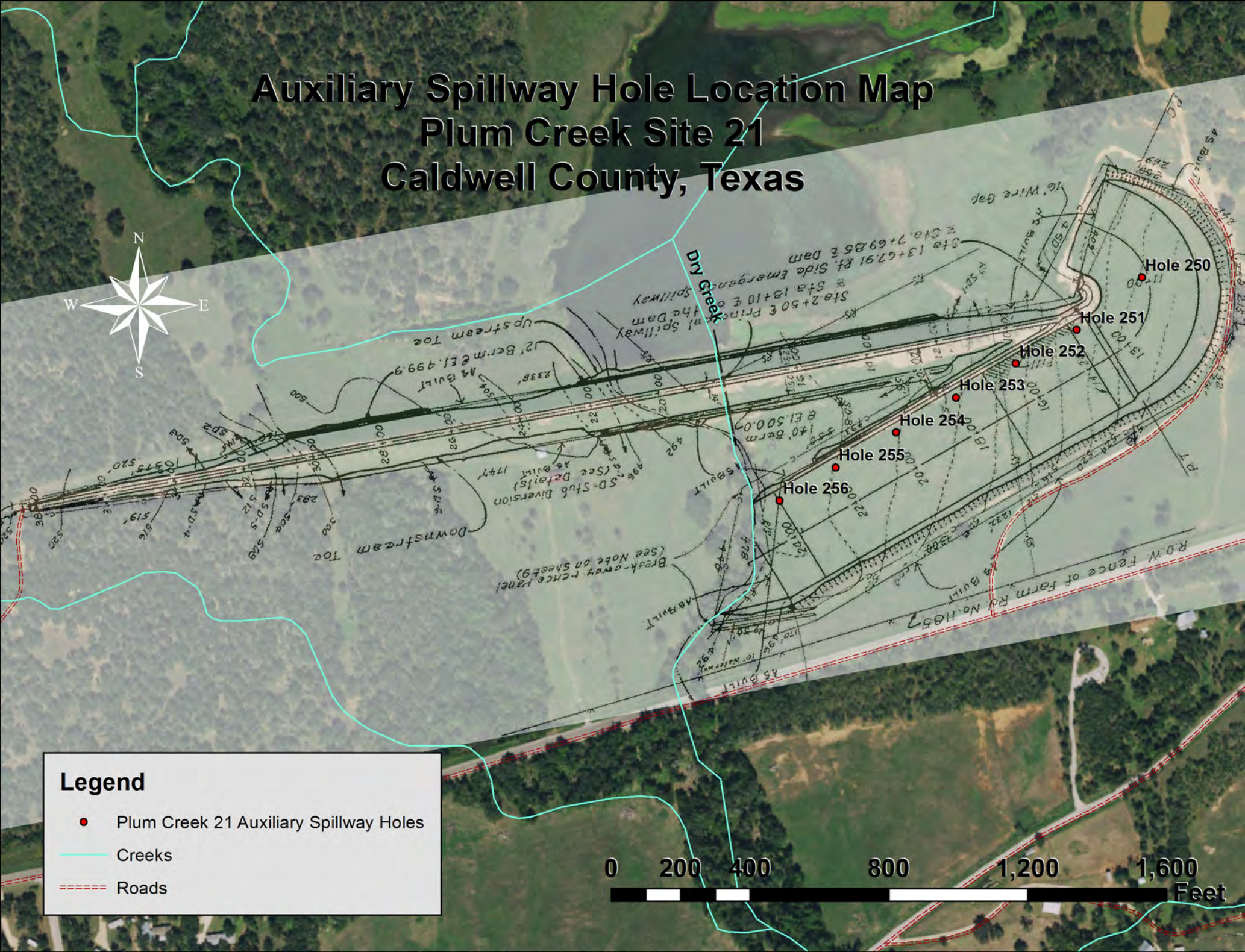
Auxiliary Spillway Hole Location Map
Plum Creek Site 21
Caldwell County, Texas



U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

NRCS-ENG-53
REV. FOR TX 08.11

LOG OF TEST HOLES

WATERSHED	Plum Creek		SUB-WATERSHED		SITE NO. 21
LOCATION	Auxiliary Spillway	DATE 09/11/2014	COUNTY	Caldwell	STATE Texas
LOGGED BY	Moffatt		PROJECT :	WP-07 _____ WP-08 _____ FP-03 _____ P.L.-46 _____	
DRILLING EQUIPMENT	Mobile B-57		LOCTION OF HOLES	Forebay	

HOLE NO.	STA. & SURFACE ELEVATION	HOLE DEPTH FROM FT	HOLE DEPTH TO FT	DESCRIPTION OF MATERIALS	N	USCS	TYPE BIT USED	SAMPLES NO	SAMPLES TYPE	SAMPLES FROM FT	SAMPLES TO FT	SAMPLES REC %	SAMPLES DISP FT	SAMPLES AMT
250		0	2	Silt, clay, dry to slightly moist, slightly plastic, roots, dark gray (topsoil)		ML	HS	.1	3"Push	5	7.5	100		
		2	9	Siltstone, thin bedded to laminated with slight claystone, soft rock, slightly		Slst	HS	.2	3"Push	10	12.5	100		
				moist to moist below 4' (hillside seep?), breaks down to ML/CL (depends on										
				which lamination or thin bed that is broken down), iron stain, becoming										
				sandy 7.5' to 9', light brown										
		9	12.5	Claystone, very silty, moist, soft to moderately soft rock, breaks down to		CS	HS							
				moderately plastic CL very silty, thin bedded to laminated, fractured, light										
				brown to light gray										
				Hole plugged 9/12/14										

DATE: 9/12/2014 TIME: 7:18 WATER LEVEL: No water CAVE IN: 11.9 SHEET 1 OF 1 SHEETS

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

NRCS-ENG-53
REV. FOR TX 08.11

LOG OF TEST HOLES

WATERSHED	Plum Creek		SUB-WATERSHED		SITE NO. 21
LOCATION	Auxiliary Spillway	DATE 09/9/2014	COUNTY	Caldwell	STATE Texas
LOGGED BY	Moffatt		PROJECT :	WP-07 _____ WP-08 _____ FP-03 _____ P.L.-46 _____	
DRILLING EQUIPMENT	Mobile B-57		LOCTION OF HOLES	Crest	

