

May 17, 2024

Mr. Guillermo Cuellar, P.E.  
Assistant Webb County Engineer  
1620 Santa Ursula, 2nd Floor  
Laredo, Texas 78040

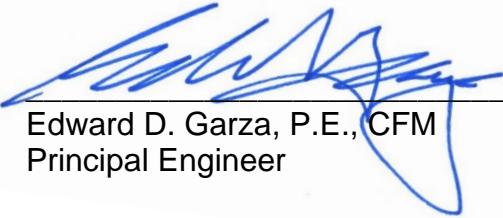
**Re: Webb County Mangana Hein Road Extension Project**

Dear Mr. Cuellar,

Submitted for your use please find closing documents including plan of record drawings for the Mangana Hein Road Extension Project. This project is subject to a one (1) year warranty upon acceptance by Commissioner's Court. We appreciate the opportunity to have assisted the County with this improvement project.

Sincerely,

**CRANE ENGINEERING CORP.**  
Firm # F-3353

  
Edward D. Garza, P.E., CFM  
Principal Engineer

*Enclosures*

**Closing Documents Checklist  
Public Projects**

Date: 5/17/2024

**Project: Mangana Hein Road Extension Project**

**Owner:** Webb County

**Contractor:** Anderson Columbia, Inc.

	<b>Who</b>	<b>Completed</b>
* 1 Engineer's Completion Report	Crane	✓
* 2 Contractor's one (1) year Warranty Letter to Owner	Contractor	Pending
* 3 Contractor's Release of Liens to Developer/Owner	Contractor	Pending
4 As-Builts ( PDF)	Crane	✓
5 Punchlist Pre-Final Inspection	Crane	✓
6 Punchlist Final Inspection	Crane	✓
7 Copy of Change Orders	Crane	✓
8 Copy of Field Changes	Crane	✓
9 Test Results	Testing Lab	Pending
10 CCTV Inspection Letter from Environmental Dept.	City	N/A
11 O&M Manual for Irrigation System	Contractor	N/A
12 Copy of bulk water payment receipt	Contractor	N/A
13 Copy of overtime fees & other fees receipt	Contractor	Pending
14 Notice of Termination (NOT)	Contractor	Pending

\* *Provide all documents as original*

Note: All items to be included in USB Drive

Legend:  
 ✓ Complete  
 N / A Not Applicable  
 P Pending

Mr. Guillermo Cuellar, P.E.  
Assistant Webb County Engineer  
1620 Santa Ursula, 2nd Floor  
Laredo, Texas 78040

**Re: Webb County Mangana Hein Road Extension Project**

Mr. Cuellar,

In accordance with the contract between Webb County and Anderson Columbia Co., Inc., and pursuant to the specifications in the contract documents, I take this opportunity to file this Completion Report with reference to the above mentioned project as follows:

STATE OF TEXAS           §

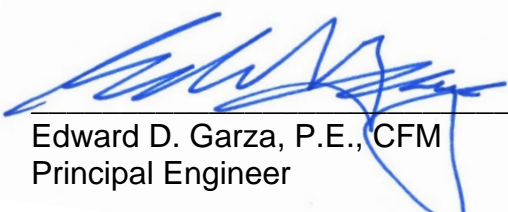
COUNTY OF WEBB       §

This is to certify that I, Edward D. Garza, P.E., Principal Engineer, have inspected the work completed by Anderson Columbia Co., Inc. and found that workmanship and materials supplied are in accordance with the plans and specifications for said project. This certification is subject to acceptance of remaining items required from Contractor and testing lab as shown on closing documents checklist.

SIGNED THIS 17<sup>th</sup> day of May, 2024.

Sincerely,

**CRANE ENGINEERING CORP.**  
Firm # F-3353

  
Edward D. Garza, P.E., CFM  
Principal Engineer



September 8, 2023

Mr. Guillermo Cuellar, P.E.  
Assistant Webb County Engineer  
1620 Santa Ursula, 2nd Floor  
Laredo, Texas 78040

**Re: Webb County Mangana Hein Road Extension Project  
Pre-Final Inspection Punchlist**

Dear Mr. Cuellar,

A pre-final inspection was conducted on 9/7/23 on the above referenced project. Sign-in sheet was prepared by Mr. Gerardo Rodriguez of Webb County. This inspection applies only to original contract work items from STA 0+00 to 52+68 and does not include additional road construction authorized by Webb County.

The following people were present:

- Guillermo Cuellar, P.E., Assistant County Engineer
- Matthew Martin, Webb County Inspector
- Gerry Rodriguez, Webb County ROW Agent
- Jerry Carrillo, Anderson Columbia
- Salvador Hernandez, Anderson Columbia
- Edward D. Garza, P.E., CFM – Crane Engineering
- Alfredo Martinez, P.E., CFM – Crane Engineering

The following items require attention from the Contractor before final acceptance can be recommended:

- 1) Establish bar ditches along both sides of road within ROW; Refer to Sheet 13 for detail; Backfill along asphalt edge to eliminate vertical drop from asphalt to subgrade;
- 2) Re-establish gravel filters and silt fence after developing bar ditches; Coordinate with Engineer on relocating up to three (3) gravel filters to drainage crossing at STA 52+67.85;
- 3) Install MBGF and concrete rip-rap at all drainage crossings. Discussion of RFI#6 held on site to confirm understanding of MBGF placement on site; All parties agreed to follow RFI#6 submittal and response; (copy of RFI attached)
- 4) Re-establish wire fence on west side of drainage crossing B at STA 41+21.54; Fence work required on both sides of headwall; H. Hereford property owner.

- 5) Remove exposed steel from back of headwall and provide rub finish at end of headwall to eliminate rough finish at drainage crossing B at STA 41+21.54;
- 6) Drainage crossing C at STA 52+67.85 constructed with box culvert exposed at road finish grade; Review of plans indicate a cover of 5.5" to 8.75" from top of box culvert to asphalt finish grade. Discussion held on reviewing product submittals for box culvert to determine type of box culvert installed.

*Note: Crane reviewed product submittal, and box culvert submittal was not submitted by contractor. Crane recommended to perform an as-built survey of drainage crossing C to assess existing condition. Webb County agreed. Discussion held on adding additional concrete rip-rap, gravel filters, and ROW grading at headwall locations.*

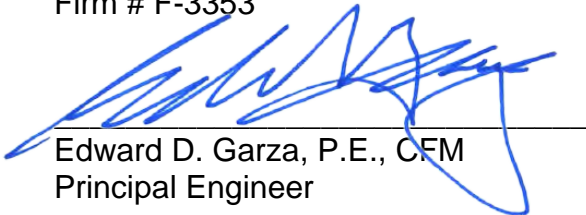
- 7) Add reflectors at each drainage crossing after MBGF installation;
- 8) Remove TCP upon completion and acceptance of project by Webb County;
- 9) Remove excess material and provide general clean-up;
- 10) Remove excess yellow and white paint material from asphalt surface close to drainage crossing C;
- 11) Provide redlined construction plans to Engineer to reflect any field changes;

Please advise when punchlist items have been completed to schedule final inspection.

Sincerely,

**CRANE ENGINEERING CORP.**

Firm # F-3353

  
Edward D. Garza, P.E., CFM  
Principal Engineer



Cc: All above

# REQUEST FOR INFORMATION

Project Name: Webb County – Mangana Hein Rd. Extension Project

RFI # 6 Date: 8/30/23

Request by: Salvador Hernandez

Plan Sheet # 9 & 15 Specification: \_\_\_\_\_

Subject Metal Beam Guard Fence

After reviewing the standard for the metal guard fence end treatments, we noticed that there are 2 driveways that will be blocked, if we install the end treatments at Culvert "A" and Culvert "C".

At culvert "A" there is a driveway located southeast of the culvert.

At culvert "C" there is a driveway located northeast of the culvert.

Please provide guidance.

