August 7, 2024



Monument Ridge East, LLC 101 North Cascade Avenue, Suite 10 Colorado Springs, Colorado 80903

- Attn: Norbie Larsen
- Re: Response to Review Comments Monument Ridge East Monument Hill Road and Palmer Divide Road El Paso, Colorado Entech Job No. 230248
- Ref: Entech Engineering, Inc., dated March 7, 2023. Soils and Geology Study, Monument Ridge East, Monument Hill Road and Palmer Divide Road, El Paso County, Colorado. Entech Job No. 230248.

Colorado Geological Survey, dated June 13, 2024. *Monument Ridge East, File No. SP241,* CGS Unique No. EP-24-0077.

WSB, dated September 10, 2021, *Level 2 Wetland Delineation Report, Monument Ridge East Development, Woodmoor, El Paso County, Colorado.* WSB Project No. 18697.

Department of the Army Corps of Engineers, dated March 22, 2022, *Jurisdictional Determination – Action No. SPA-2005-00679.*

Dear Mr. Larsen:

Entech Engineering, Inc. (Entech) has reviewed the CGS comments dated June 13, 2024 on the proposed Monument Ridge East development. This letter presents our responses to the CGS comments. It should be noted that additional investigation/design will be required and completed as the project continues through the development process.

The CGS comments, WSB *Level 2 Wetland Delineation Report, and USACE Jurisdictional Determination letter* are attached with this response letter. The responses to their comments are presented below:

ENTECH ENGINEERING, INC. RESPONSES

<u>Entech Response to Comment 1</u>: The Geology/Engineering Geology Map has been updated and is included with the revised report.

Entech Response to Comment 2: The proposed grading indicates significant cuts of up to 20 to 24 feet across the site. Four piezometers were recently installed in areas of proposed cuts, and where shallow water conditions were previously encountered in Test Boring Nos. 1 - 4. Significant drainage improvements and interceptor drains are planned. Additional site investigation will be conducted during the development process and recommendations regarding an underdrain system will be provided. The underdrain system must have a daylight to function properly. At this time, we do not believe that a general "no basement" statement is warranted. This statement should be used for areas where further investigation/analysis determines that basement construction is not feasible.

Entech Response to Comment 3: Foundations should be 3 feet above water for typical construction practices. Areas of shallow water will be further evaluated to determine mitigation measures required for the proposed construction. Mitigation measures may include raising the site grades, interceptor drains, and utility drains. Entech will continue to monitor the temporary piezometers throughout the coming seasons and during the development process. The readings

Monument Ridge East, LLC Response to Review Comments Monument Ridge East El Paso County, Colorado Page 2



will be utilized to evaluate the development. Additional piezometers may be recommended following site grading and utility installation.

<u>Entech Response to Comment 4</u>: Figure 7 has been updated, and a geologic hazard note provided for the preliminary plan/plat.

Entech Response to Comment 5: Entech is in agreement that lots should not be located within the delineated jurisdictional wetlands located in the northern and northwestern portions of the site. The jurisdictional wetlands lie within no-build areas and will be avoided by the development.

Entech Response to Comment 6: Entech is in agreement that filling of the natural drainages will not mitigate the shallow groundwater conditions and an undrain system will be needed. Additional site investigation will be conducted during the development process and recommendations regarding an underdrain system will be provided. The underdrain system must have a daylight to function properly.

We trust this has provided you with the information you require. If you have any questions or need additional information, please do not hesitate to contact us.

Respectfully Submitted,

ENTECH ENGINEERING, INC.

Logan L. Langford, P.G. Sr. Geologist

Reviewed by:



Joseph C. Goode, Jr., P.E. President

LLL:JCG Encl.

F:\AA Projects\2023\230248-Monument Ridge East-Monument Hill Rd & Palmer Divide Rd-300-SGS\Reports\230248 CGS Response Letter.docx

EP-24-0077 Monument Ridge East N¹/₂ Section 2, T11S, R67W, 6th Meridian 39.1284, -104.8624 File Number: SP241 Preliminary plan to create 342 residential lots on 63 acres.

With this referral, we received a request to provide Review Comments (Email dated 6/13/2024); Construction Drawings (Drexel, Barrell & CO., January 3, 2024); Preliminary Drainage Report (PRC Engineering, April 2024); Preliminary Plan Drawings (Bear Creek Surveying, Inc., 4/12/2024); Soil and Geology Study (Entech Engineering, Inc., 3/7/2023), and other documents. We offer the following comments and recommendations.

- Entech encountered groundwater at depths ranging from 1 to 10 feet during drilling. However, figure 7 of their report fails to depict this shallow groundwater in the relevant areas. Test Boring No. 3, which includes groundwater at 1 foot, is mapped as Colluvium and Dawson Formation without shallow groundwater. It is imperative that Figure 7 is revised to reflect the geologic hazards and constraints.
- Entech states (page 11), "Proposed grading plans indicate these areas that have been mapped in lot areas will be filled and raised above the seasonally shallow and potentially seasonally shallow groundwater areas." In our cursory review of the preliminary plan with existing and proposed grades, it appears that most of the site will contain significant cuts to achieve the proposed grades, in some areas up to 20 feet. Due to the shallow groundwater conditions at this site and the cuts planned, no basements should be allowed.
- 3. CGS agrees with Entech (page 10), "Foundations should maintain a minimum separation of 3 feet between the foundation grade and the maximum anticipated groundwater level." The maximum anticipated groundwater level should be determined during the preliminary plat application by performing a groundwater observation/monitoring program. Site grades may require filling to accommodate this recommendation. CGS recommends that a groundwater observations/monitoring program is performed in areas of shallow groundwater and potentially shallow groundwater. To be effective, this monitoring should be performed through Spring/Summer/Fall/Winter 2024.
- 4. A geologic hazard note is not included in the preliminary plan drawings. <u>CGS recommends updating</u> <u>Figure 7 of Entech's report and adding a note to the preliminary plan/plat listing the geologic hazards and</u> <u>constraints, along with mitigation measures</u>.
- 5. Wetlands (Freshwater Emergent/Freshwater Forested/Shrub Wetland) are located within the site. However, these areas do not appear to be portrayed correctly in Figure 7 of Entech's report. These areas are associated with standing water; lots should not be located within these areas, a setback should be established, and these areas should be designated as "No Build Areas". Setbacks and no build areas should be noted on the plans.
- 6. CGS has concerns with lots and future improvements constructed over the existing drainage that runs north and south through the site, even following grading operations, as this natural drainage can be an area where water will continue to migrate. CGS recommends that if lots are planned (or allowed) within/near the existing drainage (after rerouting and site grading occurs), these areas be further evaluated during site-specific geotechnical investigations to determine the impact (i.e., groundwater conditions, differential settlement, etc.) on future development. It would be prudent to install a drain system within the existing drainage prior to grading operations if it is not planned already.

Submitted 6/13/2024 by Amy Crandall, Colorado Geological Survey: acrandall@mines.edu



WSB, Level 2 Wetlands Delineation Report, dated September 10, 2021, WSB Project No. 18697



LEVEL 2 WETLAND DELINEATION REPORT

Monument Ridge East Development

Woodmoor | EL PASO COUNTY, COLORADO

SEPTEMBER 10, 2021

Prepared for: Monument Ridge East, LLC 5505 List Drive Colorado Springs, CO 80919

WSB PROJECT NO. 18697



LEVEL 2 WETLAND DELINEATION REPORT

Monument Ridge East Development

For:

Monument Ridge East, LLC

September 10, 2021

Prepared by:



The report was prepared by:

Saa Litter

Shawn Williams, CMWP No.1178

Date: September 10, 2021

Title: Senior Environmental Scientist

I hereby certify that this report was reviewed by me and that I am a Certified Minnesota Wetland Professional (CMWP).

Alison Harwood, CMWP No.1238

Date: September 10, 2021

Title: Director of Natural Resources

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I. Introduction

A. Project Location

The project is located immediately southeast of the intersection of Interstate 25 and Palmer Divide Road in the City of Monument (Woodmoor), El Paso County, CO. The project area consists of approximately 66 acres (**Figure 1, Appendix A**).

B. Project Purpose

Monument Ridge East, LLC is proposing a residential development at this location. This report is intended to address all jurisdictional Waters of the United States (WOUS) for final design and permitting of this project. This project was authorized by Monument Ridge East, LLC.

C. Project Scope

The scope of this project was to delineate all wetlands within the outlined project area.

D. Summary of Findings

A Level 2 wetland delineation was performed on the site. A total of two (2) wetlands were identified and delineated in the preparation of this report, as summarized in **Table 1**. For a visual representation of the wetland locations and size, please see **Figure 6**, **Appendix B**. All potential wetland areas (mapped hydric soils, NWI signatures, and low depressional areas) were reviewed on-site and either delineated or determined to be upland.