HOLE NO.	STA. & SURFACE ELEVATION	HOLE DEPTH FROM FT	HOLE DEPTH TO FT	DESCRIPTION OF MATERIALS	N	USCS	TYPE BIT USED	SAMPLES NO	SAMPLES TYPE	SAMPLES FROM FT	SAMPLES TO FT	SAMPLES REC %	SAMPLES DISP FT	SAMPLES AMT
251		0	2.5	Clay, silty, dry to slightly moist, highly plastic, roots, dark brown (topsoil)		CL	HS	.1	3"Push	0	2.5	100		
		2.5	5	Claystone, very silty, dry to slightly moist, very soft to soft rock, very highly		CS	HS	.2	3"Push	2.5	5	100		
				weathered, breaks down to highly plastic stiff clay, dark brown				.3	3"Push	5	7.5	60		
		5	11	Claystone, silty, highly weathered, iron stain, blocky, breaks down to highly		CS	HS	.4	3"Push	7.5	10	100		
				plastic stiff clay, thin bedded to laminated (poor structure), very soft to soft				.5	3"Push	10	12.5	100		
				rock, dark brown. Push 5' - 7.5' refusal at 6.6'. Few thin beds maroon to				.6	3"Push	12.5	15	100		
				light gray claystone with very silty limonite.				.7	3"Push	15	17.5	100		
		11	20	Claystone, very silty, weathered, iron stain, breaks down to plastic stiff clay,		CS	HS	.8	3"Push	20	22.5	95		
				thin bedded to laminated with siltstone, moist, light gray				.9	3"Push	25	26.5			
		20	28	Siltstone, soft rock, moist thin bedded to laminated with very silty claystone,		slst	HS	.10	3"Push	30	31			
				breaks down to slightly plastic clayey ML, slightly weathered, gray to dark										
				gray below 25' Push 25' to 27.5' refusal @ 26.5'										
		28	31	Claystone, silty, soft rock, slight to non-weathered, breaks down to highly		CS	HS							
				plastic clay, dark gray. Push 30' - 32.5' refusal @ 31'										
				Hole plugged 9/12/14										

DATE: 9/12/2014 TIME: 7:42 WATER LEVEL: No water CAVE IN: 29.7 SHEET 1 OF 1 SHEETS

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

NRCS-ENG-53
REV. FOR TX 08.11

LOG OF TEST HOLES

WATERSHED	Plum Creek		SUB-WATERSHED		SITE NO. 21
LOCATION	Auxiliary Spillway Exit Slope	DATE 09/11/2014	COUNTY	Caldwell	STATE Texas
LOGGED BY	Moffatt		PROJECT :	WP-07 _____ WP-08 _____ FP-03 _____ P.L.-46 _____	
DRILLING EQUIPMENT	Mobile B-57		LOCTION OF HOLES	200' Downstream Crest	

HOLE NO.	STA. & SURFACE ELEVATION	HOLE DEPTH FROM FT	HOLE DEPTH TO FT	DESCRIPTION OF MATERIALS	N	USCS	TYPE BIT USED	SAMPLES NO	SAMPLES TYPE	SAMPLES FROM FT	SAMPLES TO FT	SAMPLES REC %	SAMPLES DISP FT	SAMPLES AMT
252		0	7	Clay, silty, dry to slightly moist, highly plastic, roots, dark brown to black		CL	HS	.1	3"Push	0	2.5	95		
				Push 0' - 2.5' lost bottom 3"				.2	3"Push	5	7.5	100		
		7	14	Claystone, silty, highly weathered, fractured with iron stain, blocky, breaks		CS	HS	.3	3"Push	10	12.5	100		
				down to moderate plastic stiff very silty clay ML to CL, light brown to light				.4	3"Push	15	17.5	100		
				gray, push 5' - 7.5' Claystone bottom of tube, very silty below 10', thin				.5	3"Push	25	26			
				bedded to laminated with siltstone										
		14	18	Siltstone, very fine grain sand, slight clay, soft to moderately soft rock,		slst	HS							
				moist, thin bedded to laminated, breaks down to CL/ML/SC, light brown										
				Push 15' - 17.5' refusal @17'										
		18	23	Claystone, silty, weathered, iron stain, breaks down to highly plastic stiff		CS	HS							
				clay, soft rock, slightly moist, thin bedded to laminated, light brown										
		23	26	Claystone, silty, soft to moderately soft rock, slight to non-weathered,		CS	HS							
				breaks down to highly plastic clay, thin bedded to laminated with siltstone										
				dark gray. Push 25' to 27' refusal @ 26'										
				Plug hole 9/12/14										

DATE: 9/12/2014 TIME: 8:12 WATER LEVEL: No water CAVE IN: 24.2 SHEET 1 OF 1 SHEETS

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

NRCS-ENG-53
REV. FOR TX 08.11

LOG OF TEST HOLES

WATERSHED	Plum Creek		SUB-WATERSHED		SITE NO. 21
LOCATION	Auxiliary Spillway Exit Slope	DATE 09/11/2014	COUNTY	Caldwell	STATE Texas
LOGGED BY	Moffatt		PROJECT :	WP-07 _____ WP-08 _____ FP-03 _____ P.L.-46 _____	
DRILLING EQUIPMENT	Mobile B-57		LOCTION OF HOLES	400' Downstream Crest	

HOLE NO.	STA. & SURFACE ELEVATION	HOLE DEPTH FROM FT	HOLE DEPTH TO FT	DESCRIPTION OF MATERIALS	N	USCS	TYPE BIT USED	SAMPLES NO	SAMPLES TYPE	SAMPLES FROM FT	SAMPLES TO FT	SAMPLES REC %	SAMPLES DISP FT	SAMPLES AMT
253		0	1	Silt, slight clay, dry to slightly moist, loose, roots, brown (topsoil)		ML	HS	.1	3"Push	10	12.5	100		
		1	7	Clay, silty, dry to slightly moist, stiff, highly plastic (highly weathered		CH	HS	.2	3"Push	20	22			
				claystone broken down to a soil), dark brown										
		7	22	Claystone, very silty, weathered, thin bedded to laminated with siltstone,		CS	HS							
				soft rock, breaks down to CL to ML, slightly moist, some iron stain, light										
				brown to light gray. Push 10 ' - 12.5' Claystone on top of sample siltstone on										
				bottom of sample. Abundant iron stain at 20' weathered to slightly										
				weathered material in push at 20' - 22', Push 20' - 22.5' refusal @ 22'										
				Plug hole 9/12/14										