## RESPONSE

Response By: Alfredo Martinez, P.E., CFM AM Date: 9/1/2023

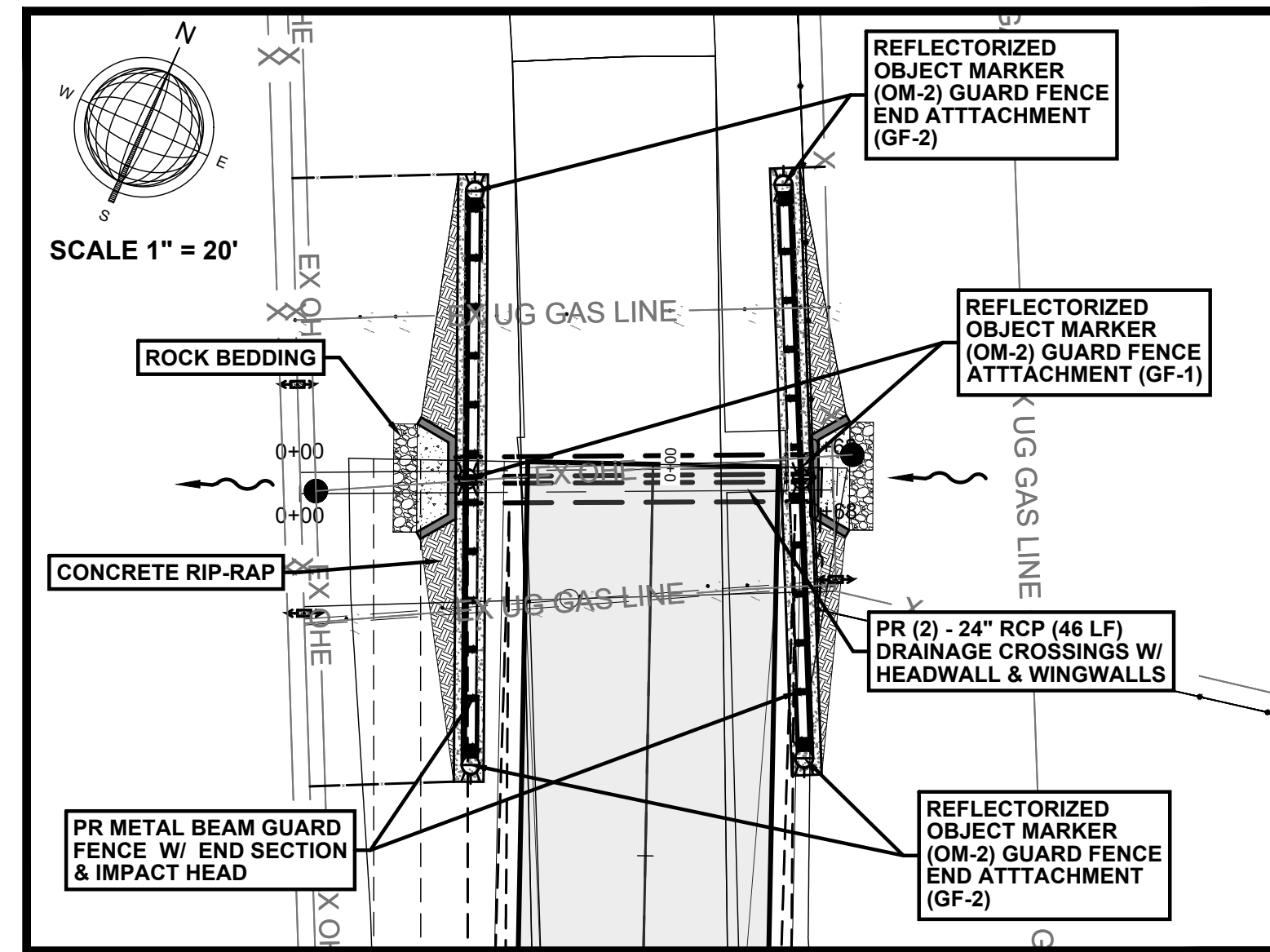
As demonstrated on the plan sheet markups included in this RFI, the MBGF should not be in conflict with these existing driveways. Additionally, the approach to MBGF installation was clarified with the response to RFI no.1.

The MBGF for Culvert "A" does not obstruct the existing driveway but does extend into the existing fence opening. We recommend to shorten the MBGF at that location.

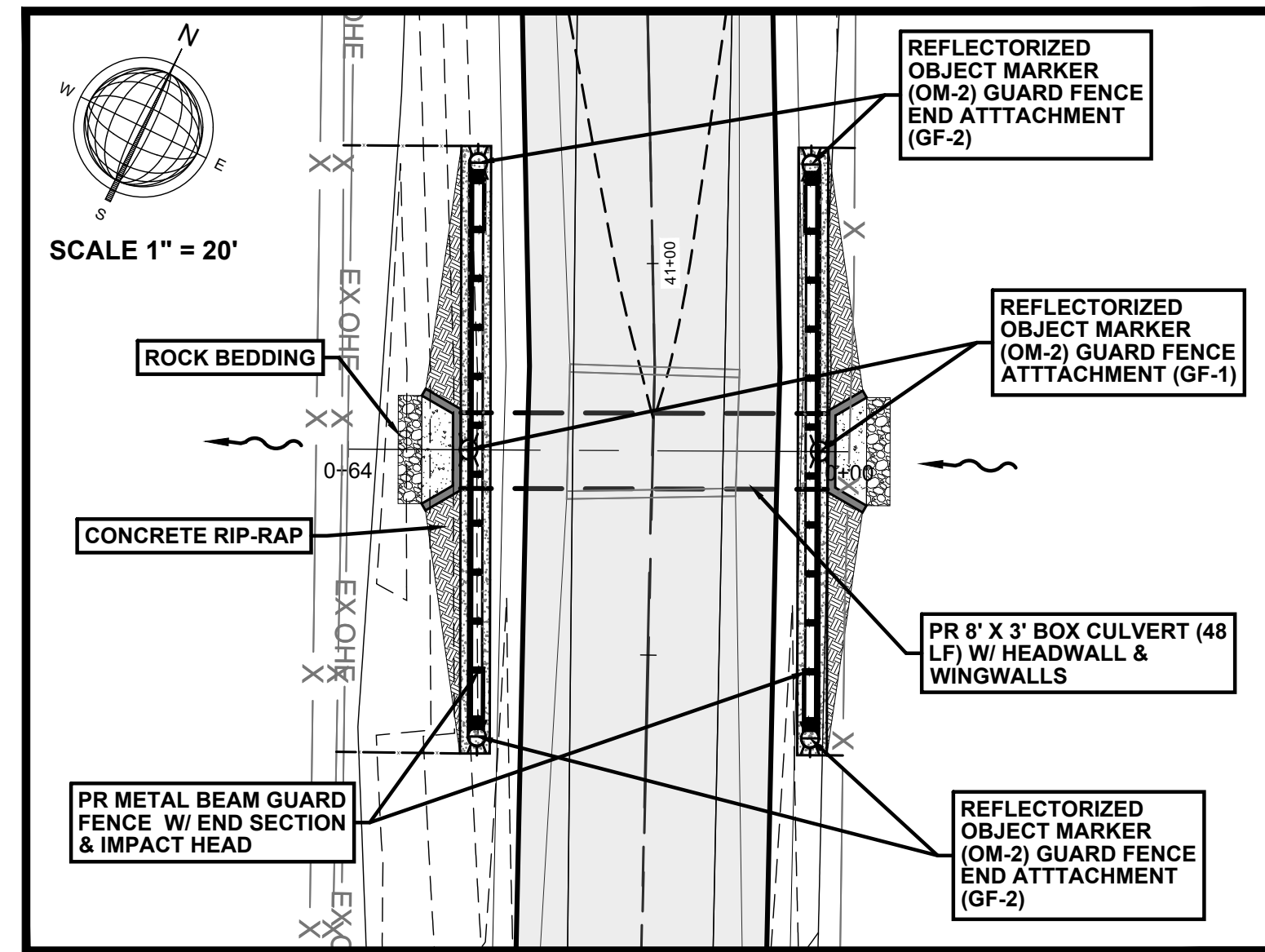
Please see the attached plan markup providing additional clarification based on the same approach provided within the RFI no.1 response. The markup incorporates the modification to the MBGF at Culvert "A" discussed above.

Let me know if you require any further clarification. We can schedule an on-site meeting to discuss.