Table 1: Summary of Delineated Wetlands, Monument Ridge East, El Paso County, Colorado

Wetland ID	Delineation Method	No. Flags/ No. Transects	Circular 39 (Cowardin)	NWI *	CO Stream Segments* *	County Soil Survey (Hydric/N on- Hydric)***	Wetland Size (acres)
A	Level 2	1-28/1	Type 1/3 (PEM1A/ PEM1C)	Yes	N/A	1 (Alamosa Ioam)	0.90
В	Level 2	1-9/1	Type 1 (PEM1A)	Yes	N/A	1 (Alamosa Ioam)	0.40

II. Delineation Procedure

A. Off-Site Determination: Base Map Review

Topography: The landform consists of sloping hills and two wetlands. The wetlands were located at two mapped low drainageways. Water generally flows north (**Figure 2, Appendix A**).

The Colorado Department of Public Health and Environment – Water Quality Control Division 2020 Spatial Representation of Stream Segment data (CDPHE 2020) shows no stream segments in the project area (**Figure 3, Appendix A**).

The *National Wetlands Inventory Map* (US Fish and Wildlife Service) identified three wetland types as part of the National Wetlands Inventory (NWI) (**Figure 4, Appendix A**). The NWI identifies the following wetland types: PEM1C, PSS1C, and R4SBC.

The Soil Survey of El Paso County, Colorado

(<u>https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm</u>) identified the following soils (**Table 2**) within the project area (**Figure 5**, **Appendix A**):

Map Symbol	Soil Unit Name	Percent Hydric	Rating
1	Alamosa loam, 1 to 3 percent slopes	85	Predominantly hydric
69	Peyton-Pring complex, 8 to 15 percent slopes	0	Not hydric
92	Tomah-Crowfoot loamy sands, 3 to 8 percent slopes	0	Not hydric
PrE2	Peyton-Pring-Crowfoot Complex, 8-15 percent slopes	0	Not hydric
Lw	Loamy Wet Alluvial Land	1	Predominantly not hydric

Table 2: Soil Survey

Antecedent Climate Conditions: The *U.S. Drought Monitor* (UNL) was referenced to determine the status of drought conditions within El Paso County, preceding the August 26, 2021 site visit, which fell within the normal precipitation range. The U.S. Drought Monitor is jointly produced by the National Drought Mitigation Center (NDMC) at the University of Nebraska-Lincoln, the United States Department of Agriculture, and the National Oceanic and Atmospheric Administration. The map is courtesy of NDMC. The Drought Monitor record for August 26, 2021 can be found in **Appendix D**.

B. On-Site Determination

A Level 2 field investigation was conducted by Shawn Williams (Certified Minnesota Wetland Professional - CMWP No. 1178) of WSB on August 26, 2021 within the project area. No deviation or omissions were undertaken as part of this investigation.

The project area was delineated using the routine methodology described in the *Corps of Engineers Wetlands Delineation Manual* (US Army Corps of Engineers 1987), with additional guidance provided by the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0).* Wetlands were classified according to the methodologies set forth in *Wetlands of the United States (Circular 39),* USFWS Shaw and Fredine 1971 and *Classification of Wetlands and Deepwater Habitats of the United States,* Cowardin 1979. The wetland types in this report are classified by the Circular 39 and Cowardin Classifications. Soil types were researched prior to the on-site investigation with the assistance of the *Soil Survey* of *El Paso County* from the National Resources Conservation Service. All soil test pits were excavated to a minimum depth of 24 inches unless otherwise noted. Soil colors were described on-site per the *Munsell Soil Color Charts* (2009 Revised Edition) from the test pits in and adjacent to the wetlands. Hydric soils were identified using the current technical criteria for hydric soils developed by the NRCS in 2017 (Version 8.1). The presence of water was observed after time was allowed for movement of water through the substrate. This time varied depending upon soil characteristics.

The quadrant sampling method was employed for all sample points unless otherwise noted. Vegetation was measured as actual areal cover and may exceed 100 percent of total area due to overlap. Grasses and herbaceous vegetative cover were measured within a circular plot of a 5-foot-radius, all woody shrubs and saplings were measured within a circular plot with a 15-foot-radius, and trees and woody vines were measured in a 30-foot-radius circular plot. Regional plant identification resources were utilized in the identification of plant species, with indicator status taken from the *2018 National Wetland Plant List* (US Army Corps of Engineers 2018). Plant species dominance was estimated based on the absolute percent coverage for herbaceous, shrub-sapling, and tree strata if present. In addition to the use of indicators of hydrology, hydric soils, and the presence of hydrophytic vegetation, other evidence such as topographic breaks and watershed characteristics were used to determine the wetland boundary.

Western Mountains, Valleys, and Coast Regional Supplement Routine Wetland Delineation data forms were used to record vegetation, hydrology, and soil characteristics at sample points in and adjacent to the wetlands (**Appendix B**). Sampling transects were taken along the wetland-upland boundary of the wetland. Transects and delineated wetland boundaries were field surveyed using a sub-meter accuracy hand-held GPS unit. Approximate sampling points and delineated wetland edges are shown on **Figure 6, Appendix B**. Pictures of each wetland can be found in **Appendix C**.

III. Results and Wetland Information

The wetland delineation data forms (**Appendix B**) and photos (**Appendix C**) are attached. A summary of the delineation is below.

A. Wetland A Circular 39: 1/3 Cowardin: PEM1A/PEM1C Soil mapping unit: Alamosa loam (1) No. Transects: 1 No. Additional Sample Points: 0 Wetland Flags: 1-28 Wetland Size (within Project Area): 0.90 acre

Wetland A is positioned in a sloped depression. The wetland is characterized as a seasonally flooded/shallow marsh wetland. The wetland boundary is outlined in **Figure 6, Appendix B**.

Dominant vegetation in the wetland consisted of Canadian thistle (*Cirsium arvense*) and Hybrid cattail (Typha x glauca) in the herb stratum. Hydric soil indicators consisted of Redox Dark Surface (F6). Hydrology indicators included Saturation (A3), Hydrogen Sulfide Odor (C1), Drainage Patterns (B10), Geomorphic Conditions (D2), and FAC-Neutral Test (D5).

Dominant vegetation in the upland consisted of Smooth brome (*Bromus inermis*) and Black bent (*Agrostis gigantea*) in the herb stratum. No hydric soil or hydrology indicators were observed.

The wetland boundary was placed along a slight topographic break where wetland hydrology was no longer observed. Wetland A flows from south to north, and conveys water under Palmer Divide Road via a culvert.

B. Wetland B
Circular 39: 1
Cowardin: PEM1A
Soil mapping unit: Alamosa loam (1)
No. Transects: 1 No. Additional Sample Points: 0
Wetland Flags: 1-9
Wetland Size (within Project Area): 0.40 acre

Wetland B is positioned in a sloped depression. The wetland is characterized as a seasonally flooded wetland. The wetland boundary is outlined in **Figure 6**, **Appendix B**.

Dominant vegetation in the wetland consisted of Canadian thistle (*Cirsium arvense*) and Bluejoint (*Calamagrostis canadensis*) in the herb stratum. Hydric soil indicators consisted of Redox Depressions (F8). Hydrology indicators included Oxidized Rhizospheres along Living Roots (C3), Geomorphic Conditions (D2), and FAC-Neutral Test (D5).

Dominant vegetation in the upland consisted of Smooth brome (*Bromus inermis*) and Common yarrow (*Achillea millefolium*) in the herb stratum. No hydric soil or hydrology indicators were observed.

The wetland boundary was placed along a defined topographic break where wetland hydrology was no longer observed. Wetland B flows from southwest to northeast, and conveys water under Palmer Divide Road via a culvert.

C. Additional Sampled Areas

Two additional sample points were taken (Sample Point 1 Up, Sample Point 2 Up). These two sample points did not meet at least one of the three wetland criteria, and were determined to be upland.

D. Additional Water Resources

No additional water resources were identified within the project area.

IV. Summary and Closing Statements

Two (2) wetlands were delineated within the project area using the Level 2 method. Two (2) additional areas were investigated but determined to be upland.

The wetland delineation report was completed by Shawn Williams of WSB. This delineation report is being submitted as a request for approval of Wetland Type and Boundary of the wetland described herein. This report supports the Approved Jurisdictional Determination (AJD) request prepared by WSB, dated July 28, 2021. This report is associated with US Department of Army (DA) # SPA-2005-0679.

V. References

The following sources of information were reviewed to assist in performing the wetland delineation.

