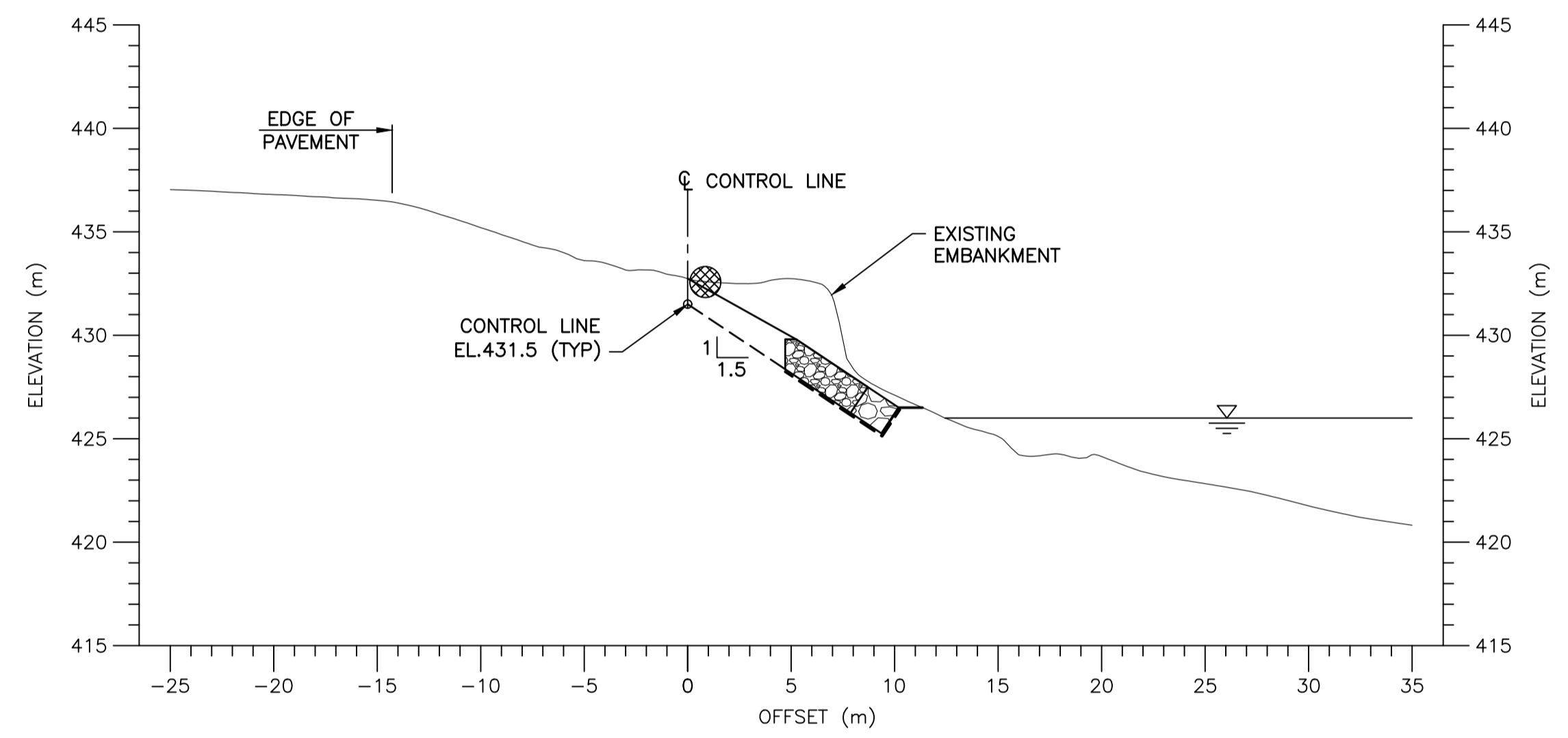
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S03