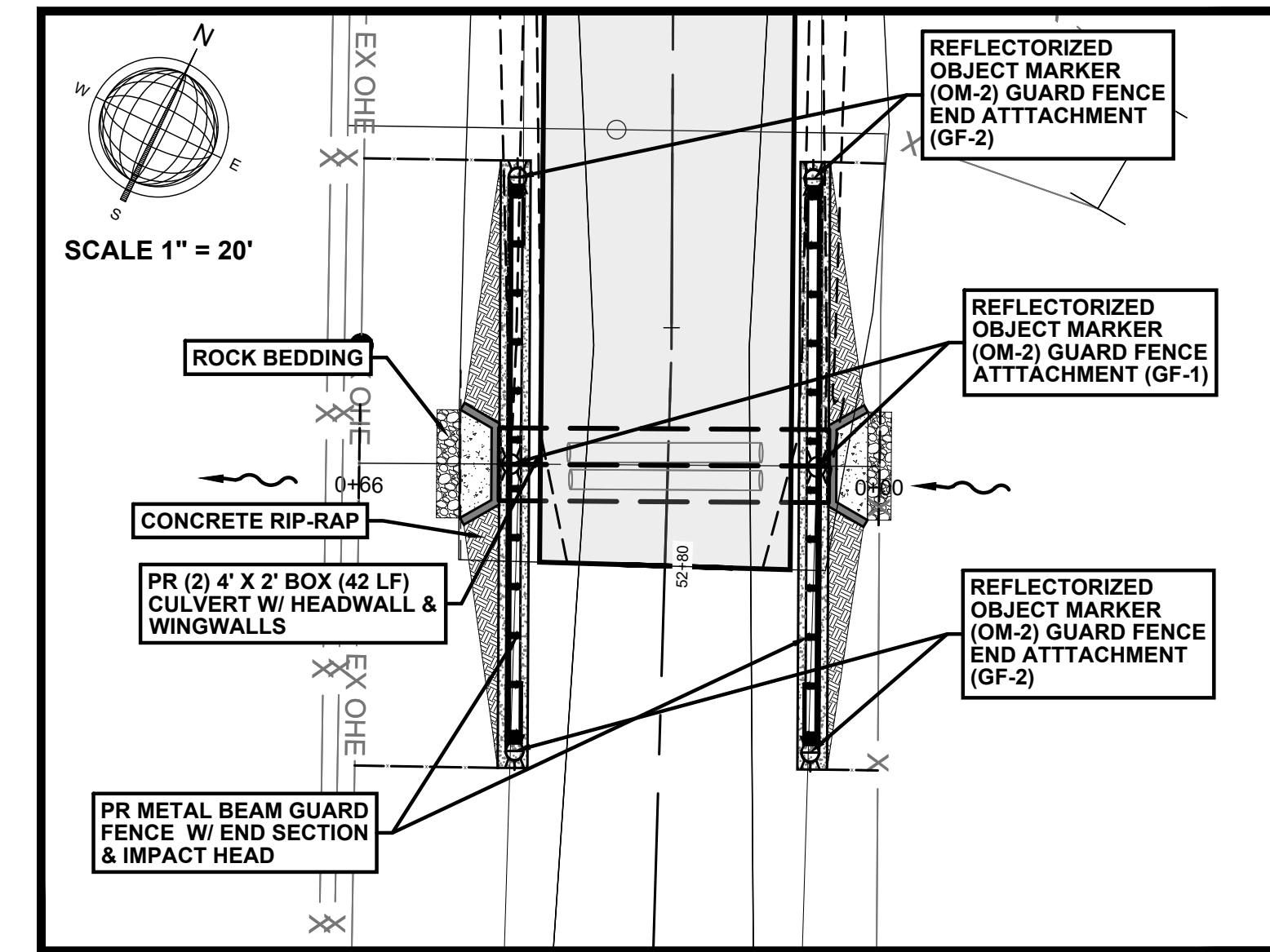
DRAINAGE CROSSING A - ROAD STATION 0+00



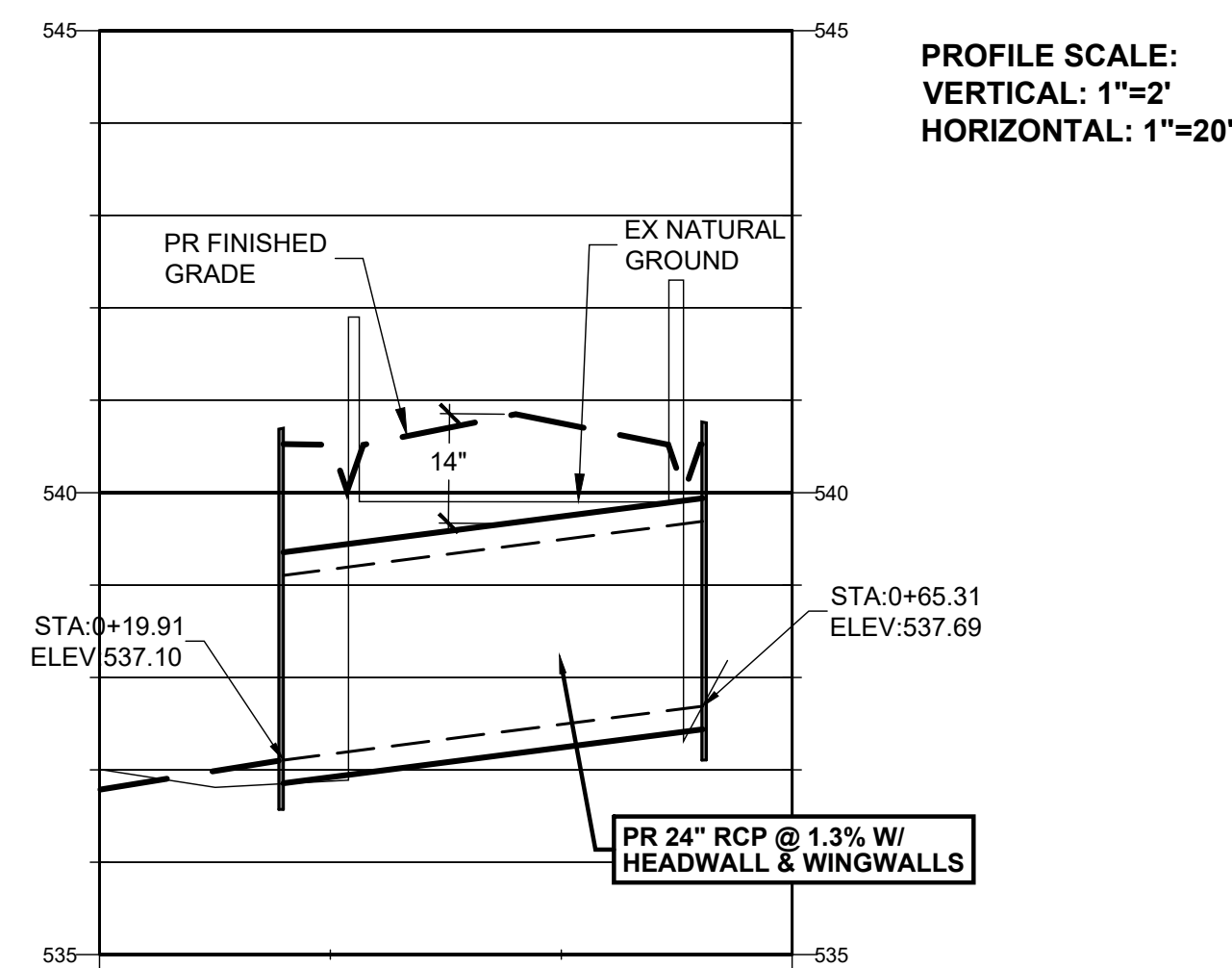
DRAINAGE CROSSING B - ROAD STATION 41+21.54