Literature Sources

- Colorado Department of Public Health and Environment Water Quality Control Division. 2020 Spatial Representation of Stream Segment data (CDPHE 2020). Available online at Center for Health and Environmental Data | Department of Public Health & Environment (colorado.gov). Accessed 8/30/2021.
- Cowardin L.M. USFWS. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Government Printing Office, Carver, D.C. 131 pp.
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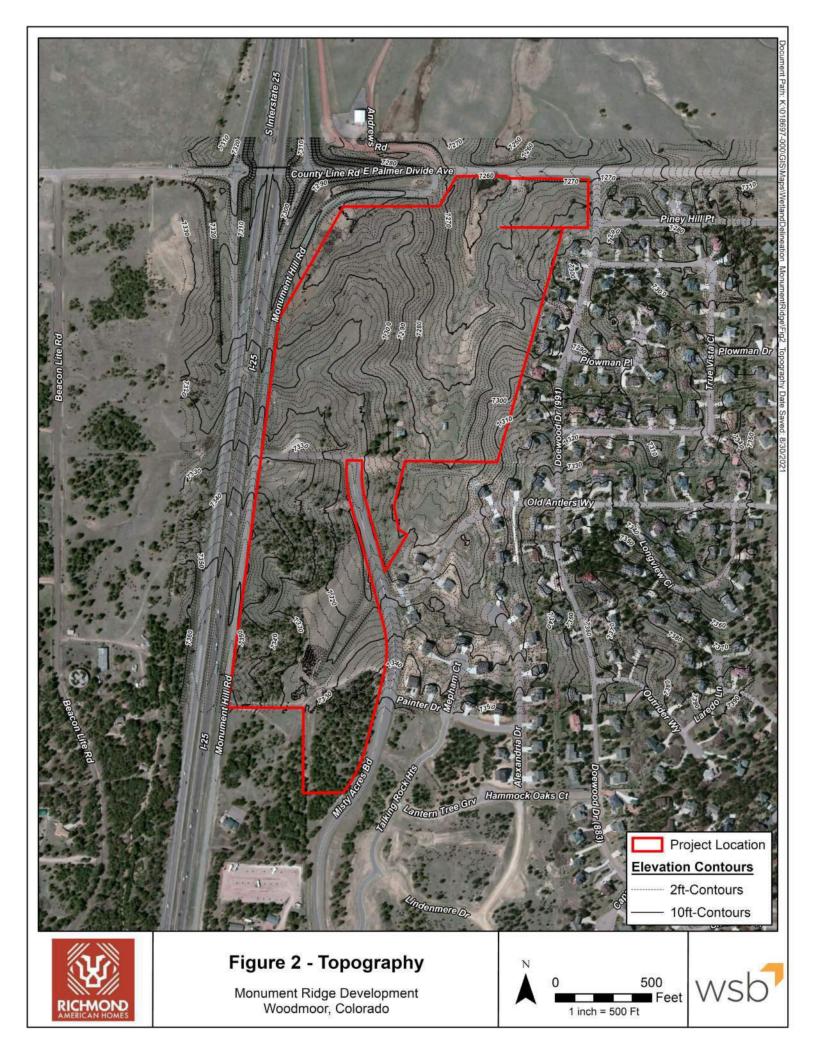
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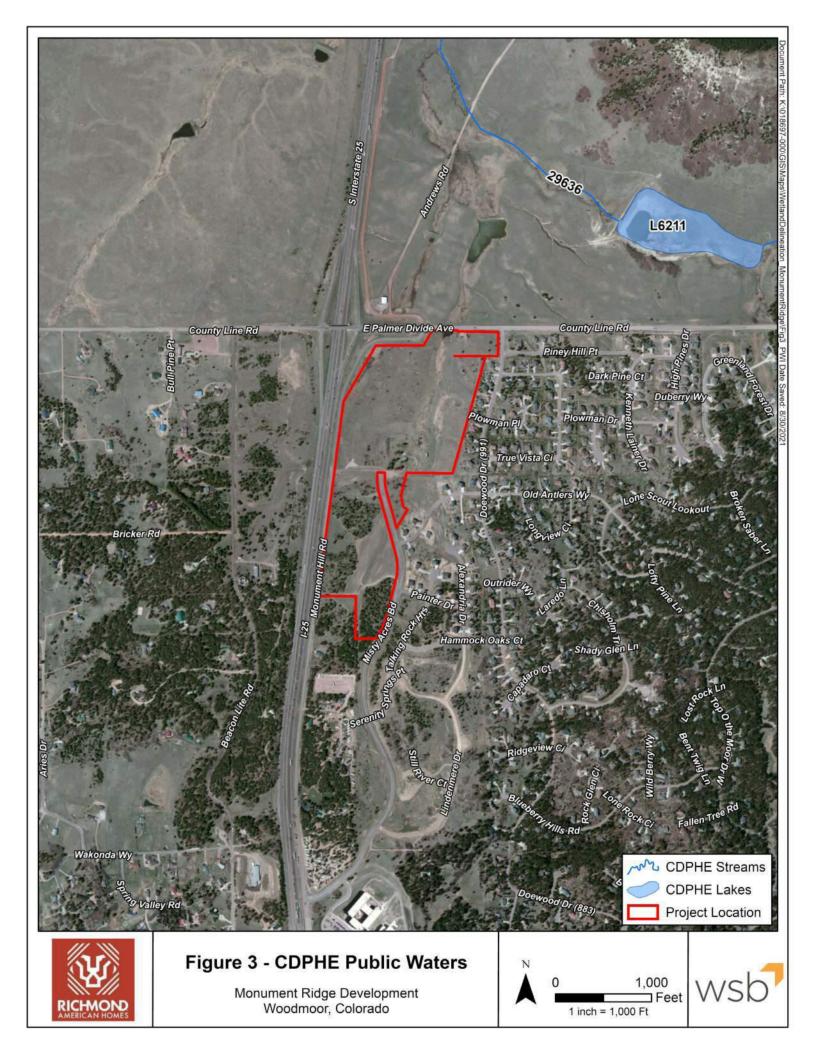
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- Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey, Colorado. Available online at http://websoilsurvey.nrcs.usda.gov/. Accessed 8/25/2021.