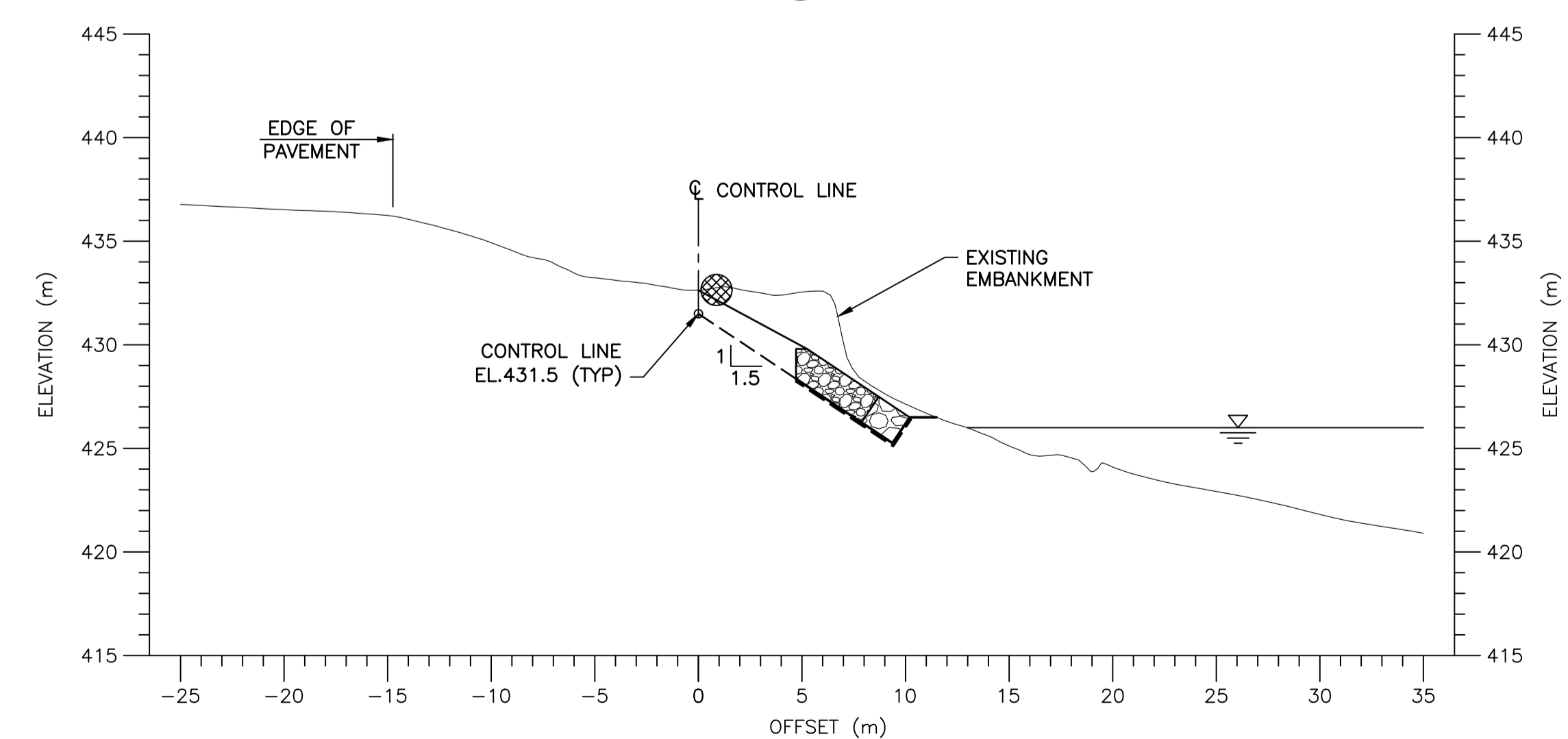
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S03



STA. 0+314.000
SECTION 9
SCALE 1:250
S03



STA. 0+334.000
SECTION 10
SCALE 1:250
S03



STA. 0+354.000
SECTION 11
SCALE 1:250
S03

Revision	Description	Date
1	ISSUED FOR ADDENDUM 001	21/09/29
0	ISSUED FOR TENDER	21/08/06

Client: _____ client



Project title: **BRITISH COLUMBIA ALASKA HIGHWAY**

EROSION REPAIRS
Emergency Embankment Stabilization
Liard River km 780
Project No.: R.117668.001

Designed by: **S. HARADA** Conçu par

Drawn by: **J. ERNEST** Dessiné par

Approved by: **K. HENSHAW** Approuvé par

Drawing title: **LIARD RIVER km 780 SECTIONS 2 OF 2**

Project no./No. du projet	Drawing no./No. du dessin	Revision no.
R.117668.001	C05 OF 5	1

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