DATE: 9/12/2014 TIME: 8:31 WATER LEVEL: No water CAVE IN: 20.8 SHEET 1 OF 1 SHEETS

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

NRCS-ENG-53
REV. FOR TX 08.11

LOG OF TEST HOLES

WATERSHED	Plum Creek		SUB-WATERSHED		SITE NO. 21
LOCATION	Auxiliary Spillway Exit Slope	DATE 09/11/2014	COUNTY	Caldwell	STATE Texas
LOGGED BY	Moffatt		PROJECT :	WP-07 _____ WP-08 _____ FP-03 _____ P.L.-46 _____	
DRILLING EQUIPMENT	Mobile B-57		LOCTION OF HOLES	600' Downstream Crest	

HOLE NO.	STA. & SURFACE ELEVATION	HOLE DEPTH FROM FT	HOLE DEPTH TO FT	DESCRIPTION OF MATERIALS	N	USCS	TYPE BIT USED	SAMPLES NO	SAMPLES TYPE	SAMPLES FROM FT	SAMPLES TO FT	SAMPLES REC %	SAMPLES DISP FT	SAMPLES AMT
254		0	0.5	Silt, slight clay, dry to slightly moist, loose, roots, brown (topsoil)		ML	HS	.1	3"Push	5	7.5	100		
		0.5	4	Clay, silty, dry to slightly moist, stiff, highly plastic, dark brown		CH	HS	.2	3"Push	15	17.5	100		
		4	6	Claystone, silty, weathered, thin bedded to laminated, soft rock, breaks		CS	HS							
				down to highly plastic stiff clay, light brown to light gray. Push 5' - 7.5'										
				claystone on top of sample very fine grain sandstone on bottom, drilling										
				change at 6'										
		6	8	Sandstone, very fine to coarse grain, iron stain, dense, slightly moist, light		SS	HS							
				brown to light gray										
		8	11	Siltstone, clayey, slightly moist - moist, soft rock, thin bedded to laminated,		slst	HS							
				medium dense, weathered, breaks down to ML, light brown										
		11	17.5	Claystone, silty, weathered, moist, thin bedded to laminated, soft rock, iron										
				stain fractured, brown, breaks down to highly plastic stiff clay										
				Plug hole 9/12/14										

DATE: 9/12/2014 TIME: 8:48 WATER LEVEL: No water CAVE IN: 15.1'

SHEET 1 OF 1 SHEETS

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

NRCS-ENG-53
REV. FOR TX 08.11

LOG OF TEST HOLES

WATERSHED	Plum Creek		SUB-WATERSHED		SITE NO. 21
LOCATION	Auxiliary Spillway Exit Slope	DATE 09/11/2014	COUNTY	Caldwell	STATE Texas
LOGGED BY	Moffatt		PROJECT :	WP-07 _____ WP-08 _____ FP-03 _____ P.L.-46 _____	
DRILLING EQUIPMENT	Mobile B-57		LOCTION OF HOLES	800' Downstream Crest	

HOLE NO.	STA. & SURFACE ELEVATION	HOLE DEPTH FROM FT	HOLE DEPTH TO FT	DESCRIPTION OF MATERIALS	N	USCS	TYPE BIT USED	SAMPLES NO	SAMPLES TYPE	SAMPLES FROM FT	SAMPLES TO FT	SAMPLES REC %	SAMPLES DISP FT	SAMPLES AMT
255		0	2	Clay, very silty, dry to slightly moist, stiff, moderately plastic, dark brown		CL	HS	.1	3"Push	5	7.5	100		
		2	4	Gravel, fine grain, sand, fine to coarse grain, silty, abundant iron stain,		GM	HS	.2	3"Push	10	12.5	100		
				dense, dry to slightly moist, reddish brown (alluvium)										
		4	12.5	Siltstone, clayey, slightly moist - moist increasing with depth, soft rock, thin		slst	HS							
				bedded to laminated, iron stain, breaks down to ML, light brown to light gray										
				Plug hole 9/12/14										

DATE: 9/12/2014 TIME: 9:02 WATER LEVEL: No water CAVE IN: 11.9'

SHEET 1 OF 1 SHEETS

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

NRCS-ENG-53
REV. FOR TX 08.11

LOG OF TEST HOLES

WATERSHED	Plum Creek		SUB-WATERSHED		SITE NO. 21
LOCATION	Auxiliary Spillway Exit	DATE 09/11/2014	COUNTY	Caldwell	STATE Texas
LOGGED BY	Moffatt		PROJECT :	WP-07 _____ WP-08 _____ FP-03 _____ P.L.-46 _____	
DRILLING EQUIPMENT	Mobile B-57		LOCTION OF HOLES	Exit	

HOLE NO.	STA. & SURFACE ELEVATION	HOLE DEPTH FROM FT	HOLE DEPTH TO FT	DESCRIPTION OF MATERIALS	N	USCS	TYPE BIT USED	SAMPLES NO	SAMPLES TYPE	SAMPLES FROM FT	SAMPLES TO FT	SAMPLES REC %	SAMPLES DISP FT	SAMPLES AMT
256		0	3	Clay, very silty, dry to slightly moist, stiff, moderately plastic, dark brown		CL	HS	.1	3"Push	3	5.5	100		
		2	5.5	Silt, slight clay, moist, moderately dense, iron stain, non-plastic, light brown		ML	HS							
				(alluvium)										
				Plug hole 9/12/14										

DATE: 9/12/2014 TIME: 9:18 WATER LEVEL: No water CAVE IN: 3'