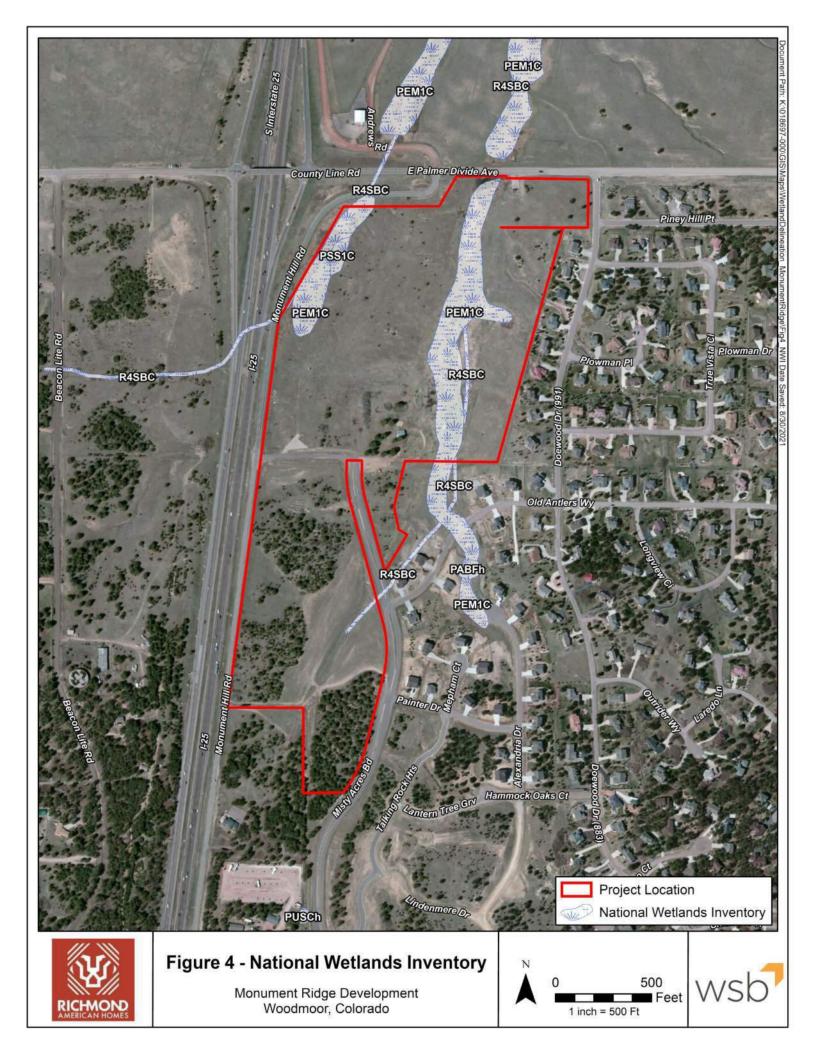
APPENDIX A

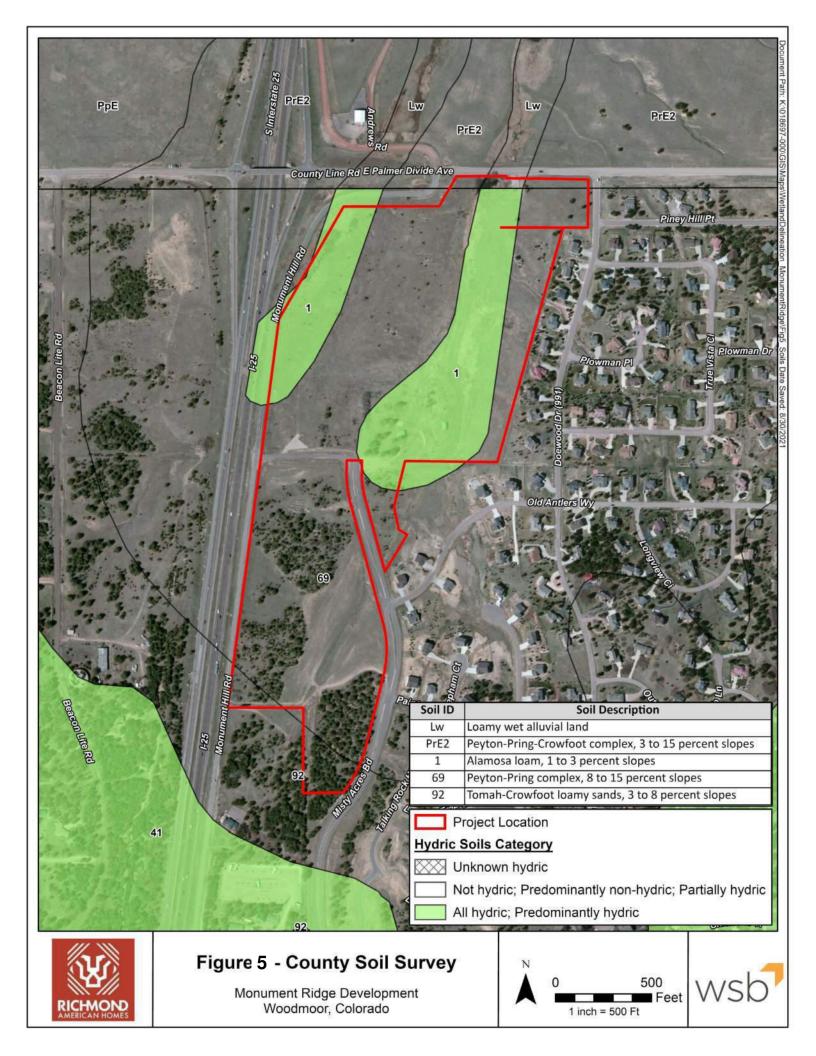
Figure 1: Project Location Figure 2: Topography Figure 3: CDPHE 2020 Stream Segments Figure 4: National Wetlands Inventory Figure 5: County Soil Survey





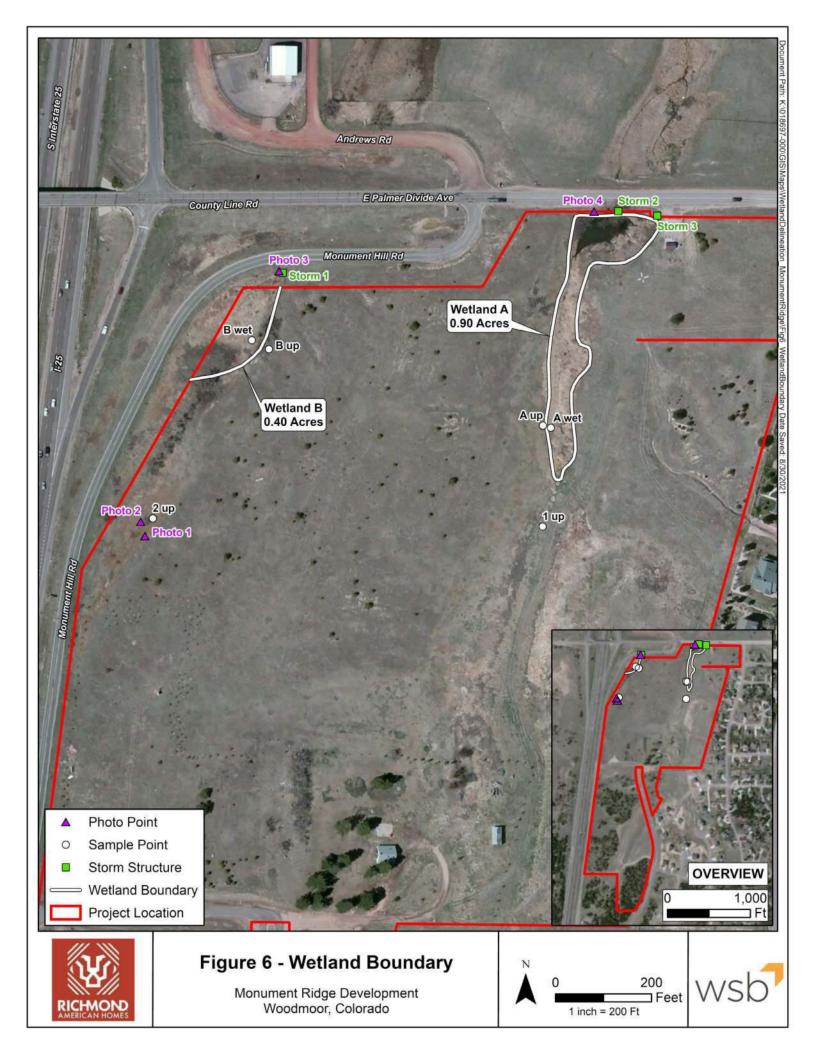






APPENDIX B

Figure 6: Wetland Boundary Wetland Determination Data Forms



Project/Site: Monument Ridge East Development	City/County: _ ^V	Voodmoor/ El Paso	Sampling Date: 8/26/2021			
Applicant/Owner:		State: CO	Sampling Point: <u>A Wet</u>			
Investigator(s): WSB (Shawn Williams)	Section, Town	Section, Township, Range: Sec. 2, T11S, R67W				
Landform (hillslope, terrace, etc.): hillslope	Local relief (concave, convex, none): <u>concave</u> Slope					
Subregion (LRR): E Lat	. 39.128710	Long: -104.860271	Datum: WGS 84			
Soil Map Unit Name: Alamosa loam, 1 to 3 percent slopes (1)		NWI classific	cation: PEM1C, R4SBC			
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes X	No (If no, explain in F	Remarks.)			
Are Vegetation, Soil, or Hydrology signific	antly disturbed?	Are "Normal Circumstances"	present? Yes X No			
Are Vegetation, Soil, or Hydrology natural	ly problematic?	(If needed, explain any answe	ers in Remarks.)			
		• • • • • •	• • • • • •			

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

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

	Absolute	Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30' × 30'</u>)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				
		= Total Co		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
<u>Sapling/Shrub Stratum</u> (Plot size: ^{15' x 15'})				
1				Prevalence Index worksheet:
2				Total % Cover of:Multiply by:
3				OBL species x 1 =
4				FACW species x 2 =
				FAC species x 3 =
5				FACU species x 4 =
Herb Stratum (Plot size: ^{5' x 5'})		= Total Co	ver	UPL species x 5 =
1. Cirsium arvense	30	Yes	FAC	Column Totals: (A) (B)
2. Typha x glauca	20	Yes	OBL	Prevalence Index = B/A =
3. Juncus tenuis	15	No	FAC	Hydrophytic Vegetation Indicators:
4. Mentha arvensis	10	No	FACW	1 - Rapid Test for Hydrophytic Vegetation
5. Persicaria amphibia	10	No	OBL	\overline{X} 2 - Dominance Test is >50%
6. Calamagrostis canadensis	5	No	FACW	3 - Prevalence Index is $\leq 3.0^{1}$
7. Geum allepicum	5	No	FACW	4 - Morphological Adaptations ¹ (Provide supporting
8. Verbascum thapsus	5	No	FACU	data in Remarks or on a separate sheet)
9				5 - Wetland Non-Vascular Plants ¹
10				Problematic Hydrophytic Vegetation ¹ (Explain)
11				¹ Indicators of hydric soil and wetland hydrology must
····		= Total Cov	ver	be present, unless disturbed or problematic.
<u>Woody Vine Stratum</u> (Plot size: ^{30' x 30'})		10tal 000	VCI	
1				Hydrophytic
2				Vegetation
		= Total Cov		Present? Yes <u>×</u> No
% Bare Ground in Herb Stratum _0				
Remarks:				·

SOIL	
------	--

Depth	Matri	х	Rec	lox Featur	es				
(inches)	Color (moist)) %	Color (moist)	%	Type ¹	Loc ²	Texture Re	marks	
0-14	10YR 4/1	95	7.5YR 3/4	5	С	PL	silt loam		
14-24	10YR 4/1	90	7.5YR 3/4	10	С	М	sand		
							· ·		
			M=Reduced Matrix, C			ed Sand G			
lydric Soil	Indicators: (App	plicable to a	II LRRs, unless oth	erwise no	oted.)		Indicators for Problemat	ic Hydric Soils':	
Histoso	()		Sandy Redox	. ,			2 cm Muck (A10)		
	pipedon (A2)		Stripped Matri	· · /			Red Parent Material (
	istic (A3)		Loamy Mucky			ot MLRA 1			
	en Sulfide (A4)		Loamy Gleyed		-2)		Other (Explain in Remarks)		
Deplete	d Below Dark Sur	face (A11)	Depleted Mat						
Thick D	ark Surface (A12))	X Redox Dark Surface (F6)				³ Indicators of hydrophytic vegetation and		
Sandy M	/lucky Mineral (S1	1)	Depleted Dark Surface (F7)				wetland hydrology must be present,		
Sandy C	Gleyed Matrix (S4)	Redox Depressions (F8)			unless disturbed or problematic.			
Restrictive	Layer (if present	t):							
Туре:									
	ches):						Hydric Soil Present? Yes	XNo	
Depth (in									

