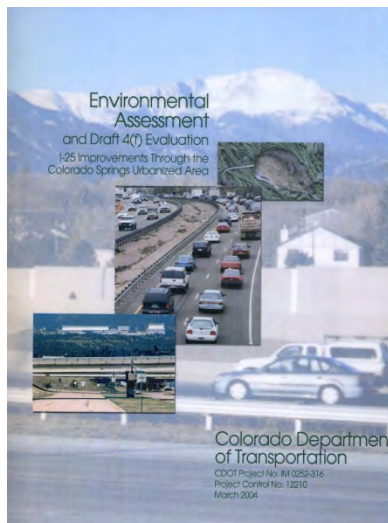




RE-EVALUATION, Mileposts 149 to 161

Interstate 25 Improvements through the Colorado Springs Area Environmental Assessment



WETLANDS AND WATERS OF THE U.S. TECHNICAL MEMO March 2012

Prepared for:
CDOT Region 2

Prepared by:
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Introduction

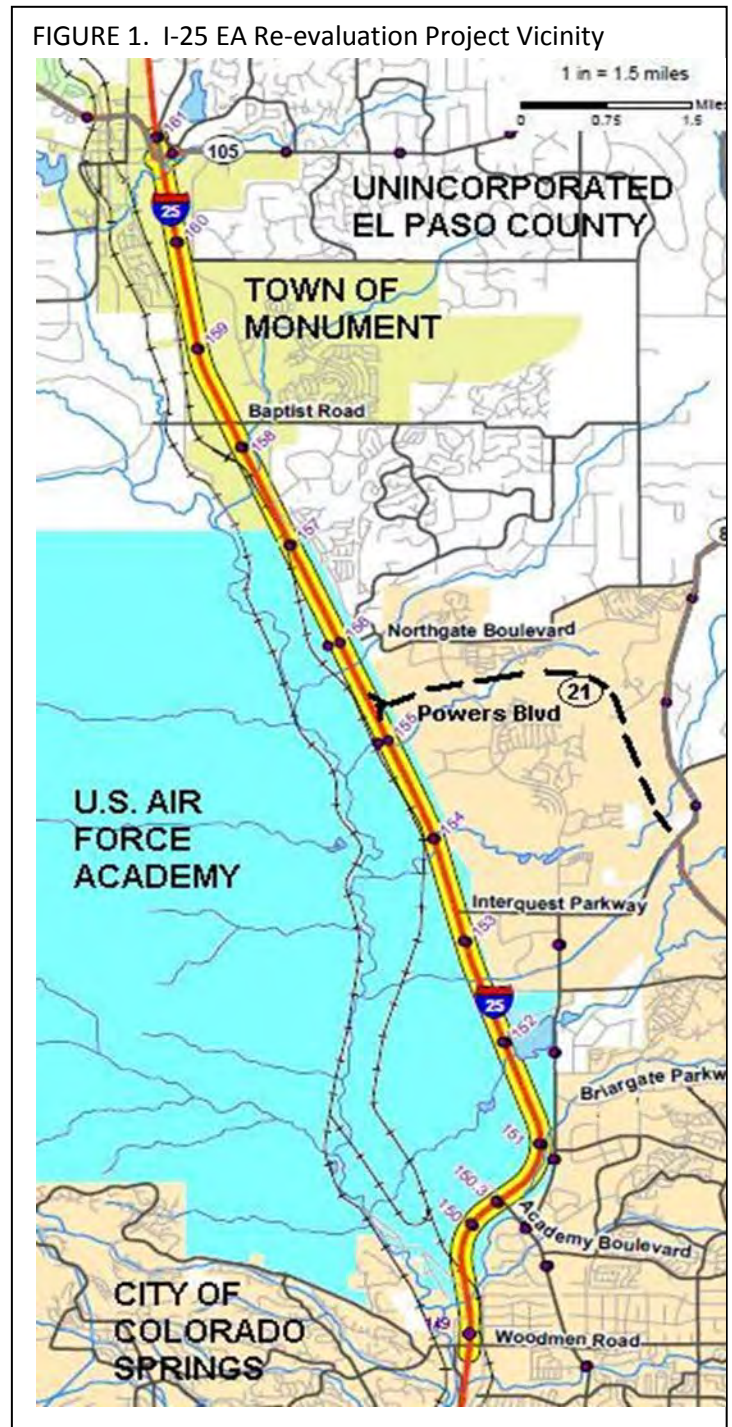
The Colorado Department of Transportation (CDOT) has prepared this technical memorandum to update findings described in the original 2004 I-25 Environmental Assessment (EA) with regard to the portion of the Proposed Action between Woodmen Road (Exit 149) in Colorado Springs and State Highway 105 in Monument (Exit 161).

The I-25 EA originally evaluated impacts for the widening of I-25 between South Academy Boulevard (Exit 135) and SH 105, together with reconstruction of various I-25 interchanges within this corridor. Page 2-10 of the EA stated that, "Consistent with projected traffic demand in the I-25 corridor, the conceptual phasing for the Proposed Action calls for:

- (1) initially six-laning through central Colorado Springs, then
- (2) six-laning in northern El Paso County, and finally
- (3) adding HOV [High-Occupancy Vehicle] lanes through central Colorado Springs and widening to six lanes south to South Academy Boulevard."

The first of these conceptual phases was undertaken in central Colorado Springs, completed in 2007. The so-called COSMIX project resulted in 12 miles of six-lane freeway, between South Circle Drive (Exit 138) and North Academy Boulevard (Exit 150). It included major reconstruction at several interchanges, notably not including the Cimarron interchange (Exit 141) or the Fillmore Street interchange (Exit 145). Additional funding will be needed to complete Phase 1.

For the year 2012, CDOT has received funding to begin the second phase, meaning to widen I-25 to six lanes in northern El Paso County, within the area shown in Figure 1. The EA calls for eventually widening I-25 all the way to SH105. Total funding for this project is yet to be determined. Currently enough is available to widen I-25 from Woodmen Rd to Interquest (Exit 153). Nevertheless, to be prepared for possible additional funding being available to complete the widening to SH 105 with this project or available in the



near future, CDOT's current EA re-evaluation effort is covering all Phase 2 improvements. Therefore, the study area for this re-evaluation extends northward all the way to Monument.

The I-25 EA included a new connection with Powers Boulevard (now State Highway 21), following SH21 eastward to just past the Powers Boulevard/Voyager Boulevard interchange. The design and analysis of this connection in the I-25 EA superseded what was proposed earlier in the North Powers Boulevard EA that was approved in 1999. The current EA re-evaluation also includes this portion of Powers Boulevard from I-25 to just east of Voyager Parkway.

Summary of the 2004 EA Wetland Resources, Impact, and Mitigation

The I-25 EA in 2004 included field reconnaissance to identify wetlands along the I-25 corridor and to estimate what amount of acreage would be affected by the Proposed Action. The EA's findings are summarized below.

TABLE 1
Wetland Impacts Summarized in the I-25 EA

Sub-watershed	Total Wetland Acres in the I-25 Study Area*	Impacted Jurisdictional Wetland Acres	Impacted Non-Jurisdictional Wetland Acres	Total Impacted Wetland Acres
Monument Creek north of Interquest Pkwy (Exit 153)	49.65	4.25	2.14	6.93
Monument Creek south of Exit 153	22.72	1.27	0.66	1.93
Colorado Springs Composite	18.64	0.65	0.63	1.28
Fountain Creek	5.02	0.62	0.00	0.62
TOTALS	96.03	6.79	3.43	10.22
Of the amounts shown above, the amounts on U.S. Air Force Academy property are:	24.69	1.86	1.76	3.62

* Acreages in the I-25 Study Area are only a fraction of the wetland acreage existing within each sub-watershed. Total acreages existing within any sub-watershed were not determined.

Wetlands impacts within the U.S. Air Force Academy (USAFA) were highlighted in the table because USAFA was a Cooperating Agency for the EA. As part of interagency coordination, the EA highlighted impacts to USAFA resources.

Of the 10.22 wetland acres anticipated to be impacted by the Proposed Action, almost nine acres were in the Monument Creek sub-watershed, in northern El Paso County, which is the study area for the I-25 EA re-evaluation. Subtotals for the Monument Creek watershed are 5.52 jurisdictional acres and 2.80 non-jurisdictional acres, for a total of 8.32 acres. As mitigation,

CDOT committed to replace all impacted wetlands on a one-to-one basis, consistent with the agency's "no net loss of wetlands" policy.

The estimated impacts summarized above were based on existing Conceptual Designs for the I-25 Proposed Action. In developing final design for I-25 improvements, CDOT and its contractor will endeavor to further reduce wetland impacts. For mitigation, the EA stated that:

"The proposed mitigation for the identified impacts consists primarily of in-kind replacement at the locations of the impacts. In addition, banked wetlands credits from CDOT's Limon Wetland Bank can be applied to compensate for some of the impacts, where appropriate."

Section 7 of the EA, Wetland Finding, provided detailed estimates of wetland impacts by location and provided extensive details on Best Management Practices and specific wetland mitigation opportunities.

Changes to the Project that Would Affect the Resource Differently

CDOT has not proposed to change the project in any way that would affect wetlands differently from what was described in the EA. Since the EA was approved in 2004, the Baptist Road interchange was reconstructed (I-25 Exit 158), and the COSMIX project widened I-25 from South Circle Drive (Exit 138) to North Academy Boulevard (Exit 150). Impacts and mitigation associated with these projects have already occurred, and would not be considered as remaining future effects of the Proposed Action.

Changes in Resources, Analysis Data, Analysis Methods or Applicable Regulations

The U.S. Army Corps of Engineers now requires use of the Regional Supplements for wetlands delineation. The project area is included in a landscape community that is a transitional area between the Rocky Mountain Forests and Rangeland and Western Great Plains. The two Regional Supplements for these two respective zones are the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (May 2010) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region* (March 2010). For this wetland re-evaluation the Western Mountains, Valleys, and Coast Region wetland determination forms were used.

These supplements are similar in delineation procedure and criteria and are comparable to the 1987 Corps Manual (Environmental Laboratory 1987) that was used at the time of the 2004 wetland delineations. A comparison of the past procedures and criteria for determining wetlands with the 1987 Manual versus the new Regional Supplements would indicate that there is no significant difference in the methods for determining wetland indicators for soils, vegetation or hydrology.

Starting in 2010, CDOT requires that all Wetland Finding Reports for CDOT projects or projects funded by FHWA with permanent wetland impacts of 0.10 acre or greater include a Functional Assessment of Colorado Wetlands (FACWet). It is anticipated that the Project will permanently impact more than 0.10 of an acre of wetlands and will require this additional analysis. This analysis would be prepared as a part of a revised Wetland Finding Report when project impacts are known based on more detailed project design.

