

MEMORANDUM

DATE: February 7, 2022  
*(Galloway Response to 2<sup>nd</sup> Round Comments – 03/31/2022)*

TO: Kari Parsons, PCD-Project Manager

FROM: Jeff Rice/Charlene Durham, PCD-Engineering  
719-520-7877/719-520-7951

SUBJECT: CDR-21-018 – Bent Grass / Woodmen Frontage Road Turn Lane  
Second Submittal

---

**Engineering Division**

Planning and Community Development (PCD)-Engineering reviews plans and reports to ensure general conformance with El Paso County standards and criteria. The project engineer is responsible for compliance with all applicable criteria, including other governmental regulations. Notwithstanding anything depicted in the plans in words or graphic representation, all design and construction related to roads, storm drainage and erosion control shall conform to the standards and requirements of the most recent version of the relevant adopted El Paso County standards, including the Land Development Code (LDC), the Engineering Criteria Manual (ECM), the Drainage Criteria Manual (DCM), and the Drainage Criteria Manual Volume 2 (DCM2). Any deviations from regulations and standards must be requested, and approved by the ECM Administrator, in writing. Any modifications necessary to meet overlooked criteria after-the-fact will be entirely the developer's responsibility to rectify.

A written response to all comments and redlines is required for review of the re-submittal. Please arrange a meeting between the developer's team and County staff to review and discuss these comments and prepared revisions/responses prior to the next submittal. Additional comments may be generated on items added or revised after the original comments.

Note: The first review was for preliminary construction plans and cursory comments were provided on EDARP (copied below for reference).

General / Letter of Intent

1. Address in the LOI the proposed guardrail design, warrants, clear zone and shy line criteria. If any deviations are proposed they need to be submitted on the deviation request form.  
*Response: See MVEA/Guardrail in the revised LOI*
2. Address in the LOI correspondence and discussions with D49 and MVEA regarding the proposed improvements.  
*Response: See revisions included in the LOI*
3. Note: Staff is examining different options as to how criteria can be met in this situation.  
*Response: We are coordinating with El Paso County Staff on the guard rail and will make any required revisions to the plans based on these discussions.*

### Construction Drawings

1. Note: As mentioned above, guardrail criteria need to be met or deviations approved; revise the CDs as appropriate. See ECM Table 2-42, CDOT M-606-1 Sheet 1 Note #4, CDOT Roadside Design Guide, and AASHTO Roadside Design Guide. Per the CDOT RDG, the following options need to be evaluated:  
Evaluation of the roadside environment entails six options:
  - Remove or redesign the obstacle so it can be safely traversed.
  - Relocate the obstacle to a point where it is less likely to be struck.
  - Reduce impact severity by using an appropriate break-away device.
  - Redirect the vehicle by shielding the obstacle with a longitudinal traffic barrier and/or crash cushion.
  - Delineate the obstacle if the above alternatives are not appropriate.
  - Make no change to existing. See the CDOT Project Development Manual (10), Section 2.09.

***Response: We are coordinating with El Paso County Staff on the guard rail and will make any required revisions to the plans based on these discussions.***

2. See cursory redlines.

***Response: See "Response to Comments (CD's)"***

3. Note: As noted in the previous EDARP comments, ROW and easement acquisition for public improvements needs to be provided as applicable.

***Response: We are coordinating with El Paso County Staff on the guard rail & shoulder width and will make any required revisions to the plans based on these discussions.***

### Final Drainage Report:

1. See drainage report redlines.

***Response: See "Response to Comments (FDR)"***

2. See remaining PBMP Applicability Form redlines.

***Response: See "Response to Comments (PBMP)"***

3. The roadside swales need to be shown to be adequate both in the drainage report calculations and the CD cross-sections.

***Response: Included roadside swale capacity calculations in the drainage report and CD cross-sections***

### Grading and Erosion Control Plan / SWMP / Geotechnical Issues

1. Note: A pavement design report will be required.

***Response: Noted. A pavement design report will be prepared. We will provide the report at a later date.***

### Financial Assurance Estimate (FAE) Form / Other

1. Note: The FAE will be reviewed in detail when the CDs are revised.

***Response: Noted. The CD's and FAE were revised and submitted***

2. Provide the required items listed in the Engineering Final Submittal Checklist, attached.

***Response: Included all requested items listed in the "Engineering Final Submittal Checklist"***

### Previous EDARP comments for reference:

1. All property lines/ROW and easements need to be shown on all sheets and in the cross-sections.

**Response: All property lines/ROW and easements are provided. Please specify what we are missing if this comment is not considered to be addressed.**

2. For a major rural collector, shoulder widths need to be 4' paved and 4' gravel. It appears that this will push the shoulder past what looks like the property line. This will require additional ROW acquisition unless a public improvements easement will suffice for the County Engineer. Either way, it appears that additional ROW and easements will be required.