Primary Indicators (minimum	of one required; c	Secondary Indicators (2 or more required)	
Surface Water (A1)		Water-Stained Leaves (B9) (exce	ot Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2)		MLRA 1, 2, 4A, and 4B)	4A, and 4B)
X Saturation (A3)		Salt Crust (B11)	<u>X</u> Drainage Patterns (B10)
Water Marks (B1)		Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2)		\underline{X} Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)		Oxidized Rhizospheres along Livir	ng Roots (C3) \underline{X} Geomorphic Position (D2)
Algal Mat or Crust (B4)		Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5)		Recent Iron Reduction in Tilled So	ils (C6) X FAC-Neutral Test (D5)
Surface Soil Cracks (B6)		Stunted or Stressed Plants (D1) (L	.RR A) Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Aer	ial Imagery (B7)	Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Con-	cave Surface (B8)		
Field Observations:			
Surface Water Present?	Yes No	X Depth (inches):	
Water Table Present?	Yes No	X Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes X No	Depth (inches): 0	Wetland Hydrology Present? Yes X No
Describe Recorded Data (stre	eam gauge, monito	oring well, aerial photos, previous inspect	tions), if available:
Remarks:			

Project/Site: Monument Ridge East Development	City/County: Woodm	oor/ El Paso	Sampling Date:			
Applicant/Owner:		State: CO	_ Sampling Point: ^{A Up}			
Investigator(s): WSB (Shawn Williams)	Section, Township,	_ Section, Township, Range: <u>Sec. 2, T11S, R67W</u>				
Landform (hillslope, terrace, etc.): hillslope	Local relief (conca	Slope (%): <u>5</u>				
Subregion (LRR): E Lat	. 39.128710	Long:	Datum: WGS 84			
Soil Map Unit Name: Alamosa loam, 1 to 3 percent slopes (1)		NWI classifi	cation:			
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes X N	o (If no, explain in F	Remarks.)			
Are Vegetation, Soil, or Hydrology signific	antly disturbed? A	re "Normal Circumstances"	present? Yes X No			
Are Vegetation, Soil, or Hydrology natural	ly problematic? (I	f needed, explain any answe	ers in Remarks.)			
			• • • • • •			

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

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

	Absolute		Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30' × 30'</u>)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 1 (A)
2				Total Number of Dominant
3				Species Across All Strata: ² (B)
4				
		= Total Co		Percent of Dominant Species That Are OBL, FACW, or FAC: ⁵⁰ (A/B)
Sapling/Shrub Stratum (Plot size: 15' × 15')				
1				Prevalence Index worksheet:
2				Total % Cover of:Multiply by:
3				OBL species x 1 =
				FACW species x 2 =
4				FAC species $\frac{65}{x 3} = \frac{195}{x 3}$
5				FACU species $\frac{5}{20}$ x 4 = $\frac{20}{20}$
Herb Stratum (Plot size: ^{5' x 5'})		= Total Co	over	UPL species $\frac{30}{150}$ x 5 = $\frac{150}{100}$
1. Bromus inermis	30	Yes	UPL	Column Totals: <u>100</u> (A) <u>365</u> (B)
2. Agrostis gigantea	30	Yes	FAC	
3. Cirsium arvense	15	No	FAC	Prevalence Index = $B/A = \frac{3.65}{2}$
4. Geum macrophyllum	15	No	FAC	Hydrophytic Vegetation Indicators:
Juncus tenuis	5	No	FAC	1 - Rapid Test for Hydrophytic Vegetation
	5	No	FACU	2 - Dominance Test is >50%
6. <u>Achillea millefolium</u>				3 - Prevalence Index is ≤3.0 ¹
7				4 - Morphological Adaptations ¹ (Provide supporting
8				data in Remarks or on a separate sheet)
9				5 - Wetland Non-Vascular Plants ¹
10				Problematic Hydrophytic Vegetation ¹ (Explain)
11				¹ Indicators of hydric soil and wetland hydrology must
		= Total Co	ver	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: ^{30' x 30'})				
1				Hydrophytic
2				Vegetation
		= Total Co		Present? Yes <u>No X</u>
% Bare Ground in Herb Stratum ⁰				
Remarks:				

	cription: (Describe	to the depth				or confirm	n the absence of indicat	ors.)	
Depth	<u>Matrix</u>		<u>Redo</u> Color (moist)	x Features		Loc ²	Tautura	Deveender	
<u>(inches)</u> 0-16	<u>Color (moist)</u> 10YR 3/2	<u>%</u>	Color (moist)		Type ¹	LOC	<u> </u>	Remarks	
	10111 3/2			·					
				·			······		
				·			·		
				·					
¹ Type: C=C	oncentration, D=Dep	letion. RM=R	educed Matrix. CS	S=Covered	d or Coate	d Sand G	rains. ² Location: PL:	=Pore Linina.	M=Matrix
	Indicators: (Applic						Indicators for Pro		
Histoso	(A1)	_	_ Sandy Redox (S	S5)			2 cm Muck (A1	0)	
	pipedon (A2)	_	Stripped Matrix	,			Red Parent Ma	-	
Black H	istic (A3)		_ Loamy Mucky N	/lineral (F1	I) (except	MLRA 1)) Very Shallow [Dark Surface (TF12)
	en Sulfide (A4)	_	Loamy Gleyed I	•)		Other (Explain	in Remarks)	
	d Below Dark Surfac	e (A11)	_ Depleted Matrix				3		
	ark Surface (A12)		_ Redox Dark Su	()			³ Indicators of hydro		
-	Aucky Mineral (S1)		Depleted Dark Redox Depress	-	7)		wetland hydrolo unless disturbed		
-	Gleyed Matrix (S4)		_ Redux Depress	1011S (FO)				or problema	uc.
Type: ref									
	ches): _ ¹⁶						Hydric Soil Present?	Yes	No_X
Remarks:	,						,		
r tornamor									
HYDROLO	GY								
Wetland Hy	drology Indicators:								
Primary Indi	cators (minimum of c	ne required:	check all that appl [,]	v)			Secondary Indic	ators (2 or mo	ore required)

Primary Indicators (minimur	n of one required;	check all that apply)		<u>Secondary Indicators (2 or more required)</u>		
Surface Water (A1)		Water-Stained Leaves (B9) (ex	cept	Water-Stained Leaves (B9) (MLRA 1, 2,		
High Water Table (A2)		MLRA 1, 2, 4A, and 4B)		4A, and 4B)		
Saturation (A3)		Salt Crust (B11)		Drainage Patterns (B10)		
Water Marks (B1)		Aquatic Invertebrates (B13)		Dry-Season Water Table (C2)		
Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)		Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)		Oxidized Rhizospheres along L	iving Roots (C3)	Geomorphic Position (D2)		
Algal Mat or Crust (B4)		Presence of Reduced Iron (C4))	Shallow Aquitard (D3)		
Iron Deposits (B5)		Recent Iron Reduction in Tilled	Soils (C6)	FAC-Neutral Test (D5)		
Surface Soil Cracks (B6	3)	Stunted or Stressed Plants (D1) (LRR A)	Raised Ant Mounds (D6) (LRR A)		
Inundation Visible on A	erial Imagery (B7)) Other (Explain in Remarks)		Frost-Heave Hummocks (D7)		
Sparsely Vegetated Co	ncave Surface (B	8)				
Field Observations:						
Surface Water Present?	Yes N	o X Depth (inches):	_			
Water Table Present?	Yes N	o X Depth (inches):	_			
Saturation Present? (includes capillary fringe)	Yes N	o X Depth (inches):	_ Wetland Hy	drology Present? Yes No $\frac{\chi}{}$		
Describe Recorded Data (st	ream gauge, mor	nitoring well, aerial photos, previous insp	pections), if availa	ible:		
Remarks:						

Project/Site: Monument Ridge East Development	City/County:	Woodmoor/ El Paso	Sampling Date: 8/26/2021	
Applicant/Owner:		State: CO	_ Sampling Point: B Wet	
Investigator(s): WSB (Shawn Williams)	Section, Tow	nship, Range: <u>Sec. 2, T11S, R67W</u>		
Landform (hillslope, terrace, etc.): hillslope	Local relief (concave, convex, none): <u>concave</u>	Slope (%): <u>4</u>	
Subregion (LRR): E La	t: <u>39.129093</u>	Long:	Datum: WGS 84	
Soil Map Unit Name: Alamosa loam, 1 to 3 percent slopes (1)		NWI classifi	cation: PEM1C, R4SBC	
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes X	No (If no, explain in F	Remarks.)	
Are Vegetation, Soil, or Hydrology signific	cantly disturbed?	Are "Normal Circumstances"	present? Yes X No	
Are Vegetation, Soil, or Hydrology natura	lly problematic?	(If needed, explain any answe	ers in Remarks.)	
		• • • • • • •	• • • • • •	