Project Impacts Based on Current Resources and Regulations

A field review of wetlands identified in the 2004 Environmental Assessment confirmed that wetland indicators and conditions were still accurate. A field survey was conducted by Chuck Schrader from PKM Design Group on January 26, 2012 which identified existing wetlands and compared these to wetland data from earlier delineations. Photographs are included in Appendix 1 that illustrates the conditions at wetland areas that were identified as being potentially impacted by the Project. A later field review was conducted by Chuck Schrader on March 9, 2012 that included more detailed analysis of wetland conditions and GPS surveying of wetland boundaries. This field GPS surveying, analysis of recent aerial photography, and past aerial/surveyed wetland boundaries was used to produce wetland boundaries as found in the field at the present time (Appendix 2, Wetland Field Mapping).

The identified wetlands were field verified with visual confirmation of vegetation and hydrological indicators and with soil testing if it appeared conditions may have changed. A majority of the wetland areas exhibited characteristics identical to those reported in the 2000 Wetland Delineations.

The results of the field review are found in Appendix 3, Routine Wetland Determination Forms. Field conditions in January and early March were characteristic of the late winter season at elevations of 6,500 to 6,900 feet. Plant material was not in active growth and soil conditions were frozen and snow covered in north facing and shaded locations. Table 1 on the following page lists each wetland that was field verified in the January and March 2012 field surveys.

One new wetland area was found (New WQ Pond) located immediately north of Woodmen Road on the east side of northbound I-25. This resource consists of 0.11 acre that is considered non-jurisdictional. This wetland is within CDOT's easement from USAFA south of Exit 150 (North Academy Boulevard), on the eastern side of I-25. See Figure 2. This wetland will not be impacted by the Proposed Action.

One previously identified wetland (Wetland T) was found to no longer exhibit wetland characteristics. The EA indicated that this ephemeral wetland was 0.0495 acre in size, and estimated that 0.0140 acre would be impacted by the Proposed Action.

In the 2012 field review and delineation, all other identified wetlands from the previous 2004 Wetland Finding were found to exist in the same locations and with the same characteristics as previously identified.

The ID #'s in Table 2 correspond to the identified project wetlands and the Routine Wetland Determination Forms that include site data. This table also includes potential wetland impacts as identified in the 2004 Wetland Finding, except for the new WQ wetland and for wetland T, which no longer has wetland characteristics. Updating potential wetland impacts based on the 2012 field survey identified that the wetland boundaries were generally the same, thus the potential impact remains the same. Actual wetland impacts will be calculated during the preparation of the

FIGURE 2. New Wetland on the Eastern Side of I-25, South of Exit 150



Wetland Finding once final design has been completed. Table 2 also includes information on photograph reference numbers as found in Appendix 1, wetland classification and the projected jurisdictional and non-jurisdictional.

TABLE 2. 2012 Wetland Reference and Impact Assessment for the I-25 Re-evaluation Area

ID #s	Photo Reference Number	Wetland Reference	Wetland Classification	Impact Activity	*Jurisdictional Wetland Acres Impacted	*Non-Jurisdictional Wetland Acres Impacted	Drainage Association
1	1 & 2	B	Perennial	Road Widening	0.13	0	Teachout
2	3	C	Perennial	Road Widening	0	0.171	No Name
3	4, 5, 6 & 7	D	Perennial	Baptist	2.44	0	Jackson
10,11	8 & 9	J, K	Isolated/Perennial	Northgate	1.666	0	Smith
12	10	U/AA, V	Isolated/Swale	Interchange	0	1.377	Smith
4	N/A	E	Isolated Wetland	Road Widening	0	0.073	Jackson
5	11	F	Isolated Wetland	Road Widening	0	0.142	N/A
6	12	G	Perennial	Road Widening	0	0.166	No Name
8	13 & 14	H	Perennial	Road Widening	0	0.387	Black Forest
7	15	Ha	Isolated Wetland	Road Widening	0	0.034	Black Forest
13	16	L	Ephemeral	Road Widening	0.148	0	No Name
14	17	W	Roadside Swale	Interchange	0	0.148	No Name
15	18	L100	Ephemeral	Road Widening	0.044	0	No Name
16	N/A	L200	Ephemeral	Road Widening	0.04	0	No Name
17	19 & 20	M	Perennial	Interchange	0.31	0	Black Squirrel
18	21	N	Isolated Wetland	Interchange	0	0.076	N/A
19	22	S	Perennial	Road Widening	0.181	0	Pine Creek
20	N/A	T**	Ephemeral	Road Widening	0	0	No Name
N/A	N/A	U/AA	Wet Meadow	Interchange	0	0.514	Monument
N/A	N/A	V	Wet Meadow	Interchange	0	0.119	Monument
9	N/A	X	Roadside Swale	Interchange	0	0.016	Smith
21	23	New WQ	Roadside Swale	WQ Pond	0	0	N/A
				TOTALS	4.959	3.223	

* Wetland impact acreage from Wetland Finding in the 2004 I-25 EA.

** Area T was considered a wetland in 2004, but as of 2012 no longer has wetland characteristics. It was formerly described as 0.0495 wetland acres with 0.014 acre of non-jurisdictional impact.

Changes in Proposed Mitigation

The 2004 I-25 EA indicated that wetland mitigation would be on a one-for-one basis primarily through in-kind replacement at the locations of impacts. Banked wetland credits from CDOT's Limon Wetland Bank could be used where appropriate. However, CDOT will make every effort to replace wetlands within the existing drainage, since most of the wetlands in the re-evaluation project area occur in or near habitat of the threatened Preble's meadow jumping mouse. Included in the Wetland Finding Report will be a FACWet assessment for each impacted wetland area as well as the projected permanent and temporary impacts.

Conclusion

The Proposed Action remains consistent and compatible with current wetland mitigation and permitting conditions and can provide improvements to water quality and watershed degradation. The key findings of this technical memorandum are summarized in Table 3.

TABLE 3. Summary of Previously and Currently Identified Wetlands and Waters of the U.S. Impacts and Mitigation

EA 2004 – No-Action Alternative	EA 2004 – Impacts of Proposed Action	EA 2004 – Mitigation	2012 – What Has Changed	Re- evaluation 2012 – No Action Alternative	Re- evaluation 2012 – Impacts of Proposed Action	Re-evaluation 2012 – Mitigation
<p>Continued development within watersheds would lead to water quality degradation because increased impervious areas would pass more pollutants to wetlands and waterways. Improvements to deteriorating drainageways would not be made to address the continuing degradation.</p> <p>Wetland and riparian areas would experience additional loss and fragmentation of valuable habitat as a result of continued urban growth, erosion, and deposition.</p>	<p>An estimated total of 8.514 acres of wetlands were identified as within potential project limits including jurisdictional and non-jurisdictional wetlands.</p>	<p>Impacted wetlands will be mitigated on a one-for-one basis primarily through in-kind replacement at the locations of impacts and using banked wetland credits from CDOT's Limon Wetland Bank where appropriate.</p> <p>Necessary permits from the U.S. Army Corps of Engineers and CDOW (CPW) will be obtained for impacted wetlands. The U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service and CDOW (now CPW) will be consulted regarding use of credits to be withdrawn from the Limon Wetland Bank.</p>	<p>USACE now requires use of Regional Supplements to its Wetland Delineation Manual. CDOT now has a revised Functional Assessment of Wetlands approach called FACWet 2.0.</p> <p>The 2012 field review and delineation found that one previously existing ephemeral wetland (0.0495 acre) no longer exhibits wetland characteristics; and one new wetland (0.11 acre) now exists in a roadside water quality pond.</p> <p>Wetland impacts and mitigation associated with projects completed in central Colorado Springs (COSMIX I-25 widening) and the Baptist Road interchange have already occurred.</p>	<p>Not making the remaining, planned I-25 improvements would lead to water quality degradation, wetland and riparian loss, and fragmentation of habitat as a result of continued development impacts to existing wetlands, waterways and drainageways.</p>	<p>The Proposed Action remains consistent and compatible with current wetland mitigation and permitting conditions.</p> <p>Previously identified wetland impacts in northern El Paso County now can be recalculated to subtract 0.0495 acre for the wetland that has disappeared.</p>	<p>Mitigation will be necessary and will be coordinated with USAFA biologists considering the potential wetland mitigation sites as identified in the Wetland Finding that was included in the 2004 I-25 EA.</p> <p>Mitigation will be on a one-for-one basis at the locations of impacts and at suitable mitigation sites as identified in the 2004 EA and Wetland Finding Report and evaluated in this study.</p>

APPENDIX 1. WETLAND SITE PHOTOGRAPHS AND VEGETATION DESCRIPTIONS

Photo's 1-3 illustrate perennial waterways with predominantly sandbar willow (*Salix exigua*) surrounded by upland grasses, forbs, and shrubs.



Photo #1: B -Teachout Creek (West I-25)



Photo #2: B -Teachout Creek (East I-25)



Photo #3: C -No Name (West I-25)



Photo #4: D -Jackson Creek (West I-25)

Photo's 4-7 illustrate the Jackson Creek waterway that crosses Baptist Road and contains sandbar willow, common cattail (*Typha latifolia*), plains cottonwood (*Populus deltoides*), and peach-leaf willow (*Salix amygdaloides*).



Photo #5: AZ -Jackson Creek (East I-25)



Photo #6: AZ -Jackson Creek (South Baptist Rd.)

Photo 8 illustrates the Smith Creek waterway that crosses Northgate and contains sandbar willow and common cattail.



Photo #7: AZ -Jackson Creek (North Baptist Rd.)



Photo #8: J -Smith Creek (East I-25)

APPENDIX 1. WETLAND SITE PHOTOGRAPHS AND VEGETATION DESCRIPTIONS

Photo 9 illustrates the Monument Branch of Smith Creek that is a perennial waterway with predominantly sandbar willow, common cattail, plains cottonwood, and peach-leaf willow.

Photo 10 is of Monument Creek which is a large complex of wetland on either side of northbound I-25. Vegetation here is predominantly sandbar willow, common cattail, *Juncus sp.*, and peach-leaf willow.



Photo #9: K -Monument Branch (West I-25)



Photo #10: U AA Monument Creek (East I-25)

Photo's 11 and 12 are views of small drainages which are dominated by sandbar willow with smaller areas of common cattail.



Photo #11: F Drainage (West I-25)



Photo #12: G -No Name (West I-25)

Photo's 13 and 14 illustrate the difference in conditions in wetland areas on either side of I-25 at Black Forest Creek. Vegetation is a mix of sandbar willow, common cattail, peach-leaf willow and *Juncus*. The west ROW contains ponderosa pine (*Pinus ponderosa*) also in more upland areas.



Photo #13: H -Black Forest Creek (West I-25)



Photo #14: H -Black Forest Creek (East I-25)

Photo 15 is a pipe drainage that feeds Black Forest Creek with sandbar willow. Wetland areas on the west side of I-25 at L- No Name Creek (Photo 16) is a taller mix of sandbar willow and common cattail surrounded by upland deciduous trees and ponderosa pine.