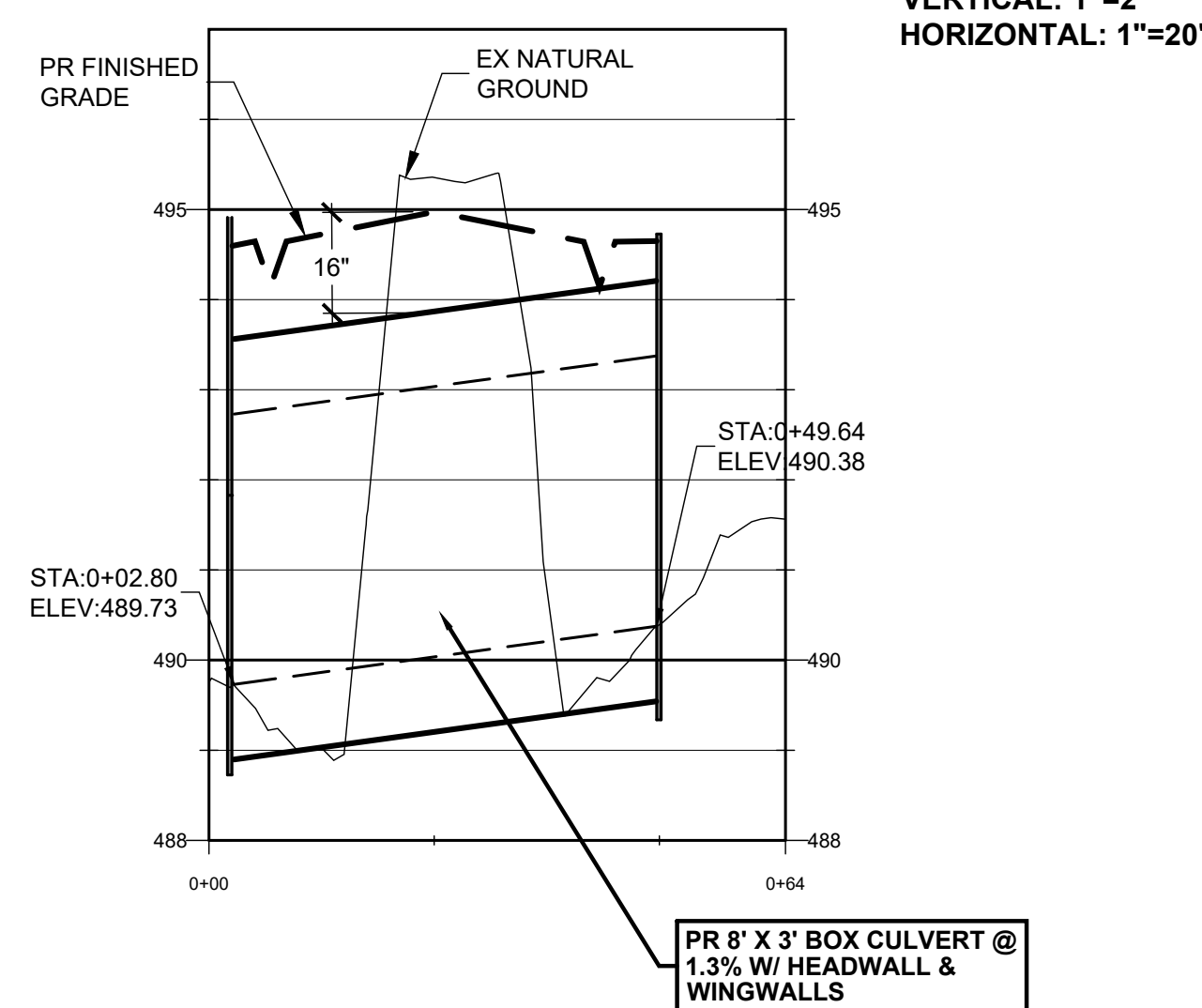
DRAINAGE CROSSING C - ROAD STATION 52+67.85



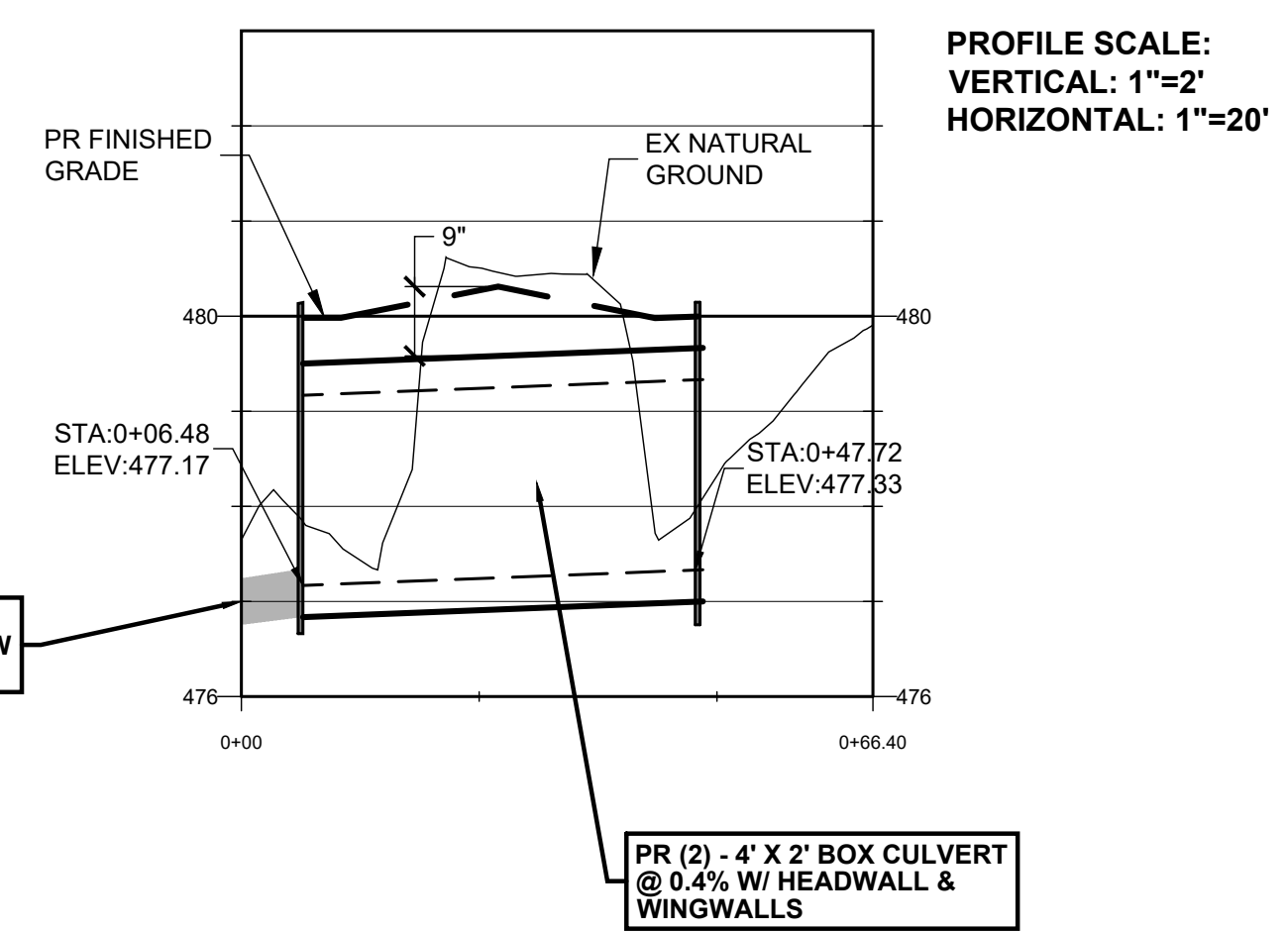
DRAINAGE CROSSING (A-1) PROFILE



DRAINAGE CROSSING (B) PROFILE



DRAINAGE CROSSING (C) PROFILE



- GENERAL NOTES
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING AND LOCATING ALL EXISTING UTILITY LINES AND COORDINATING ALL RELOCATIONS AND REMOVALS WITH EACH UTILITY COMPANY. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES CAUSED BY FAILURE TO LOCATE AND PRESERVE UNDERGROUND UTILITIES.
  - SEE SHEET 08 "STORMWATER MANAGEMENT & SW3P DETAILS" AND STANDARD SHEETS 39 THRU 44 FOR CULVERT, HEADWALL, & WINGWALL DETAILS.
  - EXISTING CULVERT STRUCTURE PHOTOS ARE SHOWN AT THE BOTTOM OF THIS SHEET FOR REFERENCE.