SHEET 1 OF 1 SHEETS

SAMPLE LIST FOR SOIL MECHANICS LABORATORY

STATE: TX **COUNTY:** Caldwell

SITE : Plum Creek 21

PROJECT TYPE: SITES **PROGRAM (Source of Funds):**

CONTACT PERSON: Bryan S. Moffatt

PHONE/ FAX: 817.233.6268

Index Tests = gradation, water content, LL, PI, Crumb, Double Hydrometer, Gs

						Tests Requested							
Lab Sample No.	Field Sample No.	Description or Location	Depth (ft)	Sample Size/Type	Field Crumb	Index	DUW	Col-lapse	Con-sol.	Shear	Pinhole	Salt	Other Tests or Other Notes
	250.1	Approx. 10+85 CL AS 21' left	5' - 7.5'	3" Push	NR	X	X			X			Forebay Auxiliary Spillway
	250.2	Approx. 10+85 CL AS 21' left	10' - 12.5'	3" Push	NR	X	X			X			Forebay Auxiliary Spillway
	251.1	Approx. 14+05 CL AS 115' left	0' - 2.5'	3" Push	NR	X	X			X			Crest Auxiliary Spillway
	251.2	Approx. 14+05 CL AS 115' left	2.5' - 5'	3" Push	NR	X	X			X			Crest Auxiliary Spillway
	251.3	Approx. 14+05 CL AS 115' left	5' 7.5'	3" Push	NR	X	X			X			Crest Auxiliary Spillway
	251.4	Approx. 14+05 CL AS 115' left	7.5' - 10'	3" Push	NR	X	X			X			Crest Auxiliary Spillway
	251.5	Approx. 14+05 CL AS 115' left	10' - 12.5'	3" Push	NR	X	X			X			Crest Auxiliary Spillway
	251.6	Approx. 14+05 CL AS 115' left	12.5' - 15'	3" Push	NR	X	X			X			Crest Auxiliary Spillway
	251.7	Approx. 14+05 CL AS 115' left	15' - 17.5'	3" Push	NR	X	X			X			Crest Auxiliary Spillway
	251.8	Approx. 14+05 CL AS 115' left	20' - 22.5'	3" Push	NR	X	X			X			Crest Auxiliary Spillway, Push 20-22.5 Rec 95%
	251.9	Approx. 14+05 CL AS 115' left	25' - 26.5'	3" Push	NR	X	X			X			Crest Auxiliary Spillway Refusal at 26.5 in Siltstone
	251.10.	Approx. 14+05 CL AS 115' left	30' - 31'	3" Push	NR	X	X			X			Crest Auxiliary Spillway Refusal at 31
	252.1	Approx. 16+04 CL AS118' Left	0' - 2.5'	3" Push	NR	X	X			X			Approx. 184' from downstream edge of Auxiliary Spillway Crest, Rec 95%
	252.2	Approx. 16+04 CL AS118' Left	5' - 7.5'	3" Push	NR	X	X			X			Approx. 184' from downstream edge of Auxiliary Spillway Crest
	252.3	Approx. 16+04 CL AS118' Left	10' - 12.5'	3" Push	NR	X	X			X			Approx. 184' from downstream edge of Auxiliary Spillway Crest
	252.4	Approx. 16+04 CL AS118' Left	15' - 17.5'	3" Push	NR	X	X			X			Approx. 184' from downstream edge of Auxiliary Spillway Crest
	252.5	Approx. 16+04 CL AS118' Left	25' - 26'	3" Push	NR	X	X			X			Approx. 184' from downstream edge of Auxiliary Spillway Crest Refusal at 26'
	253.1	Approx. 18+04 CL AS120' Left	10' - 12.5'	3" Push	NR	X	X			X			Approx. 384' from downstream edge of Auxiliary Spillway Crest

	253.2	Approx. 18+04 CL AS120' Left	20'- 22'	3" Push	NR	X	X			X			Approx. 384' from downstream edge of Auxiliary Spillway Crest, Refusal at 22'
	254.1	Approx. 20+03 CL AS117' Left	5' - 7.5'	3" Push	NR	X	X			X			Approx. 583' from downstream edge of Auxiliary Spillway Crest
	254.2	Approx. 20+03 CL AS117' Left	15' - 17.5'	3" Push	NR	X	X			X			Approx. 583' from downstream edge of Auxiliary Spillway Crest
	255.1	Approx. 22+03 CL AS 116' Left	5' - 7.5'	3" Push	NR	X	X			X			Approx. 785' from downstream edge of Auxiliary Spillway Crest
	255.2	Approx. 22+03 CL AS 116' Left	10' - 12.5'	3" Push	NR	X	X			X			Approx. 785' from downstream edge of Auxiliary Spillway Crest
	256.1	Approx. 22+04 CL AS 117' Left	3' - 5.5'	3" Push	NR	X	X			X			Exit Auxiliary Spillway

PLUM CREEK 21
CALDWELL CO., TEXAS

251.1
0'-2.5'

FILL MATERIAL OVER
ALLUVIAL SEDIMENTS

PLUM CREEK 21
CALDWELL CO., TEXAS
251.2
2.5-5'
CTES AMBIGUA SPINULA

PLUM CREEK 21

CALDWELL CO., TEXAS

251.3

5-6.5

CREST AUXILIARY SPILLWAY

PLUM CREEK 21

CALDWELL CO., TEXAS

251.4

7.5 -10

CREST ANNIDUM SPECIMEN

Rum Creek 21

Caldwell County, Texas

251.5

10'-12.5'