Photo #15: Ha -Pipe (West I-25)



Photo #16: L- No Name (West I-25)

APPENDIX 1. WETLAND SITE PHOTOGRAPHS AND VEGETATION DESCRIPTIONS

Photo 17 illustrates a roadside drainage ditch wetland. Photo 18 illustrates the drainage area wetlands at No Name Creek that contain sandbar willow, plains cottonwood and reed canary grass (*Phalaris arundinacea*).



Photo #17: W Roadside Swale (East I-25)



Photo #18: L -100 (East I-25)

Photo's 19 and 20 are of wetland M in the perennial Black Squirrel Creek drainage. The predominant vegetation is sandbar willow and common cattail.



Photo #19: M Black Squirrel Cr. (East I-25)



Photo #20: M Black Squirrel Cr. (West I-25)

Photo 21 is a view of a small roadway drainage wetland dominated by sandbar willow.



Photo #21: N Sandbar Willow (West I-25)

Photo 22 illustrates the wetland section of South Pine creek adjacent to I-25 in the North Academy Blvd area.



Photo #22: South Pine Creek (East I-25)

Photo 23 is a view of the new water quality stormwater pond with cattail wetland at the southern end of the project. This is a new wetland that was not present in the 2004 EA study.



Photo #23: New WQ Pond (East I-25)

Photo 24 is a view of the area adjacent to the new soundwalls on the west side of southbound I-25. Wetlands were identified here in 2004 which are not present at this time.



Photo #24: Former Wetlands—FF-GG

APPENDIX 2

LOCATION AND EXTENTS OF WETLANDS IMPACTED BY THE I-25 PROPOSED ACTION

This Appendix consists of the six figures that are presented on the pages that follow:

- A-1. Map of Re-evaluation Area, indicating Wetlands Impacted by the I-25 Proposed Action
- A-2. Impacted Wetlands in the Vicinity of Baptist Road, I-25 Exit 158
- A-3. Impacted Wetlands in the vicinity of North Gate Road, I-25 Exit 156
- A-4. Impacted Wetlands north of Interquest Parkway, I-25 Exit 153
- A-5. Non-wetland Area formerly Wetland T south of Interquest Parkway, I-25 Exit 153
- A-6. Impacted Wetlands in the Vicinity of North Academy Boulevard, I-25 Exit 150

Figure A-1. Map of Re-evaluation Area, indicating Wetlands Impacted by the I-25 Proposed Action



Figure A-2. Impacted Wetlands in the Vicinity of Baptist Road, I-25 Exit 158



Figure A-3. Impacted Wetlands in the vicinity of North Gate Road, I-25 Exit 156



Figure A-4. Impacted Wetlands north of Interquest Parkway, I-25 Exit 153



Figure A-5. Non-wetland Area formerly Wetland T south of Interquest Parkway, I-25 Exit 153

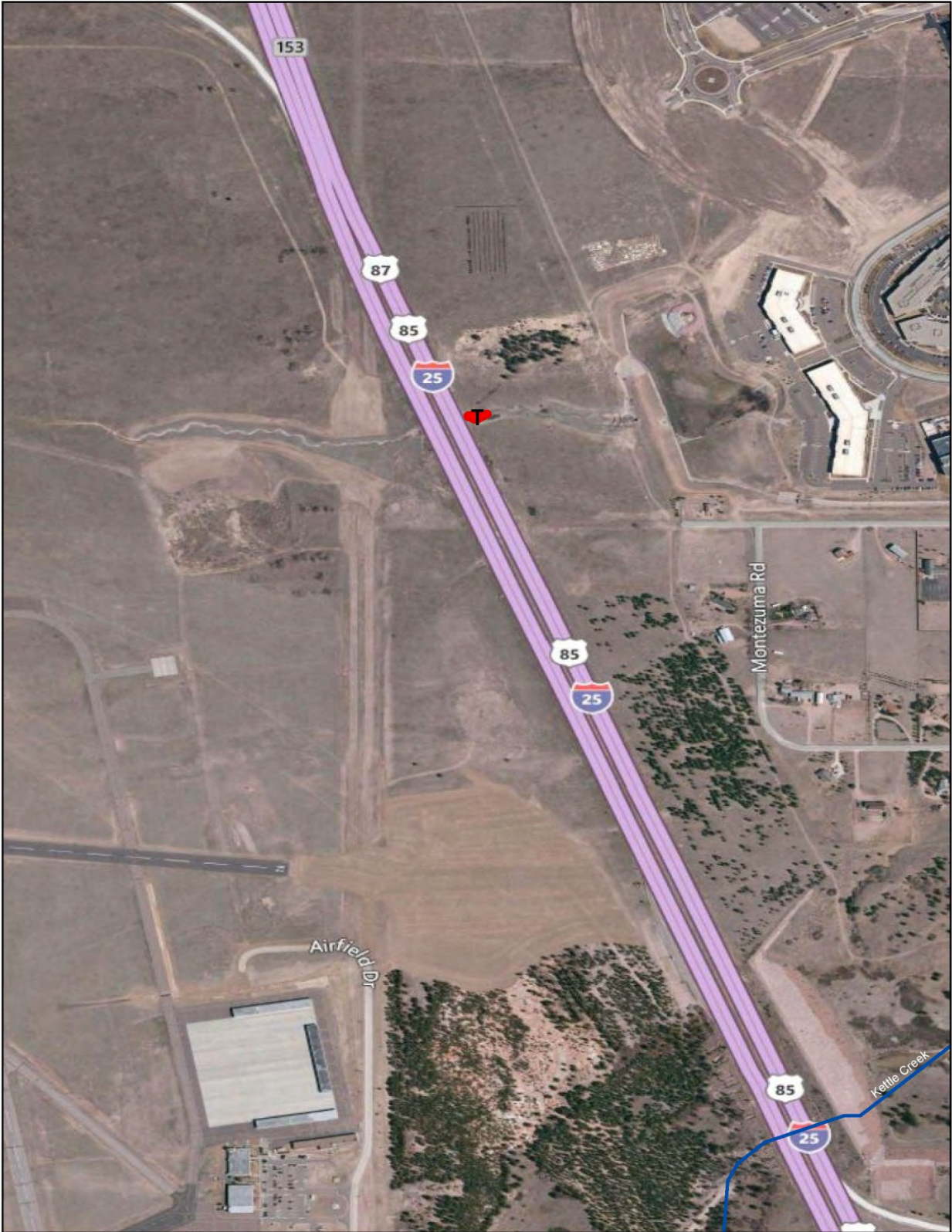
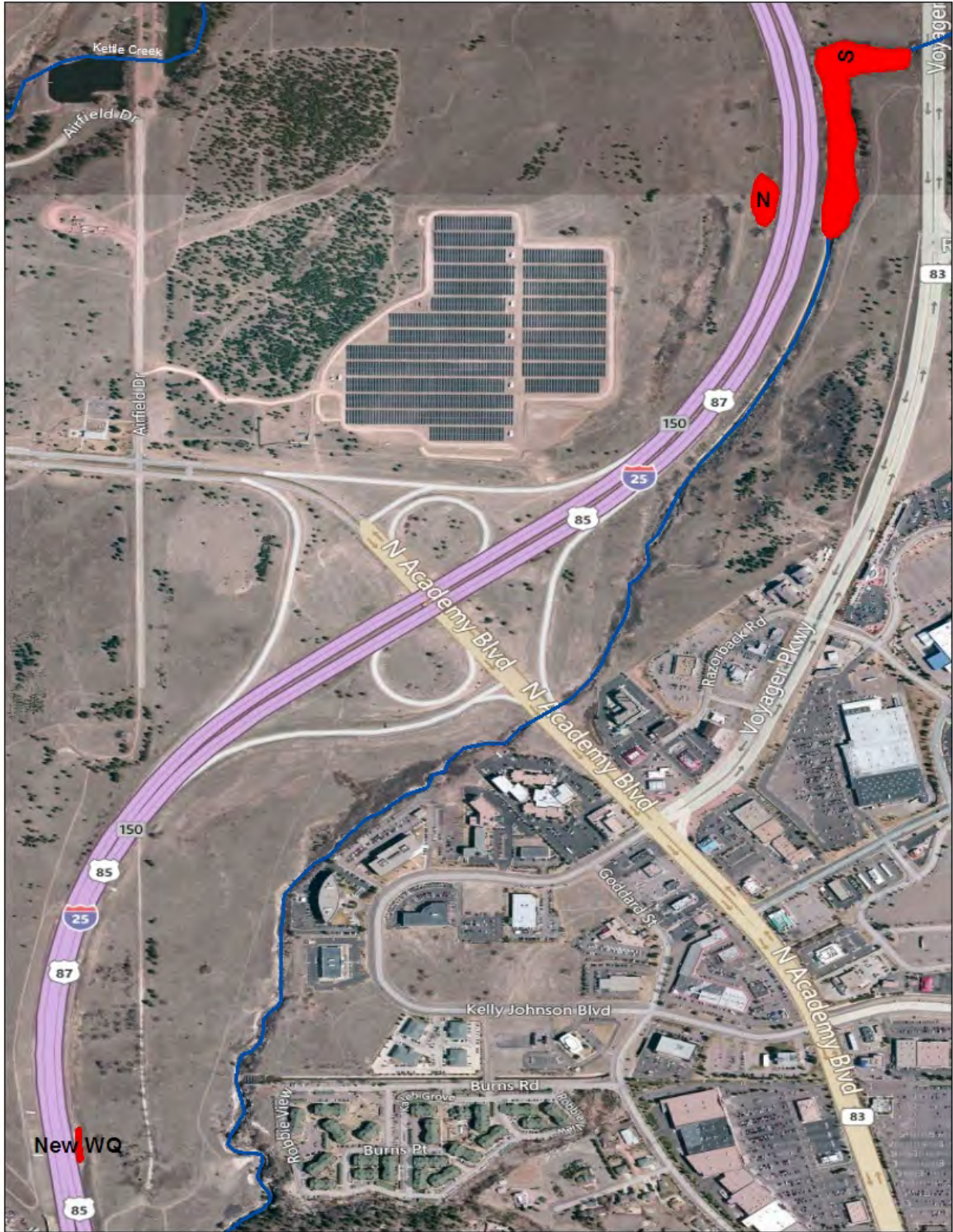


Figure A-6. Impacted Wetlands in the Vicinity of North Academy Boulevard, I-25 Exit 150



APPENDIX 3

WETLAND DELINEATION FORMS

This Appendix consists of wetland delineation forms for the following resources in the I-25 EA Re-evaluation area, presented in the order shown:

Wetland B

Wetland C

Wetland D

Wetlands J, K

Wetlands U/AA, V

Wetland E

Wetland F

Wetland G

Wetland H

Wetland Ha

Wetland L

Wetland W

Wetland L100

Wetland L200

Wetland M

Wetland N

Wetland S

Former Wetland T*

Wetland U/AA

Wetland V

Wetland X

New Wetland WQ

* Area T was considered a wetland in 2004, but as of 2012 no longer has wetland characteristics. It was formerly described as 0.0495 wetland acres with 0.014 acres of non-jurisdictional impact. The wetland determination form for this non-wetland contains only vegetation information as hydric conditions were not present. No delineation form was found for the previous wetland delineation study.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: North I-25 Re-evaluation City/County: El Paso County Sampling Date: 1/26/12 & 3/9/12
 Applicant/Owner: Colorado Department of Transportation State: CO Sampling Point: 1: Wetland B (West)
 Investigator(s): Chuck Schrader, PKM Design Group, Inc. Section, Township, Range: T 11 S., R 67 W., S. 23
 Landform (hillslope, terrace, etc.): creek/drainage channel Local relief (concave, convex, none): concave Slope (%): 3-8
 Subregion (LRR): LRR E Lat: 39.072029 Long: 104.858174 Datum: NAD 83
 Soil Map Unit Name: Pring Coarse Sandy Loam - Tomah-Crowfoot Loamy Sands NWI classification: PEM/PSS
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? No Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Sandbar willow with sandy, alluvial soil from sediment and high runoff flows. Results match 2000 field delineations.	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u> (Plot size: _____)				Dominance Test worksheet:
1. _____	0 = Total Cover			Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Total Number of Dominant Species Across All Strata: <u>1</u> (B)
1. <u>Salix exigua</u>	60 = Total Cover	Y	OBL	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
<u>Herb Stratum</u> (Plot size: _____)				Prevalence Index worksheet:
1. <u>Typha latifolia</u>	5	N	OBL	Total % Cover of: _____ Multiply by: _____
2. <u>Phalaris arundinacea</u>	10	N	FACW+	OBL species <u>65</u> x 1 = <u>65</u>
	15 = Total Cover			FACW species <u>10</u> x 2 = <u>20</u>
<u>Woody Vine Stratum</u> (Plot size: _____)				FAC species _____ x 3 = _____
1. _____	0 = Total Cover			FACU species _____ x 4 = _____
% Bare Ground in Herb Stratum <u>15</u>				UPL species _____ x 5 = _____
				Column Totals: <u>75</u> (A) <u>85</u> (B)
				Prevalence Index = B/A = <u>1.13</u>
				Hydrophytic Vegetation Indicators:
				<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
				<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
				<input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
				<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
				<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
				<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:				

SOIL

Sampling Point: 1: Wetland B (West)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-18	10 YR 3/2		some mottles				alluvial	sandy, sandy loam

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: North I-25 Re-evaluation City/County: El Paso County Sampling Date: 1/26/12 & 3/9/12
 Applicant/Owner: Colorado Department of Transportation State: CO Sampling Point: 2:Wetland C (west)
 Investigator(s): Chuck Schrader, PKM Design Group, Inc. Section, Township, Range: T 11 S., R 67 W., S. 26
 Landform (hillslope, terrace, etc.): drainage channel Local relief (concave, convex, none): concave Slope (%): 3-8
 Subregion (LRR): LRR E Lat: 39.067473 Long: 104.857124 Datum: NAD 83
 Soil Map Unit Name: Pring Coarse Sandy Loam NWI classification: PSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? No Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Dominance of sandbar willow within ROW with sedges west of ROW similar to 2000 field delineation results. Hydrology from culvert and upstream Runoff.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1	0			Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
= Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				
1. <u>Salix exigua</u>	70	Y	OBL	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>70</u> x 1 = <u>70</u> FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: <u>70</u> (A) <u>70</u> (B) Prevalence Index = B/A = <u>1.0</u>
= Total Cover				
Herb Stratum (Plot size: _____)				
1.	0			Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
= Total Cover				
Woody Vine Stratum (Plot size: _____)				
1.	0			Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
= Total Cover				
% Bare Ground in Herb Stratum <u>20</u>				
Remarks:				

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-18	10 YR 3/1	90					loamy sand	sandy few mottles

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input checked="" type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)
	<input type="checkbox"/> 2 cm Muck (A10)
	<input type="checkbox"/> Red Parent Material (TF2)
	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
	<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:

HYDROLOGY

Wetland Hydrology Indicators:																								
<table border="0"> <tr> <td><u>Primary Indicators (minimum of one required; check all that apply)</u></td> <td><u>Secondary Indicators (2 or more required)</u></td> </tr> <tr> <td><input type="checkbox"/> Surface Water (A1)</td> <td><input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)</td> </tr> <tr> <td><input type="checkbox"/> High Water Table (A2)</td> <td><input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</td> </tr> <tr> <td><input type="checkbox"/> Saturation (A3)</td> <td><input type="checkbox"/> Salt Crust (B11)</td> </tr> <tr> <td><input checked="" type="checkbox"/> Water Marks (B1)</td> <td><input type="checkbox"/> Aquatic Invertebrates (B13)</td> </tr> <tr> <td><input type="checkbox"/> Sediment Deposits (B2)</td> <td><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</td> </tr> <tr> <td><input type="checkbox"/> Drift Deposits (B3)</td> <td><input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)</td> </tr> <tr> <td><input type="checkbox"/> Algal Mat or Crust (B4)</td> <td><input type="checkbox"/> Presence of Reduced Iron (C4)</td> </tr> <tr> <td><input type="checkbox"/> Iron Deposits (B5)</td> <td><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</td> </tr> <tr> <td><input type="checkbox"/> Surface Soil Cracks (B6)</td> <td><input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)</td> </tr> <tr> <td><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</td> <td><input type="checkbox"/> Other (Explain in Remarks)</td> </tr> <tr> <td><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</td> <td></td> </tr> </table>	<u>Primary Indicators (minimum of one required; check all that apply)</u>	<u>Secondary Indicators (2 or more required)</u>	<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)	<input checked="" type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<u>Primary Indicators (minimum of one required; check all that apply)</u>	<u>Secondary Indicators (2 or more required)</u>																							
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)																							
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)																							
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)																							
<input checked="" type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)																							
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<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)																							
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)																							
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)																							
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)																							
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)																							
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)																								

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Hydrology from upstream runoff and culvert drainage, no change from 2000 study.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: North I-25 Re-evaluation City/County: El Paso County Sampling Date: 1/26/12 & 3/9/12
 Applicant/Owner: Colorado Department of Transportation State: CO Sampling Point: 3: Wetland D (west)
 Investigator(s): Chuck Schrader, PKM Design Group, Inc. Section, Township, Range: T 11 S., R 67 W., S. 36
 Landform (hillslope, terrace, etc.): stream channel and bench Local relief (concave, convex, none): concave Slope (%): 8-15
 Subregion (LRR): LRR E Lat: 39.049529 Long: 104.847626 Datum: NAD 83
 Soil Map Unit Name: Tomah-Crowfoot Loamy Sands NWI classification: PEM/PSSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? No Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: West of SB I-25 Jackson Creek.	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Populus deltoides</u>	5	N	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. <u>Salix amygdaloides</u>	5	N	FACW	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
	10 = Total Cover			Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Prevalence Index worksheet:
1. <u>Salix exigua</u>	40	Y	OBL	Total % Cover of: _____ Multiply by: _____
	40 = Total Cover			OBL species <u>60</u> x 1 = <u>60</u>
<u>Herb Stratum</u> (Plot size: _____)				FACW species <u>15</u> x 2 = <u>30</u>
1. <u>Typha latifolia</u>	20	N	OBL	FAC species <u>5</u> x 3 = <u>15</u>
2. <u>Phalaris arundinacea</u>	10	N	FACW+	FACU species _____ x 4 = _____
	30 = Total Cover			UPL species _____ x 5 = _____
<u>Woody Vine Stratum</u> (Plot size: _____)				Column Totals: <u>80</u> (A) <u>105</u> (B)
1. _____				Prevalence Index = B/A = <u>1.31</u>
2. _____				Hydrophytic Vegetation Indicators:
% Bare Ground in Herb Stratum <u>10</u>	0 = Total Cover			<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
				<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
				<input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
				<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
				<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
				<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:				

SOIL

Sampling Point: 3: Wetland D (west)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-18	10 YR 3/1	80					sandy loam	little to no mottles

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)
<input checked="" type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input checked="" type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Shallow Aquitard (D3)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	<input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations: Surface Water Present? Yes ___ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes ___ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes ___ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: North I-25 Re-evaluation City/County: El Paso County Sampling Date: 1/26/12 & 3/9/12
 Applicant/Owner: Colorado Department of Transportation State: CO Sampling Point: 4: Wetland E
 Investigator(s): Chuck Schrader, PKM Design Group, Inc. Section, Township, Range: T 11 S., R 67 W., S. 36
 Landform (hillslope, terrace, etc.): bench seep Local relief (concave, convex, none): concave Slope (%): 8-15
 Subregion (LRR): LRR E Lat: 39.048541 Long: 104.847234 Datum: NAD 83
 Soil Map Unit Name: Tomah-Crowfoot Loamy Sands NWI classification: PEM /PSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? No Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: _____)				
1. _____	0			= Total Cover
Sapling/Shrub Stratum (Plot size: _____)				
1. <u>Salix exigua</u>	30	Y	OBL	
	30			= Total Cover
Herb Stratum (Plot size: _____)				
1. <u>Phalaris arundinacea</u>	20	N	FACW+	
2. <u>Juncus arcticus</u>	10	N	OBL	
3. <u>Glycyrrhiza lepidota</u>	20	N	FACU	
	50			= Total Cover
Woody Vine Stratum (Plot size: _____)				
1. _____				
2. _____				
% Bare Ground in Herb Stratum <u>10</u>	0			= Total Cover
Remarks:				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
 Total Number of Dominant Species Across All Strata: 1 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by: _____
 OBL species 40 x 1 = 40
 FACW species 20 x 2 = 40
 FAC species _____ x 3 = _____
 FACU species 20 x 4 = 80
 UPL species _____ x 5 = _____
 Column Totals: 80 (A) 160 (B)
 Prevalence Index = B/A = 2.0

Hydrophytic Vegetation Indicators:
 1 - Rapid Test for Hydrophytic Vegetation
 2 - Dominance Test is >50%
 3 - Prevalence Index is ≤3.0¹
 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 5 - Wetland Non-Vascular Plants¹
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No

SOIL

Sampling Point: 4: Wetland E

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-18	10 YR 3/1	80					sandy clay	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)						Indicators for Problematic Hydric Soils³:		
<input type="checkbox"/> Histosol (A1)			<input type="checkbox"/> Sandy Redox (S5)			<input type="checkbox"/> 2 cm Muck (A10)		
<input type="checkbox"/> Histic Epipedon (A2)			<input type="checkbox"/> Stripped Matrix (S6)			<input type="checkbox"/> Red Parent Material (TF2)		
<input type="checkbox"/> Black Histic (A3)			<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)			<input type="checkbox"/> Very Shallow Dark Surface (TF12)		
<input type="checkbox"/> Hydrogen Sulfide (A4)			<input type="checkbox"/> Loamy Gleyed Matrix (F2)			<input type="checkbox"/> Other (Explain in Remarks)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)			<input checked="" type="checkbox"/> Depleted Matrix (F3)			³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.		
<input type="checkbox"/> Thick Dark Surface (A12)			<input type="checkbox"/> Redox Dark Surface (F6)					
<input type="checkbox"/> Sandy Mucky Mineral (S1)			<input type="checkbox"/> Depleted Dark Surface (F7)					
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			<input type="checkbox"/> Redox Depressions (F8)					
Restrictive Layer (if present):								
Type: _____								
Depth (inches): _____						Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Remarks:								
Small upland seep area above creek and below roadway.								

