Crossroads Church Development, Wetland Delineation Report

Prepared For:

Loveland Housing Authority 375 West 37th Street, Ste 200 Loveland, CO 80538

Completed by:

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December 2022



1.0 Introduction

Wildland Consultants, Inc. (WCI) completed a wetland delineation for the Crossroads Church Development project in November 2022. The project is an affordable housing project, in association with non-profits: Habitat for Humanity and the Loveland Housing Authority. The Project is located in city of Loveland, Colorado. West 57th Street borders the north site boundary and North Taft Avenue borders the west site boundary. A perennial drainage that flows to Dry Creek borders the eastern site boundary (Maps 1 and 2).

Current land uses on the site include open space, pasture, and an existing church and parking lot. The wetland delineation included only the area outlined on Map 2. Site photographs are also provided in Attachment A.

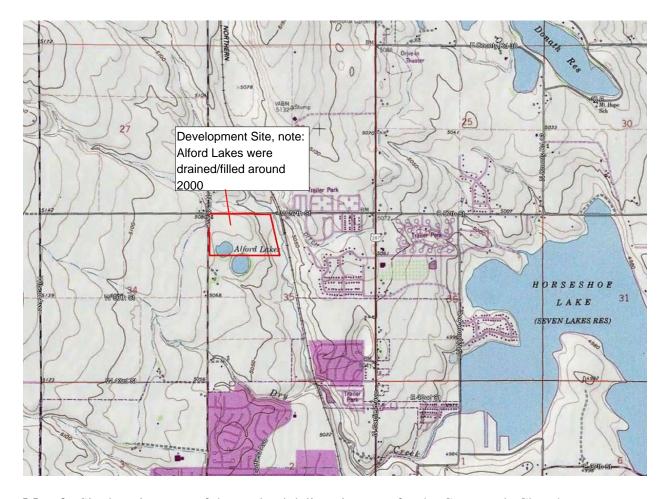
Site Location: NW1/4, S35, T6N, R69W

Lat./Long. Center of Site: 40.449N, -105.092W

Elevation: 5,073 feet



Map 1. Aerial View of the Crossroads Church delineation area, Delineated Wetlands (Wetland 1 and 2) Wetland Sampling points shown (W1-W3).



Map 2. Site location map of the wetland delineation area for the Crossroads Church Development Project.

The objectives of the wetland delineation were to help with project design and planning, and to notify the U.S. Army Corps of Engineers (ACOE) of the wetlands on the site. The delineation will also support ACOE permitting for the project. The wetland delineation was completed by Eric Berg and Craig Severn of WCI. Mr. Berg is certified as a Professional Wetland Scientist. WCI has completed hundreds of wetland delineations throughout the Rocky Mountain area.

2.0 Methods

Site-specific soil information included in the Larimer County Soil Survey (SCS 1980) was reviewed prior to completing the wetland delineation. The wetland delineation was completed

according to the methodology recommended by the ACOE (ACOE 1987 and 2010 Wetland Delineation Manuals). Vegetation, soils, and hydrologic characteristics were evaluated and recorded during the wetland delineation. Standard ACOE Wetland data forms were completed at 5 wetland and 5 upland sites during the delineation. These forms provide basic information regarding soils, vegetation, and hydrology of the wetland area (wetland data forms are included in Attachment A). Wetland boundaries were surveyed by using a submeter GPS unit. The wetland boundaries were then included on a wetlands map (See Attachment A, Wetland Exhibits).

3.0 Results

Wetlands were delineated in 3 areas within the site. These included:

- Wetland 1, wetland along a large drainage swale that drains to Dry Creek (Data points W1, U1, W2, U2)(wetland area 419,784 Square feet (9.6 acres)). Note: the entire drainage is vegetated, there is no discernable ordinary high water mark.
- Wetland 2, wetland along swale (Data Points W3, U3)(wetland 2,361 square feet in size (0.054 acres)).

A total of 422,145 square feet (9.69 acres) of wetlands were delineated on site.

Map 2 shows wetland boundaries.

Wetland Description:

Wetland 1 occurs along a large wide drainage/swale that drains to Dry Creek (wetland area 419,784 Square feet (9.6 acres)). There is no discernable channel or ordinary high water mark. Note: only the western wetland boundary was delineated, the eastern boundary is approximate based on aerial photo interpretation. Dominant species in the wetland included: reed canarygrass (*Phalaris arundinaceae*), cattail (*Typha latifolia*), field sedge (*Carex praegacilis*), curley dock (*Rumex crispus*) and other species. There are few stands of Russian olive (*Eleagnus elegans*) trees in and adjacent to the wetland. Wetland hydrology is present including standing water and saturated soils. Wetland soils are present, including evidence of a depleted soil matrix. Data point W1, U1, W2, U2.

Wetland 2 (2,361 square feet in size (0.054 acres)) occurs along a swale that historically was part of Alford Lakes (lakes were filled around 2000). The wetland connects to a swale/ditch that drains to the east but ends prior to connection to Wetland 1. The wetland is dominated by coyote willow (*Salix exigua*) with a fringe of meadow fescue (*Schedonorus* pratensis). Wetland hydrology is present including saturated soils. Wetland soils are present including evidence of a depleted soil matrix. Data points W3 and U3.

Upland species adjacent to these wetlands included: smooth brome (*Bromus inermis*), quackgrass (*Elymus repens*), yellow sweetclover (*Melitotus officinalis*), Canada thistle (*Cirsium arvense*), kochia, (*Kochia scoparia*), common milkweed (*Asclpepius speciosa*) and a few other grasses and forbs.

Map 1 shows the wetland areas that were delineated. Attachment A, Site Photos show details of site wetlands.

4.0 Conclusions

Wetlands were delineated in 3 areas within the site. These included:

- Wetland 1, wetland along a large drainage swale that drains to Dry Creek (Data points W1, U1, W2, U2)(wetland area 419,784 Square feet (9.6 acres)). Note: the entire drainage is vegetated, there is no discernable ordinary high water mark.
- Wetland 2, wetland along swale (Data Points W3, U3)(wetland 2,361 square feet in size (0.054 acres)).

A total of 422,145 square feet (9.69 acres) of wetlands were delineated on site.

Attachment A includes Site Photos, and Wetland Delineation Data Forms.

5.0 References

Kollmorgen Instruments Corporation. 1994. Munsell soil color chart. 1994 ed. Munsell Color Co. Baltimore, MD.

Soil Conservation Service (SCS) 1980. Soil Survey of Larimer County.

U.S. Army Corps of Engineers. 1987. Corps of Engineers Wetland Delineation Manual

U.S. Army Corps of Engineers. 2010. Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Great Plains Region.