Crest Foundation Seminary

PLUM CREEK 21

CALDWELL CO, TX

251.6

12.5-15

ANNEALED SPECIMEN CREST

PLUM CREEK 21
CALDWELL CO., TEXAS
251.7
15'-17.5'
CREST AUXILIARY SPILLWAY

PLUM CREEK 21

CALDWELL CO., TEXAS

251.8

20-22.5

CREST AUXILIARY SPILLWAY

RUSH 20-22.5 REC 95%

PLUM CREEK 21

CALDWELL CO., TX

251.9

25-26.5

CREST ANNULAR STRUCTURE

REFUSAL @ 26.5' FT

SILTSTONE

PLUM CREEK 21

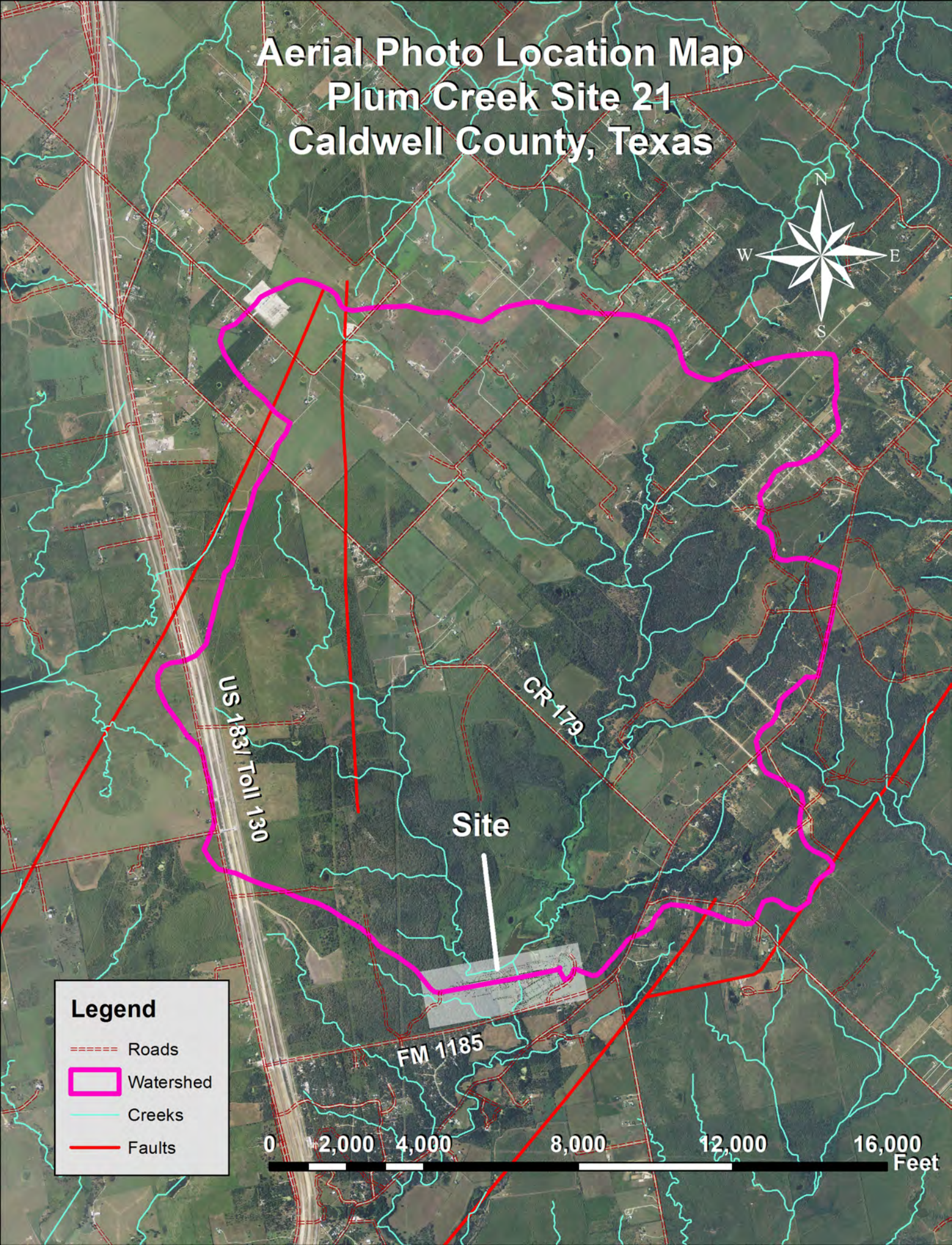
CALDWELL CO., TX

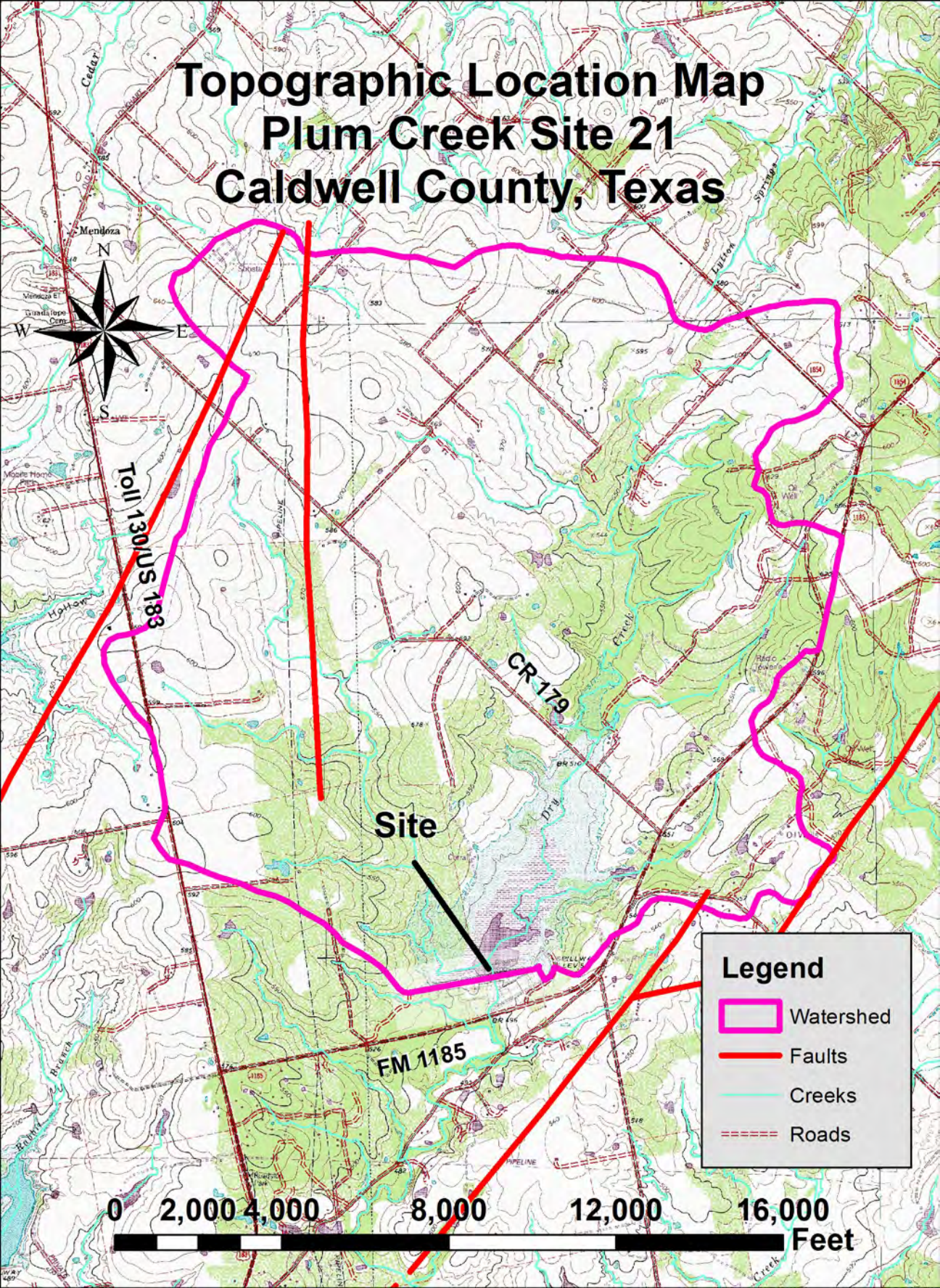
251.10

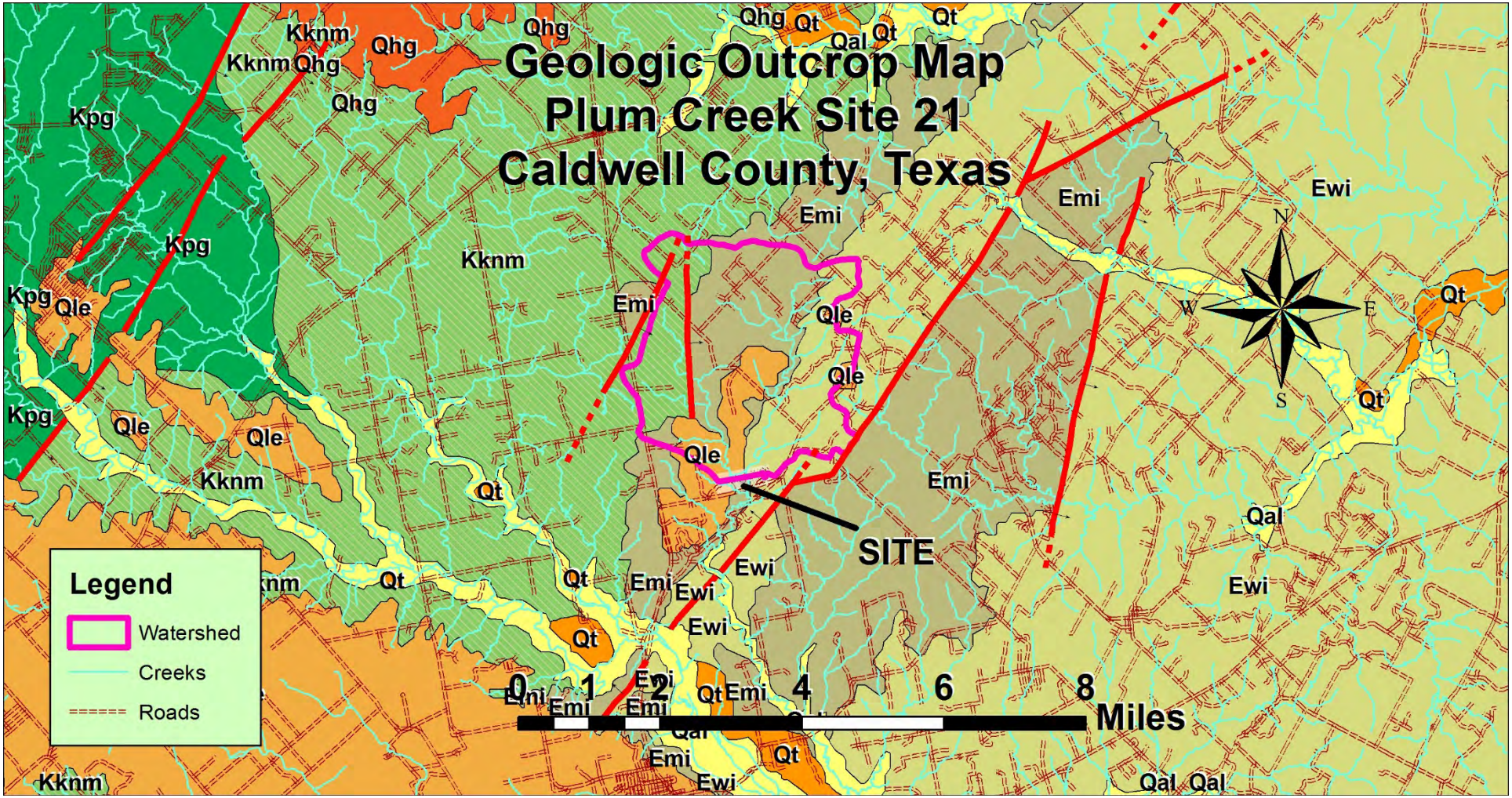
30'-31'

CRESI AUXILIARY SPECIMEN

REFUSAL @ 31'


Aerial Photo Location Map
Plum Creek Site 21
Caldwell County, Texas
N
W
E
S
US 183/ Toll 130
CR 179
Site
FM 1185
Legend
Roads
Watershed
Creeks
Faults
0
2,000
4,000
8,000
12,000
16,000
Feet


Topographic Location Map
Plum Creek Site 21
Caldwell County, Texas
N
W
E
S
Toll 130/US 183
CR 179
FM 1185
Site
Legend
Watershed
Faults
Creeks
Roads
0
2,000
4,000
8,000
12,000
16,000
Feet



Modified from: Geologic Atlas of Texas, Seguin Sheet, Bureau of Economic Geology, 1974 http://tnris.org/data-download/#!/statewide

Qal Quaternary Alluvium

Qle Quaternary Leona Formation

Kknm Cretaceous Navarro Group and Marlbrook Marl "upper Taylor Marl"