**Response: We are coordinating with El Paso County Staff on the guard rail & shoulder width and will make any required revisions to the plans based on these discussions.**

3. All existing utilities & structures need to be shown on all sheets. It appears that some utility boxes/structures will need to be relocated.

**Response: All utilities & structures are provided. Please specify what we are missing if this comment is not considered to be addressed.**

4. Ensure that the latest CDOT Std. M-606-1 is used for the guardrail design and installation.

**Response: We are coordinating with El Paso County Staff on the guard rail and will make any required revisions to the plans based on these discussions.**

5. The drainage plan needs to show all existing and proposed drainage improvements, details, and downstream conveyance.

**Response: The drainage plan is revised and now includes stormwater conveyance using concrete valley gutters.**

6. The FAE needs to include all costs for this construction, including ROW/easement acquisition and utility relocations (provide costs from the utility companies).

**Response: The drainage plan is revised and now includes stormwater conveyance using concrete valley gutters. We are coordinating with El Paso County Staff on the guard rail & shoulder width and will make any required revisions to the plans based on these discussions.**

#### Attachments

1. CD and GEC redlines
2. Drainage Report redlines
3. PBMP Applicability Form redlines
4. Engineering Final Submittal Checklist

Engineering Final Submittal Checklist for Electronic Submittals	
Check Box	Item: Report/Form
<input type="checkbox"/>	Drainage Report (signed)
<input type="checkbox"/>	PBMP Applicability Form
<input type="checkbox"/>	Traffic Impact Study (signed)
<input checked="" type="checkbox"/>	Grading & Erosion Control Plan <b>and checklist</b> (signed)
<input type="checkbox"/>	Construction Plans (signed)
<input type="checkbox"/>	Deviation Request (signed)
<input type="checkbox"/>	MS4 Post Construction Form and SDI worksheet
<input type="checkbox"/>	Proof of embankment/pond submittal to State Engineer
<input type="checkbox"/>	ESQCP (signed)
<input checked="" type="checkbox"/>	* Financial Assurance Estimate, SIA (signed)
<input checked="" type="checkbox"/>	* Pond /BMP Maint. Agreement and Easement (signed)
<input checked="" type="checkbox"/>	* Operation & Maintenance Manual
<input type="checkbox"/>	<b>AutoCAD base drawing (submitted to DPW)</b>
<input type="checkbox"/>	<b>Pre-Development Site Grading Acknowledgement and Right of Access Form (signed)</b>
<input checked="" type="checkbox"/>	Other: <b>Offsite Easements, Other Permits (FEMA CLOMR, LOMR, USACE, Floodplain...), Conditions of Approval, etc.</b>
Pre-Construction Checklist:	
<input checked="" type="checkbox"/>	Driveway/Access Permit (Temporary access permits to be obtained from EPC DPW)
<input checked="" type="checkbox"/>	Work Within the ROW Permit (DPW or CDOT)
<input checked="" type="checkbox"/>	* Stormwater Management Plan (SWMP) <b>and checklist</b> Submit to PCD-Inspections 2 weeks prior to precon.
<input checked="" type="checkbox"/>	* Colorado Discharge Permit (COR: _____ )
<input type="checkbox"/>	* County Construction Activity Permit
<input checked="" type="checkbox"/>	* CDPHE APEN – (if over 25 ac. or 6 mos.)
<input checked="" type="checkbox"/>	* Financial Surety (Letter of Credit/Bond/Collateral/Check)
<input checked="" type="checkbox"/>	Construction Permit Fee: <b>(Verify fees with Inspections Supervisor at time of scheduling)</b>
<input type="checkbox"/>	Other:

\* - required items to obtain an ESQCP

\*\* - after recordation

Permit Fee and Collateral must be separate checks

Post Construction Submittal Checklist: (ECM 5.10.6)	
<input checked="" type="checkbox"/>	As-Built Drawings
<input type="checkbox"/>	Pond Certification Letter
<input type="checkbox"/>	Acceptance Letter for wet utilities

-  = Need final / signed version

-  = complete, in file

-  = PCD Staff to provide

-  = Undetermined at this time

-  = Need later