U.S. Fish and Wildlife Service. 1988. National List of Plants That Occur in Wetlands: Central Plains (Region 5).

ATTACHMENT A Wetland Photos

Wetland Delineation Data Forms



Photo 1. View to the north of wetland sample plot W1 (shovel on right) and upland sample plot U1 (yellow clipboard on left).



Photo 2. View to the south of wetland sample plot W2 (shovel on left) and upland sample plot U2 (yellow clipboard on right).



Photo 3. View to the south of wetland sample plot W3 (yellow clipboard) and upland sample plot U3 (shovel).

Project/Site: Crossroads Church	City/County: Lovelan	d/Larimer	Sampling Date: <u>11/1/2022</u>			
Applicant/Owner:		State: CO	Sampling Point: W 1			
Investigator(s): <u>C. Severn</u>	Section, Township, Ra	Range: <u>Sec. 35, T6N , R69W</u>				
Landform (hillslope, terrace, etc.): toe of slope	Local relief (concav	e, convex, none): <u>concav</u>	e Slope (%): <u>3</u>			
Subregion (LRR): <u>LRR - G</u> Lat: <u>40.44757</u>	Long: <u>-1</u>	05.08879	Datum: <u>NAD 83</u>			
Soil Map Unit Name: Fort Collins loam 3-5 percent slopes						
Are climatic / hydrologic conditions on the site typical for this time of y						
Are Vegetation No Soil No , or Hydrology No significa						
Are Vegetation No Soil No , or Hydrology No naturally	-	eeded, explain any answe				
	,	, ,	,			
SUMMARY OF FINDINGS – Attach site map showing	g sampling point	locations, transects	s, important features, etc.			
Hydrophytic Vegetation Present? Yes X No	lo the Complet	l Area				
Hydric Soil Present? Yes X No	Is the Sampled within a Wetlar		No			
Wetland Hydrology Present? Yes X No	within a wetian	iu: les <u>A</u>	NO			
Remarks: Sample plot is located at the toe of slope						
VEGETATION – Use scientific names of plants.						
Tree Stratum (Plot size:10 M RADIUS) % Cover	Dominant Indicator Species? Status	Dominance Test works				
1.	<u>Species: Status</u>	Number of Dominant Sp That Are OBL, FACW, o				
2.		(excluding FAC-):	(A)			
3.		Total Number of Domina	int			
4.		Species Across All Strat				
5.		Percent of Dominant Sp	ecies			
	= Total Cover	That Are OBL, FACW, o				
Sapling/Shrub Stratum (Plot size: 5 M RADIUS)		Prevalence Index work	sheet:			
1.		Total % Cover of:	Multiply by:			
2. 3.		OBL species	x 1 =			
4.		FACW species	x 2 =			
5.		FAC species	x 3 =			
	= Total Cover	FACU species				
Herb Stratum (Plot size: 1 M RADIUS)		UPL species				
1. Phalaris arundinacea 80	Y FACW	Column Totals:	(A) (B)			
2.		Prevalence Index	= B/A =			
3.		Hydrophytic Vegetatio	n Indicators:			
4. 5.		_X_ Rapid test for Hyd	rophytic Vegetation			
6.		Dominance Test is:				
7.		Prevalence Index is				
8.			tations ¹ (Provide supporting or on a separate sheet)			
9.			hytic Vegetation ¹ (Explain)			
10.			Tytic regetation (Explain)			
Woody Vine Stratum (Plot size:)	= Total Cover	¹ Indicators of hydric soil present, unless disturbe	and wetland hydrology must be d or problematic.			
1.		Hydrophytic				
2.	T 0	Hydrophytic Vegetation				
% Bare Ground in Herb Stratum0	_ = Total Cover		X No			
Remarks: (Include photo numbers here or on a separate sheet.)		•				

SOIL Sampling Point: W 1

Profile Des	cription: (Describe	to the depth	needed to docu	ment the i	ndicator	or confi	rm the absence of indica	itors.)			
Depth	Matrix		Redo	x Feature	<u>s</u>						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks			
0-7	10YR 4/2	100									
7-16	10YR 4/2	70 -	10YR 5/8	30	C	<u>M</u>	clay loam				
-											
-											
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:						Indicators for Prob	lematic Hydric Soils ³ :			
Histoso	l (A1)			Gleyed Ma	` ,		1 cm Muck (A9)	(LRRI, J)			
	pipedon (A2)			Redox (S5	,		· · · · · · · · · · · · · · · · · · ·	edox (A16) (LRR F, G, H)			
·	listic (A3)			d Matrix (S			Dark Surface (S				
	en Sulfide (A4)			Mucky Mir	, ,		High Plains Dep	, ,			
	d Layers (A5) (LRR		-	Gleyed Ma			•	e of MLRA 72 & 73)			
	uck (A9) (LRR F, G,	-		X Depleted Matrix (F3)				Reduced Vertic (F18)			
	ed Below Dark Surfac	ce (A11)		Dark Surfa	` ,		Red Parent Material (TF2)				
	ark Surface (A12)			ed Dark Su	, ,		Other (Explain in Remarks)				
	Mucky Mineral (S1)	(00) (1 DD 0		Depression	. ,	4.0\		phytic vegetation and			
	Mucky Peat or Peat			ains Depre		16)	·	gy must be present,			
	ucky Peat or Peat (S Layer (if observed)	, .	(MLRA	72 & 73 o	T LKK H)		uniess disturbed	d or problematic.			
	Layer (if observed)):									
Type:											
Depth (in	nches):						Hydric Soil Present	? Yes <u>X</u> No			
Remarks:											

HYDROLOGY

III DINOLOGI		
Wetland Hydrology Indicate	ors:	
Primary Indicators (minimum	of one is required; check all that apply)	Secondary Indicators (minimum of two required)
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) Inundation Visible on Aer	· · · · · · · · · · · · · · · · · · ·	Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Oxidized Rhizospheres on Living Roots (C3) Roots (C3) (where tilled) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) X Geomorphic Position (D2) X FAC-Neutral Test (D5) Frost-Heave Hummocks (D7) (LRR F)
Field Observations:	Voc. No. V. Donah (inches)	
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): 22	Wetland Hydrology Present? Yes X No
Describe Recorded Data (stre	eam gauge, monitoring well, aerial photos, previous inspec	tions), if available:
Remarks:		
1		