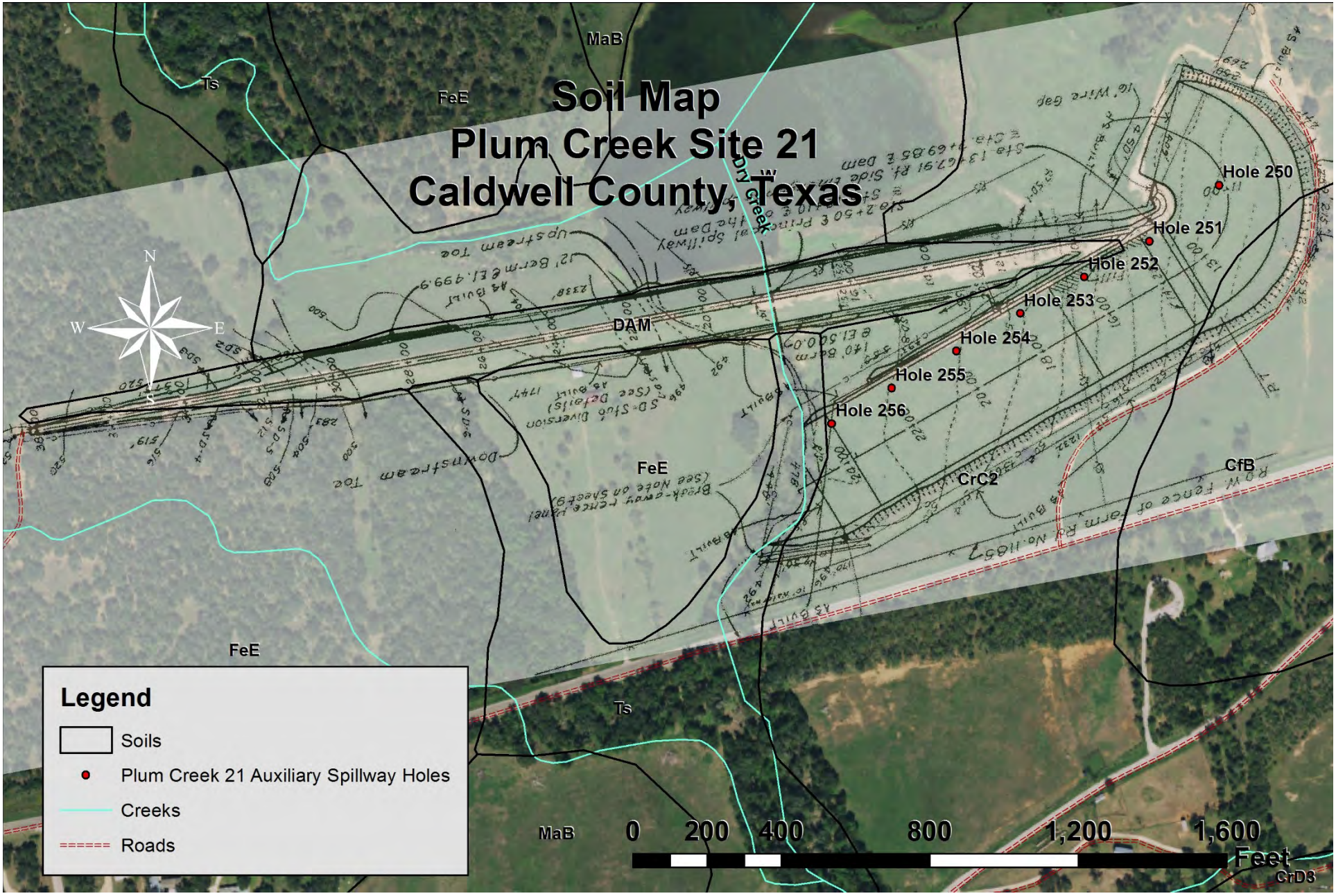
Qt Quaternary Fluviatile Terrace

Ewi Eocene Wilcox Group

Kpg Pecan Gap Chalk

Qhg Quaternary High Gravel

Emi Eocene Midway Group



Base Map: USDA/NRCS 2014 NAIP from http://datagateway.nrcs.usda.gov/ , Soils from USDA/NRCS SOIL Survey Geographic (SSURGO), Caldwell County, Texas, 2001, As-built from NRCS Texas State Office Files, 07/13/1962, Georeferenced with ArcGIS 10.2 09/03/2014, Creeks from National Hydrology Database, Roads from TNRIS http://tnris.org/data-download/#/statewide , Texas Strategic Mapping Program (StratMap) 2006, Hole Location from field survey 09/11/2014

Engineering Properties

Caldwell County, Texas

[Absence of an entry indicates that the data were not estimated. This report shows only the major soils in each map unit]

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
CcD3:												
Chaney, severely eroded	0-14	Fine sandy loam	CL-ML, ML, SM	A-4	0	0	95-100	90-100	80-95	45-65	16-30	NP-7
	14-31	Clay, sandy clay	CH, CL, SC	A-6, A-7-6	0	0	90-100	90-100	90-100	43-85	39-60	24-42
	31-52	Clay, sandy clay, sandy clay loam	CH, CL, SC	A-6, A-7-6	0	0	0	90-100	90-100	80-100	45-85	25-55 11-40
	52-62	Channery clay, sandy clay, sandy clay loam	CH, CL, SC, SC-SM	A-2, A-4, A-6, A-7-6	0	0	90-100	90-100	80-100	25-85	25-60	6-40
CfB:												
Crockett	0-12	Fine sandy loam	CL, ML, SC, SM	A-4, A-6	0	0-2	98-100	94-100	89-100	40-96	15-35	3-15
	12-18	Clay, clay loam, sandy clay	CH, CL	A-6, A-7-6	0	0	89-100	75-100	75-100	60-98	35-59	23-42
	18-38	Clay, clay loam, sandy clay	CH, CL	A-6, A-7-6	0	0	89-100	75-100	75-100	65-98	35-59	23-42
	38-54	Clay, clay loam, sandy clay loam	CH, CL	A-6, A-7-6	0	0	0-5	90-100	85-100	75-100	50-90	30-60 15-40
	54-62	Clay loam	CH, CL	A-7-6	0	0-5	90-100	90-100	90-100	70-99	45-71	27-52