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input checked="" type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		
Field Observations:		
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____		
Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: North I-25 Re-evaluation City/County: El Paso County Sampling Date: 1/26/12 & 3/9/12
 Applicant/Owner: Colorado Department of Transportation State: CO Sampling Point: 5:Wetland F (west)
 Investigator(s): Chuck Schrader, PKM Design Group, Inc. Section, Township, Range: T 11 S., R 67 W., S. 36
 Landform (hillslope, terrace, etc.): drainage swale Local relief (concave, convex, none): concave Slope (%): 3-8
 Subregion (LRR): LRR E Lat: 39.045530 Long: 104.845175 Datum: NAD 83
 Soil Map Unit Name: Peyton-Pring Complex NWI classification: PSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? No Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Sandbar willow dominated with seasonal runoff and upslope runoff from highway ditches.	

VEGETATION – Use scientific names of plants.

<p><u>Tree Stratum</u> (Plot size: _____) Absolute % Cover _____ Dominant Species? _____ Indicator Status _____ _____ = Total Cover</p> <p><u>Sapling/Shrub Stratum</u> (Plot size: _____) 1. <u>Salix exigua</u> _____ 80 _____ Y _____ OBL _____ = Total Cover</p> <p><u>Herb Stratum</u> (Plot size: _____) 1. _____ _____ = Total Cover</p> <p><u>Woody Vine Stratum</u> (Plot size: _____) 1. _____ _____ 2. _____ _____ _____ = Total Cover</p> <p>% Bare Ground in Herb Stratum <u>15</u></p>	<p>Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)</p> <p>Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>80</u> x 1 = <u>80</u> FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: <u>80</u> (A) <u>80</u> (B) Prevalence Index = B/A = <u>1.0</u></p> <p>Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0¹ ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants¹ ___ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</p> <p>Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
Remarks:	

SOIL

Sampling Point: 5:Wetland F (west)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10 YR 2/1						no mottles	sandy/loam
6-18	10 YR 4/1							

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input checked="" type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Salt Crust (B11) <input checked="" type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) <input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: North I-25 Re-evaluation City/County: El Paso County Sampling Date: 1/26/12 & 3/9/12
 Applicant/Owner: Colorado Department of Transportation State: CO Sampling Point: 6: Wetland G
 Investigator(s): Chuck Schrader, PKM Design Group, Inc. Section, Township, Range: T 11 S., R 67 W., S. 36
 Landform (hillslope, terrace, etc.): drainage swale Local relief (concave, convex, none): concave Slope (%): 3-8
 Subregion (LRR): LRR E Lat: 39.043578 Long: 104.843957 Datum: NAD 83
 Soil Map Unit Name: Pring Coarse Sandy Loams NWI classification: PEM/PSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? No Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u> (Plot size: _____)				Dominance Test worksheet:
	0 = Total Cover			Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Total Number of Dominant Species Across All Strata: <u>1</u> (B)
1. <u>Salix exigua</u>	80	Y	OBL	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
	80 = Total Cover			Prevalence Index worksheet:
<u>Herb Stratum</u> (Plot size: _____)				Total % Cover of: _____ Multiply by: _____
1. <u>Typha latifolia</u>	10	Y	OBL	OBL species <u>90</u> x 1 = <u>90</u>
	10 = Total Cover			FACW species _____ x 2 = _____
<u>Woody Vine Stratum</u> (Plot size: _____)				FAC species _____ x 3 = _____
1. _____				FACU species _____ x 4 = _____
2. _____				UPL species _____ x 5 = _____
	0 = Total Cover			Column Totals: <u>90</u> (A) <u>90</u> (B)
% Bare Ground in Herb Stratum <u>5</u>				Prevalence Index = B/A = <u>1.0</u>
				Hydrophytic Vegetation Indicators:
				<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
				<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
				<input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
				<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
				<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
				<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:				

SOIL

Sampling Point: 6: Wetland G

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10 YR 2/1						sandy loam	no mottles
12-18	10 YR 3/1							

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input checked="" type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Redox Depressions (F8)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (Explain in Remarks) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
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Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input checked="" type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) <input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: North I-25 Re-evaluation City/County: El Paso County Sampling Date: 1/26/12 & 3/9/12

Applicant/Owner: Colorado Department of Transportation State: CO Sampling Point: 7: Wetland Ha

Investigator(s): Chuck Schrader, PKM Design Group, Inc. Section, Township, Range: T 12 S., R 67 W., S. 1

Landform (hillslope, terrace, etc.): drainage/seep Local relief (concave, convex, none): concave Slope (%): 3-8

Subregion (LRR): LRR E Lat: 39.041245 Long: 104.842637 Datum: NAD 83

Soil Map Unit Name: Pring Coarse Sandy Loam NWI classification: PEM/PSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? No Are "Normal Circumstances" present? Yes No

Are Vegetation , Soil , or Hydrology naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:	

VEGETATION – Use scientific names of plants.

Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u>				Dominance Test worksheet:
1. <u>Salix amygdaloides</u>	<u>5</u>	<u>N</u>	<u>FACW</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
	<u>5</u>	= Total Cover		Total Number of Dominant Species Across All Strata: <u>2</u> (B)
<u>Sapling/Shrub Stratum</u>				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. <u>Salix exigua</u>	<u>30</u>	<u>Y</u>	<u>OBL</u>	Prevalence Index worksheet:
	<u>30</u>	= Total Cover		Total % Cover of: _____ Multiply by: _____
<u>Herb Stratum</u>				OBL species <u>70</u> x 1 = <u>70</u>
1. <u>Typha latifolia</u>	<u>30</u>	<u>Y</u>	<u>OBL</u>	FACW species <u>5</u> x 2 = <u>10</u>
2. <u>Juncus arcticus</u>	<u>10</u>	<u>N</u>	<u>OBL</u>	FAC species _____ x 3 = _____
	<u>40</u>	= Total Cover		FACU species _____ x 4 = _____
<u>Woody Vine Stratum</u>				UPL species _____ x 5 = _____
1. _____				Column Totals: <u>75</u> (A) <u>80</u> (B)
2. _____				Prevalence Index = B/A = <u>1.14</u>
% Bare Ground in Herb Stratum <u>15</u>	<u>0</u>	= Total Cover		Hydrophytic Vegetation Indicators:
				<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
				<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
				<input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
				<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
				<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
				<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:				

SOIL

Sampling Point: 7: Wetland Ha

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-18	10 YR 3/2		10 YR 5/6	0-2			sandy loam	few mottles

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input checked="" type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Redox Depressions (F8)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (Explain in Remarks)
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³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Aquatic Invertebrates (B13) <input checked="" type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) <input type="checkbox"/> Frost-Heave Hummocks (D7)	
Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: North I-25 Re-evaluation City/County: El Paso County Sampling Date: 1/26/12 & 3/9/12

Applicant/Owner: Colorado Department of Transportation State: CO Sampling Point: 8: Wetland H

Investigator(s): Chuck Schrader, PKM Design Group, Inc. Section, Township, Range: T 12 S., R 67 W., S. 1

Landform (hillslope, terrace, etc.): Black Forest creek drainage Local relief (concave, convex, none): concave Slope (%): 3-8

Subregion (LRR): LRR E Lat: 39.040162 Long: 104.841905 Datum: NAD 83

Soil Map Unit Name: Pring Coarse Sandy Loam NWI classification: PEM/PSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? No Are "Normal Circumstances" present? Yes No

Are Vegetation , Soil , or Hydrology naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Dominant sandbar willow and hydrology mirrors results from 2000 delineation.	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u> (Plot size: _____)				Dominance Test worksheet:
1. _____	<u>0</u>			Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
	= Total Cover			Total Number of Dominant Species Across All Strata: <u>1</u> (B)
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. <u>Salix exigua</u>	<u>80</u>	<u>Y</u>	<u>OBL</u>	Prevalence Index worksheet:
	= Total Cover			Total % Cover of: _____ Multiply by: _____
<u>Herb Stratum</u> (Plot size: _____)				OBL species <u>80</u> x 1 = <u>80</u>
1. <u>Typha latifolia</u>	<u>10</u>	<u>N</u>	<u>OBL</u>	FACW species _____ x 2 = _____
	= Total Cover			FAC species _____ x 3 = _____
<u>Woody Vine Stratum</u> (Plot size: _____)				FACU species _____ x 4 = _____
1. _____				UPL species _____ x 5 = _____
2. _____				Column Totals: <u>80</u> (A) <u>80</u> (B)
	= Total Cover			Prevalence Index = B/A = <u>1.0</u>
% Bare Ground in Herb Stratum <u>15</u>				Hydrophytic Vegetation Indicators:
				<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
				<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
				<input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
				<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
				<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
				<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:				

SOIL

Sampling Point: 8: Wetland H

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-20	10 YR 3/1						loam	few mottles

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)
<input checked="" type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	
Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: North I-25 Re-evaluation City/County: El Paso County Sampling Date: 1/26/12 & 3/9/12

Applicant/Owner: Colorado Department of Transportation State: CO Sampling Point: 9:Wetland X

Investigator(s): Chuck Schrader, PKM Design Group, Inc. Section, Township, Range: T 12 S., R 67 W., S. 12

Landform (hillslope, terrace, etc.): roadside ditch Local relief (concave, convex, none): concave Slope (%): 8-40

Subregion (LRR): LRR E Lat: 39.026906 Long: 104.832404 Datum: NAD 83

Soil Map Unit Name: Kettle-Rock Outcrop Complex NWI classification: PEM/PSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? No Are "Normal Circumstances" present? Yes No