Project/Site: Crossroads Church	City/County: _Lovela	and/Larimer	Sampling Date: <u>11/1/2022</u>
Applicant/Owner:		State: CO	Sampling Point: U 1
Investigator(s): <u>C. Severn</u>	Section, Township, I	Range: <u>Sec. 35, T6N , R69</u>	ıW
Landform (hillslope, terrace, etc.):	Local relief (conca	ave, convex, none): <u>concav</u>	<u>/e</u> Slope (%):
Subregion (LRR): <u>LRR-G</u> Lat: <u>40.44759</u>	Long:	-105.08875	Datum: <u>NAD 83</u>
Soil Map Unit Name: Fort Collins loam 3-5 percent slopes		NWI classificat	ion: PEM1A
Are climatic / hydrologic conditions on the site typical for this time of			
Are Vegetation No Soil No , or Hydrology No significa	antly disturbed? Ar	e "Normal Circumstances"	present? Yes X No
Are Vegetation No Soil No , or Hydrology No naturall	y problematic? (If	needed, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ing sampling poin	t locations, transect	s, important features, etc.
Hydrophytic Vegetation Present? Yes NoX			
Hydric Soil Present? Yes No X	Is the Sample		N- V
Wetland Hydrology Present? Yes No _X	within a weti	and? Yes	No <u>X</u>
Remarks:	-		
VEGETATION – Use scientific names of plants.			
Tree Stratum (Plot size: _10 M RADIUS) _% Cov	te Dominant Indicator ver <u>Species? Status</u>		
1.	voi oposios: otatac	Number of Dominant Sp That Are OBL, FACW, of	
2.		(excluding FAC-):	(A)
3.		Total Number of Domin	ant
4.		Species Across All Stra	
5.		Porcent of Dominant Sr	nacios
	= Total Cover	Percent of Dominant Sp That Are OBL, FACW, of	or FAC: (A/B)
Sapling/Shrub Stratum (Plot size: 5 M RADIUS)		Duning language landari wa sa	rah a at
1.		Prevalence Index worl	Multiply by:
2.			
3.		OBL species	
4.		FAC species	
5.		FACU species	
Herb Stratum (Plot size: 1 M RADIUS)	= Total Cover	UPL species	
1. Bromus inermis 30	Y UPL	· ·	(A) (B)
2. Cirsium arvense 10			(-)
3.		Prevalence Index	
4.		Hydrophytic Vegetation	n Indicators:
5.		Rapid test for Hydro	. ,
6.		Dominance Test is	
7.		Prevalence Index is	
8.		Morphological Adap	otations ¹ (Provide supporting sor on a separate sheet)
9.			phytic Vegetation ¹ (Explain)
10.			(=
Woody Vine Stratum (Plot size:)	= Total Cover	¹ Indicators of hydric soil present, unless disturbe	and wetland hydrology must be ed or problematic.
1.		Hydronby4ic	
2.	_	Hydrophytic Vegetation	
% Bare Ground in Herb Stratum0	= Total Cover		s No <u>X</u>
Remarks: (Include photo numbers here or on a separate sheet.)		•	

	scription: (Describe	to the denth ne	eded to docum	nent the indicator	or confirm th	ne absence of inc	dicators.)
Depth	Matrix	to the depth he		x Features	or committee	ie absence of in	uicators.)
(inches)	Color (moist)	% C	olor (moist)	% Type ¹	Loc ²	Texture	Remarks
0-4	10YR 4/3	100			C	lay loam	
4-12	10YR 5/3	100					
4-12		100		· —— ——		lay loam	
		<u> </u>					
	_						
		<u> </u>					
Type: C=	Concentration, D=Dep	letion, RM=Red	uced Matrix, CS	S=Covered or Coate	d Sand Grain	ns. ² Location	: PL=Pore Lining, M=Matrix.
	I Indicators:		<u> </u>		· <u> </u>		roblematic Hydric Soils ³ :
Histos	` '			Gleyed Matrix (S4)			(A9) (LRRI, J)
	Epipedon (A2)			Redox (S5)			e Redox (A16) (LRR F, G, H)
	Histic (A3) gen Sulfide (A4)			d Matrix (S6) Mucky Mineral (F1)			e (S7) (LRR G) Depressions (F16)
	ed Layers (A5) (LRR l	F)	-	Gleyed Matrix (F2)		-	side of MLRA 72 & 73)
	Muck (A9) (LRR F, G,	•	-	d Matrix (F3)		Reduced Ve	-
	ed Below Dark Surfac	•		Dark Surface (F6)		_	Material (TF2)
Thick I	Dark Surface (A12)		Deplete	d Dark Surface (F7))		ain in Remarks)
	Mucky Mineral (S1)			Depressions (F8)			drophytic vegetation and
	Mucky Peat or Peat (-	ains Depressions (F	16)		rology must be present,
	Mucky Peat or Peat (S		(MLRA	72 & 73 of LRR H)	1	unless distu	rbed or problematic.
	Layer (if observed)	•					
Type:							
Depth (i	ncnes):					Hydric Soli Pres	ent? Yes No <u>X</u>
Remarks:							
Remarks.							
demarks.							
emarks.							
	LOGY						
IYDROI	_OGY ydrology Indicators:						
IYDROI /etland H			theck all that ap	pply)		Secondary Inc	dicators (minimum of two required
IYDROI Vetland H	ydrology Indicators:		heck all that ap				dicators (minimum of two required Boil Cracks (B6)
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Vetland H Trimary Inc Surfac High V Satura Water Sedim Drift D Algal N Iron Do Inunda Water- ield Obse	ydrology Indicators: dicators (minimum of of e Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Vat or Crust (B4) eposits (B5) tion Visible on Aerial Stained Leaves (B9) ervations: ater Present?	one is required; o	Salt Crust Aquatic Inv Hydrogen Dry-Seaso Oxidized F (where no Presence Thin Muck Other (Exp	(B11) vertebrates (B13) Sulfide Odor (C1) on Water Table (C2) Rhizospheres on Liv of tilled) of Reduced Iron (C4 Surface (C7) olain in Remarks)	ing Roots (C	Surface S Sparsely Drainage Oxidized (where t Crayfish B Saturation Geomorp FAC-Neu	Goil Cracks (B6) Vegetated Concave Surface (B8) Patterns (B10) Rhizospheres on Living Roots (Cilled) Burrows (C8) In Visible on Aerial Imagery (C9) hic Position (D2) tral Test (D5)
HYDROI Wetland H Primary Inc Surfac High W Satura Water Sedim Drift D Algal N Iron Do Inunda Water- Field Obse	ydrology Indicators: dicators (minimum of of the Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Vater Crust (B4) eposits (B5) tion Visible on Aerial (Stained Leaves (B9) ervations: ater Present?	one is required; o	Salt Crust Aquatic Inv Hydrogen Dry-Seaso Oxidized F (where no Presence of Thin Muck Other (Exp	(B11) vertebrates (B13) Sulfide Odor (C1) on Water Table (C2) Rhizospheres on Liv of tilled) of Reduced Iron (C4 Surface (C7) olain in Remarks)	ing Roots (C	Surface S Sparsely Drainage Oxidized (where t Crayfish B Saturation Geomorp FAC-Neu	Goil Cracks (B6) Vegetated Concave Surface (B8) Patterns (B10) Rhizospheres on Living Roots (Cilled) Burrows (C8) In Visible on Aerial Imagery (C9) hic Position (D2) tral Test (D5)
HYDROI Vetland H Vrimary Ind Surfac High W Satura Water Sedim Drift D Algal M Iron Do Inunda Water- Vield Obse	ydrology Indicators: dicators (minimum of of the Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Aerial Stained Leaves (B9) ervations: ater Present? Y	one is required; of the control of t	Salt Crust Aquatic Inv Hydrogen Dry-Seaso Oxidized F (where no Presence of Thin Muck Other (Exp	(B11) vertebrates (B13) Sulfide Odor (C1) on Water Table (C2) Rhizospheres on Liv of tilled) of Reduced Iron (C4 Surface (C7) olain in Remarks) onches):	ing Roots (C3	Surface S Sparsely Drainage Oxidized (where t Crayfish B Saturation Geomorp FAC-Neu Frost-Hea	Goil Cracks (B6) Vegetated Concave Surface (B8) Patterns (B10) Rhizospheres on Living Roots (Cilled) Burrows (C8) In Visible on Aerial Imagery (C9) hic Position (D2) tral Test (D5)