No.	Revision/Issue	Date

FIRM NAME AND ADDRESS  
**CRANE ENGINEERING CORP.**  
 1310 JUNCTION DRIVE SUITE B  
 LAREDO, TX 78041 956-712-1996  
 FIRM REGISTRATION NO. F-3353

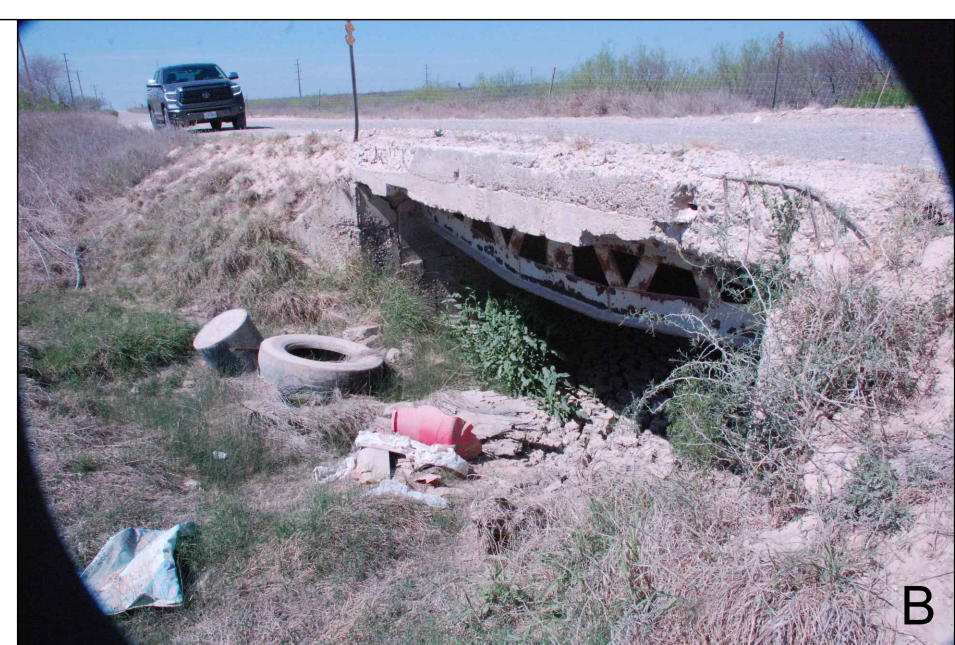
Project Name and Address  
**MANGANA-HEIN ROAD  
 EXTENSION PROJECT  
 WEBB COUNTY, TEXAS**

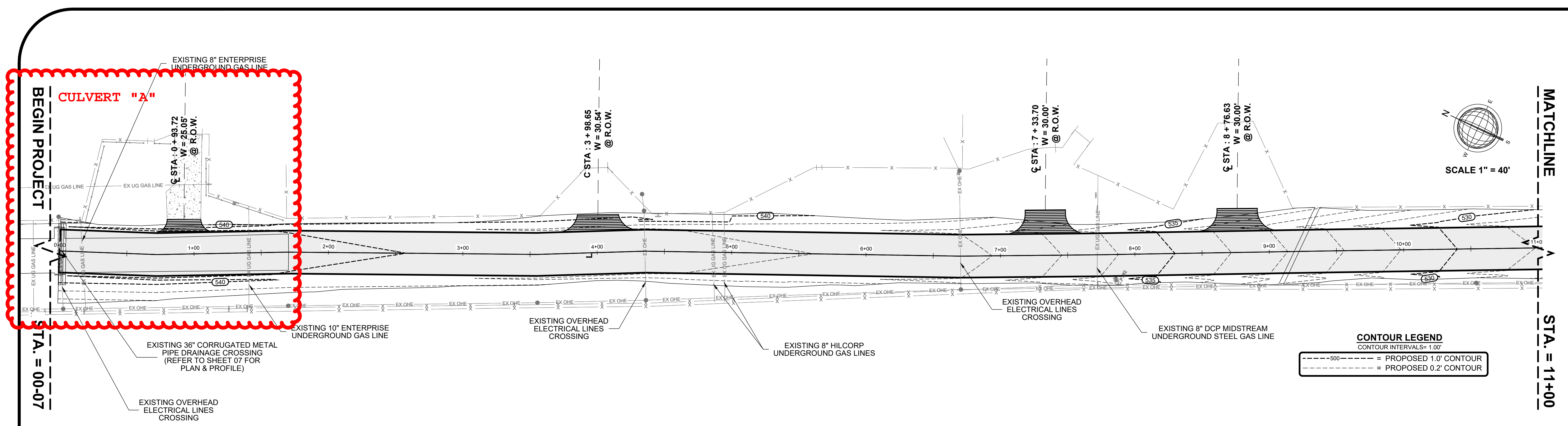
Sheet Title  
**DRAINAGE CROSSINGS PLAN & PROFILE**

Date  
 8/12/2022

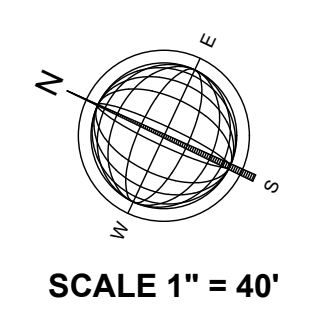
Scale  
 As Noted

Sheet  
**07**



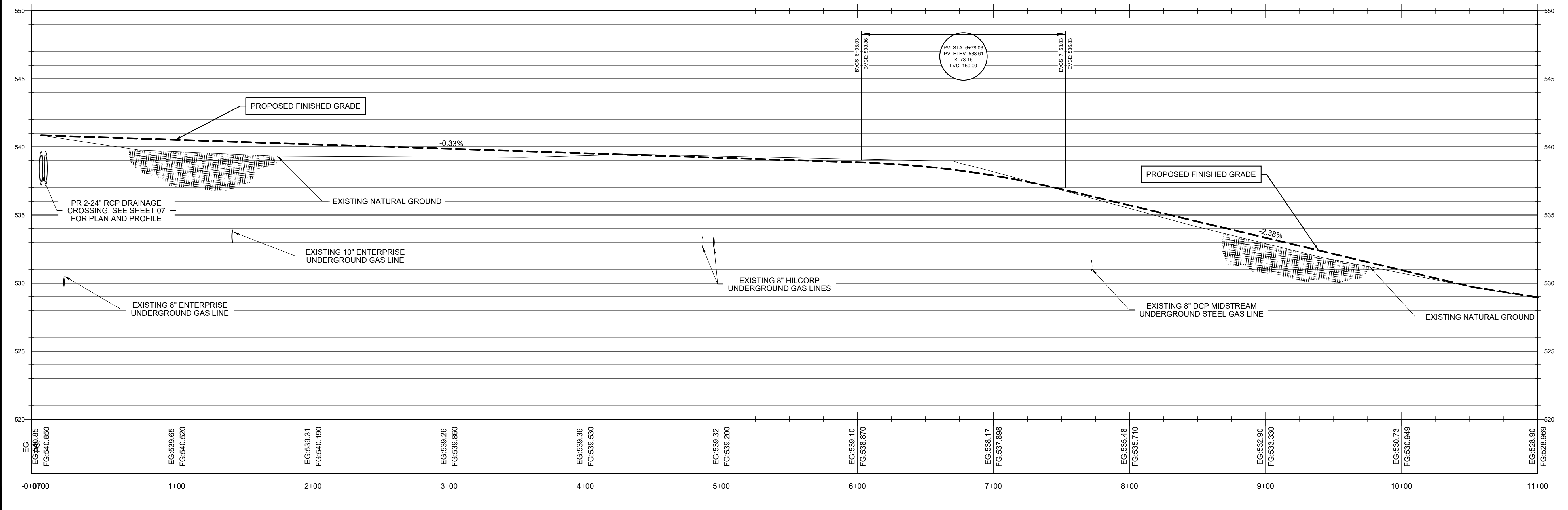


- GENERAL NOTES
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING AND LOCATING ALL EXISTING UTILITY LINES AND SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES CAUSED BY FAILURE TO LOCATE AND PRESERVE UNDERGROUND UTILITIES.
  - EXISTING GAS LINES SHOWN ON THIS SHEET WERE OBTAINED FROM EACH RESPECTIVE GAS COMPANY BY COORDINATING WITH EACH COMPANY & EITHER RECEIVING INFORMATION OR MARKINGS IN THE FIELD WITH DEPTHS PROVIDED BY EACH GAS COMPANY.
  - ENGINEER DOES NOT GUARANTEE DEPTH OF GAS LINE.
  - PROPOSED DRIVEWAY CONSTRUCTION STOPS AT RIGHT OF WAY LINE. CONTRACTOR TO PROVIDE BID UNDER ADDITIVE SECTION TO CHARGE PRIVATE LANDOWNERS TO CONSTRUCT DRIVEWAY WITHIN THEIR PROPERTY. CONTRACTOR RESPONSIBLE FOR SECURING PERMISSION FROM EACH LANDOWNER.