Are Vegetation , Soil , or Hydrology naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u> (Plot size: _____)				Dominance Test worksheet:
1. _____	<u>0</u>			Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
	= Total Cover			Total Number of Dominant Species Across All Strata: <u>2</u> (B)
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. <u>Salix exigua</u>	<u>30</u>	<u>Y</u>	<u>OBL</u>	Prevalence Index worksheet:
	= Total Cover			<u> </u> Total % Cover of: <u> </u> Multiply by: <u> </u>
<u>Herb Stratum</u> (Plot size: _____)				OBL species <u>60</u> x 1 = <u>60</u>
1. <u>Typha latifolia</u>	<u>30</u>	<u>Y</u>	<u>OBL</u>	FACW species <u>10</u> x 2 = <u>20</u>
2. <u>Phalaris arundinacea</u>	<u>10</u>	<u>Y</u>	<u>FACW+</u>	FAC species <u> </u> x 3 = <u> </u>
	= Total Cover			FACU species <u> </u> x 4 = <u> </u>
<u>Woody Vine Stratum</u> (Plot size: _____)				UPL species <u> </u> x 5 = <u> </u>
1. _____				Column Totals: <u>70</u> (A) <u>80</u> (B)
2. _____				Prevalence Index = B/A = <u>1.14</u>
% Bare Ground in Herb Stratum <u>20</u>	<u>0</u>			Hydrophytic Vegetation Indicators:
	= Total Cover			<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
				<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
				<input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
				<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
				<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
				<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:				

SOIL

Sampling Point: 9:Wetland X

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-18	10 YR 3/2		10 YR 5/6	0-2			loam	few mottles

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1) (**except MLRA 1**)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- 2 cm Muck (A10)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)

- Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- Salt Crust (B11)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Stunted or Stressed Plants (D1) (**LRR A**)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visible on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6) (**LRR A**)
- Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Hydrology from highway and stormwater runoff.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: North I-25 Re-evaluation City/County: El Paso County Sampling Date: 1/26/12 & 3/9/12
 Applicant/Owner: Colorado Department of Transportation State: CO Sampling Point: 10:Wetland J
 Investigator(s): Chuck Schrader, PKM Design Group, Inc. Section, Township, Range: T 12 S., R 67 W., S. 12/T 12 S., R 66 W., S. 7
 Landform (hillslope, terrace, etc.): Smith Creek drainage Local relief (concave, convex, none): concave Slope (%): 0-10
 Subregion (LRR): LRR E Lat: 39.024130 Long: 104.831684 Datum: NAD 83
 Soil Map Unit Name: Ustic Torrifluvents, Loamy NWI classification: PEM/PSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? No Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Salix fragilis</u>	10	N	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. <u>Salix amygdaloides</u>	5	N	FACW	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
	<u>15</u>	= Total Cover		Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Prevalence Index worksheet:
1. <u>Salix exigua</u>	30	Y	OBL	Total % Cover of: _____ Multiply by: _____
	<u>30</u>	= Total Cover		OBL species <u>50</u> x 1 = <u>50</u>
<u>Herb Stratum</u> (Plot size: _____)				FACW species <u>15</u> x 2 = <u>30</u>
1. <u>Typha latifolia</u>	20	N	OBL	FAC species <u>10</u> x 3 = <u>30</u>
2. <u>Phalaris arundinacea</u>	10	N	FACW+	FACU species _____ x 4 = _____
	<u>30</u>	= Total Cover		UPL species _____ x 5 = _____
<u>Woody Vine Stratum</u> (Plot size: _____)				Column Totals: <u>75</u> (A) <u>110</u> (B)
1. _____				Prevalence Index = B/A = <u>1.47</u>
2. _____				Hydrophytic Vegetation Indicators:
% Bare Ground in Herb Stratum <u>20</u>	<u>0</u>	= Total Cover		<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
Remarks:				<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
				<input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
				<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
				<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
				<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

SOIL

Sampling Point: 10:Wetland J

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-18	10 YR 3/1						sandy loam	few mottles

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input checked="" type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Redox Depressions (F8)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (Explain in Remarks)
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³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____
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Remarks:

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input checked="" type="checkbox"/> Water Marks (B1) <input checked="" type="checkbox"/> Sediment Deposits (B2) <input checked="" type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	Secondary Indicators (2 or more required) <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) <input type="checkbox"/> Other (Explain in Remarks)		
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width: 60%;"> Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe) </td> <td style="width: 40%; text-align: center;"> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____ </td> </tr> </table>		Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: North I-25 Re-evaluation City/County: El Paso County Sampling Date: 1/26/12 & 3/9/12
 Applicant/Owner: Colorado Department of Transportation State: CO Sampling Point: 11: Wetland K
 Investigator(s): Chuck Schrader, PKM Design Group, Inc. Section, Township, Range: T 12 S., R 66 W., S. 7
 Landform (hillslope, terrace, etc.): Monument Branch/Smith Creek Channel Local relief (concave, convex, none): concave Slope (%): 8-15
 Subregion (LRR): LRR E Lat: 39.013491 Long: 104.828952 Datum: NAD 83
 Soil Map Unit Name: Tomah-Crowfoot Loamy Sands NWI classification: PEM/PSS
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? No Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Remarks:			

VEGETATION – Use scientific names of plants.

Stratum	Absolute % Cover	Dominant Species?	Indicator Status	Notes
<u>Tree Stratum</u> (Plot size: _____)				
	<u>0</u>			= Total Cover
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				
1. <u>Salix exigua</u>	<u>40</u>	<u>Y</u>	<u>OBL</u>	
	<u>40</u>			= Total Cover
<u>Herb Stratum</u> (Plot size: _____)				
1. <u>Typha latifolia</u>	<u>20</u>	<u>N</u>	<u>OBL</u>	
2. <u>Juncus arcticus</u>	<u>5</u>	<u>N</u>	<u>OBL</u>	
	<u>25</u>			= Total Cover
<u>Woody Vine Stratum</u> (Plot size: _____)				
1. _____				
2. _____				
	<u>0</u>			= Total Cover
% Bare Ground in Herb Stratum <u>25</u>				

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of: _____ Multiply by: _____

OBL species 65 x 1 = 65

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column Totals: 65 (A) 65 (B)

Prevalence Index = B/A = 1.0

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

5 - Wetland Non-Vascular Plants¹

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No

Remarks:

SOIL

Sampling Point: 11: Wetland K

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-14							sand/cobbles	
14-18	10 YR 5/2		10 YR 5/6	0-2			sandy clay	abundant mottles

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)			Indicators for Problematic Hydric Soils ³ :		
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)			
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)			
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)			
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)			
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)				
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.			
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)				
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)				

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input checked="" type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input checked="" type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input checked="" type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: North I-25 Re-evaluation City/County: El Paso County Sampling Date: 1/26/12 & 3/9/12
 Applicant/Owner: Colorado Department of Transportation State: CO Sampling Point: 12:Wetland U/AA & V
 Investigator(s): Chuck Schrader, PKM Design Group, Inc. Section, Township, Range: T 12 S., R 66 W., S. 7
 Landform (hillslope, terrace, etc.): drainage channel Local relief (concave, convex, none): concave Slope (%): 3-8
 Subregion (LRR): LRR E Lat: 39.017204 Long: 104.827437 Datum: NAD 83
 Soil Map Unit Name: Pring Coarse Sandy Loam NWI classification: PEM/PSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? No Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Salix amygdaloides</u>	5	N	FACW	
	5	= Total Cover		
Sapling/Shrub Stratum (Plot size: _____)				
1. <u>Salix exigua</u>	30	Y	OBL	
	30	= Total Cover		
Herb Stratum (Plot size: _____)				
1. <u>Typha latifolia</u>	30	Y	OBL	
2. <u>Juncus arcticus</u>	10	N	OBL	
	40	= Total Cover		
Woody Vine Stratum (Plot size: _____)				
1. _____				
2. _____				
	0	= Total Cover		
% Bare Ground in Herb Stratum <u>15</u>				
Remarks:				

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>70</u>	x 1 = <u>70</u>
FACW species <u>5</u>	x 2 = <u>10</u>
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: <u>75</u> (A)	<u>80</u> (B)
Prevalence Index = B/A = <u>1.11</u>	

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

5 - Wetland Non-Vascular Plants¹

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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SOIL

Sampling Point: 12:Wetland U/AA & V

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-10	10 YR 3/1						silty sandy	few mottles
10-18	10 YR 3/2						sandy clay	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1) (**except MLRA 1**)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- 2 cm Muck (A10)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)

- Water-Stained Leaves (B9) (**except MLRA 1, 2, 4A, and 4B**)
- Salt Crust (B11)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Stunted or Stressed Plants (D1) (**LRR A**)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visible on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6) (**LRR A**)
- Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: North I-25 Re-evaluation City/County: El Paso County Sampling Date: 1/26/12 & 3/9/12
 Applicant/Owner: Colorado Department of Transportation State: CO Sampling Point: 13: Wetland L (West)
 Investigator(s): Chuck Schrader, PKM Design Group, Inc. Section, Township, Range: T 12 S., R 66 W., S. 18
 Landform (hillslope, terrace, etc.): drainage channel Local relief (concave, convex, none): concave Slope (%): 8-40
 Subregion (LRR): LRR E Lat: 39.003637 Long: 104.820289 Datum: NAD 83
 Soil Map Unit Name: Kettle Gravelly Loamy Sands NWI classification: PEM/PSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? No Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Sandbar willow, cattail and Juncus west of culvert. Results match 2000 field delineations.	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u> (Plot size: _____)				Dominance Test worksheet:
1. _____	<u>0</u>			Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
	= Total Cover			Total Number of Dominant Species Across All Strata: <u>2</u> (B)
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. <u>Salix exigua</u>	<u>30</u>	<u>Y</u>	<u>OBL</u>	Prevalence Index worksheet:
	= Total Cover			Total % Cover of: _____ Multiply by: _____
<u>Herb Stratum</u> (Plot size: _____)				OBL species <u>65</u> x 1 = <u>65</u>
1. <u>Typha latifolia</u>	<u>30</u>	<u>Y</u>	<u>OBL</u>	FACW species <u>5</u> x 2 = <u>10</u>
2. <u>Juncus arcticus</u>	<u>5</u>	<u>N</u>	<u>OBL</u>	FAC species _____ x 3 = _____
3. <u>Agrostis alba</u>	<u>5</u>	<u>N</u>	<u>FACW</u>	FACU species _____ x 4 = _____
	= Total Cover			UPL species _____ x 5 = _____
<u>Woody Vine Stratum</u> (Plot size: _____)				Column Totals: <u>70</u> (A) <u>75</u> (B)
1. _____				Prevalence Index = B/A = <u>1.1</u>
2. _____				Hydrophytic Vegetation Indicators:
% Bare Ground in Herb Stratum <u>20</u>	= Total Cover			<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
				<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
				<input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
				<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
				<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
				<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:				