Remarks:

Section Sect	Project/Site: Crossroads Church	(City/County: Lo	.oveland/	Larimer Larimer	Samplir	ng Date: 11/1/2022
Investigator(s):C_Severe C_Severe Section, Township, Range:Sec. 35. TéN. R68W Slope (%):1	Applicant/Owner:				State: CO	Samplir	ng Point: W2
Local relief (concave, correx, none): Concave Slope (%): 1							
Sub-region (LRR): _RRG							
Soil Map Unit Name: Longmont clay learn 0-3 percent slopes							
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X							
Are Vegetation No Soil No or Hydrology No significantly disturbed? Are Normal Circumstances' present? Yes X No Are Vegetation No Soil No or Hydrology No 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? Yes X No Wetland Hydrology Present? Yes X No Wetland? Yes X No							
Are Vegetation No Soil No or Hydrology No 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? Yes X No		-					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes X No within a Wetland? Yes X No within		-					
Hydrophytic Vegetation Present? Yes X No Wetland Hydrology Present? Yes X No Wetland? Yes X No Wetland? Yes X No Wetland? Yes X No Wetland Hydrology Present? Yes X No Wetland? Yes X No Yes X No Wetland? Yes X No Wetlan							
Hydric Soil Present? Yes X No Wetland Hydrology Present? Yes X No Wetland Present? Yes X No No No No No No No	SUMMARY OF FINDINGS – Attach site map sh	nowing	sampling p	point lo	ocations, transe	ects, impo	rtant features, etc.
Hydric Soil Present? Yes X No Wetland Yes X No No Yes X Yes X No Yes X Yes X No Yes	Hydrophytic Vegetation Present? Yes X No		lo the Co	malad A	*		
Vetal				•		V Na	
VEGETATION – Use scientific names of plants. Tree Stratum (Plot size: 10 M RADIUS) Absolute Species? Status Species? Status Species? Status Species? Status Status Species? Status Status Status Species Status Status Status Status Species Status Status Status Status Status Status Species Status Status Status Status Species Status Status Status Status Status Status Species Status Status Status Status Species Status Status Status Status Species Status Species Status	Wetland Hydrology Present? Yes X No		Within a	welland	i: 165 <u>- 7</u>	<u>x </u>	,
Absolute Species 10 M RADIUS % Cover Species Status Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC-): (A)	Remarks: Sample plot is located along an unnamed tributary	to Dry Cr	eek.				
Absolute Species 10 M RADIUS % Cover Species Status Number of Dominant Species That Are OBL FACW, or FAC (excluding FAC-):							
Absolute Species 10 M RADIUS % Cover Species Status Number of Dominant Species That Are OBL FACW, or FAC (excluding FAC-):	MEGETATION - Have design of the feet						
Tree Stratum (Plot size: 10 M RADIUS 5			D :				
Elaeagnus angustifolia 5				totuo			
3. 4. 5.							
Species Across All Strata:					(excluding FAC-):		(A)
Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)	3.				Total Number of Dor	minant	
Sapling/Shrub Stratum (Plot size: 5 M RADIUS)	4.				Species Across All S	Strata:	(B)
That Are OBL, FACW, or FAC:	5.				Percent of Dominant	Species	
1. 2. 3. 4. 5. 4. 5. 5. 5. 5. 5		5	= Total Cover				(A/B)
1. 2. 3. 4. 5.)			Prevalence Index w	orksheet:	
OBL species x 1 = FACW species x 2 = FAC species x 3 = FACU species x 4 = UPL species x 4							Multiply by:
4. 5.							
FAC species x 3 = FACU species x 4 = FACU species x 5 = FACU species x 4 = FACU species x 5 =							
Herb Stratum (Plot size:							
Herb Stratum (Plot size: 1 M RADIUS 1) 30 Y FACW 2 VFACW 3. Spergularia minor 10 N FACU 4. Iva axilaris 5 N FAC 5. Atriplex heterosperma 5 N NI 6. Symphyotrichum ericoides 7. 8. 9. 10. 10 N FACU 5 N FACU 7. Iva axilaris 10. Iva axilaris	3.	_	- Total Cover		FACU species	x 4	1 =
2. Suaeda calceoformis 10 N FACW 3. Spergularia minor 10 N FACU 4. Iva axilaris 5 N FAC 5. Atriplex heterosperma 5 N NI 6. Symphyotrichum ericoides 5 N FACU 7. Bare Ground in Herb Stratum 65 = Total Cover Prevalence Index = B/A = Hydrophytic Vegetation Indicators: X_Rapid test for Hydrophytic Vegetation Dominance Test is >50% Prevalence Index is ≤3.0¹ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) 10. 65 = Total Cover Woody Vine Stratum (Plot size:) 1 2. Hydrophytic Vegetation Indicators: X_Rapid test for Hydrophytic Vegetation Dominance Test is >50% Prevalence Index = B/A = Hydrophytic Vegetation Prevalence Index = B/A = Hydrophytic Vegetation Dominance Test is >50% Prevalence Index = B/A = Hydrophytic Vegetation Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes X_ No	Herb Stratum (Plot size: 1 M RADIUS)		- Total Cover		UPL species	x 5	5 =
3. Spergularia minor 4. Iva axilaris 5 N FAC 5. Atriplex heterosperma 6. Symphyotrichum ericoides 7. 8. 9. 10.	1. Carex praegacilis	30	Y FAC	<u>CW</u>	Column Totals:	(A)	(B)
3. Spergularia minor 10 N FACU 4. Iva axilaris 5 N NI 5. Atriplex heterosperma 5 N NI 6. Symphyotrichum ericoides 5 N FACU 7. B. 9. Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 9. Problematic Hydrophytic Vegetation¹ (Explain) 10. Problematic Hydrophytic Vegetation¹ (Explain) 1. Hydrophytic Vegetation Indicators:	Suaeda calceoformis	10	N FAC	<u>CW</u>	Drovolonoo Ina	Joy D/A	
4. Iva axilaris 5 N FAC 5. Atriplex heterosperma 6. Symphyotrichum ericoides 7. 8. 9. 10. Woody Vine Stratum (Plot size:) 1. 2. % Bare Ground in Herb Stratum 30 = Total Cover	3. Spergularia minor	10	N FAC	<u>CU</u>			ore:
5 N NI 6. Symphyotrichum ericoides 7. 8. 9. 10. 10.	4. Iva axilaris	5	N FAC	C			
7. 8. 9. Woody Vine Stratum (Plot size:) 10. Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) 11. 2. Bare Ground in Herb Stratum 30 = Total Cover Total Cover Hydrophytic Vegetation Prevalence Index is ≤3.0¹ — Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) — Problematic Hydrophytic Vegetation¹ (Explain) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Prevalence Index is ≤3.0¹ — Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) — Problematic Hydrophytic Vegetation¹ Present? Yes X No	5. Atriplex heterosperma	5	N NI		- '	, , ,	vegetation
8.	6. Symphyotrichum ericoides	5	N FAC	<u>CU</u>			
data in Remarks or on a separate sheet) 9.	7.				· 		Provide supporting
10. Woody Vine Stratum (Plot size:) 1. 2. Bare Ground in Herb Stratum 30 = Total Cover					data in Rema	arks or on a s	separate sheet)
Woody Vine Stratum (Plot size:) 1. 2. % Bare Ground in Herb Stratum 30 = Total Cover					Problematic Hyd	drophytic Veg	getation ¹ (Explain)
Woody Vine Stratum (Plot size:) 1. 2. % Bare Ground in Herb Stratum 30 = Total Cover	10.	05	T 10				
1. 2. % Bare Ground in Herb Stratum 30 = Total Cover Hydrophytic Vegetation Present? Yes X No	Woody Vine Stratum (Plot size:	65	_ = Total Cover				
2. % Bare Ground in Herb Stratum 30 = Total Cover Hydrophytic Vegetation Present? Yes X No				-	present, uniess distu	innen oi biop	ionalic.
% Bare Ground in Herb Stratum 30 = Total Cover Present? Yes X No							
	% Bare Ground in Herb Stratum 30		= Total Cover			Yes X	No
	Remarks: (Include photo numbers here or on a separate shee	et.)					
	(,					