PROFILE SCALE:  
VERTICAL: 1"=4'  
HORIZONTAL: 1"=40'

MANGANA-HEIN ROAD CENTERLINE PROFILE



EG - EXISTING NATURAL GROUND ELEVATION  
FG - PROPOSED FINISHED GRADE ELEVATION



No.	Revision/Issue	Date

FIRM NAME AND ADDRESS  
**CRANE ENGINEERING CORP.**  
 1310 JUNCTION DRIVE SUITE B  
 LAREDO, TX 78041 956-712-1996  
 FIRM REGISTRATION NO. F-3353

Project Name and Address  
**MANGANA-HEIN ROAD  
 EXTENSION PROJECT  
 WEBB COUNTY, TEXAS**









Sheet Title  
**STREET PAVING PLAN & PROFILE  
 (STATION : 00-07 - 11+00)**

Date 8/12/2022	Sheet <b>09</b>
Scale H - 1" = 40' V - 1" = 4'	

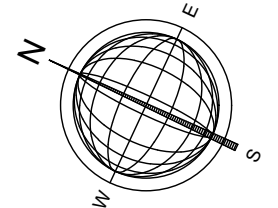





GENERAL NOTES

-  PHASE 1
-  PHASE 2
-  PHASE 3
-  PHASE 4
-  PHASE 5
-  PHASE 6
-  PHASE 7
-  PHASE 8

ALL DRAINAGE IS PHASE 1 & PHASE 2




SCALE 1" = 40'



No.	Revision/Issue	Date

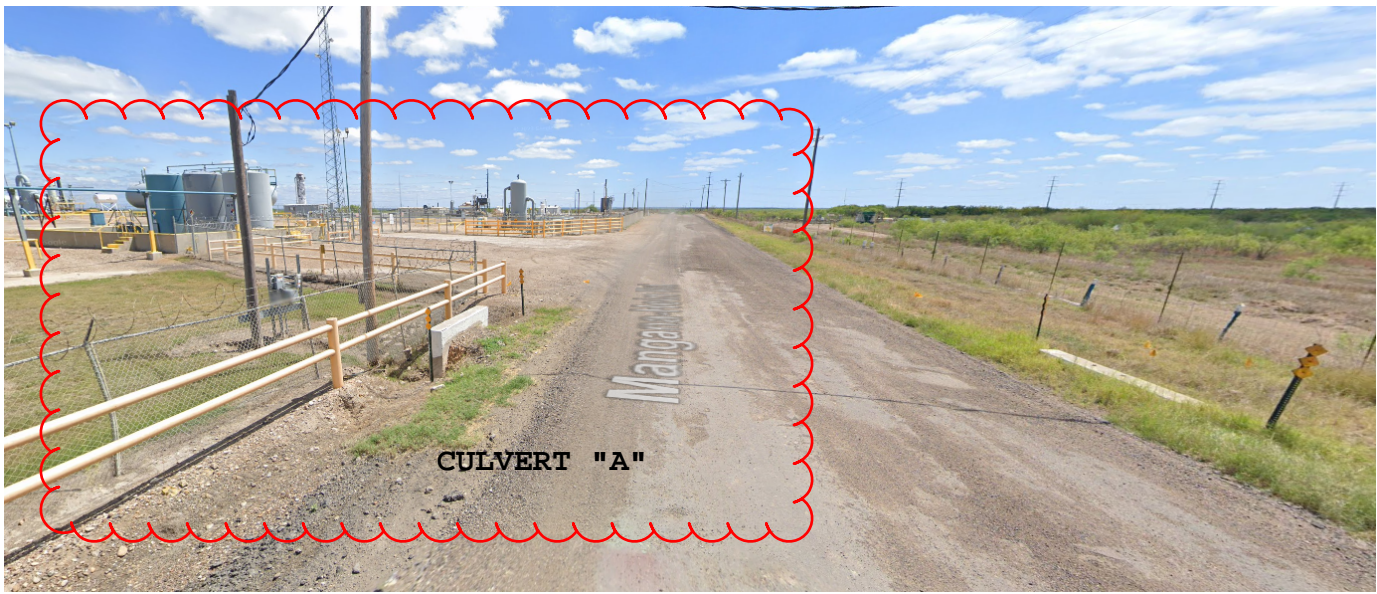
FIRM NAME AND ADDRESS  
**CRANE ENGINEERING CORP.**  
 1310 JUNCTION DRIVE SUITE B  
 LAREDO, TX 78041 956-712-1996  
 FIRM REGISTRATION NO. F-3353



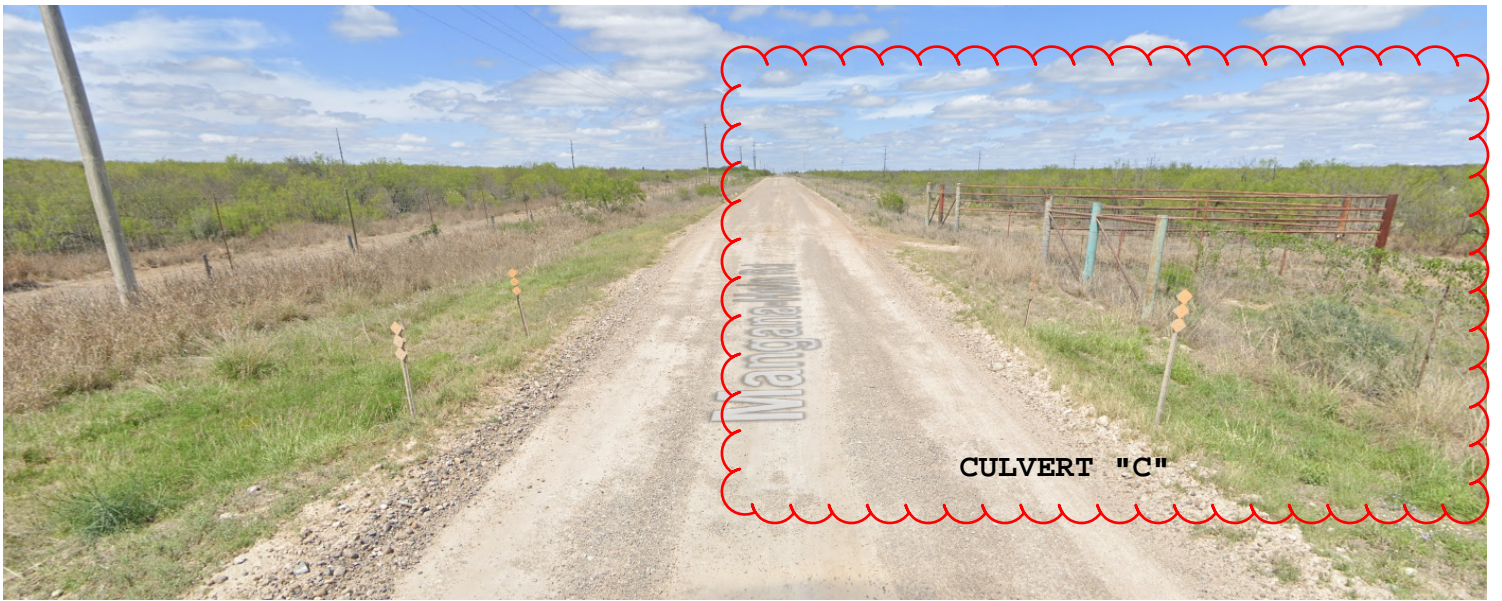
Project Name and Address  
**MANGANA-HEIN ROAD EXTENSION PROJECT**  
**WEBB COUNTY, TEXAS**

Sheet Title  
**CONSTRUCTION PHASING PLAN**

Date 9/6/2022	Sheet <b>15</b>
Scale AS NOTED	



**CULVERT "A"**



**CULVERT "C"**

October 3, 2023

Mr. Guillermo Cuellar, P.E.  
Assistant Webb County Engineer  
1620 Santa Ursula, 2nd Floor  
Laredo, Texas 78040

**Re: Webb County Mangana Hein Road Extension Project  
Pre-Final Inspection Follow-Up Letter**

Dear Mr. Cuellar,

To follow up on our pre-final inspection, we conducted an as-built survey of drainage crossing C to compare to original design. During our field work, we noticed that drainage crossing C as-built location and elevations were not matching plans, so we also conducted an as-built survey of drainage crossings A and B.

Based on our field work and comparison to construction plans, the following observations are made:

- 1) All three (3) drainage crossings are not constructed per design;
- 2) Drainage crossing C was constructed with box culvert top wall exposed and subject to direct loading;
- 3) As-built pipe slopes for drainage crossing A are below 0.25%; Design plan requires 1.3% slope; This condition will impact hydraulic performance and increase maintenance cost to Webb County;
- 4) Drainage crossing B & C as-built slopes are not built as per plans, but can still work hydraulically as designed. These crossings do have issues with as-built elevations and placement that need additional design to accommodate existing conditions.