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

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

001 001	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30' × 30'</u>)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Dominant
3				Species Across All Strata: ² (B)
4				
T				Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: 15' × 15')		= Total Co	over	That Are OBL, FACW, or FAC: 100 (A/B)
				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species x 1 =
3			·	FACW species x 2 =
4				FAC species x 3 =
5				
		= Total Co		FACU species x 4 =
Herb Stratum (Plot size: 5' x 5')				UPL species x 5 =
1. Calamagrostis canadensis	75	Yes	FACW	Column Totals: (A) (B)
2. Cirsium arvense	20	Yes	FAC	Prevalence Index = B/A =
3				Hydrophytic Vegetation Indicators:
4				1 - Rapid Test for Hydrophytic Vegetation
5				\overline{X} 2 - Dominance Test is >50%
6				3 - Prevalence Index is $\leq 3.0^{1}$
7				4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
9				5 - Wetland Non-Vascular Plants ¹
				Problematic Hydrophytic Vegetation ¹ (Explain)
10				¹ Indicators of hydric soil and wetland hydrology must
11	05		·	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: ^{30' x 30'})	30	= Total Co	ver	
1				Hydrophytic
2				Vegetation Present? Yes X No
		= Total Co	ver	
% Bare Ground in Herb Stratum 5				
Remarks:				

SOIL	
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Profile Des	cription: (Describ	be to the de	pth needed to docu	ment the	indicator	or confirm	n the absence of	f indicator	rs.)
Depth	Matrix			ox Featur					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks
0-15	10YR 4/1	95	7.5YR 3/4	5	С	PL	silt loam		
				_					
				_					
							. <u> </u>		
							· <u> </u>		
							. <u>.</u>		
¹ Type: C=C	Concentration, D=D	epletion, RM	I=Reduced Matrix, C	S=Cover	ed or Coat	ed Sand G	irains. ² Locat	ion: PL=P	ore Lining, M=Matrix.
Hydric Soil	Indicators: (App	licable to al	I LRRs, unless othe	erwise no	oted.)		Indicators	for Proble	ematic Hydric Soils ³ :
Histoso	ol (A1)		Sandy Redox ((S5)			2 cm M	Muck (A10))
Histic E	Epipedon (A2)		Stripped Matrix	(S6)			Red P	arent Mate	erial (TF2)
	listic (A3)		Loamy Mucky	•	, , ,	t MLRA 1	· ·		rk Surface (TF12)
	en Sulfide (A4)		Loamy Gleyed	•	-2)		Other	(Explain in	Remarks)
·	ed Below Dark Surf	ace (A11)	Depleted Matri				3		
	Dark Surface (A12)		Redox Dark Su	•	,			• •	nytic vegetation and
-	Mucky Mineral (S1)		Depleted Dark						/ must be present,
-	Gleyed Matrix (S4)		X Redox Depres	sions (F8)			disturbed c	or problematic.
	,								
Type:									
Depth (ir	nches):						Hydric Soil P	resent?	Yes X No
Remarks:									
HYDROLO	DGY								
_	ydrology Indicato								
Primary Ind	icators (minimum c	f one require	ed; check all that app	ly)			Seconda	ary Indicate	ors (2 or more required)
Surface	e Water (A1)		Water-Sta	ained Lea	ves (B9) (except	Wat	ter-Stained	Leaves (B9) (MLRA 1, 2 ,
High W	/ater Table (A2)		MLRA	1, 2, 4A,	and 4B)		4	4A, and 4E	3)

Wetland Hydrology Indicat	ors:		
Primary Indicators (minimum	of one required; ch	eck all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1)		Water-Stained Leaves (B9) (exce	pt Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2)		MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3)		Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1)		Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2)		Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)		X Oxidized Rhizospheres along Livi	ng Roots (C3) X Geomorphic Position (D2)
Algal Mat or Crust (B4)		Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5)		Recent Iron Reduction in Tilled So	ils (C6) X FAC-Neutral Test (D5)
Surface Soil Cracks (B6	,	Stunted or Stressed Plants (D1) (.RR A) Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Ae	erial Imagery (B7)	Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Con	icave Surface (B8)		
Field Observations:	,	,	
Surface Water Present?		C Depth (inches):	
Water Table Present?	Yes No 🖄	C Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes No <mark>></mark>	C Depth (inches):	Wetland Hydrology Present? Yes X No
Describe Recorded Data (str	eam gauge, monitor	ing well, aerial photos, previous inspec	tions), if available:
Remarks:			

Project/Site: Monument Ridge East Development	City/County: Woodm	oor/ El Paso	Sampling Date: 8/26/2021
Applicant/Owner:		State: CO	Sampling Point: B Up
Investigator(s): WSB (Shawn Williams)	Section, Township,	Range: Sec. 2, T11S, R67W	
Landform (hillslope, terrace, etc.): hillslope		ve, convex, none): <u>convex</u>	Slope (%): <u>5</u>
Subregion (LRR): E Lat	. 39.129093	Long: -104.862403	Datum: WGS 84
Soil Map Unit Name: Alamosa loam, 1 to 3 percent slopes (1)		NWI classific	cation:
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes X N	o (If no, explain in R	Remarks.)
Are Vegetation, Soil, or Hydrology signific	antly disturbed?	re "Normal Circumstances" p	present? Yes X No
Are Vegetation, Soil, or Hydrology natura	ly problematic? (i	f needed, explain any answe	ers in Remarks.)
			• • • • • •

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

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

	Absolute	Dominant	Indicator	Dominance Test worksheet:		
<u>Tree Stratum</u> (Plot size: <u>30' × 30'</u>)	<u>% Cover</u>	Species?	Status	Number of Dominant Species		
1				That Are OBL, FACW, or FAC): <u> </u>	(A)
2						
3				Total Number of Dominant Species Across All Strata:	2	(B)
				Species Across All Strata.		(D)
4				Percent of Dominant Species		
		= Total Co	over	That Are OBL, FACW, or FAC): <u> </u>	(A/B)
Sapling/Shrub Stratum (Plot size: 15' × 15')				Prevalence Index worksheet	t:	
1				Total % Cover of:	Multiply by:	
2						_
3				OBL species		
4				FACW species	x 2 =	_
				FAC species	x 3 =	_
5				FACU species	x 4 =	_
(D)		= Total Co	over	UPL species		
Herb Stratum (Plot size: ^{5' x 5'}) 1. Bromus inermis	60	Yes	UPL	Column Totals:		
					(A)	_ (D)
2. <u>Achillea millefolium</u>	20	Yes	FACU	Prevalence Index = B/A	, =	
3. Symphyotrichum ericoides	5	No	FAC	Hydrophytic Vegetation Indi		_
4				1 - Rapid Test for Hydrop		
5				2 - Dominance Test is >5	, ,	
6				3 - Prevalence Index is ≤		
7				4 - Morphological Adapta		porting
8				data in Remarks or on	a separate sheet)	
9				5 - Wetland Non-Vascula	r Plants ¹	
10				Problematic Hydrophytic	Vegetation ¹ (Explai	n)
11.				¹ Indicators of hydric soil and w	vetland hydrology n	nust
				be present, unless disturbed of		
Woody Vine Stratum (Plot size: ^{30' x 30'})	00	_= Total Co	ver			
1				Hydrophytic		
2				Vegetation Present? Yes	No <u>×</u>	
		= Total Co	ver	Fresent? Tes		
% Bare Ground in Herb Stratum						
Remarks:						

Profile Desc	cription: (Describe t	o the depth n	eeded to docur	ment the i	ndicator	or confirn	m the absence of indicators.)	
Depth	Matrix			x Features				
<u>(inches)</u>	Color (moist)	<u> % (</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture Remarks	
0-7	10YR 5/3						silt	
	·						·	
·								
		······································					·	
1 Type: C=C	oncentration, D=Depl	ation RM=Rec	duced Matrix CS	S=Covered		d Sand G	Grains. ² Location: PL=Pore Lining, M=Matrix.	
	Indicators: (Applica	,	<i>,</i>				Indicators for Problematic Hydric Soils ³	
Histosol			Sandy Redox (, ui)		2 cm Muck (A10)	•
	pipedon (A2)		Stripped Matrix	,			Red Parent Material (TF2)	
	istic (A3)		Loamy Mucky N	. ,) (excent	MIRA 1)		
	en Sulfide (A4)		Loamy Gleyed				Other (Explain in Remarks)	
	d Below Dark Surface	(A11)	Depleted Matrix		,			
-	ark Surface (A12)	()	Redox Dark Su				³ Indicators of hydrophytic vegetation and	
	lucky Mineral (S1)		Depleted Dark		7)		wetland hydrology must be present,	
-	Gleyed Matrix (S4)		Redox Depress		,		unless disturbed or problematic.	
-	Layer (if present):		•	()				
Type: <u>refu</u>	• • • •							
	ches): _ ⁷		-				Hydric Soil Present? Yes No X	
Remarks:								
HYDROLO	GY							
Wetland Hy	drology Indicators:							
Primary India	cators (minimum of or	<u>ne required; ch</u>	eck all that appl	y)			Secondary Indicators (2 or more require	<u>d)</u>