SOIL Sampling Point: W2

Profile Desc	cription: (Describe	to the depth n	eeded to docun	nent the i	ndicator o	or confirm	n the absence o	f indicators.)
Depth	Matrix			x Features		. 2	_	
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-8	10YR 3/2	100					clay loam	
8-16	10YR 3/2	90					clay loam	
	10YR 8/1	10					clay loam	gypsum nodules
								<u> </u>
		-						
		·						
		-						
1Type: C-C	oncentration, D=Dep	letion PM-Per	duced Matrix CS	:-Covered	Lor Coate	d Sand G	rains ² Loca	tion: PL=Pore Lining, M=Matrix.
Hydric Soil		netion, Rivi=Rec	duced Mairix, Co	=Covered	i oi Coale	u Sanu G		or Problematic Hydric Soils ³ :
Histosol			Sandy (Sleyed Ma	trix (S4)			uck (A9) (LRRI, J)
	pipedon (A2)			Redox (S5)				rairie Redox (A16) (LRR F, G, H)
	istic (A3)			l Matrix (S				rface (S7) (LRR G)
	en Sulfide (A4)			Mucky Min	,			ains Depressions (F16)
Stratified	d Layers (A5) (LRR I	F)	Loamy (Gleyed Ma	trix (F2)		(LRRH	outside of MLRA 72 & 73)
1 cm Mu	uck (A9) (LRR F, G,	H)	Deplete	d Matrix (F	- 3)		Reduce	d Vertic (F18)
-	d Below Dark Surfac	e (A11)		Dark Surf	` '			rent Material (TF2)
	ark Surface (A12)			d Dark Su	, ,			explain in Remarks)
	Mucky Mineral (S1)	(00) (100 0 11)		Depression	. ,	4.0\		of hydrophytic vegetation and
	Mucky Peat or Peat (_	ains Depre		16)		hydrology must be present,
	ucky Peat or Peat (S Layer (if observed):		(WLKA	72 & 73 o	I LKK II)		uniess d	listurbed or problematic.
	Layer (II observed)	•						
Type:	-l \.						Uhadaia Cail D	Oracomt 2 Vac V Na
Depth (in	*	Carana da an Indiada			- P / P	9	Hydric Soil P	
developed.	eflocculated soll sur	ace due to nigr	n sodium content	in soil. S	aline/sodi	c solls res	suits in redoxymo	rphic soils features being poorly
acro.opea.								
HYDROL	OGY							
Wetland Hy	drology Indicators:							
Primary India	cators (minimum of c	ne is required;	check all that ap	ply)			<u>Secondar</u>	y Indicators (minimum of two required)
Surface	Water (A1)		X Salt Crus	t (B11)			X Surf	ace Soil Cracks (B6)
High Wa	ater Table (A2)		Aquatic Inv	ertebrate:	s (B13)		<u>X</u> Spa	rsely Vegetated Concave Surface (B8)
Saturation	on (A3)		Hydrogen	Sulfide Oc	dor (C1)		Drain	age Patterns (B10)
Water M	larks (B1)		X Dry-Seas	on Water	Table (C2	2)	Oxidiz	zed Rhizospheres on Living Roots (C3)
Sedimer	nt Deposits (B2)		Oxidized R	Rhizospher	res on Livi	ng Roots	(C3) (whe	ere tilled)
Drift Dep	posits (B3)		(where no	ot tilled)			Crayf	ish Burrows (C8)
Algal Ma	at or Crust (B4)		Presence	of Reduce	d Iron (C4	.)	Satur	ation Visible on Aerial Imagery (C9)
Iron Dep	oosits (B5)		Thin Muck	Surface (C7)		X Geo	morphic Position (D2)
Inundati	on Visible on Aerial	magery (B7)	Other (Exp	lain in Re	marks)		FAC-l	Neutral Test (D5)
Water-S	tained Leaves (B9)						Frost-	Heave Hummocks (D7) (LRR F)
Field Obser								
Surface Wat	er Present? Y	'es No >	C Depth (ir	iches):				
Water Table	Present? Y	es No _	X Depth (in	iches):				
Saturation P		es X No	Depth (ir	iches): <u>1</u>	6	Wet	land Hydrology	Present? Yes X No
(includes car	oillary fringe) corded Data (stream	gauge monito	ring well aerial r	hotos pre	evious insi	nections)	if available.	
Describe IVE	Solded Data (Stiedil	gaago, momilo	ig won, aciiai j	o.o., pre	2410U3 II 13	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	n avallable.	
Remarks:								
L								