SOIL

Sampling Point: 13: Wetland L (West)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	10 YR 3/3						sandy loam	
3-18	10 YR 3/2		10 YR 4/3	2-5			silty loam w/cobbles	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)
<input checked="" type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input checked="" type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
	<input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: North I-25 Re-evaluation City/County: El Paso County Sampling Date: 1/26/12 & 3/9/12
 Applicant/Owner: Colorado Department of Transportation State: CO Sampling Point: 14:Wetland W (east)
 Investigator(s): Chuck Schrader, PKM Design Group, Inc. Section, Township, Range: T 12 S., R 66 W., S. 7
 Landform (hillslope, terrace, etc.): drainage channel Local relief (concave, convex, none): concave Slope (%): 3-8
 Subregion (LRR): LRR E Lat: 39.015440 Long: 104.826556 Datum: NAD 83
 Soil Map Unit Name: Pring Coarse Sandy Loam NWI classification: PEM/PSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? No Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1	<u>0</u> = Total Cover			Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Total Number of Dominant Species Across All Strata: <u>1</u> (B)
1. <u>Salix exigua</u>	<u>5</u>	<u>N</u>	<u>OBL</u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
	<u>5</u> = Total Cover			Prevalence Index worksheet:
<u>Herb Stratum</u> (Plot size: _____)				Total % Cover of: _____ Multiply by: _____
1. <u>Typha latifolia</u>	<u>60</u>	<u>Y</u>	<u>OBL</u>	OBL species <u>65</u> x 1 = <u>65</u>
	<u>60</u> = Total Cover			FACW species _____ x 2 = _____
<u>Woody Vine Stratum</u> (Plot size: _____)				FAC species _____ x 3 = _____
1. _____				FACU species _____ x 4 = _____
2. _____				UPL species _____ x 5 = _____
% Bare Ground in Herb Stratum <u>20</u>	<u>0</u> = Total Cover			Column Totals: <u>65</u> (A) <u>65</u> (B)
				Prevalence Index = B/A = <u>1.0</u>
				Hydrophytic Vegetation Indicators:
				<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
				<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
				<input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
				<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
				<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
				<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:				

SOIL

Sampling Point 14:Wetland W (east)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10 YR 3/2	90	10 YR 4/3	0-2			loamy sand	sandy few mottles

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)			Indicators for Problematic Hydric Soils ³ :		
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)			
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)			
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)			
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)			
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.			
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)				
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)				
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)				

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input checked="" type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Hydrology from upstream runoff and culvert drainage, no change from 2000 study.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: North I-25 Re-evaluation City/County: El Paso County Sampling Date: 1/26/12 & 3/9/12
 Applicant/Owner: Colorado Department of Transportation State: CO Sampling Point: 15: Wetland L100 (east)
 Investigator(s): Chuck Schrader, PKM Design Group, Inc. Section, Township, Range: T 12 S., R 66 W., S. 18
 Landform (hillslope, terrace, etc.): stream channel and bench Local relief (concave, convex, none): concave Slope (%): 8-14
 Subregion (LRR): LRR E Lat: 39.003923 Long: 104.819558 Datum: NAD 83
 Soil Map Unit Name: Kettle Gravelly Loamy Sand NWI classification: PEM/PSSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? No Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: East of NB I-25.	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status		Dominance Test worksheet:
1. <u>Populus deltoides</u>	5	N	FAC		Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. <u>Salix amygdaloides</u>	5	N	FACW		Total Number of Dominant Species Across All Strata: <u>1</u> (B)
	10 = Total Cover				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
<u>Sapling/Shrub Stratum</u> (Plot size: _____)					Prevalence Index worksheet:
1. <u>Salix exigua</u>	60	Y	OBL		Total % Cover of: _____ Multiply by: _____
	60 = Total Cover				OBL species <u>75</u> x 1 = <u>75</u>
<u>Herb Stratum</u> (Plot size: _____)					FACW species <u>5</u> x 2 = <u>10</u>
1. <u>Typha latifolia</u>	10	N	OBL		FAC species <u>5</u> x 3 = <u>15</u>
2. <u>Carex nebrascensis</u>	5	N	OBL		FACU species _____ x 4 = _____
	15 = Total Cover				UPL species _____ x 5 = _____
<u>Woody Vine Stratum</u> (Plot size: _____)					Column Totals: <u>85</u> (A) <u>100</u> (B)
1. _____					Prevalence Index = B/A = <u>1.18</u>
2. _____					Hydrophytic Vegetation Indicators:
% Bare Ground in Herb Stratum <u>10</u>	0 = Total Cover				<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
					<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
					<input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
					<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
					<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
					<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
					¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
					Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:					

SOIL

Sampling Point: 15: Wetland L100 (east)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	10 YR 3/2		No mottles				silty sand	no mottles
3-16	10 YR 3/2		10 YR 4/4				loamy sand	abundant mottles

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1) **(except MLRA 1)**
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- 2 cm Muck (A10)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- Salt Crust (B11)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Stunted or Stressed Plants (D1) **(LRR A)**
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visible on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6) **(LRR A)**
- Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____
 Water Table Present? Yes _____ No Depth (inches): _____
 Saturation Present? Yes _____ No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: North I-25 Re-evaluation City/County: El Paso County Sampling Date: 1/26/12 & 3/9/12
 Applicant/Owner: Colorado Department of Transportation State: CO Sampling Point: 16: Wetland L200 (east)
 Investigator(s): Chuck Schrader, PKM Design Group, Inc. Section, Township, Range: T 12 S., R 66 W., S. 18
 Landform (hillslope, terrace, etc.): creek bench Local relief (concave, convex, none): concave Slope (%): 8-40
 Subregion (LRR): LRR E Lat: 39.005116 Long: 104.820227 Datum: NAD 83
 Soil Map Unit Name: Kettle Gravely Loamy Sand NWI classification: PEM/PSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? No Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <u>Quercus gambelii</u>	5	N	UPL	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)	
	5	= Total Cover			
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Total Number of Dominant Species Across All Strata: <u>1</u> (B)	
1. <u>Salix exigua</u>	30	Y	OBL	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)	
	30	= Total Cover			
<u>Herb Stratum</u> (Plot size: _____)				Prevalence Index worksheet:	
1. <u>Agrostis alba</u>	20	N	FACW	Total % Cover of: _____ Multiply by: _____	
2. <u>Bromus inermis</u>	10	N	NI	OBL species <u>30</u> x 1 = <u>30</u>	
	30	= Total Cover			FACW species <u>20</u> x 2 = <u>40</u>
<u>Woody Vine Stratum</u> (Plot size: _____)				FAC species _____ x 3 = _____	
1. _____				FACU species _____ x 4 = _____	
2. _____				UPL species <u>5</u> x 5 = <u>25</u>	
% Bare Ground in Herb Stratum <u>30</u>	0	= Total Cover			Column Totals: <u>55</u> (A) <u>95</u> (B)
				Prevalence Index = B/A = <u>1.73</u>	
				Hydrophytic Vegetation Indicators:	
				<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation	
				<input checked="" type="checkbox"/> 2 - Dominance Test is >50%	
				<input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹	
				<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
				<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹	
				<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)	
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Remarks:					

SOIL

Sampling Point: 16: Wetland L200 (east)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-18	10 YR 4/2						alluvial	sandy silt with clay

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)			Indicators for Problematic Hydric Soils ³ :		
<input type="checkbox"/> Histosol (A1)	<input checked="" type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)			
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)			
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)			
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)			
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.			
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)				
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)				
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)				

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:
Sandy, alluvial deposits with sparse vegetative growth.

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)
<input checked="" type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
	<input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: North I-25 Re-evaluation City/County: El Paso County Sampling Date: 1/26/12 & 3/9/12

Applicant/Owner: Colorado Department of Transportation State: CO Sampling Point: 17:Wetland M (west)
(west)

Investigator(s): Chuck Schrader, PKM Design Group, Inc. Section, Township, Range: T 12 S., R 66 W., S. 18

Landform (hillslope, terrace, etc.): creek drainage Local relief (concave, convex, none): concave Slope (%): 8-40

Subregion (LRR): LRR E Lat: 39.000797 Long: 104.818651 Datum: NAD 83

Soil Map Unit Name: Kettle Gravelly Loamy Sand NWI classification: PSS/PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? No Are "Normal Circumstances" present? Yes X No

Are Vegetation , Soil , or Hydrology naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>	

Remarks:
Black Squirrel Creek drainage with upslope runoff and floodplain water flows. Flowing/standing water through channel.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u> (Plot size: <u> </u>)	<u>0</u>			Dominance Test worksheet:
	= Total Cover			Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
<u>Sapling/Shrub Stratum</u> (Plot size: <u> </u>)				Total Number of Dominant Species Across All Strata: <u>2</u> (B)
1. <u>Salix exigua</u>	<u>40</u>	<u>Y</u>	<u>OBL</u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
	<u>40</u> = Total Cover			Prevalence Index worksheet:
<u>Herb Stratum</u> (Plot size: <u> </u>)				Total % Cover of: <u> </u> Multiply by: <u> </u>
1. <u>Typha latifolia</u>	<u>30</u>	<u>Y</u>	<u>OBL</u>	OBL species <u>80</u> x 1 = <u>80</u>
2. <u>Schoenoplectus tabernaemontai</u>	<u>10</u>	<u>N</u>	<u>OBL</u>	FACW species <u> </u> x 2 = <u> </u>
	<u>40</u> = Total Cover			FAC species <u> </u> x 3 = <u> </u>
<u>Woody Vine Stratum</u> (Plot size: <u> </u>)				FACU species <u> </u> x 4 = <u> </u>
1. <u> </u>				UPL species <u> </u> x 5 = <u> </u>
2. <u> </u>				Column Totals: <u>80</u> (A) <u>80</u> (B)
	<u>0</u> = Total Cover			Prevalence Index = B/A = <u>1.0</u>
% Bare Ground in Herb Stratum <u>10</u>				Hydrophytic Vegetation Indicators:
				<u> </u> 1 - Rapid Test for Hydrophytic Vegetation
				<u>X</u> 2 - Dominance Test is >50%
				<u>X</u> 3 - Prevalence Index is ≤3.0 ¹
				<u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
				<u> </u> 5 - Wetland Non-Vascular Plants ¹
				<u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: North I-25 Re-evaluation City/County: El Paso County Sampling Date: 1/26/12 & 3/9/12
 Applicant/Owner: Colorado Department of Transportation State: CO Sampling Point: 18: Wetland N
 Investigator(s): Chuck Schrader, PKM Design Group, Inc. Section, Township, Range: T 12 S., R 66 W., S. 32
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 5-20
 Subregion (LRR): LRR E Lat: 38.959290 Long: 104.801555 Datum: NAD 83
 Soil Map Unit Name: Kutch Clay Loam NWI classification: PEM/PSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? No Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Area of hillside seeps and highway runoff.	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u> (Plot size: _____)				Dominance Test worksheet:
	<u>0</u>			Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
	= Total Cover			Total Number of Dominant Species Across All Strata: <u>2</u> (B)
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. <u>Salix exigua</u>	<u>50</u>	<u>Y</u>	<u>OBL</u>	Prevalence Index worksheet:
	<u>50</u>			Total % Cover of: _____ Multiply by: _____
	= Total Cover			OBL species <u>80</u> x 1 = <u>80</u>
<u>Herb Stratum</u> (Plot size: _____)				FACW species _____ x 2 = _____
1. <u>Typha latifolia</u>	<u>30</u>	<u>Y</u>	<u>OBL</u>	FAC species _____ x 3 = _____
	<u>30</u>			FACU species _____ x 4 = _____
	= Total Cover			UPL species _____ x 5 = _____
<u>Woody Vine Stratum</u> (Plot size: _____)				Column Totals: <u>80</u> (A) <u>80</u> (B)
1. _____				Prevalence Index = B/A = <u>1.0</u>
2. _____				Hydrophytic Vegetation Indicators:
% Bare Ground in Herb Stratum <u>10</u>	<u>0</u>			<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
	= Total Cover			<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
				<input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
				<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
				<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
				<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:				