Engineering Properties

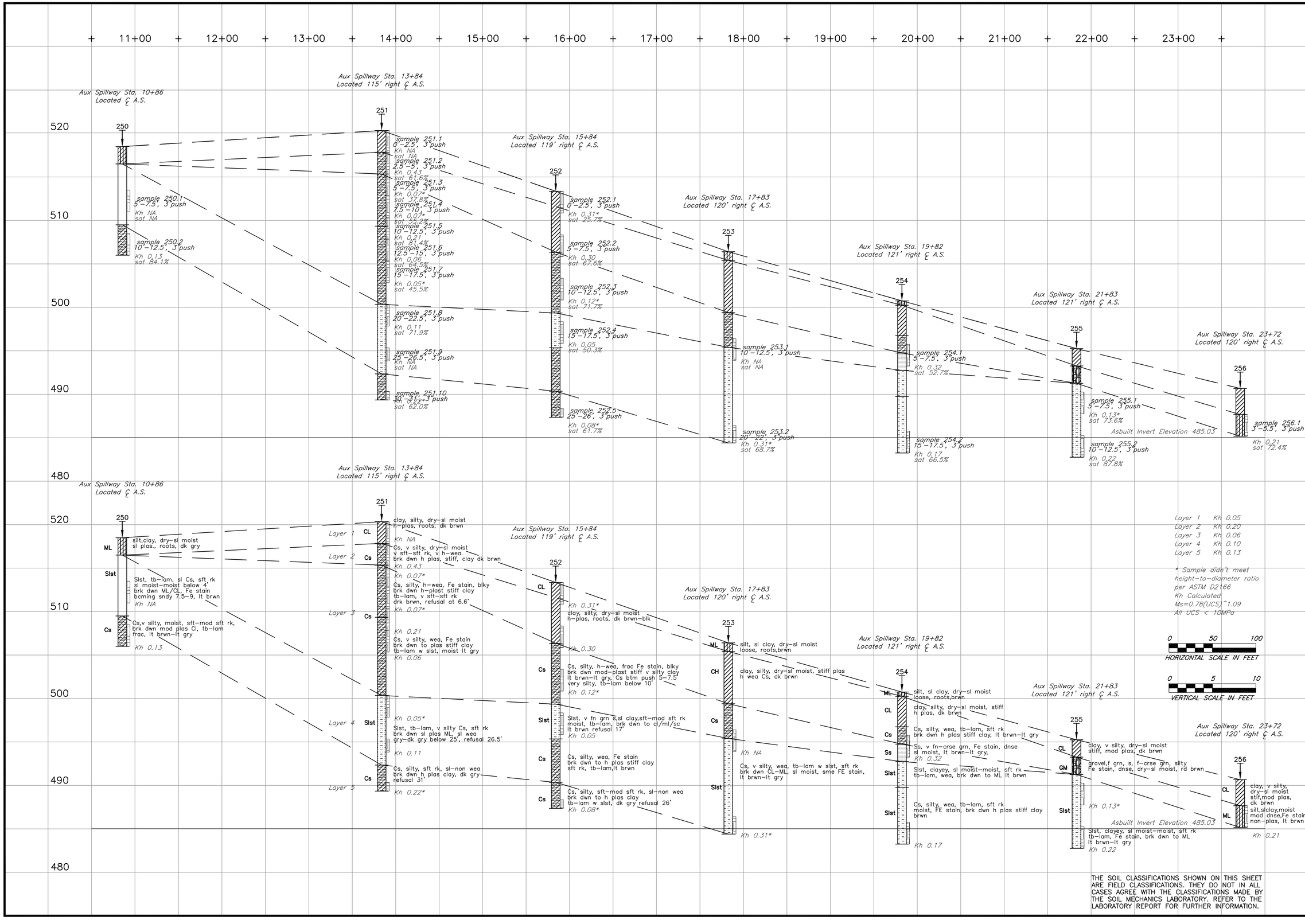
Caldwell County, Texas

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
CrC2:												
Crockett, eroded	0-7	Loam	CL, ML, SC, SM	A-4, A-6	0	0-2	98-100	94-100	89-100	40-96	15-35	3-15
	7-12	Clay, clay loam, sandy clay	CH, CL	A-6, A-7-6	0	0	89-100	75-100	75-100	60-98	35-59	23-42
	12-30	Clay, clay loam, sandy clay	CH, CL	A-6, A-7-6	0	0	89-100	75-100	75-100	65-98	35-59	23-42
	30-48	Clay, clay loam, sandy clay loam	CL	CH, A-7-6	A-6,	0	0-5	90-100	85-100	75-100	50-90	30-60 15-40
	48-62	Clay loam	CH, CL	A-7-6	0	0-5	90-100	90-100	90-100	70-99	45-71	27-52
FeE:												
Fett	0-14	Gravelly sandy loam	GM, GP, GP-GM, SP-SM	A-1-a, A-2-4	0-2	0-10	12-65	5-60	5-50	2-25	16-25	NP-7
	14-30	Gravelly clay, gravelly sandy clay, very gravelly clay	GC, SC	A-2-7	0-2	0-10	30-65	15-50	15-40	15-28	51-75	30-49
	30-80	Clay, gravelly clay, sandy clay	CH	A-7-6	0	0-5	80-100	70-100	70-100	70-99	51-84	35-61
MaB:												
Mabank	0-7	Loam	CL, CL-ML, SC,	A-4, A-6	0	0	95-100	95-100	80-98	40-70	19-32	4-15
	7-39	Clay, clay loam	CH, CL	A-6, A-7-6	0	0	95-100	95-100	95-100	60-85	38-55	22-37
	39-76	Clay, clay loam, sandy clay	CH, CL	A-6, A-7-6	0	0	95-100	95-100	95-100	60-85	38-55	22-37

Engineering Properties

Caldwell County, Texas

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
Ts:												
Tinn	0-4	Clay	CH, CL	A-7-6	0	0	95-100	95-100	85-100	80-100	45-75	25-54
	4-62	Clay, silty clay	CH	A-7-6	0	0	95-100	90-100	80-100	80-100	55-75	35-54
	62-80	Clay, silty clay	CH	A-7-6	0	0	95-100	90-100	80-100	80-100	55-75	35-54



THE SOIL CLASSIFICATIONS SHOWN ON THIS SHEET ARE FIELD CLASSIFICATIONS. THEY DO NOT IN ALL CASES AGREE WITH THE CLASSIFICATIONS MADE BY THE SOIL MECHANICS LABORATORY. REFER TO THE LABORATORY REPORT FOR FURTHER INFORMATION.

INVESTIGATED BY: BRYAN M. & DANIEL W.
TITLE: GEOLOGIST
PLOTTED BY: DANIEL WILKINSON
FILE NAME: Plum Creek 21 Auxiliary Spillway Profile.dwg
DATE PLOTTED: 04/15

PLAN AND PROFILES FOR GEOLOGIC INVESTIGATIONS

FLOODWATER RETARDING STRUCTURE SITE NO. 21

PLUM CREEK WATERSHED

OF THE

COLORADO RIVER WATERSHED – TEXAS

United States Department of Agriculture
Natural Resources Conservation Service

REVISIONS DATE

DRAWING NO. TX–EN–####

SHEET ####

D:\Rehab Dams\Plum Creek 21\Plum Creek 21 Auxiliary Spillway Profile.dwg