Project/Site: Crossroads Church		City/County	: Loveland	d/Larimer	Sampling Date	e: <u>11/1/2022</u>
Applicant/Owner:				State: CO	Sampling Poir	nt: <u>U2</u>
Investigator(s): C. Severn						
Landform (hillslope, terrace, etc.):						
Subregion (LRR): <u>LRR - G</u> Lat: <u>40.45002</u>			,	· -		
Soil Map Unit Name: Longmont clay loam 0-3 percent slope						
Are climatic / hydrologic conditions on the site typical for this ti						
	-				,	V No
Are Vegetation No Soil No , or Hydrology No sig		-				
Are Vegetation No Soil No , or Hydrology No na	iturally p	roblematic?	(If ne	eeded, explain any ansv	wers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map sh	howing	g samplir	ng point	locations, transec	cts, important	features, etc.
Hydrophytic Vegetation Present? Yes No _2	Y					
Hydric Soil Present? Yes No _2			e Sampled			
Wetland Hydrology Present? Yes No		withi	in a Wetlan	d? Yes	No <u>X</u>	
Remarks: Sample plot is located along an unnamed tributary		creek.				
VEGETATION – Use scientific names of plants.						
	bsolute	Dominant		Dominance Test wor	rksheet:	
		Species?		Number of Dominant		
Elaeagnus angustifolia	5	<u>Y</u>	<u>FACU</u>	That Are OBL, FACW (excluding FAC-):	, or FAC	(A)
2.						
3.				Total Number of Dom Species Across All St		(B)
4.				•		(
5.		= Total Cov	or	Percent of Dominant 3 That Are OBL, FACW		(A/B)
Sapling/Shrub Stratum (Plot size: 5 M RADIUS)	= TOTAL COV	ы			(,,,,,)
1.				Prevalence Index wo		
2.					: Multij	oly by:
3.				OBL species		
4.				FACW species		
5.				FACILITIES		
Hart Otestans (Distains AMDADINO		= Total Cov	er	FACU species UPL species	_	
Herb Stratum (Plot size: 1 M RADIUS)	10	V	EACH	Column Totals:	x 5 =	(B)
Elymus lanceolatus Polygonum douglasii	<u>10 </u>	<u>Y</u> N	<u>FACU</u>	Column Totals.	(^)	(B)
Atriplex heterosperma		N N	<u>FACU</u> <u>NI</u>	Prevalence Inde	ex = B/A =	
Unknow composite		N	UPL	Hydrophytic Vegetat	tion Indicators:	
5.			01 2	Rapid test for Hyd	drophytic Vegetati	on
6.				Dominance Test		
7.				Prevalence Index		
8.				Morphological Ad	laptations¹ (Provid ks or on a separat	e supporting
9.				Problematic Hydr		
10.				1 Toblematic Flydi	opriytic vegetation	ι (Ελριαιιί)
<u> </u>	30	_ = Total Co	over	¹ Indicators of hydric s	oil and wetland hy	droloav must be
Woody Vine Stratum (Plot size:)				present, unless distur		
1.				Hydrophytic		
2.		.		Vegetation		
% Bare Ground in Herb Stratum0		= Total Cov	er	Present? Y	'es No _	<u>x</u>
Remarks: (Include photo numbers here or on a separate sheet	et.)					

SOIL Sampling Point: <u>U2</u>

Profile Desc	cription: (Describe	to the depth nee	ded to docur	nent the i	ndicator o	r confirn	n the absence o	of indicators.)
Depth	Matrix			x Features		2		
(inches)	Color (moist)	<u>%</u> <u>Co</u>	lor (moist)	<u></u> %	Type ¹	Loc ²	Texture	<u>Remarks</u>
0-6	10YR 3/2	100					clay loam	
6-12	10YR 3/2	90					clay loam	
	10YR 8/1	10					-	gypsum nodule
	10111 0/1							gypsum nodule
	_							
							2	
	oncentration, D=Dep	letion, RM=Redu	ced Matrix, CS	S=Covered	or Coated	Sand G		ation: PL=Pore Lining, M=Matrix.
Hydric Soil								or Problematic Hydric Soils ³ :
Histosol	` '			Sleyed Ma				uck (A9) (LRRI, J)
	pipedon (A2)			Redox (S5)				rairie Redox (A16) (LRR F, G, H)
	istic (A3)			d Matrix (S				Irface (S7) (LRR G)
	en Sulfide (A4) d Layers (A5) (LRR	E)		Mucky Min Gleyed Ma			_	ains Depressions (F16) outside of MLRA 72 & 73)
	uck (A9) (LRR F, G,			d Matrix (F				d Vertic (F18)
	d Below Dark Surfac	-		Dark Surfa				rent Material (TF2)
-	ark Surface (A12)	0 (/ (1 1)		d Dark Su	` ,			Explain in Remarks)
	Mucky Mineral (S1)			Depression	. ,			of hydrophytic vegetation and
	Mucky Peat or Peat	(S2) (LRR G, H)		ins Depre	` '	6)		hydrology must be present,
5 cm Mu	ucky Peat or Peat (S	3) (LRR F)	(MLRA	72 & 73 of	LRR H)		unless o	disturbed or problematic.
Restrictive	Layer (if observed)	:						
Type:								
Depth (in	ches):						Hydric Soil F	Present? Yes No <u>X</u>
Remarks:								
HYDROL	ngy							
_	drology Indicators:		a alc all that are	ادرام			Casandan	u Indicatora (minimum of two required)
	cators (minimum of o	one is requirea; cr						y Indicators (minimum of two required)
	Water (A1)	_	Salt Crust	'	(= \		·	ce Soil Cracks (B6)
	ater Table (A2)		Aquatic In					sely Vegetated Concave Surface (B8)
Saturation			Hydrogen					age Patterns (B10)
Water M	` '		Dry-Seaso					zed Rhizospheres on Living Roots (C3)
	nt Deposits (B2)	-	Oxidized F		es on Livir	ng Roots		ere tilled)
Drift Dep	, ,		(where n	-			-	ish Burrows (C8)
_	at or Crust (B4)	=	Presence)		ation Visible on Aerial Imagery (C9)
Iron Dep			Thin Muck					omorphic Position (D2)
	on Visible on Aerial	Imagery (B7) _	Other (Exp	olain in Rei	marks)			Neutral Test (D5)
	Stained Leaves (B9)						Frost	-Heave Hummocks (D7) (LRR F)
Field Obser								
Surface Wat		'es No <u>X</u>						
Water Table	Present?	'es No <u>X</u>	Depth (ir	nches):				
Saturation P		'es <u>X</u> No _	Depth (ir	nches):	14	Wetl	and Hydrology	Present? Yes No X
(includes cap	pillary fringe) corded Data (stream	ngauge monitorin	n well aerial	nhotos pre	evious iner	ections)	if available:	
Describe Ke	corucu Dala (Siredii	i gauge, monitorii	y well, aelial	onotos, pre	νιουο πιομ	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	ıı avallable.	
Remarks:								