Based on these observations, we recommend the following actions:

- A. Reconstruct drainage crossing A;
- B. Accept drainage crossing B but provide additional site improvements to protect site due to placement of crossing;
- C. Accept drainage crossing C but provide additional road and site improvements to provide adequate cover and protect site due to placement of crossing

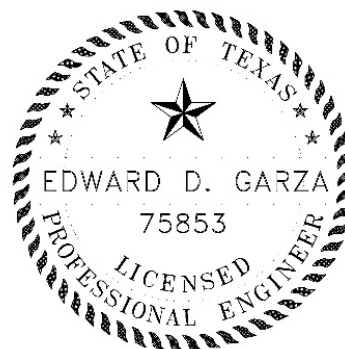
Acceptance of these recommendations will require additional design and construction phase services outside of our scope. Please advise if you would like for us to prepare a scope and fee for this additional work to address as-built conditions.

Sincerely,

**CRANE ENGINEERING CORP.**

Firm # F-3353

  
Edward D. Garza, P.E., CFM  
Principal Engineer



Cc: Mr. Nathan Bratton, esq.  
Webb County Civil Legal Director

September 8, 2023  
Updated January 11, 2024

Mr. Guillermo Cuellar, P.E.  
Assistant Webb County Engineer  
1620 Santa Ursula, 2nd Floor  
Laredo, Texas 78040

**Re: Webb County Mangana Hein Road Extension Project  
Pre-Final Inspection Punchlist**

Dear Mr. Cuellar,

A pre-final inspection was conducted on 9/7/23 on the above referenced project. Sign-in sheet was prepared by Mr. Gerardo Rodriguez of Webb County. This inspection applies only to original contract work items from STA 0+00 to 52+68 and does not include additional road construction authorized by Webb County.

The following people were present:

- Guillermo Cuellar, P.E., Assistant County Engineer
- Matthew Martin, Webb County Inspector
- Gerry Rodriguez, Webb County ROW Agent
- Jerry Carrillo, Anderson Columbia
- Salvador Hernandez, Anderson Columbia
- Edward D. Garza, P.E., CFM – Crane Engineering
- Alfredo Martinez, P.E., CFM – Crane Engineering

The following items require attention from the Contractor before final acceptance can be recommended:

- 1) Establish bar ditches along both sides of road within ROW; Refer to Sheet 13 for detail; Backfill along asphalt edge to eliminate vertical drop from asphalt to subgrade;
- 2) Re-establish gravel filters and silt fence after developing bar ditches; Coordinate with Engineer on relocating up to three (3) gravel filters to drainage crossing at STA 52+67.85;
- 3) Install MBGF and concrete rip-rap at all drainage crossings. Discussion of RFI#6 held on site to confirm understanding of MBGF placement on site; All parties agreed to follow RFI#6 submittal and response; (copy of RFI attached)
- 4) Re-establish wire fence on west side of drainage crossing B at STA 41+21.54; Fence work required on both sides of headwall; H. Hereford property owner.

- 5) Remove exposed steel from back of headwall and provide rub finish at end of headwall to eliminate rough finish at drainage crossing B at STA 41+21.54;
- 6) Drainage crossing C at STA 52+67.85 constructed with box culvert exposed at road finish grade; Review of plans indicate a cover of 5.5" to 8.75" from top of box culvert to asphalt finish grade. Discussion held on reviewing product submittals for box culvert to determine type of box culvert installed.

*Note: Crane reviewed product submittal, and box culvert submittal was not submitted by contractor. Crane recommended to perform an as-built survey of drainage crossing C to assess existing condition. Webb County agreed. Discussion held on adding additional concrete rip-rap, gravel filters, and ROW grading at headwall locations.*

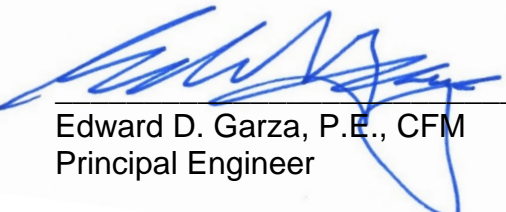
- 7) Add reflectors at each drainage crossing after MBGF installation;
- 8) Remove TCP upon completion and acceptance of project by Webb County;
- 9) Remove excess material and provide general clean-up;
- 10) Remove excess yellow and white paint material from asphalt surface close to drainage crossing C;
- 11) Provide redlined construction plans to Engineer to reflect any field changes;
- 12) Remove silt from inside all three (3) drainage crossings;
- 13) Add concrete to all rough edges on headwalls and wing walls to provide smooth finish;
- 14) Compact soil around all drainage crossings and grade ROW to drain toward drainage crossings; See note 1.

Please advise when punchlist items have been completed to schedule final inspection.

Sincerely,

**CRANE ENGINEERING CORP.**

Firm # F-3353



---

Edward D. Garza, P.E., CFM  
Principal Engineer

Cc: All above

April 17, 2024

Mr. Guillermo Cuellar, P.E.  
Assistant Webb County Engineer  
1620 Santa Ursula, 2nd Floor  
Laredo, Texas 78040

**Re: Webb County Mangana Hein Road Extension Project  
Pre-Final Inspection Punchlist**

Dear Mr. Cuellar,

A follow up to the pre-final inspection conducted on 9/7/23 was conducted on 4/16/24 on the above referenced project. This inspection applies only to original contract work and additional items from STA 0+00 to 52+68 and does not include additional road construction authorized by Webb County.

The following people were present:

- Jerry Carrillo, Anderson Columbia
- Salvador Hernandez, Anderson Columbia
- Edward D. Garza, P.E., CFM – Crane Engineering
- Alfredo Martinez, P.E., CFM – Crane Engineering

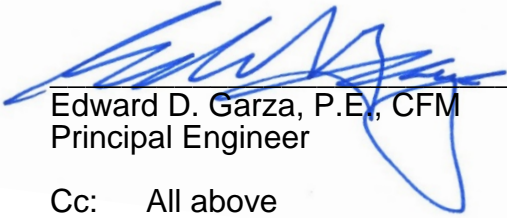
The following items require attention from the Contractor before final acceptance can be recommended:

- 1) Re-establish silt fence along completed ROW grading; Refer to plan sheet #6 for locations;
- 2) Re-establish wire fence on west side of drainage crossing B at STA 41+21.54 and drainage crossing A; (*Refer Image #1*)
- 3) Add object markers at each drainage crossing after MBGF installation; Correct yellow adhesive reflective material;
- 4) Remove TCP upon completion and acceptance of project by Webb County;
- 5) Provide redlined construction plans to Engineer to reflect any field changes; If any.
- 6) Remove silt from inside all three (3) drainage crossings;
- 7) Add concrete to all rough edges on headwalls and wing walls to provide smooth finish; Correct joints where expansion material protruding; Add sealant (*Refer to Image #2*). This applies to all drainage crossings.
- 8) Install erosion control blanket at drainage crossings;
- 9) Correct asphalt failure at approximate STA 0+50; (*Refer to Image #3*)
- 10) Clean hydromulch residue off of MBGF at all drainage crossings and existing bollard fence at drainage crossing A. (*Refer to Image #4*)
- 11) Backfill behind all concrete rip rap. (*Refer to Image #5*)
- 12) Cut off exposed bolts and add grout to seal holes as needed at crossings (*Refer to Image #6*)
- 13) Backfill at all MBGF posts as needed to provide positive drainage away from posts. Use select backfill (*Refer to Image #7*)
- 14) Construct footing for exposed fence posts as described in original bid notes. Install header curb to support existing fencing. (*Refer to Image #8&9*)

Please advise when punchlist items have been completed to schedule final inspection.

Sincerely,

**CRANE ENGINEERING CORP.**  
Firm # F-3353



---

Edward D. Garza, P.E., CFM  
Principal Engineer

Cc: All above

Mr. J. Carlos Flores, MBA, LI, CFM, Director  
Capital Projects / Facilities Infrastructure  
Webb County Engineering Dept.