Primary Indicators (minimum	of one required; ch	Secondary Indicators (2 or more required)		
Surface Water (A1)		Water-Stained Leaves (B9) (exc	ept	Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2)		MLRA 1, 2, 4A, and 4B)		4A, and 4B)
Saturation (A3)		Salt Crust (B11)		Drainage Patterns (B10)
Water Marks (B1)		Aquatic Invertebrates (B13)		Dry-Season Water Table (C2)
Sediment Deposits (B2)		Hydrogen Sulfide Odor (C1)		Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)		Oxidized Rhizospheres along Liv	ving Roots (C3)) Geomorphic Position (D2)
Algal Mat or Crust (B4)		Presence of Reduced Iron (C4)		Shallow Aquitard (D3)
Iron Deposits (B5)		Recent Iron Reduction in Tilled S	Soils (C6)	FAC-Neutral Test (D5)
Surface Soil Cracks (B6))	Stunted or Stressed Plants (D1)	(LRR A)	Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Ae	rial Imagery (B7)	Other (Explain in Remarks)		Frost-Heave Hummocks (D7)
Sparsely Vegetated Con	cave Surface (B8)			
Field Observations:				
Surface Water Present?	Yes No _	X Depth (inches):		
Water Table Present?	Yes No	^x Depth (inches):		
Saturation Present? (includes capillary fringe)	Yes No _	X Depth (inches):	Wetland Hy	/drology Present? Yes No ^X
Describe Recorded Data (str	eam gauge, monito	ring well, aerial photos, previous inspe	ctions), if avail	able:
Remarks:				

Project/Site: Monument Ridge East Development	City/County:	Woodmoor/ El Paso	Sampling Date: 8/26/2021		
Applicant/Owner:		State: CO	_ Sampling Point: ^{1 Up}		
Investigator(s): WSB (Shawn Williams)	Section, Tow	nship, Range: <u>Sec. 2, T11S, R67W</u>			
Landform (hillslope, terrace, etc.): <u>hillslope</u>	Local relief (concave, convex, none): <u>concave</u>	Slope (%): <u>4</u>		
Subregion (LRR): E La	t: <u>39.128056</u>	Long: _ ^{-104.860204}	Datum: WGS 84		
Soil Map Unit Name: Alamosa loam, 1 to 3 percent slopes (1)		NWI classifi	cation: PEM1C/R4SBC		
Are climatic / hydrologic conditions on the site typical for this time	e of year? Yes X	No (If no, explain in F	Remarks.)		
Are Vegetation, Soil, or Hydrology signifi	cantly disturbed?	Are "Normal Circumstances"	present? Yes X No		
Are Vegetation, Soil, or Hydrology natura	Illy problematic?	(If needed, explain any answe	ers in Remarks.)		
		• • • • • • •	• • • • • •		

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

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

001 001	Absolute		Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30' × 30'</u>)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: _1 (A)
2				Total Number of Dominant
3				Species Across All Strata: ² (B)
4				
		= Total Co		Percent of Dominant Species That Are OBL EACW or EAC: 50 (A/B)
Sapling/Shrub Stratum (Plot size: 15' x 15')		_ = 10tai 0t		
1				Prevalence Index worksheet:
				Total % Cover of:Multiply by:
2				OBL species x 1 =
3				FACW species x 2 =
4				FAC species 30 x 3 = 90
5				FACU species x 4 =
5 1 6 1		= Total Co	ver	
Herb Stratum (Plot size: 5' × 5')				
1. Bromus inermis	70	Yes	UPL	Column Totals: <u>100</u> (A) <u>440</u> (B)
2. Cirsium arvense	30	Yes	FAC	Prevalence Index = B/A =
3				Hydrophytic Vegetation Indicators:
4				1 - Rapid Test for Hydrophytic Vegetation
5				2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.0 ¹
7				4 - Morphological Adaptations ¹ (Provide supporting
8				data in Remarks or on a separate sheet)
9				5 - Wetland Non-Vascular Plants ¹
10				Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must
11				be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: ^{30' x 30'})	100	_= Total Co	ver	
1				Hydrophytic Vegetation
2				Present? Yes No $\frac{\times}{2}$
% Bare Ground in Herb Stratum _0		= Total Co	ver	
Remarks:				1

SOIL	
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Depth Matrix			Redo	ox Featur	es		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks
0-8	10YR 3/2	90	10YR 4/6	10	С	М	silt loam
8-24	10YR 4/2	80	10YR 4/6	20	<u>C</u>	М	sand
lydric Soi	il Indicators: (App		M=Reduced Matrix, C	rwise no		ed Sand G	Indicators for Problematic Hydric Soils ³ :
Histoso	ol (A1) Epipedon (A2)		Sandy Redox (Stripped Matrix				2 cm Muck (A10) Red Parent Material (TF2)
	Histic (A3)		Loamy Mucky		-1) (evcen	Η MIRA 1	
	gen Sulfide (A4)		Loamy Gleyed				Other (Explain in Remarks)
	ed Below Dark Surl	face (A11)	Depleted Matri		_)		
	Dark Surface (A12)		X Redox Dark Su	. ,	;)		³ Indicators of hydrophytic vegetation and
	Mucky Mineral (S1		Depleted Dark	•			wetland hydrology must be present,
_ ,	Gleyed Matrix (S4)	,	Redox Depres		. ,		unless disturbed or problematic.
-	E Layer (if present)				/		
Type:							
Depth (i	nches):						Hydric Soil Present? Yes X No
Remarks:							
YDROLO							
	ydrology Indicato	rs:					
			ed; check all that app	lv)			Secondary Indicators (2 or more required)
	e Water (A1)				ves (B9) (except	Water-Stained Leaves (B9) (MLRA 1 ,
	Vater Table (A2)			1, 2, 4A,			4A, and 4B)
	tion $(\Lambda 3)$		Salt Cruct				Drainage Patterns (B10)

Wetland Hydrology Indica	tors:				
Primary Indicators (minimun	<u>n of one requ</u>		Secondary Indicators (2 or more required)		
Surface Water (A1) Water-Stained Leaves (B9) (except				ept	Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2)			MLRA 1, 2, 4A, and 4B)		4A, and 4B)
Saturation (A3)			Salt Crust (B11)		Drainage Patterns (B10)
Water Marks (B1)			Aquatic Invertebrates (B13)		Dry-Season Water Table (C2)
Sediment Deposits (B2))		Hydrogen Sulfide Odor (C1)		Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)			Oxidized Rhizospheres along Livi	ing Roots (C3)	X Geomorphic Position (D2)
Algal Mat or Crust (B4) Presence of Reduced Iron (C4)					Shallow Aquitard (D3)
Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6)					FAC-Neutral Test (D5)
Surface Soil Cracks (B6	i)		Stunted or Stressed Plants (D1) ((LRR A)	Raised Ant Mounds (D6) (LRR A)
Inundation Visible on A	erial Imagery	(B7)	Other (Explain in Remarks)		Frost-Heave Hummocks (D7)
Sparsely Vegetated Co	ncave Surfac	e (B8)			
Field Observations:					
Surface Water Present?	Yes	No	Depth (inches):		
Water Table Present?	Yes	No	Depth (inches):		
Saturation Present? (includes capillary fringe)	Yes	No	Depth (inches):	Wetland Hyd	Irology Present? Yes No ^X
Describe Recorded Data (st	ream gauge,	monitoring v	vell, aerial photos, previous inspec	ctions), if availal	ble:
Remarks:					

Project/Site: Monument Ridge East Development	City/County:	Woodmoor/ El Paso	Sampling Date: <u>8/26/2021</u>			
Applicant/Owner:		State: CO	Sampling Point: ^{2 Up}			
Investigator(s): WSB (Shawn Williams)	Section, Tow	nship, Range: <u>Sec. 2, T11S, R67W</u>				
Landform (hillslope, terrace, etc.): <u>hillslope</u>	Local relief (concave, convex, none): <u>concave</u>	Slope (%): <u>3</u>			
Subregion (LRR): E La	t: <u>39.127965</u>	Long:104.863266	Datum: WGS 84			
Soil Map Unit Name: Alamosa loam, 1 to 3 percent slopes (1)		NWI classifie	cation: PEM1C/R4SBC			
Are climatic / hydrologic conditions on the site typical for this time	e of year? Yes X	No (If no, explain in F	Remarks.)			
Are Vegetation, Soil, or Hydrology signifi	cantly disturbed?	Are "Normal Circumstances"	present? Yes X No			
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)						
			• • • • • •			