Project/Site: Crossroads Church		City/County:	Loveland	d/Larimer	Sam	pling Date: _1	1/1/2022
Applicant/Owner:				State: _	CO Sam	pling Point: _\	N3
Investigator(s): <u>C. Severn</u>	;	Section, Tov	wnship, Ra	nge: <u>Sec. 35,</u>	T6N , R69W		
Landform (hillslope, terrace, etc.):		Local relie	ef (concave	e, convex, none): convex	Slop	e (%): 0
Subregion (LRR): <u>LRR - G</u> Lat: <u>40.44772</u>			Long:10	05.09483	· [Datum: NAD	83
Soil Map Unit Name: water (see Remarks below)							
Are climatic / hydrologic conditions on the site typical for this tim							
Are Vegetation No Soil No , or Hydrology No signi							No
Are Vegetation No Soil No , or Hydrology No natur	-				any answers in F		
SUMMARY OF FINDINGS – Attach site map sho					-		atures, etc.
Hydrophytic Vegetation Present? Yes X No		1- 41-	011	A			
Hydric Soil Present? Yes X No			Sampled n a Wetlan		Yes X	No	
Wetland Hydrology Present? Yes X No						140	
Remarks: Area was once on e of the Alford Lakes, which have	now be	een filled in a	and develo	ped.			
VEGETATION – Use scientific names of plants.							
· · · · · · · · · · · · · · · · · · ·	olute	Dominant	Indicator	Dominance T	est worksheet:	<u> </u>	
		Species?			minant Species		
1.					, FACW, or FAC	;	(4)
2.				(excluding FA	∪-).		(A)
3.				Total Number Species Acros			(B)
4.							(D)
5.		= Total Cove	or.		minant Species , FACW, or FAC		(A/B)
Sapling/Shrub Stratum (Plot size: 5 M RADIUS		- 10tai 00V	J1				\
1. Salix exigua 40	<u> </u>	<u>Y</u>	FACW		ndex workshee Cover of:		v.:
2.							<u>'y.</u>
3.					s <u>40</u>		
4. 5.				-			
J. 40)	= Total Co	over	FACU species	s <u>4</u>	x 4 = <u>16</u>	
Herb Stratum (Plot size: 1 M RADIUS)	,	= 10.0.0		UPL species		x 5 =	
		<u>Y</u>	<u>FACU</u>	Column Totals	s: <u>44</u>	(A) <u>96</u>	(B)
2. <u>Cirsium arvense</u> 2		<u>Y</u>	<u>FACU</u>	Prevaler	nce Index = B/A	.= 2.18	
3.					Vegetation Indi		
4. 5.				Rapid tes	t for Hydrophytic	c Vegetation	
6.				Dominand	ce Test is >50%		
7.				·	nce Index is ≤3.0		
8.					gical Adaptation Remarks or on		
9.					itic Hydrophytic	•	•
10.					, , , , , , , , ,		,
Woody Vine Stratum (Plot size:)		= Total Cov	er		hydric soil and v ss disturbed or p		ogy must be
1.				Hydrophytic			
Bare Ground in Herb Stratum0	_	= Total Cove	or.	Vegetation	Vac V	Ma	
		- 10tal COVE	<i>-</i> 1	Present?	Yes <u>X</u>	No	
Remarks: (Include photo numbers here or on a separate sheet.			. 4				
Sample plot is located in a stand of willows just sou	ith of	parking lo	Ot.				

SOIL						Sampling Point: <u>W3</u>		
Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix		Redox	<u>Features</u>				
(inches)	Color (moist)	<u> </u>	Color (moist)	% Type ¹ Lo	oc ²	Texture Remarks		
<u>0-7</u> <u>10</u>	YR 5/3	100						
<u>7- 15 10</u>	YR 4/2	80 10	YR 5/8	20 C M		clay loam		
			_					
	_							
	_							
		etion, RM=Red	duced Matrix, CS=	Covered or Coated Sa	and Gra			
Hydric Soil Indic						Indicators for Problematic Hydric Soils ³ :		
Histosol (A1)				eyed Matrix (S4)		1 cm Muck (A9) (LRRI, J)		
Histic Epiped	` '		Sandy Re	edox (S5) Matrix (S6)		Coast Prairie Redox (A16) (LRR F, G, H)		
Black Histic (Hydrogen Su				ucky Mineral (F1)		Dark Surface (S7) (LRR G) High Plains Depressions (F16)		
_ · ·	yers (A5) (LRR F))		eyed Matrix (F2)		(LRRH outside of MLRA 72 & 73)		
-	A9) (LRR F, G, H		X Deplete			Reduced Vertic (F18)		
· ·	low Dark Surface			ark Surface (F6)		Red Parent Material (TF2)		
Thick Dark S	Surface (A12)		Depleted	Dark Surface (F7)		Other (Explain in Remarks)		
	y Mineral (S1)			epressions (F8)		³ Indicators of hydrophytic vegetation and		
	xy Peat or Peat (S		_	ns Depressions (F16)		wetland hydrology must be present,		
Restrictive Laye	Peat or Peat (S3	(LKK F)	(MLRA /	2 & 73 of LRR H)		unless disturbed or problematic.		
Type:	ii (ii observeu).							
Depth (inches	١.					Hydric Soil Present? Yes X No		
Bopan (mones)	·)·					Tryuno don't resent. Tes <u>X</u> No		
Remarks:								
HYDROLOGY	Y							
Wetland Hydrolo	ogy Indicators:							
Primary Indicator	s (minimum of or	e is required;	check all that app	ly)		Secondary Indicators (minimum of two required)		
Surface Wate	er (A1)		Salt Crust (E	311)		Surface Soil Cracks (B6)		
High Water T	Γable (A2)		Aquatic Inve	ertebrates (B13)		Sparsely Vegetated Concave Surface (B8)		
X Saturation ((A3)		Hydrogen S	ulfide Odor (C1)		Drainage Patterns (B10)		
Water Marks	s (B1)		X Dry-Seaso	n Water Table (C2)		Oxidized Rhizospheres on Living Roots (C3		
Sediment De	eposits (B2)		Oxidized Rh	izospheres on Living F	Roots (0	C3) (where tilled)		
Drift Deposits	s (B3)		(where not	tilled)		Crayfish Burrows (C8)		
Algal Mat or	Crust (B4)		Presence of	Reduced Iron (C4)		Saturation Visible on Aerial Imagery (C9)		
Iron Deposits	s (B5)		Thin Muck S	Surface (C7)		Geomorphic Position (D2)		
	isible on Aerial In	nagery (B7)	Other (Expla	ain in Remarks)		FAC-Neutral Test (D5)		
Water-Staine	ed Leaves (B9)					Frost-Heave Hummocks (D7) (LRR F)		
Field Observation								
Surface Water Pr			X Depth (inc	,				
Water Table Pres	sent? Ye	s No _	X Depth (inc	hes):				
Saturation Preser		s X No	Depth (inc	hes): <u>10</u>	Wetla	and Hydrology Present? Yes X No		
(includes capillary Describe Recorde		gauge, monito	ring well, aerial ob	otos, previous inspect	ions) if	f available:		
		-	-					
Remarks: Wate	er from parking lo	t enters swale	area along the we	estern edge of willows	tnrough	n a curb opening		