Image #1



Image #2



Image #3



Image #4



Image #5



Image #6



Image #7



Image #8



Image #9





Miriam Garcia &lt;miriamg@craneeng96.com&gt;

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## Mangana Hein Road Project - Final Inspection 5/6

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**Edward Garza** <eddiegarza@craneeng96.com>

Mon, May 6, 2024 at 2:04 PM

To: "J. Carlos Flores" &lt;jcflores@webbcountytx.gov&gt;

Cc: "Guillermo B. Cuellar" &lt;gbcuellar@webbcountytx.gov&gt;, Salvador Hernandez &lt;salvador.hernandez@andersoncolumbia.com&gt;, Jerry Carrillo &lt;jerry.carrillo@andersoncolumbia.com&gt;, Alfredo Martinez &lt;fredm@craneeng96.com&gt;, James Vela &lt;jamesv@craneeng96.com&gt;, Miriam Garcia &lt;miriamg@craneeng96.com&gt;, Robert Garza &lt;robertg@craneeng96.com&gt;, Edward Garza &lt;eddie-crane@sbcglobal.net&gt;

Carlos - We conducted the final inspection for Mangana Hein Road project today. The following people were present:

1. Carlos Flores, Webb County Engineering
2. Guillermo Cuellar, P.E., Webb County Engineering
3. Salvador Hernandez, AC
4. Martin, AC
5. Edward D. Garza, P.E., Crane Engineering

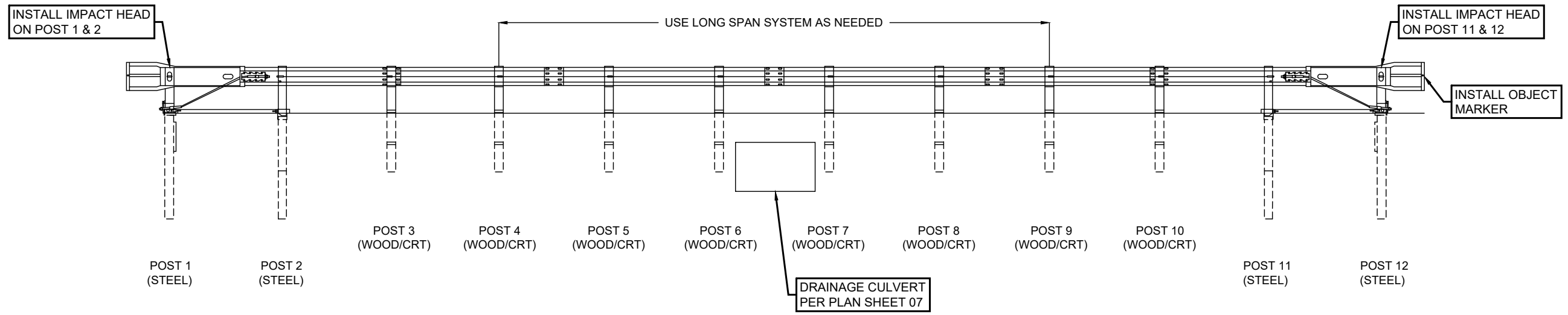
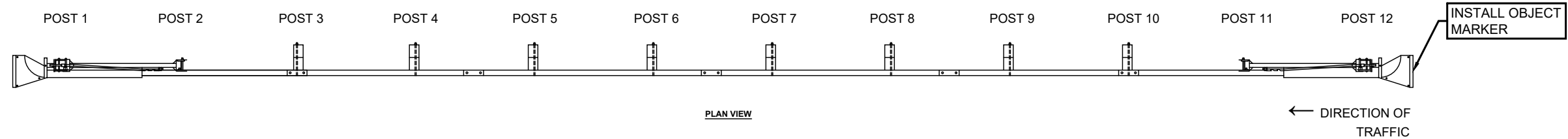
All items on the punch list dated 4/17/24 have been addressed except for the following:

1. AC to remove traffic control within project site;
2. AC to paint the existing yellow steel railing within drainage crossing A to complete the pay item on the contract. AC will provide product submittal. Work on this item includes repainting steel bollard fence with 2 coats of primer and 2 coats of paint. Paint color to match existing conditions. This information can be found on the bid schedule notes in the project manual.

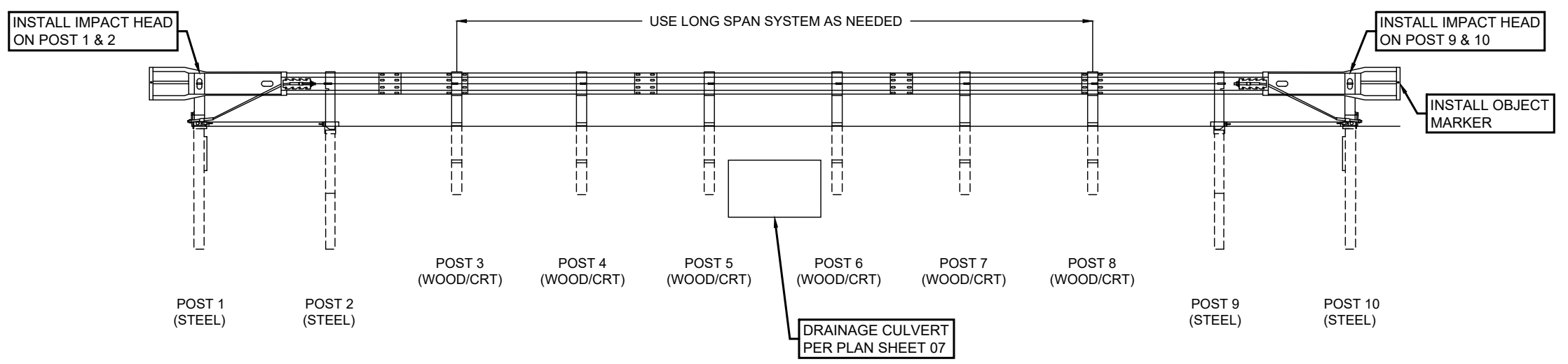
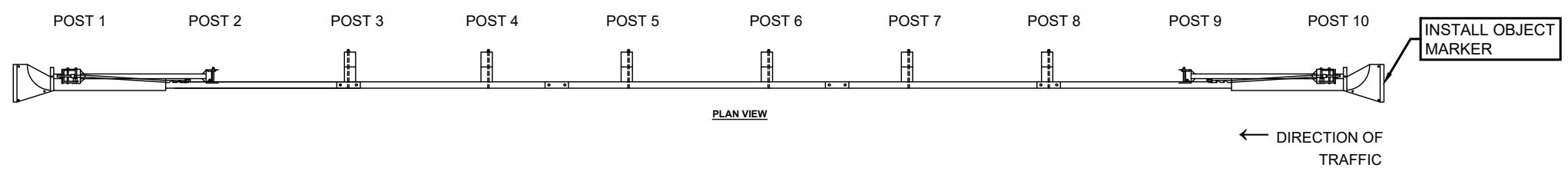
Please send product submittal and photo of completed work. Thanks. Edg

--

Edward D. Garza, P.E., CFM  
Principal Engineer  
Crane Engineering Corp.  
Firm#F-3353  
(956) 712-1996



**MODIFIED METAL BEAM GUARD FENCE WITH IMPACT HEAD ELEVATION VIEW (12 POSTS)**  
N.T.S

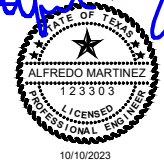


**MODIFIED METAL BEAM GUARD FENCE WITH IMPACT HEAD ELEVATION VIEW (10 POSTS)**  
N.T.S

GENERAL NOTES

1. REFER TO TXDOT STANDARD GF(31) LS-19 FOR ADDITIONAL DETAILS ON THE LONG SPAN SYSTEM.
2. REFER TO SHEET 34-36 OF CONSTRUCTION PLANS FOR ADDITIONAL DETAILS ON MBGF AND IMPACT HEAD INSTALLATION

*Alfredo Martinez*




10/10/2023

FIELD CHANGE #1

No.	Revision/Issue	Date

FIRM NAME AND ADDRESS  
**CRANE ENGINEERING CORP.**  
 1310 JUNCTION DRIVE SUITE B  
 LAREDO, TX 78041 956-712-1996  
 FIRM REGISTRATION NO. F-3353



Project Name and Address  
 MANGANA-HEIN ROAD  
 EXTENSION PROJECT  
 WEBB COUNTY, TEXAS

Sheet Title  
 MODIFIED METAL BEAM GUARD FENCE  
 WITH IMPACT HEAD DETAILS

Date 10/11/2023	Sheet <b>01</b>
Scale As Noted	