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

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

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30' × 30'</u>)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 2 (A)
2				
3				Total Number of Dominant Species Across All Strata: ² (B)
4				Percent of Dominant Species
Sapling/Shrub Stratum (Plot size: 15' x 15')		= Total Co	over	That Are OBL, FACW, or FAC: 100 (A/B)
				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species x 1 =
3				
4				FACW species x 2 =
5				FAC species x 3 =
		= Total Co	wor	FACU species x 4 =
<u>Herb Stratum</u> (Plot size: ^{5' x 5'})		10tai 0t		UPL species x 5 =
, Juncus tenuis	70	Yes	FAC	Column Totals: (A) (B)
2. Cirsium arvense	20	Yes	FAC	
3. Salix interior	10	No	FACW	Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
4				1 - Rapid Test for Hydrophytic Vegetation
5				X 2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.0 ¹
7				4 - Morphological Adaptations ¹ (Provide supporting
8				data in Remarks or on a separate sheet)
				5 - Wetland Non-Vascular Plants ¹
9				Problematic Hydrophytic Vegetation ¹ (Explain)
10				¹ Indicators of hydric soil and wetland hydrology must
11				be present, unless disturbed or problematic.
20' x 30'	100	= Total Co	ver	
Woody Vine Stratum (Plot size: 30' x 30')				
1				Hydrophytic
2				Vegetation
		= Total Co	ver	Present? Yes <u>×</u> No
% Bare Ground in Herb Stratum _0				
Remarks:				

Depth	Matrix			k Features			
inches)	Color (moist)	%	Color (moist)	<u>%</u> Type ¹	Loc ²	Texture	Remarks
-14	10YR 4/1	100				oamy sand	
	<u></u>	·					
	<u></u>						
ype: C=C	Concentration, D=De	pletion, RM=	Reduced Matrix, CS	=Covered or Coate	ed Sand Grai	ns. ² Locat	ion: PL=Pore Lining, M=Matrix.
dric Soil	Indicators: (Applie	cable to all I	LRRs, unless other	wise noted.)		Indicators	for Problematic Hydric Soils ³ :
Histoso	. ,		Sandy Redox (S	,			/luck (A10)
	pipedon (A2)		Stripped Matrix				arent Material (TF2)
	listic (A3)			lineral (F1) (excep t	: MLRA 1)		Shallow Dark Surface (TF12)
	en Sulfide (A4)	(Loamy Gleyed N			Other	(Explain in Remarks)
	ed Below Dark Surface	ce (A11)	Depleted Matrix	. ,		31	- flavalar alexatic constantions and
_	erk Surface (A12)	•	Redox Dark Sur	. ,			of hydrophytic vegetation and
	Mucky Mineral (S1)		Depleted Dark S	. ,			hydrology must be present,
	Gleyed Matrix (S4) Layer (if present):	•	Redox Depress	1011S (F6)	Г	unless	disturbed or problematic.
Type: ref							
	nches): _ ¹⁴					Hydric Soil Pr	resent? Yes No _ ^X
emarks:	ioneo).						
fillarks.							
DROLC	DGY						
etland Hy	drology Indicators	:					
<u>imary Indi</u>	icators (minimum of	one required	; check all that apply	()		Seconda	ary Indicators (2 or more required)
Surface	e Water (A1)		Water-Stai	ned Leaves (B9) (e	xcept	Wat	er-Stained Leaves (B9) (MLRA 1,
High W	ater Table (A2)		MLRA [·]	1, 2, 4A, and 4B)		4	IA, and 4B)
Saturati	ion (A3)		Salt Crust	(B11)		Drai	inage Patterns (B10)
	Marks (B1)			vertebrates (B13)			-Season Water Table (C2)
	、						uration Visible on Aerial Imagery (C
Sedime	ent Deposits (BZ)						
_	ent Deposits (B2) eposits (B3)			Sulfide Odor (C1)	Living Roots		
Drift De	posits (B3)		Oxidized R	hizospheres along	0	(C3) <u>X</u> Geo	pmorphic Position (D2)
Drift De Algal M	,		Oxidized R Presence o	. ,	4)	(C3) <u>X</u> Geo Sha	

- - Raised Ant Mounds (D6) (I RR A)

Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)		_ Stunted or Stressed Plants (D1) (LRR A) _ Other (Explain in Remarks)		Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)		
Sparsely Vegetated Con	cave Surfac	ce (B8)				
Field Observations:						
Surface Water Present?	Yes	No	_ Depth (inches):			
Water Table Present?	Yes	No <u></u>	_ Depth (inches):			
Saturation Present? (includes capillary fringe)	Yes	No <u></u>	_ Depth (inches):	Wetland Hyc	drology Present? Ye	es No
Describe Recorded Data (str	eam gauge	, monitoring	well, aerial photos, previous inspec	tions), if availal	ble:	
Remarks:						

APPENDIX C

Wetland Photos

	Photo 1 – Sample Point 2 Up
	Date: 8/26/2021
Minday - Minana - Adams	Direction Photo is Taken: Southwest
a contraction of the second	
States and the second	Photo Location: Near Sample Point 2 Up
The second second second second	
State of the second sec	
	Photo 2 – Sample Point 2 Up
and the second se	Date: 8/26/2021
The second	Direction Photo is Taken: Northeast
	Photo Location: Near Sample Point 2 Up
the state of states	
	Photo 3 – Wetland B
	Date: 8/26/2021
	Direction Photo is Taken: Southwest
	Photo Location: Looking at Wetland B, from Storm structure.
	Storm structure.
	1

APPENDIX



APPENDIX D

Antecedent Precipitation Data

U.S. Drought Monitor

Current Map Maps Data Summary About Conditions & Outlooks En Español

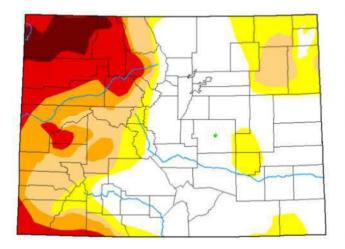
Colorado

Map released: Thurs. August 26, 2021

NADM

Home > Colorado

Data valid: August 24, 2021 at 8 a.m. EDT



Intensity



Authors

United States and Puerto Rico Author(s): Curtis Riganti, National Drought Mitigation Center

Pacific Islands and Virgin Islands Author(s): Brad Rippey, U.S. Department of Agriculture



USACE, Jurisdictional Determination Letter, Action No. SPA-2005-00679



DEPARTMENT OF THE ARMY CORPS OF ENGINEERS, ALBUQUERQUE DISTRICT 400 ROOD AVENUE, ROOM 224 GRAND JUNCTION, COLORADO 81501-2520

March 22, 2022

Regulatory Division

SUBJECT: Jurisdictional Determination - Action No. SPA-2005-00679

Monument Ridge East, LLC Attn: Don Cannella 5505 List Drive Colorado Springs, CO 80919 donald.cannella@gmail.com

Dear Mr. Cannella:

This letter responds to your request for a jurisdictional determination (JD) for the property located on wetlands immediately southeast of the intersection of Interstate 25 and Palmer Divide Road, in the unincorporated community of Woodmoor, at latitude 39.1272, longitude -104.8606, in El Paso County, Colorado. We have assigned Action No. SPA-2005-00679 to your request. Please reference this number in all future correspondence concerning the site.

Based on the information provided, we have determined that the site contains waters of the United States that are subject to regulation under Section 404 of the Clean Water Act. The attached JD form contains a list of aquatic resources that are waters of the United States located within the subject property. If you intend to conduct work that could result in a discharge of dredged or fill material into waters of the United States, please contact this office for a determination of Department of the Army permit requirements and refer to Action No. SPA-2005-00679.

The basis for this approved JD (attached) is that the project site contains wetlands with a clear flow path into Relatively Permanent Waters (RPW), Carpenter, East Plum, and Plum Creek, which then flows into Chatfield Reservoir, a Traditional Navigable Water (TNW). A copy of this JD is also available at http://www.spa.usace.army.mil/reg/JD. This approved JD is valid for 5 years unless new information warrants revision of the determination before the expiration date.

You may accept or appeal this approved JD or provide new information in accordance with the attached Notification of Administration Appeal Options and Process and Request for Appeal (NAAOP-RFA). If you elect to appeal this approved JD, you must complete Section II of the form and return it to the Army Engineer Division, South Pacific, CESPD-PDS-O, Attn: Tom Cavanaugh, Administrative Appeal Review Officer, P.O. Box 36023, 450 Golden Gate Avenue, San Francisco, CA 94102 within 60 days of the date of this notice. Failure to notify the Corps within 60 days of the date of this

notice means that you accept the approved JD in its entirety and waive all rights to appeal the approved JD.

If you have any questions, please contact me at (970) 243-1199 X 1013 or by email at <u>Tyler.R.Adams@usace.army.mil</u>. At your convenience, please complete a Customer Service Survey online at <u>https://regulatory.ops.usace.army.mil/customer-service-survey/</u>.

Sincerely,

Tyler Digitally signed by Tyler R. Adams Date: 2022.03.22 Adams 15:26:46 -06'00'

Tyler R. Adams Project Manager NW Colorado Branch

Enclosures