Project/Site: Crossroads Church	_ City/County: Lovelan	d/Larimer	Sampling Date:
Applicant/Owner:		State: CO	Sampling Point: <u>U3</u>
Investigator(s): <u>C. Severn</u>			
Landform (hillslope, terrace, etc.):			
Subregion (LRR): <u>LRR - G</u> Lat: <u>40.44773</u>			
Soil Map Unit Name: water (see Remarks below)			
Are climatic / hydrologic conditions on the site typical for this time of			
Are Vegetation No Soil No , or Hydrology No significa			
	-		
Are Vegetation No Soil No , or Hydrology No naturally		eeded, explain any answer	
SUMMARY OF FINDINGS – Attach site map showi	ng sampling point	locations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes No X Hydric Soil Present? Yes No X	Is the Sampled within a Wetlar		No <u>X</u>
Wetland Hydrology Present? Yes NoX Remarks: Area was once on e of the Alford Lakes, which have no	w heen filled in and deve	loned	
Tremains. Area was once on e or the Anord Lakes, which have no	w been filled in and deve	iopeu.	
VEGETATION – Use scientific names of plants.			
Absolute		Dominance Test works	heet:
	r Species? Status	Number of Dominant Spo	
1.		That Are OBL, FACW, or (excluding FAC-):	FAC (A)
 3. 			
4.		Total Number of Domina Species Across All Strata	
5.		Percent of Dominant Spe	
	_ = Total Cover		FAC: (A/B)
Sapling/Shrub Stratum (Plot size: 5 M RADIIUS)		Prevalence Index work	shoot:
1. Salix exigua 20	Y FACU		Multiply by:
2.		OBL species	
3.		FACW species	
4. 5.		FAC species	
	= Total Cover	FACU species	x 4 =
Herb Stratum (Plot size: 1 M RADIUS)	= 10tal 00001	UPL species	x 5 =
1. Schedonorus prantensis 40	Y FACU	Column Totals:	(A) (B)
2. Bromus inermis 20	Y UPL	Prevalence Index :	= B/A =
3.		Hydrophytic Vegetation	
4.		Rapid test for Hydro	
5.		Dominance Test is >	50%
6.		Prevalence Index is	≤3.0 ¹
7. 8.		Morphological Adapt	tations ¹ (Provide supporting
9.			or on a separate sheet)
10.		Problematic Hydropi	nytic Vegetation ¹ (Explain)
Woody Vine Stratum (Plot size:)	_ = Total Cover	¹ Indicators of hydric soil present, unless disturbed	and wetland hydrology must be
1.		,	(
2.		Hydrophytic Vegetation	
% Bare Ground in Herb Stratum	= Total Cover		No <u>X</u>
Remarks: (Include photo numbers here or on a separate sheet.)		l	

OIL Sampling Point: U3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)		
Depth Matrix	Redox Features	
(inches) Color (moist) % Color (mo	oist) % Type ¹ Lo	oc ² <u>Texture</u> <u>Remarks</u>
<u>0-12</u> <u>10YR 4/3</u> <u>100</u>		
·		
		
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. 2Location: PL=Pore Lining, M=Matrix.		
Hydric Soil Indicators:	,	Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Sandy Gleyed Matrix (S4)	1 cm Muck (A9) (LRRI, J)
Histic Epipedon (A2)	Sandy Redox (S5)	Coast Prairie Redox (A16) (LRR F, G, H)
<u> </u>	Stripped Matrix (S6)	Dark Surface (S7) (LRR G)
	Loamy Mucky Mineral (F1)	High Plains Depressions (F16)
	Loamy Gleyed Matrix (F2)	(LRRH outside of MLRA 72 & 73)
	Depleted Matrix (F3) Redox Dark Surface (F6)	Reduced Vertic (F18) Red Parent Material (TF2)
_ · · · · · · —	Depleted Dark Surface (F7)	Other (Explain in Remarks)
	Redox Depressions (F8)	³ Indicators of hydrophytic vegetation and
2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	High Plains Depressions (F16)	wetland hydrology must be present,
	(MLRA 72 & 73 of LRR H)	unless disturbed or problematic.
Restrictive Layer (if observed):		
Type:		
Depth (inches):		Hydric Soil Present? Yes No _X
Remarks:		
romano.		
HYDROLOGY		
Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check al	that apply)	Secondary Indicators (minimum of two required)
	It Crust (B11)	Surface Soil Cracks (B6)
	uatic Invertebrates (B13)	Sparsely Vegetated Concave Surface (B8)
	drogen Sulfide Odor (C1)	Drainage Patterns (B10)
	/-Season Water Table (C2)	Oxidized Rhizospheres on Living Roots (C3)
	idized Rhizospheres on Living R	
	here not tilled)	Crayfish Burrows (C8)
	esence of Reduced Iron (C4) in Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
	, ,	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7) Otl Water-Stained Leaves (B9)	ner (Explain in Remarks)	FAC-Neutral Test (D5) Frost-Heave Hummocks (D7) (LRR F)
Field Observations:		
)enth (inches):	
		Wetland Hydrology Procent? Voc. No. V
Saturation Present? Yes No _X [includes capillary fringe)	reput (mones).	Wetland Hydrology Present? Yes No _X
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		