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: North I-25 Re-evaluation City/County: El Paso County Sampling Date: 1/26/12 & 3/9/12
 Applicant/Owner: Colorado Department of Transportation State: CO Sampling Point: 19: Wetland S
 Investigator(s): Chuck Schrader, PKM Design Group, Inc. Section, Township, Range: T 12 S., R 66 W., S. 32
 Landform (hillslope, terrace, etc.): creek drainage Local relief (concave, convex, none): concave Slope (%): 5-20
 Subregion (LRR): LRR E Lat: 38.961522 Long: 104.800783 Datum: NAD 83
 Soil Map Unit Name: Kutch Clay Loam NWI classification: PEM/PSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? No Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u> (Plot size: _____)				Dominance Test worksheet:
1. <u>Salix amygdaloides</u>	5	N	FACW	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
	5	= Total Cover		Total Number of Dominant Species Across All Strata: <u>2</u> (B)
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. <u>Salix exigua</u>	30	Y	OBL	Prevalence Index worksheet:
	30	= Total Cover		Total % Cover of: _____ Multiply by: _____
<u>Herb Stratum</u> (Plot size: _____)				OBL species <u>80</u> x 1 = <u>80</u>
1. <u>Typha latifolia</u>	40	Y	OBL	FACW species <u>5</u> x 2 = <u>10</u>
2. <u>Juncus arcticus</u>	10	N	OBL	FAC species _____ x 3 = _____
	50	= Total Cover		FACU species _____ x 4 = _____
<u>Woody Vine Stratum</u> (Plot size: _____)				UPL species _____ x 5 = _____
1. _____				Column Totals: <u>85</u> (A) <u>90</u> (B)
2. _____				Prevalence Index = B/A = <u>1.06</u>
% Bare Ground in Herb Stratum <u>15</u>	0	= Total Cover		Hydrophytic Vegetation Indicators:
				<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
				<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
				<input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
				<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
				<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
				<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:				

SOIL

Sampling Point: 19: Wetland S

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10 YR 3/2						gravelly loamy sand	no mottles
6-18	10 YR 3/2		10 YR 4/6				gravelly loamy sand	abundant mottles

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1) **(except MLRA 1)**
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- 2 cm Muck (A10)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input checked="" type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Iron Deposits (B5)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> Salt Crust (B11)	
<input type="checkbox"/> Aquatic Invertebrates (B13)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	
<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	
<input type="checkbox"/> Other (Explain in Remarks)	

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: North I-25 Re-evaluation City/County: El Paso County Sampling Date: 1/26/12 & 3/9/12
 Applicant/Owner: Colorado Department of Transportation State: CO Sampling Point: 20: Non-wetland T
 Investigator(s): Chuck Schrader, PKM Design Group, Inc. Section, Township, Range: T 12 S., R 66 W., S. 29
 Landform (hillslope, terrace, etc.): overflow channel from detention pond Local relief (concave, convex, none): concave Slope (%): 1-9
 Subregion (LRR): LRR E Lat: 38.981804 Long: 104.810692 Datum: NAD 83
 Soil Map Unit Name: Blakeland loamy sand NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? No Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No <u>X</u>	Is the Sampled Area within a Wetland?	Yes _____	No <u>X</u>
Hydric Soil Present?	Yes <u>NA</u>	No _____			
Wetland Hydrology Present?	Yes <u>X</u>	No _____			
Remarks: Small detention overflow channel that did not contain hydric vegetation. No wetland delineation form was included in the earlier 2000 study.					

VEGETATION – Use scientific names of plants.

<p><u>Tree Stratum</u> (Plot size: _____) 1. _____ _____ = Total Cover</p> <p><u>Sapling/Shrub Stratum</u> (Plot size: _____) 1 _____ _____ = Total Cover</p> <p><u>Herb Stratum</u> (Plot size: _____)</p> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:35%;">1. <u>Agrostis alba</u></td> <td style="width:10%; text-align: center;">20</td> <td style="width:10%; text-align: center;">N</td> <td style="width:10%; text-align: center;">FACW</td> <td style="width:35%;"></td> </tr> <tr> <td>2. <u>Bromus inermis</u></td> <td style="text-align: center;">10</td> <td style="text-align: center;">N</td> <td style="text-align: center;">NI</td> <td></td> </tr> <tr> <td>3. <u>Agropyron smithii</u></td> <td style="text-align: center;">20</td> <td style="text-align: center;">N</td> <td style="text-align: center;">FACU</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">50</td> <td colspan="3" style="text-align: right;">= Total Cover</td> </tr> </table> <p><u>Woody Vine Stratum</u> (Plot size: _____) 1. _____ 2. _____ _____ = Total Cover</p> <p>% Bare Ground in Herb Stratum <u>30</u></p>	1. <u>Agrostis alba</u>	20	N	FACW		2. <u>Bromus inermis</u>	10	N	NI		3. <u>Agropyron smithii</u>	20	N	FACU			50	= Total Cover			<p>Dominance Test worksheet:</p> <p>Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)</p> <p>Total Number of Dominant Species Across All Strata: <u>0</u> (B)</p> <p>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)</p> <p>Prevalence Index worksheet:</p> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">Total % Cover of:</td> <td style="width:50%;">Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x 1 = _____</td> </tr> <tr> <td>FACW species <u>20</u></td> <td>x 2 = <u>40</u></td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = _____</td> </tr> <tr> <td>FACU species <u>20</u></td> <td>x 4 = <u>80</u></td> </tr> <tr> <td>UPL species <u>10</u></td> <td>x 5 = <u>50</u></td> </tr> <tr> <td>Column Totals: <u>50</u> (A)</td> <td><u>170</u> (B)</td> </tr> </table> <p>Prevalence Index = B/A = <u>3.4</u></p> <p>Hydrophytic Vegetation Indicators:</p> <p>___ 1 - Rapid Test for Hydrophytic Vegetation</p> <p>___ 2 - Dominance Test is >50%</p> <p>___ 3 - Prevalence Index is ≤3.0¹</p> <p>___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)</p> <p>___ 5 - Wetland Non-Vascular Plants¹</p> <p>___ Problematic Hydrophytic Vegetation¹ (Explain)</p> <p>¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</p> <p>Hydrophytic Vegetation Present? Yes _____ No <u>X</u></p>	Total % Cover of:	Multiply by:	OBL species _____	x 1 = _____	FACW species <u>20</u>	x 2 = <u>40</u>	FAC species _____	x 3 = _____	FACU species <u>20</u>	x 4 = <u>80</u>	UPL species <u>10</u>	x 5 = <u>50</u>	Column Totals: <u>50</u> (A)	<u>170</u> (B)
1. <u>Agrostis alba</u>	20	N	FACW																																
2. <u>Bromus inermis</u>	10	N	NI																																
3. <u>Agropyron smithii</u>	20	N	FACU																																
	50	= Total Cover																																	
Total % Cover of:	Multiply by:																																		
OBL species _____	x 1 = _____																																		
FACW species <u>20</u>	x 2 = <u>40</u>																																		
FAC species _____	x 3 = _____																																		
FACU species <u>20</u>	x 4 = <u>80</u>																																		
UPL species <u>10</u>	x 5 = <u>50</u>																																		
Column Totals: <u>50</u> (A)	<u>170</u> (B)																																		
Remarks:																																			

SOIL

Sampling Point: 20:T – Non-Wetland

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <u>NA</u> No _____
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Remarks:
No test pit was dug as hydric vegetation was not present and no data forms were available from previous wetland delineations to indicate soils.

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)
<input checked="" type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input checked="" type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input checked="" type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
	<input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Hydrology from stormwater runoff and overflow from upstream detention area.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: North I-25 Re-evaluation City/County: El Paso County Sampling Date: 1/26/12 & 3/9/12
 Applicant/Owner: Colorado Department of Transportation State: CO Sampling Point: 21:Wetland New WQ
 Investigator(s): Chuck Schrader, PKM Design Group, Inc. Section, Township, Range: T 13 S., R 66 W., S. 5
 Landform (hillslope, terrace, etc.): stormwater pond Local relief (concave, convex, none): concave Slope (%): 3-8
 Subregion (LRR): LRR E Lat: 38.942857 Long: 104.813475 Datum: NAD 83
 Soil Map Unit Name: Stapleton Sandy Loam NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? No Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Stormwater detention area on east side of northbound I-25 constructed after original wetland delineation and study was completed.	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
<u>Tree Stratum</u> (Plot size: _____)				Dominance Test worksheet:
1. _____	<u>0</u>			Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
	= Total Cover			Total Number of Dominant Species Across All Strata: <u>1</u> (B)
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1 _____	<u>0</u>			Prevalence Index worksheet:
	= Total Cover			Total % Cover of: _____ Multiply by: _____
<u>Herb Stratum</u> (Plot size: _____)				OBL species <u>70</u> x 1 = <u>70</u>
1. <u>Typha latifolia</u>	<u>70</u>	<u>Y</u>	<u>OBL</u>	FACW species _____ x 2 = _____
	= Total Cover			FAC species _____ x 3 = _____
<u>Woody Vine Stratum</u> (Plot size: _____)				FACU species _____ x 4 = _____
1. _____				UPL species _____ x 5 = _____
2. _____				Column Totals: <u>70</u> (A) <u>70</u> (B)
	= Total Cover			Prevalence Index = B/A = <u>1.0</u>
% Bare Ground in Herb Stratum <u>20</u>	= Total Cover			Hydrophytic Vegetation Indicators:
				<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
				<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
				<input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
				<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
				<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
				<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:				

SOIL

Sampling Point: 21:New WQ

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
								sandy, sediment deposits

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)			Indicators for Problematic Hydric Soils ³ :		
<input type="checkbox"/> Histosol (A1)	<input checked="" type="checkbox"/> Sandy Redox (S5)		<input type="checkbox"/> 2 cm Muck (A10)		
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)		<input type="checkbox"/> Red Parent Material (TF2)		
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)		<input type="checkbox"/> Very Shallow Dark Surface (TF12)		
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)		<input type="checkbox"/> Other (Explain in Remarks)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)				
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)				
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)				
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)				

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:
No test pit but contains sandy sediment deposits with heavy cattail growth.

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input checked="" type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input checked="" type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input checked="" type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Hydrology from highway and stormwater runoff.